

**STATE OF OHIO**  
**DEPARTMENT OF**  
**TRANSPORTATION**  
**COLUMBUS, OHIO**

**LPA**  
**CONSTRUCTION AND MATERIAL**  
**SPECIFICATIONS**

**PROPOSAL NOTE 100**

**07/16/2021**



An Equal Opportunity Employer

**Modified By: Ian Kohli**  
**Local Public Agency: City of Lima**  
**Date: 7/14/2023**



## **Table of Contents**

### **100 GENERAL PROVISIONS 4**

*101 DEFINITIONS AND TERMS 4*

*102 BIDDING REQUIREMENTS AND CONDITIONS 13*

*103 AWARD AND EXECUTION OF CONTRACT 17*

*104 SCOPE OF WORK 17*

*105 CONTROL OF WORK 21*

*106 CONTROL OF MATERIAL 28*

*107 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC 31*

*108 PROSECUTION AND PROGRESS 42*

*109 ACCEPTANCE, MEASUREMENT, AND PAYMENT 52*

# 100 GENERAL PROVISIONS

## 101 DEFINITIONS AND TERMS

**101.01 General.** These Construction and Material Specifications are written to the Bidder before award of the Contract and to the Contractor after award of the Contract. The sentences that direct the Contractor to perform Work are written as commands. For example, a requirement to provide cold-weather protection would be expressed as, “Provide cold-weather protection for concrete,” rather than “The Contractor shall provide cold-weather protection for concrete.” In the imperative mood, the subject “the Bidder” or “the Contractor” is understood.

All requirements to be performed by others have been written in the active voice. Sentences written in the active voice identify the party responsible for performing the action. For example, “The Engineer will determine the density of the compacted material.” Certain requirements of the Contractor may also be written in the active voice, rather than the active voice and imperative mood, if the sentence includes requirements for others in addition to the Contractor. For example, “After the Contractor provides initial written notice, the Engineer will revise the Contract as specified in [104.02](#).”

Sentences that define terms, describe a product or desired result, or describe a condition that may exist are written in indicative mood. These types of sentences use verbs requiring no action. For example, “The characteristics of the soils actually encountered in the subgrade may affect the quality of the cement and depth of treatment necessary.”

**101.02 Abbreviations.** The following abbreviations, when used in the Contract Documents, represent the full text shown.

AAN	<a href="#">American Association of Nurserymen</a>
AASHTO	<a href="#">American Association of State Highway and Transportation Officials</a>
AC	Asphalt Cement (pavement), Alternating Current (traffic)
ACBFS	Air Cooled Blast Furnace Slag (aggregate)
ACI	<a href="#">American Concrete Institute</a>
ACIA	Asynchronous Communications Interface Adapter (traffic controller)
ADT	Average Daily Traffic
ADTT	Average Daily Truck Traffic
AIC	Amps Interrupting Capacity
AISC	<a href="#">American Institute of Steel Construction</a>
AISI	<a href="#">American Iron and Steel Institute</a>
ANFO	Ammonium Nitrate and Fuel Oil
ANSI	<a href="#">American National Standards Institute</a>
AOS	Apparent Opening Size (fabric)
AREA	<a href="#">American Railway Engineering Association</a>
AMRL	<a href="#">AASHTO Material Reference Library</a>
ASCE	<a href="#">American Society of Civil Engineers</a>
ASLA	American Society of Landscape Architects
ASME	<a href="#">American Society of Mechanical Engineers</a>
ASTM	<a href="#">American Society for Testing and Materials</a>
AWG	American Wire Gauge
AWPA	<a href="#">American Wood Preservers' Association</a>
AWS	<a href="#">American Welding Society</a>
AWWA	<a href="#">American Water Works Association</a>
BBR	Bending Beam Rheometer (asphalt binder test)

BMP	Best Management Practice (erosion)
BOF	Basic Oxygen Furnace (aggregate)
BSG	Bulk Specific Gravity
BTEX	Benzene, toluene, ethyl benzene, and xylene (a soil test)
BUSTR	<a href="#">Bureau of Underground Storage Tank Regulations (Division of Fire Marshal)</a>
C&MS	Construction and Material Specifications
CAPWAP	<a href="#">Case Pile Wave Analysis Program</a>
CBAE	Cut Back Asphalt Emulsion
CCRL	<a href="#">Cement and Concrete Reference Laboratory</a>
CCS	Crushed Carbonate Stone
CECI	Contactors Erosion Control Inspector
CFR	<a href="#">Code of Federal Regulations</a>
CIE	<a href="#">Commission Internationale d'Eclairage</a> (illumination)
CPE	Construction Project Engineer (LPA Local-let Project specific)
CPESC	Certified Professional in Erosion and Sediment Control
CRS	Cationic Rapid Set (asphalt emulsion)
CRSI	<a href="#">Concrete Reinforcing Steel Institute</a>
CSS	Cationic Slow Set (asphalt emulsion)
CVN	Charpy V-notch (steel test)
CWT	Hundred Weight (100 lbs)
DC	Direct Current
DCA	<a href="#">District Construction Administrator</a>
DCE	<a href="#">District Construction Engineer</a>
DDD	<a href="#">District Deputy Director</a>
DET	<a href="#">District Engineer of Tests</a>
DGE	<a href="#">District Geotechnical Engineer</a>
DLS	Data Logging System (traffic markings)
DNR	<a href="#">Department of Natural Resources</a>
DRC	Dry Rodded Condition (asphalt aggregate test)
DSR	Dynamic Shear Rheometer (asphalt binder test)
DZA	Deficient Zone Average (concrete test)
EAF	Electric Arc Furnace
EDA	Earth Disturbing Activity
EI	<a href="#">Edison Electric Institute</a>
EIA	<a href="#">Electronic Industries Alliance</a>
EPA	<a href="#">Environmental Protection Agency</a>
EQS	Exceptional Quality Solids (compost)
FAA	Fine Aggregate Angularity (asphalt aggregate)
FCM	Fracture Critical Member (steel test)
FEMA	<a href="#">Federal Emergency Management Agency</a>
FHWA	<a href="#">Federal Highway Administration, Department of Transportation</a>
FRP	Fiber Reinforced Polymer
FSS	<a href="#">Federal Specifications and Standards, General Services Administration</a>
GGBFS	Ground Granulated Blast Furnace Slag
GS	Granulated Slag
HDPE	High Density Polyethylene
HMWM	High Molecular Weight Methacrylate
ICEA	<a href="#">Insulated Cable Engineers Association</a>

IEEE	<a href="#"><u>Institute of Electrical and Electronic Engineers</u></a>
IES	<a href="#"><u>Illuminating Engineering Society</u></a>
IMSA	<a href="#"><u>International Municipal Signal Association</u></a>
IPCEA	<a href="#"><u>Insulated Power Cable Engineers Association</u></a>
IPS	International Pipe Standard
ISSA	<a href="#"><u>International Slurry Seal Association</u></a>
ITE	<a href="#"><u>Institute of Transportation Engineers</u></a>
ITS	Intelligent Transportation System
IZEU	Inorganic Zinc Epoxy Urethane
<a href="#"><u>JMF</u></a>	Job Mix Formula
LED	Light Emitting Diode
LPA	Local Public Agency
LWT	Loaded Wheel Test (asphalt test)
MBF	Thousand Board Feet (wood)
MC	Medium Cure (asphalt emulsion)
MCB	Microchannel Bus (traffic controller)
MOV	Metal Oxide Varistor (traffic controller)
MPI	Magnetic Particle Inspection (steel test)
MSG	Maximum Specific Gravity (asphalt)
MTD	Maximum Theoretical Density (asphalt)
NACE	<a href="#"><u>National Association of Corrosion Engineers</u></a>
NCHRP	<a href="#"><u>National Cooperative Highway Research Program</u></a>
NEMA	<a href="#"><u>National Electrical Manufacturers Association</u></a>
NHI	<a href="#"><u>National Highway Institute</u></a>
NIST	<a href="#"><u>National Institute of Standards and Technology</u></a>
NOI	Notice of Intent
NPDES	<a href="#"><u>National Pollutant Discharge Elimination System</u></a>
OAC	<a href="#"><u>Ohio Administrative Code</u></a>
ODOT	<a href="#"><u>Ohio Department of Transportation</u></a>
OEPA	<a href="#"><u>Ohio Environmental Protection Agency</u></a>
OH	Open Hearth (aggregate)
OHWM	Ordinary High Water Mark
<a href="#"><u>OMM</u></a>	<a href="#"><u>Office of Materials Management</u></a> (the Central Office Laboratory)
OMUTCD	<a href="#"><u>Ohio Manual of Uniform Traffic Control Devices</u></a>
ORC	<a href="#"><u>Ohio Revised Code</u></a>
ORDC	<a href="#"><u>Ohio Rail Development Commission</u></a>
OSHA	<a href="#"><u>Occupational Safety and Health Administration</u></a>
OTO	<a href="#"><u>Office of Traffic Operations</u></a>
OWPCA	<a href="#"><u>Ohio Water Pollution Control Act</u></a>
OZEU	Organic Zinc Epoxy Urethane
PAT	Project Average Thickness (concrete test)
PAV	Pressure Aging Vessel (asphalt binder test)
PB	Polybutylene (conduit)
PCC	Portland Cement Concrete
PCS	Petroleum Contaminated Soil
PDA	Pile Dynamic Analysis (steel piling)
PE	Polyethylene (conduit)
PG	Performance Grade (asphalt binder grading system)

pH	Potential of Hydrogen
PLS	Pure Live Seed
PRC	Person in Responsible Charge (representation of the Local Public Agency)
PVC	Polyvinyl chloride
QA	Quality Assurance
QC	Quality Control
QCFS	Quality Control Fabricator Specialist (structures)
QCP	Quality Control Program, or Plan, or Points (steel test)
<a href="#">QPL</a>	Qualified Products List
RAP	Reclaimed Asphalt Pavement
RAS	Reclaimed Asphalt Shingles
RC	Rapid Cure (asphalt emulsion)
REA	Rural Electrification Act
RFI	Radio Frequency Interference (traffic controller)
RH	Relative Humidity
RMS	Root Mean Square (traffic controller)
RPCC	Recycled Portland Cement Concrete
RPM	Raised Pavement Marker (traffic)
RS	Rapid Set (asphalt emulsion)
RTFO	Rolling Thin-Film Oven (asphalt binder test)
RUS	<a href="#">Rural Utilities Service</a>
SAE	<a href="#">Society of Automotive Engineers</a>
SBA	Styrene Butadiene Amine
SBR	Styrene Butadiene Rubber
SBS	Styrene Butadiene Styrene
SCD	Standard Construction Drawing
SDS	Safety Data Sheets
SF	Standard Fabricated members (structures)
SI	International System of Units (Metric)
SM	<a href="#">AASHTOWare Project Sitemanager™</a>
SMA	Stone Matrix Asphalt
SPD	Surge Protection Device (traffic controller)
SPST	Single Pole / Single Throw (traffic controller)
SS	Slow Set (asphalt emulsion)
SSD	Saturated Surface Dry (aggregate)
SSPC	<a href="#">Society for Protective Coatings</a>
SWPPP	Storm Water Pollution Prevention Plan
TAP	Traffic Authorized Product
TCE	Trichloroethylene
TMPTA	Tri-methylpropane Tri-acrylate (paint)
TNP	Total Neutralizing Power
TODS	Tourist-Oriented Directional Signs
TSEC	Temporary Sediment and Erosion Control
TSR	Tensile Strength Ratio (asphalt mix test)
UF	Unique Fabricated members (structures)
UL	<a href="#">Underwriters' Laboratories, Inc.</a>
USACE	<a href="#">United States Army Corps of Engineers</a>
USC	<a href="#">United States Code</a>

VA	Verification Acceptance
VAC	Volts Alternating Current
VCA	Volume of Coarse Aggregate (asphalt mix test)
<a href="#">VECP</a>	Value Engineering Change Proposal
VMA	Voids in the Mineral Aggregate
VME	VersaModule Eurocard (traffic controller)
WDT	Watchdog Timer
WEAP	Wave Equation Analysis (steel piling)
WPS	Welding Procedure Specification (steel test)
WZRPM	Work Zone Raised Pavement Marker (traffic)
XCU	Explosion, Collapse and Underground

**101.03 Definitions.** The following terms or pronouns, when used in the Contract Documents, are defined as follows:

**Advertisement.** The public announcement, as required by law, inviting Bids for Work to be performed or materials to be furnished.

**Award.** The written acceptance by the PRC and/or CPE of a Bid.

**Bid.** The offer of a Bidder, on the prescribed form properly signed and guaranteed, to perform the Work and to furnish the labor and materials at the prices quoted.

**Bid Documents.** The Bid Documents include the Invitation for Bids, Addenda, Proposal, , contract form and required bonds, Specifications, [Supplemental Specifications](#), Special Provisions, general and detailed plans, Plan notes, standard construction drawings identified in the Plans, notice to Contractor, and any other document designated by the LPA as a Bid Document, all of which constitute one instrument.

**Bidder.** An individual, firm, or corporation submitting a Bid for the advertised Work, acting directly or through the duly authorized representative, and qualified as provided in the [ORC 5525.02 to 5525.09](#).

**Bridge.** A structure, including supports, erected over a depression or an obstruction, such as water, a highway, or a railway, and having a track or passageway for carrying traffic or other moving loads and having a length measured along the center of roadway of 10 feet (3.048 m) or more between undercopings of abutments or extreme limits of openings for multiple boxes.

**A. Length.** The length of a bridge structure is the over-all length measured along the centerline of the roadway surface.

**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 heights of curbs, between the bottoms of the lower risers. For curb widths of 1 foot (0.3 m) or less, the roadway width is measured between parapets or railings.

**Calendar Day or Day.** Every day shown on the calendar.

**Certified Test Data.** A test report from a manufacturer's or an independent laboratory approved by the Director listing actual test results of samples tested for compliance with specified Department and/or LPA requirements. The LPA will accept certified test data from manufacturers' laboratories if their products have been used satisfactorily on prior Department contracts and their test data has been confirmed. Include a statement that the test data furnished is representative of the material furnished to a Department project or to a supplier. The report is identified by number or date and identifies the LPA



project or supplier to which the material is shipped. Submit reports signed by a person having legal authority to act for the manufacturer or independent laboratory.

**Change Order.** A written order issued by the PRC and/or CPE to the Contractor, covering changes to the terms and conditions, plans and/or quantities, within or beyond the scope of the Contract and establishing the basis of payment and time adjustments for the work affected by the changes.

**Claims.** Disputes that are not settled through the Dispute Resolution and Administrative Claim Process. The Dispute becomes a Claim when the Contractor submits a Notice of Intent to File a Claim.

**Completion Date.** The date, as shown in the Contract Documents, on which the Work contemplated shall be completed.

**Construction Limits.** These limits must encompass all Work. This includes removals, room for construction equipment to complete work, site access, etc.

**Construction Project Engineer.** Designee by the LPA to serve as the main contact for the Contractor, ODOT, FHWA, and any other agencies having an interest in the Project. The CPE is someone who is tasked with managing a Local-let LPA contract who is either a Professional Engineer or is working under the purview of a Professional Engineer.

**Contract.** The written agreement between the LPA and the Contractor setting forth the obligations of the parties, including, but not limited to, the performance of the Work and the basis of payment.

**Contract Bond.** The approved forms of security, executed by the Contractor and its Sureties, guaranteeing complete execution of the Work as required by the Contract Documents and the payment of all legal debts pertaining to the construction of the Project which security shall comply with all related provisions.

**Contract Documents.** The Contract Documents include the Invitation for Bids, Addenda, Proposal, contract form and required bonds, Specifications, [Supplemental Specifications](#), Special Provisions, general and detailed plans, Plan notes, standard construction drawings identified in the Plans, notice to contractor, Change Orders, Supplemental Agreements, Extra Work Contracts, “Accepted” and “Accepted as Noted” Working Drawings, and any other document designated by the LPA as a Contract Document, all of which constitute one instrument.

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

**Contract Price.** The amount of compensation bid by the Contractor for a Contract Item in the Proposal or the amount of compensation established for a Contract Item added or modified pursuant to the Contract Documents.

**Contract Time.** The number of workdays or calendar days, including authorized adjustments, allowed for completion of the Project. When a specified Completion Date is shown in the Contract Documents instead of the number of workdays or calendar days, completion of the Project shall occur on or before that date. Specified Completion Date and Calendar Day Contracts shall be completed on or before the day indicated even when that date is a Saturday, Sunday, or holiday.

**Contractor.** The individual, firm, or corporation contracting with the LPA for performance of prescribed Work, acting directly or through a duly authorized representative and qualified under the provisions of the ORC, and any amendments thereto.

**County.** The designated county in which the Work specified is to be done.

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

**Department.** The [Department of Transportation, State of Ohio](#).

**Director.** Administrative head of the Department appointed by the Governor.

**Disputes.** Disagreements, matters in question and differences of opinion between the LPA's personnel and the Contractor.

**District Testing.** The Departments district testing laboratories.

**Engineer.** Duly authorized agent of the LPA acting within the scope of its authority for purposes of engineering and administration of the Contract. The Engineer can be either the Person in Responsible Charge (PRC) or the Construction Project Engineer (CPE)

**Engineered Drawings.** A type of Working Drawing that requires the practice of engineering as defined in [ORC 4733.01\(E\)](#). Examples of Engineered Drawings include: Excavation Bracing Plans, Demolition Plans, Erection Plans, Falsework Plans, Cofferdam Plans, Causeway Plans, Jacking and Temporary Support Plans, Plans for Heavy Equipment on Structures, Plans for structures for Maintaining Traffic, and Corrective Work Plans.

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

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

**Extra Work Contract.** A Contract concerning the performance of Work or furnishing of materials involving Extra Work. Such Extra Work may be performed at agreed prices or on a force account basis.

**Fabricator.** The individual, firm, or corporation that fabricates structural metals or prestressed concrete members as an agent of the Contractor.

**Final Inspector.** An Engineer appointed by the (DDD) who inspects the completed Work and accepts it if it complies with the Contract Documents.

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

**Invitation for Bids.** The invitation for Proposals for all Work on which Bids are required. Such Proposal will indicate with reasonable accuracy the quantity and location of the Work to be done or the character and quality of the material to be furnished and the time and place of the opening of Proposals.

**Laboratory.** The testing laboratories of the Department, including the ([OMM](#)) located at 1600 West Broad Street, Columbus, Ohio, and the District testing facilities.

**Local.** The [LPA responsible for managing the construction contract and](#) acting through its authorized representative.

**Materials.** Any materials or products specified for use in the construction of the Project and its appurtenances.

**Partnering.** A collaborative process for project cooperation and communication meant to achieve effective and efficient contract performance and completion of the Project within budget, on schedule, safely and with requisite quality in accordance with the contract.

**Person in Responsible Charge (PRC).** Serves as the agency contact for all issues or inquiries and ensures that all applicable state and federal regulations are followed on the project

**Plans.** The drawings, standard construction drawings and supplemental drawings provided by the Department that show the location, character, dimensions, and details of the Work.

**Prebid Question.** A written inquiry submitted by a prospective bidder.

**Professional Landscape Architect.** A landscape architect registered with the Ohio Landscape Architects Board to practice landscape architecture in the State of Ohio.

**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.

**Project Limits.** Project limits are points on the mainline centerline of construction where the proposed improvement, as described in the project description on the Title Sheet (excluding incidental construction), begins and ends

**Project Right-of-Way.** That portion of the Right-of-Way between the beginning and end of the Project.

**Project.** The specific section of the highway or route together with all appurtenances and/or Work to be performed thereon under the Contract.

**Proposal.** The approved form on which the LPA requires Bids to be prepared and submitted for the Work.

**Proposal Guaranty.** The security furnished with a Bid to guarantee that the Bidder will enter into the Contract if its Bid is accepted.

**Questionnaire.** The specified forms on which the Contractor shall furnish required information as to its ability to perform and finance the Work.

**Reasonably Close Conformity.** Reasonably close conformity means compliance with reasonable and customary manufacturing and construction tolerances where working tolerances are not specified. Where working tolerances are specified, reasonably close conformity means compliance with such working tolerances. Without detracting from the complete and absolute discretion of the Engineer to insist upon such tolerances as establishing reasonably close conformity, the Engineer may accept variations beyond such tolerances as reasonably close conformity where they will not materially affect the value or utility of the Work and the interests of the LPA.

**Registered Engineer.** An engineer registered with the [Ohio State Board of Registration for Professional Engineers and Surveyors](#) to practice professional engineering in the State of Ohio

**Registered Surveyor.** A surveyor registered with the [Ohio State Board of Registration for Professional Engineers and Surveyors](#) to practice professional surveying in the State of Ohio.

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

**Road.** A general term denoting a public way for purposes of vehicular travel, including the entire area within the Right-of-Way, as defined in the ORC.

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

**Roadside.** The areas between the outside edges of the shoulders and the Right-of-Way boundaries. Unpaved median areas between inside shoulders of divided highways and infield areas of interchanges are included.

**Roadside Development.** Those items necessary to the highway that provide 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; such suitable planting; and other improvements as may increase the effectiveness and enhance the appearance of the highway.

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

**Shop Drawings.** Drawings accepted by the Contractor and submitted to the LPA that describe portions of the Work fabricated off site that are incorporated permanently with the project.

**Shoulder.** The portion of the roadway contiguous to the traveled way for accommodation of stopped vehicles, for emergency use, and for lateral support of base and surface courses.

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

**Signatures on Contract Documents.** All signatures on Contract Documents must meet the requirements of [102.06](#).

**Special Provisions.** Additions and revisions to the standard and [Supplemental Specifications](#) covering conditions peculiar to an individual Project.

**Specifications.** The directions, provisions, and requirements contained herein as supplemented by the [Supplemental Specifications](#) and Special Provisions.

**State.** The [State of Ohio](#) acting through its authorized representative.

**Street.** A general term denoting a public way for purpose of vehicular travel, including the entire area within the Right-of-Way.

**Structures.** Bridges, culverts, catch basins, drop inlets, retaining walls, cribbing, manholes, endwalls, buildings, sewers, service pipes, underdrains, foundation drains, and other features that may be encountered in the Work and not otherwise classed herein.

**Subcontractor.** An individual, firm, or corporation to whom the Contractor sublets part of the Contract to be performed on the job site, who prior to such undertaking receives the written consent of the Director, and who is qualified under the ORC.

**Subgrade.** The portion of a Roadbed upon which the pavement structure and shoulders are constructed.

**Substructure.** All of that part of the structure below the bearings of simple and continuous spans, skewbacks of arches, and tops of footings of rigid frames, together with backwalls and wings.

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

**Superstructure.** The entire structure except the Substructure.

**Supplement.** A list of requirements for fabrication plants, methods of test, or other miscellaneous requirements that are maintained on file in the Office of the Director.

**Supplemental Agreement.** A written agreement executed by the Contractor and by the PRC and/or CPE covering necessary alterations.

**Supplemental Specifications.** Detailed specifications supplemental to or superseding these Specifications.

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

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

**Waters of the United States.** Waters that are under the jurisdiction of the Corps of Engineers under the Clean Water Act as defined by [33 CFR Ch. II Part 328](#), which as applied to Ohio means: the Ohio River and Lake Erie and any other river, stream, creek, lake, pond, or wetland that drains directly or indirectly into the Ohio River or Lake Erie.

**Work.** All labor, materials, equipment, tools, transportation, supplies, and other incidentals and all tasks that comprise the project or any portion thereof, as described by the Contract Documents.

**Work Limits.** Work Limits are the extreme limits of the contractor’s responsibility on a project, including all temporary and incidental construction, with the exception of work zone traffic control devices required for maintenance of traffic.

**Workday.** A calendar day that the Contractor normally works.

**Working Drawings.** Contractor submitted drawings for work, not otherwise defined in the Bid Documents, and require LPA acceptance. Examples of Working Drawings include: Engineered Drawings, installation plans, certified drawings, and any other supplementary plans or similar data that the Contractor is required to submit for acceptance.

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

## 102 BIDDING REQUIREMENTS AND CONDITIONS

**102.01 Prequalification of Bidders.** A Bidder must be prequalified by the Department according to [ORC Chapter 5525](#) and the rules and regulations governing prequalification in order to submit a Bid. Upon request, the Department will provide a prequalification application, applicable rules and regulations, and other relevant information. For prospective Bidders that are not yet prequalified, furnish the Department with a properly completed prequalification application at least 30 days before the date specified for the receipt of Bids. The prequalification certificate is the Bidder’s license to Bid and perform construction for the Department.

Subcontractors are not subject to the prequalification requirement unless otherwise specified by the LPA. The Prime Contractor will perform no less than 30 percent of the total original contract price unless a greater percentage is specified.

For foreign Contractors, refer to [ORC 5525.18](#) and [Ohio Administrative Rule 5501:2-3-07](#).

**102.02 Contents of Bid Documents.** Use the Proposal to prepare and submit Bids for the Work. Upon request, the LPA will provide Bid Documents that include or reference the following:

- A. Location and description of the Project.
- B. Estimate of quantities and description of the Work.
- C. Time to complete the Work.
- D. Amount of the Proposal Guaranty.
- E. LPA’s deadline for receiving a completed Bid.
- F. Schedule of contract items.
- G. Standard Specifications, Special Provisions, [Supplemental Specifications](#), and the Plans.
- H. Proposal.

### **102.03 Issuance of Proposals.**

**A. General.** Upon request, the LPA will provide applicable rates and other relevant information for obtaining bidding information and submitting a Bid.

**B. LPA Will Not Issue.** The LPA may refuse to sell or issue Bid Documents to a prospective Bidder for any of the following reasons:

1. The prospective Bidder owes the LPA for previously issued plans.
2. The prospective Bidder has defaulted on previous contracts.
3. The prospective Bidder is debarred from bidding on and receiving Department contracts.
4. The prospective Bidder is currently in the debarment process.

**102.04 Interpretation of Quantities in Proposal.** The quantities in the Bid Documents are approximate and the LPA uses them for the comparison of Bids only.

The LPA will only pay the Contractor for the actual quantities of Work performed and accepted according to the Contract Documents. The LPA may increase, decrease, or omit the scheduled quantities of Work as provided in [109.04](#) without invalidating the Bid prices.

**102.05 Examination of Bid Documents and Project Site and Submission of Prebid Questions.**

Carefully examine the Bid Documents and perform a reasonable site investigation before submitting a Bid. Submitting a Bid is an affirmative statement that the Bidder has investigated the Project site and is satisfied as to the character, quality, quantities, and the conditions to be encountered in performing the Work. A reasonable site investigation includes the review of prebid questions, investigating the Project site, borrow sites, hauling routes, and all other locations related to the performance of the Work.

When available, the LPA will include in the Contract Documents or provide for the Bidder's review at the LPA's offices or website, one or more of the following:

- A. Record drawings.
- B. Available information relative to subsurface exploration, borings, soundings, water levels, elevations, or profiles.
- C. The results of other preliminary investigations.

A reasonable site investigation includes a review of these documents.

Should a question arise at any time during the examination of Bid Documents or investigation of the site the Bidder may seek clarification by submitting a Prebid Question. Responses to Prebid Questions by the LPA are not revisions to the Bidding Documents and are not binding.

**102.06 Preparation of Bids.** Prepare a Bid according to the requirements found in the Bid Documents.

**102.07 Duty to Notify of Errors in Bid Documents.** Notify the LPA of errors and omissions in the Bid Documents. The Contractor's duty to disclose errors and omissions is not only a bidding requirement but is also a legal requirement that cannot be ignored.

Failure to provide the required notification prior to the opening of bids shall constitute a waiver by the Contractor and does not obligate the LPA for any costs based upon any apparent or patent ambiguity arising from insufficient data or obvious errors in the Bid documents. Knowingly withholding information regarding an error or omission in the Bid Documents, or intentionally misrepresenting an



item of Work for financial or competitive gain may result in civil or criminal penalties in excess of the value of the item bid.

**102.08 Unbalanced Bidding.** Bid all items correctly and price each quantity as indicated in the Bid Documents. The LPA will reject a Mathematically Unbalanced Bid if the Bid is also Materially Unbalanced. A Mathematically Unbalanced Bid is a Bid containing lump sum or unit price items that do not include reasonable labor, equipment, and material costs plus a reasonable proportionate share of the Bidder's overhead costs, other indirect costs, and anticipated profit. A Materially Unbalanced Bid is when the LPA determines that an award to the Bidder submitting a Mathematically Unbalanced Bid will not result in the lowest ultimate cost to the LPA.

**102.09 Proposal Guaranty.** The LPA will reject a Bid submitted without a Proposal Guaranty in the amount designated and payable to the PRC. Submit the required Proposal Guaranty according to the requirements found in the Bid Documents.

When submitting a Bid bond, ensure that the Surety is licensed to do business in the State.

If the LPA invites alternate Bids and the Bidder elects to Bid more than one alternate, the Bidder may submit one Proposal Guaranty in the amount required for a single alternate. The Proposal Guaranty covers each individual Bid.

**102.10 Delivery of Bid.** The LPA will accept Bids until the time and date designated in the Notice to Bidders.

**102.11 Withdrawal of Bids.** Withdrawal of Bids shall be in accordance with the Bid Documents.

**102.12 Combination Proposals.** The LPA may elect to issue Bid Documents for projects in combination or separately, so that Bids may be submitted either on the combination or on separate units of the combination. The LPA reserves the right to make awards on combination Bids or separate Bids to the best advantage of the LPA. The LPA will not consider combination Bids, other than those it specifically identifies in the Bid Documents. The LPA will write separate Contracts for each individual Project included in the combination.

**102.13 Public Opening of Bids.** The LPA will publicly open Bids at the time and place indicated in the notice to Contractors. The LPA will announce the total Bid amount for each Bid.

Bidders or their authorized agent and other interested persons are invited to the opening.

The LPA may postpone the receipt of Bid time or the opening of Bids time. If the LPA changes the hour or the date of the receipt of Bids or the opening of Bids, it will issue an addendum or public notice to notify prospective Bidders.

**102.14 Disqualification of Bidders.** Disqualification of Bidders shall be in accordance with the Bid Documents.

**102.15 Material Guaranty.** Before any Contract is awarded, the LPA may require the Bidder to furnish a complete statement of the origin, composition, and manufacture of any or all Materials to be

used in the construction of the Work together with samples. The LPA may test the samples as specified in these Specifications to determine their quality and fitness for the Work.

**102.16 Certificate of Compliance with Affirmative Action Programs.** Before any Contract is awarded, the LPA will require the Bidder to furnish a valid Certificate of Compliance with Affirmative Action Programs, issued by the [State EEO Coordinator](#).

**102.17 Drug-Free Safety Program.** During the life of this project, the Contractor and all its Subcontractors, that provide labor on the Project site, must be enrolled in and remain in good standing in the [Ohio Bureau of Worker's Compensation](#) ("OBWC") [Drug-Free Safety Program](#) ("DFSP") or a comparable program approved by the OBWC.

In addition to being enrolled in and in good standing in an OBWC-approved DFSP or a comparable program approved by the OBWC, the LPA requires each Contractor and Subcontractor that provides labor, to subject its employees who perform labor on the project site to random drug testing of 5 percent of its employees. The random drug testing percentage must also include the on-site supervisors of the Contractors and Subcontractors. Upon request, the Contractor and Subcontractor shall provide evidence of required testing to the LPA.

Each Subcontractor shall require all lower-tier Subcontractors that provides labor on the project site with whom the Subcontractor is in contract for the Work to be enrolled in and be in good standing in the OBWC-approved DFSP prior to a lower-tier Subcontractor providing labor at the Site.

The LPA will declare a bid non-responsive and ineligible for award if the Contractor is not enrolled and in good standing in the [Ohio Bureau of Workers' Compensation's Drug-Free Safety Program \(DFSP\) Discount Program](#) or a similar program approved by the Bureau of Workers' Compensation within 8 days of the bid opening. Furthermore, the LPA will deny all requests to sublet when the subcontractor does not comply with the provisions of this section.

Failure of the Contractor to require a Subcontractor to be enrolled in and be in good standing in the an OBWC-approved DFSP prior to the time that the Subcontractor provides labor at the Site, shall result in the Contractor being found in breach of the Contract and that breach shall be used in the responsibility analysis of that Contractor or the Subcontractor who was not enrolled in a program for future contracts with the State for five years after the date of the breach.



## 103 AWARD AND EXECUTION OF CONTRACT

**103.01 Consideration of Proposals.** After opening and announcing the Bids, the LPA will compare the Bidders' proposed prices. The proposed price is the summation of the products of the estimated quantities shown in the Proposal and the unit Bid prices. If the amount shown for the proposed product differs from the actual product of the unit Bid price and the estimated quantity, then the actual product will govern.

The LPA may reject any or all Bids, waive technicalities, or advertise for new Bids without liability to the LPA.

**103.02 Award of Contract.** The LPA will award a Contract or reject Bids in accordance with the Bid Documents.

**103.03 Cancellation of Award.** The LPA may cancel a Contract award at any time before all parties sign the Contract without liability to the LPA.

**103.04 Return of Proposal Guaranty.** Proposal Guaranties will be returned in accordance with the Bid Documents.

**103.05 Requirement of Contract Bond.** The contractor shall furnish a performance and payment bond in an amount at least equal to 100 percent of the estimate as security for the faithful performance of its contract. In addition to the project Owner, ODOT shall be named as an obligee. Furnish Contract Bonds within 10 days after receiving notice of award.

**103.06 Execution of Contract.** The acceptance of the proposal shall be in accordance with the Bid Documents.

**103.07 Failure to Execute Contract.** If the successful Bidder fails to sign the Contract and furnish the Contract Bonds, the LPA will have just cause to cancel the award. The LPA may award the Contract to the next lowest responsive Bidder, re-advertise the Work, or take any other action decided by the PRC and/or CPE.

## 104 SCOPE OF WORK

**104.01 Intent of the Contract Documents.** The intent of the Contract Documents is to provide for the construction and completion of the Work. Perform the Work according to the Contract Documents.

### **104.02 Revisions to the Contract Documents.**

**A. General.** The LPA reserves the right to revise the Contract Documents at any time. Such revisions do not invalidate the Contract or release the Surety, and the Contractor agrees to perform the Work as revised.

The provisions of this section are subject to the limitation of the ORC.

**B. 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 Documents 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 Documents, are encountered at the site, notify the Engineer as specified in [108.02.F](#) of the specific differing conditions before they are disturbed or the affected Work is performed.

Upon 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, the LPA will make an adjustment and modify the Contract as specified in [108.06](#) and [109.05](#). The Engineer will notify the Contractor of the determination whether or not an adjustment of the Contract is warranted.

**C. Suspension of Work.** 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 or time is due as a result of such suspension or delay, notify the Engineer as specified in [108.02](#).

Upon receipt of notice, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost or time required for the performance of the Work 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 equitable adjustment (excluding profit) and modify the contract as specified in [108.06](#) and [109.05](#). The Engineer will notify the Contractor of its determination whether or not an adjustment to the Contract Documents is warranted. Failure of the Engineer to suspend or delay the Work in writing does not bar the Contractor from receiving a time extension or added compensation according to [108.06](#) and [109.05](#).

The LPA will not make an adjustment under this subsection in the event that performance is 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.

**D. Significant Changes in Character of the Work.** The Engineer may increase or decrease quantities and alter the Work as necessary to complete the Project. The Engineer will make appropriate adjustments according to [108.06](#) and [109.05](#), if such alterations significantly change the character of the Work.

If the Contractor disagrees as to whether an alteration constitutes a significant change, use the notification procedures specified in [108.02.F](#).

Significant changes in the character of work.

- (i) 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.
- (ii) 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.

- (iii) 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.
- (iv) The term “significant change” shall be construed to apply only to the following circumstances:
  - (A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
  - (B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

**E. Eliminated Items.** The LPA may partially or completely eliminate contract items.

The LPA will only make an adjustment to compensate the Contractor for the reasonable cost incurred in preparation to perform significantly changed work as set forth in [104.02.D](#) or work completely eliminated prior to the date of the Engineer’s written order to significantly change or completely eliminate the Work. The adjustment will be determined according to [109.04](#) and [109.05](#). Such payment will not exceed the price of the Contract Item.

The LPA will not seek a savings for maintaining traffic, mobilization, and construction layout stakes items for Eliminated Items of Work, unless there is a significant change.

**F. Extra Work.** Perform Extra Work as directed by the Engineer. The LPA will pay for Extra Work as specified in [109.05](#). Time extensions, if warranted, will be determined according to [108.06](#).

**G. Unilateral Authority to Pay.** The LPA has unilateral authority to pay the Contractor sums it determines to be due to the Contractor for work performed on the project. This unilateral authority to pay by the LPA does not preclude or limit the rights of the LPA and the Contractor to negotiate and agree to the amounts to be paid to the Contractor.

**104.03 Rights in and Use of Materials Found on the Work.** Upon obtaining the Engineer’s approval, the Contractor may use material, such as stone, gravel, or sand, found in the plan excavation for another Contract Item. The LPA will pay for both the excavation of the material under the corresponding Contract Item and for the placement of the excavated material under the Contract Item(s) for which the excavated material is used. Excavate or remove material only from within the grading limits, as indicated by the slope and grade lines.

Obtain written permission from the Engineer according to [107.11.A](#).

**104.04 Cleaning Up.** Maintain the Project in a presentable condition. Remove all rubbish, layout stakes, sediment control devices as directed by the Engineer, excess material, temporary structures, and equipment, including stream channels and banks within the Right-of-Way at drainage structures, and all borrow and waste areas, storage sites, temporary plant sites, haul roads, and other ground occupied by the Contractor in connection with the Work. Establish suitable vegetative cover in these areas by seeding and mulching according to Item [659](#), except for cultivated fields. Leave the Project site in an acceptable condition as determined by the Engineer. The cost of cleanup is incidental to all contract items. The LPA may withhold 10 percent of the Bid amount for the mobilization contract item, if included, until performance under this section is complete. See [624.04](#).



## 105 CONTROL OF WORK

**105.01 Authority of the Engineer.** The Engineer will decide questions concerning all of the following:

- A. The quality and acceptability of Materials furnished.
- B. The quantity of Work performed.
- C. The Contractor's rate of progress.
- D. The interpretation of the Contract Documents.
- E. Acceptable fulfillment of the Contract.
- F. Contractor compensation.

The Engineer may suspend all or part of the Work when the Contractor fails to correct conditions that are unsafe for the workers or the general public, fails to comply with the Contract Documents, or fails to comply with the Engineer's orders. The Engineer may suspend the Work due to adverse weather conditions, conditions considered adverse to the prosecution of the Work, or other conditions or reasons in the public interest.

The Engineer's acceptance does not constitute a waiver of the LPA's right to pursue any and all legal remedies for defective work or work performed by the Contractor in an un-workmanlike manner.

**105.02 Plans and Working Drawings.** The Plans show details of structures, the lines and grades, typical cross-sections of the Roadway, and the location and design of structures. Keep at least one set of Plans at the Project at all times.

Prepare working drawings when required by the Contract Documents and after verifying applicable field and plan elevations, dimensions, and geometries. Where Work consists of repairs, extension, or alteration of existing structures, take measurements of existing structures to accurately join old and new Work.

Unless otherwise indicated, the LPA will review working drawing submittals to ensure conformance with the Contract and to provide the Contractor a written response to document the results of its review as follows:

- A. **"ACCEPTED."** The LPA accepts the submittal for construction, fabrication, or manufacture.
- B. **"ACCEPTED AS NOTED."** The LPA accepts the submittal for construction, fabrication, or manufacture, subject to the Contractor's compliance with all LPA comments or corrections to the submittal. If also marked "RESUBMIT," the LPA still accepts the submittal, but requires the Contractor to provide a corrected submittal to the LPA.
- C. **"NOT ACCEPTED."** The LPA does not accept the submittal. The submittal does not conform to Contract requirements. Do not begin construction, fabrication, or manufacture of Work included in the submittal. Revise the submittal to comply with LPA comments or corrections and Contract requirements and provide the revised submittal to the LPA for another review.

"Accepted" and "Accepted as Noted" Working Drawings are Contract Documents as defined in [101.03](#). The LPA's acceptance will not relieve the Contractor of responsibility to complete the Work according to the Contract nor relieve a signatory engineer's responsibility as defined by [OAC 4733-23](#). Include the cost of furnishing Working Drawings in the cost of the Work they cover.

**105.03 Conformity with Contract Documents.** Perform all Work and furnish all Materials in reasonably close conformity with the lines, grades, cross-sections, dimensions, and material requirements as shown on the Plans and as specified.

If the PRC and/or CPE determines the Work is not in reasonably close conformity with the Contract Documents and determines the Contractor produced reasonably acceptable Work, the PRC and/or CPE may accept the Work based on engineering judgment. The PRC and/or CPE will document the basis of acceptance in a Change Order that provides for an appropriate adjustment to the Contract Price of the accepted Work or Materials. If the PRC and/or CPE determines the Work is not in reasonably close conformity with the Contract Documents and determines the Work is inferior or unsatisfactory, remove, replace, or otherwise correct the Work at no expense to the LPA.

**105.04 Coordination of the Contract Documents.** The Contract Documents are those defined in [101.03](#). A requirement appearing in one of these documents is as binding as though it occurs in all. The Engineer will resolve discrepancies using the following descending order of precedence:

- A. Addenda.
- B. Proposal and Special Provisions.
- C. Plans.
- D. [Supplemental Specifications](#).
- E. Standard Construction Drawings.
- F. Standard Specifications.

Immediately notify the Engineer upon discovering any latent error or omission in the Contract Documents.

**105.05 Cooperation by Contractor.** The LPA will supply the Contractor with one set of the Contract Documents, exact standard construction drawings, supplemental specifications, and these specifications, which will be provided electronically, if requested.

Provide the constant attention necessary to progress the Work according to the Contract Documents. Cooperate with the Engineer, inspectors and all other Contractors on or adjacent to the Project.

**105.06 Superintendent.** Provide a Superintendent for the Project that is available and responsive at all times and is responsible for all aspects of the Work, irrespective of the amount of subcontract Work. The Superintendent must be capable of reading and understanding the Contract Documents and experienced in the type of Work being performed. The Superintendent shall receive instructions from the Engineer or the Engineer's authorized representatives. The Superintendent shall promptly execute the Engineer's orders or directions and promptly supply the required materials, equipment, tools, labor, and incidentals.

**105.07 Cooperation with Utilities.** Unless otherwise provided for by the Contract Documents, the LPA will direct the utility owners to relocate or adjust water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, and all other utility appurtenances within the limits of the proposed construction at no cost to the Contractor.

If the Contractor is directed by a utility company to perform any work not specifically contained in this note, the LPA will not compensate the Contractor for this work unless the LPA approves the request in writing before the work begins. If the work is not preapproved by the LPA, the Contractor will be responsible for obtaining reimbursement for its work from the utility company which directed the Contractor to perform the work.

In the event that the Contractor requests that additional work, not specifically contained in this note, be performed by a utility company, the Contractor will be responsible for reimbursing the utility

company for the additional work unless the LPA has agreed in writing to pay for the additional work before the work begins.

The Contract Documents will indicate various utility items and indicate a time frame or date when the LPA expects the owners to complete utility relocation or adjustment. Provide utility owners adjusting facilities during construction with adequate notification of the scheduled Work to prevent conflict with the Contractor's schedule of operations.

When bidding, consider all permanent and temporary utility appurtenances in present and relocated positions as shown in the Contract Documents.

According to [ORC 153.64](#) and at least 2 Workdays prior to commencing construction operations in an area that may affect underground utilities shown on the Plans, notify the Engineer, the registered utility protection service, and the owners that are not members of the registered utility protection service.

The owner of the underground utility shall, within 48 hours, excluding Saturdays, Sundays, and legal holidays, after notice is received, start staking, marking, or otherwise designating the location, course,  $\pm 2$  feet ( $\pm 0.6$  m), together with the approximate depth of the underground utilities in the construction area.

If the utility owners fail to relocate or adjust utilities as provided for in the Contract Documents and the Contractor sustains losses that could not have been avoided by the judicious handling of forces, equipment, and plant, or by reasonable revisions to the schedule of operations, then the Engineer will adjust the Contract according to [108.06](#) and [109.05](#).

**105.08 Cooperation Between Contractors.** At any time, the LPA may contract for other work on or near the Project.

Separate Contractors working within the limits of the Project shall conduct their work without interfering with or hindering the progress or completion of Work being performed by other Contractors and shall cooperate with each other as directed by the Engineer.

**105.09 Authority and Duties of the Inspector.** Inspectors are authorized to inspect the Work and the preparation, fabrication, or manufacture of materials. Inspectors are not authorized to alter or waive requirements of the Contract Documents. Inspectors are authorized to notify the Contractor of Work that does not conform to the Contract; reject materials that do not conform to Specification requirements; and until the issue is decided by the Engineer, suspend portions of the Work if there is a question regarding the Contract Documents, use of unapproved material, or safety. Inspectors are not obligated or authorized to provide direction, superintendence, or guidance to the Contractor, its crew, its subcontractors, or suppliers to accomplish the Work.

Any action or inaction of the Inspector does not constitute a waiver of the LPA's right to pursue any and all legal remedies for defective work or work performed by the Contractor in an un-workmanlike manner.

**105.10 Inspection of Work.** The Engineer may inspect materials and the Work. Provide the Engineer or the Engineer's representative access to the Work, information, and assistance necessary to conduct a complete inspection. Notify the Engineer at least 24 hours prior to all required inspections.

When directed by the Engineer, remove or uncover completed Work to allow inspection. After the Engineer's inspection, restore the Work according to the requirements of the Contract Documents. If the inspected Work conformed to the requirements of the Contract Documents, the LPA will pay for uncovering or removing and restoring the Work as Extra Work according to [109.05](#). If the inspected



Work did not conform to the Contract Documents, the LPA will not pay for uncovering or removing and restoring the Work.

The LPA shall have the discretion to dictate the level of inspection for any item of work. The Contractor bears sole responsibility for the quality of work and compliance with the contract regardless of the LPA's level of inspection.

The LPA's failure to identify defective Work or material shall not, in any way, prevent later rejection when defective Work or material is discovered, or obligate the LPA to grant acceptance under [109.11](#) or [109.12](#).

Inspection of Work may include inspection by representatives of other government agencies or railroad corporations that pay a portion of the cost of the Work. This inspection will not make other government agencies or railroad corporations a party to the Contract and will not interfere with the rights of the Contractor or LPA.

**105.11 Removal of Defective and Unauthorized Work.** Work that does not conform to the requirements of the Contract is defective.

Unless the LPA formally accepts defective Work according to [105.03](#), immediately remove and replace defective Work.

Unauthorized Work is Work done contrary to the instructions of the Engineer, beyond the plan lines, or any extra work done without the LPA's permission. The LPA will not pay for unauthorized Work. The Engineer may order the Contractor to remove or replace unauthorized Work at no expense to the LPA.

If the Contractor fails to comply with the Engineer's orders under the provisions of this subsection, the PRC and/or CPE may correct or remove and replace defective or unauthorized Work and deduct the costs from the Contract Price.

**105.12 Load Restrictions.** Comply with all legal load restrictions when hauling materials on public roads.

Operate equipment of a weight or so loaded as to not cause damage to structures, to the roadway, or to other types of construction. Comply with subsection [501.05.B.6](#) for allowed loads on bridges.

Do not use off road vehicles on bases or pavements unless permitted by the PRC and/or CPE in writing.

Do not haul on concrete pavement, base, or structures before the expiration of the curing period.

Do not exceed the legal load limits in this section unless permitted by the PRC and / or CPE in writing.

**105.13 Haul Roads.** Prior to hauling equipment or materials, provide written notification to the Engineer of the specific roads or streets on the haul route. If the haul route includes roads and streets that are not under the jurisdiction and control of the LPA and the PRC determines that LPA controlled roads are not available or practical for a haul route, the Contractor may use local roads and streets that are not restricted by local authorities. If the PRC determines that LPA controlled roads are available and practical for a haul route, revise the proposed haul route provided in the original written notification and resubmit to the PRC.

If the Engineer determines that haul route roads were properly used during construction to haul equipment and materials and that the haul route roads were damaged, then the Engineer may order the Contractor to perform immediate and practical repairs to ensure reasonably normal traveling conditions. The Engineer will pay for repairs according to applicable provisions of [109.04](#) and [109.05](#).



The Contractor shall not file a claim for delays or other impacts to the Work caused by disputes with the local authorities regarding the use of local roads or streets as haul routes. The Contractor shall save the LPA harmless for any closures or hauling restrictions outside the Project limits beyond the control of the LPA.

**105.14 Maintenance During Construction.** Maintain the Work during construction and until Final Inspector accepts the work under [109.12](#), except for portions of the Work accepted under [109.11](#). The Contractor is responsible for damage done by its equipment.

Maintain the previous courses or subgrade during all construction operations, when placing a course upon other courses of embankment, base, subgrade, concrete or asphalt pavement, or other similar items previously constructed. This maintenance includes, but is not limited to draining, re-compacting, re-grading, or if destroyed, the removal of Work previously accepted by the LPA.

Maintain the Post Construction Storm Water Best Management Practice (BMP) features. Prevent sediment laden surface water from coming in contact with the BMP features during construction.

Maintain the Work during construction and before acceptance of the Work under [109.12](#), except for portions of the Work accepted under [109.11](#). The LPA will not provide additional compensation for maintenance work.

**105.15 Failure to Maintain Roadway or Structure.** If the Contractor, at any time, fails to comply with the provisions of [105.14](#), the Engineer will immediately notify the Contractor of such noncompliance. If the Contractor fails to remedy unsatisfactory maintenance within 24 hours after receipt of such notice, the Engineer may immediately proceed to maintain the Project, and deduct the entire cost of this maintenance from monies due or to become due the Contractor on the Contract.

**105.16 Borrow and Waste Areas.** Prior to beginning borrow or wasting operations, obtain the Engineer's written approval of a detailed operation plan that addresses the following concerns:

- A. Control of drainage water.
- B. Cleanup, shaping, and restoration of disturbed areas.
- C. Disposal of regulated materials.
- D. Avoidance of regulated areas.
- E. Excavation and filling of waste and borrow areas.
- F. Saving of topsoil.
- G. Temporary Sediment and Erosion Control BMPs required for compliance under the [Clean Water Act](#), [Ohio Water Pollution Control Act, \(OWPCA\) \(ORC Chapter 6111\)](#) and the [NPDES permit](#).

Perform all engineering necessary to ensure long term stability of all side slopes and foundations of all borrow and waste areas. Furnish a certification by a [Registered Engineer](#) attesting to the stability of all borrow and waste areas. All damage resulting from the instability of borrow and waste areas, the removal of borrow materials, the placement of waste materials, or the hauling of material to and from these areas is the sole responsibility of the Contractor. Repairs to approved haul roads will be made in accordance with [105.13](#).

Perform all engineering, including any field investigation, necessary to ensure long term stability of all side slopes and foundations of all borrow and waste areas.

Ensure that all side slopes of all waste areas do not reduce horizontal sight distance as defined by the current version of the [Department's Location and Design Manual](#).

Have the proposed borrow and waste areas reviewed by an environmental consultant that is pre-qualified by the Department for ecological work. Have the environmental consultant certify that the proposed borrow and waste operations will not impact the “Waters of the United States” or an isolated wetland. If consultant certification is not provided, obtain the 404/401 permits necessary to perform the operations as proposed. Have the environmental consultant certify that the work conforms to the requirements of the permit(s). Provide all documentation submitted to obtain the appropriate permit(s) and a copy of the permit(s) to the District’s [Office of Environmental Services](#).

If burning is permitted under the [OAC-3745-19](#) and [ORC 1503.18](#), submit a copy of the [Ohio EPA](#) permit and the [Ohio DNR](#) permit to the Engineer and copies of all information used to obtain the permit.

Prior to the disposal of waste materials, submit to the LPA an executed copy of the Contract or permission statement from the property owner. The Contract or permission statement must indicate that the waste materials are not the property of the LPA. Further, it must expressly state that the LPA is not a party to the Contract or permission statement and that the Contractor and property owner will hold the LPA harmless from claims that may arise from their contract or permission statement.

Restoration of all borrow or waste areas includes cleanup, shaping, replacement of topsoil, and establishment of vegetative cover by seeding and mulching according to [104.04](#) and Item [659](#). Ensure the restored area is well drained unless approval is given by the Engineer to convert a pit area into a pond or lake, in which case confine restoration measures to the disturbed areas above the anticipated normal water level.

For waste sites shown on the plan, the plan will indicate if the clearances have or have not been obtained for the project right-of-way locations. No extension of time or additional compensation will be paid for any delays due to not having the written permit(s) to waste in a floodplain.

The allowed use of Project Right-of-Way and other LPA property for borrow and waste is detailed in [104.03](#) and [107.11](#).

Borrow and Waste Area shall adhere to [107.10](#).

The cost of work described herein is incidental to the Contract, unless included under another item of work.

**105.17 Construction and Demolition Debris.** [OAC-3745-37](#), [OAC-3745-400](#), and [ORC Chapter 3714](#) regulates the use and disposal of construction and demolition debris. Notify the local Board of Health or the local [Ohio EPA](#) office 7 days before placing Clean Hard Fill off the Right-of-Way. Submit copies of this notification to the Engineer.

Legally dispose of debris containing wood, road metal, or plaster at a licensed construction and demolition debris site.

Under the regulations cited above the disposal of brush, trees, stumps, tree trimmings, branches, weeds, leaves, grass, shrubbery, yard trimmings, crop residue, and other plant matter is restricted. If allowed by the Contract Documents, the Contractor may waste brush, trees, stumps, tree trimming, branches, weeds, leaves, grass, shrubbery, yard trimmings, crop residue, and other plant matter within the Right-of-Way. Otherwise, submit a plan and any required permits to legally dispose of these materials off the Right-of-Way to the Engineer. Provide all documents submitted to obtain this permit to the Engineer.

If the Project contains garbage or solid and hazardous waste, the Contract Documents will detail the removal of these items.

When wasting PCC, mix the PCC with at least 30 percent natural soil to construct an inner core in the waste area. Cover this inner core with 3 feet (1.0 m) of natural soil on the top and 8 feet (2.4 m) on

the side slopes. Place and compact the material according to [203.06.D](#) to prevent future settlement and sliding.

Clean Hard Fill consisting of reinforced or non-reinforced concrete, asphalt concrete, brick, block, tile or stone that is free of all steel as per [703.16](#) shall be managed in one or more of the following ways:

- A. Recycled into a usable construction material.
- B. Disposed in licensed construction and demolition debris facility.
- C. Used in legitimate fill operations on the site of generation according to [105.16](#).
- D. Used in legitimate fill operations on a site other than the site of generation to bring a site up to grade.

A Beneficial Reuse Certification form needs to be properly executed by the Recipient prior to any material leaving the project.

**105.18 Acceptance.** The LPA will accept Work according to [109.12](#) or completed sections of the Project according to [109.11](#).

**105.19 Value Engineering Change Proposals.** Value Engineering Change Proposals are not permitted in this Contract.

## 106 CONTROL OF MATERIAL

**106.01 Source of Supply and Quality Requirements.** Notify the Engineer of the proposed sources of supply before the delivery of materials. The Engineer may approve materials at the source of supply before delivery. If the proposed sources of supply cannot produce the specified material, then furnish materials from alternate sources without adjustment to the Contract Price or Completion Date.

**106.02 Samples, Tests, and Cited Specifications.** The Engineer will inspect and determine whether the materials comply with the specified requirements before they are incorporated into the Work. The LPA may sample and test materials or require certifications. Unless specified, the LPA will pay for and test materials according to [AASHTO](#), [ASTM](#), or the methods on file in the office of the Engineer. A qualified representative of the LPA will take test samples according to LPA procedures. Read any reference to other specifications or testing methods to mean the version in effect at the pertinent Project Advertisement date. All materials being used are subject to inspection, test, or rejection at any time before their incorporation into the Work. The LPA will furnish copies of the tests to the Contractor's representative upon request. Furnish the required samples and specified material certifications at no expense to the LPA other than provided in [109.03](#).

Equip all transports and distributors hauling asphalt material with an approved submerged asphalt material sampling device.

**106.03 Small Quantities and Materials for Temporary Application.** The Engineer may accept small quantities and materials for temporary application that are not intended for permanent incorporation in the Work. The Engineer may accept these small quantities and materials for temporary application in either of the following cases:

- A. Where similar materials from the same source have recently been approved.
- B. Where the materials, in the judgment of the Engineer, will serve the intended purpose.

**106.04 Plant Sampling and Testing Plan.** The Engineer may undertake the inspection of materials at the source.

In the event plant sampling and testing is undertaken, the Contractor and its material provider shall meet the following conditions:

- A. Cooperate and assist the Engineer with the inspection of materials. Provide full entry to the Engineer at all times to such parts of the plant as may concern the manufacture or production of the materials being furnished. Agree to all documentation and inspection requirements of the [TE-24 plant sampling and testing plan](#).
- B. If required by the Engineer, arrange for the inspector to use an approved building on site. The building should be located near the plant and independent of any building used by the material producer.
- C. Maintain and provide adequate safety measures at the plant at all times.

The LPA reserves the right to retest all materials that have been tested and accepted at the source of supply before their incorporation into the Work. After the approved materials have been delivered to the site, the LPA may reject all materials that when retested do not meet the requirements of the Contract Documents.

**106.05 Storage of Materials.** Properly store all materials to ensure the preservation of their quality and fitness for the Work. The Engineer may re-inspect stored materials before their incorporation into the Work, even though they were approved before storage. Locate stored materials

to facilitate their prompt inspection. The Contractor may use approved portions of the Project Right-of-Way for storage; however, if any additional space is required, the Contractor must provide it at the Contractor's expense. Do not use private property for storage purposes without written permission from the owner or lessee. If requested by the Engineer, furnish copies of the written permission. Restore all storage sites to their original condition at no expense to the LPA. The Contractor and property owner will hold the LPA harmless from claims that may arise from their contract or permission statement. This subsection does not apply to the stripping and storing of topsoil, or to other materials salvaged from the Work.

Areas used to Store Materials shall conform to [107.10](#).

**106.06 Handling Materials.** Handle all materials in such manner as to preserve their quality and fitness for the Work. Transport aggregates from the storage site to the project site in vehicles constructed to prevent loss or segregation of materials after loading and measuring. Ensure that there are no inconsistencies in the quantities of materials loaded for delivery and the quantities actually received at the place of operations.

**106.07 Unacceptable Materials.** Unacceptable materials are all materials not conforming to the requirements of these Specifications at the time they are used. Immediately remove all unacceptable materials from the project site unless otherwise instructed by the PRC and/or CPE. The PRC and/or CPE will determine if unacceptable materials may remain conforming to [Supplement 1102](#). The PRC and/or CPE must approve the use of previously identified unacceptable materials that have been corrected or repaired. If the Contractor fails to comply immediately with any order of the PRC and/or CPE made under the provisions of this subsection, the PRC and/or CPE will have authority to remove and replace defective materials and to deduct the cost of removal and replacement from any monies due or to become due to the Contractor.

**106.08 LPA-Furnished Material.** Furnish all materials required to complete the Work, except when otherwise provided in the Proposal.

The LPA will deliver the LPA-furnished materials to the Contractor at the points specified in the Contract Documents.

Include the cost of handling and placing of all LPA-furnished materials in the contract price for the contract item for which they are used.

The LPA will hold the Contractor responsible for all material upon delivery of the materials to the Project site. The LPA will make deductions from any monies due the Contractor to make good any shortages and deficiencies, for any cause whatsoever, and for any damage that may occur after such delivery, and for any demurrage charges.

**106.09 Steel Products Made in the United States.** Furnish steel products that are made in the United States according to the applicable provisions of State of Ohio laws, ORC 153.011 and 5525.21. "United States" means the United States of America and includes all territory, continental or insular, subject to the jurisdiction of the United States.

**A. State Requirements.** All steel products used in the Work for load-bearing structural purposes must be made from steel produced in the United States. State requirements do not apply to iron.

**B. Exceptions.** The Director may grant specific written permission to use foreign steel products in bridge construction. The Director may grant such exceptions under either of the following conditions:

1. The cost for each contract item used does not exceed 0.1 percent of the total contract cost, or \$2,500, whichever is greater. For the purposes of this section, the cost is the value of the steel product as delivered to the project.

2. The Director determines that specified steel materials are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet contract requirements.

**C. Proof of Domestic Origin.** Furnish documentation to the Engineer showing the domestic origin of all steel products covered by this section, before they are incorporated into the Work. Products without a traceable domestic origin will be treated as a non-domestic product.

**106.10 Qualified Products List.** The LPA may use [Qualified Product Lists \(QPL\)](#) for approval of manufactured materials. The [Office of Materials Management \(OMM\)](#) will maintain the [QPL](#) and the standard procedure for the [QPL](#) process. Inclusion of a material onto the [QPL](#) will be determined by [OMM](#) with support from other Department offices. To be kept on the [QPL](#), manufacturers must recertify their material according to the Department's standard procedure by January 1 of each year. When a material requires [QPL](#) acceptance, only provide materials listed on the [QPL](#) at the time of delivery of the material to the project. Provide the Engineer documentation according to the Department's standard procedure that, at the time of delivery, the material provided is on the [QPL](#).

**106.11 Maritime Transportation.** On federal-aid projects, ensure that project-specific materials or equipment transported by ocean vessel are in compliance with [46 CFR 381](#) and the [Cargo Preference Act](#). Transport at least 50% of any equipment or materials on privately owned United States-flag commercial vessels, if available.

**106.12 Traffic Authorized Product.** The LPA may use Traffic Authorized Product (TAP) List for approval of products used in Intelligent Transportation Systems (ITS) or Traffic Signal Systems. The ODOT Office of Traffic Operations will maintain the TAP and the standard procedure for the TAP process. Inclusion of a product onto the TAP will be determined by Office of Traffic Operations with support from other Department offices. To be kept on the TAP, manufacturers must recertify their product according to the Department's standard procedure by February 28 of each year. When a product requires TAP acceptance, only provide products listed on the TAP at the time of delivery of the product to the project. Provide the Engineer documentation according to the LPA's standard procedure that, at the time of delivery, the material provided is on the TAP.



## 107 LEGAL RELATIONS AND RESPONSIBILITY TO PUBLIC

**107.01 Laws to be Observed.** Stay fully informed of all Federal and State laws, all local laws, ordinances, and regulations, and all orders and decrees of authorities having any jurisdiction or authority that affect those engaged or employed on the Work, or that affect the conduct of the Work. Observe and comply with all such laws, ordinances, regulations, orders, and decrees. The Contractor shall protect and indemnify the State, respective Local and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's employees, subcontractors, or agents.

The Contractor, under [Title VI of the Civil Rights Act](#) and related statutes, agrees that in the hiring of employees for the performance of Work under this Contract or any subcontract hereunder, neither the Contractor, the subcontractor, nor any person acting on behalf of such Contractor or subcontractor shall, by reasons of race, religion, color, sex, national origin, disability or age, discriminate against any citizen of the United States in the employment of labor or workers, who is qualified and available to perform the Work to which the employment relates.

Neither the Contractor, the subcontractor, nor any person on their behalf shall, in any manner, discriminate against or intimidate any employee hired for the performance of Work under this Contract on account of race, religion, color, sex, national origin, disability or age.

Comply with [OAC-4123:1-3](#), entitled "Specific Safety Requirements of the Industrial Commission of Ohio Relating to Construction," as amended, and with the [Federal Occupational Safety and Health Act of 1970](#) and [Code of Federal Regulations, Title 29, Chapter XVII, Part 1926](#) and as amended.

**107.02 Permits, Licenses, and Taxes.** Procure all permits and licenses; pay all charges, fees, and taxes; and provide all notices necessary and incidental to the due and lawful prosecution of the Work.

**107.03 Patented Devices, Materials, and Processes.** Before employing any design, device, material, or process covered by letters of patent or copyright, provide for its use by suitable legal agreement with the patentee or owner. The Contractor and the Surety shall indemnify and save harmless the State, respective Local, any affected third party, or political subdivision from any and all claims for infringement of patented design, device, material, process, or any trademark or copyright, and shall indemnify the State for any costs, expenses, and damages that it may be obliged to pay by reason of any infringement, at any time during the prosecution or after the completion of the Work.

**107.04 Restoration of Surfaces Opened by Permit.** The LPA may grant to the municipality in which the Work is performed a reservation of rights to construct or reconstruct any utility service in the highway or street or to grant permits for same, at any time.

Any individual, firm or corporation wishing to make an opening in the highway must secure a permit. Allow parties bearing such permits, and only those parties, to make openings in the highway. When ordered by the Engineer, make in an acceptable manner, all necessary repairs due to such openings. The necessary repairs will be paid for as Extra Work, or as provided in the Contract Documents, and will be subject to the same conditions as the original Work performed.

**107.05 Federal-Aid Provisions.** When the United States Government pays for all or any portion of the Project's cost, the Work is subject to the inspection of the appropriate Federal agency.

Such inspections will not make the Federal Government a party to this Contract. The inspections will in no way interfere with the rights of either party to the Contract.

**107.06 Sanitary Provisions.** Provide and maintain sanitary accommodations in a neat condition for the use of employees and LPA representatives that comply with the requirements of the State and local Boards of Health, or of other authorities having jurisdiction over the Project.

**107.07 Public Convenience and Safety.** At all times, ensure that the Work interferes as little as possible with the traffic. Provide for the safety and convenience of the general public and the residents along the highway and the protection of persons and property. Do not close any highways or streets unless specifically allowed by the Contract.

Any illegal drugs, drug paraphernalia, mobile drug labs or dumps, weapons or firearms found on the Project Right of Way shall be considered a potential crime scene and shall not be handled or moved. Immediately notify law enforcement and the Project Engineer.

**107.08 Bridges Over Navigable Waters.** Conduct all Work on navigable waters so that it does not interfere with free navigation of the waterways and that it does not alter the existing navigable depths, except as allowed by permit issued by the [U.S. Coast Guard](#). Work within the flood plain of a navigable stream may require a permit from the [U.S. Army Corps of Engineers](#). If an [U.S. Army Corps of Engineers](#) permit is required, provide all documentation submitted to obtain the permit(s) and a copy of the permit(s) to the LPA.

**107.09 Use of Explosives.** When the use of explosives is necessary for the prosecution of the Work, exercise the utmost care not to endanger life or property, including new Work. The Contractor is responsible for all damage resulting from the use of explosives.

Obtain written permission to perform in-stream blasting from the Chief of the Division of Wildlife, [Ohio DNR](#) according to [ORC 1533.58](#). Provide the Engineer with all documentation submitted to obtain this permit and with a copy of the permit.

The Contractor agrees, warrants, and certifies that it will observe State laws and local ordinances and regulations relative to the use and storing of explosives kept on the Project site.

Perform all blasting operations according to Item [208](#).

**107.10 Protection and Restoration of Property.** The Contractor is responsible for the preservation of all public and private property impacted by the Contractor's operations.

The Contractor is responsible for all damage or injury to property, during the prosecution of the Work, resulting from any act, omission, neglect, defective work or materials, or misconduct in the manner or method of executing the Work. The Contractor will remain responsible for all damage and injury to property until the Project is accepted under [109.12](#), except for portions of the Work accepted under [109.11](#).

If the Contractor causes any direct or indirect damage or injury to public or private property by any act, omission, neglect, or misconduct in the execution or the non-execution of the Work, then it must restore, at its own expense, the property to a condition similar or equal to that existing before the damage or injury.

If mail boxes, road, or street name signs and supports interfere with the Work, then remove and erect them in a temporary location during construction in a manner satisfactory to and as directed by the Engineer. After completion of the Work and before final acceptance of the Project, erect the mailboxes, road, or street name signs and supports in their permanent locations according to the plans unless otherwise directed by the Engineer. Consider the cost of this Work as incidental to the affected items.

Cooperate with the Engineer in protecting and preserving survey monuments that are affected by the Work. At the beginning of the Work, verify the position of all survey monuments in the area to be improved, according to [623](#). If survey monuments not shown in the Contract Documents are



unexpectedly encountered, then protect, reference, and preserve them in the same manner as survey monuments that are shown in the Contract Documents.

Do not create staging areas, store materials and equipment, or borrow or waste materials in areas labeled as an environmental resources areas in the Contract Documents. All properties to be utilized by the Contractor outside the project Work Limits must be cleared for all environmental resource impacts prior to the beginning of work. Environmental resources include but may not be limited to:

1. Cultural Resources
  - a. Buildings, structures, objects, and sites eligible for or listed on the [National Register of Historic Places](#)
  - b. Historic or prehistoric human remains, cemeteries, and/or burial sites (pursuant with [ORC 2909.05](#) and [2927.11](#))
2. Ecological Resources
  - a. Wetlands
  - b. Streams
  - c. Wooded areas with trees to be removed in excess of 8 inches diameter at breast height
3. Public Lands
  - a. Lands meeting the criteria of [49 U.S.C. 303](#), [23 CFR 771.135: 4\(f\)](#).
  - b. Lands meeting the criteria of [16 U.S.C. 4601-4](#), [36 CFR 59.1: 6\(f\)](#).
4. [FEMA Mapped 100 year Floodplains](#)
5. Hazardous Waste Areas

Except for locations utilized specifically for:

1. Parking of equipment between workdays for maintenance type projects:
2. Reuse of Clean Hard Fill as described in [CA-EW-20 \(ODOT Beneficial Reuse Form\)](#). Prior to transferring Clean Hard Fill from the project, fully execute form [CA-EW-20](#) and provide appropriate documentation to the Engineer as described for each reuse option.

All areas proposed to be utilized by the Contractor outside the project construction limits and not described above shall be reviewed by environmental Contractor(s) that are prequalified by the Department for each environmental resource. Exception (1.) noted above only applies to projects with “maintenance” in the project description. Have the consultant(s) certify that the proposed site to be utilized for the Contractor will not impact:

1. Cultural Resources
2. Ecological Resources
3. Public Lands
4. [FEMA Mapped 100 year Floodplains](#)
5. Hazardous Waste Areas

Provide all documentation and the consultant certification to the District [Office of Environmental Services](#) with a copy to the Engineer.

Should the areas proposed for use by the Contractor outside the project right of way limits contain environmental resources the Contractor is responsible to the LPA for all environmental clearances and permits prior to the beginning of work.

**107.11 Contractor's Use of the Project Right-of-Way or Other LPA-Owned Property.**

**A. Disposal of Waste Material and Construction Debris and Excavation of Borrow on the Project Right-of-Way or on Other LPA-Owned Property.** Dispose of waste material according to [105.16](#) and dispose of construction debris according to [105.17](#). In addition to the rights granted in [104.03](#), the Contractor's use of the Project Right-of-Way or other LPA-owned property for the disposal of waste material and construction debris and excavation of borrow material is restricted as follows:

1. If the Contract Documents identify locations for the disposal of waste material and construction debris or excavation of borrow material within the Project Right-of-Way or on other LPA-owned property, then only perform these operations in these designated locations.

2. If the Contract Documents do not identify locations for the disposal of waste material and construction debris or excavation of borrow material within the Project Right-of-Way or on other LPA-owned property, then do not Bid assuming that the LPA will make such locations available.

If the Contractor's request to use locations within the Project Right-of-Way or on other LPA-owned property is approved by the Engineer, then the LPA may allow the Contractor to dispose of waste material and construction debris or excavate borrow material for a fee of \$0.50 per cubic yard.

**B. Contractor's Use of Portable Plants Within the Project Right-of-Way or on Other LPA-Owned Property.** The Contractor's use of portable plants within the Project Right-of-Way or on other LPA-owned property is limited as follows:

1. If the Contract Documents identify locations within the Project Right-of-Way or on other LPA-owned property to place a portable plant, then only place a portable plant in these designated locations subject to the requirements of [107.11.C](#).

2. If the Contract Documents do not identify locations within the Project Right-of-Way or on other LPA-owned property to place a portable plant, then do not bid assuming that the LPA will make such locations available.

**C. Placement of a Portable Plant within the Project Right-of-Way or on Other LPA-Owned Property.** To place a portable plant within the Project Right-of-Way or on other LPA-owned property, comply with the following requirements:

1. Local noise ordinances.

2. Obtain any necessary [EPA](#) permits for the operation of the plant. Provide the LPA with a copy of the information submitted to obtain the permit and a copy of the permit.

3. Provide the Engineer written certification that the plant will supply material only for the Project for which it was approved. Do not use the plant to supply any other project or to sell materials commercially.

4. Submit a traffic control plan to the Engineer for approval that details the anticipated truck movements and provides acceptable protection, warning, and guidance to motorists, pedestrians, and the workers.

**D. Equipment Storage and Staging.** The Contractor may use, fee-free, any portion of the Project within the Project Right-of-Way for staging, equipment storage, or an office site with the approval of the Engineer, provided such usages do not interfere with the Work and are not prohibited by the

Contract Documents. Do not bid in anticipation of using any properties within the Project Right-of-Way or LPA-owned property outside the Project Right-of-Way for equipment storage or staging.

**E. Equipment Removal and Site Restoration.** Remove all Contractor equipment and completely restore all utilized sites used as required by [104.04](#) before Final Acceptance as provided in [109.12](#).

**107.12 Responsibility for Damage Claims and Liability Insurance.** The Contractor shall indemnify and save harmless the State and all of its representatives, municipalities, counties, public utilities, any affected railroad or railway company, and any fee owner from whom a temporary Right-of-Way was acquired for the Project from all suits, actions, claims, damages, or costs of any character brought on account of any injuries or damages sustained by any person or property on account of any negligent act or omission by the Contractor or its subcontractors or agents in the prosecution or safeguarding of the Work.

The Contractor shall procure and maintain insurance for liability for damages imposed by law and assumed under this Contract, of the kinds and in the amounts hereinafter provided from insurance companies authorized to do business in the State by the [Ohio Department of Insurance](#). The cost of insurance is incidental to all contract items. Before the execution of the Contract by the PRC, furnish to the LPA a certificate or certificates of insurance in the form satisfactory to the LPA demonstrating compliance with this subsection. Provide an insurance certificate or certificates that show that the Contractor's liability and auto policies coverage are not reduced, restricted, or canceled until 30 days written notice has been given to the LPA by the insurer.

Mail all certificates and notices to: Auditor of the City of Lima, attention Purchasing Department of the City of Lima, Ohio, Municipal Center, 50 Town Square, Lima, Ohio 45801

Upon request, the Contractor shall furnish the LPA with a certified copy of each policy, including the provisions establishing premiums.

The types and minimum limits of insurance are as follows:

**A. Workers' Compensation Insurance.** Comply with all provisions of the laws and rules of the Ohio Bureau of Workers' Compensation covering all operations under Contract with the LPA whether performed by it or its subcontractors. In addition, if a portion of the Work is performed from a barge or ship or requires unloading material from a barge or ship on a navigable waterway of the United States, it is the responsibility of the Contractor to arrange coverage for that portion of the Work under the Longshore and Harborworkers' Compensation Act [[33 USC Section 901 et seq.](#)] and the [Jones Act](#) [[5 USC Section 751 et seq.](#)] and provide proof of coverage to the Department.

**B. Commercial General Liability Insurance.** The minimum limits for liability insurance are as follows:

General Aggregate Limit	\$2,000,000
Products - Completed Operations Aggregate Limit	\$2,000,000
Personal and Advertising Injury Limit	\$1,000,000
Each Occurrence Limit	\$1,000,000

Obtain the above minimum coverages through primary insurance or any combination of primary and umbrella insurance. In addition, the LPA will require the General Aggregate Limit on a per project basis.

Ensure that the Commercial General Liability Insurance policy names the State of Ohio, Local Public Agency, its officers, agents, and employees as additional insureds with all rights to due notices

in the manner set out above. Obtain Explosion, Collapse, and Underground (XCU) coverage at the same limits as the commercial general liability insurance policy. In addition, if blasting is to be performed, obtain XCU coverage providing a minimum Aggregate Limit of \$5,000,000 and Each Occurrence Limit of \$1,000,000. Submit proof of insurance, endorsements, and attachments to the Engineer prior to starting the Work.

**C. Comprehensive Automobile Liability Insurance.** The Comprehensive Automobile Liability policy shall cover owned, non-owned, and hired vehicles with minimum limits as follows:

Bodily Injury and Property Damage Liability Limit	
Each Occurrence	\$1,000,000

Insurance coverage in the minimum amounts set forth neither relieves the Contractor from liability in excess of such coverage, nor precludes the LPA from taking such other actions as are available to it under any other provisions of this Contract or otherwise in law.

Clearly set forth all exclusions and deductible clauses in all proof of insurance submitted to the LPA. The Contractor is responsible for the deductible limit of the policy and all exclusions consistent with the risks it assumes under this Contract and as imposed by law.

If the Contractor provides evidence of insurance in the form of certificates of insurance, valid for a period of time less than the period during which the Contractor is required by terms of this Contract, then the LPA will accept the certificates, but the Contractor is obligated to renew its insurance policies as necessary. Provide new certificates of insurance from time to time, so that the LPA is continuously in possession of evidence that the Contractor's insurance is according to the foregoing provisions.

If the Contractor fails or refuses to renew its insurance policies or the policies are canceled or terminated, or if aggregate limits have been impaired by claims so that the amount available is under the minimum aggregate required, or modified so that the insurance does not meet the requirements of [107.12.C](#), the LPA may refuse to make payment of any further monies due under this Contract or refuse to make payment of monies due or coming due under other contracts between the Contractor and the LPA. The LPA in its sole discretion may use monies retained pursuant to this subsection to renew or increase the Contractor's insurance as necessary for the periods and amounts referred to above. Alternatively, should the Contractor fail to comply with these requirements, the LPA may default the Contractor and call upon the Contractor's Surety to remedy any deficiencies. During any period when the required insurance is not in effect, the Engineer may suspend performance of the Contract. If the Contract is so suspended, the Contractor is not entitled to additional compensation or an extension of time on account thereof.

Nothing in the Contract Documents and insurance requirements is intended to create in the public or any member thereof a third party beneficiary hereunder, nor is any term and condition or other provision of the Contract intended to establish a standard of care owed to the public or any member thereof.

**107.13 Reporting, Investigating, and Resolving Motorist Damage Claims.** The Contractor and the LPA are required to report, investigate, and resolve motorist damage claims according to 107.10 and 107.12 and as follows.

When a motorist reports damage to its vehicle either verbally or in writing to the Contractor, the Contractor shall within 3 days make and file a written report to the LPA. In the event that the LPA directly receives the motorist's claim, the LPA shall within 3 days send the claim report to the Contractor. In the event the Contractor has not agreed to resolve the motorist claim, the LPA, as a co-

insured party, may then contact the Contractor's insurance company and request that the insurance company investigate and resolve the claim.

In the event of a lawsuit filed against the LPA in the Ohio Court of Claims by the motorist, the LPA, as co-insured party, may request the Contractor's insurance company to defend this claim or lawsuit and hold the LPA harmless according to 107.12.

**107.14 Opening Sections of Project to Traffic.** The Engineer may order the Contractor to open a section of the Work to the safe use of traffic at any time. The LPA will make an adjustment according [108.06](#) and [109.05](#) to compensate the Contractor for the added costs and delay, if any, resulting from such an opening.

**107.15 Contractor's Responsibility for Work.** Until the Final Inspector accepts the Work during the Final Inspection according to [109.12.A](#), the Contractor is responsible for the Project and will take every precaution against injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the Work. Rebuild, repair, restore, and make good all injuries or damages to any portion of the Work occasioned by any of the above causes before final acceptance. Bear the expense of the repairs except when damage to the Work was due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor. Unforeseeable causes include but are not restricted to; (a) earthquake, floods, tornados, high winds, lightning or other catastrophes proclaimed a disaster or emergency, (b) slides, (c) civil disturbances, or (d) governmental acts.

In the event that the Engineer determines that damage to completed permanent items of Work results from traffic using a substantially completed section of Roadway, the LPA may compensate the Contractor for repair of the damage as authorized by Change Order. Additionally, if traffic permanently damages beyond use and of the following temporary maintenance of traffic items, the LPA may compensate the Contractor for replacement of the item as authorized by Change Order:

1. Arrow board.
2. Work zone signal, pole, or controller.
3. Lighting unit or pole.
4. Changeable message sign.
5. Work Zone Impact Attenuator
6. Truck Mounted Impact Attenuator
7. Digital Speed Limit Sign Assembly

To receive compensation for the damage to permanent items of Work or temporary maintenance of traffic items names above, the Contractor must first meet the following requirements.

- A. Notify the Engineer of each occurrence of damage in writing within 10 Calendar Days.
- B. Contact the local law enforcement agency to determine if the accident was investigated and a report filed. If an accident report was filed, obtain the report and notify the motorist, and copy their insurance company, via certified mail informing both that the motorist is responsible for the cost of damage repairs. If the motorist does not respond within 30 days, make a second attempt to contact the motorist and copy the insurance company via certified mail.

- C. If no response is received from the motorist or insurance company within 30 days of the motorist receipt of the second notice, send a letter to the Engineer within eighteen months of the event and include documentation of good faith effort to seek recovery from responsible parties.
- D. The LPA will make an adjustment according to 108.06 and 109.05 to compensate the Contractor for the added costs and delays, if any, resulting from the repair or replacement of damaged Work.

If there is no accident report on file and no means of identifying the responsible motorist, the Contractor may likewise be compensated to repair the damaged Work.

In case of suspension of Work by the Contractor or under the provisions of [105.01](#), the Contractor is responsible for the Project and shall take necessary precautions to prevent damage to the Project; provide for normal drainage; and erect any necessary temporary structures, signs, or other facilities at its expense. During such period of suspension of Work, properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, seedings, and soddings furnished under the Contract, and take adequate precautions to protect new tree growth and other important vegetative growth against injury.

The Engineer may direct the Contractor to remove graffiti any time during the Work. The LPA will make an adjustment according to [108.06](#) and [109.05](#) to compensate the Contractor for the added costs and delays, if any, resulting from all ordered graffiti removal.

**107.16 Contractor's Responsibility for Utility Property and Services.** At points where the Contractor's operations are adjacent to properties of railway, cable, telephone, and power companies, or are adjacent to other property, and any damage to their property may result in considerable expense, loss, or inconvenience, do not commence with the operation until all arrangements necessary for the protection of the property have been made.

Cooperate with the owners of any underground or overhead utility lines in their removal and rearrangement operations to ensure these operations progress in a reasonable manner, that duplication of rearrangement Work may be reduced to a minimum, and that services rendered by those parties will not be unnecessarily interrupted.

In the event interruption to underground or overhead utility services results from an accidental breakage or from being exposed or unsupported, immediately alert the occupants of nearby premises as to any emergency that the accidental breakage may create at or near such premises. Then notify the Engineer and the owner or operator of the utility facility of the disruption and cooperate with the said utility owner or operator in the restoration of service. If water service is interrupted, perform the repair work continuously until the service is restored unless the repair work is performed by the local governmental authority. Do not begin Work around fire hydrants until the local fire authority approves provisions for continued service.

**107.17 Furnishing Right-of-Way.** The LPA is responsible for securing all necessary Right-of-Way in advance of construction. The Bid Documents will indicate any exceptions. The LPA will notify all prospective Bidders in writing before the date scheduled for receipt of Bids regarding the specific dates certain parcels will be made available to the Contractor.

**107.18 No Waiver of Legal Rights.** The following LPA actions do not waive the LPA's rights or powers under the Contract, or any right to damages herein provided:

- A. Inspection by the Engineer or by any of Engineer's duly authorized representatives.
- B. Any order, measurements, or certificate by the PRC and/or CPE, or LPA representatives.
- C. Any order by the PRC and/or CPE or LPA representatives for the payments of money or the withholding of money.



- D. Acceptance of any Work.
- E. Any extension of time.
- F. Any possession taken by the LPA or its duly authorized representatives.

The LPA will not consider any waiver of a breach of this Contract to be a waiver of any other subsequent breach.

**107.19 Environmental Protection.** Comply with all Federal, State, and local laws and regulations controlling pollution of the environment. Avoid polluting streams, lakes, ponds, and reservoirs with fuels, oils, bitumens, chemicals, sediments, or other harmful materials, and avoid polluting the atmosphere with particulate and gaseous matter.

By execution of this contract, the Contractor, will be deemed to have stipulated as follows:

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

Fording of streams is prohibited. Causeways for stream and river crossings or for Work below a bridge are permitted provided:

- A. The causeway complies with the requirements of the [404 Permit](#) the LPA obtained for the Project.
- B. The Contractor obtains a [404 Permit from the U.S. Army Corps of Engineers](#) if the LPA has not obtained such a permit. Obtain the [404 Permit](#) prior to beginning construction of the causeway. The LPA does not guarantee that the Contractor will be able to obtain a [404 Permit](#).

Comply with all current provisions of the Ohio Water Pollution Control Act ([OWPCA](#)), ([ORC Chapter 6111](#)). The LPA will obtain a storm water permit under the [OWPCA](#) provisions when the plan work acreage requires a permit. Apply for a permit to cover operations outside the Project limits shown on the plans as required by the [OWPCA](#) provisions. When the LPA has not applied for a permit on the Project and a permit is required under the provisions of the [OWPCA](#) because of the total area of the Contractor's work, apply for, obtain, and comply with the required permit for both the Work within Project limits and the Contractor's work.

The LPA has obtained the required permits from the [U.S. Army Corps of Engineers](#) and [Ohio EPA](#) for Work in the "Waters of the United States" and isolated wetlands under [ORC Chapter 6111](#). Comply with the requirements of these permits.

When equipment is working next to a stream, lake, pond, or reservoir, appropriate spill response equipment is required. Do not stockpile fine material next to a stream, lake, pond, or reservoir.

Take precautions to avoid demolition debris and discharges associated with the excavation and hauling of material from entering the stream. Remove any material that does fall into the stream as soon as possible.

When excavating in or adjacent to streams, separate such areas from the main stream by a dike or barrier to keep sediment from entering the stream. Take care during the construction and removal of such barriers to minimize sediment entering the stream.

Contain, collect, characterize and legally dispose of all liquid waste and sludge generated during the work. Do not mix wastes with storm water. Do not discharge any liquid waste without the appropriate regulatory permits. Manage liquid waste and sludge in accordance with [ORC Chapter 6111](#) and all other laws, regulations, permits and local ordinances relating to this waste. Liquid waste management is incidental to the Work unless otherwise specified in the contract.

Control the fugitive dust generated by the Work according to [OAC-3745-17-07\(B\)](#), [OAC-3745-17-08](#), [OAC-3745-15-07](#), and [OAC-3745-17-03](#) and local ordinances and regulations. Prior to the initiation of abrasive coating removal, pavement cutting or any other construction operation that generates dust, demonstrate to the Engineer that construction related dust will be controlled with appropriate Reasonable Available Control Measures (RACM) as described in [OEPA Engineering Guide #57](#).

In addition, use dust control measures when fugitive dust creates unsafe conditions as determined by the Engineer. Perform this work without additional compensation except for Item [616](#).

Perform open burning according to [105.16](#).

**107.20 Civil Rights.** Comply with Federal, State, and local laws, rules, and regulations that prohibit unlawful employment practices including that of discrimination because of race, religion, color, sex, national origin, disability or age and that define actions required for Affirmative Action and Disadvantaged Business Enterprise (DBE) programs.

**107.21 Prompt Payment.** In accordance with [ORC 4113.61](#), make payment to each subcontractor and supplier within 10 Calendar Days after receipt of payment from either the Department or LPA for Work performed or materials delivered or incorporated into the Project, provided that the pay estimate prepared by the Engineer includes Work performed or materials delivered or incorporated into the public improvement by the subcontractor or supplier. Contractors are prohibited from holding retainage from subcontractors that can provide a bond. For unbonded subcontractors and suppliers, promptly release any retainage held, as set forth in any subcontractor or supplier agreement, 30 days after the work is satisfactory completed. For the purposes of this section, satisfactory completed will be interpreted as when the subcontractor has completed all physical work and submitted any necessary documentation required by the specifications and the LPA. No subcontract provision shall permit the Contractor to delay subcontractor's retainage payments until the Project's final payment.

Also require that this contractual obligation be placed in all subcontractor and supplier contracts that it enters into and further require that all subcontractor and suppliers place the same payment obligation in each of their lower tier contracts. If the Contractor, subcontractors, or supplier subject to this provision fail to comply with the 10 Calendar Day requirement, the offending party shall pay, in addition to the payment due, interest in the amount of 18 percent per annum of the payment due, beginning on the eleventh Calendar Day following the receipt of payment from either the Department or LPA and ending on the date of full payment of the payment due plus interest.

Repeated failures to pay subcontractors and suppliers timely pursuant to this subsection will result in a finding by the LPA that the Contractor is in breach of Contract and subject to all legal consequences



that such a finding entails. Further, repeated failures to pay timely pursuant to this subsection will result in a lower evaluation score for the Contractor and those subcontractors who are subject to evaluation by the Department.

**107.22 Unmanned Aircraft Systems.** If the project requires or anticipates the use of Unmanned Aircraft Systems within LPA Right of Way, the Contractor will follow proper risk assessment and federal regulations in accordance with [Supplement 1132](#).

## 108 PROSECUTION AND PROGRESS

**108.01 Subletting of the Contract.** Perform Work amounting to not less than 30 percent of the Contract Price with its own organization. The phrase “its own organization” includes only workers employed and paid directly, inclusive of employees who are employed by a lease agreement acceptable to the LPA, and equipment owned or rented with or without operators by the Contractor. The phrase does not include employees or equipment of a subcontractor, assignee, or agent of the Contractor. Provide ODOT Division of Opportunity, Diversity, and Inclusion with a copy of all Disadvantaged Business Enterprise subcontracts.

The Contractor’s percentage of the total Contract Price includes the cost of materials and manufactured products purchased by the Contractor, but not the cost of materials and manufactured products purchased by subcontractors.

The PRC or CPE will calculate the Contractor’s percentage based on the quantities shown in the Proposal and the unit prices of the contract items to be performed by the Contractor’s organization. If the Contractor performs only a portion of a contract item, then the PRC or CPE will determine the proportional value administratively on the same basis. The PRC or CPE will follow this procedure even when the part not subcontracted consists only of the procurement of materials. However, if a firm both sells the materials to the Contractor and performs the Work of incorporating the materials into the Project, then the PRC or CPE will consider these two phases in combination and as a single subcontract. If an affiliate of the firm either sells the materials or performs the Work, the LPA may refuse approval. An affiliate is one who has some common ownership or other close relation to said firm.

Use actual subcontract prices for calculating compliance with any Disadvantaged Business Enterprise (DBE) percentage subcontracting obligations. If only a part of a contract item is sublet, then determine its proportional value administratively on the same basis. The PRC and/or CPE will follow this procedure even when the part not sublet consists only of procuring materials. However, if a firm both sells the materials to the Contractor and performs the work of incorporating the materials into the Project, then the LPA will consider these two phases in combination and as a single subcontract. If an affiliate of the firm either sells the materials or performs the Work, the LPA may refuse approval.

**108.02 Partnering.** It is the intent of the LPA to partner every project. The purpose of Partnering is to develop a proactive effort and spirit of trust, respect, and cooperation among all stakeholders in a project. Partnering does not affect the terms and conditions of the Contract. The Partnering process in this section is Self-facilitated Partnering performed by the Project personnel. Costs associated with the Self-facilitated Partnering process are incidental to the Contract.

**A. Preconstruction Meeting.** Meet with the Engineer for a Preconstruction Meeting before beginning the Work. At or before the meeting, submit the initial progress schedule to the PRC. Prepare the schedule according to [108.03](#).

Furnish a list of proposed subcontractors and material suppliers at or before the Preconstruction Meeting. If the Contractor fails to provide the required submissions at or before the Preconstruction Meeting, the Engineer may order the meeting suspended until they are furnished. Do not begin the Work until the meeting is reconvened and concluded or the Engineer gives specific written permission to proceed.

**B. Initial Partnering Session.** In conjunction with the PRC and/or CPE, determine whether the Initial Partnering Session will be conducted as part of the Preconstruction Meeting or as a separate meeting. Partnering may have its own agenda with specific time set aside to develop the necessary partnering protocols. Develop the Partnering agenda with the PRC and/or CPE.

Identify and invite all stakeholders necessary to make the Project successful including utility companies, other transportation entities (i.e., railroads), community leaders, all Project participants including subcontractors.

During the Initial Partnering Session, consider developing Partnering teams consisting of LPA and Contractor senior personnel and Project personnel. Consider the following items for discussion:

1. Identifying and developing a consensus on project goals consistent with the contractual obligations, including specific goals concerning safety, quality, schedule, and budget.
2. Deciding how the teams will measure progress on Project goals.
3. Identifying any potential risks to the Project's success, mitigation strategies and an implementation plan for the appropriate strategies.
4. Defining key issues, project concerns, joint expectations, roles of key partnership leaders, lines of decision making authority, and share relevant information to help determine the scope of the Partnering efforts.
5. Identifying any opportunities for project enhancement, enhancement strategies and a specific action plan for implementing strategies.
6. Developing a communication protocol to enhance communication on the Project
7. Developing an issue identification and resolution process that identifies and attempts to resolve issues at the level closest to the work. The issue identification and resolution process will develop all the necessary steps for issue elevation including Notice and Mitigation defined in [108.02.F](#) and the Dispute Resolution and Administrative Claims Process defined in [108.02.G](#).
8. On-line surveys of Project participants may be used to evaluate Project goals and help identify issues either before or immediately after the Initial Partnering Session. The on-line survey is located on the Division of Construction Management's Partnering website:

<http://www.dot.state.oh.us/Divisions/ConstructionMgt/Pages/Partnering.aspx>

**C. Progress Meetings.** Hold monthly Progress Meetings unless the frequency is otherwise determined at the Preconstruction Meeting. Coordinate with the Engineer to determine agenda topics prior to each meeting. The purpose of Progress Meetings is to keep open communication between the Contractor and the Engineer. The senior personnel team is encouraged to participate in all Progress Meetings. Include Partnering as an agenda item at the Progress Meetings.

**D. Post-milestone Meeting.** In conjunction with the PRC and/or CPE, determine whether the Post-milestone Meeting will be conducted as part of the Progress Meeting or as a separate meeting for multi-year, multi-phase, or projects with critical items of work or milestone dates. Consider discussing and updating items from the Initial Partnering Session in addition to items specific to the Project. All stakeholders should be invited to attend.

**E. Partnering Monitoring.** Monitor the progress of the Partnering relationship based on the goals decided during the Initial Partnering Session.

**F. Mitigation and Notice.** Mitigation of any issue, whether caused by the LPA, Contractor, third-party or an intervening event, is a shared contract and legal requirement. Mitigation efforts include, but are not limited to, re-sequencing work activities, acceleration, and substitution of materials. The Contractor and Engineer must explore and discuss potential mitigation efforts in a timely manner.

**1. Contractor Initial Oral Notification.** Provide immediate oral notification to the PRC and/or CPE upon discovering a circumstance that may require a revision to the Contract Documents or may

result in a dispute. Upon notification, the Engineer will attempt to resolve the identified issue as quickly as possible.

**2. Contractor Written Early Notice.** If the PRC and/or CPE has not resolved the identified issue within two (2) working days after receipt of oral notification, provide written notice to the PRC and/or CPE of any circumstance that may require a revision to the Contract Documents or may result in a dispute. This early notice must be given by the end of the second working day following the occurrence of the circumstance.

The PRC and/or CPE and Contractor shall maintain records of labor, equipment, and materials used on the disputed work or made necessary by the circumstance. Such records will begin when early notice is received by the PRC and/or CPE. Tracking such information is not an acknowledgement that the LPA accepts responsibility for payment for this disputed work.

If an issue is not resolved through the initial mitigation efforts, either abandon or escalate to the Dispute and Administrative Claims Process defined in [108.02.G](#).

**G. Dispute Resolution and Administrative Claims Process.** Whenever an issue is elevated to a dispute, the parties shall exhaust the LPA's Dispute Resolution and Administrative Claim process provided in the Bid Documents as a condition precedent to filing an action in the Ohio Court of Claims. The following procedures do not otherwise compromise the Contractor's right to seek relief in any Ohio Court with legal jurisdiction.

All parties to the dispute must adhere to the Dispute Resolution and Administrative Claim process. Do not contact LPA personnel who are to be involved in higher tiers until a decision has been issued by the previous tier. LPA personnel involved in higher steps reviews will not consider a dispute until the previous tier has properly reviewed the dispute and issued a decision.

Failure to meet any of the timeframes outlined below or to request an extension will terminate further review of the dispute and serve as a waiver of the Contractor's right to file a claim.

Disputes and claims by subcontractors and suppliers may be pursued by the Contractor on behalf of subcontractors or suppliers. Disputes and claims by subcontractors and suppliers against the LPA but not supported by the Contractor will not be reviewed by the LPA. Disputes and claims of subcontractors and suppliers against the Contractor will not be reviewed by the LPA.

Continue with all Work during the Dispute Resolution and Administrative Claims process, including that which is in dispute. The LPA will continue to pay for Work.

The LPA will not make the adjustments allowed by [104.02.B](#), [104.02.C](#), and [104.02.D](#) if the Contractor did not give notice as specified in [108.02.F.1](#) and [108.02.F.2](#). This provision does not apply to adjustments provided in Table [104.02-2](#).

**H. Post Construction Meeting.** The LPA may conduct a Post Construction Meeting with the Contractor prior to the project finalization. The PRC and/or CPE will invite the design agency and any other stakeholders deem necessary including utility companies, other transportation entities (i.e. railroads), community leaders, all Project participants including subcontractors performing critical work to attend this meeting.

Consider the following items for discussion:

1. Project Safety.
2. How were the goals evaluated or measured?
3. How were foremen/ workers involved in the Partnering process?

4. How were the subcontractors involved in the Partnering process?
5. How were relationships with key stakeholders managed?
6. Teambuilding activities or unique motivational activities.

## **I. Partnering Close-Out Survey.**

**SPECIFICATION IS NOT INCLUDED IN THIS CONTRACT**

**108.03 Prosecution and Progress.** Start the Work according to [108.02](#). Notify the Engineer at least 24 hours before starting the Work. If the prosecution of the Work is suspended, notify the Engineer a minimum of 24 hours in advance of resuming operations.

Pursue the Work diligently and continuously as to complete the Project by the Completion Date.

### **A. Progress Schedule.**

**1. General.** Furnish a bar chart progress schedule to the PRC and/or CPE for review at or before the Preconstruction Meeting. The Engineer will review the schedule and within 14 calendar days of receipt, will either accept the schedule or provide the Contractor with comments. Acceptance of the schedule does not revise the Contract Documents. Provide clarification or any needed additional information within 10 days of a written request by the Engineer. The LPA will withhold Estimates until the Engineer accepts the schedule. The Engineer will not measure or pay for the preparation of the schedule and schedule updates directly, but the cost of preparing and updating the schedule is incidental to all Contract Items.

a. Include the following Administrative Identifier Information:

- (1) Project Number
- (2) County
- (3) Route Number
- (5) PID Number
- (8) Completion Date
- (9) Contractor's Name
- (10) Contractor's Dated Signature
- (11) LPA's Dated Acceptance Signature

Provide a working day schedule that shows the various activities of Work in sufficient detail to demonstrate a reasonable and workable plan to complete the Project by the Completion Date. Show the order and the sequence for accomplishing the Work. Describe all activities in sufficient detail so that the Engineer can readily identify the Work and measure the progress of each activity. The bar chart schedule must reflect the scope of work, required phasing, maintenance of traffic requirements, interim completion dates, the Completion Date, and other project milestones established in the Contract Documents. Include activities for submittals, working and shop drawing preparation, submittal review time for the LPA, material procurement and fabrication, and the delivery of materials, plant, and equipment, and other similar activities. The schedule must be detailed on letter or legal sized paper.

b. Activity requirements are discussed in further detail as follows:

(1) Activity Description. Assign each activity an unambiguous descriptive word or phrase. For example, use "Excavate Area A," not "Start Excavation."

(2) Activity Original Duration. Indicate a planned duration in calendar days for each activity. Do not exceed a duration of 20 working days for any activity unless approved by the Engineer. Do not represent the maintenance of traffic, erosion control, and other similar items as single activities extending to the Completion Date. Break these Contract Items into component activities in order to meet the duration requirements of this paragraph.

**2. Early Completion Schedule.** An Early Completion Schedule is defined as a baseline schedule or update schedule which anticipates completion of all work prior to the Completion Date established by the contract documents and the Contractor submits as an Early Completion Schedule. In the event that an Early Completion Schedule is accepted, the Engineer will initiate a change order amending the Completion Date to the finish date shown on the accepted Early Completion Schedule. The amended Completion Date will be effective upon execution of that change order and all contract provisions concerning the Completion Date such as incentives, disincentives, excusable delays, compensable delays, and liquidated damages will be measured against the amended Completion Date. The Contractor may elect not to execute the change order amending the Completion Date; however, in so doing, the Contractor waives its rights to delay damages in meeting the projected early Completion Date.

**3. Updated Progress Schedule.** Submit an updated progress schedule when ordered by the Engineer. The Engineer may request an updated progress schedule when progress on the work has fallen more than 14 calendar days behind the latest accepted progress schedule. Information in the updated schedule must include a "% work completed" value for each activity.

**4. Recovery Schedule.** If the progress schedule projects a finish date for the Project more than 14 calendar days later than the Completion Date, submit a revised schedule showing a plan to finish by the Completion Date. The LPA will withhold Estimates until the Engineer accepts the revised schedule. The Engineer will use the schedule to evaluate time extensions and associated costs requested by the Contractor.

**108.04 Limitation of Operations.** Limit operations to prevent unnecessary inconvenience to the traveling public. If the Engineer concludes that the extent of the Contractor's Work unnecessarily inconveniences the public or concludes limiting operations are necessary to protect the existing or new construction from damage, the Engineer will require the Contractor to finish portions of Work in progress before starting new Work.

**108.05 Character of Workers Methods and Equipment.** Provide personnel with sufficient skills and experience to perform assigned tasks.

Ensure that no debarred individuals listed on the Federal website:

<https://www.sam.gov/SAM/pages/public/samStatusTracker.jsf>

or State debarment list at the website:

<http://www.dot.state.oh.us/divisions/contractadmin/Pages/default.aspx>

act in any ownership, leadership, managerial, or other similar position that could influence the operations of an entity doing business with the LPA.

If the Engineer gives written notification that specific Contractor or subcontractor personnel are improperly performing the Work, intemperate, disorderly, or creating a hostile work environment, remove the identified personnel from the Project. Do not allow removed personnel to return to the Project without the Engineer's approval.

The Engineer may suspend the Work by written notice under this subsection for the following reasons:



**A.** The Contractor does not furnish sufficient skilled and experienced personnel to complete the Project by the Completion Date.

**B.** The Contractor does not remove personnel from the Project as directed in writing by the Engineer.

Use equipment of sufficient size and mechanical condition to complete the Project by the Completion Date. Ensure that the equipment does not harm the roadway, adjacent property, other highways, workers, or the public.

If the Contract Documents do not prescribe the methods and equipment required to accomplish the Work, determine the methods or equipment necessary to complete the Work according to the Contract.

If the Contract Documents specify methods and equipment to perform the Work, use such methods and equipment, unless others are authorized by the Engineer. Obtain the Engineer's written approval before substituting alternate methods or equipment. To obtain the Engineer's approval, submit a written description of the alternate methods and equipment proposed and an explanation of the reasons for making the change. The Engineer's approval of the substitute methods and equipment does not relieve the Contractor of the obligation to produce Work according to [105.03](#). If after trial use of the substituted methods or equipment, the Engineer determines that the Work does not conform to the Contract Documents, then complete the remaining Work using the specified methods and equipment. Remove all deficient Work and replace it according to the Contract Documents, or take such other corrective action as directed by the Engineer. The Engineer's authorization to substitute alternate methods and equipment will not change the basis of payment for the construction items involved or the Contract Time.

**108.06 Determining a Time Extension to the Completion Date and Payment for Excusable Delays.**

**A. General.** The LPA will only extend the Completion Date if an excusable delay, as specified in [108.06.B](#) or [108.06.D](#), delays Work on the critical path shown on the accepted progress schedule and impacts the Completion Date. The critical path is defined as; the longest path of activities in the project that determines the project schedule completion date. The activities that make-up the critical path of activities are the "Critical Activities." Any extension of the Completion Date will be executed by a change order.

Mitigation of any delay, whether caused by the LPA, Contractor, third-party or an intervening event, is a shared contract and legal requirement. Mitigation efforts include, but are not limited to, re-sequencing work activities, acceleration, and continuation of work through an otherwise planned shutdown period. The Contractor and Engineer must explore and discuss potential mitigation efforts in a timely manner.

The LPA will not evaluate a request for extension of the Completion Date unless the Contractor notifies the Engineer as specified in [108.02.F](#). Notification shall be in writing to the Engineer within 30 days following the termination of the event giving rise to the request and shall be accompanied by supporting analysis and documentation.

The Engineer will evaluate the Contractor's analysis and determine the time extension due, if any. The Engineer will measure all time extensions in Calendar Days. For delays measured in Workdays, the Engineer will convert Workdays to Calendar Days by multiplying by 1.4 for a 5-day work week or less; 1.2 for a 6-day work week; and 1 for a 7-day work week; and extend the Completion Date by the resulting number of Calendar Days plus any holidays the Contractor does not normally work that occur in the extension period. When the conversion of Workdays to Calendar Days results in a decimal of 0.5 or greater, the Engineer will round the number of Calendar Days to the next highest whole number.



When the conversion results in a decimal less than 0.5, the Engineer will delete the decimal portion of the Calendar Days.

The Engineer will not grant an extension of time for delays incurred from December 1 to April 30 unless the Contractor's accepted progress schedule depicts work on the critical path occurring during this period.

The Engineer may order the Contractor to continue Work after November 30 and compensate the Contractor for costs incurred due to cold weather Work.

The Contractor's plea that insufficient time was specified is not a valid reason for an extension of time.

The LPA will relieve the Contractor from associated liquidated damages, as specified in [108.07](#), if the Engineer extends the Completion Date under [108.06.A](#).

The extended Completion Date shall then have the same standing and effect as though it was the original Completion Date.

If the Contractor contends that an excusable delay is also compensable, as specified in [108.06.D](#), submit a detailed cost analysis of the requested additional compensation along with the request for extension of Completion Date.

**B. Excusable, Non-Compensable Delays.** Excusable, non-compensable delays are delays that are not the Contractor's or the LPA's fault or responsibility. The Engineer will not grant additional payment for excusable, non-compensable delays.

The following are excusable, non-compensable delays:

1. Delays due to floods, tornadoes, lightning strikes, earthquakes, or other cataclysmic phenomena of nature.
2. Delays due to weather as specified in [108.06.C](#).
3. Extraordinary delays in material deliveries the Contractor or its suppliers cannot foresee or avoid resulting from freight embargoes, government acts, or area-wide material shortages. Delays due to the Contractor's, subcontractor's, or supplier's insolvency or mismanagement are not excusable.
4. Delays due to civil disturbances.
5. Delays from fires or epidemics.
6. Delays from labor strikes that are beyond the Contractor's, subcontractor's, or supplier's power to settle and are not caused by improper acts or omissions of the Contractor, subcontractor, or supplier.
7. Added quantities that delay an activity on the critical path.
8. All other delays not the Contractor's and Department's fault or responsibility.

**C. Extension to the Completion Date for Weather or Seasonal Conditions.** A weather day is defined as a workday that weather or seasonal conditions reduced production by more than 50 percent on items of work on the critical path. Submit the dates and number of weather days in writing to the Engineer at the end of each month. In the event the Contractor fails to submit weather days at the end of each month the Engineer will determine the dates and number of weather days from project records.

Delays caused by weather and seasonal conditions should be anticipated and will be considered as the basis for an extension of time when the Contractor's accepted progress schedule depicts Work on the critical path and the actual workdays lost exceeds the number of work days lost each month as determined by Table [108.06-1](#).

**TABLE 108.06-1**

<b>Month</b>	<b>Number of Workdays Lost Due to Weather</b>
January	8
February	8
March	7
April	6
May	5
June	5
July	4
August	4
September	5
October	6
November	6
December	6

This table applies to the duration between contract execution and original completion date. Extensions for weather days beyond the original completion date will be for the actual workdays lost each month.

Lane closures within the project, 60 days or less as indicated in the contract documents, which are impacted by weather will be extended for the actual work days lost each month. Lane closures within the project, 61 days or longer as indicated in the contract documents, which are impacted by weather will be extended when the actual work days lost exceeds the number of anticipated work days lost each month as determined by Table 108.06-1.

The Engineer will not consider weekends and holidays as lost workdays unless the Contractor normally works those days or unless the Engineer directs the Contractor to work those days.

**D. Excusable, Compensable Delays.** Excusable, compensable delays are delays that are not the Contractor's fault or responsibility, and are the LPA's fault or responsibility or are determined by judicial proceeding to be the LPA's sole responsibility or are the fault and responsibility of another local government. For the following excusable, compensable delays, the Engineer will extend the Completion Date if the conditions specified in [108.06.A](#) are met:

1. Delays due to revised Work as specified in [104.02.B](#), [104.02.D](#), or [104.02.F](#).
2. Delays due to utility or railroad interference within the Project limits.
3. Delays due to an Engineer-ordered suspension as specified in [104.02.C](#).
4. Delays due to acts of the government or a political subdivision other than the LPA.
5. Delays due to the neglect of the LPA or its failure to act in a timely manner.

Compensation for excusable, compensable delays will be determined by the Engineer according to [109.05.D](#).

**E. Non-Excusable Delays.** Non-excusable delays are delays that are the Contractor's fault or responsibility. All non-excusable delays are non-compensable.

**F. Concurrent Delays.** Concurrent delays are separate critical delays that occur at the same time. When a non-compensable delay is concurrent with a compensable delay, the Contractor is entitled to additional time but not entitled to additional compensation.

**108.07 Failure to Complete on Time.** If the Contractor fails to complete the Work by the Completion Date, then the PRC and/or CPE, if satisfied that the Contractor is making reasonable progress, and deems it in the best interest of the public, may allow the Contractor to continue in control of the Work. The LPA will pay the Contractor for Work performed on the Project less any liquidated damages incurred.

If the Work is not completed by the Completion Date and the PRC and/or CPE permits the Contractor to remain in control, prosecute the Work at as many different places, at such times, and with such forces as the PRC requests. Provide a written plan for the completion of the Work.

For each calendar day that Work remains uncompleted after the Completion Date, the LPA will deduct the sum specified herein from any money due the Contractor, not as a penalty, but as liquidated damages. The Director will adjust the Completion Date or other contractually mandated dates for delays specified in [108.06.B.7](#) and [108.06.D](#).

Permitting the Contractor to continue and complete the Work or any part of the Work after the Completion Date, or after extensions to the Completion Date, will in no way operate as a waiver on the part of the LPA of any of its rights under the Contract.

Provided the project is available for use as intended by the Contract and the Work remaining will not impact traffic, the Contractor may submit a request that the LPA suspend the assessment of liquidated damages for a stated period of time. For the limited purposes of assessing liquidated damages, the closing of a shoulder is not considered an impact upon traffic. Submit this request within 30 days of the assessment of the liquidated damages. In addition to the written plan required to remain in control of the Work as stated above, this request should include at a minimum the Work left to be completed, the reason(s) the Work is incomplete or on hold, as well as, methods, resources and timelines for pursuing the same. This will define diligent pursuit of the work. Once accepted, and provided both of the following criteria are met, the LPA may suspend the assessment of liquidated damages:

- A. The Contractor is diligently pursuing the remaining Work.
- B. Necessary items are completed and operational to provide an appropriate level of safety to the traveling public. These items include but are not limited to signs, pavement markings, guardrail, attenuators, signals and RPM's.
- C. The Work remaining will not interfere with the intended use of the project and will not impact traffic. For the limited purposes of assessing liquidate damages, the closing of a shoulder is not considered an impact upon traffic.

**TABLE 108.07-1 SCHEDULE OF LIQUIDATED DAMAGES**

Original Contract Amount (Total Amount of the Bid)		Amount of Liquidated Damages to be Deducted for each Calendar Day of Overrun in Time
From More Than	To and Including	
\$0.00	\$500,000	\$450
\$500,000	\$2,000,000	\$650
\$2,000,000	\$10,000,000	\$1,000
\$10,000,000	\$50,000,000	\$1,700
Over \$50,000,000		\$3,100

**108.08 Unsatisfactory Progress and Default of Contractor.** The PRC and/or CPE will notify the Contractor in writing of unsatisfactory progress for any of the following reasons:

- A. The Contractor has not commenced the Work by the dates established in the schedule.

- B. The Contractor does not proceed with the Work in a manner necessary for completion of the Project by the Completion Date.
- C. The Contractor is performing the Work improperly.
- D. The Contractor abandons, fails, or refuses to complete the Work.
- E. Any other reason the PRC and/or CPE believes jeopardizes completion of the Work by the Completion Date.

If the Contractor does not respond to the satisfaction of the PRC and/or CPE, the PRC and/or CPE may declare the Contractor in default and may notify the Contractor and Surety that the responsibility to complete the Work is transferred to the Surety. Upon receipt of this notification, the Contractor's right to control and supervise the Work will immediately cease. The defaulted Contractor will not be compensated for costs resulting from the default and is not eligible to be retained by the Surety to complete the Work. If it is determined that the LPA's default of the Contractor according to [108.08](#) is wrongful, then the default will revert to a termination of the Contract according to [108.09](#).

**108.09 Termination of the Contract for Convenience of the LPA.** The PRC and/or CPE may terminate the Contract at any time for the convenience of the LPA. The LPA will compensate the Contractor according to [109.04](#) and [109.05](#) for termination of the Contract for the convenience of the LPA.

**108.10 Payroll Records.** Keep payroll records as specified in [ORC 4115.07](#) or as required by Federal law.

Authorized representatives of the PRC and/or CPE may inspect the certified payroll and other payroll records. Upon completion of the Work and before receiving the final estimate and when required by [ORC 4115.07](#), submit an affidavit stating that wages have been paid according to the minimum rates specified in the Contract Documents.

## 109 ACCEPTANCE, MEASUREMENT, AND PAYMENT

**109.01 Measurement of Quantities.** The LPA will measure the quantities of Work and calculate payments based on the method of measurement and basis of payment provisions provided in these Specifications. When the following units of measure are specified, the LPA will measure quantities as described below unless otherwise specified in the Contract Documents. The accuracy of individual pay item estimate payments will be one decimal more accurate than the unit of measure denoted for the pay item.

**Lump Sum.** Not measured. Describes payment as reimbursement for all resources necessary to complete the Work. When a complete structure or structural unit is specified as the unit of measurement, the unit will include all necessary fittings and accessories.

**Each.** Measured by the number of individual items of Work completed.

**Foot (Meter).** Measured parallel to the longitudinal base or foundation upon which items are placed, or along the longitudinal surface of the item. Measured vertically to the nearest 0.1 foot (0.01 m), with a minimum vertical measurement of 1 foot (0.10 m), at each unit.

**Square Yard or Square Foot (Square Meter).** Measured by a two-dimensional area method on the surface of the item.

**M Square Feet.** One thousand square feet.

**Cubic Yard (Cubic Meter).** Measured by a three-dimensional volume method. Measure all “loose material” or material “measured in the vehicle” by the cubic yard (cubic meter). Haul material “measured in the vehicle” in approved vehicles and measure in the vehicle at the point of delivery. For this purpose, use approved vehicles of any type or size satisfactory to the Engineer, provided the vehicle’s bed is of such type that the actual contents are readily and accurately determined. Unless all approved vehicles on a job are of uniform capacity, each approved vehicle must bear a legible identification mark indicating the specific approved capacity. The Inspector may reject all loads not hauled in such approved vehicles.

**Cubic Yard (Cubic Meter) for Asphalt Concrete.** Measure as specified in [401.21](#).

**Acre (Hectare).** Measured by a two-dimensional area method on the surface to the nearest 0.1 acre (0.05 ha).

**Pound (Kilogram).** Measured by actual item net weight avoirdupois (mass).

**Ton (Metric Ton).** The term “ton” means the short ton consisting of 2000 pounds avoirdupois. The term “metric ton” means 1000 kilograms. Weigh all materials that are proportioned by weight on accurate and approved scales that are operated by competent, qualified personnel at locations approved by the Engineer. However, car weights will not be acceptable for materials to be passed through mixing plants. If trucks are used to haul material being paid for by weight, weigh the empty truck at least once daily and as the Engineer directs and only if the weight of the truck is used in determining the ticket weight. Place a plainly legible identification mark on each truck bearing the weight of the truck.

For Work on a tonnage basis, file with the Engineer receipted freight bills for railroad shipments and certified weight-bills when materials are received by any other method, showing the actual tonnage used. For Work on a volume basis, itemize evidence of the volume used.

**Gallon (Liter).** Measured by actual item liquid volume. The Department will measure the following materials by the gallon (liter) at the following temperatures:

Temperatures	Items
60 °F (16 °C)	Creosote for Priming Coat, Creosote Oil, Creosote Solutions for Timber Preservatives, Asphalt Primer for Water-proofing, and Liquefier
100 °F (38 °C)	RC, MC Asphalt Emulsions, CBAE, Primer 20, and Primer 100
300 °F (149 °C)	Asphalt Binder

Measure tank car outage of asphalt material at its destination before any material has been removed from the tank car according to [Supplement 1060](#).

Convert the net weight of asphalt material shipments to gallons (liters) at the specified pay temperature according to [Supplement 1060](#).

Convert the gallons (liters) at the measured temperature to gallons (liters) of asphalt material at the specified pay temperature according to [Supplement 1060](#).

**M Gallon.** One thousand gallons.

**Thousand Board Feet, MBF (Cubic Meter).** Measure timber by MBF (cubic meter) actually incorporated in the structure. Base the measurement on nominal widths, thicknesses, and the extreme length of each piece.

**Standard Manufactured Items.** When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by size, unit weight, section dimensions, etc., such identification will be to nominal weights or dimensions set by the industry.

**109.02 Measurement Units.** The Department will measure using either English or metric units as indicated in the Contract Documents. Use the Tables [109.02-1](#) and [109.02-2](#) to convert units when required. If Tables [109.02-1](#) and [109.02-2](#) do not provide a required factor, then use the appropriate factor provided in the [IEEE/ASTM SI 10](#).

**TABLE 109.02-1 ENGLISH TO SI (METRIC) CONVERSION FACTORS**

<b>Symbol</b>	<b>When You Know</b>	<b>Multiply By</b>	<b>To Find</b>	<b>Symbol</b>
<b>Length</b>				
mil	mils	25.4	micrometers	μm
in	inches	25.4	millimeters	mm
ft	feet	0.3048	meters	m
yd	yards	0.9144	meters	m
mi	miles	1.609347	kilometers	km
<b>Area</b>				
in <sup>2</sup>	square inches	645.16	square millimeters	mm <sup>2</sup>
ft <sup>2</sup>	square feet	0.09290304	square meters	m <sup>2</sup>
yd <sup>2</sup>	square yards	0.8361274	square meters	m <sup>2</sup>
ac	acres	0.4046873	hectares	ha
ac	acres	4046.873	square meters	m <sup>2</sup>
mi <sup>2</sup>	square miles	2.589998	square kilometers	km <sup>2</sup>
<b>Volume</b>				
fl oz	fluid ounces	29.57353	milliliters	mL
gal	gallons	3.785412	liters	L
ft <sup>3</sup>	cubic feet	0.02831685	cubic meters	m <sup>3</sup>
yd <sup>3</sup>	cubic yards	0.7645549	cubic meters	m <sup>3</sup>
<b>Mass</b>				
oz	ounces	28.34952	grams	g
lb	pounds	0.4535924	kilograms	kg
T	2000 pounds	0.9071847	metric tons	t
<b>Temperature</b>				
°F	Fahrenheit	$C = (F-32)/1.8$	Celsius	°C
<b>Illumination</b>				
fc	foot-candles	10.76391	lux	lx
fl	foot-lamberts	3.426259	candelas per square meter	cd/m <sup>2</sup>
<b>Force and Pressure or Stress</b>				
lbf-ft	pounds-force foot	1.355818	newton meter	N·m
lbf	pounds force	4.448222	newtons	N
lbf/ft <sup>2</sup> (psf)	pounds force per square foot	47.88026	pascals	Pa
lbf/in <sup>2</sup> (psi)	pounds force per square inch	0.006894757	megapascals	MPa



**TABLE 109.02-2 SI (METRIC) TO ENGLISH CONVERSION FACTORS**

Symbol	When You Know	Multiply By	To Find	Symbol
<b>Length</b>				
µm	micrometers	0.03937	mils	mil
mm	millimeters	0.03937	inches	in
m	meters	3.28084	feet	ft
m	meters	1.093613	yards	yd
km	kilometers	0.62137	miles	mi
<b>Area</b>				
mm <sup>2</sup>	square millimeters	0.00155	square inches	in <sup>2</sup>
m <sup>2</sup>	square meters	10.76391	square feet	ft <sup>2</sup>
m <sup>2</sup>	square meters	1.19599	square yards	yd <sup>2</sup>
ha	hectares	2.4710437	acres	ac
m <sup>2</sup>	square meters	0.000247	acres	ac
km <sup>2</sup>	square kilometers	0.3861	square miles	mi <sup>2</sup>
<b>Volume</b>				
mL	milliliters	0.033814	fluid ounces	fl oz
L	liters	0.264172	gallons	gal
m <sup>3</sup>	cubic meters	35.31466	cubic feet	ft <sup>3</sup>
m <sup>3</sup>	cubic meters	1.30795	cubic yard	yd <sup>3</sup>
<b>Mass</b>				
g	grams	0.035274	ounces	oz
kg	kilograms	2.204622	pounds	lb
t	metric tons	1.1023114	2000 pounds	T
<b>Temperature</b>				
°C	Celsius	F = 1.8C + 32	Fahrenheit	°F
<b>Illumination</b>				
lx	lux	0.09290304	foot-candles	fc
cd/m <sup>2</sup>	candelas per square meter	0.29186352	foot-lamberts	fl
<b>Force and Pressure or Stress</b>				
N·m	newton meters	0.7375621	pounds-foot force	lbf ft
N	newtons	0.22480892	pound force	lbf
Pa	pascals	0.02088543	pounds force per square foot	lbf/ft <sup>2</sup> (psf)
MPa	megapascals	145.03774	pounds force per square inch	lbf/in <sup>2</sup> (psi)

**109.03 Scope of Payment.** Payment of the Contract Price is full compensation for all resources necessary to complete the Contract Item and maintain the Work. Assume liability for risk, loss, damage, or expense resulting from the Work. The Contract Price and Contract Time shall only be changed by written Change Order or as determined by the LPA in writing in accordance with the contract documents.

**109.04 Compensation for Altered Quantities, Eliminated Items or Termination of the Contract for Convenience of the LPA.** If the agreed quantities of contract items vary from the quantities in the Contract, the LPA will make payment at the original Contract unit prices for the agreed quantities of Work.

**A.** If an item is eliminated in accordance with [104.02.E](#) or the contract is terminated in accordance with [108.09](#) the LPA will pay the following in addition to that provided by [104.02.D](#):

1. Restocking charges supported by paid invoices and an additional 5 percent markup on the compensation for overhead and profit.

2. The cost of material transferred to the LPA in lieu of restocking or disposal. The allowed compensation is the paid invoice cost plus 15 percent markup, but no more than the unit bid price for the reference number involved.

3. Hauling costs, if not included in restocking charges, for returned material and for material delivered to the LPA.

**B.** If the project is terminated for convenience of the LPA, the LPA will negotiate compensation with the Contractor for actual costs incurred as a result of the termination.

### **109.05 Changes and Extra Work.**

**A. General.** If the LPA revises the Contract under: [104.02](#), [105.07](#), [105.10](#), [105.13](#), [107.10](#), [107.14](#), [107.15](#), [108.09](#), [109.06](#), or [109.07](#), the Department will pay for changes and Extra Work with a Change Order using the sequence specified in [109.05.B](#) through [109.05.E](#).

In establishing the method of payment for contract changes or extra work orders, force account procedures shall only be used when strictly necessary, such as when agreement cannot be reached with the Contractor on the price of a new work item, or when the extent of work is unknown or is of such character that a price cannot be determined to a reasonable degree of accuracy. The reason or reasons for using force account procedures shall be documented.

Unless otherwise stated in [109.05](#), the compensation provided in [109.05.B](#) through [109.05.E](#) constitutes payment in full for all changes and Extra Work completed by original Contract Price, agreed unit price, agreed lump sum price, and for work performed on a force account basis, including:

1. Administration.
2. Superintendence.
3. Project and field office overhead.
4. Home office overhead.
5. Use of tools and equipment for which no rental is allowed.
6. Profit.
7. Taxes other than sales tax.

8. Premiums on insurance including additional premiums for Commercial General Liability Insurance required by [107.12.B](#) and any additional coverage carried by the Contractor or subcontractor, excluding pollution and railroad General Liability Insurance. The LPA will pay the Contractor's pollution and railroad liability insurance premiums, if required by the contract, by a separate Change Order for the cost of the premium without any markup. When the Contractors or subcontractors basic rate for General Commercial Liability Insurance required by [107.12.B](#) is greater than 5 percent of payroll, the LPA will pay directly without markup the portion of the premium in excess of 5 percent and provide copies of paid premiums.

Sales tax will not be allowed on any item for which tax exemption was obtained.

**B. Negotiated Prices.** Negotiated prices for changes and Extra Work shall be comparable to prices that would have resulted from a competitive bid contract. The Engineer and Contractor will negotiate agreed unit or lump sum prices using one or more of the following methods:

1. Original Contract prices for similar work but adjusted for:
  - a. increased or decreased material costs specified in [109.05.C.3](#).
  - b. increased or decreased labor costs specified in [109.05.C.2](#)
  - c. increased or decreased equipment costs specified in [109.05.C.4](#)

Adjustments of these prices for inflation or markup for subcontractor work is not allowed.

2. State-wide average unit price awarded for the item, LPA average unit price awarded for the item, or items as listed in the Department's annual "Summary of Contracts Awarded." These prices may be adjusted for inflation using factors issued by the [Office of Construction Administration](#). No markup for subcontractor work is allowed.

3. Average price awarded on three different projects of similar work and quantity. These prices may be adjusted for inflation using factors issued by the [Office of Construction Administration](#). No markup for subcontractor work is allowed.

4. Prices computed by the Office of Estimating.

5. Cost analysis of labor, material, equipment, and markups as allowed in [109.05.C](#).

6. For the cost of compensable delays as defined in [108.06](#), prepare a cost analysis as allowed by [109.05.D](#).

Provide proposed pricing and cost justification for changes or Extra Work within 5 business days after the LPA's request. The LPA will respond within 5 business days after receipt of the Contractor's proposal. The LPA and the Contractor can mutually agree to extend these 5-day time limits.

If the LPA negotiates with the Contractor but does not agree on a price adjustment, the Engineer may direct the Contractor to perform all or part of the revised Work under force account.

### **C. Force Account.**

**1. General.** The Engineer may direct the Contractor to perform the revised Work under force account. Submit a written proposal and estimated costs for the Work, including the planned equipment, materials, labor, and a work schedule.

The LPA will pay the Contractor as specified in [109.05.C](#) as full compensation for performing the force account Work. The Project and Contractor personnel will document the labor and equipment used on the force account work on a Daily Force Account Record. At the end of each Workday, the Project and Contractor personnel will compare and sign the Daily Force Account Record. The LPA will make no force account payment before the Contractor submits an itemized statement of the costs for that work.

The Engineer will examine and, if found to be acceptable, approve all rates and costs submitted by the Contractor.

Provide the following content in itemized statements for all force account work:

- a. Name, classification, date, daily hours, total hours, rate, and amount for all labor.
- b. Designation, dates, daily hours, total hours of actual operation and idle time, [Blue Book](#) rate with reference or category, and amount for each unit of equipment and the applicable [Blue Book](#) hourly operating cost for each unit of equipment and invoices for all rental equipment. The designation includes the manufacturer's name or trademark, model number, and year of manufacture.
- c. Quantities of materials and prices.
- d. Transportation charges on materials, free on board (F.O.B.) at the job site.

e. Cost of workers' compensation insurance premiums, all applicable insurance premiums, unemployment insurance contributions, and social security tax and fees or dues required by a collective bargaining agreement. Express each of these items of cost as a percentage of payroll, except fees or dues, which should be expressed as a cost per hour.

f. Documentation showing payment for all surveying, professional, or similar specialized Work not normally a part of an LPA contract.

g. If materials are taken from Contractor's stock and original receipted invoices for the materials and transportation charges do not exist, provide an affidavit and certify all of the following:

- (1) The materials were taken from the Contractor's stock.
- (2) The quantity shown was actually used for the force account work.
- (3) The price and transportation costs represent the actual cost to the Contractor.

h. Documentation showing payment to trucking firms and owner-operators. Submit documentation showing owner-operations status. When the trucking is subject to prevailing wage, submit payroll and equipment usage records according to [109.05.C.1.a](#), [109.05.C.1.b](#), and [109.05.C.1.e](#).

i. Provide "receipted invoices" for all costs substantiated by an invoice.

If only part of the expenditure represented by an invoice is applicable to force account work, or if the invoice represents expenditure for more than one item of work, clearly indicate the actual amount of expenditure applicable to each item of work.

**2. Labor.** The LPA will pay the wages and fringe benefits currently in effect for each hour the Work is performed by all labor employed in the Work and all foremen in direct charge of the specific operation. The LPA will pay an additional 38 percent markup on these wages and benefits. "Fringe benefits" are the actual costs paid to, or on behalf of, workmen by reason of health and welfare benefits, pension fund benefits, or other benefits, when such amounts are required by prevailing wage laws or by a collective bargaining agreement or other employment contracts generally applicable to the classes of labor employed on the Project.

The LPA will pay the actual itemized cost, without markup, of the following payroll taxes and legally required insurances:

- a. Social Security Tax.
- b. Medicare Tax.
- c. Ohio Workers' Compensation Premiums.
- d. State and Federal Unemployment Insurance.
- e. Longshore and Harborworkers' Compensation Insurance for work from a barge or ship, or unloading material from a barge or ship.

Provide itemized statements in addition to the documentation requirements for all labor including the name, classification, date, daily hours, total hours, rate, and amount. If any person is paid more than the one rate, a separate listing shall be made for that person for each rate paid. Provide itemized statements for Ohio Workers' Compensation insurance premiums, all applicable insurance premiums, State and Federal Unemployment Insurance contributions, and Social Security Tax and fees or dues required by a collective bargaining agreement. Express each of these items of cost as a percentage of payroll, except fees or dues, which shall be expressed as a cost per hour.

Instead of itemizing the cost of Social Security Tax, Ohio Workers' Compensation, and State and Federal Unemployment Insurance, the Contractor may elect to receive as compensation for these

payroll taxes and premiums, an amount equal to 22 percent of the paid wages. If the Contractor pays fringes directly to the worker in lieu of paying into a fringe benefit program, then the LPA will treat these fringe payments as paid wages when calculating the allowed 22 percent compensation.

The LPA will pay, without markup, the actual itemized cost of fees and dues paid to labor unions or to business associations when they are based on payroll hours and required by a collective bargaining agreement.

The LPA will not pay for wages or benefits for personnel connected with the Contractor's forces above the classification of foreman that have only general supervisory responsibility for the force account work.

If the foreman or timekeeper is employed partly on force account work and partly on other work, the Contractor shall prorate the number of hours between the force and non-force account work according to the number of people on each task as shown on payrolls.

The LPA will pay the prevailing wage and fringe rates that apply to the Project for the classifications required for Extra Work. The Contractor must provide payroll records for pay rates higher than the prevailing wages and establish that the higher than prevailing rates are paid for original Contract Work. The LPA will pay for foremen and time keepers not covered by prevailing wages not more than the salaried rate they receive when engaged in original Contract Work.

The LPA will pay actual costs for subsistence and travel allowances when such payments are required by the collective bargaining agreement or other employment contracts applicable to the classes of labor employed on the Project. The LPA will not pay a percent markup on these costs.

**3. Materials.** The LPA will pay the Contractor's actual invoice costs, including applicable taxes and actual freight charges, for Engineer approved materials the Contractor uses in force account Work. The LPA will pay an additional 15 percent markup on these costs.

Freight or hauling costs charged to the Contractor and not included in unit prices shall be itemized and supported by invoices. The cost of owned or rented equipment used to haul materials to the project is not part of the materials cost. Such equipment, when used for hauling materials, shall be listed under cost of equipment.

Provide itemized statements in addition to the documentation requirements for all equipment including the quantity and price of each material and transportation charges free on board (F.O.B.) at the job site. Attach invoices to support the quantities of materials used, unit prices paid and transportation charges. If the Contractor uses materials from the Contractor's stock and original receipted invoices for the materials and transportation charges do not exist, the Department and the Contractor will agree on a price that represents the actual cost to the Contractor. Provide an affidavit and certify all of the following:

- a. The materials were taken from the Contractor's stock.
- b. The quantity shown was actually used for the force account work.
- c. The price and transportation costs represent the actual cost to the Contractor.

Do not incorporate materials into the Work without a price agreement.

#### **4. Equipment.**

**a. General.** The LPA will pay the Contractor's costs for equipment the Engineer deems necessary to perform the force account work for the time directed by the Engineer or until the Contractor completes the force account Work, whichever happens first. The LPA will pay the Contractor the established rates for equipment only during the hours that it is operated, except as

otherwise allowed elsewhere in these Specifications. The LPA will pay for non-operating hours at the idle equipment rate as specified in [109.05.C.4.c](#). Report equipment hours to the nearest 1/2 hour. The established equipment rates in these Specifications include compensation for overhead and profit except as otherwise specified.

The LPA will pay for use of Contractor-owned equipment the Engineer approves for force account Work at established rates. The LPA will pay the rates, as modified in [109.05.C.4.b](#), given in the [Equipment Watch Cost Recovery](#) (formerly Rental Rate [Blue Book](#)), by EquipmentWatch, a division of Penton Business Media, Inc.

Provide, and the Engineer will confirm, the manufacturer's ratings and manufacturer-approved modifications required to classify equipment for rental rate determination. For equipment with no direct power unit, use a unit of at least the minimum recommended manufacturer's rating.

The LPA will not pay rental for small tools or equipment that show a daily rate less than \$5.00 or for unlisted equipment that has a value of less than \$400.

Tool trucks will be allowed for compensation if they are used at the force account site. Only the tools used from the tool truck will be allowed for compensation. Tools in the tool truck that are not used in the force account work will not be compensated. A tool trailer that remains at the Contractor's office or yard will not be allowed on the force account work. Tool trailers that are taken to the force account site will be allowed for compensation along with the tools used on the force account work that were taken from the trailer.

Treat traffic control devices used in Maintaining Traffic and owned by the Contractor as owned equipment. Allowed rates for common traffic control devices and concrete barrier that are not listed in the [Blue Book](#) will be as determined by the LPA.

Use Engineer approved equipment in good working condition and providing normal output or production. The Engineer may reject equipment not in good working condition or not properly sized for efficient performance of the Work.

For each piece of equipment used, whether owned or rented, provide the Engineer with the following information:

- (1) Manufacturer's name or trademark.
- (2) Equipment type.
- (3) Year of manufacture.
- (4) Model number.
- (5) Type of fuel used.
- (6) Horsepower rating.
- (7) Attachments required, together with their size or capacity.
- (8) All further information necessary to determine the proper rate.
- (9) Dates, daily hours, total hours of actual operation and idle time,
- (10) [Blue Book](#) rate with reference or category,
- (11) Amount
- (12) Applicable [Blue Book](#) hourly operating cost
- (13) Invoices for all rental equipment.

**b. Hourly Owned Equipment Rates.** The base rate for the machine and attachments represent the major cost of equipment ownership, such as depreciation, interest, taxes, insurance, storage, and major repairs. The hourly operating rate represents the major costs of equipment operation, such as fuel and oil lubrication, field repairs, tires, expendable parts, and supplies.

For all equipment used on force account work, determine, and have the LPA confirm, the hourly owned equipment rates as follows:

$$\text{HOER} = [\text{RAF} \times \text{ARA} \times (\text{R} / 176)] + \text{HOC}$$

Where:

HOER = hourly owned equipment rate

RAF = regional adjustment factor shown in the [Blue Book](#)

ARA = age rate adjustment factor shown in the [Blue Book](#)

R = current [Blue Book](#) monthly rate

HOC = estimated hourly operating cost shown in the [Blue Book](#)

However, compensation for equipment normally used on a 24 hours per day basis will not exceed the monthly rate plus adjustments and operating costs.

The rate adjustment factor assigned to any attachment will be the yearly factor as determined for the base equipment.

When multiple attachments are included with the rental equipment, only the attachment having the highest rental rate will be eligible for payment, provided that the attachment has been approved by the Engineer as being necessary to the force account Work.

When a piece of owned equipment is not listed in the [Blue Book](#), use the rate for similar equipment found in the [Blue Book](#) or use 6 percent of the purchase price as the monthly rate (*R*) and add the hourly operating rate found in the [Blue Book](#) for similar equipment of the same horsepower.

For equipment brought to the Project exclusively for force account work and on the Project for less than a month, multiply the monthly rate (*R*) by the factor listed below:

**TABLE 109.05-1**

<b>Working Hours</b>	<b>Factor</b>
Less than or equal to 8.0	2.00
8.1 to 175.9	2.048 - (hours/168)
176 or greater	1.00

The term “WORKING HOURS,” as used in Table [109.05-1](#), includes only those hours the equipment is actually in operation performing force account work; apply the factor, as determined above, to these actual working hours only. Calculate compensation for any idle time according to [109.05.C.4.c](#) without application of the factor.

The LPA will pay as working equipment for the entire Workday equipment used intermittently during the Workday. The following criteria qualify for intermittently used equipment:

(1) Equipment dedicated to the force account exclusively all day and not used on bid work.

(2) Equipment works before and after the intermittent idle period and its total working time during the Workday is at least 2 hours.

Equipment that is captive to the force account work (i.e. it must remain at the force account site), but does not qualify for intermittently used owned equipment, is paid as idle equipment according to [109.05.C.4.c](#). for the time it is not working.

**c. Hourly Idle Equipment Rate.** For equipment that is in operational condition, on site, and necessary for force account Work, but is idle, the LPA will pay an hourly idle equipment rate. The procedure to determine the hourly idle equipment rate for Contractor owned equipment is as follows:



$$\text{HIER} = \text{RAF} \times \text{ARA} \times (\text{R} / 176) \times (1/2)$$

Where:

HIER = Hourly idle equipment rate.

RAF = Regional adjustment factor shown in the [Blue Book](#).

ARA = Age rate adjustment factor shown in the [Blue Book](#).

R = Current [Blue Book](#) monthly rate.

If rented equipment necessary for force account work is idle, the LPA will pay the Contractor for the actual invoiced rates prorated for the duration of the idle period. The actual invoiced rates must be reasonably in line with the [Blue Book](#) rates and approved by the Engineer. The LPA will pay a 15 percent markup for overhead and profit for the actual invoiced rates during the idle period.

The LPA will not pay idle owned equipment costs for more than 8 hours in a 24-hour day or 40 hours in a week.

The LPA will not pay for inoperable equipment.

The Engineer may order specific equipment to the site up to 5 days before its planned usage. If this equipment is not used for other work, the LPA will pay for it as idle equipment until used.

The LPA will pay for the cost of idle owned or rented equipment when the Work was suspended for the convenience of the State. The LPA will not pay the cost of idle equipment when the Work was suspended by the Contractor for the Contractor's own reasons.

The LPA will only pay for the number of Calendar Days during the existence of the suspension. The LPA will not compensate the Contractor for days that the Engineer determined were lost to weather.

The LPA will only pay for equipment physically located at the Project site that was received to prosecute the scheduled work during the delay.

Compensation for idle equipment will stop at the completion of the force account Work or at the end of the suspension of Work.

**d. Rented Equipment.** The LPA will pay a 15 percent markup for overhead and profit for all rented equipment, its corresponding [Blue Book](#) hourly operating costs, and State and Local sales taxes.

**(1) Equipment Rented Solely for Force Account Work.** If the Contractor rents or leases equipment from a third party exclusively for force account Work, the LPA will pay the actual invoiced amount. The actual invoiced rates must be reasonably in line with the [Blue Book](#) and approved by the Engineer. The LPA will pay a 15 percent markup for overhead and profit for all rented equipment paid for by the actual invoices. Add the [Blue Book](#) hourly operating cost to the marked up actual invoiced rates.

**(2) Equipment Rented for Original Contract Work, but Used for Force Account Work.** If the Contractor uses rented equipment currently on the Project for original Contract Work to perform force account Work, then determine the hourly outside-rented equipment rate as follows:

$$\text{HRER} = (\text{HRI} \times 115\%) + \text{HOC}$$

Where:

HRER = hourly rented equipment rate

HRI = hourly rental invoice costs prorated for the actual number of hours that rented equipment is operated solely on force account work. Use a monthly invoice rate

divided by 176, a weekly invoice rate divided by 40, or a daily invoice rate divided by 8.

HOC = hourly operating cost shown in the [Blue Book](#)

The LPA will not compensate for rental rates that exceed the [Blue Book](#) rates unless approved in advance of the Work by the Engineer.

**e. Moving of Equipment.** The LPA will also pay for the time required to move needed equipment to the location of the force account work and to return it to its original location. The LPA will pay for loading and transportation costs instead of moving time if equipment is moved by means other than its own power. Moving time back to the original location or loading and transportation costs will not be allowed if the equipment is used at the site of the force account work on contract items or related work.

The LPA will consider the actual cost of transferring the equipment to the Project and returning it to the original location as an additional expense and pay for it as specified, for equipment moved on the Project exclusively for force account work.

The Engineer will confirm the original location of the equipment before the Contractor moves and uses it for force account work.

If the equipment is transported by a common carrier, the allowance is the invoiced amount paid for the freight plus 15 percent. However, if the Contractor's forces transport the equipment, the allowable compensation will be [Blue Book](#) rate of the hauling unit and hourly [Blue Book](#) operating cost plus the driver's wages and the cost of loading and unloading the equipment calculated according to [109.05.C.2](#).

**5. Foreman's Transportation.** The LPA will pay the [Blue Book](#) rate for every hour the foreman's truck is on the force account site or moving to or from the site. This rate includes equipment cost, fuel and lubricants, overhead, profit, and mobile phone or two-way radios.

**6. Subcontract Work.** For Work performed by an approved subcontractor, the LPA will pay an amount to cover administrative costs of 8% on the first \$10,000 of work and 5% for work in excess of \$10,000 as provided in [109.05.C.4](#) through [109.05.C.5](#). No additional mark-up is allowed for work of a sub-subcontractor or trucking services employed by a subcontractor.

**7. Final Adjustment to Premium for Contract Bonds.** The final bond premium amount for the payment and performance bonds will be computed based on the actual final contract value. For the purpose of computing a bond premium adjustment the actual final contract value is defined as the whole sum of money, excluding any bond premium adjustment, which is passed from the LPA to the Contractor as a result of the completion of the Work. If the actual final contract value is different from the original contract value, the premium shall be adjusted accordingly; either by refund of part of the original bond premium by the Contractor if the original contract value is larger than the actual final contract value; or by payment of additional bond premium by the LPA if the original contract value is smaller than the actual final contract value. Additional payment by the LPA or refund by the Contractor will be based on the difference between the invoiced bond premium for the original contract value and the invoiced bond premium for the actual final contract value without any markup. A final bond premium adjustment will not be made when the actual final contract value differs from the original contract value by less than \$ 40,000.00.

## 8. Trucking.

a. Trucking firms and owner operators not subject to prevailing wage will be paid at the invoiced cost plus 8% on the first \$10,000 of trucking and 5% for trucking in excess of \$10,000 to cover administrative costs.

b. Trucking that is subject to the prevailing wage law will be compensated according to 109.05.C.1, 109.05.C.2, 109.05.C.4, 109.05.C.6, and 109.05.C.10.

Provide documentation showing payment to trucking firms and owner-operators and owner-operations status. When the trucking is subject to prevailing wage, submit payroll and equipment usage records according to [109.05.C.2](#) and [109.05.C.4](#).

**9. Professional and Specialized Work.** The following work, when performed by a firm hired by the Contractor, is paid at the reasonable and fair market invoiced cost plus 8% on the first \$10,000 of work and 5% for work in excess of \$10,000.

a. Surveying.

b. Engineering design.

c. Specialized work that is not normally part of a LPA Contract and is not normally subject to prevailing wage.

d. Installation, periodic maintenance, and removal of traffic control devices under [Item 614](#) performed by a traffic control service or rental company, provided the workers are not on the Project full-time. Maintenance of Traffic services performed by LEO.

e. Other professional or specialized work not contemplated at the time of Bid.

Provide documentation showing payment for professional and specialized Work.

**10. Payment for Force Account Work.** Submit an analysis of estimated cost prepared in accordance with [109.05.C](#) for work that will be performed on a force account basis. Attach an original affidavit to the analysis stating:

*“Labor rates shown are the actual rates paid for labor, unit prices for materials and rates for owned and rented equipment have been estimated on the basis they are not in excess of those charged in the area in which the work will be performed.”*

The Engineer will process an Estimated Cost of Force Account (ECFA) if the amount of the force account work is likely to be greater than \$100,000 and is expected to take more than two weeks to complete. The Engineer will process an Actual Cost of Force Account (ACFA) to make any necessary adjustment between the ECFA and the final itemized costs for the force account work.

For force account work estimated to be less than \$100,000 and anticipated to require less than two weeks to perform, the Engineer will process an Actual Cost of Force Account (ACFA) at the conclusion of the work.

Submit biweekly itemized statement of costs prepared from the Daily Force Account Records to the Engineer as the work is being performed. The Engineer will process estimates as the force account work is performed. Payment will only be made upon receipt of the Contractor’s itemized statement of costs.

Upon conclusion of the work performed by an ECFA or work performed by an ACFA submit an itemized statement of the actual costs prepared from the Daily Force Account Record Submit a compact disk (CD), labeled with the Contractor’s name and the project number, and a hard copy of the

“Electronic Force Account.” An “Electronic Force Account” template can be downloaded from the following website:

[www.dot.state.oh.us/divisions/constructionmgt/admin/pages/default.aspx](http://www.dot.state.oh.us/divisions/constructionmgt/admin/pages/default.aspx)

The Engineer may approve an alternative electronic template provided all calculations and printouts are equivalent to those generated by the “Electronic Force Account” template.

Attach an original affidavit to the hard copy stating:

*“The name, classification, total hours worked and rates paid each person listed on the Summary of Actual Cost are substantiated by actual records of persons employed on the force account work. All unit prices for materials and rates for owned and rented equipment listed on the Summary of Actual Costs are substantiated by actual records of materials and equipment actually used in performance of the force account work and the price of any owned equipment not previously agreed upon does not exceed prices charged for similar equipment in the area in which the work was performed.”*

Daily Force Account Records signed by both the LPA and Contractor will govern over other LPA and Contractor records subject to the following:

a. When the Contractor is subject to a Union Contract that requires a minimum number of paid hours, the compensation will be for the verified contract minimum hours.

b. Material quantity disagreements will be resolved by field measurements of the installed quantities or the Engineer’s estimate of the amount of temporary or un-measurable material used. The Engineer may also review and consider the Contractor’s material invoices and material certifications to make the final determination.

In the event the Contractor declines to sign the Daily Force Account Record, the LPA’s records shall govern. Any resulting dispute must be pursued in accordance with 108.02.G.

#### **D. Delay Costs.**

**1. General.** If the LPA agrees that it has caused a delay, the LPA will pay for the costs specified in [109.05.D](#) as allowed by [108.06.D](#), unless these costs have been previously paid as listed in [109.05.B](#) or [109.05.C](#). Such payment constitutes full compensation for any and all delay costs

The LPA will make no payment for delays occurring during the period from December 1 to April 30 unless the Contractor’s approved progress schedule depicts critical Work occurring throughout this period.

The LPA will not pay for delay costs until the Contractor submits an itemized statement of those costs. Provide the content specified in [109.05.C.1](#), for the applicable items in this statement and as follows:

- a. Proof of cost of Superintendent, or other project staff salaries, wages, and payroll taxes and insurance.
- b. Proof of cost of office rent, utilities, land rent, and office supplies.
- c. Proof of escalated cost for labor and material.
- d. Proof of material storage costs.

#### **2. Allowable Delay Costs**

**a. Extended Labor.** Compute labor costs during delays as specified in [109.05.C.4](#) for all non-salaried personnel remaining on the Project as required under collective bargaining agreements or for other Engineer-approved reasons.

**b. Escalated Labor.** To receive payment for escalated labor costs, demonstrate that the LPA-caused delay forced the Work to be performed during a period when labor costs were higher than planned at the time of Bid. Provide adequate support documentation for the costs, allowances, and benefits specified in [109.05.C.4](#). The LPA will pay wages and fringes with a 20 percent mark-up to cover administrative costs.

**c. Idle Equipment or Equipment Demobilization.** The LPA will pay the Contractor according to [109.05.C.4.c](#) for idle equipment, other than small tools, that must remain on the Project during the delays. The LPA will pay the Contractor’s transportation costs to remove and return equipment not required on the Project during the delays. No other equipment costs are recoverable as a result of delay.

**d. Material Escalation or Material Storage.** The LPA will pay the Contractor for increased material costs or material storage costs due to the delay. Obtain the Engineer’s approval before storing materials due to a delay. Payment will be based upon the accepted quantity of work performed during the period for which escalated costs have been approved. The LPA will pay increased material costs with an 8 percent mark-up to cover administrative costs and any material waste inherent to the Work.

**e. Field Overhead.** The LPA will pay any Contractor or subcontractor for field overhead costs which include the cost of supervision, field office and office supplies, and utilities for which payment is not provided for in [109.05.D.2.f](#), during a delay period provided all of the following criteria are met:

(1) The Contractor or subcontractor has incurred an excusable, compensable delay that delays the Work at least 10 Calendar Days beyond the original Completion Date. These days are cumulative throughout the project.

(2) The delay for which payment of field overhead is sought is only due to delays defined in [108.06.D.2](#), [108.06.D.3](#), [108.06.D.5](#) or for delays due to revised Work as specified in [104.02.B](#) or [104.02.F](#).

The LPA will pay the salary and fringes plus a 5 percent markup for field personnel identified in Table [109.05-4](#).

**TABLE 109.05-4**

<b>Original Contract Amount</b>	<b>Field Personnel</b>
Up to \$5,000,000	One Superintendent
\$5,000,001 to \$50,000,000	One Superintendent, One Assistant Superintendent or One Engineer, One Clerk
Over \$50,000,000	One Superintendent, One Assistant Superintendent, One Engineer, One Clerk

Superintendent’s transportation is compensable at the same rate allowed for foreman’s transportation in Section [109.05.C.5](#), which includes the cost of mobile communication devices. The allowed hours are when the superintendent is at the project site.

Superintendent’s subsistence, provided this is the company’s terms of compensation to such employees, as documented by the Contractor’s written company policy or contracts with their employees.

The Contractor’s or subcontractor’s field office costs include field office trailers, tool trailers, office equipment rental, temporary toilets, and other incidental facilities and supplies. Compute these costs on a Calendar Day basis. Owned trailers are paid at the [Blue Book](#) rate. Rented trailers are paid at the invoiced cost plus a 15 percent markup. Rented office space, toilets, and office equipment are allowed a 5 percent markup. Purchased office supplies are allowed a 5 percent markup.

Office utilities include, but are not limited to, telephone, electric, water, and natural gas. Compute these costs on a Calendar Day basis and allow a 5 percent markup.

**f. Home Office Overhead.** The LPA will pay the Contractor for home office overhead, unabsorbed home office overhead, extended home office overhead, and all other overhead costs for which payment is not provided for in [109.05.D.2.e](#), including overhead costs that would otherwise be calculated using the Eichleay formula or some other apportionment formula, provided all of the following criteria are met:

(1) The Contractor has incurred an excusable, compensable delay that delays the Work at least 10 Calendar Days beyond the original Completion Date. These days are cumulative throughout the project.

(2) The delay for which payment of home office overhead is sought is only due to delays defined in [108.06.D.2](#), [108.06.D.3](#) and [108.06.D.5](#).

Any subcontractor that has approved C-92’s for subcontracted work totaling \$4,000,000 or more is eligible for reimbursement of home office overhead provided the criteria set forth in [109.05.D.2.f.\(1\)](#) and [109.05.D.2.f.\(2\)](#) are met.

Payment will be made for every eligible day beyond the original contract completion date at the rate determined by [109.05.D.2.f.\(1\).i](#). Payment for eligible days occurring during an unanticipated construction period will be calculated in accordance with [109.05.D.2.f.\(1\).ii](#). Payment for eligible days occurring during an unanticipated winter period will be calculated in accordance with [109.05.D.2.f.\(1\).iii](#).

**(i) Home Office Overhead Daily Rate**

Calculate the home office overhead daily rate using the following formula:

$$\text{Daily HOOP} = (A \times C)/B$$

Where:

- A = original contract amount
- B = contract duration in Calendar Days
- C = value from [Table 109.05-5](#)

**TABLE 109.05-5**

<b>Original Contract Amount</b>	<b>C</b>
Up to \$5,000,000	0.08
\$5,000,001 to \$25,000,000	0.06
Over \$25,000,000	0.05

Daily HOOP = home office overhead daily rate



Contract duration term, B, includes every Calendar Day from the execution of the Contract, unless otherwise specified by the PRC and/or CPE, to the original Contract Completion Date.

When the Contractor requests home office overhead compensation for a subcontractor, use the above formula to calculate the subcontractor's Daily HOOP; however, in the subcontractor calculation, A is equal to the subcontractor's portion of the original contract amount as determined by the sum of all approved C-92's issued for the subcontracted work.

**(ii) Home Office Overhead Payment for an Unanticipated Construction Period**

Calculate the home office overhead payment for an unanticipated construction period occurring between May 1 and November 30 using the following formula:

$$\text{CP HOOP} = \text{Daily HOOP} \times D$$

Where:

D = sum of all excusable, compensable delays in Calendar Days minus the sum of all delays due to [108.06.D.1](#) and [108.06.D.4](#) in Calendar Days

Daily HOOP = daily home office overhead rate

CP HOOP = home office overhead payment for an unanticipated construction period occurring between May 1 and November 30

The excusable, compensable delay term, D, is the additional, unanticipated extended period for work performed between May 1 and November 30 in Calendar Days.

**(iii) Home Office Overhead Payment for an Unanticipated Winter Period**

Calculate the payment for home office overhead for an unanticipated winter period occurring between December 1 and April 30 using the following formula:

$$\text{WP HOOP} = \text{Daily HOOP} \times F \times D/E$$

Where:

D = sum of all excusable, compensable delays in Calendar Days minus the sum of all delays due to [108.06.D.1](#) and [108.06.D.4](#) in Calendar Days

E = sum of all excusable, compensable delays in Calendar Days plus the sum of all excusable, non-compensable delays in Calendar Days

F = 151 for a non-leap year or 152 for a leap year

Daily HOOP = daily home office overhead rate

WP HOOP = home office overhead payment for an unanticipated winter period occurring between December 1 and April 30

Payment for Home Office Overhead for an unanticipated winter period will not be made when the value of the remaining work is below the lesser of \$500,000.00 or 10 percent of the estimated final contract value.

**(iv) Total Home Office Overhead Payment**

Calculate the total home office overhead payment using the following formula:

$$\text{Total HOOP} = \text{CP HOOP} + \text{WP HOOP}$$

Where:

CP HOOP = home office overhead payment for an unanticipated construction period occurring between May 1 and November 30

WP HOOP = home office overhead payment for an unanticipated winter period occurring between December 1 and April 30

Total HOOP = total home office overhead payment



**g. Subsistence and Travel Allowance.** The LPA will pay costs for subsistence and travel allowances for labor that must remain on the Project during the delays, when such payments are required by the collective bargaining agreement or other employment contracts applicable to the classes of labor employed on the project. Overnight lodging will be reimbursed if the person is at a location greater than forty-five miles from their residence up to a maximum of \$106 per day. Meals and incidental expenses will be reimbursed up to a maximum of \$56 per day. The LPA will not pay a percent markup on these costs.

**E. Changes in Materials.** Changes in material specifications that result in increased cost to the Contractor are compensated by lump sum adjustment to the reference number. The allowed compensation is equal to the invoice supported material cost increase plus 15 percent markup for profit and overhead.

Material cost savings resulting from a specification change shall be credited to the project by a lump sum adjustment to the reference number plus a 15 percent markup if the originally specified material has not been ordered.

If the original material was ordered before the Contractor was informed of the change, the savings markup allowed is 2.5 percent in order to exclude profit on the original bid price and pay only for incurred overhead.

**109.06 Directed Acceleration.** The PRC and/or CPE may order the Contractor to accelerate the Work to avoid delay costs or to complete the Project early. The PRC and/or CPE and the Contractor will negotiate acceleration costs.

**109.07 Inefficiency.** The LPA will compensate the Contractor for inefficiency or loss of productivity resulting from [104.02](#) Revisions to the Contract Documents. Use the Measured Mile analysis comparing the productivity of work impacted by a change to the productivity of similar work performed under un-impacted conditions to prove and quantify the inefficiency.

**109.08 Unrecoverable Costs.** The Contractor is not entitled to additional compensation for costs not specifically allowed or provided for in [109.05](#) including, but not limited to, the following:

- A. Loss of anticipated profit.
- B. Consequential damages, including loss of bonding capacity, loss of bidding opportunities, insolvency, and the effects of force account work on other projects, or business interruption.
- C. Indirect costs.
- D. Attorney's fees, claim preparation expenses, and the costs of litigation.

**109.09 Estimates.** If satisfactory progress is being made, the Contractor will receive monthly payments equaling the Work and materials in place. The monthly payment is approximate, and all partial estimates and payments are subject to correction in the Final Estimate and payment. Payment for Work and materials shall not, in any way, prevent later rejection when defective Work or material is discovered, or constitute acceptance under [109.11](#) or [109.12](#). Any pay item deficient in material approval can be withheld for payment on an estimate.

Except for estimates generated during Project finalization, the LPA will not pay an estimate until the Contractor certifies to the Engineer that the work for which payment is being made was performed in accordance with the contract. Certification will be made on forms provided by the LPA.

The LPA may pay estimates twice each month if the Engineer concludes the amount of work performed is sufficient.

No estimate or payment shall be construed as acceptance of defective Work or improper materials.

The LPA will not pay the adjusted final estimate until the Contractor remedies all defective Work and accepted Work damaged by the Contractor's operations.

Interest will be paid in accordance with [ORC 126.30](#) when warranted.

**109.10 Payment for Delivered Materials.** The LPA will pay, up to 75 percent of the applicable contract item, for the invoiced cost of the delivered and approved materials before they are incorporated in the Work, if the approved materials are delivered, accepted, and properly stored on the project or stored in acceptable storage places in the vicinity of the Project.

The LPA will pay for the cost of approved materials before they are incorporated in the Work when asked by the Contractor, if the Engineer determines that it is not practical to deliver the material to the Project site. This provision applies only to bulky materials that are durable in nature and represent a significant portion of the project cost, such as aggregates, steel, and precast concrete. The Department will pay for un-fabricated structural steel if the following requirements are met:

- A. The Contractor has provided both the Engineer and the [Office of Materials Management](#) an itemized invoice from the steel mill for the steel for which reimbursement is requested
- B. Project structural Steel design plans are complete with no forthcoming revisions. For design build projects, Contractor accepted show drawings per [501.04](#), will need to be provided.
- C Contractor accepted certified test data for all steel in question along with mill shipping notices have been received by the [Office of Materials Management](#) per [501.06](#).
- D. The steel is properly stored to allow inspection by the [Office of Materials Management](#). It shall also be properly set apart from other material and identified as belonging to ODOT.
- E. The Contractor will provide the Engineer a written statement that under [106](#), the Contractor is responsible for the steel that has been paid for until the actual steel is erected and accepted in the field.
- F. Payment shall only be authorized after all the aforementioned documentation has been received by the [Office of Materials Management](#) and the steel has been inspected by the [Office of Materials Management](#) to verify that all steel listed in the itemized invoice has been received by the fabricator and properly stored. The amount to be paid shall be equivalent to the itemized invoice from the steel mill, but shall not exceed 50% of the bid price for the structural steel.

The LPA will not pay delivered materials on small warehouse items or for plant materials.

**109.11 Partial Acceptance.** Upon completion of a portion of the Work, the Contractor may request acceptance of a completed portion of the Work.

- A. An inspection may be performed on a completed portion of the project roadway section provided:
  - 1. All safety items are in place including permanent pavement markings.
  - 2. Traffic is in its final pattern.
  - 3. A completed portion of the project constitutes a completed geographic section of the project or a direction of traffic on a divided highway.
  - 4. Is in accordance with other contract provisions.
- B. An inspection may be performed on a completed bridge provided:
  - 1. All work on the bridge and approaches are complete, including all safety items and permanent pavement markings.
  - 2. The Contractor will not return to the bridge for any work except as allowed in 4.

3. Traffic is in its final pattern.
4. Painting of structural steel is either completed or scheduled to be performed.
5. Is in accordance with other contract provisions.

The Final Inspector will grant written partial acceptance for that portion of the Work or reject the Contractor's request. Such written partial acceptance will designate what portion of the Work is accepted, the date of acceptance, and the warranty provisions started by the partial acceptance.

Partial acceptance will relieve the Contractor of maintenance responsibility for the designated portion of the Work. This does not relieve the Contractor of responsibility to correct defective Work or repair damage caused by the Contractor or waive any other remedy to which the LPA is entitled at law or in equity.

#### **109.12 Final Acceptance.**

**A. Final Inspection.** The Department will perform a Final Inspection for the sole purpose of relieving the Contractor of maintenance responsibility for the Work.

The Final Inspection shall be a limited visual review of the Work and shall only serve as the LPA's verification that the Work appears substantially complete. Final Inspection does not waive any available rights or remedies of the LPA, nor divest the Contractor of any responsibility for compliance with the contract or liability for damages.

Notify the Engineer when the Project is complete and all of the Engineer's punch list items are complete. If the Engineer agrees the Project is complete, then within 10 business days the District Final Inspector will inspect the Work and categorize it as one of the following:

1. Unacceptable or not complete.
2. Substantially complete with punch list items found by the Final Inspector.
3. Substantially complete.

If the Final Inspector finds the Work substantially complete or substantially complete with punch list items, then the Contractor's maintenance responsibilities end on the day of the Final Inspection, except for any maintenance related to unfinished punch list items. This does not relieve the Contractor of responsibility to correct defective Work or repair damage caused by the Contractor or waive any other remedy to which the LPA is entitled at law or in equity. The Final Inspector will issue a Final Inspection Report that will document the findings of the inspection and start any warranty period.

**B. Punch List.** The Final Inspector will issue to the Contractor a written punch list of work required as a condition of acceptance. For project involving multiple public agencies, the Final Inspector will receive and compile punch lists from all agencies that have authority to provide one prior to issuing the Department's punch list. The Final Inspector's punch list will stipulate a reasonable time to complete the required Work. Failure of the Contractor to complete the punch list items by the stipulated time will result in the assessment of fifty percent of the Liquidated Damages according to [108.07](#) for each Calendar Day for every day beyond the stipulated time the punch list work remains incomplete and beyond the revised Completion Date.

**C. Finalization.** The Contractor shall accept the final quantities as determined by the Engineer or provide a written notice indicating the reason for disagreement within 30 Calendar Days of receiving the Engineer's list of final quantities. The prescribed 30 Calendar Day period can be modified by mutual agreement of the Contractor and the PRC and/or CPE. If no notice of disagreement is received, then the final payment will be based on the Engineer's list of final quantities.

Supply all documents necessary for Project finalization within 60 Calendar Days from the date that the Work is physically complete. These documents include:

1. Delinquent material certifications.
2. Delinquent certified payrolls or required revised payrolls.
3. Wage affidavit required by [ORC Chapter 4115](#) on projects without any Federal funding.
4. Delinquent force account records.
5. If applicable, DBE affidavits.
6. Any other document required to complete finalization of the project.

Failure to submit these acceptably completed documents will result in an administrative fee of \$100 per Calendar Day for every day that any of the required documents remain delinquent, starting 30 Calendar Days after receipt of written notification from the Engineer of a document deficiency.

**D. Final Payment.** Final payment is based on:

1. The agreed final quantities or as determined by the Engineer if agreement is not possible, no compensation for unauthorized work is allowed.
2. Finding of substantial completion by the Final Inspector.
3. Receipt of acceptable finalization documents.
4. Contractor certification that the Work was performed in accordance with the contract.

**E. Completion of Contract and Continuation of Contractor's Responsibility.** The Contract is complete, except for items covered by the required bonds, when the Contractor receives final payment. The PRC or if applicable, the CPE, will issue a letter confirming completion of the contract, noting any exception as provided in Items [659](#) and [661](#) and any warranty. Neither Completion of the Contract nor substantial completion relieves the Contractor of any responsibilities to properly perform or correct the Work or to repair damage or waives any remedies to which the LPA is entitled at law or in equity.

