

## Chapter 8 FORMS

*Effective January 1, 2014, summary boxes must be used for all projects beginning the computation/summary phase; refer to Estimates Bulletin 13-09. The 2013 edition of this chapter is available for projects let with computation book forms, prior to the implementation of summary boxes.*

CADD Forms/Sheets/Cells are maintained by the [State Engineering/CADD Office](http://www.dot.state.fl.us/ecso/default.htm) at <http://www.dot.state.fl.us/ecso/default.htm>

COMP Forms are maintained by the [State Construction Office](http://www.dot.state.fl.us/construction/forms/CompBookForms/CompForms.shtm) at <http://www.dot.state.fl.us/construction/forms/CompBookForms/CompForms.shtm>

For information regarding these forms, please contact these offices directly.

### 8-1 Introduction

Support information for CADD/Comp forms is now located within Section 1 of the Construction Office's handbook **Computation Methods For Design, Construction & Final Estimates Handbook** located at: <http://www.dot.state.fl.us/construction/Manuals/finalest/newcompbook/ HandbookMenu.shtm> on the internet. Please refer to this handbook for the latest information on both CADD and Comp book forms.

The forms referenced in this section were developed by the Department of Transportation to serve the needs of Design, Construction and Estimates personnel. In Design, they are used to record calculations and tabulations for plan quantity. Construction personnel must verify the original quantity or modify it to reflect what was constructed, and enter a tentative final pay quantity. Estimates personnel must check both the original or plan quantity, versus the final quantity, and substantiate what quantity is to be paid to the contractor in agreement with all specifications and Department policies.

It is MANDATORY that each pay item be documented. **When two or more forms are available, the Designer should select the best form (CADD or COMP) to document the pay item quantity, based on project conditions.** For example, a simple area of turf may be documented in a CADD summary box in the plans. A complex area of turf should be shown in the plans with detailed quantity calculations documented in the comp book. DO NOT use both forms, as this duplication of effort causes additional work for designers, reviewers, estimators, and others.

There are three groups of forms applicable for estimate purposes: Computation Book Forms, Plans Forms, and Miscellaneous Forms. Computation Book forms are maintained by the State Construction Office, Final Estimates Section. Plans forms are maintained by the Engineering CADD Systems Office, with input from affected Design Offices. The State Estimates Office, Engineering Support Section, maintains miscellaneous Forms. Web links to these forms are included with each group.

**DISCLAIMER:** The information contained within this Section is for information/reference purposes only. The intent is to provide a brief summary of the forms referenced by specific pay items. Current forms are available from the responsible office, as noted above. Any questions, comments, or other correspondence related to forms should be directed to the responsible office.

## 8.2 Computation Book Forms

The forms assembled in the Computation Book provide a simple and logical basis of documentation for the Summary of Pay Items Sheet in the contract plans. The calculations required for different forms, range from tabulations of “each items” or “lump sum items” to complex area or volume calculations. The designer should use the form recommended for each item calculated or tabulated, if practical.

<i>Form Number</i>	<i>Form Title</i>
700-050-01	Area Computations
700-050-02	Curb and/or Gutter Computation
700-050-03	Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computations
700-050-04	Volume Measure Items
700-050-05	Lump Sum Quantities
700-050-06	Weight Measure or Liquid Volume Computations
700-050-07	Concrete & Reinforcing Steel Computations
700-050-08	Piling Tabulation
700-050-09	Linear Measurement Computation with Components
700-050-10	Computation Book Pay Item Summary Sheet
700-050-11	Computation Book Pay Item Summary and Certification Sheet
	<b><i>The following are Final Estimates Site Source Records</i></b>
700-050-50	Off Duty Police Officer
700-050-51	Daily Log Sheet, Maintenance of Traffic
700-050-52	Daily Log Sheet (Striping)
700-050-54	Daily Report of Truck-Measured Material
700-050-55	Daily Log Sheet for Tracking Grassing Items
700-050-56	Daily Log Sheet for Miscellaneous Items
700-050-62	Contractor’s Certified Invoice, Maintenance of Traffic Sheet

**For questions or comments regarding these forms, please contact the State Construction Office, Final Estimates Section. Contact information is located in the introduction section of this handbook.**

Forms are available in .pdf format from the Office of Forms and Procedures at <http://www.dot.state.fl.us/proceduraldocuments/> Search by Number, Office (Construction) or Title.

To retrieve forms from the FDOT CADD software, use the bar menu. Contact your CADD Manager for details and software updates.

### 8.3 Plans Forms (CADD-Generated Summary and Tabulation Sheets and Boxes)

Plans Forms are CADD-generated. They provide the designer with a simple and logical format for summarizing quantities by the type of item. These forms contain spaces for recording both original design quantities and final “as built” quantities.

<b>Summary and Tabulation Sheets and Boxes</b>
Refer to CADD software for current cell names and titles
Pole Data Sheet (Sheets 1 and 2)
Tabulation of Quantities *
Summary of Pay Items
Summary of Drainage Structures
Summary of Guardrail
Summary of Ditch Pavement and Performance Turf- Sod
Summary of Fencing, Type A, Type B
Summary of Litter Removal and Mowing
Summary of Mailboxes
Summary of Earthwork
Summary of Performance Turf- Sod
Summary of Side Drain and Mitered End Sections (Without Offset and Flow Line)
Summary of Sheeting
Summary of Turnouts
Summary of Underdrain
Summary of Gravity Wall
Summary of Flood Data
Cross Drain Optional Materials Tabulation (With Flow Line) (Sheets 1 & 2)
Optional Materials Tabulation (without Flow Line Changes) (Sheets 1 & 2)
Summary of Edge Drains
Summary of Sidedrain and Mitered End Sections (With Offset and Flow Line)
Summary of Miscellaneous Asphalt
Summary of Permanent Crash Cushions
Note: Design Standard Summary Tables may also be applicable.

\* The Tabulation of Quantities format shall be used for the following:

1. Signalization Plans
2. Signing and Pavement Marking Plans
3. Lighting Plans
4. Landscaping Plans
5. Utility Joint Project Agreement Plans
6. Other items, as indicated in the Basis of Estimates Handbook.

**CONTACT INFORMATION:** For questions or comments regarding these forms, please contact the Engineering CADD Systems Office. To retrieve CADD forms, visit the Engineering/CADD Systems Office web site at:

<http://www.dot.state.fl.us/ecso/default.htm>

## 8.4 Quantity Manager & Computation Book (A Note from the CADD and Construction Offices)

When the Designer utilizes the Department's Quantity Manager Tool within MicroStation/GEOPAK, the data that is depicted on the Computation Sheets may not utilize the whole form. The data shown on the Computation Sheets may only fill a portion of the actual form, and not display the whole form with blank lines. This will be an acceptable format, as the data depicted on the Computation Sheets should be complete. The first page will continue to provide a signature block for plan quantity items, as well as the area of notes for over/under runs, and the extra notes below that. The remainder of the sheets will provide quantities for the individual sheets. By utilizing the Quantity Manager tool in GEOPAK, the Designer will eliminate potential errors in data transfer and transposition of numbers by being automated.

## 8.5 Forms Selection and Documentation

Forms and Documentation information associated with each pay item is based on common use of the pay item. **The designer should always consider project conditions when choosing a summary sheet or form.** The designer should also consider whether tabulation information in the plans would be beneficial to the contractor when preparing a bid; comp books are not available for bidding purposes. Below is a summary of forms and documentation for various types of items:

Example Items (Not intended to be a complete list)	Initial Form & Documentation message	Notes
<b>Component Summaries</b> -Drainage Optional Materials and Drainage Structures -Signing & Pavement Marking Materials -Signalization/ Mast Arms -ITS -Lighting -Landscape -Irrigation System -Utilities	Tabulation of Quantities sheet in the plans, located behind component plans key sheet	Preliminary "P" quantity is entered in the plans by the designer. Final "F" quantities are entered during construction by the engineer.

<p><b>Summary of Quantities</b> -Guardrail -Permanent Crash Cushions -Fence -Turnouts -Sod* -Ditch Pavement -Side Drains &amp; Mitered End Sections^ -Underdrain -Earthwork* -Litter Removal &amp; Mowing</p>	<p>Specific CADD summary boxes.  Detail quantities by location.  *Sod and Earthwork may be documented with a CADD or COMP form, based on project conditions. ^Drainage structures may be detailed in Summary of Drainage Structures</p>	<p>Preliminary "P" quantity is entered in the plans by the designer. Final "F" quantities are entered during construction by the engineer.</p>
<p>SF, SY items</p>	<p><b>700-050-01</b> Area Computations and Continuation</p>	
<p>Curb &amp; Gutter Items</p>	<p><b>700-050-02</b> Curb /Gutter Calculations and Continuation</p>	
<p>MOT Items Assembly, Each, Each Day items LF, Mile items</p>	<p><b>700-050-03</b> Linear Measurement, Component Weight, Per Hour, Per Day or Per Each Computations and Continuation</p>	
<p>CY items (see -07 form for some concrete items)</p>	<p><b>700-050-04</b> Volume Measure Items and Continuation</p>	
<p>Lump Sum Items</p>	<p><b>700-050-05</b> Lump Sum Quantities or <b>LS Tabulation</b></p>	<p>Form selection determined by item. Some details may be needed in the plans, i.e. special detours</p>
<p>LB, GA items</p>	<p><b>700-050-06</b> Weight Measure or Liquid Volume Computations and Continuation</p>	
<p>Concrete &amp; Steel for bridges</p>	<p><b>700-050-07</b> Concrete &amp; Reinforcing Steel Computations and Continuation</p>	
<p>Piling Items</p>	<p><b>700-050-08</b> Piling Tabulation and Continuation</p>	
<p>LF, Mile items</p>	<p><b>700-050-09</b> Linear Measurement Computation with Components and Continuation</p>	
<p>NA</p>	<p><b>700-050-10</b> Item Computation Book Pay Summary &amp; Certification Sheet</p>	<p>This form is used by construction only.</p>



## **Chapter 8 Revision History**

**12-30-14:** Added note in red below chapter title.

**2-20-13:** Updated header dates for 2013 edition.

**11-23-11:** Updated header dates for 2012 edition.

**7-29-11:** Updated web link for Construction forms.

**5-19-11:** Updated web link for Computation Methods For Design, Construction & Final Estimates Handbook.

**11-10-10:** Updated header dates for 2011 edition. Updated Construction Office web links. Changed font size from 10 pt to 12 pt.

**11-8-10:** Inserted 8.5 to better explain Forms and Documentation. Renumbered Estimates Forms from 8.5 to 8.6.

**10-30-09:** Updated header dates for 2010 edition.

**10-6-08:** Updated header dates for 2009 edition.

**10-6-08:** Updated pay item request form information, per Chapter 6. Use of the form is optional.

**5-14-08:** Inserted 8.4, note from Construction and CADD Offices. Requested by Sherry Valdes, State Construction Office & Kenny Rudd, District 3 CADD Office.