100 GENERAL PROVISIONS

101 DEFINITIONS AND TERMS	1
101.01 General	1
101.02 Abbreviations	1
101.03 Definitions.	
101.04 Interpretations.	10
102 BIDDING REQUIREMENTS AND CONDITIONS	11
102.01 Prequalification of Bidders.	11
102.02 Contents of Bid Documents.	
102.03 Issuance of Proposals	11
102.04 Interpretation of Quantities in Proposal.	11
102.05 Examination of Bid Documents and Project Site and Submission of Prebid Questions	
102.06 Preparation of Bids.	12
102.07 Duty to Notify of Errors in Bid Documents	12
102.08 Unbalanced Bidding.	13
102.09 Proposal Guaranty.	
102.10 Delivery of Bid.	
102.11 Withdrawal of Bids	
102.12 Combination Proposals.	13
102.13 Public Opening of Bids	
102.14 Disqualification of Bidders.	
102.15 Material Guaranty.	
102.16 Certificate of Compliance with Affirmative Action Programs	
102.17 Drug-Free Safety Program.	
103 AWARD AND EXECUTION OF CONTRACT	
103.01 Consideration of Proposals.	
103.02 Award of Contract.	
103.04 Return of Proposal Guaranty.	
103.05 Requirement of Contract Bond.	16
103.06 Execution of Contract.	16
103.07 Failure to Execute Contract.	
104 SCOPE OF WORK	
104.01 Intent of the Contract Documents.	
104.02 Revisions to the Contract Documents.	
104.03 Rights in and Use of Materials Found on the Work.	
104.04 Cleaning Up.	
104.05 Recordkeeping/Audit.	
105 CONTROL OF WORK	
105.01 Authority of the Engineer.	
105.02 Plans and Working Drawings.	
105.03 Conformity with Contract Documents	
105.04 Coordination of the Contract Documents.	
105.05 Cooperation by Contractor	
105.06 Superintendent.	
105.07 Cooperation with Utilities	
105.08 Cooperation Between Contractors.	
105.09 Authority and Duties of the Inspector.	
105.10 Inspection of Work.	
105.11 Removal of Defective and Unauthorized Work.	
100.11 Removal of Delegate and Chaumonized Work	∠⊤

105 10	T ID (' ' '	2.4
	Load Restrictions.	
	Haul Roads	
	Maintenance During Construction.	
	Failure to Maintain Roadway or Structure	
	Borrow and Waste Areas.	
	Construction and Demolition Debris.	
105.18	Acceptance	27
	Value Engineering Change Proposals	
	NTROL OF MATERIAL	
	Source of Supply and Quality Requirements.	
106.02	Samples, Tests, and Cited Specifications.	28
106.03	Small Quantities and Materials for Temporary Application	28
	Plant Sampling and Testing Plan.	
	Storage of Materials	
	Handling Materials.	
106.07	Unacceptable Materials	29
106.08	Franklin County-Furnished Material.	29
106.09	Steel and Iron Products Made in the United States	29
	Qualified Products List.	
107 LEC	GAL RELATIONS AND RESPONSIBILITY TO PUBLIC	31
107.01	Laws to be Observed	31
107.02	Permits, Licenses, and Taxes.	31
107.03	Patented Devices, Materials, and Processes.	31
	Restoration of Surfaces Opened by Permit.	
	Federal-Aid Provisions.	
107.06	Sanitary Provisions.	31
	Public Convenience and Safety.	
	Bridges Over Navigable Waters.	
	Use of Explosives.	
	Protection and Restoration of Property	
	Contractor's Use of the Project Right-of-Way or Other Franklin County-Owned Property	
	Responsibility for Damage Claims and Liability Insurance.	
	Reporting, Investigating, and Resolving Motorist Damage Claims.	
	Opening Sections of Project to Traffic.	
	Contractor's Responsibility for Work	
107.16	Contractor's Responsibility for Utility Property and Services.	. 38
	Furnishing Right-of-Way.	
	No Waiver of Legal Rights.	
	Environmental Protection.	
	Civil Rights.	
	Prompt Payment	
	Indemnification.	
	DSECUTION AND PROGRESS	
	Subletting of the Contract	
	Project Coordination	
	Prosecution and Progress.	
	Limitation of Operations	
	Character of Workers Methods and Equipment	
	Determining a Time Extension to the Completion Date and Payment for Excusable Del	
100.00	56	ays.
108.07	Failure to Complete on Time.	59

60
60
60
62
62
63
65
ation of the Contract for
65
66
78
78
78
78
79
79
80
81
81
82

LIST OF TABLES

ENTITY SUBMITTING PROPOSAL REQUIRED SIGNATURE	12
Table 104.02-1	18
Table 104.02-2	18
Table 104.02-3	Error! Bookmark not defined
Table 108.06-1	58
Table 108.07-1 SCHEDULE OF LIQUIDATED DAMAGES	60
Table 109.02-1 English to SI (Metric) Conversion Factors	64
Table 109.02-2 SI (Metric) to English Conversion Factors	65
Table 109.05-1	71
Table 109.05-4	76
Table 109.05-5	77

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

Basic Oxygen Furnace (aggregate)

BOF

BSG Bulk Specific Gravity

BTEX Benzene, toluene, ethyl benzene, and xylene (soil test)

BUSTR Bureau of Underground Storage Tank Regulations (Division of Fire Marshal)

CMS Construction and Material Specifications

CAPWAP Case Pile Wave Analysis Program CBAE Cut Back Asphalt Emulsion

CCRL Cement and Concrete Reference Laboratory

CCS Crushed Carbonate Stone

CECI Contactors Erosion Control Inspector

CFR Code of Federal Regulations

CIE Commission Internationale d'Eclairage (illumination)
CPESC Certified Professional in Erosion and Sediment Control

CRS Cationic Rapid Set (asphalt emulsion)
CRSI Concrete Reinforcing Steel Institute
CSS Cationic Slow Set (asphalt emulsion)

CVN Charpy V-notch (steel test)
CWT Hundred Weight (100 lbs)

DC Direct Current

DCA District Construction Administrator
DCE District Construction Engineer
DDD District Deputy Director
DET District Engineer of Tests
DGE District Geotechnical Engineer

DLS Data Logging System (traffic markings)

DNR Department of Natural Resources

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
EEI Edison Electric Institute
EIA Electronic Industries Alliance
EPA Environmental Protection Agency
EQS Exceptional Quality Solids (compost)

FAA Fine Aggregate Angularity (asphalt aggregate)

FCM Fracture Critical Member (steel test)
FEMA Federal Emergency Management Agency

FHWA Federal Highway Administration, Department of Transportation

FRP Fiber Reinforced Polymer

FSS Federal Specifications and Standards, General Services Administration

GGBFS Ground Granulated Blast Furnace Slag

GS Granulated Slag

HDPE High Density Polyethylene

HMWM High Molecular Weight Methacrylate ICEA Insulated Cable Engineers Association

IEEE Institute of Electrical and Electronic Engineers

IES Illuminating Engineering Society

IMSA International Municipal Signal Association IPCEA Insulated Power Cable Engineers Association

IPS International Pipe Standard

ISSA International Slurry Seal Association

ITE Institute of Transportation Engineers IZEU Inorganic Zinc Epoxy Urethane

JMF Job Mix Formula LED Light Emitting Diode

Loaded Wheel Test (asphalt test) LWT **MBF** Thousand Board Feet (wood) MC Medium Cure (asphalt emulsion) **MCB** Microchannel Bus (traffic controller) Blaw-Knox Materials Management Kit **MMK** MOV Metal Oxide Varistor (traffic controller) MPI Magnetic Particle Inspection (steel test) MSG Maximum Specific Gravity (asphalt) Maximum Theoretical Density (asphalt) MTD National Association of Corrosion Engineers NACE **NCHRP** National Cooperative Highway Research Program National Electrical Manufacturers Association **NEMA**

NHI National Highway Institute

NIST National Institute of Standards and Technology

NOI Notice of Intent

NPDES National Pollutant Discharge Elimination System

NTP Notice to Proceed

OAC Ohio Administrative Code

ODOT Ohio Department of Transportation
OEPA Ohio Environmental Protection Agency

OH Open Hearth (aggregate)
OHWM Ordinary High Water Mark

OMM Office of Materials Management (the Central Office Laboratory)

OMUTCD Ohio Manual of Uniform Traffic Control Devices

ORC Ohio Revised Code

ORDC Ohio Rail Development Commission

OSHA Occupational Safety and Health Administration

OTE Office of Traffic Engineering
OWPCA Ohio Water Pollution Control Act
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
PVC Polyvinyl chloride
QA Quality Assurance
QC Quality Control

QCFS Quality Control Fabricator Specialist (structures)

QCP Quality Control Program, or Quality Control Points (steel test)

QCQC Quality Control Qualification Committee

QPL Qualified Products List

RAP Reclaimed Asphalt Pavement
RAS Reclaimed Asphalt Shingles
RC Rapid Cure (asphalt emulsion)
REA Rural Electrification Administration

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 Rural Utilities Service

SAE Society of Automotive Engineers

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 AASHTOWare Project Sitemanager TM

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 Society for Protective Coatings
SWPPP Storm Water Pollution Prevention Plan

TAP Traffic Authorized Product

TCE Trichloroethylene

TMPTA Tri-methyolpropane 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 Underwriters' Laboratories, Inc

USACE United States Army Corps of Engineers

USC United States Code
VA Verification Acceptance
VAC Volts Alternating Current

VCA Volume of Coarse Aggregate (asphalt mix test)

VECP 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.

Allowance. A non-biddable amount of money dedicated for specific contract work.

Award. The written acceptance by the Franklin County Commissioners 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, ODOT Construction and Material Specifications, and any other document designated by Franklin County 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 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 Engineer listing actual test results of samples tested for compliance with specified Franklin County requirements. Franklin County will accept certified test data from manufacturers' laboratories if their products have been used satisfactorily on prior Franklin County or ODOT contracts and their test data has been confirmed. Include a statement that the test data furnished is representative of the material furnished to a Franklin County project or to a supplier. The report is identified by number or date and identifies Franklin County 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 Franklin County Commissioners 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 Steps 1 and 2 of 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 (Final Completion Date). The date, as shown in the Contract Documents, on which the Work shall be completed.

Construction Limits. These limits must encompass all Work. This includes removals, room for construction equipment to complete work, site access, etc. as shown on the Plans or otherwise stated in the Contract Documents.

Contract. The written agreement between the Franklin County Commissioners 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 and be subject to ORC 5525.16 and 5525.13, and 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 Franklin County 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.

Contingency. An item of work or amount of money dedicated to a circumstance that is possible but cannot be predicted with certainty.

Contractor. The individual, firm, or corporation contracting with the Franklin County Commissioners for performance of prescribed Work, acting directly or through a duly authorized representative and qualified under the provisions of ORC 5525.02 to 5525.09 inclusive, 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. When referenced in the ODOT CMS, Administrative head of ODOT appointed by the Governor.

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

District Testing. The Departments district testing laboratories.

Engineer. Duly authorized agent of Franklin County acting within the scope of its authority for purposes of engineering and administration of the Contract.

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 as provided in ORC 5525.14.

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

Franklin County. The Franklin County Engineer's Office, acting through its publically elected Franklin County Engineer or properly authorized agents thereof, such agents acting severally within the scope of the particular duties entrusted to them.

Franklin County Commissioners. Elected administrative head of Franklin County government, given specific and limited authority by the Ohio Revised Code to hold title to all county properties, serve as the sole taxing authority for the county and control county purchasing. The Franklin County Commissioners are the budget and appropriating authority for Franklin County including all county agencies and elected officials.

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

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

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 as designated by Franklin County.

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

National Holidays. New Year's Day, January 1; Martin Luther King's Birthday, the Third Monday in January; Presidents' Day, the Third Monday in February; Memorial Day, the last Monday in May; Independence Day, July 4; Labor Day, the First Monday in September; Columbus Day, the second Monday in October; Veterans Day, November 11; Thanksgiving Day, the fourth Thursday in November; Christmas Day, December 25.

Notice to Proceed. Written notice to the Contractor, by Franklin County, authorizing the beginning of Work and setting forth the Completion Date.

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.

Permit (License). An official certificate of permission.

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

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

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 Work together with all appurtenances and construction to be performed thereon under the Contract.

Proposal. The approved form on which Franklin County 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 required under ORC 5525.01.

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, in his sole discretion, 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 Franklin County.

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 ORC 5501.01.

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 Franklin County that describe portions of the Work fabricated off site that are incorporated permanently with the project. Franklin County acceptance is not required.

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 Franklin County, and who is qualified under ORC 5525.02 through 5525.09 inclusive.

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

Substantial Completion. The point at which the Project is complete such that it can be safely and effectively used by the public without further delays, disruption, or impediments. For conventional bridge and highway work, substantial completion is the point at which all bridge deck, parapet, pavement structure, shoulder, permanent signing and markings, traffic signal, traffic barrier, and safety appurtenance work is complete.

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 ODOT's Office of the Director.

Supplemental Agreement. A written agreement executed by the Contractor and by the Franklin County Commissioners 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 Department 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 for the type of work specified in the Contract by the Ohio Department of Transportation according to ORC Chapter 5525 and the rules and regulations governing prequalification in order to submit a Bid. Upon request, the Ohio Department of Transportation will provide a prequalification application, applicable rules and regulations, and other relevant information. For prospective Bidders that are not yet prequalified, furnish the Ohio Department of Transportation 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 Franklin County.

For foreign Contractors, refer to ORC 5525.18 and Ohio Administrative Rule 5501:2-3-07.

Franklin County will perform contractor performance evaluations for each contractor and subcontractor on every construction project. Evaluations shall be well documented, objective, and performed in a timely manner, in accordance with Supplement 1131. The contractor's average scores for the previous calendar year will be used in the calculation of the contractor's bidding capacity. The contractor has the right to appeal an evaluation.

102.02 Contents of Bid Documents. Use the Proposal to prepare and submit Bids for the Work. Upon request, Franklin County will provide Bid Documents that include or reference, but are not limited to, 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. Franklin County'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, Franklin County will provide applicable rates and other relevant information for obtaining bidding information and submitting a Bid.
- B. Franklin County reserves the right to refuse to sell or issue Bid Documents to a prospective Bidder and to open the Bid from a prospective Bidder for any of the following reasons:
 - 1. The prospective Bidder has defaulted on previous contracts.
 - 2. The prospective Bidder is debarred from bidding on and receiving Franklin County contracts.
 - 3. The prospective Bidder is currently in the debarment process with any State or Federal agency.

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

Franklin County will only pay the Contractor for the actual quantities of Work performed and accepted according to the Contract Documents. Franklin County 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. A bidder shall 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 investigating the Project site, borrow sites, hauling routes, and all other locations related to the performance of the Work.

When available, Franklin County will include in the Contract Documents or provide for the Bidder's review at Franklin County's office, 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. Submit all Prebid Questions in writing to Franklin County. Franklin County will respond to Prebid Questions through issuance of an addendum. Franklin County is not obligated to respond to, or otherwise act upon, a Prebid Question, but reserves the right to act upon any information received.

102.06 Preparation of Bids. Prepare a Bid according to this subsection and the requirements found in the Bid Documents. Properly complete the Bid Documents by legible printed handwriting or typing.

Provide a unit price for each item listed in the Proposal. Calculate and place the products for the respective unit prices and quantities in the "Total Price" column. For a lump sum item, place the same price in the "Unit Price" column and in the "Total Price" column pertaining to that item. Indicate the summation of the Bid Amount by adding the values entered in the "Total Price" column for the listed items. Submit the Bid as specified in the Bid Documents.

Properly execute the Proposal by completing all sections and attaching the required signatures in the space provided.

ENTITY SUBMITTING PROPOSAL REQUIRED SIGNATURE

Individual	The individual or a duly authorized agent accompanied	
	by evidence of authority to sign.	
Partnership	A partner or a duly authorized agent accompanied by	
	evidence of authority to sign.	
Joint Venture	A member or a duly authorized agent accompanied by	
	evidence of authority to sign of at least one of the joint	
	venture firms.	
Corporation	An authorized officer or duly authorized agent	
	accompanied by evidence of authority to sign of the	
	corporation. Also, show the name of the state chartering	
	the corporation and affix the corporate seal.	
Limited Liability Company	A manager, a member, or a duly authorized agent	
	accompanied by evidence of authority to sign.	

102.07 Duty to Notify of Errors in Bid Documents. Notify Franklin County of errors and omissions in the Bid Documents. Make notification by submitting a question in the manner described in 102.05. 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 Franklin County 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. Franklin County 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 Franklin County determines that an award to the Bidder submitting a Mathematically Unbalanced Bid will not result in the lowest ultimate cost to Franklin County.
- **102.09 Proposal Guaranty.** Franklin County will reject a Bid submitted without a Proposal Guaranty in the amount designated and payable to the Franklin County Board of Commissioners. Submit the required Proposal Guaranty in one of the following forms:
 - A. Properly executed project Bid bond submitted on Franklin County's form.
 - B. Properly executed electronic bid transfer to Franklin County's account.
 - C. Certified check drawn on the account of the Bidder submitting the Bid.
 - D. Cashier's check.
 - E. Properly executed electronic project Bid bond submitted using the software specified in the Bid Documents.

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

If Franklin County 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.

If Franklin County invites combined Bids and the Bidder elects to Bid only on one package, then the Bidder must submit only one Proposal Guaranty. If the Bidder bids on the combined Bid package, the Bidder must submit a Proposal Guaranty in the amount required for the combined Bid. The combined Proposal Guaranty covers each individual Bid.

102.10 Delivery of Bid. The delivery of the Bid to Franklin County is the sole responsibility of the Bidder. Unless otherwise indicated in the Proposal, all Bids must be submitted using the electronic Bid submission software specified in the Proposal. Franklin County will accept Bids until the time and date designated in the Notice to Bidders. Franklin County will return Bids received after the designated time to the Bidders unopened. Franklin County will return all Bids not prepared and submitted in accordance with the Proposal.

102.11 Withdrawal of Bids

- **A.** After Bid Opening (Mistake in Bid). After Bids are opened, ORC 5525.01 requires that a Bidder identify a mistake in its Bid within 48 hours of the Bid opening. After Bids are opened, the Bidder must provide a written request, in accordance with the requirements of ORC 5525.01, to withdraw a Bid already filed with Franklin County. Any Bidder for whom a request to withdraw its Bid is approved by Franklin County will not be permitted to participate in any manner in a contract awarded for that project for which the Bid was withdrawn.
- **B.** Prior to Bid Opening. Prior to the opening of Bids, a Bidder may withdraw its Bid. The Bidder must make a written request that is received by the Engineer prior to the time of Bid opening. The Bid will be returned to the Bidder unopened.
- **102.12** Combination Proposals. Franklin County 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. Franklin County reserves the right to make awards on combination Bids or separate Bids

to the best advantage of Franklin County. Franklin County will not consider combination Bids, other than those it specifically identifies in the Bid Documents. Franklin County will write separate Contracts for each individual Project included in the combination.

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

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

Franklin County may postpone the receipt of Bid time or the opening of Bids time. If Franklin County 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.** Franklin County will declare a Bid nonresponsive and ineligible for award when any of the following occur:
 - A. The Bidder lacks sufficient prequalification work types or dollars to be eligible for award.
 - B. The Bidder fails to furnish the required Proposal Guaranty in the proper form and amount.
 - C. The Bid contains unauthorized alterations or omissions.
 - D. The Bid contains conditions or qualifications not provided for in the Bid Documents.
 - E. The Bid is not prepared as specified.
 - F. A single entity, under the same name or different names, or affiliated entities submits more than one Bid for the same Project.
 - G. The Bidder fails to submit a unit price for each contract item listed, except for lump sum items where the Bidder may show a price in the "Total Price" column for that item.
 - H. The Bidder fails to submit a lump sum price where required.
 - I. The Bidder fails to submit a complete Bid Express file using the software specified in the Proposal.
 - J. The Bidder is debarred from submitting Bids by any State or Federal agency.
 - K. The Bidder has defaulted, has had a Contract terminated for cause by Franklin County, has either agreed not to Bid or has had debarment proceedings initiated against the Bidder's company and/or its key personnel.
 - L. The Bidder submits its Bid Guaranty on forms other than those provided by Franklin County.
 - M. The Bidder submits a Materially Unbalanced Bid as defined by 102.08.
 - N. The Bidder fails to acknowledge addenda.
 - O. Franklin County finds evidence of collusion.
 - P. Any other omission, error, or act that, in the judgment of Franklin County, renders the Bidder's bid non-responsive.
- 102.15 Material Guaranty. Before any Contract is awarded, Franklin County 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. Franklin County 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, Franklin County will require the Bidder to furnish a valid Certificate of Compliance with Affirmative Action Programs, issued by the State EEO Coordinator dated prior to the date fixed for the opening of bids.

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.

103 AWARD AND EXECUTION OF CONTRACT

103.01 Consideration of Proposals. After opening and announcing the Bids, Franklin County 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.

Franklin County may reject any or all Bids, waive technicalities, or advertise for new Bids without liability to Franklin County.

- 103.02 Award of Contract. Franklin County will award a Contract or reject Bids within 60 days after Bid opening. Franklin County will notify the successful Bidder by either electronic mail or by mailing a letter to the address on the Bid. Franklin County will award to the lowest, responsive and responsible bidder. Franklin County will not award a Contract until it completes an investigation of the apparent low Bidder. Franklin County will not award a Contract for an amount greater than the maximum acceptable bid which is calculated as 110 percent of the Engineer's Estimate.
- **103.03** Cancellation of Award. The Department (Franklin County) may cancel a Contract award at any time before all parties sign the Contract without liability to the Department (Franklin County).
- 103.04 Return of Proposal Guaranty. Immediately after the opening and checking of Bids, Franklin County will return all Proposal Guaranties provided in the form of a certified check or cashier's check, except to the three lowest Bidders. Within 60 days after opening bids, Franklin County will return the Proposal Guaranties of the two remaining unsuccessful Bidders. After the successful Bidder submits the signed Contract, Contract Bonds, and other Contract Documents, and after Franklin County signs the Contract, Franklin County will return the Proposal Guaranty to the successful Bidder. Franklin County will not return Bid bonds.
- **103.05 Requirement of Contract Bond.** Furnish Contract Bonds within 10 days after receiving notice of award. Furnish Contract Bonds to Franklin County on the prescribed form, in the amount of the Contract, and according to ORC 5525.16.
- 103.06 Execution of Contract. Sign and return the Contract, along with the certificate of compliance, Contract Bonds, and other required Contract Documents, within 10 days after notice of award. Franklin County does not consider a proposal binding until the Franklin County Commissioners sign the Contract. If the Franklin County Commissioners do not sign the Contract within 30 days after receiving the successful Bidder's signed Contract, certificates, Contract Bonds, and other Contract Documents, the successful Bidder may withdraw the Bid without prejudice.
- 103.07 Failure to Execute Contract. If the successful Bidder fails to sign the Contract and furnish the Contract Bonds, Franklin County will have just cause to cancel the award. The successful Bidder shall forfeit the Proposal Guaranty to Franklin County, not as a penalty, but as liquidated damages. Franklin County may award the Contract to the next lowest responsive Bidder, re-advertise the Work, or take any other action decided by Franklin County.

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. Franklin County 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 ORC 5525.14.

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 Department (Franklin County) 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 or 109.05.

The Department (Franklin County) 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.G.

The term "significant change" is defined as follows:

- 1. when the character of the Work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
- 2. when the product of the quantity in excess of the estimated quantity of a contract item and the unit price exceeds the limits set forth in Table 104.02-1.

TABLE 104.02-1

Contract Price	Contract Limits	
Up to \$500,000	\$25,000	
\$500,001 to \$2,000,000	5% of Total Contract Price	
Over \$2,000,000	\$100,000	

A quantity underrun is defined as follows:

- a. the estimated quantity of a contract item exceeds four units, and
- b. the decrease in quantity of any unit price Contract Item exceeds 25 percent of the estimated quantity, and
- c. the total of all such adjustments for all contract items is more than \$400.

Then after the determination of final quantities according to 109.12.C, the Engineer will adjust the unit prices for the affected Contract item by multiplying the bid unit price by the factor obtained from Table 104.02-2.

Table 104.02-2

% Decrease	Factor	% Decrease	Factor
25	1.08	67	1.51
26 to 27	1.09	68	1.53
28 to 29	1.10	69	1.56
30 to 31	1.11	70	1.58
32 to 33	1.12	71	1.61
34 to 35	1.13	72	1.64
36	1.14	73	1.68
37 to 38	1.15	74	1.71
39	1.16	75	1.75
40 to 41	1.17	76	1.79
42	1.18	77	1.84
43	1.19	78	1.89
44 to 45	1.20	79	1.94
46	1.21	80	2.00
47	1.22	81	2.07
48	1.23	82	2.14
49	1.24	83	2.22
50	1.25	84	2.31
51	1.26	85	2.42
52	1.27	86	2.54
53	1.28	87	2.67
54	1.29	88	2.83
55	1.31	89	3.02
56	1.32	90	3.25
57	1.33	91	3.53
58	1.35	92	3.88
59	1.36	93	4.32
60	1.38	94	4.92
61	1.39	95	5.75
62	1.41	96	7.00
63	1.43	97	9.08
64	1.44	98	13.25
65	1.46	99	25.00
66	1.49		

When the increase in quantity or decrease in quantity of any unit price contract item does not exceed the limits set forth in Tables 104.02-1 and 104.02-2, the change is considered a minor change. The Department (Franklin County) will pay for minor changes in the Work at the unit bid price.

The unit prices for the following items are not subject to adjustment under 104.02.D:

- 1. Contingency,
- 2. Allowances,
- 3. Law Enforcement Officer with Patrol Car,
- 4. Portable Changeable Message Sign,
- 5. Erosion Control Items (included under Item 207 of the ODOT CMS), and
- 6. Any other fixed unit price pay items.

E. Eliminated Items. Franklin County may partially or completely eliminate contract items.

Franklin County 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.

Franklin County 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 as defined in 104.02.D.

- **F. Extra Work.** Perform Extra Work as directed by the Engineer. Franklin County will pay for Extra Work as specified in 109.05. The additional quantities and unit prices paid for under 109.05 provide full compensation for the scope of extra work described in the Change Order. Time extensions, if warranted, will be determined according to 108.06. The execution of a Change Order by the Contractor is a waiver of any claims for additional time and/or further compensation for the extra work.
- **G.** Unilateral Authority to Pay. Franklin County 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 Franklin County does not preclude or limit the rights of Franklin County 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. Franklin County 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 and safe 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. Franklin County may withhold 10 percent of the Bid amount for the mobilization contract item, if included, until performance under this section is complete. See ODOT CMS 624.04.

104.05 Recordkeeping/Audit. The Contractor, subcontractor(s) and supplier(s) shall cooperate with the Engineer and shall produce, compile, maintain and keep all cost, time and schedule records sufficient to substantiate all requests for payment, Claims for additional compensation, and requests for time extensions. The Contractor shall keep the following records, including, but not limited to, daily time sheets and foreperson's daily reports, union agreements if any, payroll register, earnings records, payroll tax returns, material invoices, purchase orders, cancelled checks, equipment records, vendor rental agreements, subcontractor payment certificates, job cost report, general ledgers and subsidiary ledgers, cash disbursement journals, complete bid estimate and worksheets, financial statements, worksheets used to prepare the Claim and establish cost components for Claim items, and schedule information and updates. The Contractor shall submit one legible copy of the Contractor's Daily Report to the Engineer within three working days from date work was performed.

Upon reasonable written notice to the Contractor, the Engineer or its designated agents shall be provided access to, and the right to inspect and audit, all of the Contractor's and its subcontractors' and suppliers' records pertaining to the Project. If and to the extent that the Contractor fails to maintain and keep proper Project records, fails to provide the Engineer or its designated agents access to such Project records, or fails to provide the documentation required by 108 or 109, the Engineer may deny any requests for payment, additional compensation, and/or requests for time extensions if and to the extent they have not been or cannot be substantiated by the Contractor or by inspection/audit of the Engineer.

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 Franklin County'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, Franklin County 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." Franklin County accepts the submittal for construction, fabrication, or manufacture.
- B. "ACCEPTED AS NOTED." Franklin County accepts the submittal for construction, fabrication, or manufacture, subject to the Contractor's compliance with all Franklin County comments or corrections to the submittal. If also marked "RESUBMIT," Franklin County still accepts the submittal, but requires the Contractor to provide a corrected submittal to Franklin County.
- C. "NOT ACCEPTED." Franklin County 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 Franklin County comments or corrections and Contract requirements and provide the revised submittal to Franklin County for another review.

"Accepted" and "Accepted as Noted" Working Drawings are Contract Documents as defined in 101.03. Franklin County'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 in OAC 4733-23. Include the cost of furnishing working drawings in the cost of the Work they cover.

105.03 Conformity with Contract Documents. The Contractor shall 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 Engineer determines the Work is not in reasonably close conformity with the Contract Documents and determines the Contractor produced reasonably acceptable Work, the Engineer, in his sole discretion, may accept the Work based on engineering judgment. The Engineer 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 Engineer 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 Franklin County.

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. Franklin County will supply the Contractor with an email or a CD containing Contract Document files. The Contractor will be responsible for making their own plan copies and copies for their subcontractors.

The Contractor shall 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. The Project Superintendent, and other Contractor's representatives as required by the Contract Documents, are required to physically attend monthly progress meetings.

105.06 Superintendent. The Bidder shall provide a competent 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. If the Total Contract Price is greater than \$1 million, the Superintendent shall be on site while any Work is being performed. 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. Such superintendence shall be furnished irrespective of the amount of Work sublet.

105.07 Cooperation with Utilities. Unless otherwise provided for by the Contract Documents, Franklin County 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, Franklin County will not compensate the contractor for this work unless Franklin County approves the request in writing before the work begins. If the work is not preapproved by Franklin County, 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 Franklin County 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 Franklin County 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,+/- 2 feet (+/-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, Franklin County 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 Franklin County'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. The Contractor shall 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, Franklin County 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, Franklin County will not pay for uncovering or removing and restoring the Work.

Franklin County 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 Franklin County's level of inspection.

Franklin County'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 Franklin County 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 Franklin County.

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

Unless Franklin County formally accepts defective Work according to 105.03, work differing from the contract documents whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause, shall be removed immediately and replaced in a manner in accordance with the plans and specifications at no expense to Franklin County.

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

If the Contractor fails to comply with the Engineer's orders under the provisions of this subsection, the Engineer 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 Engineer 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 Engineer in writing.

105.13 Haul Roads. Prior to hauling equipment or materials, the Contractor shall 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 Franklin County and Franklin County 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 Franklin County determines that county controlled roads are available and practical for a haul route, Contractor shall revise the proposed haul route provided in the original written notification and resubmit to the Engineer.

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.

If the Engineer determines that haul route roads were not properly used during construction, then the Contractor is solely responsible for all repairs. Those repairs shall be made immediately to ensure reasonable normal traveling conditions.

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 Franklin County harmless for any closures or hauling restrictions outside the Project limits beyond the control of Franklin County.

105.14 Maintenance During Construction. Maintain the Work during construction and until Final Acceptance of 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, regrading, or if destroyed, the removal of Work previously accepted by Franklin County.

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. Franklin County 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), the NPDES permit, and the Franklin County Commissioners NPDES Storm Water 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 ODOT's *Location and Design Manual*.

Have the proposed borrow and waste areas reviewed by an environmental consultant that is pre-qualified by ODOT 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 Franklin County.

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 Franklin County 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 Franklin County. Further, it must expressly state that Franklin County is not a party to the Contract or permission statement and that the Contractor and property owner will hold Franklin County 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 ODOT CMS 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 Franklin County 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 ODOT CMS 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 on an existing roadbed or parking lot project.

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

105.18 Acceptance. Franklin County will accept Work according to 109.12 or completed sections of the Project according to 109.11.

105.19 Value Engineering Change Proposals. Franklin County will partner with the Contractor by considering the Contractor's submission of a Value Engineering Change Proposal (VECP) which will reduce construction costs and possibly time on projects that do not contain Design Build provisions or incentive provisions based on time. The purpose of this provision is to encourage the use of the ingenuity and expertise of the Contractor in arriving at alternate plans, specifications or other requirements of the contract. Savings in construction costs and possibly time will be shared equally between the Contractor and the Engineer. The Contractor's costs for development, design and implementation of the VECP are not eligible for reimbursement. The VECP must not impair any of the essential functions and characteristics of the project such as service life, reliability, economy of operation, ease of maintenance, safety and necessary standardized features. Acceptance of a VECP is at the discretion of Franklin County.

Franklin County will not approve VECPs with any of the following characteristics:

- A. Consist only of non-performing items of work contained in the plans.
- B. Include plan errors identified by the Contractor as part of the cost reduction.
- C. The VECP designer/consultant for the Contractor is also the designer of record for ODOT (Franklin County).
- D. Changes to any special architectural or aesthetic treatments.
- E. Requires concrete beams to be installed with less than 17' vertical clearance over a highway.
- F. Changes the type or buildup of permanent pavement.
- G. Compromises controlling design criteria or would require a design exception as discussed in Volume I, Section 100, of the Location and Design Manual.
- H. Proposes a time savings for any project which has an Incentive / Disincentive clause, which was awarded based on A+B Bidding or Lane Rental.
- I. Includes cost savings based on revisions of utility relocations or other similar items to be done by other non-contract parties.
- J. Causes additional work, increases the cost, or causes modifications to adjacent projects.

VECP processing shall adhere to the latest version of ODOT supplement 1113.

Engineering and drawing development and implementation costs for the VECP are not recoverable.

The Contractor shall have no claim against Franklin County for any costs or delays due to the review or rejection of the VECP.

If Franklin County is already considering revisions to the contract which are subsequently proposed as a VECP, Franklin County may reject the Contractor's initial VECP or portions thereof and may proceed with such revisions without any obligations to the Contractor.

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. Franklin County may sample and test materials or require certifications. Unless specified, Franklin County 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 Franklin County will take test samples according to Franklin County 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. Franklin County 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 Franklin County 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.

Franklin County 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, Franklin County 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 in a manner that does not reduce sight distance as defined by the current version of ODOT's Location and Design Manual. 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 Franklin County. The Contractor and property owner will hold Franklin County 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. Under no circumstances are temporary easements to be used for storage of material unless noted otherwise.

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 Engineer. The Engineer will determine if unacceptable materials may remain conforming to ODOT's Supplement 1102. The Engineer 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 Engineer made under the provisions of this subsection, the Engineer 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 Franklin County-Furnished Material. The Contractor shall furnish all materials required to complete the Work, except when otherwise provided in the Proposal.

When specified in the Contract, Franklin County will furnish materials to the Contractor at the points specified in the Contract Documents.

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

Franklin County will hold the Contractor responsible for all material upon the contractor taking possession of the material as stated in the contract documents. Franklin County 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 and Iron Products Made in the United States. Furnish steel and iron products that are made in the United States according to the applicable provisions of Federal regulations stated in 23 CFR 635.410 and State of Ohio laws, and 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. Federal Requirements. All steel or iron products incorporated permanently into the Work must be made of steel or iron produced in the United States and all subsequent manufacturing must be performed in the United States. Manufacturing is any process that modifies the chemical content; physical shape or size; or final finish of a product. Manufacturing begins with the initial melting and mixing, and continues through the bending and coating stages. If a domestic product is taken out of the United States for any process, it becomes a foreign source material.
- **B.** 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.

C. Applications.

- 1. When the Work is Federally funded both the Federal and State requirements apply. This includes all portions of the Work, including portions that are not Federally funded.
- 2. When the Work has no Federal funds, only the State requirements apply.
- **D.** Exceptions. The Director may grant specific written permission to use foreign steel or iron products in bridge construction and foreign iron products in any type of construction. The Director may grant such exceptions under either of the following conditions:
 - 1. The cost of products to be used does not exceed 0.1 percent of the total Contract cost, or \$2,500, whichever is greater. The cost is the value of the product as delivered to the project.
 - 2. The specified products are not produced in the United States in sufficient quantity or otherwise are not reasonably available to meet the requirements of the Contract Documents. The Director may require the Contractor to obtain letters from three different suppliers documenting the unavailability of a product from a domestic source, if the shortage is not previously established.
- **E. Proof of Domestic Origin.** Furnish documentation to the Engineer showing the domestic origin of all steel and iron 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 Department (Franklin County) 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.

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 and its representatives and Franklin County 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, Franklin County, 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 and Franklin County 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. Franklin County 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 and safe condition for the use of employees and Franklin County 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.

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 Franklin County.

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 ODOT CMS 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. The Contractor shall defend, indemnify and hold harmless Franklin County as provided in 107.22 relating to any damage or injury to property.

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 the Contractor fails to remedy any such damage or injury to property within 14 days after damage or injury occurs, the Engineer may immediately proceed to restore the property, and deduct the entire cost of this restoration from monies due or to become due the Contractor on the Contract.

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 as required by ORC 5519.05. 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.I35: 4(f).
 - b. Lands meeting the criteria of 16 U.S.C. 4601-4, 36 CFR59.1: 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 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 Department (Franklin County) 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 Franklin County-Owned Property.

A. Disposal of Waste Material and Construction Debris and Excavation of Borrow on the Project Right-of-Way or on Other Franklin County-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 Franklin County-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 Franklin County-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 Franklin County-owned property, then do not Bid assuming that Franklin County will make such locations available.

If the Contractor's request to use locations within the Project Right-of-Way or on other Franklin County-owned property is approved by the Engineer, then Franklin County 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 Franklin County-Owned Property. The Contractor's use of portable plants within the Project Right-of-Way or on other Franklin County-owned property is limited as follows:
 - 1. If the Contract Documents identify locations within the Project Right-of-Way or on other Franklin County-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 Franklin County-owned property to place a portable plant, then do not bid assuming that Franklin County will make such locations available.

However, Franklin County will consider a Value Engineering Change Proposal (VECP) for the placement of a portable plant within the Project Right-of-Way or on other Franklin County-owned property and, if accepted, may allow the use of a particular site on its property subject to the requirements of 107.11.C.

- C. Placement of a Portable Plant within the Project Right-of-Way or on Other Franklin County-Owned Property. To place a portable plant within the Project Right-of-Way or on other Franklin County-owned property, comply with the following requirements:
 - 1. Local noise ordinances.
 - 2. Obtain any necessary EPA permits for the operation of the plant. Provide Franklin County 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, do not reduce sight distance as defined by the current version of ODOT's Location and Design Manual, and are not prohibited by the Contract Documents. Do not bid in anticipation of using any properties within the Project Right-of-Way or Franklin County-owned property outside the Project Right-of-Way for equipment storage or staging. Under no circumstances are temporary easements to be used for storage and staging of equipment unless noted otherwise.

- **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 (Franklin County, the Franklin County Commissioners), 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 Director (Franklin County Commissioners), furnish to the Department (Franklin County) a certificate or certificates of insurance in the form satisfactory to the Department (Franklin County) 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 Department (Franklin County) by the insurer. Mail all certificates and notices to: Administrator, Office of Contracts, Ohio Department of Transportation, 1980 West Broad Street, Columbus, Ohio 43223 (Deputy Engineer – Construction Department, Franklin County Engineer, 970 Dublin Road, Columbus, Ohio 43215). Upon request, the Contractor shall furnish the Department (Franklin County) 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 Department (the Franklin County Commissioners) 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 (Franklin County).

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 Department (Franklin County) will require the General Aggregate Limit on a per project basis.

Ensure that the Commercial General Liability Insurance policy names the State of Ohio, Department of Transportation (Franklin County, the Franklin County Commissioners), 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 Department (Franklin County) 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 Department (Franklin County). 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 Department (Franklin County) 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 Department (Franklin County) 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 Department (Franklin County) 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 Department (Franklin County). The Department (Franklin County) 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 Department (Franklin County) 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. When a motorist reports damage to its vehicle either verbally or in writing to the Contractor, the Contractor shall immediately make and file a written report to Franklin County's Engineer. In the event that Franklin County directly receives the motorist's claim, Franklin County shall within 3 days send the claim report to the Contractor. In the event the Contractor has not agreed to resolve the motorist claim, Franklin County's construction office, as a co-insured party, may then contact the Contractor's insurance company and request that the insurance company investigate and resolve the claim. If the Contractor or their insurance company does not resolve the claim in a timely manner, Franklin County may advise the motorist of the option of pursuing the claim through litigation.

In the event of a lawsuit filed against Franklin County in any court by the motorist, Franklin County, as co-insured party, may request the Contractor's insurance company to defend this lawsuit and hold Franklin County harmless according to ODOT CMS 107.12.

If the lawsuit claim amount is \$2,500 or less and a court determines that the Contractor is responsible for the claimed damages, then Franklin County may, after notifying the Contractor, determine that it would be in the best interest of Franklin County to settle the claim. Any settlement amount including court costs may be assessed to the Contractor and deducted from the project. The Engineer will notify the Contractor prior to executing the deduction.

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. Franklin County 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 Franklin County 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, from vandalism, from vehicular accidents 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 any such 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, Franklin County may compensate the Contractor for repair of the damage as authorized by Change Order. To receive compensation for the damage the Contractor must 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 registered mail 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 registered mail.
- C. If no response is received from the motorist or insurance company within 30 days, 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. Franklin County 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 repairing damaged Work.

If there is no accident report on file and no means of identifying the guilty motorist, the Contractor will 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, temporary pavements, signs, or other facilities, and providing required maintenance of traffic and public and private access to property at the Contractor's 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. Franklin County 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. Franklin County is responsible for securing all necessary Right-of-Way in advance of construction. The Bid Documents will indicate any exceptions. Franklin County 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 Franklin County actions do not waive Franklin County'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 Franklin County Commissioners, or Franklin County representatives.
 - C. Any order by the Franklin County Commissioners or Franklin County 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 Franklin County or its duly authorized representatives.

Franklin County 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 Department (Franklin County) 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 Department (Franklin County) obtained for the Project.
- B. The Contractor obtains a 404 Permit from the U.S. Army Corps of Engineers if the Department (Franklin County) has not obtained such a permit. Obtain the 404 Permit prior to beginning construction of the causeway. The Department (Franklin County) 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), and the Franklin County Commissioners NPDES Storm Water Permit. The Department (Franklin County) 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 Department (Franklin County) 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 Department (Franklin County) 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.

Accomplish control of ground water and water in excavations in a manner that prevents the degradation of the water quality of any surface water. Install wells and well points with suitable screens and filters where necessary to prevent the continuous pumping of fines. Pump sediment-laden water in a manner to prevent degradation of streams, lakes, ponds, or other areas of water impoundment. Such prevention may involve but is not limited to the means and methods described in ODOT CMS Item 207. Use the current version of the Sediment and Erosion Control Handbook to plan this work. Use the methods necessary to prevent adverse effects to surface waters as provided in OAC-3745-1-04. The cost of constructing and maintaining these measures is incidental to the Contract.

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 (http://epa.ohio.gov/dapc/engineer/eguides.aspx).

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 the Department (Franklin County) 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 bonded subcontractors. For unbonded subcontractors, promptly release any retainage held, as set forth in any subcontractor or supplier agreement, within 10 days of department's (Franklin County's) acceptance of the work involving the subcontractor or supplier from whom retainage has been held. For the sole purpose of establishing a time frame for the release of the subcontractor or supplier retainage, acceptance of subcontractor or supplier work will occur when the subcontractor or supplier has complied with the requirements of 109.12.A and B. 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 the Department (Franklin County) 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 Department (Franklin County) 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 (Franklin County).

107.22 Unmanned Aircraft Systems. If the project requires or anticipates the use of Unmanned Aircraft Systems within ODOT Right of Way, the Contractor will follow proper risk assessment and federal regulations in accordance with Supplement 1132.

107.23 Indemnification. To the fullest extent permitted by law, the Contractor shall defend, indemnify and hold harmless Franklin County and its officers, employees, representatives, and agents (hereinafter collectively referred to as "Franklin County") against any and all claims, actions, damages, costs, and legal liability of every name and nature that Franklin County may sustain, incur or be required to pay (including,

but not limited to, consultant and attorney's fees, disbursements, costs or other expenses) arising out of or in connection with the Work by reason of any action, inaction, omission, or breach by the Contractor, its agent(s) or person(s) employed by the Contractor, or any of its subcontractors or suppliers, including, but not limited to, (i) failure to comply with the terms and conditions of the Contract or pertinent subcontract(s), or (ii) any of the Contractor's liability under the Contract Documents.

Franklin County may retain any amounts due or that may become due to the Contractor as may be necessary to satisfy any claim for indemnification under the Contract. The Contractor's obligation under this Section shall not be deemed waived by the failure of Franklin County to retain in whole or any part of such monies due to the Contractor, nor shall such suit, action, damages and/or costs have to have been resolved or determined prior to release of any monies to the Contractor under the Contract, nor shall such obligation be deemed limited or discharged by the procurement of any insurance for liability for damages imposed by law upon the Contractor, its subcontractors or suppliers, or Franklin County.

In applying this indemnification provision, the Contractor shall be required to indemnify Franklin County in any action brought by an employee of the Contractor, or any employee of its subcontractors or suppliers, whenever such employee is found to have been comparatively negligent, even if Contractor and/or its subcontractors or suppliers are found not to have been negligent themselves.

The Contractor shall advise the Engineer in writing immediately upon its receipt of notice, actual or otherwise, of any (a) incident or circumstance or (b) claim or action that could give rise to a claim covered by this indemnification provision.

108 PROSECUTION AND PROGRESS

108.01 Subletting of the Contract. The Contractor shall perform Work amounting to not less than 50 percent of the Contract Price with its own organization, unless otherwise approved by Franklin County. The phrase "its own organization" includes only workers employed and paid directly, inclusive of employees who are employed by a lease agreement acceptable to Franklin County, 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. Obtain Franklin County's written consent to subcontract, sublet, sell, transfer, assign, or otherwise relinquish rights, title, or interest in the Work. Provide Franklin County 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.

Franklin County 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 Franklin County will determine the proportional value administratively on the same basis. Franklin County 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 Franklin County 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, Franklin County 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. Franklin County 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 Franklin County 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, Franklin County may refuse approval.

108.02 Project Coordination. It is the intent of Franklin County to enter into a collaborative process to develop a proactive effort and a spirit of trust, respect, and cooperation among all stakeholders in a project. This collaborative process of cooperation and communication results in efficient contract performance and completion of the Project within budget, on schedule, safely and with requisite quality in accordance with the contract. Costs associated with the Self-facilitated Project Coordination 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 Engineer. 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. Not Used.

C. Progress Meetings. Hold monthly Progress Meetings unless the frequency is modified in writing by the Engineer at any time. Progress Meetings will be held at either the project location or at the Franklin County Engineer's office. 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 and the project Superintendent is required to participate, in person, in all Progress Meetings.

- D. Not Used.
- E. Not Used.
- **F. Mitigation and Notice.** Mitigation of any issue, whether caused by the Franklin County Engineer, 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 Engineer 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. The Contractor is advised that oral notice must be followed up by a written notice as provided in 108.02.F in order for the Contractor to preserve its right to make and pursue a Claim; if the Contractor fails to do so, it shall be a waiver and release of the Claim.
 - 2. Contractor Written Early Notice. If the Engineer has not resolved the identified issue within two (2) working days after receipt of oral notification, provide written notice to the Engineer 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 Engineer 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 Engineer. The Contractor shall provide the records for the disputed work upon request by Franklin County. Tracking such information is not an acknowledgement that the Franklin County Engineer 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 Resolution and Administrative Claims Process defined as follows.

G. Dispute Resolution and Administrative Claims Process. Whenever an issue is elevated to a dispute, the parties shall exhaust the Franklin County Engineer's Dispute Resolution and Administrative Claim process set forth below as a condition precedent to filing an action in any court of competent jurisdiction. The following procedures do not otherwise compromise the Contractor's right to seek relief in any court of competent jurisdiction.

All parties to the dispute must adhere to the Dispute Resolution and Administrative Claim process. Do not contact Franklin County Engineer personnel who are to be involved in a Step 2 or Step 3 review until a decision has been issued by the previous tier. Franklin County Engineer personnel involved in Step 2 or Step 3 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 will 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 Franklin County Engineer but not supported by the Contractor will not be reviewed by the Franklin County Engineer. Disputes and claims of subcontractors and suppliers against the Contractor will not be reviewed by the Franklin County Engineer.

Continue with all Work during the Dispute Resolution and Administrative Claims process, including that which is in dispute. The Franklin County Engineer will continue to pay for Work not in dispute.

The Franklin County Engineer 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 above. This provision does not apply to adjustments provided in Table 104.02-2.

- 1. Step 1 (On-Site Determination). The Engineer will meet with the Contractor's superintendent within two (2) working days of receipt of the Contractor Written Early Notice set forth above. They will jointly review all pertinent information and contract provisions and negotiate in an effort to reach a resolution. The Engineer will issue a written Step 1 decision within fourteen (14) calendar days of the meeting and receipt of substantiating documentation. If the dispute is not resolved either abandon or escalate the dispute to Step 2.
- 2. Step 2 (Engineers Office Dispute Resolution Committee). The Engineers Dispute Resolution Committee (EDRC) will be responsible for hearing and deciding disputes at the Step 2 level. The EDRC will consist of two Chief Deputy Engineers and the Design Engineer or designees (other than the project personnel involved in the dispute).

Within seven (7) calendar days of receipt of the Step 1 decision, either abandon the dispute or submit a written request for a Step 2 meeting to the Construction Engineer. The Construction Engineer will assign the dispute a dispute number. Within fourteen (14) calendar days of submitting the request for a Step 2 meeting, submit three (3) complete copies of the Dispute Documentation to the Construction Engineer as follows:

- a) Identify the Dispute on a cover page by county, project number, Contractor name, subcontractor or supplier if involved in the dispute, and the dispute number.
- b) Clearly identify each item for which additional compensation and/or time is requested.
- c) Provide a detailed narrative of the disputed work or project circumstance at issue. Include the dates of the disputed work and the date of early notice.
- d) Reference the applicable provisions of the plans, specifications, proposal, or other contract documents in dispute. Include copies of the cited provisions in the Dispute Documentation.
- e) Include the dollar amount of additional compensation and length of contract time extension requested.
- f) Include supporting documents for the requested compensation stated above.
- g) Provide a detailed schedule analysis for any dispute involving additional contract time, actual or constructive acceleration, or delay damages. At a minimum, this schedule analysis must include the Schedule Update immediately preceding the occurrence of the circumstance alleged to have caused delay and must comply with accepted industry practices. Failure to submit the required schedule analysis will result in the denial of that portion of the Contractor's request.
- h) Include copies of relevant correspondence and other pertinent documents.

Within fourteen (14) calendar days of receipt of the Contractor's Dispute Documentation, the Engineer will provide the Contractor with all documentation it intends to rely on at the EDRC meeting to rebut the Contractor's dispute.

After allowing at least fourteen (14) calendar days for the Contractor to review the Engineer's Dispute Documentation, the EDRC will conduct the Step 2 meeting with Contractor personnel who are authorized to resolve the dispute. The EDRC will issue a written Step 2 decision to the Contractor and Dispute Resolution Coordinator within fourteen (14) calendar days of the meeting. If the dispute is not resolved, either abandon or escalate the dispute to Step 3.

3. Step 3 Hired Neutral Third Party (Mediation). Submit a written Notice of Intent to File a Claim to the Construction Engineer who will serve as the Dispute Resolution Coordinator within fourteen (14) calendar days of receipt of the Step 2 decision.

The dispute becomes a claim when the Dispute Resolution Coordinator receives the Notice of Intent to File a Claim.

Submit six (6) complete copies of the Claim Documentation to the Dispute Resolution Coordinator within thirty (30) calendar days of receipt of the Notice of Intent to File a Claim. This timeframe may be extended with approval of the Dispute Resolution Coordinator.

In addition to the documentation submitted at Step 2:

- (a) Enhance the narrative to include sufficient description and information to enable understanding by a third party who has no knowledge of the dispute or familiarity with the project.
- (b) Certify the claim in writing and under oath using the following certification:
 - "I, (Name and Title of an Officer of the Contractor) certify that this claim is made in good faith, that all supporting data is accurate and complete to the best of my knowledge and belief, and that the claim amount accurately reflects the contract amendment for which (Contractor Company name) believes the Franklin County Engineer is liable."

Sign and date this claim certification and have the signature notarized pursuant to the laws of the State of Ohio. The date the Dispute Resolution Coordinator receives the certified claim documentation is the date of the Franklin County Engineer's Receipt of the Certified Claim for the purpose of the calculation of interest as defined in 108.02.G.4.

- (a) An overview of the project.
- (b) A narrative of the disputed work or project circumstance at issue with sufficient description and information to enable understanding by a third party who has no knowledge of the dispute or familiarity with the project.
- (c) The dates of the disputed work and the date of early notice.
- (d) References to the applicable provisions of the plans, specifications, proposal, or other contract documents. Copies of the cited provisions shall be included in the claim document.
- (e) Response to each argument set forth by the Contractor.
- (f) Any counterclaims, accompanied by supporting documentation, Franklin County wishes to assert.
- (g) The status of the negotiations of the Claim that have occurred to-date, including the amount of any offers and counteroffers made by the parties.
- (h) Copies of relevant correspondence and other pertinent documents.

The Franklin County Engineer will then choose Mediation in the manner in which those methods are practiced by the Franklin County Engineer and allowed by law. The Dispute Resolution Coordinator will coordinate the agreement of the parties to the Mediation, and the selection of a Mediator. The fees of the Mediator will be shared equally between the Franklin County Engineer and the Contractor. The Dispute Resolution Coordinator will obtain a written agreement, signed by both parties, that establishes the Mediation process. The Mediator will have complete control of the claim upon execution of the Mediation agreement. The Contractor may have legal counsel present during the hearing to observe or for private consultation. Similarly, Franklin County's position will be presented by one or more representatives who are thoroughly knowledgeable of the claim.

The decision of the Mediator is the final step of the Franklin County Engineer's Dispute Resolution Process. The decision may be appealed by the Franklin County Engineer who is not bound by any offers of settlement, or findings of entitlement made during Steps 1, 2 and 3 of the Dispute Resolution Process

- 4. *Interest on Claims*. The Department (Franklin County) will pay interest in accordance with ORC Section 5703.47 on any amount ultimately found due on a claim which is not paid within 30 days of the Dispute Resolution Coordinator's Receipt of the Certified Claim. However, interest will not be paid on the amount of any agreed settlement unless specifically itemized and included in the total settlement prior to agreement.
- **108.03 Prosecution and Progress.** Start the Work according to 108.02. Unless specified otherwise in the Contract Documents or the Engineer provides written approval, start Work within 14 days of the effective date of the Notice to Proceed. 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.

The Construction Schedule shall reflect the Contractor's detailed construction plan to be implemented during all phases of the construction process, Notice to Proceed to final completion. The approved Construction Schedule also serves as a means for the Contractor to schedule, coordinate and evaluate the work of its subcontractors and suppliers. The Contractor is required to include and involve all subcontractors and suppliers in the development and updating of the Construction Schedule. The Contractor shall produce schedule updates and reports to analyze project progress and current status and shall be prepared to respond to reasonable requests from the Engineer for additional information.

Unless a specific Pay Item is included in the Proposal, the cost of preparation of the Construction Schedule, progress updates, and other schedule related information requested by the Engineer is to be included within the Contractor's bid prices for the various pay items.

Failure to comply with Project scheduling requirements may be grounds for termination of the Contract. In addition, Franklin County may withhold pay estimates until all scheduling requirements, including providing schedule updates, are met and accepted by the Engineer.

When a pay item for a CPM schedule is included in the Bid Documents, use Type B – Critical Path Method (CPM) Schedule. Otherwise, all projects shall be scheduled using the Type A – Basic Construction Schedule.

A. Basic Construction Schedule (Type A).

1. Initial/Baseline Construction Schedule Submission. The Contractor shall submit to the Engineer at or before the Preconstruction Conference a baseline bar chart construction schedule and written narrative describing the sequence of construction, and critical events including delivery of materials, services, or equipment.

The Engineer will review the schedule and within seven calendar days of receipt, will either accept the schedule or provide the Contractor with written comments. Acceptance of the schedule does not revise the Contract Documents. Provide clarification or any needed additional information within seven calendar days of a written request by the Engineer. Franklin County will withhold pay estimates until the Engineer accepts the schedule.

The Contractor shall 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 major activities in sufficient detail so that the Engineer can readily identify the Work and measure the progress. The bar chart schedule must reflect the scope of work, required phasing, maintenance of traffic, interim completion dates, final Completion Date, and other project milestones established in the Contract Documents. Include activities for major submittals, as provided in 105.02, major material procurement and fabrication, and the delivery of key materials, plant, and equipment, and other similar activities. The schedule must be detailed on letter or 11 x 17 sized paper.

- **2. Completion Date.** The baseline construction schedule shall not indicate a completion date that is earlier than the Contract Completion Date.
- **3. Monthly Progress Updates.** Prior to the 5th of every month, submit an updated schedule that includes the following:
 - a. Date that all progress is being recorded through;
 - b. Actual start date of progressed activities;
 - c. Actual finish date of completed activities;
 - d. Actual percent complete for each progressed activity.

4. Changed Conditions Reporting.

- **a.** Schedule Revisions. If the Contractor's operations are materially affected by changes in the Work plan or in the amount of the Work or if the Contractor has failed to comply with the approved Construction Schedule, the Contractor shall submit a revised construction schedule. The revised schedule shall show how the Contractor proposes to prosecute the balance of the Work. All schedule revisions are subject to Engineer's approval.
- b. Recovery Schedules. If the Monthly Update Schedule or Revised Monthly Update Schedule projects a finish date for the Project later than the current Completion Date, submit a recovery schedule showing a plan to finish by the current Completion Date as requested by the Engineer, at no additional cost to Franklin County. Such measures to regain schedule may include, but are not limited to, increasing the size of the workforce; increasing the number of working hours per shift, shifts per work day, work days per week, the amount of equipment or combination thereof; or rescheduling of work activities to achieve maximum concurrence of work efforts, all at no additional cost to Franklin County. The Contractor shall submit the recovery schedule within five calendar days after the request is made by the Engineer.

Franklin County will withhold Estimates until the Engineer approves the recovery schedule. The approved Recovery Schedule will supersede the then-current Construction Schedule and be used as the basis for progress evaluations. Acceptance by Franklin County of the recovery schedule and/or recovery plan shall not serve as a time extension approval.

c. Delay and Analysis of the Construction Schedule. The Contractor shall not be entitled to and hereby waives any extension of time resulting from any event, circumstance, condition or cause unless a Claim for an extension of time is made in accordance with the requirements of 104.02. In the event the Contractor requests an extension of the Contract Time, it shall furnish such justification and supporting evidence as the Engineer may deem necessary for a determination of whether or not the Contractor is entitled to an extension of time under the provisions of the Contract.

The written claim seeking an extension of time must include the following information:

- i. Nature of the delay.
- ii. Date (or anticipated date) of commencement of delay.
- iii. Identification of person(s) or organization(s) or events affected by delay.
- vi. Activities on the Construction Schedule affected by the delay, or new activities created by the delay and their relationship with existing activities.
- v. Identification of person(s) or organization(s) or event(s) the Contractor believes responsible for the delay.
- vi. Anticipated extent of the delay.
- vii. Recommended action to avoid or minimize the delay.

viii. Identification of the pertinent contract provisions and supporting documents or project records.

Any request for an extension of the Contract Completion Date must be processed per 108.06. If there is a time extension request pending, the Contractor shall not include the time extension in a monthly progress update until the request is approved by Franklin County and shall not use the time extension request as a basis for refusing to prepare and submit a recovery schedule.

B. Critical Path Method (CPM) Schedule (Type B).

The Contractor shall submit to the Engineer a baseline construction schedule as described in 108.03.B.1 in the form of a computer generated CPM Schedule in a format approved by the Engineer or as specified. The Contractor shall designate a Scheduler(s) who shall be responsible for preparing and maintaining the schedule and coordinating with the Engineer. The Contractor shall provide personnel or a subcontractor specializing in CPM scheduling with experience in scheduling three projects of a similar complexity to the Project. If requested by the Engineer, provide at the preconstruction meeting the experience and qualifications of the scheduler(s).

The CPM Construction Schedule shall clearly show the sequence of work and interdependence of activities by utilizing predecessor and successor relationships.

1. Initial/Baseline Construction Schedule Submission. The Contractor shall submit a baseline schedule within fifteen calendar days from the Notice to Proceed. The baseline schedule will be in CPM format and as described herein. The baseline construction schedule shall provide a complete and detailed sequence of operations of the work within the time limits specified in the Contract. The baseline construction schedule shall show the order in which the Contractor proposes to carry out the work, the dates on which the various portions of the work shall commence, and the dates on which the Contractor contemplates completing the Work.

In addition to providing the baseline construction schedule, the Contractor shall provide an initial work plan narrative containing the following: the planned number of crews: crew type, approximate crew size, and equipment.

The Engineer will review the baseline schedule and will provide a disposition of the schedule within fourteen calendar days of receipt. The Engineer's review of the baseline schedule will be for compliance with the Specifications and Contract requirements. Approval by the Engineer shall not relieve the Contractor of any of its responsibilities for the accuracy or feasibility of the schedule.

For baseline schedules that are not accepted, the Engineer shall indicate in writing all portions of the schedule that are not in compliance with the Contract requirements. The Contractor shall make the necessary revisions and resubmit the revised schedule within seven Calendar Days. The Engineer will reject baseline schedules that are not in compliance with Contract requirements.

The Engineer shall conduct a mandatory meeting with the Contractor and the Contractor's Schedule Representative within seven calendar days of the Engineer's written notice for any baseline schedule that is not accepted. The purpose of this meeting is to resolve issues with the baseline schedule. At this meeting the Contractor shall provide clarification and additional information necessary for the Engineer to accept the baseline schedule.

Franklin County shall withhold pay estimates until the baseline schedule is "accepted".

Acceptance of the baseline schedule does not revise the Contract Documents.

a. Schedule Requirements. Generate the baseline schedule using Oracle Corporation's Primavera P6 Project Management or the latest version of Oracle Primavera Software.

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 Contract Completion Date. Show the order and interdependence of activities and the sequence for accomplishing the Work. Describe

all activities in sufficient detail so that the Engineer can readily identify the elements of the Work and measure the progress of each activity. The baseline 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 major submittals, working drawings, shop drawings, submittal review time for Franklin County, material procurement and fabrication, and the delivery of materials, plant, and equipment, and other similar activities.

The Contractor shall be responsible for assuring all work, including all subcontractor and supplier work, is included in the schedule. The Contractor shall be responsible for assuring that all work sequences are logical and that the schedule indicates a coordinated plan.

Failure by the Contractor to include any element of Work required for performance of the Contract shall not excuse the Contractor from completing all Work by the Completion Date. Omissions and errors shall be corrected as described in 108.03.B.4.a and will not affect Contract Time.

b. CPM Schedule Format.

- i. Administrative Identifier Information: The following information should be included in the title bar on all schedule sheets:
 - a. Project Number
 - b. Project Name
 - c. Project Location
 - d. Data Date
 - e. Completion Date
 - f. Contractor's Name
- ii. Project Activities shall represent an uninterrupted action, task, component, process or operation and include the following:
- a. Activity Identification (ID). Assign each activity a unique identification number. Activity ID length shall not exceed 10 characters. Once accepted, the Activity ID shall be used for the duration of the project.
- b. Activity Description. Each activity shall have a narrative description consisting of a verb or work function (e.g.; form, pour, excavate) and an object (e.g.; slab, footing, underdrain).
- c. Activity Original Duration. "Activity Original Duration" is defined as the amount of time required to complete the activity based on a set of planned resources necessary to complete the activity. Assign a planned duration in working days for each activity. Do not exceed a duration of 20 working days for any construction 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 Pay Items into component activities in order to meet the duration requirements of this paragraph.
 - d. Activity Relationships:
- 1. All activities, except the first activity, shall have a predecessor(s). All activities, except the final activity, shall have a successor(s).
 - 2. Use only finish-to-start relationships with no leads or lags to link activities.
- a. No activity shall involve more than one trade or specialty subcontractor. There is to be at least one activity for every subcontractor performing work on the Project.
- b. Provide activities for procurement of major equipment and any other long lead time items.

- c. Any activity durations that are based on other than a single shift operation are to be clearly and individually identified with an appropriate explanation of how those multi-shift activities relate to the other schedule activities. Shift work needs to be consistently addressed either in an activity id and/or in an activity code. The schedule is considered to be based on an eight hour days, five day work-weeks unless otherwise noted.
- iii. Project Milestones. Milestones shown in the Contractor Documents shall be included in the Baseline Schedule. Milestone dates may be modified only by Change Order or Contract Modification. In addition to any milestones identified in the Contract Documents, include the following milestones in the schedule:
- a. Start Project: The Contractor shall include as the first milestone in the schedule, a milestone named "Start Project". The date used for this milestone is the date provided in the Notice to Proceed.
- b. End Project Milestone: The Contractor shall include as the last activity in the project schedule, a milestone named "End Project". The date used for this milestone is considered the project completion date.
- c. Start Phase Milestone: The Contractor shall include as the first activity for a project phase, an activity named "Start Phase X", where "X" identifies the phase of work.
- d. End Phase Milestone: The Contractor shall include as the last activity in a project phase, an activity named "End Phase X" where "X" identifies the phase of work. The Contractor may include additional milestones, but at a minimum contractual milestones.
- iv. Level of Effort Activities: Use level of effort activities to show the duration of specified contract work periods, phases and road closures. The level of effort activity type is allowed to have a start-to-start relationship with the first activity in a series of activities and a finish-to-finish relationship with the last activity in a series of activities.
- v. Constraints: The Construction Schedule is to have no constrained activities except the Start Project Milestone and the End Project Milestone dates, unless otherwise permitted by the Engineer. Interim dates are to be controlled by logic and activity duration only. Mandatory start and finish constraints are not to be used in the schedule.
- vi. Seasonal Weather Conditions: Anticipated weather days outlined in the Table 108.06-1 identify the number of days each month the Contractor must plan for weather impacts. Seasonal weather conditions shall be considered and included in the planning and scheduling of all Work in accordance with Table 108.07-1.

Anticipated weather days specified in Table 108.06-1 shall be incorporated in the schedule using work calendars. In the baseline schedule, random non-sequential weekdays shall be considered non-workdays to match the anticipated weather days total for that month according to 108.06. Anticipated weather days must be the same dates on all calendars affected by weather. Subsequent schedule updates shall remove the random weather days and replace them with the actual agreed weather days at no additional cost to Franklin County. The winter shutdown periods shall be shown using non-work calendars. The activity can be assigned to a calendar indicating time periods of non-work. These custom calendars can be created to show days, weeks, or months of non-work. Seasonal weather conditions shall be considered and included in the planning and scheduling of all work.

- vii. Linking Projects: Independent projects shall not be linked.
- vii. Activity Codes: The Contractor shall, at a minimum, include codes for Area, Phase, and Responsibility for each activity. At the Engineer's approval, the Contractor may use a Work Breakdown Structure (WBS) to organize the construction schedule.

- ix. Schedule Options: The schedule may only be calculated using actual dates. Schedule durations are to be contiguous. Total float shall be calculated as finish float. All activities must have a predecessor/successor relationship except for the first activity (Project Start) and the last activity (Project Finish).
- x. Calendars: All calendars are to be based on a five-day, work week and activity durations are to be in working days unless otherwise approved by the Engineer. Calendars are to include any recognized holidays (when observed) that will shorten a five working-day week. The construction schedule shall include multiple calendars appropriate to the activity (i.e. 7 day calendar for cure time, burn—in time, settlement period, etc.). Calendars should reflect weather restrictions for certain work (i.e. asphalt, painting, etc.).
- **b.** Completion Date. The baseline construction schedule shall not indicate a completion date that is earlier than the Contract Completion Date.
- **c. Submission Requirements.** Submit all schedules within the time frames specified. Submit the schedule and information in electronic file format.

Submit the following information along with the electronic baseline schedule:

- i. A baseline schedule in a bar chart format, including the Administrative Identifier Information on the first page of the schedule. For each activity on the chart, indicate the Activity ID, Activity Description, Original Duration, Remaining Duration, Total Float, Early Start Date, Early Finish Date, and Calendar ID. Use arrows to show the relationships among activities.
- ii. A baseline schedule in a bar chart format, on paper. Identify the critical path of the project on the bar chart in red. The critical path is defined as; the longest path of activities in the project that determines the project completion date. The activities that make-up the critical path of activities are the "Critical Activities."
- iii. A Six Week Look Ahead Schedule in bar chart format. This schedule will have all the requirements of the baseline schedule in bar chart format except that it shall be limited to those activities that have an early start or early finish within a six week period of the data date.
- iv. A Scheduling Statistics Report. Submit a report of baseline schedule statistics, including number of activities, number of activities on the longest path, number of started activities, number of completed activities, number of relationships, percent complete, and number and type of constraints.
- v. A Logic Diagram (If requested by the Engineer). Submit a diagram in PERT chart format showing the logic of the baseline schedule.
- vi. An Activity ID Sort. Submit a listing of all activities included in the baseline schedule sorted by ascending Activity Identification Number.
- vii. A Total Float Sort. Submit a listing of all activities included in the baseline schedule sorted by increasing total float and by early start date.
- viii. A Detailed Predecessor/Successor Sort. Submit a listing of all activities included in the baseline schedule indicating the activities that immediately precede and immediately succeed that activity in the schedule logic.
- **2. Float.** Float is not time for the exclusive use or benefit of either Franklin County or the Contractor but is to be a shared commodity to be reasonably used by either party to mitigate delay to the Contract Completion Date.

Pursuant to the float sharing requirements of this Section, the use of float suppression techniques such as: preferential or logic sequencing (arranging critical path through activities more susceptible to Franklin County caused delay); special lead/lag restraints; extended activity durations; as late as possible constraints;

imposed constraint dates other than those required by the Contract Documents; and the like are prohibited and shall be cause for rejection of the project schedule or its updates.

- a. Definitions of Float: "Float" is defined as the amount of time between the early start date and the late start date (or the early finish date and late finish date) of any activity in the Construction Schedule. "Total Float" is defined as the amount of time any given activity or path of activities may be delayed before it will affect the Contract Completion Date. Project Float is the length of time between the End Project Milestone and the Contract Completion Date.
- b. Ownership of Float: Float available in the schedule, at any time, shall not be considered for the exclusive use of either Franklin County or the Contractor. During the course of contract execution, any float generated due to the efficiencies of either party is not for the sole use of the party generating the float; rather it is a shared commodity to be reasonably used by either party. Efficiencies gained as a result of favorable weather within a calendar month, where the number of days of normally anticipated weather is less than expected, will also contribute to the Project Float. A monthly progress update schedule showing work completing in less time than the contract time, and accepted by Franklin County, will be considered to have Project Float. Project Float will be a resource available to both Franklin County and the Contractor. No time extensions will be granted nor delay damages paid unless a delay occurs which impacts the Project's critical path, consumes all available float and extends the work beyond the Contract Completion Date.
- c. Negative Float: Negative float will not be a basis for requesting time extensions. Any extension of time will be addressed in accordance with 108.03.B.4.c. Scheduled completion date(s) that extend beyond the Contract (or phase) Completion Date(s) may be used in computations for assessment of liquidated damages. The use of this computation shall not be construed as an order by Franklin County to accelerate the Work.
- **3. Monthly Progress Updates.** Prior to the 5th of every month, submit an updated schedule with a data date of the last day of the previous month, unless a different date is agreed to by the Engineer. A monthly update schedule is a schedule in which only progress is updated from the prior data date to the current data date. Work added and/or excusable delays encountered since the prior data date must be represented as a schedule revision as described in 108.03.B.4.a.
 - a. Update Requirements.
- i. Submit the monthly updated bar chart on paper and a copy of the updated schedule in electronic file format. The Engineer shall accept or not accept the schedule update within seven calendar days of receipt of the updated CPM schedule.
- ii. Correct out-of-sequence progress listings generated by the Scheduling Statistics Report as directed by the Engineer.
- iii. Maintain schedules to record actual start and finish dates of completed activities on a weekly basis until otherwise notified by the Engineer.
- iv. Identify the actual start date and remaining duration for all activities in progress. Indicate progress of each activity to date of revision using remaining duration, not percent complete.
- v. Show accumulated percentage of completion of each item for updates, and total percentage of Work completed, as of the schedule's data date.
 - b. Submit the following with each updated schedule:
 - i. CPM Schedule in Bar Chart Format Two large printed copies, minimum 22" X 34"
 - ii. Two Week Look Ahead CPM Schedule in Bar Chart Format
 - iii. Logic Diagram (If requested by the Engineer)
 - iv. Activity ID Sort (If requested by the Engineer)

- v. Total Float Sort (If requested by the Engineer)
- vi. Detailed Predecessor/Successor Sort (If requested by the Engineer)
- vii. Schedule Statistics Report
- viii. Electronic files of the Primavera Project files in .xer

The Contractor may submit a statement that there were no changes in the schedule logic, activity durations, or calendars since the previous update in lieu of submission of items 3, 4, 5 and 6.

- c. Provide two printed copies of a Narrative Status Report that includes the following:
 - i. A description of the general status of the Work.
- ii. Any outstanding issues that affect the construction schedule, i.e., any current and anticipated delaying factors, and describe their impact on the construction schedule, the critical path and the Project Completion Date.
 - iii. Any activities added to the construction schedule with an explanation for their addition.
- iv. Any activities deleted from the construction schedule with an explanation for their deletion.
 - v. Any changes in the relationships of activities with an explanation.
 - vi. Any changes to worker hours or budgeted costs with an explanation.
 - vii. An explanation of any recovery measures being taken.
 - d. Estimates will not be processed unless all schedule requirements are met.
- e. Early Completion Monthly Update Schedule. In the event that an accepted monthly progress update indicates a completion date that is earlier than the Contract Completion Date, the Contractor shall not be entitled to any extension in Contract time or recovery of any cost for delay, disruption, interference, hindrance, extension, or acceleration costs incurred, however caused, because of an extension of the early completion date until such time as the network or activities affected increases the critical path duration of the CPM Schedule beyond the Contract Completion Date.
- f. Late Completion Monthly Update Schedule. A Late Completion Monthly Update Schedule is defined as a monthly update schedule submitted by the Contractor in which the Finish Date exceeds the Contract Completion Date.
 - g. The project schedule shall be reviewed at each progress meeting.
- h. Any corrections to the schedule shall be made and submitted to the Engineer within seven calendar days.

4. CPM Changed Conditions.

a. Schedule Revisions. If the Contractor's operations are materially affected by changes in the Work plan or in the amount of the Work or if the Contractor has failed to comply with the approved Construction Schedule, the Contractor shall submit a revised construction schedule, which schedule shall show how the Contractor proposes to prosecute the balance of the Work.

Any addition of new activities or new calendars or changes to existing activities, calendars or logic constitute a revision. All revisions must be reported in narrative form on a cover sheet accompanying the monthly update schedule. The schedule revision must be accompanied by a narrative detailing the changes in logic, activities, and durations from the accepted baseline.

Any revision which modifies the critical path or impacts an interim date or project completion date must be represented on a companion schedule submitted with the monthly update schedule or as a fragnet within the monthly update schedule. A fragnet is defined as the sequence of new activities that are

proposed to be added to the existing schedule. The fragnet shall identify the predecessors to the new activities and demonstrate the impacts to successor activities. If submitted as a fragnet, the Contractor shall compute two Finish Dates. The first Finish Date shall be computed without consideration of any impact by the fragnet. The second Finish Date shall be computed with consideration of any impact by the fragnet. The Contractor shall also submit a written narrative stating the reason for the proposed revisions. The Engineer shall "approve" or "reject" proposed revisions within ten days of receipt of appropriate schedules and narrative. All approved revisions will be incorporated into the Monthly Update Schedule which will become the Revised Monthly Update Schedule.

b. Recovery Schedules. If the Monthly Update Schedule or Revised Monthly Update Schedule projects a finish date for the Project more than fourteen calendar days later than the current Completion Date, submit a recovery schedule showing a plan to finish by the current Completion Date if requested by the Engineer, at no additional cost to Franklin County. The recovery schedule shall also include a written plan detailing how the Contractor proposes to recover the lost time and meet the Completion Date. Such measures may include, but are not limited to, increasing the size of the workforce; increasing the number of working hours per shift, shifts per work day, work days per week, the amount of equipment or combination thereof; or rescheduling of work activities to achieve maximum concurrence of work efforts, all at no additional cost to Franklin County. The Contractor shall submit the recovery schedule within ten days after the request is made by the Engineer.

Franklin County may withhold Estimates until the Engineer approves the recovery schedule. The Engineer will use the schedule to evaluate time extensions and associated costs requested by the Contractor. In the event the current Completion Date is in dispute, the recovery schedule must be submitted once the dispute has been resolved.

The Engineer will review the Contractors' revised plan and provide comments. The Contractor is to incorporate or resolve all such comments to the satisfaction of the Engineer. At that time, the revised Construction Schedule will supersede the then-current Construction Schedule and be used as the basis for progress evaluations. Acceptance by Franklin County of the revised construction schedule and/or recovery plan shall not serve as a time extension approval.

c. Delay and Analysis of the Construction Schedule. The Contractor shall not be entitled to and hereby waives any extension of time resulting from any event, circumstance, condition or cause unless a request for an extension of time is made in accordance with the requirements of 104.02. In the event the Contractor requests an extension of the Contract Time, it shall furnish such justification and supporting evidence as the Engineer may deem necessary for a determination of whether or not the Contractor is entitled to an extension of time under the provisions of the Contract.

Any request for an extension of the Contract Completion Date must be processed per 108.06. If there is a time extension request pending, the Contractor shall not include the time extension in a monthly progress update until the request is approved by Franklin County and shall not use the time extension request as a basis for refusing to prepare and submit a recovery schedule in accordance with this Section. Franklin County may withhold payment estimates until the progress schedule, revised progress schedule and/or recovery plan is approved by Franklin County. Should the prosecution of the Work, for any reason, be discontinued, the Contractor shall notify the Engineer at least one Work Day in advance of resuming operations.

Submit the impacted schedule with the request for time extension. Include a narrative report describing the effects of new activities and relationships to interim and contract completion dates. The written claim seeking an extension of time must include the following information:

- i. Nature of the delay.
- ii. Date (or anticipated date) of commencement of delay.
- iii. Identification of person(s) or organization(s) or events affected by delay.

- iv. Activities on the Construction Schedule affected by the delay, or new activities created by the delay and their relationship with existing activities.
 - v. Identification of person(s) or organization(s) or event(s) responsible for the delay.
 - vi. Anticipated extent of the delay.
 - vii. Recommended action to avoid or minimize the delay.
- viii. Identification of the pertinent contract provisions and copies of applicable documents and project records.
- ix. Show the impact of the delay on the Critical Path by comparing the original longest path to the current longest path that incorporates the delay.

The determination of the total number of days' extension shall be based upon the most recently approved Schedule Update as of the start of the delay claimed by Contractor and on all data relevant to the extension. Circumstances and activities leading to such claim shall be indicated or referenced in the Contractor's daily field report for the day(s) affected.

Perform the following analysis to compute the duration of the time extension. Submit two paper copies and two electronic copies of each analysis performed.

- i. Determine project progress prior to circumstance(s) necessitating the time extension. Provide an interim schedule updated to the date of the circumstance alleging to have caused delay. This schedule is referred to as the Un-impacted Schedule.
- ii. Prepare a fragmentary network (fragnet) depicting the circumstance that is believed to have delayed the project.
- iii. Insert the fragnet into the Un-impacted Schedule, run the schedule calculations and determine the finish date. This schedule is referred to as the Impacted Schedule.
- iv. Compare the Impacted Schedule finish date with the Un-impacted Schedule finish date in order to determine the duration of any warranted time extension.

All approved time extensions will be incorporated into the monthly update with the fragnet used to determine impacts incorporated into the schedule.

C. Basis of Payment.

No separate payment will be made for Type A schedules and the cost of such schedule shall be included in the prices bid for the various Pay Items of the Contract.

Franklin County will make payments for Type B Schedules according to 109.09 and as modified by the following schedule:

- 1. Franklin County will release 60 percent of the lump sum amount bid for CPM Progress Schedule to the Contractor with the first regular estimate payable after the Engineer has approved the CPM Baseline schedule submission.
- 2. Franklin County will release an additional 30 percent of the lump sum amount bid for CPM Progress Schedule to the Contractor with the first regular estimate payable after 50 percent of the original contract amount is complete.
- 3. Franklin County will release the remaining 10 percent of the lump sum amount bid for CPM Progress Schedule to the Contractor with the first regular estimate payable after 90 percent of the original contract amount is complete.

Franklin County will pay for the accepted quantities at the contract price as follows:

Item	Unit	Description
108.03	Lump Sum	Type B CPM Progress Schedule

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: www.epls.gov or State debarment list at the website: www.dot.state.oh.us/divisions/contractadmin/ act in any ownership, leadership, managerial, or other similar position that could influence the operations of an entity doing business with Franklin County.

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.

Should the Contractor fail to furnish sufficient competent personnel, materials and equipment for the proper prosecution of the Work, or fail to remove such person(s) as requested by the Engineer, the Engineer may withhold all payment estimates, which are or may become due.

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

A. General. Franklin County 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. Any delay that is not on the critical path of the Project shall not be excusable or compensable. The critical path is defined as the longest path of activities in the Project that determines the 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.

The Contractor is responsible for mitigating any delay, whether caused by Franklin County, the Contractor, its subcontractors or suppliers, a third party, or an intervening event. 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 shall work cooperatively with one another to explore and discuss potential mitigation efforts in a timely manner.

Franklin County 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 provided 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 as required in 108.03. If the Contractor fails to provide notice of the delay in accordance with this provision, it shall be a waiver and release of any claim associated with the delay.

The Engineer will evaluate the Contractor's analysis and determine the time extension due, if any. Time extensions will be added to the contract by a change order signed by the Franklin County Commissioners. Final signed change order documents are due thirty days prior to the anticipated Franklin County Commissioners agenda date. 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 during the period December 1 to April 30.

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

Franklin County 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 in accordance with 109.05 along with the request for extension of the Completion Date.

B. Excusable, Non-Compensable Delays. Excusable, non-compensable delays are delays that are not the Contractor's or Franklin County'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 Franklin County's fault or responsibility.
- C. Extension to the Completion Date for Weather or Seasonal Conditions. The Contractor shall be entitled to a non-compensable extension of the Completion Date caused by weather days only as permitted in 108.06.C. A weather day is defined as a Work Day that weather or seasonal conditions reduced production by more than 50 percent on items of work on the critical path. Delays caused by weather or seasonal conditions should be anticipated by the Contractor. The Construction Schedule must reflect these anticipated weather delays in all weather-dependent activities. 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 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 due to inclement weather exceeds the anticipated number of inclement weather days as shown in Table 108.06-1.

TABLE 108.06-1

Month	Number of Workdays Lost Due to Weather
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.

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.

The Engineer will not extend the Completion Date for work days lost from December 1 to April 30, unless the Contractor's accepted progress schedule depicts Work on the critical path occurring during the

period from December 1 to April 30 and the number of weather days is in excess of those listed above for the period from December 1 to April 30.

- **D.** Excusable, Compensable Delays. Excusable, compensable delays are delays that are not the Contractor's fault or responsibility, and are Franklin County's fault or responsibility or are determined by judicial proceeding to be Franklin County's sole responsibility or are the fault and responsibility of a 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 Franklin County; however, these compensable delay costs are limited to escalated labor and material costs only, as allowed in 109.05.D.2.b and 109.05.D.2.d.
 - 5. Delays due to the neglect of Franklin County 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 independent sources of critical delay that occur at the same time. To be concurrent, delays must be literally concurrent. When a non-excusable delay is concurrent with an excusable delay, the contractor is not entitled to an extension of the contract time for the period the non-excusable delay is concurrent with the excusable delay. When an excusable, non-compensable delay is concurrent with a compensable delay, the contractor is entitled to an extension of the contract time, but not entitled to compensation for the period the non-compensable delay is concurrent with the compensable delay.
- **108.07** Failure to Complete on Time. If the Contractor fails to complete the Work by the Completion Date, then the Engineer, 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. Franklin County 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 Engineer permits the Contractor to remain in control, prosecute the Work at as many different places, at such times, and with such forces as the Engineer requests. Provide a written plan for the completion of the Work.

For each calendar day that Work remains uncompleted after the Completion Date, Franklin County will deduct the sum specified herein from any money due the Contractor, not as a penalty, but as liquidated damages. Franklin County 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 Franklin County of any of its rights under the Contract.

Franklin County may stop deducting liquidated damages when:

- A. The Work is substantially complete and the project is available for use as intended by the contract.
- B. The Engineer determines that the Contractor is diligently pursuing the remaining Work.

- 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.
- D. All contract safety items are complete and operational. These safety items include but are not limited to signs, pavement markings, guardrail, attenuators, and signals. Raised pavement markers (RPM) are required safety items if the roadway section involved had RPMs before the project started.
- E. Deemed reasonable and appropriate by Franklin County.

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	
From More Than	To and Including	Calendar Day of Overrun in Time	
\$0.00	\$500,000	\$400	
\$500,000	\$2,000,000	\$600	
\$2,000,000	\$10,000,000	\$900	
\$10,000,000	\$50,000,000	\$1,400	
Over \$50	0,000,000	\$2,900	

108.08 Unsatisfactory Progress and Default of Contractor. Franklin County 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 Franklin County believes jeopardizes completion of the Work by the Completion Date.

If the Contractor does not respond to the satisfaction of Franklin County, Franklin County 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. In such a case, Franklin County will proceed as specified in ORC 5525.17, with the County Engineer acting in place of the Director. 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 Franklin County's default of the Contractor according to 108.08 is wrongful, then the default will revert to a termination of the Contract for the convenience of Franklin County.

108.09 Termination of the Contract for Convenience. Franklin County may terminate the Contract at any time for the convenience of Franklin County. Franklin County will compensate the Contractor according to 109.04 and 109.05 for termination of the Contract for the convenience of Franklin County. This subsection is subject to the provisions of ORC 5525.14.

108.10 Payroll Records. Keep payroll records as specified in ORC 4115.07 or as required by Federal law.

Authorized representatives of the Director (Franklin County) 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, specified in the Con	ntract Document	S.	. wages nave	ocen paid acc	ording to the E	1att

109 ACCEPTANCE, MEASUREMENT, AND PAYMENT

109.01 Measurement of Quantities. Franklin County 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, Franklin County 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. Franklin County 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 ODOT's Supplement 1060.

Convert the net weight of asphalt material shipments to gallons (liters) at the specified pay temperature according to ODOT's Supplement 1060.

Convert the gallons (liters) at the measured temperature to gallons (liters) of asphalt material at the specified pay temperature according to ODOT's 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. Franklin County 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

Symbol	When You Know	Multiply By	To Find	Symbol
		Length		·
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
		Area		
in ²	square inches	645.16	square millimeters	mm²
ft²	square feet	0.09290304	square meters	m²
yd²	square yards	0.8361274	square meters	m ²
ac	acres	0.4046873	hectares	ha
ac	acres	4046.873	square meters	m²
mi ²	square miles	2.589998	square kilometers	km²
		Volume	_	•
fl oz	fluid ounces	29.57353	milliliters	mL
gal	gallons	3.785412	liters	L
ft³	cubic feet	0.02831685	cubic meters	m³
yd³	cubic yards	0.7645549	cubic meters	m³
		Mass		•
OZ	ounces	28.34952	grams	g
lb	pounds	0.4535924	kilograms	kg
T	2000 pounds	0.9071847	metric tons	t
		Temperature		•
°F	Fahrenheit	C = (F-32)/1.8	Celsius	°C
	-	Illumination		•
fc	foot-candles	10.76391	lux	1x
fl	foot-lamberts	3.426259	candelas per square meter	cd/m²
	F	orce and Pressure or St	tress	·
lbf×ft	pounds-force foot	1.355818	newton meter	N×m
lbf	pounds force	4.448222	newtons	N
lbf/ft² (psf)	pounds force per square foot	47.88026	pascals	Pa
lbf/in² (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
		Length		
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
		Area		
mm^2	square millimeters	0.00155	square inches	in ²
m^2	square meters	10.76391	square feet	ft²
m²	square meters	1.19599	square yards	yd²
ha	hectares	2.4710437	acres	ac
m²	square meters	0.000247	acres	ac
km²	square kilometers	0.3861	square miles	mi ²
		Volume		
mL	milliliters	0.033814	fluid ounces	fl oz
L	liters	0.264172	gallons	gal
m³	cubic meters	35.31466	cubic feet	ft³
m³	cubic meters	1.30795	cubic yard	yd³
	•	Mass		•
g	grams	0.035274	ounces	oz
kg	kilograms	2.204622	pounds	lb
t	metric tons	1.1023114	2000 pounds	T
		Temperature		
°C	Celsius	F = 1.8C + 32	Fahrenheit	°F
		Illumination		
lx	lux	0.09290304	foot-candles	fc
cd/m²	candelas per square meter	0.29186352	foot-lamberts	fl
	Fo	orce and Pressure or Sti	ress	
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	lbf/ft²
1 a	pascais	0.02000343	square foot	(psf)
MPa	megapascals	145.03774	pounds force per	lbf/in²
1711 (1	megapascais	173.03//7	square inch	(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 Franklin County in writing in accordance with the contract documents.

109.04 Compensation for Altered Quantities, Eliminated Items or Termination of the Contract for Convenience of Franklin County.

- A. If the agreed quantities of contract items vary from the quantities in the Contract, Franklin County will make payment at the original Contract unit prices for the agreed quantities of Work.
- B. If an item is eliminated in accordance with 104.02.E or the contract is terminated in accordance with 108.09 Franklin County 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 Franklin County or a local government agency 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 Franklin County.
- C. If the project is terminated for convenience of Franklin County, Franklin County will negotiate compensation with the Contractor for actual costs incurred as a result of the termination. Franklin County will pay for Extra Work as stipulated in approved Extra Work Change Orders or written authorizations subject to the limitations set forth in ORC 5525.14. Such authorizations for emergencies and to avoid Project delays are in advance of an approved Extra Work Change Order and commit Franklin County only to the terms of the authorizations. Franklin County will pay for Extra Work after the approval of the subsequent Change Order.

In no event shall allowances be made for loss of anticipated profits suffered or claimed by the Contractor resulting directly or indirectly from such increased, decreased or eliminated quantities or from unbalanced allocation among the Contract items, or from any other cause.

109.05 Changes and Extra Work.

A. General. If Franklin County 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, Franklin County 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. Franklin County 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, Franklin County 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 or items as listed in Franklin County'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 Franklin County's request. Franklin County will respond within 5 business days after receipt of the Contractor's proposal. Franklin County and the Contractor can mutually agree to extend these 5-day time limits.

If Franklin County 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.

Franklin County 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. Franklin County 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 a Franklin County 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. Franklin County 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. Franklin County 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.

Franklin County 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 Franklin County will treat these fringe payments as paid wages when calculating the allowed 22 percent compensation.

Franklin County 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.

Franklin County 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.

Franklin County 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. Franklin County 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.

Franklin County 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. Franklin County will not pay a percent markup on these costs.

3. Materials. Franklin County 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. Franklin County 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, Franklin County 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. Franklin County 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. Franklin County 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. Franklin County 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.

Franklin County will pay for use of Contractor-owned equipment the Engineer approves for force account Work at established rates. Franklin County 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 Equipment Watch, 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.

Franklin County 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 Franklin County.

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 Franklin County confirm, the hourly owned equipment rates as follows:

$$HOER = [RAF * ARA * (R / 176)] + HOC$$

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:

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

TABLE 109.05-1

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.

Franklin County 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 C&MS Section 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, Franklin County will pay an hourly idle equipment rate. The procedure to determine the hourly idle equipment rate for Contractor owned equipment is as follows:

HIER = RAF * ARA * (R / 176) * (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, Franklin County 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. Franklin County will pay a 15 percent markup for overhead and profit for the actual invoiced rates during the idle period.

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

Franklin County 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, Franklin County will pay for it as idle equipment until used.

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

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

Franklin County 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. Franklin County 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, Franklin County will pay the actual invoiced amount. The actual invoiced rates must be reasonably in line with the Blue Book and approved by the Engineer. Franklin County 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:

$$HRER = (HRI * 115\%) + HOC$$

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

Franklin County 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. Franklin County 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. Franklin County 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.

Franklin County 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. Franklin County 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, Franklin County 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.2 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 Franklin County 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 Franklin County if the original contract value is smaller than the actual final contract value. Additional payment by Franklin County 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, 109.05.C.10, and 109.05.C.11.

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 Franklin County 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."

Contractor shall submit biweekly itemized statement of costs prepared from the Daily Force Account Records to the Engineer as the force account work is being performed. Payment for force account work will only be made through a Change Order which will be processed after the force account work is completed and Franklin County has received and reviewed the Contractor's itemized statement of costs. Final signed change order documents are due thirty days prior to the anticipated Franklin County Commissioners agenda date.

Upon conclusion of the force account work, the Contractor shall submit an itemized statement of the actual costs prepared from the Daily Force Account Record and utilizing the ODOT electronic template titled "Electronic Force Account." Submit a compact disk (CD), labeled with the contractor's name and the project number, and a hard copy of the "Electronic Force Account." The "Electronic Force Account" template can be downloaded from the following website:

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 Franklin County and Contractor will govern over other Franklin County 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, Franklin County's records shall govern. Any resulting dispute must be pursued in accordance with 108.06.G.

D. Delay Costs.

1. General. If Franklin County agrees that it has caused a delay, Franklin County 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

Franklin County 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.

Franklin County 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.2 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 Franklin County-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.2. Franklin County will pay wages and fringes with a 20 percent mark-up to cover administrative costs.
- c. Idle Equipment or Equipment Demobilization. Franklin County 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. Franklin County 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. Franklin County 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. Franklin County 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. Franklin County 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.

Franklin County will pay the salary and fringes plus a 5 percent markup for field personnel identified in Table 109.05-4.

TABLE 109.05-4

Original Contract Amount	Field Personnel
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. Franklin County 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.i. Payment for eligible days occurring during an unanticipated construction period will be calculated in accordance with 109.05.D.2.f.ii. Payment for eligible days occurring during an unanticipated winter period will be calculated in accordance with 109.05.D.2.f.iii.

(i) Home Office Overhead Daily Rate

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

Daily HOOP = (A * C)/B

Where:

A = original contract amount

B = contract duration in Calendar Days

C = value from Table 109.05-5

TABLE 109.05-5

Original Contract Amount	С
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 Franklin County, 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:

 $CP HOOP = Daily HOOP \times D$

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:

WP HOOP = 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:

Total HOOP = CP HOOP + 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. Franklin County 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 reimbursed up to a maximum of \$56 per day. Franklin County 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 Engineer may order the Contractor to accelerate the Work to avoid delay costs or to complete the Project early. Franklin County and the Contractor will negotiate acceleration costs.
- **109.07 Inefficiency.** Franklin County will compensate the Contractor for inefficiency or loss of productivity resulting from 104.02. 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. When satisfactory progress is being made, the Contractor will receive monthly payments for the Work and materials completed and approved. The monthly payment is approximate and will be generated after representatives of the Engineer's office meet with the Contractor's representative to review and agree on quantities for payment. 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, Franklin County reserves the right not to 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 Specifications.

The first estimate will not be processed until the Contractor provides emergency contacts and submittals for the progress schedule, Worksite Traffic Supervisor if applicable, and Storm Water Pollution Prevention Plan.

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

Franklin County 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.

Franklin County will hold retainage equal to the smaller amount of 8% of the total work completed to date or 4% of the original amount of the contract.

109.10 Payment for Delivered Materials. Franklin County 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.

Franklin County 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. Franklin County 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 shop 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 Engineer and the Office of Materials Management per 501.06.
- D. The steel is properly stored to allow inspection by the Engineer and the Office of Materials Management. It shall also be properly set apart from other material and identified as belonging to Franklin County (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 Engineer and the steel has been inspected by the Engineer and 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.

Franklin County 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 Engineer 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 Franklin County is entitled at law or in equity.

109.12 Final Acceptance.

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

The Contractor shall 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 Project Engineer and Construction Engineer 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 Engineer.
- 3. Substantially complete.

If the Engineer 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 Franklin County is entitled at law or in equity. The Engineer will issue a Final Inspection Report that will document the findings of the inspection and start any warranty period.

B. Punch List. The Engineer will issue to the Contractor a written punch list of work required as a condition of acceptance. For a 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 (Franklin County's) punch list. The Engineer'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 Engineer. 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 Engineer.
 - 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 Engineer will issue a letter confirming completion of the contract, noting any exception as provided in ODOT's CMS Items 659 and 661 and any warranty. The date the final payment is approved by Franklin County constitutes acceptance for the purpose of ORC 5525.16. 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 Franklin County is entitled at law or in equity.
- **109.13 Project Contingency.** Project Contingency is identified in the Proposal. This amount shall be included in the Contract Sum and shall be included in the coverage of the Proposal Guaranty. During the Contract, this pay item shall be utilized by the Engineer as a resource for funding necessary changes in the Work. Project Contingency shall not, however, be considered a sum to which the Contractor has any entitlement, except as portions of it are assigned for payment by Change Order, and as progress is made by the Contractor upon the Work under such Change Order.

Upon completion of the Work under this Contract, any portion of the Project Contingency which has not been assigned for payment by Change Order shall be deducted by the final Contract Modification. Thereafter, such deducted amount may be deleted from the Contractor Bond, warranty, guarantee, and other applicable coverages.

109.14 Release of Liability. No person or corporation other than the signer of this Contract as Contractor, has any interest hereunder and no claim shall be made or be valid, and neither the Engineer, nor

any official or agent thereof, shall be liable for or be held to pay any money, except as provided in the Contract. The acceptance by the Contractor of final payment shall operate as and shall be a release to the Engineer, and every officer and agent thereof, from all claims and liability to the Contractor for anything done or furnished for, or relating to the Work, or for any act or neglect of the Engineer, or of any person relating to or affecting the Work.

109.15 Back charges. To the extent the Engineer has the right to back charge the Contractor pursuant to the Contract, the Engineer, at its option, may take one or more of the following actions: (i) require the Contractor to make payment to the Engineer within ten days of the Contractor's receipt of the invoice; (ii) deduct the back charge from the next and subsequent pay estimates until the full amount of the back charge has been satisfied; or (iii) deduct the back charge from Retainage. The Engineer's right to back charge is in addition to any or all other rights and remedies provided in the Contract, at law, in equity, or otherwise.