

DATE: July 1, 1999

TO: Basis of Estimate Handbook Holders

FROM: Cheryl Adams, CES Coordinator

COPY: Ken Morefield, Bill Deyo, Freddie Simmons, Bill Albaugh, Greg Xanders, Lex Chance, William Nickas, Duane Brautigam, Billy Hattaway, District Design Engineers, District Project Management Engineers, District Structures Design Engineers, District Construction Engineers and District Specifications Engineers

SUBJECT: **1999 Mid Year Update- Basis of Estimate Handbook Summary of Major Changes**

The Coordination Team has made recommendations on the implementation of changes to pay items and specifications that have been developed within the last six months. The implementation plan for each issue has been approved by the appropriate office and concurred in by the Directors for the Offices of Design and Construction. A detailed description on each of these changes and their implementation dates is attached. The following is a summary of the issues addressed in this update:

<i>Group</i>	<i>Issue Description</i>	<i>Effective Letting</i>	<i>Page No.</i>
CES	Obsolete Pay Items Flagging	See Write Up	5- 6
CES	Loading CES projects as English or Metric	Immediately	7
Signs	Update on Status	See Write Up	8 - 9
Erosion	Rock Bags	July 2000	10
Geosynthetic	Steepened Slopes and Reinforcement over Soft Soils	July 2000	11-12
Pavement	Asphalt by the Ton.	July 2000 (or sooner)	13-14
Earthwork	Subsoil Excavation (Earthwork)	July 2000	15-16
Earthwork	Selecting Pay Items	July 2000	17-19

Group	Issue Description	Effective Letting	Page No.
Guardrail, End Anchorage Assemblies	Guardrail, End Anchorage Assemblies	July 2000	20-21
Attenuators	Vehicular Impact Attenuators (Temp) and Vehicular Impact Attenuators (Permanent)	See Write Up	22-23
Signalization	List Blocked and New Items	July 2000	24-26
Utility Pay Items	Rework of Complete Structure to look like metric	July 2000	27-31

Additional Information to Designers:

In updating the specifications to include both English and Metric, several pay items have been Permanently Blocked. These items are as follows:

English Item No.	Metric Item No.	Permanently Blocked Pay Item Description	Notes
110-13	2110-13	Removal of Existing Pile Jacket Forms	
327-71	2327-71	Isolated Milling Exist. Asph. Pav't	
327-72	2327-72	Milled Asphalt Disposal	
327-73	2327-73	Milling Existing Asphalt Pavement	by the Ton
356-70	2356-70	Waterproofing Conc. Pavement Joints	
425-72	2425-72	Modifying Inlets	Use 425-1-9, Effective Jan 2000
430-985	2430-985	Mitered End Section (Basin Outlet)	Use Cross Drain MES
440-74	2440-74	Underdrain Wye Fitting	Payment included in the cost of underdrain
440-77	2440-77	Underdrain Clean out Structure	Payment included in the cost of underdrain
460-8	2460-8	Elastic Preformed Joint Seal	
514-71-3	2514-71-3	Plastic Filter Fabric (Riprap)	
518-70	2518-70	Pavement Overlay Fabric	
550-71	2550-71	Fencing, Type R	

642-abb-xcc	2642-abb-xcc	Steel Strain Poles	All Except 642-112 (Special Design)
708-70	2708-70	Reflective Barrier Marker	Payment included in the cost of barrier wall. Effective Jan 2000
736-71-a	2736-71	Utility Relocation	Effective Jan 2000

Metric/English: All the changes listed in this cover letter, with the implementation dates shown for each individual item apply to both English and Metric projects, unless otherwise noted.

Internet/Infonet:

Roadway Design's Web Site will contain this letter highlighting the Basis of Estimate Handbook Summary of Major Changes.

Specifications' Web Site will contain a draft of proposed specifications identified in this letter for the July 2000 workbook as they become available.

Estimates' Web Site will contain all BOE mid-year update information, as well as current Master Pay Item lists for English (91) and Metric (99).

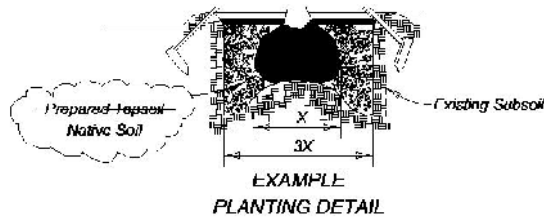
Specifications: Beginning with jobs let in July 1999 and extending through jobs let in June 2000, the districts will be using a new tool. ALL jobs will be let under the 1999 Metric Specification Book, in active voice. This will be our ONLY Spec Book, used for BOTH metric and English jobs. The districts will be using only ONE workbook to prepare ALL specification packages. The specifications in the workbook will be in metric units.

New Computation Book Forms: Designers and Construction personnel are advised to use the new computation forms whenever possible, beginning immediately. It is acceptable to have old computation forms and new computation forms within the computation book to document quantities for a project.

Clarification of Issues: Documented in the Basis of Estimates Summary of Major Changes Letter dated January 1, 1999.

Fertilizer: There was a conflict between the rates of spread shown in the Basis of Estimates Summary of Major Changes Letter dated January 1, 1999 and the specification on Reworking Shoulders. The specification for Reworking Shoulder is being updated to reflect the spread rate of 400 lbs/ac 450kg/ha.

Prepared Topsoil: This item will be permanently blocked on June 30, 1999. Designer's should check their plans to verify that all details showing "Prepared Topsoil" have the description changed to "Native Soil"



Wildflower Rates: The Roadway and Traffic Design Standards will be updated by specification to reflect the rates shown below:

Unless specified otherwise in the plans, only one of the following wildflower seed varieties shall be planted:

Wildflower Seeding Rate (English)	
Common Name (Botanical Name)	Pounds/acre
Indian Blanket (<i>Gaillardia pulchella</i>)	25
Black-eyed Susan (<i>Rudbeckia hirta</i>)	5.5
Lance-Leafed Tickseed (<i>Coreopsis lanceolata</i>)	25
Annual Phlox (<i>Phlox Drummondii</i>)	25
Moss Verbena (<i>Verbena tenuisecta</i>)	15

Unless specified otherwise in the plans, only one of the following Wildflower seed varieties shall be planted:

Wildflower Seeding Rate (Metric)	
Common Name (Botanical Name)	Kilograms/hectare
<i>Indian Blanket (Gaillardia pulchella)</i>	11.2
<i>Black-eyed Susan (Rudbeckia hirta)</i>	2.25
<i>Lance-Leafed Tickseed (Coreopsis lanceolata)</i>	11.2
<i>Annual Phlox (Phlox Drummondii)</i>	11.2
<i>Moss Verbena (Verbena tenuisecta)</i>	6.7

*Effective with July 1999 for CES PJ10 and CES PJ29
Effective with January 2000 for CESPJ15*

Issue: *Pay Items that are Obsolete or Not on current Master Pay Item List - Flagging by Computer*

History: When permanently blocked pay items or pay items that are not on the current master pay item list are called for on a project, the Department no longer has specifications or standards to support them. OIS has updated several CES programs to electronically notify the designer when the project contains one of these pay items. A message of “***BLOCKED ITEM***” will appear next to any item that has been permanently blocked. A message of “***NOT ON FILE***” will appear next to any item that does not exist on the master pay item file. An implementation plan has been developed to assist the designer in identifying these items is as follows:

CES Programs CESPJ10 and CESPJ29 will be updated July 15, 1999 to start flagging incorrect pay items. This will allow the designer to run this program so they can identify incorrect pay items on their project and make the necessary changes. (By not updating the CES PJ15 program at this time, the Summary of Pay Items will not flag these pay items. This will allow projects that are in the process of letting to make it thru the system without impacting production.)

The CES Program CESPJ15 (Summary of Pay Items that is included in the plans) will be updated December 4, 1999 to start flagging incorrect pay items. Once this program is updated, anytime a CESPJ15 is run after December 4, 1999 and it contains an incorrect pay item, an error message will appear next to the pay item.. This message will be in the place of the Pay Item Description. It is CRITICAL that all projects be cleaned up prior to this date by using CESPJ10 or CESPJ29.

Implementation Plan:

Central Office: Update CES Programs to flag incorrect pay items with the appropriate error message.

CESPJ10 and CESPJ29 on July 15, 1999
CESPJ 15 on December 4, 1999 (weekend after Dec. letting)

District Design: Run a CESPJ10 or CESPJ29 on all projects to verify that the project does not contain any incorrect pay item(s).

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: William N. Nickas _____ Date _____

State Structures Design Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

Effective Immediately

Issue: *Loading projects in CES using new Measure Type.*

History: The CES programs have been updated to require the use of Measure Type (English or Metric) replacing Type Construction. The measure type field has been designated in CES (E-Card) where the designer will specify E for English projects or M for Metric projects replacing the values of Type Construction (U or R).

Implementation Plan

Central Office: Update the CES Programs to accept the Measure Type as English or Metric projects. Central Office will convert all projects currently loaded in CES.

District Design: The Designer should load projects in CES using Measure Type (E or M).

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: William N. Nickas _____ Date _____
State Structures Design Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

**Issue: Memo dated March 3, 1999, Billy Hattaway to Plans
Preparation Manual Holders
Subject: Delay of Implementation**

This memo indicated resolution for three issues that would involve mandatory implementation beginning with the January 2000 letting:

1. Portable Regulatory Signs
2. Radar Activated Speed Signs
3. Strong Yellow Green Sheeting (AKA Flourescent Yellow Green)

Status: These issues are still under review, development and/or evaluation. There will not be any changes mandated for the January 2000 letting related to these issues. Once these issues are resolved, a schedule will then be developed for implementation in accordance with the Department's normal update schedule. Adequate advance notification of any required changes will be provided to all affected parties.

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer



Florida Department of Transportation

**JEB BUSH
GOVERNOR**

605 Suwannee Street
Tallahassee, FL 32399-0450

**THOMAS F. BARRY, JR.
SECRETARY**

MEMORANDUM

DATE: March 3, 1999

TO: Registered Plans Preparation Manual Holders

FROM: Billy L. Hattaway, P.E., State Roadway Design Engineer

COPIES: Ken Morefield, Bill Deyo, Bill Albaugh, Freddie Simmons, Greg Xanders, Jim Mills, District Directors of Production, District Directors of Operations

SUBJECT: Delay of Implementation

There are three requirements that were to be effective with the July 1999 letting that are withdrawn effective immediately with this letter. This is due to incomplete direction and numerous concerns that have been raised by the Districts, Industry, and others within Central Office on these items.

Our plan is to resolve these issues and have direction available by the July 1999 update to the Plans Preparation Manual for a mandatory January 2000 letting. Those items and the documents that they were implemented by are referenced below:

1. January 1, 1999 letter from Cheryl Adams to Basis of Estimate Handbook Holders, Subject: Summary of Major Changes (Metric and English Editions), p. 4, Portable Regulatory Signs. Portable Regulatory Signs were to be required for use during MOT activities. This pay item is blocked and the item is not required to be used.
2. January 1, 1999 letter to Registered Plans Preparation Manual Holders from Jim Mills, Subject: Implementation - Plans Preparation Manual, January 1999 Updates, p. 2 of 4, Volume I Chapter 10, Section 10.10.3 Variable Message Signs. The use of Radar Activated Speed Signs will not be implemented. There is currently no specification or pay item in place for this device.
3. January 14, 1999 letter to District Directors of Production and District Directors of Operations from Bill Deyo, Subject: Use of Strong Yellow Green Sign Sheeting. The requirement to use this sheeting on production projects is being delayed. The specification for this sheeting is in development.

Should you have any questions, you may contact me at (850)414-4310 or Suncom 994-4310.

BH/bh

Issue: Rock Bags

History: This is a new item that should be included for the purpose of controlling siltation at curb and gutter inlets as shown in the Roadway and Traffic Design Standards Index No. 102, 2000 Edition. Hay bales move during rainfall events because they cannot be staked. The intent is to use rock bags where one cannot drive a stake.

Implementation Plan

Central Office:

Establish the following new pay items July, 1999:

104-16	Rock Bags	EA
2104-16	<i>Rock Bags</i>	<i>EA</i>

Update Standard Index 102 to show the intended use of rock bags at curb inlet locations. The designer should estimate 20 bags for each curb inlet. (This is an average to be used as the Basis of Estimate, the final quantity will be paid for as measured in the field)

District Design: Update plans, if necessary, and CES to indicate the new pay item on all projects beginning with the July 2000 letting. Adjust hay bale quantities as necessary.

Specifications: Specifications will be available for July 2000.

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: William N. Nickas _____ Date _____
State Structures Design Engineer

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

Effective with the July 2000 letting

Issue: *Steepened Slopes and Reinforcement Over Soft Soils*

History: The Department has decided to eliminate proprietary pay items numbers for these products and pay for this work under a generic pay item number. A generic design will be furnished by the designer and will be provided in the plans. There is no longer a need to contact the individual suppliers to obtain designs to be placed in the plans.

Implementation Plan:

Central Office Design:

Establish the following new pay items July, 1999:

145-1	Geosynthetic Reinforced Soil Slopes	SF	
2145-1	<i>Geosynthetic Reinforced Soil Slopes</i>		M2
145-2	Geosynthetic Reinforced Foundations Over Soft Soils	SY	
2145-2	<i>Geosynthetic Reinforced Foundations Over Soft Soils</i>	M2	

Permanent Block the following pay items June 30, 2000

145-74-xxa	Geosynthetic Reinforced Soil Slopes	SF	
2145-74-xxa	<i>Geosynthetic Reinforced Soil Slopes</i>		M2
145-75-xxa	Geosynthetic Reinforced Foundations Over Soft Soils	SY	
2145-75-xxa	<i>Geosynthetic Reinforced Foundations Over Soft Soils</i>	M2	

Central Office Design - Structures and Roadway:

Add a new chapter to the 1999 Plans Preparation Manual, Volume I, to establish design guidelines, parameters and limitations for these systems.

District Design: Update plans and CES to indicate the new pay item(s) on all projects beginning with the July 2000 letting.

Specifications: Specifications will be available for July 2000.

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: William N. Nickas _____ Date _____

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

***Effective with the July 2000 letting
(or sooner if it does not impact production)***

Issue: Asphalt by the Ton

History: The Department has decided to pay for all asphalt (except asphalt used in the base) by the ton.

Implementation Plan:

Central Office, Design: Update the Basis of Estimate Handbook and the Pavement Design Manual to reflect this change in policy.

Permanently block existing pay items below on June 30, 2000:

331-72-aaa	Type S Asphaltic Concrete	SY
2331-72-aaa	<i>Type S Asphaltic Concrete</i>	<i>M2</i>
333-1-aab	Type III Asphaltic Concrete	SY
	<i>No Metric Number currently open</i>	
334-2a-bbb	Superpave Asphaltic Concrete	SY
2334-2a-bbb	<i>Superpave Asphaltic Concrete</i>	<i>M2</i>
335-1-aab	Sand Asphalt Hot Mix	SY
2335-1-aab	<i>Sand Asphalt Hot Mix</i>	<i>M2</i>

District Design: Update plans indicating the rate of spread, the Summary of Pay Items (CES) and computation book to indicate the appropriate asphaltic concrete tonnage pay item(s) on all projects beginning with the July 2000 letting. Pavement designs do not have to be updated, the design has not changed, only the method of payment has changed..

Specifications: Specifications currently handle payment by the ton, but clarification may be needed. If clarifications are made, specifications will be available for July 2000.

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

Effective with the July 2000 letting

Issue: *Earthwork - Selecting Pay Items:*

History: The Department is changing its philosophy on several issues that involve earthwork. Chapter 3 of the Plans Preparation Manual is being completely rewritten to include the changes which will simplify how the department addresses earthwork on a project. Below are “some” of the highlights of the proposed changes at a glance.

Summary of Major Changes to Earthwork

1. Pay for all Cut Operations as Regular Excavation or Regular Excavation (Lump Sum); Do not differentiate between suitable and unsuitable.
2. Pay for all Fill Operations as Embankment or Borrow Excavation (Truck Measure).
3. Permanently Block the Pay Item for Borrow Excavation (Pit Measure) & (Stockpile).
4. Pay for all material excavated below the finished grading template as Subsoil Excavation; Do not differentiate between suitable and unsuitable.
5. When quantities are large, pay for Lateral Ditch and/or Channel Excavation separately.

Implementation Plan:

Central Office, Design: Update the Plans Preparation Manual to reflect the change in selecting earthwork pay items:

Permanent Block the following pay items June 30, 1999

120-2-1	Borrow Excavation (Pit Measure)	CY
2120-2-1	<i>Borrow Excavation (Pit Measure)</i>	<i>M3</i>
120-2-3	Borrow Excavation (Stockpile)	CY
2120-2-3	<i>Borrow Excavation (Stockpile)</i>	<i>M3</i>

District Design:

Complete review of PPM Chapter 3 is recommended prior to plans preparation utilizing earthwork on a project.

3.5.1 Guidelines for Selecting Earthwork Pay Items

Guidelines for Selecting Earthwork Pay Items					
Description		Control Lines	Recommended Pay Item		
			Projects with Cross Sections	Projects without Cross Sections	
Earthwork operations above the original ground line and below the finished grading template		Fill	from original ground to the finished grading template	Embankment	Borrow Excavation (Truck Measure)
Earthwork operations below the original ground line and above the finished grading template		Cut	from original ground to the finished grading template	Regular Excavation	Regular Excavation (3-R Projects) LS
Earthwork operations below the original ground line and below the finished grading template		Cut	from the finished grading template or original ground, whichever is lower, to the lower limits of removal of organic or plastic material	Subsoil Excavation	Subsoil Excavation
		Fill	from the lower limits of removal of organic or plastic material removed to the finished grading template.	Embankment	Borrow Excavation (Truck Measure)
With Significant quantities of lateral ditch or channel excavation the designer may select to pay for separately.			from original ground to the finished grading template	Lateral Ditch Exc Channel Exc.	N/A

Specifications: No Specifications changes will be required.

Approved: Billy L. Hattaway

_____ State Roadway Design Engineer

Date _____

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

Issue: *End Anchorage Assemblies*

History: The Department has decided to pay for all end anchorage assemblies with generic pay items instead of proprietary pay items. The designer may specify the use of a particular end anchorage assembly by type and location in the plans and pay for it using the appropriate generic pay item on the CES.

The 2000 Standard Index has been updated to identify each existing proprietary end anchorage to be one of the following - Flared; Parallel; Type II or Type CRT .

Implementation Plan:

Central Office Design:

Establish the following new pay items July, 1999

536-85-xaa	Guardrail, End Anchorage Assembly	EA
2536-85-xaa	<i>Guardrail, End Anchorage Assembly</i>	<i>EA</i>
aa =	22 Flared	
	24 Parallel	
	25 Type II	
	26 Type CRT	

Permanent Block the following pay items June 30, 2000

536-6	End Anchorage Assemblies (Type II)	EA
536-9	End Anchorage Assemblies (Type IV)	EA
536-84	End Anchorage Assemblies (Type CRT)	EA
536-86	End Anchorage Assemblies (Type ET-2000)	EA
536-87	End Anchorage Assemblies (Type BEST)	EA
536-88	End Anchorage Assemblies (Type SRT-350)	EA
536-89	End Anchorage Assemblies (Type LET)	EA
536-90	End Anchorage Assemblies (Type MELT/SRT-350)	EA
536-91	End Anchorage Assemblies (Type ET-2000/BEST/LET)	EA
2536-85-xaa	<i>Guardrail, End Anchorage Assembly</i>	<i>EA</i>
	<i>where aa = 1 thru 14</i>	

District Design: Update plans and CES to indicate the new pay item(s) on all projects beginning with the July 2000 letting.

Specifications: Specifications will be available for July 2000.

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: William N. Nickas _____ Date _____
State Structures Design Engineer

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

Effective with the July 2000 letting

**Issue: *Attenuators , Vehicular Impact
Temporary and Permanent***

History: The Department has approved additional impact attenuators for use in accordance with the Standard Index, the ADIEM-350 and the TRACC (The ADIEM-350 is already in use for metric jobs).

The 2000 Standard Index has been updated to clarify the confusion centered around the use of the optional temporary redirective crash cushions, the (Index 415 Option) has been replaced by (Redirective Option).

Implementation Plan:

Central Office Design:

Establish the following new pay items July, 1999

102-89-xxa	Vehicular Impact Attenuators	LO
2102-89-xxa	<i>Vehicular Impact Attenuators</i>	<i>LO</i>
	aa = 5 = (Adiem 350)	
	6 = (TRACC)	
	7 = Redirective Option	

544-75-xxa	Vehicular Impact Attenuators	EA
2544-75-xxa	<i>Vehicular Impact Attenuators</i>	<i>EA</i>
	a = 15 = (Adiem 350)	
	16 = (TRACC)	

Permanent Block the following pay items June 30, 2000

102-89-xaa	Vehicular Impact Attenuators	LO
2102-89-xaa	<i>Vehicular Impact Attenuators</i>	<i>LO</i>
	aa = 3 = (Index 415 Option)	

District Design: Update plans and CES to indicate the new pay item(s) on all projects beginning with the July 2000 letting.

Specifications: Specifications will be available for July 2000.

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: William N. Nickas _____ Date _____
State Structures Design Engineer

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

Effective with the July 2000 letting

Issue: Traffic Signal Pay Items

History: The specifications have been updated to reflect current industry technology and practices. In doing this several pay items have changed to be compatible with the specifications.

Implementation Plan

Central Office:

Establish the following new pay items July, 1999:	Unit	Permanent Block the following pay items June 30, 2000	Unit
670-5-abc Traffic Controller Assembly 2670-5-abc <i>Traffic Controller Assembly</i> a = Operation 1 Furnish and Install 2 Furnish 3 Install 4 Modify b= Type 1 Nema 2 170 3 Special c= Preemption 0 none 1 One Preemption 2 Two Preemption	AS	670-1ab-cde Actuated Solid State Controller Assembly 2670-1ab-xcd <i>Actuated Solid State Controller Assembly</i> 670-2-abc Fixed Time Mechanical Controller Assembly 670-3-abc Fixed Time Solid State Controller Assembly 2670-3-abc <i>Fixed Time Solid State Controller Assembly</i> 672-1-xxa Model 170 Controller Assembly 2672-1-xxa <i>Model 170 Controller Assembly</i>	AS AS AS AS

Establish the following new pay items July, 1999:	Unit	Permanent Block the following pay items June 30, 2000	Unit
671-2-xab Traffic Controller 2671-2-xab <i>Traffic Controller</i> a = Operation 1 Furnish and Install 2 Furnish 3 Install 4 Modify b= Type 1 Nema 2 170 3 Special	EA	671-1-abc Actuated Solid State Digital Timing Traffic Controller 2671-1-abc <i>Actuated Solid State Digital Timing Traffic Controller</i> 676-1ab-cdd Controller Cabinet 2676-1ab-cdd <i>Controller Cabinet</i>	EA EA EA
632-6 Cable (Signal) a = Operation 4 Adjust	LF		
632-7 Cable (Signal) a = Operation 4 Adjust	PI		
		632-9-abb Cable Support Accessories	EA
		635-1-xxa Pull and Junction Boxes 2635-1-xxa <i>Pull and Junction Boxes</i> a = 4 Adjust	EA
		2653-abc <i>Pedestrian Signals</i> a = 4 Remove	AS
		660-4-xxa Loop Material 2660-4-xxa <i>Loop Material</i>	AS
		674-1-abc Fixed Time Mechanical Controller	EA
		679-1-abc Coordination Unit	EA

District Design: Update plans and CES to indicate the new pay item(s) on all projects beginning with the July 2000 letting.

Specifications: Specifications will be available for July 2000.

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer

Approved: Jack Brown _____ Date _____
State Traffic Operations Engineer

Issue: Utility Pay Item Structure

History: The Department has decided to update the English utility pay item structure to be compatible with the metric pay item structure. At the time the Department was developing metric pay items, the decision to let the English phase out and update the metric to current industry practice, was thought to be a good decision. Since we are going back to English we need to make the English pay items more in line with current industry practices therefore we are updating the English structure to that shown below:

Implementation Plan:**Central Office Design:**

Establish the following new ENGLISH utility pay items June 30, 1999. There are no proposed changes to the Metric Utility Pay Items. Due to the large number of pay items that will need to be opened we are requesting that the first time an item is needed, the District CES coordinator contact Central Office Estimates to identify the Financial Identification ID project to have the item opened in the Master Pay Item File.

This is a **draft** list of the new pay items to be opened for English projects, we do not anticipate any major changes to what is shown below. The Utility Industry has been involved with the proposed changes, but we will be meeting with the Utility Industry one more time prior to finalization of pay items.

PAY ITEM STRUCTURE

The pay item structure below is separated into Generic Items, Sewer, Water, Power, Communications, and Fuel Transmission. Whenever an item is applicable to more than one type of utility, the item should be included under Generic, and not duplicated under the separate utility types. Red-lined items are proposed to be added; strike-out text will be deleted. Notes at the top of each section explain replaced items.

Although not shown on these pages, the ####-abc-def structures continue to describe Operation (Furnish, Install, Remove, etc.) Material, Type, Class, Joint Type, and/or Size. For example, Miscellaneous Fixtures will continue to have separate pay items for each operation, fixture and size combination.

After the primary structure below is determined, the remaining structure will similarly be subject to review. Selected materials, sizes, and/or type combinations, although potentially valid by pay item numbers may not be commercially available or desirable for applications in Florida. Notes/rules/instructions must be available to block these selected combinations. Again, these combinations will be discussed at a later date.

1000/3000 Generic Items

Notes: The English items are added to match existing Metric generic items. Miscellaneous fixtures currently includes valve boxes, line stopping assembly, valve vault. Utility Manholes added to include both water and Sewer Manholes.

1010-xxa-xxx	Pipe (Plug & Place Out of Service)	EA/LF	3010-xxa-xxx	Pipe (Plug & Place Out of Service)	EA/M1
1020-xxa-xxx	Pipe (Removal)	LF	3020-xxa-xxx	Pipe (Removal)	M1
1030-ab-c	Bridge Hanger	EA	3030-ab-c	Bridge Hanger	EA
1040-abc-	Sheathing & Bracing	SF	3040-abc-	Sheathing & Bracing	M2
1050-abc-dee	Tapping Assemblies	EA	3050-abc-dee	Tapping Assemblies	EA
1060-abc-def	Utility Structures	EA	3060-abc-def	Utility Structures	EA
1080-abb-cdd	Miscellaneous Fixtures	EA	3070-abc-dee	Valve Assembly	EA
1090-abc-dee	Pipe (PVC)	LF	3080-abb-cdd	Miscellaneous Fixtures	EA
1091-abc-dee	Pipe (Polyethylene)	LF	3090-abc-dee	Pipe (PVC)	M1
1100-abc-dee	Pipe (Ductile/Cast Iron)	LF	3091-abc-dee	Pipe (Polyethylene)	M1
1110-abc-dee	Pipe (Steel)	LF	3100-abc-dee	Pipe (Ductile/Cast Iron)	M1
1120-abc-dee	Pipe (Concrete)	LF	3110-abc-dee	Pipe (Steel)	M1
			3120-abc-dee	Pipe (Concrete)	M1
			3125-abc-def	Utility Manhole	EA
			3130-abb-cde	Poles And Towers (DSBN)	EA
			3140-abc-dde	Anchors (DSBN)	EA
			3150-abc-dde	Guys (DSBN)	EA
			3160-abc-dee	Conduit	M1
			3170-1-aa	Pole Encasement	M1
			3180-99	MALSR Tower Base	EA

1500/3500 Sewer

Notes: Pipe, valve, and box items covered by above generic items. Service and Service Connection covered under one item: Service.

1500-600-xxa	Pipe (Plug & Placed Out Of Service)	EA/LF			
1500-900-xxa	Pipe (Removal)	LF			
1511-abc-dee	Sanitary Sewer Fittings	EA/TN	3511-abc-dee	Sewer Fittings	EA/MT
1512-abc-dee	Sewer Pipe (Solvent Joint)	LF			
1513-abc-dee	Sewer Pipe (Push-On Joint)	LF			
1514-abc-dee	Sewer Pipe (Mech Joint)	LF			
1515-abc-dee	Sewer Pipe (Flex Ball Joint)	LF			
1516-abc-dee	Sewer Pipe (Flanged Joint)	LF			
1517-abc-dee	Sewer Pipe (Welded Joint)	LF			
1518-abc-dee	Sewer Pipe (Restrained Joint)	LF			
1519-abc-dee	Service	EA	3516-abc-dee	Service	EA
1522-ab-edd	Bridge Hanger	EA			
1521-abc-dee	Sheathing & Bracing	SF			
1533-abc-dee	Tapping Saddle	EA			
1537-abc-dee	Valve Box, Tapping Cross & Valve	EA			
1541-abc-def	Utility Manhole And Junction Box	EA			
1542-abc-dee	Sanitary Valve	EA			
1543-abc-dee	Valve Box, Tapping Sleeve & Valve	EA			
1544-abc-dee	Air Relief Valve	EA			
1545-abc-def	Junction Box	EA			
1548-abb-edd	Miscellaneous Sewer Fixtures				
1593-a00-	Service Connection	EA			

1600/3600 Water Special

Notes: Pipe, valve, and box items covered by above generic items. Service and Service Connection covered under one item: Service.

1600-600-xaa	Pipe (Plug & Placed Out Of Service)	EA/LF			
1600-900-xaa	Pipe (Removal)	LF			
1611-abc-dee	Water Fittings	EA/TN	3611-abc-dee	Water Fittings	EA/MT
1612-abc-dee	Water Pipe (Solvent Joint)	LF			
1613-abc-dee	Water Pipe (Push-On Joint)	LF			
1614-abc-dee	Water Pipe (Mech Joint)	LF			
1615-abc-dee	Water Pipe (Flex Ball Joint)	LF			
1616-abc-dee	Water Pipe (Threaded Joint)	LF			
1617-abc-dee	Water Pipe (Restrained Joint)	LF			
1618-abc-dee	Water Pipe (Welded Joint)	LF			
1619-abc-dee	Service	LF	3616-abc-dee	Service	M1
1621-abc-dee	Water Pipe (Flanged Joint)	LF			
1622-ab-ecd	Bridge Hanger	EA			
1631-abc-dee	Corporation Stop	EA			
1632-abc-dee	Curb Stop	EA			
1633-abc-dee	Tapping Saddle	EA			
1634-abc-dee	Dresser Coupling	EA			
1635-abc-dee	Tapping Sleeve & Tap	EA			
1636-abc-dee	Service Clamp	EA			
1637-abc-dee	Valve Box, Tapping Cross & Valve	EA			
1641-abc-def	Utility Manhole	EA			
1642-abc-dee	Water Valve	EA			
1643-abc-dee	Valve Box, Tapping Sleeve & Valve	EA			
1644-abc-dee	Fire Hydrant	EA	3622-abc-dee	Fire Hydrant	EA
1645-abc-dee	Meter Box	EA	3645-abc-dee	Meter Box & Meter	EA
1646-abc-dee	Guards (Fire Hydrant)	EA			
1647- a-bcc	Air Release Assembly	EA			
1648-a00-xxb	Miscellaneous Water Fixtures	EA			
1691-abb-	Blocking & Anchoring Pipe	CY			
1692-abb-	Mechanical Joint Restraints	EA	3612-abb-	Mechanical Joint Restraints	EA
1693-abc-dee	Service Connections	EA			

1700/3700 Power

1710-abb-cde	Poles And Towers (DSBN)	EA	3130-abb-cde	Poles And Towers (DSBN)	EA
1711-abc-dde	Anchors (DSBN)	EA	3140-abc-dde	Anchors (DSBN)	EA
1712-abc-dde	Guys (DSBN)	EA	3150-abc-dde	Guys (DSBN)	EA
*	1713-abb-ccd	Miscellaneous Pole, Anchor, & Repairs (DSBN)	EA		
*	1714-abb-cde	Secondary And Primary Framing (DSBN)	AS		
1715-abc-dee	Conduit	LF	3160-abc-dee	Conduit	M1

				3715-abc-dee	
	1716-abb-cde	Utility Manhole	EA		
*	1717-abb-ccc	Switches And Arrestors	EA		
*	1718-abc-def	Pole And Framing Packages	AS		
*	1719-abb-cde	Misc. DSBN Primary, Secondary & Pole Hardware	EA		
*	1720-abb-	Transformers	EA		
*	1721-abc-def	Capacitors And Regulators	EA		
*	1722-abb-cde	Services O.H. (And Special Metering As Required)	EA		
*	1723-abb-cde	Lighting	EA		
	1724-abc-def	Conductors	LF	3711-abc-def	Conductors M1
	1725- 1- aa	Pole Encasement (aa)	LF	3170- 1- aa 3725- 1- aa	Pole Encasement M1
	1799- 99	MALSR Tower Base	EA	3180- 99 3799- 99-	MALSR Tower Base EA

1800/3800 Communications

*	1811-abc-dde	Pole	EA		
*	1812-abc-dee	Anchor	EA		
*	1813-abc-dee	Guy	EA		
	1821-abc-dee	Cable	LF	3811-abc-dee	Cable M1
	1822-abc-dee	Bridge Hangers	EA		
*	1823-abc-dee	Casing	LF		
	1831-abb-cde	Manhole	EA		
	1832-abc-dee	Conduit	LF		
	1833-abc-ddd	Frame & Cover	EA		

1900/3900 Fuel Transmission

Notes: Pipe, valve, fittings, and box items covered by above generic items. Service and Service Connection covered under one item: Service.

	1900-600-xaa	Pipe (Plug & Placed Out Of Service)	EA/LF		
	1900-900-xaa	Pipe (Removal)	LF		
	1911-abc-dee	Natural Gas Fittings	EA	3911-abc-dee	Natural Gas Fittings EA
	1912-abc-dee	Natural Gas Pipe (Socket Fused Joint)	LF		
	1913-abc-dee	Natural Gas Pipe (Butt Fused Joint)	LF		
*	1914-abc-dee	Natural Gas Pipe (Mech Joint)	LF		
*	1915-abc-dee	Natural Gas Pipe (Threaded Joint)	LF		
	1916-abc-dee	Natural Gas Pipe (Welded Joint)	LF		
*	1919-abc-dee	Service	EA	3919-abc-dee	Service EA
	1922-ab-cdd	Bridge Hanger	EA		
*	1923- ab-cdd	River Clamps	EA		
	1941-abc-def	Utility Manhole	EA		
	1943-abc-dee	Valve Box	EA		
	1944-abc-dee	Natural Gas Valve	EA	3912-abc-dee	Natural Gas Valve EA
	1947- a-bcc	Casing Insulator	EA	3913- a-bcc	Casing Insulator EA
	1948- a-bcc	Casing Seals	EA	3914- a-bcc	Casing Seals EA

1949-abc-dee	Casing Vents	LF	3915-abc-dee	Casing Vents	M1
* 1991-abb-	Anchoring Pipe	CY			
* 1993-abc-dee	Service Connections	EA			

Permanent Block the strike-out pay items noted above on June 30, 2000.

District Design: Update plans and CES to indicate the new pay item(s) on all projects beginning with the July 2000 letting.

Specifications: No specification changes will be required.

Approved: Billy L. Hattaway _____ Date _____
State Roadway Design Engineer

Approved: William N. Nickas _____ Date _____
State Structures Design Engineer

Approved: Greg Xanders _____ Date _____
State Construction Engineer

Approved: Lex Chance _____ Date _____
State Estimates Engineer

Approved: Duane F. Brautigam _____ Date _____
State Specifications Engineer