



Construction Manual

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LOWE
Anniversary
ENGINEERS



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REFERENCES/ATTRIBUTION

These are the original source documents which are frequently referenced.

- SRTA Procurement and Contracting Policy
- SRTA Purchase Order Terms and Conditions
- GDOT Construction Manual
- GDOT Standards & Details
- GDOT Standard Specifications (2013)
- GDOT Standard Specifications (2016 Supplement)
- FTA Project and Construction Management Guidelines
- Federal Lands Highway Construction Manual, FHWA

APPENDIX

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CHAPTER ONE

INTRODUCTION

1.1 PURPOSE AND USE OF THE MANUAL

This manual describes the process field personnel are to generally follow when administering construction contracts for State Road and Tollway Authority (SRTA).

It is stressed that this manual is a guide, not a compilation of mandatory instructions. Unless the language is explicitly mandatory, such as that related to regulatory requirements, operations personnel are expected to be innovative and to apply their own reasoning to unique project situations. Those unique situations may sometimes lead to conclusions and actions contrary to what is written in this manual; all actions, however, must fall within the constraints of SRTA policies, procedures, and delegations.

The manual does not contain detailed discussions of every technical area of construction engineering. To effectively carry out their responsibilities, users may find it necessary to also refer to other sources of information, such as:

The Design Manual for Xpress Stations and Park & Ride Facilities, which contains Special Provisions by SRTA and can be viewed online at the following web address: <https://www.srta.ga.gov/wp-content/uploads/2019/03/SRTA-Park-Ride-Design-Manual-3-22-19.pdf>;

The GDOT Construction Manual, which can be viewed online at the following web address: <http://www.dot.ga.gov/PartnerSmart/Business/Source/Pages/ConstructionSpecs.aspx>;

The GDOT Standard Specifications Construction of Transportation Systems, which can be viewed online at the following web address: <http://www.dot.ga.gov/PartnerSmart/Business/Source/specs/DOT2013.pdf>;

The GDOT Supplemental Specifications, which can be viewed online at the following web address: http://www.dot.ga.gov/PartnerSmart/Business/Source/special_provisions/2016%20Supplemental%20Specifications/2016SupplementalSpecBook.pdf;

The GDOT Construction Details and Standards, which can be viewed online at the following web address: <http://mydocs.dot.ga.gov/info/gdotpubs/ConstructionStandardsAndDetails/Forms/AllItems.aspx>, which are subject to additions and revisions at any time, with change and revisions accessible online at <http://www.dot.ga.gov/PS/Business/Source>;

The Manual of Uniform Traffic Control Devices (MUTCD), with current edition accessible online at <https://mutcd.fhwa.dot.gov/> and;

Various AASHTO and ASTM publications, Federal Regulations, and construction industry standards as may be referenced within this Manual.

It should also be noted that although this manual has been written in part to clarify contract requirements and may at times specifically refer to such requirements, the guidance provided does not replace, modify, or supersede any contract provisions, including the specifications, special provisions, and plans.

This manual has been updated as an electronic version to in part improve the timeliness and ease of updates as methods, materials, policies, procedures, specifications and technologies change in the construction field. An updated version is scheduled for review/revision once the first major Capital Project is completed.

1.2 ABBREVIATIONS AND DEFINITIONS (Source: SRTA Contract, Exhibit A)

Section 101 of the Standard Specifications includes the intent and meaning of abbreviations and terms commonly used in connection with construction projects administered by SRTA. Users of this manual are required to be familiar with these terms and abbreviations and use them correctly.

The terms cited in the Standard Specifications, as well as other terms, which are defined or explained as follows, will be used frequently in this manual.

Acceptance is the action of consenting to receive or undertake something offered.

Amendment shall mean a document that is properly signed by both Parties that changes the terms and conditions of this Contract.

Business Day means Monday through Friday excluding State-recognized holidays.

Change Order means a written approval by SRTA, counter-signed by Contractor, which shall set forth any adjustments to the Contract Sum and/or the Contract Time as further described in **Section 20.2 (Change Order)** of the Contract.

Construction Manager or Construction Project Manager (CM) is the primary person assigned to the project who deals daily with the contractor and represents SRTA as their on-site consultant.

Construction Documents mean those documents set forth in the ITB as Attachment 1 (Construction Plans), and Attachment 2 (GDOT Standard Specifications and GDOT Supplemental Specifications) and all drawings, plans, material and hardware descriptions, construction quality control reports, construction quality assurance reports and samples necessary or desirable for construction of the Project, in accordance with the ITB.

Contract means this Construction Contract between SRTA and Contractor.

Contract Documents shall have the meaning assigned to it in **Section 3 (Priority of Contract Documents)** of the Contract.

Contract Sum means the total amount due to the Contractor under the terms of the Contract.

Contractor shall have the meaning assigned to it in the Recitals.

Contractor Party(ies) means the Contractor's agents, employees, independent contractors, assigns, contractors, subcontractors, suppliers, or any other entity or Person with whom Contractor entered into an agreement to perform services or supply Materials and/or Fixtures or any other item of Work required of Contractor under the Contract Documents.

Contractor's Bid means the bid submitted by the Contractor in response to the ITB.

Critical Path means the sequence of activities that must be completed on schedule for the entire Project to be completed on in accordance with the schedule milestone deadlines. This is the longest duration path through the Work Plan, in terms of time, of logically connected activities on the schedule ending with the relative schedule milestone deadlines in respect thereof.

Day(s) shall mean calendar days unless otherwise specified in the Contract as a Business Day.

Default shall consist of those events and conditions listed in **Section 30.1 (Default)** of the Contract.

Designated Representative(s) shall mean the individual(s), consultant, partnership, firm, or corporation authorized by SRTA to represent SRTA's interests in the Project.

Disputed Work shall have the meaning assigned to it in **Section 20.2.2 (Disputed Work)** of the Contract.

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

Federal Acquisitions Regulation (FAR) the uniform Federal Government-wide procurement regulations found in the Code of Federal Regulations (CFR) at 48 CFR, Chapter 1. Some parts will be made contract clauses. Others will be furnished separately to the Project Engineer, depending on need.

Fixtures means any hardware, supplies, items, and/or physical property that is permanently attached to real property.

FLH Standard Specifications means a publication titled: "Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-14, United States Department of Transportation, Federal Highway Administration" which can be found at <https://flh.fhwa.dot.gov/resources/specs/fp-14/fp14.pdf>.

FTA The Federal Transit Administration of the U.S. Department of Transportation. When used to designate a person, FTA shall mean the Administrator or his duly authorized representative.

Force Majeure Event means the occurrence of any of the following events that materially and adversely affects performance of Contractor's obligations, provided that such events (or the effects of such events) could not have been avoided by the exercise of caution, due diligence, or reasonable efforts by Contractor (a) war (including civil war and revolution), invasion, armed conflict, violent act of foreign enemy, military or armed blockade, or military or armed takeover of the Project, in each case occurring within the State; (b) any act of terrorism or sabotage that

causes direct physical damage to the Project; (c) nuclear explosion or contamination, in each case occurring within the State; (d) riot and civil commotion on or in the immediate vicinity of the Project; (e) fire, explosion, flood, earthquake, hurricane, or tornado, in each case that causes direct physical damage to the Project; or (f) national or statewide (i.e. State of Georgia) strike that has a direct adverse impact on the Contractor's ability to obtain materials, fixtures or labor for the Project.

Governmental Approval means any permit, license, consent, concession, grant, franchise, authorization, waiver, variance or other approval, guidance, protocol, mitigation agreement, special provision, or memoranda of agreement/understanding, and any amendment or modification of any of them provided by governmental entities including state, local, or federal regulatory agencies, agents, or employees, which authorize or pertain to the Project or the Work.

Governmental Entity(ies) means any federal, state or local government and any political subdivision or any governmental, quasi-governmental, judicial, public or statutory instrumentality, administrative agency, authority, body or entity other than SRTA.

GDOT means the Georgia Department of Transportation.

GDOT Standard Specifications means a publication titled: "Department of Transportation, State of Georgia Standard Specifications, Construction of Transportation Systems" which can be found at <http://www.dot.ga.gov/PartnerSmart/Business/Source/specs/DOT2013.pdf>

GDOT Supplemental Specifications means the GDOT approved additions to or revisions of the Standard Specifications, which can be found at [http://www.dot.ga.gov/PartnerSmart/Business/Source/special_provisions/2016%20Supplemental%20Specifications/2016 SupplementalSpecBook.pdf](http://www.dot.ga.gov/PartnerSmart/Business/Source/special_provisions/2016%20Supplemental%20Specifications/2016%20SupplementalSpecBook.pdf).

Wherever the word "**including**" "**includes**" or "**include**" is used in this Contract, it shall be deemed to be followed by the words "without limitation."

Intention of Terms Whenever, in these Specifications or on the Plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of the like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Designated Representative is intended; and similarly, the words "approved," "acceptable," "satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Designated Representative, subject in each case to the final determination of SRTA.

Invitation to Bid (ITB) means the SRTA Solicitation Number and any addenda thereto and any documents referenced therein.

In Writing indicates documented communication via email, letter or handwritten.

Law or Laws means (a) any statute, law, code, regulation, ordinance, rule or common law, (b) any binding judgment (other than regarding a Claim or Dispute), (c) any binding judicial or administrative order or decree (other than regarding a Claim or Dispute), (d) any written directive, guideline, policy requirement or other governmental restriction or (e) any similar form of decision

of or determination by, or any written interpretation or administration of any of the foregoing by, any Governmental Entity, in each case which is applicable to or has an impact on the Project or the Work, whether taking effect before or after the Effective Date, including Environmental laws but excluding Governmental Approvals.

Legal Counsel – Provides advice on the existence or interpretation of laws and regulations.

Liquidated Damages means the damages assessed by SRTA and payable by Contractor to SRTA for failure to meet the Project milestones as set forth under **Section 26 (Liquidated Damages)** of the Contract.

Lump Sum means when used as an item of payment will mean complete payment for the Work described in the Contract.

Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) - The industry standard for design and utilization of standard traffic control devices.

Material(s) Any substance specified for use in the construction of the Contract Work.

Minor Field Adjustment shall mean deviations from the material(s) quantities provided in ITB that do not result in an increase in cost to SRTA as well as SRTA approved deviations from the construction schedule that do not result in an extension of the final completion date.

Mobilization means preparatory Work and operations to mobilize for beginning Work on the project. Mobilization shall include, but not be limited to, those operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for the establishment of temporary offices, buildings, utilities, safety equipment, including barriers, and first aid supplies, sanitary and other facilities, as required by these specifications and state and local laws and regulations. The costs of bonds and any required insurance and any other pre-construction expense necessary for the start of the Work, excluding the cost of construction materials, may also be included in Mobilization.

Notice to Proceed (NTP) means a written notice to the Contractor to begin the actual Contract Work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the Contract time begins.

O.C.G.A. means the Official Code of Georgia Annotated.

Park & Ride means the _____ Xpress Park & Ride lot located at _____ in _____ County.

Person means any individual, corporation, joint venture, limited liability company, company, voluntary association, partnership, trust, unincorporated organization, governmental entity, or SRTA.

Plans The official drawings or exact reproductions which show the location, character, dimensions and details of the Park & Ride and the Work to be done and which are to be considered as a part of the Contract, supplementary to the specifications.

Project Engineer is the primary SRTA designated representative.

Procurement and Contracts Manager (PCM) the Agency representative having full authority to execute and administer the contract on behalf of the Government, or a warranted delegate of that official who has been delegated some of that authority, e.g. contract administration.

Procurement and Contracts Manager's Technical Representative (PCMTR) the SRTA employee or employees having onsite support authority on behalf of the PCM as provided in Division delegations. For construction contracts, this person is normally the SRTA Project Manager.

Progress Schedule Chart (PSC) means the GDOT maintained form that depicts the project critical path schedule as the basis for establishing the controlling items of work and as a check of the progress of the Work. A template can be accessed here:

<http://www.dot.ga.gov/PartnerSmart/Business/Forms/PROGRESS%20%20SCHEDULE%20%200CHART3.doc>

Project. The scope of Work for accomplishing specific construction, development, and maintenance Work, as specified in the Contract Documents and Construction Documents.

Project Acceptance means successful completion of all tests described in Part 2, Section V of the ITB, closure of all punch list items, completion and submission of all required documents and meeting of other conditions as specified in the Contract Documents as acknowledged in writing by SRTA.

Project Acceptance Date means the date by which Project Acceptance is achieved which is set forth in the Schedule.

Project Management Plan (PMP) means the document that describes the system of management, staff, and measurable controls that will be utilized to meet the specifications of this ITB and will enable SRTA to monitor the progress and quality of the Work performed on the Project(s). The PMP will include all aspects of change management, communications management, configuration management, human resources management, requirements management and will incorporate the quality management plan, risk management plan, and cost, schedule and scope baselines.

Punch List means an itemized list of Construction Work that remains to be completed following Substantial Completion but as a condition to Project Acceptance, provided that the nature of any such incomplete Work, and the correction and completion of same, will have no material or adverse effect on the normal and safe use and operation of the Project.

Quality Control Program shall have the meaning ascribed to that term in **Section 9.2.4** of the Contract.

Schedule means the Contractor's Schedule approved in writing by SRTA, as may be adjusted pursuant to a Change Order, including on account of any permissible extensions of time pursuant to **Section 20.3 (Delay and Extensions of Time) of this Contract.**

Site means the physical boundaries on which the Project is located.

Special Provisions means additions or revisions by GDOT to the Standard Specifications or Supplemental Specifications, as applicable to the Project.

SRTA Default shall have the meaning ascribed to that term in **Section 30.3** of the Contract.

SRTA Director of Engineering is the immediate supervisor of the Project Engineer who may also be a warranted CO with limited contract administration delegations with respect to construction contracts.

Substantial Completion shall have the meaning ascribed to it in **Section 16.4 of the Contract**.

State means the State of Georgia.

Subcontractor means any individual, partnership or corporation supplying the Contractor with labor, materials, and supplies, used directly or indirectly by the said Contractor or subcontractor in the prosecution of the Work.

Superintendent means the individual designated by the Contractor and approved in writing by SRTA in the position to take full responsibility for the prosecution of the Work, who is present on the Work during progress, authorized to receive and fulfill instructions from the Designated Representative, and will act as a single point of contact on all matters on behalf of Contractor as described in the approved Project Management Plan.

Supplemental Agreement means a written agreement entered into by and between SRTA and the Contractor covering modifications or alterations to the original Contract, and establishing any necessary new Contract Items, any other basis of payment, and any time adjustments for the Work affected by the changes. This Agreement becomes a part of the Contract when properly executed and approved.

Work shall mean without limitation all plant, labor, materials, equipment, systems, taxes, services and other facilities, installation, testing, operations and maintenance and other things necessary or proper for or incidental to the carrying out and completion of the terms of the Contract Documents.

Work Breakdown Structure (WBS) means a chart that depicts all the Project deliverables that Contractor must complete, which is organized into multiple levels and displayed graphically.

1.3 DELEGATIONS OF AUTHORITY

The PCM holds full authority for administering SRTA construction contracts. The PCM delegates and assigns specific authorities and responsibilities to the Project Engineer. The Project Engineer cannot formally re-delegate authority or responsibility. Therefore, all inspectors and other subordinates act on behalf of the Project Engineer with apparent authority limited by the Project Engineer's supervision.

The Contractor must be informed of the authority of SRTA personnel, including the Project Engineer, for administering the contract. Questions of authority should be addressed at the pre-construction conference. Normally, the Contractor provides a description of the authorities of his or her representative at the site. Authority to agree to contract modifications and otherwise agree to contract changes is of particular importance for efficient contract administration.

1.3.1 PROCUREMENT AND CONTRACTS MANAGER (PCM)

This person has various contracting responsibilities including awarding and administering contracts, terminating contracts, and executing final settlements of contracts. The PCM responsibilities are delegated to the SRTA PM. Many PCM functions are typically delegated to different Division personnel depending on their nature. However, expending additional contract funds or changing a contract are not delegable, and therefore must be authorized by a PCM.

From [FAR 43.102](#):

(a) Only Contracting Officers acting within the scope of their authority are empowered to execute contract modifications on behalf of the Government. Other Government personnel shall not

(1) Execute contract modification

(2) Act in such a manner as to cause the contractor to believe that they have authority to bind the Government; or

(3) Direct or encourage the contractor to perform work that should be the subject of a contract modification.

From [FAR 43.202](#):

Change orders shall be issued by the contracting officer except when authority is delegated to an administrative contracting officer.

And from [FAR 2.101](#):

The term [CO] includes certain authorized representatives [delegate] of the contracting officer acting within the limits of their authority as delegated by the contracting officer.

FAR, Subparts [42.2](#) and [42.3](#), prescribe the policies and procedures for the PCM's assignment of contract administration responsibilities to a delegate, such as the Project Engineer.

1.3.2 PROCUREMENT AND CONTRACTS MANAGER TECHNICAL REPRESENTATIVE (PCMTR)

The Procurement and Contracts Manager (PCM) will designate a SRTA Project Engineer to be the on-site contact person for the contract and to generally verify that the work performed meets the requirements of the contract. The Project Engineer may be delegated support and verification functions, but not functions specifically reserved for the PCM.

At SRTA, the Project Engineer is usually a subordinate of a PCM and therefore may be delegated certain functions in assisting the PCM in fulfilling his/her functions. An example might be in facilitating the negotiation of a contract modification. However, the Project Engineer is not delegated the authority to commit the Government as a PCM.

CHAPTER TWO

ROLE OF THE CONSTRUCTION MANAGER

2.1 GENERAL

The Construction Manager (CM) is responsible for assuring the contractors for the projects comply with the contract and for project construction and certain equipment and material procurement administration from start of construction to the final turnover to SRTA. Where responsibilities for related activities are under control of other jurisdictions, the CM is responsible for integration and coordination of those activities or monitors the activities of those that are.

Prior to contract award (pre-construction phase), the CM is responsible for verifying the contract milestones are compatible with the project schedule, ensuring that special construction requirements are noted, assisting with constructability reviews and participating in VE studies. During construction, the CM is responsible for monitoring contract compliance with the drawings, specifications, and other requirements including construction warranties, contract documentation and as-built records, and project closeout. Additionally, the CM is responsible for overseeing contract administration procedures and construction safety and security. The CM provides construction management personnel to supplement SRTA's CM Organization.

2.2 PRE-CONSTRUCTION MEETING

The CM shall organize and facilitate the Pre-Construction Meeting.

Items to Discuss include (but not limited to):

1. Introduction of personnel on project and their role
2. Issuance of NTP
3. Project Schedule, including any adjustments made after initial submittal by Contractor
4. Permits / Plans
5. QC/QP Plan
6. Safety Plan
7. Traffic Control measures
8. Payment Processing and Procedures
9. Contract Compliance

2.3 Work Suspensions / Stop Work Orders

The CM shall review all provisions within the project Scope of Work. Additional provisions within the contract may trigger work suspensions or stop work orders. Where there is a conflict between the provisions within the contract and the items listed within the chapter, the contract shall take precedence.

Work Suspensions / Stop Work Orders may occur during the construction phase in the event one of the following occur:

1. Any condition where the safety of the workers or general public has been placed at risk;
2. Weather or soil conditions considered unsuitable for continuation of work;
3. Failure on the part of the Contractor to correct deficiencies previously noted and documented in a timely manner and having been provided multiple notices; or
4. Nonperformance of any provision of the Contract.

For Item 1, the notice may be verbal, especially when there is an immediate risk. Written documentation of the Stop Work Order is to immediately follow. For Items 2-4, the CM shall provide a written notice of the Stop Work Order along with a list of the deficiencies to be corrected. Stop Work Orders are to be released as soon as the deficiencies are corrected.

In the event the Stop Work Order is weather related or for the convenience of SRTA, adjustments to the contract schedule may be warranted as authorized by SRTA. In the event the Stop Work Order has been made due to deficiencies on the part of the Contractor, no adjustments are to be made.

2.4 Review Material Tickets

See Chapter 11, Measurement and Payment.

2.5 Review Invoices / Pay Requests

The CM is responsible for the verification of Invoices / Pay Requests to compare the amounts invoiced vs. project completion. The CM is responsible for measuring quantities, making computations and receiving reports to validate the Contractors invoices. Reviews are to be prompt upon receipt of all documentation. Measurements are to be performed as per Chapter 11, Measurement and Payment.

The CM is responsible for ensuring that all contract compliance is collected monthly per FTA requirements:

1. Davis Bacon wage rates are required on all federally funded construction contracts of \$2000 or more; CM will conduct monthly labor interviews with at least 1 employee from the prime contractor and each subcontractor to confirm compliance. Avoid interviewing the same person within 6 months of a previous interview;
2. Contractor to submit Weekly certified payrolls documentation with their pay application for prime and all subcontractors performing work on the project. CM to confirm accuracy and compliance before completing review.
 - a. Compliance field verifications: conduct & document monthly labor interviews
 - b. Davis Bacon requirements are applicable to all sub-contractors as well, down to as many subcontractors' layers as possible;
 - c. Electronic copies are preferred as submittals, but SRTA would also receive

- and process hard copies;
- d. NOTE: If there is any pay rate change, only prevailing rates of the minimum wages need to be updated in contractor's payroll.
 - e. For contractors who do not have a customized payroll certification system for their company, use instead the certified payroll form retrievable by clicking on <https://www.dol.gov/whd/forms/wh347.pdf>.



**DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (DBE)/SMALL
BUSINESS ENTERPRISE PARTICIPATION (SBE)
SUBCONTRACTOR PAYMENT REPORT**

To be completed by Subcontractor and included in Prime Contractor's Payment Request

**Subcontractor's
Name** _____

Report:
Month _____ Year _____

DBE/Small Business Subcontractor

Name: _____

DBE/SBE Certification #: _____

Contact Person: _____

Address: _____

City _____ State _____ Zip _____

Phone _____ Fax _____

Subcontractor Services Provided _____

Project Number: _____
SBE Subcontract Amount: _____
DBE Subcontract Amount: _____
Contract Begin Date: _____
Contract End Date: _____
Service Provided: _____

**List all payments received from Prime
Contractor in the preceding 30 days:**

1. _____

2. _____

3. _____

Total Amount Paid \$ _____

**List dates and amounts of any outstanding
invoices:**

1. _____

2. _____

3. _____

Total Dollars Unpaid \$ _____

Prime Contractor Name _____ Contact Person _____

Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____

RETURN COMPLETED FORM AND ANY ADDITIONAL INFORMATION AS REQUIRED TO:

Cathy Gesick, Compliance Manager/DBE Liaison Officer

State Road and Tollway Authority

245 Peachtree Center Avenue, NE, Suite 2200

Atlanta, Georgia 30303

cgesick@srta.org (404) 893-6177

Signature of DBE/SBE: _____ **DATE:** _____

2.6 Review Schedule Adjustments / Recovery Plan

Prior to the pre-construction meeting, the Contractor shall submit a proposed project schedule to SRTA. The CM shall assist SRTA with the review of the schedule and provide recommendations if the proposed schedule does not meet the projected project schedule dates. The adjusted schedule shall be reviewed with the Contractor during the pre-construction meeting or a follow-up meeting within 5 days of the pre-construction meeting.

Weekly updates of the schedule are to be provided by the Contractor and the CM shall compare them to the original schedule. Deviations from the original scheduled are to be discussed along with the documentation of mitigating factors causing the changes. The CM is to work with the Contractor to establish a recovery plan to make every effort to maintain the original schedule. Factors such as contract modifications that increase scope of work should allow for increased time.

Weather delays or the potential for them should be taken into consideration in preparation of the original schedule based on time of year, length of project and historical data. The CM shall document daily weather conditions for the life of the project. The CM shall also document Suspensions of Work or Stop Work Orders caused by contractor deficiencies and any delays caused by these, given that delays may result in liquidated damages.

Increases in contract time may be authorized by:

- Supplemental Agreement that includes a revised fixed completion date;
- Change Order that provides a unilateral revised completion date for performing work which there has been no agreement;
- Supplemental Agreement issued in settlement of a claim.

CM shall review SRTA's Procurement Policies and Procedures and the Contractors Contract for any other terms and conditions. All modifications to the original schedule are to be authorized by SRTA and properly documented.

2.7 Weekly / Monthly Reports

Depending on the length and complexity of the project, the CM shall submit either weekly or monthly reports to SRTA. Frequency is to be determined prior to commencement of the construction work. Reports are to be a summary of the work performed within the designated time period and shall be based on the following:

1. Daily Reports / Diary Entries
2. Updates to Project Schedule
3. Accident Reports / Summaries
4. Summary of Reports provided by the Contractor
5. Other reports or summaries of work

Reports shall be factual, concise, complete and legible. Information should not be vague nor based on personal views or opinions. Any information written should be subject to review by the Contractor.

Date Mon 12/09/2019

Job # Bid 20-026

Prepared By David Ayers



Weather

6:00 AM

43°

Overcast

Wind: 7 MPH | Precipitation: .01" | Humidity: 68%

12:00 PM

42°

Overcast

Wind: 4 MPH | Precipitation: .06" | Humidity: 94%

4:00 PM

45°

Overcast

Wind: 4 MPH | Precipitation: .07" | Humidity: 100%

Work Logs

Name	Description	Quantity
J.G. Leone Enterprises, Inc	JG Leone crews removed the concrete sidewalk and the remainder of curb and gutter in preparation of pouring the new handicap access area in the northern lot. Loaded spoil concrete into on site dumpsters Began repair work on the gate to northern parking lot. Replaced a bracket and reinforced the support wheel on bottom of gate. Additional adjustments will be made.so gate will function properly.	0
Total		0

Time Cards

No entry

Materials

No entry

General Notes

1. Met with Joe Leone to measure quantities for the November Pay Estimate.

Site Safety Observations

No entry

Survey

Questions	N/A	No	Yes	Description
1. Any accidents on site today?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2. Any schedule delays occur?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3. Did weather cause any delays?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4. Any visitors on site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Any areas that can't be worked on?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
6. Any equipment rented on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	



I, David Ayers, have reviewed and completed this report.



WEEKLY PROJECT STATUS REPORT

PROJECT SUMMARY

REPORT DATE	PROJECT NAME	PREPARED BY
September 23, 2019	<i>SRTA On-Call Construction Management - Contract #20-022, Administration, Inspection & Materials Testing Services</i>	DA/WTM

TASKS COMPLETED PREVIOUS REVIEW PERIOD (09/16 THRU 09/22)

- Task Order #1, includes General Purpose CE&I services on Ten (1) minor maintenance projects for Xpress facilities as well as emergency on-call services as required (Effective Date: 08/15/19):
 - Stockbridge Park & Ride – Project completed and closed.
 - Mall of GA Bus Lane Repairs – Completed concrete work
 - Cumming, GA Park & Ride – Lowe reached out to J.G. Leone Enterprises (contractor) to schedule the Pre-Con; haven't confirmed date yet, but will publish once this is coordinated
- Task Order #3, Town Center (AKA Big Shanty) Park and Ride: Lowe received executed task order from SRTA, 9/19.

TASKS SCHEDULED FOR NEXT WEEK (09/23 THRU 09/29)

- T/O #1: (Mall of GA bus lane repairs) – complete milling and asphalt repairs (scheduled for Tuesday, 9/24) – all major concrete and asphalt work will be complete except striping.
- T/O #1: Cumming Park & Ride project – Conduct the Pre-Construction conference NLT September 27th.
- T/O #2: Submit 1st Draft of the SRTA Construction Manual index to SRTA for final edits
- T/O #3: Initiate the 90% plan review when plans are received from SRTA

RISK AND ISSUE HISTORY

- None reported this period

PROJECT TIMELINE / KEY MILESTONES

- | | |
|---|---------------|
| ▪ Kick-Off meeting with SRTA Key Personnel/Lowe Management Team | Aug. 1, 2019 |
| ▪ T/O #1, Minor Repairs at numerous facilities issued | Aug. 15, 2019 |

- Stockbridge Park & Ride – Complete and Closed
- Mall of GA bus lane (Comm. Paving Services)
- Cumming, GA Park & Ride
- 7 remaining Xpress P&R lots
- T/O #2, Develop SRTA Construction Manual
- T/O #3, Big Shanty Park & Ride – Capital Improvement

Aug. 29, 2019
 Start, 9/9; scheduled end NLT 10/4
 Schedule the Pre-Con NLT 9/27
 TBD -- Awaiting SRTA procurement
 T/O issued Sept. 1, 2019

PROJECT PHOTOS



Aerial photo taken during 1st week of demo activities

Form, place and finish remaining concrete, 9.16



Contractor completes remaining concrete placement, 09.16.2019

Protect newly placed concrete

U.S. Department of Labor

Wage and Hour Division

PAYROLL

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm)



Rev. Dec. 2008

NAME OF CONTRACTOR OR SUBCONTRACTOR	ADDRESS	PROJECT AND LOCATION
PROJECT OR CONTRACT NO.		

OMB No.: 1235-0008
Expires: 04/30/2021

(1) NAME AND INDIVIDUAL IDENTIFYING NUMBER (e.g., LAST FOUR DIGITS OF SOCIAL SECURITY NUMBER) OF WORKER	(2) EXEMPTION OR NON-APPLICATION	(3) WORK CLASSIFICATION	(4) DAY AND DATE							(5) TOTAL HOURS	(6) RATE OF PAY	(7) GROSS AMOUNT EARNED	(8) DEDUCTIONS			(9) NET WAGES PAID FOR WEEK		
			HOURS	WORKED	EACH	DAY	FICA	WITH- HOLDING TAX	OTHER				TOTAL DEDUCTIONS					

While completion of Form WH-347 is optional, it is mandatory for covered contractors and subcontractors performing work on Federally financed or assisted construction projects to respond to the information collection contained in 29 C.F.R. §§ 3.3, 5.5(a). The Copeland Act (40 U.S.C. § 3145) requires contractors and subcontractors performing work on Federally financed or assisted construction projects to "furnish weekly a statement with respect to the wages paid each employee during the preceding week." U.S. Department of Labor (DOL) regulations at 29 C.F.R. § 5.5(a)(3)(ii) require contractors to submit weekly a copy of all payrolls to the Federal agency contracting for or financing the construction project, accompanied by a signed "Statement of Compliance" indicating that the payrolls are correct and complete and that each laborer or mechanic has been paid not less than the proper Davis-Bacon prevailing wage rate for the work performed. DOL and federal contracting agencies receiving this information review the information to determine that employees have received legally required wages and fringe benefits.

Public Burden Statement

We estimate that it will take an average of 55 minutes to complete this collection, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. If you have any comments regarding these estimates or any other aspect of this collection, including suggestions for reducing this burden, send them to the Administrator, Wage and Hour Division, U.S. Department of Labor, Room S3502, 200 Constitution Avenue, N.W. Washington, D.C. 20210

(over)

Note: Please select the appropriate participation report for the drop down menu below

Monthly DBE Participation Report

REPORT SUBMISSION DATE: _____

PROJECT NO. (S) _____
 COUNTY: _____
 CONTRACT ID#: _____
 CONTRACTOR: _____

REPORT #:

DATE WORK BEGAN: _____ DBE REQUIRED %: _____
 CONTRACT \$ AMOUNT: _____ % DOLLAR COMPLETE: _____
 DBE \$ AMOUNT: _____ % PROJECT COMPLETE: _____

- | | | | |
|-----------------|--------------------------|---------------------|-------------------------------------|
| JANUARY 31 | <input type="checkbox"/> | JULY 31 | <input checked="" type="checkbox"/> |
| FEBRUARY 28 | <input type="checkbox"/> | AUGUST 31 | <input type="checkbox"/> |
| MARCH 31 | <input type="checkbox"/> | SEPTEMBER 30 | <input type="checkbox"/> |
| APRIL 30 | <input type="checkbox"/> | OCTOBER 31 | <input type="checkbox"/> |
| MAY 31 | <input type="checkbox"/> | NOVEMBER 30 | <input type="checkbox"/> |
| JUNE 30 | <input type="checkbox"/> | DECEMBER 31 | <input type="checkbox"/> |

S=SUPPLIER		O=OWNER/OPERATOR		SC=SUBCONTRACTOR		SAR=SUBCONTRACTOR AGREEMENT RECEIVED		RN=RACE NEUTRAL		RC=RACE CONSCIOUS	
APPROVED DBE						VENDOR ID		DESCRIPTION OF WORK			
S	O	SC	SAR	RN	RC	ORIG. SUBCONTRACT AMOUNT	PREVIOUS PAYMENTS	PAYMENTS THIS REPORT	PAYMENTS TO DATE		
01.											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
02.											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
03.											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
04.											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
05.											
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>						
CURRENT COLUMN TOTALS											

% PAID TO DATE _____ %

I HEREBY CERTIFY THAT THE ABOVE STATEMENT IS TRUE AND CORRECT AND SUPPORTING DOCUMENTATION IS ON FILE AND IS AVAILABLE FOR INSPECTION BY DEPARTMENT PERSONNEL AT ANY TIME.

PRINT NAME: _____
 SIGNATURE: _____
(MANDATORY) CONTRACTOR

FOR DEPARTMENTAL USE ONLY:

THIS DOCUMENT HAS BEEN REVIEWED AT THE PROJECT LEVEL BY:

PRINT NAME: _____ TITLE _____
 SIGNATURE: _____
(MANDATORY)

THIS DOCUMENT HAS BEEN REVIEWED AT THE DISTRICT LEVEL BY:

PRINT NAME: _____ TITLE _____
 SIGNATURE: _____
(MANDATORY)

Submit Form Via Email

LABOR STANDARDS INTERVIEW

CONTRACT NUMBER				EMPLOYEE INFORMATION				
NAME OF PRIME CONTRACTOR				LAST NAME		FIRST NAME		MI
				STREET ADDRESS				
NAME OF EMPLOYER				CITY		STATE	ZIP CODE	
				SUPERVISOR'S NAME		WORK CLASSIFICATION		WAGE RATE
LAST NAME		FIRST NAME		MI				
ACTION							CHECK BELOW	
							YES	NO
Do you work over 8 hours per day?								
Do you work over 40 hours per week?								
Are you paid at least time and a half for overtime hours?								
Are you receiving any cash payments for fringe benefits required by the posted wage determination decision?								
WHAT DEDUCTIONS OTHER THAN TAXES AND SOCIAL SECURITY ARE MADE FROM YOUR PAY?								
HOW MANY HOURS DID YOU WORK ON YOUR LAST WORK DAY BEFORE THIS INTERVIEW?				TOOLS YOU USE				
DATE OF LAST WORK DAY BEFORE INTERVIEW (YYMMDD)								
DATE YOU BEGAN WORK ON THIS PROJECT (YYMMDD)								
THE ABOVE IS CORRECT TO THE BEST OF MY KNOWLEDGE								
EMPLOYEE'S SIGNATURE							DATE (YYMMDD)	
INTERVIEWER	SIGNATURE			TYPED OR PRINTED NAME			DATE (YYMMDD)	
INTERVIEWER'S COMMENTS								
WORK EMPLOYEE WAS DOING WHEN INTERVIEWED				ACTION (If explanation is needed, use comments section)		YES	NO	
				IS EMPLOYEE PROPERLY CLASSIFIED AND PAID?				
				ARE WAGE RATES AND POSTERS DISPLAYED?				
FOR USE BY PAYROLL CHECKER								
IS ABOVE INFORMATION IN AGREEMENT WITH PAYROLL DATA?								
<input type="checkbox"/> YES <input type="checkbox"/> NO								
COMMENTS								
CHECKER								
LAST NAME		FIRST NAME		MI	JOB TITLE			
SIGNATURE							DATE (YYMMDD)	

2.8 Quality Assurance / Quality Control (QA/QC)

The Design Engineer is responsible for establishing the QA/QC processes and requirements during projects' design phase. The CM may be requested to participate in constructability reviews, value engineering and/or peer reviews. The purpose of these reviews is to:

- Eliminate construction requirements that are impossible or impractical or unnecessary to build;
- Improve constructability;
- Verify accurate depictions of site conditions with regard to access, utilities, and general configuration;
- Make sure of the adaption of designed structures and features to the project site conditions and constraints;
- Determine appropriate construction durations and milestones;
- Verify requirements for QA/QC during construction;

Prior to the commencement of any construction work, the Contractor is required to prepare a written QA/QC Plan as specified in their contract. The CM shall review the plan and ensure the plan meets the QA/QC requirements for construction. Documentation as provided within the plan is to be provided to the CM by the Contractor which will be incorporated into the weekly / monthly reports.

2.9 Contractor Performance Evaluation

At the end of the project, the CM shall prepare a performance evaluation of the Contractor and if necessary, any major sub-contractors. The CM shall utilize the Standard Form 1420 for this evaluation, located at <https://www.govinfo.gov/content/pkg/CFR-2004-title48-vol2/pdf/CFR-2004-title48-vol2-sec53-301-1420.pdf>. Other key project personnel may also be requested to perform an evaluation.

Although most contractors are evaluated as satisfactory or better, it is important to understand the process for dealing with serious or chronic unsatisfactory performance. Evaluations are conducted based on the following performance characteristics:

- Quality of Work
- Timeliness
- Effectiveness of management
- Compliance with Contract requirements
- Compliance with labor standards
- Compliance with safety standard

Exhibit 12.2-A SF 1420, Performance Evaluation – Construction (Continued)

FOR OFFICIAL USE ONLY (WHEN COMPLETED)

PART III - EVALUATION OF PERFORMANCE ELEMENTS

N/A = NOT APPLICABLE O = OUTSTANDING A = ABOVE AVERAGE S = SATISFACTORY M = MARGINAL U = UNSATISFACTORY

15. QUALITY CONTROL							16. EFFECTIVENESS OF MANAGEMENT						
	N/A	O	A	S	M	U		N/A	O	A	S	M	U
a. QUALITY OF WORKMANSHIP			X				a. COOPERATION AND RESPONSIVENESS			X			
b. ADEQUACY OF THE QCC PLAN	X						b. MANAGEMENT OF RESOURCES/ PERSONNEL			X			
c. IMPLEMENTATION OF THE QCC PLAN	X						c. COORDINATION AND CONTROL OF SUBCONTRACTOR(S)				X		
d. QUALITY OF QC DOCUMENTATION	X						d. ADEQUACY OF SITE CLEAN-UP				X		
e. STORAGE OF MATERIALS			X				e. EFFECTIVENESS OF JOB-SITE SUPERVISION				X		
f. ADEQUACY OF MATERIALS				X			f. COMPLIANCE WITH LAWS AND REGULATIONS				X		
g. ADEQUACY OF SUBMITTALS				X			g. PROFESSIONAL CONDUCT			X			
h. ADEQUACY OF QC TESTING				X			h. REVIEW/RESOLUTION OF SUBCONTRACTOR'S ISSUES	X					
i. ADEQUACY OF AS-BUILTS	X						i. IMPLEMENTATION OF SUBCONTRACTING PLAN	X					
j. USE OF SPECIFIED MATERIALS				X									
k. IDENTIFICATION/CORRECTION OF DEFICIENT WORK IN A TIMELY MANNER			X										
17. TIMELY PERFORMANCE							18. COMPLIANCE WITH LABOR STANDARDS						
a. ADEQUACY OF INITIAL PROGRESS SCHEDULE			X				a. CORRECTION OF NOTED DEFICIENCIES				X		
b. ADHERENCE TO APPROVED SCHEDULE			X				b. PAYROLLS PROPERLY COMPLETED AND SUBMITTED				X		
c. RESOLUTION OF DELAYS			X				c. COMPLIANCE WITH LABOR LAWS AND REGULATIONS WITH SPECIFIC ATTENTION TO THE DAVIS-BACON ACT AND EEO REQUIREMENTS				X		
d. SUBMISSION OF REQUIRED DOCUMENTATION				X									
e. COMPLETION OF PUNCHLIST ITEMS				X			19. COMPLIANCE WITH SAFETY STANDARDS						
f. SUBMISSION OF UPDATED AND REVISED PROGRESS SCHEDULES							a. ADEQUACY OF SAFETY PLAN				X		
g. WARRANTY RESPONSE	X						b. IMPLEMENTATION OF SAFETY PLAN				X		
							c. CORRECTION OF NOTED	X					

20. REMARKS (Explanation of unsatisfactory evaluation is required. Other comments are optional. Provide facts concerning specific events or actions to justify the evaluation. These data must be in sufficient detail to assist contracting officers in determining the contractor's responsibility. Continue on separate sheet(s), if needed.)

The project was constructed under a letter contract for which the completed work was covered under a warranty of 5 years. The warranty period has expired, an inspection of the project has been completed and there are no warranty issues outstanding. In performing the work the contractor was very cooperative and was very open to changes and modifications as they occurred. The contractor produced a quality product with absolute minimal Government supervision or oversight.

Quality of Work should meet or exceed the requirements included in the approved QA/QC plan. If a Contractor fails to meet the requirements included in the approved QA/QC plan (inspections, testing, etc.), then this will generally warrant an unsatisfactory rating in the Quality of Work category. In that instance, the contractor would be qualified as deficient. Deficient contractors would be notified of deficiencies and provided an opportunity to correct them.

The CM must know that any unsatisfactory rating of a Contractor's performance shall be supported by evidences recorded in the project records. The Contractor shall be notified of any unsatisfactory performance after the evaluation and provided with the opportunity for correction.

Evaluation reports may be shared with other state or federal agencies or private entities with a prior written approval by SRTA. Evaluations must be objective and based solely on performance and documentation. Evaluations shall not be based on personal views or opinions.

In the event the Contractor's overall performance is impacted by the performance of a major subcontractor, it may be worthwhile to separate the performance of each and perform a separate evaluation of the subcontractor following the same rules as for the prime.

2.10 Request for Information (RFI)

A Request for Information (RFI) is used in construction to clarify any uncertainties or to fill in any gaps in information that may be found in any plans, specifications, contracts, or other documents. An RFI should never be verbal. Written RFI's are to be submitted to the CM who will determine who the RFI needs to be routed to (Design Engineer, SRTA, etc.) RFI's are to be routed immediately with an established date for response. The CM shall monitor each RFI to ensure they are addressed promptly. Copies of the RFI and all related correspondence are to be filed in the project records.

2.11 Photographs and Drone Footage

Photographs serve to document the progress of the project. They can also create a record in regard to slides, cave-ins, floods, or other unusual occurrences; actual conditions when a Contractor alleges differing site conditions; unusual construction features or practices; accidents involving death, personal injury or property damage; encroachments within the right-of-way; or other occurrences and conditions. They are useful in illustrating final construction reports or other reports. They are invaluable as evidence in case a controversy develops that results in litigation.

A photographic history of all construction projects should be made. Photographs should be taken of the construction site before construction begins, during each stage of construction as it progresses and of the completed project. Photographs can be incorporated into daily or weekly reports. Photographs taken on a regular basis should be taken from the location and aimed at the same reference point in order for the progress, or lack thereof, to be monitored. Photographs should be taken from different locations around the site to ensure adequate coverage of the area under construction is covered. Coverage can also be provided through the use of drones to provide a better perspective of the overall conditions.

Photographs should also be taken immediately after unusual occurrences and before any unusual conditions are disturbed. The CM and all Inspectors should either have a camera, including a cell phone camera, with them or have easy access to one.

Photographs should have some reference point for scale and be able to document the correct

time and date the picture was taken. Reports utilized to identify or record the photographs should identify the location where the photograph was taken, why the photograph was taken and who took the photograph. The photographs should be filed in a manner to allow them to be easily accessible and filed in an organized manner.

2.12 Project Diaries / Project Reports

2.12.1 Project Diaries

Daily records are to be kept for each project and filed with other records when the project is complete. The CM must maintain a diary which is to be filled out on a daily basis. If the CM is absent from the project, daily entries must be made and signed by the person in charge in their absence.

Diary entries are to be factual, concise, complete and legible. Entries should avoid vague generalizations. Personal opinions are not to be included in diary or project reports. Entries should report exactly what was observed, discussed, or agreed upon.

It is intended that the information recorded in the diaries and in the project reports, including Inspector Reports, be of sufficient detail so that the events can be reconstructed later as they actually happened. On projects where the Contractor is required to maintain records of equipment, personnel and construction operations, it is not necessary for the CM to duplicate these records, but they should have copies of these records for the project files. In the event the CM utilizes the Contractor's information, a process should be established to review, endorse and provide feedback on the Contractor-produced records.

In the event that a voice recorder is utilized to help with record keeping or making diary entries, a notation should be included that the information was transcribed from a recording. While the diary will most likely be produced in an electronic format, a hard copy is to be generated, signed and filed at the end of each daily entry.

Project diaries and reports may be reviewed by the Contractor or the general public. All entries should be made as if they will eventually be seen by the Contractor or others involved in the contract. Approval to review any of this information, including for the Contractor, must come from SRTA.

Unless otherwise directed, field measurements and notes for documenting monthly or weekly progress or for estimating quantities should not be included in the project diary.

Diaries and project reports are to be filed with other project records at the end of the project. Any recordings that have been retained shall also be included.

Daily diary entries should include the following as appropriate, plus any additional pertinent information:

- Date
- CM name and hours worked
- Name of project staff and hours worked
- Name of visitors on the project

- Construction work in progress, unless otherwise covered by the Inspectors Daily Report.
- Comments on the progress of operations as compared to the Contractor's approved schedule.
- The substance of important conversations with the Contractor concerning conduct, changes, interpretation of specifications and similar details
- Comments on construction safety hazards and corrective measures as appropriate
- Discussion of erosion control and other environmental concerns as appropriate
- Information concerning accidents occurring on the project or incidental to the construction work
- Comments on traffic control and signing as appropriate
- Any information not covered in other reports that might have a bearing in case of future disagreement, such as difficulties encountered in construction and their causes, delays caused by breakdowns of equipment, comments relative to improper use of equipment reflecting inefficient operations by the Contractor, etc.

The best record will be produced by the CM who looks ahead at potential problems and prepares for those problems. Records could include:

- Diary notes of equipment or material moved to the project for use;
- Subsequent use of the equipment or material;
- Pertinent conversations;
- Preparatory or production work on items that may be deleted or reduced in the future;
- Situations that may lead to possible future disputes.

The record should also include all additional information that could help evaluate a claim for additional compensation or time.

2.12.2 Project Reports

Project reports, including Inspector Daily and Weekly Reports, should document the Contractor's construction operations. These forms shall provide a concise, readily retrievable record of the following key elements (see samples):

- Header with project name, address, date, job number and author
- Weather conditions (at 6 AM, 12 noon, and 4 PM)
- Work log (Itemized list of contractors, subs and vendors, with an explanation of tasks completed and crew size)
- Materials delivered to the jobsite
- Notes, issues and concerns
- Site safety observation

- Quality control observations
- General project questionnaire/checklist
- Project photos
- Signed by inspector

2.13 Correspondence / Contract Administration

To assist with clarity on who correspondence should be directed to, the CM shall maintain a complete list of contacts related to the project which identifies each contact's name, agency or company, phone and email address and their relationship to the project. The list should categorize the typical types of correspondence on the project and who should be copied based on these categories. This list will help expedite appropriate communication of project problems and assist new personnel assigned to the project.

All correspondence coming from the CM should be either initialed or signed by the CM or their assigned representative for a specific task. All correspondence to the CM should be copied to the SRTA Project Manager (PM). Correspondence covering items outside the authority of the CM should be noted so action may be taken by the required SRTA PM. Copies of correspondence to outside agencies shall also be copied to the SRTA PM. All incoming and outgoing correspondence shall be provided to the CM and filed in the appropriate project file folder. All correspondence will be submitted with the project files at the end of the project.

2.14 How to Escalate Issues

In accordance with SRTA's Construction Contract, in the Dispute Resolution section, whenever the Contractor believes that it is or will be entitled to additional compensation, whether due to delay, extra work, breach of contract or other causes, the Contractor is instructed to follow the procedures set forth within this paragraph.

To help avoid this process, the CM shall ensure all of the items discussed within this Chapter have been followed with direct and proper communication being a priority. In the event the Contractor submits a claim, the CM shall provide to the SRTA PM copies of all the pertinent files and other documentation.

CHAPTER THREE

ROLE OF SRTA

3.1 GENERAL

Generally speaking, SRTA's Project Engineer is the main contact between SRTA and the CM/construction contract. SRTA issues task orders periodically, based on upcoming construction projects, in order to accomplish SRTA's construction, maintenance and capital improvement goals.

3.2 KEY RESPONSIBILITIES – CATEGORY 1 PROJECTS (MINOR MAINTENANCE)

SRTA'S Project Engineer issues Task Orders as program details are completed and procured.

SRTA Typical Task Inputs (to the CM team) include but are not limited to:

- Furnish a detailed scope, plans for each minor maintenance project as bids are being reviewed/confirmed;
- Keep the CM Schedule Reviewer and CM advised of upcoming project milestones so proper staffing and scheduling can be properly coordinated;
- Advise the CM once a contractor is awarded the contract and furnish a copy of the contract to CM;
- Review and approval authority – contract modifications / time extension / scope change requests;
- Once the CM evaluates and certifies contractor monthly pay apps, process promptly certified invoices;
- Orchestrate introductions to SRTA operations, compliance staff, and other personnel with involvement in the project.

3.3 KEY RESPONSIBILITIES – CATEGORY 2 PROJECTS (Parking Lot Expansion / New Park & Ride Facilities)

SRTA'S Project Engineer issues Task Orders as program details are completed and procured.

SRTA typical task inputs (to the CM team) include but are not limited to:

- Issue the 90% designed plan documents for review by the CM team;
- Provide budget and funding documentation;
- Furnish the CM team with final construction plans, specifications and detailed scope of the project as soon as they are available;
- Advise the CM once a contractor is awarded the contract and furnish a copy of the contract to CM;
- Furnish any other documentation relevant in executing the Work. For example, soil exploration reports, key stakeholder contact information, existing as-built records and CAD files;
- Review and approval authority – contract modifications / time extension / scope change requests;
- Once the CM evaluates and certifies contractor monthly pay apps, process promptly certified invoices
- Orchestrate introductions to SRTA operations, compliance staff, and other personnel with involvement in the project.

CHAPTER FOUR

COOPERATION WITH OTHER AGENCIES/ENTITIES

4.1 GENERAL

As soon as possible after assignment to the project, the CM should become acquainted with the Local Issuing Authority (LIA), County, MARTA, Regional Transit Partners, GDOT and/or other interested agencies to discuss phases of the work pertinent to each of them.

It should be emphasized to these agencies' representatives that contact with the Contractor on contract issues should be exclusively through the Project Engineer. This should not preclude them from dealing with the Contractor on non-contract issues, such as, overweight permits, pollution regulations, speed enforcement, coordinating bus schedules and site staging, and similar matters.

These agencies' representatives should also be advised of limitations in the CM ability to add or to change contract work, and that such requests should be in writing for approval by SRTA.

These issues will be discussed at the pre-construction conference, so that the Contractor understands the relationships involved.

4.2 LOCAL ISSUING AUTHORITY

The CM should confirm who the issuing authority is for the project. This is normally the local City or County that issues the Building Permit and/or the Land Disturbance Permit for the project. Communication will usually be directly between the LIA inspector and the contractor's superintendent; however, the CM should request that all written reports (between the LIA and the Contractor) be shared with the CM team for record purposes.

4.3 OTHER COOPERATING AGENCIES

Other County and State agencies may be involved with the project, depending on the scope of work. Examples include: State Fire Marshal, Municipal or County Water and Sewer departments or Municipal or County Public Works departments, MARTA, Regional Transit Partners, GDOT, etc.

Whenever a construction project is undertaken for, or involving one of these agencies, the CM will make the Project Engineer aware of all necessary administrative information regarding SRTA obligations to the agency. The CM will also furnish copies of any applicable documents to the Project Engineer, which may contain a Memorandum of Agreement (MOA) for the project.

The Project Engineer should also be aware of any limitation in the Government's authority to approve or agree to any work that would change the limit of construction with respect to available right-of-way or the acquired property. The Project Engineer should be consulted if there is any uncertainty.

4.4 REGULATORY AGENCIES

A number of State and Federal agencies have regulatory responsibilities that might result in them coming onto the project and interacting with the Contractor, SRTA personnel or the CM. These agencies include those responsible for water pollution control, air pollution control, occupational safety, erosion control, stormwater management and protection of endangered species and other. Examples include: GA EPD, OSHA, etc.

The involvement of these Federal and State regulatory agencies has increased in recent years as a result of changes in Federal regulations recommending compliance with all Local and State regulations. Any requests from these agencies for inspection or reviewing the project and/or the project's records shall be forwarded to the Project Engineer.

In addition to diary notation, the CM should be notified of all visits and any anticipated further action. When regulatory agencies take issue with SRTA's compliance with permit or project agreements, the SRTA Project Engineer should be advised immediately.

4.5 RELATIONS WITH THE PUBLIC

SRTA field personnel, the CM and technical consultants are in daily contact with, and under the critical eyes of customers and the general public. This might include adjacent property owners, daily commuters, residents of nearby communities, tourists, and groups with special environmental or other interests. For these and other reasons, it is imperative that all representatives conduct themselves in a manner that will command respect and confidence.

In any community, information concerning transportation improvements is of primary interest. Therefore, it is important that accurate and complete information pertaining to SRTA projects be made available as soon as possible

All public questions and requests for information related to the project, should be referred to and coordinated by the SRTA Project Engineer. Sometimes, especially on low profile projects, the cooperating agency will defer to SRTA for routine public interaction. If the PCM advises that this is the case, the Project Engineer should become acquainted with heads of civic groups and other public entities to furnish such information of local interest, as it is pertinent to the project to which they are assigned. Care must be exercised to avoid the release of information concerning controversial matters or items that might be misconstrued. Reference to any conflict or disagreement between SRTA and the State, County or another Federal agency should be avoided. For example: a statement such as "the matter is being jointly studied" is preferred over "there is a conflict".

When the Project Engineer is specifically assigned to be the focal point of public contacts and information, the following guidelines will be helpful to ensure timely releases that establish and maintain good public relations:

- Information concerning road closures, detours, speed restrictions, and other items related to public safety and of general interest to motorists, should be given timely publicity. In some cases, sketch maps will be helpful in conveying such information.

- Refrain from stating opinions on local issues that have no connection with the project or that involve choices that are the prerogative of the local authorities.
- Questions directed to the survey crew, construction engineering crew members or contract inspectors, should generally be referred to the Project Engineer for answers.
- Requests for information pertaining to matters of recognized public interest that cannot be completely answered at the project level, should be promptly referred to the Project Engineer.

4.6 MEDIA RELATIONS

Requests from the media, such as newspaper and magazine reporters or TV and radio news producers, are to be directed to the SRTA Project Engineer for further handling.

CHAPTER FIVE

CONTRACTOR REQUIREMENTS

Reference should be made to the Project Contract including all terms and conditions. Where there is a conflict in this information and the Contract, the Contract governs.

5.1 PERMITS

During the design phase, the Design Engineer shall be responsible for obtaining the required approvals from all relevant governmental jurisdictions, agencies and utilities. Plans utilized for preparation of bid documents shall be based on the approved plans. The Contractor shall be responsible for obtaining all permits related to the actual construction for which it is responsible. The cost and schedule impacts of this contract requirement should be the full responsibility of the contractor. Examples of potential permits include:

- Land Disturbance Permits (LDP's)
- NPDES NOI's
- Right-of-Way Encroachment Permits
- Utility Encroachment Permits (Gas Line Easements, Power Company, etc.)

5.2 CHARACTER OF WORKERS AND ADEQUACY OF EQUIPMENT

The Contractor shall perform the work in a skillful and workmanlike manner. The Contractor shall be allowed after the approval of CM to propose and use alternate equipment, materials or processes as long as it is determined that the equipment, materials or processes are deemed to be equivalent to those specified.

The Contractor shall be responsible for being in compliance with all the terms and conditions as specified in the SRTA Procurement and Contracting Policies.

5.3 CONTRACTOR QUALITY CONTROL PLAN (CQCP) (Reference Section 10 in SRTA Contract)

5.4 PROJECT SCHEDULE AND UPDATES

The Contractor shall be responsible for preparing and submitting a construction schedule and schedule updates. All schedules shall be based on calendar days. The schedule is to represent the sequence in which the Contractor plans to perform the Contract work, showing start and end dates for each work activity, including material ordering and delivery. The initial start date shall be the issuance date of the Notice to Proceed (NTP) and the ending date shall be based up to the time duration mentioned in the ITB. Deviations from the start and end date shall be approved by SRTA after the CM's review and approval recommendation.

5.4.1 CONSTRUCTION SCHEDULE FORMAT

The general format of the schedule shall include a graphic representation of the sequencing of the work activities as well as a narrative supporting the Contractors logic used to develop the graphic representation. While the Contractor may choose which format is used to prepare the chart, the preferred method would be the Critical Path Method, especially on larger projects, as it clearly defines the critical activities of work.

The Contractor is required to provide the project schedule approved by SRTA in PDF and in the original electronic file format of the scheduling software. Microsoft Project software is preferred.

5.4.2 PRELIMINARY CONSTRUCTION SCHEDULE

Copies of the preliminary construction schedule (PCS) are to be provided at least 5 days prior to the pre-construction conference unless otherwise directed within the Contract. The PCS shall be a written narrative, detailing the Contractors activities for the first 30 to 45 days after the NTP is issued. The PCS will be reviewed prior to the pre-construction conference and discussed during the conference. Adjustments to the schedule will be made and re-submitted within 7 days after the conference. During this timeframe, work shall be limited to project mobilization, installation of traffic control devices and the installation of the initial erosion control measures. Upon review and approval of the preliminary construction schedule, work designated to be performed within the allocated timeframe may commence while the Contractor prepares the initial construction schedule.

During the review process, factors such as the length and type of project, shall be taken into consideration. On smaller projects, the review may not need to be overly critical and the preliminary construction schedule may be adequate to serve as the construction schedule.

5.4.3 INITIAL CONSTRUCTION SCHEDULE

The Contractor shall prepare and submit the initial construction within 14 days of approval of the preliminary schedule. The initial construction schedule shall be reviewed and either approved or rejected within 7 days by the CM and Project Engineer. The Contractor shall either adjust the schedule based on the comments provided or proceed accordingly. If rejected, the Contractor has 7 days to address the concerns. If the concerns are not addressed, the CM may issue a stop work order.

The initial construction schedule will establish the baseline for all future schedule changes or updates. Claims will also be compared to this schedule and justified. The CM will review the schedule considering the following:

- Each work activity on the schedule and the time proposed for its completion;
- Unrealistic production rates based on the proposed crew size or amount of equipment;
- Any impractical sequencing of work activities either for contractual reasons, physical constraints, or for improper workmanship or aesthetic;
- Any actions involving the CM or SRTA such as shop drawing approvals or time allotted for testing.

5.4.4 SCHEDULE REVISIONS & UPDATES

Any revisions to the schedule shall be provided in writing and returned to the Contractor for resolution before the final acceptance of the schedule. Failure of the Contractor to respond in a timely manner could result in the issuance of a stop work order, or having payment withheld until receipt and approval of the schedule, or as specified in the Contract terms and conditions.

The Contractor shall document actual progress on the approved schedule. Updates are to be submitted every 30 days or as specified in the Contract. The schedule shall be monitored and the critical path shall be evaluated for potential impacts. Should the critical path be impacted, the Contractor shall provide written notification of the impacts along with recommendations which would allow the project to get back on schedule. Should it be determined the project cannot get back on schedule, documentation providing the circumstances that have prevented the schedule to be on track or to be brought back, is to be provided. This documentation will then be reviewed to determine the overall impacts of the adjusted schedule. All updated schedules will be reviewed and either approved or rejected. Adjustments will be addressed as per the terms and conditions of the original Contract.

5.5 FIELD REVISIONS / MARK-UP SET

The Contractor shall maintain a working set of approved plans and specifications (Construction Documents) on site at all times. On occasion, modifications to the plans will be required due to site conditions or revisions to the site as requested by SRTA. Modifications requiring revisions to the plans will be properly documented. Should the modifications require revisions to the plans, the Contractor is to be provided a new set depicting the required modifications. Revisions of this nature shall depict the date of the revision as well as a detailed explanation of what was revised.

Minor modifications may require revisions to be made in the field which need to be documented. The Contractor shall maintain a set, to be kept on site, depicting the field modifications. Changes that could potentially impact other portions of the project are to be discussed with the CM. The CM may deem it necessary to request a review by the Project Engineer. Modifications of this nature are to be initialed on the project set by the Project Engineer.

The marked up set (a physical hard copy) and a digital copy (PDF format) of the set is to be submitted to the CM at Project Closeout as specified in that chapter.

5.6 REQUEST FOR INFORMATION (RFI)

A Request for Information (RFI) is a formal means for a contractor to obtain an interpretation of the design documents or other contractual requirement that is not apparent to the contractor. All RFI's are to be submitted to the CM in writing. These RFI's will then be submitted by the CM to the appropriate party, as required. Omissions, conflicts or other inconsistencies in the drawings or specification should be rectified by issuing a change notice to the contractor. Clarifications that do not require a change in the contract specifications should be made in a written response to the RFI. All RFI's and subsequent responses are to be filed as required in Chapter 7 – Records Management.

5.7 MATERIAL PROCUREMENT / STORAGE

The Contractor is responsible for handling and storing materials in a manner that preserves their quality and fitness for the work. All materials are to be stored on-site. If the CM determines that the Contractor's handling and storage operations will be detrimental to quality, and this opinion continues after consultation with, and/or suggestions to the Contractor, the CM should consult with the Project Engineer regarding directed operations and/or payment for preliminary work. SRTA and/or their representative has the right to re-test materials to verify they have not been degraded by contract operations or the lack of adequate protection. The Project Engineer and/or the CM can decline to make advance payment for materials that are not being stored or protected properly. The contractor will not receive advance payment for material stored off-site.

5.8 PERSONNEL, RECORDS, WAGE RATES

The CM shall receive the following documents from the Contractor as attachments with the monthly pay application:

- Weekly Certified Payroll (prime and subcontractors)
- Monthly DBE Report

Refer to the SRTA Contract

CHAPTER SIX PRE-CONSTRUCTION

6.1 GENERAL

This chapter will address pre-construction activities that will help insure a smoother transition to the construction phase. Topics discussed include the following:

- Field office requirements
- Pre-construction conference requirements, including preparatory work, agenda, topics, suggested attendees and follow-up activities
- Claims avoidance techniques
- Issuance of the Notice to Proceed (NTP), including situations that may delay the NTP

6.2 FIELD OFFICE

A field office is not required for minor maintenance projects nor for any Capital Projects intended to last six months or less, unless expressly required by the Project Engineer.

- For Capital Projects whose cost of construction exceeds one million dollars and whose duration exceeds six months, a field office will be provided on-site at SRTA's sole discretion. Facilities will be provided through a negotiated lease (SRTA or Contractor) supplied trailer or other office space as determined by the Project Engineer in coordination with the CM.

- A sign shall be placed at the office facility with the following wording:

Construction Engineering and Inspection Field Office
State Road and Tollway Authority (SRTA logo) and
SRTA's Designated Representative firm (Company logo)

- Trailer and/or office facility shall:
 - Be located on or immediately adjacent to the construction site
 - Have sufficient parking (minimum three spaces) accessible by standard passenger vehicles
 - Have utilities, including electricity and heat/AC
 - Have adequate security with padlock entry
 - Have sufficient space including an internal office with keyed entry (desk with three chairs, fireproof filing cabinet and layout table) and a common area with two tables and ten folding chairs

- Have a unisex restroom facility

6.3 PRE-CONSTRUCTION CONFERENCE

As soon as practical after the contract is awarded and before issuance of the Notice to Proceed (NTP), the Construction Manager (CM) will arrange a conference with the Contractor. *Note: For Minor Maintenance Projects, the CM will determine if a Pre-Construction Conference is necessary.* SRTA personnel in attendance will normally include the Project Engineer and specialized personnel as needed. Representatives of Federal cooperating agencies, States, Cities, Counties, utility companies, and any other groups that will be significantly affected by the construction should also be invited.

A Pre-Construction Conference is a meeting of all supervisory personnel who will be involved in the accomplishment of the work. The purpose of this conference is to acquaint the CM, Contractor, Sub-Contractors and Utility Owners with each other and the proposed construction. The meeting allows individuals involved with the Project to become familiar with and coordinate work schedules and discuss special provisions, special requirements, and special conditions. Its purpose is also to coordinate the scheduled activities of all concerned parties toward the satisfactory completion of the Project.

Pre-Construction Conferences shall be scheduled by the CM who is responsible for the Project. The CM shall facilitate the Pre-Construction Conference. The SRTA Designated Representative shall assist the CM as necessary and ensure the Conference is conducted properly. The meeting shall be scheduled on a convenient day after the Notice of Award of Contract and before the Contractor plans to begin work.

At a minimum of seven calendar days before the meeting date, notification of the time and place shall be sent to all of the applicable internal and external customers via email. This notification shall include a draft agenda for discussion at the Conference. It shall include the contact information of the CM as a point of contact for information or directions.

Personnel participating in the Pre-Construction Conference shall include but not limited to:

- General Contractor key personnel but specifically, the Project Manager and site superintendent;
- SRTA Project Engineer, utility companies, state and local governments representatives who may need to attend as determined by the CM;
- Federal agencies' representatives as determined by SRTA;
- When railroad facilities are within the Project limits and/or are part of the Scope of Work, a notice shall be sent out at least 14 days before the conference to the railroad representative listed in the Contract Special Provision for the Protection of Railway Interests. This notice shall identify the Project using the railroad milepost, city and county given in the description in the Special Provision noted above. A copy of this notice shall be sent to the State Utilities Engineer.

Note: Project Type, Scope and Complexity should be considered when Schedule invites are made

Topics of discussion for the CM include a brief summary of the Project scope, special conditions and requirements regarding traffic control, erosion and sedimentation control, environmental requirements, DBE and Payroll requirements, Utility and Railroad Coordination, and stakeholder introductions and discussions. Note: The Project Type, Scope, Complexity, and Cost should control discussion topics.

Additional topics may include:

- Project plans and specifications;
- Unusual conditions;
- The Contractor's plan and schedule of operation;
- Type and adequacy of equipment;
- Labor requirements;
- EEO requirement;
- Maintenance of traffic;
- Traffic control requirements;
- The Contractor's responsibilities for worksite safety and accident prevention;
- Material sources and testing requirements;
- Subcontracting requirements;
- Required submittals;
- Compliance requirements;
- Specific project related issues;
- Any other pertinent items that will result in a better job understanding;

The CM shall provide the Contractor with a list of documents that will be needed in support of Final Acceptance including, but not limited to, material certifications and documentation requirements, Final DBE Report, payrolls, damage release documentation, and earth work documentation.

The CM will prepare and send to the Contractor, a meeting agenda and other information to assist in preparing for the conference. See [Example 6.1](#) for an example of a basic pre-construction conference agenda. This agenda should be augmented to reflect unique features of the contract.

6.1 EXAMPLE PRE-CONSTRUCTION CONFERENCE AGENDA

Based on DOT F 4220.3 and Typical Contract Requirements

Date and location of conference

Attendees, including names and organizations

Organizational makeup and lines of authority (Government and Contractor)

a. Government

1. Contracting Officer(s)
2. Project Engineer/COTR
3. Inspectors
4. Contract Inspectors

b. Contractor

1. Project Manager
2. Superintendent
3. QC Personnel
4. Traffic and Safety Supervisor

c. Cooperating and other Agencies

1. Agency liaison
2. Local contact (SRTA Operations)

Commencement, progress and completion of work

- a. Insurance requirements
- b. Notice to Proceed
- c. Construction schedule submittal, approval, updates
- d. Retent for poor progress and/or delinquent submittals
- e. Completion date
- f. Liquidated damages
- g. Intended shifts, Saturday, Sunday, holiday, night work

Correspondence

- a. To Contractor
- b. To SRTA Project Engineer

Labor

- a. Equal Opportunity – SF 100, EEO policy, VETS-100
- b. David-Bacon Act (applies or does not apply)

Payment to Contractor

- a. Prompt payment
- b. Invoices – receiving reports
- c. Electronic Funds Transfer payment
- d. Pre-approve schedule of values base on the itemized bid schedule
- e. Lump sum items
- f. Weighing and certifying materials for payment
- g. Obligation to pay subcontractors, including suppliers
- h. No invoices for work associated with delinquent payrolls, test reports, materials certifications or construction schedule
- i. Bond premiums
- j. Stockpiled materials – storage and protection, test reports, certifications
- k. Mobilization item, other preparatory work, percentages payments

Notice of delays, disputes, claims

- a. Responsibility to notify owner (in writing)
- b. No contract time adjustment except if delay is beyond control and without fault or negligence of Contractor. Delay must impact construction schedule.

Materials

- a. Sources
 - 1. Contractor vs. government sources
 - 2. Borrow areas, limits, etc.
 - 3. Staking, stripping, pit clean-up
- b. Specifications for materials
 - 1. Source approval
 - 2. Quality control
 - 3. Quality assurance sampling and testing
 - 4. Documentation of compliance
 - 5. Production documentation
 - 6. Commercial product documentation
 - 7. Acceptance, statistical analysis, QL-Pay program

Safety

Submittals

- a. Submittal, approval and review time
- b. Rejection and corrections
- c. Signed and dated by a designated representative and/or engineer of record
- d. Notify Government of incomplete information

Traffic Control

- a. Submit plan for review/approval by CPM

Inspection

- a. Contractor's inspection system – QC personnel
- b. SRTA's/CPM right to: inspect, reject defective material and workmanship, stop non-complying work
- c. CPM inspectors not authorized to waive or change contract requirements
- d. Responsibility to notify SRTA of conflicts in contract documents
- e. Acceptance – partial and final

Changes

- a. Contract modifications – Supplemental Agreements and Change Orders
- b. All contract modifications in writing
- c. Written notice of: constructive changes, delays, differing site conditions
- d. Detailed cost proposal for any request for equitable adjustment
- e. Advanced pricing vs. post work pricing
- f. Value Engineering Change Proposals

Subcontracting

- a. Notice to OFCCP and SF 1413 for on-site subcontracts more than \$10,000
- b. Report all subcontracts (on-site, off-site, and materials supply) on Form FHWA 1775
- c. Responsibility for coordination and contract compliance of all subcontractors
- d. Small business and small disadvantaged business subcontracting plan
 1. Contractor's liaison officer
 2. Records
 3. Reporting (SF 294/295)
 4. Liquidated damages
- e. DBE/WBE subcontracting compensation clause
 1. DBE/WBE certification
 2. Submittals
 3. Threshold for compensation
 4. Compensation (monetary and contract time)

Other contracts at or near the project site

Utilities

- a. Relocation responsibility and schedule
- b. Location, protection, notification
- c. Coordination with utility companies

Operations and Storage

- a. Storage/Staging areas to be authorized or approved
- b. CPM field office (if applicable)
- c. Access and hauling limitations
- d. Employee Parking
- e. Disposal areas
- f. Bulletin board (posters, emergency phone numbers, EEO policy, Minimum wage schedule)

Layout of Work

- a. Government established base line and bench marks
- b. Contractor responsibilities for stakeout, line and grades
- c. Responsibility to notify owner of missing or conflicting stakeout information

Government furnished property and salvaged material

- a. Furnished property – location, delivery, storage, protection, damage
- b. Salvaged material – identification, who will salvage, delivery location, storage, damage

Protection of material and work

- a. Protection of existing structures, utilities, vegetation, adjacent property and Government property
- b. Protection of completed work until acceptance

Erosion, sedimentation and other environmental concerns

- a. 7-day letter
- b. Authority of and inspection by regulating agencies

Compliance with local rules and regulations

- a. Fire hazards and forest fires
- b. Burn permits

The conference facilitator (usually the CM) should explain:

- The SRTA contract administration process;
- The authority and responsibilities of SRTA personnel;
- The relationship of SRTA to the cooperating agency(s), emphasizing that SRTA (and not any other entity) will be the sole issuer of all orders to the Contractor relating to the contract; The CM enforces SRTA's construction management authority by extension. The payment and invoice process, particularly the Contractor's obligation to provide the required materials documentation, test reports and certifications to support payment for completed work.

Similarly, the Contractor's representatives should explain its organization and identify its authorized representative for the project. See [FAR Clause 52.236-6](https://farclause.com/FARregulation/Clause/FAR52.236-6), <https://farclause.com/FARregulation/Clause/FAR52.236-6> Basic-superintendence-by-the-contractor, Superintendence by the Contractor. If the Contractor's representative is not identified at the conference, the Contractor must submit a written designation prior to commencement of project or within 7 days, whichever comes first. A written report or minutes will be prepared by the CM for each pre-construction conference (see [Example 6.1](#)). This report should consist of a summary of the discussions, with the sign-in sheet attached. The report of minutes will document the explanation of authority and duties of SRTA personnel, and the Contractor's explanation of its organization and designation of its authorized representative. One or more copies of that report or minutes should be provided to the Contractor and other major participants, along with a request that any omissions and perceived misrepresentations be documented in writing to CM for final minutes/reports.

6.4 CLAIMS AND DISPUTES

In the course of construction, it is not uncommon for differences of opinion to arise between the Contractor and CM over interpretation of the contract provisions, or as to whether increased costs or time extensions are allowable for changes, differing site conditions, or delays. The Contractor may also express dissatisfaction or disagreement with contract modifications.

SRTA endorses the philosophy of *partnering* to avoid and resolve contract disputes. Most differences can be resolved by negotiation that leads to appropriate contract modifications. Prompt action should be taken to resolve issues and to participate in making any equitable adjustments as necessary, giving full consideration to the terms of the contract.

The CM must keep the SRTA Designated Representative informed of issues as they arise. The CM should use the project diaries, *Inspector's Daily Reports*, and all other available records to document and evaluate issues. Photographs, if applicable, can be an important part of the documentation. See Chapter 7 for additional information on records management.

Because recorded information is invaluable in the event of a claim, and claims may occur on any project, the need for routine preparation and maintenance of records cannot be over-emphasized.

The CM must maintain a daily diary. Project diaries should contain sufficient factual information to reveal the nature of the Contractor's complaint, the circumstances involved, and the substance of statements made by both parties. Both the project diaries and the *Inspector's Daily Reports* should discuss the Contractor's operations relative to the work in dispute. Descriptions of the equipment and materials that may be involved, construction progress or lack thereof, and similar information should be included. Any opinions or conclusions should be labeled as such, with their factual basis described. (See Section [2.12.1](#))

If the Contractor indicates that it may file a claim, the CM should direct the Contractor's attention to the Contract, particularly to those provisions dealing with disputes, changes, differing site conditions, suspension of work, contract time, and notice requirements, as applicable (see [Section 12.4](#) for more information). [Exhibit 6.1A](#) provides some additional tips related to claims prevention.

Formal claims must be submitted in writing to the SRTA Project Engineer. An example acknowledgment of receipt of claim is shown in [Exhibit 6.1B](#).

Exhibit 6.1A Preventative Measures for Claims

Develop a thorough knowledge of plans and specifications.

Read all relevant portions of the contract before answering questions or making decisions.

Perform accurate and consistent timely inspections, testing and reporting.

Strictly adhere to established testing procedures.

Accept nothing less, nor require anything more, than required by the contract.

Ensure that all inspectors are properly instructed to apply consistent standards for the work being performed.

Maintain professional and cooperative attitude with Contractor personnel.

Be sympathetic to Contractor problems, complimentary when Contractor delivers exceptional quality.

View project accomplishments as a team effort between Contractor and SRTA personnel.

Deal with the superintendent or at least the same people on the same issues all the time.

Try to anticipate and recognize potential claim situations.

Face problems including SRTA mistakes, and seek fair and equitable resolutions.

Track proposed CM to be sure those charged with making decisions know that the project is waiting for those decisions.

Act promptly and decisively in dealing with problems. If you can't resolve an issue, refer it to someone who can.

Realize that communication is probably the most effective deterrent to claims -- thorough documentation is the best defense.



U.S. Department
of Transportation
Federal Highway
Administration

Central Federal Lands Highway Division
12300 West Dakota Avenue, Suite 210A
Lakewood, CO 80228-2583

February 7, 2008

In Reply Refer to: HFCO-16

Mr. John Smith, President
Smith Construction
423 Tumbling River Road
San Diego, California 55532

Dear Mr. Smith:

Subject: CA PFH 47-1(2), Sacramento Basin
Contract No. DTFH68-05-C-00321
Claim No. XVI-07-002

Your claim on CA PFH 47-1(2), Sacramento Basin, was received on December 5, 2007. Claim Number XVI-07-002 has been assigned to your claim. Please include this number on all future correspondence associated with the subject claim.

We will issue the final Contracting Officer's Decision on the subject project after our evaluations are completed. Due to the size and complexity of the claim, we do not yet know how long the evaluation and subsequent issuance of the final Contracting Officer's Decision will take.

We will inform you of our anticipated schedule for issuance of the final Contracting Officer's Decision within 60 days of the claim submittal date.

Sincerely yours,

Seth C. Greenwell, P.E.
Contracting Officer



6.5 NOTICE TO PROCEED

The Notice to Proceed (NTP) is a document that is delivered to the Contractor, stating that construction is authorized. The Contractor shall not perform any work on the Project until receipt of the NTP, and SRTA will not be obligated to pay for work done prior to receipt of the NTP. It may be necessary for the SRTA Procurement Office to issue a Conditional Notice to Proceed. A Conditional Notice to Proceed may prohibit some specific work activities to commence, but allow the Contractor to begin some other work. Once the restrictions are removed, the SRTA Procurement Office will notify the Contractor and no additional Notice to Proceed is issued. The CM will notify the Contractor that the restrictions noted in the Conditional Notice to Proceed have been lifted.

6.5.1 PROGRESS SCHEDULE CHART

The Contractor shall furnish the CM, for approval, a Progress Schedule Chart (Schedule) immediately following the receipt of the Notice to Proceed. Unless otherwise specified, the Schedule shall be prepared using an acceptable critical path schedule that will be used as the basis for establishing the controlling items of Work and as a check on the progress of the Work.

Note: A Progress Schedule Chart is not required on resurfacing Projects.

If the Contractor is delinquent in the submission of a Schedule, or the submission of a revised Schedule, the Department may withhold monies due based on the current estimate. The Schedules shall be completed by the Contractor and shall be legible and suitable for copying. Illegible Schedules or those made out in light pencil, green ink, or blue ink, are not acceptable and the Contractor shall be so notified. Unacceptable Schedules are to be kept for the Project records.

To ensure the Contractor furnishes an acceptable Schedule, the following instructions are issued:

- The Schedule shall be complete and contain all essential information pertinent to the Work. This includes Information such as the Contractor's signature, Project number, county, date, etc.
- Contract Time shall be shown in calendar days, calendar dates, and/or available days as appropriate to the Contract. Intermediate completion dates for bridges, resurfacing, striping, shoulder construction and opening to traffic shall be shown. On available day Contracts, calendar days and dates shall not be shown except for an overall estimated completion date.
- The principal items of Work shall be arranged in logical sequence and the progress curve should be a reasonable accumulation of all items completed in accordance with the Contract. The beginning and end of each bar graph shall show the percent complete of the item represented.

The CM shall review and evaluate the proposed Schedule to ensure compliance with Project Scope and completion of the Work. The Schedule shall also be reviewed for

adequate progress and proper coordination of the Work by the Contractor or by others. If the CM concurs with the proposed Schedule of the Work as presented, the Schedule shall be signed and transmitted to SRTA for approval by the Project Engineer.

The Project Engineer shall review the proposed Schedule and, if in agreement with the CM, shall sign the Schedule and return to the CM to be kept in the Project Records. The approved schedule should be saved as the Project Record. If the Project Engineer does not approve the chart as presented, the Contractor shall be notified in writing. The Contractor is expected to make the necessary revisions for an acceptable Schedule and re-submit. A copy of the unapproved Schedule(s) shall be kept in the Project files.

CHAPTER SEVEN

RECORDS MANAGEMENT

7.1 GENERAL

This section addresses what items need to be filed and outlines the proper procedures for how to file. Project records are the official record for the construction Project. The records shall be current, complete, legible, well-organized, and concise. Original source payment documents are contained within the Project records. These source documents show Project Number, Project location, calculation methods used, signature of the person(s) preparing or certifying the record, date and location, the name of the Contractor performing the Work, and certified analysis.

Note: Record on the source document the Work or materials that do not meet specifications or Contract requirements.

7.2 MAINTAINING PROJECT RECORDS

The Construction Manager (CM) maintains the Project records to support quantities certified for payment. The CM's certification on monthly statements and construction reports ensures the Work done by the Contractor is acceptable per the plans and specifications and the records document that the Work was performed.

Note: Quantities and calculations shall be prepared by project personnel. Contractor's measurements shall not be used for payment but may be used for comparison with project personnel calculations and measurements (trust but verify).

Project documentation and record keeping may be delegated to other personnel; however, the CM is responsible for maintaining the records. The person keeping the records must have the following abilities:

- Have a working knowledge of the plans;
- Have a working knowledge of the Specifications and other Contract requirements;
- Be able to perform calculations;
- Be able to obtain and maintain source documents in an organized/orderly fashion (areas, scaled take-offs, volumes, etc.)

7.3 PROTECTING PROJECT RECORDS

Project records shall be kept in a secure place, preferably in a fireproof cabinet. "As-Built" plans should be kept in fireproof cabinets if possible when not in use. On Capital Projects, the Special Provisions may require additional fireproof file cabinets for the CM's office. This recommendation can be made during the Field Plan Review.

Note: Electronic files maintained on the CM server are backed up daily.

7.4 FILE MANAGEMENT SYSTEM

The File Management System is a directory of files necessary for managing the administrative requirements of a SRTA Contract. The CM maintains these files or delegates the task. Not all files are mandatory for every project. On smaller projects, many of the files may be combined or eliminated. All documents are to be scanned and electronically filed. Additional files may be required, such as Force Accounts, Time Extension Requests, Shop Drawing Submittals, or Notices of Potential Claims. Contracts with multiple project sites will have some duplicate folders (i.e., construction reports, vouchers, etc.) these folders need to be clearly labeled with the individual project listed on the tab. Post an index of the files by numbers on the fireproof file cabinet.

Filing System

The CM should utilize OneDrive, PRO-COR or VPN to maintain and share project records. The CM should determine when to use OneDrive, PRO-COR or VPN and when it may be unreasonable to do so:

- Use OneDrive, PRO-COR or VPN when document access and/or input is needed.
- Do not use OneDrive, PRO-COR or VPN if the document has an excessive amount of paper (e.g. payrolls) and/or the paper is an odd size (e.g. asphalt and aggregate weight tickets).
- Do not use OneDrive, PRO-COR or VPN if there are no scanning capabilities reasonably available.

Project Filing System

File Folder	Item	Responsible for Filing
Contracts		
	Contract	SRTA Procurement/Copy to CM
	Terms & Conditions / Policies and Procedures	SRTA Procurement/Copy to CM
	Task Orders	SRTA Procurement/Copy to CM
Change Orders		
	Submitted Change Orders	Contractor/CM
	Approved Change Orders	CM
	Change Order Log	CM
Schedule		
	Notice to Proceed (NTP)	CM
	Project Schedule and Revisions	CM
	Daily Work Schedules	CM
	Materials Fabrication Status	CM
	Project Delays	CM
	Stop Work Orders	CM

Correspondence		
	Emails, Letters, Memos	CM
	RFI's and response	CM
	Meeting Agenda and Minutes	CM
Reports		
	Daily Diary	CM
	Daily Reports (Work)	Project Inspector
	Monthly (Weekly) Reports to SRTA	CM
	Incident Reports	CM
	Material Testing Reports Base / Sub-base Pavement Smoothness Concrete Rebar Etc.	Project Inspector
	Material Status	CM
	Construction Inspection Reports	Project Inspector
	Contractor and CM's QC/QA Plan	CM
	Daily Weather	Project Inspector
	Final Construction Report	CM
Permits / Plans		
	LDP's	CM
	Federal and State (GDOT) – Permits	Construction Manager
	NPDES / Erosion Control Plan	CM
	Traffic Control Plan / Approvals	CM
	R/W Agreements	CM
	Contractor and CM's Safety Plans	CM
Project Closeout		
	As-Built Drawings	Contractor/CM
	Warranties	Contractor/CM
	O&M Manuals	Contractor/CM
	Contractor's Performance	CM
Pay Requests		
	Separate Sub-folder by Month	CM
	Itemized Measurements/Back-up Documents	CM
	Certified Payroll (Prime and Subs)	Contractor/CM
	DBE Monthly Report	Contractor/CM
	Labor Interviews	CM

7.5 OTHER DOCUMENTATION AND REFERENCES

The CM ensures that the current reference documents and publications listed below are available to project personnel on-line or at a central location:

- Complete Set of Standards and Construction Details as referenced within the design documents;
- Project's Special Provisions
- "As-Built" Set of Project Plans (current revisions);
- The Manual of Uniform Traffic Control Devices (MUTCD), Part 6 Temporary Traffic Control Devices;
- The GDOT Standard Specifications Construction of Transportation Systems and all supplemental to it;
- SRTA's Construction Manual;
- Green Book – Manual for Erosion and Sediment Control in Georgia;

7.6 SURVEY/LAYOUT DATA

The Construction Manager collects survey/layout material required and stores it in the file cabinet (See Section 149, GDOT Standard Specifications).

7.7 MATERIALS TEST REPORT AND INVOICE EXAMPLES

The CM ensures that the following documents are available to project personnel on-line or at a central location:

- Asphalt Job Mix Formulas and Asphalt Paving Plans
- Item 310 Test Reports – Compaction Reports and Depth Checks
- Concrete Test Reports (DOT 319)
- Pipe Invoices and Mill Certification
- Rebar Cut Sheets and Lab Submittal (File by Structure) Soil Survey/Bridge Foundation Investigation (BFI)
- Miscellaneous Test Reports filed separately by item (Piles, Strain Poles, Deck Panels, Guardrail, etc.)

Note: Test reports pertaining to pay factors need to be filed in the supporting work item documentation section (Ex. DOT 179 with the particular Asphalt Pay Item)

7.8 WEIGH TICKETS

The CM ensures that the following documents are filed as specified below:

- File weigh tickets together by pay period for tonnage items such as Graded Aggregate Base (GAB), Aggregate Surface Course, Rip Rap, etc.;
- File Asphalt items by Lot numbers;
- Place weigh tickets into an envelope and label with the line item number, item description, dates, lot numbers, and tonnage (this can be done on a computer-generated sheet and attached to the front of the envelope);

- Place the appropriate daily tare weight sheets with the weigh tickets if received from the Contractor;
- Because they are a source document for payment of unit weight items, keep weigh tickets in a fireproof file cabinet.

CHAPTER EIGHT

SAFETY

8.1 GENERAL

This chapter addresses the responsibilities of SRTA, the Construction Manager (CM) and the Contractor to ensure the health and safety of its employees and the public. Requirements and guidance related to the following topic areas are included:

- Personal protective equipment;
- Incident response and reporting procedures; and
- Construction safety.

Reference: SRTA Procurement and Contracting – Policy Section 1.4.5.a.5 – Seat Belts, <https://www.srta.ga.gov/wp-content/uploads/2018/11/FY-2019-Procurement-Policy-11-15-18.pdf>

8.2 RESPONSIBILITY FOR SAFETY OF PERSONNEL

8.2.1 Personal Protective Equipment

8.2.1.1 Protective Clothing

It is the responsibility for SRTA, the CM and the Contractor to provide their respective personnel with the necessary articles of special protective clothing. This includes hard hats and approved safety vests, which must be worn by all their personnel on all construction project work sites, regardless of the relative hazard of operations. Work gloves and safety glasses shall be worn as required.

Employees are required to furnish and wear personal clothing that will allow them to work in reasonable comfort in all weather conditions. Employees shall wear shirts and long pants at all times.

8.2.1.2 Protective Footwear

Construction personnel must wear suitable footwear, normally steel-toed boots.

8.2.2 Construction Manager Safety Responsibilities

The CM shall:

- Ensure that the contractor has a published Safety Plan and obtain an electronic copy for the project record;

- Be subject to the contractor's Safety Control Plan. Jobsite safety is first and foremost the contractor's responsibility;
- Become familiar with all prescribed accident report forms
- Ensure that the Contractor promptly reports all incidents;
- Ensure that the Contractor orients new employees as to the special safety concerns of the project; and
- Ensure that the Contractor holds frequent safety meetings for all personnel, emphasizing those areas of danger that might be encountered on the project.

8.2.3 Contractor Safety Responsibilities

The Contractor is responsible for ensuring its personnel and any subcontractors are aware of the safety requirements on the project. This responsibility includes:

- Preparation and submittal of a Project Safety Plan (See Section 8.4.5 Appendices and Forms – 8A.2 Suggested Outline for Contractor's Safety Plan);
- Ensuring all of their personnel have been provided a copy of the Safety Plan or are made aware of its content;
- Performing safety meetings on a regular basis;
- Having adequate first aid supplies on site for the treatment of basic injuries;
- Ensuring incident report forms are available on site;
- Ensuring all incident report forms are properly filled out in a timely manner.

8.3 ACCIDENTS

8.3.1 PERSONAL OR PROPERTY ACCIDENTS

All accidents reported to the CM must be reported to the SRTA Project Engineer. Accidents involving injury should be reported the same business day. Accidents involving property damage should be reported within 72 hours of the incident. Contact the CM with questions regarding accident reporting.

8.3.2 CONTRACTOR ACCIDENTS

8.3.2.1 Work Zone Accident Report

All accidents should be reported verbally to the CM the same day of the accident. Accidents involving fatalities are to be reported immediately to the CM and the SRTA Project Engineer.

Document any type of accidents occurring within the project limits. Include accurate details, several photos, and diagrams. Be sure to document traffic control signs and devices in the area.

The local Law Enforcement Agency may be called in to investigate; they will then do their own report. Ask to get a copy of their report to attach to yours.

The completed report, with any attached law enforcement reports,

photos and other documentation, is to be sent to the CM who files the report and provides copies to the Project Engineer.

8.3.2.2 Accident Inquiries and Investigations

Accidents and injuries often result in inquiries from insurance investigators, lawsuits, and attorneys. Any subpoenas, depositions, or requests for information associated with accidents on the project should immediately be referred to SRTA.

Exhibit 8.3 Example of a Work Zone Accident Report

WDFD-27
(10/88)
Doc. #0124F:1

WORK ZONE ACCIDENT REPORT

Date: 10/7/96 Time: 1304 Light Conditions: BRIGHT SUN

Project Name & No.: ID PFH 63-1(3) COUNCIL-CUPRUM ROAD

Driver Names (If known): BUZZ LIGHTYEAR
1122 BOOGIE WOOGIE AVE.
TUCSON, AZ 85999

County: ADAMS Weather: CLEAR AND DRY

Location, Milepost, or Station: 63+00 TO 58+00 1 MILE N.W. OF B.O.P.

No. of Vehicles Involved: 1 Severity: Minor damage Major damage

No. of Pedestrians Involved: 0

Surface condition: Wet Dry Injury Death

Adjacent Construction Activity: NONE

Method of Traffic Control: Signs , Temporary Barriers , Flaggers ,
Pilot Car , Other (explain) TEMPORARY PAVEMENT MARKING

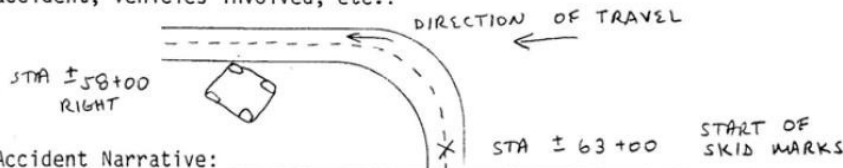
Contributing Factors: Excess speed , Failure to yield , Weather ,
Improper movement , Highway condition , Drugs/Alcohol ,
Mechanical , Unknown , Other

Have other accidents of similar nature occurred in this zone? NO

If yes, give dates: _____

Investigated by: (INSPECTOR) JOE FRIDAY

Accident diagram including all traffic control devices present at the time of accident, vehicles involved, etc.:



Accident Narrative: MR. LIGHTYEAR WAS DRIVING EAST ON COUNCIL CUPRUM HEADING INTO TOWN WHEN HE LOST CONTROL OF HIS TRUCK COMING AROUND A CURVE. AFTER TRYING TO CORRECT HE ENDED UP FLIPPING THE TRUCK INTO THE DITCH. FURTHER INVESTIGATION REVEALED HE WAS UNDER THE INFLUENCE, AND EXCEEDING THE POSTED SPEED LIMIT.

Resulting action: NONE

Time and date that action was taken: _____

Name and title: Joe Friday, Inspector

8.4 CONSTRUCTION SAFETY

8.4.1 GENERAL

Federal law requires all SRTA contracts to contain FAR Clause 52.238-13, <https://www.acquisition.gov/content/part-52-solicitation-provisions-and-contract-clauses#>. Accident Prevention, which obligates the Contractor to perform work in accordance with the Safety and Health Regulations for Construction (29 CFR 1926, <https://www.osha.gov/laws-regs/regulations/standardnumber/1926>) published by the U.S. Department of Labor. Each project office should have a copy of the OSHA regulations.

FAR Clause 52.238-13 also requires the Contractor, without separate or additional payment, to safeguard the public, Government employees, and Government property exposed to the construction. It is the CM's responsibility to see that the Contractor effectively fulfills this responsibility. None can be permitted to work in an environment that is unsafe in ways that are correctable or controllable. This obligation gives the Government the discretion to order correction of hazards, whether or not a specific hazard is covered by the OSHA regulations.

Accidents and injuries often result in inquiries from insurance investigators and attorneys. Any subpoenas, depositions, and requests for information associated with accidents on the project should immediately be referred to Legal Counsel through SRTA.

Contracts may contain a supplement to the FAR clause that requires the Contractor to submit a proposed safety plan to the CM for review and agreement prior to beginning construction. Appendix 8A.2 contains a suggested outline for a Contractor's safety plan. It should be provided to the Contractor at or before the pre-construction conference so that they know what we expect for a safety program. Even for contracts that do not have the FAR clause supplement, the outline should be provided to the Contractor for informational purposes.

8.4.2 SRTA SAFETY RESPONSIBILITIES PRIOR TO CONSTRUCTION

The CM should perform the following activities prior to the start of construction.

1. At the pre-construction conference, emphasize the Contractor's safety responsibilities under FAR Clause 52.238-13 and contract provisions dealing with specific subjects such as work zone traffic control and explosives.
2. Approve or otherwise respond to the Contractor's safety plan submittal for contracts including that provision. Exhibit 8.4-A is an Example Approval Letter.
3. Regardless of the contract's requirement for a safety plan, emphasize at the pre-construction conference those safety precautions that are applicable to all projects.

For example:

- Identification of Contractor employees with overall responsibility for safety management and supervision.
 - Posting of emergency procedures, including appropriate telephone numbers and locations of doctor, emergency services, and hospitals.
4. Emphasize that the Contractor, not the CM, is obligated to:
 - Perform routine safety inspections and otherwise monitor project safety;
 - Immediately correct or otherwise determine an appropriate response to complaints of safety deficiencies, whether those complaints come from Contractor employees, the Government, or the public; and
 - Provide the required safety expertise to fulfill these obligations. It should not be assumed that SRTA has, or will provide, such expertise.
 5. Advise the Contractor that the contract requires that SRTA or its representative notify the Contractor in writing of alleged safety deficiencies and that a representative of SRTA or the CM will notify the State or Federal OSHA office responsible for construction safety monitoring if deficiencies are chronic or remain unresolved.
 6. Advise the Contractor that if it fails to immediately correct safety deficiencies, especially high risk deficiencies, the CM has authority to immediately stop work on the affected operations until the deficiencies are corrected.
 7. Advise the Contractor that the safety of public traffic and pedestrians in the vicinity of the project is of paramount concern; and that accommodation of the public will be in strict accordance with the contract or subject to the direction and approval of the CM.
 8. Advise the Contractor that inspectors, testers, and other SRTA or Construction Management employees and contractors working at the site are not obligated to work under unnecessary or unreasonable risks; and that the inspection and acceptance of the work may require accommodations to protect those personnel.
 9. Advise the Contractor that it will be required to provide to the CM copies of all accident reports prepared.

Exhibit 8.4-A Example Approval Letter of Contractor's Safety Plan



U.S. Department
of Transportation

**Federal Highway
Administration**

Western Federal Lands Highway Division

610 East Fifth Street
Vancouver, WA 98661-3801
(360) 619-7700 FAX: (360) 619-7846

Shoalwater Contractors, Inc
Attn: Scott Fitzpatrick
P.O. Box 1956
Bandon, OR 97412

February 17, 2009

In Reply Refer To: SL-17

Dear Mr. Fitzpatrick:

OR PFH 97-1(1), North Century Drive
Contract No. DTFH70-08-C-00009

I have reviewed the Accident Prevention Plan you submitted at the Preconstruction Conference held on February 5, 2009. The plan meets the requirements of FAR 52.236-13 and Section 107.08 of the Contract. It is therefore approved for use. I have attached your copy with an "Approved" and today's date stamped on it.

Should your plan for the construction operations change from what was envisioned under the Accident Prevention Plan, an updated plan will need to be submitted. If personnel identified in the Plan change, an updated plan will need to be submitted. If you have any questions, do not hesitate to contact me.

Sincerely yours,

Charles B. Dawson,
Project Engineer

cc: C. Johns, COE
central files

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8.4.3 SRTA SAFETY RESPONSIBILITIES DURING CONSTRUCTION OPERATIONS

1. Normally, neither SRTA nor the Construction Management Team will perform periodic, comprehensive project safety inspections or safety inspections of Contractor equipment, tools, or workplace. However, if during the course of their other duties, either SRTA employees or members of the Construction Management Team become aware of hazardous conditions resulting from the Contractor's known or possible violation of either OSHA regulations or reasonable standards of construction safety practice, as determined by the Construction Manager, the Contractor shall be notified immediately with a written follow up. See [Exhibit 8.4-B](#) for an example notification of a safety deficiency.
2. Allegations of safety deficiencies may come from sources outside SRTA and its on-site inspection staff. SRTA's employees, contractor employees, others working at the site, or private citizens may point out what they think are safety violations. These allegations will be provided to the CM for review and shall be conveyed to the Contractor in writing. The Contractor should be instructed to correct the deficiency if the CM is convinced that one exists. The Contractor will be asked to investigate the deficiency and take appropriate corrective action if there is doubt as to whether a deficiency exists.
3. All safety deficiencies identified, whether serious or minor, singular or repeated, should be considered an inadequacy within the Contractor's safety program, and the Contractor should be advised of the necessity to not only correct the deficiency, but to review and modify its safety program to prevent recurrence.
4. When any representative of SRTA observes a life-threatening condition resulting from the Contractor's operations, the CM will order the Contractor to immediately correct the situation. In addition, that portion of the work should be stopped until the hazard is corrected.

When in doubt, the CM may elect to discuss the situation with SRTA before taking action. However, it is generally better to act conservatively than to not take action.

5. SRTA on-site personnel are generally not trained as safety specialists, and should not directly or indirectly assume control, direction, or responsibility for the Contractor's safety program.

In advising the Contractor of apparent deficiencies, SRTA personnel should not prescribe the corrective measures or procedures to be taken by the Contractor. In many cases, the CM may not know for sure whether an OSHA violation exists — for example, whether a given piece of equipment is required to have a ROPS (Roll Over Protection System) or other features. Upon notification, it is up to the Contractor to provide the expertise to determine if there is a violation, and to correct it if necessary, or demonstrate to the CM's satisfaction that no deficiency exists.

6. In addition to its contractual responsibilities, SRTA has a responsibility to ensure a safe working environment for its employees and its other contractors (e.g. contract inspectors). None of these personnel should be required to perform inspection or other duties in an unsafe environment. If the unsafe environment is

under the control of the Contractor, the Contractor's superintendent should be advised that the work requiring inspection cannot be accepted until the unsafe condition is corrected. For example, rolling operations may have to be suspended during testing if the compaction tester perceives a hazard associated with that equipment. If verbal notice proves ineffective, written notice to this effect should be provided.

Exhibit 8.4-B Example Notification of a Safety Deficiency



U.S. Department
of Transportation
**Federal Highway
Administration**

Western Federal Lands Highway Division

610 East Fifth Street
Vancouver, WA 98661-3801
(360) 619-7700 FAX: (360) 619-7846

Shoalwater Contractors, Inc
Attn: Scott Fitzpatrick
P.O. Box 1956
Bandon, OR 97412

March 17, 2009

In Reply Refer To: SL-37

Dear Mr. Fitzpatrick:

OR PFH 97-1(1), North Century Drive
Contract No. DTFH70-08-C-00009

During your trench operation on March 16, 2009 near Station 96+50 Rt., several safety deficiencies were noted. I have itemized them below:

1. Some personnel were not wearing proper personal protective equipment
2. Material was spilling outside of the construction limits onto the pedestrian trail
3. Truck numbers 0345 and 0411 had backup alarms that worked only intermittently

Review your Safety Plan with your personnel to ensure they understand what is required. Check all equipment to ensure that it's safety devices are functioning properly.

If you have any questions, do not hesitate to contact me.

Sincerely yours,

Charles B. Dawson,
Project Engineer

cc: C. Johns, COE
central files

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Exhibit 8.4-C Example Notification of Chronic Deficiencies



U.S. Department
of Transportation

**Federal Highway
Administration**

Western Federal Lands Highway Division

610 East Fifth Street
Vancouver, WA 98661-3801
(360) 619-7700 FAX: (360) 619-7846

Shoalwater Contractors, Inc
Attn: Scott Fitzpatrick
P.O. Box 1956
Bandon, OR 97412

April 17, 2009

In Reply Refer To: SL-47

Dear Mr. Fitzpatrick:

OR PFH 97-1(1), North Century Drive
Contract No. DTFH70-08-C-00009

During your blasting operation on April 15, 2009 near Station 111+50 several safety deficiencies were noted. I have itemized them below:

1. Warning signs were not properly located relative to the blast zone.
2. The Blaster in Charge was not the individual listed in the approved Safety Plan.
3. Workers were entering the blast area prior to the "All Clear" being sounded.
4. Provisions for controlling fly rock were inadequate.
5. The subcontractor's personnel were not wearing proper personnel protective equipment

Several of these deficiencies were pointed out to you after the previous blast of April 10, 2009. I am directing you to review your Safety Plan. Submit an updated Safety Plan with changes correcting the noted deficiencies.

Blasting operations on the project are suspended under authority of FAR Clause 52.236-13 until the updated Safety Plan is reviewed and approved by FHWA. If you have any questions, do not hesitate to contact me.

Sincerely yours,

Charles B. Dawson,
Project Engineer

cc: C. Johns, COE
central files

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8.4.4 HIGH RISK SITUATIONS

Contractor personnel should be alert to the following high-risk safety hazards:

1. **Construction Vehicle Accidents.** Incidents involving construction vehicles are a leading cause of construction accidents and fatalities. If the use of construction vehicles is perceived to present unnecessary risks, the CM should advise the Contractor as to whether or not a specific OSHA violation has occurred. Possible deficiencies associated with vehicular accidents are:
 - Failure to separate pedestrian workers from heavy equipment and other construction vehicles;
 - Failure to provide working backup alarms or clearly identified signal persons instead of backup alarms;
 - Failure to adequately plan and manage the movement of vehicles in congested or low visibility conditions;
 - Failure to maintain brakes, Roll Over Protection Systems (ROPS), and other safety equipment adequately;
 - Failure to operate vehicles using due care and caution; and
 - Altering “as designed” configuration or safety features of equipment.
2. **Interaction with Public Traffic.** See [FLH Standard Specifications, Section 156](#), Public Traffic and Section 635, Temporary Traffic Control.
3. **Trenching and Excavation.** [Regulations related to Trenching and Excavation may be found in the Safety and Health Regulation for Construction, 29 CFR 1926, Subpart P. Exhibit 8.4-D](#) summarizes OSHA trenching and excavation requirements. The actual regulations should be reviewed by the Contractor for exceptions and more detailed information. It is the Contractor’s obligation to have personnel who are trained in, or otherwise competent to implement, the regulations. The Contractor should not expect SRTA to provide that competence, to train the Contractor’s personnel, or to approve each trenching operation.
4. **Falls.** Scaffolding, rails, stairs, and ladders meeting OSHA standards are the primary requirement to safeguard against falls. If these measures are impractical, then personal fall arrest systems are required. If both are impractical, then the CM shall make sure that the Contractor provides guardrail at heights exceeding 10 feet (3.1 meters) and protects vertically protruding reinforcing steel that is below walkways or where persons are working.
5. **Explosives.** See [29 CFR 1926, Subpart U](#), and the contract provisions which contain requirements regarding blasting and the use of explosives.

Exhibit 8.4-D Summary of OSHA Trenching and Excavation

Requirements Summary¹ of OSHA Trenching and Excavation Requirements

Soil Classification

Classification	Description
Stable Rock	Solid rock which can be excavated with vertical sides which remain intact while exposed.
Type A Soil	Cohesive soil, caliche or hardpan that is not fissured, subject to vibration or other factors which would require it to be classified as a less stable material; and which has an unconfined compressive strength of at least 150 kilopascals.
Type B Soil	Cohesive soil that is fissured, subject to vibration or other factors which would require it to be classified less than Type A, but not Type C and which has an unconfined compressive strength between 50 and 150 kilopascals; granular cohesionless soils including silt, silty loam, sandy loam; angular gravel or crushed rock; previously disturbed soil.
Type C Soil	Cohesive soil with an unconfined compressive strength of less than 50 kilopascals; cohesionless soils including rounded rock, sand; submerged or saturated soil, submerged rock that is not stable; layered systems which dip into the excavation at a slope of 1:4 or steeper.

Maximum Slope and Trenching Depth Unsupported Trenches

Soil Type	Maximum Slope	Maximum Depth ²
Stable Rock	Vertical	20 feet
Type A, B or C	Vertical	3.5 feet
Type A Soil	1.3:1	20 feet
Type A Soil (Alternate)	Vertical and 1.3:1 ³	3.5 feet 8 feet
Type A Soil (Alternate)	Vertical and 1:1 ³	3.5 feet 12 feet
Type A Soil (Short Term) ⁵	2:1	12 feet
Type B Soil	1:1	20 feet
Type C Soil	1:1.5	20 feet

1. This material is a summary of OSHA regulations published in [29 CFR 1926](#), Subpart P, Appendix A and B. The regulations themselves are more detailed than the summary presented herein; and therefore should be used to resolve actual job site questions and interpretations.
2. Support systems for trenches over 20 feet deep must be designed by a registered Professional Engineer.
3. Maximum slope above vertical portion of trench.
4. Maximum total depth including vertical portion of trench.
5. Short term means 24 hours or less.
6. All soil must assumed to be Type C, unless a competent person, provided by the Contractor, following the procedures in [29 CFR 1926](#), Subpart P, Appendix A, determines that it is Type A or Type B.
7. See [29 CFR 1926](#), Subpart P, Appendix B for details regarding compound slopes, stepped slopes and permitted use of shoring and support systems.
8. Design of shoring and support systems must comply with [29 CFR 1926](#), Subpart P, Appendix C or D; be a commercial system used in accordance with manufacturers recommendations; or be designed by a registered Professional Engineer.

8.4.5, APPENDICES AND FORMS

8A.1

FORMS FOR ACCIDENTS INVOLVING GOVERNMENT VEHICLES

8A.1.1 SF 95, Claim for Damage Injury, or Death

.....

8A.1.2 SF 94, Statement of Witness

.....

8A.1.3 SF 91, Motor Vehicle Accident Report

.....

8A.2

SUGGESTED OUTLINE FOR CONTRACTOR'S SAFETY PLAN

8A.1.1 SF 95, CLAIM FOR DAMAGE INJURY, OR DEATH

CLAIM FOR DAMAGE, INJURY, OR DEATH		INSTRUCTIONS: Please read carefully the instructions on the reverse side and supply information requested on both sides of this form. Use additional sheet(s) if necessary. See reverse side for additional instructions.		FORM APPROVED OMB NO. 1105-0008	
1. Submit To Appropriate Federal Agency:			2. Name, Address of claimant and claimant's personal representative, if any. (See instructions on reverse.) (Number, Street, City, State and Zip Code)		
3. TYPE OF EMPLOYMENT <input type="checkbox"/> MILITARY <input type="checkbox"/> CIVILIAN	4. DATE OF BIRTH	5. MARITAL STATUS	6. DATE AND DAY OF ACCIDENT	7. TIME (A.M. OR P.M.)	
8. Basis of Claim (State in detail the known facts and circumstances attending the damage, injury, or death, identifying persons and property involved, the place of occurrence and the cause thereof. Use additional pages if necessary.)					
9. PROPERTY DAMAGE					
NAME AND ADDRESS OF OWNER, IF OTHER THAN CLAIMANT (Number, Street, City, State, and Zip Code).					
BRIEFLY DESCRIBE THE PROPERTY, NATURE AND EXTENT OF DAMAGE AND THE LOCATION WHERE PROPERTY MAY BE INSPECTED. (See Instructions on reverse side.)					
10. PERSONAL INJURY/WRONGFUL DEATH					
STATE NATURE AND EXTENT OF EACH INJURY OR CAUSE OF DEATH, WHICH FORMS THE BASIS OF THE CLAIM. IF OTHER THAN CLAIMANT, STATE NAME OF INJURED PERSON OR DECEDENT.					
11. WITNESSES					
NAME		ADDRESS (Number, Street, City, State, and Zip Code)			
12. (See instructions on reverse.) AMOUNT OF CLAIM (in dollars)					
12a. PROPERTY DAMAGE	12b. PERSONAL INJURY	12c. WRONGFUL DEATH	12d. TOTAL (Failure to specify may cause forfeiture of your rights.)		
I CERTIFY THAT THE AMOUNT OF CLAIM COVERS ONLY DAMAGES AND INJURIES CAUSED BY THE INCIDENT ABOVE AND AGREE TO ACCEPT SAID AMOUNT IN FULL SATISFACTION AND FINAL SETTLEMENT OF THIS CLAIM					
13a. SIGNATURE OF CLAIMANT (See instructions on reverse side.)			13b. Phone number of person signing form	14. DATE OF SIGNATURE	
CIVIL PENALTY FOR PRESENTING FRAUDULENT CLAIM			CRIMINAL PENALTY FOR PRESENTING FRAUDULENT CLAIM OR MAKING FALSE STATEMENTS		
The claimant is liable to the United States Government for a civil penalty of not less than \$5,000 and not more than \$10,000, plus 3 times the amount of damages sustained by the Government. (See 31 U.S.C. 3729.)			Fine of not more than \$10,000 or imprisonment for not more than 5 years or both. (See 18 U.S.C. 287, 1001.)		

8A.1.1 SF 95, Claim for Damage Injury, or Death (Continued)

INSURANCE COVERAGE	
In order that subrogation claims may be adjudicated, it is essential that the claimant provide the following information regarding the insurance coverage of his vehicle or property.	
15. Do you carry accident insurance? <input type="checkbox"/> Yes If yes, give name and address of insurance company (Number, Street, City, State, and Zip Code) and policy number. <input type="checkbox"/> No	
16. Have you filed a claim on your insurance carrier in this instance, and if so, is it full coverage or deductible?	17. If deductible, state amount.
18. If a claim has been filed with your carrier, what action has your insurer taken or proposed to take with reference to your claim? (It is necessary that you ascertain these facts.)	
19. Do you carry public liability and property damage insurance? <input type="checkbox"/> Yes If yes, give name and address of insurance carrier (Number, Street, City, State, and Zip Code). <input type="checkbox"/> No	
INSTRUCTIONS	
<p>Claims presented under the Federal Tort Claims Act should be submitted directly to the "appropriate Federal agency" whose employee(s) was involved in the incident. If the incident involves more than one claimant, each claimant should submit a separate claim form.</p> <p style="text-align: center;">Complete all items - Insert the word NONE where applicable.</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p>A CLAIM SHALL BE DEEMED TO HAVE BEEN PRESENTED WHEN A FEDERAL AGENCY RECEIVES FROM A CLAIMANT, HIS DULY AUTHORIZED AGENT, OR LEGAL REPRESENTATIVE, AN EXECUTED STANDARD FORM 95 OR OTHER WRITTEN NOTIFICATION OF AN INCIDENT, ACCOMPANIED BY A CLAIM FOR MONEY</p> <p>Failure to completely execute this form or to supply the requested material within two years from the date the claim accrued may render your claim invalid. A claim is deemed presented when it is received by the appropriate agency, not when it is mailed.</p> <p>If instruction is needed in completing this form, the agency listed in item #1 on the reverse side may be contacted. Complete regulations pertaining to claims asserted under the Federal Tort Claims Act can be found in Title 28, Code of Federal Regulations, Part 14. Many agencies have published supplementing regulations. If more than one agency is involved, please state each agency.</p> <p>The claim may be filed by a duly authorized agent or other legal representative, provided evidence satisfactory to the Government is submitted with the claim establishing express authority to act for the claimant. A claim presented by an agent or legal representative must be presented in the name of the claimant. If the claim is signed by the agent or legal representative, it must show the title or legal capacity of the person signing and be accompanied by evidence of his/her authority to present a claim on behalf of the claimant as agent, executor, administrator, parent, guardian or other representative.</p> <p>If claimant intends to file for both personal injury and property damage, the amount for each must be shown in item #12 of this form.</p> </div> <div style="width: 48%;"> <p>DAMAGES IN A SUM CERTAIN FOR INJURY TO OR LOSS OF PROPERTY, PERSONAL INJURY, OR DEATH ALLEGED TO HAVE OCCURRED BY REASON OF THE INCIDENT. THE CLAIM MUST BE PRESENTED TO THE APPROPRIATE FEDERAL AGENCY WITHIN TWO YEARS AFTER THE CLAIM ACCRUES.</p> <p>The amount claimed should be substantiated by competent evidence as follows:</p> <p>(a) In support of the claim for personal injury or death, the claimant should submit a written report by the attending physician, showing the nature and extent of injury, the nature and extent of treatment, the degree of permanent disability, if any, the prognosis, and the period of hospitalization, or incapacitation, attaching itemized bills for medical, hospital, or burial expenses actually incurred.</p> <p>(b) In support of claims for damage to property, which has been or can be economically repaired, the claimant should submit at least two itemized signed statements or estimates by reliable, disinterested concerns, or, if payment has been made, the itemized signed receipts evidencing payment.</p> <p>(c) In support of claims for damage to property which is not economically repairable, or if the property is lost or destroyed, the claimant should submit statements as to the original cost of the property, the date of purchase, and the value of the property, both before and after the accident. Such statements should be by disinterested competent persons, preferably reputable dealers or officials familiar with the type of property damaged, or by two or more competitive bidders, and should be certified as being just and correct.</p> <p>(d) Failure to specify a sum certain will render your claim invalid and may result in forfeiture of your rights.</p> </div> </div>	
PRIVACY ACT NOTICE	
<p>This Notice is provided in accordance with the Privacy Act, 5 U.S.C. 552a(e)(3), and concerns the information requested in the letter to which this Notice is attached.</p> <p>A. <i>Authority:</i> The requested information is solicited pursuant to one or more of the following: 5 U.S.C. 301, 28 U.S.C. 501 et seq., 28 U.S.C. 2671 et seq., 28 C.F.R. Part 14.</p>	<p>B. <i>Principal Purpose:</i> The information requested is to be used in evaluating claims.</p> <p>C. <i>Routine Use:</i> See the Notices of Systems of Records for the agency to whom you are submitting this form for this information.</p> <p>D. <i>Effect of Failure to Respond:</i> Disclosure is voluntary. However, failure to supply the requested information or to execute the form may render your claim "invalid".</p>
PAPERWORK REDUCTION ACT NOTICE	
<p>This notice is <u>solely</u> for the purpose of the Paperwork Reduction Act, 44 U.S.C. 3501. Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Director, Torts Branch, Attention: Paperwork Reduction Staff, Civil Division, U.S. Department of Justice, Washington, D.C. 20530.</p>	

MOTOR VEHICLE ACCIDENT REPORT	Please read the Privacy Act State- ment on Page 3	INSTRUCTIONS: Sections I thru IX are filled out by the vehicle operator. Section X, items 72 thru 82c are filled on by the operator's supervisor. Section XI thru XIII are filled out by an accident investigator for bodily injury, fatality, and/or damage exceeding \$500.
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SECTION I - FEDERAL VEHICLE DATA

1. DRIVER'S NAME <i>(Last, first, middle)</i>		2. DRIVER'S LICENSE NO./STATE/LIMITATIONS		DATE OF ACCIDENT	
4a. DEPARTMENT/FEDERAL AGENCY PERMANENT OFFICE ADDRESS				4b. WORK TELEPHONE NUMBER ()	
5. TAG OR IDENTIFICATION NUMBER	6. EST. REPAIR COST \$	7. YEAR OF VEHICLE	8. MAKE	9. MODEL	10. SEAT BELTS USED <input type="checkbox"/> YES <input type="checkbox"/> NO
11. DESCRIBE VEHICLE DAMAGE					

SECTION II - OTHER VEHICLE DATA *(Use Section VIII if additional space is needed)*

12. DRIVER'S NAME <i>(Last, first, middle)</i>		13. SOCIAL SECURITY NO./ TAX IDENTIFICATION NO.	14. DRIVER'S LICENSE NO./STATE/LIMITATIONS		
15a. DRIVER'S WORK ADDRESS			15b. WORK TELEPHONE NUMBER ()		
16a. DRIVER'S HOME ADDRESS			16b. HOME TELEPHONE NUMBER ()		
17. DESCRIPTION OF VEHICLE DAMAGE				18. ESTIMATED REPAIR COST \$	
19. YEAR OF VEHICLE	20. MAKE OF VEHICLE	21. MODEL OF VEHICLE		22. TAG NUMBER AND STATE	
23a. DRIVER'S INSURANCE COMPANY NAME AND ADDRESS				23b. POLICY NUMBER	
				23c. TELEPHONE NUMBER ()	
24. VEHICLE IS <input type="checkbox"/> CO-OWNED <input type="checkbox"/> RENTAL <input type="checkbox"/> LEASED <input type="checkbox"/> PRIVATELY OWNED		25a. OWNER'S NAME(S) <i>(Last, first, middle)</i>		25b. TELEPHONE NUMBER ()	
26. OWNER'S ADDRESS(ES)					

SECTION III - KILLED OR INJURED *(Use Section VIII if additional space is needed)*

27. NAME <i>(Last, first, middle)</i>		28. SEX		29. DATE OF BIRTH	
30. ADDRESS					
A 31. MARK "X" IN TWO APPROPRIATE BOXES <input type="checkbox"/> KILLED <input type="checkbox"/> DRIVER <input type="checkbox"/> PASSENGER <input type="checkbox"/> INJURED <input type="checkbox"/> HELPER <input type="checkbox"/> PEDESTRIAN		32. IN WHICH VEHICLE <input type="checkbox"/> FED <input type="checkbox"/> OTHER (2)	33. LOCATION IN VEHICLE	34. FIRST AID GIVEN BY	
35. TRANSPORTED BY		36. TRANSPORTED TO			
37. NAME <i>(Last, first, middle)</i>		38. SEX		39. DATE OF BIRTH	
40. ADDRESS					
B 41. MARK "X" IN TWO APPROPRIATE BOXES <input type="checkbox"/> KILLED <input type="checkbox"/> DRIVER <input type="checkbox"/> PASSENGER <input type="checkbox"/> INJURED <input type="checkbox"/> HELPER <input type="checkbox"/> PEDESTRIAN		42. IN WHICH VEHICLE <input type="checkbox"/> FED <input type="checkbox"/> OTHER (2)	43. LOCATION IN VEHICLE	44. FIRST AID GIVEN BY	
45. TRANSPORTED BY		46. TRANSPORTED TO			
47. Pedestrian a. NAME OF STREET OR HIGHWAY			b. DIRECTION OF PEDESTRIAN <i>(SW corner to NE corner, etc.)</i> FROM TO		
c. DESCRIBE WHAT PEDESTRIAN WAS DOING AT TIME OF ACCIDENT <i>(Crossing intersection with signal, against signal, diagonally; in roadway playing, walking, hitchhiking, etc.)</i>					

8A.1.3 SF 91, Motor Vehicle Accident Report (Continued)

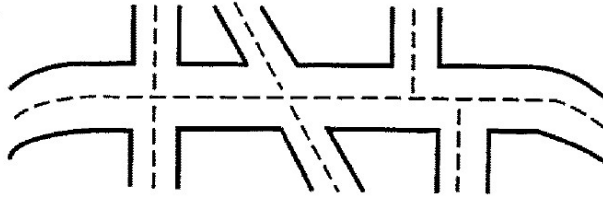
SECTION IV - ACCIDENT TIME AND LOCATION (Use Section VIII if additional space is needed.)

48. DATE OF ACCIDENT | 49. PLACE OF ACCIDENT (Street address, city, state, ZIP Code; Nearest landmark; Distance nearest intersection; Kind of locality (industrial, business, residential, open country, etc.); Road description).

50. TIME OF ACCIDENT
 AM
 PM

51. INDICATE ON THIS DIAGRAM HOW THE ACCIDENT HAPPENED

- Use one of these outlines to sketch the scene. Write in street or highway names or numbers.
- a. Number Federal vehicle as 1, other vehicle as 2, additional vehicle as 3 and show direction of travel with arrow.
 - Example: → 1 ← 2 ←
 - b. Use solid line to show path before accident and broken line after the accident.
 - c. Show pedestrian by → ○
 - d. Show railroad by ++++++
 - e. Place arrow in this circle to indicate NORTH



52. POINT OF IMPACT (Check one for each vehicle)

FED	2	AREA
		a. Front
		b. R. Front
		c. L. Front
		d. Rear
		e. R. Rear
		f. L. Rear
		g. R. Side
		h. L. Side

53. DESCRIBE WHAT HAPPENED (Refer to vehicles as "Fed", "2", "3", etc. Please include information on posted speed limit, approximate speed of the vehicles, road conditions, weather conditions, driver visibility, condition of accident vehicles, traffic controls (warning light, stop signal, etc.), condition of light (daylight, dusk, night, dawn, artificial light, etc.), and driver actions (making U-turn, passing, stopped in traffic, etc.)

SECTION V - WITNESS/PASSENGER (Witness must fill out SF 94, Statement of Witness) (Continue in Section VIII.)

A	54. NAME (Last, first, middle)	55. WORK TELEPHONE NUMBER ()	56. HOME TELEPHONE NUMBER ()
	57. WORK ADDRESS	58. HOME ADDRESS	
B	59. NAME (Last, first, middle)	60. WORK TELEPHONE NUMBER ()	61. HOME TELEPHONE NUMBER ()
	62. WORK ADDRESS	63. HOME ADDRESS	

SECTION VI - PROPERTY DAMAGE (Use Section VIII if additional space is needed.)

64a. NAME OF OWNER (Last, first, middle)	64b. WORK TELEPHONE NUMBER ()	64c. HOME TELEPHONE NUMBER ()
64d. WORK ADDRESS	64e. HOME ADDRESS	
65a. NAME OF INSURANCE COMPANY	65b. TELEPHONE NUMBER ()	65c. POLICY NUMBER
66. ITEM DAMAGED	67. LOCATION OF DAMAGED ITEM	68. ESTIMATED COST

SECTION VII - POLICE INFORMATION

69a. NAME OF POLICE OFFICER	69b. BADGE NUMBER	69c. TELEPHONE NUMBER ()
70. PRECINCT OR HEADQUARTERS	71a. PERSON CHARGED WITH ACCIDENT	71b. VIOLATION(S)

8A.1.3 SF 91, Motor Vehicle Accident Report (Continued)

SECTION VIII - EXTRA DETAILS

SPACE FOR DETAILED ANSWERS. INDICATE SECTION AND ITEM NUMBER FOR EACH ANSWER. IF MORE SPACE IS NEEDED, CONTINUE ITEMS ON PLAIN BOND PAPER.

PRIVACY ACT STATEMENT

The information on this form is subject to the Privacy Act of 1974 (5 U.S.C. section 552a). Authority to collect the information is Title 40 U.S.C. Section 491 and title 31 U.S.C. Section 7701. The information is required by Federal Government agencies to administer motor vehicle programs, including maintaining records on accidents involving privately owned and Federal fleet vehicles, and collecting accident claims resulting from accidents. Federal employees, and employees under contract, will use the information only in the performance of their official duties. Routine uses of the collected information may include disclosures to: appropriate Federal, State, or local agencies or contractors when relevant to civil, criminal, or regulatory investigations or prosecutions; the Office of Personnel Management and the General Accounting Office for program evaluation purposes; a Member of Congress or staff in response to a request for assistance by the individual of record; another Federal agency, including the Departments of Treasury and Justice, or a court under judicial proceedings; agency Inspectors General in conducting audits; private insurance and collection agencies (including agencies under contract to Treasury to collect debt), and to other agency finance offices for fiscal management and debt collection. Furnishing the requested information is mandatory, including the Social Security Number or Taxpayer's Identification Number (TIN) for use as a unique identifier to ensure accurate identification of individuals or firms in the system.

SECTION IX - FEDERAL DRIVER CERTIFICATION

I certify that the information on this form (Sections I thru VIII) is correct to the best of my knowledge and belief.

72a. NAME AND TITLE OF DRIVER	72b. DRIVER'S SIGNATURE AND DATE
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SECTION X - DETAILS OF TRIP DURING WHICH ACCIDENT OCCURRED

73. ORIGIN	74. DESTINATION
75. EXACT PURPOSE OF TRIP	

76. TRIP BEGAN	DATE	TIME (Include AM or PM)	77. ACCIDENT OCCURRED	DATE	TIME (Include AM or PM)
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78. AUTHORITY FOR THE TRIP WAS GIVEN TO THE OPERATOR <input type="checkbox"/> ORALLY <input type="checkbox"/> IN WRITING (Explain)	79. WAS THERE ANY DEVIATION FROM DIRECT ROUTE? <input type="checkbox"/> NO <input type="checkbox"/> YES (Explain)
---	--

80. WAS THE TRIP MADE WITHIN ESTABLISHED WORKING HOURS? <input type="checkbox"/> YES <input type="checkbox"/> NO (Explain)	81. DID THE OPERATOR, WHILE ENROUTE, ENGAGE IN ANY ACTIVITY OTHER THAN THAT FOR WHICH THE TRIP WAS AUTHORIZED? <input type="checkbox"/> NO <input type="checkbox"/> YES (Explain)
---	--

82. COMPLETED BY DRIVER'S SUPERVISOR	a. DID THIS ACCIDENT OCCUR WITHIN THE EMPLOYEE'S SCOPE OF DUTY <input type="checkbox"/> YES <input type="checkbox"/> NO	b. COMMENTS
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83a. NAME AND TITLE OF SUPERVISOR	83b. SUPERVISOR'S SIGNATURE AND DATE	83c. TELEPHONE NUMBER ()
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8A.2

SUGGESTED OUTLINE FOR CONTRACTOR'S SAFETY PLAN

- A. **Overall Responsibility** - Who will be responsible for the on-site safety program? What are the credentials (training & experience) of that person? Will they have direct authority or will their authority be through the superintendent? Who will be responsible for reporting accidents and maintaining the accident log required by OSHA?
- B. **Subcontractors** - Will subcontractors be under prime's program or will they have their own program? If they have their own program, separate plans are required.
- C. **Safety Policy** - How will new employees be oriented and their responsibilities explained? How will all employees be oriented to specific project hazards or the hazards of new operations? How will drug & alcohol policy be conveyed to employees?
- D. **Personal Protection** - What conditions/operations will require personal protection equipment? Hardhats, ear plugs, steel toed boots, respirators, etc? Who will decide when protection is needed? Who will monitor its use?
- E. **Safety Meetings** - Who will conduct meetings? What will frequency be? Who will attend? How will subjects be selected?
- F. **Emergency Medical Care** - Telephone Numbers. (Ambulance, Fire, Rescue). Directions. Prearrangements made - insurance, workmen's comp?
- G. **First Aid** - Names of trained employees. Names of CPR trained employees
- H. **Trenching and Excavating** - Who will be responsible for selecting slopes, shoring and protection systems during trenching operations? Is the person trained and competent in the revised (1989) OSHA regulations?
- I. **Hazard Recognition, Reporting and Abatement** - To whom will employees report perceived hazards? How will these reports be handled? Who will correct hazards?
- J. **Equipment Inspection** - Who will inspect construction and hauling equipment? Will it be inspected before shipment to project, or after? How will suppliers' equipment be inspected (e.g. asphalt hauling trucks)?
- K. **Separating Pedestrians from Construction Vehicles and Public Traffic** - Are there hazards associated with pedestrians (contractor or public) moving amidst equipment and public traffic? How will these hazards be abated?

- L. **Jobsite Inspections** - Who will perform jobsite inspections? What will the frequency be? Will a report be generated? How will deficiencies be corrected? Immediate order or report back to superintendent?
- M. **Hazardous Materials** - Will hazardous materials be generated, for example, asphalt products, solvents, chemicals? What are special procedures for handling and/or disposing?
- N. **Explosives** - See Section 205 for special requirements. What are provisions for storage and inventory control of explosives?
- O. **Fire Fighting and Emergencies** - What are fire hazards requiring special attention? What resources are available for fire emergencies?
- P. **Maintenance of Traffic (MOT) and the Public** - All MOT controls and operations will be per the current MUTCD. How will protection of the public, whether on foot or vehicle, be planned and coordinated? What provisions are there to separate the public from the construction activities? Who will perform inspections? What will the frequency be? Will a report be generated? How will deficiencies be corrected? Immediate order or report back to superintendent? How will the ability of the public to interfere with construction activities be minimized?

CHAPTER NINE

EROSION AND SEDIMENTATION CONTROL

9.1 GENERAL

Georgia's natural resources are protected by State and Federal laws, in addition to many related rules and regulations. This chapter describes the responsibilities and procedures necessary to comply with the Department of Natural Resources, Environmental Protection Division NPDES General Permit and procedures to maximize erosion and sedimentation control. While projects may vary in size, the importance of controlling erosion shall be emphasized. Projects with a total disturbance of one acre or more shall conform to the requirements as established within the Georgia Environmental Divisions National Pollutant Discharge Elimination System Georgia Permit (GAEPD NPDES) GAR100002 for Infrastructure Construction. Projects with a total disturbance of less than one acre shall utilize sound engineering judgment and follow the Erosion and Sediment Control Plan as provided by the Design Engineer.

9.2 REFERENCED DOCUMENTS

- Manual for Erosion and Sediment Control in Georgia, Latest Edition; http://gaswcc.georgia.gov/sites/gaswcc.georgia.gov/files/imported/SWCC/Files/GS_WCC_2016_Manual_for_Erosion_%26_Sediment_Control.pdf
- Field Manual for Erosion Control in Georgia; <https://gaswcc.georgia.gov/sites/gaswcc.georgia.gov/files/imported/SWCC/Files/2016%20Field%20Manual%20for%20Erosion%20%26%20Sediment%20Control.pdf>
- GDOT Standards and Specifications, Construction Erosion Control Sections 160-171; <http://www.dot.ga.gov/PartnerSmart/Business/Source/specs/DOT2013.pdf>
- Georgia EPD NPDES Permit GAR 100002 – Infrastructure Construction General Permit; <https://epd.georgia.gov/forms-and-permits/watershed-protection-branch-forms-permits/storm-water-forms/npdes-construction>

9.3 PRIOR TO CONSTRUCTION

The Construction Manager (CM) shall ensure all required permits have been obtained. The Contractor shall have an approved copy of the Erosion and Sediment Control Plan on site and the CM shall also be provided a copy of it. If land disturbance is over one acre, a Notice of Intent (NOI) shall be submitted to the GA EPD and a copy of the NOI shall be on site as well as provided to the CM.

Upon receipt of the Notice to Proceed (NTP) for the project and prior to commencement of any construction activity, the Contractor shall install any required erosion control measures. The CM shall verify the Contractor has Certified Personnel on site, as required. Copies of certifications are to be provided for project records. On projects requiring a NPDES permit, the Contractor shall provide documentation to the CM that the initial inspection by the Design Professional, or the alternate Design Professional previously approved by EPD, has been performed within seven days. Documentation should be in the form of a letter that either notifies the Site Permittee that the erosion control measures are installed properly or a list of deficiencies has been provided. If a list of deficiencies was provided, then documentation

needs to be provided stating the deficiencies have been properly addressed.

The CM shall independently monitor and prepare a report of the installation of the erosion control measures on site. Deficiencies shall be noted in the report and provided to the Contractor.

9.4 DURING CONSTRUCTION

The CM shall ensure inspections of installed erosion control measures have been performed on a daily basis, as required. Copies of all inspection reports, reports of rainfall event measurements, documentation of modifications to erosion control plans, and documents sent to EPD during the construction phase are to be provided to the CM by the Contractor. The CM shall independently monitor the site and prepare a report of the findings. Deficiencies are to be noted and the Contractor is to be notified.

In the event noted deficiencies are not corrected in a timely manner, the CM shall notify SRTA, and concurrently, a Stop Work Order is to be issued and shall remain in place until all deficiencies are corrected.

9.5 POST-CONSTRUCTION

When all land disturbing activities are complete and the project is stabilized, as defined within the regulations and/or permit, the Contractor shall provide copies of all documents verifying completion. For projects that required a NPDES permit, the Notice of Termination (NOT) shall be submitted to EPD and a copy of the NOT shall be provided. The CM shall also document through pictures or other means and methods that the project is complete and stabilized with permanent vegetation. These documents are also to be properly filed.

CHAPTER TEN

MATERIALS

10.1 GENERAL

This chapter provides guidance for sampling and testing, and acceptance of materials produced at the project, as well as guidance for accepting commercially produced or manufactured items.

Specific materials requirements are stated in the Standard Specifications, special contract requirements, and plans. SRTA has adopted the [GDOT STI \(Standards, Testing & Inspection\) Manual](#) as the primary guide for sampling and testing materials.

The Standard Specifications require the Contractor to notify the Project Engineer of all proposed sources of materials at the earliest date possible. These sources should be reported immediately to the CM so that necessary arrangements may be made for the testing of materials. If the Contractor is to do sampling and testing (e.g., as for Contractor-proposed sources of crushed aggregates), the CM will make known, before the work is started, any requirements relative to the size and numbers of samples not otherwise explicit in the contract.

The Standard Specifications usually provide the Contractor the option to furnish materials from sources shown on the plans or described in the special contract requirements, or from Contractor-furnished sources. In any case, the Contractor is to determine the amount of equipment and character of the processing required to produce specification materials.

Copies of all preliminary engineering, materials, and subsurface data, such as soil profiles, boring log data, materials sources, borrow area diagrams, material source options, use permits, and test reports, should be on file at the project office. The Project Engineer should consult with the CM to ensure that all preliminary materials information has been made available.

10.2 CONTRACTOR-LOCATED SOURCES

The Contractor is required to submit certain information relative to any proposed materials source other than a source shown by the SRTA in the contract as acceptable. The CM will, in consultation with the independent materials testing firm, review the Contractor's test results and quantity data before recommending approval of Contractor-located sources.

10.3 MATERIAL PRODUCTION

The independent materials testing consultant identifies the production sampling and testing requirements in accordance with the GDOT STI Manual.

10.3.1 NUMBER OF SAMPLES TO SUBMIT FOR VERIFICATION TESTING

To determine the number of samples required for verification testing, the materials testing consultant should do the following:

- As the Contractor is producing material, obtain SRTA's split of all samples taken by the Contractor. Forward the split samples to the independent materials testing consultant lab for verification testing according to GDOT procedures.
- Compare the lab's results to the Contractor's results to verify the quality control process.
- If the Contractor's results are verified, only submit 10% (at random) of the remaining samples. The CM should still obtain all of the split samples, but hold the other 90% at the project office until all of that particular material has been placed on the project and the CM has discussed material disposition with the SRTA Project Engineer.

The test results must also be reviewed to determine compliance with the Contract specifications. The test results should indicate a consistent production that is within the specification limits. Consult with the SRTA Project Engineer to discuss all quality control test results.

10.3.2 MATERIAL NOT MEETING CONTRACT REQUIREMENTS

If the test results indicate that the material does not meet the requirements for one or more characteristics, the Contractor is required to modify its material production methods. It may be necessary to issue a stop work order for material production. The Contractor may want to continue at its own risk. Every situation and project is different, but it is suggested that the CM should not allow the Contractor to proceed with production.

The stop work order is a serious action, and it must be discussed and approved by the SRTA Project Engineer before issuance.

10.4 MATERIAL STORAGE

The Contractor is responsible for handling and storing materials in a manner that preserves their quality and fitness for the work. If the Project Engineer or CM comes to believe the Contractor's handling and storage operations will be detrimental to quality, and the belief continues after consultation with, and/or suggestions to the Contractor, the Project Engineer should consult with the CM regarding directed operations and/or payment for preliminary work. SRTA always has the right to re-test materials to verify that they have not been degraded by contract operations or the lack of adequate protection. SRTA can decline to make advance payment for materials that are not being stored and protected from degradation.

10.5 SAMPLING AND TESTING

The GDOT STI Manual provides details as to the nature of quality assurance documentation

required for various type of materials. The [GDOT STI Manual](#) explains independent assurance sampling and testing, including required frequency. The CM will monitor these functions or at least be aware of the requirements. Sampling and testing requirements are contained in the specifications. Detailed instructions are in the [GDOT STI Manual](#).

Pursuant to [FAR Clause 52.246-12](#), <https://www.acquisition.gov/content/52246-12-inspection-construction> Inspection of Construction, the Contractor must maintain an adequate inspection system to ensure the work conforms to contract requirements. The CM should review all test reports for accuracy and completeness, whether the test was performed on the project, by designated laboratories, or another inspection agency. Commercially produced products that are shipped to the project, whether or not quality assurance documentation is required, should be physically inspected by the Contractor upon delivery. Spot checks by CM-designated personnel should verify that these inspections are effective.

10.5.1 RECORDS AND REPORTS OF MATERIALS

It is the responsibility of the CM to maintain records at the project office of all tests made, both in the field or elsewhere, to indicate the quality of all materials delivered to the project and used in the construction. All test reports should show the source of the samples, the quantity represented, and where, when, and by whom the sampling and testing was done. The record should also show whether the material is accepted or rejected.

Copies of independent materials testing consultant test reports will be furnished to the Contractor.

Forms for recording of field-testing operations are described in the [GDOT STI Manual](#).

Frequencies at which quality control, verification, and independent assurance samples are to be taken should conform to the contract requirements; otherwise guidance in the [GDOT STI Manual](#) should be used.

Sample sizes to be submitted for testing should conform to the contract requirements; otherwise guidance in the [GDOT STI Manual](#) should be used.

10.6 ACCEPTANCE

There are three types of acceptance – certification, visual and measured/tested.

With respect to acceptance, construction materials fall into one of the following categories:

- Those found to be in excess of or reasonably close conformance with the specifications and are therefore accepted at full payment;
- Those not in reasonably close conformance but deemed technically serviceable and therefore accepted at reduced payment, as provided by a contract acceptance plan or as mutually agreed upon if there is no acceptance plan; and
- Those not in reasonably close conformance, and not deemed technically serviceable, which are therefore rejected and required to be removed, replaced, or acceptably corrected.

10.6.1 METHODS OF DETERMINING MATERIALS ACCEPTANCE

There are three methods of the construction materials' acceptance: Visual; Certification, visual, and Measured / Tested. The CM personnel should follow the guidance provided below to determine the acceptability of materials.

10.6.2 VISUAL

To evaluate material for acceptance, visually inspect the material for compliance with the Contract and prevailing industry standards. Use engineering judgment to determine if the material is satisfactory. Document that you have visually verified that the material has no defects and meets the contract requirements. File your documentation according to the procedures recommended by this manual.

This check should be performed as soon as possible. The CM should check the material before it is incorporated into the work. If it is only possible to check the material after placement, the CM should do so as soon as practicable so as to avoid unnecessary rework on the part of the Contractor.

10.6.3 CERTIFICATION

A certification should accompany material that is to be evaluated for acceptance under Subsection 106.03 of the FLH [Standard Specifications](#). The certification should document that the material meets the specifications. Check the certification for evidence that the Contractor verified that the certification is acceptable. If they haven't, the CM should continue with the check, but also notify the Contractor that they are expected to review the certifications before passing them on to the CM. The CM should perform the check before the material is incorporated into the project work.

The CM shall verify that the certification meets the required specification. Subsection 2.42 of the [GDOT STI Manual](#) provides detailed guidance on certifications. You may have to refer to AASHTO, ASTM, or the contract to find out what the project's requirements. If the certification is acceptable, the CM shall notify the Contractor of its acceptability. If the certification is not acceptable, the CM shall notify the Contractor that the certification is incomplete, incorrect, or both. File the approved certification in accordance with this manual.

10.6.4 MEASURED AND TESTED

If the material was produced off-site, the Contractor will need to provide the required test results.

If the material is produced on-site, or if the work is performed on-site, review the test results or the work itself to ensure compliance with the specifications. If the work does not meet the specification, the Contractor is required to correct or replace it, or request to have the work accepted at a reduced price.

The timing of this check is similar to the guidance provided for visual acceptance.

10.6.5 NON-CONFORMING MATERIAL OR WORK

If the material or work does not meet the Contract requirements, the CM shall offer to the Contractor one of the following three options:

1. remove and replace the defective material or work;
2. correct the defect; or
3. propose to have the material or work accepted at a reduced price.

Depending on the situation, 1) or 2) may or may not be practical. The earlier the defect is found, the more opportunity there is to correct it. If the Contractor is obtaining the material from a stockpile, and all production is complete, it may be necessary for them to do additional screening or processing. Corrective action (or removal and replacement) would be required on the material already placed. Care should be taken when evaluating materials after a Contractor's corrective efforts. One common misconception is that an individual sample and test result represents a discrete quantity of material. However, poor quality materials often contain both passing and failing quantities. One passing test may be due solely to chance.

In fact, any quantity of material is collectively represented by all the samples taken from it. Any corrective effort should be applied to the whole of any material represented by a series of samples, unless additional testing convincingly isolates the defective areas. After corrective action, additional testing must be used to verify that the corrective actions were effective.

If the material has already been placed by the time the test results are received, reprocessing may not be practical, and the Contractor may propose to have the material or work accepted at a reduced price. To accept nonconforming materials at reduced payment two things must happen. SRTA must make a determination that the materials will serve the purpose intended, and the Contractor and SRTA must agree on the amount of the reduced payment. In this situation, the Project Engineer should coordinate very closely with the CM and Materials testing consultant. The independent materials testing personnel will provide the technical advice, but the Project Engineer and the CM have to weigh the overall risks and determine the appropriate administrative action.

Because 1) or 2) ultimately result in conforming material or work, no further administrative action is required. However, if the Contractor proposes to have the work accepted at a reduced price, SRTA is allowing a deviation to the contract, and a contract modification is necessary. The modification should address the "this-for-that" tradeoff. SRTA gets a lesser product than it originally bargained for, and the Contractor gets less compensation than they originally bargained for.

When determining the value of the price reduction, coordinate with the independent materials testing consultant for materials items, and the CM for other work items. The [GDOT STI Manual](#) provides detailed guidance on price reduction values

CHAPTER 11

MEASUREMENT AND PAYMENT

11.1 GENERAL

This chapter addresses:

- Measurement and payment of contract work items,
- Progress payments,
- Partial payment for preparatory work and stockpiled material,
- Retainage and liquidated damages, and
- Pre-final payment.

Refer to Section 15.2 for information related to final payment after Project Acceptance.

Reference: Georgia DOT Standards and Specifications and SRTA's Construction Contract.

11.2 PAY NOTES AND COMPUTATIONS

11.2.1 GENERAL

Quantities should be documented in accordance with the construction contract requirements and this manual.

The number and content of pay notes and computation documentation depends upon the type of construction involved. During the Pre-Construction meeting, the Project Engineer will issue instructions or guidelines for standard notes and methods of computations. In any case, notes must be recorded neatly, clearly, in an uncrowded manner, and in sufficient detail to be easily understood. Too much detail is better than too little.

Original entries accepted by the CM, but later determined to be in error or no longer applicable, are not to be deleted. A new pay note will be created to record any changes to an original pay note entered in error or containing incorrect quantities.

Pay notes should be organized in chronological order, follow a logical order of progression throughout the duration of the project, and be summarized for each payment period. The pay notes should show the following, at a minimum:

- the date,
- the project name,
- item number,
- item description,
- location of measurement,
- total quantity of the measurement, and
- the names of the persons who made and checked the computations.

Computation sketches, photos, remarks, and similar clarification, should be included within or attached to the pay note. Each pay note must be designated as interim or final.

When records are required to be kept by Contractor personnel, the CM should go over the required format, timeliness and content, and provide constructive feedback to the Contractor if the records are deficient.

Pay notes are used as source documentation for work that necessitates field measurement, stakeout, or verification.

11.2.2 COMPUTATIONS AND SUPPORTING DOCUMENTS

Pay notes and measurements are converted to quantities for progress payments by the computations required or implied in the contract. For simple items, the computations may be included in the pay notes.

For complex items, it may be necessary to use a computer spreadsheet or other calculation format, to supplement the pay notes.

The pay notes for each specific item should be summarized for each payment period for entry into the progress payment or final payment.

Pay notes and any supporting documentation should be retained in hard copy for each item active for that payment period.

11.3 MEASUREMENT OF QUANTITIES

11.3.1 GENERAL

The Standard Specifications prescribe methods of measuring quantities but are not intended to be all-inclusive. Refer to the plans, special contract requirements, and to this chapter of the construction manual for measurement details.

Each *technical* section of the Standard Specifications contains a subsection entitled *Measurement*, stating what is to be measured and how it is to be measured. Further, the *Payment* subsection of each section states how work is covered by the payment. Work that is not specifically identified for payment is assumed to be a subsidiary obligation and no payment is required.

Occasionally, plans and special contract requirements will change the standard methods of measurement and payment, or will include provisions for measurement and payment for items not in the Standard Specifications.

Before making any measurements on a project, the CM should study the plans, specifications, and special contract requirements to determine first, what is to be measured, and second, how it is to be measured.

There are three basic methods of measuring contract items – *contract quantity or lump sum, staked or ordered quantity, and as constructed quantity.*

1. **Contract Quantity or Lump Sum.** For these items, the work authorized by the contract is verified and paid for. No detailed re-measurement is required. Changes or correction of errors must be documented by a contract modification. Examples of payment by contract quantity would be mobilization and structural concrete (usually).

Contract quantity items should be supported by a signed and dated pay note, stating the item of work has been completed satisfactorily and is in substantial conformity with the plans and specifications.

2. **Staked or Ordered Quantity.** This method applies to work that is staked out or ordered by the Project Engineer. The quantity is defined before such work is performed, and the Contractor receives payment for this quantity. Again, although the CM must verify that the work is done, no detailed re-measurement is required. An example of this would be a design-build contract.
3. **As Constructed Quantity.** Under this method, work authorized by the contract or the Project Engineer, is performed, measured, computed (if necessary), and paid for, subject to CM inspection. Examples of this method would be paving items paid by the ton, sub-excavation of soft spots, and watering.

11.3.2 Earthwork

Electronic computation of earthwork quantities is standard procedure. It may be necessary or desirable, however, to make supplementary earthwork quantity computations on the project for minor alignment, grade, or slope changes, or for other reasons. These supplementary computations may be performed on computer-based software, or by manual calculations if necessary. The relationship to the main design computations should be clearly documented and checkable by others.

A pay note should include all of the current documentation used to pay for earthwork (i.e., the master quantity printout along with each supplement or correction to those quantities). Each document referenced should be dated or otherwise identified. Obsolete or superseded computations should not be included with current documentation.

11.3.2.2 Computation Methods

Unless otherwise provided in the special contract requirements or otherwise approved by the CM as providing equivalent accuracy, excavation quantities for payment are to be computed by the average end area method, with no correction for curvature. This method uses the average area of end sections (taken at right angles to the centerline) and the centerline distances between end sections.

To avoid distorted balancing of earthwork quantities in areas of sinuous alignment through heavy sidehill construction, correction for curvature may be necessary. Such correction will be for the purpose of balance only, and payment will be made for uncorrected excavation quantities unless otherwise provided in the special contract requirements. In the case of contract modification work, the difference between actual and computed excavation quantities should be discussed with the Contractor during negotiation, as this difference may impact costs and quoted prices.

The cross-section areas generally are obtained either by direct computation from slope stake notes or by plotting and computing the section. Direct computation of areas from slope stakes is preferable because it is usually less time consuming.

A number of commercial earthwork software packages are available which compute quantities using cross-sections and end areas, or equivalent techniques. If commercial earthwork software is not available, there are several acceptable methods of manually computing cross-section areas such as the average end area method.

11.3.2.3 Documentation and Verification

Cross-section notes may be entered directly in a preformatted slope stake field book. Electronic data collectors may also be used. Field books for slope staking may be duplicate (no carbon required) type. If used, the original must be retained in the book to serve as the permanent record. The second copy may be detached to facilitate computing. Likewise, if electronic data is collected, a copy should be retained prior to sending the electronic files to the CM.

The maximum interval for cross-sectioning should usually be 50 feet, with intermediate sections taken as necessary to catch all breaks in terrain. For pay purposes, the volumes must be computed and checked mathematically, and all computations should be documented in field books, on computer printouts, or on cross-section rolls. Each document should be uniquely identified and referenced in the Summary Book. The Summary Book should contain a tabulation of the following: station to station; prism excavation and/or embankment volume; and any other quantities involved, such as sub-excavation, waste, and channel changes. Grouping may be between balance point stations, or for example, every 1000 feet when balances are infrequent. Plan quantities may be entered in the Summary Book originally, whether or not they are a specified basis for payment. Measured quantities may be added to, or substituted for, the plan quantities after computation and checking. Whenever changes or new sections are substituted, the referencing should be clear. The old sections should be discarded or identified as *superseded*.

11.3.2.4 Cross-Sections

The taking of cross-sections after completion of the grading is not normally required. Ordinarily, cross-sections will not be necessary except in areas where there is a dispute with the Contractor, where slides are involved, or in rock cuts involving overbreak or underbreak. In rock excavation, where it is necessary to determine the allowable overbreak, plotting of the cross-sections may be necessary.

11.3.2.5 Wastage

When borrow is paid for in its original location (borrow pit), the use of unclassified excavation must be carefully monitored to ensure unnecessary waste does not occur, which would increase the need (and payment) for borrow. Typical waste problems might be fill slopes that are too wide, not breaking down and incorporating rock into fills, not conserving potential topping material, and wasting acceptable quality material just because it is too wet or haul distance is excessive.

11.3.3 MEASUREMENT OF MATERIALS (WEIGHT BASIS)

11.3.3.2 Documentation

For materials paid for on a weight basis, a daily summary of all weighed and accepted loads should be generated. Either custom software or a spreadsheet is acceptable for this summary.

The summary should be filed with the tickets indicating certified weight and acceptance. The summary should also be included with the pay note. Separate summary reports are best used for each contract item when more than one item is being produced at once.

The following procedure is to be followed for most items paid by weight:

- Contractor to provide original tickets only. Photocopies of tickets will not be accepted under any circumstances.
- Tickets are to have pre-printed ticket numbers. Tickets are to be provided in sequential order.
- Each ticket must be a computerized printout and contain the following:
 - a. Gross, tare, and net weight
 - b. Date
 - c. Time of batch or loading
 - d. Sequential ticket number
- Each ticket must contain (by imprint, printer, or hand) the following:
 - a. Load number
 - b. Truck number
 - c. Certified Public Weigher (CPW) stamp, seal or number
 - d. CPW signature
 - e. Project name or number, if applicable
 - f. Description of material

11.3.3.2.1 Standard Tickets

When standard tickets are used, the weigher should fill them in completely, except for the station of placement, and should deliver the original and duplicate to the truck driver and retain the triplicate. If an original is lost or missing at the end of the shift and delivery on the road was accomplished, the triplicate may be used to verify the quantity, provided it can be confirmed that the material was delivered.

11.3.3.2.2 Scale Tickets

When approved recording scales are used, the details regarding checking and delivering material will vary according to the form of the tickets, but must be arranged so as to provide both the weigher and checker with a record of each load and the Contractor with a ticket issued as each load is weighed. When the recording scales accommodate tickets in duplicate only, it will be necessary for the weigher to keep a complete tabulation showing ticket number, tare, total weight, and pay weight. Both tickets will then be given to the truck driver.

Weighing by an accredited public weighmaster is acceptable, provided the same basic procedures as described above are used.

11.4 PROGRESS PAYMENTS

11.4.2 GENERAL REQUIREMENTS

The processing of progress payments became a substantially more complex process with the *Prompt Payment Act of 1982*, including amendments to the Act and additional administrative requirements by the Office of Management and Budget (OMB). These requirements are included in [FAR Clause 52.232-5](#), Payments Under Fixed Price Construction Contracts, [FAR Clause 52.232-27](#), Prompt Payment for Construction Contracts, and Subsection 109.08, Progress Payments, within the Standard Specifications. These clauses appear in each contract and should be reviewed in detail.

11.4.3 PROMPT PAYMENT

Some of the basic requirements of the Prompt Payment Act are as follows:

- SRTA is required to make payment to the Contractor within 30 days after a valid invoice is received at the designated billing office from the Contractor.
- SRTA must advise the Contractor in writing if the invoice is defective.
- The Contractor may invoice only subcontractor's work for which it is committed to paying the subcontractor.

- The Contractor may be obligated to pay interest to SRTA and an interest penalty to the subcontractor on any amounts for subcontractor work for which it invoices and receives payment from SRTA, but then fails to pay the subcontractor within fifteen (15) days.
- SRTA is not to become involved in disputes between subcontractors and contractors, beyond providing a copy of the Contractor's payment bond to the requesting subcontractor and withholding interest from the Contractor for nonpayment of a subcontractor for subcontracted work for which the Contractor has been paid.

The payment and invoice process as well as the Contractor's obligations in this process should be emphasized at the preconstruction conference. In particular, the Contractor should understand that failure to provide required materials documentation, test Reports and certifications will result in nonpayment for the work in question.

While the CM should avoid getting involved in disputes between the prime and subcontractors, the interest on amounts due to subcontractors sometimes makes SRTA have a stake in the dispute. This means the Contractor should be requested to resolve such disputes and advise the CM of how they are resolved - at least to the extent we are satisfied that there were no Prompt Payment violations. It should be made clear to the Contractor that SRTA is not a policing or auditing agency; and if disputes linger on, or appear to indicate improper actions of the Contractor, prejudicial to SRTA, SRTA will request intervention of an appropriate State legal authority.

.

Exhibit 11.5-A Example CM's Receiving Report

12/20/2006
09:36:42

Page 1

ID FS RFO 2005(1)-29(1)
CREEK BRIDGE

Contract No. ITH70-06-C-00015

Supporting Data for Estimate No. 2

Paying \$183,450.14 from 11/01/2006 to 12/06/2006

Item No.	Description	Unit	Price	Probable		Account Number 1		Account Number 2		Account Number 3	
				Quantity	Amount	Quantity	Amount	Quantity	Amount	Quantity	Amount
15201-0000	CONSTRUCTION SURVEY AND STAKING	LPSM	\$14,814.88	5,037.06	73,777.82	9,777.82	73,777.82	9,777.82	73,777.82		
15401-0000	CONTRACTOR TESTING	LPSM	\$4,915.35	1,671.22	8,244.13	3,244.13	8,244.13	3,244.13	8,244.13		
15501-0000	CONSTRUCTION SCHEDULE	LPSM	\$2,785.44	1,643.41	4,573.87	1,643.41	4,573.87	1,643.41	4,573.87		
15701-0000	SOIL EROSION CONTROL, STREAM DIVERSION	LPSM	\$24,526.48	18,394.86	448,331.62	6,131.62	150,000.00	6,131.62	150,000.00		
15705-0100	SOIL EROSION CONTROL, SILT FENCE	LMFT	\$6.97	115	799.95	115	799.95	115	799.95		
20102-0000	CLEARING AND GRUBBING	LPSM	\$2,528.40	1,896.30	4,773.10	632.10	1,611.00	632.10	1,611.00		
20304-2000	REMOVAL OF BRIDGE	LPSM	\$10,013.88	5,006.94	50,069.40	5,006.94	50,069.40	5,006.94	50,069.40		
20403-0000	UNCLASSIFIED BORROW	CUYD	\$21.80	450.0	9,780.00	250.0	5,450.00	250.0	5,450.00		
55101-1100	STEEL H-PILES, IN PLACE	LMFT	\$222.76	282.2	62,648.00	219.8	48,562.65	219.8	48,562.65		
55401-1000	REINFORCING STEEL	LB	\$3.09	0	0.00	2,256	6,971.04	2,256	6,971.04		
55504-0000	PRE-FABRICATED STEEL BRIDGE INSTALLATION (Government Provided)	LPSM	\$34,390.63	1,000.00	34,390.63	33,390.63	1,139.63	33,390.63	1,139.63		
60101-0000	CONCRETE	CUYD	\$3,002.01	0.3	900.60	21.7	65,143.62	21.7	65,143.62		
63501-0000	TEMPORARY TRAFFIC CONTROL	LPSM	\$2,808.77	2,106.58	5,912.19	702.19	1,968.00	702.19	1,968.00		
64625-1000	MAINTENANCE, TOILET	EACH	\$100.21	2	200.42	2	200.42	2	200.42		
CM0001-A	Item# 25101 - Class V Riprap by tons	ton	\$36.86	453.7	16,706.42	709.3	26,144.80	709.3	26,144.80		
MOH-1	Item# 25101 Class V Riprap	LS	\$4,108.20	0.0	0.00	-1.0	-4,108.20	-1.0	-4,108.20		
MOH-2	Item# 55101 H-Piles	LS	\$28,643.20	0.00	0.00	-1.00	-28,643.20	-1.00	-28,643.20		
											\$0.00

-\$32,550.98

11.4.4 CONTRACTOR INVOICES

The Contractor's invoice package must contain the items listed in Section 109 of the Standard Specifications. See [Exhibit 11.5-B](#) for an example of a contractor's invoice. The contract specifies where the invoice must be sent or delivered in order for the 30-day turnaround to start. This may be either the SRTA Office or the project office. It is important to stamp or note the receipt date on the invoice. It is also important to know the maximum time the billing office may retain the invoice for processing without exceeding the 30 day limit for payment.

There are generally three major components of a Contractor invoice:

- Tabulation of quantities and unit prices. No quantity for an individual item should exceed the quantity for that item on SRTA's receiving Report. However, quantities for certain items may be less. For example, if a subcontract provided that certain work not be paid for until complete, payment would then be based on the lower (Contractor's) quantity (see Section [11.5.5](#)).
- Accounting of subcontractors, with the total amounts, amounts previously paid, and amounts to be paid from this estimate.
- Signed certification conforming to FAR Clause 52.232-5(c), <https://www.acquisition.gov/content/52232-1-payments>.

[FAR Clause 52.232-27](#), <https://www.acquisition.gov/content/52232-27-prompt-payment-construction-contracts>. Prompt Payment for Construction Contracts, requires interest penalties and similar adjustments to also be included in the invoice — that is, if the Contractor previously invoiced SRTA for work that it then withheld from a subcontractor, it is required to show the interest penalty (credit to SRTA) on the invoice. The CM expects this sort of adjustment to be very infrequent. However, if the occasion arises, and the Contractor needs the correct current interest rate, the information should be obtained from the Project Engineer.

AIA[®] Document G703[™] - 1992

Continuation Sheet

AIA Document G702[™]-1992, Application and Certificate for Payment, or G732[™]-2009, Application and Certificate for Payment, Construction Manager as Adviser Edition, containing Contractor's signed certification is attached.
In tabulations below, amounts are in US dollars.
Use Column I on Contracts where variable retainage for line items may apply.

APPLICATION NO:
APPLICATION DATE:
PERIOD TO:
ARCHITECT'S PROJECT NO:

A ITEM NO.	B DESCRIPTION OF WORK	C SCHEDULED VALUE	D WORK COMPLETED		F MATERIALS PRESENTLY STORED <i>(Not in D or E)</i>	G TOTAL COMPLETED AND STORED TO DATE <i>(D+E+F)</i>	H BALANCE TO FINISH <i>(C - G)</i>	I RETAINAGE <i>(If variable rate)</i>
			FROM PREVIOUS APPLICATION <i>(D + E)</i>	THIS PERIOD				
GRAND TOTAL								

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

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AIA Document G702™ - 1992

Application and Certificate for Payment

TO OWNER: PROJECT: APPLICATION NO: Distribution to:

PERIOD TO: OWNER

CONTRACT FOR: ARCHITECT

CONTRACT DATE: CONTRACTOR

PROJECT NOS: FIELD

OTHER



CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the Contract. AIA Document G703™, Continuation Sheet, is attached.

- ORIGINAL CONTRACT SUM \$
- NET CHANGE BY CHANGE ORDERS \$
- CONTRACT SUM TO DATE (Line 1 + 2) \$
- TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$
- RETAINAGE:
 - % of Completed Work (Columns D + E on G703) \$
 - % of Stored Material (Column F on G703) \$
- TOTAL EARNED LESS RETAINAGE (Lines 5a + 5b, or Total in Column I of G703) \$
- LESS PREVIOUS CERTIFICATES FOR PAYMENT (Line 4 minus Line 5 Total) \$
- CURRENT PAYMENT DUE (Line 6 from prior Certificate) \$
- BALANCE TO FINISH, INCLUDING RETAINAGE (Line 3 minus Line 6) \$

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief the Work covered by this Application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.

CONTRACTOR:

Date:

By:

State of:

County of:

Subscribed and sworn to before me this _____ day of _____

Notary Public:

My commission expires:

ARCHITECT'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Architect certifies to the Owner that to the best of the Architect's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED \$
(Attach explanation if amount certified differs from the amount applied. Initial all figures on this Application and on the Continuation Sheet that are changed to conform with the amount certified.)

ARCHITECT:

By:

Date:

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

CHANGE ORDER SUMMARY	ADDITIONS	DEDUCTIONS
Total changes approved in previous months by Owner	\$	\$
Total approved this month	\$	\$
TOTAL	\$	\$
NET CHANGES by Change Order	\$	\$

CAUTION: You should sign an original AIA Contract Document, on which this text appears in RED. An original assures that changes will not be obscured.

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11.4.5 SUBCONTRACTOR WORK AND PAYMENTS

The term subcontractor as used in the payment clauses means not just onsite subcontractors, but supply, equipment rental, and service subcontractors as well. The Contractor may withhold payment from a subcontractor for cause - such as producing defective work (whether or not SRTA considers it defective), or not completing its work on time. However, the Contractor cannot invoice SRTA for work for which it is temporarily withholding payment from the subcontractor. *Temporarily* means the Contractor recognizes an obligation to pay the subcontractor as soon as the subcontractor corrects the defective work.

If the Contractor does invoice SRTA for work performed by a subcontractor, it must pay the subcontractor within fifteen (15) days of receiving payment from SRTA. Failure to make payment results in an interest penalty due from the Contractor to SRTA. Interest continues as long as the Contractor has received payment from SRTA, but fails to pay the subcontractor. If the Contractor has violated the terms of the subcontract by failure to make payment, it may owe a second interest penalty to the subcontractor. Generally, SRTA is not a party to the latter obligation, and the CM should not attempt to monitor or enforce subcontract provisions.

If the withholding from the subcontractor is permanent, that is considered a de facto reduction in the amount of the subcontract and should be reported in the invoice documentation as such. For example: A subcontractor building a box culvert is unable to obtain credit to buy ready mix concrete. The prime purchases the concrete and deducts payment from the subcontractor's payments. This transaction reduces the amount of the subcontract. The prime may invoice SRTA for the full amount of the completed work, and is not obligated to pay interest to the subcontractor or to SRTA.

The Prompt Payment Act takes precedence over the terms of the contract. For example, the contract may provide that temporary traffic control devices are paid at 50% on delivery to the site. However, the Contractor may have a subcontract that provides payment at 5% per month for the first 20 months of the contract. In this case, the Contractor may invoice SRTA only for the amounts it will pay the subcontractor, plus a proportionate share of any overhead and profit markup if applicable. The CM will often not have enough information to know if a significant difference exists between the payment terms in the subcontract and those in the contract. A comparison of the tabulation of the status of all subcontract payments required by Subsection 109.08 of the FLH [Standard Specifications](https://flh.fhwa.dot.gov/resources/specs/), <https://flh.fhwa.dot.gov/resources/specs/>, with the CM's knowledge of how much subcontracted work has been paid for under the contract, may reveal problems that should be raised to the Contractor.

Complaints from subcontractors who say they have not been paid have two implications under the contract. The first is a possible Miller Act claim by the subcontractor against the Contractor's surety. The second is a possible violation of the Prompt Payment Act, if the payment in question was invoiced to SRTA and paid to the Contractor, but not passed on to the subcontractor.

See Section [8.8.5](#) for a discussion of the Miller Act, and [Appendix 8A.2.2](#) for an

example of a Miller Act - Prompt Payment Letter to a Subcontractor. Copies of such letters should be normally provided to the Contractor. The CM should discuss unusual situations, such as allegations of fraud or other criminal activity, with the SRTA Rep.

If there is an apparent violation of the Prompt Payment Act, SRTA should write to the Contractor detailing the allegations and facts as we know them, and request a written explanation from the Contractor. See [Exhibit 11.4-C](#) for an example of a prompt payment letter. Note that SRTA's only interest in underpayments to subcontractors is possible violations of the Prompt Payment Act and the interest that might therefore be due SRTA. SRTA should avoid becoming involved in disputes between the Contractor and its subcontractors; and should not order the Contractor to pay its subcontractors. Our position is simply that if the Contractor is not paying the subcontractors, it cannot invoice SRTA for their work.

[Exhibit 11.4-D](#) summarizes guidelines for handling subcontractor/supplier complaints of nonpayment.

Exhibit 11.4-C Example Prompt Payment Letter



U.S. Department
of Transportation
**Federal Highway
Administration**

Western Federal Lands
Highway Division

610 E 5th Street
Vancouver, WA 98661

December 23, 2008

Ms. N. Neidelstrom
Project Manager
ABC Construction
Any Town, USA

Dear Ms. Neidelstrom:

This is to acknowledge your notice of nonpayment related to materials provided on this project which is being administered by this office of the Federal Highway Administration.

In accordance with the Miller Act (Title 40, United States Code, Section 270), the prime contractor, XYZ Construction, submitted a payment bond, under which it bound itself through its bonding company (surety) to pay all legitimate claims of its subcontractors and suppliers under the contract. A copy of the pertinent sections of the Act (and the Payment Bond for the contract) is enclosed.

NOTE: The following paragraph may be omitted if the complainant obviously does have a contractual relationship with the prime. DELETE these instructions.

If you do not have a direct contractual relationship with the prime contractor, you must notify the prime contractor in writing of your request for payment within ninety days of the last day you performed the labor or furnished the supplies. You have the right, after failing to receive a response to your request for payment from the prime contractor, to file a claim under the Miller Act.

In addition, this contract is subject to the terms of the Prompt Payment Act. This law obligates the contractor to make payment on any work performed by subcontractors and which it invoices to and is paid by the Government. If you provide this office with a detailed accounting of the work you have performed on the contracts, and the date/amounts you have been paid for the work, we will evaluate if there has been an apparent violation of the Prompt Payment Act.

If you choose to file a claim under the Miller Act, please contact ***Jane Doe***, WFLHD Construction Operations Engineer. Please note that neither the Miller Act, the contract, nor any other Federal or State laws or regulations creates any right for you to bring this type of claim directly against the Federal Highway Administration; or the United States Government; or permits payment by the Government directly to you. Your exclusive recourse under the law is against the prime contractor and its surety. If you have any further questions on this matter please contact this office.

Sincerely yours,

Project Engineer

Exhibit 11.4-D Guidelines for Nonpayment Complaints from Subcontractors

Complaint	Response
Verbal complaint from subcontractor or supplier of nonpayment.	Verbally advise subcontractor/supplier that no action can be taken unless a written complaint is provided.
	Verbally advise subcontractor/supplier that in order to ascertain a violation of the Prompt Payment Act, SRTA needs a detailed statement of payments under the subcontract, dates payments made, and amounts subcontractor/supplier believes were due on those dates.
	Verbally advise contractor's superintendent of complaint and remind him/her of Prompt Payment Act requirements.
	Document all exchanges in diary. No further action in absence of written statement/complaint.
Written complaint from subcontractor/supplier of nonpayment, but without detailed accounting of amounts paid and dates.	Furnish copy of bond and Miller Act information to subcontractor/supplier.
	Request a statement of payments under the subcontract, dates payment made, and amounts subcontractor/supplier believes were due on those dates.
	No further action unless statement of payments is provided.
Written complaint from subcontractor/supplier of nonpayment, including detailed accounting of amounts paid and dates.	Furnish copy of bond and Miller Act information to subcontractor/supplier.
	Compare subcontractor/supplier's detailed statement of payments, Contractor accounting of subcontractor payments, and SRTA's payments for contract items known to be part of the subcontract.
Subcontractor statement of payments generally agrees with Contractor's accounting and amounts paid by SRTA for subcontracted work.	No further action. Subcontractor may have recourse under Miller Act, but no apparent Prompt Payment Act violation.
Subcontractor statement indicates payments less than corresponding invoiced percentages of contract items associated with the subcontract.	Write letter to Contractor requesting resolution of payment discrepancies.
Contractor fails to respond to letter requesting resolution of alleged underpayment.	Notify Contractor in writing that without an adequate response to nonpayment allegations, further invoices including the payment in question must be presumed to be defective.
	Refer file to Legal Counsel for possible referral to DOT Office of Inspector General

	as false claim.
Contractor responds that payment information provided by subcontractor/supplier is in error and that all payments have been made in accordance with the Prompt Payment Act, but does not provide credible evidence that this is the case.	Refer file to Legal Counsel for advice on possible nonpayment of invoices and referral to DOT Office of Inspector General as false claim.
Contractor responds in a way that confirms that payments made to subcontractor/supplier have been less than those invoiced SRTA for the contract items associated with the subcontract.	On next invoice, require Contractor to debit appropriate interest from next progress payment. Require debit of overpayment unless Contractor pays subcontractor/supplier by then.

11.4.6 PREPARATORY WORK AND STOCKPILED MATERIALS

11.4.6.1 Preparatory Work

General mobilization and preparatory work for starting construction is included in the Mobilization pay item. See Section 151 of both of the [Standard Specifications, https://flh.fhwa.dot.gov/resources/specs/](https://flh.fhwa.dot.gov/resources/specs/). Preparatory work, or the beginning stages of work on a particular item, should be included in the Contractor's invoice and paid as an agreed percentage of that item. While it is possible to pay preparatory work on an actual expenses' basis, this is not recommended because it entails additional bookkeeping and control to prevent overpayment. See [Exhibit 11.4-E](#) for guidelines related to percentage payments for partially complete work.

11.4.6.2 Stockpiled Materials

Stockpiled materials may be included in the Contractor's invoice and paid for as one or more separate (temporary) line items, provided:

- The materials are stored onsite
- The materials are designated for incorporation into the work. In contrast, materials such as form lumber, explosives, and diesel fuel cannot be paid as stockpiled materials.
- Test Reports, certifications, or other reasonable documentation indicates that the materials comply with contract requirements, or that the item into which they will be incorporated will comply with those requirements.

Payment for stockpiled materials is intended to allow the Contractor to order materials sufficiently in advance of the work to avoid delivery delays. Payment does not constitute acceptance of the material, although SRTA may argue that it legally owns the materials in the event of a default. It is also not intended as a means of providing advance payments. Payments must Represent the reasonable value of the materials as compared to the bid prices for the work into which they will be incorporated. Whenever there is payment for stockpiled materials, such payment is covered by the conditions of the Prompt Payment Act (i.e., the Contractor is required to make payment to the subcontractor (supplier) within 15 days of receiving payment from SRTA).

As the materials previously paid for are incorporated into the work and paid under contract items, the temporary line item created to pay for them must be reduced or zeroed out accordingly.

All materials shall conform to Section VI.B Special Terms and Conditions, Material Quality Assurance as found within SRTA's standard Scope of Services in their agreements. Vendors are to be notified that materials purchased for SRTA specific projects are not to be included in quarterly Reports to GDOT.

Exhibit 11.4-E Guidelines for Percentage Payments for Partially Complete Work

Description	Allowance (Cumulative)
Clearing and Grubbing	
Felled and slashed	35
Bucked and piled (slashings, brush and logs)	60
Grubbed	75
Burned or chipped and removed	98
Substantially complete including cleanup	100
Excavation and Embankment	
Pioneered	5
Drilled	20
Blasted	35
Roughed out to grade	85
Roadbed finished to grade	90
Slopes seeded	98
Substantially complete including cleanup	100
Structural Excavation	
Excavation Complete	85
Backfill complete	98
Substantially complete including cleanup	100
Aggregate Courses	
Crushed and stockpiled onsite	50
Placed on roadway	80
Spread, compacted and tested	98
Substantially complete including cleanup	100
Asphalt Pavements	
Aggregates crushed and stockpiled onsite	50
Placed, compacted and tested	98
Substantially complete including cleanup	100
PCC Pavement	
Forms set	35
Concrete in place	90
Forms removed and testing complete	98
Substantially complete including cleanup	100
Concrete Structures	
Falsework erected	10
Forming complete	20
Concrete in place	80
Forms removed	90
Concrete tested and finished	98
Substantially complete including cleanup	100
Steel Structures	
Falsework erected	10
Steel in place	80
Bolting and welding complete	90
Painting complete	98
Substantially complete including cleanup	100

Notes:

These percentages are typical. They may be adjusted based on a detailed analysis of circumstances on a given project.

Whenever partially complete work entails continuing maintenance, an appropriate percentage should be retained to cover those costs.

11.4.7 ADJUSTMENTS TO CONTRACTOR'S INVOICE

Generally, any change that SRTA makes to the Contractor's invoice invalidates the certification accompanying the invoice and should therefore be avoided. However, if an error in the Contractor's invoice is based on erroneous information that SRTA provided or failed to provide at the onsite meeting before the invoice was submitted, the CM should try to reconcile the error administratively rather than declare the invoice to be defective. Such reconciliations or corrections can be handled by phone, with a follow-up confirmation in writing to the Contractor.

Certain additions or adjustments discussed in Section 109 of the Standard Specifications may be made to the Contractor's invoice. These adjustments may be documented on the receiving report or generated separately. The adjustments generally relate to retainage, liquidated damages, or other liabilities to SRTA, which are handled outside the normal contract items. Some of these items, like liquidated damages, may be in dispute. It is awkward to ask a Contractor to certify to the correctness of liquidated damages at the same time they are being contested. It is therefore acceptable for SRTA to make such adjustments administratively after the invoice is received. These adjustments do not make the certification invalid.

Any adjustments to the Contractor's invoice that are an adverse action (i.e., retainage, liquidated damages, or other liabilities to SRTA) should be documented by written notice to the Contractor explaining the reason for the adjustment, and, if temporary, the conditions under which SRTA would rescind the adjustment.

11.4.8 RETAINAGE AND LIQUIDATED DAMAGES FOR POOR PROGRESS

Retainage is money withheld from progress payments. [FAR Clause 52.232-5\(e\), https://www.acquisition.gov/content/52232-5-payments-under-fixed-price-construction-contracts](https://www.acquisition.gov/content/52232-5-payments-under-fixed-price-construction-contracts), permits the retainage of 10 percent of any progress payment when progress is unsatisfactory. See [Section 5.4](#) for a discussion of administration of contract time. Unsatisfactory progress means one of the following:

- Contractor is significantly behind the approved construction schedule.
- Contractor is following a construction schedule that shows completion beyond the contract completion date (or time).
- Contractor does not have an approved construction schedule, or the originally approved schedule has been rendered obsolete and invalid, thereby making it impossible to determine if progress is satisfactory.

Retainage is not applied to the entire amount of payments to date, but only to those payments earned since progress became unsatisfactory. Withholding of additional retainage is discontinued as soon as progress and the approved schedule are demonstrated to be consistent. However, previously withheld retainage will continue to be withheld until the Contractor demonstrates an ability to complete the project by the contract completion date (as modified by any contract modification or incentives).

Once the contract completion date has passed without completion, SRTA is to withhold liquidated damages for each day of delay, in accordance with the terms specified within the SRTA construction contract

Whereas retainage is a discretionary condition of the contract, liquidated damages are mandatory unless there is a contract modification modifying or waiving them. If substantial retainage and liquidated damages are being withheld, it is reasonable to estimate what the final amount of liquidated damages will be, and to assess a combined amount of retainage and current liquidated damages not to exceed this amount. This is done by reducing the retainage to some number less than 10 percent. The CM should discuss this situation with the SRTA Rep before taking action.

When Contract time is in dispute, or when there is recognized entitlement to additional time that has not yet been quantified, the SRTA Project Engineer may modify SRTA's assessment of retainage and liquidated damages pending the resolution of the contract time issue. If this occurs, the SRTA Rep should be involved in any decision, and the Contractor should be advised in writing as to the conditions of any such arrangement.

11.4.9 PRE-FINAL PAYMENT

The provisions of the Prompt Payment Act apply to final payments as well as progress payments, including that final payment is required in 30 days of the SRTA receipt date of the certified [final] invoice. For final payment, SRTA is permitted to withhold a reasonable sum pending the checking of final quantity records. Because the Contractor cannot sign an accurate final invoice/voucher or claims release until this checking process is complete, an attempt should be made to minimize retainage due solely to the checking. It is recommended that not more than one percent of the contract amount be withheld pending the checking of final quantities. If additional amounts are outstanding after the work is complete, a pre-final or additional progress payment is recommended to reduce the amount being withheld solely to protect SRTA during the checking process. This does not include retainage for cause, such as liquidated damages or failure to provide certifications and other required documentation. If extenuating circumstances suggest that larger amounts be withheld to protect SRTA, this should be discussed with the SRTA Rep.

CHAPTER TWELVE

CONTRACT MODIFICATIONS

12.1 GENERAL

One of the primary roles of the CM is to complete projects within budget. This chapter addresses the approaches and procedures that will be used to accomplish this.

In the event the contractor encounters unforeseen conditions, errors and omissions on the drawings and/or the Owner wishes to direct material changes to the work, the CM will work with the contractor to ensure timely collection of change order pricing. The construction project management team will evaluate each change request and furnish SRTA with a professional opinion on the merits / validity of the claim. The CM will further maintain a change order log that documents the details of each change condition along with a cumulative cost summary. This data will be reviewed and documented at each monthly site meeting and be incorporated into the monthly project status report.

The most effective approach to controlling the cost of changes is a management culture that resolves contractor requests for change in a timely, decisive and equitable manner. Experience shows that it is costly for CMs to allow a backlog of unresolved changes to grow. A backlog creates contention and diverts management attention to the backlog and away from productive project activities.

Additionally, time extensions may need to be considered and documented.

12.2 BUDGET CONTROL

- A. Change Order Analysis: The CM will analyze all claims for change orders and aid in negotiations of prices as necessary, using a combination of designer and contractor resources in this effort. If the contractor requests additional items, funding, or contract time, the CM will prepare a recommendation for acceptance, rejection or modification – resubmission. If the scope change involves additional item code quantities only (in excess of those in the Base Bid), with no additional scope items or time required, the CM will render a decision that will be thoroughly documented in the Project Record.
- B. Actions Pending Approval: The CM will ensure that the contractor does not proceed with change order work until the SRTA Project Engineer approves it (in writing).
- C. Change Order Log: The CM will maintain the project change order log documenting details of each change condition, along with a cumulative cost summary. This data will be reviewed and documented at each monthly contractor meeting and an executive summary will be incorporated (by project) into the monthly project status report.
- D. Incremental Reviews: The CM conducts incremental (weekly) reviews with regular checkups by our management team. Monthly Reports provide executive summaries for ease of reference. SRTA's Designated Representative remains engaged throughout the project lifecycle and details are communicated regularly via phone, email and face-to-face interface with key SRTA staff.
- E. Quantity Verification: Quantities will be measured at the end of each month as specified in Chapter 11, Section 11.3 Measurement of Quantities and agreed to by our field inspector and the contractor's site superintendent (pencil walk) prior to approving monthly applications for payment. In the event we exceed quantities outlined on the bid schedule, these will be explained in our weekly project narrative.

12.3 CONTRACT MODIFICATION PROCESS

- A. Give the contractor and Owner Notice of Change – Identify the need for the change
 - a. In Writing – identify scope of work
 - b. Timely
 - c. Clear (use drawings, sketches, reference details, etc.)
 - d. Follow the terms and conditions of the construction contract
 - i. Approval by authorized SRTA project engineer for changes up to \$_____
 - ii. Approval by _____ for changes over _____
- B. Always try to resolve changes promptly
 - a. Request contractor to prepare a proposal
 - b. Prepare an independent estimate
 - c. Analyze the contractor's proposal:
 - i. Accept proposal if fair and reasonable
 - ii. Perform additional fact-finding if not
- C. Negotiate and reach agreement with the contractor
 - a. What to do if agreement cannot be reached:
 - i. See GDOT specifications – Force Account
- D. Document and keep records of the approved change
 - a. Distribute to all affected parties
 - b. Update the Change Order log
 - c. Update the drawings (“Red-line”) to reflect approved changes
- E. Communicate regularly, clearly, concisely and often with SRTA Project Engineer

12.4 EVALUATION AND DOCUMENTATION OF TIME EXTENSIONS

- A. Types of Delays:
 - a. Non-excusable:
 - i. Within the contractor's control
 - ii. Non-compensable
 - iii. No time
 - iv. Liquidated damages may be assessed
 - b. Excusable (compensable):
 - i. Not within the contractor's control
 - ii. Within the Owner's control and Foreseeable by the Owner
 - iii. Eligible for a time extension and compensation
 - iv. No liquidated damages may be assessed
 - c. Excusable (Non-compensable):
 - i. Not within the Owner's control and not foreseeable by Owner
 - ii. Eligible for a time extension
 - iii. No liquidated damages may be assessed
- B. Evaluating the impact of a Delay:
 - a. Make a “fragnet” (fragmentary network)
 - b. Include submittal and procurement time
 - c. Use reasonable logic and durations
 - d. Perform an evaluation and recommendation to SRTA Project Engineer
- C. Cost implications of a Delay:
 - a. Direct costs
 - b. Inefficiency

- c. Acceleration
 - d. Extended field costs
 - e. Home office overhead
- D. Negotiate
- a. Document SRTA's position
 - b. Make reasonable offers
 - c. Be a good listener
 - d. Point out discrepancies and shortcomings
 - e. Agree to disagree
- E. Document terms of Agreement when negotiations are completed.
- F. Claims Avoidance and Dispute Resolution
- a. What does the contract for construction say?
 - b. What does the FTA say?
 - i. 4220.1F, Chapter VII (paragraphs 5, 6 and 7)
 - 1. Recipient's role and responsibilities
 - a. Notify FTA about claims and litigation
 - b. Legal rights and remedies
 - 2. FTA's role and responsibilities
 - a. Proceeds recovered

CHAPTER THIRTEEN

TRAFFIC CONTROL

13.1 GENERAL

The purpose of Temporary Traffic Control (TTC) within a work zone is to provide for the safe passage of all road users: motorists, bicyclists, and pedestrians, including persons with disabilities in accordance with the Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities (ADAAG). Most municipalities within the Metro-Atlanta area have specific requirements for lane and/or road closures which must be followed. Permit requirements are to be met prior to commencement of work, as applicable. It shall be the responsibility of both the CM and the Contractor to become familiar with local requirements. It shall be the Contractor's responsibility for the preparation of the permit application and the preparation of required documents as specified by the Local Issuing Authority (LIA). For areas that do not have specific permitting requirements or standards, reference should be made to Georgia Department of Transportation Special Provision 150 which specifies the installation and maintenance requirements of temporary traffic control devices during construction.

The TTC Plan is defined in Special Provision Section 150. Traffic control devices referred to in this section are devices specified in the Contract and the MUTCD and are used by the Contractor to regulate, warn, or guide traffic (and Pedestrians if applicable) through a Project under construction. When any provisions of the Specifications or the Plans do not meet the minimum requirements of the MUTCD, the MUTCD shall govern.

13.2 CONSTRUCTION MANAGER'S RESPONSIBILITIES

Prior to installation of temporary traffic control devices, review the Contractor's detailed staging and TTC Plans (including pedestrian traffic control if applicable) for performing specific areas of the Work. The plan shall meet the requirements of the LIA or Special Provision 150, whichever is applicable. At the time of the Pre-construction Meeting, the TTC Plans should be reviewed with the Contractor and the Project Engineer.

Before construction begins, inspect the initial installation of the traffic control devices and pedestrian traffic control devices if applicable. Advanced warning signs shall not be installed until the Work activities are about to begin. Having work zone traffic control in place on an inactive Project may de-sensitize the road users and should therefore be avoided when possible. Any temporary traffic control signs that are post-mounted shall be covered until all necessary work zone signs are installed unless all of the signs needed to sign the work zone can be installed within seven calendar days after beginning installation.

13.2.1 INSPECTIONS

The Contractor is responsible for design, installation and maintenance of the TTC Plan. The CM, or his designated representative, should perform periodic day and night inspections of the Project to ensure the TTC Plan has been implemented and the signs and/or devices are not obscured. The CM should also inspect and review the general layout, condition, and maintenance of the TTC Plan items, e.g., drum spacing. This

inspection shall be performed a minimum of once a week and documented in the Daily Work Report.

On all Projects, traffic control and warning signs should be documented with video recordings. The recording should be made of all traffic control and approach warning signs as soon after installation as practical. If videos cannot be made on a timely basis, digital photographs can be substituted. After each major staging change affecting traffic control, video recordings should also be made to document the changes to the TTC Plan (See Chapter 2 of the Construction Manual).

Note: It is recommended the CM maintain a video/photo log to ensure accurate record keeping and documentation cycles.

13.2.2 ACCIDENT DOCUMENTATION

Please see Chapter 8, Section 8.3 Accidents for additional documentation requirements.

Whenever possible, the CM should document accidents in the remarks section that occur within the construction limits. This includes taking and/or collecting photographs, videos and police reports.

Copies of any photographs taken by police or private photographers should also be obtained and placed in the Project file. This information can also be evaluated at a later date when formulating the Traffic Management Plan (TMP) for future Projects.

When an accident involving a fatality or serious injury occurs in a construction zone, it is essential that photographs or video recordings be taken to document the TTC Plan conditions.

Photographs or videos should be taken before the project conditions existing at the time of the accident are altered and, in no case, later than twenty-four hours after the accident.

Accidents that involve fatalities that occur within the Project limits need to be reported immediately to the CM who in turn shall notify the SRTA Project Engineer. Additionally, accidents that close major roads need to be reported in the same way as fatalities.

13.2.3 ENFORCEMENT

If deficiencies in traffic control are not satisfactorily corrected as specified in Special Provision 150, the CM will:

Set a deadline for making corrections noted on the Traffic Control Inspection Report (See Special Provision 150). The CM will notify the Contractor's Worksite Traffic Control Supervisor (WTCS) and the Project Superintendent in writing (attach the current report identifying deficiencies remaining) that the Contractor will cease all

Work on the Project, except for traffic control and erosion control, and impose non-refundable deductions in accordance with Section 150.08 if the corrections are not made by the established deadline.

If the Contractor fails to meet the established deadline, the CM will:

Again notify the Contractor's WTCS and the Project Superintendent in writing that the WTCS has failed to properly perform the duties of the job and request that the Contractor cease all Work on the Project except for traffic and erosion control items. The CM shall also notify the Contractor's Company Principal that non-refundable deductions for non-performance will begin until the CM is satisfied that all corrections have been made. All Work, except traffic control and erosion control, shall remain shut down until all required corrections have been made.

If the WTCS continues to be delinquent:

The CM may direct in writing to the Project Superintendent that the WTCS be placed on probation or dismissed, depending on the circumstances. If dismissed, the CM shall request that the Contractor find an immediate replacement to administer traffic control. The CM shall consult with the Senior CM and the SRTA Project Engineer prior to placing a WTCS on probation or dismissing them from the Project. A meeting with the WTCS and the Project Superintendent shall occur prior to taking this action against the WTCS. The Senior CM should attend this meeting and emphasize and outline the SRTA's concerns and expectations in regard to traffic control. What is discussed and agreed on in the meeting shall be documented by letter to the Contractor and a copy placed in the Project files.

13.3 CONTRACTOR'S RESPONSIBILITY

Prior to construction, the Contractor shall submit detailed staging and TTC Plans for performing specific areas of the Work. This TTC Plan shall be submitted to the CM a minimum of five business days prior to the Pre-Construction meeting. During the Pre-construction Meeting the Contractor should be able to address the following:

- Identity of the Worksite Traffic Control Supervisor (WTCS)
- Procedures for anticipating the need for, and ordering, of signs and traffic control devices
- Procedures for setting up and removing groups of devices
- Procedures for off-duty hours inspections
- Procedures for covering or removal of unnecessary signs
- Training and procedures to be followed by flaggers
- Training and instruction of other Contractor personnel
- Procedures for movement of Contractor equipment through the project
- Facilities for employee parking
- Emergency (accident) procedures
- Storage of equipment and materials, if required

- Any required coordination with local law enforcement agencies

The Contractor shall coordinate with the LIA to verify whether special provisions or permits are required prior to performing work within existing rights-of-way. Contractor shall prepare required documents and apply for the required permits prior to performance of any work within said rights-of-way. The Contractor shall provide a copy of the permit and any required documents from the LIA to the CM prior to commencement of work.

At a minimum of fourteen calendar days before a major traffic, and/or pedestrian shift on the Project, the Contractor shall submit traffic control details as specified in the Special Provisions to the CM for consideration. Activities that have not been approved at least seven calendar days prior to the scheduled date shall be rescheduled.

13.3.1 WORKSITE TRAFFIC CONTROL SUPERVISOR

The Contractor shall designate a qualified individual as the WTCS, who shall be responsible for administering the Temporary Traffic Control Plan according to the Contract. If the work requires traffic control activities to be performed during the daylight and night time hours, it may be necessary for the Contractor to designate an alternate WTCS. An alternate WTCS must meet the same requirements and qualifications as the primary WTCS and be approved by the CM prior to beginning any traffic control duties. The WTCS shall meet the requirements set forth by the LIA or as specified in Special Provision Section 150 as applicable.

13.3.2 TRAFFIC INTERRUPTION REPORTS

SRTA reserves the right to restrict construction operations when, in the opinion of their representative or the CM, the continuance of the work would seriously hinder traffic flow, be needlessly disruptive or unnecessarily inconvenience the traveling public. Special Provision 150 outlines the required notification to be given to the Contractor prior to suspending Work.

13.3.3 PEDESTRIAN CONSIDERATIONS

All existing pedestrian facilities, including access to transit stops, shall be maintained. Where pedestrian routes are closed, alternate routes shall be provided. Closures of existing, interim and final pedestrian facilities shall have the prior written approval of the CM. Whenever a sidewalk is to be closed, the CM shall notify the maintaining agency two weeks prior to the closure. When existing pedestrian facilities are disrupted, closed or relocated in a TTC zone, the temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.

13.3.4 TRAFFIC CONTROL FOR UTILITY WORK

Utilities in the Contract are bound by the requirements of the LIA or Special Provision 150, as applicable. For utilities not included in the Contract but working within the Project limits shall, at a minimum, follow the MUTCD.

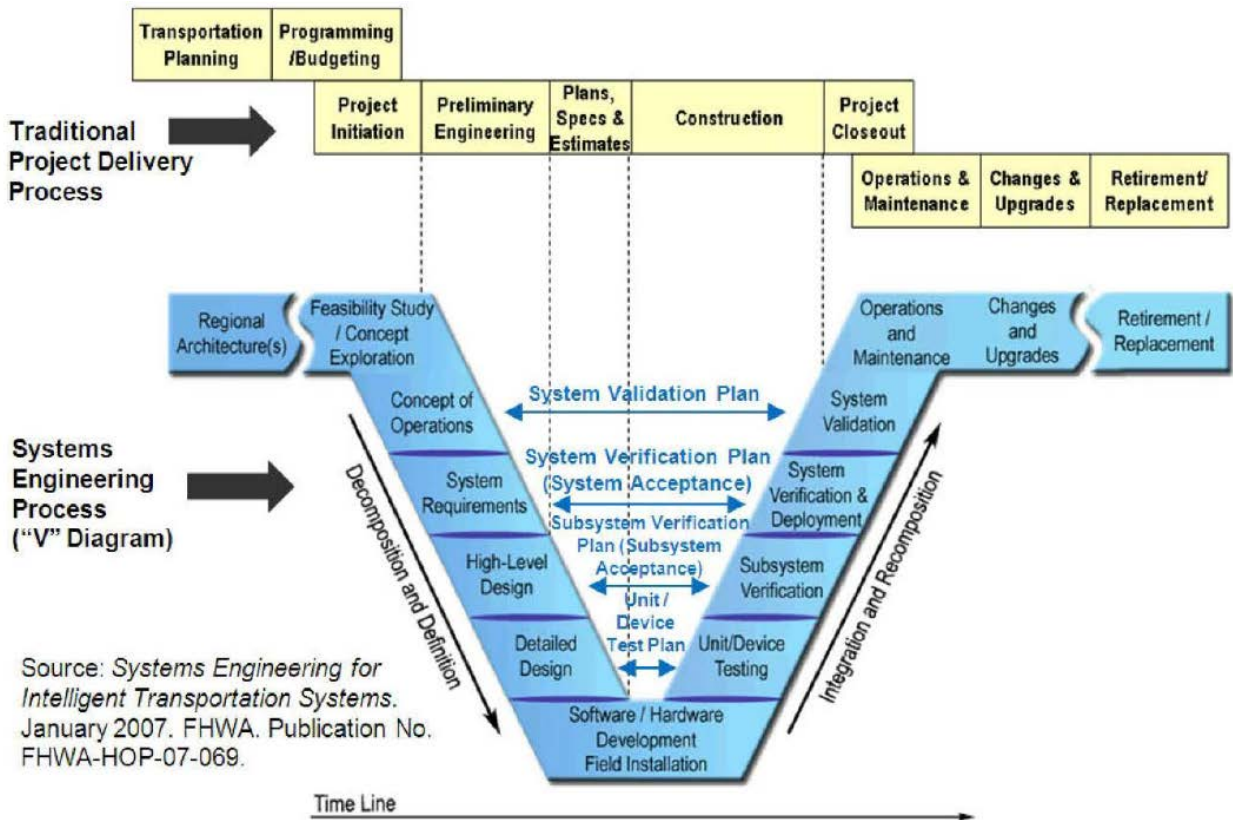
CHAPTER FOURTEEN

TECHNOLOGY IMPLEMENTATION

14.1 GENERAL

This section applies to (but is not limited to) the following technologies:

- Changeable Message Signs (CMS)
- Public Address (PA) Systems
- Closed-Circuit Television (CCTV) Camera System
- Emergency Call Box System
- Smart LED Lighting System
- Interior Network System
- External Network System
- Other Technologies



14.2 PRE-CONSTRUCTION PHASE INVOLVEMENT

The pre-construction phase is everything necessary to make the construction phase successful before it starts. It defines the requirements of the project before choices are made regarding technology and design, and defines how those choices will be implemented.

- A. Concept of Operations phase will yield a Systems Validation Strategy/Plan. The user needs and performance measures that are identified in the Concept of Operations are the basis for the System Validation. The Construction Manager will review and comment on this.
- B. The System Verification Plan is developed with the System Requirements so that the engineers consider how to verify each requirement as the requirements are written. The Construction Manager will review and comment on this
- C. Subsystem Requirements (High-Level Design) will yield a Subsystem Verification Plan. The Construction Manager will review and comment on this.
- D. Detailed / Component Level Design will yield a Unit Test Plan: The Construction Manager will review and comment on this.

14.3 CONSTRUCTION PHASE

The Construction phase is the central core of the systems engineering process focusing on construction and implementation.

- A. Initial Deployment Phase: What procedures and documentation are required?
- B. Unit/Device Testing: outline procedures and documentation required for the Unit testing plans. Verify factory tests performed, do pre-installation testing. Devise a series of tests to exercise the hardware and software components. Proposed checklists for inspection for each category are included at the end of this chapter
- C. Subsystem Integration and Verification: outline procedures and documentation required for the subsystem verification plan. Verify equipment is working before installation
- D. System Integration & Verification: outline procedures and documentation required for the overall system verification plan (System Acceptance Plan). Repeat initial procedures
Transition to Operation: Create the Transition Plan to clearly define how the system will be transition to operational status. This will include a series of checklists of performance, as well as a plan to phase out equipment being replaced.

14.4 PROJECT CLOSE-OUT PHASE

The project doesn't end when the system is turned on. The project close-out phase confirms that all equipment is working as desired and progresses the project to operations and maintenance.

- A. System Validation: outline procedures and documentation required for the Burn-In

Period and Final System Acceptance

- B. Retirement/Replacement: remove old equipment from operation if necessary
- C. Obtain O&M Manuals and Warranties. This documentation will be stored at the CM facility in the prescribed fireproof storage
- D. Other requirements - document lessons learned and changes to be made for future projects.

CHAPTER FIFTEEN

PROJECT CLOSEOUT

15.1 GENERAL

This section outlines the procedures required to closeout project contractual and administrative activities. Closing contractual activities requires the SRTA's Project Engineer to oversee final settlement of project contracts, acceptance of contract deliverables, collection of contract documents and records (such as As-Built drawings, operation and maintenance manuals, and warranties, etc.), and approval of final payments. Typically, these tasks will be delegated to the CM whose responsibilities for administrative closeout relate to demobilizing the project team and completing activities with other stakeholders, arranging the disposition of project records, closing of funding and financing agreements, and performing an evaluation of project success and lessons learned.

15.2 CONTRACTUAL CLOSEOUT

Construction Contracts

The Construction Manager (CM) and Contract Administrator should follow the procedures and actions specified in each contract's terms and conditions to settle and close the project's construction contract agreements. For a typical construction contract, the CM will confirm the completion and acceptability of the following activities:

- a. *Manuals and Training* – The Contractor delivers the operations and maintenance (O&M) manuals for the facilities constructed and equipment installed and provides any associated training of SRTA staff in their use.
- b. *Beneficial Occupancy* – A contract is substantially complete when the permitting authority issues a Certificate of Beneficial Occupancy to SRTA and then SRTA can occupy and begin use of the facility and equipment. It is important on taking beneficial occupancy that you ensure the CM prepares and distributes a punch list of open items for the Contractor to complete.
- c. *Guaranties and Warranties* – With beneficial occupancy, confirm that the Contractor has initiated the guaranties and warranties associated with the facility and equipment.
- d. *Record or As-Built Drawings* – The CM confirms that the Contractor has submitted the record drawings that show the As-Built condition of the constructed facility and installed equipment.
- e. *Final Inspection* – Lead a final walk through inspection of the project to confirm that the Contractor has completed the open punch list items and all work is completed correctly and satisfactorily.
- f. *Discussion about bonds* that extend past the Project Acceptance date.
E.g. Landscape bond.

- g. *Resolve Outstanding Change/Claim Disputes* – Make every effort to resolve any outstanding contract disputes so that they do not drag on past contract and project completion.
- h. *Final Payment* – With the above activities satisfactorily completed, approve the final payment to the Contractor and SRTA can close the contract.

15.3 ADMINISTRATIVE CLOSEOUT

A. Project Demobilization

Managing the demobilization of the project can often test the CM's administrative and interpersonal skills in order to address the following end of project issues:

- Key project staff that see the end of the project coming and acquire positions elsewhere before their project role and duties are complete.
- Professional service consultants, whose role is concluding, prematurely transfer key staff to newer long-term assignments and/or endeavor to stretch out their services to maintain revenue.

To manage demobilization, the CM should develop a staffing plan for the final phase of the project that plans the reduction in the professional service consultants. Meet with the Principals of the professional service firms to reach agreement on a timetable for winding down their services as the project concludes.

The CM's final challenge once the demobilization plans are in place is to keep the project team's attention focused on the tasks needed to complete the project as opposed to what they will be doing once the project is over.

B. Closure of Project Financing and Funding

The CM will need to work with SRTA's finance staff to close out the funding to the project.

Ensure that the Contractor/Consultant/Vendor complete the DBE/SBE Utilization Contract Close-out Report. (Attached)

Where a project receives FTA funds, Circular 5010.1D Grant Management Guidelines sets out the activities required of SRTA to satisfy the FTA that all the SRTA's project responsibilities and work are completed and the associated financial records closed. Circular 5010.1D may be found at <https://www.transit.dot.gov/regulations-and-guidance/fta-circulars/grant-management-requirements>

C. Disposition of Project Records

The CM will arrange for project records to be transferred to SRTA's document control function. Project records required to be maintained will be determined by a combination of SRTA's own records retention policy, retention requirements imposed by parties funding the project such as the FTA, and any special requirements due to contract provisions. Should there be an unresolved change/claim dispute, it is important that all records pertaining to the contract and dispute also be retained.

D. Project Evaluation

Before the project is over and key project staff have dispersed, it is desirable for the CM to hold

a lessons-learned session. The lessons-learned session should focus on identifying project strengths and weaknesses with recommendations on how to improve future performance on projects. To be most effective, the CM should encourage the project team to identify and document lessons learned through the project life cycle so that a database of lessons learned experience is built up for consideration at the final lessons learned session. Lessons learned can consider technical, managerial, and process aspects of the project.

E. Stakeholder Closure

Finally, acceptance and closure of the project by the project's principal stakeholders, those who sponsored the project, and those that are to use the facilities and equipment delivered by the project, is an important step. The CM should now receive formal confirmation that with the handover of the project deliverables from the project team to the operational users, the SRTA Project Engineer and users have officially accepted the project deliverables.

This formal acceptance is also the opportunity to celebrate project success with some ceremony to mark the opening of the new facility and equipment into operations.



DBE/SBE UTILIZATION CONTRACT CLOSE-OUT REPORT

The Contractor/Consultant/Vendor must complete the DBE/SBE Utilization Contract Close-Out Report ("Close-Out Report") and submit it to the SRTA Project Manager after completion of all work on the Contract. The Compliance Manager/DBE Liaison Officer will verify the information included in the report. Contractor/Consultant/Vendor may be asked for additional documentation upon SRTA's review of the Close-Out Report. If you have questions regarding the preparation of this report, contact Cathy Gesick at cgесick@srtа.ga.gov or (404) 893-6171.

Part I: Summary Information

Contract Amount: State the total amount of the original Contract awarded to the Contractor/Consultant/Vendor, the total amount of all approved changes to the Contract, the total amount of the final contract (i.e. the total of the original contract amount plus the amount of all approved changes), and the total amount that has actually been paid to the Contractor/Consultant/Vendor to date.

DBE/SBE Amounts: Report the total dollar amount and percentage of the Contract committed to DBEs as stated in the original approved Utilization Plan, the total of all approved changes to amounts committed to DBEs, and the final total dollar amount and percentage of the final Contract amount DBEs will be paid on the Contract (i.e. the total amount paid to DBEs to date).

Part II: Contractor/Consultant Participation

Complete Part 2 *only* if the Contractor/Consultant/Vendor is a DBE. Report the Contractor/Consultant/Vendor's own participation (total dollar amount and percentage of the contract), less any amount subcontracted, as reported in the original approved Utilization Plan, report the total dollar value of approved changes to the amount of the Contractor/Consultant/Vendor's participation, less any amount subcontracted, and report the final total of the Contractor/Consultant/Vendor's participation (total dollar amount and percentage of the contract), less any amount subcontracted.

Part III: Subcontractor Participation

List each subcontractor/subconsultant/supplier (including DBEs) contained in the original approved Utilization Plan. Also, list any other subcontractors/subconsultants/supplier used in the performance of the Contract. Give the complete name of each subcontractor/subconsultant/supplier and provide:

- a) the dollar amount committed to the subcontractor/subconsultant/supplier in the original Utilization Plan;
- b) the dollar amount of any approved changes to the commitment that subcontractor/subconsultant/supplier;

- c) the actual amount paid to the subcontractor/subconsultant/supplier to date; and
- d) the amount of retainage due to the subcontractor/subconsultant/supplier.

For each subcontractor/subconsultant/supplier, explain any difference in the amount contained in the original Utilization Plan and the final total. The final total is the actual amount paid to the subcontractor/subconsultant/supplier to date plus the amount of retainage due to the subcontractor/subconsultant/supplier (i.e., c + d).

If a subcontractor/subconsultant/supplier was substituted with another subcontractor/subconsultant/supplier, or if a subcontractor/subconsultant/supplier was added or deleted, attach a copy of the approval letter from SRTA. If an unapproved substitution was made, please indicate and attach any relevant information.

Part IV: Signature and Notarization

The completed document must be signed by an authorized representative of the Contractor/Consultant/Vendor firm and notarized by a public notary prior to submission to SRTA.



DBE/SBE UTILIZATION CONTRACT CLOSE-OUT REPORT

Instructions: This form must be signed by an authorized representative of the Contractor/Consultant/Vendor and notarized. Detailed instructions are provided on the previous page.

SRTA Contract No.: _____

Project Name: _____

Contractor/Consultant/Vendor Name: _____

Contractor/Consultant/Vendor is:

- Non-DBE
- DBE
- SBE

Part I: Summary Information

	Original Contract and Utilization Plan	Approved Changes	Final Total	Actual Amount Paid
Contract Amount	\$	\$	\$	\$
DBE Amounts	\$ %	\$	\$ %	\$ %

DBE Race	Original Contract and Utilization Plan Percentage	Approved Changes	Final Total	Actual Amount Paid
African American	%			
Hispanic	%			
Native American	%			
Asian American	%			
Other	%			

Part II: Contractor/Consultant/Vendor Participation

If Contractor/Consultant/Vendor is a DBE, contractor's participation, less any amount subcontracted

Original Contract and Utilization Plan	Approved Changes	Final Total
\$ (%)	\$	\$ (%)

Part III: Subcontractor Participation

List below all subcontractors/subconsultants/suppliers (DBEs as well as non-DBEs) used in performance of the contract.

Subcontractor: _____

Utilization Plan	Approved Changes	Actual Amount Paid	Amount of Retainage Due
\$	\$	\$	\$

Reasons for any difference between the Utilization Plan and the Final Total (Actual Amount Paid + Amount of Retainage Due): _____

Subcontractor: _____

Utilization Plan	Approved Changes	Actual Amount Paid	Amount of Retainage Due
\$	\$	\$	\$

Reasons for any difference between the Utilization Plan and the Final Total (Actual Amount Paid + Amount of Retainage Due): _____

Subcontractor: _____

Utilization Plan	Approved Changes	Actual Amount Paid	Amount of Retainage Due
\$ _____	\$ _____	\$ _____	\$ _____

Reasons for any difference between the Utilization Plan and the Final Total (Actual Amount Paid + Amount of Retainage Due): _____

Part 4: Affidavit

The above information is true and complete to the best of my knowledge and belief.

Name and Title (Print) _____

Signature: _____ Date: _____

State of _____

County of _____

On the _____ day of _____, 20__, personally appeared _____ and having been duly sworn by me subscribed to the foregoing affidavit and has stated therein are true and correct.

Printed Name of Notary

FOR INTERNAL USE ONLY

Signature: _____

Date: _____

SRTA Technical Lead

Printed Name: _____

APPENDICES

CHANGE ORDER PROCEDURE PLAN

Change Order Analysis: The CM will analyze all claims for change orders and aid in negotiation as necessary, using a combination of the Engineer of Record and or the Contractor's resources in this effort. If the Contractor requests additional items, funding, or contract time, the CM will prepare a detailed recommendation for acceptance, rejection, or modification-resubmission. If the scope change involves additional item code quantities only (in excess of those in the base bid), with no additional scope items or time required, the CM will render a decision that will be thoroughly documented in the Project Record.

Actions Pending Approval: The CM will ensure that no change order work is executed by the Contractor until the SRTA Project Engineer signs off on it.

Change Order Log: The CM will maintain a change order log documenting details of each change condition, along with a cumulative cost summary. This data will be reviewed and documented at each monthly meeting and be incorporated into our monthly project status report.

CONSTRUCTION SCHEDULE CONTROL PLAN

Initial Review/Approval of the Baseline Construction Schedule:

1. Schedules for this project will be managed at the individual task level, where each task reflects a task identified on the approved Work Breakdown Structure (WBS). Task durations will be measured in days. The critical path method will be used to control and monitor schedules.

2. The project schedule will be developed from the approved WBS constructed as part of the scope management planning effort. The Project Manager and Project Scheduler will identify task durations associated with each task. They will also conduct a dependency analysis to determine the order in which the work must occur. Tasks, their associated activities, and durations will be entered into the project schedule software tool with both predecessor and successor tasks assigned at the activity level. Task sizing will be within the project's established work package limits, for both effort and duration. Named resources will be assigned to each task. If named resources are not known, then resource groups will be assigned to the task. Once completed, the Project Manager and Schedule reviewer will examine the schedule to ensure it is technically correct and reasonable and submit to the Project Engineer with recommendation for approval.

Ongoing Maintenance Phase:

SRTA's Designated Representative firm's Construction Project Manager and Schedule Reviewer will be copied on all ongoing weekly and monthly reports to ensure that the Contractor is tracking according to their approved baseline schedule. Additionally, at monthly meetings, a dedicated portion of the meeting will specifically address the project schedule, including:

- a. Confirmation of completed tasks (since the last meeting) and two-week look-ahead
- b. Computation/documentation of any weather-related delays
- c. Review and recommendation for any other time extension claims
- d. Executive Summary

In the event the Contractor falls behind schedule, our CM staff (particularly the Schedule Reviewer) will document the specific details regarding the failure to execute and devise a plan (in conjunction with the Contractor's management team) to correct the situation by an approved deadline. If the CM team comes to the conclusion, based on the Contractor's repeated failure to meet project schedule milestones, failure to meet remedy deadlines, and in our assessment, will not complete the project on time, SRTA's Designated Representative firm will provide SRTA with a logical recommendation that may include one or a combination of the following:

- a. Mandate for Contractor to supplement forces;
- b. Recommendation to enforce liquidated damages, if intermediary project milestones are missed;
- c. Termination for cause

DOCUMENT CONTROL AND RECORDS MANAGEMENT PLAN

Document Control Plan: Project records and documents will be filed, managed, controlled, and maintained in accordance with the Records Management section of the CM Manual. Document control and records management procedures are used to handle, maintain, and manage all documents and supporting information, as well as contractual documents, financial records, and grant-related records throughout the design and construction phases of the Program. Document control and records management tasks include: receipts, storage, retrieval, and distribution of all project documents, including key project documents classified as “controlled documents”.

The document control and records management plan is limited to the field reports we provide to the project team for items that are included in our scope of work. All reports have a unique numbering system that are recorded in a monthly activity log. All reports are distributed to the project team once they have been reviewed through our QA/QC process. Upon request, all reports may be submitted on an external storage device at the end of the project.

Digital Records: The CM Team will maintain digital records of relevant construction records so that they are current, complete, legible, concise, well-organized, and accessible. The Construction Project Manager will have primary responsibility for records management but may delegate specific tasks to key staff. Digital records will be stored on SRTA’s Designated Representative firm’s central server (accessible to all key staff via VPN). All projects will be organized using the same file management system in compliance with Section 4 of GDOT’s Construction Manual.

Hardcopy Records: Hardcopies, including but limited to, original contact documents, approved submittals, haul tickets, certified pay apps, etc., will be maintained and stored in a central location using the same file order and format as that on the central server.

Archiving and Transmittal: Upon completion of each project (or periodically during construction), SRTA’s Designated Representative firm will provide a complete (or on-going working) digital copy of the Project Record to the SRTA DR for your organization’s records.

MATERIALS TESTING CONTROL PLAN

Construction Testing: Contractor will notify the testing technician 24 to 48 hours in advance of scheduled work to be inspected.

Test Reports: Following each site visit, the materials inspector will provide a dated Field Report. All reports have a unique numbering system that are recorded in a monthly activity log. All reports are distributed to the project team once they have been reviewed through our QA/QC process. Upon request, all reports may be submitted on an external storage device at the end of the project.

Materials Testing: The Materials Testing Control Plan is directly related to the Contractor's request for materials testing and inspection services. All testing shall be in conformance to GDOT Standards Testing and Inspections Manual.

QUALITY ASSURANCE AND QUALITY CONTROL PLAN

CM shall be familiar with project plans, specifications and contract documents.

All CM staff shall be experienced with GDOT specifications and participate in relevant on-going training

CM and inspection staff shall perform daily observation and enforcement, along with the independent materials testing firm.

There will be open lines of communication between all the CM key staff, SRTA's Project Engineer, general contractor's team, materials testing firm, engineer of record, etc. This will ensure timely sharing of observations and if deficiencies are identified, re-confirm that all parties understand the scope, specific location, and appropriate remedy.

Oversight shall be provided by SRTA's Designated Representative firm senior staff (Project Director, Construction Project Manager, and QA/QC Director).

There will be monthly reporting that completed/installed work is in place per project plans and specifications.

There will be on-going monitoring of non-complying work until remedied.

SAFETY PLAN

SRTA'S DESIGNATED REPRESENTATIVE FIRM SAFETY PROCEDURES

The health and safety of everyone involved in the project construction is paramount during all construction activities and performance of any supporting services. The CM is responsible for notifying subcontracted personnel of the safety policies and ensuring that they adhere to all required procedures requisite in SRTA's Designated Representative firm's Safety Plan.

The CM issues all necessary protective equipment to its employees. Safety equipment includes, but is not limited to: life jackets, safety vests, hardhats, and first aid supplies. Field personnel shall complete OSHA safety classes and field members shall be certified in CPR and first aid. All employees shall be required to know the safety procedures that he or she is called upon to perform. If in doubt, employees should consult their respective supervisor.

Safety meetings shall be held on job sites at the beginning of a project and weekly thereafter, or more frequently, as needed. The meetings are documented with the date, attendance, subjects discussed, and names of staff who conducted the meetings. The field personnel should hold "tailgate" safety meetings each Monday or Wednesday before beginning work to discuss specific hazards and safety activity.

In addition to normal procedures followed in the case of a minor accident, if a major accident occurs, and/or if there is a life-threatening situation, employees trained in CPR and first aid will respond and control the situation until trained professional medics arrive, or until the injured are in professional medical facilities. The use of vehicles, radios, and mobile telephones will be utilized by the Contractor in order to communicate with authorities and assistance. Emergency telephone numbers and reporting instructions for ambulance, physician, hospital, fire and police are conspicuously posted at the work site.

TECHNOLOGY INTEGRATION VERIFICATION AND OVERSIGHT PLAN

In conjunction with SRTA, the CM will:

Perform a physical verification and report on the installed electronic devices and components per project plans and specifications;

Perform a logical verification and report on the cohesiveness of all installed technology systems and sub-systems;

Test and report on the functionality and operability of all installed systems and sub-systems per the project plans and specifications;

Review contractor/integrator's test scheduled and sequences;

Review contractor/integrator's technology test report;

Generate logs of all installed assets using the need field data descriptions log provided by SRTA.