

PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES

Request for Proposal (RFP) → Pre-Construction Meeting → Construction Contract Award → Construction Start

Figure 3-1: Pre-Construction & Construction Flow Chart (continued)

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES

Request for Proposal (RFP) → Pre-Construction Meeting → Construction Contract Award → Construction Start

Figure 3-1: Pre-Construction & Construction Flow Chart (continued)

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PRE-CONSTRUCTION PROCEDURES


RESPONSIBLE CHARGE

- The Local Government (LG) must designate a Project Supervisor and an Official who will be responsible for the administration of the project, including, but not limited to: requesting authorization of funds, requesting award of contract, supervision of the CEI, authority to approve changes, and accountability for contract compliance (23 CFR 635.105) as outlined in Chapter 3: Getting Started.
- The LG will act on the behalf of the Tennessee Department of Transportation (TDOT) for the administration of construction projects and that in accordance with federal regulations, funds may be withheld for non-compliance of federal rules and regulations (23 CFR 1.36):

"If the Administrator determines that a Local Agency has violated or failed to comply with the Federal laws or the regulations in this part with respect to a project, he may withhold payment to the Local Agency of Federal funds on account of such project, withhold approval of further projects by the Local Agency, and take such other action that he deems appropriate under the circumstances, until compliance or remedial action has been accomplished by the Local Agency to the satisfaction of the Administrator."

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES




FHWA “Big Five”

- DBE Requirements
- Buy America Provision
- ADA Requirements
- Environmental Commitments
- Pay Item Documentation (Original Contract items or Change Orders)

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES




- Refer to Section 1.6 for information regarding selection of a consultant for the CEI portion of the project.
- A project shall be advertised one time at least 21 calendar days prior to the public bid opening (23 CFR 635.112). The advertisement shall describe the type of work to be performed and where, when, and by what time the sealed bids shall be received. The TDOT provided Bid Advertisement Template (Form 8-3) is available for the LG to use.
- The advertisement must be submitted to the LPDO to be placed on TDOT's website for publication. The advertisement must be submitted by clicking on the 'Local Programs Ad Submittal Form' link on the bottom of this webpage: <http://www.tn.gov/tdot/topic/local-programs-current-projects>.
- The Local Programs Ad Submittal Form, along with the bid advertisement (Form 8-3), must be submitted on the same email as an attachment and sent to LocalPrograms@tn.gov at a minimum of 24 days prior to the bid opening date.
- **The use of Electronic Bidding Documents or software will need prior approval. This includes the distribution of documents electronically.**

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES




- For all projects, bidding opportunities on a nondiscriminatory basis shall be afforded to all qualified bidders regardless of state boundaries, race, sex, color, or national origin. The LG shall comply with the standard USDOT Title VI Assurances by inclusion of the following language in the solicitations for bids:

The (Local Government) in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color or national origin in consideration for an award.”

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES




Who Can Bid?

- All contractors must be on TDOT's pre-qualified list
- Contractors must use and only use the name as shown on pre-qualification records
- Bid book and bid form must be marked VOID if sold to non-prequalified contractors or those pending qualification
- Contractors who are not prequalified with TDOT in the appropriate work classification(s) should not be authorized to bid (i.e., guardrail contractor would not be authorized to bid resurfacing project)
- All subcontractors must be on TDOT's pre-qualified list before beginning any work

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES




- Please be aware that TDOT requires all PRIME contractors (except mowing and litter removal contractors) to be licensed with the Tennessee Department of Commerce and Insurance, Board for Licensing Contractors.
- For Federally Funded Contracts, the Contractors will not be required to have a license to bid. However, prior to recommending award of the Contract, the Local Government will confirm that the lowest responsible bidder is licensed. The Contractor will be considered for award for twenty-one (21) days after the letting date (bid submittal). If the contractor does not have a license, on or before the 21 days, the contractor will be considered non-responsive, and the next lowest responsible bidder will be considered for award.
- For more information on obtaining a Contractor's License please visit the Board for Licensing Contractors website at the following:
<https://www.tn.gov/commerce/regboards/contractors.html>

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES



- Title 48 of Tenn. Code Ann. requires all contractors and subcontractors that are domestic or foreign Corporations, Limited Liability Companies, Limited Partnerships, or Limited Liability Partnerships to be in good standing with the Secretary of State. This includes being duly incorporated, authorized to transact business, and/or in compliance with other requirements as detailed by the Secretary of State. Please contact the Secretary of State should you have any questions at (615) 741-2286 or visit <https://sos.tn.gov/business-services>.
- TDOT will not execute any contracts or approve subcontracts with contractors that are domestic or foreign Corporations, Limited Liability Companies, Limited Partnerships, or Limited Liability Partnerships, who are not in good standing with the Secretary of State (i.e. have a valid Certificate of Existence/Authorization).

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REASONS FOR NOT AWARDING A BID 

- Failure to sign the bid by a authorized representative (proposal form, proposal certificate, proposal bond, Power of Attorney)
- Failure to furnish the required bid bond and Power of Attorney, with the same dates
- Omissions, alterations of form, additions, or conditions not called for
- Unauthorized bids or irregularities
- Failure to include a unit bid price for each item (must be an amount of zero or greater)
- Units prices are mathematically unbalanced
- Failure to submit a non-collusion affidavit
- Failure to utilize the required forms approved by TDOT (Form 8-1 Federal or Form 8-1 State)
- Failure to submit a bid within the original bound bid book or **electronic bid information**
- Failure of bidder to acknowledge all addenda
- Bidder not prequalified or not in good standing the day of the letting

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES 

- Reasons for not awarding a bid include the bid being unresponsive, often called an irregular bid, or if the bidder is determined to be "not responsible". The difference between a responsive bid and responsible bidder is that:
 - A responsive bid is one that meets all the requirements of the advertisement and proposal, while
 - A responsible bidder is one who is physically organized and equipped with the financial wherewithal to undertake and complete the contract.

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES 

- The LG shall provide a **list of ALL bidding companies/entities and their bid price**, a bid tabulation of at least the three (3) lowest bidders (or all bids if fewer than three (3) are submitted), line-item by line-item, including the engineers estimate that matches the schedule of values for reviewing bids. When more than three bids are received, the total amount of all but the three lowest bids must be submitted. All bids shall be reviewed to determine if they are unbalanced, which is defined as:
 - A mathematically unbalanced bid is a bid that contains lump sum or unit bid items that do not reasonably reflect the actual costs (plus reasonable profit, overhead costs, and other indirect costs) to construct the item;
 - A materially unbalanced bid is a bid that generates reasonable doubt that award to that bidder would result in the lowest ultimate cost to the government.
- **FYI, the final engineer's estimate can change, based on valid reasons, even after the project is advertised provided that it is revised prior to the receipt of bids and submitted to LPDO.**

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PRE-CONSTRUCTION AND CONSTRUCTION PROCEDURES



- The Local Government Guidelines describes a linear process, however many of these events could occur simultaneously or at a much later timeframe in the project process. Please be aware of the specific requirements for all processes in the construction phase relative to any approvals or submittals that are time sensitive. An example is a mix design, which will be discussed late in the presentation but it will be an item that will require approval near the start of construction.
- Also, the guidelines outline the high level documentation process for the project and does not outline the specific inspection or testing requirements for individual items. Specific inspection requirements such as ADA requirements will be checked in the field.

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WHEN DO YOU NEED CONSTRUCTION INSPECTION SERVICES PERFORMED TO TDOT STANDARDS?



- The LG shall hire an independent consulting firm for Construction Engineering Inspection (CEI) services to monitor the project and complete all the necessary inspection and documentation as outlined in the TDOT Proposed Scope of Work for CEI. The LG may use the same consultant for both the design phase and CEI phase of the project for small size projects only. For mid-range and large size projects, the selected CEI consultant shall not be associated with any other aspect of the project. Please refer to Section 3.1 and to the Local Version of TDOT Consultant Selection Policy (Form 1-2) for further information on this important requirement. The selected CEI consultant shall be a pre-qualified consulting firm on the TDOT pre-qualified list. All CEI staff shall be qualified in accordance with TDOT requirements.
- Depending on the type, amount, and difficulty of work, the Local Government may request that its own qualified forces be used to document and inspect the work in accordance with these guidelines. The use of local forces must be pre-approved by TDOT. Contact the LPDO for additional information.

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CRITERIA FOR ALLOWING LOCAL GOVERNMENTS TO MANAGE PROJECTS



Local Government Guidelines Form 1-2
March 9, 2018

ATTACHMENT A - Consultant Selection for Locally Managed Projects

TYPE OF PROJECT	TYPE OF PROJECT	DOCUMENTATION REQUIREMENTS
<p>MAJOR PROJECTS</p> <ul style="list-style-type: none"> • Roadway projects with an estimated cost of \$10 million or more. • Roadway projects with an estimated cost of \$5 million or more and a length of 10 miles or more. • Roadway projects with an estimated cost of \$5 million or more and a length of 5 miles or more and a length of 10 miles or more. • Roadway projects with an estimated cost of \$5 million or more and a length of 5 miles or more and a length of 10 miles or more. 	<ul style="list-style-type: none"> • Construction Management • Construction Management with Resident Engineer • Resident Engineer • Resident Engineer with Resident Inspector • Resident Engineer with Resident Inspector and Resident Surveyor • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety and Resident Construction Management 	<ul style="list-style-type: none"> • Construction Management and Resident Engineer • Construction Management with Resident Engineer • Resident Engineer • Resident Engineer with Resident Inspector • Resident Engineer with Resident Inspector and Resident Surveyor • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety and Resident Construction Management
<p>MEDIUM PROJECTS</p> <ul style="list-style-type: none"> • Roadway projects with an estimated cost of \$5 million or more. • Roadway projects with an estimated cost of \$5 million or more and a length of 5 miles or more. • Roadway projects with an estimated cost of \$5 million or more and a length of 5 miles or more and a length of 10 miles or more. • Roadway projects with an estimated cost of \$5 million or more and a length of 5 miles or more and a length of 10 miles or more. 	<ul style="list-style-type: none"> • Construction Management • Construction Management with Resident Engineer • Resident Engineer • Resident Engineer with Resident Inspector • Resident Engineer with Resident Inspector and Resident Surveyor • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety and Resident Construction Management 	<ul style="list-style-type: none"> • Construction Management and Resident Engineer • Construction Management with Resident Engineer • Resident Engineer • Resident Engineer with Resident Inspector • Resident Engineer with Resident Inspector and Resident Surveyor • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety and Resident Construction Management
<p>MINOR PROJECTS</p> <ul style="list-style-type: none"> • Roadway projects with an estimated cost of \$5 million or less. • Roadway projects with an estimated cost of \$5 million or less and a length of 5 miles or less. • Roadway projects with an estimated cost of \$5 million or less and a length of 5 miles or less and a length of 10 miles or less. • Roadway projects with an estimated cost of \$5 million or less and a length of 5 miles or less and a length of 10 miles or less. 	<ul style="list-style-type: none"> • Construction Management • Construction Management with Resident Engineer • Resident Engineer • Resident Engineer with Resident Inspector • Resident Engineer with Resident Inspector and Resident Surveyor • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety and Resident Construction Management 	<ul style="list-style-type: none"> • Construction Management and Resident Engineer • Construction Management with Resident Engineer • Resident Engineer • Resident Engineer with Resident Inspector • Resident Engineer with Resident Inspector and Resident Surveyor • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety • Resident Engineer with Resident Inspector and Resident Surveyor and Resident Traffic Control and Resident Safety and Resident Construction Management

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MATERIALS AND TESTS CHARGES FOR LOCAL GOVERNMENT PROJECTS

- The Tennessee Department of Transportation's Material and Tests Division requires payment for any materials testing done on construction projects. As stated in the Local Government's contract with TDOT, materials charges/departement oversight charges are the responsibility of the Local Governments. Therefore, when a Local Government utilizes the TDOT laboratory or certified personnel as a third party for Acceptance Testing, Independent Assurance Testing, Verification Testing, or Mix Design Approval, an invoice will be sent to the Local Governments for payment for such testing/approval at the end of each month or upon completion of a project. The Local Government representative will be asked at the pre-construction meeting to complete an information sheet to ensure proper distribution for the respective testing invoices. **This is a reimbursable cost.**

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MATERIALS AND TESTS CHARGES FOR LOCAL GOVERNMENT PROJECTS



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MATERIALS AND TESTS BILLING



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BILLING PROCEDURES





- Invoices must be sent by email as an attachment to lpd.invoices@tn.gov in PDF form
- Includes all invoices for Local Programs, Transportation Alternative, and Safe Routes to School Projects
- TDOT Local Government invoice cover sheet from <https://www.tn.gov/tdot/program-development-and-administration-home/local-programs/reimbursement.html> must accompany all reimbursement requests**
- All invoices without the correct TDOT invoice cover sheet will be returned
- Reimbursement requests should be submitted in eGrants when applicable.**

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SAMPLE: TDOT CONSTRUCTION INVOICE COVER SHEET

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SAMPLE: AUTHORIZED SIGNATURE FORM




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BILLING PROCEDURES



Invoice shall be submitted no more often than monthly, but at least quarterly, per project per phase to LPD.Invoices@tn.gov as a single PDF file, if possible. Emails must contain the PIN in the subject of the email as well as the attachment. **Invoices for projects initiated through TDOT eGrants must be submitted in the eGrants system.**

C.4 Payment Methodology:

In the event that the Agency shall receive federal and/or state funds for any portion of the herein described Project, this provision shall apply.


a) The Agency shall submit invoices, in a form outlined in the Local Government Guidelines with all necessary supporting documentation, prior to any reimbursement of allowable costs. Such invoices shall be submitted no more often than monthly but at least quarterly and indicate, at a minimum, the amount charged by allowable cost line-item for the period invoiced, the amount charged by line-item to date, the total amount charged for the period invoiced, and the total amount charged under this agreement to date. Each invoice shall be accompanied by proof of payment in the form of a canceled check or other means acceptable to the Department.

Will not issue Notice to Proceed for Construction Phase if not in compliance

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BILLING PROCEDURES




- Invoices will be returned for correction of errors
- Each request must include:
 - copies of paid invoices
 - copies of **canceled checks**, or
 - other acceptable proof of payment
 - personal private information (PPI) removed from backup documentation
 - approved submittal signature


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CONSTRUCTION PROCEDURES



- **AWARD OF THE CONTRACT**



- The Local Government shall request TDOT concurrence in its intent to award the contract to the lowest responsive bidder. This request shall be sent to the Manager of the Local Program Development Office by electronic means (email at Local.Programs@tn.gov) who will forward it to the TDOT Construction. Until this concurrence is received, the Local Government may not enter into contract with the contractor nor may it issue a work order. Failure to follow these procedures could result in a loss of funding for the Construction Phase of project development.

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CONSTRUCTION PROCEDURES

- Once the TDOT Construction Office and TDOT Estimating and Bid Analysis Office concurs in the intent to award, the LG can proceed with the execution of the contract with the responsive low bidder. The LG will issue the contractor a copy of the Proposal Contract for signature. The contractor shall return the signed copy to the LG with a fully executed Payment and Performance Bond equal to one hundred (100) percent of the contract amount. The signed proposal contract and bond shall be returned within ten (10) days or the contract may be canceled and the Proposal Bond/Guarantee forfeited. Any necessary railroad insurance must also be submitted in accordance with the railroad agreements prior to the final execution of the contract (twenty (20) calendar days are allowed for this). **The signed contracts shall be distributed such the Contractor, the Surety, and the LG all receive signed copies. The LPDO will only accept an electronic/PDF version.**

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CONSTRUCTION PROCEDURES

AWARD OF THE CONTRACT (CONT'D)

- At least seven days prior to the pre-construction conference, the LG shall send, by electronic means, a set of plans, a copy of the bid book and final cost estimate to the TDOT District Operations Engineer/Manager and the TDOT Regional Materials and Tests Supervisor. A copy of this email shall be sent to Local.Programs@tn.gov. **The preconstruction meeting may be held virtually if all requirements are met.**
- Once all the required signatures, bonds, and insurance have been submitted, the Local Government will provide the contractor with a work order (Notice to Proceed) identifying the effective Date of Construction. The effective date is typically 21 calendar days after the issuance of the work order. **The LG shall also provide a copy of the work order via email to the TDOT District Operations Engineer/Manager and the LPDO.**


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WORK ORDER EXAMPLE

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CONSTRUCTION CONTRACT ADMINISTRATION 

CONSTRUCTION

- All construction shall be completed in full compliance with the contract documents, including the Bid Book, TDOT Standard Specifications for Road and Bridge Construction, and TDOT Standard Drawings.
- The TDOT Regional Construction Manager and Materials & Tests Manager will each assign a TDOT representative to participate in the project pre-construction conference. The TDOT Construction Representative will conduct routine project reviews (at designated intervals as described in Circular Letter 105.11-01), attend progress meetings, and participate in the final inspection.
- For non-traditional projects, the LPDO may elect to utilize a consultant firm to conduct oversight reviews. The TDOT Regional office will need to verify with the LPDO if an oversight consultant firm will be used.

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CONSTRUCTION CONTRACT ADMINISTRATION 

CONSTRUCTION

- The TDOT Operations' Circular Letter File contains general guidance and requirements for the proper administration of projects. The Circular Letters can be found at: https://www.tn.gov/content/dam/tn/tdot/programdevelopment/localprograms/documents-and-forms/LP_Circular_Letters_Combined.pdf.
- Reduced requirements for non-traditional projects can be found in Chapter 10: Non-Traditional Projects.

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CONTRACT DOCUMENTS 

- TDOT Local Government Guidelines (LGG)
- **TDOT Standard Specifications for Road and Bridge Construction (2021)** and Supplemental Specifications
- TDOT Standard Drawings
- Contract including Special Provisions
- Plans
- TDOT Circular Letters
- Other referenced guidance (AASHTO, ASTM, MUTCD, ETC.)

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HIERARCHY OF CONTRACT DOCUMENTS(\$105.04) 

- Special Provisions
- Plans
- Supplemental Specifications
- Standard Specifications

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CONSTRUCTION CONTRACT ADMINISTRATION 

PRE-CONSTRUCTION CONFERENCE

- Before any work begins, a pre-construction conference shall be held (Standard Specifications, Section 105.06) by the Local Government's Project Supervisor to discuss the contractor's plan of operation, required contract provisions, environmental commitments if applicable, erosion control, traffic control/work zone safety, utility relocations, inspection, materials acceptance, independent assurance, quality control plans, certified payrolls, DBE/subcontractors (approximate mobilization dates), etc. Minutes (Pre-Construction Conference Minutes Form) shall be kept of this conference, including an attendance roster (Pre-Construction Conference Sign-in Sheet), and key decisions shall be fully documented. A copy of these minutes should be emailed to all attendees and to Local.Programs@tn.gov. **The preconstruction meeting may be held virtually if all requirements are met.**
- A meeting announcement (Pre-Construction Conference Notice) (Circular Letter 105.06-01) (Form 8-10a) shall be sent 14 days in advance, to all parties with a vested interest in the project including, but not limited to: prime and subcontractors, material suppliers, permitting agencies, utility owners, the TDOT District Operations Engineer/Manager, TDOT Regional Materials and Tests Supervisor and other affected LGs. **The preconstruction meeting shall not commence until the work order (notice to proceed) has been issued.**

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CONSTRUCTION CONTRACT ADMINISTRATION 

PRE-CONSTRUCTION CONFERENCE (CONT'D)

- **TDOT Materials & Tests Office and TDOT District Operations Office representatives must be present at the Pre-Construction Conference.** If both of these offices are not represented at the Pre-Construction conference, the Pre-Construction conference must be postponed until TDOT representatives can be present.
- In the Pre-Construction Conference, the following documents will be required.
 - Pre-Construction Notice (Form 8-10a)
 - Pre-Construction Conference Meeting Minutes (Form 8-11a)
 - Pre-Construction Conference Sign-in Sheet (Form 8-12)
- In the case that Erosion Control and/or Utility Conferences are necessary, refer to Section 8.2.14 and/or Section 8.2.15.

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CONSTRUCTION CONTRACT ADMINISTRATION 

CONTRACT ADMINISTRATION (CONT'D)

- Project Meetings - Several project meetings are held throughout construction of the project.
- Partnering, scheduling, and progress meetings are held during construction. Detailed meeting minutes shall be documented and kept in the project records "Correspondence File". A meeting sign-in-sheet shall accompany the meeting minutes.
- Progress meetings shall be held, at a minimum, quarterly to discuss the status of the project and other project issues. The Local Government's Project Supervisor, Local Government Official and the TDOT representative shall be notified of the scheduled progress meetings.
- Attestation of Illegal Immigrants (Circular Letter 102.01-02) (Form 8-18) - The Prime Contractor shall certify they are not knowingly utilizing the services of illegal immigrants in the performance of each contract.

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ILLEGAL IMMIGRANT ATTESTATION FORM 

TN TDOT Local Government Submittal Form 8-18
March 2018

Attestation Regarding Personnel Used in Contract Performance

SUBJECT CONTRACT NUMBER:	
CONTRACTOR LEGAL ENTITY NAME:	
FEDERAL TAXPAYER IDENTIFICATION NUMBER:	
TDOT COUNTY NUMBER:	


The Contractor (Contractor) above, does hereby attest, certify, warrant, and declare that the Contractor shall not knowingly utilize the services of an illegal immigrant in the performance of this contract and shall not knowingly utilize the services of any subcontractors who will utilize the services of an illegal immigrant in the performance of this contract.

SIGNATURE & DATE: _____

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CONSTRUCTION CONTRACT ADMINISTRATION 

PROJECT INSPECTION AND DOCUMENTATION

- The LG/CEI shall maintain an adequate, qualified staff to administer the inspection and material sampling and testing in accordance with all circular letters, specifications, standard drawings, and contract documents. As previously noted, the services of a qualified CEI firm, unless otherwise approved by TDOT, shall be used for the inspection of work, the sampling and testing for acceptance (TDOT SOP 1-1), and proper and sufficient documentation of acceptance. The inspection staff shall be qualified and knowledgeable about the type of work taking place, be familiar with the contract documents, and certified in accordance with TDOT Standard Operating Procedures (TDOT SOP 1-3) when conducting sampling and testing of materials for acceptance.
- The TDOT representative will conduct routine project reviews, attend progress meetings, and participate in the final inspection of the project. The Local Government Project Supervisor and the Local Government Official responsible for the project shall be present at project reviews and the final inspection. Refer to Circular Letter 105.11-01 for detailed information on the frequency of the project reviews. Any findings during the project reviews shall be responded to in writing by the Local Government Project Supervisor and the Local Government Official.

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CONSTRUCTION CONTRACT ADMINISTRATION 

PROJECT INSPECTION AND DOCUMENTATION (CONT'D)

- **CEI SCOPE OF SERVICES SUMMARY**
- 12. Inspection of Work:**
 - Provide inspection services for conformance to Plans and
 - Observe, measure, and record all quantities for payment.
 - Record field measurements for review by the Department or auditors.
 - The records will be recorded on a standard form (fieldbook) supplied or defined by the Department and/or on field inspection forms to be submitted to the Department.
 - Check traffic control daily, and additionally as required or requested.
 - Notify the contractor of deficiencies or problems immediately.
 - The consultant is not charged with the role of safety inspector, but expected to have unsafe issues corrected by the Prime Contractor.
 - Document weekly (or as often as necessary) project traffic control and distribute reports as required.

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CONSTRUCTION CONTRACT ADMINISTRATION 

PROJECT INSPECTION AND DOCUMENTATION (CONT'D)

- **CEI SCOPE OF SERVICES SUMMARY**
- 12. Inspection of Work (cont):**
 - Inspect daily erosion control items for conformance to the plans as well as effectiveness in the field. Notify the contractor of deficiencies.
 - Prepare to justify any and all pay quantities.
 - Prepare an accurate daily diary signed by the inspector, consisting of:
 - A record of the contractors on the project
 - Their personnel (number and classification)
 - Equipment (number and type or size)
 - Location and work performed by each contractor or subcontractor
 - Orders given the contractor
 - Events of note on the project

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CONSTRUCTION CONTRACT ADMINISTRATION 


PROJECT INSPECTION AND DOCUMENTATION (CONT'D)

- **CEI SCOPE OF SERVICES SUMMARY**
- 12. Inspection of Work (cont):**
 - Prepare an accurate daily diary signed by the inspector, consisting of (cont):
 - Accidents on the project w(police report, fatalities, causes, time, etc.)
 - Weather conditions, precipitation, temperature (AM, noon, PM)
 - Days charged (if working day contract), with explanation if not charged
 - Equipment arriving or leaving the project, idle equipment
 - Any other details that may be important later in the project life

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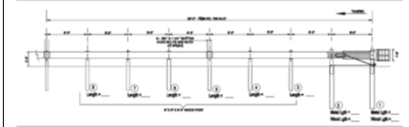
GUARDRAIL INSPECTION FORM



INSPECTION FORM FOR TERMINAL UNITS

Date: _____ Roadway Name: _____ County: _____ Location: N S E W Road Side: Med. SHO

Time: _____ Mile marker: _____ Inspector: _____ (FVEE name) _____ (Signature)




IN Type: 167200 872200 BEST OTHER (Circle One) Tables Damaged (As Spaced or Tracked) YES NO
 Quantity of Record sheets: _____ (If YES, Please Comment below)
 Circle new Roadway Post: 1 2 3 4 5 6 7 8 Lane Closure needed? _____
 Post new Guardrail? _____ Any old Guardrail needed? _____
 Cable Test: _____ Photographed by: _____

Comments: _____

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CONSTRUCTION CONTRACT ADMINISTRATION




CONSTRUCTION INSPECTION OF STRUCTURES

- The requirements in Section 8.2.16 shall apply to construction inspection of structures in addition to the following requirements
- The Bridge Construction Inspector's Checklist (Form 8-22) **shall be completed for each bridge on the project and forwarded to the Division of Structures at completion of the work along with an electronic copy of the contract drawings.**
- A qualified construction inspector shall be on site to view foundation conditions and substructure construction including but not limited to: driving of piles, concrete pours, girder erection, steel spacing and elevations, deck pouring operations (TDOT SOP 4-1), and other structural appurtenances as necessary. **This inspector will be responsible for maintaining a daily diary.** A certification from the Engineer of Record confirming compliance with TDOT standard construction procedures shall be required.

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CONSTRUCTION CONTRACT ADMINISTRATION




CONSTRUCTION INSPECTION OF STRUCTURES (CONT'D)

- The Structures (Construction) Checklist (Form 8-22) shall also be submitted with the as-built plans.
- A Pre-Pour Meeting shall be scheduled and conducted prior to any bridge deck pours (Circular Letter 604.17-01). The following forms are required when pouring a bridge deck.
 - 1. Bridge Deck Pre-Pour Checklist (Form 8-23)
 - 2. Bridge Deck During Pour Checklist (Form 8-24)
 - 3. Bridge Deck Post-Pour Checklist (Form 8-25)

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CONSTRUCTION CONTRACT ADMINISTRATION 

PLANS AND WORKING DRAWINGS (SHOP DRAWINGS)

- The construction plans, generally, will show sufficient details and dimensions to define the work. When additional details and dimensions are needed, the contractor shall prepare working drawings and submit them to the Engineer of Record for approval. In any case, the fabricator shall be construed to be an agent of the contractor and any changes from the construction plans submitted by the fabricator shall be considered as made by the contractor. All costs for changes will be at the expense of the contractor. Shop drawings for all types of structures shall be submitted by, or on behalf of the contractor, directly to the Engineer of Record unless noted otherwise in plans or specifications, for handling with the checking agency and for distribution. Proof of appropriate fabricator certification (as required by these specifications) for type of structure to be fabricated shall be submitted along with the shop drawings.

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CONSTRUCTION CONTRACT ADMINISTRATION 

PLANS AND WORKING DRAWINGS (SHOP DRAWINGS) (CONT'D)

- The following items require submittal of shop drawings by the contractor:
 - Structural Steel, Metal Bridge Rails, Bearing Devices (shop drawings not required for plain elastomeric bearing pads), Bridge Deck Drains (shop drawings not required if fabricated according to applicable Standard Drawing), Navigation Lighting Support Brackets, Precast Prestressed Concrete Beams, Precast Prestressed Concrete Deck Panels, Precast Reinforced Concrete Beams, Precast Reinforced Concrete Box Culverts, Post-tensioned Concrete, Roadway Expansion Devices, Steel Stay-In-Place forms, Energy Attenuation Devices, Overhead and Cantilever Sign Structures, Strain Poles, Street Lighting Poles, High Mast Poles with Accompanying Lowering Devices, Photometrics, Cofferdams and any other items when indicated on plans. Also required are erection drawings for steel structures, drawings of falsework, bracing, cofferdams, sheeting, bending of reinforcing steel and other supplementary plans called for by the Engineer of Record.

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CONSTRUCTION CONTRACT ADMINISTRATION 

PLANS AND WORKING DRAWINGS (SHOP DRAWINGS) (CONT'D)

- Each shop drawing sheet shall contain in the title block the following:
 - Project number
 - County
 - Bridge name
 - Bridge number (or structure type and number)
 - Station
 - Contract number
 - The words "Locally Managed Project"
- Shop drawings shall be submitted in sets with the drawing numbers running consecutively in each set, and, if more than 5 sheets in a set, shall be appropriately bound. Shop drawings marked "APPROVED" or "APPROVED AS NOTED" need not be resubmitted unless specifically instructed.

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CONSTRUCTION CONTRACT ADMINISTRATION 

PLANS AND WORKING DRAWINGS (SHOP DRAWINGS) (CONT'D)

- Shop drawings shall be a minimum of 8-1/2 x 11 inches in size. Legible half-size copies (11 x 17 inches) of full size drawings are acceptable for submittal. The minimum number of sets of shop drawings shown below shall be submitted for approval. Only one (1) set will be returned to the fabricator unless specifically requested and the additional set(s) requested to be returned is submitted along with those shown below. For consultant designs, an additional set is required. For railroad structures, three (3) additional sets are required. Copies should be kept in LG's files.
 - Two Sets: Structural Steel (Half-size sets shall be submitted for approval. Four (4) additional sets, two (2) full-size and two (2) half-size, will be required after final approval.)
 - Four Sets: Energy Attenuation Devices, Overhead and Cantilever Sign Structures, Strain Poles, Street Lighting Poles, High Mast Poles with Accompanying Lowering Devices, Photometrics (Submit directly to Special Design Office, Structures Division), Cofferdams
 - Six Sets: Metal Bridge Rails, Bearing Devices (shop drawings not required for plain elastomeric bearing pads), Bridge Deck Drains (shop drawings not required if fabricated according to applicable Standard Drawing), Navigation Lighting Support Brackets, Precast Prestressed Concrete Beams, Precast Prestressed Concrete Deck Panels, Precast Reinforced Concrete Beams, Precast Reinforced Concrete Box Culverts, Post-tensioned Concrete, Roadway Expansion Devices, Steel Stay-In-Place forms, and any other type of structural shop drawing not specifically listed.

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CONSTRUCTION CONTRACT ADMINISTRATION 

PLANS AND WORKING DRAWINGS (SHOP DRAWINGS) (CONT'D)

All working drawings shall be approved by the Engineer of Record; such approval shall be general in nature and shall not operate to relieve the contractor of any of his responsibility under the contract for the successful completion of the work. In addition to such approval, working drawings involved in construction over or under railroad tracks will require approval of the railroad company before approval is granted by the Engineer of Record. The contractor shall submit four sets of plans for any cofferdams, sheeting and bracing details for bents or piers adjacent to a track, and falsework for erecting the spans over tracks, and the method of installation for the protection of the tracks, to the Engineer of Record. No work shall be started until these plans are approved by the LG and the Chief Engineer of the railroad. Approval of these plans will not relieve the contractor from liability. The above also applies in connection with the installation of pipes, culverts, etc. adjacent to or under railroad tracks. The cost of preparation of working drawings will not be paid for separately but shall be included in the prices of the respective contract items involved.

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CONSTRUCTION CONTRACT ADMINISTRATION 

EROSION PREVENTION / SEDIMENT CONTROL (EPSC) INSPECTION

- It is essential that the SWPPP and erosion control plans be followed and revised as needed to fully comply with the environmental permits on each project. The LG and the CEI shall conduct routine project inspections and document the findings to ensure that the SWPPP is being followed and that non-compliance is unlikely.
- The Local Government is encouraged to acquire the services of an independent, certified professional in Erosion and Sediment Control (CPESC) certified erosion control consultant on projects with an NPDES or ARAP permit to conduct project inspections. The purpose of the inspections is to provide a "third party" independent review to ensure that the EPSC devices are installed and maintained as required, ensure the requirements of the permits are being documented and followed, and, if asked, provide recommendations. The inspections should be conducted monthly, or more frequent if violations or repeat non-conformances occur.

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CONSTRUCTION CONTRACT ADMINISTRATION 

EROSION PREVENTION / SEDIMENT CONTROL (EPSC) INSPECTION (CONT'D)

- Erosion and Sediment Control Construction Inspection Report - This report shall be completed for the evaluation of erosion and sediment control measures on all projects that are subject to the requirements of the NPDES General Permit for Storm Water Discharges from Construction Activities. This report shall also be used to document Contractor compliance with erosion and sediment control requirements in conformance with ARAP, Corps of Engineers, and/or TVA permits. An Inspection Report template and sample, along with instructions, are noted in EPSC Inspection Manual. The fillable version of the report is available as Form 8-27 on the LPDO website. [Check to see if stream credits are available.](#)

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CONSTRUCTION CONTRACT ADMINISTRATION 

EROSION PREVENTION / SEDIMENT CONTROL (EPSC) INSPECTION (CONT'D)

- Class V Underground Injection Control (UIC) Permit – Circular Letter 209.06-01 establishes the procedures for applying for a UIC Permit on an active construction project in the event that depressions (sinkholes with open throats) are encountered on or bordering the project site during construction activities.
- Construction Related Sediment Removal – Circular Letter 209.01-03 establishes the procedures for removal and/or stabilization of sediment discharges caused by active construction projects to non-jurisdictional areas, as well as jurisdictional areas, within or beyond the project's construction limits.
- Waste/Borrow Site Weekly EPSC Inspection Review Report – This report shall be completed for the evaluation of approved project exclusive waste/borrow sites. The contractor is responsible for performing twice weekly EPSC inspections of the site and must have a certified EPSC inspector as required by the TDEC Construction General Permit. [See the TDOT Waste and Borrow Procedures for further information and the Waste and Borrow Procedure Contractor's Support Activities Certification form.](#)

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CONSTRUCTION CONTRACT ADMINISTRATION 

EROSION PREVENTION / SEDIMENT CONTROL (EPSC) INSPECTION (CONT'D)

- Notice of Termination (NOT) (TDEC CN-1175) – Storm Water Discharges Construction Activity (Circular Letter 107.08-01) (Form 8-28) - This form notifies the Tennessee Department of Environment and Conservation of the request to termination of coverage from the General NPDES Permit for Discharges of Storm Water Associated with Construction Activities. Instructions for completing the NOT form are noted in Circular Letter 107.08-01.
- Upon concurrence of final stabilization by all involved parties, the NOT form shall be completed by the Local Government and submitted to the local Water Pollution Control (WPC) Environmental Field Office address indicated on the form. The NOT shall be signed by an authorized official of the Local Government.

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CONSTRUCTION CONTRACT ADMINISTRATION

PROGRESS PAYMENTS

- The Local Government shall make monthly partial progress payments to the contractor in general accordance with Section 109.06 of the TDOT specifications, 23 CFR 635.122, and Circular Letter 109.02-02.
- Progress payment reimbursement requests submitted to TDOT shall contain all the necessary documentation and certifications as required in Chapter 9 of these guidelines.
- Monthly Engineer's Estimate - Item quantities paid on engineer's estimates shall be supported by field documentation as directed in the Item Documentation instructions. Each item's current estimate quantity documented in the Field Book shall be referenced to the respective engineer's estimate number where payment was made. The reference shall be placed in the remarks field on the Field Book sheet.

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CONSTRUCTION CONTRACT ADMINISTRATION


PROGRESS PAYMENTS (CONT'D)

- Material Certifications covering each item's current estimate quantity shall be on file before payment may be processed. (Circular Letter 109-02.02)
- Additional information documented on the progress estimate:
 - Documented reason as to why Liquidated Damages are not being assessed on the current progress estimate when the contract days charged has overrun the original contract days allowed.
 - Local Government Project Supervisor's signature approving estimate payment also certifies that the required labor interview has been conducted.
 - Local Government Project Supervisor's signature certifies that the required material certifications are on file for each item's current estimate quantity.
- Monthly Construction Report - At the end of each estimate period a Monthly Construction Report is sent to the Contractor and a copy is sent to the Surety. The Monthly Construction Report documents the status of the project in regard to % of time used vs. % of contract amount paid. A 15% variance of time over amount shall be explained.

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PROGRESS PAYMENT EXAMPLE



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MATERIALS AND TESTS PROCEDURES

ACCEPTANCE TESTS (CONT'D)

- Materials not accepted on certification shall have daily reports documenting the actual test results.
- The required forms for material certifications/test reports are located at <https://www.in.gov/tdot/materials-and-tests/field-operations/forms.html>. Each form has an example completed form.
- All Material Certifications/Test Reports shall be documented by the LG/CEI. There shall be a test report totals summary for every item that requires certification/test reports for materials used.

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MATERIALS CERTIFICATION FORM (T-2)

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MATERIALS AND TESTS PROCEDURES

PROJECT MATERIALS ACCEPTANCE

- Products delivered to the project site for use in the work shall be in compliance with TDOT Specifications, Qualified Products List, or other contract documents. Products accepted by certification shall have a materials certification attached to a completed Form 8-31, or similar, stating the TDOT test requirements and certified test results. Other products shall have daily reports showing actual test results. Progress payments should not be made on an item if there are insufficient certifications or test data for that item (Circular Letter 109.02-01).
- All materials shall be accepted in accordance with this manual and TDOT Standard Operating Procedures (SOP).

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MATERIALS AND TESTS PROCEDURES 

VERIFICATION TESTS

- Verification samples and tests are those used for validating the quality of a product which is being incorporated into the project. LG or CEI shall be responsible for obtaining verification samples in accordance with TDOT SOP 1-1 and submitting to TDOT Materials & Tests. TDOT Materials & Tests shall conduct Verification Testing in accordance with TDOT SOP 1-1.
- The CEI or the Local Government shall notify the TDOT Regional Materials Supervisor at least 72 hours prior to the start of work requiring verification testing.

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MATERIALS AND TESTS PROCEDURES 

INDEPENDENT ASSURANCE TESTS

- TDOT Materials & Tests shall conduct Independent Assurance Sampling and Testing in accordance with TDOT SOP 1-2. Independent Assurance testing is only required for projects on the National Highway System (NHS).
- The CEI or the Local Government shall notify the TDOT Regional Materials Supervisor at least 72 hours prior to the start of work requiring Independent Assurance testing.
- Independent assurance samples and tests are used for the purpose of making checks on the reliability of the results obtained in acceptance sampling and testing. An independent assurance technician will be responsible for observing the acceptance technician conduct the tests to ensure that the proper techniques and procedures are followed.
- Independent assurance sampling shall be conducted at the minimum frequency established in TDOT SOP 1-2. A prompt comparison of acceptance test results with independent assurance test results will be made by the TDOT representative. This comparison must be documented in the project records. If the comparison indicates a problem either with the materials or with the testing methods, action must be taken immediately to resolve the problem.

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MATERIALS AND TESTS PROCEDURES 

PROJECT MATERIAL CERTIFICATION

- A materials certification shall be issued by the Local Government or their CEI Representative to the Local Program Development Office at the completion of the project in accordance with 23 CFR 637.207.
- The intent of the material certification is to assure that the quality of all materials incorporated into the project is in conformance with the plans and specifications.
- The certification from the Local Government or their CEI Representative must be based on an audit of the project records according to a certification check list stating that:
“The results of the test on acceptance samples indicate that the materials incorporated in the construction work, and the construction operations controlled by sampling and testing, were in conformity with the plans and specifications; and such results compare favorably with the results of the independent assurance sampling and testing. Exceptions to the plans and specifications are explained in the attachment.”

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FINAL INSPECTION/ACCEPTANCE

FINAL INSPECTION / ACCEPTANCE (CONT'D)

- Any work that has not been completed in accordance with the contract after the established contract completion date (or working days) shall be assessed liquidated damages (23 CFR 635.127).
- Documents relating to the Final Inspection shall be included in the End of Job folder. The Final Inspection Date shall be documented in the project diary. Also, the attendees at the inspection shall be listed and if applicable, the work that must be performed to complete the project (Punch List).

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PUNCH LIST FORM

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FINAL INSPECTION/ACCEPTANCE



COMPLETION NOTICE

- The Local Government Project Supervisor shall send to the LPDO, TDOT Operations Representative, TDOT Regional Materials and Tests Supervisor, contractor, and surety a Completion Notice (Form 8-33) indicating that all items of work have been inspected and are complete. The notice shall be sent as soon as possible after all items are accepted as complete. The completion date is the date time charges are stopped. This notice shall be sent by email to Local.Programs@tn.gov.

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FULL SETTLEMENT/CLAIMS EXAMPLE

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FINAL INSPECTION/ACCEPTANCE




FINAL ESTIMATE AND SUMMARY CHANGE ORDER (CONT'D)

- Contract Finalization - Upon completion of the project, the quantities paid to date shall be compared to the documented final quantities. All differences shall be corrected on the Final Estimate (the presumed last progress estimate). A Summary Change Order must be prepared to adjust the contract amount to an amount that coincides with the final quantities. Provide a copy of this change order to the LPDO along with the End of Job Certificate.
- Explanations of Overruns/Underruns – All overruns/underruns shall be explained in accordance with Circular Letter 109.03-01. Explanations shall be attached to the Final Estimate and filed in the End of Job file.
- Determination of Time based on Quantity Increase – Circular Letter 108.07-01 provides additional detail on the applicability and process for increasing contract working time based on the increase in quantities of the project.

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FINAL INSPECTION/ACCEPTANCE





FINAL ESTIMATE AND SUMMARY CHANGE ORDER (CONT'D)

- After the records have been checked by the LG, a document should be sent to the contractor displaying a comparison of the Original Quantities to the Final Quantities. Now is the appropriate time to attach a request to the Contractor for CC-3s (if applicable) and any deficient material certifications required to pay the Final Estimate.
- Certification Regarding Money Paid to DBEs (CC-3) - As soon as possible after the project is completed; the contractor shall submit a CC-3 form (Form 8-35) for each DBE on the project to the Local Government. The CC-3 form certifies the amount of monies paid the DBE for this project. The Final Estimate shall not be processed until all the CC-3s have been received and are on file in the project records. Each original CC-3 shall be filed in the End of Job file. Once the contractor submits the CC-3's, send a copy to the TDOT Civil Rights Office and the Local Programs Development Office via their web addresses (tdot.dbe.program@tn.gov and Local.Programs@tn.gov).

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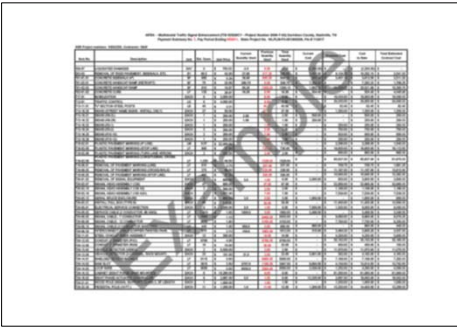
SUMMARY CHANGE ORDER EXAMPLE 



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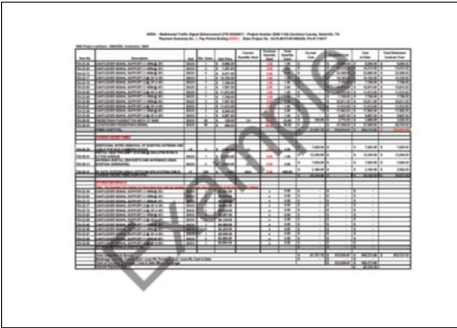
SUMMARY CHANGE ORDER EXAMPLE 



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SUMMARY CHANGE ORDER EXAMPLE 

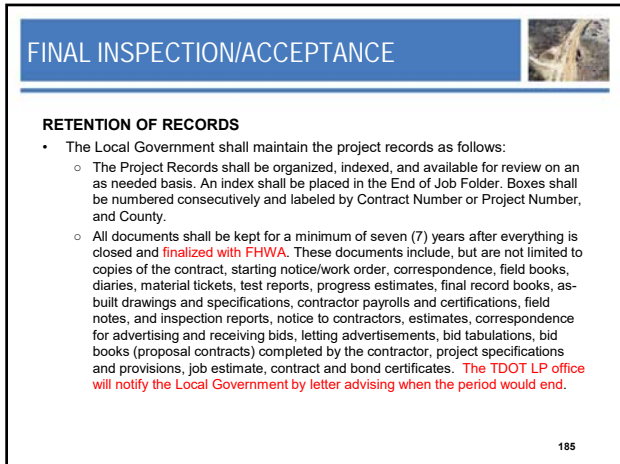


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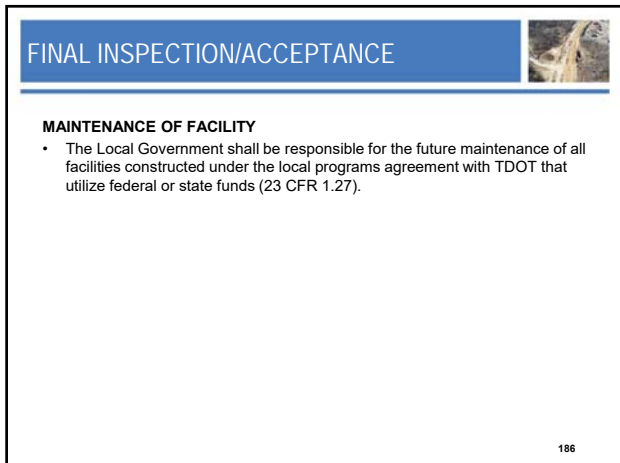
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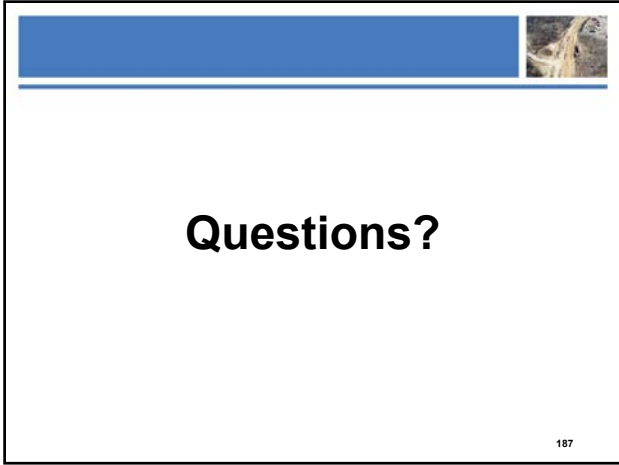
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DD1 David Donoho, 6/7/2021



Questions?

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