

## **DIVISION 11. GENERAL REQUIREMENTS AND COVENANTS**

This part consists of the general provisions applying to all types of construction and maintenance as set forth in the following sections:

- 1101. Definitions.**
- 1102. Proposal Requirements and Conditions.**
- 1103. Approval for Award and Award of Contract.**
- 1104. Scope of Work.**
- 1105. Control of Work.**
- 1106. Control of Materials.**
- 1107. Legal Relations and Responsibility to the Public.**
- 1108. Prosecution and Progress.**
- 1109. Measurement and Payment and Metric Conversion.**
- 1110. Progress Scheduling.**
- 1111. Incentive/Disincentive for Early Completion.**
- 1112. A + B Bidding.**
- 1113. Hourly Lane Rental (A + B Bidding with Incentive/Disincentive).**

### **Section 1101. Definitions**

#### **1101.01 GENERAL.**

- A.** Wherever in these specifications or other contract documents the following definitions terms, or both, or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

In order to avoid cumbersome and confusing repetition of expressions in these specifications, it is provided that whenever anything is, or is to be, done, if, as, or, when, or where "contemplated, required, determined, directed, specified, authorized, ordered, given, designated, indicated, considered necessary, deemed necessary, permitted, reserved, suspended, established, approval, approved, disapproved, acceptable, unacceptable, suitable, accepted, satisfactory, unsatisfactory, sufficient, insufficient, rejected, or condemned," it shall be understood as if the expression were followed by the words "by the Engineer" or "to the Engineer."

- B.** The titles or headings of the sections and articles herein or referred to on the plans are intended for convenience of reference and shall not be considered as having any bearing on their interpretation.
- C.** The contract documents may reference specifications or standards that have been issued by organizations such as AASHTO, ASTM, ANSI, etc. In such instances the reference being made is to the specification or standard that is in effect four weeks prior to letting unless a specific date or year of issue is provided.

**1101.02 DEFINITIONS OF ABBREVIATIONS.**

Wherever the following abbreviations are used in these specifications or in the contract documents, they are to be construed the same as the respective expressions represented:

AA - Affirmative Action  
AAN - American Association of Nurserymen  
AAR - Association of American Railroads  
AASHTO (or AASHO) - American Association of State Highway and Transportation Officials  
ABI - Average Base Index  
ABS - Acrylonitrile-Butadiene-Styrene  
ACI - American Concrete Institute  
AGC - Associated General Contractors of America  
AIA - American Institute of Architects  
AISC - American Institute of Steel Construction  
ALS - American Lumber Standards  
ANSI - American National Standards Institute  
APA - American Plywood Association  
API - American Petroleum Institute  
APWA - American Public Works Association  
ATSSA - American Traffic Safety Services Association  
ARA - American Railway Association  
AREA - American Railway Engineering Association  
ARI - Air-Conditioning and Refrigeration Institute  
ASA - American Standards Association  
ASCE - American Society of Civil Engineers  
ASLA - American Society of Landscape Architects  
ASTM - American Society for Testing and Materials  
AWPA - American Wood Preservers Association  
AWS - American Welding Society  
AWWA - American Water Works Association  
BSC - Bituminous Seal Coat  
CFR - Code of Federal Regulations  
CLSM - Controlled Low Strength Material  
CMP - Corrugated Metal Pipe  
CPM - Critical Path Method  
CRSI - Concrete Reinforcing Steel Institute  
DBE - Disadvantaged Business Enterprise  
DFT - Dry Film Thickness  
DIP - Ductile Iron Pipe  
DNR - Department of Natural Resources  
DOT - Department of Transportation  
EEI - Edison Electric Institute  
EEO - Equal Employment Opportunity  
EPA - Environmental Protection Agency  
FHWA - Federal Highway Administration  
FR - Federal Register  
ESAL - Equivalent Single Axle Load  
FSS - Federal Specifications and Standards  
GGBFS - Ground Granulated Blast Furnace Slag  
GRI - Geosynthetic Research Institute

GSA - General Services Administration  
HDPE - High Density Polyethylene Pipe  
HMA - Hot Mix Asphalt  
IAC - Iowa Administrative Code  
IMSA - International Municipal Signal Association  
ID - Identification  
I/D - Incentive/Disincentive  
IMSA - International Municipal Signal Association  
IEEE - Institute of Electrical and Electronics Engineers  
IES - Illuminating Engineering Society  
ICEA (or IPCEA) - Insulated Cable Engineers Association  
IMSA - International Municipal Signal Association  
ITE - Institute of Transportation Engineers  
Materials I.M. - Materials Instructional Memorandum  
MSDS - Material Safety Data Sheets  
MUTCD - Manual on Uniform Traffic Control Devices  
NCHRP - National Cooperative Highway Research Program  
NEC - National Electrical Code  
NEMA - National Electrical Manufacturers Association  
NFPA - National Fire Protection Association  
NSF - National Sanitation Foundation  
OSHA - Occupational Safety and Health Administration  
PE - Polyethylene Pipe  
PCC - Portland Cement Concrete  
PLS - Pure Live Seed  
PVC - Polyvinyl Chloride Pipe  
RAP - Recycled Asphalt Pavement  
RCAP - Reinforced Concrete Arch Pipe  
RCP - Reinforced Concrete Pipe  
SAE - Society of Automotive Engineers  
SDR - Standard Dimension Ratio  
SSPC - Steel Structures Painting Council  
SUDAS - Statewide Urban Design and Specifications  
UL - Underwriters' Laboratories, Inc.  
US - United States  
USC - United States Code  
VCP - Vitrified Clay Pipe  
VE - Value Engineering  
VOC - Volatile Organic Compound

### **1101.03 DEFINITION OF TERMS.**

#### **Acceptable Work.**

Work in reasonably close conformance with the contract requirements.

#### **Addendum.**

A revision to the contract documents written and issued after the notice to bidders, and prior to the advertised time for receipt of proposals. Changes reflected in the Addendum shall govern over all other contract documents.

**Advertisement.**

The public announcement, publication, or solicitation, as required by the Contracting Authority, inviting bids for work to be performed or materials to be furnished.

**Affiliates.**

Affiliate companies that have any individual who is an officer, director, or partner in both companies, or if one or more persons or entities own or control 20% or more of the stock of both companies.

**Approval for Award.**

The acceptance by the Contracting Authority of a bid.

**Approved Equal (Equivalent).**

A product or material that, upon review of the Engineer, is determined to meet or exceed the requirements called for by the specifications. Upon approval, the item will be allowed in lieu of the specified material or product.

**Approximate Start Date.**

A calendar day shown on the proposal on which it is anticipated, at the time of letting, that conditions will be such as to permit the Contractor to commence work.

**Assignment of Contract.**

The written agreement whereby the Contractor sells, assigns, or transfers rights in the contract to any person, firm, or corporation.

**Award.**

The execution of the contract.

**Backslope.**

The sloping surface of a cut, borrow pit, or ditch of which the downward inclination is toward the traveled way.

**Bid Amount.**

The aggregate sum obtained by totaling the amounts arrived at by multiplying the number of units of each class of work, as shown in the proposal form, by the unit price specified in the proposal form for that class of work.

**Bid Bond.**

See Proposal Guaranty.

**Bidder.**

An individual, firm, corporation, or joint venture submitting a bid for the advertised work.

**Bid Item.**

See Contract Item (Pay Item).

**Board or County Board.**

The County Board of Supervisors as constituted under Chapters 39 and 331, Code of Iowa.

**Bridge.**

Any structure, including supports, erected over a depression or an obstruction, such as water, a highway, or a railroad, and having a track or passageway for carrying traffic or other moving loads and having a length measured along the center of roadway of more than 20 feet (6.1 m) between undercopings of abutments or extreme ends of openings for multiple boxes.

**Length.** The length of a bridge structure is the overall length measured along the line of survey stationing back-to-back of backwall of abutments, if present, or otherwise end to end of the bridge floor, but in no case is less than the total clear opening of the structure.

**Roadway Width.** The clear width measured at right angles to the longitudinal center line of the bridge between the bottom of curbs or guard timbers or in the case of multiple height of curbs, between the bottoms of the lower risers.

**Calendar Day.**

Every day shown on the calendar.

**Change Order.**

A written order to the Contractor, signed by the Engineer, ordering a change in the performance of work or furnishing of materials, from that originally shown by the contract documents. Change orders duly signed and executed by the Contractor constitute authorized modifications of the contract, and may be performed at contract unit prices, agreed prices, or on a force account basis, as provided elsewhere in these specifications.

**Channel.**

A natural or artificial water course.

**Chief Engineer.**

A Professional Engineer licensed in the State of Iowa and appointed by the Director of the Department of Transportation.

**Classes of Work.**

The divisions made for the purpose of measuring and paying for labor to be performed or materials to be furnished according to the methods of construction involved, as indicated by the items for which bids have been received for each specific contract.

**Commencement of Work.**

Work will be considered commenced when the Contractor's operations are started on items of work covered by the contract documents and which require inspection within the right-of-way; or when the Contractor notifies the Engineer, and the Engineer agrees, that the Contractor's equipment and personnel are available to the site, but the operations are prevented by weather or soil conditions.

**Commission.**

The State Transportation Commission as constituted under the laws of the State of Iowa (which is the party of the first part in the contracts let in behalf of the State, of which these specifications are a part).

**Commissioner.**

A member of the State Transportation Commission.

**Completion Date.**

The Date on which all work specified in the contract is completed.

**Contract (Also Contract Documents).**

The written agreement between the Contracting Authority and Contractor setting forth obligations of the parties thereunder, including but not limited to, performance of the work, furnishing of labor and materials, and basis of payment. The contract includes the following:

- Addendum,
- Contract bond,
- Contract form,
- Materials Instructional Memorandums,
- Notice to Bidders,
- Notice to Proceed,
- Plans,
- Proposal,
- Special Provisions,
- Standard Specifications, including General Supplemental Specifications,
- Developmental Specifications,
- Supplemental Specifications, and
- Any change orders and agreements which are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.

**Contract Bond.**

The bond executed by the Contractor and the Contractor's surety in favor of the party of the first part, guaranteeing the faithful performance of the obligation assumed by the contract and the payment of all debts pertaining to the work.

**Contract Item (Pay Item).**

A specifically described unit of work for which a price (either unit or lump sum) is provided in the contract.

**Contract Period (Also Contract Time).**

The number of working days allowed for completion of the contract, including authorized time extensions.

**Contract Sum.**

The aggregate sum obtained by totaling the amounts arrived at by multiplying the number of units of each class of work, as shown in the contract, by the unit price specified in the contract for that class of work.

**Contract Unit Price.**

The price bid by the Contractor for one unit of work, as defined by the specifications.

**Contracting Authority.**

The governmental body, board, commission, or officer having authority to award a contract.

**Contractor.**

The individual, firm, corporation, or joint venture contracting with the Contracting Authority for performance of prescribed work.

**Contractor's Financial Statement.**

The specified forms on which a contractor shall furnish required information as to the Contractor's ability to perform and finance the work.

**Controlling Item of Work.**

The Controlling Item of Work is the unique activity of a contract that will determine the duration of the construction period. The character of this work may change during the construction period. It is the work that could be in progress at any time that would have the greatest influence on the duration of the construction period.

**County.**

Party of the first part in the contract, let by a County Board of Supervisors, of which these specifications are a part.

**County Auditor.**

The auditor of the contracting county duly elected under Chapter 39, Code of Iowa.

**County Engineer.**

A Professional Engineer licensed in the State of Iowa and appointed by the County Board of Supervisors.

**Culvert.**

A structure not classified as a bridge or storm sewer which provides an opening under a roadway or embankment, except that such term shall not include tiles crossing the road, or intakes thereto, where such tiles are part of a tile line or system designed to aid subsurface drainage.

**Deficient Work.**

Work not in reasonably close conformance with the contract requirements, or otherwise inferior, but in the opinion of the Engineer, reasonably acceptable for its intended use and allowed to remain in place.

**Department of Transportation (the Department).**

The Department of Transportation, as defined in Chapter 307, Code of Iowa.

**Developmental Specifications.**

Additions and revisions to the standard, general supplemental, and supplemental specifications covering the development of new construction items or changes to a process. They only apply to a project when noted in the proposal form.

**Divided Highway.**

A highway with separate roadways for traffic in opposite directions.

**Drainage Ditch.**

An artificially constructed open depression, other than a road ditch, which is constructed for the purpose of carrying off surface water.

**Employee.**

Any person working on the project mentioned in the contract of which these specifications are a part, and who is under the direction or control, or receives compensation from, the Contractor or subcontractor.

**Engineer.**

For the Department, the Engineer is the Chief Engineer. For publicly owned projects, the Engineer is a Professional Engineer licensed in the State of Iowa and authorized representative of the Contracting Authority. For privately contracted projects, with improvements that will become publicly owned, the Engineer is the authorized representative of the public entity ultimately accepting ownership of the improvements. For all other projects, the Engineer is the owner's authorized representative.

The Engineer may act directly or through duly authorized representatives, acting within the scope of the duties assigned to the Engineer, or the authority given the Engineer.

**Equipment.**

All machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for proper construction and acceptable completion of the work.

**Extra Work.**

Work not provided for in the contract, as awarded, but deemed essential to the satisfactory completion of the contract within its intended scope and authorized by the Engineer.

Extra work shall not include additional materials, equipment, and labor used due to natural variations in surface and subsurface conditions, except as specifically provided for elsewhere in the contract documents.

**Foreslope.**

The sloping surface of an embankment, ditch, or borrow pit of which the downward inclination is away from the traveled way.

**General Supplemental Specifications.**

Specifications adopted by the Department's Specification Committee subsequent to the publication of this book. They contain changes to the Standard Specifications and apply to all contracts. Published in April and October each year.

**Grade Separation.**

A structure, with its approaches, which provides for highway or pedestrian traffic to pass without interruption over or under a railway, another highway, road, or street.

**Haul Road.**

A corridor of land, when so designated in the contract documents, either private or public, of which the right to use is acquired by the Contracting Authority for the

purpose of hauling equipment, materials, or machinery either as vehicles or vehicles with loads, where these vehicles or vehicles with loads exceed the provisions of Chapter 321, Code of Iowa, governing size, weight, and load. (Not to be confused with temporary Primary Road haul road.)

**Independent Contractor.**

Any person, firm, or corporation who contracts with the Contractor to perform a service for which the basis of payment is in terms of units of service rather than salary or wages.

**Inspector.**

The authorized representative of the Engineer assigned to make a detailed inspection of any or all portions of the work, or materials.

**Institutional Road Project.**

A project on the institutional road system of highways at any state institution.

**Instruction to Bidders.**

See Notice to Bidders.

**Intermediate Contract Period.**

A period of working days shown on the proposal form specifying the time of completion for a specific item or portion of work on a contract.

**Interstate Project.**

A Primary project on the Federal System of Interstate and Defense Highways. Includes projects on county and city road bridges over the Interstate.

**Item.**

See Contract Item.

**Joint Bid.**

A firm proposal submitted by two or more qualified bidders who have been authorized to bid jointly by the Contracting Authority on a specific proposal, in which case bidders will be held individually and collectively responsible for completion of the work involved in any contract resulting from such proposal.

**Joint Venture.**

The joining of two or more qualified contractors for the purpose of combining equipment, personnel, and finances in order to submit a bid on a single proposal.

**Jurisdiction.**

Political subdivision acting through its governing body or through the authorized representatives of such governing body when so authorized.

**Jurisdictional Engineer.**

See Engineer.

**Laboratory.**

The testing laboratory of the Contracting Authority or any other testing laboratory which may be designated in the contact documents.

**Late Start Date.**

A calendar day shown on the proposal form specifying the latest date on a contract that the Contractor is to commence work.

**Legal Axle Load.**

A maximum axle load of 20,000 pounds, as defined in Chapter 321, Code of Iowa.

**Liquidated Damages.**

The dollar amount, determined by the Department and set forth in the contract documents, as an estimate of the damage to the Contracting Authority or the public for delay in completion of the work.

**Lump Sum.**

The contract amount is complete payment for all work described in the contract documents and necessary to complete the work for that item. Changes in payment will be made for obvious errors or authorized additional work that was not included in the work to be bid by lump sum.

**Major Item of Work.**

Any contract item (pay item) for which the original contract amount plus authorized additions is more than 10% of the total original contract sum or \$50,000, whichever is less.

**Manhole.**

See Utility Access.

**Materials.**

Any substances specified for use in the construction of the project and its appurtenances.

**Materials Instructional Memorandum (Materials I.M.).**

This is an instruction prepared by the Office of Materials. These may identify approved sources of various qualities or types of materials, sampling, testing, and approval procedures, and conditions for acceptance and use.

**Maximum Density and Optimum Moisture Content.**

The term maximum density and optimum moisture content as applied to soil, aggregate, and similar materials shall be construed as the maximum density described in AASHTO T 99, T 134, or T 180, as specified, and the corresponding optimum moisture as defined therein. The test methods will normally be AASHTO T 99, Method C; AASHTO T 134, Method B; and AASHTO T 180, Method C, as modified by the Materials I.M.s.

**Median.**

The portion of a divided highway separating the traveled ways for traffic.

**Mobilization.**

Preparatory work and operations for all items under the contract documents, including, but not limited to, those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, buildings, and other facilities necessary for work on the projects; and for all other work or operations which must be performed or costs incurred prior to beginning

work on the various items on the project site. Mobilization may include bonding, permit, and demobilization costs.

**Need Line.**

A line or lines within the right-of-way, as shown on the plans or set by the Engineer, to define an area inside which disturbance is expected to complete work on the project and outside which permanent disturbance should be avoided.

**Notice to Bidders.**

That portion of the contract documents prepared and furnished by the Contracting Authority for the information of bidders submitting proposals, which notice specifies the provisions, requirements, and instructions pertaining to the method, manner, and time of submitting bids.

**Notice to Proceed.**

Written notice to the Contractor to proceed with the contract work including, when applicable, the date of beginning of contract time.

**Optionally Combined Proposal.**

The projects from two or more proposals combined by the Contracting Authority to allow the Contractor to bid all the projects as one contract.

**Park Road Project.**

A project on the park road system of highways and roads at any state park.

**Pavement or Paving.**

The pavement structure, or the upper surface of a pavement structure, or the materials of which the pavement structure is constructed.

**Pavement Structure.**

The combination of subbase, base course, and surface course placed on a subgrade to support the traffic load and distribute it to the roadbed.

**Plans.**

The final plan, authorized for letting, which includes approved plans, profiles, cross sections, typical cross sections, working drawings, plan notes, standard plans, and supplemental drawings, or exact reproductions thereof, including modifications, altered plans, revisions, and amendments, which show the location, character, dimensions, and details of the work to be done.

**Precast Concrete Units.**

Conventionally reinforced (not prestressed) concrete structural units, formed, cast, and cured presumably in a central casting yard and later moved and incorporated into the finished structure.

**Prestressed Concrete.**

Concrete which is subjected to compressive stresses, after hardening, by means of high strength steel tendons, for the purpose of eliminating or minimizing tensile stresses in the concrete due to applied loads. Prestressed concrete may be prefabricated in a permanent plant or at the site, or it may be designed to be cast in place. Prestressed concrete may be either pretensioned, in which case the concrete is cast to engage the steel tendons which have been prestressed between fixed

anchorage and released after the concrete has hardened, or post tensioned, in which case the steel tendons are cased in the concrete in suitable enclosures to prevent bond and are stressed by jacking and anchoring against the concrete after it has hardened.

**Primary Project.**

A project on the Primary Road System of Iowa and extensions thereof in cities and towns. Includes projects on county and city road bridges within an interchange of a Primary road with a county road or city road.

**Profile Grade.**

The trace of a vertical plane intersecting the top surface of the proposed wearing surface, usually along the longitudinal center line of the roadbed. Profile grade means either elevation or gradient of such trace, according to the context.

**Project.**

The specific section of the highway together with all appurtenances and construction to be performed under a contract. A contract may involve the work covered by one or more projects.

**Project Area.**

The right-of-way between the project limits shown in the contract documents, and additional area which is necessary for the Contractor to place traffic control devices required by the contract documents or necessary to protect the work.

**Proposal.**

The offer of a bidder, on the prescribed form, to perform the work and to furnish the labor and materials at the prices quoted.

**Proposal Form.**

The form showing the location and description of the proposed work, the approximate quantities of work to be performed or materials to be furnished, the form and amount of the required proposal guaranty, and the contract period. The proposal form will also contain a reference to any special provisions or requirements which are supplemental to the standard specifications.

**Proposal Guaranty.**

The security furnished by the bidder with the proposal for a project(s), as guaranty the bidder will execute the contract for the work if the proposal is accepted.

**Reasonably Acceptable.**

Reasonably acceptable means acceptance with price adjustment of material or finished work that is incorporated and is not within reasonable close conformity with the contract documents, but at the discretion of the Engineer, it is determined that acceptable work has been produced. This is material or work for which a determination has been made to be accepted and remain in place.

**Reasonably Close Conformity.**

Reasonably close conformity means compliance with reasonable and customary manufacturing and construction tolerances where working tolerances are not specified. Where working tolerances are specified, reasonably close conformity means compliance with such working tolerances. Without detracting from the

complete and absolute discretion of the Engineer to insist upon such working tolerances as establishing reasonably close conformity, the Engineer may accept variations beyond such tolerances as reasonably close conformity where they will not materially affect the value or utility of the work and the interests of the State.

**Resident Bidder.**

A person, corporation, partnership, or firm authorized to transact business in this State and having a place of business for transacting business within the State at which it is and has conducted business for at least 6 months prior to the first advertisement for the public improvement and, in the case of a corporation, at least 50% of the common stock or other forms of ownership is owned by residents of this State.

**Responsive Bid.**

A bid submitted by a Contractor which is determined not to be an irregular proposal as defined by Article 1102.10 and fulfills the good faith effort recruitment requirements in Article 1102.17.

**Right-of-Way.**

The land area of which the right to possession is secured or reserved by the Contracting Authority for road purposes.

**Road.**

A general term denoting a public way for vehicular travel, including the entire area within the right-of-way.

**Roadbed.**

The area of the roadway between the tops of foreslopes.

**Roadside.**

The area within the right-of-way and outside the shoulder lines of a roadbed.

**Roadway.**

That portion of the right-of-way designed or ordinarily used for vehicular traffic.

**Secondary Project (Secondary Road Construction Project).**

A project on the Secondary Road System of Iowa and extensions thereof in cities and towns.

**Shoulder.**

That portion of the road bed contiguous with the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

**Sidewalk.**

That portion of the roadway primarily constructed for the use of pedestrians.

**Skew or Skew Angle.**

The complement of the acute angle between two center lines which cross. The angular deviation of the axis of a culvert or bridge from a true right angular crossing of a road.

**Slope.**

The inclination of a line or surface expressed as a ratio of horizontal distance to vertical distance.

**Special Provisions.**

Additions and revisions to the Standard, General Supplemental, Developmental, and Supplemental Specifications covering conditions particular to an individual project. They only apply to a project when noted in the proposal form.

**Specialty Items.**

Pay items designated in the contract documents as specialty items; usually minor items requiring equipment, skills, or crafts not ordinarily associated with the major types of work covered by the contract.

**Specifications.**

The general term comprising all the written documents, provisions, and requirements to which may be added or adopted Supplemental Specifications, Developmental Specifications, or Special Provisions, all of which are necessary for the proper performance of the contract documents.

**Specified Starting Date.**

A calendar day shown on the proposal on which date commencement of work is expected.

**Speed Limit.**

Refers to the legally established speed limit before construction and not the advisory speed during construction.

**Standard Road Plans.**

A manual of detailed drawings showing standardized design features, construction methods, and approved materials for repetitive use on Interstate, Primary, and Secondary road construction.

**Standard Specifications.**

The requirements contained herein applying to all contracts, and pertaining to the method and manner of performing the work, or to the quantity and quality of the materials to be furnished under the contract.

**State.**

The State of Iowa acting through its authorized representative.

**Station (Metric Station).**

One hundred linear feet (one hundred meters).

**Street.**

See Road.

**Structures.**

All objects constructed of materials other than earth, required by the contract documents to be built, or to be removed, but not including pavement, surfacings, base courses, and subbases. Includes bridges, culverts, intakes, drop inlets, retaining

walls, cribbing, utility accesses, end walls, buildings, sewers, service pipes, subdrains, foundation drains, and other features which require engineering analysis.

**Subbase.**

The layer or layers of specified or selected material of designed thickness upon which a base course or pavement is constructed.

**Subcontractor.**

Any individual, firm, or corporation to whom the Contractor, with the written consent of the Contracting Authority, sublets any part of the contract.

**Subgrade.**

The top surface of a roadbed upon which the pavement structure and shoulders are constructed.

**Substructure.**

All of that part of the structure below the bearings of simple and continuous spans, and tops of footings of rigid frames, together with the backwalls, wingwalls, and wing protection railings.

**SUDAS Standard Specifications.**

Refers to specifications developed by the Iowa Statewide Urban Design and Specifications Program.

**Superintendent.**

The Contractor's authorized representative in responsible charge of the work.

**Superstructure.**

The entire structure except the substructure.

**Supplemental Agreement.**

Written agreement between the Contractor and Contracting Authority modifying the original contract.

**Supplemental Specifications.**

Specifications adopted subsequent to the publication of this book. They involve new construction items or changes to Standard Specifications. They only apply to a project when noted in the proposal form. Generally published in April and October each year.

**Surety.**

The corporation, partnership, or individual, other than the Contractor, executing a bond furnished by the Contractor.

**Target or Target Value.**

When a target or target value is specified, a continuous and determined effort is expected to reach and maintain that value, as a goal.

**Temporary Primary Road Haul Road.**

Any Secondary public road or city street so designated by the Department in accordance with Chapter 313, Code of Iowa.

**Temporary Structure.**

Any structure required to maintain traffic during construction of the work and which will be dismantled when the work is completed. The temporary structure shall include the earth approaches thereto.

**Traffic Control Device.**

As defined in the MUTCD.

**Traffic Control Zone.**

The distance between the first advance warning sign and the point beyond the work area where traffic is no longer affected. This does not include work more than 12 feet (3.6 m) from the outside edge of the traveled way.

**Traveled Way.**

The portion of the roadway for the movement of vehicles, exclusive of shoulders.

**Unacceptable Work (Also Defective Work).**

Work not in reasonably close conformance with the contract requirements and ordered to be removed and replaced.

**Unauthorized Work.**

Work neither contemplated by the contract documents nor authorized by the Engineer, and work done contrary to the instructions of the Engineer.

**Unit Price.**

See Contract Unit Price.

**Utility.**

Includes all privately, publicly, municipally, or co-operatively owned structures and systems for supplying water, sewer, electric lights, street lights and traffic lights, gas power, telegraph, telephone, communications, transit, pipelines, and the like.

**Utility Access.**

An inline structure to allow personnel access and maintenance of underground utilities.

**Utility Agency.**

Means and includes: 1) all franchised utilities having utility system facilities with State or local jurisdiction right-of-way, including but not limited to gas electric, telephone, cable television, and communications; 2) communications systems allowed by the State or local jurisdiction; and 3) all governmental agencies owning or operating governmental utility systems, including but not limited to water, sewer, traffic control, and communications.

**Waters of the United States.**

All waters, impoundments of waters, or tributaries of waters, including but not limited to lakes, rivers, streams, intermittent streams, mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, or natural ponds.

**Work.**

Work shall mean the furnishing of all labor, materials, equipment, and other incidentals necessary or convenient to the successful completion of the contract and the carrying out of all the duties and obligations imposed by that contract.

**Work Area.**

That portion of the project area in which construction activity is ongoing.

**Working Day.**

Any calendar day, exclusive of Saturdays, Sundays, or a recognized legal holiday, on which weather or other conditions (not under control of the Contractor) will permit construction operations to proceed for not less than 3/4 of a normal work day in the performance of a controlling item of work.

**Working Drawings.**

Stress sheets, shop drawings, erection plans, falsework plans, framework plans, cofferdam plans, bending diagrams for reinforcing steel, or any other supplementary plans or similar data which the Contractor is required to submit to the Engineer for approval.

## **Section 1102. Proposal Requirements and Conditions**

### **1102.01 COMPETENCY AND QUALIFICATION OF BIDDERS.**

- A.** Prospective bidders shall meet the Department's requirements for prequalification. To prequalify, a prospective bidder shall complete the required sections of the "Contractor's Financial - Experience - Equipment Statement" (Form 650004) and submit it to the Department. The filing of this statement does not in itself constitute qualification. A prospective bidder shall receive definite approval of this statement to be placed on the qualified list before the bidder's proposals will be considered. The statement shall be filed with the Contracting Authority at least 5 calendar days before the date on which proposals are to be received.
- B.** In order to continuously remain on the qualified list, a prospective bidder must file Form 650004 with the Department for approval once each year and at such other times as the Department may request. Unless otherwise notified, the previously approved statement will expire 18 calendar months from the date of that statement. The prospective bidder will be dropped from the qualified list if a new statement has not been filed and approved by the expiration date.
- C.** The Contracting Authority will compute the Contractor's maximum prequalification amount based on the following prequalification formula:

$$\text{MAXPREQ} = [\text{CURRENT} + \text{NONCURRENT} + \text{LL}] \times \text{F}$$

Where:

MAXPREQ = maximum prequalification amount

CURRENT = current assets minus current liabilities

NONCURRENT = (non-current assets minus non-current liabilities)/2 if > 0

NONCURRENT = (non-current assets minus non-current liabilities) if < 0

LL = approved authorization to loan letter

F = experience factor

**D. The Contracting Authority will qualify Contractors into three categories:**

**1. Individually Prepared Statement.**

- a. An Individually Prepared Statement is a "Contractor's Financial - Experience - Equipment Statement" that has been completed by the prospective bidder. If the statement has been compiled by a CPA, but does not contain a CPA review or audit of the financial portion of the statement, it is still considered an Individually Prepared Statement.
- b. When an Individually Prepared Statement is submitted to the Department, an experience factor (F) of 1.0 will be used in the prequalification formula. Regardless of the formula calculations, however, the maximum prequalification amount can not exceed \$100,000.

**2. CPA Reviewed Statement.**

- a. A CPA Reviewed Statement is a "Contractor's Financial - Experience - Equipment Statement" that includes a current CPA review of the financial portion of the statement. The review must be completed by a CPA who is either registered to practice in Iowa or registered in another state having reciprocal arrangements with Iowa.
- b. When a CPA Reviewed Statement is submitted to the Department, an experience factor (F) ranging from 0.0 to 10.0, depending on the prospective bidder's past performance with projects let by the Department, will be used in the prequalification formula. A prospective bidder, who has been qualified to submit proposals with this type of statement, shall be limited to individual proposal sizes that do not exceed the lesser of \$600,000 or the maximum prequalification amount minus the bidder's amount of uncompleted work currently under contract. Any combination of proposals, however, may total more than \$600,000 - as long as that total does not exceed the maximum prequalification amount minus the currently uncompleted work.

**3. CPA Audited Statement.**

- a. A CPA Audited Statement is a "Contractor's Financial - Experience - Equipment Statement" that includes a current CPA audit of the financial portion of the statement. The audit must be completed by a CPA who is either registered to practice in Iowa or registered in another state having reciprocal arrangements with Iowa.
- b. When a CPA Audited Statement is submitted to the Department, an experience factor (F) ranging from 0.0 to 10.0, depending on the

prospective bidder's past performance with projects let by the Department, will be used in the prequalification formula. A prospective bidder, who has been qualified to submit proposals with this type of statement, shall be limited to work that does not exceed the maximum prequalification amount minus the bidder's amount of uncompleted work currently under contract. However, a prospective bidder shall be considered to have an "Unlimited" bidding capacity with the Department if they were awarded over \$50 million of work (including that from other Contracting Authorities) during their past fiscal year and have a prequalification limit, by the formula, over \$100 million.

- E. A prospective bidder must complete contract work in the following categories in excess of the quantities listed below before qualification to submit proposals or receive awards for projects involving larger quantities than those listed. The contract work may be done as a contractor or subcontractor. All such completed contract work will be combined into one total for each category to determine the bidder's qualifications.

PCC Pavement	Square Yards (Square Meters) 100,000 (100,000)
Grading	Cubic Yards (Cubic Meters) 500,000 (400,000)
Bituminous Pavement	Tons (Megagrams) 50,000 (50,000)
Bridges	\$200,000
Culverts	\$100,000
Other classes of work	No Fixed Maximum

- F. In all cases a bidder will be restricted to a specific dollar volume of contracts within reasonable limits of the bidder's ability to properly finance, equip, and perform the work within the specified contract period.
- G. The necessary forms and instructions for furnishing the "Contractor's Financial - Experience - Equipment Statement" will be supplied by the Contracting Authority upon application.
- H. For proposals involving only the furnishing of materials, granular surfacing, lighting, buildings, asbestos removal, salvage and removal, wells, traffic signals, pavement marking, or mowing, the following shall apply in lieu of the above requirements of this article:

Bidders submitting proposals must be recognized contractors engaged in the class of work provided for in the contract documents, and must possess all necessary licenses, certificates and resources to complete the work. Before the contract is awarded to a bidder, the bidder may be

required to furnish evidence to the satisfaction of the Contracting Authority of the bidder's ability to perform and complete the contract.

#### **1102.02 REDUCTION IN BIDDER QUALIFICATION RESTRICTIONS.**

- A.** The requirements and conditions for bidder qualification as contained in Article 1102.01 may be reduced by the Contracting Authority either for contractors who have well established performance records in other fields or for contractors having adequate financial responsibility and experienced supervisory personnel available for the work that is under consideration or for both the above reasons.
- B.** Likewise, the requirements may be modified by the Contracting Authority for newly formed or reorganized firms or corporations whose basic organization is composed of individuals who are veterans of the construction industry, with proven records of satisfactory performance in the field in which they have elected to bid, provided, however, that they have adequate financial responsibility, equipment, and available experienced supervisory personnel.

#### **1102.03 IMPOSITION OF INCREASE IN BIDDER QUALIFICATION REQUIREMENTS, SUSPENSION, AND DISQUALIFICATION.**

- A.** The requirements and conditions for bidder qualification in Article 1102.01 may be imposed, reimposed, or increased, or a contractor may be suspended or disqualified.
  - 1.** The requirements and conditions for bidder qualification of a contractor may be imposed, reimposed, or increased if or when:
    - a.** The Contractor seriously delays commencement or completion of any work within the contract period or any extension thereof under circumstances that would normally give rise to a right in the Contracting Authority for liquidated damages or declaration of default, or
    - b.** The Contractor does any act or omits doing or performing any act which, in the judgment of the Contracts Engineer, evidences a material change in the Contractor's financial responsibility or work capability where, in the judgment of the Contracts Engineer, the same will materially prejudice the Contractor's ability to successfully prosecute such public improvement contracts, or the Contractor knowingly submits false information on the "Contractor's Financial - Experience - Equipment Statement" (Form 650004) or "Certification of Uncompleted Work Under Contract" (Form 650022) or other information concerning prequalification, or
    - c.** The Contractor takes or fails to take any action which the Contracts Engineer deems to warrant an imposition of increase in bidder qualification requirements.
  - 2.** A contractor may be suspended from bidder qualification if or when:
    - a.** The Contractor continually fails or refuses to remove and replace materials or work found by the Engineer not to be in reasonably close conformity with the contract documents or to correct such

- material or work so as to cause such materials or finished product to be reasonably acceptable work, or
- b.** The Contractor continually and, in the judgment of the Contracts Engineer, without good cause therefor, fails to carry on the work in an acceptable manner or refuses to comply with a written order of the Engineer within a reasonable time, or
  - c.** The Contractor fails to perform with its own organization the work as required in Article 1108.01, or otherwise assigns or disposes of work or the contract or any part thereof without approval of the Contracting Authority, or
  - d.** The Contractor forfeits a proposal guaranty and fails to enter into the contract upon an offer of award by the Contracting Authority in response to a prior advertisement for bids for the same project or any combination of projects involving the project for which award is currently being considered, or
  - e.** The Contractor fails to comply with Equal Employment Opportunity/Affirmative Action requirements of the contract, or
  - f.** The Contractor fails to pay the subcontractor progress payments and retainage as required by Article 1109.05, or
  - g.** The Contractor continually takes actions, or continually fails to take actions, which present safety concerns for the Contracting Authority or the general public, or
  - h.** The Contracts Engineer deems a suspension is appropriate for reasons stated in Paragraph 1 above.

A suspension is intended to be for an indefinite period of time or, in the case of Paragraph d, for a specific project. A suspension shall continue until the Contractor resolves, to the satisfaction of the Contracts Engineer, the problem for which the suspension was made.

- 3.** A contractor may be disqualified from bidder qualification if or when:
  - a.** The Contractor is currently debarred by some other state or Federal agency, or
  - b.** The Contractor subcontracts, employs, or otherwise uses services, for work of the Contracting Authority, of one who is debarred by the Contracting Authority or disqualified according to Article 1102.03, A, 3, a, except to fulfill agreements for work on existing contracts, or
  - c.** The Contractor is convicted of or pleads guilty or nolo contendere (no contest) to a charge of engaging in any conspiracy, combination, or other unlawful act in restraint of trade or of similar charges in any Federal court or a court of this or any other state, or
  - d.** The Contractor has offered or given gifts or gratuities to employees of the Contracting Authority in violation of State law or has had as an employee a person who was at that time also an employee of the Contracting Authority, or
  - e.** The Contractor has falsified documents or certifications, or has knowingly provided false information to the Department or the Contracting Authority, or
  - f.** The Contracts Engineer deems a disqualification is appropriate for reasons stated in Paragraph 1 or 2 above.

- B. A disqualification is intended to be for a specified time. A disqualification will not exceed 36 months.
- C. The Contracts Engineer will issue a written notice of any intent to disqualify or suspend a contractor, except when suspended for a specific project according to Article 1102.03, A, 2, d.
- D. Should the Contractor believe that the increase in bidder qualification requirements, intended suspension, or intended disqualification is based on false, biased, or incomplete information or that the increase or intended action is severe or unwarranted, the Contractor may make a written request to the Contracts Engineer for an opportunity to be heard in a contested case pursuant to Chapter 17A, Code of Iowa, and 761 IAC, Ch. 13. If notice is given, the written request for a hearing shall be filed with the Contracts Engineer within 10 calendar days of receipt of the notice of intended agency action. If the basis of the intended disqualification is a criminal violation which is reasonably related to bidding and contracting procedures, the intended disqualification may be applied to the organization, including a person, firm, association, partnership, or corporation, to an affiliate, officer, representative, or employee thereof, and to any other such organization in which the organization or affiliate or the officer, representative, or employee has an interest as either officer or owner.
- E. When a notice is given or when any action is contested, the Contracts Engineer will issue a notice of the final action taken.

#### **1102.04 CONTENTS OF PROPOSAL FORMS.**

- A. Bidders will be furnished with proposal forms showing the location and description of the proposed work, the approximate quantities of work to be performed or materials to be furnished, the form and amount of the required proposal guaranty, and the contract period. The proposal form will also contain a reference to any special provisions or requirements which are supplemental to the standard specifications.
- B. The statement, "By virtue of statutory authority preference will be given to products and provisions grown and coal produced within the State of Iowa where applicable," which is on the bidding document shall not be applicable to contracts involving Federal-aid participation in construction.
- C. If a predetermined wage is shown on the proposal form, it will apply to all labor used on the project. This will include labor used in the production of aggregate, HMA, and ready mix PCC which is not produced in a commercial plant. The rulings of the U.S. Department of Labor will be used in determining what is a "roadside plant" where the predetermined wage will apply and a commercial plant where the predetermined wage will not apply.
- D. The following bidding and letting regulations shall apply to all proposals for which the Department receives bids (includes projects on Interstate, Primary, urban, park and institutional roads, farm-to-market, and local county systems).

1. Contractors will be permitted to bid on proposals amounting in total to three times their adjusted prequalification rating (prequalification rating minus uncompleted contracts).

The adjusted prequalification rating will be determined at each letting, taking into consideration the amount of work under contract, equipment and personnel available, and construction periods, etc.

Approvals for award of contracts will not exceed any contractor's actual adjusted prequalification rating.

2. Contracts will be recommended for approval for award on the basis of the greatest total savings in the public interest. The determination of which proposals to be awarded will be based on the approval by the Department and even if the selected bids are later rejected by other contracting agencies, other projects will not be substituted.
3. Contractors will not be permitted to tie proposals or to designate on the bidding proposal the limit of the amount they will accept. Contractors may voluntarily lower their prequalification rating provided written request is on file at the Office of Contracts, Iowa Department of Transportation, Ames, Iowa, by noon of the working day prior to the letting.

#### **1102.05 ISSUANCE OF PROPOSALS.**

Requests for proposal forms to bid construction and maintenance contracts must be filed by noon of the working day prior to the letting. These requests should be on the request form provided by the Department. Unless otherwise specified, proposal forms will be furnished to qualified bidders who have filed properly completed "Certification of Uncompleted Work Under Contract" forms (Form 650022) with their request. Any contractor knowingly submitting any false information required by Form 650022 may be suspended from bidding as provided in Article 1102.03.

#### **1102.06 NONSEGREGATED FACILITIES NOTICE TO PROSPECTIVE FEDERAL-AID SUBCONTRACTORS AND MATERIAL SUPPLIERS.**

Certain requirements concerning nonsegregated facilities may be applicable to prospective subcontractors and material suppliers for Federal-aid projects. These are in the contract documents.

#### **1102.07 ESTIMATE OF QUANTITIES.**

- A. The Proposal form will contain a Schedule of Prices that lists the items of work on the project(s). The Schedule of Prices, which shall be completed and submitted by each bidder, will be used for comparing bids for award of the contract.
- B. Contract items listed in the Schedule of Prices will be either Unit Price or Lump Sum.
- C. The contract documents may also include a list of items that are noted as incidental. Incidental work is normally minor in scope and is clearly described in the contract documents. The cost to complete incidental items

shall be included in the contract unit price bid for the item to which they are listed as incidental. Additional payment will not be made for incidental items unless there are obvious errors or changes to the quantity of the incidental item. An item of work, normally paid for separately, and not listed in the contract documents as incidental, will be paid for in accordance with Article 1109.03, B.

#### **1102.08 EXAMINATION OF PLANS, PROPOSAL FORM, SPECIFICATIONS, AND SITE OF WORK.**

It is the responsibility of the bidder to examine the plans, proposal form, Specifications, Supplemental Specifications, Developmental Specifications, Special Provisions, the site of the work, and the state of the work of other contractors on the project to assure that all requirements of the proposal form and the plans are fully understood. It is the bidder's responsibility to understand the nature of the work and all reasonably ascertainable conditions which may affect performance under the contract. The Contracting Authority does not warrant, implicitly or explicitly, the nature of the work, the conditions that will be encountered by the bidder, or the adequacy of the contract documents for the Contractor to perform the work.

#### **1102.09 PREPARATION OF PROPOSALS.**

- A.** Only contractors who have been authorized to bid a proposal may submit a bid for a contract. For bids submitted to the Department that exceed \$600,000, the bidder shall use subparagraph 2 or subparagraph 3 below. The Department may waive this requirement for unique or isolated situations.
  - 1.** Submit the signed, original Bidding Document furnished by the Contracting Authority with a Schedule of Prices from the Estimating Proposal.
  - 2.** Submit the signed, original Bidding Document furnished by the Contracting Authority with the computer printout and diskette of the Schedule of Prices from the bidding software furnished by the Department.
  - 3.** Submit an electronic bid with digital signature using the bidding software furnished by the Department and the electronic bid submittal procedures of the Department.
- B.** The bidder shall be familiar with the requirements of the applicable specifications. The bidder shall specify a unit price in figures of dollars and cents for all pay items, the extensions for the respective unit prices and quantities in figures in the column provided for the purpose, and the total amount of the proposal obtained by adding the amounts of the several items. All the unit price figures shall be in ink, typed, or computer printed. If there is a discrepancy between the unit bid prices, extensions, or total amount of bid, the unit prices shall govern. The bidder shall not alter the quantity, unit price, or the extension which has been provided for items which have been predetermined by the Contracting Authority.
- C.** If the proposal is made by a partnership or corporation, the name of the partnership or corporation, its agent, and its principal place of business shall

be shown. The proposal shall be signed by an authorized agent of the partnership or corporation.

- D.** If the proposal is made on the basis of a joint bid, the proposal shall be signed by each of the joint bidders, unless the firms submitting the joint venture have a written request on file with the Department signed by each of the bidders which states the individual(s) who are authorized to sign the bidding documents for the joint venture.
- E.** By signing and submitting the proposal, the bidder:

  - 1.** Acknowledges the bidding requirements included in the bidding documents,
  - 2.** Agrees to perform all work that is necessary to complete the proposed work in the time specified. Work not covered by proposal will be paid for according to Article 1109.03,
  - 3.** Certifies compliance with the provision of the Code of Iowa listed in the bidding documents,
  - 4.** Gives an unsworn declaration on behalf of each person, firm, association, partnership, or corporation submitting a proposal, certifying that such person, firm, association, partnership, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract, and is not under debarment currently by the Federal government for a criminal violation which is reasonably related to bidding and contracting procedures,
  - 5.** For Federal-aid contracts, certifies acknowledgment of the limitations of lobby activities shown in the bidding documents, and
  - 6.** For Federal-aid contracts, certifies the bidder does not maintain segregated facilities.
- F.** Cooperation and coordination will be required of all contractors and other agencies authorized to do work in the project area.
- G.** The attention of the bidder, for the work covered by a proposal and referred to as this work, is directed to the fact that contracts for work other than the work covered in this proposal may have been awarded, are being advertised for letting on the same date as this work, or may be awarded in the future.
- H.** Completion of work covered by this proposal may be contingent upon certain work covered by other contracts being performed on the project in advance of this work; likewise, completion of work covered by other contracts may be dependent upon completion of work covered by this proposal.
- I.** The proposal will list types of work involving other contracts anticipated to be let on the same letting date or sometime within the contract period anticipated for this work. The contract documents will also list other

governmental agencies, railroads, utilities, or other parties who will have work with which it is known that this work must be coordinated.

- J. The bidder is expected to become familiar with work already in progress or previously let on this project, the contract periods, the progress being made, and any other conditions regarding that work which may affect the bid or the bidder's performance under this contract.
- K. The bidder on this work acknowledges these facts and agrees that it is in the public interest to have the work of certain contracts and agencies performed concurrently rather than consecutively. The bidder further agrees to cooperate and coordinate the work with that of other contractors or agencies to the mutual interest of all parties doing work in the project area, whether by contract with the State, County, or City or necessary work being done by governmental agency or utility force.
- L. By the submission of a bid on this work, the bidder acknowledges and agrees that investigation and inquiry has been made regarding the contracts for work with which this work must be coordinated.
- M. In the event disputes arise between contractors or other agencies, or both, doing work on the project as to their mutual rights or obligations, the Contracting Authority or its authorized representative will, when requested to do so or the Contracting Authority's own motion, act as referee and define the rights of all interested parties with regard to the conduct of the work, which decision shall be final as provided in Article 1105.01.
- N. If a prospective bidder, for a proposal for which the Department is accepting bids, is in doubt as to the true meaning of any part of the contract documents, the bidder may submit to the Contracts Engineer a request for additional information, explanations, or interpretations. Interpretations may be in the form of an addendum to the contract documents. The Contracting Authority will not be responsible for any information, explanation, or interpretation from any other source.

#### **1102.10 IRREGULAR PROPOSALS.**

Proposals will be considered irregular and may be rejected for any unauthorized changes in the proposal form or for any of the following reasons:

- A. If on a form other than that furnished by the Contracting Authority, or if the form is altered or any part thereof is detached,
- B. If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning,
- C. If the bidder adds any provisions reserving the right to accept or reject an award because of being low bidder on another proposal in the same letting,
- D. If the bidder adds any provisions reserving the right to accept or reject an award or to enter into contract pursuant to an award,

- E. If a bid on one proposal is tied to a bid on any other proposal, except as specifically authorized on the proposal form by the Contracting Authority,
- F. If the proposal does not contain a unit price for each pay item listed, except in the case of authorized alternate pay items.

#### **1102.11 PROPOSAL GUARANTY.**

- A. Each proposal shall be supported by a proposal guaranty in the form and amount prescribed in the proposal. Bids not so supported will not be read.
- B. The proposal guaranty shall be in the form of a certified check or credit union certified share draft, cashier's check, money order, or bank draft drawn on a solvent bank or credit union. Certified checks or credit union certified share drafts shall bear an endorsement signed by a responsible official of such bank or credit union as to the amount certified. Cashier's checks, money orders, or bank drafts shall be made payable either to the Contracting Authority or to the bidder and, where made payable to the bidder, shall contain an unqualified endorsement to the Contracting Authority signed by the bidder or the bidder's authorized agent. Certified checks and credit union share drafts shall be certified, or the cashier's check shall be drawn and endorsed, in an amount not less than prescribed in the proposal.
- C. A "Contractor's Bid Bond" (Form 650001) may be used for the proposal guaranty in lieu of that specified above. Bid bonds will be declared invalid and bid proposals will not be considered if any of the following items are omitted or incorrect:
  - Date of Letting
  - Bid Order Number
  - Name of Contractor
  - Original Signature of Contractor: In case of joint venture bid, all contractors must sign.
  - Name of the Surety Company
  - Original Signature of Surety (if Surety's limitation is less than the amount of the bid bond, a certificate of reinsurance must be attached).
- D. A Contractor's Annual Bid Bond (Form 650043) may also be used for the proposal guaranty in lieu of that specified above. The Annual Bid Bond shall contain the following items:
  - Name of Contractor
  - Original signature of the Contractor
  - Date of signature
  - Name of Surety Company
  - Original signature of the Surety

#### **1102.12 FILING OF PROPOSAL.**

- A. The proposal, proposal guaranty, and other supporting documents for each proposal shall be filed in an envelope, which is marked to indicate its contents. All proposals shall be filed with the Contracting Authority at the place designated in the notice to bidders, prior to the time advertised for

opening of bids. Proposals received after the time of opening bids will be returned to the bidder.

- B.** The Contracting Authority may take bids on the same project as an individual proposal or part of an Optionally Combined Proposal. When an Optionally Combined Proposal is designated, the consideration for award of contracts will be based on which of the following gives the lowest total cost:
  - 1. The sum of the lowest responsible bid on each of the individual proposals.
  - 2. The lowest responsible bid on the Optionally Combined Proposal.

### **1102.13 WITHDRAWAL OF PROPOSAL.**

The bidder will be permitted to withdraw their proposal under one of the following three conditions:

- A.** The bidder may withdraw a proposal unopened if such a request is made in writing and received at the Department prior to the time specified in the advertisement for receiving bids. A proposal so withdrawn may be resubmitted as long as it is resubmitted prior to the deadline for receipt of bids.
- B.** If, after bids are open, the low bidder should claim a serious error in the preparation of the bid, and can support such a claim with evidence satisfactory to the Department, the bidder may be permitted to withdraw the bid and the bid guarantee may be returned. In such an event, action on the remaining bids will be considered as if the withdrawn bid had not been received. Under no circumstances will the bidder be permitted to alter the bid after the bids have been opened.

The Department will keep the bidder's proposal guarantee unless the bidder satisfies all four of the following conditions:

- 1. The mistake must be a clerical mistake as opposed to a mistake involving poor judgment concerning a construction process. The bidder must be able to produce bid preparation documentation to show how the clerical error occurred.
- 2. The bidder must immediately notify the Department as soon as the error is observed.
- 3. The scope of the mistake must be significant. The size of the mistake when compared to the overall project must be significant enough to cause major financial difficulties if the bidder is forced to complete the project at the price quoted.
- 4. The Department should not be placed in a worse position than if the bid had never been submitted.

- C. The bidder may withdraw their bid from consideration if a contract has not been offered them within 30 calendar days after the letting and the bidder has not requested approval for award be deferred.

#### **1102.14 PUBLIC OPENING OF PROPOSALS.**

Proposals will be publicly opened and read at the time and place stipulated in the notice to bidders.

#### **1102.15 FOREIGN CORPORATIONS.**

- A. Before entering into a contract involving construction or maintenance work, corporations organized under the laws of any other state shall file with the Contracting Authority a certificate from the Secretary of State of the State of Iowa showing that they have complied with all of the provisions of Chapter 490, Code of Iowa, governing foreign corporations. For contracts involving only the furnishing of materials, the foregoing requirement does not apply.
- B. When a contract not involving Federal-aid participation for a public improvement is to be awarded to the lowest responsible bidder, a resident bidder shall be allowed a preference as against a nonresident bidder from a state or foreign country which gives or requires a preference to bidders from that state or foreign country. The preference is equal to the preference given or required by the state or foreign country in which the nonresident bidder is a resident.
- C. If another state or foreign country has a more stringent definition of a resident bidder, the more stringent definition is applicable as to bidders from that state or foreign country.
- D. Any joint venture that includes a nonresident bidder will be considered nonresident, and the preference rule will be used.

#### **1102.16 INCOME TAX DEDUCTION ON NONRESIDENT CONTRACTORS.**

Each nonresident person or firm doing business as an individual and each nonresident co-partnership will be required, as precedent to receiving an award, to file a certificate issued by the State Tax Commission, as provided in Section 422.17, Code of Iowa, releasing the Contracting Authority from withholding any and all sums required by the provisions of Section 422.17, Code of Iowa.

#### **1102.17 DISADVANTAGED BUSINESS ENTERPRISES.**

##### **A. General.**

- 1. All contractors shall pursue affirmative action requirements to encourage and increase participation of disadvantaged individuals in business enterprises in all Federal-aid projects let by the Department, as set forth in this specification which is imposed pursuant to 49 CFR Part 26 Subpart A through F and Public Law 105-178, 112 Stat. 107 which supersedes all existing minority business enterprise regulations, orders, circulars, and administrative requirements concerning financial assistance programs that the United States Department of Transportation has issued.

2. The requirements set forth in this specification shall constitute the specific affirmative action requirements for project activities under this contract insofar as DBEs are concerned.

**B. Disadvantaged Business Enterprise Policy.**

The Contractor shall accept as operating policy and include in all subcontract agreements the following statement which is designed to promote full participation of DBEs as suppliers and subcontractors through a continuous, positive result-oriented program on contracts let by the Department:

"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 Department assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in termination of this contract or such other remedy as the Contracting Authority deems appropriate."

**C. Contractor's Affirmative Action Responsibilities.**

The Contractor shall designate a responsible person or company official to serve as its DBE Liaison Officer. The DBE Liaison Officer shall:

1. Have the necessary statistics, funding, authority, and responsibility to carry out and enforce the intent of the firm's DBE policy and shall be responsible for developing, managing, and implementing the program on a day-to-day basis.
2. Use the current Directory of Certified DBEs to identify potential material suppliers and contractors.
3. Make every reasonable effort to involve DBEs in the performance of contracts, as suppliers and subcontractors, by soliciting quotations from the DBEs and incorporating them into the firm's bid.
4. Advise the Contracts Engineer of any known DBE not included in the current Directory of Certified DBEs.
5. Make every reasonable effort, at least 2 weeks prior to the time prices and quotations are to be submitted, to establish systematic written and/or oral contact with those DBEs that have been determined to have necessary potentials and capabilities to furnish needed materials and perform necessary work to be subcontracted.
6. Provide or arrange to assist certified DBEs with obtaining necessary bonding, analyzing plans and specifications, planning and managing work, and by providing other technical assistance.
7. Maintain complete records of negotiations with DBEs to reach agreeable prices, quotations, and work schedules.

8. Ensure that regularly scheduled progress payments are made to DBEs as required by the Iowa Code and the Standard Specifications.
9. Report to the Department all suspected instances of firms fraudulently claiming to be DBEs.

**D. Counting DBE Participation Toward Meeting Goals.**

1. The Contractor may count toward the goals only expenditures to DBEs that perform a commercially useful function towards the completion of a contract, including those functions as a subcontractor. Work performed by a DBE firm in a particular transaction may be counted toward the goal only if the Department determines that it involves a commercially useful function. The work performed by the DBE firm shall be necessary and useful to the completion of the contract, and consistent with normal highway construction industry practices in Iowa.
2. The bidder may count the following DBE expenditures towards the DBE commitment:
  - a. **Projects where the DBE is the Prime Contractor** - The portions of the contract to be completed by certified DBE firms will be counted toward meeting the goal. Items of the contract subcontracted to non-DBE firms will not be counted in the commitment.
  - b. **Portions of a bid from a Joint Venture** - A bid from a joint venture, between a DBE and non-DBE Contractor shall include a "Statement of DBE Commitments" (Form 102115), which is included in the bidding documents and in the computer software provided by the Department, listing the dollar value of the contract which will be completed by the DBE partner.
  - c. **DBE Subcontractors** - The DBE subcontractor shall assume actual and contractual responsibility for provision of materials and supplies, subcontracted work, or other commercially useful functions of the items of work subcontracted to them. Cost of materials purchased from or the cost of equipment leased from the Contractor will not count toward the project DBE commitment.
  - d. **Manufacturers** - The Contractor may count toward the DBE commitment 100% of its expenditures for materials and supplies required under a contract and obtained from a DBE manufacturer only if the DBE firm produces and supplies goods manufactured from raw materials or substantially alters them before resale.
  - e. **Regular Dealers (e.g. Material Suppliers)** - The Contractor may count toward the DBE goal 60% of its expenditures for materials and supplies required under a contract and obtained from a DBE regular dealer only if the DBE firm performs a commercially useful function in the supply process. For purposes of this section, a regular dealer is a firm that owns; operates; or maintains a store, warehouse, or other establishment in which materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. To be a regular dealer, the firm shall engage in, as its principal business and in its own name, the purchase and sale of

the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock if it owns or operates the distribution equipment. If the DBE supplier does not own the distribution equipment, an acceptable lease containing the terms of the agreement shall be available. The Department may request a copy of this lease.

- f. **Brokers and Packagers** - Brokers and packagers will not be regarded as regular dealers within the meaning of this section. Only the cost of the service performed may be used towards meeting the DBE commitment.
- g. **Transportation or Hauling of Materials** - If a DBE trucking company picks up a product from a manufacturer or regular dealer and delivers the product to the Contractor, the commercially useful function performed is not that of a supplier, but that of a transporter of goods. Unless the DBE company is itself the manufacturer or a regular dealer in the product, credit only will be allowed for the cost of the transportation service. For transportation of materials by truck to be used toward meeting the DBE commitment, the following shall apply:
  - 1) The DBE shall be responsible for management and supervision of the entire trucking operation that is to count toward the commitment. The DBE shall maintain strict records to verify the amount of hauling done by each trucker. These records shall be available to the Engineer, upon request.
  - 2) The Office of Contracts will maintain a truck roster for each DBE that performs trucking. Each truck on the truck roster shall be either owned by the DBE or controlled by the DBE under a lease. Trucks that are leased shall be from a firm that is in the commercial leasing business; the owner of the commercial leasing business can not be a heavy-highway contractor. The DBE firm shall make available to the Department the lease agreement if requested.
  - 3) To meet the DBE commitment, the following conditions shall be used:
    - a) At least one fully licensed, insured, and operational truck, listed on the truck roster under the DBE trucking company shown on the Form 102115, shall be hauling on the project at all times. The Contractor will receive credit for the fee paid to the DBE for these trucks.
    - b) Any truck on the truck roster of another DBE may be used. There is no limitation to the number of these trucks that can be used. The Contractor will receive credit for the fee paid to the DBE for these trucks.
    - c) A DBE trucker may also use trucks from a non-DBE firm, including an owner operator. The Contractor will receive credit toward the DBE commitment only for the fee or commission retained by the DBE trucker. The Contractor will not receive credit for the total amount paid for the truck because the DBE was a lessee rather than the actual provider of transportation services.

- h. Other Commercially Useful Functions** - The fees paid to certified DBE firms which is necessary for the completion of the contract and commonplace outside of the DBE program may be counted towards the commitment.

Interpretations by the Department regarding participation of DBEs will be in accordance with 49 CFR, Part 26 Public Law 105-178, 112 Stat.107.

**E. Contract Award Procedures.**

The proposal will specify if the proposed contract has an established DBE goal or has no established DBE goal. The established DBE goal will be shown on the proposal as a percent of the total amount bid. The bidder may only use work on the federal aid projects on the proposal to achieve the DBE goal. The proposal may also designate the items of the federal aid project that are over utilized by DBE firms and can not be used for DBE commitments.

**1. Bidder's Responsibility.**

It is the bidder's responsibility to determine the level of professional competence and financial responsibility of any proposed DBE subcontractor. The bidder shall ascertain that the proposed DBE subcontractor has suitable experience and equipment to perform a commercially useful function for work that is common industry practice in the Iowa highway construction industry. Subcontractor expenditures, which may be counted towards the DBE commitment, will include DBE trucking, purchase of materials from a DBE manufacturer or supplier, or off-site services provided by a certified DBE firm.

**2. Proposals with Established Project DBE Goals.**

- a. For proposals with established project goals the bidder will be required to complete Form 102115.
- b. The bidder shall list the following information on Form 102115 that is submitted with their bid:
  - 1) Certified DBE firms contacted,
  - 2) Date that each DBE firm was first contacted concerning quoting on the proposal to be bid,
  - 3) Whether each DBE firm submitted a quote on the proposal to be bid,
  - 4) If the DBE firm is being used as part of the bidder's DBE commitment,
  - 5) If used as part of the bidder's DBE commitment, the work items on the contract for which the DBE will be used,
  - 6) If used as part of the bidder's DBE commitment, the "Amount To DBE" which has been committed to each DBE firm which will be used on the contract,
  - 7) If the DBE firm is being used as a supplier (in which case, only 60% of the dollars paid to the DBE firm will count toward the DBE commitment), and
  - 8) The "DBE Commitment" of each DBE firm which will be counted towards the total DBE commitment for the contract.

- c. In cases where the required information is included on the form, but where discrepancies occur, the Office of Contracts will make the following calculations to determine the Contractor's DBE commitment. The DBE dollar commitment will be the sum of the amounts listed in the "Amount to DBE" column, adjusted for suppliers as provided in the specifications. The percent of DBE participation will be the DBE dollar commitment as determined above, divided by the total contract amount as defined by Article 1102.09. Each bidder's DBE participation commitment will be calculated to the nearest 0.1%. If two or more projects are combined on one proposal, the DBE commitment will be calculated using the sum of the DBE dollar commitments and the sum of the project totals.
- d. The completed form shall be filled out in ink or be computer generated and submitted with the bidding documents. Failure to attach this completed form or submitting incomplete forms will cause the bid to be rejected as irregular, in accordance with Article 1102.10. Only DBE firms listed in the Directory for the current letting may be used.

### 3. Bidder Selection.

- a. The successful bidder will be selected on the basis of having submitted the lowest responsive bid. Bidders shall make a Good Faith Effort to achieve the DBE goal in order to be responsive. Contractors who meet or exceed the proposed contract goal will be assumed to have made Good Faith Effort to utilize DBE firms. DBE firms who bid as prime contractors will be considered to have met the goal.
- b. The Department's process used to judge the Good Faith Effort of a bidder who has not met the established DBE goal is as follows:
  - 1) **80% of the Goal.**  
A bidder who has achieved 80% of the established goal will be assumed to have made Good Faith Effort to achieve the goal.
  - 2) **80% of the Average Commitment.**  
The Department has established the following objective measurement of Good Faith Effort. Good Faith Effort will be determined by calculating 80% of the average of the percentages of the goal and the DBE commitments submitted by all bidders satisfying Article 1103.01, and comparing the percent of DBE commitment of each bidder to that percentage average. The following example shows how the Department will compute the average DBE participation:
    - a) Only that amount of a bidder's DBE commitment that does not exceed the established goal will be used.
    - b) The amount of the goal will be used as the DBE commitment amount from DBE bidders who are bidding the project as the prime contractor.
    - c) The commitments to DBE firms who are affiliates of the bidder will not be included in the calculation.
    - d) The project DBE Goal will be included in the computation.  
Example:  
80% of the Average Good Faith Effort calculation

Proposal Requirements and Conditions	1102.17
Project Proposal has a 10% Goal for DBE participation	= 10.0%
Contractor "A" submits a commitment of 11.8%	= 10.0%
Contractor "B" submits a commitment of 7.0%	= 7.0%
Contractor "C" submits a commitment of 11.4% (of which 4.0% was committed to a DBE affiliate)	= 7.4%
Contractor "D" submits a commitment of 3.6%	= 3.6%
Contractor "E" is a DBE	= 10.0%
Sum of Commitments	= 48.0%
Average DBE Commitment	= 48.0 / 6 = 8.0%
80% of the Average Commitment = 80% of 8.0	= 6.4%

Contractors "A", "C", and "E" would all be responsive for meeting the DBE goal. Contractor "B" would be responsive for meeting 80% of the Average DBE Commitment. Contractor "D" would not be responsive for meeting 80% of the Average DBE Commitment. Should the low bidder's DBE commitment be lower than 80% of the average, with the contract goal included in the calculation, that bidder will be considered non-responsive for Good Faith Effort to meet the project DBE goal. If the lowest bid is non-responsive due to lack of Good Faith Effort, the next bidder is compared to this 80% of the average commitment until a bidder is identified as having made a Good Faith Effort to achieve the DBE goal.

**4. Contractors with History of Utilizing DBEs.**

- a. A bidder who has demonstrated their ability to utilize DBE firms on both Federal-aid and non-Federal-aid projects let by the Department in the 24 months prior to the letting will be assumed to have made a Good Faith Effort to achieve the project goal.
- b. The Department's objective evaluation of prior usage of DBE firms will include all contracts let by the Department that were awarded to the Contractor during the 24 months prior to the letting. The calculation will include the sum of the following:
  - 1) One point for each percentage of average DBE subcontracted dollars for the 24 months prior to the letting (e.g. an average 7.5% dollars subcontracted to DBE equals 7.5 points)
  - 2) An additional point for each percentage of usage of DBE firms who meet the emerging small business requirements during the reviewed period (e.g. 1.5 points if 1.5% of the work is subcontracted to DBE firms meeting the small business requirements)

A contractor under consideration for having a history of utilizing DBE firms must have been awarded at least two contracts during the period being reviewed. Contractors who have used the same

DBE firm for over 50% of their subcontract dollars with DBE firms will not be considered as having a history of utilizing DBEs.

A contractor under consideration for having a history of utilizing DBE firms must have been awarded a dollar amount of contracts that exceed at least twice the dollar amount of the contract under consideration. For example, to be awarded a \$1,000,000 contract, the contractor under review would have to have been awarded \$2,000,000 in the Annual Good Faith Effort calculation.

The Annual Good Faith Effort points used for a letting would be based on the signed contractors and Request for Subcontract forms submitted by 5 calendar days before the letting. The number of points a contractor will need to be considered to demonstrate a history of utilizing DBE firms must exceed 67% of the Department's Annual DBE Goal (e.g. if the Department's annual DBE Goal is 7.8%, the contractor must have over 5.2 points). It is assumed that 67% of the DBE usage will be subcontract work and 33% of the dollars paid to DBE firms will be to DBE firms who have been awarded prime contracts.

**5. Administrative Reconsideration of Project Specific Good Faith Effort.**

- a. Contractors who have not met the specified DBE goal or have not been determined to have demonstrated Good Faith Effort by the above methods can request administrative reconsideration of their Good Faith Effort.
- b. Within 2 business days after the deadline for bid submittal, the Department will use the three Good Faith Effort methods to determine which bidders have made a Good Faith Effort to meet the DBE goal on each proposal for which bids were received. The Department will contact all otherwise lowest responsive bidders who have not met any of the Good Faith Effort criteria and offer that bidder an opportunity for an Administrative Reconsideration meeting with the Department's Administrative Reconsideration Committee. This committee consists of the Department's Contracts Engineer, Assistant Contracts Engineer, and EEO/AA Administrator. The bidder shall request the Administrative Reconsideration meeting within 1 business day of the Department's offer of an Administrative Reconsideration meeting.
- c. Any bidder who has requested Administrative Reconsideration shall not adjust their DBE Commitment or provide any additional documentation of DBE firms contacted that were not listed on Form 102115. However, the bidder will be allowed to provide documentation on other Good Faith Efforts they did to utilize DBE firms that are listed on Form 102115. These efforts may include:
  - 1) Efforts to provide interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
  - 2) Written documentation of negotiation with certified DBE firms including the names, addresses, and telephone numbers of

DBEs 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 DBEs to perform the work.

- 3) Written documentation of follow-ups made after the initial solicitations to encourage DBE firms to quote.
  - 4) Written documentation that the DBE firm's quote was not reasonable or that the DBE firm was not capable of performing the work for which they quoted. The fact that there may be some additional costs involved in finding and using DBE firms is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a 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.
  - 5) Written documentation of efforts to assist interested DBE firms in obtaining bonding, lines of credit, or insurance as required by the specifications.
  - 6) Written documentation of efforts to assist interested DBE firms in obtaining necessary equipment, supplies, materials, or related assistance or services needed for the project.
- d. The determination made by the Administrative Reconsideration Committee shall be considered final.

#### **F. Construction Period Requirements.**

1. The Contractor shall use those DBEs for the amounts listed on Form 102115 as submitted with their bid. After adequate notice by the Contractor, if any DBE is unable to perform, the Contractor shall inform the Engineer of the reasons why a DBE will be unable to complete the work for which they were committed. The Contractor shall document their efforts to have another DBE perform the item or to have a DBE perform other items to replace the original DBE commitment amounts. Any request for substitution of a DBE subcontractor shall be made to the Engineer and approved by the Contracts Engineer.
2. The Contractor is allowed to offer construction assistance to DBE subcontractors, but only in areas where DBEs can benefit from their expertise or in situations arising from unforeseen emergencies or natural disasters. The assistance shall be short-term and involve only equipment, or workers that function as trainers. Before offering the assistance, the Contractor shall notify the Engineer and obtain the written approval of the Contracts Engineer.
3. Brokering of work by DBEs is not allowed and is a contract violation. A DBE firm involved in brokering of work may be decertified. Any firm involved in brokering of work, that engages in willful falsification, distortion, or misrepresentation with respect to any facts related to the project shall be referred to the U. S. Department of Transportation's Office of the Inspector General for prosecution under Title 18, U. S. Code, Section 100.20.

### **G. Post Construction Requirements.**

1. Prior to receiving final payment, the Contractor shall provide to the Engineer certification of the dollars paid to each DBE firm, using Form 102116, Certification Of DBE Accomplishment. This certificate shall be submitted on all Federal-aid contracts where a DBE performed work and shall list the dollar amounts paid to all DBE firms on the contract. The certification shall be dated and signed by a responsible official legally representing the Contractor. Falsification of this certification will result in suspension of bidder qualifications according to Article 1102.03.
2. If the contract contained a DBE commitment, the Engineer will verify that the Contractor has attained the DBE commitment specified on Form 102115. If the commitment is not met and was less than the goal, the price adjustment is the difference between the actual dollars paid and the commitment. If the commitment is not met and was greater than the goal the price adjustment is the difference between the actual dollars paid and the goal.
3. The penalty for failure to meet DBE commitments will then be reduced by the following amount:
  - a. Underruns or deletion of contract items which were subcontracted to DBE firms.
  - b. Designated work that the DBE failed to perform and concurrence to waive this work was received from the Department.
4. Failure to meet the specified DBE commitment to each DBE firm will result in a price adjustment of an amount equal to the difference between the actual DBE dollars paid and the Contractor's adjusted DBE commitment to that DBE firm.

### **H. Required Records.**

The Contractor and subcontractors shall retain, for a period of not less than 3 years after final acceptance of a project, copies of canceled checks or other documentation that substantiates payments to DBE firms. These records shall be available at reasonable times and places for inspection by authorized representatives of the Department and Federal Agencies.

### **I. Sanctions for Failing to Comply with the Intent of the DBE Regulations.**

#### **1. DBE Firms.**

The ability to be eligible to receive DBE goal work is a privilege made available to a select group of firms. Firms that abuse this privilege may have their ability to be counted towards the DBE goal restricted if the firm fails to perform their work consistent with common industry practices. Examples of not performing work consistent with common industry practice include, but are not limited to:

- a. Patterns of failing to perform a commercially useful function for work quoted to meet a DBE goal.
- b. Patterns of failing to complete the work with their own organization for work quoted to meet a DBE goal.

- c. Patterns of failing to pay for all labor and materials for the work they have subcontracted to meet a DBE goal.
- d. Patterns of failing to perform the work they have subcontracted.
- e. Patterns of failing to notify the prime contractor in a timely manner when their work schedule makes it impossible for them to begin subcontract work at the requested time.
- f. Patterns of failure to furnish documents (e.g. certified payrolls, material test reports, etc.) within the timeframes allowed by the specifications.

The Department will provide written notice to the DBE firm, informing them of any proposed sanction. The DBE firm will have 14 calendar days, from the receipt of the certified notification, to make a written request for a hearing. The appeal hearing will be held with a three-person committee consisting of representatives from the Office of Contracts, Office of Construction, and a district office. If the Department does not receive a written request for a hearing, or if the DBE firm does not provide sufficient evidence at the hearing to refute the violations, the Department may suspend the DBE firm from the ability to be counted towards the commitment on projects with DBE goals. The duration of the suspension will be determined based on the severity of the violation and the number of prior suspensions of the DBE firm.

## **2. Prime Contractors.**

Contractors who show a pattern of non-compliance with the DBE requirements of the contract may be suspended from bidding on contracts that have DBE goals. Examples that would indicate a lack of good faith effort to comply with the DBE requirements include, but are not limited, to:

- a. Patterns of performing work with their own organization, or having another company perform work, which was committed to a DBE firm to meet a DBE goal.
- b. Patterns of not keeping the DBE firms posted on the status of their projects, and not providing advance notification to the DBE when their subcontract work will be available to the DBE firm.
- c. Patterns of not promptly paying DBE firms for completed work in accord with Article 1109.05.
- d. Not treating DBE firms as they would any other subcontractor on the project.

The Department will provide written notice to the Contractor, informing them of any proposed sanction for failure to comply in good faith with the intent of the DBE regulations. The Contractor will have 14 calendar days, from the receipt of the certified notification, to make a written request for a hearing. The appeal hearing will be held with a three-person committee consisting of representatives from the Office of Contracts, Office of Construction, and a district office. If the Department does not receive a written request for a hearing, or if the contractor does not provide sufficient evidence at the hearing to refute the violations, the Department may suspend the Contractor from bidding on projects that have DBE goals. The duration of the suspension will be determined based on the severity of the violation and the number of prior

suspensions of the Contractor for DBE sanctions. The sanctions may be extended beyond contracts with DBE goals if the Contractor's treatment of DBE firms has extended beyond contracts assigned DBE goals.

**1102.18 SPECIFIC AFFIRMATIVE ACTION RESPONSIBILITIES ON NON-FEDERAL-AID PROJECTS (TARGETED SMALL BUSINESS PROJECT PARTICIPATION).**

**A. General.**

1. AA requirements are to encourage and increase participation of disadvantaged individuals in business enterprises in all state projects involving funds made available through the Department. This is required by Iowa Code Section 19B.7 and 541 Iowa Administrative Code Chapter 4. On projects let by the Department, funded in whole or in part by state funds, these requirements supersede all existing TSB enterprise regulations, orders, circulars, and administrative requirements.
2. TSB Directory information is available from:
  - Office of Contracts
  - Iowa Department of Transportation
  - 800 Lincoln Way
  - Ames, IA 50010
  - Telephone 515.239.1422

**B. Targeted Small Business.**

A TSB is a small business, defined by Iowa Code Section 15.102(4), which is 51% or more owned, operated, and actively managed by one or more women or minority persons. Generally this is a for-profit small business enterprise under single management, which is located in Iowa.

**C. Contractor's TSB Policy.**

The Contractor is expected to promote participation of disadvantaged individuals in business enterprises as suppliers, manufacturers, and subcontractors through a continuous, positive result oriented program. The following statement should be included in the Contractor's operating policy:

It is the policy of this firm that TSB concerns, as defined in Iowa Code Section 19B.7 and 541 Iowa Administrative Code Chapter 4, shall have the maximum practical opportunity to participate in contracts funded in whole or in part by state funds through this firm (e.g. suppliers, manufacturers, and subcontractors).

The purpose of the Contractor's policy is to encourage and increase participation by TSBs in contracting opportunities made available by this firm in the performance of contracts let by the Department.

**D. Positive TSB Effort Documentation.**

1. Contractors are required to make positive efforts in utilizing TSBs on all non-Federal-aid projects let by the Department. The Contractor shall document all efforts made to include TSB participation in these projects.

The documentation shall remain in the Contractor's project files for a period of 3 years after the completion of the project and be available, upon request, for examination by the Department.

2. On proposals where a specific TSB goal has been established, the Contractor will be required to submit the TSB form with their bid. The TSB form will be provided by the Contracting Authority and used to document the TSB participation that shall be attained. The Contracting Authority will determine if the bidder has made adequate Good Faith Effort to meet the established goal. Bidders who fail to make such Good Faith Effort may have their bid rejected on the basis of being non-responsive to meeting the established TSB goal.

## **1102.19 EQUAL EMPLOYMENT OPPORTUNITY AND AFFIRMATIVE ACTION REQUIREMENTS.**

### **A. General.**

1. EEO and AA requirements will apply to all contracts let by the Department that equal or exceed \$10,000.00. The requirements will also apply to any subcontracts that equal or exceed \$10,000 if the subcontract involves a contract let by the Department.
2. On Federal-aid projects 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 this specification and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO/AA standards for the Contractor's company-wide activities for contracts let by the Department and for subcontracts involved in such contracts. 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 both incorporated by reference in contracts and subcontracts utilized by the Department.
3. On non-Federal-aid projects the Iowa Civil Rights Act of 1965, as amended; current Iowa Administrative Rules; and Iowa Executive Order 15 shall constitute the specific EEO/AA standards for the Contractor's company-wide activities for contracts let by the Department and for subcontracts involved in such contracts.

### **B. Definitions.**

1. **Affirmative Action.**
  - a. The efforts exerted toward achieving equal opportunity through positive, aggressive, and continuous result-oriented measures to correct past and present discriminatory practices and their effects on the conditions and privileges of employment. These measures include, but are not limited to, recruitment, hiring, promotion, upgrading, demotion, transfer, termination, compensation, and training.

- b. Women and minorities are both considered disadvantaged persons. They are however considered distinct and separate groups in regard to employer's good faith recruitment efforts.

**2. Equal Employment Opportunity.**

In hiring and employment practices, the absence of discrimination on the basis of race, religion, sex, color, national origin, age, disability, or other protected classification under Federal, state, or local law.

**3. Journey-Worker.**

A trained worker who is capable of performing all duties within a given job classification or craft.

**4. Minority.**

A citizen or lawful permanent resident of the United States and who is a member of one of the following racial groups:

- a. **Black:** All persons having origins in any of the Black racial groups not of Hispanic origin.
- b. **Hispanic:** All persons of Mexican, Puerto Rican, Cuban, Central or South American, or any other Spanish culture or origin, regardless of race.
- c. **Asian or Pacific Islanders:** All persons having origins in any of the original peoples of the Far East, Southeast Asia, or the Pacific Islands. This area includes, for example, China, Japan, Korea, the Philippine Islands, and Samoa.
- d. **American Indian or Alaskan Native:** All persons having origins in any of the original peoples of North America.

**5. New Hire.**

A new hire is not a recall or a rehire, and was originally hired within the previous 12 months. It is not required that the new hire was originally hired for a contract let by the Department, but they shall have worked on a contract let by the Department within the previous 12 months.

**6. Recall.**

A person who, after being involuntarily laid off by a contractor, is re-employed by that same contractor when the layoff is no longer necessary. In addition, to be defined as a recall, at least one of the following two criteria must have been met during the layoff period:

- a. The former employee must have had no employment with other heavy highway contractors.
- b. The former employee's health insurance or pension plan must have been maintained by the re-employing contractor.

**7. Rehire.**

A person who, after voluntarily terminating employment with a contractor because of a change in working conditions or circumstances, returns to employment with the same contractor. In addition, to be defined as a rehire, at least one of the following two criteria must have been met during the period of severed employment:

- a. The former employee must have had no employment with other heavy highway contractors.

- b. The former employee's health insurance or pension plan must have been maintained by the re-employing contractor.

**8. Segregated Facilities.**

Employee facilities that are separated on the basis of race, religion, color, national origin, age, or disability either by explicit directive or by fact because of habit, local custom, or any other reason. Examples of such facilities include, but are not limited to, the following: waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms, storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities. The only exception to this definition is the provision of special accommodations, such as handicapped parking spaces, to make the workplace more accessible for those who are disabled.

**9. Trainee/Apprentice.**

A person receiving on-the-job training through a program approved or accepted by the United States Department of Labor, the FHWA, or the Department.

**C. Contractor's/Subcontractor's EEO/AA Policy.**

The Contractor/subcontractor, with the exception of manufacturers, suppliers, and hauling firms, shall have an EEO/AA policy approved by the Department prior to being awarded a contract or subcontract that equals or exceeds \$10,000.00. The Contractor's/subcontractor's EEO/AA policy shall be re-approved on an annual basis through either the preparation or completion of a new EEO/AA policy or the review of an existing policy. When requesting re-approval under the latter option, the Contractor/subcontractor shall submit a written statement indicating that the existing policy has been reviewed. It shall further state that the policy is current with no revisions or, if revisions have been made, the revisions shall be signed and dated by their EEO/AA Officer and another company officer. The Contractor's/subcontractor's EEO/AA policy shall also include the following items:

**1. The EEO/AA Operating Statement.**

"It is the policy of this Company to ensure 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, pre-apprenticeship, and/or on-the-job training."

**2. Designation and Job Responsibilities of the Company's EEO/AA Officer.**

The Contractor/subcontractor shall designate an EEO/AA Officer to be responsible for and capable of effectively administering and promoting the Contractor's/subcontractor's EEO/AA program. Adequate authority and responsibility shall also be assigned to the EEO/AA Officer in order to perform these duties.

**3. Affirmative Action Recruitment Plan.**

The Contractor's/subcontractor's Affirmative Action Recruitment Plan shall be designed to seek out and obtain applications from women and minorities for all job openings and promotions. The plan shall also include the following provisions:

- a. At a minimum, the Contractor/subcontractor shall utilize one or more Iowa Workforce Development Centers or State Employment Services. When feasible, the Contractor/subcontractor shall commence a recruitment effort no later than 1 month prior to the date on which a hiring decision will be made.
- b. All solicitations and advertisements for employees, placed by or on behalf of the Contractor/subcontractor, shall include the notation: "An Equal Opportunity Employer."

**4. Identification of Recruitment Methods.**

When the Contractor/subcontractor is unable to obtain a reasonable flow of applications from women and minorities, the Affirmative Action Recruitment Plan shall identify specific methods used to exhaust all possible avenues of recruitment. Such methods may include:

- a. Maintaining a list of the names and locations of publications that have a large circulation among minority groups in the area from which the workforce would normally be derived, and placing recruiting advertisements in these publications.
- b. Utilizing public and private employee referral sources likely to yield applications from qualified women and minorities.
- c. If unionized, a strategy for obtaining union referrals of women and minorities through the Contractor's/subcontractor's collective bargaining agreement. If the union is unable to provide the Contractor/subcontractor with a reasonable flow of referrals of women and minorities within the time limit set forth in the collective bargaining agreement or other contract or understanding, the Contractor/subcontractor will go through independent recruitment efforts. As part of those efforts, the Contractor/subcontractor will attempt to obtain qualified, qualifiable, and/or trainable women and minorities, and will fill employment vacancies without regard to race, religion, sex, color, national origin, age, or disability.
- d. A plan for encouraging present employees to recruit women and minorities.
- e. Other specific actions the Contractor/subcontractor will take to ensure that a pool of woman and minority candidates is available from which to hire.

**5. Facility Certification.**

The Contractor/subcontractor shall certify that nonsegregated facilities are provided for their employees. In addition, certification shall state that no employee will be denied access to adequate facilities on the basis of sex or disability. If the Contractor/subcontractor provides employees with any facility that is segregated, work at the site with the segregated facility may be suspended.

**D. Training and Promotion Plan.**

**1. General.**

If the Contractor/subcontractor is planning to provide any training, the Contractor/subcontractor shall have a training and promotion plan. If the Contractor/subcontractor does not have a training and promotion plan, the Contractor's/subcontractor's EEO/AA policy shall state there is no plan. The Contractor/subcontractor shall have a plan, however, if they later decide to provide training for new or existing employees. Any training and promotion plan that is required shall include the following:

- a. This training specification supplements subparagraph 7e of the Contract Provision entitled "Standard Federal Equal Opportunity Construction Contract Specification (Executive Order 11246)" and is in implementation of 23 U.S.C. 140(a).
- b. The Contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.
- c. As part of the Contractor's EEO/AA program, the Contractor shall provide training to a prescribed number of trainees. Training new and existing employees for the purpose of promotion is to be considered a part of doing business with the Department. No reimbursement payment will be made to the Contractor.
- d. The number of trainees required shall be determined by the Contractor. The number of trainees will be determined by using the previous 3 year average of work actually performed by the Contractor including all prime and sub contract work with the Department. The Contractor shall provide the following number of trainees while under contract with the Department:
 

Under \$4,999,999	No trainee requirement
\$5,000,000 to \$9,999,999	1 trainee
\$10,000,000 to \$19,999,9992	2 trainees
\$20,000,000 to \$29,999,9993	3 trainees
\$30,000,000 or more	4 trainees
- e. These training requirements are minimums and the Contractor is encouraged to have more than the minimum.
- f. Completion of this required training shall be the responsibility of the Contractor and shall not be assigned to a Subcontractor.
- g. This information may be verified by the Department.

**2. Work Classifications.**

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. The Contractor will be credited for each trainee employed on the contract work who is currently enrolled or becomes enrolled in an approved program.

**3. Minorities and Women.**

Training and upgrading of minorities and women toward journeymen status is a primary objective of this training specification. Accordingly, the Contractor shall make every effort to enroll minority trainees and women by conducting systematic and direct recruitment through public

and private sources likely to yield minority and women trainees to the extent that these persons are available within a reasonable area of recruitment. The Contractor shall be responsible for demonstrating the steps taken in pursuance of recruitment, prior to a determination of the Contractor being in compliance with this training specification.

**4. Training.**

- a.** An employee shall not be employed as a trainee in any classification in which an employee has successfully completed a training course leading to journeyman status or in which an employee has been employed as a journeyman. The Contractor shall satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records shall document the findings in each case.
- b.** The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Department. The Department will approve a program, if it is determined to meet the equal employment opportunity and affirmative action obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U. S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U. S. Department of Labor, Manpower Administration, or Bureau of Apprenticeship and Training, will also be considered acceptable provided it is being administered in a manner consistent with the equal employment and affirmative action obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the Department prior to commencing work on the classification covered by the program.
- c.** It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions, such as office engineers, estimators, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and is approved by the division office of the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

**5. Payment of Trainees.**

On contracts with a predetermined wage rate, trainees must be paid at least the journeyman's wage unless the trainee is enrolled in an approved U.S. Department of Labor (DOL) training program. Trainees in approved U.S. DOL training programs shall be paid the appropriate rates approved by the U. S. DOL or Iowa DOT.

**6. Compliance.**

- a. A Contractor's compliance will be based on the number of trainees completing a training program during the construction season.
- b. A Contractor that fails to meet the determined number of trainees will be allowed the opportunity to show that a Good Faith Effort was made trying to meet the training requirement. If the Contractor fails to show that a Good Faith Effort was made in meeting the training requirement, the Contractor may be suspended from bidding projects with the Department.

**7. Records.****a. General.**

- 1) The Contractor shall furnish the trainee a copy of the program the trainee will follow during the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.
- 2) The Contractor shall provide for the maintenance of records and furnish a report once per construction year documenting their performance under this training specification. The report shall be submitted to the Office of Contacts with the Annual Company Wide Report of Total Employment on All Federal and Non-Federal Projects Let By the Iowa Department of Transportation. This report shall include but is not limited to, names of trainees, job classifications, gender, ethnic background, future status with the company and hours of training received. The Office of Contracts may verify this information with the trainee.

**b. Designation of Trainee and Promotional Job Classifications.**

For each designated classification, the plan shall identify benchmarks specifying the types of work an employee will be doing after various intervals of time. For example, the plan might describe increasingly skilled levels of work to be performed after every 100 hours of training.

**c. Notice of On-the-Job Training Programs and Training Entrance Requirements.**

Methods to advise employees and job applicants of training programs and training entrance requirements.

**d. Review of Training and Promotion Potential.**

Methods to periodically review the training and promotion potential of women and minority employees, thus ensuring they have the opportunity to be upgraded.

**e. Training Progress Review.**

A method to routinely review the progress of each employee enrolled in training.

**f. Maximum Trainee/Journey-Worker Ratio.**

The maximum trainee/journey-worker ratio, by craft, that the Contractor/subcontractor intends to utilize; a maximum ratio of 1:3 is suggested.

**E. Dissemination of Policy.**

All members of the Contractor's/subcontractor's staff who are involved in the hiring, supervision, promotion, and discharge of employees shall be made

knowledgeable of the Contractor's/subcontractor's EEO/AA policy. The following actions shall be taken as a minimum:

1. **Periodic Review of Contractor's/Subcontractor's EEO/AA Policy.**  
Periodic meetings of supervisory and personnel office employees shall be conducted at least once every 6 months, at which time the Contractor's/subcontractor's EEO/AA policy and its implementation will be reviewed and explained. The meetings shall be conducted by the EEO/AA Officer.
2. **Instruction of New Supervisory and Personnel Office Employees.**  
The EEO/AA Officer shall provide all new supervisory and personnel office employees with thorough instruction, covering all major aspects of the Contractor's/subcontractor's EEO/AA obligations, within 30 calendar days following the date they first reported for duty with the Contractor/subcontractor.
3. **Instruction in Recruitment Procedures.**  
All personnel directly engaged in recruiting shall be instructed, by the EEO/AA Officer, in the Contractor's/subcontractor's procedures for locating and hiring women and minorities.
4. **Employee Notification of EEO/AA Policies and Procedures.**  
The Contractor's/subcontractor's EEO/AA policy, as well as the procedures for its implementation, shall be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
5. **Placement of EEO/AA Notices and Posters.**
  - a. The Contractor shall place the following notices and posters on a bulletin board at the project site in areas readily accessible to employees and potential employees.
    - 1) Notice provided by the Iowa DOT listing the names, addresses, and phone numbers of the Contractor and all approved subcontractors.
    - 2) Publication OFCCP 1420, stating "Equal Employment Opportunity is THE LAW".
    - 3) Form FHWA-1022, regarding any false statement, false representation, false report, or false claim made in connection with any Federal or Federal-aid highway or related project.
    - 4) Form FHWA-1495, regarding wage rate information for a Federal-aid highway project, required only if Davis/Bacon predetermined wage rates apply to the project.
    - 5) Current Iowa Predetermined Wage Rate Decision, identifying Davis/Bacon predetermined wage rates for the State of Iowa. The wage rate decision shall be arranged on a bulletin board so that all wage rate and classification information is visible.
    - 6) IOSH 30 Safety and Health Protection on the Job.
    - 7) WH-1420 Your Rights Under the FMLA Act of 1993.
    - 8) WH-1462 Notice: Employee Polygraph Protection Act.
    - 9) Form FHWA-1495A (Spanish version of form FHWA-1495), stating "Informacion Sobre Escalas De Salarios Proyecto De

Carretera Con Ayuda Federal", required only if Davis/Bacon predetermined wage rates apply to the project.\*

- 10) Form EEOC-P/S-1 (Spanish version of form EEOC-P/E-1), stating "La Igualdad de Oportunidades De Empleo Es LA LEY".\*

\* These forms are not required, but it is strongly recommended that these two Spanish notices be posted whenever the company employs and/or anticipates receiving applications from those who speak Spanish.

- b. All required postings shall be in place when work commences on a project and shall remain in place through completion of the project.
- c. Progress payments to the Contractor will not be made until these notices and posters are displayed at the required site.

#### **F. Personnel Actions.**

Wages, working conditions, employee benefits, and personnel actions of every type including hiring, upgrading, promotion, transfer, demotion, layoff, and termination shall be made without regard to race, color, religion, sex, national origin, age, or disability. The following procedures shall be followed by the Contractor/subcontractors. The EEO/AA Officer may appoint a designee to perform these functions.

##### **1. Periodic Inspection of Project Sites.**

Project sites shall be periodically inspected by the EEO/AA Officer to ensure that there is no discriminatory treatment of project site personnel with regard to employee facilities and working conditions. The EEO/AA Officer shall document the dates of these inspections and provide the Contractor/subcontractor with a summary of the findings. The Contractor/subcontractor shall promptly take corrective action where evidence of discriminatory treatment is found.

##### **2. Periodic Evaluation of Wage Differentials.**

Wage differentials within each job classification shall be periodically evaluated by the EEO/AA Officer to determine whether there are any discriminatory wage practices. The EEO/AA Officer shall document the dates of these evaluations and provide the Contractor/subcontractor with a summary of the findings. The Contractor/subcontractor shall promptly take corrective action where evidence of discriminatory treatment is found.

##### **3. Periodic Review of Selected Personnel Actions.**

Selected personnel actions shall be periodically reviewed by the EEO/AA Officer to determine whether there is evidence of discrimination. The EEO/AA Officer shall document the dates of these reviews and provide the Contractor/subcontractor with a summary of the findings. The Contractor/subcontractor shall promptly take corrective action where evidence of discriminatory treatment is found.

##### **4. Review of Supervisors.**

An annual review shall be conducted to discuss each supervisor's performance with regard to the Contractor's/subcontractor's EEO/AA

policy. The review shall include a discussion of each supervisor's adherence to the provisions of that policy.

**5. Investigation of Each Complaint, with Corrective Action if Necessary.**

An investigation of each discrimination complaint shall be initiated within 14 calendar days following receipt of the complaint. If the investigation indicates that discrimination exists, which may affect persons other than the complainant, corrective action shall include the other persons in addition to the complainant. Upon completion of the investigation, the Contractor/subcontractor shall inform the complainant and each affected person of all their avenues of appeal.

**G. Records and Reports.**

A Contractor/subcontractor shall keep records to document compliance with the EEO/AA requirements. The records shall be retained for a period of 3 years following completion of the contract work, and shall be available for inspection, at reasonable times and places, by authorized representatives of the Department and the FHWA.

1. The Contractor/subcontractor shall keep records to document the following:
  - a. All of the Contractor's/subcontractor's efforts and progress toward locating, hiring, training, qualifying, and upgrading women and minorities. A detailed summary of these efforts and progress shall include a list providing the name, address, phone number, date of contact, and contact person of each referral source and each publication in which job vacancies were posted. In addition, dated copies shall be kept of all job orders, tear sheets, and newspaper ads, along with the specific job classification that was posted in each of these employment notices.
  - b. All company efforts and progress toward cooperating with unions, community organizations, and other recruitment sources for the purpose of increasing employment opportunities for women and minorities. A current file, providing the following information, shall also be maintained:
    - 1) Name, address, and phone number of each woman and minority off-the-street applicant.
    - 2) Name, address, and phone number of each woman and minority referred from a union, community organization, or other recruitment source.
    - 3) The date on which action was taken with respect to each of the above individuals. If an individual was referred to the Contractor/subcontractor, but not employed by the Contractor/subcontractor, the reason(s) for not hiring the individual shall be documented. Similarly, if an individual was sent by the Contractor/subcontractor to a union hiring hall for referral, but not referred back to the Contractor/subcontractor by the union, the reason(s) for not making the referral shall be documented. Any additional actions taken with regard to either of these referrals shall also be documented.

- c. Employment data, arranged both by race and sex within each race, for each of the following:
- 1) The number of individuals employed within each of the Contractor's/subcontractor's job categories.
  - 2) The number of individuals employed as apprentices in all of the Contractor's/subcontractor's job categories combined.
  - 3) The number of individuals employed as on-the-job trainees in all of the Contractor's/subcontractor's job categories combined. The data shall be provided for any employee who worked on any Federal-aid project and any non-Federal-aid project let by the Department during the week of peak employment for the previous 12 months. A grid of these required kinds of data is illustrated on Form 650037 7-99 (Iowa PR-1391); see Article 1102.19, G, 2, b. The number of individuals employed as on-the-job trainees in all of the Contractor's/subcontractor's job categories combined. The data shall be provided for any employee who worked on any Federal-aid project and any non-Federal-aid project let by the Department during the week of peak employment for the previous 12 months. A grid of these required kinds of data is illustrated on Form 650037 7-99 (Iowa PR-1391); see Article 1102.19, G.
- d. The name, race, sex, job classification, date of employment, and specific referral source(s) of each new employee utilized on any project let by the Department during the previous 12 months.
- e. The name, race, sex, job classification, date of employment, date of last job change, hours worked during the previous 12 months, and current rate of pay of each employee utilized on any project let by the Department during the previous 12 months.
- f. The name, race, and sex of each trainee and each employee who was terminated, transferred, demoted, or promoted while utilized on any project let by the Department during the previous 12 months. Records shall also include the dates for each of these actions, the previous and/or new job classifications, and the wage rates corresponding to those classifications.
- g. The maximum trainee/journey-worker ratio, by craft, that was utilized on all projects let by the Department during the previous 12 months.
- h. All meetings of supervisory employees that include a discussion, during the previous 12 months, of EEO/AA topics and requirements. Records shall also document the thoroughness of instruction explaining the company's EEO/AA obligations to new supervisory employees within 30 calendar days of their hiring or promotion date. Documentation of all meetings and training sessions shall be dated and signed by those in attendance. It shall also identify the specific EEO/AA topics that were discussed.
- i. The provision, for all personnel directly engaged in recruitment, of thorough instruction on the company's procedures for locating and hiring women and minorities. The instruction shall be given by the EEO/AA Officer within the past 12 months. Documentation of the instruction shall be dated and signed by those in attendance, and shall also include the specific EEO/AA topics that were discussed.

- j. The provision of information regarding the Contractor's/subcontractor's EEO/AA policy and the company's procedures for implementing the policy. The information shall be provided to all employees. Documentation should include the name of each employee receiving the information, along with the method and date of its distribution.
  - k. All EEO/AA on-site inspections by the EEO/AA Officer, or designee, on projects let by the Department during the previous 12 months. Observations made during the inspection shall include the following: poster reviews; identification of segregated and non-segregated facilities; stated, observed, or overheard employee EEO/AA concerns; and the method(s) of addressing those concerns.
  - l. Periodic evaluation of wage differentials within each job classification utilized on projects let by the Department during the previous 12 months.
  - m. Periodic review of selected personnel actions(s) to determine whether there is evidence of discrimination on projects let by the Department during the previous 12 months.
  - n. All pending Equal Employment Opportunity Commission, Department of Justice, and local and state Human/Civil Rights Agency cases, including a copy of each complaint and a summary of the Contractor's/subcontractor's investigation into each complaint.
  - o. Initiation of an investigation into each complaint of discrimination within 14 calendar days of the receipt of each complaint.
2. The Contractor/subcontractor shall submit the following documentation to the Office of Contracts:
- a. The Contractor's/subcontractor's EEO/AA policy, shall be submitted annually and include the following:
    - 1) Age of the firm.
    - 2) Annual gross receipts of the firm may be reported by designating the appropriate bracket below:
      - Less than \$500,000
      - \$500,000 - \$1,000,000
      - \$1 million - \$2 million
      - \$2 million - \$5 million
      - \$5 million - \$10 million
      - \$10 million - \$20 million
      - \$20 million - \$50 million
      - over \$50 million
  - b. Two annual reports, submitted in July of each year, which are titled "Federal-Aid Contractor's Annual Employment Report" and "Annual Company Wide Report of Total Employment on All Federal and Non-Federal Projects Let by the Iowa Department of Transportation." Report form numbers are 650038 7-97 (Iowa PR-1391) and 650039 5-97 (Iowa PR-1391), respectively. The reports shall provide employment data, arranged both by race and sex within each race, for each of the following:
    - 1) The number of individuals employed within each of the Contractor's/subcontractor's job categories.

- 2) The number of individuals employed as apprentices in all of the Contractor's/subcontractor's job categories combined.
- 3) The number of individuals employed as on-the-job trainees in all of the Contractor's/subcontractor's job categories combined.

The annual data shall be provided during the last week in July for any employee who worked on any Federal-aid project and any non-Federal-aid project let by the Department. A grid of these required kinds of data is illustrated on both of the required report forms.

- c. Immediate notification that a union having a collective bargaining agreement, contract, or other understanding with the Contractor/subcontractor, has failed to refer to the Contractor/subcontractor a minority or woman who had been sent to the union hall by the Contractor/subcontractor for help in obtaining employment. The Office of Contracts shall also be notified if the Contractor's/subcontractor's efforts to meet EEO/AA obligations have been impeded in any other way by a union referral process.

#### **H. Non-compliance with EEO/AA Requirements.**

Compliance with the Department's EEO/AA specifications and/or the Contractor's/subcontractor's EEO/AA policy will be enforced as follows:

##### **1. Compliance through Informal Means, Including Conciliation and Persuasion.**

If a Contractor/subcontractor is found to have violated the Department's EEO/AA specifications and/or the Contractor's/subcontractor's EEO/AA policy, reasonable efforts will be made, whenever possible, to secure the Contractor's/subcontractor's compliance through informal means, including conciliation and persuasion. Such efforts may require a written commitment by the Contractor/subcontractor to correct violations through a plan of specified remedial actions.

- a. Violations are considered to be either deficiencies or minor deficiencies. Any of the following is considered to be a deficiency, all other violations are considered to be minor deficiencies:
  - 1) Hiring employees from another company.
  - 2) Failure to engage in a good faith recruitment effort.
  - 3) Failure to use training hours assigned to a project.
  - 4) A finding of probable cause with regard to a civil rights complaint.
  - 5) Failure to utilize project assigned training hours on contracts.
  - 6) Refusal to submit an EEO/AA policy.
  - 7) Refusal to allow access to premises for an on-site compliance review.
- b. The form of written agreement utilized for correcting deficiencies is called a conciliation agreement, whereas the form of agreement for resolving minor deficiencies is called a letter of commitment. If a letter of commitment is violated, the violation may be corrected through either a conciliation agreement or an enforcement proceeding. Violation of a conciliation agreement may lead to either a notice to show cause or an enforcement proceeding.

**2. Compliance through Enforcement Proceedings or a Notice to Show Cause.**

If conciliation efforts are unsuccessful, administrative enforcement proceedings may be initiated or the Contractor/subcontractor may be issued a show cause notice. The show cause notice will require the Contractor/subcontractor to show, within 30 calendar days, why monitoring, enforcement proceedings, or other appropriate action to ensure compliance should not be instituted. Enforcement proceedings may lead to a written notice prohibiting the violations, requiring the Contractor/subcontractor to provide whatever remedies are appropriate, and/or imposing sanctions. Such sanctions may include withholding progress payments; termination of a contract, in whole or in part; or suspension for an indefinite or specified period of time.

**3. Compliance with Executive Order 11246.**

The Office of Federal Contract Compliance Programs, within the United States Department of Labor, is the only party having authority to determine enforcement of and compliance with Executive Order 11246 requirements incorporated in contracts and subcontracts utilized by the Department. Included among these requirements are the equal opportunity clause, contained in 41 CFR 60-1.4; the Notice of Requirement for Affirmative Action to Ensure Equal Employment Opportunity, contained in 41 CFR 60-4.2; and (3) the Standard Federal Equal Employment Opportunity Construction Contract Specifications, contained in 41 CFR 60-4.3.

**Section 1103. Approval for Award and Award of Contract**

**1103.01 CONSIDERATION OF BIDS.**

The Contracting Authority reserves the right to waive technicalities and to reject any or all proposals. Bidders may be denied a contract award for any one of the following reasons:

- A. For failure to meet the Contracting Authority's requirements for qualification of bidders, as set forth in Articles 1102.01, 1102.02, 1102.03, 1102.15, 1102.16, and in the contract documents for the project.
- B. For failure to maintain satisfactory progress on work already under contract.
- C. For failure to meet promptly financial obligations undertaken in connection with other work under the existing contract or previous contracts.
- D. For filing more than one proposal at any letting for the same work under the same or different names. However, affiliates will be allowed to bid against each other on proposals for the same contract. The Department, however, will only consider the lowest of the otherwise responsible affiliate bids for possible award. The proposals of the other affiliates bidding for that contract will be considered non-responsive for both DBE good-faith calculations and consideration for award of the contract.

- E. For an unsatisfactory record of performance and cooperation on previous contracts.
- F. For submitting an obviously unbalanced bid. An unbalanced bid shall be defined as a bid containing lump sum prices or unit bid prices which do not reflect reasonable actual costs plus a reasonable proportionate share of the bidder's anticipated profit, overhead costs, and other indirect costs to complete that item.
- G. For having sublet or otherwise assigned work without the approval of the Contracting Authority.
- H. For forfeiture of a proposal guaranty and failure to enter into contract upon an offer of an award by the Contracting Authority in response to a prior advertisement for bids for the same project or any combination of projects involving the project for which award is currently being considered.
- I. For failure to file and maintain with the Contracting Authority a current Certificate of Insurance meeting the requirements of Article 1107.02.
- J. For filing proposals exceeding the bidder's qualification rating in a manner not permitted by the Contracting Authority.

#### **1103.02 APPROVAL FOR AWARD.**

- A. In the approval for award of contract, consideration will be given not only to prices bid but also to the mechanical and other equipment available to the bidder, the financial responsibility of the bidder, and the bidder's ability and experience in performance of like or similar contracts.
- B. Approvals for award will be made as promptly as practical after bids have been opened and read. The Contracting Authority reserves the right to delay the approval for award for such time as is needed for consideration of bids and for receipt of concurrence in recommended approvals for award from other governmental agencies whose concurrence may be required.

#### **1103.03 RETURN OF PROPOSAL GUARANTY.**

Proposal guaranties will be returned to the unsuccessful bidder by mail promptly after the approval for award has been made. Return to the successful bidder will be made promptly after the filing of the contract documents.

#### **1103.04 CERTIFICATE OF INSURANCE.**

The Contractor's certificate of liability and property damage insurance described in Article 1107.02 shall be filed with the Contracting Authority on or before the execution of the contract and shall be maintained throughout the prosecution of the work and until final acceptance and completion of the contract. A separate verification shall be required for contracts awarded on the basis of joint bids.

#### **1103.05 REQUIREMENT OF CONTRACT BOND.**

On all contracts, the Contractor shall file an acceptable bond in an amount not less than 100% of the contract sum with the Contracting Authority; however, the amount of the contract bond does not need to include the predetermined costs for incentives or

bonuses shown on the contract. The bond shall be executed in quadruplicate on the standard form of the Contracting Authority. This bond shall be held to cover all work included in the contract, whether performed by the Contractor or under a subcontract or assignment. The bond shall be executed by the Contractor and by a surety company authorized to do business in the State of Iowa. The Contractor shall not begin work on any contract before being notified, in writing, that the required bond has been approved and accepted, or until the signed contract is returned.

#### **1103.06 EXECUTION OF CONTRACT.**

The bidder to whom a contract is being awarded shall execute and file two copies of such contract with the Contracting Authority.

#### **1103.07 FAILURE TO EXECUTE CONTRACT.**

Unless the time limit is modified by the contract documents, failure to execute a contract and file an acceptable bond within 30 calendar days of the date of the approval for award, herein provided, will be just and sufficient cause for annulment of the approval for award and for forfeiture of the proposed guaranty to the Contracting Authority.

#### **1103.08 DISCLOSURE OF SUBCONTRACTOR.**

- A.** A bidder awarded a contract with the Department shall disclose the names of all subcontractors who will work on the project or projects, or who the bidder anticipates will work on the project or projects. If a subcontractor named by a bidder awarded a contract is replaced, or if the cost of work to be done by a subcontractor is reduced, the bidder shall disclose the name of the new subcontractor or the amount of the reduced cost. If a subcontractor is added by a bidder awarded a contract, the bidder shall disclose the name of the new subcontractor.
- B.** The list of proposed subcontractors shall be submitted to the Office of Contracts with the performance bond and signed contract.
- C.** Failure to present the subcontractor list will cause the Contractor to be re-evaluated for future bidder qualification as per Article 1102.03.
- D.** These requirements are in addition to Article 1108.01.

### **Section 1104. Scope of Work**

#### **1104.01 INTENT OF PLANS AND SPECIFICATIONS.**

- A.** The intent of the plans and specifications is to provide for the construction and completion of every detail of the work described therein. It shall be understood by the Contractor that the Contractor shall furnish all labor, material, tools, transportation, and supplies required for all or any part of the work to make each item complete in accordance with the spirit of the contract. It is understood that the apparent silence of the specifications as to any detail or the apparent omission of a detailed description concerning any point shall be regarded as meaning that only the best general practice is to

prevail and that only first quality materials and first quality work are to be used.

- B. For the purpose of design and the preparation of the Engineer's estimate, the Contracting Authority or its representatives may perform a reasonable amount of exploratory work to gain information relative to surface and subsurface conditions relating to types of soil, moisture content, and types and extent of rock strata. This information, when shown in the contract documents, represents a summary of conditions as of the date the survey was made; it is only an approximate estimation of the site conditions made merely to be suggestive to the Contracting Authority of construction conditions and quantities and classes of work. The appearance of this information in the contract documents will not constitute a guarantee that conditions other than those indicated will not be encountered at the time of construction. The bidder is advised that all information concerning the project or projects, compiled by the Contracting Authority preceding the design, is available for examination at the Contracting Authority's headquarters. The prospective bidder shall conduct an examination as provided in Article 1102.08 to be satisfied as to the character of the work to be done, the probable construction conditions, and any other reasonably ascertainable conditions and the potential effect these could have on the Contractor's performance under the contract. The Contractor's bid shall be prepared on the basis of this examination.
- C. Any bidder interested in the work is authorized to make whatever additional investigation that is advisable. In making such additional investigation, the bidder is directed to the Engineer for information relating to available right-of-way. If there are, at that time, any parcels of land over which the Contracting Authority does not have jurisdiction, right of entry must be secured by the prospective bidder from those authorized to grant such permission. Investigational work performed by a prospective bidder on existing highways and streets open to traffic shall be performed in compliance with the requirements of the current Part VI of the MUTCD. All such additional investigational work shall be performed without costing or obligating the Contracting Authority in any way.

#### **1104.02 SPECIAL WORK.**

Any conditions not covered by these standard specifications are stated in the contract documents.

#### **1104.03 INCREASED OR DECREASED QUANTITIES.**

- A. The Contracting Authority reserves the right to make such increase or decrease in the quantities of the work shown in the contract documents as may be considered necessary to complete fully and satisfactorily the construction included in the contract. The compensation to the Contractor for such changes will be as provided in Article 1109.03.
- B. No significant change in quantities, as defined in Article 1109.16, shall be made by increasing or decreasing the length of road or roads to be improved as shown in the contract documents, without mutual written consent between the Contracting Authority and the Contractor; however, such notice

shall not be required for maintenance or restoration work ordered by the Engineer on temporary Primary haul roads.

#### **1104.04 EXTRA WORK.**

The Contracting Authority reserves the right to order, in writing, the performance of work of a class not contemplated in the contract documents but which may be considered necessary to complete satisfactorily the work included in the contract. This extra work will be paid for as provided in Article 1109.03, B.

#### **1104.05 MAINTENANCE OF DETOURS.**

Unless required by the contract documents, the Contractor will not be required to assume any responsibility in connection with the maintenance or marking of detours.

#### **1104.06 REMOVAL OF STRUCTURES AND OBSTRUCTIONS.**

- A. The Contractor shall remove all materials, existing structures or part of structures that in any way interfere with the new construction. If specific payment for such work has not been provided in the contract, it will be paid for per Article 1109.03, B.
- B. The Contractor shall remove all materials or structures found on the right-of-way which are not to remain in place or which have not been designated for use in the new construction. These materials, when removed from the project, shall become the property of the Contractor. The removal of pipe culverts will not be paid for directly but shall be considered as incidental work, and the cost of removal shall be considered to be included in the contract price for other items. Pipe culverts designated for salvage shall be removed by methods that will cause a minimum of damage to the pipe culverts. The removal of bridges or other masonry or monolithic concrete construction will be paid for. If the contract documents do not contain an item for this work, it will be paid for per Article 1109.03, B.

#### **1104.07 RIGHTS IN AND USE OF MATERIALS FOUND ON THE RIGHT-OF-WAY.**

- A. Unless stated to the contrary in the contract documents, all materials such as stone, gravel, sand, timber, and structures or parts of structures found on the right-of-way of the highway or on land acquired for the work are the property of the Contracting Authority or the owner of the fee title to the land. If these materials are to be removed but use or salvage is not designated in the contract documents, they shall become the property of the Contractor, and the Contractor shall remove the materials from the project. When the Contractor is permitted to use materials found on the right-of-way, all excavations that the Contractor makes below the grade elevations shall be backfilled with other suitable materials so that the finished road will conform to the grade shown on the plans. Extra compensation will not be allowed for this backfilling.
- B. When rock excavation is encountered, any portion of rock excavation which would otherwise be deposited in areas designated in the contract documents and not be incorporated in the embankments may be processed and used, royalty free, by the Contractor in any other portion of the construction in

which material of that quality would be acceptable. Deduction will not be made from excavation quantities for rock so used.

#### **1104.08 FINAL CLEANING UP.**

- A.** Before final acceptance of the work, the Contractor shall remove all unused material and rubbish from the site of the work, remedy any objectionable conditions the Contractor may have created on private property, and leave the right-of-way in a neat and presentable condition. The Contractor shall not make agreements which allows salvaged or unused material to remain on private property within view of a road except when consistent with previous land use.
- B.** All ground occupied by the Contractor in connection with the work, which is within view of or adjacent to a road, shall be restored. Restoration shall include appropriate smoothing to its original condition and may include making the area suitable for cultivation and, where vegetation has been disturbed, seeding of the area. All material removed from the work site because of the final cleaning operation shall become the property of the Contractor.
- C.** Final cleaning up shall be subject to approval of the Engineer and in accordance with applicable regulations.

#### **1104.09 RIGHT-OF-WAY.**

Right-of-way for the work will be provided without cost to the Contractor. Right-of-way will be made available to the Contractor on or before the date the notice to proceed is issued when the approximate starting date is designated, and on the date of execution of contract when the late start date or specified starting date is designated, unless a later date for right-of-way to be made available to the Contractor is designated in the contract documents. Permission of the property owner may be necessary to access some parcels prior to the letting.

#### **1104.10 RAILROAD CROSSINGS.**

Whenever the work involves construction with which railroad companies are concerned, the performance of the work is contingent upon arrangements with the railroad companies for the proposed construction. The performance of the work shall be in accordance with arrangements established by the Contracting Authority. The Contractor may make additional arrangements. Claims will not be allowed for loss or damage caused by failure of the railroad to comply with provisions of the agreement with the Contracting Authority. The Contracting Authority will institute necessary legal action to enforce the conditions of its agreement with the railroad company.

### **Section 1105. Control of Work**

#### **1105.01 AUTHORITY OF ENGINEER.**

- A.** The Engineer will decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work, all disputed and mutual rights between contractor, all contract documents, and all questions as to the acceptable fulfillment of the

contract on the part of the Contractor. Except as provided in Article 1109.12, the Engineer's decisions will be final.

- B. For authority to temporarily suspend work, see Articles 1105.07 and 1108.06.

#### **1105.02 PLANS.**

- A. The final plans on file in the office of the Contracting Authority, show the location, typical construction details, and dimensions of the work contemplated. The work shall be performed in conformity therewith, except in case of error or unforeseen contingency.
- B. The plans are made from careful surveys and represent the foreseen construction requirements. Any appreciable deviation from the plans made necessary to expedite construction, or because of error, shall be called to the attention of the other party, in writing, by the party discovering such conditions. If necessary, revised plans will be provided.

#### **1105.03 WORKING DRAWINGS.**

- A. The plans will be supplemented by such working drawings as are necessary to adequately control the work. Working drawings shall be furnished by the Contractor, as required by the contract documents. When certification by a Professional Engineer licensed in the State of Iowa is required, the certification shall be in the appropriate branch of engineering, for the work specified in the contract documents. Working drawings may include shop drawings of fabricated materials, erection plans, falsework plans, cofferdam plans, or other supplemental plans or data. Shop drawings for structures shall show fully detailed dimensions and sizes of all component parts of the structure. Prior to review of working drawings, any work done or material ordered shall be at the Contractor's risk. The Contractor shall understand that the Contracting Authority's review of working drawings submitted by the Contractor covers only requirements for strength and arrangement of component parts. The Contracting Authority assumes no responsibility for errors in dimensions and assumes the Contractor will use material complying with requirements of the contract documents or, where not specified, those of sound and reasonable quality, and will erect the subjects of such working drawings in accordance with recognized standards of first quality work or, when specified, in accordance with standards of the contract documents. If unanticipated and either unusual or complex construction procedures or site conditions occur, the Engineer may require the Contractor to submit such working drawings as, in the judgment of the Engineer, are necessary to satisfactorily complete the proposed construction.
- B. For non-Primary projects, working drawings shall be submitted to the Engineer unless noted otherwise in the contract documents.
- C. For Primary and Interstate projects, all submittals shall be processed by the Contractor and sent to the Review Office identified in Table 1105.03-1 below with a copy of the cover letter sent to the Resident Construction Engineer

and District Materials Engineer. The cover letter shall include the following information:

- Date of submittal or resubmittal
- Project number
- Description of submittal
- Contractor's name, address, and telephone number
- Number of submittal copies
- Fabricator's name, address, and telephone number (if applicable).

**Table 1105.03-1: Review Offices for Working Drawings**

<b>DESCRIPTION</b>	<b>REVIEW OFFICE</b>	<b>NUMBER OF COPIES</b>	<b>REVIEW TIME (calendar days)</b>
Falsework for slab bridges	Bridges and Structures	2	30
Cofferdam design (when required)	Bridges and Structures	2	30
Reconstruction of substructure (detailed plans for supporting the superstructure)	Bridges and Structures	2	30
Steel Structures	Bridges and Structures	7	30
Detail plans for falsework or centering support of steel structures (i.e. erection plans)	Bridges and Structures	2	30
Steel and aluminum pedestrian hand rails	Bridges and Structures	2	30
Highway sign support structures (i.e. trusses, cantilevers, & bridge mounts)	Bridges and Structures	2	30
Precast concrete (i.e. deck panels, RCB culverts, noise wall panels, arch sections, etc.)	Bridges and Structures	2	30
Tower lighting	Bridges and Structures	2	30
Highway lighting	Traffic & Safety	2	30
Highway signing steel breakaway posts	Traffic and Safety	2	30
Traffic signalization*	Traffic and Safety	2	30
Highway signing - Type A & B signs	Traffic and Safety	2	30
Bridge components	Bridges and Structures	2	30
Pre-engineered steel truss recreational trail bridge	Bridges and Structures	2	30

MSE, segmental, & modular block retaining walls	Design (Soils Design Section)	Preliminary submittal: 3 design calculations, 3 shop drawings, & 3 field construction drawings	30
		Final submittal: 3 design calculations, 3 shop drawings, & 3 field construction drawings	14
Soil nail & tie-back retaining walls	Design (Soils Design Section)	6 final design plans	60
Intermediate foundation improvement (IFI) (i.e. stone columns, geopiers, etc.)	Design (Soils Design Section)	4 design calculations & 8 field construction drawings	30
Removal of box girder bridges	Bridges and Structures	2	30
Structural erection manual	Bridges and Structures	2	30
Temporary shoring	Bridges and Structures	2	30
Temporary sheet pile retaining wall	Bridges and Structures	2	30
Safety grates for RCB culverts	Bridges and Structures	2	30
* Submittal time shall be within 45 calendar days from the date of award of contract.			

- D. Unless specified otherwise in the contract documents, Contractor submittal time shall be subject to the specified review time and the Contractor's need based on their schedule for the work.
- E. When the contract documents specify submittals to be sent to the Design Consultant, copies of the cover letter shall be sent to the specified Review Office, Resident Construction Engineer, and District Materials Engineer.

**1105.04 CONFORMITY WITH AND COORDINATION OF THE CONTRACT DOCUMENTS.**

- A. In case of a discrepancy between contents of the contract documents, the following items listed by descending order shall prevail:
  1. Addendum
  2. Proposal Form
  3. Special Provision
  4. Plans
  5. Standard Bridge Plans, Standard Culvert Plans, and Standard Road Plans
  6. Developmental Specifications

7. Supplemental Specifications
  8. General Supplemental Specifications
  9. Standard Specifications
  10. Materials I.M.
- B.** Should there be a discrepancy between figures and drawings on any of the contract documents, the figures shall govern unless they are obviously incorrect.
- C.** The Contractor shall not take advantage of any apparent error, omission, or discrepancy in the contract documents. The Engineer will be permitted to make such correction in interpretation as may be deemed necessary for the fulfillment of the intent of the contract documents subject to compensation as provided in Articles 1109.03, 1109.04 and 1109.16. Written notice of changes in the contract documents will be given to the Contractor by the Engineer.
- D.** All work performed and all materials furnished shall be in reasonably close conformity with the lines, grades, cross sections, dimensions, and material requirements, including tolerances, shown in the contract documents.
- E.** If the Engineer finds the material or the finished product in which the material is used is not within reasonably close conformity with the contract documents but that reasonably acceptable work has been produced, the Engineer will then make a determination if the work shall be accepted and remain in place. In this event, the Engineer will document the basis of acceptance by contract modification which will provide for an appropriate adjustment in the contract price for such work or materials as is necessary to conform to the determination based on engineering judgment.
- F.** If the Engineer finds the material or the finished product in which the material is used or the work performed is not in reasonably close conformity with the contract documents and has resulted in an inferior or unsatisfactory product, the work or material shall be considered unacceptable work and shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.

#### **1105.05 SUPERVISION BY CONTRACTOR.**

The Contractor or a competent Superintendent must be on the project when construction activities are taking place. This representative must be capable of reading and thoroughly understanding the contract documents and experienced in the type of work being performed. The Superintendent shall supervise, direct, and control the Contractor's operations, personnel, work, and the subcontractor's operations. The Superintendent shall have full authority to execute orders or directions of the Engineer without delay and to promptly supply such materials, equipment, tools, labor, and incidentals as may be required. The Contractor shall give the Engineer written notification of the name of the Superintendent. A copy of the official plans and specifications shall be available on the project site at all times.

**1105.06 CONSTRUCTION STAKES.**

- A. Minimum standards for Construction Survey provided by the Engineer will meet the requirements of Section 2526. The Engineer will set the necessary center line, slope, and grade stakes promptly upon notification by the Contractor that stakes are needed.
- B. For all structures, the Engineer will set stakes for roadway center line and such other stakes as are necessary to establish the location, elevation, and alignment of the structure. If requested by the Contractor, the Engineer will furnish stakes determining the center line of piers or pedestals, the faces of abutments, and angles of the wings or retaining walls. When these stakes or lines are given by the Engineer, the Contracting Authority will be responsible for the correctness thereof, and the Contractor shall be responsible for their proper use, interpretation, and preservation.
- C. The Contracting Authority will not be responsible for delays due to lack of grade or line stakes unless the Contractor has given the Engineer a 24 hour written notice that such stakes will be needed and the Contractor's work is being conducted in a satisfactory manner and at the specified rate of progress.
- D. The Contractor shall be responsible for the preservation of stakes and marks. If in the opinion of the Engineer any of the survey stakes or marks have been carelessly or willfully destroyed or disturbed by the Contractor, the cost of replacing them will be charged against the Contractor.

**1105.07 AUTHORITY AND DUTIES OF INSPECTOR.**

The Contracting Authority may appoint inspectors to represent the Engineer in the inspection of materials used in and work done under the contract. Such inspection may extend to any part of the work and to preparation or manufacture of materials to be used. The inspector will not be permitted to modify in any way the provisions of the contract documents or to delay the work by failing to inspect materials and work with reasonable promptness. An inspector is placed on the work to keep the Engineer informed as to its progress and the manner in which it is being performed. Results of inspection tests and examinations will be available to the Contractor on an informational basis. Absence or presence of representative test data does not alter the Contractor's responsibility for compliance with the contract documents in accordance with Article 1104.01. The inspector will not act as supervisor or perform other duties for the Contractor, nor improperly interfere with management of the work. The inspector will not be authorized to approve or accept any portion of the work. In case of dispute between the Contractor and inspector as to quality of materials or manner of performing the work, the inspector has authority to reject materials or suspend the work until the question at issue can be decided by the Engineer. Written notice of suspension of work will be given to the Engineer and Contractor by the inspector.

**1105.08 INSPECTION OF WORK.**

- A. The Contractor shall furnish the Engineer with every reasonable facility for ascertaining whether the work is being performed in conformance with the contract documents. At any time before acceptance of the work, upon

request of the Engineer, the Contractor shall remove or uncover such portions of finished work as the Engineer may direct. After examination has been made, the Contractor shall restore such portions of the work to the standard required by the contract documents.

- B. If work thus exposed or examined proves acceptable, the uncovering or removing and replacing of covering, or the restoring of parts removed, will be paid for as extra work, except that no payment will be made for work involved in checking smoothness of pavement surfaces. If work thus exposed and examined proves unacceptable, the Contractor shall replace the defective work in accordance with the specifications. If work thus exposed and examined proves either unacceptable or deficient, the Contractor will be paid only for work as finally accepted.
- C. Work done without the Engineer having been afforded ample opportunity to provide suitable inspection, or unauthorized work, may be ordered removed and replaced at the Contractor's expense, or may be excluded from the quantities measured for payment.

#### **1105.09 REMOVAL OF DEFECTIVE WORK.**

- A. Any defective work shall be removed and replaced at the Contractor's expense.
- B. Should the Contractor fail or refuse to remove defective work when so ordered by the Engineer, the Engineer has authority to order the Contractor to suspend further operations, and may withhold payment on estimates until such defective work has been removed and replaced in accordance with the contract documents. Continued failure or refusal on the part of the Contractor to correct defective work promptly will be sufficient cause for the Contracting Authority to declare the contract in default and to complete the work in accordance with Article 1108.11.

#### **1105.10 UNAUTHORIZED WORK.**

Unauthorized work or work done in excess of that provided by the lines and grades shown in the contract documents or as given by the Engineer will not be paid for.

#### **1105.11 FINAL INSPECTION.**

Upon notification by the Contractor or the Contractor's authorized representative that the work is completed, the Engineer shall make prompt final inspection of each item of work included in the contract. If the work is found not to be in accordance with the contract documents, the Contractor will be advised as to the particular defects to be remedied.

#### **1105.12 RESTRICTIONS ON MOVING AND USE OF HEAVY EQUIPMENT.**

The following restrictions shall apply to the moving and use of heavy equipment:

- A. Movement of equipment to and from the project shall be in compliance with the laws governing the operation of vehicles on the highways of Iowa. Movement and operation of equipment over completed portions of pavements, HMA surfaces, base courses, and structures which are a part of the project shall be with legal axle loads, except as modified in this article.

- B.** In the case of earthwork and shouldering to be done in connection with either rigid or flexible pavement or pavement widening and resurfacing, earth moving equipment shall not be operated or driven on or across the pavement, except as authorized by the Engineer at designated equipment crossings.

When equipment crossings are specifically permitted, the Contractor shall designate before use the location and number of equipment crossings to be used. The location of all equipment crossings shall be subject to the approval of the Engineer. The Engineer will not approve equipment crossings in areas of limited sight distance or near structures or railroad crossings or at any other location which will place safety of the traveling public in jeopardy. At these equipment crossings, equipment having axle loads greater than the maximum permitted by law may be used.

Equipment crossings shall be 30 feet (10 m) in width measured along the center line of the road to be crossed and shall not be closer than 300 feet (100 m) to each other.

Within the prescribed limits, the Contractor may operate hauling equipment on the surface of the pavement or on a hauling bridge constructed by the Contractor.

If an equipment crossing is used, the existing driving surface on the through road shall be restored at the end of each day's operation to safely serve traffic at expected speeds. The Contractor may install pavement protection at equipment crossings to reduce the surface restoration at the end of each day's operation.

For each equipment crossing used, the Contractor shall, at the Engineer's option, either replace the pavement or pay the Contracting Authority at the rate of \$7,500 dollars on the basis of a two lane pavement.

If a hauling bridge is used, it shall support loaded hauling equipment with no contact with the pavement surface and will be subject to the Engineers approval. When a hauling bridge is used, no pavement replacement or payment to the Contracting Authority will be required.

Pavement protection installations and hauling bridges shall accommodate two lanes of public traffic. They shall be removed from the through road at the close of each day's operations.

- C.** Drag lines, cranes, or power shovels shall not be operated with any part of the machine resting upon a pavement, HMA surface, or base course except with approval of the Engineer and in accordance with restrictions in that approval.
- D.** For structures, the following equipment and material loads shall apply:
- 1.** Only legal load vehicles and equipment will be permitted on structures unless approved by the Engineer.

2. Legal load vehicles and equipment will be subject to weight restrictions according to the posted limits.
3. All loads in spans where critical or damaged members, as indicated in the contract documents, are being repaired or replaced shall be subject to the approval of the Engineer.
4. Material loads stored on the structure shall be limited to a maximum weight of 20 tons (20 Mg). Distribution of load shall be governed by the following:
  - a. If the material load is greater than 200 pounds per square foot (9.5 kPa) and less than 500 pounds per square foot (23.9 kPa), the loaded area will be restricted to an area 5 feet by 10 feet (50 square feet) (1.5 m by 3 m (4.5 m<sup>2</sup>)) with a clear spacing of 15 feet (4.6 m) between loaded areas.
  - b. If the material load is less than or equal to 200 pounds per square foot (9.5 kPa), the loaded area is only restricted by the 20 ton (20 Mg) maximum.
5. Construction vehicles and equipment not involved with the loading and unloading of stored material shall be restricted from operating within 10 feet (3 m) of the area where the material is stored.

All vehicle, equipment, and material loads exceeding the limitations as stated above shall be submitted to the Engineer for checking and review prior to subjecting the loads to the structure. The Contractor shall include in their submittal all details, calculations, and assumptions. The calculations shall be certified by a Professional Engineer licensed to practice engineering in the State of Iowa.

The above submittal requirements shall also apply to cranes or other construction equipments when:

- a. Other components are added resulting in overall weight greater than legally allowed or granted by special permit.
  - b. The operational weight including construction loads is greater than legally allowed or granted by special permit.
  - c. Load distribution is altered during operation due to the use of outriggers or other devices.
- E.** Under no conditions shall machines equipped with metal lugs or similar projections on the treads be operated on the surface of a pavement, HMA surface, base course, or structures.
- F.** For building shoulders on completed pavements of any type, the maximum axle load used for equipment operating on pavement shall not exceed the legal axle load.
- G.** Crawler type equipment shall not be moved on or off a pavement or base course except at places where the compacted earth adjacent to slab is at least 2 inches (50 mm) higher than the surface of the pavement or base course. When heavy, crawler type equipment is moved on or off the edge of

a pavement or base course, an adequate timber approach shall be built at the edge of slab to prevent overloading or otherwise damaging the edge of the slab.

- H. Compacting equipment having axle loads greater than 20,000 pounds may be used on the work under the following provisions:
  1. The equipment shall be transported to and from the work and across the bridges on the work in compliance with laws of the State of Iowa.
  2. For compaction of subbase, the weight (mass) of the equipment used shall not be greater than that of compaction equipment used in correction of the roadbed for grade and cross section.
  3. For compaction of base course, the weight (mass) of the equipment used shall not be greater than the weight of the equipment used in compaction of the subbase on which the base is placed.
  4. For compaction of surface courses, the weight (mass) of the equipment shall not be greater than that of equipment used in compaction of the base on which the surface course is placed.
- I. For grading or any other type of work, no equipment having an axle load greater than 50,000 pounds shall be operated over a culvert except as may be authorized by the Engineer.

#### **1105.13 TEMPORARY PRIMARY ROAD HAUL ROADS.**

- A. For Primary Road projects, the Department may designate any Secondary Road or city street, excluding officially designated temporary Primary Road detours, as a temporary Primary Road haul road, over which materials from any source are to be hauled, such as those listed below:
  1. Soil for embankments or shouldering;
  2. Sand, gravel, and crushed stone for base and subbase courses;
  3. Roadway paving aggregates prior to mixing;
  4. Granular surfacing or backfill;
  5. Mixed HMA or PCC for paving, transported from the plant to the work site;
  6. Broken or milled pavement.
- B. Designation of temporary Primary Road haul roads shall be as follows:
  1. When materials such as those listed, in an amount greater than 5000 tons (5000 Mg), are to be transported to the work by truck, and when requested by the Contractor, or on its own initiative, the Department will designate a temporary Primary Road haul road. In making such

designation, the Department will only consider routes which are physically capable for such use. In addition, the Department will consider if the route submitted by the Contractor is practical and feasible regarding length of haul, road conditions, traffic, and maximum utilization of the Primary Road System. The designation will include a separate return route from the project if requested by the Contractor when granular surfaced roads are to be used for the return route. If a separate return route is not requested by the Contractor, it will be designated by the Contracting Authority.

2. The Department reserves the right to designate as a temporary Primary Road haul road a route other than a route selected by the Contractor which is physically capable for such use; in this case, haul in excess of the route selected by the Contractor will be paid for by the Department. The Department will not designate, as a temporary Primary Road haul road, roads normally serving primarily as access to a regularly operated commercial source.
  3. When temporary Primary Road haul roads are required, the Contractor shall submit the suggested haul route or routes to the Department within 21 calendar days after the approval for award. Haul route requests shall be submitted to the Engineer. These are to be the most reasonable and practical route or routes. They shall be suitable for use as the haul road or haul roads. In evaluating the feasibility of haul routes, the Contractor shall contact the appropriate local jurisdictions, prior to submitting the haul road request. Roads or bridges with load restrictions and low structural values will not be considered as feasible routes, physically capable of use by the Contractor. If the Contractor fails to provide haul road information within the time allowed, the Department will have the right to establish a route without increased compensation to the Contractor.
- C. Primary Roads and temporary Primary Road haul roads for the project shall be used for delivery of materials for which routes are designated.
- D. Prior to any revocation by the Department of the temporary Primary Road haul road designation, The Department will comply with Subsections 1, 2, and 3 of Section 313.28 and Section 313.29, Code of Iowa. If restorative work is ordered to be done by the Contractor, payment will be made as extra work in accordance with Article 1109.03.

#### **1105.14 PROTECTION OF WATER QUALITY AND WETLANDS.**

- A. The Contractor shall comply with the requirements of the Clean Water Act (33 U.S.C. 1344 and 33 CFR 323) and Executive Order 11990. When it becomes necessary for the Contractor to work in waters of the United States, the Contractor shall be aware that a Section 404 permit may be required.
- B. When required, the Contracting Authority will obtain a Section 404 permit for essential work on the right-of-way prior to the award of the contract. The Contractor shall adhere to the requirements of the permit. Activities

occurring in or across waters of the United States not specifically reviewed and approved in the permit are not authorized. If the Contractor desires to use construction methods that are not specifically approved by the permit, the Contractor shall be responsible for obtaining approval in the form of a new Section 404 permit from the U.S. Army Corps of Engineers and possibly Iowa DNR. The Contractor shall not use construction methods that require additional mitigation by the Contracting Authority. The Contractor will not be granted additional compensation or contract time due to their request for a new permit. If, however, due to no fault of the Contractor, a Section 404 permit modification involving activities within the right-of-way is deemed necessary by the Engineer, additional contract time and/or compensation may be considered.

- C. Projects that are regulated by the requirements of a Clean Water Act Section 404/401 Permit will be identified in the contract documents. The Contractor shall comply with the following requirements in order to meet the general conditions of Clean Water Act Section 404/401 Permits.

**1. Historic or Archaeological Remains.**

The Contractor shall comply with Article 2102.03, J.

**2. Inspection.**

The Contractor shall allow representatives from the Iowa Department of Natural Resources or U.S. Army Corps of Engineers to inspect the work any time deemed necessary to ensure that the work is being accomplished in accordance with the terms and conditions of the contract documents and permit.

**3. Timing.**

The Contractor is encouraged to conduct construction activities during a period of low flow unless otherwise agreed upon by the Engineer.

**4. Vegetation Clearing.**

Clearing of vegetation, including trees located in or immediately adjacent to waters of the state, shall be limited to that which is absolutely necessary for construction of the project as indicated in the contract documents. Vegetative clearing material shall not be disposed of in wetlands unless otherwise indicated in the contract documents.

**5. Disposal and Handling.**

All construction debris shall be disposed of at upland, non-wetland locations so that it cannot enter a waterway or wetland. Construction equipment, activities, and materials shall be kept out of the water to the maximum extent possible. Equipment for handling and conveying materials during construction shall be operated to prevent dumping or spilling the materials into waterbodies, streams, or wetlands except as approved by the Engineer. Care shall be taken to prevent petroleum products, chemicals, or other deleterious materials from entering waterbodies, streams, or wetlands.

**6. Erosion Control.**

Erosion control features shall be installed by the Contractor in accordance with Sections 2601 and 2602.

**7. Revegetation.**

All disturbed areas not covered with revetment shall be seeded in accordance with Section 2601.

**8. Temporary Fills.**

If temporary crossings, causeways, or work pads are needed for the work, then temporary structures and fills shall be constructed in accordance with Section 2547.

**9. Flowable Mortar.**

Flowable mortar shall be installed in accordance with Section 2506.

**10. Bridge Removal.**

When bridge removal is identified in the contract documents, the bridge and piers shall be removed in accordance with Section 2401. Debris from bridge removal that falls into the water shall remain there only temporarily and shall be removed by the Contractor.

**11. Revetment.**

Revetment materials shall comply with Section 4130.

**12. Indiana Bats.**

Suitable habitat for the Indiana bat (*Myotis sodalis*), as identified by the Contracting Authority, shall be removed between September 15th and April 15th when Indiana bats are not expected to be using potentially suitable trees. The Contractor shall limit removal of forest cover to those areas which are absolutely necessary for the construction of the work. Questions regarding this condition shall be directed to the Engineer.

**13. Navigation.**

No activity shall cause more than a minimal adverse effect on navigation. Safety lights and signals required by the contract documents shall be installed on authorized facilities in navigable waters of the United States. Payment will be made in accordance with Article 1109.03.

**14. Aquatic Life Movements.**

When indigenous aquatic life has been identified in the contract documents, no activity shall substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area.

**15. Spawning Areas.**

When spawning areas and spawning seasons have been identified in the contract documents, the Contractor shall limit activities in spawning areas during spawning seasons and avoid these areas. Contractor's activities that result in physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important

spawning area will be prohibited, unless otherwise indicated in the contract documents.

**16. Migratory Bird Breeding Areas.**

When migratory bird breeding areas have been identified in the contract documents, activities in waters of the United States that serve as breeding areas for migratory birds shall be avoided by the Contractor.

**17. Shellfish Beds.**

When shellfish beds have been identified in the contract documents, no construction activity shall occur in areas of concentrated shellfish populations.

**18. Suitable Material.**

No activity shall use undesirable material (e.g. trash, debris, car bodies, asphalt, etc.). Discharged material or material used for construction shall be free from toxic pollutants in toxic amounts in accordance with Section 307 of the Clean Water Act.

**19. Water Supply Intakes.**

Unless otherwise indicated in the contract documents, no activity shall occur in the proximity of a public water supply intake, except where the activity is for repair or improvement of public water supply intake structures or adjacent bank stabilization.

**20. Adverse Effects From Impoundments.**

If construction activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, or restricting its flow shall be minimized.

**21. Management of Water Flows.**

To the maximum extent practical; the pre-construction course, condition, capacity, and location of open waters shall be maintained by the Contractor during construction, including stream channelization and storm water management activities.

**22. Equipment.**

Heavy equipment working in wetlands or mudflats shall be placed on mats, or other measures shall be taken to minimize soil disturbance.

**23. Endangered Species.**

No activity will be authorized which will jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act, or will destroy or adversely modify the critical habitat of such species.

**24. Historic Properties.**

No activity will be authorized which violates the requirements of Section 106 of the National Historic Preservation Act.

**25. Mitigation.**

The work shall be constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States at the project site (i.e., on site).

**1105.15 VALUE ENGINEERING PROPOSAL.**

- A.** The Contractor may submit written Value Engineering (VE) Proposals to the Engineer, for changing the plans, specifications, or other contract requirements. The purpose of this provision is to encourage the Contractor to suggest alternative lower cost or more efficient construction and to share with the Contractor any cost savings. The changes shall not impair the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, or design and safety standards.
- B.** VE Proposals shall contain the following information:
  - 1. Existing requirements and proposed changes;
  - 2. Contract requirements that must be changed if the VE proposal is adopted;
  - 3. A detailed cost estimate of performing the work as stipulated and as proposed;
  - 4. The time within which the Engineer must make a decision thereon;
  - 5. The items of work affected by the proposed changes, including quantity variations;
  - 6. A statement that the VE proposal is submitted pursuant to the provisions of Article 1105.15.
- C.** The provisions of this article do not require the Engineer to consider any VE proposal that is submitted. Proposed changes that involve the basic design of a bridge or pavement type, or involve the use of mechanical dowel bar inserters will not be considered an acceptable incentive proposal.
- D.** If a VE proposal is similar to a change in the contract documents under consideration by the Contracting Authority for the project at the time the VE proposal is submitted, or if the VE proposal is based on or similar to standard specifications, special provisions, or plans adopted by the Contracting Authority, the Engineer will not accept the VE proposal.
- E.** The Contractor shall continue to perform the work in accordance with contract requirements until a change order incorporating the VE proposal has been processed. If a change order has not been processed by the date on which the Contractor's VE proposal specifies that a decision thereon should be made, or such other date as the Contractor may subsequently have specified in writing, the proposal shall be rejected.

- F.** The Contracting Authority will not be liable to the Contractor for failure to accept or act upon any VE Proposal submitted or for any delays to the work attributable to any such VE proposal.
- G.** The Engineer shall be the sole judge of the acceptability of a VE proposal and of the estimated net savings in construction costs from adoption of all or any part of such VE proposal. In determining the estimated net savings, the right is reserved to disregard the contract bid prices if, in the judgment of the Engineer, the prices do not represent a fair measure of the value of work to be performed or to be deleted.
- H.** The Contracting Authority reserves the right to require the Contractor to share in the Contracting Authority's costs of investigating a VE proposal. Where this condition is imposed, the Contractor shall indicate acceptance in writing, and acceptance may constitute authority for the Contracting Authority to deduct up to 50% of the investigation costs from any money due to the Contractor resulting from the change.
- I.** If the Contractor's VE proposal is accepted in whole or in part, such acceptance will be by change order. The change order will incorporate the changes in the contract documents which are necessary to permit the VE Proposal to be put into effect, and will include any conditions upon which the Contracting Authority's approval is based. The change order shall also set forth the estimated net savings in the cost of performing the work attributable to the VE proposal effectuated by the change order, and will further provide that the Contractor be paid 50% of the estimated net savings amount.
- J.** Acceptance of the VE proposal and performance of the work will not extend the time of completion of the contract, unless specifically provided for in the change order authorizing the proposal.
- K.** The amount specified to be paid to the Contractor in the change order for a VE proposal shall constitute full compensation to the Contractor for the proposal and performance of the work.
- L.** The Contracting Authority reserves the right to adopt a VE Proposal for general use on contracts administered by the Contracting Authority when it determines that a VE proposal is suitable for application to other contracts. When an accepted VE proposal is adopted for general use, only the Contractor who first submitted this VE proposal will be eligible for compensation according to this article, and in that case, only on those contracts awarded to the same Contractor prior to submission of the accepted VE proposal and on which such VE proposal is also submitted and accepted. VE proposals identical or similar to previously submitted VE proposals will be eligible for consideration and compensation under provisions of this article if those VE proposals were not adopted for general application to other contracts administered by the Contracting Authority. Subject to the provisions contained herein, the State or any other public agency will have the right to use all or any part of any submitted VE proposal without obligation or compensation of any kind to the Contractor.

- M.** The Contractor is encouraged to include the provisions of this article in contracts with subcontractors. All VE proposals by subcontractors shall be submitted by the prime contractor.

### **Section 1106. Control of Materials**

#### **1106.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS.**

- A.** Materials used in work shall meet all quality requirements of the contract. In order to expedite inspection and testing of materials, the Contractor shall notify the Contracting Authority in writing of the proposed sources of materials promptly after being awarded the contract. Any material shall be produced with a reasonably uniform quality and within requirements specified; the producer shall perform quality control tests and evaluations the producer believes necessary to control the product adequately. All materials for use in the project are subject to inspection and tests at any time prior to being incorporated into the work.
- B.** For the convenience of the Contractor and when convenient to the Contracting Authority, materials may be inspected at the site of production. Materials tested and found in compliance at the site of production may be later inspected for reasonable conformance and will be rejected for obvious mistakes, contamination, quality change, or mishandling. To avoid later rejection, materials which usually show an extreme change in character or quality prior to or during the process of incorporation into the work should be produced to more rigid limits than those required by the specifications. At the option of the Engineer, approval of the source, or approval of materials at the source prior to delivery, may be required. If it is found after examination that sources of supply for previously approved materials do not produce specified products or when conditions are such that use of unfit materials can not be prevented except by extraordinary inspection methods, the Contractor shall furnish materials from other sources. Before delivery, and at any time during the process of preparation and use, materials shall be subject to the approval of the Engineer.
- C.** Materials which are not previously inspected will be inspected at the project site. Acceptance at this time will be based on sampling and testing, producer's certifications, visual inspection, or any combination of these at the discretion of the Engineer.
- D.** Use of materials on the basis of the producer's certification, quality control tests, and evaluations may be permitted or required. Contractor and supplier laboratories performing testing for all projects on Interstate and Primary routes shall be qualified laboratories in accordance with Materials I.M. 208. The Engineer may require specific data obtained by qualified persons and procedures be provided with the material when delivered. Certified gradation testing by a certified aggregate technician will be required for all aggregates to be furnished by the Contractor, and this shall be done in accordance with Materials I.M. 209 and 213. This requirement shall apply to aggregate furnished in accordance with Article 1106.05 only when gradation of that aggregate is a contract requirement.

**1106.02 SAMPLES AND TESTS.**

- A. Each consignment of material shall be tested or inspected before being incorporated into the project and shall be approved by the Engineer in charge of the contract before it is used. The Contractor shall afford such facilities for collecting and forwarding samples as the Engineer may require.
- B. When not designated in the standard or supplemental specifications or Materials I.M.s, the inspection, sampling, testing, and basis of acceptance of materials shall be in accordance with the current AASHTO "Standard Specifications for Transportation Materials and Methods of Sampling and Testing," including published interim standards.

**1106.03 STORAGE OF MATERIALS.**

The Contractor shall be responsible for care and storage of materials delivered to the project site or purchased for use. Material that has been delivered to the project site and has become damaged or contaminated before actual incorporation in the work may be rejected by the Engineer even though it may have been previously acceptable. Stored materials shall be so located as to facilitate thorough inspections.

**1106.04 UNACCEPTABLE MATERIALS.**

All materials not conforming to requirements of the specifications at the time they are to be used shall be considered unacceptable, and these materials will be rejected and shall be removed immediately from the work site unless otherwise instructed by the Engineer. Rejected material shall not be used until the defects have been corrected and approval has been given.

**1106.05 AGGREGATE FURNISHED BY COUNTY.**

On some Secondary asphalt concrete paving or base construction projects, part or all of the aggregates may be furnished by the County in the pit, stockpile, or on the road, as stated in the contract documents. When the proposal states that the County will furnish the aggregate, the material will be furnished in the designated pit, stockpile, or on the road without cost to the Contractor, unless otherwise stated.

**A. Aggregate Furnished by County in Pit.**

1. When aggregate is furnished by the County in a pit, the Contractor will be required to do all work necessary, including stripping, pumping, processing, and hauling, to produce pit run material or material of the quality specified. The operation in any county owned or county controlled pit will be under the general direction of the County Engineer. All gravel aggregate produced for base construction or produced from wet pits for any part of the construction shall be stockpiled for a period of not less than 24 hours before being used in the project.
2. In the operation of the pits, the Contractor will be required to conduct the work in such a manner that a uniform product is obtained. This may require working full faces, partial faces, and/or simultaneous operations from different locations in the pit, as directed by the Engineer. All oversize aggregate less than 8 inches (200 mm) in diameter shall be crushed to pass the 3/4 inch (19 mm) sieve.

**B. Aggregate Furnished by County in Stockpile.**

When aggregate is furnished in a stockpile or stockpiles at stated locations, the Contractor will not be responsible for quality of the aggregate unless designated, but the Contractor will be required to mix, blend, haul, compact the material, and do all other work necessary to incorporate this material into the project.

**C. Aggregate Furnished by County on Road.**

When aggregate is furnished on the road, the material will be deposited by dumping the required amount onto the road. The Contractor will not be responsible for quality of the aggregate unless designated, but the Contractor will be required to windrow, equalize, mix, blend, wet, compact the material, and do all other work necessary to incorporate this material into the project.

**D. Filler.**

When it is possible to predetermine, with a reasonable degree of accuracy, that the aggregate specified for use and furnished will require the addition of filler or another aggregate to produce a workable and satisfactory mixture, the contract documents will identify the filler or other aggregate and will include an estimate of the quantity and a basis of payment.

**Section 1107. Legal Relations and Responsibility to the Public****1107.01 LAWS TO BE OBSERVED.**

- A.** The Contractor is presumed to be familiar with all laws, ordinances, and regulations that may in any manner affect those engaged or employed upon the work, or materials or equipment used in or upon the work, or that may in any way affect the conduct of the work. The Contractor shall so conduct the work that conflict with any such laws, ordinances, or regulations will be avoided, and the Contractor shall save harmless the Contracting Authority and its representatives against any claims arising from violation thereof.
- B.** The provisions of Chapter 73, Code of Iowa, concerning preference for Iowa products and labor shall not apply to contracts involving work financed wholly or in part by the Federal Government.
- C.** All contractors must register with the Labor Commissioner as required by the Code of Iowa, Chapter 91C. For State contracts, this registration must be on file prior to the award of contract.
- D.** Contractors shall indicate whether or not they are an "out of state contractor", as defined in Iowa Code Section 103A.3.
- E.** Except for contracts that are for materials only, all out of state contractors shall file a surety bond for contracts involving non-Federal-aid projects in excess of \$5,000 in value prior to commencing a contract. This surety bond shall be filed in accordance with the Code of Iowa, Section 91C.7. It shall be filed with the Division of Labor Services of the Department of Workforce

Development. The value of this surety bond shall be \$1,000 or 5% of the total contract amount, whichever is greater.

**1107.02 INSURANCE.**

**A. Liability Insurance for All Projects.**

1. It shall be the Contractor's responsibility to have liability insurance covering all of the construction operations incident to contract completion and the Contractor must have on file with the Contracting Authority a current "Certificate of Insurance" prior to award of contract. The certificate shall identify the insurance company firm name and address, Contractor firm name, policy period, type of policy, limits of coverage, and scope of work covered (single contract or statewide). This requirement shall apply with equal force, whether the work is performed by persons employed directly by the Contractor including a subcontractor, persons employed by a subcontractor, or by an independent contractor.
2. In addition to the above, the Contracting Authority shall be included as an insured party, or a separate owner's protective policy shall be filed showing the Contracting Authority as an insured party.
3. The liability insurance shall be written by an insurance company (or companies) qualified to do business in Iowa. For independent contractors engaged solely in the transportation of materials, the minimum coverage provided by such insurance shall be not less than that required by Chapter 325A, Code of Iowa, for such truck operators or contract carriers as defined therein. For all other contractors, subcontractors, independent contractors, and the Contracting Authority, the minimum coverage by such insurance shall be as follows:

General Liability, Including:		BODILY INJURY
Independent Contractors	\$500,000	Each Occurrence
Contractual Liability,	\$500,000	Aggregate
Products and Completed Operations		PROPERTY DAMAGE
	\$250,000	Each Occurrence
	\$250,000	Aggregate
		or

BODILY INJURY AND PROPERTY DAMAGE		
- COMBINED SINGLE LIMIT*		
	\$750,000	Each Occurrence
	\$750,000	Aggregate

\*A comprehensive Catastrophe Liability Policy (Umbrella) can be used to aid in achieving the minimum required limits.

4. Failure on the part of the Contractor to comply with the requirements of this article will be considered sufficient cause to suspend the work, withhold estimates, and to deny the Contractor from receiving further contract awards, as provided in Article 1103.01.

**B. Insurance When Working In Railroad Right-of-Way.****1. General.**

This section shall apply when specified in the proposal form. When work is to be performed within railroad right-of-way, this specification prescribes provisions for Public Liability and Property Damage Insurance obtained by the Contractor for their own operations; and on behalf of railroads on or about whose right-of-way the Contractor is required to work in during the construction of highway projects.

**2. Applicability.**

This specification applies to the following:

- a. To Contractor's legal liability for bodily injury to or death of persons and for injury to or destruction of property.
- b. To the liability which may attach to railroads for bodily injury to or death of persons and for injury to or destruction of property.
- c. To damage of property owned by or in the care, custody, or control of the railroads, both as liability or damage may arise out of the Contractor's operations, or may result from certain work, described in Article 1107.02, B, 5, that may be performed by railroads at or about railroad rights-of-way, in connection with the construction of highway projects.

**3. Contractor's Public Liability and Property Damage Insurance.**

- a. The Contractor may be subject to liability with respect to bodily injury or death of persons, and damage or destruction of property, which may be suffered by persons other than their own employees as a result of their operations in connection with construction of highway projects located wholly or partly within railroad right-of-way. Protection to cover such liability of the Contractor shall be furnished under regular Public Liability and Property Damage Insurance policies issued in the name of the Contractor. These policies shall be written to furnish protection to the Contractor respecting their operations in performing work covered by their contract.
- b. When the Contractor sublets a part of the work on any project to a subcontractor, the Contractor shall secure insurance protection in the Contractor's own behalf under the Contractor's Public Liability and Property Damage Insurance policies to cover any liability imposed on the Contractor by law for damages because of bodily injury or death of persons and damage or destruction of property as a result of work undertaken by these subcontractors. In addition, the Contractor shall provide for and on behalf of any such subcontractor's protection to cover like liability imposed upon the latter as a result of their operations by means of separate and individual Public Liability and Property Damage policies; or, in the alternative, each subcontractor shall provide satisfactory insurance on the subcontractor's own behalf to cover the subcontractor's individual operations.
- c. The Contractor shall furnish to the Department evidence that the insurance coverages required herein have been provided. The Contractor shall also furnish a copy of this evidence to the railroad

or railroads involved. The insurance specified shall be kept in force until all the work required to be performed shall have been satisfactorily completed and accepted in accordance with the contract under which the construction work is undertaken.

**4. Railroad Protective Insurance.**

In connection with highway projects for the elimination of hazards of railroad highway crossings and other highway construction projects wholly or partly within railroad right-of-way, railroad protective liability insurance shall be purchased on behalf of the railroad by the Contractor. The standards for railroad protective insurance established by this specification shall be adhered to insofar as the insurance laws of the State will permit.

**5. Standards for Railroad Protective Insurance.**

- a. Coverage shall be limited to damage suffered by the railroad on account of occurrences arising out of the work of the Contractor on or about the railroad right-of-way, independent of the railroad's general supervision or control, except as noted in Paragraph b, 4, b below.
- b. Coverage shall include:
  - 1) The death of or bodily injury to passengers of the railroad and employees of the railroad not covered by State Workmen's Compensation laws,
  - 2) Personal property owned by or in the care, custody or control of the railroads,
  - 3) The Contractor, or any of the Contractor's agents or employees who suffer bodily injury or death as a result of acts of the railroad or its agents, regardless of the negligence of the railroad, and
  - 4) Negligence of only the following classes of railroad employees:
    - a) Any supervisory employee of the railroad at the job site,
    - b) Any employee of the railroad while operating, attached to, or engaged on, work trains or other railroad equipment at the job site which are assigned exclusively to the Contractor, or
    - c) Any employee of the railroad not within a) or b) above who is specifically loaned or assigned to the work of the Contractor for prevention of accidents or protection of property, the cost of whose services is borne specifically by the Contractor.
- c. The maximum dollar amounts of coverage with respect to bodily injury, death, and property damage is limited to a combined amount of \$2 million per occurrence with an aggregate of \$6 million applying separately to each annual period.

**6. Form of Insurance Policy.**

The policy forms and endorsements shall be those adopted by the companies for use in the State of Iowa.

**7. Payment.**

Payment to the Contractor for insurance required in the contract documents shall be considered as incidental to other items in the contract.

**1107.03 PERMITS, LICENSES, AND TAXES.**

The Contractor shall procure all necessary permits and licenses; pay all charges, fees, and taxes; and give all notices necessary and incident to the due and lawful prosecution of the contract.

**1107.04 PATENTED DEVICES, MATERIALS, AND PROCESSES.**

- A.** The Contractor and Contract Surety shall indemnify and save harmless the Department, any affected third party, or political subdivision from any and all claims for infringement by reason of the use of any patented or copyright item.
- B.** The Contractor shall indemnify the Department for costs, expenses, and damages that may be obligated for payment by reason of an infringement during the prosecution of the work or after completion of the project.

**1107.05 RESTORATION OF SURFACES OPENED BY PERMIT.**

- A.** Prior to final acceptance, if any repairs to the roadway are necessary due to construction or repair of drains or sewers, laying or repairing of pipes or conduits for telegraph or electric wires, or from any other disturbance of the roadway under permission issued by the Contracting Authority, the Contractor shall, upon notification by the Engineer, immediately make necessary repairs in conformance with the contract documents. These repairs shall be paid for per Article 1109.03, B; however, compensation will not be allowed when these repairs are made necessary by the Contractor's negligence or carelessness.
- B.** The Contractor shall not authorize any person or persons to make an opening in the roadway unless a permit, duly authorized by the Contracting Authority, is presented.

**1107.06 FEDERAL PARTICIPATION.**

- A.** The attention of the Contractor is directed to the provisions of an act of Congress known as Title 23, United States Code, Section 1 and any other acts of Congress providing for road improvements. When the Federal Government is to pay all or any portion of the cost of an improvement or project, the construction work, although it is under the supervision of the Department and subject to laws of the State of Iowa, is also subject to the above mentioned acts of Congress and to all authorities. This construction work shall be subject to inspection by duly authorized agents of the Federal Government, but this inspection will not make the Federal Government a party to the contract.
- B.** On all contracts involving Federal-aid, all products of iron, steel, or a coating of steel which are incorporated into the work must have been manufactured

in the United States. The Engineer may allow minimal amounts of these materials from foreign sources, provided the cost does not exceed 0.1% of the contract sum or \$2,500, whichever is greater. The Contractor shall certify that these materials are of domestic origin.

#### **1107.07 SAFETY, HEALTH, POLLUTION, AND SANITATION.**

- A.** In the performance of the contract, the Contractor shall comply with all applicable laws, rules, regulations, and ordinances governing safety, health, pollution, sanitation, noise control, and disposal of waste materials. The Contractor shall also make available such additional safeguards, safety devices, protective equipment, and take such actions as are reasonably necessary to protect the life and health of employees and the public. Violations of properly promulgated laws, rules, regulations, and ordinances reported to the Engineer by responsible agencies may result in the issuance of a suspension order until such time as the violation is corrected.
- B.** The Contractor shall make adequate provisions satisfactory to the Engineer for safety of inspectors, particularly at sampling locations. Provisions shall include guards for moving belts, pulleys, and wheels near the sampling point and a stable platform when sampling is to be done from an elevated location.
- C.** There shall be suitable retention dams in areas where approved liquid asphalt materials or asphalt binder are stored and used, to minimize pollution of nearby areas from effects of normal rains. The Contractor shall take other necessary precautions to prevent pollution of streams, lakes, ponds, reservoirs, and other areas with fuels, oil, bitumens, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.
- D.** Machinery must be properly maintained at all times in order to limit engine noise as well as other extraneous noise.
- E.** When directed by the Engineer, and with no additional compensation, the Contractor shall apply water to the construction area and haul routes, as necessary, to prevent the spread of dust. On Primary Roads and Primary Road extensions, on temporary Primary Road haul roads, and when designated in the contract documents construction areas adjacent to Primary Roads on which traffic is maintained, the Contractor will be paid for watering ordered by the Engineer at the rate of \$15 per thousand gallons (\$4 per kL).

#### **1107.08 PUBLIC CONVENIENCE AND SAFETY.**

- A.** If traffic is to be maintained through the project, the Contractor shall conduct the work to assure the least possible obstruction to access by the residents along the project. The Contractor shall schedule and conduct the work in such a way as to provide for their safety and convenience. Work and materials required by the Engineer for public convenience and safety in excess of that provided for in the contract documents will be paid for per Article 1109.03, B.

- B.** Whenever it is practical to do so, the Contracting Authority will close the portion of the road under construction, provide a detour, and cause suitable detour signs to be erected to mark such detour.
- C.** When it is not practical for the Contracting Authority to close the road for construction, the Contractor will be expected to perform the work under traffic. The contract documents will indicate this fact and provide instruction for handling traffic through the work. Unless otherwise stated in the contract documents, all work shall be performed by the Contractor between the hours of 30 minutes after sunrise to 30 minutes before sunset.
- D.** Except when the contract documents indicate the road is to be closed, during all pavement widening, base widening, and HMA resurfacing work, traffic will be permitted to use the routes involved at all times and shall not be delayed unnecessarily. Where a pavement or base is being widened, the machine depositing material shall operate within the designated work area. Construction equipment may be stored within the right-of-way, as far from the traveled way as is practical, but the roadbed shall be free of Contractor's equipment during non-working hours. The work shall be planned and conducted to cause a minimum delay or interference with traffic.
- E.** When work on a traveled way necessitates diverting traffic from a work lane to another lane, material, mobile equipment, and vehicles shall occupy the work lane to the minimum extent and for the minimum time necessary, and non-mobile equipment shall be removed from the work lane promptly after its operation is completed in that lane.
- F.** On two-lane roadways, a work area shall be established only on one side of the roadway and there shall be no parking of vehicles or equipment on the opposite shoulder within 500 feet (150 m) of the work area.
- G.** The location for storage of equipment by the Contractor during nonworking hours shall be as reviewed and approved by the Engineer prior to use.
- H.** Parking of private vehicles on Interstate right-of-way will not be allowed. Parking of unattended equipment within the median or storage of equipment within 50 feet (15 m) of the edge of pavement will not be allowed.
- I.** Materials stored within the highway right-of-way shall be placed to cause a minimum obstruction to traffic. Sidewalks, gutters, sewer inlets, and portions of highway adjoining the roadway under construction shall not be obstructed more than is necessary.
- J.** When the shoulder work is a part of the contract for work on a project open to public traffic during construction, the Contractor shall coordinate the operations so that the length and degree of pavement edge drop-off caused or partly caused by the operations are minimized.
- K.** Shoulder construction in conjunction with PCC overlay or HMA resurfacing shall meet the following:

**1. Paved Shoulders (Partial or Full Width).**

Construction shall be staged so no drop-offs exist at the pavement or shoulder edge when the adjacent lane is to be opened to traffic. The pavement edge drop-off requirement shall be satisfied with an HMA shoulder fillet. This fillet shall extend into the shoulder area a minimum of six times the thickness of the drop-off and shall be placed prior to the adjacent lane being opened to traffic. Compaction of the HMA fillet shall be a minimum of one coverage with a pneumatic tired roller per 1 inch (25 mm) of thickness. The fillet shall be removed prior to start of shoulder paving. The shoulder edge drop-off requirement shall be satisfied with a granular fillet, meeting the requirements of the following paragraph.

**2. Granular Shoulders.**

Construction shall be staged so no drop-offs exist at the pavement edge when the adjacent lane is to be opened to traffic. The drop-off requirements shall be satisfied with a shoulder fillet or full shoulder width of granular material according to Article 2121.03. The fillet shall extend into the shoulder area a minimum of six times the thickness of the drop-off and shall be placed prior to the adjacent lane being opened to traffic. Compaction of the fillet shall be a minimum of one coverage with a pneumatic tired roller per 1 inch (25 mm) of thickness.

- L. When the Contractor works on a bridge spanning a roadway or passageway, the Contractor shall take all necessary steps to protect the public using the facility below the bridge from falling debris, material, or construction equipment. The Contractor shall submit a safety procedure written plan to the Engineer prior to starting work. The plan shall include the following:
- Design of the means and methods used to provide protection.
  - All assumptions used in the design.

Evaluation of the plan and design may require its preparation by a Professional Engineer licensed in the State of Iowa. If so, the costs will be paid for in accordance with Article 1109.03, B.

**1107.09 BARRICADES AND WARNING SIGNS.**

- A. Barricades, warning signs, and other aspects of traffic control shall be in accordance with the contract documents. In providing adequate and proper traffic control, both the Contracting Authority and the Contractor have certain responsibilities.

**1. Responsibilities of the Contracting Authority.**

**a. Advance Notification.**

Whether a road is closed for construction or traffic is to be maintained during construction, the Contracting Authority will furnish, erect, and maintain such suitable advance warning signs, warning lights, and barricades as it deems appropriate outside the project area, in addition to those barricades and signs required to be erected by the Contractor. If necessary, where a road is closed for construction, a marked detour will be established.

**b. Primary Road Intersections.**

The Department will furnish, erect, and maintain such suitable advance warning signs, warning lights, and barricades as it deems appropriate where a Primary Road intersects a Primary project to provide a marked detour for through traffic using the intersecting Primary route or to provide advance notification to through traffic using the intersecting Primary Road and passing through the intersection. A marked detour may allow public traffic to use the intersection.

**c. Secondary Projects.**

Where a Secondary Road project requires work within a Primary Road right-of-way or extension of the right-of-way across the Secondary Road, the Primary Road shall be protected as a Primary project through which traffic is maintained. The Department will furnish, erect, and maintain such suitable advance warning signs, warning lights, and barricades as it deems appropriate. The County will notify the Department so this protection can be provided for Secondary projects.

**d. Availability.**

Except when there is an item for traffic control, all signs and traffic control devices (except pilot car signs and flagger signs) will be made available to the Contractor at a nearby site designated by the Engineer. They will be furnished by the Contracting Authority. Replacement materials will also be furnished as necessary.

**e. Additional Notification.**

Any additional signs, barricades, or notification beyond the project area deemed appropriate by the Engineer will be the responsibility of the Contracting Authority.

**f. Regulatory and Warning Signs.**

The Contracting Authority will erect prior to construction any additional special regulatory or warning signs required due to construction that are located outside of the project limits. This does not apply to warning and regulatory signs specifically required for traffic control zones necessary for construction activities defined in the contract documents.

**g. Suspensions.**

By agreement, the Contracting Authority will accept responsibility for maintenance of signs and barricades when work is suspended for 30 calendar days or more, or when such time of suspension is anticipated.

**2. Responsibilities of the Contractor.****a. General.**

1) The Contractor shall be responsible for placing and maintaining proper barricades, warning signs, and other traffic control devices on the project, and the Contractor shall take every reasonable precaution to prevent traffic from interfering with the work and to prevent the work from interfering with the traffic; and shall take every reasonable precaution to provide for safety of the general public traveling to, through, within, along, and across the project. Where the road is closed for construction, the Contractor shall take every reasonable

precaution to protect the work and equipment and to provide for safety of the public. When traffic is to be maintained through the construction, the Contractor shall erect and maintain all signs; furnish, erect, and maintain all other traffic control devices and other safeguards; provide all flaggers necessary to protect the traveling public. Payment for this work will be in accordance with Article 2528.05.

- 2) The Contractor shall furnish, erect, and maintain ROAD WORK AHEAD and END ROAD WORK signs at the mainline limits of individual work areas on highway construction or contract maintenance projects where traffic is maintained through a traffic control zone. The ROAD WORK AHEAD sign shall be placed to identify where traffic enters a traffic control zone. the END ROAD WORK sign shall be placed to identify where traffic leaves a traffic control zone and be located at least 500 feet (150 m) beyond the work area. Should more than one contractor be working on the project, the Engineer will assign the responsibility for these signs.

**b. Intersecting Local Public Roads.**

- 1) When a road closed for construction intersects other local public roads within a project, the Contractor shall erect and maintain barricades and warning signs in accordance with the contract documents. Payment for this work will be in accordance with Article 2528.05.
- 2) The responsibility described in the previous paragraph is intended to be in addition to actions of the Department described in Paragraph A, 1, b.

**c. Entrance from Local Public Roads.**

On local public roads open to traffic during construction, the Contractor shall erect and maintain signs in accordance with the contract documents. When scarification is part of the contract, ROUGH ROAD signs shall also be erected on the shoulder of the road under construction at local public road intersections. These signs shall be erected, moved when appropriate, and maintained by the Contractor until the scarified areas are covered with the new surface material. Payment for this work will be in accordance with Article 2528.05.

**d. Shoulder Drop-Offs.**

Drop-offs at paved and granular shoulders shall be treated as provided in Article 1107.08. All other drop-offs shall be handled in accordance with project plan requirements.

**e. Sign Removal.**

- 1) The Contractor shall not remove, move, or obstruct any regulatory, guide, or warning sign without approval of the Engineer. If these signs interfere with construction, approval of the Engineer shall be obtained prior to removal; temporary re-erection, if appropriate; and re-erection by the Contractor.
- 2) The Contractor shall be responsible for erecting, moving, maintenance, and removal of all signs necessary to protect the work area and uncompleted work and signs required elsewhere by the contract documents.

- 3) If the Contractor inadvertently damages a regulatory, guide, or warning sign, or makes it ineffective, the Contractor shall correct it and promptly notify the Engineer.
- f. **Availability of Signs.**  
The Contractor shall pick up signs and barricades furnished by the Contracting Authority at the site designated and shall return them when the work is completed.
- g. **Traffic Control Item.**  
When there is a contract item for traffic control, the Contractor shall furnish all signs, barricades, channelizing devices, and other traffic control identified in the contract documents.
- h. **Commencement of Responsibility.**  
The Contractor shall assume the responsibility required by this article because of the operations concurrent with possession of the work site or right-of-way through moving of equipment, machinery, tools, or materials thereon and in all cases when the work is commenced.
- i. **Contractor's Work Plan.**  
When traffic is to be maintained through construction areas, the Contractor shall submit to the Engineer the work plan or statement for traffic control at the preconstruction conference or at least before work commences.
- j. **Cleaning.**  
The reflective surfaces of signs and traffic control devices shall be washed, as described in Article 2528.03, L, and shall be clean at the time of initial installation on a project.
- k. **Traffic Control in Place.**  
At any time signs, barricades, or other traffic control devices are in place, for which the Contractor is responsible, the Contractor shall have a person on the project site or on call to promptly, within 6 hours, repair and maintain these devices.
- B. The contract documents may require placement, maintenance, and removal of temporary and permanent pavement marking and temporary delineators. This work shall be in accordance with requirements of Section 2527.
- C. An additional flagger shall be stationed at public road intersections or crossings within the work area, if necessary, to prevent vehicles from entering the work area against the flow of traffic. When traffic control is incidental, additional flaggers will not be paid for separately.
- D. The Engineer may require additional flaggers or other safeguards because of unusual or changed conditions, including suspensions and delays. Except when the need arises from the Contractor's actions or inactions, this will be paid for in accordance with Article 1109.03.

#### **1107.10 USE OF EXPLOSIVES.**

- A. When the use of explosives is necessary for the prosecution of the work, the Contractor shall exercise the utmost care not to endanger life or property, including new work. The Contractor shall be responsible for all damage resulting from use of explosives.

- B. All explosives shall be stored in a secure manner in compliance with all laws and ordinances and in quantities maintained at a practical minimum. Storage places shall be clearly marked. Where no local laws or ordinances apply, storage shall be provided satisfactory to the Engineer and, in general, not closer than 1000 feet (300 m) from the road, building, camping area, or place of human occupancy.
- C. The Contractor shall notify each public utility company having structures in proximity to the site of the work of the Contractor's intention to use explosives. This notice shall be given sufficiently in advance to enable the companies to take such steps as may be necessary to protect their property from damage.

#### **1107.11 PROTECTION AND RESTORATION OF PROPERTY.**

- A. The Contractor shall replace or renew fences, sidewalks, or other property damaged by performance of the work or the negligence of the Contractor's employees.
- B. The Contractor shall take suitable precautions to prevent damage to telephone, telegraph, and electric transmission lines along the highway and to pipes, conduits, and other underground structures.
- C. The Contractor shall be responsible for damage to property resulting from the performance of the work; however, this responsibility shall not extend to damage to fences, telephone, telegraph, or electric lines occupying the right-of-way unlawfully, provided due caution has been used in removing them.
- D. The Contractor shall carefully protect from disturbance all land monuments and property marks until an authorized agent has witnessed or otherwise referenced their location, and the Contractor shall not remove them until so directed.
- E. The Contractor's responsibility shall not be released until the work under the Contractor's contract is completed and accepted.

#### **1107.12 RESPONSIBILITY FOR DAMAGE CLAIMS.**

- A. The parties agree that it is their intent that there be no third-party beneficiaries to this contract. No provision of this contract; or of any addendum, materials instructional memorandums, plan, proposal, special provision, developmental specification, supplemental specification, or general supplemental specification; shall be construed as creating any third-party beneficiaries.
- B. The Contractor shall indemnify and save harmless the Contracting Authority and other agencies which have concurred in the award of the contract, as well as their officers and employees, from all suits, actions, or claims of any character, except as provided in the next sentence. Indemnity shall not, however, extend to acts or omissions for which the Contracting Authority is solely responsible, though it shall extend to those claims, actions, or suits in

which the Contractor, Subcontractor, or either's employee or agent, and the Contracting Authority are alleged to be, or could be, jointly or concurrently liable. Any funds due said Contractor under the Contractor's contract as may be considered reasonable and necessary by the Contracting Authority for such purpose may be retained for the use of the Contracting Authority; in case no money is due, the Contractor's surety may be held until such suit or suits, action or actions, claim or claims have been settled and suitable evidence to that effect furnished to the Contracting authority, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence of insurance covering the claim, action, or suit.

- C. The Contractor's responsibility for providing warning devices required by Article 1107.09 to avoid damages or injuries to the traveling public on any portion of the road covered by the contract shall not cease until the work on such portion has been released by the Engineer. A "release" in this context means a written statement by the Engineer stating that the Contractor may cease to maintain barriers and lights, that the road may be opened to traffic, and that the Contractor is relieved of further maintenance of that portion of the road. This release shall not constitute an acceptance of the work.
- D. The Contractor's responsibility for maintenance of lights on any individual structure will cease upon final acceptance of such structure, or when released in writing by the Engineer.

#### **1107.13 OPENING OF SECTIONS OF HIGHWAY TO TRAFFIC.**

- A. When any substantial portion, part, or feature of a contract is completed to the extent that its stability and integrity is not dependent upon completion of other items or work required in the contract, that portion, part, or feature may be released by the Engineer, after conferring with the Contractor, and opened to traffic or received for public usage prior to final approval and acceptance of all work involved in the contract. The Contractor will not be responsible for damages due to the elements or the general wear of traffic to those portions, parts, or features of the road which have been released by the Engineer. The Contractor will be responsible for any damages which may be caused by defective work or failure to comply with the contract documents.
- B. The above provisions relating to a release by the Engineer will be applicable only to those portions, parts, or features of a contract for which the Engineer has furnished to the Contractor a written release.

#### **1107.14 CONTRACTOR'S RESPONSIBILITY FOR WORK.**

The Contractor will be responsible for care and maintenance of partially completed work and finished work on any portion of the road until the Contractor has been released by the Engineer from this responsibility. It shall be the Contractor's responsibility to adjust the operation or method of operation to prevent any damage of any nature to any portion of partially completed or completed work, except for damage to work in officially designated disaster areas where the damage results from Acts of God for which the designation is made. Repair work shall be done promptly upon being so ordered by the Engineer.

**1107.15 CONTRACTOR'S RESPONSIBILITY FOR UTILITY FACILITY AND SERVICES.**

- A.** The Contracting Authority will endeavor to have all necessary adjustments made to public or private utilities within or adjacent to the limits of construction prior to construction activities, except those requiring coordination with the Contractor. Utility facilities have been plotted from available surveys and records, and shall be considered approximate. Other utilities may exist and their location may not be presently known or identified on the plans. The Contractor shall notify Iowa One-Call at 1.800.292.8989 to identify the location of all underground utility facilities within the construction area.
- B.** The Contractor shall determine the exact location of all public and private utility facilities located within the construction area to avoid damage in accordance with Section 480.4, Code of Iowa. The Contractor shall have considered in their bid all permanent and temporary utility appurtenances in their present or adjusted positions as shown in the contract documents. For projects not developed under 761 IAC, Chapter 115.25 and not designated as POINT 25 projects in the contract documents, additional compensation will not be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the utility appurtenances or their operation or relocation.
- C.** Where existing utility facilities are shown in the contract documents or encountered within the construction area, the Contractor shall notify the utility company prior to beginning construction activities. The Contractor shall be responsible for notifying utilities and conducting work near utility facilities, required by Section 480.4, Code of Iowa.
- D.** Any system for supplying water, gas, power, or communications; a storm sewer, sanitary sewer, drainage tile, or other system for transmitting liquids; a pipeline system; traffic signalization system; and lighting systems within the limits of the proposed construction, which are to be adjusted, are to be moved by the utility company at their expense, except as otherwise provided for in the contract documents.
- E.** The Contractor shall cooperate with utility companies in their adjustment operations so that these operations may progress, the duplication of adjustment work may be reduced, and that services rendered by those parties will not be interrupted.
- F.** Where the Contractor's operations are adjacent to properties of railway, communication, or power companies, or are adjacent to other utility facilities where damage might result in considerable expense, loss, or inconvenience, work shall not begin until all arrangements necessary for protection of the facilities have been made.
- G.** In the event of interruption to utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the

authority in restoration of service. If a utility service is interrupted, repair work shall be continuous until service is restored.

- H. Primary projects developed under 761 IAC, Chapter 115.25 and designated as POINT 25 projects in the contract documents, where the utility company's adjustment is dependent on work by the Contractor, the Contractor shall provide the Contracting Authority and the utility company a good faith notice 14 calendar days and a confirmation notice not less than 3 working days before the Contractor's work will be complete and ready for the utility company to begin its work. If the utility fails to complete the adjustment of its facilities and fails to submit or comply with its accepted work plan as referenced in the Utility Status Report in the contract documents, and these failures result in a delay to the Contractor or causes damages to be incurred by the Department or Contractor, the utility may be liable for costs and damages incurred as a result of its failure to perform.

#### **1107.16 PERSONAL LIABILITY OF PUBLIC OFFICIALS.**

In carrying out any of the provisions of the contract, or in exercising any power or authority granted to any agent or representative of the Contracting Authority thereby, there shall be no liability upon such agent or representative, including the Engineer or authorized assistants, either personally or as an official of the Contracting Authority, it being understood that in such matters the Engineer acts as the agent and representative of the Contracting Authority.

#### **1107.17 NO WAIVER OF LEGAL RIGHTS.**

- A. The Contracting Authority shall not be prevented by any measurement, estimate, or certificate made either before or after the completion and acceptance of the work and payment therefor from showing the true amount and character of the work performed and materials furnished by the Contractor, or from showing that any such measurement, estimate, or certificate is untrue or incorrectly made, or that the work or materials do not, in fact, conform to the contract.
- B. The Contracting Authority shall not be prevented, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the Contractor and the Contractor's sureties such damages as it may sustain by reason of the Contractor's failure to comply with the terms of the contract. Neither acceptance by the Contracting Authority, or any representative of the Contracting Authority, nor any payment for or acceptance of the whole or any part of the work, nor any extension of time, nor any possession taken by the Contracting Authority, shall operate as a waiver of any portion of the contract, or for any power herein reserved, or any right to damages herein provided. A waiver of any breach of contract shall not be held to be a waiver of any other or subsequent breach.

**Section 1108. Prosecution and Progress****1108.01 SUBLETTING OF CONTRACT.**

- A.** The Contractor's own organization shall perform work amounting to not less than 30% of the total contract cost unless otherwise specified in the contract documents. The percent total contract subcontracted will be computed on Contract Unit Prices for the work performed by the subcontractor, unless the subcontractor is only doing partial work on the contract item. In order to meet this 30% requirement, the Contractor shall not purchase any materials for a subcontracted item nor shall they place other contractor's employees on their payroll. Employees must be hired in accordance with the AA hiring process as detailed elsewhere in the contract documents. Any item designated as a specialty item may be performed by subcontract, and the cost of any such specialty item as performed by subcontract may be deducted from the total cost before computing the amount of work required by the Contractor's organization. Any items that have been selected as specialty items for the contract are listed as such in the contract documents.
- B.** Except for the furnishing and transportation of materials, no portion of the contract shall be sublet, assigned, or otherwise disposed of except with written consent of the Contracting Authority. Where a subcontract has been approved, the approved subcontractor shall be responsible to complete that portion of the contract with its own organization.
- C.** Where a subcontract does not exist, but a DBE firm is manufacturing, supplying, or trucking materials to the job site; terms of the agreement shall be described and documented on the Subcontract Request and Approval form (Form 830231). This will assure the Engineer that a Contractor is meeting commitments previously stated on the Statement of DBE Commitments form (Form 102115). This dollar value will not be used to determine the percent subcontracted as specified previously. Where Davis/Bacon wage requirements apply, the Contractor shall be responsible for collecting and submitting certified payrolls for all drivers. Owner/operators shall be listed on the certified payrolls as owner/operators.
- D.** Request for permission to subcontract, assign, or otherwise dispose of any portion of any contract shall be submitted in writing with the Contractor's signed contract to the Office of Contracts, on a Subcontract Request and Approval form (Form 830231). For contracts that exceed \$600,000, the Contractor shall submit the Subcontract Request and Approval form electronically using the software furnished by the Department. In certain situations, with approval of the Department, the Contractor may request an extension of up to 30 calendar days to submit the Subcontract Request and Approval forms.

**1108.02 PROSECUTION OF WORK.****A. General.**

- 1.** The proposal form may designate the contract period by either a Specified Start Date, Approximate Start Date, or Late Start Date. The

proposal form may also indicate the contract period by a Completion Date for non-highway type contracts (e.g. buildings, furnishing materials, etc.). The number of working days will be designated for the three types of start dates. Working days will not apply for a Completion Date contract period.

2. The return of the signed and executed contract to the Contractor shall serve as notice that the contract bond is acceptable, that the contract is in force, and that the Contractor may complete arrangements for materials and other work in accordance with the contract documents.
3. Should a delay become apparent before or after the work is started, the Engineer will immediately notify the Contractor in writing that work on the contract will be delayed, and if possible, the approximate duration of the delay.

**B. Completion Date Contracts.**

The Contractor shall complete the contract on or before the Completion Date. Unless noted otherwise in the proposal form, the Contractor may commence work any time after receipt of the signed contract, specifications permitting. Articles 1108.02, G, Charging of Working Days and 1108.02, H, Winter Work will not apply. Liquidated damages will be assessed in accordance with Article 1108.08 for each calendar day beyond the Completion Date that the contract remains uncompleted.

**C. Working Day Contracts.**

The three types of start dates are as follows:

**1. Specified Start Date.**

Working days will be charged to the Contractor starting on the Specified Start Date, but not prior to 15 calendar days after the contract has been signed by the Contracting Authority. Starting work prior to the Specified Start Date will be considered upon request, and working days will be charged when work starts.

**2. Approximate Start Date.**

It is expected the site will be available by the Approximate Start Date. If it appears the site will not be available by the Approximate Start Date, the Engineer will inform the Contractor of the delay and if possible the duration of the delay. The Contractor may commence work, weather and specifications permitting, any time after execution of the contract and on or after the Approximate Start Date provided the site has become available. If work is started under these conditions, working days will be charged. Starting work before the Approximate Start Date and before the site is available, will be considered only after the Contractor has submitted a signed waiver of any right to claim extra compensation for damages due to delays from any cause related to early commencement. If approved, working days will not be charged when working prior to the date of site availability. If the Contractor is working on the project when the site becomes available, working days will be first charged on the following day.

### **3. Late Start Date.**

- a. Unless noted otherwise in the proposal form, the Contractor may commence work any time after receipt of the signed contract, weather and specifications permitting. Except as noted in Article 1108.02, H, working days will begin to be charged whenever the Contractor starts work. Charging of working days will begin on the Late Start Date if the Contractor has not started work prior to this date.
- b. If the Contractor wishes to start preliminary work prior to the Late Start Date and move out intending to return at a later date to complete the project, the Contractor shall request approval from the Engineer for temporary suspension of work in accordance with Article 1108.06. Approval of suspension of work in this circumstance will be based on if the road is open to traffic and the roadway is in a condition that is at least as safe as it was before the start of the preliminary work. The Engineer will submit in writing to the Contractor approval for suspension of work and a computed revised Late Start Date. The revised Late Start Date will be computed by adding the working days used for the preliminary work to the Late Start Date listed on the proposal form. The charging of the remainder of the working days will resume on the revised Late Start Date or when the Contractor recommences work prior to the revised Late Start Date.

### **D. Intermediate Contract Periods.**

Intermediate contract periods may be designated for construction of certain portions of the contract. The intermediate contract period may be the same type as listed in Articles 1108.02, D and 1108.02, E. The intermediate contract period, description, working days (if applicable), and liquidated damages will be shown as a site number on the proposal form.

### **E. Charging of Working Days.**

1. The Contractor will be charged working days as defined in Article 1101.03 and this article. For multiple site contracts, working day charges for each site will be charged independently based on the controlling operation for the site.
2. Working days will be charged beginning with the following circumstances:
  - a. On the date specified for projects with a Specified Start Date.
  - b. On the date that has been agreed to at the preconstruction conference for projects with an Approximate Start Date.
  - c. On the start date indicated in the Notice to Proceed for projects with an Approximate Start Date.
  - d. On the day following the date the site becomes available if the Contractor is already working on the site for projects with an Approximate Start Date.
  - e. On the date the Contractor begins work prior to the Late Start Date.
  - f. On the date specified for projects with a Late Start Date and the Contractor has not begun work prior to that date. However, working days will not be charged prior to 15 calendar days after the contract

has been signed by the Contracting Authority, as long as the Contractor furnished the signed contract, performance bond, and proof of insurance within the time allowed by Article 1103.07; and has not begun work on the contract.

3. The Contractor will be charged 1/2 working day when weather or other conditions beyond the control of the Contractor permits work for at least 1/2 but less than 3/4 of a working day. The Contractor will not be charged a working day when weather or other conditions beyond the control of the Contractor work for less than 1/2 of a working day. In the event of adverse weather when work on a project is ready to be started or resumed and the Contractor is not on the project, working days will not be charged during the inclement weather period provided the Contractor starts work as soon as weather and ground conditions permit work to be started or resumed.
4. Working days will not be charged for Sundays and recognized legal holidays the Contractor does not work. Working days will be charged for Sundays and recognized legal holidays the Contractor does work.
5. Working days will not be charged for Saturdays the Contractor does work, unless a 6 day work week is specified in the contract documents.
6. Working days will be charged for cure time of pavement and structural concrete when it is the controlling item of work.

#### **F. Winter Work.**

1. Winter work is work done at the project site between November 15 and April 1. The proposal form may require winter work on all or portions of the project. If winter work is required on a project, the proposal form will indicate how the working days will be counted. When winter work is not required in the contract documents, the following shall apply:
  - a. The Contractor may start or resume work before April 1. Working days will not be charged if the proposal form does not indicate that working days will be charged during winter work. Working days will be charged if the proposal form indicates that working days will be charged during winter work.
  - b. For projects started prior to November 15, the Contractor may work between November 15 and April 1 with no working days charged if working days remain on November 15.
2. If the number of working days specified on the contract has been exceeded, the Engineer may require the Contractor to continue work after November 15 if it is in the best interest of the Contracting Authority. These working days will be charged.

#### **G. Notice to Proceed.**

1. A notice to proceed will be issued when, in the opinion of the Engineer, considering the approximate starting date, site availability, and working days allowed, failure of the Contractor to commence work places the

timely completion of the project in jeopardy. The starting date in the notice to proceed will not be less than 15 calendar days after the date of the issuance of the notice.

2. Working days will be charged beginning with the starting date established by the notice or when the Contractor starts work if prior to that date.

#### **H. Weekly Report of Working Days.**

Whenever the Contractor is subject to being charged with working days, the Engineer will furnish the Contractor a weekly statement indicating the working days to be charged to the Contractor for that period. Should the Contractor believe the statement to be inaccurate, the Contractor shall submit to the Engineer, in writing, an objection and reasons within 10 calendar days after receipt of the statement.

#### **I. Work Progress.**

1. The progress of the work shall be at a rate sufficient to complete the contract within the time allowed. If it appears that the rate of progress is such that the contract will not be completed within the time allowed, or if the work is not being executed in a satisfactory manner, the Engineer may order the Contractor to take such steps as necessary to complete the contract within the period of time specified or to prosecute the work in a satisfactory manner. If the Contractor fails to comply with such order within 14 calendar days after receipt of the order, the Contractor may be disqualified from receiving any additional bidding proposals, and the Contracting Authority will have the right to declare the contract in default and to complete the work in accordance with Article 1108.11. Failure of the Contracting Authority to issue such order shall not alter the Contractor's responsibility under the contract.
2. The Contractor's sequence of operations shall be such as to cause as little inconvenience to the general public as possible.

#### **J. Schedule of Staging.**

On any project, or part of a project, on an existing road where the work may prohibit or restrict public or private access that has been previously available, the Contractor may be required to submit a schedule of staging for the Engineer's approval before work is started. Preliminary work may be required in stage construction, even though the work involved in these operations is similar, in order to minimize the inconvenience to the public and those to whom access has been previously available. This requirement will apply equally to work that is subcontracted.

#### **K. Accelerated Work Schedule.**

1. An accelerated work schedule may be required by a note on the proposal. When required, the Contractor shall marshal the necessary forces, including but not limited to, extra crews, subcontractors, extra work hours, or other acceptable methods to insure completion of the

project, or various stages of the project, within the contract period and in compliance with the specifications.

2. A work plan shall be submitted to the Engineer for review prior to commencement of work. Work will be permitted on a 24 hour day basis and on Sundays and holidays when traffic interference exists, though work may be restricted during peak traffic periods. Credit will not be allowed for delayed or slow delivery of materials.

**L. Preconstruction Conference.**

The Engineer may schedule and conduct a preconstruction conference. The Contractor and the intended subcontractors, if known, shall participate in this conference. The Engineer will invite representatives of railroads and utilities and others having responsibilities or interest in the work.

**1108.03 LIMITATIONS OF OPERATIONS.**

- A. The Contractor shall conduct the work so as to create a minimum amount of inconvenience to traffic. At any time, when in the judgment of the Engineer, the Contractor has obstructed or closed, or is conducting operations on, a greater portion of the road than is necessary for the proper prosecution of the work, the Engineer may require the Contractor to finish the sections on which work is in progress before work is started on any additional sections.
- B. Whenever work which is being done by other contractors or subcontractors is contiguous to, or a part of, the work included in this contract, the Engineer will, in case of dispute, determine and define the respective rights of the various interests involved, in order to secure the completion of all parts of the work in general harmony and with satisfactory results.
- C. Except when an accelerated work schedule is required, no work requiring inspection will be permitted on Sundays or holidays observed by the Department except with permission of the Engineer. The Contractor should request a determination of the holidays to be observed at the beginning of each calendar year.
- D. Work on Primary Roads where traffic is maintained through the project and work on all Interstate highways will not be permitted during the times identified below without approval of the Engineer:
  1. **Memorial Day and Labor Day weekends** - No work will be allowed the preceding Friday and all day Saturday.
  2. **Fourth of July** - When the Fourth of July is observed on Saturday, Sunday or Monday, no work will be allowed beginning the preceding Friday through the holiday. When the Fourth of July is observed on Friday, no work will be allowed the preceding Thursday or the following Saturday.
- E. If the Contractor requests permission to work for the times identified above and the Engineer approves this request, working days will be charged for the times requested.

**1108.04 METHODS AND EQUIPMENT.**

- A. The methods and equipment used shall produce a satisfactory quality of work and shall be adequate to maintain the schedule of progress specified. Equipment used on any portion of the project shall be such and its use so regulated that no serious or irreparable damage to the roadway, adjacent property, or other highways will result from its use. If damage does occur to the highway, suitable repairs shall be made.
- B. When the methods and equipment to be used by the Contractor in accomplishing the construction are not prescribed in the contract documents, the Contractor is free to use any methods or equipment that will accomplish the contract work in conformity with the requirements of the contract documents, as demonstrated to the satisfaction of the Engineer.
- C. When the contract documents specify that the construction be performed by use of certain methods and equipment, these methods and equipment shall be used unless others are authorized by the Engineer.
- D. If the Contractor desires to use a method or type of equipment other than specified in the contract documents, the Contractor may request authority from the Engineer to do so. The request shall be in writing and shall include a full description of the method and equipment proposed to be used and an explanation of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor shall be fully responsible for producing construction work in conformity with contract requirements. If after trial use of the substituted methods or equipment the Engineer determines that the work produced does not meet the requirements of the contract documents, the Contractor shall discontinue use of the substitute method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor shall remove the defective work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. Change will not be made in basis of payment for the construction items involved or in contract time as a result of authorizing a change in methods or equipment under these provisions.

**1108.05 CHARACTER OF WORKERS.**

Any employee of the Contractor who is careless, incompetent, or disorderly, or who refuses or neglects to perform the work in accordance with the contract documents or who shall commit trespass upon any public or private property in the vicinity of the work, shall be discharged upon the written request of the Engineer and shall not be re-employed on any of the work unless written permission is given by the Engineer.

**1108.06 TEMPORARY SUSPENSION OF WORK.**

- A. Work shall be suspended wholly or in part when, in the opinion of the Engineer, weather or other conditions are unfavorable to its satisfactory prosecution. Work shall also be suspended at the direction of the Engineer pending settlement of disputes arising out of failure of the Contractor to comply with provisions of the contract.

- B. The start of work may be delayed or work may be suspended upon request of the Contractor and with approval of the Engineer. The Engineer may require the request to be in writing and also may require the Contractor to include with the request a schedule for satisfactory completion of the work. Prior to temporary suspension of work, all obstructions or hazards that prevent safe travel by public traffic shall be removed from the project.
- C. The Engineer will notify the Contractor in writing of directed or approved temporary suspension of work. Working days will not be charged during periods of suspension of work directed or approved by the Engineer except when the suspension is a result of a violation of terms of the contract.

#### **1108.07 EXTENSION OF CONTRACT PERIOD.**

An extension of the contract period will be granted by the Engineer for additional work requiring additional construction time that adds additional work to the controlling item of work.

#### **1108.08 LIQUIDATED DAMAGES.**

- A. Liquidated damages will be assessed as follows:

- 1. **Completion Date Contracts.**

- The amount of liquidated damages specified in the proposal form will be assessed, not as a penalty but as predetermined and agreed liquidated damages, for each calendar day that any work remains uncompleted beyond the Completion Date or any extension granted under Article 1108.07. Assessment of liquidated damages will be based only on the number of calendar days required to complete the contract beyond the completion date, plus authorized extensions.

- 2. **Working Day Contracts.**

- The amount of liquidated damages specified in the proposal form will be assessed, not as a penalty but as predetermined and agreed liquidated damages, for each working day that any work remains uncompleted beyond the number of working days allowed or any extension granted under Article 1108.07. If work remains uncompleted on more than one portion for which working days and liquidated damages have been specified, the liquidated damages assessed will be the total of the damages per day listed for each uncompleted portion. Assessment of liquidated damages will be based only on the number of working days required to complete the contract in excess of the specified working days allowed, plus authorized extensions.

- B. The final payment will be withheld until the amount of liquidated damages are agreed upon.
- C. This provision for the assessment of liquidated damages for failure to complete work within the contract period does not constitute a waiver of the Contracting Authority's right to collect any additional damages other than time delays which the Contracting Authority may sustain by failure of the Contractor to carry out the terms of the contract.

**1108.09 FAILURE TO COMPLETE WORK WITHIN CONTRACT PERIOD.**

- A.** If the Contractor fails to complete the work within the contract period, or any extension thereof, as provided in Article 1108.07, upon written notice to the Contractor and surety, said contract shall be in default. The Contracting Authority may, at its option, permit the Contractor or the Contractor's surety to complete the work included in the contract, or may proceed to complete the work in accordance with Article 1108.11. In either event, the Contractor or the Contractor's surety shall be responsible for all costs incident to the completion of the work, and also for the liquidated damages stipulated in the proposal form.
- B.** The Contracting Authority may waive such portion of the liquidated damages as may accrue after all of the following conditions are met:
  - 1.** Traffic must have complete use of the roadways, shoulder to shoulder, with no delays or one way traffic and no obstructions except for signs warning of construction work ahead.
  - 2.** The remaining work to be completed is confined to the areas outside the shoulder edge.
  - 3.** Only minor work is left for completion such as clean up or erosion control work if it is a small item, not part of an erosion control contract, and the erosion control work is completed during the first available seeding period.
  - 4.** The remaining work is completed without excessive delay on the part of the Contractor.

**1108.10 CONTRACTS IN DEFAULT.**

The Contracting Authority may declare a contract in default for any one of the following reasons:

- A.** Failure to complete the work within the contract period or any extension thereof;
- B.** Failure or refusal to comply with an order of the Engineer within a reasonable time;
- C.** Failure or refusal to remove rejected materials;
- D.** Failure or refusal to correct any defective or unacceptable work;
- E.** Bankruptcy or insolvency, or the making of an assignment for the benefit of creditors;
- F.** Failure to carry on the work in an acceptable manner.

**1108.11 COMPLETION OF CONTRACTS IN DEFAULT.**

- A. If for any reason a contract is declared in default, the Contracting Authority shall have the right, without process or action at law, to take over all or any portion of the contract and complete it, at its option, either by day labor or by reletting the work. Written notice will be given the Contractor by the Contracting Authority that the Contractor's contract has been declared in default, and upon receiving this notice, the Contractor shall relinquish possession of the project site or the parts of the project specified in the notice.
- B. The Contracting Authority may, at its option and at a rental which it considers reasonable, retain all material, equipment, and tools on the project site until the work has been completed.
- C. Neither the Contracting Authority nor any member or employee thereof shall be in any way liable or accountable to the Contractor or the Contractor's surety for the method by which the completion of the contract, or any portion thereof, may be accomplished, or for the price paid therefor. Should the cost of completing work be in excess of the original contract price, the Contractor and the Contractor's surety will be held responsible for such excess cost. Should the cost of such completion, including all proper charges, be less than the original contract price, the amount so saved shall be paid to the Contractor. Neither by taking over the portions of the contract nor by declaring the contract in default will the Contracting Authority forfeit the right to recover damages from the Contractor or the Contractor's surety for failure to complete the entire contract.

**1108.12 TERMINATION OF CONTRACTOR'S RESPONSIBILITY.**

The contract will be considered completed when the work has been accepted in writing by the Engineer. Such acceptance will release the Contractor from all further obligation with respect thereto, except to conditions and requirements set forth in the bond.

**Section 1109. Measurement and Payment and Metric Conversion****1109.01 MEASUREMENT OF QUANTITIES.**

The work completed under the contract will be measured in accordance with the contract documents. The standards of the U.S. DOT, FHWA, and ASTM SI-10 will be used.

**A. Methods of Measurement.**

- 1. Payment will be based on the actual quantity of work performed under the various classifications of work in the contract unless otherwise provided below or in the method of measurement for the various classes of work.
- 2. For items to be paid for by plan quantity by specification or plan quantity agreement, by written agreement between the Contractor and the Engineer, final settlement may be made on the basis of contract

quantities without final field measurements. This agreement may be made before work is started or after work has been completed, if no material deviation from the original plans is involved. Except for those items for which quantities cannot be accurately predetermined, the contract quantities have been accurately and properly estimated, but adjustments will be made for obvious errors or authorized changes. The Engineer will exercise such controls and make such measurements as are necessary to assure that each item of work is done in substantial compliance with the contract documents. The use of this agreement for payment shall not be considered as a change in the contract.

3. When a contract item or quantity for any granular material is in tons (Mg), the quantity may be measured by volume.

**B. Metrication.**

Project specific documents provided by the Contractor on English unit contracts shall be expressed in English units and on metric unit contracts shall be expressed in metric units. Manual conversion of metric units to English units is acceptable on contracts expressed in English units. Manual conversion of English units to metric units will be acceptable on metric unit contracts. The Contractor shall be responsible for the conversion of units. The following tables provide common metric units and symbols, prefixes, and conversions:

**Table 1109.01-1: Common Prefixes Used with Metric Units**

Prefix	Symbol	Multiplication Factor
giga	G	1,000,000,000
mega	M	1,000,000
kilo	k	1,000
hecto	h	100
deka	da	10
base unit		1
deci	d	0.1
centi	c	0.01
milli	m	0.001
micro	μ	0.000001

**Table 1109.01-2: Common Metric Units and Symbols**

Measurement	Unit	Symbol
Length	kilometer	km
	meter	m
	centimeter	cm
	millimeter	mm
	micrometer	μm
Area	hectare	ha
	square meter	m <sup>2</sup>
	square centimeter	cm <sup>2</sup>
	square millimeter	mm <sup>2</sup>
Volume	cubic meter	m <sup>3</sup>
	cubic centimeter	cm <sup>3</sup>
	cubic millimeter	mm <sup>3</sup>
	kiloliter	kL

	liter milliliter	L mL
Mass	megagram kilogram gram	Mg kg g
Temperature	degrees Celsius	°C
Pressure	pascal kilopascal megapascal	Pa kPa MPa
Force	newton kilonewton	N kN

**Table 1109.01-3: Other Metric Units Which Might be Encountered and the Symbol for Each**

Electric current	ampere	A
Luminous Intensity	candela	cd
Frequency	hertz	Hz
Energy, Work	joule gigajoule	J GJ
Luminous flux	lumen	lm
Electric Potential	volt	V
Power	watt kilowatt	W kW

**Table 1109.01-4: English and Metric Unit Conversion  
(Referenced from ASTM SI-10, except those marked with asterisks)**

Measurement	English Units (Multiply)	Metric Units (To Find)	Conversion Factor (By)
Length	mile	kilometer	1.609347
	yard	meter	0.9144
	foot (U.S. Survey)	meter	0.3048006
	inch	millimeter	25.4
	station*	meter	30.48006
	station*	metric station	0.3048006
Area	acre	hectare	0.4046873
	square yard	square meter	0.8361274
	square foot	square meter	0.09290304
	square inch	square millimeter	645.16
	square mile	square kilometer	2.589998
	square*	square meter	9.290304
Volume	cubic yard	cubic meter	0.7645549
	cubic foot	cubic meter	0.02831685
	cubic inch	cubic millimeter	16,387.06
	gallon	liter	3.785412
	fluid ounce	milliliter	29.57353
	board foot	cubic meter	0.00236
Mass	ton (2000 lb.)	megagram	0.9071847
	pound	kilogram	0.4535924
	ounce	gram	28.34952

Pressure	pounds per sq. in. (psi)	kilopascals	6.894757
	pounds per sq. ft.	Pascal	47.880263
Overhaul	station yard*	station meter	0.2330368
Other	lbs./cu. ft.	kg/m <sup>3</sup>	16.01846
	lbs. force	Newton	4.448222
	gal./cu. yd.	L/m <sup>3</sup>	4.9511316
	lbs./gal.	kg/L	0.1198264
	oz./cu yd.	mL/m <sup>3</sup>	38.680714
	oz./100 lbs.	mL/kg	0.6519846
	<b>(To Find)</b>	<b>(Divide)</b>	<b>(By)</b>
<b>Temperature:</b> (°C x 1.8) + 32 = °F (Take the temperature in °C and multiply by 1.8; then add this number to 32 to get the temperature in °F.)			

**1. Exceptions.**

The Engineer may approve exceptions to construction based on plan dimensions, on a project-by-project basis, provided the request does not adversely affect the intended design. Exceptions shall be at no additional cost to the Contracting Authority.

**a. Reinforced Concrete Box (RCB) Culvert.**

- 1) The Contractor, as an option, may construct a comparable size single or twin box culvert in metric units using the MRCB-G1-95 or MTWRCB-G1-95 culvert standards in lieu of the English culvert standards specified on the letting plans. Exceptions/substitutions on special designs that are not covered by the MRCB-G1-95 or MTWRCB-G1-95 standards will not be allowed.
- 2) After being awarded the contract, if the Contractor intends to exercise this option, the Contractor shall submit to the Engineer an amended copy of the letting plan showing the alternate units for all the appropriate dimensions. These shall include the fill height, the culvert span and rise, all longitudinal (along the culvert) dimensions and a list of the MRCB-G1-95 or MTWRCB-G1-95 culvert standard sheets required to build the RCB, including headwall sheets and bell joint sheets if required.
- 3) A list of comparable metric culvert opening sizes that can be constructed in lieu of a specified English culvert opening is as follows:

**Table 1109.01-5: Comparable Metric Culvert Opening Sizes**

English (feet)	Comparable Metric (millimeters)	English (feet)	Comparable Metric (millimeters)
3 x 3	900 x 900	8 x 6	2400 x 1800
4 x 4	1200 x 1200	8 x 10	2400 x 3000
5 x 3	1500 x 900	10 x 4	3000 x 1200
5 x 4	1500 x 1200	10 x 5	3000 x 1500
5 x 5	1500 x 1500	10 x 6	3000 x 1800

5 x 6	1500 x 1800	10 x 8	3000 x 2400
6 x 3	1800 x 900	10 x 10	3000 x 3000
6 x 4	1800 x 1200	10 x 12	3000 x 3600
6 x 5	1800 x 1500	12 x 6	3600 x 1800
6 x 6	1800 x 1800	12 x 8	3600 x 2400
6 x 8	1800 x 2400	12 x 10	3600 x 3000
8 x 4	2400 x 1200	12 x 12	3600 x 3600
8 x 5	2400 x 1500		

**b. Construction Materials.**

1) The following exceptions in Division 41, Construction Materials are approved, and will be allowed:

**a) Section 4151, Steel Reinforcement.**

All English Reinforcing steel may be substituted with metric reinforcing steel as follows:

<b>English</b>	<b>Hard Converted* Metric Size</b>	<b>Soft Converted* Metric Size</b>
4	15	13
5	15	16
6	20	19
7	25	22
8	25	25
9	30	29
10	35	32
11	35	36

\* Hard Converted metric size reinforcing steel refers to bars referenced in ASTM A 615/A 615 M - 95b using the following sizes: 10, 15, 20, 25, 30, 35, 45, and 55. Soft Converted metric size reinforcing steel refers to bars referenced in ASTM A 615/A 615 M - 96a using the following sizes: 10, 13, 16, 19, 22, 25, 29, 32, 36, 43, and 57.

**b) Plant Operations.**

Batching of materials may be performed with English or metric units, but all reports on English unit contracts shall be prepared in English units, and all reports on metric unit contracts shall be prepared in metric units.

**c) Delivery Tickets.**

Delivery tickets for materials such as aggregates, HMA mixes, asphalt binder, etc. may be converted at the end of the day, or at the end of a process for the day, in lieu of individual ticket conversion; but all reports on English unit contracts shall be prepared in English units and all reports on metric unit contracts shall be prepared in metric units.

2) All hard converted metric reinforcing steel (bar size matrix shown on plans) may be substituted with English reinforcing steel or soft converted metric steel as follows:

**Table 1109.01-7: Hard Converted and Soft Converted Metric Sizes**

English	Hard Converted* Metric Size	Soft Converted* Metric Size
4	10	13
5	15	16
6	20	19
8	25	25
10	30	32
11	35	36
<p>* Hard Converted metric size reinforcing steel refers to bars referenced in ASTM A 615/A 615 M - 95b using the following sizes: 10, 15, 20, 25, 30, 35, 45, and 55. Soft Converted metric size reinforcing steel refers to bars referenced in ASTM A 615/A 615 M - 96a using the following sizes: 10, 13, 16, 19, 22, 25, 29, 32, 36, 43, and 57.</p>		

- 3) The spacing or pattern of bar placement shall be as shown in the contract documents, and no changes in the spacing or the pattern will be allowed with the substitution.

**2. Method of Measurement and Basis of Payment.**

The cost of all equipment, labor, and materials necessary for metric conversion shall not be paid separately, but shall be considered incidental to the price bid for the item for which the conversion was necessary. The cost of exception of construction materials as specified above shall not be paid separately, but shall be considered incidental to the price bid for the item for which the substitution is made.

**1109.02 SCOPE OF PAYMENT.**

- A. The Contractor shall accept the compensation herein provided as full payment for furnishing all material, labor, tools, and equipment and for performing all work under the contract or any extension thereof allowed under Article 1108.07; also, for all cost arising from the action of the elements or other natural causes, agreements, and performances, non-performances, or delays involving other contractors and third parties, or injunctions or lawsuits resulting therefrom, or from any unforeseen difficulties not otherwise provided for in the specifications and which may be encountered during prosecution of the work and up to the time of acceptance thereof, except damage to the work due to acts of war. Nothing herein shall in and of itself be construed to prejudice or deny any claim filed under provisions of Article 1109.11.
- B. The contract price for any item shall be full compensation for acceptable work and for materials, equipment, tools, and labor for performance of all work necessary to complete the item in accordance with the contract documents, except as specifically exempt in the clauses covering the basis of payment for the item.

**1109.03 PAYMENT FOR WORK PERFORMED.**

The Contractor shall receive and accept payment for work performed under the contract as follows:

**A. Items of Work Performed Which Are Covered by Definite Prices Stipulated in the Contract.**

1. For all items of acceptable work performed which are covered by definite unit prices or lump sum amounts specified in the contract, the Contractor shall receive and accept compensation at the rate specified in the contract, except for items identified as that of significant change as provided in Article 1109.16.
2. In making contract adjustments, consideration will be given to the portion of the cost of the work that can be classified as fixed costs, independent of the exact quantity of work performed, such as transportation and installation costs on equipment, overhead cost, etc. Any price adjustment will be arrived at from the standpoint that neither party to the contract shall be penalized by the increase or decrease in quantities which occasioned the price adjustment.

**B. Extra Work.**

Extra work ordered by the Engineer, of a quality or class not covered by the contract, will be paid for either at an agreed price or on a force account basis.

**1. Agreed Price Basis.**

For extra work ordered by the Engineer and performed on an agreed price basis, the Engineer and the Contractor shall enter into a written agreement before the work is undertaken. This written agreement shall describe the extra work that is to be done and shall specify the agreed price or prices therefore.

**2. Force Account Basis.**

- a. For extra work performed on a force account basis, the Contractor shall receive the rate of wage (or scale) agreed to in writing with the Engineer before beginning work for each and every hour that laborers, timekeepers, supervisors, and superintendents are actually engaged in work.
- b. The Contractor shall receive the actual costs paid to, or in behalf of, workers by reason of subsistence and travel allowances, health and welfare benefits, pension fund benefits, or other benefits, when the amounts are required by a collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work.
- c. An amount equal to 35% of the sum of the above items will also be paid to the Contractor. The 35% shall cover compensation for furnishing the necessary small tools for work, together with all other overhead items of expense.
- d. For property damage, liability, and worker's compensation insurance premiums, unemployment insurance contributions, and social security taxes on the force account work, the Contractor shall receive the actual cost, to which 10% will be added. The Contractor

shall furnish evidence of the rate or rates paid for such bond, insurance, and tax.

- e. The wage of the superintendent, timekeeper, or supervisor who is employed partly on force account work and partly on other work shall be prorated between two classes of work according to the number of persons shown by the payrolls as employed on each class of work.
- f. For materials used on force account work, the Contractor shall receive the actual cost of materials delivered on the work, including the freight and handling charges as shown by original receipted bills, to which cost will be added a sum equal to 15% thereof.
- g. Rental rate for machinery, tools, or equipment (except small hand tools which may be used) and fuel and lubricants shall be based on the average monthly rental rate published in the RENTAL RATE BLUE BOOK by Primedia Information, Inc. The Engineer and the Contractor shall agree on a rental rate in writing before extra work on force account basis is performed. Profit percentage shall not be added to the rental rate.
- h. Compensation as herein provided shall be accepted by the Contractor as payment in full for extra work done on a force account basis. It will be assumed that such payment includes the use of tools and equipment for which no rate is allowed, overhead, and profit.
- i. At the end of each day, the Contractor shall prepare payrolls in duplicate for labor furnished on a force account basis, using the Contracting Authority's standard force account forms. Both copies shall be signed by the inspector and Contractor's representative. One copy shall be furnished to the Engineer and one to the Contractor. Claims for extra work performed on a force account basis shall be submitted to the Engineer in triplicate. To the claims shall be attached such receipts or statements as the Engineer may require in support of such claims. Such claims shall be filed not later than the tenth day of the month following that in which the work was actually performed, and shall include all labor charges, rental charges on machinery, tools, and equipment, and all material charges insofar as they are available.

### **3. Extra Work Performed by the Subcontractor.**

The percentage markup to be allowed to the Contractor for extra work, including force account work, performed by a Subcontractor shall be in accordance with the following:

- 10% on the first \$50,000 with a \$100 minimum.
- 5% on the portion over \$50,000.

### **C. Deficient Work.**

1. Payment for work judged by the Engineer to be deficient work will be made at the reduced rate specified in the contract documents or, if no such rate is specified, at a modification of the contract price, as determined by the Engineer.

2. All contract price adjustments will be subject to the concurrence of the Contracting Authority.

#### **1109.04 CANCELLED WORK.**

- A. The Contracting Authority will have the right to cancel any or all items from the contract when unforeseen circumstances, unanticipated design changes, or other reasons beyond the control of the Contractor prevent or unreasonably delay completion of the contract or certain items of the contract, or when the Contracting Authority determines that cancellation is in the public or national interest.
- B. The Contractor may be prevented from starting work on a contract or an identified phase of a contract as a result of a delay caused by the Contracting Authority or others.
- C. When the contract period is defined by the Approximate Starting Date and the delay prevents the Contractor's starting work on the contract or an identified phase of the contract for 30 calendar days beyond such date, the Contractor may request cancellation by written notice to the Engineer, stating the reasons therefore.
- D. When the contract period is defined by the Late Start Date and the delay prevents the Contractor's starting for more than 30 calendar days after the date of award of contract and at least 30 calendar days beyond the date which, by notice to the Engineer, the Contractor proposed to start work, the Contractor may request cancellation by written notice to the Engineer, stating the reasons therefore.
- E. In either case, within 30 calendar days from the date of the request, the Engineer will eliminate or minimize, if possible, the cause for the delay and issue a notice to proceed, redefine the basis on which the work is to proceed, or cancel the contract or phase of the contract.
- F. The Contractor shall not use delays that occur prior to starting work or an identified phase of the work as a basis of a claim against the Contracting Authority except for an extension of contract period.
- G. Notices described in this article should be transmitted by certified mail.
- H. For finished portions of non-major items canceled, the Contractor will be paid at the contract unit prices, in accordance with the provisions of Article 1109.03. For finished portions of major items canceled, the Contractor will be paid as provided in Article 1109.16. For all items, materials ordered and delivered for the unfinished portion of such canceled or omitted items, the Contracting Authority will pay cost plus 10% as an overhead charge. The Contractor's expense for work of handling or transporting this material shall be included in computing the cost. The Contracting Authority will also pay any actual expenses sustained by the Contractor by reason of such cancellation or omission and not represented by work completed or material delivered. In computation of material cost or expenses sustained, no anticipated profit will be included. Material paid for shall become the property

of the Contracting Authority and shall be disposed of as directed by the Engineer.

#### **1109.05 PARTIAL PAYMENTS.**

##### **A. Progress Payments.**

1. For work extending over a period of more than 1 month, the Contractor will receive monthly progress estimate payments based on the amount of work completed in an acceptable manner. For Primary and Secondary projects in which the Contracting Authority is the Department or a county Board of Supervisors, these progress payments will be bi-weekly if requested by the Contractor. For late payment, the Contracting Authority will pay a penalty of 1.0% per month (or part of a month), or a minimum of \$250, whichever is the greater amount, on any work completed but not processed for payment within 14 calendar days after completion of the work. Completion of the work includes physical completion of the work and submittal of all paperwork required by the contract.
2. On contracts for which the contract sum is \$10,000 or more, payments may be allowed based on value of processed or fabricated materials or rolled steel products which have been delivered on the work or 90% of the value of processed or fabricated material, or rolled steel products, reserved for the project and stored elsewhere within Iowa or in other locations where there is routine inspection by Departmental personnel, provided the materials are of acceptable quality and the manner of storage is satisfactory to the Engineer.
3. Should a reasonable doubt arise as to the integrity of any part of the completed work, the payment for that portion will not be allowed until the cause for such doubt has been removed. The Engineer's estimates of work completed will result in partial payments on the contract sum, and the allowance of a progress payment by the Contracting Authority does not constitute final acceptance of the work upon which the payments are based.
4. The Contractor shall sign the final voucher certifying the quantities are just and unpaid.

##### **B. Prompt Payment to Subcontractors.**

1. The Contractor shall promptly pay each subcontractor. Any delay or postponement of payment among the parties may take place only for good cause, with written notification to the subcontractor. A payment, excluding retainage, to a subcontractor for satisfactory performance of the subcontractor's work shall be made by the Contractor no later than one of the following, as applicable:
  - a. 7 calendar days after the Contractor receives payment for the subcontractor's work.



items of work, quantities, unit prices, dates work was performed, total amount owed, and signature of a representative of the subcontractor.

4. If the initial attempt to resolve the issue does not result in satisfactory payment for completed work, the Contractor or subcontractor shall submit a written complaint to the Office of Contracts. The written complaint shall include copies of the correspondence with the Project Engineer or Contractor that provides the details stated above. The Department will investigate and provide written response to the complainant within 15 business days of receipt of the complaint.

**E. Required Records.**

The Contractor shall retain records that document the date of completion of the field work of each subcontractor and the date of final payment (including retained funds) to each subcontractor. Prior to receiving final payment, the Contractor shall provide to the Engineer the "Certification of Subcontractor Payments" (Form 518002). This form shall include the names of each approved subcontractor, the date of completion of the work, the date of final payment, the number of days between completion and final payment, and explanations for any final payments made after the 30 calendar day period following completion.

**1109.06 PAYMENT OF RETAINED FUNDS.**

Retained funds may be released by one of two methods. On contracts where the progress and final payment vouchers are paid by the Department the retainage will be released according to Paragraph A. On all other contracts the retainage may be released by either Paragraph A or Paragraph B below.

**A. Retainage Release.**

When 95% of the original contract amount has been completed to the satisfaction of the Engineer, and it is apparent that conditions beyond the control of the Contractor will delay completion of the contract for more than 60 calendar days, the Contractor may request payment of retained funds. If the Contracting Authority agrees, payment of the retained funds will be made no sooner than 30 calendar days after approval.

**B. Supplemental Contract.**

1. When 95% of the work has been performed to the satisfaction of the Engineer, including consideration of the contract period, and it is apparent that conditions beyond the control of the Contractor will delay the completion of the contract for more than 60 calendar days, the Contractor may request a supplemental contract for the uncompleted portion of work on the same terms as those of the original contract. If the Contracting Authority agrees, and the surety for the Contractor consents to the extension of the bond for the time required to complete the supplemental contract, the supplemental contract will be issued. After the contract has been entered into, full payment will be made for the work completed except under circumstances which would prejudice the rights of those who have filed claims pursuant to Chapter 573, Code of Iowa.

2. The unpaid moneys held by the Contracting Authority as a retainer of the original contract price will be due and payable to the Contractor 30 calendar days after the date of the Contracting Authority's approval of the supplemental contract, except as provided for the release and adjudication of claims in Article 1109.05.

**1109.07 CERTIFIED STATEMENT OF SALES TAX AND USE TAX PAID.**

Contractors and approved subcontractors will be provided a Sales Tax Exemption Certification to purchase building materials, supplies, or equipment in the performance of construction contracts let by the Department.

**1109.08 RESERVED.**

**1109.09 FINAL ACCEPTANCE AND PAYMENT.**

- A. Final acceptance is a written acceptance by the Contracting Authority. The Contracting Authority will make final acceptance promptly upon the satisfactory completion of the work. Final payment will be made as soon as possible following the expiration of statutory time for filing claims, or following adjudication or release of claims against the amount withheld.
- B. On all Interstate and Primary System contracts, interest shall be paid in accordance with IAC Chapter 27 and Chapter 573.12, Code of Iowa. Interest shall begin to accrue on retained funds on the date of the first progress payment until the date final payment is issued. Interest shall be paid on retained funds only if the accrued interest on those funds is greater than \$25. The interest payment will be issued by a separate warrant within 2 weeks after issuance of final payment. Interest will cease to accrue on retained funds if:
  - After 90 calendar days following contract acceptance if the Contractor has failed to submit to the Contracting Authority documentation necessary for final payment or,
  - Upon payment of retained funds by a retention release voucher.
- C. On county or city administered contracts, failure to make final payment within 50 calendar days after final acceptance of the work, and if all requirements of the contract are complete, will cause interest to accrue and additional payment to be made in accordance with provision of Chapter 573, Code of Iowa.
- D. Completion of the work will be considered as the date of approval and work acceptance on "Statement of Completion and Final Acceptance of Work" (Form 830435) by the Engineer. When interest is to be paid, the date from which interest is to be calculated will be the 31st calendar day after all required materials, certifications, and other documentation required to be submitted by the Contractor are received by the Engineer; however, the Contractor will be paid no interest if final payment is made within 50 calendar days from the final acceptance. The signed final voucher is not required documentation, but if not returned to the Engineer within 50 calendar days, it will be considered required documentation.

- E. Signing of the final voucher, or acceptance of payment based thereon, shall not waive any rights of either party in the resolution of any claim filed in accordance with Article 1109.11.
- F. The Engineer must be satisfied as to the completion of each part of the work, and may reject any portion found to be inconsistent with the terms of the contract documents.

**1109.10 RESPONSIBILITY FOR PAYMENT.**

Payment for work will be made by the Contracting Authority by warrants drawn against funds which are legally available for such work.

**1109.11 DISPUTED CLAIMS FOR EXTRA COMPENSATION.**

- A. In any case where the Contractor deems that extra compensation is due for work or material not clearly covered in the contract and not ordered by the Engineer as extra work as defined herein, the Contractor shall notify the Engineer in writing to make claim for this extra compensation before work begins on which the claim is based.
- B. The Contracting Authority will be responsible for damages attributable to the performance, nonperformance, or delay, of any other contractor, governmental agency, utility, firm, corporation, or individual authorized to do work on the project, only when these damages result from negligence on the part of the Contracting Authority, its Engineer, or any of its officers or employees. In any case where the Contractor deems that extra compensation is due from the Contracting Authority as damages resulting from these performances, non-performances, or delays, the Contractor shall notify the Engineer in writing at the time the delay occurs.
- C. In all cases, if this notification is not given, or if after the notification is given, the Engineer is not afforded facilities for keeping strict account of actual costs as defined for force account construction, the Contractor thereby agrees to waive the claim for extra compensation for this work. This notice by the Contractor, and the fact that the Engineer has kept account of the cost as aforesaid, shall not be construed as establishing the validity of the claim. The claim, when filed, shall be in writing and in sufficient detail to permit auditing and an intelligent evaluation by the Engineer. The claim shall be supported by such documentary evidence as the claimant has available and shall be verified by affidavit of the claimant or other persons having knowledge of the facts. If the claimant wishes an opportunity to present the claim in person, then the claim shall be accompanied by a written request to do so. Where the claimant asks an opportunity to present the claim in person, the Engineer, within 30 calendar days of the filing of the claim, will fix a time and place for a meeting between the claimant and the Engineer. The Engineer will, within a reasonable time from the filing of the claim or the meeting above referred to, whichever is later, rule upon the validity of the claim and notify the claimant, in writing, of the ruling together with the reasons therefore. In case the claim is found to be just, in whole or in part, it will be allowed and paid to the extent so found.

- D. The Contractor shall not institute any court action against the Contracting Authority for the adjudication of any claims until the claim has been first presented to the Engineer, pursuant to this article, and either submitted to arbitration or a request for arbitration is denied pursuant to Article 1109.12.

#### **1109.12 ARBITRATION.**

- A. If a Contractor's claim as outlined in Article 1109.11 has been disallowed in whole or in part, then the Contractor may, within 30 calendar days from the date the ruling of the Engineer is mailed, make a written request to the Engineer that the claim or claims be submitted to a board of arbitration. The Engineer will decide whether the matter is one which is subject to arbitration and will, within 30 calendar days of the receipt of the request for arbitration, grant or deny the same. The Engineer's decisions will be final.
- B. The board of arbitration will consist of three persons; one to be chosen by the Engineer, one by the Contractor, and the third by the two arbitrators thus chosen.
- C. The arbitrators selected will be persons experienced and familiar with construction or engineering practices in the general type of work involved in the contract, but will not have been a regular employee or an individual retained by either party at the time involved in the controversy, or at the time of arbitration.
- D. The board of arbitration will make its own rules of procedure and will have authority to examine records kept by the Engineer and the Contractor. If the desired records are not produced within 14 calendar days after they are requested, the board of arbitration will proceed without them as best it may. In determining the findings or award, or both, the majority vote of the board will govern. Copies of the findings or award, or both, signed by the arbitrators will be filed with the Engineer and the Contractor. A unanimous report or minority report may be filed. The board of arbitration will fix the cost of the proceedings, including a reasonable compensation to the arbitrators, and will determine how the total cost shall be borne.
- E. The board of arbitration will have jurisdiction to pass upon questions involving compensation to the Contractor for work actually performed or materials furnished and upon claims for extra compensation which have not been allowed by the Engineer. Jurisdiction of the board will not extend to a determination of quality of work or materials furnished or to an interpretation of the intent of the plans and specifications except as to matters of compensation. Jurisdiction of the board will not extend to setting aside or modifying the terms or requirements of the contract.
- F. The findings or award, or both, of the arbitration board, if acceptable to both parties to the contract, may become a basis for final payment.
- G. If the findings of the arbitration board are unacceptable to either party to the contract, said findings may become the basis for further negotiations between the parties. If a solution agreeable to both parties has not been reached through the filing of a claim, through arbitration, or if arbitration has

been denied, either party may resort to whatever other methods for resolving the claim are available.

### **1109.13 CLAIMS AGAINST CONTRACTOR.**

- A.** The Contractor guarantees the payment of all just claims against the Contractor or any of the Contractor's subcontractors in connection with the work. If another contractor on the project submits a claim for alleged damages caused by delay due to the Contractor not having completed the work in a timely manner, the Contractor's bond shall remain in effect until payment of such claim is made or until litigation is concluded, at which time the bond will be released.
- B.** Claims may be filed against the Contractor as provided in Chapter 573, Code of Iowa. The claims shall be submitted on forms provided by the Contracting authority. The amount of retainage held by the Contracting Authority is described in Article 1109.05, C.
- C.** For public improvement projects let and paid by the Department, the claims shall be submitted to the Project Accounting and Payables Section, Office of Finance, Iowa Department of Transportation. For public improvements let by the County, claims shall be filed with the county auditor. For public improvements let by the City, claims shall be filed with the officer, board, or commission authorized by law to let contracts for such improvements.
- D.** The contract bond required by Article 1103.05 stipulates that the principal and sureties agree to pay to all persons, firms, or corporations having contracts directly with the principal or with subcontractors, all just claims due them for labor performed or materials furnished, in the performance of the contract on account of which the bond is given, when the same are not satisfied out of the portion of the contract price which the public corporation is required to retain until completion of the public improvements, but the principal and sureties shall not be liable to said persons, firms, or corporations unless the claims of said claimants against said portion of the contract price shall have been established as provided by law.

### **1109.14 TIME LIMITS FOR FINAL ADJUSTMENT.**

The Contractor shall understand that the Contracting Authority will not be bound to consider applications for correction of estimates and payments after the Contractor has signed the final estimate, or after 30 calendar days from the date when the final estimate is submitted to the Contractor for approval. Should an error be discovered as a result of the Contractor's annual audit, an application for correction, promptly made, will be considered.

### **1109.15 NATIONAL EMERGENCY PROVISIONS.**

- A.** The Contracting Authority may, by written notice, with the approval of the FHWA where applicable, terminate the contract or a portion thereof when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the prosecution of war or in the interest of national defense, as provided in Chapter 573A, Code of Iowa.

- B. When contracts, or any portion thereof, are terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract unit price, or as mutually agreed for items of work partially completed or not started. Claim for loss of anticipated profits will not be considered. Reimbursement for organization of the work (when not otherwise included in the contract) and moving equipment to and from the job will be considered where the volume of work completed is too small to compensate the Contractor for these expenses under the contract unit prices, the intent being that an equitable settlement will be made with the Contractor.
- C. Acceptable materials, obtained by the Contractor for the work, which have been inspected, tested, and approved by the Engineer, and which are not incorporated into the work, will be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the Engineer.
- D. Termination of a Contract or a portion thereof shall not relieve the Contractor of responsibilities for the completed work, nor shall it relieve the Contractor's surety of its obligation for and concerning any just claims arising out of the work performed.

#### **1109.16 STANDARDIZED CONTRACT CLAUSES.**

##### **A. Differing Site Conditions.**

1. During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.
2. Upon written notification, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the contract is warranted.
3. No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.
4. No contract adjustment will be allowed under this clause for any effects caused on unchanged work.

**B. Suspensions of Work Ordered by the Engineer.**

1. If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer, in writing, a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
2. Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or Subcontractors at any approved tier, and not caused by weather, the Engineer will make an adjustment (excluding profit) and modify the contract in writing accordingly. The Contractor will be notified of the Engineer's determination whether or not an adjustment of the contract is warranted.
3. No contract adjustment will be allowed unless the Contractor has submitted the request for adjustment within the time prescribed.
4. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

**C. Significant Changes in the Character of Work.**

1. The Engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the Contractor agrees to perform the work as altered.
2. If the alterations or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.
3. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.

4. The term "significant change" shall be construed to apply only to the following circumstances:
  - a. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
  - b. When a major item of work, as defined elsewhere in the contract, is increased in excess of 125% or decreased below 75% of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125% of original contract item quantity. The adjustment in unit price for an underrun in excess of 25% will be computed on the difference between the actual quantity and 75% of the original contract quantity.

### **Section 1110. Progress Scheduling**

#### **1110.01 GENERAL.**

- A. When specified in the contract documents, the Contractor shall submit a progress schedule of construction activities based on the CPM by the principles defined in the most current issue of THE USE OF CPM IN CONSTRUCTION published by the AGC. The CPM progress schedule may be hand or computer developed.
- B. The CPM progress schedule shall be used for coordination and monitoring of all work under the contract including all activity of subcontractors, vendors and suppliers. The CPM progress schedule shall include provisions for traffic control, any staging, and other events to complete a project or tied projects. This schedule shall be the Contractor's intended working schedule and shall be used to plan, organize and execute the work; record and report actual performance and progress; and forecast remaining work.

#### **1110.02 SUBMITTAL OF A CPM PROGRESS SCHEDULE.**

##### **A. Submitting a CPM Progress Schedule.**

When a submittal of a CPM progress schedule is specified in the proposal form, the successful bidder for the project must submit 5 copies of a satisfactory CPM progress schedule to the Contracts Engineer with the signed contract. Failure to submit a CPM progress schedule may result in suspension of bidder qualifications in accordance with Article 1102.03, A.

##### **B. Compliance with Intended Work.**

Upon receipt of the CPM progress schedule, the schedule will be reviewed for compliance with the intended work. The Contracting Authority will notify the Contractor within 10 calendar days after receiving the CPM progress schedule if the schedule is approved or if any corrections or revisions are needed. If corrections or revisions are required for the initial CPM progress schedule, the Contractor shall submit 3 copies of the revised CPM progress schedule to the Engineer 10 or more calendar days before the preconstruction conference. If the Contractor fails to submit a revised CPM progress schedule as stated above, the Contractor's bidder qualification may

be suspended according to Article 1102.03, A, and the contract may be declared in default according to Article 1108.10.

### **1110.03 REQUIREMENTS FOR THE CPM PROGRESS SCHEDULE.**

The CPM progress schedule submitted shall be a network diagram with a numerical tabulation for each activity.

#### **A. Network Diagram.**

1. The network diagram shall show a logical sequence and quantities of the required work. The network diagram shall also show the order and interdependence of activities. The Contractor shall prepare the network diagram making use of the crew hour estimates and material delivery schedules so that the project or tied projects are completed within the specified contract period. The Contractor shall take account in the network diagram for any critical closure periods and limitations of operations specified in Article 1108.03, the contract proposal, or the plans.
2. The basic concept of network scheduling shall be followed to show how the start of a given activity is dependent on the completion of preceding activities and how its completion may affect the start of following activities. The network diagram shall include the following:
  - activity description
  - activity duration (work days)
  - intended production rates
  - any activity done by a subcontractor noted (the subcontractor identified)
  - location of activity
  - critical path noted
  - event nodes numbered
  - all restraints noted
  - slack "or float" for each activity (work days)
  - work days calendar which extends for the length of the contract plus 25% additional time
  - dummy paths noted
  - start/completion dates

#### **B. Numerical Tabulation.**

1. The Contractor shall include a numerical tabulation for each activity shown on the detailed network diagram. The following information shall be furnished as a minimum for each activity on this tabulation:
  - event nodes numbered
  - activity description
  - activity location
  - if activity done by a subcontractor (identify the subcontractor)
  - estimated duration (work days)
  - earliest start date (calendar date)
  - earliest completion date (calendar date)
  - latest start date (calendar date)

- latest completion date (calendar date)
  - contractor's intended start date (calendar date)
  - contractor's intended completion date (calendar date)
  - slack or float for each activity (work days)
  - quantities involved on each activity based on the Contractor's intended start and completion date
2. This numerical tabulation may be either a computer printout or prepared manually. There shall be a column for each of the above requirements.

**C. Other Specific Requirements.**

1. The construction time, as determined by the CPM progress schedule, for the entire project or any milestone shall not exceed the specified contract period. No individual activity duration shall be longer than 20 working days unless specified in the contract proposal or by the Contracting Authority. A unique activity numbering system shall be used to identify activities by bid items, work items, areas, procurements, or subcontractors. If subnetworks are used, no two activities shall bear the same activity number or description.
2. There shall be a legend with the CPM progress schedule defining all abbreviations, terms, or symbols used.

**1110.04 USE OF CPM PROGRESS SCHEDULE IN CONSTRUCTION OPERATIONS.**

- A.** No contract work shall be done without a CPM progress schedule approved by the Engineer. The items in the activities for the denoted critical path will determine the controlling operations of the work for the charging of working days.
- B.** During the life of the project, the Contractor shall review the CPM progress schedule with the Engineer biweekly unless otherwise specified. The Contractor shall submit a revised CPM progress schedule within 5 working days of the review meeting if the Contractor is behind schedule or if the schedule has been modified. All revised CPM progress schedules must be approved by the Engineer. For each revised CPM progress schedule, the Contractor shall submit 3 copies to the Engineer.
- C.** If the Contractor deviates from the current approved CPM progress schedule by not following the logical sequence of the critical path, payment will be withheld for the pay items for the affected activities until the Contractor submits a revised CPM progress schedule and this schedule is approved by the Engineer.
- D.** A revised CPM progress schedule will be required if the controlling operation falls 10 working days behind schedule, the Engineer then may take steps specified in Article 1108.02, K, to insure satisfactory completion of the project. If the controlling operation falls 20 working days behind schedule and it appears that the completion of the project in the specified time is in

jeopardy, the Contracting Authority may take action described in Article 1102.03, B, and Article 1103.01 and may take further action described in Article 1108.02, K.

#### **1110.05 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.**

The cost of preparing and revising the CPM Progress Schedule shall be included in the bid item for Mobilization.

### **Section 1111. Incentive/Disincentive for Early Completion**

#### **1111.01 GENERAL.**

- A.** I/D provisions for early completion of specific highway construction projects with critical closure activities may be assigned by the Department. Early completion may be specified for an entire project or for designated portions of a project.
- B.** Projects on which I/D provisions will apply have the I/D daily rates, the critical closure activity, the number of closure days allowed, the total working days for the project, and the maximum incentive payment shown on the proposal form.

#### **1111.02 DEFINITIONS.**

##### **A. Critical Closure Activity.**

Critical closure activities on highway construction projects are those activities specified in the contract documents where traffic movements are adversely affected causing undue delay and operating costs.

##### **B. Closure Day.**

A closure day is a calendar day during the critical closure activity. A closure day will be counted for each calendar day or portion of a day during the critical closure activity. The number of closure days given will assume some delay caused by weather. The Contractor may work any days and hours within the critical closure activity.

##### **C. I/D Daily Rate.**

The I/D Daily Rate is the incentive or disincentive dollar amount per day assigned by the Contracting Authority, that will be applied to the contract for incentive payment or disincentive assessment.

#### **1111.03 CONSIDERATION FOR EXTRA WORK OR DELAYS DURING THE CRITICAL CLOSURE ACTIVITY.**

- A.** The duration of a critical closure activity will be in closure days. Closure day credits will not be given within the assigned critical closure activity.
- B.** Additional closure days may be added when approved by the Engineer for extra work, overruns of contract items, or extraordinary circumstances.

- C. Approved extra work or overruns of contract items that will delay the Contractor during the critical closure activity must be documented and included in the critical path of the project on a revised critical path diagram which is subject to the approval of the Engineer. An additional closure day may be added for each additional closure day caused by the approved extra work or overruns of contract items as shown on the revised critical path diagram and approved by the Engineer.
- D. Non-weather related extraordinary circumstances that delay the Contractor during the critical closure activity must be documented by the Contractor and a written request for additional closure days must be submitted to the Engineer within 10 calendar days of the beginning of the delay. The Engineer will approve or deny all requests for additional closure days resulting from non-weather related extraordinary circumstances. Non-weather related extraordinary circumstances shall be limited to the following:
1. **Strikes.**  
Strikes which are not directed against the Contractor.
  2. **Legal Stoppages.**  
Legal Stoppages will be allowed if they result from legal action against the Contracting Authority or against the Contractor if not based on a specification violation.
  3. **Late Delivery of Material.**  
Procurement of material for a project is the sole responsibility of the Contractor. Late delivery will be considered an extraordinary circumstance only when the Contractor can show that orders were placed with a reliable supplier in sufficient time for materials to be delivered when needed and only when there is:
    - a. A nationwide shortage; or
    - b. An industry wide strike; or
    - c. Transportation strike which delays the delivery of material; or
    - d. Delays due to a change in material commitments when caused by a Federal emergency or order.
  4. **Natural Disaster.**  
A suspension order may be issued on any project in a declared disaster area, if the disaster causes conditions that do not allow productive work.
- E. Adverse weather including rain, snow, wind, flood, extreme heat, and the results thereof, such as inaccessibility or non-workability of materials, is only considered as extraordinary circumstance if the Contractor is working or ready to work on the contract and the adverse weather conditions do not allow productive work on the critical path. Adverse weather that delays the Contractor during the critical closure activity must be documented by the Contractor and a written request for additional closure days must be submitted to the Engineer within 10 calendar days of the beginning of the delay. Some delays for weather have been included in the number of closure days allowed. Therefore, additional closure days for adverse weather will not be allowed for the first 5 consecutive closure days of each delay.

**1111.04 WORK OUTSIDE THE CRITICAL CLOSURE ACTIVITY.**

- A.** The contract period may specify a number of working days. These days are provided to complete work prior to and/or following the critical closure activity. Working days will not be charged on any calendar day that a closure day is charged.
- B.** The liquidated damage rate shown on the proposal will be assessed for each working day used in excess of the number of working days specified.

**1111.05 I/D PAYMENT OR ASSESSMENT.****A. Incentive Payment.**

For the number of closure days remaining after completion of the critical closure activity, the Contractor will be paid the I/D daily rate as an incentive payment. Maximum incentive payment will not exceed that amount shown on the proposal. Incentive payments will be made in accordance with Article 1109.09.

**B. Disincentive Assessment.**

For the number of closure days used to complete the work required in a critical closure activity in excess of the specified closure days, the Contractor will be assessed the I/D daily rate. There will be no maximum amount for the disincentive assessment.

**Section 1112. A + B Bidding****1112.01 GENERAL**

A + B Bidding may be assigned by the Department. If so, the determination of the low bidder will involve a combination of the contract sum and the bidder's proposed time to complete all work designated in the A+B portion of the proposal form.

**1112.02 DEFINITION.****A. Critical Closure Activity.**

Critical closure activities are those activities specified in the contract documents where traffic movements are adversely affected causing undue delay and operating costs. The Critical Closure Activity will be defined in the proposal form.

**B. Closure Day.**

A closure day is a calendar day during the critical closure activity. A closure day will be counted for each calendar day or portion of a day during the critical closure activity. The Contractor may work any days and hours within the critical closure activity.

**C. Daily Road User Cost.**

The amount which represents the average daily cost of interference and inconvenience to the road user. The daily road user cost will be shown on the proposal form.

**1112.03 PREPARATION OF PROPOSAL.**

The bidder shall establish the number of calendar days to be used to complete the work required under the A + B portion of this contract as identified in the proposal form. The proposal may state a maximum number of calendar days allowable. Bids showing time for completion in excess of this maximum amount will be considered non-responsive and will be rejected.

**1112.04 CONSIDERATION OF BIDS.****A. Each bid submitted shall consist of two parts:**

(A) The contract sum.

(B) Total number of calendar days proposed by the bidder to complete all work defined as the Critical Closure Activity in the proposal form. The bidder shall enter the number of calendar days on the proposal form.

**B. The bid amount for award consideration will be determined by the following formula:**

$(A) + [(B) \times (\text{Daily Road User Cost})] = \text{Bid amount for award consideration.}$

**1112.05 WORK OUTSIDE THE CRITICAL CLOSURE ACTIVITY.**

**A.** Work performed on any calendar day prior to and/or following the critical closure activity will have working days charged according to Article 1108.02, D, of the Standard Specifications. Working days will not be charged on any calendar day that a closure day is charged.

**B.** The liquidated damage rate shown on the proposal will be assessed for each working day used in excess of the number of working days specified.

**1112.06 I/D PAYMENT OR ASSESMENT.****A. Incentive Payment.**

For the number of closure days remaining after completion of the critical closure activity, the Contractor will be paid the I/D daily rate as an incentive payment. Incentive payments will be made in accordance with Article 1109.09 of the Standard Specifications.

**B. Disincentive Assessment.**

For the number of closure days used to complete the work required in a critical closure activity in excess of the specified closure days, the Contractor will be assessed the I/D daily rate. There will be no maximum amount for the disincentive assessment.

**1112.07 CONSIDERATION FOR EXTRA WORK OR DELAYS DURING THE CRITICAL CLOSURE ACTIVITY.**

Article 1111.03 applies.

**1112.08 DETERMINATION OF DBE GOOD FAITH EFFORT.**

The percentage of DBE Commitment for each bidder will be computed by dividing their DBE Commitment by their bid for the Contract Sum (A). This percentage will be used in the Contract Award Procedures listed Article 1102.17.

**Section 1113. Hourly Lane Rental (A + B Bidding with Incentive/Disincentive)****1113.01 GENERAL.**

The determination of the low bidder involves a combination of the contract sum and the bidder's proposed time to complete the work designated as the A+B portion of this project. These specifications also describe lane rental procedures with incentive/disincentive under which the Contractor will be assessed a rental rate for each lane closure. Rental days will be used for bidding purposes; however, charging of rental time will be based on a rental hour.

**1113.02 DEFINITION OF TERMS.****A. Rental Day.**

For bidding purposes only, a rental day is equal to 24 rental hours. The bidder shall bid rental days in whole numbers.

**B. Hourly Rental Rate.**

1. The amount, as determined by the Contracting Authority and shown in the proposal form, which represents the average hourly cost of interference and inconvenience to the road user for each lane closure.
2. The proposal form may identify separate peak, non-peak, and shoulder rental rates. Unless otherwise stated in the contract documents, the peak rate will be between 6:00 a.m. to 9:00 a.m. and 4:00 p.m. to 7:00 p.m.; the non-peak rate will be all other hours. The shoulder rate will occur whenever a shoulder is closed.

**C. Rental Hour.**

Any 60 minute period or portion of a 60 minute period beginning at the time a lane or shoulder is closed by the Contractor's operation.

**1113.03 PREPARATION OF PROPOSAL.**

The bidder shall calculate the number of rental days from the number of rental hours they estimate using to complete the work required under the A+B portion of this project.

**1113.04 CONSIDERATION OF BIDS.****A. Each bid submitted shall consist of two parts:**

(A) The contract sum.

(B) Total number of rental days proposed by the bidder. The bidder shall enter the number of rental days on the proposal form.

- B.** The bid amount for award consideration will be determined by the following formula:  
 $(A) + [(B) \times (\text{Daily Road User Cost})] = \text{Bid amount for award consideration.}$

#### **1113.05 CHARGING OF CONTRACT TIME.**

- A.** The proposal form will identify the portions (geographic section of traffic stage) of the project for which lane rental applies.
- B.** The proposal form will also include working days to complete work not requiring a lane closure. These working days will be charged according to Article 1108.02, D. The working days will be assessed based on a separate controlling operation for the items of work that do not require a lane closure.
- C.** The Contractor shall record the time a lane or shoulder is closed, whether work is being performed or not. The Contractor shall submit to the Engineer, in writing, a log of lane closure activity. This report shall be submitted to the Engineer daily (reporting the previous days activities) and shall include station location (beginning and ending) of every closure, and hours of use (beginning time, ending time, and total hours per closure). This report shall also include a written statement of any objections to rental hours or rates charged.
- D.** A lane closure will be identified as any of the following instances:
- Lane closure commencing with a taper or when access to a lane is denied continuing through the ending taper,
  - Access is denied to a turning lane (left or right), or
  - Ramp closure (does not include narrowing of a ramp where traffic is allowed access)
- E.** Rental periods for multiple lane closures, both longitudinally and transversely, will be assessed simultaneously for each lane that is closed. Lane rental will not be charged for shoulder closures that are adjacent to lane closures. Turn lane closures will be counted when a turn lane is not available to turning traffic. When a ramp is closed, each lane closed on the ramp will be assessed independently. Rental periods for shoulder closures will be assessed independent of lane closures.

#### **1113.06 LANE RENTAL PAYMENT OR ASSESSMENT.**

Lane rental payment or assessment will be as follows:

**A. Incentive Payment.**

The Contractor will be paid an amount equal to the hourly rental rate multiplied by the time remaining if the time used is less than the time bid. Maximum incentive payment will not exceed the amount specified on the proposal form. If not shown, there will be no maximum amount for incentive payment. Incentive payments will be made in accordance with Article 1109.09.

**B. Disincentive Assessment.**

The Contractor will be assessed an amount equal to the hourly rental rate multiplied by the time used that is in excess of the time bid. There will be no maximum amount for disincentive assessment

**1113.07 CONSIDERATION FOR EXTRA WORK OR DELAYS DURING LANE RENTAL CHARGES.****A. Lane Rental by Hour.**

No consideration for additional time will be considered for the first 10 consecutive hours of delay for each extraordinary circumstance. The Contractor will be responsible for obtaining necessary weather forecasts prior to the lane or shoulder closure.

**B. Additional Time.**

Additional time will be given by the Engineer for extra work, overruns of contract items, or extraordinary circumstances meeting the following requirements:

1. Approved extra work or overruns of contract items that extend the duration of the closure shall be documented and included in the critical path of the project. The revised critical path diagram shall be submitted to the Engineer for approval.
2. Non-weather related extraordinary circumstances that delay the Contractor during the lane closure shall be documented by the Contractor and a written request for additional closure time shall be submitted to the Engineer within 72 hours of the beginning of the delay. The Engineer will approve or deny all requests for additional closure time resulting from non-weather related extraordinary circumstances. Non-weather related extraordinary circumstances will be limited to the following:
  - a. **Strikes.**  
Strikes which are not directed against the Contractor.
  - b. **Legal Stoppages.**  
Legal Stoppages will be allowed if they result from legal action against the Contracting Authority or against the Contractor if not based on a specification violation.
  - c. **Late Delivery of Material.**  
Procurement of material for a project is the sole responsibility of the Contractor. Late delivery will be considered an extraordinary circumstance only when the Contractor can show that orders were placed with a reliable supplier in sufficient time for materials to be delivered when needed and only when there is:
    - 1) A nationwide shortage; or
    - 2) An industry wide strike; or
    - 3) Transportation strike which delays the delivery of material; or
    - 4) Delays due to a change in material commitments when caused by a Federal emergency or order.

**d. Natural Disaster.**

A suspension order may be issued on any project in a declared disaster area, if the disaster causes conditions that do not allow productive work.

3. Adverse weather related extraordinary circumstances including rain, snow, wind, flood, and the results thereof, such as inaccessibility or non-workability of materials, is only considered as extraordinary circumstance if the Contractor is ready to work on the contract and the adverse weather conditions do not allow productive work on the critical path. Adverse weather that delays the Contractor during the lane closure shall be documented by the Contractor and a written request for additional closure time shall be submitted to the Engineer within 72 hours of the beginning of the delay.

