



Basis of Estimates

June Mobley, P.E.

State Program Management Office

June.Mobley@dot.state.fl.us

Outline

- Why and When Changes are made
- Recent Changes/Bulletins for 2016-2017
- General BOE Reminders
- Summary Boxes

- Additional Pay Item Specific changes posted online on BOE home page:
<http://www.dot.state.fl.us/programmanagement/Estimates/BasisofEstimates/BOEManual/BOEOnline.shtm>

Why and When Changes are Made

The only thing constant is change.

Pay Item Changes – Why?

Significant Specification Change

- Old Spec = Old Pay Item
- New Spec = New Pay Item

- Implementation Dates are Important

Significant Design Standards Change

- Old Index = Old Pay Item
- New Index = New Pay Item

- Implementation Dates are Important

Pay Item Changes – Why?

PPM Change

- Usually Accompanied by Specification or Standard Change

Legal or FDOT Policy Changes

- Previous Claims
- Agreements with Industry
- Management Decisions
- Legislative Mandates

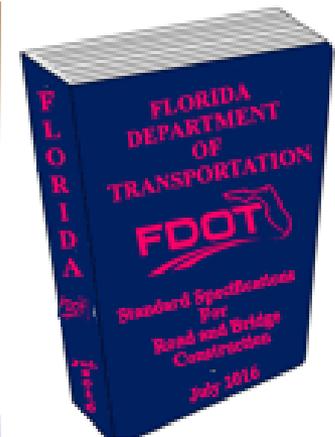
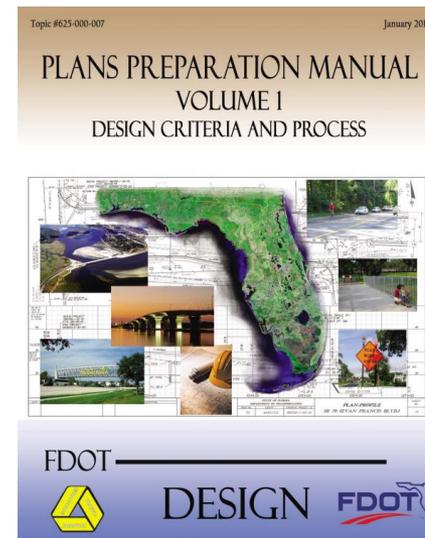
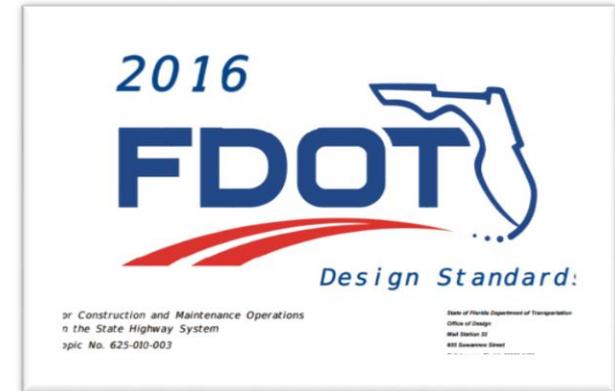
Pay Item Changes – When?

January or July Lettings

- When Specification Workbook Changes

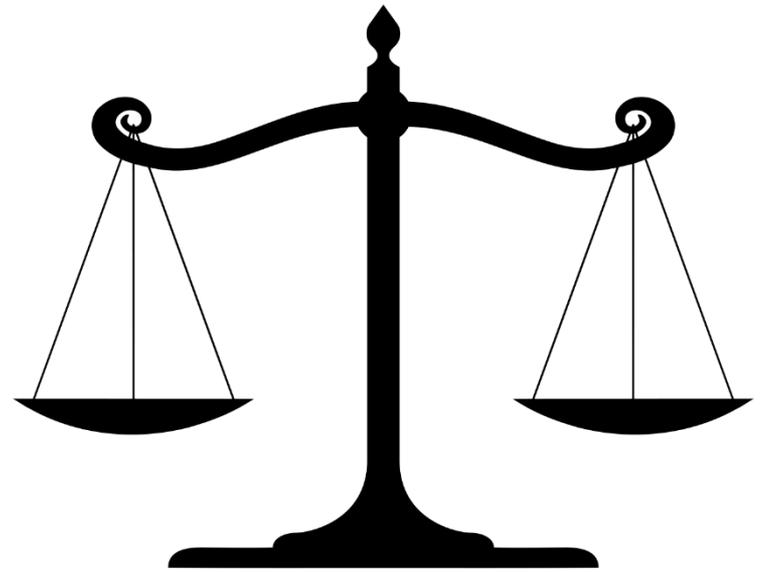
July Lettings

- When Design Standard Index is Implemented
- When PPM Guidance is Implemented



Pay Item Changes – When?

- **Designers:** Implement with 12+ months notice
- **Contractors:** Implement immediately
- **Department:** Compromise & Financial Impact to tax payers



Pay Item Changes – Tools

- **Contact Database:** Register online
- **Project Edit Report (Webgate):** After Making ANY Changes in Designer Interface – Run the Project Edit Report!
- **FUSE- Proposed Enhancements**
 - Coming in 2018!

Changes/Bulletins for 2016-2017

Changing again?

January 2016



Initial Contingency Amount

- Designer Loads Pay Item on Every Project
- Estimator Determines Amount
- Estimates Bulletin 15-08

Utility Pipe

- Additional Pay Items were added at the request of the Construction Industry
- New Items available January 2016
- Old Pay Items Valid Through December 2016
- Estimates Bulletin 15-07

July 2016

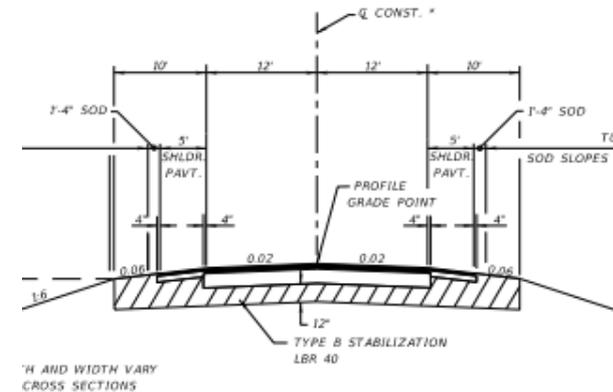
Lump Sum Pay Items

- Supplemental Description Required
- **Non-Structures Items:** Project Number
- **Structures Items:** Project Number AND Bridge ID Number

- The Supplemental Description helps the bidder to identify/separate bids for Lump Sum items
- Program Management Bulletin 16-02

January 2017

- **Asphalt Binder**
- Equivalent binders
 - Examples:
 - PG 76-22 (PMA)
 - PG 76-22 (ARB)
- Plans: Typical Section, Summary Box
- Pay Items
 - Old Items Blocked- Binder Type Specific
 - New Items available- No specified Binder
- Program Management Bulletin 16-**XX**



TYPICAL SECTION
SR 10 (U.S. 90-A)
STA. 10+00.00 TO STA. 267+34.89

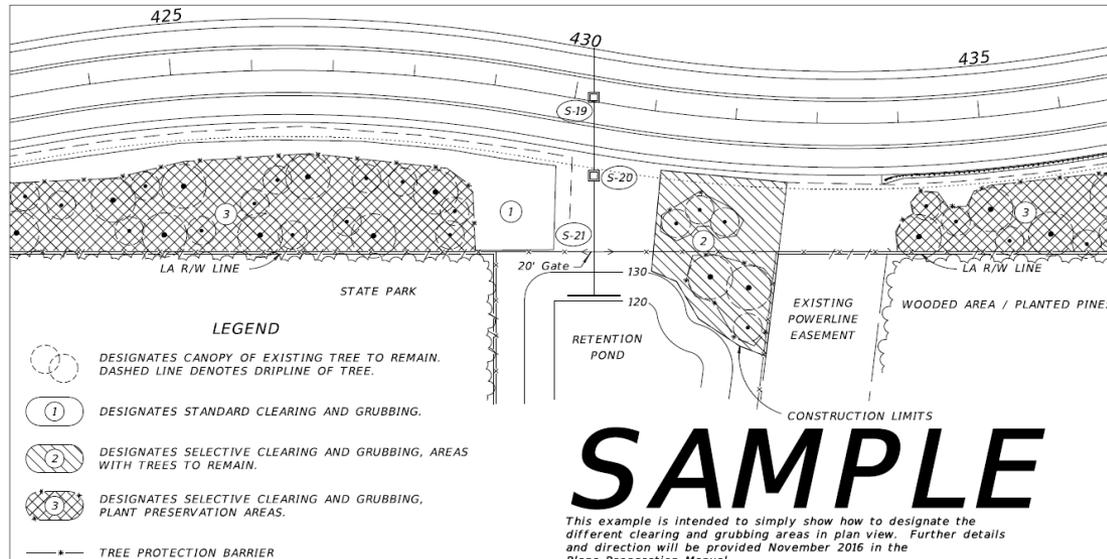
NEW CONSTRUCTION
OPTIONAL BASE GROUP 8 WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC C) (2")
AND FRICTION COURSE FC-12.5 (TRAFFIC C) (1 1/2") PG 76-22 (ARB)

July 2017

- **Section 110- Clearing and Grubbing**

- **Protecting Existing Vegetation**

- Selective Clearing and Grubbing: Selected Removal and Protection
- Plant Preservation Area: Do Not Touch



July 2017

- **Section 110- Clearing and Grubbing**

- **Removal of Existing Concrete**

Plan Area Items, SY: Curb Elements, Sidewalk, Ditch and Slope Pavement

Projected Area Items, SY: Barrier Walls, Retaining Walls, Gravity Walls

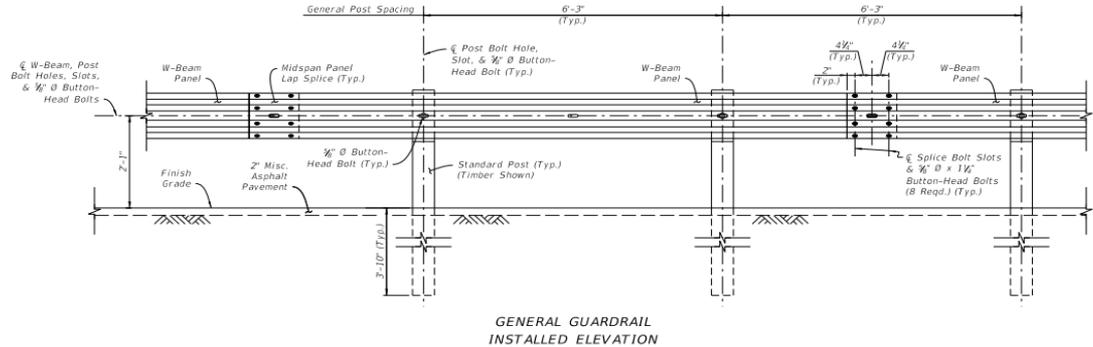
- No Early Implementation

- Program Management Bulletin 16-xx



July 2017

Guardrail



- Design Standards Revision
- End Treatments and Special Posts
- Introduced in 2015, with Roadway presentations
- Training at the Expo
- Contact Central Office Roadway Design
- Early Implementation Possible
 - Coordinate with Specifications and Standards
 - Follow rules for Developmental Design Standards implementation

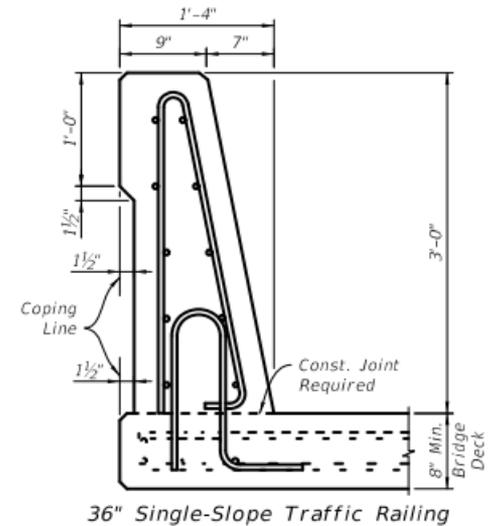
July 2018

- **Bridge Railing**

- Early “heads up” Bulletin was Issued by Structures Office on March 28, 2016 (ST16-04)

- Supplementary Bulletin Pending

- Updated Pay Item Information, when Developmental Design Standards D426 and D427 are available



Future

- **Express Lane Markers (705)**
- PENDING
- Nationwide Research is being Conducted
 - Do Not Modify Specification 705 without approval
 - Do Not use a Plan Note; it will conflict with existing Specifications
- Project Specific use Must be Approved by Chester Henson, CO Roadway Design
 - Future policy decisions will be made by FDOT management for statewide use

General BOE Reminders

General BOE Reminders

- **Questions and comments are welcome!**
 - Many issues can be clarified in the BOE details
 - Specifications or Standards changes can be addressed, as needed
 - Consistent, statewide response
- **District X vs District Y**
 - Designers and Contractors work across District lines
- **Reviewer A vs Reviewer B**
- **Design vs Construction**
 - Designers and Reviewers see many projects
- **Inconsistencies** = Changes, Revisions, Claims, and/or Supplemental Agreements (\$\$)

General BOE Reminders

- **Pay Item Group: 123- 1A-BCD**
 - First 3 digits (after the zero) correspond to the applicable specification section
 - Pay Item Structure/Variables can be expanded for other sizes/shapes, subject to specs/standards
 - If the Specification doesn't apply- DON'T use the pay item number, even if the description is "close"
 - Project specific items are easy to create; please include plan details or a description of the item for review

General BOE Reminders

- **Push Button and Work Order Contracts**
 - NO LUMP SUM ITEMS- these cannot be bid for unknown quantities
 - Alternative pay items with applicable units can be created
- **PENDING:** Specifications and Maintenance Offices are working on additional guidance, especially for Mobilization and Maintenance of Traffic issues

General BOE Reminders

- **No Stockpiling or Spare Parts**
 - Maintenance or other “spare parts” are generally not permitted on construction contracts, due to funding rules
 - Lighting and Signal poles are addressed in the Maintenance agreements; do not include spare poles in construction contracts
 - Maintenance parts, for state or local projects, should be purchased with maintenance funds, on a separate contract: No construction contractor overhead!

General BOE Reminders

- “Special” pay items blocked
 - Pay item description is not sufficient for bidding
 - No consistency from one project to another
 - No cost history
- Minor changes to standards can be noted in the plans, using the standard pay item number
- Major changes can request additional, design specific or project specific items
- Example: Drainage Structures with special features

Basis of Estimates

Chapters 1-10

The “static” chapters- updated annually

Chapter 1- Registration

- Remember to update your preferences through the FDOT Contact Database
- www.dot.state.fl.us/projectmanagementoffice/contactdatabase.shtm

Chapter 2- Units of Measure

All units are paid to the nearest whole number, except for:

- **0.1** Cubic Yard, Cubic Foot, Tons, MB lumber
- **0.01** Acres
- **0.001** Gross Mile Stripe

- CADD calculations are made to one additional significant figure, and the total rounded to the above precision

Chapters 3 and 4

- Reserved for future enhancement

Chapter 5- Contact Lists

- Expert list - by pay item group
- Also helpful - the applicable office's web pages

Chapter 6- Pay Item Requests

- No Recent Changes
- Form not required
- **Activating Pay Item:** Structure exists in the BOE
- **Expanding Pay Item Group:** Additional sizes, shapes, or materials
 - Subject to Specification and/or Standards limitations
- **New Pay Item Group:** New Spec or Standard

Chapter 6- Pay Item Requests

- **Developmental/Project Specific:** Testing new materials or unique situations
- **Generic Pay Items:** Great for utilities
 - No Existing Specifications
 - No Cost History - description varies by job
 - Not for testing new materials or possible future needs, as there is no tracking
 - Do not use without CO Coordination, as developmental/project specific specifications may be applicable

Chapter 7- Design Tools

- **Specification Flags:** Usually applicable specification type, but may vary by project
- T= Technical Special Provision
- P= Plan Details
- D= Developmental Specification
- M= Maintenance Use Only

Chapter 7- Design Tools

- **Parts of a Specification**
 - **Description**
 - **Material Requirements** - may refer to existing materials specifications
 - **Construction**
 - “How to” construct
 - “End Result” requirements - preferred
 - **Method of Measurement**
 - Field or Plan Quantity
 - Unit of Measure
 - Special considerations: skips, actual/projected area
 - **Basis of Payment**
 - Includes all work and materials

Chapter 8: Summary Boxes

Items and Quantities by Location

Summary Boxes - General

- All Items
 - Summary Box
 - Tabulation Sheet
- Quantities by Location
- Area
 - Length and Width
- or -
 - Area ID (CADD)

Summary Boxes - Formatting

- Totals
 - Pay Items Listed at Top
 - Quantities Go Down
 - Pay Items on Left
 - Quantities Go Across
- Do Not Add
 - Additional Columns
 - Subtotal Columns
 - Total Columns
 - Additional Rows
 - Subtotal Rows
 - Total Rows

Summary Boxes - Formatting

- Design Notes
 - Use for Location Specific Information
- Construction Remarks
 - F-Columns (Plan & Final)
 - Do Not Populate These Columns
 - For Construction's Use
 - No Revision Symbols or Other Pre-Letting Notes

Summary Boxes - Order

- See the List in BOE
- In Pay Item Order
- If Component Plans Don't Exist,
Use Appropriate Tabulation
Sheets Placed After Summary of
Quantities Sheet
- See the instructions in Chapter 8
of BOE

Summary Boxes

- **Strung Projects**

- Normally Separate Plans
- With Separate SQ-XX Sheets

- **Units**

- If the column allows for multiple units, choose only one unit for the item
- **P = Plan Quantity from Design shown in the Plans**
- **F = Final Quantity**

Summary Boxes - Lump Sum Projects

- Lump Sum Projects follow MOST of the same instructions
- ALL ITEMS must be quantified, by location
- DO NOT TOTAL quantities

Chapters 9 and 10

- Chapter 9: Webgate and Designer Interface
 - No recent changes
- Chapter 10: Formatting Pay Items
 - No recent changes
 - Understanding the variables and operations
 - Furnish & Install
 - Install - furnished by FDOT or Local Agency
 - Relocate
 - Remove
 - Others, upon request

Chapters 11-20: Pay Item Specific Changes

by Pay Item and Specification Section Number

102 Temporary Signals

- 102-104 Temporary Signalization and **Maintenance**
- 102-107-1 Temporary Detection and **Maintenance**

- BOTH Items are used
- FULL DURATION of the Construction Contract
- READ the Specification & BOE
- **Existing:** Total # Days X # intersections
- **Temporary:** # Days X # intersections

102 Temporary Barrier

- **Formerly “Temporary Barrier Wall”**
- Just a name change, to be consistent with industry terminology
- Some of the permanent roadway barriers will also be updated in the future, as Design Standards are updated

455 Piling

- Internal vs. External gauges
- Test piles
- Ongoing research

- Short term: follow existing Bulletin
 - Complete for identified projects
- Long term: watch for additional information
- Future changes under discussion

455 Drilled Shafts

- **Bridge**
- **Incidental Construction**
 - Large signs
 - High Mast Lighting
 - Mast Arms
- CSL (Cross-Hole Sonic Logging) testing
- Thermal Integrity testing
- Ongoing research - future Specification changes
- Project Specific at this time

707 Internally Illuminated RPMs

- Developmental Item
- Must be approved on a project specific basis
- Coordinate through Traffic Ops
- Alan El-Urfali
Alan.El-Urfali@dot.state.fl.us
(850) 410-5416

Questions?

Contact Information

- Program Management Office Web page
<http://www.dot.state.fl.us/programmanagement/staff.shtm>
- Basis of Estimates Coordinator
Melissa.Hollis@dot.state.fl.us

Thank you!

We appreciate your time and feedback.