## **Chapter 7**

# **Summary of Quantities**

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### Chapter 7

#### **Summary of Quantities**

#### 7.1 General

The summary of quantities sheet shows individual summaries of guardrail, crash cushions, fence, turnouts, sodding, ditch pavement, side drains, mitered end sections, underdrains, earthwork, litter removal and mowing when applicable. The tabulation shall show location and quantities in the plans column (P). The final quantity column (F) is reserved for construction and final estimates. As noted in *Chapter 4*, the necessary pay items and the quantities shall be shown on the summary of pay items sheet.

For examples of summary of quantities sheets see *Exhibits SQ-1 thru 6*.

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#### 7.2 Item Quantity "Boxes" and Format

The various "boxes" used for each type of summary are contained in the FDOT Engineering/CADD Systems Software. Each box is identified by the appropriate Form Number required for the Computation Book. The arrangement of these "boxes" on the sheet is dependent on the number used and the size each one must be to contain all of the necessary information.

On contracts with multiple Financial Project ID's or federal aid and non-federal aid quantities, provisions shall be made to tabulate and summarize their respective quantities.

Standard notes (see *Exhibit 7-1*) shall be shown under the appropriate box.

Applicable pay item notes, listed in *Exhibit 7-1*, shall also be included on this sheet.

#### 7.3 Box Culvert Data Table

The structural design of box culverts may be done by computer program as described in *Chapter 33*.

The program is the *LRFD Box Culvert Program* and designs the culvert based on the details shown on *Index 289* of the *Design Standards*. When this program is used the Box Culvert Data Table (from the Structures FDOT CADD Menu cells) and the Reinforcing Bar List shall be completed and placed on normally formatted plan sheets. These sheets should generally be placed, behind the drainage structure sheets in the contract plans.

#### 7.4 Litter Removal and Mowing

The estimated litter removal and mowing areas shall be provided in the Summary of Litter Removal and Mowing. For each phase, show the phase duration, frequency, estimated number of cycles, estimated area per cycle and total area for each construction phase (See *Exhibit SQ-5*).

The construction office estimates the duration for each construction phase (based on the Temporary Traffic Control Plans) during the Phase III Plans Review. The litter removal and mowing cycle frequency should be estimated in 15-day increments (e.g., 30 days, 45 days, 60 days, etc.), for the duration of the project (with a minimum of one cycle per phase). It is not necessary to adjust the estimated number of cycles for growing season, special events, or project location.

The litter removal and mowing areas for each construction phase are based on the total area of existing and proposed turf or vegetation to be mowed within the project limits. It is not necessary to adjust for inlets, drains, slopes, ditch pavement, turnouts, driveways, sidewalks, small variations in tree lines, or other similar areas.

The litter removal and mowing areas are multiplied by the number of cycles in each phase to determine the estimated total areas per construction phase. Litter removal and mowing areas and frequency will be adjusted by the engineer during construction, as needed.

#### Exhibit 7-1 **Standard Notes for Summary of Quantities Sheet** Sheet 1 of 2

Below are standard notes that should be used on the summary of quantities sheet, as applicable:

(Under Summary of Earthwork): Earthwork has been calculated using the \_\_\_\_\_ base option. If another option is constructed, there shall be no revision to the earthwork quantities for which payment is made by plan quantity. **Pay Item Notes** Includes approximately \_\_\_\_\_ SY of Temporary Pavement. 102- 1-All salvageable material designated to be delivered by the 110-86contractor shall be delivered to: (Provide address of nearest FDOT Maintenance Yard.) (On applicable Utility Work by Highway Contractor (UWHC) Agreement plans, also include the following note): All utility infrastructure designated in the utility plans to be salvaged and delivered by the contractor shall be delivered to: (Provide applicable Utility/Agency Owner address.) Includes TN for turnouts, connections to existing drives, 334- 1 streets, etc., as directed by the Engineer.

4. (For new construction projects with Asphalt Base, Type B-12.5 Only):

520-1-7 or 520-1-10

1.

2.

3.

Cost of asphalt curb pad and additional curb thickness required to be included in the cost of curb and gutter. The Engineer may allow, at no additional cost to the Department, the substitution of 5 inches of RAP base in accordance with FDOT Specifications Section 283 for the asphalt curb pad.

5. 536-73-(To be used for the removal of existing guardrail when FDOT Maintenance wants materials).

> Existing guardrail to be dismantled and stockpiled within the right of way in areas designated by the Engineer for removal by FDOT maintenance forces.

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# Exhibit 7-1 Standard Notes for Summary of Quantities Sheet Sheet 2 of 2

6.	538- 1-	This is to include replacement of panels, regular posts and special posts which have been determined to be non-salvageable. Additional posts and panels determined to be non-salvageable during resetting shall be paid for under 538-5 of the Specifications.
7.	included in	Turf: When required by the project design, these items shall be the cost of the Performance Turf items. A pay item note should proximate quantities. For example:
	570- 1- 1	Includes approximately SY Turf for temporary erosion control.
	570- 1- 2	Includes approximately SY Sod for temporary erosion control.
8.	639- 2-1	Payment shall be based on the linear feet of a single conductor.
9.	The following	g pay item note should be shown in the Roadway Plans:

The totals shown on the Summary of Roadway Pay Items are for

painted pavement markings used for Maintenance of Traffic.

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