DIVISION 100 – GENERAL PROVISIONS

SECTION 101 – DEFINITIONS AND TERMS

Wherever 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.

101.01 Abbreviations

Wherever the following abbreviations are used in these specifications, the Proposal, or on the plans, they are to be construed the same as the respective expressions represented.

AAR	Association of American Railroads
AASHTO	American Association of State Highway and Transportation Officials
ACBF	air-cooled blast furnace slag
ACI	American Concrete Institute
AE	asphalt emulsion
AIA	American Institute of Architects
AMS	Aerospace Material Specifications
ANSI	American National Standards Institute
APS	accessible pedestrian signal
API	American Petroleum Institute
ARA	American Railway Association
AREA	American Railway Engineering Association
ASCE	American Society of Civil Engineers
ASLA	American Society of Landscape Architects
ASNS	American Standards for Nursery Stock
ASTM	American Society for Testing and Materials
ATSSA	American Traffic Safety Services Association
AWPA	American Wood Protection Association
AWS	American Welding Society
AWWA	American Water Works Association
BBR	bending beam rheometer
BF	blast furnace slag
BMP	best management practice
BSG	bulk specific gravity
CAPP	Certified Aggregate Producer Program
CAPWAP	Case Pile Wave Analysis Program
CCPR	Cold Central Plant Recycling
CCRL	Cement and Concrete Reference Laboratory of the National Institute of Standards and Technology
CESSWI	Certified Erosion Sediment and Stormwater Inspector
CFR	Code of Federal Regulations

	CIR	Cold In-Place Recycling
45	CISEC	Certified Inspector of Sediment and Erosion Control
	CMDP	concrete mix design production
	CMDS	concrete mix design submittal
	COE	Corps of Engineers (US Army)
	CPESC	Certified Professional in Erosion and Sediment Control
50	CSGP	Construction Stormwater General Permit
	CWI	Certified Welding Inspector
	DBE	disadvantaged business enterprise
	DCP	Dynamic Cone Penetrometer
	DMF	design mix formula
55	DR	dimension ratio
	DSR	dynamic shear rheometer
	DTE	District Testing Engineer
	EPA	Environmental Protection Agency
	ESAL	equivalent single-axle loads
60	FDR	Full Depth Reclamation
	FHWA	Federal Highway Administration, Department of Transportation
	FSS	Federal Specifications and Standards, General Services Administration
65	GBF	granulated blast furnace slag
	HDB	hydrostatic design basis
	HDPE	high density polyethylene
	HFRS	high float seal coat asphalt emulsion
	HMA	hot mix asphalt
70	HRWR	high range water reducing
	HRWRR	high range water reducing and retarding
	IAC	Indiana Administrative Code
	IC	Indiana Code
	IDEM	Indiana Department of Environmental Management
75	IDNR	Indiana Department of Natural Resources
	IEEE	Institute of Electrical and Electronics Engineers
	IMSA	International Municipal Signal Association
	INDOT	Indiana Department of Transportation
	IOSHA	Indiana Occupational Safety and Health Administration
80	ISO	International Organization for Standardization
	ITM	Indiana Test Method or Procedure
	IVOSB	Indiana Veteran Owned Small Business
	JITT	Just-in-Time Training
	JMF	job mix formula
85	JRCP	jointed reinforced concrete pavement
	LRFD	Load and Resistance Factor Design
	LWD	Light Weight Deflectometer
	MAF	mixture adjustment factor
	MASH	Manual for Assessing Safety Hardware

	MC	medium curing asphalt
	MCA	medium curing asphalt with additive
	MS4GP	Indiana Municipal Storm Sewer General Permit
	MSE	mechanically stabilized earth
	MSG	maximum specific gravity
	MUTCD	Manual on Uniform Traffic Control Devices
	MWBE	Minority and Women's Business Enterprises
	NACE	National Association of Corrosion Engineers
	NCHRP	National Cooperative Highway Research Program
	NDT	Non-Destructive Testing
	NEC	National Electrical Code
	NEMA	National Electrical Manufacturers Association
	NESC	National Electrical Safety Code
	NHS	National Highway System
	NIST	National Institute of Standards and Technology
	NOI	Notice of Intent
	NOS	Notice of Sufficiency
	NOT	Notice of Termination
	NPDES	National Pollutant Discharge Elimination System
	OG	open graded
	OHWM	Ordinary High Water Mark
	OSHA	U.S. Occupational Safety and Health Administration
	PAV	pressurized aging vessel
	PCC	portland cement concrete
	PCCP	portland cement concrete pavement
	PDA	pile driving analysis
	PEAS	AASHTO Product Evaluation and Audit Solutions
	PG	performance grade asphalt
	POTW	Publicly Owned Treatment Works
	PSM	plastic sewer main
	PVC	polyvinyl chloride
	QA	quality assurance
	QC	quality control
	QC/QA	quality control/quality assurance
	QCP	quality control plan
	QPL	qualified products list
	RAP	reclaimed asphalt pavement
	RAS	reclaimed asphalt shingles
	RBC	reclaimed base course
	RCBA	reinforced concrete bridge approaches
	RCRA	Resource Conservation and Recovery Act
	RECP	rolled erosion control product
	RS	seal coat asphalt emulsion
	RSP	Recurring Special Provision
	RTFO	rolling thin film oven
	SAE	Society of Automotive Engineers

	SC	seal coat
	SCA	slow curing asphalt with additive
	SCM	supplementary cementitious material
	SDR	standard dimension ratio
140	SDS	Safety Data Sheet
	SF	steel furnace slag
	SHRP	Strategic Highway Research Program
	SMA	stone matrix asphalt
	SSD	saturated surface dry
145	SSPC	Society for Protective Coatings
	SWP3	Stormwater Pollution Prevention Plan
	SWQCP	Stormwater Quality Control Plan
	SWQM	Stormwater Quality Manager
	TCLP	Toxicity Characteristic Leaching Procedure
150	TSR	tensile strength ratio
	UA	utility asphalt
	UL	Underwriter Laboratory
	UST	underground storage tank
	VFA	voids filled with asphalt
155	VMA	voids in mineral aggregate
	VOC	volatile organic compounds
	VRAM	void reducing asphalt membrane
	WWR	welded wire reinforcement

160 **101.02 Above Normal Inclement Weather Days**

The specific yearly number of days over and above the normal inclement weather days shown below which work on the controlling operation is delayed by rain or other inclement weather. The above normal days include the days following a weather event on which the controlling operation is still delayed.

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The following table shows the estimated number of normal inclement weather days, in each month, the Department considers when setting completion dates.

Month	ESTIMATED NUMBER OF DAYS	
	R and **M** Contracts	**T** and **B** Contracts
April	18	8
May	8	5
June	5	3
July	5	3
August	4	3
September	5	3
October	6	4
November	12	5

170 **101.03 Blank**

101.04 Bid Bond

The approved form of security furnished with a bid to guarantee that the bidder will enter into the contract if the bidder is awarded the contract.

101.05 Bidder

An individual, partnership, firm, corporation, or combination of same submitting a bid for the advertised work.

101.06 Bridge

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

(a) Length

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

(b) Roadway Width

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

101.07 Business Day

Monday through Friday except for holidays in accordance with 101.27.

101.08 Calendar Day

Every day shown on the calendar.

101.09 Change Order

A written order issued to the Contractor covering changes in the contract and establishing payment for the work affected by the changes.

101.10 Commissioner

The chief executive and chief administrative officer of the Department who is responsible for administering the Department.

101.11 Construction Limits

The line shown on the plans beyond which no work is intended to be performed and that which no disturbance of existing terrain will be allowed unless otherwise authorized by the Engineer.

101.12 Contract

The written agreement between the Department and the Contractor setting forth

the obligations of the parties thereto including, but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment.

The contract may include, but is not limited to, the Proposal, Contract Information book, Schedule of Pay Items, contract form, bid bond, performance bond, specifications, special provisions, information to bidders, instructions to bidders, general and detailed plans, notice to proceed, 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.

101.13 Contract Information Book

A document which includes a contract information sheet, an estimate of quantities, special provisions, and additional contract requirements. Such document may include the plans.

101.14 Contract Item (Pay Item)

A specifically described unit of work for which a price is provided in the contract.

101.15 Contract Time

The fixed calendar date or the number of calendar days allowed for completion of the contract or a phase of the contract, including authorized time extensions.

101.16 Contractor

The individual, partnership, firm, corporation, or combination of same contracting with or desiring to contract with the Department for performance of prescribed work.

101.17 Controlling Operation

An activity that, if delayed, will delay the completion of the project. When a critical path method schedule is required, the controlling operation will be determined from the critical path.

101.18 Culvert

A structure not classified as a bridge which provides an opening under the roadway.

101.19 Department

The Indiana Department of Transportation as constituted under the laws of Indiana for the administration of highway work.

101.20 Embankment Foundation

The existing materials upon which an embankment is to be constructed.

101.21 Engineer

The Chief Engineer of the Department acting directly or through the duly authorized representatives.

101.22 Equipment

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

101.23 Extra Work

An item of work not provided for in the contract as awarded but found essential to the satisfactory completion of the contract.

101.24 Failed Material

Material or a finished product determined not to be in accordance with applicable specifications or tolerances and a determination regarding the disposition of the material or finished product has been rendered by the Department's Failed Materials Committee or other Department representatives in accordance with 105.03.

101.25 Force Account Work

Extra work in the contract for which the Contractor and the Department cannot reach agreement on the unit price or lump sum price prior to performing the work. Settlement will be made upon receipt and approval of documents substantiating and truly representing the allowable costs incurred by the Contractor for performing such extra work.

101.26 Frequency Manual

A document issued by the Department titled Manual for Frequency of Sampling and Testing and Basis for Use of Materials. The number of samples and tests, the basis for approval, the basis for use, and similar requirements for furnished materials are specified in the document.

101.27 Holidays

Holidays are considered to be:

All Sundays
New Year's Day
Martin Luther King Jr. Day
Lincoln's Birthday
Washington's Birthday
Good Friday
Primary Election Day
Memorial Day
Independence Day
Labor Day
Columbus Day
Election Day
Veterans Day
Thanksgiving Day
Friday after Thanksgiving Day
Christmas Day

If a holiday listed above, except Sunday, falls on a Sunday, the following Monday shall be considered a holiday. If a holiday listed above falls on a Saturday, the preceding Friday shall be considered a holiday.

101.28 Invitation for Bids

The advertisement for proposals for all work or materials on which bids are required. Such advertisement will indicate with reasonable accuracy the quantity and location of the work to be done or the character and quantity of the material to be furnished, and the time and place of the opening of proposals.

101.29 Itemized Proposal

The Schedule of Pay Items shown in the Proposal.

101.30 Joint Venture

A bid of two or three contractors will be considered a joint venture. Not more than three contractors will be allowed as parties to a joint venture. All contractors applying for joint venture approval shall be prequalified separately.

A contractor that is a member of a joint venture may not submit a proposal bid, in its individual capacity or as a participant in another joint venture, for the same contract on which the joint venture bids.

Each contractor on an awarded Joint Venture bid shall comply with 105 IAC 11-3-5 and, regardless of any other agreement between the contractors, is jointly and severally liable to the State for all obligations owing to the State under the awarded contract.

101.31 Laboratory

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

101.32 Land-disturbing Activity

Any man-made action to the land surface that exposes the underlying soil including clearing, grading, excavation operations, cutting and filling, or the movement and stockpiling of topsoil.

101.33 Major and Minor Contract Items

All contract items having an original contract value in excess of 5% of the original contract amount shall be considered as major items. Minor contract items shall be all items shown in the Schedule of Pay Items which constitutes 5% or less of the original contract amount.

101.34 Materials

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

101.35 Notice to Proceed

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

101.36 Open to Unrestricted Traffic

The condition that exists when all pavement work is completed, including surface courses, and shoulders. All safety features including guardrail and signs are in place, and pavement markings are in the final marking pattern.

101.37 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.

101.38 Performance Bond

The approved form of security, furnished and executed by the bidder and its surety or sureties, guaranteeing complete execution of the contract, as defined herein, and for the payment of all legal debts pertaining to the construction of the project. The performance bond will be in effect after both parties have signed the contract and the contract has been approved by the Attorney General of the State.

101.39 Plans

The approved plans, profiles, typical cross-sections, standard drawings, working drawings, and supplemental drawings or exact reproductions thereof which show the location, character, dimensions, and details of the work to be done.

101.40 Professional Engineer

A person who is duly licensed by the Indiana Professional Licensing Agency to practice engineering in the State.

101.41 Profile Grade

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 elevation or gradient of such trace according to the context.

101.42 Project

The specific section of the highway where work is to be performed under the contract.

101.43 Proposal

A document which includes the Proposal Page, Schedule of Pay Items, and contract forms which shall be completed or signed by the bidder.

101.44 Qualified Products List

Lists of preapproved manufacturers, materials, products, sources, or suppliers maintained by the Department.

101.45 Quality Assurances Adjustments

Monetary credits either to the Contractor or to the Department for material used outside specified tolerances but within allowable tolerances as indicated for QC/QA pay items or others that may apply.

101.46 Reasonably Close Conformance

Reasonably close conformance means conformance with reasonable and customary manufacturing and construction tolerances where working tolerances are not specified. Where working tolerances are specified, reasonably close conformance means conformance with such working tolerances. Without detracting from the complete and absolute discretion of the Engineer to insist on such tolerances as establishing reasonably close conformance, variations beyond such tolerances may be accepted as reasonably close conformance where they will not materially affect the value or utility of the work and the interest of the State.

Reasonably close conformance also means, for materials manufactured according to the English system of measures, that the materials are about the same size as nearly equivalent metric-sized materials. For materials manufactured according to the metric system of measures, reasonably close conformance means the materials are about the same size as nearly equivalent English-sized materials. Nearly equivalent sized materials will be accepted unless the nearly equivalent material is outside specified working tolerances in accordance with the contract documents.

101.47 Recurring Special Provisions

Approved additions or revisions to the Standard Specifications with the intent to be used on multiple contracts.

101.48 Right-of-Way

A general term denoting land, property, or interest therein, usually in a strip, acquired for or devoted to a highway.

101.49 Road

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

101.50 Roadbed

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

101.51 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.

101.52 Roadside Development

That work necessary to the complete road which provides for the preservation of

landscape materials and features; the rehabilitation and protection against erosion of all areas disturbed by construction through seeding, sodding, mulching, and the placing of other ground covers; and such suitable planting and other improvements as may increase the effectiveness and enhance the appearance of the road.

101.53 Roadway
The portion of a road within limits of construction.

101.54 Schedule of Pay Items
A part of the Proposal which shows pay items, quantities, and pay units for the contract. The bidder shall complete the document by filling in the unit prices and the bid amounts.

101.55 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.

101.56 Sidewalk
The portion of the roadway primarily constructed for the use of pedestrians.

101.57 Special Provisions
Additions or revisions to the Standard Specifications that describe conditions and requirements for special situations on a specific project.

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

101.59 Specified Completion Date
The date on which the contract work is specified to be complete.

101.60 State
The State of Indiana acting through its authorized representative.

101.61 State Highway System
The highways and streets in Indiana for which responsibility is assigned to the Department.

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

101.63 Structures
Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, end walls, buildings, sewers, service pipes, underdrains, foundation drains, and other

features which may be encountered in the work and not otherwise classified herein.

101.64 Subcontractor

An individual, partnership, firm, corporation, or combination of same to whom the Contractor sublets part of the contract.

101.65 Subgrade

The upper portion of a roadbed upon which the pavement structure and shoulders are constructed.

101.66 Substantial Completion

The date, as determined by the Department, when the construction of a project is sufficiently completed in accordance with the plans and specifications, as modified by any approved change orders, so that it can be used for its intended purpose. In order for a project to be used for its intended purpose, all lanes shall be, or have the ability to be, opened to traffic without further need for them to be restricted for any purpose except for the placement or maintenance of stormwater control or the maintenance or removal of temporary stormwater control. At a minimum, all lanes of the road or bridge shall be completed through the final roadway surface, including shoulders, with all the sidewalks, curbs, drainage features, markings, permanent safety appurtenances, lighting, traffic signals, and signing as shown in the contract documents.

101.67 Substructure

The portion of the structure below the bearings of simple and continuous spans, skewbacks or arches, and tops of footings of rigid frames together with backwalls, wingwalls, and wing protection railings.

101.68 Superintendent

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

101.69 Superstructure

The entire structure except the substructure.

101.70 Surety

The corporate body bound with and for the Contractor for the full and complete performance of the contract and for the payment of all debts pertaining to the work. When applied to the Bid Bond, it refers to the corporate body which engages to be responsible in the execution of the contract by the bidder, within the specified time.

101.71 Technician or Inspector

The authorized representative of the Engineer assigned to make detailed inspections of contract performances.

101.72 Titles (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.

101.73 Township, Town, City

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

101.74 Traveled Way

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

101.75 Unique Special Provisions

Additions or revisions to the Standard Specifications that pertain only to a specific situation on a contract that is not covered by an existing Recurring Special Provision or other standard contract document, and is intended only for a single use in a specific contract.

101.76 Wastewater

Water containing waste residue from paint, coatings, form release oils, curing compounds and other construction debris, as well as soaps, detergents or solvents used in vehicle, equipment and structure washing, or other material defined as illicit discharge in accordance with the Indiana Municipal Storm Sewer General Permit, MS4GP. This includes untreated sediment-laden stormwater and wastewater associated with liquid waste from concrete, grout, mortar, stucco, and other similar construction materials resulting from concrete washout, hydrodemolition, saw cutting, coring, or dewatering operations contaminated by concrete pours or similar activities.

101.77 Work

The furnishing of labor, materials, equipment, 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.

101.78 Workable Day

A calendar day on which inclement weather does not prevent work on the controlling operations for at least 50% of the day. However, if the weather is unsuitable for work on the controlling operation at the normal starting time, and remains unsuitable for 2 h, such a day will be considered non-workable regardless if the Contractor worked on other operations.

101.79 Working Drawings

Supplementary bridge plans, stress sheets, shop drawings, erection plans, falsework plans, framework plans, cofferdam plans, bending diagrams for reinforcement, or any other supplementary plans, detailed drawings, design drawings, or similar data which the Contractor is required to submit for approval.

101.80 Blank

SECTION 102 – BIDDING REQUIREMENTS AND CONDITIONS

102.01 Prequalification and Bidding

The bidder will be required to prequalify and follow the bidding procedures as set out in the rules for Prequalification of Contractors and Bidding, 105 IAC 11, now on file with the Indiana Secretary of State, copies of which are available upon request in the Contract Administration Division.

If apparent errors, discrepancies, or unclear statements are found in the contract documents prior to letting, the Department shall be contacted.

102.02 Certification Regarding Lobbying for Contracts, Grants, Loans, and Cooperative Agreements

This requirement will apply only to a federal aid contract. The bidder certifies to the best of its knowledge and belief, that it has complied with the requirements of FHWA-1273 Part XI, included in the Contract Information book.

If required, the bidder shall complete and submit Standard Form-LLL, Disclosure Form to Report Lobbying, in accordance with its instructions. Such form and its instructions are available from the Department.

SECTION 103 – AWARD AND EXECUTION OF CONTRACT

103.01 Disadvantaged Business Enterprise Program

This requirement will apply only to a federal aid contract.

(a) General Requirements

Failure to carry out the requirements set forth in 49 CFR Part 26, as outlined in the Department's DBE Program Manual, shall constitute a breach of contract and, after notification, may result in such contract sanctions as the Department or the Federal Highway Administration may determine to be appropriate, including, but not limited to: (a) withholding of payments to the Contractor under the contract until the Contractor complies, and/or (b) cancellation, termination or suspension of the contract, in whole or in part.

The above referenced CFR section requires the following policy and disadvantaged business enterprise obligation to be included in all subsequent agreements between the Contractor and all subcontractors as follows:

1. It will be the policy of the Department to create a level playing field on which DBE's can compete fairly for federally funded contracts. Consequently, the disadvantaged business enterprise requirements of 49 CFR Part 26, as outlined in the Department's DBE Program Manual, apply to this contract.

2. The Contractor shall not discriminate on the basis of race, color, national origin, religion, sex, sexual orientation or gender identity in the award and performance of this contract. The Contractor shall carry out the applicable DBE requirements in the award and administration of federally funded 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, which may include, but is not limited to: withholding progress payments; assessing sanctions; liquidated damages; and/or disqualifying the Contractor from future bidding as non-responsible. The Contractor shall include language prohibiting discrimination on the basis of race, color, national origin, religion, sex, sexual orientation or gender identity in the performance of this contract and all subcontracts.

(b) Definitions

The following definitions will apply.

1. DBE

A small business concern which is at least 51% owned by one or more socially and economically disadvantaged individuals, or, in the case of a publicly owned business, at least 51% of the stock of which is owned by one or more socially and economically disadvantaged individuals; and whose managements and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it.

2. Small Business Concern

A small business as defined pursuant to Section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto, except that a small business concern shall not include a concern or group of concerns controlled by the same socially and economically disadvantaged individual or individuals which has annual average gross receipts in excess of $16.6 million over the previous three fiscal years.

3. Socially and Economically Disadvantaged Individuals

Those individuals who are citizens of the United States or lawfully admitted permanent residents and who are women, black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Asian-Indian Americans, or other minorities or individuals found to be disadvantaged by the Small Business Administration pursuant to Section 8(a) of the Small Business Act.

4. Certified DBE

A business enterprise which has completed and filed a request for certification

with the Department, and that the business enterprise has been reviewed and determined to comply with the guidelines established in 49 CFR Part 26. Business enterprises which are determined to be eligible will be certified as DBEs to perform specific types of work.

(c) Goal

A contract provision DBE goal may be shown on the Proposal sheet. Such goal, if required, has been established as the desired minimum amount to be contracted to DBEs. The Contractor shall meet or exceed the goal or demonstrate that it could not be met despite good faith efforts. Achievement of the goal does not relieve the Contractor of the requirement for affirmative action on subsequent subcontracting on this contract. Only work with listed DBEs that are certified prior to the date of the letting will count toward the goal. Credit towards contract goals will be given only for work performed by certified DBEs in the work areas for which they have been certified. The same requirements with respect to obtaining the goal apply for a Contractor that is certified as a DBE. A DBE Contractor shall either achieve the goal utilizing other DBE firms or demonstrate that the goal could not be met despite good faith efforts.

Contracting may be in the form of a subcontract, lease agreement, or material supply agreement. Prime contractors will receive 100% credit for work done by the DBE under subcontracts and lease agreements. Credit for utilization of a DBE material supplier depends on whether the supplier is a manufacturer, regular dealer, or broker. Full credit will be given for suppliers who manufacture the items and are certified as Supplier Manufacturer in the DBE repository. Credit will be limited to 60% of the expenditure for suppliers acting as a regular dealer and are certified as Supplier Regular Dealer in the DBE repository. Credit will be limited to fees and commissions for suppliers acting as a broker and are certified as Supplier Broker in the DBE repository. Suppliers shall also perform a commercially useful function in order for credit to be received.

The Contractor shall not terminate or reduce a commitment to a DBE, or an approved substitute DBE listed on the Affirmative Action Certification without the prior written consent of the Department. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Unless the Department provides written consent, the Contractor shall not be entitled to any payment for work or materials unless it is performed or supplied by the listed DBE. Written consent will be provided based on the Contractor meeting all requirements outlined in 49 CFR 26.53, Department policy, and as stated herein. The Contractor shall make good faith efforts within seven business days of Department consent to obtain additional DBE participation.

Written consent will only be provided by the Department if the Contractor has good cause to terminate or reduce its commitment to the DBE firm. Good cause shall consist of any of the following circumstances:

1. The listed DBE subcontractor fails or refuses to execute a written contract.

2. The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a manner consistent with normal industry standards, unless such failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the Contractor.

3. The listed DBE subcontractor fails or refuses to meet the Contractor's reasonable, nondiscriminatory bond requirements.

4. The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness.

5. The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215 and 1200 or applicable state law.

6. The Department has determined that the listed DBE subcontractor is not a responsible contractor.

7. The listed DBE subcontractor voluntarily withdraws from the project and provides the Department written notice of its withdrawal.

8. The listed DBE is ineligible to receive DBE credit for the type of work required.

9. A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract.

10. Other documented good causes, that the Department will determine, which compels the termination of the DBE subcontractor. Good cause does not exist, however, if the Contractor seeks to terminate a DBE it relied upon to obtain the contract so that it can self-perform the work for which the DBE contractor was engaged or so that the Contractor can substitute another DBE or non-DBE contractor after the contract has been awarded.

Before transmitting to the Department its request to terminate or reduce a

commitment made to a listed DBE, the Contractor shall give written notice to the affected DBE, with a copy to the Department, of its intent to request termination or reduction and the reasons for the request. The DBE shall be given five days to respond to the Contractor and the Department of the reasons, if any, why it objects to the proposed termination or reduction, and why the Department should not approve the Contractor's action. If required in a particular case, as a matter of public necessity and safety, the Department may specify a response period shorter than five days.

When a DBE subcontractor is terminated as specified herein or fails to complete its work on the contract for any reason, the Department will require the Contractor to make good faith efforts to find another DBE subcontractor to substitute for the original DBE. These good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal the Department established for the contract.

In order to receive DBE credit for commitments made as part of the prime contract award process, a DBE firm shall be certified before the due date for bids on the prime contract. There may be situations after the award of the prime contract in which it is appropriate to count DBE credit for the use of a DBE firm. To be eligible to obtain DBE credit in these situations, the DBE firm shall be certified prior to participation on the contract.

If a non-DBE contractor joint ventures with a DBE contractor, the portion of the joint venture which is performed by a DBE may be utilized to achieve the DBE goal. Two types of DBE joint ventures are allowed and are defined as follows:

1. DBE Joint Venture Type A

A DBE contractor and a non-DBE contractor bidding on specific pay items to be performed by each company.

2. DBE Joint Venture Type B

A DBE contractor and a non-DBE contractor combining resources and agreeing upon a percentage of the total work to be performed by each contractor.

DBE joint ventures Type A do not require DBE joint venture certification. DBE joint ventures Type B do require DBE joint venture certification. A request for DBE joint ventures Type B certification shall be submitted no later than 9:00 a.m. local time the last business day before the letting and shall be approved prior to bidding in order to receive credit toward the DBE goal. The DBE shall be certified with the Department prior to requesting DBE joint venture certification. The work for the DBE shall be identified, performed, managed, and supervised by its forces.

(d) Affirmative Actions

The Contractor shall develop an affirmative action plan for a Disadvantaged Business Enterprise Program which shall include the minimum requirements as follows:

1. Appointment of a representative with authority to administer the Contractor's Disadvantaged Business Enterprise Program.

2. Documents of affirmative action methods and procedures intended to be used in seeking out and considering certified DBEs as subcontractors or suppliers.

3. A list of certified DBEs to be contacted prior to the selection of a potential subcontractor for the particular pay items within the capabilities of the DBEs. This list shall include but shall not be limited to the requirements as follows:

   a. The name of each subcontractor or supplier and a notation as to their DBE certification status.

   b. The potential type of work or services to be performed by each subcontractor or supplier.

(e) Determination of Good Faith Efforts

Appendix A of 49 CFR Part 26 has been used for guidance in preparing the Department's procedures to determine the adequacy of good faith efforts. Additional factors consistent with 49 CFR Part 26, and the Department's policies and procedures have also been utilized.

1. Good Faith Efforts Prior to Award

The following factors will be considered in determining good faith efforts prior to award of a contract. The Contractor, including DBE Contractors, shall submit evidence on each of the factors.

a. The Contractor shall make reasonable effort to contact all ready, willing, and able DBEs who express a desire to work on any of the pay items of the contract.

b. To effectively participate, the DBE shall have the opportunity to analyze the contract and submit quotations prior to letting. Information provided by the Contractor to the DBEs shall include, at a minimum, the contract number, pay items, quantities for those pay items to be subcontracted, and the date the subcontract bid is desired.

c. The Contractor shall select the portions of the work to be performed by DBEs in order to increase the likelihood of DBE participation. This shall include,

where appropriate, an attempt to break down the contract into economically feasible units to facilitate DBE participation.

d. The Contractor shall provide the interested DBEs with complete information about the plans, specifications, and requirements of the contract. Attempts shall be made to have plans available or to notify the DBE of the location of available plans. The Contractor shall notify the DBE of revisions to the contract.

e. It will be considered unacceptable to avoid subcontracting to DBEs if such subcontracting to DBEs results in the need to further subdivide remaining work items.

f. The Contractor shall negotiate in good faith with interested DBEs and not reject such DBEs as unqualified without sound reasons based on thorough investigation of their capabilities. Confirmed documentation that a DBE has not been able to perform previous work through no fault of others will be considered to be sound reason. Unacceptable criteria include, but are not limited to, unsubstantiated oral statements and unsigned documentation.

g. The Contractor shall make efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance required by the State. However, the Contractor shall affirmatively consider waiving requirements it may have in order to assist the DBE.

h. Only firms certified as DBEs prior to the letting date can be used to meet the contract goal for the Department's DBE program.

The Contractor will be considered to have made good faith efforts if it either:

a. Documents that it has obtained enough DBE participation to meet the goal, or

b. Documents that it made adequate good faith efforts in accordance with the factors set out above to meet the goal even though it did not succeed in obtaining enough DBE participation to do so.

If a DBE goal has been established for the contract, the Contractor shall take good faith efforts to achieve the established goal prior to the bid opening. The Affirmative Action Certification shall be completed and submitted with the Proposal to indicate both race/gender conscious and race/gender neutral proposed DBE utilization.

The award of the contract will be made to the lowest and best bidder when all other requirements have been met and good faith efforts have been taken toward meeting the DBE goal, if required, in accordance with these requirements.

If the apparent low bidder has not achieved the contract DBE goal, the bidder shall respond by email or in writing within five business days after notification by the Department of the failure to meet the DBE goal. The response shall provide evidence identifying the bidder's good faith efforts and all affirmative actions taken prior to letting to achieve the required DBE goal. Failure to respond within the five business day period will result in rejection of the bid, and may result in forfeiture of the bid bond, and the referral of the bidder to the Prequalification Committee.

Responses shall be sent to the Department's Division of Contract Administration. The Department will review the bidder's good faith efforts for compliance with these requirements.

If the Department determines that adequate good faith efforts have been made, and the bidder has met all other bidding requirements, the contract will be awarded.

If the Department determines that good faith efforts were inadequate, the Department will notify the bidder of the determination by email. The determination will outline the reasons for determination of non-compliance with good faith effort requirements.

The bidder may request a review of a determination of non-compliance by email or written submittal within five business days of the bidder's receipt of notification of non-compliance from the Department. The request for review shall include evidence disputing the Department's reasons for issuing a determination of non-compliance. The request shall be sent to the Department's Division of Contract Administration.

Upon receipt of a request, the Department will contact the bidder to schedule a review. The review will be held by the Department's Deputy Commissioner and Chief Legal Counsel, or a designee who did not participate in the original determination of non-compliance. The review will be conducted in accordance with the Department's policy for review of good faith efforts requirements. A copy of the policy is available on the Department's website or through the Division of Contract Administration.

If the Deputy Commissioner's finding determines that the bidder's good faith efforts were adequate, and the bidder has met all other bidding requirements, the contract will be awarded and the Department will adjust the contract time by the number of calendar days from the date of the original determination of non-compliance

to and including the date of the Deputy Commissioner's findings.

If the Deputy Commissioner's finding determines that the bidder's good faith efforts were inadequate, the finding will be forwarded to the Commissioner. The Commissioner will review the Deputy Commissioner's finding and issue a written Contract Award Determination.

If the Commissioner's Contract Award Determination finds that the bidder's good faith efforts were adequate, and the bidder has met all other bidding requirements, the contract will be awarded and the Department will adjust the contract time by the number of calendar days from the start of the original determination of non-compliance to and including the date of the Commissioner's determination.

If the Commissioner's Contract Award Determination finds that the bidder's good faith efforts were inadequate, at the Commissioner's sole option and without further proceedings, either all bids will be rejected or the contract will be awarded to the next lowest and qualified bidder. An apparent low bidder who has not met the DBE goal and requirements for good faith efforts may be requested not to rebid on this contract during subsequent lettings.

The Commissioner's Contract Award Determination will be the final decision of the Department.

2. Good Faith Efforts for Extra Work

When extra work in accordance with 104.03 is added to a contract with a DBE goal, the Contractor shall hire or make good faith efforts to hire a DBE subcontractor to perform significant extra work.

For purposes of DBE good faith efforts, significant extra work is defined as new pay items added to a Contract that result in a new contracting opportunity not reasonably related to existing pay items being performed by the Contractor or a subcontractor.

When significant extra work related to existing pay items being performed by a DBE subcontractor is added to a contract with a DBE goal, the Contractor shall offer that same DBE subcontractor the opportunity to perform the extra work whether or not the existing pay items are counted toward the DBE goal. The Contractor shall consider other DBE subcontractors if the extra work would result in the original DBE subcontractor exceeding its prequalification limits. The Department may consider an exception to a DBE subcontractor's prequalification limit. If the DBE subcontractor is unable to perform the extra work, the Contractor shall hire or make good faith efforts to hire an alternate DBE subcontractor to perform the work.

When significant extra work related to existing pay items being performed by a non-DBE subcontractor is added to a contract with a DBE goal, the non-DBE subcontractor may perform the extra work. If the non-DBE subcontractor is unable to

perform the extra work, the Contractor may self-perform the extra work. If the Contractor chooses not to self-perform the extra work, the Contractor shall hire or make good faith efforts to hire a DBE firm to perform the work.

When significant extra work related to existing pay items being performed by the Contractor is added to a contract with a DBE goal, the Contractor may self-perform the extra work. If the Contractor chooses not to self-perform the extra work, the Contractor shall hire or make good faith efforts to hire a DBE firm to perform the work.

The Contractor shall forward documentation of good faith efforts to hire a DBE subcontractor to perform extra work to the District Equal Employment Opportunity Officer (EEO Officer) for review. The EEO Officer will determine if good faith efforts have been met in accordance with 103.01(e)1.

If the EEO Officer determines that the Contractor failed to make good faith efforts to hire a DBE firm when required as a result of significant extra work, written notice will be sent to the Contractor. The Contractor may appeal the determination in accordance with 103.01(e)1.

(f) Affirmative Action Certification

The Affirmative Action Certification, included in the Proposal, shall be completed when the Proposal is submitted to the Department. The certification shall list all DBE firms the Contractor plans to utilize, either race/gender consciously or race/gender neutrally. Blank certifications shall cause the bid to be rejected. If a portion of a pay item is to be performed by a DBE, an explanation shall be included stating exactly what the DBE is performing or supplying. Failure to do so may affect the award of the contract. The Contractor shall ensure that DBE firms listed on the Affirmative Action Certification are certified DBE firms as listed in the Department's DBE directory at the time of letting. In addition to the listing of DBE firms that will be used race/gender consciously to meet the goal, the Contractor shall also provide a total for the amount of work that it anticipates will be performed by other DBE firms used race/gender neutrally on the contract beyond the goal requirements.

Race/gender neutral awards involve the utilization of a DBE firm because the DBE firm is the best firm to perform the work. Race/gender conscious awards involve the utilization of a DBE firm primarily to achieve the contract DBE goal.

(g) Subcontracts

If the Contractor intends to subcontract a portion of the work, affirmative action shall be taken to seek out and consider DBEs as potential subcontractors prior to the subcontractual commitment.

The contacts made with potential DBE subcontractors and the results thereof shall be documented and made available to the Department and the FHWA upon request.

If the Contractor originally did not intend to subcontract a portion of the work and later circumstances dictate subcontracting a portion of the work, the affirmative action contacts described herein shall be performed.

Upon receipt of notification from the Department, a Disadvantaged Business Enterprise Utilization Affidavit, Form DBE-3, shall be completed by the Contractor and returned to the Department. The Contractor and the subcontractor/lessor/supplier shall certify on Form DBE-3 that specific amounts have been paid and received. A DBE-3 Form certification shall be completed and submitted for every DBE utilized on the contract, whether or not there was a DBE contract goal.

(h) Leases and Rentals

Hauling leases made with DBEs shall be submitted to the Department for approval before beginning work. Leases for hauling, when used, shall be submitted when borrow, subbase, compacted aggregate, HMA mix, cement concrete mix, or a combination of the above is to be hauled by a DBE. The lease shall show the dollar amount of anticipated work before the work begins. The actual dollar amount shall be reported to the Department after the work has been completed.

In order to perform a commercially useful function on a contract, the dollar volume of hauling by a DBE trucking firm that is counted toward the DBE goal is limited to the total value of transportation services provided by the DBE's own trucks; the total value of transportation services a DBE lessee provides with its own trucks; and the total value of transportation services a non-DBE lessee provides with its own trucks, not to exceed the value of transportation services provided by DBE-owned trucks. In addition, DBE credit will also be given for any fee or commission the non-DBE lessee receives as a result of the lease arrangement for any additional non-DBE trucks.

In order to count leased trucks toward the goal, the lease must indicate that the DBE has exclusive use of and control over the truck. This does not preclude the leased truck from being used by 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. Leased trucks must display the name and identification number of the DBE. The DBE must be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there cannot be a contrived arrangement for the purpose of meeting the DBE goals.

The Contractor shall provide the Engineer copies of any lease agreements between DBE trucking subcontractors and any DBE or non-DBE trucking firms or owner/operators that will be used to supplement the DBE trucking subcontractor’s trucks for the purpose of meeting the DBE goal. Copies of these lease agreements shall be provided by the time of use of any supplemental trucks on the Contract.

In addition to delivery ticket information required by Section 106, the name of trucking firm shall be included on each ticket for material delivered to the job site by a DBE trucking subcontractor or lessee.

The Contractor shall notify the Department when purchases or rental of equipment, other than leases for hauling, are made with DBEs. The information submitted shall include the name of the business, the dollar amount of the transaction, the type of purchase made, or the type of equipment rented.

If a subcontract agreement between the Contractor and a majority subcontractor requires that the majority subcontractor sublease a portion of its hauling to a DBE, the Contractor may receive credit toward the contract goal. The Contractor shall notify the Department when sublease agreements exist. The notification shall include the name of the DBE, the dollar amount of anticipated hauling before the work begins, and the actual dollar amount after the work is completed. The subcontractor shall certify actual utilization of the DBE at the end of the work and provide such certification to the Contractor for submission to the Department.

(i) Records and Reports

The Contractor shall keep such records as necessary to determine compliance with its DBE utilization obligations and compliance with the Guidelines for Determining of Good Faith Efforts. The Contractor's records shall indicate the minimum requirements as follows:

1. The number of disadvantaged, non-minority, and women subcontractors and suppliers and type and dollar value of work or materials services being performed on or incorporated into this contract.

2. The progress and efforts being made in seeking out disadvantaged contractor organizations and individual disadvantaged contractors for work on this contract.

3. Documentation of all correspondence, contacts, or telephone calls to obtain the services of DBEs on this contract.

Reports shall be submitted as required by the Department for those contracts and other business agreements executed with DBEs with respect to the records referred to above.

All such records shall be maintained for a period of three years following acceptance of final payment and shall be available for inspection by the Department and the FHWA and their authorized representatives.

103.02 Specific Equal Employment Opportunity Responsibilities

This requirement will apply only to a federal aid contract.

The Contractor and all subcontractors not including material suppliers, holding subcontracts of $10,000.00 or more, shall comply with the following minimum

specific requirement activities of equal employment opportunity. The equal employment opportunity requirements of Executive Order 11246, included in the Contract Information book, will be applicable to material suppliers as well as contractors and subcontractors. The Contractor shall include these requirements in each subcontract of $10,000.00 or more with such modification of language as necessary to make them binding on the subcontractor.

103.03 Record Keeping

All firms performing work on Department contracts, bidding on Department contracts, or offering quotes for subcontract or trucking services shall register with the Department, annually, by submitting the following information to the Department's Prequalification Engineer:

(a) firm's name,
(b) firm's address,
(c) firm's status as a DBE or non-DBE,
(d) the age of the firm,
(e) the annual gross receipts of the firm, and
(f) identify which of the following markets the firm has participated:

1. prime Contractor
2. subcontractor
3. hauler
4. consultant
5. supplier.

103.04 Blank

103.05 Insurance

Prior to commencing the work, the Contractor shall obtain and thereafter keep in force, the following insurance coverages provided by insurance companies acceptable to the Department and authorized to transact business under the laws of the State of Indiana. Certificates of insurance shall be filed with the Department. The Department may temporarily accept an insurance binder pending receipt of the certificate of insurance. When Railroad's Protective Liability insurance in accordance with 103.05(d) is required, the original policy shall be submitted to the railroad company with a copy transmitted to the Department. In addition, certificates of insurance shall be provided to the railroad, on forms satisfactory to the railroad, covering the Contractor's Commercial General Liability and Business Automobile Liability insurance.

The Contractor may purchase insurance for the full limits required by 103.05(b), or 103.05(c), or by a combination of primary policies for lesser limits and remaining limits provided by a Commercial Umbrella Liability policy.

Proof of renewal shall be furnished 15 days or more in advance of the policy

expiration. If subject to cancellation, the insurance company shall provide at least 30 days prior notice, and the insurer shall immediately notify the Department in writing of such impending cancellation.

In the event of cancellation or expiration, all work on the contract shall be suspended except that necessary for traffic maintenance and the protection of life and property. No extension in the contract completion time or additional payment will be allowed on account of this requirement and contract time charges will continue.

Nothing contained herein shall modify the Contractor's obligation of indemnification and exculpation of the State and its representatives in accordance with 107.17.

(a) Worker's Compensation and Employer's Liability

1. Worker's compensation shall be provided according to the provisions of the Indiana Worker's Compensation and Occupational Diseases Act as amended.

2. A certificate from the Worker's Compensation Board of Indiana shall be furnished as evidence of compliance with the provisions of the Indiana Worker's Compensation and Occupational Diseases Act.

(b) Commercial General Liability

Required liability insurance coverage shall provide coverage for operations of the Contractor and operations of subcontractors. The general aggregate limit shall be endorsed so as to provide coverage for each contract as follows:

1. General Aggregate Limit..... $2,000,000
2. Products-Completed Operations Aggregate Limit..... $2,000,000
3. Each Occurrence Limit ..... $1,000,000.

Coverages shall include:

1. premises operations,
2. independent contractors,
3. products,
4. completed operations,
5. broad form property damage,
6. hazards of explosion, collapse, and underground damage, and
7. contractual liability.

(c) Business Automobile Liability

This policy shall cover owned, non-owned, and hired vehicles. The combined

single limit of liability for bodily injury and property damage liability per each accident shall be $1,000,000.

(d) Railroad's Protective Liability

When required, the Contractor shall carry, with respect to the operations performed and those performed by others, for and in behalf of each railroad company, Railroad Protective Liability insurance providing for a limit of not less than a combined single limit of $2,000,000 per occurrence for damages arising out of bodily injury, death, and property damage with an aggregate limit of $6,000,000 for the term of the policy.

In addition, the limits specified in 103.05(b)3 shall be increased to $2,000,000.

(e) Owner's and Contractor's Protective Liability Insurance Coverage for Operations of Designated Contractor

The named insured in this policy shall be the State of Indiana, c/o Indiana Department of Transportation. If specified elsewhere in the contract, the named insured shall also include a local governmental agency.

The limits of coverage shall be not less than $1,000,000 for all damages arising out of bodily injury or death in one occurrence, and for all damages arising out of injury to or destruction of property in any one occurrence. Subject to the limit per occurrence, an aggregate limit for the contract of not less than $3,000,000 shall be provided during the policy period.

In addition to the limits specified herein, the policy and the binder shall also include the endorsements to the Owner's and Contractor's Protective Liability Insurance as follows:

1. Wherever used in this policy, the term "named insured" shall include the Indiana Department of Transportation, its officers, and employees. If specified in the contract, the term "named insured" shall also include a local governmental agency, its officers, and employees.

2. Wherever used in this policy, the term "general supervision" shall include on-site inspection, field engineering, field testing, and activities incidental thereto.

3. Exclusion (c) is amended to read as follows:

   (c) To bodily injury or property damage occurring after all work on the project to be performed by or on behalf of the State at the site of the covered operation has been completed, and the Contractor designated herein has been relieved of further maintenance, as set out in the

final acceptance letter of the Indiana Department of Transportation.

4. Not withstanding other terms or conditions, this policy provides the minimum insurance coverages as of the latest filing with the Indiana Department of Insurance by the Insurance Services Office with the endorsements and amendments specified by 103.05(e) of the Indiana Department of Transportation Standard Specifications. The policy is identified as the latest edition of form CG 00 09 as copyrighted by the Insurance Services Office, Inc.

(f) Basis of Payment

No direct payment will be made for insurance. The cost thereof shall be included in the cost of the pay items.

103.06 Waiver of Damages

At the time the contract is ready for final execution, all of the necessary right-of-way may not have been secured. In order to expedite prompt execution of the contract, the Contractor may sign a waiver of damages. This will waive all damages that might accrue to the Contractor for delay, expense, inconvenience, loss of profits, or for all other causes occasioned to the Contractor by the failure of the Department to secure such right-of-way. The waiver shall be binding upon each subcontractor of the principal Contractor. This waiver provision will not apply on Federal Aid projects.

103.07 Wage and Labor Requirements

These requirements apply to all contracts let by the Department. These requirements will apply to all work performed by the Contractor with its own organization and with the assistance of workers under its immediate superintendence, and to all work performed by piecework, station work, subcontract, or lease.

(a) Non-discrimination of Employees

The Contractor and its subcontractors shall not discriminate against an employee or applicant for employment, to be employed in the performance of the contract work, with respect to hire, tenure, terms, conditions, or privileges of employment or matters directly or indirectly related to employment, because of race, religion, color, sex, sexual orientation, sexual identity, disability, national origin, or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

(b) Affidavits and Payrolls

All labor shall be paid weekly. The payroll and related records of the Contractor and all subcontractors shall be preserved for a period of three years after completion of the project work and shall be open to the inspection of the Department.

The wages of labor shall be paid in legal tender of the United States. However, this condition will be considered satisfied if payment is made by means of a negotiable

check, on a solvent bank, which may be cashed readily by the employees in the local community for the full amount, without discount or collection charges. If checks are used for payment, the Contractor shall make all necessary arrangements for them to be cashed and shall give information regarding such arrangements.

The Contractor on each contract let by the Department shall be responsible for electronically filing certified payroll for its employees and any subcontractors on a weekly basis with the appropriate Department personnel and in a format acceptable to the Department. Failure of the Contractor to timely file certified payroll for its employees or any subcontractors, may result in the withholding of progress estimate payments until the certified payroll is properly submitted.

No fee shall be asked or accepted by the Contractor or its agents from a person as a condition of the contract.

No laborers shall be charged for tools used in performing their respective duties except for reasonable avoidable loss or damage thereto.

Each employee on the work covered by the contract shall be allowed to lodge, board, or trade where or with whom he or she elects. Neither the Contractor nor its agents, nor its employees shall directly or indirectly require as a condition of employment that an employee shall lodge, board, or trade at a particular place or with a particular person.

No charge shall be made for transportation furnished by the Contractor or its agents to a person employed on the work.

No individual shall be employed as a laborer on the contract except on a wage basis. This shall not be construed to prohibit the rental of trucks or other equipment from individuals. No such rental agreement, or charges for fuel, supplies, or repairs on account of such agreement shall cause deduction from the wages accruing to an employee except as authorized by the regulation cited herein.

(c) Wage Stipulations

No person employed on a federally funded contract shall be paid less than required by the rate of wages set forth for labor classifications listed in the General Decision as required by the Davis Bacon Act and related Acts. No person employed on a state funded contract shall be paid at a rate of less than $20.00 per hour, as required by IC 8-23-9-22 or the rate of wages set forth for labor classifications listed in the General Decision, whichever is greater.

1. General Decision Included in Contract Information Book

The Contractor shall pay the workers who are employed in performance of the contract work, rates of wages which are not less than the rates set forth for labor classifications listed in the General Decision.

The computations used in arriving at the contract unit prices shall be based on the hourly rates shown in the General Decision and as shown above. The wages herein stipulated shall become and be a part of the contract as provided by law.

The following statement, shown in the General Decision, will not apply to state funded contracts.

> "Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii))."

2. General Decision Not Included in Contract Information Book

If the General Decision is not included in the Contract Information book, the requirements of 103.07(c)1 will not apply.

103.08 Accident Prevention and Safety

In the performance of the contract work, the Contractor shall comply with all applicable federal, State, and local laws governing safety, health, and sanitation. The Contractor shall provide all safeguards, safety devices, and protective equipment. The Contractor shall take all reasonably necessary actions to protect the life and health of employees on the project site and the safety of the public, and to protect property in connection with the performance of the contract work.

It is a condition of the contract, and shall be made a condition of each subcontract entered into pursuant to the contract, that the Contractor and all subcontractors shall not require a laborer or mechanic employed in performance of the contract work to work in surroundings or in working conditions which are unsanitary, hazardous, or dangerous to that person's health or safety, as determined under construction safety and health standards 29 CFR 1926, as amended at the time the work is performed.

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, safety equipment, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

It is understood by all concerned that the apparent silence of the specifications as to a detail or the apparent omission of a detailed description concerning a point shall be regarded as meaning that only the best general practice is to prevail and that only material and workmanship of the first quality is to be used. All interpretations of these

specifications shall be made on this basis.

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

It is further provided that all work including the furnishing of materials, equipment, tools, labor, and incidentals required to carry out the terms of the contract shall be done by the Contractor, its employees, or subcontractors unless specifically set out otherwise in the Proposal. The words "by the Contractor" will not necessarily be used to so indicate. All work shall be carried out in a thorough, careful, effective, and satisfactory manner without specifically using these words to describe the action.

Reports and other documents that are determined to be pertinent and necessary to the effective monitoring of the contract shall be submitted by all applicable contractors and subcontractors in accordance with appropriately issued instructions.

104.02 Changed Conditions

A changed condition causes the work to substantially differ in kind or nature from the work as required in the original contract. The Department will adjust the contract for changed conditions as described herein. A contract adjustment may revise one or more of the following:

(a) the work to be performed

(b) the time required for the work

(c) the amount of compensation due the Contractor.

Changed conditions considered as reason for a contract adjustment are differing site conditions, suspensions of work ordered by the Engineer, and significant changes in the character of the work. A request by the Contractor for a contract adjustment shall be based on one or more of the changed conditions described herein.

(a) 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

the site is disturbed and before the affected work is performed.

Upon written notification, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the contract, an adjustment, excluding anticipated profits, will be made and the contract modified in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the contract is warranted.

No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice of a changed condition in accordance with 105.16.

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

(b) Suspensions of Work Ordered by the Engineer

If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation, and/or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within seven calendar days of 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 Contractor will be notified of the Engineer's 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 in accordance with 105.16.

No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

(c) Significant Changes in the Character of Work

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 such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.

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.

No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice of a changed condition in accordance with 105.16.

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

1. 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

2. When a major item of work, as defined elsewhere in the contract, is increased in excess of 125% or decreased below 75% of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125% of the original contract item quantity, or in case of a decrease below 75%, to the actual amount of work performed.

(d) Pre-established Remedies to Changed Conditions

The Contractor and the Department shall cooperatively work to resolve a request for a contract adjustment due to a changed condition by means of the pre-established remedies described herein.

After receipt of a notice of a changed condition in accordance with 105.16, the Engineer will determine if the Contractor's request for a contract adjustment is justified. The Engineer will respond to the Contractor in writing within two business days of the receipt of notification, or other time as mutually agreed, as to whether the request is justified and as to how the changed condition will be remedied.

If the Engineer determines that a request for a contract adjustment is justified, the

changed condition will be remedied by means of a contract adjustment based on one or more of the following pre-established remedies.

1. Calculations and payment involving existing pay items in the contract.

2. Payment for extra work in accordance with 104.03.

3. Extension of contract time in accordance with 108.08.

4. Payment for delay costs in accordance with 109.05.2 as allowed by 108.08(b).

If the impact of a changed condition will not be known for some length of time, the following procedure shall be followed to expedite a contract adjustment until the impact of the change can be determined.

1. After submitting notification of the changed condition, the Contractor shall keep daily records, apart from other records, of all labor, material, and equipment costs incurred for the work affected. The daily records shall identify each operation affected and the location where work is affected.

2. The Engineer will also maintain daily records of the work affected from the date of the notification.

3. Beginning the week following notification of a changed condition, the Contractor shall meet weekly with the Engineer to exchange and discuss each party's daily records of the work affected during the preceding week.

4. The Contractor shall notify the Engineer in writing within three business days of any disagreements with the Engineer's records and include the specific points of disagreement. These points will be addressed by the Engineer at the next weekly meeting.

5. Refusal by the Contractor to attend any weekly meeting or to submit daily records at a weekly meeting will constitute a waiver to any objections to the accuracy of the Engineer's records and the Engineer's records will control for purposes of computing any contract adjustment for the changed condition.

If the Contractor accepts the Engineer's remedy for a changed condition, the contract adjustment will be considered to be full and complete compensation for the changed condition and no further contract adjustment will be made for the circumstances of the Contractor's request.

If the Contractor disagrees with the Engineer's remedy for a changed condition, and decides to further pursue compensation, a written notification of a claim may be submitted in accordance with 105.16.

Pre-established remedies to a changed condition have the following conditions.

1. Acceleration

If the Department gives written direction for the Contractor to accelerate the work, a contract adjustment will be made specifying the work to be accelerated, the time to be saved by acceleration and the amount of compensation due the Contractor for the acceleration.

The Department assumes no liability for constructive acceleration unless the Contractor has provided written notice of the intent to accelerate the work, there is an excusable delay for which the Department has either improperly rejected the Contractor's request for an extension of contract time or failed to act on the request, and the Contractor has incurred additional costs for the acceleration.

2. Inefficiencies

If a claimed loss of productivity due to a changed condition cannot be isolated and remedied separately, the Department will consider payment for inefficiency costs on the basis of a measured mile analysis performed by the Contractor or other analysis method approved by the Engineer.

If the claimed inefficiency is for work performed out of scheduled sequence due to the changed condition, the current accepted schedule will be analyzed to determine if the work was performed out of sequence.

3. Unrecoverable Costs

The Department will not make payment for any of the following:

a. Loss of anticipated profits.

b. Consequential damages, including but not limited to loss of bonding capacity, loss of bidding opportunities and insolvency.

c. Expense of claim preparation and submission, including but not limited to attorney's fees, consultant's fees and expenses and litigation expenses.

d. Interest.

e. Home office overhead in excess of that provided for in the contract.

4. Unacceptable Cost Calculation Methods

The Department will not make any payments for costs calculated using any of the following methods:

a. Total cost methods based on calculation of costs as the difference between the Contractor's bid for the work and the Contractor's calculation of the costs for the work.

b. Calculation of home office overhead using the Eichleay Formula or other formulas used to calculate home office overhead due to delay.

104.03 Extra Work

Unforeseen work, for which there is no price included in the contract, shall be performed whenever it is deemed necessary to fully complete the contract within its intended scope, or it is in the best interest of the State to complete the unforeseen work under the contract. Such work shall be performed in accordance with the specifications and as directed, and will be paid for in accordance with 109.05.

104.04 Maintenance of Traffic

Unless otherwise provided, the road shall be kept open to all traffic while undergoing improvements. Where so provided on the plans, the traffic may be bypassed over an approved detour route. The detour route markings shall be erected, maintained, and removed by the Contractor.

Maintenance of traffic shall be in accordance with the details as shown on the plans or as directed. If an alternate plan for maintaining traffic is requested, it shall be submitted in writing as soon as possible for consideration. Such submittal shall include the complete details of the alternate maintenance of traffic scheme including all traffic control devices to be incorporated. If approved, the alternate plan shall not increase the cost of maintaining traffic to the Department.

The portion of the roadway being used by public traffic shall be kept in a condition which allows traffic to be adequately accommodated. Drums in accordance with 801.09 shall be placed at 200 ft intervals where drop-offs of greater than 3 in. are adjacent to the shoulder until the aggregate or earth wedge is placed. Temporary approaches to businesses, parking lots, residences, garages, farms, and crossings and intersections with trails, roads, and streets shall be provided in a safe condition.

All traffic control devices shall be maintained with no additional payment, except as set out in 107.18. Regulatory controls shall not be changed by the Contractor without prior approval. Regulatory control devices may be relocated in order to enable necessary construction, provided these control devices remain effective and convey the intended meaning after relocation to a position which complies with the

requirements of the MUTCD. After completion of the construction, regulatory control devices which were relocated to facilitate construction shall be permanently installed with no additional payment, in accordance with the plans, or as otherwise directed. All traffic control devices damaged, while being moved or handled, shall be replaced with no additional payment. All other traffic control devices necessary to maintain safe traffic operation and routings shall not be removed, changed, or relocated, except as authorized. Traffic control devices removed without authorization shall be replaced with no additional payment.

The cost of maintaining traffic over the section of road undergoing improvement and the cost of the construction and maintenance of such necessary features as approaches, crossings, and intersections shall be included in the contract unit price bid for maintenance of traffic pay items as set out in the Schedule of Pay Items, except as provided in 104.04(a), 104.04(b), and 107.18.

(a) Special Detours

When the Schedule of Pay Items contains an item for maintenance of detours or removing existing structures and maintaining traffic, the payment of the pay item shall cover all costs of constructing and maintaining such detours, including the construction of temporary bridges and accessory features and the removal of the same in accordance with 713.08.

(b) Maintenance Directed by the Engineer

If special maintenance is directed for the benefit of the traveling public, payment will be made on the basis of unit prices or in accordance with 104.03 or 105.13. The Engineer will be the sole judge of whether special maintenance shall be performed.

Except as otherwise expressly provided in the contract, existing Department maintained roads and other public roads and streets within the limits of the contract shall be kept open to two-way traffic between the dates of December 1 and April 1.

Where the surface on an existing road or street is disturbed by the Contractor and the entire depth of the new surface is not completed prior to December 1, two-way traffic shall be maintained between the above dates on the partially completed new surface or on a temporary surface satisfactory for two-way traffic. Such surfaces shall be maintained between the above dates with no additional payment. Precautions shall be taken to prevent unnecessary damage to partially completed surfaces. All portions which become damaged shall be repaired with no additional payment.

Public roads, commercial and private drives, and mailbox approaches which are disturbed, and on which the surfacing has not been completed, shall be maintained in a condition satisfactory for use during the time work is suspended.

Where such approaches have been constructed to grade and drainage structures installed, the approaches shall be surfaced with compacted aggregate, No. 53, to a depth as directed. Such surfacing material, which is incorporated in the finished work,

will be paid for at the contract unit price. The following season, the surfacing on the approaches shall be completed to the compacted depth shown on the plans by the addition of the surfacing material specified in the contract. During suspension of the work where such approaches have not been constructed to grade, a satisfactory temporary surface shall be provided with no additional payment.

(c) Blank

(d) Traffic Control for Patching on a Two-Lane Roadway

The work specified shall be arranged and prosecuted in accordance with the applicable requirements of 107 and 801, and as shown below.

Only one lane may be closed at a time.

A minimum of two drums shall be placed on the traffic approach side of each concrete patch or opened hole.

Patching on a two-lane roadway shall be in accordance with 305 and the details shown on the plans. Traffic restrictions will be allowed during daylight hours only. If the Contractor is unable to fill an area to be patched with concrete during daylight hours, the patch shall be filled with No. 53 aggregate for the times other than daylight hours. Drums in accordance with 801.09 shall be placed at the side of the roadway at the patch locations. If an opened hole cannot be patched for two or more calendar days, a 6 in. HMA cap shall be placed in the hole if concrete cannot be obtained. A watcher will be required while the roadway is temporarily patched.

104.05 Removal and Disposal of Structures and Obstructions

Unless otherwise provided, any existing structure or parts thereof, fence, building, or other encumbrance or obstruction upon or within the limits of the right-of-way which interferes in any way with the new construction shall be removed with no additional payment.

All removal of structures and obstructions the Contractor is directed to perform outside the construction limits for the benefit of the Department, including work needed for utility relocation, and not simply for the Contractor's convenience, will be paid for in accordance with 104.03 or 109.03.

Materials belonging to abutting property owners shown to be retained for the property owner shall be stockpiled in an acceptable manner at a designated area off the right-of-way. Materials not shown to be retained, except those materials mentioned in 104.06 or 805.03, shall become the property of the Contractor and shall be removed or disposed of according to the contract.

Materials to be salvaged for Department use shall be removed without damage in sections that can be readily transported. These materials shall be stockpiled neatly at locations identified on the plans or identified by the Engineer.

104.06 Removal and Disposal of Regulated Materials

The removal, testing, transportation, or disposal of regulated materials, except for paint and coating removal and disposal operations described in 619, shall be in accordance with the requirements included herein and the applicable Federal, State, and local laws, regulations, and rules. These include, but will not be limited to, the requirements of the Federal Toxic Substances Control Act, the Federal Resource Conservation Recovery Act, the Federal Comprehensive Environmental Response Compensation Liability Act, OSHA, IDEM, and State rules requiring certification of underground storage tank removal firms.

Regulated materials will consist of those as follows:

(a) materials which are classified as a hazardous waste, hazardous substance, or hazardous material under the regulations of the EPA or the United States Department of Transportation; and

(b) materials which contain more than 1% asbestos and are friable, or have high probability of becoming friable as per 326 IAC 14-10.

The Contractor shall be responsible for proper handling, storage, transportation, and disposal of all regulated materials which are brought onto the site by the Contractor. This shall include those materials which are required under the contract. The Contractor shall comply with all applicable laws, regulations, and rules regarding such materials. All spills of regulated materials, caused by the negligence of the Contractor shall be cleaned up in accordance with the applicable laws, regulations, and rules.

Except as provided herein, the Department will be responsible for proper handling, storage, cleanup, removal, testing, transportation, and disposal of all regulated materials, which are located within the project limits including materials that have spread beyond the project limits except for those materials brought onto the site by the Contractor. The following procedure shall be used for regulated materials under 42 U.S.C. 6921 et seq, 42 U.S.C. 9601 et seq, 40 CFR 260, 49 CFR 171-179, IC 13 Articles 19 - 24, 329 IAC 1 Articles 10, 11, and 12 or other applicable environmental laws, regulations, or rules:

(a) For Such Materials which are Identified in the Proposal as Being Present on the Project Site

1. The Department will provide in the Proposal all known information of all such materials known or suspected to exist within or adjacent to the project limits.

2. The Contractor shall act only under the written direction of the Department regarding the removal, testing, transportation, or

disposal of all such materials. Such written instructions may be provided in the Proposal or in accordance with 104.03.

3. Except as provided herein, the Contractor shall follow the construction requirements shown in 200.

4. The Department will be listed as the owner or the generator on all regulated material manifests. If disposal is required for such materials, the Department will approve, in writing, the appropriate licensed disposal site. The Department will retain title to all such regulated materials which are being disposed.

Payment for all work relating to removal, testing, transportation, or disposal of all regulated materials will be made in accordance with 202.14.

(b) For Such Materials which are not Identified in the Proposal as Being Present on the Project Site

Materials suspected of being regulated and discovered by either the Contractor or the Department shall be subject to the procedure described below.

1. If such materials are discovered by the Contractor, the Contractor shall cease all operations in the immediate vicinity and shall promptly notify the Engineer. If the material discovered is being released to the surrounding environment or if there is a perceived health threat, the Contractor shall immediately notify the State Police, IDEM's Office of Environmental Response, the local fire department, the county emergency management coordinator, and the Engineer.

2. If the Contractor determines that a tank now contains, or previously contained, a listed hazardous waste as defined by the RCRA, the Engineer shall be notified. No further work shall be done with such tank until directed.

3. If such materials are discovered by the Department, the Engineer will promptly notify the Contractor. The Contractor shall immediately cease all operations in the immediate vicinity.

4. If the substance is unknown, the Contractor shall take no action to identify the substance until receiving written instructions from the Department to conduct tests necessary to identify the material.

5. The Contractor shall test those areas for materials and products as directed by the Department.

6. All required sampling and testing shall be performed by an environmental engineer or hazardous materials manager, environmental specialist, qualified laboratory, or other person experienced in such work.

7. Once an unknown material has been identified and emergency response is concluded, the Contractor shall follow written instructions from the Department regarding removal, additional testing, transportation, or disposal of the regulated material, subject to the requirements as follows:

   a. Except for testing which the Contractor has been directed to perform, the Contractor shall not resume work in the vicinity of the hazardous condition or in such affected area until after the Department has obtained all required permits, approvals, notices of intent, or other submittals including, but not limited to, the following, as applicable:

      (1) Air emissions registration or permit.

      (2) Stormwater NPDES permit.

      (3) Sewer discharge permit/local POTW approval.

      (4) Regulated material characterization.

      (5) Treatment/disposal facility profiles and approvals.

      (6) Notification of hazardous waste activity as a generator and EPA identification number.

      (7) Submittal of a waste analysis plan to the EPA for treatment on-site in tanks and containers.

      (8) Hazardous waste permit for on-site treatment or storage of hazardous waste.

      (9) Advanced notification to IDEM for asbestos removal.

   b. The Department will provide written notice to the Contractor specifying the hazardous conditions and that the affected area is, or has been, rendered safe for the resumption of work, or specifying the conditions under which work may be safely resumed.

Payment for all work relating to removal, testing, transportation, or disposal of such materials will be in accordance with 104.03 utilizing pay items in 202.14.

c. Adjustments, as warranted by the specific circumstances, will be made to the contract price, contract time, or both as a result of such work stoppage or such special conditions under which the Contractor agrees to resume work. Contract time will not be adjusted on completion date contracts.

d. The Department will be listed as the owner or the generator on all regulated material manifests or documents.

e. If disposal is required for such materials, the Department will approve, in writing, the appropriate licensed disposal site.

f. The Department will retain title to all such regulated materials, which are being disposed.

8. Except as provided herein, the Contractor shall follow the construction requirements shown in 202.

104.07 Rights in and Use of Materials Found in the Project Site

Except for hazardous wastes, hazardous substances, hazardous materials, and asbestos which are subject to 104.06, and lead and zinc bridge painting debris which is subject to 619, all materials designated to be removed from the project and not used in the work shall become the property of the Contractor, unless otherwise set out in the Proposal. The value of these materials shall be taken into account when the bid is being prepared.

Construction materials such as gravel, stone, or sand found in the excavation shall not be used for purposes other than indicated on the plans without written approval. When such approval is given, it shall state explicitly the provisions under which it is granted.

On all contracts involving construction within the corporate limits of cities and towns in which items such as drainage structure castings, or other items having a salvage value, are to be removed, the removed items shall remain the property of the governmental bodies involved as specified in the Proposal or as shown on the plans. Otherwise, these items shall be disposed of in accordance with these Standard Specifications. The cost of such disposal shall be included in the contract unit prices of the various pay items of the contract, unless otherwise provided.

Archeological artifacts encountered during construction shall be addressed in accordance with 107.10.

104.08 Final Clean-Up

Before acceptance and final payment, the right-of-way, borrow and disposal areas, and all ground occupied in connection with the work shall be cleaned of rubbish, excess materials, temporary buildings, structures, and equipment. Waterways shall be left unobstructed.

All property which may have been damaged in the prosecution of the work shall be restored in an acceptable manner. All parts of the work shall be left in a neat and presentable condition.

All equipment shall be removed from the right-of-way.

Unless otherwise provided, all falsework, piling, concrete or timber mudsills, or similar material placed during construction and not required in the completed work, shall be removed entirely or cut off at least 2 ft below the finished ground. Within a low water channel, they may be removed or cut off even with the stream bed.

SECTION 105 – CONTROL OF WORK

105.01 Authority of the Engineer

The Engineer will decide all questions which may arise as to the quality and acceptability of materials furnished and work performed and as to the rate of progress of the work, which may arise as to the interpretation of the plans and specifications, and as to the acceptable fulfillment of the contract on the part of the Contractor.

The Engineer will have the authority to suspend the work wholly or in part for failure to carry out provisions of the contract, for failure to carry out orders, for such periods as may be deemed necessary due to unsuitable weather, for conditions considered unsuitable for prosecution of the work, or for any other condition or reason deemed to be in the public interest. Any contract adjustments for suspension of work will be in accordance with 104.02(b). Work shall not be suspended without written authority from the Engineer.

105.02 Plans and Working Drawings

Road plans will show, in detail, structures of up to and including 20 ft spans, lines, grades, typical cross-sections of the improvement, and general cross-sections. They may also show general features of bridges. Bridge plans will show general plans and details of bridges.

Working drawings as defined in 101.79 shall be furnished.

All working drawings and design calculations shall include the contract number, the Contractor's name, and contact person.

Working drawings shall be submitted as soon as practical after contract award in a format acceptable to the Engineer. Working drawings will be reviewed for design features only. The Contractor shall be responsible for dimensions, accuracy, and fit of work. Welding symbols used on working drawings shall be those shown in AWS A2.4 standards.

Design calculations required for approval for construction purposes shall be submitted as soon as practical after contract award in a format acceptable to the Engineer. When requested, a longhand example of the design methodology shall be furnished if the design calculations are in a computer-printout format.

Working drawings and design calculations for permanent work items shall be signed by and shall bear the seal of a professional engineer. Design calculations and drawings shall be checked for accuracy by a second qualified individual. This individual shall include their initials on the drawings and calculations. The qualifications of the checker shall be commensurate with the items being reviewed.

Working drawings for temporary work items shall be signed by and shall bear the seal of a professional engineer.

Working drawings shall be furnished for commercially available patented devices that appear on a QPL as published by the Department. Drawings shall be signed by and shall bear the seal of a licensed professional engineer. However, the professional engineer signing and stamping these drawings may be licensed in any state. Manufacturer's installation manuals shall be provided with the working drawings and will remain the property of the Department.

Working drawings and design calculations will be returned either approved or showing changes or corrections required within 14 calendar days of receipt. Working drawings that include bridge load rating in accordance with 714.04(c) item 9 or 723.04(c) item 10 will be returned either approved or showing changes or corrections required within 28 calendar days of receipt. If required to be changed or corrected, the drawings shall be resubmitted until they receive approval.

Fabrication or construction shall not start on an item of work before working drawings are approved. Authorized alterations will be endorsed on approved plans or shown on supplementary sheets. All work performed or material ordered prior to the approval of such plans and drawings shall be at the risk of the Contractor. Department approval of working drawings will not release the Contractor from the responsibility for errors, adequacy or safety of falsework, cofferdams, or other temporary work or risk in connection with the work. Prior to final acceptance, the Contractor shall provide a copy of all approved working drawings, including all approved modifications.

105.03 Conformance with Plans and Specifications

All work performed and all materials furnished shall be in reasonably close conformance with the lines, grades, cross-sections, dimensions, and material requirements, including tolerances, as shown on the plans or indicated in the specifications. Any deviation from the plans or specifications that may be required by the constraints of construction will be determined by the Engineer and authorized in writing.

Plan dimensions and contract specifications values are to be considered as the target value to be strived for and complied with as the design value from which any deviations are allowed. It is the intent of the specifications that the materials and workmanship shall be uniform in character and shall conform as nearly as realistically possible to the prescribed target value or to the middle portion of the tolerance range. The purpose of the tolerance range is to accommodate occasional minor variations from the median zone that are unavoidable for practical reasons. When a maximum or minimum value is specified, the production and processing of the material and the performance of the work shall not be preponderantly of borderline quality or dimension.

When construction equipment, office equipment, production equipment, or testing equipment are specified in metric sizes, any such equipment that has been built to nearly equivalent English system dimensions will be accepted. When such equipment is specified in English system sizes, any such equipment that has been built to nearly equivalent metric sizes will be accepted.

If the Engineer finds the materials or the finished product in which the materials used are not within reasonably close conformance with the plans and specifications, but that reasonably acceptable work has been produced, the Engineer will determine if the work will be accepted and remain in place. In this event, the basis of acceptance will be documented by an appropriate adjustment in the contract price for such work or materials as deemed necessary to conform to the determination based on engineering judgment.

If the Engineer finds the materials or the finished product in which the materials are used or the work performed are not in reasonably close conformance 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 with no additional payment.

105.04 Coordination of Plans, Standard Specifications, and Special Provisions

The Standard Specifications, the plans, special provisions, and all supplementary documents are essential parts of the contract. 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, calculated dimensions will govern over scaled dimensions; and the following relationships apply:

Instructions to Bidders and description of pay items listed in the Schedule of Pay Items	hold over:	Question and Answer Form Unique Special Provisions Plans Recurring Special Provisions Standard Specifications
Question and Answer Form	holds over:	Unique Special Provisions Plans Recurring Special Provisions Standard Specifications
Unique Special Provisions	hold over:	Plans Recurring Special Provisions Standard Specifications
Plans	hold over:	Recurring Special Provisions Standard Specifications
Recurring Special Provisions	hold over:	Standard Specifications

The Contract pre-bid Question and Answer Forms published on the Department's Contract Letting Information website are a part of the Contract Letting Documents. In case of discrepancy relative to other contract documents, the Question and Answer Forms shall take precedence over Unique Special Provisions. In case of discrepancy relative to other contract documents, the QPL will be regarded the same as Recurring Special Provisions. Notes on the plans which are not also included in either the special provisions or among the general notes portion of the plans, and refer to payment, non-payment, or cost to be included in that of other pay items, will not govern over specifications. The precedence outlined herein shall not absolve the Contractor of its responsibility in accordance with 107.17.

Advantage shall not be taken of any apparent error or omission in the plans or specifications. In the event such an error or omission is discovered, the Engineer shall be notified immediately. Such corrections and interpretations as may be deemed necessary for fulfilling the intent of the plans and specifications will then be made.

105.05 Cooperation by Contractor

The Department will furnish the Contractor all contract documents in electronic format without charge. The Contractor shall be responsible for supplying all necessary information for use by contractor and subcontractor personnel.

The work shall be given the constant attention necessary to facilitate the progress thereof. The Contractor shall cooperate with the Engineer, technicians, inspectors, and

other contractors in every way possible.

Where new work is to be fitted to old work, the Contractor shall check all dimensions and conditions in the field prior to ordering material and assume responsibility for fit of new work to old.

The Contractor shall have available at all times, and on the work site when work is in progress, as its agent, a competent superintendent capable of reading and understanding the plans and specifications and experienced in the type of work being performed. The superintendent shall receive instructions from the Engineer or its authorized representatives and shall have full authority to execute orders or directions without delay. They shall promptly supply such materials, equipment, tools, labor, and incidentals as may be required. Such superintendence shall be furnished irrespective of the amount of work sublet.

105.06 Cooperation with Utilities

Prior to letting the contract, the Department will notify all known utility companies, all pipeline owners, or other parties affected. The Department will endeavor to have all necessary adjustments of the public or private utility fixtures, pipelines, and other appurtenances within or adjacent to the limits of construction completed.

Waterlines, 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 which are to be relocated or adjusted are to be moved by the owners at their expense, except as otherwise provided for in the special provisions or as noted on the plans.

The plans show all known utilities located within the limits of the contract according to information obtained from the various utility companies. The accuracy of the plans in this respect is not guaranteed by the Department. All of the permanent and temporary utility appurtenances in their present or relocated positions as shown on the plans shall have been considered in the bid.

If work by one or more utilities is contingent on work by the Contractor or another utility, the Contractor shall keep all parties informed of the status and estimated completion date for the advance work in order to give each utility as much notice as possible to schedule crews and material for their relocation work.

The contract documents identify each known utility and describe all known necessary work and an anticipated schedule for completion. However, if a utility fails to relocate or adjust their facilities as provided for in the contract documents and the Contractor sustains delays, losses, or both, that could not have been avoided by the Contractor’s judicious handling of forces, equipment, and plant or by reasonable revisions to the schedule of operations, and the Contractor has documented its utility coordination efforts and sustained delays and losses, and if the sustained delays and

losses were not caused by the negligence of the Contractor, the Contractor may pursue appropriate compensation under 104.02 or from the documented offending party in accordance with Public Law 35-2005.

If the Contractor is delayed and it provides the aforementioned information to the Engineer, the time for completion may be extended in such amount as the conditions justify or the Contractor may be compensated for an accelerated construction schedule.

105.07 Cooperation Between Contractors

The Department may at any time contract for and perform other or additional work on or near the work covered by the contract.

When separate contracts are let within the limits of a project, each contractor shall conduct its work so as to not unnecessarily 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 as directed.

Each contractor involved shall assume all liability, financial or otherwise, in connection with its contract and shall protect and save harmless the Department from all damages or claims that may arise because of inconvenience, delay, or loss experienced by such contractor because of the presence and operations of other contractors working within the limits of the same project.

Work shall be arranged and the materials being used shall be placed and disposed of to not interfere with the operations of the other contractors within the limits of the same project. Work shall be joined with work performed by others in the proper sequence and in an acceptable manner.

105.08 Construction Stakes, Lines, and Grades

(a) Construction Engineering by the State

Unless otherwise provided, the Engineer will set construction stakes establishing lines, slopes, continuous profile-grade, centerline of roadway, centerline of piers and abutments, a benchmark adjacent to the work, and vertical control elevations for items including but not limited to flow lines, footings, caps, bridge seats, and screed elevations. In addition, all necessary information will be furnished relating to lines, slopes, and grades. Using the control lines and grades as established, the Contractor shall be responsible for completing the layout and performing the work.

The Contractor shall be responsible for the accuracy of transfer from the control lines and grades and layout of the work. The Contractor shall notify the Engineer to locate all existing underground traffic signal and lighting wiring. The Engineer will only perform this locate service once per construction season per contract. The Contractor shall also be responsible for the preservation of all stakes and marks. If the

construction stakes or marks are carelessly or willfully destroyed or disturbed by the Contractor or its employees, the cost to the Department for replacing them will be charged against the Contractor. Such costs will be deducted from payment for the work.

All stakes, templates, straightedges, and other devices necessary for checking, marking, and maintaining points, lines, and grades shall be furnished with no additional payment.

The Department will be responsible for the accuracy of control lines and grades established by the Engineer. If there is an error in the establishment of the original construction or survey stakes set, and discovered after the work has been fully or partially completed in compliance with the erroneous stakes, payment for additional work as may be required due to the error, will be made at the contract unit price for the class of work involved.

(b) Construction Engineering by the Contractor

If set out as a pay item, the construction engineering, including all staking and layout usually done by the Department, shall be performed by the Contractor. Construction engineering shall include re-establishing the survey points and survey centerlines; referencing the necessary control points; running a level circuit to check or re-establish plan benchmarks; running a level circuit to establish elevations on new benchmark tablets; setting stakes for right-of-way, culverts, slopes, subbase, underdrains, paving, subgrade, bridge piers, abutments, and all other stakes required for control lines and grades; setting vertical control elevations, such as footings, caps, bridge seats, and screed elevations; and obtaining flowline elevations. Construction engineering shall also include documenting the underground wiring as located by the Department.

The Contractor shall notify the Engineer to locate all existing underground traffic signal and lighting wiring. The Engineer will only perform this locate service once per construction season per contract. The required documentation shall be performed and a copy provided to the Engineer as soon as practical after the locations have been marked. Documentation which is not provided to the Engineer in a timely manner shall not be considered valid for the purpose of resolving conflicts related to the accuracy of the location markings. The documentation may be digital pictures, regular photos, or sketches of the areas marked. The documentation shall be such that the underground wiring can be easily and accurately re-established in the field by the Contractor, if needed.

The Contractor shall schedule its construction engineering operation, including staking, in a timely fashion so as to assist the utilities in the relocation or adjustment of their facilities as early as possible in the contract. All staking the Contractor is directed to perform to assist the utilities' relocation and which is considered to be in addition to the normal staking required, will be paid for in accordance with 104.03 or 109.03.

A complete cross-section shall be taken at each 500 ft interval. Horizontal control shall be checked at the beginning and ending of the mainline and all "S" lines. This information shall be used to verify that the planned alignment and elevations will match existing conditions. Required alignments and elevations will be shown on the plans.

Prior to incorporating established grades, the Contractor will be required to determine that all other planned elevations are in accordance with field conditions. The profiling of existing pavements beyond tie-in points for proper ride, profiling of existing ditches for proper flow, and visual observations that driveways or sidewalks may be constructed satisfactorily, will be required.

Interstate routes and other divided lane pavements shall be checked for the vertical clearance under structures to ensure that a minimum of 16 ft is maintained over the traffic lanes and paved shoulder. Ramps which connect to the above type pavements shall provide the same clearance. All other pavements shall be checked for the vertical clearance under a structure to ensure that a minimum of 14 ft is maintained over the traffic lanes and paved shoulders. Grade transitions shall be tapered to meet the grade of the pavement under a structure a minimum of 100 ft away from the structure and at a rate not to exceed 0.14%. All discrepancies shall be brought to the immediate attention of the Engineer. All changes in the design will be provided by the Department. Field adjustments that do not affect the design shall be made by the Contractor and the Engineer shall be notified. Adequate control stationing shall be maintained throughout the length of the project. At the end of the contract all survey control points that fall within the right-of-way shall be established. At the end of the contract, the Contractor shall provide the necessary centerline layout so that the final sections may be taken by the Department.

The re-establishment of the centerline control points shown on the plans, right-of-way points used for fence or markers, and section corners shall be performed by a land surveyor who is registered in the State or by people under the direct supervision of the land surveyor, per the requirements of IAC Title 865 of the State Board of Registration for Professional Surveyors Statutes and Rules.

Benchmarks and elevations shall be established on new or rehabilitated bridges. The elevations shall be tied to the United States Geodetic Survey system providing there is an existing monument within a radius of 3 mi of the bridge site. If a monument is not within this distance, the elevation of the new benchmark shall be established from the benchmarks shown on the plans. Tablets will be furnished by the Department and shall be set in the new concrete at the locations directed. The Contractor shall document the elevation on the proper forms furnished by the Department. The forms shall be signed, sealed, and dated by a land surveyor or engineer who is registered in the State. The work shall be performed in accordance with Part 1, Chapter 106 of the Department's Design Manual. Copies of the forms shall be provided to the Engineer for distribution.

All stakes, templates, straightedges, and other devices necessary for checking, marking, and maintaining points, lines, and grades shall be furnished.

On a road contract, the level circuit to check the plan benchmarks shall be run for the full length of the project. Intermediate benchmarks shall be established approximately every 500 ft through the project. On a bridge contract, the circuit shall include four plan benchmarks, if available, two on each side of the structure.

Field notes shall be kept in hard covered field books in a clear, orderly, and neat manner consistent with standard engineering practices and in accordance with the Department's prescribed field book procedure, including titles, number, and indexes. Such field books shall be furnished by the Contractor and shall adequately document all survey information. Copies of field book shall be furnished to the Engineer upon request during the life of the contract. The original field notes shall become the property of the Department upon completion of the work. Such field notes shall be bound. All pages shall be numbered before submission to the Department.

After the grade stakes have been set for earthwork, an elevation on the top of each stake shall be taken. Such elevation shall be tied into a permanent plan benchmark. Using this information in conjunction with the plans, a grade sheet shall be prepared. Grade sheets shall also be prepared for special ditches.

When staking culverts, the Contractor shall perform the necessary checking to establish the proper location, length, skew, and grade. Prior to culvert installation the Engineer will approve adjustments in the location, length, skew, and grade to fit best the conditions on the site. The Contractor will not be responsible to verify that the culvert is of adequate opening.

Where sumping is shown on the plans, the Contractor shall obtain the existing flowline elevation. This information will be used to verify that the planned sump depth matches existing conditions. Prior to culvert or bridge working drawing design, the Engineer will determine adjustments in footing or invert elevation necessary to provide the appropriate sump depth.

The Engineer will make all measurements and surveys that involve the determination of final pay quantities, including original and final cross-sections for all earthwork. The accuracy of the construction engineering may be checked as necessary, but responsibility for the accuracy of engineering layout or the final result of construction accuracy will not be assumed. The staking by the Contractor shall be done similar to the standard procedure for Department engineering personnel. All inspection and testing will be performed by Department personnel.

The supervision of the Contractor's construction engineering personnel shall be the responsibility of the Contractor. All errors resulting from the operations of such personnel shall be corrected with no additional payment.

The Contractor shall not engage, on full-time, part-time, or other basis during the contract time, professional or technical personnel who are or have been, during the contract time, in the employment of the Department, except regularly retired employees, without the written consent of the Commissioner.

Construction engineering as specified herein will be paid for at a contract lump sum price. The cost of furnishing all necessary personnel, equipment, and supplies to accomplish the work shall be included in the cost of this work. A change in plans or scope of work which causes the Contractor's construction engineering cost to increase or decrease by $500.00 or more per occurrence will be paid for or deducted from the original lump sum price bid for construction engineering. An amount of less than $500.00 per occurrence will not be considered for price adjustments.

(c) Production Staking by the Contractor

When specified, production staking shall be performed by the Contractor. Production staking shall include staking for finishing subgrade and placing subsurface drains, subbase, adjacent curbs or curbs and gutters, and all types of pavements, including base and surface. It shall also include the furnishing of all labor, equipment, and supplies except field books required to complete the work and the staking and re-staking involved in any authorized alteration of the plans or added work in the specified items. It does not include staking right-or-way, setting slope stakes, referencing points, and preparing grade sheets for rough grading. Rough grade staking will be performed by the Department.

Notes for production staking shall be prepared in standard field books in a clear, orderly, and neat manner consistent with good engineering practices and in accordance with the Department's prescribed note book procedure. Notes shall be kept in a manner which can be checked readily and shall be available upon request. Grades and other information, which are obtainable from the plans, shall be computed and transcribed to the books. The Contractor shall be responsible for the accuracy of the transferal of the information to the finished work. Errors caused by inaccurate staking of grades and lines shall be corrected with no additional payment. The method of staking will be subject to approval. Stakes shall be set and marked in a manner that will enable checking. Completed staking shall be preserved as long as required for inspection and checking of the work.

Standard field books will be furnished which will remain the property of the Department and shall be returned at the completion of the work. Point references, required benchmark data, and information which is not obtainable from a complete set of contract documents will be furnished. The Department will be responsible for errors in the plans or other information furnished for layout purposes. If an error is discovered after the work is fully or partially completed and the error is the result of erroneous information, payment will be made for additional required work at the contract unit price for the work involved.

Production staking will not be paid for directly. The cost thereof shall be included in the cost of the pay items involved.

105.09 Duties of Technician and Inspector

The technicians and inspectors employed by the Department are stationed on the work to:

(a) keep the Engineer informed as to the progress of the work and the manner in which it is being performed,

(b) report whenever it appears that the materials furnished and the work performed fail to fulfill the requirements of the specifications and contract, and

(c) call to the attention of the Contractor, as the work progresses, all known deviations from, or infringement upon, the plans and specifications with respect to materials and workmanship.

Technicians and inspectors will be authorized to inspect all work performed and materials furnished and to exercise such additional authority as may be delegated to them in writing. Such inspection may extend to all the work performed and material furnished. They shall have authority to reject defective materials and to suspend any work that is being improperly performed, subject to the final decision of the Engineer.

Such inspection will not relieve the Contractor from any obligation to furnish acceptable materials or to perform all work strictly in accordance with the requirements of the plans and specifications.

Technicians and inspectors will not be authorized to:

(a) revoke, alter, enlarge, relax, or release any requirements of the specifications;
(b) approve or accept any portion of the work; or
(c) issue instructions contrary to the plans and specifications.

Technicians and inspectors will not, in any case, act as foremen or perform other duties for the Contractor, nor interfere with the management of the work. Any advice which technicians and inspectors may give the Contractor will not be construed as binding the Engineer or the Department in any way or as releasing the Contractor from the fulfillment of the terms of the contract.

105.10 Inspection of Work

All materials and each part or detail of the work will be subject to inspection. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance as is required to make a complete and detailed inspection. Such inspection may include preparation and manufacture of the materials at the plant.

At any time before acceptance of the work, such portions of the finished work shall be removed or uncovered as may be directed. After examination, said portions of the work shall be restored to the standard required by the specifications. If the work thus exposed or examined proves to be acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for in accordance with 109.05. If the work so exposed or examined proves to be unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be with no additional payment.

All work done or materials used without supervision or inspection by an authorized Department representative may be ordered removed and replaced with no additional payment unless the Department representative failed to inspect after having been given reasonable notice in writing that the work was to be performed.

When work covered by the contract is being performed under an agreement with a unit of government or political subdivision, or a railroad corporation, its respective representatives shall have the right to inspect the work. Such inspection shall in no sense make such unit of government or political subdivision or such railroad corporation a party to the contract, and shall in no way interfere with the rights of either party hereunder.

105.11 Removal of Unacceptable and Unauthorized Work

All work which is not in accordance with the contract will be considered as unacceptable work, subject to conditions set out in 105.03.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner.

No work shall be performed unless lines and grades have been given or approved. Work performed contrary to instructions, beyond the lines shown on the plans or as given, 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 with no additional payment.

If the Contractor fails to comply forthwith with any order made under the provisions of this subsection, the Engineer will have authority to cause unacceptable work to be remedied or removed and replaced, to cause unauthorized work to be removed, and to deduct the costs from any monies due or to become due.

105.12 Load Restrictions

Legal load restrictions shall be complied with on public roads beyond the limits of the project. A special permit will not relieve the Contractor of liability for damage

which may result from the moving of equipment.

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 allowed. No loads will be allowed on concrete pavement, concrete bases, or structures before the expiration of the curing period. The Contractor shall be responsible for all damage done by the Contractor, its employees, agents, or subcontractors.

This requirement will serve as written notice that hauling or handling of materials on completed or partially completed structures, pavement structures, or paved shoulders in excess of legal weight limits will not be allowed unless approved in advance of the operation. Approval shall be obtained from the authority having jurisdiction over the structures, pavement structures, or paved shoulders.

105.13 Maintenance During Construction

The work shall be maintained during construction and until the contract is accepted. This maintenance shall constitute continuous and effective work prosecuted day by day with adequate equipment and forces to keep the roadway, structures, barricades, and construction signs in satisfactory condition at all times.

Once construction operations have begun within the project limits, and through traffic is required to be maintained, the Contractor shall repair areas as directed which require special maintenance. If the repair work is determined to be required during construction and is due to the Contractor's operations, the cost of such work shall be included in the cost of other pay items. If the areas of the roadway which require repair are due to use by the traveling public or the elements of nature, and are not the fault of the Contractor, the Contractor will be paid to repair those areas of the roadway. This work will be paid for under the appropriate pay items or in accordance with 104.03.

If the contract includes work for the placing of a course upon a previous course or subgrade which the Contractor has constructed, the previous course or subgrade shall be maintained during all construction operations. The cost of maintaining this work shall be included in the cost of other pay items.

105.14 Failure to Maintain Roadway, Structures, Barricades, and Construction Signs

If the Contractor, at any time, fails to comply with the requirements of 105.13 and 107.12, the Contractor will immediately be notified of such non-compliance. If satisfactory maintenance is not furnished or unsatisfactory maintenance is not remedied within 24 h after receipt of such notice, the Engineer may order suspension of work and proceed to maintain the project, and all progress estimates will be withheld until the Contractor complies. The entire cost of this maintenance will be deducted from the money due or to become due on the contract. No additional contract time will be considered.

The Contractor may be assessed damages for failure to maintain the required

traffic control devices or markings, except for construction warning lights, in accordance with 801.03. For each day, or portion thereof, during which a type of traffic control device or marking is in non-compliance, damages will be assessed at a rate of $40.00 for each day, per non-compliant unit within a device or marking. If the pay unit for a traffic control device is per day, the damage assessment will equal twice the unit price.

Non-compliance caused by events beyond the control of the Contractor may not be assessed damages. Immediate repairs shall be made to protect the traveling public.

Assessment of damages for non-compliance of construction warning lights will be in accordance with 801.14.

105.15 Acceptance and Final Inspection

(a) Partial Acceptance

The Contractor may request a final inspection and partial acceptance if:

1. a usable portion of the contract one mile or more in length is completed,

2. a portion of the contract designated as a project is completed, or

3. a portion of the contract physically and functionally separate from other work areas is completed.

If the inspection shows the completed portion to be satisfactory and in accordance with the contract, that portion may be accepted and the Contractor may be relieved of further responsibility. Such partial acceptance shall in no way void or alter any of the terms of the contract.

(b) Final Acceptance

When the Contractor gives notice of presumptive completion of the entire contract, an inspection will be made. If all construction provided for and contemplated by the contract is found completed satisfactorily, that inspection shall constitute the final inspection and the Contractor will be notified in writing of final acceptance. The date of final acceptance shall be the date the Contractor is relieved of further maintenance in accordance with 107.18 and as set out in the final acceptance letter. This date shall not be prior to the date of the final inspection or the date of last work. The date of last work will normally be the date the Contractor removes the last construction traffic control device.

If the work is not acceptable at the time of such inspection, the Contractor will be advised in writing as to the particular defects to be remedied before final acceptance. If, within a period of 10 days after such notice, steps have not been taken to complete

the work speedily as outlined, the Department, acting through the Commissioner, may, without further notice and without impairing the contract in any way, make other arrangements as necessary to have the work completed in a satisfactory manner. The cost of so completing the work may be deducted from money due or which may become due the Contractor on the contract.

105.16 Notice of Changed Conditions and Claims

Nothing in this subsection shall be construed as establishing a claim contrary to the terms as set out in 104.02.

(a) Contractual Notice of a Changed Condition

If the Contractor requests a contract adjustment for a changed condition in accordance with 104.02 notification shall be made in writing before the work is begun or expenses relating to the request are incurred.

The written notification of a changed condition shall be submitted to the Engineer and shall include the following minimum information.

1. A statement that the submittal is notification of a changed condition.

2. The date the circumstances believed to have caused the changed condition were discovered and an explanation of how and by whom the changed condition was discovered.

3. A detailed and specific statement describing the nature and circumstances of the changed condition.

4. A statement of the estimated effect of the changed condition on the controlling operation and the cost and contract time of the project.

If written notification of a changed condition is not given and the Engineer is not afforded the opportunity to remedy the changed condition, then no request for a contract adjustment will be considered. Notification of a changed condition and the estimate of the cost of the change shall not be construed as validation of a changed condition. If the Engineer determines that a contract adjustment is due, payment will be made as provided for herein.

No contract adjustment will be made for work performed or for expenses incurred prior to the date of notification of a changed condition. The Contractor shall diligently prosecute the work unaffected by the changed condition to the maximum extent possible.

(b) Claims

When the Contractor disputes the Engineer's determination of a remedy for a changed condition and decides to pursue further relief, a written notification of a claim

shall be submitted to the Engineer within 15 days of receipt of the Engineer's notification of the remedy. If the Contractor fails to submit a notice of a claim within the time specified, the Contractor shall waive any further rights to a contract adjustment due to the circumstances from which the claim arose.

1. Required Documentation

The Contractor shall submit a claim in writing to the Engineer within 30 days, or other time as mutually agreed, of when the circumstances giving rise to the claim have ended or otherwise been resolved.

The claim shall contain sufficient detail to enable the Engineer to determine the basis and amount of the claim. At a minimum, the following information shall be included in a claim in a format that can readily be analyzed by the Engineer. The format shall include, but not be limited to, document length page numbering, a table of contents, and cross references as applicable throughout the claim documentation.

a. A detailed factual statement of the claim providing all necessary dates, locations, and items of work affected by the changed condition.

b. The date on which the changed condition resulting in the claim occurred or became evident and an explanation of how and by whom the changed condition was discovered.

c. A copy of the notification of changed condition as originally submitted by the Contractor.

d. Copies of the Contractor's daily records of the changed condition as kept in accordance with 104.02(d).

e. The name and function of each individual involved in or knowledgeable about the claim.

f. The specific provisions of the contract which support the claim and a statement of the reasons why the provisions support the claim.

g. A detailed factual statement of any actions taken by the Contractor to mitigate the claim.

h. The identification of documents and the substance of communications relating to the claim.

i. A detailed factual statement supporting the Contractor's contention that the Department's decision was a breach of contract if the claim is related to a

decision that the contract leaves to the Department as discretionary or final.

j. The specific amount and basis of costs sought broken down in the categories specified for force account in 109.05, including a separate calculation of markup as allowed in 109.05.

k. The specific amount of contract time extension sought and the basis for the request, including approved and as-built bar chart or critical path method schedules depicting the affected work.

l. A notarized statement, signed by an officer of the Contractor, under the penalties of perjury, that the claim is made in good faith, that no portion of the claim has previously been paid, and that the amount of the claim and the supporting documents are true, accurate, and reflect what the Contractor believes to be the Department's liability.

The Engineer will provide a written notice to the Contractor of receipt of a claim. If the information provided by the Contractor with a claim does not contain sufficient detail to enable the Engineer to determine the basis and amount of the claim, the Engineer will notify the Contractor in writing of the specific details required. The Contractor shall provide the required details within 14 days, or other time as mutually agreed, of receipt of the Engineer's request. If the Contractor fails to provide the requested details within the time frame, the Engineer's original remedy for the changed condition will be the final determination by the Department and the Contractor shall waive any further right to contest the remedy.

2. Auditing of Claims

Claims filed by the Contractor against the Department shall be subject to audit at any time following the filing of such claim, whether or not such claim is part of a suit in the courts of the State. The audit may begin a minimum of 30 days after written notice to the Contractor, subcontractor, or supplier and may be extended as mutually agreed by all parties. The Contractor, subcontractor, or supplier shall make a good faith effort to cooperate with the auditors. Failure to cooperate shall constitute a waiver by the Contractor of the claim in its entirety. Failure of the Contractor, subcontractor, or supplier to maintain and retain sufficient records to allow the Department's auditor to verify the claim shall constitute a waiver of that portion of the claim that cannot be verified and shall bar recovery.

(c) Claim Resolution Process

1. Project Level Review

The Contractor shall submit the claim to the Engineer at the project level. The

Engineer will review the claim and make an effort to resolve the claim at the project level within 30 days of receipt of the claim, or other time as mutually agreed. Meetings may be requested by either the Engineer or the Contractor to discuss the claim in an effort to reach resolution. The Engineer will make a project level determination on the claim and notify the Contractor in writing of the determination.

If the Contractor disagrees with the project level determination or if a determination is not issued within the specified or agreed upon time, a written request for a District Office review may be submitted to the Engineer within 30 days of receipt of the project level determination or the end of the time for the determination to be issued. Failure to submit a request for District Office review within the specified time will constitute acceptance of the project level determination by the Contractor and a contract adjustment will be made in accordance with the determination. The contract adjustment will be considered full and complete compensation for the changed condition and the Contractor shall waive any right to further contest the determination.

When a District Office review of the project level determination is requested, the claim will be sent from the project office to the District Office for the review. The Contractor shall not modify the basis of the claim or the method for calculating the amount claimed after submittal to the District Office.

2. District Office Review

The Engineer will review the claim as submitted to the District Office. Meetings may be requested by either the Engineer or the Contractor to discuss the claim in an effort to reach resolution.

For claims with a total value less than or equal to $150,000, or 20% of the original contract amount or 100 days of contract time extension, the Engineer will review the project level determination and issue a written District Office determination within 45 days, or other time as mutually agreed, of the Contractor's request for a District Office claim review. A claim review by the District may affirm, reject, or modify the project level determination. The District determination will specify the portions, if any, of the project determination that are being rejected or modified and the rationale supporting the portions rejected or modified.

The Contractor may accept or reject a claim review determination made by the District Office. If the Contractor accepts the determination, it will be considered the final determination by the Department and a contract adjustment will be made in accordance with the determination.

If a District determination is rejected, the Contractor may submit a written request for a final review meeting before a District Claim Review Board. The request shall be submitted to the Director of Construction Management within 30 days of the Contractor's receipt of the District determination. The Director of Construction Management will respond in writing to the Contractor and will convene a Board to review the claim. Failure to submit a request for a review meeting within the specified

time will constitute acceptance of the District Office determination by the Contractor and a contract adjustment will be made in accordance with the determination. The contract adjustment will be considered full and complete compensation for the changed condition and no further claim shall be made for the circumstances that gave rise to the claim.

The District Claim Review Board will consist of three Department personnel selected by the Director of Construction Management and will include one member from District Construction in the District involved in the claim and two members from the Division of Construction Management. The Director of Construction Management will assign one member as the chairperson who will then schedule a review meeting with the Contractor at a mutually agreed time and location. The Contractor will be given sufficient time at the review meeting to present arguments and exhibits in support of the claim. The Board will issue a written determination within 30 days of the review meeting and the decision will be considered as the final determination by the Department and no further dispute resolution will be considered by the Department. A contract adjustment will be made in accordance with the determination of the Board and will be considered full and complete compensation for the changed condition and no further claim shall be made for the circumstances that gave rise to the claim.

For claims with a total value greater than $150,000, or 20% of the original contract amount, or 100 days of contract time extension, the District will forward the claim, along with the project level ruling and a District Office written opinion to Central Office for a determination. The Contractor shall not modify the basis of the claim or the method for calculating the amount claimed after submittal to Central Office.

3. Central Office Review

The Engineer will review the claim as submitted to Central Office from the District. Meetings may be requested by either the Engineer or the Contractor to discuss the claim in an effort to reach resolution.

The Engineer will review the claim and issue a written final determination within 60 days, or other time as mutually agreed, of receipt of the claim from the District. A claim review determination by Central Office may affirm, reject, or modify the determination made at the project level. The determination will specify the portions, if any, of the project determination that are being rejected or modified and the rationale supporting the portions rejected or modified.

The Contractor may accept or reject a claim review ruling made by Central Office. If the Contractor accepts the ruling, it will be considered as the final decision by the Department and a contract adjustment will be made in accordance with the ruling.

If a Central Office determination is rejected, the Contractor may submit a written request that the matter be discussed before a civil mediator. The request shall be submitted to the Director of Construction Management within 30 days of the date of

the Central Office determination. Failure to request mediation within the specified time shall constitute acceptance of the Central Office determination by the Contractor and a contract adjustment will be made in accordance with the determination. The contract adjustment will be considered full and complete compensation for the changed condition and no further claim shall be made for the circumstances that gave rise to the claim.

Upon receipt of the request for civil mediation, the parties will select a mutually agreed upon certified mediator from the list of mediators eligible to perform civil mediations in the State of Indiana. The mediator shall be familiar with the highway and bridge construction industry but shall not have any financial interests in the parties. The mediation shall be conducted in Indianapolis, Indiana pursuant to the applicable rules of the Indiana Supreme Court governing civil mediations in the State of Indiana. The mediator will schedule the mediation as soon as practicable, preferably within 60 days of selection. In the event settlement is reached, a summary of agreement will be prepared. Either party or the mediator may declare the mediation to be unsuccessful. By requesting mediation, it is agreed that, as with other civil mediations, the discussions and proceedings at mediation are considered part of settlement negotiations and are inadmissible in any civil proceeding.

The Contractor and the Department mutually agree that use of the claim resolution process up to and including the utilization of a mediator is a condition precedent to the filing of any lawsuit concerning claims or alleged breaches of the Contract. The costs and expenses associated with use of the mediator shall be borne by both parties equally. Each party to the mediation shall bear its own costs in preparation and participation.

SECTION 106 – CONTROL OF MATERIAL

106.01 Source of Supply and Quality Requirements

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 the proposed sources of materials prior to delivery. The Engineer may deem materials acceptable for use at the source of supply before delivery. All materials tested at the source may be subjected to further testing during production or after incorporation into the work. The Contractor shall also advise the Engineer when orders for materials are placed and when such materials are received. The quantity, source of supply, and the locations where the materials have been stored shall be included in the notice.

If a combination of materials individually tested and deemed acceptable for use do not produce final products that meet contract requirements, that combination shall not be used. Other materials from different sources shall be furnished. Acceptance of materials or a product made from a combination of materials will be based on the results of tests made nearest to incorporation into the work.

A specific material deemed acceptable for use shall not constitute acceptance of all materials from that source.

Material tested prior to incorporation into the work and found not to be in accordance with the contract will be rejected. Material tested after incorporation into the work and found not to be in accordance with the contract will be governed by 105.03.

The application of all epoxy, galvanizing, painting, and other coatings required by the contract to metal products shall be domestically applied.

(a) Prequalified Materials

Certain materials and equipment will be prequalified by brand name or source of manufacture. QPLs are maintained by the Department as provided in the specifications. The Department will review all QPLs prior to January 1 of even numbered years. Unless otherwise provided, any item listed for three years prior to the review without being supplied to a contract may be removed from the list.

All packaged materials shall be marked plainly showing the amount and nature of contents and shall be delivered intact.

(b) Material Records

The Engineer will prepare the material record from the documentation provided by the Contractor.

1. Documentation of Material Delivery

The Contractor shall provide a copy of each delivery ticket and certifications, if required, to the Engineer not later than the next business day, except as specified herein. If providing this information on the next business day is not possible, the Contractor and the Engineer will agree upon other arrangements for the receipt of the necessary documentation prior to the event.

2. Delivery Ticket Information

The material delivery ticket shall include an itemized quantity of all materials delivered, the date of delivery, and the contract number. The material delivery ticket shall document the source of supply and source code, if known, and shall contain information necessary to obtain a basis for use as required by Department specifications. The material delivery ticket may be either a paper ticket or an electronic ticket, e-ticket.

When e-tickets are to be supplied, the Contractor shall either be approved to use the Department's e-ticketing system or request approval of the Engineer to use an alternate e-ticketing system.

The approval of an alternate e-ticketing system shall warrant the following minimum requirements:

a. The Contractor shall provide a user guide document and answer questions as needed.

b. The Contractor shall provide the Department access to the e-ticket data in real-time via software compatible with both Apple macOS and Microsoft Windows desktop operating systems and both Apple iOS and Google Android mobile operating systems.

c. The Contractor shall provide the Department the ability to acknowledge the delivery of e-tickets within both the desktop and the mobile systems in real time.

d. The system shall compile e-tickets into a single PDF format document by date and material description with the number of tickets per page limited to maintain legibility. The system shall also compile a PDF format e-ticket summary by date and material description with the total quantity delivered. E-tickets and summaries shall include the delivery status input by the Department.

e. The Contractor shall provide software access to the Department for direct download of all e-tickets and summaries, or in the absence of such access, the Contractor shall be responsible for emailing the required documents.

f. The Department may request paper tickets at any time due to system failures, cellular connectivity failures, or lack of reliability due to inaccuracy or inconsistency of the data provided.

All required certifications shall be in accordance with 916 or as directed.

3. Payment Procedures

If the Contractor does not provide the necessary documentation for the materials, such materials will not be paid for. The Engineer will notify the Contractor of those materials held from the estimate with the justification for withholding payment. If corrective action has not been taken within six weeks of the materials delivery to the project site, the entire estimate payment may be withheld.

(c) Buy America Requirement

All contracts shall be supplied with steel and iron products that are produced in the United States. Steel and iron products shall comply with IC 5-16-8 and 23 CFR 635.410.

A Buy America Certification shall be submitted and received for each product or source of material prior to being incorporated into the contract in accordance with 916.

1. Steel and Iron Products

All steel and iron products incorporated permanently into a contract shall be made of steel or iron produced in the United States and all subsequent manufacturing shall be performed in the United States except for pig iron and processed, pelletized, and reduced iron ore. Manufacturing is any process that modifies the chemical content; physical shape or size; or final finish of a product. Manufacturing begins with the initial melting and mixing and continues through the bending and coating stages. If a domestic product is taken out of the United States for any process, it becomes a foreign source material.

Manufactured products that are partially or predominantly steel, shall be entirely produced with domestic steel. If a product has miscellaneous foreign steel incorporated, such as fasteners or brackets, then those miscellaneous pieces shall be replaced or substituted.

a. Exceptions

The Engineer may grant specific written permission to use foreign steel or iron products when both of the following conditions apply:

(1) The total cost of all foreign products to be used does not exceed 0.1 percent of the total Contract cost, or $2,500, whichever is greater. The cost is the value of the product as delivered to the project.

(2) The specified products are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet the requirements of the Contract Documents. The Engineer may require the Contractor to obtain letters from three different suppliers documenting the unavailability of a product from a domestic source if the shortage is not previously established by the Department.

106.02 Samples, Tests, and Cited Specifications

The Engineer will inspect, test, and determine whether the materials comply with the contract requirements before they are incorporated into the work. The Department may sample and test materials or require certifications. The minimum required number of samples and tests will be as specified in the Frequency Manual. Samples will be taken by or under the supervision of the Engineer. All materials being used will be subject to inspection, testing, or rejection at any time.

Such facilities as may be required for collecting and forwarding samples shall be

provided and the materials represented by the samples shall be held until tests have been made and such materials found to have the qualities required in the contract. All samples required and additional material required to replace samples shall be furnished without charge.

All tests of materials will be made in accordance with the methods described or designated in the contract. When tests are made at places other than the laboratory, every needed facility shall be furnished for the verification of all scales, measures, and other devices which are used.

If the Contractor elects to supply materials other than structural steel and prestressed structural members which require on-site sampling or testing as they are manufactured in out-of-state manufacturing plants located more than 60 mi outside a State line, the Contractor shall provide the sampling or testing services required. Such services shall be conducted by a Department-approved testing laboratory. No additional payment will be made for such services.

Unless otherwise specified, tests will be made by, and at the expense of, the Department. Materials will be tested in accordance with AASHTO, ASTM, or other specifications or methods referred to herein or elsewhere. The version of the AASHTO, ASTM, or other specification will be the standard, interim, or tentative specification included in the latest published edition as of January 1 of the current year, unless otherwise specified. ITMs will become effective immediately upon approval by the ITM Committee unless otherwise directed. All materials being used are subject to inspection, test, or rejection at any time. In case of discrepancy, the following relationships apply:

Special Provisions	hold over:	ITM, AASHTO and ASTM or other specification for materials and methods of tests
ITM	hold over:	AASHTO and ASTM or other specification for materials and methods of tests
AASHTO	hold over:	ASTM or other specification for materials and methods of tests

106.03 Plant Inspection

The Engineer may undertake the inspection of materials at the source.

If plant inspection is undertaken, the following conditions shall be met:

(a) The Engineer shall have the cooperation and assistance of the Contractor and the material supplier. All reasonable facilities to assist in determining whether the materials

meet the requirements of the contract shall be furnished without additional payment.

(b) The Engineer shall have 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.

106.04 Blank

106.05 Storage of Materials

Storage of materials shall be such that will ensure the preservation of their quality and fitness for the work. When considered necessary, materials shall be placed on raised, clean platforms, constructed of wood or other hard surfaced material, and under cover. Stored materials shall be located to facilitate proper inspection. Materials to be used for all contracts shall be stored separately and intact and, after being tested for such work, shall not be used for other purposes except unless otherwise approved. All stored materials will be inspected at the time of use in the work, even though they may have been inspected and accepted before being placed in storage.

No flammable, inflammable, or combustible materials shall be stored within 50 ft of a bridge or overhead sign structure. Such materials shall be stored in accordance with directions from the manufacturer. These materials include, but are not limited to, fuel, paint, solvents, fertilizer, PVC products, wood and timber not currently being used for falsework. No Contractor equipment, equipped with a fuel tank shall be stored beneath a bridge or overhead sign structure when workers are not present.

The portion of the right-of-way not required for public travel may be used for storage purposes and for placing the Contractor's plant and equipment, subject to requirements set out in 107.08 and only by written request. Approval will be based on compliance with 107.08 and the Contractor's proposed procedure for re-establishing vegetation in the affected area to its original condition or better. Except as provided in 105.07 and except where necessary for drainage, if storage limits are shown on the plans, the right-of-way within such storage limits will be available for construction operations and storage of materials. Private property shall not be used for storage purposes without written permission of the owner or lessee. If requested, copies of such written permission shall be furnished. All storage sites shall be restored to their original condition with no additional payment.

106.06 Handling of Materials

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

Aggregates shall be transported to the project in tight vehicles so constructed as

to prevent loss or segregation of materials after loading and measuring in order to prevent inconsistencies in the quantities of materials intended for incorporation in the work as loaded, and the quantities as actually received on the project.

106.07 Unacceptable Materials

All materials not in accordance with the contract at the time they are used will be considered unacceptable and all such materials will be rejected and shall be removed immediately from the site of the work unless otherwise directed by the Engineer. Rejected materials already in place shall be removed and replaced with acceptable materials at no additional cost to the Department. No rejected material, the defects of which have been corrected, shall be used until approval has been given.

If rejected materials are not removed within the time specified, the Department may order their removal with no additional payment or complete the contract in accordance with 108.09.

106.08 Hazard Communication Program

The Contractor and all subcontractors will be required to furnish the Engineer with Safety Data Sheets for each hazardous material which each firm uses or stores on the project site for Department maintained roadways. Such sheets shall be generated by each hazardous material manufacturer and shall be in accordance with Indiana IOSHA requirements.

106.09 Department Furnished Materials

The Contractor shall furnish all materials required to complete the work, except those specified to be furnished by the Department. Materials furnished by the Department will be delivered or made available at the locations specified. The cost of handling and placing materials after they are delivered to the locations specified shall be included in the contract price for the item in connection with which they are used. The Contractor will be held responsible for all materials delivered. Deductions will be made from any monies due to the Contractor to make good all shortages or deficiencies and for all damage which might occur after delivery or for demurrage charges.

106.10 Proportioning Materials

All materials used shall be proportioned as specified for each type of work, kind of unit, or item of work required by the contract. No change in the source, or kind of materials, or blending of asphalt materials will be allowed during construction without written consent. Application for such consent shall be in writing. Material which is not in accordance with the quality requirements set out in the contract shall not be blended with a better quality material to upgrade the end product.

Where not explicitly set out, the size and amount of aggregate as well as the grade and amount of asphalt material to be used shall be as ordered.

106.11 Sample Asbestos Exclusion Letter

Asbestos-containing materials shall not be used in the construction or

reconstruction of buildings or bridges. A letter of exclusion for each building or bridge shall be submitted by the Contractor to the Engineer prior to acceptance of work and final payment. Such letter shall indicate that no asbestos-containing material was used as a building material during the project. A sample letter of exclusion is shown in 916.04.

SECTION 107 – LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

107.01 Laws to be Observed

The Contractor shall keep fully informed of Federal and State laws, local laws, ordinances, rules, regulations, 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. The Contractor shall at all times observe and comply with all such laws, ordinances, rules, regulations, orders, and decrees. The Contractor shall protect, indemnify, and exculpate the State and its representatives, in accordance with 107.17, against civil claim or civil liabilities arising from or based on the violation of such law, ordinance, rule, regulation, order, or decree, whether by itself or its employees, even if such violation is due wholly or in part to violation of said law, ordinance, rule, regulation, order, or decree by the State or its representatives.

Certain counties in the State are considered by the United States Department of Agriculture to be generally infested with various harmful pests such as, but not limited to, various types of beetles. In an effort to prevent these pests from being spread by shipments of infested materials, quarantines have been imposed. Under the regulations, materials and equipment that may be infested must be treated before they are moved from an infested area. Such items as hay, straw, fodder, small grains, corn, sod, earth moving equipment, and other articles that might be infested are subject to these regulations. All State, Federal, and local regulations and quarantines pertaining thereto shall be observed. No additional allowance or compensation will be made for any delay or inconvenience incurred conforming to such requirements, but the cost thereof shall be included in the various pay items.

It shall be a condition of each contract let for the construction of a State maintained highway or bridge, financed entirely with state funds that all unskilled laborers employed on such work shall be residents of the county or counties in which such highway or bridge is being constructed, if such labor is available. The Department will designate the class of labor which is unskilled. This provision will not apply to any contract on which federal funds are to be used.

The Contractor and its subcontractors shall not discriminate against an employee or applicant for employment to be employed in the performance of any contract with respect to his or her hire, tenure, terms, conditions or privileges of employment, or any matter directly or indirectly related to employment, because of race, color, sex, disability, religion, national origin, or ancestry. Breach of this covenant may be

registered as a material breach of the contract.

Water wells or test wells to be drilled shall be in strict accordance with the Indiana Code. Such wells shall be drilled only by a water well driller licensed in the State. A copy of the driller's license shall be furnished prior to commencement of work.

The Contractor may hire only citizens and nationals of the United States, and aliens authorized to work in the United States. The Contractor shall verify the identity and employment eligibility of all employees, in accordance with the Immigration and Nationality Act.

Maintaining a drug-free workplace will be required in accordance with Executive Order 90-5, as follows:

(a) The Contractor shall agree to make a good faith effort to provide and maintain a drug-free workplace during the contract time. It shall give written notice to the Department within 10 days after receiving actual notice that an employee of the Contractor has been convicted of a criminal drug violation occurring on the project site.

(b) If the total bid amount shown in the Schedule of Pay Items is in excess of $25,000.00, the Contractor shall further agree that the contract is expressly subject to the terms, conditions, and representations contained in the Drug-Free Workplace certification executed by the Contractor in conjunction with the contract, and which is included in the Proposal.

(c) The failure of the Contractor to comply in good faith with the terms of (a) above, or falsifying or otherwise violating the terms of the certification referenced in (b) above, shall constitute a material breach of the contract. Such failure shall entitle the Department to impose sanctions against the Contractor including, but not limited to, suspension of contract payments, termination of the contract, or debarment of the Contractor from doing further work for the Department for up to three years.

IC 4-13-18-5 requires all bidders to submit an employee drug testing plan which complies with the requirements of the cited Code. The Contractor is directed to implement the employee drug testing plan as submitted. Material breaches of this requirement may constitute an independent basis to invoke 108.10.

107.02 Permits, Licenses, and Taxes

All permits and licenses which may be required due to construction methods such

as, but not limited to, borrow or disposal pits, stream crossings, causeways, work bridges, and cofferdams, but which are not part of the contract documents, shall be procured by the Contractor prior to beginning the work which requires the permit. All charges, fees, and taxes shall be paid. All notices necessary and incidental to the due and lawful prosecution of the work shall be given.

The Department is exempt from State, Federal, and local taxes and will not be responsible for any taxes levied on the Contractor as a result of the contract.

The Department may have acquired waterway permits, including, but not limited to, U.S. Army Corps of Engineers Permit, IDNR Certificate of Approval of Construction in a Floodway, IDEM Section 401 Water Quality Certification, or a permit for construction of temporary pavement across a state line. If the Department has acquired one or more of such permits, the restrictions or conditions which were issued with such permits will be made available to bidders prior to letting. The Contractor shall prosecute the work in accordance with all such restrictions or conditions.

107.03 Patented Devices, Materials, and Processes

If a design, device, material, or process covered by letters of patent or copyright is employed by the Contractor, such use by suitable legal agreement with the patentee or owner shall be provided. The Contractor and the surety shall indemnify and save harmless the State, affected third party, or political subdivision from all claims for infringement by reason of the use of such patented design, device, material, process, trademark, or copyright. The State shall be indemnified for costs, expenses, and damages which it may be obliged to pay by reason of infringement during the prosecution or after the completion of the work.

107.04 Restoration of Surfaces Opened by Permit

The right to construct or reconstruct utility service in the highway or street or to grant permits for same is hereby expressly reserved by the Department for the proper authorities of the municipality in which the work is done.

An individual, firm, or corporation wishing to make an opening in the highway shall obtain a permit from the Department. Parties bearing such permits, and only those parties, will be allowed to perform work on the right-of-way.

107.05 Federal Aid Provisions

When the United States Government pays all or a portion of the cost of a project, the Federal laws and the rules and regulations made pursuant to such laws shall be observed. The work shall be subject to inspection by the appropriate Federal agency. Such inspection will in no sense make the Federal Government a party to the contract and will in no way interfere with the rights of any party.

The U.S. Department of Labor has designated the Administrator of the Wage and Hour and Public Contracts Division to conduct investigations with the compliance and

enforcement of labor standards. However, the administration and enforcement of labor standards remain the responsibility of the U.S. Department of Transportation.

107.06 Equal Employment Opportunity Trainees

Equal Employment Opportunity trainees will be required if the Equal Employment Opportunity Trainees hours are shown in the Proposal. The number of trainees required will be one trainee for each 1,000 h shown.

When the project is funded in total or in part by the United States Government and no Equal Employment Opportunity hours are shown in the Proposal, the Contractor shall participate in the Department's Equal Employment Opportunity Trainee Program. Requirements for participation in the program are available on the Department's website or from the Department's Equal Opportunity Division. Failure by the Contractor to comply with this requirement may result in reduction or loss of prequalification to bid for future work.

As part of the Contractor's equal opportunity affirmative action program, training shall be provided as on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

If the Contractor subcontracts a portion of the work, it shall determine as to how many, if any, of the trainees are to be trained by the subcontractors, provided, however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed herein. The Contractor shall also ensure that these requirements are made applicable to such subcontract. Where feasible, 25% of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Department for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed on the contract work that is currently enrolled or becomes enrolled in an approved program.

Training and upgrading of minorities and women toward journeymen status is the primary objective. Accordingly, the Contractor shall make every effort to enroll minority and women trainees, for example, by conducting systematic and direct recruitment through public and private sources likely to yield such minority and women trainees to the extent that such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this provision. This training commitment is not intended, and shall not be used, to discriminate against an applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in a classification in which he or she has successfully completed a training course leading to journeyman status or in which he or she has been employed as a journeyman. The Contractor shall satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records shall document its findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Department. The Department and the FHWA will approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the requirement for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by such Bureau, and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations of the contract. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. Training shall be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training programs for other than traditional training programs may be submitted for consideration where the training is oriented toward construction applications. Training in the laborer classification may be allowed provided that significant and meaningful training is provided and approved by the Department. Some offsite training is allowable as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

It is normally expected that a trainee shall begin his or her training on the project as soon as feasible after start of work utilizing the skill involved and shall remain on the project as long as training opportunities exist in his or her work classification or until he or she has completed the training program. It is not required that all trainees be on board for the entire contract time. The Contractor shall have fulfilled its responsibilities if it has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60% of the appropriate minimum journeyman's rate paid by the Contractor for the first half of the training period, 75% for the third quarter of the training period, and 90% for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on the project. In that case, the appropriate rates approved by the United States Department of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this specification. However, the salary shall never be less than specified in IC 8-23-9-22.

The trainee shall be furnished a copy of the program to be followed in providing the training. Each trainee shall be provided with a certification showing the type and length of training satisfactorily completed.

The maintenance of records and the furnishing of periodic reports documenting its performance shall be in accordance with these requirements.

107.07 Sanitary Conditions Requirements

Accommodations for the use of employees shall be provided and maintained in a neat and sanitary condition as may be necessary to comply with the requirements of the Federal, State, and local Boards of Health, or of other bodies or tribunals having jurisdiction.

107.08 Public Convenience and Safety

All safeguards, safety devices, and protective equipment shall be provided. Responsibility reasonably necessary to protect the lives of employees on the job, the safety of the public, and property in connection with the performance of the work, shall be taken.

(a) Worker Safety

All workers within the right-of-way who are exposed either to traffic or construction equipment within the work area shall wear high visibility safety apparel in accordance with Section 6D.03 of the MUTCD.

If a trench, 5 ft or more in depth, is constructed on a project, the requirements for trench safety systems as specified in OSHA regulations 29 CFR 1926, Subpart P, shall be performed. Unless otherwise specified, trench safety systems work will not be paid for separately, but the cost thereof shall be included in the cost of the pay item covering the trench excavation work.

(b) Dust and Air Pollution

Provision shall be made for prompt removal from traveled roadways of all dirt and other materials that have been deposited thereon by operations concerned with the project whenever the accumulation is sufficient to cause the formation of dust or mud, interfere with drainage, damage pavements, or create a traffic hazard. Construction methods and means shall be employed to keep flying dust and air pollution to a minimum. Provision shall be made for the control of dust on the project and on roads, streets, and other areas affected by the project wherever traffic or buildings, or construction materials are affected by such dust. The materials and methods used for dust control shall be subject to approval. The cost of controlling dust and air pollution shall be included in the cost of other pay items and no additional payment will be made.

(c) Protection to Traffic

The work shall be arranged so that all operations on the pavement will be held to

a minimum by using the new grade insofar as possible. The work shall be conducted in a manner that will ensure the least obstruction to traffic. Materials stored on the right-of-way shall be placed so as to cause only such inconvenience to the traveling public and residents as is considered unavoidable.

Non-operating construction equipment, worker's vehicles, materials, field offices, field laboratories, and temporary offices may be stored on the right-of-way no less than 30 ft from the edge of pavement lanes open to traffic except, storage may be allowed closer to such lanes if traffic is protected by guardrail in good condition or other suitable barrier. However, if the area has a posted speed limit of 40 mph or less prior to the start of construction, this distance may be reduced to 10 ft, if approved.

Temporary crossings and approaches in passable condition shall be provided and maintained as shown on the plans and in accordance with 104.04, with no additional payment.

(d) Notice to Local Public Officials

On construction work, the chief administrative officer of the local governmental unit shall be given 24 h notice, in writing, before it becomes necessary to blockade a cross street.

If it is desired to use water from public hydrants, application shall be made to the proper authorities and in accordance with the city ordinances, rules, and regulations concerning their use. Fire hydrants shall be accessible at all times to the fire department. No material or other obstruction shall be placed closer to a fire hydrant than specified by ordinances, rules, or regulations, or within 5 ft of a fire hydrant in the absence of such ordinances, rules, or regulations.

The local governmental agencies for each jurisdiction in the State have the legal authority to establish load limits on their roads. Prior to submitting a bid, each bidder shall contact the local governmental agency in which the use of roads is contemplated and confirm allowable routing of bidder's equipment.

(e) Convenience to Traffic and Property Owners

Frontage roads, public roads, and private and mailbox approaches which are disturbed shall be reconstructed as soon as possible to avoid unreasonable inconvenience to traffic and adjacent property owners.

The grading of all approaches and frontage roads shall be completed and the drainage structures shall be placed concurrently with the roadway excavation and embankment construction, except as directed or specified. It is the general intent to construct frontage roads, public roads, and private drive approaches, including at least the grading, structures, and base course, as soon as possible to minimize inconvenience to the abutting property owners when their access to existing outlets is being cut off by the construction.

If postponement of the above construction causes unreasonable inconvenience to traffic and adjacent property owners, the Contractor shall construct an adequate, approved, temporary surface on all such frontage roads, public roads, and private approaches with no additional payment. All cost thereof shall be considered as included in the various pay items of the contract.

If the contract involves widening, one-lane traffic shall be maintained across all public, private, and commercial approaches either by leaving gaps in the widening or by use of temporary crossing bridges.

107.09 Railroad-Highway Requirements

Whenever it is necessary or required for personnel or construction equipment to be on operating railroad right-of-way, all necessary arrangements shall be made with the railroad company regarding a temporary or existing railroad grade crossing for this purpose. Such railroad grade crossing shall be in accordance with these specifications and shall meet all requirements of the railroad company. All cost involved in establishing the crossing shall be included in the contract price for various pay items and will not be paid for directly.

All work on the railroad right-of-way shall be performed at such times and so as not to interfere unnecessarily with the movement of trains or traffic upon the tracks of the railroad company. All care and precautions shall be used in order to avoid accidents, damage, or unnecessary delay or interference with the trains or other property of the railroad company.

When necessary, adjacent structures, embankments, and tracks of the railroad company shall be protected and shored adequately. The Contractor shall assume all risks and liability for damage done to such property as a result of its operations or negligence. No method of work which affects the tracks, movement of trains, or other operations of the railroad shall be used without the approval of the railroad company.

When bridge deck work is being performed over railroad property, including tracks and wires, and the bridge floor slab is penetrated, the work shall be stopped in the area of the penetration. Both the Engineer and the railroad company shall be notified. The railroad property shall be protected as approved before resuming work.

(a) Protection of Track Ballast

Operations shall be conducted both on and off railroad right-of-way so that earth, mud, silt, or other foreign matter shall not be allowed to foul railroad track ballast. Temporary earth dikes, sheeting, tie cribbing, silt fences, or other precautions to prevent the fouling of railroad track ballast shall be installed as directed.

Where demolition work, concreting, or hauling along or across tracks, in the opinion of the railroad company, will result in ballast becoming fouled, preventive measures shall be taken to protect the entire ballast section. This may be accomplished by nailing canvas, plywood, or similar material to the ties in the entire area likely to

be affected. This protective material shall remain in place until there is no further possibility of fouling the ballast. At that time, it shall be removed.

These protective measures shall be performed with no additional payment under the supervision and to the satisfaction of the chief engineer of the railroad company or its authorized representative. The railroad company will assume no responsibility for the adequacy of the protective measures. However, in addition to the aforementioned protective measures, if the railroad track ballast does become fouled, the railroad company, with its own forces, will remove the fouled ballast and replace it with clean ballast. The charges for this work will be billed by the railroad company against the Contractor.

(b) Hold Harmless Clause

The Contractor shall indemnify and save harmless the Railroad Company and the State from all suits, actions, or claims of any character brought for or on account of any injuries or damages received or sustained by any person, persons or property from the acts of the Contractor or its forces, or in consequence of any neglect in safeguarding the work, or on account of any claims or amounts recovered for any material furnished or labor performed, or for any infringement of patent, trademark or copyright, or any claims arising or amount recovered under the Worker's Compensation Laws, Federal Employer's Liability Act, or under any other laws, by-laws, ordinances, orders or decrees.

107.10 Archeological Artifacts

If archeological artifacts, including cultural features or skeletal remains are discovered, all work within a minimum 100 ft radius of the discovery shall cease immediately, the area shall not be further disturbed, and the Contractor shall notify the Engineer immediately.

In accordance with IC 14-21-1-27, if skeletal remains are encountered, the Contractor shall notify the local law enforcement agency immediately and the Engineer immediately thereafter. The Department will notify IDNR within two days. Work within the area of the discovery shall not resume without written authorization.

For discoveries other than skeletal remains, the Department will coordinate with IDNR to mitigate impacts to the discovery. Work within the area of the discovery shall not resume without written authorization.

In no event shall an employee of the Contractor or the State of Indiana share in ownership or profit from salvaged archeological findings.

107.11 Bridges over Navigable Waters

All work on navigable waters shall be conducted so as not to interfere with free navigation of the waterways nor to impair the existing navigable depths. Exceptions may be allowed by permit issued by the authority having jurisdiction over the navigable waters.

107.12 Traffic Control Devices

All necessary barricades, suitable and sufficient lights, danger signals, signs, and other traffic control devices shall be provided, erected, and maintained. All necessary precautions shall be taken for the protection of the work and safety of the public. Highways closed to traffic shall be protected by effective barricades. Obstructions shall be illuminated during hours of darkness. Suitable warning signs shall be provided to control and direct traffic. All construction vehicles and equipment shall have amber lights in accordance with 801.14(d) when in the work area and located on the pavement, sidewalk, or shoulder with the road open to traffic. Vehicles delivering materials to the job site, if displaying headlights, clearance lights and hazard warning lights which are in compliance with Indiana statutes, shall be exempt from this requirement.

Warning signs shall be erected in advance of any location on the project where operations may interfere with the use of the road by traffic and at all intermediate points where the new work crosses or coincides with an existing road. Such warning signs shall be constructed and erected in accordance with the plans. Temporary pavement markings, when required, shall be placed in accordance with 801.12 or as directed.

Barricades, warning signs, lights, signals, markings, and other protective devices shall be in accordance with the plans and the MUTCD current on the date of advertisement for bids.

All signs, barricades, and other protective devices shall be maintained in good condition and in accordance with 105.13, 801, and 802. Barricades and the backgrounds and messages of all signs shall be kept clean and bright. They shall be renewed or replaced as often as necessary to keep them effective. Failure to maintain these devices may result in the assessment of damages in accordance with 105.14 and 801.14.

Pavements and shoulders having an edge drop of more than 3 in. shall be delineated with drums in accordance with 801.09. Delineation shall be at a maximum spacing of 200 ft. The use of cones in accordance with 801.08 will be allowed as shown on the plans except cones shall not be used for shift or merge tapers on interstates and freeways and 42 in. cones may be used in tangent sections on interstates and freeways only when the use of drums would result in an effective lane width of less than 10 ft.

At least 14 days before a road is to be closed to traffic, notification shall be given of such intention. Detour route marker assemblies shall be erected and maintained along the detour route designated by the Department. Barricades shall not be erected nor the traffic interfered with until the posted detour or the temporary runaround is approved.

If it is necessary to close a road for the purpose of replacing a drainage structure, the road shall not be closed until the pipe structure is at the project site.

Sufficient barricades, supplemented by watchers or flaggers when necessary, shall be provided continuously to protect any and all parts of the work and to promote safe and orderly movement of traffic. When a road is closed or posted for official detour but is still usable by local traffic, barricades and road closure sign assemblies, in addition to the closure barricades, required at the beginning and end of the portion of such road being detoured, shall be erected at the site of bridge removals, pipe removals, or other high hazard locations. Such barricades shall be located within 150 ft of the removal location. These barricades shall be of the type shown on the plans, and in accordance with 801.07. Such barricades shall extend from shoulder to shoulder, or to the limit of area that is readily traversable by a motor vehicle, as directed. During non-working hours, no opening shall exist in the barricades. The road closure sign assembly shall be placed at or near the center of the roadway. If these requirements are violated, operations shall be suspended until adequate measures are taken for full compliance. The use of hand signaling flags will not be allowed except for emergency situations. The Stop/Slow paddle shall be required as a primary hand signaling device to control traffic through work areas. The Stop/Slow paddle shall be in accordance with section 6E.03 of the MUTCD, except it shall be at least 24 in. wide.

Unless otherwise specified, sufficient watchers shall be furnished and be on duty 24 h a day during the time widening or patching is in progress. These workers shall have adequate transportation facilities to patrol the entire portion under construction. They shall maintain the signs, barricades, and lights at all times for the safety of pedestrian and vehicular traffic.

107.13 Use of Explosives

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

All explosives shall be stored in a secure manner in accordance with all laws and ordinances. All such storage places shall be clearly marked in large black letters on a red background “Dangerous Explosives”. Where no local laws or ordinances apply, satisfactory storage shall be provided no closer than 1,000 ft from the road or from a building or camping area or place of human occupancy. Detonators shall not be stored with explosives.

Each public utility company having structures in proximity to the site of the work shall be notified of intentions to use explosives. Such notice shall be given sufficiently in advance to enable the companies to take such steps necessary to protect their property from injury. The notification shall in no way relieve responsibility for damage to the structures.

107.14 Protection and Restoration of Property and Landscape

Private property shall not be entered for any purpose in connection with the work, without first obtaining proper permission. The Contractor shall be responsible for the

preservation of all public and private property. All land monuments and property marks shall carefully be protected from disturbance or damage until the Engineer has witnessed or otherwise referenced their location and approved their removal. All areas on the right-of-way that are used for storage of any kind shall be restored to their original condition, or to that set out in the Proposal, when no longer required for that purpose.

The Contractor shall be responsible for damage or injury to property resulting from defective work or materials and from any act, omission, or misconduct in its manner or method of executing the work. When direct or indirect damage or injury is done, such property shall be restored with no additional payment to a condition similar or equal to that existing before such damage or injury, or such damage or injury shall be made good in an acceptable manner.

Construction equipment shall not be stored in wetland replacement sites shown on the plans. Such sites shall not be used for purposes other than for the creation of wetlands.

On those portions of the project where fence is required on the right-of-way, the required permanent fence shall be erected and maintained at locations where the property owner desires to use the adjacent area for pasturage or livestock. If the permanent fence has not been erected by the time the adjacent property owner desires to use such pasturage, a temporary fence shall be erected and maintained. The fence shall be sufficient to prevent encroachment of livestock onto the right-of-way until the permanent fence is erected.

At locations involving temporary right-of-way where it is necessary to remove existing fence, unless otherwise directed, a temporary fence shall be erected and maintained along the temporary right-of-way. The fence shall be sufficient to prevent encroachment of livestock on the right-of-way. Except when included as a bid item in the contract, temporary fence will not be measured and paid for directly, but will be included in the cost of various pay items.

On those portions of the project where a fence is not required, but the removal of an existing fence from the right-of-way is required, the property owner and tenant, if any, must be notified at least 10 days before the fence is removed from the right-of-way.

107.15 Illicit Discharge

The Contractor shall not discharge wastewater, soap, detergent, solvents, fuel, oil, or other pollutants into a drainage structure, jurisdictional waterway, or similar environmental resource. Cationic polymers shall not be used. Quality adjustments will be assessed in accordance with 109.05.1(f) and 205.

107.16 Forest Protection

In carrying out work within or adjacent to State or National Forests and other

wooded areas, the Contractor shall comply with all regulations of the State Fire Marshal, Natural Resources Commission, Forestry Department, or other authority having jurisdiction, governing the protection of forests, and performing work within forests. The Contractor shall observe all sanitary laws and regulations with respect to the performance of work in forest areas. The Contractor shall keep the areas in an orderly condition, dispose of all refuse, and obtain permits for the construction and maintenance of all construction camps, stores, warehouses, residences, latrines, cesspools, septic tanks, and other structures in accordance with the requirements of the forest supervisor.

Reasonable precautions shall be taken to prevent and suppress forest fires. The Contractor's employees and subcontractors shall be required, both independently and at the request of forest officials, to do all reasonably within their power to prevent and suppress and to assist in preventing and suppressing forest fires and to make every possible effort to notify a forest official at the earliest possible moment of the location and extent of all fires seen by them.

107.17 Responsibility for Damage Claims

The Contractor shall indemnify, defend, exculpate, and hold harmless the State of Indiana, its officials and employees from all liability due to loss, damage, injuries, or other casualties of whatsoever kind, or by whomsoever caused, to the person or property of anyone on or off the right-of-way arising out of or resulting from the performance of the contract or from the installation, existence, use, maintenance, condition, repairs, alteration, or removal of any equipment or material, whether due in whole or in part to the negligent acts or omissions:

(a) of the State, its officials, agents, or employees;

(b) of the Contractor, its agents or employees, or other persons engaged in the performance of the contract;

(c) the joint negligence of any of them, including any claim arising out of the Worker's Compensation law or any other law, ordinance, order, or decree.

The Contractor also agrees to pay all reasonable expenses and attorney's fees incurred by or imposed on the State in connection herewith in the event that the Contractor shall default under the provisions of this section. As much of the money due the Contractor under and by virtue of its contract as the Department may consider necessary for such purpose may be retained for the use of the State. If no money is due, the Contractor's 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. Money due will not be withheld when the Contractor produces satisfactory evidence that it is protected adequately by public liability and property damage insurance. The obligation of the Contractor under this section and 107.01 shall not extend to the indemnification or exculpation against

claims arising out of the preparation or approval of plans, specifications, or special provisions unless furnished by the Contractor.

It is specifically agreed between the parties executing the contract that it is not intended by the provisions of any part of the contract to create the public or any member thereof a third party beneficiary hereunder, 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.

107.18 Opening Sections of Project to Traffic

Shoulders shall be graded and shaped to assure reasonable safety to traffic before opening any completed pavement to traffic.

Work which is in suitable condition for travel, or any portion thereof, shall be opened to traffic as directed. Such opening shall not be construed as acceptance of the work or any part thereof, or as a waiver of any of the provisions of the contract.

When it is desirable to open a structure or portion of a highway to traffic, such opening shall be delayed until traffic will cause no injury to completed portions of the work. When opening to traffic is required or allowed, the Contractor shall make provisions for the safety of the public as specified or directed. Opening to traffic will not relieve the Contractor of liability and responsibility prior to final acceptance.

When a contract time has expired, the Contractor shall be responsible for all damage resulting from traffic and any other cause occurring on the incomplete portions of the project, whether these portions have been opened to traffic by order of the Department or not.

On those portions of an incomplete contract that have been ordered opened to traffic or are constructed under traffic and the contract time has not yet expired, the Department will assume the responsibility for repairs of damages resulting directly from traffic, provided such damage is not the direct or indirect result of the operations of the Contractor and provided the Contractor is unable to collect damages from the responsible party or parties.

The Department will only assume such responsibility

(a) if the Contractor documents those damages with all available information, including but not limited to photos and investigative materials, and

(b) if the Contractor preserves all documentation, evidence, photos and information regarding the nature, extent and cause of such damage.

Also, the Department will only assume such responsibility if, within 90 days from

the date such damage is discovered by the Contractor or the Contractor receives notice of that damage, whichever is earlier,

(a) the Contractor demonstrates to the Department that despite its good faith, vigorous efforts, it has been unable to collect those damages from the responsible party or parties, and

(b) the Contractor provides to the Department all documentation, evidence, photos and information regarding the nature, extent and cause of such damage.

Ordered repairs for damage for which the Department assumes responsibility will be paid for at the contract unit price for the item involved in making the repairs, where such items are applicable.

Opening a portion of a project to traffic does not preclude the responsibility of the Contractor for providing necessary safety measures, as required in these Standard Specifications, to protect persons using the highway.

107.19 Contractor's Responsibility for Work

Until the date the Contractor is relieved of further maintenance as stated in the final written acceptance of the project, or portion thereof in accordance with 105.15, the Contractor shall have the charge and care thereof. The Contractor shall be responsible for injury or damage to any part thereof, by the action of the elements or from any other cause except as set out in 107.18, whether arising from the execution or from the non-execution of the work. All portions of the work occasioned by the above causes shall be rebuilt, repaired, and restored. All injuries or damages shall be made good before final acceptance. The Contractor shall bear the expense thereof except as otherwise provided in these specifications or otherwise determined.

In case of suspension of work, the Contractor shall be responsible for the contract work and shall take such precautions as may be necessary to prevent damage to the contract work. Normal drainage shall be provided, and all necessary temporary structures, signs, or other facilities shall be erected with no additional payment. During such period of suspension of work, newly established plantings, seedlings, and sodding furnished under the contract shall be properly and continuously maintained in an acceptable growing condition.

107.20 Contractor's Responsibility for Utility Property and Services

At points where the Contractor's operations are adjacent to properties of railroad, telegraph, telephone, and power companies or are adjacent to other property, damage to which might result in considerable expenses, loss, or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

The Contractor shall coordinate and cooperate with the owners of all underground

or overhead utility lines in their removal and relocation operations in order that this work may progress in a reasonable manner, that duplication of relocation work may be reduced to a minimum, and that services rendered by those parties are not unnecessarily interrupted.

If it is necessary to place pipes or conduits through structures, sheet metal sleeves shall be provided around the pipe or conduit to make a sliding joint or provide suitable openings as required, with no additional payment.

If there is an interruption to water or 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 water 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.

The Contractor shall establish and maintain open communication with each utility affected by the construction and document and report all communication to the Engineer. The Contractor shall prepare its construction schedule to accommodate all the utility work plans included in the contract documents including some allowance for unexpected minor variation in the anticipated utility work plan and schedule.

Regardless of previous notification by the Department, the Contractor shall give notice to the owners of each utility located within the contract limits, or which might be affected by the work, in sufficient time before beginning work for the owners to relocate or protect their property. No work shall be done which injures or damages such property until satisfactory arrangements have been completed with the owner for its protection, relocation, or reconstruction.

Prior to any work which penetrates any existing soil or pavement surface, the Contractor shall notify both the Indiana Underground Plant Protection Service, IUPPS, in accordance with IC 8-1-26 requirements, and the Engineer in accordance with 105.08 prior to commencing construction operations in an area that may affect underground utilities.

If abandoned underground utilities are encountered during construction, sections of which are to be removed, ends of pipes that remain in place shall be sealed with Class A concrete as directed. Concrete used for this purpose will be paid for at the contract unit price per cubic yard for concrete, A, in structures. Cutting of abandoned gas lines shall be by mechanical methods. A cutting torch shall not be used.

If a permit is issued to a city or other governmental unit for the installation of conduits, poles, or other appurtenances for artificial lighting of the structure, it may be necessary or desirable to revise the plans or make structural changes as needed to accommodate such installation. In this event, the provisions of 104.02 shall apply to all changes in quantities of work.

107.21 Furnishing Right-of-Way

The Department will be responsible for securing necessary right-of-way in advance of construction. Exceptions will be indicated in the contract.

107.22 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 Department, Commissioner, Engineer, or their authorized representatives, either personally or as officials of the State, it being understood that in all such matters they act solely as agents and representatives of the State.

107.23 Waiver of Legal Rights

Upon completion of the work, the Department will expeditiously make final inspection and notification of acceptance. Such final acceptance, however, 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 its surety, or both, such overpayment as it may sustain by failure on the part of the Contractor to fulfill its 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 latent defects, fraud, or such gross mistakes as may amount to fraud, or with regard to the rights of the Department under any warranty or guaranty.

107.24 Governing Law

This contract shall be construed by the laws of the State of Indiana. Suit, if any, shall be brought in the State of Indiana.

107.25 Severability

The invalidity in whole or in part of a provision of the contract shall not void or affect the validity of all other provisions.

SECTION 108 – PROSECUTION AND PROGRESS

108.01 Subletting of Contract

The contract, contracts, or portions thereof; or the right, title, or interest therein shall not be sublet, sold, transferred, assigned, or otherwise disposed of without written consent. In case such consent is given, the Contractor will be allowed to sublet a portion thereof, but shall perform with its own organization, work amounting to not less than 50% of the original or revised contract amount, whichever is less. All items designated in the contract as specialty items may be performed by subcontract. The cost of such specialty items so performed by subcontracts may be deducted from the

total cost before computing the amount of work required to be performed by the Contractor with its own organization. No subcontracts or transfer of contracts will release the Contractor of liability under the contract and bonds. Approved subcontractors will not be allowed to further subcontract their work.

Unless the Department provides written consent, the Contractor shall not be entitled to any payment for subcontracted work or materials unless it is performed or supplied by a subcontractor approved on the contract prior to the work being performed.

The minimum wage for labor as stated in the Proposal shall apply to all labor performed on all work sublet, assigned, or otherwise disposed of in any way.

The Contractor or subcontractor may enter into leases or rental agreements for equipment with operators or trucks with drivers. When certified payrolls are required, they shall be submitted for all such equipment operators and truck drivers who perform work. This payroll shall verify that these employees have been paid not less than the predetermined wage rate set out elsewhere in the contract for the classification of work performed.

The subcontractor shall be in accordance with the requirements of 105 IAC 11-2-10, Subcontractors.

The Contractor shall submit payment records through the Department's Subcontractor Payment Tracking System (http://itap.indot.in.gov) of all payments made to subcontractors and DBE, MBE, WBE, and IVOSB firms approved by the Department. Reports shall be submitted no later than 10 days after the end of each month in which a subcontractor is paid for work on the contract. Reports shall include any release of retainage payments made to subcontractors.

All subcontractors and DBE, MBE, WBE, and IVOSB firms approved by the Department shall verify all payments made to them through the Department's Subcontractor Payment Tracking System (http://itap.indot.in.gov). All payments received for work on the contract shall be verified no later than 20 days after the end of the month in which payment was received.

108.02 Release of Retainage to Subcontractors

If the Contractor is withholding portions of payments due subcontractors as retainage, the Contractor shall release such retainage to the subcontractor within 30 calendar days after satisfactory completion of the work performed by the subcontractor.

For the purposes of this section, satisfactory completion will be interpreted as when the subcontractor has completed all physical work and completed other contract requirements, including the submission of all submittals required by the specifications and the Department.

108.03 Notice to Proceed

Unless otherwise provided, the Contractor will be expected to start active and continuous work on the contract within 15 calendar days after the date of the notice to proceed. Work shall not begin prior to the date of the notice to proceed.

If a delayed starting date is indicated in the proposal, the 15-calendar day limitation will be waived. If the contract is canceled after an award has been made but prior to the issuing of the notice to proceed, no reimbursement will be made for any expenses accrued relative to this contract during that period.

If the contract involves demolition work, the Contractor shall not enter the parcel or proceed with the demolition without written authority from the Engineer. The Contractor will be compensated only for those houses and buildings which are actually removed from the right-of-way. Time of commencing demolition work and time of completion shall be in accordance with 108.08.

108.04 Prosecution of the Work

A pre-construction conference will be held at the earliest possible date, at which time it will be determined when the Contractor's operations will start.

For contracts greater than 60 calendar days in duration, excluding the months of December through March inclusive, except for those with an M prefix, the Contractor shall provide a project schedule using the critical path method. The initial schedule shall be provided at the pre-construction conference. The initial schedule shall include at the least the first 90 calendar days of work. The Contractor shall use computer software designed to produce such schedules. Within 7 days after the pre-construction conference, the Engineer will either accept the schedule or request a revision. If 7 days elapse with no comment by the Engineer, the schedule will be considered accepted. All schedule updates will be accepted in the same manner. Acceptance of the schedule does not revise the contract documents. The Engineer will not be responsible for the schedule's completeness, accuracy, or compliance with the plans and specifications. Within 30 calendar days of the pre-construction conference, the initial schedule shall be updated to include the full contract duration.

The schedule shall indicate the order and interdependence of activities needed to complete the project including the critical path. The Contractor shall include the planned hours of work per week as part of the schedule submittal.

The schedule shall reflect the scope of work, construction phasing, maintenance of traffic control, environmental requirements, utility and railroad coordination, coordination with other contractors, and any other work included in the contract. The schedule shall include:

1. Activities for all work to be performed by the Contractor and subcontractors.

2. Activities specific to the project to be performed by the Department, other units of government, regulatory agencies, utilities, and any other parties necessary to complete the work as described in the contract.

3. Activities for working drawing preparation, Contractor submittals, material procurement and fabrication, and the delivery of significant materials and equipment and other similar activities.

4. Time for submittal review in accordance with 105.02.

5. Intermediate and contract completion dates and other milestones established by the contract documents.

For contracts not requiring a critical path method schedule, the Engineer may require the Contractor to furnish a bar chart or narrative at the pre-construction conference. This shall include the start dates and estimated times required to prosecute the significant activities and phases of work.

Sufficient materials, equipment, and labor shall be provided to guarantee the completion of the project in accordance with the plans and specifications within the specified completion time. The Engineer shall be notified at least three days in advance of the date on which the work is expected to begin.

The Department and the Contractor shall meet at least twice each month to compare actual progress to the currently accepted schedule. The Contractor shall supply sufficient information for the Department to plan inspection services until the next scheduled meeting. A lookahead schedule may be provided consistent with the project schedule to convey this level of detail.

Schedules shall be provided in a format acceptable to the Engineer.

If, in the opinion of the Engineer, construction progress has been or will be materially affected by changes in the plans or in the quantities of work, or if performance is two weeks or more behind the current accepted schedule, a revised schedule shall be submitted within five business days of the Engineer's request. Existence of a current and accepted schedule will be a condition precedent to the processing and payment of a partial pay estimate.

If the prosecution of the work is discontinued, the Engineer shall be notified at least 24 h in advance of resuming operations.

During the progress of the work, the Engineer shall be notified at least 24 h in advance of undertaking construction operations. This advance notification shall also

apply anytime a DBE is scheduled to work on a project or deliver material or supplies to a project site.

For those contracts not requiring waterway permits or a Construction Stormwater General Permit, the Contractor shall submit a written site plan to the Engineer describing the following:

1. A description of the contract site.
2. The locations of all equipment storage areas, staging areas, fueling locations, construction trailers, batch plants, and designated concrete truck washout locations.
3. A material handling and spill prevention plan for sanitation facilities and fueling and concrete washout locations.

Based on changes in scope, in accordance with 104.02 and 104.03, the Engineer may request a cost breakdown of the stormwater management implementation item, when the item exists within the contract.

The site plan shall be submitted for acceptance seven calendar days prior to the start of any construction activity. Construction activities shall not begin until the written site plan has been approved by the Engineer.

The cost of preparation of the site plan described above shall be included in the cost of other items of the contract. The cost of the stormwater management implementation item of the site plan will be paid for in accordance with 205.11.

For contracts not requiring waterway permits but having a Stormwater Management Budget, the Contractor shall locate, install, maintain and remove temporary stormwater, sediment, and erosion control BMPs, for land-disturbing activity areas in accordance with 205. An SWQCP will not be required for these contracts.

For contracts requiring a CSGP, an SWQCP shall be developed and submitted to the Engineer for review, in accordance with 205.03.

For contracts requiring waterway permits and no CSGP, a written site plan shall be developed and submitted to the Engineer for review, as specified herein.

Borrow and disposal sites shall be in accordance with 203.08. When required by a CSGP, stockpile and storage sites shall have their own permit. The Contractor shall submit an NOS to the Engineer prior to the beginning of operations at those locations. An NOI with an IDEM time stamp 48 h prior to the beginning of operations at these locations shall also meet these requirements.

When temporary construction materials are no longer required or used for maintenance of traffic or for other temporary purposes, such materials shall be

removed and disposed of as provided herein. If temporary roadbed or asphalt pavement materials are used for embankment construction, such materials will be classified as excavation and paid for at the contract unit price per cubic yard for the type of excavation shown in the Schedule of Pay Items. No allowance will be made for overhaul or added haul. If temporary HMA pavement materials are used in the work for subbase, base, approaches, or for new shoulder construction, such materials will be paid for as salvaged road material in accordance with 613.

Temporary concrete pavement, temporary concrete base, or temporary concrete widening, when no longer required for maintenance of traffic, shall be removed and disposed of in accordance with 202.05. Such removal and disposal will be paid for in accordance with 202.14.

Temporary drainage structures, temporary traffic barrier, and other temporary devices required and used for the maintenance of traffic shall remain the property of the Contractor. All costs for furnishing, placing, maintaining, removal, and disposal of temporary drainage structures shall be included in the contract lump sum price for maintaining traffic. If there is no pay item for maintaining traffic, these costs shall be included in the various pay items listed in the proposal, unless otherwise provided.

108.05 Pre-phase Site Construction Meetings

A pre-phase site construction meeting shall be scheduled and conducted by the Contractor prior to the beginning of work on each major work phase. These meetings are intended to help improve the quality of construction, personnel safety on the project site, and safety of the traveling public. These meetings shall include all subcontractors connected with the particular phase. When the conditions described in 105.07 are possible during a particular phase, the other Contractors shall be invited to attend. The Department's project staff and the Area Engineer shall be invited to attend.

At each meeting, the Contractor shall indicate its current schedule for the phase, discuss maintenance of traffic control, project site personnel safety, compliance with the plans and specifications including quality construction, and all other pertinent subjects.

The number of pre-phase site construction meetings will be determined at the pre-construction conference. No additional payment will be made for these meetings.

108.06 Limitation of Operations

The work shall be conducted in such a manner and in such sequence as ensures the least interference with traffic. Due regard shall be given to the location of detours and to the provisions for handling traffic. Work shall not be started to the prejudice or detriment of work already begun. The completion of a section on which work is in progress may be required before work is started on additional sections, if opening such section is essential to public convenience.

Except as hereinafter specified, no load of material for any construction shall be dispatched so late in the day that it cannot be placed, finished, and protected within

the specification's limits and provisions during daylight of that same day. Daylight will be defined as the period between sunrise and sunset as established by the National Weather Service. When it is important that construction shall be completed at an early date, work may be allowed at times other than daylight hours provided sufficient illumination is available and that work performed under these conditions complies in every respect with the terms and conditions of the contract.

108.07 Character of Workers, Methods, and Equipment

Sufficient labor and equipment for prosecuting the several classes of work shall be employed at all times 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 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.

Each person employed by the Contractor or by each subcontractor who does not perform in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the Engineer, be removed forthwith by the employer of such person. The person shall not be employed again in any portion of the work without approval. If the person is not removed as required herein, or if suitable and sufficient personnel for proper prosecution of the work are not furnished, all estimates may be withheld or the work suspended by written notice until these requirements have been met.

All equipment which 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 which was originally developed to be used in performing work in International System measurements may be used in performing work in English System measurements. Where possible, such equipment shall be adjusted to the English System measurements. Where equipment cannot be adjusted, it shall then be made compatible, as required, to satisfactorily be used for performing work in English System measurements in accordance with 101.46, 105.03, 109.01(a), and 109.01(i). Equipment used on the project shall not cause damage to the roadway, adjacent property, or other highways from its use.

Construction equipment, which is used in recreational areas, shall not be left parked in existing parking areas or on existing park road pavements except as may be necessary during the time construction work is in progress. All damage to such roadways or parking lot pavements caused by equipment, such as gouge marks or petroleum leakage, shall be repaired with no additional payment in accordance with the applicable requirements of 107.14 or as directed.

When the methods and equipment to be used in accomplishing the construction are not prescribed in the contract, any methods or equipment that will accomplish the work in accordance with the contract may be used.

When the contract specifies that the construction be performed by the use of certain methods and equipment, such methods and equipment shall be used unless others are authorized. If the use of a method or type of equipment other than those specified in the contract is desired, authority to do so may 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 shall be fully responsible for producing construction work in accordance with contract requirements. If, after trial use of the substituted methods or equipment, it is determined that the work produced does not meet contract requirements, the use of the substitute methods or equipment shall be discontinued and the remaining construction shall be completed with the specified methods and equipment. The deficient work shall be removed and replaced with work of specified quality or other corrective action shall be taken as directed. No change will be made in basis of payment for the construction items involved or in contract time as a result of authorizing a change in methods or equipment under these provisions.

108.08 Determination and Extension of Contract Time

The number of days allowed for the completion of the work included in the contract will be stated in the Proposal and will be known as the contract time.

If the contract time is on a calendar day basis, it shall consist of the number of calendar days stated in the contract including all Sundays, holidays, and non-workable days. All calendar days elapsing between the effective dates of any orders to suspend work and to resume work for suspensions not the fault of the Contractor will be excluded.

If the contract time is a fixed calendar date, it shall be the date on which all work on the contract shall be completed. For such contracts, an extended date of completion will be considered for delay in the issuance of the notice to proceed if the notice to proceed is not issued within 30 days of the letting, except if the delay is due to the failure of the Contractor to furnish requested forms or information. Unless otherwise determined, an extension to the contract completion date and intermediate completion date will be allowed for each calendar day from 30 days after the date of the letting to and including the date of the notice to proceed.

A weekly statement showing the controlling operation and the fraction of each day that was workable on the controlling operation will be furnished. A workable day or fraction thereof will be determined as defined in 101.78. The Contractor will be allowed one week from the date it receives the statement in which to file a written protest setting forth in what respect said weekly statement is incorrect. Otherwise, the statement will be deemed to have been accepted by the Contractor as correct. The Department will begin providing weekly statements when the Contractor begins work operations, but no later than the earliest date the Contractor will be allowed to begin work in accordance with the contract.

The number of days for performance shown in the contract as awarded will be based on the original quantities as defined in 104.02.

1. For a completion date contract, unless otherwise determined, an increase in quantities will not increase the time specified for the performance of the contract.

2. If intermediate completion times are specified, unless otherwise determined, an increase in quantities will not increase the time specified.

   If an intermediate completion time is specified for road closure or restriction, the first day or portion thereof of the closure or restriction will constitute the first chargeable day. The date the road is opened to unrestricted traffic will be counted as a chargeable day, regardless of the time of day when the roadway is opened. Open to unrestricted traffic shall be as defined in 101.36. Temporary pavement marking materials in accordance with 801.12 shall be placed if the final marking materials cannot be placed in accordance with 808.07(b).

If the Contractor finds it impossible for reasons beyond its control to complete the work within the contract time as specified prior to the expiration of the contract time, a written request in accordance with 105.16 may be made for an extension of time setting forth therein the reasons which will justify the granting of the request. A plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the contract controlling operation was delayed due to an excusable delay under 108.08(a) or 108.08(b), the Department will extend the contract time for completion in such amount as the conditions justify. The extended time for completion shall then be in full force and effect, the same as though it were the original time for completion. The Department will not extend contract time for a non-excusable delay under 108.08(c).

Contractors shall not work during the following holiday periods unless prior written approval is received from the Engineer. All deliveries and traffic coming from suppliers shall cease during the Department-ordered suspensions of work listed below. No time extensions to closure periods, intermediate completion dates, or contract completion dates will be granted for suspending work during these holiday periods.

1. New Year's Day. If New Year's Day falls on a Sunday, work shall be suspended from noon December 31 until sunrise January 3. If New Year's Day falls on a Monday through Saturday, work shall

be suspended from noon December 31 until sunrise January 2.

2. Good Friday. Work shall be suspended from noon on Good Friday until sunrise Monday.

3. Memorial Day. Work shall be suspended from noon the Friday before Memorial Day until sunrise Tuesday, the day after Memorial Day.

4. Independence Day. If Independence Day falls on a:

Sunday - Work shall be suspended from noon Friday, July 2, until sunrise Tuesday, July 6.

Monday - Work shall be suspended from noon Friday, July 1, until sunrise Tuesday, July 5.

Tuesday - Work shall be suspended from noon Friday, June 30, until sunrise Wednesday, July 5.

Wednesday - Work shall be suspended from sunset on Tuesday, July 3, until sunrise Thursday, July 5.

Thursday - Work shall be suspended from noon Wednesday, July 3, until sunrise Monday, July 8.

Friday - Work shall be suspended from noon Thursday, July 3, until sunrise Monday, July 7.

Saturday - Work shall be suspended from noon Thursday, July 2, until sunrise Monday, July 6.

5. Labor Day. Work shall be suspended from noon the Friday before Labor Day until sunrise Tuesday, the day after Labor Day.

6. Thanksgiving Day. Work shall be suspended from noon the Wednesday before Thanksgiving Day until sunrise the Monday after Thanksgiving Day.

7. Christmas Day. Work shall be suspended from noon December 24 until sunrise December 27.

The Department may order the suspension of work, either wholly or in part, for a period of time for certain holidays not already specified herein. For such orders, if the

contract suspension is not stated in the contract documents, the contract completion time will be adjusted as follows:

1. If a contract time is on a calendar day basis, all calendar days on which work on the controlling operation is suspended will be excluded.

2. If a contract time is a fixed calendar date, the contract time will be extended by the number of days that work on the controlling operation is suspended.

If the Department does not specify nor order the suspension of work for certain holidays, work may be performed on those holidays. On a completion date contract, the contract completion time will not be shortened by the number of holidays worked.

Liquidated damages will not be assessed during the required cure period for concrete surfaces requiring a sealer, provided all other contract work is completed and all lanes are open to traffic. Liquidated damages will resume after the required cure period.

If an extension of time on a calendar day contract or a calendar completion date contract extends the completion date past November 30, the days remaining after November 30 will be added to April 1, of the following year for the contract completion date, providing the project could be suitably opened to traffic in accordance with 107.18.

Completion of the removal of houses and buildings on time, if specified, shall be in accordance with the requirements herein.

Not all parcels shown in the Schedule of Pay Items will be available for demolition at the time of the letting. Houses and buildings shall be removed as soon as they are vacated in accordance with the procedure as follows:

1. The 15 calendar days limitation after the date of notice to proceed as specified in 108.03 will not apply.

2. The contract time extension consideration for 30 days delay in issuing the notice to proceed as specified in 108.08 will not apply to a contract for which demolition is the majority of the contract work.

3. When parcels become available for demolition, the Engineer will notify the Contractor of the availability of such parcels. The Contractor shall commence work within five calendar days from the date of receipt of such notification. Inspection and testing for asbestos

presence or filing a notification of demolition with the IDEM will be considered as part of the work.

4. If the Contractor fails to commence work within five calendar days of the date of receipt of notification, $100.00 will be assessed as liquidated damages, not as a penalty, but as damages sustained for each calendar day after five on which work has not commenced.

5. Once work has commenced in accordance with 3 and 4 above, the work shall progress continuously and shall be completed within 60 calendar days. If such work is not completed within 60 calendar days, $100.00 will be assessed as liquidated damages, not as a penalty, but as damages sustained for each calendar day after 60 on which work is not completed.

6. Each notification received by the Contractor shall establish a separate five calendar day starting period and 60 calendar day completion time, regardless of the number of parcels which are shown in each notification.

(a) Excusable, Non-Compensable Delays

Excusable, non-compensable delays are delays that are not the fault or responsibility of the Contractor or the Department. The following are excusable, non-compensable delays:

1. Delays due to acts of the public enemy, civil disturbances, acts of Government or political subdivision other than the Department.

2. Delays due to floods, lightning strikes, tornadoes, earthquakes, or other cataclysmic phenomena of nature.

3. Delays due to fires or epidemics.

4. Delays due to labor strikes that are beyond the Contractor's reasonable power to settle.

5. Extraordinary delays in material deliveries the Contractor or its suppliers cannot foresee or avoid resulting from freight embargoes, government acts, or wide-area material shortages. Delays due to the

Contractor's, subcontractor's or supplier's insolvency or mismanagement are not excusable.

6. Delays due to above normal inclement weather as defined in 101.02.

7. Delays due to changes in quantities that are not significant changes as defined in 104.02(c).

The Department will extend the contract time for completion but will not pay for any costs associated with an excusable, non-compensable delay.

(b) Excusable, Compensable Delays

Excusable, compensable delays are delays that are not the fault or responsibility of the Contractor and are the fault or responsibility of the Department. The following are excusable, compensable delays:

1. Delays due to differing site conditions in accordance with 104.02(a), significant changes in the character of work in accordance with 104.02(c), or extra work in accordance with 104.03.

2. Delays due to suspension of work ordered by the Engineer in accordance with 104.02(b).

3. Delays due to work that utilities or other third parties perform within the project limits.

The Department will extend the contract time for completion and will pay for delay costs covered under item 1 above in accordance with 104.03.

The Department will make payment for delay costs under items 2 and 3 above in accordance with 109.05.2.

(c) Non-Excusable Delays

Non-excusable delays are delays that are the fault or responsibility of the Contractor. The Department will not extend the contract time or compensate the Contractor for delay costs due to non-excusable delays.

(d) Concurrent Delays

Concurrent delays are separate delays to the controlling operation or critical path that occur at the same time. When an excusable, non-compensable delay is concurrent with an excusable, compensable delay, the Department will extend the contract time but will not make payment for delay costs. When a non-excusable delay is concurrent with an excusable delay, the Department will not extend the contract time and will not make payment for delay costs.

108.09 Failure to Complete on Time

For each calendar day, as specified, that work shall remain incomplete during the months of April through November inclusive, after the control time specified for the completion of the work provided for in the contract, the sum specified in the Proposal or Special Provisions will be deducted, as liquidated damages, from any money due the Contractor. Account will be taken of adjustment of the contract time for completion of the work granted in accordance with 108.08. Contract time will not be charged while waiting for final inspection as defined in 105.15 provided all contract work has been satisfactorily completed. However, five workable days during the months of April through November inclusive will be allowed after notification from the Department to complete all corrective or clean up work necessary for final inspection. Thereafter, time will be charged for each day the work remains uncompleted.

Further, 10 workable days will be allowed after notification by the Department to remove all construction signs and temporary traffic control devices. Thereafter, time will be charged for each day the sign and device remain.

For each calendar day, as specified, that any work shall remain incomplete during the months of December through March inclusive, liquidated damages will be assessed. However, when the project is open for its intended purpose or modified for safe use, liquidated damages will not be deducted, and payment for the field office and field laboratory, if set out as a pay item in the itemized proposal, will not be made. Intended purpose will include all pavement lanes, sidewalks, trails, drainage features, and all safety appurtenances. The Contractor may be required to make temporary repairs to the pavement or structures. Liquidated damages will be assessed until temporary repairs are made. No payment will be made for such temporary repairs.

If the contract is not completed, or the pavement or structure is not opened to traffic within the stipulated time as set out in the Proposal, the Department may reduce the qualified rating of the Contractor for bidding on future contracts.

Allowing the Contractor to continue and finish the work or a 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 be considered as a waiver on the part of the Department of any of its rights under the contract.

Adjustments to the contract payment with respect to liquidated damages will be included in a liquidated damages pay item. The unit price for this pay item will be $1.00 and the quantity will be in units of dollars. The quantity is the total calculated in accordance with the Proposal or Special Provisions.

108.10 Default and Termination of Contract

Notice in writing will be given to the Contractor and its surety of delay, neglect, or default if the Contractor:

(a) fails to begin work under the contract within the time specified,

(b) fails to perform the work with sufficient workmen and equipment or with sufficient materials to ensure the prompt completion of said work,

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

(d) discontinues the prosecution of the work,

(e) fails to resume work which has been discontinued within a reasonable time after notice to do so,

(f) becomes insolvent or is declared bankrupt, or commits an act of bankruptcy or insolvency,

(g) allows final judgment to stand against it unsatisfied for a period of 10 days,

(h) makes an assignment for the benefit of creditors,

(i) for other causes whatsoever, fails to carry on the work in an acceptable manner, or

(j) fails to implement the employee drug testing plan as submitted with the bid, or fails to provide information regarding the implementation of the employee drug testing plan when requested by the Department, or provides false information regarding implementation of the employee drug testing plan.

If the Contractor or surety does not proceed in accordance therewith within a period of 10 days after such notice, then the Department will, upon written notification from the Engineer of the fact of delay, neglect, default, or the failure of the Contractor to comply with such notice, have full power and authority, without violating the contract, to take the prosecution of the work away from the Contractor. The Department may appropriate or use materials and equipment on the ground as may be suitable and acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof. Other methods required for the completion of the contract in an acceptable manner may be used.

All costs and charges incurred by the Department, together with the cost of completing the work under the contract, will be deducted from any monies due or which may become due. If such expense exceeds the sum which would have been

payable under the contract, the Contractor and the surety shall be liable and shall pay to the Department the amount of such excess.

108.11 Termination of Contractor's Responsibility

The contract shall be considered as completed after all work provided for therein has been accepted. The Contractor shall then be released from all further obligations except as provided in 107.23 and 109.08.

The Department may, by written order, terminate the contract or a portion thereof only after a meeting with the Contractor, and after determining that termination would be in the public interest. Reasons for termination will include, but will not be limited to, the following:

(a) executive orders of the President relating to prosecution of war or national defense,

(b) national emergency which creates a serious shortage of materials,

(c) budgetary concerns of the Department,

(d) errors in the plans or Proposal which make the project unbuildable,

(e) orders from duly constituted authorities relating to energy conservation,

(f) 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,

(g) when it is the finding of the Department that the Contractor is unable to complete the contract and the construction covered thereby within a reasonable length of time on account of inability to obtain materials or satisfactory substitutes therefore which do not change the general type of construction or labor.

In such cases, work performed, including partially completed items, will be paid for in full at the contract unit prices for the actual quantities of work done, which prices will not be subject to change if the quantity for a pay item or items is increased or decreased more than 20%. Should such relief from performance of a portion of the contract or such elimination of a portion of the contract directly cause the loss of work or material already furnished under the terms of the contract, the actual cost of such work or of salvaging such material will be reimbursed. All such material may, at the

option of the Department, be purchased at its actual cost. Anticipated profit on work not performed will not be allowed. Final settlement will depend upon the merits of the individual case. All actual damages will be paid following a meeting with the Contractor to determine if payment of actual damages is appropriate and in accordance with applicable laws.

108.12 Contract Documentation

The Contractor shall furnish upon request, all documentation relating to its performing as a Contractor or subcontractor on a contract. The requested information may be, but is not limited to payroll records, material invoices, subcontract agreements with pertinent attachments, lease agreements, and Equal Employment Opportunity documentation.

SECTION 109 – MEASUREMENT AND PAYMENT

109.01 Measurement of Quantities

(a) General Requirements

All measurements of work completed under the contract will be according to the English System unless otherwise specified.

The standard measures shown in this publication are primarily in the English System of Units such as feet and inches, pounds, gallons, and acres. Any metric equivalents, shown in parentheses, are intended only for those contracts in which they are specified, or to maintain consistency with industry standards. No guarantee is provided, explicit or implicit, that the units are accurate conversions.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice. Results are to be determined using the standard "5" up procedures as defined in General Note 9 on Page viii herein. When the quantities to be measured are shown in English System units, and the Contractor uses equipment or materials that were originally developed to be used in performing work in the International System measure, there will be no allowance if the International System dimensions exceed the English System measurements. When the quantities to be measured are shown in International System measure, and the Contractor uses equipment or materials that were originally developed to be used in performing work in the English System units, there will be no allowance if the International System dimensions exceed the English System measurements.

Unless otherwise specified, longitudinal measurements for base, surface, and shoulder area computations will be made along the centerline of the actual surface of the roadway. No deduction will be made for individual fixtures having an area of 10 sq ft or less. Unless otherwise specified, transverse measurements for area computations will be the neat line dimensions shown on the plans or ordered in writing.

Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.

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.

All work which is measured by the linear foot will be measured parallel to the base or foundation upon which such work is placed, unless otherwise specified.

A station when used as a definition or term of measurement in the English System will be 100 linear feet. A station when used as a definition or term of measurement in the International System will be l km.

When metric dimensioned materials are specified, the Contractor shall convert to metric all weigh tickets, delivery receipts, or other material documentation before submitting the documentation.

The term gauge, when used in connection with the measurement of metal plates or sheets, will mean the U.S. Standard Gauge except when the referenced AASHTO, ASTM, or other specification for a material specifies that it be ordered and measured in terms of thickness.

When the term gauge refers to the measurement of wire, it will mean the U.S. Steel Wire Gauge except when the reference AASHTO, ASTM, or other specification for the wire specifies that it be ordered and measured in terms of wire size number or diameter.

The term ton will mean the short ton consisting of 2,000 pounds avoirdupois. The term megagram will mean 1,000,000 g or 1,000 kg. All materials which are measured or proportioned by weight (mass) shall be weighed on accurate approved scales which are in accordance with all requirements and specifications adopted by the Indiana State Board of Health, Division of Weights and Measures. The weighing shall be accomplished by competent qualified personnel at designated locations. Materials specified according to metric unit weights may be weighed on a scale that uses English system units and then converted to the metric equivalent using the conversion factors shown elsewhere in the specifications.

(b) Scales and Measurement by Weight (Mass)

All materials for which measurements are obtained by weight (mass) shall be weighed on approved scales which, except as hereinafter provided for out-of-state scales, shall be tested and sealed by the Indiana State Board of Health, Division of Weights and Measures. This inspection shall have been made within a period of not more than one year prior to the date of use for weighing material. A scale which has been tested and approved within this one year period and which has been repaired or

dismantled or moved to another location, shall again be tested and approved before it is eligible for weighing. All interested parties, such as the Department, the Contractor, or the owner of the scales, may request an inspection of the scales in question. The latest inspection shall take precedence over all previous inspections.

A motor-truck scale shall have a suitable undercarriage of such construction that shall safely carry and weigh an amount equal to 80% of the rated capacity of the scale on either end of the scale platform. When so loaded, the stresses in the lever system shall not exceed the stresses allowable under AREA specifications. The load carried per 1 in. of knife-edged bearing shall not exceed 5,000 lb.

The scale platform shall be of such length and width as to conveniently accommodate all trucks containing materials which need to be weighed. The entire truck load shall rest on the scale platform and shall be weighed as one draft.

If material is weighed on truck scales, weigh tickets showing the net weight of each load of material delivered shall be supplied for use in computing quantities. The tickets shall contain the ticket serial number, date, contract number, source of supply, material designation such as ledge and size or type, DMF or JMF number for HMA, truck number, time weighed, gross weight direct reading if scale is of the direct reading type, tare, net weight, and moisture content if applicable. Space shall be provided on each ticket for the signature of a representative of the Engineer.

A duplicate ticket may be furnished by the Contractor for its records. The original, and duplicate if furnished, tickets will be signed at the point of incorporation into the work. E-tickets, when used, shall be in accordance with 106.01(b)2. No additional payment will be made for furnishing, maintaining, and operating scales.

The weight of materials weighed outside the State and intended for use on the contract may be determined on scales tested and approved by the proper governmental unit having authority where the scales are located. In such case, the Department shall be furnished with a certified copy of such inspection and approval which, to be acceptable, shall have been made within one year to the time of such weighing. Out-of-state truck scales used shall be in accordance with all pertinent provisions as they apply to truck scales accepted within the State of Indiana. They shall be subject to approval and inspection by the Department and to the requirements applicable to such scales located within the State.

If materials are shipped by rail, the car weight may be accepted provided payment is made for only the actual weight of the materials. Car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty daily at such times as directed. Each truck shall bear a plainly legible identification mark.

(c) Measurement by Volume

Materials to be measured by volume in the hauling vehicle shall be hauled in

approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of the size or acceptable type provided the body is of such shape that the actual contents may be determined readily and accurately. All vehicles shall be loaded to at least their water level capacity. All loads shall be leveled when directed, after the vehicles arrive at the point of delivery.

When requested and approved in writing, material specified to be measured by the cubic yard may be weighed. Such weights will be converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

In computing volumes of excavation, the average end area method or other acceptable methods will be used.

If excavation is measured by cross-sections, the following will apply:

1. Unless otherwise provided, where sodded areas are involved, the cross-sections will be considered as located at the surface of the sod.

2. If the cost of excavation is specifically included in the payment for a pay item of work, the final sections will be taken at the finished surface of the work.

3. If the cost of excavation is not specifically included in the payment for a pay item of work, the final sections will be taken at the limits of the authorized excavation.

Unauthorized wastage of material will be deducted. Only such quantities as are actually incorporated into the completed work will be included in the final estimate.

(d) Measurement of Asphalt Materials

If an asphalt material is to be paid for directly, it will, except as hereinafter provided, be weighed and paid for by the ton. If the Engineer decides that weighing is not feasible, the asphalt material may be measured by volume and converted to tons. The conversion will be based on the unit weight as determined in the laboratory.

If asphalt material is to be measured by volume, it will be measured by the gallon in tank cars, distributor tanks, tanks, or drums. Certified calibration of tank cars, distributor tanks, tanks, and certified quantities in drums in which asphalt materials are delivered or stored shall be furnished.

If asphalt material is furnished in drums, the amount in each drum shall be stenciled plainly on the drumhead by the producer. The amount so indicated will be accepted as the quantity furnished. However, the amount in each drum may be checked in accordance with the requirements set out herein.

Tank car deliveries will be measured by volume and converted to tons.

Volumes will be measured at 60°F or will be corrected to the volume at 60°F in accordance with ASTM D1250 for asphalts or ASTM D633 for tars.

Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when asphalt material has been lost from the car or the distributor, is wasted, or is otherwise not incorporated into the work.

(e) Measurement of PCC

For design and production, PCC will be measured by the cubic yard. The relative yield will be determined in accordance with 505.01. Payment for PCC will be in the unit designated for the specified use.

(f) Measurement of Aggregates

Unless otherwise provided, all aggregates for which measurements are obtained by the cubic yard will be measured at the truck loading point in truck beds that have been measured, stenciled, and approved. They may be weighed and converted to cubic yards by a conversion factor computed at sufficient intervals to ensure correct measurement.

Free water in all aggregates for which payment is made as a separate pay item on a weight basis shall be drained prior to weighing and selection of samples. Samples for determination of moisture content shall be taken immediately prior to the time the material is to be weighed. The number of moisture tests will be governed by moisture conditions. Moisture contents shall be determined on the basis of oven dry weight by drying samples to constant weight at 230 ±9°F. However, if ovens are not available for drying samples, other methods which give equivalent results may be used. Moisture content shall be computed to the nearest 0.5% in accordance with the formula as follows:

$$\text{Percent of Moisture (M)} = \frac{\text{Wet weight of sample-Dry weight of sample}}{\text{Dry weight of sample}} \times 100$$

The percent of moisture shall be noted on each weight ticket.

The wet weight will be used for the basis of payment, if

(a) the % of moisture is determined to be less than 6% for B borrow

(b) 9% or optimum moisture content, as determined in accordance with AASHTO T 99, whichever is greater, for size No. 53 or No. 73 aggregates or modifications thereof when specified, or

(c) 4% for aggregates of all other specified sizes including sand.

If the percent of moisture exceeds the limitations set out above, the weight to be paid for will be the gross weight of aggregate minus the weight of the excess moisture computed as follows:

$$\text{Weight to be paid for} = G \times \frac{(100 + m)}{(100 + M)}$$

in which:

G = Gross weight of material.

M = Percent of moisture in the aggregate to the nearest 0.5% based on oven dry weight.

m = Percent of moisture allowed in the wet aggregate to be paid for based on oven dry weight.

(g) Measurement of Timber or Lumber

Timber or lumber will be measured by the thousand feet board measure or MFBM actually incorporated into the work. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.

(h) Rental of Equipment

Rental of equipment will be measured in hours of actual working time and necessary traveling time of the equipment within the project limits. If special equipment has been ordered in connection with force account work, travel time and transportation costs to the project site will be recorded. If equipment has been ordered and held on the project site on a standby basis, full time rates for such equipment will be paid.

(i) Manufactured Materials

If standard manufactured materials are specified such as fence, wire, plates, rolled shapes, pipe, or conduit, and such materials are identified by gauge, unit weight, or section dimensions, 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. Nearly equivalent metric dimensioned manufactured items will be accepted in lieu of English dimensioned items, provided they are within the specified tolerances, when English sizes are specified. Nearly equivalent English dimensioned manufactured items will be accepted in lieu of metric dimensioned items, provided they are within the specified tolerances, when metric sizes are specified.

109.02 Scope of Payment

Compensation provided for in the contract shall be received and accepted as full payment for furnishing all materials and for performing all work specified in the contract in a complete and acceptable manner. This shall also be payment in full for

all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the prosecution thereof, in accordance with 107.23.

If the basis of payment clause in the specifications relating to a unit price in the Schedule of Pay Items requires that said unit price cover and be considered compensation for certain work or material essential to the pay item, this same work or material will not also be measured or paid for under another pay item which may appear elsewhere in the specifications.

The term lump sum when used as a unit of payment will mean complete payment for the pay items of work described in the contract.

The payment of a current estimate before final acceptance of the work shall not affect the obligation of the Contractor to repair or renew any defective parts of the construction. The responsibility for all damages due to such defects will be determined in accordance with 107.19.

If it is agreed in writing that the quantities of certain items or portions of items of work, as set forth in the contract, are in substantial agreement with actual quantities of work performed, compensation therefore will be based on the quantities set forth in the contract without measurement thereof upon completion of the work. Compensation based on contract quantities as agreed shall be accepted as full payment for such items or portions of items.

If the Contractor has previously agreed in writing to accept photogrammetric methods of measurement for common excavation and borrow, the Department may utilize such methods of measurement as the basis of payment. Computation of volumes shall be in accordance with 203.

109.03 Compensation for Altered Quantities

If the accepted quantities of work vary from the quantities shown in the Schedule of Pay Items, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract unit prices for the accepted quantities of work performed. No allowance, except as provided in 104.02, will be made for increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the contract items of overhead expense on the part of the bidder and subsequent loss of expected reimbursement therefore, or from any other cause.

If an increase or decrease in a contract item is in accordance with 104.02, the contract unit price will be the rate of payment unless an adjusted price is agreed to by the parties to the contract. The contract unit price for a minor item may be adjusted if agreed to by parties for only that portion of the item which exceeds 6% of the total bid amount of the contract. A loss or gain of overhead costs will not be a consideration for adjusting the unit prices.

If such alteration directly causes the loss of any work or materials already furnished under the terms of the original contract, the actual cost of such work or of salvaging such materials will be reimbursed. All such materials may, at the option of the Department, be purchased at the actual cost including freight to the Contractor, plus 12%.

109.04 Cost Reduction Incentive, CRI

The Contractor may submit a written proposal for modifying the Contract Documents for the purpose of reducing construction costs or contract time. The proposal shall produce a savings without impairing essential functions, characteristics, and timing of the project including, but not limited to, safety, service life, economy of operations, the traveling public, ease of maintenance, desired appearance, design standards and construction schedules.

(a) CRI Initial Requirements

The Contractor shall initially submit five copies of a brief proposal to the Department to illustrate the concept or idea. At a minimum, the Contractor shall submit the following:

1. A statement that the proposal is submitted as a conceptual CRI.

2. A brief proposal with graphics, if appropriate, to illustrate and describe the concept.

3. A brief description of the existing work and the proposed changes for performing the work including a discussion of the comparative advantages and disadvantages for each and how the proposal meets the original intent of the design.

4. An approximate cost estimate for performing the work under the existing contract and under the proposed change.

5. An approximate cost estimate of design and engineering fees associated with the proposed change.

6. A description of any effects the proposed change would have on Department costs other than those in the contract such as future construction, design, right-of-way, utilities, maintenance, and operations costs.

7. The amount of time that will be needed to develop a formal CRI proposal.

8. A statement of the date by which the Department must execute an agreement adopting the proposal to obtain the maximum cost reduction during the remainder of the contract time, the date the

work must begin in order to not delay the contract, and the reasoning for this time schedule.

9. An approximate estimate of the effect the proposal will have on the time for completion of the contract, including development of the formal proposal, review by the Department and implementation.

10. The name of the redesign professional engineer, if any.

11. Reference to the applicable Indiana Design Manual provisions.

12. A statement regarding impacted permit requirements.

13. Identification of any material not in the current contract that the contractor proposes to use and corresponding applicable specifications.

The Department will notify the Contractor in writing within five business days after receipt of the proposal that the proposal has been rejected, accepted, or that a meeting needs to be arranged to discuss the proposed conceptual CRI. If the Department fails to respond within five business days, the proposal will be deemed rejected. If a meeting is requested, the Contractor shall arrange a meeting involving any professional engineer that will be used in development of the proposal, the engineer who designed the original plans or review engineer designated by the Department, contractor personnel, and Department personnel as determined by the Engineer. This meeting shall be held within 10 business days of receipt of the written notification, unless the Engineer approves additional time. At least two business days prior to the meeting, the Contractor shall provide a copy of its conceptual CRI to all persons invited to the meeting. Within 10 business days or a mutually agreed upon time after this meeting, the Department will notify the Contractor in writing as to whether a complete CRI may be developed.

(b) CRI Formal Proposal Requirements

If a concept is accepted by the Department, a formal proposal shall be submitted with a statement identifying the proposal as a CRI and shall contain, at a minimum, information as follows:

1. A description of the difference between the planned work and the proposed change with a comparison of effects on safety, service life, economy of operations, the traveling public, ease of maintenance, desired appearance, design standards, and construction schedules.

2. Proposed changes in the contract documents. Documents showing design changes shall be signed and bear the seal of a

Professional Engineer. Design changes shall be supported by design computations as necessary for a thorough and expeditious evaluation.

3. The pay items, unit prices, and quantities affected by the change.

4. Complete, detailed cost estimates for performance of the work both as planned and as proposed.

5. The calendar date required for approval of the proposal in order to produce the savings indicated.

6. Locations and situations, including test results, in which similar measures have been successfully used.

7. A statement regarding the effect the proposal will have on the contract completion time.

8. A signed contract between the Contractor and the Contractor's redesign engineer, who prepared and sealed the plans for the CRI proposal, shall be submitted to the Department. The contract shall provide for the following:

   a. The Contractor's redesign engineer shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications, load rating analysis, and other services furnished by the redesign engineer under this contract. The redesign engineer shall correct or revise any errors or omissions in its designs, drawings, specifications, and other services. The Contractor's redesign engineer shall indemnify, defend, and hold harmless the State and its agents, officials, and employees, from all claims and suits including court costs, attorney's fees, and other expenses caused by any acts, errors, or omissions of the Contractor's redesign engineer, its agents, or employees, in connection with the CRI proposal.

   b. Neither the Department's review, approval, nor acceptance of the plans for the CRI shall be construed to operate as a waiver of rights under the contract or cause of action arising out of the contract. The Contractor's redesign engineer shall be and shall remain liable to the Department for all damages caused by the Contractor's redesign engineer.

c. The rights and remedies of the Department provided in the contract are in addition to all other rights and remedies provided by law.

d. No terms between the Contractor and the redesign engineer shall adversely affect the Department's liability protection.

9. The Contractor's engineering costs to develop the proposal shall be submitted with full documentation.

Additional information shall be provided as required to properly evaluate the proposed change. Failure to do so may result in rejection of the cost reduction incentive proposal.

(c) Approval of Formal CRI Proposal

The Engineer will be the sole judge as to whether a formal CRI proposal qualifies for consideration, evaluation, and approval. A proposal which requires excessive time or cost for review, evaluation, or investigation, or which is not consistent with Department design policies, may be rejected. A proposal may also be rejected if not submitted within the time frame specified in the Contractor's conceptual proposal, unless the Engineer approves additional time. Proposed changes in pavement design including materials or pavement type, changes in materials required to be installed by a certified installer, or changes in right-of-way will not be approved. A proposal which uses empirical design (AASHTO LRFD Bridge Design Specifications, Section 9.7.2) of the concrete bridge deck will not be considered or approved. Only proposals which result in the Department's portion of the estimated net savings being $10,000.00 or more will be considered. Except as provided in 109.04(d), the Department will not be liable for failure to accept or act upon a proposal submitted in accordance with the requirements herein or for delays to the work attributable to such proposal, unless an extension of time is provided as part of the agreed CRI proposal.

Original contract bid prices shall not be based on the anticipated approval of a CRI proposal. If the proposal is rejected, the contract shall be completed at the original contract prices. If a CRI proposal is not approved on or before the calendar date submitted by the Contractor in the CRI shown on the proposal, such proposal will be deemed rejected. In determining the estimated net savings, the contract prices bid may be disregarded if it is determined that such prices do not represent a fair measure of the value of the work to be performed or deleted.

The CRI proposal will not be approved if equivalent options are already available within the contract, or if the Department is already considering a change order to the contract which includes the proposal revisions.

When a CRI proposal is received which changes superstructure type, superstructure dimensions, or superstructure dead load, the Engineer will perform a load rating analysis on the proposed structure. The load rating analysis must yield an

inventory rating of 1.0 or greater for the design live load in order to be considered for approval. If the inventory rating is less than 1.0, the proposed design shall be modified so that the load rating analysis yields an inventory rating of 1.0 or greater for the design live load before the CRI proposal is considered for approval.

If the CRI proposal is approved, it will be executed by means of a change order. The change order will show the changes in the plans and specifications necessary to enable the proposal to be put into effect and the net estimated savings will be set forth on the change order.

Upon approval, the Department will have the right to use, duplicate, and disclose in whole or in part, all data necessary for the subsequent adoption of the proposal for future projects.

The provisions of this specification will apply only to a contract awarded to the lowest bidder in accordance with the Department's competitive bidding requirements.

(d) Payment for Design of Formal Proposal, if Rejected

Except as provided elsewhere herein, if the Department rejects the formal CRI proposal, the Contractor will be reimbursed for 50% of the Contractor's reasonable design costs incurred after the Department's acceptance of the CRI conceptual proposal.

The Contractor will also be reimbursed for 50% of the Contractor's reasonable design costs of an approved CRI proposal if the Department determines that the proposal is no longer feasible because of changes in field conditions or other conditions beyond the control of the Contractor. If written approval was given to proceed with the work, procure materials, begin fabrication, and rejection occurs, the work and fabrication costs will be reimbursed in accordance with 109.05. The Contractor will be compensated for materials ordered which are unique to the project based on the Contractor's cost minus salvage value if the Contractor is unable to return these items to the vendor. All such material may, at the option of the Department, be purchased at its actual cost. There will be no reimbursement for costs incurred prior to the acceptance of the conceptual CRI proposal. The Contractor will not be reimbursed for design costs if a formal CRI proposal is rejected because it was not submitted within the time frame specified in the Contractor's conceptual proposal or additional time approved by the Engineer, if the Contractor fails to submit additional information requested by the Department, or if the design criteria used in the proposal does not comply with the Department's design standards.

(e) Other Conditions

The Contractor shall continue to perform the work in accordance with the contract requirements until a change order incorporating the CRI proposal has been approved. However, no contract work that will be affected by a CRI proposal shall be performed until the CRI proposal has been approved or rejected.

Prior to approval, the Engineer may modify a proposal with the concurrence of the Contractor, to enhance it or make it acceptable. If any modification increases or decreases the net savings resulting from the proposal, the Contractor's 50% share will be determined upon the basis of the proposal as modified.

The Department reserves the right to include in the change order the conditions it deems appropriate for consideration, approval, and implementation of the CRI proposal. Acceptance of the change order by the Contractor shall constitute acceptance of such conditions. As a condition for considering a Contractor's CRI proposal, the Department also reserves the right to require the Contractor to share in the Department's costs of investigating the proposal. If this condition is imposed, the Contractor shall indicate acceptance in writing. Such acceptance shall constitute full authority for the Department to deduct amounts for the investigation from moneys due the Contractor under the contract.

The Engineer may reject, in accordance with 105.03 and 105.11, all or any portion of work performed under an approved CRI proposal.

(f) Time Savings Proposals

The Contractor may submit a CRI proposal that reduces contract time by changing phasing of the work, the traffic control plan, or design elements.

The Department will consider proposals that result in time savings and at the same time may increase the cost of the project. The Department will be the sole judge as to whether the benefits of completing the project or a project phase before the scheduled completion date or milestone offsets an increase to the cost of the project.

The submittals for time savings will be reviewed using the CRI proposal process. The Contractor shall provide the Department sufficient information to enable the Department to evaluate the cost benefit of the savings.

(g) Adjustments to Contract Time

For approved formal CRI proposals the Department will adjust the applicable contract time as set out in the proposal. Any adjustment will be set forth in the change order for the CRI proposal. Depending on the Contractor's proposal, the adjustment will be an increase or decrease in the appropriate completion date.

(h) Method of Measurement

The work, as revised by the formal CRI proposal, will be measured as complete and in place and in accordance with the change order.

(i) Basis of Payment

The work, as revised by the formal CRI proposal, will be paid for as complete and in place and in accordance with the change order. In addition, the Contractor's Reasonable Design Cost and 50% of the total net savings of the CRI proposal will be paid for separately as follows:

1. The Contractor's Reasonable Design Cost for the CRI proposal will be paid for after approving the formal CRI proposal with the change order.

2. Upon completion of all items of work included in the change order, the total net savings will be calculated, and the Contractor will be paid 50% of the total net savings.

   The total net savings resulting from the CRI will be calculated as follows:

$$TNS = OCW - RCW - CRDC - DC$$

where:

TNS = total net savings
OCW = original cost of the work required by the original contract
RCW = revised cost of the work
CRDC = Contractor's reasonable design cost for the CRI proposal
DC = Department's cost for investigating, evaluating, and implementing the CRI proposal.

3. A cost savings of not less than $5,000.00 shall be guaranteed to the Department.

The actual formal CRI proposal net savings will be checked upon completion of the contract and determination of final quantities to determine if any payment adjustment is required.

Only those work items directly affected by the plan change will be considered in making the determination of net cost savings. Subsequent plan changes affecting the modified work items but not related to the CRI proposal will be excluded from such determination. Upon completion of all work included in the CRI proposal, the final total net savings will be determined by comparing the cost of the work based on the original contract quantities with the cost of the actual CRI proposal work performed.

In determining the savings, the Department reserves the right to consider other factors in addition to the contract bid prices and proposed unit prices if, in the judgment of the Department, such prices do not represent a fair measure of the value of the work to be deleted from or added to the contract.

The net savings of a CRI proposal to reduce contract time will be determined by multiplying the number of days saved by the daily liquidated damages as set forth in Section 108.08 or as otherwise provided in the contract.

Redesign engineering, in accordance with this section, is defined as 50% of the contractor's reasonable design costs incurred after the Department's acceptance of the CRI proposal. Redesign Engineering will be paid when a conceptual CRI has been accepted by the Department, but the final proposal is rejected.

Payment will be made under:

Pay Item	Pay Unit Symbol
Contractor's Reasonable Design Cost for CRI Proposal No. ____	LS
Cost Reduction Incentive Proposal No. ____	LS
Redesign Engineering, CRI Proposal No. ____	LS

109.05 Payment for Extra Work

A Change Order Request form, available on the Department's website, shall be submitted for review for all extra work prior to the Engineer drafting a change order. The form shall describe any unique circumstances and shall include unit prices or lump sum prices utilizing standard Department pay items.

Extra work performed in accordance with 104.03 will be paid for by one of the following methods:

(a) Agreed Price

Extra work will be paid for at agreed upon unit prices or lump sum prices as documented on approved change orders. The Department will perform a cost analysis of the Contractor's unit price or lump sum price indicated on the Change Order Request form.

Based on the results of the cost analysis, the Engineer may direct the Change Order Request form to be amended to incorporate additional information, including:

1. A detailed explanation of unique circumstances of the extra work.

2. The effect of the circumstances on the requested price.

3. A breakdown of the estimated costs for the categories of labor, equipment, and materials in sufficient detail to enable the Engineer to determine the basis and amount of the requested price.

(b) Force Account

The Department may require the Contractor to perform extra work on a force account basis when a price cannot be agreed upon in accordance with 109.05(a). The Contractor shall, when directed, submit a written proposal for the extra work prior to

the start of the work. When directed, the proposal shall include the planned labor, materials, equipment, and schedule for the work.

Extra work performed by force account will be documented on an approved change order and will be compensated in the following manner:

1. Labor Costs

For all labor and foremen in direct charge of the specific operations, the Contractor will receive the rate of wage, or scale, agreed upon in writing before beginning work for each hour that said labor and foremen are actually engaged in such work.

The Contractor will receive the actual costs paid to, or in behalf of, workmen by reasons of subsistence and travel allowances, worker's compensation insurance premiums, unemployment insurance contributions, social security taxes, health and welfare benefits, pension fund benefits, or other benefits when such amounts are required by collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work. The Contractor shall furnish satisfactory evidence of the rate or rates paid for insurance premiums and tax.

An amount equal to 20% of the sum of the above items will also be paid to the Contractor.

2. Bond and Insurance

For bond premium and property damage and liability insurance premiums, the Contractor will receive the actual cost, to which cost 10% will be added. The Contractor shall furnish satisfactory evidence of the rate or rates paid for such bond premium and insurance premiums.

3. Materials

For materials accepted and used, the Contractor will receive the actual cost of such materials delivered on the work, including transportation charges paid by the Contractor, exclusive of machinery rentals as hereinafter set forth, to which cost 12% will be added.

4. Equipment

For Contractor owned machinery, equipment, or tools, the rates shall be not more than those listed in the current Rental Rate Blue Book as published by EquipmentWatch®. The rate used shall be the FHWA hourly rate which is the ownership cost rate plus the operating cost rate. Regardless of the time used, the ownership cost rate shall be the hourly rate obtained by dividing the monthly Blue Book rate by 176 with appropriate adjustments made for region and age. Actual transportation costs may be added to the FHWA rate.

The Department will only pay for machinery, equipment, or tools with an FHWA hourly rate of greater than $2.00 per hour as listed in the Rental Rate Blue Book

published by EquipmentWatch®.

The Department will not pay for machinery, equipment, or tools which are not listed in the Rental Rate Blue Book published by EquipmentWatch® unless the machinery, equipment, or tools have a documented fair market value of greater than $2,000 per item.

For machinery, equipment, or tools not owned by the Contractor, the rate shall be as shown on invoices. Actual fuel, lubricant and transportation costs may be added to the rental cost. The Engineer may designate the use of the fuel percentage of the Rental Rate Blue Book operating cost rate in lieu of actual fuel and lubricant costs. No payment will be made for repairs to rented equipment.

For equipment that is operational, on-site, and necessary for force account work, but is idle due to conditions beyond the control of the Contractor, a standby rate will apply. The standby rate will also apply during the period of transportation and on-site assembly and disassembly of the equipment for transportation purposes. The standby rate will be the published ownership cost rate reduced by 50%. Standby time will not be paid for in excess of 8 hours per day minus the number of hours paid for at the FHWA rate per day; or 40 hours per week minus the number of hours paid for at the FHWA rate per week. If rented equipment necessary for force account work is idle, the Department will pay the Contractor for the actual invoice rates for the duration of the idle period.

The Contractor shall provide a list of all information needed to verify the Blue Book rental rate for each piece of equipment. The information shall include the equipment type, manufacturer name, model number, year, any attachments used, and any other information necessary to determine the proper rate.

The Contractor will receive payment for the total costs agreed upon to which sum 12% will be added.

5. Miscellaneous

No additional allowance will be made for general superintendence or other costs for which no specific allowance is herein provided.

6. Subcontracting

For administration costs in connection with approved subcontract work, the Contractor will receive an amount equal to 7% of the total cost of such work computed as set forth above. The procedure set forth above in sections 1 through 5 will not be required for subcontracted portions of the work when either of the following takes place:

a. An agreed price as defined herein is accepted by the Department, in such case the 7% markup will not apply.

b. Three subcontractor quotes are submitted by the Contractor for the work and the lowest priced quote is accepted by the Department.

7. Compensation

The Contractor and the Engineer shall compare records of the cost of work done as ordered on a force account basis at the end of each day. These records shall be signed by both. Each shall retain one copy.

8. Statements

No payment will be made for work performed on a force account basis until the Contractor has furnished an itemized statement of the cost of such force account work detailed as follows:

a. name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman;

b. designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment;

c. quantities of materials, prices, and extensions;

d. transportation of materials;

e. cost of property damage, liability and worker's compensation insurance premiums, unemployment insurance contributions, and social security tax.

Statements shall be accompanied and supported by receipted invoices for all materials used and for transportation charges. However, if materials used on the force account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were taken from its stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor.

If the Contractor fails or refuses to prosecute extra or force account work as directed, the Department may withhold payment of all current estimates until the Contractor's failure or refusal is eliminated.

109.05.1 Quality Adjustments

Quality adjustments are those adjustments in the payment for work done or materials furnished and incorporated into the work which exceed or fall below the standards established by the contract.

A change order will be prepared to reflect these adjustments. The unit price for

these adjustments will be $1.00 and the quantities will be in units of dollars.

Payment will be made under:

Pay Item	Pay Unit Symbol
Quality Adjustments, _____ type	DOL

The dollars shown shall be the amount of the quality adjustments for the following types and may consist of plus or minus adjustments.

(a) HMA and SMA

Quality adjustments with respect to mixture, density, and smoothness for mixture produced will be computed in accordance with either 401.19 or 410.19.

(b) PCCP

Quality adjustments will be calculated in accordance with 501.28 or 502.21(c) as appropriate.

(c) Temporary Traffic Control Devices and Markings, TTCD

Quality adjustments will be assessed when the device is deemed to be in non-compliance in accordance with 801.03. Adjustments will be determined in accordance with 105.14.

Adjustments for non-compliance of construction warning lights will be determined in accordance with 801.14.

(d) Failed Materials, FM

Quality adjustments for materials which are deemed below the standards established, but which are allowed to remain in place by the Department's Failed Materials Committee in accordance with 105.03, will be as determined by that committee.

(e) Pavement Traffic Markings, PTM

Quality adjustments will be calculated in accordance with 808.07.

(f) Stormwater Management

Quality adjustments will be calculated in accordance with 205.08.

109.05.2 Delay Costs

When the Engineer determines that an excusable, compensable delay has occurred as defined in 108.08(b), the Department will pay for the costs incurred by the Contractor as a result of the delay. The Department will not pay for unrecoverable costs as defined in 104.02(d) and will not make duplicate payment for compensation made in accordance with 109.05.

The Department will not make payment for delays that occur during the period from December 1 through March 31 unless the Contractor's current accepted progress schedule, as required by 108.04, indicates work on the controlling operation or critical path during this period.

The Contractor shall provide satisfactory documentation to support payment for delay costs. The Department will not make any payment for delay costs until the documentation is submitted.

Payments made under this specification shall constitute full compensation for all delay costs and associated costs, including overhead.

(a) Allowable Delay Costs

1. Labor

Payment will be made for all necessary salaried and non-salaried personnel that must remain on the project, as approved by the Engineer, during the delay period and cannot be assigned to unaffected work. Necessary personnel will include field superintendents, assistants, watchmen, clerical and other field support staff, and those persons required for maintenance within the project limits, including maintenance of traffic control devices, maintenance of stormwater control measures and similar activities as approved by the Engineer. Payment for labor costs will be calculated in accordance with 109.05(b)1.

2. Insurance

Payment will be made for the increased cost of insurance resulting directly from the delay and will be calculated in accordance with 109.05(b)2.

3. Equipment

Payment will be made for idle equipment that must remain on the project, as approved by the Engineer, during the delay period and cannot be used for active work. Payment for idle equipment will be calculated in accordance with 109.05(b)4.

If the Engineer determines that idle equipment should not remain on the project, the Department will pay for the cost to demobilize the equipment during the delay and remobilize it at the end of the delay.

4. Field Office Costs

Payment will be made for the cost to maintain a Contractor's field office, if determined necessary by the Engineer, during the delay period.

Field office costs include, but are not limited to, the Contractor's field office facilities, tool trailers, office equipment rental, temporary toilets, incidental supplies, and utility expenses. Payment will be made only for the actual costs incurred during the delay period as documented on paid invoices.

5. Escalation Costs

Payment for escalation costs due to an excusable, compensable delay will be limited to the escalated cost of labor, materials, and equipment on that portion of the work which is delayed beyond an original intermediate completion date or the contract completion date and is caused to be performed during a period when the costs were higher than when the work was planned to be performed as shown on the accepted schedule prior to the delay. The Contractor shall submit satisfactory documentation of escalation costs in a format approved by the Department.

a. Labor Escalation

Payment for escalated labor costs will be calculated as the difference in labor cost between the time the work was performed and the time the work was planned. Labor costs will be calculated in accordance with 109.05(b)1 except that no markup will be paid for labor escalation.

b. Materials Escalation or Storage

Payment for escalated material costs will be calculated as the difference in the material cost between the time the work was performed and the time the work was planned. No material escalation cost will be paid for any item covered by a separate escalation or indexing clause under the contract.

The Department will pay for storage of materials, as approved by the Engineer, due to the delay. Only the actual cost of storing the materials will be paid. No markup will be paid for materials storage.

c. Equipment Escalation

Payment for equipment escalation costs will be calculated as the difference between the Rental Rate Blue Book FHWA hourly rate at the time the work was performed and the Rental Rate Blue Book FHWA hourly rate at the time the work was planned. No markup will be paid for equipment escalation costs.

(b) Blank

109.05.3 PG Asphalt Binder Material Cost Adjustments

The Contractor shall elect at the time the bid proposal is submitted, in a manner determined by the Department, whether or not to enact PG asphalt binder material cost adjustments. If the Contractor elects not to enact such adjustments, there will be no adjusted payment made to the Contractor for changes in the cost of PG asphalt binder materials used on the project and the provisions of this specification will not be applied to the contract. PG asphalt binder material cost adjustments will not be added to the contract at any time after the Contractor has elected not to enact such adjustments with submittal of the bid proposal. PG asphalt binder material cost adjustments will not be applied to alternate bid pavement items, but may be applied to the common items on contracts containing alternate bid pavement items.

When the Contractor elects to enact PG asphalt binder material cost adjustments at the time the bid proposal is submitted, the Department will adjust payment to the Contractor due to an increase or decrease in the cost of PG asphalt binder material used on the project to produce HMA mixtures that are paid in accordance with 304, 401, 402, 410, 414, 610, or 718. Payment will be adjusted when an increase or decrease in the PG asphalt binder index for the contract is greater than or equal to 10.01%. Payment will only be adjusted when the total original or revised quantity of at least one HMA pay item exceeds 2,000 tons.

For contracts without any original HMA pay item quantity equal to or greater than 2,000 tons, adjusted payment will not be made until the revised quantity of at least one HMA pay item meets the quantity criteria.

The initial 2,000 tons of HMA will not be eligible for a payment adjustment.

The Department will determine a PG asphalt binder index from one or more commercial services that provide regional indices. The PG asphalt binder index will be maintained by the Department's Division of Materials and Tests and posted on the Department's website. The posting will include an explanation of how the index is determined. A monthly payment adjustment will be calculated for each HMA pay item placed on the contract during that month. The total PG asphalt binder adjustment applied to the contract each month will be the sum of the calculations for each HMA pay item. The payment adjustment for each HMA pay item will be calculated as follows:

For a price increase:

$$MPA = (Q \times Pb)/100 \times LI \times [(BI-LI)/LI - 0.10]$$

For a price decrease:

$$MPA = (Q \times Pb)/100 \times LI \times [(BI-LI)/LI + 0.10]$$

where:

MPA = Mixture Payment Adjustment, in dollars, calculated to the nearest 0.01 dollar for each HMA pay item.

Q = Quantity of a HMA pay item placed, in tons, entered to the actual 0.01 unit placed. The quantity will be calculated prior to calculation of any other quantity adjustment.

Pb = Percent of virgin asphalt binder from the DMF, in the adjustment period, or JMF for the HMA mixture, entered to the nearest 0.1.

BI = PG asphalt binder index for the month the HMA pay item is placed, reported to the nearest whole dollar.

LI = PG asphalt binder index for the contract. The LI for all original contract HMA pay items equals the BI for the month immediately prior to the month of letting for the contract. The LI for any HMA extra work pay item will be the BI for the month the unit price for the pay item is submitted by the Contractor.

The calculation of (BI-LI)/LI will be rounded to the nearest 0.001. Payment will only be adjusted when the absolute value of (BI-LI)/LI is equal to or greater than 0.101.

If HMA pay items are placed beyond the specified contract completion date for the contract, the Department will calculate pay adjustments on the BI for the month of the specified completion date or the month of placement, whichever result is less.

The unit price of PG asphalt binder payment adjustment will be $1.00 and the pay quantities will be in units of dollars.

Payment will be made under:

Pay Item	Pay Unit Symbol
Payment Adjustment, PG Asphalt Binder	DOL

109.06 Eliminated Pay Items

If pay items contained in the Schedule of Pay Items are found unnecessary for the proper completion of the work, they may be eliminated from the contract as a change order. Such action shall not invalidate the contract. When notified of the elimination of pay items, the Contractor will be reimbursed for actual work done and all costs incurred, including mobilization of materials prior to said notification. This material may, at the option of the Department, be purchased at the actual cost including freight to the Contractor, plus 12%.

109.07 Partial Payments

The contract may contain more than one project. Partial payments may be made once each month as the work progresses or twice each month if it is determined that the amount of work performed is sufficient to warrant such payment. These payments will be based on estimates, prepared by the Engineer, of the value of the work performed and materials complete in place in accordance with the contract. No partial payment will be made or estimates submitted when the total value of the work performed since the last estimate amounts to less than $500.

Except as set out in 105 IAC 11-3-8 of the Rules for Prequalification of Contractors and Bidding, the balance, less all previous payments and less amounts

claimed which are required to be held by the Department in accordance with IC 8-23-9-26 through 8-23-9-39, will be certified for payment.

Within 10 business days of receipt of payment for any such estimate, the Contractor shall make payment to all subcontractors, including lessors and material suppliers, for the value of their work performed and materials complete in place in accordance with the contract. Failure to comply with this clause shall constitute a material breach of the contract and may result in sanctions under the contract.

Any delay or postponement of payment among the parties may take place only for good cause, with the Department's written approval. The explanation from the Contractor shall be made in writing to the Department.

Upon receipt of a claim under IC 8-23-9-26, the Department will retain out of the amount due the Contractor the amount of the claim. The amount to be retained will be withheld from partial payment estimates until the total amount of the claim has been retained.

In order to retain an amount when required by IC 8-23-9-26, the Engineer will apply a negative quantity to the contract liens pay item for the actual dollar amount of the claim. Upon resolution of the claim, the Engineer will post a positive quantity to the contract liens pay item equal to the amount originally retained. The final quantity of the contract liens pay item will be zero prior to final payment.

The contract unit price for contract liens will be $1.00.

Payment will be made under:

Pay Item	Pay Unit Symbol
Contract Liens	DOL

No allowance will be made for materials received which have not been incorporated into the work except in accordance with 111.

109.08 Final Payment

When the work has been completed in accordance with the terms of the contract, a final estimate will be prepared for the work done and a copy will be furnished to the Contractor. Final payment will not be made to the Contractor until allowed by IC 8-23-9-26 through IC 8-23-9-39.

All prior partial estimates and payments will be subject to correction in the final estimate and payment.

Except as otherwise provided herein, final payment will be made within 180 days after acceptance of the project. Acceptance shall be considered as the date the Contractor is relieved of further maintenance as provided in 107.19 and as set out in

the final acceptance letter. However, final payment shall not be made on an amount which is in dispute or the subject of a pending claim. However, final payment may be made on that portion of the contract or those amounts which are not in dispute or subject of a pending claim. Such partial payment shall not constitute a bar, admission, estoppel, or have any other effect as to those payments in dispute or the subject of a pending claim. For the purpose of this section, a dispute exists when the Contractor makes a claim for increase or decrease to any part of the contract or seeks additional compensation for any reason.

SECTION 110 – MOBILIZATION AND DEMOBILIZATION

110.01 Description

This work shall consist of all work necessary for the movement of personnel and equipment to and from the project site, except for seeding, and for the establishment and removal of all field offices, buildings, and other facilities necessary to the performance of the work.

110.02 Limitations

For the purpose of payment, the mobilization portion of this work will be limited to 5% of the original total contract price. The remainder of the work will be considered demobilization. The first progress estimate will include a percentage payment of the pay item for mobilization and demobilization that is equal to the lesser of 5% of the original total contract price or the contract lump sum price for the pay item mobilization and demobilization. The balance of the lump sum price will be paid when the contract has been completed and accepted.

110.03 Method of Measurement

No measurement will be made.

110.04 Basis of Payment

This work will be paid for at the contract lump sum price for mobilization and demobilization.

Payment will be made under:

Pay Item	Pay Unit Symbol
Mobilization and Demobilization	LS

The cost of all materials, equipment, tools, labor, transportation, operations, and incidentals required for mobilization and demobilization shall be included in the cost of this work.

If no pay item for mobilization and demobilization is shown in the Schedule of Pay Items, the cost of the work described above shall be included in the total cost of the contract, with no direct payment for the work.

SECTION 111 – STOCKPILED MATERIALS

111.01 Description

This work shall consist of the partial payment for certain stockpiled materials.

111.02 General Requirements

After certified copies of costs are presented, partial payments may be allowed for non-perishable materials to be incorporated into the work and delivered in the vicinity of the project or stored in approved storage facilities. Such materials shall be limited to structural steel, concrete structural members, MSE wall components, piles, reinforcing bars, drainage structures, contraction joints, and structural supports for signals, signs, and luminaires. In addition to the aforementioned, the Department will consider the stockpiling of other products, if requirements in 111.03 and 111.04 are met. Payment for stockpiled materials will only be considered when the allowable partial value exceeds $50,000 for a given pay item.

All required inspections, material compliance, and acceptable storage will be verified prior to authorizing partial payment. Stockpiled materials shall not be scheduled for incorporation into the work for 45 days from the Contractor's request.

Stockpiled materials shall be kept separate from other materials and be identified and marked for use only on the specific contract. When payment is authorized for stockpiled material, such material shall not be used for any other item except their intended item.

All materials paid for under this requirement will become the property of the Department in the event of default on the part of the Contractor. The Department may use, or cause to be used, such materials in the construction of the work provided for in the contract.

Although payment may have been made for materials, the Contractor shall be responsible for loss or damage to the materials. Such materials shall be replaced with no additional payment.

Approval of partial payment for stockpiled materials will not constitute final acceptance of such materials for use in completing the work. Stockpiled materials may be subjected to additional inspection and testing prior to final acceptance and incorporation into the work. Partial payments for stockpiled materials that are a portion of the pay item will be deducted from estimates due the Contractor as the material is incorporated in the work.

111.03 Materials

(a) Structural Steel, Concrete Structural Members, and Supports for Signals, Signs, and Luminaires

Partial payment for these pay items will be considered only when the total quantity

for an entire structure, or designated portion of a structure as specified on the plans and approved by the Engineer, has been completely fabricated.

(b) MSE Wall Components, Piles, Rebar, Drainage Structures, Dowel Bar Assemblies, and Bridge Expansion Joints

Partial payment for these pay items will be considered only when the total quantity for an entire structure, phase, intersection, or designated portion of a project as specified on the plans and approved by the Engineer, has been completely fabricated.

(c) Other Materials

Partial payment for other pay items may be considered only if a critical shortage has been determined by the Department.

111.04 Additional Requirements

(a) Delivered to the Job Site

Partial payment made under the requirements of this paragraph will be the delivered cost of the item, including freight, as verified by invoices furnished by the Contractor. Partial payment will not exceed the percentage indicated in the table below of the contract unit price as set out in the Schedule of Pay Items.

(b) Acceptably Stored at the Fabricator's, Manufacturer's, or Contractor's Storage Facilities

Partial payment made under the requirements of this paragraph will be the delivered cost of structural steel and concrete structural members, minus freight charges, as verified from invoices furnished by the Contractor.

Partial payment will not exceed the percentage indicated in the table below of the contract unit price as set out in the Schedule of Pay Items. Under this requirement, all invoices shall show the location of material storage. Materials shall be stored in the United States.

PARTIAL PAYMENT MAXIMUM PERCENTAGE		
Material	Delivered to Job Site	Other Acceptable Storage Facility
Structural Steel Concrete Structural Members Supports for Signals, Signs, and Luminaires	75%	70%
MSE Wall Components Pile Rebar Drainage Structures Dowel Bar Assemblies Bridge Expansion Joints	75%	50%
Other Materials	50%	30%

111.05 Method of Measurement

No measurement will be made. However, the amount will be substantially verified before authorization for payment.

111.06 Basis of Payment

Stockpiled materials which are authorized for payment in accordance with the requirements herein will be paid for in accordance with 111.03 and 111.04.

Payment will be made under:

Pay Item	Pay Unit Symbol
Stockpiled Material, _____ (type of material)	CYS, EACH, LBS, LFT, LS, SFT, SYS, TON

SECTION 112 – BLANK

SECTION 113 – PARTNERING OVERHEAD

113.01 Description

All major players for both the Contractor and the Department will be expected to attend a partnering workshop to develop a statement of goals and monthly follow-up meetings.

Players need to attend the follow-up meetings only when they are active in the project. This workshop shall be held at a neutral location and may include a working lunch if the cost is less than $10.00 per person.

The workshop should take place before the pre-construction conference but shall not take the place of the pre-construction conference.

113.02 Requirements

The requirements for the workshop shall be as follows:

(a) Meeting Room

The size of the room and the number of people in attendance may vary.

Attendees	Approximate Number
City or County Officials, if applicable	3
Department Personnel	12
Designers or Design Consultant	2
Prime Contractor's and Subcontractor's Personnel	13
Utilities, if applicable	6
Total Approximate Number in Attendance	36

(b) Meeting Length

The workshop is expected to last a minimum of 5 h. The follow-up meetings are expected to last approximately 1 to 2 h.

(c) Facilitator

A facilitator shall be provided. Such facilitator shall have expertise in conducting workshops of this nature. The Contractor shall select the facilitator. The facilitator will be subject to approval by the Engineer prior to being contracted for the work. The facilitator shall conduct the workshop, the first follow-up meeting, every third follow-up meeting, and a close-out meeting. The other monthly follow-up meetings will be conducted by the Engineer and Contractor. At the close-out meeting, a statement of successes and failures shall be developed. The facilitator shall compile and publish a summary of these successes and failures for distribution to all players.

113.03 Method of Measurement

Partnering overhead will not be measured for payment.

113.04 Basis of Payment

Partnering overhead will be paid for at the contract lump sum price for partnering overhead.

Payment will be made under the following:

Pay Item	Pay Unit Symbol
Partnering Overhead	LS

The cost of the room, facilitator, mailings, video and audio equipment required, and all other incidentals shall be included in the cost of partnering overhead.