

Section 5.14

FIELD RECORDS AND CONTRACTOR'S CERTIFICATIONS

5.14.1 Purpose

This procedure describes the methods of maintaining the various field records required by the Department to substantiate final estimates quantities. The methods outlined are generally applicable to any field notes, but they are particularly pertinent to those used in the calculation or verification of final pay quantities.

The Contractor's Certification of Quantities forms are also described herein. These Certification forms are required by the Department for the Contractor to document and certify the quantities of specific installed items for which payment is included in a monthly estimate.

5.14.2 Authority

Sections [20.23\(3\)\(a\)](#) and [334.048\(3\)](#), Florida Statutes (F.S.)

5.14.3 References

[Materials Acceptance Certification \(MAC\) System](#)

National Institute of Standards and Technology (NIST) Handbook-44

5.14.4 Field Records

Field Records should be prepared assuming that the user has no familiarity with the work being recorded. The **Field Records** are important site source records for establishing pay quantities. They may be required as evidence in any arbitration or lawsuit. All **Field Records** ~~shall~~must be submitted as part of the **Final Estimates Documentation**. Below ~~is~~are the allowed types of **Field Records**:

NOTE: Ensure that Plan Quantity Pay Items are not field measured. Only measure field changes or plan errors for Plan Quantity Pay Items.

(A) Types of Field Records

(1) Standard Bound Field Book

A Surveying/Engineering field book ~~that is~~ typically has a hard covered cover and is bright orange or yellow in color. Most have gridlines, ~~table~~tables, or graph paper. ~~Its, and its pages are typically waxed or specially coated to withstand moisture to from ruining protect its contents. These book covers are typically bright orange or yellow in color.~~

(2) Site Source Records/Forms/Electronic Output

Any supporting documentation (spreadsheet, electronic tabulation, etc.) or Department form ~~use~~used to substantiate final quantities.

Electronic output and reports from Global Navigation Satellite System (GNSS) rovers are also acceptable to document final measurement and quantities. GNSS output and reports must include accuracy and precision information.

(3) Form 700-050-61, Final Measurements “Miscellaneous”

This form simulates a **Field Book** page and is preferred over standard bound field books, since it ~~results in savings to the Department and it~~ can be maintained electronically therefore resulting in savings to the Department.

5.14.5(B) General Instructions

(1) Identify the front cover of each Standard Field Book used by including the Federal Aid Project Number, Financial Project Identification Number, Contract Number, Field Book Number, State Road Number, and the general contents of ~~that~~the book in bold letters. On the back binding (spine) of each Field Book, show the Field Book Number and the Financial Project Identification Number. (See Attachment 5.14-1 for Sample Field Book Identification.)

(A) ~~(1)~~(2) When the **Final Measurements “Miscellaneous” Form** is ~~utilized, include~~used, list the same project information ~~listed in (A) above~~required on the cover of the **Standard Field Book** at the top of each form used. It is recommended to maintain these forms electronically; therefore, it is unnecessary to bind these forms together ~~and~~or provide Field Book Numbers.

- ~~(B)~~(3) Each **Field Book** ~~shall~~must be clearly indexed with a complete list of the contents beginning on the first lined page, ~~which is to be and~~ numbered page one. ~~All~~The following pages ~~that are~~ used to record notes ~~shall~~must be numbered sequentially in the upper right corner of each page.
- ~~(C)~~(4) The date, weather conditions, and the name(s) of the field party ~~shall~~must be shown on the **Field Records** and at the beginning of each day's notes. Well documented **Field Records** are indispensable in the event of litigation.
- ~~(D)~~(5) Corrections ~~shall~~must be made by striking through the incorrect data and inserting the correct data. All corrections ~~shall~~must be initialed and dated by the person making the correction.
- (2) — Do not cut or otherwise remove pages from any **Field Book**. If an entire page is found in error, mark the original page as **VOID**, initial, date, and make a note referring to the page where that item of work was corrected.
- (6) _____
- ~~(3)~~(7) Keeping notes on loose-leaf or scratch pads and transferring them to ~~the~~ **Field Books** or **Final Measurements** **“Miscellaneous” Form** is prohibited. Field notes ~~shall~~must be entered directly into the field book or ~~the~~ Department's form as the site source document.
- (8) _____ **Field Records** ~~shall always~~must be legible [especially when inputted into the Electronic Document Management System (EDMS)], and include sufficient sketches and explanatory notes to convey the intent to a person who is not familiar with the job. Pay item numbers, original/final ~~cross~~-sections, and other relevant information ~~shall~~must be included.
- ~~(E)~~(9) Good sketches are ~~most important~~imperative when recording final measurements. The details of the sketches ~~shall~~must be sufficient to clearly show the extent of the work as well as any exceptions.
- ~~(F)~~(10) _____ Use standard symbols and abbreviations. Keep the notes simple and avoid making ambiguous statements.
- ~~(G)~~(11) _____ Show all pertinent measurements and observations. Use a degree of accuracy ~~that is~~ consistent with operations. If there is any doubt about the need for data, record it. Review the data for accuracy and completeness before leaving the field.
- ~~(4)~~(1) ~~NOTE: Ensure that Plan Quantity Pay Items are not field measured. Only measure field changes or plan errors for Plan Quantity Pay Items.~~

- ~~(H)~~(12) A complete summary shall must be made for each item at the end of its field notes. ~~The summary total for each item will then be checked by the~~The personnel ~~doing compiling~~ the final estimate will check the summary total for each item and enter it on the **Summary of Quantity Sheet(s)**, **Estimated Quantities Report (EQR)**, or other ~~quantity tracking sheet~~, ensure appropriate payment. The summary, and the **Field Record**, ~~shall~~EDMS number(s) must be properly ~~cross-~~referenced in the **Final Estimates Documentation**.
- ~~(I)~~(13) ~~Keep the calculations~~Calculations and measurements for Federal Aid participating and non-participating items must be separated. This also applies to **Utility Work by Highway Contractor Agreements (UWHCA)** and **Locally Funded Agreements (LFAs)**.
- ~~(J)~~(14) When more than one project (state or federal) is constructed under the same Contract, ~~separate Field Records shall be kept for each project, keeping, measurements, and other data~~ must be kept separate for each project.
- ~~(5)~~(15) **Field Records** for projects let under separate contracts shall must never be recorded in the same **Final Measurements "Miscellaneous" Form** or **Field Book**.
- ~~(K)~~(16) All **Field Books** shall must be scanned into EDMS for submittal with the **Final Estimates Documentation**. The original **Field Book** may be destroyed.
- ~~(L)~~(17) When documenting any data on ~~the~~ grid sheets, neatness, and legibility give credence to the accuracy of field notes and the calculations which they support.
- ~~(M)~~(18) **Field Records** containing alignment data shall must contain all the necessary information for horizontal control for new construction projects and major widening projects.
- ~~(6)~~ — **Form 700-010-60, Pile Driving Record:**
- ~~(7)~~ — Individual pile record data is entered on the **Pile Driving Record** forms by bent or pier numbers.
- ~~(4)~~(19) — Data for alignment and pile driving shall must be entered on the **Pile Driving Record** forms. These are permanent records and will must be retained until the structure is removed.
- ~~(N)~~(20) **Form 700-050-53, Final Measurements Site Source Record:** This form is used to document quantities using the Latitude and Departure

method. A Technician may use as many pages as needed for individual pay items.

5.14.65.14.5 Tabulation Forms

Tabulation Forms are site source records for establishing pay quantities.

(A) Form 700-050-54, Daily Report of Truck-Measured Material Site Source Record

This form is used to record truck quantities. When the final quantities are determined by certification/measurements of loose volume in truck bodies, the following procedures will satisfy the requirements for final pay records:

- (1) All trucks ~~shall~~**must** have an assigned unique number, along with the manufacturer's certification, or permanent decal, showing the truck capacity rounded to the nearest tenth of a cubic yard and placed on both sides of the truck. This includes the truck body capacity only, and any sideboards added will not be included in the certified truck body capacity provided by the contractor. The Project Administrator (PA) will randomly check the certified capacity on a selective number of trucks for accuracy by **using Form 700-050-54A, Truck Measured Sketch (Regular Bed)** and/or **Form 700-050-54B, Truck Measured Sketch (Irregular Shape Bed)**. This ~~will~~**does** not require the field personnel to climb into the body of the truck. When applicable, sideboard measurements will be transposed on these sheets and added to the certified capacity.
- (2) Using the trucks unique identification number and capacity, this form is used to record the quantity for each truck as it delivers a load of the material to the project.
- (3) The volume entered on this form for borrow material ~~shall~~**must** reflect the struck-measured volume (the dry measure having the contents leveled off and not heaped). The use of the struck-measured capacity ~~shall~~**will** apply to trucks, pans, or any other means of transport used. Documentation on loose volume bases, as measured in other hauling equipment, ~~shall~~**must** be made at the point of dumping on the construction site.

- (4) The PA ~~shall~~ will request, at the **Preconstruction Conference**, that the Contractor provide a list of trucks to be used on Department's projects, along with their assigned numbers and their certified capacities. This list ~~shall~~ must be submitted with the **Final Estimates Documentation**.
- (5) A separate line on the form will be used for each truck showing:
 - (a) Hauling company
 - (b) Truck number
 - (c) Capacity certified
 - (d) Load count & time recorded
 - (e) Total volume for that truck that day
 - (f) Inspector's signature and title at the bottom of the page
- (6) Typical materials paid for by volume and recorded on the form include:
 - (a) Borrow material
 - (b) Stabilizing material
 - (c) Cover material for prime coat, asphalt membrane interlayer or spread footings

(B) Form 700-050-56, ~~(A)~~, Daily Log Sheet - Miscellaneous Tabulation Form Weight Site Source Record and 700-050-56(B), Daily Log Sheet - Miscellaneous Tabulation Form Bag Count Site Source Record

~~This~~ These forms ~~is~~ are provided in the **FDOT Excel Forms Manager** plugin which can be installed from the Department's **Construction Downloads** webpage. These forms are used when material is paid by weight. ~~The~~ **Field Records** are also kept for each truck load of material hauled each day and signed by the Inspector. This form is only used for Riprap and Sand-Cement Riprap. The Department's Engineering Quantities Program is available to verify quantities for tracking documentation and payment ~~and Plan Summary Boxes~~.

- (1) Riprap: ~~q~~Quantities used and approved in each day's operation ~~shall~~must be recorded ~~in~~on this form. In the Remarks column, include the station, offset, and structure number of the placement location.
 - (a) Measure in tons, in surface dry natural state, by railroad scales, truck scales, or barge displacement. See [Attachment 5.14-2](#) for Barge Displacement Calculation example. Provide weight certificates when weights are not measured by the Engineer as described in **Specification 530-4.2**.
 - (b) Ensure concrete removed from an existing structure and subsequently used as rip rap (per plans) ~~and~~is paid for as Removal of Existing Structures ~~is~~and not paid for again as Riprap.
 - (c) For a toe wall, only include the volume of sand-cement riprap, concrete blocks, or poured-in-place concrete placed within the neat lines shown in the plans ~~shall be included~~ in the volume calculation of the final toe-wall quantities. See [Attachment 5.14-3](#) for Toe Wall Calculations example.

- (2) Bulk-Weight Final Pay Records: Certified weight tickets for certain bulk weight shipments are acceptable as final payment records under the following conditions:
 - (a) All weighing is done on state certified scales. The ticket must indicate gross, tare, and net weight.
 - (b) The State of Florida will recognize any scale that has been certified by a state agency outside Florida using traceable standards. All 50 states have adopted and use the same laws as **Florida NIST Handbook-44**.
 - (c) Project personnel will record each truck number and time of loading, on **Form 700-050-56, Daily Log Sheet Miscellaneous Tabulation Form Site Source Record** at the rail head site.
 - (d) All rail cars are visually inspected to ensure all material has been unloaded.

- (e) Material remaining in cars after job completion is to be hauled by truck to state certified scales and determine gross, tare, and net weights to make appropriate deductions from the car weights.
 - (f) Hauling will be done in covered trucks to minimize loss of material. The single car weight is more accurate than weighing numerous trucks ~~(and with use~~ the **Form 700-050-56, Miscellaneous Tabulation** system as outlined above).
- (3) Sand-Cement Riprap: Document the volume (in cubic yards) of sand used in the sand-cement mixture bags placed.
- (a) Calculate the total cubic yards of prepackaged Sand-Cement Bags by multiplying the bag quantity (total bags placed) by the cubic yards per bag.
 - (b) The volume in cubic yards placed and accepted within the minimum dimensions in the Plans or for each location. If the sand cement is proportioned by weight, use the conversion factor for sand of 85 lbs./ft³. Standard Plans will be paid per **Specifications Section Specification** 530-4.1. Delivery
 - ~~(c)~~ Submit delivery tickets showing the batch weights of sand and cement used ~~shall be submitted.~~ (See **Attachment 5.14-4** for a Delivery Ticket sample.)
 - ~~(a)~~(d) When the pay quantity for sand cement is determined by the volume of sand, verify calculations from sketches and dimensions of the batch box capacity (or other approved measure) ~~should be verified.~~

Payment for riprap ~~shall~~**must** not be made solely on the quantity delivered by truck and placed by the Contractor. For example, the quantity of riprap for an 84" diameter triple-concrete pipe ~~84" in diameter~~ is 31.1 CY, and this ~~quantity shall be adhered to as is~~ the maximum quantity applicable for payment. No compensation will be made for material placed ~~that is~~ beyond the neat lines shown in the plans. A sketch of the riprap structure must be submitted with authorized dimensions and volume calculations if not constructed according to Plans. This sketch must be included in the **Field Records**. (See **Attachments 5.14-5** and **5.14-6** for an example of a Riprap Sketch and Sand Cement Riprap Pay Analysis.)

~~To achieve this objective, the PA must maintain and exercise control of the riprap placement operation as follows:~~

If ~~during the course of riprap placement,~~ the PA determines ~~that~~ the Contractor is placing the material too thick or beyond required limits, the PA must submit written notification to the Contractor. In addition, the Inspector shall must include the station, offset structure, and the words "**Partial Pay**" or "**No Pay**" on the form collected for materials which are either partially or completely placed outside the limits authorized by the PA.

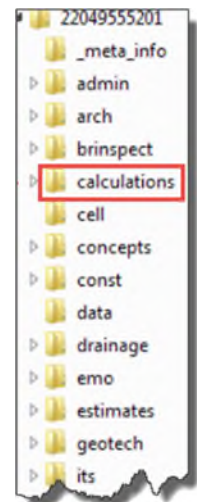
NOTE: When box beam scales are used, and the net weight is given automatically, only the net weight is required to be recorded.

(4)(C) Resident Office Responsibility

The material quantities represented ~~in on~~ the forms shall must be reconciled. Multiple trucks may be recorded on one form as long as if each individual truck is identified by number and company name.

Department forms shall must be cross-checked with the Contractor or subcontractor's records on a regular basis (daily or weekly). Any existing differences ~~that may exist~~ in pay quantities will must be reconciled immediately. This systematic comparison of site source records will avoid misinterpretations concerning final pay quantities.

~~A summary shall be made from the The form totals in the **Plan Summary Boxes**. Additional summary boxes can be created from the Excel spreadsheets included in the **CADD_[FPID].zip file**, in the **Calculations** directory. (See figure.)~~



~~The output shall be submitted with the final estimate must be summarized and shall be cross-referenced in the Plan Summary Boxes. within the **Final Estimates Documentation**.~~

5.14.75.14.6 Contractor's Certification of Quantities

(A) Form 700-050-62, Contractor's Certification of Quantities - (MOT, Signs, etc.)

This form is provided in the *FDOT Excel Forms Manager* plugin which can be installed from the Department's [Construction Downloads](#) webpage. ~~Once generated, the form will list~~generate all the MOT pay items within a contract. The Contractor will document and certify all 102 pay items. ~~All MOT pay items within a Contract will be listed~~This form is not required on the form once generated Lump Sum and Design Build contracts.

The form ~~shall~~must be signed by both the Contractor's Authorized Agent and the Worksite Traffic Supervisor, ~~(WTS)~~, then submitted monthly to the PA for payment. The Contractor's Authorized Agent must be an employee of the Prime, and the WTS must be Advanced MOT Certified per Specification Section 105-8.3. The PA will submit these certifications with the *Final Estimates Documentation*. ~~The Contractor's Authorized Agent must be an employee of the Prime.~~

~~This form is not required on Lump Sum and Design Build contracts.~~

NOTE 1: Cones are paid for under the MOT LS pay item 102-1.

NOTE 2: MOT LS pay item 102-1 is NOT adjusted by construction for overruns/underruns using the secondary units of days, see Item 102-1 of the [Basis of Estimates Manual Pay Item Database](#).

NOTE 3: MOT Certifications ~~that have been~~ approved and paid on a previous progress estimate should not be retracted and revised if errors are discovered. Corrections ~~are allowed, but should~~may be done made on the current/next progress estimate ~~and~~ make with a note ~~of~~in the remarks column explaining the correction ~~on the current/next. If~~ backup documentation is available, submit it with the certification ~~as well.~~

(B) Form 700-050-67/68, MOT ~~-- Painted Pavement~~ Traffic Stripes and Markings, Daily Worksheet and ~~Form 700-050-68, Contractor's Monthly Certifications of Quantities~~

These forms are to be used by the Contractor for all the Traffic Striping and Marking pay items. These forms include the following pay items: 701, ~~702~~, 705, 706, 709, 710, 711, 713, and 102 striping items. The 102 striping pay items are also listed in this worksheet to eliminate the need for filling out two different forms. ~~For projects let July 2021 and~~

~~forward after~~, pay items 701, 709, 711, and 713 will be paid as plan quantity, regardless of their inclusion on the Contractor's Certification. Raised Pavement Markers (RPMs) (706-1 pay item) are now final measure. Ensure the ~~e~~Contractor is aware of the appropriate basis of payment for striping items. This form is not used on Lump Sum and Design-Build contracts. See **CPAM Section 6.2** for more information.

The Contractor is responsible for the measurements/counts for these items, and payment for the certified quantities ~~shall~~**must** be approved by the Engineer. If the Engineer disputes a quantity certified by the Contractor, the Engineer must request justification for the disputed quantity from the Contractor. The Engineer must ~~document in detail if provide~~ detailed documentation for the ~~unapproved~~ quantity ~~certified is not approved~~.

The form ~~shall~~**must** be signed by both the Contractor's Authorized Agent and the Worksite Traffic Supervisor, then submitted monthly to the PA for payment. The intent is to have two different individuals sign this form for checks and balances. The ~~The Contractor's Authorized Agent must be an employee of the Prime, and the WTS must be Advanced MOT Certified per **Specification Section 105-8.3**. If the same individual signs for both the Contractor's Authorized Agent and the WTS, the PA must verify this individual holds both positions and is Advanced MOT Certified.~~ The PA will submit these certifications with the **Final Estimates Documentation**. ~~The Contractor's Authorized Agent must be an employee of the Prime.~~

~~This form is not used on Lump Sum and Design-Build contracts. See **CPAM Section 6.2** for more information.~~

NOTE 41: For the Lump Sum Pay Item 710-90, the Contractor should ~~document~~**reflect** the quantity as a percentage (in decimal form) on the daily worksheet, ~~so to report the cumulative quantity~~ when ~~the~~ monthly certified sheet is tabulated ~~the cumulative quantity is reported~~. The total quantity should be 1 Lump Sum (LS) once the Contractor completes this pay item.

NOTE 52: Payment under the Lump Sum Pay Item 710-90 ~~shall~~**will** only be made when the final lift of asphalt placement is complete. All intermediate stages of asphalt placement requiring striping are paid under the appropriate pay items.

NOTE 63: The Department's representative is not required to check or record MOT Signs and Striping quantities ~~on a daily basis~~. During the estimate period, randomly spot ~~checks shall be made~~**check** and documented ~~ed. these quantities~~. These checks can be achieved in a combined effort with the Contractor. ~~This approach should to~~ minimize disputed

quantities. The Contractor is responsible for supplying the Department with accurate documentation of quantities.

NOTE 74: For RPM's (706-1 pay item), it is not intended for the Resident Offices to count individual RPM's. Using the Station-to-Station length divided by the RPM spacing will suffice.

(C) Form 700-050-70, Traffic Marking Certification (Worksheet)

This form is used for recording Initial Retroreflectivity Reading of White/Yellow Pavement Markings, Thickness, and Wet Weather in accordance with **Florida Method FM 5-541**, per **Specifications Section 710**. This form will also be utilized on Lump Sum and Design-Build Projects. See CPAM Section 6.2 for more information.

~~The Contractor has~~ It is the Contractor's responsibility ~~to of~~ measuring, recording, and certifying the Retroreflectivity on the Department's approved form and to submitting it to the PA. This form is signed by both the Contractor ~~or his representative's~~ Authorized Agent and the Worksite Traffic Supervisor as stated in section 5.15.6(B) above.

The Department reserves the right to test the markings after three (3) days of receipt of the **Contractor's Certification**. Failure to allow the Department to complete this task will result in non-payment to the Contractor.

~~This form shall also be utilized on Lump Sum and Design-Build Projects. See CPAM Section 6.2 for more information.~~

~~5.14.85.14.1~~ Approved Products List (APL) Item Records

~~(A)~~ Contractor Responsibilities

~~The Contractor should provide APL numbers corresponding to pay items intended for use on the project to the PA (or designee) for record and verification. This includes items incorporated in the project on a permanent basis and all MOT items.~~

~~On projects with a Non-Standard Job Guide Schedule (JGS), the Contractor shall include all MAC Materials for APL Tracking samples under the Materials tab in the Materials Acceptance and Certification system (MAC) so project personnel have the ability to enter the APL Tracking Samples. In addition, the Contractor shall continue to include the APL Spec Categories used on the project under the APL Specs tab.~~

~~(B)(A)~~ Resident Office Responsibilities

~~The PA (or designee) shall verify the APL information for specification conformance, including any comments, statuses, or limitations on the product in the Product Acceptance and Tracking History (PATH) application before the item is placed on the project. The PA (or designee) will enter APL Tracking samples into MAC prior to payment on the monthly estimate. For instructions, see the MAC website.~~

~~PAs shall confirm that all APL method of acceptance requirements are listed on the JGS on projects with a Standard JGS in MAC. On projects with a Non Standard JGS, the PA shall ensure the Contractor has included all MAC Materials under the Materials tab and APL Spec Categories used on the project under the APL Specs tab. Material Certification (MC) Reviewers will review the JGS and confirm that product(s) are entered in MAC for each MAC Material as part of the MC Review in MAC and coordinate with the PA if there are any questions about the use of APL products.~~

5.14.9 Notifying the District Materials Office of Rock Base Measurements

~~(A)~~ Resident Office Responsibilities

~~The PA shall notify the District Earthwork Coordinator or designee of the anticipated date and time of base measurements, whenever there is a measurement that requires Construction Training and Qualification Program (CTQP) qualified Earthwork Technicians to perform field measurements of base thickness. This notification process is the only efficient way the District Materials Office Staff can learn of upcoming base depth measurements.~~

~~5.14.105.14.1~~ Bulk Weight Final Pay Records

~~Certified weight tickets for certain bulk weight shipments are acceptable as final payment records under the following conditions:~~

~~(A)(a) All weighing is done on state certified scales. The ticket must indicate gross, tare, and net weight.~~

~~(B)(a) The State of Florida will recognize any scale that has been certified by a state agency outside Florida using traceable standards. All 50 states have adopted and use the same laws as Florida NIST Handbook 44.~~

- ~~(C)(a) Project personnel will record each truck number and time of loading, on **Form 700-050-56, Daily Log Sheet Miscellaneous Tabulation Form Site Source Record** at the rail head site.~~
- ~~(D)(a) All rail cars are visually inspected to ensure all material has been unloaded.~~
- ~~(E)(a) Material remaining in cars after job completion is to be hauled by truck to state certified scales and determine gross, tare, and net weights to make appropriate deductions from the car weights.~~
- ~~(F) Hauling will be done in covered trucks to minimize loss of material. The single car weight is more accurate than weighing numerous trucks and with the **Form 700-050-56, Miscellaneous Tabulation** system as outlined above.~~

~~5.14.115.14.7 Fuel and Bituminous~~ Adjustments

~~Fuel Adjustments~~

~~On Applicable Contracts with an original Contract Time in excess of exceeding 120 calendar days, ~~the Department will make~~ receive price adjustments on the portion of the Current Fuel Price (CFP) that varies by more than 5% of the Base Fuel Price (BFP). The adjustment will be made on each applicable progress estimate to reflect increases or decreases in the price of fuel from those in effect for the month in which bids were received. ~~(See (BFP) per Specifications Section 9-2.1.1.)~~ When an estimate is generated, fuel adjustments ~~will be~~ automatically calculated per the Specifications using pre-determined fuel factors for applicable pay items and the Price Index Tables.~~

A complete list of ~~items that require~~ items eligible for fuel adjustments, according to contract letting date, can be found on the Department's Construction Web site at: **Fuel and Bituminous Forms (fdot.gov)**. Fuel adjustments for this list of pay items will generate automatically in AASHTOware Project Construction (PrC) for conventional Contracts.

<http://www.fdot.gov/construction/fuel&bit/Fuel&Bit.shtm>

NOTE 1: ~~Fuel adjustments for this list of the following~~ pay items will be generated automatically calculated in AASHTOware Project Construction (PrC) ~~the~~ **Fuel Adjustment Report** for conventional Contracts and will need to be entered manually into PrC as a line item adjustment.

- Clearing and grubbing
- Structural Steel
- Black base option
- Composite base option

NOTE 41: To calculate manual fuel adjustments corresponding to thickness/ or 105%/110% pay quantity, ~~and spread rate~~ adjustments ~~(see CPAM 11.4, Attachment A, Example 1 and 2)~~, utilize the Contractor's Lump Sum & Design Build [Fuel Adjustment Certification](#). See **CPAM 11.4** for examples.

NOTE 2: Effective for contracts let January 2022 and forward, fuel adjustments will only be made on diesel fuel. ~~the **Fuel Adjustment Report** by following the steps below and will need to be entered **manually** into PrC as a line item adjustment:~~

NOTE 3: Contracts let in April 2021 and after are not eligible to receive fuel adjustments for clearing and grubbing.

~~(A) — **Fuel adjustments for the following pay items will be calculated in the *Fuel Adjustment Report*:**~~

~~(B) — **Clearing and grubbing**~~

~~(C) — **Black base option**~~

~~(D) — **Structural Steel**~~

~~(E) — **Composite base option**~~

~~(F) —~~

~~(G)(A) **Fuel Adjustment Report**~~

To access the *Fuel Adjustment Report*, follow the steps below:

- (1) Access the [State Construction Office application](#)
- ~~(1)~~ Login
- (2)
- ~~(2)~~(3) Select *Reports*, then select *Central Office (StateWide Reports)*
- (4) Select the *Estimate* tab, then click *Fuel Adjustment*

~~The steps below explain how to~~To create the ~~the~~ Fuel Adjustment Report, follow the steps below:

- ~~(1) Enter the Contract ID~~ and
- ~~(2) Enter the estimate number the Adjustment Report is being created for. The estimate number is a four-digit field and only one estimate can be run at a time. Click "Get" to generate the report (if there is no Black Base Option or Composite Base Option included in the Contract).~~
~~Enter the estimate number the Adjustment Report is being created for. The estimate number is a four-digit field. Reports can and only be created for one estimate can be run at a time.~~

~~(3)~~

Get Fuel Adjustment report

Report File Name* Contract Id* Estimate #:(example: 0001)*

Fuel Adjustment T6168 0007

Other Adjustments Over ride Index Flag

Output Formats

PDF

*Denotes Required Fields

~~(1)~~

~~If the Fuel Adjustment "flag" was not set in PrC, select the "Over ride Index Flag" option before generating the report.~~

Over ride Index Flag

~~If (if there is not an All no Black Base Option or Composite Base Option included in the Contract, then click "Get" to generate the report.~~

~~Enter the adjustments manually in PrC as a line item adjustment as required. The report cannot write the adjustments back). Steps to PrC.~~

~~(1) Using create a **Fuel Adjustment Report** for the Black Base or Composite Base Option~~

~~If there is an All Black Base or Composite Base Option, select the "~~

Other Adjustments

Get Fuel Adjustment report

Report File Name* Contract Id* Estimate #:(example: 0001)*

Fuel Adjustment T5686 0007

Other Adjustments Over ride Index Flag

Output Formats

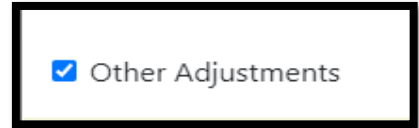
PDF

*Denotes Required Fields

(B) Fuel Adjustment Report (Black Base or Composite Base Option)

To create a Fuel Adjustment Report for Black Base or Composite Base, follow the steps below:

- (1) Enter the Contract ID and estimate number the Adjustment Report is being created for.
- (2) Select the “Other Adjustments” check box.
The FIN Project ID and the Base Items fields will be populated with any associated pay items to the contract.
- (3) Select the Optional Base Item.
- (4) Select the FIN Project ID to calculate the fuel adjustment for the Optional Base quantity.
- (5) Only enter the quantity of Black Base (or Composite Base) and select “Add Selected” to add the quantities to the “Items” Field.
- (6) Repeat as needed, then select “Get” to generate the report.



NOTE 4: If paying for a mixture of optional bases on this estimate, the Daily Work Report (DWR) quantity will be the total of Asphalt and Limerock pay areas.

- ~~— Select the Optional Base Item~~
- ~~— Select the FIN Project ID and Optional Base Item to calculate the fuel adjustment for the Black Asphalt Optional Base quantity.~~
- ~~— Only enter the quantity of Black Base (or Composite Base) and select “Add Selected” to add the quantities to the “Items” Field.~~
- ~~— Repeat as needed, then select “Get” to generate the report.~~
- ~~— **NOTE 32:** If paying for a mixture of optional bases on this estimate, the Daily Work Report (DWR) quantity will be the total of Asphalt and Limerock pay areas. Only enter the quantity of Black Base (or Composite Base) and select “Add Selected”. Repeat as needed, then select “Get” to generate the report.~~

(2)(1) Sample Fuel Adjustment Report for Asphalt Base Example

In this example, the DWR quantity is 192.24 SY, of which, only 50.0 SY is Asphalt Base.

After adding the report parameters (shown above) and generating the report, the adjustment amount for diesel for the Asphalt Base will be shown. The adjustment amount

		PrC Total:	\$165.30
		Manual Total:	\$0.00
Diesel Adjustment			
0105	0160 4	25.300 SY	.1196 .659
0110	0285715	192.240 SY	.4359 .659
Asphalt Base option for quantity		192.24 fuel adjustment of \$	147.56 **
0120	0334 1.13	22.430 TN	4.6220 .659

generated in this report (\$38.38) will ~~needs~~ to be added to PrC as a manual line-item adjustment.

However, if all the DWR quantity (192.24 SY) is Asphalt Base, enter this amount into the quantity field. This will make the adjustment on the entire DWR quantity and generate the adjustment amount (\$147.56) shown below.

Diesel Adjustment						
0105	0160	4	25.300	SY	.1196	.659
0110	0285715		192.240	SY	.4359	.659
Asphalt Base option for quantity		192.24 fuel adjustment of \$	147.56 **			
0120	0334	1.13	22.430	TN	4.6220	.659

~~(H)~~ _____

~~(I)~~ _____

~~(J)~~ _____

~~(K)~~ _____

~~(L)~~ _____

~~(M) However, if all the DWR quantity (192.24 SY) is Asphalt Base, enter this amount into the quantity field. This will make the adjustment on all of the~~

Diesel Adjustment					
0105	0160	4	25.300	SY	.1196 .659
0110	0285715		192.240	SY	.4359 .659
Asphalt Base option for quantity			192.24	fuel adjustment of \$	147.56 **
0120	0334	1.13	22.430	TN	4.6220 .659

~~entire DWR quantity.~~

~~(N) Using the Clearing & Grubbing or Steel LS overrun~~

~~(C) To use the Fuel Adjustment Report for Clearing and Grubbing or Steel LS Overrun, part of the Fuel Adjustment Report, the Acres that this LS pay item is to~~

Site Manager Total:	\$165.30
Manual Total:	\$.00
Total Amount:	\$165.30
** Adjusted Amount:	\$38.38
Adjusted Total:	\$203.68

~~be adjusted by must be known. The Steel overrun portion will work in a similar way.~~

To create a Fuel Clearing and Overrun, follow

Adjustment Report for Grubbing or Steel LS the steps below:

~~NOTE 1: Effective for contracts let April 2021 forward, clearing and grubbing will not be eligible to receive fuel adjustments.~~

- ~~(1) Select the "Other Adjustments" check box. Enter the Contract ID and estimate number the Adjustment Report is being created for.~~
- ~~(2) Select the "Other Adjustments" check box.~~
- ~~(3) Select the adjustment type.~~

(4) The FIN Project ID list and pay item will automatically ~~be populated after selecting the adjustment type~~ populate.

Other Adjustments Over ride

Types*	Projects*	Clearing & Grubbing*	Qty*
<ul style="list-style-type: none">Black BaseClearing & GrubbingComposite BaseSteel	<ul style="list-style-type: none">4235721520142357225201	<ul style="list-style-type: none">0075:0110 1	0

(5) After selecting Select the project and pay item FIN Project ID to which calculate the fuel adjustment will be made, enter.

(6) Enter the quantity (in Acres) of the overrun adjustment. Then and select the "Add

Other Adjustments Over ride Index Flag

Types*	Projects*	Clearing & Grubbing*	Qty*	Items
<ul style="list-style-type: none">Black BaseClearing & GrubbingComposite BaseSteel	<ul style="list-style-type: none">4235721520142357225201	<ul style="list-style-type: none">0075:0110 1	5	CLRGRB:42357215201:0075

Selected" button" to add the quantity to the "Items" box. (See below.) Field.

By selecting the "Select "Get" button," to generate the report will be generated.

(7) **NOTE 43:** Contracts let in April 2021 and after are not eligible to receive fuel adjustments for clearing and grubbing. Contracts let January 2022 and after, will only receive adjustments on diesel fuel for eligible pay items.

(1) Sample Fuel Adjustment Report for Clearing & Grubbing or Steel LS overrun Example

In this example, the Clearing and Grubbing quantity being adjusted is 5 Acres (the acres this LS pay item is being adjusted by must be known). The overrun of Clearing and Grubbing can be found under the Diesel and Gasoline adjustment for this pay item. The

The screenshot shows a software interface for 'Other Adjustments'. At the top, there are two checkboxes: 'Other Adjustments' (checked) and 'Over ride Index Flag' (unchecked). Below this is a table with the following columns: 'Types*', 'Projects*', 'Clearing & Grubbing*', 'Qty*', and 'Items'. The 'Types*' dropdown menu is open, showing options: 'Black Base', 'Clearing & Grubbir', 'Composite Base', and 'Steel'. The 'Projects*' dropdown menu shows several project IDs. The 'Clearing & Grubbing*' dropdown menu shows '0005:0110 1 1'. The 'Qty*' field contains the number '5', with a red arrow pointing to it. The 'Add Selected' button is highlighted with a red box. Below the 'Add Selected' button are 'Remove Selected' and 'Remove All' buttons. The 'Items' column contains the text 'CLRGRB;43667915201:0005'.

Project personnel will need to make individual line-item adjustments for each dollar amount associated with Clearing and Grubbing in PrC, if applicable.

Ln #	Item Code	Est Qty	Unit	Qty	Unit	Adjustment Factor	Index Difference	Adjustment Amount
Diesel Adjustment								
0075	0110 1 1	.900	LS	2.900	AC	45.6400	-2.1755	-\$259.15 **
Item 0110 1 1 Over Run		5.000	AC adjustment of \$					-\$496.45 **
0085	0120 1	3895.000	CY			.2015	-2.1755	-\$1,707.57 *
0095	0285709	6181.000	SY			.4359	-2.1755	-\$5,862.06 *
0100	0327 70 8	6307.000	SY			.0912	-2.1755	-\$1,251.31 *
0105	0334 1 24	5222.980	TN			4.6220	-2.1755	-\$52,522.81 *

The dollar

Site Manager Total:	-\$61,343.75
Manual Total:	-\$259.15
Total Amount:	-\$61,343.75
** Adjusted Amount:	-\$755.60
Adjusted Total:	-\$62,099.35

report will automatically add the total amount for all Diesel adjustments.

Example:

-\$259.15	\$136.57
-\$496.45	\$547.59
+ -755.60	+ 684.16

PrC Total:	\$2,056.61
Manual Total:	\$136.57
Total Amount:	\$2,056.61
* Adjusted Amount:	\$684.16
Adjusted Total:	\$2,740.77

5.14.125.14.8 Bituminous Adjustment

~~Applicable~~ contracts will receive ~~amonthly~~ bituminous adjustments if the Contract has an original ~~contract~~ time of more than 365 calendar days or more than 5,000 tons of asphalt concrete. The Department will adjust the price for bituminous material, excluding cutback and emulsified asphalt, to reflect ~~either~~ increases or decreases in the **Asphalt Price Index (API)** of bituminous material from that in effect during the month in which ~~the bids were~~ received. (See **Specifications Section 9-2.1.2.**) The Department will determine the API for each month and post it on the Construction website. ~~When an estimate is generated, Bituminous Adjustments must be calculated per the Specifications using the Asphalt Price Index and the PA must add a manual line item adjustment to the estimate. Asphalt Price Indexes can be found on the Department's Construction website at:~~

<http://www.fdot.gov/construction/fuel&bit/Fuel&Bit.shtm>

~~For each monthly progress estimate, Bituminous adjustments will be made only when the current API (CAPI) varies by more than 5% of the base API (BAPI) and only on the portion that exceeds 5%. The Contractor will prepare, sign, and submit not be given the option to accept or reject the PA adjustment.~~

~~It is the Contractor's responsibility to provide a Contractor's Certification of Quantities to the PA, using the Department's current approved Form 700-050-66, which can be found at:~~

<http://www.fdot.gov/construction/fuel&bit/FuelForms.shtm>

~~This <https://www.fdot.gov/construction/fuel-bit/fuelforms.shtm>. The form will include the tonnage placed and accepted for the asphalt items that will applicable to receive a bituminous adjustment during the progress estimate cutoff period. Adjustments will only be made on for work accepted by the Department. If an adjustment is made and the work is later determined to be unacceptable, a deduction to the adjustment will be made on the~~

next progress estimate. The asphalt items will be reported on the lead FIN Project ID ~~in order~~ to receive payment. (See [Attachment 5.14-7](#) for a sample Contractor's Certification of Quantities.)

NOTE 1: The Department will make a Bituminous Adjustment for Polymer PG76-22 Binder on all Contracts. The Criteria for Polymer PG76-22 will be as stated above. When a Composite Base item is specified in the Plans, a price adjustment for bituminous material will apply to ~~that~~the asphalt portion ~~of the base only, according to per~~ **Specifications Section 9-2.1.2.**

(A) Resident Office Responsibility

The Resident Office (RO) personnel will ~~verify monthly ensure~~ the appropriate fuel and bituminous ~~material on projects that meet~~adjustments are applied to each monthly progress estimate. It is the RO's responsibility to obtain bituminous certifications from the Contractor monthly and spot check the forms for quantity errors, indexes, dates, etc. to ensure the criteria ~~specified in~~ **Specifications Section 9** is met. Fuel and bituminous adjustments will be based on the index of the estimate period the work was completed, not the estimate period of payment. ~~Fuel and bituminous adjustments will be based on the index of the estimate period the work was completed, not the estimate period of payment.~~ This is ~~especially~~particularly important for adjustments made after final acceptance.

When an estimate is generated, Bituminous Adjustments must be calculated per the Specifications using the Asphalt Price Index and the PA must add a manual line-item adjustment to the estimate. Asphalt Price Indexes can be found on the Department's Construction website at: <https://www.fdot.gov/construction/fuel-bit/fuel-bit.shtm>.

The PA ~~shall~~will ensure the running total of each item's tonnage in the QCRR for the period represented and compare to the Certification of Quantities submitted. Any discrepancies must be resolved with the Quality Control (QC) Manager before authorizing payment on the progress estimate. If a Certification of Quantities has been determined to show tonnage that wasn't accepted on the project, the QC Manager must be notified for justification and/or correction. The Certification of Quantities must be inputted into EDMS for reference as Final Estimates Documentation backup.

NOTE 24: Bituminous Certifications that have been approved and paid on a previous progress estimate should not be retracted and revised if errors are discovered. Bituminous corrections are allowed, but should be done must be completed on the current/next progress estimate and make a note of the correction documented on the

current/next certification. For the removal and replacement asphalt adjustment process, see Example 2 above and **CPAM 11.4.4.3.**

NOTE 32: For Fuel and Bituminous Material Adjustments on Lump Sum, Design-Build, and other Alternative Contracts, refer to **CPAM Section 6.2.**

(1) Examples

Example 1: After final acceptance, the project personnel found that fuel adjustments for black base were not applied during the contract. The project personnel ~~would~~will manually calculate the fuel adjustments based on the index for each estimate period the asphalt was completed, not the fuel index for the month of the final estimate. The Lump Sum & Design Build Fuel Adjustment Certification can be used to generate the adjustment amount.

Example 2: Asphalt was placed on the mainline for payment during the May estimate period, but 50 feet required removal and replacement due to a material failure. The contractor performed the removal and replacement during the July estimate period. When the bituminous adjustment corrections are made, the removal correction will be made at the May index, and the placement will be at the July index. The Lump Sum & Design Build Asphalt & Bituminous Adjustment Certification can be used to generate the adjustment amount.

Example 3:- Asphalt was incorrectly reported in the **QCRR** for an estimate period, and fuel & bituminous adjustments were paid on that amount. The following month ~~if~~the QCRR ~~is~~was corrected, ~~fuel.~~ Fuel and bit adjustments ~~should~~will be ~~applied on the amounts corrected, as well as the asphalt for the corrected amounts. Adjustments will also be calculated for the amount~~ placed in the new estimate period. ~~These~~The revised fuel and bit adjustments can be calculated using the Lump Sum & Design Build Certifications, and the difference ~~on what should be paid between the corrected adjustment and the current adjustment~~ will be entered as a line item adjustment on the pay item.

~~The PA shall ensure the running total of each item's tonnage in the **QCRR** for the period represented and compare to the **Certification of Quantities** submitted. **Any discrepancies shall** be resolved with the Quality Control (QC) Manager before authorizing payment on the progress estimate. If a **Certification of Quantities** has been determined to show tonnage that wasn't accepted on the project, the QC Manager must be notified for justification and/or correction. The Certification of Quantities must be inputted into EDMS for reference as **Final Estimates Documentation** backup.~~

~~**NOTE 1:** Bituminous Certifications that have been approved and paid on a previous progress estimate should not be retracted and revised if errors are discovered. Bituminous corrections are allowed, but should be done on the current/next progress estimate and make a note of the correction on the current/next certification. For the removal and replacement asphalt adjustment process, see Example 2 above and **CPAM 11.4.4.3.**~~

~~**NOTE 2:** For Fuel and Bituminous Material Adjustments on Lump Sum, Design-Build, and other Alternative Contracts, refer to **CPAM Section 6.2.**~~

5.14.9 Approved Products List (APL) Item Records

(A) Contractor Responsibilities

~~The It is the Contractor's responsibility to should provide APL numbers corresponding to for pay items intended for use on the project. APL numbers are provided to the PA (or designee) for record and verification. This includes items incorporated in the project on a permanent basis and all MOT items.~~

~~On projects with a Non-Standard Job Guide Schedule (JGS), the Contractor shall include must assign all MAC Materials for APL Tracking samples under the Materials tab in the Materials Acceptance and Certification system (MAC) sefor project personnel have the ability to enter the APL Tracking Samples. In addition, the Contractor shall must continue to include the APL Spec Categories used on the project under the APL Specs tab.~~

(B) Resident Office Responsibilities

~~The PA (or designee) shall will verify the APL information for specification conformance before the item is placed on the project. Verification is done by reviewing, including any comments, statuses, or limitations on the product in the Product Acceptance and Tracking History (PATH) application before the item is placed on the project. The PA (or designee) will enter APL Tracking samples into MAC prior to payment on the monthly estimate. For instructions, see the **MAC website**.~~

~~PAs shall must confirm that all APL method of acceptance requirements are listed on the JGS on projects with a Standard JGS in MAC. On projects with a Non-Standard JGS, the PA wishall ensure the Contractor has included all MAC Materials under the Materials tab and APL Spec Categories used on the project under the APL Specs tab. Material Certification (MC) Reviewers will review the JGS and confirm that product(s) are entered~~

in MAC for each MAC Material as part of the MC Review in MAC and coordinate with the PA if there are any questions about the use of APL products.

5.14.135.14.10 Cutoff Period

All **Certifications of Quantities** worksheets submitted by the Contractor ~~need to~~must represent the amount of material placed on the project and accepted by the Department for the estimate cutoff period. The estimates cutoff dates are provided on the State Construction Office website:

~~<http://www.fdot.gov/construction/CONSTADM/EstimatesCutOff.shtm>~~ at:
~~<http://www.fdot.gov/construction/CONSTADM/EstimatesCutOff.shtm>~~

The Contractor must request payment by submitting a **Certification of Quantities** no later than twelve o'clock noon on Monday ~~after~~following the estimate cut-off or as directed by the PA. This is in accordance with **Specifications**. The Contractor's submitted quantities must be approved by the PA. Any disputed quantities ~~need to~~must be reconciled as soon as possible.

All digital signatures must be verified prior to acceptance by the Department. The RO must ensure each digital signature is from an approved digital signature authority and valid at the time the document was signed. The RO must also verify the document was not altered after the digital signature was applied.

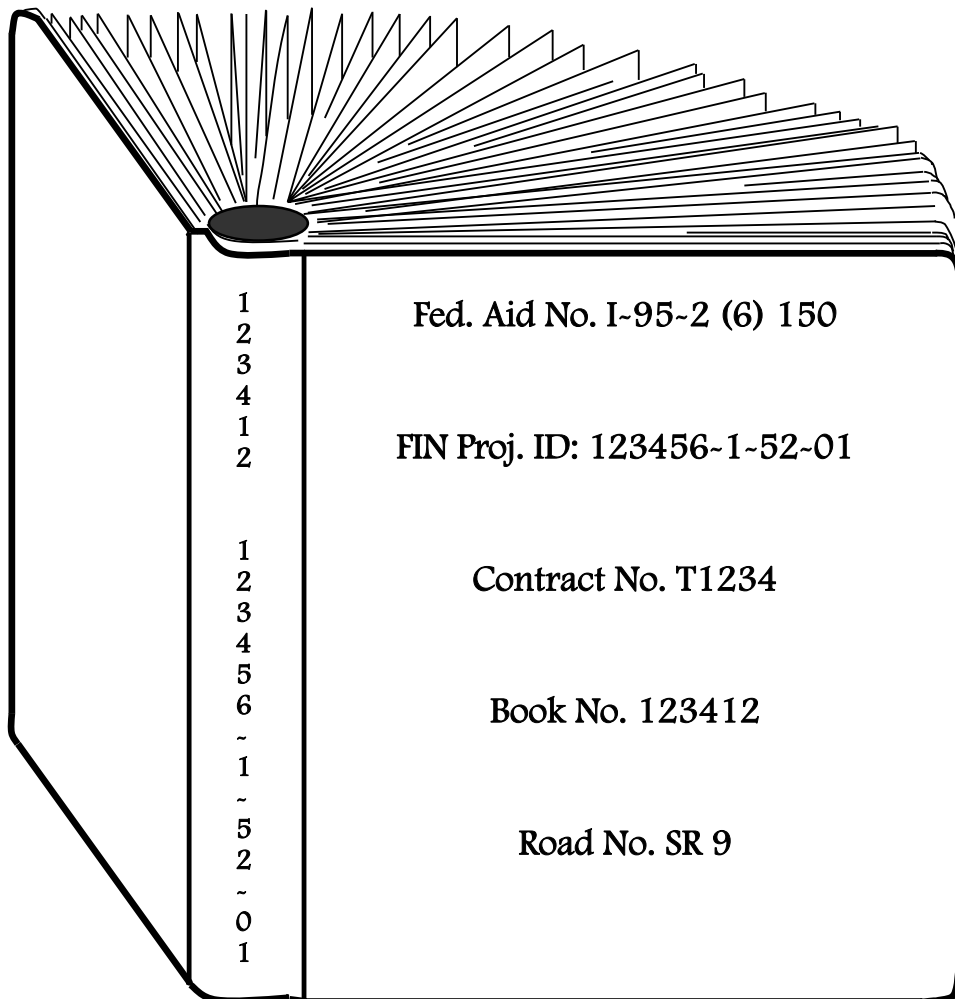
5.14.145.14.11 Forms

The forms referenced in this manual can be found on the Department's website: <https://pdl.fdot.gov/>. Official forms provided by the Department ~~shall~~will be used without alteration or modification.

5.14.155.14.12 Attachments

<u>Attachment 5.14-1</u>	Field Book Identification
<u>Attachment 5.14-2</u>	Barge Displacement Calculation
<u>Attachment 5.14-3</u>	Toe Wall Calculation
<u>Attachment 5.14-4</u>	Delivery Ticket
<u>Attachment 5.14-5</u>	Sketch of Riprap Structure
<u>Attachment 5.14-6</u>	Sand Cement Riprap Pay Analysis
<u>Attachment 5.14-7</u>	Contractor's Certification of Quantities

**Attachment 5.14-1
FIELD BOOK IDENTIFICATION**



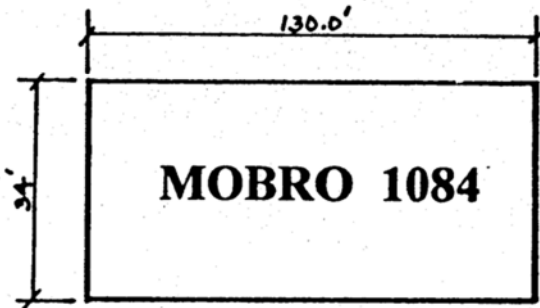
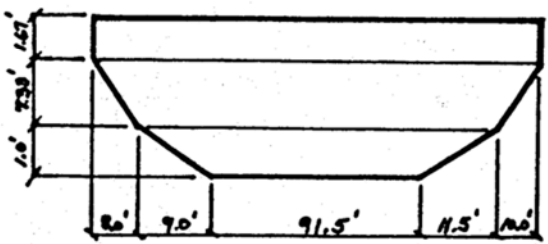
Attachment 5.14-2 BARGE DISPLACEMENT CALCULATION

BARGE WEIGHT CALCULATION EXAMPLE

Barge Material Delivery

	IN	Dec. 11, 1989
	OUT	Dec. 12, 1989

**MATERIAL 300 - 5000
rubble rip rap**

LOADED DRAFT

Port Forward	6.6
Port Aft	6.7
Starboard Forward	7.0
Starboard Aft	7.1
Average	6.85

LIGHT DRAFT

Port Forward	2.3
Port Aft	2.6
Starboard Forward	2.3
Starboard Aft	2.5
Average	2.43

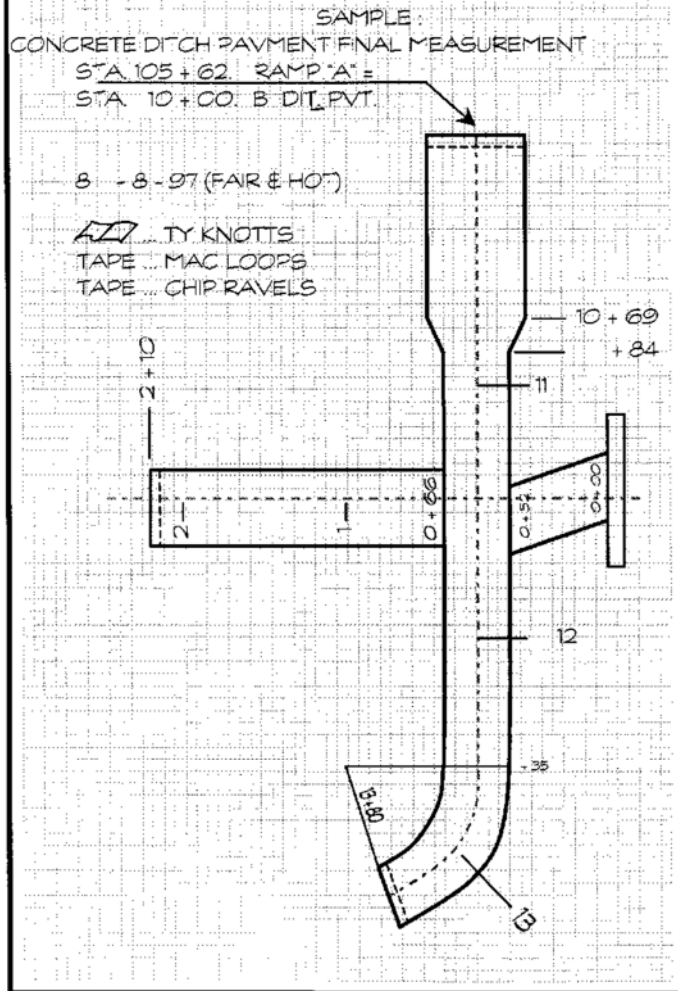
Water line length at average loaded draft	126.36	
Water line length at average light draft	115.51	Bilge Correction
Net average water line length	120.94	-0-
Shape correction	-0-	Average
Average water line length	120.94	2.43

Average Difference in Light and Loaded Draft 4.42

Tonnage Computations: = 120.94' x 34' x 4.42' x [64(lb/cf)/2000(lb/ton)] =
 = 581.6 Tons

Note for unit weight of water: Sea Water = 64.0 lb/cf and Fresh Water = 62.4 lb/cf

Attachment 5.14-3 TOE WALL CALCULATION




DITCH PAVT. LT. 105 + 62		DITCH PAVT. LT. RAMP 'A'	
STA	MEAS 'M'	STA	MEAS 'M'
0+00	39.2	10+00	20.2 W=8.5
-20	39.4	+50	20.0
+40	42.3	+69	20.1
+52	42.2 BK	+84	16.3
EXCEPTION			
+66	42.5 AH	11+00	16.1
+80	40.8	+50	16.2
1+00	41.0	12+00	16.3
+50	41.0	+35	16.9
+75	40.7	+50	17.0
2+00	40.5	3+00	17.3
+10	40.3 W=38.7	+50	17.2
	8,001.35 S.F.	+80	17.4 W=16.7
3.5 * 38.7 =	+135.45 S.F.		6,612.4 S.F.
	8,136.80 S.F.		+123.2 S.F.
			6,735.6 S.F.
		18.5	
		+6.7	
		3.5 * 35.2 =	123.2 S.F. (Toewalls)

MEASUREMENT 'M'
 IS ALONG THE SURFACE

VOLUME OF CONCRETE IN TOEWALLS ARE COMPUTED AS EQUIVALENT SQUARE FEET. IE, 6" thick + 3" increments = 2 x Height of toewall. (2 x 1.75' = 3.5' x 'W') = Equivalent S. F.

Attachment 5.14-4 DELIVERY TICKET



FLORIDA MINING & MATERIALS
 CONCRETE PRODUCTS
 LEE DIVISION
 P.O. BOX 2376, 2858 FORD STREET, FT. MYERS, FLORIDA 33902, PHONE (813)334-4521

Plant No. 03-004 Del. Ticket _____
 Serial No. _____
 Date: _____ 19 _____

Delivered To: _____
 Address _____

F.D.O.T. Fin. Proj. ID. _____

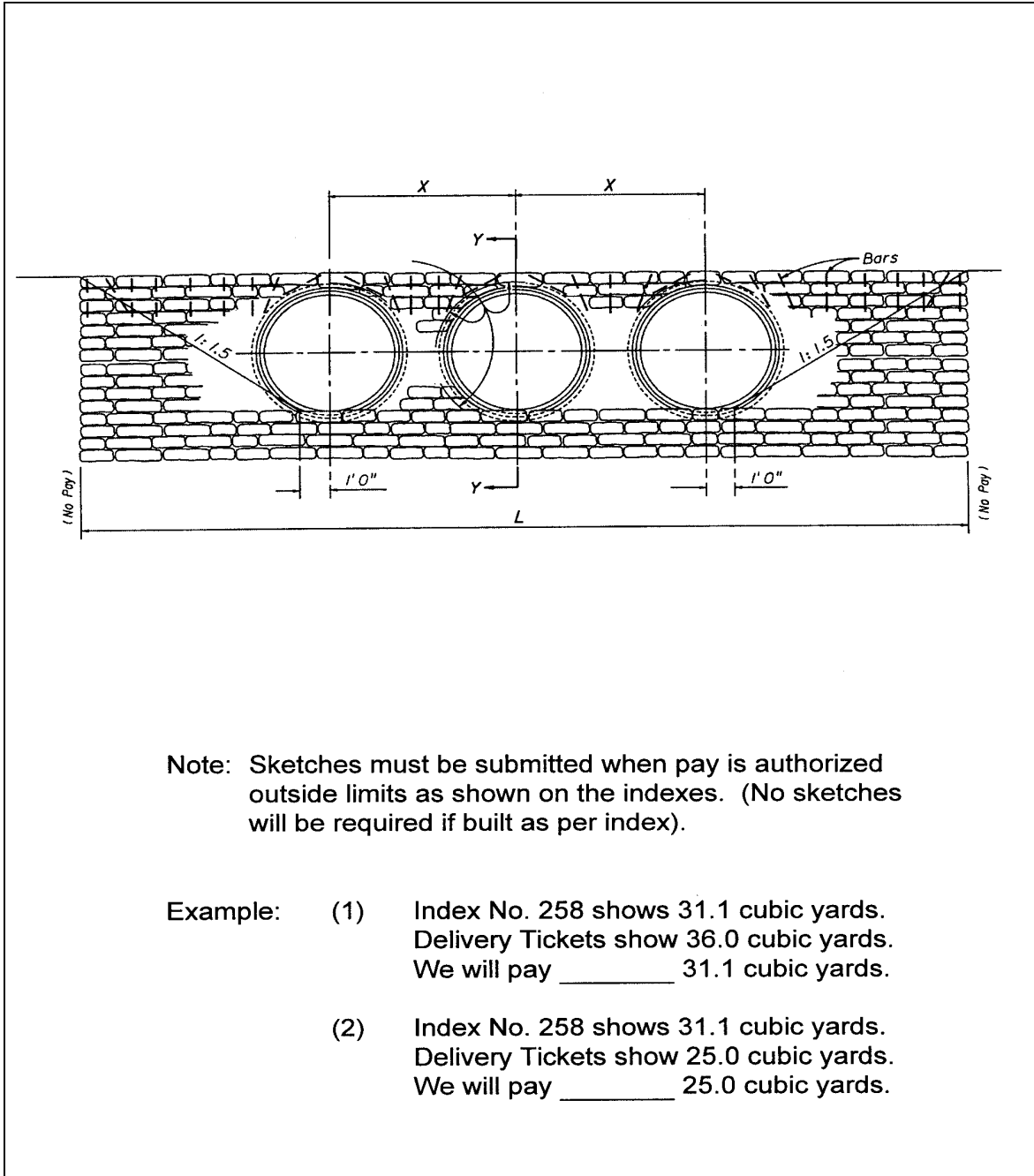
Truck No.	DOT Class	DOT Mix NO.	Cubic Yards This Load
Time Loaded	Arrived	Discharged	Cubic Yards Total Today
Allowable Jobsite Water Addition gals./cu. yd.		Mixing Revolutions:	At Plant: At Jobsite:
FILL OUT ON FIRST DELIVERY AND ON EACH CHANGE OF AGGREGATE WEIGHTS			
Cement _____ Brand _____ Amount _____	Air _____ MBVR _____	Amount _____ oz.	
Course Agg. _____ % Moisture _____ Amount _____	Retarder _____ MBL-80 _____	Amount _____ oz.	
Fine Agg. _____ % Moisture _____ Amount _____	Fly Ash _____ Source _____	Amount _____	
Batch Water (Gals.) _____ Amount _____	Course Agg. DOT Pit # _____	S.C. _____	
	Fine Agg. DOT Pit # _____	S.C. _____	

Issuance of this ticket constitutes certification to the accuracy of the above recorded information

Signature of Plant Operator or Company Rep.

WATER ADDED ON JOBSITE _____ GALLONS
 ADDITIONAL MIXING REVOLUTIONS _____

Attachment 5.14-5 SAMPLE SKETCH OF RIPRAP STRUCTURE




Attachment 5.14-6 SAND CEMENT RIPRAP PAY ANALYSIS

Step 1 <u>STRUCTURE QUANTITY DETERMINATION</u>	
Approved Quantity Dimension = 31.1 cu. yds.	
Step 2 <u>DELIVERY QUANTITY DETERMINATION</u>	
Prebag ticket Delivery tickets	<u>Example</u> <u>Tally Book Summary</u>
Delivery tickets must be submitted showing the weights of sand & cement actually used for each delivery Ticket.	Jan. 9, 1990 = 8 cy = sand = 18,360 lbs. = cement = 4,064 lbs. Jan.10,1990 = 8 cy = sand = 18,360 lbs. = cement = 4,064 lbs. Jan.11,1990 = 8 cy = sand = 18,360 lbs. = cement = 4,064 lbs. Jan.12,1990 = 8 cy = sand = 18,360 lbs. = cement = 4,064 lbs. <u>32 cu. yds.</u>
Note: Whichever is the lesser of Step 1 or Step 2 above, shall be paid. In the above example the structure quantity should be paid. If the delivery ticket quantity had been less than the structure quantity, the actual quantity delivered would have been paid.	
Step 3 <u>5:1 DETERMINATION</u>	
I.	Computations to check for the actual ratio of the 5:1 mix : $18,360 \text{ lbs sand} + 85 \text{ lbs/cf} = 216 \text{ cf}$ $4,064 \text{ lbs cement} + 94 \text{ lbs/cf} = 43.2 \text{ cf}$ $216 \div 43.2 = \underline{5.0}$, therefore this is a 5:1 mix, as required.
II.	CONSIDER: If the 5:1 mix had not been achieved, and the mix was allowed to be placed on the project, the following documentation is required: A. C-165 with negotiated pay reduction. B. Supplemental Agreement revising the unit price.

**Attachment 5.14-7
CONTRACTOR'S CERTIFICATIONS OF QUANTITIES
(FORM 700-050-66)**

Contractor's Certification of Quantities Asphalt Mixes with Modified and Unmodified Binders (Conventional Projects) Certification No. <u>9</u>			
Financial Project ID: <u>654321-52-01</u>			
Contractor: <u>We Got Asphalt, Inc.</u>			
Contract Number: <u>X1234</u>			
From (Mo/Day/Yr): <u>01/16/17</u>		To (Mo/Day/Yr): <u>02/19/17</u>	
Asphalt Mixes with Unmodified Binders (PG 67 & Lower)			
Pay Item Number:	<u>334-1-13</u>	Tonnage Placed:	<u>341.4</u>
Pay Item Number:	<u> </u>	Tonnage Placed:	<u> </u>
Pay Item Number:	<u> </u>	Tonnage Placed:	<u> </u>
Additional Gallons (ARMI*):			
Base Index Month:	<u>May-15</u>	Base Asphalt Price Index:	<u>1.9365</u>
Current Index Month:	<u>Feb-17</u>	Current Asphalt Price Index:	<u>1.8230</u>
		Asphalt Index Difference:	<u>-0.0167</u>
Asphalt Mixes with Modified Binders (PG 76 & Higher)			
Pay Item Number:	<u> </u>	Tonnage Placed:	<u> </u>
Pay Item Number:	<u> </u>	Tonnage Placed:	<u> </u>
Pay Item Number:	<u> </u>	Tonnage Placed:	<u> </u>
Base Index Month:	<u> </u>	Base Polymer Price Index:	<u> </u>
Current Index Month:	<u> </u>	Current Polymer Price Index:	<u> </u>
		Polymer Index Difference:	<u> </u>
Asphalt Material (ASPHALT TREATED PERMEABLE BASE)			
Pay Item Number:	<u> </u>	Tonnage Placed:	<u> </u>
Base Index Month:	<u> </u>	Base Asphalt Price Index:	<u> </u>
Current Index Month:	<u> </u>	Current Asphalt Price Index:	<u> </u>
		Asphalt Index Difference:	<u> </u>
Navigation and Printing Functions			
<input type="button" value="Go To Main Sheet"/>		<input type="button" value="Go To Last Month Sheet"/>	
<input type="button" value="Save As Month Sheet"/>		<input type="button" value="Remove Last Month Sheet"/>	
<small>Effective January 2007 Letting FORM: 700-050-66 (7/21/2015)</small>			

EXAMPLE OF A CONTRACTOR'S CERTIFICATION OF QUANTITIES (FORM 700-050-66) Continued

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION		FORM 700-050-66 CONSTRUCTION 02/17	
CONTRACTOR'S CERTIFICATION OF QUANTITIES ASPHALT MIXES WITH MODIFIED AND UNMODIFIED BINDERS (CONVENTIONAL PROJECTS)			CERTIFICATION NO.
			<u>9</u>
FINANCIAL PROJECT ID:	<u>654321-52-01</u>		
CONTRACTOR	<u>We Got Asphalt, Inc.</u>		
CONTRACT NO.	<u>X1234</u>		
PERIOD REPRESENTED BY CERTIFICATION:			
FROM (MO/DAY/YR)	<u>01/16/17</u>	TO (MO/DAY/YR)	<u>02/19/17</u>
ASPHALT MIXES WITH UNMODIFIED BINDERS (PG 67 & LOWER)			
BASE PRICE INDEX:	<u>1.9385</u>	CURRENT PRICE INDEX:	<u>1.8230</u> INDEX DIFFERENCE: <u>-0.0167</u>
	TONNAGE	GALLONS	MONTHLY PAYMENT
PAY ITEM NUMBER:	<u>334-1-13</u>	<u>341.4</u>	<u>4,974</u>
PAY ITEM NUMBER:			
PAY ITEM NUMBER:			
GALLONS OF ASPHALT CEMENT USED IN MIX: *		<u>4,974</u>	<u>-\$83.07</u>
ADDITIONAL GALLONS (ARMI):			
TOTAL GALLONS:		<u>4,974</u>	
TOTAL MONTHLY PAYMENT:			<u>-\$83.07</u>
ASPHALT MIXES WITH MODIFIED BINDERS (PG 76 & HIGHER)			
BASE PRICE INDEX:		CURRENT PRICE INDEX:	
		INDEX DIFFERENCE:	
	TONNAGE	GALLONS	MONTHLY PAYMENT
PAY ITEM NUMBER:			
PAY ITEM NUMBER:			
PAY ITEM NUMBER:			
TOTAL GALLONS OF POLYMER USED IN MIX: *			
TOTAL MONTHLY PAYMENT:			
ASPHALT MATERIAL (ASPHALT TREATED PERMEABLE BASE)			
BASE PRICE INDEX:		CURRENT PRICE INDEX:	
		INDEX DIFFERENCE:	
	TONNAGE	GALLONS	MONTHLY PAYMENT
PAY ITEM NUMBER:			
TOTAL MONTHLY PAYMENT:			
I certify that, based on my personal knowledge and well-founded belief following my own reasonable investigation, the tons and gallons (metric tons and liters) represented by this Certification are true and correct.			
 _____ Contractor's Authorized Agent		_____ Name of Company and email address	