Chapter 3 – Project Recordkeeping and Documentation

Part I – Records Maintained in Project Volumes

1-301 General

The Chief Inspector is responsible to ensure that all forms and reports documenting the contractors work, as well as those that may be required by other units of the Department and State and Federal agencies, are accurate and complete. Notes and explanations must supplement the records, if needed, to make the records as clear and complete as possible. The more important records include the following:

- Contract Documents,
- Chief Inspector’s Diary,
- Inspector's Daily Work Report (DWR) (Form CON-134),
- Concrete Pavement Inspection Report (Form CON-135),
- Base & Bituminous Concrete Inspection Report (Form CON-136),
- Inspector's Daily Work Report Appendix (Form CON-134A),
- Progress Meeting Minutes,
- Volume III Calculations,
- Requisitions (Form STO-2) and Receiving Reports (Form STO-3) for State-furnished materials,
- Requests for Material Tests (Form MAT-100),
- Report for Test on Cylinders (Form MAT-308),
- Report of Rejected Materials (Form MAT-103),
- Daily Reports of Cost Plus (Form CON-9),
- Orders for extra and additional work (Construction Orders),
- Pile Driving Records (Form CON-87),
- Special orders/directives to Contractors,
- Labor Wage Check (Form CON 131), and
- Contract Status (Form CON-100)
- Contractor’s Certified Payrolls
- Construction Orders
- Environmental Forms

At the end of the workday, project records are to be kept in a secure location. Volume III records should always be stored in the fireproof safe if one is available, when not in use. Other records should also be kept in the safe if there is sufficient room.

The Department's standardized system for recording and documenting construction work is presented in this section. Project records must be accurate and complete. They may be subject to detailed review and audit by State and Federal personnel at any time, even years after project completion, and they may also be required for court-claim action.

The minimum retention period for all project-related records is seven years after the project's Certification of Acceptance of Project (Form CON-501) is issued or three years after final federal payment whichever is later, providing there is no pending litigation. Note: The date of final payment by the Federal Highway Administration or other federal agency may be years after the date of acceptance by the State Department of Transportation.

Because payment of the federal portion is contingent on original source documentation for each item, the system of recordkeeping has been standardized to provide the method of recording and documenting the quantity of each item.
Some guiding principles are as follows:

- The records should be complete, but sufficiently simple and clear that an informed layman can understand what is presented.

- Full signature and printed name is required on all prepared forms and attached notes, including but not limited to inspectors, project engineer, checked by names, etc.

- Willful falsification, distortion or misrepresentation of any facts related to the Project is a violation of State and Federal law.

- All computations for payments for metric projects must be made in metric units. Conversions of computations made in English units to metric units are not permitted. Computations for projects designed in English units will remain in English units.

### 1-302 Official Field Records

The Department has established a standard format for project recordkeeping using four Volumes to record project information. The content and format for these volumes was created to establish uniformity throughout the State, facilitate the review and audit of project records, and provide for continuity when inspection personnel are transferred or reassigned to other projects or Districts.

Official project records are filed in binders, as follows:

- Volume I—Diaries and Inspector's Daily Work Reports
- Volume II—Contract Items (only required for non-SiteManager projects)
- Volume III—Computations, Etc.
- Volume IV—Miscellaneous Contract Data

Care must be taken not to obscure the content of records when holes are punched in the pages.

If more than one book in each volume is needed for a project, the second book in the series is designated “Book 2” (for example, “Volume II, Book 1;” “Volume II, Book 2;” and “Volume II, Book 3”). On minor projects all volumes may be contained in one or two binders, as the number of pages dictates. Each volume must have an index page that lists the contents.

### 1-303 Volume I—Diaries and Inspector's Daily Work Reports

All Diaries and DWRs are kept in a binder. If more than one binder is necessary, identify the contents of each by showing the book number and the dates of the first and last Diary. The Chief Inspector must create and print a Diary for each day from the Notice to Proceed Date to Construction Completion Date.

The following procedure must be used when adding hard copies of Diaries and DWRs to the Volume I book.

The Volume I entries are filed by date. The first entry for each date will be the Chief Inspector’s Diary followed by their CON-134, CON-135 or CON 136 and respective attachments. Any sub-inspector reports will be inserted behind the Chief Inspector’s report in alphabetical order, based on the inspectors SiteManager User ID.
Inactive Projects: In some cases, such as when utilities perform work on the project prior to the ordered-to-start date, hard copy DWRs may be required. This information will not be entered into SiteManager.

Active Projects: From the ordered-to-start date to the completion date, the Chief Inspector is required to create a daily Diary in SiteManager (including Saturday, Sunday and holidays). Inspection staff must prepare a DWR any day they inspect construction work, except when they are assisting in concrete and bituminous concrete placement operations for an entire day and not inspecting other work.

Suspended Projects: If personnel remain assigned to a project in the field or District Office that has been suspended, daily or weekly Diaries and DWRs, as warranted, must continue to be made out.

If all project personnel are relieved of their duties (reassigned, etc.), it is the responsibility of the Project Engineer to make periodic checks of the job site and create weekly Diaries in SiteManager. The Diaries must contain all ongoing information, discussions, meetings, etc., regarding the suspension period and job-site changes.

NOTE: When the project is under suspension, the field forces are required to inventory materials stored and equipment left on the job site and attach a list to their Diary or DWR.

Project Completed but Not Finalized: From the completion date, to the period when the final has been completed, a SiteManager Diary or DWR only needs to be prepared when there is construction activity or an item payment needs to be made.

1-303A Daily Work Report and Diary

The Daily Work Report (DWR), in conjunction with the Diary, are considered source documents. When properly maintained, these reports provide valuable information and evidence in the event of contractual controversies and legal actions. These records are vital to document the daily activities of a contract, record payments, meet the requirement for the Federal reimbursement of a project, and to document field conditions in the case of a claim or dispute between the State and the contractor. The goal is to have complete, uniform records for all contracts. They must be kept current and up to date in the Volume I and in SiteManager.

Diary:

On contracts maintained in SiteManager, the SiteManager Diary is entered by the Project Manager (Chief Inspector) to track time (i.e. elapsed days, calendar days), and to authorize (approve) the Daily Work Report (DWR) entered by inspection forces. Each Diary is a summary of the DWRs entered into SiteManager by all Inspectors on the project. The Chief Inspector is responsible for authorizing DWRs and making sure the charge day is correct on their Diary.

A diary needs to be entered for every calendar day from the actual “Start Date” to the “Completion Date” of the contract. See Section 1-A103 “Diary” for details concerning entering diaries into SiteManager. For work performed after the “Completion Date” (i.e.: punch list), a Diary is required when a DWR is entered.

Daily Work Report:

A DWR is required when there is construction activity or contract work being performed. A DWR is also required when contract payments are made. A DWR may be created for a ‘No Activity’ day to make item payments. For example, to pay for a project field office during a winter shut-down period.
The Inspector’s Daily Work Report (Form CON-134), Concrete Pavement Inspection Report (Form CON-135), and Base & Bituminous Concrete Inspection Report (Form CON-136) are the primary forms used by inspection staff to document the contract work. These forms are referred to as Daily Work Reports (DWR) or Inspector’ Reports (IR).

A DWR must be made out daily by all field personnel engaged in the inspection of contract work. See Section 1-A102 “SiteManager DWR” for details concerning entering DWRs into SiteManager and Section 1-307 “Daily Paving Reports” for reporting requirements for concrete and bituminous placement operations. The Chief Inspector should authorize them no later than 5 working days from the date of the DWR.

Notes:
- The Inspector’s Daily Work Report (Form CON-134) and the SiteManager DWR CON-134 (included in the Reporting Tools) include a certification statement.
- The Concrete Pavement Inspection Report (Form CON-135), and Base & Bituminous Concrete Inspection Report (Form CON-136), and the SiteManager DWR (printed from within SiteManager) do not currently include the certification statement. Therefore, the CON-134A, Inspector’s Daily Work Report Appendix, which does include the certification statement, and must be completed and attached to all SiteManager Printed DWRs, Concrete Inspection Report (CON-135) and the Base & Bituminous Concrete Inspection Report (CON-136).
- The SiteManager DWR must be authorized before it is printed and included in the Volume I Book.

Project inspectors must produce a detailed report of the work activities they are assigned to cover. Inspectors may use either hard copy DWR’s to record this information (with a summary entered in SiteManager) or enter only the detailed information in SiteManager system. Inspectors that compile their daily DWRs at the work site must enter a general description of the work that took place that day into the SiteManager DWR. The paper DWR may be handwritten, typed or printed from the SiteManager reporting tool or from SiteManager. If the Inspector chooses to utilize a print-out of the SiteManager DWR in lieu of a handwritten DWR, then the SiteManager DWR must include all of the detail of the work. Any field notes used to prepare the DWR must be attached to the DWR, except as noted below when using a bound field book (book diary system). Field notes are required whenever field measurements are necessary or documentation is developed in the field. Field notes must be signed, dated and include printed name and project number. The Inspector must sign each of their DWRs. If a hard bound field book (book diary system) is used to record information gathered in the field, this must be included with the project records. This can be used in lieu of field notes attached to the DWR if referenced accordingly from the DWR to the hard bound diary.

The inspector documents in the DWR the contractors that worked that day, the location of work, and a description of the work in progress and inspected. The description of contractor’s work that the inspector has observed must identify the work as beginning, continuing or completed. Possible cost-plus work must be carefully documented as well. Labor and equipment for each contractor’s operation, including the contractor’s equipment number if possible must be documented. If work is acceptable it should be noted as such. Similarly, if in the inspector’s opinion, the work is deficient it should be noted as such (see below for further information). Lane closures and work hours of the inspector and contractor must be noted. Item payments are included on the DWR. As a general rule, the entering of zero quantities is not required unless District management or the Office of Construction requires it. The narrative of the DWR shall describe each operation which took place on that day. Pay quantities must reference the Volume III book and page number of the source documentation, if applicable. Discussions with contractors, property owner, governmental agencies or others should be noted. Meetings attended should reference the minutes of the meeting.
NOTE: Absolutely no erasures or whiteouts are allowed in any of the volumes on forms prepared by project personnel. If an error is made, the incorrect figure, item, or statement is crossed out and initialed. The correction may be written neatly above it or made elsewhere. If the correction is made elsewhere, a reference to the correction is written above the crossed-out and initialed error.

NOTE: If an Inspector is using a book diary system (the diary book that is brought out into the field), it must be referenced from the DWR. At the conclusion of the project the book diary (as well as any other supporting documentation) will become a part of the project records.

The presence of defective work is indicated in the appropriate section of the CON-134, CON-134A and in the SiteManager DWR. Refer to Non-Compliance Notices (Section 1-319) for additional information. Defective work is defined within the Standard Specifications 1.05.11 and defective materials are defined within 1.06.04.

Contents: The following information must be included in a DWR or a Diary, when applicable:

- Discussions with the contractor, property owners, governmental agencies, or others;
- Sketches, measurements, and computations;
- Work performed by others (Utilities, Maintenance, Municipalities, or others);
- Meetings attended (reference to minutes of meeting);
- Official visitors (State or Town officials, ConnDOT supervisors or managers, and FHWA, FTA, FAA, utility representatives, Record Examiners, Auditors, DEP, AMTRAK, etc.);
- The equipment and labor involved for each contractor's operation. Including the contractor's equipment number, when possible;
- References to source documentation (volume book and page) for pay quantities listed on the DWRs;
- Actual hours of work for the Contractor and their subcontractors; and
- Actual hours of work for the daily Project staff.
- Environmental deficiencies when a Non-Compliance Report is issued.

NOTE: Project staff assisting in concrete and bituminous concrete placement operations are not required to prepare a DWR; however, they must be listed on the DWR of the Inspector overseeing that operation.

Project staff not engaged in field activities (working in the project office on computations, etc.) and not required to prepare a DWR must be noted on the Diary or DWR prepared by the Chief Inspector, showing the hours of work and a brief description of their activities.

Diaries, DWRs, supplementary sheets, and forms prepared by inspection staff and attached to the Diary or DWR must have the date, Project Number, signature and printed name of author.
Weigh tickets are required for materials that are paid for by the ton. Inspectors are responsible for collecting the tickets and signing them as the loads are dumped. These tickets are attached to the inspectors DWR or kept in a separate folder or binder. The location of the weigh ticket(s) must always be referenced in the DWR, i.e. 3 weigh tickets attached, 3 weigh tickets located in Book 1 – Processed Aggregate Base. When kept in separate folder, or binder, weigh tickets should be filed in chronological order by Item. On small projects a single binder can be used, however, separate sections should be created for each item. Refer to other sections for information to note on tickets.

**Chief Inspector’s Diary and DWR:**

The Diary or DWR prepared by the Chief Inspector must include information concerning important discussions with the Contractor; incidents on the Project; discussions with designers, utilities, or public officials; meetings held (refer to meeting minutes for details); the work operations covered buy each sub-inspector and other information necessary to document the events that occurred on the project. If the Chief Inspector performs inspection duties as well as these other tasks, the details concerning the work personally inspected is also included on the DWR.

**NOTE:** The Chief Inspector is only to report the actual hours daily staff worked on the Project in their Diary or DWR. Do not record hours that project staff is on sick leave, vacation, etc.

When Assistant Chief Inspectors are performing general supervisory and administrative duties, they must also complete a DWR detailing their activities, instructions given, etc.

**1-303B Diaries and Daily Work Reports During Periods of Inactivity**

**Diary:**
A diary needs to be entered for every calendar day from the actual “Start Date” to the “Completion Date”. See Section 1-A103 “Diary”.

For work performed after the “Completion Date” (i.e.: punch list), a Diary is required when a DWR is entered.

For days of active construction, or days with contractor payments (monthly pay items, etc.), DWR’s must be entered in addition to the Diary.

**Daily Work Report:**
A DWR may be created for a ‘No Activity’ day to make item payments (Ex. pay for project field office during a winter shut-down period) or document ongoing information, discussions, meetings, etc., regarding the inactivity and suspension period and job-site changes.

**Chief Inspector/Project Engineer Diary and DWR:**
If all project personnel are relieved of their duties (reassigned, etc.), it is the responsibility of the Project Engineer to make periodic checks of the job site and continue to make out daily Diaries and DWRs as indicated above.

**1-303C Review of DWRs**

Each DWR must be reviewed and signed by an independent person. It is the responsibility of the Chief Inspector(s) to thoroughly review and approve all sub-inspectors’ DWRs’ content including attached sheets and forms and sign them. The Chief Inspector’s DWR must be reviewed by independently by another inspector. For state inspected projects, the independent reviewer must be at the Transportation Engineer 2 level or higher. For consultant inspected projects the independent reviewer must be at the Senior Inspector level or higher. **The same person shall not generate and review the same DWR.**
The manner in which the project staff proposes to satisfy this requirement shall be discussed and accepted by the Project Engineer or the MSAT Representative at the onset of the project. The reviewer(s) signing of the DWRs is meant to indicate that to the best of their knowledge, information and belief that all work and payments described in the DWR are consistent with the Department’s Policies and Procedures.

The following checklists have been created to standardize the review of DWRs by the noted individuals:

Review by Independent Reviewer:

1. Diaries, DWRs (CON-134, 134A, 135, 136), supplementary sheets, and forms prepared by inspection staff and attached to the Diary or DWR have the date, project number, signature and printed name of author.

2. The DWR records the weather conditions, contractors that worked that day, their hours of work, location of work, and description of the work in progress and inspected. The description of the contractor’s work that the inspector observed identifies the work as beginning, continuing or completed and notes if the work is acceptable in the opinion of the Inspector.

3. Possible cost-plus work must be carefully documented. A full description of the location and work as well as labor and equipment hours, and amounts of material used for each contractor’s operation must be detailed.

4. The Inspector has completed, signed and attached the CON-134A to their respective DWR or SiteManager DWR printout if not using the most current version of the CON-134 that includes the certification statement.

5. Lane closure information includes the location, lane(s) closed, direction etc. If there are no lane closures involved in an operation the DWR notes N/A or None.

6. Pay quantities on the hard copy DWR and in Site Manager match each other and reference to the source documentation (Volume III book and page number, ticket folder etc, of the source documentation).

7. Sketches, measurements, and computations documented and signed compiled by or checked by, field measured by, etc.

8. Work performed by others (i.e. Utilities, Maintenance, Municipalities, or others) is documented by hours, personnel, equipment, and description of work.

9. Project and other DOT staff assisting with inspection of operations are listed on the lead inspectors report (include hours of work).

10. The Chief Inspectors DWR or Diary lists all Inspectors assigned to the project and the work operations covered by each inspector (on consultant inspected projects the Chief or Senior Inspector may list the sub inspectors).

If there are DWRs or diaries that do not comply with the requirements listed above, the reviewer shall provide the Chief Inspector with a list detailing the DWR/Diary number and issue. The Chief inspector shall confirm that the corrections are made and discuss the issues with the inspector to avoid omissions in the future.

Review by Chief Inspector or Resident Engineer:

11. Items 1 – 10 included under the Independent Reviewer checklist.

12. Notes regarding discussions with contractors, property owners, governmental agencies or others, detail specifics of the conversation and actions taken.
13. No erasures or whiteouts are allowed in any of the volumes or forms prepared by project personnel. Mistakes should be lined out and initialed.

14. Meetings attended are noted and a reference is made to location of the minutes of meeting.

15. Official visitors (i.e. State or Town officials, ConnDOT supervisors or managers, and FHWA, FTA, FAA, utility representatives, Record Examiners, Auditors, DEP, AMTRAK, etc.) are noted and conversations detailed.

If there are DWRs or diaries that do not comply with the requirements listed above, the reviewer shall provide the Chief Inspector with a list detailing the DWR/Diary number and issue. The Chief inspector shall confirm that the corrections are made and discuss the issues with the inspector to avoid omissions in the future.

**Review by Project Engineer**

The Project Engineer is responsible for performing a review a minimum of three days per month of DWRs (including sub-inspectors DWRs), for procedure, content and documentation. The DWRs reviewed should contain either major item payments, cost-plus items in excess of $100,000.00, or items with computations in Volume III. The items checked should vary from month to month. Documentation to the source DWR must be examined as well as supporting back-up documentation. The item quantities reviewed and the supporting back-up documentation must be initialed by the Project Engineer on the payment line of the DWR. If there are DWRs or Diaries that do not comply with the requirements, the Project Engineer must discuss the issues with the Chief Inspector and if necessary provide a listing of the issues and actions required. The Chief inspector will ensure the corrections are made and notify the Project Engineer when complete. The Project Engineer should not sign the DWRs until corrections have been made. The Project Engineer’s signature on a DWR indicates the DWR has been reviewed and is in accordance with the Department’s Policies and Procedures.

The following checklist has been created to standardize the review of DWRs by the Project Engineer:

1. Is the diary kept up to date?
2. Are DWRs being kept up to date for all work activities?
3. Are the DWRs clear, concise and do they adequately describe the work performed?*
4. Are pay items properly documented with quantities, supporting documentation and do the hard copy pay items match the Site Manager entries.*
5. Are material test results consistent with quantities being paid?*
6. Are field measurements being conducted and documented properly?*
7. Are corrections being made using the “strike out” method?*
8. Are all the DWRs and diaries being signed by the inspector and signed reviewed by an independent person?

*Note: Refer to the inspector DWR checklist when verifying nos. 3-7.

The Records Examiners will verify the Project Engineer review for compliance with the above requirements.
1-303D Daily Paving Reports

The Inspector in charge of a paving operation is required to make out a Concrete Pavement Inspection Report, Form CON-135 or a Base and Bituminous Concrete Inspection Report, Form CON-136. Refer to Volume 2, Chapter 7, “Concrete Pavements,” for guidelines to complete Form CON-135, and Volume 2, Chapter 6, “Bituminous Pavements,” for guidelines to complete Form CON-136. The Inspector in charge of the paving is also required to make out a Form CON-134, if any other type of work is inspected on the day of the operation.

NOTE: When nuclear density tests are performed on bituminous concrete paving operations, the inspector must attach the Data & Compaction Sheet for Nuclear Density Test-HMA (Con-133) to the Form CON-136.

1-304 Volume II—Contract Items (Non-SiteManager Only)

Volume II is used when the Department’s construction management system, SiteManager, is not used to administer construction activities. The Volume II records daily Contract item quantities, Change Order Revisions, estimate payments, new Construction Order items, and material test results. Items are placed in the Volume II as follows:

- The first sheet in Volume II is the Project Identification/Construction Recordkeeping Format Sheet, shown in Figure 1-3.1.

Figure 1-3.1 Volume II - Project Identification/Construction Recordkeeping Format Sheet

```
CONNECTICUT DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING AND HIGHWAY OPERATIONS

PROJECT #: 200-200
F.A.P. #: BRZ-6200
NAME OF TOWN: GRISWOLD
ROAD: ELMOND ROAD
CONTRACTOR: STEPHEN CONSTRUCTION
ORIGINAL CONTRACT VALUE: $1,505,742.67
FINAL CONTRACT VALUE: $1,937,989.48
FUNCTION: 730-210
UNIT: 701
CONTRACTOR ORDERED TO START: APRIL 1, 2001
CONTRACTOR STARTED: APRIL 1, 2001
CONTRACT COMPLETED: JUNE 15, 2002
SPECIFICATIONS REFERENCE: 814A
INSPECTOR’S NAME: TYLER STEPHENS
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- Next, each Volume II contains a Construction Item Index, shown in Figure 1-3.2, with the items listed in numerical order.

- The Request for Test Index sheet that lists the material tests in numerical order follows the index. It is shown in Figure 1-3.3.
The first Contract item is entered on Page 1 and the opposite page contains testing data and is numbered Page 2. The next Contract item is entered on the next page and is numbered 3. The left-hand page for the daily-item quantity entries is always an odd number, and the right-hand page, containing item-testing data, is an even number. Figure 1-3.4 and Figure 1-3.5 shows a sample of a Contract item page and corresponding testing data page.

- The testing requirements noted on the right-hand page (Figure 1-3.5) are completed with the minimum frequency for control and progress tests, and all materials tested for that item are listed.
- Additional pages needed for daily-item entries, are inserted after the item page. The pages are numbered with the item page number and a letter (for example, “31A,” “31B,” and “31C”). Additional testing-data pages follow the same procedure, but they are placed in front of the testing-data sheet.
- The heading for each Contract-item page (Figure 1-3.4) in Volume II shows the item number, item description, original quantity, unit price, Construction Order revisions, revised quantities, and, when the item is completed, the final quantity.

![Figure 1-3.2 Volume II - Construction Item Index](image)

- Each daily entry shows the date, location, quantity, and quantity to date, and is referenced to a DWR and to the source of the documentation, a Volume III computation.
Monthly or semimonthly estimate payments are recorded accordingly in red. An example entry is “Estimate No. 2, Pay 20,065. Total to Date 24,104.”

Items added to the Contract by a Construction Order are inserted after the original Contract items.

Material testing requirements for new items must be included.

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**Figure 1-3.3 Volume II - Request for Test Index**

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<thead>
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<th>SAMPLE DATE</th>
<th>MATERIAL</th>
<th>REPORT DATE</th>
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**REQUEST FOR CP TESTING (ASSURANCE)**

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**REQUEST FOR TEST CYLINDER CARDS**

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<td>Class “A” Concrete</td>
<td>04/13/01</td>
<td>I</td>
<td></td>
<td>PAGE 28A</td>
</tr>
<tr>
<td>C6001A</td>
<td>04/10/01</td>
<td>Class “A” Concrete</td>
<td>04/13/01</td>
<td>I</td>
<td></td>
<td>PAGE 28A</td>
</tr>
</tbody>
</table>

**REQUEST FOR TEST BITUMINOUS**

<table>
<thead>
<tr>
<th>SAMPLE NUMBER</th>
<th>SAMPLE DATE</th>
<th>MATERIAL</th>
<th>REPORT DATE</th>
<th>APPROVED</th>
<th>REJECTED</th>
<th>VOLUME 2 REFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1</td>
<td>08/25/01</td>
<td>Bituminous Concrete Class 4</td>
<td>09/07/01</td>
<td>A</td>
<td></td>
<td>PAGE 24A</td>
</tr>
<tr>
<td>B2</td>
<td>08/25/01</td>
<td>Bituminous Concrete Class 1</td>
<td>09/07/01</td>
<td>A</td>
<td></td>
<td>PAGE 22A</td>
</tr>
</tbody>
</table>

Notes:
1) Rejected Material Must have a "Report of Rejected Material" Filled out and submitted to the District
### Figure 1-3.4 Volume II - Contract Item Page

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>QTY</th>
<th>UNIT</th>
<th>DESCRIPTION</th>
<th>COST NO.</th>
<th>QUANT</th>
<th>UNIT PRICE</th>
<th>TOTAL PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>0507201</td>
<td>200</td>
<td>each</td>
<td>catch basin</td>
<td>1-3.12</td>
<td>2.25</td>
<td>$100.00</td>
<td>$2,500.00</td>
</tr>
<tr>
<td>0701.01</td>
<td>1</td>
<td>each</td>
<td>catch basin</td>
<td>1-3.12</td>
<td>2.25</td>
<td>$100.00</td>
<td>$2,250.00</td>
</tr>
<tr>
<td>0702.01</td>
<td>1</td>
<td>each</td>
<td>catch basin</td>
<td>1-3.12</td>
<td>2.25</td>
<td>$100.00</td>
<td>$2,250.00</td>
</tr>
</tbody>
</table>

### Figure 1-3.5 Volume II - Contract Item Testing Data Page

<table>
<thead>
<tr>
<th>ITEM NO.</th>
<th>LAB NO.</th>
<th>QUANT</th>
<th>UNIT</th>
<th>DATE</th>
<th>RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0701.01</td>
<td>162810</td>
<td>1</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>0702.01</td>
<td>070277</td>
<td>5</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>0703.01</td>
<td>070279</td>
<td>5</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>0704.01</td>
<td>070290</td>
<td>125</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>0705.01</td>
<td>070300</td>
<td>180</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>0706.01</td>
<td>070310</td>
<td>5</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>0707.01</td>
<td>070320</td>
<td>5</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>0708.01</td>
<td>070330</td>
<td>5</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>0709.01</td>
<td>070340</td>
<td>5</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
<tr>
<td>0710.01</td>
<td>070350</td>
<td>5</td>
<td>each</td>
<td></td>
<td>A</td>
</tr>
</tbody>
</table>

**Project Recordkeeping and Documentation**

1-3.12  
ver. 2.2 (Aug 2010)

Volume 1
**I-305 Volume III—Quantity Computations**

**Contents.** Volume III is used for items involving extensive computations and measurements, items difficult to track throughout the records system, and other items as directed. The following is a list of items and documentation that should be incorporated in Volume III, if applicable:

- Asphalt adjustment documentation.
- Proofs for factors used, if not standard factors.
- Flasher Summary Sheet.
- Copies of Daily Reports of Cost Plus, including payroll copies, receipted material invoices, bills, and *Blue Book* verification sheets. Refer to the “Final Package Booklet” for a sample form. (Cost-Plus back-up documentation is to be kept in its own Volume III book).
- Standard factor sheets for drainage.
- Trafficperson Report Summary Sheet.
- Trainee documentation.
- Water Pollution Control Summary Sheet.
- Any other items or documentation, as required or requested.

**General Information:** Each Volume III book will have an individual number. Examples are “Volume III, Book 1” and “Volume III, Book 2.” Do not duplicate book numbers. If the books become too voluminous, an expandable concept may be used. An example is “Volume III, Book 1;” “Volume III, Book 1A;” and “Volume III, Book 1B.” On complex contracts, in addition to the book number, it is suggested to use subtitles to identify content of certain Books, i.e., “Volume III, Book 3, Drainage Book.” A loose leaf binder is acceptable to use for the Volume III books. All Volume III’s must have summary sheets and a table of contents.

The Volumes will usually consist of, roadway items (earth excavation, subbase, formation of subgrade etc.), structure items (concrete classes, deformed steel bar items etc.), drainage items (trench excavation, pipe, bedding etc.), electrical items conductor, cable etc., contaminated materials items (handling of contaminated material, handling of controlled material, reuse of controlled material etc.), volumes for any cost-plus work and any removal items (removal of guardrail etc.).

If a Volume III item has a very large original bid quantity and the back-up documentation to support the payments is voluminous it is suggested that the item have its own book number. (Many of these items have an “estimated” dollar value in the contract. Some items of this nature are Handling of Contaminated Materials, Materials for Structural Steel, Lead Health and Safety, Trafficperson and large cost-plus items.

Forethought and anticipation of expansion when setting up the records is very important as it will be beneficial at the conclusion of the project. Consideration should be given to the size and nature of the project. Any questions regarding this should be directed to the Project Engineer.
All Volume III Books must have an Index. Very large projects should also keep a list of all of the Volume books to assure all of the applicable volumes are forwarded to the District at the conclusion of the project.

All items in Volume III must have summary sheets. Summary sheets for items in Volume III must provide a clear audit trail throughout so that anyone unfamiliar with the records will be able to follow them. A total must be shown for each summary sheet. The summary sheet shall be signed, “Compiled by” and “Checked by” the inspector(s). Refer to Figure 1.3.6. It is recommended that a “Quantity to Date Column” be included in the Volume III summary sheet for larger projects.

NOTE: A master summary book must be incorporated in the records, if items are contained in more than one Volume III book and or on DWRs. Computations on or attached to DWRs—but not contained in or incorporated in Volume III—that are used for final backup documentation must be included on the master summary. An example master summary sheet is shown in Figure 1-3.7 and Figure 1-3.13. Also, included is a sample of a Master Summary sheet showing multiple categories shown in Figure 1-3.9. All summary sheets must show a total and must be signed “Compiled by” and “Checked by” the Inspector(s).

Figure 1-3.6 Volume III – Sample Item Summary Sheet

<table>
<thead>
<tr>
<th>ITEM: 0601003 CLASS &quot;A&quot; CONCRETE</th>
<th>PROJECT NO: 200 240</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume III Summary</td>
<td>PAGE NO: 23</td>
</tr>
<tr>
<td>Location</td>
<td>Quantity</td>
</tr>
<tr>
<td>Abutment No. 1</td>
<td>405.89</td>
</tr>
<tr>
<td>Abutment No. 2</td>
<td>397.26</td>
</tr>
<tr>
<td>Wingwall 1A &amp; 1B</td>
<td>18.07</td>
</tr>
<tr>
<td>Wingwall 2A &amp; 2B</td>
<td>18.07</td>
</tr>
</tbody>
</table>

TOTAL CLASS "A" CONCRETE $225.51

COMPUTED BY: Tylor Stephens
PRINTED NAME: Tylor Stephens
SIGNATURE: Tylor Stephens
DATE: 11/12/04

CHECKED BY: John Doe
PRINTED NAME: John Doe
SIGNATURE: John Doe
DATE: 11/16/04
**Figure 1-3.7 Volume III – Sample Master Summary Sheet**

<table>
<thead>
<tr>
<th>Location</th>
<th>Quantity</th>
<th>Source Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ellendale Road Station 19+085.591 to 19+285</td>
<td>361.85</td>
<td>Volume III Book 1 Page 1A</td>
</tr>
<tr>
<td>Ellendale Road Station 19+285 to 19+385.591</td>
<td>87.95</td>
<td>LR 15A</td>
</tr>
<tr>
<td>Ellendale Road Station 19+385.591 to 19+585.591</td>
<td>150.67</td>
<td>Volume III Book 1 Page 1C</td>
</tr>
<tr>
<td>Ellendale Road Station 19+585.591 to 19+785.591</td>
<td>181.85</td>
<td>Volume III Book 1 Page 1E</td>
</tr>
<tr>
<td>Ellendale Road Station 19+785 to 19+987.5</td>
<td>121.15</td>
<td>Volume III Book 1 Page 1F</td>
</tr>
<tr>
<td>Ellendale Road Station 19+987.5 to 19+999.5</td>
<td>168.54</td>
<td>Volume III Book 2 Page 1A</td>
</tr>
<tr>
<td>Ellendale Road Station 19+999.5 to 20+088.591</td>
<td>103.54</td>
<td>Volume III Book 2 Page 1B</td>
</tr>
</tbody>
</table>

**TOTAL FINAL EARTH EXCAVATION** 1,371.85

**Figure 1-3.8 Volume III – Sample Master Summary Sheet with Categories**

<table>
<thead>
<tr>
<th>Date</th>
<th>DVR</th>
<th>Description</th>
<th>Reference</th>
<th>LIN 0303</th>
<th>LIN 0304</th>
<th>LIN 0305</th>
<th>LIN 0306</th>
<th>LIN 0307</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/31/97</td>
<td>corr</td>
<td>Fairfield Police</td>
<td>Pg 7</td>
<td>813.75</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7/21/03</td>
<td>corr</td>
<td>Bridgeport Police</td>
<td>Pg 2B</td>
<td>341.55</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6/30/02</td>
<td>corr</td>
<td>Bridgeport Police</td>
<td>Pg 2C, 2D</td>
<td>529.06</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>260.23</td>
</tr>
<tr>
<td>6/30/02</td>
<td>corr</td>
<td>Bridgeport Police</td>
<td>Pg 2E</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10/15/06</td>
<td>corr</td>
<td>Westport Police Balance</td>
<td>Pg 7E</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>35.00</td>
<td>-</td>
</tr>
<tr>
<td>12/31/06</td>
<td>corr</td>
<td>Bridgeport Police</td>
<td>Pg 2F, 2G, 2H</td>
<td>8,506.55</td>
<td>-</td>
<td>2,174.80</td>
<td>-</td>
<td>469.71</td>
</tr>
<tr>
<td>1/15/07</td>
<td>corr</td>
<td>Bridgeport Police</td>
<td>Pages 31, 3</td>
<td>6,427.30</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2,024.98</td>
</tr>
<tr>
<td>2/13/09</td>
<td>corr</td>
<td>Bridgeport Police</td>
<td>Pages 32, 3L</td>
<td>1,524.21</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>819.93</td>
</tr>
<tr>
<td>7/13/09</td>
<td>corr</td>
<td>Fairfield Police</td>
<td>Pages 3M, 3N</td>
<td>214.40</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>23.40</td>
</tr>
</tbody>
</table>

**Category Subtotals**

<table>
<thead>
<tr>
<th>Category</th>
<th>LIN 0303</th>
<th>LIN 0304</th>
<th>LIN 0305</th>
<th>LIN 0306</th>
<th>LIN 0307</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat 02</td>
<td>18,140.30</td>
<td>214.40</td>
<td>2,174.80</td>
<td>569.40</td>
<td>11,542.85</td>
</tr>
<tr>
<td>Cat 03</td>
<td>0.00</td>
<td>0.00</td>
<td>125,000.00</td>
<td>125,000.00</td>
<td>125,000.00</td>
</tr>
</tbody>
</table>

**Total Paid to Date**

22,647.75

**Total Quantity**

625,000.00
When an estimated payment procedure is used to make payment for an item a record that this procedure has been approved by the Project Engineer must be placed in the Volume III. For further explanation refer to Section 1-912. A sample record is shown in Figure 1-3.8A.

**Figure 1-3.8A (formerly 1-3.27) Volume III– Record of Estimated Payment Procedures (Sample)**

<table>
<thead>
<tr>
<th>Estimated Payment Procedures</th>
<th>Project # XXX-XXXX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item No. 0202003 Earth Excavation:</td>
<td>Paying estimated by load count until the survey party is available to survey the area.</td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>(signed)</td>
<td>(printed name)</td>
</tr>
<tr>
<td>Approved by Project Engineer:</td>
<td></td>
</tr>
<tr>
<td>___________________________</td>
<td>___________________________</td>
</tr>
<tr>
<td>(signed)</td>
<td>(printed name)</td>
</tr>
</tbody>
</table>

Also refer to the following sections for additional direction: Section 1-305C Drainage Systems, 1-305D Structures, Mainline and Roadway, and 1-2005 Trafficperson.

**1-305A Computations and Measurements**

Computations prepared by the inspection staff and contained within the project records must be well documented and checked. Reference to the appropriate plan sheet(s) is to be included with the computations. Measurements taken by inspection staff must also be well documented and reference other source(s) used to prepare the documentation:

- For Computations on or attached to DWRs, the checker is to sign off, print their name and record the date they checked the computations using the following or similar format:
  
  “Checked by (signature) __________________ Date____________.”

- For Computations in the Volume III, the person who did the computation and the person who checked it are to sign and date every page. Use the following or similar format:
  
  “Computed by (signature) __________________ Date____________.”
• For recorded sketches, measurements, etc. in the Volume III, the person who recorded the sketch, measurement, etc. is to sign and date the page using the following or similar format:

“Prepared by \( \text{(signature)} \) \( \text{_____________} \) Date \( \underline{\text{_________}} \)  
\( \text{(printed name)} \)

Measured by \( \text{(signature)} \) \( \text{_____________} \) Date \( \underline{\text{_________}} \) 
\( \text{(printed name)} \)

• For measurements recorded on a DWR that were measured by others, record the name of the inspector(s) who took the measurement(s) and date(s).

1-305B Electronic Forms

The following software programs are approved by the Office of Construction for use by project personnel for performing calculations:

• Earthworks
• Eagle-point CADD
• Micro-station CADD
• Inroads CADD
• Microsoft Excel (Spreadsheets)
• Other Software Programs approved for use by the Office of Construction

In addition, the following guidelines are to be followed when using software programs:

• Software programs must be properly licensed for Department use.

• The project records must identify the software programs, including version numbers that were used for calculations. Also identify the file extension(s) associated with this program. This information can be reported on the computer-generated reports or summary sheets kept in the Volume III. (Example: Microsoft Excel – Version 8.0e, Rebar spreadsheets, cost-plus spreadsheets.)

• Printouts of computer generated reports used for source documentation will be incorporated into the project records.

• Each printout must identify the Contract/Project the report is for and file name given the report.

• The person who entered the data must sign and date each printout, i.e.:

“Data Entered by: \( \text{(signature)} \) \( \text{_____________} \) Date: \( \underline{\text{_________}} \)  
\( \text{(printed name)} \)"
• Computer-generated reports must be checked to verify the calculations are correct. For reports using a template, i.e. cost-plus spreadsheets, calculations only need to be verified on one report. Reports checked to verify calculations are to be signed and dated by the person who checked them, e.g.:

“Calculations Checked by: ______ (signature) _______ Date: ______________ 
__________________________
(printed name)

“Calculations of Template Checked by: _____ (signature) __________ Date: ____________
____________________________
(printed name)

• Each computer-generated report must be checked to verify the data entered agrees with project records. The person who verified the data is to sign and date the report, i.e.:

“Verified as Correct: ______ (signature) __________ Date: ______________ 
__________________________
(printed name)

When checking the data, you must always make sure the method of measurement and materials used comply with the Contract requirements. The most common errors discovered in computer-generated reports involve incorrect entry of data or incorrect method of measurement.

• For Rebar spreadsheets, check the data to make sure the bar types, sizes, and lengths agree with the approved shop drawings and DWRs. (The bar type is obtained from the Bar Mark.)

• For cost-plus reports, check the labor, material, and equipment data to make sure the information agrees with the original report created in the field, certified payrolls, receipted bills, and “Rental Rate Blue Book” worksheets.

• For excavation calculations, check the data to make sure entries agree with plan sheets and survey data.

• Each computer-generated report is to be saved electronically and backed up onto a CD.

• At the completion of the Project, the CD(s) with the backed up data are to be clearly identified, i.e., “Disk 1 - Project XXXX-XXXX,” and stored in a protective case for inclusion with the Project Records. The content of each CD is to be clearly identified and kept on or in the protective case for the CD.

1-305C  Drainage Systems

The following are guidelines to use when setting up individual drainage systems in the Volume III books: As used in this section a drainage system is from structure to structure, i.e. catch basin to catch basin, catch basin to outlet.

• The Volume III drainage index master summary log, shown in Figure 1-3.9, is listed by system, as they appear in the drainage books and summarizes the items and quantities for each system. A total must be shown for each item.
The right-hand page, shown in Figure 1-3.10, shows the plan sketch and the computations for the system. Only one system is allowed on the right-hand page. The left-hand page, shown in Figure 1-3.11, lists the items and quantities pertinent to the system shown on the right-hand sheet. Quantity entries are listed below as the system is installed.

Totals for each item are noted on the drainage system summary sheet when the system is completed. If additional pages are needed, they are inserted between the two pages and given a letter designation.

**Figure 1-3.9 Volume III – Drainage Master Summary Log**

<table>
<thead>
<tr>
<th>STATION FROM</th>
<th>STATION TO</th>
<th>DEPTH D70 - 0.9</th>
<th>DEPTH R0-14</th>
<th>DEPTH R15-2.5</th>
<th>DEPTH R25-4.0</th>
<th>DEPTH R40-6.0</th>
<th>DEPTH R60-10.0</th>
<th>CHANNEL D40-10.0</th>
<th>DRAINAGE SLOPE</th>
<th>UNIQUE FEATURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 40</td>
<td>10468.90 TO 10472.10</td>
<td>18.10</td>
<td>0.53</td>
<td>88.03</td>
<td>0.75</td>
<td>1.00</td>
<td>2.04</td>
<td>69.06</td>
<td>97.00</td>
<td></td>
</tr>
<tr>
<td>4 31</td>
<td>10462.90 TO 10465.10</td>
<td>7.16</td>
<td>1.00</td>
<td>20.80</td>
<td>1.00</td>
<td>2.04</td>
<td>69.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 33</td>
<td>12.50 TO 10.25</td>
<td>15.00</td>
<td>2.54</td>
<td>10.00</td>
<td>1.00</td>
<td>2.04</td>
<td>69.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 37</td>
<td>10.75 TO 8.00</td>
<td>15.00</td>
<td>1.00</td>
<td>79.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 39</td>
<td>7.50 TO 10.25</td>
<td>15.00</td>
<td>2.04</td>
<td>69.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 41</td>
<td>10.25 TO 7.50</td>
<td>15.00</td>
<td>2.04</td>
<td>69.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 43</td>
<td>10.25 TO 7.50</td>
<td>15.00</td>
<td>2.04</td>
<td>69.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 45</td>
<td>10.25 TO 7.50</td>
<td>15.00</td>
<td>2.04</td>
<td>69.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comp by: Printed Name:  
Signature:  
Date:  

Chkd By: Printed Name:  
Signature:  
Date:  

TOTALS: 200.10 20.20 20.20 20.00 20.00 20.00 20.00 20.00 20.00 20.00
Figure 1-3.10 Volume III – Drainage (Right-Hand Page)

Figure 1-3.11 Volume III – Drainage (Left-Hand Page)
1-305D Structures, Mainline Roadway, Ramps, Etc.

Use the following guidelines for setting up Volume III books for structures, mainline roadway, ramps, etc.

- The first sheet in the book is the index sheet, shown in Figure 1-3.12.

**Figure 1-3.12 Volume III – Index Sheet (Sample)**

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Description</th>
<th>Page No</th>
<th>Item No.</th>
<th>Item Description</th>
<th>Page No</th>
</tr>
</thead>
<tbody>
<tr>
<td>020002</td>
<td>Earth Excavation</td>
<td>1</td>
<td>030504</td>
<td>Appointed Masonry</td>
<td>31</td>
</tr>
<tr>
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<td>030566</td>
<td>Installation of Barricade</td>
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</table>

- Because an expandable concept usually is used in the book, only one page number is assigned to any item. Additional pages that show computations are assigned the same number with a letter designation. An example is “Class A Concrete, Page 23”; “Class A Concrete, Page 23A”; and “Class A Concrete, Page 23B.”

- On projects with several structures, ramps, etc., the item summary sheet can list the structures and the assigned letter for each, as shown in Figure 1-3.13. Separate books should be set up for each structure, ramp, etc.
1-306 Volume IV - Miscellaneous Contract Data

This volume contains miscellaneous contract data pertaining to the Project. It can be either maintained in a hard copy or electronic data file format. A Sample Index for Miscellaneous Contract Data is shown in Figure 1-3.14. The sheets listed in the indexes can be obtained from the District or may be developed using Microsoft Excel spreadsheets or other computer generated reports.
### VOLUME IV - MISCELLANEOUS CONTRACT DATA INDEX

<table>
<thead>
<tr>
<th>PAGE DESCRIPTION</th>
<th>PAGE #</th>
<th>REMARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title Sheet</td>
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<td></td>
</tr>
<tr>
<td>Record of Project Personnel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material Stored Inventory Log</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Record of Shop Drawings</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*** Record of Labor Wage Checks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*** Record of Certified Payrolls</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**N/A if electronic files are kept.**

***SiteManager data entry is acceptable in lieu of Vol. IV sheets.***

Revised June 2010

The sheets that follow the index in Volume IV are listed below. The information on the sheets must be complete and kept up to date throughout the Project. They can be either maintained in the Volume IV or in electronic files. (Refer to Volume I, Chapter 11 for a list of the acceptable electronic spreadsheets).

- **Record of State/Consultant Personnel.** The sheet is shown in Figure 1-3.21. Record all personnel assigned to the project from the ordered-to-start date until the final is completed. Include the start and completion dates for each employee and the assigned operation. Include Project Engineers on this record.

  Figure 1-3.15 Deleted

  Figure 1-3.16 Deleted

  Figure 1-3.17 Deleted

  Figure 1-3.18 Deleted
• Record of Labor Wage Checks. This summary is only required if information is not entered into SiteManager. The summary is shown in Figure 1-3.22. List all labor wage checks made on the summary. Form CON-131 for individual checks is shown in Figure 1-12.5. If the number of the records is large, the Form CON-131s may be kept in a separate booklet, labeled accordingly. Refer to Volume 1 Chapter 12 Civil Rights, Labor and Contract Compliance for additional information on labor wage requirements.

• Record of Certified Payrolls. This summary is only required if information is not entered into SiteManager. Figure 1-3.23 shows a payroll log. Keep a copy of each pertinent payroll for the prime Contractor and all subcontractors at the construction project site in designated folders(s) and maintain a log of their receipt. Refer to Volume 1 Chapter 12 Civil Rights, Labor and Contract Compliance for additional information on payroll requirements.

• Material Stored Inventory Log. The sheet is shown in Figure 1-3.24. The material must be inspected and inventoried as specified in the section 1-909 “Payment for Stored Materials.” On large projects or projects with large amounts of materials stored, a separate Volume should be created to centralize the location of all documentation for materials stored on site.

• Record of Shop Drawings and Working Drawings. The sheet is shown in Figure 1-3.25. List all shop drawings pertinent to the project.
## Figure 1-3.22 Record of Labor Wage Checks

### RECORD OF LABOR WAGE CHECKS

<table>
<thead>
<tr>
<th>Employee</th>
<th>Contractor</th>
<th>Date Wage Check Taken</th>
<th>Complying to the Minimum Hourly Rate Is</th>
<th>Comments</th>
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## Figure 1-3.23 Record of Certified Payrolls

### PROJECT RECORDKEEPING AND DOCUMENTATION

<table>
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<th>Year:</th>
<th>Contract No.:</th>
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<tbody>
<tr>
<td>Prime Contractor:</td>
<td>Page No.:</td>
</tr>
<tr>
<td>Payroll Log for Subcontractors:</td>
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</tbody>
</table>

### RECORD OF CERTIFIED PAYROLLS

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<th>Date Started:</th>
<th>Date Completed:</th>
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<tbody>
<tr>
<td>Date Payroll Received</td>
<td>Date Payroll Taken</td>
</tr>
<tr>
<td>Date Payroll Received</td>
<td>Date Payroll Taken</td>
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</table>

<table>
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<table>
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<th>JUNE</th>
<th>OCTOBER</th>
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</table>

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<th>NOVEMBER</th>
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**Figure 1-3.24 Material Stored Inventory Log**

```
"MATERIAL STORED" INVENTORY LOG

<table>
<thead>
<tr>
<th>DESCRIPTION OF MATERIAL</th>
<th>MATERIAL QUANTITY</th>
<th>STORED MTE (LOCATION)</th>
<th>VERIFIED BY (SIGNATURE OF INSPECTOR)</th>
<th>REMARKS</th>
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```

**Figure 1-3.25 Record of Shop Drawings and Working Drawings**

```
RECORD OF SHOP DRAWINGS AND WORKING DRAWINGS

<table>
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<th>DATE</th>
<th>DESCRIPTION</th>
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```
Part II – Other Project Records

1-307 Project Correspondence

To properly identify Project related correspondence both the State and Federal project numbers are to be shown. The official copy of Project correspondence is to be kept in the District Office. The Supervising Engineer is responsible to establish and maintain a complete chronological file of all project-related correspondence for each project assigned to him/her. When necessary, copies of correspondence are to be forwarded to the Project field office for their records. Correspondence received in the field is to be forwarded to the District.

Correspondence and other project information that is not part of the four volume record-keeping system must be maintained in an organized manner at the field office. A hierarchical file structure should be established at the onset of the project for the project correspondence. The size of the file system will vary depending on the size and complexity of the project. The files for smaller projects are usually categorized based upon the type of correspondence or contents of the folder. Larger projects or those projects using an electronic database will likely use a more complex numerical sequential system. The Resident Engineer or chief inspector is responsible for establishing the file system for the project, subject to the review and approval of the Project Engineer. Sample correspondence filing systems for both smaller and larger projects are included in Appendix C, Table 2.

On Federal oversight projects, the FHWA Area Engineer should be copied on the project correspondence concerning issues that have a significant impact on project scope, schedule or budget.

The “List of Standard Correspondence” is located in Appendix C, Table 1, of this manual. This chart assigns responsibility for research and preparation of project correspondence, and also provides guidance for the authorized signature on the respective documents. A higher level of authority could possibly be necessary depending on the circumstances. Suggestions to add additional correspondence to this chart are encouraged and should follow the instructions in Appendix B “Update Procedures”.

The “Approved Forms” folder is located within the Construction Manual folder on the Department’s share drive. Suggestions to add additional forms are also encouraged and should follow the instruction in Appendix B of this manual “Update Procedures”.

Generally, all official project correspondence (letters addressing compensation, disputes, RFCs (requests for changes), and other contractual issues) must be sent through the District before it is sent to the Contractor. Similarly, all Contractor correspondence of this nature must be sent to the District Office and then forwarded to the field office. Advance or preliminary copies of such correspondence may be exchanged at the project level, however all official copies must be sent to/from the District Office. Routine correspondence (meeting reports, transmittals, material test reports, RFIs (Requests for Information), etc.) may be issued at the field level with a copy to the District office. If “field memorandums” are issued by the Inspector to the Contractor relative to contract performance, the District Office must be copied.

1-307A Email

Emails are contract records and may be subject to detailed review; therefore, Project related email, sent and received, must be printed and kept in the correspondence folder. An exception may be allowed if the project maintains an electronic database of project records. Email prepared by project staff should always be professional and to the point.
1-308 Progress Meetings

Progress meetings are required to be held at least monthly on active projects, except during the winter shutdown period or at other times when no work activity is occurring on the project. The purpose of the meeting is to discuss the progression of the work and any issues which may impact the ongoing work. The meeting shall be conducted by the Chief Inspector or Project Engineer. Where appropriate, action items should be defined and responsible parties assigned specific tasks. Each task shall be given a due date and tracked until resolved. The Chief Inspector is responsible for preparing a report of the meeting. The Project Engineer is responsible to ensure that the report of meeting is accurate. The report of meeting should be prepared, reviewed and be ready for distribution within 5 working days of the date of the meeting.

On Federal oversight projects, the FHWA Area Engineer should be invited to each Progress Meeting and copied on the meeting minutes.

The following topics should be discussed at each meeting and included in the meeting minutes:

- Contractor’s progress and review of project’s schedule,
- Utilities,
- Quality and workmanship
- Environmental concerns,
- Maintenance and Protection of Traffic/Work Zone Safety
- Submittals
- Testing
- Civil Rights (DBE/SBE, OJT, Payrolls, Labor Wage)
- General Concerns.

Figure 1-3.28 shows a sample report of meeting. Project staff is to use this format for Report of Meetings or other format approved at the District level.
Figure 1-3.28 Sample of Report of Meeting

CONNECTICUT DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING AND HIGHWAY OPERATIONS
DISTRICT IV        UNIT 901

REPORT OF MEETING

Project:  
Route #:  
Location of Meeting: Project Job Site:  
Subject of Meeting: Project Progress Meeting (9:00am)

Date of Meeting: July 14, 2004

Town:  

Attendance:
FHWA (860) 659-
CT DOT District 4 (860) 585-
CT DOT District 4 (860) 585-
CT DOT District 4 (860) 585-
Construction Inc. (203) 355-
(860) 589-

Transactions and Determinations:

Today is the 21st meeting for this project.

The following is a summary of the meeting.

Old Business

19.1 Time Extension

Construction was instructed by CT DOT to submit a detailed time extension request.

Mr.  stated that  has not yet submitted their request for a time extension and they should do so as soon as possible.

(Action:  )

New Business

21.1 D.E.E.

D.E.E. requirements were discussed and it appears that the Contractor will meet the 12% goal even though  has refused to return to work to complete their subcontract with  .

This goal is being met because of an increase to  and subcontract and the utilization of two additional D.E.E.'s on the project,  and .

(Action: none required)

21.2 Training

The total number of training hours for this project is 520. The trainer,  , has performed 367 hours.

Mr.  no longer works for  and therefore the hours will fall short of the required amount.

This issue is pending review by Mr.  of the Office of Construction.

(Action: Conn. DOT)

21.3 Certified Payroll

Mr.  was informed that there are still outstanding certified payroll submittals by his Subcontractors.

Mr.  said his office has been in contact with all his Subcontractors regarding this issue.

(Action:  )

21.4 Schedule

Mr.  stated that August 24, 2004 is the projected date for the semi final inspection, with a total completion date of September 7, 2004.

(Action: none required)
Figure 1-3.28 Sample of Report of Meeting (Continued)

21.5 Utility

An existing fire hydrant at Sta 10+695 Lt is in conflict with the proposed sidewalk and was discussed. It was decided that _______ would relocate the hydrant rather than request a price from _______.

(Action: _______)

Note: Subsequent to this meeting it was decided by Conn. DOT to move the proposed walk rather than relocate the hydrant.

(See Report of Meeting No. 22)

21.6 Grading

The contract drawings show the grade of the proposed sidewalk sloping away from the road between Sta 10+560Lt to 10+700Lt on Rte 6. Mr. _______ was concerned that snowmelt would cross the walk and freeze.

DOT Highway Design will be contacted to discuss this issue.

(Action: DOT Highway Design)

Note: Subsequent to this meeting, an on site meeting was held to discuss this and other grading issues.

(See Report of Meeting No. 22)

21.7 Traffic Signal

_______ was instructed to coordinate the traffic signal work (flashing and semi-final inspection) so that the activation of the signal coincides with the completion of the paving and line stripping.

(Action: _______)

21.8 Mast Arm Foundation

It was noted by the Conn. DOT that the Mast Arm Foundation should be installed on the north side of Rte 6 to avoid any delay. The Conn. DOT will not allow the installation of the Mast Arms until the concrete reaches it's required strength.

(Action: _______)

With no further business, the meeting adjourned 11:00 am.

Statement of Accuracy:

We believe this Report of Meeting accurately reflects what transpired at this meeting. Unless notified in writing to the contrary within ten days after receipt, we will assume that all in attendance concur with the accuracy of this transcript.

Submitted By: _______  
Chief Inspector

Approved By: _______  
Project Engineer

Cc: _______  
Attendees
1-309 Other Project Booklets and Folders

When applicable, the following additional information should be put together in a booklet or series of folders and kept with the field books as part of the records:

- computer disks;
- Construction Orders, with backup;
- Contract;
- Contractor payrolls;
- correspondence;
- delivery tickets (separate book that is clearly labeled should be used for each type of material);
- environmental correspondence, logs, etc.;
- EEO/Affirmative Action reports;
- hazardous waste manifests;
- Labor Wage Checks, Form CON-131;
- Materials Certificates and all laboratory reports;
- Nuclear Density Tests and Data Sheets, Forms CON-125 and MAT-438;
- Pile Driving Logs, Form CON-87;
- purchase orders and requisitions;
- semimonthly and monthly estimates;
- schedules;
- shop drawings;
- working drawings;
- Request for Information (RFI)
- Request for Change (RFC)
- utility forms, Forms CON-40 and CON-41;
- Other materials, if required or requested (i.e. work performed by others, records of state furnished materials).

1-310 Non-Compliance Notices

Defective work is defined within the Standard Specifications 1.05.11 and defective materials are defined within 1.06.04. The DWR Appendix (CON-134A) is required to be completed and attached to all SiteManager DWRs, Concrete Inspection Reports (CON-135) and Base & Bituminous Concrete Inspection Reports (CON-136), as these do not currently include the required certification statement.
Non-Compliance Notices are to document instances when the Contractor’s workmanship or materials do not conform to the plans and/or specifications. The process of recognizing and resolving non-compliance issues consists of the following major steps; 1) recognizing the problem, 2) proposing a corrective procedure, 3) gaining approval for the corrective procedure, and 4) completing the corrective work. Whenever unacceptable work is encountered, as identified above, are always necessary. Depending upon the scope and/or severity of the non-compliance issue, corrective procedures may be required (steps 2 and 3). When approval is required for corrective procedures, separate correspondence is generated addressing the issue in question.

The goal of this process is not to create more paperwork for project personnel, but to alleviate some of the difficulties of confronting these issues day to day. Also, items will not be forgotten and left until the punch-list at the end of the project. No Contractor likes rework; however, if the issues and expectations are clearly defined, the work can be reasonably discussed and included in the work plan. In so doing, confrontation at the field level will be reduced.

Non-Compliance Notices should be issued to the contractor if any of the following conditions exist:

- Unacceptable materials are being incorporated into the work.
- The construction methods or workmanship do not meet the contract requirements or approved plans.
- Rework is required to correct a deficiency discovered on the project.
- The survey lay-out is incorrect or there is inadequate survey to verify the accuracy of the work.
- The contractor intends to place new work upon previous work that has not been accepted.
- The contractor has left the work in an incomplete state and it is possible the remaining work could be overlooked. If the project staff has adequately documented the incomplete nature if the work in some other fashion (ex. DWR, Volume 3, As-Built, White Paper Tracings, etc.), then the NCN may not need to be issued.

Specific questions pertaining to Non-Compliance/Compliance Notices and their issuance should be directed to the Project Engineer. The inspection staff may not deviate from the above guidance unless approved by the Project Engineer or Supervising Engineer for the project.

The following procedure is to be used for the resolution of non-compliance issues:

- Whenever unacceptable materials or workmanship is discovered, a Non-Compliance Notice should be issued to the Contractor that clearly identifies the problem and requests a proposed corrective measure if one is required. Non-Compliance Notices are to be numbered as follows: XXXX-XXXX-0001NCN. XXXX-XXXX-0002NCN etc. See Figure 1-3.29

- Refer to Appendix “A” for direction on entering Non-Compliance Notices in SiteManager.

- For each Non-Compliance Notice issued that requires a corrective procedure to ensure there is agreement as to the scope of the repair work required, the final/approved corrective procedure will be issued by the District. In some instances the correction is obvious and may be determined by project personnel. Other times approval by the District, Lab, CE Design or other units is required. Project personnel are to obtain such approval, when required.

- When the corrective work has been completed in accordance with the approved corrective procedure, a Compliance Notice is to be issued to clear the Non-Compliance Notice. The Compliance Notice shall have the same number as the Non-Compliance Notice. Example: XXXX-XXXX-0001CN. See figure 1-3.30.
Discussion of “open” Non-Compliance issues should be included as a standing item at Progress Meetings. The Non-Compliance Notices and corresponding Compliance Notices are to be kept in a folder at the project.

Figure 1-3.29 Non Compliance Notice

Connecticut Dept. of Transportation

Contract No. 0123-0456
Project Description: Reconstruction of Route 454 in New Haven

NON-COMPLIANCE NOTICE
NO. 0123-0456-0001NCN

TITLE: Bridge No. 987
DATE ISSUED: 2/7/2007

PROJECT: 0123-0456 & 123-457, Reconstruction of Route 454 in New Haven

CONTRACTOR RESPONSIBLE: Dave's Rebar Installers, LLC

TO: ABC General Contractors, Inc.
2345 Main Street
Bridgeport, CT

Attention: Mr. Robert Smith, Project Super

DATE CONTRACTOR IS REQUIRED TO COMPLETE BY: 2/15/07
DATE CONTRACTOR STARTED:
DATE CONTRACTOR COMPLETED:
DATE OF DWR REPORTED ON AND USER ID: 2/7/07, ferrard

DESCRIPTION OF NON-COMPLIANCE:
Subcontractor Dave's Rebar Installers are currently using the wrong type of rebar for wingwall 1A footing on Bridge No. 987. Contractor told that rebar should be #7 not #5 as shown on plan sheet no. 31 of 156. Contractor has ordered the correct size and type of rebar and will remove bars previously installed.

SIGNATURE:
PRINTED NAME: David Ferraro
Date: 2/7/07

cc: Paul H. Breen
Steve DiGiovanna
Alan Warner
Connecticut Dept. of Transportation
Contract No. 0123-0456
Project Description: Reconstruction of Route 454 in New Haven

TO: ABC General Contractors, Inc.
2345 Main Street
Bridgeport, CT

Attention: Mr. Robert Smith, Project Super

DATE ISSUED: 2/7/2007

PROJECT: 0123-0456 & 123-457, Reconstruction of Route 454 in New Haven

CONTRACTOR RESPONSIBLE: Dave's Rebar Installers, LLC

DATE CONTRACTOR STARTED: __________
DATE CONTRACTOR COMPLETED: __________
DATE OF DWR REPORTED ON AND USER ID: 2/7/07, ferrard

CORRECTIVE ACTION COMPLIANCE:

Subcontractor Dave's Rebar Installers are currently using the wrong type of rebar for wingwall 1A footing on Bridge No. 987. Contractor told that rebar should be #7 not #5 as shown on plan sheet no. 31 of 156.
Contractor has ordered the correct size and type of rebar and will remove bars previously installed.

SIGNATURE: ____________________________
PRINTED NAME: David Ferraro
Date: 2/7/07

cc: Paul H. Breen
Steve DiGiovanna
Alan Warner
1-311 Working Drawings

1-311A Working Drawings for Permanent Construction

When working drawings for permanent construction are required, the Contract should require the Contractor to submit nine (9) copies of the working drawings directly to the appropriate Principal Engineer in the Office of Engineering for review (State Design or Consultant Design as the case may be). The Office of Engineering is responsible for transmitting the submission to other reviewing units as required for comments. Examples of working drawings for permanent construction are: Proprietary Retaining Walls, Precast Concrete Box culverts, Pot Bearings, Modular Joints, Permanent Soil Nail Wall, Tie-Backs, Micro-Piles, etc.

The Working Drawings are reviewed and stamped in accordance with the requirements of the Bridge Design Manual. After review, five (5) stamped copies of the working drawing submittal are sent to the District administering the contract with recommendation regarding acceptance.

The District is to forward two (2) copies of the working drawing submittal along with the review comments and statement regarding the acceptability of the submission to the contractor. The District is responsible to ensure that all review comments are appropriately addressed prior to the Contractor starting work.

The District is to retain one (1) copy of the submittal in the District files, and one (1) copy in the field office files. After all comments have been resolved, the District shall forward one (1) copy to the Materials Testing Division.

The District is to direct the Contractor to submit reproducible mylars of the working drawings after the Contractor has addressed the review comments and made necessary changes. The District is responsible for including these mylars as part of the "As-Built" Drawings.

1-311B Working Drawings for Temporary Construction

When working drawings for temporary construction are required, the Contract should require the Contractor to submit nine copies of the working drawings to the District. The District will forward the submittal with a Letter of Transmittal to the appropriate Principal Engineer in the Office of Engineering for review (State Design or Consultant Design as the case may be) when necessary. The Office of Engineering unit will not review the Design computations in depth.

The Working Drawings will be reviewed and stamped in accordance with the requirements of the Bridge Design Manual. After review, five copies of the working drawing submittal will be returned to the District administering the contract with a recommendation regarding acceptance.

The District will forward three copies of the working drawing submittal with the review comments to the Contractor along with a statement regarding the acceptability of the working drawing submission. The District will be responsible for the resolution of all comments prior to the Contractor starting work.

The District will retain one copy of the submittal in the District files, and one copy will be retained in the field office files.

1-311C Examples of Working Drawings That Require a Review by the Office of Engineering

**Permanent Construction:** Proprietary Retaining Walls, Precast Concrete Box culverts, Pot Bearings, Modular Joints, Permanent Soil Nail Wall, Tie-Backs, Micro-Piles, etc.,

**Temporary Construction:** Temporary Sheet Piling, temporary Soil Nail Walls, Cofferdams, temporary Superstructure Supports, Falsework, Jacking, Structural Steel Erection Plans, Post-Tensioning Procedures, Containment and Collection Systems for painting, etc.
In general, the working drawings that can be reviewed by the District are minor traffic control plans, submissions related to the implementation of construction staging plans, minor steel erection schemes, bearing replacement or repair schemes, barrier relocation plans, etc.

1-312 Shop Drawings

When shop drawings are required the contract should require the contractor to submit nine (9) copies of the shop drawings directly to the appropriate Principal Engineer in the Office of Engineering or Office of Traffic for review (State Design or Consultant Design as the case may be).

The drawings must include erection plans, material lists, and material designated for project use, such as:

- Reinforcing steel,
- Anchorage details for rail attachments at the ends of bridge parapets,
- Structural steel,
- Pre-tensioned concrete beams and deck units,
- Post-tensioned concrete superstructures,
- Post-tensioned pier caps,
- Concrete for structures (remain-in-place forms),
- “Modular” expansion joints,
- Mechanical/electrical components of movable bridges,
- Elastomeric compression seals,
- Bearings,
- Bridge scuppers,
- Pipe for bridge drainage,
- Stain protection,
- Metal bridge rail,
- Open steel sidewalk grating,
- Granite facing, and
- Illumination.

In addition to bridges, shop drawings are required for side-mounted sign supports, bridge-mounted sign supports, and tubular and truss sign supports. These sign support drawings are submitted to the Office of Traffic Engineering.

The contractor should provide the District with a copy of the letter of transmittal for all shop and working drawings that are not sent directly to the District. The Inspector must maintain a log in the Volume IV or in an electronic file to track the acceptance of shop and working drawings and notify the Project Engineer if reviews are not timely.

1-313 Final Revisions of Plans and Cross Sections (As-Builts)

The Chief Inspector must make sure the information necessary to create the as-built drawings are kept up to date on white paper plans as the Project progresses. This duty can be delegated to other inspectors; however, the Chief Inspector is responsible for making sure it is done. At a minimum the white paper plans should be updated every other week. Periodically, as part of the review of project records, the Project Engineer is to verify that as-built plans are being updated concurrently with the physical work on the project and note this review by initialing and dating the front sheet of the white paper as-builts.

When the Contractor is required to produce as-built drawings (i.e. electrical or vertical construction projects), the Chief Inspector should periodically remind the Contractor of the requirement to submit as-built drawings and ask for an update on the status.
The following guidance is offered for the preparation of as-built drawings:

**Responsibility of Contracting Engineers.** A contracting engineer must indicate the as-built features of a project in either ink on the original tracings or the digital design file, if required. The work must be accomplished in accordance with the terms of the agreement with the State. If a contracting engineer must indicate the as-built features on the tracings, it is not necessary to revise a set of prints of the plans for the use of the Highway Design Section.

**Responsibility of Department Forces.** Designated District staff is to revise the original tracings or digital design files on State or federal-aid projects to show the project as-built.

**Methods of Showing Revisions.** If paper transparencies have been added to the plans to indicate revisions resulting from Construction Orders during construction, the revisions are transferred to the corresponding original tracings. The following notations are inscribed in a conspicuous place on the original tracings:

Revisions of __________________ shown on Sheet No. _____
Date of Transparency

___________________ incorporated on this sheet ____________
of Transparency      Date

• **Title Sheet.** Use the following guidelines for the title sheet:

  o **Title.** Show the corrected beginning and ending stations, and the horizontal length of the project in the title. Cross out original figures.

  o **Inscription.** Inscribe the following in a conspicuous place on the sheet:

    • Construction Started Date _____________
    • Construction Completed Date _____________

**Index Plan and Index Profile Sheet.** Do not correct the plan and profile sheets. In a conspicuous place, inscribe this note: “THIS SHEET NOT CORRECTED.”

**Detailed Estimate Sheet.** Inscribe this note somewhere on the detailed estimate sheet: “THIS SHEET NOT CORRECTED.” If quantities are on the title sheet, inscribe this note: “THESE QUANTITIES NOT CORRECTED.”

**Typical Section Sheets.** Show any changes in the typical sections and add the note, “TYPICAL SECTION CORRECTED.”

**Plan Sheets.** If either the beginning or ending stations of the project have been changed, make the necessary correction and label: “BEGINNING OF CONSTRUCTION” or “END OF CONSTRUCTION.”

Use the following guidelines to revise the plan view:

• **General Construction Notes.** General construction notes are not to be corrected.
• **Culverts.** The locations and lengths of culverts must be changed, except that no change in location is made unless the culvert has been moved 3 m (10 ft.) or more from its original proposed location or unless the angle of crossing has been radically changed. If the original culvert notes were listed individually adjacent to each proposed culvert and no change has been made in the length or size, simply check the note with a black ink “x” mark.

If either the length or size of the culvert has been changed, cross out the incorrect figures and insert the correct ones immediately above. If new pipes were installed that were not originally proposed, plot the pipe and label it. For example, “28 ft.—28 in. × 20 in. (8.5 m—680 mm × 500 mm) A.C.C.M. PIPE ARCH INSTALLED.”

• **Catch Basins, Manholes, Underdrains, Endwalls and Ditches.** Use the procedure for culverts. For example, “INSTALLED” or “DITCH EXCAVATED.”

• **Drives and Barways.** Plot as constructed. If not constructed, cross out.

• **Wire Fences.** Plot as constructed. Label “WIRE FENCE ERECTED” or “CHAIN LINK FENCE ERECTED.”

• **Stone Wall Fences.** Plot in the locations constructed. Label “STONE WALL FENCE ERECTED” or “FARM WALL ERECTED.”

• **Guide Railing.** Show as constructed. Label “GUIDE RAILING ERECTED.” Cross out any not installed.

• **Single Posts.** If not proposed on the plan, plot and label “SINGLE POST ERECTED.” Single poles at each end of Guide Railing need not be shown.

• **Intersecting Roads.** Outline as constructed. Give the type of surface. Label “APPROACH CONSTRUCTED.”

• **Temporary Approaches.** Indicate by heavy broken lines and label “TEMPORARY APPROACH CONSTRUCTED.”

• **Slope Lines.** Do not revise.

• **Relocation of Buildings, Poles, Etc.** Show in the new locations.

• **Channel Relocation.** Plot in the location actually constructed. If not originally proposed, plot and label “CHANNEL EXCAVATED.”

• **Riprap.** Show the outline as constructed. Label “RIPRAP INSTALLED.”

• **Curbing.** Show the beginning and end, with the note, “(TYPE) CURBING INSTALLED.”
Profile Sheets. Use the following guidelines for the profile view:

- **Culverts, Catch Basins, Manholes and Underdrains.** For structures 381 mm (15 in.) or greater in diameter, plot accurately all field changes in elevation and location. Use the procedure for plan notes for these items.

- **Grade Changes.** Any field change in grade of 91 mm (0.3 ft.) or more must be shown with a broken line. Label “GRADE AS CONSTRUCTED.”

- **Subbase.** Make all changes in subbase with correcting notes, such as “STA. __________ TO STA. __________ (DEPTH),” or if no change, check the original notes.

Bridge Sheet. Show all changes in the structures. Do not correct bar lists.

Cross-Section Tracings. Revise the final cross-section tracings only if changes in the original design were authorized or if embankment material is to be deducted from the borrow material.

**1-314 Recycling of Construction Materials**

Department policy encourages the reuse and recycling of materials on construction projects. To determine the amount of material recycled, a Recycling Report for Construction Projects must be completed twice each year, January through June and July through December. The reports are due no later than the 20th of the following month.

Figure 1-3.31 lists the types of material that are reported.

**Figure 1-3.31 Type Designation of Recycled Material**

<table>
<thead>
<tr>
<th>Type Designation</th>
<th>Kind of Material</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Demolition debris—concrete and bituminous concrete</td>
</tr>
<tr>
<td>B</td>
<td>Wood—clearing and grubbing, structures and cable rail posts</td>
</tr>
<tr>
<td>C</td>
<td>Steel—reinforcing bars, sheeting, beam rail, etc.</td>
</tr>
<tr>
<td>D</td>
<td>Glass</td>
</tr>
</tbody>
</table>

See Figure 1-3.32 for a copy of the form. Enter the appropriate reporting period, year and project number. Then complete the form as follows:

- **Reuse of Material On Site.** Enter the type of material, either A or B as described above, obtained from within the limits of the project and reused on the same project.
Reuse of Material Off Site. Enter the type of material, either A or B, obtained from within the limits of the project and transported off site for reuse.

Imported Recycled Material. Enter the type of recycled material, either A or B, imported from beyond the limits of the project. Note: Recycled materials from beyond the limits of the project must be accompanied by a materials certificate and certified test report indicating that the material is environmentally acceptable and structurally sound in accordance with Article 1.06.07 of the Standard Specifications.

Original and Final Locations. If possible, use station numbers and describe the application for all locations. If the material was used off site but on another CONNDOT project, list the project number and application where used.

Percentage of Recyclable Material Used. The percentage is derived from the amount of recyclable material utilized in an application. For example, Project XYZ has one metric ton (1.1 ton) of bituminous material that has been removed, the project has a requirement for 10 metric tons (11 tons) of fill. The one metric ton (1.1 ton) of bituminous was used as part of the fill. This yields 10 percent of recyclable material used.

Figure 1-3.32 Recycling Report

<table>
<thead>
<tr>
<th>Reporting Period</th>
<th>Jan-Jun</th>
<th>Jul-Dec</th>
<th>Year 2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project No.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>District No. 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reuse of Material On-Site</td>
<td>% of Recyclable</td>
<td>Type of Material</td>
<td>Original Location</td>
</tr>
<tr>
<td>A</td>
<td>9432.92</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reuse of Material Off-site</td>
<td>% of Recyclable</td>
<td>Type of Material</td>
<td>Original Location</td>
</tr>
<tr>
<td>A</td>
<td>14655</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>291.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Imported Recycled Material</td>
<td>% of Recyclable</td>
<td>Type of Material</td>
<td>Original Location</td>
</tr>
<tr>
<td>A</td>
<td>1904</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>405</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Report only the following material: Steel, Wood, Bituminous Concrete, Concrete, and Glass. Where possible list location by station numbers. Quantities should be in tons for all items.

All quantities must be reported in metric tons (tons). Use the following factors for converting volumes to mass.

- Type A, Bituminous 1 cu. yd. = 3105 lbs. = 1.55 tons
- Type A, Concrete 1 cu. yd. = 4050 lbs. = 2.02 tons
- Type D, Glass 1 cu. yd. = 3105 lbs. = 1.55 tons
1-315 Retention of Project Records

The following list of project records, documents and materials must be retained by the District after projects are accepted:

- The Contract,
- Field books, all Volumes,
- Semi-monthly and monthly payment estimates,
- Construction Orders with backup,
- All delivery tickets for bituminous concrete, processed aggregate base, concrete, etc.,
- Material certifications and all Laboratory reports,
- Nuclear Density Tests and Data Sheets (Forms CON-125 and MAT-438),
- Pile Driving Logs (Form CON-87),
- Environmental correspondence, logs, etc.,
- Utility forms (Forms CON-40 and CON-41),
- Contractors' payrolls,
- EEO/Affirmative Action reports (for 30%, 60%, and 90-percent project completion),
- Labor Wage Checks (Form CON-131),
- Shop drawings,
- Hazardous waste manifests,
- Stores requisitions and transfer vouchers,
- Purchase orders and requisitions,
- Correspondence,
- Consultants' billings with backup,
- Computer disks (properly labeled), and
- Any other related records, either required or requested.

The above records and materials must be retained by the District for one of the periods below whichever is later:

- Seven (7) years after the issuance of the project's Certification of Acceptance, or
- Three (3) years after the final federal payment is made, providing there is no pending litigation. Records must be retained until all litigation is resolved.
Requests for Information and Requests for Change

Request for Information (RFI) - Is a request for clarification of the contract documents. This can include clarification of intent of information shown on the plans or in the specifications, requests for information missing from contract documents and interpretation of conflicting information shown on the plans or in the specifications.

Procedure for RFI - The Prime Contractor sends the RFI to the Project Staff/District Field Office. If the RFI can not be resolved by the District Staff the RFI is sent to the Designer for resolution. The Designer prepares a response addressed to the District and the District responds to the Contractor. A response to an RFI should be within 7 days.

Request for Change (RFC) - This includes all requests by the Contractor to substitute materials specified in the contract documents. This also includes requests to change the methods of construction as detailed in the contract documents. Before any RFC by the Contractor will be considered, a formal written request from the Contractor must be made to the District and written approval secured before any change in the design will be sanctioned.

Procedure for RFC - The Prime Contractor sends a written request to the District’s ADE. The District determines the appropriate parties for review. If design review is required, the request will be sent to the appropriate Project Manager in Design. Design will forward the request, if required to the Consultant Designer for their comment and/or recommendations. Design will forward their recommendation to the District after reviewing the request and/or the Consultant Designer recommendations. The District will make the final decision and approve or not approve the request. A written response of the decision will be sent to the Contractor. A response to an RFC should be within 30 days.