

**DIVISION 100
GENERAL PROVISIONS**

**SECTION 101
DEFINITIONS AND TERMS**

101.01 Abbreviations and Definitions. Whenever the following abbreviations are used in these specifications or on the plans, they are to be construed the same as the respective expressions represented:

(a) Industry Abbreviations.

ACI	American Concrete Institute
AASHTO	American Association of State Highway and Transportation Officials
ADEQ	Arkansas Department of Environmental Quality
AGC	Associated General Contractors of America
AHTD	Arkansas State Highway and Transportation Department
AIA	American Institute of Architects
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
ARA	American Railway Association
AREMA	American Railway Engineering and Maintenance-of-Way Association
ARTBA	American Road and Transportation Builders Association
ASCE	American Society of Civil Engineers
ASTM	American Society for Testing and Materials
ATSSA	American Traffic Safety Service Association
AWPA	American Wood Preservers Association
AWS	American Welding Society
AWWA	American Water Works Association
C of E	U.S. Army Corps of Engineers
CFR	Code of Federal Regulations
CRSI	Concrete Reinforcing Steel Institute
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FSS	Federal Specifications and Standards, General Services Administration
ITE	Institute of Transportation Engineers
MIL	Military Specifications
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways
NEMA	National Electrical Manufacturers Association
OSHA	Occupational Safety and Health Administration
SAE	Society of Automotive Engineers
SSPC	Steel Structures Painting Council

UL Underwriter's Laboratory
 USC United States Code

(b) Contract Abbreviations for Construction Work.

AC	Asphalt Cement	CTD	Coated
ACHM	Asphalt Concrete Hot Mix	CU, cu	Cubic
ACTD	Actuated	DBL	Double
ADJ	Adjusted	DI	Drop Inlet(s)
AGG	Aggregate(s)	DWY(S)	Driveway(s)
ALUM	Aluminum	EMUL	Emulsified
APPL	Application	EWK	Earthwork
APPR	Approach	EXC	Excavation
ASPH	Asphalt	EXP	Expansion
ASSY	Assembly	F&I	Furnish and Install
AST	Asphalt Surface Treatment	FDN	Foundation
AUTO	Automatic	FES	Flared End Section(s)
BIND	Binder	FNC	Fence(s)
BIT	Bituminous	FURN	Furnish, Furnishing
BLDG	Building(s)	GA	Gage, Gauge
BLKT	Blanket	GALV	Galvanized
BNG(S)	Bearing(s)	GR	Grade, Graded
BR	Bridge(s)	GRVL	Gravel
BST	Bituminous Surface Treatment	ha	hectare(s)
C&G	Curb and Gutter	HI	High Intensity
CA	Corrugated Aluminum	HM	Hot Mix
cc	cubic centimeter(s)	HMA	Hot Mix Asphalt
CD	Compacted Depth	HMAS	Hot Mix Asphalt Stabilized
CEM	Cement	INST	Install, Installing, Installation
CL	Class	j	joule(s)
CLVT(S)	Culvert(s)	kg	kilogram(s)
CM	Corrugated Metal	kL	kiloliter(s)
CMBN	Combination	km	kilometer(s)
CNTL	Control, Controller	km/h	kilometers per hour
COMP	Compaction, Compacted	kPa	kiloPascal(s)
CONC	Concrete	L	liter(s)
CONST	Construction	LAB	Laboratory
CONT	Continuous, Continuously	m	meter(s)
CORR	Corrugated	mm	millimeter(s)
CR	Crushed	MA	Mineral Aggregate
CRS	Course(s)	MAINT	Maintenance
CS	Corrugated Steel	MATL	Material(s)
		MES	Mitered End Section(s)
		MET	Metal
		MG	1000 Gallons
		MIN	Mineral

MOB	Mobilization	RMC	Rigid Metallic Conduit
MOD	Modified	RNMC	Rigid Non-Metallic Conduit
MPa	MegaPascal(s)	SCAR	Scarify, Scarifying
MRK	Marking(s)	SGNL(S)	Signal(s)
msta	metric station	SHLD(S)	Shoulder(s)
mton	1000 kilograms	SPEC	Special
NO	Number(s)	sq	Square
NON MET	Non-Metallic	sta	Station (100 feet)
NON REINF	Non-Reinforced	STAB	Stabilized, Stabilization
NPDES	National Pollutant Discharge Elimination System	STKPL	Stockpile, Stockpiling
OCT	Octagonal	STL	Steel
OFF	Office	STN	Stone
OH	Overhead	STR(S)	Structure(s)
Pa	Pascal(s)	STRL	Structural
PC	Portland Cement	SURF	Surface, Surfacing
PIL	Piles, Piling	SWPPP	Storm Water Pollution Prevention Plan
PM	Plant Mixed	SYS	System, Systems
ppm	parts per million	TEMP	Temporary
PRCST	Precast	TERM	Terminal
PRFMD	Preformed	THERMPL	Thermoplastic
PROC	Process, Processing	TMBR	Timber
PVC	Polyvinylchloride	TRAF	Traffic
PVMT	Pavement(s)	TRP	Triple
PVNG	Paving	TRMT	Treatment
QPL	Qualified Products List	TRTD	Treated
QUAD	Quadruple	TY	Type
QUINT	Quintuple	UNCL	Unclassified
R&D	Removal and Disposal	UNTRTD	Untreated
RC	Reinforced Concrete	UT	Uniform Thickness
RDWY	Roadway(s)	VAR	Variable
RECOMP	Recompact(ed), Recompaction	VEH	Vehicle(s)
RECON	Reconstruct(ed)	µm	micrometer (1 X 10 ⁻⁶ m)
REFL	Reflectorized		
REHAB	Rehabilitate, Rehabilitation		
REINF	Reinforced, Reinforcing		
RELOC	Relocate, Relocation		
REMV	Removal, Removing, Removed		
REPL	Replace, Replacing		
RESTOR	Restoration		
RESTEEL	Reinforcing Steel		

(c) Definitions. Whenever in these specifications or in other contract documents the following terms, or pronouns in place of them, are used, the intent and meaning shall be interpreted as follows:

Advertisement. The public announcement, as required by law, inviting bids for work to be performed or materials to be furnished.

Award. The acceptance by the Commission of a proposal.

Bidder. An individual, partnership, corporation, or joint venture submitting a bid for the advertised work. (The terms "Bidder" and "Contractor" are frequently used synonymously.)

Bridge. A single or multiple span structure, including supports, erected over a depression or an obstruction, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20' (6 m) between undercopings of abutments or spring lines of arches or extreme ends of openings for multiple boxes; may include multiple pipes where the clear distance between openings is less than half the smaller contiguous opening. (All measurements shall include the widths of intermediate piers or division walls.)

Bridge Length. The greater dimension of a structure measured along the center of the roadway between backs of abutment backwalls or between ends of bridge floor.

Bridge Roadway Width. The clear width of structure measured at right angles to the center of the roadway between the bottom of curbs or, if curbs are not used, between the inner faces of parapet or railing.

Business Day. Any calendar day except Saturdays, Sundays, and Department recognized holidays. If a holiday falls on Saturday or Sunday, the observed day shall be the Friday preceding the Saturday or the Monday following the Sunday.

Calendar Day. Any day shown on the calendar, beginning and ending at midnight. If a day is not identified by any other modifier, it shall be considered a calendar day.

Change Order. A written order issued by the Engineer to the Contractor, covering changes in the plans or quantities or both, within the scope of the Contract and establishing the basis of payment and time adjustments for the work affected by the changes. A contract modification.

Commission. The Arkansas State Highway Commission as constituted under the laws of the State of Arkansas for the administration of the Arkansas State Highway and Transportation Department.

Contract. The written agreement between the Commission and the Contractor setting forth the obligations of the parties thereunder, including, but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment.

(The Contract includes the contract form; the contract schedule of prices; the payment and performance bonds; specifications, supplemental specifications, and special provisions; general and detailed plans; and any change orders and agreements that are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.)

Contract Item (Pay Item). A specifically described unit of work for which a price is provided in the Contract.

Contract Time. The number of working days allowed for completion of the Contract.

If a fixed date of completion is shown in the proposal, the Contract shall be completed by that calendar date.

Contractor. The individual, partnership, corporation, or any combination thereof, or joint venture contracting with the Commission for performance of the prescribed work. (The terms "Contractor" and "Bidder" are frequently used synonymously.)

County. The county in which the work herein specified is to be done.

Culvert. Any structure not classified as a bridge that provides an opening under the roadway.

Department. The Arkansas State Highway and Transportation Department as constituted under the laws of the State of Arkansas for the administration of highway and transportation work. ("Department" and "State" are sometimes used synonymously.)

Director. Director of Highways and Transportation, the chief executive officer of the Department.

Engineer. The Chief Engineer of the Department, acting directly or through duly authorized representatives, who is responsible for engineering supervision of the construction.

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

Extra Work. An item of work not provided for in the Contract as awarded but found essential to the satisfactory completion of the Contract within its intended scope.

Holidays. The Department observes the following legal holidays: New Year's Day, January 1; Dr. Martin Luther King Jr.'s Birthday/Robert E. Lee's Birthday, 3rd Monday in January; President's Day, 3rd Monday in February; Memorial Day, last Monday in May; Independence Day, July 4; Labor Day, 1st Monday in September; Veteran's Day, November 11; Thanksgiving Day, 4th Thursday in November; Christmas Eve, December 24; and Christmas Day, December 25. If a holiday falls on Saturday or Sunday, the observed day shall be the Friday preceding the Saturday or the Monday following the Sunday.

Inspector. The Engineer's authorized representative assigned to make detailed inspections of Contract performance.

Laboratory. The testing laboratory of the Department or any other testing laboratory that may be designated by the Engineer.

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

Metric Station. 100 meters.

Metric Ton. 1000 kilograms.

Notice to Contractors. The advertisement for proposals for all work or materials on which bids are required indicating with reasonable accuracy the quantity and location of the work to be done, or the character and quantity of the materials to be furnished; and the time and place of the opening of proposals.

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.

Payment Bond. The approved form of security, executed by the Contractor and his/her Surety or Sureties, guaranteeing the payment of all legal debts of the Contractor pertaining to the construction of the project.

Performance Bond. The approved form of security, executed by the Contractor and his/her Surety or Sureties, guaranteeing complete performance of the Contract and all supplemental agreements thereto.

Plans. The approved plans, profiles, typical cross- sections, working drawings, and supplemental drawings, or exact reproductions thereof, which show the location, character, dimensions, and details of the work to be done. (The Title Sheet of the plans is provided for general information only and is not to be taken as an all-inclusive description of the work. Other work and/or locations may be included in the Project as described by the plans, specifications, supplemental specifications, and special provisions.)

Profile Grade. Unless otherwise shown on the plans, the trace of a vertical plane intersecting the top surface of the proposed wearing surface, usually along the longitudinal centerline of the roadbed. (Profile grade means either the 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 thereon under the Contract.

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

Proposal Form. The approved form on which the Department requires bids to be prepared and submitted for the work.

Proposal Guaranty. The security furnished with a bid to guarantee that the bidder will enter into the Contract if the bid is accepted.

Prospective Bidder. An individual, partnership, corporation, or joint venture who has requested and been issued a proposal form from the Department.

Questionnaire. The specified forms on which an individual, a partnership, or a corporation shall, as a prerequisite to bidding, periodically furnish required information as to ability to perform and finance the work.

Registered Professional Engineer. An Engineer registered in the State of Arkansas by the Arkansas State Board of Registration for Professional Engineers and Land Surveyors. All details, drawings, calculations, and reports submitted by the registrant as required by these specifications shall be certified, signed, and stamped with the seal or facsimile thereof as authorized by the Board.

Registered Professional Land Surveyor. A Land Surveyor registered in the State of Arkansas by the Arkansas State Board of Registration for Professional Engineers and Land Surveyors. All plats submitted by the registrant as required by these specifications shall be certified, signed, and stamped with the seal or facsimile thereof as authorized by the Board.

Registered Scale Mechanic. A person registered with the Arkansas Bureau of Standards, Division of Weights and Measures, as being qualified by training and experience to make adjustments and repairs to commercial scales and performs such work as a skilled trade.

Resident Engineer. The direct representative of the Engineer placed in immediate charge of the engineering details and general administration of a project.

Right-of-Way. A general term denoting land, property, or interest therein, acquired for or devoted to highway purposes.

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

Roadbed. The graded portion of a highway within top and side slopes, prepared as a foundation for the pavement structure and shoulders.

Roadside. A general term denoting the area adjoining the outer edge of the roadway. (Extensive areas between the roadways of a divided highway may also be considered roadside.)

Roadway. The portion of a highway within limits of construction.

Shoulder. The portion of the roadway 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 constructed primarily for the use of pedestrians.

Sieve. U.S.A Standard Series, as defined in AASHTO M 92. Percent passing or retained is by weight.

Special Provisions. Additions and revisions to the standard and supplemental specifications covering conditions peculiar to an individual project.

Specifications. A general term applied to all directions, provisions, and requirements pertaining to performance of the work.

Standard Specifications. This printed book of Standard Specifications for Highway Construction. Unless otherwise noted, the Edition in effect on the date of advertisement.

State. The State of Arkansas acting through its authorized representative. ("State" and "Department" are sometimes used synonymously.)

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

Structures. Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, endwalls, buildings, sewers,

service pipes, underdrains, foundation drains, and other features that may be encountered in the work and not otherwise classed herein.

Subbase. The layer or layers of specified or selected material of designated thickness placed on a subgrade to support a base course.

Subcontractor. An individual, firm, or corporation to whom the Contractor sublets part of the work.

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, skewbacks of arches and tops of footings of rigid frames, together with the backwalls, wingwalls, and wing protection railings.

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

Superstructure. The entire structure except the substructure.

Supplemental Agreement. A written negotiated agreement constituting a modification of the originally executed Contract and covering the performance of work beyond its general scope. (The items of work contained therein will be included in an approved Change Order.)

Supplemental Specifications. Revisions to the Standard Specifications that are adopted subsequent to issuance of the printed book of Standard Specifications.

Surety. The company, other than the Contractor, executing a bond furnished by the Contractor.

Titles (Or Headings). The titles or headings of the sections and subsections herein are intended for convenience of reference and shall not be considered as having any bearing on their interpretation.

Ton. 2000 pounds.

Town or City. A subdivision of the county used to designate or identify the location of the proposed work.

Traveled Way. The portion of the roadway for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

Work. The furnishing of all materials, labor, equipment, tools, and incidentals necessary or convenient to the successful completion of the project and the carrying out of the duties and obligations imposed by the Contract.

Working Day. A calendar day during which normal construction operations could proceed; normally excludes Saturdays, Sundays, and Department recognized holidays. (A working day is further defined in subsection 108.06.)

Working Drawings. Stress sheets, shop drawings, erection plans, falsework plans, framework plans, cofferdam plans, or any other supplementary plans or similar data that the Contractor is required to submit to the Engineer for informational and record purposes or for approval.

Work Order. Written notice from the Engineer directing the Contractor to begin prosecution of the work.

101.02 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, 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."

SECTION 102
BIDDING REQUIREMENTS AND CONDITIONS

102.01 Prequalification of Bidders. Prospective bidders, when requested, must present satisfactory evidence that they have been regularly engaged in the kind of work bid upon, giving the length of time so engaged, and that they are fully prepared with the necessary capital, material, machinery, and expert workers to carry out the Contract.

A financial statement and experience record must be furnished on questionnaire forms specified by the Commission. These forms must be prepared by a Certified or Registered Public Accountant and filed by the prospective bidder. A bidder's period of qualification will be for one year, beginning with the effective date of the statement, plus a grace period of four months. Prospective bidders may file a questionnaire at any time; however, no proposal will be released to a bidder unless a rating has been extended based on an acceptable questionnaire. The Department will expect a review period of at least 5 business days before extending a rating. Contractors will be rated in accordance with the maximum amount of work it is deemed they can satisfactorily prosecute through any given period. The maximum amount of work considered will include the unfinished value of all contracts in force.

The attention of prospective bidders is directed to Ark. Code Ann. §17-22-101 et seq., Act 150 of the 1965 Acts of Arkansas, being an "Act Regulating the Practice of Contracting in the State of Arkansas", and acts amendatory thereto. When the work offered is financed in whole with State funds and is estimated to cost \$20,000 or more, the prospective bidder must show evidence of license with the Contractors Licensing Board for the State of Arkansas before being furnished with a proposal form.

When a project is funded in whole or in part with Federal Aid funds, the Commission does not require the bidder to be licensed to bid. Any contractor, otherwise qualified by the State of Arkansas to perform such work, is not required to be licensed nor to submit application for license before submitting a bid or having such bid considered; provided, however, that such exemption does not constitute a waiver of the State's right under its license laws to require a contractor, determined to be a successful bidder, to be

licensed to do business in the State of Arkansas in connection with the execution of an ensuing Contract. (See also subsection 103.02.)

For informational purposes, proposals marked "not for bidding" may be obtained upon request without the prequalification or licensing requirement.

102.02 Notice to Contractors. After the date is fixed for the letting of work, the Department will give notice of such letting to contractors. The Notice to Contractors will contain a description of the proposed work, and information to the bidder regarding access to proposal forms, plans, and specifications, and the amount and nature of the proposal guaranty. This notice will be published as required by State law.

102.03 Contents of Proposal Form. The proposal form will state the location and description of the contemplated construction and will show the estimate of the various quantities and kinds of work to be performed or materials to be furnished, and will have a schedule of items for which unit bid prices are invited. The proposal form will state the time in which the work must be completed, the amount of the proposal guaranty, and the date and time of the letting of work. The form will also include any special provisions or requirements that vary from or are not contained in the standard specifications.

All papers bound with or attached to the proposal form are considered a part thereof and should not be detached or altered when the proposal is submitted.

The plans, specifications, and other documents designated in the proposal form will be considered a part of the proposal whether attached or not.

102.04 Issuance of Proposals. Proposals will only be issued to prequalified contractors or their authorized representatives upon request.

If the prospective bidder's prequalification rating is not "unlimited", the bidder shall file a certification with the Department citing all contracts in force and the unfinished value of such work. Proposals will not be issued until a certification for the current bidding period is on file and the amount of work the contractor may be allowed to undertake is determined. The contractor's prequalification rating, less the unfinished value of all contracts in

force, will determine the amount of additional work that the contractor may be allowed to undertake. Proposals covering individual projects for which the estimated cost is more than the amount that the contractor may be allowed to undertake will not be issued, but the contractor may be issued proposals on more than one project, providing that the estimated cost of each project is not more than the amount that the contractor may be allowed to undertake. In the event a contractor submits a low bid on more than one project and the aggregate amount is greater than the amount the contractor may be allowed to undertake, the Commission will exercise its discretion in the award of a particular project or projects.

A charge will be made for proposals and plans issued. Payment shall be made at the time proposals or plans are received or upon receipt of statement therefor. No refund will be allowed for plans or proposals returned.

Plans, proposal forms, and specifications may be examined in the Programs and Contracts Division at the Arkansas State Highway and Transportation Department, 10324 Interstate 30, Little Rock, Arkansas during regular business hours and may be purchased until one hour before the time established for opening proposals.

The Department reserves the right to refuse to issue, accept, or consider a proposal for any of the following reasons:

(a) Failure to comply with the prequalification requirements of the Department.

(b) Lack of competency and adequate machinery, plant, and other equipment, as revealed by the financial statement and experience questionnaires required under subsection 102.01.

(c) Uncompleted work that, in the judgment of the Department, might hinder or prevent the prompt completion of additional work if awarded.

(d) Failure to pay or satisfactorily settle all bills due for labor and material on former contracts in force at the time of issuance of proposals.

(e) Misconduct which, in the opinion of the Engineer, is of such a serious nature as to adversely affect the ability of the Contractor to perform future work.

(f) Debarment or suspension currently in effect.

(g) Failure to reimburse the Department for moneys owed on any previously awarded contracts including those where the prospective bidder is a party to a joint venture and the joint venture has failed to reimburse the Department for moneys owed.

(h) Previous failure to execute a Contract and/or submit acceptable bonds for any subsequent advertisement of that project.

(i) Unsatisfactory performance on previous work.

(j) If the prospective bidder is the Contractor on a current Contract with the Commission on which Liquidated Damages are being assessed due to failure to complete the work within the Contract time. The Engineer will review each project being assessed liquidated damages to determine if a time extension is warranted under Subsection 108.06(d); and subsequently may allow the Contractor to obtain proposals.

(k) Default under previous contracts.

(l) Failure to pay any bills owed the Department.

102.05 Interpretation of Quantities in Proposal Schedule.

The quantities appearing in the schedule are approximate only and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished in accordance with the Contract. The scheduled quantities of work to be done and materials to be furnished may each be increased, decreased, or omitted as hereinafter provided.

102.06 Examination of Plans, Specifications, Special Provisions, and the Site of the Work.

The Department will provide full, complete, and accurate plans and specifications giving such directions as will enable any competent mechanic or contractor to carry them out. The bidder is expected to examine carefully the site of the proposed work, the proposal, plans, specifications, supplemental specifications, special provisions, and contract forms before submitting a proposal. The submission of a bid shall be considered prima facie evidence that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirements of the plans, specifications, supplemental specifications, special provisions, and contract.

When the plans or special provisions include information pertaining to subsurface exploration, boring logs, soil survey information, or other preliminary investigations, such information was obtained by the Department for design and estimating purposes only. This and other subsurface investigation information may be available and prospective bidders will be permitted to examine such information upon request. It is expressly understood and agreed that said information does not constitute a part of the Contract and represents only the best knowledge of the Department as to the location, character, and depth of the materials encountered. This information is only included and made available so that prospective bidders may have access to subsurface information obtained by the Department and is not intended to be a substitute for personal investigation, interpretation, and judgment of the bidder. The bidder should be cognizant of the possibility that conditions affecting the cost and/or quantities of work to be performed may differ from those indicated.

102.07 Preparation of Proposal. The proposal shall be submitted upon the forms furnished to the prospective bidder by the Department. A computer-generated proposal schedule as described below may be used in lieu of the proposal schedule in the proposal. The bidder shall specify a unit price in figures for each pay item for which a quantity is given and should also show the products of the respective unit prices and quantities written in figures in the column provided for that purpose, and the total amount obtained by adding the amounts of the several items. These extensions and totals as calculated by the bidder are for information only; the total proposal amount will be the true sum of the products obtained by multiplying the approximate quantities by their respective unit bid prices. Any notes, comments, or amounts written outside the column headed "Unit Bid Price" will be disregarded when calculating the total proposal amount. A unit price of "zero" (\$0.00) is a valid price and will be considered. A blank unit price is not considered valid except in the case of a lump sum item for which the price is entered in the column headed "Extension". The unit bid price should not be carried beyond 1/10 cent (\$0.001). Any figures on the unit bid price beyond 1/10 cent will be dropped. All figures shall be in ink and legible.

Should a bidder need to change a unit bid price on the bid proposal schedule of items, the original entry shall be marked out

and the new entry shall be initialed by the person signing the proposal or another officer of the firm. Should a bidder need to change an extension, subtotal, or total on the bid proposal schedule of items, the original entry should be marked out and the new entry should be initialed by the person signing the proposal or another officer of the firm. Changes are defined as any physical alterations to the original figures including, but not limited to erasures, cross-outs, line-outs, or other corrections (e.g., liquid paper white-outs, tape corrections, etc.).

If the bidder elects to use a computer-generated Proposal Schedule, the bidder should print the Job Number, Bidder's Company Name (as prequalified with the Department), and Page Number on each Proposal Schedule page and shall list the line numbers, items, and item quantities as shown on the Department Schedule of Items. The final page of the computer-generated Proposal Schedule shall contain the original signature of an authorized representative of the firm. Even though the bidder chooses this option, Page 3 of the Proposal form must still be signed, any applicable certification forms included in the proposal form must be executed, and the entire proposal form submitted.

When plans and specifications permit the use of different types of materials for an item of work and when the proposal provides for these different acceptable materials in an alternate bid system, the bidder should enter a unit price and extension for only one of the two or more alternates listed for that item of work. Should unit prices be entered for more than one alternate of an item of work, the alternate with the lowest extension will be used when computing the contract amount.

The bidder's proposal must be signed with ink by the individual, by one or more members of the partnership, by one or more members or officers of each firm representing a joint venture, or by one or more officers of a corporation, or by an agent of the Contractor legally qualified and acceptable to the Department.

If the bidder's proposal is made by an individual, the name of the individual must be shown; by a partnership, the name of each partnership member must be shown; as a joint venture, the name of a member or officer of each of the firms represented by the joint venture must be shown; by a corporation, the name of the corporation must be shown. If the proposal is signed by any person

who is not listed in the bidder's Prequalification Questionnaire (Questionnaire Form) as the individual, as a partner of a partnership, or as an officer of a corporation, authorization for such signature should be on file with the Department before opening of bids, or should accompany the proposal. This authorization shall be made before the opening of bids and be in the form of a Power of Attorney duly executed and signed by an official with power to constitute such authority.

Various sections of these specifications provide for separate pay items for the major components of Mineral Aggregate/Asphalt Binder mixes, and it is intended that the unit bid prices submitted for these items are balanced according to their proportionate share of the in-place cost of the mix.

To prevent gross unbalancing of bids on these components, a minimum unit bid price has been established for some or all of the pay items for Asphalt Binder. Those items within the Proposal Schedule that are subject to this minimum unit bid price will bear the note "(Minimum bid price is \$___ per ton)". Unit bid prices submitted which are equal to or greater than this listed minimum price will be computed and tabulated at the unit bid price submitted. However, any unit bid price submitted in an amount less than the specified minimum will be automatically adjusted upward to the specified minimum and computed accordingly, without any counter-adjustment in price for related component items.

The proposal for all federal aid projects will contain a bidders list. The bidder should complete the list by showing the name, address, and DBE designation for all subcontractors, material suppliers, or trucking firms that bid or provided quotes on any item on the project, regardless if the quotes were used or not used in the preparation of the bidder's proposal. The information provided will be used to establish and maintain a master list of subcontractors, materials suppliers, and trucking firms for the development of the Department's overall DBE goals. The information provided will not be used for contract awarding purposes but must be provided before the Contractor will be issued proposals for future lettings.

102.08 Irregular Proposals. (a) Proposals will be considered irregular and will be rejected for the following reasons:

(1) If changes are made to the entries for unit bid prices on the bid proposal schedule of items and they are not initialed by the person signing the proposal or an officer of the firm.

(2) If the proposal does not contain a unit price for each pay item listed except in the case of authorized alternate pay items or lump sum pay items. In the case of a lump sum pay item, a price may be entered as a unit price or an extension.

(3) If the proposal is not prepared and signed with ink.

(4) If the final page of a computer generated Schedule of Items and Page 3 of the Proposal Form do not contain the original signature of an authorized representative of the firm.

(5) If the computer generated Schedule of Items does not contain the items and item quantities shown on the Department's Schedule of Items.

(6) If the proposal is not accompanied by the proper proposal guaranty.

(7) If a proposal is received from an individual, firm, partnership, or corporation with an interest, as principal, in another proposal for the same project.

(8) If any unit price entered on the Schedule of Items or a computer-generated Schedule of Items is illegible.

(9) If the proposal is not submitted by the prospective bidder who purchased the original proposal.

(10) If the Disadvantaged Business Enterprise (DBE) Participation Form or the Certification to Submit DBE Participation is not completed and signed, or documentation to request consideration of a good faith effort is not included with the proposal.

(b) Proposals will be considered irregular and may be rejected for the following reasons:

(1) If the proposal is on a form other than that furnished or authorized by the Department; or if the form is altered except as authorized; or any part thereof is detached.

(2) If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind that may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning.

(3) If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.

(4) If any item entered on the Schedule of Items or a computer-generated Schedule of Items is ambiguous.

(5) If the computer generated Schedule of Items does not contain the Job Number, Bidder's Company Name (as prequalified by the Department), and Page Number on each Proposal Schedule page.

(6) Unbalanced proposals in which the prices for some items are out of proportion to the reasonable costs representative of those items.

102.09 Proposal Guaranty. No proposal will be considered by the Commission unless it is accompanied by a guaranty in the form of either a bank draft, certified check, or cashier's check drawn on a solvent bank or trust company, or a bidder's bond executed by an approved surety company. The guaranty shall be made payable to the Arkansas State Highway and Transportation Department and shall be in an amount not less than the amount indicated in the proposal, except that in a joint venture arrangement it will be permissible for each participating bidder to submit a lesser amount that, in aggregate, will meet the required total amount. A separate check or bidder's bond shall be furnished with each proposal submitted.

102.10 Delivery of Proposals. Each proposal should be submitted in a special envelope furnished by the Department. The information provided on the submittal envelope shall clearly indicate that it contains a bid proposal for State Job (number) and should list the State job name and the name and address of the Contractor submitting the bid. The submittal envelope should be sealed and addressed to the Chief Engineer, Arkansas State Highway and Transportation Department. When sent by mail, the sealed submittal envelope should be enclosed in a second envelope addressed to the Chief Engineer, Arkansas State Highway and Transportation Department, P.O. Box 2261, Little Rock, Arkansas

72203, and identified as a bid proposal. In the event that the second envelope is not identified as a bid proposal, the Department will not be responsible for consideration of the proposal if it is not recognized as such by the time designated for receipt of proposals. If submitted other than by mail, it shall be delivered to the Division Head, Programs & Contracts Division, or an authorized representative, Arkansas State Highway and Transportation Department, 10324 Interstate 30, Little Rock, Arkansas. Any proposal received after the time stated in the proposal form for receipt of proposals will not be accepted and will be returned unopened to the bidder.

102.11 Withdrawal/Modification of Proposals. (a) A bidder may withdraw or modify a proposal after it has been deposited with the Department, provided a request for withdrawal or modification, as described herein, is received by the Department before the time set for opening proposals. A proposal may also be withdrawn if the Commission fails to make an award within 40 calendar days after the date of opening.

(b) A request to withdraw or modify a proposal before bid opening must be legible and in one of the following forms.

(1) Written Request. Written requests for release of the bid proposal shall be signed by the bidder and delivered by the person who is to take possession of the proposal. Proposals withdrawn in this manner may be modified and resubmitted, but the modifications must be legible and must satisfy all other criteria for changes listed in this Section. Failure to resubmit a modified proposal before the time set for bid opening will result in no bid on behalf of the company that has withdrawn its bid.

(2) Facsimiles.

a. The Department will not be responsible for any failure attributable to the transmission or receipt of a facsimile.

b. Facsimile requests to withdraw bid proposals shall be on the bidder's letterhead and must clearly and legibly state the job number, job name, and letting date of the proposal being withdrawn. Requests shall be signed by the bidder and addressed to the Division Head, Programs and Contracts Division. The request should be transmitted to the Department at (501)569-2623.

c. Facsimile requests to modify a bid must be legible copies of Schedule of Items pages, identical to those originally submitted as part of the bid proposal. The subtotal and total page(s) shall be submitted even if the modifications made do not change the total and subtotal. Original entries must be lined through and only legible revisions initialed by the person who signed the original proposal will be considered. This person must also sign and date the page containing the revised bid total.

Facsimile requests to modify bid proposals may not be transmitted directly to the Department or any of its agents. The office or person receiving the facsimiles (e.g., the bidder's bonding agent, a local delivery service, etc.) shall seal them in an envelope clearly marked "BID MODIFICATION" and on which the job number, job name, bidder's name, letting date, and the typed or printed name of the person delivering it have been recorded. This person must also sign and date the envelope. The sealed envelope must then be delivered to the Division Head, Programs & Contracts Division, according to the requirements of this Section. Facsimiles will become part of the bid proposal document. If for any reason a facsimile modifying a bid is not delivered to the Department before the time set for bid opening, the original bid will be opened, read, and considered in the award of the project.

The original, signed modified pages shall immediately be sent to the Department by the bidder. The award of Contract containing a facsimile modification shall be subject to receipt of the original, signed modified pages by the Department within ten calendar days of the bid opening date. Failure to provide the original pages to the Department within ten calendar days shall be taken as a failure to execute the Contract and handled according to subsection 103.07(a).

102.12 Public Opening of Proposals. Proposals will be opened and read publicly at the time and place indicated in the Notice to Contractors. Bidders, their authorized agents, and other interested parties are invited to be present.

102.13 Disqualification of Bidders. Only one proposal from an individual, firm, partnership, or corporation, whether under the same or under different names, will be considered. Should it appear to the Commission that any bidder is interested, as principal, in more than one proposal for any one project, all such proposals in which the bidder is interested will be rejected.

A bidder may, however, submit a proposal as principal and also quote as a subcontractor to other principals on the same project provided the quotation as a subcontractor does not exceed 70% of the total bid, and by so doing will not thereby be liable for disqualification. Furthermore, it is not the intent of this specification to disqualify any proposal because of quotations made by any one subcontractor to more than one principal. Should there be reasonable grounds for believing that collusion or a combination exists, all proposals may be rejected and bidders or participants in such combination or collusion will not be considered in future proposals for the same work.

102.14 Material Guaranty. The successful bidder may be required to furnish a complete statement of the origin, composition, and manufacture of any or all materials to be used in the construction of the work together with samples which may be subjected to the tests provided for in these specifications to determine their quality and fitness for the work.

102.15 Project Withdrawal. The Arkansas Highway Commission reserves the right to withdraw a project previously scheduled for letting. In the event of such withdrawal, potential bidders will be notified by the Department, time permitting. In any case, an announcement will be made before opening bids for such withdrawn project and the unopened bids will be returned to the bidders.

SECTION 103

AWARD AND EXECUTION OF CONTRACT

103.01 Consideration of Proposals. After the proposals are opened and read, they will be compared on the basis of the bid total, which is the summation of the products obtained by multiplying the approximate quantities shown in the Proposal by the unit bid prices. Errors found in the bidder's extensions will be corrected before release of the final summation. The results of such comparisons will be immediately available to the public.

The right is reserved to reject any or all proposals, to waive technicalities, or to advertise for new proposals, if in the judgement of the Commission the best interest of the Department will be promoted thereby.

103.02 Award of Contract. Award of the Contract, if awarded, will be made within 40 calendar days after the opening of the proposals or, in the case of contracts having conditional award status, after any conditional award status is lifted, to the lowest responsive and qualified bidder whose proposal complies with all the requirements prescribed. The successful bidder will be notified by letter of the bid acceptance and of the award of the Contract.

In instances where licensing with the Contractors Licensing Board is not a prerequisite to bidding, an unlicensed successful bidder will be allowed a maximum of 30 calendar days after the written notice of award in which to file for a license. In the event the bidder does not become licensed within 90 calendar days after the written notice of award, the bid may be rejected and the proposal guaranty forfeited.

"Conditional award status", as used herein, means the situation during which, subsequent to bid opening and before execution of Contract, a bidder has been formally advised to comply with one or more bidding requirements, or the Department is obtaining concurrences.

103.03 Cancellation of Award. The Commission reserves the right to cancel the award of any contract at any time before the execution of said contract by all parties without any liability against the Commission.

103.04 Return of Proposal Guaranty. All proposal guaranties in the form of checks, except those of the two lowest bidders, will be returned immediately following the opening and verification of the

proposals. The retained proposal guaranties of the two lowest bidders will be returned after the Contract has been executed.

All bid bonds will be retained in the files of the Department.

103.05 Requirement of Performance Bonds, Payment Bonds, and Liability Insurance. (a) Bonds. At the time of execution of the Contract, the successful bidder shall furnish a surety Performance bond or bonds in a sum equal to the full amount of the Contract and a surety Payment bond or bonds in a sum equal to 80% of the full amount of the Contract. The form of the bonds as well as the surety shall be acceptable to the Department. The Statutory Payment and the Statutory Performance Bonds furnished with the Contract shall be executed by a Resident Agent or Nonresident Agent. The Resident or Nonresident Agent shall be licensed by the Insurance Commissioner of the State of Arkansas to represent the surety company executing the bond. A Power of Attorney supporting the Resident or Nonresident Agent's signature shall be furnished with each bond. The bond number used by the Surety must also be recorded in the space provided on each bond.

The Resident or Nonresident Agent will be responsible for advising the Department, by Certified Mail -- Return Receipt Requested, of any indication that the Surety is experiencing difficulty that may affect its ability to perform. Failure of the Resident or Nonresident Agent to do so may be just cause to reject any or all future bonds from that individual/agency.

Suits concerning the payment or performance bond shall be filed in the State of Arkansas; and the Department and the Commission shall be entitled to the sovereign immunity from suit afforded by the Constitution of Arkansas and laws of the State of Arkansas.

The Department reserves the right to refuse bonds from sureties with a record of unsatisfactory performance under previously accepted bonds.

(b) Liability Insurance. The Contractor shall procure and maintain at its own sole cost and expense, until acceptance of the project by the Engineer, General Public Liability Insurance providing bodily injury, including death, personal injury, and property damage coverage with a limit of at least \$1,000,000 per occurrence and a general aggregate limit of at least \$2,000,000.

Each such policy shall be endorsed to include broad form general liability, contractual liability, and completed operations coverage.

Before a work order is issued, the Contractor shall furnish to the Division Head, Programs & Contracts Division, evidence of the required insurance. Each policy or its declaration pages shall provide that the policy shall not be materially changed or cancelled until the Engineer has been given at least 30 calendar days advance notice in writing. If any policy is cancelled during the duration of the work, a satisfactory replacement policy must be in force, with notice and evidence of insurance to the Engineer, prior to the effective date of cancellation of the former policy.

Failure to furnish the required proof of Liability Insurance with the submission of the Contract signed by the successful bidder shall be just cause for the cancellation of the award and forfeiture of the proposal guaranty, which shall become the property of the Commission, not as a penalty, but in liquidation of damages sustained. Failure to furnish notice of cancellation or change in the policy will result in the temporary suspension of work as provided in Section 108.05. Temporary suspension shall remain in effect until proof that the required insurance is in effect is received by the Department. If no proof of insurance is received within 20 calendar days of the Suspension Order, the Engineer may proceed with written notice of default according to Section 108.08.

103.06 Execution and Approval of Contract. (a) General. The Contract shall be signed by the successful bidder and returned to the Division Head, Programs & Contracts Division, together with the required bonds and proof of liability insurance, within 10 business days after written notice of award has been issued. Execution of the Contract by the Department will take place as soon as practical after it has been signed and returned by the successful bidder.

(b) Furnishing Disadvantaged Business Enterprise (DBE) Information. For contracts having DBE goals, and where required DBE information is not submitted with the bidder's proposal, the successful bidder shall furnish the required DBE information as specified in Subsection 103.08. If the information is furnished and the conditional award status is lifted, the Contract will be handled as stated in (a) above.

103.07 Failure to Execute Contract. (a) General. Failure to execute the Contract and file acceptable bonds and proof of liability

insurance within 10 business days after the written notice of award has been issued to the bidder shall be just cause for the cancellation of the award and forfeiture of the proposal guaranty, which shall become the property of the Commission, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised and constructed under contract or otherwise, as the Commission may decide. The low bidder who fails to execute the Contract and submit acceptable bonds and proof of liability insurance will not be permitted to bid on any subsequent advertisement of that project.

(b) Failure to Furnish DBE Information. For contracts having DBE goals, failure to furnish the DBE information required under subsection 103.08 shall be just cause for the cancellation of the conditional award and forfeiture of the proposal guaranty. The proposal guaranty shall become property of the Commission, not as a penalty, but in liquidation of damages sustained to the DBE Program. Conditional award, re-advertisement, etc., will be handled as in (a) above.

103.08 Disadvantaged Business Enterprise (DBE) in Highway Construction. (a) Contract Requirements. The provisions of this subsection shall apply to all contracts administered by the Department. If there are no specific participation goals for a contract, the Contractor agrees to ensure that Disadvantaged Business Enterprises (DBEs) are provided reasonable opportunities to compete for and perform on the contract or subcontracts and shall take all necessary and reasonable steps to ensure that the policy set forth in this supplemental specification is maintained. If a Contractor on a project without a specific participation goal elects to utilize a DBE subcontractor, all payments to the DBE subcontractor must be documented in accordance with Subsection 103.08(h). If the Prime Contractor is a DBE, records must be submitted in accordance with the above referenced section for work accomplished by their own forces.

(b) Policy. It is the policy of the Department to ensure nondiscrimination in the award and administration of Department contracts and to create a level playing field on which Disadvantaged Business Enterprises (DBEs) can compete fairly. Consequently, the following apply to the Contract, the DBEs listed in the Contractor's submittal required by Subsection 103.06(b) to achieve a DBE goal

(either on a subcontract, purchase order, or other written agreement), the DBEs that may be added to the list later as substitutes, and DBEs performing on a contract, but not used to fulfill a portion of a DBE goal:

(1) The Contractor agrees to ensure that DBEs are provided reasonable opportunities to compete for and to perform on contracts awarded by the Department. In this regard, the Contractor shall take all necessary and reasonable steps to meet the DBE goal established in the Contract.

(2) The Contractor and any subcontractors shall not discriminate on the basis of race, color, national origin, or sex in the performance of the Contract. The Contractor shall carry out applicable requirements of 49 CFR § 26 in the award, administration and performance of contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Department deems appropriate.

(3) After a conditional award is made and the apparent successful bidder has submitted the required DBE information, the Department will determine if the DBE requirements have been met. If those requirements are met, the conditional status will be removed and the Contract will be forwarded to the bidder for execution. If those requirements are not met, the proposal guaranty will become the property of the Commission, as specified in subsection 103.08(d).

(4) The Contractor should ensure that all DBEs performing on the Contract serve a commercially useful function. To ascertain that all obligations under contracts awarded to DBEs are met, the Department will review the Contractor's DBE involvement efforts during the performance of the Contract. No work shall be performed by the Contractor or any subcontractor on items originally committed to or included in a subcontract (including purchase orders or other written agreements) with a DBE without prior written approval by the Department. Payments to the Contractor will be withheld or previous payments recovered by the Department in amounts equivalent to that portion of the subcontract with a DBE in which:

a. The DBE subcontractor is found not performing a commercially useful function as defined in subsection 103.08(f)(3); or

b. The Contractor or any subcontractor performs any portion of the work to be accomplished by a DBE without prior written approval by the Department.

Amounts that have been withheld as a result of a or b above will be retained by the Department until the Contract DBE goal is satisfied or will be withheld permanently if the Contract DBE goal is not met.

(5) The Contractor shall pay all subcontractors their respective subcontract amounts, including retainage, according to subsection 108.01. The Contractor shall inform the Department of any situation in which regularly scheduled progress payments are not made to DBE subcontractors.

Failure of the Contractor or any subcontractor to carry out the requirements set forth above shall constitute a breach of contract and, after notification by the Department, may result in withholding estimates due the Contractor, termination of the Contract by the Department, or other action as the Department deems appropriate.

(c) Definitions.

(1) "Disadvantaged Business Enterprise" means a for profit small business concern:

a. which is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged, or, in the case of a corporation, at least 51 percent of the stock is owned by one or more such individuals; and

b. whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

(2) "Small Business Concern" means, with respect to firms seeking to participate as DBEs, a small business as defined pursuant to Section 3 of the Small Business Act and Small Business Administration (SBA) regulations implementing it (13 CFR § 121), that also does not exceed the cap on average annual gross receipts allowed by Federal Regulation.

(3) "Socially and economically disadvantaged individual" means any individual who is a citizen of the United States (or lawfully admitted permanent resident) and who is found to be a socially and economically disadvantaged individual on a case-by-case basis; or any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged: Black Americans, Hispanic Americans, Native Americans, Asian Pacific Americans, Subcontinent Asian Americans, Women and any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.

a. "Black Americans" includes persons having origins in any of the Black racial groups of Africa;

b. "Hispanic Americans" includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race;

c. "Native Americans" includes persons who are American Indians, Eskimos, Aleuts, or Native Hawaiians;

d. "Asian Pacific Americans" includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, U.S. Trust Territories of the Pacific Islands (Republic of Palau), the Commonwealth of the Northern Marianas Islands, Macao, Fiji, Tonga, Kiribati, Juvalu, Nauru, Federated States of Micronesia, or Hong Kong;

e. "Subcontinent Asian Americans" includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka; and

f. "Women".

(d) Bidder's Responsibilities.

(1) On projects with a DBE goal, each bidder shall furnish, with the proposal, one of the following:

- a. The required DBE participation,
- b. Documentation of good faith efforts, or

- c. An irrevocable certification that the required DBE participation will be submitted within ten (10) business days following conditional award of the project.

If none of the items listed in (d) (1) a, b, or c is submitted, the Department will reject the bid and the proposal guaranty will be handled in accordance with Subsection 103.04.

(2) If an irrevocable certification to achieve the required DBE participation is submitted with the proposal, within ten (10) business days after conditional award of the Contract, the apparent successful bidder shall furnish the required information to the Department on a form provided by the Department. If the information is not furnished as required, the conditional award will be cancelled in accordance with Subsection 103.07(b).

(3) Information required to be submitted to document DBE participation is:

- a. The names and addresses of the AHTD-certified DBE subcontractors to be used to satisfy the percentage goal;
- b. An itemized description of the work each DBE subcontractor is to perform;
- c. The dollar value of each item to be included in the DBE subcontract;
- d. Written documentation of the bidder's commitment to use a DBE subcontractor whose participation it submits to meet a contract goal; and
- e. Written confirmation from the DBE that it is participating in the contract as provided in the Contractor's commitment.

(4) An apparent successful bidder who cannot meet the percentage goals shall document and submit with the proposal the steps taken to obtain the required DBE participation. Only those efforts made by the bidder to obtain DBE participation prior to the letting will be considered in the evaluation of good faith efforts. Good faith efforts to meet DBE goals would include such items as, but not limited to, the following:

a. Soliciting through all reasonable and available means (e.g., attendance at a pre-bid meeting, if any, advertising and/or written notices) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest at least two weeks prior to the letting to allow the DBEs to respond to the solicitation. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations;

b. Selecting portions of the work to be performed by DBEs to increase the likelihood of meeting DBE goals (including, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces). Selections should be made based on the current DBE directory of contractors and their specialty area/areas of work.

c. Providing interested DBEs with adequate information about plans, specifications, and requirements of the Contract in a timely manner to assist them in responding to a solicitation;

d. Negotiations.

(1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were contacted; 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;

(2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and

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

e. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the project goal;

f. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the Department or Contractor;

g. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services;

h. Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

(5) The preceding information shall be submitted directly to the Arkansas State Highway and Transportation Department, Programs and Contracts Division, P. O. Box 2261, Little Rock, Arkansas 72203.

a. The information submitted by the apparent low bidder will be reviewed by the Department to determine if the Contractor has successfully met the DBE goal or made a good faith effort to obtain DBE participation sufficient to achieve the DBE goal.

b. If it is determined that the goal was not met or a good faith effort was not made, the bidder will be notified and

provided an opportunity for administrative reconsideration. As part of the reconsideration, the bidder may provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. A request for administrative reconsideration must be submitted to the Chief Engineer within two business days of the Department's notification. The Chief Engineer will render a written decision on the reconsideration explaining the basis for the finding.

(6) Should the bidder to whom the Contract is conditionally awarded refuse, neglect, or fail to meet the DBE goals or to furnish acceptable documentation of efforts to meet these goals, the bidder will not be provided a contract for execution. If the goal is not met and the good faith efforts are found to be inadequate, the proposal will be rejected and the proposal guaranty filed with the bid will be returned to the contractor. However, if documentation of good faith effort was not submitted with the bid and DBE participation sufficient to achieve the goal is not provided within ten days, as required, the proposal will be rejected and the proposal guaranty shall become the property of the Commission, not as a penalty, but as liquidation of damages to the Department's DBE program.

(7) Should the Department accept a good faith effort, this determination will be made on the condition that the Contractor continue efforts throughout the life of the project to attain the DBE participation goal and to document such continued good faith efforts.

(8) A Contractor may not terminate a DBE firm's subcontract or purchase order without the written approval of the Department. The Contractor shall make good faith efforts to replace a DBE subcontractor with another DBE subcontractor if the original DBE subcontractor is unable or unwilling to perform successfully. All substitutions of DBE subcontractors during Contract performance must be approved by the Department in writing, not only because it is routinely required, but also to ensure that DBE firms are provided reasonable opportunities to perform on contracts and substitute firms are eligible DBEs. A substitute DBE or the Contractor will not be allowed to commence work on those items committed or subcontracted to a

DBE until satisfactory evidence of the original DBE's inability or unwillingness to perform is submitted to and approved by the Department in writing. For projects with a DBE goal, evidence of good faith efforts exerted by the Contractor must be submitted to and approved by the Department. Good faith efforts to replace a DBE subcontractor shall be directed at finding another DBE to perform at least the same amount of work (not necessarily the same work) under the contract as the DBE that was terminated, to the extent needed to meet the contract goal established for the project. (See also subsection 103.08(b)(4).)

(9) Requirements of this Subsection shall also apply to DBE firms bidding as the Prime Contractor on a project. In determining whether a DBE bidder has met a contract goal, the work that the DBE performs with its own forces, as well as the work performed by DBE subcontractors and suppliers will count toward the goal. DBE bidders must list on the DBE Participation Form all work to be performed with its own forces and work to be performed by DBE subcontractors, DBE suppliers, DBE manufacturers, and/or DBE non-construction services that will be utilized in achieving the goal.

(10) Agreements between a bidder and a DBE in which the DBE promises not to provide subcontracting quotations to other bidders are prohibited.

(11) The successful bidder shall designate a liaison officer who will administer the Contractor's DBE program and maintain in the home office the records and results of the contacts made with DBE subcontractors.

(12) Contractors are encouraged to investigate the full extent of services offered by banks owned and controlled by disadvantaged individuals.

(e) Eligibility of DBEs.

(1) To ensure that the Department's DBE program benefits only those firms for whom it is intended, the Department will certify or ascertain the eligibility of DBEs, and joint ventures, any of which are proposed to be used by contractors to perform subcontract work.

(2) Certification by the Department will be accomplished through the use of Schedules A, B, and C. Certification will be

granted for specific types of work for which the socially and economically disadvantaged owners have the ability to control the firm.

(3) Eligibility of firms certified by the Small Business Administration under Section 8(a) of the Small Business Act or small and disadvantaged business (SDB) programs will be considered on a case-by-case basis by the Department.

(4) Contractors are encouraged to solicit DBE subcontractors wherever they may be located and, if the DBE is not certified by the Department, to encourage the DBE to submit certification forms for approval.

(5) Early submission of certification forms is encouraged, particularly for those complex situations in which a determination of eligibility may require extensive documentation and review.

(6) A Disadvantaged Business Enterprise Directory is published, maintained, and available from the Department. Firms listed in the Directory are certified at the date the Directory is printed. Additions or deletions to the Directory after that date due to certifications, decertifications, etc. are possible. The current status of firms can be ascertained by contacting the Department's DBE Program Specialist.

(f) Determination of DBE Participation. DBE participation shall be counted toward meeting the DBE goal according to the following:

(1) When a DBE participates in a contract, only the value of the work actually performed by the DBE for which it is certified is counted toward a DBE goal.

a. The entire amount of that portion of a contract that is performed by the DBE's own forces for which it is certified is counted toward a goal. The cost of supplies and materials obtained by the DBE for the work of that portion of the contract, including supplies purchased or equipment leased by the DBE (except supplies and equipment the DBE subcontractor purchases or leases from the Contractor or its affiliates), is included. DBEs bidding as prime contractors

must indicate all work the firm will be performing with its own forces on the DBE Participation form.

b. When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor is a DBE and is certified for the types of work. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

c. No credit will be given toward the DBE goal for any subcontracting arrangement that is contrived to artificially inflate or obtain the appearance of DBE participation. Of particular concern is the interjection of DBE middlemen or passive conduits that are inconsistent with standard industry practices or which serve no commercially useful function, and arrangements in which a DBE subcontractor is acting essentially as a broker, (e.g., DBE second-tier subcontracts between DBE subcontractors who are fulfilling project goals, and non-DBE subcontractors with contracts acknowledged by the Department on the same project). Regardless of whether an arrangement between the Contractor and a DBE represents standard industry practice, where such an arrangement erodes the ownership, control, or independence of the DBE or does not meet the commercially useful function requirement, the Contractor shall receive no credit toward the DBE goal.

d. The entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a contract, may be counted toward DBE goals, provided the fee is determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

(2) When a DBE performs as a participant in a joint venture, the portion of the total dollar value of the contract equal to the clearly defined portion of the work that the DBE performs with its own forces may be counted toward the goal.

(3) The Contractor may count toward the DBE goal only expenditures to DBEs that perform a commercially useful function in the work of a contract. A DBE is considered to

perform a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibilities by actually performing, managing, and supervising the work involved. To determine whether a DBE is performing a commercially useful function, the Department shall evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

A commercially useful function is performed when:

a. All employees are under direct supervision of the DBE and on the DBE's payroll. Use by a DBE of personnel from the Contractor or any subcontractor will not be permitted without prior approval by the Department.

b. The DBE is responsible for obtaining all equipment necessary to perform Contract work. The DBE shall negotiate and enter into equipment lease or purchase order agreements directly with the equipment source. Such lease or purchase order agreements shall have prior approval by the Department.

c. The DBE is responsible, with respect to materials and supplies, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

If the Contractor chooses to assist a DBE firm by assuring payment for materials to be placed in the DBE's work or equipment leased by the DBE and wants to receive credit toward the DBE goal for the cost, the following procedures may be used:

- the material supplier or lessor may invoice the DBE firm and be paid by remittance from the DBE firm or
- the supplier or lessor may invoice the Contractor and DBE firm jointly and be paid by the Contractor and DBE firm utilizing a joint check from the Contractor. Such a joint checking arrangement must be in writing, either in the subcontract or a separate agreement, and approved by the Department prior to the supplies or equipment being utilized and payment being made.

No credit will be given toward the DBE goal for the cost of the DBE's required materials or equipment that the Contractor pays directly to the material supplier or lessor.

d. A DBE subcontractor will be deemed to have performed a commercially useful function and the Contractor will be allowed DBE goal credit when a DBE subcontractor performs at least 30 percent of its subcontract. This work shall be performed by the DBE subcontractor's normal work force.

(4) The following factors will be used in determining whether a DBE trucking firm or owner/operator is performing a commercially useful function:

a. The DBE must be responsible for the management and supervision of the entire trucking operation for the items on its subcontract or purchase order, including scheduling, providing sufficient trucks to accomplish the haul, and coordinating the work with the Contractor. There cannot be a contrived arrangement for the purpose of meeting DBE goals.

b. The DBE must own and operate at least one fully licensed, insured, and operational truck used on the contract when work is in progress.

c. The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs. Long-term lease arrangements are an acceptable form of "ownership."

d. Lease Agreements. There are two types of lease arrangements that can be utilized by DBE firms: long-term leases and short-term leases.

- (1) Long-term lease arrangements. The DBE may lease trucks under a long-term lease arrangement from independent equipment leasing companies. Long-term leases with owner/operators or other trucking firms, even though only the truck is leased, are not acceptable. A long term lease is defined as a twelve month or longer lease period. The drivers, fuel, minor maintenance responsibility, and full control of the leased trucks must rest solely with the DBE owner as stipulated in the lease agreement. Drivers must be employees of the DBE, subject to withholding, worker's compensation requirements, unemployment, etc. Leased trucks must display the name and identification number of the DBE. The DBE will receive full credit for the full value of the transportation services provided by trucks leased and operated in this manner. A DBE supplier

(regular dealer) must utilize this type of lease to supplement distribution equipment owned by the firm to receive credit for transportation services.

(2) Short-term lease arrangements.

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

All lease agreements must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. A copy of each lease agreement must be provided to and approved by the Resident Engineer before the truck begins hauling. The agreement must reflect the name of the lessor, cab card registration numbers of all leased trucks, the description of the truck(s), the amount and terms of the lease and method of payment (hour, ton, cubic yard, or number of loads hauled), and, if owner-operator, his/her Social Security Number.

e. The DBE must certify each estimate period the amounts paid to: (1) other DBE truckers, (2) non-DBE truckers, and (3) for hauls made with trucks owned by the firm. This certification must be made on the form provided by the Department.

(5) When a DBE is found not to be performing a commercially useful function, the DBE may present evidence to rebut the finding. Such evidence will be reviewed by the Department and a determination made. Decisions on commercially useful function matters are subject to review by the Federal Highway Administration for projects receiving federal funds.

(6) The Contractor may count toward the DBE goal 60 percent of expenditures for materials and supplies required under a Contract and obtained from a DBE regular dealer, and 100 percent of such expenditures to a DBE manufacturer.

a. For purposes of this Section, a manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles or equipment required under the contract for incorporation into the work, and of the general character described by the specifications.

b. For purposes of this Section, a supplier or regular dealer is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract for incorporation into the work are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a supplier, the firm must be an established, regular business that engages in, as its principal business and under its own name, the purchase and sale or lease of the products in question. A trucking firm or owner/operator will not be considered a supplier, nor will a supplier be considered a trucking firm.

A regular dealer in such bulk items as asphalt, steel, cement, gravel, stone, or petroleum products must own or lease, and operate, a refinery, pit, quarry, concrete plant, or other such facility that sells materials to the public. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

c. Expenditures for lease of a particular piece or pieces of equipment from DBEs for exclusive use on the project for which DBE participation is to be claimed may be counted 60 percent toward contract goals, provided the DBE dealer actually has ownership or control of the equipment and is considered a regular dealer.

d. Capital expenditures for tools, equipment, vehicles, field office furniture, and similar property items, even though such items are used on the project and purchased from DBEs, are not creditable toward contract DBE goals.

e. Expenditures for materials and supplies obtained from DBE suppliers and manufacturers for use in the Contractor's general operations which are not incorporated into the work are not creditable in whole or part toward contract goals, even though a portion of such items may be used in the administration and/or execution of a project.

(7) Brokers, manufacturer's representatives, packagers, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this section.

With respect to materials or supplies purchased from a DBE which is neither a manufacturer nor regular dealer, the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, can be counted toward DBE goals, provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services. None of the cost of the materials and supplies themselves will count toward DBE goals.

(8) In order for a firm to qualify as a DBE supplier of metal and/or concrete pipe, the firm must fabricate the pipe.

(9) If material is purchased from a DBE supplier, credit will be allowed at 60% of the total cost of the material obtained from the DBE facility and the cost of delivery if the supplier is transporting the material using equipment it owns or leases on a long-term basis. Credit for 100% of transportation services provided by the DBE truckers will be allowed.

(10) A valid purchase order for the material must be executed by the contractor and DBE and approved by the Department prior to the material being hauled from the facility.

(11) The Contractor may count toward the DBE goal only those payments made to DBEs for work or services performed or material furnished after the DBE has been approved, either on the list in the Contractor's original participation submittal or later as a substitute. The Department must have acknowledged a subcontract or purchase order prior to the beginning of work by the DBE firm. Payments made to a DBE for work, services, or materials performed or furnished prior to approval and acknowledgment will not be counted toward the DBE goal.

(g) Subcontract Eligibility. On Federal-Aid projects, the provisions of Arkansas Act 936 of 1989, concerning the listing of unlicensed subcontractors, do not apply. However, the proposed DBE subcontractor shall meet all requirements of applicable Arkansas law (including licensing) prior to subcontract approval by the Department.

(h) Certificate of Payment to DBEs/Non-DBEs. Certification of payments to DBE subcontractors, suppliers, manufacturers, and/or non-construction services must be submitted by the Contractor each estimate period utilizing the forms provided by the Resident Engineer. A payment certification is also required when a non-DBE subcontractor subcontracts a portion of its work to a DBE firm or a DBE subcontractor subcontracts to another firm (DBE or non-DBE).

In this case, the subcontractor shall complete the proper form and submit it through the Contractor. In lieu of using these forms, contractors may submit a copy of subcontractor pay estimates provided the required information and certification are included. This information will be submitted to the Resident Engineer for review and compilation. Only those payments reported will be credited toward the DBE goal. Failure to submit the reports within thirty calendar days after the end of the estimate period may result in contract sanctions, including withholding of progress payments.

In addition, a final certificate of payment to DBEs shall be submitted to the Resident Engineer who will attach it to the original copy of the final estimate for payment. This requirement applies regardless of whether a DBE goal had been established for the project.

(i) Cooperation. All participants in the Department's DBE program, including, but not limited to, DBE firms and applicants for DBE certification, and Contractors using DBE firms to meet contract goals, are required to cooperate fully and promptly with U. S. Department of Transportation or Department compliance reviews, certification reviews, investigations, and other requests for information. Failure to do so shall be a ground for appropriate action against the party involved (e.g., with respect to DBE firms, denial of certification or removal of eligibility and/or suspension and debarment; with respect to a Contractor using DBE firms to meet goals, withholding of progress estimates, findings of non-responsibility for future contracts and/or suspension and debarment).

(j) Intimidation and retaliation. All participants in the DBE program, including but not limited to the Department and contractors, must not intimidate, threaten, coerce, or discriminate against any individual or firm for the purpose of interfering with any right or privilege secured by 49 CFR § 26 or because the individual or firm has made a complaint, testified, assisted, or participated in any manner in an investigation, proceeding, or hearing.

SECTION 104 SCOPE OF WORK

104.01 Intent of Contract. The intent of the Contract is to provide for the construction and completion in every detail of the work described. The Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work according to the plans, specifications, and terms of the Contract.

104.02 Alteration of Plans or Character of Work. (a) General. The Commission shall have the right to increase or decrease the extent of the work or to change the location, gradient, or the dimensions of any part of the work, provided that the length of the improvement is not increased or decreased in excess of 25% of the contract length, or that the quantities of work to be done or the materials to be furnished are not increased or decreased in money value in excess of 25% of the total Contract. Such changes shall not be considered as a waiver of any conditions of the Contract nor invalidate any of the provisions thereof. The Contractor shall perform the work as increased or decreased within the qualifying limits named and no allowance will be made for anticipated profits on increases or decreases so incurred.

(b) Significant Changes in the Character of Work. 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.

If the alterations or changes in quantities significantly change the character of the work under the Contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will 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.

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.

The term "significant change" shall be construed to apply only to the following circumstances:

- 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
- When a major item of work is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any adjustment due to an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

A major item of work is defined as any bid item for which the original contract value is more than 10 percent of the total original contract value.

(c) Differing Site Conditions. 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 they are disturbed and before the affected work is performed.

Upon written notification, the Engineer will investigate the conditions. If the Engineer determines 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 loss of 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.

No Contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.

No Contract adjustment will be allowed under this clause for any effects caused on unchanged work.

104.03 If and Where Directed Items. The plans and the proposal may specify one or more items to be incorporated into the

project "if and where directed" by the Engineer. The Engineer shall have sole discretion in determining whether and to what extent such items will be incorporated into the project. The Engineer may order incorporation of such items at any location within the project and at any time during the work. These items may or may not be located on the plans. The estimated quantities set out in the proposal for such items are presented solely for the purpose of obtaining a representative bid price. The actual quantities employed may be only a fraction of, or many times the estimated quantities. The Contractor shall make no claim for additional compensation because of any increase, decrease, or elimination of such items.

104.04 Extra Work. The Contractor, when directed, shall perform unforeseen work for which there is no quantity and price included in the Contract, or where increases or decreases in quantities are made in excess of the amounts set out in subsection 104.02, or whenever it is deemed necessary or desirable to further complete the work as contemplated. Such extra work shall be performed according to the specifications and as directed. However, before payment for any extra work is made, a Supplemental Agreement shall be signed by both contracting parties, or a written order procured from the Engineer directing the Contractor to do the work on a Force Account basis as provided in subsection 109.04.

104.05 Maintaining Traffic. Unless otherwise provided, the road, while undergoing improvements, shall be kept open by the Contractor to all traffic. When so provided on the plans, the Contractor may bypass traffic over an approved detour route. The Contractor shall keep the portion of the project being used by public traffic, whether it is through or local traffic, in such condition that will permit the safe, continuous flow of two-way traffic at all times. When a part of the plans or when approved by the Engineer, areas where the nature of the work restricts or prohibits two-way flow, one-way operation may be maintained by using flaggers or timed signalization. The Contractor shall also provide and maintain in a safe condition temporary approaches or crossings and intersections with trails, roads, streets, businesses, parking lots, residences, garages, farms, etc. The Contractor shall bear all expense of maintaining traffic over the section of road undergoing improvement, and of constructing and maintaining such approaches, crossings, intersections, and other features as may be necessary,

without direct compensation, unless a pay item for this work is included in the Contract.

The Contractor is not responsible for general snow and ice removal. Snow and ice removal will be performed by State, County, or City forces, consistent with its snow and ice removal procedures, for the entire length of the route within which the project is located. Work required other than the normal blading of snow and ice, salting, or application of grit, necessary to clear or make passable the main roadway, shall be accomplished by the Contractor.

104.06 Rights in and Use of Materials Found on the Work.

The Contractor, with the approval of the Engineer, may use on the project such stone, gravel, sand, or other material, determined suitable by the Engineer, as may be found in the planned excavation and will be paid both for the excavation of such materials at the corresponding contract unit price and for the pay item for which the excavated material is used. However, the Contractor shall replace with other acceptable material at no cost to the Department all of that portion of the excavation material so removed and used that was needed for use in the embankments, backfills, approaches, or otherwise. No charge for the material so used will be made against the Contractor. The Contractor shall not excavate or remove any material from within the highway location that is not within the grading limits, as indicated by the slope and grade lines, without written authorization from the Engineer. When topsoil is stripped from within the project limits, measurement and payment for earthwork and the topsoil will be according to Sections 210 and 628. Planned excavation, for the purposes of this subsection, is defined as all excavation, including structural excavation-roadway, shown on the plans and/or as changed by the Engineer for any purpose other than obtaining additional material lying within the planned typical sections and slopes. Planned excavation also includes any excavation made beyond the ends of the project for the purpose of blending the new construction into the existing roadway.

When the material found in the planned excavation is used as Borrow, payment will be made for either: 1) the appropriate classification of excavation; or 2) Borrow, whichever results in the lesser cost to the Department. In no case will payment be made for the same material for both excavation and borrow.

Unless otherwise provided, any material from any existing structures designated salvageable that is to remain the property of the owner, may be used temporarily by the Contractor in the erection of the new structure. Such material shall not be cut or otherwise damaged. Material thus used and subsequently cut or damaged by the Contractor's action or inaction shall be replaced in kind with new material of like dimension at no cost to the Department.

104.07 Final Cleaning Up. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the right-of-way, from any temporary plant sites, and from any temporary equipment and material storage sites, all construction equipment, falsework, discarded material, rubbish, debris, temporary structures, footings, and all surplus material. For surplus merchantable aggregates, and upon written request of the property owner, the Engineer may authorize the Contractor to neatly spread or stockpile the aggregates on the temporary plant sites or material storage sites. The Contractor shall restore in an acceptable manner all property, both public and private, that has been damaged during the prosecution of the work and shall leave the waterways unobstructed and the roadway in a neat and presentable condition throughout the length of the work under contract. General mowing of the right-of-way will not be required of the Contractor. However, any isolated areas of excessively high vegetation existing within the project limits, such as at side roads and drives, which restrict or impair vehicular sight distance, shall be cut or mowed by the Contractor any time the situation develops.

Final cleanup of temporary plant sites, equipment and material storage sites, waste areas, and the accompanying access roads shall be completed according to subsection 110.04 at no cost to the Department.

Material pits and quarries shall be completed according to subsection 106.02 at no cost to the Department.

The materials, labor, equipment, and expense of the final cleaning up of a project will not be paid for separately, but full compensation therefor will be considered included in the contract unit prices bid for the various items in the Contract.

SECTION 105 CONTROL OF WORK

105.01 Authority of the Engineer. The Engineer will decide all questions that 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 questions that may arise as to the interpretation of the plans and specifications; and all questions as to the acceptable fulfillment of the Contract by the Contractor.

The Engineer will have the authority to suspend the work wholly or in part due to the failure of the Contractor to correct conditions unsafe for the workers or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for such periods as deemed necessary due to unsuitable weather; for conditions considered unsuitable for the prosecution of the work; or for any other condition or reason deemed to be in the public interest.

Any unresolved disputes arising under the Contract shall be submitted by the Contractor in writing to the Department's Resident Engineer. Disputes claiming additional compensation shall contain the information set forth in Subsection 105.18(a) and (b). The Resident Engineer shall render a written decision within 60 calendar days of receipt of the Contractor's letter and information.

Should a dispute not be resolved by the written decision of the Resident Engineer, subsequent appeal by the Contractor shall be submitted in writing within 60 calendar days of the decision of the Resident Engineer, and shall be addressed directly to the Chief Engineer.

The Chief Engineer shall render a decision on the matter in writing to the Contractor within 60 calendar days after receipt of the Contractor's written request for dispute resolution. The ruling by the Chief Engineer shall be final and conclusive unless, within 180 calendar days from the date of issuance of the Chief Engineer's decision, the Contractor files a claim with the Arkansas State Claims Commission appealing the decision of the Chief Engineer. In connection with any appeal proceeding under this clause, the Contractor shall be afforded an opportunity to be heard and offer evidence in support of an appeal before the Arkansas State Claims Commission, subject to the rules and regulations of the Claims

Commission and Ark. Code Ann. § 19-10-302 which require pursuit and exhaustion of all remedies against responsible third parties and insurance coverages. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the Contract and in accordance with the Chief Engineer's decision.

105.02 Automatically Controlled Equipment. Whenever a breakdown or malfunction of the automatic controls occurs on scales, scale printers, batch plants, or mixing plants, the equipment may be operated manually or by other methods for a period not to exceed two working days, provided that such alternate methods of operation produce results otherwise meeting the specifications.

105.03 Plans and Working Drawings. Plans will show lines, grades, details of all structures, typical cross sections of the roadway, and a summary of items appearing on the proposal.

Work may be provided for on the plans that is not located within the limits of the project as shown on the plan sheets. Work of this nature may include but is not limited to removal of existing items, obliteration, grading, base and surfacing, transitions, etc., and is considered a part of the project.

The plans will be supplemented by such working drawings as are necessary to adequately control the work. Working drawings for structures shall be furnished by the Contractor and shall consist of such detailed plans as may be required to adequately control the work and are not included on the plans furnished by the Department. They shall include stress sheets, shop drawings, erection plans, falsework plans, cofferdam plans, or any other supplementary plans or similar data required of the Contractor. All working drawings shall be submitted to the Engineer for informational and record purposes or for approval as specified for the item of work involved. The Contractor should anticipate a review period of 15 - 30 calendar days from receipt by the Engineer of working drawings. Approval shall not relieve the Contractor of any responsibility under the Contract for the successful completion of the work.

The Contract price shall include the cost of furnishing all working drawings.

105.04 Conformity with Plans and Specifications. 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 on the plans or indicated in the specifications.

Unless otherwise specified, in the event the materials or the finished product in which the materials are used is not within reasonably close conformity with the plans and specifications but reasonably acceptable work has been produced, the Engineer shall then determine if the work shall be accepted and remain in place. In this event, the Engineer will document the basis of acceptance by change order that will provide for an appropriate adjustment in the contract cost for such work or materials as deemed necessary to conform to the determination based on engineering judgement.

In the event the materials or the finished product in which the materials are used or the work performed is found not to be in reasonably close conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected at no cost to the Department.

105.05 Coordination of Plans, Specifications, Supplemental Specifications, and Special Provisions. These specifications, the supplemental specifications, the plans, special provisions, and all supplementary documents are essential parts of the Contract, and a requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy:

- Shown or computed dimensions will govern over scaled dimensions;
- Special provisions will govern over plans, supplemental specifications, and standard specifications;
- Plans will govern over supplemental specifications and standard specifications;
- Supplemental specifications will govern over standard specifications.

Neither the Contractor nor the Department shall take advantage of any apparent error or omission on the plans or in the proposal, Contract, or specifications. The party discovering such error or omission shall notify the other party when the discovery is made. The Engineer will then make such corrections and interpretations as

may be deemed necessary for fulfilling the intent of the plans and specifications.

105.06 Cooperation by Contractor. The Contractor will be supplied with a minimum of two sets of approved plans and Contracts, one set of which shall be kept available on the project at all times.

The Contractor shall give the work the attention necessary to facilitate the progress thereof and shall cooperate fully with the Engineer, inspectors, and other Contractors. Failure to cooperate may result in default according to Subsection 108.08.

The Contractor shall have on the project at all times an agent who is a competent superintendent capable of reading and thoroughly understanding the plans and specifications and thoroughly experienced in the type of work being performed. The superintendent shall receive instructions from the Engineer and shall have full authority to execute orders or directions of the Engineer without delay and to promptly supply such materials, labor, equipment, tools, and incidentals as may be required. Such superintendent shall be furnished regardless of the amount of work sublet.

105.07 Cooperation with Utilities. In general, the Contract will indicate various utility items, certain of which are to be relocated or adjusted by the utility owner, and others that are to be relocated or adjusted by the Contractor. The Department will notify all known utility companies, all known pipe line owners, or other known parties affected, and endeavor to have all necessary adjustments of the public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction made as soon as practicable.

Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, and all other utility appurtenances within the limits of the proposed construction that are to be relocated or adjusted are to be moved by the owners, except as otherwise provided for in the Special Provisions or as noted on the plans.

The Contractor shall consider in the bid all of the permanent and temporary utility facilities and appurtenances in their present, relocated, or proposed positions. No additional monetary compensation will be allowed for any delays, inconveniences, or

damages sustained due to any interference from the utilities or appurtenances or from the operations of relocating them. Assessment of time charges shall be in accordance with Subsection 108.06.

105.08 Coordination and Cooperation Between Contractors.

The Department reserves the right at any time to contract for and perform other or additional work on or near the work covered by the Contract.

When separate contracts are let adjacent to or within the limits of any one project, the work of each Contractor shall be conducted so as not to interfere with or hinder the progress or completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other.

It is understood and agreed that the Contractor considered, in the bid, the status of the existing Contract or Contracts at the time of bidding and will arrange to coordinate and schedule the work jointly with the other affected Contractors in order to complete the work within the time allowed in the Contract.

Contractors involved shall assume all liability, financial or otherwise, in connection with their own Contracts and shall protect and save harmless the Department from any and all damages or claims that may arise because of inconvenience, delay, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

Contractors shall arrange their work and shall place and dispose of the materials being used so as not to interfere with the operations of the other Contractors within the limits of the same project, and shall join their work with that of the others in an acceptable manner, and shall perform it in proper sequence with that of the others.

105.09 Construction Stakes, Lines, and Grades.

When Section 635, Roadway Construction Control, and/or Section 636, Bridge Construction Control is not included in the Contract, the Engineer will set construction stakes establishing lines, slopes, and profile grade in road work, and line and grade for bridge work, culvert work, protective and accessory structures and appurtenances as may be deemed necessary, and will furnish the Contractor with all necessary information relating to lines, slopes, and grades. The Department will be responsible for the accuracy of all stakes or

marks set by the Department to establish the planned lines, slopes, and grades. These stakes and marks shall constitute the field control with which the Contractor shall be responsible for accurately establishing other necessary controls and performing the work.

The Contractor will be held responsible for the preservation of all stakes and marks. If any of the construction stakes or marks are carelessly or willfully destroyed or disturbed by the Contractor, the cost of replacing them will be deducted from the payment for the work.

Before beginning work, the Contractor must be satisfied as to the correctness and meaning of all stakes, measurements, and marks. No claim will be entertained as a result of alleged inaccuracies unless the Contractor notifies the Engineer thereof in writing in time for the Engineer to verify or check such stakes or marks before the work is begun.

105.10 Authority and Duties of Resident Engineer. As the direct representative of the Engineer, the Resident Engineer has immediate charge of the engineering details of each construction project; is responsible for the general administration of the project; and has the authority to reject unacceptable material or work and to suspend any work that is being improperly performed.

105.11 Duties of the Resident Engineer's Personnel. Inspection personnel will be authorized to inspect all work performed and all materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. The inspection personnel will not be authorized to alter or waive the provisions of the Contract and will not be authorized to issue instructions contrary to the plans and specifications, or to act as supervisor for the Contractor. The inspection personnel shall, however, have the authority to reject work or materials until any questions at issue can be referred to and decided by the Engineer.

105.12 Inspection of Work. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is necessary to make a complete and detailed inspection.

When requested by the Engineer at any time before acceptance of the work, the Contractor shall remove or uncover such portions of

the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering or removing and the replacing of the covering or making good of the parts removed will be paid for as extra work. Should the work so exposed or examined prove unacceptable, the uncovering or removing and the replacing of the covering or making good of the parts removed will be at no cost to the Department.

Any work performed or materials used without inspection by an authorized Department representative may be ordered removed and replaced at no cost to the Department.

When any unit of government, political subdivision, railroad corporation, or other agency is to pay a portion of the cost of the work covered by the Contract, its respective representatives shall have the right to inspect the work. Such inspection shall in no sense make any unit of government, political subdivision, railroad corporation, or other agency a party to the Contract, and shall in no way interfere with the rights of either party thereunder.

105.13 Removal of Unacceptable or Unauthorized Work. All work that does not comply with the requirements of the Contract will be considered unacceptable, unless otherwise determined acceptable under the provisions of Subsection 105.04.

Unacceptable work, whether the result of poor workmanship, use of unacceptable materials, damage through carelessness, negligence, or any other cause, found to exist before the final acceptance of the work, shall be removed and replaced in an acceptable manner at no cost to the Department.

Unless otherwise provided, no work shall be done without lines and grades having been established. Work performed contrary to any instructions of the Engineer; work performed beyond the lines shown on the plans or as established, except as herein specified; or any extra work performed without authority will be considered as unauthorized and will not be paid for under the provisions of the Contract. Work so performed may be ordered removed or replaced at no cost to the Department.

Should the Contractor fail to comply with any order of the Engineer, the Engineer will have the authority to cause unauthorized

work to be removed and unacceptable work to be corrected or removed and replaced and to deduct the costs from any moneys due or to become due the Contractor.

105.14 Load Restrictions. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads being maintained for the traveling public. A special permit will not relieve the Contractor of liability for damage that may result from construction equipment operations. The operation of equipment of such weight or so loaded as to cause damage to structures or the roadway or to any other type of construction will not be permitted.

When hauling materials over the base or surface courses under construction, the Contractor shall limit the hauling as necessary to prevent damage. No loads will be permitted on bases, pavements, or structures before the expiration of the specified curing period controlling such operations.

The Contractor shall be responsible for all damage resulting from construction operations.

The City, County, or Department may restrict the load limit on any route under their jurisdiction at any time.

105.15 Maintenance During Construction. The Contractor shall maintain the work during construction and until the project is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces, to the end that the roadway or structures are kept in satisfactory condition at all times.

In the case of a Contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

The Contractor shall be responsible for the maintenance of existing drainage ditches and channels within the right-of-way limits, including construction easements if any, from the date any work is begun on the project to the date of its final acceptance. This is not a requirement that the Contractor improve existing drainage ditches and channels, except as shown on the plans or as directed by the Engineer. The Contractor shall maintain the waterways in such condition that damage to the work or to abutting property will not result from the Contractor's operation. Obstruction of natural flow in waterways by stockpiling or storing materials, or by placement of

equipment or supplies without provision for adequate by-passing of such natural flow, will not be permitted. Collections of sediment or debris that prohibits or inhibits normal function of drainage facilities shall be removed promptly.

All costs of maintenance work during construction and before the project is accepted will not be paid for separately, but full compensation therefor will be considered included in the contract unit prices bid for the various items in the Contract.

105.16 Failure to Maintain Roadway or Structure. If the Contractor, at any time, fails to comply with the provisions of subsection 105.15, the Engineer will immediately notify the Contractor of such noncompliance. If the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Engineer may immediately proceed to maintain the project and the entire cost of this maintenance will be deducted from moneys due or to become due the Contractor on the Contract.

105.17 Acceptance. (a) Partial Acceptance. The Engineer may accept units or substantially completed portions of a project when it is in the best interest of the Department. Partial acceptance will generally be made on stage construction projects where the partial acceptance of a portion of the project will allow an early issuance of a work order on a contract located within the limits of the first contract. Such partial acceptance shall in no way void or alter any of the terms of the Contract.

Devices intended to be used for traffic safety and control, which are permanently installed in their final position and being used by the traveling public, will be accepted when installed according to the plans and specifications before completion of the remaining work on the project. Permanently installed items accepted on this basis are limited to guardrail, impact attenuation barriers, traffic signal items, signs, delineators, lighting, raised pavement markers, concrete barrier wall, concrete bridge parapet, bridge railings, guard cable, crash cushions, permanent pavement markings, and fence. Any required performance tests and/or guarantees shall remain applicable.

The Contractor shall erect these items in a logical sequence and time frame within the life of the project and any of these items constructed prematurely will not be accepted until such time in the

life of the project that the device becomes effective for its intended use.

Damage, theft, or vandalism to these items after acceptance will be repaired and/or replaced by the Department, or by the Contractor at the applicable contract unit price. When the damage to an item is such that only partial repair or replacement is required and the work is to be done by the Contractor, payment shall be made as provided in Subsection 109.04. Items damaged due to negligence of the Contractor shall be repaired and/or replaced at no cost to the Department.

The Department reserves the sole right to seek any and all recovery of repair or replacement costs from those parties responsible for damage to permanently installed items accepted according to this subsection.

(b) Final Acceptance. As soon as practical after completion of the entire project, including receipt of all required documentation, the Engineer will make an inspection. If all construction provided for and contemplated by the Contract is found to have been satisfactorily completed, that inspection shall constitute the final inspection and the Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the Engineer will advise the Contractor of the work requiring correction. The Contractor shall immediately make the required corrections. Upon correction of the work, another inspection will be made which shall constitute the final inspection provided the work has been satisfactorily completed. In such event, the Engineer will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

105.18 Claims for Adjustment and Disputes. (a) General. If, in any case, the Contractor deems that additional compensation is due for work or material not clearly covered in the Contract or not ordered by the Engineer as extra work, as defined in Subsection 104.04, the Contractor shall notify the Engineer in writing of intention to make claim for such additional compensation before beginning the work on which the claim is based. If such notification is not given and the Engineer is not afforded proper time

and facilities by the Contractor for keeping accurate account of the actual costs of the work, the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the Engineer has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. If the claim, after consideration by the Engineer, is found to be just and adequately supported, an adjustment will be made to the Contract. If the Contract does not contain a pay item for which the adjustment can be made, the adjustment will be made according to Subsection 109.04.

Nothing in this subsection shall be construed as establishing any claim contrary to the terms of Subsection 104.02.

All claims shall be in sufficient detail to enable the Engineer to determine the basis for entitlement and the costs incurred, excluding loss of anticipated profits, organization or overhead expenses not related directly to the project, or interest. The following information must accompany each claim:

(1) A detailed factual statement of the claim providing all necessary dates, locations, and items of work affected by the claim.

(2) The date actions resulting in the claim occurred or conditions resulting in the claim became evident.

(3) A copy of the "Notice of Potential Claim" filed for the specific claim.

(4) The name, title, and activity of each Department employee knowledgeable about facts that gave rise to such claim.

(5) The name, title, and activity of each Contractor or employee knowledgeable about facts that gave rise to such claim.

(6) The specific provisions of the Contract that support the claim, and a statement why such provisions support the claim.

(7) The identification of any pertinent documents, and the substance of any material oral communications relating to the claim.

(8) A statement whether the additional compensation or extension of time is based on the provisions of the Contract or an alleged breach of Contract.

(9) If an extension of time is also sought, the specific days for which it is sought and the basis for such claim.

(10) The amount of additional compensation sought and a breakdown which clearly differentiates the additional cost from the Contractor's normally anticipated costs for an item or project.

(11) Any other information or documents that may be relevant to the claim.

All claims must be submitted to the Resident Engineer within 180 calendar days after receipt of the Final Estimate. Failure to do so shall constitute a waiver of said claims.

(b) Required Certification of Claims. When submitting a claim, the Contractor must certify in writing, under oath according to the formalities required, as to the following:

(1) The claim is made in good faith.

(2) Supportive data are accurate and complete to the Contractor's best knowledge and belief.

(3) The amount of the claim accurately reflects the actual cost incurred by the Contractor.

(c) Auditing of Claims. All claims filed against the Department shall be subject to audit by the Department at any time following the claim filing, whether the claim is part of a suit pending in the courts of this State or an action before the State Claims Commission. The audit may begin upon ten business days notice to the Contractor, subcontractor, or supplier. The Contractor, subcontractor, or supplier shall make a good faith effort to cooperate with the auditors and shall provide access to the following documents upon the request of the Chief Engineer:

(1) Daily time sheets and foreman's daily reports.

(2) Union agreements, if any.

(3) Insurance, welfare, and benefits records.

(4) Payroll register.

(5) Earnings records.

(6) Payroll tax returns.

(7) Material invoices, purchase orders, and all material and supply acquisition contracts.

(8) Material cost distribution worksheets.

(9) Equipment records (list of company equipment, rates, etc.)

(10) Vendor rental agreements and subcontractor invoices.

(11) Subcontractor payment certificates.

(12) Cancelled checks (payroll and vendors).

(13) Project cost report.

(14) Project payroll ledger.

(15) General ledger, general journal (if used), and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals.

(16) Cash disbursements journal.

(17) Financial statements for all years reflecting the operations on this project.

(18) Depreciation records on all company equipment.

(19) All other documents used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment.

(20) All bid preparation documents and all documents necessary to determine compensation due according to Subsection 109.04.

(21) Any other information or documents that may be relevant to the claim.

105.19 Claims Limitations. The Contractor acknowledges and agrees that in no event shall a claim be submitted to the Resident Engineer more than 180 calendar days after the receipt of the Final Estimate for the project and the Contractor acknowledges and agrees that any claim submitted to the Department or before the Arkansas State Claims Commission later than 180 calendar days from receipt of the Final Estimate shall be deemed waived by the Contractor.

SECTION 106 CONTROL OF MATERIAL

106.01 Sources of Supply and Quality Requirements.

(a) General. The materials used in the work shall meet all quality requirements of the Contract. To expedite the inspection and testing of materials, the Contractor shall notify the Engineer of proposed sources of materials before delivery. At the option of the Engineer, certain materials may be approved at the source of supply before delivery is started. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources. Materials shall be approved before being incorporated in the work.

The Contractor shall assume full responsibility for ordering materials of the quality and quantity required and for the delivered costs of such materials. Materials needed in the work shall be furnished by the Contractor unless otherwise stated in the Contract.

(b) Steel and Iron Items.

(1) General. Steel and iron items are subject to the "Buy America" provisions of 23 CFR § 635.410, and the requirements and restrictions of this section:

Except as provided hereinafter, steel and iron materials shall not be permanently incorporated into the work unless all manufacturing processes (e.g., smelting, remelting, and any subsequent process that alters the material's physical form or changes its chemical composition) occur within the United States. This includes, but is not limited to, such processes as rolling, extruding, machining, bending, grinding, drilling, fabrication, and coating. Coating includes all processes that protect or enhance the value of the material to which the coating is applied. The use of pig iron or processed, pelletized, and reduced iron ore manufactured outside of the United States is permitted in the domestic manufacturing process for steel and/or iron materials. All steel and iron mill test reports must include a certified statement as follows: "All manufacturing processes for the iron or steel product occurred in the United States." Each

manufacturer/fabricator shall provide the same certification. Each supplier shall provide certification of the transfer of intermediate products, thereby generating a chain of custody documentation. Exceptions are as follows:

a. These requirements do not prevent a minimal use of foreign iron or steel material if the cost of such materials used does not exceed 0.1% of the total Contract cost or \$2,500, whichever is greater. For comparison with either of these given limitations, the cost is that shown to be the value of steel products as they are delivered to the project.

b. These requirements do not apply when the Engineer establishes:

- That their application would be inconsistent with the public interest, or
- That such materials are not produced in the United States in sufficient and reasonably available quantities that are of a satisfactory quality.

The determination of foreign or domestic character is based on place of manufacture. The burden of proof for the place of manufacture shall rest with the Contractor. The cost of any foreign materials permanently incorporated into the work shall be documented by the Contractor and the documentation submitted to the Engineer.

(2) Foreign Steel Option. If the Proposal for the project contains an alternate bid system for submitting a bid for furnishing domestic structural steel for which all manufacturing processes occur in the United States and a bid for furnishing foreign structural steel, bidders are hereby advised that the Contract will be awarded to the bidder who submits the lowest total bid based on furnishing domestic structural steel unless such total bid exceeds the lowest total bid based on furnishing foreign structural steel by more than 25%.

If the bidder proposes to furnish foreign structural steel, it shall be mandatory that a bid for domestic structural steel also be submitted. If the bidder proposes to furnish domestic structural steel, it will not be necessary to submit a bid for foreign structural steel.

Structural steel is hereby defined as steel sheet piling (Section 811-Sheet Piles); H-piling and shell or pipe piling (Section 805-Piling); and W, M, S, or Z shapes, plates, channels, angles, and/or T-sections (Section 807-Steel Structures).

(3) Quality Control for Foreign Steel. When the Contractor elects to purchase items of structural steel manufactured outside the United States, such materials shall be furnished only from those foreign manufacturers who have previously established, to the satisfaction of the Engineer, the sufficiency of ability to furnish material uniformly and consistently in conformance with the Specifications.

Proof of sufficiency must be provided to the Engineer by the Contractor and the Engineer's approval obtained before manufacture of the material is authorized. Proof may be established by 1) the Contractor providing the Engineer with a detailed written certification by an established and approved independent testing and inspection laboratory or agency showing evidence that the foreign manufacturer has previously established in-plant quality control to give assurance of their ability to furnish material uniformly and consistently in conformance with the specifications, or 2) a thorough in-plant inspection of the foreign manufacturer's facilities by the Engineer or an appointed representative. The cost of determining such sufficiency shall be borne by the Contractor.

When the Contractor elects to have items of structural steel fabricated outside the United States, the Contractor shall reimburse the Department for all costs connected with the inspection of such fabrication, including necessary expenses for the Engineer or a representative to make an in-plant inspection or to arrange for an inspection agency to handle the shop inspection.

Reimbursement for costs of determining sufficiency and inspection of fabrication shall be made by the Contractor upon receipt of detailed billing prepared by the Department.

Steel material manufactured outside the United States shall be delivered to the fabrication site where it shall be retained a sufficient period of time to permit inspection, sampling, and testing, as deemed necessary by the Engineer, before fabrication.

Before fabrication or shipment of any foreign produced structural steel items, the Contractor shall obtain all the Certified Mill Test Reports clearly identifiable to the lot of material to be shipped. These reports shall be identifiable by heat numbers and color-coding, and shall be submitted to the Engineer for complete review, analysis, and approval.

The Contractor or a designated representative shall serve as the Communication Contact for any structural steel fabricator outside the United States. All correspondence, telephone calls, and other forms of communication from the Department or its representative will be made with the Communication Contact and not with the foreign industry.

Costs involved in materials testing, shop inspection, communication, consultation, and coordination that are incurred because of the use of materials produced or fabricated outside the continental limits of the United States, shall be borne by the Contractor.

106.02 Furnishing Materials from Borrow Areas, Pits, or Quarries. The required materials shall be obtained from local or commercial sources.

When obtained from local sources, applicable severance taxes shall be paid by the Contractor.

Borrow areas, material pits, and quarry sites shall comply with the following requirements:

- 1) All Areas, Pits, or Quarries. In general, the nearest edge of an area, pit, or quarry shall be no closer than 300' (100 m) from the nearest right-of-way line of a State Highway, except as provided in 3) or 4) below. All slopes shall be 2:1 or flatter, except that faces of rock quarries shall be cut to a neat appearance with the overburden sloped to 2:1 or flatter.
- 2) Water Retaining Pits or Quarries. Water retaining pits or quarries will not be permitted within 300' (100 m) of the nearest right-of-way line of a State Highway.
- 3) Drained Areas, Pits, or Quarries. Areas, pits, or quarries shall comply with 1) above but with the following exceptions: a) if the material is being obtained from a site that is being excavated and contoured to conform to the terrain of the adjacent

surroundings, or b) if the site is to be used as a commercial or residential building location as defined in the agreement with the property owner.

- 4) In the event that an area, pit, or quarry is closer than 300' (100 m) from the right-of-way line of a County Road or City Street, the written approval of the governing authority shall be furnished the Engineer prior to any excavation.
- 5) When sites are closer than 300' (100 m) from the right-of-way line, the slope in the area, pit, or quarry adjacent to the right-of-way shall not be steeper than that of the backslope or foreslope of the existing or planned roadway in the area of the site. All other slopes in the site shall not be steeper than 2:1, except that faces of rock quarries shall be cut to a neat appearance with the overburden sloped to 2:1 or flatter. In addition, if the floor of the site is sloped away from the right-of-way line, the slope shall not be steeper than 6:1 for a distance of 100' (30 m) from the right-of-way line.

The final quantity of material removed from each pit will be verified by the Engineer and furnished the Contractor as soon as possible after the final measurements have been made, except that no measurement will be made by the Department when Compacted Embankment is a pay item or when Borrow is specified to be paid as Plan Quantity. In such cases, the determination of the quantity of material removed from each pit shall be the responsibility of the Contractor.

The Contractor shall be responsible for resolving disputes or claims arising from the pit operations.

Natural tree screens shall be preserved during the course of construction. Haul roads will not be allowed to pass through tree screens except where absolutely necessary for access to the construction site. A temporary haul road through a tree screen shall be normal to the roadway and the cleared width shall be no more than is necessary to accomplish the work. In general, temporary haul roads will not be approved through natural tree screens at intervals closer than 500' (120 m).

All applicable work involved in furnishing borrow, pit, or quarried materials, including:

- Clearing, grubbing, stripping, and disposal of overburdens or other unsatisfactory material;
- Stockpiling and replacing topsoil;
- Loosening, excavating, and hauling;
- Screening, furnishing right-of-way, and constructing and maintaining haul roads;
- Fence moving and reconstructing;
- Confining livestock;
- Seeding and restoration, as required; and
- Complying with Section 110 and Subsection 107.10

will not be paid for separately, but full compensation therefor will be considered included in the contract unit prices bid for the various items of work.

106.03 Samples, Tests, and Cited Specifications. All materials will be inspected, tested, and accepted as required by these specifications before incorporation in the work.

Whenever a reference is made in the specifications to the Department's *Manual of Field Sampling and Testing Procedures*, it shall mean the revision in effect on the day the advertisement for bids is dated. Copies of this manual are available from the Engineer of Materials.

Whenever a reference is made in the specifications to a Federal Specification, or to a specification or test designation of the American Association of State Highway and Transportation Officials, the American Society for Testing and Materials, or any other recognized national organization, it shall mean the year of adoption or latest revision of the specification or test designation in effect on the day the advertisement for bids is dated. When a specific reference is made to a dated specification or test designation, the revision in effect on that date shall apply.

When requested, the Contractor shall furnish a complete certified statement of the origin, composition, and/or manufacture of materials that are to be used in the work.

106.04 Acceptance of Materials. All materials used in the work shall conform to the specified requirements. For the purposes of determining conformance with specifications, all limits are to be considered absolute limits, according to AASHTO R11, "Standard Recommended Practice for Indicating Which Places of Figures Are

to Be Considered Significant in Specified Limiting Value,”. Limits are maximums, minimums, or tolerances and shall be considered absolute limits. Observed or calculated values shall not be rounded but shall be compared directly with the limit. Any deviation, however small, outside the limit shall be considered non-complying. Reported values that are an average of two or more test values are to be rounded-off to the same number of significant digits as the individual test value even though the specification requirements are considered absolute. Test values and reported values are to be the same and are to show the same number of significant figures allowed by the accuracy of the test procedure and the equipment being used.

In the case of materials for which quality may be subject to change during handling and storage, samples may be taken at the source for informational purposes only. Sampling will be performed at the latest practicable time the Engineer deems it necessary to check compliance with specification requirements either prior to, during, or after incorporation in the work. Regardless of any compliance at that time, if there is subsequent indication of change in any material it will again be tested for compliance.

All materials used are subject to inspection and testing during preparation, placement, manipulation, and use. The Contractor will be held responsible for damage, contamination, segregation, and/or degradation caused by poor methods of stockpiling, manufacture, handling, placement, and/or by poor workmanship or negligence prior to completion and acceptance of the work.

Further, the Contractor shall be responsible for defects in accordance with Subsections 107.20 and 109.02.

All Contractor Acceptance Tests must be signed by the certified technician performing the test and submitted to the Engineer on the next business day after the test is performed. All test reports shall contain the following information, as a minimum:

- Job Number
- Date of Test
- Type of Material (i.e. ACHM Surface Course, Aggregate Base Course Cl. 5, etc.)
- Test Method

- Property being Tested (i.e. gradation, compressive strength, etc.)
- Sample Location
- Quantity Represented (Lot or Sublot size)
- Quality Control or Acceptance Test indicator
- Sequential sample number for each project
- Name, Signature, Title, and Certification number of Technician performing the test.
- Name and address of testing laboratory (if applicable)
- Pass or Fail indicator (in addition to actual numerical test results)

Examples of acceptance test report forms are found in the Department's *Manual of Field Sampling and Testing Procedures*.

106.05 Plant Inspection. The Engineer may undertake the inspection of materials at the source.

In the event plant inspection is undertaken the following conditions shall be met:

(a) The Engineer shall have the cooperation and assistance of the Contractor and of the producers of materials for the work.

(b) The Engineer shall have full entry at all times to such parts of the plant as may concern the manufacture or production of the materials being furnished.

(c) Adequate safety measures shall be provided and maintained.

106.06 Storage of Materials. Materials shall be so stored as to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected before their use in the work. Stored materials shall be located so as to facilitate their prompt inspection. Approved portions of the right-of-way may be used for storage purposes and for the placing of the Contractor's plant and equipment, but any additional space required therefor must be provided by the Contractor, and at no cost to the Department. Private property shall not be used for storage purposes without written permission of the owner or lessee, and if requested by the Engineer, copies of such written permission shall be furnished.

106.07 Handling Materials. All materials shall be handled in such manner as to preserve their quality and fitness for the work.

Aggregates shall be transported from the storage site to the work in tight vehicles so constructed as to prevent loss or segregation of materials after loading and measuring so that there may be no inconsistencies in the quantities of materials intended for incorporation in the work as loaded and the quantities as actually received at the place of operations.

106.08 Unacceptable Materials. All materials not conforming to the requirements of the specifications at the time they are used shall be considered as unacceptable and all such materials will be rejected and shall be removed immediately from the site of the work unless otherwise instructed by the Engineer. No rejected material, the defects of which have been corrected, shall be used until approval has been given.

106.09 Department-Furnished Material. The Contractor shall furnish all materials required to complete the work, except those specified to be furnished by the Department.

Material furnished by the Department will be delivered or made available to the Contractor at the points specified in the Special Provisions.

The cost of handling and placing all materials after they are delivered to the Contractor will not be paid for separately, but full compensation therefor will be considered included in the contract unit price(s) bid for the item(s) with which they are used.

The Contractor will be held responsible for all material delivered by the Department through this arrangement. Deductions will be made from any moneys due the Contractor to make good any shortages and deficiencies, from any cause whatsoever; for any damage that may occur after such delivery; and for any demurrage charges.

106.10 Qualified Products List. The Department maintains a Qualified Products List (QPL). Various materials are listed on the QPL by manufacturer, supplier, and/or brand name. Specific brands, manufacturers, and/or suppliers may be added to the QPL upon request and compliance with the requirements specified for the type of material involved. Materials listed on the QPL will be accepted under the procedures specified therein. Information concerning the QPL may be obtained from the Engineer of Materials.

Products listed on the QPL must meet all the appropriate requirements of the specifications. The quality of materials listed on the QPL will be monitored by the Department through random sampling and testing.

The listing of a material on the QPL will in no way relieve the Contractor of furnishing material meeting the specification requirements. Material may be rejected if the Engineer determines that the material is contaminated and/or damaged or if products normally shipped as packaged units have been opened and partially used before delivery to the project.

The QPL does not constitute an endorsement by the Department of any product, manufacturer, or supplier, but is a listing of products that have been prequalified for use. If the Specifications designate that a material shall be one listed on the QPL or from a source listed on the QPL, the Contractor has the option of furnishing a material or using a source that is not listed provided that the material or source is shown by appropriate certifications and/or test reports to meet the requirements necessary for listing on the QPL.

For materials not listed on the QPL, if deemed appropriate, the Engineer may require and accept the manufacturer's certified analysis in lieu of sampling and testing of commercial or manufactured products.

106.11 Contractor Acceptance Test Evaluation. The Contractor's acceptance test results will be evaluated by the Department and will be correlated with other test results available for the same material. The Department will use all tests and witness the Contractor's sampling and testing methods as part of this verification process in accordance with the *Manual of Field Sampling and Testing Procedures*.

If the results fail to correlate within the limits shown in the *Manual of Field Sampling and Testing Procedures* or if the witness of the sampling and testing indicates the utilization of improper procedures, the Engineer will notify the Contractor and document the finding. In such case, the Engineer reserves the right to instruct the Contractor to cease materials placement to prevent non-complying materials from being utilized. Operations may resume when, in the Engineer's judgment, sampling and testing procedures are acceptable. The Contractor will continue to be responsible for providing material meeting the applicable Specification.

The Contractor shall investigate the cause of the failure of the test results to correlate and document and report the findings to the Engineer. If the cause cannot be determined, or if the Contractor's investigation is considered unacceptable to the Engineer, the Engineer may require the material to be resampled and retested by the Contractor and the Department using the same test methods and frequencies as required by the *Manual of Field Sampling and Testing Procedures*. Acceptance of the lot will then be based on the new test results. The original test results shall not be used for acceptance.

If the test results of the resampled material fails to correlate, and the cause remains undetermined, the Engineer may elect to accept the material based upon the uncorrelated results or proceed with dispute resolution as provided in Subsection 106.12.

106.12 Materials Dispute Resolution. When either the Contractor or the Engineer disputes the other's acceptance test results and cannot resolve the dispute, the party disputing the results shall notify the other party in writing that the acceptance test results are in dispute. Both parties shall then review the sampling and testing procedures with a representative of the Department's Materials Division.

In the event that the test procedures are revealed as the cause of the dispute, the technicians who performed the original test for each party will split and test one sample from the disputed subplot. The Materials Division representative will observe the testing procedures of both technicians. In addition, each party will observe the other's testing procedure. The Materials Division will prepare a report of the review findings and distribute the report to both parties for their information and action. The Contractor and the Department will respectively provide training and instruction to the technician who has performed improper testing, as identified in the Materials Division's report.

If the dispute is not resolved, the Materials Division will sample and test the material in dispute. The test results obtained by the Materials Division will govern over all previous test results. As appropriate, the Contractor or the Engineer will take corrective action.

**SECTION 107
LEGAL RELATIONS AND
RESPONSIBILITY TO PUBLIC**

107.01 Laws and Regulations to be Observed. (a) The Contractor shall keep fully informed of all Federal and State laws, all local laws, ordinances, and regulations, and all orders and decrees of bodies or tribunals having any jurisdiction or authority which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. Further, the Contractor shall at all times observe and comply with all such laws, ordinances, regulations, quarantines, orders, and decrees; and shall protect and indemnify the State and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's employees.

All work pertaining to Electrical, Plumbing, and/or Building Crafts shall be performed in strict accordance with governing Federal, State, City, and Local Codes and Ordinances, with particular attention to the current editions of the Arkansas State Plumbing Code and the National Electrical Code as adopted by the National Fire Protection Association.

(b) The Contractor shall comply with applicable Federal, State, and local laws governing safety, health, and sanitation. The Contractor shall provide safeguards, safety devices, and protective equipment and take any other action necessary to protect the life and health of employees on the project and the safety of the public and to protect property in connection with the performance of the work covered by the Contract.

Attention is directed to Federal, State, and local laws, rules, and regulations concerning construction safety and health standards. The Contractor shall not require workers to work in surroundings or under conditions that are unsanitary or dangerous to their health or safety.

(c) Restrictions placed on the employment of labor or on the scale of pay for the work on a contract will be the requirements of the Fair Labor Standards Act (Federal Wage-Hour Law) of 1938, 28 USC §201 et seq., other applicable labor laws, and, when included

as a part of the Special Provisions, the Department of Labor's schedule of minimum wages for the Contract. For further information regarding overtime or opinions on specific cases, contact the Office of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Little Rock, Arkansas.

The Contractor will be expected to employ Arkansas labor insofar as possible unless such preferential practice is prohibited by regulations such as for Federal Aid Contracts.

(d) If designated on the bridge layout or where the working height above the ground or water surface exceeds 25' (7.7 m) or where other conditions exist that require protection to workers against injury from falling, the Contractor shall install safety nets or life lines with safety belts. All materials and construction methods shall comply with the Occupational Safety and Health Act of 1970, 29 USC § 651 et seq., and the Safety and Health Regulations for Construction promulgated thereunder.

(e) The Contractor shall comply with Ark. Code Ann. § 2-16-101, et seq., and Title VII of USC and regulations promulgated thereunder. These laws and regulations have been established to prevent the spread of certain plant pest species, control of pesticides, and control and eradication of Johnson grass. Pursuant to such regulations, the U.S. Department of Agriculture and the Arkansas State Plant Board have established certain domestic quarantine areas within the State of Arkansas for the purpose of preventing further infestation within and beyond these boundaries.

Soil moving equipment operating within or from regulated areas will be subject to plant quarantine regulations. In general, these regulations provide for cleaning soil from equipment before it is moved from regulated areas.

It is the Contractor's responsibility to determine from Federal or State plant pest control authorities the exact areas under control. Any list of regulated areas appearing in the proposal is furnished for information purposes only and represents the most recent information available to the Department as of the date indicated. Prospective bidders should be aware that the list of regulated areas is subject to change and they should therefore verify the exact areas under control by contacting the Plant Industry Division of the

Arkansas Plant Board or the Plant Protection Program offices of the Arkansas District of the U.S. Department of Agriculture.

(f) If the release of a suspect hazardous substance has occurred, the Contractor shall notify the Engineer. This will not relieve the Contractor or responsible parties of the obligation to notify other appropriate agencies and will not relieve responsible parties of any liability.

Commonly used materials which could be potentially hazardous substances if they are spilled or enter waterbodies are: asphalt materials, concrete, cement, paint, solvents, petroleum products, fertilizers, concrete curing compound, lime, linseed oil, asphalt additives, and concrete additives. This list is not all inclusive.

Notification should be made if, at any time, there is an indication of a spill. Indicators could be:

- Leaking or empty containers, surface staining, chemical odors, vegetation damage, etc.
- Oil, grease or petrochemical substances which produce residue, coat the banks and/or bottoms of a waterbody, or produce a visible, colored film on the surface.
- Distinctly visible solids, scum, or foam of a persistent nature, or slime, bottom deposits, or sludge banks in a waterbody.

The work involved or the delay or cost incident to compliance with these regulations will not be paid for separately, but full compensation therefor will be considered included in the contract unit prices bid for the various items of the Contract.

107.02 Permits, Licenses, and Taxes. The Contractor shall procure all permits and licenses, pay all charges, fees and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the work. These costs will not be paid for directly, but will be considered included in the contract unit prices bid for the various items of the Contract.

107.03 Patented Devices, Materials, and Processes. Contractors employing any design, device, material, or process covered by letters of patent or copyright shall provide for such use by suitable legal agreement with the patentee or owner. Contractors and their Sureties shall indemnify and save harmless the State, any affected third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design,

device, material, or process, or any trademark or copyright, and shall indemnify the State for any costs, expenses, and damages that it may be obliged to pay by reason of any infringement, at any time during the prosecution of or after the completion of the work.

107.04 Restoration of Surfaces Opened by Permit. The right to construct or reconstruct any utility service in the highway or street, or to grant permits for such work, at any time, is hereby expressly reserved by the Department for the proper authorities of the political entity in whose jurisdiction the work is done and the Contractor shall not be entitled to any damages either for the digging up of the street or for any delay occasioned thereby.

Any individual, firm, or corporation wishing to make an opening in the highway must secure a permit from the Department and deposit security in a suitable amount to cover the cost of making the necessary repairs. The Contractor shall allow parties bearing such permits, and only those parties, to make openings in the highway. When ordered by the Engineer, the Contractor shall make in an acceptable manner all necessary repairs due to such openings and such necessary work will be paid for as extra work, or as provided in these specifications, and will be subject to the same conditions as original work performed.

107.05 Required Federal-Aid Contract Provisions. When the United States Government pays all or any portion of the cost of a project, the Federal laws and rules and regulations made pursuant to such laws must be observed by the Contractor, and the work shall be subject to the inspection of the appropriate Federal Agency.

Such inspection shall in no sense make the Federal Government a party to the Contract and will in no way interfere with the rights of either party thereunder.

107.06 Sanitary Provisions. The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of the employees as may be necessary to comply with the requirements of the State and local Boards of Health, or of other bodies or tribunals having jurisdiction.

107.07 Public Safety and Convenience. The Contractor's work shall at all times be conducted so as to assure the least possible obstruction to traffic. The safety and convenience of the general public and the residents along the highway and the protection of

persons and property shall be provided for by the Contractor as specified under Subsection 104.05 and Sections 603 and 604, as applicable.

The Contractor will be responsible for maintaining U.S. mailboxes within the project limits in such a manner that the public may receive continuous mail service according to U.S. Postal Service regulations. Unless otherwise provided, upon completion of the project, mailboxes will be replaced as near as practicable to their original location.

The Contractor shall be responsible for providing a fence to control livestock in areas where pastures are severed or existing fencing is altered under the Contract. Wire fence may be constructed initially, or in lieu thereof, the Contractor, at Contractor expense, may elect to provide temporary fencing suitable to contain livestock.

107.08 Railway-Highway Provisions. All work on railroad property shall be accomplished in strict compliance with the plans, these specifications, and such Special Provisions as are appropriate to the Contract.

All work to be performed by the Contractor in construction on the railroad right-of-way shall be performed at such times and in such manner as not to unnecessarily interfere with the movement of trains or traffic upon the track of the Railway Company. The Contractor shall use all care and precaution to avoid accidents, damage, or unnecessary delay or interference with the Railway Company's trains or other property.

Plans for all sheeting or cofferdams for foundation work adjacent to operated track, and plans of falsework, staging, protective sheeting, or other temporary construction near the operated track shall be approved by the Railway Company. The Contractor shall construct the work according to the approved plans.

107.09 Work over Navigable Waters or within Regulated Floodways. (a) Navigable Waters. All work on navigable water shall be so conducted that free navigation of the waterways will not be interfered with and that the existing navigable depths will not be impaired except as allowed by permit issued by the U.S. Coast Guard and/or the U.S. Army Corps of Engineers (C of E), as applicable, and with Section 110.

(b) Regulated Floodways. All work within regulated floodways shall be accomplished within the requirements of all permits issued by the Federal Emergency Management Agency (FEMA), C of E, or other applicable agencies, and with Section 110.

(1) Responsibility for FEMA Permit. Within regulatory floodways all permanent and temporary fills/structures must be in accordance with FEMA and local governmental requirements. The Department obtains all required permits and/or variances for essential work in the regulated floodway before the Contract is awarded. The Department will apply for Contractor requested variances which it determines are necessary. The Contractor should be aware that requested temporary fills/structures may not be approved or may require mitigation.

(2) Corps of Engineers Section 404 Permit Requirements. Placement of temporary fills/structures within a regulatory floodway may also require alteration of the existing C of E 404 Permit described in Section 110. The Contractor should refer to Section 110 and the Contract Documents for further details, restrictions, and requirements of Section 404 Permits.

(3) Compensation and Extension of Contract Time. The Contractor will not be granted additional compensation or contract time due to requested floodway variances that are considered by the Engineer to be for the convenience of the Contractor. If, however, due to no fault of the Contractor, a floodway variance is deemed by the Engineer to be necessary, additional contract time and/or compensation may be considered according to the provisions of Section 104.

(c) Contractor's Permit Conditions. All permits issued to the Contractor by the U.S. Coast Guard, C of E, or other applicable agencies, for the convenience of the Contractor in accomplishing the work, shall be complied with in full and the project will not be accepted until the permittor has accepted the work covered by permit. The Contractor will be responsible for obtaining a release from the permittor before acceptance.

107.10 Restraining Conditions. (a) General. A "restraining condition" is defined as a condition and/or material that is, or can reasonably be suspected of being:

- Archeologically or historically significant.

- Environmentally sensitive.
- Hazardous substances or waste.

(1) Archeologically or historically significant sites may contain artifacts or the remains of prehistoric/historic people's dwelling sites. The determination of archeological or historical significance will be made by the Department in coordination with the appropriate authorities.

(2) Environmentally sensitive conditions include, but are not limited to, wetlands, caves, underground streams, and habitats of threatened or endangered species.

(3) Hazardous substances or waste are defined as: any chemical or biological element, compound, mixture, solution, or substance that, when released to the environment, may present substantial danger to public health or welfare or to the environment.

Potentially hazardous substance or waste sites may include, but are not limited to: tanks, drums, containers, and packages (with or without hazardous materials labels), plus any liquids or solids not typical in color, odor, or texture to the native soils or strata of the site. Any indication that the area was a dump site or landfill shall constitute a reason to stop work in that area until a determination can be made as to whether hazardous materials exist.

(b) Restraining Conditions Within the Right-of-Way. Known restraining conditions within the right-of-way will be shown on the plans and any special work requirements in the vicinity of such conditions shall be shown on the plans or included in the Contract.

When any restraining condition not shown on the plans is encountered, work in that area will stop and the Engineer shall be notified immediately. Work in that area shall not resume until the condition has been investigated, a determination made as to the disposition of the condition, and clearance to continue has been obtained.

(c) Restraining Conditions Outside of the Right-of-Way.

(1) Commercially Operated Site. The term "commercially operated site" is defined as a pit or quarry from which material is obtained that has served the general public for purposes other than Department projects for more than one year and has

furnished materials to the general public for purposes other than Department projects during the twelve month period immediately preceding the execution of the Contract.

The Contractor is advised that the owner/operator of the site has the responsibility to obtain clearances and ensure compliance with all Federal and State laws regarding the above restraining conditions.

(2) Non-commercially Operated Site. The Contractor shall notify the Engineer of the location of all proposed off-site locations, including borrow pits, waste areas, haul roads, equipment and materials storage areas, field offices, etc., prior to starting any site preparation in these areas. This notification shall include detailed information which will enable Department personnel to locate the site on the ground, and include a 7.5 minute topographic quadrangle or equivalent map showing the location and limits of the proposed off-site location. The limits of the off-site location shall be clearly and visibly flagged for easy recognition. Within 10 business days after notification by the Contractor, the Department will:

- Investigate for the presence of archeologically or historically significant sites. If no evidence is found of archeological/historical materials during the initial visual survey, the site will be conditionally approved, and
- Investigate for the presence of environmentally sensitive conditions. If no evidence is found the site will be conditionally approved.
- After Restraining Condition conditional approval has been given to the Contractor, the Department will provide the Contractor with an Endangered Species Clearance. This clearance may be used by the Contractor to obtain his NPDES Permit for the off right-of-way site.

The Contractor is responsible to carefully investigate off right-of-way sites to ensure the absence of hazardous materials or wastes.

If the site is determined to involve a restraining condition, no work in that area will be permitted. Any site preparation prior to conditional approval will cause the site to be rejected. The

Contractor will not be reimbursed for work done prior to conditional approval.

If a restraining condition is discovered the Contractor may, at no cost to the Department, acquire approval for use of the site from the appropriate authorities. All sites that have been rejected because of prior site preparation are ineligible for clearance. All clearances or permits obtained by the Contractor regarding the dismissal of the restraining conditions shall be submitted to the Engineer for approval before site preparation begins.

If a restraining condition is discovered after operations have begun, work in the area of the restraining condition shall stop and the Engineer shall be notified immediately. Work in that area shall not resume until the condition has been investigated, a determination made as to the disposition of the condition, and clearance to continue has been obtained. If no further work is permitted at the site due to the restraining condition, the site shall be closed and the area dressed and restored under Sections 106 and 110 to the extent practicable without interfering with the disposition of the condition.

(d) Contract Adjustments.

(1) Within the Right-of-Way. Contract adjustments due to the discovery on the right-of-way of restraining conditions not shown on the plans will be made according to subsection 104.02(c).

(2) Outside of the Right-of-Way. No additional compensation or extension of time will be given for delays or extra work required resulting from the discovery of restraining conditions at commercially operated sites.

In the event the Contractor has begun using a conditionally approved non-commercially operated site and is prevented from fully utilizing this site due to the discovery of a restraining condition, such conditions will be deemed a differing site condition and Contract adjustments will be made according to subsection 104.02(c).

(e) Protection of Sensitive Areas. Any area identified by the Department as containing a restraining condition which is adjacent to or within an approved site must be clearly marked and protected by the Contractor from any vehicle or equipment encroachment.

Department personnel will establish the limits of the restraining condition area. The Contractor, at Contractor expense, will mark and maintain the limits of the restraining condition area using flagging, stakes, or other appropriate devices to clearly indicate that the area is to be protected. The Contractor will be responsible for any damages to the area containing the restraining condition as provided in Subsection 107.12.

107.11 Use of Explosives. 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 comply with all laws and ordinances regarding the use of explosives; further, the Contractor shall be responsible for all damage resulting from the use of explosives.

All explosives shall be stored in a secure manner in compliance with all laws and ordinances, and all such storage places shall be clearly marked. Where no local laws or ordinances apply, storage shall be provided satisfactory to the Engineer and in accordance with the Occupational Safety and Health Act of 1970, 29 USC § 651 et seq., and the Safety and Health Regulations for Construction promulgated thereunder, but not closer than 1,000' (300 m) from the road or from any building or camping area or place of human occupancy.

The Contractor shall notify each public utility company having structures in proximity to the site of the work of any intention to use explosives. Such notice shall be given sufficiently in advance to enable the companies to take such steps as they may deem necessary to protect their property from injury.

107.12 Protection and Restoration of Property and Landscape. The Contractor shall be responsible for the preservation of all public and private property and shall protect carefully from disturbance or damage all land monuments and property marks until the Engineer has witnessed or otherwise referenced their location, and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character: 1) during the prosecution of the work, resulting from any act, omission, neglect, or misconduct in the manner or method of executing the work, or 2) at any time, due to

defective work or materials, and said responsibility will not be released until the project has been completed and accepted.

Property shall include but not be limited to street and roadway signs, right-of-way monuments, roadway lighting, traffic signal equipment, and any conduits and wiring. Should it become evident that any item, such as listed above, is in conflict with the proposed work, the Contractor will notify the Engineer so that proper steps can be taken to adjust, remove, or otherwise eliminate the conflict.

On projects where the Department has monumented the right-of-way before the start of construction operations, it shall be the responsibility of the Contractor to protect such right-of-way or land monuments from disturbance during the construction period. The term "right-of-way or land monument" shall include the actual monument; stakes, pins, nails, or other devices marking the location of the monument; and witness markers associated with the monument. Any and all such monuments disturbed by the Contractor's operations will be reestablished by the Department. An immediate deduction of \$300 for each monument disturbed by the Contractor's operations will be made on the next progress estimate after the discovery of the damage.

If the Department has completed installation of all monuments and filed the appropriate plat before the disturbance of any monument, the Contractor may, at Contractor option and in lieu of restoration by the Department, have the monuments restored by a Registered Professional Land Surveyor at the Contractor's expense. The monument will be reset using current AHTD property and right of way monumenting procedures and shall include the registration number of the surveyor. A plat shall be prepared by the licensed surveyor for documentation of such replacement or restoration. The plat shall comply with the requirements of the *Arkansas Minimum Standards for Property Boundary Surveys and Plats*. The plat shall be filed with the appropriate County Circuit Clerk and a copy of the filed plat, including book and page, shall be furnished to the Department. The deduction of \$300 per monument will be made as specified above and re-paid after completion of the requirements of this paragraph.

The Contractor shall not create a public nuisance while performing the various operations of the work. Excessive noise between the hours of 10 p.m. and 6 a.m., and dust from haul roads,

County roads, or State roads may be considered by the Engineer to be a public nuisance.

When or where any direct or indirect damage or injury is done to public or private property by or as a result of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the nonexecution thereof, the Contractor shall restore, or bear the expense of restoring, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, rebuilding, or otherwise restoring as may be directed, or shall make good such damage or injury in an acceptable manner. Failure to do so within a reasonable period of time will constitute noncompliance, and the Engineer may cause the entire cost of the restoration to be deducted from moneys due or to become due the Contractor on the Contract.

107.13 Forest Protection. When working within or adjacent to a State or National Forest, the Contractor shall comply with all regulations concerning the protection of forests. The Contractor and all subcontractors shall take all reasonable precautions to prevent forest fires and shall provide reasonable aid in the suppression of forest fires. The size and location of all fires seen or otherwise detected by the Contractor's personnel shall be reported immediately to the Engineer and/or the nearest Forest official.

107.14 Responsibility for Damage Claims. The Contractor shall indemnify and save harmless the Department and its officers and employees from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of the Contractor; or because of any claims or amounts recovered from any infringement of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workman's Compensation Act," or any other law, ordinance, order, or decree; and so much of the money due the Contractor under and by virtue of the Contract as may be considered necessary by the Department for such purpose may be retained for the use of the Department; or in case no money is due, the Surety may be held until such suit or suits, action or actions, claim or claims for injuries

or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Department; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that adequate protection is provided by public liability and property damage insurance.

It is specifically agreed between the parties executing the Contract that it is not intended by any of the provisions of any part of the Contract to create the public or any member thereof a third party beneficiary thereunder, or to authorize anyone not a party to the Contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the Contract.

107.15 Opening Section of Highway to Traffic. Whenever any roadway, or portion thereof, is in an acceptable condition for travel, it shall be opened to traffic, as may be directed, and such opening shall not be held to be in any way an acceptance of the roadway, or any part of it, or as a waiver of any of the provisions of these specifications and the Contract. Necessary repairs or renewals made on any section of the roadway opened to travel under instructions from the Engineer, due to defective material or work, or to natural causes, other than normal wear and tear, pending completion and acceptance of the roadway, shall be performed at no cost to the Department.

If the Contractor is dilatory in completing shoulders, drainage structures, or other features of the work, the Engineer may give notification in writing and establish therein a reasonable period of time in which the work should be completed. If the Contractor is dilatory or fails to make a reasonable effort toward completion in this period of time, the Engineer may take action as provided in subsection 105.01. On such sections that are so ordered to be opened, the Contractor shall conduct the remaining construction operations so as to cause the least obstruction to traffic and shall not receive any added compensation due to the added cost of the work by reason of opening such section to traffic.

107.16 Contractor's Responsibility for Work. Until final acceptance of the project by the Engineer, the Contractor shall have the charge and care thereof and shall take every precaution against injury, theft, or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the nonexecution of the work. The Contractor

shall rebuild, repair, restore, and make good all injuries, thefts, or damages to any portion of the work occasioned by any of the above causes before final acceptance, and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, of the public enemy, or of governmental authorities.

In case of suspension of work from any cause whatever, the Contractor shall be responsible for the project and shall take such precautions as may be necessary to prevent damage to the project, provide for normal drainage and maintenance of the traveled way, and shall erect any necessary temporary structures, signs, or other facilities. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seedings, and soddings furnished under the Contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

The protection of the work shall be accomplished at no cost to the Department except for the work required to maintain the traveled way.

In case of errors or negligence on the part of the Contractor, any expenses incurred by the Department for engineering, inspection, testing, design, or evaluation relative to correction of the work will be assessed against the Contractor.

107.17 Contractor's Responsibility for Utility Facilities and Services. At points where the Contractor's operations are adjacent to railroad or utility facilities, damage to which may result in loss or inconvenience, work shall not begin until all arrangements necessary for the protection thereof have been made.

The Contractor shall cooperate with the owners of any utility facilities in their removal and rearrangement operations so that these operations may progress in a reasonable manner, that duplication of rearrangement work may be reduced to a minimum, and that services rendered by those parties will not be unnecessarily interrupted.

In the event of interruption of 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 said authority in the restoration of service. If utility service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

107.18 Furnishing Right-of-Way. The Department is responsible for the securing of all necessary rights of way in advance of construction within the limits indicated on the plans. Acquisition of right-of-way by the Department does not include areas required by the Contractor for material sources (borrow, gravel, topsoil, sod, etc.), plant sites, equipment storage, stockpiles, disposal of waste or excess material, or any other areas required for the proper prosecution of the work. The Contractor is responsible for obtaining, at no cost to the Department, areas outside the right-of-way required for such purposes and shall, at the Engineer's request, furnish copies of agreements with the property owners. The Contractor may, with the approval of the Engineer, use areas within the right-of-way that are outside the construction limits for these purposes. Erosion control, prevention of water pollution, and restoration of all such areas, both inside and outside the right-of-way, shall be performed by the Contractor according to the specifications and at no cost to the Department.

107.19 Personal Liability of Public Officials. In carrying out any of the provisions of these specifications, or in exercising any power or authority granted to them by or within the scope of the Contract, there shall be no liability upon the Commission, Engineer, or their authorized representatives, either personally or as officials of the Department, it being understood that in all such matters they act solely as agents and representatives of the Department.

107.20 No Waiver of Legal Rights. Final acceptance according to subsection 105.17(b) shall not preclude or estop the Department from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Department be precluded or estopped from recovering from the Contractor or the Surety, or both, such overpayment as it may sustain, or by failure on the part of the Contractor to fulfill obligations under the Contract. A waiver on the part of the Department of any breach of any part of

the Contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the Contract, shall be liable to the Department for any or all of the following: fraud or such gross mistakes as may amount to fraud, the Department's rights under any warranty or guaranty, or any latent defects in the work.

SECTION 108 PROSECUTION AND PROGRESS

108.01 Subletting of Contract. The Contractor will be permitted to sublet a portion of the Contract, except that work amounting to not less than 30% of the total Contract amount (based on the Contract unit prices) must be performed by the Contractor's organization. No subcontractor shall further subcontract any portion of the work without the written consent of the Contractor and acknowledgment of the Engineer. If consent and acknowledgment are given, the first tier subcontractor may further subcontract a portion of his work not to exceed 70% of the work originally subcontracted to him by the Contractor. Second tier subcontractors will not be permitted to subcontract any portion of the work. No subcontracts, or transfer of contract, shall in any case release the Contractor of liability under the Contract and bond.

The Contractor shall submit and file with the Engineer a signed copy of each subcontract. No work may be performed by a proposed subcontractor until the Contractor has received acknowledgment by the Engineer.

It shall be the responsibility of the Contractor to determine that all parties performing work amounting to \$20,000 or more are currently licensed by the Contractors Licensing Board for the State of Arkansas.

The Contractor shall pay all subcontractors their respective subcontract amount within 10 calendar days after the Contractor receives payment from the Department. The payment amount shall be according to the terms of the subcontract, except that the Contractor shall not require or withhold a retainage in excess of 10% of the amount due to the subcontractor. Amounts withheld as

retainage from subcontractors must be returned within thirty calendar days after the subcontractor's work is satisfactorily completed, whether the Contractor's work is complete or not. The term "satisfactorily completed" for the purpose of this prompt return of retainage provision is defined as when; 1) the subcontractor's work is completed in accordance with the plans and specifications, 2) all required paperwork, including material certifications, payrolls, etc., has been received and approved by the Engineer; 3) the subcontractor does not have past due balances with suppliers for work associated with the project; and 4) the Engineer has determined the final quantities for the subcontractor's portion of the work. Delay or postponement of payment to a subcontractor may only be effected after the Contractor has established good cause and received written approval from the Engineer. If the Contractor fails to pay the subcontractors within the required periods, all or any portion of subsequent payments due the Contractor may be withheld by the Engineer.

In addition to the allowable retainage specified above, the Contractor may withhold from payments due to the subcontractor amounts owed by the subcontractor to the Contractor for items on the Contract. Payments to subcontractors in the form of joint checks made payable to the subcontractor and any other party shall be documented either in the approved subcontract or by a separate written agreement between the Contractor and the subcontractor. **No other deductions from the full amount due will be allowed.**

Contractors must include in their subcontract agreements notice to subcontractors of their right to prompt payment and return of retainage, and provisions that require the subcontractor to pay second tier subcontractors as provided above, with the same restrictions on retainage.

108.02 Prosecution of Work. (a) Preconstruction Conference.

A preconstruction conference, when applicable, will be held for each contract as soon as possible after the execution of the Contract and generally before the work begins. The Engineer will notify the Contractor, utility companies, and other interested parties of the date and place for the conference.

(b) Work Order. The following shall apply to the various work orders applicable to the prosecution of the work:

(1) Except as provided herein, no work shall be performed under the Contract until the Engineer has issued a Work Order.

The Contractor shall notify the Engineer of intent to begin work at least 72 hours before work is begun.

(2) The delivery to the Department for execution of the Contract and bonds properly executed on behalf of the Contractor and surety and the minimum 72 hours advance notice as required above shall constitute the Contractor's authority to begin the following items of work:

- Mobilization;
- Preparation of shop drawings and other required submissions;
- Ordering, fabrication, assembly, and/or stockpiling of materials;
- Driving Test Piling; and
- Contract surveying, when Roadway and/or Bridge Construction Control is included in the Contract.
- Erection of advance warning signs.

Such advance work shall be subject to the Contractor's assumption of the risk of cancellation of the award and the following:

- The Contractor shall, on commencing such operations, take all precautions required for public safety and shall observe all the provisions in the Contract;
- In the event of cancellation of the award, the Contractor shall at Contractor expense do such work as necessary to leave the site in a neat condition to the satisfaction of the Engineer;
- In the event of cancellation of the award, all work performed shall be deemed to be at the Contractor's expense; and
- All work done under this subsection in accordance with the Contract before its execution by the Commission will, when the Contract is executed, be considered authorized work and will be paid for as provided in the Contract.

Unless otherwise notified in writing, no time will be assessed for work performed prior to the effective date of a Work Order.

No payments will be made prior to the date established by the Engineer under Subsection 109.07, which date will be after the effective date of a Work Order.

The Contractor shall not be entitled to any additional compensation or an extension of time for any delay, hindrance, or interference caused by or attributable to commencement of work before the effective date of a Work Order.

(3) Partial Work Order. A Partial Work Order may be issued which will describe the specific items and/or limits of work to be performed under the Partial Work Order. Assessment of contract time will be as described in the Work Order and payment will be made according to Section 109.

(4) Full Work Order.

a. Fixed Completion Date Contract. Unless the Contractor is otherwise advised in writing, the Work Order for a fixed completion date contract shall become effective on the day following the execution of the Contract by the Department. Should the effective date fall on Saturday, Sunday, a legal holiday designated in Subsection 101.01(c), Monday following a holiday on Sunday, or Friday preceding a holiday on Saturday, the effective date shall be the next work day. The written Work Order from the Engineer will follow with the effective date being as specified.

b. Working Day Contract. Unless the Contractor is otherwise advised in writing, the Work Order for a working day contract shall become effective on the fifteenth calendar day following the execution of the Contract by the Department. Should the effective date fall on Saturday, Sunday, a legal holiday designated in Subsection 101.01(c), Monday following a holiday on Sunday, or Friday preceding a holiday on Saturday, the effective date shall be the next work day. The written Work Order from the Engineer will follow with the effective date being as specified. No time will be assessed for any work performed including erection of traffic control devices during the 10 calendar day period following the effective date of the Work Order. The assessment of contract time, according to Subsection 108.06, will begin on the eleventh

calendar day following the effective date of the Work Order.

Except as specified in 108.02(b)(2) above, no work of any type, including the erection of traffic control devices, shall begin before the effective date of the Work Order.

(c) The Contractor shall begin the work to be performed under the Contract not later than 10 calendar days after the effective date of the Work Order. If the Contractor is unable to begin the work within this time period, the Engineer shall be so notified in writing. Unless the Engineer gives written approval for the delay in beginning the work, contract time will be assessed according to Subsection 108.06.

(d) The Department allocates its resources to a contract based on the total time allowed in the Contract. The Contractor may propose an accelerated work schedule indicating an early completion date; however, the Department cannot guarantee the Department's resources will be available to meet the accelerated schedule. No additional compensation or extension of time will be allowed if the Contractor is unable to meet the accelerated schedule due to the unavailability of the Department's resources or for other reasons beyond the Department's control.

108.03 Limitation of Operations. The Contractor shall conduct the work at all times in such a manner and in such sequence as will assure the least interference with traffic. Due regard shall be given to the location of detours and to the provisions for handling traffic. No work shall be opened up to the prejudice or detriment of work already started. The Engineer may require the Contractor to finish a section on which work is in progress before work is started on any additional sections if the opening of such section is essential to public convenience.

108.04 Character of Workers, Methods, and Equipment. The Contractor shall at all times employ sufficient labor and equipment for prosecuting the several classes of work to full completion in the manner and time required by these specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work

and in the operation of the equipment required to perform all work properly and satisfactorily.

Any person employed by the Contractor or by any subcontractor who, in the opinion of the Engineer, does not perform work in a proper and skillful manner, or is intemperate or disorderly shall, at the written request of the Engineer, be removed forthwith by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without the approval of the Engineer.

Should the Contractor fail to remove such person or persons as required above, or fail to furnish suitable and sufficient personnel for the proper prosecution of the work, the Engineer may suspend the work by written notice and withhold moneys due until such orders are complied with.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the project shall be such that no injury to the roadway, adjacent property, or other highways will result from its use.

When the methods and equipment to be used by the Contractor in accomplishing the construction are not prescribed in the Contract, the Contractor is free to use any methods or equipment that are demonstrated to the satisfaction of the Engineer as being capable of accomplishing the Contract work in conformity with the requirements of the Contract.

When the Contract specifies that the construction be performed by using certain methods and/or equipment, such methods and/or equipment shall be used unless others are authorized by the Engineer. If the Contractor desires to use a method or type of equipment other than those specified in the Contract, authority from the Engineer to do so must be requested. The request shall be in writing and shall include a full description of the methods 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 will be fully responsible for producing 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 contract requirements, the

Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining construction with the specified methods and equipment. The Contractor shall remove the deficient work and replace it with work of specified quality, or take such other corrective action as the Engineer may direct. No change will be made in basis of payment for the construction items involved nor in contract time as a result of an authorized change in methods or equipment under these provisions.

108.05 Temporary Suspension of Work. The Engineer will have the authority to suspend the work wholly or in part for such period or periods necessary, due to unsuitable weather or other conditions unfavorable for the suitable prosecution of the work. If it should become necessary to stop work for an indefinite period, the Contractor shall store all materials in such manner that they will not obstruct or impede the traveling public nor become damaged in any way, and shall take every reasonable precaution to prevent damage or deterioration of the work performed; provide suitable drainage of the roadway by opening ditches and shoulder drains; maintain the traveled way; erect temporary structures where directed; etc.

The Contractor shall not suspend the work nor remove any equipment or materials essential to the completion of the current phase of the project without the permission of the Engineer.

If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for a 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 ten (10) business days of the receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.

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 Engineer will notify the

Contractor of a determination whether or not an adjustment of the Contract is warranted.

No Contract adjustment will be allowed unless the Contractor has submitted the request for adjustment within the time prescribed.

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 for or excluded under any other term or condition of the Contract.

108.06 Determination of Time of Completion and Extension of Contract Time. (a) General. The time allowed for the completion of the work included in the Contract will be stated in the proposal and Contract, and will be known as the "Contract Time". The contract time will be specified as a fixed completion date or as working days.

The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project according to the plans and specifications within the contract time. The Contractor shall advance the work so that the available time is appropriately utilized in order to complete the work within the contract time.

Unless an emergency is declared, the Contractor shall not perform work that requires inspection on Sundays or legal holidays designated in Subsection 101.01(c) and the actual holiday if it falls on a Saturday or Sunday. If the Commission declares Friday following Thanksgiving Day as a Departmental holiday, the Contractor shall not perform work that requires inspection.

No claim for an extension of time will be considered as a result of failure of the Engineer to furnish interpretations of the plans and specifications until 30 calendar days after receipt of such demand in writing as required by Subsection 105.01, and not then unless such request for an interpretation is reasonable and made in good faith.

The Engineer will determine the date upon which the Contract is substantially complete and time assessment will cease. In the event cleanup is necessary or items found at the final inspection are to be corrected, the Contractor shall complete this work in a timely manner or the Engineer will resume time charges.

(b) Fixed Completion Date. When the contract time is specified as a fixed date, it will be the date on which all work on the project

shall be substantially complete. The Contractor shall take into consideration all normal conditions considered unfavorable to the normal progress of the work and place a sufficient work force and equipment on the project to ensure completion of the work within the contract time. Inaccessibility to a portion of the work due to utility conflict or utility work, either of which prevents effective utilization of 60% of normal forces and equipment for at least 60% of the Contractor's normal work hours, will be considered as an adverse working condition for time exceeding that specified in the Contract for the utility adjustment.

(c) Working Days. When the contract time is specified in working days, time will be assessed for each day on which, in the judgement of the Engineer and subject to the limitations below, conditions allow the Contractor to effectively utilize 60% of normal forces and equipment to prosecute the work required at that time, for at least 60% of the Contractor's normal work hours, regardless of whether the Contractor actually works.

The Engineer will not assess a working day when conditions exist beyond the control and without the fault of the Contractor that prevent the utilization of forces and equipment as defined above. Also, for the purpose of assessment of working days, inaccessibility to a portion of the work due to utility conflict or utility work, either of which prevents utilization of forces and equipment as defined above, will be considered as an adverse working condition for time exceeding that specified in the Contract for the utility adjustment. The ability of vendors, suppliers, and subcontractors to provide materials and/or services is considered within the Contractor's control for the purpose of assessment of working days.

Should the Contractor prepare to begin work on any day on which inclement weather, or the conditions resulting from the weather, prevent the work from beginning at the usual starting time, and the crew is dismissed as a result, the Contractor will not be charged for a working day whether or not conditions change during the day and the rest of the day becomes suitable for construction operations.

Time from December 21 through March 15, inclusive, will not be assessed against the contract time.

Saturdays and Department recognized holidays, other than those designated above, which may be declared by the Department for

certain special or unusual circumstances, will be optional to the Contractor as working days, and time will not be assessed unless work is performed that requires inspection. If work is performed, contract time assessment will be based upon the same conditions as a normal working day.

Contract time will be assessed during a Partial Work Order period according to Subsection 108.02(b)(3).

Contract time will not be assessed during a full suspension of the work as ordered by the Engineer. During a partial suspension of the work as ordered by the Engineer, the contract time will be assessed in direct proportion to the ratio of the money value of the items not suspended to the total contract amount.

At the end of each estimate period, the Engineer will furnish the Contractor a written statement showing each working day charged during the preceding period and the total number of working days charged to date. If the Contractor disagrees with the working days charged by the Engineer, then the Contractor shall, within 10 calendar days after receipt of the statement, give the Engineer written notice of such disagreement and the reasons therefor. Subsequent handling of this dispute shall be according to Subsection 105.01. If the Contractor fails to protest the Engineer's determination of working days charged within the 10 calendar day period, the Contractor shall be deemed to have accepted the time charged for that period as correct and no subsequent request for review will be considered.

(d) Extension of Contract Time. If the Contractor is unable to complete the work within the contract time as specified, at any time prior to the final acceptance of the project, a written request may be made to the Engineer for an extension of time. This request must contain specific dates and the detailed circumstances relative to the time extension desired. The Contractor's contention that insufficient time was specified is not a valid reason for an extension of time.

All extensions of time, except extensions due to overruns, will be documented by Change Order.

Any extended time for completion shall be in full force and effect the same as though it were the original contract time.

(1) An extension of time will be granted:

a. On fixed completion date projects, if the Work Order is not issued within 30 calendar days after the execution of the Contract. An extension of time will be given based on the number of days delayed beyond the 30 calendar days.

b. On fixed completion date projects, for time elapsing between the effective dates of any order from the Engineer for a complete or partial suspension of the work, when such suspension is due to no fault of the Contractor. Days assessed during a partial suspension period will be determined by dividing the money value of the work performed during the partial suspension period by the money value of one day. The money value of one day will be based on the ratio of the total contract amount to the number of calendar days from the date of the work order through the fixed calendar date stipulated in the Contract, both dates inclusive.

c. On fixed completion date projects, if the total dollar value of accumulated current estimates or the final estimate, **exclusive of incentives and disincentives**, exceeds the dollar value of the total contract bid, the completion date will be extended by the number of calendar days obtained by multiplying the contract time as set forth in the Contract by that percentage that the dollar value of the estimate exceeds the dollar value of the total contract bid. When this occurs, the extension of time will be based upon the number of calendar days from the date of the work order through the fixed calendar date stipulated in the Contract, both dates inclusive.

d. On jobs on which time is specified in working days, the contract time will be increased in the same proportion that the total dollar value, **exclusive of incentives and disincentives**, exceeds the total contract bid.

(2) An extension of time will be considered, based upon documented evidence submitted by the Contractor, if:

a. The Contract requires the furnishing of critical materials and the Contractor experiences a delay in delivery because of Federal priorities for defense needs or

because of nationwide shortages. Additional contract time may be allowed in an amount equal to the actual lost time resulting from such delay. To obtain additional contract time, the Contractor shall document and file with the Engineer all evidence pertaining to the original agreement with the material supplier or manufacturer. This evidence must indicate that delivery would be made at or before the time the materials would be needed in the normal sequence of construction operations for incorporation in the work. In the event that no prior agreement has been made for furnishing a critical material, and the Contractor is unable to locate a supplier or manufacturer that can deliver the material when needed, the Engineer shall be advised of this situation in writing, indicating the date that delivery will be made and the date of the original request for such material. In either of these situations, when work has progressed to the point that critical materials not delivered are delaying progress of the project, the Contractor may make a written request to the Engineer for additional contract time.

b. The work has been delayed by any act or omission of the Commission.

c. Preparatory work to be performed by the Owner or by others specified in the Contract has not been accomplished and the delay is not the fault of the Contractor.

d. Weather conditions or the condition of the ground or materials were significantly abnormal and these conditions significantly delayed the work. For consideration of a time extension based on weather conditions, the Contractor shall submit, in writing, documented evidence of the conditions that existed for the specific days requested. The Engineer will verify the validity of the request.

e. Change Orders involve extra work and the time needed to complete this extra work would exceed the normal time extension as a result of overruns, based on money value, the completion date may be extended by Change Order to provide for this difference.

f. It is determined that anticipated time extensions due to overruns did not materialize due to underruns in other items.

g. The work was delayed because of conditions not described herein that were beyond the control and without fault of the Contractor.

108.07 Failure to Complete Work on Time. Time is an essential element of the Contract and it is important that the work be pressed vigorously to completion. The cost to the Department of the administration of the Contract, including engineering, inspection, and supervision, will be increased as the time occupied in the work is lengthened. Loss will accrue to the public due to delayed completion of the contemplated facility.

For each calendar day or working day, as specified, that work remains uncompleted after the contract time has expired, the sum specified in the proposal and Contract will be deducted from any money due the Contractor, not as a penalty, but as liquidated damages.

Should the amount otherwise due the Contractor be less than the amount of such liquidated damages, the Contractor and the Surety shall be liable to the Department for such deficiency.

Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Department of any of its rights under the Contract.

108.08 Default and Termination of Contract. The Engineer will give written notice of delay, neglect, or default to both the Contractor and the Surety if the Contractor:

(a) Fails to begin the work under the Contract within the time specified in the Work Order, or

(b) Fails to perform the work with sufficient workers, equipment, or materials to assure prompt completion of the work, or

(c) Performs the work negligently or unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable or unsuitable, or

(d) Discontinues the prosecution of the work, or

(e) Fails to resume work that has been discontinued within 10 calendar days after notice to do so, or

(f) Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or fails to provide a replacement bond within 10 calendar days, containing all the guarantees of the original bond, if the Surety should be declared in default and/or liquidation, or

(g) Fails to settle all valid claims for materials, labor, or supplies in an expedient manner, or

(h) Allows any final judgment to stand unsatisfied for a period of 10 calendar days, or

(i) Makes an assignment for the benefit of creditors, or

(j) Fails to refund any moneys due the Commission due to errors in determining pay quantities for estimates within 30 calendar days, or

(k) Fails to appropriately cooperate with the Department, the public, or others associated with the work or to provide proper superintendence of the work, or

(l) Fails to comply with contract requirements, or

(m) Is a party to fraud, or

(n) For any other cause whatsoever, fails to carry on the work in a manner acceptable to the Department.

If the Contractor or Surety, within a period of 10 calendar days after written notice from the Engineer, does not proceed according to the notice, the Commission will, upon written notification from the Engineer of the facts relative to delay, neglect, or default, and the Contractor's failure to comply with the written notice, have full power and authority, without violating the Contract, to take the prosecution of the work out of the hands of the Contractor. The Commission may appropriate or use any or all materials and equipment associated with the project as may be suitable and acceptable and may enter into an agreement for the completion of the Contract according to the terms and provisions thereof, or use such other methods as in the opinion of the Engineer will be required for the completion of the Contract.

All costs and charges incurred by the Commission due to any of the above will be deducted from any moneys due or which may become due the Contractor. If such expense exceeds the sum that

would have been payable under the Contract, the Contractor and the Surety shall be liable and shall pay to the Commission the amount of such excess. Such charges shall include but not be limited to the cost of completing a part or all of the work under the Contract, for calculating and collecting any compensating taxes due under Ark. Code Ann. §26-53-201 et seq. and Ark. Code Ann. §17-22-401 et seq. (formerly Act 125 of 1965), and for the collection of any overpayments due the Commission.

The Department may, by written order, terminate the Contract or any portion thereof after determining that for reasons beyond either Department or Contractor control the Contractor is prevented from proceeding with or completing the work as originally contracted for, and that termination would be in the public interest. Reasons for termination may include, but need not be necessarily limited to: executive orders of the President relating to prosecution of war or national defense; national emergency that creates a serious shortage of materials; orders from duly constituted authorities relating to energy conservation; and restraining orders or injunctions obtained by third-party citizen action resulting from national or local environmental protection laws or where the issuance of such order or injunction is primarily caused by acts or omissions of persons or agencies other than the Contractor.

When contracts, or any portion(s) 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. No claim for loss of anticipated profits will be considered.

Reimbursement for organization of the work (when not otherwise included in the Contract) and moving equipment to and from the project 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.

Acceptable materials, obtained by the Contractor for the work, that have been inspected, tested, and accepted by the Engineer, and that are not incorporated in the work may, at the option of the Engineer, 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.

Termination of a contract or a portion thereof shall not relieve the Contractor of responsibilities for the completed work, nor shall it relieve the Surety of its obligation for and concerning any just claims arising out of the work performed.

108.09 Vacant.

108.10 Suspension or Termination of Contract Because of Insufficient Appropriation of Funds. When the construction of the project is being financed, in whole or in part, with funds provided by an agency or agencies of government other than the State of Arkansas and should such agency or agencies fail to appropriate and make available sufficient funds for the normal prosecution of the Contract, the Commission reserves the right to:

- delay issuance of the initial work order to the Contractor until sufficient funds have been made available,
- suspend construction operations on the project after the Work Order has been issued until sufficient funds have been made available, or
- terminate the Contract upon giving 30 calendar days written notice to the Contractor.

If suspension of construction operations is ordered, the requirements of Subsection 108.05, as applicable, shall govern.

If the Contract is terminated by the Commission, the requirements of Subsection 108.08, as applicable, shall govern.

If it becomes necessary to suspend work because of insufficient funds, additional time for completion will be allowed equal to the period during which work is necessarily so suspended. In no case will additional compensation be allowed for such suspension of work except an equivalent extension of time for completion of the Contract.

108.11 Termination of Contractor's Responsibility. The Contract will be considered complete when all work has been finished, the final inspection made by the Engineer, and the project accepted by the Department. The Contractor's responsibility shall then cease, except as may be required by law or as set forth in the Surety bonds and insurance policies.

SECTION 109 MEASUREMENT AND PAYMENT

109.01 Measurement of Quantities. Work acceptably completed under the Contract will be measured by the Engineer according to United States Standard measures or the International System of units (SI, or metric). **The unit of measure designated by the contract, be it US Standard or metric, will be the governing dimension for all inspection, testing, staking, and quantities on the project.** Only actual quantities will be paid for unless otherwise specified. Unless otherwise specified, the following listed methods will be used:

(a) For computing volumes of excavated materials, such as excavation, embankment, borrow, soil aggregate, etc., specified for measurement by the cubic yard (cubic meter), the average end area method will be used.

(b) Structures will be measured to the neat lines as shown on the plans or as finally constructed at the direction of the Engineer.

(c) Items that are measured by the linear foot (meter), such as pipe culverts, guardrail, underdrains, etc., will be measured parallel to the base or foundation upon which such structures are placed.

(d) In determining the area for items bid on a square yard (square meter) or acre (hectare) basis, except as noted below, the longitudinal measurement will be made along the actual surface of the item and not horizontally, and transverse measurements shall conform to the dimensions shown on the plans or as directed by the Engineer. For items measured by the square yard (square meter), no deduction will be made for any fixture or opening having an area of 9 square feet (1 square meter) or less.

In determining the area for clearing and/or grubbing items bid on an acre (hectare) basis, the longitudinal and transverse measurements will be made on a horizontal basis. The area will be computed to the nearest 0.01 acre (0.01 ha).

In determining the area for all seeding and mulch cover items bid on an acre (hectare) basis, when the area is a strip of varying width running approximately parallel to the centerline of the roadway, the

longitudinal dimension will be measured horizontally and the transverse dimension will be measured parallel to the surface of the area seeded and/or mulched. For other areas of seeding and mulch cover items, all measurements will be made parallel to the surface of the area seeded and/or mulched. The area will be computed to the nearest 0.01 acre (0.01 ha). No deduction will be made for driveways, streets, and similar gaps that are 20' (6 m) or less in the dimension parallel to the centerline of the roadway, nor for ditch paving or similar construction that is 6' (2 m) or less in width.

(e) Materials that are specified for measurement by the cubic yard (cubic meter) in vehicles shall be hauled in approved vehicles and measured therein at the point of entry on the project. Approved vehicles for this purpose may be of any type or size satisfactory to the Engineer, provided the body is of such type that the actual volume of the contents may be readily and accurately determined. No vehicle will be allowed to haul before measurements have been taken by the Department for determination of volumetric capacity.

The volume will be computed to the nearest 0.01 cubic yard (0.01 cu m) and rounded to the nearest 0.1 cubic yard (0.1 cu m). The capacity of each vehicle shall be plainly marked on such vehicle and the marking shall not be changed without permission of the Engineer. In addition, each vehicle shall bear a plainly legible identification number.

The Contractor shall strike off and level the loads and the inspector will inspect each load to check its volume at the point of entry on the project.

When requested by the Contractor and approved by the Engineer, materials specified to be paid for by the cubic yard (cubic meter) may be measured by weighing the material according to (f) below and converting to cubic yards (cubic meters) by a constant factor, computed by determining the average weight of a minimum of three loads, deducting for moisture in excess of 5%, and dividing the known volume by the computed weight.

(f) Materials that are specified for measurement by the ton (metric ton) shall be hauled in approved vehicles bearing a plainly legible identification number and weighed on accurate, approved scales furnished by the Contractor and inspected by a registered scale mechanic at least once a year and before their use after each

move. Scales shall be located at the loading point or other approved location.

The scales shall be an automatic weighing system, with digital or springless dials, and equipped with an automatic ticket printer. An automatic ticket printer is defined as a device connected to the weighing system in such manner that it automatically detects the weight determined by the system. It shall store and recall the TARE weight when the operator enters the truck identification. It shall print the following information on the ticket:

- Gross, Tare, and Net weights.
- Identification of the truck.
- Current date.
- For asphalt mixtures, the time of loading or weighing.
- A unique ticket number (may be preprinted on the tickets).

The NET weight should be computed by the weighing system; however, it may be computed manually and keyed in for printing.

When the net weight of the material is determined by batch weights, the scales used shall meet all applicable requirements specified for truck scales, including automatic ticket printing, except that the GROSS and TARE weights will not be required.

The ticket shall accompany each load delivered to the project. In addition to the items shown above that must be printed by the ticket printer, the following information shall also be shown on each ticket:

- Identification of the project.
- Identification of the material being delivered, including mix design numbers for asphalt mixtures.

The ton shall be the short ton of 2000 pounds. (The metric ton shall be 1000 kg.) Vehicles used to haul materials measured by weight shall be weighed empty for each load, or shall be weighed daily or from time to time during the day as the Engineer may direct, to establish the tare weight of each load. The scales furnished shall be capable of weighing the entire loaded vehicle at one time.

Deduction will be made for the weight of moisture in aggregates in excess of 5% of the oven-dry weight of the material.

When requested by the Contractor and approved by the Engineer, aggregates specified to be paid for by the ton (metric ton) may be

measured by the cubic yard (cubic meter) in vehicles as specified in (e) above and converting to tons by a constant factor established by determining the average weight of a minimum of three loads, deducting for moisture in excess of 5%, and dividing by the known volume.

(g) Asphalt binders, liquid asphalts, and asphalt emulsions will be measured by the gallon (liter or kiloliter) or by the ton (metric ton) in distributors, transfer tanks, supply tanks, or tank cars as may be appropriate; or may be measured by other methods specified under the individual item. Volumetric measurements of asphalt binders and liquid asphalts will be corrected to 60° F (15 °C) using correcting tables from Chapter 11, Section 1, of the American Petroleum Institute's *Manual of Petroleum Measurement Standards*. Volumetric measurements of asphalt emulsions will be corrected to 60° F (15 °C) using the expansion coefficient factor of 0.00025 per degree Fahrenheit (0.00045 per degree Celsius). Water added to dilute emulsified asphalt will not be included in the pay quantity.

Volumetric measurements made in the various types of tanks, including distributors, may be based on calibration of the tanks made by the Engineer, an authorized employee of another State Department of Transportation, a private laboratory approved by the Engineer, or by the manufacturer. If the calibration has not been made by the Engineer, the Department reserves the right to verify the calibration before the use of the distributor or tank. In the case of railroad tank cars or distributors, the outage table furnished for each tank by the manufacturer may be used in lieu of actual calibration of the tank.

The Contractor shall furnish, at no cost to the Department, all necessary equipment, materials, and assistance for such calibration or verification. The Contractor shall furnish the Engineer with an outage table, obtained from the shipper, for each railroad tank car containing asphalt material received and unloaded on the project. When shipment is made by tank truck, the Contractor shall furnish the Engineer with a copy of the delivery ticket for each load showing the gallons (liters) at the temperature when loaded, but in no case shall such delivery ticket be used as a sole basis of payment in lieu of measurement through a calibrated distributor or tank. Pay quantities will include only the material actually used on the work at the direction of the Engineer.

(h) Timber will be measured by 1000 foot board measure, (M.F.B.M.) [cubic meter]. Measurements will be based on nominal width and thickness based on applicable grading rules.

(i) The term "gage" (or "gauge"), when used in connection with the measurement of plates, will mean the U.S. Standard Gage.

Wire and wire mesh for concrete reinforcing will be specified by wire size number as shown in AASHTO M 32.

(j) Cement will be measured by the ton (metric ton). Fly ash or ground granulated blast-furnace slag used as a replacement for cement will be measured as cement.

(k) A station (metric station) when used as a definition or term of measurement will be 100 linear feet (100 meters) measured horizontally.

(l) The term "lump sum" when used as an item of payment will mean complete payment for the work described in the Contract.

When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gage, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.

It is the intent of these Specifications that ALL measurements of pay quantities shall be made according to the system of measurement used in the Contract. If a pay quantity in a metric contract is measured in English units and it is not feasible to re-measure the quantity in metric units, the conversion factors listed in the following table will be used to convert the measured quantity to the pay quantity. The Contractor will be responsible for converting any products purchased for incorporation into the work into the Contract units. Any products manufactured by the Contractor or subcontractor for incorporation into the work shall be produced in the units designated in the Contract. The results of the conversion

will be rounded to the appropriate number of significant figures, but in no case to a precision greater than 0.01 unit.

Conversion Factors for Pay Quantities

<u>Multiply</u>	<u>by</u>	<u>to get</u>
inch	25.4000	millimeters (mm)
foot	0.3048	meter (m)
yard	0.9144	meter (m)
mile	1.6093	kilometer (km)
square inch	645.1600	square millimeter (sq mm)
square foot	0.0929	square meter (sq m)
square yard	0.8361	sq m
acre	0.4047	hectare (ha) [10,000 sq m]
cubic inch	16.3871	cubic centimeter (cc)
cubic foot	0.0283	cubic meter (cu m)
cubic yard	0.7646	cu m
gallon	3.7854	liter (L)
pound	0.4536	kilogram (kg)
ton (2000 lb)	0.9072	metric ton (mton) [1,000 kg]

109.02 Scope of Payment. Payments to the Contractor will be made for the actual quantities of contract items completed and accepted according to the plans and specifications and if, upon completion of the construction, these actual quantities show either an increase or decrease from the quantities given in the proposal schedule, the contract unit prices will still prevail, except as provided in Subsections 109.03 or 109.04.

The Contractor will receive and accept the compensation herein provided as full payment for furnishing all materials, labor, equipment, tools, and incidentals necessary to the completed work; for performing all work contemplated and embraced under the Contract; for all loss or damage arising out of the nature of the work, or from the action of the elements, or from any unforeseen difficulties or obstructions that may arise or be encountered during the prosecution of the work until its final acceptance by the Commission; for all risks of every description connected with the prosecution of the work; for all expenses incurred by, or in consequence of, the temporary suspension or discontinuance of the work as herein specified; for any infringement of patent, trade mark,

or copyright; for all costs of permits, licenses, fees, and taxes; and for completing the work in an acceptable manner according to the plans and specifications. The payment of current or final estimate, or of retained percentage, shall in no degree prejudice or affect the obligation of the Contractor, at no cost to the Department, to repair, correct, renew, or replace any defects or imperfections in the construction of the roadway and its appurtenances, or in the strength of or quality of materials used therein or thereabouts, or relieve the Contractor from the payment of all damages due to such defects; provided such defects, imperfections, or damages shall be discovered on or before the final inspection or acceptance of the entire work. No retained percentage payable under the Contract, or any part thereof, shall become due and payable, if the Commission so elects, until the Commission is satisfied that the Contractor has fully settled or paid for all materials and equipment used in or upon the work, and for all labor done in connection therewith, and the Commission, if it so elects, may pay any or all such accounts wholly or in part and deduct the amount or amounts so paid from the final estimate.

Any overpayments made to the Contractor or Surety, from whatever cause, are due and payable to the Department upon receipt by the Contractor or Surety of a request setting forth the particulars, regardless of pending claims or intention of the Contractor or Surety to file a claim.

109.03 Payment and Compensation for Altered Quantities.

When alterations in plans or quantities of work not requiring supplemental agreements are ordered and performed as provided in Subsection 104.02 or 104.03, and when such alterations result in an increase or a decrease of the quantity of work to be performed, the Contractor shall accept payment in full at the contract unit prices for the actual quantities of work accomplished, except as provided in Subsection 104.02 or 104.03, and no allowance will be made for anticipated profits, organization or overhead expense, or interest. Increased or decreased work involving supplemental agreements will be paid for as stipulated in such agreements.

109.04 Extra and Force Account Work. (a) Supplemental Agreement. Extra work performed under a Supplemental Agreement shall be agreed upon by both the Engineer and the Contractor and shall be documented by an approved Change Order

before the work is performed. When the Engineer deems it impractical to handle extra work on a unit price basis, payment specified in the Supplemental Agreement may be by any method agreed upon by both the Engineer and the Contractor. Mutual agreement between the Engineer and the Contractor as to the amount to be paid and method of payment under a Supplemental Agreement may be based on an estimate of the costs of performing the work; detailed information such as required for Force Account work; or any other logical method to which both parties agree which estimates costs incurred, excluding loss of anticipated profits and organization or overhead expense.

(b) Force Account. Work ordered and accomplished by Force Account shall be documented by an approved Change Order **prior to beginning the work.** Payment for work accomplished on a Force Account basis, shall be made according to the following:

(1) Labor. For all labor and foremen employed on the specific operation, the Contractor will receive the current local rate of wage, or the wage stipulated in the Contract, for each and every hour that said labor and foremen are actually engaged in such work, to which will be added an amount equal to 20% thereof. Only the actual amount of insurance and payroll taxes imposed by law and paid by the Contractor on the labor used will be allowed. No charge shall be made by the Contractor for organization or overhead expense. The number of laborers and foremen employed in the work shall be subject to regulation by the Engineer, and the number so employed shall not exceed the number the Engineer deems most practical and economical for the work.

(2) Materials. For all materials used, if furnished by the Contractor, the Contractor will receive the actual cost of such materials, including freight, hauling, and handling charges, as shown by original receipted bills or certified statements, to which cost will be added a sum equal to 15% thereof.

(3) Equipment. For any Contractor owned machinery or special equipment (other than small tools) which has been authorized by the Engineer, the Contractor shall receive the rental rates specified in the Change Order authorizing the work. The hourly rental rates shall be determined from the applicable monthly schedule in the current edition of the *Rental Rate Blue*

Book for Construction Equipment, published by EquipmentWatch, a PRIMEDIA Business Directories and Book Group, as follows:

The established rental rate shall be equal to the monthly rate for the basic equipment plus the monthly rate for applicable attachments, both divided by 176, all multiplied by the regional adjustment factor and the rate adjustment factor, plus the estimated hourly operating costs.

For equipment not listed in this schedule, the Contractor shall receive a rental rate as agreed upon and specified in the Change Order for the work. If agreement cannot be reached, the Department reserves the right to establish a rate based on similar equipment in the schedule or on prevailing commercial rates in the area.

Equipment that must be rented or leased specifically for extra work required by Change Order shall be authorized in writing by the Engineer. The Contractor shall be paid the invoice price for the rented or leased equipment, but not to exceed the applicable "Blue Book" rate, plus the estimated hourly operating costs.

When it is necessary to obtain equipment from sources beyond the project limits exclusively for extra work of less than one month duration, the cost of transferring the equipment to the site of the work and return will be allowed as an additional item of expense. Where the move requires the use of a hauling unit, the move-in allowance will be limited to the rental rate, as computed above, for the hauling unit plus operator wages. In the event that the equipment is transferred under its own power, the moving allowance will be limited to one half of the hourly rental rate, as computed above, plus operator's wages. In the event that the move-out is to a different location, payment will in no instance exceed the amount of the move-in. Move-in allowance shall not be made for equipment brought to the project for extra work but which is subsequently retained on the project and utilized for completion of other contract items or related work.

Standby time will be paid only on valid and documented claims made for equipment under Section 104.02 or on equipment ordered brought to the project or ordered held on the project by the Engineer. Equipment already on the project to

complete other contract items will not be considered for payment for standby time.

Equipment authorized or deemed by the Engineer to be on a standby basis shall be paid for at the standby rental rate for the number of hours in the Contractor's normal work day, but not to exceed 8 hours per day. The standby rental rate shall be computed by the following formula:

$$\text{Standby rate} = \frac{\text{Established rental rate} - \text{Operating costs}}{2}$$

Time will be recorded to the nearest one quarter hour for purposes of computing compensation to the Contractor for equipment utilized under these rates.

The equipment rates as determined above shall be full compensation for providing the required equipment and no additional compensation will be made for other costs such as, but not limited to, fuels, lubricants, replacement parts, or maintenance costs. Cost of repairs, both major and minor, as well as charges for mechanic's time utilized in servicing equipment to ready it for use before moving to the project, and similar charges will not be allowed.

(4) The compensation as herein provided shall be received by the Contractor as payment in full for extra work done on a Force Account basis, and shall include the proper supervision of the work as well as furnishing small tools and equipment required by the labor employed, without additional compensation other than provided in clauses (1), (2), and (3) of this subsection. The Contractor's representative and the Inspector shall compare records of the extra work done on a Force Account basis, at the completion of certain units of the work or at intervals considered most practical. Copies of those records shall be made in duplicate, upon suitable forms provided for this purpose, and signed by both the Inspector and Contractor's representative, one copy each being forwarded to the Engineer and to the Contractor. All claims for extra work done on a Force Account basis, shall be submitted to the Engineer by the Contractor upon certified statements, to which shall be attached original receipted bills or certified statements covering the cost of and the freight charges on all materials used in such work, and said statements 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, equipment, and material accounts properly chargeable to the work. Payment will then be made on the next regularly scheduled estimate following receipt of all required documents.

109.05 Vacant.

109.06 Vacant.

109.07 Partial Payments. (a) Current Estimates. The Engineer will make in writing, at two-week intervals, an estimate of the materials in place and the amount of work performed during the preceding period and the value thereof at the contract unit prices. Payments for lump sum items will be made in proportion to the amount of work accomplished, as determined by the Engineer. Payments made on current estimates shall be subject to correction on any subsequent current estimate and/or on the final estimate.

The estimate period will begin on Monday and the initial beginning date will be established by the Engineer at the preconstruction conference.

The Engineer may withhold any current estimate or portion thereof if the Contractor is negligent or delinquent in submitting any required forms or documents, or if a timely response is not given to a request made by the Department for information, price quotations, or other data pertinent to the prosecution of the work.

(b) Materials Estimates. At the request of the Contractor, the Engineer may at any time submit a materials estimate which will include the value of all aggregates, signing and lighting materials, precast concrete products, pipe culverts, piling, bridge railing, guard fence, reinforcing steel, structural steel, steel wire mesh, or other approved manufactured or commercially produced materials, delivered on the job site or placed in an approved storage area, but not incorporated into the work at the time of such estimate, provided the total value of such materials, including freight charges, appearing on any one estimate is not less than Twenty Thousand Dollars for paid invoices or Fifty Thousand Dollars for unpaid invoices, and only with agreement of the Surety. The approved storage area for materials for which advanced payment is made must be located within the State of Arkansas. This requirement may be waived if the Contractor provides the Department a separate bond for the full amount of the requested estimate. This Advance

Materials Payment Bond shall remain in effect until the full amount of the advance payment has been recovered. All estimates in which materials allowances are made shall be approved by the Engineer in writing before payment and the Contractor shall be responsible for the storage, safekeeping, and delivery in acceptable condition of all materials for which payments have been allowed.

Materials estimates will be allowed only for those materials that will be permanently incorporated into the work. The quantities allowed on a materials estimate will not exceed the plan quantities or quantities established by approved change order. Payments made on materials estimates will be deducted as the material is incorporated into the work.

To request advance payment for stockpiled materials for which the Contractor has paid in full, the Contractor shall submit the following documentation:

1. Written request for advance payment for stockpiled material, signed by the Contractor and the Surety.
2. Documentation of the quantity and cost of the material.
3. For commercially produced or manufactured material, receipted (paid) bills or invoices, signed by a duly authorized Officer of the firm supplying the materials and properly notarized.
4. For materials produced by the Contractor, detailed statements showing the delivered cost of the material. Such statements shall also include receipted (paid) bills or invoices for royalty payments and/or a Certification of Ownership signed by a duly authorized Officer of the firm supplying the material and properly notarized.
5. Certification by the Contractor that the material meets the Specification requirements for the stage of production at which the material is stored.

To request advance payment for stockpiled materials for which the Contractor has NOT paid in full, the Contractor shall submit the following documentation:

1. A written request for advance payment for stockpiled material, signed by the Contractor, the Supplier, and the Surety. This statement shall plainly state that the materials have not yet been paid for and that the Supplier shall be paid in full within 10

calendar days from the Contractor's receipt of payment by the Department. It shall further state that the Contractor shall provide the Department with paid invoices within 10 calendar days of payment to the Supplier and that the Surety agrees to responsibility for payment should the Contractor fail to so pay.

2. Documentation of the quantity and cost of the material.
3. For commercially produced or manufactured material, unpaid bills or invoices, signed by a duly authorized Officer of the firm supplying the materials and properly notarized.
4. Certification by the Contractor that the material meets the Specification requirements for the stage of production at which the material is stored.

109.08 Surplus Materials. Materials purchased or produced according to the plans or Contract, actually delivered and on hand and surplus to the needs of the project through any act or omission of the Department, may with the approval of the Engineer, be purchased by the Department. Payment will be made through the current or final estimate and shall be based on actual delivered cost to the Contractor as shown by receipted, paid bills, or by an approved certified statement of cost of production. All materials paid for as provided above shall be placed in the possession of the Department at the site and become the property of the Department.

109.09 Acceptance and Final Payment. The Engineer will approve the estimate for final payment after previous payments have been deducted, and will notify the Contractor and Surety of such approval.

Before delivery of the final payment, the Engineer shall receive from the Contractor a written acceptance of the final estimate as payment in full for the work done. The final estimate shall be considered as the final payment even though it may be a zero amount. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

SECTION 110 PROTECTION OF WATER QUALITY AND WETLANDS

110.01 General. This work shall consist of measures taken to prohibit the degradation of water quality and wetlands. The purpose is to limit, control, and contain fill materials, soil erosion, sedimentation, and other harmful wastes resulting from construction operations that could result in harm to the wetlands and waters of the United States. These requirements apply even if Corps of Engineer (C of E) Section 404 or National Pollutant Discharge Elimination System (NPDES) Permits are not required for the project.

This Section applies to all activities under the Contract. The Contractor should be aware that requested modifications to the Contract and/or individual permits may not be approved.

These Specifications require compliance with all applicable Federal, State, and local permits and requirements on sites outside of the Right-of-Way limits utilized by the Contractor for the benefit of the project. While the primary enforcement of these requirements for locations off of the Right-of-Way rests with the applicable regulatory government agency, the Department retains the right and authority to inspect and enforce Contractor compliance should violations come to the attention of the Department.

110.02 Responsibility of the Contractor. The Contractor shall comply with the requirements of the Federal Water Pollution Control Act, 33 USC § 1251 et seq., the Arkansas Water and Air Pollution Control Act, Ark. Code Ann. § 8-4-101 et seq., and the regulations, orders, or decrees issued pursuant thereto. In the event of conflict between these regulations, orders, or decrees and the provisions shown on plans, the more restrictive requirements shall apply.

110.03 C of E Section 404 Permit for Department Right-of-Way and Contractor Facilities. (a) General. All requirements of this subsection shall apply to those Contractor's activities covered by the Department's C of E Section 404 Permit on or off the right-of-way. Section 404 of the Federal Water Pollution Control Act, as amended, establishes a permit program for the regulation of discharges for dredged or fill material and excavation in wetlands and other waters of the United States.

(b) Responsibility for Initial Permit. The Department will obtain all required Section 404 Permits for essential work on the right-of-way before the Contract is awarded. Contract documents will detail the location and amount of permanent and/or temporary fills, excavation, and clearing activities allowed under this permit.

(c) Contractor Requested Permit Modifications. The Contractor shall submit a request on a form provided by the Department to the Engineer for any activity involving wetlands or waters of the U.S. on or off the right-of-way and not covered by the Department's C of E Section 404 Permit prior to performing the activity. The Contractor shall be prepared to prove there is no practicable alternative to the Section 404 Permit change being requested. A determination will be made by the Engineer within 10 business days concerning the necessity or practicability of the request. The Department will then apply for permit modifications which it determines to be necessary or practicable. The Contractor should be aware that C of E review of proposed modifications to a Section 404 Permit may require 60-120 calendar days. These requested changes may be denied or modified by the Department or C of E. Requested modifications which require mitigation will be denied by the Department.

If the Department declines to consider a Permit modification request by the Contractor for an off right-of-way activity, the Contractor may apply for his own Section 404 Permit.

(d) Compensation and Extension of Contract Time. The Contractor will not be granted additional compensation or contract time due to requested modifications of the Section 404 Permit that are considered by the Engineer to be for the convenience of the Contractor. If, however, due to no fault of the Contractor, a Section 404 Permit modification involving on right-of-way activities is deemed by the Engineer to be necessary, additional contract time and/or compensation may be considered according to the provisions of Section 104.

110.04 NPDES Permit for Contractor Facilities Off the Right-of-Way. The National Pollutant Discharge Elimination System (NPDES) requires a permit to discharge storm water associated with industrial activity or construction sites into the waters of the United States. The Arkansas Department of Environmental Quality (ADEQ) issues these permits.

Contractor's operations on lands located off the right-of-way, such as borrow pits, plant sites, waste sites, or other facilities, may require an NPDES permit. If so, the Contractor shall be responsible for submitting the Notice of Intent, developing a Storm Water Pollution Prevention Plan, implementing the plan, stabilizing the land, submitting the Notice of Termination, and complying with all requirements in the permit and any revisions or additions to it. Contractor facilities off the right-of-way will not be covered by the NPDES permit obtained by the Department for the right-of-way.

110.05 NPDES Permit for Department Right-of-Way. The Department will obtain an NPDES Permit for all disturbed Department right-of-way lands and easements.

The Department's Storm Water Pollution Prevention Plan (SWPPP) will contain the temporary and permanent erosion and sedimentation control devices for the right-of-way.

110.06 Standard Conditions. (a) General. The following conditions are required on all projects for the protection of water quality and wetlands:

- Compliance with all conditions of the C of E Section 404 permit, NPDES permit and Section 401 Water Quality Certification.
- To the maximum extent practicable, discharges of dredged or fill material into waters of the United States shall be avoided or minimized through the use of other practicable alternatives.
- Construction activities shall not cause unacceptable interference with navigation.
- No activity shall substantially interrupt the movement of the species of aquatic life native to the waterbody, including those species which normally migrate through the area.
- Under a Nationwide Section 404 Permit, no activity shall occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in official study status. Individual permits shall be obtained for activities occurring in these rivers.
- No storage of petroleum, other chemical products, waste materials, trash, etc., shall be allowed within 30 meters (100 feet) of a wetland or waterbody boundary or elevation as shown on the plans. The Engineer reserves the right to limit the storage of any material within the floodplain of a stream to preclude the possibility of an unlawful discharge to the stream.
- To move clean water around the construction area without causing additional turbidity or sediment, the use of construction staging, cofferdams, pipe culverts, lined channels, sandbagged material, barrier wall, or other suitable materials as approved by the Engineer, shall be utilized for directing or confining water from the work area. This water shall be returned to the waterbody downstream from the construction site. The options utilized should consider the minimization of sedimentation and turbidity as a primary objective.
- If material or debris resulting from Contractor operations enters a waterway, it is considered an unpermitted fill material under the C of E Section 404 Permit and the Engineer shall determine whether it may remain. If it is determined that the material is to be removed from the waterway, the Engineer will approve the Contractor's method of removal. Options for removal should consider the minimization of turbidity as a primary objective.

- No asphaltic material shall be disposed of in wetlands or waters of the United States.
- Temporary bridges or other structures shall be used whenever it is necessary to ford any body of water on the project more than twice in any six month period.
- Equipment shall not be operated in any body of water on the project except when required to construct channel changes or structures.
- Cofferdams needed for work in water shall be constructed from non-erodible materials.
- Materials excavated during bridge construction shall be placed on dry land outside the channel banks of all streams, at least 10 feet (3 meters) from the channel banks of a perennial stream, and at least 25 feet (8 meters) from the channel banks of a 5 Cubic Feet/Second (CFS) or larger stream. This includes channelized streams and relief channels. This material shall be properly contained or stabilized to minimize erosion and degradation of water quality and be removed before the beginning of the wet season.

(b) Wetland Areas. Wetland areas on and off the right-of-way shall be preserved and protected whenever possible. Work in or near wetlands shall be performed in a manner that will minimize harm to the wetlands. The Contractor shall be responsible for the protection of adjacent wetlands.

- Clearing of wetlands shall be limited to the minimum necessary for the completion of the project.
- Wetland areas inside or outside the construction limits will not be used for storage, parking, access, borrow material, haul roads or any other construction support activity unless specifically approved in advance by the Engineer and according to the applicable Section 404 Permit.
- When heavy equipment is working in wetlands, appropriate measures such as placing the equipment on mats, shall be taken to minimize soil disturbance.
- Material shall not be wasted or temporarily stockpiled in wetlands.

(c) Temporary fill.

- Unless otherwise provided, temporary work ramps or haul roads, when permitted, shall provide sufficient waterway

openings to allow the passage of expected high flows during the time the ramp or haul road is in place.

- Temporary fills or structures, if washed downstream, are considered to be unauthorized fill under the C of E Section 404 Permit and the Engineer shall determine whether it may remain. If it is determined that the material is to be removed from the waterway, the Engineer will approve the Contractor's method of removal. When considering options for removal, the Contractor shall consider the minimization of turbidity as a primary objective. Replacement of washed fill may require a Section 404 permit change or an additional permit.
- All fill for temporary work ramps or haul roads placed within the channel banks of a stream, within 10 feet (3 meters) of the channel banks of a perennial stream, and within 25 feet (8 meters) of the channel banks of a 5 Cubic Feet/Second (CFS) or larger stream, shall be constructed using a riprap of the size specified in Subsection 816.02(a)(2), or larger material. This includes channelized streams and relief channels. A minimal amount of clean stone or gravel may be placed on top of the temporary fill in order to obtain a smooth working surface. The clean stone or gravel utilized shall have less than twelve percent passing the #200 (0.075 mm) sieve. Upon removal, salvaged material that meets the requirements of Subsection 816.02 will be paid for when reused in areas which require the utilization of riprap.
- Unless specifically authorized under the Section 404 Permit as temporary or permanent fill material, bridge demolition rubble may not be dropped into a waterbody or wetland.
- All fill material shall be free from toxic pollutants in harmful amounts.
- All temporary fills must be removed and the affected areas returned to their preexisting elevation.
- All temporary fill in any body of water or wetland shall be properly contained or stabilized to minimize erosion and degradation of water quality.

(d) Erosion and Sediment Control. The Contractor shall install, construct, and maintain erosion and sedimentation control items as shown on the plans or as directed by the Engineer.

- The Contractor shall install, construct, repair, and maintain erosion and sedimentation control items within seven calendar days of being instructed to do so by the Engineer.
- Minimizing time of exposure of disturbed ground is a primary objective. Therefore, disturbing an area and postponing subsequent work could result in the Contractor being required to stabilize the area at no cost to the Department. Unless modified on the plans or directed by the Engineer, the total surface area of disturbed soil on the right-of-way at any one time shall be limited to a maximum of 25 acres (10 hectares). Disturbed soil is defined as exposed bare soil denuded of vegetative cover or lacking stabilization. Stabilized soil is defined as soil that is covered by grass, seeded and mulched, mulched, covered by erosion control matting, or covered by permanent stabilization as shown on the plans or as directed by the Engineer. The Engineer will have the authority to increase or decrease the limitation on surface area of disturbed land based upon the Contractor's capability to effectively control erosion and sedimentation on these areas and contain the sediment within the right of way limits, including temporary construction easements (TCE). The Contractor shall be responsible for making the necessary arrangements with the proper owner(s) and for reclaiming sediment and stabilizing the area that is not contained within these limits. This work will be the responsibility of the Contractor and shall be performed at no cost to the Department.
- Cut and fill slopes shall be completed and stabilized in increments not to exceed 25 feet (8 meters), measured vertically, as the construction progresses.
- Completed areas, including increments described above, shall receive permanent seeding, temporary seeding, or mulch cover within 14 calendar days after completion as directed by the Engineer.
- Disturbed areas that are temporarily abandoned shall be stabilized within 14 calendar days after activity ceases unless work is to be resumed within 21 calendar days after activity ceases. Payment for this work will be made if abandoned due to no fault or negligence of the Contractor. Payment will not be made for temporary stabilization required by Contractor

negligence, by the lack of proper Contractor scheduling, or for the convenience of the Contractor.

- Excavation, including silt removed from erosion and sedimentation control devices, shall not be deposited where it can be eroded into waters of the United States. At locations of drainage structures, care shall be taken to prevent mounds of excavation on the inlet end from washing through the structure or on the outlet end from washing downstream.
- Water pumped from excavated footings shall be diverted into a sediment basin of the appropriate type as shown on the standard drawings or other device as approved by the Engineer. This sediment basin or device and its holding capacity shall be approved by the Engineer.
- Off-site vehicle tracking of sediments and the generation of dust shall be minimized.
- After cut sections have been constructed, the tops of backslopes will be rounded to blend the slopes into natural ground when practicable. At transitions from cut to fill, ditches shall be tailed out to prevent erosion of the toe of slope.
- Temporary erosion and sedimentation control devices shall not be removed or destroyed by the Contractor without permission from the Engineer.

The Engineer will also have the authority to direct the Contractor to provide permanent or temporary erosion and sedimentation control measures. If required, additional temporary and permanent erosion and sedimentation control items on the right-of-way that are not attributed to the Contractor's negligence, carelessness, or failure to install permanent controls, shall be performed as ordered by the Engineer and will be paid for either at unit bid prices or as provided for in Subsection 109.04.

110.07 Pollutants. (a) General. The Contractor shall employ best management practices to prevent pollution by spills. Pollutants such as chemicals, fuels, lubricants, asphalt, raw sewage, concrete drum wash water, and other harmful wastes shall not be discharged into or alongside any waters of the United States, but shall be disposed of in accordance with governing State and Federal regulations. Storage of these materials shall not be allowed within 100 feet (30 meters) of a wetland or waterbody.

(b) Spill Prevention.

(1) Good Housekeeping.

- The quantity of materials stored on the project should be limited, as much as practical, to that quantity required to perform the work in an orderly sequence and should be stored in a neat, orderly manner in their original containers with the original manufacturer's label.
- Manufacturer's recommendations for proper use and disposal of materials shall be followed. All disposal shall be according to all local, State and Federal regulations in a permitted landfill or permitted disposal facility.
- The Contractor should inspect daily to ensure proper use and disposal of materials.

(2) Hazardous Products.

- Hazardous products shall be kept in original containers with their original labels unless they are not re-sealable or are damaged.
- Material Safety Data Sheets shall be retained and shall be available to all personnel at all times.
- If surplus products must be disposed of, manufacturer's recommendations and local, State, and Federal regulations shall be followed.

(3) Product Specific Practices. The Contractor shall limit the amount of petroleum products and other chemicals in work areas adjacent to wetlands, waterbodies, and other sensitive areas. The following product specific practices shall be followed on-site:

- **Petroleum Products.** All on-site vehicles shall be monitored for leaks and receive regular preventive maintenance to reduce the chance of leakage. Petroleum products shall be stored in tightly sealed containers that are clearly labeled. All asphalt substances used on-site shall be applied according to manufacturer's recommendations and/or Department specifications. Construction of berms, or other similar measures, may be required for storage/refueling areas as a best management practice to restrict spill areas.

- **Fertilizers.** Fertilizers shall be applied only in the manner and amounts required by the specifications. Material shall be stored in a covered area and shall not be exposed to precipitation. Partially used bags shall not be discarded, but removed and disposed of properly. No storage of these materials shall be allowed within a wetland or floodplain.
- **Paints and Solvents.** All containers shall be tightly sealed and stored when not required for use. Excess material and waste shall not be discharged, but shall be properly disposed of according to manufacturers' instructions and/or State and Federal regulations. No storage of these materials shall be allowed within a wetland or floodplain.
- **Concrete Trucks.** Concrete trucks shall be allowed to discharge surplus concrete or drum wash water on site only in areas designated by the Engineer. Discharge areas shall not be in or where the discharge can be washed into wetlands or waterbodies.
- **Concrete Curing Agents.** Concrete curing agents shall be applied only in the manner and amount required by the specifications. Excess material shall not be allowed to run off the area being treated.

(c) **Spill Reporting and Cleanup Practices.** All spills shall be reported as described in Subsection 107.01(f).

In addition, the practices below shall be followed:

- All spills shall be cleaned up immediately after discovery or contained until appropriate cleanup methods can be employed.
- The spill area shall be contained and personnel shall wear appropriate protective clothing to prevent injury from contact with a hazardous substance.
- Manufacturer's recommended methods for spill cleanup shall be followed along with proper disposal methods in accordance with local, State, and Federal regulations referred to previously.

Further, where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR §§ 110, 117, or 302, occurs on the

right-of-way during a 24-hour period, the following action shall be taken by the Engineer:

- A report shall be submitted to the Arkansas Department of Environmental Quality within 14 calendar days of the knowledge of the release. The report shall include a written description of the release (including the type and estimate of the amount of material released); the date that such a release occurred; the circumstance leading to the release; and the corrective actions taken.
- The Stormwater Pollution Prevention Plan must be modified within 14 calendar days of knowledge of the release by addition of the above information. Review and modification of the plan must be made to identify measures to prevent the reoccurrence of such releases, and to respond to such releases.

If the spill occurs on a site off of the right-of-way, the Contractor shall follow the reporting procedures as described above.

110.08 Contractor Negligence. If the Contractor violates the requirements of a C of E Section 404 Permit, NPDES Permit, or any other requirement of these specifications, and fails to properly maintain, install and/or construct erosion and siltation control items, the Engineer may take, but is not limited to, one or more of the following actions:

- Cessation of other project related work,
- Withholding of Contractor payments,
- Suspension of the Project,
- Default of the Contract.

All work required due to the violation of provisions of C of E Section 404, NPDES Permits, or other requirements of these specifications which results from Contractor negligence, carelessness, or failure to perform work as scheduled, shall be performed by the Contractor at no cost to the Department. In addition, the Contractor will be assessed the amounts of any and all fines and penalties assessed against and costs incurred by the Department which are the result of the Contractor's failure to comply with a C of E Section 404 Permit or NPDES Permit.

Failure to comply with the conditions of the C of E Section 404 Permit may result in the C of E issuing a cease and desist order for

all permitted activities. To obtain a new Section 404 Permit from the C of E may require 60-120 calendar days processing time.

The Department will not be responsible for any delays or costs due to the Contractor's failure to comply with the above special conditions. The Contractor will not be granted additional compensation or contract time due to loss of Permits for noncompliance.

In the event that pollutant spills occur which are the result of the Contractor's actions or negligence, the clean-up shall be performed by the Contractor at no cost to the State.

110.09 Method of Measurement and Basis of Payment. All Contractor costs incurred in complying with this section will not be paid for directly, but shall be included in the unit prices bid for other items of work unless specifically included as a pay item in the Contract.