Chapter 1 Administration

1-00 Agency Organization and Relations with Other Organizations

GEN 1-00.1 Purpose and Scope of Manual

This manual is published by the State Construction Office as a resource for construction engineering personnel. It provides instruction for administering Washington State transportation projects, recognizes established standards and describes accepted engineering practices. The instruction provided by this manual identifies desired results, establishes standardized requirements, and provides statewide uniformity in the administration and construction of transportation related contracts.

Chapters 1 through 8 of the *Construction Manual* are organized with two types of content. General information that isn't tied to any specific Section of the *Standard Specifications* is prefaced by "GEN" in the Section number. Information that is intended to complement and expand on sections of the *Standard Specifications* is prefaced by a "SS" in the section number. Not all sections of the *Standard Specifications* are addressed in the *Construction Manual*.

Construction engineering staff should be familiar with the guidance and instructions included in this manual. The guidance presented by this manual complements the requirements of the *Standard Specifications* and the Contract Provisions and promotes uniformity of results among all Regions of the Washington State Department of Transportation (WSDOT).

Suggestions for corrections, additions, or improvements to this manual and to the *Standard Specifications* or *General Special Provisions* are welcomed and should be submitted to the State Construction Office in the form of a Word document in "track changes" format.

GEN 1-00.2 Definition of Terms

Definitions of words or terms should be the same as set forth under "Definitions and Terms" in *Standard Specifications* Section 1-01. If a conflict occurs between the guidance or instructions offered by this manual and the Specifications or provisions identified in the Contract, the latter will always prevail. Unless exclusively stated in the Request for Proposal documents of a Design Build Contract, any reference of the Project Engineer in this manual will mean the WSDOT Project Engineer.

GEN 1-00.3 WSDOT State Construction Office

The State Construction Office strives for consistent, cost-effective, quality construction through direct support of WSDOT's Regional construction program. The State Construction Office coordinates the development of policies and standards, provides training, guidance, oversight, technical expertise and advocacy, introduces innovation, and coordinates and shares information on construction issues.

GEN 1-00.3(1) State Construction Engineer

The Director of the Construction Division is the State Construction Engineer and reports to the Assistant Secretary Multimodal Development and Delivery. The State Construction Engineer is responsible for all WSDOT contract construction projects, except those contracts executed by the Director of Washington State Ferries Division. The State Construction Engineer is responsible for all matters pertaining to contract administration and represents the Chief Engineer in managing the performance of these contracts. In addition, the State Construction Engineer acts for the Chief Engineer in approving increases or decreases of work, changes in the work or in materials incorporated into the work, authority to accomplish work by force account, extensions of time, and the assessment of any liquidated damages. The State Construction Engineer is responsible for providing guidance and direction to the Regions and State Construction Office personnel who are investigating construction claims and is responsible for the approval of all claim settlements. The State Construction Engineer establishes WSDOT policy relative to inspection and documentation and ensures uniform interpretation and enforcement of the *Standard Specifications* and Contract Provisions throughout the State. The State Construction Engineer is assisted by the Deputy State Construction Engineer, the Lead Construction Engineer, Administration, the Lead Construction Engineer, Projects, and the Assistant State Construction Engineers.

GEN 1-00.3(1)A Deputy State Construction Engineer

The Deputy State Construction Engineer reports to the State Construction Engineer. The Deputy State Construction Engineer is delegated the authority to execute documents concerning the following:

- Advertising, award, and execution of Contracts
- Federal Aid project documentation
- Contract change orders of a value not to exceed $2 million and 60 days
- Extensions of time
- Reduction in pre-qualification
- Certification of materials to FHWA
- Claims on Contracts
- Final Acceptance

GEN 1-00.3(1)B Lead Construction Engineer, Projects

The Lead Construction Engineer, Projects represents the State Construction Engineer by formulating policy in the following areas:

- *Standard Specifications*
  - All Divisions except for Division 9
- *Construction Manual*
  - All Chapters except for Chapter 9

Additionally, the Lead Construction Engineer, Projects is the lead within the State Construction Office for Environmental Coordination.

The Lead Construction Engineer, Projects is delegated authority to execute contract documents concerning:

- Force account rates
- Interpretation of Contract Provisions
- Specification and Contract requirements
- Policy related to inspection and documentation
- Contract change orders of a value not to exceed one million dollars and/or changes in Contract time not to exceed 60 days

GEN 1-00.3(1)C Lead Construction Engineer, Administration

The Lead Construction Engineer, Administration reports to the Deputy State Construction Engineer and represents the State Construction Engineer by formulating policy in the following areas:

- Design-Build Program
  - *Design-Build Manual* M 3126
  - Contract Template
- eConstruction
- Contract Advertisement and Award
- Organizational Conflict of Interest

The Lead Construction Engineer, Administration is delegated authority to execute contract documents concerning:

- Force account rates
- Interpretation of Contract Provisions
- Specification and Contract requirements
- Policy related to inspection and documentation
- Contract change orders of a value not to exceed one million dollars and/or changes in Contract time not to exceed 60 days

The Lead Construction Engineer, Administration, is assisted by:

- **Documentation Engineer –** Provides guidance for Contract documentation and Contract payments, as well as providing support to Region Documentation Engineers. The Documentation Engineer resolves issues of material documentation deficiencies for all Federal aid projects, is responsible to assist with prevailing wage issues, and is also responsible for evaluating Contracts for Acceptance. The Documentation Engineer may assist the State Materials Laboratory with Quality Audits on administrative documentation as well as audits performed by FHWA and the State Auditor's Office.
- **Construction Administration Specialist –** Is the CCIS System Manager/Administrator, the State Construction Office Liaison to Management Information Systems (MIS), supports the Region and Project Offices by providing guidance in the use of CCIS, and the IBM Cognos reporting tool used to report from the Construction Data Mart. This position oversees the maintenance of the *Construction Manual*, C30P and the Force Account Program. This position also maintains contact with the publishers of the Equipment Rental Rate Blue Book (Equipment Watch).

GEN 1-00.3(1)D Assistant State Construction Engineers

Assistant State Construction Engineers report to the Lead Construction Engineers or the Deputy State Construction Engineer and are assigned as the State Construction Office point of contact for specific Project Offices or Programs. Assistant State Construction Engineers also assist the Construction Engineers in the development of policy and are assigned responsibility for specific sections of the *Standard Specifications* and the *Construction Manual*.

Assistant State Construction Engineers are delegated the authority to execute:

- Contract Change Orders of a value not to exceed one million dollars and/or changes in contract time not to exceed 60 days

GEN 1-00.3(2) State Materials Laboratory

The State Materials Engineer reports to the Director of the Construction Division and represents the Director of the Construction Division by directing the materials acceptance and quality assurance program used on WSDOT projects. The State Materials Engineer directs operating methods to be followed in providing soils and materials analysis and testing; furnishes counsel and technical assistance to the Regional Construction Managers in conducting required materials tests and analysis and provides for periodic review of these test methods and procedures to ensure their conformance to established policies, procedures, and methods.

The State Materials Engineer represents the Director of the Construction Division by formulating policy in the following areas:

- *Standard Specifications*
  - Division 9 Materials
- *Construction Manual*
  - Chapter 9 Materials
- *Materials Manual*
  - All Sections
- Design Build Request for Proposal
  - Section 2.25 and 2.28

The State Materials Engineer is delegated the authority to execute documents concerning:

- Reports on soil and test results
- Approving material sources
- Approving material for the Qualified Products List and New Products List
- Establishing policy related to construction inspection, materials testing and documentation
- Interpretation and meaning of Contract Provisions
- Construction Quality Audits

The State Materials Engineer is assisted by a staff of professional engineers, administrative personnel, engineers and technicians.

GEN 1-00.3(2)B State Pavements Engineer

The State Pavements Engineer reports to the Director of the Construction Division by directing the pavement design and pavement management sections. The State Pavement Engineer establishes statewide pavement policy and provides technical support for pavement design and construction. The State Pavement Engineer approves design changes and material substitutions for pavement design related changes.

The State Pavement Engineer is assisted by a staff of professional engineers, administrative personnel engineers and technicians.

GEN 1-00.3(2)C State Geotechnical Engineer

The State Geotechnical Engineer reports to the Director of the Construction Division, and represents the Director of the Construction Division by formulating and implementing geotechnical design and construction policy, primarily through the *Geotechnical Design Manual*, but also through Standard Plans, General Special Provisions, and portions of the *Standard Specifications*. The State Geotechnical Engineer or his representatives, develop, and/or review and approve, the following types of documents:

- Summary of Geotechnical Conditions
- Boring logs and associated geotechnical test data
- Blasting plan submittals
- Geotechnical aspects of shoring and excavation submittals
- Other geotechnical construction submittals
- For design-build projects, portions of the RFP (primarily Section 2.6), geotechnical base-line reports, geotechnical data reports, and related geotechnical reports

The State Geotechnical Engineer, or his representatives, develop and/or approve geotechnical reports that provide the design basis for construction projects statewide. The State Geotechnical Engineer, or his representatives, provide geotechnical expertise and support for evaluation of construction and changed condition claims to Region Construction Managers and the State Construction Office staff.

GEN 1-00.4 Region Organization

GEN 1-00.4(1) Regional Administrator

The Regional Administrator, or those delegated Regional Administrator authority, represents the Assistant Secretary in a geographic area, organizes and supervises a staff of personnel which perform administrative duties and supervise location, design, construction administration, and maintenance of the transportation system within the region.

The Regional Administrator is delegated the authority to execute:

- Change orders as Specified in *Construction Manual* SS 1-04.4, Delegation of Execution Authority
- Approval of subcontractors and agents

GEN 1-00.4(2) Regional Construction Manager

In supervision of construction, the Regional Administrator is assisted by a Regional Construction Manager. The Regional Construction Manager, or those delegated Regional Construction Manager authority, assigns Project Engineers with appropriate supporting personnel and provides training and guidance to the Project Engineers. It is the responsibility of the Regional Construction Manager to ensure that sufficient qualified personnel are provided on all projects at all times to ensure adequate inspection, documentation, materials testing and quality assurance program controls.

GEN 1-00.4(3) Regional Administration of the Inspector Certification Program

Goal – The purpose of the Inspector Certification Program is to provide training and resources for Construction Inspectors and to provide examinations to confirm the Inspector's knowledge. This will ensure consistent administration of highway construction contracts. The monitoring of construction activities by Certified Inspectors will help to ensure that only quality materials and workmanship are employed on WSDOT construction projects.

Definitions

Director of the Construction Division (Director) – Individual delegated authority from the Secretary of Transportation to administer the Department's Construction Program.

Region Inspector Certification Manager (RICM) – Individual designated by the Director of the Construction Division to coordinate all construction training and Inspector Certification in that Region.

Region Inspector Certification Official (RICO) – Appointing authority for Region Construction Project Engineers or an individual delegated this responsibility by the appointing authority.

Department – Washington State Department of Transportation.

There are two types of Inspectors, Interim Inspectors and those enrolled in the Inspector Certification Program (ICP). There are two different levels of certification, General and Divisional.

An Interim Inspector is a person assigned to work under the supervision of a WSDOT Certified Inspector. This person may be a temporary employee, seasonal employee or permanent employee within the Department. Interim Inspectors should be considered for inclusion within the Inspector Certification Program. Interim Inspectors at the Transportation Technician 3 In-Training level and above may only serve as Interim Inspectors for six months before being required to obtain certification as a General Inspector.

An Inspector is entered into the ICP through the Washington State Learning Center (LC). The employee's supervisor will contact their Region Trainer who will assign the certification tests via the LC.

The Inspector will become certified as a General Inspector once they have successfully demonstrated proficiency by achieving a passing score of 75 percent on each open book examination for the following subjects:

- Technical Mathematics
- Contract Plans Reading
- Basic Surveying

- Composing an Inspector's Daily Report
- Force Account Documentation and Payment
- Materials Documentation
- Inspector's Role for Change Order Work
- Inspector Safety
- Utilizing Resources
- Environmental
- Work Zone Traffic Control

The Inspector may either take the courses first and then take the examination or take the examination without taking the course. If the Inspector does not achieve a passing score on an examination, they may retake that examination after waiting three days. If they fail an examination a second time, the Inspector will be required to successfully complete training before attempting another examination for that subject matter. Certification as a General Inspector shall not expire. The General Inspector may be required to successfully complete additional courses to maintain their General Inspector certification should the Department change its work methods or standards, pertaining to the subject matter covered in the General Inspector Certification.

The purpose of the General Inspector Certification phase is to broaden the Construction Inspectors' knowledge base through additional instruction and inspection experience.

Division Certificates

The next phase of the Inspector Certification Program includes modules for Division Certifications as shown below. Once the Inspector becomes a Certified General Inspector, they will be eligible for training and certification focus in at least one of the following Divisions as they become available. A Division Certification will include modules of training and exams for a particular item of work.

Division 2 Earthwork **Division 5** Hot Mix Asphalt Placement Cement Concrete Pavement	**Division 6** Structures Cast-in-Place Concrete Foundations Concrete Bridges Structural Earth Walls Tieback Walls Concrete Walls	**Division 7** Drainage **Division 8** Guardrail Signing Illumination, Signals, Electrical & ITS

The Certified General Inspector will be certified in the Divisions listed above when they have successfully demonstrated proficiency by achieving a passing score of 80 percent on the examinations. After completion of the stated requirements, the individual will be granted the title of Certified Inspector in that Division. At this level, the Inspector would be expected to operate independently with limited supervision in that Division.

Each year, the Construction Project Engineers will ensure that Inspectors assigned to them are afforded the opportunity to take additional courses to broaden their knowledge and certifications.

All Division certification requirements may be completed by either successful completion of the required training courses and then passing the examinations or the examinations may be taken without completing the training courses. If an exam is failed the RICM will notify the Project Engineer. The Inspector must take an on-line or Instructor Led course

for the affected subject prior to re-taking the exam. The exam may be retaken with a minimum of a three-day waiting period from the date the original test was failed.

If an exam is failed for a second time, the RICM will notify the Project Engineer and RICO. The Project Engineer and RICO will develop an action plan for training and mentoring on the subject. A period of 30 days minimum is required for the action plan to be completed, and then the Project Engineer will notify the RICM the Inspector is ready to retake the examination.

An Inspector's Division certification will be valid for a period of 4 years from the date of certification, after which they will be required to complete a recertification course and/or examination.

Certification Revocation Based on Lack of Proficiency

If it is determined that a Certified Inspector has demonstrated a lack of proficiency, the RICO will work with the inspector's Project Engineer to develop an action plan to correct the lack of proficiency. The action plan will include successfully completing course work identified and achieving a passing score on course examinations. If the inspector fails to successfully complete the action plan, the RICO will revoke the Inspector's Certification and inform the Director of the Construction Division.

The RICM will maintain a database of all certified Inspectors, in what areas they are certified, and any who have had their certification revoked.

The RICO will initiate notification that a certification has been revoked. Notification shall be in writing and shall be mailed ("return receipt requested") to the affected Inspector. A copy of the notification shall be sent to the employee's supervisor.

Prior to having the certification reinstated, the inspector must meet all requirements stated in their revocation letter and pass any applicable proficiency examination(s).

Reporting

Once each year the RICM will report actions taken under the Inspector Certification Program. The report shall include as a minimum the number of certified inspectors, the Inspector's names, what certifications they hold, and any certification revocations, taken under the Inspector Certification Program. The report will be due to the Director by the last working day in January.

GEN 1-00.4(5) Regional Administration of the Quality Assurance Program

Goal – The purpose of the WSDOT Quality Assurance Program (QAP) is to ensure that materials incorporated into any highway construction project are in conformity with the approved plans and specifications, including any approved changes. This program also conforms to the criteria in the FHWA regulation for Quality Assurance Procedures for Construction (23 CFR 637). The requirements for the WSDOT QAP are detailed in Section 9-5 of this manual. The Regional Construction Manager is responsible for overall management of the Region QAP.

The Region QAP includes the following:

- WAQTC Testing Technician Qualification Program
- Method Qualified Tester Program
- Testing Equipment Calibration/Standardization/Check and Maintenance Program

- Qualified Laboratory Program
- Independent Assurance (IA) Program

The WSDOT QAP requires Western Alliance for Quality Transportation Construction (WAQTC) qualified testers, American Concrete Institute (ACI) qualified testers, method qualified testers, testing equipment calibrations/standardization/check and maintenance, qualified laboratories, and independent assurance to ensure consistent materials testing as well as ensure materials used on WSDOT contracts meet specification quality requirements.

The WAQTC Qualified Tester Program requires all personnel who perform acceptance testing of materials on WSDOT projects be WAQTC qualified in the test method they are performing. The WAQTC program certifies materials testers in testing aggregate, asphalt, concrete, in place density, embankment and base testing, and embankment and base in place density testing. Within the WAQTC program concrete testers are ACI certified testers. Materials Testers are required to pass both a written exam and a hands-on evaluation to become qualified and the qualification lasts 5 years unless revoked or suspended. The WAQTC Registration Policies & Information Handbook provides information on tester qualifications, certification renewals, as well as tester certification revocation or suspension processes. The requirements for tester qualifications are detailed in Section 9-5.3 of this manual.

The Method Qualified Tester Program is a tester qualification program for personnel who perform materials tests not included in a WAQTC tester certifications. Method qualified testers are required to pass both a written exam and a hands-on evaluation to become qualified and the qualification lasts 5 years. The WAQTC Registration Policies & Information Handbook provides information on method qualified tester qualifications, certification renewals, as well as tester certification revocation or suspension processes. The requirements for tester qualification are detailed in Section 9-5.4 of this manual.

The Testing Equipment Calibration/Standardization/Check and Maintenance Program requires that all testing equipment used for testing be calibrated on a yearly basis, be standardized to ensure required correction factors are applied, checks are performed to ensure compliance with standards and regular maintenance performed to ensure testing equipment does not degrade and is able to produce repeatable tests results. Each year all laboratory equipment is required to be calibrated/standardized/checked as required by the test procedures, AASHTO R 18 or the WSDOT Verification Procedures. The requirements for the Calibration/Standardization/Check of Equipment are detailed in Section 9-5.5 of this manual as well as the WSDOT Standardization and Check Procedures for Materials Testing Equipment (VP's) that are available online.

The Qualified Laboratory Program requires that all Region and Private testing laboratories, other than the State Materials Laboratory, which are AASHTO accredited, perform acceptance testing, dispute resolution testing or Independent Assurance testing for WSDOT construction projects be qualified by the State Materials Laboratory Quality Systems Section. The Quality Systems Section inspects the Region and Private testing laboratories for conformance with the requirements of WSDOT Standard Practice QC-3 to ensure testing laboratories can provide consistent repeatable test results. The requirements for the Laboratory qualification program are found in Section 9-5.6 of this manual and WSDOT Standard Practice QC-3 is found in the WSDOT *Materials Manual* M 46-01.40.

The Independent Assurance (IA) Program requires that each active WAQTC Certified, or Method Qualified Tester will have an annual IA audit by a Region Independent Assurance Inspector (IAI). These audits include IAI observations, IAI split samples of materials and quality assurance and acceptance test result comparisons. Split samples test results from assurance and acceptance materials samples are compared for degree of conformance with reports sent to the Project Engineer and the Region IAI by the Region Materials Engineer (RME). The requirements for the Independent Assurance Program are found in Section 9-5.7 of this manual.

Quality Assurance Program Reporting

The Regional Construction Manager will submit a Region annual Independent Assurance (IA) report to the Director of the Construction Division (Director) with an electronic copy sent to the State Materials Engineer. The region IA report will be submitted to the Director by the last working day in January. The region IA report will summarize the results of the previous calendar year and contain the following:

1. Number and percent of materials testers audited
2. The testers name, list of the tester certifications, date each tester was audited
3. If applicable, the reason the annual tester audit was not completed on a tester or testers; see Section 9-5.7 Independent Assurance Program.
4. Any tester certification revocations
5. What, if any, problems occurred and why
6. A general statement as to how any problems that were reported were resolved

The State Materials Laboratory Quality Systems Section will compile the Region IA report information and submit the information to the FHWA per the requirements in Section 9-5.7C of this manual.

GEN 1-00.5 Relationship with Other Agencies

GEN 1-00.5(1) Federal Highway Administration

The Federal Government provides transportation funding to Washington State through the Federal Highway Administration (FHWA), a division of the U.S. Department of Transportation. These funds are subject to applicable Federal law, Executive Orders, regulations, and agreements.

The WSDOT contact with FHWA for Construction Administration matters is the State Construction Office. In preparing and approving *Standard Specifications*, General Special Provisions, and this manual, the State Construction Office seeks the review and approval of FHWA. Use of approved provisions and meeting the required outcomes described in the manual become the basis of federal reimbursement.

FHWA provides oversight of WSDOT work on some projects and has delegated that responsibility to WSDOT on others. A full discussion of WSDOT responsibilities under Stewardship is included in Section 1-00.10.

GEN 1-00.5(2) Local Agencies

Cities, counties, and other municipalities within the state may also perform work funded with federal dollars. When this happens, the money is passed through the Department of Transportation, and we will have entered into agreements with the local agencies to provide services. For example, WSDOT will allow the use of testing facilities by a local agency.

GEN 1-00.5(2)A Project Engineer Administering Local Agency Project

Occasionally, a WSDOT Project Engineer may be assigned to provide engineering and inspection services on a local agency project. The duties of the Project Engineer will be determined by the actual Contract Provisions and by any specific agreement made between the Region Administration and the local agency. The provisions of this manual may or may not apply, depending on the situation.

GEN 1-00.5(2)B Local Agency Administering Its Project on State Right of Way

In some cases, WSDOT may grant approval for a local agency to construct a facility on State Right of Way using local agency staff and contractors. (For example, a city funded overpass of an interstate). When this happens, a Project Engineer will be assigned to provide oversight of the local agency work. The Project Engineer is expected to assure that the local agency provides the same level of engineering and inspection that State employees would accomplish. While the Local Agency may have different administrative provisions with respect to risk-sharing and submittal requirements, all of the technical aspects of the *Standard Specifications* and this manual must be met.

GEN 1-00.5(3) Other Federal, State, and Local Agencies

The design and construction of transportation improvements often incorporates locations and features that fall within the jurisdiction of other agencies. It is the policy of WSDOT to cooperate with all agencies as partners in the completion of each project, recognizing and complying with each agency's legal requirements. The Project Engineer shall cooperate with local authorities to help ensure that the contractor complies with local laws, ordinances, and regulations. However, unless specifically allowed in the statutes or the contract documents, no WSDOT employee shall engage in any kind of enforcement of laws, rules, regulations, or ordinances which are the responsibility of other agencies. WSDOT needs to maintain the confidence and build trust with resource agencies and the public, so it is critical that we take the proper actions when we are aware of an issue. When WSDOT employees observe something which is questionable or appears to not be in compliance with local laws, ordinances, and regulations, it shall be brought to the Project Engineer's attention. The Project Engineer is responsible for bringing it to the Contractor's attention for proper action. Rely on the Regional and Headquarters expertise and the appropriate agencies when dealing with complex issues such as environmental compliance, safety, or hazardous materials.

GEN 1-00.5(3)A Highways over National Forest Lands

WSDOT has entered into a Memorandum of Understanding (MOU) with the United States Forest Service (USFS) and the Project Engineer is required to do the following when performing work on National Forest Service Lands:

1. Represent the department in all matters pertaining to the project.
2. Confirm that the USFS has been notified of the project advertisement and award.
3. Notify and obtain approval from the USFS for any changes in the project that will affect National Forest System Lands, beyond that of the original contract.
4. Notify the USFS when the project nears completion, at which time the USFS will indicate if they choose to participate in the final review of the project.

GEN 1-00.6 Relating to the Public

Public confidence is enhanced by WSDOT personnel being responsive to reasonable requests for information, providing timely advanced notice of possible impacts, and reducing inconvenience to traffic while maintaining worker safety. When possible, the Project Engineer should rely on resources such as Regional Public Information Officers and the State Office of Communications and Public Involvement. If there is concern or reason to question the confidentiality or sensitivity of the information requested, consult with your supervisor or seek the advice of the Attorney General's office.

GEN 1-00.7 Application of Contract Provisions, Plans, and Specifications

GEN 1-00.7(1) Construction Contracts Information System (CCIS)

The CCIS system is a mainframe application designed to track Contract information and generate reports for all WSDOT administered construction projects. The initial setup of Contract information into CCIS is done automatically by using information in CAPS and other systems. However, after the Contract has been executed, the Project Office must enter the majority of the Contract information into the CCIS system. The Project Engineer will verify that the initial Contract information in CCIS is correct. The data entered is then maintained and stored on the mainframe.

Among other things, CCIS generates and tracks the Weekly Statement of Working Days and Change Orders. The system creates the forms for these reports so a preprinted form is not needed. Following is a list of data that needs to be entered into the CCIS database over the life of the project:

1. **Contract Information –** This part of CCIS will contain general Contract information, including but not limited to:
   - Region administering Contract
   - Region the Contract is located in
   - Regional Administrator
   - Operations Engineer
   - Project Engineer/PE Org code
   - Description of Work
   - SR Number(s)
   - Begin and End mile post
   - County
   - Prime Contractor's local address, if applicable
   - Prime Contractor contact person
   - Prime Contractor DMWBE type if applicable
   - Prime Contractor ethnic code if applicable

- Date of Statement of Intent to Pay Wages – Prime
- Date of Contractor and Subcontractor/Agent Cert. for F.A. Projects
- Date of Affidavit of Wages Paid – Prime
- Date of Preconstruction Meeting Minutes
- Date time started
- Date work started
- Date Orig. Progress Schedule approved
- Date Last Supplemental Progress Schedule approved if applicable
- Date of Substantial Completion (if no Substantial Completion granted, use Physical Completion date)
- Date of Physical Completion
- Final Estimate to Contractor
- Date of Completion
- Final Estimate to State Construction Office (filled in by Region office)
- Contract time – Original Authorized Working Days

2. **Contractor Information –** This part of CCIS tracks information about Request to Sublet and Affidavits of Amounts Paid.
   - Request to Sublet
   - Affidavit of Amounts Paid
3. **ECR Tracking –** This part of CCIS tracks the Contractor's training program, trainees, and MWDBE reviews.
   - Training Program
   - Apprentice/Trainee Approval Request
   - DMWBE and EEO reviews
4. **Change Orders –** Change orders are created, printed, and tracked in this part of CCIS. It is very important to keep the information current to facilitate correct tracking and reporting.
   - Approval (to proceed when granted)
   - VECP Amount (if the change order is a VECP)
   - A brief description of the change order (if the change order is a VECP)
   - Date sent to Contractor
   - Date received from Contractor
   - Is there Surety consent
   - Date of Surety consent
   - Dates of approval and execution (***Note:*** Line 4 "Date Executed" should only be used by Region or the State Construction Office)
   - Change Order Voided (if applicable)
5. **Weekly Statement of Working Days –** The "Weekly Statement of Working Days" report is generated by CCIS, based on information entered into the system by the Project Office. This report details the number of workable/unworkable days charged to a project, the reason a day is charged as unworkable, daily weather codes, the current status of contract days, and a summary or the week's construction activity. The Project Engineer must ensure that the appropriate information is entered into

CCIS on a weekly basis, a "Weekly Statement of Working Days" is generated, and the report is sent to the Contractor by 5:00 p.m. the following Thursday. Weekly statements shall cease when physical completion is granted, or when substantial completion is granted and all working days are expended.

Refer to the CCIS Users Guide for details on using the system. This guide is available on the State Construction Office SharePoint site in the Shared Documents folder.

GEN 1-00.7(2) Order Lists

Contract language requiring an order list can be found in *Standard Specifications* Section 6-05.3(2), which addresses piling other than cast in place concrete and steel piles, and in Section 8-21.3, which addresses the determination of lengths of wood and steel sign posts. In other types of work, such as drainage, guardrail, etc., the actual layout will often result in quantities and lengths that vary from the plan estimates. A Project Engineer could choose to communicate this information in several ways, one of which could be the development of a formal order list. If an order list is used, extra care should be taken to ensure its accuracy. An alternate method of notice could also be a walk through with the contractor representative after staking.

GEN 1-00.8 Emergency Work Performed Under the Contract

When a natural disaster impacting a wide area strikes, WSDOT may utilize an existing construction Contract in order to restore essential travel, minimize damage or protect remaining facilities. RCW 47.28.170(2) allows WSDOT to contract this work on a negotiated basis provided (a) the cost does not exceed force account rates for the work performed and (b) the Contract does not exceed thirty working days. There must be an emergency declaration by the appropriate authority, the Project Engineer must complete a DOT Form 300-001 Detailed Damage Inspection Report (DDIR) and the Project Engineer must contact the Regional Program Manager, since this work will initially be funded by state funds. The Project Engineer should follow the guidance provided in the WSDOT *Emergency Funding Manual* M 3014.

Emergency repair work, when performed by the Contractor under an existing Federal-Aid Contract, may be eligible for Emergency Relief funding. In order to qualify for Emergency Relief funding, the repair work must be the result of a natural disaster over a wide area, such as a flood, an unusually severe storm or a landslide. The work must be demonstrated to be beyond the Contractor's responsibility and not work that has already been scheduled for repair or replacement of deficient structures. Only the work required to protect and open the roadway is eligible for Emergency Relief funding.

Adding emergency work to a State funded Contract would require the addition of all Federal-Aid specifications, and is not practicable. It is however acceptable to hire the existing Contractor to perform emergency work at the same location under a separate emergency force account Contract which would include all the Federal requirements.

GEN 1-00.9 Prime Contractors Performance Report

The procedures for completing and submitting the Prime Contractors Performance Report are included with DOT Form 421-010 and in the *Prime Contractors Performance Report Manual* M 41-40. The requirement for this report and other direction can also be found in WAC 468-16-150 and WAC 468-16-160. Notify the Regional Construction Manager for assistance and advice if the Contractor's performance on a project becomes below standard.

GEN 1-00.10 Stewardship

Webster defines "steward" as "one who acts as a supervisor or administrator, as of finances and property, for another or others." The designated steward of all federal highway funds is the United States Department of Transportation, acting through the Federal Highway Administration (FHWA). In Washington State, FHWA is represented by its Washington Division. Washington Division has delegated a portion of its stewardship responsibility (and the corresponding authority) to the Washington State Department of Transportation (WSDOT) through the Federal-Aid Highway Program Stewardship and Oversight Agreement, signed on March 3, 2015.

This Section describes further agreement between FHWA and WSDOT concerning the details of the part of the Stewardship Agreement and Construction Monitoring Plan that applies to construction. The subject matter of this subagreement is monitoring of construction performed on behalf of WSDOT by independent contractors.

Scope of Construction Monitoring Plan – Outlines expectations for federally-financed construction projects performed under Contract with WSDOT and administered through the WSDOT State Construction Office. It is not intended to be all-encompassing and does not include: WSDOT Ferries Division Contracts for construction of vessels and facilities; Contracts administered through Local Programs; Utility Agreements; and Emergency Relief work administered by WSDOT Maintenance.

Project Responsibility – FHWA Washington Division has delegated to WSDOT (and through the WSDOT delegation of authority to the State Construction Office) stewardship responsibility and authority for all federally-funded construction unless a project specific action (1) requires FHWA approval as defined in Attachment A of the Stewardship and Oversight Agreement or (2) the FHWA Division has retained approval as documented in an executed project specific Project of Division Interest (PoDI) plan.

The State Construction Office has further delegated the stewardship reporting responsibility for projects with 251 or more working days, as defined in the Contract Provisions to the various WSDOT Regions. The delegation of stewardship authority from the State Construction Office to the Regions is through the *Construction Manual*.

FHWA has also delegated to WSDOT the authority to accept projects unless FHWA has retained this action as documented in an executed project specific Project of Division Interest (PoDI) plan.

FHWA Review/Approval Actions and Related Processes – With the pre-approval of specifications and processes and the extensive delegation of stewardship authority, there are relatively few approval actions needed from FHWA during actual construction.

The following processes will apply:

FHWA may retain the oversight role of interim, or project inspections and acceptance, and the approval of certain high-value change orders on PoDIs. All PoDIs will be governed by a separate PoDI Plan that specifies FHWA and WSDOT's responsibilities for the project.

The FHWA Area Engineer may choose to accompany WSDOT during the review of any federal-aid project. Such participation will be random and will be initiated by the Area Engineer. This participation by the FHWA will not change any delegation of oversight responsibility or authority in any way. When the Area Engineer has participated in a review, a copy of the summary report will be provided directly to the Area Engineer.

Stewardship Summary Reports – It is important to note the difference between a steward and a stewardship reviewer/reporter. Stewardship on WSDOT federal-aid projects is provided by a wide cross-section of employees who make stewardship decisions according to the requirements of the *Construction Manual* and their own delegated responsibilities and authorities. From the Project Inspector who observes Contract work and prepares pay instructions, to the Project Engineer who reviews and approves a monthly progress payment, to the Region Construction Manager who executes a change order, to the State Construction Engineer who negotiates and approves a claim settlement, all are acting as stewards in their own job descriptions and assignments.

The stewardship reviewer/reporter, on the other hand, is acting as an overseer, observing and collecting information about all of the stewardship activities, evaluating that information, making recommendations concerning the qualification of the covered work for federal funding and preparing reports to summarize the activities. Reviewers may be FHWA Area Engineers, State Construction Engineers, Region Managers or subordinate region specialists in documentation or contract administration. For the reports that it prepares, WSDOT may assign any person of the classification of Transportation Engineer 3 or above to this duty. The reviewer must not have been involved in the project-level administration and the report must be signed by someone with supervisory authority over the Project Engineer or management responsibility over the Contract itself.

- **Interim Reports:**

  At least once per year, the State Construction Office will create a list of all open, federally funded projects that will be divided to assign responsibility for stewardship reporting by Region. Projects identified as requiring stewardship reporting will be required to complete and interim report. The State Construction Office delegates authority of stewardship reporting responsibility to the WSDOT Regions.

  Interim Reports are required on projects with 251 or more working days, as specified in the Contract Provisions. Interim Reports will be completed when a project is at 30 – 50% of working days completed. Interim Reports may be required at a greater frequency, on shorter-duration projects, or for a special purpose at the discretion of the State Construction Office.

  Copies of Interim Reports will be sent to State Construction Office and forwarded to FHWA.

- **Content of Reports**

  Interim Reports provide immediate summaries of uncompleted projects, communicating details in a concise and comprehensive manner. The report should clearly identify project progress, conditions that make the project unique, difficulties encountered and their resolutions.

  Job Description – A description of the major elements of the work. Include a narrative about the job. Include the Contractor's name, the award date, amount of the bid and the working days specified in the Contract Provisions.

  Time and Damages – Discuss the present status of time and its relationship to the completion status. If behind, describe what is being done to catch up. Describe any suspensions or time extensions.

  Change Orders – Choose one executed change order to confirm that the change was approved according to the checklist before the work started and that a cost verification is on file. Include a detailed description of high impact change orders (e.g., scope change, claim settlements, major impacts to cost and schedule).

Buy America and Build America/Buy America (BABA):

Steel and Iron - Choose one applicable bid item and verify that a completed and signed Certificate of Materials Origin (CMO) was submitted to the Project Engineer prior to incorporation into permanent work. Discuss how the office is tracking foreign material used to ensure the amount does not exceed one-tenth of one percent of the total contract cost or $2,500.00.

Construction Materials - Review processed progress estimates to ensure that signed Certificate of Materials Origin - Required for Acceptance of Construction Materials was submitted to the Project Engineer for each paid estimate. Include information if a CMO was received that showed foreign construction materials were placed and the resolution.

Materials – Review a process in progress by checking for submittals and approvals of RAMs, any drawing or catalog submittals, the testing method and frequency, adjustments to the ROM, observe field tests and include a summary report. Comment on the overall status of materials testing, documentation and adequacy.

Disputes, Claims – Note all claims or major disputes for the project and discuss resolution, if applicable.

Traffic Control – Comment on the adequacy of the traffic control plans and unusual events during the project. Discuss the project's use of flagging, devices, pilot cars, etc.

Training and Apprenticeship – Verify that a plan has been submitted and approved, the current percentage attained, and efforts to recover if behind.

Subcontracting – Discuss the level and nature of subcontracted work. Note any Disadvantaged Business Enterprise (DBE) requirements and any change orders modifying these requirements by deleting, adding or substituting DBE commitments. Make reference to any Condition of Award requirements. Review on-site reports for any DBE firm utilized, whether or not its utilization was mandatory.

Other – Talk to the Project Engineer. Look for special notes. If there was an experimental specification or process, discuss how it is working on the project. If there was an unusual event or happenstance, discuss the circumstances that caused the event. Describe the overall impression of the contractual relationship. Describe any evidence of successful collaboration between the parties. Include any other information of interest.

Note: As a significant part of any review, the reviewer must visit the jobsite and confirm that a project of approximately the nature and magnitude of that shown on the plans actually does exist. This is true for all stewardship reporting.

Communication – Much of the day-to-day communication between WSDOT and FHWA is informal in nature. Verbal discussions, telephone consultations and email notices (including digital photos when needed for clarity) are used extensively. Except where formal written notices are specifically required, staff from both agencies will attempt to utilize the simplest form of communication that accomplishes the needed communication in the least time. All reports and correspondence related to a project shall bear both the WSDOT contract number and the FHWA project number as identifiers.

GEN 1-00.11 Bridge and Structures Office Support on Design-Bid-Build Projects During Construction

The Bridge and Structures Office supports Project Offices, Regions and the State Construction Office on Design-Bid-Build projects when the Contract work involves bridges and structures. Support is provided in two primary areas; submittal review and processing, and technical support.

When changes to structural engineered drawings occur, licensed professionals shall follow the requirements in *Construction Manual* SS 1-04.4 "Responsibility of Licensed Professionals for Changes to Structural Engineered Drawings During Design-Bid-Build Construction Contracts".

GEN 1-00.11(1) Submittal Review and Processing

The Bridge and Structure Office coordinates and tracks submittals to be reviewed on WSDOT projects in accordance with *Standard Specifications* Section 1-05.3, Working Drawings. The Construction Support Engineers or Bridge Technical Advisors coordinate submittal reviews with the various SMEs (Subject Matter Experts) per Section SS 1-05.3 and Figure 1-1. For Contracts not using Unifier for submittals, the Region Project Office electronically submits Working Drawings and design calculations in PDF format directly to: BridgeConstructionSupport@wsdot.wa.gov

Bridge Construction Support maintains a database of submittals received and reviewed listed by Contract number at: www.wsdot.wa.gov/eesc/bridge/conlog for Contracts not using Unifier. Contracts utilizing Unifier will process submittals accordingly and will not be entered into Conlog.

GEN 1-00.11(2) Technical Support

Upon advertisement of a Contract that includes bridges or structures, the Bridge and Structures Office will identify a primary and secondary Bridge Technical Advisor (BTA) who will support the project during pre-bid questions and through construction. BTA assignments will be made for all Contracts with bridges or structures that were designed in-house as well as projects that were consultant-designed. Depending on the complexity of the project and the needs of the Region, some consultant-designed projects may use a consultant to provide primary BTA construction support. On these projects, a representative of the Bridge and Structures Office will provide secondary BTA support.

BTA assignments will be available via the "HQ-Bridge-CN Support" MS Team, which is public and accessible to all WSDOT employees. Requests for BTAs not on the list may also be made within the Team via the Posts tab.

The BTA coordinates structural support from the Bridge and Structures Office for the Project Engineer during Contract Work. BTA's may be consulted for questions relating to structural design, inconsistencies or clarifications of structural plans, and for recommendations on structural issues that are identified during construction.

The Assistant State Construction Engineer (ASCE) shall be included in correspondence on contract administration issues when:

- Work or recommendations of the BTA or others may result in a change to the Contract or are considered the practice of engineering in accordance with *Construction Manual* SS 1-04.4 "Responsibility of Licensed Professionals for Changes to Structural Engineered Drawings During Design-Bid-Build Construction Contracts".

- Work of the BTA or others will result in a change to the Contract; approval for this change must come from the State Construction Office.

The Project Engineer is encouraged to engage the ASCE early in the process prior to inclusion in a BTA response.

BTAs and others shall comply with the following guidelines when supporting projects:

- Follow procedures in accordance with *Construction Manual* SS 1-04.4 "Responsibility of Licensed Professionals for Changes to Structural Engineered Drawings During Design-Bid-Build Construction Contracts"
- Develop the most economical recommendations while considering the Contractor's means and methods
- Provide recommendations and support documentation to the Project Engineer and the ASCE in writing. Include a cost estimate of any change work
- Keep all correspondence, activities and recommendations
- Defer contract administration issues or questions to the Project Engineer and the ASCE
- Conform to the field safety requirements of the Region and the Contractor
- Give the project priority but be prudent in the use of time and expense charges
- Avoid direct communications with the Contractor without coordinating through the Project Engineer
- Avoid directing the Contractor's work

Once a project is underway, the Project Engineer shall set up a meeting between the Project Office, ASCE and primary BTA to discuss project roles, responsibilities, and communication protocols. The BTA's technical responsibility will be to the BTA's supervisor in the Bridge and Structures Office.

1-02 Bid Procedures and Conditions

SS 1-02.2 Plans and Specifications

When the design phase of a project is completed and funding has been secured, the public is then notified that WSDOT is ready to accept bids for completion of the Work involved. This notice is accomplished by publishing an advertisement for the project, along with an invitation to bid the work, in the "Daily Journal of Commerce." The advertisement includes a specific date and time for the opening of bids along with the necessary information for obtaining plans, specifications, and bid documents. Once advertised, these plans and specifications are then made available to all Contractors who wish to study the project. Contract proposal forms or bid documents are also furnished, but only to those prospective Contractors who have been prequalified to bid on the types and quantities of Work involved. Once bids have been opened, an announcement in the "Daily Journal of Commerce" will also be made identifying the "Apparent Low Bidder." Specific information regarding the advertisement phase and bidding procedures can be found in the *Advertisement and Award Manual* M 27-02.

SS 1-02.4 Examination of Plans, Specifications, and Site of Work

If the Project Engineer determines that prospective bidders may have difficulty locating the project or determining the project limits, the Project Engineer may choose to post the project limits.

Standard Specifications Section 1-02.4 requires that all requests for explanation or interpretation of the Contract documents be submitted, and be answered, in writing. Any answers that may interpret, clarify, or change the Contract shall do so by means of an addendum. Acceptable answers to pre-bid questions are:

1. Your question will be addressed by addendum
2. Refer to the contract documents – Page/sheet #XXX
3. Bid in accordance with the Contract

Anytime the answer to a question from a prospective bidder might be perceived as interpreting, clarifying, or changing the Contract, the Project Engineer should immediately contact the Region Construction Manager or Region Plans Office to facilitate the preparation of an Addendum. Answers to such questions must be provided to all bidders in the same manner.

All questions from prospective bidders regarding an advertised project should be referred to the Project Engineer listed in the "Notice to All Planholders" for a complete response. The Project Engineer will coordinate the effort to determine if any requested information needs to be addressed by an addendum. If no addendum is required, the response will be posted on the Contract Ad & Award web page. The Project Engineer shall send the response to: ContractAd&Award@wsdot.wa.gov for posting to the web page.

When questions arise regarding the Transfer of Coverage (TOC) for the Construction Stormwater General Permit, the Project Engineer should go to the Environmental Service Office's Erosion Control page on the internet for guidance.

1-03 Award and Execution of Contract

SS 1-03.2 Award of Contract

Bids for Contracts are opened at a public meeting where each prospective bidder's proposal is read and the Apparent Low Bidder is announced:

- Within 45 calendar days of bid opening, the proposals will be closely reviewed and the Contract will be awarded to the lowest bidder deemed responsive.
- The successful bidder must return the required documentation in *Standard Specification* 1-03 within 20 calendar days. Only after all required documentation has been submitted can the Contract be executed by WSDOT.
- The Contract Administration and Payment System (CAPS) unit of Accountability and Financial Services (AFS) sends awarded Contracts to the Contractor for execution within three days of award using digital signature software.

Once bids for the Contract have been opened, all communication with bidders shall be directed through the Contract Ad and Award Office and/or CAPS. This moratorium on communication with bidders, including the Apparent Low Bidder, remains in effect until execution of the Contract.

SS 1-03.3 Execution of Contract

After the documents required in *Standard Specification* 1-03 are returned to WSDOT, the Contract is ready to be executed by WSDOT. Proposals submitted by Contractors are not binding to WSDOT prior to execution of the Contract. No bid item Work can be performed within the project limits or WSDOT furnished sites prior to the execution of the Contract by WSDOT. Any work that is performed by the Contractor outside of these areas, or any material that is ordered prior to WSDOT execution, is done so solely at the risk of the Contractor.

Once the Contract is executed by WSDOT, a copy is sent to the Contractor and the Project Engineer automatically through the digital signature software. Copies of the full Contract are available on the WSDOT ftp site.

1-04 Scope of the Work

SS 1-04.3 Reference Information

Reference Information is information provided to the Contractor that is not part of the Contract. Reference Information often includes design files, CAD files, engineering calculations, survey information, geotechnical reports, bridge condition reports, etc. Because the Reference Information is not part of the Contract, any construction requirements described in the Reference Information will need to be captured in the Contract documents (for example, the plans or special provisions).

Reference Information for most WSDOT projects should be linked through the Contract Ad and Award web site – "View Project Information" - under the Reference Information Section of the specific project page.

SS 1-04.4 Changes

WSDOT reserves the right, under *Standard Specifications* Section 1-04.4, to make changes to the work, work methods, working days, or quantities, as necessary to satisfactorily complete the project as originally intended.

Adding work beyond the original scope is, in essence, entering into a contract to perform work without the benefit of a competitive bid. There is a statutory (RCW 47.28.050) exception from the competitive bid requirement for work up to a value of $7,500. If the value of the work is in excess of $7,500 it is necessary to go through the competitive bidding process.

Change order work may impact the design criteria used to develop the project. The Project Engineer must be alert to this and ensure that the Design Documentation Package is revised to reflect any such changes. Changes to the design may also require reevaluation of environmental processes (NEPA/SEPA), as well as permit modifications. The Project Engineer must contact the Region Project Development staff and Environmental Permit Coordinators to obtain approval for the change, and for guidance in documenting and incorporating the change into the Design Documentation Package.

Types of Changes

There are several categories of changes that may occur during the work. A change may warrant additional payment to the contractor, a credit to the contracting agency or be a no cost change order. A change may also warrant an increase or decrease in the working days. Every situation is different. The *Standard Specifications* are very specific on what additional costs are eligible for adjustment. The balance of this discussion of types of changes is intended to help describe and explain the various categories of changes. The Project Engineer should also employ the guidance supplied by the WSDOT Construction Change Order Process Guide, which is available on the State Construction Office SharePoint site.

Deletion of Items

A. **Authority to Delete –** As provided in *Standard Specifications* Section 1-04.4 and 1-08.10(2), WSDOT may cancel all or portions of Work included in a Contract. Refer to Section 1-07.11 for information regarding changes or deletion of Work that affect COA requirements.

B. **Payment for Remaining Work –** There are some limitations to payment that should be noted under *Standard Specifications* Section 1-09.5. When work is decreased or deleted by the contracting agency, payment will only be for the costs actually incurred for partially completed work. No profit will be allowed for work that was not completed. Consequential damages are also not allowed. Consequential damages may include such things as: loss of credit, loss of bonding capacity, loss of other jobs, loss of business reputation, loss of job opportunities, etc. In the case of a portion of a lump sum item or partially completed unit items, the value of this work will need to be determined. It may also be necessary to negotiate a price adjustment for the work that was performed and paid using a contract unit price if there is a material difference in the nature of the accomplished work when compared to the nature of the overall planned work. Under certain circumstances when the contractor says, "you eliminated all the easy work and left the difficult," there may be entitlement to an adjustment.

   In the event that the deletion impacts the critical path for the project, an adjustment in working days may also be appropriate.

C. **Payment for Materials –** When work is deleted from the project and the contractor has already ordered acceptable materials for such work, *Standard Specifications* Section 1-09.5 controls.

   1. **Contractor Restocks –** The first and best method for disposing of the materials is to request that the contractor attempt to return the materials to the supplier at cost or subject to a reasonable restocking charge. If the materials are restocked then, in accordance with *Standard Specifications* Section 1-09, the contractor's actual costs incurred in handling the materials may be paid.

   2. **Contractor Purchases –** If WSDOT cannot utilize the materials, the contractor may elect to retain them for other work. Once again, in accordance with *Standard Specifications* Section 1-09, the contractor's actual costs incurred to handle the materials may be paid.

3. **State Purchases and Disposes –** As a last resort, if the materials can not be disposed of at a reasonable cost to WSDOT, the Department may choose to purchase the materials from the contractor. There are some limitations that come with the use of federal funds that may require that the materials be purchased with state funds depending on the situation. The State Construction Office may be contacted for advice. If possible, such materials may be provided to a future contractor (work with Design) or to Maintenance (work with the Regional Maintenance Office). If the materials cannot be used, they shall be disposed of as described in the WSDOT *Disposal of Personal Property Manual* M 72-91. Once again, in accordance with *Standard Specifications* Section 1-09, the contractor's actual costs incurred in handling the materials may be paid.

Contract Modifications

Changes in Materials, Work Method, or Work Sequence may or may not be a change to the contract. The determining factor is if the change is a modification of a specific contract requirement. If the contract includes language such as "recommends," "suggested," or "approved equal" associated with the item or allows the engineer to approve changes, then a change order is probably not required. In essence, this would not be a violation of the contract and therefore, does not require a change to the contract. A common situation is when the contractor proposes a change to a submitted manufacturer's recommendation, drawing or plan such as a falsework drawing or erection plan. Changes to those drawings/plans may be made by the same authority that approved them the first time. Once again, it is not a change to the Contract.

Responsibility of Licensed Professionals for Changes to Structural Engineered Drawings During Design-Bid-Build Construction Contracts

During construction, changes to engineered drawings are often required to address field conditions, plan errors, Contractor errors, repairs, differing site conditions, etc. The following policy defines the responsibilities of licensed professional engineers for changes to engineered drawings for bridges and structures after Contract award and execution.

Practice of Engineering

The practice of engineering is defined in RCW 18.43.020(5)(a):

"Practice of engineering" means any professional service or creative work requiring engineering education, training, and experience and the application of special knowledge of the mathematical, physical, and engineering sciences to such professional services or creative work as consultation, investigation, evaluation, planning, design, and supervision of construction for the purpose of assuring compliance with specifications and design, in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works, or projects.

Structural Engineering

Structural engineering is recognized as a specialized branch of professional engineering. See *Bridge Design Manual* 1.3.2.C for guidelines on providing structural engineering services for significant structures.

Area of Expertise

For a change to be within their area of expertise, the licensee shall be registered in the applicable technical field and qualified by education or experience as defined in the Revised Code of Washington (RCW) and Washington Administrative Code (WAC). The licensee shall be competent in the technology and knowledgeable of the applicable codes and regulations (see WAC 196-27A-020(2)).

Evaluation of Changes for Practice of Engineering

All proposed changes from what is shown in the engineered drawings shall be evaluated by the Project Engineer to determine whether they are considered practice of engineering. When the change is outside the area of expertise of the Project Engineer, they shall consult the ASCE and a licensed professional acting within their area of expertise to make this determination. Some examples of changes to engineered drawings that may be considered the practice of engineering include:

- Changes to engineered drawing details
- Material substitutions not allowed in the Contract documents, and possibly material substitutions when the Contract allows "approved equal" replacements
- Material properties outside of contract tolerances, even when the contract provides a method for acceptance such as for deficient strength concrete
- Changes in geometry or location of a component outside of contract tolerances when the capacity or function of the element or system is affected
- Changes to mandatory, prescriptive construction sequences shown in engineered drawings (e.g. including but not limited to sequencing and temporary work)
- Repairs that impact the capacity or function of the element. For example:
  - Modifications to structural steel elements
  - Concrete repairs that involve modifications (splicing, coupling, doweling) to reinforcing steel
  - Repairs to structural elements that are already loaded by actions such as prestressing, release of falsework, subsequent material placement, etc.
- Modification to a concrete construction joint in a bridge column, bridge crossbeam, bridge deck, prestressed element, etc. (see *Standard Specification* 6-02.3(12)A)
- Modification of a concrete reinforcement splice (see *Standard Specification* 6-02.3(24)D)

Some examples of changes to engineered drawings that may not be considered practice of engineering include:

- Editorial changes (such as corrections of spelling or grammar) with no effect on engineering performance
- Changes to quantities with no effect on engineering performance
- Corrections to sheet and detail references with no effect on engineering performance
- Addition of typical construction aids. For instance, in concrete construction, the addition of concrete embedments used to facilitate construction including inserts, reinforcement ties and chairs, reinforcement braces, form ties and hangers, strand deviators, CSL tubes, thermocouples, etc.

- Notation of which alternate or option was chosen when engineered drawings identify acceptable alternates or options for portions of the Work
- Application of pre-approved repair procedures

Documentation and Notification Requirements

After determining whether a proposed change is the practice of engineering, the Project Engineer shall then ensure the requirements listed in the table below are met:

	Change to the Contract	Not a Change to the Contract
Practice of Engineering	• Change shall be prepared and sealed by a licensed professional acting within their area of expertise • Notify the original Engineer-of-Record of change if possible • Document change in change order and in as-built	• Change shall be evaluated by a licensed professional acting within their area of expertise • Notify the original Engineer-of-Record of change if possible • Document change in as-built
Not the Practice of Engineering	• Change need not be prepared and sealed by a licensed professional • Document change in change order and in as-built	• Document change in as-built

For proposed changes considered to be the practice of engineering, the Project Engineer shall require sealed engineering calculations and/or other documentation to show that the change complies with all design criteria or is otherwise structurally acceptable. If WSDOT prepares or evaluates the change, the calculations or other documentation will be generated and archived by the support group preparing the change as appropriate and need not be provided to the Project Engineer. Any sealed engineering calculations and/or other documentation for structures that is not prepared by WSDOT shall be provided to the WSDOT Bridge & Structures Office who will archive it if appropriate in accordance with *Bridge Design Manual* Sections 1.3.3.C.4 and 1.3.8.

The licensed professional engineer shall be a licensed structural engineer when providing structural engineering services for significant structures.

Licensed professional engineers who sealed the current documents shall be notified of changes to their work (including Contract-allowed "approved equal" material substitutions) that are considered practice of engineering and shall be given an opportunity to review and comment, if possible. Licensed professional engineers who are no longer WSDOT employees or who are not available through a consultant services agreement need not be notified of changes to their work (see WAC 196-27A-030(9)).

General Requirements for Changes to Engineering Drawings

The location, extent and details of all physical changes to the Work shall be contained in the changed engineering drawings. If changes to engineered drawings are part of a Contract change order, the drawings shall identify the associated change order by number.

Changes to Engineered Drawings Prepared and Sealed or Evaluated by a Licensed Professional

Changes to engineered drawings may be prepared and sealed or evaluated by any licensed professional engineer who is working within their area of expertise. As a way to limits costs, it is recommended to have the engineering done by the person or party who may complete it most efficiently. Some general guidelines to consider include:

- When WSDOT is the Engineer of Record, it is usually most efficient to have WSDOT prepare the changes to engineered drawings
- If there is a consultant Engineer of Record, and a consultant services agreement exists with them, they should prepare changes to the engineered drawings. Otherwise, changes to engineered drawings could be handled by a different consultant or by WSDOT
- When WSDOT has the contractual responsibility for the change, the engineering should be performed by WSDOT or by a consultant working for WSDOT
- When the Contractor has the contractual responsibility for the change, or the responsibility is not apparent, the engineering may be performed by WSDOT, a consultant working for WSDOT, or an engineer working for the Contractor
  - The Contractor may hire an engineer to make the changes to the engineered drawings. The modified drawings will require WSDOT review and concurrence
  - It may be more efficient for the Engineer of Record (WSDOT or a WSDOT consultant) to perform the engineering; we own the design so there is less start-up effort needed to evaluate a change to an engineered drawing
  - WSDOT can require the Contractor to perform any needed engineering
  - For significant changes, WSDOT should consider reimbursement for our engineering costs through a credit change order

Changes to engineered drawings shall be prepared on the most recent version of the existing drawings, on substitute drawings or on additional drawings. For revisions to existing engineered drawings, the licensee shall note the extent of their change and responsibility (see WAC 196-23-020(3)(a) and WAC 196-27A-030(9)). When revisions to existing engineered drawings will make the drawings difficult to read or interpret, the details and changes should be consolidated onto substitute drawings. Substitute drawings shall meet the detailing requirements of *Bridge Design Manual* Chapter 11 and *Plans Preparation Manual* Chapter 4. Preexisting seals of licensed professional engineers shall be preserved when revising existing engineered drawings but need not be preserved for substitute drawings.

Provided a licensee is acting within the guidelines of their profession, during an emergency it is acceptable to certify documents after the emergent need is stabilized (see Secretary's Executive Order E 1010.01 III.B).

Contractor Endorsement/Unilateral Execution

In order to facilitate timely processing of all change orders, the *Standard Specifications* require the Contractor to endorse or respond to a change order within 14 calendar days of delivery from WSDOT. With the exception of Minor Changes (see Section 1-04.4(1)), a Contractor signature is required for change orders. Change orders are identified as a document that requires additional verification and must be signed using an approved electronic signautre software (currently Adobe Sign). A change order signature flowchart

is available for use on the Construction SharePoint site to assist with setting up documents to receive the appropriate signatures (depending on execution requirements) in the system.

The *Standard Specifications* retains authority for the Project Engineer to unilaterally execute change orders when the Contractor fails to respond within the time specified or refuses to sign a change order. When this happens, the Project Engineer will notify the Region Construction Engineer with the intention of proceeding with unilateral execution of the change order. Processing the change order unilaterally will ensure that all parties affected by the change are promptly paid.

To document a unilaterally executed change order using the electronic signature program (Adobe Sign), the Project Engineer will send it for signature following typical protocol. If the Contractor has not signed the change order within a two week timeframe:

- Cancel the document
- Set it up again for signature without including the Contractor as a signer
- Attach the original audit report showing that the Contractor was given two weeks to sign it, but chose not to

Requests for extensions of time for Contractor endorsement may be granted with sound justification from the Contractor. Items to consider for granting such requests are size, risk and complexity of the change, whether terms have been agreed to prior to sending the change order for signature, prompt payment and if surety consent is required. The Project Office should consult the Region Construction Engineer prior to approving a time extension request for endorsement of a change order.

Approval of Changes/Checklist

In addition to noting who can execute a change order, the Change Order Checklist (DOT Form 422-003) further indicates who must approve the change prior to execution. The completed checklist will be a part of the change record and shall accompany the change order when it is transmitted to the State Construction Office, and represents the minimum information required to process the change order. Written approval constitutes agreeing with the general nature of the change and can be granted by memorandum, RFI response or email. The checklist works as follows: for any item marked “yes,” approval from the State Construction Office must be obtained if indicated by the column with the “Xs.”

The Project Engineer and the Region Construction Office have the authority to decide not to proceed with the change. This approval does not constitute authority to proceed with the Work. Approval to proceed with the Work prior to executing the change order must come from the person who will execute the change order (see approval to proceed). In an emergency, the Region Construction Manager may authorize Work to begin on any change order if the assigned ASCE or other State Construction Office representative cannot be contacted for the required approvals and the Work must proceed.

Approval to Proceed

All change orders shall be executed prior to the work being performed unless otherwise approved as an exception. In all cases, approval requests (per the change order checklist) should occur immediately after the need for a change is identified and include at a minimum, why the change is necessary, general terms of the change, estimated cost (range of cost acceptable) and the change in contract time. If it is determined to be

necessary to proceed with the change work prior to execution of the change order, this exception requires approval per the checklist and approval from the executing authority prior to beginning work. Such an approval to proceed might be warranted if it will provide a cost/time benefit to WSDOT or minimize a cost/time disadvantage to the Contractor.

In the event that the Project Engineer determines that it is in the State's best interest to proceed with the Work prior to having a signed change order, the permission of the executing authority and approval per the checklist to proceed with the change under these circumstances must be documented in the file. If approval is granted to proceed prior to an executed change order, the Project Engineer must process a change order prior to payment becoming due to the Contractor. For complex changes, this may necessitate issuing multiple change orders and/or paying for the initial Work on a Force Account basis until agreement on an overall equitable adjustment can be reached.

In the event the Project Engineer determines, as part of the RFI, a change is required and that it is necessary to proceed with the change Work prior to execution of the change order, approvals shall be obtained prior to responding to the RFI.

A. **FHWA Approval –** On Projects of Division Interest (PoDI), written FHWA approval, or other less formal prior approval if the public interest is served by the more timely action, is required prior to beginning work on those change orders meeting the threshold as outlined in the project specific PoDI agreement.

   Who does what? – The Region will formally submit this type of change order to FHWA for approval if it is within Region approval authority. If it is outside Region approval authority, the State Construction Office will submit the change order to FHWA for approval. A guidance document regarding PoDI is available on the HQ Construction SharePoint site.

B. **State Materials Laboratory**

   Areas of Responsibility – *Standard Specifications* Division 9 (see Section 1-00.3(2)) The State Materials Laboratory also advises the State Construction Office and Regions regarding an alternate material's capability to perform the same function as a required material. However, the State Construction Office makes the final approval based on application of the material, maintenance concerns, etc., as to whether an alternate material acceptable.

Delegation of Execution Authority

Highway Construction

The Change Order Checklist (DOT Form 422-003), in addition to describing the approval requirements previously described, also outlines who has authority to execute a change order.

The State Construction Engineer (or designee) executes the change order:

- If any one of 1, 2, 3, or 4 is true (checklist item # 1, 2, 3, or 4 is yes).

The Region (Regional Administrator (and those designated Regional Administrator authority) may execute a change order provided:

- 1, 2, 3, and 4 are not true of the change (checklist item # 1, 2, 3, and 4 are no).

The Regional Administrator's authority to execute change orders may be:

- Delegated to the Regional Construction Manager.
- Further delegated to the assistant to the Regional Construction Manager.
- Further delegated to the Project Engineer.

Limits of Execution Authority

Executing Authority	Dollar Limit	Time Limit
State Construction Engineer	$2,000,000 and Greater	60 days and Greater
Deputy State Construction Engineer	not to exceed $2,000,000	not to exceed 60 days
Lead Construction Engineer	not to exceed $1,000,000	not to exceed 60 days
Assistant State Construction Engineers	not to exceed $1,000,000	not to exceed 60 days
Region Administrator (and those designated Regional Administrator authority) or Designee	not to exceed $500,000	not to exceed 30 days

Local Agency Projects

When the project being administered includes local agency participation, the Project Engineer should coordinate with the Regional Local Programs Engineer and the local agency to establish an approval process acceptable to all the parties. Any funding constraints and timelines for reviews and approvals should be established per an agreement and specified in the contract, if appropriate. Absent an agreement, changes that affect permanent work incorporated within WSDOT right of way with use of local agency funds (regardless of which agency is administering the contract) will require following the WSDOT approval process and execution authorities.

Documentation

State Construction Office Role

The State Construction Office will review Region executed change orders and provide appropriate feedback.

Project Files

A. **CCIS Input –** The Project Engineer will ensure that the following information is entered into CCIS accurately and in a timely manner:
   - Page 1
     - Contract No.: (in 6-digit format)
     - Proposed By: C(Contractor), E(Engineer), or B(Both)
     - Order Date: Date change order is entered into CCIS
     - Unilateral Change: Y/N
     - PE Stamp required: Y/N (***Note:*** For structural changes, see Section "Responsibility of Licensed Professionals for Changes to Bridge and Structure Engineered Drawings During Design-Bid-Build Construction Contracts".)
     - Short Description: Descriptive title for change order
     - Is this a Minor Change?: Y/N

- Page 2 – (Use only if approval to proceed is requested)
  - Approval Date: The date approval given
  - Requested By: Who requested approval
  - Approved By: Who gave approval
  - Estimated Amount: The estimated dollar amount of the change order
  - Narrative: Description of why approval is needed
- Page 3 – (Use only if this change order is a Value Engineering Change Proposal (VECP)
  - VECP Amount
  - Commentary on VECP
- Page 4
  - Sent To Contr: The date the change order was sent to the Contractor for signature/concurrence
  - Rec'd From Contr: The date the change order was returned from the Contractor
  - Surety Consent: Was surety consent obtained (Y/N)
  - Surety Date: Date surety consent is obtained
  - PE Recom: Is the Project Engineer recommending execution by Region or the State Construction Office
  - Exec: Initials of the Project Engineer if executing the change the order
  - Date: Date that the Project Engineer executed or recommended execution (***Note:*** the date field on line 4 is for Region or State Construction Office use only)
  - By Whom: Who voided the change order (if applicable)
  - Date: Date the change order was voided (if applicable)
- Page 5
  - Phase: Contract phase affected by change order (if days are added/deleted)
  - Description: Phase description (if days are added or deleted)
  - Net Change: Number of days added or deleted by change order
- Page 6
  - Description: Change order text (uploaded from C30P: Construction Contract Change Order Program)
- Page 7
  - What Section of the contract changed?
  - Describe the Detail Change:
  - What created the need or caused the change?
  - What is the purpose of this change order?

If new items are created, Contract items are modified, or Condition of Award (COA) is modified by the change order, this information must be input into CCIS as well.

CCIS automatically assigns sequential change order numbers. Timely entry will provide information regarding the need for the change and must be adequate to assist the users with monitoring project changes and costs. Some key items to remember are as follows:

- Is there a clear description of the Work?
- Is the origin and purpose of the change being entered using at least two of the reasons listed in the system?
- Was there an order, other than a signed change order, by the Project Engineer for the Contractor to proceed?
- Is there a reference to any key documents in the change order file?
- Are any increases or decreases in Contract time associated with the change order entered in the appropriate field enabling the Weekly Statement of Working Days to be automatically updated?
- For COA change orders, are the appropriate fields filled in to generate the change order and automatically update the COA items?
- Are any disclaimers included in the change order and are any agreed upon disclaimers included in the text?
- Are all the appropriate dates entered?

B. **Change Record (DOT Form 422-002) –** The change record must accompany the change order describing the change in sufficient detail so that everyone involved will understand the need for the change, will see that the price is appropriate and that appropriate checks and consultations have been made. The following is a list of items to include in the change record accompanying the change order:

1. **Evolution & Description of the Change**
   - What is required by Contract?
   - What is the change?
   - How does it solve the problem?
   - Reason for entitlement/why is this not paid under the Contract?
   - Is there time associated with the change?
   - Did the Contractor concur/if not why?
   - Is FHWA participation appropriate?
   - Does the change affect COA?
2. **Basis of Cost & Justification**
   - Any increase or decrease in cost?
   - How it was established (see equitable adjustment)
   - Force account must include estimate
3. **Contract Time**
   - Does the change impact the critical path?
   - How was any change in working days established?
   - Note if a change in Contract time affects the amount of liquidated damages

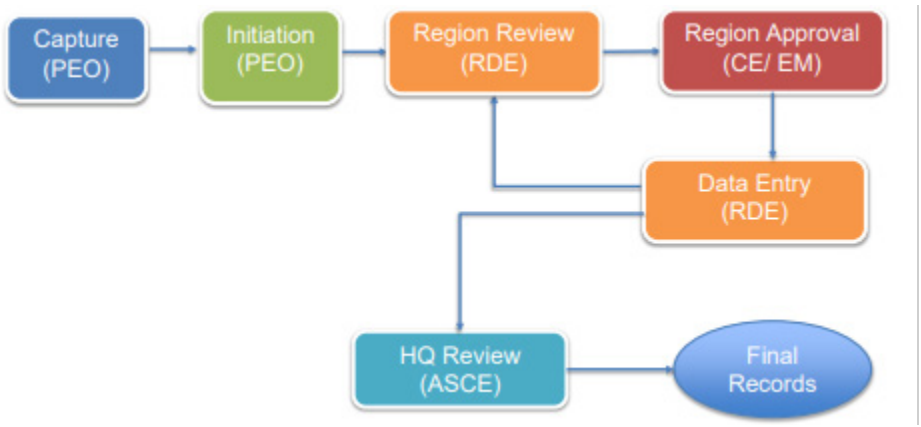
4. **Prior Approval**
   - Was the change order executed by the appropriate WSDOT authority prior to proceeding with the Work?
   - If not, prior approval by whom and when
5. **List Attachments**
   - Checklist
   - Documentation of approval to proceed
   - Any supporting documentation needed for understanding

C. **Distribution -** Change orders are signed and transmitted using approved electronic signature software (currently Adobe Sign). Each change order is set up to require specific signatures depending on execution requirements. After receiving all the required signatures, a copy is automatically sent to the Contractor through the electronic signature software.

If the change order requires FHWA approval per Section SS 1-04.4, FHWA must include the appropriate FHWA representative as a signer when setting the change order up in the electronic signature program.

Completed change orders (all required signatures applied) and corresponding backup documentation are routed through the Electronic Content Management (ECM) for review and storage. The Project Office initiates the process through the Electronic Change Order Routing Workflow:

Electronic CO Routing Workflow



- **Capture** - The Project Office uploads the change order and backup documentation.
- **Initiation** - The Project Office starts the change order routing workflow in the ECM.
- **Region Review** - Region Documentation Engineer reviews and either sends it to the Construction Engineer or Engineering Manager for approval or sends it back to the Project Office for corrections.
- **Region Approval** - Construction Engineer or Engineering Manager reviews and either sends to Region Documentation Engineer for data entry or back to the Region Documentation Engineer for corrections.
- **Data Entry** - Region Documentation Engineer executes the change order in CCIS, completes the CAPS entry if a new bid item is created and/or notifies CAPS if a new group needs to be created.

- **HQ Review** - Assistant State Construction Engineer (ASCE) reviews the change order and either sends it to the ECM for final record storage or returns to the Region Documentation Engineer for correction. If the change order exceeds the threshold to post the change order on the external website or for lessons learned tracking, the ECM will mark it as such for further processing at HQ.
- **Final Records** - Moving the document to this step completes the process and moves the change order to the final records in the ECM. The Region Documentation Engineer will enter change order information in CAPS if a new bid item is created and notify the CAPS unit of Accountability and Financial Services (AFS) to create new groups. Additional resources regarding the change order signature and password requirements are available on the Construction SharePoint site.

D. Protecting the Interest of the Surety – Consent of Surety may be required on any change order that expands the scope of the contract. It is also appropriate on any change of large value or risk. Failure to obtain consent of surety could weaken the State's protection under the bond.

E. Change Order Tracking

In order to provide current status and communication of contract changes Project Offices need to maintain an active change order log. For consistency, a tracking template has been developed and can be found on the State Construction Office SharePoint site: Change Order Forms - All Documents Congnos also has a standard report that can be used for tracking under "Individual Contract Analysis".

SS 1-04.4(1) Minor Changes

All contracts will have a standard item for "Minor Change." This item will be established in every group as a calculated lump sum. Credits, debits, changes in working days and no cost changes may all be processed under the Minor Change method subject to the listed criteria.

The Contractor may submit an RFI, in accordance with Section 1-05.1(2) *Requests for Information*, requesting a change to the Contract so long as it meets the criteria for a minor change. The minor change should be used for simple and straightforward Contract modifications. In any case, a Contractor-proposed change must be beneficial to the project. The Project Engineer is under no obligation to accept the proposal and the Contractor may not protest the Project Engineer's decision.

Criteria for Use

Although the change meets the criteria for using the Minor Change process, the Project Engineer may decide that this process is not appropriate. The use of this item is at the Region's and the Project Engineer's discretion. Also keep in mind that the limitations and approvals required by the Change Order Checklist still apply as well as all other Change Order criteria not modified by this Minor Change section. Use of the Minor Change process is limited to changes that satisfy all of the following criteria:

- The value of the change (credit or debit) is estimated at $25,000 or less
- Any change in working days not greater than ten days
- The proposed change can be fully described and explained on page 1 (Change Order page) and with no more than 3 revised/new plan sheets

Endorsement

In the interest of being timely, the Change Order should be a tool to document agreement and not a negotiation tool back and forth. The Contractor's authorized signature on the Change Order is desirable but not mandatory. A phone call or a verbal agreement with the Project Superintendent may be appropriate when payment is to be made under the item "Minor Change." This may be a good discussion item at the preconstruction conference. The Project Engineer should determine when the Contractor's signature is required based on when it is in the State's best interest to document agreement prior to proceeding with a Change Order. Some situations that may warrant the Contractor's signature are as follows:

- The Contract includes substantial incentives
- There are mutual benefits associated with the change
- The change might include impacts to time or other Work
- The change is proposed by the Contractor
- The change is a claim settlement

In any case, a copy of page 1 (Change Order Page) of DOT Form 421-005A must be sent to the Contractor. If the Contractor does not agree with the terms or conditions of any Change Order and has not endorsed the change, then the Contractor is required to follow the procedure outlined in *Standard Specifications* Section 1-04.5. This orders the Work to proceed and puts the decision to continue negotiations in the Contractor's hands as detailed in that section. The Contractor is obligated to endorse or protest as described in the Specification, and a timeline is provided for these actions.

Execution

Due to the criteria for the application of minor changes, the Project Engineer has the authority to execute these change orders, after obtaining all approvals required by the change order checklist. Approval is required prior to performing the work.

Payment by LUMP SUM

The negotiation of prices for payment under the item "Minor Changes" is intended to be the same as any other change order. The focus, as always, should be forward pricing such that the Contractor controls the work and assumes the risk. However, situations occur where it makes sense to measure portions of the work in a variety of ways such as units, force account and/or lump sum. The method for establishing, measuring and monitoring the total may be by any combination of methods however, the payment will only be by a lump sum under the item "Minor Changes."

Project Files

A. **CCIS Input –** "Minor Change" Change Orders must be entered into CCIS; however the required input is slightly abbreviated. Since a formal Change Order document as described in Section SS 1-04.4 is not processed, the Work Description Section in CCIS requiring a detailed upload of text is not required. However, the Short Description is required and should provide enough detail to identify the content of the "Minor Change" Change Order. All other information requested by CCIS, including changes to Working Days, is required.

B. **Transmittal –** Under the Minor Change process (Change Order – Minor Change DOT Form 421-005A) substitutes for the transmittal included in the more formal process described above. The information on the Minor Change form should at a minimum briefly document three key items:
   - A description of the change
   - Reason for entitlement/why is this not paid by bid items
   - Any increase or decrease in cost and time and briefly how it was established

C. **Distribution –** When utilizing the Minor Change process, the Minor Change Form is substituted for the Change Order document and the change record. Backup documentation shall be kept in the project file at the Project Office, with a copy of the completed Minor Change form. The original, signed Minor Change form, change approval documentation, and the original, completed change order checklist shall be submitted to the State Construction Office. The Minor Change shall be fully documented on DOT Form 421-005A, which is limited to pages 1 (Change Order Page) and 2 (Change Record Page), with no more than three new or revised plan sheets included. A copy of the form may be used to document the payment.

SS 1-04.4(2) Value Engineering Change Proposal (VECP)

It is the policy of WSDOT to encourage our contractors to be innovative in planning and performing the work when a cost savings can be realized. When a contractor identifies such a savings and provides a significant portion of the efforts needed to develop the proposal, WSDOT will share the resulting savings with the contractor. This policy is carried out through change orders containing Value Engineering Incentive Payments. The Project Engineer should encourage VECPs and seriously consider the mutual benefits of these proposals brought forth by the contractor as a partner in the contract.

A VECP must meet all the requirements enumerated in *Standard Specifications* Section 1-04.4(2)A, General.

SS 1-04.4(2)B VECP Savings

VECP savings are calculated as defined in *Standard Specifications* Section 1-04.4(2)B1, Proposal Savings and *Standard Specifications* Section 1-04.4(2)B2, Added Cost to Achieve Time Savings.

SS 1-04.4(2)C VECP Approval

There are two separate approvals for a VECP. The first is approval of the concept as described in *Standard Specifications* Section 1-04.2(2)C1, Concept Approval and the second approval is described in *Standard Specifications* Section 1-04.4(2)C2, Formal Approval.

SS 1-04.5 Procedure, Protest and Dispute by the Contractor

During the course of a Contract, differences of opinion may arise over decisions and plan interpretations that benefit one party at the expense of the other. WSDOT pursues resolution of these differences at the earliest possible time, fully recognizing the contractual rights of the Contractor during the resolution process. These differences of opinion can become contentious and distracting for both WSDOT and Contractor staff. The Project Engineer should make every effort to maintain professionalism and

collaboration between the parties while seeking timely resolution of these disagreements. In all circumstances, the Contractor must continue to proceed with the Work under the Contract.

Disagreements, disputes, and protests are the responsibility of the Project Engineer until a Certified Claim is filed in accordance with *Standard Specifications* Section 1-09.11. The Project Engineer may employ a variety of techniques and procedures to pursue resolution of these issues. With the high potential for cost impact and delay, it is strongly recommended that all disagreements be identified, tracked, and communicated with the Region Construction Manager as they become apparent.

Protested Work

When the Contractor disagrees with the requirements of a change order or a Project Engineer's Written Determination, a written notice of protest must be submitted according to procedures of *Standard Specification* Section 1-04.5.

While the Project Engineer may acknowledge a Contractor's verbal protest, the Contractor should be advised that it must follow the procedures of Section 1-04.5 in order to pursue an adjustment of the payment or Contract time, and to avoid waiving its right to pursue a claim for protested work. While these provisions require the Contractor to keep accurate records for completing the protested work, it is not advisable for the Project Engineer to rely on these records to determine what may have taken place when trying to verify costs for protested work many months later. In order to help document the Contractor's work, the form Report of Protested Work DOT Form 422-007 was developed as a tool for the Project Engineer's use.

If in the opinion of the Project Engineer, the Contractor has not supplied sufficient information to evaluate a protest, the Contractor may be allowed one opportunity to correct or amend their supplemental information. Corrections or amendments of the supplemental information must be furnished within 14 days of the Project Engineer's notice.

Only protests and supplemental information that follow the procedures set forth in Section 1-04.5 will be evaluated by the Project Engineer, with a Written Determination of merit provided to the Contractor within 21 days. If the Project Engineer determines that the protest has merit, then an adjustment of the payment or contract time will be made in accordance with Section 1-09.4.

If the Project Engineer determines that the protest does not have merit the Contractor may continue to pursue the protest by following the dispute procedures outlined in Section 1-04.5(1). Regardless of the Contractor's decision to continue the dispute, the Project Engineer must ensure the Contractor continues work.

1-04.5(1) Disputes

The Contractor must exhaust the procedures for protest before pursuing the matter as a dispute. The Contractor is required to notify the Project Engineer within 14 days after receiving the Project Engineer's Written Determination of merit of their protest. The Project Engineer should remind the Contractor of its obligation to furnish this notice if it wishes to pursue the dispute. The Contractor must exhaust the procedures in this section, including the use of a Disputes Review Board, before they may submit a Certified Claim under Section 1-09.11.

Disputes Review Boards

Unresolved Protests may be referred to a Disputes Review Board (the board). Whether the Contract includes the bid item for "Disputes Review Boards" will determine whether referral of the matter to the board requires mutual agreement of the parties or whether either party may refer a matter to the board. Not all matters are eligible to be heard by the board. Typically, the board is best suited to provide recommendations on matters of Contract interpretation or entitlement to additional compensation and time. Interpretations of the law and matters concerning the fairness of Contract terms are usually not appropriate for consideration by a board. In all cases, the Project Engineer must contact the State Construction Office for concurrence before presenting any matter to a Disputes Review Board.

The Project Engineer and Contractor are responsible for selecting the board members. They may use the Statewide Prequalified Candidate Roster to select board members, but it is not required. Once established, regular meetings should be held to discuss the status of the project with the board. The board's primary purpose in regular board meetings is claim avoidance. By monitoring key project indicators and facilitating communications between project participants, the board can be quite effective in helping the project avoid claims.

The board may also assist with claim resolution by issuing written recommendations regarding a specific dispute that is referred to them. When the board issues a recommendation concerning a dispute, the Contractor and Project Engineer must respond and either accept the board's recommendation, request a clarification or reconsideration from the board, or notify the other party that the dispute is unresolved. Although the board recommendations are not binding on either party, they should be weighed carefully and will be admissible in subsequent proceedings such as arbitration or litigation. The Project Engineer should consult with their ASCE if they are not in agreement with the board's recommendations prior to responding in writing to the board and the Contractor.

SS 1-04.6 Variation in Estimated Quantities

Contracts are set up with estimated quantities. Contractors provide unit prices and actual measured quantities are paid using those unit prices. What happens when the actual measured quantity varies from the estimated proposal quantity? *Standard Specifications* Section 1-04.6 require that variations of less than 25 percent be performed without changes in the bid price, but that variations greater than 25 percent may qualify for a payment adjustment of the contract bid. This distribution of estimating risk is a policy of WSDOT and is also a Federal requirement for any project with Federal funds.

Variations may occur because field conditions cause a different quantity for the planned work than was envisioned during the estimating. Other variations may occur when work is added or deleted by change order and original contract unit items are included as the method of pricing the change order. Finally, quantity variations occur when work is added, deleted, or revised without a formal change order (constructive change) and units with unit prices are the only measure of the revision. The work represented by a constructive change order is in fact work not anticipated at the time the contract was bid and executed, and as such would be outside of the requirements of *Standard Specifications* Section 1-04.6. In other words, you cannot deny a payment adjustment based solely on the fact that the accepted quantity of a bid item is within 25 percent of the original proposal quantity.

As discussed below, quantities included in formal change orders are excluded from consideration of quantity variations. The Project Engineer who allows constructive changes without formal documentation may find an additional negotiation waiting when final adjusted quantities are calculated and compared with the original proposal quantity.

A unit bid price consists of four different parts. First, and most obvious, are the costs of labor, equipment, materials and services needed to accomplish the work. These are the "direct costs" involved and they vary directly with the amount of work. Second are the variable overhead costs, such as field supervision, field support items (phones, computer rental, payroll clerks, portable restroom, etc.) whose amounts will vary along with the direct costs. Third, and more difficult to assess, are unavoidable, distributed, fixed overhead costs. These are typically long term and exist whether the quantity varies or not. They include things like home office costs, field trailer setup, long term equipment rentals and other fixed costs. These are typically distributed to the project by allocating them to the plan quantity. Fourth, and finally, the unit price will include some amount for profit.

A. ***Standard Specifications* Section 1-04.6 –** The standard contract provision calls for the calculation of an adjusted final quantity. This is the method of revising the final measured quantity to allow for proposal item quantities included in agreed change orders. Unit prices as originally bid will be utilized if the adjusted final quantity is more than 75 percent of the original proposal quantity and not more than 25 percent greater than the original proposal quantity.

   If the final adjusted quantity is outside these limits, then either party to the contract may initiate a renegotiation. If neither party does so, then unit prices will apply to the entire measured quantity of the item. Neither of these actions would be a change to the contract, as the provisions already allow a price change. A formal change order document might well be initiated to show the agreement, however, and would be the mechanism to create new prices.

   If a negotiation is initiated, the provision calls for a new price for the quantity in excess of the 25 percent overrun or a contract price adjustment to compensate for costs and losses associated with an excessive underrun. The renegotiated price for the overrun portion is not an equitable adjustment and this is an important distinction. The new price is based upon actual costs experienced and is completely unrelated to the old bid price. The typical discussion about "what's different from the bid work and what number should be used to modify the bid price?" does not apply in this type of negotiation. The underrun compensation is an equitable adjustment, however, and much of the negotiation is related to the bid price and discussions of the actual work costs as opposed to the planned costs.

   Other features of the provision include an exclusion of force account items and other items where an amount has been entered solely to provide a common proposal for the bidders. Consequential damages and lost profits are specifically excluded. The effect of any unbalanced allocation of overhead costs is also excluded from compensation under the provision.

   Force accounts and calculated quantities are already taking actual costs into account for overruns. Because of the nature of these items, contractors are unable to allocate unavoidable fixed costs to them except as a share of the allowed markup. The contractor is aware of this provision at the time of bid and knows that this item will not be eligible for renegotiation in the case of an underrun.

Consequential damages are those which are separated from the project and which might be presented as part of a negotiation. “Because of your overrun, I was unable to start work on my other project and had to do that other work in the wintertime.” This consequence of the quantity variation is not compensable because of the wording of the provision. Similarly, the profit that the contractor might have made on some other work but for the need to perform the extra work in an overrun is also not compensable.

Unbalanced bidding might result in a significantly higher or lower price for an item than normal. It means that too much or too little of allocated overhead or other costs is assigned to the item. This is not a problem in a low bid situation when all items come in at plan quantity. The problem would arise if an unbalanced item were to be involved in an excessive underrun. This provision allows the Project Engineer to evaluate this possibility during an underrun negotiation (remember that the overrun pricing takes care of the problem automatically by assessing cost and ignoring the bid price.)

Contract time may be affected by the first unit of overrun or underrun. It may be appropriate to add or delete working days; depending on how the quantity variation affects critical activities, as shown on the Contractor’s approved progress schedule.

B. **Negotiation Guidelines**

1. **Adjusted Final Quantity –** The *Standard Specifications* language is quite clear on this subject. Start with the final measured quantity, the number that would be included in the final estimate for the item. Review all change orders that have been approved and have been accepted by the Contractor (see *Standard Specifications* Section 1-04.5 for a definition of contractor acceptance of change orders.) Identify change order increases in the item and subtract these from the final measured quantity. Identify change order decreases in the item and add these to the result of the previous subtraction. The result of these calculations is defined as the Adjusted Final Quantity.

   Compare the Adjusted Final Quantity to the original proposal quantity. If the Adjusted Final Quantity is greater than 1.25 times the original proposal quantity, then the item is eligible for an overrun renegotiation. If the Adjusted Final Quantity is less than 0.75 times the original proposal quantity, then the item is eligible for negotiation of an equitable adjustment due to underrun.

2. **Renegotiation for Overruns –** The first analysis should be to determine, if possible, where and when the overrun took place. This is not necessarily the work done after the quantity of 1.25 times proposal was reached. In many cases, a review of the work will disclose which part of the project actually experienced the low estimate and the resulting extra quantity. This is more common in physical items that are visible and can be measured by weight or physical dimensions (Roadway Excavation, Culvert Pipe, Select Borrow, etc.) These are often detailed in the plans to the extent that actual work can be compared with the relevant portion of the proposal quantity. When actual overrun work can be identified and when records exist showing the resources utilized for that work, then those records can form the basis for the revised payment amount. In other cases, the item is a support function, often measured by time, where the plan segments cannot be separated for analysis. This is common in Flagging, Pollution Control items, etc. To analyze these, the only choice is often to look at the actual work that occurred after the

threshold was reached and price it. A third method, where records are adequate, is to evaluate the actual costs for the entire item, and apply those only to the overrun units.

Regardless of method of determining direct cost, markups will be allowed. A good place to start would be the force account percentages described in *Standard Specifications* Section 1-09.6. If the contractor is providing other records for overhead and profit, these can be used, if they are reasonable. Any overhead items that are unavoidable, distributed fixed costs should be excluded. Remember that the Contractor has already been compensated for these one and a quarter times over.

The revised price will apply only to the units measured in excess of 1.25 times the original proposal quantity. The overrun units between the proposal quantity and the threshold will be paid, according to the terms of the contract, at the bid price.

3. **Equitable Adjustment for Underruns –** The adjustment for an underrun is limited by the contract terms to three factors. The first of these is an adjustment for any increase or decrease in direct costs that result solely from the reduction in quantity. The most common example of this type of cost is the learning curve. "By the time my crew learned how to do this work at this site with these specifications, we were done. They should have been able to apply these skills to an additional 30, 40, or 50 percent of the plan quantity. I experienced the least efficient units and missed out on the most efficient." in negotiation, this might be demonstrated by production rates, by inspectors' reports or by the agreed judgment of the negotiators. If such a condition did exist, then an agreed amount for inefficiency during the learning curve could be included in the adjustment.

   The second factor has to do with the nature of the work actually done, when compared with the work shown in the plans. The most common manifestation of this is "You deleted the easiest units and left me with the most difficult," or "You added units that were much more difficult than those shown in the plan." Compensable, if true. Logic dictates that, if all of the work shown in the plans was performed and, if no work was added except by formal change order, then this factor can have no value. The work that was performed was what was shown in the plans and was what the Contractor bid. If, on the other hand, the project engineer has allowed constructive changes without formal documentation, then this factor could well come into play.

   Finally, the negotiation should include a look at reallocation of undistributed unavoidable fixed overhead costs. The contractor has allocated these to 100 percent of the proposal amount. The bid price is firm as long as 75 percent of the units are measured and paid. If the final adjusted quantity is less than 75 percent, then the anticipated contribution of the units not performed (up to 75 percent) can be identified, negotiated and included in the equitable adjustment.

   One Final Aspect of Underruns – There is a reality that, if more units were paid up to the 75 percent threshold, then there would be no eligibility for negotiation. Because of this, there is a limit to the equitable adjustment. The total paid for the item, including units actually performed and the equitable adjustment cannot exceed 75 percent of the original proposal quantity, multiplied by the unit bid price.

SS 1-04.7 Differing Site Conditions (Changed Conditions)

There are two types of changed conditions. The first (Type I) is a hidden condition that is different from that indicated by the Contract (the borings do not show this rock). The second (Type II) is a hidden condition that is not shown differently in the Contract but is unusual and different from what a reasonably prudent Contractor would expect (i.e., "I've never seen this before and nobody else has ever seen it, either"). In either case, to qualify for renegotiation, the condition must have a "material" effect on the work. In other words, there must be a definable difference in the way the work will now be performed and that difference must be significant.

The contractual rules included in *Standard Specifications* Section 1-04.7 are related to fair notice and to giving the State an opportunity to examine the condition and, perhaps, order a different approach to the work. If the contractor takes away this opportunity, then there may be grounds for denying compensation for the different approach to the work. In some cases, the changed situation is not recognized until much or all of the work has been done. In that case, the determining factor for notice is the time when the Contractor knew or should have known of the condition. Whenever notice is served, it must be written.

Contractors work on tight schedules with one activity interdependent on others and it is not in the public interest to stop work while a changed condition discussion takes place. As soon as possible, to the extent possible, and in any manner which accomplishes the intent, the Project Engineer is expected to consult with the Region Construction Manager and the State Construction Office to obtain the approval before agreeing that a changed condition exists or before entering negotiations for price adjustments.

The Department response to a Contractor's assertion of changed conditions, whether agreement or denial, must be written. The Project Engineer must keep accurate time and material records whether the response was negative or positive.

1-05 Control of Work

SS 1-05.1 Authority of the Engineer

The Project Engineer is designated as the Contracting Agency's representative who directly supervises the engineering and administration of the construction Contract. This provides considerable authority to enforce the provisions of the Contract under *Standard Specifications* Section 1-05.1. This authority is tempered by WSDOT's policies and delegation of authority from the State Construction Engineer to the Project Engineer. Accordingly, considerable care and professional judgment must be exercised by the Project Engineer in order to avoid exceeding the authority as delegated and to avoid decisions or actions that may be contrary to WSDOT policy. Should there be any doubts as to the limits of authority; the Project Engineer should consult the Regional Construction Manager.

In many cases the courts have held that where the Project Engineer has exceeded their delegated authority their actions are binding upon Contracting Agency. Because of this, it is important that the Project Engineer make no instructions, verbally or by written memoranda, that are outside of their authority.

The term Written Determination is defined in *Standard Specification* Section 1-01.3. It is important for the Project Engineer to understand that the Written Determination initiates most of the contractual timelines related to protests, disputes, delays, and Contract changes. It signals to the Contractor that they have limited time to protect their contractual rights by either accepting the Project Engineer's position, or by initiating a dispute or demand for additional compensation. A Written Determination must be transmitted to the Contractor by a letter or electronic mail, and it must be clearly identified as a "Written Determination".

SS 1-05.1(1) Oral Orders

The Project Engineer may occasionally need to issue oral directions, instructions, interpretations and determinations in order to protect the traveling public or to avoid unnecessary delay to critical Work. While these circumstances are unavoidable, the Project Engineer should avoid giving oral orders, opting for other verifiable communication methods using a mobile electronic device or other means. If an oral order is given, the Project Engineer must send the Contractor a Written Determination within 3 days, documenting the order and specifying whether it constitutes a change to the Contract. Oral orders can be misunderstood or misinterpreted, making it crucial that the Project Engineer provide the order in writing so the Contractor may understand its rights and obligations under the Contract.

During the course of the project the Contractor may believe it has been given an oral order that changes the Work. *Standard Specification* Section 1-05.1(1) requires the Contractor to notify the Project Engineer within 3 days of receiving an oral order. Upon receiving this notification from a Contractor, the Project Engineer will provide a Written Determination within 14 days. Having notified the Project Engineer of an oral order in accordance with this section, the Contractor has preserved its rights to pursue a protest and dispute until the Project Engineer issues a Written Determination. The purpose of this procedure is to avoid misunderstanding between the parties, and to identify disagreements as early as possible.

If the Contractor disagrees with any Written Determination, it must follow the procedure for protest in Section 1-04.5.

SS 1-05.1(2) Requests for Information (RFI)

The request for information is the procedure by which the Contractor may officially request an explanation or interpretation of the Contract. The Contractor is expected to notify the Project Engineer of ambiguities in the Contract as soon as they are discovered. Failure to do so may result in denial of any resulting claims. Requests for information must not be used as a means of providing notice of protest or notice of a differing site condition. RFIs should also not be used to request time extensions. However, the Contractor may submit an RFI for any of the reasons listed in the *Standard Specifications*. See Section 1-04.4(1) and 1-05.7 for more discussion on RFIs.

The Project Engineer has a responsibility for resolving ambiguities in a timely manner. Therefore, they must respond to a RFI within the timeframe provided in the Contract. If more than 14 calendar days are needed, because of the complexity of the RFI, they should notify the Contractor. Responses to RFIs are considered Written Determinations and any disagreement from the Contractor should follow the procedure for protest. Rejection or non-approval of a RFI that requests a change to the Contract is not subject to protest.

Project Engineer's Relationship and Responsibilities

The Region will appoint a Project Engineer to act as the authorized representative of the Secretary of Transportation for each contracted project. To avoid Contract claims, the Region and Project Engineer must not negotiate Contract items with the Contractor until the Contract has been executed by WSDOT (see Section 1-03.3). Prior to execution, the Region and Project Engineer must keep communication with the Contractor to non-contractual items such as congratulations, general introductions, or directing them to CAPS Unit for execution questions.

After the Contract has been executed by WSDOT, the Region may provide the Contractor with written confirmation of the name and address of the Project Engineer assigned. (The Region may rely on the special provisions and forego this letter, unless a change is made.) If a letter is sent, the Contractor should be reminded to send all correspondence and forms regarding the project to the Project Engineer.

The Project Engineer is then responsible for enforcement of the Contract Specifications and provisions and the completion of all work according to the plans. The Project Engineer supervises the work of WSDOT personnel assigned to the project and ensures that they perform their work in accordance with the Plans, Specifications and all applicable WSDOT policies. The Project Engineer is responsible for keeping complete and accurate records of all construction data and work progress, preparing progress and final estimates, and preparing other records necessary for a complete documentation of the project, including a performance evaluation of the Contractor (see Section 1-00.9).

Changes made to the project or substitutions for work detailed in the contract plans or specifications, must be made in accordance with the requirements of *Standard Specifications* Section 1-04 and the guidance provided by Section SS 1-04.4. The Project Engineer should review the project on a regular basis with the Regional Maintenance personnel so they have an opportunity to present any maintenance problems that may arise.

The Project Engineer must, at all times, stay aware of the design implications of actions taken during construction. Change orders and undocumented field adjustments can affect the design standards utilized. If change orders or field adjustments affect the project design criteria, the changes must be documented, approved, and incorporated into the Design Documentation Package. The Project Engineer shall contact the Region Project Development staff for guidance in documenting these design criteria changes. The Project Engineer should also consult with Region Environmental Permit Coordinators and Environmental Subject Matter Experts to make sure proposed design changes comply with environmental requirements.

Responsibility as a Public Official

The Project Engineer is responsible for a project that is affected by Federal, State, Tribal, and local laws, ordinances, and regulations. While no one could be familiar with every requirement, the Project Engineer should seek to understand as much as possible. Beyond that, the prudent Project Engineer will look for guidance and seek information related to whatever current issue is at hand. Legal requirements could affect State employees, those employed by the Contractor in performing the work, the materials to be incorporated, the equipment that is used on the project, or could otherwise affect the conduct of work.

If the Project Engineer discovers that any provision of the contract, plans, or specifications appears to be inconsistent with a law, ordinance, or regulation, the inconsistency should be investigated and, if appropriate, referred to the Region Construction Manager. The Project Engineer should, at all times, strive to comply with all laws, ordinances, and regulations.

Relationship with the Contractor

The Project Engineer must be familiar with the conditions of the contract, special provisions, and specifications for the work. The Project Engineer must attend to any reasonable request of the Contractor, i.e., furnishing grades, stakes, plans, whenever necessary and within reason. In general, the Project Engineer should do all things necessary to enable the Contractor to work to advantage and without delay. The Project Engineer should not set any stakes or furnish to the Contractor any plans which are the responsibility of the Contractor to set or provide. The Project Engineer must ensure that the Contractor performs the work in accordance with the contract provisions, plans, and specifications.

Integrity on the part of all employees is essential. The attitude of the Project Engineer and staff toward the Contractor and the Contractor's personnel should be one of cooperation, consistent with the requirements of the Specifications. It should be recognized that both the State and the Contractor have explicit rights under the Contract and that both parties must respect those rights. The Contractor is generally trying to complete the Contract as required. Errors or difficulties are usually due to a lack of information or misunderstandings. If conflict should occur, the Project Engineer should make every effort to determine the cause of the conflict and make appropriate corrections. The Contractor also has the responsibility, under 1-05.1(2) *Requests for Information*, to notify the Contracting Agency of ambiguities that exist in the Contract and should be encouraged to do so.

Relationship with Other Government Agencies

Other agencies responsible for such things as flood control, land development, resource protection, stream navigation, or pollution may be affected by the work. The Project Engineer must ensure that the contractor follows the contract pertaining to these and other related issues. The Project Engineer is encouraged to obtain a copy of commitments from the project design file or other sources, like the Commitment Tracking System. This should be available from a region or project design office. This file should contain environmental permits/agreements, real estate commitments, utility commitments, design deviations, and other important information. When the Contractor is specifically required by the contract to obtain an approval document from other agencies, the Project Engineer must confirm that the document was received. Other approvals required of the contractor, but not mentioned in the contract documents should be confirmed to the extent that the requirements are known and the confirmation is possible. If a representative of an agency visits the project, the Project Engineer or an inspector should accompany the representative on the visit.

In carrying out construction work in forested areas, the Project Engineer should encourage the Contractor to comply with all Federal and State forest rules and regulations governing the protection of forests and the prosecution of the work within both national and State forests. The Contractor must take all precautions necessary to prevent and suppress forest fires. The Project Engineer shall report to the nearest forest fire warden at the earliest possible moment, the location and extent of any fire and shall take immediate steps to control the fire if practicable.

Construction work in or near streams, rivers, or other bodies of water may require a permit from state and federal agencies, including but not limited to the State Department of Fish and Wildlife, Washington State Department of Ecology, or the U.S. Army Corps of Engineers. The Project Engineer is encouraged to coordinate closely with these (and other) agencies during permit acquisition to ensure the permits don't contain conflicting conditions. Also, be sure to consult across agencies if one of these agencies request modifications to the project that may affect other permits. The Project Engineer should ensure that the provisions of environmental permits are rigidly enforced. If the Contractor's method of operations, weather conditions, design changes, or other factors affect waters of the state in ways not anticipated or represented in the permit, the Project Engineer will work with the Region Environmental Office and the Contractor (if necessary) to modify the existing permit(s) or obtain a new or revised one(s) as appropriate.

The U.S. Department of Labor, Mine Safety and Health Administration (MSHA) has jurisdiction over and inspects mine sites. A pit, quarry, or other aggregate production facilities may be considered a mine site and under the jurisdiction of MSHA. Testing facilities, personnel and equipment located within a mine site are subject to Title 30 Code of Federal Regulations Parts 46 Training and Retraining of Miners engaged in shell dredging or employed at sand, gravel, surface stone, surface clay, colloidal phosphate, or surface limestone mines and Part 56 Safety and Health Standards – Surface Metal and Nonmetal Mines. When possible, WSDOT-owned testing facilities should be located outside the fenced area of the mine. If testing facilities are located on mine property, they should be placed where other mine administrative offices are located.

Before entering a mine site, contact the operator of the site and request site-specific hazard-awareness training which should include what personal protective equipment is required. This training is required by Title 30 CFR for facilities under MSHA jurisdiction. WSDOT employees are not considered miners and therefore must be escorted to/through the mine site by a Trained Miner when obtaining samples, as required by Title 30 CFR Part 46.

The U.S. Department of Labor, Mine Safety and Health Administration, Metal and Non-Metal Mine Health and Safety Division, 3633 136th Place SE, Suite No. 206, Bellevue, WA 98006, 206-553-7037, must be notified at the beginning and closing of all mining operations. This includes surface mining, such as our normal pit site operations. Notification is required for all crusher operations and for all pits and quarries, including borrow pits, which are separated from the roadway under construction. The owner, operator, or person in charge of the mine site is responsible for notification to MSHA for all mining operations; including those taking place in WSDOT furnished pits and must submit the required report as soon as the date of opening or closing can reasonably be determined.

Whenever construction work is performed in navigable waterways, it is necessary to obtain a construction permit from the Coast Guard. One of the requirements of the construction permit is regular submission of Bridge Construction Progress Reports. Two copies of the report should be prepared by the Project Engineer sufficiently in advance of the first working day of the month and transmitted to the State Bridge and Structures Engineer. When a Coast Guard permit modification is proposed (by the Contractor or WSDOT), it shall be submitted to the Bridge and Structures Engineer for processing through the Coast Guard. The time required for approval/disapproval of the proposed permit modification is variable and depends on the nature and significance of the modification. Up to six months may be required. When all construction obstructions to navigation have been removed, the Project Engineer shall report that fact immediately to the Bridge and Structures Engineer indicating the date removal was completed. Upon completion of all permitted bridge work, a final report indicating the date of completion and certifying that the bridge has been constructed in compliance with the Coast Guard Bridge Permit shall be submitted by the Project Engineer to the State Bridge and Structures Engineer.

Preconstruction Meetings, Discussions

The Project Engineer is required to communicate with the Contractor for the purpose of discussing the project and exchanging a variety of information. Depending upon the complexity of the project, this information can be exchanged in any combination of the following methods:

- Information packets provided to the Contractor.
- Letters transmitting information.
- Informal meetings.
- A single multipurpose formal meeting.
- Several formal meetings with different purposes.

If the Project Engineer decides that a formal meeting is necessary in order to successfully begin work on the project, a meeting should be arranged as soon as practical after the contract is awarded and the Contractor has organized for the work.

In the case of a project that includes utilities to be adjusted, relocated, replaced or constructed by a utility, or their contractor, during the performance of the contract, the Project Engineer shall facilitate a mandatory utility preconstruction meeting with the Contractor, all affected utility owners and their contractors prior to any on-site work. The Project Engineer should request assistance from the Region Utilities Engineer for help in getting utilities to attend this meeting. This meeting should include a discussion of all utility work schedules, in order to enable the utilities and the Contractor to coordinate their work, resolve schedule conflicts, and eliminate delays.

In the case of a project that includes work on or near a reservation, the Project Engineer should notify the appropriate Tribe of the preconstruction conference and invite them to attend.

The Revised Code of Washington (RCW 47.01.300 and 47.85.030) requires that projects with environmental considerations be reviewed during the preconstruction meetings held with the contractor. The Memorandum of Agreement Concerning Implementation of Fish and Wildlife Hydraulic Code for Transportation Activities requires WSDOT to invite the Area Habitat Biologist for the Washington State Department of Fish and Wildlife

to all environmental preconstruction meetings. More information about discussing environmental topics at the preconstruction meeting is found in the Chapter 600 of the *Environmental Manual*. Verification of the Contractor's Certified Erosion and Sediment Control Lead (CESCL) is required when the project has obtained a NPDES Construction Stormwater General Permit See the Department of Ecology CESCL Database to verify CESCL credentials.

All information exchanged should be documented in the project records, by formal meeting minutes, or by file copies of letters.

The nature, amounts, and methods of communication with the Contractor are left to the Project Engineer. As a minimum, the following subject areas should be covered during the preconstruction time period:

- **Contractor WSDOT Relationships** – The Project Engineer should begin to develop a positive and effective relationship with the Contractor as soon as the contract is awarded. This is also a good time to introduce the concept of "Partnering" if it has not already been introduced on the project. The Project Engineer should strive to create an environment that encourages a cooperative approach to completing the project. This can be helped by beginning the development of a team consisting of both the Contractor's and WSDOT's project people. The level of authority delegated to each member of the Project Engineer's staff should be discussed with the Contractor. The level of authority of each member of the Contractor's staff, in particular regarding change orders, should be discussed. In addition, the methods of establishing the Contractor's Performance ratings can be reviewed (see Section 1-00.9 for additional information). The Contractor should also be informed that there is an opportunity to evaluate the WSDOT construction process as well.

  Especially on projects with Contractor surveying, it is strongly advised to invite the Region Survey Committee member or their representative to discuss the requirements for removing, disturbing, or re-establishing survey monuments.

- **Environmental Commitments –** Almost every project will have environmental commitments resulting from, but not limited to: 1) environmental processes like the National Environmental Policy Act or the Washington State Environmental Policy Act; 2) consultations with Federal agencies concerning endangered species; 3) obtaining Federal, State, and local permits; or 4) existing inter agency agreements. WSDOT uses the Commitment Tracking System (CTS) to store project specific environmental commitments and to organize them by ownership; Contractor, WSDOT, or both.

  It is WSDOT policy to incorporate all Contract-relevant environmental commitments into the Contract. As a result, the Special Provisions and the Plans should contain all the Contract-relevant environmental commitments not covered by the *Standard Specifications*. The Project Engineer is encouraged to review the Special Provisions and Plans with the Contractor at the preconstruction meeting. The Project Engineer should consider using relevant information from the Environmental Compliance Binder (See *Environmental Manual* Chapter 600) during the preconstruction meeting and throughout the project.

  The Contractor's responsibility to obtain any local agency permits should also be discussed. For example if a rock crusher is required for a project, the State Department of Ecology registration requirements should be discussed (WAC 173-400). In addition, a written record of this discussion should be sent to the Regional Office of the State Department of Ecology so that they are aware of the timing and location of the rock crushing operation.

- **Order of Work and Time Schedules** – The Project Engineer needs to know the Contractor's schedule of work in order to set up the crews, arrange for any special inspections, or provide timely reviews of submittals. The Contract requirements for progress schedule or time for completion in accordance with *Standard Specification* Section 1-08, or as amended by the Special Provisions, can also be discussed. When shown in the Plans, the first order of work shall be the installation of high visibility fencing to delineate all areas for protection or restoration. The Project Engineer should review the Plans at the preconstruction meeting to ensure these resources are not disturbed during clearing and grading activities. See the Temporary Erosion and Sediment Control Plan template located on the Stormwater & Water Quality page for the Project Engineer to ensure the clearing limits are properly marked in the field to protect sensitive areas.
- **Subcontractors and Lower-Tier Subcontractors –** In accordance with *Standard Specifications* Section 1-08.1, the Project Engineer needs to become aware of the Contractor's plans to delegate portions of the work to subcontractors. These plans must conform to the condition of award, if any, related to underutilized disadvantaged business enterprise participation. The Project Engineer should explain the requirements and process involved for subcontractor and lower-tier subcontractor approval, including the prevailing wage rate requirements outlined in the contract documents (see Section SS 1-07.9(1)), the requirement to verify that each subcontractor meets the responsibility criteria outline in 39.04 RCW and possesses any license required by 19.28 RCW or 70.87 RCW, and the requirement that all subcontracts (of whatever tier) on Federal Aid contracts must include FHWA-1273 and Amendments to FHWA-1273. WSDOT/Contractor/Subcontractor relationships should also be discussed. The Project Engineer should remind the Contractor that there is no contractual relationship between WSDOT and the subcontractors. All subcontractor correspondence with WSDOT should pass through the Contractor for submittal to WSDOT or vice versa. Contractor representation should also be discussed. It will be necessary for the Contractor to be represented at the job site at all times, even when there is only subcontractor work in progress.
- **Utilities, Railroads, and Other Third Parties –** If the project affects or is affected by third party organizations, the Project Engineer must advise the Contractor about the relationships with the third parties and the expectations they hold regarding the actions of both WSDOT and the Contractor. The Project Engineer may wish to arrange face-to-face meetings with representatives of affected third parties. In the case of utilities, reference should be made to the underground locator services and the requirements to utilize them (see RCW 19.122). If WSDOT has agreed to notification time limits, these should be communicated to the Contractor. If special insurance is required by any agreements with third parties, then these requirements should be pointed out to the Contractor.

  If utilities are to be adjusted, relocated, repaired or constructed by the utility during the performance of the contract, the Project Engineer shall facilitate a separate, mandatory, utility preconstruction meeting with the Contractor, the utility, and their contractors.

  If public transportation agencies will be impacted, the Project Engineer will consistently supply information to WSDOT's Construction Traffic Management team throughout the life of the project. Keep in mind that public transportation is not just fixed routes, but includes services for people with special needs, vanpools,

park and ride lots, and other ride-sharing services. Traffic hot spots and other traffic information is accessible at: www.wsdot.wa.gov/construction/planning

- **Safety and Traffic Control** – The Contractor's safety program should be discussed as outlined in Section SS 1-07.1. WSDOT has an interest in safe operations on the job and the Project Engineer should make clear that this interest will be protected. As part of a discussion of specific safety requirements of the particular work, safety considerations for workers and WSDOT personnel, such as safety zone requirements, vehicle intrusion protection, fall prevention, closed spaces, hazardous materials, work around heavy equipment, etc., should be addressed. The need for control of speed on all construction equipment should be emphasized.

  The Project Engineer should describe WSDOT's traffic requirements. The Contractor's Traffic Control Manager (TCM), Traffic Control Supervisor (TCS) and WSDOT's traffic control contact person should be identified and their responsibilities and authorities clearly stated. Any traffic control requirements that are unique or restrictive should be emphasized and addressed by the Contractor with respect to construction operations. Unacceptable delays to traffic should also be discussed.

  The MUTCD, as adopted by WSDOT, is the legal standard for all signing, traffic control devices and traffic control plan requirements on the project. These standards have been incorporated into the project Traffic Control Plans (TCPs.) If the Contractor chooses to use these TCPs, they must be formally adopted in writing as required in *Standard Specifications* Section 1-10.2(2). If the Contractor wishes to use some other traffic control scheme, then that plan must be submitted and approved in advance.

  Flaggers and their intended locations must be included in the plans. When Flaggers are utilized, they must have a current flagging card and shall be equipped with hard hats, vests, and standard stop/slow paddles as required in *Standard Specifications* Section 1-07.8 and 1-10.3. Overuse of flaggers is not appropriate as "catch all" traffic control and should be discouraged. Safety of flaggers, through use of physical protection devices where practical, proper flagging methods and formulating an emergency escape plan, should be emphasized.

  The Contractor and the Project Engineer should establish communication with the Washington State Patrol (WSP) and local law enforcement agencies. Law enforcement advice about traffic control should be considered. Arrangements for all law enforcement agencies to notify the Project Office about accidents near, or in, the construction area should be established, if possible. If WSP traffic control assistance is to be used, a general discussion of strategy and responsibilities should be included.

  Off-site hauling can pose a safety hazard to the public. WSDOT will cooperate with law enforcement agencies in the enforcement of legal load limit requirements and the covered load regulations. The Project Engineer should discuss this with the Contractor before any hauling begins.

  The Contractor should be reminded of *Standard Specifications* Section 1-07.1, requiring the Contractor to comply with all Federal, State, tribal or local laws, ordinances, and regulation that affect Work under the contract.

  Particular mention should be made of observance of Industrial Fire Precaution Levels (IFPL) when performing work on or adjacent to forest land under the purview of the Department of Natural Resources (DNR). The Contractor is required to comply with all fire regulation including, but not limited to, fire shutdowns, fire fighting tools required, notifications, etc. Information regarding IFPLs may be found on the DNR webpage listed: https://www.dnr.wa.gov/ifpl

- **Control of Materials** – The Contractor should be reminded of *Standard Specifications* Section 1-06.1, requiring the Engineer's approval of all materials prior to their use. In order to expedite these approvals, the Contractor should be encouraged to make these requests as early as possible. The Project Engineer should provide the Contractor with a current copy of the Record of Materials (ROM) for the project.

  The Project Engineer should discuss the ROM with the Contractor, covering the various requirements for sampling, catalog cuts, shop drawings, certification requirements, etc., which may be needed for approval of materials prior to their use. If the project includes federal funds, the Project Engineer should discuss Build America/Buy America requirements and the need to submit DOT Form 350-109, and Certification of Materials Origin (Steel and Iron) and DOT Form 350-110 - Certification of Materials Origin - Required for Acceptance of Construction Materials. The requirements of *Standard Specifications* Section 1-06.2 for ongoing acceptance of approved materials prior to their being incorporated into the work, should also be discussed. The Project Engineer should discuss with the Contractor who should have access to the Statistical Acceptance of Material (SAM) program. If fabricated items will be needed, the inspection process for fabricated materials, including shop drawing approvals and notification requirements for fabrication inspectors, should also be outlined. The requirements of *Standard Specifications* Section 1-06.3 that require manufacturer certifications prior to use of the materials should also be reviewed.

  The Contractor should be reminded that, in order to avoid deferred progress payments for portions of work not completed, all necessary documentation for approval of materials and required certifications must be received and accepted prior to their use. A method of notification of intent to defer payment should be discussed with the Contractor, and an agreed upon method documented in the project files.
- **Other Submittals** – Discuss any other submittals that may be needed during the course of the contract. This may include Falsework and Forming Plans, Traffic Control Plans, Temporary Erosion and Sediment Control Plans, Spill Prevention Control and Countermeasures Plans, Schedules, Installation or Operating Procedures, Temporary Stream Diversion Plans, Painting Plans, or other Contractor initiated items requiring WSDOT review and/or approval. There are requirements for a number of submittals which, if not satisfied in a timely manner, could delay the initial progress payment. These include the Statement of Intent to Pay Prevailing Wages, the Progress Schedule, and the Training Plan. There may be others depending on the work to be done and as required by the contract provisions. The Project Engineer should identify and remind the Contractor of these requirements and the potential for deferred payments.
- **DBE Participation/EEO/Training –** The Project Engineer should briefly discuss and answer any questions the contractor may have with regard to the efforts, reports, and monitoring necessary to ensure successful performance for DBE Participation, EEO, Apprentice Utilization, and Training. Section SS 1-07.11(2) of this manual provides a breakdown of these various programs and the general requirements each contains. However, the specific requirements and contractor performance information are included in the *Standard Specifications*, the Amendments included in the contract, as well as the contract specific special provisions titled Equal Employment Opportunity Responsibilities. If additional assistance or information is necessary, the Project Engineer could also request assistance from the Region EEO Officer, the State Office of Equal Opportunity, or the State Construction Office.

- **Wage Rate Administration –** Advise the Contractor of the requirement to pay prevailing wage rates as identified in the Contract. Advise the Contractor that it is their responsibility to work directly with Washington State Department of Labor and Industries (LNI) for approval of the Statement of Intent to Pay Prevailing Wages (SOI) and Affidavit of Wages Paid (AWP) and that:
  - The SOI and AWP will be on forms provided by LNI.
  - The forms will be filed electronically using LNIs online system – Prevailing Wage, Intents and Affidavits (PWIA).
  - The contractors, subcontractors, lower-tier subcontractors, suppliers, manufacturers, and fabricators that are required to submit SOIs and AWPs will pay the approval fee directly to LNI.
  - The Contractor will submit a copy of the approved forms (SOI, before any payment can be made for work performed and all AWPs before the contract can be accepted) to the Project Engineer through PWIA.
  - If payrolls are required, establish submittal deadlines in accordance with *Standard Specifications* Section 1-07.9(5) and describe the wage rate interview process.
  - Describe the required and/or recommended job site posters and provide them to the Contractor (see Section SS 1-07.9(2)).
  - On all Federal-Aid contracts, the Project Engineer must remind the Contractor that the work falls under the guidance of Davis-Bacon and Related Acts and the Contract Work Hours and Safety Standards Acts. As indicated in Section SS 1-07.9(1), the U.S. Department of Labor may conduct investigations to ensure compliance with these Acts.
- **Forms –** The Project Engineer should provide the Contractor a description of all required forms, providing guidance on where the Contractor can find each - www.wsdot.wa.gov/forms/pdfForms.html. Remind the Contractor that all form submittals, including those of subcontractors, lower-tier subcontractors, and suppliers, should be routed through the Prime Contractor for submittal to WSDOT.
- **Request for Information –** The Project Engineer should discuss the Request for Information (RFI) process as provided for in Standard Specification 1-05.1(2) and 1-05.7(1) to discuss the Contractor's responsibility in this process. The RFI process is a tool for documentation and communication between the Contractor and the Project Engineer but should not take the place of building a working relationship with the Contractor.

  The Contractor is required to submit an RFI if they believe there is information missing or a clarification of the Contract is needed. At a minimum, the Project Engineer will communicate with the Contractor on a weekly basis the status of RFIs.
- **Summary –** While these issues are to be discussed with the Contractor in some manner at the beginning of each contract, the Project Engineer is free to select the most effective method of doing so. A formal preconstruction conference may or may not be the best solution. Perhaps a single meeting is adequate or several meetings may be required. The entire preconstruction communication may also be covered in a short meeting between the Project Engineer and the Contractor. The Project Engineer is responsible to address these subjects, inform the Contractor in some manner and maintain a written summary of the preconstruction meetings or discussions for the contract files.

The Contractor and Project Engineer may be knowledgeable about those normal requirements listed above. In this situation, some items need only be listed in a mailing as a convenience to the Contractor's staff. Unique features, constructability, and third party coordination should be focused on with as many of the interested parties as can be assembled.

The key is effective communication, getting the right message to the necessary people. Additional meetings may be required as people change, as new facets of the work become imminent, or as the project goes into a second or third season. In order to assist this process, a checklist has been developed as a tool for the Project Office's use. It can be used to help identify the issues and track them for completion through the various preconstruction communications.

SS 1-05.3 Plans and Working Drawings

Working Drawings submitted by the Contractor must be reviewed and checked for conformance to Contract requirements by the Project Office. Submittals that are incomplete, not legible, or not in conformance with Contract requirements shall be rejected and shall not be distributed for review outside the Project Office. If the Contract submittal requirements require modification, the submittal cannot be submitted and reviewed until after a change order is processed revising the submittal requirements. A Change Order is required for any deviation from Contract requirements. Any conflicts with the Contract Plans that have been detected or revisions that may be desired by the Project Engineer should be noted on the copy being forwarded to Headquarters. If change orders to cover any deviations from the Contract Plans have been issued, or are being processed, those changes should also be noted and copies of the change orders shall be provided to the reviewers.

Figure 1-1 is a list of the most common Working Drawings and includes references to the Specifications that require them and the Section of this manual that covers the procedures for processing them. The WSDOT Review Groups column identifies the groups within WSDOT that need to review the various Working Drawings. All review by State groups (Bridge Technical Advisor, Bridge Construction Support, Bridge and Structures Architect, Geotechnical Engineer, State Materials Laboratory and Assistant State Construction Engineer) identified in Figure 1-1 is coordinated by the Bridge Technical Advisor or Bridge Construction Support. Submittals are coordinated by the Bridge Technical Advisor if they are listed as a review group in Figure 1-1, and all other submittals are coordinated by Bridge Construction Support. Bridge Technical Advisor and Bridge Construction Support assignments and can be found here: BTA List.

The Project Engineer should use DOT Form 410-025 to transmit the Working Drawings with State review requirements to the Bridge and Structures Office. The Bridge Technical Advisor or Bridge Construction Support will then send a response back to the Project Engineer that incorporates comments from all State review groups.

The Project Engineer should maintain a log of all shop plans or other drawings received for each contract. Shop plans for items that conform to the contract plans or a standard plan, except those listed in Figure 1-1, should be reviewed by the Project Engineer.

Type 1 Working Drawings are generally informational in nature and are often used to provide the Project Engineer a description of work to be completed and allow the Project Engineer an opportunity to prepare for the inspection of this work. A Type 1 Working Drawing does not require a response to the Contractor. Should the Project Engineer determine the work proposed by the Contractor does not comply with the contract, a response should be sent to the Contractor. Type 2 and 2E Working Drawings are required for work that is more complex or specialized than what would be required for a Type 1 Working Drawing. A Type 2 Working Drawing is submitted to the Project Engineer for review and comment and will often be reviewed by support offices that specializes in the type of work. The Project Engineer is allowed up to 20 calendar days for review and the Contractor is not allowed to begin work until the Project Engineer has provided review comments. It is important that the Project Engineer complete the review and return comments, even if the plan is acceptable, to prevent a delay to the Contractor. Type 3 and 3E Working Drawings require WSDOT's approval prior to the Contractor beginning work, and the Project Engineer is allowed 30 calendar days to complete their review. For Type 3 and 3E Working Drawings, it is important that the Project Engineer complete the review and reply to the Contractor within the allowed 30 calendar days. Should the Project Engineer fail to complete the review and respond to the Contractor within the allowable time for the Type 2 or 3 Working Drawings, the Contractor may be entitled to compensation for impacts due to the delay.

At this time, not all sections of the *Standard Specifications* and Special Provisions have been updated to reflect the revisions to Section 1-05.3. There will still be some sections that reference different requirements for the submittal and review of Working Drawings. The Project Engineer should review the Contract to confirm the proper Working Drawing requirements are being followed.

Comments on Working Drawings should be related only to conformance of the Working Drawing to the contractual requirements. Possible responses to Working Drawings include:

- Approved (only use for Working Drawings that require WSDOT approval)
- No exceptions taken
- Make corrections noted
- Revise and resubmit
- Rejected

Working Drawings that conform to the requirements of the contract will generally be returned as approved for Type 3 or no exceptions taken for Type 2. Working Drawings that don't comply with the contract will be returned with one of the other responses depending on the nature and severity of the contractual compliance issues.

Figure 1-1 Working Drawings, Shop Plans or Submittal Type

Working Drawing, Shop Plan, or Submittal Type	*Construction Manual* Reference	Standard Spec. or Other References	WSDOT Review Groups	PE Distribution of Drawings	Notes
Working Drawings (Shop Plans for Contract or Standard Plan Item)	SS 1-05.3	1-01.3	Project Engineer	Contractor Fabrication Inspector	
Calculations for Overload of Structure	None	1-07.7(2) 6-01.6	Project Engineer Bridge Construction Support	Contractor	PE stamp is required
Mfg. Specification for Portable Temporary Traffic Control Signal	None	1-10.3(3)K	Project Engineer	Contractor	
Prefabricated Vertical Drainage Wick Submittals	None	2-03.3(14)H	Project Engineer	Contractor	
Calculation for Backfilling Abutment Prior to Superstructure Placement	None	2-03.3(14)I	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	PE stamp is required
Blasting Plan	None	2-03.3(2)	Project Engineer	Contractor	
Excavation Slope Working Drawings and Calculations	None	2-09.3(3)B	Project Engineer Geotechnical Engineer	Contractor	PE stamp is required for Temporary Slopes Greater than 20 ft in Height
Cofferdams, Shoring, Cribs, and Trench Boxes	6-1.5	2-09.3(3)D 2-09.3(4) 6-02.3(16)	Project Engineer Bridge Construction Support Geotechnical Engineer	Contractor Region Construction	PE stamp is required
Falsework, Forming, and Bracing Plans (including design calculations)	6-1.5	6-02.3(16) 6-02.3(17)F	Project Engineer Bridge Construction Support	Contractor Region Construction	PE stamp is required
Contractor Supplied Design Buried Structure Plans, Specifications and Calculations	None	6-20.3(2)A	Project Engineer Bridge Construction Support Geotechnical Engineer	Contractor Fabrication Inspection	PE stamp is required
Contractor Supplied Design Buried Structure Load Rating Report	None	6-20.3(2)B	Project Engineer Bridge Construction Support	None	PE stamp is required
Buried Structure Fabrication Shop Drawings	None	6-20.3(2)C	Project Engineer Bridge Construction Support Geotechnical Engineer	Contractor Fabrication Inspection	
Buried Structure Dewatering Plan	None	6-20.3(2)D	Project Engineer Geotechnical Engineer	Contractor	
Buried Structure Installation Plan	None	6-20.3(2)F	Project Engineer Bridge Construction Support	Contractor	PE stamp is required

Figure 1-1 Working Drawings, Shop Plans or Submittal Type

Working Drawing, Shop Plan, or Submittal Type	*Construction Manual* Reference	Standard Spec. or Other References	WSDOT Review Groups	PE Distribution of Drawings	Notes
Project Specific Powder Coating Plan and Materials Submittals	None	6-07.3(11)B	Project Engineer State Materials Engineer (Fabrication Inspection) Bridge Technical Advisor	Contractor Fabrication Inspection	
Bridge Demolition Plans	None	2-02.3(2)A	Project Engineer Bridge Construction Support Assistant State Construction Engineer	Contractor Region Construction	PE stamp is required
Shaft Installation Plan and Construction Experience for Bridges and Permanent Signing Structures	None	6-19.3(2)	Project Engineer Bridge Construction Support Bridge Technical Advisor Geotechnical Engineer Assistant State Construction Engineer	Contractor	
Precast Vaults	None	See Special Provisions	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor Fabrication Inspection	PE stamp is required
Pipe Jacking Plans	None	See Special Provisions	Project Engineer Bridge Construction Support Geotechnical Engineer	Contractor	
Soil Nail Walls	None	6-15.3(3)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor Fabrication Inspection	Include State Const. Engr. if shotcrete facing is permanent (6-18.3(1)) Experience criteria to be verified by Project Engineer
Soldier Pile Walls	None	6-16.3(2)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	PE stamp is required for concrete fascia panel forming plans only.
Permanent Ground Anchor Submittals	None	6-17.3(3)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	
Roadside Plant/Weed and Pest Control Plan	None	8-02.3(2)	Project Engineer	Contractor Region Construction	Signed by Licensed Chemical Pest Control Consultant
Shop Plans for Light Standard and Traffic Signal Standards	8-20.2B	8-20.2(1)	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection Maintenance	Shop drawings are required for all signal standards and for those light standards without pre-reviewed plans. (per Std. Spec)

Figure 1-1 Working Drawings, Shop Plans or Submittal Type

Working Drawing, Shop Plan, or Submittal Type	*Construction Manual* Reference	Standard Spec. or Other References	WSDOT Review Groups	PE Distribution of Drawings	Notes
Shop Plans for Sign Structures	8-21.3	8-21.3(9) A refers to Section 6-03.	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection	
Column Jacket Shop Drawings and Installation Plans	None	GSP 6-02.3.OPT8(C). GB6 and 6-02.3.OPT8(D). GB6	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor Fabrication Inspection Maintenance	PE stamp is required on column jacket installation plan
Form Liners (Various patterns per GSP)	None	6-02.3(14)D	Project Engineer Bridge and Structures Architect	Region Construction Contractor	Include 2ft × 2ft sample with drawing to Bridge and Struct. Architect
Welding Steel Piling	6-5.6	6-05.3(6) 6-03.3(25)	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection	Weld splices of steel casing for cast-in-place conc. Piles shall be the Contractor's responsibility
Pile Driving Equipment Adequacy Submittals		6-05.3(9)	Project Engineer Bridge Construction Support Geotechnical Engineer Assistant State Construction Engineer	Contractor	PE stamp is required on wave equation analysis
Painting Plan – Shop Application Powder Coating Plan - Shop Application	None	6-07.3(2) 6-07.3(11)B1	Project Engineer Bridge Technical Advisor Assistant State Construction Engineer State Materials Engineer (Fabrication Inspection)	Contractor	
Painting Plan – Field Application	None	6-07.3(2)	Project Engineer Bridge Technical Advisor Assistant State Construction Engineer	Contractor	
Modified Concrete Overlays (Mix Design, Equipment Specifications and Procedures)	None	6-09.3(2)	Project Engineer Assistant State Construction Engineer	Contractor	
Shaft Installation Plan for Noise Walls, Soldier Pile Walls, Signal Standard Foundations, and Luminaire Bases	6-2.3E	6-12.3(1) 6-16.3(2)	Project Engineer Bridge Construction Support Bridge Technical Advisor Geotechnical Engineer Assistant State Construction Engineer	Contractor	

Figure 1-1 Working Drawings, Shop Plans or Submittal Type

Working Drawing, Shop Plan, or Submittal Type	*Construction Manual* Reference	Standard Spec. or Other References	WSDOT Review Groups	PE Distribution of Drawings	Notes
Structural Earth Wall Submittals	None	6-13.3(2)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	PE stamp is required
Geosynthetic Retaining Wall Plans (Includes Std. Plan Type 1-6 Walls)	None	6-14.3(2)	Project Engineer Bridge Technical Advisor Geotechnical Engineer	Contractor	
Girder Erection Plans (Including falsework and stress calculations)	None	6-02.3(16) 6-02.3(25)N 6-03.3(7)A	Project Engineer Bridge Construction Support	Contractor Region Construction	PE stamp is required
Welding Reinforcing Steel	6-2.6D	6-02.3(24)E	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection	
Shop Detail Plans of Prestressed Concrete Girders, Prestressed Structures, Prestressed and Precast Conc Piles	6-2.7A	6-02.3(25)A None for Piles	Project Engineer Bridge Technical Advisor	Contractor Fabrication Inspection	6-02.3(16)B is for the formwork plans for preapproval
Post-Tension Shop Drawings	6-2.8	6-02.3(26)A	Project Engineer Bridge Technical Advisor Assistant State Construction Engineer	State Construction Engineer Contractor Region Construction	PE stamp required
Precast Concrete Panels	None	6-02.3(28)A 6-12.3(1)	Project Engineer Bridge Technical Advisor	State Construction Engineer Contractor Fabrication Inspection	
Welding Structural Steel (Submitted with Shop Drawings)	6-3.6C	6-03.3(25)	Project Engineer Bridge Technical Advisor	Region Construction State Materials Lab Contractor	
Bird Protection Plan	None	GSP 1-07.5(4)	Project Engineer WSDOT Project Biologist	Project Engineer Project Inspector	Contact your Environmental Coordinator to provide a contact name for your WSDOT Project Biologist if needed

SS 1-05.4 Conformity with and Deviations from Plans and Stakes

Permanent Monuments

Most permanent monuments which are in the construction zone are relocated by the establishing agency. Normally these monuments are relocated prior to beginning of construction, but if monuments are found within the construction zone, they must be preserved until they can be moved. If the urgency of construction does not allow time for the relocation of the monument, it must be properly referenced so it may be reset or relocated at a later time. When a monument is found within the construction area, the proper agency shall be notified promptly and requested to relocate the monument.

Property Corner Monuments and Markers

It is imperative that land plats and property corners be preserved. The 1973 Legislature enacted a Survey Recording Act, RCW 58.09, to provide a method for preserving evidence of land surveys by establishing standards and procedures for monuments and for recording surveys as a public record. When a general land office corner, plat survey corner, or property line corner exists in the construction zone, it is necessary to properly reference it and reset it after the construction work has been done. RCW 58.09.040 requires that, for all monuments that are set or reset, a record of the monument be filed on a Monumentation Map with the County Engineer in the county in which the corner exists and the original sent to the State Right of Way Plans Branch, who will forward a copy to DNR for their records.

Alignment Monumentation

During construction, alignment monumentation may be altered to fit field conditions. Such changes may include:

- Normally all PCs and PTs are to be monumented. Additional point on tangent (POT) monuments are necessary where line of sight is, or may in the future be obstructed by the horizontal or vertical alignment, buildings, or other barriers.
- When the right of way and the construction alignment do not coincide, the monumentation shall be such that the exact right of way as acquired can be positioned in the field. This will generally require, as a minimum, that the right of way alignment be monumented.
- When safety of the survey crew or survival of the monuments is an issue, monuments may be offset from the true alignment. An extra effort in accuracy must be made when setting offset monuments to ensure an accurate reestablishment of the true alignment. The monumentation, including monument locations, reference distances, stations, and bearings, is to be shown on the as built plans.

Surveying Provided by the State

Unless the contract states otherwise, the Project Engineer is responsible for providing all surveying needed to locate and define the contract work. The staking done in construction surveying must assure that the work will conform to the plans and must also conform to the Contractor's approach to the work. There are numerous survey techniques that will accomplish these objectives. Prior to each phase of the work, the Project Engineer must reach agreement with the Contractor concerning the method, location, and timing of construction staking. Once this agreement is reached, it must be shared with all WSDOT, Contractor, and subcontractor personnel who place or use construction stakes.

Contractor Surveying

If the contract requires the Contractor to provide some or all of the construction surveying, the Project Engineer is required to provide only the primary control points staked, marked, and verified in the field and the coordinate information for the main alignment points in the plans. The plan alignment and the field control points must be referenced to the same grid coordinate system.

The provisions for contractor surveying are intended to provide the stakes needed to inspect the work, as well as the primary function of locating and defining the work. If the survey stakes required by the contract do not provide the reference data needed for inspection, then the Project Engineer will have to provide additional survey work that is needed. As an alternative, a change could be negotiated with the Contractor to perform the added work.

The Contractor's survey work is a contract item, just like all other contract items. It must be inspected for adequacy and conformance with the contract. Once it is performed and inspected, it must be paid for.

The wise Project Engineer will inspect the survey efforts and check as much of the contractor's work as is practical. Any errors should be brought to the Contractor's attention for corrective action. The inclusion of contractor surveying in a project transfers the risk of survey errors to the Contractor. The Project Engineer must assure that the survey work of the Contracting Agency does not relieve the Contractor of that risk.

Subgrade Grade Control Tolerance

The finish required on roadway subgrades shall ensure a final grade in as close conformity to the planned grade and cross-Section as is practicable, consistent with the type of material being placed. Subgrade blue tops shall be set 0.05 ft below subgrade elevation and be accurate to + or – 0.01 ft. The finished subgrade surface shall not deviate from the plan subgrade elevation by more than +0.00 to -0.05 ft. Where excessively rocky materials are being placed, deviations in excess of the above may be accepted where, in the opinion of the Engineer, closer conformance cannot be achieved by normal procedures and with a reasonable amount of effort and care on the part of the Contractor. Conformance to grade shall be checked by rod and level, straight-edging, or other appropriate engineering method as selected by the Engineer.

Surfacing Grade Control Tolerance

Red and Yellow tops for surfacing materials shall be set accurate to + or -0.01 ft. The finish of the compacted materials shall conform to the grade established by the blue tops as closely as is practicable and in general, should not deviate from the established grade in excess of the following: ballast and base course, + or – 0.05 ft; top course for bituminous surface treatment, + or – 0.03 ft; top course for asphalt concrete, + or – 0.02 ft; surfacing under treated base course, + or – 0.03 ft; treated base under Portland cement concrete pavement, + 0.00 to – 0/02 ft.

Conformance should be checked by use of rod and levels from blue tops and/or by string-line or straight edge methods as determined appropriate by the Engineer. The above schedule refers to conformance both longitudinally and transversely to the traveled way. The outer shoulder line finished grades shall not exceed double the deviations outlined for the traveled way.

In the event that additional blue tops are not set for setting grade of surfacing courses, the grade of the surfacing shall be referenced to the earthwork subgrade blue tops and adequate controls shall be used to ensure the placement of the required thickness of surfacing and a final surface meeting the requirements outlined above.

Inspection of Course Thicknesses

Tabulated below are the permissible deviations in measured thickness for specified depths of surfacing and paving. While these are the maximum deviations that can be allowed, the Project Engineer may impose tighter requirements for conforming to the plan dimensions where there is a reason to do so.

Material	Specified Depth	Max. Allowable Deviation at Any One Point	Average Depth Deviation for Entire Project
Untreated Surfacing	0 – 0.25′	-0.05′	-0.025′
	0.26 – 0.50′	-0.06′	-0.03′
	0.51 – 0.75′	-0.07′	-0.035′
	0.76 – 1.0′	-0.08′	-0.04′
	Over 1.0′	-8%	-4% Hot
Mix Asphalt (HMA) (single-lift) (multi-lift)	0.08 – 0.15′	-0.045′	-0.015′
	0.00 – 0.25′	-0.03′	-0.01′
	0.26 – 0.50′	-0.045′	-0.015′
	0.51 – 0.75′	-0.06′	-0.02′
	Over 0.75′	-0.075′	-0.025′

For HMA overlays with a specified depth of less than 0.08 ft, it will be the responsibility of the Project Engineer to ascertain the adequacy of the overlay depth in conformance to the plan.

SS 1-05.7 Removal of Defective and Unauthorized Work

Contract Final Acceptance for all work completed on a project is made solely by the Secretary of Transportation acting through the State Construction Engineer. However, the Engineer relies heavily on the actions and professional opinions of others, involved throughout the course of work, in determining acceptability. Because of this, it is expected that the Project Engineer, working with the assistance of the Regional Construction Manager, as well as making full use of the many resources available at both the Regional and State level, particularly the office of the State Construction Engineer, will ensure that sufficient inspection is conducted in order to determine that the work performed or the materials utilized to construct the project comply with the requirements included in the contract plans and specifications. When inspections or tests are performed that indicate substandard work or materials, the Project Engineer should immediately notify the Contractor, rejecting the unsatisfactory work or material.

The following types of activities will be considered unauthorized Work and will be completed solely at the risk and expense of the Contractor:

- Work performed contrary to, or regardless of, the instructions of the Project Engineer.
- Work and materials that do not conform to the Contract requirements.
- Work done beyond the lines and grades set by the Plans or the Engineer.
- Any deviation made from the Plans and Specifications without written authority of the Project Engineer.

The Contractor is responsible for notifying the Project Engineer of any defective Work they discover. If the Project Engineer becomes aware of defective or unauthorized Work, they should first notify the Contractor. The Contractor should be notified as quickly as possible so that changes in materials or Work methods can be made to avoid materials or Work being rejected.

Until all issues of material acceptance and conformity to the Contract Plans and Specifications can be resolved, unauthorized or defective Work will not be paid for by WSDOT.

Once the unauthorized or defective Work has been discovered or the Contractor has been notified, the Contractor must immediately correct the deficiency. *Standard Specification* 1-05.7(1) provides the Contractor an option to submit an RFI to propose a repair procedure or method for correcting a deficiency. An RFI should be submitted when the repair would constitute a change to the Contract, or when the Contract does not include a specified remedy for the defect. The Project Engineer should ensure the Contractor has provided all the information needed to respond to the request and will discuss the request with the Contractor prior to providing a final response. Any engineering necessary to evaluate the acceptability and adequacy of the repair should be done by the Contractor and submitted to the Project Engineer with their RFI. All RFIs for repairs or corrections are considered Contractor-proposed changes and WSDOT is under no obligation to accept or approve them.

Alternately, the Project Engineer may direct that all unauthorized or defective Work be immediately remedied, removed, replaced, or disposed of. If the defective Work is replaced with Work meeting the Contract requirements, approval from the Project Engineer is not needed, nor is an RFI.

In correcting unauthorized or defective Work, the Contractor will be responsible to bear all costs to comply with the Engineer's order.

For additional guidance, see *Standard Specifications* Section 1-05.7. If the Contractor fails or refuses to carry out the orders of the Engineer or to perform Work in accordance with the Contract requirements, the Project Engineer should immediately notify the Regional Construction Manager of the facts in the matter, seek assistance and advice.

Defective Materials

The contract plans and specifications for construction of a project require that specific materials and/or work practices be utilized in completing the work. The Project Engineer may reject any materials not conforming to the requirements of the specifications. The rejected materials, whether in place or not, are to be immediately removed from the site of the work unless the following guidelines for acceptance of non-specification materials are followed:

Material Not in Place

There may be situations where WSDOT determines the use of nonconforming materials is acceptable. This requires prior approval of the State Construction Engineer and a change order modifying the project specifications.

The Contractor is required to submit an RFI as provided for in *Standard Specification* 1-05.1(1) for any material substitution. The Project Engineer will discuss the request with the Contractor prior to providing a final response to the RFI. If this is not done prior to incorporating into the project, the material should be treated as defective or unauthorized Work.

Material in Place

1. Price adjustments have been developed and are referenced in the contract for acceptance of certain materials whose properties cannot be determined until they are in place. Items this policy applies to include: concrete compressive strength, Portland cement concrete pavement thickness, hot mix asphalt mixture and density, and pavement smoothness.
2. Material incorporated into the Work that is subsequently found to be in non-conformance with the Specifications and for which price adjustments for acceptance are not included in the Contract, may be reviewed to determine acceptability. The determination of acceptability should be made only when, in the Project Engineer's judgment, there is a possible service or benefit to be obtained from its use. If it is determined that no benefit or service is obtained from the material's use, the Project Engineer should direct that the material be immediately removed and replaced at no cost to WSDOT.

The Project Engineer may consult the State Construction Office, State Materials Laboratory, the State Bridge and Structures Office, or other design organizations for assistance in determining the usefulness of the nonconforming material. If consulted, these offices will offer technical advice to the extent that information is available. It is not intended to enter into extensive research to assess material which could be removed and replaced under the contract terms.

If the material is acceptable for continued use, a determination shall be made by the Project Engineer of the possible reduced service life caused by the material substitution and the resulting credit assessed by change order.

This determination of acceptability and the resulting credit must meet with the Region Construction Manager's approval for execution of the change order. In addition, prior review and approval must be obtained from the State Construction Engineer with a recommendation from the State Materials Engineer for the intended application of the material. With this determination for acceptance of non-specification material, discussions should be initiated with the Contractor and a change order completed.

If it is determined that the Specification violation will not compromise the performance of the material and the nature of the violation is more of a technical infraction of the Specification, the material may be accepted with a change order, possibly including a price reduction. If there is sufficient data and if the nature of the material makes analysis feasible, a pay factor may be determined using QC/QA methods similar to those described in *Standard Specifications* Section 1-06.2(2). If QC/QA cannot be applied, the Project Engineer may determine an adjustment subjectively, using whatever information is available. This assessment or price adjustment is typically based on the unit bid price and may vary from no price adjustment up to the total contract unit bid price for the item involved. If it is determined that the violation is serious enough that the material cannot be accepted for use on the project, the Project Engineer may direct its complete removal and replacement at no cost to WSDOT.

All change orders for acceptance of nonconforming materials are Contractor proposed and WSDOT is under no obligation to accept or approve any of them.

SS 1-05.9 Equipment

The Contractor is required to furnish adequate equipment for the intended use. The Contractor's equipment must also be maintained in good working condition. Prior to the start of work, the Project Engineer should ensure, by inspection, that the Contractor's plant, equipment, and tools comply with the specifications.

Whenever the specifications contain specific equipment requirements, the Project Engineer should verify that the equipment provided meets these specifications. This should be documented in project records such as the Inspector's Daily Report. The Contractor is required to furnish, upon request, any manuals, data, or specialized tools necessary to check the equipment.

It is most important that the operation of automatically controlled equipment be checked carefully and that the Contractor be advised immediately whenever the equipment is not performing properly.

The Contractor's supervisory personnel must be experienced, and able to properly execute the work at hand. If, in the Project Engineer's opinion, the Contractor's supervisory personnel are not fully competent, the Project Engineer should immediately notify the Regional Construction Manager of the facts in the matter, seeking assistance and advice.

It is expected that, consistent with WSDOT's policies and delegated authority, the Project Engineer will assist the Contractor in every way possible to accomplish the work under the contract. However, the Project Engineer must not undertake, in any way, to direct the method or manner of performing the work. Contrary to popular legend, this statement is true of force account work as well. Should the Contractor select a method of operation that results in substandard quality of work, non-specification results, a rate of progress insufficient to meet the contract schedule, or that otherwise violates the contract specifications or provisions, the Contractor should be ordered to discontinue that method or make changes to comply with the contract requirements. Where cooperation cannot be achieved, the Project Engineer should notify the Regional Construction Manager of the facts in the matter, seeking assistance and advice.

SS 1-05.10 Guarantees

Standard Specifications Section 1-05.10 and 1-06.5 specifies the Contractor shall provide to the Project Engineer all guarantees, warranties, or manuals furnished as a customary trade practice, for material or equipment incorporated into the project. The Project Engineer should transmit the originals of any such guarantees/warranties or manuals to the organization that will be maintaining the items covered by the guarantee/warranty or manuals. The Project Office should maintain a copy of the guarantee/warranty, and a letter of transmittal for manuals, with the materials documentation file for the project.

SS 1-05.14 Cooperation with Other Contractors

When two or more Contractors, including any utility or their contractor, are working in the same area, *Standard Specifications* Section 1-05.14 will apply. The Contractor shall not cause any unnecessary delay or hindrance to the other contractors on the work, but shall cooperate with other contractors to the fullest extent. Progress schedules and plans for all contractors involved should be reviewed by the Project Engineer to detect possible conflicts which might be resolved before a delay of work is experienced or extra costs are incurred as a result. If an adjacent project requiring coordination is known prior to holding a pre-construction meeting, it would be beneficial to invite principals from that project to the meeting.

1-06 Control of Material

SS 1-06.3 Manufacturer's Certificate of Compliance

All material is to be accepted for use on the project based on satisfactory test results that demonstrate compliance with the contract plans and specifications. All work demonstrating compliance is to be completed prior to the material's incorporation into the work. In many cases, this testing has already been completed in advance by the manufacturer. A Manufacturer's Certificate of Compliance provides a means to utilize this testing in lieu of job testing performed prior to each use of the product. This provides for a timely use of the material upon arrival to the job site without a delay in waiting for the return of test results. The Project Office is required to complete and file a Manufacturer's Certificate of Compliance Check List (DOT Form 350-572). This must be done in a timely manner and is necessary to ensure that the material meets all the requirements of the contract.

Standard Specifications Section 1-06.3 describes the procedures for acceptance of materials based upon the Manufacturer's Certificate of Compliance. *Standard Specifications* Division 9 describes those materials that may be accepted on the basis of these certificates. Since a certificate is a substitute for prior testing, it is intended that all certificates be furnished to the Project Engineer prior to use or installation of the material.

However, there are some circumstances where the Contractor may request, in writing, the Project Engineer's approval to install materials prior to receipt and submittal of the required certificate. The Project Engineer's approval of this request must be conditioned upon withholding payment for the entire item of work until an acceptable Manufacturer's Certificate of Compliance is received. Examples of materials that shall not be approved by the Project Engineer for installation prior to the Contractor's submittal of an acceptable certificate are: materials encased in concrete (i.e., rebar, bridge drains); materials under succeeding items where the later work cannot be reasonably removed (i.e., culvert under a ramp to be opened to traffic); etc. The Project Engineer's approval or denial shall be in writing to the Contractor, stating the circumstances that determined the decision. If the requirements of this provision are followed, including the written request by the Contractor and the written approval by the Project Engineer, then the remedy for failure to provide the Certificate is the withholding of 100 percent of the cost of the material and the cost of the work associated with the installation of the material.

At the conclusion of the contract, there may still be some items that are lacking the required certificates. These items must be assessed as to their usefulness for the installation, prior to payment of the Final Estimate and subsequent Materials Certification of the contract. The review of these items may include:

- Comparison with the suitability of other shipments to the project or other current projects.
- If possible, sampling and testing of the items involved or residual material from the particular lot or shipment.
- Independent inspection on site of the completed installation.

If it is determined that the uncertified material is not usable or is inappropriate for the completed work that incorporates the material, the Contractor should be directed to immediately remove the material, replacing it with other certified materials. If the material is found to be usable and is not detrimental to the installation it was incorporated into, it may be left in place but, if the provisions of *Standard Specifications* Section 1-06.3 were followed, with a reduction to no pay. The reduction in pay will be the entire cost of the work (i.e., unit contract price, portion of lump sum) rather than only the material cost. The Contractor should continue to have the option of removing and replacing the uncertified material in order to regain contract payment for the installation. If the provisions of *Standard Specifications* Section 1-06.3 were not followed, then there can be no withholding beyond the value of the missing work itself (the preparation and submittal of the Certificate.)

SS 1-06.6 Recycled Materials

SS 1-06.6(1) Recycling of Construction Aggregate and Concrete Materials

Engrossed Substitute House Bill 1695 requires the use of recycled concrete aggregate in the amount of 25 percent on all WSDOT projects, and to report annual usage to the legislature. However, this requirement only applies to materials included in the Contract that are listed in *Standard Specifications* 9-03.21(1)E and that allow the use of recycled concrete aggregate.

Recycled concrete is hardened concrete that is crushed and may contain coarse and fine mineral aggregate with Portland cement. The *Standard Specifications* encourage the use of recycled materials and requires that recycled concrete aggregates be incorporated into the work by the Contractor.

Because it is important that the Contractor have a plan for using the required percentage of recycled concrete aggregates, the *Standard Specifications* require the Contractor to submit a utilization plan. The Contractor's Recycled Concrete Aggregate Utilization Plan is to be submitted on DOT Form 350-075A – Recycled Concrete Aggregate Reporting - within 30 calendar days of Contract Execution, preferably at the Pre-Construction Conference.

The recycled concrete aggregate utilization plan details how the Contractor will meet the 25 percent requirement. Each bid item that includes eligible material will be listed on the utilization plan and will include the percentage of anticipated recycled concrete aggregate that will be used. If the plan shows the Contractor will not meet the minimum 25 percent requirement, a cost estimate meeting the requirements of *Standard Specification* 1-06.6(1) A must be attached. The details of the plan are not required to be static as the Contractor should be actively managing their use of recycled concrete aggregate throughout the

Contract. Therefore, the Contractor may alter the utilization plan at their discretion without submitting a new one. Should the Contractor alter their plan, the Project Engineer may choose to review it.

Within 30 days after Physical Completion, the Contractor is required to re-submit the Recycled Concrete Aggregate Reporting form (DOT Form 350-075A) to include the actual amounts of recycled concrete aggregate and virgin material used on the project. If the final tally of recycled concrete aggregate does not meet the 25 percent requirement, the Contractor is required to attach a cost estimate meeting the requirements of *Standard Specification* 1-06.6(1)A. The Project Engineer should review the cost estimate for reasonableness; an independent verification of detailed costs is not required as the Contractor certifies the accuracy of the information.

The Project Engineer shall submit the Recycled Concrete Aggregate Reporting form to the Region Documentation Engineer for their review and approval prior to a copy of the form being sent to the Documentation Engineer at the State Construction Office. These reports will be used by the State Construction Office in the annual report submitted to the legislature.

1-07 Legal Relations and Responsibilities to the Public

SS 1-07.1 Laws to be Observed

Safety

Safety is not optional in WSDOT. No employee will be permitted to disregard applicable safety and health standards of the State Department of Labor and Industries or other regulatory agencies.

The Secretary of Transportation's Executive Order E 1033 provides direction to all WSDOT employees to adhere to the following basic safety provisions in every work activity:

- Participate in your work group safety plan (or Safety Management System for WSDOT Ferries Division employees).
- Look for ways to prevent accidents.
- Immediately identify hazards and safety concerns.
- Always use personal protective equipment.
- Promptly report all injuries.

The Order also states that all employees at WSDOT Ferries Division are already covered and shall continue to be covered by the existing Ferries Division Safety Management System. Therefore:

- All Ferries Division employees will refresh their knowledge of existing Safety Management System procedures and shall follow them accordingly.
- A concerted effort will be made to address existing and new Safety Management System safety reports in a timely manner.
- All Ferries Division employees shall address issues of concern with existing safety procedures using the existing Safety Management System reporting program.

All other WSDOT employees are covered and continue to be covered by the policies and procedures in the *Safety Procedures and Guidelines Manual* M 75-01, and other related policy documents. Therefore, a pre-activity safety plan is required prior to performing any new field work. Office staff will conduct a hazard assessment and mitigation plan for all office environments.

Since WSDOT employees on transportation construction projects are routinely exposed to a variety of hazards, they must take adequate safety precautions at all times. The following items represent common activities that workers or work crews may encounter, and should be addressed in pre-activity safety plans as needed.

- The employee shall ensure that an area is safe before entering it for the purpose of inspection. For example, a deep trench must be adequately shored and braced before entering it.
- Aggregate production and material processing plants should be inspected for safety hazards. Corrective measures should be called to the attention of the Contractor or producer. Corrections must be completed before WSDOT personnel will be permitted to proceed with entry or work upon the premises.
- The employee must, at all times, watch for backing trucks and not depend upon hearing alone for warning. The noise of plants and other equipment often make it impossible to hear trucks approaching and the truck driver's vision area is restricted when backing a truck.
- Parking WSDOT vehicles too close to the path of construction equipment, behind standing equipment, or in other hazardous locations is not permitted.
- Where traffic is maintained in work zones, care must be taken to avoid approaching traffic when it is necessary for inspectors and others to step onto or cross the traveled portion of the roadway. Whenever possible, work activities, ingress and egress, should be conducted within the relative safety of the work zone.
- WSDOT employees working on foot in the highway right of way and other areas exposed to vehicular traffic must comply with the high visibility clothing requirements of the WSDOT *Safety Procedures and Guidelines Manual* M 75-01 Section 4.2, Chapter 3.
- Where the engineering crew is working adjacent to traffic, without positive barriers, the work area should be marked with proper signs and traffic control devices as shown on the appropriate Traffic Control Plan (TCP). The crew may be protected by a certified flagger as needed.
- When the engineering crew is working under the protection of the Contractor's flaggers and signs, other signs may not be needed, but a "STOP"/"SLOW" paddle should be available for use in special situations. Good communication with the Contractor and Flagger is needed to ensure that they are aware of crew activities within the work zone.
- A survey crew is typically exposed to traffic hazards and should conduct survey work under approved TCPs from the *Work Zone Traffic Control Guidelines* M 54-44. The Region Traffic Office will assist survey crews with TCPs for situations not covered in this publication.
- During blasting operations, employees are instructed to seek cover at least 500 ft from the location of the blasting.

In addition to the above requirements for workers and work crews, supervisors also have the following responsibilities:

- Each supervisory employee is charged with the responsibility of providing safety leadership and safety enforcement when necessary.
- Supervisors shall give thorough instructions to employees under their jurisdiction on the safe use of tools, materials, and equipment and the safe prosecution of work on construction projects.
- The Division of Occupational Safety and Health requires that every foreman, supervisor, or other person in charge of a crew have a valid first aid card.
- When employees are injured on the job to the extent that the services of a doctor are required, the Regional Safety Officer shall be notified immediately.
- When traffic control measures are necessary, approved Traffic Control Plans (TCPs) should be used in conformance with the *Manual on Uniform Traffic Control Devices* (MUTCD), as adopted by WSDOT. Supervisors should ensure that the appropriate TCP is used and that the necessary signs, devices and equipment are available. Contact Region Traffic Office for assistance.

Responsibility for Enforcement of Safety and Health Requirements

All contractors doing work for WSDOT must provide safety controls for the protection of life and health of the Contractor's employees and other persons, for the prevention of property damage, and for the avoidance of interruptions in the performance of the work under the contract. As the owner contracting agency, WSDOT has the responsibility for enforcement of the provisions of the contract, however, provisions and regulations which are by law the fundamental responsibility of other agencies, both from the standpoint of interpretation and enforcement, should be monitored by WSDOT, but with full recognition as to the responsibilities and authorities of those agencies. The Project Engineer will cooperate fully with the responsible agency.

Any violations noticed by the Project Engineer will be brought to the attention of the Contractor for correction. The Project Engineer will also notify the responsible agency (if that action is deemed necessary by the Region Construction Manager) and utilize such sanctions as are consistent with contract terms in assisting the responsible agency in enforcing laws, rules, and regulations.

The Contractor is obligated by law to comply with both State and Federal safety regulations. State regulations are administered by the Washington State Department of Labor and Industries under the Washington Industrial Safety and Health Act (WISHA). Federal regulations are administered by the Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration (MSHA) of the U.S. Department of Labor, which has jurisdiction over federal safety requirements for pit and quarry operations up to the point where materials leave the quarry area or go into a batch plant. Inspectors from any or all of these agencies may review the Contractor's operations at any time. (See *Standard Specifications* Section 1-07.1.) In order to fulfill WSDOT obligations to monitor contract operations in accordance with the above, the following procedures should be followed on both Federal-aid and non Federal-aid contracts.

Precontract Preparation

- The Project Engineer shall obtain the WISHA manuals, particularly Safety Standards for Construction Work WAC 296-155, General Safety and Health Standards WAC 296-24, and General Occupational Health Standards WAC 296-62, and shall review them with the key field WSDOT inspectors to ensure reasonable familiarity to the extent that they can recognize important requirements.
- The Contract Plans and contract provisions should be reviewed to identify those aspects of the work meriting special attention from the standpoint of potentially dangerous types of work and hazard elimination.
- The project site should be reviewed to identify those aspects of the location that present hazards such as limited sight distance, confined spaces, difficult terrain, extreme temperatures, illegal encampments, or exposure to biological and physical hazards associated with animals or humans.

Preconstruction Duties

As part of the Preconstruction Meetings and Discussions (see Section SS 1-05.1), the Contractor's safety program should be discussed. Some of the things that the Project Engineer may want to consider are:

- The contractual obligation of the Contractor for complying with State and Federal construction safety standards (see *Standard Specifications* Section 1-07.1).
- The availability of the safety standards that apply to the Contract.
- The accident prevention program of the Contractor – organization, staff, names of responsible individuals, meetings, training, reports, etc. A review of specific areas for which plans are required (especially those also affecting WSDOT personnel). These might include Fall Protection, Confined Spaces, Respirators, Hearing, and Hazardous Materials plans. Implementing a mechanism for employees to report "near misses" and/or work zone accidents.
- The Contractor's responsibility for seeing that subcontractors comply with safety regulations.
- The Contractor's plans for meeting specific safety requirements and for eliminating potentially critical hazards on the project for all Contractor employees, Contracting Agency employees, and the public.
- The Contractor's responsibility to meet the requirements of WAC 296-800, which requires employers to provide a safe workplace. Particular mention must be made to WAC 296-800-11025, which prohibits alcohol and narcotics from the workplace.

The PE's Role in Safety on the Project

It is difficult to generalize about safety. It's a judgment call which is dependent on risk, knowledge, authority to direct corrections, etc. As people, professionals and representatives of the State, Project Engineers have an obligation to act if they become aware of a situation that presents an immediate threat. Project Engineers should advise their employees on what the lines of communication are and what the procedures are for alerting the responsible agencies regarding serious safety hazards.

Employees should be made aware that the Contractor is obligated to make the work-site safe, to their satisfaction, for inspection activities. Anyone who is uncomfortable with access for inspection should inform their supervisor of the situation and expect resolution. Project personnel should also be made aware of project specific hazards and

be trained in specific areas as the project warrants. For example: fall protection, confined space requirements, respirator training, lead paint hazards, hazardous material training, and exposure to medical waste (sharps). It is suggested that the expertise of the Regional Safety Officers or Headquarters Safety Office be utilized as appropriate.

Be aware that the construction contract requires the contractor to perform any measures or actions the Engineer may deem necessary to protect the public, and that the Engineer may suspend work if the Contractor fails to correct unsafe conditions. Project staff should continuously monitor the Contractors' work activities for potential violations of legal safety requirements, and for any condition that poses an immediate threat to the health of any person. Immediately notify the Contractor upon becoming aware of any such condition.

Additional information, such as safety regulations and Department of Labor and Industries (L&I) contacts are available on the internet at www.wa.gov/lni. Keep in mind that many WSDOT employees are not trained to interpret and apply safety regulations; however, employees need to have a reasonable understanding of what hazards may be encountered on a project. Many, but not all, of the requirements are listed under WAC 296-155 Safety standards for construction work under the various "Parts a through V."

State L&I offers consultation service (advise is given) and enforcement (assessment of a violation would result in a citation being issued). A listing of the various L&I field offices is as follows:

- **Region 1**

Bellingham Field Services Location	360-647-7300
Everett Field Services Location	425-290-1300
Mount Vernon Field Services Location	360-416-3000

- **Region 2**

Bellevue Field Services Location	425-990-1400
Seattle Field Services Location	206-515-2800
Tukwila Field Services Location	206-835-1000

- **Region 3**

Bremerton Field Services Location	360-415-4000
Port Angeles Field Services Location	360-417-2700
Tacoma Field Services Location	253-596-3800

- **Region 4**

Aberdeen Field Services Location	360-533-8200
Kelso Field Services Location	360-575-6900
Tumwater Field Services Location	360-902-5799
Vancouver Field Services Location	360-896-2300

- **Region 5**

East Wenatchee Field Services Location	509-886-6500
Kennewick Field Services Location	509-735-0100
Moses Lake Field Services Location	509-764-6900
Yakima Field Services Location	509-454-3700

- **Region 6**

Pullman Field Services Location	509-334-5296
Spokane Field Services Location	509-324-2600

SS 1-07.3 Fire Prevention and Merchantable Timber Requirements

SS 1-07.3(1) Fire Prevention Control and Countermeasures Plan

A Fire Prevention Control and Countermeasures Plan (FPCC) Plan is required on every project, regardless of proximity to forestland. The plan is required to be submitted as a Type 2 Working Drawing no later than the date of the preconstruction conference. The Project Engineer will review the FPCC plan for completeness as outlined in *Standard Specification* 1-07.3(1)A1. The required elements listed in the plan must be periodically verified by Project Inspectors. An updated FPCC plan is due annually on multiple year Contracts, and a revised FPCC plan is required as site conditions change.

Most of Washington State is covered under the Industrial Fire Protection Level (IFPL) system which, by law, is managed by the Department of Natural Resources (DNR). The IFPL system was established to identify fire risk levels and accordingly prohibit certain high risk work activities during periods of dry weather. The risk level for a given area is regularly assessed and can change daily. In certain areas, jurisdiction is transferred to the United States Forest Service (USFS) or to the local fire authority.

The Project Engineer is encouraged to establish a working relationship with the local agency responsible for fire protection (DNR, USFS, Tribe, or the local fire district) early in the project. It is important for the Project Office to know and understand the different laws of the jurisdiction governing the work site. The Project Office should also check the IFPL website daily during the closed season (April 15 – October 15) to verify the fire threat level for the project site. It is recommended that fire protection be discussed at the weekly safety meeting, or more frequently if levels warrant further discussion.

In the event the IFPL requires either a partial or general shutdown of Work, the Contractor may obtain a waiver to continue certain work activities. The Project Office will verify that the Contractor has received a waiver from DNR before allowing continuation with prohibited Work. If the IFPL requirements prohibit the Contractor from performing Work, the Contractor may be eligible for an unworkable day in accordance with Section 1-08.5.

When it is in WSDOT's interest to pursue a waiver, and after receiving ASCE approval, the Project Engineer will lead the effort to obtain the waiver while working closely with the Contractor and the agency responsible for fire protection. The Project Engineer must discuss pursuing a waiver with the ASCE, as the Department bears additional risk and cost when WSDOT is the initiating party. The potential need for a waiver should be discussed with the regulatory fire agency prior to or early in the fire season. Factors such as work activities, location, and shortened work windows are some examples of risks to consider at the beginning of the project. Requesting the waiver in the middle of the fire season, or at the last minute, is not advisable.

If the project is contained within the paved roadway surface or is an emergency operation, the Project Engineer can allow work to continue during restrictions, however, all effort should be made to follow the IFPL restrictions.

WAC 332-24-405 requires the Contractor and WSDOT Inspectors to have certain equipment available and in working order. The requirements are:

Contractor	WSDOT Inspector
1. Fire extinguisher of at least a 5 B C rating 2. Approved exhaust system 3. Shovel (mounted on all vehicles/ equipment) 4. Two serviceable five gallon backpack pumps filled with water 5. Firewatch (with portable power saw operation)	1. Fire extinguisher of at least a 5 B C rating 2. Approved exhaust system 3. Shovel

The purpose of the equipment is to extinguish fire when initially started while it can be controlled or extinguished by portable fire extinguishers or small hose systems without the need for protective clothing or breathing apparatus. Project Inspectors are not required to compromise their personal safety in fighting fires.

If a waiver is issued to the Contractor to continue work during a shutdown, the Contractor must have all the required tools noted above in addition to the specific mitigation measures in place listed in the approved waiver.

SS 1-07.3(1)A2 Forest Fire Prevention

When the project limits are next to or extend into a State or Federal forest, the Contract may contain an appendix with additional USDA Forest Service requirements that need to be included in the FPCC plan and the Contractor must take extra steps for fire prevention. When approving the FPCC Plan in these areas, the Project Engineer may elect to contact the local forest supervisor or regional manager to ensure the Contractor has obtained the information required in *Standard Specification* 1-07.3(1)A2.

SS 1-07.4 Sanitation

SS 1-07.4(2) Health Hazards

Site Cleanup – Some contracts contain specifications for site cleanup. This may include the removal of illegal encampments, unauthorized pedestrians, personal property, refuse, and other biological and physical hazards from the work area. The Contractor is required to perform all necessary work, and to take precautions to maintain the health and safety of all workers and the public, who may be in the work area. It is the responsibility of the Project Engineer to inspect the Contractor's work and ensure compliance with the contract requirements and with all applicable laws. Each Project Engineer should appoint a contact for encampment removal issues.

The Contractor is required to have a Health and Safety Plan, and to submit the plan to the Project Engineer prior to commencing any cleanup work. The Project Engineer should ensure that the plan is prepared in accordance with contract provisions.

The Contractor will furnish and install "No Trespassing" signs in all areas where pedestrians may be encountered, except where pedestrians are legally allowed. "No Trespassing" signs must be posted no less than 72 hours prior to beginning site cleanup work or any other potentially hazardous work. If the site contains encampments, the signs should be posted at each encampment. The Project Engineer should conduct a site

visit in order to verify that the signs are posted correctly and meet the requirements of the contract.

At the time the signs are posted the Contractor should provide written notification to the Project Engineer and local jurisdictions. When the work includes removal of encampments the Contractor should also notify local advocacy groups that site cleanup and removal is scheduled.

After the initial removal of encampments, the Contractor should revisit the area at regular intervals, and if encampments persist, permanently post the area with "No Trespassing" signs and proceed with removal activities.

Immediately prior to commencing cleanup and removal, brush clearing, or other potentially hazardous work, and periodically throughout the day, the Contractor should visually inspect the area to ensure that no unauthorized pedestrians are present. The Project Engineer should verify that the site is cleared of pedestrians and that periodic area checks are being done. Special attention should be given to areas hidden from view, such as in dumpsters or equipment, or under blankets. The Project Engineer may consider the use of non-invasive detection aids, such as infrared detectors, to ensure that no unauthorized persons are present.

Removal, Storage, and Return of Personal Property – The Contractor will remove personal property that is not refuse. Items will be placed in large transparent plastic bags, labeled, and stored for return to the property owner. The Project Engineer should ensure that personal property is handled and stored in accordance with the requirements of the contract and all applicable laws.

Further WSDOT policy information and guidance is available on the State Construction Office Webpage at: www.wsdot.wa.gov/Business/Construction/TechnicalGuidance.htm

SS 1-07.5 Environmental Regulations

The following procedure pertains to WSDOT personnel on all WSDOT contracts and contains duties and activities by persons other than the project staff, but all of which are related to construction contracts and affect the Project Engineer to one degree or another. The Project Engineer must stay aware of this procedure and follow it as written.

Environmental Compliance Assurance Procedure

The purpose of the Environmental Compliance Assurance Procedure (ECAP) is to recognize and rectify environmental non-compliance events during the construction phase on WSDOT highway and modal construction sites, and to ensure prompt notification to WSDOT management and regulatory agencies. For purposes of this procedure, non-compliance events are defined as actions that violate environmental permits, agreements, laws, or regulations.

When non-compliance is suspected or known, the Project Engineer (PE) shall initiate the Notification and Resolution process. The Regional/Modal Environmental Manager will serve as a resource to the PE and give priority to addressing the non-compliance event. The Project Engineer and Environmental Manager will work together on an appropriate response to avoid or minimize environmental damage.

Notification and Resolution Process

When a non-compliance event is suspected or known, the following steps must be taken:

1. The person who discovers an event must immediately notify the PE.
2. The PE must:

   Step A – Immediately notify the Contractor of the situation and suspend all work that is causing non-compliance.

   Step B – Immediately contact the Environmental Manager or designee to confirm whether or not it is a non-compliance event. If the event is compliant, stop the notification process and resume work activity. If not compliant, collaborate with the Environmental Manager to determine the regulatory agencies with jurisdiction. Notify all regulatory agencies with jurisdiction.

   Step C – Consult with the Environmental Manager regarding response actions taken and any additional remediation actions that may be necessary.

   Step D.1 – Highway Projects: Notify the appropriate Assistant Region Administrator or Mega Projects Engineering Manager for Construction and the assigned Headquarters liaison (i.e. Assistant State Construction Engineer). If resolving the non-compliance event requires any design decision, notify the appropriate Assistant State Design Engineer.

   Step D.2 – WSF Projects: Notify the Terminal Engineering Construction Engineering Manager and the Terminal Engineering Design Engineering Manager.

   Step E – Additional notifications from the PE are necessary when the non-compliance event:

   - results in a formal written/verbal enforcement action from a regulatory agency;
   - presents risk to public health or the environment; or
   - creates a public controversy.

     Step E.1 – Region Highway Projects: Notify the Region Administrator and the State Construction Engineer.

     Step E.2 – Mega Projects Highway Projects: Notify the Mega Project's Program Administrator.

     Step E.3 – WSF Projects: Notify the Terminal Engineering Director.

3. The Region Administrator, State Construction Engineer, Mega Projects Program Administrator, and/or Terminal Engineering Director must notify the appropriate agency executives as warranted by the situation.
4. The Environmental Manager must:

   Step A – Notify the Director of Environmental Services Office (ESO) when the non-compliance event:

   - results in a formal written/verbal enforcement action from a regulatory agency;
   - presents risk to public health or the environment; or
   - creates a public controversy.

Step B – Assist the PE in recognizing the underlying cause that resulted in the non-compliance event, and determine how to prevent a reoccurrence of the event.

Step C – In consultation with the PE, identify and obtain new or modified permits, approvals, or agreements as needed to rectify the non-compliance event.

5. The Director of ESO must notify the ESO Compliance Solutions Branch Manager.

Documentation

1. The PE and the Environmental Manager shall coordinate and prepare the appropriate responses to all regulatory agencies with jurisdiction. The responses shall include documentation about the non-compliance event and how it was recognized and rectified.
2. The Environmental Manager, with assistance from the PE, shall record the details of the non-compliance event in the WSDOT Commitment Tracking System (per RCW 47.85.040), including but not limited to:
   - Project Name and location, plus the name of PE and Contractor.
   - Date of event.
   - Location(s) on the project where the non-compliance event occurred.
   - The type of work and the underlying cause that resulted in the non-compliance event.
   - The environmental, permit, agreement, law, or regulation violated.
   - Description of how the non-compliance event was recognized, rectified, and the lessons learned.
   - Which regulatory agencies and staff were notified, including dates of notification and any tracking numbers provided.
   - Whether or not regulatory agency staff conducted a site review in response to the notification.
3. The ESO shall produce a yearly report of all written notifications or violations to the Washington State Legislature (per RCW 47.85.040).

SS 1-07.5(3) Working in Water

When working in water, the Project Engineer shall ensure the Contractor complies with the environmental and navigation provisions of the contract. If the contract requires the Contractor to obtain special permits, the permits shall be obtained before the work covered by them is begun. Project work occurring in water must meet state water quality standards. Monitoring is required to verify the work achieves compliance with state water quality standards. WSDOT is required by law to report noncompliance with water quality standards to the Department of Ecology. Please follow the Environmental Compliance Assurance Procedures if standards are not achieved (see Section SS 1-07.5).

(I) Monitoring Water Quality

WSDOT is responsible for monitoring water quality during the Contractor's work in the water. Information is available that helps the Project Engineer successfully apply WSDOT's *Monitoring Guidance for In-Water Work* and collect a representative sample.

The Project Engineer may need to prepare a Water Quality Monitoring and Protection Plan (WQMPP) if required as a condition of a permit. Check the permits early and prepare the plan in advance to prevent delays in the Contractor conducting the work. A procedure exists (PRO610-e) that helps the Project Engineer develop the WQMPP. To help the Project Engineer develop the WQMPP, a template can be found on the Stormwater & Water Quality page under the tools, templates, and links tab.

Note that water quality monitoring of work occurring in water is different than monitoring construction stormwater discharging from a construction site. Refer to Section 8-1.3 for information about monitoring stormwater discharges from construction sites.

(II) Work Area Isolation/Stream Diversions

A meeting including the Contractor, Project Engineer, and WSDOT Hydraulics Office is required no less than 7 days prior to the start of the fish block net installation and the Contractor is required to notify the Project Engineer 14 calendar days before the meeting. The Project Engineer should include WSDOT Headquarters Hydraulics staff, Project Inspectors, and other stakeholders and permitting agencies to the meeting.

The Contractor will be required to submit a Temporary Stream Diversion (TSD) Plan for WSDOT to review and provide comments. Make sure to include your Region Environmental Permit Coordinator and Biology staff in reviewing the submittal. A TSD reviewer's checklist is available on the WSDOT SharePoint site. Do not allow any TSD Work until all comments on the Contractor's plan are addressed.

(III) Fish Moving Protocols and Standards

The Project Engineer should check project permits to determine whether WSDOT is required to isolate and remove fish from the work area in advance of the Contractor's work. The Project Engineer must coordinate these activities with the WSDOT biologist. Refer to the WSDOT Fish Exclusion Protocols and Standards to learn about the roles and responsibilities for these activities.

(IV) Reporting Monitoring Data

The Project Engineer is responsible for ensuring any monitoring data is submitted to the Washington State Department of Ecology's Federal Permit Coordinator. The Project Engineer should coordinate with Region Environmental Staff to ensure that reporting is done correctly.

(V) Reporting Spills to Water

Work that results in a spill to water generates multiple reporting obligations. At a minimum, the Project Engineer must follow the Environmental Compliance Assurance Procedure (see Section SS 1-07.5) of this manual) to start WSDOT's internal spill response. Also, the Project Engineer must ensure the Contractor enacts the spill response Section of their Spill Prevention, Control, and Countermeasures Plan.

Infiltration of Slurry

In accordance with 8-01.3(1)C, some classifications of shaft drilling slurry wastewater may be disposed of on-site by using upland infiltration. If the Contractor plans to infiltrate these types of slurry wastewater on-site, they must submit a Shaft Drilling Slurry Wastewater Management and Infiltration plan in accordance with Section 8-01.3(1)C. Project specific site conditions, such as a high water table or contaminated soil, may exclude the use of on-site infiltration as a slurry disposal option. The Project Engineer shall review and accept the plan prior to any on-site slurry wastewater infiltration.

Guidelines for reviewing and accepting Contractor plans are as follows:

1. The classification of slurry wastewater to be infiltrated and the Contractor's Shaft Drilling Slurry Wastewater and Infiltration plan both meet the specified requirements in Section 8-01.3(1)C.
2. The proposed best management practices (BMPs), controls, or other methods included in the plan are adequate to prevent surface wastewater runoff from leaving the infiltration location. What is "adequate" is site specific and dependent on how much water is being infiltrated and where, some examples may include:
   - The basis for the selection of an infiltration location (e.g., subsurface conditions, soil type, estimated infiltration rate, location of surface water)
   - Barrier BMPs (e.g., sandbags, berms, water bladders, silt fence) used to prevent surface wastewater runoff from leaving the infiltration area.
   - Interceptor BMPs (e.g., trenches, traps, pipe drain to containment area) used to capture wastewater surface runoff before it leaves the infiltration area.
   - A metering device that can be adjusted to discharge water to the ground at a rate that will prevent surface runoff from developing.
   - Digging a temporary infiltration containment area to hold a specific volume of wastewater. Keep in mind that digging will diminish the layer of unsaturated soil (prior to infiltration occurring, there must be a minimum of 5 feet of unsaturated soil between the soil surface where the infiltration will occur and the saturated soil). In addition, using heavy equipment to dig the infiltration containment area may cause soil compaction at the location, thereby lowering the effective infiltration rate.
3. The Contractor's plan includes an adequate level of detail to demonstrate that the planned controls and methods will prevent potential impacts to receiving waters of the State, including groundwater, for example:
   - Containment strategy for wastewater prior to infiltration.
   - Strategy for managing wastewater pH neutralization prior to infiltration.
   - Monitoring strategy to ensure infiltration activity is in compliance.
4. The Contractor's plan identifies a contingency plan that will be implemented immediately if it becomes evident that the controls and methods in place are not adequate to meet the requirements in Section 8-01.3(1)C. Contingency plans must be capable of being implemented immediately, such as:
   - Identifying procedures for rectifying plan deficiencies.
   - Having additional BMP materials on hand.
   - Eliminating the discharge to the ground (stopping infiltration activity).

Responsibility for Environmental Considerations

During the precontract period, the Project Engineer should obtain copies of the final environmental documents and permits related to the project. The Project Engineer should review all contract commitments in the WSDOT Commitment Files and participate in any Environmental Commitment Meetings. It is important that all key personnel become familiar with the environmental decisions considered during the design process. The contract documents should include any necessary provisions for protection of the environment and cultural resources, including requirements that the Contractor secure all permits as required by the contract and abide by regulations of appropriate Federal, State, and local agencies. Any changes in contract work that may become necessary must also be reviewed to ensure conformance with the requirements, and commitments established during the environmental design of the project. For more information on Environmental Commitment Meetings please reference the *Environmental Manual*, Chapter 590 - Incorporating Environmental Commitments Into Contracts.

SS 1-07.5(6) U.S. Fish and Wildlife Service and National Marine Fisheries Service

Bird Protection Plan

The Project Engineer needs to work closely with the WSDOT biologist on:

- The need to complete monitoring while the Contractor drafts and finalizes the plan
- Notifications and actions by the Contractor as stated in the plan
- Prior removal of any nest

SS 1-07.9 Wages

SS 1-07.9(1) General

The payment of predetermined minimum wages on Federal-aid Contracts is derived from the Davis-Bacon Act of 1931 and is prescribed by 23 USC 113. The payment of predetermined minimum wages on State funded Contracts is partly modeled after the federal Davis-Bacon Act. Both Acts are intended to protect the employees of Contractors who are performing public works construction from substandard earnings and to preserve local wage standards.

The guidance provided herein is intended to help those Project Offices administering construction Contracts understand the laws, regulations and contractual obligations regarding prevailed wages. It is not meant to be a substitute for reading and understanding Federal and State laws and it is not intended to be legal advice. If a labor issue arises and cannot be resolved at the Project Office level, it must be elevated to the Region Construction Office and if necessary, the State Construction Office.

Complaints

Any complaints regarding violations of minimum wage rate regulations that are referred to the Project Engineer by employees of the Contractor, Subcontractor, or lower-tier subcontractors should be treated as confidential.

All issues of noncompliance involving either the Contractor, Subcontractor, or any lower-tier subcontractors must be addressed through the Prime Contractor for resolution and elevated to the regulatory agency if necessary. If no violation is found, the employee making the complaint will be notified by WSDOT staff, however the Contractor does not need to be informed.

Federally Funded Contracts

All complaints brought to any WSDOT staff by a worker employed on the project must be promptly investigated by the Project Engineer using DOT Form 424-003. Follow the guidance provided in the Section titled Employee Interviews.

If the Project Engineer finds an apparent violation of prevailing wages, the Contractor must be informed and prompt corrective action must be made.

State Funded Contracts

All complaints brought to any WSDOT staff by a worker employed on the project must be promptly investigated by the Project Engineer using certified payrolls that have been submitted through PWIA.

If the Project Engineer finds an apparent violation of prevailing wages, the Contractor must be informed and prompt corrective action must be made. WSDOT staff should also refer the individual to LNI's website under Workers Rights.

Federal Prevailing Wage

Enforcement of Federal Prevailing Wage Provisions

In addition to the requirements of *Standard Specifications* Section 1-07.9, all Contracts financed with Federal funding includes the Required Contract Provisions for Federal-aid Construction Contracts (FHWA-1273). These provisions identify Federal wage requirements. The Federal prevailing wage requirements included in these provisions are also commonly referred to as Davis Bacon and Related Acts (DBRA). It is the Project Engineer's responsibility to monitor and enforce these provisions to the degree necessary to ensure full compliance. In order to comply with these requirements, the Contractor must:

- Submit weekly certified payrolls to the Project Engineer through LNI's Prevailing Wage Intents and Affidavits (PWIA) system.
- Ensure each Subcontractor, and each agent or lower-tier subcontractor submits weekly certified payrolls to the Project Engineer through PWIA.
- Post wage rate posters.
- Post the Federal Wage Determination included in the Contract Provisions.
- Allow interviews of employees during working hours by authorized representatives of WSDOT, the Federal Highway Administration, and the U.S. Department of Labor (USDOL).

The Contractor is ultimately responsible for all Subcontractor, agent, or lower-tier subcontractor compliance with the requirements for Federal prevailing wages.

When the Contract is subject to both State and Federal hourly minimum rates, the Contractor is required to pay the higher of the two rates unless specifically preempted by Federal law. The wage must be verified using the specific wages included in the Contract Provisions.

Federal Prevailing Wage Violations

In the event the Project Engineer identifies an error during an inspection of Federal certified payroll regarding:

- improper application or nonpayment of Federal prevailing wages
- improper application of overtime pay
- other requirements noted in the FHWA-1273s

The Project Engineer will immediately notify the Contractor requesting an explanation or prompt corrective action within a mutually agreed timeframe.

If the Project Engineer finds the Contractor has failed to make the corrections or provide an explanation within the time period determined, the matter must be elevated to the Region Construction Manager.

Employee Interviews

The Project Engineer must conduct periodic employee interviews using Employee Interview Report Form DOT 424-003. The purpose of these interviews is to establish, with reasonable certainty, that the provisions for Federal prevailing minimum wages are being complied with and that there is no misclassification of workers or disproportionate employment of laborers, helpers, or apprentices. The occupation description must be shown on the form used for the employee interview noted under current duties. The occupation description is noted in the wage listing included in the Contract Provisions.

Some employees may refuse to reveal their rate of pay. This is acceptable and should be noted in the remarks column. Many employees do not know or may guess the rate. If possible, a determination of the accuracy of the stated rate should be made, and any uncertainty noted in the remarks column to reduce the need for follow up interviews.

If either the stated rate (from the employee) or the record rate (from the certified payroll) is below the minimum rate (from the Contract wage listing), an investigation by the Project Engineer must be conducted. The investigation may be as simple as a follow up interview with the employee, or a more in depth investigation may result in a requirement for a supplemental payroll. In any event, the matter must be resolved so that the employee interview report describes what corrective action was taken to ensure that the employee has been paid the minimum prevailing wage rate. This corrective action is to be reported under remarks on the form or by an attached memo if more space is needed. All discrepancies found must be resolved.

The frequency and extent of these interviews will be sufficient to ensure a representative sampling has been made for all classes of workers employed on the Contract. A minimum sampling includes employees of the Contractor and a random sampling of 10% of all subcontractors. The interviews should be made with such frequency as may be necessary to ensure compliance.

Department of Labor Investigation

USDOL may investigate compliance with the DBRA and the Contract Work Hours and Safety Standard Act (CWHSSA) when conducting any investigations relative to compliance with the Fair Labor Standards Act or any other acts under its enforcement authority. Investigative action taken by the USDOL with respect to DBRA and CWHSSA do not, in any way, change the degree of authority or responsibility of WSDOT for enforcement of these Acts. Any actions taken by USDOL should be considered a service we may

use to assist in our enforcement activities but does not relieve WSDOT of our basic responsibility to fully investigate all potential violations and to apply such sanctions that are deemed applicable under our enforcement authority to ensure compliance.

Request for Authorization of Additional Classification and Rate

USDOL issues Wage Determinations under the Davis-Bacon Act (DBA) using available statistical data on prevailing wages and benefits paid in a specific locality. On occasion, the data does not contain sufficient information to issue rates for a particular classification of worker needed in the performance of the Contract. Because of this, DBA provisions contain a conformance procedure for the purpose of establishing an enforceable wage and benefit rate for the missing classification (*Standard Specifications* Section 1-07.9(1) and FHWA-1273).

Contractors are responsible for determining the appropriate staffing necessary to perform the Contract work. Contractors are also responsible for complying with the minimum wage and benefits requirements for each classification performing work on the Contract. If a classification considered necessary by the Contractor for performance of the work is not listed on the applicable Wage Determination, the Contractor must initiate a request for approval of an additional classification along with the proposed wage and benefit rates for that classification.

The Contractor initiates the request by preparing form SF1444, Request for Authorization of Additional Classification and Rate, at the time of employment of the unlisted classification. (Reference FAR 22.406-3 and 52.222-6(b), and Title 29 CFR Part 5, Section 5.5(a)). The Contractor completes blocks 2 through 15 on the form. Standard Form 1444 is readily available via the internet and is accessible by going to www.gsa.gov/portal/forms/type/sf, and searching by the form number.

The Contractor submits the request to the State Construction Office via the Project Office. The Project Office will need to review the request and if applicable, provide backup data showing that the requested classification(s) have been prevailed in other counties within the state. The Project Office will also need to describe the work being performed and verify that the duties performed, as described in the request, are not covered by any other classification(s). This documentation, along with the request, will be forwarded from the Project Office, through the Region Documentation Office, to the State Construction Office.

The State Construction Office reviews the request for completeness and signs the form designating the Contracting Agency's concurrence or disagreement with the Contractor's proposal. If the Project Engineer or the State Construction Office indicates disagreement with the Contractor's proposal, a statement must be attached supporting a recommendation for different rates. The State Construction Office then submits the proposal with all attachments to USDOL for approval. The Contractor is obligated to pay the proposed wage and benefit rates during the request for determination and pending a formal response from USDOL.

When a determination has been received from USDOL, the Contractor is obligated to pay that determined wage and benefits. If the Contractor has underpaid the employee(s), they are required to make back payment and re-submit corrected certified payrolls.

State Prevailing Wage

Enforcement of State Prevailing Wage Provisions

Except as noted for missing Statements of Intent, routine monthly progress payments made to the Contractor for work completed should not be deferred for enforcement of State prevailing wage laws.

State Prevailing Wage Violations

The State Construction Office will refer matters to LNI for further investigation that may be appropriate. If LNI chooses to investigate, they will establish the amount of unpaid wages due to employees.

In order to recover these wages for employees, LNI may choose to file a claim against the Contractor's retainage held under the Contractor by requesting that the Project Engineer withhold funds from monthly progress estimates for work completed by the Contractor.

Refer to SS 1-09.9, Withholding of Payments, for more information.

Owner-Operators of Trucks and Other Hauling Equipment

The FHWA neither defines the term "owner-operator" nor uses it in regulation. The FHWA regulates "employers" and "drivers." An owner-operator may act as both an employer and a driver at certain times or as a driver for another employer at other times depending on contractual arrangements and operational structure (Federal Register/Vol. 62, No. 65/Friday, April 4, 1997/Rules and Regulations).

Bona fide owner-operators of trucks and similar construction hauling equipment, who are independent Contractors, are not subject to enforcement of Contract labor standard provisions of the Davis Bacon Act and/or RCW 39.12. Owner-operators of other non-hauling type equipment (dozers, scrapers, backhoes, etc.) are considered a Subcontractor, a lower tier subcontractor or an employee of the Contractor or of a Subcontractor. If they are an employee of the Contractor or a Subcontractor, they must appear on that Contractor's payroll as an employee, not as an owner operator.

A ruling by USDOL states in effect that:

Because owner-operators usually work under payment arrangements based on a unit price (e.g., so much per cubic yard hauled) rather than on an actual truck or equipment rental rate plus the driver's (or operator's) rate, and, because of difficulties that have arisen with respect to securing adequate data on rental arrangements in order to determine whether Contract minimum rates are being paid, therefore, as a matter of administrative policy, the provisions of Davis-Bacon and related acts will not be applied to bona fide owner-operators of trucks or other similar construction equipment used exclusively for hauling and who are independent Contractors.

Certified payrolls for owner-operators shall be in accordance with the FHWA-1273. The certified payroll only needs to show the owner-operator's name, the week ending date, and if any work was performed. This does not apply to owner-operators of other equipment such as bulldozers, backhoes, cranes, welding machines, etc. These other owner-operators are considered to be operators and subject to labor standard provisions.

If the owner-operator employs additional drivers, all such employees shall be listed on the payroll with a complete breakdown of hours worked, hourly rate paid, and all other required information according to the FHWA-1273.

Though owner-operators who drive their own trucks may not be subject to prevailed wages as defined in the Davis Bacon Act and **RCW 39.12**, they are required under State statute to submit Statement of Intent to Pay Prevailed Wages and Affidavit of Wages Paid. The Statement of Intent will identify if the company filed as an owner-operator. There is no exception to this requirement.

SS 1-07.9(2) Posting Notices

Jobsite posters are required on all Contracts administered by WSDOT. Funding on each of these jobs will determine which posters are required. Each poster must be visible and readily accessible to employees. See *Standard Specification* 1-07.9(2) Posting Notices for each poster that is required.

In addition to the required job site posters, the following publications will be made available and readily accessible to employees:

- A copy of the approved Statement of Intent to Pay Prevailing Wages for the Contractor and each Subcontractor and lower-tier subcontractor is required in accordance with RCW 39.12.020
- A copy of the Contractor's company EEO policy. In addition, Federally funded Contracts requires a copy of each Subcontractor's and lower-tier subcontractor's EEO policy.
- A copy of prevailing wage rates from the Contract Provisions
- Emergency phone numbers for Safety and EEO officers for the Contractor and each Subcontractor and lower-tier contractor.

Fraud Notice Poster

Fraud Notice, FHWA-1022, Title 18 USC 1020, must be displayed on all Federally funded projects during the course of the work. This notice points out the consequences of any impropriety on the part of any Contractor or WSDOT employee working on the project.

Federal Prevailing Wage Rates

The Contractor must post the Federal Wage Determination, consisting of the wage listing included in the Contract Provisions, in a prominent place where it can easily be seen by workers. Standard posters (form WH 1321) are also to be posted and are available to the Region from the Support Services Supervisor, FHWA, Olympia, Washington.

SS 1-07.9(3) Apprentice Utilization

Apprentice Participation Special Provision – General

Apprentice utilization of 15% of all labor hours is a requirement on every Contract estimated to cost $2 million dollars or greater, regardless of the funding source or delivery method. The Apprentice Utilization Requirement is a separate obligation than the Federal Training Program and promotes the use of any apprentice enrolled in an apprenticeship program approved by the Washington State Apprenticeship Council.

It is important to note that while the State Apprentice Utilization Requirement and the Federal Training Program are two separate programs, both could be a requirement on a Contract with Federal funding. A female or minority apprentice enrolled in a program approved by the Washington State Apprenticeship Council may meet both requirements and could be counted toward both goals with appropriate approvals.

Only apprentices enrolled in an apprenticeship program approved by the Washington State Apprenticeship Council may be counted toward attainment of the Apprentice Utilization Requirement. The Apprenticeship Registration and Tracking System (ARTS) can be used to verify apprentice enrollment.

The Contractor may attain the Apprentice Utilization Requirement as part of their work activities or through the work activities of Subcontractors or lower tier subcontractors. Utilization will be calculated using the Department of Labor and Industries (LNI) Prevailing Wage Intents and Affidavits System (PWIA) automatically, using certified payrolls and Affidavits of Wages Paid submitted by the Contractor, Subcontractors and lower tier subcontractors.

Utilization is calculated in PWIA by dividing the total labor hours worked by apprentices into the total labor hours worked by apprentices and journey level workers on each project. Hours include those working offsite at fabrication sites, plant operations, and truck drivers. Per RCW 39.04.310 the total labor hours performed on the project do not include hours worked by foreman, superintendents, owners, and workers if they are not subject to prevailing wage requirements. WAC 296-127-015 defines a supervisor, while WAC 296-127-026 defines owners.

A supervisor (foreman, general foreman, superintendent, etc.) is subject to prevailing wage requirements when they spend more than 20% of their week performing manual/physical labor on the project. If the supervisor performs physical labor between 20% and 50% of their time during the week, they must be paid prevailing wages for each hour worked performing trades work. These hours must be reported to LNI and be included in the total labor hours considered for apprentice utilization. If more than 50% of the supervisor's time is spent performing trades work during the week, all the supervisor's hours for the week must be paid prevailing wages. These hours must be reported to LNI and be included in the total labor hours considered for apprentice utilization.

Apprentice Utilization Plan

The Contractor is required to submit an Apprentice Utilization Plan on DOT Form 424-004 within 30 days of execution of the Contract. The Apprentice Utilization Plan shall be submitted by uploading the document to the PWIA system. Although the plan is not submitted for approval, the Project Engineer must verify that the plan is reasonable to complete the Contract work. The intent of the plan is to provide the Project Engineer with enough information to track the Contractor's progress in meeting the Apprentice Utilization Requirements. If the plan indicates that the Contractor will not attain the Apprentice Utilization Requirements, then the Contractor must submit Good Faith Effort (GFE) documentation to the Project Engineer for review and comment with their Apprentice Utilization Plan. The GFE shall be uploaded to the PWIA System at the time of the Apprentice Utilization Plan submittal. Submitting a GFE early does not excuse the Contractor from continuous attempts to solicit apprentices.

Apprentice Reporting

Each Contract with an Apprentice Utilization Requirement will be marked as such in the PWIA system by the State Construction Office upon Contract setup. Apprentice reporting is done automatically through the PWIA system when the Contractor submits their certified payroll. The PWIA system calculates the apprentice utilization based on submitted certified payrolls by each Contractor working on the project and is considered

real time data. The Project Engineer must verify utilization through the life of the Contract at least monthly and should bring concerns up early and often if it appears like the goal is no longer attainable.

Apprenticeship must be discussed at the preconstruction conference, and the Project Engineer is encouraged to bring up apprenticeship goals as necessary, if it appears as though the goal will not be met. The Project Office should compare the PWIA generated report and the Apprentice Utilization Plan at least quarterly to measure the Contractor's progress toward attainment of the Apprentice Utilization Requirement. If apprentices are not being reported on the project when the plan shows that they should be working, the Project Engineer should request a revised plan.

Compliance

A Contractor can meet the Apprentice Utilization Requirements by either of the following:

1. Meeting the Apprentice Utilization Requirements through labor hours performed by apprentices, meeting or exceeding 15% of total project hours or
2. Submitting GFE documentation explaining why the Contractor failed to meet the Apprentice Utilization Requirements, and the Project Engineer approves the GFE.

In the event that the Contractor is unable to achieve the Apprentice Utilization Requirement, the Contractor shall submit GFE documentation for review and approval to the PWIA system. The GFE documentation shall be submitted after Substantial Completion but no later than 30 days after Physical Completion. If GFE documentation was previously submitted as part of the Apprentice Utilization Plan, it shall be updated and resubmitted. The Project Engineer must notify the Contractor in writing of the approval or rejection of the GFE. The response letter must be uploaded into the PWIA system. It is at the Project Engineer's discretion to allow revisions to GFE documentation.

If the Contractor fails to submit GFE documentation or if the Project Engineer does not approve the GFE, the Contractor will be subject to disciplinary actions as allowed under WAC 468-16-180.

Good Faith Effort

Notification of Rejection or Non-Submittal of the GFE

The Project Engineer must notify their Assistant State Construction Engineer and the Construction Administration Specialist at the State Construction Office when a GFE is not approved or if it is known that a GFE will not be submitted by Contractor.

When a Project Engineer rejects a GFE, the notification needs to include a copy of the Contractor's GFE and Project Engineer's reason for not approving it. Notification of either acceptance or rejection must be in letter format and must be uploaded into the PWIA system.

Disciplinary Measures for Non-Compliance

The first and second offense in not meeting Apprenticeship Utilization Requirements requires that a letter be sent to the Contractor informing them that they failed to meet the requirement of the Contract Specifications for apprenticeship. The letter will be sent from the State Construction Office to the Contractor, with a copy of the letter to the Project Engineer and the Contract Ad and Award Office.

The letter will contain the following information at a minimum:

- Contractor name
- Contact person
- Contract number
- Contract title
- Percentage of Apprentice labor hours required
- Actual percentage of labor hours performed by apprentices
- Reason for the rejected GFE or statement that GFE documentation was not submitted
- Notification that the Project Engineer will note the missed requirement in the Prime Contractors Performance Report
- If second offense, a letter will provide the date the first letter was sent and inform the Contractor of the second offense in not meeting the Apprenticeship Utilization Requirements on a Contract.
- Notification that other active Contracts with WSDOT at the time of offense will require the Contractor to submit a Plan to the State Construction Office within 30 days of receipt of the letter. Failure to comply will lead to actions taken under WAC 468-16-180(3) and (4). The Plan will include the following at a minimum:
  - The Contract number and name of each active Contract with Apprentice Utilization Requirements; and identify the percentage of apprentice labor hours required per the Contract and the percentage of apprentice labor hours achieved at time of plan submittal
  - Provide the dates the Contracts were awarded and provide the substantial, or physical dates if those dates have been received
  - Provide, in Contractors best judgment at the time of plan submittal if they will meet the percentage of apprentice labor hours required in the Contract
  - If they do not plan to meet apprenticeship labor hours, what course of action will they pursue (such as GFE submittal) to meet apprenticeship attainment requirements
- Notice that future letters of non-compliance may result in action being taken as allowed under WAC 468-16-180(3) and (4)
- Inform the Contractor that this first offense will stay in effect until the Contractor has either:
  - Met Apprentice Attainment requirements on three consecutive completed Contracts, or
  - Two calendar years have passed

If after the second letter to the Contractor, they fail to meet apprenticeship requirements before they have successfully completed three Contracts meeting the Apprenticeship Utilization Requirement, a third certified letter will be sent to the Contractor.

The letter will contain the following information at a minimum:

- Contractor name
- Contact person
- Contract number
- Contract title

- Percentage of Apprentice labor hours required
- Actual percentage of labor hours performed by apprentices
- Reason for a rejected GFE or failure of a GFE to be submitted
- Notification that the Project Engineer will note the missed requirement in the Prime Contractors Performance Report
- Notification that this is the third offense letter on not meeting the Apprenticeship Utilization Requirements (provide the dates the first and second offense letter were sent)
- Should the Contractor have other active Contracts with WSDOT at the time of the third offense letter, then the letter will require the Contractor submit a Plan to the State Construction Office, within 30 days of receipt of the letter. Failure to comply will lead to further actions taken under WAC 468-16-180(3)(e). The requirements of the Plan submittal are the same as those listed in the first offense letter.
- Notification that the Contractor is suspended of qualifications for a period of six months as allowed under WAC 468-16-180(3)(f) and (4)(b) starting on date established by the State Construction Office. After the suspension period, the next offense will be a first offense. Inform that a third offense within two years of previous suspension, prequalification may be revoked as allowed under WAC 468-16-190 Revocation of qualifications.
- Notification that if additional non-compliance occurs during the suspension period, the State Construction Office will determine further warranted action.

SS 1-07.9(5) Required Documents

The requirements for the Contractor's compliance with prevailing wages are noted in *Standard Specifications* Section 1-07.9.

Specific wage rate determinations for State prevailing wages are noted in the Contract and are verified through the PWIA system. Effective January 1, 2020, all certified payrolls, Statement of Intents to Pay Prevailing Wages (Intents) and Affidavits of Wages Paid (Affidavits) are required to be submitted to the Project Engineer through LNI's PWIA system.

The State Construction Office will enter each Contract into PWIA after award and before execution. The funding source and apprenticeship requirements will be selected at the time the Contract is established in PWIA.

Statement of Intent

Every Contractor, Subcontractor, agent, or lower tier subcontractor performing work on a public works contract must submit a Statement of Intent to Pay Prevailing Wages to LNI for approval. Separate Intents are required for each Request to Sublet submitted on the project. Hiring Contractors are required to file an Intent if they hire a lower tier subcontractor subject to prevailing wages.

The Project Office will verify Intents are filed and approved by LNI using PWIA.

No progress payments can be released to the Contractor for work completed by the Contractor, or for portions of work completed by Subcontractors, agents, lower-tier subcontractors, fabricators or suppliers, whom LNI have determined as being covered by State prevailing wage laws, prior to the Project Engineer's verification of the approved Intent for the entity performing the work.

Fabricators or suppliers of material whom LNI has determined as being covered by State prevailing wage laws will require an Intent. Project Office staff are required to monitor PWIA for Contractors that are not considered Subcontractors, but are subject to State prevailing wage laws.

LNI will approve the Intents and further certify that the documents meet the requirements of State laws. Submittal and approval dates of the Intents can be found within PWIA.

Affidavit of Wages Paid

Prior to Contract Completion, the Contractor, all Subcontractors, agents and lower-tier subcontractors must submit an Affidavit of Wages Paid to the Project Engineer using PWIA. The form may be submitted earlier by a Subcontractor or lower-tier subcontractor if that firm's work is completed prior to Completion of the Contract. All Affidavits must be approved by LNI prior to Contract Completion.

In the event a Subcontractor or lower-tier subcontractor cannot or will not provide a completed Affidavit, the Contractor should consult with LNI to seek assistance in filing an Affidavit "On Behalf Of" these Subcontractors. Failure to provide all required Affidavits for all Contractors who worked on the project will result in the withholding of Contract Completion, the Notice of Completion and the release of retainage or bond. PWIA will display those Contractors who have not submitted their Affidavit. If an Affidavit has not been submitted after Physical Completion, the Project Office should send an email to the Contractor through PWIA requesting the missing Affidavits.

Affidavits are required for each fabricator or supplier who was also covered by State prevailing wages, and are required for every firm that submitted an Intent.

Certified Payroll

Certified payroll must be submitted to the Project Engineer through PWIA for each Contractor, Subcontractor, and each lower tier subcontractor performing work on the project, regardless of funding source or delivery method.

Certified payrolls are required from the time each Firm begins performing Contract work until the time the Affidavit is visible in PWIA, or until the Contractor has identified their last certified payroll has been submitted. Once the Affidavit is visible in PWIA, the Affidavit has been approved by LNI. The last working day is included on the Affidavit, and the Project Office should compare this date to the last certified payroll submitted.

A tracking sheet is required to document when Project Office staff verify that certified payrolls are received through PWIA. The frequency of verification depends on the funding source of the project. Weekly verification is required for federally funded projects, while monthly verification is required for state funded contracts. The tracking sheet needs to indicate that all active Contracts have been checked for late or missing certified payrolls. PWIA will be used to track requests made for missing certified payrolls. Project Office staff must ensure payrolls are not printed and stored on computers or as paper copies due to privacy laws. A separate tracking sheet may be used to track which certified payrolls have been verified for each project.

State funded projects require a minimum of monthly submittals, however, each week must be reported.

State funded Contracts:

- Monthly submittals
- Affirmation Statement is electronically signed by the Contractor
- LNI will verify wage rate based on the prevailed wage at time of bid opening for bid build (at award time for design build), however, will allow the Contractor to enter a rate lower than the minimum
- Required for every week, including weeks that no work was performed

Federally funded projects require weekly submittals. Further review of the payroll will be required to ensure the Federal prevailed wage rate is met using the Wage Determination included in the Contract Special Provisions.

Federally funded Contracts:

- Weekly submittals
- No leniency on late submittals
- Statement of Compliance meeting CFR requirement is electronically signed by the Contractor
- System will redact employee addresses and display the last four digits of the employees SSN
- Wages must be verified using the Wage Determination included in the Contract Provisions (PWIA will not verify)
- Required for every week, whether work was performed or not
- Enforcement of all Federal requirements will remain WSDOT responsibility

Certified Payroll Inspection – Federal Funded Projects

The FHWA-1273 requires the Contractor, Subcontractors, agents or lower-tier subcontractors to submit certified payrolls for each week in which any Contract work is performed on the project for projects funded with any amount of federal dollars. These payrolls are to be checked by the Project Engineer to ensure that the required information has been included, is correct, and employees have been paid correctly. The Project Engineer should accomplish this by making a complete check of the first payroll submitted on the project by each Contractor, Subcontractor, and lower-tier subcontractors. Once satisfied the first payrolls are correctly prepared, subsequent payrolls may be accepted by a random spot checking of approximately 10 percent of the payrolls submitted.

If errors are found during any spot-checking of the payrolls, a more complete or thorough check should occur until the Project Engineer is satisfied that the Contractor is in compliance. Monitoring can then be returned to approximately 10 percent of certified payrolls submitted. The FHWA-1273 identifies the required items to be included in certified payrolls.

The first complete check of payroll submitted should confirm that the following items are present:

- The Contract number, title, and payroll period
- The name of the employer, identifying the Contractor, Subcontractor, or lower-tier subcontractor, must be shown.

- A specific minimum wage rate is to be identified for each worker. The *Standard Specifications* require the Contractor to use work descriptions for the labor classifications that are included in the Contract Provisions identifying federal wage rates, and are to be used on all payrolls. *Standard Specifications* Section 1-07.9 permits the Contractor to use an alternative method to identify or correlate the labor descriptions used, if approved by the Project Engineer, in order that they may be compared to the Contract Provisions.
- Each employee's unique identification number (i.e., last four digits of the employee's Social Security Number). The payroll shall not include the full Social Security Number or home address of the employee; however, the Contractor or Subcontractor shall maintain this information on file and provide this information upon request by the Agency.
- Payroll deductions must conform to Section IV of the FHWA-1273. If payroll deductions are questionable, contact the State Construction Office for assistance.
- Every laborer or mechanic working on the Contract must be classified for the proper minimum prevailing wage in accordance with the designated Wage Determination. If a classification of worker is used that does not appear in the Contract Special Provisions, *Standard Specifications* Section 1-07.9 requires the Contractor to contact the USDOL (through the Project Engineer) for a determination of the proper wage rate. The FHWA-1273 provides a method for resolving this.
- Each payroll submitted shall be accompanied by a Statement of Compliance, signed electronically by the Contractor or Subcontractor or their agent who pays or supervises the payment of the persons employed under the Contract, certifying the requirements listed in item (2), under part 3 of the FHWA-1273.

It is the Contractors responsibility to ensure all Subcontractors and lower-tier subcontractors complete and submit their certified payrolls to the Project Engineer using PWIA. Any payrolls which do not comply fully with the requirements outlined above must be corrected by a supplemental payroll. This is done by amending the original payroll through PWIA.

Federally funded projects require weekly submittal of certified payrolls. If the Contractor is unable to submit their payroll electronically using PWIA, they must submit the certified payrolls directly to the Project Office. When accepting these payrolls, the Project Office should request the Contractor use a unique employee identification number that is not the last four digits of the SSN. In addition, the Contractor must still submit the certified payrolls to PWIA to remain compliant with State law.

Non-compliance or non-submittal could result in the Project Engineer withholding an appropriate portion of payment (see Section SS 1-09.9).

Other Requirements

- A Contractor or Subcontractor may enter into an agreement with his or her employees to work 10 hours per day without having to pay overtime. This is provided that no employee works more than 4 calendar days a week. The 4-10 agreement must be uploaded into PWIA and will be verified by LNI When working on Force Account copies of the 4-10 agreements will need to be verified by the Project Office if working 10 hour days to ensure proper payment. This can be done by either sending the agreements directly to the Project Office or uploading them in the FILES tab in PWIA.

- LNI has also defined "Contractor" to include some fabricators or manufacturers who produce nonstandard items specifically for use on the public works project. Additionally, some companies who may contract with the Contractor, Subcontractors, or lower-tier subcontractors for the production and/or delivery of gravel, concrete, asphalt, or similar materials may perform activities that cause employees of these firms to be covered by State prevailing wage laws.
- Specific circumstances that may cause employees of these firms to be covered by State prevailing wage laws are described in LNI publications. These publications are included in the Provisions of each Contract adjacent to the State Prevailing Wage listings. Where these firms are covered by State prevailing wage laws, an approved Intent and Affidavit must be submitted to the Project Engineer into PWIA.
- If a lower tier subcontractor submits an Intent through PWIA, the Hiring Contractor must also submit an Intent. This is monitored through PWIA. If the Hiring Contractor does not submit an Intent, the lower tier subcontractor will appear as an "orphan" Contractor in PWIA.

PWIA will verify that certified payrolls meet or exceed the State prevailed wage rate, however, it is the Project Office's responsibility to verify the Federal prevailed wage rate has been met. The higher of the two rates (State prevailed wage and Federal prevailed wage) takes precedent.

References, but not limited to:

- Required Contract Provisions FHWA-1273
- RCW 39.04
- RCW 39.12
- U.S. Department of Labor Davis-Bacon Resource Book 11/2002
- Davis-Bacon Manual on Labor Standards for Federal and Federally Assisted Construction, Copyright © August 1993 by The Associated General Contractors of America

SS 1-07.11 Requirements for Nondiscrimination

SS 1-07.11(1) General Application

DBE, MSVWBE, and Training

Every Contract administered is funded either with State, Federal funds, or a combination of both. As a result, individual Contracts may have different guiding requirements depending on what laws were in place at the time the Contract was executed and how the Contract is funded. The Special Provisions, *Standard Specifications*, and Amendments specify the specific requirements for each Contract.

SS 1-07.11(2) Contractual Requirements

The type of funding used for each Contract will determine whether mandatory or voluntary goals are included. Contracts funded with only State funds have voluntary MSVWBE goals. Contracts over $100,000 with any amount of Federal funding may include DBE mandatory Contract goals, of not less than two percent as part of a Condition of Award (COA), or a mandatory Federal Small Business Enterprise (FSBE) goal if no COA is established. FSBE goals are not a Condition of Award.

All payments made towards MSVWBE and DBE Subcontractors shall be reported by the Contractor using the application available at: https://wsdot.diversitycompliance.com. Payments made to MSVWBE and DBE Subcontractors will only be counted towards Contract goals if the noted Subcontractor is determined to be performing a Commercially Useful Function (CUF) and a type of Work for which they are certified through Washington State Office of Minority and Women's Business Enterprises (OMWBE).

The Department includes MSVWBE, DBE or FSBE goals to promote diversity in support of inclusion in each Contract, therefore, it is important that the Project Office diligently tracks and monitors the accomplishments of all programs. The State MSVWBE and Federal DBE program contribute to the Agency's inclusion goal as specified in the strategic plan. Contractors are encouraged to achieve voluntary goals and required to meet mandatory Contract goals. The Office of Equity and Civil Rights (OECR) and the Region OECR Compliance Specialist should be contacted for Program questions and the State Construction Office should be consulted for Contract administration matters.

Minority, Small, Veteran and Women Owned Business Enterprise (MSVWBE) - State Funded Only Contracts

MBE, SBE, VOB or WBE are the designations for holding State certification as a minority, small, veteran or women owned business enterprise. OMWBE certifies businesses as either a minority owned business (MBE), a women owned business (WBE), or a combination of both minority and women owned business (M/WBE). The Department of Veteran Affairs certifies a business as a veteran owned business (VOB), and small businesses (SBE) are registered in Washington's Electronic Business Solution (WEBS). Contracts funded only with State funds require the Contractor submit an MSVWBE Participation Plan, except for those Contracts with an estimated value of $250,000 or less. WSDOT provides guidelines for creating a MSVWBE Participation Plan which is available at: MSVWBE Participation Plan Drafting Guidelines

When the Project Office receives the Contractor's MSVWBE Participation Plan, it will be reviewed for completeness. Incomplete plans will be returned for correction and resubmittal. The Project Office will transmit reviewed plans to their Region OECR Compliance Specialist who will review and either accept the plan as submitted, with or without comments, or return the plan if incomplete or inadequate.

Disadvantaged Business Enterprise (DBE) - Federally Funded Contracts

As a condition of receiving Federal funding, WSDOT has given assurance to FHWA that it will comply with Title 49 CFR Part 26. For Contracts under the authority of the Regions and State Construction Office, all contractual matters relating to the DBE program will be elevated through OECR. The OECR DBE Liaison Officer (DBELO) has the authority for the following:

- Regular Dealer determination
- Pre Award and Post Execution Contract specific approval
- Review and Approval of Pre Award, End of Contract and Termination/Substitution Good Faith Efforts (GFE)
- Pre Award clearing of DBE commitments
- Approval of changes to COA DBE commitments
- Commercially Useful Function reviews
- Applicable Sanctions
- Joint Check Agreements

Any contractual DBE issues, including those listed above must be elevated through the State Construction Office, who will seek the approval of OECR, including concurrence from the DBELO.

OMWBE certifies DBEs and maintains the certified DBE directory. Each DBE is certified in a North American Industry Classification System (NAICS) code that most closely represents the type of work that the DBE is said to perform. It should be noted that the NAICS code doesn't always represent the specific types of work in which the DBE owner has the ability to control, thus, the need for a more specific breakdown, as shown in the Description of Work section of the DBE's profile (in the DBE Directory). The NAICS codes listed on the certification directory are primarily used to determine whether the firm meets the size standards for a small business and may also aid in evaluating the degree of control exercised by the owners of the DBE firm.

Payments made to DBE Subcontractors will be counted toward DBE participation goals if the Subcontractor is determined to be performing a commercially useful function for Work in which they are certified to perform (per the Description of Work section as shown in their profile in the DBE Directory). COA DBE participation will only be counted towards Contract specific and Department goals if the DBE firm being listed as a Condition of Award and is certified in the type of work involved prior to the due date for bids on a prime Contract. Payments reported to non COA DBE firms for certified Work will count toward the Department goal as race neutral participation. In situations where subcontract opportunities arise subsequent to execution of a prime Contract, a DBE must be certified prior to execution of the subcontract in order to count as DBE participation.

Federal Small Business Enterprise (FSBE) - Federally Funded Contracts

The Federal Small Business Enterprise (FSBE) program is an added element of the DBE program, requiring the same level of monitoring, reporting, and verification. FSBE goals are mandatory and assigned as a percentage of the final Contract amount, but are not a Condition of Award. It is important to remember that if the Contract increases in dollar value, the amount required to fulfill the FSBE goal will increase concurrently.

The FSBE goals are not attached to specific Subcontractors at the time of award, and can be met through utilization of any firm designated as a DBE, UDBE or SBE in the OMWBE certified directory.

Good Faith Effort documentation meeting the requirements of the Contract will be required if the FSBE goal is not met. If at any time during the Contract it appears that the FSBE goal will not be met, work with the ASCE and Region OECR Compliance Specialist to determine appropriate actions.

For purposes of tracking and reporting, a Federal Small Business will be designated as FSBE (Federal Small Business Enterprise) on the Request to Sublet and in CCIS.

Disadvantaged Business Enterprise (DBE) Condition of Award Participation – Federally Funded Contracts

When a COA goal is specified, the Contractor shall be held to its DBE Contract commitments, unless otherwise established through a Change Order. The Contractor shall submit the DBE Utilization Certification Form (DOT Form 272-056U) with the Bid. The DBE Utilization Certification Form identifies the Contractors' monetary commitment amount and the general scope of certified work the DBE is to perform.

Once the Bid is submitted, the Bidder has 48 hours to submit the following documents:

- DBE Written Confirmation Document (DOT Form 422-031U)
- DBE Trucking Credit Form (if required) (DOT Form 272-058)
- DBE Bid Item Breakdown (DOT Form 272-054)
- Good Faith Effort Documentation (required if the bidder did not certify adequate participation to meet the goal)

The DBE Bid Item Breakdown is the initial submittal for the Contractor's DBE Utilization Plan and is used to identify the bid items and dollar amounts specific to the scope of certified work being committed to the DBE. The information is verified and entered into CCIS by HQ OECR.

Subcontracts – Applies to DBE and FSBE

Prior to a DBE or FSBE performing Work on the Contract, the Contractor is required to submit a copy of the executed subcontract between the firm and the Contractor that hired them to the appropriate email address identified in the Contract. The Region OECR Compliance Specialist will review submitted subcontracts and if no comments for noncompliance are issued, no further action is required by the Project Office.

If the Region OECR Compliance Specialist contacts the Project Engineer due to non-submittal or noncompliance of subcontracts, language will be provided by the Region OECR Compliance Specialist to be used to inform the Contractor of non-compliance or non-submittal.

Trucking – Applies to DBE and FSBE

Each trucking firm performing only trucking or hauling Work, certified as DBE or FSBE must submit a Primary Truck Unit Listing Log, including all applicable rental/lease agreements. The form will identify all trucks that will be used on the Project by the trucking firm, and must be designated as Primary.

If additional trucks will be added to the Primary Truck Unit Listing Log, a new form will be required and identified as the Updated Primary.

The same form will also be utilized as a daily trucking report, required to be submitted for each day the trucking firm is on-site, listing not only the truck information but also the driver name(s) and hours worked, and marked as the Daily.

- **Primary Truck Unit Listing Log – DOT Form 350-077**
  - Initial Submittal due prior to trucking firm performing work
  - Updated and resubmitted as necessary (identified as Updated Primary)
  - Drivers names and hours worked are not required
  - Lease/rental agreements must be attached
  - Submitted to the Project Engineer
  - Project Office uploads into DMCS
  - Requires field verification with the CUF On-Site Review

Forms received with incomplete or missing supporting documentation must be returned to the Contractor for correction.

- **Daily Truck Unit Listing Log**
  - Daily reporting
  - Weekly submittal
  - Driver names and hours are required to be reported
  - Submitted to OECR Region mailbox
  - Region OECR Compliance Specialist verifies a minimum of 10% of the Daily Truck Unit Listing Logs
  - Region OECRCompliance Specialist uploads into DMCS

If the Region OECR Compliance Specialist contacts the Project Engineer due to forms received with incomplete or missing information, language will be provided by the Region OECR Compliance Specialist to inform the Contractor of non-compliance.

Primary – Prior to any trucking services being performed on the Contract, a Primary Truck Unit Listing Log must be submitted. The Project Office will review and upload the Primary Truck Unit Listing Log to DMCS. When reviewing the Primary DBE Truck Unit Listing Log verify:

- The trucking firm has signed each lease agreement
- The truck lease agreement is with DBE or FSBE trucking firms or commercial truck leasing companies
- The license plate numbers on each lease agreement match the Primary Truck Unit Listing Log
- The lease agreements are reasonable to perform the work

Updates to the Primary Truck Unit Listing Log must be resubmitted within 10 calendar days of the change. The Project Engineer will upload any Updated Primary Truck Unit Listing Logs into DMCS.

Daily –By the Friday of the week after Work was performed by the trucking firm, the Daily Truck Unit Listing Log is required to be submitted to the Region OECR mailbox. After the initial submittal, the Daily Truck Unit Listing Log will be required to be submitted on a weekly basis.

The Daily Truck Unit Listing Log will include the same list of trucks that was included on the Primary Truck Unit Listing Log, and will also include each driver's name and the hours worked for the specified day. In addition to CUF review(s), the Region OECR Compliance Specialist will verify a minimum of 10% of certified payrolls (listed truck drivers) against the daily logs throughout the life of the trucking firm's work on the project. The verification may require the use of supporting documentation such as:

- Inspector Daily Reports
- Delivery Tickets and Field Note Records– can be requested from the Project Office
- Dispatch Tickets – can be requested from the Contractor

If the Region OECR Compliance Specialist notices discrepancies during their review, the Project Engineer will be notified immediately. Additional field verification using the accepted Primary Truck Unit Listing Log may be required by the Project Inspector.

Field verification is required to ensure that trucks used on the Contract by the trucking firms are listed on the accepted Primary Truck Unit Listing Log. Verification records will be retained in the Contract files with the Project Offices' copy of the trucking firm's CUF On-Site Review, and it is recommended that the two activities occur at the same time. Use the accepted and most current Truck Unit Listing Log as the verification record.

If during the verification process a truck is found to be on-site that is not on the accepted Truck Unit Listing Log, the Project Engineer will immediately notify the Contractor of the following in writing:

- A trucking firm used trucks that were not included on the accepted Truck Unit Listing Log, therefore, cannot be counted as participation towards the commitment
- An Updated Primary Truck Unit Listing Log is required to be sent to the Project Engineer for acceptance within 10 days of when the truck started the work, in order to count its participation

Upon accepting the Updated Primary Truck Unit Listing Log, the Project Engineer will perform a field verification. A new on-site review is not required for every Truck Unit Listing Log verification. If the Contractor fails to provide an acceptable list within 10 days of the truck performing any work, contact the Region OECRCompliance Specialist for guidance, as the Contractor is at risk of a potential CUF infraction. Trucks not listed on the approved list cannot be counted towards the Contract goal, but are allowed to work on-site.

If the Project Inspector witnesses new trucks onsite at any time during the project, additional field verifications of the trucking inventory are required.

Changes to the Condition of Award (COA)

Any change to reduce the COA DBEs scope or commitment amount will be processed as a Change Order, requiring State Construction Office and HQ OECR approval, to terminate COA work and a substitution is required to fulfill the COA commitment amount. If approval is not granted prior to any termination and substitution, the Contractor will not be entitled to any payment for COA work not performed by the existing DBE. Substitution of a COA DBE cannot occur without termination. The Project Engineer will discuss the Contractor's plan for substitution as part of the termination approval process.

Exceptions to the substitution requirement may be allowed in the following circumstances:

- WSDOT deletes the COA firm's intended work or,
- The work has progressed to the point where no other work remains to be acceptable subcontracted. The occurrence of this circumstance should be minimized through timely notification by the contractor to WSDOT of termination requests.

The State Construction Office will approve any substitution with concurrence from the Office of Equal Opportunity.

Condition of Award (COA) Change Orders

Changes to COA DBE Subcontractors' scope or commitment amounts must be made through a Change Order executed by the State Construction Office. Approval is granted by the assigned ASCE, with the concurrence of OECR This approval must be obtained and documented prior to the changed work, and any related work, being performed. Types of COA Change Orders may include:

- **Substitution** – Contractor requests to terminate a COA DBE Subcontractor in whole or part for good cause and substitute with another COA DBE Subcontractor. The COA Change Order will include a DBE termination for the DBE Subcontractor being replaced and assigning an equal or greater amount of COA work to another DBE Subcontractor.
- **Using COA DBE for Type of Work Not Listed** – Contractor requests to use COA DBE Subcontractor for a type of work that is not listed on the DBE Utilization Certification. In order to be counted toward the COA Goal amount, a COA Change Order must add this work to the COA items for the COA DBE Subcontractor. The COA DBE Subcontractor must be OMWBE certified to perform this type of work prior to execution of its original Subcontract on the Contract.
- **Change Due to Contractor Initiated Change** – Contractor proposes a change that deletes or reduces work to be performed by a COA DBE Subcontractor. This is a termination, and therefore must follow the requirements associated with terminating a DBE. The Contractor shall find substitute work to replace this COA work. If the Contractor cannot guarantee COA DBE participation the requested change order cannot be approved.
- **Change Due to Owner Initiated Change** – Owner initiates a change that deletes or reduces COA DBE work. This could have the same effect as termination, therefore, the ASCE should negotiate inclusion of additional COA DBE work (may include paying a premium) or require a GFE to be included in the change order.

The amounts shown in the COA Change Order should meet or exceed the credit necessary to accomplish the original Contract DBE commitment amount. The Request for Approval, Change Order and Change Order Package will contain the following information:

- An explanation of why the change is necessary
- Identification of all deleted work and all added work
- Revised subtotals for all affected COA DBE firms. The change order only needs to address each affected DBE firm, not all COA DBE firms.
- Revised total attainment for DBE participation.

When submitting the Change Order to the Contractor for signature, the Project Engineer will send copies to the affected DBE firms as notification of the change and will advise the Contractor that this has been done.

Termination of DBE Subcontracts

Prior to requesting termination of a DBE Subcontractor, the Contractor shall submit, in writing, a letter to both the DBE Subcontractor and Project Office explaining the reason for termination. The DBE Subcontractor has five days to respond to the letter, either in support or objection to the termination. The Contractor must have good cause to terminate, as specified in the General Special Provision. The Project Office will work with the ASCE and HQ OECR for approval of the termination.

If termination of the DBE Subcontractor is approved, the Contractor shall substitute for the DBE with another DBE Subcontractor in an amount equal to the value remaining from the previous DBE's work. A revised Utilization Plan to achieve the UDBE commitment amount shall be submitted to the Project Engineer within two days of the approval of termination or the Contract may be suspended until the plan is submitted.

Commercially Useful Function On-Site Reviews

The Project Engineer will assist WSDOT OECR in performing CUF On-Site Reviews on each MSVWBE, and DBE Contractor, Subcontractor, Regular Dealer (Federal funds only), Supplier or Manufacturer performing work or supplying materials. The reviews are required whether the Contract is established with voluntary or mandatory goals, and regardless of COAs.

Contracts funded with only State funds will use the following forms, as applicable:

- DOT Form 226-013, *MSVWBE On-Site Review for Construction Subcontractors/Supplier/Manufacturers*
- DOT Form 226-014, *Project Office On-Site Review for Architect & Engineering and Professional Services Firms*

Contracts funded with Federal funds will use the following forms, as applicable:

- DOT Form 272-052, *Commercially Useful Function On-Site Review for Construction Contractors/Subcontractors*
- DOT Form 272-064, *Commercially Useful Function On-Site Review for Regular Dealer/Manufacturers*
- DOT Form 272-051, *On-Site Review Form/Commercially Useful Function Architect & Engineering/Professional Services Firms*

While it is the responsibility of the Project Inspector to complete the entire MSVWBE On-Site Review Forms, the Commercially Useful Function On-Site Review forms for Federally Funded projects are to be completed by three separate entities: the Project Inspector, the Office Engineer, and the Region OECR Compliance Specialist. Once the On-Site Reviews are completed within the Project Office, enter the following information into CCIS:

- The date the review was completed by the Project Office Staff
- The name(s) of the individuals conducting the review

The CUF On-Site Review form is sent to the Region OECR Compliance Specialist for completion with a copy of the Inspectors' Daily Report (IDR). The Project Inspector should attach a copy of the CUF On-Site Review form to their IDR. Photographs capturing the work, equipment, and materials used should be attached to the CUF On-Site Review and the IDR.

If a Regular Dealer is utilized, the Region OECR Compliance Specialist will notify the Project Office. Coordination between the Project Office and the Region OECR Compliance Specialist may be necessary to conduct the CUF On-Site Review for Regular Dealers, due to their rarity and typical short duration on the project site.

All CUF On-Site Reviews will be conducted at the peak of the firms' on-site work and whenever a firm begins performing work under a different scope of work or Contract. An additional CUF On-Site Review will be completed each calendar year for multi-year Contracts.

A CUF On-Site Review is a "snapshot in time" and should record the personal observations, personnel interviews, and results of documentation reviews. It is the Project Inspectors' responsibility to work with Contractor personnel to gather and report accurate data. If the interviewee is unsure of a question, this should be reflected in the answer. Instructions and clarifying statements are included in each of the forms. Once the review is complete and the date and initials of the interviewer have been entered into CCIS, the

Project Office will send the original review to the Region OECR Compliance Specialist within 10 calendar days.

An accurate and thorough CUF On-Site Review is critical, as the review is used to help determine participation credit to both the Contract and Department goals, as well as prevent fraud. If the Project Inspector or Office Engineer are unclear of a question, they are encouraged to inquire to either their Project Engineer or their Region OECR Compliance Specialist for further clarification.

As previously mentioned, the CUF On-Site Review assists when determining participation, but if at any time the Project Inspector witnesses activities that could result in non-participation, notify the Project Engineer immediately.

Any issues regarding DBE compliance should be brought to the attention of the assigned ASCE, who will then coordinate with OECR to take appropriate actions.

On rare occasions, OECR may elect to perform a more in-depth investigation after the CUF On-Site Review is complete. OECR will contact the Project Office directly to inform them of the investigation, however, no further action will be needed by the Project Office.

Note:

- Practices that violate CUF criterion may not be excused by forfeiting credit for that portion of the work. Violation may result in none of a MSVWBE or DBE's work being eligible for credit and will not count towards DBE goals.
- After the MSVWBE or DBE firm has met their obligation under their subcontract and total commitment, the Contractor may utilize the firm for additional work.

Brokering, Flagging, and Traffic Control Services

The CUF for traffic control work is specific to the type of work and credit allowed under the terms of the Contract. The following is guidance specific to brokering, flagging and traffic control services.

Brokering

A business firm that provides a bona fide service, such as professional, technical, consultant or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials, or supplies required for the performance of the Contract; or, persons/companies who arrange or expedite transactions.

MSVWBE Participation Credit (State Funding)

When a MSVWBE participates as a broker, only the dollar value of the fee or commission charged, or 20 percent of the total dollar value of expenditures by the MSVWBE (whichever is greater) counts toward the MSVWBE Voluntary Goal if the firm performs a CUF.

DBE Participation Credit (Federal Funding)

When a DBE participates as a broker, credit may be allowed for the reasonable fees or commission charged by a DBE broker or a DBE behaving in the manner of a broker. To be considered reasonable, the fee must not be excessive as compared with fees customarily paid for similar services, and shall not exceed 5 percent of the value of the goods or services. If Brokering is identified as part of the commitment amount, the DBE Utilization Certification form (DOT Form 272-056U) is required.

The cost of materials and supplies provided by the prime Contractor cannot count towards any portion of the DBE goal, unless the prime Contractor is certified as DBE.

Flagging

When MSVWBE or DBE traffic control companies are listed in the MSVWBE Participation Plan or DBE Utilization Certification as providing "Flagging":

- The MSVWBE or DBE shall be in control of its work inclusive of supervision
- The Traffic Control Supervisor (TCS) shall be employed by the MSVWBE or DBE firm and be responsible for managing and supervising the flagging operation and perform all duties required in *Standard Specification* 1-10.2(1)B
- All Flaggers shall be employed by the MSVWBE or DBE firm
- The MSVWBE or DBE firm shall provide all flagging equipment

Credit: when providing both flaggers and TCS, the value of the labor is eligible to be credited toward the goal.

If the DBE is acting as a broker, only their fee for service would be eligible towards the DBE goal.

Traffic Control Services

When MSVWBE or DBE traffic control companies provides "Traffic Control Services" as designated in the MSVWBE Participation Plan or DBE Utilization Certification:

- The MSVWBE or DBE shall be in control of its work inclusive of supervision
- The Traffic Control Supervisor (TCS) shall be employed by the MSVWBE or DBE firm and be responsible for managing and supervising the flagging operation and perform all duties required in *Standard Specification* 1-10.2(1)B
- The MSVWBE or DBE firm shall provide all traffic control items to perform the work under their subcontract
- The MSVWBE or DBE traffic control company shall not lease or use equipment supplied by the prime Contractor

The State Construction Office should be consulted if questions arise about required equipment.

Joint Checks

Prior to the use of a joint check by a MSVWBE or DBE, for the purchase of materials or supplies required for the project, the MSVWBE or DBE shall submit the DBE Joint Check Request Form (WSDOT Form 272-053) accompanied by a copy of the Joint Check Agreement between the parties to the Project Office. The Project Office will forward these documents to the Region OECR Compliance Specialist for review. If the Project Office and Region OECR Compliance Specialist are satisfied that the Joint Check request meets the requirements of the Contract, the documents will be forwarded to the ASCE for approval and concurrence from OECR.

Note: Joint checks for anything other than materials and/or supplies will not be accepted. The Joint Check Agreement must be specific to the current project, and include, among other things, a detailed description of the materials/supplies covered by the Agreement.

Escalation and Enforcement

The Department's MSVWBE and DBE programs are managed by OECR. For day-to-day issues, the Project Engineer should communicate with the Region OECR Compliance Specialist and their assigned ASCE. Any questions received from the Contractor or Subcontractor about MSVWBE or DBE Provisions or enforcement should be answered only with full knowledge and at the direction of the State Construction Office and HQ OECR.

Project Inspectors working with MSVWBE or DBE Contractors must notify the Project Engineer immediately if violation of CUF or other unfavorable practices are suspected. Once the Project Engineer is aware of the situation, it is their responsibility to escalate the problem as outlined:

Upon confirmation of any infractions found by the Region OECR Compliance Specialist, the Project Engineer will issue a Notice of Non-Compliance letter to the Contractor. The Contractor will have 14 calendars days from receipt of the letter to respond with a corrective action plan. The letter must contain a detailed list of the infractions that occurred and a list of all applicable sanctions if the Contractor remains non-compliant or non-responsive. The Region OECR Compliance Specialist will be available to assist the Project Engineer with the Notice of Non-Compliance Letter.

If it is determined the Contractor remains non-compliant, sanctions may be applied in accordance with *Standard Specification* 1-07.11(5).

On-the-Job Training (OJT) – Federally Funded Contracts

The Federal government requires Contracting Agencies to include these Training Provisions as a condition attached to the receipt of Federal Highway Funding. The training and upgrading of minorities and women is a primary objective of this Training Special Provision.

The amount of training hours are determined by HQ OECR. The requirements for trainee, training plan approval, and trainee payment are all specified in the Contract Special Provisions. On Design-Build Contracts, the Contractor does not submit a monthly invoice for payment. Refer to the Request for Proposal (RFP) for training requirements. The Contract Provisions allow the Contractor to accomplish required training hours as part of their work activities, or through the activities of their Subcontractors or lower-tier Subcontractors. However, the Contractor is designated as being solely responsible for the completion of the training requirements.

Payment for Training

The Contractor shall submit a certified invoice requesting payment for training. The invoice shall provide the following information for each trainee:

- The related weekly payroll number
- Name of trainee
- Total hours trained under the program
- Previously paid hours under the Contract
- Hours due for current estimate
- Dollar amount due for current updated estimate

Retroactive payment may be allowed provided:

- The Training Program was approved prior to the trainee beginning work on the project
- There are no outstanding issues or circumstances that would have prevented approval of the trainee

Increases in training hours are allowable and may be approved on a case by case basis by the Project Engineer in consultation with the Regional EEO Officer.

On-the-Job-Training Required Reports

- **DOT Form 272-049, *Training Program***

  This report shall be submitted to the Project Engineer for approval prior to commencing Contract work. The Project Office has the authority to approve Apprenticeship, Training, Employer and Labor Services (ATELS) or State Apprentice and Training Council (SATC) programs provided they meet the requirements specified in the Contract provisions. The Region OECR Compliance Specialist will review any non-ATELS/SATC training plans submitted under Section III of the form for compliance and submit the plan to HQ OECR for concurrence and submittal to FHWA for final approval.

- **DOT Form 272-050, *Apprentice/Trainee Approval Request***

  Approval of an individual trainee cannot be authorized until an approved Training Program is filed with the Region. This form shall be submitted by the Contractor for each trainee to be trained on the project. When an ATELS/SATC trainee is first enrolled, a copy of the trainee's certificate showing training registration shall accompany the Trainee Approval Request. Trainees are approved by the Project Office based on the criteria in the special provisions. If the Contractor submits a request for approval of a trainee who is neither female, nor a minority, the Contractor shall submit a GFE and the Project Office will obtain concurrence from the Regional EEO Officer and OECR prior to approval.

  The form requires the Project Office assign a Trainee Tracking Number for use when entering trainee information in CCIS. Only accept forms with a revision date 1/2022 or later.

- **DOT Form 226-012, *Trainee Interview Questionnaire***

  One trainee interview is to be conducted for each craft designated on an approved training program for Contracts which have 600 or more training hours or as designated by the Region EEO. The Region EEO shall designate additional Contracts on which trainee interviews are to be completed in conjunction with those that meet the criteria above to ensure that trainee interviews are conducted on at least one fourth of all the Contracts that have training hours established for any given construction season. The intent of these training interviews is to document that the trainees are working and receiving proper training consistent with their approved programs, that the trainee is being paid at the appropriate wage rate, and that discrimination/harassment is not occurring. Interviews are to be confidential and aside from the Contractor and Subcontractors unless the Trainee states otherwise. The individual's identity should not be disclosed to the employer without employee's written permission.

  Submit completed interviews to the Region EEO Office.

- **DOT Form 272-060, *Federal-Aid Highway Construction Annual Project Training Report***

  This report will be completed annually by the Project Engineer summarizing the training accomplished by the individual trainees during the reporting period beginning January 1 and ending December 31 of the calendar year. This report is due at the Regional EEO Office by December 20th of the same calendar year, for submission to FHWA.

Requirements for Affirmative Action to Ensure Equal Employment Opportunity

EEO (State Funded Projects)

The Contractor shall comply with the EEO requirements detailed in *Standard Specifications* Section 1-07.11. The Project Engineer should be alerted and respond to any indications or accusations of discrimination. If the Project Engineer, or any other Project Office staff, becomes aware of any indications or accusations of discrimination, they will immediately notify the Region OECR Compliance Specialist, who will in turn immediately notify OECR. OECR will handle any investigation that is warranted.

EEO (Federally Funded Projects)

WSDOT has committed to FHWA to perform comprehensive construction compliance reviews, consistent with WSDOT's approved EEO Assurances Program document, to ensure compliance with the Federal non-discrimination requirements (ref. *Standard Specifications* Section 1-07.11 and the FHWA 1273). This review is performed by OECR on a select number of FHWA Funded Contracts and may take place at any time, including after Contract Completion. These reviews do not normally involve the Project Office other than notification of their occurrence and the resulting findings, however, OECR may elect to interview Project Office staff associated with the Contract as part of their review. OECR will contact the Region OECR Compliance Specialist or Project Office to facilitate the timing of the review.

SS 1-07.11(5) Sanctions

The Project Engineer shall take steps to stop any acts that are harassing in nature as described in the *Standard Specifications* Section 1-07.11(2). These steps may include removing a Contractor's employee pending outcome of an investigation. ASCE approval is required in the case where the Project Engineer determines that the conditions warrant removal of a Contractor's employee. It is important to note that this is not a request that the employee be terminated by the Contractor, just that they are removed from this Project. The ASCE will consult with the Region OECR and investigate the conditions prior to directing the removal. Care should be taken to ensure that all parties are treated with respect and in a nondiscriminatory manner. The facts should be established and everyone should be given a chance be heard.

SS 1-07.11(10) Records and Reports

- **FHWA-1391, *Federal-Aid Highway Construction Contractors Annual EEO Report***

  FHWA Form 1391 is required from both the Contractor and each Subcontractor on Federally funded Contracts that have construction activity during the month of July. These forms shall be submitted to the Project Engineer, and are due by August 25th of each year.

A Contractor who works on more than one Federally funded Contract in July is required to file a separate report for each of those Contracts. For multi-year projects, a report is required to be submitted each year work was performed for the duration of the Contract. A responsible official of the company must sign the completed report.

Upon receipt, the Project Engineer will review, sign and date, and forward the annual report to the Region EEO Officer by September 5th. The Region EEO staff at the direction of the OECR will compile and report the information noted on the forms.

- **FHWA-1392**, ***Summary of Employment Data Report***

  WSDOT is required to submit a summary of employment data to FHWA for each Federal fiscal year. This report is prepared using the data from FHWA-1391 (project specific annual reports) that have been submitted to the Region OECR Compliance Specialist by the Project Offices. The summary is prepared by the Region OECR Compliance Specialist or other Region designee for each federally assisted project. The report also includes Local Agency Projects administered through the Region's Highways and Local Programs Offices. The completed FHWA-1392 Report, including all FHWA-1391 reports, are then submitted by the Region EEO Officer to the WSDOT Office of Equal Opportunity by September 15th each year, for formal submission to FHWA.

- **DOT Form 820-010**, ***Monthly Employment Utilization Report***

  The information required by DOT Form 820-010 may be accepted in an alternate format provided that format contains all of the data required by and is completed in accordance with the instructions for DOT Form 820-010. The Region EEO staff should be consulted regarding the acceptability of any alternate format proposed by the Contractor.

  Instructions for completing the form can be found on the back of the form itself. This monthly report is to be maintained by the Contractor in the respective prime or Subcontractor's records for a period of three years from Acceptance of the Contract, and available to WSDOT and/or Federal reviewers upon request.

- **DOT Form 272-055**, ***Final DBE Utilization Plan Report***

  The Final DBE Utilization Plan Report is required on all Contracts that include DBE requirements and must be accompanied by a report of the final amounts paid to DBE's, as verified from the final report generated through DMCS. The signed Final DBE Utilization Plan Report and the attached final amounts paid report become part of the three-year Temporary Final Records retained by the Region. The form may be signed by the Project Engineer, Region Construction Manager or the Region OECR Compliance Officer.

  The Final DBE Utilization Plan Report represents a certification that contracting records associated with DBE work have been reviewed, on-site performance has been monitored, and it has been determined that work committed to DBEs was performed by the designated DBEs. Signing this report also testifies that all DBE On-Site Reviews are complete, on file, and can be retrieved as supporting documentation for the certification. This certification is a requirement of 49 CFR Part 26.37(b).

SS 1-07.12 Federal Agency Inspection

Construction Work in International Boundary Strip

The International Boundary Commission of Washington, D.C., by treaty with Canada, has the exclusive jurisdiction of the 20-ft boundary strip, 10 ft on each side of the International Boundary. Any construction work within this strip must be with the exclusive permission of the International Boundary Commission (IBC). Boundary monuments are not to be moved or disturbed in any manner without the expressed approval of the IBC. It is expected that permission for all work within the boundary strip will be obtained from the IBC during the design stage of a project. However, it is the Project Engineer's responsibility to ascertain that permission has, in fact, been obtained from the IBC for all work performed within the boundary strip. The Region shall be immediately notified if, upon construction, it is found that permission has not been obtained to relocate boundary markers or perform construction work in the 20 ft boundary strip.

Responsibilities When Working on Tribal Lands

Indian nations have the political distinction of being sovereign. This is different from being designated as having protected group status based on racial classifications. Being sovereign, tribes have the ability to create and enforce tribal ordinances such as Tribal Employment Rights Ordinances (TERO). These are legal requirements pertaining to work within the boundaries of the reservation which are enforced by the respective tribes. When a contract includes work on a reservation, the project should include a general special provision "Indian Preference and Tribal Ordinances" that alerts the contractor to the possibility that TERO requirements may apply and provides a contact person for the tribe. The provision also reminds the contractor to bid any costs associated with TERO compliance into associated items of work. TERO requirements may take a variety of forms, some of which are listed in the noted provision. The provision also notes that complying with TERO requirements shall not be a violation of the contract equal employment opportunity requirements. The end result is that the contractor is expected to comply with TERO requirements as they would any other legal obligations. The underlying intent is to reduce Indian unemployment and most tribes are willing to work with contractors to best meet this goal. We want to avoid creating any contractual requirements that interfere with their ability to do so. Our role is to assist in communication but not become involved in determining or paying the tax.

Cargo Preference Act (CPA) 46 CFR Part 381

The Contract Provisions for federal-aid construction contracts (FHWA 1273) requires the implementation of the Cargo Preference Act (CPA) of 1954. The regulations for the Act are given in 46 CFR Part 381, and require that at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government, and are transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available. A listing of United States-flag commercial vessels is maintained by MARAD at: www.marad.dot.gov/wp-content/uploads/pdf/MAR620.US_.Flag_.Vessels.pdf

The Federal Highway Administration has stated that Part 381.7 (a)-(b), shown below, are the appropriate clauses for use in the Federal-aid highway program.

(a) Agreement Clauses. "Use of United States-flag vessels:

"(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

"(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a) (1) of this Section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

(b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees-

"(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

"(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United State of cargo described in paragraph (b) (1) of this Section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.tes, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment

The CPA requirements would be appropriate for oceanic shipments of materials or equipment that is intended for use on a specific Federal-aid project, such as a precast concrete structural members, fabricated structural steel, tunnel boring machines, or large-capacity cranes.

The CPA requirements are not applicable for goods or materials that come into inventories independent of an FHWA funded-contract. For example, the requirements would not apply to shipments of Portland cement, asphalt cement, or aggregates, as industry suppliers and contractors use these materials to replenish existing inventories. In general, most of the materials used for highway construction originate from existing inventories and are not acquired solely for a specific Federal-aid project.

A test for whether CPA requirements apply or do not apply to shipped goods or materials would be if the goods or materials are what one would consider to be common inventory supplies for highway construction contractor, then CPA would not apply. If the materials or goods are considered to be supplies one would consider to be not common supplies of a highway construction contractor then CPA would apply.

When the CPA requirements apply, the Contractor must furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United

States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo as described in 46 CFR Part 381.7 (b) (1). Copies shall be provided to the Contracting Agency (Engineer) by the Contractor (through the prime contractor in the case of subcontractor bills-of-lading), and also to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

SS 1-07.13 Contractor's Responsibility for Work

SS 1-07.13(1) General

Standard Specifications Section 1-07.13(1) specifically designates the Contractor as being solely responsible for the completed work or material until the entire improvement has been completed. All work and material, including change order work, is at the sole risk of the contractor and when damaged must be rebuilt, repaired, or restored. When these damages occur to either the permanent or temporary work, and have occurred prior to the contract Completion Date, the costs for these repairs shall be entirely at the Contractor's expense. However, the specification does provide the contractor exceptions for causes that are generally beyond the contractor's control.

While the Contractor is fully responsible for the work and materials, the Section does provide the contractor some options for relief. Relief is broken into 2 categories. The first category is relief of maintenance and protection for portions of works that have been completed. The second category is for relief of damage caused by the public when it is necessary that the public use the facility during construction. Both options for relief have specific criteria in order to exercise them. While a brief explanation of each option is provided, the Project Engineer should review the entire *Standard Specifications* Section 1-07.13 to ensure that the extent of responsibilities are understood and that any relief from responsibility is granted in accordance with those provisions.

SS 1-07.13(2) Relief of Responsibility for Completed Work

Standard Specifications Section 1-07.13(2) provides relief to the Contractor from maintaining and protecting specific portions of contract work as they are completed. The Contractor must submit a written request for relief to the Project Engineer. Before granting any relief, the Project Engineer will review the request to ensure that the items of work noted conform to the requirements and limitations outlined in *Standard Specifications* Section 1-07.13(2) and have been fully completed in all respects of the contract. The Regional Construction Manager or designee may approve these requests for relief. Relief may be granted for several specific items, for example: "Item 17, Beam Guardrail, Type I; Item 18, Beam Guardrail Anchor Type I; etc." Relief may also be granted for all work except certain items, for example: "All work except Item 38, Electrical." the approval of the Contractor's request must be in writing.

SS 1-07.13(3) Relief of Responsibility for Damage by Public Traffic

When it is necessary for public traffic to utilize a highway facility during construction, *Standard Specifications* Section 1-07.13(3) provides relief of responsibility to the Contractor for damage caused to the permanent work by the public traffic. When the conditions specified in this Section are met, the Contractor is automatically relieved of this responsibility. However, this Section may not provide relief for damage caused by vandalism or other causes. The Contractor will resume full responsibility for both temporary and permanent work if traffic is relocated to another Section of roadway.

This responsibility will again continue until contract completion unless the Section is reopened to public traffic or the Contractor is granted relief under *Standard Specifications* Section 1-07.13(2).

The first paragraph of *Standard Specifications* Section 1-07.13(3) refers to damage to "permanent work." This refers to work included in the contract that is being constructed in accordance with the requirements noted in the plans and specifications and is damaged. The intent is to exclude equipment, temporary facilities and temporary materials such as formwork and falsework and "Temporary Traffic Control Devices."

SS 1-07.13(4) Repair of Damage

Section SS 1-07.13(4) details when WSDOT assumes responsibility and pays for third party damages. The WSDOT *Enterprise Risk Management Manual* M 72-01, provides detailed guidance on procedures, including lines of communication. Payment should be made under the item "Reimbursement for Third Party Damages." This item is only intended to be used for costs that are the responsibility of the contracting agency. If this item was not included in the contract, it may be added by change order using a separate group for each Control Section (as shown in the Plans) in which an incident occurs.

Risk Management has created a form that is to be used to report each new occurrence of Third Party Damages, "DOT Form 350-013". The form is available from Forms Management. Any supporting documents should be attached to the form and submitted as well. The form should be filled out and submitted per the routing listed on the bottom of the form. This routing includes:

- **AFS –** Contract Payments
- **Enterprise Risk Management**
  - For AFS and Risk Management use thirdpartydamage@wsdot.wa.gov
- **Region Construction Office**

Region Construction may need to send to Region Program Management and to Region Financial Services if additional funds are required. If this item was not included in the contract, it may be added by change order using a new group for the Control Section (as shown in the Plans) in which an incident occurred. Once the item has been added to the contract, use DOT Form 350-013 when establishing the group for the occurrence. This group will be used for only one occurrence. A new group will be required for each new occurrence.

If the item is included in the contract and a new occurrence of Third Party Damage occurs, use DOT Form 350-013 to add a group for each new occurrence. You will need a group for each occurrence of Damage.

If additional information (responsible party, police reports, Field Notes, paynotes, etc.) becomes available after the initial report form has been submitted, you may send an updated form to the same routing. Be sure to indicate that this is a revised form by selecting the "Revised Report" radio button.

SS 1-07.14 Responsibility for Damage

Claims Against the Contractor – Damage

The Department has a claims office, now known as the WSDOT Risk Management Office (RMO). All receptionist job descriptions, all Region operations manuals, and all telephone training is set up to refer citizens with damage claims related to construction to the RMO and to provide the toll free number (1-800-737-0615). The RMO will react to the call, issuing claims forms, contacting the contractor, and following up on the actions taken. The Project Engineer's role is to appropriately advise the RMO, if needed. There may be confusion about which contract is involved. Field office knowledge about the incident and the surrounding circumstances may be solicited. The contractor's insurance and the insurance provided by the Contractor for the State may be involved and information about the policy will, most likely, be requested.

If, in spite of the Department process, the claimant contacts the field office directly, the Project Engineer should refer the claimant to the State Risk Management Office (1-800-737-0615).

Claims Against the Contractor – Money

Claims received by the Region for money owed by the Contractor should be referred to the Contractor. A claimant should be advised of the legal right to file a lien against the retained percentage or performance bond for claims involving labor, equipment, or materials used on the project and be referred to the Accounting and Financial Services Division for obtaining the necessary lien forms.

Claims Against Officials and Employees

The statutes provide that claims may be filed against the State of Washington, State officers and employees, for damages resulting from their conduct and prescribes the manner in which the action must be taken. Whenever this occurs, the state will furnish the legal defense and pay any judgments if the act which caused the alleged damage was within the scope of the person's duties, was in good faith, and without negligence.

SS 1-07.15 Temporary Water Pollution Prevention

SS 1-07.15(1) Spill Prevention, Control, and Countermeasures Plan

Spill Prevention, Control, and Countermeasures (SPCC) Plans are written by the Contractor to prevent, respond to, and report hazardous material spills in a safe and effective manner. All WSDOT projects should have a project specific SPCC Plan and the plan must be submitted to the Project Engineer prior to starting any on-site work. The plan should be reviewed by the Project Office for compliance with the WSDOT *Temporary Erosion and Sediment Control Manual* M 3109. WSDOT personnel who review SPCC Plans are required to take the Spill Plan Reviewer and Preparedness Training class available through the Learning Management System (LMS).

SPCC Plans should include information regarding the project site and contractor activities as they relate to spill prevention, control, and response activities. Additionally, SPCC Plans should identify possible sources of hazardous materials, methods to prevent and control spills, and spill response procedures. SPCC Plans are written and maintained by the Contractor and are required on all WSDOT projects, regardless of the size or duration of construction activities.

SPCC Plans are applied to the life of a construction project and may need to be amended over time with changing conditions. Periodic inspections will ensure that the required preparation and preventative steps identified in the SPCC Plan have been taken to keep the site in compliance throughout the life of the project.

The *Standard Specifications* provide the complete list of required contents for the Contractors SPCC Plan in Section 1-07.15(1).

SS 1-07.16 Protection and Restoration of Property

SS 1-07.16(1) Private/Public Property

Standard Specifications Section 1-07.16(1) restricts the contractor from using Contracting Agency owned or controlled property other than property directly affected by the contract work without the approval of the Engineer. The Engineer has the authority to allow the use of Contracting Agency owned or controlled property within the project limits and any other property specifically listed for use in the contract. The use of any other Contracting Agency owned or controlled property would require a lease agreement as detailed in WSDOT *Right of Way Manual* M 26-01 Chapter 11.

In many cases the courts have held that where the Project Engineer has exceeded their delegated authority their actions are binding upon Contracting Agency. Because of this, it is important that the Project Engineer make no instructions, verbally or by written memoranda, that are outside of their authority.

SS 1-07.16(4) Archaeological and Historical Objects

It is both National and State policy to preserve historical or prehistorical objects and ruins. These objects and ruins may include sites, buildings, artifacts, fossils, or other objects of antiquity that may have particular significance from a historical, cultural, or scientific standpoint.

If provisions for archaeological and historical salvage have not been made in the contract and it appears that significant historic or prehistoric objects or ruins have been or are about to be encountered, the Project Engineer should immediately take steps to preserve and protect the objects or ruins. Once the objects or ruins have been sufficiently protected, the Project Engineer should immediately notify the Region Construction Manager, who will provide any necessary initial assistance to the Project Engineer. Where the Region determines appropriate, the Project Engineer will contact and inform through existing Region Environmental staff, the Cultural Resources Consultant, the State Historic Preservation Officer (SHPO), FHWA, and affected tribes of the discovery. The Project Engineer will also help facilitate any on-site meetings for the appropriate parties should either FHWA, SHPO, or the cultural resources consultant believes it necessary.

Cultural Resource Monitoring

When cultural resource monitoring is necessary for a project, the Project Engineer will invite the Cultural Resource Specialist to the preconstruction meetings to review and explain project specific cultural monitoring requirements.

The Project Engineer will coordinate with the Contractor to ensure that notice is provided to the Region Environmental Office seven (7) calendar days prior to the beginning of any ground disturbing activities in any area designated as requiring monitoring.

The Project Engineer will coordinate with the Region Environmental Office to ensure that a monitor will be present on-site prior to the Contractor beginning any ground disturbing activities in any area designated as requiring monitoring.

On any project that has Cultural Resource Monitoring commitments, the Project Engineer will coordinate with the Region Environmental Office to ensure that a monitor is present and the appropriate notifications are made prior to the Contractor beginning any ground disturbing activities in any area designated as requiring monitoring.

Responsibilities Following Unanticipated Discovery of Cultural Resources

Given the wealth of historical and archeological resources found in Washington, the Project Engineer should be familiar with the requirements of the National Historic Preservation Act (NHPA), *Standard Specifications* Section 1-07.16(4), and any contract specifications regarding the discovery of cultural resources. The Project Engineer should discuss these requirements with the Contractor and WSDOT staff at the Pre-Construction Conference. These resources include, but are not limited to:

- Human skeletal remains
- Anthropogenic soil horizons (areas showing the influence of humans on nature), occupational surfaces (areas showing evidence of human activity or habitation), midden (refuse heap), etc.
- Areas of charcoal or charcoal-stained soil and stones.
- Stone tools or waste flakes (i.e., arrowheads or stone chips).
- Bones, burned rocks, or other food related materials in association with stone tools or flakes.
- Clusters of tin cans or bottles.
- Logging or agricultural equipment more than 50 years old.

The Project Engineer will include a project-specific unanticipated discovery plan (UDP) in the project provisions for use by the Contractor. The UDP outlines the notification process and provides guidance to the Contractor should archaeological or historic resources be encountered during project activities. The Regional or Modal Cultural Resources Specialist will assist with completing the plan. The UDP template is available at: www.wsdot.wa.gov/Environment/CulRes/Compliance.htm.

Discovery of Human Skeletal Remains

The following guidance is given to assist the Project Engineer when construction activities cause disturbance to human skeletal remains. All human skeletal remains, which may be discovered, shall at all times be treated with dignity and respect.

Should any WSDOT employee, contractor, or subcontractor believe that he or she has discovered human skeletal remains; the following steps shall be initiated:

1. Ensure that all work adjacent to the discovery has ceased. The area of work stoppage shall be adequate to provide for the total security and protection of the integrity of the human skeletal remains.
2. The Project Engineer shall:
    a. Notify the Region Construction Manager.

b. Immediately notify the local coroner and the local sheriff, or other appropriate law enforcement official, requesting that a person who is competent and qualified to identify human skeletal remains be present. Do not call 911 or the media.
   - No persons other than the coroner or proper law enforcement personnel, WSDOT Cultural Resources staff, SHPO (State Historical Preservation Officer), and DAHP (Department of Archeological and Historic Preservation) staff will be authorized direct access to the discovery location. This access must comply with all safety and security procedures.
   - The coroner will make a determination as to whether the human skeletal remains are forensic (evidence of a possible crime) or non-forensic (historical). If the human skeletal remains are determined to be forensic, the coroner will retain control of the human skeletal remains and the discovery site will be treated as a crime scene. If the human skeletal remains are determined to be non-forensic, the coroner will notify DAHP.
   - The DAHP state physical anthropologist will make the initial determination as to whether the human skeletal remains are of Native American ancestry. If the human skeletal remains are determined to be of Native American ancestry, DAHP will notify the affected tribe(s).

c. Notify the WSDOT Cultural Resource Manager at Environmental Services Office, who will notify:
   - FHWA Area Engineer or Environmental Program Manager.
   - State Historic Preservation Officer (SHPO).
   - WSDOT Tribal Liaison Office. The WSDOT Tribal Liaison Office will contact the affected tribe(s) and notify them of the unanticipated discovery.
   - Region Environmental Manager.

3. If the human skeletal remains are determine to be of Native American ancestry, tribal access will be allowed to the designated representative(s) of the affected tribe(s). WSDOT and FHWA will make a good faith effort to accommodate requests from affected tribe(s) to be present, prior to implementation of mitigation measures. The Project Engineer, WSDOT Cultural Resources, SHPO, and the affected tribe(s), in consultation, will determine what treatment is appropriate. If disinterment of Native American remains becomes necessary, FHWA, WSDOT, SHPO, and the affected tribe(s) will jointly determine the final custodian of the human skeletal remains for re-interment.

Discovery of Other Cultural Resources

The following guidance is given to assist the Project Engineer when construction activities cause the disturbance of cultural resources, other than human skeletal remains.

Should any WSDOT employee, contractor, or subcontractor believe that he or she has uncovered a cultural resource, at any point in the project, the following steps should be initiated:

1. Ensure that all work adjacent to the discovery has ceased.
2. Immediately notify the Project Engineer. The Project Engineer shall immediately notify:
   a. The Region Construction Manager

b. The WSDOT Cultural Resource Manager at the Environmental Services Office who will notify:
   - FHWA Area Engineer or Environmental Program Manager
   - State Historic Preservation Officer (SHPO)
   - WSDOT Tribal Liaison Office
   - Region Environmental Manager

3. Ensure that the area of work stoppage is adequate to provide total security and protection of the integrity of the resource. Vehicles, equipment and unauthorized personnel will not be permitted to traverse the site, nor will work resume, until treatment of the cultural resource is completed.
4. All archeological deposits discovered during construction are to be treated as if they are eligible for inclusion in the National Register of Historical Places (NRHP). Intentional disturbance of archeological sites without a permit from DAHP is prohibited by RCW 27.53. Disturbance of Indian burials, cairns and glyphs is prohibited by RCW 27.44.
5. If cultural resources are discovered, but additional project effects to the resource are not anticipated, project construction may resume, away from the site of the discovery, while documentation and assessment of the resource proceeds.

SS 1-07.17 Utilities and Similar Facilities

Relationship with Public and Private Utilities

In some cases, utility adjustments will be completed prior to contract work. In other cases, adjustments are to be made concurrently with the work. The Project Engineer and the Contractor should meet with the public utility companies, individuals, and others owning or maintaining utility features within the limits of the highway right of way and confirm the relationship, the terms of the relocation agreements, and the relocation work schedule. Where the feature will require adjustment during construction, notice should be provided far enough in advance to allow the utility to perform the adjustment without affecting the Contractor's work schedule.

Utilities should have been given prints of the preliminary plans, prior to awarding of the contract, showing grade lines and right of way to enable them to prepare plans and estimates for making the necessary changes to their facilities in as timely a manner as possible. The Project Engineer should determine that plans for the work have been made, that the relocated facilities will be clear of the construction, and that the utilities coordinate with the Contractor's operations to the fullest extent possible.

When utilities are known to exist within the limits of the project and are not planned for relocation but may be affected by the Contractor's construction activities, the Project Engineer and the Contractor should become familiar with the requirements of RCW 19.122, Underground Utilities. The Project Engineer may wish to obtain copies of the RCW for review at Preconstruction Meetings.

The approximate locations of most existing underground utilities are shown on the contract plans. However, the existence of some underground utilities may not have been known or detected during design. If a one number locator service is available, the Contractor must utilize it in an attempt to locate all affected utility features. If no one number locator service is available, notice shall be provided individually to those owners

of underground facilities known to have or suspected of having underground facilities within the area of proposed excavation. Even areas covered by a one number service may contain utilities not included in the service. If the Contractor discovers underground facilities which are not identified, the Contractor shall cease excavating in the vicinity of the facility and immediately notify the owner or operator of such facilities, or the one number locator service.

Work Performed Under Utility Agreements

Utility agreement work associated with a contract exists in two categories. The first is work done for a utility by WSDOT that is included in the contract and performed by the WSDOT contractor. The second is work done, either by the utility or the utility's contractor, that is associated with and done near the WSDOT project.

If the utility work is included in the contract, the plans will show the work and will include pay items exactly as if the work was part of the transportation improvement. The responsibility of the Project Engineer is to treat this work the same way that "normal" work is handled. There will be a necessity for communication with the utility itself, inviting comments and joint reviews and inspection of the work. In many cases, the utility will provide materials or equipment to be incorporated into the work. The utility will also provide certification that provided material meets the requirements of the contract. If problems arise and changes are considered, there are additional paperwork demands. The Project Engineer should consult with the Utility and the Region Utility Engineer.

If the work is associated with the project, or if unrelated work is being done nearby, and the utility or its contractor is performing the work, the Project Engineer should treat the neighboring work in the same manner that adjacent WSDOT work would be treated (see *Standard Specifications* Section 1-05.14 and Section SS 1-07.17.)

Responsibility for Coordination of Railroad Agreements

When railroads are involved within the project limits, an agreement covering the work involved is usually entered into between WSDOT and the Railroad Company. Upon identifying that the contract involves work or involvement by a railroad, the Project Engineer should immediately obtain a copy of the Railroad Agreement or contact the Region Utilities Engineer to determine the status of the agreement and to make sure it contains all elements needed to accommodate the construction of the project. If an agreement has not been made with the railroad, the Project Engineer should coordinate and monitor the development and processing of the agreement through the Region Construction and Region Utilities Engineers. Where notices are required, The Project Engineer should ensure that proper notice is provided to the railroad company and that such notice is acknowledged by them. The Project Engineer should work with the Region Construction Manager and Utilities Engineer to resolve any conflicts with the Railroad Company and prevent delays to the Contractor's operations.

Work Performed Under Railroad Agreements

Railroad work associated with a contract exists in three categories. The first is work done for a railroad by WSDOT that is included in the contract and performed by the WSDOT contractor. The second is work done, either by the railroad or the railroad's contractor, that is associated with and done near the WSDOT project. The third category is railroad protective services. Protective services, such as flagging, are typically provided by the railroad.

If the railroad work is included in the contract, the plans will show the work and will include pay items exactly as if the work was part of the transportation improvement. The responsibility of the Project Engineer is to treat this work the same way that "normal" work is handled. There will be a necessity for communication with the railroad itself, inviting comments and joint reviews and inspection of the work. In many cases, the railroad will provide materials or equipment to be incorporated into the work. The railroad will also provide certification that provided material meets the requirements of the contract. If problems arise and changes are considered, there are additional paperwork demands. The Project Engineer should consult with the Railroad Company and the Region Utility Engineer.

If the work is associated with the project, or if unrelated work is being done nearby, and the railroad or its contractor is performing the work, the Project Engineer should treat the neighboring work in the same manner that adjacent WSDOT work would be treated (see *Standard Specifications* Section 1-05.14 and Section SS 1-07.17.)

Protective services may be called for when the Contractor is performing work on railroad facilities (first category above) or when the Contractor's work is conflicting or adjacent to a railroad facility that is not being changed. Typically, the railroad will determine the need for service, provide the protective services, and send the bill to WSDOT. There may be an agreement in place, or the railroad's actions may be unilateral. On all projects including railroad flagging, the Project Engineer will notify the Railroad Company when all work involving the railroad is physically complete.

The addition or revision of agreements with the railroad can be lengthy processes. The Project Engineer should stay alert for possible changes and the need for revisions to the agreement. When these arise, the Railroad Company and the Region Utility Engineer should be contacted early and often.

Railroad Flagging

All dollar amounts actually incurred by the Railroad Company for railroad flagging, under the terms of the typical railroad agreement, will be paid by WSDOT. The Contractor will incur no costs for railroad flagging unless the flagging is for the Contractor's benefit and convenience. In this case, the Project Engineer will deduct this cost on monthly progress estimates as a below the line item in the Contract Administration and Payment System.

SS 1-07.18 Public Liability and Property Damage Insurance

Projects which include work on railroad right of way generally require special insurance protection. Pay particular attention to the Contract Special Provisions for project requirements because they vary from project to project. It is the responsibility of the Project Engineer to enforce the provisions. The required insurance documents are to be furnished by the Contractor (usually through the Project Engineer) to the Accounting and Financial Services Division who will (a) review the documents and (b) obtain approval of the insuring documents from the railroad company. Written notification of approval by the railroad company will be furnished to the Project Engineer by the Accounting and Financial Services Division as soon as approval is obtained.

No work shall be started on railroad property until the necessary approvals have been obtained. The railroad insurance must be maintained until the date of physical completion of the project unless otherwise stated. However, the Contractor may make a written request to be relieved of the responsibility to continue all or part of the railroad protective

liability insurance before the completion date under certain conditions. The details and conditions for this relief are specifically set forth in the special provisions of the contract. If the Contractor should make a request for relief, the Project Engineer should contact the Region Construction Manager and Utilities Engineer for guidance and assistance in coordinating this effort with the railroad.

SS 1-07.23 Public Convenience and Safety

SS 1-07.23(1) Construction Under Traffic

General

Under the many special conditions encountered where traffic must be moved through or around construction operations, serious problems of traffic control can occur. Most conditions are temporary and are, therefore, dangerous and difficult to deal with because they are unexpected and not in accordance with the normal pattern of highway traffic. *Standard Specifications* Section 1-07.23(1) requires the Contractor to conduct all operations with the least possible obstruction and inconvenience to the public and to provide adequate safeguards, safety devices, protective equipment, and any other needed actions to protect the life, health, safety, and property of the public. The responsibility to comply with these requirements is the Contractor's. It is the Project Engineer's responsibility to ensure that the Contractor complies.

Any deviation from these requirements shall only be allowed if the Contractor has requested the deviation in writing and the Engineer has provided written approval. The Region Traffic Office should be contacted to help evaluate the deviation and determine if the requested deviation is approvable.

Speed Reductions

If speed reductions are considered, the Project Engineer shall follow Executive Order E 1060 and the guidance found in *Traffic Manual* Appendix 5B.

Temporary Breaks in Limited Access for Construction

The Federal Highway Administration (FHWA) cannot delegate its approval authority to add access points to existing limited access controlled Interstate facilities through the WSDOT-FHWA Stewardship Agreement. The FHWA has granted approval to break limited access in order to gain access to the worksite from adjacent properties. This approval was granted through the FHWA approval of *Standard Specifications* Section 1-07.16. This approval does not extend to allowing the contractor to use this access to merge construction vehicles and equipment with public traffic in the traveled way, auxiliary lanes, or shoulders. It is therefore necessary to seek approval from the FHWA when proposing to break limited access and merge construction vehicles with public traffic in the traveled way, auxiliary lanes, or shoulders.

Standard Specifications Section 1-07.16 allows the contractor to access the worksite from adjacent properties but does not allow the contractor to merge construction vehicles or equipment (including contractor workforce vehicles of any type) from that access with public traffic. *Standard Specifications* Section 1-07.23 allows the Interstate highway system to be accessed through existing facilities or through access points allowed within the contract only. These access points allowed in the contract will either be in the form of site-specific traffic control plans or by contract provisions included in the contract documents.

If the contractor proposes to merge construction vehicles with public traffic in the traveled way, auxiliary lanes or shoulders and the contract contains the General Special Provision (GSP) that allows this access, then the contractor shall submit a site-specific plan for traffic control in accordance with the MUTCD Part VI. The Region Traffic Engineer should review this plan and it should be submitted to FHWA.

During construction on Interstate projects the Project Engineer will notify the appropriate Assistant State Construction Engineer (ASCE) who will forward the information to the FHWA Area Engineer and the WSDOT Access Manager by sending them a copy of the approved vicinity map showing the location of the access break and site-specific traffic control plan. FHWA approval of a PS&E containing this GSP constitutes approval of access from adjacent properties to the traveled way, auxiliary lanes or shoulders. Consultation with Region and Headquarters Design offices and approval by FHWA must occur prior to deciding to include this GSP in a contract on Interstate facilities.

While some contracts may not contain provisions for breaking limited access for construction and for merging of construction vehicles with mainline and/or interchange ramp traffic, the contractor may request one. If the Region agrees and the project is on limited access-controlled Interstate, the Project Engineer shall contact the appropriate ASCE who will forward the request to the FHWA Area Engineer for approval. The ASCE will cc the Access Manager when forwarding the request to FHWA. The contractor shall submit a vicinity map showing the location of the access break, a site-specific plan for traffic control in accordance with the MUTCD Part VI, and the duration for which the accesses will be in operation. On non-interstate limited access-controlled facilities, approval will be required by the Region. If approval is granted and the facility is a limited access facility, the GSP will be added to the contract by change order. On managed access roadways the Project Engineer, with Region concurrence, has approval authority to grant the contractor temporary access, in accordance with the *Standard Specifications*.

Public Information and Customer Focus

Most drivers still have the expectation of proceeding to their destination with little or no delay even though traffic conditions on many of our highways are deteriorating, primarily due to increased traffic volume. This increased volume may create congestion, delays, accidents, and aggressive driving during normal daily operation. Highway construction will usually require a more restricted roadway to accommodate work zones and can further reduce traffic mobility and safety. Even some of our lower volume rural highways can present a challenge due to factors such as drivers not expecting construction work and seasonal/recreational traffic increases. Construction and user delays present significant costs in addition to costs associated with crashes and worker safety. These delays and costs can be minimized by implementing a traffic control strategy based on traffic conditions and construction requirements, and which includes public information and customer focus considerations.

Our goal on every highway construction project should be to provide the best overall balance of work zone safety and traffic mobility while constructing quality highway projects. Much of our effort is directed at engineering responses to safety and mobility issues and is generally included in the contract requirements. Recent customer focused highway construction studies have shown that accurate and timely project information is a valuable element in an overall traffic control strategy. Advance planning and coordination between the project engineer and contractor is necessary to ensure that there is an opportunity to provide public information for all phases of the project that

impact traffic. Proper use of public information and customer focused techniques will provide safety and mobility benefits that would not otherwise be gained, as listed below:

- Alert drivers to potential delays by advance notice through project signing and the news media that would allow drivers to take alternate routes, adjust scheduled trips and have better awareness of traffic impacts and how to avoid them.
- Provide benefits to the Contractor from reduced traffic volume and better driver awareness through fewer crashes, less material delivery delay, better worker safety, fewer complaints, and overall public acceptance of the project.
- Achieve better driver acceptance, reduced aggressive driving and improved work zone credibility by minimizing delays and providing accurate and timely information.
- Consider innovative construction techniques and shorter-term intense work stages with more severe traffic restrictions, such as weekend closures, if possible.
- Closely monitor traffic conditions when traffic is restricted to determine the need for any traffic control or work hour adjustments that would improve traffic flow. Specified working hours and the accompanying traffic restrictions are critical elements of the project traffic control strategy and should not be adjusted without proper traffic analysis.
- Maintain ongoing communication during the life of the project with local law enforcement, emergency services, local agencies, transit groups, affected local businesses, etc.
- Continue use of innovative devices such as portable, changeable message signs, project information signs with information phone number and highway advisory radio systems.

The Regional Construction Manager, Traffic Engineer, and Public Information Officer should be involved in the project traffic control strategy and may be able to offer assistance.

Road/Ramp Closures and Use Restrictions

When it is necessary to close a road, street, or ramp, the Project Engineer shall submit a request that includes the appropriate closure/detour plan to the Region Traffic Engineer in advance of the need. Per RCW 47.48.010, the Regional Administrator may close a road, street, or ramp.

With proper planning and implementation, road/ramp closures can be an effective and safe method of traffic control. As required by RCW, notice of the closure shall be published in one issue of a newspaper in the area in which the closure is to take place. Signs indicating dates and times of the closure shall be placed at each end of the Section to be closed on or before publishing the notice in the newspaper. Publishing the notice and placing of the signs shall be a minimum of three days in advance of the closure. Advance notice using local radio, portable changeable message signs or HAR may be effective in diverting traffic from the closed or impacted locations.

Coordinate with the Region Public Information Officer for assistance with public notification.

In cases of emergency, or closures of 8 hours or less, the road, street, or ramp may be closed without prior notice to the public. If possible, a notice should be posted one working day in advance of the closure.

When planning to close or restrict use for more than 8 hours on one or both directions of mainline on Interstate systems, system to system ramps or Federal-aid Primary Routes, FHWA must be notified as shown in the table below. Use restrictions are defined as any limitation on the vehicle type, load or function of the facility. These notification requirements apply even to projects with onsite or offsite detours in place. Federal-aid Primary Routes are US routes 2, 12, 97, 101, 395 and State Routes 16, 18, 99, 167, 520, 522. FHWA notification shall be made to the following email address: washington.fhwa@dot.gov

WORK Activity	WSDOT Action
Interstate closures or use restrictions of 7 or more consecutive days	Send notification to FHWA 60 days in advance of potential closure and provide updates as available
Federal-aid Primary Routes closures or use restrictions of 7 or more consecutive days	Send notification to FHWA 14 days in advance and provide updates as available
Interstate closures or use restrictions between 48 hours and 7 consecutive days	Send notification to FHWA 14 days in advance and provide updates as available
Interstate closures or use restrictions between 8 hours and 48 consecutive hours	Send notification to FHWA 7 days in advance and provide updates as available

Pedestrian Safety

When the work area encroaches upon a sidewalk, crosswalk, or other areas that are near an area utilized by pedestrians or bicyclists, special consideration should be given to their accommodation and safety. Pedestrians are more susceptible to personal injury in work areas than are motorists. Visibility and recognition of hazards is an important requirement for the safety of pedestrians and bicyclists.

Protective barricades, fencing, handrails, and bridges, together with warning and guidance devices, should be used so that pathways for pedestrians, bicyclists, equestrians, and other non-motorists are safe and well defined. Where walks are closed by construction or maintenance, an alternate walkway should be provided where feasible. Where it is necessary to divert pedestrians into the parking lane of a street, barricades and delineation should be provided to separate the pedestrian walkway from the adjacent traffic lane. Pedestrians should not be diverted into a portion of the street used by vehicular traffic. At locations where adjacent alternate walkways cannot be provided, pedestrians can be diverted across the street by placing appropriate signs at the construction limits and at the nearest crosswalk or intersection. When hazardous work conditions exist overhead, it may be necessary to install a fixed pedestrian walkway of the fence or canopy type to protect and control pedestrians. In such cases, wood and chain link fencing can be used with warning lights and illumination to warn and guide both pedestrians and motorists. These accommodations for pedestrians and bicycles should be included in Traffic Control Plans.

Fences around a construction area are often necessary and may be a requirement of the local jurisdiction building code. They are often constructed in conjunction with a special pedestrian walkway or when there are deep excavations or when pedestrian access to the job site is not desirable. Installation of such fencing must consider relocation of existing control devices and facilities such as traffic signals, pedestrian signals, traffic signs, and parking meters. The use of chain link fencing which can be seen through may be needed at intersections to provide adequate sight distance.

Relocating a walkway without unreasonable inconvenience to pedestrians, residents, or commercial interest, is the safest practice of all. Remember, however, that pedestrians like to "see what's going on." Simply denying them access does not, of itself, prevent their encroachment onto the worksite. Sometimes it is advisable to design and construct a pedestrian observation area for this purpose.

SS 1-07.23(2) Construction and Maintenance of Detours

Construction zone detours will normally be detailed in the plans. When detours not shown in the plans are required, the design will likely be done by the Project Office under the direction of the Project Engineer and requirements of the MUTCD. If the detour is a full-fledged roadway, design and traffic reviewers should check the design. Short-term minor detours may be installed and operated without formal review, but the Project Engineer must be satisfied that the facility is suitable and safe for traffic use.

Existing pavement markings on asphalt pavement shall never be merely blacked out with oil or paint; this is not allowed by the MUTCD. Rather, the striped and adjacent areas should be hydroblasted, or ground in a pattern different from the original marking until the marking is no longer visible. This change in pattern minimizes the possibility that the original marking will still be visible to drivers, especially at night or in rainy weather when covered-over stripes tend to shine in contrast to the pavement. Temporary pavement marking tape, either for temporary lane marking or masking of existing markings may offer another option and approved removable tapes are listed on the Qualified Products List (QPL). Existing conflicting markings should never be allowed to remain in place. When markings remain from an alignment shift or the marking goes under a device (like barrier), the existing marking must be removed to eliminate confusion to the motorist.

Temporary concrete barrier should be part of the plan design for positive protection of the work area. Barrier is not to be used as primary delineation to guide traffic. A combination of pavement markings and temporary channelization devices are to be used along with the barrier. Temporary barrier delineators must be maintained and kept clean. When delineators become covered with grime or are damaged, they become ineffective. The condition and positioning of these devices should be checked daily.

SS 1-07.23(3) Work Zone Clear Zones

When a project requires traffic control, a Work Zone Clear Zone (WZCZ) shall be established and will apply during both working and non-working hours. During non-working hours no equipment or materials shall be within the WZCZ, unless it is protected by permanent guardrail or temporary concrete barrier (location and installation to be approved by the Project Engineer). During working hours, unless protected as stated for non-working hours, only materials or equipment absolutely necessary to construction shall be allowed in the WZCZ or allowed to park on the shoulder of the roadway.

The minimum clear zone distance, measured from the edge of traveled way, shall be based on the posted speed as follows:

Posted Speed	Distance From Traveled Way
35 mph or less	10 ft
40 mph	15 ft
45 to 50 mph	20 ft
55 to 60 mph	30 ft
65 mph or greater	35 ft

1-08 Prosecution and Progress

SS 1-08.1 Subcontracting

Requests by the Contractor to sublet Work are submitted on a Request to Sublet Work (RTS) DOT Form 421-012 for approval by the Project Engineer or designee. The request will not be approved if the Contractor is debarred from bidding on or performing work on a public works Contract (search Debarred Contractors on the Labor & Industries webpage). The request must be reviewed in order to ensure that the proposed Subcontractor meets the requirements of WAC 296.127.10.

The request must be approved prior to the performance of any work on the Contract by either the Subcontractor or a lower-tier Subcontractor. If more than one Subcontractor on a project wants to utilize the same firm as a lower-tier subcontractor, a separate RTS is required.

A copy of the Statement of Intent to Pay Prevailing Wages (SOI), approved by the Washington State Department of Labor & Industries (LNI), must be provided to the Project Engineer by the Contractor prior to payment for any work performed by that subcontractor or lower-tier sub. An SOI will be required for each subcontract, even if the subcontractor has already submitted an SOI for work under another subcontract. A SOI is required for every Subcontractor or lower-tier sub unless documentation is provided from LNI stating that their work is not covered by prevailing wage laws.

In addition, for Federal-aid projects, a Certification for Federal-Aid Projects DOT Form 420-004 must be submitted with the Request to Sublet (RTS) prior to any subcontractor or lower tier subcontractor beginning work. Non-submittal of the Certification for Federal-Aid Projects will result in rejection of the RTS.

Standard Specifications Section 1-08.1 defines what is not considered to be subcontracting. By default, any entity performing bid item work on the project is a Subcontractor, unless: (1) they are the Prime Contractor, (2) an Owner furnished resource (such as WSP, utility owner or its Contractor or consultant), or (3) they are specifically excluded from consideration as a Subcontractor in *Standard Specifications* Section 1-08.1.

Do not be confused by the distinction between Professional Services and Subcontractors in the markups for force account work described in *Standard Specifications* Section 1-09.6. Those provisions apply only to how the markup for overhead and profit is applied to force account work, and they have no relationship to the requirement for a RTS. If a Contractor is performing bid item work on the Contract, and they do not qualify for one of the two exceptions listed in *Standard Specification* 1-08.1, a RTS is required.

Standard Specifications Section 1-08.1 outlines the requirements to approve the RTS and also sets limitations on the amount of work a Subcontractor or lower-tier Subcontractor may perform. The dollar value to be used for determining the amount of work that must be performed by the Prime Contractor is the total original Contract amount less the amount of any specialty items which have been subcontracted.

In order to ensure proper tracking and reporting of sublet information, the Project Office will enter data from each RTS into CCIS. When the Project Office is in a situation where CCIS is not utilized during the administration of a project (i.e., Emergency Contracts, State Aid Contracts), and requires the “hand calculation” of the percentage of amount sublet, the percentage will be calculated for all items except specialty items, using the amount shown on the RTS or the bid amount whichever is smaller.

Every Contractor is required to report payments as described in Section 1-08.1. A Contractor withholding payment from a Subcontractor must notify the Subcontractor and the Contracting Agency identifying the reason for the withholding and providing remedy for the release of payment. If the Contractor fails to make the proper notifications, and the Project Office becomes aware of a withheld Subcontractor payment, the Project Engineer shall notify the Prime Contractor in writing. If the issue is not resolved prior to the next progress estimate, the Project Engineer will withhold same amounts that were withheld from the Subcontractor.

On Federal-aid projects, the request may indicate that the Subcontractor is a Disadvantaged Business Enterprise (DBE) or a Federal Small Business (FSBE).

When Condition of Award (COA) items are sublet, compare the RTS and the Utilization Plan with the information entered into DMCS to ensure accuracy. The RTS could include additional bid items and could have a sublet amount greater that the COA amount. The RTS cannot be approved if the sublet amount is less than the COA amounts shown in DMCS.

On projects funded wholly by the State, the request may indicate that the Subcontractor is a Minority Business Enterprise (MBE), Small Business Enterprise (SBE), Veteran Business Enterprise (VOB) or a Women Business Enterprise (WBE).

Upon receipt of the request, the Project Office should verify that the Subcontractor is certified by using the links at: https://wsdot.diversitycompliance.com.

Once the request has been verified and approved, enter the information into CCIS and verify the Subcontractor has been added to DMCS to enable tracking and reporting. DOT Form 421-012 allows the Contractor to indicate more than one type of certification for Subcontractors, however only one type may be entered into CCIS. Use the following order of precedence when determining the certification for CCIS:

Federal Funded	State Funded
DBE	MBE
FSBE	WBE
MBE	VOB
WBE	SBE
VOB	DBE
SBE	FSBE

SS 1-08.1(1) Prompt Payment, Subcontract Completion and Return of Retainage Withheld

The Project Engineer will ensure that the Contractor and all subcontractors make payment to all subcontractors of whatever tier in accordance with the requirements of RCW 39.04.250.

The Project Engineer shall also ensure that if a contractor or subcontractor withholds payment from a subcontractor they follow the procedures as described in *Standard Specifications* Section 1-08.1(1).

If the withholding is not resolved prior to the next progress estimate payment to the Contractor, the Project Engineer will withhold an amount equal to the amount withheld from the subcontractor from the next progress estimate payment to the Contractor. If the withholding is not justifiable or the Contractor fails to comply with the prompt pay requirements, the Project Engineer shall consult with the State Construction Office to determine the appropriate use of the remedies described in Section 1-08.1(1), No. 7.

Within 15 calendar days after the Prime Contractor receives their monthly progress payment, a current copy of the Monthly Retainage Report (WSDOT Form 272-065) shall be emailed by the Prime Contractor to the appropriate Region email address as listed in the General Special Provision. The Monthly Retainage Report shall be submitted each month until every subcontractor and lower tier subcontractor's retainage has been released. The form shall be made available to the Prime Contractor at the Pre-Construction Conference. No further action is needed by the Project Office, unless the Region OECR Compliance Specialist requests that the Project Engineer contacts the Prime Contractor due to non-submittal. A letter of non-compliance will be issued, and payment may be withheld in the event of habitual non-compliance.

SS 1-08.3 Progress Schedules

SS 1-08.3(1) General Requirements

The requirements for progress schedules are specified in *Standard Specifications* Section 1-08.3. A copy of the specified reference, Construction Planning and Scheduling, Second Edition, published by the Associated General Contractors of America, was sent to each Project Office and each Region Construction Office. Regions and Project Offices may order additional copies from: http://store.agc.org/ePubs/ePubs/3502EB. One of three progress schedules will be specified in the Contract. Two types of progress schedules are identified in the *Standard Specifications*, Type A and Type B. A third type may be inserted in the contract as a General Special Provision specifying a Type C Progress Schedule. The three types of progress schedules represent levels of job complexity. Type A being the simplest and easiest to produce and Type C being the most complex. Application is such that the complexity of the project (whether it be timing, coordination, or the work itself) will be reflected in the complexity of the schedule.

In addition, a preliminary schedule is required on contracts requiring Type B or C Progress Schedules. Preliminary progress schedules show the work to be accomplished within the first 60 working days. As always, the Contract Provisions may contain requirements that add to, or supersede, all or parts of *Standard Specifications* Section 1-08.3 to allow for special circumstances.

There are four basic reasons that we ask for a schedule:

- To better understand the Contractor's plan to deliver the project within the time allowed
- To plan our work force and other resource requirements
- To advise the public and executive staff of major milestones
- And to enable us to actively manage impacts to the contract

Progress schedules should have sufficient detail such that the progress of the work can be evaluated accurately at any time during the performance of the contract. The owner is obligated by contract to return the schedule for correction or approve it within 15 calendar days of receipt. Approval requires that the schedule complies not only with *Standard Specifications* Section 1-08.3 but it demonstrates compliance with other contract requirements such as interim completions, staged work, order of work, etc. Periodically, as warranted by progress, delays, or changes, the Project Engineer should review the schedule for accuracy and progress of work. If it is determined that the current schedule does not provide the required information or is no longer accurate, a schedule update may be requested from the Contractor. Monthly updates are required when Type C progress

schedules are specified, and the cost of the updates is included in the Lump Sum price of the Bid item.

The cost of Type B schedule updates is not included in the Lump Sum price of the bid item. When work is added to the project or the work method is changed at the request of the contracting agency, the respective cost to update the Type B progress schedule should be included in the change order. Type B schedule updates driven by the Contractor's actions shall be provided to the Contracting Agency and are considered incidental to other work. No payment is made for Type A Progress Schedules or Type A schedule updates. Type B and C Progress Schedules are paid as a lump sum. Eighty percent of the lump sum payment is paid upon approval of the initial schedule. The remaining portion is paid when eighty percent of the original work is completed, provided updates have been provided as requested. Weekly look-ahead schedules are considered incidental to other items of work in the contract and therefore are not paid for separately.

When the Contractor has failed to provide a required schedule, the Engineer may:

- Withhold payment for the Type B or Type C schedule if it is not received (but not for other conforming work).
- Withhold all progress payments for failure to comply with the terms of the contract as specified in *Standard Specifications* Section 1-09.9 (this should be a rare event).
- Suspend work and continue to charge each day as workable (this should only be implemented when the Agency is harmed by lack of knowledge of the contractor's intended approach to the work).

In extreme cases, the Agency may determine that the Contractor is in breach of contract according to *Standard Specifications* Section 1-08.10 (usually accompanied by other serious breaches).

When lacking a progress schedule, the Engineer must base progress on the information available and their best judgment. According to *Standard Specifications* Section 1-08.5, the Contractor may protest working day charges, but must support the protest in sufficient detail to enable the Engineer to ascertain the basis and amount of time disputed by following the protest procedures in Section 1-04.5.

Review and Approval of Progress Schedules

It is the responsibility of the Project Engineer to ensure that the Contractor submits a correct and complete progress schedule in the time specified. Progress schedules must meet the general as well as type-specific criteria. Once it is determined that the progress schedule submitted is of the type specified by the contract, the Project Engineer should evaluate the schedule to determine if it meets the requirements of *Standard Specifications* Section 1-08, the Special Provisions and the Contract.

- The progress schedule must include all activities necessary to physically complete the project. By definition, activities consume time and usually consume resources. Activities like concrete curing time and slope staking earthwork may be rolled-up into the overall duration of the activity.
- The progress schedule must show the planned order of work in logical sequence, and in compliance with any requirements of the contract. The reviewer should remember that some work is sequenced by factors inherent in the work, but the Contractor may sequence the work by their preference as long as the project is completed within the authorized time and in conformance to the contract.

- The progress schedule must show durations of work activities in working days. Except for defining nonworking days, the calendar has no relationship to administering contract time. An activity may be stalled by unsuitable weather for days or weeks and remain "on schedule."
- The progress schedule must show activities in durations that are reasonable for the intended work. Since durations of work are a function of resource allocation, the Project Engineer may be required to estimate production rates using estimating manuals, experience or other resources, or to ask the Contractor to explain their planned resource allocation to support the duration.
- The progress schedule must define activities in sufficient detail that progress of individual activities may be evaluated daily. The reviewer should keep in mind that the level of detail required in a progress schedule is driven by the amount of precision required to perform and monitor the work. For example, a single activity that represents several miles of grading may not provide adequate detail and may need to be subdivided into smaller activities described by station limits.
- The progress schedule must show the physical completion of all contract work within the authorized contract time.

WSDOT may accept a Progress Schedule indicating an early physical completion date but cannot guarantee that WSDOT's resources will be available to meet an accelerated schedule.

If the progress schedule does not provide the required information, it should be returned to the Contractor for correction and resubmittal. Because the *Standard Specifications* do not specify timelines for resubmittal, the Engineer should provide a reasonable amount of time for the Contractor to revise and resubmit the schedule, and advise the Contractor of the expected date of resubmittal.

SS 1-08.3(2) Progress Schedule Types

Type C Progress Schedule

Type C Progress Schedules are required for all projects that include the bid item for Type C Progress Schedule. The Contractor is to submit a preliminary Type C Progress Schedule to the Engineer no later than the first working day (as defined in *Standard Specifications* Section 1-08.5). The preliminary schedule must meet all requirements of a Type C Progress Schedule and of *Standard Specifications* Section 1-08.3(1) except that it may be limited to activities occurring within the first 60 working days.

The Contractor is required to submit a Type C Progress Schedule no later than 60 calendar days after the contract is executed.

Each time that a preliminary schedule, Progress Schedule, or Schedule Update is submitted, the Contractor is required to provide the Engineer with an electronic copy of that schedule, in Primavera Project Manager Enterprise Version, P6.

Type C Progress Schedules must contain all of the information required of a Type B schedule, and the following additional information:

- A timed scale logic diagram.
- Activities for traffic detours and closures.
- Milestones for required delivery of State furnished materials (if any)
- Activities for State furnished traffic control resources (if any).

- Activities for fabrication of materials with longer than 90 calendar days lead time.
- Fixed constraints shall be identified on the activity listing and be supplemented with a written narrative describing why the constraint exists.
- Milestones for interim or stage completion dates.
- Activities for scheduled outages on illumination systems, ITS systems, traffic signal systems and other electrical service outages.
- Nighttime activities shall be so coded.
- Activities for all submittals requiring State review, including the allowable review duration.

If requested by the Engineer, the Contractor shall provide a written narrative describing assumed production rates and planned resource allocation to support activity durations.

SS 1-08.3(2)A Type A Progress Schedule

Type A Progress Schedules are required for any projects that do not include the bid item for Type B Progress Schedule or Type C Progress Schedule. The Contractor is required to submit the Type A Progress Schedules to the Engineer no later than 10 days after the date the contract is executed, or some other mutually agreed upon submittal time. This may be a critical path method (CPM) schedule, a bar chart, or other standard schedule format, such as fenced bar charts, linear schedules, PERT networks and others. These scheduling methods are described in detail in the benchmark document "Construction Planning and Scheduling, Second Edition,". The Contractor is required to identify the critical path of the project, because a bar chart schedule does not rely on network calculations to determine the critical path.

The Engineer will evaluate this schedule and approve or return it for correction within 15 calendar days of receiving the submittal.

SS 1-08.3(2)B Type B Progress Schedule

Type B Progress Schedules are required for all projects containing the bid item for Type B Progress Schedule.

The Contractor is required to submit a preliminary schedule to the Engineer no later than five calendar days after the date the contract is executed. Preliminary schedules must meet all requirements of a Type B Progress Schedule except that they may be limited to activities occurring in the first 60 days of the project.

The Contractor is required to submit a copy of the Type B Progress Schedule to the Engineer no later than 30 calendar days from the date that the Contract is executed. This schedule must be a critical path method (CPM) schedule developed by the Precedence Diagramming Method and may employ restrains provided the restraints do not alter the network logic or critical path. As a minimum the Type B Progress Schedule must show:

- The Contract Number and Title
- Construction Start Date
- Critical Path
- Activity Description
- Milestone Description
- Activity Duration
- Predecessor Activities
- Successors Activities
- Early Start and Early Finish for each activity
- Late Start and Late Finish for each activity
- Total Float and Free Float for each activity
- Physical Completion Date
- Data Date

(Many of these terms are defined in "Construction Planning and Scheduling.)

The reviewer should watch for fixed date constraints that override network logic and force activities to become critical. Specific work windows or "open to traffic" milestones may legitimately influence sequence and duration of related activities. Fixed completion milestones for work that is susceptible to unsuitable weather are inappropriate because completion may be extended by the determination of unworkable days.

It is not unusual to see dual critical paths on a CPM schedule, nor is it prohibited. Multiple critical paths are generally very short in duration. Lengthy occurrences of parallel critical activities should be cause for scrutiny of activity durations and sequencing.

The Engineer will evaluate this schedule to ensure that all required information is included in the schedule, check the network calculations, and approve or return it for correction within 15 calendar days of receiving the submittal.

SS 1-08.3(2)D Weekly Look-Ahead Schedule

Weekly Look-Ahead Schedules are required for all projects. The Contractor is required to submit a Weekly Look-Ahead Schedule, for each week that work is to be performed on the project, showing Contractor and all subcontractor activities for the next two weeks. The Weekly Look-Ahead Schedule must show:

- Description of the work.
- Duration of the work.
- Sequence of the work.
- Planned hours of work.

The specification requires that Look-Ahead Schedules show the contractor's planned hours of work. This information is necessary to evaluate the results of unsuitable weather on the critical path and to assess working days charges correctly.

This schedule is to be submitted by mid-week of the week preceding the scheduled work, or other mutually agreed upon submittal time.

SS 1-08.3(3) Schedule Updates

Schedule Updates are required for all projects. The Engineer may request schedule updates when any of the following events occur:

- A change that affects the critical path.
- The sequence of work is changed from that in the approved schedule.
- The project is significantly delayed (10 days or 10 percent of the original contract time, whichever is greater).
- An extension of contract time is requested.

It is important to note that schedule updates are only required when they are requested by the Project Engineer, when a contractor submits a request for a time extension, or monthly in the case of a Type C Progress Schedule. The Project Engineer may request an update when any of the triggers occurs but may choose to forego the update if the impacts to the schedule are readily evident.

The Contractor is required to submit a copy of the Schedule Update for approval within 15 calendar days of a written request, or when an update is required by Contract Provisions.

In addition to all other requirements, a Schedule Update must show:

- Actual duration and sequence of as-constructed work activities, including changed work.
- Approved time extensions.
- Construction delays or other conditions that affect the progress of work.
- Modifications to sequence or duration of remaining work.
- Physical completion of all remaining work within the remaining time authorized.

It is important to know the difference between an as-planned schedule and an as-constructed schedule. All updates must show the as-constructed sequence and actual durations of all activities prior to the status date.

When the need for a schedule update is triggered by an event that is the contractor's doing, they are responsible for the cost. When WSDOT causes an event or requests an update for their need, payment will be made as part of an equitable adjustment. When WSDOT is adding work or time by means of a change order, the price of the schedule update can be included as part of the work.

Any unresolved request for time extension must be shown by assuming that no time extension will be granted, and by showing the effects to follow-on activities necessary to physically complete the project within the currently authorized time for completion.

SS 1-08.4 Prosecution of Work

The Work will start as established in accordance with *Standard Specifications* Section 1-08.4 or such other date as prescribed by the contract provisions. *Standard Specifications* Section 1-08.4 indicates that Work may start at a time different from that specified if "otherwise approved in writing." Such other approval is intended only for very unusual circumstances, usually associated with mishandling of contract documents. It will only be granted in consultation with the State Construction Office.

SS 1-08.5 Time for Completion

Time associated with each phase of work established in the contract is to be shown on the Weekly Statement of Working Days. The Project Engineer is to furnish a weekly statement advising the Contractor of the current status of working day charges against the contract. Weekly Statements are generated by the CCIS computer system. This statement is to be issued in accordance with *Standard Specifications* Section 1-08.5. **The weekly statement must be provided to the Contractor by 5:00 PM the following Thursday.** The purpose of this statement is to advise the Contractor about the Project Engineer's decision for each passing day. The questions to be answered when determining if a day is chargeable are:

- Is it a nonworking day (holiday or a day the contract does not allow critical work to advance)?
- Was it a chargeable working day (critical work progressed uninhibited)? or
- Was it an unworkable day (critical work delayed by weather or conditions caused by the weather)?

When evaluating each day, the Project Engineer should take into consideration the following conditions:

1. The effect of inclement weather on critical activities.
2. The effect of conditions caused by inclement weather on critical activities.
3. Critical work restrictions imposed by the contract or the Project Engineer.

If any of the above conditions prevent work or reduce the Contractor's efficiency on critical activities on the project, working day charges shall be adjusted accordingly. If the Contractor can continue Work on critical activities but the efficiency is significantly reduced, a half day may be charged. When determining unworkable days the Project Engineer shall take into consideration the prolonged effects of weather events. If the Contractor is required to divert resources from working on critical path activities due to the lasting effects of a weather event the Project Engineer may determine a half day, the whole day or several days as unworkable.

If the contract does not specifically define a working day, a working day will be considered a 24 hour period. The contractor establishes the hours of work in the Weekly-Look Ahead Schedule and the start of the day should be by mutual agreement. The contractor shall be charged for one day during the defined 24 hour period regardless of how many shifts are worked.

The Project Engineer will complete Weekly Statements of Working Days throughout the course of the project, showing workable, nonworking and unworkable days as they occur. Statements will continue to be completed until the project has reached Substantial Completion and the Working Days assigned to the Contract have been exhausted. Following are the three possible scenarios:

- The working days are exhausted prior to reaching Substantial Completion. Weekly Statements of Working Days continue until Substantial Completion.
- The working days are exhausted on the day Substantial Completion is achieved. Weekly Statements of Working Days cease upon Substantial Completion.
- The working days are not exhausted upon reaching Substantial Completion. Weekly Statements of Working Days continue until the working days are exhausted or until physical completion.

Weekly Statements of Working Days are considered Written Determinations by the Engineer. If the Contractor does not agree with the Weekly Statements of Working Days, they are required to follow the procedures identified in *Standard Specification* 1-04.5.

Upon Substantial Completion the Project Engineer will ensure that the date is entered into CCIS and is noted in the remaining Weekly Statements of Working Days. After Weekly Statements have stopped, comments concerning weather and other events beyond the Contractor's control should be documented, and the effect of these conditions on remaining Work and on the scheduled completion should also be noted.

The contract duration specified for physically completing the contract is stated in the contract provisions under the general special provision "Time For Completion." Although there are exceptions, the guidance in this chapter pertains to contracts in which time is accounted for in terms of working days.

The Contractor may begin work as soon as the contract is executed and shall prosecute the work diligently until physical completion has been reached.

Between the execution of the contract and the acceptance by the State Construction Engineer, the Project Engineer will likely encounter time-related issues. These will be documented through Weekly Statements of Working Days (*Standard Specifications* Section 1-08.5), Suspensions of Work (*Standard Specifications* Section 1-08.6), Protested Work (*Standard Specifications* Section 1-04.5), and Time Extensions (*Standard Specifications* Section 1-08.8).

Contract Completion Milestones – There are two milestones that establish the end of contract time. They are defined *Standard Specifications* Section 1-01.3 as Substantial Completion Date and Physical Completion Date. These two milestones are discussed in greater detail later in this chapter.

Substantial Completion

Substantial Completion may be granted when only minor, incidental items of work, replacement of temporary facilities or correction remain in order to physically complete the contract. In determining Substantial Completion, the Project Engineer should consider whether:

- The public has full use and benefit of the facility.
- Major safety features are installed and functional, including guardrail, striping, and delineation.
- Illumination, if required, is installed or a temporary system with equal functional capabilities is operating.
- Signals, if required, are installed or a temporary system with equal functional capabilities is operating.
- The need for temporary traffic control on a regular basis has ceased. Only minor traffic restrictions will be needed for the remaining work.
- The traffic is operating in its permanent configuration.

The Project Engineer is responsible for determining the Substantial Completion date. When this has been done, the Contractor will be notified by letter, specifically noting the date on which Substantial Completion was achieved. Per *Standard Specifications* Section 1-07.18, Substantial Completion is tied to the contract insurance requirements and the Contract Administration and Payment System (CAPS) Unit of Accountability and Financial Service (AFS) must also be notified of the substantial completion date (email to caps@wsdot.wa.gov). In order to be in concurrence, the project engineer will also provide notification of Substantial Completion to the State Materials Laboratory Materials Quality Assurance Section (email to mlrom@wsdot.wa.gov) and to the State Construction Office (email to DOTconstruction@wsdot.wa.gov).

Physical Completion

The date on which the Project Engineer determines that all physical work has been completed is noted and then established as the date of Physical Completion. The Project Engineer will immediately notify the Contractor by letter of the date determined for Physical Completion. The letter will include a statement asking the Contractor to complete and return the Contractor's Construction Process Evaluation (DOT Form 410-029), and will provide a copy of the form as an attachment. Copies of the letter will be sent to:

- The Railroad companies, if applicable.
- The Contract Administration and Payment System (CAPS) Unit of Accountability and Financial Services (AFS) by means of a copy of the letter sent by email to caps@wsdot.wa.gov.
- The Regional Local Programs Engineer on all city and county projects.
- The GIS and Roadway Data Office (GRDO) Roadway Geometrics Office (email to roadway@wsdot.wa.gov).
- The State Construction Office, (email to DOTconstruction@wsdot.wa.gov).
- State Materials Laboratory, (email to mlrom@wsdot.wa.gov)
- Any other distribution that the Region deems appropriate.

Actions the Project Engineer should consider taking once Physical Completion has occurred include:

- Identify any unresolved disputes and initiate discussions.
- Initiate a full review of item quantities, seeking contractor concurrence.
- Initiate a final review of materials documentation.
- On Federal-aid projects, initiate a Stewardship Final Inspection and Acceptance.
- Compile a list of all approved subcontractors performing work on the project and transmit to Contractor, who will review the list for completeness and return the list annotated with each subcontractor Universal Business Identifier (UBI).

Assembly of Delinquent Records

Immediately after the Physical Completion date has been established, the Project Engineer is to notify the Contractor of all outstanding documents that are required to establish a project Completion Date. Once all the obligations of the Contract have been performed by the Contractor, the Project Engineer will provide the Contractor written notice of project completion, identifying the Completion Date established for the contract.

For the project Completion Date to be established, all the physical work on the project must be completed, and the Contractor must have furnished all documentation required by the contract. This includes all approved Affidavits of Wages Paid, and the signed Final Contract Voucher Certification. (***Note:*** Establish the Completion Date as soon as the last item of paperwork is received.) The notice to the Contractor should be prepared and mailed on the same day that is designated as the completion date. A copy of the completion letter, with attached completed *Contractor UBI and AWP Identification Number List* (LIST) must be emailed to caps@wsdot.wa.gov (CAPS) on the day the letter is written and sent. The LIST must include the UBI number and the Affidavit of Wages Paid (AWP) identification number for the Prime Contractor, subcontractors, applicable suppliers and manufacturers, delivery firms, and other firms that have filed an AWP with the Department of Labor and Industries (LNI). The LIST must be accurate and legible as errors will cause delays when requesting the release from LNI. To assure accuracy, it is recommended that offices compare their LIST against LNIs Prevailing Wage Intents and Affidavits system before issuing Contract Completion.

If the Contractor refuses, or is unable to return, a signed FCVC or any of the required documents, the Project Engineer, the Region and the State Construction Office can work together to move the project towards closure by establishing a unilateral completion date allowing WSDOT Acceptance of the contract. See Section SS 1-09.9 for Unilateral Acceptance procedures.

SS 1-08.6 Suspension of Work

The Project Engineer may order suspension of all or part of the Work if:

1. Inclement weather, or conditions caused by inclement weather, make it impracticable to achieve satisfactory results on a critical item of work,
2. The Contractor does not comply with the Contract, or
3. When, in the judgment of the Project Engineer, it is in the best interest of the public

If possible, suspensions for weather should be made with the concurrence of the Contractor. If the Contractor does not agree to a weather suspension, the Project Engineer should consult with the Region Construction Manager before issuing a unilateral suspension.

During suspensions of long duration, for example a winter shutdown, the publication of Weekly Statements may be suspended. Notices to suspend or resume work should be written. DOT Forms 421-006 and 421-007 have been developed for this purpose. A letter may accomplish the same purpose. If it is determined that some items of noncritical work on the project could be continued unaffected by weather conditions, those items may be excluded from the order to suspend work. The prime consideration for unworkable days or suspensions is always the ability to work on critical items.

The Project Engineer must decide if the Contractor made sufficient efforts to pursue Work before the suspension of work. If it is determined that the Contractor worked diligently before the suspension, WSDOT will maintain the temporary roadway, which includes:

1. The Traveled Way, Auxiliary Lanes, Shoulders, and detour surface
2. Roadway drainage along and under the traveled Roadway or detour
3. All barricades, signs, and lights needed for directing traffic through the temporary Roadway or detour in the construction area

All costs of roadway maintenance in this instance will be the responsibility of the Contracting Agency. The Project Engineer should coordinate these efforts with the area maintenance superintendent before any maintenance work takes place. If the Project Engineer deems the Contractor did not make sufficient efforts prior to the suspension of work, the maintenance described above will be the responsibility of the Contractor, along with the expense.

In either scenario, the Contractor is responsible for protection and maintenance of all other work areas not used by traffic during the suspension.

The suspensions described above as related to weather apply only to critical work items and, therefore, always result in a determination of an unworkable day. If the Engineer and the Contractor agree to stop working on a noncritical item for one of these causes but to continue critical work, then the agreement should be noted in the records and weekly statements should be issued in the normal fashion.

The contract also gives the Engineer the right to suspend work on any part of the project when the Contractor is not complying with the contract's terms or the orders of the Engineer. This would be a significant action and, except in an emergency situation, should not be undertaken without the full and informed consent of the Region Construction Manager and the State Construction Office. If work is suspended under this contract

provision, then weekly statements and the charging of workable days will continue in the normal fashion.

Suspending the Work because it is in the public interest is a serious action and should be taken with great care. Unless there is imminent danger, the Project Engineer should consult with the Region Construction Manager and State Construction Office before suspending for public interest. Reasons for suspending for public interest may include natural disaster or emergency that necessitates the Work being halted.

Suspension of the Work may increase the cost or time necessary to perform the Work and gives the Contractor the right to protest when they believe the Work has been suspended, interrupted, or delayed by the Contracting Agency for an unreasonable amount of time. If the Contractor believes this has happened, they must submit their protest within 14 calendar days of the start of the suspension or delay. The Contractor is not entitled to an adjustment for any costs incurred more than 14 calendar days prior to the notice they provide. Additionally, the Contractor is not entitled to an adjustment if performance would have been delayed by any other cause including the fault of the Contractor or if an adjustment is excluded under another provision of the Contract.

SS 1-08.8 Extensions of Time

In general time extensions are appropriate whenever the critical work is delayed due to an action or inaction of the Contracting Agency, or by a cause that is not the responsibility of the Contractor. *Standard Specifications* Section 1-08.8 includes a list of reasons that entitle the Contractor to a time extension, and a list of reasons for which no time extension will be granted. In all cases, the change or delay must delay critical work or an extension is not appropriate.

The Contract requires the Contractor to identify a delay within 14 days of recognizing that one exists. If a delay is readily identifiable, the Project Engineer should enforce this provision. If the delay is not immediately apparent the time extension discussion should take place as soon as the delay is recognized. Before discussing a potential delay for which adequate notice was not given, the Project Engineer should discuss the situation with the Region Construction Manager to seek guidance. The Contractor should be encouraged to identify delays and bring them to the State's attention at the earliest opportunity. This allows the Contracting Agency to mitigate the delay by adding time, modifying the work or recovering the schedule. In the interest of actively managing a delay the project engineer may act unilaterally to address time if the contractor avoids the discussion. In any case, the Contractor is not entitled to a time extension for any Contract time that was incurred more than 14 days prior to the date the Project Engineer receives their request of time extension.

All time associated with Work added by change order should be addressed as part of the change order. If the Project Engineer is unable to come to agreement on the number of working days to add, the Region Construction Manager should be consulted concerning the need to unilaterally add time to the Contract. Deferring the discussion of time in a change order to a later date should be a last resort, and should be by mutual agreement between the parties, with a specific time when the discussion will resume. This mutual agreement must be documented in the Change Order.

If the Contractor is not granted time for Work added by a change order, they are still required to complete the Contract in the number of working days that remain. This situation may cause the Contractor to accelerate their efforts, by adding additional crews,

equipment or working longer hours or extra days. If these actions are taken as a result of the Contracting Agency not granting a time extension for which the Contractor is entitled, the Contracting Agency may be responsible for the additional cost of these efforts. This is known as constructive acceleration. If the Project Engineer determines that the Contractor is entitled to time, but an agreement cannot be reached, the Project Engineer should consider unilaterally executing a change order to add the justified amount of time to the Contract. The Contractor can then pursue the matter under the procedure for protest as outlined in Section 1-04.5.

The State has a responsibility to inform the Contractor's surety whenever increased time is being considered and the current extension, combined with previous extensions, would exceed 20 percent of the original allotted time in the contract. This information could be represented by the Surety's signature on the change order that adds time, by a separate letter from the Surety, or by a notice letter direct to the Surety office. Such notice and surety consent is a legal requirement and will help maintain the State's rights to be protected by the performance bond.

Standard Specifications Section 1-08.6 provides under what circumstances the Contractor may be entitled to compensation. Anytime a project is delayed for any cause, the Project Engineer and the Contractor must consider methods of mitigating the delay damage. A common approach is to pursue schedule recovery by allocating additional resources to the work to get the project back on schedule. When the Project Engineer suspects that the State may be responsible for the delay, then compensation for the mitigation efforts may be proposed as necessary.

The Project Engineer must respond to the Contractor with a Written Determination within 21 calendar days of receiving the time extension request or supplemental information. Any time extension will be documented in a change order with approval levels defined in Section SS 1-04.4.

SS 1-08.9 Liquidated Damages

Liquidated Damages and Direct Engineering, or other related charges, are to be addressed as described in the contract specifications, *Standard Specifications* Section 1-08.9. Direct Engineering charges are a form of Liquidated Damages and must be listed on the monthly progress estimates on the line for Liquidated Damages. Traffic related damages as described in Section SS 1-08.9 are to be listed under Miscellaneous Deductions. The Project Engineer must evaluate potential Liquidated Damages that have accrued as a result of the expiration of contract time before the damages are withheld from moneys due the Contractor. The work and circumstances that have occurred over the course of the project should be reviewed to determine if there is potential entitlement for granting additional contract time. Liquidated Damages that have accrued should be adjusted for this evaluation. Liquidated Damages deemed chargeable should then be withheld from moneys due the Contractor each monthly progress estimate as Liquidated Damages accrue. While the Project Engineer takes the action to withhold damages as the work progresses, only the State Construction Office may actually assess those damages.

Liquidated Damages must be resolved before the final estimate can be completed and processed. Guidance for assessing Liquidated Damages can be found in *Standard Specifications* Section 1-08, and in some cases in the contract provisions.

Any withholding or assessment made against the Contractor's payments, is to be preceded by a fair notice written communication to the contractor. For those issues that could be remedied with actions taken or initiated by the Contractor, this notice should also include a reasonable period of time that will allow the contractor to take action to mitigate or completely avoid the withholding or assessment.

The term "withhold" refers to a temporary deduction shown on a progress estimate. The term "assess" refers to a permanent deduction that could be shown on a progress estimate, but will be shown on the final estimate. Liquidated damages fall into two categories – one deals with contract time and the other deals with miscellaneous provisions such as ramp or lane closures. These two categories are described below.

Contract Time Liquidated Damages

Standard Specifications Section 1-08.9 establishes the amount of Liquidated Damages to be assessed if the Contractor overruns contract time. These assessments are either: (1) included in the Contract Provisions or (2) or in the form of direct engineering and related costs.

The State Construction Engineer has not subdelegated to the Region the authority to assess time related damages on progress estimates or the final estimate. However, the authority to withhold below the line "Liquidated Damages" on progress estimates has been subdelegated to the Regions, and may be further subdelegated to the Project Engineer. Liquidated Damages should be addressed whenever it is apparent that the number of working days provided in the contract will be used before Substantial Completion. It is emphasized once again that fair notice and communication is necessary as a legal requirement.

In some cases, there are legitimate reasons for time extensions which would preclude with-holding liquidated damages on progress estimates. If the Project Engineer is aware of or anticipates a possible time extension that would preclude withholding liquidated damages on progress estimates, the Region and/or the State Construction Office should be consulted for guidance. If the Project Engineer determines that withholding of liquidated damages on progress estimates would not be appropriate, the reasons for not withholding are to be documented by a memorandum to the files. The following describes the procedures for addressing contract time related liquidated damages in the various stages or phases of the project:

- **Phases (Interim Physical Completion Dates) –** Liquidated damages for phases will be shown in the special provisions. When the contract includes additional phases, and the time for physical completion of a phase has overrun, the overrun should be resolved as it occurs. This involves the Contractor either being granted an extension of time or being assessed liquidated damages by the State Construction Office.
- **After Substantial Completion Date of the Contract –** If substantial completion is granted after the expiration of contract time the amount in the Contract Provision for liquidated damages will be assessed for that period of time between the expiration of contract time and the substantial completion date. Liquidated damages assessed after the date of substantial completion will be only those costs identified as Direct Engineering and related costs that have been incurred by WSDOT. The direct engineering and related costs are defined as field engineering and inspection time charges plus any vehicle, travel pay, per diem, or other charges connected with the delayed contract physical completion. Engineering costs such as computing grades,

quantities, etc. which would have been incurred by WSDOT under normal conditions should not be included in the determination of direct engineering and related costs. If substantial completion is granted on or prior to the expiration of contract time, direct engineering costs will only be assessed for that period of time between the date contract time expired and the physical completion date.

- **Before Physical Completion –** If Substantial Completion has not been established, the amount in the Contract Provisions for Liquidated Damages, will be assessed for that period of time between the expiration of contract time and the Physical Completion date.

Working days added to the contract by time extensions when time has overrun shall only apply to the days on which Liquidated Damages or Direct Engineering have been charged, such as:

- If Substantial Completion has been granted prior to all of the authorized working days being used, then the number of days in the time extension will eliminate an equal number of days on which Direct Engineering charges have accrued.
- If the Substantial completion date is established after all of the authorized working days have been used, then the number of days in the time extension will eliminate an equal number of days on which Liquidated Damages or Direct Engineering charges have accrued.

Miscellaneous Liquidated Damages

The contract provisions may provide for assessment of other liquidated damages not connected to contract working days. These liquidated damages are recorded in CAPS as miscellaneous deductions. Miscellaneous liquidated damages may include, but are not limited to, failure to open traffic lanes or ramps within the prescribed time, fabrication inspection costs, or the cost of challenge tests that do not show a passing result. The State Construction Office has subdelegated the authority to the Regions to withhold and assess these types of liquidated damages on progress estimates and the final estimate. The Project Engineer shall notify the Contractor in writing when these types of liquidated damages are to be assessed. The Project Engineer shall include an explanation of miscellaneous liquidated damages with the Final Estimate package when it is submitted to the State Construction Office.

Processing Liquidated Damages

Both categories of liquidated damages affect project expenditures differently and must be entered correctly in CAPS.

- **Liquidated Damages –** Amounts withheld due to contract time overruns and direct engineering costs. All temporary withholding or final assessment of these damages are to be shown as a below the line “Liquidated Damages” deduction on progress estimates and the final estimate. Withholding liquidated damages reduces the contract construction engineering (CE) expenditures; and releasing them will increase the contract CE for the same amount. The Project Engineer should be aware of the potential charges to the project CE cost prior to over spending or releasing the surplus CE expenditure prior to the Contract Completion.

- **Miscellaneous Liquidated Damages –** Amounts withheld for activities not connected to contract working days, such as failure to open traffic, fabrication costs or challenging test results. All temporary withholding or final assessment for these liquidated damages shall be shown as a below the line "miscellaneous" deduction on progress estimates and final estimate. Miscellaneous liquidated damages do not affect work order expenditures and are released back to the funding source when the contract is complete.

SS 1-08.10 Termination of Contract

Contract termination is divided into two major categories, termination for default and termination for public convenience. *Standard Specifications* Section 1-08.10(1) defines the situations when a contract may be terminated for default (doesn't happen very often.) *Standard Specifications* Section 1-08.10(2) defines the situations when a contract may be terminated for public convenience.

Keep in mind that the conditions of the termination may be negotiated in the event that the termination is in the best interest of both parties. An example would be if a major change is beyond the abilities of the contractor. Negotiations with regard to conditions of the termination may include pricing partially completed items, mobilization payment, or the State taking possession of fabricated/purchased materials.

In both categories, if federal funds are involved, FHWA needs to be notified and informed of the situation early in the process. Specifically, Federal participation eligibility should be discussed prior to making a decision on termination. Formal notification and discussion should use normal channels through the Region to the State Construction Office. Authority to terminate a contract rests with the same position that had authority to execute the contract.

SS 1-08.10(2) Termination for Public Convenience

A. **Authority to Terminate –** As provided in *Standard Specifications* Section 1-08.10(2), WSDOT may cancel all or portions of the Work included in a contract. If the project is to be terminated in whole and contains Federal funds, FHWA must be notified and a discussion of Federal participation eligibility should take place prior to the decision to terminate is finalized. The authority to terminate a contract resides in the same position that is authorized to execute the project. Change order approvals, per the Change Order Checklist, are required for termination change orders.

B. **Cost Associated With Deleted Work –** The Contractor must submit a request for payment of costs associated with termination of the contract no later than 90-calendar days from the effective date of the termination. There are some limitations to payment that should be noted under *Standard Specifications* Section 1-09.5. When Work is deleted by the termination of a contract by the contracting agency, payment will only be for the costs actually associated with the termination. No profit will be allowed for Work that was not completed. Consequential damages are also not allowed. Consequential damages may include such things as loss of credit, loss of bonding capacity, loss of other jobs, loss of business reputation, loss of job opportunities, etc.

C. **Payment for Materials –** When Work is deleted from the project by termination and the contractor has already ordered acceptable materials for such Work, payment for these materials may be negotiated in accordance with *Standard Specifications* Section 1-09.5.

D. **Deletion of Contract Items –** Since a termination change order is deleting work from the contract, uncompleted and unused contract items, if they are to remain uncompleted, must be deleted from the contract by the change order. "Zeroing out" these items assists in releasing funding from the project. When terminating a contract that contains work that is condition of award (COA), be sure to delete that work from the COA requirements by completing the condition of award portion of the change order in CCIS. Due to limited character space in CCIS, it may be necessary to create more than one change order to complete the termination change order. Be sure these multiple change orders are concurrent.

E. **Physical Completion –** If the Contractor is not required to complete any contract Work after execution of the change order, the execution date of the change order should be established by the Project Engineer, and entered into CCIS, as the Physical Completion date for the contract. If the Contractor must complete some items of the Work, Physical Completion will be granted by the Project Engineer upon satisfactory completion of the Work (*Standard Specifications* Division 1-03). This date assists the CAPS unit of AFS to know if insurance must be maintained on the project.

F. **Time –** The change order should contain a time statement, just like any other change order.

G. **Waiver –** The change order should contain waiver language similar to that found in Section SS 1-04.4.

1-09 Measurement and Payment

SS 1-09.4 Equitable Adjustment

Pricing

Standard Specifications Section 1-04.4 specifies that an equitable adjustment (EA) in accordance with *Standard Specifications* Section 1-09.4 will be made when changes cause an increase or decrease in the cost of performing work on the contract. The basic theory of an EA is to leave the parties to the contract in the same position cost wise and profit wise as they would have been without the change, preserving to each as nearly as possible the advantages and disadvantages of their agreement. Although the contractor is entitled to profit on the changed work, the profit (or loss) on the unchanged work should remain unaffected by the equitable adjustment.

- This is an important point, for unchanged work, the contractor is entitled to the profit bid or a windfall, if the work turns out to be easier than expected.
- On the other hand, for unchanged work, the contracting agency is not obligated to make the contractor well for an under bid item.

Consequential damages are never allowed as part of a negotiated equitable adjustment. Consequential damages may include such things as: loss of credit, loss of bonding capacity, loss of other jobs, loss of business reputation, loss of job opportunities, impacts to another project, etc.

A. **Unit Prices –** An appropriate price may be established using average unit bid prices, citing similar unit bid prices, a determination of market value, by estimating the cost to perform the work, or a combination of these methods. Unit bid price is one indication of an equitable price; however the contracting agency should be prepared to support the price by other means.

B. **Force Account –** When added work is paid by force account, a change order shall be prepared detailing the added work to be performed and the estimated cost. Standard Item Number 7715 is to be used for all force account items that do not have an assigned standard item number. Force account should be a last resort used only if the work can't be clearly defined.

C. **Overhead –** There are two basic types of overhead as follows:

- **Distributed Fixed Costs –** Offsite "home office overhead" is the cost of running a company. These costs are assumed to be distributed among all the projects performed by the company. Onsite overhead is incurred as a function of time needed to accomplish the project. Onsite costs are assumed to be evenly distributed among contract items. This category of overhead is eligible under an equitable adjustment if working days are added to the contract as part of the adjustment.
- **Variable Fixed Costs –** these costs are directly associated with performing an item of work on the project and therefore vary with the quantity, the contractor is entitled to recover these costs as a part of an equitable adjustment.

Forward Pricing and Risk

The first and best option for an equitable adjustment is agreement in advance between the contractor and WSDOT on the increased or decreased cost and time for performance of the changed work. The Project Engineer should expend every effort possible to obtain a satisfactory negotiated equitable adjustment prior to submitting the change order to the contractor for endorsement. The Project Engineer must remember that the contractor is a full participant in the contract and retains all the rights and privileges during a negotiation. When bidding a job, the contractor must be optimistic and take appropriate risks. When negotiating, it is understandable and acceptable for the contractor to be pessimistic and avoid risk, unless compensated. Some key points to remember are:

- A negotiated price will likely be higher than a competitive bid price.
- A proposal which assigns extensive risk to the contractor will likely be more costly yet.
- The contractor may be willing to take on this risk if the price is a bit higher
- The significant advantage of reaching a price agreement before the work is started (forward pricing) is that the contractor assumes the risk of the accuracy of the pricing assumptions and predicted duration for performing the work.
- (when forward pricing) the Project Engineer may utilize the high end of the estimating range in justification.
- (when forward pricing) an audited overhead rate may be substituted for the markups described in *Standard Specifications* Section 1-09.6. Contractors can usually provide an estimated home office overhead rate which may be checked by an annual audit, if warranted.

Pricing After Fact

When establishing prices after the work has been performed, actual costs should be used to the extent they are available. The following are key points to keep in mind:

- Costs for equipment cannot exceed the rates established by the AGC/WSDOT Equipment Rental Agreement for an equitable adjustment.
- When pricing after the fact, the markups described in *Standard Specifications* Section 1-09.6 are appropriate for measuring time and materials because there is no risk involved in after the fact pricing.

Unilateral Pricing

In the interest of being timely, the change order should be a tool to document agreement and not a negotiation tool back and forth. Ideally we will have agreement with the contractor when pricing the work. On occasion, however, due to time constraints and difference of opinion, we can't always come to agreement. The difference of opinion may be for only a small portion of the work. *Standard Specifications* Section 1-09.4(2) provides, "If the parties cannot agree, the price will be determined by the Engineer using unit prices, or other means to establish costs." This is not to say that the contractor is obligated to honor unit bid prices for work that qualifies for an equitable adjustment. This allows us to proceed with changed work prior to reaching an agreement on the price. In the interest of being timely, and provided the Project Engineer is comfortable that the included price can be supported, there's nothing wrong with issuing a change order to the contractor unilaterally. This orders the work to proceed, establishes the State's position on cost, and puts the decision to continue negotiations in the contractor's hands as detailed under *Standard Specifications* Section 1-04.5. The contractor is obligated to endorse, write a separate acceptance, or protest as described in the specification and a timeline is provided for these actions.

Time

The completed equitable adjustment should include provisions for any increases or decreases in contract time based on impacts to overall contract duration. The decision on time should be supported by an analysis of the project schedule. Analyzing time in advance encourages communication between the parties allowing the contracting agency to make an informed decision on the true costs. It also enables the contracting agency to mitigate time impacts if that is in the agency's best interest.

SS 1-09.6 Force Account

General

When it is difficult to provide adequate measurement or to estimate the cost for certain items of work, force account may be used in order to pay the Contractor for performing the work. Some contract items may be set up to be paid by force account. Some change orders may require payment by force account. *Standard Specifications* Section 1-09.6 describes the boundaries for payment of work performed by the force account method. In any case, the purpose of force account is to fully reimburse the Contractor for costs incurred on the work. These costs may also include indirect segments, such as travel, per diem, safety training, industrial safety measures, overhead, profit and other hidden costs. The objective is to minimize the inclusion of any "contingencies" included in the contract

bid in anticipation of costs that may be incurred during force account work and not reimbursed.

When work is added to the contract and is to be paid by force account, a change order will have been prepared describing the added work to be performed. The change order package will also contain an independent estimate of the cost to perform the added work. All non-standard force account items are assigned the Standard Item Number 7715.

Force account payments are typically not authorized for employees engaged in management or general supervisory work. The cost for this type of activity is presumed to be included in the Contractor's markups for overhead and profit. However a foreman or, in some cases, a dedicated superintendent devoting full time to the force account work is eligible for payment on the force account.

On projects that require the Contractor to employ trainees, these employees may be utilized in force account work.

In the case of some Emergency Contracts (see the WSDOT *Emergency Funding Manual* M 3014) which will be measured and paid by Force Account, it is appropriate for the Engineer to consider payment for mobilization of equipment to the site of the emergency, including all staff time employed to procure and coordinate the mobilization. It may also be appropriate to include the labor payment for a dedicated superintendent and foremen employed solely to oversee the emergency work. On emergency contracts the mark ups may not be enough to cover the cost of performance bonds; the Project Engineer may consider payment for performance bond costs when making payment under emergency force account contracts.

The Project Engineer should consider a decision to direct force account work with the same degree of caution that would be applied to directing any other work on the contract. The Contractor should have the expertise to schedule the work and determine what equipment is required. In most cases, it is best that we allow the Contractor to propose the method and approach to the work. Our most effective role would be to concur or approve of the Contractor's proposal or suggest modifications to it. Before any work is performed by the Contractor on a force account basis, the Project Office should review and agree with the Contractor upon:

1. **Labor –** The classification and approximate number of workers to be used, the wage rate to be paid those workers, whether or not travel allowance and subsistence is applicable to those workers, and what foreman, if any, will be paid for by force account. This agreement will be closely tied to the development of the Labor List.
2. **Materials –** The material to be used, including the cost and any freight charges whether the material is purchased specifically for the project or comes from the Contractor's own supply. For materials representing a significant cost, or where the industry experiences fluctuations in price, the contract allows for shopping and the Contractor may be directed to obtain quotations.
3. **Equipment –** The equipment to be used including the size, rating, capacity, or any other information requested by the Engineer. Whether the equipment to be used is owned by the Contractor or is to be rented. The cost per hour for the equipment to be used. In the case of rented equipment, the Engineer may ask for competitive quotations, provided the request is made in advance and there is time to obtain them.

Payment for force account work should be made on the same timely basis as any other item of work. When money is being withheld from a progress estimate, the criteria for withholding should apply equally to all items of work, not just to force account work, because of its method of payment.

The procedure for record keeping and payment of force account work on change orders shall be the same as for contract items to be paid by force account. Separate records are to be kept for each force account whether it is an item in the original contract or established as a result of a change order.

Payment Procedures for Force Account Work

1. **Labor –** The specifications require the Contractor to prepare and submit a "Labor List" in advance of force account work. Once approved by the Project Engineer, this list provides the hourly rate for force account calculations until a new list is approved. New lists will not be approved retroactively and calculations previously made from an approved list will not be changed when a new list is approved. If the Contractor fails to submit a list before the first force account calculations are made, then the Project Engineer will determine the rates from the best data available (payrolls on this job, payrolls on other jobs, prevailing wage requirements, union information, etc). Labor list rates will include all the pieces of wage expense – base rates, benefits, assessments, travel, with allocations shown where necessary. Examples of Labor List entries might be:

Generic Laborer (Straight Time)		John Doe, Teamster (Overtime)	
Basic Wage/hr	$21.36	Basic OT Wage/hr	$32.81
FICA (7.65%)	FICA (7.65%)		
FUTA (0.80%)	FUTA (0.80%)		
SUTA (5.42%) Total =	2.96	SUTA (5.42%) Total =	4.55
Indust Ins $1.01/hr	1.01	Indust Ins $1.01/hr	1.01
Benefits/Hr	5.45	Benefits/Hr	8.00
Subtotal	$30.78/hr	Subtotal	$46.37/hr
Travel Expense	Travel Expense		
$250/40 hrs	6.25/hr	$250/40 hrs	$6.25/hr
Total	$37.03/hr	Total	$52.62/hr
Use	$37per hr	Use	$53per hr

These examples show the rate rounded to the nearest dollar, which is permissible. If either party would prefer to use the unrounded amount, that is also acceptable. When deciding how many hours require compensation, the specification allows all hours that are a contractual obligation or are customary payments made to all employees. This means that, if a labor contract calls for 4 hours of pay for any call out, then that is a contractual obligation and the 4 hours would be eligible for reimbursement. (As always, the Contractor is expected to reassign the employees, if possible, to avoid the penalty.) In the same vein, a non-Union contractor, who has made call out payments to all employees for years, would be eligible for reimbursement for similar payments in a force account.

Per Diem and Subsistence – This item must be agreed to in advance of the work. A daily allowance for expense generally prescribed by a labor contract or a company policy. When requested, a copy of the labor contract/company policy which describes how the Contractor is paying Per Diem must be obtained. Per Diem costs will be paid on an actual cost (invoiced and receipted) basis incurred as the direct result of the Force Account work, if the Per Diem is paid to workers for similar pay item work.

2. **Materials –** Materials also work from a list, but the list is generated in a different fashion. The Project Engineer provides the basic list of materials observed by the inspector. This is done in a timely manner (daily, unless the Contractor agrees otherwise). The Contractor adds prices to the list and attaches invoices or affidavits to support the prices. Once the list is returned and checked, payment can be made.

   If a shipment of material is only partially consumed during the force account reporting period, the inspector may choose to include the entire amount in the first report or to estimate the amount consumed during each reporting period. The decision should be based upon the amount of the shipment, the nature and cost of the shipment and the security of the stockpile. A case of empty sandbags to be utilized throughout the winter for pollution control would adapt well to a single report, while a stockpile of galvanized conduit should probably be reported piecemeal as it is used in the work. The Contractor may use copies of the original invoice when the material is reported incrementally. If the Contractor has to restock unused material, restock charges can be reimbursed if the original order was reasonable for the work planned.

   Along with supplying prices and invoices, the Contractor may suggest additions or corrections to the Materials List. These suggestions will be reviewed by the Project Engineer and, if appropriate, added before payment is made.

   If the Contractor does not have an invoice, as in the case of stockpiles or some warehouse stock, then an affidavit will suffice. The Engineer may review the affidavit and, if it is an unreasonable price that cannot be supported, the Engineer may substitute another price, utilizing the best data available. The reasonableness of the price must consider the circumstances of the purchase and all costs associated with obtaining material from another source.

   The specifications allow the Engineer to require competitive quotations, if this is done before the work is started and sufficient time is available. If the Contractor has to divert an employee to obtain the quotations, then that employee may be included in the labor reimbursement for the force account.

3. **Equipment –** The Project Engineer should review and comply with the rules governing payment for equipment as outlined in the most current AGC/WSDOT Equipment Rental Agreement. This agreement was developed as a supplement of the specifications and is relatively self explanatory.

   There are three methods of acquiring equipment for use on a force account. “Owned” means that the Contractor controls and operates the equipment. A long term lease arrangement would be the same as ownership. Owned equipment is priced according to the Blue Book. For equipment not listed by Equipment Watch, a rental rate may be requested from the Engineer by completing and submitting the Force Account Equipment Rental Rate Request (WSDOT Form 422-010). “Rented to Operate” means that the Contractor has obtained a piece of equipment through a short-term rental and will operate that equipment with its own employees. Rented to Operate

equipment is priced according to the invoice from the rental agency. “Rented Operated” means that the Contractor has obtained a service from an individual or a company to provide a piece of equipment with an operator. An operated rental is not paid as equipment, but rather as a Service. In some cases, the Service will be reclassified as an entity performing in the manner of a subcontractor (see below).

Damage waivers are compensable. The Engineer has the discretion to reimburse for a damage waiver when it makes good business sense. Upon request, the Contractor should be able to demonstrate that the purchase of the damage waiver is consistent with their standard business practice. Consideration should be given to the potential risk of damage to the equipment versus the cost of paying for the damage waiver. In most cases, the cost of the waiver is minimal. The damage waiver does not cover damage caused by operator negligence, nor should the Department reimburse the Contractor for repair of any damage caused by operator negligence.

Normal wear and tear on equipment is included in the Blue Book rental rates. The ownership rates include major overhaul of the equipment. The Blue Book defines major overhaul as the periodic rebuilding of the engine, transmission, undercarriage, and other major equipment components. The operating rates include the cost of daily servicing of the equipment, including the replacement of small components such as pumps, carburetors, injectors, filters, belts, gaskets and worn lines. The operating rates also include the cost of expendables such as fuel, lubricants, filters, tires, and ground engaging components, such as pads, blades bucket teeth, etc.

The costs of extraordinary operating expendables are not covered in the operating rates due to their highly variable wear patterns. These extraordinary operating expendables may include certain ground engaging components, such as hammer and drill bits, drill steel, augers, saw blades, and tooth-bits. The cost for these items will normally be recovered separately, based upon invoices for their cost.

Repair of damage is considered a risk of providing equipment. The cost of this risk is assumed to be in the markup for overhead and profit. Costs for repair of damage should not be included in the force account direct charges. A common event is the offer of a Damage Claim Waiver by a renting agency. If such a charge appears on an invoice, it will be considered for inclusion when payment is calculated.

As with Materials, the Engineer may require competitive bids for equipment rentals. Normally, this requirement must be made in advance before the work is started. However, if the rental is not made in an “arm’s length” transaction, for example when the contractor rents the equipment to himself through some sort of business structure, then after the fact quotations may be obtained from independent rental agencies and the lowest such quotation may be used in place of the rental invoice.

Any contractor-owned equipment, not considered part of equipment already being paid for, listed in the Blue Book with a monthly rate of less than $100 and any other equipment with a purchase price of between $100 and $500 are considered Small Tools (except for rentals). Small tools may include specialty safety equipment required for the force account work, like respirators, entry/retrieval gear for confined space and hand tools. Safety equipment that is used day in and day out and/or consumable is not included. The Contractor needs to provide supporting invoices or affidavit of purchase costs. The negotiations should consider discussions of shared use with other work and residual value. Small tools should be paid for by a lump sum agreement, or

other means as agreed to by the parties, that may be paid monthly or after the force account work is completed.

Finally, as a special insertion into this manual, there is a separate method of paying for Pavement Routers for Crack Sealing. WSDOT has agreed to set aside the Blue Book rate for this equipment and to pay $20 per hour for the operated router.

4. **Services –** Services billed by invoice will be compensated according to the invoice if that is the typical method in standard industry practice. Typical industry practice might include specialized technical services, such as Testing Labs and Environmental Cleanup firms. Also included might be unit price invoices, such as Sweeping per mile or Concrete Pumping per cubic yard, or lump sum quotation invoices, such as Remove Danger Tree or Pump Septic Tanks.

   The markup for services depends on the nature of the firm's activities on the project. If the firm is clearly an uninvolved supplier, then the Service markup will apply. If the firm is acting as a subcontractor, then the markup will be made under the subcontractor provisions described below, with the underlying (subcontractor's) overhead and profit assumed to be embedded in the invoice.

   It should be noted that payment of force account work through an invoice does not excuse the Contractor from other requirements of the contract. Wage rate rules, subcontractor approvals and other provisions are still contract requirements and must be enforced. Such enforcement, however, is independent of the administration of force accounts and force account payment will not ordinarily be withheld to aid in the enforcement. Note that the statutes associated with some provision requirements do involve the withholding of payment for associated work.

   As with materials and equipment rentals, the Engineer may require competitive bids for invoiced services. Normally, this requirement must be made in advance, before the work is started. However, if the service is not obtained in an "arm's length" transaction, for example when the invoice comes from a subcontractor without sufficient effort to find competitive prices, then after the fact quotations may be obtained from independent service providers and the lowest such quotation may be used in place of the service invoice.

5. **Mobilization –** Mobilization and demobilization are reimbursable expenses for assembling equipment, materials, supplies and tools for any force account item and then returning those items to the previous location when the work is finished. Demobilization can include restocking costs for materials not utilized. Force account mobilization applies to original bid item force accounts as well as force accounts added through change orders. The standard bid item "Mobilization" is assumed to not include mobilization activities for force account work.

   Mobilization may occur within the project limits if special efforts are required to assemble needed items to the force account location. For example, if a lowboy is required to move a bulldozer from one end of a project to the other, then that mobilization effort would be reimbursed.

   If off site preparation work is needed, the Contractor must notify the Engineer in a timely enough manner that the work can be observed, if that is desired. Without such notice, that preparation work will not be reimbursed.

The AGC Agreement allows for pro-rating mobilization costs for equipment that will be used in both force account and bid item work. This will be done by negotiation and agreement. For example, if the Project Engineer and Superintendent agree that a mobilized backhoe will be used three hours on regular work for each hour on force account, then 25 percent of the mobilization costs would be paid on the force account.

All mobilization activities can be categorized as Labor, Equipment, Materials, or Services and will be listed under those categories for payment.

6. **Other Payments**

- **Permits or Fees –** When a force account requires the Contractor to pay for permits or fees (hazardous waste dumping, etc.) that would fall outside the scope of overhead, these costs are reimbursable and may be included in the "Services" Section of the force account payment.
- **Retail Sales and Use Tax –** How retail sales tax and use tax is handled on the overall project depends on the ownership of the property upon which it rests. The retail sales tax consequences related to construction projects and land owned by the state of Washington or privately is addressed by WAC 458-20-170 ("Rule 170"), while the retail sales tax consequences related to construction projects and land owned by a municipal corporation, political subdivision of the state of Washington, or by the United States is addressed by WAC 458-20-171 ("Rule 171").

  With respect to Rule 171, ownership refers to ownership for the street, place, road, highway, easement, right of way, etc. being constructed and not the underlying real property. See RCW 82.04.050(10); Rule 170; and Rule 171. Thus, for instance if WSDOT has an easement with respect to a road subject to a construction project, then Rule 171 treatment will not apply even if the underlying real property were owned by the United States, Indian tribe, or municipal entity.

  The Contractor's books may be audited by the Department of Revenue upon completion of each project to ensure compliance.

  – **State and Local Tax: WAC 458-20-170 – Retail Sales and Use Tax –** Item quantities listed in the summary of quantities under *Standard Specifications* Section 1-07.2(2) require retail sales tax on the item to be paid by the Contracting Agency; therefore; Contractor would not include the tax in their bids. The Contracting Agency provides this tax payment to the Contractor on the total cost summation of the bid items listed under Section 1-07.2(2). Contractor remits this retail sales tax through to Department of Revenue. Under state tax law project Work requires remittance of retail sales tax on the full contract price.

    - **Resale Items –** Materials purchased for incorporation into the permanent project.
    - **Use of Reseller Permits –** Generally, purchases of tangible personal property by persons without a valid reseller permit are subject to retail sales tax. See WAC 458-20-102. For example, a Contractor's purchases of materials incorporated permanently into the structure being built or improved as part of the project Work (including but not limited to cement concrete, lumber, finished hardware, asphalt concrete pavement) are treated as a retail sale at the point of purchase unless the contractor has

a valid reseller permit. If the contractor has a valid reseller permit, the Contractor can provide it to their vendors to purchase these materials permanently incorporated into a structure being built or improved under a project without paying retail sales tax. These materials if purchased with a reseller permit are considered to be purchased for "resale".

- **Tax Paid at Sourced Deduction –** If the contractor does not have a valid reseller permit when purchasing materials permanently incorporated into a structure being built or improved as a part of the project Work, the contractor must pay retail sales tax at point of purchase and then may take the appropriate deduction (tax paid at source) when filing its Washington state excise tax return. The Contracting Agency pays retail sales tax to the Contractor when the material is incorporated into the permanent work of the project.
- **Consumables Items –** There may be items that the contractor is required to pay retail sales tax on at the point of purchase because they are consumed by the Contractor rather than resold ("consumables"). For example, tools, machinery and equipment, and supplies consumed (including but not limited to concrete forms, fuel or tools, equipment purchased or rented) during the performance of the project work are "consumables", which are a part of the overall cost of doing business for the Contractor. The Contractor is required to pay retail sales tax at the point of purchase/rental for these items or use tax if retail sales tax is not paid. These costs are bid as a part of the associated bid items.

  The contractor is considered the "consumer" when renting equipment for use in Washington State and must pay sales tax on the total charge. This is no different than purchasing a tool the contractor must have in order to perform its services and passing the cost on to the customer. The sales tax paid by the contractor to the rental company is a cost of doing business and, if it is passed on to the customer, it is considered to be part of the gross contract price that is subject to sales tax.

  When calculating or estimating the cost of force account or change order work, retail sales tax will always be applied and paid by the Contracting Agency on the whole summation of daily force account cost including labor, equipment and material costs, which can in the case of "consumable" items include paying retail tax on a tax.

  - **State and Local Tax: WAC 458-20-171 – Retail Sales and Use Tax –** For item quantities listed in the summary of quantities under *Standard Specifications* Section 1-07.2(1) retail sales tax is not required on the item.

However, the Contractor is required to pay retail sales tax on all of its own retail sales taxable purchases regardless of use ("consumable" or not) or use tax if retail sales tax is not paid. For contract work, this expense is incidental and therefore included in the individual contract items as a part of the bid amount.

- **Ownership By Covered Persons –** Rule 171 applies where the operative public road construction is owned by a municipal corporation, political subdivision of the state of Washington, the United States, or an Indian or Indian tribe in Indian country. RCW 82.04.050(10); Rule 171, and WAC 458-20-192.

- **WSDOT Not A Covered Person –** WSDOT is not a municipal corporation, political subdivision of the state of Washington, the United States, or an Indian or Indian tribe. Therefore, where the operative public road construction is owned by WSDOT, the construction is subject to retail sales tax consistent with Rule 170 above.
- **WSDOT Easements –** Washington Excise Tax Advisory (ETA) 3068.2009 explains that where "title to the land upon which the highway, street, place, or road is being constructed vests in the state of Washington, the construction contract is a retail sale." ETA 3068.2009 further makes clear that this vesting provision refers to the street, place, road, highway, easement, right of way, etc. being constructed and not the underlying real property. Thus, for instance if WSDOT has an easement with respect to a road subject to a construction project, then Rule 171 treatment will not apply regardless of whether the underlying real property is owned by another party.

When calculating or estimating the cost of force account or change order work, sales tax should be included on all invoices. As stated previously, the fact that taxes are shown or not shown on invoices is not a reliable indication of what the contractor is obligated to pay. The contractor may receive reimbursement later or be required to pay additional taxes when the contract is complete.

- **Exceptions –** Consistent with Rule 171, construction of the following facilities has been specifically exempted. Work on these facilities falls under Rule 170 even if they are on non state owned land:
  - Water mains.
  - Telephone, telegraph, electrical power, or other conduits or lines in or above streets and roads, unless such power lines become a part of a street or road lighting system.
  - Construction of sewage disposal facilities.
  - The installing of sewer pipes for sanitation, unless the installation thereof is within, and a part of, a street or road drainage system.
- **Conclusion –** Most of the time, retail sales tax on invoices is required. In turn, we need to reimburse the contractor for the tax (paid or deferred) on force account invoices and include the costs when estimating the value of change order work.

  The one exception is "resale" items if the contract falls under Department of Revenue rule 170 where retail tax sales need not be paid at the point of purchase.

  These rules should be adhered to regardless of whether retail sales tax is shown on the invoice.
- **Contractor Markup on Subcontractor's Work –** If work is being performed by a Subcontractor (or by a service supplier acting in the manner of a Subcontractor), a supplemental markup will be added. This supplement will be added one time for each payment, even if a lower-tier subcontractor is doing the work. No additional markups will be applied to force account work done by a Subcontractor's lower tier subcontractors.

If more than one Subcontractor performs work on the same force account item, the supplemental markup is applied separately to each Subcontractors computed cost for their work.

Additional markups are not applied to force account work done by a Subcontractor's lower tier subcontractors. Section 1-09.6 of the *Standard Specifications* states the additional markup is applied to each Subcontractor doing force account work. Section 1-01.3 of the *Standard Specifications* defines Subcontractor as an individual, partnership, firm, corporation or joint venture that is sublet part of the contract by the Contractor. A lower tier subcontractor does not have a sublet with the Contractor. Their sublet is with the Subcontractor; therefore the additional markup is only applied to Subcontractor per the *Standard Specifications*.

The supplemental markup is a graduated step down rate, which gets smaller as the amount of payment to a given Subcontractor for that force account item increases. The supplemental markup rate is determined by the accumulated value of work that a specific Subcontractor has performed on each specific force account item. For example, if Subcontractor × performed force account work on bid item A in the amount of $150,000 for the first estimate, the markup would be calculated at 12% for the first $25,000, 10% the next $75,000, and 7% on the remaining $50,000 and all subsequent payments for this bid item work (($25,000 × 0.12) + ($75,000 × 0.10) + ($50,000 × 0.07) = $14,000 markup).

The amounts on which the rate is determined will be tracked separately for each Subcontractor on each force account item included in the original contract or added by change order. If two Subcontractors work on the same force account item, then the accumulated total will be tracked for each, and markup for work done by each will be according to the respective total. If a single Subcontractor works on two force account items, then there will be a running total of work done by that Subcontractor on each force account item and the markup rate for the same sub on different force account items could be different.

Records and Source Documents

Accurate daily time records should always be kept when performing force account work. A Daily Report of Force Account Worked DOT Form 422-008A is provided for the Project Engineer's use to help facilitate timely, accurate, and complete records of the daily force account activities. Whatever method of record keeping is used, it is recommended that the document be signed by both the Inspector and a representative of the Contractor agreeing on the materials used and the hours noted for labor and equipment. A copy of the daily report must be provided to the Contractor. When the work is performed by a subcontractor, a copy should also be provided to the subcontractor.

The costs for force account work should be determined and entered into the CAPS system in as timely a manner as possible.

All calculations for determining force account costs should be checked, initialed, and dated. After the cost of the work has been computed in the office, a copy of calculations shall be furnished to the Contractor.

Summary

To summarize, the purpose of force account is to fully reimburse the Contractor for costs incurred on the work. The objective of force account administration is to minimize the inclusion of any "contingencies" included in the contract bid in anticipation of costs that may be incurred during force account work and not reimbursed.

Items which are bid or negotiated with a unit price or a lump sum agreement will not be converted to force account unless a change (as defined in *Standard Specifications* Section 1-04.4) has occurred. On the other hand, any work to be done or the remaining portion of work underway on a force account basis may be converted to unit prices or a lump sum at any time the parties can reach an agreement. Such a conversion is highly desirable and should always be a goal of the Project Engineer.

SS 1-09.8 Payment for Material on Hand

Payment for material on hand (MOH) may be considered for materials intended to be incorporated into the permanent work. The requirements for payment of MOH are noted in *Standard Specifications* Section 1-09.8. Payments for MOH are made under the 900 series of item numbers as ledger entries and need to be backed out as material is utilized such that 900 series entries are zeroed at close out of the Contract. Payment for MOH must not exceed the value of the corresponding bid item. It is the responsibility of the Project Engineer to devise procedures that assure this is done correctly.

Payments may be made provided the Contractor submits documentation verifying the amounts requested, the materials meet the requirements of the contract and the materials are delivered to a specified storage site or stored at the suppliers/fabricators as approved by the Project Engineer. Payment cannot be made until the material has been inspected, approved, and stamped or tagged (as required). Materials shall be segregated, identified and reserved for use on a specific Contract or project. Payments commensurate with the percentage of completion may be paid for partially fabricated items.

All materials paid for as MOH must be readily available for inspection by the owner. Steel materials must be available for inspection but this availability need not be immediate. Reasonable notice should be given to allow the Contractor to locate and make the material available for inspection. The Project Engineer may accept a higher level of risk that steel material may not be reserved for our use. The Contractor's obligation to perform the work and the surety's guarantee of this obligation serve to offset the risk that reserved materials are diverted to other projects.

When materials paid for as MOH are stored in areas outside the general area the region shall make arrangements for inspection as deemed necessary prior to making payment. The region may utilize other regions or the State Materials Laboratory in doing so.

When contracts are estimated to cost more than $2 million and require more than 120 working days to complete, a General Special Provision (GSP) will be included in the contract provisions, requiring documentation from the contractor as the basis for MOH payments and deductions. When this GSP is included in the contract provisions, the following procedure is used to determine how much of the MOH payment should be deducted from an estimate:

- Each month, no later than the estimate due date, the contractor will submit a document and the necessary backup to the Project Engineer that clearly states:
  - The dollar amount previously paid for MOH,
  - The dollar amount of the previously paid MOH incorporated into the various work items during the month, and
  - The dollar amount that should continue to be retained in MOH items.

  If work is performed on the items and the contractor does not submit a document, all previous associated MOH payments may be deducted on the next progress estimate.

SS 1-09.9 Payments

General

Payment for work performed by the Contractor and for materials on hand must be made in accordance with *Standard Specifications* Section 1-09. To facilitate payments to the Contractor and ensure proper documentation, WSDOT utilizes an automated computer system to record project progress in terms of bid item quantity accomplishment. This is then used to pay the Contractor for actual work performed during each designated pay period or for materials on hand. The automated system that completes this task is called the Contract Administration and Payment System (CAPS). CAPS utilizes an electronic tie between each Project Office's computer system and the mainframe computer. This system provides access to a large volume of corporate data and facilitates the maintenance of this data by different groups in different locations. Some of these different activities include:

- **Contract Initiation –** A Headquarters action whereby new contracts are created and stored in a computer file. The information consists of the names of the Contractor and the Project Engineer, project descriptive data, accounting identifier numbers, preliminary estimate, proposal date, bid opening date, award date, execution date, accounting groups and distributions, and an electronic ledger.
- **Project Ledger –** An updating process by the Project Office which keeps track of work performed on the contract as it is completed.
- **Estimate Payments –** A Project Office action whereby progress estimates and Regional final estimates are processed directly from the Project Office. The Headquarters Final Estimate process activates the Region Final when all the required paperwork is in place. Supplemental final estimates are processed by Headquarters only. Complete instructions for use of the CAPS computer system are included in WSDOT Contract Administration and Payment System M 13-01.

Progress Estimates

Progress estimates are normally processed on the 5th of the month for odd numbered contracts and on the 20th of the month for even numbered contracts. Where the Project Engineer deems it appropriate, estimates may also be run on other dates.

Estimates may also be run on other dates if the progress estimate or parts of the progress estimate were withheld to encourage compliance with some provision of the contract and the Contractor resolves the issue that caused the withholding. These estimates should be paid immediately upon resolution by the Contractor.

Within the CAPS system, the basis for making any estimate payment is information from the project ledger. Every entry in the ledger is marked by the computer as paid, deferred, or eligible for payment. Before an estimate can be paid, a Ledger Pre-Estimate Report (RAKD300C-PE) must be produced. In constructing this report, the CAPS system gathers all the ledger entries that are identified as eligible for payment, prints them on the report summarized by item, and shows the total amount completed to date for that item but not yet paid for by progress estimate. The report also shows any deferred entries or exceptions if they exist and includes a signature block for the Project Engineer's approval.

If there are errors or omissions in this report, the ledger must be changed to reflect the correct data. After corrections are made, the Ledger Pre-Estimate Report must be run again in order to get the corrections into the report and made available for payment by progress estimate. Once the Ledger Pre-Estimate Report is correct, an actual estimate can be paid. The report containing the Project Engineer's signature should be retained in the project files.

The estimate process is then accomplished with a few keystrokes in option 2, estimate payments, in the CAPS main menu. At this point, the CAPS system will automatically calculate mobilization, retainage (on projects containing no Federal funds), and the sales tax. The warrant will be produced, signed, and sent to the Contractor along with the Contract Estimate Payment Advice Report and two different sales tax summary reports. Copies of these reports will also be sent to the Project Office. When the Project Office receives their copy of the Contract Estimate Payment Advice Report, the total amount paid for contract items should be checked against the Pre-Estimate Report. This helps to verify that the amount paid was what the Project Engineer intended to pay. In addition, the ledger records that produced the estimate will now be marked by the CAPS system as being paid.

Once the estimate is paid, the Project Engineer should ensure that estimate payment information is available to all subcontractors and any other interested parties who request the information. This may be accomplished by posting to a project specific webpage, a Region Construction webpage, email, or other means as determined by the Project Engineer and the Region Construction Office.

Up to the point of actually producing the warrant, the entire process for making a progress estimate payment is initiated and controlled by the Project Office.

Particular attention should be given to the comparison of the plan quantities and the estimate quantities for the various groups on the project as shown on the Ledger Pre-Estimate Report. Overpayments on intermediate progress estimates are sometimes difficult to resolve with the Contractor at the conclusion of the project.

New groups which do not change the termini of the original contract or changes in groups should be accomplished by memorandum from the Region to the Accounting and Financial Services Division.

An additional estimate may be prepared if considerable work has been done between the date of the last progress estimate and the date of physical completion when the Engineer anticipates delays in preparing the final estimate. Should this circumstance occur, the additional estimate should show the work done to date no later than the day before the date of physical completion.

Payment for Lump Sum Items

The Contractor is required to submit a detailed Lump Sum price breakdown for those items specified as Lump Sum for which there is no specified payment described in the payment clause of the applicable specification. Estimate payments for items specified as Lump Sum will be a percentage of the price in the Proposal, based on the Project Engineer's determination of the amount of work performed. Consideration will be given to, but payment will not be based solely on, the Contractor's Lump Sum breakdown. The Project Engineer should verify that the price breakdown is based upon a reasonable proportioning of the work, and detailed enough to allow a determination of the work performed on a monthly basis.

Payment of the first 80 percent of the Lump Sum price for Type B Progress Schedules will be made on the next progress estimate following the submittal and approval of the Type B Progress Schedule. The payment will be increased to 100 percent of the Lump Sum price when the Contractor has attained 80 percent of the Original Contract Award amount, as shown on the CAPS Pre-Estimate Report (inclusive of payments made for Material on Hand).

On WSDOT contracts for which payment is made through CAPS (Contract Administration and Payment System), payment for mobilization is calculated and paid automatically by the system. On contracts that do not use CAPS, the Project Office must calculate, and make payment for, the Contract item "Mobilization." Payment will be made in accordance with *Standard Specifications* Section 1-09.7. Based on the lump sum Contract price for "Mobilization," partial payment will be made as follows:

1. When 5 percent of the original Contract amount has been earned from other Contract items, excluding any amounts paid for materials on hand, the Contractor is also entitled to a partial payment of the Bid item "Mobilization." This payment, which is in addition to payment for contract work performed, will be calculated as 50-percent of the amount bid for "Mobilization" or 5 percent of the original Contract amount, whichever is the least.
2. When 10 percent of the original Contract amount has been earned from other Contract items, excluding any amounts paid for materials on hand, the Contractor will be paid 100 percent of the amount bid for "Mobilization" or 10 percent of the original Contract amount, whichever is the least. This payment is in addition to payment for contract work performed.
3. When the Substantial Completion date has been established for the project, payment of any remaining portion of the lump sum item "Mobilization" will be made.

Payment for Falsework

On those projects which include a lump sum item for bridge superstructure, payment may be made on request by the Contractor for falsework as a prorated percentage of the lump sum item as the work is accomplished. The Project Engineer may require the Contractor to furnish a breakdown of the costs to substantiate falsework costs. For any given payment request, the Contractor may be required to furnish invoices for materials used and substantiation for equipment and labor costs.

Payment for Shoring or Extra Excavation

When Shoring or Extra Excavation Class A is included as a bid item, payment must be made as the work under the bid item is accomplished, the same as for any other lump sum bid item. When Shoring or Extra Excavation Class B is included as a bid item, measurement and payment shall be made in accordance with *Standard Specifications* Section 2-09.4 and 2-09.5. RCW 39.04 provides that the costs of trench safety systems shall not be considered as incidental to any other contract item, and any attempt to include the trench safety systems as an incidental cost is prohibited. Accordingly, when no bid item is provided for either Shoring or Extra Excavation Class A or Shoring or Extra Excavation Class B and the Engineer deems that work to be necessary, payment will be made in accordance with *Standard Specifications* Section 1-04.4.

Payment for Asphalt, CRS-2P, Steel, and Fuel Cost Adjustment

Some projects may include the specifications for Asphalt Cost Adjustment, CRS-2P Cost Adjustment, Steel Cost Adjustment, or Fuel Cost Adjustment (one or more) as a General Special Provision. Not all projects will contain these provisions, since their use depends on the type of work, the duration of the contract, and Region preference. For those contracts containing one or more of the cost adjustment bid items, an adjustment (payment or credit) will be calculated monthly for qualifying changes in the index price of the commodity. No adjustment (payment or credit) shall be made if the 'Current Reference Cost' is within the percentage of the 'Base Cost' specified in the contract, and only those items that are included in the provision are eligible for adjustment. Worksheets are available, in the "Shared Documents" folder of the State Construction Office Sharepoint site at: http://sharedot/eng/cn/hqconstr/Shared%20Documents/Forms/AllItems.aspx, to assist the Project Office in computing these price adjustments, and on the State Construction Office web page (Construction - Escalation Clauses | WSDOT (wa.gov) to assist the Contractor and local agencies.

It is important to understand that the adjustments provided by these provisions are not a guarantee of full compensation for changes in the contractors cost, and that they are intended only to absorb some of the risk of severe cost escalation during contract performance. Because of this, the method of computing the adjustment has been simplified to eliminate tedious considerations that would otherwise be required to provide precise reimbursement of actual costs.

The Reference Cost is posted twice each month on the external website at: http://www.wsdot.wa.gov/Business/Construction/EscalationClauses.htm

Payment for "Asphalt Cost Price Adjustment", "CRS-2P Cost Adjustment" and "Fuel Cost Adjustment" is based on quantities of the eligible material(s) incorporated during the period covered, as demonstrated by pay notes for those items. Regardless of the Contract estimate cutoff date – the 5th or 20th of the month – adjustments will be calculated once per month using the Current Reference Cost, as defined in the Contract, for the total quantity of each eligible item for which we have tickets. If an unusual number of late tickets are received, work with your ASCE to determine the appropriate calculation.

The Current Reference Cost will be selected from the website using the "Date Effective" that immediately precedes the current month's progress estimate end date.

Payment for "Steel Cost Adjustment" is based on the quantity of eligible steel items incorporated or paid as Materials on Hand for the period covered. The Contractor is required to provide documentation of the quantities and the date shipped from the producing mill to the manufacturer.

If the Contractor fails to provide the required documentation, any adjustment credit will be unilaterally computed by the Project Office using a shipment date determined by the Engineer. If the Contractor wishes to protest this adjustment, it must be done in accordance with *Standard Specifications* Section 1-04.5.

When a portion of the payment for an eligible item is deferred, a similar portion of the price adjustment for that item should be deferred.

The provisions for these cost adjustments are silent regarding changed work because there are other Contract clauses that address how the Department will pay for changed work. Should changes occur in bid items that are eligible for adjustment, equitable adjustments should adhere to the guidance provided in Section SS 1-04.4. Under no circumstances should eligible items that were not included in the specifications at the time of bid be added by change order after award and execution of the contract. Likewise, these provisions should not be added by change order. FHWA will not participate in the cost of retroactive price adjustments.

Credits

Dollar amounts may be deducted as a "Below the Line Miscellaneous Deduction" from progress or final estimates when WSDOT is due a credit from the Contractor. Routine credits from the Contractor to WSDOT include, but are not limited to, the following items:

- Engineering labor costs when due to Contractor error or negligence, additional engineering time is required to correct a problem. This includes the costs of any necessary replacement of stakes and marks which are carelessly or willfully destroyed or damaged by the Contractor's operation.
- Lost and/or damaged construction signs furnished to the Contractor by WSDOT. The Contractor should be given the opportunity to return the signs or replace them in kind prior to making the deductions.
- Assessment to WSDOT from a third party that is the result of the Contractor's operations causing damage to a third party, for example, damage to a city fire plug. Actual costs will be deducted from the estimate.
- Other work by WSDOT forces or WSDOT materials when the Contractor cannot or will not repair damages that are the responsibility of the Contractor under the contract.
- Liquidated damages not associated with contract time, i.e., ramp closures, lane closures (see Section SS 1-10).
- As provided for in the specifications, specific costs or credits owed WSDOT for unsuccessful contractor challenged samples and testing.

The authority to withhold and assess routine "Below the Line Miscellaneous Deduction" on progress and final estimates has been delegated to the Regional Construction Manager, and may be further subdelegated to the Project Engineer. The Project Engineer must give written documentation to the Contractor describing the deduction and provide sufficient notice of the impending assessment.

Credit items which are specifically provided for by the *Standard Specifications* or contract provisions, such as non-specification density, non-specification materials, etc. may be taken through the contract items established for those purposes. A change order is required for credit items which are not specifically provided for by the contract provisions.

Occasionally a Contractor will send a check directly to a Project Office for payment of money due WSDOT. (The Project Office should not request payment.) Whenever a Project Office or WSDOT employee receives a check or cash directly from a Contractor, it is very important that the guidance found in the WSDOT *Accounting Policy Manual* M 13-82, Section 2-1, Control of Cash Receipts, be followed.

Withholding of Payments

Withholding payments for work the Contractor has performed and completed in accordance with the contract should not be done casually. There must be clear contract language supporting the action. The authority to withhold progress payments is subdelegated to the Regions. Further delegation to the Project Engineers is at the discretion of each Region.

There are very few occasions when it would be appropriate to withhold the total amount of a payment for completed work. If a minor amount of cleanup remains, if a portion of the associated paperwork has not been submitted, or if minor corrective measures are needed, then the correct action is to pay for the work and defer an amount commensurate with the needed remaining effort.

The concept of "allowing the Contractor to proceed at his own risk" and then withholding payment is not often supported by the contract. There is a contractual obligation to finish the work correctly, there would certainly be a "moral obligation" on the part of the Contractor to live up to the bargain, but there is no contract language that allows such an action. Specific exceptions to this rule are listed below.

Once a decision to withhold any part of the monthly payment has been reached, then it is imperative that the Contractor receive fair notice of this action. The method of this notice can be negotiated with the Contractor and could be a listing at the time of estimate cutoff, a copy of the pre-estimate report or other mechanism. Once notice has been provided, then it is also necessary to allow a reasonable time for corrections to be made.

No Payment for the Work – *Standard Specifications* Section 1-06.3 is unique in that this is a situation, specified as part of the contract, where the contractor may request permission to assume the risk for no certificate and end up never being paid for the related work.

Progress Payment Deferral – In the following situations, the contract specifies that the contracting agency has the authority to defer the entire progress payment:

- The contracting agency may not make any payments for work performed by a Prime/Subcontractor until the contractor performing the work has submitted a Statement of Intent to Pay Prevailing Wages approved by Labor and Industries (RCW 39.12.040).
- Failure to submit the "required reports" by their due dates (*Standard Specifications* Section 1-07.11(10)B).

Wage Administration in General – The administration of wages and payment for the work are separate issues. Holding a force account payment for certified payrolls is not appropriate. Withholding payments on the contract is suggested as a method to achieve compliance under *Standard Specifications* Section 1-07.9(1) pertaining to wages. This remedy should not be used without approval of the State Construction Office. Routine enforcement of wage requirements should be done on their own merits utilizing the sanctions specified as follows:

State Wage Administration – Labor and Industries is the enforcement agency for state prevailing wage administration. The State (WSDOT) is protected under the contract from wage claims by reserving 5 percent of the moneys earned as retained percentage. This 5 percent is made available for unpaid or underpaid wages liens among other claims. Contract payments should not be deferred due to a contractor's failure to pay the State minimum prevailing wage.

Federal Wage Administration – FHWA-1273 specifies that the State Highway Administration (SHA) is in the enforcement role for federal prevailing wage administration. Under Section IV "Payment of Predetermined Minimum Wage" subsection 6., "Withholding," the State Highway Administration (contracting agency) is authorized to withhold an amount deemed necessary to make up any shortfalls in meeting Davis Bacon prevailing wage requirements. It goes on to authorize the deferral of all payments, under certain conditions, until such violations have ceased. This is only for federal wage requirements and the amount "deemed necessary" must be based on the amount of the underpayment.

Application of the Standard Specifications – *Standard Specifications* Section 1-05.1 reads in part as follows: "If the Contractor fails to respond promptly to the requirements of the contract or orders from the Engineer: …. 2. The Contracting Agency will not be obligated to pay the Contractor, and …."

Standard Specifications Section 1-09.9 reads in part as follows: "Failure to perform any of the obligations under the contract by the Contractor may be decreed by the Contracting Agency to be adequate reason for withholding any payments until compliance is achieved."

Sounds good and we can do so, but withholding of payments owed the contractor must not be done on an arbitrary basis. Other than the previously noted exceptions, money is normally withheld because work/work methods are not in accordance with contract specifications. Also, the amount withheld must have a logical basis. We cannot penalize the contractor by withholding more than the out of compliance work is worth.

Withholding payments should not be used routinely as a tool for forcing compliance on general contract administration requirements. The State is protected against nonperformance by requiring a performance bond. In the event that lack of contract compliance puts the State at substantial risk monetarily or safety wise, it may be appropriate to inform the contractor of the compliance problem and suspend work under *Standard Specifications* Section 1-05.1 until corrections are made.

When withholding money, remember that delaying the contractor's cash flow may damage the contractor's ability to perform work. Before doing so, the State should be able to demonstrate:

- Specifically what was not in accordance with the contract and where the requirement is specified in the documents.
- That the amount withheld is commensurate with the amount of the unauthorized, uncompleted or defective work.
- That the contractor was notified in a timely manner (within eight days per prompt pay laws) and given a chance to make corrections.
- That the State has worked with the contractor to mitigate corrections to non-specification work in order to minimize the cost.

The State is required to pay the contractor in a prompt manner within 30 days after receipt of the work or after recognition of entitlement to additional compensation. The Project Engineer must keep an eye on the calendar when scheduling monthly estimate payments.

Regions are not authorized to withhold amounts that are greater than the estimated cost of the missing or incorrect portion of the work. Any such excess withholding must be approved by the State Construction Office.

Delinquent Contractor Submittals

Missing submittals is a principal source of delays in closing out the project and processing the final estimate. As the project proceeds toward completion, the Project Engineer and the Contractor should attempt to obtain all submittals as the need arises. These might include such things as materials certificates, certified payrolls, extension of time requests, or any other item or document that might delay processing the final estimate. Attention is needed to assure the receipt of these items from subcontractors as they complete their work.

Final Estimates

The final estimate for a Contract is processed in CAPS by selecting the "Final" option when running the estimate. The final estimate is a two part process that begins with the Region running the Region Final and is completed when the Accounting and Financial Services (AFS) Division runs the Headquarters Final.

Running the Region Final in CAPS will not generate a warrant for the Contractor, but instead will generate the following reports:

- Final Comparison of Quantities
- Contract Estimate Payment Advice
- Contract Estimate Payment Total and
- Sales Tax Summary

The Work Done to Date entry on a final estimate is the Physical Completion Date. CAPS cannot process estimates if the Work Done to Date entered is after the Physical Completion Date.

Review the reports generated for accuracy, verifying quantities posted and costs accumulated during the life of the Contract. Corrections can be made to the project ledger in CAPS and the Region Final can be rerun as needed to ensure it is correct.

Region Finals showing an overpayment to the Contractor will be processed in the same manner. If this occurs, the Contract Estimate Payment Totals report will show a negative amount due to the Contractor. When AFS receives the accepted final estimate package, they will request reimbursement from the Contractor for the amount owed. The Project Engineer should not request reimbursement from the Contractor.

Once the Project Engineer has validated the amounts, forward the following documentation to the Contractor using the approved electronic software:

- Contract Estimate Payment Totals Report - CAPS report RAKC300F-EA – Informational only, Contractor signature not required
- Final Contract Voucher Certification (FCVC) DOT Form 134-146 - Requires Contractor signature

The person signing the Final Contact Voucher Certification must be authorized to do so. Authorized signatures are submitted by the Contractor at the beginning of each Contract.

Submit the documentation noted above to the Contractor for electronic signature as soon as reasonably possible, but within six months of Physical Completion.

Once the Contractor and PE signatures are obtained, the FCVC will automatically be sent to Region by the electronic signature software. Region cannot proceed with signatures and approvals until all outstanding documentation has been received and the Project Office sends the final estimate package for review.

After Contract Completion has been granted and the Region has reviewed and approved the FCVC, submit the final estimate package to the State Construction Office. Project Offices must submit documentation to the region for region executed contracts. Include recommendations for assessment of liquidated damages associated with Contract time if not submitted previously. The State Construction Office must resolve all issues of liquidated damages before the final estimate package can be accepted and submitted to the AFS and Financial Services Division.

Final Estimate Package

The final estimate package consists of the following:

- **Project Status Report will include:**
  - Contract time and recommendations for liquidated damages related to contract time.
  - Amount of railroad flagging used if any.
  - Identify Miscellaneous Deductions by including backup documentation equal to the amount deducted
  - Explanation of any Monies Due WSDOT as indicated in the Contract Estimate Payment Totals.
  - Identification of overruns/underruns in Contract quantities and a brief explanation of resolution.
  - In addition, indicate whether or not all Affidavits of Wages Paid have been received for the Contractor, and all Subcontractors, agents or lower-tier subcontractors. List all Contractors, subcontractors, etc. for whom an Affidavit has not been received.
  - Federally funded projects advertised after October 17, 2022 - Confirmation that all Build America/Buy America (BABA) CMO forms are on file and resolutions are documented.

- **Final Contract Voucher Certification –** DOT Form 134-146, original only.
- If an assessment of liquidated damages has been made previously, include a copy of the letter from the State Construction Engineer to the Contractor assessing these.
- If an assessment of miscellaneous damages or liquidated damages resulting from causes other than time, include copies of letters from the Region to the Contractor to document assessments.
- **Contract Estimate Payment Totals –** RAKC300F-EA.

The final estimate package for contracts executed by the Region will be reviewed by Region Construction and the Final Contract Voucher Certificate will be signed by the Region Administrator (as Designee) accepting the Contract. The date on which the Region Administrator signs the Final Contract Voucher Certificate becomes the final acceptance date for the Contract. The final estimate package is retained with the permanent final records.

When the final estimate package is reviewed by the State Construction Office for acceptance of the Contract, the date the State Construction Engineer signs the Final Contract Voucher Certification becomes the final acceptance date for the Contract. The final estimate package is then submitted to AFS.

Final Estimate Claim Reservations

Should the Contractor indicate a claim reservation on the Final Contract Voucher Certification, it must be accompanied by all the requirements of *Standard Specifications* Section 1-09.11(2) (provided these have not been met in a previous claim submittal). The Project Engineer must assure that the requirements have been met prior to submitting the final estimate package to the State Construction Office. If the claim package is incomplete, return the FCVC to the Contractor with notice of the missing parts.

Unilateral Acceptance

The Project Engineer cannot establish Contract Completion if the Contractor is unwilling or unable to submit one or more of the required documents noted in *Standard Specifications* Section 1-08.5. However, the Region can request that the State Construction Engineer accept the Contract by signing the Final Contract Voucher Certification (FCVC) in spite of the missing documents.

If the Contractor has not signed the FCVC, the Region can request that the State Construction Engineer accept the Contract without the Contractor's signature. The Region is responsible for notifying the Contractor before such a request is made. The State Construction Office will send the email and delivery confirmation required in *Standard Specifications* Section 1-09.9. The date the State Construction Engineers signs the FCVC becomes both the final acceptance date and the Contract Completion date for the Contract, both established unilaterally.

Formal Claim Settlements After Acceptance

Formal claim settlements are negotiated and approved by the Assistant State Construction Engineer, and may require payment adjustments after the Final Contract Voucher Certification (FCVC) is signed. To process a payment or take a credit after a project is accepted by the State Construction Engineer, the Project Engineer should complete, assemble and route the following items.

1. Send the formal claim settlement (which has been approved by the Assistant State Construction Engineer) and a letter to the Contractor that includes the following information:
   - A claim decision has been determined
   - The formal claim settlement documentation
   - The amount of the claim settlement
   - Who made the decision and what process was utilized
   - Timeframe for paying the settlement
   - Request the Contractor sign and return the attached formal claim settlement
   - Include the statement: "This Claim Settlement Statement is issued in connection with the settlement of a claim, as evidenced by the attached settlement agreement. The execution of this Statement does not change the established Completion Date and Final Acceptance Date of the contract or cause the need for a new final contract voucher."
2. Contact region program management to determine if work order needs to be reopened in TRAINS. If a separate group will be used to track settlement payments, request the new group and provide a copy of the letter.
3. Send the original, contractor signed, settlement agreement, a copy of the letter and payment information (group/control Section to be used) to the State Construction Office. The State Construction Engineer or the Deputy State Construction Engineer will sign the settlement agreement, and forward received documentation to CAPS. A copy of the agreement will be returned to the Project Office for inclusion in the contract Permanent Final Records. CAPS will inform the Project Office of the new item number created in CAPS.
4. Prepare a Field Note Record to document the payment, and post as an entry for the new item number using the appropriate group(s). Taxes will be assigned based on the group(s).

Once complete, the Project Engineer runs a Supplemental Final Estimate and contacts HQ CAPS for further instructions.

Supplemental Final Estimates

A Supplemental Final Estimate is a payment adjustment made to a contract after the Final Estimate has been processed and the project has been accepted by the State Construction Engineer. A Supplemental Final Estimate may be necessary to correct an inadvertent under payment or where a claim settlement may require additional payment be made to the Contractor. In order to complete a Supplemental Final Estimate, the Project Engineer should complete and assemble the following items, routing them through the Region to the State Construction Office for review and further processing:

1. Complete any corrections or additional postings necessary in CAPS, including any postings to change order items added to CAPS for the settlement of a claim. (Please note, where additional CAPS postings are necessary after the Physical Completion date has been established, the "Work Done To" date in CAPS must be entered as the Physical Completion date or prior.)

2. Complete a Pre-Estimate report including the Project Engineer's recommendation for payment.
3. Assemble the backup information supporting the necessity and substantiating the cost of the changes to be made.
4. Send 2 and 3 above via email or campus mail to the State Construction Office.

After review, the Pre-Estimate report will be signed by the State Construction Engineer authorizing payment to proceed.

While postings and corrections to CAPS may continue, once the Completion date has been established for a contract, CAPS will no longer allow the Project Engineer or the Region to process further payments to the Contractor. As a result, payment of the Supplemental Final Estimate will need to be completed for the Project Engineer by the Accounting and Financial Services Division.

If this process requires a more timely response, the above documentation may be scanned and emailed to the State Construction Office and CAPS; and the contract payments Section can be requested to print out the pre-estimate report to be taken to the State Construction Engineer for signature prior to processing the supplemental final estimate. Once the supplemental payment is completed, the signed and executed Pre-Estimate report will be returned to the Project Engineer where it can be maintained as a part of the project payment files and made a part of the Region Temporary Final Records.

The above process will also be used when there has been an inadvertent over payment to the Contractor, the Final Estimate has been processed, and the project has been accepted by the State Construction Engineer. In this case, the Project Engineer must work with the Region, the Contract Payments section of the Accounting and Financial Services Division and the State Construction Office to make the correction.

If the Accounting and Financial Services Division requires a supplemental Final Contract Voucher to reflect the new cost of the contract due to the supplemental estimate, the new voucher will not be signed by the Project Engineer as that would reestablish the final acceptance date and restart the 30 day period to file claims against the bond (RCW 39.08.030) and restart the 180 day period for Contractor to file suit (Section 1-09.3(11)). The original acceptance dates will not change from the dates the Construction Engineer signed the original Final Contract Voucher Certificate.

SS 1-09.9(1) Retainage

Retained percentage withholding is based upon RCW 60.28, which provides that:

- A sum not to exceed 5 percent of the money earned by the Contractor on estimates for projects containing no Federal funds is to be retained by the Contracting Agency.
- The Contractor may submit a bond for all or any portion of the amount of funds retained by WSDOT.

  When a Contract is awarded, the Division of Accountability and Financial Services (AFS)/Contract Administration and Payments System (CAPS) unit or the Region Plans Office sends a package of contract documents to the Contractor.

This package of Contract documents also includes the necessary instructions for the Contractor to make application for a bond to replace all or any portion of the retainage. The bond form will be processed by AFS/CAPS without involvement from Project Engineer's Office, although the payment system will not allow them to process a payment until some form of retainage is in place.

The Contractor, at any time during the life of the contract, may make a request to the Project Engineer for the release of all or any portion of the amount of funds retained. This request does not need consent of surety since the retainage bond form, for this purpose, requires their consent. The Region must forward this request by transmittal letter to AFS/CAPS, which will furnish the appropriate bond form to the Contractor for execution. The Contractor may return the executed bond form directly to AFS/CAPS for final approval and signature by WSDOT.

- Effective July 27, 2011, for projects containing no Federal funds that include landscaping work the Contractor may request that, 30 days after completion of all contract work other than landscaping work, WSDOT release and pay in full the amount of funds retained during the life of the contract for all work except landscaping. In order to initiate this release of funds, DOT Form 421-009 should be completed by the Contractor and submitted to the Project Engineer. In signing the request, the Project Engineer will confirm that all work, except landscaping work, is in fact physically completed. For any landscaping work that may have been completed, the Project Engineer will designate the amount of landscaping moneys, if any, that have been earned to date by the contractor. In the space designated for remarks the Project Engineer will identify the landscaping or plant establishment work that remains to be completed and its approximate value. Except for landscaping work, the Project Engineer will determine if all Statements of Intent and Affidavit of Wages Paid have been received for the work that has been physically completed. The Project Engineer will transmit to the Contractor a list of all subcontractors, including UBI numbers, believed to have performed work on the project. The Contractor will verify which subcontractors did work on the project and that the UBI number listed is correct for each subcontractor. DOT Form 421-009 will not be transmitted to AFS/CAPS until the Contractor has verified the subcontractors and UBI numbers. WSDOT will continue to withhold a 5 percent retainage of any moneys earned for landscaping work that may have been completed to date and will continue to retain 5 percent of the moneys that are to be earned for landscaping that is yet to be completed. A bond is not required.

  The completed request along with the Project Engineer's cover memo confirming receipt of Statement of Intent and Affidavit of Wages Paid for the Contractor, subcontractor, and any lower-tier subcontractors, who were involved in the completed work, is then forwarded to the State Construction Office, through the Region Construction Office, for approval. Once approved, the Construction office will submit the request to AFS/CAPS for further processing. If there are no claims against the retainage still in place and releases have been received from Revenue and Employment Security within the designated 60 day period, AFS/CAPS will release the appropriate portion of retainage to the Contractor.

SS 1-09.10 Payment for Surplus Processed Materials

When excess aggregate is produced by the Contractor from a WSDOT furnished source, the Contractor will be reimbursed actual production costs if the excess materials meet the requirements of *Standard Specifications* Section 1-09.10. If more than one type of aggregate is involved, the provisions of *Standard Specifications* Section 1-09.10 apply to each type. When excess aggregate for HMA is produced, adjust the planned and actual HMA quantity by deducting the quantity of Asphalt and RAP or other materials used in the mix.

If WSDOT has a need for the excess aggregate for either maintenance or future construction contracts, the material may be purchased into the appropriate inventory account. The Project Engineer should contact Region Maintenance and the Accounting and Financial Services Division for guidance. If aggregates are to be disposed of as surplus, the Project Engineer should contact the State Administrative Services Office, Purchasing and Inventory Section, for additional assistance.

SS 1-09.11(2) Claims

Claims by the Contractor

The *Standard Specifications* contains specific requirements in Section 1-04.5 which, if not followed, may result in a waiver of the Contractor's rights to submit a Certified Claim. The Project Engineer should monitor whether the Contractor has met these requirements. If all the requirements have been met, the Project Engineer must evaluate the merits of the Certified Claim.

If the Contractor has pursued and exhausted all the means provided in *Standard Specifications* Section 1-04.5 to resolve a dispute, the Contractor may file a Certified Claim. A Certified Claim, filed in accordance with *Standard Specifications* Section 1-09.11(2), is a much more structured device and demands a high level of conformance with the contract requirements. The objective is to utilize the rights that WSDOT has under the contract to identify the issues, obtain a sufficient level of information from the Contractor and limit the discussion to a defined subject matter. To accomplish this, and to maintain the Department's rights in a situation that may lead to court action and expensive lawsuits, the Project Engineer must insist on rigid conformance with the requirements of the provision. In fact, the first evaluation must not be of the claim's merit, but rather of the claim's structure and content. If the package fails the specification requirements in any way, it should be returned to the Contractor immediately with a written explanation. Conversely, if the package meets the contract requirements, then the Project Engineer must comply with the demands for WSDOT actions that are included in the same specification.

The notarized statement that is required to accompany the Certified Claim states that it is a "true statement of the actual costs incurred and time sought and is fully documented and supported under the Contract between the parties." The Contractor is acknowledging that they have expended the cost and time that they are seeking. Therefore, a Certified Claim may only be submitted after the costs have been realized. If the Project Engineer receives a Certified Claim for costs that have not been realized by the Contractor they should contact the State Construction Office.

The existence of a Certified Claim does not diminish the responsibility of the Project Engineer to pursue resolution. The only difference is that State Construction Office final approval of a proposed settlement is required. The change order settling a formal claim must include waiver language similar to the following:

> "The Contractor, (company name), by the signing of this change order agrees and certifies that:
>
> Upon payment of this change order in the amount of $_____, any and all claims set forth in the letter(s) to the Department of Transportation, dated _____ and signed by _____ of (company name) in the approximate amount of $_____, have been satisfied in full and the State of Washington is released and discharged from any such claims or extra compensation."

If the settlement is intended to close out all dispute discussions for the contract, use language similar to:

> "The Contractor, (company name), by the signing of this change order agrees and certifies that:
>
> Upon payment of this change order in the amount of $_____, any and all claims in any manner arising out of, or pertaining to, Contract No. _____, (including but not limited to those certain claims set forth in the letter(s) to the Department of Transportation, dated _____and signed by _____ of (company name) in the approximate amount of $_____, have been satisfied in full and the State of Washington is released and discharged from any such claims or extra compensation in any manner arising out of Contract No. _____."

Legal Filing

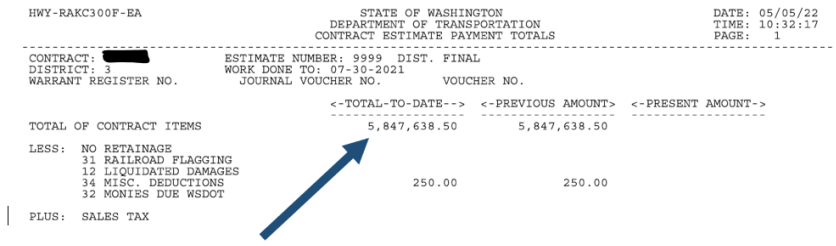
Once the Contractor has submitted a Certified Claim in acceptable form and the State has either denied the claim or failed to respond in the time allowed, the Contractor is free to seek judicial action by filing a lawsuit or, in some cases, demanding binding arbitration. Note that the Contractor must fully comply with the provisions of *Standard Specifications* Section 1-09.11 before it can seek judicial relief. Once any legal action has been started, the Project Engineer may only continue with settlement efforts if the Attorney General's office has given specific permission to do so. Such permission may be sought through the State Construction Office. Settlements of claims which have resulted in a judicial filing need review and approval by the Attorney General's office and different waiver language similar to the following:

> "The Contractor, (company name), by the signing of this change order agrees and certifies that:
>
> Upon payment of this change order in the amount of $_____, any and all claims in any manner arising out of, or pertaining to, Contract No. _____, (including but not limited to those certain claims set forth in the complaint filed under Thurston County Cause No._____ (Contractor's name) vs. State of Washington), have been satisfied in full and the State of Washington is released and discharged from any such claims or extra compensation in any manner arising out of Contract No. _____."

Any documents pertaining to a settled claim which has resulted in a judicial finding must be kept for a period of six (6) years following the date of the court order dismissing the lawsuit.

Final Contract Voucher Certification

The Final Contract Voucher Certification requires the Contractor to acknowledge and certify that the final estimate is a correct statement showing all monies due from the State. The dollar amount shown in the Final Amount section of the form is shown on CAPS report RAKC300F-EA. Use the dollar amount shown in the Total of Contract Items in the column titled TOTAL TO DATE:



HWY-RAKC300F-EA STATE OF WASHINGTON DATE: 05/05/22
DEPARTMENT OF TRANSPORTATION TIME: 10:32:17
CONTRACT ESTIMATE PAYMENT TOTALS PAGE: 1

CONTRACT: [redacted] ESTIMATE NUMBER: 9999 DIST. FINAL
DISTRICT: 3 WORK DONE TO: 07-30-2021
WARRANT REGISTER NO. JOURNAL VOUCHER NO. VOUCHER NO.

	<-TOTAL-TO-DATE-->	<-PREVIOUS AMOUNT>	<-PRESENT AMOUNT->
TOTAL OF CONTRACT ITEMS	5,847,638.50	5,847,638.50	
LESS: NO RETAINAGE			
31 RAILROAD FLAGGING			
12 LIQUIDATED DAMAGES			
34 MISC. DEDUCTIONS	250.00	250.00	
32 MONIES DUE WSDOT			
PLUS: SALES TAX			

The final amount reported on the FCVC will be the total paid for Contract Bid Items and does not include amounts paid in retail sales tax or miscellaneous liquidated damages.

The Final Contract Voucher Certificate releases the State from any claims arising from performance of the Contract. The Contractor must submit any Certified Claims with, or prior to, signing the FCVC and must note any Certified Claims as exceptions on the FCVC. If there is no exception above the Contractor's signature on the FCVC, the Contractor's right to submit a Certified Claim has been waived.

Once the project is physically complete, the Project Office will assemble the final estimate and send it to the Contractor with the FCVC for signature. If the Contractor does not sign and return the FCVC in a reasonable time, WSDOT may unilaterally set the completion date and process the final estimate without the Contractor's signature. The Project Engineer will send at least one reminder to the Contractor prior to pursuing unilateral final acceptance. Discuss proposals to unilaterally accept a Contract with Region managers before contacting the State Construction Office to request unilateral final acceptance. Include evidence of the initial transmittal of the FCVC and any reminders sent to the Contractor when sending requests to the State Construction Office for unilateral final acceptance. The Contractor must submit any Certified Claims prior to unilateral final acceptance or their rights to said claims shall have been waived.

Note: Contracts executed by the Region do not require acceptance by the State Construction Engineer. The final signature will be the Region Administrator, Area Administrator, or designee.

SS 1-09.12 Audits

The Project Engineer is responsible for preparing all necessary records to document the work performed on the Contract. Detailed instructions on the records required and methods of preparing them are covered in Chapter 10.

Construction Quality Audits

Construction Quality Audits will be performed by the Construction Division - State Materials Laboratory to document conformance of project records to DBE compliance, construction administration and materials certification standards.

The Construction Quality Audit consists of documentation review and may include a field review. The documentation review will normally be conducted at the Project Office unless arrangements are made for it to be conducted elsewhere.

The goal is to perform a Construction Quality Audit on at least one project per Project Office every three years. Construction Quality Audits may be conducted more frequently at the discretion of the Construction Division. Projects will be selected with consideration given to project size and complexity.

Audits are typically performed during the active life of the project; generally, 20 percent to 80 percent complete, but also may occur after substantial completion has occurred. Construction Quality Audits are performed to validate that construction inspection, contract administration, materials testing and documentation are completed in accordance with established requirements and standards.

Records reviewed will include those maintained and developed by the Project Engineer for DBE compliance, inspection requirements, approval, testing, acceptance and field verification of materials placed and paid for on the Contract.

In addition to general audit deficiencies found, the following are audit performance measures:

- Record of Materials: Accuracy maintained with less than 10 percent errors
- Materials Approval: Accuracy maintained with less than 10 percent errors
- Materials Acceptance: Accuracy maintained with less than 10 percent errors
- Field Verification: Accuracy maintained with less than 10 percent errors
- Materials Testing Frequencies: Within 10 percent of minimum required frequencies

Audit areas with less than 10 percent deficiency are exit items, while audit areas that exceed 10 percent are audit findings.

Upon completion of the audit, the findings will be discussed with the Project Engineer and/or their representative. Audit exit items are areas for the Project Engineer to make improvements to processes and can require corrective action be taken to resolve the issue. General audit deficiencies and audit findings are more serious and require a corrective action plan to document the Project Office process improvements. The final audit report will be sent to the Project Engineer with copies sent to the Region Documentation Engineer, Region Construction Engineer, State Construction Office, Construction Materials Office, and the FHWA Division Office.

The Project Engineer will address any general audit deficiencies, exit items and audit findings found by the audit, documenting the correction, deviation or change that resolved the deficiency. Deficiencies not rectified or meeting the requirements of Section 9-1.2F shall be noted during the Materials Certification.

The Project Engineer is responsible for developing and implementing a corrective action plan to ensure audit deficiencies and audit findings are avoided on future audits and to review the corrective action plan with the Region Construction Engineer for their concurrence.

All contract documentation shall be available for review by the Audit Team. The following items of documentation may be requested by the Audit Team:

1. Request to Sublet Work Form 421-012
2. DOT Form 420-004
3. DBE On-Site Review Form 272-052
4. Record of Materials, as revised and amended by the Project Office (see Section 9-1.2C)
5. Approval Documents
   a. Request for Approval of Material (see Section 9-1.3B)
   b. Qualified Products List pages (see Section 9-1.3A)
6. Acceptance Documents
   a. Test Results
      - Acceptance Test Reports
      - Assurance Test Reports (where applicable)
      - Independent Assurance Test Reports (where applicable)
      - Verification Test Reports (Cement and Liquid Asphalt)
      - Toxicity Test Reports (Recycled Materials)
   b. Manufacturer's Certificate of Compliance (see Section 9-1.4D)
   c. Miscellaneous Certificates of Compliance (see Section 9-1.4E)
      - Lumber Grading Certificate
      - Certification of Cement Shipment
      - Notice of Asphalt Shipment or Certified Bill of Lading
      - Any other certificates required by the contract documents
   d. WSDOT Fabrications Inspected Items (see Section 9-1.4B)
   e. Concrete Pipe Acceptance Report (see Section 9-1.4B(3))
   f. Catalog Cuts (see Section 9-1.4G)
   g. Proprietary or Agency Supplied Items (see Sections 9-1.3B(1)(IV) and 9-1.3B(1)(V))
   h. Visual Acceptance Items (see Section 9-1.4C)
   i. Reduced Acceptance Criteria Checklist (see Section 9-1.1)
7. Field Verification Documentation (see Section 9-1.5)
8. Inspectors Daily Reports
9. Field Note Records
10. Comparison/Summary of Quantities
11. List of Change Orders
12. Project Office Signature/Initial List
13. List of all materials testers and their qualification records
14. Other documentation as requested by the Auditor.

1-10 Temporary Traffic Control

SS 1-10.1 General

Work Zone Traffic Control

The primary function of work zone traffic control is to move vehicles and pedestrians safely through or around work zones while protecting on-site workers and accommodating the Contractor's construction operations.

All work is to be performed by the Contractor under the Contractor's control and supervision. All resources are to be provided by the Contractor unless the Special Provisions of the Contract specifically states that the Department will provide some resource(s), what those resources will be and how they are to be utilized. Such provided resources will be placed in the Contractor's control to be used in the Contractor's operation. Any additional resources provided to the Contractor during the project should be accompanied by a change order to the Contract and, where appropriate, a price reduction.

The "General" requirements for traffic control (*Standard Specifications* Section 1-10.1) address the responsibility to provide adequate traffic control measures at work zones as follows:

- No Work shall be done until all necessary signs and traffic control devices are in place and conflicting or confusing signs are covered.
- If the Contractor does not provide necessary traffic control, WSDOT may do it and deduct the cost from the Contractor's payments.
- The Contractor is responsible regardless of whether or not WSDOT orders, furnishes, or pays for necessary traffic control.

It is important for the Project Engineer to ensure that the Contractor has an accepted traffic control plan in place and implemented providing all necessary signs and other traffic control devices so that the traveling public is aware of all deviations from the normal traffic conditions and is furnished adequate direction and guidance to permit safe travel through the construction area.

Law Enforcement Traffic Control Assistance

Law Enforcement traffic control assistance is considered an enhancement to the required work zone traffic control and should be reserved for those work zones that have unusual hazards or a high degree of worker exposure to traffic, which cannot be addressed by traditional traffic control means.

The use of Law Enforcement Officers in work zones follows two scenarios. Each scenario differs in the duties, management, administration, and payment for the officers.

Uniformed Police Officer (UPO)

In the first case, a Contractor provided UPO may be included in the plans to participate in a Contractor's traffic control activity, perhaps for intersection flagging. The UPO is provided by the Contractor and their use will be defined in the Contract Provisions and traffic control plans. The Contractor shall direct the activities of the UPO and payment will be made in accordance with the Contract Provisions. It is important to note that Washington State Patrol (WSP) Troopers may be used in the roll of a UPO.

Washington State Patrol (WSP)

The second case, WSP Troopers are dispatched for active enforcement for speed control or roadway/ramp closures around an active work zone. In this case, WSP does not participate in the Contractor's traffic control work with the possible exception of a rolling slowdown on the interstate. The Contract Provisions will identify the number of hours and tasks that will be provided at no cost to the Contractor. Costs for hours beyond what is noted in the provisions will be split between the Department and the Contractor if the Project Engineer approves the need for additional hours. There shall be no entitlement to their services and no entitlement for any impacts for any reason as a result of WSP personnel.

It is important to establish and maintain communication through all phases of Work that include WSP, beginning at the pre-construction conference. Topics of discussion might include: WSP tasks, Trooper scheduling coordination, and communication strategies.

Daily communication is necessary between the Project Inspector and WSP Trooper(s) assigned to the project at the beginning their shifts so they understand their roles and ensure that the appropriate traffic control strategy is applied. On each shift of WSP traffic control assistance, DOT Form 421-045, WSP Field Check List, shall be filled out. WSDOT will fill out the top portion of the form and give it to the WSP Trooper on the project to complete. At the end of the Trooper's shift, the completed form shall be returned to WSDOT.

WSDOT has agreement GC 5080 to reimburse the WSP for Trooper assistance on construction projects. Instructions for WSP assistance including contact information for the Districts and detachments are in the *Traffic Manual* M 51-02 Chapter 5.

A mid-project decision to provide troopers would be a change order. To be fair to unsuccessful bidders, adding the WSP specifications to a Contract should have the initial number of hours set at zero if nothing else has changed so that all costs are shared between the Contractor and WSDOT. Routine enforcement by WSP in our work zones is always welcome.

Records of Construction Signing, Collisions, and Surveillance

It is important that detailed documentation of temporary traffic control installations be maintained. The following are recommended procedures and methods of documentation:

- Use photos and video records.
- The Contractor's installation must adhere to the traffic control plan (TCP), and the records must confirm that the installation is checked against that plan. Involve the Regional Traffic Engineer for significant changes to the TCPs.

- Documentation of the Contractor's activity for traffic control, including signing, should be completed by the Contractor's Traffic Control Supervisor (TCS). In accordance with the *Standard Specifications*, the TCS must maintain a daily project traffic control diary. DOT Form 421-040A Contractor's Daily Report of Traffic Control – Summary, and 421-040B Contractor's Daily Report of Traffic Control – Traffic Control Log, are provided to the Contractor for this purpose.

  The Summary report will typically contain a brief description of the daily activities of the TCS with expanded details of any important event such as traffic collisions, meetings, decisions, or rapidly deteriorating conditions of traffic or weather. The Summary report is usually sufficient to verify the location and status of Class A signs once they are installed.
- The Traffic Control Log report is used to specifically identify all details of each Class B work zone setup. This includes identification of specific signs used, location of the signs, location of Flaggers, location of the work zone, the time it was set up, and the time it was removed. Additional information includes cone layout, if used, comments about piloted traffic, and comments about the setup of an accepted TCP.

The Project Inspector must work with the Contractor to ensure the Project Office is informed when collisions occur. It is important that the Project Office be aware of all traffic collisions within the project area. Thorough records must be maintained about the collision, including site conditions, status of signing, other traffic control measures, and anything else that may have contributed to the incident.

When an incident is investigated by the WSP, do not move signs until released to do so by the Trooper. Attempt to make contact with the Trooper to obtain a copy of the incident report or a case number.

When inspections are made of the work zone, either by project or region personnel, document the inspection and maintain the reports in the project files along with responses to any action items that resulted from the inspection.

Work Zone Safety and Mobility

In keeping with the above recommendations, the Project Engineer should utilize the information obtained from traffic control reports, collision reports, and other field observation in order to better manage Work Zone impacts. This will allow the Project Engineer to implement any necessary changes to traffic control in order to increase safety and to enhance mobility through the work zone.

At the completion of each project, the Project Engineer should review the traffic control used on the project in order to identify trends, etc. that may be used to improve Work Zone practices or strategies. This information should be summarized and provided to the Region Traffic Office for inclusion in annual reports.

SS 1-10.2 Traffic Control Management

Standard Specifications Section 1-10.2 addresses the requirements and duties of the Contractor's management personnel responsible for traffic and the Traffic Control Supervisor (TCS). The Contractor has the responsibility for managing traffic control and providing safe traffic control measures that are appropriate for the type of work and consistent with the requirements of the contract plans and specifications. The Contractor's traffic control work is a contract activity. Just like other contract activities, it is associated with pay items. The activity must be inspected for adequacy

and conformance with the contract. Once it is performed and inspected, associated contract items must be measured and paid. Traffic management actions affect not only the Contractor's work operations, but also those of subcontractors. The process for coordinating and approving those actions must be well defined and consistent with the contract requirements.

Contractor management and the TCS work together with the Project Engineer and WSDOT's traffic control contact person to address traffic control issues as the work progresses. Planning and coordination of the Contractor's work efforts with appropriate traffic control measures are the primary responsibilities of contractor management. It is also the responsibility of management to ensure that any adopted State-provided or accepted Contractor-proposed Traffic Control Plans (TCPs) needed to implement the contract work operations are provided to the TCS and that any necessary resources to implement the TCP are available.

SS 1-10.2(1) General

SS 1-10.2(1)B Traffic Control Supervisor

The Traffic Control Supervisor (TCS) ensures that the traffic control measures shown on the accepted traffic control plans (TCPs) are properly implemented, operating, and documented on the project. The Contractor's TCS may not be required full time on the project, but is required to perform all the duties required by the Specifications. When the Contractor is working multiple shifts, it may be necessary to have more than one person assigned to the role.

In addition to the Contractor's responsibility to designate a Traffic Control Supervisor, WSDOT may designate a DOT employee who is qualified, but not necessarily certified, to serve as the State's traffic control contact. It is intended to have qualified, trained representatives from both the Contractor and WSDOT work together to achieve safe traffic control operations on the project.

Among the duties of the Project Engineer in the area of Traffic Control are the following:

- **Communication –** About the planned work, traffic control needed and adjustments to the accepted Traffic Control Plan. During the work, to stay aware of changes, events and issues.
- **Monitoring –** The activities of the Contractor TCS and traffic control workers. The status of signs and control devices. Conformance with specifications and requirements.
- **Documentation –** Obtaining and reviewing daily reports. Handling Traffic Control Plans and their approvals.
- **Coordination –** With adjacent projects, with DOT Traffic offices, notices to the media.

The Project Engineer may assign these duties in any manner. It would make sense to include the State's traffic representative in these activities.

When reference is made to the Traffic Control Supervisor (TCS) in these provisions or in the *Standard Specifications*, it shall mean the Contractor's Traffic Control Supervisor unless stated otherwise.

Verify the Traffic Control Supervisor is certified by one of the firms listed in the Special Provisions by recording their full name, TCS card number, and card expiration date in the Inspectors Daily Report. Do not take a copy of the TCS certification card.

SS 1-10.2(2) Traffic Control Plans

Standard Specifications Section 1-10.2(2) addresses the requirements of Traffic Control Plans (TCPs). The Contractor must either adopt the TCPs appearing in the contract or propose modified TCPs to be used for the project. The Contractor must submit proposed modifications to plan TCPs or alternate plans at least ten calendar days in advance of the time the traffic control will be required. Approval of these plans must be obtained before the work can begin.

The possibility of alternate plans is covered by the contract. No change order will be needed because of that reason. However, if a price adjustment is needed then a change order will be necessary to accomplish that. We would allow additional payment, either through added units or revised lump sums, only if the original contract TCP was shown to be inadequate or in the case of traffic control needed for another change in the work. If the proposal is only for contractor convenience or preference, then a discussion of no pay for added traffic control or a credit for less traffic control would be appropriate. If the contractor should balk at this, the response could be "build according to plan."

Minor modifications to the TCP may be made by the Traffic Control Supervisor to accommodate site conditions. Modifications or adjustments to the plan must maintain the original intent of the plan. When there is a change in the intent and/or substantial revisions are needed, a revised TCP shall be submitted for approval through the TCM to the Project Engineer. The Regional Traffic Office should be consulted when this situation occurs. Again, changes may call for a formal change order.

Traffic Control Plans should not only address all work zones and standard devices and signs but should also address issues such as:

- Conflicting or temporary pavement markings.
- Maintaining existing operational signs and covering conflicting signs.
- Staging requirements.
- Temporary vertical or lateral clearance restrictions.
- Temporary work zone illumination.
- Consistency with any existing work hour restrictions.
- Position of positive barriers for traffic hazards or worker protection.
- Vertical drop-offs.
- Work zone access.
- Intersections or access control (traffic signals, road approaches).
- Pedestrians and bicycles.
- Work zone capacity and related mobility impacts.

If the Contractor's method of operation or the work area conditions require other than minor modification of the specific TCP appearing in the contract or any of the TCP's previously designated and adopted by the Contractor, the Contractor shall submit a proposed modification of the TCP for approval. If the Contractor's proposed modifications comply with the MUTCD requirements and are consistent with contract requirements as well as State and Region policy, the Project Engineer may approve these proposed modifications (perhaps utilizing a change order, if appropriate.) If the Contractor's proposed modifications do not comply with the MUTCD requirements, the Project Engineer should consult with the Region Traffic Engineer.

Any Contractor proposed TCP or modifications to an existing TCP should be evaluated for their effects on work zone safety and mobility. The Project Engineer should refer to the guidance in the *Design Manual* M 22-01 Chapter 1010 when evaluating how the new TCP works within the projects overall Transportation Management Plan (TMP).

On heavily used freight routes (I-5, I-205, I-405, I-90, I-82, I-182, SR 18, SR 167, and US 395-Tri-cities to Spokane), the contract may require that the Contractor provide the Engineer 30 calendar days of notice before implementing a TCP that reduces the travelled way to a single lane with a clear width of less than 16 feet for more than 4 calendar days. The request from the Contractor will include a schedule showing the dates of the width reduction, details of the limits and amount of the width reduction, description of available detour routes and a plan to provide unrestricted travel windows through the work zone when possible. The Engineer must provide 21 days of advance notice to Commercial Vehicle Services (CVS) at CVSPermits@wsdot.wa.gov. The Engineer should provide details of the width reduction to CVS and provide updates if there are any changes or adjustments in the schedule for the width reduction.

If there is any doubt that the proposed TCP complies with the MUTCD or provides for the safe movement of traffic, the Project Engineer shall consult with the Region Traffic Engineer or the Region Construction Manager.

SS 1-10.2(3) Conformance to Established Standards

Must meet standards of the MUTCD, and MASH 16 for devices made after 12/31/19 EXCEPT:

If a device is not available with a manufacture date of 12/31/19 or later, then the Contractor may use a device that is compliant with either NCHRP 350 or MASH 09 with approval from the engineer.

If the device was made prior to 12/31/19 and it was tested by NCHRP report 350 or MASH 09 it can be used through normal service life.

Small devices – channelizing and delineating including cones, tubular markers, flexible delineator posts, plastic drums can meet either NCHRP 350, MASH 09, or MASH 16 as determined by device.

Determination of crashworthiness is not required for trailer mounted devices like arrow displays, temporary traffic signals, area lighting supports and PCMSs.

Standard Specifications Section 1-10.2(3) addresses the requirements for standards and condition of signs and all other traffic control devices. In addition to standards established in the latest adopted edition of the MUTCD and/or as specified in the contract plans, all traffic control devices shall meet the crashworthiness standards of the "National Cooperative Highway Research Project, 350 (NCHRP 350) or the AASHTO *Manual for Assessing Safety Hardware* (MASH). There are four categories of traffic control devices. Category 1 devices consist of small lightweight devices that generally do not present a hazard. Typical Category 1 devices are cones, tubular markers, and plastic drums with no attachments. The Contractor is required to keep the manufacturer's certification document on file and available for inspection if needed. Inspection of certification documents by WSDOT is not routinely required but should be considered if operational or safety issues are observed.

Category 2 contains devices that are more hazardous due to their rigid construction, such as barricades, portable sign stands, and drums with lights. The collision test certification rules apply to all Category 2 devices. The Inspector should verify, and document, that all portable sign stands have an identifying label affixed. The label will display the FHWA approval letter designation and will appear similar to the image below.

Category 3 devices are fixed or substantial in mass and could cause significant damage to a vehicle or its occupants. Devices such as barriers, fixed sign supports, and TMAs are included in this category. WSDOT maintains a list of approved devices in this category on the QPL. Barrier is to be included in the contract plans to ensure that it meets WSDOT design standards.

Category 4 devices are typically trailer or truck mounted devices such as arrow boards, PCMS, portable signals, and portable lighting units. Crash testing is not required for these devices but care must be given to their placement to ensure that they do not pose an undue hazard to drivers, and that they meet the requirements of Section SS 1-10.3(3).

Resources for Traffic Control and Work Zone Safety

The following information may provide additional guidance and more specific detail. Also, this list includes the staff, reference documents, and manuals mentioned throughout Section SS 1-10.2(3).

- *Work Zone Traffic Control Guidelines* M 54-44
- *Traffic Manual* M 51-02 Chapter 5
- MUTCD Part VI
- Work Zone Safety Task Force Recommendations
- Quality Guidelines for Temporary Traffic Control Devices (ATSSA)
- Work Zone Traffic Control Supervisor's Notebook
- Highway Work Zone Reviews, 1997 (Work Zone Safety Task Force)
- Planning and Scheduling Work Zone Traffic Control (FHWA-IP-81-6)
- Executive Order E 1060 Speed Limit Reductions in Work Zones
- *Traffic Manual* M 51-02 Appendix 5A Work Zone Traffic Control
- Traffic Control Supervisor Evaluation – Final Report
- Region Construction or Traffic Office (Traffic Engineer or Work Zone Traffic Control Specialist) and Public Information Officer
- State Traffic Office (Mobility and Safety Manager or the State Traffic Control Engineer)

SS 1-10.3 Traffic Control Labor, Procedures, and Devices

SS 1-10.3(1) Traffic Control Labor

All traffic control labor must be trained to ensure safety in the work zone. Flaggers have additional requirements concerning flagging cards and apparel.

All flaggers working on WSDOT construction projects must have a valid State of Washington flagging card or a flagging card issued by the states of Oregon, Montana, or Idaho. Document verification of the card by recording the flaggers full name, card number and card expiration date in the Inspectors Daily Report. Do not take a copy of the flaggers card. Flaggers and all other personnel performing the Work described in *Standard Specifications* Section 1-10, are required to wear high visibility apparel as specified in

Standard Specifications Section 1-07.8. Other workers may certainly use this type of clothing, but doing so is not a contract requirement, unless they are performing work on foot within the work zone of a Federal-Aid highway.

SS 1-10.3(1)A Flaggers

Typically, flaggers have the highest exposure to traffic hazards than other workers, so flaggers should only be used when all other forms of traffic control are inadequate. When flaggers are used, flagging stations must be shown on the TCP along with warning signs and other devices. Flagger stations shall be illuminated at night and should be protected with a positive barrier, if possible. The flagger must also have in mind an "escape plan" to avoid errant vehicles. Flaggers are not allowed on freeways and the use of flaggers to exclusively display the "SLOW" message is also not allowed. The provisions call for a flagger with intermittent responsibilities to direct traffic to step back from the flagging station between tasks. Additional guidance on the use of flaggers is located in Part 6 of the MUTCD and WAC 296-155-305.

SS 1-10.3(1)B Other Traffic Control Labor

For some projects, labor in addition to the assigned Flaggers is needed for a variety of traffic-related tasks. Some of these tasks are listed in the provisions. Hours for this item are measured only for work on certain defined tasks (see *Standard Specifications* Section 1-10.4(2)).

SS 1-10.3(2) Traffic Control Procedures

SS 1-10.3(2)A One-Way Traffic Control

The major points to note in *Standard Specifications* Section 1-10.3(2)A are:

- The provision does not limit one-way traffic control to treated bases, surface treatments, and pavements. This type of configuration can be used in other operations, such as grading, when appropriate.
- Line of sight is important in coordination of side roads and approaches with the limits of the one-way operation.
- When the contract does not stipulate a pilot car operation, it may be established by change order if the Engineer deems that method of traffic control to be most appropriate; and
  - Contractor vehicles and equipment may utilize the closed lane in any manner. The one-way controlled open lane is for public traffic and, should the contractor use that lane, all rules and procedures applicable to public traffic will apply to the contractor. There will be no "wrong-way" travel in the open lane, no heavy equipment will join the public traffic and any additional traffic control will be performed according to accepted plans only.
  - The contractor is required to plan and conduct operations so that the roadway can be reopened to two-way traffic at the end of the shift. If the nature of the work prevents this or if the work area is left in a condition unsafe for public two-way traffic, then the contractor must continue the one-way operation throughout the off-shift hours.

SS 1-10.3(2)B Rolling Slowdown

This can be a useful method of creating gaps in traffic for specific, very short-term non-repetitive activities such as sign bridge removal or utility wire crossing. Rolling slowdown traffic control operations are not to be used for routine work that can be addressed by standard lane or shoulder closure traffic control. The Contractor may implement a rolling slowdown on a multilane roadway, as part of an accepted traffic control plan per *Standard Specifications* Section 1-10.3(2)B. The key is planning and communication so the work can be completed without stopping traffic. If the work is not completed the contractor must undertake the most expeditious method of opening the roadway. If demobilizing and pulling off is faster than finishing the task, then it shall be done without regard to cost, efficiency, or schedule.

SS 1-10.3(2)C Lane Closure Setup/Takedown

The use of truck-mounted attenuators (TMA) with arrow boards is required by the provisions. This combination is to be used during the transition from open lane to closed lane. Once a lane is closed, the TMA may be removed, leaving the arrow board alone.

SS 1-10.3(2)D Mobile Operations

The key to this operation is to keep the traffic control equipment effectively close to the work and moving to match the work operation. Two traffic protection devices are used. One is a TMA/Arrow Board combination upstream of the work. The primary purpose of this device is to protect the errant vehicle from fixed object collisions. The second device (preferably a TMA) is immediately adjacent to the work area. Its purpose is to protect the workers from the errant vehicle.

SS 1-10.3(2)E Patrol and Maintain Traffic Control Measures

This activity is to observe, repair and maintain traffic control devices and layout. The provisions require an hourly visit to each device and layout. Depending on the extent of the control measures, more than one patroller may be required.

SS 1-10.3(3) Traffic Control Devices

SS 1-10.3(3)A Construction Signs

The standard of these provisions is that the contractor provides all signs, posts and supports. If the special provisions do not promise that some or all of these will be furnished by the State, then the contract requires the contractor to do it all. All signs shall be constructed from either aluminum or aluminum composite materials.

“Do Not Pass” and “Pass With Care” signs are the responsibility of the Contractor. The provisions explain how to determine the number of these and that determination is to be made by the Contractor as well.

Construction Signs (*Standard Specifications* Section 1-10.3(3)) divides construction signs into two categories, Class A and Class B, and lists the work required for the Contractor.

At no time should signs be left in traffic control position during periods when they are not necessary to traffic safety. Indiscriminate use of traffic control signs soon destroys public confidence and respect for the signs. Unnecessary traffic restriction and inconvenience tends to reduce the effectiveness of all signing and causes difficulty in enforcement by

authorities. The Project Engineer should ensure that signs are removed or completely covered per *Standard Specifications* Section 8-21.3(3) during the hours they are not needed, either before or after working hours and on nonworking holidays or nonworking weekends. Tripod-mounted signs in place more than 3-days in any one location, unless approved by the Project Engineer, shall be required to be post mounted to improve visibility, and to keep useable shoulders clear.

Signing for nighttime traffic is more difficult than that required for daylight hours. A review of the project signing should be made and recorded during the hours of darkness.

Signs and other traffic control devices should be shown on the traffic control plan (either State-provided or contractor-submitted), approved and in use, and should be installed with adjustments for work zone and traffic conditions. The Contractor and WSDOT should ensure proper use and placement of signs and devices. For situations not addressed by the TCPs, the Project Engineer will determine who is responsible for preparing a revised TCP. Refer to the *Work Zone Traffic Control Guidelines* Book, MUTCD, or seek assistance from the Region Traffic Engineer for appropriate TCP revisions. A modified or new TCP may be needed if adjustments to signs and devices do not adequately address existing hazards or resolve observed traffic problems or accidents.

Judgment will be required when a traffic control plan is changed. The project engineer must determine if the change has arisen because of a flaw in the original plans or because of the contractor's activities or preferences. In the first case, a change order, perhaps with compensation, may well be needed.

The remaining devices listed in the provisions are the following:

- Sequential Arrow Signs
- Portable Changeable Message Sign
- Barricades
- Traffic Safety Drums
- Traffic Cones
- Tubular Markers
- Warning Lights and Flashers
- Truck-Mounted Attenuator
- Tall Channelization Devices
- Portable Temporary Traffic Control Signal

The specifications for these devices should be sufficient to explain their use and requirements.

SS 1-10.4 Measurement

Measurement is the key element of the new provisions, which now contain lump sum bid items. The provisions will define one of several pay item strategies, which will determine the measurements to be made.

First, the "normal" project with these provisions will contain items. The items are different from previous contracts and are non-standard, although several have very similar item names. Each of these is described below.

Instead of items, the project may be designated as a "Total Project Lump Sum." This will be the case if the item "Project Temporary Traffic Control, Lump Sum" is included in the proposal. If this is the strategy of the project, then all measurement and payment provisions for all other pay items are deleted from the contract. When this occurs, then all temporary traffic control costs of whatever nature (everything defined in Section 1-10) are included in the lump sum.

The project may be a lump sum hybrid. In this case, the Total Project Lump Sum item will be present, but the provisions will reinstate one or more of the deleted standard items. If that happens, the measurement and payment of the reinstated item(s) will be separate from and not included in the lump sum.

These are the items and a discussion of the features of the measurement spec for each:

- **Traffic Control Supervisor (Lump Sum) –** Previously paid by the hour, this item is now a fixed cost. Overtime is not considered, a second TCS for a night shift makes no difference. This lump sum status will likely cause TCS to become a part of change order negotiations. If the change does, in fact, require additional TCS work, then there would be entitlement. This will also apply to extended contract duration, as the TCS can be considered part of on-site over-head.
- **Flaggers (Per Hour) –** This contract activity is separated from other kinds of traffic control labor. It is measured according to the hours that an approved flagging station is manned. We will not count minutes and seconds; time will be rounded up to the half hour as specified in *Standard Specifications* Section 1-09.1. If a station is manned, but full-time presence of the flagger is not necessary (trucks entering roadway, equipment crossing) then the flagger is expected to step back out of harm's way until the next event. No deduction will be made for this stepping back, provided the flagger cannot be assigned to other duties while waiting. In measuring flagging, disregard overtime, split shifts, union rules for show-up time, the trade classification of the flagger and any other payroll issues. The flagging is a service that is provided and paid by the hour. It is only peripherally related to the flagger's paycheck.
- **Other Traffic Control Labor (Per Hour) –** There are other duties for traffic control labor besides flagging. Some of them are included in this item for separate measurement. If one of the activities listed in the provision is provided, then measurement of that activity is appropriate. Only the hours that the activity is performed will be measured. Again, this is not a payroll measurement.

  Note the limit under patrolling and maintaining. No matter how many people are involved in this activity, measure only one hour for each hour that each approved route is operated.

  Another little feature shows up under the last bullet (Installing and removing devices). Time spent ahead of the setup marking layout points on the shoulder or getting signs ready in the yard will be measured under this item.

  Do not succumb to pressures to add other hours to this item. As the payment spec for "Other Temporary Traffic Control" states, all costs not compensated by other items are covered there.

  Construction Signs, Class A (per sq ft) to qualify for payment under this item, the sign must be designated as Class A on an accepted TCP or be directed installed by the Engineer and designated as Class A at the time of direction. After-the-fact re-designations of signs that have been originally thought to be Class B should not be considered.
- **Other Unit Price Items –** The traffic control provisions limit unit items to major devices. These include Sequential Arrows, Changeable Message Signs, Portable Signal and Transportable Attenuators. The measurement and payment requirements for these are similar or identical to those which have been in use for some time and are relatively straightforward.

One point to make is with the force account item for Repair Transportable Attenuator. Because this is a temporary installation and not a part of the permanent work, the Third Party Damage item does not apply and that is why a separate force account is established. If the damage was caused by a third party, the department may well be able to recover the costs paid to the Contractor under this item. The Project Engineer should take steps to protect the department's interest and involve the Maintenance, the Accounting and Financial Services Division, and Risk Management offices to initiate the efforts to recover costs.

SS 1-10.5 Payment

The payment provisions of the new specifications are intended to provide a mechanism that accounts for all of the Contractor's costs for temporary traffic control. The total project lump sum item is self-explanatory. There is no additional payment unless there is a change order.

If the job contains items, the pay definition for each describes the limited portion of the Contractor's costs that are covered by each item. The summary lump sum item (Other Temporary Traffic Control) is written to be a catchall cleanup that lets nothing escape for "additional compensation" discussions.

Watch out for change orders. A principal concern over lump sum items is that work will be added that is not required by the original contract and no mechanism exists to increase traffic control payment. This can be straightforward in identified changes, merely becoming an additional aspect of the negotiation. More troubling are constructive changes, which are not written, but which do end up in negotiation. An "overrun" of asphalt pavement to add a few driveways may be a convenient way to do field decisions, but may also create a dispute over the related traffic control costs (not to mention the dispute about the changed nature of the paving).