

# Basis of Estimates Manual 2021

# Introduction BASIS OF ESTIMATES MANUAL

### I.1 PURPOSE

The **Basis of Estimates Manual** sets forth the standard methods of documenting design quantities, as well as selection criteria, for pay items for Florida Department of Transportation (FDOT) projects.

Pay items are used to define, quantify, and pay for items of work to be completed on the Department's Maintenance and Construction Contracts.

### I.2 AUTHORITY

Sections 334.044(2), 20.23(3)(a), and 334.048(3), Florida Statutes (F.S.)

### I.3 SCOPE

This procedure impacts anyone preparing construction plans or specifications for the Department.

### I.4 GENERAL INFORMATION

Chapter 334 of the Florida Statutes, as part of the Florida Transportation Code, establishes the responsibilities of the State, counties, and municipalities for the planning and development of the transportation systems serving the people of Florida, with the objective of assuring development of an integrated, balanced statewide system. The Code's purpose is to protect the safety and general welfare of the people of the State and to preserve and improve all transportation facilities in Florida. Under Sections 20.23(3)(a) and 334.048(3), F.S., the Code sets forth the powers and duties of the Department of Transportation including adopting rules, procedures and standards for the conduct of its business operations and the implementation of any provisions of law for which the Department is responsible.

### I.5 DISTRIBUTION

This document is published online at <a href="http://www.fdot.gov/programmanagement/">http://www.fdot.gov/programmanagement/</a>. Contacts, updates and registration information are available at the Basis of Estimates link on the above internet web page.

### I.6 REGISTRATION

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All users are encouraged to register online with the FDOT Project Management Contact Database located at http://www.fdot.gov/designsupport/contactdatabase.shtm. Registered users will receive e-mail notification of major updates and bulletins.

### I.7 REVISIONS and UPDATES

**Basis of Estimates** users are encouraged to submit comments and suggestions for changes to this manual to the Program Management Office. When ideas or suggestions are received, they will be reviewed by appropriate Design and/or Construction staff in a timely manner, and will be coordinated with other offices affected by the proposed change. Issues warranting immediate change will be made with the approval of the State Estimates Engineer or State Program Management Engineer in the form of a *Program Management Bulletin*.

**Program Management Bulletins** will be posted online at <a href="http://www.fdot.gov/programmanagement/">http://www.fdot.gov/programmanagement/</a>.

NOTE: Program Management Bulletins will remain effective until either:

- a) an official manual revision is published, or
- b) the Bulletin is made void.

The Program Management Office will coordinate proposed revisions or additions with affected offices within the Central Office. All new chapters and substantive revisions that result in policy change will be coordinated in accordance with the Forms and Procedures Office in accordance with *Procedure No. 025-020-002, Standard Operating System*, and the Executive Committee for concurrence.

Basis of Estimates Coordinator, FDOT State Program Management Office 605 Suwannee St., MS 34 Tallahassee, FL 32399-0450 http://www.fdot.gov/programmanagement/

Updates are posted online at least twice a year. Issues resulting in a **Program Management Bulletin** will be updated as approved by the State Program Management Engineer. Additions, minor issues, or corrections not requiring a bulletin will be updated as needed.

### I.8 TRAINING

No training required. Optional training for the **Basis of Estimates**, reports, and supporting computer systems is available through the Estimating Systems Support section of the State Program Management Office.

### I.9 FORMS

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The Pay Item Request form is available online at <a href="http://www.fdot.gov/development/">http://www.fdot.gov/development/</a> The use of this form is optional; refer to <a href="http://www.fdot.gov/development/">Chapter 6</a> for complete information.

### **Revision History**

This is the revision history for the *Introduction*; revisions to *Chapters 1-10* are located at the end of each chapter. Revisions and history of individual pay items is available through the State Specifications and Estimates Office, care of the Basis of Estimates Coordinator.

- **11-1-20:** Updated header for 2021 edition.
- 11-1-19: Updated header for 2020 edition.
- 12-1-18: Updated header for 2019 edition. Updated web links for fdot.gov web pages.
- **11-21-17:** Updated header for 2018 edition. Updated web links and references to Program Management Office.
- 10-4-16: Updated header for 2017 edition.
- 12-30-14: Updated header for 2015 edition.
- **1-15-14:** Updated header for 2014 edition. Added definition of a pay item.
- 2-20-13: Updated header dates for 2013 edition.
- 11-23-11: Updated header dates for 2012 edition.
- **12-1-10:** Updated header dates for 2011 edition.
- **12-9-09:** Expanded **Revisions and Updates** to include a limitation on the lifespan of an **Estimates Bulletin**.
- **10-30-09:** Updated header dates for 2010 edition.
- **6-30-09:** Removed draft watermark. Updated header date for publication.
- 11-14-08: Updated internet links to current addresses.
- **11-5-08:** Updated formatting in accordance with Forms and Procedures Office's recommendations.
- **10-1-08:** Updated header dates for 2009 edition. Forms- added note to indicate form is optional.

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# Chapter 1 Updates and Registration

### 1.1 Registration

All users of the Basis of Estimates (BOE) are encouraged to register with the Contact Database at <a href="http://www.fdot.gov/designsupport/contactdatabase.shtm">http://www.fdot.gov/designsupport/contactdatabase.shtm</a>. Registration is free. Additional information about the contact database is available at the web page above.

### 1.2 Update Notices

An e-mail message is sent to all registered users when a bulletin or major update occurs.

Program Management Bulletins will be posted online for major pay item changes. E-mail messages will be sent when it is determined that an issue has a "significant impact" on a large number of projects. E-mail messages will only be sent with approval of the State Estimates Engineer.

Major changes and bulletins must be implemented according to the posted implementation schedule for the specific pay item(s). The implementation dates are scheduled to coordinate specifications, standards, and other design guidance.

**Minor** changes will be posted online, as needed. Note the revision date for the applicable file or chapter. A summary of minor changes will be posted online, with the major updates. Minor changes should be implemented in design as early as practical.

### 1.3 Proposed Changes

Users are encouraged to submit comments and suggestions for changes to the BOE. All items will be reviewed by the BOE Coordinator, and processed as follows:

- a) Pay item Issues: Refer to Chapter 6 for additional information.
- b) Formatting Issues: Evaluated by the BOE Coordinator.
- c) Other Content Issues: Evaluated by the BOE Coordinator and/or the responsible office.

Issues forwarded to the C-Team are processed as detailed in Chapter 6. Other issues requiring review will be discussed with the State Estimates Engineer and processed as recommended.

### 1.4 Submitting Proposed Updates

To submit a comment or suggestion, send the appropriate information to the BOE Coordinator or State Estimates Engineer. Contact Information is listed in Chapter 5, and on the State Program Management Office's web pages.

Please include the complete pay item number (if applicable), a detailed explanation of the proposal, and contact information (if you would like a response).

### 1.5 Critical Dates for BOE Updates

In order to process changes in a timely manner, please submit proposed changes as early as possible. What may appear as a minor change for one office may result in major changes for another office. With assistance from the Coordination team, all issues should be resolved prior to announcement in a Bulletin or other posting.

The following dates are normal processing deadlines. Issues impacting a significant number of projects and/or dollar value may require longer or shorter processing times, as recommended by FDOT managers.

Updates to *Chapters 1-10: BOE Manual*, will be posted in November, along with other design documents. Updates to *Chapters 11-20: BOE Database* will continue to be updated within the Design Quantities and Estimates (DQE) application, as needed throughout the year. BOE Database changes are posted as early as possible; see Chapter 6 for additional information.

Approximate Date(s)	Activity	Groups/Individuals
Year-round	Submit Proposed Changes	FDOT Designers,
		Consultants, others
September 15-30	Update Chapters with	BOE Coordinator
	proposed changes	
October 1	Drafts Posted*	BOE Coordinator
October 1-20	District Review	District Estimators,
		District Designers, others
October 20-31	Final Review	BOE Coordinator,
		State Estimates Engineer
November 1	Posting for July letting	BOE Coordinator
	implementation	

<sup>\*</sup>Issues which require coordination between multiple contract documents (specifications, standards, and/or pay items) or manuals should be submitted as early as possible; additional review and/or implementation time may be needed.

### **Chapter 1 Revision History**

11-1-20: Update header dates for 2021 edition.

11-1-19: Update header dates for 2020 edition.

**12-1-18:** Update header dates for 2019 edition. Update web links for fdot.gov web page. Removed critical dates for 2016/2017 editions.

11-1-17: Update header dates for 2018 edition.

**7-6-17:** Update header dates for 2017 edition.

**10-24-16:** Update header dates for 2016 edition. Updated contact database hyperlink. Updated office titles. Updated critical dates.

- **7-26-16:** Updated 1.5 with proposed schedule for coordinated implementation.
- **11-25-15:** Updated header dates for 2016 edition. Added note to 1.5 regarding coordination with specs and standards implementation dates.
- **12-30-14:** Updated header dates for 2015 edition.
- **12-2-13:** Updated header dates for 2014 edition.
- 2-20-13: Updated header dates for 2013 edition.
- **11-23-11:** Updated header dates for 2012 edition.
- **12-1-10:** Updated header dates for 2011 edition.
- **10-30-09:** Updated header dates for 2010 edition.
- **10-19-2009:** Removed cover letter reference; all major changes announced with a bulletin.
- **10-1-2008:** Updated header dates for 2009 edition.

# Chapter 2 UNITS OF MEASURE

### 2.1 Abbreviations

Listed below are selected abbreviations used in the Basis of Estimates. For a more complete list of abbreviations, refer to the **Standard Plans**.

NOTE: Pay item descriptions shown on various reports may be abbreviated as needed to fit "long" and "short" description fields of 80 and 40 characters, respectively. While every effort is made to be consistent, the abbreviated descriptions may vary from those shown on the Standard Plans.

Abbreviation	Unit of Measure	Precision
AC	Acre	0.01
AS	Assembly <sup>1</sup>	1
BF	Board Feet <sup>3</sup>	1
CF	Cubic Foot	0.1
CY	Cubic Yard	0.1
DA	Day	1
EA	Each	1
ED	Each Day	1
FD	Feet·Day	1
GA	Gallon	1
GM	Gross Mile	0.001
HR	Hour	1
LB	Pound	1
LF	Linear Foot	1
LO	Location	1
LS	Lump Sum	1
LU	Luminaire <sup>1</sup>	1
MB	Board Measure/	0.1
	Thousand Feet	
MG	Thousand	1
	Gallons <sup>3</sup>	
MH	Man-hour <sup>2</sup>	1
MI	Mile	0.001
MO	Month <sup>3</sup>	1
NM	Net Mile <sup>3, 4</sup>	.001
PI	Per Intersection <sup>1</sup>	1
PM	Per Mile <sup>3, 4</sup>	1
PS	Per Set <sup>1</sup>	1
SF	Square Foot	1

Units of Measure 2-1

SY	Square Yard	1
TN	Ton	0.1

<sup>&</sup>lt;sup>1</sup> Units which will be replaced with unit of Each (EA) upon pay item/specification update. See details below.

Per Item versus Each: Units of measure previously identified as assembly, luminaire, plant, or other will be changed to EA, as specifications are revised. The item's description should indicate the item to be measured with the EA unit of measure.

### 2.2 Secondary Units

Secondary Units apply to Lump Sum (LS) pay items. When a lump sum pay item has secondary units other than lump sum (LS/LS), the designer must enter the estimated secondary quantity into the Designer Interface. Estimating reports will show the secondary units for estimating purposes. The Project Summary, Proposal Summary, and other bid document reports will show the LS units with a quantity of 1.

Example: 102-1-1 Maintenance of Traffic, LS/DA has a secondary unit of days. After the designer enters the number of MOT days for that project number, estimating reports will show the number of days while the Proposal Summary of Quantities will show 1 LS.

For Lump Sum items with a secondary unit of Lump Sum (LS/LS), partial payments will be made based on the percentage completed, per Section 9 of the specifications. Percentage will be rounded to 2 decimal places (0.01 of the total quantity of 1).

Additional guidance for pay items with secondary units may be included with the pay item number details. Refer to BOE Chapter 9 for guidance on Supplementary Descriptions. Refer to Chapter 8 for guidance on documenting work and materials for Lump Sum items. NOTE: Lump Sum pay items are NOT PERMITTED on Push Button/Work Document Contracts. Additional details are included in Chapters 6 and 10.

### 2.3 Precision and Rounding

Precision is noted on the abbreviations table above. Calculations are performed with one additional significant figure, and then rounded to the above precision for measurement/payment.

As a quick guide, all units are paid to the nearest whole number, except for:

0.1: Cubic Yard. Cubic Foot. Tons. MB lumber

0.01: Acre

Units of Measure 2-2

<sup>&</sup>lt;sup>2</sup> Units will be replaced with Hour (HR), upon pay item/specification update. See details below.

<sup>&</sup>lt;sup>3</sup> Unit used by Maintenance pay items only

<sup>&</sup>lt;sup>4</sup> Unit will be replaced with Mile (MI), upon pay item/specification update.

### 0.001: Gross Mile Stripe

Rounding shall be completed in accordance with the common rule: If the number you are rounding is followed by 5, 6, 7, 8, or 9, round the number up. If the number you are rounding is followed by 1, 2, 3, or 4, round the number down. DO NOT use "up rounding", which will always round up the next value. For example: A calculated total of 132.3 ft should be shown as 132 ft, and NOT up rounded to 133 ft.

### **Chapter 2 Revision History**

**11-1-20:** Updated header dates for 2020 edition. Added 2.3 heading for secondary units. Added FD Feet Day, BF Board Feet, MG Thousand Gallons, MO Month, NM Net Mile, and PM Per Mile units of measure.

**11-1-19:** Updated header dates for 2020 edition. Removed old footnote for Mile (MI) units. Updated 2.1 guidance for Lump Sum pay items.

**11-1-18:** Updated header dates for 2019 edition. Deleted 2.3 metric conversion factors. Added note for item vs. each.

**10-23-17:** Updated header dates for 2018 edition. Added reference to Chapter 9 for Supplemental Description used with Lump Sum items.

**6-22-17:** Added LS/LS information for rounding partial payment percentage, per Final Estimates- Construction Office request.

**10-25-16:** Updated header dates for 2017 edition. Added abbreviations and rounding information. Removed discontinued section 2.4 Accuracy/Precision information updated in 2.1 and 2.2.

**3-14-16:** Added information for secondary units to 2.1.

**2-1-16:** Added note for removal of alphabetical list.

**11-25-15:** Updated header dates for 2015 edition. Corrected AC unit of measure to 1/100 AC.

**12-30-14:** Updated header dates for 2015 edition. Added end date to PM unit; refer to Rumble Strip pay items for details.

**2-27-14:** Removed units for Clean-out (CO), Bushel (BU), Dollars per Day (DD), Luminaire (LU).

**12-2-13:** Updated header dates for 2014 edition. Added note to 2.1 to indicate that abbreviated text for pay item descriptions may vary from with Design Standards. Moved Alphabetical list from Chapter 3 to 2.4.

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

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

**12-1-10:** Updated header dates for 2011 edition.

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

**1-28-09:** Added 2.2 Accuracy. Renumbered 2.3 Conversion Factors.

**10-1-08:** Updated header dates for 2009 edition.

Units of Measure 2-3

# Chapter 3 ENGINEER'S ESTIMATES

This chapter is new; implementation will be at the discretion of the District Estimates Engineer for 2021. It is intended to assist the Designer with meeting the Estimates requirements in the <u>FDM</u>, as well as meeting estimating needs of District Estimators, FDOT Project Managers, and others. The requirements are intended to compliment the FDM, Consultant Designer's Scope of Services, as well as current FDOT procedures. Comments or suggestions are welcome; contact your District Estimates Engineer for district specific guidance.

### 3.1 General

Estimators are required to develop and review Construction Cost Estimates for all projects, throughout the Work Program. While the project is under design, the scope must be maintained, so that cost estimates correctly reflect the anticipated work. This chapter will address estimate requirements at each project phase, as well as periodic updates that may be required.

### Terminology used:

**Construction Cost Estimate:** The Department's Estimate for all construction related costs.

NOTE: While these requirements apply to all projects, Districts may vary in who completes the data entry for the updates. The guidance below is written to the Designer/EOR, unless otherwise shown. However, Designers, Project Managers, and District Estimators must work together to ensure that all updates are completed in a timely manner, and fully reflect the project's anticipated work or scope.

### 3.2 Initial Work Program and Scope Estimates

The Initial Work Program and Scope Estimates are often completed by the Department, prior to a Consultant Design Contract being issued. These estimates are normally entered into the **Long Range Estimates (LRE)** system, based on available scope information and historical prices.

The purpose of these estimates is to determine a budget amount for the Work Program. For additional information, see procedures 600-010-005, Development & Review of the 5 Year Work Program Construction Cost Estimates, and 600-010-001, Preparation of the Authorization/Official Construction Cost Estimate & Contract Bid Review Package, available in the Procedural Document Library.

### 3.3 Project Design Estimates

### 3.3.1 Phase I Estimate

Update the estimate to reflect any scope changes. **FDM 301/901** identifies preliminary information that should be available at this phase. Verify that the following items are correctly reflected in the Phase I Estimate:

Typical Section(s)
Right of Way widths

Bridge and Bridge Culvert lengths and widths

Curb and/or Sidewalk preliminary lengths

Drainage needs, including open/closed system or retention ponds Other components, including Signalization, Lighting, Landscaping

While specific pay items and quantities may not be known at this phase, it is important that the estimate identify all anticipated work/scope.

### 3.3.2 Phase II Estimate

Update the estimate to reflect any scope changes. *FDM 301/901* identifies preliminary design information that should be available at this phase. Verify that the following items are correctly reflected in the Phase II Estimate:

Typical Section(s)

Right of Way widths

Bridge and Bridge Culvert lengths and widths

Curb and/or Sidewalk preliminary lengths

Drainage Structures and Pipe Sizes

Retention Pond Size

Other components, including Signalization, Lighting, Landscaping

In addition to updating scope information for the Phase II Estimate, the **FDM** requires that pay items be loaded into the Designer Interface. This will help to identify specification and pay item needs that must be addressed before the Phase III submittal. Coordinate with the District Specifications and Estimates Office(s) for any non-standard specification or pay item needs. See the **Specifications Handbook** for additional specification guidance. See **BOE Chapter 6** for requesting pay items.

The District Estimator will update/review the Department's Phase II Cost Estimate using any combination of LRE, DQE, PrP AASHTOWARE, Phase II plans, and other scope information.

### 3.3.3 Phase III Estimates

**FDM 301/901** requires that all pay items and quantities should be "complete, but subject to change". Verify that all items are correctly reflected in Estimated Quantities Report. Update pay items and quantities through the Designer Interface.

Notify the District Specifications and Estimates Offices of any pending non-standard

specifications or pay items, so that the Cost Estimates can reflect all anticipated work. The District Estimator may request the Designer/Engineer's Cost Estimate on specific pay items, especially Lump Sum pay items and those with non-standard specifications or pay items.

The District Estimator will update the Department's Phase III Cost Estimate, based on the pay items and quantities loaded through the Designer Interface. Project conditions, details, work, materials, and applicable specifications may be considered by the District Estimator.

### 3.3.4 Phase IV Estimates

**FDM 301** calls for Work Zone Traffic Control pay items to be updated based on the established construction duration. Update all remaining pay items, including any changes due to non-standard specifications or pay items. Finalize the Estimated Quantities Report. Update the quantities through the Designer Interface.

The District Estimator will update the Department's Phase IV Cost Estimate, based on the pay items and quantities loaded through the Designer Interface. Project conditions, details, work, materials, and applicable specifications may be considered by the District Estimator when pricing the pay items.

### 3.3.5 PS&E Phase Estimates

Per the *FDM 301/901*, "after corrections noted during the Phase IV submittal review are completed and verified, the plans are referred to as Final Plans." **Projects with outstanding specifications or pay items are not ready to begin the PS&E phase.** 

The District Estimator will begin preparation of the Department's Authorization Estimate. Project conditions, details, work, materials, and applicable specifications may be considered by the District Estimator when pricing the pay items.

Additional guidance on the cost estimates during this phase is available **procedure 000-0000, Title**.

### 3.4 Revisions and Addenda

Coordinate with the District Estimator to update Authorization or Official Estimate. Provide updated Summary Box or EQ Report, as directed by the District Estimator.

### 3.5 Estimating Systems

Long Range Estimates (LRE): https://fdotwp1.dot.state.fl.us/LongRangeEstimating/

Webgate and Designer Interface:

https://fdotwp1.dot.state.fl.us/WTWEBGATEREPORTS/WebGate.aspx.

**Design Quantities & Estimates (DQE):** Estimates application for pre-letting activities. DQE has both public and secure pages. The application is located at: <a href="https://fdotewp1.dot.state.fl.us/designquantitiesandestimates">https://fdotewp1.dot.state.fl.us/designquantitiesandestimates</a>

The **Basis of Estimates: Chapters 11-20 Database** and **Master Pay Item** list are available to view/print on the DQE public pages. From the home page, select the Basis of Estimates or Master Pay Item link from the dark blue border at the top of the page; do NOT enter a userID/password.

### **Chapter 3 Revision History**

**11-1-20:** Updated header dates for 2021 edition. Changed the scope of the chapter to address estimating guidance to Designers, working with FDM changes.

11-1-19: Updated header dates for 2020 edition.

12-1-18: Updated header dates for 2019 edition.

**10-25-16:** Updated header dates for 2017 edition. Ongoing draft text.

11-25-15: Updated header dates for 2016 edition.

**12-30-14:** Updated header dates for 2015 edition. Added DQE definition.

-14-14: Started adding DRAFT text for new section.

**12-2-13:** Deleted 3.2. Moved Alphabetical List to Chapter 2.

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

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

2-1-10: Updated header dates for 2011 edition.

**5-14-10:** Restored Alphabetical Index. Created explanation text for chapter.

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

**10-1-08:** Updated header dates for 2009 edition. Deleted "Alphabetical Index" chapter. Users, please use search/find, as needed.

# Chapter 4 PAY ITEMS AND ESTIMATES FOR ALTERNATIVE CONTRACTS

### 4.1 General Information

This chapter includes information to the designer and estimator. Additional instructions may be provided in the Construction Project Administration Manual (CPAM) and Estimates Handbook.

Designers should work with the District Specifications and Estimates Office(s) to ensure that the appropriate specifications and pay items are incorporated into the Alternative Contract.

### 4.2 Lump Sum Proposals

Lump sum contracting involves the contractor providing the Department with a lump sum price to complete a project, as opposed to bidding on individual pay items and quantities. The contractor is provided a set of bid documents and required to develop a lump sum bid for all work for the project.

### 4.2.1 Pay Items

Lump Sum proposals consist of one or more Lump Sum projects. The following is an example of a typical Lump Sum projects' pay items:

Pay Item	Description	Unit	Qty
999-2	Lump Sum Contract, Alternative Bidding (123456-1-52-01)	LS	1
999-25	Initial Contingency Amount, Do Not Bid (123456-1-52-01)	LS	1

Supplemental descriptions for each lump sum pay item are necessary to distinguish between projects when more than one project is in a proposal. See additional guidance in Chapter 9.

Complete Summary Boxes/Tabulation Sheets or Summary Tables, in accordance with Chapter 8, are still required for a lump sum project. Designers enter Pay Items in a duplicate project with the letters "LS" appended to the project number and a duplicate proposal is created with the letters "LS" appended to the proposal number, for estimating purposes.

### 4.2.2 DQE Instructions

Estimators will prepare a detailed estimate for the duplicate "LS" projects and proposal

and enter the total amounts in the projects and proposal used for bidding purposes.

### 4.2.3 Estimating Guidance

Ensure all pay items are included in Summary Boxes/Tabulation Sheets or Summary Tables in the plans.

### 4.3 Design-Build Proposals

Design-Build is a special type of lump sum project and proposal which combines the design and construction phases of one or more projects into a single proposal.

### 4.3.1 Pay Items

Design-Build proposals consist of one or more Design-Build projects. The following is an example of a typical Design-Build proposals' pay items:

Pay Item	Description	Unit	Qty
0-50-4	Design / Build, Bridge Construction (123456-1-52-01)	LS	1
0-50-4	Design / Build, Bridge Construction (123456-1-52-01)	LS	1
0-50-4	Design / Build, Bridge Construction (123456-2-52-01)	LS	1
999-16	Partnering, Do Not Bid (123456-1-52-01)	LS	1
999-20-1	Disputes Review Board, Meeting-Do Not Bid	DA	55
999-20-2	Disputes Review Board, Hearing-Do Not Bid		2
999-25	Initial Contingency Amount, Do Not Bid (123456-1-52-01)	LS	1
999-25	Initial Contingency Amount, Do Not Bid (123456-2-52-01)	LS	1

Supplemental Descriptions for each lump sum pay item are necessary to distinguish between projects when more than one project is in a proposal. See additional guidance in Chapter 9.

### 4.3.2 DQE Instructions

Design-Build projects and proposals may be estimated in either LRE or DQE. Estimators will prepare a detailed estimate for the duplicate "DB" projects and proposal and enter the total amounts in the projects and proposal used for bidding purposes.

At this time the dollar amount is restricted to a maximum amount of \$99,999,999.99. If the Design-Build pay item estimated amount or anticipated bid amount is \$100,000,000.00 or more, enter multiples of the same pay item which will be combined for a total amount.

### 4.3.3 Estimating Guidance

An allowance for the design work is estimated either in LRE or DQE to account for the design fees for each project.

Even though Design-Build proposals follow a different procurement process than traditional Design-Build proposals, every Design-Build project and proposal has an Authorization Estimate and Official Estimate estimated in DQE by the Estimator.

### 4.4 Push-Button/Work Document Proposals

Push-button proposals are used to expeditiously resolve state roadway deficiencies at various locations concerning signalization, signing, pavement, pavement markings and other miscellaneous roadway deficiencies for a pre-determined contract term. Push-button proposals may be commonly referred to as Indefinite Delivery/Indefinite Quantity, Job Order, Task Work Order, or Work Document proposals. This contracting process establishes a defined scope of work to be completed by the Contractor and also includes establishing unit cost prices for predetermined work items which may be completed by the Contractor pursuant to the Department's issuance of Work Documents. The original scope of work as defined by the estimated number of units for each pay item is approximate and represents estimated planned work requirements based on historical or specific project needs. Work Documents will identify the location, description and amount of work to be performed. Under Push-button contracting, the Department does not guarantee any maximum quantity, minimum quantity, range of quantities, or work to be performed.

Award of Construction and Traffic Operations proposals are to be based on the Bid Factor method. Under this method, the Department provides quantities and predetermined Base Unit Prices for pay items which are included in the Contract Plans and Advertisement. In response to the Advertisement, bidders use the Department provided quantities and predetermined Base Unit Prices listed for each item to establish and include in their Bid Price Proposal a single Bid Factor expressed as a number carried out to 3 decimal places. The proposed Bid Factor will be applied to all predetermined pay item Base Unit Prices included in the Advertisement. The Bid Factor of 1.000 shall be 100% of the Base Unit Price, any number above 1.000 will increase the Base Unit Price, and any number below 1.000 will decrease the Base Unit Price. The lowest bidder will be determined by the lowest Bid Factor submitted in response to the Advertisement. Award of the contract is based upon the bidder who submits a responsive and responsible bid with the lowest Bid Factor.

### 4.4.1 Pay Items

Refer to Chapter 2 for guidance on Lump Sum pay items and alternative units of measure. Refer to Chapters 6 and 10 for use and formatting of Lump Sum pay items. Refer to Chapter 8 for additional guidance on documentation.

Designers will enter pay items through the Designer Interface into the proper Design Groups.

### 4.4.2 DQE Instructions

Estimators will prepare a balanced Authorization Estimate in DQE and coordinate with the State Estimates Office and Contracts Administration to set each pay item on the proposal to "fixed price" in AASHTOWare Project Preconstruction so that the Base Unit Prices will be displayed to the bidders.

Estimators will prepare an Official Estimate in DQE, in accordance with current procedures.

### 4.4.3 Estimating Guidance

In the past, the Department has experienced significantly unbalanced bids on Pushbutton contracts. These unbalanced bids limit the amount of work that can be performed under the contract. Therefore, it is important for the estimator to prepare an Authorization Estimate which is balanced. This Authorization Estimate Base Unit Price will be displayed to the bidders and the bidders will base their submitted single Bid Factor based on these prices.

An example of a Calculated Contract Unit Price is provided below:

Base Unit Price (\$439.20) x Bid Factor (0.988) = Calculated Contract Unit Price (\$433.93)

All Calculated Contract Unit Prices shall be rounded to the nearest penny. Payment under the executed contract is based upon actual quantities completed at the Calculated Contract Unit Price.

Please note that lump sum pay items are not included in Work Document contracts therefore the cost of lump sum items such as Mobilization are not accounted for in separate pay items and must be distributed among other items of work.

### 4.5 A + B Proposals

Cost-plus-time bidding or A + B bidding, where A is the standard construction cost and B is the time bid, is designed to shorten the total contract time by allowing each contractor to bid the number of days to construct the project.

### 4.5.1 Pay Items

No special pay items are needed for an A + B proposal.

### 4.5.2 DQE Instructions

No special actions are needed in DQE for A + B proposal estimating.

### 4.5.3 Estimating Guidance

The number of days and road user cost per day will be entered by the Estimator in the time tab for the proposal in AASHTOWare Project Preconstruction. See AASHTOWare Project Preconstruction Role Help for additional guidance.

### **Chapter 4 Revision History**

- 11-1-20: Updated header dates for 2021 edition.
- 11-1-19: Updated entire chapter. Updated header dates for 2020 edition.
- 7-1-19: Updated 4.4 for Pay items on Push Button Contracts.
- 12-1-18: Updated header dates for 2019 edition.
- 10-31-17: Updated header dates for 2018 edition.
- 3-3-17: Draft started for Alternative Contracts. Moved text from BOE Chapter 6 to 4.1.
- 10-25-16: Updated header dates for 2017 edition.
- 11-25-15: Updated header dates for 2016 edition.
- 12-30-14: Updated header dates for 2015 edition.
- 4-30-14: Updated header dates for 2014 edition.
- 2-20-13: Updated header dates for 2013 edition.
- 11-23-11: Updated header dates for 2012 edition.
- 11-23-10: Updated header dates for 2011 edition.
- 10-30-09: Updated header dates for 2010 edition.
- 10-01-08: Updated header dates for 2009 edition.

# Chapter 5 CONTACT LISTS

The Basis of Estimates is the result of coordination between District Estimates Offices and Central Office Design, Construction, and Maintenance. Following the pay item development processes, issues are identified in the districts, options are proposed through the Responsible Offices, and finally, recommendations are presented for management approval and statewide implementation.

In general, **Designers should coordinate with the FDOT Project Manager.** Pay item issues should be forwarded through the District Estimates and Specifications Coordinator(s) to the Central Office BOE Coordinator. Issues that require major changes (plans, standards, specifications, pay items, or other manuals) will be coordinated between the Responsible Offices, and any recommendations will be forwarded from the Coordination Team.

### **5.1 CENTRAL OFFICE PAY ITEM COORDINATORS**

CENTRAL OFFICE	COORDINATOR	LOCAL
Estimates, Engineering Support Services		
Basis of Estimates	Melissa Hollis	850-414-4182
Long Range Estimates		
Administrator	Cheri Sylvester	850-414-4179
System Issues	Karen Veenstra	850-414-4751
Project Estimates	June Mobley	850-414-4191
Pay Items	Melissa Hollis	850-414-4182
DQE		
Administrator	Cheri Sylvester	850-414-4179
Project Estimates	June Mobley	850-414-4191
System Issues	Karen Veenstra	850-414-4751
Pay Items	Melissa Hollis	850-414-4182
Final Estimates	Kristin Tadlock	850-414-4280
Specifications	Daniel Strickland	850-414-4130
	Rebecca Frimmel	850-414-4155
Maintenance	Deanna Hutchison	850-410-5634
CADD- Summary Boxes	Kandi Daffin	850-414-4289

### 5.2 DISTRICT SPECIFICATIONS AND ESTIMATES COORDINATORS

A list of district specifications and estimates contact persons is available online at <a href="http://www.dot.state.fl.us/programmanagement">http://www.dot.state.fl.us/programmanagement</a>.

Contact Lists 5-1

### **5.3 CONTACTS - BY RESPONSIBLE OFFICE**

Contact information is available on the following office web pages:

Construction: <a href="http://www.fdot.gov/construction/">http://www.fdot.gov/construction/</a> Roadway Design: <a href="http://www.fdot.gov/roadway/">http://www.fdot.gov/roadway/</a>

Traffic Engineering and Operations: <a href="http://www.fdot.gov/traffic/">http://www.fdot.gov/traffic/</a>

Maintenance: <a href="http://www.fdot.gov/maintenance/">http://www.fdot.gov/maintenance/</a>

Production Support: <a href="http://www.fdot.gov/designsupport/">http://www.fdot.gov/designsupport/</a>

Program Management: http://www.fdot.gov/programmanagement/

### **Chapter 5 Revision History**

11-1-20: Updated header dates for 2021 edition.

**11-1-19:** Updated header dates for 2020 edition. Updated LRE, DQE, and Specifications contacts.

**12-1-18:** Updated header dates for 2019 edition. Updated Maintenance contacts.

**7-16-18:** Updated Program Management contact names.

**10-23-17:** Updated header dates for 2018 edition. Updated CADD and Specifications contacts. Replaced office contacts with web links to various offices.

10-25-16: Updated header dates for 2017 edition.

**5-24-16:** Updated names and phone numbers for responsible office contact persons. Updated web address in 5.2.

**2-1-16:** Updated header dates for 2016 edition. Corrected names and numbers.

**12-30-14:** Updated header dates for 2015 edition. Corrected names and numbers. Corrected ITS and TMS references, due to changes in 600 series.

4-30-14: Updated header dates for 2014 edition. Corrected names and numbers.

**2-20-13:** Updated header dates for 2013 edition. Corrected names and numbers for Specifications Office contact persons.

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

**10-24-11:** Updated names and phone numbers for responsible office contact persons.

**11-17-10:** Removed table 5.2 for District Estimates and Specifications Offices; added link to contact list on web page. Updated header dates for 2011 edition.

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

**10-29-09:** Updated Pay Item ranges & contact persons.

**10-22-09:** Updated contact information for CO and District Specs/Estimates.

**10-22-08:** Updated contact information for District Specs/Estimates.

**10-1-08:** Updated header dates for 2009 edition.

**10-1-08:** Updated CO Specs contact information.

**5-28-08:** Updated contact information for Districts 3.

Contact Lists 5-2

# Chapter 6 Pay Item Development Process

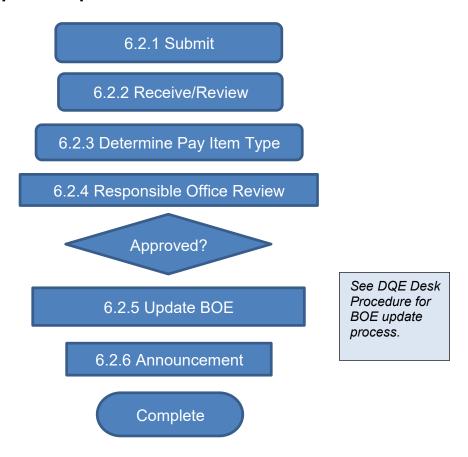
### 6.1 General

The pay item development process below outlines the process needed for establishing and maintaining pay items. The pay item should be coordinated with specifications and plans development. Use this guide when expanding, activating, or requesting specific types of pay items.

Pay Item Requests should be submitted at Phase 2, or as soon as the need is identified, so that the correct pay item and quantity can be loaded for Phase 3. Refer to the **Specifications Handbook** and **FDM** for further guidance.

**NOTE:** Central Office Estimates will make every effort to respond to a Pay Item Request within 24 hours. Pending specification concerns and/or incomplete requests may delay the review time and actions outlined below.

### 6.2 Pay Item Request Steps



### 6.2.1 Submit the Pay Item Request (Step 1- Designer)

The pay item request should be accompanied by supporting information to assist with the review of the pay item, to ensure that the Plans, Specifications and Estimates (PS&E) components are working together.

**Plans:** Indicate whether the standard plans, approved modification, or a project specific detail will be used. For items reviewed by the Responsible Office, words or draft plan sheets will help identify the location, conditions, and related details.

**Specifications:** Indicate whether the standard specifications book (ebook), Special Provisions (SP), Developmental Specifications (DevSpec), Modified Special Provisions (MSP), or Technical Special Provisions (TSP) will apply.

**Estimates:** Indicate whether an existing pay item structure applies, or if a new/project specific pay item is needed.

TO: <u>FDOT-PayItems@dot.state.fl.us</u>, District Estimates Engineer (as applicable) COPY: FDOT Project Manager, District Specifications Engineer (as applicable)

FROM: Designer

SUBJECT: PROJECT 123456-1-52-01, Pay Item Request for Item 123-456- A

Please activate/create the following pay item(s):

123- 4- 5 Widget, per EA

Plans: Index 123-001

Specs: Section 123 or attached draft spec/modification Additional Notes/details, attachments, as applicable

### Contact:

Joe Smith, ZZZ Consulting, 1-555-555-555

Joe.Smith@zzzConsulting.com

**Hints:** DO NOT copy/attach standard plans, standard specifications, or BOE text that is available online.

DO attach project specific plan sheets or draft specification, modifications, etc. to help with the review.

**Approximate time to prepare email:** Normally less than 5 minutes. Actual time may vary based on plans phase and details submitted.

### 6.2.2 Review the Pay Item Request (Step 2- Estimates)

The pay item request will be reviewed by Central Office Estimates, to determine if PS&E needs above been addressed.

**Hint:** See BOE for related items and/or Step 4 for information Responsible Office may need to complete review.

Approximate time: Normally less than 5 minutes to review email request

### 6.2.3 Determine the Pay Item Type (Step 3- Estimates)

Verify the pay item type, based on the applicable specification(s). See the Specifications Office's web page at <a href="https://www.fdot.gov/programmanagement/specs.shtm">https://www.fdot.gov/programmanagement/specs.shtm</a> for a complete description.

**Approximate Time:** Normally less than 5 minutes. Time may vary, depending upon proposed specification type.

**Standard/Special Provision:** Specification is available in either the Standard Specification Book and/or workbook.

**Hint:** Standard pay items normally exist for standard specifications or standard plans; items for additional sizes, materials, or operations may need to be activated.

**Developmental/Monitored:** Specification is available, upon approval of the Monitor. Project Specific Pay items are activated following the spec approval. Details are available at:

https://www.fdot.gov/programmanagement/OtherFDOTLinks/Developmental/ Default.shtm

**Hints:** Work with the District Specifications Engineer to follow the Developmental Specification Process. See FDM 115 for guidance. Proceed to Step 5 upon Developmental Spec approval.

Modified Special Provision (MSP) or Technical Special Provision (TSP): Pay item will be based on the project specific needs.

**Hints:** See the Specification development information at <a href="https://www.fdot.gov/programmanagement/specs.shtm">https://www.fdot.gov/programmanagement/specs.shtm</a> Include the draft MSP or TSP for the responsible office's review.

**Reminder:** Technical Special Provisions are used when a Standard Specification or Special Provision does not exist. Changes to an existing specification should be made through a Modified Special Provision, subject to the approval of the State Specifications Engineer. Coordinate with the District Specifications Office, as needed. Responsible Office's review time may vary; see Step 4.

### 6.2.4 Reviews (Step 4- Responsible Office)

The Responsible Office should consider the existing specification, existing standard plans, and existing guidance, with respect to the proposed changes. Some of the questions/concerns to be addressed include:

### Plan Details/Standard Plans:

Should the Standard Plans be used? Has a design variation, per the FDM, been submitted?

Are appropriate notes/details shown in the project specific plan details, without duplicating/conflicting with the specifications?

### **Specifications:**

Should the existing Standard Specification or Special Provision be used? Is a Developmental Specification available? Has a request been submitted? Is a Technical Special Provision needed, due to lack of existing specification? Should a Modified Special Provision be considered? Does the specification use/affect the Approved Products List (APL)?

**Reminder:** When a specification is modified, the APL cannot be used for that specification section/item; the APL is valid only for products meeting the Standard Specification. Additional information is available at <a href="https://www.fdot.gov/programmanagement/ProductEvaluation/Default.shtm">https://www.fdot.gov/programmanagement/ProductEvaluation/Default.shtm</a>

Have the material requirements been addressed? Is there a Division III specification?

Are there any means/methods required? Should these be up to the contractor?

Has the AASHTO format been followed, including Description, Materials, Installation/Acceptance, Method of Measurement, and Basis of Payment?

### **Estimates:**

Has the unit of measure, method of measurement, and basis of payment been addressed?

Are there any plan/pay item notes which duplicate, modify, or conflict with the measurement and payment?

If a pay item structure or item is needed, the Responsible Office will coordinate with Central Office Specifications and Estimates.

NOTE: Pay item descriptions are NOT changed. "Old specifications" use "Old pay item number", while "new/updated specifications" use "new pay item number". Additional details are in Chapter 10.

### Criteria:

Has the FDM guidance been followed for design decisions?

Are other FDOT handbooks or manuals applicable, such as the FDOT Design Manual (FDM), Traffic Engineering Manual (TEM), Construction Project Administration Manual (CPAM)?

Are other external handbooks or test methods applicable, such as the Manual for

Uniform Traffic Control Devices (MUTCD), American Society for Testing and Materials (ASTM), or Federal Highway Administration (FHWA)?

The responsible office will work together with the above groups when a significant change is proposed, to reduce the potential "unintended consequences". The affected offices will coordinate the implementation date, as needed.

**Approximate time:** Responsible Office's review time may vary, depending upon material submitted and scope of the change. A response within two working days is normal. Full implementation may depend upon publication dates of affected standards, specifications, or other criteria.

### 6.2.5 Update the BOE (Step 5- Estimates)

Upon approval of the Responsible Office, the pay item structure will be created/updated. Pay Item(s) for the applicable operation, size, shape, etc. will be activated. Items will be immediately available through the Designer Interface.

CO Estimates will respond to the original email request.

**Approximate time:** 5 minutes to activate pay item. 5-10 minutes to update the BOE if pay item structure changes are needed.

### 6.2.6 Announcements (Step 6- Estimates and/or Responsible Office)

For project specific pay items or issues with no impact to others, an announcement will not delay implementation. The pay item activated in Step 5 is available immediately.

For changes affecting multiple projects, an announcement is normally provided. This may be completed through the BOE update, an internal FDOT email, Memorandum, or Bulletin, depending upon the number of projects and the effective letting date. The responsible office should work with the FDOT Coordination Team (C-Team) to discuss changes affecting multiple projects across multiple districts.

**Approximate time:** varies, depending upon the level of coordination completed during step 4.

**Reminder:** The issue is NOT COMPLETE, until the all coordination and announcements are finalized. The Responsible Office will track this step.

### **6.3 Pay Item Request Form Instructions**

Use of the Pay Item Request Form is optional. While most requests are submitted through e-mail, a Pay item request form 600-000-02 is available through the Policy and **Process Management Office's** web page at <a href="https://fms.fdot.gov/">https://fms.fdot.gov/</a>. The form may be helpful to identify information that is needed to complete the steps of the pay item request process for new pay item structures.

To complete the form, the Originator completes the fields marked with an asterisk (\*). The Originator may be a Consultant Designer (for project specific needs), an FDOT Designer (for new products, processes, etc.) or any FDOT Employee (for implementing policy or procedures).

Fields without an asterisk (\*), or unknown information, may be left blank. They will be completed by the BOE Coordinator and/or Responsible Office, as necessary.

### Pay Item Structure (Group level for Pay Item Numbers):

Pay item structure numbers will be assigned by the Basis of Estimates Coordinator in the Central Office. Specification Section numbers will be selected with recommendations from the State Specifications Office. See additional guidance in **Chapter 10** for Formatting Pay Items.

Guidelines for new pay item structures 0123-456-789:

- First three digits (123) match the Specification Section. See also Developmental Pay Items for special cases.
- Digits 456-789 are right justified within the group.
- Variables ABC-DEF may be used to define operation, size, shape, color, type, etc. when needed to separate items with significantly different cost. Variables that can be defined in the plans or specifications do not need separate pay items, if the cost is similar. Contact the Basis of Estimates Coordinator for assistance.

When install, relocate, or other non-furnish operations are defined, the remaining variables may be blank or zero. These should be clearly indicated with the structure.

### \*Description:

Describe the new pay item so that this "name" best communicates what this item is used for.

### \*Unit of measure:

Identify the unit of measure. A maximum of two characters used to abbreviate the method of measure for this item. See **Chapter 2** for acceptable units.

### \*Requested Action:

Check the type of action requested: New Item or Permanent Block. When this item is to be coordinated with other pay items, specifications, or standard plans, note the related item(s), i.e. Item No. ###-abc-def, or "MOT items for updated standards". An expanded pay item structure is considered a "new item".

### \*Structure:

See above for Pay Item Structure guidelines.

Additional parameters which do not affect the price may be detailed in the plans; DO NOT create additional pay item structures for these parameters. Limited structures can be used to encourage price competition between products that perform similar functions and/or

provide similar end results. Use additional sheet(s) if necessary.

### \*Detail Information:

Describe the item, application, recommended use, materials, etc. This information will be used to help identify the appropriate pay item, and cost estimate distribution. This information is used in the Basis of Estimates detail to assist designers in the selection and quantity calculations of an item.

Text may include "Use When...", "Do not use when...", "Estimate xx items per...", and/or "Item(s)... are recommended/required when this item is used."

The pay item detail information is not a substitute for specifications. In case of doubt, always refer to the applicable specification(s) for a complete description of the work to be completed, materials, measurement, and payment.

### \*Method of Measurement, Precision:

Describe the Method of Measurement in the specification. The precision is based on the unit of measure, per Chapter 2.

### \*Plan Quantity:

Yes, if payment of the item is based on Plan Quantity, subject to specifications. No, if payment is based on Field Measurement.

Ensure that this selection matches compensation information in the applicable specifications.

### Documentation-

### \*Specification- Section, Article; Tech Specs?:

- For items with existing or related specifications (requests for items with new size, shape, or function), refer to the applicable Section number.
- For project specific items without existing specifications (requests for items with limited use or project specific conditions), contact the District Specifications Office; a copy of the Technical Special Provision will be required with the pay item request form.
- **For new, general use items** without existing specifications (requests for items based on changes to standards, specifications, and or policy), contact the State Specifications Office. The implementation of these items will be coordinated with all affected offices.

### Specifications Submitted, Date:

List the name of the person originating the specification, and the date it was sent to the Specifications Office.

### \*FDOT Design Manual:

Refer to Chapter for applicable information. If a revision is necessary, contact the State Roadway Design Office to propose revision(s).

### \*Standard Plans, Index No(s):

Applicable *Standard Plans*, with index number(s). If a revision is necessary, contact the applicable office.

### \*Summary Box or Tabulation Sheet:

Applicable Summary Box or Tabulation Sheet for documentation of quantities. Refer to Chapter 8. Changes to the summary box(es) or tabulation sheet(s) must be coordinated with CADD Support and Estimates.

### \*Shop Drawings:

If shop drawings will be required, circle yes, otherwise circle no.

### \*Plan Notes:

If plan notes will be required, provide sample text of note. (Plan notes should not replace or duplicate specification text.) All plan notes should be coordinated with the FDM text.

### Other:

If use of this item is included in other documentation (Drainage, Pavement Design, Traffic Signals, or other Manual/Handbook), note applicable volume, chapter, or edition. If revisions are necessary, coordinate changes with applicable office.

### Responsible Office Approval, Date:

The Responsible Office will depend upon the applicable specification section(s).

### Cost Data-

### Related Pay Item(s), Unit Price, Additional Cost, Manufacturer/Supplier(s):

For items similar in cost, provide related item numbers. If no similar items exist, provide price and availability information. Unit price, per the specification, normally includes cost of material installation, delivery, incidental materials, etc.

### **Estimator's Approval, Date:**

Estimates review of the proposed price and/or related items.

### \*Originator-

### Name, Date, Office, Phone, District:

The originator may be a Consultant or FDOT employee, currently working on the project for which the item is requested. This person should be able to answer any additional questions regarding the use/application of this item. Complete information as requested.

### **District Estimates Office Approval:**

For Items originating in the districts, the District Estimates Engineer should sign, indicating that the form contents have been completed and reviewed.

### **Central Office Approvals-**

### **Design Coordinator, Specifications Coordinator, BOE Coordinator:**

Each person responsible for approval should verify that requested action is necessary,

meets existing/proposed standards, guidelines, handbooks, etc, and is not in conflict with existing item(s).

### Implementation Notes and Effective/Obsolete Dates-Effective Letting Date, C-Team Issue #, Summary Details:

The implementation information will be completed in the Central Office, following all approvals. Actions which require coordination between offices will be addressed by the Coordination Team, with approved implementation plans detailed in the Basis of Estimates Summary of Changes. Minor actions, not requiring an implementation plan, will be implemented immediately.

Effective and Obsolete dates will be coordinated with the effective/obsolete dates of the applicable specifications or standard plans. See Step 6 above for announcements that may be needed.

Project Specific pay items will be valid for the 6 month period (January-June or July-December) in which the project's letting date occurs. If the project's letting date changes, valid dates for Project Specific pay items will be updated upon request, unless a specification or standard plans change conflicts with the pay item.

**Master File-** Item Number, Financial Project Number, and Project Letting Date: Project specific pay items will be activated upon approval and implementation.

For new or replacement pay item groups, the commonly used sizes, shapes or other pay item combinations may be activated upon approval of the specification/standard plans, without waiting for specific projects to request the items.

### 6.4 Generic Pay Items for Utility Work

### 6.4.1 Description

At this time, generic pay items are only available for utility work. Generic pay items are general-use pay items available for Utility Work that are defined by a pay item supplemental description on a project by project basis. They are intended to support one-time usage pay items or specialty situations where a standard pay item is not available, and for which it is not practical to create a new pay item. A single generic pay item number can be used many times, but only once per project/proposal; each time it is used the appropriate descriptive information must be included. Since these items are for unique situations, tracking of cost history for future estimation purposes is not necessary. If cost history might be helpful, consider requesting a new pay item.

Coordinate with the District Estimates Engineer, as needed, to address contract issues when generic items are used on multiple projects or similar items within a contract.

### **6.4.2 Rules**

The following rules apply in the usage of all **generic pay items**, **including duplicate Lump sum projects**:

- Must not be used if there is an existing pay item.
- Must not be used to violate or circumvent standard pay items. Must not be used to circumvent the approval process (for specification usage) on developmental items.
- Must not be used as a standard means to work-around a pay item that has been rejected for statewide usage by Central Office.
- Must not to be used for sole-sourcing of materials/methods for items of work.
- Must not be used to circumvent the pay item request process if the pay item should be activated for statewide usage.
- Must be supported by a technical special provision and/or plan details; refer to 7.3 of the Basis of Estimates.
- Must be loaded under the appropriate project category (Utilities=700).

### **6.4.3 Roles**

It is important that everyone involved in the pre-letting and post-letting processes understands and fulfills their respective responsibilities regarding generic pay items:

**Designer** – Designers are responsible for determining if a generic pay item is needed, developing the technical special provision (or ensuring it has been developed), and ensuring that all necessary details are included in the contract documents.

**District Estimates Staff** –The District Estimates Staff is responsible for updating the pay item's description and unit of measure.

**Central Office Project Review Team** – The CO Project Review staff will perform a quarterly Quality Assurance review of generic pay items after the letting. They will not perform a Quality Control review of generic pay items prior to the letting.

The quarterly review will be completed as follows:

- Run the Pay Item Future Search report to determine if any generic pay items were used during the previous quarter;
- Check for proper details and plan notes in the contract documents;
- Check for correct information in Trns•port:
- Verify that the description of the generic pay item has a Supplemental Proposal Description, with unit of measure;
- Verify that generic items have been loaded in the correct category;
- Coordinate with the responsible design office if usage of generic pay item is questionable (usage does not appear to abide by the usage "Rules" as described in this document).

### 6.4.4 Process

The process that is to be followed when generic pay items are used is as follows:

- 1. District identifies work that is appropriate for a generic pay item, but must not violate the rules;
- 2. Designer includes all supporting details for the generic pay item in the contract documents;
- 3. Designer loads generic pay item via the Designer Interface, and supplies the District Estimates staff with the pay item supplemental description.
- 4. District Estimates staff loads supplemental description and units for generic pay item.

### 6.4.5 Quality Control & Quality Assurance

**Quality Control:** Districts assume all responsibility for proper usage of generic pay items. No approvals from Central Office will be required; no Quality Control reviews will be performed by Central Office.

**Quality Assurance:** Quarterly post-letting reviews of generic pay items will be performed by the Central Office Project Review team. The team will check for:

- Supplemental Proposal Description (clearly representing the item of work), with unit of measure, has been loaded; and
- Complete documentation (drawings and/or specifications) is included in the contract package.

The responsible Central Office Design personnel may be consulted to verify appropriate usage.

### 6.4.6 Pay Item Structure & Description

Generic pay items are structured as:

0000-AAA-BBB

AAA = Design Group/ Category (700 for Utilities)

BBB= Sequential Number that can be re-used

Note: Zeros are hard-coded; they are NOT blanks.

The default unit of measure for all generic pay items is ZZ. The actual unit of measure must be entered with the project-specific description being added at the end of the Supplemental Proposal (Pay Item) Description.

Example:

```
0000-700- 1 UTILITY DESIGN GROUP - GENERIC PAY ITEM 1 (UTILITY PIPE, F&I, DI/CI, WATER/SEWER, 10" - LF) ZZ
```

**Description:** The Supplemental Proposal (Pay Item) Description and unit of measure are

entered as follows:

By default, the Description field will be filled with the generic description that is associated with the pay item number in the master pay item list; the default unit of measure will be ZZ. While the designer may enter the pay item number and quantity, it is the District Estimates Office's responsibility to enter the Supplemental Proposal Description and actual unit of measure, as shown in parentheses in the example above.

**Utility Pay Items:** Generic pay items can provide greater flexibility for Utilities projects. They can be used to:

- Specify a pipe size when the standard pay item is for a size range:
- Break out fittings on items that normally have fittings included as an incidental cost of the pipe (pipe size less than 8"):
- Combine fittings into one pay item when the standard pay item does not include the fittings (pipe size greater than or equal to 8").
- Separate payment for unique utility work or materials

### 6.5 Inactive Items

In an effort to remove unused pay items, those items not used within a 2 year period will be labeled as "inactive" and considered for temporary and/or permanent blocking.

Restoring inactive items will require that the Designer follow the instructions for requesting a new item, as standards or specifications may have changed.

If an inactive item remains unused for 3 years, the Estimates Office will recommend to the responsible office that the pay item structure be blocked. Once blocked, a pay item request must be submitted in accordance with 6.2, before it will be reactivated.

### 6.6 Pay Item Reviews

When a major specification or standards change is made, the responsible office is requested to review the pay item structure to ensure that the affected items meet the needs of Design, Construction, Maintenance, and other industries. Historical use and item averages are available, but should not be the only consideration.

As recommended with new items, the pay item structure ###-abc-def, should be used to define parameters as needed. Some factors to consider when reviewing the pay item structure:

a. What factors are most important to the Designer, Estimator, Supplier, Manufacturer, and/or Contractor? Can they be detailed in the plans? Are they included in the specification? Does it affect the price?

Note: Not all factors should be weighted equally. Sometimes the installation (labor) is more significant than the materials.

b. Are there standards/specifications for the item?

There may be 2 standard products and 8 "special" items. If the 2 standard items account for a significant percentage of applications, could the "special" items be combined under one "special" item?

Additional parameters which do not affect the price may be detailed in the plans; DO NOT create additional pay item structures for these parameters. Limited structures can be used to encourage price competition between products that perform similar functions and/or provide similar end results

### 6.7 Coordination Team (C-Team)

A team representing many Design & Construction Offices has been established to coordinate the review and implementation of various issues. By working together, the team is able to ensure that pay items, specifications, and standards, as well as supporting handbooks and manuals, are available in a timely manner- with a coordinated implementation plan. Design Representatives include the persons from Roadway, Structures, Specifications, Standards, and Estimates. Construction and Maintenance are also represented. When necessary, representatives from other affected offices are requested to attend.

Issues may be submitted by any office or representative, but are normally the result of changes to pay items, specifications, and/or standards. Each office's representative is encouraged to keep the team informed of issues that may impact others. When proposing major changes to the pay item structure, specifications or standards, please coordinate with each office to determine/verify known or unintended impacts.

Issues brought to the attention of the C-Team will be evaluated and processed on a "case-by case" basis. Issues with minimal impact on others are noted, with little or no further C-Team activity. Issues with extensive impact may be assigned to a committee for further investigation. The result of C-Team activity should be a recommended implementation plan, complete with a brief history and resulting changes. Implementation will be scheduled to coincide with Specification, BOE, Standard, and Manual updates, when possible.

The State Estimates Office compiles information resulting from C-Team recommendations for the Summary of Major Changes included with each edition/update to the Basis of Estimates. Managers of the affected offices approve issues included in the summary. Overall approvals, from the Directors of the Office of Design and Highway Operations, are also included.

## 6.8 Developmental Pay Items, Project Specific Items, and Special Use Items

### 6.8.1 Developmental Pay Items

Developmental Pay Items are used with Developmental Specifications. See the **Specifications Handbook** for additional information.

When an item is recommended for implementation while details are under review (specifications, standards, policy, etc.) a developmental pay item may be assigned. Developmental items are intended for limited use, for a limited period of time, while the item is under review. A monitor is assigned for each Developmental Specification. Any problems or concerns with the Developmental Specification, from either Design or Construction, should be directed to the monitor.

Developmental pay item numbers are assigned upon project specific approval of the Developmental Specification. Requests, per the Specifications Handbook, must be through the District Estimates Office.

Upon completion of the review period for the specification, standard, and/or policy change(s), the monitor may recommend that a specification and pay item be activated for statewide implementation.

### 6.8.2 Project Specific Pay Items

Project Specific Pay Items are similar to Developmental Pay items; they are also monitored by the responsible Design or Construction Office. These items may be requested when an infrequently used item has a need for tracking, and specifications are project specific. Specifications for these pay items must be coordinated with the monitor. Examples of Project Specific Pay Items include research of geotechnical materials, asphalt surfaces, or new technology. Some of these items may become developmental items, as the research, monitoring needs, or number of projects continues to expand. Coordinate requesting use of these pay items with the District Estimates Office.

### 6.8.3 Special Use Pay Items

Special Use pay items are generally used to encumber funds. They are numbered as described in 6.8.1. Details for most of these pay items are found in the *Construction Project Administration Manual (CPAM)*. Examples of special Use pay items include Lump Sum Contract, Partnering, Disputes Review Board, Speed and Law Enforcement, and Initial Contingency Amount. Note that some of the special use pay items are marked "do not bid" and/or contain pre-set prices.

### **Chapter 6 Revision History**

**11-1-20:** Updated header dates for 2021 edition. Editorial changes to 6.8, to be consistent Specifications Handbook.

- 11-1-19: Updated header dates. Updated the pay item process and graphic.
- Renumbered section, as needed. Updated Generic Items, to limit applications to only Utility category work.
- **12-1-18:** Updated header dates for 2019 edition.
- **10-30-17:** Updated header dates for 2018 edition. Changed "Trial Pay Items" to "Project Specific". Removed 6.10- Related Documents.
- **10-1-16:** Updated header dates for 2017 edition.
- **2-1-16:** Updated header dates for 2016 edition. Clarified difference between open/activating and new pay items in 6.2.
- **12-30-14:** Updated header dates for 2015 edition. Corrected minor spelling and punctuation errors.
- **4-30-14:** Updated header dates for 2014 edition. Added notes for Comp Books/Summary Boxes in 6.10. Updated hyperlinks.
- **2-20-13:** Updated header dates for 2013 edition.
- **11-23-11:** Updated header dates for 2012 edition.
- **10-17-11:** Added Pay Item Process flowchart, with details about color paths. Updated 6.2 through 6.7 to refer to the flowchart processes.
- **4-21-11:** Updated header date. Revised 6.5.2 regarding Technical Special Provisions and/or plan details to refer to 7.3 of the BOE. Revised 6.9 to detail differences between Developmental, Trial, and Special Use pay items.
- **11-22-10:** Updated header dates for 2011 edition. Expanded 6.2 and 6.3 for e-mail requests.
- **3-10-2010:** Updated 6.5.2 to expand generic pay item rules to duplicate LS projects.
- **12-9-2009:** Inserted section 6.5 Generic Pay Items. Text is based on Estimates Bulletin 09-06, and the accompanying Guidelines for Usage of Generic Pay Items.
- 10-30-2009: Updated header dates for 2010 edition.
- 10-1-2008: Updated header dates for 2009 edition.
- **10-1-2008:** Updated text to make the pay item request form optional. Complete information may be submitted by e-mail.

# Chapter 7 Design Tools

#### 7.1 General Information

Detailed **plan notes**, **modified special provisions**, **and/or technical special provisions** must be provided by the designer for all items **not covered by existing specifications**. *Plan notes are not acceptable as a substitute for specifications*. Plan notes are intended to work <u>with</u> the specifications, and are not intended to supersede the specifications. Plan notes <u>must not</u>:

Change the specifications
Conflict with the specifications
Duplicate the specifications
Change the pay item description

When existing specifications are not applicable, coordinate specification revisions with the District Specifications Office. Every effort should be made to avoid conflicts, as plan notes are overridden by some specifications and take precedence over others. In either case, plan notes must <u>never</u> conflict with specifications. Details necessary for complete information include:

Description of item
Materials
Construction and installation
Method of measurement
Basis of payment

Modified Special Provisions are also known as "MSPs". Technical Special Provisions are also known as "Tech Specs" or "TSPs". In general, the difference is:

- MSPs: used to modify existing specification sections
- TSPs: used when no specification section exists

For additional information on various types of specifications, refer to the **Specifications Handbook** at <a href="http://www.fdot.gov/programmanagement/specs.shtm">http://www.fdot.gov/programmanagement/specs.shtm</a>. Contact the District Specifications Office with any project related specifications concerns.

NOTE: Refer to the FDOT Design Manual (FDM), Topic 625-000-002, for additional guidelines on using plan notes. It is located online at <a href="http://www.fdot.gov/roadway/FDM">http://www.fdot.gov/roadway/FDM</a> Contact the Roadway Design Office with any questions, comments, or corrections regarding these notes. Similar guidance is in the Structures Detailing Manual, 5.1, F.

Pay item descriptions must remain as shown in the BOE and provided from the various system reports. This is the description used for the contract bid documents through final payment. See Chapter 6 for requesting pay items when project specific needs require other descriptions.

## 7.2 Specification Flags

Several letters or "flags" are used on the Master Pay Item list and Summary of Pay Items to indicate when a non-standard specification and/or Plan detail is **likely needed**. Flags are listed, with further guidance below:

A= Approvals needed

B= BOE guidance

D= Developmental Spec

E= Estimates Use Only

G= Generic Item

T= Technical Special Provision

M= Maintenance use only

P= Plan Details

R= Permit

S= Modified Special Provision

**Approvals:** Contact the monitor for approval on each project. Additional information is provided in the BOE details for the pay item.

**BOE Guidance:** Specification flag(s) may depend on multiple factors, as described in the BOE details for the pay item group.

**Developmental Specification:** Developmental Specifications must be requested from the District Specifications Office, for approval by the CO Specifications Office, on a project by project basis. Follow the instructions on the Specifications Office's developmental specifications page at

https://www.fdot.gov/programmanagement/OtherFDOTLinks/Developmental/Default.sht m

**Estimates Use Only:** These items are intended for estimating/accounting use. For additional information, see BOE guidance for the pay item number.

Generic Item: See Chapter 6 for details

**Technical Special Provision (TSP):** Specification preparation assistance is available at <a href="https://www.fdot.gov/programmanagement/PackagePreparation/Default.shtm">https://www.fdot.gov/programmanagement/PackagePreparation/Default.shtm</a> While TSPs are project specific, coordinate with the District Specifications Office, as past specifications may be available.

**Maintenance Use Only:** Selected pay items are available for use on Maintenance Contracts only, due to maintenance specification changes that provide for separate payment and/or method of measurement.

**Plan Details:** While all pay items have selected plan details showing the quantities, locations, and/or dimensions, this flag is used to identify pay items with additional information required, per the specification.

**Permit:** Pay item is used for work required by a permit, normally issued by an environmental or water management agency. These pay items should NOT be used unless addressed in the permit.

**Modified Special Provision:** Modified specifications must be coordinated with the District Specifications Office. Additional guidance is available at <a href="https://www.fdot.gov/programmanagement/PackagePreparation/Default.shtm">https://www.fdot.gov/programmanagement/PackagePreparation/Default.shtm</a>

Refer to the details for the specific pay item group in the Basis of Estimates for additional information.

## 7.3 Choosing between Specifications and Plan Details

When trying to decide between Specifications and Plan Details, there are several quick questions to consider:

- 1. What is the work to be completed?
- 2. What are the material requirements? What are the testing criteria?
- 3. How is this to be **installed**? What are the performance requirements?
- 4. Will the item be **measured** in the field, or paid by plan quantity?
- 5. What work/materials are included with, or excluded from, this **payment**?

When is a Plan Note sufficient? When the quick questions above are answered by the specifications, a plan note is sufficient. This frequently occurs when the specification indicates "use xxx, unless otherwise shown in the plans." Remember, plan details/drawings show dimensions and location; they alone are not a substitute for complete specifications.

When is a Specification Required? If the above quick questions are not answered by the existing specifications, a non-standard specification is required. The Designer is responsible for ensuring that all pay items are completely covered within the contract documents (specs, standards, and/or plans).

#### A complete specification includes:

**Description:** A Description of the work to be completed may be in the form of a drawing/plan detail, words in a specification, or both.

**Material requirements:** Materials may be identified in the specifications, design standards, by reference to ASTM or other testing criteria, or by notes in the plans. Consider long-term material requirements, such as UV protection or other coatings.

**Construction:** Either installation methods or performance requirements may be given. Some products may be installed "in accordance with manufacturer's instructions."

**Method of Measurement:** Describe HOW the item will be measured, as well as whether it will be paid by plan quantity or field measured. The standard text normally includes the "furnish and install" operation. When working with "install only" items, ensure that the pick-up/delivery instructions are included. For "relocate" items, clearly identify original and final location, as well as clean-up work at the original location and incidental items needed at the final location. "Remove" items should clearly identify whether contractor takes ownership (dispose) or the Department retains ownership (stockpile- within right of way, or delivered to maintenance yard). Additional operations are explained in the **BOE**, **Chapter 10**.

Special/Custom items should only be used when there is a significant deviation from the standard item of work; existing specs and/or standards do not apply. Complete specifications are needed. Note: Minor changes may be noted in the plans, using standard pay items, as long as conflicts are not created within the contract documents. Coordinate proposed specification changes with the District Specifications Office.

**Basis of Payment:** Payment is often "full compensation for all work specified" for a complete and accepted installation.

## 7.4 Plan Details and Pay Item Notes

**FDM 2020 edition:** FDM Chapters 304 and 307 address the Summary of Quantities sheets in the plans, along with standard pay item notes. When a plan note is necessary, locate it where it is most relevant. For roadway items, this would be on the roadway summary of quantities, along with standard pay item notes. For other component plans, this would be on the summary of quantities sheet(s), or near the item detail/drawing.

#### From the **FDM 311.1 General Notes**:

General notes provide information and direction to the contractor by clarifying design details or construction practices. General notes are project-specific and must not restate, broaden or curtail requirements in the Standard Specifications or Standard Plans.

**FDM 2021 edition:** Ensure that notes do not duplicate or conflict with specifications.

## 7.4.1 Choosing between Plan Details, Pay Item Notes, and Summary Box Design Notes Column

The Design Notes column of the summary box is used to show information that is location and/or payment specific. Do not use the design notes column for specification details, such as material requirements. Refer to Chapter 8 for additional guidance.

Plan or Pay Item notes should be coordinated with the District Specifications and Estimates Offices. They should not be used in conflict with specification text for Measurement and Payment. Refer to the **FDOT Design Manual (FDM)** for additional guidance.

## 7.4.2 Pay Item Notes

Pay item notes that begin "Payment includes..." should be moved to the appropriate specification's Basis of Payment. Do not use a pay item note to change or duplicate the specification, without approval of the District Specifications Engineer.

## 7.5 Plan Quantity Concept

Plan Quantity Measurement is defined in 9-1.3 of the specifications. Estimated quantities must be calculated and documented as accurately as possible. Plan Quantity pay items shall not include contingencies in the quantity calculation.

## 7.6 Federal Funding

## 7.6.1 Projects with Federal Funds

When any project with federal funds is let together with a state funded project, also known as "strung projects", all projects within the contract become "federalized", i.e. they must comply with all applicable federal laws, rules, and regulations related to the federalized contract. In addition, the Federal-aid project may become the lead project.

Details are available in the *FDOT Design Manual (FDM)*. Contact the District Estimates Engineer for additional guidance.

## 7.6.1 Federal Participation at the Pay Item Level

On a project with federal funds, all items will "participate" in the funding, unless specifically noted otherwise. Summarized from FHWA, all items of work, including preventative maintenance, which are intended to extend the useful life of the highway will be eligible for participation in federal funds.

Items of "routine maintenance" are not eligible for participation in federal funds. Examples of "routine maintenance" include litter removal and mowing.

For construction contracts, most items will be loaded as participating. Pay Items specifically noted in the **Basis of Estimates** (**BOE**) as "non-participating" will default to "non-participating". Do not change the participating/non-participating field, unless specifically instructed by the District Estimates Office.

## 7.7 Proprietary Products

#### 7.7.1 Procedure

Proprietary products, identifying a specific brand, product, and/or model, must follow the Proprietary Product Procedure No 630-020-005. Details are available from Product Evaluation at http://www.fdot.gov/programmanagement/ProductEvaluation/Default.shtm

## 7.7.2 Specifications

Specifications associated with Proprietary Products must follow current specification instructions, available at <a href="http://www.fdot.gov/programmanagement/specs.shtm">http://www.fdot.gov/programmanagement/specs.shtm</a> Ensure that Method of Measurement and Basis of Payment are addressed in the contract documents.

## 7.7.3 Pay Items

Pay items for proprietary products will normally follow existing pay item guidance for the applicable item(s).

- if the item is currently covered by an existing pay item, the proprietary product will continue to use the existing item
- If the item is covered by a project specific or developmental pay item, the proprietary product will use the applicable pay item

As with all pay items, if the proprietary product is expected to have significantly higher or lower cost, a project specific pay item may be requested.

#### **Chapter 7 Revision History**

**11-1-20:** Updated header dates for 2021 edition. Formatted text in 7.2. Added 2021 FDM guidance to 7.4.

**4-17-20:** Added "S" code for specification type. Expanded guidance in 7.2.

**11-1-19:** Updated header dates for 2020 edition. Added 7.4.2 for pay item notes.

**12-1-18:** Updated header dates for 2019 edition. Added text for pay item descriptions. Added 7.7 for Proprietary Products.

**8-8-18:** Updated 7.1 and 7.4 references from PPM to FDM chapters.

**10-23-17:** Updated header dates for 2018 edition. Updated PPM reference and web page to FDM. Updated General Notes quote from 2018 FDM.

**8-12-16:** Added PPM reference to 7.4 for active voice wording. Updated web links to fdot.gov.

**5-9-16:** Updated 7.2 to include B value.

2-1-16: Updated header dates for 2016 edition. Updated PPM reference in 7.4.

**12-30-14:** Updated header dates for 2015 edition. Added third paragraph to 7.1 to define Tech Specs and refer to specs web page. Corrected missing text from last sentence of 7.6.1.

**5-14-14:** Updated 7.2 to include developmental specs.

**1-14-14:** Updated header dates for 2014 edition. Updated "Spec Type" flag list. Included Quick Reference information into section 7.3. Updated hyperlink.

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

**12-30-11:** Added 7.5 to include Plan Quantity information, per Estimates Bulletin 11-06.

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

**10-17-11:** Added 7.4 to detail pay item notes, along with PPM guidance.

**4-21-11:** Updated header date. Moved text from "Quick Reference" to new section 7.3. The "Quick Reference" content will also be available as a separate file online.

**11-23-10:** Updated header dates for 2011 edition. Added color to "Quick Reference" page.

**5-14-10:** Updated "Quick Reference" page.

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

**9-16-09:** Changed chapter title from Plan Notes to Design Tools. Added section for Tech Spec and other flags. Added "Quick Reference" page.

**10-1-08:** Updated header dates for 2009 edition.

**5-28-08:** Deleted notes; refer to PPM for current information for: Key Sheet Notes, Typical Section Notes, Summary of Quantities Sheet Notes, Plan and Profile Sheet Notes, Pay Item Footnotes, Drainage Map Notes, and Utility Adjustment Sheet Notes.

## Chapter 8 SUMMARY BOXES

CADD tools are maintained by the State Engineering CADD Office. Additional guidance is available at <a href="http://www.fdot.gov/cadd/default.shtm">http://www.fdot.gov/cadd/default.shtm</a>. Updates are posted through maintenance releases and the FDOT CADD Support community website.

**NOTICE:** The CADD Office will be transitioning to NexGen plans, with new Summary Tables for the new Estimated Quantities Report. When a project is identified to use the new report format, the entire project must use the one report format. A "mixture" of new format and Plan Summary Boxes will not be accepted. See **BOE Chapter 8-Summary Tables**.

#### **Errors, Comments, or Questions:**

- Contact <u>CADD.Support@dot.state.fl.usCAD</u> for Summary Box Calculation, Automation, or CADD Support.
- Contact <u>FDOT-PayItems@dot.state.fl.us</u> for Box selection, Pay items, formatting, or BOE Support.

Training will be available through both the CADD Office and Estimates Office, to address the needs of designers, cadd users, reviewers, and estimators.

#### 8.1 Introduction

## **8.1.1 History**

For many years, Computation Books were used to document planned and final quantities, by location, for each pay item on a project. These books were used by construction inspectors to document quantity changes and related notes as a project progressed. Alternatively, some pay items were documented within the plans on summary tables. The summary table information varied; only selected tables detailed the quantities by location. While both methods contained similar information, computation books were not a part of the contract bid documents.

Due to requests from our bidding contractors, the State Construction Office began an effort to streamline the final estimates process. Effective January 2014, projects starting the quantity calculation process no longer created computation books.

Summary Boxes were established to provide quantity information BY LOCATION, in a consistent format for ALL pay items. Beginning with lettings in November 2013, projects transitioned to the new summary boxes. All projects were required to use the summary boxes by July 2014.

Summary boxes were originally located behind the typical sections. In 2019, the location was moved to the end of the Roadway Plans. Projects beginning design in 2021 will utilize

Summary Tables and a new report titled "Estimated Quantities Report" (EQ Report), as detailed below, separate from the plans file(s). See the **2021 FDM** for additional information. The Summary Tables within the EQ Report continue to be an integral part of the Plans, Specifications, and Estimates Contract Package.

#### 8.1.2 Current Documentation

Pay item Quantities will be documented in the contract documents using summary boxes and/or tabulation of quantities sheets. These summary boxes inform the construction contractor the pay item number, location description, location (station to station), unit of measure and designer notes to the contractor.

## 8-1.3 General Requirements:

All pay items must be documented on a plan summary box or tabulation sheet. In general, Roadway and Structures items are included on plan summary boxes. Signing and Pavement Marking, Lighting, Signalization, Landscaping, and Utility component plans will use tabulation sheets. Whether plan summary boxes or tabulation sheets are used, the quantity of each item, by location is required. Each quantity must be calculated with one additional significant decimal place, totaled, and then rounded to the defined precision for each pay item, per Chapter 2. If station equations exist in the alignment, the region numbers are required for the station locations.

**Do not include contingency quantities.** Due to state and federal regulations, bid quantities must reflect actual work to be completed. Unforeseen work will be addressed in accordance with the Specifications. Quantity overruns, Measurement and Payment are addressed in Section 9 of the Standard Specifications. Construction/Final Estimates will adjust **Final** quantities and/or prices, as applicable, per the specifications.

Designers must retain back-up. If a question arises involving quantities, Construction will request in writing, that the designer provide detailed documentation or verify the concern of the pay item(s) in question. The designer shall produce the back-up documentation within five working days of the request from construction.

**DO NOT create project specific Summary Boxes.** See below for acceptable modifications to existing Summary Boxes. NOTE: Data tables are not intended for location, quantity, or pay item information; they may be used, as called for in the FDOT Design Manual (FDM) or Standard Plans. These are used to supplement data calculations or item specific details. DO NOT use data tables to duplicate or relocate information from a Summary Box or Tabulation Sheet.

## 8.2 Summary Box Format

## 8.2.1 Adding and Deleting Columns or Rows

The summary boxes are formatted with pay items and quantities listed in columns or rows. Customize the summary boxes for the specific work to be quantified/documented. Do not

add columns or rows for pay items not associated with that summary box. Do not add columns or rows for sheet numbers or other non-standard information. Update pay item (A) and size (XX) on column heading. Specific modifications to summary boxes that are prohibited are identified with each summary box below. Unused columns or rows may be hidden or deleted; this is not required. However, DO NOT hide or delete the columns or rows intended for Construction Remarks or Final (F) quantities. When noting plans revisions, DO NOT use the areas reserved for construction's use, including the Construction Remarks column. Additional guidance is provided with each summary box below.

When adding columns or rows to a summary box, consider the size of the plan sheet(s). Refer to CADD instructions for boxes that extend beyond one page, so that quantities continue to automatically total across continued boxes.

For summary boxes that show each pay item in a separate column and total at the bottom, the Plan Total should be shown on the first summary box with any subsequent summary boxes showing only the Sub-Totals. This format has already been set up in the templates provided by the CADD office.

For pay items with multiple rows, due to area/locations or other details, DO NOT REPEAT the pay item number and description multiple times. Only enter the pay item, description, unit of measure, and total on the first line. Use as many additional rows, as needed, for each location. DO NOT add subtotals to any sheet.

For Summary Boxes designed to include multiple pay items, show all locations/quantities of the first pay item, followed by locations/quantities of the next pay item. DO NOT use a separate box for each pay item.

## 8.2.2 Design Notes Column

When location specific notes are needed to clarify details or quantities, the design notes column may be used. Refer to **BOE** Chapter 7 for additional information on plan/project notes.

#### 8.3 Order and Placement within Plans

## 8.3.1 Plan Sets with Roadway Plans, with or without additional components:

**Summary boxes for the Roadway component** items are placed on Summary of Quantities sheets, and numbered SQ-1, SQ-2, etc. Do not use other alpha characters for sheet suffixes. These sheets will be located after the numbered plan sheet(s). Refer to the <u>FDM</u> **307** for additional details. Do not add non-standard summary tables, tabulation sheets, or other data tables to the Summary of Quantities sheets.

Within the SQ sheets, place the summary boxes in the following order, when possible. While allowances may be made to fit multiple summary boxes on a single sheet, the pay

item order shown below will allow items to be easily located. Do not number the summary boxes in the plans.

#	Summary Box Title (select title to go to Instructions)	Examples <sup>1</sup>
1	Summary of Lump Sum Items	Examples
2	Summary of General Items	Examples
3	Summary of Temporary Traffic Control Plan Items	Examples
4	Summary of Special Detours	Examples
5	Summary of Temporary Highway Lighting	Examples
6	Summary of Pedestrian Longitudinal Channelizing	Examples
	<u>Devices</u>	
7	Summary of Temporary Signalization & Detection	<u>Examples</u>
8	Summary of Temporary Driveways	<u>Examples</u>
9	Summary of Temporary Crash Cushions	<u>Examples</u>
10	Summary of Erosion and Sediment Control Devices	<u>Examples</u>
11	Summary of Litter Removal and Mowing	<u>Examples</u>
12	Summary of Monitor Existing Structures	Examples
13	Summary of Clearing and Grubbing & Removal Items	Examples
14	Summary of Mailboxes	Examples
15	Summary of Earthwork	Examples
16	Summary of Geotechnical Items	Examples
17	Summary of Turnouts, valid through 12/2019 lettings	Examples
	Summary of Driveway Base, New title effective	
	1/2020 lettings	
18	Summary of Pavement	Examples
19	Summary of Miscellaneous Asphalt Pavement	Examples
20	Summary of Structure Quantities, Bridge XXXXXX*	Examples
21	Summary of Box Culverts <sup>2</sup>	Examples
22	Summary of Walls	<u>Examples</u>
23	Summary of Utility Adjustments	<u>Examples</u>
24	Summary of Side Drain & Mitered End Sections/	Examples
	Summary of Drainage	
25	Summary of Miscellaneous Drainage Items/	Examples
	Summary of Drainage	
26	Summary of Trench Drain	<b>Examples</b>
27	Summary of Underdrain	<u>Examples</u>
28	Summary of French Drain	<u>Examples</u>
29	Summary of Edgedrain	Examples
30	Summary of Railing	Examples
31	Summary of Permanent Concrete Barrier (formerly	Examples
	Barrier Wall)	
32	Summary of Curb & Gutter and/or Traffic Separators	Examples
33	Summary of Sidewalk & Detectable Warnings	Examples
34	Summary of Permanent Driveways	<u>Examples</u>

35	Summary of Ditch Pavement	Examples
36	Summary of Guardrail	Examples
37	Summary of Cable Barrier (Pending)	Examples
38	Summary of Permanent Crash Cushions	Examples
39	Summary of Fencing	Examples
40	Summary of Performance Turf	<u>Examples</u>
41	Summary of Traffic Monitoring Site Items	<u>Examples</u>

<sup>&</sup>lt;sup>1</sup>Examples with new summary tables are not included in this Chapter. See Example pages for additional information.

In the Structures component plans, the applicable structures or box culvert summary boxes will be placed on Summary of Structures Quantity sheets and be numbered BQ#-1, BQ#-2, etc. These sheets will be located after the key sheet/index sheet. NOTE: Effective with July 2018 lettings, refer to the 2018 FDM for placement of all box culvert plan sheets within the structures component plans. However, when loading pay items and quantities in the Designer Interface, non-bridge structures (box culverts less than 20' and retaining walls) will continue to be loaded in the ROADWAY CATEGORY, per <u>BOE</u> <u>Chapter 9</u>.

For Roadway projects without a Lighting, Signing, or similar components, summarize the quantities for incidental component work on either the appropriate summary box (Summary of Clearing and Grubbing & Removal Items, Summary of Utility Adjustments), on the Summary of General Items or on the appropriate Tabulation of Quantities Sheet. If the Tabulation of Quantities sheet is used, it should be placed behind the Summary of Quantities sheets and number with the rest of the Roadway component sheets. Revision for projects let after July 2018: If the Tabulation of Quantities sheet is used for the lighting, signing, or other component items, it should be placed behind the Summary of Quantities sheets and numbered with the SQ sheets.

## 8.3.2 Plans without Roadway Component Plans

**For structures projects without a Roadway component,** the Summary of Structures Quantity sheets for all structures will be located after the Summary of Pay Items sheet (Trnsport report).

For Signing, Lighting, and similar projects without a Roadway component, the non-roadway pay items will be shown on the applicable tabulation sheet. For the Roadway pay items on these projects, include the appropriate summary boxes following the tabulation sheet(s). Continue to number the component sheets without the SQ numbering (i.e. S1, S2, S2, or L1, L2, L3). All of these sheets (tabulation sheets and summary of quantity sheets) should be placed in the TABQXX design files.

## 8.3.3 Plans with Multiple Projects

<sup>&</sup>lt;sup>2</sup>Structures summaries, only when no separate component plans exist

**For multiple projects let under one contract**, Summary Boxes or Tabulation Sheets are completed separately for each project; locate the summary boxes for each project with their respective project and component plans.

For multiple project FPID numbers with one set of plans (incidental work for secondary project shown in primary project's plans): When incidental work (project B without separate plans) is added to a larger project (project A with plans), the summary boxes for the incidental work are shown following the summary boxes for the larger project, with the project number located in the upper right corner of the summary box. For example:

Summary of Lump Sum Items (Project A in upper right corner)

Summary of Lump Sum Items (Project B, in upper right corner)

Summary of General Items (Project A in upper right corner)

Summary of General Items (Project B, in upper right corner)

Summary of Temporary Traffic Control Plan Items (TTCP) (Project A in upper right corner)

Summary of Temporary Traffic Control Plan Items (TTCP) (Project B, in upper right corner)

Continue with summary box order shown above.

The project number in the upper right corner should ONLY be used when separate plans for project B do not exist, and work under a separate project number is shown in project A.

SUMMARY OF GENERAL ITEMS													
PAY ITEM	The reput appearance of	LOCATION	cree		QUANTITY		TO	TAL	DESIGN	CONSTRUCTION			
NO.	PAY ITEM DESCRIPTION	STA, TO STA.	SIDE	UNIT	р	F	P	F	DESIGN NOTES	REMARKS			
			- 5										

## 8.4 Sample Summary Boxes and Instructions

The summary boxes shown below have been modified to fit this chapter. The complete and latest versions of the summary boxes are available with the FDOT CADD software. The instructions and examples are provided to encourage consistency in the use of the summary boxes.

## 1. Summary of Lump Sum Items

000: Lump Sum

Examples, Return to Summary Box List

This form is intended for use with Lump Sum pay items. For items with secondary units, a note should be included with the box to indicate that these quantities are for information purposes only. Secondary unit quantity should be shown in the Design Notes column.

This summary box is NOT intended for use with pay item **999-2 Lump Sum Contract**. Refer to 8.7 for summarizing quantities on Lump Sum Projects/Contracts.

This form is not for MOT items, such as Special Detour or Maintenance of Traffic-LS; use the Summary of Temporary Traffic Control Plan Items for MOT-LS.

This form is not for Clearing and Grubbing; use the Summary of Clearing and Grubbing & Removal Items.

For any Lump Sum pay item with a secondary unit, ensure that the secondary quantity is clearly defined, by location or arealD. For example, a LS/SF Item must be quantified by square foot, for each location.

For Lump Sum pay items with a LS secondary unit, the work and materials must be clearly identified by location. Detail the quantities of all items of work, to provide the contractor with sufficient information to bid the total work. As with all pay items, do not include non-quantifiable or contingency items within a Lump Sum item.

Do not include initial contingency or do not bid items on this summary box; these are not for the contractor's use.

	SUMMARY O	F LUMP	SUM I	TEMS	
PAY ITEM NO.	PAY ITEM DESCRIPTION	QUAN	TITY	DESIGN NOTES	CONSTRUCTION REMARKS
		,	,		

#### 2. Summary of General Items

000: DA, Architectural, Mass Transit, other Examples; Return to Summary Box List

This form is intended for use with Per Day items, Architectural Items, Mass Transit Items (if not included on a component plan Tabulation Sheet), and other incidental items with no specified form.

Do NOT use this form for 999-102- Speed and Law Enforcement Officer; this pay item is for use by the Construction Engineer, not the Contractor, and is not shown in a Summary Box.

	SUMMARY OF GENERAL ITEMS													
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNIT	QUAN	TITY	TO	TAL	DESIGN	CONSTRUCTION				
NO.	PAT ITEM DESCRIPTION	STA. TO STA.	STA. TO STA.		Р	F	Р	F	NOTES	REMARKS				

## 3. Summary of Temporary Traffic Control Plan Items (TTCP)

102: Traffic Control

Examples: Return to Summary Box List

This form is intended for use with most Traffic Control Items. However, Temporary Driveways, Temporary Crash Cushions, and Temporary Signalization and Detection

have separate summary boxes, and are not included on the Summary of TTCP. The format for this Summary Box has been set-up in the CADD software to accommodate additional phases and the grand total.

Do not add an additional column for "All Phases". If a pay item applies to all phases, show the quantity in the total/grand total column, as applicable.

Quantities for Each and Each Day items MUST be a whole number. See <u>examples</u> for items needed less than the full phase duration.

Information such as total days or number of applications should be added to Design Notes column.

This table is used for temporary pavement markings (paint) for MOT quantities. Final Surface Pavement Markings (pay item 710-90) is shown on the Signing and Pavement Marking Tabulation Sheet.

For MOT Items not based on time or days, the duration column may be blank.

Do not include temporary fencing, sodding, or erosion control devices under MOT lump sum; refer to the 550, 570, and 104 pay items respectively.

		SUMI	MARY OF	TEMPORAR	Y TRAF	FIC CONT	ROL PLA	V ITEMS	5			
PAY ITEM	PAY ITEM DESCRIPTION			PHASE I		1	PHASE II		то	TAL	DESIGN	CONSTRUCTION
NO.	PAT TIEM DESCRIPTION	UNIT	DURAT I ON	QUANT ITY	TOTAL			TOTAL			NOTES	REMARKS
			DAYS	P	P	DAYS	Р	Р	Р	F		
		-										
		_										
		-										
		_			_							
		<u> </u>										

			SUMMA	RY OF TE	MPORAR	Y TRAFF	IC CONTR	OL PLA	V ITEMS	5				
PAY ITEM	PAY ITEM DESCRIPTION	UNIT	ı	PHASE III		I	PHASE IV		то	TAL	GR.	AND T AL	DESIGN	CONST RUCT I ON
NO.	PAY TIEM DESCRIPTION	UNII	DURATION DAYS	QUANTITY P	TOTAL P	DURATION DAYS	QUANTITY P	TOTAL P	P	F	P	F	NOTES	REMARKS
		_			_									

## 4. Summary of Special Detours

102: Traffic Control

**Examples**; Return to Summary Box List

This form is intended for use with Pedestrian and Vehicular Special Detours. DO NOT include this pay item on the Summary of Temporary Traffic Control Plan Items.

Locations MUST be shown in the plans. This is a Lump Sum/ pay item; secondary units for all locations must be shown.

пс	LOCATION	SIDE	AREA		TEM	PECIAL DETC	UR EMENT	S EA	PECIAL DETO	UR ASE	PEDESTI	RIAN SPECIAL	DETOUR	DESIGN NOTES	CONSTRUCTION
PHASE	10000000000	SIDE	AREA	UNITS		0102 2200			0102 2300			01024		NOTES	REMARKS
	STA TO STA				Р	SY	F	P	CY	F	P	SY	F		
				LS	1			- 1			- 1				
			-			-	-		_						
						1									
			-												

## 5. Summary of Temporary Highway Lighting

102: Traffic Control

Examples; Return to Summary Box List

This form is intended for use with Temporary Highway Lighting, in accordance with the FDM. DO NOT include these pay items on the Summary of Temporary Traffic Control Plan Items.

Locations MUST be shown in the plans. This is a Lump Sum/Each item; secondary units for all locations, by phase, must be shown.

ттс	LO	CATION	SIDE	UNITS		ORARY LIGHTING	SECONDARY UNITS	DESIGN	CONSTRUCTION
PHASE	CTA	TO CTA	3100	UNITS	102	2 - 30	# POLES	NOTES	REMARKS
	SIA.	TO STA.			P	E	EACH (EA)		
		***************************************				<u></u>			
				2					i e

## 6. Summary of Pedestrian Longitudinal Channelizing Devices

102: Traffic Control

Examples; Return to Summary Box List

This form is intended for use with Pedestrian LCDs, in accordance with the FDM.

DO NOT include these pay items on the Summary of Temporary Traffic Control Plan Items. Locations MUST be shown in the plans, per the FDM.

				SUMMA	RY OF PEE	E STRIAN L	ONGITUDINAL CHANNELING DEVICES	
CONST.	LO	CATI	ON	SIDE	0102	NTITY 274-7	DE SIGN	CONSTRUCTION
PHASE	STA	. TO	AT2	0.02		F	NOTES	RE MARK S
			1		Р	F		
			-	-		-		
	-							
	<del> </del>		-	-		<del> </del>		
	-		<b></b>	-		<del> </del>		
				-		<del> </del>		
	<u> </u>					ļ		
				<b>-</b>		<b>†</b>		
						<b>†</b>		
						1		
						<u> </u>		
				\$UB-TOTAL:				
				TOTAL:				

## 7. Summary of Temporary Signalization & Detection

102: Traffic Control

Examples; Return to Summary Box List

This form is intended for use with Temporary Signalization, as well as maintenance of Existing Signalization.

DO NOT include these pay items on the Summary of Temporary Traffic Control Plan Items.

The Design Notes column may be used to identify the intersections by street names/numbers, as needed.

				010	2104					0102					
PHASE	DURATION	10	OF INTERSECTION - EACH DAY  EXISTING  TEMPORARY						ORARY TRA	AFFIC DET TERSECTI	TECTION ON - EA	& MAINT CH DAY	ENANCE	DESIGN CONSTRUCT NOTES REMARKS	CONSTRUCTION REMARKS
	L		EXISTING	G	TEMPORARY		RY		EXISTING	G	TEI	IPORARY/	NEW	NOTES	DEMARKS.
	DAYS	#	P	F	#	Р	F	#	p	F	#	Р	F		-
_		_						<del>-</del>							
	SU	B-TOTAL									12 2				222
					TOTAL	1					TOTAL				

## 8. Summary of Temporary Driveways

102: MOT- Temporary Driveways

Examples, Return to Summary Box List

This form is intended to summarize the locations for Temporary Driveways, and quantity needed for Commercial Material. DO NOT include this pay item on the Summary of Temporary Traffic Control Plan Items.

LOCATION			COMMERCI	AL MATERI	AL FOR DRI	VEWAY MAI	NTENANCE		
LOCATION	SIDE	AREA	L	W	THK	010	2 3	DESIGN	CONSTRUCTION
STA. @ @ OF DRIVEWAY		ID		"	THK	С	Y	NOTES	REMARKS
STA. & & OF DRIVEWAL			FT	FT	IN	P	F		
					SUB-TOTAL:				

## 9. Summary of Temporary Crash Cushions

102: Temporary Crash Cushions

Examples, Return to Summary Box List

This form is intended for use with Temporary Crash Cushions. Details must be provided for each location. DO NOT include this pay item on the Summary of Temporary Traffic Control Plan Items.

					SUMMARY	OF TEMPORA	RY CRASH C	USHION:	5		
TTC PHASE	STATION	OFFSET (FT)	SIDE	WORK ZONE SPEED (MPH)	TEST LEVEL (TL-2 OR TL-3)	WIDTH OF HAZARD (IN)	LENGTH RESTRICTION (FT)	CRASH (	ORARY CUSHION 89 1	DESIGN NOTES	CONSTRUCTION REMARKS
							SUB-TOTAL:				
							TOTAL:				

## 10. Summary of Erosion and Sediment Control Devices

104: Erosion Control

Examples; Return to Summary Box List

This form is intended for use with Erosion and Sediment Control Devices. Columns may be added or deleted, as necessary for other Section 104 Erosion and Sediment Control pay items. Summarize quantities by location.

LOCATION	SIDE	AREA	ART I F	RINGS	SED. BA	MENT SIN	SEDI BA CLEA	MENT SIN WOUT	SED. BAR	MENT RIER	TURB	TING IDITY RIER	TURB	AKED IDITY RIER	SOIL TI PREVE DEV	RACKING NTION ICE	PROTE	CT ION TEM	DESIGN	CONSTRUCTIO
16th - 6500 16th	SIDE	10	010	4 1	010	4 7	010	4 9	0104	10 3	010	4 11	010	4 12	010	4 15	010	4 18	NOTES	REMARKS
STA. TO STA.			S	Y	1	A	E	A	1	F	- 1	F	1	LE	E	A	t	A		
			P	F	P	F	P	F	P	F	P	F	P	F	P	F	P	F		
	9 0			9	1									3	ii i	1.1	10 8	- 3		
														Į.						
					1 1															
																	li,			
	-1			Š.	3	10 8	1						1	1			ğ - 1	1 3		1
				0.																
																				21

## 11. Summary of Litter Removal and Mowing

107: Litter Removal and Mowing

Examples; Return to Summary Box List

This form is intended for use with Litter Removal and Mowing. The specification defines the area/limits that should be included for each pay item. Each area must be separately identified/summarized by location. Phases may be combined, if no area/quantity changes are needed.

This Summary Box may extend multiple plan sheets for projects with many small areas, such as urban areas with or without utility mowing strips, sidewalks, and driveways.

								SUMM	IARY OF	LITTE	R REMO	VAL A	ND MO	WING						
	LOCATION		100	S.)			L	ITTER R	EMOVAL 1						MOW 11					
CONST . PHASE	STA. TO STA.	SIDE	DURATION (DAYS)	FREQUE (DAYS	AREA ID	L	L W CYCLES AC/ CYCLE				(AC)	AREA ID	L	W	CYCLES		AREA TOTAL	(AC)	DESIGN NOTES	CONSTRUCTION REMARKS
				30 30																
				30 30																
				30																
				30 30																
				30 30																
	30								SUB-TOTAL:							SUB-TOTAL:				
									TOTAL							TOTAL:			1	

#### 12. Summary of Monitor Existing Structures

108: Monitor Existing Structures

Examples, Return to Summary Box List

This form is intended for use with Monitor Existing Structures. The specification defines the area/limits that should be included for each pay item. Do NOT include structures covered under Article 108-2 of the specifications. This box is intended to identify additional locations that may require monitoring outside the limits defined in the specifications (108-1). All locations for pay items 108-2 and 108-3 should be included in the summary box. Place X's in the quantity column and show the total at the bottom as 1.

For Lump Sum projects with no structures outside of the specification limits, it is possible to have an "empty box", with only the pay item 108-1 column. This empty box will serve as notice that monitoring is needed within the specification limits. Additional examples, including traditional pay item projects, are shown below.

Reviewer/Estimator: The limits in Specification 108-2.1.2 are ONLY for settlement monitoring. ALL Vibration Monitoring and Groundwater Monitoring locations should be shown on the summary box.

SITE	LOCATION	STRUCTURE	SETTL	TION & EMENT ORING	VIBRA MONIT		GROUND MONIT		DESIGN	CONSTRUCTION
SITE NO.		USAGE		8 1	0108		0108		NOTES	REMARKS
1	ADDRESS AND/OR STA.	1	L	S	L	5	L	S		
	AUDITESS AND/OR STATE		P	F	P	F	P	F		1
						10				
	1.	TOTAL	İ		7		7			1

THIS LIST INCLUDES EXISTING STRUCTURES (AS DETERMINED BY THE DEPARTMENT) LOCATED OUTSIDE THE LIMITS SPECIFIED IN ARTICLE 108-2 OF THE FDOT SPECIFICATIONS THAT ARE REQUIRED TO BE MONITORED. THIS LIST SHOULD NOT BE CONSIDERED ALL INCLUSIVE AND DOES NOT CONTAIN EXISTING STRUCTURES TO BE MONITORED THAT ARE LOCATED WITHIN THE DISTANCES SPECIFIED IN ARTICLE 108-2.

## 13. Summary of Clearing and Grubbing & Removal Items

110: Removal Items

Examples; Return to Summary Box List

This form is intended for use with roadway items to be removed. For Signalization, Signing, or Lighting, use the appropriate tabulation sheet.

This form may be used to detail items to be included under Clearing and Grubbing, LS.

If Clearing & Grubbing, Lump Sum, is used, the quantity for secondary units should be shown in the area column under secondary units. The "P" total should remain 1 LS. Total acres may be shown in the Design Notes column.

		SUMM	ARY OF	CLEA	RING	AND C	GRUBB I	NG & REMOVAL I	TEMS					
PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	NGTH	нда.	UNITS	SECONDARY UNITS (IF LUMP SUM)	QUA	VTITY	то	TAL	DESIGN NOTES	CONSTRUCTION REMARKS
no.		STA. TO STA.			1.5	*		AREA (AC)	P	F	P	F	HOTES	newwo.5
-							1							
			_	-	-	_	+			+	_	1		

#### 14. Summary of Mailboxes

110: Mailboxes

Examples; Return to Summary Box List

This form is intended for use with mailboxes.

		SU	MMARY (	OF MAILBOXES	
STATION	SIDE	QUAN 0110 P	7 1 F	DESIGN NOTES	CONSTRUCTION REMARKS
SUB	-TOTAL:				
	TOTAL:				

## 15. Summary of Earthwork

120: Earthwork

Examples; Return to Summary Box List

This form is intended for use with all earthwork items. For earthwork items with SY units of measure, add column pair with P and F columns.

Expanded area calculations may be included with quantity calculations on additional worksheets.

	SUMMAR	Y OF E	ARTHWOR	K	
PAY ITEM NO.	PAY ITEM DESCRIPTION	P	Y F	DESIGN NOTES	CONSTRUCTION REMARKS

## 16. Summary of Geotechnical Items

140s and 400s: Geotechnical

Examples; Return to Summary Box List

This form is intended for use with Geotechnical Items. Design Notes column may be used to refer to Technical Special Provisions, as applicable, to clarify quantities shown on the summary box.

:

		SUMMARY	OF G	EOTEC	HNICAL	ITEMS	5				
PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	AREA ID	UNIT	QUAN P	T ITY F	TO P	F F	DESIGN NOTES	CONSTRUCTION REMARKS
			_	_							
			_								

#### 17. Summary of Driveway Base

286: Summary of Driveway Base- base material Examples; Return to Summary Box List

This form is intended for use with Driveway Base. Refer to pay item and specification for details. Note: Specification Section title was changed.

For concrete turnouts/driveways, see the Summary of Permanent Driveways or Summary of Sidewalk & Detectable Warnings.

The asphalt surface course (Superpave) is paid separately under 334-Asphalt. The asphalt quantities may be shown on the Summary of Permanent Driveways or Summary of Pavement.

					iummary of E	riveway Ba	se						
Pay Item		Units of	Qua	ntity	Total Q	uantity			Location				
Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
200													
	•												

#### 18. Summary of Pavement

160s, 200s, 300s, 520s, and 546s: Pavement- patterned pavement or architectural pavers, rumble strips.

Examples, Return to Summary Box List

This form is intended for use with permanent asphalt and concrete pavement, including patterned/textured pavement. For asphalt driveways, the quantity may be shown on this summary box, or the Summary of Permanent Driveways. When driveways are shown on this summary box, add "Driveway" to the description column for each location.

For quantities summarized on the Summary of Permanent Driveways, add a row to this summary box to indicate the total from the former box.

DO NOT break this summary box into separate boxes for each pay item. Follow rules for continued boxes, as needed.

When overbuild is used, show overbuild quantities separate from structural quantities. Add "Overbuild" to the Design Notes column for each location. Do NOT create any other overbuild quantity summary box in the plans. See FDM 306 for overbuild details required. Refer to 334- pay item group for additional details.

			SUMM	ARY OF	PAVE	MENT								
PAY ITEM		LOCATIO	v		AREA	STH	H.		QUAN	TITY	то	TAL	DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STA. TO STA.	DESCRIPTION	SIDE	ID	LENG	WIDT	UNIT	0	-		-	NOTES	REMARKS
										-	-	-		
				-				_			_	_		
			1	1										

## 19. Summary of Miscellaneous Asphalt Pavement

339: Miscellaneous Asphalt, per TN Examples; Return to Summary Box List

This form is intended for use with Miscellaneous Asphalt Pavement, including under guardrail, bicycle paths, and median pavement. Do not use this pay item for Special Detours or other temporary asphalt applications.

					SUM	MARY O	F MISC	ELLANE	OUS AS	PHALT	PAVEME	NT			
LOCATION		AREA	ENGTH	МІДТН	THICK	GUAR	DER DRAIL	PA	YCLE TH	PAVE	I AN EMENT		HER	DESIGN	CONSTRUCTION
	SIDE	ID	×	2	(IN)	033	9 1	033	9 1	033	9 1	033	9 1	NOTES	REMARKS
STA. TO STA.	l		77	≥	,	T	N	T	N .	7	N	7	N		
31A. 10 31A.						Р	F	P	F	P	F	Р	F		
	SUB-7			B-TOTAL:											
					TOTAL:									1	
				GRAI	ID TOTAL:									•	

#### 20. Summary of Structure Quantities, Bridge xxxxxx

400s: Structures

Examples; Return to Summary Box List

This form is intended for use with 400s: substructure or superstructure items, as well as related bridge items. It is normally included in the structures component plans. See 8-3 above.

Incidental quantities that would normally be shown on another component (i.e. signals and gates for movable bridge) may be shown on the Summary of Structure Quantities, when the other components are not included in the plan set.

Retaining Walls and Gravity Walls should be shown on the Summary of Walls. Refer to the Structures Detailing Manual for additional guidance.

Barrier Walls should be shown on the Summary of Permanent Barrier Walls.

Sheet piling associated with a structure is shown on the Summary of Structure Quantities. Sheet piling not associated with a structure is shown on the Summary of Walls.

Steps should be shown on the Summary of General Items or the appropriate tabulation sheet for landscaping or architecture.

		SUMMAR	Y OF STRUCTUR	RE QUA	NTITIE	S - BR	IDGE XX	XXXX		
CECTION	PAY ITEM	247 1754 25552157104	10047100		QUAN	TITY	TO	TAL	DESIGN	CONSTRUCTION
SECTION	PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	UNIT	P	F	P	F	DESIGN NOTES	CONSTRUCTION REMARKS
UMP SUM ITEMS										
EARTHWORK										
FOUNDATION				_						
7004070701										
				_						
CULVERT				_						
COLVERI										
SUBSTRUCTURE				_						
				_						
PPROACH SLABS										
				_						
				_						
UPERSTRUCTURE				_						
PATITING/				_						
RAILING/ BARRIERS				_						
				_						
OVABLE BRIDGE										
ARCHITÉCTURAL										
SPECIAL										
SPECIAL FEATURES				_						
					l	l				

#### 21. Summary of Box Culverts

400s: Box Culverts, Reinforcing Steel <u>Examples; Return to Summary Box List</u>

This form is used for Box Culverts less than 20'.

Bridge Culverts (20' and greater) use the Summary of Structure Quantities, with the bridge number in the summary box heading.

		SU	MMARY	OF BO	X CULVI	ERTS								
PAY ITEM	PAY ITEM DAY ITEM DESCRIPTION LOCATION UNIT QUANTITY TOTAL DESIGN CONSTRUCTION													
NO.														

#### 22. Summary of Walls

400, 534, etc.

Examples, Return to Summary Box List

This form is intended for use with Noise Walls, MSE walls, Perimeter Walls, Gravity Walls, and Retaining Walls. Barrier Walls should be included on the Summary of Permanent Barrier Walls.

Sheet piling associated with a structure is shown on the Summary of Structure Quantities. Sheet piling not associated with a structure is shown on the Summary of Walls.

Do NOT include rails on this summary box. Use the separate Summary of Railing.

	SUMMARY OF WALLS													
WALL NO.	PAY ITEM NO.	PAY ITEM DESCRIPTION LOCATION SIDE UNIT QUANTITY TOTAL DESIGN NOTES REMARKS												
		·												

#### 23. Summary of Utility Adjustments

425: Manholes & Inlets

Examples; Return to Summary Box List

Work being completed under the roadway project (-52 project number) will be shown in the roadway plans on the Summary of Utility Adjustments. This is normally limited to utility adjustment for milling, pay items 425-4, 425-5-A, and 425-6.

Work being completed under the JPA (-56 project) will be shown in the utility component plans with a tabulation sheet. DO NOT USE this form for utility component plans.

	SUMMARY OF UTILITY ADJUSTMENTS														
PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STATION	UNIT	QUAN P	T ITY F	P TO	TAL F	DESIGN NOTES	CONSTRUCTION REMARKS						

#### 24. Summary of Side Drain & Mitered End Sections

430: Drainage

Examples, Return to Summary Box List

These forms are intended for use with Sidedrain and Mitered End Sections. Either form may be used, as needed (with or without flowlines).

Due to space constraints, pay items are not normally shown on Summary of Drainage Structure sheets. DO NOT add pay items to this summary box. Do NOT add a column for sod; use the Summary of Performance Turf.

For miscellaneous drainage work, the Summary of Miscellaneous Drainage Items may be used.

Columns for unused sizes or shapes may be removed. Additional sizes may be added.

							SUMMA	IRY OF	SIDE	DRA	IN 6	MITER	ED E	VD 58	ECTIO	NS.						
LOCATION	T	$\overline{}$			PIPE	LENGT	H - LI	F							MES	. EA	l .					
EDC AT 10W	SIDE		DUND (0	4301741				4ER (04	30174.				(0430			0		0430	9847C		DESIGN	CONSTRUCTION
STA. TO STA.	37124	_	KX"	_	$\chi \chi^*$	_	XX		$\vdash$	XX.	_	XX"	$\overline{}$	X)	_	-	$\chi \chi^*$	$\rightarrow$	XX		NOTES	REMARKS
3171. 10 3771.	_	ρ	F	ρ	- 1	F	ρ	F	ρ	-	F	ρ	F	ρ	F	ρ	-	7	Ρ	F		
	-	—	-	+	_	_	$\overline{}$		-	-	_	$\rightarrow$	$\rightarrow$	_		-	_	$\rightarrow$	$\rightarrow$			
	-	-	-	+	-	-	$\rightarrow$		—	-	$\rightarrow$	$\rightarrow$	$\rightarrow$	_		-	-	$\rightarrow$	$\rightarrow$			
	-	-	-	-	-	-	$\overline{}$		-	-	-	$\rightarrow$	$\rightarrow$	_		-	-	$\rightarrow$	$\rightarrow$			
	-	-	-	-	-	$\rightarrow$	$\overline{}$		-	-	-	$\rightarrow$	$\rightarrow$	_	_	-	-	+	$\rightarrow$			
	+	+-	-	+	-	_	_		+	+	-	$\rightarrow$	$\rightarrow$	_		+	-	+	$\rightarrow$			
	+	+-	+	+	-	_	$\overline{}$		-	-	-	$\overline{}$	$\rightarrow$			+	-	$\rightarrow$	$\rightarrow$			
	+	+	_	+	-	$\overline{}$			<del>                                     </del>		-	$\overline{}$	$\rightarrow$			-	$\top$	$\overline{}$	$\neg$			
	-	-	-	+	$\overline{}$	$\overline{}$	$\overline{}$		-	-	$\overline{}$	$\overline{}$	$\rightarrow$			-	-	$\neg$	$\overline{}$			
	-	-	-		$\neg$	-			-		$\neg$	$\neg$	$\neg$			-	$\neg$	$\neg$	$\neg$			
S	UB TOTAL																					
	TOTAL																					
							SUMM	ARY O	c cin													
								MAT U	310	DKA	IN &	MITER	ED EN	D SE	CTIO	NS						
							201111		PE LEI			MITER	ED EN	D SE	CT10		MES .	EA			T	<u> </u>
	COCAT	TON				$\vdash$	RO	P I I	PE LEI	ISTH -	LF OT	4ER			ROU	ND I	-		OTHE	A	-	
	LOCAT						RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 742CC*	i	(1)	ROU 143098	ND 141CC*	.,	104	30984	2CC* /	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC		AHE	40		RO	PII UND 741CC*	PE LEI	ISTH -	LF OT	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine			AHE) OFFSET	4D E		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 742CC*	i	(1)	ROU 143098	ND 141CC*	,	104	30984	2CC* /	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC			4D 		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DES.IGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC			4D - €		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC			10 E		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC			4D - €		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC			4D <b>€</b>		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC			4D €		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC			40 €		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC			40 €		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	eine	BAC		DFFSET	40 €		RO (04301	PII UND 741CC*	PE LEI	ISTH -	LF 01/ 04301	HER 747CC*	i	(1)	ROU 143098	ND 41cc*	,	104 XX	30984	XX*	DESIGN WOTES	CONSTRUCTION REMARKS

## 25. Summary of Miscellaneous Drainage Items

430: Drainage- Miscellaneous items

Examples; Return to Summary Box List

This is an optional form; it is intended for use with Miscellaneous Drainage Items or on projects with minimal drainage work, i.e. replacing broken inlet tops or moving structures to accommodate added turn lanes, etc.

Use this form ONLY when items cannot be included on Summary of Drainage Structures or Summary of Side Drain & Metered End Sections. Do NOT include in multiple locations.

Do not modify this form to duplicate Summary of Drainage Structures columns. If additional columns are needed, use Summary of Drainage Structures sheet.

For additional information of the Summary of Drainage Structures sheet, see the Plans Preparation Manual, Volume 2, Chapter 8/FDOT Design Manual 308.

	SUMMARY OF MISCELLANEOUS DRAINAGE ITEMS													
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNIT	QUAN	ITITY	то	TAL	DESIGN	CONSTRUCTION				
NO.	PAI TIEM DESCRIPTION	STA. TO STA.	3102	ON 11	P	F	P	F	NOTES	REMARKS				
					· ·									

## 26. Summary of Trench Drain

436: Trench Drain

Examples; Return to Summary Box List

This is an optional form; it is intended for use with Trench Drain. Quantities may be included on Summary of Drainage Structures sheet. Do NOT include in both locations.

	S	UMMARY	OF TREI	NCH DRAIN	
LOCATION	SIDE	DRA	NCH AIN 1 A	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.		XX" P	(LF) F	NOTES	REMARKS
SU	B-TOTAL:				
	TOTAL:				

#### 27. Summary of Underdrain

440s: Underdrains

Examples, Return to Summary Box List

This is an optional form; it is intended for use with Underdrain. Quantities may be included on Summary of Drainage Structures sheet. Do NOT include in both locations.

							SUMMAR	RY OF U	INDERDR	AIN					
LOCATION					UNDERDR	AIN TYPE				INSPE B	CTION OX	OUTLE	T PIPE	DECIGN	CONSTRUCTION
	SIDE				0440	1 AA				044	0 70	0440	73 A	DESIGN NOTES	REMARKS
STA. TO STA.	7	Ι (	LF)	I I	(LF)	III	(LF)	V (	LF)	( 8	A)	6"	(LF)	1 "0,23	NEMANKS
31A. 10 31A.		Р	F	Р	F	Р	F	P	F	Р	F	Р	F	1	
<u> </u>															
	SUB-TOTAL:														
	TOTAL:														

#### 28. Summary of French Drain

443: French Drain, when not included on Summary of Drainage Structures <u>Examples</u>; <u>Return to Summary Box List</u>

This is an optional form; it is intended for use with French Drain. Quantities may be included on Summary of Drainage Structures sheet. Do NOT include in both locations.

	5	UMMARY	OF FREI	NCH DRAIN	
LOCATION	SIDE		DRAIN 70 AA	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.		XX"	(LF) F		ALMANG
SU	B-TOTAL:				
	TOTAL:				

## 29. Summary of Edgedrain

446: Edgedrain and outlet pipe, when not included on Summary of Drainage Structures Examples; Return to Summary Box List

This is an optional form; it is intended for use with Edgedrain. Quantities may be included on Summary of Drainage Structures. Do NOT include in both locations.

			SUMMAR	Y OF ED	GEDRAIN	1	
LOCATION		EDGEL	DRAIN		T PIPE GTH	DESIGN	CONSTRUCTION
	SIDE	0446	1 1	0446	71 1 (LF)	NOTES	REMARKS
STA. TO STA.		Р	F	P	F		
SU	B-TOTAL:						
	TOTAL:						

## 30. Summary of Railing

460, 515: Railings

Examples, Return to Summary Box List

This form is intended for use with Metal Railings.

F	SUMMARY OF RAILING														
1							SUMMAR	Y OF RA	ILING						
Γ	LOCATION	SIDE	METAL RAI	METAL TRAFFIC RAILING		NDRAIL - ERAIL		ICYCLE LING	HANE	RAIL	BUL	IINUM LET LING	DESIGN	CONSTRUCTION	
		SIDE	0460	71 A	0515	1 A	0515	2ABB	0515	3 A	0515	4 A	NOTES	REMARKS	
		1	L	.F	L	.F	L	.F	L	.F	L	F	1		
	STA. TO STA.		P	F	Р	F	P F		1						
L															
$\perp$	SUI	B.TOTAL.											1		
L		TOTAL.													

#### 31. Summary of Permanent Concrete Barrier, formerly "Barrier Wall"

*521: Concrete Barrier* 

Examples; Return to Summary Box List

Reviewers: Either table description is acceptable through June 2020 lettings; projects let July 2020 and later must use new table.

This form is intended for use with Permanent Barrier. Gravity Walls should use Summary of Walls.

	SUMMARY OF PERMANENT BARRIER WALL													
PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION STA. TO STA.	SIDE	UNIT	QUAN P	TITY	TO:	TAL F	DESIGN NOTES	CONSTRUCTION REMARKS				

#### 32. Summary of Curb & Gutter and/or Traffic Separators

520s: Curb & Gutter, Traffic Separator Examples; Return to Summary Box List

This form is intended for use with Curb: curb and gutter, curb elements, and/or Traffic Separators.

	SUMMARY OF CURB & GUTTER AND/OR TRAFFIC SEPARATORS														
PAY ITEM	DAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	UNIT			QUANT IT			то	TAL	DESIGN	CONSTRUCTION	
NO.	PAY ITEM DESCRIPTION	STA. TO STA.	ID	UNII	GROSS	DEDU	CT I ONS LENGTH	NET L	ENGTH		-	NOTES	REMARKS		
				Special		LENGIN	TYPE	LENGTH	Ρ	-	P	-			
			_												
				TS											
				ONLY											

## 33. Summary of Sidewalk & Detectable Warnings

522 and 527. Sidewalk

Examples; Return to Summary Box List

This form is intended for use with Sidewalk. Columns for bus pads may be deleted, if unused. Each detectable warning location/areaID must be listed, with the appropriate area.

For concrete driveways, the quantity may be shown on this summary box (as 6" sidewalk/driveways), or the Summary of Permanent Driveways. For quantities summarized on the Summary of Permanent Driveways, add a row to this summary box to indicate the total from the former box. See examples.

	SUMMARY OF SIDEWALK & DETECTABLE WARNINGS															
LOCATION		4054			4		CONC SIDEWALK		PAD - C	ONCRETE	PAD - C	PAD - CONCRETE		TABLE INGS	DECICH	
	SIDE	AREA ID	LENGTH	WIDTH	052	2 1	052.	2 2	0522 3		0522 4		0527 2		DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	( l '	10			5	SY		SY		SY		SY		F	MOTES	KEHARKS
SIA. IU SIA.					Р	F	Р	F	Р	F	P	F	P	F	1	
			SU	B-TOTAL:												
				TOTAL:												

#### 34. Summary of Permanent Driveways

334 or 522: Permanent Driveways

Examples; Return to Summary Box List

This is an optional form, and is intended for use with Permanent Driveways.

Permanent Concrete Driveways may be summarized on the Summary of Sidewalk & Detectable Warnings summary box.

Permanent Asphalt Driveways may be summarized on the Summary of Pavement.

DO NOT duplicate quantities by location on multiple summary boxes. For quantities summarized on this box, add a row to the Summary of Pavement (Asphalt) or Summary of Sidewalk (Concrete) to indicate the total from this box. See examples.

Identify each driveway, by location.

	SUMMARY OF PERMANENT DRIVEWAYS													
LOCATION	SIDE	AREA	CONCRE	MATE TE (SY)		T (TN)	DESIGN	CONSTRUCTION						
STA. @ @ OF DRIVEWAY	SIVE	ID	052. P	2 2 F	0334 P	1 AA F	NOTES	REMARKS						
	SU	B-TOTAL: TOTAL:												

#### 35. Summary of Ditch Pavement

524 and 530: Ditch Pavement and Riprap Examples; Return to Summary Box List

This is an optional form; it is intended for use with Ditch Pavement and Riprap. Quantities may be included on Summary of Drainage Structures.

Note: removal of existing ditch pavement is shown on the Summary of Clearing and Grubbing & Removal.

	SUMMARY OF DITCH PAVEMENT													
LOCATION		4054			SAND -	CEMENT	RIPRAP (DITCH	RUBBLE LINING)	DIT PAVE		DESIGN			
	SIDE	AREA ID	LENGTH	WIDTH	053	0 1	0530	3 4	0524	1 A	DESIGN NOTES	CONSTRUCTION REMARKS		
STA. TO STA.	1 1.0				CY		TN		SY		NOTES	ne men		
37A. 10 37A.					Р	F	Р	F	Р	F				
	SUB-TOTAL													
				TOTAL:										

#### 36. Summary of Guardrail

536: Guardrail

Examples, Return to Summary Box List

This form is intended for use with Guardrail. Refer to pay item details for use with Thrie Beam guardrail. For removal of Guardrail, add a column to this summary box for 536-73.

						SUMMAR	Y OF G	JARDRAI	L				
LOCATION	SIDE	GUAR	DRAIL	BRIDGE ANCHORAGE ASSEMBLY		END ANCHORAGE ASSEMBLY		PIPE RAIL		RI RA	UB NI L	DESIGN	CONSTRUCTION
	SIVE	0536	1 AA	0536	8 A	0536 85 AA 0536 6 0536 5 A	NOTES	REMARKS					
STA. TO STA.		L	.F	E	Α	E	A	L	F	L	F	1	
		P	F	P	F	P	F	P	F	P	F	1	
S	UB-TOTAL:												
	TOTAL:												

#### 37. Summary of Cable Barrier (Pending)

540: Cable Barrier (also Developmental Item 904-540-A)

Examples, Return to Summary Box List

See Roadway Design Bulletin/Instructions for Developmental Design Standard/ Developmental Standard Plans Instructions for required table.

#### 38. Summary of Permanent Crash Cushions

544: Crash Cushions

Examples; Return to Summary Box List

NOTE: New summary box, in accordance with SPI 544-001, will is available for projects let July 2019 and later in the CADD software.

This form is intended for use with Permanent Crash Cushions. Details must be provided for each location.

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATIO	N	BARRIER WIDTH	LENGTH RESTRICTION	QUA	VT ITY EA)	To	TAL	DESIGN NOTES	CONSTRUCTION
	PAT TIEN DESCRIPTION	STATION	SIDE	IN	FT	P	F	P	NOTES REMAI	CONSTRUCTION REMARKS	
- 1				1	1 1						
					1 1						
					1						
- 21			-		9						

#### 39. Summary of Fencing

550: Fencing

Examples, Return to Summary Box List

This form is intended for use with all types of Fencing. Summarize quantities by location.

Temporary fencing is incidental to permanent fencing. See the specification and additional information for 550-10-xx for additional information.

	SUMMARY OF FENCING														
PAY ITEM NO.	DESCRIPTION	LOCATION	SIDE	UNIT	QUAN	ITITY	то	ΓAL	DESIGN	CONSTRUCTION					
	BESCRIFTION	STA. TO STA.	3102	OW17	P	F	P	F	NOTES	REMARKS					
						<u> </u>									
1							I								

## 40. Summary of Performance Turf

570, 571: Turf

Examples, Return to Summary Box List

This form is intended for use with both "Performance Turf" and "Performance Turf-Sod", as well as the Prepared Soil Layer.

When applicable, include a row for performance turf: "Subtotal from Summary of Drainage Structures".

Prepared Soil Layer valid through June 2019 lettings. Refer to 570- items for details.

	SUMMARY OF PERFORMANCE TURF													
LOCATION		1051			PERFORMANCE TURF		PERFOI TURF	RMANCE (SOD)	PLASTIC EROSION MAT		PREPARED SOIL LAYER		DEC. LOW	CONSTRUCTION
	SIDE	AREA ID	LENGTH	WIDTH	0570	1 1	0570	1 2	0571	1 AB	0162	1 AB	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	]	,,,			SY		SY		SY		SY		110723	NEW MOS
STA. TO STA.					P	F	P	F	Р	F	P	F		
			SU	B-TOTAL:										
				TOTAL:										

## 41. Summary of Traffic Monitoring Site Items

695: Traffic Monitoring

Examples, Return to Summary Box List

This form is ONLY intended for use with Transportation Statistic Office's Traffic Monitoring Sites. For Traffic Ops or MCSAW Traffic Monitoring Sites, refer to the correct 600-series or 700-series pay items for documentation.

										SI	JMMARY	OF TRAF	FIC MO	NITORII	IG SITE	ITEMS								
9	LOCATION		CON	DUIT	PULL &	SPLICE	VEHICE SEN NON-W	E AXLE SOR, EIGHT	VEHICLE	TRUSIVE SENSOR, VELGHT	CLASSI	SPEED/ FICATION WIT	WIRE MAGNET SEE	LESS TOMETER SOR	SOLAR	POWER	INDUCT I	VE LOOP MBLY	CAB	INET	COMMUN MO	STEM ICATIONS DEM	DESTON	CONSTRUCTION
		SIDE	0630	2 18	0635	2 AB	0695	1 1	0695	2 1	0695	3 AB	0695	4 A	0695	5 1	0695	6.12	0695	7.ABC	0695	e AB	DESIGN NOTES	REMARKS
SIYE NO.	STATION			F	- 3	EA	E	A	1	A	1	45	- 3	A		A		A		E.A	1 3	A		
		-	P	F	P	F	P	E	P	F	P	F	P	f	P	7	P	- 1	P	F	P.	f		
_		-	_	-	_	_	_	_	+		-	-		_	_	_	_	_	_	-	_	-		
					1							-					<del>                                     </del>			-	_			1
	50	#-TOYAL												6 6										
$\overline{}$		TOTAL :							_								_		_		_			

## 8.5 Tabulation of Quantities

Non-roadway component plans normally use a tabulation of quantities sheet where each pay item is summarized by sheet number. The quantity for each sheet must be calculated with one additional significant decimal place. The grand total, placed on the last tabulation sheet, is then rounded to the defined precision for each pay item. Note: Gross Mile items are to be shown to the defined precision for each pay item, in all columns, due to space constraints.

Refer to the PPM, Vol 2, Chapters 23-29/FDOT Design Manual for sheet numbering guidance.

### Landscape: Tabulation of Quantities/Plant Schedule

580: Landscape Items

This form is intended for use with Landscape Items.

Summarize items by pay item and location. For small/large plant pay items, include plant names and sizes. Note all incidental items to be included. For irrigation system, include pipe sizes and lengths, as well as sprinklers and other fixtures.

#### Signalization: Tabulation of Quantities

600s: Signals

This form is intended for use with Signals Items

Summarize items by pay item and location.

Note: See conduit pay items for additional required plan details.

### Signing and Pavement Markings: Tabulation of Quantities

700s: Signing

This form is intended for use with Signing and Pavement Marking Items

Summarize items by pay item and location.

### **Lighting: Tabulation of Quantities**

715: Lighting

This form is intended for use with Lighting Items.

Summarize items by pay item and location.

Note: See conduit pay items for additional required plan details.

**Utility: Tabulation of Quantities** 

U1000: Utility Work

This form is intended for use with Utility Work.

## 8.6 Pay Items with No Form Required

#### Maintenance Item- No Form Required

000: Maintenance

NO BOX OR FORM: Maintenance pay items do not require any specific form or summary box.

## NA: No applicable form/Form not needed

000: No applicable form

NO BOX OR FORM: DO NOT BID and "special" pay items do not require any summary box or form.

## 8.7 Lump Sum Contracts

Projects or Contracts using pay item 999-2 will continue to require detailed quantities, by location, for work shown in the plans. Complete the summary boxes or tabulation sheet(s), similar to traditional pay item projects. Do not include the total quantity.

For example, Roadway guardrail is summarized by location from station A to B as 250', station C to D as 300', and station E to F as 500'; do not provide pay item number 536-1-1 or the total quantity.

Pay item numbers are not needed on Summary Boxes or Tabulation sheets for Lump Sum Contracts, but may be used to describe work to be completed. When pay items are included, a note is added to the Summary of Pay Items sheet, per the Plans Preparation Manual/FDOT Design Manual 140:

999-2 Lump Sum Contract: All other Pay Item numbers shown in the Contract Plans are provided only for the purpose of describing the work to be performed. Pay item descriptions are found in the Department's Basis of Estimates Manual."

The above note should be used once. Do not repeat the note on any SQ sheets. The 999-2 pay item is not shown on a Summary Box.

## 8.8 Pay Item Request Form

#### **PAY ITEM REQUEST**

600-000-02

Note: This form is optional; required information may be sent via e-mail, per Chapter 6. This form is used by designers and consultants when a project requires the use of a pay item that is not defined in the pay item structure. Refer to Chapter 6 for more details.

## **Chapter 8 Revision History-**

**11-1-20:** Updated header dates for 2021 edition. Separate "Summary Boxes", valid for FDM 2020 projects in this file. Instructions for "Summary Tables", valid for FDM 2121 projects, are in a separate Chapter 8 posting.

1-24-20: Updated Summary Box numbering. Added Summary of Special Detours.

**11-1-19:** Updated header dates for 2020 edition. Noted pending change for Special Detours.

**11-1-18:** Updated header dates for 2019 edition. Added Summary of Temporary Highway Lighting. Added Summary of Pedestrian Special Detours, Summary of Pedestrian Channelization Devices. Renumbered summary boxes.

**2-20-18:** Expanded 8-1 to clarify limitations for custom summary boxes.

8-1, Expanded information regarding use of the Design Notes Column.

8-3, List of Summary Boxes- added Summary of Temporary Longitudinal

Channelization Devices. Renumbered remaining summary boxes.

Summary of Lump Sum Items- added text to require summary of quantities based on secondary units.

Summary of Temp Traffic Control...- Added text to require whole numbers for EA and ED items, to prevent "reverse calculation" of quantities. Also clarified summary of MOT and final surface paint.

Summary of Temp Signalization- Added text to allow/recommend design notes column to identify intersections.

Summary of Temporary Longitudinal Channelization Devices- new summary box added. Summary of Permanent Barriers (formerly Barrier Wall)- Updated title based on specification and standard index terminology change.

8-3.3 Added text for plans with multiple projects.

Throughout chapter: for existing PPM references added FDM references.

**11-1-17**: Updated header dates for 2018 edition. Removed introductory text for Summary Box implementation.

#### 7-6-17: Minor updates:

- Clarified text for roadway pay Items on projects without Roadway component plans.
- Added text to clarify contingency items vs. overruns/adjustments.
- Summary of Lump Sum Items: Clarified usage note.
- Summary of Earthwork: Added guidance for pay items with SY units.
- Summary of Sidewalk: Deleted note for removal of sidewalk. See details for 522items.

**4-11-17:** Added note to prohibit custom/project specific summary boxes.

**2-2-17:** Added notes for Monitor Existing Structures. Added instructions and example

for Temporary Traffic Control Devices with different durations within a phase.

**11-1-16:** Updated header dates for 2017 edition.

- Summary of Clearing and Grubbing & Removal Items: Updated title, replaced graphic.
- Summary of General Items: removed old note.
- Summary of Box Culverts: Clarified instructions for bridge culverts.
- Summary of Performance Turf: Removed note regarding Temporary Sod. Future guidance pending.
- Summary of Traffic Monitoring Site Items: added graphic.
- Examples: Added text to clarify some of the correct/incorrect features.

**6-8-16:** NO policy or instruction changes were made. Corrected title of "Traffic Monitoring Site". Updated examples. Added Landscape Soil details.

1-28-16: Updated entire Chapter for 2016 edition.

- o Header: Updated header dates.
- o 8-1: Expanded 3<sup>rd</sup> paragraph to include calculation note.
- 8-2: Clarified that empty columns/rows do not need to be deleted. Added reminder to keep Construction notes column reserved for construction use (not used by designer). Added note to restrict added subtotals.
- 8-3: Clarified sheet numbering. Updated PPM reference. Converted list to table.
   Added hyperlinks to sample box and examples.
- o 8-4: Added "and Instructions" to article heading. Added note regarding examples.
- 8-5 through 8-8: Corrected article numbering.
- 8-5: Expanded text to clarify calculations. Added PPM reference for sheet numbering.
- Summary of General Items: updated guidance. Removed reference to Traffic Monitoring due to new summary box.
- Summary of Special Detour Quantities: Summary Box removed; no longer valid.
- Summary of Monitor Existing Structures: New Summary Box, per bulletins and 2016 PPM. Note change from "Protection of Existing Structures" to "Monitor Existing Structures".
- Summary of Removal Items: Clarified note for LS item.
- o Summary of Geotechnical Items: Clarified note for specification reference.
- Summary of Turnouts: Clarified guidance for showing surface course.
- Summary of Pavement: Clarified guidance for driveways and overbuild.
- Summary of Misc Asphalt Pavement: Removed obsolete note.
- Summary of Sidedrain & MES: updated guidance for Sod/Turf, added reference to PPM, and added note for updated summary box.
- o Summary of Sidewalk & Detectable Warnings: Clarified guidance for driveways.
- Summary of Permanent Driveways: Clarified guidance for asphalt driveways.
- o Summary of Traffic Monitoring Items: Sample summary box is pending.
- Added Examples & links for all summary boxes. Additional populated examples will be added as they become available.
- o Landscape tabulation of Quantities: This tabulation sheet may include the plant

**8-20-15:** Added Summary Box Examples to end of chapter. Added note above 8.1 Introduction. Formatted 8-3 table for Summary Box Order, to include hyperlinks within

chapter to instructions and examples for each summary box.

- **8-6-15:** Added text to 8.1 Introduction, to address 5 day language for response to quantity questions from Construction. This text was previously located in the *Computation Methods for Design, Construction, and Final Estimates Handbook.* Added text to Summary of Miscellaneous Drainage Items, Summary of Side Drain and Mitered End Sections, Summary of Trench Drain, Summary of Underdrain, and Summary of French Drain, to clarify usage and avoid duplication of quantities.
- **4-28-15:** Added details to Summary of Pavement, to require overbuild quantities to be shown separately from structural quantities. Removed reference to Field Office from Summary of General Items. Removed reference to Special Detours from Summary of Temporary Traffic Control Plan Items. Added note to keep Summary of Temporary Signalization & Detection separate from Summary of Temporary Traffic Control Devices.
- **2-20-15:** Updated note for Summary of Permanent Barrier Wall, to address 521-8 items. Added Summary of Temporary Signalization to list in 8-3. Marked Summary of Special Detour with strikethrough, due to Estimates Bulletin 14-06. Added Summary of Cable Barrier (Pending).
- **2-10-15:** Updated Summary of Structure Quantities and Summary of Walls with note for Sheet Piling. Replaced Summary of Drainage Structures box. Updated note for Special Detour, per Estimates Bulletin 14-06. Updated Summary of Miscellaneous Asphalt; removed column for Temporary Sidewalk.
- **12-30-14:** Updated header dates for 2015 edition. Removed contact information from header. Updated note in red at top of chapter to refer to revision history. Added text to 8.2 for summary box totals to be shown on the first page, per the CADD templates. Added text to 8.3 for multiple projects let under one contract.
- **10-20-14:** Added note to Summary of Guardrail for removal pay item.
- 10-17-14: Updated all graphics for the latest Summary Boxes.
- **10-13-14:** Added rumble strips to Summary of Payement.
- **9-24-14:** Temporary Signalization- updated detail. When the new box with total is used, do not include the total on the Summary of Temporary Traffic Control Plan Items. If the old box is used, the total remains on the Summary of Temporary Traffic Control Plan Items.
- **9-19-14:** Updated details for Summary Boxes, as follows:
  - Temporary Traffic Control Plan Items: Corrected items, based on new boxes.
     Added notes to limit format of summary box. Added note for 710-90 and temporary items.
  - Added Summary of Temporary Signalization and Detection.
  - o Litter and Mowing: added notes for areas identified in the plans.
  - Miscellaneous Asphalt Pavement: updated notes to remove temporary asphalt and temporary sidewalk.
  - Utility Adjustments: updated notes to clarify items to be included.
  - Sidedrain and Mitered End Sections: clarified that pay item numbers are not shown, and are not to be added by designer.
  - Sidewalk & Detectable Warnings: clarified note for location/area ID.
  - Sidewalk, Curb, and Ditch Pavement: added note for removal work. Permanent Crash Cushions: Removed note- cadd file is current.

- Fencing: Added note for temporary fencing.
- Performance Turf: Added note for temp sodding.
- **9-19-14:** Update 8.2 to clarify when columns or rows may be added or deleted.
- **9-17-14:** Updated 8.3 to clarify that non-standard tables may not be included with SQ sheets. Changed TABQLT to TABQXX. Added Summary of Temp Signals to list of Summary Boxes.
- **9-16-14:** Updated 8.6 to clarify note location on the Summary of Pay Items.
- **8-28-14:** Updated Special Detour to include Temporary Bridge information.
- **8-12-14:** Updated introductory information to remove "Draft" statement.
- **8-7-14:** Updated instructions for Lump Sum projects, to allow pay item numbers, with notice.
- **4-18-14:** Updated instructions based on user comments.
- **3-17-14:** Added instructions for projects with no roadway component.
- 2-26-14: Updated text with additional notes and guidance, per CADD webinar training.
- **3-6-13:** Complete re-write of Chapter, due to change from Comp Book to Plan Summary Boxes. Chapter title changed from "Forms" to "Plan Summary Boxes". Refer to Estimates Bulletin 13-09 for details.
- **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.

## **Summary Box Examples**

These examples are provided to show specific details from the instructions provided above (Chapter 8), as well as pay item specific instructions contained in the details section of various pay items (Chapters 11-20). **The examples are not intended to cover all possible situations.** Please consider the notes associated with the correct/incorrect examples.

Additional examples of correct/incorrect summary boxes are welcome and appreciated. Submit files to: <a href="mailto:FDOT-payitems@dot.state.fl.us">FDOT-payitems@dot.state.fl.us</a>

#### **Miscellaneous Errors:**

Do NOT move or delete the total columns or rows. The total for a pay item should be found on either the FIRST row when the items total across, or the FIRST summary box when the items total at the bottom.

Do NOT include Tab sheets within the SQ sheets. They go after the SQ sheets and are numbered with the rest of the component plan set.

## **Construction Requirements:**

When noting plans revisions, DO NOT use the areas reserved for construction's use, including the Construction Remarks column. In accordance with CADD requirements, do NOT reduce the summary box or font size; this makes it difficult to note construction changes.

## **Construction Request:**

For Summary Boxes totaled at the bottom, please leave 2 empty rows before this subtotal, for construction use. This may not currently be possible for some automated boxes; CADD will review the templates.

### **General Notes:**

The hyphen in the pay item is acceptable; however, when used, it needs to be consistent throughout the summary boxes. Blank rows used to separate pay item groups, locations, etc. may be helpful for easier reading; this is a designer option.

## 1. Summary of Lump Sum Items

Instructions, Return to Summary Box List

**Correct:** This summary box is appropriate for lump sum pay items that do not require location information/station, secondary units, or arealD/dimensions. Do not use this box for lump sum items that require additional information.

	SUMMARY	OF LUMP	SUM ITE	MS	
PAY ITEM	DAY ITEM DESCRIPTION	QUAN	ITITY	DESIGN NOTES	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	P	F	NOTES	REMARKS
101-1	MOBILIZATION	1			
		1	7/8		38

#### Incorrect:

102-1 belongs on the Summary of Temporary Traffic Control Plan Items

110-1-1 belongs on the Summary of Clearing and Grubbing & Removal Items. Location and quantities for secondary units are needed.

				SUMMARY OF LUMP SUM	ITEMS			
PAY ITEM	UNIT	SECONDARY	AREA ID	PAY ITEM DESCRIPTION	QUANT	ITY	TOTAL	CONSTRUCTION
NO.	UNIT	UNIT	AKEA IU	PAT TIEM DESCRIPTION	P	F	TOTAL	REMARKS
0101 1	LS			MOBILIZATION	1		1	
0102 1	LS			MAINTENANCE OF TRAFFIC	1		1	
0110 1 1	LS	AC	153189	CLEARING & GRUBBING	1/ (30.05AC)		1/ (30.05AC)	

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## 2. Summary of General Items

Instructions, Return to Summary Box List

**Correct:** 

### Incorrect:

Location information is missing.

	SUMMA	ARY OF GENERAL	ITEMS			
PAY ITEM	DAY ITEM DESCRIPTION	LOCATION	UNIT	QUAN	TITY	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	LOCATION	UNII	P	F	REMARKS
0519 78	BOLLARDS		EA	70		
	FIXED - 30					
	REMOVABLE - 9					
	WOODEN - 31					
	111-00-00-00-00-00-00-00-00-00-00-00-00-					

Do not use the Summary of General Items for component items that belong on a Tabulation Sheet (Signalization, Signing and Pavement Markings, Lighting, etc.)

102-3 belongs on Summary of Temporary Driveways. It does not go with the General Items.

	SUMMA	ARY OF	GENE	RAL	ITEMS	
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNITS	QUA	TITY	DESIGN	CONSTRUCTION
NO.	PAP TIEM DESCRIPTION	UNITED	P	F	NOTES	REMARKS
102-3	COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE	CY	7		FOR TEMP_ DRIVEWAY ACCESS	
					AT STA. 110+94.33 TO STA. 111+29.33	

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# 3. Summary of Temporary Traffic Control Plan Items (TTCP) Instructions; Return to Summary Box List

#### **Correct:**

102-78 Temporary Retroreflective Pavement Markers used for MOT are included in this summary box. 102-14 Traffic Control Officer (contractor's use for MOT) is included by phase in this summary box.

PAY ITEM		7000000	3	PHASE I		9	PHASE II		T01	AL	DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	UNIT	DURATION	QUANTITY	TOTAL	DURATION	<b>OUANTITY</b>	TOTAL			NOTES	REMARKS
V-30V-5			DAYS	P	P	DAYS	P	р	P	-x		ASHAYAMISIMASI
1102-1	MAINTENANCE OF TRAFFIC	1.5							1		500 CONSTRUCTION DAYS	
7102-2-1	SPECIAL DETOUR - DIVERSION 1	L5		1	1	į.			1		1	
2102-2-2	SPECIAL DETOUR - DIVERSION 2	1.5					(1)	1	7.			
7102-14	TRAFFIC CONTROL OFFICER	MH			. 2			2	4			
2102-60	WORK ZONE SIGN	ED	300	23	6_900	147	23	3.381	10,281			
0102-61	BUSINESS SIGN	ED	300	3	900	147	3	441	1,341		1	
7102-71-11	TEMPORARY BARRIER WALL	LF		564	364		( )		364			
2102-74-1	CHANNELIZING DEVICE, TYPES I. II, DI. VP. Drum. OR LCD	ED	300	560	168,000	147	437	64,239	232,239			
7102-74-2	CHANNELIZING DEVICE, TYPE III, 6'	ED	300	10	3,000	147	10	1.470	4,470			
7102-76	ARROW BOARD / ADVANCE WARNING ARROW PANEL	ED	300	2	600	147	2	294	894			
2102-78	TEMPORARY RETROREFLECTIVE PAVEMENT MARKER	EA		1107	1,107		649	649	2,836			
2102-99	PORTABLE CHANGEABLE MESSAGE SIGN - TEMPORARY	ED	307	- 4	1.228	147	2	294	1.522		INCLUDES 7 DAYS PRIOR	1
2102-911-2	REMOVABLE TAPE PAVENENT MARKING - WHITE / BLACK	LF		521	521				521			
7710-11-101	PAINTED PAVEMENT MARKINGS, STD, WHITE, SOLID, 6"	NN.		5.337	5.337		5.337	5.337	11			
7710-11-102	PAINTED PAVEMENT MARKINGS, STD. WHITE, SOLID 8°	GM		1.531	1.531	Ř	1.531	1.531	3			
7710-11-123	PAINTED PAVEMENT MARKINGS STD. WHITE, SOLID 12"	LF		1,636	1.636		1.636	1.636	1,272			
7710-11-124	PAINTED PAVEMENT MARKINGS, STD, WHITE, SOLID, 18"	LF.		3,259	3,259		3.259	3,259	6,518		1	
7710-11-125	PAINTED PAVEMENT MARKINGS, STD, WHITE, SOLID, 24"	LF		1,733	1.733	3	1.733	1,733	3,466			
2710-11-131	PAVEMENT PAVEMENT MARKINGS, STD. WHITE, SKIP 10-30 OR 3-9 SKIP, 6° WIDE	GM		3.935	3,935	11	3.935	3.935	n		1	
7710-11-141	PAINTED PAVEMENT MARKINGS, STD, WHITE, DOTTED, GAP EXTENSION 6°	GM		2.128	2-128		2.128	2:128	- 4			-
7710-11-160	PAINTED PRVEMENT MARKINGS, SRD, WHITE, MESSAGE OR SYMBOL	EA		23	23		23	23	46	,		
7710-11-170	PAINTED PAVENENT MARKINGS, STD, WHITE, ARROWS	EA		69	69		69	69	138		1	
2710-11-201	PAINTED PAVEMENT MARKINGS, STD, YELLOW, SOLID, 6°	NM		5,555	5.555		5.555	5.555	11			
7710-11-224	PAINTED PAVENENT MARKINGS, STD. YELLOW, SOLID, 18"	LF		281	281		281	281	562			
7710-11-241	PAINTED PAVENENT MARKINGS, STD. YELLOW, DOTTED, GAP EXTENSION 6"	GN		0.131	0.131		0.131	0.131	0.262			

Always use whole numbers for "Each" and "Each Day" item quantities. Add additional rows for different durations within the phase. See below for Items needed less than the full phase duration, example with 3 devices needed for 60 days, and 2 devices needed for 30 days:

		SUMMARY OF	TEMPORARY	TRAFFIC CO	NTROL PLA	NITEMS			-
PAY ITEM				PHASE I		т	OTAL	DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	UNIT	DURATION	QUANTITY	TOTAL			NOTES	REMARKS
			DAYS	P	Р	Р	F		
22-76-	ARROW BOARD/ ADVANCE WARNING ARROW PANEL	ED				2	10	Total, both locations	
		ED	60	3	180			Location assas	
		ED	30	2	60		]	Location bbb	

### Incorrect:

Do not include 706-3 Reflective Pavement Markers (RPMs) with Temporary Traffic Control Plan Items. Permanent RPMs are included with 710-90 Final Surface Markings.

## 4. Summary of Pedestrian Special Detour- DRAFT

Instructions; Return to Summary Box List

**Incorrect:** Blank draft form shown; title will be corrected to Summary of Pedestrian Special Detours. Locations and secondary units must be shown. For quantities remaining in place, do not repeat location/quantity.

	GW.		44	000	SUMM	ART OF	PEDESTRIA	AN DETOU	кэ	200	21
TTC PHASE	LOCATION	SIDE	AREA ID	ENGTH	МІОТН	UNITS		AN SPECIA TOUR	SECONDARY UNITS	DESIGN NOTES	CONSTRUCTION REMARKS
				=	3		0	102 4		110100	1361073,015
	STA. TO STA.						P	ı F	AREA (SY)		
		illi	1							1	
										]::::::::::::::::::::::::::::::::::::::	100000000000000000000000000000000000000
								1		1	
											1
								•			
		anaan da aanaa maanaa maa	00.000 (1872.000.000		013 [44 E2042]	20/21/12/02/19	443764-91704794	or () Markanaaraaraa			
	CORPOR THE CONTRACTOR OF STREET CONTRACTOR OF STREET							7			
	1										
	1										1
	1							·		1	
		1	12.505.50		77.77.77.77	P. 11/2/2-2-2		7		<b>-</b>	

#### Incorrect:

### **PENDING:**

**4. Summary of Special Detours.** See bulletin for example.

Instructions, Return to Summary Box List

**Correct:** Locations and secondary units must be shown. For quantities remaining in place for more than one phase, do not repeat location/quantity.

## 5. Summary of Temporary Highway Lighting

Instructions, Return to Summary Box List

**Correct:** Spacing may be indicated in the design notes column. P column will indicate 1 LS total; secondary units for EA must be completed.

			SUMMARY	OF TEMP	ORARY HIGHW	AY LIGHTING	
TTC	LOCATION	DC 1111/170	TEMPO HIGHWAY	967/48322477	SECONDARY UNITS	DESIGN	CONSTRUCTION
PHASE		DE UNITS	102	- 30	# POLES	NOTES	REMARKS
	STA. TO STA.		Р	F	EACH (EA)		
***************************************					***************************************	•••••••••••••••••••••••	
	SUB-TO		ļ				
N.	TO	TAL:					

Incorrect:

## 6. Summary of Pedestrian Longitudinal Channelizing Devices Instructions; Return to Summary Box List

**Correct:** Indicate duration when remaining for more than one phase. See Pedestrian Special Detour when walking surface is needed.

	LOCATION		QUAN			
CONST.	EUCH 1011	SIDE	0102	74 7	DESIGN	CONSTRUCTION
PHASE	STA. TO STA.	SIDE	L	F	NOTES	REMARKS
	SIA, IU SIA.		P	F		
1	160+00 TO 161+50	Lt.	150		REMAINING IN PLACE FROM PHASE 1 THRU PHASE 3	·
3	161+50 TO 165+00	Rt.	350			
31	163+00 TO 164+00	Lt.	100			
9	166+00 TO 166+00	Lt.	5.		SIDEWALK CLOSURE	
2	164+00 TO 165+00	Rt.	100		REMAINING IN PLACE FROM PHASE 2 THRU PHASE 3	
3	164+00 TO 165+00	Lt.	200		100' x 2 SIDES OF TEMPORARY WALKWAY	
3	166+00 TO 166+00	Rt.	5		SIDEWALK CLOSURE	

Incorrect:

## 7. Summary of Temporary Signalization & Detection Instructions; Return to Summary Box List

**Correct:** This form is NOT limited to "Temporary Signals". Quantity based on maintaining existing intersections for the full duration of project. See additional information under pay item 102-104- and 102-107-1. Design Notes column may be used to identify location or intersection location(s).

				010	02104					0102	107 1				
PHASE	DURATION	7			ALS & MA	INTENAN CH DAY	CE	TEMPO	ORARY TRA	AFFIC DET			ENANCE	DESIGN	CONSTRUCTION REMARKS
			EXISTING	G	10	TEMPORA	RY		EXISTING	9	TEN	MPORARY/	NEW	NOTES	NEMANAS
	DAYS	#	P	F	#	P	E	#	P	F	#	P	F		
J.	91	3	27.3					3	273						
2	190	3	570					3	570			7	1		
3	152	3	456					3	456						34
4	31	3	93					3	93						
	SU	B-TOTAL	1392					1	1392						
					TOTAL	1392					TOTAL	1392			

#### Incorrect:

Quantities must be summarized by phase, or indicate "all phases". Missing Construction Remarks column.

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## 8. Summary of Temporary Driveways Instructions; Return to Summary Box List

**Correct:** Example with location and dimensions.

LOCATION		COMMERCIAL	MATERIA	L FOR DRIV	EWAY MAIN	TENANCE	DESTGN	CONSTRUCTION
CTA A C AT DENIEWAY	SIDE	L	W	THK	CY		NOTES	REMARKS
STA. 9 & OF DRIVEWAY		FT	FT	IN	P	F		
70+53:00	AT	39.50	12.60	#.00	8.8		PHASE I	
70+85.00	RT.	40.00	12.00	6,00	8.9		PHASE 1	
72+21.00	87	40.00	12.00	€.00	8.9		PHASE I	
61+48.00	1.7	41.00	12,00	€.00	9.2		PHASE 2	
62+97.00	17	41.00	12.00	6.00	9.1		PHASE 2	
66+05.00	LT	41.00	18.00	€.00	13.7		PHASE 2	
71+56.00	17	41.50	12.00	6.00	9.2		PHASE 2	i i
		1	1	SUB-TOTAL:	58			-
				TOTAL	58			

## Example with Location, Area ID, and Thickness

LOCATION			COMMERCIAL MATER	RIAL FOR DRIVEWAY	MAINTENANCE		
LOCATION	SIDE	AREA	THK	0102	3	DESIGN	CONSTRUCTION
TA. @ C OF DRIVEWAY	-5.4	1D	THK	C	Y	NOTES	REMARKS
STA. & & OF BRIVEWAY			IN	P	F		
1011+00.00	1.7	290406	2.00	7.76		PHASE 1	
1014+00.00	LT	290392	2.00	3.34		PHASE 1	
1014+00.00	LT	290399	2.00	3.10		PHASE 1	
1018+60.00	RT	290619	2.00	2.66		PHASE 1	
1019+65.00	RT	290636	2.00	2.96		PHASE I	
1020+25.00	RT	290656	2.00	2.07		PHASE 1	
291+62.00	LT/RT	290898	2.00	6.10		PHASE 3	
294+25.00	LT/RT	290842	2.00	4.40		PHASE 3	
1016+50.00	LT/RT	290820	2.00	3.58		PHASE 3	
1018+60.00	LT/RT	290803	2.00	1.62		PHASE 3	
1019+65.00	LT/RT	290831	2.00	2.51		PHASE 3	
1020+25.00	LT/RT	290775	2.00	2.29		PHASE 3	
			SUB-TOTAL:	42.4			
			TOTAL:	42	1		

Incorrect:

## 9. Summary of Temporary Crash Cushions Instructions; Return to Summary Box List

**Correct:** Do not remove any columns from this table; **all design information is required**. If length restriction does not apply, use N/A; do not remove column.

PHASE STATION (FT) SIDE SPEED (TL-2 OR (IN) (FT) O102 89 1 NOTES REMARKS  I 1371+65.30 8.50 LT. 50 TL-3 24.00 N/A 1 1 1 100+49.38 5.50 RT. 40/50 TL-3 24.00 N/A 1 1 1 1732+92.00 90.86 RT. 70 TL-3 24.00 N/A 1 1 1 85+80.00 8.36 LT. 50 TL-3 24.00 N/A 1 RAMP A-1 1 85+80.00 21.00 RT. 50 TL-3 24.00 N/A 1 RAMP A-1 1 1 418+40.00 8.29 LT. 50 TL-3 24.00 N/A 1 RAMP A-1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TTC	STATION	OFFSET	SIDE	WORK ZONE	TEST	WIDTH OF	LENGTH RESTRICTION		ORARY CUSHION	DESIGN	CONSTRUCTION
1     1371+65.30     8.50     LT.     50     TL-3     24.00     N/A     1       1     1374+00.00     35.64     LT.     50     TL-3     24.00     N/A     1       1     100+49.38     5.50     RT.     40/50     TL-3     24.00     N/A     1       1     17/2+92.00     90.86     RT.     70     TL-3     24.00     N/A     1       1     85+80.00     8.36     LT.     50     TL-3     24.00     N/A     1     RAMP A-1       1     85+80.00     21.00     RT.     50     TL-3     24.00     N/A     1     RAMP A-1       1     418+40.00     8.29     LT.     50     TL-3     24.00     N/A     1     RAMP D-1       1     418+40.00     21.69     RT.     50     TL-3     24.00     N/A     1     RAMP D-1       1     51/6H AVE.     SEE PLANS LT.     40     TL-2     24.00     N/A     1       1     51/6H AVE.     SEE PLANS RT.     40     TL-2     24.00     N/A     1       1     51/6H AVE.     SEE PLANS RT.     40     TL-2     24.00     N/A     1       1     51/6H AVE.     SEE PLANS RT	PHASE	STALLOW	(FT)	SIUE						_	NOTES	
1     1374+00.00     35.64     LT.     50     TL-3     24.00     N/A     1       1     100+49.36     5.50' RT.     40/50     TL-3     24.00     N/A     1       1     1712+92.00     90.86' RT.     70     TL-3     24.00     N/A     1       1     85+80.00     8.36' LT.     50     TL-3     24.00     N/A     1     RAMP A-1       1     85+80.00     21.00' RT.     50     TL-3     24.00     N/A     1     RAMP A-1       1     418+40.00     8.29' LT.     50     TL-3     24.00     N/A     1     RAMP D-1       1     418+40.00     21.69' RT.     50     TL-3     24.00     N/A     1     RAMP D-1       1     516H AVE.     SEE PLANS LT.     40     TL-2     24.00     N/A     1       1     5LIGH AVE.     SEE PLANS RT.     40     TL-2     24.00     N/A     1       1     5LIGH AVE.     SEE PLANS RT.     40     TL-2     24.00     N/A     1       1     5LIGH AVE.     SEE PLANS RT.     40     TL-2     24.00     N/A     1       1     5LIGH AVE.     SEE PLANS RT.     40     TL-2     24.00     N/A	- 7	1371465 30	8.50	17	50		74.00	W/A	5 60	1		+
I 100+49.38 5.50 RT. 40/50 TL-3 24.00 N/A I I 1712+92.00 90.86 RT 70 TL-3 24.00 N/A I RAMP A-1 I 85+80.00 8.36 LT. 50 TL-3 24.00 N/A I RAMP A-1 I 85+80.00 21.00 RT. 50 TL-3 24.00 N/A I RAMP A-1 I 418+40.00 8.29 LT. 50 TL-3 24.00 N/A I RAMP D-1 I 418+40.00 21.69 RT. 50 TL-3 24.00 N/A I RAMP D-1 I 5LIGH AVE. SEE PLANS LT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I	- 1									1		
1	1		-					1910		1		1
I 85+80.00 21.00 RT. 50 TL-3 24.00 N/A I RAMP A-1  I 418+40.00 8.29 LT. 50 TL-3 24.00 N/A I RAMP D-1  I 418+40.00 21.69 RT. 50 TL-3 24.00 N/A I RAMP D-1  I SLIGH AVE. SEE PLANS LT. 40 TL-2 24.00 N/A I  I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I  I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I  I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I  I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I  I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I  I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I  I SLIGH AVE. SEE PLANS RT. 50 TL-3 24.00 N/A I	1	1712+92.00			70			117.00		†		1
I     418440.00     8.29 LT.     50.     TL-3     24.00     N/A     1     RANP D-1       I     418440.00     21.69 RT.     50.     TL-3     24.00     N/A     1     RANP D-1       I     SLIGH AVE.     SEE PLANS LT.     40.     TL-2     24.00     N/A     1       I     SLIGH AVE.     SEE PLANS RT.     40.     TL-2     24.00     N/A     1       I     SLIGH AVE.     SEE PLANS RT.     40.     TL-2     24.00     N/A     1       I     SLIGH AVE.     SEE PLANS RT.     40.     TL-2     24.00     N/A     1       II     1372+21.12     19.79 LT.     50.     TL-3     24.00     N/A     1	1	85+80.00		LT.	50			N/A	1		RAMP A-I	
1 41840.00 21.69 R7. 50 TL-3 24.00 N/A 1 RANP D-1 1 SLIGH AVE. SEE PLANS LT. 40 TL-2 24.00 N/A 1 1 SLIGH AVE. SEE PLANS R7. 40 TL-2 24.00 N/A 1 1 SLIGH AVE. SEE PLANS R7. 40 TL-2 24.00 N/A 1 1 SLIGH AVE. SEE PLANS R7. 40 TL-2 24.00 N/A 1 1 SLIGH AVE. SEE PLANS R7. 40 TL-2 24.00 N/A 1 1 SLIGH AVE. SEE PLANS R7. 40 TL-2 24.00 N/A 1 11 1372+21.12 19.79 LT. 50 TL-3 24.00 N/A 1	1	85+80.00	21.00	RT.	50	71.3	24.00	N/A	- 1	1	RAMP A-I	
1         SLIGH AVE.         SEE PLANS         LT.         40         TL-2         24.00         N/A         1           I         SLIGH AVE.         SEE PLANS         RT.         40         TL-2         24.00         N/A         1           I         SLIGH AVE.         SEE PLANS         LT.         40         TL-2         24.00         N/A         1           I         SLIGH AVE.         SEE PLANS         RT.         40         TL-2         24.00         N/A         1           II         1372+21.12         19.79         LT.         50         TL-3         24.00         N/A         1	- t	418+40.00	8.29	LT.	50.	74-3	24.00	N/A	- 2:		RANF D-1	
I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS LT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I II SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I II 1372+21.12 19.79 LT. 50 TL-3 24.00 N/A I	7	418+40.00	21.69	87.	50	TL-3	24.00	N/A	1		RANF D-1	
I SLIGH AVE. SEE PLANS LT. 40 TL-2 24.00 N/A I I SLIGH AVE. SEE PLANS RT. 40 TL-2 24.00 N/A I II 1372+21.12 19.79 LT. 50 TL-3 24.00 N/A I	1	SLIGH AVE.	SEE PLANS	LT.	40	71.2	24.00	N/A	- 1			
I SLIGH AVE. SEE PLANS RI. 40 TL-2 24.00 N/A I II 1372+21.12 19.79 LT. 50 TL-3 24.00 N/A I	1	SLIGH AVE.	SEE PLANS	.RT	40	712	24.00	N/A	( )			
11 1372+21_12 19.79 LT. 50 TL-3 24.00 N/A 1	1	SLIGH AVE.	SEE PLANS	LT.	40	74-2	24.00	N/A	1			
	1	SLIGH AVE	SEE PLANS	R7	40	TL-2	24.00	N/A	1			
111 1210+00.00 17.00 RT. 40/50 TL-3 24.00 N/A 1	310	1372+21_12	29.79	LT.	50	TL-3	24.00	N/A	1			
	111	1210+00.00	17.001	RT.	40/50	TL-3	24.00	N/A	1			
								TOTAL	14		]	

Incorrect:

# 10. Summary of Erosion and Sediment Control Devices Instructions; Return to Summary Box List

Correct: When a Summary Box continues on multiple sheets, totals for ALL columns are to be shown on the FIRST sheet of the series.

LOCATION	SIDE	AREA ID	/ RO EROS	RINGS LLED SION TROL	SEDI NE BARRI	ER 7	FLOATIN TURBIDI Y BARRIEF	P	SOIL TRACKING REVENTION DEVICE	PRO	NLET TECTION YSTEM	DESIGN NOTES	CONSTRUCT 101
STA. TO STA.		"	104	4 1	0104 10 LF	3	0104 11 LF		0104 15 EA	01	104 18 EA	NO/ES	REMARKS
PERMIT RECEIVED		]	P	F	P	F	PF	1	PF	P	F	1	
1401+69.67 R2 to 1403+76.66 R2	RT				252.7								
1401+78.80 R2 to 1403+69.32 R2	LT				243.1								
1404+01.92 R2 to 1407+29.79 R2	RT				418.0								
1404+07.29 R2 to 1411+03.51 R2	LT				755.3								
1407+68.94 R2 to 1411+02.14 R2	RT				414.2								
1410+74.82 R2 to 1410+78.56 R2	RT		- 3		4.9				0.0				
1411+39.97 R2 to 1414+72.72 R2	RT				406.6								
1411+42.18 R2 to 1418+30.39 R2	LT				830.8								
1415+06.38 R2 to 1416+28.18 R2	RT				375.8								
1418+74.44 R2 to 1421+44.39 R2	RT				449.0	1							
1418+80.65 R2 to 1421+32.57 R2	LT				390.2								
1418+81.13 R2 to 1418+81.64 R2	LT				15.0								
1418+93.50 R2 to 1419+00.00 R2	RT				6.7			-					
1422+44.37 R2 to 1428+25.73 R2	RT				756.9				010				
1422+47.14 R2 to 1436+85.49 R3	LT				1483.9								
1428+50.18 R2 to 1436+61.28 R3	RT				1024.9								
1437+43.12 R3 to 1441+33.27 R3	LT				404.1								
1437+49.84 R3 to 1441+42.10 R3	RT				448.3								
1441+72.52 R3 to 1445+23.59 R3	LT				373.6								
1441+76.60 R3 to 1445+21.40 R3	RT				375.0								
1445+62.91 R3 to 1452+80.15 R3	LT				697.2								
1445+72.40 R3 to 1448+40.49 R3	RT				293.9				200				
1448+61.31 R3 to 1451+00.00 R3	RT				251.8			$\top$					
1451+57.58 R3 to 1455+63.05 R3	RT				416.0		$\neg$						
1453+18.60 R3 to 1461+92.11 R3	LT				902.7	$\neg$							
1455+99.20 R3 to 1461+76.64 R3	RT				618.8				- 0 0 - 0				
1425+44.51 R2 to 1426+37.18 R2	RT						92.8						
1425+95.55 R2 to 1426+58.44 R2	LT						67.0						
1447+52.17 R3 to 1447+95.65 R3	RT					-	45.7	_					
1447+98.03 R3 to 1448+52.40 R3	LT						51.8						
	1					$\rightarrow$		_					
1407+31.18 R2 to 1407+33.22 R2	RT					$\rightarrow$	-	1		1			
1407+52.74 R2 to 1407+54.78 R2	LT		_			$\rightarrow$	_	-	_	1			
1407+64.39 R2 to 1407+66.43 R2	RT		- 7						700 8	1			
1411+01.08 R2 to 1411+03.12 R2	RT					$\rightarrow$	$\overline{}$	-		1			
1411+33.99 R2 to 1411+36.03 R2	RT					_	_	_		1			
1411+35.28 R2 to 1411+37.33 R2	LT		_			$\rightarrow$	-	4	_	1			1
1414+70.92 R2 to 1414+72.97 R2	RT								86	1			
1414+90.54 R2 to 1414+92.59 R2	LT					_				i			
1415+04.03 R2 to 1415+06.08 R2	RT					_	_	-		1			
1415+04.74 R2 to 1415+06.78 R2	LT/RT		-			$\rightarrow$	_	-		1			
1418+05.39 R2 to 1418+07.43 R2	LT/RT									1			
1418+31.29 R2 to 1418+33.33 R2	RT					$\rightarrow$	-			1			
1418+65.40 R2 to 1418+67.44 R2	RT				<b>—</b>	-	_	_		1			
1419+57.24 R2 to 1419+59.29 R2	LT		_			$\rightarrow$	_	_	_	1			-
1420+58.92 R2 to 1420+60.96 R2	LT		- 3			-	_			i			
1440130.92 RZ 10 1420100.96 RZ		B-TOTAL:	*349		12609.4	- 1	57.3	1	2	15		* SEE PAY ITEM NOTES FOR BASIS OF CALCULATIONS	_
		TOTAL:	349		12609		257		2	31		JEE THE ITEM MOTES FOR BASIS OF CALCOLATIONS	

#### Incorrect:

Do not add pay item notes for replacement. Per the specification, no separate payment is made for maintenance or replacement.

PAY ITEM 104-10-3 (SEDIMENT BARRIER)
 INCLUDES ALL COSTS FOR RESTAKING AND MAINTENANCE OF FENCE; AND IS BASED ON REPLACEMENT EVERY 12 MONTHS.

Do not specify type of barrier; per the specification, this is an option open to the contractor. Totals are to be shown on the FIRST sheet of a series. The incorrect example below is for a "cont." sheet in the series and should NOT include the series total.

STA, TO STA.  455+17.34 16 455+13.35 LT  458+87.25 10 458+87.70 LT  458+87.25 10 458+87.70 LT  468+87.25 10 458+87.70 LT  468+87.25 10 458+87.70 LT  465+80.90 10 465+37.10 LT  465+80.90 10 465+37.34 LT./MT  459+32.39 10 469+38.33 LT  459+32.79 10 479+38.33 LT  479+47.70 10 470+32.36 LT  493+29.31 10 493+33.09 RT  315+69.45 10 516+28.07 LT  329+38.78 10 320+25.00 LT  329+38.78 10 320+25.00 LT  322+24.85 10 348+20.00 RT  322+24.85 10 348+20.00 RT  322+24.85 10 348+20.00 RT  322+26.00 10 400-17.40 RT  51602+68.21 10 1848+21.29 LT:/MT  443+70.82 10 489+21.38 RT  441+87.94 10 445+13.29 LT:/MT  1448+74.15 10 1447+29.28 LT:/MT  1448+74.15 10 1447+29.28 LT:/MT  1448+74.15 10 1447+29.28 LT:/MT  1458+73.46 10 455+32.30 RT  1502+68.15 10 467+29.28 LT:/MT  1459+74.15 10 1645+28.48 LT  2502+68.15 10 1647+29.28 LT:/MT  1458+73.46 10 455+32.30 RT  1502+68.23 RT  1502+68.34 LT  1502+68.34 RT  1	0104 10 3 LF P F 61.9 62.8 62.8 62.8 62.8 62.8 62.8 62.8 62.8 62.8	0104 11 LF P F	0104 15 EA P F	0104 18 EA P F	NOTES
455+17.34 15 455+17.35 LT	P F 61.5 62.8 82.8 62.4 60.5 62.4 62.4 62.4 62.4				
458+15.84 to 458+17.08 LT.  458+167.25 to 458+17.08 MT.  458+167.25 to 458+17.0 MT.  458+37.25 to 458+27.70 LT.  452+33.50 to 452+37.10 LT.  452+33.50 to 452+37.10 LT.  455+52.39 to 462+37.10 LT.  459+52.39 to 462+38.34 LT.  459+52.39 to 469+38.63 LT.  489+29.31 to 498+32.30 LT.  489+29.31 to 493+30.09 RT.  3215+30.00 to 3348+30.00 LT.  3215+30.00 to 3348+30.00 LT.  321+30.00 to 348+30.00 LT.  348+30.00 to 400+17.40 RT.  348+370.00 to 429-70.58 RT.  348+370.00 to 449-70.58 RT.  348+370.00 to 449-70.30 LT.  449+30.00 to 449-70.30 LT.  440+34.34 to 348+40.31 RT.  444+04.50 to 461+58.73 RT.  458+73.46 to 451+58.73 RT.  458+73.46 to 451+58.73 RT.  458+73.46 to 451+58.73 RT.  469-72.11 to 316+78.48 LT.  479-70.26 to 499-72.30 RT.  556+93.63 to 305+90.01 RT.  564+93.42 to 503+31.40 RT.  564+93.42 to 503+31.40 RT.  564+31.42 to 1448+23.24 LT.  477-4449.42 to 1448+23.24 LT.  477-315-183.44 RT.  469+30.62 RT.	61.9 62.8 82.8 62.8 62.8 60.5 62.8 62.8 62.8	, , ,	<i>p f</i>	, ,	
458+15.84 to 458+17.08 LT.  458+167.25 to 458+17.08 MT.  458+167.25 to 458+17.0 MT.  458+37.25 to 458+27.70 LT.  452+33.50 to 452+37.10 LT.  452+33.50 to 452+37.10 LT.  455+52.39 to 462+37.10 LT.  459+52.39 to 462+38.34 LT.  459+52.39 to 469+38.63 LT.  489+29.31 to 498+32.30 LT.  489+29.31 to 493+30.09 RT.  3215+30.00 to 3348+30.00 LT.  3215+30.00 to 3348+30.00 LT.  321+30.00 to 348+30.00 LT.  348+30.00 to 400+17.40 RT.  348+370.00 to 429-70.58 RT.  348+370.00 to 449-70.58 RT.  348+370.00 to 449-70.30 LT.  449+30.00 to 449-70.30 LT.  440+34.34 to 348+40.31 RT.  444+04.50 to 461+58.73 RT.  458+73.46 to 451+58.73 RT.  458+73.46 to 451+58.73 RT.  458+73.46 to 451+58.73 RT.  469-72.11 to 316+78.48 LT.  479-70.26 to 499-72.30 RT.  556+93.63 to 305+90.01 RT.  564+93.42 to 503+31.40 RT.  564+93.42 to 503+31.40 RT.  564+31.42 to 1448+23.24 LT.  477-4449.42 to 1448+23.24 LT.  477-315-183.44 RT.  469+30.62 RT.	62.8 82.8 62.8 60.5 62.8 62.8 62.8				1
458-87.25 to 458-87.78 NT N009-01.31 to 460-02.05 LT N009-01.31 to 460-02.05 LT N009-01.31 to 460-02.05 LT N009-01.31 to 462-33.50 LT N009-01.31 to 455-62.63 LT N009-01.31 to 455-62.63 LT N009-01.31 to 469-95.34 LT N07 N09-95.39 LT N009-95.39 LT N009-95.	82.8 62.8 50.5 62.8 62.8 62.8				SYNTHETIC MALES
### ### ### ### ### ### ### ### ### ##	62.8 60.5 62.8 62.8 62.8				SYNTHETIC BALES
462+33.50 to 462+37.10 LT  455+60.90 to 455+62.63 LT  455+60.90 to 455+62.63 LT  456+34.85 to 466+35.34 LT.///T  459+52.39 to 469+58.63 LT  479+47.70 to 470+32.36 LT  479+47.70 to 470+32.36 LT  479+47.70 to 470+32.36 LT  479+27.31 to 483+32.09 RT  479+38.78 to 316+78.07 LT  529+38.78 to 316+78.00 LT  527+30.00 to 3146+70.00 LT  527+30.00 to 3146+70.00 LT  527+30.00 to 328+80.00 RT  527+30.00 to 348+80.00 RT  528+20.00 to 429+72.40 RT  549+70.00 to 348+72.70 LT  4403+32.69 to 429+72.58 RT  5403+88.31 to 428+72.28 LT  443+70.62 to 483+42.38 RT  5444+74.13 to 2454+63.3 RT  5454+73.66 to 451+58.73 RT  5454+73.66 to 451+58.73 RT  5454+73.66 to 451+58.73 RT  5468+22.11 to 316+28.48 LT  5469+76.30 to 364+37.70 RT  5564+33.46 to 503+33.46 RT  5564+33.46 to 503+33.46 RT  5564+33.47 to 503+33.46 RT  5564+33.48 to	60.5 62.8 62.8 42.8				SYNTHETIC BALES
465+60-90 to 465+62.63 t.7  465+48.95 to 466+95.34 t.7./77  465+93.39 to 469+98.63 t.7  479+37.70 to 479+52.36 t.7  489+79.31 to 489+23.71 t.7  489+79.31 to 489+30.09 RT.  515+69.45 to 516+78.67 t.7  521+30.00 to 2340+20.00 t.7  321+30.00 to 2340+20.00 t.7  322+30.50 to 242+80.00 RT.  322+30.50 to 242+80.00 RT.  324+30.00 to 242+80.00 RT.  324+30.00 to 242+80.00 RT.  349+20.00 to 242+80.00 RT.  402+21.69 to 242+80.00 RT.  440+64.30 to 242+80.00 RT.  444+82.94 to 1444+12.28 t.7./77  444+82.41 to 1444+22.34 t.7./77  445+73.46 to 453+22.30 RT.  456+73.46 to 453+22.30 RT.  456+73.46 to 453+22.30 RT.  456+73.46 to 453+22.30 RT.  456+73.46 to 453+22.30 RT.  456+22.11 to 2434+03.18 t.7.  446+74.36 to 453+22.30 RT.  456+72.11 to 2434+03.18 t.7.  446+74.36 to 453+22.30 RT.  456+73.46 to 503+32.30 RT.  56493.83 to 303+30.18 t.7.  442+88.34 to 503+32.30 RT.  444+82.41 to 244+22.34 RT.  444+82.42 to 504+32.34 RT.  444+82.42 to 504+32.34 RT.  444+82.42 to 504+32.34 RT.  440+74.10 to 1444+22.34 RT.	62.8 62.8 62.8	+			SYNTHETIC MALES
### ### ### ### ### ### ### ### ### ##	62.8 62.8				SYNTHETIC MALES
459+52.39 to 469+98.63 LT 429+47.70 to 478+52.36 LT 489+18.70 to 478+52.36 LT 489+18.70 to 488+23.71 LT 489+28.31 to 483+33.08 MT 515+68.45 to 516+78.67 LT 529+38.78 to 526+78.67 LT 529+38.78 to 526+78.00 LT 727+30.00 to 1246+20.00 LT 727+30.00 to 1246+20.00 LT 727+30.00 to 1246+20.00 LT 728+20.00 to 1246+20.00 LT 748+20.00 to 1246+20.00 LT 7402+88.21 to 248+20.00 RT 7402+88.21 to 248+20.00 LT 7402+88.21 to 248+20.28 LT 7402+70.82 to 429+70.58 RT 741+87.94 to 1448+23.28 LT 742+70.82 to 489+48.33 RT 742+70.82 to 548+23.28 LT 747-70.26 to 548+23.28 LT 747-74.26 to 548+27.28 RT 748+28.31 to 536+37.30 RT 748+28.32 to 536+37.30 RT 748+38.32 to 536+38.33 RT 748+38.32 to 536+38.33 RT 748+38.32 to 536+39.30 RT	42.4				STATMET IC BALES
### ### ### ### ### ### ### ### ### ##					SYNTHETIC MALES
### ### ### ### ### ### ### ### ### ##	62.0				SYNTHETIC BALES
493+29.31 to 493+30.09 HT.  515+68.45 to 516+78.07 LT.  515+68.45 to 516+78.07 LT.  320+38.78 to 320+25.00 LT.  321+30.00 to 320+25.00 LT.  321+30.00 to 348+80.00 HT.  322+24.85 to 348+80.00 HT.  322+24.85 to 348+80.00 HT.  320+27.98 to 329+76.12 LT.  5249+20.00 to 420+77.40 HT.  5402+68.21 to 348+48.33 HT.  5402+68.21 to 348+48.33 HT.  5402+68.22 to 448+48.33 HT.  5448+74.13 to 348+48.33 HT.  548+74.13 to 348+48.33 HT.  549+74.02 to 348+48.33 HT.  549+74.02 to 348+48.34 HT.  549+74.02 to 348+72.34 HT.  540+74.02 to 348+72.34 HT					SYNTHETIC BALES
\$16+69.45 to \$16+70.67 i.T. \$299-18.78 to \$290-25.00 i.V. 7 \$299-18.78 to \$290-25.00 i.V. 7 \$211+30.00 to \$230-25.00 i.V. 7 \$212+30.00 to \$230-20.00 i.V. 7 \$222+24.85 to \$248+80.00 RT. 2 \$348+79.98 to \$249+80.00 RT. 5 \$499-20.00 to \$400+17.40 RT. 5 \$499-20.00 to \$429-70.58 RT. 3 \$404-00.50 to \$449-70.58 RT. 7 \$444-74.13 to \$449-40.18 i.T./RT. 1 \$459-00.00 to \$447-79.20 i.T./RT. 1 \$459-00.00 to \$447-79.20 i.T./RT. 1 \$459-00.00 to \$448-20.18 i.T./RT. 1 \$459-00.00 to \$461+58.73 RT. 2 \$469-72.11 to \$16-70.40 i.T. 7 \$459-00.00 to \$461+58.73 RT. 2 \$497-70.20 to \$498+22.23 RT. 1 \$504-81.83 to \$303-30.01 RT. 1 \$404-81.83 to \$400-81.45 RT. 1 \$404-91.83 to \$400-81.45 RT. 1 \$400-81.30	61.1				SYNTHETIC HALES
1909-38 78 10 320-25 00 (F 2 2 121-30 00 12 3 1360-20 00 0 7 3 122-24 85 10 348-80 00 67 3 122-24 85 10 348-80 00 67 2 3 348-72 00 0 122-24 85 10 348-80 00 67 2 3 348-72 00 12 122-24 85 10 348-72 00 67 67 5 149-20 00 12 400-12 40 67 5 149-12 60 12 12 12 12 12 12 12 12 12 12 12 12 12	65.8	30			SYNTHETIC HALES
321+30.00 to 2340+20.00 tr 2 322+24.85 to 242+80.00 AT 2 348+79.08 to 1299+76.12 tr 5 569+20.00 to 400+17.40 AT 3 402+68.21 to 1299+76.12 tr 5 602+68.21 to 1299+76.12 tr 6 602+21.60 to 429+70.58 AT 3 402+68.21 to 429+70.58 AT 3 401+82.04 to 429+70.58 AT 3 401+82.04 to 429+70.58 AT 3 401+82.04 to 429+70.28 tr //AT 1 448+76.62 to 489+48.73 AT 7 448+76.13 to 1644+08.18 tr 6 458+73.46 to 465+32.30 AT 1 459+70.06 to 465+32.30 AT 1 469+70.26 to 490+32.30 AT 1 469+70.26 to 490+32.30 AT 1 460+70.26 to 166+70.74 tr //AT 1 460+70.10 to 1640+70.74 tr //AT 1 470+88.78 to 444+72.54 tr //AT 1 470+88.78 tr //AT	59.3				STATHETIC HALES
122+24 85 to 348+80.00 RT 2 348+12.98 to 1299+16.12 LT 5 149+20.00 to 429+12.40 RT 5 1492+20.00 to 429+12.40 RT 5 1492+31.69 to 429+10.58 RT 1 1402+31.69 to 429+10.58 RT 1 1402+31.69 to 429+10.58 RT 1 1403+31.69 to 448+12.90 LT./AT 1 1403+74.13 to 1403+12.30 LT./AT 1 1403+74.13 to 1403+03.18 LT 1 1504+73.40 to 455+32.30 RT 1 1404+74.13 to 1403+2.23 RT 1 1404+74.13 to 1403+2.23 RT 1 1404+74.13 to 304+30.10 RT 1 1404-74.13 to 304+30.13 RT 1 1404-74.13 to 344-77.74 LT./AT 1 1404-74.10 to 244-77.74 LT./AT 1 1404-74.10 to 244-77.74 LT./AT 1 1404-74.10 to 244-77.14 LT./AT 1 1404-74.10 to 344-77.14 LT./AT 1	1137,9				STAKED SILT FENCE
348:73.98 to 1299:76.12 LT 5 549:20.00 to 400-17.40 RT 5 402+68.21 to 2446-21.40 LT 4 602+32.69 to 429:70.58 RT 3 441:82 94 to 1445-13.29 LT:/AT 1 443:70.82 to 449:48.33 RY 5 444:87.94 to 1445-13.29 LT:/AT 1 444:74.13 to 1444-23.18 LT:/AT 1 459:70.86 to 461:458.73 RT 2 459:71.10 to 3447-29.28 LT:/AT 1 459:08 66 to 461:458.73 RT 2 459:72.11 to 316:78.48 LT 2 407:710.26 to 489:42.23 RT 1 502:48.13 to 303:31.46 RT 3 502:48.13 to 303:31.46 RT 3 502:48.13 to 303:31.46 RT 4 444:91.42 to 3448-17.74 LT:/AT 4 440:18.42 to 3448-17.74 LT:/AT 1 440:18.78 to 444:23.84 LT:/AT 1 110:21.19 to 488:22.15 LT:/AT 1 110:21.19 to 488:22.15 LT:/AT 1 105:49.31	1654,7				STAKED SILT PENCE
149+20.00 1= 400+17.40 NT. 5 402+88.21 1= 3464-21.80 LT. 4 102+32.69 1= 429+70.58 NT. 3 142+70.82 1= 449+40.33 NT. 3 142+70.82 1= 449+40.33 NT. 3 142+70.82 1= 449+40.33 NT. 3 142+70.82 1= 449+40.31 NT. 3 142+70.82 1= 449+40.31 NT. 3 142+70.82 1= 455+32.30 NT. 3 159+08.86 1= 455+32.30 NT. 3 159+08.86 1= 455+32.30 NT. 3 159+08.22.11 1= 316+78.48 LT. 2 169+70.26 1= 498+22.23 NT. 3 1502+82.13 1= 503+33.46 NT. 3 1602+82.13 1= 503+33.46 NT. 3 1602+82.13 1= 603+32.30 NT. 3 1602+82.13 1= 603+32.30 NT. 3 1602+82.13 1= 603+32.03 NT. 3 1602+82.13 1= 603+32.30 NT. 3 1602+82.13 1= 603+32.30 NT. 3 1602+82.30 NT. 3 1602+82.30 NT. 3 1602+82.30 NT. 3 1602+82.30 NT. 3 1602+82	2680.7	3 3			STAKED SILT FENCE
### ### ### ### ### ### ### ### ### ##	5089.4				STAKED SILY, FENCE
103+32.69 to 439+70.58 RT. 3 141+87.94 to 1445+73.29 tT.//RT. 2 141+87.94 to 1445+73.29 tT.//RT. 2 1448+74.73 to 1447+79.28 tT.//RT. 4 148+74.73 to 1464+03.18 tT. 2 158+73.46 to 455+72.70 RT. 1 159+08.06 to 461+58.73 RT. 2 168+22.71 to 316+78.48 tT. 2 1697-70.26 to 498+32.23 RT. 7 102+84.74 to 502+33.40 RT. 3 140+33.42 to 304+33.23 RT. 7 140+33.42 to 3468+27.74 TT./RT. 140+33.42 to 3468+27.74 TT./RT. 142+84.74 to 448+23.84 TT./RT. 111+23.19 to 488+28.15 TT./RT.	5114.5			1 6	STAKED SILT. FENCE
41+87-94 10 2445+12-20 17:/NT 1 152+10-02 10 489+48-33 NY 1 164+04-50 10 1447+29:20 17:/NT 1 448+34-15 10 1464+00.18 LT //T 1 152+08-08-16 10 453+32-30 NT 1 153+08-08-16 10 453+32-30 NT 1 159+08-08-16 10 463+58-73 NT 2 168+22-11 10 316+78-48 LT 2 197+70-28-16 498+22-23 NT 1 197+70-28-16 498+22-23 NT 1 102+82-34 10 503+33-40 NT 1 164+91-83-10 1468+37-74 17-/NT 1 464+92-20-10 1468+37-74 17-/NT 1 464+32-20-10 1468+37-74 17-/NT 1 464+32-32-10 1648+37-74 17-/NT 1 464+32-32-10 1648+37-74 17-/NT 1 464+32-32-10 167-74 17-/NT 1 464+32-32-10 167-74 17-/NT 1 464+32-32-10 167-74 17-/NT 1 464+32-32-10 17-/NT 1 464+32-32-10 17-/NT 1 464-32-32-10 17-/NT 1	1475 0				STAKED STLT FENCE
142+76.82 to 849+46.33 RT 1 164+64.50 to 1447+79.28 LT./AT 1 448+74.13 to 1464+60.18 LT 1 1584+73.66 to 451+58.73 RT 1 1584+73.66 to 451+58.73 RT 1 1584+73.67 to 3164-78.48 LT 2 1684+22.21 to 3164-78.48 LT 2 1694+70.26 to 488+22.23 RT 1 1624-64.74 to 503+33.66 RT 1 1624-61.74 to 503+33.66 RT 1 1624-61.74 to 503+33.66 RT 1 1624-61.74 to 3646-77.74 LT./AT 1 1644-93.43 to 3646-77.74 LT./AT 1 1644-78.10 to 1446-72.54 RT 1 1644-78.20 to 448+22.54 LT./AT 1 1642-68.78 to 448+22.54 LT./AT 1 162-68.78 to 448+22.54 LT./AT 1 162-68.78 to 488+28.15 LT./AT 1	1539.2				STAKED SILT, FENCE
144+94.59 to 3447+29:28 tr./AT 1 448+94.18 to 3484+90.18 tr. 1 154+73.46 to 455+32.30 RT 1 159+96.66 to 461+58.73 RT 2 168+22.11 to 316+28.48 tr. 2 169+02.21 to 316+28.48 tr. 2 169+02.21 to 316+28.48 tr. 2 169+02.21 to 303+33.40 RT 1 102+68.14 to 503+33.40 RT 1 102+68.14 to 503+33.40 RT 1 102+88.14 to 303+38.03 RT 1 440+28.33 to 303+38.03 RT 1 440+28.33 to 365+27.44 RT 1 440+28.32 to 468+27.74 tr./AT 1 440+38.32 to 440+21.50 tr./AT 1 142+68.78 to 440+21.54 tr./AT 1 142+68.78 to 440+21.54 tr./AT 1 165+29.31 to 488+28.15 tr./AT 1 165+29.31 RT 1	363.3				STAKED STEEL FENCE
448+74.13 to 2464+00.18 LT. 1 154+73.46 to 455+32.30 RT. 1 159+00.66 to 461+58.73 RT. 2 169+00.66 to 461+58.73 RT. 2 169+00.66 to 461+58.73 RT. 2 1697+70.26 to 461+58.73 RT. 2 1697+70.26 to 461+58.73 RT. 2 1697+70.26 to 480+22.23 RT. 1 1602+84.14 to 503+33.40 RT. 3 1604+91.83 to 504+97.74 LT./AT. 4 1604+91.83 to 548+27.74 LT./AT. 4 1604+34.32 to 548+27.74 LT./AT. 4 1604+34.32 to 480+28.15 LT./AT. 4 111+21.19 to 480+28.15 LT./AT. 4 111	539,8		3 - 3		STAKED SILT FENCE
458+73.46 10 455+32.30 RT. 1 459+08.66 to 461+58.73 RT. 2 668+22.11 to 316+78.48 LT. 2 679+70.26 10 488+32.23 RT. 1 502+86.14 to 503+31.40 RT. 2 504+91.83 to 305+98.01 RT. 1 604+91.83 to 305+98.01 RT. 1 646+31.42 to 3648+37.74 LT. /AT. 4 669+8.10 to 3648+37.74 LT. /AT. 4 669+8.10 to 3648+37.74 LT. /AT. 4 669+8.10 to 3648+37.74 LT. /AT. 4 679+34.32 to 468+27.74 LT. /AT. 4 679+34.33 to 462+21.90 LT. /AT. 4 689+30.61 RT. 4 689+30.61 RT.	239.1				STAKED SILT, FENCE
159+08.86 to 463+58.73 KT 2 1680-22.13 to 316-28.48 LT 2 1670-26 to 488+22.23 KT 1 1024-68.14 to 503-33.46 KT 2 1024-68.14 to 503-33.46 KT 3 1402-78.44 to 7603-87.43 KT 3 1403-78.44 to 7603-87.74 LT 7/KT 440-34.32 to 1448-12.54 LT 7/KT 440-34.32 to 440-21.59 LT 7/KT 1 142-68.78 to 440-21.59 LT 7/KT 1 111-21.19 to 4803-28.15 LT 7/KT 1 111-21.19 to 4803-28.15 LT 7/KT 1 105-29.31 KT 3	1587.0	3 3			STAKED SILT FENCE
968-22.11 18 316-78.48 LT. 2 979-70.26 14 499-32.23 RT. 1 902-84.34 19 503-33.40 RT. 3 904-92.83 10 503-33.40 RT. 3 904-92.83 10 503-39.03 RT. 1 402-72.44 18 102-87.43 RT. 4 404-75.10 10 1046-27.74 LT./RT. 4 409-75.23 10 404-71.90 LT./RT. 4 402-88.78 18 404-72.54 LT./RT. 4 402-88.78 18 404-72.54 LT./RT. 1 111-21.19 10 488-28.15 LT./RT. 1 115-28.34 RT. 4 409-30.61 RT.	132.6	3			STAKED STAT. FENCE
497+70.26 (± 498+22.23 RT 1) 102+86.14 to 503+31.46 RT 5 102+86.14 to 503+31.46 RT 5 104+91.83 to 303+38.03 RT 1 440+91.43 to 302+87.43 RT 4 440+91.42 to 306+27.74 LT 7.78T 1 440+78.10 to 3048+05.92 LT 7.78T 1 440+38.22 to 440+21.19 CT 7.78T 1 111+21.19 to 408+28.15 LT 7.78T 1 111+21.19 to 408+28.15 LT 7.78T 1 115-19.31 RT 4 409+30.61 RT 4	245.7				STAKED STLT FENCE
002+84:34 to 503+33.40 KT 3 664+91:83 to 300+50.03 KT 4 402-72.44 to 3002+87.45 KT 444+93.42 to 3448+37.74 LT./AT 446+34.32 to 3448+37.74 LT./AT 440+34.32 to 3448+37.74 LT./AT 440+34.32 to 440+21.90 LT./AT 440+34.32 to 440+22.84 LT./AT 111+21.19 to 488+24.15 LT./AT	26.82.8				STAKED SILT FENCE
004-91.83 to 309-98.03 NF I A022/87.84 1s J602-87.45 NT . 464-93.42 to 3468-37.74 LT./AT. 464-93.23 to 464-92.32 tf /AT. 460-34.33 to 462-23.90 LT./AT. 462-68.78 to 444-22.04 LT./AT. 111-22.19 to 488-28.15 LT./AT. 115-28.31 NT . 47. 468-30.61 RT.	126.0				STAKED SILT. FENCE
#02:72:44 1s 302:87.43 RT.  #444:74:10 10:466-27.74 LT./RT.  #440:75:10 10:1448:05.92 LT./RT.  #40:54:32 1s 442:11:00 LT./RT.  #42:68.78 1s 444:12:54 LT./RT.  #11:12:19 10:488:28:15 LT./RT.  #15:18:18:14 RT.	329.0				STAKED SILT FENCE
444-93-42 to 3448-37.74 LT./AT. 446-76-10 to 1448-05.92 LT./AT. 440-78-32 to 447-11-90 LT./AT. 440-84.78 to 444-72.84 LT./AT. 111-21.19 to 488-28.15 LT./AT. 1055-29.31 AT. 115:18-34 AT.	120.5				STAKED SILF. FENCE
449-78 10 to 1448-05,92 (F./AT. 140-34,32 to 449-71 90 (F./AT. 142-88,78 to 444-72.04 (F./AT. 111-21,19 to 488-28.15 (F./AT. 103-29,31 AT. 115-88.84 AF.		141.0			FLOAFING TURBIDITY
140+34,32 (# 442+21.90 tT./AT. 142+46,78 (# 444+22.54 tF./AT. 111+21.19 to 482+24.15 tF./AT. 305+29.31 AT. 115+38.34 AT.		221.2.			FLOATING TURBIDITY
(42-68-78 to 444-72-54 LT./AT.  111-21-19 to 488-28-15 LT./AT.  305-29-31 AT.  115-18-34 AT.		226.2			FEOATING TURBIDITY
111+21-19 to 488+28-15 LT //AT . 105+29-31 AT . 125+38-34 AT .	184	221.2	(8====		FIGATING TURBIDITY
105-29,31 AT. 115-188.84 RT. 1094-20.61 RT.		226.2			FLOATING TURBIDITY
015:88.84 RF. 809+30-51 RF.	2		8		I DEVICE FER WILE NO & S
669+30-51 RT	10.4	30		1	INLET PROTECTION XYSTEM
The second secon				70	INLET PROTECTION SYSTEM
171+99 dd AT	35.4			1 2	INLET PROTECTION SYSTEM
		9 3	3 3	1	INLET PROTECTION SYSTEM
(75+00-30 RT.				A.	INLET PROTECTION SYSTEM
179+61,22 RT.	19.0			1	INLET PROTECTION SYSTEM
ES+00.99 RT				1	INCET PROTECTION SYSTEM
497+65.12 RT.				- OX	INLET PROTECTION SYSTEM
198+62.46 45					INLET PROTECTION SYSTEM
191-48 00 AT.					INLET PROTECTION SYSTEM
SUB-TOTAL 1		1036		20	

Topic No. 600-000-002

Basis of Estimates

2021 Edition
as of February 4, 2021

## 11. Summary of Litter Removal and Mowing

**Instructions**; Return to Summary Box List

#### **Correct:**

Frequency estimated based on 30 day cycle.

Separate entry for each area. When automated, the mowing areas and quantities may follow the litter removal areas and quantities. Use "same as phase x", when applicable.

Note: Only use "ALL" for the Const. Phase column when TCP does not affect the areas for quantities. Otherwise, ensure locations are separated by phases.

Totals are to be shown on the FIRST sheet of a series (not shown correctly below). This summary box does not appear to extend to multiple sheets.

		1			(9)	1.77	тей немо	VAL.				MOW LINE		50		4 17
course.	LOCATION	95795	OUR AT LOW	PREQUENCY	1		0107 1	100				0197 2	2000		DESIGN	CONSTRUCTION
PHASE .	THE PERCENTING	2100	(DAYS)	(DAYS)	AREA	0.000		AREA		****	10000	1,100	AREA		NOTES	REMARKS
	STA. TO STA.		144.114		10	CYCLES	CYCLE	TOTAL	(AC)	AREA (II)	CYCLES	CTCLE	TOTAL	(AC)		
ALL	27+65,29 (c.25+45.56)	1.7	10	36	37747	- 3	8,130	4.400								
ALL	27148,00 to 28158,43	.87	86	36	32733		0.972	8,277				-				
.664.	36+68,33 to 37+13.20	1.7	10	.26	17731		0,320	1.860				- 3				
ALL	30+57.30 to 37+32.27		30	30	25745		8,300	6.800	8	4				- 1		
26.5	22+48,09 to 24+41.39	1.7	801	.00		5 0 3			2	37119		9.120	2.360	151		
ALL	27+08.37 to 30+69.11	- 17	80	.30						17007	3	0.230	8.630			
ALL:	30+48 21 1v 3(+89 80	17.	90	30	05					17447		0.040	# 1779			
ALL	36+63.33 to 32+36.99	.47	80	30						17492	3	p.040	0.460			
ALL:	F0+98.60 fm 32+82.29	1,7	.90	310						3756E		0.000	#. 1770			
ALL	37+72,82 to 32+34.84	67	80	36						37,147		H.0.50	#.836			
ALL	32-93.27 (m 33-65.8)	At.	#E	3.0		8 8				37978		F.810	\$1,030			3
ALL:	30r73.57.1w 39x38.31	1.7	90	30	1.0	9				37643		0.050	0.00	35 3		
ALL	33+57,50 to 35+89.01	Ef.	80	31			$\overline{}$			11459	3	6.416	8.030			
-		_				_	SURATOTAL S	2,22	_	_		DAR-TOTAL	2,88	-		
							TOTAL	-	-			TITTAL				

#### Incorrect:

Each area must be separately identified, either by Area ID or Length/width/location.

Do NOT lump quantities for a phase in one row. (This was acceptable ONLY when supported by a Computation Book, prior to Summary Boxes)

Do not add footnotes to this box.

Totals are to be shown on the FIRST sheet of a series. The example below correctly shows the totals at the bottom of the sheet.

	1					Į,	ITTER RE	MOVAL						HOW I N	G		- 1		
	LOCATION						0107	1						0107	2				
PHASE		(DAYS)	(DAYS)	2000	Samuel A	Singer 18	March of	×	AREA	-u	creari)	vencio cius)	lancerial.	Latina		AREA	-0.00	DESIGN NOTES	CONSTRUCTION REMARKS
, mar	STA. TO STA.	10000	1000.32	AREA ID	LENGTH	WIDTH	CYCLES	AC/ CYCLE	TOTAL	(AC)	AREA ID	LENGTH	WIDTH	CYCLES	AC/ CYCLE	TOTAL	(AC)	WOZES.	OLEGONS.
- 1	54+21.33 - 760+50.00	20	30			8	1.	261.850	261.050					1	212.730	212.730			i.
- 11	450+00.00 - 597+00.00	420	30				14	38.910	544.740					34	46,420	649 880			
III	450+00.00 - 597+00.00	350	30				12	38,910	453,950					12	46.428	347.567	7		
. IV	450+00.00 - 597+00.00	30	30		( )	Ui II	1	38.910	38.910					. 2	46.420	46.420			
- 200 - 111					V.————————————————————————————————————	177		SUB-TOTAL					A		SUB-TOTAL	1450 597			7
								TOTAL:	1299.45					_	TOTAL	1450.60			

THE PHASE DURATIONS SHOWN ARE NOT BASED ON PROJECT SCHEDULE AND SHOULD NOT BE USED FOR SCHEDULING PURPOSES BY THE CONTRACTOR

Separate Location column required for each of the pay items.

							SUMMARY	OF LIT	TER REMO	VAL AN	D MOW	ING					
	00780000000	16	-			-	7		LITTER RE	MOVAL		T	MOWING	j.	210		
and the second	LOCATION		1500				caralination.		0107	1			0107	2	417	0.000	The same as a second second
CONST. PHASE	110000000000000000000000000000000000000	SIDE	AREA	LENGTH	WIDTH	OURATION (DAYS)	(DAYS)			AREA			(0) 50	MEA		DESIGN NOTES	CONSTRUCTION REMARKS
1000000	STA, TO STA.	1	100			1600000	10000000	CYCLES	AC/CYCLE	TOTAL	(AC)	CYCLES	AC/CYCLE	TOTAL	(AC)		11.55
- 1	SIAL TO SIA.							Jeen state at 1	MUTUTULE	- 8	F	John Daving	MUTUTELL	P	F.		
A4.4	205+00.00 to 264+64.88					230	30		5.3	42.4		#	2.37	10.95			
777		-7/		· ·		6 70			SUB-TOTAL:	42.4			SUB-TOTAL	10.95	181		
									TOTAL	42.4			TOTAL	10.96	1910		-

NOTE: THE PHASE DOBATIONS SHOWN ARE NOT WASED ON PROJECT SCHEDULE AND SHALL NOT WE USED FOR SCHEDULING PURPOSES BY THE CONTRACTOR.

Do NOT modify the pay item description in the header rows.

	110-200	RECOVERNMENT.					LITTI	ER			MOW I	NG			
CONCE	FOC	AT I ON		DUDATION	ENFOUCHER		0107	-1			0107	-2	- 5	DECLEN	CONCTRUCTION
PHASE			SIDE	(DAYS)	FREQUENCY (DAYS)		14	AREA			2.5	AREA		DESIGN NOTES	CONSTRUCTION REMARKS
7.17F-04-1	CTA	TO STA.	200000000000000000000000000000000000000	(0/1/3)	(Dec.3)	CYCLES	AC/	TOTAL	(AC)	CYCLES	AC/	TOTAL	(AC)	MOLES	UMGGGGG S
	31.4	10 SIA.					CYCLE	P	F	7 1	CYCLE	P	F		-
	429+13.59	456+30.95	RT	60	30	2	3.001	6.003		2	2.405	4.810			
	429+13,59	466+11.77	MED	60	30	(2)	7,965	3,930			1.830	3.660			
	429+58,54	442+46.47	LT	60	30	- 20 3	1.131	2.262		2	0.925	1.851			
	442+46 47	456+06 27	LT	60	30	(2)	1.518	3 035		2	1.208	2.416			
	456+06 27	466+12.11	1,7	60	30	2	7 602	3.204		2	1.407	2.814			
	456+30.95	466+11.77	RT	60	30	2	0.971	1.942		2	0.275	1.550			
						9	SUB-TOTAL:	20.376				17.101			
							TOTAL:	20.38		1		17.10			

Individual locations are not shown. Areas are lumped together for left and right. Per specifications the limits are different for Litter Removal and Mowing areas.

							LITTER	REMOVAL			MOW I	NG			
	LOCATION	receise.	Service of	DURAT 10	FREQUEN		010	1			0107	2		protest	Secretaries and General States
CONST . PHASE		SIDE	(SY)	N	CY	SECURITION SHOW		AREA	****			AREA		DESIGN NOTES	CONSTRUCTION REMARKS
r ricese	STA. TO STA.		1.000.0	(DAYS)	(DAYS)	CYCLES	AC	TOTAL	(AC)	CYCLES	AC/CYCLE	TOTAL	(AC)	6576.000	TAL PARTIES
	3/7. 10/3/7.						/CYCLE	Р	F		ACTOTOLL	P	F		7
ALL PHASES	197+00.00 TO 458+59.29	LT/RT	327888.9	1200	30	40	52.950	2118.00							
ALL PHASES	197+00.00 TO 458+59.29	LT/RT	277888.9	1200	30					40	42.770	1710.80			
															+
- 1		VI. 15	31	1	7 II.		SUB-TOTAL:	2118.00			SUB-TOTAL:	1710.80			
	·						TOTAL:	2118.00 AC		- 6	TOTAL:	1710.80 AC			==

Do not list the Area ID as a range. Each areaID/location must be listed in the summary box.

					SUM	MARY C	F LITTE	R REMOV	/AL AN	ID MOW	I NG					
						L	ITTER REMO	OVAL				MOW I NG				
CONCE	LOCATION		SUB AT LON	FREQUENC			0107 1					0107 2			nec.cu	CONSTRUCTIO
CONST . PHASE		SIDE	DURATION (DAYS)	Y		ava. F	Ĭ "ii	AREA		4054			AREA		DESIGN NOTES	N
111115	STA. TO STA.		(DAIS)	(DAYS)	ID	CYCLE	AC/	TOTAL	(AC)	AREA ID	CYCLES	AC/	TOTAL	(AC)	110723	REMARKS
	31A. 10 31A.						CYCLE	P	F			CYCLE	Р	F	1	
ALL	248+48.96-328+95	LT/RT	160	30	41977	6	14.300	85.800		49146 to	6	5.100	30.600			
					43103					52760						
	331		SUB-TOTAL					85.800				SUB-TOTAL	30.600			
			TOTAL:					85.80				TOTAL	30.60			

## 12. Summary of Monitor Existing Structures

Instructions; Return to Summary Box List

#### Correct:

The example below is correct for projects where monitoring is required; only the locations to be monitored which are outside of the specification limits are shown. The note below the summary box should be in accordance with the applicable Plans Preparation Manual (PPM)/FDOT Design Manual 140. NOTE: The specification limits only apply to 108-1. When 108-2 and/or 108-3 are used, specific location(s) for each must be shown.

	on-		SUMMA	RY OF M	IONITOR	EXIST	ING STRUCTURES	
SITE	LOCATION	STRUCTURE	SETTI	TION 6 EMENT ORING	VIBR MONIT	AT ION ORING	DESIGN	CONSTRUCTION
SITE NO.		USAGE	010	8 1	010	8 2	DESIGN NOTES	REMARKS
	ADDRESS AND/OR STA.		- 1	S	- 1	S		
	ADDRESS AND/OR STA.		P	F	P	F	1	
- 1	8660 US MWY 17 S / 142+54,44 1T	CHURCH	Х.		X.		ROADWAY COMPACTION	
- 2	7891 US MNY 17 S / 212+40.20 RT.	RADIO STATION	X	3 9	, X		RDADWAY COMPACTION	
		37.2.3.4111-3.07.5					. Portino-seconilisocotti	
	ý.		-					
	111	TOTAL	. 1		- 1			·

THIS LIST INCLUDES EXISTING STRUCTURES (AS DETERMINED BY THE DEPARTMENT) LOCATED OUTSIDE THE LIMITS SPECIFIED IN ARTICLE 108-2 OF THE FDOT SPECIFICATIONS. THAT ARE REQUIRED TO BE MONITORED. THIS LIST SHOULD NOT BE CONSIDERED ALL INCLUSIVE AND DOES NOT CONTAIN EXISTING STRUCTURES TO BE MONITORED THAT ARE LOCATED WITHIN THE DISTANCES SPECIFIED IN ARTICLE 108-2.

The example below is correct for projects where monitoring is required, but all locations are within specification limits. The estimator/reviewer should verify types of monitoring required, per PPM/FDOT Design Manual guidance. For a lump sum project, place an "X" in the appropriate column(s) to indicate required monitoring. NOTE (still applies to LS projects): The specification limits only apply to 108-1. When 108-2 and/or 108-3 are used, specific location(s) for each must be shown.

	S	UMMARY OF MON	ITOR E	XISTING S	STRUCTURES	
SITE	LOCATION	STRUCTURE	SETTL	TION & EMENT ORING	DESIGN	CONSTRUCTION
NO.		USAGE	010	8 1	NOTES	REMARKS
	ADDRESS AND/OR STA.		L	5		
	ADDRESS AND/OR STA.		Р	F		
	))					
		TOTAL:	1	0 8		1

THIS LIST INCLUDES EXISTING STRUCTURES (AS DETERMINED BY THE DEPARTMENT) LOCATED OUTSIDE THE LIMITS SPECIFIED IN ARTICLE 108-2 OF THE FOOT SPECIFICATIONS THAT ARE REQUIRED TO BE MONITORED. THIS LIST SHOULD NOT BE CONSIDERED ALL INCLUSIVE AND DOES MOT CONTAIN EXISTING STRUCTURES TO BE MONITORED THAT ARE LOCATED WITHIN THE DISTANCES SPECIFIED IN ARTICLE 108-2.

#### Incorrect:

Do not add/change columns. Place an "X" in the appropriate column(s) for the type of monitoring to be completed. Address goes under the Location. Unused pay item column should be removed.

Do not remove Total rows at the bottom of the summary box. Total should reflect 1LS for each applicable pay item.

SITE	LOCAT	ION	STRUCTURE	SETTL	CTION & .EMENT ORING		AT ION ORING		DWATER ORING	DESIGN	ADDRESS	STRUCTUR												
NO.			USAGE	010	8 1	010	8 2	010	8 3	NOTES	ADDRESS	TYPE												
	STATION	SIDE		L	.5	L	.5	L	5															
	3/A/TON	SIDE	Į.	P	F	P	F	P	F															
	1313+50	LEFT	PHARMACY			1				MONITOR DURING ROADWAY COMPACTION	2256 W NINE MILE RD													
	1316+00	RIGHT	PHARMACY			21				MONITOR DURING ROADWAY COMPACTION	2237 W NINE MILE RD													
	1337+50	LEFT	MEDICAL	li i				MONITOR DURING ROADWAY COMPACTION	400 MILESTONE BLVD															
	1340+50	LEFT	DENTISTRY 1			MONITOR DURING ROADWAY COMPACTION	35 NEWPORT ST																	
	1347+50	LEFT	MEDICAL			1				MONITOR DURING ROADWAY COMPACTION	185 CROSSVILLE ST													
	1350+00	LEFT	ASSISTED LIVING		( N	1	1	(8)	8	MONITOR DURING ROADWAY COMPACTION	150 CROSSVILLE ST													
	1385+50	RIGHT	CHURCH			1				MONITOR DURING ROADWAY COMPACTION	1251 W NINE MILE RD													
	1388+50	LEFT	CHURCH			1				MONITOR DURING ROADWAY COMPACTION	1144 W NINE MILE RD													
	1394+00	LEFT	CHURCH			1				MONITOR DURING ROADWAY COMPACTION	1101 W NINE MILE RD													
	1416+50	LEFT	VETERINARY CLINIC			1				MONITOR DURING ROADWAY COMPACTION	550 W NINE MILE RD													
	1420+00	RIGHT	RESTAURANT			1	1 MONITOR DURING DEEP EXCAVATION		MONITOR DURING DEEP EXCAVATION	535 W NINE MILE RD														
	1422+50	RIGHT	REST AURANT			1				MONITOR DURING DEEP EXCAVATION	529 W NINE MILE RD													
	1422+50	LEFT	LEFT CHIROPRACTOR				The state of the s	The state of the s						- Control of the Control				- 1			5	MONITOR DURING ROADWAY COMPACTION	410 W NINE MILE RD	
	15+50	RIGHT	RESIDENTAL		6 9	1				MONITOR DURING SHEETPILE WALL INSTALL.	9106 UNTREINER AVE													
	15+50	LEFT	RESIDENTIAL			1		0		MONITOR DURING SHEETPILE WALL INSTALL.	9107 UNTREINER AVE													
	17+50	LEFT	RESIDENTIAL			1				MONITOR DURING SHEETPILE WALL INSTALL.	9111 UNTREINER AVE													
	18+50	RIGHT	RV PARK			1				MONITOR DURING SHEETPILE WALL INSTALL.	9110 UNTREINER AVE													
	20+00	RIGHT	RESIDENTIAL			1				MONITOR DURING SHEETPILE WALL INSTALL,	9112 UNTREINER AVE													
	21+50	RIGHT	RESIDENTIAL			1				MONITOR DURING SHEETPILE WALL INSTALL.	9250 UNTREINER AVE													
	22+00	LEFT	RETAIL			1				MONITOR DURING SHEETPILE WALL INSTALL.	541 W NINE MILE RD													
	23+00	RIGHT	RESIDENTIAL	N 9	8	1	13	13 -	į.	MONITOR DURING SHEETPILE WALL INSTALL.	9270 UNTREINER AVE													
	24+00	00 RIGHT RESIDENTIAL				1	5			MONITOR DURING SHEETPILE WALL INSTALL.	9295 UNTREINER AVE													
	26+00 RI	RIGHT	INDUSTRIAL			1				MONITOR DURING SHEETPILE WALL INSTALL.	9320 UNTREINER AVE													
	27+00	RIGHT	RETAIL SERVICE			10				MONITOR DURING SHEETPILE WALL INSTALL.	301 W NINE MILE RD #1													
	27+50	R/GHT	CHURCH			1				MONITOR DURING SHEETPILE WALL INSTALL.	301 W NINE MILE RD #3													
	28+50	RIGHT	COMMERCIAL			>1			1	MONITOR DURING SHEETPILE WALL INSTALL.	301 W NINE MILE RD # 2													

## 13. Summary of Clearing and Grubbing & Removal Items Instructions; Return to Summary Box List

Correct: Shown below, with 110-4- pay item and old title, prior to July 2017 implementation of new Section 110 specification.

			SUI	MARY	OF R	EMOVAL ITEMS						
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	UNITS	SECONDARY UNITS (IF LUMP SUM)	QUAN	TITY	TOT	AL	DESIGN	CONSTRUCTION
NO.		STA. TO STA.		10		AREA (AC)	P	F	P	F	NOTES	REMARKS
110 1 1	CLEARING AND GRUBBING	963+61.19 to 963+61.19	RT	21748	LS	0.810			1	-	1.76 TOTAL AC	
		963+80.76 to 963+80.76	1.7	21821		0.950			Į.			
110 4	REMOVAL OF EXISTING CONCRETE PAVEMENT	964+14.59 to 964+28.34	R7	20703	SY		7.2		269	i i		
		954+70.49 to 967+09.85	LT.	20696			195.9				4	
		965+23.57 to 965+93.41	RT	20707			56.8					
		966+73.63 to 966+84.28	RT	20713			8.7					
			1									

Shown below, with 110-4-10 pay item, after July 2017 implementation of new Section 110 specification, with type of concrete to be removed identified in the Design Notes Column. Similar types of concrete may be sorted together, i.e. all sidewalk, all Retaining Walls.

PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA ID	UNITS	QUANT	ITY	тот	AL	DESIGN NOTES	CONSTRUCTION REMARKS
orac.		STA. TO STA.		77.F2		Р	F	P	F	10.50 0.50	1 0.00000000000000000000000000000000000
110 4 10	REMOVAL OF EXISTING CONCRETE	700+71.00 TO 703+71.00	RT	19624	SY	134.0		1640		TRAFFIC SEPARATOR	
		701+34.00 TO 705+70.99	LT	19434		291.3				SIDEWALK	
		701+38.50 TO 702+16.58	LT	19634		43.4				GRAVITY WALL	
		703+52.34 TO 708+36.74	RT	19635		233.9				RETAINING WALL	
		705+70.99 TO 712+37.08	RT	18843		421.9				SIDEWALK	1.0
		705+70.99 TO 712+37.08	LT	18838		466.2				SIDEWALK	
		713+25.23 TO 714+35.97	LT	19629		49.2				TRAFFIC SEPARATOR	

## Incorrect:

Do not create "custom" summary boxes for Tree Protection or Clearing & Grubbing- Tree Removal.

LOCATIO	W .		QUAN	ITITY						
TATION	SIDE	CALIPER	p		DESIGN	CONSTRUCTION REMARKS				
II AI TON	Side	CHETPER	EA	EA	Notes	HEMMAS.				
18+49.48	1.7	n.					- 1		E	
19+51.95	AF	9.	=i							
21+18.05	i.f	725	(3)							
31+89.34	i.r	14*	. 1		Same and the					
22+62.43	6.7	24*	- 1	8	MULTE THONK					
34+42.82	1.7	26*	1							
36+17.95	LF	12*	1							
36+66.72	LT.	134	7							
37+28 29	cr-	115	1							
37+72.52	LF.	12*								
38+17:70	LT	12*		S.	T.					
38+62:29	LF.	12*	1.0							
39+13.54	i.T	24"	- 1		MULTI TRONK					
39+59:50	LT.	14"			ly Company Company					
41+11.71	1.7	13+	- 1							
41+58 12	LT-	10"	- 1	E	0	3				
53+71.75	1.7	70.0								
\$4144.06	1.7	195	- 1		0					
55+37.07	1.7	76*	- 1		1					

LOCAT I	ON		QUAN	IFITY.	400000000000000000000000000000000000000	
STATION	SIDE	CALIPER	P	F	DESIGN	CONSTRUCTION REMARKS
STALTON.	2106	LALLY EN	EA	EA	10723	SERVICE CF.
256+19.29	1.7	321	-1			
256+76.00	LT.	341	- 1		1	
257+27.66	LT	231	-1			
258+30.50	LT	255	1	8	1: 1	
758166.32	AT.	121	- 1	1	1 -	
258+84.24	AT	395	4			
259+02.26	AT	3.	1		1 -	
239+03.80	4.5	141			7 1	
259+20.42	AT.	325	1		1 1	
260+73.10	LT	261	- 1	8	1 1	
761+09.86	17	241	1	3		
261+47.11	LT	227	1			
261+83.70	LT	121	- 1		1	
262+22.98	1.7	12"	1			
262+65-55	LT	287	1			
263+04.24	170	14+	1	8		
263+43.72	LF.	73*	J.			
	_	SUE-YOYAL	17		San taraba menangan ang awa	
263+43.72	I.F	73*	1		COST OF TARE PROTECTION TO HE INCLUDED IMPER CLEARING AND GROSSING [110.1.1]	

Guardrail Removal belongs on the Summary of Guardrail.

	SUMMARY OF REMOVAL ITEMS											
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNITS	QUANT	ITY	тот	AL	CONSTRUCTION			
NO.		STA. TO STA.			P	F	P	F	REMARKS			
0536 73	GUARDRAIL REMOVAL	1425+32.01 R2 to 1426+67.99 R2	RT	LF	148.0		392					
		1425+67.65 R2 to 1427+30.09 R2	LT		164.0		1					
		1446+30.99 R3 to 1446+69.54 R3	RT		80.0		1					

14. Summary of Mailboxes <u>Instructions; Return to Summary Box List</u>

## **Correct:**

CANADAN AND AND AND AND AND AND AND AND A			NTITY	DESIGN	CONSTRUCTION
STATION	SIDE	0110 P	7 I	NOTES	REMARKS
108+11.51	LT.	1	1		
109+78.56	LT.	1			
154+13.18	RT.	1			
155+42.04	RT.	1		0	
155+46 .49	RT.	1			
184+45.26	LT.	1	1		
256+66.95	RT.	1		7	
256+67.26	RT.	1		9	
256+67.99	RT.	1			
256+68.14	RT.	1			
256+68.64	RT.	1		U.	
256+69:20	RT.	1			
256+70.17	RT.	1			
294+31,30	RT .	1			
5	UB-TOTAL:	14	1		
-	TOTAL	14			

## Incorrect:

8-58 **Summary Boxes** 

## 15. Summary of Earthwork

Instructions, Return to Summary Box List

**Correct:** Use description field to separate locations. Street names, ramp identification, and or station limits may be used as shown, or within the Design Notes column. Remember to include note below summary box, per PPM/FDM instructions. While this example is correct, the Design Notes column could have been used to identify the street/ramp name.

PAY ITEM	PAY ITEM DESCRIPTION	C	•	CONSTRUCTION
NO.	PAT TIEM DESCRIPTION	P	F	REMARKS
0120- 1-	REGULAR EXCAVATION			
	MAINLINE (SR 45A) STA. 1401+79.59 TO 1461+87.37	25545.00		
	MAINLINE (SR 45A) STA. 1462+50.00 TO 1468+60.00 (FOR MEDIAN N OF BIRD BAY)	343.00		
	GROVELAND AVE.	175.00		
	LAUREL AVE.	27.00		
	CYPRESS AVE.	299.00		
	VEHICE AVE.	42.00		
	RIDGEWOOD AVE	37.00		
	SNF C	6780.00		
	SNF D	10031.00		
	TOTAL REGULAR EXCAVATION	43279.00		
0120- 6-	EMBANKMENT			
	MAINLINE (SR 45A) STA. 1401+79.59 TO 1461+87.37	12014.00		
	GROVELAND AVE.	28.00		
	LAUREL AVE.	1.00		
	CYPRESS AVE.	0.00		
	VENICE AVE.	34.00		
	RIDGEWOOD AVE	4.00		
	SNF C	3652.00		
	SNF D	5181.00		
	TOTAL ENBANKHENT	20914.00		

Incorrect: Quantities were not separated by location. An additional "Total" column was added.

		SUMMARY	OF EA	ARTHWOR	RK		
PAY ITEM	PAY ITEM DESCRIPTION	QUANT 11	Y (CY)	TOTAL	(CY)	DESIGN NOTES	CONSTRUCTION
NO.	PAN TIEM DESCRIPTION	Ъ	F	p	F	NOTES	REMARKS
120 1	REGULAR EXCAVATION			572.00		i i	
		572.00				12TH AVENUE	
120 8	EMBJAKHENT			4463.00		-	
		4463.00				12TH AVENUE	
		4492.44				CENT SECTION	

Earthwark has been calculated using the Limerock base option.
If another option is constructed, there shall be no revision to the
earthwark quantities for maich payment is made by Plan Quantity.

Do NOT create supplemental summary boxes to define the work.

Distribution of the	1	etaa.a.commeno	1 0	Y
STREET NAME		DESCRIPTION	P	F
MAINLINE NW 7TH Avenue	EXCAVATION	68+60.00 TO 170+70.00 ISEE CROSS SECTIONS!	26439	
	EMBANKMENT	68+60.00 TO 170+70.00 (SEE CROSS SECTIONS)	239	
SUBTOTAL (NW 9th Street)	EXCAVATION	8+86.00 TO 9+75.00 (SEE CROSS SECTIONS)	152	
	EMBANKMENT	8+86.00 TO 9+75.00 (SEE CROSS SECTIONS)	0	
SUBTOTAL (MW 10th Street)	EXCAVATION	9+10.00 TO 10+85.00 (SEE CROSS SECTIONS)	228	
	EMBANKMENT	9+10:00 TO 10+85:00 (SEE CROSS SECTIONS)	5	
SUBTOTAL (NW //th Street)	EXCAVATION	8+65.00 TO 9+75.00 (SEE CHOSS SECTIONS)	/26	
	EMBANKMENT	8+65:00 TO 9+75:00 ISEE CROSS SECTIONS)	0	
SUBTOTAL (NW 11th Street) E	EXCAVATION	10+25.00 TO II+45.78 (SEE CROSS SECTIONS)	294	
	EMBANKMENT	10+25.00 TO 11+45.78 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 12th Street)W	EXCAVATION	8+95:00 TO 9+74:97 (SEE CROSS SECTIONS)	120	
	EMBANKMENT	8+95.00 TO 9+74.97 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 13th Street)W	EXCAVATION	9+24.00 TO 9+75.00 (SEE CROSS SECTIONS)	95	
	EMBANKMENT	9+24:00 TO 9+75:00 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 13th Street) E	EXCAVATION	IO+25.00 TO II+00.00 (SEE CROSS SECTIONS)	136	
	EMBANKMENT	10+25.00 TO 11+00.00 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 14th Street) W	EXCAVATION	9+0/00 TO 9+75-39 ISEE CHOSS SECTIONS!	9/	
	EMBANKMENT	9+01:00 TO 9+75:39 (SEE CROSS SECTIONS)	7	
SUBTOTAL (NW 14th Street) E	EXCAVATION	10+25.45 TO 10+93.00 (SEE CROSS SECTIONS)	232	
	EMBANKMENT	10+25.45 TO 10+93.00 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 15th Street)W	EXCAVATION	8+00.00 TO 9+75.15 (SEE CROSS SECTIONS)	756	
	EMBANKMENT	8+00.00 TO 9+75.15 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 15th Street) E	EXCAVATION	ID+24-98 TO ID+85-00 (SEE CROSS SECTIONS)	144	
	EMBANKMENT	ID+24.98 TO ID+85.00 (SEE CROSS SECTIONS)	0	
		SUBTOTAL EXCAVATION	282/3	
		SUBTOTAL EMBANKMENT	25/	

Topic No. 600-000-002

2021 Edition
Basis of Estimates

as of February 4, 2021

## 16. Summary of Geotechnical Items

**Instructions**, Return to Summary Box List

## **Correct:**

**Incorrect:** Missing AREA ID column. No width information provided to verify area quantity.

		apri	SUMMARY O	F GEOT	TECHN I	CAL IT	EMS		17.		~
PAY ITEM	DAY ITCH DECERIPTION	LC	CATION	CIDE	THEFT	QUAN	TITY	TO	AL	DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STA	TO STA.	SIDE	UNII	P	F	Р	F	NOTES	REMARKS
0145 2	GEOSYNTHETIC REINFORCED FOUNDATION OVER SOFT SOIL	83+36.00	to 91+20.00	LT	SY	2367		2367			

Topic No. 600-000-002 Basis of Estimates 2021 Edition as of February 4, 2021

17. Summary of Turnouts

Instructions; Return to Summary Box List

**Correct:** 

Incorrect:

8-62 Summary Boxes

Topic No. 600-000-002

Basis of Estimates

2021 Edition
as of February 4, 2021

## 18. Summary of Pavement

Instructions, Return to Summary Box List

#### **Correct:**

The street name, ramp designation, "northbound mainline", or "median", etc. may be added to the location description column, to provide additional clarity.

Requested: Need a correct example that includes overbuild, with detailed quantity calculations. Need an example that includes driveway(s).

NAME OF TAXABLE		166000	20						T	11		
PAY ITEM	PAY ITEM DESCRIPTION	LOCATIO	W.	SIDE	AREA	UNIT	QUAN	TITY	TO	AL	DESIGN	CONSTRUCTION
NO.	TENETIN CONTROL OF THE CONTROL OF TH	STA. TO STA.	DESCRIPTION	3100	10	0143.7	0		P		NOTES	REMARKS
250 4	TYPE B STABILIZATION	60+41.48 to 66+99.00	I AIGING MARKET	LT/RT	35797	5Y	5480.10		8988.0			1
	VIDSC = PARTICULAR VIA MOR.	66+95 OD 10 67+13.25		LT/RT	35843		113.50		0.0000000	1 1		T .
		68+30.75 to 68+45.00	8	LY/RT	35838		113.30		1	I 8E		
		68+44.96 fm 72+61.48		LYZRT	33821		3281 20		1			1
1857/06	DPT/ONAL WASE, WASE GROUP OR	60+41.48 tw 66+99.00		47/87	35918	SY:	5317.80		2414.0			
- 5		66+99.06 to 67+13.25		CT/RT	35917		113.50	3	1	8 ⊏		1
		68+30.75 to 68+45.00		LT/RT	35906		113.30		1	1 1		ľ
		68+45.00 tu 72+61.48	0	LT/RT	35937		3269.20			. XI		
2327 70 1	MILLING EXIST ASPH PART, I' AND DEPTH	56+17.45 to 60+41.48		LT/RT	7169	SY	2992.60		6400.0	9		1
		72461.48 to 77449.38		LT/MT	30464		3407.00			1		
134 1 22	SUPERPAVE ASPHALTIC CONCRETE	60+41.48 (# 66+99.60		LTIAT	36079	TN	844 44		1379.1			1
	(TRAFFIC B. PG 26-22, PMA)	66499:00 to 67+12.04		LT/AT	40925		7.97		20000000	1		ľ
		66+99.00 to 67+12.04		LT	40817		7.07		1	)   N		
		E#+31.96 to 68+43.00		RT	41522		7.03		1			1
		66+31.96 to 68+45.00		LT	47529		7.95		1			
		68+45.00 to 72+61.48		LT/AT	36036		506.42		1 .	լ ∦=		1
2337 7 40	ASPHALTIC CONCRETE FRICTION COURSE	56+17 45 Ta 60+41 48		LTJAT	36118	TN	164,61		8317	8 8		
	(TRAFFIC B. FC-5.5. PC 76-22, PMA)	60+42,48 to 66+99.00		LT/RT	36563		201.40			9		
		66+99:00 to 67+12.04	()	LT	40886		2.36		1			
		66+99.00 to 67+12.04		RT.	40873		2.36		1	1 1		
		68+31.96 to 68+45.60		RT	41561		2.33			1 1		
- 8		68+31,34 to 68+45.60	2	CF.	41552		2.25			1 8		
		68+45.00 to 72+61.48		LT/MT	36080		268.81					
		72+61.48 to 77+49.38		LTYMT	36089		107.39					

	<u> </u>	30MMAF	RY OF PAVEMENT								
PAY ITEM NO.	PAY ITEM DESCRIPTION  MILLING EXIST ASPH PANT, 1/2" AND DEPTH	LOCATION	SIDE	AREA ID	UNIT	QUANTITY		TOTAL		CONSTRUCTION REMARKS	
		STA. TO STA.	DESCRIPTION	35050350	10	OMANOPOL	P	F	P	F	REMARKS
327 70 16		138+22.48 R 2 TO 150+90.15 R 2	RAMP B OUTER SHOULDER	LT	40903	SY	1625.8		8329		
		138+24.79 R 2 TO 151+10.81 R 2	RAMP B INNER SHOULDER	LT	40904		397.0				
		138+55.26 R 2 TO 151+18.03 R 2	RAMP A OUTER SHOULDER	RT	40908		1573.0				
		138+58.34 R 2 TO 151+27.21 R 2	RAMP A INNER SHOULDER	RT	40907		352.2	Ü			
		151+88 35 R 2 TO 164+36.60 R 2	RAMP C INNER SHOULDER	LT	40905		490.0				
		152+04.09 R 2 TO 165+54.22 R 2	RAMP D INNER SHOULDER	RT	40910		520.8				
		152+24.95 R 2 TO 164+39.53 R 2	RAMP C OUTER SHOULDER	LT	40906		1662.3		1		
		152+51.23 R 2 TO 165+55.60 R 2	RAMP D OUTER SHOULDER	RY	40909		1707.7				
34 1 12	SUPERPAVE ASPH CONC. TRAFFIC B	99+99.41 R 2 TO 132+56.66 R 2		RT	41133	TN	276.44		4514.0		
		99+99.41 R 2 TO 128+16.69 R 2	1	LT	41169		226.24				
		128+16.67 R 2 TO 138+23.25 R 2	1	LT	41137		74.35				
		132+55.69 R 2 TO 138+56.49 R 2	1	RT	41142		52.64				
		138+24.79 R 2 TO 150+25.61 R 2	1	1.7	41341		92.13				
		138+58.32 R 2 TO 150+28.02 R 2	OUTSIDE SHOULDERS OF	RT	41347		106.07				
		152+68.22 R 2 TO 164+40.58 R 2	MAIN TRAVEL LANES	LT	41404		86.12	7	1		
		152+70.73 R 2 TO 165+54.44 R 2	Which is with the contract of	RT	41376		88.64		1		
		164+38.58 R 2 TO 214+01.25 R 2	1	LT	41319		404.33				
		165+55.12 R 2 TO 214+21.15 R 2	1	RT	41146		413.65	-	_		
		218+56.05 R 2 TO 364+18.77 R 3	1	LT	41153		1266.00				
		219+30.79 R 2 TO 364+18.80 R 3	1	RT	41162		1227.3		_		
		99+99.41 R 2 TO 364+18.80 R 3	EB OVERBUILD	RT			60.5	7.	_		
	-	99+99.41 R 2 TO 364+18.80 R 3	WB OVERBUILD	LT			139.6	-	_		
		Server in the later than the	110 07 01100 1 00						_	= ==	
0334 1 22	SUPERPAVE ASPH CONC. TRAFFIC B. PG76-22. PMA	322+44.93 R 3 TO 325+59.59 R 3	PERMANENT CROSSOVER	LT /RT	52755	TN	53.00	-	53.0	-	
Corr. Conce	AND THE EMPTH SHIPS THAT IS BY THE EXPLORED		THE ARCHITICATE AND THE STREET PROPERTY AND A STREET PROPERTY OF THE				10000000				
334 1 23	SUPERPAVE ASPH CONC. TRAFFIC C. PG76-22. PMA	138+23.48 R 2 TO 151+08.86 R 2	RAMP B TRAVEL LANE	LT	42698	TN	253.53		1070.4	_	
	and the state of t	138+56.49 R 2 TO 151+36.99 R 2	RAMP A TRAVEL LANE	RT	42712		273.41	-			
		151+87.95 R 2 TO 164+38.39 R 2	RAMP C TRAVEL LANE	LT	42723		273.18		_	_	
		152+05.81 R 2 TO 165+55.00 R 2	RAMP D TRAVEL LANE	RT	42688		270.27		1		
					1000			_	_	_	
0334 1 34	SUPERPAVE ASPH CONC. TRAFFIC D. PG82-22. PMA	99+99.41 R 2 TO 150+28.92 R 2		RT	46488	TN	204.70		1803.8		
		99+99.41 R 2 TO 150+25.63 R 2	†	LT	46521		166.80		1000		
		152+68.43 R 2 TO 214+21.21 R 2	INSIDE SHOULDERS OF	LT	46496		238.90		1	-	
		152+70.27 R 2 TO 214+21.11 R 2	MAIN TRAVEL LANES	RT	46502		223.70	*	_	-	
		218+55.80 R 2 TO 364+18.78 R 2	1	LT	46509		491.70	_	-		
		219+30.92 R 2 TO 364+18.80 R 2	†	RT	46516		478.00		_		
		272702702772 70 207710700 11/2			40570		47.0100		1		
0334 1 34	SUPERPAVE ASPH CONC. TRAFFIC D. PG82-22. PMA	99+99.41 R 2 TO 150+28.74 R 2		RT	43530	TN	1754.40		17323.4		
		99+99.41 R 2 TO 150+25.62 R 2		LT	43543		1811.50				
		152+68.39 R 2 TO 214+01.26 R 2		LT	43557		2069.70				
		152+70.37 R 2 TO 214+21.07 R 2	MAIN TRAVEL LANES	RT	43522		2196.20				
		218+55.82 R 2 TO 364+18.78 R 2	1	LT	43483		4607.40				
		219+30.82 R 2 TO 364+18.80 R 2	†	RT	43488		4625.00				
		99+99.41 R 2 TO 364+18.80 R 3	EB OVERBUILD	RT	15100		119.6		$\overline{}$		
		99+99.41 R 2 TO 364+18.80 R 3	WB OVERBUILD	LT			139.6		_		
		70. 2011.0.00 N J	ing bremoting	-			100.0				
		-							_		

## Incorrect:

Do not add columns (Volume in this example). Do not create a separate summary box. Keep the 334 quantities together and notate the quantity as Overbuild in the Design Notes column.

SUMMARY OF PAVEMENT (OVERBUILD)													
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION		AREA	VOLUM	IINIT	QUANT ITY		γ	TOTAL		DESIGN	CONSTRUCTION
NO.	770 7720 0230007700	STA. TO STA.	DESCRIPTION	FUILER	E		P	$\overline{}$	F	P F		NOTES	REMARKS
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (OVERBUILD)	85+00.00		0.46		TN		$\neg$				*326.2 TN INCLUDED IN	
		85+50.00		1.46	47.9			4				SUMMARY OF PAVEMENT	
		86+00.00		2.18	90.9			7	$\neg$			0334 1 13	
		86+50.00		2.48	116.4			9					
		87+00.00		2.80	132.0			10	$\neg$				
		87+50.00		3.55	158.8			12					
		88+00.00			88.7			7					
								$\neg$					
		92+40.00		7.14				$\neg$					
		92+50.00		7.14	71.4			5					
		93+00.00		7.14	178.4			13					
		93+00.00		33.37				$\neg$	$\neg$				
		93+33.00		33.37	1101.2			81	$\neg$				
		93+33.00		17.24									
		93+50.00		17.24	293.0			21					
		94+00.00		4.46	542.5			40					
		101+00.00		12.61									
		101+50.00		7.48	502.3			37					
		102+00.00		9.16	416.0			31					
		102+50.00		4.66	345.5			25					
		103+00.00		3.91	214.1			16					
		103+50.00		1.38	132.2			10					
		103+74.48			16.9			1					
								$\neg$					

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## 19. Summary of Miscellaneous Asphalt Pavement

Instructions, Return to Summary Box List

### **Correct:**

CONSTRUCTION REMARKS
100000000000000000000000000000000000000

#### Incorrect:

Location information (including the Area ID or length/width of quantified area) shall be included in the summary box. There should not be a reference to the plans for the information.

SUMMARY OF MISCELLANEOUS ASPHALT PAVEMENT							
LOCATION	SIDE	THICK	UNI GUARI	DER DRAIL	DESIGN	CONSTRUCTION	
STA. TO STA.	SIDE	(IN)	0339 P	1 (TN) F	NOTES	REMARKS	
92+20.66 TO 96+78.16	LT	2	7.62		**		
92+85.29 TO 94+24.51	RT	2	3.69		**		
94+70.70 TO 96+90.70	RT	2	3.66		**		
	St	JB-TOTAL:	14.97				
		TOTAL:	14.97				

\*\* NOTE: REFER TO PLANS FOR MISCELLANEOUS ASPHALT PAVEMENT WIDTH.

20. Summary of Structure Quantities, Bridge XXXXXX Instructions; Return to Summary Box List

**Correct:** 

Incorrect:

## 21. Summary of Box Culverts

Instructions, Return to Summary Box List

**Correct:** This summary box is normally used for box culverts less than 20'. Box Culverts over 20' are defined as bridge culverts, and should use the Summary of Structure Quantities, along with the Bridge number.

		- 9	SUMMARY	OF BOX	CULVE	RTS			
PAY ITEM	DAY ITEM DESCRIPTION	LOCATION	· ·	QUANT 17	Υ	TOT	AL	DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STATION	UNIT	P	F	P	F	NOTES	REMARKS
0400 4 1	CONCRETE CLASS IV. CULVERTS	1426+00.00 R2	CY	459.00		491.2		SEE BOX CULVERT DATA SHEETS	
	HANNAUM PERMENCE OF A BUILDING NOVE	1448+00,00 R3		32.20				SEE BOX CULVERT DATA SHEETS	
0415 1 1	REINF STEEL-ROADWAY	1426+00.00 R2	LB	127250.89		135637.1		SEE BOX CULVERT DATA SHEETS	
	novina semona novierosa.	1448+00.00 R3		8386.22		1		SEE BOX CULVERT DATA SHEETS	

Incorrect:

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22. Summary of Walls
<a href="mailto:lnstructions">lnstructions</a>; Return to Summary Box List

#### **Correct:**

Requested: Need a correct example with Wall No. column.

		50	MMARY	OF WAL	LS					
PAY ITEM	DAY ITEM BECCRIOTION	LOCATION	crer	COLLET	QUAN	TITY	707	AL	DESIGN NOTES	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STA, TO STA.	STOR	UNIT	P	#	p	F	NOTES	REMARKS
400 0 11	CONCRETE CLASS NS. GRAVITY WALL	63+75.00 - 65+38.99	AT:	CY	#0.5		175.5		5.5° AVG. HETGHT	
		65+44.65 - 65+88.50	RT.		16.2				S.S. AVG. HEIGHT	
		£5+93_83 + £6+78:00	AT:		31.1				5.5° AVG. HEIGHT	
		69+02.00 - 70+00.00	47	4	21.8		6 1		4.0" AVG. HEIGHT	
		#E+45.00 + 59+90.00	AT		45.9				S.O. AVG. HEIGHT	
					- 10					

#### Incorrect:

Do NOT rename the summary box.

AY ITEM	DAY ITEM DESCRIPTION	LOCATION	cine		QUAN	TITY	TOTA	AL	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STA. TO STA.	SIDE	UNII	P	F	P	F	REMARKS
00 4 11	CONCRETE CLASS IV, RETAINING WALLS	1412+98.62 1418+10.78	LT	CY	201.5		282		
15 1 3	REINFORCING STEEL - RETAINING WALL	1412+98.62 1418+10.78	LT	LB	25722.0		25722	- 1	
00	NO.	NO. PAT THEM DESCRIPTION  1 4 11 CONCRETE CLASS IV, RETAINING WALLS	NO. PAY ITEM DESCRIPTION STA. TO STA.  O 4 11 CONCRETE CLASS IV, RETAINING WALLS 1412+98.62 1418+10.78	NO. PAY ITEM DESCRIPTION STA. TO STA.  O 4 11 CONCRETE CLASS IV, RETAINING WALLS 1412+98.62 1418+10.78 LT	NO. PAY ITEM DESCRIPTION STA. TO STA.  O 4 11 CONCRETE CLASS IV, RETAINING WALLS 1412+98.62 1418+10.78 LT CY	NO. PAY ITEM DESCRIPTION STA. TO STA.  O 4 11 CONCRETE CLASS IV, RETAINING WALLS 1412+98.62 1418+10.78 LT CY 281.5	NO. PAY ITEM DESCRIPTION STA. TO STA.  O 4 11 CONCRETE CLASS IV, RETAINING WALLS 1412+98.62 1418+10.78 LT CY 281.5	NO. PAY ITEM DESCRIPTION STA. TO STA.  SIDE UNIT P F P  14 11 CONCRETE CLASS IV, RETAINING WALLS 1412+98.62 1418+10.78 LT CY 281.5 282	NO. PAY ITEM DESCRIPTION STA. TO STA. SIDE UNIT P F P F 0 4 11 CONCRETE CLASS IV, RETAINING WALLS 1412+98.62 1418+10.78 LT CY 281.5 282

## 23. Summary of Utility Adjustments

Instructions, Return to Summary Box List

#### **Correct:**

Quantities separated for each included project.

Note: Total column formatting could remain without merged cells, with the total shown at the top. When cells are merged, use top justification, so the total remains at the top of the cell.

PAY ITEM	Carrier Carrier Committee Committee Committee	LOCATION		UNIT	OUAN	TITY	TOTAL	(EA)	DESTON	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STAFFON	SIDE	CWITT	P	+	P	#	NOTES	REMARKS
425 5	ADJUST FOOT RIMINOLES	74+30-34	47	64	1.0		10		Resetine Survey SR \$5.5	
		75+73.37	47	EA	3.4		1 [		Resetting Survey SR 953	
-		77+49 37	AT	6.4	1.0		1 1		Reservine Survey SR 93.3	
		92427.35	17	EA	1.0		] [		Baseline Survey 58 #53	
		93+61 93	1.7	6.4	2.0		1 1		Basicine Survey 58 953:	
		95+5.7.08	4.5	64	1.0		1 1		Baseline Survey SA 953	
		96+54 37	1.7	F.A.	1.0		1 1		Reservine Survey 54 #53	
		99163.99	4.9	EA	3.4		1 1		Reseline Survey SR #53	
		26+20.60	15	5.4	1.0		1 1		Baseline Survey Albanbra Crista	
		(6+6) 20	1.5	£4	1.0		1 1		Baseline Survey Alhanbra Circle	

			UMMAA	tr of	UTILIT	Y ADI	USTMENT	5		433492-1-36-1
PAY ITEM NO.	PAY ITEM DESCRIPTION	STATION	SIDE	UNIT	DUA:	TITY	TOTAL	(EA)	DESIGN NOTES	CONSTRUCTION REMARKS
1422.6	WIAMI DADE WATER VALVE ADJUSTMENTS*	94427.72	1.5	6.4	1.0		111		Reservice Survey SR 953	
		94+73-24	1.F	F.A.	1.0		1		Reserve Survey 58, 99.5	
		94+31.72	LF	£.4-	1.0		]		Reseline Survey SA 953	
		94477.59	1,6	64.	1.0		3 1		Assertine Survey 58, 953	
		94473.96	4.5	E.A	1.0		3 1		Sateline Survey SR 953	
		24+57.20	4.7	E4.	1.0		1 1		Baseline Survey Athanbra Circle	
		24072.47	1.5	64	1.0		3 1		Baseline Sulvey Albandra Cricle	
		24+76-26	4.5	6.4	1.0		3 1		Reserver Survey Alhanbra Circle	
		23+92-29	17	8.6	1.0		1 1		Reseline Survey Albanbra Crista	Ti.
		26+3.5-49	LF.	E.A.	11.0		3 1		Baseline Survey Athenbra Circle	
		26455 94	1.7	£.4.	1.0		1 1		Baseline Survey Alhanbra Cricle	

#### Incorrect:

Do not include offset information with location/station.

PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	cine	UNIT	QUAN	TITY	T01	AL	DESIGN	CONSTRUCTION
NO.	PAT TIEN DESCRIPTION	STATION	SIDE	UNLES	P	F	P	F	DESIGN NOTES	REMARKS
425.5-	MANHOLES. ADJUST	9+41.59 (10.17'RT)	RT	EA	1.0		1.0		NW 14TH ST	
		66+69.60 (22.69°LT)	RT	EA	1.0		1.0		NW 7TH AVE	
	j.	66+70.81 (9.47'RT)	RT	EA	1.0		1.0		NW 7TH AVE	
		67+29.17 (22.83'RT)	97	EA	1.0		1.0		NW 7TH AVE	
		67+62 10 (6.82'LT)	RT.	EA	1.0		7.0		NW TH AVE	
	3	8	ž.		5.0		5.0		1	

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# 24. Summary of Side dDrain and Mitered End Sections Instructions; Return to Summary Box List

#### **Correct:**

LOCATION		PIPE	THE RESIDENCE AND ADDRESS OF	- LF		MES - I		DESIGN	CONSTRUCTION
	SIDE		ROUND		_	ROUND		NOTES	REMARKS
STA. TO STA.		18"	24"	30"	18*	24"	30*		
169+30.00 to 169+30.00	RT	171.0			1			INDRIO	315
301+70.00 to 301+70.00	LT		68.0					INDRIO	
304+49.97 to 304+49.97	1.7	43.0			8 <b>1</b> 0			INDRIO	
304+92.32 to 304+92.32	LT				- 1			INDRIO	70
316+30.00 to 316+30.00	RT		-	139.0			- 1	JOHNSTON	
51	IB-TOTAL:	214.0	68.0	139.0	3	1	- 1		
	TOTAL:	214	68	139	3	1	1	1	

#### Incorrect:

Sod column should not be added to this summary box. Use Summary of Performance Turf

	LOCA	TION		13	0	PIPE LENG	TH - LF	MES	- EA	PERF. TURF	0.00	The second secon
CTA TO CTA	SIDE	BAC	CK	AHE	AD:	ROUI	VD.	RO	UND	(SOD)	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	SIDE	OFFSET	E	OFFSET	E	18"	24*	18*	24*	SY	MOTES	nements.
28+91 16 to 129+31.67	RT	60.45	202.00	59.75	201.50	22.0		2		18		
31+29.95 to 132+09.37	RT	59.49	199.60	59.42	199.40		57.0		2	20		
35+85 16 to 136+69.46	RT	59.50	198.40	59.11	197.90		62.0		2	20		
39+22.73 to 140+24.88	RT	61.26	197.60	60.34	197.40		80.0	- 3	2	20		
35+67.20 to 236+24.37	RT	71.40	146.90	68.68	145.80		35.0		2	20		
64+87.75 to 266+67.27	RT	.73.23	138,60	72.54	139.60	162.0	-	2		18		
	3			SU	B-TOTAL:	184.0	234.0	4	8	116		
					TOTAL	184	234	4	8	116		

8-71 Summary Boxes

Structure number should be notated in the Design Notes column. Location column should include the station.

LOCATION		PIPE LENGTH - LF	MES - EA	72-22-2-2-2	V 20 20 V 20 20 20 V 20 20 20 20 20 20 20 20 20 20 20 20 20
LOCATION	SIDE	18" ROUND	18" ROUND	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	1 20000	0430-174-118	0430-984-125	NOTES	KEMMAK 3
140+28.46 TO 440+98.92	LT	52.0	ľ		
5-1	LT		2.		
449+25.43 TO 449+33.43	LT	8.0			3
449+73.45 TO 449+81.45	LT	8.0			
5-2	LT	-5.00	1		
					1
	SUB-TOTAL:	68.0	2.0		

# 25. Summary of Miscellaneous Drainage Items

**Instructions**; Return to Summary Box List

#### Correct:

#### Incorrect:

Do NOT repeat the pay item number, description, unit, or total. These should only be on the FIRST row where the pay item is list in the summary box. The total should include the accumulated total for all of the values in the Quantity column and shown only on the FIRST row where the pay item is list in the summary box.

PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNIT	QUANTITY	TOT	AL	CONSTRUCTION REMARKS	
NO.		STA. TO STA.	35555	2,500,625	P	P	F	nemana3	
425-10	YARD DRAINS	1409+75.00 R2	RT	EA	1.0	1			
625-10	YARD DRAINS	1411+65.00 R2	RT	EA	1.0				
425-10	YARD DRAINS	1414+54.00 R2	RT	EA	1.0	1			
425-10	YARD DRAINS	1416+80.00 R2	RT	EA	1.0	1			
430-175-115	PIPE CULVERT OPT MAT, ROUND, 15°, S/CD	1409+77.00 R2 to 1411+01.25 R2	RT	LF	150.0	150			
30-175-115	PIPE CULVERT OFT MAT, ROUND, 15°, S/CD	1411+35.06 R2 to 1411+64.00 R2	RT	LF	50.0	50			
130-175-115	PIPE CULVERT OPT MAT, ROUND, 15°, 5/CD	1414+55.00 R2 to 1414+72.36 R2	RT	LF	37.0	37			
430-175-115	PIPE CULVERT OPT MAT, ROUND, 15°, S/CD	1415+05.98 R2 to 1416+78.00 R2	RT	LF	192.0	192			

Do NOT change the name or create a new summary box. Desilting quantity should be included on the Summary of Miscellaneous Drainage Items, Summary of Box Culverts, or on the Summary of Drainage Structures Sheets.

			SUMM	ARY O	F DESI	LTING			
PAY ITEM	DAY ITEM DESCRIPTION	CIDE		QUAN	TITY	TOT	AL	DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	SIDE	UNIT -	P	F	P	F	NOTES	REMARKS
430 950	DESILTING CONCRETE BOX CULVERT	LT/RT	CY	145.8		198	1777	TRIPLE CULVERT . STA. 1426+10	94000000000
		LT/RT		52.6				DOUBLE CULVERT # STA. 1447+95	
		0				1 1			

Do not include the Summary of Drainage Structures on the Summary of Quantity sheets. They belong on their own sheets. If there is only minor work, use the Summary of Miscellaneous Drainage Items.

						SUMMA	RY OF DRAINAG	E STRUCTURES			
177	0.025		illa i		CURB INLET	GUTTER INLET	MANHOLE	PIPE CULVERT	FRENCH DRAIN	DESIGN	or and the con-
T/V	STR.	STATION	SiD	DESCRIPTION	Type 9 < 10'	Type 5 < 10'	Type P-7 < 10'	18"	24° FD	NOTES	CONSTRUCTION REMARKS
DUANT	0.505 4-2		, v.		425 12 01(EA)	425 17 01 (EA)	425 2 41 (EA)	430 174 118 /LF)	443 70 4 (LF)		111000000000000000000000000000000000000
- 7	5-1	12+45.55	RT.	INLET . FD	1				50	Provide Type 11 Skinner	
70										-34-44-411354135413	
- /-	5-2	14+54.53	LT	INLET . PIPE		9		16	3	See Brainage Details	
f.			100						3		
7	5-3	14+54.53	1.7	MANHOLE FD	3.		1		70	Provide Type II Skimmer	
- /											
7.	5-4	14+90.58	LT.	INCET. PIPE	¥6.			33			
F											
			-			-		49	120		
TOTAL	F								142		

This quantity should be included on the Summary of Miscellaneous Drainage Items, Summary of Side Drain and Mitered End Sections, or on the Summary of Drainage Structures Sheets.

SUMMA	RY OF	PIPE FI	LLING	& PLUGGING
LOCATION	SIDE	PIPE FIL & PLUGO PLACE OF SERV	OUT	DESIGN NOTES
	7.000	0430 8	330	MULES
STA.		CY		
SIA.	1	P	F	1
1422+80 +/-	RT	4.71		SEE PLAN SHEET FOR MORE INFORMATION
1426+30 +/-	RT	1.86		SEE PLAN SHEET FOR MORE INFORMATION
sui	-TOTAL:	6.57		
PLA	TOTAL:	6.57		(

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26. Summary of Trench Drain Instructions; Return to Summary Box List

### **Correct:**

Note: This box is correct; however, there is a newer version of the Summary Box template available.

SUMMARY	OF TRE	NCH D	RAIN	
LOCATION	SIDE	TREI DRA (STAN	IN	CONSTRUCTION
STA. TO STA.	7	0436	1 1	REMARKS
SIA. TO SIA.	-	L	F	
1424+03.12 R2 to 1425+61.43 R2	RT		159.0	
1431+19.43 R3 to 1431+29.43 R3	LT		10.0	
1432+22.42 R3 to 1432+32.42 R3	LT		10.0	
1443+78.16 R3 to 1443+88.16 R3	LT		10.0	
5	UB-TOTAL:		189.0	
PL	AN TOTAL		189	
FIN				

#### Incorrect:

8-75 Summary Boxes

27. Summary of Underdrain Instructions; Return to Summary Box List

### **Correct:**

LOCATION		UNDERDRAIN TYPE II	UNDERDRAIN TYPE V	OUTLET P	IPE	
200701701	SIDE	0440 1 20	0440 1 50	0440 73	DESIGN	CONSTRUCTION
	1	(LF)	(LF)	4" (LF	MOLES	REMARKS
STA. TO STA.	1 1	P F	P. F.	P	F	
1161+51.49 70 1182+24.95	1.7	74.0			BANP BT	
1162+27 53 TO 1164+48 47	4.7	222.3			RAMP BI	
1164+51.53 70 1165+29.01	6.7	78.0			RANP BI	
1165+30.59 70 1167+78.00	347	248.5			BANP BI	0
1167+78 00 TO 1170+22 31	4.7	245.8	9 9		RANF B1	
1170+35 79 70 1171+97.97	17	163.0			NAW BI	
1172+02.03 70 1173+50.00	LT	148.7			RAHP B1	
1173+50.00 70 1174+97.97	LT	145.7	8 1		RANP B1	
1175+02.03 70 1175+75.00	1.7	73.3			SANP B1	
1175+75.00 70 1176+47.97	1.7	73.3			BARP B1	
1176+52.03 70 1177+99.32	127	145.0			NAMP 81	
1179+28.07 TO 1179+47.97	17	20:0			RANP B1	
1181+58.29 70 1181+78.25	4.7	20.0			RAMP B1	
1183+62.13 70 1183+82.13	4.7	20.0			KANP BI	d d
1183+85.63 70 1184+05.63	LT	20.0			BANP BI	Ų.
1194+26.99 70 1194+76.71	1.7		50.0		RAMP BI	7
1375+83.83 70 1376+97.73	RY		230.0		RAMP D	
1745+60.38 70 1747+84.71	RZ		225.0		BL 175	
1748+13.81 70 1750+38.14	87		225.0		BL 175	
1756+14.65 70 1756+83.18	RY		70.3		BL 175	
1758+01 30 70 1758+49 02	RT		48.9		EL 175	
1750+49.02 70 1759+29.15	RT		02.2		BL 175	
1762+99.94 70 1764+74.99	RT		185.0		SL 175	
1764+99.99 70 1766+50.00	RX		160.0		BL 175	
1766+50.00 70 1767+99.97	RT		250.0		HL 175	×
1194+76.71 70 1194+86.09	LT	7	(c)	15.6	RAMP BI	
1376+97.73 TO 1377+68.93	RT			70.0	RAMP D	
1747484 71 TO 1747+99 41	RT			20.8	BL 175	
1747+99,41 70 1748+13 81	RY			20.5	BL 175	
1756+83.18 70 1756+95.50	RT	19	9 1	12.7	BL 175	
1764+20.09 TO 1764+20.23	R7			25.0	#£ 175	
1766+78.10 70 1766+78.23	RT			34.5	8L 175	1
50	B-TOTAL:	1703.6	1426.4	209.1	3 (1	
	TOTAL:	1704	1427	210		1

#### Incorrect:

Remove unused/blank columns.

				SUMMAR	Y OF U	NDERDR	AIN				
LOCATION								OUTLE	TPIPE	056161	CONCERNCE LON
	SIDE							0440		DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.								 6"	(LF)		112.11.01.0
31A. 10 31A.								P	F		
118+90.36	RT							1.25			
119+20.35	RT							1.25			
50	B-TOTAL:							2.50			
	TOTAL:							2.50			

8-76 **Summary Boxes** 

28. Summary of French Drain Instructions; Return to Summary Box List

**Correct:** 

Incorrect:

8-77 Summary Boxes

29. Summary of Edgedrain

Instructions; Return to Summary Box List

### **Correct:**

LOCATION		EDGEDI	RAIN	OUT LET			CONSTRUCTION			
	SIDE	0446	1 1	0446 7	1 1	DESIGN NOTES	CONSTRUCTION REMARKS			
STA. TO STA.		4" (	LF)	4" (	LF)	WOILS	HEMARKS			
31A. 10 31A.		Ρ	F	P	F					
1762+00.00 to 1767+00.00	RT	500.0								
1767+00.00 to 1772+00.00	RT	500.0								
1772+00.00 to 1775+00.00	RT	300.0								
1775+18.00 to 1780+00.00	RT	482.0			- 1					
1780+00.00 to 1783+00.00	RT	300.0			1					
1783+00:00 to 1788+00:00	RT	500.0								
1788+00.00 to 1793+00.00	RT	500.0			1		11			
1793+00.00 to 1797+46.00	RT	446.0			1					
1767+00.00 to 1767+08.50	RT			26.7						
1772+00.00 to 1772+08.50	RT			31.6	1		10			
1775+00.00 to 1775+08.50	RT			30.7			1			
1775+09.50 to 1775+18.00	RT			30.7						
1779+91.50 to 1780+00.00	RT			24.0						
1782+91.50 to 1783+00.00	RT			23.5						
1787+91.50 to 1788+00.00	RT			30.0						
1792+95.08 to 1793+00.00	RT			22.1						
SU	B-TOTAL:	3528.0		219.3	T T					
	TOTAL:	3528		220	-					

Incorrect:

8-78 **Summary Boxes** 

30. Summary of Railing
<u>Instructions</u>; <u>Return to Summary Box List</u>

### **Correct:**

SUM	MARY O	F RAILIN	G		
LOCATION	SIDE	PED/BIC RAILI (ALUMINUM (42° TY	NG	CONSTRUCTION	
		0515	2311	REMARKS	
CT4 TO CT4	7 1	LF			
STA. TO STA.		P	F		
1424+10.00 R2 to 1426+67.58 R2	LT	259.7			
1425+58.56 R2 to 1426+34.87 R2	RT	76.4			
1447+55.60 R3 to 1447+96.93 R3	RT	42.9			
1447+97.37 R3 to 1448+41.04 R3	LT	42.0			
s	UB-TOTAL:	421.0			
PL	AN TOTAL:	421			

### Incorrect:

8-79 **Summary Boxes** 

# 31. Summary of Permanent Barrier, formerly "Barrier Wall" Instructions; Return to Summary Box List

#### **Correct:**

PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNIT	OUANT	TITY	TOTAL		DESIGN NOTES	CONSTRUCTION
NO.	PAI TIEM DESCRIPTION	STA. TO STA.	SIDE	DIVIT	P	F	P	F	NOTES	REMARKS
521 1	MEDIAN CONCRETE BARRIER WALL,	1352+40:00 to 1360+99.97	T)	LF	860.0		1000			
	CAST IN PLACE	1360+99.97 to 1362+15.37			115.6		] [	8		
	. ()	1362+15.37 to 1362+39.91	LT		24.6		1	7		
9521 72 3	SHOULDER CONCRETE BARRIER WALL.	1447+50.57 to 1454+35.03	RT	LF	692.5		2037			
	RIGID-SHOULDER	1456+97.27 to 1464+20.00	RT		722.7		1	1		
		1457+53.98 to 1463+76.08	LT		622.1		1 1			
521 72 10	SHOULDER CONCRETE BARRIER WALL.	432+81.61 to 434+03.17	RT	LF	121.6		243	- 6		
	RIGID SHOULDER 42"	434+03.17 to 434+03.17	RT		121.6		1 1			

### Incorrect:

# 32. Summary of Curb & Gutter and/or Traffic Separators Instructions; Return to Summary Box List

#### **Correct:**

PAY ITEM	AND ITTH OCCUPATION	LOCATION	SIDE	AREA	UNIT			QUANT IT	ra		TOT	AL	DES/GN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STA. TO STA.	1 STUE	10	ONTE			CTIONS	NET LE	NGTH			NOTES	REMARKS
		3/A: 10 3/A:				LENGTH	TYPE	LENGTH	P	F	P	F		
1520 1 7	CONCRETE CURB & GUTTER, TYPE E	248+32.25 to 249+38.76	LT/RT		LF	113.4			113.4		857			
		248+32,25 to 249+38,76	LT /RT			110.8			110.8					
		253+27.01 to 254+11.57	1.7			85.0	8 8		85.0					
		253+27 01 to 254+11.57	LT/RT			88.9			88.9				.). 	
		257+34.15 to 258+04.00	RT			75.6			75.6					
		257+34.15 to 258+04.00	LT /RT			76.4		- 1	76.4					
		258+10.00 to 258+94.53	LT/RT	8		90.1	4 1	23	90.1				i i	
		258+10.00 to 258+94.53	LT			91.2			91.2					
		266+41.48 to 267+01.84	LT/RT			61.8			61.8					
		266+41.48 to 267+01.84	LT/RT			63.7	8 6		63.7				(-	
520 1 10	CONCRETE CURB & GUTTER, TYPE F	257+93.00 to 258+18.00			LF	25.0			25.0		48		-	
	**************************************	257+95.00 to 258+18.00	1.7			23.0			23.0		000		7	
520 5 11	TRAFFIC SEPARATOR CONCRETE - TYPE 1. 4' WIDE	254+11.57 to 255+26.00	LT.		1,F	114.4			114.4		598		OPTION I	1
		256+20-12 to 257+34.15	87			114.0		- 3	114.0				OPTION I	
		258+94.53 to 260+53.48	LT			159.0			159.0				OPTION I	
		267+01.84 to 269+12.50	LT.			210.7	1		210.7				OPTION I	1

2021 Edition

#### Incorrect:

Do NOT rename the boxes.

		SUMMAI	RY OF C	URB & C	SUTTER					
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	CIDE	LANCE	QUAN	TITY	тот	AL	DESIGN NOTES	CONSTRUCTION
NO.	PAT TIEM DESCRIPTION	Taken at the participant of	SIDE	UNIT					NOTES	REMARKS
1.000000		STA. TO STA.			P	F	P	F		0.0000000000000000000000000000000000000
0520-1-10	CONCRETE CURB & GUTTER, TYPE F	460+51.90 TO 466+11.77	LT:	LF	572.0		572			
		460+49.65 TO 466+11.77	87	LF:	575.0		575			Ť
		46	SUB-TOTAL:		1147		1147			
	_		TOTAL		1147		1147			

Do NOT repeat total quantity in every summary box when it continues to the next sheet. The total should ONLY be on the FIRST summary box in the FIRST row (not centered or justified to the bottom of a merged cell) where the pay item is introduced to a box.

	ī ī		LUND	1	1.40.00	T T		SEPARA						1
AY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA	UNIT			QUANTITY			TOT	AL	DESIGN	CONSTRUCTIO
NO.		STA. TO STA.		10		GROSS LENGTH	TYPE	T I ONS LENGTH	P P	ENGTH F	ρ	F	NOTES	REMARKS
20-1-10	CONCRETE CURB & GUTTER, TYPE F (CONT'D)	80+69 80 to 80+74.16	RY	67251	TAR	8.50	110000							
		81+14.47 to 81+38.83	R7	67223		33.60					]			
		81+38.83 to 83+29.91	RT	67230	4	191.10		2						
		82+98-91 to 83+11.91	1.7	67204		20.50					]			
		82+98.91 to 83+11.91	LT	67463		20.50					]			
		83+11.47 to 83+11.91	1.7	67170		67.00					1			
		83+29.91 to 86+24.59	RT	67224		294.70				_	ļ			
		83+37.89 to 83+38.00	LT	67185		65.70		-		-	1			
		83+38 00 to 83+53.00	1.7	67206		23.60				_	1			
		83+53.00 to 86+61.50	LT	67205		308.50				-	ł			-
		86+24.59 to 86+54.59	RI	67253		47.00		$\overline{}$		_	Į			
		86+54.59 to 86+54.89	R7	67228	_	45.30	_	-			1			
		86+61_30 to 86+76.50	LT	67187	-	23.60	-	-	-	-	1			_
		86+76.50	1.7	67163		27.40		$\vdash$			1			-
		86+76.50 to 86+76.63 86+90.57 to 87+20.57	LT RT	67254		47.20	_				ł			+
		86+90.57 to 86+90.68	RT	67.227	-	45.00		-	-	-	ł			+
		87+06_92_to_87+41_92	LT	67186	_	55.00		_	_		1			+
	-	87+06.92 to 87+06.93	LT	67458	-	15.80		-		_	1			+
	<del></del>	87+20.57 to 90+86.25	RT	67226		365.70	_	<del>     </del>	-	-	ł			+
	<del> </del>	87+41_92_to_90+86.51	LT	67177		344.60				_	1			+
	<del> </del>	90+86.25 to 91+16.25	RT.	67236		47.50	_	-		_	1			+
		90+86.51 to 91+16.51	1.7	67207		47.20		-	_	_	ł	1		
		91+15.76 to 91+16.25	RT	67234		37,80					1	1		+
		91+15.76 to 91+15.83	87	67497		22.10								+
		91+16.42 to 91+16.45	LT	67461		24.80				1	24052.96			+
		91+16.51 to 91+16.52	LT	67171		19.30	_	_	<del></del>		2.4032.30			+
		91+40 30 to 91+41.09	LT	67462		36.90						1		
		91+41.09 to 91+79.08	LT	67188		59.00					1	1 1		1
		91+53 10 to 91+54.28	RT	67233		59.10					1	1		
		91+53.10 to 91+83.09	RT	67235		47.80					1			
		91+79.08 to 96+90.87	LT	67178		511.80					1	1 1		
	-	91+83 09 to 94+33 47	RT			264.26					1	1		
		94+54.57 to 97+50.27	RT		ĝ.	306.60					1			
		96+90.87 to 97+05.86	LT	67189		23.90					1	1 1		
		97+04.26 to 97+05.86	1.7	67172		74.80					1	1		
		97+30.17 to 97+31.33	1.7	67164		23.70					1			
		97+31.33 to 97+48.33	LT	67208		25.40					1			
		97+48 33 to 97+97 77	LT	67158		49.50					]	1 1		
		97+50.27 to 97+82.26	R7	67257	i.	49 50	- 1	18			]			
		97+82.26 to 97+82.37	RT	67238		4.20					]			
		97+82 36 to 97+83 02	RY	67237		25.50					]			
		97+97 80 to 104+23.85	LT	67156	ji	626.10	- 1							
		98+07.49 [a 98+08.23	RT	67239	I	25.50								
		98+07 .49	RT	67255		0.80					]			
		98+07.49 to 98+41.49	RT	67256		53.40								
		98+41 49 to 104+23 18	87	67216	0	581.70								
		104+23.18 to 104+55.17	RT	67260		49.70								
		104+23.85 to 104+48.84	LT	67169		39.80					1			
	I I	104+47 59 to 104+48 84	1.7	67173	(1)	66.80					1	1 1		1

Do not delete the total column for boxes that total across and then add pay items by sections with individual total rows.

		SUMMARY OF CURB	& GUT	TER	AND/OR 1	RAFFIC S	SEPARATORS	6	-		
PAY ITEM		LOCATION	c.nc			7	QUANTITY			DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STA. TO STA.	SIDE	ONTI	GROSS LENGTH	DEDUC	TIONS LENGTH	NET L	ENGTH F	NOTES	REMARKS
20-2-2	CONCRETE CURB TYPE B				-		1				
		1131+61.74 TO 1131+76.90	LT	LF	40.6		10				
	CURB AND GUTTER B TOTAL			LF	41						
20-2-4	CONCRETE CURB TYPE D	SR 482							-		
		1127+96.73 TO 1128+05.85	LT	LF	17.3						
		1128+12.35 TO 1128+60.66		LF	48.7				<del>                                     </del>		
		1128+55.74 TO 1128+71.32		LF	77.8		-		<del>                                     </del>		
		1129+00.63 TO 1129+19.16		LF	22.8		-	-			
		1129+03.32 TO 1129+42.38		LF	48.7		13				
	i	1129+96.77 TO 1131+20.33	LT	LF	124.8				<b>—</b>		
		1127+13.87 TO 1127+13.31	RT	LF	14.0						
		1107501177101111 00									
		INTERNATIONAL DR	7.6	0.00	12.0						
		22+10.15 TO 22+08.46	LT	LF	12.9		-	_			
		22+33.51 TO 22+40.00	LT	LF	15.0		-	_	<del></del>		
		26+10.66 TO 26+10.37	LT	LF	3.1			_			
		26+35.86 TO 26+37.50	LT	LF	6.9						
		34+35.42 TO 34+35.42	LT	LF	24.0				-		
		34+59.42 TO 34+59.42	LT	L.F	24.0		-	_			
		35+78.34 TO 34+78.34 36+01.84 TO 36+01.84	LT	LF LF	6.0			_			
	ii '	36+01.84 10 36+01.84	Li	LF	0.0						
	CONCRETE CURB TYPE D TOTAL:			LF	452						
			_								
20-3	CONCRETE VALLEY GUTTER	SR 482									
		1128+55.42 TO 1129+14.73		LF	59.3						
		1129+29.25 TO 1129+98.72		LF	69.5						
		1131+03.88 TO 1132+35.19		LF	131.3						
		1136+50.72 TO 1137+49.80	LT	LF	99.1						
		1131+28.54 TO 1132+08.88	RT	LF:	80.3						
		1133+90.34 TO 1134+72.26	RT	LF	81.9						
		INTERNATIONAL DR									
		21+86.65 TO 22+57.01	LT	LF	70.4						
		25+93.03 TO 26+53.52	LT	LF.	60.5		·		<del>                                     </del>		
		25+84.95 TO 26+84.72	RT	LF	99.8		<u> </u>				
	CONCRETE VALLEY GUTTER TOTAL:			LF	752			_			

### 33. Summary of Sidewalk & Detectable Warnings

**Instructions**; Return to Summary Box List

#### **Correct:**

Where "back of sidewalk curb" is constructed or removed with the sidewalk, no separate payment is made. Optional: The designer may quantify these lengths, in accordance with the Design Standards/Standard Plans, and show in the Design Notes column.

LOCATION		1780-580			CONC SI		CONC SI		DETECT		9.9.5.00 and 0.	Out Windstown And Williams
- IS DOMESTOWN	510E	AREA	LENGTH	WIDTH	0522	8 18	0522	2	0527	2	DESIGN	CONSTRUCTION
A SECURITY CALLS HOWEVER TO THE	1	10		3	5)		5		58		NOTES	REMARKS
STA. TO STA.		l		1	p	F	P	V.E.	(P)	2.6:		
60+41.48 to 60+54.20	LT	17214			2.7							
60+66.80 to 61+22.56	iT	12200	1	9 - 3	36.7			- 5				T .
\$1+35.07 to 61+60.65	LT.	17187			75.6							
62+72.27 to 62+15.71	iT	17173		0	27.5							
62+28.29 to 62+88.28	LT.	17158			38.0							1
63+05 72 16 63+42 22	LT	29176		0 8	20.7					8		T .
53+75.00 to 65+99.00	AT	30532			207.7							
63+88.88 to 65+93.33	LF	33222		(===	129.4							1
66+27-17 to 66+33.27	£F.	33167			7.5			57				(
66+33.27 to 66+99.00	17	33188			37.5							
68+45.00 to 69+90.00	RF	29061			89.5							
68+45.00 to 70+74.00	135	29042			149.4							
70+86.00 te 31+50.00	17	14559			40.7							
71+62.00 to 71+94.22	17	14572			20.0							
72+05.13 to 72+49.43	ir	30478			27.9					1		
60+44:41 To 60+76.58	LIT.	20127			- 3		23.9	- 5				7
52+12.88 fc 61+45.08	4.7	20144					20.0					
61+44 S4 to 61+77 46	RT	20110			- 19		24.3					i i
62+50.92 to 61+82.07	(T)	20099					25∶€					
62+05.92 to 62+38.08	15	50133					33.4					2
62+78.48 to 63+15.52	17	30421					47.0					
65+83.01 to 66+27.09	iT.	40918		( U	- 1		711.3					
79+37.00 to 70+69.00	AT	20012		(i ii			29.8					
70+64.00 to 79+95.00	17	29245					27.3					
70+69.00 to 71+01.00	RT	20024	if.		- 1-		21.3					3
71+26.50 to 71+38.50	AT:	20045					29.0					
72+40.00 to 71+72.03	LT	29225			- 1		23.4			1		(
77+84.05 to 72+16.05	i.r	29224	<u> </u>	6 3			20.6					2
72+05.07 to 72+37.08	Af	35215					25.3					
53+33.50 to 63+40.00	LT.	40901		i s					73.3			
63+90.23 to 63+97.60	28.	40896							23.2			
	1		(0.00	TOTAL	#56		47)		26			-
				TOTAL	856		473	-	26	$\overline{}$		-

LOCA	TION		CONC SIDEW	ALK	CONC SI		DETECT WARN I		0534250470111	64747VVC34740V9041+0*GVVV
112752718		SIDE	0522 1		0522	2	0527	2	DESIGN NOTES	CONSTRUCTION REMARKS
STA. T	O STA		SY		SY		SF		MOTES	0500003
31A. I	J STA.		P	F	P	F	ρ	F		
429+58-54 To	220000000000000000000000000000000000000	LT	53.9							
429+58-54 TO		LT			3	115	30.0			
430+54.38 TO		LT					11.0			
431+08:96 To	The state of the s	1.T					10.0			
431+09.25 70		LT	135.5		8 4					
433+50 31 To		LT					10.0			
433+78-40 TO		LT					11.0			
433+78.69 To		LT	87.3							1
435+20.45 To	7 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	CT.					11.0			
435+49-96 To	and the second second second second	LT	259.9							
435+49 96 To		LT					10.0			
440+12.27 To	51 [20030.104120.F300]	LT					10.0			
440+21.31 TO		LT	36.3	_	0 10					1
440+21.31 To		LT					10.0			
440+86_30 TO		LT			7.0					
440+98_80 TO	17.000	LT	71.1	_						1
442+23.68 74		LT		-			11.0			
442+54_44 To		LT	98.1	_		_	-			
442+54 44 Ti		LT		_			12.0	_		
444+31-47 To	100000000000000000000000000000000000000	LT.			15.3					
444+58.93 TO		LT	43.9	_	-	- 1	- 1	_		1
445+34.66 TI		LT		_			11.0			
445+59.57 Ti		LT	210.1	-		$\rightarrow$	11.0			
445+59:86 TO		LT	215.1	-			10.0			
449+35.74 To		ET		_			16.0			
449+69.37 To		LT	255	_			13.0			-
449+69 66 TO		LT	328.9	_	-	_				
455+51,77 TO		LT		_	-		23.0			+
456+29.53 TO		LT.		-	-	_	19.0			+
456+29.82 To		LT	16.4	_		_				+
456+57 17 To	3 2 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	LT	163.0	_	-		13.0			
457+16.93 TO	The state of the s	LT	162.8		-					
457+16.93 TO		LT		_		_	14.0	_		+
460+08.74 TO		LT		_			9.0			-
****		LT	375.7	_		_	9.0			+
460+55.00 To	9 466+05-21	10.4	3/5./		-	_				-
	-	UB-TOTAL:	1831		2.2	_	245	_		+
	31	TOTAL:	3699		107		535	_		

# On LS Project (optional: pay item numbers not shown)

LOCATION				STORES STORES	CONC 511		DETECT WARN		********	
Cettempon	SIDE	AREA	LENGTH	WIDTH	SY	fi i	5/	5	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.					ρ	F	p	F		10
129+06.01 to 129+11.61	AT.	13068			4.3				TENNESSEE AVE SE	
129+11 55 to 129+26 99	BT	73865			11.0				TENNESSEE AVE-SE	
238+37.6# to 238+50.32	4.7	#19#			5.0				LURA AVE NW	
140+43.57 to 140+64.39	1.7	23534			12.0				HUMMOOD AVE SW	
141+07.15 to 141+15.93	4.7	#2#2			1.0				HURNOOD AVE NW	
741+07 42 to 741+21 08	1.7	13900			6.5		- 1		MURRIOOD RIE NW	
141+43.79 to 141+49.30	LT	13081			3.1				HURWOOD AVE NW	
141+49.30 to 141+62.30	47	13028			7.5				HURMOOD RIVE NW	
141+62.29 to 141+79.41	1.7	23024			8.0				HURWOOD AVE NW	
113+67.00 to 713+81.47	AT	13727					23.6		HOMEDEFOT, DELIVERY ENTRANCE	(A)
114448 05 to 114461 32	87	13729					21.7		MOMEDEPOT, DELIVERY ENTRANCE	
117+90.11 to 118+63.22	407	13734					21.6		HOMEDEPOT, IST ENTRANCE SE	6
110+07 48 to 718+09.48	4.7	73744				- 18	10.2		TANGERINE AVE SW	
118+53.46 to 118+65.76	LT	13249					22.6		TANCERINE AVE NW	
118+65.59 to 118+78.67	AT	13739			8 89		21.6		HOMEDEPOT, IST ENTRANCE WE	3
221+36.88 to 121+52.51	HT	13/54					25.0		HOMEDEPOY, 2ND ENTRANCE SE	
229+18.60 to 229+26.99	AT	13212				- 1	27.4		TENNESSEE AVE-SE	X.
133+30 IR to 133+41.82	MT:	13762					29.7		DEONGIA AVE NE	
136+39.89 to 136+46.98	87	7,3768			100		24.8		HATFIELD AVE SE	2
236+88.02 to 736+96.81	RT	13773					17.1		HATFIELD AVE NE	
138+41.20 to 138+44.25	1.7	13220			1 3		8.0		LURA AVE NO	1
140+53.19 to 140+64.39	£.T	13227					25.2		HURMOOD AVE SW	
141+11.33 to 141+14.25	4.7	6824)	- 3				2.0		MURKOOD AVE NW	
141+53.30 to 141+58.30	4.7	13252					10.0		HURWOOD AVE NW	

### Incorrect:

Either the Area ID or the length and width columns must be used. Do not delete these columns.

LO	CATION		CONC SIDEW	ALK	CONC 51		DETECT WARN!			
		SIDE	0522 1		0522	2 2	0527	2	DESIGN NOTES	CONSTRUCTION REMARKS
Sere W.	TOTAL	1	5Y		5	Y	5F		NOTES	AEMAAA 3
SIA	TO STA.	Ĺí	P	Ē()	P	F	Р	E		
429+11.45	70 429+56.19	RT	23.9		i i		- 1			
429+11.48	TO 429+17.35	RT			8 8		12.0	- 6		
429+54.79	TO 430+66.60	RT			60.3	- 3				
430+62.54	TO 431+14.62	RT	25.7				4			
431+03.50	TO 431+14.62	RT					18.0		0.00	
431+33.99	70 431+41-23	RT					13.0		₹%	
431+34.00	TO 432+08.73	RT	40.0						WWW.SEC	
432+03.60	TO 432+08:73	RI					12.0	0		
432+39.21	TO 434+07.51	RT	91.3							
432+39.21	TO 432+50.23	AT					18.0	- 6		
433+99.37	70 434+07.51	RT			6 6		15.0			
434+38.50	TO 442+07.31	RT	425.9							
434+38:50	TO 434+44.53	BT					12.0			31
441+90.62	TO 442+07.31	RT			8 8		25.0			
442+81.84	70 448+41 47	RT	311.7							
442+81.84	TO 442+98.71	RT					26.0			
448+36.47	70 448+41.47	RT			8 - 8		11.0			
448+76.12	70 449+52.66	RT	41.8							
448+76.12	TO 448+80.80	RT			1		11.0			
449+50.42	TO 449+52.66	RT			8 9		10.0			4
449+80.65	TO 456+13.20	AT	351.4							
449+80.65	TO 449+83.01	RT					10.0			1
456+07:24	70 456+13.20	RT			6 - 6		12.0			
456+56.51	70 457+87 88	HT	72.1							
456+56.51	TO 456+63.10	RT			*		13.0			*
457+85.81	70 457+87 88	RT			( t	- 1	10.0			
458+02.86	TO 458+86.34	RT	46.1							
458+02.86	TO 458+06.47	RT					11.0			1
458+84.14	70 458+86.34	RT			( S		10.0			
459+04.66	TO 460+30.89	NT.	73.9							
459+04.66	TO 459+09.33	RT					11.0	-		1
460+27.47	70 460+30.11	RT			6 5	7	18.0			
460+51.31	TO 460+55.24	RT					12.0			
460+51.80	70 465+59.33	RT	341.4			1				
465+49.46	70 465+85.45	RT			24.4					1
465+75.24	10 466+04 13	RT	23.2							
			-		-	-		_		*
	-	UB-TOTAL:	1868.4		84.7		290	-		

When the Area ID is not used, the width and length should be included in the available columns. The width should not be documented in the Design Notes column.

LOCATION					CONC SIDEWA		IDEWALK				DETECT WARNI			
LOCALION	SIDE	AREA	LENGTH	WIDTH	0522 1		2 2		_		0527		DESIGN	CONSTRUCT 10
227 727 127	-	ID			5Y		SY		<del>                                     </del>	-	SY		NOTES	REMARKS
STA. TO STA.					P F	P	F				P	F		
29+71.45 to 130+56.08	RT				18.00								WIDTH= 2.0°, HARMONIZATION AREA	
31+82,10 to 132+39,80	RT			-	39.10								WIDTH= 4.3", HARMONIZATION AREA	
37+89.36 to 138+02.70	LT				8.40								WIDTH= 6.0', HARMONIZATION AREA	
39+96.85 to 140+69.20	RT				40.00								WIDTH= 7.3', HARMONIZATION AREA	
\$2+53.17 to 142+91.75	RT				24.50								WIDTH= 6.0", HARMONIZATION AREA	
13+21.75 to 143+45.75	RT				16.00			_	-				WIOTH= 6.0°, HARMONIZATION AREA	
13+69.75 to 143+93.80	RT				15.90				-				WIDTH= 6.0' , HARMONIZATION AREA	
14+23.78 to 144+64.68	RT				90.80	_				9 1			WIDTH= 20.0', HARMONIZATION AREA	
48+05.91 to 149+18.78 19+03.72 to 149+41.28					12.10	_	<del> </del>			-			WIDTH= 2.0', HARMONIZATION AREA	
51+91.74 to 152+06.76	LT				4.20	_	-				-		WIDTH= 3.0', HARMONIZATION AREA WIDTH= 2.5', HARMONIZATION AREA	
57+90.00 to 158+13.45	LT	_			2.40	_		_	-				WIDTH= 2.3 , HARMONIZATION AREA	
8+13.45 to 158+38.50	LT	-			7.80		<del>                                      </del>	_	-	-			WIDTH= 6.0' HARMONIZATION AREA	
San Day and American State County	_	-		-			<del>                                      </del>		1	-			WIDTH- 5.0' HARMONIZATION AREA	
8+59.00 to 9+58.98	RT				42.78								SIDE STREET-NW 12 ST(WEST)	
8+85.00 to 9+64.40	RT				17.80								WIDTH= 2.0°, HARMONIZATION AREA SIDE STREET-NW 15 ST(WEST)	
10+50.36 to 11+23.83	RT				11.80								WIDTH= 1.5 HARMONIZATION AREA SIDE STREET NW 17 ST(EAST)	
8+45.80 to 8+90.80	RT				19.40								WIDTH= 4.0' HARMONIZATION AREA SIDE STREET-NW 18 ST(WEST)	
8+66.32 to 9+01.52	LT				35.00								WIDTH= 9.0°, HARMONIZATION AREA SIDE STREET-NW 18 ST(WEST)	
9+48.95 to 9+64.66	LT	-			20.00					-			WIDTH= 9.0" HARMONIZATION AREA	
10+35.62 to 10+94.74	LT			-	35.80	_	+	_	-				SIDE STREET-NW 18 ST(WEST) WIDTH= 5.0', HARMONIZATION AREA	
1+14.74 to 11+44.32	LT				16.80	_		_	_	-			SIDE STREET-NW 21 TERR(EAST) WIDTH= 5.0 - HARMONIZATION AREA	
0+44.00 to 10+96.01	RT			-	6.90	_	<del>                                     </del>	_	<b>—</b>				SIDE STREET NV 21 TERR(EAST) WIDTH= 1.3' HARMONIZATION AREA SIDE STREET NV 22 ST	
	-	2222			6.90	10.10							SIDE STREET NW 22 ST	
59+33.21 to 69+68.21	LT	6717				16.10		_						
1+34.39 to 71+46.28	LT RT	65203				35.00	-	_	-	-			-	
1+38.13 to 71+80.11 2+52.09 to 72+86.24	LT	6627	-	_	_	13.40		_	+	-			<del> </del>	
3+69.04 to 74+01.04	LT	6645		_		13.80		-	-	<del></del>			1	
6+12.39 to 76+46.39	RT	6628			-	13.20		_	+	+			1	
8+33.49 to 78+40.10	RT	6719			<b>-</b>	19.80				-			1	
11+69.09 to 82+19.09	RT	6630				27.70			1	-				
82+16.01 to 82+60.01	LT	6631				19.50								
3+04.73 to 83+09.84	LT	44754			1	9.60								
3+18.88 to 83+62.80	RT	6632				22.10	0							
3+39.85 to 83+44.93	LT	6720				12.20	9							
3+57.45 to 83+85.45	LT	6633		2 5		16.30	)							
3+87.45 to 84+11.45	ir	6634		ŝ l		15.10								
4+13.45 to 84+41.45	LT	6635		4	i i	16.20								
4+60.88 to 84+92.88	LT	6636				17.10								
14+97.23 to 85+29.23	LT	6637				17.00								
86+24.67 to 86+62.67	LT	6638			-	22.30								
77+73.09 to 98+11.12	LT	6639				28.90			-					
18+47.68 to 99+03.68	RT	6640				35.70								
99+28.16 to 99+60.16	LT	6641	l.			21.00	9							

## 34. Summary of Permanent Driveways Instructions; Return to Summary Box List

**Correct:** 

Incorrect:

35. Summary of Ditch Pavement Instructions; Return to Summary Box List

### **Correct:**

TES CONSTRUCTION REMARKS
J. J

#### Incorrect:

Either the Area ID or the length and width columns must be used.

LOCATION		13557			(DITCH I	RUBBLE LINING)	BEDD	ING	PAVE	CH IENT	0242575000	E WATER STORES
	SIDE	AREA	LENGTH	WIDTH	0530	3 4	0530	74	0524	12	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	1100000	0.000	2002-000	A35745000	73	V	77	v	51	1	19967 6.35	CHE THE PROPERTY
37A. 10 31A.					p	F	P	E	p	F		
65+67 50 to 65+72.50	1.7	Š			(5 - 3)	- 3		- 4	3.0			38
66+78.01 to 67+10.99	AT				3453		371.9	3 11				
58+77.57 to 58+87.54	LT				4.0	_	2.9					
			50/	B-TOTAL:	28.1	0.0	24.8	0.0	3.0	0.0		
			710	TOTAL	20.1	9.0	74.8	0.0	3.0	0.0		

Topic No. 600-000-002

2021 Edition
Basis of Estimates

as of February 4, 2021

## 36. Summary of Guardrail

Instructions, Return to Summary Box List

#### **Correct:**

LOCATION	SIDE	GUARI (W+B		RUB (SINGLE		P I I	PE	GUARD REMO		ANCH! ASSE	ND DRAGE MBLY E [])	DESIGN	CONSTRUCTION
	1 [	0536	1 1	0536	5 1	0536	6	0536	7.3	0536	85 25	NOTES	REMARKS
STA. TO STA.	1 1		F	L	F	L	F.	L	F	E	A	1	
E-WATE SAN		Р	F	P	F	p	F	P	F	p	F	li .	
56+22.32 to 67+64.83	LT					142.5						E 7	
67+64.63 to 67+99.20	4.7							37.5				1	
67+64.83 to 68+58.01	1.7	100.0					4						
68+01.01 to 68+58.01	6.7			100.0									
86+00.00 to 400+19.50	1.7					1073.8						EQUATION: STA. 96+54,25(BK)= STA. 400+06.00(AMD)	
68+42.15 to 68+42.15	17				5				-	- 1	2	Par - 12-02-10-22-2	
		100.0		122						-			
.31	TOTAL	100.0		100.0	$\overline{}$	1216.3		37.5			_		

#### Incorrect:

Note implies full run of guardrail requires encased posts. This would need to be handled by a specification revision and not a note.

LOCATION		GUARI	RAIL	PIPE	RAIL		ANCHOI ASSEM	RAGE		uzaga-ingeun	
	SIDE	0536	1.1	0536	6	0536	85 24	0536	85 25	DESIGN NOTES	CONSTRUCTION REMARKS
	100000	L	F	Li		- t	EA	E	A	NOTES	UE GWOWS
STA. TO STA.		P	F	P	F	P	F	Р	F		
92+30.65 TO 96+67.64	LT	437		437		1		1			
92+95.29 TO 94+20.31	RT	125		125		3.		2.	.0 ()	381	
94+80.20 TO 95+80.71	RT	200.5		200.5		1		1		(6)	
									1		
50	B-TOTAL:	762.5		762.5		3		-3	1		
	TOTAL:	762.5		762.5		3		3			

<sup>\*</sup> NOTE: USE ENCASED (ROUND OPTION) STEEL GUARDRAIL POSTS

37. Summary of Cable Barrier (Pending)

Instructions; Return to Summary Box List

Correct: See Instructions for Developmental Design Standards/Developmental Standard Plans Instructions.http://www.fdot.gov/roadway/DS/Dev/IDDS/IDDS-D00450.pdf

Incorrect:

Topic No. 600-000-002 2021 Edition Basis of Estimates as of February 4, 2021

# 38. Summary of Permanent Crash Cushions Instructions; Return to Summary Box List

### **Correct:**

LOCATION		BARRIER	SYSTEM	DESIGN LENGTH	DESIGN SPEED	CRASH TEST LEVEL	HAZARD	LENGTH RESTRICTION	CRASH	CUSHTON	DESIGN	CONSTRUCTION
er er ren	ATION SIDE CONC		GUARDRAIL	LENGTH	Service Little		RIDIN	RESTRICTION	0544	75 1	DESIGN NOTES	REMARKS
SIMITON		BARRIER WALL	GONNORALE	FT.	MPH	TL-2 / TL-3	IN.	FT.	P	F	(19100000)	OCONTRACTORIS.
297+66.01	TA.	. K	3	76	60	TL-3		24.00	1		Bridge # 030075	Ž.

### Incorrect:

Missing design length column.

CONSTRUCT IO REMARKS			CRASH C	RESTRICTION	CRASH TEST LEVEL	DESIGN	SYSTEM	BARRIER		LOCATION
CONTRACTOR SECTION	NOTES	75 1	0544	RESTRICTION	TEST LEVEL	SPEED	GUARDRAIL	CONCRETE	SIDE	CTATION
	A.	- 1	p	FT	7L-2 / TL-3	MPH	COMMUNANT	BARRIER WALL		STATION
			1	18.75	713	70	A.		er.	309+04.00
			1	28.75	713	70			AT.	369+73.63
			1	18.25	71-3	30			AT.	502+48.52
			1 1	18.75	T13	70	- 1		AT.	309+04.00 309+73.03 502+43.52

39. Summary of Fencing
<a href="mailto:Instructions">Instructions</a>; Return to Summary Box List

### **Correct:**

PAY ITEM	DESCRIPTION	LOCATION	SIDE	UNIT	QUAN	TITY	TOT		DESIGN	CONSTRUCTION
NO.	\$35500000000000000000000000000000000000	STA. TO STA.	3855	0.000	p	E	p		NOTES	REMARKS
150-10-120	FENCING TYPE A. S. S. B. B. D. STANDARD	1379+17-98 TO 1379+31-70	- RT	15	24.0	-	268			1
THE RESTREE		1379+4K-11 TO 1379+53 4E	AT.	LF.	48.0		1			1
		1399+95 73 70 1400+25 05	LT./RT.	LF	48.0		-			1
		1402+35.36 70 1402+43.83		LF.	24.5					1
		1402485.03 [0.1402478.24]	cr.mr.	U	24,0			=		
550-10-128	FENCING TYPE A. S.I' E.O' . RESET EXISTING	321+63.02 TO 321+64.74	RT.	U	44.0		284			+
		321491 50 10 322425 04	RT.	LF	50.0					
		378+45 83 70 379+53.58	it.	. I.F.	40.0			2		1
		379+81.58 TO 379+92.86	1.7	LF	48.0					1
		400132.82: 70 400163.95	LT./AT	LF.	40.0					
		402+62 83 70 402+75 33	LT. INT.	U	20.01			J.		11.0
	4	403100.94 TO 403102.26	- lit	LF.	24.0					1
		403+02:77 TO 403+08:43	LT./NT	LK	13.0				·	

		SUMMARY OF	F FENC	ING						
PAY ITEM	DESCRIPTION	LOCATION	SIDE	UNIT	QUANT	TITY	тот	AL	DES1GN	CONSTRUCTION
NO.	DESCRIPTION	STA. TO STA.	SIDE	UNII					NOTES	REMARKS
					P	F	P	F		
550 10222	Fencing, Type B, 5.1- 6.0' Height, w/ Vinyi Coating	1412+96.73 R2 to 1412+98.62 R2	LT	LF	1.9		2003			
		1412+96.73 R2 to 1412+99.62 R2	LT		38.5		1			
		1413+16.82 R2 to 1417+96.36 R2	LT		479.6		1			3
		1418+10.78 R2 to 1418+20.16 R2	LT		23.7		]			
		1418+20.16 R2 to 1418+20.36 R2	LT		21.7		1			
		1428+53.58 R2 to 1434+46.34 R3	RT		1437.5		1			
550 60212	Fence Gate, Type B, Single, 6.1-12.0' Opening	1434+46.33 R3 to 1434+46.34 R3	RT	EA	1.0		1			
550 60225	Fence Gate, Type B. Double, 20.1-24.0' Opening	1412+99.62 R2 to 1413+16.82 R2	LT	EA	1.0		2			
		1417+96.36 R2 to 1418+20.36 R2	LT		1.0		1 1			
					1000		1 1			

### Incorrect:

8-94 Summary Boxes

40. Summary of Performance Turf
<a href="Instructions">Instructions</a>; Return to Summary Box List

### **Correct:**

	55 5	2 5		SUMMA	NRY OF I	PERFORM	ANCE T	URF		
LOCATION		1/102/2010	LENGTH	H	PERFORMANCE TURF 0570 1 1 SY		PERFORMANCE TURF (SOD) 0570 1 2		04040406	CONSTRUCTION
	SIDE	AREA	9	ПОТН					DESIGN NOTES	
CTA TO CTA	2011.652	10	Œ.	8			5	Y	NULES	REMARKS
STA. TO STA.			. 552		P	F	P	F		- 3 <sup>m</sup> / <sub>2</sub>
83+36:00 to 86+36:09	RT	103295			320.4					100
86+36.06 to 96+54.54	RI	106021			2354.4					1 6
302+43.30 to 302+77.74	RT	88694			34.3					il d
400+20.60 to 402+11.28	LT	105018			616.4					
401+60.84 to 410+36.32	1.7	103916			809.1			ó <u>1</u> 1		8
67+46.08 to 83+36.00	RT	#2996			3867.6					
68+00.15 to 76+22.98	LT	104934			2277.2					
76+53 52 10 79+00 00	LT	104915		$\neg$	467.4					
300+70.00 to 305+16.51	LT.	60316			257.4					
301+86.13 to 302+47.11	RT	83032			16.2			4		19
302+73.98 to 303+06.85	RT	#3037		$\neg$	9.9					
303+18 71 to 305+98.96	RT	#2977			533.6					1 2
401+47.31 to 401+47.31	RT	114826			662.3					
403+00.45 to 404+70.59	RT	114609			22.1					
407+66.30 to 410+33.63	RT	114626	$\neg$	$\neg$	157.8					
68+01.69 to 68+69.04	LT	84813		$\neg$			46.0	7 1		1
68+69.04 to 73+20.00	1.7	84788					172.1			
83+36.00 to 86+36.09	RT	103246					116.9			
67+26.29 to 73+20.00	RT	#2671		$\neg$			225.5			
73+20.00 to 76+28.08	LT	92314		$\neg$			145.4			
73+20.00 to 78+80.00	RT	28169		$\neg$			218.2			<del> </del>
76+48.32 to 79+00.00	LT	92335	$\neg$	-			122.9			1
78+80.00 to 83+36.00	RT	28320	$\neg$	$\overline{}$			177.4			
86+36.06 to 91+20.00	RT	60586					188.6			
91+20.00 to 96+54.54	RT	28202					208.2			
300+00.00 to 305+96.57	RT.	80288	$\overline{}$	$\overline{}$	-		251.2			
300+00.01 to 306+05.87	1.7	28064					212.7			
400+00 00 to 401+20 00	1.7	78933					50.0			T
400+00 00 to 401+20.00	RT	78945					46.1			
			-				-35.07	1		
FROM DRAINAGE STRUCTURES	BT/LT						90:0			
	92		SUB-	TOTAL	12406.1	1	2281.2	3		- TA

8-95 Summary Boxes

### Incorrect:

Do NOT create a new summary box. Plastic Erosion Mat and Prepared Soil Layer quantities go in the same summary box as the Performance Turf.

SUMMARY OF PLASTIC EROSION MAT										
PAY ITEM	DAY ITTH DECEMENTAL	cros	AREA		QUANT ITY		TOTAL		DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	SIDE	AREA ID	UNIT	P	F	P	F	NOTES	REMARKS
571 1 13	PLASTIC EROSION MAT, TURF REINFORCED MAT, TYPE 3	LT	156440	SY	48.0	20	172		MAT @ HATCHETT CREEK	
		RT	156445		48.0				MAT O HATCHETT CREEK	
		LT	156435		76.0				MAT @ HATCHETT CREEK	U.

LOCATION					SOIL L		- Landa Valida	CONSTRUCTION REMARKS
CONTRACTOR OF THE STATE OF THE	SIDE	ARE A	LENGTH	WIDTH	0162	1 11	DESIGN NOTES	
STA TO STA		10	SEAST-SMITTER	ANDRESAMO	SY		Notes	TEMPARA.
STA. TO STA.				1 1	P	F		
14+19.18 TO 14+44.75	LT				88.0		3-6" LAYERS OF 75/25 SOIL	
14+20.72 TO 14+43.35	RT				38.0		3-6" LAYERS OF 75/25 SOIL	
75+81.00 TO 76+60.00	LT/RT				153.0		21" LAYER OF 75/25 SOIL	
90+36.50 TO 90+98.00	LT /RT				133.0		21" LAYER OF 75/25 SOIL	
96+60.00 TO 97+41.00	LT /RT				192.0		21" LAYER OF 75/25 SOIL	
			SU	B-TOTAL:	604		1	-
				TOTAL	604			

# 41. Summary of Traffic Monitoring Site Items Instructions; Return to Summary Box List

**Correct:** See 695- 1 to verify if Traffic Monitoring Site is for Transportation Statistics "TranStat" Office, or if site is for Traffic Ops, MCSAW, or other purpose.

#### Incorrect:

LF quantity and sub-total should be shown to the tenth decimal place.

						SUMMARY	OF TR	AFFIC I	MONITOR	ING SITE	ITEM.	5			
	LOCATION		CONDUIT (OPEN TRENCH)		PULL AND SPLICE BOX (17" X 30")		VEHICLE AXLE SENSOR, NON-WEIGHT		INDUCTIVE LOOP ASSEMBLY		CABINET		DES/IGN	CONSTRUCTION	
Sec years		SIDE	0630 2 11		0635 2 11		0695 1 1		0695 6 12		0695 7132		NOTES	REMARKS	
SITE NO.	STATION		L	F		A	E	A	E	A	Ε	A		1	
NO.			P	F	P	F	P	F	P	F	P	F			
105616	1368+09.00	LT/RT	133		2		(4)		(4)		1				
	S	UB-TOTAL:	133		2		- 4		4		1				
		TOTAL	133		2		- 4		4		T.				

#### **CADD Manual, Chapter 8**

### FDOT-delivered Summary Box templates for use with LDM in both automated and manual formats:

Barrier Walls Pedestrian Longitudinal Channeling Devices

Curb and Traffic Separators Permanent Crash Cushions

Ditch Pavement Permanent Crash Cushions 2019

**Driveways Railing** 

Edgedrain Sidewalk

**Erosion Control Temporary Crash Cushions** 

Fencing Temporary Driveways

French Drain Trench Drain

Guardrail Turf and Prepared Soil

**Mailboxes Turnouts** 

Miscellaneous Asphalt Underdrain

**Pavement Utility Adjustments** 

### FDOT-delivered Summary Box templates for use with LDM in manual format only:

**Box Culverts** 

Clearing and Grubbing and Removal Items

Earthwork

General Items

Geotechnical Items

Litter Removal and Mowing

**Lump Sum Items** 

Miscellaneous Drainage

Monitor Existing Structures

Pedestrian Special Detours

Side Drain and Mitered End Sections

Side Drains and Mitered End Section with Flowlines

**Structures Quantities** 

Temporary Traffic Control Plan Items

**Temporary Highway Lighting** 

Temporary Signalization and Detection

Traffic Monitoring Site Items

Walls

# Chapter 8 SUMMARY TABLES

CADD tools are maintained by the State Engineering CADD Office. Additional guidance is available at <a href="http://www.fdot.gov/cadd/default.shtm">http://www.fdot.gov/cadd/default.shtm</a>. Updates are posted through maintenance releases and the FDOT CADD Support community website.

**NOTICE:** The CADD Office will be transitioning to NexGen plans, in accordance with FDM 900 Series, with new Summary Tables for the new Estimated Quantities Report. When a project is identified to use the new report format, the entire project must use the one report format. A "mixture" of new format and Plan Summary Boxes will not be accepted. See **BOE Chapter 8-Summary Boxes** for the projects using the older format.

All examples shown in this Chapter are as of 2-1-2021. Updates will be provided, as more examples are available. Please use the tables as provided through the latest CADD tools. **DO NOT MODIFY the Summary Table's default format**; this may negatively impact the report generation tool.

#### PRECISION:

The CADD Office is working on the format of the tables and the Estimated Quantities Report tool.

**Reviewers/ Designers,** do not comment/change tables based on the precision or number of significant figures for automated quantities; these will be corrected through the CADD/EQ Report tools.

For projects at nearing 100% plans, with letting within 4 months, please contact <a href="mailto:CADD.Support@dot.state.fl.us">CADD.Support@dot.state.fl.us</a> and <a href="mailto:FDOT-Payltems@dot.state.fl.us">FDOT-Payltems@dot.state.fl.us</a> for further guidance. For projects more than 4 months from letting, please be patient as the tools are refined.

#### **Errors, Comments, or Questions:**

- Contact <u>CADD.Support@dot.state.fl.us</u> for Table Calculation, Automation, or CADD Support.
- Contact <u>FDOT-PayItems@dot.state.fl.us</u> for Table/Box selection, Pay items, formatting, or BOE Support.

Training will be available through both the CADD Office and Estimates Office, to address the needs of designers, cadd users, reviewers, and estimators.

#### 8.1 Introduction

## **8.1.1 History**

For many years, Computation Books were used to document planned and final quantities, by location, for each pay item on a project. These books were used by construction

inspectors to document quantity changes and related notes as a project progressed. Alternatively, some pay items were documented within the plans on summary tables. The summary table information varied; only selected tables detailed the quantities by location. While both methods contained similar information, computation books were not a part of the contract bid documents.

Due to requests from our bidding contractors, the State Construction Office began an effort to streamline the final estimates process. Effective January 2014, projects starting the quantity calculation process no longer created computation books.

Summary Boxes were established to provide quantity information BY LOCATION, in a consistent format for ALL pay items. Beginning with lettings in November 2013, projects transitioned to the new summary boxes. All projects were required to use the summary boxes by July 2014.

Summary boxes were originally located behind the typical sections. In 2019, the location was moved to the end of the Roadway Plans. Projects beginning design in 2021 will utilize a new report titled "Estimated Quantities Report" (EQ Report), as detailed below, separate from the plans file(s). See the **2021 FDM** for additional information. The Summary Tables within the EQ Report continue to be an integral part of the Plans, Specifications, and Estimates Contract Package.

#### 8.1.2 Current Documentation

Pay item Quantities will be documented in the contract documents using Summary Tables. The Summary Tables identify the pay item number, location description, location (station to station), unit of measure and designer notes to the contractor.

Throughout the BOE, including pay item details, all references to documentation on "Summary Boxes" will apply equally to documentation on "Summary Tables", unless separate instructions are provided.

## 8-1.3 General Requirements:

All pay items must be documented on a Summary Table. The quantity of each item, by location is required. Each quantity must be calculated with one additional significant decimal place, totaled, and then rounded to the defined precision for each pay item, per Chapter 2. If station equations exist in the alignment, the region numbers are required for the station locations. These requirements will be incorporated into the automated quantities, as much as possible.

**Do not include contingency quantities.** Due to state and federal regulations, bid quantities must reflect actual work to be completed. Unforeseen work will be addressed in accordance with the Specifications. Quantity overruns, Measurement and Payment are addressed in Section 9 of the Standard Specifications. Construction/Final Estimates will adjust **Final** quantities and/or prices, as applicable, per the specifications.

Designers must retain back-up. If a question arises involving quantities, Construction will request in writing, that the designer provide detailed documentation or verify the concern of the pay item(s) in question. The designer shall produce the back-up documentation within five working days of the request from construction.

**DO NOT create project specific Summary Tables.** See CADD instructions for additional information about table automation and creating reports.

NOTE: Data tables are not intended for location, quantity, or pay item information; they may be used, as called for in the <u>FDOT Design Manual (FDM)</u> or <u>Standard Plans</u>. These are used to supplement data calculations or item specific details. DO NOT use data tables to duplicate or relocate information from a Summary Table. As the Department moves towards 3-D models, the Summary Tables may include more supporting data, away from plan sheet notes and tables.

## 8.2 Summary Table Format

## 8.2.1 Adding and Deleting Columns or Rows

All Summary Tables are formatted in a similar manner, with column headings for pay item, location, offset, quantity, etc., as needed. Rows reflect the individual location(s), as needed. DO NOT add any additional columns. See the *CADD Manual* at <a href="https://www.fdot.gov/cadd/downloads/publications/publications.shtm">https://www.fdot.gov/cadd/downloads/publications/publications.shtm</a> for additional information.

## 8.2.2 Design Notes Column

When location specific notes are needed to clarify details or quantities, the design notes column may be used. Refer to **BOE Chapter 7** for additional information on plan/project notes.

#### 8.3 Order and Placement within Plans

# 8.3.1 Plan Sets with Roadway Plans, with or without additional components:

**Summary Tables for the Project, including components** will be included in the EQ Report. The table order is automated; do not change the order of report pages. Follow **BOE** Chapter 3 and **FDM** guidance for submitting the report.

#	Summary Table Title (select title to go to Instructions)	Examples <sup>1</sup>
1	Summary of General Items	Examples
2	Summary of Lump Sum Items	<u>Examples</u>

	Commence of Townson, Troffic Control Disc. V	Francis -
3	Summary of Temporary Traffic Control Plan Items	Examples
4	Summary of Special Detours	Examples
5	Summary of Temporary Highway Lighting	<u>Examples</u>
6	Summary of Temporary Driveways	Examples
7	Summary of Pedestrian Longitudinal Channelizing	<u>Examples</u>
	<u>Devices</u>	
8	Summary of Temporary Crash Cushions	<u>Examples</u>
9	Summary of Temporary Signalization & Detection	<u>Examples</u>
10	Summary of Erosion and Sediment Control Devices	<u>Examples</u>
11	Summary of Litter Removal and Mowing	<u>Examples</u>
12	Summary of Monitor Existing Structures	<u>Examples</u>
13	Summary of Clearing and Grubbing & Removal Items	<u>Examples</u>
14	Summary of Mailboxes	<u>Examples</u>
15	Summary of Earthwork	<u>Examples</u>
16	Summary of Geotechnical Items	<u>Examples</u>
17	Summary of Driveway Base	<u>Examples</u>
18	Summary of Pavement	Examples
19	Summary of Miscellaneous Asphalt Pavement	Examples
20	Summary of Box Culverts	Examples
21	Summary of Drainage, includes Summary of Trench	Examples
	Drain, summary of Underdrain, Summary of French	
	Drain, Summary of Edgedrain	
22	Summary of Utility Adjustments	<u>Examples</u>
23	Summary of Miscellaneous Drainage Items	<u>Examples</u>
24	Summary of Railing	Examples
25	Summary of Curbs	<u>Examples</u>
26	Summary of Permanent Barriers	<u>Examples</u>
27	Summary of Permanent Driveways	<u>Examples</u>
28	Summary of Sidewalk & Detectable Warnings	Examples
29	Summary of Ditch Pavement	Examples
30	Summary of Walls	Examples
31	Summary of Guardrail	Examples
	Summary of Cable Barrier (Pending)	Examples
32	Summary of Permanent Crash Cushions	Examples
33	Summary of Fencing	Examples
34	Summary of Performance Turf	Examples
35	Summary of Traffic Monitoring Site Items	Examples
36	Summary of Utilities <sup>2</sup>	Examples
37	Summary of Structures, Bridge XXXXXX <sup>2</sup>	Examples
38	Summary of Landscaping <sup>2</sup>	Examples
39	Summary of Signalization <sup>2</sup>	Examples
40	Summary of ITS <sup>2</sup>	
41	Summary of Signing and Pavement Marking <sup>2</sup>	Examples
	י די	1
42	Summary of Lighting <sup>2</sup>	Examples

<sup>&</sup>lt;sup>1</sup>Examples with new summary tables will be provided, as they become available.

See Example pages for additional information.

<sup>2</sup>Title of summary tables for component plans may include "Items", during transition, i.e. *Summary of Utility Items*.

### 8.3.2 Plans without Roadway Component Plans

No changes when using Summary Tables.

### **8.3.3 Plans with Multiple Projects**

**For multiple projects let under one contract:** An EQ Report is completed for each 11-digit FPID number, 123456-1-52-01.

For multiple project FPID numbers with one set of plans (incidental work for secondary project shown in primary project's plans): An EQ Report is completed for each 11-digit FPID number, 123456-1-52-01. The plans sheet(s) MUST clearly identify work to be covered by the secondary project. This will ensure that the final quantities are recorded on the appropriate Summary Table.

### 8.4 Sample Summary Tables and Instructions

The summary tables shown below have been modified to fit this chapter. The latest versions are available within the FDOT CADD software, for use with the automated quantities tools. Enter the EOR information and project fields through the .xls file. DO NOT modify any other information on the cover page.

### 1. Summary of General Items

000: DA, Architectural, Mass Transit, other Examples; Return to Summary Box List

This form is intended for use with Per Day items, Architectural Items, Mass Transit Items (if not included on a component plan Tabulation Sheet), and other incidental items with no specified form.

Do NOT use this form for 999-102- Speed and Law Enforcement Officer; this pay item is for use by the Construction Engineer, not the Contractor, and is not shown in a Summary Box.

				Summ	ary of Genera	l Items						
		Units of	Qua	intity	Total G	uantity		Loc	ation			
Pay Item Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Design Notes	Construction Remarks
								Ú.				
		1 7					1					T.

### 2. Summary of Lump Sum Items

000: Lump Sum

Examples, Return to Summary Box List

This form is intended for use with Lump Sum pay items. For items with secondary units, quantify by location, per Chapter 2.

This summary table is NOT intended for use with pay item **999-2 Lump Sum Contract**. Refer to 8.7 for summarizing quantities on Lump Sum Projects/Contracts.

This form is not for MOT items, such as Special Detour or Maintenance of Traffic-LS; use the Summary of Temporary Traffic Control Plan Items for MOT-LS.

This form is not for Clearing and Grubbing; use the Summary of Clearing and Grubbing & Removal Items.

For any Lump Sum pay item with a secondary unit, ensure that the secondary quantity is clearly defined, by location or arealD. For example, a LS/SF Item must be quantified by square foot, for each location.

For Lump Sum pay items with a LS secondary unit, the work and materials must be clearly identified by location. Detail the quantities of all items of work, to provide the contractor with sufficient information to bid the total work. As with all pay items, do not include non-quantifiable or contingency items within a Lump Sum item.

Do not include initial contingency or do not bid items on this summary box; these are not for the contractor's use.

		Summa	ry of Lump Sun	items				
Pay Item	Pay Item Description	Units of	Qua	ntity	Total Qu	antity	Design Notes	Construction Remarks
Number	Pay item Description	Measure	P	F	P	F	Design Notes	Construction Remarks
***	¥.							
22	<b>*</b>				i i			

### 3. Summary of Temporary Traffic Control Plan Items (TTCP)

102: Traffic Control

Examples, Return to Summary Box List

This form is intended for use with most Traffic Control Items. However, Temporary Driveways, Temporary Crash Cushions, and Temporary Signalization and Detection have separate summary boxes, and are not included on the Summary of TTCP.

Quantities for Each and Each Day items MUST be a whole number. See <u>examples</u> for items needed less than the full phase duration.

Information such as total days or number of applications should be added to Design Notes column.

This table is used for temporary pavement markings (paint) and RPMs for MOT quantities. See the Summary of Signing and Pavement Markings for Final Surface Pavement Markings (pay item 710-90).

For MOT Items not based on time or days, the duration column may be blank.

Do not include temporary fencing, sodding, or erosion control devices under MOT lump sum; See the BOE details for 550, 570, and 104 pay items.

		Su	mmary of Tem	porary Traffic	Control Plan Ite	ms				
Pay Item	Pay Item Description	Units of	Duration	Qua	ntity	Total C	Quantity	Location	Design Notes	Construction Remarks
Number	ray item bescription	Measure	(Days)	P	F	P	E	Const. Phase	Design Notes	Consudction Remarks
ere:	**									
44C										

#### 4. Summary of Special Detours

102: Traffic Control

Examples; Return to Summary Box List

This form is intended for use with Pedestrian and Vehicular Special Detours. DO NOT include these pay items on the Summary of Temporary Traffic Control Plan Items.

Locations for each Special Detour MUST be shown in the plans. Secondary units for all locations must be shown.

						Sun	mary of	Special D	etours										
Pay Item	2 5 6 70	Units of			Qua	intity	Total G	uantity	Secon	ndary Qu	uantity	1		Locat	ion			L v.	Construction
Number	Pay Item Description	Measure	Length (FT)	Width (FT)	Р	F	Р	F	Units	Р	F	Const. Phase	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Remarks
-		i i				_													
int.																			
		- 1																	ľ

### 5. Summary of Temporary Highway Lighting

102: Traffic Control

Examples; Return to Summary Box List

This form is intended for use with Temporary Highway Lighting, in accordance with the BOE details. DO NOT include these pay items on the Summary of Temporary Traffic Control Plan Items.

Locations MUST be shown in the plans. This is a Lump Sum/Each item; secondary units for all locations, by phase, must be shown.

					15	Summary	of Tempor	rary Highw	ay Lightin	g							
Pay Item		Units of	Qu	antity	Total Q	uantity	Seco	ondary Qu	antity		L.	Loca	tion	A44			Construction
Number	Pay Item Description	Measure	Р	Ι,	Р	F	Units	Р	F	Const. Phase	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Remarks
2001										į.				į.			
#30																	
***																	

### 6. Summary of Temporary Driveways

102: MOT- Temporary Driveways

Examples; Return to Summary Box List

This form is intended to summarize the locations for Temporary Driveways, and quantity needed for Commercial Material. DO NOT include this pay item on the Summary of Temporary Traffic Control Plan Items.

					Summary of	Temporar	y Drivewa	ys								
Pay Item		Units of			Thickness	Qua	ntity	Total G	uantity			Location	14			Construction
Number	Pay Item Description	Measure	Length (FT)	Width (FT)	(IN)	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Remarks
ing.																

### 7. Summary of Pedestrian Longitudinal Channelizing Devices

102: Traffic Control

Examples, Return to Summary Box List

This form is intended for use with Pedestrian LCDs, in accordance with the FDM.

DO NOT include these pay items on the Summary of Temporary Traffic Control Plan Items. Locations MUST be shown in the plans, per the FDM.

				Summary o	f Pedestriar	Longitudin	al Channeli	zing Devices	Ç H					
Pay Item		Units of	Qua	intity	Total C	Quantity			Loc	ation				
Number	Pay Item Description	Measure	Р	F	P	F	Const. Phase	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
+														
				ĵ.					]					
ee :														

#### 8. Summary of Temporary Crash Cushions

102: Temporary Crash Cushions

Examples; Return to Summary Box List

This form is intended for use with Temporary Crash Cushions. Details must be provided for each location. DO NOT include this pay item on the Summary of Temporary Traffic Control Plan Items.

	*				Summa	ry of Tem	porary C	rash Cus	hions									
					Length	Width	Qua	ntity	Total 0	Quantity			Local	ion				
Pay Item Number	Pay Item Description	Units of Measure	Work Zone Speed (MPH)	Test Level (TL-2 or TL-3)	Restriction (FT)	of Hazard (IN)	Р	F	Р	F	Const. Phase	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
																		0

### 9. Summary of Temporary Signalization & Detection

102: Traffic Control

Examples; Return to Summary Box List

This form is intended for use with Temporary Signalization, as well as maintenance of Existing Signalization. DO NOT include these pay items on the Summary of Temporary Traffic Control Plan Items.

The Design Notes column may be used to identify the intersections by street names/numbers, as needed.

			Summ	ary of Tempo	orary Signaliza	ation and Det	ection					
			Existing (E)			Qua	ntity	Total C	uantity	Location		
Pay Item Number	Pay Item Description	Units of Measure	or Temp/New (T)	Number Required	Duration (Days)	Р	F	P	F	Const. Phase	Design Notes	Construction Remarks
<del>1</del> 66												
-14			ľ									

### 10. Summary of Erosion and Sediment Control Devices

104: Erosion Control

Examples; Return to Summary Box List

This form is intended for use with Erosion and Sediment Control Devices. Summarize quantities by location.

			Sum	mary of Eros	sion Control	and Sedime	nt Control De	vices					
Pay Item		Units of	Qua	ntity	Total G	uantity			Location			distribution and a second	
Number	Pay Iteny Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
149													
***						0.							

### 11. Summary of Litter Removal and Mowing

107: Litter Removal and Mowing

Examples; Return to Summary Box List

This form is intended for use with Litter Removal and Mowing. The specification defines the area/limits that should be included for each pay item. Each area must be separately identified/summarized by location. Phases may be combined, if no area/quantity changes are needed.

This Summary Box may extend multiple plan sheets for projects with many small areas, such as urban areas with or without utility mowing strips, sidewalks, and driveways.

Effective July 2021 lettings: See the 107-pay items for updated area guidance.

			Sum	mary of Eros	sion Control	and Sedime	nt Control De	vices					
Pay Item		Units of	Qua	ntity	Total C	uantity			Location				
Number	Pay Itemy Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
***													
650													
-													

### 12. Summary of Monitor Existing Structures

108: Monitor Existing Structures

Examples: Return to Summary Box List

This form is intended for use with Monitor Existing Structures. The specification defines the area/limits that should be included for each pay item. Do NOT include structures covered under Article 108-2 of the specifications. This box is intended to identify additional locations that may require monitoring outside the limits defined in the specifications (108-1). All locations for pay items 108-2 and 108-3 should be included in the summary box. Place X's in the quantity column and show the total at the bottom as 1.

For Lump Sum projects with no structures outside of the specification limits, it is possible to have an "empty box", with only the pay item 108-1 column. This empty box will serve as notice that monitoring is needed within the specification limits. Additional <a href="mailto:examples">examples</a>, including traditional pay item projects, are shown below.

Reviewer/Estimator: The limits in Specification 108-2.1.2 are ONLY for settlement monitoring. ALL Vibration Monitoring and Groundwater Monitoring locations should be shown on the summary box.

		^													
					Summar	y of Monito	r Existing S	tructures							ev.
Pay Item		Pt	Structure	11-24	Qua	intity	Total C	uantity			Location				Construction
Number	Pay Item Description	Type	Usage	Measure	Р	Ę	Р	F	Site No.	Alignment	Begin Station	End Station	Side	Design Notes	Remarks

The note associated with the table is NOT added to the Summary Table. This must be addressed in the project's notes, until other guidance is provided.

**December 2020:** updated guidance is under review. See the 108-pay items for additional guidance.

### 13. Summary of Clearing and Grubbing & Removal Items

110: Removal Items

Examples; Return to Summary Box List

This form is intended for use with roadway items to be removed. For Signalization, Signing, or Lighting, use the appropriate component Summary Table.

This form may be used to detail items to be included under Clearing and Grubbing, LS.

If Clearing & Grubbing, Lump Sum, is used, the quantity for secondary units should be shown in the area column under secondary units. The "P" total should remain 1 LS. Total acres may be shown in the Design Notes column.

				s	ummary (	of Clearin	g Grubbi	ng and R	emoval Ite	ems								
Pay Item	Table Wall Code States	Units of			Qua	ntity	Total C	uantity	Seco	ndary Qu	antity		- 1	Location				Construction
Number	Pay Item Description	Measure	Length (FT)	Width (FT)	Р	F	Р	E	Units	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Remarks
	1989										Ď.							
	k																	
				Ī							ij							

### 14. Summary of Mailboxes

110: Mailboxes

Examples; Return to Summary Box List

This form is intended for use with mailboxes.

					Summary o	f Mailboxes							
Pay Item		Units of	Qua	intity	Total Q	uantity			Location			2000 000 0	
Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
***													

### 15. Summary of Earthwork

120: Earthwork

Examples, Return to Summary Box List

This form is intended for use with all earthwork items. For earthwork items with SY units of measure, add column pair with P and F columns.

Expanded area calculations may be included with quantity calculations on additional worksheets. See CADD guidance for shapes and documentation by alignment.

					Summary of	f Earthworl	k						
Pay Item		Units of	Qua	intity	Total Q	uantity			Location	8			1111
Number	Pay Item Description	Measure	P	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
44													

#### 16. Summary of Geotechnical Items

140s and 400s: Geotechnical

Examples, Return to Summary Box List

This form is intended for use with Geotechnical Items. Design Notes column may be used to refer to Technical Special Provisions, as applicable, to clarify quantities shown on the summary box.

				Sur	mmary of Ge	otechnical l	tems						
Pay Item		Units of	Qua	ntity	Total C	uantity	1		Location	v	101		ľ
Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
444		•											

#### 17. Summary of Driveway Base

286: Summary of Driveway Base- base material Examples; Return to Summary Box List

This form is intended for use with Driveway Base. Refer to pay item and specification for details. Note: Specification Section title was changed.

For concrete turnouts/driveways, see the Summary of Permanent Driveways or Summary of Sidewalk & Detectable Warnings.

The asphalt surface course (Superpave) is paid separately under 334-Asphalt. The asphalt quantities may be shown on the Summary of Permanent Driveways or Summary of Pavement.

				S	Summary of E	riveway Ba	se						
Pay Item		Units of	Qua	ntity	Total Q	luantity		0	Location				
Number	Pay Item Description	Measure	P	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
ana .	60				Ĵ					e e			
	8												

### 18. Summary of Pavement

160s, 200s, 300s, 520s, and 546s: Pavement- patterned pavement or architectural pavers, rumble strips.

Examples; Return to Summary Box List

This form is intended for use with permanent asphalt and concrete pavement, including patterned/textured pavement. For asphalt driveways, the quantity may be shown on this summary box, or the Summary of Permanent Driveways. When driveways are shown on this summary box, add "Driveway" to the description column for each location.

For quantities summarized on the Summary of Permanent Driveways, add a row to this summary box to indicate the total from the former box.

DO NOT break this summary box into separate boxes for each pay item. Follow rules for continued boxes, as needed.

When overbuild is used, show overbuild quantities separate from structural quantities. Add "Overbuild" to the Design Notes column for each location. Do NOT create any other overbuild quantity summary box in the plans. See FDM 306 for overbuild details required. Refer to 334- pay item group for additional details.

					Sum	mary of Pa	vement							
Pay Item	_	Units of	Qua	ntity	Total G	Quantity	I .		Loc	eation				ľ
Number	Pay Item Description	Measure	Р	F	P	F	Alignment	Begin Station	End Station	Location Description	Side	Element ID	Design Notes	Construction Remarks
-17														
"														
***														

### 19. Summary of Miscellaneous Asphalt Pavement

339: Miscellaneous Asphalt, per TN Examples; Return to Summary Box List

This form is intended for use with Miscellaneous Asphalt Pavement, including under guardrail, bicycle paths, and median pavement. Do not use this pay item for Special Detours or other temporary asphalt applications.

		741			Summary o	f Miscellane	ous Aspha	lt.						See a se
Pay Item		Mails of	Thickness	Qua	intity	Total C	Quantity			Location				-
Number	Pay Item Description	Measure	(IN)	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
474														
_														
-112 -112														

### 20. Summary of Box Culverts

400s: Box Culverts, Reinforcing Steel <u>Examples</u>; <u>Return to Summary Box List</u>

This form is used for Box Culverts less than 20'.

Bridge Culverts (20' and greater) use the Summary of Structure Quantities, with the bridge number in the summary box heading.

					Summary of	Box Culvert	s						
Pay Item		Units of	Qua	ntity	Total G	uantity			Location				
Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks

# **21. Summary of Drainage** (formerly Summary of Side Drain & Mitered End Sections) *430: Drainage*

Examples, Return to Summary Box List

These forms are intended for use with Sidedrain and Mitered End Sections. Either form may be used, as needed (with or without flowlines).

NEW, January 2021: This form replaces previous Summary of Trench Drain, Summary of Underdrain, Summary of French Drain, and Summary of Edgedrain.

Due to space constraints, pay items are not normally shown on Summary of Drainage Structure sheets. DO NOT add pay items to this summary box. Do NOT add a column for sod; use the Summary of Performance Turf.

For miscellaneous drainage work, the Summary of Miscellaneous Drainage Items may be used.

Columns for unused sizes or shapes may be removed. Additional sizes may be added.

					Sum	mary of Drai	inage							
Pay Item			Units of	Qua	ntity	Total G	uantity			Location		. 1		
Number	Label	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
												į į		
pan.														

### 22. Summary of Utility Adjustments

425: Manholes & Inlets

Examples; Return to Summary Box List

Work being completed under the roadway project (-52 project number) will be shown in the roadway plans on the Summary of Utility Adjustments. This is normally limited to utility adjustment for milling, pay items 425-4, 425-5-A, and 425-6.

Work being completed under the JPA (-56 project) will be shown in the utility component plans with a tabulation sheet. DO NOT USE this form for utility component plans.

					Sum	mary of Dra	inage							
			Units of	Qua	intity	Total C	uantity			Location				
Pay Item Number	Label	Pay Item Description	Measure	Р	F	P	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
1														
***														

### 23. Summary of Miscellaneous Drainage Items

430: Drainage- Miscellaneous items <u>Examples</u>; <u>Return to Summary Box List</u>

This is an optional form; it is intended for use with Miscellaneous Drainage Items or on projects with minimal drainage work, i.e. replacing broken inlet tops or moving structures to accommodate added turn lanes, etc.

Use this form ONLY when items cannot be included on Summary of Drainage Structures or Summary of Side Drain & Metered End Sections. Do NOT include in multiple locations.

Do not modify this form to duplicate Summary of Drainage Structures columns. If additional columns are needed, use Summary of Drainage Structures sheet.

For additional information of the Summary of Drainage Structures sheet, see the Plans Preparation Manual, Volume 2, Chapter 8/FDOT Design Manual 308.

			er.	Summar	y of Miscella	neous Drain	age Items						
Pay Item		Units of	Qua	ntity	Total C	uantity			Location				
Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
-													
140													

### 24. Summary of Railing

460, 515: Railings

Examples, Return to Summary Box List

This form is intended for use with Metal Railings.

			k		Summary	of Railing							
0		Units of	Qua	intity	Total C	luantity			Location				1
Pay Item Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
-													
													1
449													

#### 25. Summary of Curbs

520s: Curb & Gutter, Traffic Separator <u>Examples</u>; <u>Return to Summary Box List</u>

This form is intended for use with Curb: curb and gutter, curb elements, and/or Traffic Separators.

					Summary	of Curbs							
Day New		Units of	Qua	ntity	Total Q	uantity	ļ	-	Location				
Pay Item Number	Pay Item Description	Measure	P	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
-													
***										1			
H													

### 26. Summary of Permanent Barriers, formerly "Barrier Wall" and "Concrete Barrier"

521: Concrete Barrier

Examples, Return to Summary Box List

Reviewers: Either table description is acceptable through June 2020 lettings; projects let July 2020 and later must use new table.

This form is intended for use with Permanent Barrier. Gravity Walls should use Summary of Walls.

				Sui	mmary of Per	manent Bar	riers						
Pay Item		Unitsof	Qua	intity	Total G	uantity			Location				ľ
Number	Pay Item Description	Measure	Р	F	P	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
		Į.	Ĭ.							Ĭ.			
***													
***													

### 27. Summary of Permanent Driveways

334 or 522: Permanent Driveways

Examples, Return to Summary Box List

This is an optional form, and is intended for use with Permanent Driveways.

Permanent Concrete Driveways may be summarized on the Summary of Sidewalk & Detectable Warnings summary box.

Permanent Asphalt Driveways may be summarized on the Summary of Pavement.

DO NOT duplicate quantities by location on multiple summary boxes. For quantities summarized on this box, add a row to the Summary of Pavement (Asphalt) or Summary of Sidewalk (Concrete) to indicate the total from this box. See examples.

Identify each driveway, by location.

				Sum	mary of Pern	nanent Driv	eways						
Pay Item	Contract was a series of	Units of	Qua	ntity	Total G	luantity			Location			9-20- 60 Photos	
Number	Pay Item Description	Measure	P	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
4													
***													

### 28. Summary of Sidewalk & Detectable Warnings

522 and 527: Sidewalk

Examples; Return to Summary Box List

This form is intended for use with Sidewalk. Columns for bus pads may be deleted, if unused. Each detectable warning location/areaID must be listed, with the appropriate area.

For concrete driveways, the quantity may be shown on this summary box (as 6" sidewalk/driveways), or the Summary of Permanent Driveways. For quantities summarized on the Summary of Permanent Driveways, add a row to this summary box to indicate the total from the former box. See examples.

						SUM	MARY O	F SIDE	WALK & D	DETECTAB	LE WARN	INGS				
LOCATION					CONC S	IDEWALK	CONC S	IDEWALK	BUS BAY / PAD - C	BOARD I NG CONCRETE	BUS SI PAD - C	HELTER CONCRETE	DETEC WARN	TABLE INGS	255.50	
	SIDE	AREA ID	LENGTH	WIDTH	052	2 1	052.	2 2	052	2 3	052	2 4	052	7 2	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	1	10			5	Υ	5	Υ	5	Υ	5	Υ	5	F	1 10723	NEW MAN
SIA. IO SIA.					Р	F	Р	F	Р	F	P	F	P	F	1	
			SU	B-TOTAL:												
				TOTAL:												

### 29. Summary of Ditch Pavement

524 and 530: Ditch Pavement and Riprap Examples; Return to Summary Box List

This is an optional form; it is intended for use with Ditch Pavement and Riprap. Quantities may be included on Summary of Drainage Structures.

Note: removal of existing ditch pavement is shown on the Summary of Clearing and Grubbing & Removal.

				S	ummary of D	itch Pavem	ent						
Pay Item		Units of	Qua	ntity	Total G	luantity			Location	-			
Number	Pay Item Description	Measure	Р	F	P	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
***													
114					in .				ĺ				
414													

#### 30. Summary of Walls

400, 534, etc.

Examples, Return to Summary Box List

This form is intended for use with Noise Walls, MSE walls, Perimeter Walls, Gravity Walls, and Retaining Walls. Barrier Walls should be included on the Summary of Permanent Barrier Walls.

Sheet piling associated with a structure is shown on the Summary of Structure Quantities. Sheet piling not associated with a structure is shown on the Summary of Walls.

Do NOT include rails on this summary box. Use the separate Summary of Railing.

	c	70			Summar	of Walls							
Pay Item	FORTING AND MARKET	Units of	Qua	ntity	Total G	uantity			Location		to.	1.67 00 00000	
Number	Pay Item Description	Measure	Р	F	P	F	Wall No.	Alignment	Begin Station	End Station	Side	Design Notes	Construction Remarks
144			j .										
200													
-									j j				

#### 31. Summary of Guardrail

536: Guardrail

Examples; Return to Summary Box List

This form is intended for use with Guardrail. Refer to pay item details for use with Thrie Beam guardrail. For removal of Guardrail, add a column to this summary box for 536-73.

					Summary o	of Guardrail							
Pay Item		Units of	Qua	ntity	Total G	uantity			Location				
Number	Pay Item Description	Measure	P	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
act i													
344													
***			li i					i i					

#### xx. Summary of Cable Barrier (Pending)

540: Cable Barrier (also Developmental Item 904-540-A)

Examples, Return to Summary Box List

See Roadway Design Bulletin/Instructions for Developmental Design Standard/ Developmental Standard Plans Instructions for required table.

#### 32. Summary of Permanent Crash Cushions

544: Crash Cushions

Examples: Return to Summary Box List

NOTE: New summary box, in accordance with SPI 544-001, will is available for projects let July 2019 and later in the CADD software.

This form is intended for use with Permanent Crash Cushions. Details must be provided for each location.

Ţ.	7			1 10	Summary	of Perman	ent Crash (	Cushions	100						
Pay Item	1000 Day 2000 Day	Units of	Length	Width of	Qua	ntity	Total G	uantity			Location				Construction
Number	Pay Item Description	Measure	Restriction (FT)	Barrier (IN)	P	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Remarks
100						è				ľ					
400															
110				, j	Ü					Ĭ	ĺ				

#### 33. Summary of Fencing

550: Fencing

Examples, Return to Summary Box List

This form is intended for use with all types of Fencing. Summarize quantities by location.

Temporary fencing is incidental to permanent fencing. See the specification and additional information for 550-10-xx for additional information.

					Summary	of Fencing							
Pay Item		Units of	Qua	ntity	Total G	uantity			Location		70		ľ
Number	Pay Item Description	Measure	P	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
<u>a</u>								į.					

### 34. Summary of Performance Turf

570, 571: Turf

Examples, Return to Summary Box List

This form is intended for use with both "Performance Turf" and "Performance Turf-Sod", as well as the Prepared Soil Layer.

When applicable, include a row for performance turf: "Subtotal from Summary of Drainage Structures".

Prepared Soil Layer valid through June 2019 lettings. Refer to 570- items for details.

		· · ·	> ~	Sun	nmary of P	erformano	e Turf		14						
Pay Item		Units of		B10000 201000 00100	Qua	ntity	Total C	Quantity			Location				Construction
Number	Pay Item Description	Measure	Length (FT)	Width (FT)	P	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Remarks
***															
														į.	

### 35. Summary of Traffic Monitoring Site Items

695: Traffic Monitoring

Examples, Return to Summary Box List

This form is ONLY intended for use with Transportation Statistic Office's Traffic Monitoring Sites. For Traffic Ops or MCSAW Traffic Monitoring Sites, refer to the correct 600-series or 700-series pay items for documentation.

				Summa	ry of Traffic I	Monitoring S	ite Items						
		Units of	Qua	ntity	Total G	uantity	j j		Location				
Pay Item Number	Pay Item Description	Measure	Р	F	P	F	Site No.	Alignment	Begin Station	End Station	Side	Design Notes	Construction Remarks
Ē.					Į.		2.5	į.					
1													10

### 36 Summary of Utilities

U1000: Utility Work

Examples; Return to Summary Box List

This form is intended for use with Utility Work.

					Summary of	Utiltiy Items	5						
Pay Item		Units of	Qua	ntity	Total G	uantity			Location		. 1		
Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
114													
***													

### 37. Summary of Structures, Bridge xxxxxx

400s: Structures

Examples, Return to Summary Box List

This form is intended for use with 400s: substructure or superstructure items, as well as related bridge items. It is normally included in the structures component plans. See 8-3 above.

Incidental quantities that would normally be shown on another component (i.e. signals and gates for movable bridge) may be shown on the Summary of Structure Quantities, when the other components are not included in the plan set.

Retaining Walls and Gravity Walls should be shown on the Summary of Walls. Refer to the Structures Detailing Manual for additional guidance.

Barrier Walls should be shown on the Summary of Permanent Barrier Walls.

Sheet piling associated with a structure is shown on the Summary of Structure Quantities. Sheet piling not associated with a structure is shown on the Summary of Walls.

				Sur	mmary of Str	ucture Quant	ities						
	Pay Item	_	Units of	Qua	intity	Total C	uantity	Sec	ondary Qua	ntity	Location		T .
Section	Number	Pay Item Description	Measure	Р	F	Р	F	Units	Р	F	Location Description	Design Notes	Construction Remarks
	***												
1						e i.				i .			
	e16)												

### 38. Summary of Landscaping

580: Landscape Items

Examples; Return to Summary Box List

This form is intended for use with Landscape Items.

Summarize items by pay item and location. For small/large plant pay items, include

plant names and sizes. Note all incidental items to be included. For irrigation system, include pipe sizes and lengths, as well as sprinklers and other fixtures.

					Su	mmary of L	andscape it	ems							
Pay Item			Max.	Units of	Qua	intity	Total G	uantity	Sec	ondary Qua	ntity	Los	ation	-	Construction
Number	Label	Pay Item Description	Maint. Size	Measure	P	F	Р	F	Units	P	F	Site No.	Location Description	Design Notes	Remarks
											j.				
645											Ų.				
															i.

### 39. Summary of Signalization

600s: Signals

Examples; Return to Summary Box List

This form is intended for use with Signals and/or ITS Items

Summarize items by pay item and location.

Note: See conduit pay items for additional required plan details.

				Summar	y of Signalizat	ion Items						
Pay Item		Units of	Qua	ntity	Total Q	uantity		Loc	ation			
Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Design Notes	Construction Remarks
***												
								į				
***												

### 40. Summary of Intelligent Transportation System (ITS)

600s: Signals

Examples; Return to Summary Box List

This form is intended for use with ITS Items. This form may be used with a Summary of Signalization. If combining ITS and Signalization items, use Summary of Signalization.

Summarize items by pay item and location.

Note: See conduit pay items for additional required plan details.

			Summ	ary of Intellig	ent Transport	ation System	s Items					
Pay Item	Units of Quantity Total Quantity Location											
Number	Pay Item Description	Measure	Р	F	P	F	Alignment	Begin Station	End Station	Side	Design Notes	Construction Remarks
***												
aid.												
***												

### 41. Summary of Signing and Pavement Marking

700s: Signing

Examples; Return to Summary Box List

This form is intended for use with Signing and Pavement Marking Items

Summarize items by pay item and location. See pay item 710-90, for updated guidance; details for this LS pay item will not be shown on the summary table.

				Summary	of Signing a	ind Paveme	nt Marking						
Pay Item		Units of	Qua	ntity	Total G	luantity			Location				
Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Element ID	Design Notes	Construction Remarks
-													
***													
200													

### 42. Summary of Lighting

715: Lighting

Examples; Return to Summary Box List

This form is intended for use with Lighting Items.

Summarize items by pay item and location.

Note: See conduit pay items for additional required plan details.

			_	Summ	ary of Lightin	g Items					175	
0		Units of	Qua	intity	Total C	luantity		Loc	ation			
Pay Item Number	Pay Item Description	Measure	Р	F	Р	F	Alignment	Begin Station	End Station	Side	Design Notes	Construction Remarks
414												
								Ĭ.				
44												

### 8.5 Tabulation of Quantities

Tabulation sheets in the plans are no longer used with the Estimated Quantities Report.

### 8.6 Pay Items with No Form Required

### Maintenance Item- No Form Required

000: Maintenance

NO BOX OR FORM: Maintenance pay items do not require any specific form or summary box.

### NA: No applicable form/Form not needed

000: No applicable form

NO BOX OR FORM: DO NOT BID and "special" pay items do not require any summary box or form.

### 8.7 Lump Sum Contracts

Projects or Contracts using pay item 999-2 will continue to require detailed quantities, by location, for work shown in the plans. Complete the summary boxes or tabulation sheet(s), similar to traditional pay item projects. Do not include the total quantity.

For example, Roadway guardrail is summarized by location from station A to B as 250', station C to D as 300', and station E to F as 500'; do not provide pay item number 536-1-1 or the total quantity.

Pay item numbers are not needed on Summary Boxes or Tabulation sheets for Lump Sum Contracts, but may be used to describe work to be completed. When pay items are included, a note is added to the Summary of Pay Items sheet, per the Plans Preparation Manual/FDOT Design Manual 140:

999-2 Lump Sum Contract: All other Pay Item numbers shown in the Contract Plans are provided only for the purpose of describing the work to be performed. Pay item descriptions are found in the Department's Basis of Estimates Manual." The above note should be used once. Do not repeat the note on any SQ sheets. The 999-2 pay item is not shown on a Summary Box.

### 8.8 Pay Item Request Form

#### **PAY ITEM REQUEST**

600-000-02

Note: This form is optional; required information may be sent via e-mail, per Chapter 6. This form is used by designers and consultants when a project requires the use of a pay item that is not defined in the pay item structure. Refer to Chapter 6 for more details.

### **Chapter 8 Revision History-**

**5-5-21:** Updated Summary of Signing and Pavement Marking: Updated requirements for 710-90- Final Surface Markings, LS, per pay item details.

**2-2-21:** Updated Summary Table titles and order, to coordinate with the latest CADD release. Ongoing coordination with the CADD Office.

**11-1-20:** Updated header dates for 2021 edition. Separate "Summary Table" information for FDM 2121 projects in this file. Instructions for "Summary Boxes", valid for FDM 2020 projects, are in a separate Chapter 8 posting.

1-24-20: Updated Summary Box numbering. Added Summary of Special Detours.

**11-1-19:** Updated header dates for 2020 edition. Noted pending change for Special Detours.

**11-1-18:** Updated header dates for 2019 edition. Added Summary of Temporary Highway Lighting. Added Summary of Pedestrian Special Detours, Summary of Pedestrian Channelization Devices. Renumbered summary boxes.

**2-20-18:** Expanded 8-1 to clarify limitations for custom summary boxes.

8-1, Expanded information regarding use of the Design Notes Column.

8-3, List of Summary Boxes- added Summary of Temporary Longitudinal Channelization Devices. Renumbered remaining summary boxes.

Summary of Lump Sum Items- added text to require summary of quantities based on secondary units.

Summary of Temp Traffic Control...- Added text to require whole numbers for EA and ED items, to prevent "reverse calculation" of quantities. Also clarified summary of MOT and final surface paint.

Summary of Temp Signalization- Added text to allow/recommend design notes column to identify intersections.

Summary of Temporary Longitudinal Channelization Devices- new summary box added. Summary of Permanent Barriers (formerly Barrier Wall)- Updated title based on specification and standard index terminology change.

8-3.3 Added text for plans with multiple projects.

Throughout chapter: for existing PPM references added FDM references.

**11-1-17**: Updated header dates for 2018 edition. Removed introductory text for Summary Box implementation.

### 7-6-17: Minor updates:

- Clarified text for roadway pay Items on projects without Roadway component plans.
- Added text to clarify contingency items vs. overruns/adjustments.
- Summary of Lump Sum Items: Clarified usage note.
- Summary of Earthwork: Added guidance for pay items with SY units.
- Summary of Sidewalk: Deleted note for removal of sidewalk. See details for 522items.

**4-11-17:** Added note to prohibit custom/project specific summary boxes.

**2-2-17:** Added notes for Monitor Existing Structures. Added instructions and example for Temporary Traffic Control Devices with different durations within a phase.

11-1-16: Updated header dates for 2017 edition.

- Summary of Clearing and Grubbing & Removal Items: Updated title, replaced graphic.
- Summary of General Items: removed old note.
- Summary of Box Culverts: Clarified instructions for bridge culverts.
- Summary of Performance Turf: Removed note regarding Temporary Sod. Future guidance pending.
- Summary of Traffic Monitoring Site Items: added graphic.
- Examples: Added text to clarify some of the correct/incorrect features.

**6-8-16:** NO policy or instruction changes were made. Corrected title of "Traffic Monitoring Site". Updated examples. Added Landscape Soil details.

1-28-16: Updated entire Chapter for 2016 edition.

- Header: Updated header dates.
- o 8-1: Expanded 3<sup>rd</sup> paragraph to include calculation note.
- 8-2: Clarified that empty columns/rows do not need to be deleted. Added reminder to keep Construction notes column reserved for construction use (not used by designer). Added note to restrict added subtotals.
- 8-3: Clarified sheet numbering. Updated PPM reference. Converted list to table.
   Added hyperlinks to sample box and examples.
- 8-4: Added "and Instructions" to article heading. Added note regarding examples.
- 8-5 through 8-8: Corrected article numbering.
- 8-5: Expanded text to clarify calculations. Added PPM reference for sheet numbering.
- Summary of General Items: updated guidance. Removed reference to Traffic Monitoring due to new summary box.
- o Summary of Special Detour Quantities: Summary Box removed; no longer valid.
- Summary of Monitor Existing Structures: New Summary Box, per bulletins and 2016 PPM. Note change from "Protection of Existing Structures" to "Monitor Existing Structures".
- Summary of Removal Items: Clarified note for LS item.
- o Summary of Geotechnical Items: Clarified note for specification reference.

- Summary of Turnouts: Clarified guidance for showing surface course.
- Summary of Pavement: Clarified guidance for driveways and overbuild.
- Summary of Misc Asphalt Pavement: Removed obsolete note.
- Summary of Sidedrain & MES: updated guidance for Sod/Turf, added reference to PPM, and added note for updated summary box.
- Summary of Sidewalk & Detectable Warnings: Clarified guidance for driveways.
- Summary of Permanent Driveways: Clarified guidance for asphalt driveways.
- Summary of Traffic Monitoring Items: Sample summary box is pending.
- Added Examples & links for all summary boxes. Additional populated examples will be added as they become available.
- Landscape tabulation of Quantities: This tabulation sheet may include the plant
- **8-20-15:** Added Summary Box Examples to end of chapter. Added note above 8.1 Introduction. Formatted 8-3 table for Summary Box Order, to include hyperlinks within chapter to instructions and examples for each summary box.
- **8-6-15:** Added text to 8.1 Introduction, to address 5 day language for response to quantity questions from Construction. This text was previously located in the *Computation Methods for Design, Construction, and Final Estimates Handbook.* Added text to Summary of Miscellaneous Drainage Items, Summary of Side Drain and Mitered End Sections, Summary of Trench Drain, Summary of Underdrain, and Summary of French Drain, to clarify usage and avoid duplication of quantities.
- **4-28-15:** Added details to Summary of Pavement, to require overbuild quantities to be shown separately from structural quantities. Removed reference to Field Office from Summary of General Items. Removed reference to Special Detours from Summary of Temporary Traffic Control Plan Items. Added note to keep Summary of Temporary Signalization & Detection separate from Summary of Temporary Traffic Control Devices.
- **2-20-15:** Updated note for Summary of Permanent Barrier Wall, to address 521-8 items. Added Summary of Temporary Signalization to list in 8-3. Marked Summary of Special Detour with strikethrough, due to Estimates Bulletin 14-06. Added Summary of Cable Barrier (Pending).
- **2-10-15:** Updated Summary of Structure Quantities and Summary of Walls with note for Sheet Piling. Replaced Summary of Drainage Structures box. Updated note for Special Detour, per Estimates Bulletin 14-06. Updated Summary of Miscellaneous Asphalt; removed column for Temporary Sidewalk.
- **12-30-14:** Updated header dates for 2015 edition. Removed contact information from header. Updated note in red at top of chapter to refer to revision history. Added text to 8.2 for summary box totals to be shown on the first page, per the CADD templates. Added text to 8.3 for multiple projects let under one contract.
- **10-20-14:** Added note to Summary of Guardrail for removal pay item.
- **10-17-14:** Updated all graphics for the latest Summary Boxes.
- **10-13-14:** Added rumble strips to Summary of Pavement.
- **9-24-14:** Temporary Signalization- updated detail. When the new box with total is used, do not include the total on the Summary of Temporary Traffic Control Plan Items. If the old box is used, the total remains on the Summary of Temporary Traffic Control Plan Items.

- **9-19-14:** Updated details for Summary Boxes, as follows:
  - Temporary Traffic Control Plan Items: Corrected items, based on new boxes.
     Added notes to limit format of summary box. Added note for 710-90 and temporary items.
  - Added Summary of Temporary Signalization and Detection.
  - Litter and Mowing: added notes for areas identified in the plans.
  - Miscellaneous Asphalt Pavement: updated notes to remove temporary asphalt and temporary sidewalk.
  - Utility Adjustments: updated notes to clarify items to be included.
  - Sidedrain and Mitered End Sections: clarified that pay item numbers are not shown, and are not to be added by designer.
  - Sidewalk & Detectable Warnings: clarified note for location/area ID.
  - Sidewalk, Curb, and Ditch Pavement: added note for removal work. Permanent Crash Cushions: Removed note- cadd file is current.
  - o Fencing: Added note for temporary fencing.
  - Performance Turf: Added note for temp sodding.
- **9-19-14:** Update 8.2 to clarify when columns or rows may be added or deleted.
- **9-17-14:** Updated 8.3 to clarify that non-standard tables may not be included with SQ sheets. Changed TABQLT to TABQXX. Added Summary of Temp Signals to list of Summary Boxes.
- **9-16-14:** Updated 8.6 to clarify note location on the Summary of Pay Items.
- 8-28-14: Updated Special Detour to include Temporary Bridge information.
- **8-12-14:** Updated introductory information to remove "Draft" statement.
- **8-7-14:** Updated instructions for Lump Sum projects, to allow pay item numbers, with notice.
- **4-18-14:** Updated instructions based on user comments.
- **3-17-14:** Added instructions for projects with no roadway component.
- 2-26-14: Updated text with additional notes and guidance, per CADD webinar training.
- **3-6-13:** Complete re-write of Chapter, due to change from Comp Book to Plan Summary Boxes. Chapter title changed from "Forms" to "Plan Summary Boxes". Refer to Estimates Bulletin 13-09 for details.
- 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.

Topic No. 600-000-002
Basis of Estimates

### **Summary Table Examples**

These examples are provided to show specific details from the instructions provided above (Chapter 8), as well as pay item specific instructions contained in the details section of various pay items (Chapters 11-20). **The examples are not intended to cover all possible situations.** Please consider the notes associated with the correct/incorrect examples.

Additional examples of correct/incorrect summary tables are welcome and appreciated. Submit files to: <a href="mailto:FDOT-payitems@dot.state.fl.us">FDOT-payitems@dot.state.fl.us</a>

#### **Miscellaneous Errors:**

Do NOT move or delete the total columns or rows. The total for a pay item should be found on either the FIRST row when the items total across, or the FIRST summary box when the items total at the bottom.

#### **Construction Requirements:**

When noting plans revisions, DO NOT use the areas reserved for construction's use, including the Construction Remarks column. In accordance with CADD requirements, do NOT reduce the summary box or font size; this makes it difficult to note construction changes.

#### **General Notes:**

The hyphen in the pay item is acceptable; however, when used, it needs to be consistent throughout the summary boxes. Blank rows used to separate pay item groups, locations, etc. may be helpful for easier reading; this is a designer option.

### **Summary Tables and Estimated Quantities Report:**

The CADD Office has provided new tools for automating much of the quantity and summary table information. The format of automated tables should NOT be modified, as this may impact the generation of the Estimated Quantities Report. Changes from the existing box to new table will be noted within the instructions above.

### 1. Summary of General Items

Instructions, Return to Summary Box List

**Correct:** 

#### Incorrect:

Location information is missing.

	SUMMA	ARY OF GENERAL	TEMS			
PAY ITEM	DAY ITEM DESCRIPTION	LOCATION	UNIT	QUAN	TITY	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	LOCATION	UNII	p	F	REMARKS
0519 78	BOLLARDS		EA	70		
	FIXED - 30					
	REMOVABLE - 9					
	WOODEN - 31					

Do not use the Summary of General Items for component items that belong on a Tabulation Sheet (Signalization, Signing and Pavement Markings, Lighting, etc.)

102-3 belongs on Summary of Temporary Driveways. It does not go with the General Items.

	SUMMA	ARY OF	GENE	RAL	ITEMS	
PAY ITEM NO.	PAY ITEM DESCRIPTION	UNITS	QUAI	TITY	DESIGN	CONSTRUCTION
NO.	PAI TIEM DESCRIPTION	UNITED.	P	F	NOTES	REMARKS
102-3	COMMERCIAL MATERIAL FOR DRIVEWAY MAINTENANCE	CY	7		FOR TEMP_ DRIVEWAY ACCESS	
					AT STA. 110+94.33 TO STA. 111+29.33	

### 2. Summary of Lump Sum Items

Instructions; Return to Summary Box List

**Correct:** This summary box is appropriate for lump sum pay items that do not require location information/station, secondary units, or areaID/dimensions.

	SUMMARY	OF LUMP	SUM ITE	MS	
PAY ITEM	PAY ITEM DESCRIPTION	QUAN	ITITY	DESIGN NOTES	CONSTRUCTION
NO.	PAT TIEM DESCRIPTION	P	F	NOTES	REMARKS
101-1	MOBILIZATION	1			
					11 13
			7 7		N 8

#### Incorrect:

102-1 belongs on the Summary of Temporary Traffic Control Plan Items

110-1-1 belongs on the Summary of Clearing and Grubbing & Removal Items. Location and quantities for secondary units are needed.

				SUMMARY OF LUMP SUM	ITEMS			
PAY ITEM	UNIT	SECONDARY	AREA ID	PAY ITEM DESCRIPTION	QUANTI	ITY	TOTAL	CONSTRUCTION
NO.	UNIT	UNIT	AKEA IU	PAT TIEM DESCRIPTION	P	F	TOTAL	REMARKS
0101 1	LS			MOBILIZATION	1		10	
0102 1	LS			MAINTENANCE OF TRAFFIC	1		1	
0110 1 1	LS	AC	153189	CLEARING & GRUBBING	1/ (30.05AC)		1/ (30.05AC)	

Topic No. 600-000-002

2021 Edition
Basis of Estimates

as of May 5, 2021

### 3. Summary of Temporary Traffic Control Plan Items (TTCP)

Instructions; Return to Summary Box List

### **Correct (New table format):**

#### **Correct (Old format):**

102-78 Temporary Retroreflective Pavement Markers used for MOT are included in this summary box.

See specification changes effective July 2021; payment is separated for Type B and Type D RPMs.

102-14 Traffic Control Officer (contractor's use for MOT) is included by phase in this summary box.

PAY ITEM		0.0029999	10	PHASE I		F	HASE 11		TO	TAL	DESIGN	CONSTRUCT ION
NO.	PAY ITEM DESCRIPTION	UNIT	DURATION	QUANTITY	TOTAL	DURATION	<b>OUANTITY</b>	TOTAL			NOTES	REMARKS
			DAYS	ρ	P	DAYS	P	P	P	F	1	MATCH AND THE CO.
102-1	MAINTENANCE OF TRAFFIC	1.5				7 137.400.4			1		500 CONSTRUCTION DAYS	
102-2-1	SPECIAL DETOUR - DIVERSION I	LS		1	1	3	3		1			
2102-2-2	SPECIAL DETOUR - DIVERSION 2	LS					12.	(2	(1)			
7102-14	TRAFFIC CONTROL OFFICER	MH			2	Ē.	0.00	- 2	4		3	
7102-60	WORK ZONE SIGN	ED	300	23	6.900	147	23	3.381	10,281			
7102-61	BUSINESS SIGN	ED	300	3	900	147	3	44)	1.341			
7102-71-11	TEMPORARY BARRIER WALL	LF		564	564				564			
7102-74-1	CHANNELIZING DEVICE, TYPES I, II, DI, VP, Drum, DR LCD	ED	300	560	168,000	147	437	64,239	232,239			
1102-74-2	CHANNELIZING DEVICE. TYPE 111, 6'	ED	300	10	3.000	147	10	1,470	4,470		1	
102-76	ARROW BOARD / ADVANCE WARNING ARROW PANEL	ED	300	2	600	147	2	294	894		9	
2102-78	TEMPORARY RETROREFLECTIVE PAVEMENT MARKER	£4		1187	1,187		649	649	1.836			
7102-99	PORTABLE CHANGEABLE MESSAGE SIGN - TEMPORARY	ED	307	4	1.228	147	2	294	1.522		INCLUDES 7 DAYS PRIOR	
0102-911-2	REMOVABLE TAPE PAVEMENT MARKING - WHITE / BLACK	LF		521	521				521			
7710-11-101	PAINTED PAVEMENT MARKINGS, STD, WHITE, SOLID, 6"	NM:		5.337	5.337	1	5.337	5.337	11			
2710-11-102	PAINTED PAVENENT MARKINGS, STD. WHITE, SOLID 8°	GM		1.531	1.531	2	1.531	1.531	3			(X
7710-11-123	PAINTED PAVENENT MARKINGS STD. WHITE, SOLID 12"	LF		1.636	1,636	Ų.	1,636	1.636	3,272			
7710-11-124	PAINTED PAVEMENT MARKINGS, STD, WHITE, SOLID, 18"	LE		3,259	3.259	i i	3.259	3.259	6.518		1	
7710-11-125	PAINTED PAVEMENT MARKINGS, STD, WHITE, SOLID, 24"	LF		1,733	1.733		1,733	1.733	3,466			
2710-11-131	PAVEMENT PAVEMENT MARKINGS, STD. WHITE, SKIP 10-30 OR 3-9 SKIP, 6" WIDE	GM		3.935	3.935		3.935	3.935	8			
7710-11-141	PAINTED PAVEMENT MARKINGS, STD, WHITE, DOTTED, GAP EXTENSION 6"	GM		2.128	2.128		2.128	2.128	- 4			
710-11-160	PAINTED PAVEMENT MARKINGS, SRD, WHITE, MESSAGE OR SYMBOL	EA		23	23		23	23	46			
7710-11-170	PAINTED PAVEMENT MARKINGS. STD, WHITE. ABROWS	EA		69	6.9		69	69	138			
7710-11-201	PAINTED PAVEMENT MARKINGS, STD, YELLOW, SOLID, 6°	AM		5.555	5.555		5.555	5.555	11			
7710-11-224	PAINTED PAVEMENT MARKINGS, STD, YELLOW, SOLID, 18"	LF		281	281		281	281	562			
7710-11-241	PAINTED PAVEMENT MARKINGS, STD, YELLOW, DOTTED, GAP EXTENSION 6"	GH		0.131	0.131		0.131	0.131	0.262			

Always use whole numbers for "Each" and "Each Day" item quantities. Add additional rows for different durations within the phase. See below for Items needed less than the full phase duration, example with 3 devices needed for 60 days, and 2 devices needed for 30 days:

#### Incorrect:

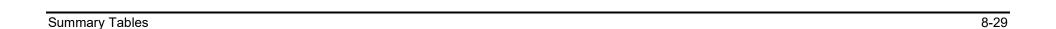
Through June 2021: Do not include 706-3 Reflective Pavement Markers (RPMs) with Temporary Traffic Control Plan Items. Permanent RPMs are included with 710-90 Final Surface Markings.

Effective July 2021: Separate Payment will be made for RPMs. See pay item details of 706-3 for documenting quantities.

## 4. Summary of Special Detours. See bulletin for example.

Instructions, Return to Summary Box List

**Correct:** Locations and secondary units must be shown. For quantities remaining in place for more than one phase, do not repeat location/quantity.



# 5. Summary of Temporary Highway Lighting

Instructions, Return to Summary Box List

**Correct (Old format):** Spacing may be indicated in the design notes column. P column will indicate 1 LS total; secondary units for EA must be completed.

C.				SUMMARY	OF TEMP	ORARY HIGHW	AY LIGHTING	
TTC	LOCATION	CIDE	UNITS	TEMPO HIGHWAY	TOTAL CONTINUE CONTIN	SECONDARY UNITS	DESIGN	CONSTRUCTION
PHASE	CTA TO CTA	SIDE	UNITS	102	- 30	# POLES	NOTES	REMARKS
	STA. TO STA.			Р	F	EACH (EA)		
	Si	UB-TOTAL:						
		TOTAL:						

Incorrect:

# **6. Summary of Temporary Driveways**

Instructions, Return to Summary Box List

Correct (Old format): Example with location and dimensions.

LOCATION		COMMERCIAL	MATERIA	L FOR DRIV	EWAY MAIN	TENANCE	DESIGN	CONSTRUCTION
CTA A C OF DRIVEWAY	SIDE	1	W	THK	CY		NOTES	REMARKS
STA. # & OF DRIVEWAY		FT	FT	IN	p.	F		
20+57.46	RT	38.50	12.60	6.00	8.8		PNASE 1	d d
70+85.CO	WT	40.00	12.00	€.00	8.9		PHASE 1	
72+21.00	RT	40.00	12.00	€,00	8.9		PHASE I	
61+48 00	17	41.00	12.00	€.00	9.1		PNASE 2	
62+97.00	1.7	41.00	12.00	6.00	9.1		PHASE 2	1
66+03.00	17	41.00	18.00	6.00	17.7		PHASE 2	- Ç
71+56.00	1.7	41.50	12.00	€.00	9.2		PHASE 2	
								3
				SUB-TOTAL:	62			
				TOTAL	68			

Example with Location, Area ID, and Thickness

LOCATION			COMMERCIAL MATE	RIAL FOR DRIVEWAY MA	INTENANCE		
LOCALION	SIDE	AREA	THK	0102 3		DESIGN	CONSTRUCTION
STA. @ @ OF DRIVEWAY		1D	THK	CY		NOTES	REMARKS
STA. & & OF DRIVENAL			IN	P	F	1	
1011+00.00	LT	290406	2.00	7.76		PHASE 1	
1014+00.00	LT	290392	2.00	3.34		PHASE 1	
1014+00.00	LT	290399	2.00	3.10		PHASE 1	
1018+60.00	RT	290619	2.00	2.66		PHASE I	
1019+65.00	RT	290636	2.00	2.96		PHASE 1	
1020+25.00	RT	290656	2.00	2.07		PHASE 1	
291+62.00	LT/RT	290898	2.00	6.10		PHASE 3	
294+25.00	LT/RT	290842	2.00	4.40		PHASE 3	
1016+50.00	LT /RT	290820	2.00	3.58		PHASE 3	
1018+60.00	LT /RT	290803	2.00	1.62		PHASE 3	
1019+65.00	LT/RT	290831	2.00	2.51		PHASE 3	
1020+25.00	LT/RT	290775	2.00	2.29		PHASE 3	
11.11.2.11			SUB-TOTAL:	42.4			
			TOTAL:	42			

Incorrect:

# 7. Summary of Pedestrian Longitudinal Channelizing Devices Instructions; Return to Summary Box List

**Correct (Old format):** Indicate duration when remaining for more than one phase. See Pedestrian Special Detour when walking surface is needed.

CONST.	LOCATION	C L D C	0102		DESIGN	CONSTRUCTION
PHASE	STA. TO STA.	SIDE	L	F	NOTES	REMARKS
	JIA. TO JIA.		P	F		
1	160+00 TO 161+50	Lt.	150		REMAINING IN PLACE FROM PHASE 1 THRU PHASE 3	·
1	161+50 TO 165+00	Rt.	350			
1	163+00 TO 164+00	Lt.	100			
1	166+00 TO 166+00	Lt.	5		SIDEWALK CLOSURE	
2	164+00 TO 165+00	Rt.	100		REMAINING IN PLACE FROM PHASE 2 THRU PHASE 3	
3	164+00 TO 165+00	Lt.	200		100'x 2 SIDES OF TEMPORARY WALKWAY	
3	166+00 TO 166+00	Rt.	5		SIDEWALK CLOSURE	
		TOTAL	910			

Incorrect:



# 8. Summary of Temporary Crash Cushions

Instructions, Return to Summary Box List

**Correct:** Do not remove any columns from this table; **all design information is required**. If length restriction does not apply, use N/A; do not remove column.

### Incorrect:

TTC PHASE	STATION	OFFSET (FT)	SIDE	WORK ZONE SPEED (MPH)	TEST LEVEL (TL-2 OR TL-3)	WIDTH OF HAZARD (IN)	LENGTH RESTRICTION (FT)	CRASH 0102	ORARY CUSHION 89 1	DESIGN NOTES	CONSTRUCTION REMARKS
						Wiccen	(Approxim	P	F		
5X	1371+65.30	8.50	LT.	50	7£-3	24.00	N/A	- E			
1	1374+00.00	35.641	6.7	50	TL-3	24.00	N/A	1			315
1	100+49.38	5.50	87	40/50	74-3	24.00	N/A	1			514
7	1712+92.00	90.86	RT.	70	TL-3	24.00	N/A	1			
1	85+80.00	8.361	LT.	50	TL-3	24.00	N/A	1		RAMP A-1	
1	85+80.00	21.00	87	50	TL-3	24.00	N/A	- 3		RAMP A-1	
1	418+40.00	8.29	LT.	50	TL-3	24.00	N/A	1		RANF D-1	
1	418+40.00	21.69	RT.	50	TL-3	24.00	N/A	1		RAMP D-1	
4 1	SLIGH AVE.	SEE PLANS	LT.	40	7L-2	24.00	N/A	0 18			2023
1	SLIGH AVE.	SEE PLANS	RT.	40	71-2	24.00	N/A	X.			
1	SLIGH AVE.	SEE PLANS	LT	40	TL-2	24.00	N/A	1			
1	SLIGH AVE.	SEE PLANS	RT.	40	712	24.00	N/A	1			311
11	1372+21-12	19.79	LT.	50	TL-3	24:00	N/A	1			
111	1210+00.00	17.00	RT	40/50	TL-3	24.00	N/A	1.			
93					29	1	SUB-TOTAL:	14			100
							TOTAL	14			

### 9. Summary of Temporary Signalization & Detection

Instructions; Return to Summary Box List

**Correct:** This form is NOT limited to "Temporary Signals". Quantity based on maintaining existing intersections for the full duration of project. See additional information under pay item 102-104- and 102-107-1. Design Notes column may be used to identify location or intersection location(s).

				010	02104			I		0102	107 1				
PHASE	DURATION		TEMPORAL OF IN		ALS & MA ION - EA		CE	TEMPO	RARY TRA	FFIC DET			ENANCE	DESIGN NOTES	CONSTRUCTION REMARKS
	l		EXISTING	G		<b>TEMPORA</b>	RY		EXISTING	3	TEN	IPORARY/	NEW	WOILS	DEMANA 3
	DAYS	#	P	F	#	P	F	#	P	F	#	ρ	F		
1	91	3	273					3	273						
2	190	3	570					3	570						ľ
3	152	3	456					3	456						
d	31	3	93					3	93						
_	SU	B-TOTAL	1392		-	1		1	1392			- 1			1
					TOTAL	1392					TOTAL	1392			

#### Incorrect:

Quantities must be summarized by phase, or indicate "all phases". Missing Construction Remarks column.

# 10. Summary of Erosion and Sediment Control Devices

**Instructions**; Return to Summary Box List

**Correct (Old Box):** When a Summary Box continues on multiple sheets, totals for ALL columns are to be shown on the FIRST sheet of the series.

LOCATION	SIDE	AREA ID	ARTIFI COVER / ROL EROS CONT	INGS LED ION	SEDIMEN BARRIE	T	LOATING URBIDIT Y VARRIER	PREV	OIL CKING ENTION VICE	PRO	NLET TECTION YSTEM	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.		10	104		0104 10 LF	3 (	104 11 LF		04 15 EA	01	104 18 EA	no/es	REMARKS
oral to oral			P	F		F	PF	P	F	P	F	1	
1401+69.67 R2 to 1403+76.66 R2	RT				252.7					200	1777		
1401+78.80 R2 to 1403+69.32 R2	LT				243.1								
1404+01.92 RZ to 1407+29.79 RZ	RT				418.0								
1404+07.29 R2 to 1411+03.51 R2	LT				755.3								
1407+68.94 R2 to 1411+02.14 R2	RT				414.2								
1410+74.82 R2 to 1410+78.56 R2	RT				4.9								
1411+39.97 R2 to 1414+72.72 R2	RT				406.6								
1411+42.18 R2 to 1418+30.39 R2	LT				830.8								
1415+06.38 R2 to 1418+28.18 R2	RT				375.8								
1418+74.44 R2 to 1421+44.39 R2	RT				449.0								
1418+80.65 R2 to 1421+32.57 R2	LT				390.2								
1418+81.13 R2 to 1418+81.64 R2	LT				15.0								
1418+93.50 R2 to 1419+00.00 R2	RT				6.7								
1422+44.37 R2 to 1428+25.73 R2	RT				756.9								
1422+47.14 R2 to 1436+85.49 R3	LT				1483.9								
1428+50.18 R2 to 1436+61.28 R3	RT				1024.9								
1437+43.12 R3 to 1441+33.27 R3	LT				404.1	$\rightarrow$	_						
1437+49.84 R3 to 1441+42.10 R3	RT				448.3								
1441+72.52 R3 to 1445+23.59 R3	LT				373.6	$\neg$	$\neg$						
1441+76.60 R3 to 1445+21.40 R3	RT		1		375.0	_	_						
1445+62.91 R3 to 1452+80.15 R3	LT				697.2	_	_			_			
1445+72.40 R3 to 1448+40.49 R3	RT				293.9		$\overline{}$						
1448+61.31 R3 to 1451+00.00 R3	RT		$\vdash$		251.8		$\rightarrow$						
1451+57.58 R3 to 1455+63.05 R3	RT		-		416.0	-	$\rightarrow$						
1453+18.60 R3 to 1461+92.11 R3	LT				902.7	$\rightarrow$	_			_			+
1455+99.20 R3 to 1461+76.64 R3	RT		-	_	618.8		_						
1425+44.51 R2 to 1426+37.16 R2	RT		-				2.8	-	_				
1425+95.55 R2 to 1426+58.44 R2	LT					_	7.0			_			
1447+52.17 R3 to 1447+95.65 R3	RT		$\rightarrow$	_		-	15.7	-		_			+
1447+98.03 R3 to 1448+52.40 R3	LT			-		_	1.8		-				
1447 T30:03 R3 T0 7440T32:40 R3			$\rightarrow$	_	_		1.0			_			
1407+31.18 R2 to 1407+33.22 R2	RT	_	$\rightarrow$	_	_	_	$\rightarrow$	-	_	1	_		
1407+52.74 R2 to 1407+54.78 R2	LT	-	-	_	-	_	-		-	+	-		
1407+64.39 R2 to 1407+66.43 R2	RT		$\rightarrow$		_	-	_			1			
1411+01.08 R2 to 1411+03.12 R2	RT		-		_	_	_			-			
1411+33.99 R2 to 1411+36.03 R2	RT		-				_		-	1	_	-	
1411+35.28 R2 to 1411+37.33 R2	LT	_	-	-	<del>     </del>	_	$\rightarrow$		-	-	-	-	+
1411+35.28 R2 to 1411+37.33 R2 1414+70.92 R2 to 1414+72.97 R2	RT				-	$\rightarrow$	$\rightarrow$	-	_				
1414+90.54 R2 to 1414+92.59 R2	LT		-		-	_	_		_				
1415+04.03 R2 to 1415+06.08 R2	RT						_		-	1		-	
	LT/RT	-	-	_		_	-			$\overline{}$	_	-	+
1415+04.74 R2 to 1415+06.78 R2			-			-	-			1	_	-	-
1418+05.39 R2 to 1418+07.43 R2	LT/RT			_		-	+	$\vdash$		-		1	
1418+31.29 R2 to 1418+33.33 R2	RT						-		_	1			
1418+65.40 R2 to 1418+67.44 R2	RT	_	$\rightarrow$			-	_			1		-	
1419+57.24 R2 to 1419+59.29 R2	LT		-		$\vdash$	-	-	$\vdash$		1			
1420+58.92 R2 to 1420+60.96 R2	LT			_		- 1-21				1			
		B-TOTAL:	*349	_	12609.4	_	7.3	*2		15	_	* SEE PAY ITEM NOTES FOR BASIS OF CALCULATIONS	
		N TOTAL:	349		12609	_	257	2		31			

#### Incorrect:

Do not add pay item notes for replacement. Per the specification, no separate payment is made for maintenance or replacement.

PAY ITEM 104-10-3 (SEDIMENT BARRIER)
 INCLUDES ALL COSTS FOR RESTAKING AND MAINTENANCE OF FENCE; AND IS BASED ON REPLACEMENT EVERY 12 MONTHS.

Do not specify type of barrier; per the specification, this is an option open to the contractor. Totals are to be shown on the FIRST sheet of a series. The incorrect example below is for a "cont." sheet in the series and should NOT include the series total.



LOCATION	20000	SEDIME BARRII		FLOA TURBI BARR	DITY	PREVE	KING NTION ICE	PROTE SYS	CTTON	DESTON
	SIDE	0104 10	- 3	0104	1.11		1 15	0704	1.81	NOTES
STA. TO STA.		LF		- 4	F	E	Α	E	A:	
		P	6	P	1.	P	. 8	P		
455+13.34 16 455+13.35	47	63.9								SYNTHET (C. MALES
458+15.84 to 458+17.08	AT.	62.4								SYNTHETIC BALES
458+87 25 to 458+87.78	at.	57.8	â							SYNTHETIC BALES
460+01.33 to 460+02.05	67	42.4								SYNTHETIC MALES
462+33.50 10 462+37.10	47.	60.5	_							SYNTHETIC MALES
455+60.90 (+ 455+62.63	4.7	62.8	_	- 8					0	SYNTHETIC BALES
465+94.95 10 466+95.34	LT. JAT.	62.8							1	SYNTHETIC BALES
459+53.39 to 469+58.43	47.	42.4	- 8							SYNTHETIC BALES
479:47:70 to 478:52.36	AF.	52.5								SYNTHETIC BALES
ABU+19.78 10 488-23.73	4.7	61.1								SYNTHETIC HALES
493+29.31 10 493+32.09	HT.	65.8	-	1 15		1 2			3	SYNTHETIC BALES
516+69.45 to 516+78.67	2.7	69.3								SYNTHETIC BALES
329+38.78 to 320+25.00	67.	2137,9								STAKED SILT FENCE
321+30.00 to 3348+20.00	67.	2654,7								STAKED SILT. FENCE
322+24.85 to 348+80.00	AT.	2680.7	- 8	5						STAKED SILT FENCE
348:79.58 1= 1299:76.12	4.7	5089,4	_						9	STAKED SILY, FENCE
349+20.00 1= 400+17.40	RT.	5114.5	- 3						2 4	STAKED SILT. FENCE
402+68 31 1= 1446+21.80	47	4475 0	- 8							STAKED STET FENCE
403+32.69 10 439+70.58	KT.	3539.2	_							STAKED SILT PENCE
441+87-94 tu 1445+13.29	CT:/AT.	369.3								STAKED SILT FENCE
443+70.03 10 449+48.33	87	559.8	- 3			3			3	STAKED SILT FENCE
444+04.50 to 1447+29:28	LT: /AT	239.1								STAKED SILT FENCE
448+74.15 to 1464+00.18	47.	1587.0	- 3							STAKED SILT FENCE
454+73.46 10 455+32.30	87	130.0								STAKER SILT FENCE
459+08 86 to 461+38.73	KT.	245.7								STAKED STLT. FENCE
468+22.11 to \$16+28.48	47	2632.5				0			30	STAKED SILT FENCE
497+70.26 (= 498+32.23	87	125.0								STAKED SILT. FENCE
502+64.34 to 503+33.40	RY.	729.9								STAKED SILT FENCE
564+91.83 to 305+58.01	Mr.	120.5	- 9			1				STAKED SILT. FENCE
402178 44 16 1402187 45	87			141.0						FLOAFING TURBIDITY
444433.42 10 3448+37.74	LF:700			221.2.						FLOATING TURBIDITY
440+76 10 10 1448+05,92	CT: /AT.			226.7						FEOATING TURBIDITY
440+34,37 1# 497+71 90	ET./AT.	3 15 1		221.2		13				FLOATING TURRIDITY
442+65,78 to 444+12.54	LF. /WT.			226.2		_				FLOATING TURBIDITY
371+23.19 to 488+28.15	LT. /HT.		_			8			-	I DEVICE PER MILE NO & SI
305+29,31	AT.	2 3 4	_	- 3				1.7		INCET PROTECTION XYSTEM
315(98.84	RF.			$\overline{}$		_		-79		INLET PROTECTION SYSTEM
469+20.62	AT.	3 8 8				- 2		1		INCET PROTECTION SYSTEM
471+99 dif	AT	2 11						- 1		INLET PROTECTION SYSTEM
475+00.30	RT.							/3		INLET PROTECTION SYSTEM
479+61,22	AT.							1		INLET PROTECTION SYSTEM
488+00,99	AT.							1		INLET PROTECTION SYSTEM
497+65-17	AT.							- 01		INLET PROTECTION SYSTEM
498162.46	4.0							-1-		INLET PROTECTION SYSTEM
503+48.00	47.							- 1		INLET PROTECTION SYSTEM
9515	用・アウナム!:	22427		103E		18		2.0		

### 11. Summary of Litter Removal and Mowing

Instructions; Return to Summary Box List

#### **Correct:**

Frequency estimated based on 30 day cycle.

Separate entry for each area. When automated, the mowing areas and quantities may follow the litter removal areas and quantities. Use "same as phase x", when applicable.

Note: Only use "ALL" for the Const. Phase column when TCP does not affect the areas for quantities. Otherwise, ensure locations are separated by phases.

Totals are to be shown on the FIRST sheet of a series (not shown correctly below). This summary box does not appear to extend to multiple sheets.

	145 0300 ADV-0	1	// ·			11	TTEN HEMO	VAL				MOH LNIS		215		
CONST.	LOCATION	2235	DECREE LONG	PREQUENCY		_	0107 1	411-		_		0107.2	0.0000		DESIGN	CONSTRUCTION
PHASE	- STANSAN A	SIDE	(DAYS)	(DAYS)	AREA	0.00		AHEA	-	AREA	SERVING		AREA		NOTES	REWARKS
	STA. TO STA.			10000000	AREA ID	creues	CYCLE	TOTAL	(AC)	AKEA ID	CYCLES	CYCLE	YOTAL P	(AC)		
ALC:	27-88,00 fp 28-48.08	LT.	100	36	17761	-3-	0,110	5.490				-				
ALL	27148,07 (v 28158.83	.87	30	200	37733		0.070	8.277								
CALL	36+66,22 fx 37×12:28	4.7	70	3.84	1773.1	(3)	8,120	E.860								
ALL	20+28,30 to 37+22.27	.67	80	30	17742	- 3	2,700	0.800	3 3			3		- 1		5
ALL	Freezier in Freezist.	1.7	80		1.			5 1		375.89		8.120	8.380			
ALL.	27+98 27 to 28+69 21	.87	80	:31						17517	3:	9.070	#.630	10.0		5 A
ALL.	35+48 22 1v 32+89 80	1.7	96	30	(1)					37687	1	0.040	6. \$29	59.32		
ALL	35+63.37 to 32+36.64	107	80	-30	3:	3				17645	3	9.050	2.140	20 31		3 1
ALL	20+08.60 to 32+82.28	1,5	36	36						trece		#.1850	# 3130	99.90		
ALL.	33+32,82 to 32+34.44	47	60							37.687		0.030	8.1130			
ALL	22493.27 1# 33465.81	87	10	30						17638		#.010	#.020			
A(3).	33429 SF 3n 30+36-33	1.7	200	200						17643		0.050	0.030			
ALL	23-27,70 to 32-49-81	67	92	201					-	27420		11.11.10	2.670			
-		_					Sep. 13742.4	7.17			_	SIME TOTAL	2,24			
							TOTAL		7			TOTAL:				

#### Incorrect:

Each area must be separately identified, either by Area ID or Length/width/location.

Do NOT lump quantities for a phase in one row. (This was acceptable ONLY when supported by a Computation Book, prior to Summary Boxes)

Do not add footnotes to this box.

Totals are to be shown on the FIRST sheet of a series. The example below correctly shows the totals at the bottom of the sheet.

						L	ITTER RE	MOVAL						MOW I N	G				
	LOCATION						0107	1						0107	2				
PHASE	1	(DAYS)	(DAYS)		Secretary of the	Gran-H	March of	-	AREA		(Separation	vencuncius)	lancered.	Latin Color		AREA		DESIGN NOTES	CONSTRUCTION REMARKS
	STA. TO STA.	10000	(1000.32	AREA 1D	LENGTH	WIDTH	CYCLES	AC/ CYCLE	TOTAL	(AC)	AREA	LENGTH	WIDTH	CYCLES	AC/ CYCLE	TOTAL	(AC)	. HOZES	menous.
1 54	14+21.33 - 760+50.00	20	30	8		16 18	1	261.050	261.850	1 2	- 1			1	212.730	212.730			É
11 450	50+00.00 - 597+00.00	420	30				14	38.910	544.740					34	46,420	649 880			
III 450-	10+00.00 - 597+00.00	350	30				12	38.910	453.950					12	46.420	347.567	Ý.		
IV 450-	\$0+00.00 · \$97+00.00	30	30				1	38.910	38.910					1	46.420	46.420			3

THE PHASE DURATIONS SHOWN ARE NOT BASED ON PROJECT SCHEDULE AND SHOULD NOT BE USED FOR SCHEDULING PURPOSES BY THE CONTRACTOR

Separate Location column required for each of the pay items.

							7		LITTER RE	MOV AL			MOW I NO		- 1		
and the second	LOCATION		4522						0107	1			0107	2		ANGLES	CONTRACTOR CONTRACTOR
PHASE STA. TO STA.	SIDE	AREA	LENGTH	WIDTH	(DAYS)	(DAYS)	ACTOR MICHEL		AREA		SEVICULS SEE	/	WEA		DESIGN NOTES	CONSTRUCTION REMARKS	
	STA TO STA		200			1.5500.000	1 (2520)	CYCLES	AC/CYCLE	TOTAL	(AC)	CYCLES	AC/CYCLE -	TOTAL	(AC)		1155101151
-						2	1	The state of the s		- P	- F		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	P	F.		
A2.1	205+00.00 1# 264+64.88					230	30	4	5.3	42.4		#	2.37	10.95			
ALL	205+00.00 to 264+64.88					230	30		SUB-TOTAL	42.4		ä	SUB-TOTAL	10.95			
									TOTAL	42.4			TOTAL	10.96	1910		-

NOTE: THE PHASE DOBATIONS SHOWN ARE NOT WASED ON PROJECT SCHEDULE AND SHALL NOT WE USED FOR SCHEDULING PURPOSES BY THE CONTRACTOR.

Do NOT modify the pay item description in the header rows.

	100-00	SERVICE PRODUCT					LITT	ER			MOW I	NG			
-	LO	CATION		400404			0107	- 1		1	0107	-2	- 1	W. W. C. C. C.	manager at the same
PHASE			SIDE	(DAYS)	FREQUENCY (DAYS)			AREA			25	AREA		DESIGN NOTES	CONSTRUCTION REMARKS
7.17F-04-1	CTA	TO STA.	5,000,000	(00,000)	(Dec.3)	CYCLES	AC/	TOTAL	(AC)	CYCLES	AC/	TOTAL	(AC)	MOLES	U.M. GOOD OF CO.
	31.4	10 31A					CYCLE	P	F	7	CYCLE	p	F		1
	429+13.59	456+30.95	RT	60	30	12	3.001	6.003		2	2.405	4.810			
	429+13 59	466+11.77	MED	60	30	(2)	7.965	3,930		2	1.830	3.660			
	429+58,54	442+46.47	LT	60	30	-2: 3	1.131	2.262		2	0.925	1.851			
	442+46 47	456+06 27	LT	60	30	2	1.518	3 035		2	1.208	2.416			
	456+06 27	466+12.11	1,7	60	30	2	7 602	3.204		2 3	1.407	2.814			
	456+30.95	466+11.77	RT	60	30	2	0.971	1.942		2	0.275	1.550			
						0	SUB-TOTAL:	20.376				17.101			11
							TOTAL:	20.38				17.10			

Individual locations are not shown. Areas are lumped together for left and right. Per specifications the limits are different for Litter Removal and Mowing areas.

							LITTER	REMOVAL			MOW	NG	I		
	LOCATION	I HAVE SER	And a	DURAT 10	FREQUEN		010	7 1			0107	2		accres.	CONTRACTOR CONTRACTOR
CONST . PHASE		SIDE	AREA (SY)	N	CY	SECURITION SHOW		AREA	4447777			AREA		DESIGN NOTES	CONSTRUCTION REMARKS
r ricese	STA. TO STA.		1.00.7	(DAYS)	(DAYS)	CYCLES	AC	TOTAL	(AC)	CYCLES	AC/CYCLE	TOTAL	(AC)	1190 600	THE PERSON SE
	300 19 310						/CYCLE	Р	F		ACTOTOLL	P	F		4
ALL PHASES	197+00.00 TO 458+59.29	LT/RT	327888.9	1200	30	40	52.950	2118.00							
ALL PHASES	197+00.00 TO 458+59.29	LT/RT	277888.9	1200	30					40	42.770	1710.80			
		-						-				-			1
2.		AL 15		11			SUB-TOTAL:	2118.00			SUB-TOTAL:	1710.80			1
	·						TOTAL:	2118.00 AC	5		TOTAL:	1710.80 AC			=

Do not list the Area ID as a range. Each areaID/location must be listed in the summary box.

					SUM	MARY O	F LITTE	R REMOV	/AL AN	ID MOW	I NG					
CONST . PHASE	LOCATION	SIDE	DURATION (DAYS)	FREQUENC Y (DAYS)	LITTER REMOVAL					MOWING					BEGIGN	CONSTRUCTIO
					0107 1					0107 2						
						CYCLE -	AREA			4054		AREA			DESIGN NOTES	N
	STA. TO STA.						AC/	TOTAL	(AC)	AREA ID	CYCLES	AC/ CYCLE	TOTAL (AC)		10723	REMARKS
							CYCLE	P	F				Р	F		
ALL	248+48.96-328+95	LT/RT	160	30	41977	6	14.300	85.800		49146	6	5.100	30.600			
					43103					52760						
SUB-TOTAL:												SUB-TOTAL	30.600			
	TOTAL:											TOTAL	30.60			

## 12. Summary of Monitor Existing Structures

Instructions; Return to Summary Box List

#### **Correct:**

The example below is correct for projects where monitoring is required; only the locations to be monitored which are outside of the specification limits are shown. The note below the summary box should be in accordance with the applicable Plans Preparation Manual (PPM)/FDOT Design Manual 140. NOTE: The specification limits only apply to 108-1. When 108-2 and/or 108-3 are used, specific location(s) for each must be shown.

	57	0	SUMMA	IRY OF A	ONTION	EXISI	ING STRUCTURES	
SITE	LOCATION	STRUCTURE	SETTL	TION & EMENT ORING	VIBR MONIT	AT ION OR ING	DESIGN	CONSTRUCTION
SITE NO.		USAGE	010	8 1	010	8 2	NOTES	REMARKS
EDAME.	ADDRESS AND/OR STA.		- 1	5	L	S	11.702-2.704	
	AUDRESS MID/OR SIN.		P	F	P	F		
12.0	8660 US HAVY 17 S / 142+54.44 LT.	CHURCH	X:		×		ROADWAY COMPACTION	
-2	7891 US HWY 17 S / 212+40.20 RT.	RADIO STATION	- ¥		x		ROADWAY COMPACTION	
	100	TOTAL	20					

THIS LIST INCLUDES EXISTING STRUCTURES (AS DETERMINED BY THE DEPARTMENT) LOCATED OUTSIDE THE LIMITS SPECIFIED IN ARTICLE 108-2 OF THE FOOT SPECIFICATIONS THAT ARE REQUITED TO BE MONITORED. THIS LIST SECULD NOT BE CONSIDERED ALL INCLUSIVE AND DOES NOT CONTAIN EXISTING STRUCTURES TO BE MONITORED THAT ARE LOCATED WITHIN THE DISTANCES SPECIFIED IN ARTICLE 108-2.

The example below is correct for projects where monitoring is required, but all locations are within specification limits. The estimator/reviewer should verify types of monitoring required, per PPM/FDOT Design Manual guidance. For a lump sum project, place an "X" in the appropriate column(s) to indicate required monitoring. NOTE (still applies to LS projects): The specification limits only apply to 108-1. When 108-2 and/or 108-3 are used, specific location(s) for each must be shown.

	S	UMMARY OF MON	ITOR E	XISTING S	STRUCTURES		
SITE	LOCATION	STRUCTURE	SETTL	TION & EMENT ORING	DESIGN	CONSTRUCTION	
NO.		USAGE	0108	3 1	NOTES	REMARKS	
	ADDRESS AND/OR STA.		LS				
	ADDRESS AND/OR STA.		Р	F		1:	
		TOTAL:	1	0 0		4.	

THIS LIST INCLUDES EXISTING STRUCTURES (AS DETERWINED BY THE DEPARTMENT) LOCATED OUTSIDE THE LIMITS SPECIFIED IN ARTICLE 108-2 OF THE FOOT SPECIFICATIONS THAT ARE REQUIRED TO BE MONITORED. THIS LIST SHOULD NOT BE CONSIDERED ALL INCLUSIVE AND DOES MOT CONTAIN EXISTING STRUCTURES TO BE MONITORED THAT ARE LOCATED WITHIN THE DISTANCES SPECIFIED IN ARTICLE 108-2.

#### Incorrect:

Do not add/change columns. Place an "X" in the appropriate column(s) for the type of monitoring to be completed. Address goes under the Location. Unused pay item column should be removed.

Do not remove Total rows at the bottom of the summary box. Total should reflect 1LS for each applicable pay item.

SITE	LOCAT	ION	STRUCTURE	SETTL	CTION S EMENT ORING		ATION ORING		DWATER FORING	DESIGN	ADDRESS	STRUCTURI
NO.			USAGE	010	8 1	010	8 2	010	8 3	NOTES	ADDRESS	TYPE
	STATION	SIDE			5		.5		.5			
_	1313+50	LEFT	PHARMACY	Р	F	P	F	Р	F	MONITOR DURING ROADWAY COMPACTION	2256 W NINE MILE RD	
			7.117.00.00	-	-	1	_	-	-			
	1316+00	RIGHT	PHARMACY		-					MONITOR DURING ROADWAY COMPACTION	2237 W NINE MILE RD	
	1337+50	LEFT	MEDICAL			1	-			MONITOR DURING ROADWAY COMPACTION	400 MILESTONE BLVD	
	1340+50	LEFT	DENTISTRY		_	- 1	_	_	-	MONITOR DURING ROADWAY COMPACTION	35 NEWPORT ST	
	1347+50	LEFT	MEDICAL		_	- 1		_		MONITOR DURING ROADWAY COMPACTION	185 CROSSVILLE ST	
_	1350+00	LEFT	ASSISTED LIVING			1				MONITOR DURING ROADWAY COMPACTION	150 CROSSVILLE ST	
_	1385+50	RIGHT	CHURCH			1				MONITOR DURING ROADWAY COMPACTION	1251 W NINE MILE RD	
	1388+50	LEFT	CHURCH			1			-	MONITOR DURING ROADWAY COMPACTION	1144 W NINE MILE RD	
	1394+00	LEFT	CHURCH			1			-	MONITOR DURING ROADWAY COMPACTION	1101 W NINE MILE RD	
	1416+50	LEFT	VETERINARY CLINIC			1				MONITOR DURING ROADWAY COMPACTION	550 W NINE MILE RD	
	1420+00	RIGHT	REST AURANT			1				MONITOR DURING DEEP EXCAVATION	535 W NINE MILE RD	
	1422+50	RIGHT	REST AURANT			1				MONITOR DURING DEEP EXCAVATION	529 W NINE MILE RD	
	1422+50	LEFT	CHIROPRACTOR			- 1	1		5	MONITOR DURING ROADWAY COMPACTION	410 W NINE MILE RD	
	15+50	RIGHT	RESIDENTAL		6 6	I	i i			MONITOR DURING SHEETPILE WALL INSTALL.	9106 UNTREINER AVE	
	15+50	LEFT	RESIDENTIAL			1				MONITOR DURING SHEETPILE WALL INSTALL.	9107 UNTREINER AVE	
	17+50	LEFT	RESIDENTIAL			1				MONITOR DURING SHEETPILE WALL INSTALL.	9111 UNTREINER AVE	
	18+50	RIGHT	RV PARK			1				MONITOR DURING SHEETPILE WALL INSTALL.	9110 UNTREINER AVE	
	20+00	RIGHT	RESIDENTIAL			1				MONITOR DURING SHEETPILE WALL INSTALL.	9112 UNTREINER AVE	
	21+50	RIGHT	RESIDENTIAL			1				MONITOR DURING SHEETPILE WALL INSTALL.	9250 UNTREINER AVE	
	22+00	LEFT	RETAIL			1		-		MONITOR DURING SHEETPILE WALL INSTALL.	541 W NINE MILE RD	
	23+00	RIGHT	RESIDENTIAL	1 8	6	1				MONITOR DURING SHEETPILE WALL INSTALL.	9270 UNTREINER AVE	
	24+00	RIGHT	RESIDENTIAL			1				MONITOR DURING SHEETPILE WALL INSTALL.	9295 UNTREINER AVE	
	26+00	RIGHT	INDUSTRIAL			1				MONITOR DURING SHEETPILE WALL INSTALL.	9320 UNTREINER AVE	
	27+00	RIGHT	RETAIL SERVICE			1				MONITOR DURING SHEETPILE WALL INSTALL.	301 W NINE MILE RD #1	
	27+50	RIGHT	CHURCH			1				MONITOR DURING SHEETPILE WALL INSTALL.	301 W NINE MILE RD #3	1
	28+50	RIGHT	COMMERCIAL	14 1		>1				MONITOR DURING SHEETPILE WALL INSTALL.	301 W NINE MILE RD # 2	<b>—</b>

# 13. Summary of Clearing and Grubbing & Removal Items

Instructions; Return to Summary Box List

Correct: Shown below, with 110-4- pay item and old title, prior to July 2017 implementation of new Section 110 specification.

			SUI	MMARY	OF R	EMOVAL ITEMS						
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA	UNITS	SECONDARY UNITS (IF LUMP SUM)	OUAN	ITITY	тот	TAL	DESIGN NOTES	CONSTRUCTION REMARKS
NO.		STA. TO STA.	1	10		AREA (AC)	P	F	Р	F	NOTES	ACMARK 3
0110 1 1	CLEARING AND GRUBBING	963+61.19 to 963+61.19	R7	21748	L5	0.810			1		1.76 TOTAL AC	
		963+80.76 to 963+80.76	LT	21821		0.950						
0110 4	REMOVAL OF EXISTING CONCRETE PAVEMENT	964+14.59 to 964+28.34	RT.	20703	5Y		7.2		269			
		964+70.49 to 967+09.85	LT	20696			195.9					
		965+23.57 to 965+93.41	RT	20707			56.8					
		966+73.63 to 966+84.28	RT	20713			8.7	j				
			1									

Shown below, with 110-4-10 pay item, after July 2017 implementation of new Section 110 specification, with type of concrete to be removed identified in the Design Notes Column. Similar types of concrete may be sorted together, i.e. all sidewalk, all Retaining Walls.

PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA	UNITS	QUANT	ITY	TOT	AL	DESIGN NOTES	CONSTRUCTION REMARKS
1000000		STA. TO STA.		10.000		P	F	ρ	F	1	1.550
110 4 10	REMOVAL OF EXISTING CONCRETE	700+71.00 TO 703+71.00	RT	19624	SY	134.0		1640		TRAFFIC SEPARATOR	
		701+34.00 TO 705+70.99	LT	19434		291.3				SIDEWALK	
		701+38.50 TO 702+16.58	LT	19634		43.4				GRAVITY WALL	
		703+52.34 TO 708+36.74	RT	19635		233.9				RETAINING WALL	
		705+70.99 TO 712+37.08	RT	18843		421.9				SIDEWALK	i.
		705+70.99 TO 712+37.08	LT	18838		466.2				SIDEWALK	
		713+25.23 TO 714+35.97	LT	19629		49.2				TRAFFIC SEPARATOR	

#### Incorrect:

Do not create "custom" summary boxes for Tree Protection or Clearing & Grubbing- Tree Removal.

LOCATIO	W .		QUAN	TITY		
	2000	CALIPER	p	F	DESIGN NOTES	CONSTRUCTION REMARKS
STATION	SIDE	CALIFER	EA	EA	Noves	REMARKS
128+49-48	1.7	n-	- 1		E	
119+01.95	AF	9.	=i			
21+18.05	i.f	725	- 31			
221+89.34	i.f	14*	- 1	Ų.	Book and an	3
22+62.43	6.7	24*	1	3	MIKTE THINK	2
34+42.82	1.7	26*	1			
36+17.95	LF	12*	- 1			
36+66.12	1,7	134				
37+28 29	cr-	11*	1			
37+72.52	LF.	12*				5
138+17:70	LT	12*		Š.	(	8
138+62:29	LF.	12*	1.0			
39+13.54	i.T	24"	- 1		MULTI TROWN	
39+59.50	LT	14"			by Company of the Com	
41+11.71	1.7	13+			1/2	
41+5# 12	i.T	10"	- 1	8	0	3
53+71.75	1.7	70.0	- 1			
\$4144.06	1.7	197			0	
155+37.07	1.7	76*	- 1			

LOCAT 10	W		QUAN	TITY		
STATION	SIDE	CALIPER	P	F	DESIGN	CONSTRUCTION REMARKS
STALLOW	2106	LALLY EN	EA	EA	MOTES	DEPLYSON OF
256719.29	1.7	321	-1			
256+76.00	LT.	341	1		1 [	
257+27.66	LT	2,31	1			
258+30.50	LT	251	1	3		
258166.32	AT.	121	- 1	1	] [	
258+84.24	AT	395	4/			
259+02.26	AT	3.	1		1	
239+03.80	1.7	141	7			
259+20.42	RT	22*	1			
260+73.10	LT	261	- 1	8		
261+09.88	17	241	1	3		
261+47.11	LT	12*	1			
261+83.70	LT	12*	- 1		1	
262+22.98	LF.	12"	-1			
262+65:55	1.7	287	1			
263+04.24	17	14+	1	8		
263+43.72	LF	137	of :	i .		
		SUE-YOTAL	_17		- San	
		FINAL TOTAL	36		COST OF TAKE PROTECTION TO BE INCLUDED UNDER CLEANING (AND GRUBBING [110-1-1]	

Guardrail Removal belongs on the Summary of Guardrail.

	v-	SUMMARY OF REMOVA	L ITE	MS		,			2
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNITS	QUANT	ITY	тот	AL	CONSTRUCTION
NO.		STA. TO STA.			PF		PF		REMARKS
536 73 GU	GUARDRAIL REMOVAL	1425+32.01 R2 to 1426+67.99 R2	RT	LF	148.0		392		
	-	1425+67.65 R2 to 1427+30.09 R2	LT		164.0				
		1446+30.99 R3 to 1446+69.54 R3	RT		80.0		1		

# 14. Summary of Mailboxes

Instructions; Return to Summary Box List

Correct (old format): Each location is identified.

	2022		ITITY	DESIGN	CONSTRUCTION
STATION	SIDE	0110 P	7 1 F	NOTES	REMARKS
108+11.51	ŁT.	1			
109+78.56	LT.	- 1		9	
154+13.18	RT.	1			
155+42.04	RT.	1			
155+46.49	RT.	- 1		III .	
184+45,26	LT.	7		0 0	
256+66.95	RT.	1			
256+67.26	RT.	1			
256+67.99	RT.	1		9	
256+68.14	RT.	1			
256+68.64	RT.	1			
256+69.20	RT.	1		U .	
256+70.17	RT.	1			
294+31.30	RT.	1			
5	SUB-TOTAL:	14			
	TOTAL:	14			

#### Incorrect:



## 15. Summary of Earthwork

Instructions; Return to Summary Box List

**Correct:** Use description field to separate locations. Street names, ramp identification, and or station limits may be used as shown, or within the Design Notes column. Remember to include note below summary box, per PPM/FDM instructions. While this example is correct, the Design Notes column could have been used to identify the street/ramp name.

PAY ITEM	TORREST SPACES TORREST LAND TO STATE OF	C	,	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	P	F	REMARKS
0120- 1-	REGULAR EXCAVATION			
	MAINLINE (SR 45A) STA. 1401+79.59 TO 1461+87.37	25545.00		
	MAINLINE (SR 45A) STA. 1462+50.00 TO 1468+60.00 (FOR MEDIAN N OF BIRD BAY)	343.00		
	GROVELAND AVE.	175.00		
	LAUREL AVE.	27.00		
	CYPRESS AVE.	299.00		
	VENICE AVE.	42.00		
	RIDGEWOOD AVE	37.00		
	SNF C	6780.00		
	SNF D	10031.00		
	TOTAL REGULAR EXCAVATION	43279.00		
0120- 6-	EMBANKMENT			
	MAINLINE (SR 45A) STA. 1401+79.59 TO 1461+87.37	12014.00		
	GROVELAND AVE.	28.00		
	LAUREL AVE.	1.00		
	CYPRESS AVE.	0.00		
	VENICE AVE.	34.00		
	RIDGEWOOD AVE	4.00		
	SNF C	3652.00		
	SNF D	5181.00		
	TOTAL ENBANKHENT	20914.00		

**Incorrect:** Quantities were not separated by location. An additional "Total" column was added.

PAY ITEM	PAY ITEM DESCRIPTION	QUANTITY (CY)		TOTAL (CY)		DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	P	F	P	F	DESIGN NOTES	REMARKS
0120 1	REGULAR EXCAVATION			572.00		1	
		572.00				12TH AVENUE	
120 6	EMBANKHENT			4463.00			
	Ü	4463.00	1 3	- 5		SZTN AVENUE	9

Earthwork has been calculated using the Limotock base option.
If another option is constructed, there shall be no revision to the corthwork quantities for which payment is made by Plan Quantity.

Do NOT create supplemental summary boxes to define the work.

AND DESCRIPTION OF THE PARTY OF	1		C	Y
STREET NAME		DESCRIPTION	P	F
MAINLINE NW 7TH Avenue	EXCAVATION	68+60.00 TO 170+70.00 (SEE CROSS SECTIONS)	26439	
	EMBANKMENT	68+60.00 TO 170+70.00 (SEE CROSS SECTIONS)	239	
SUBTOTAL (NW 9th Street)	EXCAVATION	8+86.00 TO 9+75.00 (SEE CROSS SECTIONS)	152	_
	EMBANKMENT	8+86.00 TO 9+75.00 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 10th Street)	EXCAVATION	9+10:00 TO ID+85:00 ISEE CROSS SECTIONS	228	
South the family services	EMBANKMENT	9+10:00 TO 10+85:00 (SEE CROSS SECTIONS)	5	
SUBTOTAL (NW   th Street)	EXCAVATION	8+65.00 TO 9+75.00 (SEE CROSS SECTIONS)	126	
SODIOTAL IIII IIII SITOOII	EMBANKMENT	8+65:00 TO 9+75:00 ISEE CROSS SECTIONS)	0	
SUBTOTAL (NW lith Street) E	EXCAVATION	ID+25.00 TO II+45.78 (SEE CROSS SECTIONS)	294	_
SOUTH THE THE THE THE THE THE THE THE THE T	EMBANKMENT	NO+25.00 TO II+45.78 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 12th Street)W	EXCAVATION	8+95.00 TO 9+74.97 (SEE CROSS SECTIONS)	120	
SOUTH THE TEN STORY	EMBANKMENT	8+95.00 TO 9+74.97 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 13th Street)W	EXCAVATION	9+24.00 TO 9+75.00 (SEE CROSS SECTIONS)	95	_
	EMBANKMENT	9+24:00 TO 9+75:00 ISEE CROSS SECTIONS)	0	
SUBTOTAL (NW 13th Street) E	EXCAVATION	IO+25.00 TO II+00.00 (SEE CROSS SECTIONS)	136	
	EMBANKMENT	IO+25.00 TO II+00.00 (SEE CHOSS SECTIONS)	0	
SUBTOTAL (NW 14th Street) W	EXCAVATION	9+0/00 TO 9+75-39 ISEE CHOSS SECTIONS!	9/	
	EMBANKMENT	9+01:00 TO 9+75:39 (SEE CROSS SECTIONS)	7	
SUBTOTAL (NW 14th Street) E	EXCAVATION	10+25.45 TO 10+93.00 (SEE CROSS SECTIONS)	232	_
	EMBANKMENT	10+25.45 TO 10+93.00 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 15th Street) W	EXCAVATION	8+00.00 TO 9+75.15 (SEE CROSS SECTIONS)	156	
	EMBANKMENT	8+00.00 TO 9+75.15 (SEE CROSS SECTIONS)	0	
SUBTOTAL (NW 15th Street) E	EXCAVATION	10+24-98 TO 10+85-00 (SEE CROSS SECTIONS)	144	
	EMBANKMENT	ID+24.98 TO ID+85.00 (SEE CROSS SECTIONS)	0	
		SUBTOTAL EXCAVATION	28213	
	1	SUBTOTAL EMBANKMENT	25/	

# 16. Summary of Geotechnical Items

Instructions, Return to Summary Box List

### **Correct:**

Incorrect: Missing AREA ID column. No width information provided to verify area quantity.

	7.V	1.00	SUMMARY O	F GEO	ECHN I	CAL IT	EMS	151	19		
PAY ITEM	PAY ITEM DESCRIPTION	LO	CATION	CIDE	UNIT	QUAN	TITY	TO	AL	DESIGN	CONSTRUCTION
NO.	PAT TIEM DESCRIPTION	STA.	TO STA.	SIDE	UNIT	P	F	P	F	NOTES	REMARKS
	GEOSYNTHETIC REINFORCED FOUNDATION OVER SOFT SOIL	83+36.00	to 91+20.00	LT	SY	2367		2367			



# 17. Summary of Driveway Base Instructions; Return to Summary Box List

**Correct:** 

Incorrect:



## 18. Summary of Pavement

Instructions, Return to Summary Box List

#### **Correct:**

The street name, ramp designation, "northbound mainline", or "median", etc. may be added to the location description column, to provide additional clarity.

Requested: Need a correct example that includes overbuild, with detailed quantity calculations. Need an example that includes driveway(s).

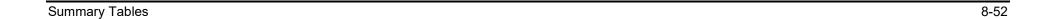
			SUMMARY	OF PAV	EMENT							
PAY ITEM	PAY ITEM DESCRIPTION	LOCATIO	W.	510E	AREA	UNIT	QUAN	VI ITY	TOT	AL	DESTON	CONSTRUCTION
NO.	PACIFICAL DESCRIPTION	STA. TO STA.	DESCRIPTION	3100	10	OWIT	6	F	P	F	NOTES	REMARKS
2260 4	TYPE 8 STABILIZATION	65+41,48 to 66+99.00		CT/RT	35797	SY	5480.10		8988.0	- 3		1
	ACCEPTANCE AND ACCEPT	66+99.00 to 67+13.25		LT/RT	35843		117.50		20000000			1
		68+30.75 to 68+45.00		LT/RT	35838		113.30		1	- 8		
		68+44.96 to 22+61.48		LYIRT	33822		3281 20		1			
285706	OFTIONAL WASE, WASE GROUP DE	60+41,48 to 66+99.00		LT/RT	35978	38	5117.60		8414.0			
		66+99.00 to 67+13.25		CT/RT	35917		113.50		1	- 4		
		68+30.75 to 68+45.00		LT/RT	35906		717.30		1 1			
		68+45,00 fo 72+61.48		LYINT	35937		3069.20		1			
9327.70 1	MILLING EXIST ASPH PART, 1" AVG DEPTH	56+17.45 to 60+41.48		LTIRT	7160	SY	2992.80		€400.0			
	A STATE OF THE STA	72+61.48 to 77+49.38		LT/MT	30464		3407.00					1
2334 1 22	SUPERPAVE ASPHALTIC CONCRETE	60+41,48 to 66+99.60		LT/AT	36819	TN	244.44		2379.1			1
	ITRAFFIC B. PG 76-22, PMAT	66+99:00 to 67+12:04		LT2RT	40825	_	7.03		- 52000 CL			
		66+99.00 to 67+12.04		LT	40817		7.07		1			
- 5		68+31.96 to 68+45.00		RT	41532		7.05		1	- 1		
		68+31 96 to 68+45.00		U	47539		7.05		1 1			
		68+45,00 to 72+61,48	V	LTINT	36036		506.42		1 1	. 8		1
3337 7 40	ASPHALTIC CONCRETE FRICTION COURSE	56+17.45 to 60+41.48	0	LT/AT	36118	TN	164.61		0.71.7	179		
-	ITRAFFIC B. FC-9.5. FG 76-22. FMA)	60+41.48 to 66+99.00		LT/AT	36063		281.48			8		
3	American production and production and an arrange of the second s	66+99.00 to 67+12.04	(4)	LT	40986		2.36		1	3		1
		66+99.00 to 67+12.04		RT.	42873		2.36		1.			
		68+31.96 to 68+45.60		Rf	41361		2.33		7 I	- 3		
		68+31.36 to 68+45.00		(7	47552		2.95		]			
		68+45.00 to 72+61.48	j.	LT/AT	36080		268.81		1	8		
- 3		72+61.48 to 77+49.38	(2	LT/MT	36089		187.39		1	8		10

	1	2551 MWW	RY OF PAVEMENT	-	_						
PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	Ī	SIDE	AREA ID	UNIT	OUAN	TITY	то	TAL	CONSTRUCTION REMARKS
110.	TOWNSHIP MINISTER CONTRACTOR AND	STA. TO STA.	DESCRIPTION		10		P	F	P	F	NEWARKS
327 70 16	MILLING EXIST ASPH PAVT, 1/2" AVG DEPTH	138+22.48 R 2 TO 150+90.15 R 2	RAMP B OUTER SHOULDER	LT	40903	SY	1625.8		8329		
		138+24.79 R 2 TO 151+10.81 R 2	RAMP B INNER SHOULDER	LT	40904		397.0				
		138+55.26 R 2 TO 151+18.03 R 2	RAMP A OUTER SHOULDER	RT	40908		1573.0				
		138+58.34 R 2 TO 151+27.21 R 2	RAMP A INNER SHOULDER	RT	40907		352.2				
		151+88 35 R 2 TO 164+36.60 R 2	RAMP C INNER SHOULDER	LT	40905		490.0				
		152+04.09 R 2 TO 165+54.22 R 2	RAMP D INNER SHOULDER	RT	40910		520.8		-		
		152+24.95 R 2 TO 164+39.53 R 2	RAMP C OUTER SHOULDER	LT	40906		1662.3		1		
		152+51.23 R 2 TO 165+55.60 R 2	RAMP O OUTER SHOULDER	RT	40909		1707.7		1		
					10200				_		
34 1 12	SUPERPAVE ASPH CONC. TRAFFIC B	99+99.41 R 2 TO 132+56.66 R 2		RT	41133	TN	276.44		4514.0		
	SOUTH OF CALL SOUTH STATES STATES	99+99.41 R 2 TO 128+16.69 R 2	1	LT	41169	1.17	226.24		192119		
		128+16.67 R 2 TO 138+23.25 R 2	1	LT	41137		74.35		1		
		132+55.69 R 2 TO 138+56.49 R 2	1	RT	41142		52.64		+		
		138+24.79 R 2 TO 150+25.61 R 2	1	LT	41341		92.13		_		
		138+58.32 R 2 TO 150+28.02 R 2	·	RT	41347	-	106.07		+		
		152+68.22 R 2 TO 164+40.58 R 2	OUTSIDE SHOULDERS OF MAIN TRAVEL LANES	LT	41404		86.12		+	-	
		152+70.73 R 2 TO 165+54.44 R 2			41376		88.64		+		
			1	RT					+		
		164+38.58 R 2 TO 214+01.25 R 2	-	LT	41319		404.33		-		
		165+55.12 R 2 TO 214+21.15 R 2	ļ	RT	41146		413.65		-	_	
		218+56.05 R 2 TO 364+18.77 R 3	Į.	LT	41153		1266.00				
		219+30.79 R 2 TO 364+18.80 R 3		RT	41162		1227.3		_		
		99+99.41 R 2 TO 364+18.80 R 3	EB OVERBUILD	RT			60.5		_		
		99+99.41 R 2 TO 364+18.80 R 3	WB OVERBUILD	LT			139.6	_	-		
334 1 22	SUPERPAVE ASPH CONC, TRAFFIC B, PG76-22, PMA	322+44.93 R 3 TO 325+59.59 R 3	PERMANENT CROSSOVER	LT /RT	52755	TN	53.00		53.0	-	
							202.02	-		-	
334 1 23	SUPERPAVE ASPH CONC, TRAFFIC C, PG76-22, PMA	138+23.48 R 2 TO 151+08.86 R 2	RAMP B TRAVEL LAWE	LT	42698	TN	253.53		1070.4		
		138+56.49 R 2 TO 151+36.99 R 2	RAMP A TRAVEL LANE	RT	42712		273.41		-	-	
		151+87.95 R 2 TO 164+38.39 R 2	RAMP C TRAVEL LANE	LT	42723		273.18		_		
		152+05.81 R 2 TO 165+55.00 R 2	RAMP D TRAVEL LANE	RT	42688		270.27		-	-	
	CUREROWS AGAIN COME TO AGE TO DECOR TO THE					70.00	204:20	_	1002.0	-	
334 1 34	SUPERPAVE ASPH CONC, TRAFFIC D, PG82-22, PMA	99+99.41 R 2 TO 150+28.92 R 2	ł	RT	46488	TN.	204.70	_	1803.8	-	
		99+99.41 R 2 TO 150+25.63 R 2		LT	46521		166.80	-	_	-	
		152+68.43 R 2 TO 214+21.21 R 2	INSIDE SHOULDERS OF MAIN TRAVEL LANES	LT	46496		238.90		-	-	
		152+70.27 R 2 TO 214+21.11 R 2	MAIN THAVEL LANES	RT	46502		223.70				
		218+55.80 R 2 TO 364+18.78 R 2	1	LT	46509		491.70				
		219+30.92 R 2 TO 364+18.80 R 2		RT	46516		478.00				
										-	
334 1 34	SUPERPAVE ASPH CONC. TRAFFIC D, PG82-22. PMA	99+99.41 R 2 TO 150+28.74 R 2	1	RT	43530	TN	1754.40		17323.4	-	
		99+99.41 R 2 TO 150+25.62 R 2	1	LT	43543		1811.50		_		
		152+68.39 R 2 TO 214+01.26 R 2	MAIN TRAVEL LANES	LT.	43557		2069.70				
		152+70.37 R 2 TO 214+21.07 R 2		RT	43522		2196.20				
		218+55.82 R 2 TO 364+18.78 R 2	1	LT	43483		4607.40				
		219+30.82 R 2 TO 364+18.80 R 2		RT	43488		4625.00	v.			
		99+99.41 R 2 TO 364+18.80 R 3	EB OVERBUILD	RT			119.6	V.			
		99+99.41 R 2 TO 364+18.80 R 3	WB OVERBUILD	LT			139.6	7			

#### Incorrect:

Do not add columns (Volume in this example). Do not create a separate summary box. Keep the 334 quantities together and notate the quantity as Overbuild in the Design Notes column.

		SUM	MARY OF PAVE	MENT	(OVERB	UILD)							
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION		AREA	VOLUM	UNIT	QU.	ANT I	TY	TO	ΓAL	DESIGN	CONSTRUCTION
NO.	770 7721 02301177701	STA. TO STA.	DESCRIPTION	701271	E		P	$\top$	F	ρ	F	NOTES	REMARKS
334-1-13	SUPERPAVE ASPHALTIC CONC, TRAFFIC C, (OVERBUILD)	85+00.00		0.46		TN		$\neg$				*326.2 TN INCLUDED IN	
		85+50.00		1.46	47.9			4				SUMMARY OF PAVEMENT	
		86+00.00		2.18	90.9			7				0334 1 13	
		86+50.00		2.48	116.4			9					
		87+00.00		2.80	132.0			10					
		87+50.00		3.55	158.8			12					
		88+00.00			88.7			7					
								$\top$					
		92+40.00		7.14				$\top$					
		92+50.00		7.14	71.4			5					
		93+00.00		7.14	178.4			13					
								$\neg$					
		93+00.00		33.37				$\neg$					
		93+33.00		33.37	1101.2			81					
		93+33.00		17.24				$\top$					
		93+50.00		17.24	293.0			21					
		94+00.00		4.46	542.5			40					
		101+00.00		12.61				$\top$					
		101+50.00		7.48	502.3			37					
		102+00.00		9.16	416.0			31					
		102+50.00		4.66	345.5			25					
		103+00.00		3.91	214.1			16					
		103+50.00		1.38	132.2			10					
		103+74.48			16.9			1					
								$\neg$	$\neg \neg$				



# 19. Summary of Miscellaneous Asphalt Pavement

Instructions, Return to Summary Box List

#### **Correct:**

LOCATION		AREA			тніск	PAVEMENT		DESIGN	CONSTRUCTION
VISABIN BENGANA	SIDE	ID	LENGTH	WIDTH	(IN)	0339	1	NOTES	REMARKS
STA. TO STA.		1.00.00			2000120	P	F		
1450+72.58 R3 to 1450+79.81 R3	LT	146055			2	0.24			
1452+13.26 R3 to 1452+18.26 R3	RT	120216			2	0.44	- 3		1
1455+98.24 R3 to 1456+05.77 R3	LT	120210			2	0.32			
1456+28.91 R3 to 1456+36.20 R3	RT	120205			2	0.24			
1461+69.67 R3 to 1461+77.00 R3	LT	120200			2	0.35			
1462+59.20 R3 to 1462+65.03 R3	LT/RT	120195			2	0.44			
				SI	8-TOTAL:	2.0	-		+
					TOTAL:	2.0			

#### Incorrect:

Location information (including the Area ID or length/width of quantified area) shall be included in the summary box. There should not be a reference to the plans for the information.

SUMMARY OF	MISC	ELLANI	EOUS A	SPHALT	T PAVEMEN	T
LOCATION	SIDE	THICK	UNI GUARI	DER DRAIL	DESIGN	CONSTRUCTION
STA. TO STA.	SIVE	(IN)	0339 P	1 (TN)	NOTES	REMARKS
92+20.66 TO 96+78.16	LT	.2	7.62		**	
92+85.29 TO 94+24.51	RT	2	3.69		**	
94+70.70 TO 96+90.70	RT	2	3.66		**	
	St	JB-TOTAL:	14.97			
		TOTAL:	14.97			

\*\* NOTE: REFER TO PLANS FOR MISCELLANEOUS ASPHALT PAVEMENT WIDTH.

# 20. Summary of Box Culverts

Instructions, Return to Summary Box List

**Correct:** This summary box is normally used for box culverts less than 20'. Box Culverts over 20' are defined as bridge culverts, and should use the Summary of Structure Quantities, along with the Bridge number.

	SUMMARY OF BOX CULVERTS												
PAY ITEM	ANY ITTH ACCOUNTION	LOCATION		QUANT 17	r	TOT	AL	DESIGN	CONSTRUCTION				
NO.	PAY ITEM DESCRIPTION	STATION	UNIT	P	F	P	F	NOTES	REMARKS				
0400 4 1	CONCRETE CLASS IV. CULVERTS	1426+00.00 R2	CY	459.00		491.2		SEE BOX CULVERT DATA SHEETS					
	to the first through the first trans	1448+00.00 R3	1	32.20				SEE BOX CULVERT DATA SHEETS					
0415 1 1	REINF STEEL-ROADWAY	1426+00.00 R2	LB	127250.89		135637.1		SEE BOX CULVERT DATA SHEETS					
	2000 COOK THE COOK SOOK S	1448+00.00 R3		8386.22		1		SEE BOX CULVERT DATA SHEETS					

Incorrect:



# 21. Summary of Drainage

Instructions, Return to Summary Box List

**Correct:** In addition to standard cross drains and side drains, includes quantities for Trench Drain, Underdrain, French Drain, and Edgedrain.

Incorrect:



## 22. Summary of Utility Adjustments

Instructions; Return to Summary Box List

#### **Correct:**

Quantities separated for each included project.

Note: Total column formatting could remain without merged cells, with the total shown at the top. When cells are merged, use top justification, so the total remains at the top of the cell.

PAY ITEM		1 1007 17 1000		_	2501.00	TITY	TOTAL TOTAL	(EA)	Add total	CONTRACTOR LONG
NO.	PAY ITEM DESCRIPTION	STAFFON	SIDE	UNIT	P	1	P	150/	DESTGN NOTES	CONSTRUCTION REMARKS
423 5	ADJUST FOOT MANNOLES	74+30.54	87	F.A.	1.0		10		Basetine Survey SA 953	
		75+73.37	207	8.4	1.4		1 " 1		Resetting Survey AA 853	
		77+49.37	AF	7.4	1.0		1 1		Haserine Survey 5A 953	
		91+17.35	LF	EA	1.0		1 1		Reseline Survey SR #53	
		93+65-97	1,7	4.3	1.0		] [		Baseline Survey 58 953	
		95433 04	17	EA	1.0		3 (		Easeline Survey St #33	
		96+54.22	LT	2.4.	1.0		1 1		Besettine Survey SR 953	
		52163.55	17	6.4	1.0		1 1		Reseive Survey SR #53	
		26+20:40	1.5	F.A.	1.0		1 1		Exertine Survey Athanbra Crista	
		26+67 20	4.5	EA	1.0		1 1		Baseline Survey Albanbra Citile	H .

		5	LIMMAR	ty of	UTILIT	Y ADJU	STMENT	S		421492-1-96-5
PAY ITEM NO.	PAY ITEM DESCRIPTION	STATION	SIDE	OWIT	OU AN	TITY	TOTAL	(EA)	DESTON NOTES	CONSTRUCTION REMARKS
	WIANT-DADE MATER VALVE ADJUSTMENTS*	94+27.72	17	E.A.	2.0		2.0		Reseline Survey SR 253	
		94421.24	1.5	E.A.	1.0		1		Reservee Survey SR 953	
		94+31.72	17	£4.	1.0		3 1		Maseline Survey 58 953	
		94×71.59	1,7	E.A.	11.0		1 1		Basetine Survey SR 955	
		94473.90	17.	EA.	1.0		1 1		Heseline Survey SR 953	
	-	24437.20	4.5	64	1.0		]		Maseline Survey Alhanbra Crecke	
		14+70 47	1.7	6.4	1.0		]		deserine Survey Athanbra Cricie	
		24+74.29	1.5	£.4	1.0		]		Reseline Survey Alhanbra Circle	
		73+97.29	1.7	8.4	1.0		3 1		Resettine Survey Albanbra Cresta	
		26+53-49	AT	E.4	1.0		]		Baseline Survey Albanbra Circle	
		26+55.94	LF	EA	1.0		1 1		Baseline Survey Alkanbra Circle	

#### Incorrect:

Do not include offset information with location/station.

		SUMMA	ARY OF	UTIL	ITY AD	JUSTME	NTS			
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNIT	QUAN	TITY	TO	TAL	DESIGN	CONSTRUCTION
NO.	PAI TIEM DESCRIPTION	STATION	SIDE	UNIT	P	F	P	F	DESIGN NOTES	REMARKS
425-5-	MANHOLES, ADJUST	9+41.59 (10.17'RT)	RT	EA	1.0		1.0		NW 14TH ST	
		66+69.60. (22.69°LT)	R7	EA	1.0		1.0		NW 7TH AVE	
		66+70 81 (9.47 RT)	RT.	EA	1.0		1.0		NW 7TH AVE	
		67+29.17 (22.83°RT)	RT	EA	1.0		1.0		NW 7TH AVE	
		67+62.10 (6.82'LT)	9.7	EA	1.0		1.0		NW 2TH AVE	
	Ý.				5.0		5.0			¥

### 23. Summary of Miscellaneous Drainage Items

**Instructions**; Return to Summary Box List

#### Correct:

#### Incorrect:

Do NOT repeat the pay item number, description, unit, or total. These should only be on the FIRST row where the pay item is list in the summary box. The total should include the accumulated total for all of the values in the Quantity column and shown only on the FIRST row where the pay item is list in the summary box.

PAY ITEM NO.	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNIT	QUANTITY	TOT	AL	CONSTRUCTION REMARKS
		STA. TO STA.			P	P	F	
425-10	YARD DRAINS	1409+75.00 R2	RT	EA	1.0	1		
425-10	YARD DRAINS	1411+65.00 R2	RT	EA	1.0	1		
425-10	YARD DRAINS	1414+54.00 R2	RT	EA	1.0	1		
425-10	YARD DRAINS	1416+80.00 R2	RT	EA	1.0	1		
430-175-115	PIPE CULVERT OFT MAT, ROUND, 15", S/CD	1409+77.00 R2 to 1411+01.25 R2	RT	LF	150.0	150		
430-175-115	PIPE CULVERT OFT MAT, ROUND, 15", S/CD	1411+35.06 R2 to 1411+64.00 R2	RT	LF	50.0	50		
430-175-115	PIPE CULVERT OPT MAT, ROUND, 15°, S/CD	1414+55.00 R2 to 1414+72.36 R2	RT	LF	37.0	37		
430-175-115	PIPE CULVERT OPT MAT, ROUND, 15°, S/CD	1415+05.98 R2 to 1416+78.00 R2	RT	LF	192.0	192		

Do NOT change the name or create a new summary box. Desilting quantity should be included on the Summary of Miscellaneous Drainage Items, Summary of Box Culverts, or on the Summary of Drainage Structures Sheets.

			SUMM	IARY O	F DESI	LTING			
PAY ITEM	DAY ITEM DESCRIPTION	CIDE	UNIT	QUAN	TITY	TOT	AL	DESIGN NOTES	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	SIDE	UNII	P	F	P	F	NOTES	REMARKS
0430 950	DESILTING CONCRETE BOX CULVERT	LT/RT	C	145.8		198		TRIPLE CULVERT & STA. 1426+10	
		LT/RT		52.6				DOUBLE CULVERT & STA. 1447+95	
7		83							

Do not include the Summary of Drainage Structures on the Summary of Quantity sheets. They belong on their own sheets. If there is only minor work, use the Summary of Miscellaneous Drainage Items.

						SUMMA	RY OF DRAINAG	E STRUCTURES			
177	0.025		illa i		CURB INLET	GUTTER INLET	MANHOLE	PIPE CULVERT	FRENCH DRAIN	DESIGN	or and the con-
W.	STR.	STATION	SiD	DESCRIPTION	Type 9 < 10'	Type 5 < 10'	Type P-7 < 10'	18"	24° FD	NOTES	CONSTRUCTION REMARKS
DUANT	1,555				425 12 01(EA)	425 17 01 (EA)	425 2 41 (EA)	430 174 118 /LF)	443 70 4 (LF)		111000000000000000000000000000000000000
F	5-1	12+45.55	RT.	INLET . FD	1				50	Provide Type 11 Skinner	
70										-34-44-411354135413	
- /-	5-2	14+54.53	LT	INLET . PIPE	Į.			16	3	See Brainage Details	
F.		-	100		1	100			3		
7	5-3	14+54.53	1.7	NANHOLE FD			1		70	Provide Type II Skimmer	
- /											
- 1	5-4	14+90.58	LT.	INCET. PIPE	¥.			33			
F	3								2		
			-			-		49	150		
TOTAL	F					- 1		49	120		

This quantity should be included on the Summary of Miscellaneous Drainage Items, Summary of Side Drain and Mitered End Sections, or on the Summary of Drainage Structures Sheets.

LOCATION	SIDE	PIPE FIL & PLUGO PLACE OF SERV	OUT	DESIGN NOTES
		0430 8	330	MOTES
CTA		CY		
STA.		P	F	1
1422+80 +/-	RT	4.71		SEE PLAN SHEET FOR MORE INFORMATION
1426+30 +/-	RT	1.86		SEE PLAN SHEET FOR MORE INFORMATION
SUL	-TOTAL:	6.57		
PLA	TOTAL:	6.57		

24. Summary of Railing Instructions; Return to Summary Box List

#### **Correct:**

SUM	MARY O	F RAILIN	G		
LOCATION	SIDE	PED/BIC RAILI (ALUMINUM (42" TY	NG	CONSTRUCTION	
		0515	2311	REMARKS	
STA. TO STA.		LF			
SIA. IO SIA.		P	F		
1424+10.00 R2 to 1426+67.58 R2	LT	259.7			
1425+58.56 R2 to 1426+34.87 R2	RT	76.4			
1447+55.60 R3 to 1447+96.93 R3	RT	42.9			
1447+97.37 R3 to 1448+41.04 R3	LT	42.0			
s	UB-TOTAL:	421.0	- 1		
PL	AN TOTAL:	421			

### Incorrect:



25. Summary of Curbs

Instructions; Return to Summary Box List

#### **Correct:**

PAY ITEM	DAY ITEN OFFCERIBLION	LOCATION	SIDE	AREA	UNIT			QUANT IT	Y		TOT	AL	DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STA. TO STA.	7 5100	10	UNIT			CTIONS	NET L	NGTH			NOTES	REMARKS
		37A: 10 31A.				LENGTH	TYPE	LENGTH	P	F	P	F	<u> </u>	
520 1 7	CONCRETE CURB & GUTTER, TYPE E	248+32.25 to 249+38.76	LT/RT		LF	113.4			113.4		857			
		248+32,25 to 249+38,76	LT /RT			110.8			110.8					
		253+27.01 to 254+11.57	1.7			85.0	1 3		85.0				Š.	
		253+27 01 to 254+11.57	LT/RT			88.9			88.9				ž	
		257+34.15 to 258+04.00	RT			75.6			75.6				II.	
		257+34:15 to 258+04.00	LT/RT			76.4	1		76.4					
- 1		258+10.00 to 258+94.53	LT/RT			90.1	4 1	84	90.1				E .	
		258+10.00 to 258+94.53	LT			91.2			91.2				Į.	
		266+41 48 to 267+01 84	LT/RT			61.8			61.8					T
		266+41.48 to 267+01.84	LT/RT			63.7		8	63.7				Ü	
520 1 10	CONCRETE CURS & GUTTER, TYPE F	257+93.00 to 258+18.00	. RT		LF	25.0			25.0		48			
		257+95.00 to 258+18.00	1.7			23.0			23.0		5030		1	
520 5 11	TRAFFIC SEPARATOR CONCRETE - TYPE 1, 4' WIDE	254+11.57 to 255+26.00	LT		1,F	114.4			114.4		598		OPTION I	1
		256+20_12 to 257+34_15	RT-			114.0			114.0				OPTION I	
		258+94.53 to 260+53.48	LT			159.0			159.0				OPTION I	
		267+01.84 to 269+12.50	LT.			210.7			210.7				OPTION I	

#### Incorrect:

Do NOT rename the boxes.

		SUMMAR	RY OF C	URB & C	SUTTER					
PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNIT	QUAN	TITY	тот	AL	DESIGN NOTES	CONSTRUCTION
NO.	PAR TIEM DESCRIPTION	STA, TO STA.	SILE	UNIT					NOTES	REMARKS
		SIA. TO SIA.			P	F	P	F		01.000.000.000.000.000.000.000.000.000.
0520-1-10	CONCRETE CURB & GUTTER, TYPE F	460+51.90 TO 466+11.77	LT	LF	572.0		572			
		460+49.65 TO 466+11.77	87	LF.	575.0		575			Ĭ.
	1	- H C	SUB-TOTAL		1147		1147			
			TOTAL		1147		1147		·	

Do NOT repeat total quantity in every summary box when it continues to the next sheet. The total should ONLY be on the FIRST summary box in the FIRST row (not centered or justified to the bottom of a merged cell) where the pay item is introduced to a box.

	i i		T	1	1 213 23	T		SEPARA			_			1
AY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	AREA	UNIT			QUANTITY			TOT	AL	DESIGN	CONSTRUCTIO
NO.		STA. TO STA.		10	>	GROSS LENGTH	TYPE	T I ONS LENGTH	P P	ENGTH F	ρ	F	NOTES	REMARKS
20-1-10	CONCRETE CURB & GUTTER, TYPE F (CONT'D)	80+69 80 to 80+74.16	RY	67251	TAR	8.50	110.110							
		81+14.47 to 81+38.83	R7	67223		33.60		8 1			]			
		81+38.83 to 83+29.91	RT	67230	1	191.10					]			
		82+98-91 to 83+11.91	4.7	67204		20.50					]			
		82+98.91 to 83+11.91	LT	67463		20.50					]			
		83+11.47 to 83+11.91	1.7	67170	4	67.00					1			
		83+29.91 to 86+24.59	RT	67224		294.70					Į			
		83+37.89 to 83+38.00	LT	67185		65.70		-			1	1 1		
		83+38 00 to 83+53.00	1.7	67206		23.60					1			
		83+53.00 to 86+61.50	LT	67205		308.50					4			
		86+24.59 to 86+54.59	RI	67253		47.00					1			1
		86+54.59 to 86+54.89	R7	67228		45.30		-			4			
		86+61 50 to 86+76.50	LT	67.187	-	23.60	-	-			4			-
		86+76.50	1.7	67163		8.70		-			4		-	
		86+76.50 to 86+76.63	LT	67457		27 40					-			+
		86+90.57 to 87+20.57	RT	67254		47.20	-	-	-		-			-
		86+90.57 to 86+90.68	_	67.227	_	45.00		-		_	-			+
	F	87+06_92 to 87+41_92	1.7	67186	-	55.00					-			+
	ļ-	87+06.92 to 87+06.93 87+20.57 to 90+86.25	RT	67458	_	15.80 365.70	_	-	_	_	-			+
		87+41_92_to_90+86.51	1.7	67177		344.60	-		-	_	-	1 1		+
	<del> </del>	90+86.25 to 91+16.25	87	67236	_	47.50	_	<del>   </del>			1			+
	-	90+86.51 to 91+16.51	1.7	67207	_	47.20		_			1	1		
	ļ-	91+15.76 to 91+16.25	RT	67234		37.80		-			-			+
		91+15.76 to 91+15.83	87	67497	-	22.10	_							-
		91+16.42 to 91+16.45	1.7	67461	_	24.80	_	1	_		24052.96			+
	<del> </del>	91+16.51 to 91+16.52	LT	67171		19.30	_	<del>                                     </del>	_		2.7022.30			+
		91+40 30 to 91+41.09	LT	67462		36.90		-			1			_
		91+41.09 to 91+79.08	LT	67188	-	59.00		1			1	1 1		+
		91+53.10 to 91+54.28	RT	67233		59.10	-	1			1			_
		91+53.10 to 91+83.09	RT	67235		47.80					1			
		91+79.08 to 96+90.87	LT	67178		511.80					1	1		
		91+83 09 to 94+33 47	RT	-		264.26	-				1	1		_
		94+54.57 to 97+50.27	RT		ė .	306.60				- 3	1			
		96+90.87 to 97+05.86	LT	67189		23.90					1			
		97+04.26 to 97+05.86	1.7	67172		74.80					1	1		1
		97+30.17 to 97+31.33	1.7	67164		23.70					1			
		97+31.33 to 97+48.33	LT	67208		25.40					1			
		97+48 33 to 97+97 77	LT	67158		49.50	7				1	l i		
		97+50.27 to 97+82.26	R7	67257		49.50		8			1	1		
		97+82.26 to 97+82.37	RT	67238		4.20					1			
		97+82 36 to 97+83 02	RY	67237		25.50					]	1 1		
		97+97.80 to 104+23.85	LT	67156		626 10					]	1		
		98+07.49 [0 98+08.23	RT	67239	i .	25.50	- 4	ź.			]			i.
		98+07 49	RT	67255		0.80					]			
		98+07.49 to 98+41.49	RT	67256		53.40								
		95+41.49 to 104+23.18	RT	67216	6	581.70								
		104+23.18 to 104+55.17	RT	67260		49.70					]			
		104+23.85 to 104+48.84	LT	67169		39.80					]			
		104+47 59 to 104+48 84	1.7	67173		66.80		10				1		

Do not delete the total column for boxes that total across and then add pay items by sections with individual total rows.

	1	SUMMARY OF CURB	4 00	1.	T	THAT TO	DET ANATONS				
PAY ITEM	ANY ITTH OCCUPATION	LOCATION	ctor	IIII TT			QUANTITY			DESIGN	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STA. TO STA.	SIDE	UNIT	GROSS	DEDU	CT10N5	NET	ENGTH	NOTES	REMARKS
		31A. 10 31A.			LENGTH	TYPE	LENGTH	P	F		
20-2-2	CONCRETE CURB TYPE B			1			13				
		1131+61.74 TO 1131+76.90	LT	LF	40.6		k				
	CURB AND GUTTER B TOTAL			LF	41						
	200000282-01000-2008-0	55-70-5									
20-2-4	CONCRETE CURB TYPE D	SR 482	1777-20-7					_			
		1127+96.73 TO 1128+05.85		LF	17.3			_			
		1128+12.35 TO 1128+60.66		LF	48.7						
		1128+55.74 TO 1128+71.32		LF	77.8						
		1129+00.63 TO 1129+19.16		LF	22.8			_			1
		1129+03.32 TO 1129+42.38		LF	48.7						
		1129+96.77 TO 1131+20.33		LF	124.8						
		1127+13.87 TO 1127+13.31	RT	LF	14.0				-		-
		INTERNATIONAL DR					2		-		
		22+10.15 TO 22+08.46	LT	LF	12.9				<del>                                     </del>		1
		22+33.51 TO 22+40.00	LT	LF	15.0		+	_	<del>                                     </del>		+
		26+10.66 TO 26+10.37	LT	LF.	3.1		-		<del>                                     </del>		
		26+35.86 TO 26+37.50	LT	LF	6.9				<del>                                     </del>		
		34+35.42 TO 34+35.42	LT	LF	24.0				<del>                                     </del>		1
	•	34+59.42 TO 34+59.42	LT	LF	24.0		-		<del>                                     </del>		+
		35+78.34 TO 34+78.34	LT	LF	6.0			_	<del>                                     </del>		
		35+01.84 TO 36+01.84	LT	LF	6.0				· ·		
	7	30707.84 10 30707.84		45	0.0		-		1		1
	CONCRETE CURB TYPE D TOTAL:			LF	452				1 1		1
				ii .							
		2		2			(				
20-3	CONCRETE VALLEY GUTTER	5R 482									
		1128+55.42 TO 1129+14.73		LF	59.3						
		1129+29.25 TO 1129+98.72		LF	69.5				1 1		
		1131+03.88 TO 1132+35.19		LF	131.3			_			
		1136+50.72 TO 1137+49.80		LF	99.1						
		1131+28.54 TO 1132+08.88	RT	LF	80.3						
		1133+90.34 TO 1134+72.26	RT	LF	81.9				$\longrightarrow$		
_								_	-		
		INTERNATIONAL DR	114.96	0.ee	70.4		-		<del>                                     </del>		+
		21+86.65 TO 22+57.01	LT	LF	70.4						
		25+93.03 TO 26+53.52	LT	LF	60.5		_		-		
		25+84.95 TO 26+84.72	RT	LF	99.8		-				-
	CONCRETE VALLEY GUTTER TOTAL:	•		LF	752		-				+
	CONCRETE TREES OUTTER TOTAL	-		107			1		<del>     </del>		1

# 26. Summary of Permanent Barriers, formerly "Barrier Wall" Instructions; Return to Summary Box List

#### **Correct:**

PAY ITEM	PAY ITEM DESCRIPTION	LOCATION	SIDE	UNIT	QUANT	TITY	TOT	AL	DESIGN	CONSTRUCTION
NO.	PAT TIEM DESCRIPTION	STA. TO STA.	SIVE	DNII	P	F	P	F	NOTES	REMARKS
521 1	MEDIAN CONCRETE BARRIER WALL,	1352+40.00 to 1360+99.97		LF	860.0		1000			
-	CAST IN PLACE	1360+99.97 to 1362+15.37			115.6					
		1362+15.37 to 1362+39.91	LT		24.6			8		
521 72 3	SHOULDER CONCRETE BARRIER WALL.	1447+50.57 to 1454+35.03	RT	LF	692.5		2037	-		
	RIGID-SHOULDER	1456+97.27 to 1464+20.00	RT		722.7					
		1457+53.98 to 1463+76.08	LT.		622.1					
521 72 10	SHOULDER CONCRETE BARRIER WALL.	432+81.61 to 434+03.17	RT	LF	121.6		243			
	RIGID SHOULDER 42°	434+03.17 to 434+03.17	R7		121.6		1			

#### Incorrect:



27. Summary of Permanent Driveways Instructions; Return to Summary Box List

**Correct:** 

Incorrect:



## 28. Summary of Sidewalk & Detectable Warnings

Instructions, Return to Summary Box List

#### **Correct:**

Where "back of sidewalk curb" is constructed or removed with the sidewalk, no separate payment is made. Optional: The designer may quantify these lengths, in accordance with the Design Standards/Standard Plans, and show in the Design Notes column.

LOCATION		nguasa.			CONC SI		CONC SI		DETECT		The second	
	SIDE	AREA 1D	LENGTH	WIDTH	0522	S 10	0522	2	0527	2	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	7	1000			59		5	-	5/		MOTES	UE NOW 2
			_		P	E	P	1.5	P	(E)		
60+4).48 10 60+54.20	LT	17214			7.7							-
60+66.80 to 61+22.56	i.r	17200	-		36.7			-		_		-
61+35.07 to 61+60.63	LT	17187			15.6		2 2					- 1
61+72.27 to 62+15.71	LT.	17173			27.5		-			$\rightarrow$		
63+28.29 to 62+88.28	LT.	17158			31.1							
53+05.72 to 63+42.22	LT	29176			20.7							
63+75.00 to 66+99.00	AT	30532			207.7							1
53+88.88 to 65+93.33	LT	33222			129.4					9 16		
66+27.17 to 66+33.27	LT	33167			7.5							
66+33.27 to 66+99.00	4.7	331##			37.5							
68+45.00 to 69+90.00	AT	29061			89.5							0
68+45.00 te 70+74.00	LY	29042			249.4							
70+86.00 te 73+50.00	LT.	14559		1	40.7							
71+62.00 to 71+94.22	1.7	14572			20.0							
72+66.13 tu 72+49.43	LT	30478		4-3	27.9			- 2				
80+44.41 to 80+78.58	i.T	20121					23.9					1
61+12.88 Yo 61+45.08	LT.	20144					20:0					
67+44 54 to 61+77 46	RT	20116					24.3			3		-
62+50.92 to 61+82.07	LT.	20099			-		25.4					
\$2+05.92 to 62+38.08	LY	20133					33.4					
62+78.48 TO 63+15.52	47	30421					47.0					
65+83.01 to 66+27.09	LT	40919					111.3					8
70+37.00 to 70+69.00	AT	20012		1 7			29.8					
76+64.00 to 70+96.00	17	29245					27.7					
70+69.00 to 71+02.00	AT	20034					31.3					-
72+26.30 to 71+38.50	AT:	20045					29.0					
72+40.00 to 71+72.03	LY	29275		1			23.4	-				
71+84.05 to 72+16.06	i.r	29224					20:4					
72+05.07 to 72+37.08	RT	35225					25.3					
53+33.50 to 63+40.88	LT	40901							23.3			
63+90.23 to 63+97.66	ir:	40896							12.1			
			500	S-TOTAL!	#56		47)		26			

LOCATION	CONC SI		CONC SIL		DETECT WARN I		05332500000	64700000 1000 1000 1000 10
110-02-00-01-00-0	SIDE 0522	2 1	0522	2	0527	2	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	5	Y	SY		SF		NOTES	0500003
SIA. 10 SIA.	P	F	P	F	ρ	F		
429+58.54 TO 430+58.03	LT 53.9							
429+58.54 TO 429+78.06	LT				30.0			
430+54.38 TO 430+57.98	LT				11.0			
431+08.96 TO 431+12.09	LT				10.0			
431+09.25 TO 433+54.21	LT 135.5		8 3	110	3			
433+50.31 TO 433+53.93	LT				10.0			
433+78.40 TO 433+82.24	LT				11.0			
433+78.69 TO 435+24.31	LT 87.3		5 3		3			
435+20.45 TO 435+24.02	CT				11.0			
435+49.96 TO 440+14.36	LT 259.9							
435+49.96 TO 435+53.14	LT				10.0			
440+12.27 TO 440+14.37	LT				10.0			
440+21.31 TO 440+86.35	LT 36.3							
440+21.31 TO 440+23.35	LT				10:0			
440+86_30 TO 440+98_92	LT		7.0					
440+98.80 TO 442+27.63	LT 71.1							
442+23.68 70 442+27.63	LT				11.0			
442+54_44 TO 444+31_50	LT 98.1							
442+54 44 TO 442+59.82	LT			- 1	12.0			
444+31 47 TO 444+58 96	LT .		15.3					
444+58.93 TO 445+39.26	1.7 43.9		3 1	110				
445+34.66 TO 445+39.27	LT				11.0			
445+59.57 TO 445+63.97	LT				11.0			
445+59.86 TQ 449+39.51	LT 215.1							
449+35.74 TO 449+38.75	LT				16.0			
449+69:37 TO 449+75.72	LT		$\longrightarrow$		13.0			
449+69 66 TO 455+66 19	LT 328.9		-		-			-
455+51,77 TO 455+65.91	LT				23.0			
456+29.53 TO 456+41.01	LT				19.0			+
456+29.82 TO 456+64.50	LT 16.4		-	_		$\rightarrow$		
456+57 17 TO 456+64.22	LT		-		13.0			
457+16.93 TO 460+12.63	LT 162.8		1					
457+16.93 10 457+24.52	LT				14.0	_		
460+08.74 TO 460+12.62	LT		_		10.0			
460+54.55 TO 460+59.38	LT		_	_	9.0			+
460+55.00 70 466+05.21	LT 375.7		-					+
	YOU'L TOTAL			-	315	-		+
508	TOTAL 1831		107		245 535			

# On LS Project (optional: pay item numbers not shown)

LOCATION			3.37410.0-004	SINCREPACE	CONC 511		DETEC WARN		650004	Constitution of the second
O-STRING STR	51DE	AREA ID	LENGTH	WIDTH	SY	f.	5	F	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.				-	ρ	F	p	F		10
129+06.01 to 129+11.61	AT.	13068			(.)				TENNESSEE AVE SE	
129+11.55 to 129+26.99	RT	13865			11.8				FERNESSEE AVE SE	
238+37.68 to 238+50.32	4.7	#19#			5:0				LURA AVE NW	
149+43.57 to 140+64.39	1.7	23534			12.0				HURMOOD AVE SW	i i
141+07.15 to 141+15.93	4.7	#2#2			1.0				HURROOD AFE NW	
741+07.42 to 741+21.08	6.7	13900	- 1		6.5		- 3		MURRICOD RVE NW	
141+43.79 to 141+49.30	1.7	13081			3.1				HURNOOD AVE NW	
141+49.30 to 141+62.30	4.7	13028			7.5	- 1			MURKOOD AVE NW	
141+62.29 (# 141+79.41	1.7	23024			8.0				MURRISOD AVE NW	
113+67.00 to 113+81.47	AT	13727			10		23.6		HOMEDERGT, DELIVERY ENTRANCE	V
114448 05 to 114461 32	87	13729					21.7		HOMEDEPOT, DELIVERY ENTRANCE	
217+90.11 to 118+03.22	307	13734	1 2		1 1		21.6		HOMEDEPOT, IST ENTRANCE SE	å.
118+97 48 to 718+99.48	4.7	73744			8		10.2		TANGERINE AVE SW	1
178+53.46 to 118+65.76	LF	13749					22.6		TANGERINE AVE NW	
118+65.59 to 118+78.67	AT	13739			8 80		21.6		HOMEDEPOT, IST ENTRANCE WE	0
131+36.88 to 121+52.51	HT	13/54					25.0		HOMEDEPOY, 2ND ENTRANCE SE	
129+18.60 to 129+26.99	AT	13212					17.4		TENNESSEE AVE SE	I/
133+30 IR to 133+41.82	MT:	13762					29.7		GEORGIA AVE NE	
136+39.89.10 136+46.98	#7	73768	- 13		100		14.8		HATFIELD AVE SE	E
236+88.62 to 736+96.81	.RT	13773					17.1		HATFIELD AVE NE	
138+41.20 to 138+44.25	1.7	13220	- 3				8.0		LURA AVE NO	E
140+53.19 to 140+64.39	£T.	13227					25.2		HURNOOD AVE SW	
141+11.33 to 141+14.25	4.7	6824)	- 3				# 0		MURKIODS AVE NW	
141+53.30 to 141+58.30	4.7	13252					10.0		HURWOOD AVE NW	



#### Incorrect:

Either the Area ID or the length and width columns must be used. Do not delete these columns.

	9 e 190 e 1	T	CONC SIL		CONC 51		DETECT	E WARNII		
LO	CATION		4"		6		WARNII			
		SIDE	0522	1	0522	2	0527	2	DESIGN NOTES	CONSTRUCTION REMARKS
CTA	TO STA.		5Y		51	r .	5F		WOILS	nemana 2
SIA.	TO STA	9	P	E	P	F	P	E		
429+11 48	70 429	+56.19 RT	23.9		3 5			Ê		3
429+11.48	TO 429	+17.35 RT			3		12.0	ý.		
429+54.79		+66.60 RT			60.3					
430+62.54		+14.62 RT	25.7				- 4	É		
431+03.50	TO 431	+14.62 RT					18.0	- 8		
431+33.99	TO 431	+41-23 RT					13.0		₹%_	
431+34.00	TO 432	+08.73 RT	40.0		3 3				WW03366	
432+03.60	TO 432	+08.73 RT			ř 9		12.0	- 6		1 1
432+39,21	70 434	+07.51 RT	91.3							
432+39.21	TO 432	+50.23 RT			å S		18.0	- 6		
433+99.37	70 434	+07.51 RT			8		15.0			
434+38.50	TO 442	+07.31 RT	425.9							
434+38.50	TO 434	+44.53 RT					12.0			
441+90 62	70 442	+07.31 RT			5 8		25.0			
447+81 84	70 448	+41 47 RT	311.7							
442+81.84	70 442	+98.71 RT					26.0			
448+36.47	70 448	1+41 .47 RT			8 8	-	11.0			40
448+76.12	70 449	+52.66 RT	41.8							
448+76.12	TO 448	+80.80 RT					11.0	- 1		
449+50.42	TO 449	+52.66 RT			8 9		10.0			5
449+80.65	TO 456	+13.20 RT	351.4							
449+80.65	70 449	+83.01 RT					10.0			
456+07 24	70 456	+13.20 RT			8		12.0			3
456+56.51	70 457	+87.88 RT	72.1							
456+56.51	TO 456	+63.10 RT					13.0			
457+85.81	TO 457	+87.88 RT			(	- 1	10.0			
458+02.86	TO 458	+86.34 RT	46.7							
458+02_86	TO 458	+06:47 RT			î î		11.0			
458+84.14	70 456	+86.34 RT					10.0			
459+04.66	TO 460	+30.89 NT	73.9							
459+04.66	70 459	+09.33 RT			î î		11.0			
460+27.47	70 460	+30.11 RT			0 5		18.0			
460+51.31	TO 460	+55.24 RT					12.0			All
460+51.80	70 465	+59.33 RT	341.4				1,000			
465+49.46	70 465	+85.45 RT			24.4			8		
465+75.24	10 466	+04 13 RT	23.2							
			-							

When the Area ID is not used, the width and length should be included in the available columns. The width should not be documented in the Design Notes column.

LOCATION					CONC SIDEWA		IDEWALK				DETECT WARNI			
LOCALION	SIDE	AREA	LENGTH	WIDTH	0522 1		2 2		_		0527		DESIGN	CONSTRUCT 10
227 727 227	-	ID			5Y		SY		<del>                                     </del>	-	SY		NOTES	REMARKS
STA. TO STA.					P F	P	F				P	F		
29+71.45 to 130+56.08	RT				18.00								WIDTH= 2.0°, HARMONIZATION AREA	
31+82,10 to 132+39,80	RT			-	39.10								WIDTH= 4.3", HARMONIZATION AREA	
37+89.36 to 138+02.70	LT				8.40								WIDTH= 6.0', HARMONIZATION AREA	
39+96.85 to 140+69.20	RT				40.00								WIDTH= 7.3', HARMONIZATION AREA	
\$2+53.17 to 142+91.75	RT				24.50								WIDTH= 6.0", HARMONIZATION AREA	
13+21.75 to 143+45.75	RT				16.00			_	-				WIOTH= 6.0°, HARMONIZATION AREA	
13+69.75 to 143+93.80	RT				15.90		-1		-				WIDTH= 6.0' , HARMONIZATION AREA	
14+23.78 to 144+64.68	RT				90.80	_				9 1			WIDTH= 20.0', HARMONIZATION AREA	
48+05.91 to 149+18.78 19+03.72 to 149+41.28					12.10	_	<del> </del>			-			WIDTH= 2.0', HARMONIZATION AREA	
51+91.74 to 152+06.76	LT				4.20	_	-				-		WIDTH= 3.0', HARMONIZATION AREA WIDTH= 2.5', HARMONIZATION AREA	
57+90.00 to 158+13.45	LT	_			2.40	_		_	-				WIDTH= 2.3 , HARMONIZATION AREA	
8+13.45 to 158+38.50	LT	-			7.80		<del>                                      </del>	_	-	-			WIDTH= 6.0' HARMONIZATION AREA	
San Day and American State County	_	-		-			<del>1 1 -</del>		1	-			WIDTH- 5.0' HARMONIZATION AREA	
8+59.00 to 9+58.98	RT				42.78								SIDE STREET-NW 12 ST(WEST)	
8+85.00 to 9+64.40	RT				17.80								WIDTH= 2.0°, HARMONIZATION AREA SIDE STREET-NW 15 ST(WEST)	
10+50.36 to 11+23.83	RT				11.80								WIDTH= 1.5 HARMONIZATION AREA SIDE STREET NW 17 ST(EAST)	
8+45.80 to 8+90.80	RT				19.40								WIDTH= 4.0' HARMONIZATION AREA SIDE STREET-NW 18 ST(WEST)	
8+66.32 to 9+01.52	LT				35.00								WIDTH= 9.0°, HARMONIZATION AREA SIDE STREET-NW 18 ST(WEST)	
9+48.95 to 9+64.66	LT	-			20.00					-			WIDTH= 9.0" HARMONIZATION AREA	
10+35.62 to 10+94.74	LT			-	35.80	_	+	_	-				SIDE STREET-NW 18 ST(WEST) WIDTH= 5.0', HARMONIZATION AREA	
1+14.74 to 11+44.32	LT				16.80	_		_	_	-			SIDE STREET-NW 21 TERR(EAST) WIDTH= 5.0 - HARMONIZATION AREA	
0+44.00 to 10+96.01	RT			-	6.90	_	<del>                                     </del>	_	<b>—</b>				SIDE STREET NV 21 TERR(EAST) WIDTH= 1.3' HARMONIZATION AREA SIDE STREET NV 22 ST	
	-	2222			6.90	10.10							SIDE STREET NW 22 ST	
59+33.21 to 69+68.21	LT	6717				16.10		_						
1+34.39 to 71+46.28	LT RT	65203				35.00		_	-	-				
1+38.13 to 71+80.11 2+52.09 to 72+86.24	LT	6627	-	_	_	13.40		_	+	-			<del> </del>	
3+69.04 to 74+01.04	LT	6645		_		13.80		-	-	<del></del>			1	
6+12.39 to 76+46.39	RT	6628			-	13.20		_	+	+			1	
8+33.49 to 78+40.10	RT	6719			ļ .	19.80				-			1	
11+69.09 to 82+19.09	RT	6630				27.70			1	-				
82+16.01 to 82+60.01	LT	6631				19.50								
3+04.73 to 83+09.84	LT	44754			1	9.60								
3+18.88 to 83+62.80	RT	6632				22.10	0							
3+39.85 to 83+44.93	LT	6720				12.20	9							
3+57.45 to 83+85.45	LT	6633		2 1		16.30	)							
3+87.45 to 84+11.45	ir	6634		ŝ l		15.10								
4+13.45 to 84+41.45	LT	6635		4	i i	16.20								
4+60.88 to 84+92.88	LT	6636				17.10								
14+97.23 to 85+29.23	LT	6637				17.00								
86+24.67 to 86+62.67	LT	6638			-	22.30								
77+73.09 to 98+11.12	LT	6639				28.90			-					
18+47.68 to 99+03.68	RT	6640				35.70								
99+28.16 to 99+60.16	LT	6641	l.			21.00	9							

Topic No. 600-000-002 Basis of Estimates

29. Summary of Ditch Pavement Instructions; Return to Summary Box List

#### **Correct:**

LOCATION		10000			DITO	H ENT	1011000	100000000000000000000000000000000000000
	SIDE	AREA ID	LENGTH	WIDTH	0524	1 2	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.		1.0			5Y		moreo.	316013000
37,4, 10 37,4					P	F		
964+30.00 to 967+10.00	LT		280.0	7.0	217.8	-		
966+74.00 to 966+84.00	RT		10.0	7.0	7.8			
		1		1 1				1

#### Incorrect:

Either the Area ID or the length and width columns must be used.

LOCATION		2357			(DITCH I	RUBBLE LINING)	BEDD	ING	PAVE	CH	02257000	SOUND STORES
	SIDE	AREA	LENGTH	WIDTH	0530	3 4	0530	74	0524	12	DESIGN NOTES	CONSTRUCTION REMARKS
STA. TO STA.	110000	0.896)	200000000000000000000000000000000000000	225/25000	77	v I	7.1	v	51	1	1997 6.3	OCTOPION S
SIA. IO SIA.					p	F	P	E.	p	F		
65+67 50 to 65+22.50	1.7	Š			(8 8)	- 1			3.0			
66+78.07 to 67+10.99	AT				34.3		371.9					
68+77.57 to 68+87.54	LT				4.0		2.9					
			50/	B-TOTAL:	28.0	0.0	24.8	0.0	3.0	0.0		<del>                                     </del>
			710	TOTAL	20.1	9.0	74.8	0.0	3.0	0.0		

# 30. Summary of Walls

**Instructions, Return to Summary Box List** 

#### **Correct:**

Requested: Need a correct example with Wall No. column.

		50	MMARY	OF WAL	LS					
PAY ITEM	THE STORY OF SCHOOL OF LOW	LOCATION	SIDE	COLUMN	QUANT	TITY	TOT	AL	DESIGN NOTES	CONSTRUCTION
NO.	PAY ITEM DESCRIPTION	STA, TO STA.	STUE	UNIT	P	F	p	F	NOTES	REMARKS
0400 0 11	CONCRETE CLASS NS, GRAVITY WALL	63+75.00 - 65+38.99	AT	CY	#0.5		175.5		5.5° AVG. HETGHT	
		65+44.65 - 65+88.50	AT		76.2				5.5" AVG. HEIGHT	
		65+93 83 + 66+78:00	AT.		31.1				5.5° AVG. HEIGHT	
		69+02.00 . 70+00.00	47	4	21.8				4.0" AVG. HEIGHT	
3		#E+45.00 + 59+90.00	AT		45.3				5.0" AVG. HEIGHT	
									1	

#### Incorrect:

Do NOT rename the summary box.

			SUMMARY OF RETAINING	WALL						
WALL	PAY ITEM	ANY ITEM DESCRIPTION	LOCATION	CIDE	,,,,,,	QUAN	TITY	TOT	AL	CONSTRUCTION
NO.	NO.	PAY ITEM DESCRIPTION	STA. TO STA.	SIDE	UNIT	P	F	P	F	REMARKS
1	0400 4 11	CONCRETE CLASS IV, RETAINING WALLS	1412+98.62 1418+10.78	LT	C	281.5		282	100	(777-50-77
	0415 1 3	REINFORCING STEEL - RETAINING WALL	1412+98.62 1418+10.78	LT	LB	25722.0		25722		

## 31. Summary of Guardrail

Instructions, Return to Summary Box List

#### **Correct:**

LOCATION	SIDE	GUARE (W+B		RUB (SINGLE	RAIL FACE)	P I I	PE I L	GU ARE REMO		ANCH	ND ORAGE EMBLY E !!)	DESIGN NOTES	CONSTRUCTION REMARKS
	1 1	0536	1 1	0536	5 1	0536		0536			85 25	NOTES	DEMARKS.
STA. TO STA.			F:	L	F	L	E	L	F	· · · · · · Ł	A		
tations—on Britis		ρ	F	P	F	P	F	P	F	p	F	1	
56+22.32 to 67+64.83	LT	Š				142.5	1 7					1	
67+64.83 to 67+99.20	1.7							37.5				1	
67+64.83 to 68+58.01	1.7	100.0						- 3					
68+01.01 to 68+58.01	67			100.0									
86+00.00 to 400+19.50	1.7					1073.8						EQUATION: STA. 96+54.25(BK)= STA. 400+00.00(AMD)	
58+42.15 to 68+42.15	4.7					3				- 3		Silva 1929 Silva 10	
											I		
51	UB-TOTAL	100.0		100.0		1216.3		37.5		1		3	
	TOTAL:	100		100		1216	2 3	3.8		1			

#### Incorrect:

Note implies full run of guardrail requires encased posts. This would need to be handled by a specification revision and not a note.

LOCATION		GUARE	RAIL	PIPE	RAIL		ANCHO! ASSEM	RAGE		1040000000	
	SIDE	0536	1.1	0536	6	0536	85 24	0536	85 25	DESIGN NOTES	CONSTRUCTION REMARKS
OWNERS SINCE SHOW		L	E	LI	-		EA	E	A	1001123	OF BOOK 3
STA. TO STA.		P	F	P	F	P	F	P	F		
92+30.65 TO 96+67.64	LT .	437		437		1		1			
92+95.29 TO 94+20.31	RT	125		125		7		1	.0	363	
94+80.20 TO 96+80.71	:RT	200.5		200.5		7		26			
							ž.		- 1		
50	B-TOTAL:	762.5		762.5		3		93			
	TOTAL:	762.5		762.5		- 3		3			

<sup>\*</sup> NOTE: USE ENCASED (ROUND OPTION) STEEL GUARDRAIL POSTS

xx. Summary of Cable Barrier (Pending)

Instructions; Return to Summary Box List

Correct: See Instructions for Developmental Design Standards/Developmental Standard Plans Instructions.http://www.fdot.gov/roadway/DS/Dev/IDDS/IDDS-D00450.pdf

Incorrect:



Topic No. 600-000-002 2021 Edition Basis of Estimates as of May 5, 2021

# 32. Summary of Permanent Crash Cushions Instructions; Return to Summary Box List

#### **Correct:**

LOCATION		BARRIER :	SYSTEM	DESIGN LENGTH	DESIGN	CRASH	HAZARD	LENGTH RESTRICTION		CUSHTON	DESIGN	CONSTRUCTION
STATION	SIDE	CONCRETE	GUARDRAIL	LENGTH	SPEED	TEST LEVEL	WILDIN	RESTRICTION	0544	75 1	DESIGN NOTES	REMARKS
SIMITON		BARRIER WALL	GONNONALE	FT.	MPH	TL-2 / TL-3	IN.	ET.	P	F	(1910)000	OCONTRACTORES.
297+66.01	LY.	X.	5	76	60	TE-3		24.00	1		Bridge # 030075	Ž.

#### Incorrect:

Missing design length column.

LOCATION SIDE SARRIER SYSTEM DESIGN CRASH LENGTH RESTRICTION OS44 75 1 DESIGN NOTES  STATION STATION AT TO TL-2 / TL-3 FT P F  309+04.00 RT. A 70 TL-2 / TL-3 IR.75 1	REMARKS
BARRIER WALL MPH TL-2 / TL-3 FT P F	
309+04.08 RT. X 70 TL-3 18.75 1	A.
369+73.63 LT, 8 70 TL-3 28.75 I	
592+48-32 RT. 8 20 71-2 18-25 I	



33. Summary of Fencing
<a href="mailto:Instructions">Instructions</a>; Return to Summary Box List

#### **Correct:**

PAY ITEM	DESCRIPTION	LOCATION	SIDE	UNIT	QUAN	TITY	TOT		DESIGN	CONSTRUCTION
NO.	\$35500000000000000000000000000000000000	STA. TO STA.	3855	0.000	p	E	p		NOTES	REMARKS
150-10-120	FENCING TYPE A. S. S. B. B. D. STANDARD	1379+17-98 TO 1379+31-70	- RT	15	24.0	-	268			1
THE RESTREE		1379+4K-11 TO 1379+53 4E	AT.	LF.	48.0		1			1
		1399+95 73 70 1400+25 05	LT./RT.	LF	48.0		-			1
		1402+35.36 70 1402+43.83		LF.	24.5					1
		1402485.03 [0.1402478.24]	cr.mr.	U	24,0			=		
550-10-128	FENCING TYPE A. S.I' E.O' . RESET EXISTING	321+63.02 TO 321+64.74	RT.	U	44.0		284			+
		321491 50 10 322425 04	RT.	LF	50.0					
		378+45 83 70 379+53.58	it.	. It.	40.0			2		1
		379+81.58 TO 379+92.86	1.7	LF	48.0					1
		400132.82: 70 400163.95	LT./AT	LF.	40.0					
		402+62 83 70 402+75 33	LT. INT.	U	20.01			J.		11.0
	4	403100.94 TO 403102.26	- lit-	UF.	24.0					1
		403+02:77 TO 403+08:43	LT./NT	LK	13.0				·	

		SUMMARY OF	FENC	ING				-		
PAY ITEM	DESCRIPTION	LOCATION	SIDE	UNIT	QUANT	ITY	тот	AL	DES1GN	CONSTRUCTION
NO.	DESCRIPTION	STA. TO STA.	SIDE	0					NOTES	REMARKS
					P	F	P	F		
0550 10222	Fencing, Type B, 5.1- 6.0' Height, w/ Vinyl Coating	1412+96.73 R2 to 1412+98.62 R2	LT	LF	1.9		2003			
		1412+96.73 R2 to 1412+99.62 R2	LT		38.5		]			
		1413+16.82 R2 to 1417+96.36 R2	LT		479.6		]			
		1418+10.78 R2 to 1418+20.16 R2	LT		23.7		1			
		1418+20.16 R2 to 1418+20.36 R2	LT		21.7		1			
		1428+53.58 R2 to 1434+46.34 R3	RT		1437.5		1			
550 60212	Fence Gate, Type B, Single, 6.1-12.0' Opening	1434+46.33 R3 to 1434+46.34 R3	RT	EA	1.0		1			
550 60225	Fence Gate, Type B. Double, 20.1-24.0' Opening	1412+99.62 R2 to 1413+16.82 R2	LT	EA	1.0		2			
		1417+96.36 R2 to 1418+20.36 R2	LT		1.0		1 1			
		37 37 37 37 37 37 37 37 37 37 37 37 37 3	1							

Incorrect:

Topic No. 600-000-002 Basis of Estimates

34. Summary of Performance Turf
<a href="Instructions">Instructions</a>; Return to Summary Box List

#### **Correct:**

			SUMI	IARY OF		Ç. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1
LOCATION		5/06/2000	LENGTH WIDTH	PERFOR		PERFOR TURF			(6/14/10/15/10/15/2001
	SIDE	AREA	ENGTH	0570	1 1	0570	1 2	DESIGN	CONSTRUCTION
SERVE SERVERS	6011502	10	(H)	51	/	5	Y	NOTES	REMARKS
STA. TO STA.			532	P	F	P	F		- EMDO
83+36.00 to 86+36.09	RT	103295		320.4					100
86+36.06 to 96+54.54	RT	106021	Ÿ.	2354.4					16
302+43.30 to 302+77.74	RT	88694		34.3					THE STATE OF THE S
400+20.60 to 402+11.28	LT	105018		616-4					
401+60.84 to 410+36.32	1.7	103916	1 2	809.7			ó - i -		8
67+46.08 to 83+36.00	RT	#2996		3867.6					
68+00.15 to 76+22.98	LT	104934	1	2277.2	- 1		3 3		138
76+53 52 10 79+00 00	LT	104915		467.4					
300+70.00 to 305+16.51	LT	60316		257.4					
301+86.13 to 302+47.11	RT	83032	5 - 6	16.2			4 4		118
302+73.98 to 303+06.85	RT	#3037		2.9					
303+18 71 to 305+98.96	RT	#2977		533.6					Hig
401+47_31 to 401+47_31	RT	114826		662.3					
403+00.45 to 404+70.59	RT	114609		22.1					10
407+66.30 to 410+33.63	RT	114626		257.8					
68+01.69 to 68+69.04	LT.	84013				46.0			
68+69.04 to 73+20.00	1.7	84788				172.1			
83+36.00 to 86+36.09	RT	103246				116.9			
67+26.29 to 73+20.00	BT	#2671				235.5			
73+20.00 to 76+28.08	LT	92314				145.4	1		
73+20.00 to 78+80.00	RT	28169				218.2			
76+48.32 to 79+00.00	L7	92335				122.9			
78+80.00 to 83+36.00	RY	28320				177.4			
86+36.06 to 97+20.00	RT	60586				18R 6			11 6
91+20.00 to 96+34.54	RT	28202				208.2			
300+00:00 to 305+96:57	RT	80288				251.2			
300+00.01 to 306+05.87	1.7	28964	į į		- 9	212.7			
400+00 00 to 401+20 00	LT	78933				50.0	( I		
400+00 00 to 401+20 00	RT	78945				46.2			
FROM DRAINAGE STRUCTURES	RT/LT					90.0			
	22		SUB-TOTAL	12406.1	1	2281.2			- 72
			TOTAL	22406		2287			

#### Incorrect:

Do NOT create a new summary box. Plastic Erosion Mat and Prepared Soil Layer quantities go in the same summary box as the Performance Turf.

SUMMARY OF PLASTIC EROSION MAT										
PAY ITEM	PAY ITEM DESCRIPTION	SIDE	AREA ID	UNIT	QUANT ITY		TOTAL		DESIGN	CONSTRUCTION
NO.					P	F	P	F	NOTES	REMARKS
571 1 13	PLASTIC EROSION MAT, TURF REINFORCED MAT, TYPE 3	LT	156440	SY	48.0		172	- 22	MAT . HATCHETT CREEK	
		RT	156445		48.0				MAT @ HATCHETT CREEK	
		LT	156435		76.0				MAT @ HATCHETT CREEK	

LOCATION	SIDE	AREA ID	LENGTH		PREPA SOIL L		14049499411	Transportation of the Control of the
				WIDTH	0162 1 11 SY		DESIGN NOTES	CONSTRUCTION REMARKS
STA TO STA							NOTES	
STA. TO STA.				[	P	F		
14+19.18 TO 14+44.75	LT				88.0		3-6" LAYERS OF 75/25 SOIL	
14+20.72 TO 14+43.35	RT				38.0		3-6" LAYERS OF 75/25 SOIL	
75+81.00 TO 76+60.00	LT/RT				153.0		21" LAYER OF 75/25 SOIL	
90+36.50 TO 90+98.00	LT /RT				133.0		21" LAYER OF 75/25 SOIL	
95+50.00 TO 97+41.00	LT /RT				192.0		21" LAYER OF 75/25 SOIL	
			SU	B-TOTAL:	604		+	
				TOTAL	604			

Summary Tables 8-77

Topic No. 600-000-002

Basis of Estimates

2021 Edition
as of May 5, 2021

#### 35. Summary of Traffic Monitoring Site Items Instructions; Return to Summary Box List

**Correct:** See 695- 1 to verify if Traffic Monitoring Site is for Transportation Statistics "TranStat" Office, or if site is for Traffic Ops, MCSAW, or other purpose.

#### Incorrect:

LF quantity and sub-total should be shown to the tenth decimal place.

						SUMMARY	OF TR	AFFIC I	MONITOR	ING SITE	ITEM	5		
LOCATION			CONDUIT (OPEN TRENCH)		PULL AND SPLICE BOX (17" X 30")		VEHICLE AXLE SENSOR, NON-WEIGHT		INDUCTIVE LOOP ASSEMBLY		CABINET		DES/IGN	CONSTRUCTION
an reserve		SIDE	0630	2 11	0635	2 11	0695	1 1	0695	6 12	0695	7132	NOTES	REMARK5
NO.	STATION		LF		EA		EA		EA		EA			
			P	F	P	F	P	F	P	F	P	F		
105616	1368+09.00	LT/RT	133		2		4		4		1			
SUB-TOTAL: 133				2		- 4		4	2 9	1				
TOTAL: 133				2		4		-4		1				

Summary Tables 8-78

Topic No. 600-000-002 Basis of Estimates 2021 Edition as of May 5, 2021

36. Summary of Utilities
Instructions; Return to Summary Box List

**Correct:** 

Incorrect:



Summary Tables 8-79 Topic No. 600-000-002

Basis of Estimates

2021 Edition
as of May 5, 2021

#### 37. Summary of Structures, Bridge XXXXXX

Instructions; Return to Summary Box List

**Correct:** 

Incorrect:



Summary Tables 8-80

# Chapter 9 APPLICATIONS FOR DESIGNERS: WEBGATE, PROJECT PRECONSTRUCTION (PrP), AND DESIGNER WEB PAGES

#### 9.1 General

Multiple applications are available to the designer to facilitate the data entry necessary for pay items and quantities. They include: FDOT's Design Quantities and Estimates (DQE), AASHTOWare's Project Preconstruction (PrP), and FDOT's Designer Interface and Webgate Reports. While DQE and PrP are restricted to FDOT Estimators, the systems work together to assist Designers with loading pay items and quantities.

**2021 Projects:** This chapter reflects application guidance current at the time of posting. For projects following the 2021 edition of the FDM and using the new CADD platforms, updates will be posted as more information becomes available.

#### 9.1.1 AASHTOWARE Suite

AASHTOWare Project (Pr) is a suite of programs owned by AASHTO (American Association of State Highway Transportation Officials). Many states around the country use this suite of programs for their transportation contracts. Additional information is available at <a href="http://www.aashtoware.org/">http://www.aashtoware.org/</a> FDOT uses the Project Preconstruction (PrP) module. Details on the modules are available at <a href="https://www.aashtoware.org/products/project/project-modules/">https://www.aashtoware.org/products/project/project-modules/</a>

#### 9.1.3 Training

Training is available from the State Program Management Office, Estimating Systems Support section. Dates are scheduled upon request. Please contact your District Estimates Office to request training. Training is available in various formats: online recorded, classroom, and/or remote online meeting.

#### 9.1.4 Security

Security within Webgate, PrP, and Designer Interface are coordinated through the FDOT Automated Access Request Form (AARF). Contact your District Security Coordinator (FDOT employees) and/or FDOT Project Manager (FDOT Design Consultants) to request access.

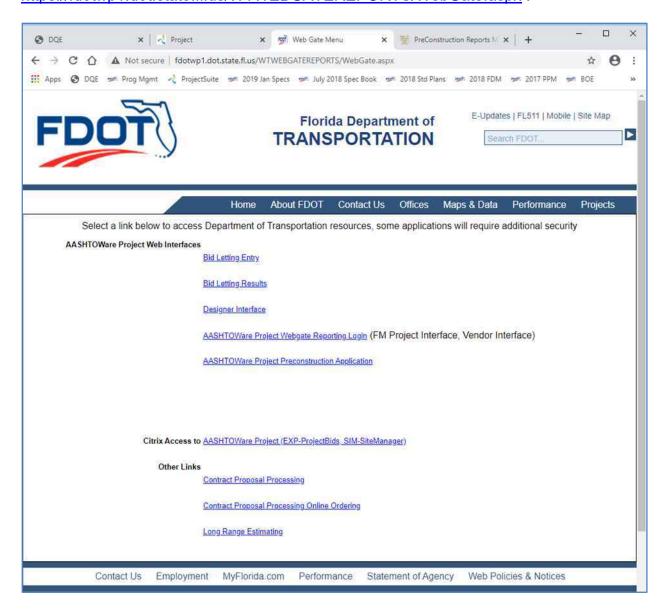
Webgate and Designer Interface are generally available to designers and FDOT staff working in FDOT projects. PrP is generally restricted to FDOT staff working in specific types projects (construction and/or maintenance).

#### 9.2 Webgate

The Webgate is a FDOT application that serves as a doorway to the Designer Interface, Reports Menu, and other applications. It is accessed with the RACF userID and password.

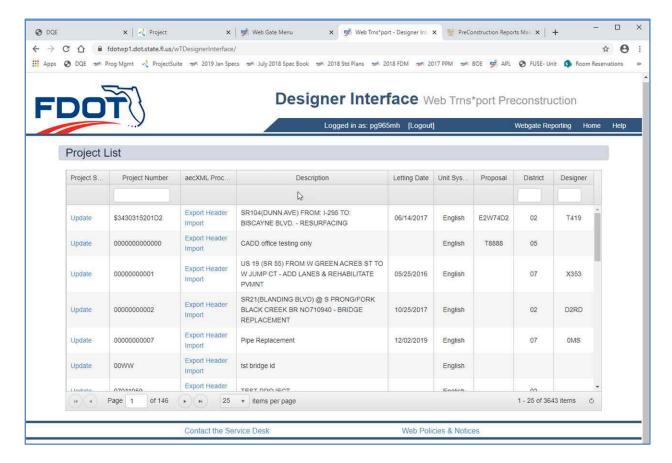
#### 9.2.1 Menu

The screen below shows the options available on the Webgate menu at <a href="https://fdotwp1.dot.state.fl.us/WTWEBGATEREPORTS/WebGate.aspx">https://fdotwp1.dot.state.fl.us/WTWEBGATEREPORTS/WebGate.aspx</a>.



#### 9.2.2 Designer Interface

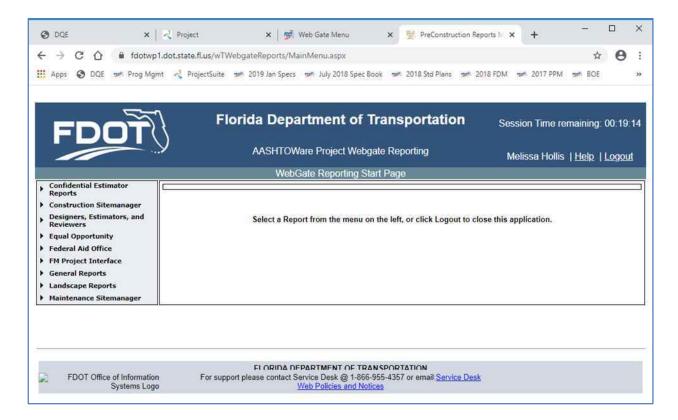
The Designer Interface is a tool used for loading project pay items into PrP. Details are included below in 9.3.



#### 9.2.3 Reports

The Reports menu allows users to select and produce reports based on current "live" information. Some of the reports are based on historical (awarded) projects, while other reports are based on future (proposed) projects. Additional details are provided below for using the Reports.

Note: Report options may vary for designers, reviewers, estimators, and others.



#### 9.2.4 Other Applications

Links to additional applications, including LRE (Long Range Estimates System), are available from the Webgate menu. Note that additional rights may be required to fully utilize these applications. Contact your District Estimates Office for information and/or to request access to these applications. Access will be based on the applications needed to complete the FDOT work assigned to a user and/or their employer.

#### 9.3 Designer Interface

#### 9.3.1 Project Access and Verification

Once assigned to a project, the designer should verify:

- a) that the project exists (or that proper control has been given)
- b) that all project header information is correct

If proper control is not given, the project will not appear on the designer's list of available projects. The designer should contact the District Estimates Office to request control. If the project appears on the Project List with a lock, another user may be accessing the project. If the lock remains, contact the District Estimates Office; the lock may be the result of closing a browser without closing the project from editing.

#### 9.3.2 Headers

As described above, information is grouped at various levels:

Proposal

Project

Category (aka Design Group)

Pay Item

Each level includes information applicable to the levels above and/or below it.

**Proposal Headers:** The District Estimates Office creates the proposal prior to the letting. The proposal is used to "link" or "string" one or more projects, for letting purposes. All projects must be assigned a proposal number prior to advertisement.

Note: The State Program Management Office recommends that the proposal be created between 90-100% plans. Creating the proposal prior to 90% plans is possible, but may cause other issues, if created too early.

**Project Headers:** When first given access to the project, and at each design phase, the designer must verify the project header information. While much of this information is automatically transferred from FM to PrP, the designer should check the letting date, spec/pay item year, and other information. Any errors should be immediately reported to the FDOT project manager for correction.

If project header information is incorrect, DO NOT attempt change it; this information is refreshed nightly from FM. It MUST BE CORRECTED IN FM. The designer should contact the FDOT project manager prior to making any changes. The project manager will coordinate FM changes with the responsible office(s) in the district. See below for more information on Project Headers.

Category Headers: From the project level of the Designer Interface, the designer can select, copy, and/or delete categories. At a minimum, each component set of plans (structures, roadway, lighting, etc.) must have a corresponding category. In accordance with the Plans Preparation Manual (PPM)/ FDOT Design Manual (FDM), it is possible to have minor/incidental work from another design group included on the roadway plans, yet still have a separate category for pay items. Unused categories should be deleted.

Items are categorized by pay item range:

Item Numbers (Specification Sections)	SUBJECT/GRO	Category / Design Group/ Plans	
100-102	MOT	0200 Roadway	
103	Temporary Struc		
104	Erosion Dr	rainage	
	Control Er	nvironmental	
106-108	Environmental	Coordinator	
		Water/Erosion Control	
		Air Quality	
		Decontamination/Hazardous	
		Materials	
109	Field Office		
110-199	"Dirt" Earthwork	Roadway	
		Erosion Control	
		Topsoil/Vegetation	
200-299	Base Courses		
300-399	Surface Courses	s, Concrete Pavement	
except 346-347	Concrete		0100 Structures or
			0200 Roadway
400-499	Structures		0100 Structures
except 425-449	Drainage Structu		0200 Roadway
500-515		ruction- Structures	0100 Structures
516-559		ruction- Roadway Items	0200 Roadway
560-569		ruction- Structural Paint	0100 Structures
570-599	Incidental Constr	0200 Roadway or	
			0600 Landscaping
600-699	Traffic Control Do	0500 Signals	
	Conduit and other	er "common use" items	Other categories, as needed
700-714	Traffic Control		0300 Signing
715	Traffic Control- L	ighting	0400 Lighting
720-740	Incidental Constr		0200 Roadway
741-749		ruction- Traffic Monitoring (TMS)	====================================
750-770	Incidental Constr		
800-899	Mass Transit (Ra		0900 Mass Transit
1000-1999	Utilities	0700 Utilities	

NOTE: While pay item ranges are generally grouped by category, some items may be used in multiple categories. Refer to the specific items for details.

**Bridge Category Header:** The bridge header requires information specific to each structure. **Each bridge must be loaded into a separate structures category**, with details specific to that bridge. With each bridge category, the Designer Interface requires that the bridge category header information, specifically the bridge ID, be entered prior to loading/editing pay items. The following fields must be completed:

**Alternate Code:** leave blank unless using alternate structures. Contact your District Estimates Office for assistance when considering alternate structures.

**Bridge Length (feet):** Enter the total bridge length, not including approach slabs.

**Bridge Width (feet):** For new/replacement bridges or bridge repair, enter the total bridge deck width, from outside to outside of traffic railing. For bridges with variable width, divide the total bridge deck area, outside to outside, by the length to obtain the average width. For bridge widening, enter the widened width.

**Number of Spans:** Enter the correct number of spans.

**Bridge Type ("Structure Type" on some reports):** Select the appropriate type. Options include overpass, low level, medium level, high level, moveable bridge, pedestrian overpass, box culvert, miscellaneous, and ramp overpass.

- Box Culvert is ONLY for bridge culverts greater than 20'; box culverts not meeting bridge definition should be loaded in Roadway Category, regardless of where plan sheets are located.
- Retaining Walls are loaded in Roadway Category, regardless of where plan sheets are located.
- Pedestrian overpass must have bridge ID, due to "over roadway" condition. Pedestrian "trail" bridges may be loaded in roadway, if they are not designed for vehicular weights and do not need to be inspected. Coordinate with District or CO Bridge Maintenance to determine of "trail bridge" is assigned a bridge ID.

**Bridge ID:** Enter the valid bridge number. For bridge replacements, use the new bridge ID (replacement) number, not the "existing" or old number.

Note that the Structures Detailing Manual (also referenced by the PPM/FDM) recommends that the bridge ID be obtained in the early design phase. By phase 2 and phase 3 submittals, as defined in the PPM, this information must be known in order to correctly complete the bridge category information.

DO NOT ENTER invalid bridge ID numbers or alpha characters. Contact the District Maintenance Office to obtain a valid bridge number for any structure, including Pedestrian Bridges or other structures that may be subject to inspection.

Pedestrian bridges over travel lanes are subject to inspection. Other pedestrian bridges will be considered on a case-by-case basis, depending on the location and anticipated loading. Contact the Maintenance Office for guidance.

**Bridge Designer:** Select the applicable coder for the design firm.

**Superstructure Type:** Select the appropriate type; for box culverts, select "Concrete Box (Cast-in-Place)".

Substructure Type: Select the appropriate type; for box culverts, select "Other".

**Foundation Type:** Select the appropriate type; for box culverts, select "Special".

**Structure Location:** Select the appropriate type.

**Structure Work Type ("Type of Work" on some reports):** Select the appropriate type: New Bridge Construction, Bridge Widening, Bridge Repair, Retaining Walls only (not used), Fender System Only, Rail Retrofit, Miscellaneous. For Pedestrian overpass or Box Culvert, select "Miscellaneous".

**Structure Work Class ("Actual Work" on some reports):** Select the appropriate Structure Work Class from the following:

**New Bridge Construction Structure Work Classes:** 

	<u>. 9 · · · · · · · · · · · · · · · · · · </u>
01A	Major Bridge – Bascule Spans
01B	Major Bridge – Curved Steel Girders
01C	Major Bridge – Multi-Level Roadways
01D	Major Bridge – Concrete Segmental Construction
01E	Major Bridge – Steel Truss Construction
01F	Major Bridge – Cable Stayed Construction
01G	Major Bridge – Over Water (Bridges of conventional construction
	which are over a water opening of 1,000 feet or more)
01H	Major Bridge – Cast in Place/Post-Tensioned/Super-Structure
02	Minor Bridges (have span lengths not exceeding 50 feet center to
	center of cap and total length not exceeding 300 feet)
	(includes Concrete Box Culverts with a span length 20 feet or greater)
07	Intermediate Bridges (contain none of the types of construction listed
	under Major Bridges and have span lengths exceeding 50 feet center
	to center of cap)

Bridge Repair and Rehabilitation Structure Work Classes:

08	Bascule Bridge Rehabilitation
30F	Bridge Painting
30L	R&R Minor Bridges (have span lengths not exceeding 50 feet center
	to center of cap and total length not exceeding 300 feet)
	(includes Concrete Box Culverts with a span length 20 feet or greater)
30M	R&R Intermediate Bridges (contain none of the types of construction
	listed under Major Bridges and have span lengths exceeding 50 feet
	center to center of cap)
30N	R&R Major Bridge – Multi-Level Roadways
300	R&R Major Bridge – Concrete Segmental Construction
30P	R&R Major Bridge – Steel Truss Construction

30Q	R&R Major Bridge – Cable Stayed Construction
30R	R&R Major Bridge – Over Water (Bridges of conventional
	construction which are over a water opening of 1,000 feet or more)
30S	R&R Major Bridge – Curved Steel Girders
30U	Cathodic Protection
30Y	Bridge Deck Overlay

After loading all bridge header information through the Designer Interface, verify the project and category header information by running the Project Edit Report. **Box Culverts, LESS THAN 20':** Pay items and quantities for box culverts that do NOT meet the Bridge definition are to be **loaded in the Roadway Category**. Follow the FDM instructions for placement of the box culvert details and summary box in the structures plans.

**Pay Item Header:** Pay Item header information (description, unit of measure, etc.) is maintained by the State Program Management Office, Estimating Systems Support section. Any errors in the pay item header should immediately be brought to the attention of the BOE Coordinator in the State Estimates Office.

If the pay item description does meet the project needs, refer to Chapter 6 for Requesting a New Pay Item. Additional items can be created within 24 hours, pending approval of the specifications. See below for additional information regarding pay items.

**Supplemental Description for Lump Sum Pay Items:** Supplemental Descriptions are required to differentiate lump sum items on projects and proposals. For most lump sum pay items, designers must enter the project's FPID in the Supplemental Description through Designer Interface. For structures lump sum pay items, designers must enter the project's FPID and Bridge Number in the Supplemental Description through Designer Interface.

The Supplemental Description provides a reference for each lump sum pay item to the corresponding project and/or structure. Supplemental Descriptions are used for lump sum pay items having both lump sum as the secondary unit of measure, such as 101-1 Mobilization (LS/LS), and lump sum pay items having a secondary unit of measure, such as 110-1-1 Clearing and Grubbing (LS/AC).

Do not add supplemental descriptions to other pay items, as this will prohibit the pay item from "rolling up" for bidding purposes.

#### 9.3.3 Leading Zeros

Leading zeros for pay items are optional, except as required by the PrP system. Refer to Chapter 10 for additional guidance on pay item formatting in the plans and specifications.

Designer Web Pages / Summary of Pay Items: When entering pay items 50- through 999 into the system, a leading zero must be added before the first group of digits, i.e. 102- 1 becomes 0102- 1. (A leading zero replaces the leading space only in

the first group of digits.) Metric items and English Utility items are unaffected, as they already have four numbers in the first group of digits.

**Other Documents:** The plans, specifications, standards, and other documents, including the BOE, will continue to refer to the pay item numbers without the leading zero.

#### 9.3.4 Alternates

If there is a need to consider alternate categories and/or alternate pay items, contact your District Estimates Office for assistance. Additional coordination may be needed with Contracts Administration for any innovative contracting.

#### 9.3.5 Participating/Non-Participating Field

The column labeled "Non-Part" within the designer interface screens and reports is an indicator or "flag" for those items not participating in the major funding group. **Designers are no longer able to change this field.** Please consult with your District Estimates Engineer if unusual funding is anticipated.

#### 9.3.6 Pay Items, Category, and Component Plans

Pay items within a category must correspond to the work shown in the component plans. For example, the signals items shown in the signals category/summary of pay items must correspond to the work shown in the signals plans.

Category totals are used for reporting purposes. Ensure that all work shown in a category uses the appropriate items for that category. Additional reminders are as follows:

For landscaping- all work must be detailed in the plans.

For structures- each bridge must be entered separately. All work associated with each structure must be entered accordingly.

For Signals- use signals pay items.

For lighting- use lighting pay items.

Note: Some pay items are valid in multiple categories, such as conduit or pull boxes. Some items are separated by category and specification, such as pavement markings. Select the pay item appropriate for the category and work to be completed. Refer to the specifications for materials and installation requirements.

When a project does not have a roadway component (structures only, signals only, landscape only, etc.), the "roadway" pay items are loaded into the category that corresponds with the primary component plans. For example, Mobilization and Maintenance of Traffic are included in the signalization component plans & category of a "signalization project" without roadway plans. The pay items within a category will continue to correspond to the work shown in each of the component plans.

Additional details may be included with specific pay items and/or summary boxes.

#### 9.4 Reports

#### 9.4.1 General

Many of the reports are available to any user with access to the Reports Menu. The reports listed below are generally used by the Designer, with the "Designer" role. Users may not have access to all of the reports listed below.

The following definitions are important:

**Project:** A single project, with appropriate Financial Project number, header information, funding, items, etc.

**Proposal:** One or more projects combined for the purpose of creating a contract for letting. Projects are "strung" only when combined to form a proposal. The District Estimates Office, according to district practices, will create proposals.

#### 9.4.2 Project Edit Report

The **Project Edit Report is the single most important report.** It should be run at the project level after updating any items or quantities, after an update bulletin, or after a project has been idle or "shelved" for a period of time. In addition to listing the current items and quantities, this report will provide an item check based on the proposed letting date. For projects with a structures category, this report MUST be used to review structures header information.

#### 9.4.3 Master Pay Item List

Designers are encouraged to use the Master Pay Item List from DQE. This report is generated from a "live" database and is the primary source of all pay items. The Webgate Master Pay Item List is a list of items currently available in PrP. It also includes valid (effective/obsolete) dates, a Spec flag, and a Reference Price. Additional items are opened upon request; refer to Chapter 6 for additional information.

Note: The Reference Price is for general information only. It is based on a weighted average, with extreme high/low values removed. It should NOT be used for project estimates, without consideration of other project conditions.

#### 9.4.4 Summary of Pay Items

After the District Estimates Office has created a proposal, the Designer will be able to select a Proposal Summary of Quantities from the Reports menu. After entering the proposal number, a report (.txt format) will be sent to the CADD ftp site. The designer can download and import the file according to established CADD procedures.

For early phase reviews (up to Phase III, or until the proposal has been created), the Project Summary of Quantities Report must be used. (No proposal, no proposal report.) If multiple projects are anticipated to be let together, the Designer should be sure to print each project's Summary of Quantities for review. These reports may be printed on standard 8.5" by 11" paper.

For later phase reviews Phase III, or after the proposal has been created), the Proposal Summary of Quantities Report should be used. After the Designer submits the

report from the interface menu, the output will be sent to the CADD ftp site in 5-10 minutes.

Note: While the user enters the project number, the system will provide the appropriate project/proposal report.

**2021 FDM:** For projects following the 2021 FDM, the Summary of Pay Items is no longer included in the plans. See **BOE Chapter 3** and the **FDM** for additional guidance on phase reviews.

#### 9.4.5 Item Average Unit Cost, by Item

This report will provide historical project information for specific pay items. Note: The pay items must be entered individually, rather than as a group. This report is helpful when detailed project information is needed for a specific pay item.

#### 9.4.6 Item Average Unit Cost, by range

This report provides a historical average for a pay item range, over a specified date range. This report is helpful when general price information is needed for selected pay item(s).

#### 9.4.7 Custom Reports

The State Program Management Office has the ability to create and/or run custom reports for user specified criteria. Please contact your District Estimates Office if custom reports are needed.

Note: Pricing for individual projects does not require a custom report. Pricing (Authorization and Official Estimate) before the letting is completed by the District Estimates Office using DQE. Design estimates should be project specific- based on specifications, location, market area, materials, quantity, equipment, labor, and other related factors.

#### **Chapter 9 Revision History**

**11-1-20:** Updated header dates for 2021. Changed footer from "Webgate, PrP and Designer Interface" to "Applications for Designers". Updated reports information, including 2021 FDM guidance. Updated screens/sample graphics.

1-9-20: Added Class 30U for Cathodic Protection to table of Structure Work Classes.

**11-1-19:** Updated header dates for 2020. Added text to 9.3.1 for locked project. Removed table of contents.

**12-1-18:** Updated header dates for 2019. Updated Bridge Type/Structure Type instructions.

**2-19-18:** Updated Bridge Header information in 9.3.2.

**10-30-17:** Updated header dates for 2018 edition. Added additional text for bridge ID number and pedestrian bridges. Added text for loading box culverts, less than 20'. Leading Zero reference in 9.3 updated to include reference to Chapter 10 for pay item

#### formatting.

- **9-6-17:** Added Supplemental Description information, per Program Management Bulletin 16-02.
- **5-10-17:** Added Structure Work Class to 9.2.2 Bridge Category Header; revised Category/Design Groups.
- **10-25-16:** Updated header dates for 2017 edition. Updated web addresses and Program Management Office title. Removed TRNSPORT references; included PrP references, as needed.
- **12-30-14:** Updated header dates for 2015 edition. Updated note in 9.1. Added last sentence to 9.3.6 to indicate that additional information may be specific to a pay item or summary box.
- **4-30-14:** Updated header dates for 2014 edition. Updated hyperlink.
- **2-20-13:** Updated header dates for 2013 edition. Added note to 9.1 General to indicate software development is ongoing.
- **11-23-11:** Updated header dates for 2012 edition. Added note to 9.1.
- **11-23-10:** Updated header dates for 2011 edition. Added note to 9.1 General about pending webTrnsport.
- **10-30-09:** Updated header dates for 2010 edition. Updated formatting for section & subsection titles.
- **1-27-09:** Expanded 9.3.6 to include instructions for projects without roadway component plans.
- **10-1-08:** Updated header dates for 2009 edition.
- **10-1-08:** Updated 9.3.6 Pay Items, TRNS\*PORT Category, and Component Plans to include examples of items/category usage.

# Chapter 10 Formatting Pay Items

#### 10.1 General

The purpose of this Chapter is to assist with maintaining the pay item structure and associated documentation. It will also assist users with understanding how/why pay items are formatted and displayed in the plans.

Pay items begin as a request, in accordance with Chapter 6. A complete request will provide the information needed to complete all fields for the pay item's format. Incomplete requests must be addressed, prior to implementation of the pay item(s).

This chapter is a guide for creating new pay item structures. It is not a restriction on how they may/may not be used. Each pay item group should be evaluated based on the many needs of our customers: Design, Estimates, Construction, Maintenance, Traffic Operations, Contracts, and Management. Note that the needs of one group may be considerably different than those of another. Communication between these groups is essential, whenever a new pay item request is evaluated.

#### 10.2 Format / Legend

The pay item fields, are shown in the following format:

Structure ID Detail

Structure ID Title

Unit Plan Quantity?

Notes Important Notes or Dates

**Details** Details and usage recommendations

Plan Summary Box Summary Box title

References

PPM/FDM Chapter(s)

CPAM Chapters
Other

Standards
Specifications

**Structure** Item Description Unit

Pay Items Pay Item Year, Item Number, Description, Unit, Spec Type, Valid

Date, and Obsolete Date

Each of the above fields are described below:

Formatting Pay Items 10-1

**Structure ID:** Each 10 digit Pay Item is structured into three parts: 1234-567-890. Spaces and/or digits may be used to detail an item.

Within the first group (first 4 digits),

- the leading digit indicates the unit system:
  - o 0, 1, 9, E: US Customary Units
  - 2, 3: Metric Units (not currently maintained in BOE)
- the remaining digits (second through fourth digits), identify the applicable Specification Section.

The remaining groups (fifth through tenth spaces/digits), are descriptive fields, as detailed for each item. These variables are described in the pay item structure below.

Note: the 900 series items are special, developmental, and/or project specific. See the applicable pay item group for more information. The middle group of digits may identify the applicable Specification Section.

**Title:** The structure level description of the pay item group. Whenever possible, the title should use common terminology. This description may be abbreviated on some reports, due to space constraints. The complete, "Long Description", is used whenever possible.

**Unit**: Unit of measure and precision (decimal places) are defined in Chapter 2. When secondary units are shown, they are intended for estimating purposes, and should be documented in the Summary Box or Tabulation Sheet as instructed.

**Plan Quantity?:** Indicator (Yes or No) that this item is, or is not, designated to be paid under the Plan Quantity concept, per Article 9-1.3.2 of the Specifications. The pay item's applicable specification section will identify measurement and payment details.

**Important Notes or Dates:** Many pay items are opened or blocked with an effective/obsolete letting date. Verify that the applicable dates correspond a project's scheduled letting date. The Designer Interface and/or reports will verify valid dates for selected pay items.

Important dates are normally shown in this field for 1 year after implementation of a change. Longer or shorter durations may be used, based on the change and number of projects impacted.

**Detail:** Description of the most common usage of the pay item, intended to assist designers with the selection of pay items. Also includes, when necessary, detailed information useful to the designer for calculating quantities and determining related pay items. Text may include "Use When...", "Do not use when...", or "Estimate xx items per...".

Comments from any BOE user are welcome to enhance this information. Details must follow current Specifications, Standards, or other FDOT documents.

**References- FDM Chapter, SDGs, Other:** Links are provided to applicable FDOT Design Manual Chapter(s), Structures Design Guidelines, or other design references.

**Standards:** Indicates the index sheet number(s) for the applicable Standard Plans. When the index number is listed in the pay item description, the pay item **must** be used in accordance with the referenced standard. Contact the BOE Coordinator and/or Responsible Office for non-standard applications. Non-standard applications may be required to use a different pay item number, due to differing cost history.

**Specifications:** Links are provided to the current Standard Specifications (Specifications eBook), applicable specification section, and/or the specifications library. These links are for reference purposes only; the designer is responsible for using applicable specifications, as available from the State Specifications Office, for the project's letting date. Contact your District Specifications Office for further assistance.

#### 10.3 Pay Item Structure

The Pay Item Structure may vary between items, but the intent is to define the operation and variables needed to pay for the work and/or materials provided. Additional operations may be added as needed.

#### 10.3.1 Common Operations

Valid operations and numbering may vary by item (some operations may not be valid; additional operations may exist):

- 1 (Furnish & Install)
- 2 (Furnish)
- 3 (Install)
- 4 (Replace)
- 4 (Relocate)
- 4 (Repair)
- 5 (Adjust & Modify)
- 6 (Remove)
- 7 (Preventative Maintenance)
- 8 (Diagnostic and Minor Repair)
- 9 other item specific operation, as needed

The specifications normally describe furnish & install operations. For all other operations, always verify that the specifications/plan details correctly and

completely describe the work to be completed. Refer to Chapter 7 for assistance with determining if a Technical Special Provision (TSP) or plan detail is needed.

FURNISH & INSTALL: Includes all work and materials necessary for a complete installation in accordance with the contract documents (plans, specifications, standard plans, etc.).

FURNISH: This operation is valid for very few pay item groups. Approvals by the responsible office may be required for each project. Do not furnish additional items to DOT maintenance yards using construction funds. When requested, and funded by the maintaining agency, the furnish only item may be used. Plans or specifications must detail instructions for delivery of item(s) to the maintaining agency. Do not use separate "Furnish" and "Install" pay items for the same item of work.

INSTALL: To be used ONLY when the item is to be furnished by the Department or other maintaining agency. Plans or specifications should clearly identify the item(s) to be installed, pick-up/delivery instructions, as well as installation instructions. Payment includes any incidentals necessary (furnished by the Contractor) for a complete installation.

RELOCATE: Ensure that the existing item is in good condition; may not be cost effective to relocate an old/obsolete item. Plans or specifications should clearly identify the item and initial/final locations. As needed, detail the incidental items (included in relocate item payment) to be furnished by the Contractor for a complete installation. Clearly identify conditions under which item replacement (damaged by contractor) is needed.

ADJUST/MODIFY: Detail minor work to be completed by the Contractor. Incidental items are to be furnished by the Contractor. This operation may include retrofits.

REHABILITATE: Includes the removal and replacement of an item, as detailed in the contract documents. Designer should ensure that materials and installation instructions are available to the contractor.

REMOVE: Plans or specifications should identify if contractor is to take ownership, stockpile, or deliver item(s) to a FDOT maintenance yard.

PREVENTATIVE MAINTENANCE: Work to be completed to extend the useful life of a product, as allowed by Federal Highway Administration (FHWA). This does not include routine maintenance, such as litter removal, mowing, or graffiti removal. Details must be included in the contract documents to describe the work to be completed.

PLUG & PLACE OUT OF SERVICE: Plans or specs should identify materials and work to be completed.

DIAGNOSTIC AND MISCELLANEOUS REPAIR: This is normally a maintenance operation to determine the work required to return an item to full working order. If components or assemblies are needed to complete the repair, they will be paid under related pay items, i.e. Furnish & Install, Replace, or Install.

SPECIAL/CUSTOM: To be used only when there is a significant deviation from the standard item or work to be completed: existing specifications and/or standards do not apply. Complete details including description, materials, installation, maintenance, method of measurement, and basis of payment are to be included in the plans or specifications. Project Specific Pay Items may be recommended for unique situations.

#### 10.3.2 Equipment and Materials

When there is a need for the design to specify the equipment and/or materials to be installed (i.e. solar versus AC power, or standard versus preformed thermoplastic), the equipment or materials may be included within the pay item structure. Selection guidance should be available in the supporting documentation or handbook, to ensure consistent use of the item.

If no selection guidance is available, all equipment and material options, per the specification, should remain a contractor option.

#### 10.3.3 Construction Means and Methods

For most specifications, acceptance criteria is based on the end result or performance criteria; the contractor's means and methods, equipment used or how something is installed, is not a factor. The pay item structure should not differentiate various means and methods, unless the approved specification includes these requirements.

Project specific pay items may be used when approved specifications identify means and methods that will likely cause significant bid price variations.

#### 10.3.4 Maintenance Office Contracts

Maintenance Office contracts deviate from normal construction contracts, due to different specification needs. Some pay items are reserved for Maintenance Use Only, and are supported by Maintenance Specifications. When pay items are identified for Maintenance use, ensure that contract needs and applicable specifications are available/applicable, as needed.

#### 10.4 Pay Item Ranges and Other Variables

The pay item structure ####-abc-def, should be used to define parameters which affect the price (i.e. size, shape, material), where variables a through f are detailed as needed. Parameters which do not affect the price may be detailed in the plans; DO NOT create additional pay item variables for these parameters. Limited structures can be used to encourage price competition between products that perform similar functions and/or provide similar end results (i.e., more items, less history per item).

Ranges are established to combine items/sizes with similar installed costs. When a pay item range is used, the designer must specify the specific size/shape needed on the plans and/or tabulation sheet(s). Ranges are not intended as a "contractor's option".

For most reports, including the Master Pay Item List, Project Edit Report, and Pay Item Summary, descriptive information, such as size, shape, and color, will be included after the primary description. The title and/or description may include abbreviations when the pay item is created.

Currently open pay item numbers are shown following the pay item structure. For additional information on opening or requesting new pay items, refer to Chapter 6.

### 10.5 Displaying Pay items in the Plans and other contract documents

#### **10.5.1 General**

Pay item numbers and descriptions may vary, depending on where it is displayed and the available space. When referring to a **group of pay items**, the Pay Item Structure (123- 1- AB) is normally used with the variables omitted (123- 1-). When referring to **individual pay item numbers**, the complete Pay Item Number (123-1-11) is used with the full pay item description. Below are some exceptions and guidelines.

#### 10.5.2 Displaying Pay Items in Specifications

Specifications normally apply to an entire **group of pay items**. Therefore, only the group level of the Pay Item Structure is shown in the specification (123- 1-) with the group level description. Letters for the pay item variables are not included with the specification.

#### 10.5.3 Displaying pay items from Applications or Reports

Reports normally apply to specific **pay item numbers**. The complete pay item number should be used with the pay item's description. The complete pay item

description should be used, as shown in the Master Pay Item List (long description). NEVER alter the application's report/output; do not change report content or format.

## 10.5.4 Displaying pay items in Plans (Summary of Pay Items Report, Summary Boxes, Tabulation Sheets, and Notes)

**2021 FDM:** For projects following the 2021 FDM, see additional guidance in **BOE Chapters 3 and 8**. The Summary of Pay Items will not be included in the plans. The Summary Tables within the Estimated Quantities (EQ) Report will replace the Summary Boxes and Tabulation Sheets.

The Summary of Pay Items, normally located behind the Key Sheet and/or Signature Sheet, is a report. Do not alter the pay item format or any associated quantities. If changes are needed, complete the change(s) through the appropriate applications and re-run the report. Note that leading zeros and appropriate spaces are included with pay item numbers. Dashes are not included with these pay item numbers.

Summary Boxes may be a combination of CADD generated data and user input data with formatting. Quantities are summarized by pay item number, per BOE Chapter 8. The pay item description may be abbreviated by CADD software, depending on space available. Leading zeros and/or dashes may be included, at the designer's option, but should be consistent throughout the summary boxes.

When pay items are shown in the plans, a dash and/or space is normally used to separate the numbers, as shown in Chapters 11-20. When referring to a pay item group in the plans or specifications, the variables may be omitted, with only the numerical part of the pay item structure included; these should also follow the pay item structure shown in Chapters 11-20. When referring to a specific pay item number, the complete number should be shown.

Some applications and reports (CADD, Designer Interface, or other) may omit the dash in their default formatting. The spaces within a pay item number, or lack thereof, have significance in these situations, and MUST be retained. The designer must NEVER manually add or delete a dash or space from a report or application output.

#### 10.6 Changing/Updating Pay Item Descriptions in the Master File

In general, pay item descriptions cannot be changed or updated, due to the impact on the historical database and previously let contracts. Minor clarifications will be considered, depending on the scope of the change and project impact. Contact the Basis of Estimates Coordinator for item specific concerns.

#### 10.7 Where to Find It

As noted above, the first 3 digits of the pay item corresponds to the applicable specification section. The following table is helpful for finding the pay item group. Note that it does not include all possible section numbers; it is only a guide to help identify "Where to find it..."

Pay Item Group/ Specification Section	Description, including key words for searches
101	Mobilization
102	Maintenance of Traffic
104	Erosion Control
107	Litter Removal and Mowing
110	Clearing and Grubbing
120-175	Excavation, Embankment, and other Earthwork
200s	Base Courses
300-341	Bituminous Mixtures, Milling, Superpave, Friction Courses
346-347	Portland Cement Concrete
350-353	Concrete Pavement
400	Concrete Structures
415	Reinforcing Steel
425-449	Drainage: Inlets, Manholes, Junction Boxes, Pipe, Trench
	Drain, Underdrain, French Drain, Edgedrain
450	Precast, Prestressed Concrete
455	Structures Foundations: Piling, Drilled Shafts
470	Timber Structures
508-510	Movable Bridges: Navigation Lights, Machinery
520s	Concrete Gutter, Curb, Barriers, Traffic Separator, Sidewalk
523	Patterned/Textured Pavement
530	Riprap
534	Sound Barriers
536-538	Guardrail
550	Fencing
555-557	Directional Bore, Vibratory Plowing, Jack & Bore
570-580	Grassing, Seeding, Sodding, Landscaping, Trees, Plants
600s	Signalization: Conduit, Mast Arms, Detectors, Cabinets
700-705	Signing, Delineators
710-714	Pavement Markings: Paint, Thermo
715	Lighting: Poles, Conduit (see also 630 for conduit)
800s	Mass Transit
900s	Special, Developmental, Trial Items

Formatting Pay Items

#### 10.8 Errors, Omissions, Comments

The Engineering Systems Support Section of the State Program Management Office maintains the Basis of Estimates, Pay Item Structure, as well as the Master Pay Item List(s). Details, notes, and documentation information is based on information provided with the pay item request. When a detail is missing or incomplete, you may contact the BOE Coordinator, or submit a recommendation via e-mail. Links are provided within the BOE pages on the Specifications and Estimates Office web pages at <a href="http://www.fdot.gov/programmanagement">http://www.fdot.gov/programmanagement</a>. While we make every effort to provide the most current information, please note that pay items and related FDOT handbooks/manuals are continuously developing.

If an error is found with any of the BOE content, please notify the BOE Coordinator. Comments and suggestions are appreciated.

#### Chapter 10 Revision History

**11-1-20:** Updated header dates for 2021 edition. Minor editorial changes. Expanded 10.3 to include Materials, Means & Methods, and Maintenance text. Expanded 10.5.4 to add reference to 2021 FDM changes. Updated references to existing reports and new Estimated Quantities Report.

**11-1-19:** Updated header dates for 2020 edition.

**12-1-18:** Updated header dates for 2019 edition.

**10-31-17:** Updated header dates for 2018 edition. Editorial changes throughout Chapter. Removed fields associated with obsolete computation books. Updated references to PPM/FDM and Design Standards/Standard Plans. Moved Tech Spec information to Chapter 7. Expanded 10.5 for displaying pay items in plans and other documents.

**8-5-16:** Updated header dates for 2017 edition. 10.2 Specifications: Specification links added to most pay items in DQE. Updated pay item structure information to match DQE screens.

**2-1-16:** Updated header dates for 2016 edition.

**12-30-14:** Updated header dates for 2015 edition. Added 10.5 for displaying pay item numbers in plans and specs; renumbered remaining sections.

**4-30-14:** Updated header dates for 2014 edition. Updated 10.3 for commonly used operations. Updated hyperlink.

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

**10-23-12:** Added operations to 10.3, per meeting with Maintenance,

Construction, and Roadway Design Offices.

**9-17-12:** Added typical detail for Rehabilitation operation.

11-1-11: Updated header dates for 2012 edition.

**2-1-11:** Clarified 10.3 relocate and other operations requiring Tech Spec or plan details. Corrected numbering on 10.4 and 10.5.

**11-23-10:** Updated header dates for 2011 edition. Added reference to Chapter 7 in 10.2, Plan Details.

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

**9-16-09:** Added 10.3 Pay Item Structure, with guidance on common operations. Corrected Office and web links to "State Specifications and Estimates Office".

**1-28-09:** Expanded 10.2 to include TRNS\*PORT Category.

**10-1-08:** Updated header dates for 2009 edition.