## 10-1 General

### 10-1.1 Introduction

This chapter provides guidance for records created during projects constructed by Contract. While each Project Office may have additional requirements, this guidance identifies the minimum standards to establish:

- · An adequate method of record keeping,
- · A basic level of uniformity among all Project Offices statewide, and
- Efficiency when engineering personnel are transferred or reassigned

Having a clear record keeping method in place prior to the beginning of Work also reduces the effort to assemble temporary and permanent final records at project completion.

Successful Contract documentation requires accuracy, completeness and diligent oversight by the Project Engineer. This approach supports the integrity of the Contract payments, and ensures transparency and the readiness of records for audits or reviews:

- Accuracy and Completeness: Measurements and calculations supporting contract payments must be correct and comprehensive enough to reflect the actual work performed.
- **Detailed and Clear Records:** Documentation must be detailed enough to withstand audits and be clear and understandable to anyone reviewing it, even if they are not familiar with the project. All staff working on the project are responsible to ensure that documentation is correct and complete with all pertinent information.
- Responsibility of the Project Engineer: The Project Engineer is responsible for
  ensuring that all records related to Contract Work are accurate and complete. This
  responsibility encompasses maintaining records throughout the project life cycle.

Project documentation recorded in paper format must be organized and maintained in a safe filing facility during the active stage of a project. Transfer these documents to safe adequate, and recoverable storage after the Contract is complete. All source documents, reports, survey notes, etc., should be kept in fire resistant cabinets where possible.

Unifier is used as the electronic document control system for design bid-build projects. Documentation housed in Unifier will become part of the temporary or permanent final records, depending on their retention requirements. The Unifier Training and Resources page located on the Construction Office SharePoint site provides additional information.

#### Signatures

A signature, whether digital, electronic, or hand-written, is a symbol signifying intent and identifying those who worked on the record. A substantial portion of our business is conducted via the computer, and each individual must become familiar with those documents which require an original signature and which are acceptable with a printed/computer generated name.

Chapter 11 lists the various electronic construction forms made available by WSDOT. These forms may be used to record, document, and make payment for construction activities and materials on WSDOT construction projects. The forms are categorized by:

- Those persons responsible for completing the form (e.g., Project Office, Contractor, Materials Lab).
- Whether an original signature is required or a printed/computer generated name is acceptable.

### 10-1.3 Source Documents and Field Notes

#### **Source Documents**

All records created during a project are either a source document or field note. Source documents are records that are created during the life of the project that are required by the Contract, the *Construction Manual* and other WSDOT Manuals and are not defined as a field note. Source documents can be either part of the temporary or permanent final records depending on their retention requirement, and can be created by WSDOT, the Contractor, subcontractors, or others.

Errors found on source documents cannot be changed or deleted if signed. Errors must be corrected by drawing a line through the entry and adding the corrected entry with dates and initials of the person making the change.

Additional information on source documents used to support payment can be found in Section 10-4.2.

### **Field Notes**

Field notes are records created in the field during the life of the project that are not defined as a source document and become part of the temporary final records. Original field notes should be formatted so that they can be filed and retained as written. To avoid errors when transcribing and the unnecessary cost of duplication, field notes should not be taken on scratch paper or transferred to another format.

Handwritten entries later determined to be in error must be corrected by drawing a line through the mistaken entry and corrections entered directly above with the date of the correction and the initials of the person making the change. This is very important, as erasures, or deletions will destroy the legal standing of notes. When revisions require abandonment of a considerable portion of notes, they will be crossed out and a cross reference made to the book and page number where the revised notes may be found.

## 10-2 Measurement of Items of Work

#### 10-2.1 General

#### 10-2.1A Introduction

The Project Engineer must ensure proper controls are exercised when measuring items of Work and that payment made for any item can be substantiated by the project records, regardless of the Work's stage of completion. Items that are paid for based on weight or truck volume require measurement of the quantities involved, evidence of receipt for the materials, and documentation for both operations through use of Item Quantity Tickets (IQT), receiver logs, or other delivery methods.

## 10-2.1B Quantity Details

The number of significant decimal places to which quantities are measured and/or computed varies with the value or unit bid price of the respective items involved. Unless advised otherwise, the Project Engineer will use the following guidelines.

Bid Price	Significant Decimal Per Unit
Less than \$10 per unit	1.0
From \$10 to \$100 per unit	0.1
Over \$100 per unit	0.01

If a higher significant decimal place is used to calculate various parts of a particular quantity, the total payment amount will be determined using the guidelines above. For example, when totaling daily item quantity tickets, calculate the quantity to the decimal point recorded on the tickets. Payment totals for the day will be rounded to the proper significant decimal place shown above and the rounded quantity is recorded in the CAPS project ledger.

Quite often, good practice would dictate that the various parts of a particular quantity be calculated to a higher significant decimal place or in some other unit, a unit other than that used for payment, and then be converted to the payment unit in the summation. Good judgment should be used in selecting when to actually apply rounding to the quantity. In general, it is considered proper to apply rounding at the first summation of each isolated part. For example, at the summation of a day's item quantity tickets the quantity to be recorded should be rounded to the proper significant decimal place and the rounded quantity recorded into the project ledger.

## 10-2.1C Item Quantity Ticket

IQTs are used to document items that are paid for based on quantities of material or other bid item services that are received at the project site. IQTs can be provided by the State, the Contractor, commercial sale companies or suppliers at commercial plants/material sources.

The State provided IQT (DOT Form 422-021) shown in Figure 10-1 can be used to document material or services that do not require the use of electronic tickets. The Contractor will receive a copy of all State provided IQTs.

The Project Engineer will ensure that all IQTs include the items noted below, identified as the minimum required information for documenting receipt of materials and for supporting payment of those materials. Additional information may be added to IQTs at the option of the Project Engineer as a convenience when monitoring material use.

All IQTs must include the following minimum required information:

- Contract Number
- Date
- · Contract Unit Bid Item No.
- · Unit of measure
- · Identification of hauling vehicle
- · Record of the gross, tare, and net weights
  - If the scale has a tare beam so that the net weight can be read directly or when using batch plants or storage silos with direct reading scales, only the net weight need be recorded.

If the unit of measurement is cubic yards, hours, etc. only the net quantity needs to be recorded.

In addition to the minimum required information, there are a number of other items that could also be included on IQTs. While this information is helpful to others who may also be using these same tickets for monitoring materials, materials placement, or other issues, this additional information is not required to support payment for materials received. Recording this information on IQTs is solely at the option of the Project Engineer. Some of these optional items may include:

- · Group, Station or Mile of material placement
- Contractor/Subcontractor completing the work
- Cumulative totals for the day
- Pit number identifying the source of the material
- Time weighed and initials of the person issuing the ticket
- Time materials or services are received on the job site
- Description of the material that matches the unit bid item name
- Ticket serial number, etc.

#### **Electronic Tickets**

An electronic ticket is an example of a Contractor provided IQT. When the Contract requires use of electronic tickets, a WSDOT representative is responsible for monitoring and tracking loads of delivered material at the delivery site or at the site where the item is placed. The receiver can use the Contactless Receipt Log (DOT Form 410-001), to document the number of delivery loads received for each type of material placed. Use of an alternative form is allowed if all the same information included on the Contactless Receipt Log is documented.

Electronic tickets are uploaded by the Contractor to a designated site where the Project Inspector can access them, allowing for additional information to be recorded on the electronic ticket as necessary. If additional notes cannot be made directly on the electronic ticket, record additional information in the comments column of the Contactless Receipt Log. Receiving and accepting tickets in a portal is a common way for tracking the needed information.

Use of electronic tickets allows the receiver to observe and record deliveries from a safe distance away from the point of delivery. Locate the receiver in an area where the Work can be visually observed while maintaining the Contactless Receipt Log. The receiver can access electronic tickets and record the weight of the material incorporated into the project when delivered. If electronic tickets are not immediately accessible, due to internet connection or other issues, the weight can be added when access is restored. If a partial load is placed, note the amount of material incorporated in the weight column and make a note in the comment field.

At the end of each work shift, the receiver will reconcile quantities captured in the Contactless Receipt Log with the electronic tickets uploaded for each day. To reconcile the form:

- Ensure that tickets are on file for each load received, and
- Add the weight from each ticket to the Contactless Receipt Log
  - To be done throughout the day as incorporated, or once access is restored
- Note partial loads placed in the Comments column to account for any discrepancies between the electronic tickets and the Contactless Receipt Log
- Reconcile any differences between the Contactless Receipt Log and the Contractor provided Daily Summary Report

Once reconciled, check the "Reconciled" box on the bottom of the Contactless Receipt Log and electronically sign the form indicating that the loads shown were delivered and are accepted.

Contactless Receipt Logs are retained with the associated electronic tickets and daily summary reports and filed with the payment documentation. Reconcile missing tickets with the Contractor immediately to avoid contention for payment later. Payment will be based on the reconciled Contactless Receipt Log.

For materials or services that are not paid for by weight, the receiver will complete a State provided IQT at the point of delivery.

### **Electronic Delivery Management System - E Ticketing System**

When the Contract requires the use of electronic tickets, the Contractor is responsible for providing a system capable of meeting the requirements of *Standard Specification* 1-09.2 and a Type 2 Drawing that details how the system used meets specification.

The working drawing will need to address:

- How partial loads will be tracked
- Contingency plans for lost internet connectivity and/or phone reception
- Training for everyone who is required to access the e-ticket information
- An alternative method for creating tickets if internet or cell phone service is temporarily unavailable where material is loaded

This would be the appropriate time to discuss other information that would be beneficial to include on the electronic ticket. Many of the systems will have the ability to print information on the tickets that can be used by Project Office staff to help with tracking materials.

#### 10-2.1D Conversion Factors

Where the Plans require a weight measurement for minor items of construction, the Contractor may request permission to convert volume to weight. When approved by the Project Engineer, an agreed factor may be used to make this conversion and volume may be used to calculate the corresponding weight for payment. The provisions for this conversion factor can be found in *Standard Specification* Section 1-09.2(5). When using a conversion factor, the Project Engineer must perform adequate tests and retain supporting data establishing the conversion factor or new price quotation. A letter of agreement or change order for the conversion factor is needed.

## 10-2.2 Items Measured by Weight

#### 10-2.2A General Instructions

All materials paid by weight are to be weighed in accordance with the *Standard Specifications*. The Contractor has the option of using:

- Contractor provided scale operations scales are set up specifically for the project and are used to weigh all or most of the material utilized in the Contract Work, or
- Commercial scale operations scales that are used to sell materials to the public

All scales must be capable of producing electronic tickets that include the necessary weights and information on the Item Quantity Tickets in accordance with Section 10-2.1C

The Project Engineer will collect the documentation required in SS 1-09.2(5) for scale verification checks. Scale verification checks:

- Are required twice per project year for Contractor provided scale operations once near the beginning of scale operation and then again near the end of when the scale will be used.
- Are at the option of the Project Engineer for commercial scale operations.

For most materials, material and tare weights will be measured to the nearest 100 pounds. In determining quantities for materials produced from batch type mixing plants, where individual components of each batch materials are weighed before mixing, the batch weights are acceptable for measurement and payment.

### 10-2.2B Weighing Equipment

Scales for the weighing of natural, manufactured, or processed highway and bridge construction materials that are required to be proportioned or measured and paid for by weight, are to be furnished, erected, and maintained by the Contractor, or be permanently installed, certified, commercial scales. All weighing equipment and scale operations must meet the specific requirements noted in *Standard Specifications* Section 1-09.2.

When batching scales or platform scales are used, the Project Engineer will collect scale certifications meeting the *Standard Specification* requirements before use at a new site and 6-month intervals afterwards.

## 10-2.3 Items Measured by Volume

#### 10-2.3A Truck Measure

Except as noted below, when materials are measured and paid on volume delivered in trucks, the Project Engineer should ensure that a receiver is assigned at the point of delivery to issue or receive load tickets and to make periodic computations of yield where applicable.

Use Item Quantity Tickets (see Section 10-2.1C) when recording the volume of materials paid based on truck measure. The tickets should include all information previously noted as required for materials measured by weight, with the substitution of measured volume in place of measured weight to be shown as the quantity received.

## Surfacing Material, Gravel, Topsoil, Etc.

In lieu of issuing individual load tickets when surfacing materials, gravel backfill, top soil, etc., are measured and paid for based on of volume delivered in trucks, it is acceptable for the Project Engineer to maintain a field record showing a recording for each delivery, issuing one ticket for the total amount delivered for each item at the end of each work shift. The field record will show the Contract number, date, identification number of hauling vehicles, Contract bid item number, time of delivery, and volume for each load. The daily ticket issued will include all pertinent data including reference to the field number.

In documenting the size of loads received, ensure the following procedures are followed:

- 1. The volume of each truck box will be calculated and recorded to the nearest 0.1 cubic yard based on a struck or water level height for the leveled load
  - The volume may be calculated by using a measurement of the truck box (either from the interior or exterior of the bed) using any standard measurement method.
     This measurement may be performed by a representative of the Project Engineer or by the Contractor, as verified by the Project Engineer
  - The calculation may also be made based upon verified manufacturer's truck bed dimensions supplied to the Contractor by the manufacturer, or
  - By filling the truck bed and measuring the volume of a full load after it is dumped.

Although State law requires 6 inches of freeboard on loaded aggregate material trucks, the actual quantity hauled or calculated may exceed the measured capacity. This is due to the normal practice of heaping material in the center of the load.

- 2. The material receiver should have sufficient loads leveled at the point of delivery to judge consistency in the quantity being hauled.
- 3. Load volume will be recorded to the nearest cubic yard for pay purposes using the volume calculation methods described in part (1) above. If the Project Inspector questions whether a truck is fully loaded, the load will be leveled. If the vehicle is not fully loaded, the Project Inspector will measure and document the amount delivered to the nearest cubic yard.

#### Water

The amount of water delivered to a project will be documented either by use of a Contactless Receipt Log or by a Contractor provided Item Quantity Ticket (IQT).

If the Contactless Receipt Log is used, the Project Inspector will complete the form and record the number of deliveries made each day.

Contractors can also provide an IQT using the state provided form, or a form that includes:

- Delivery location of each load
- Contract number
- · Identifying number for hauling vehicle
- · Amount delivered for each load
- · Time each load was delivered

If a Contractor provided IQT is used, the Project Inspector must perform daily spot checks to verify quantities delivered and document these checks in the Inspector's Daily Report and on the Item Quantity Ticket. If a note cannot be made directly on the IQT received, the information can be recorded on the Field Note Record when payment is made.

The capacity of each water truck will be determined by measuring, weighing, or using the truck make and model. Record the method used and capacity of each truck in the project records.

When water meters are installed at the discharge point for hydrants or water trucks, the Project Inspector must record the meter reading at the beginning and end of each shift and document readings on the Contactless Receipt Log for the net quantity of water placed in accordance with Contract Specifications for the item.

#### 10-2.3B Cross-Sections

Many excavation items are measured by field cross sections and/or template notes. The Project Engineer will ensure that the project is staked and measured accurately in accordance with guidance noted in the "Basic Surveying" manual and utilizing sound engineering practices. At a minimum, show the date the data was taken, weather, crew members, and their assigned duties in the field records. When these measurements are required, it is important that the same base line and elevation datum be used.

Documentation of volume measurement for excavation areas which require original and final measurements, should contain cross references between the original notes and the re-measure notes. Also reference the transit notes and elevation datum for that excavation area.

#### 10-2.3C Neat Line Measurement

Some items, such as concrete volumes, are paid based on dimensions detailed in the plans. For these items, the quantities need to be calculated and the calculations made a part of the record. If additional sketches or dimensions are also required to compute the quantities, include in the records as well.

Other items, such as structure excavation and gravel backfill, are measured for payment using neat line volumes based on plan dimensions as a maximum limit. These items require field measurement to determine pay quantities that may be less than neat line maximums. Many times, sketches with the dimensions shown are desirable.

Include dimensions to show the limits of the actual Work, except when these limits exceed the maximum allowed for payment, then the dimensions will be limited to the maximum allowed.

## 10-2.4 Items Measured by Hour/Day

When Contract items are to be measured and paid for on an hourly or daily basis, the Project Engineer is to ensure that a WSDOT representative is assigned to verify the hours or days of payment, and issue Item Quantity Tickets or other verified field note records. Issue at least one ticket at the end of each work shift or working period and show all pertinent information for the item involved.

Some items measured by the hour may be eligible for payment during non-shift hours; for example, a 24-hour flashing arrow used for lane closures or detours in effect during nonworking hours. In these situations, an Item Quantity Ticket for one shift may show more hours for payment than are actually available within the shift.

To ensure agreement on the hours or days of work performed, Item Quantity Tickets for items of work measured by the hour or by the day should be initialed by the Project Inspector and signed by the Contractor's representative daily.

# 10-2.5 Items Measured by Lump Sum

For items that are to be paid on a Lump Sum basis, the project records should identify the item, the date that the material was received, and/or the date work was accomplished. This can be accomplished by ensuring that a field note record is made showing the dates work was performed, has the initial of the Project Inspector, and shows the work to be 100 percent complete. A field note should also be used to show any estimated portions for progress payment of a Lump Sum amount prior to 100 percent completion. It must include the basis on which any quantities used for progress estimate payments were calculated.

## 10-2.6 Items Measured by Other Units

#### 10-2.6A Linear Measurement

Records for materials measured by length should show the length measured, initials of the persons making the measurements, and the date measured.

For features, such as guard rail and barrier, that are paid by length and which contain repetitive elements or units, the length may be "measured" by calculation. In other words, if the length of a single element is known, then the number of elements may be counted and multiplied by that amount and a total "measured" length determined. Care should be taken to account for odd length elements, such as end sections and custom-fabricated pieces, and for areas where elements overlap or gaps exist.

Records for measurement should also include the beginning and ending stations of the work, recorded by the Project Inspector or person making the measurement, tying the work to its location on the project. The dates of construction should also be recorded.

#### 10-2.6B Area Measurement

Records for materials or work measured by area should show the length and width measured or otherwise determined, initials of the persons making the measurements, and the date measured. In many instances a sketch of the area with the measurements would be very helpful in showing the computed area. The dates of construction should also be recorded.

### 10-2.6C Per Each Measurement

Records for materials or work measured per each unit should provide a listing showing the location of each item constructed, dates constructed, and initials of the Project Inspector or person measuring the item.

## 10-2.7 Items Bid at "No Charge"

Normal documentation procedures are not required for items bid at "no charge" if the items do not physically constitute a portion of the finished work. However, notes in the Inspector's Daily Report are necessary to show when the work was done. Examples of these items might include water, haul, and embankment compaction.

For items bid at "no charge" which physically constitute a portion of the finished work, normal documentation procedures, such as Item Quantity Tickets or cross sections, are required to show how the item was incorporated into the project. Examples of these items might include layering materials and prime coat aggregate.

## 10-3 Final Records for Projects Constructed by Contract

#### 10-3.1 Final Records

All records created during a construction project are placed in one of two categories, permanent final records - retained by Headquarters and State Archives for future reference, and temporary final records - retained for a limited period of time after which they are discarded. Any record created during the life of a project not specified as a permanent final record becomes part of the temporary final records. The period of time that records must be retained is referred to as the retention period.

Documentation housed in Unifier is labeled with respect to the location (or Business Process) where the record was created in Unifier (e.g. Transmittal, Construction Submittal, Inspector Daily Report, Field Note Record, etc.) and this designation will be used when moving records to the Enterprise Content Management (ECM) system. The designation will indicate if records are part of the permanent or temporary final records.

#### 10-3.1A Software Generated Documents

There are many computer applications available for use on WSDOT highway construction projects. Examples include programs used for earthwork quantities, mass diagrams, basic cut and fill, geometrics, surveying, and for determining structural quantities. In addition, there are many other "stand alone" applications created by Project Office staff that are also recognized for these kinds of uses.

Documentation created from these programs becomes part of the final records and must be:

- Attached as supporting documentation to a source document or field note,
- Kept on file with the Project Office until retention requirements have been met (temporary final records only), or
- Filed in the ECM system.

When a computer program is used to calculate quantities for payment, the summary sheets containing the quantities entered in the project ledger can be used as a payment source document if all required signatures, dates, ledger entry number, and sufficient cross-referencing is included on the document.

## 10-3.1B Photographs

A detailed photographic record is an important part of project documentation and can consist of digital photos, infrared photographs, video, drone footage, etc. Photographic records can include unusual equipment used, construction methods, problem areas, areas of possible controversy, traffic control, and the condition of areas where accidents occurred. In addition, "before" and "after" views taken from the same vantage point can be used to document Work progress.

Photographs maintained as a part of the project documents must be fully identified. Photographs should clearly note when and where they were taken (date and project location).

Photographs are part of the temporary final records, and can be stored on an office drive until retention requirements have been met. The Project Engineer can also choose to permanently retain photos by including them in the permanent final records Book 8 - Miscellaneous Records.

### 10-3.2 Permanent Final Records

Documents designated as permanent final records are permanently filed, meaning that they are never destroyed. Permanent Final Records are filed electronically using the ECM. Records that are part of the permanent final records that are not uploaded automatically to the ECM must be uploaded by the Project Office Staff.

Contact the State Construction Office to request approval to file permanent final records or as-builts in paper format for projects that are not in Unifier or that are older and have received most or all submittals in paper.

The following documents are part of the permanent final records and are filed in the ECM by HQ- specifically Accounting Financial Services (AFS) or Region Staff:

- Original Signed Contract Form filed by AFS
- · Original Change Orders filed by Region
- Contract Estimate Payments filed by AFS
- · Final Contract Voucher Certification filed by AFS
- Final Estimate Package filed by AFS

Change orders and supporting documentation are part of the permanent final records and are filed in the ECM by Region Staff following the guidance found in Appendix A - Change Orders.

To use the ECM, projects must either be in CCIS or, if the project is not in CCIS, the Project Offices can request that the project be set up in the ECM by sending an email to WSDOT Construction ECM Support (constructionecmsupport@wsdot.wa.gov).

Refer to the ECM User Guide for detailed instruction on submitting Permanent Final Records.

Permanent Final Records stored in the ECM must meet the following criteria:

Type/Format: All documents uploaded to the ECM must be flattened PDF's and created electronically. Scanned documents are acceptable if emailed from a recognized agent of the Contractor.

Resolution: 300 DPI

Dimensions: Electronic records shall be standard dimensions of 8 ½"×11" or 11"×17".

**File names:** When each document is created by WSDOT or submitted by the Contractor or Design Builder, it must be named according to the naming conventions outlined in the ECM User Guide.

**File Size:** Files should be broken up, compressed, or formatted so that the file size is not larger than 200 MB.

Permanent Final Records are filed in books as outlined below:

- 1. Final Records Book No. 1 (See Section 10-3.2 for requirements)
- 2. Construction Project Diaries (DOT Form 422-004A)
- 3. Inspector's Daily Reports
- 5. Pile Driving Records
- 6. Post Tensioning Records
- 7. Contaminated Materials Records
- 8. Miscellaneous Records

Traffic Control Reports are assigned as Book Number 4 in the ECM and are part of the temporary final records with a unique retention schedule.

Permanent Final Records also include a set of electronic as-built plans and complete Contractor provided shop drawings.

Once all electronic final record documents for the Contract are assembled and complete at the Project Office, they are sent to Region for review through the ECM. When one group completes their review, the records are locked to that group and are made available to the next. If a reviewer finds issues within the records, comments are added, and the records are returned to the previous reviewer. Once all reviews are complete, HQ Record Services is notified by Region that permanent final records for the Contract are complete.

After documents are uploaded into the ECM, they can be found in the ECM Portal located at <a href="http://wsdotecm/Portal">http://wsdotecm/Portal</a>. Refer to the Construction ECM Search Guide for more information.

### 10-3.2A Final Record Book No. 1

Final record Book No. 1 contains indices for the records that have been compiled for both permanent and temporary final records. It identifies the people who worked on the project and provides specific summary information. Final record Book No. 1 will include a title page DOT Form 422-009.

The following records are incorporated in the order shown below. No other documentation is included in this book.

- 1. **Title Page and Index** Include a completed copy of DOT Form 422-009 as the first page. There are also two indexes included in final record Book No. 1.
  - The first is an index or detailed listing showing the various sections included. Figure 10-2 provides an example of an index for Book No. 1.
  - The second index provides a detailed listing of all records that have been kept and assembled for the project in both the permanent and temporary records. Figure 10-3 provides an example of this index.
- WSDOT Personnel List Include a listing of all WSDOT personnel assigned to the
  project and their classifications. Each person will place their electronic signature and
  initials after their name on the listing in the same manner as it appears on other final
  record documents. The Project Office may use Project Personnel Listing DOT Form
  422-001 for this purpose.
- 3. **Comparison of Quantities** CAPS report prepared from the Final Estimate.
- 4. Change Orders A listing of all change orders prepared for the completed project.
- 5. Record of Construction Materials A tabulation showing the source of all construction materials. If material of a certain type was obtained from two or more sources, the station limits or parts of a structure relative to each source should be shown. If a maintained Record of Materials was used, a copy of the final maintained Record of Materials per Construction Manual Section 9-1.2C will also be included.

When preparing the individual Final Record Books, other than Book No. 1, it is not necessary to label pages within each book. Where it is appropriate, a table of contents may be added to identify sections within a particular book.

### 10-3.2B Construction Project Diaries - Final Records Book No. 2

The Project Engineer may include records of conversations, meetings, or other pertinent information that is not covered by routine reporting. Page 2 of the Inspector's Daily Report (DOT Form 422-004A) or in Unifier, the Construction Project Diary Business Process may be used to document:

- Routine matters if the circumstances are unusual
- Conferences or meetings with the Contractor or the Contractor's field representative
- · Agreements made with the Contractor
- Special notes regarding equipment or labor conditions, weather, or any other causes for delays
- Matters that might impact completion of the Contract

Book No. 2 can also be used to incorporate emails, photos, or other documents that the Project Engineer wants to include in the Permanent Final Records. As these records are kept forever, only include documentation that includes information outside of daily correspondence.

### 10-3.2C Inspector's Daily Report - Final Records Book No. 3

The Inspector's Daily Report (IDR) is a record of operations for a specific type of Work on the project, such as surfacing, grading, paving, bridge, etc., which is being inspected by the writer. The IDR documents the normal work process completed each day and anything unusual that occurred on the project.

The first section of the IDR is a structured sheet of questions addressing identification of Work operations and the associated labor and equipment being used to accomplish the Work. Fill out the first section completely for all questions that pertain to the specific type of Work activity being inspected.

The second section is a narrative portion that should include a notation of any orders given or received, discussions with the Contractor, unusual conditions, delays in the operations, and the presence of any visitors. If an operation is being inspected which results in the partial payment of an item, the item should be identified along with the basis for calculating the partial payment. It is also of value to note the Project Inspector or Engineer's activities in the daily report.

Electronic versions of Inspector's Daily Reports are available depending on the application used during administration:

SharePoint - DOT Form 422-004 & 422-004A

Unifier - Use the Inspector Daily Report Business Process, which has the IDR forms and workflow built into the system

IDRs are required for each day any contractor is on-site (for all chargeable working days) and are to be submitted daily. IDRs should be reviewed and approved by the Project Managers/Project Engineers in a timely manner; ideally within two weeks of the IDR activity date. Each page of the IDR will be stored electronically in the permanent final records.

When necessary, the Project Engineer will add clarifying comments or remarks on the electronic copies of the IDR after they have been submitted. If the IDR has reached the end step in Unifier and a clarifying comment needs to be made to the IDR, the Project Engineer will:

- Create a copy of the IDR
- Add clarifying comments or remarks to the document
- Initial and date all changes made
- Make a note on the IDR that this is the official "amended" IDR

#### **IDR Content**

The IDR is intended to document communication, progress of Work, Contractor workforce/equipment and materials sampling/acceptance. The following are general rules for content of IDRs (including those created in Unifier):

- 1. The IDR is public record and may be called upon in case of litigation. The level of detail and professionalism exhibited may be of great benefit.
- 2. Do not make (or document) derogatory comments, as this is unprofessional behavior, and may be used to demonstrate that the inspector was hostile toward the Contractor and did not behave in a manner consistent with good faith.

3. All statements must be based on facts and requirements should reference the contract requirements.

- 4. All entries should be clear, concise, correctly spelled, concurrent and complete.
- 5. Summarize key points of any discussion of work activities with the Contractor.
- Attach relevant photos to document the Work happening to ensure they are included with the IDR in the Permanent Final Records. Photos can be added to the IDR by including them with the written narrative of daily activities or electronically attached to the document.

Every photo taken does not need to be attached to the IDR, only photos that enhance the written notation for the Work activities performed that day or if unusual circumstances occurred.

- 7. Be specific when recording information about Work activities. Use drainage codes, exact bid item numbers, line and station limits, etc. Avoid referencing a coworker's IDR, but if doing so, attach a copy.
- 8. Be specific when recording deliveries of materials to the project. Use bid item numbers, drainage codes, RAM number, etc. Record heat numbers, lot numbers, "Approved For Shipment" and "WSDOT Inspected" tags or stamps, etc. Using the IDR as materials documentation is acceptable. If used as documentation for acceptance, a copy of the IDR, with the appropriate items high-lighted, should be included with the materials documentation file.
- 9. Daily Equipment Status Reports should be complete and current.
  - Record all equipment, including any trailer or transport used to deliver equipment to the project.
  - Record the make, model and year of equipment. Request an equipment list from the Contractor and keep it updated. Photos make a good record of condition and configuration.
  - Record the exact bid item on which the equipment was working.
  - Understand the difference between down, idle, and standby time and use the correct term on the report.
  - Record crew composition (once a week or whenever it changes) along with the hours worked where practicable. This can be done on a separate IDR or in the narrative portion (page 2).
- 10. Record a chronology of events throughout the day, as they occur. Taking notes and transferring them to the IDR will work, but duplicates work and introduces an opportunity for error.
- 11. Record any potential delay, in as much detail as possible. Include start and end time, who was notified of the issue and when; along with any mitigating action by the Inspector or the Contractor.
- 12. Record every time the Contractor disagrees with a determination or protests a decision by the Project Engineer, and refer the Contractor to follow the process for protest as defined in the *Standard Specifications*.

### 10-3.2D Pile Driving Records - Final Records Book No. 5

Pile Driving Record Book DOT Form 450-004 or Pile Driving Log DOT Form 450-004A, if used, is a part of the permanent final records. The requirements for pile driving and pile driving records are further detailed in Chapter 6.

### 10-3.2E Post Tensioning Records - Final Records Book No. 6

Post Tensioning Record Book DOT Form 450-005, if used, is a part of the permanent final records. The requirements for post tensioning and post tensioning records are further detailed in Chapter 6.

#### 10-3.2F Contamination Material Records - Final Records Book No. 7

Contamination records document the disposal of contaminated materials.

#### 10-3.2G Miscellaneous Records - Final Records Book No. 8

Miscellaneous Records are optional records and may be included in the permanent records at the Project Engineer's discretion. This part of the permanent records is intended to allow for inclusion of records that might be considered of added importance by the Project Engineer. Optional records could include the following:

- Photographs photos of special features or construction methods.
- Traffic Information information on openings to traffic.
- Ceremonies reports on dedication activities.

Miscellaneous Records that must be included in Book 8 are:

• Environmental Contamination – records or documents on environmental contamination. Disposal records of contaminated materials are placed in Book 7.

Documents placed in the permanent final records are retained forever and are subject to public disclosure requests.

## 10-3.3 Temporary Final Records

All records created during a Contract that are not part of the permanent final records become part of the temporary final records. Temporary final records have a retention schedule of three years with the exception of Traffic Control Reports which are retained for ten years. Temporary final records are indexed for easy retrieval, and are transferred to the ECM (either automatically for records in Unifier or uploaded by Project Office staff) or kept on an office drive for their entire retention period. The ECM will use the date entered in the Retention Date field in the A1 screens of CCIS to calculate when records can be destroyed:

Retention Date: 04 22 2024

For State-funded projects, the retention period begins when the Final Contract Voucher is signed by the State Construction Engineer. The State Construction Office will enter the Retention Date in CCIS.

For Federal-funded projects, the retention period **begins** when FHWA accepts the final payment voucher. The Headquarters Accounting and Financial Services (AFS) Division will send a Retention of Records on Federal Aid Projects letter to the Region that specifically indicates when the retention period begins and ends. Project Office staff will enter the date the retention period **begins** in the Retention Date field in CCIS when the letter is received. If there is a date in the field already, modify the screen to record the date shown on the letter.

Temporary final records are retained for their designated retention period after which they are destroyed. If a claim, lawsuit, or other circumstance is pending at the end of their retention period, the Region will further retain those pertinent records until the issues have been resolved.

Prior to destroying temporary final records, complete a Public Records Destruction Log, DOT Form 720-025, to request approval from the Records Officer (identified on the form) and attach a copy of:

- A CCIS screenshot (Page 4 of the A1 screens) for State-funded projects showing the acceptance was at least three years prior
- The letter sent from AFS indicating that the retention period has been met for Federal-funded projects

Regions must keep copies of approved destruction logs in a location that is easily accessible for public disclosure requests.

The following list contains some of the items that may be kept as temporary final records. This listing is not a complete listing of all the possible items that could be grouped into this category. Remember, temporary final records consist of all project records that are not identified as permanent final records. If temporary final records are kept in numbered books, begin with Book No. 9 to eliminate confusion with permanent final records.

Examples of temporary final records include:

- Item Quantity Tickets
- Pre-estimate Reports with the PE's signature
- Project Correspondence
- Inspector's Record of Field Tests
- Concrete Pour Records
- Approval of Source of Materials -Request for Approval of Materials (RAM) and Qualified Product Lists (QPL)
- Quantity Computation Sheets
- Surfacing Depth Check Records
- Source document files
- Alignment (Transit) Book
- · Grade Book

- Cross-Section Notes
- Drainage Notes
- Photographs
- Falsework and Form Plans
- Daily Report of Force Account Worked
- · Field Note Records
- Final DBE Utilization Plan Report
- Milestone Letters (Substantial, Physical and Completion)
- Washington State Patrol Field Check list
- Recycled Material Report and Utilization Plan
- Traffic Control Reports

### 10-3.3A Traffic Control Reports - Final Records Book No. 4

Traffic Control Reports are part of the temporary final records and are kept for ten years past the Retention Date in the CCIS A1 screens for state federally funded projects.

#### Record of Collisions and Traffic Surveillance

Records of Accidents (now known as Record of Collisions) received by the Project Office are recorded by the Washington State Patrol (WSP) and are part of WSDOT's Transportation Data Office records (TDO), and do not need to be kept in the temporary or permanent final records.

If it is necessary to change traffic control as a result of a collision, the Project Office only needs to reference the Record of Collision report in the Project Construction Diaries or the Inspector's Daily Report. The Record of Collisions is only used during the life of the project to augment decisions on changing traffic control plans during construction. It should be noted that Section SS 2-04, Temporary Traffic Control does not require a collision report be obtained for every collision that may occur within the project limits.

A separate file should also contain the records of traffic control surveillance prepared in accordance with Section SS 2-04, Temporary Traffic Control. Information in this file should be kept current until completion of the Contract. When WSP provides the Project Engineer with traffic control assistance they also provide the Project Engineer with a WSP Traffic Control Checklist, DOT Form 421-045. While this form is a part of the traffic control operations, it can be kept separately and made part of the temporary final records.

## Contractor's Daily Report of Traffic Control

The Contractor's Daily Report of Traffic Control, DOT Form 421-040A and 421-040B, completed by the Contractor's Traffic Control Supervisor, is also included as part of the project's permanent final records. The Contractor's Daily Report of Traffic Control is discussed in more detail in Section 2-04, Temporary Traffic Control.

## 10-3.4 Payment Source Documents

Payment source documents are source documents that are used to support payment. Field Note Records, Item Quantity Tickets and Force Account sheets are examples of payment source documents. Create payment source documents using standard forms available or by using the following guidelines:

- 1. Include the date and initials or full name of the person creating the document
- 2. Include the date and initials or full name of the person checking the calculations and quantities
- 3. Include the date and initials or full name of the person making the project ledger entry in CAPS
- 4. Include the date and initials or full name of the person verifying the CAPS entry and the ledger entry number
- 5. Each pay quantity on the payment source document must list the corresponding bid item number and item description listed in the Contract
- Quantities paid will correspond to the standards established in Section 10-2.1B

Quantities shown on payment source documents will correspond directly to the entries made in the CAPS project ledger. Adequate cross-referencing must exist between the payment source document and the project ledger entry.

If a payment source document includes payments made for different phases of work or if multiple payments are made from the same payment source document, dates and initials (or full name) are required for each CAPS project ledger entry as shown above. Include sufficient information to indicate the dates work was performed.

Payment source documents for grading, excavation or other similar items must show the method used for determining the payment amount and how it led to the accurate measurement for the work completed. Sketches can be used to illustrate how volume quantities were calculated and are useful in avoiding duplicate payments when used to determine limits of previous payments.

For lump sum items, the field notes or diaries can show an estimated percentage of work completed. If this percentage method is used, then a brief discussion outlining the basis for the calculation and any assumptions that were used must also be included. Refer to Contractor submitted lump sum breakdowns to justify payment amount.

Payment source documents will only include one bid item number. The only exception to this rule is field note records for drainage structures.

Drainage structure field note records can include multiple bid items as shown in Figure 10-6 and 10-7. In addition, drainage structure field note records should show the stationing, distance left or right, angle or skew if applicable and the flow line elevation, and if paying for culverts, drains or ditches, grade elevation. Show any calculations necessary to support the bid items listed for payment. Include the drainage structure number on the field note record and group numbers must still be segregated as shown in the summary of quantities included with the Plans.

Additional requirements for payment source documents are included in 10-4.1 and 10-4.2.

## 10-3.5 Documents Submitted Through PWIA

Documents submitted to the Project Engineer through Labor and Industries' Prevailing Wage, Intents and Affidavits (PWIA) system will be stored within and do not need to be printed for inclusion with the temporary final records. PWIAs retention schedule keeps records for six years after the Notice of Completion for the project or longer if there are outstanding issues, exceeding our retention schedule for temporary final records. Examples of records stored in PWIA include:

- · Statement of Intents
- Affidavits of Wages Paid
- · Certified Payrolls
- Apprenticeship Utilization Reports
- Apprenticeship GFE Documentation
- Apprenticeship Utilization Plan

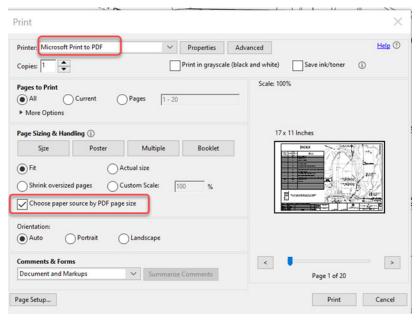
## 10-3.6 As-Built Plans and Shop Drawings

As-built plans are a record of changes made to the originally intended physical product of the Contract. As-built plans reflect the same degree of detail as the original plan drawings and preserve the historical detail of what occurred on the project. As-built plans can also be used as a basis to plan and design future projects in the same location and to make repairs to damaged structural components or other non-functioning facilities. In addition, state law requires that owners of "underground facilities" be able to locate these facilities within 24 inches of the outside dimensions. As-built plans offer a convenient means for recording these facilities.

## 10-3.6A Preparing As-Built Plans

As-built plans are prepared as electronic flattened PDF files. A full set of the Contract plans are available on the Active Contract Directory (FTP DIRECTORY). This set of plans can be used by the Project Engineer for the purpose of preparing as-built plans. Contract plans that are locked can be flattened by printing to PDF (for best results, select the option "Choose paper source by PDF page size" under Page Sizing & Handling:

Figure 10-3.6A-1



All corrections, repairs, revisions and additional details necessary to depict the Work as it was constructed shall be shown on the as-built plans, whether considered the practice of engineering or not and whether considered a change to the Contract or not.

Corrections to existing plans are to be made by lining out quantities or features that were changed during construction, then noting the correction or change in red. Note corrections and revisions on the plans in a manner that results in neat and legible sheets. Use medium width line styles when making changes or corrections to plan sheets. If desired, the changes may be further identified by placing them in a "cloud" symbol.

Include the most current version of additional or replacement plan sheets from change orders in the as-built plans. The changes shall be clearly marked by methods that may include revision numbers, clouding or other means and need not be made in red.

Changes shown in as-built plans shall include a reference to the appropriate change order number, if applicable.

Note construction changes on all Contract plan sheets that were affected the by the change. For instance, the change in location of a catch basin or manhole may affect the location listed in the structure note sheet, the drainage plan view sheet, and the drainage profile sheet.

As-built plans for Design-Build Contracts must meet the same requirements as any other set of as-built plans, unless specifically stated otherwise in the Contract documents. This is to include formatting, file size, and naming conventions.

If concrete foundations are partially removed, show the remaining portions of the foundations on the as-built plans. It is not required that the as-built, Summary of Quantity sheets be revised to reflect final estimate quantities. Summary of Quantity sheets reflect original plan quantities which are shown as preliminary estimates of the Work. Final as-built quantities for individual unit bid items can be obtained from the final CAPS ledger for the project.

In order to help identify changes in Work location or changes in the Work completed at a particular location, the Quantity Tabulation and Structure Note sheets must be updated to show the actual physical feature items or the locations of installations where changes were made. Changes may include revisions to guardrail, guardrail termini, post types, anchors or anchor types, revisions to monuments, structure notes that were added or revised, pipe size and types that were changed, revised locations for catch basins, manholes, etc. The intent is to show what changes to the planned Work were made. Changes to quantities of items used which increase or decrease the original quantities by more than 25 percent and items added or deleted at a particular installation, shall be updated. Final as-built quantities for the individual unit bid items can be more accurately obtained from the final CAPS ledger for the project.

In addition to the requirements outlined above for as-built plans, the *Standard Specifications* also require that the Contractor furnish the Project Engineer with an electronic copy of: shop drawings, schematic circuit drawings, prestressed structural elements, structural steel components, etc. to be included with the electronic copy of the as-built plans. Refer to the *Standard Specifications* for specific requirements of each plan.

### As-Built Plans for Bridges and Structures

Changes shown in as-built plans considered practice of engineering and also a change to the Contract shall include the signed and dated seal of the Engineer-of-Record approving the change. Changes shown in as-built plans considered practice of engineering but not a change to the Contract shall include a reference to the licensed Professional Engineer who evaluated the change and the date of their recommendation. See Section SS 1-04.4 Changes/Responsibility of Licensed Professionals for Changes to Structural Engineered Drawings During Design-Bid-Build Construction Contracts for reference.

Prior to submitting the as-built plans to Engineering Records, the Project Engineer shall submit a draft version to the Bridge and Structures Office for review. The Bridge and Structures Office will compare the draft as-built plans with their construction support records, and will inform the Project Engineer if any discrepancies are noted. Please allow 30 days for this review process.

## 10-3.6A(1) Submitting Electronic As-Built Plans and Shop Drawings

As-built plans and shop drawings must be electronically uploaded into the Enterprise Content Management (ECM) system as PDF files as described below. For each Contract that is submitted electronically, a Region staff member must be responsible for:

- Verifying that all necessary documentation is complete,
- Uploading electronic PDF as-built content into the ECM
- Verifying that the as-builts are available to view in the ECM before deleting the Region's copy of the electronic as-builts
- Quality verification of any scanned as-builts prior to uploading to the ECM and disposal of paper copies after the upload is complete.

Format - PDF

**DPI** - 300

Size - 11 in × 17 in (capable of printing full size plan sheets)

**As-Built Plans** – Mark each sheet with "FOR AS-BUILT PLANS ONLY" or "FOR AS-CONSTRUCTED PLANS ONLY". This mark can either be a grey watermark applied to each sheet or stamped in red to each sheet.

**As-built Sheet Contract Numbers** – Each sheet should have the Contract number applied, for example, "XE1234".

Naming Convention – Each PDF document must be named using the Contract number, for example, "XE1234.pdf". If the Contract is large, you would need to break it up in volumes no greater than 200 MB each. An example of PDF naming with the Contract number and volume for volume 1 of a 10 volume set would be "XE1234-Vol-1-of-10.pdf". An example of PDF naming for volume 10 of a 10 volume set would be "XE1234-Vol-10-of-10.pdf".

**As-Built Cover Sheet** – The first page of Volume 1 will be a completed As-Built Cover Sheet, DOT Form 722-025, which will be used to key in the metadata. Fill out the form electronically and include it as the first page of Volume 1. WSDOT Form 722-025 must be signed and sealed by the Project Engineer for Design-Bid-Build contracts.

**Design-Bid contracts** - The P.E. stamps and signatures must be the Design Builder Engineer of Record (EOR).

**Progressive Design Build contracts** - The P.E. stamps and signatures must be the Progressive Design Builder EOR.

**Design-Bid Build P.E. Stamps and Signatures** – All appropriate WSDOT P.E. stamps and signatures as shown in awarded Contract Plans must be shown on the as-builts plans.

**Design Builder P.E. Stamps & Signatures** – All appropriate Design-Builder P.E. stamps and signatures as shown in the Released for Construction (RFC) plans must be shown on the final as-builts.

**ILINX Capture of PDF Files** - Upload PDFs to the ECM using ILINX Capture for As-Builts. Refer to the ECM Construction User Guide for additional information.

#### 10-3.7 Final Record Field Notes

Final record field notes are documents created during the life of the project that are not considered a source document. Records that appear in the field note final records should not be duplicated and placed in other final record books.

Field notes will need an individual index to indicate what records are included and be consecutively numbered.

## 10-4 Project Ledger System

#### 10-4.1 General

The Contract Administration and Payment System (CAPS) provides both an accounting and payment system, while also acting as an information collection system. The CAPS program uses an electronic project ledger that is maintained current throughout the life of the project as the backbone of the system. All items of Work on a project for which payment is made must be entered into the electronic project ledger. Items posted in the ledger become the basis for payment and summary record document for dollars paid to the Contractor, quantity of Work performed, status report during the active life of the Contract and are also used as the basis for final reports when the project is completed.

As Work is completed, the Project Office continuously enters those quantities into the ledger; those records then become eligible for payment when the next progress estimate is due. Processing of monthly progress and project final estimates is further detailed in Section SS 1-09.9, Payments. With the ledger entries completed, CAPS compiles all records eligible for payment and transfers the data to the payment portion of the system. Because of CAPS's ability to store information it is also used as an extensive resource for corporate information regarding the construction program and is used extensively by many other groups throughout WSDOT.

All electronic data incorporated into CAPS is stored on either an active file or a history file. These files are both permanently retained and are available for use whenever the need arises. It is not necessary, or intended, that paper copies of the project ledger be retained for final records.

Detailed instructions for the use of CAPS can be found on the HQ Construction SharePoint site.

A key function of CAPS is to provide a complete accounting trail for every item. An accounting trail must be clearly maintained from the original source document through the actual payment to the Contractor. Audits are an effective tool used by both state and federal governments to ensure established procedures and processes are correctly used to maintain the most effective use of the public's funds. It is important that WSDOT maintain sufficient records and documentation to clearly identify an accounting trail that is capable of withstanding the test of audits.

In order to satisfy the requirements of an accounting audit, the following conditions must be met:

- There must be a source document for every ledger entry and vice-versa.
- There must be an orderly filing system to facilitate timely retrieval of source documents.
- Both Interim Progress Estimate and Final Estimate reports must be signed by the Project Engineer.
- The Contract Estimate Payment Advice report must be filed along with its corresponding Progress Estimate report.

## 10-4.2 Payment Source Documents

Each ledger entry must be supported by a detailed source document, which specifically identifies the type, amount, and location of the Work or material that is being entered into CAPS for payment. Source documents used to support these entries are intended to be complete documents, documents that stand alone, and fully support the payment that is being made. If information from other documents are referenced, these additional document(s) must be clearly identified in order to complete the audit trail.

Payment source documents are the beginning of the audit trail, showing that a WSDOT Project Inspector has observed and determined the amount of Work performed by the Contractor. Also, the payment source document must show that all calculations have been checked by a second WSDOT employee for accuracy.

Payment source documents must show four sets of dated initials or full names for each person who:

- (1) completed the original calculations,
- (2) checked the original calculations,
- (3) entered the payment quantity/amount in the CAPS ledger, and
- (4) verified the CAPS ledger entry.

For Unifier documents, the audit log meets the requirements listed above.

In addition, the source document must show the ledger entry number.

All of the checks and initials or names noted above must be complete prior to payment to ensure that information entered into the CAPS ledger is accurate. It is not appropriate to complete any of these checks after payment is made.

Many Project Offices use electronic data collectors for surveying work. These data collectors eliminate the need for hand prepared field transit and field level books. Many Project Offices have also developed or routinely use other electronic programs or applications, which perform calculations and produce a report of the results. In using these applications there can be confusion regarding the need for checking data that has been compiled and reported electronically. In the absence of specific direction, when an electronically produced record or set of notes is used as a source document for a contract payment, the individual who originated the document should be noted. A second person can then check both input and output for both reasonableness and accuracy.

This check may range from duplicating the process to verifying the input. Whatever the case may be, it is recommended that the dated initials or full names of those two individuals be on the source document.

## 10-4.3 Source Document Filing Systems

Basic criteria for a good source document filing system includes:

- · ease of setup
- · ease of use, and
- capability to retrieve any specific document in a timely manner.

The Project Office will be able to transfer documentation submitted through Unifier into the ECM, using the document designation assigned to each record. The designation will determine if each record is part of the permanent or temporary final records.

Contracts that are not in Unifier will require a system to file source documents that corresponds with final records requirements. An example of a system for filing payment source documents is to set up two books or folders. One book is organized by Bid Item Number and the second book is organized by Structure Number. Source documents are filed by Bid Item Number except for drainage items, which are filed by Structure Number. Drainage items are filed by Structure Number because their source document (field note record) normally has multiple items while the Structure Number is unique to a specific drainage facility.

This system allows anyone to easily locate the source documents that support a contract payment. These records are retained in the Project Office until final records are filed when the source documents are made a part of the three-year temporary final records.

# 10-5 Region Project Documentation Reviews

### 10-5.1 General

The Region is responsible to ensure that reviews of record keeping and documentation procedures are completed during the progress of the work. This will help to ensure that the original field records and pay notes are being properly prepared and that proper procedures are being followed. The Region should review specific pay items for correctness of the payments made as well as for procedural requirements for documenting and processing of contract payments, acceptance of materials and other pertinent contract administration requirements. Reviews of specific pay items should be recorded on DOT Form 421-014. Reviews of procedural items should be recorded on either DOT Form 230-036A or 230-036B. Version A should be used for the first review made on a project. Version B places more emphasis on individual pay items and should be used for the second review or on larger projects during the initial review phase where this emphasis is more appropriate.

On projects that are estimated to cost more than \$1,000,000, and require more than 35 working days to construct, the Region should conduct an interim documentation review when the project is approximately 50 percent complete. This review should be thorough and complete to ensure that the documentation records are adequate and are being properly maintained. This review should include both procedural checks for those items listed on DOT Form 230-036A and detailed reviews of specific pay items for accurate documentation practices of contract payments completed to date. Audit work for pay items may also be started at this time in preparation for the Final Records general Review at Physical Completion. This early audit work could consist of checking any individual items that have been fully completed. Reviews of completed items that are recorded on DOT Form 421-014 can be kept and then made a part of the Final Records

check upon Physical Completion. Once the project has been completed, information from both procedural reviews and specific pay item reviews can then become a part of the *Temporary Final Records*.

On projects that are estimated to cost more than \$500,000 and require more than 100 working days to construct, the interim documentation review should be considered as early as 30 percent completion but, where possible, no later than 50 percent completion. On these larger projects, it is particularly important that the interim reviews be sufficient to verify both documentation and procedural practices. However, on many projects, the nature of the work completed at 30 percent may not provide an adequate representation of the documentation procedure to merit a documentation review. In these instances, the Region should exercise considerable judgment regarding the timing of interim documentation reviews.

The Region reviewer should also exercise considerable judgment in deciding whether or not to perform additional documentation reviews in conjunction with the reviews described above. In addition to cost and time, other criteria should also be used to evaluate the need for additional documentation reviews. This could include results of previous documentation reviews as well as the history, knowledge, and experience of the specific Project Office personnel involved. The Region reviewer should be satisfied on a case-by-case basis that each project's records are adequate and are being properly maintained. A copy of the final region review shall be sent to the Materials Quality Assurance section at the State Materials Laboratory.

It is recommended that each time a documentation review is performed on a project the Region reviewers discuss the results of the review with the Project Office staff, leaving a completed copy of DOT Form 230-036 and 421-014 to be included in the project temporary records.

### 10-5.2 Review Procedures for Final Estimates and Final Records

When work on the project is physically complete, it is important that the final records be completed and assembled in as timely a manner as possible. The final quantities should be checked and the final estimate or Final Contract Voucher Certification furnished to the Contractor as soon as is reasonably possible.

In order to facilitate this, the Project Engineer should ensure that the overall project final records, including the final contract quantities, are made ready for Region review as timely as can be and that the Region has completed their review work shortly thereafter.

The Region is responsible to ensure that the final records for the contract are complete, accurate and maintained in an orderly manner. The Region may exercise considerable judgment regarding the procedures used for this check. These procedures may include a complete check of all records or a representative sampling of records in order to validate all records maintained. If problems are discovered during the review of the representative sample, and if those problems indicate that the entire population might be flawed, then the entire population should be checked and corrected by the field office and a new representative sample taken. In conducting these final reviews the Region reviewer should mark the areas that have been checked, initialing and dating the records or portions of records that have been reviewed. The Examination Sheets for Contract Items DOT Form 421-014 and Documentation Review (Procedures) DOT Form 230-036A and 230-036B should be kept until the contract final records check is completed and then filed with the *Temporary Final Records* where they can be further reviewed should an audit occur.

Figure 10-1

Date *	Location	ntity Tic	Group	
	Location		Group	
Remarks				
Time Received		Time Weighe	d	
Received By *		Weighed By		
Pit Number		Truck Numbe	er*	
Check One *		Legal Gross \	Weight	
	Hours	Gross *		
	M. Gal.			
□ LBS.	Each	Tare *		
Days		Net *		
Other Unit of Measure		This Load	Total	
	Item Ide	ntification	•	
Contract Number *		Item Number	*	
Item Description				
Subcontractor				
Contractor	*****			
		Ticket Number		

# Figure 10-2

## Contract #6767 Johnson Creek Bridge 112/38 Columbia Basin Region Final Records Book 1

Item	Section
Index of Final Records Books	1
Listing of State Personnel	2
Comparison of Quantities	3
Listing of Change Orders	4
Record of Construction Materials	5

# Figure 10-3

## **Contract # 7767**

## Johnson Creek Bridge 112/38

### Columbia Basin Region

### **Permanent Final Records**

#### (Retained at HQ Records Services)

Book Description	Book No.
Final Records Book No. 1	1
Construction Project Diaries	2
Inspector's Daily Reports	3
Traffic Control Reports	4
Pile Driving Records	5
Post Tensioning Records	6
Contaminated Materials Disposal Bills	7
Miscellaneous Records	8
As-Built Plans (Submitted under separate cover dated 08/10/2000)	

#### **Temporary Final Records**

(Retained Within the Region)

Description	Book No.
Item Quantity Tickets	9
Project Engineer's Copy of Estimates	10
Inspector's Record of Field Tests	11
Scale Test Report	12
Concrete Pour Records	13
Field Note Records	14
Drainage Notes	15
Approval of Source of Materials	16
Daily Report of Force Account Worked	17
Other Source Document Files	18
Quarterly Report of Amounts Credited DBE Participation	19
Quarterly Report of Amounts Paid MBE/WBE Participation	20
Contractor's Payrolls (Fed-Aid Projects)	21
FHWA Form 1589 (ARRA Projects)	22
Alignment (Transit) Book	23
Grade Book	24
Cross Section Notes	25
Quantity Computation Sheets	26
Record of Field Audits	27
Surfacing Depth Checks	28
Washington State Patrol Field Checklist	29

Figure 10-4

ontract 47			Stat		λ.						L	ine	1 -	Lin							C	/s 2	2 1 1	<u> </u>			_
taked E	By _			EE	De	<u> </u>	11_			Date				- 17		Vork	Start	ted			V	Vork C			ed .		_
H	. Le	wid	1					1				2-	28		$\perp$		?-5		8			2		- 9	8		
alculate	<b>8</b> By				2 · 1		8	Ch	ecke B	d By					2-19		18	Inst Q	ector	's S ()	ignati				ate 2 - 9	1-98	,
		Œ.	Eυ	٠ ر		Le	וטו	s	M	, }	Ba	e Ne	<u>, x</u>	T	Ju.	\$							T	Ī			_
		WIE	AT	AU	re :		در	EA	R		Į O																_
-	-	_	-		-	_				<u> </u>	١.			-	-	_						_	4			-	_
				-	+	C	LE	A	21)	1G	*	<b>(7</b>	₽u	BE	IN	G						+	+			$\perp$	
		G	20	υF	>	1	Т	рΤ	AL			١.	21	77		MZ		F	204	,	2=	VERS	ε	5	DE		
												-	2.	1		İ	Ai										
	_	+	-	-	-	-			$\vdash$	-				<u> </u>										_	_		
	-	G	POI	JP.	3	-	T	ÞΤ	4	-	-		1	60	1	<u> </u>		2	F	OM	F	AGE	: (	4		+	
												-	1.4	6	14	EC	741	E.	\$				+	$\dashv$			
		Pk	201	ec 1	-	ВΤ	AL				-		3.5	8		HE	CTA	احار	کڌ				1				
					ļ				-					_								_	1				
	_	-				-						┼											-	+		-	~
+		+	-								-	$\vdash$											+	+		-	
																							1				
				<u></u>																							
em No.		Ma	terial				N	lanuf	actur	er				and Na odel/T				MS/C		Αp	pr/Acc Code				asis cepta		
						ļ																					
																								-			_
em No.		lte	m De	script	ion			Grou		ate V		L	nit	Qua	entity		PS En No.		Po Initials	sted	By Date	Initia		cked	<u> </u>	Est. N	o.
2	Cuer	RMG	10	zeu.	BBIA	14		1	$\neg$	9.9		HE	ARE	2,1	2		7	-	<b>1</b> 5	+	116	ce		4/2		ı	
2		"		4				2	2	.9.9	8	HEC.	l by Bag	1.4			8	1	Š		lib	CE		4/2		ı	
									-	•		_								+							_
							_		+			-				ļ		+		-		-					_

Figure 10-5

Station	Left	Right	Length or Width	Area 🔒 3	Remarks
CTROUP 1	BEGIN (	CLEARING			
57+400		8-15			
57 +420		8-15	7	140	
57 +440		10-15	6	120	
57 + 460	0	10-15	5	100	A
57+480	18-10	12-15	8	160	
<i>57 + 50</i> 0	18-3	0	13	260	
57+520	18-1		16	320	
57+540	18-0	0-7	21	420	
57 +560	21	7	215	530	
57 +580	24	7	29.5	590	
57+600	24	7	31		
57+620	24				
57+64				590	
		7	29.5	590	
	2)	10	31	620	
61+000	18	7.5	28.25	565	
61 +020	18	7.5	25.5	510	
61 +040	18	<i>5.5</i>	2A.5	490	
61+060	18.5	5.5	23.75	475	
61+080	17.5	5.5	23.25	465	
61+100	17.5	<i>5.</i> 5	22.75	455	
61+120	17.5	<i>5.</i> 5	23	460	GEOUP 1
61+140	17.3	5.5	22.5	450	END CLEADING
0, 1, 10	1.6				
	<u> </u>				
			-		
·····					
			_		
			Page Total	21172	

Figure 10-6

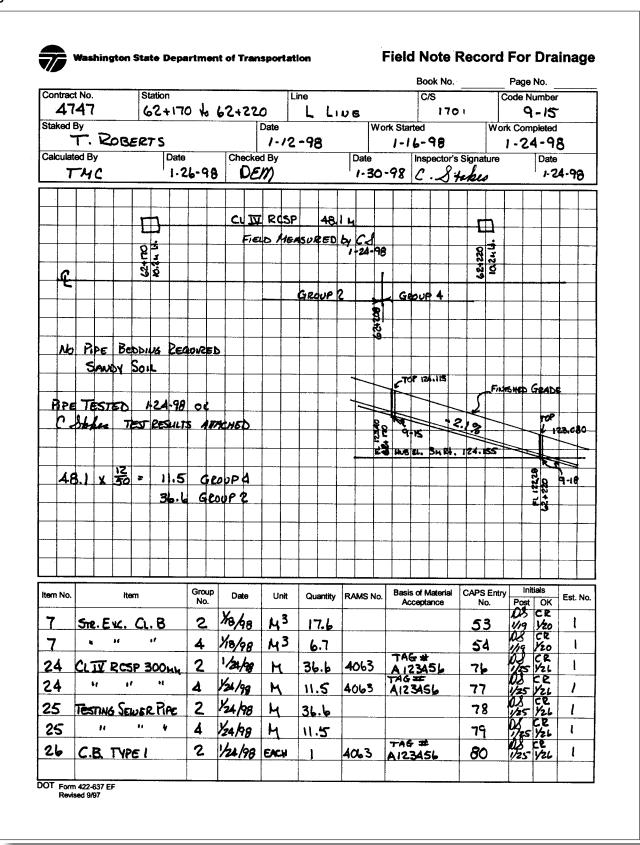


Figure 10-7

STRUCT	TURE EXCA	VATION			(PIPE ST	RUCTURE EX	CAVATION WI	DTH = 1 m
	VV-1914 AAAAAA			CENTERL		RK 1.8mR	+	
STATION	FLOW LINE GRADE	ORIGINAL GROUND	SUB-GRADE	FLOW LINE	BOTTOM DITCH	OFFSET HUB	OFFSET CUT-F.L.	REMARKS
CB9-18								
0+000	122.28	123.02		c-0.74		122.97	C-0.69	,
0+000.7	122.29	123.02		c-0.73				Str. EXC.
010+0	122.53	122.96		c-0.43				
0+020	122.80	123.14		c-0.34		123.51	C-0.71	
0+030	123.00	123.38		c-0.38				
)t040	123.33	123.60		c-0.27		124.05	C-0.72	
7-049.3	123.38	123.81		c-0.43				end str. Exc.
0+050	123.40	123.81		C-0.41		124.21	c-0.81	
B9-15						1		
		-						
	· ·							
						-		
						İ		
			0.051	n added f	or			
1			Pipe 1	thickness				
410	tn Exc. 2+000.7 c- 2+010 c-		0.64 X			m <sup>3</sup> 5.95 0.72		
01	+011.5 c-		0.43 X		1 =	3.66	6.7 6	roup 4
/I\			1,41 X		i =	4.10		
2 0			.38 X		1 =	3.80		-
	+040 C-				i =	3 72		
	1049,3 c-		,70 A	1.5 1			Froup Z	
07	1047,5 0-	0,47				10.0	roup 2	-
CR	0.85× 0.	91 × 0.6	1					
<u> </u>	1.46 × 1.5			23		6.7		
	11 10 V 11-	- L A 1.0	<u></u>	ے سر		15.3		
						2.3		
• • • • • • • • • • • • • • • • • • • •	ау 6.7 n 17.6 m	3	. /				3-11	c1 :-
	ay 6.ln	1 Grp.	<i>†</i>			64.31	ur lotal	Str. Exc

# Figure 10-8



# **Field Note Record**

Contract No.	Station	Mile/Line:		C/S	
C7616	Project Limits	SR 26		0134 - G1/ 3830 - C	32
Staked by	Date	Work Started Date		Work Complete	d Date
Jason Lefler		4/27/2009		4/27/2009	
3/23/2009					
Calculated by	, Date	Checked by	Date	Inspector	Date
Jason Lefler		Sean Carpenter		Jason Lefler	4/27/09
4/27/2009		5/6/2009			

One Type B Guardrail Connection installed at each bridge corner; 4 total.

Group 1

Station 299+93 Left and Right = 2

Pay 2.00 each

Group 2 Station 302+43 Left and Right = 2

Pay 2.00 each



Item Num		Manufacturer	RAMS/QPL		Basis of Accept	Accep	tance
	Name/Model Type		Ref. No.	Code		Date	Init.
019.01	9-16 Fence and Guardrail W and Thrie Beam + componants	Trinity Highway Produ LLC	ucts, QPL-0012	3002	Document conformance to approved plan	04/27/09	JL
019.02.00	9-09 Timber and Lumber	Superior Wood Treati	ng QPL-0013	2110	Verify Cert of Treatment and Lumber Grade Stamp.	04/27/09	JL
019.02.02	Steel Fasteners Threaded Rods,Nuts,and Washers	Portland Bolt and Mfr	g QPL-0022	2015	Verify Product along with MCC and CMO	04/27/09	JL
019.02.03	9-26 Epoxy Resins Acrylic Tie (AT)	Simpson Strong Tie C Inc.	Co., QPL-0021	3008	Visually Verify Product	04/27/09	JL
Item	Item Description	Grp Date Work U	nit Quantity L	edger	Posted By Chec	ked By	Est.

Item	Item Description	Grp	Date Work	Unit			Pos	ted By	Che		Est.
Num			Complete			Entry No.	Init.	Date	Init.	Date	No.
0019	TYPE B GUARDRAIL CONNECTION	1	4/27/2009	EACH	2.00	48	rah	05/07/09	TH	05/07/09	
0019	TYPE B GUARDRAIL CONNECTION	2	4/27/2009	EACH	2.00	49	rah	05/07/09	TH	05/07/09	

Attachments

File Attachment

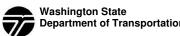
DOT Form IP 422-635ER EF Revised 2/2009

# Figure 10-9

Contrac	·+			SR Nos						Day		-	Shift		Date			
C776				SR 2						Tueso	lav		Day			8/200	09	
Veathe				U							,					-,		
AM C	lr/warr	m							PM clr/l	hot								
٨	Contracto								Represer		tle							
'" I	nland	Asph		ractor	or Agent			Appr'd	Tony	Via			Renrese	entative/	itle			
_	1		Cubcon	i dotor (	or rigent					1	Ci			STRUCTURE OF T	1110			
	Norths		mmory					У	У	Jerei	my Sim	npkins	5					
	tion and		mmary										de Tod					
											on comp No completestimate NOTE:	LS Itel LS Itel e paynot e cutoff. Any "No Req atls Doc	r at estimm. Work te on con " will be quired Ba umentati	nate cuto c is not completion explaine ckup Sa ion Appro	ompleted or percer d in Diary mples Ta	. Will Itage at		
											Ma	atis Sour	rce Appro	oveu				
Item N	lo.		Contract	tem De	scription	1				Locat		atis Sour	rce Appro		/N Y/	N Y	′/N	Y/N
11 ile U F	pload	chmen	ction Sig	ns Cl		1		Througho	out proj			atis Sour	rce Appro		/N Y/ No	N Y	_	Y/N No
41  Fragger Fr	pload File Attactor's ng Contr. No.	s Equ ractors la	t ipment d (A-E Above	) .000	dass A	Equipr		Througho  No. and Desc				atis Soul	rce Appro	NA Opr	<del></del>	NA		
© FContra	pload File Attactor's ng Contr No.  1	s Equ ractors lo	t ipment d (A-E Above 3500 20 e 1500 p	ns Cl	GVW	Equipn flatbe		) No. and Desc				atis Soul	rce Appro	NA Opr 8 6	No	NA		No
ile U  Fontra peratir	Pload File Attactor's ng Control No.  1 1 1	s Equ ractors lo GMC Dodg	t ipment d (A-E Above	ns Cl	GVW	Equipn flatbe		) No. and Desc				atis Souli	rce Appro	NA Opr	No	NA		No
ile U  ontra  a  a  ontra  a	pload File Attactor's ng Contr No.  1	s Equ ractors lo GMC Dodg	t ipment d (A-E Above 3500 20 e 1500 p	ns Cl	GVW	Equipn flatbe		) No. and Desc				atis Souli	rce Appro	NA Opr 8 6	No	NA		No
ile U  Feontral peratir	pload File Attactor's ng Control No.  1 1 1 2 2 2 2 3 3 4 4 5 4 5 7 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 8 7 8	GMC Dodg	t ipment d (A-E Above 3500 20 e 1500 p	ns Cl ) .000 ickup d trai	GVW	Equipn flatbe 9A L8	d tru	D No. and Desc				atis Souli	rce Appro	NA Opr 8 6	Stdby	Dov		No
ile U  Frontriperatiring	pload File Attactor's ng Control No.  1 1 1 2 2 2 2 3 3 4 4 5 4 5 7 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 8 7 8	GMC Dodg 20 for s	t ipment d (A-E Above 3500 20 e 1500 p ot flatbe	ns Cl ) .000 ickup d trai	GVW 90, #39	Equipn flatbe 9A L8	d true	D No. and Desc		ject		Electri		NA Opr 8 6	Stdby	NA Dov	wn	No
41  Francisco Fr	Co pload file Attar actor's ng Contr No.  1 1 1 actor's force ng contra	GMC Dodg 20 for s	t ipment d (A-E Above 3500 20 e 1500 p ot flatbe	ns Cl	GVW 90, #39	Equipn flatbe DA L8	d true	D No. and Desc	cription	ject	I ion		cians	NA   NA   NA   NA   NA   NA   NA   NA	Stdby	NA Dov	wn	Idle
### File U  ### Fi	Co pload file Attar actor's ng Contr No.  1 1 1 factor's force ng contra Labore	GMC Dodg 20 for s actors IE	t ipment d (A-E Above 3500 20 e 1500 p ot flatbe	ns Cl	GVW 90, #39	Equipn flatbe DA L8	d true	D No. and Desc	cription	ject  Fla	ggers		cians	Opr 8 6 8	Stdby  Nu  Female	NA Dov	wn	Idle
File U  Fraction F  F  Fraction F  F  F  F  F  F  F  F  F  F  F  F  F	Coolpload File Attactor's ng Control No.  1 1 1 1 Labore Labore 4 C Control	GMC Dodg 20 foo s actors IE	t ipment d (A-E Above 3500 20 e 1500 p ot flatbe	0000 ickupid trai	GVW o, #39 ler #1	Equipn flatbe DA L8	d tru	D No. and Desc Ck, #45A	pription	Fla	ggers	Electri	cians	Opr 8 6 8	Stdby  Nu Female	NA Dov	wn	Idle
File U  File U  Fraction	Coolpload File Attactor's actor's force actor's Contraffic s/Vide actor's Cotor's Coto	s Equipment of Section 1 S	ipment d (A-E Above  3500 20 e 1500 p ot flatbe  Carpenters  DI Labor F en Today?	ns Cl	GVW p, #39 ler #1	Equipn flatbe DA L8	Number ters	D No. and Desc Ck, #45A	Masons Was	Fla 1	ggers 3	Electri-	cians	Opr 8 6 8 Male 4	Stdby  Nu Female  1	Downwher App	wn por	Idle Trnee
### FECONTRIL STREET OF THE PROPERTY OF THE PR	Coolpload File Attactor's actor's force actor's Contraffic s/Vide actor's Cotor's Coto	s Equipment of Section 1 S	ipment d (A-E Above  3500 20 e 1500 p ot flatbe  Carpenters  DI Labor F en Today?	ns Cl	GVW ators  ators  ed Tod Yes	Equipm flatbe DA L8	Number ters	D No. and Desc	Masons Was	Fla 1	ggers 3	Electri-	cians approv	Opr 8 6 8 Male 4	Stdby  Nu Female  1	NA Dow	wn	Idle Trnee
### FECONTRIL STREET OF THE PROPERTY OF THE PR	Coolpload File Attactor's actor's force actor's Contraffic s/Vide actor's Cotor's Coto	s Equipment of Section 1 S	ipment d (A-E Above  3500 20 e 1500 p ot flatbe  Carpenters  DI Labor F en Today?	ns Cl  )  0000 ickup ickup Oper equire :00 a	GVW ators  ators  ed Tod Yes	Equipm flatbe DA L8	Number ters	D No. and Desc	Masons Was	Fla 1	ggers 3	Electri-	cians approv	Opr 8 6 8 Male 4 Ved TC	Stdby  Nu Female  1  P?	NA Dow	wn	Idle  Trnee  No No
### File U  ### Fraction  ###	Coolpload File Attactor's actor's force actor's Contraffic s/Vide actor's Cotor's Coto	s Equipment of Section 1 S	ipment d (A-E Above 3500 20 e 1500 p ot flatbe Carpenters ol Labor F en Today?	ns Cl  )  0000 ickup ickup Oper equire :00 a	GVW  D, #39  ler #1  ators  ed Tod  Yes	Equipm flatbe DA L8	Number ters	D No. and Desc	Masons Was	Fla 1	ggers 3	Electri-	approv	Opr 8 6 8 Male 4 Ved TC	Stdby  Nu Female  1  P?	Dov App	wn por linsp	Idle  Trnee  No No

# Figure 10-9 (continued)

### **IDR Sheet 3 of 3 Sheets**



# **Inspector's Daily Report**

Inspector

Contract	Day	Date
C7762	Tuesday	2009-07-28
File Upload		·
■ File Attachment		
	limited to: a report of the day's or, and any applicable statement	operations, time log (if applicable), orders given and received, s for the monthly estimate.
	re working today. Northsta	th questions about the Class A signing. This was the first r still does not have an approved traffic control plan for
I met the installation crew on the jobsite around 9:00 am and answered their questions. A couple of stakes had been knocked over which I located and set back in place.		
Kevin Littleton and Chad Swenson visited the site to evaluate the proposal to not grind out the shoulders between US 2 and Yale rd. to avoid adjusting the drainage structures.		
Spent the day on site answering questions from the sign installation crew and working on documentation.		
Off site at 2:30 PM		
		Gordon Hurt