

# District Five Final Estimates Meeting September 2010





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# Problems Found On PARS



$$\int \frac{x+5}{x^2-2x-3} dx$$

Problems

$$\frac{5}{3} dx = \int \frac{2}{x-3} dx - \int \frac{1}{x+1}$$
$$= 2 \ln (x-3) - \ln (x+1)$$
$$= \ln \frac{(x-3)^2}{x+1} + C$$



- 1. Contract Time: This is a federal aid contract and the FHWA contract time column does not reflect the allowable or used time on the contract time summary sheet.**
- 2. Contract Time: There were no requests to work or approval to work submitted with the final estimate for when the contractor worked on a holiday.**
- 3. Contract Time: The contractor worked on December 28-31, 2008 and there was no request to work or approval to work submitted with the final estimate.**



#### **4. Final As-Built Plans:**

- A. Bench marks that were destroyed, disturbed, or adjusted were not noted on the plans.**
  
- B. Any contractor as-built plans are to be included in the final as-built plans and are to be included in the as-built plan index. If the contractor as-built plans are to be found in a different folder, binder, or book then the final as-built plan index, on the key sheet, is to note where these as-built plans can be found (see Prep & Doc Manual Chapter 4 Section 4.5.8).**



## **5. Comp Book:**

- A. A comp book page was not added for the Initial Contingency pay item. Work orders are to be listed on this page or the summary inserted behind the contingency pay item comp book page (see Prep & Doc Manual Chapter 2 Section 2.3.10 and Chapter 5 Section 5.5).**
  
- B. A comp book page for Mobilization was not furnished by design nor was there one added by construction (see Prep & Doc Manual Chapter 2 Section 2.3.10 and Chapter 5 Section 5.5).**
  
- C. Construction entries were made in blue ink. The colors red, blue, and green are not to be used these colors are reserved for the use of checking staff of the DFEO during their review of the final estimate (see Prep & Doc Manual Chapter 5 Section 5.2).**



- 6. WO #7 Impact Attenuator Repair: Attenuator Repairs are to be paid as a line item adjustment to 102-89-7. Per spec 102-13.12 pay invoice plus 20%. The Invoice from Traffic Control Products included the 20% mark-up making the total cost of \$2,642.48. Then Sub Contractor marked the repair up another 10% or \$264.25. Then the Prime Contractor marked the repair up 10% or \$290.67 and added Labor and Equipment of \$47.96 making a total for the Work Order of \$3,245.36. Need to do a negative WO for -\$3245.36 and add a line item adjustment of \$2,642.48 to 102-89-7. ( $\$3,245.36 - \$2,642.48 = -\$602.88$  Overpayment).**
- 7. 102-99 Changeable-variable Message Sign: You changed the quantity on the Ad-Hoc from 158 ED to 160 ED, but failed to change the paid amount. ( $2 \times \$60.00 = +\$120.00$ ).**
- 8. Base Group 4: Lot 76 –The CPF adjustment for this lot was in error the adjustment should have been based off of the square yards of the lot and not the tons (+\$185.90).**



- 9. Composite pay factors were not paid on the asphalt base per specification 334-8.1.**

**\$1,297.35 Underpayment**

- 10. 334-1-13 Superpave Asph Conc, TL-C: The tonnage on road report dated 4/24/2009 in Lot 27 is reported as waste. This tonnage was added to the non-density tonnage and the non-density tonnage shown on the CPF worksheet. The actual non-density tonnage is 892.06 tns. This amount did not change the pay factor.**



## **11. Superpave Asphalt TL-D:**

**Lot 41 – The CPF worksheet shows a CPF of 102. The asphalt summary is showing a CPF at 100. The asphalt for this lot was paid at a CPF of 100 (+\$283.88).**

**Lot 56 - The non-density tonnage on the road report does not match the non-density tonnage on the CPF worksheet which affected the CPF (-\$ 4,449.60).**

**Lot 62 –Tonnage on the lot did not match the asphalt summary or the CPF summary. Tonnage on CPF worksheet and road report did not match the tonnage from the delivery ticket pad cover. The corrected tonnage affected the CPF of the lot (-\$1,094.91).**

**Lot 84 – Total tonnage on the road report did not match the total from the delivery tickets and the amount reported on the CPF worksheet. Correction was made and there was no affect to the CPF for this lot.**



- 12. 337-7-33 Asph Conc Friction Course, Traffic C, FC-12.5: Paid 1,964.7 tons (-\$2,848.82) for CPF of 0.99 on LOT 42. This Lot was a 2000 ton LOT, should be (-\$2,900.00).**
- 13. 339-1 Misc Asph Pavement: Asphalt certification indicates that 22 tons was laid during the period of 11/17/08 thru 12/14/08. There was no asphalt laid during that period of time. The asphalt documentation shows paving started on 2/23/09. The asphalt tickets and road report only shows 7.18 tons laid on March 30, 2009 for miscellaneous asphalt. Therefore the contractor is not due the bituminous adjustment of \$303.20.**
- 14. Asphalt Bituminous Certification: Certification #7 did not include 4.95 tons of misc asphalt. This results in an underpayment of \$35.18 for the bituminous adjustment.**



- 15.** All adjustments that were calculated on the six month prior to letting date were based on the average unit price and should be on the weighted average.
  
- 16.** 520-70 Concrete Traffic Separator, Special : Adhoc shows two pay items one on page #6 and one on page #7. You paid 240 Sy on page #6 and 38 Sy on page 7. Comp Book page 32 shows 38 Sy going to Bridge #705910 and 202 Sy going to Bridge #705920 making a total of 240 Sy. (  $240 - 202 = -38 \times \$65.00 = -\$2470.00$  )
  
- 17.** Striping Certifications: No daily worksheets (form 700-050-67) with monthly certifications. Required by spec 710-9.



# Housekeeping



- **Where does it say GEN Files are to be furnished by the Designer?**
  - **The designers are to follow the procedures of the FDOT CADD Production Criteria Handbook which states in 8.5.3 the following:**
    - **The designer shall also create and deliver the cross sections in an alternate ASCII text file format (GEN file) as defined herein, ensuring that each set of delivered cross sections for the project has a matching ASCII text file.**
    - **The Handbook is located at the following link:**  
**<http://www.dot.state.fl.us/ecso/downloads/publications/CriteriaHandBook/>**



- **Computation Methods for Design, Construction, and Final Estimates Handbook states the following:**
  - **The Department requires that all engineering data files used or produced in conjunction with a project be delivered in the native format of the system used to produce it, in addition to the standard format required in the *CADD Manual, Chapter 3, Section 3.8.1.1*.**
  - **The standard format required is the *American Standard Code for Information Interchange (ASCII) text file*. Information on ASCII text files is located in the *CADD Production Criteria Handbook, Chapter 6*.**



- **What is the procedure when the GEN Files have not been provided by the Designer or do not import properly into MultiLine?**
  - **The PA is to contact the Design Project Manager. If the PA is a consultant then they are to contact their Project Manager and they will contact the Design Project Manager.**
  - **The Design Project Manager will then get with the Engineer of Record to get working GEN Files.**
  - **After these contacts have been made and the PA is unable to get the files then contact John Burnette or Tonii Brush for additional assistance.**



- **Per Specification 285-3 Only one base option is permitted for each typical section.**

**There are occasions where limerock was selected but during construction it was determined that the use of asphalt base would be better in certain areas. These areas are to be approved by the Engineer and the reasoning should not be just for the contractor's convenience.**



**When this happens the question arises on “How are payments and adjustments made on an estimate when Limerock is used for the base option of a road and there are isolated areas (that have been approved by the Engineer) where asphalt base was used?”**



**The total quantity for the optional base pay item would be the total plan quantity or the adjusted plan quantity (this is when a plan error meets the criteria to adjust the quantity or approved design or field changes have occurred).**



- **Calculating the Thickness/Spread Rate Adjustments**
  - **The amount of square yards covered with asphalt base is to be deducted from the total quantity of optional base. The remainder is the quantity of limerock base.**



- **Area of Limerock Base**
  - Cores are to be taken and entered into the Coreout Averages of the FDOT Engineering Quantities Program.
  - A thickness adjustment is then calculated using the quantity of square yards where only limerock was used.
  - A line item for the thickness adjustment is to be entered into the estimate.



- **Area of Asphalt Base**
  - **No Cores for asphalt base.**
  - **A spread rate adjustment is calculated using only the square yards covered by asphalt base.**
  - **A Spread rate line item adjustment is to be entered into the estimate.**
  - **The appropriate CPF line item adjustments are to be applied and entered into the estimate.**



- **Small isolated areas of limerock base, such as a median crossovers, are required to be cored.**
  - Specification 200-7.2.2 requires QC to perform 3 cores per lot.
  - Specification 120-8.1 defines a Lot and also states that “isolated compaction operations will be considered as a separate Lots.”
  - If the isolated area is the only area for a particular base group then it would also get a thickness adjustment.
    - This would also apply for a spread rate adjustment if it was asphalt base.

# Plan Square Yards vs Asphalt Road Report Square Yards



- **The total square yards from the asphalt road reports should be fairly close to the plan square yards when there are no errors or approved changes reported.**



- **If there is a large difference then there should be an investigation as to why.**
  - Was there an actual plan error that was not previously found?
  - Are there errors in the road reports?
  - Were the square yards included in the road report total for removed and replaced areas?
  - Were areas of asphalt base not correctly entered on the road report for proration?
  - Are there and overlap of stations on the road reports?



- **If it is determined that there is no plan error or field change then the plan quantity would be used to calculate the spread rate adjustment (thickness) on Base and the 105% maximum for pay on Base, Structural, and Friction.**
- **Need to pay close attention to the thickness requirements of Specification 234-8.**

# MULTI-FIN CONTRACTS



- Pay items that are to be documented and certified by the contractor (such as MOT, asphalt, or striping) can be done by one of two options:
  - 1 - Keeping the pay items separate per FIN project
  - 2 - Recording the pay items under the lead project



- At the Pre-Construction Conference, the contractor is to establish which option is going to be used for documenting the pay items.
- The contractor is to be informed that the option that is chosen shall be maintained throughout the project.
- The PA is not to choose or dictate which option the contractor is to use.



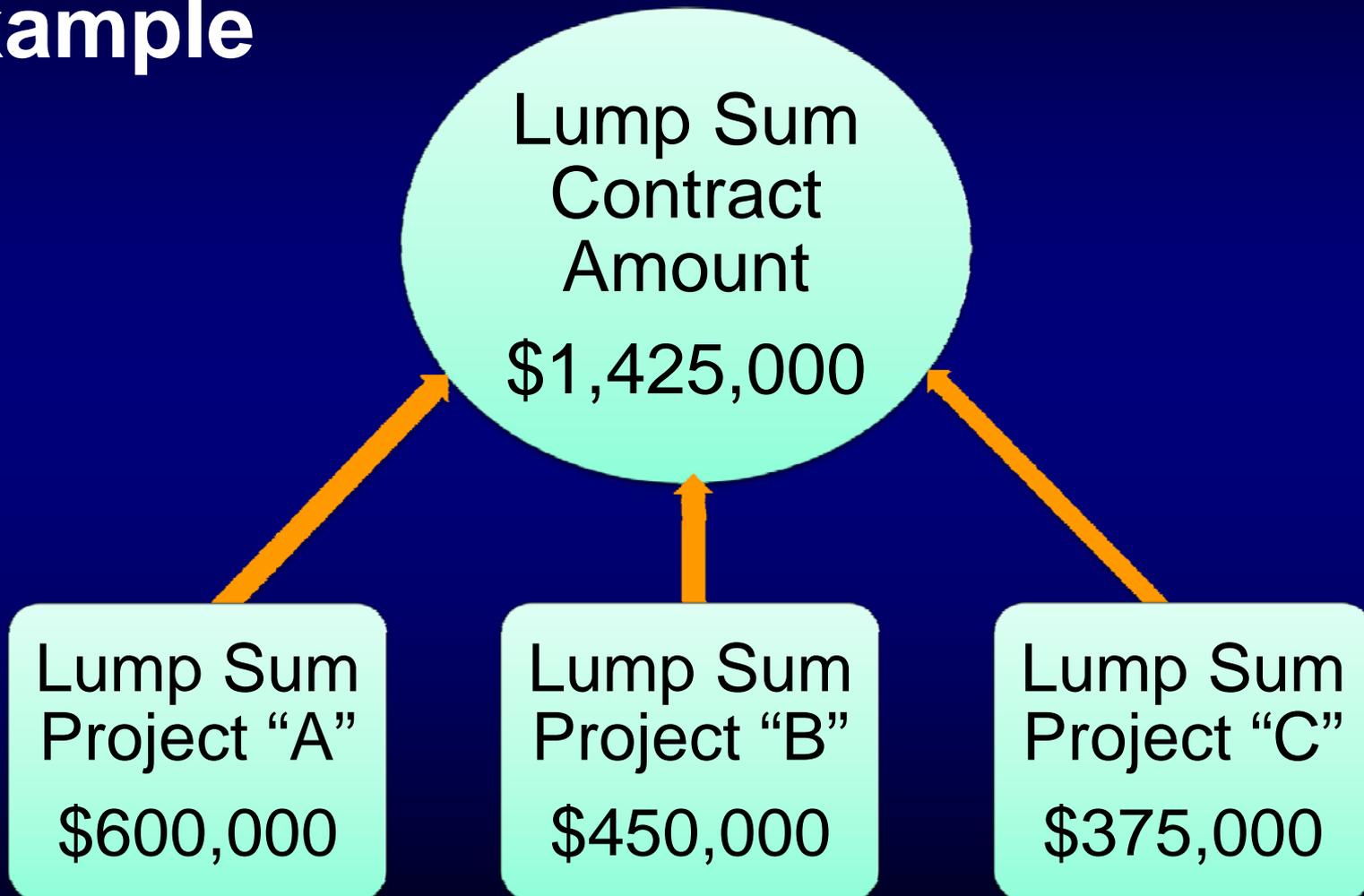
- **There have been some Multi-FIN Projects where the projects are Lump Sum. The question has been asked “How are the adjustments (CPF, fuel, bituminous, etc) to be paid?”**

**This is done through proration.**

- **Calculate the percentage of each project as it relates to the total amount of the contract.**
- **The percentage of each project is then applied to the specific adjustments.**



# Example





The percentage for each project would be:

**Project "A"**

$$\$600,000/\$1,425,000 = 0.421 = 42\%$$

**Project "B"**

$$\$450,000/\$1,425,000 = 0.316 = 32\%$$

**Project "C"**

$$\$375,000/\$1,425,000 = 0.263 = \frac{26\%}{100\%}$$



- **In some cases the rounding will not bring the total to 100% or will go over the 100%. When this happens, just pick a project to adjust the percentage to equal 100%.**
- **The percentages are to be rounded to the whole percent.**
- **The project percentages are then applied to the applicable adjustments.**



**Asphalt Lot 3 CPF = \$3,525.00**

**Project "A"**

$$42\% \times \$3,525.00 = \mathbf{\$1,480.50}$$

**Project "B"**

$$32\% \times \$3,525.00 = \mathbf{\$1,128.00}$$

**Project "C"**

$$26\% \times \$3,525.00 = \mathbf{\underline{\$ 916.50}}$$

$$\mathbf{\$3,525.00}$$

# Lump Sum Project Adjustments



- **When adjustments are made on Lump Sum project they are to be entered into the estimate with a quantity of 1 LS with a the dollar amount for the unit price as shown highlighted in yellow in the next slide.**
  - **Do not leave the quantity blank and just enter a dollar amount.**
  - **Do not enter a quantity other than 1 (one).**

[http://www.dot.state.fl.us/construction/Manuals/final\\_est/newcompbook/NewSampleCompbook.shtm](http://www.dot.state.fl.us/construction/Manuals/final_est/newcompbook/NewSampleCompbook.shtm)



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
COMPUTATION BOOK PAY ITEM SUMMARY AND CERTIFICATION SHEET

Form 700-050-10  
CONSTRUCTION  
02/03

Date: 5/9/08

Contract ID:                      Fin Proj. ID:                      Managing District:                      FAP No.:

Fin Proj regular Work Paid: \$ 9,744,449.14

Quantity	Unit Meas.	Item Code	S.A. Number	Pay Item Description	CDMS/ Page No.	Unit Price	Item Paid Amount	Line Item Adjustment Amount	Total Item Paid Amount
<i>Contract Adjustments for Pay Item Code: 0999 2</i>				<i>Change order Number:</i>					
		0002 BITM 1		Bituminous Adjustment	111584		\$ 142,510.23		\$ 142,510.23
		0002 BITM 1		Corrected Bit Adj. for removal & replacement of 48.00 Tons	112391		\$ (378.40)		\$ (378.40)
		0002 BITM 2		Asphalt Bituminous Adjustment	112392		\$ 269,232.82		\$ 269,232.82
		0002 BITM 3		Bituminous Adjustment	112977		\$ 36,537.12		\$ 36,537.12
		0002 BITM 2		Corrected Bit Adj. for removal & replacement of 825.73 Tons	112078		\$ (7,661.12)		\$ (7,661.12)
		0002 BITM 1		Bituminous Adjustment	113981		\$ 72,001.05		\$ 72,001.05
		0002 BITM 1		Bituminous Adjustment	114481		\$ 8,096.81		\$ 8,096.81
		0002 BITM 1		Bituminous Adjustment for estimate # 5	113448		\$ 22,613.95		\$ 22,613.95
		0002 BITM 1		Corrected Bit Adj. for removal & replacement of 58.15 Tons	112393		\$ (459.05)		\$ (459.05)
1	LS	0009 CPF 1		Lot No. 3 CPF of 0.94	15	\$ (9,360.00)	\$ (9,360.00)		\$ (9,360.00)
1	LS	0009 CPF 2		Lot No. 6 & 14 CPF of 0.96	15	\$ (18,538.57)	\$ (18,538.57)		\$ (18,538.57)
1	LS	0009 CPF 3		Lot No. 1, 2, 8, & 10 CPF of 0.98	15	\$ (14,724.15)	\$ (14,724.15)		\$ (14,724.15)
1	LS	0009 CPF 5		Lot No. 13, 16, & 17 CPF of 1.04	15	\$ 37,440.00	\$ 37,440.00		\$ 37,440.00
1	LS	0009 CPF 7		Lot No. 19 & 21 CPF of 0.92 (FC)	15	\$ (24,378.55)	\$ (24,378.55)		\$ (24,378.55)
1	LS	0009 CPF 9		Lot No. 22 & 26 CPF of 1.03 (FC)	15	\$ 10,800.00	\$ 10,800.00		\$ 10,800.00
1	LS	0009 CPF 10		Lot No. 25 CPF of 1.05 (FC)	15	\$ 9,000.00	\$ 9,000.00		\$ 9,000.00
1	LS	0009 CPF 11		Lot No. 23 & 24 CPF of 1.04 (FC)	15	\$ 14,400.00	\$ 14,400.00		\$ 14,400.00
1	LS	0009 CPF 8		Lot No. 20 CPF of 0.95 (FC)f	15	\$ (9,000.00)	\$ (9,000.00)		\$ (9,000.00)
1	LS	0009 CPF 6		Lot No. 4, 9 & 15 CPF of 1.05	15	\$ 31,200.00	\$ 31,200.00		\$ 31,200.00
1	LS	0009 CPF 4		Lot No. 5, 12 & 18 CPF of 1.03	15	\$ 19,397.92	\$ 19,397.92		\$ 19,397.92
		0001 FUEL 1		Diesel Fuel Adjustment	111026		\$ 359.18		\$ 359.18
		0004 FUEL 2		Diesel Fuel Adjustment	112976		\$ 2,532.36		\$ 2,532.36
		0004 FUEL 1		Corrected Diesel Fuel Adj. for removal & replacement of 826.73 tons	112974		\$ (7,849.06)		\$ (7,849.06)
		0006 FUEL 1		Diesel Fuel Adjustment	113988		\$ (2,373.37)		\$ (2,373.37)
		0005 FUEL 1		Corrected Diesel Fuel Adj. -64.42 tons asphalt used for base	113449		\$ (41.95)		\$ (41.95)
		0003 FUEL 1		Diesel Fuel Adjustment	112340		\$ 53,954.47		\$ 53,954.47
		0001 GASO 1		Gasoline Fuel Adjustment	111025		\$ 168.75		\$ 168.75
		0003 GASO 1		Corrected Gasoline Fuel Adj. for removal & replacement of 48 tons	112393		\$ (0.18)		\$ (0.18)
		0004 GASO 2		Corrected Gasoline Fuel Adj. for removal & replacement of 826.73 ton	112971		\$ (191.54)		\$ (191.54)

PAGE TOTAL	\$ 635,288.72
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# Asphalt Remove & Replace



- **How is removed and replaced asphalt to be recorded on the asphalt road reports?**

## **When directed by a DDM**

- **The asphalt is not to be listed as waste.**  
It is to be counted in the lot the same as the rest of the tonnage.



- In the description column it is to be noted that “this material is replacing removed material for Lot X”.
- The amount of tonnage used to replace the removed tonnage from a different lot is to be deducted from the original lot the tonnage was removed from.
- The original Lot Submittal Package will be explained with remarks as “No Pay” with reference to the new replacement Lot Submittal Package (Prep & Doc Chapter 9).

# Update Certification of Quantities



- **Item 287-1 Asphalt Treated Permeable Base**
  - » <http://www.dot.state.fl.us/construction/fuel&bit/Forms/BituminousWS-2007.xls>
- **Bituminous Adjustment**
  - » <http://www.dot.state.fl.us/construction/fuel&bit/FuelForms.shtm>
- **For all ongoing & forward projects**
- **July 2010 contracts**

# Sand Cement Rip-Rap



- **We cannot pay for sand-cement rip-rap which does not meet the minimum spec. 5:1 ratio requirements.**
- **Documentation Requirements**
  - **Plant batched Sand Cement Rip Rap**
    - **Delivery tickets are required to be submitted. The tickets must show the weights of sand and cement actually used.**
    - **A miscellaneous tabulation form should be used to summarize quantities and locations.**



## – Pre-Mixed (already in bags)

- A certification from the manufacturer stating the weights of sand and cement for each bag and that it meets the requirements of the specifications of DOT.
- If proportion of sand and cement is listed on the label of the bag, then a readable picture of that label would be acceptable.
- A miscellaneous tabulation form should be used to summarize quantities and locations.

# Truck Measurement



- **The Truck Measured Sketch forms (700-050-54A & 700-050-54B) along with the Daily Report of Truck-Measured Material Site Source Record has been automated.**

**Truck Measured Sketch 700-050-54A**

**Daily Report of Truck- Measured Material Site Source Record 700-050-54**

# Housekeeping



*What Questions  
do you have?*



# Discussion Of Different Contracts



- **Streamline Lump Sum.**
- **Streamline Plan Quantity.**
- **Lump Sum.**
- **Design Build/ Lump Sum.**



# Streamline Contracts

**Florida Department of Transportation  
Starting July, 2010 letting**



# Streamline Contracts



- **Goal of Streamline Contracts**
- **Specifications**
- **Final Estimates Process**
- **Final Acceptance**
- **DFEO Responsibilities - Closeout**
- **Manual Write Ups**



# Streamline Contracts



- **Specifications**
  - **Projects will be let as either LS or PQ**

**SCOPE OF WORK - INTENT AND SCOPE**

**SP0040100SLLS**

**SP0040100SLPQ**



# Streamline Contracts



- **Specifications ...continued**

**MEASUREMENT AND PAYMENT**

**SP0090103SLLS**

**SP0090103SLPQ**



# Streamline Contracts



- Specifications ....continued
  - Pay adjustments; **VERY LIMITED**
    - Lump Sum – overbuild and foundations
      - Prices provided in Contract - Tables 9-2 and 9-3
      - Adjustments could be < or > the Contract amount; up to 105% of the original Contract amount.
        - » Examples provided in the Prep & Doc Manual
      - **Failed Material: Remove/replace or leave in at no pay (FDOT discretion)**
        - » **For failures other than items listed in Section 9-2 on Lump Sum Projects; use the unit price as determined by using the six month State Wide Pay Item Averages.**
        - » **The dates will be the six months prior to the Letting Date.**
        - » **This will eliminate the need, in most cases, to process a SA/WO**
        - » **Spec change to reflect this**



# Streamline Contracts



- Specifications .....continued
  - Pay adjustments; VERY LIMITED....continued
    - **Plan Quantity –**
      - Each item on this contract will be **Plan Quantity**
    - No Fuel and Bit, no CPF, no Spread Rate/ Thickness Adjustments on PQ or LS projects.

# Streamline Contracts



- **Specifications .... continued**
  - **Changed Verification Testing Frequency**
    - 120 – EXCAVATION AND EMBANKMENT
    - 125 – EXCAVATION FOR STRUCTURES
    - 160 – STABILIZATION
    - 200 – ROCK BASE
    - 346 – PORTLAND CEMENT CONCRETE
  - Verification testing reduced to  $\frac{1}{2}$  of the standard verification testing frequency
  - All the above Specification changes will also be affected by the reduced standard verification testing frequency.

# Streamline Contracts



- **Final Estimates Process**
  - Typically the F.E. process is no different from other processes on regular projects with exception to the following:
    - **1. Plan Quantity Projects**
      - Each pay item is Plan Quantity
      - The Contractor will provide monthly & final Invoices
      - Comp Book updated for plan errors or Engineer approved field revisions to the final pay quantity only.
    - **2. Lump Sum Projects**
      - No change (1 LS Project, no pay items)
      - Eliminated Tables 9-1 (deficiencies), and 9-4 (Quality).

# Streamline Contracts



- **Final Estimates Process ..... continued**
- **What about.....**
  - Asphalt Tickets? keep in file with the PA, unless needed to support any quantity changes/disputes
  - Material delivery tickets? Keep in file with the PA, unless needed to support any quantity changes/disputes.
  - Lot submittal packages? will not be needed
  - Asphalt cover sheets? will not be needed
  - Asphalt QC and roadway reports? Keep in file with PA, unless needed to support any quantity changes/disputes
  - Core out reports? Keep in file with the PA.



# Streamline Contracts



- **Final Estimates Process .....continued**
- **What about documents to support changes?**
  - **Lump Sum Projects: for failing material left in place and that are not referenced in Section 9-2, Tables 9-2 and 9-3; such as fencing: use the 6 month Statewide Pay Averages (use the 6 months prior to letting)**
  - **Field changes: supported by appropriate measurements**
  - **Plan Quantity changes:**
    - **Either party will need to provide justification**
    - **Plan Quantity will not be revised based solely on a particular method of construction that the Contractor selects.**
    - **Changes will be handled separately**

# Streamline Contracts



- **Final Acceptance**
  - **Project Administrator to do the following:**
    - **Upon Final Acceptance, send e-mail “Reminder Notice” of Section 9-8 to the Contractor, and copy in the DFEO**
    - **Final Invoice approved by Project Administrator**
    - **Submit F. E. Package to DFEO**
    - **No Offer of Final Payment to the Contractor on these types of Contracts**
    - **Contractor needs to send Contract Documents and Final Invoice, listed in Section 9-8, directly to the DFEO.**

# Streamline Contracts



- **DFEO RESPONSIBILITIES**

- **Closing the Contract**

- **Review Final Estimates Package in accordance with Chapter 14 of the R & AM.**
    - **Review contract documents – Section 9-8**
    - **All documents & Final Invoice complete & approved**
    - **Pay Final Invoice**
    - **Close project**

# Streamline Contracts



- **Prep & Doc. Manual Chapters Write-up**
  - Ch 7 – Final Measurement
  - Ch 11 – Alternative Contracts
- **Review & Admin Manual Chapter Write-up**
  - Ch 14- Post review Processing/Contract Closeout
- **Streamline Final Estimates Guide List**

<http://www.dot.state.fl.us/construction/CONSTADM/Guidelist/FinalEst/FEGuidelist.shtm>

# Stream Line Lump Sum Contracts



[http://www.dot.state.fl.us/construction/DistrictOffices/d5web/operating\\_procedures.shtm#13.3](http://www.dot.state.fl.us/construction/DistrictOffices/d5web/operating_procedures.shtm#13.3)

# Stream Line Lump Sum Contracts



- **Let's take a closer look at Stream Line Projects, Starting with Stream Line Lump.**

# Discussion Stream Line Contracts



- **How will you know that a project is a Streamline Project?**
- **Regardless, if it is a Streamline Lump Sum or Plan Quantity project, it has to be less than 2000 Tons asphalt and less than \$2,000,000.00**

# Stream Line Lump Sum Contracts



## If it is a Streamline Lump Sum Project

### **STREAMLINE LUMP SUM**

#### SCOPE OF THE WORK – INTENT AND SCOPE.

(REV 2-15-10) (FA 2-17-10) (7-10)

ARTICLE 4-1 (Page 19) is deleted and the following substituted:

#### 4-1 Intent and Scope.

The improvements under this Contract consist of \_\_\_\_\_.

**This is a Streamline Lump Sum Contract** with only one pay item listed in the Contract.

All references to payment under individual pay item numbers, regardless of where those references are contained in the Contract Documents or when in time any such pay item reference is incorporated in the Contract Documents, are superseded by the pay item references in this Special Provision.

Payment for all work in this Contract will be made under:

Item No. \_\_\_\_\_, LS

**Pay adjustments as shown in the Contract Documents, regardless of where those pay adjustments are referenced, shall not apply, except as provided for in 9-2 Scope of Payments.**

# Stream Line Lump Sum Contracts



- **Are there any adjustments for Fuel and Bit.**

# Stream Line Lump Sum Contracts



ARTICLE 9-2 (Pages 96-98) is deleted and the following substituted:

## 9-2 Scope of Payments.

**9-2.1 Items Included in Payment:** Accept the compensation as provided in the Contract Documents as full payment for furnishing all materials and for performing all work contemplated and embraced under the Contract; also for all loss or damage arising out of the nature of the work or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its final acceptance; also for all other costs incurred under the provisions of Division I.

The Contract Lump Sum Price will include overhead, profits, and direct and indirect costs required to complete the project except as described below.

Pages 96-98 are deleted! This is Fuel and Bituminous!

The only exceptions are 9-2.2.1, 9-2.2.2 and 9-2.2.3

# Stream Line Lump Sum Contracts



The Contract Lump Sum Price will include overhead, profits, and direct and indirect costs required to complete the project except as described below.

## 9-2.2 General Basis of Adjusted Pay:

**9-2.2.1 Asphalt Overbuild:** Where overbuild is called for in the plans for the correction of cross-slope, the Engineer will make an adjustment in payment should the quantity of material placed be less than the specified spread rate. In addition, should the material placed exceed the specified spread rate with no negative effect to the correction of cross-slope, an upward adjustment will be made representing the additional material placed. The upward adjustment in payment is limited to 5% of the original material required for overbuild. Adjustments in pay will be determined for the entire project by applying a proportional adjustment in payment for the material in question, based on a ratio of the average spread rate to the design spread rate, which will then be applied using the unit prices as shown in Table 9-2.

Table 9-2

Item Description	Unit	Unit Price

# Stream Line Lump Sum Contracts



## EXPECTED IMPLEMENTATION JANUARY 2011

### MEASUREMENT AND PAYMENT.

(REV 6-8-10) (FA 7-29-10) (1-11)

SUBARTICLE 9-2.2.1 (of the Special Provisions) is deleted and the following substituted:

**9-2.2.1 Asphalt Overbuild:** Adjustment in the lump sum payment will be made for actual quantities installed of asphalt overbuild, as additions or deletions, based on the quantity shown in the Contract Documents. The upward tonnage adjustment will not exceed 5 % of the asphalt overbuild quantity shown in the Contract Documents.

The Engineer will base all adjustments in payment on the unit prices as shown in Table 9-2.

Table 9-2

Item Description	Unit	Unit Price

# Stream Line Lump Sum Contracts



**9-2.2.2 Foundations:** Adjustment in the lump sum payment will be made for actual quantities installed of Piling and Drilled Shafts, as additions or deletions for the total project quantity determined from the pile/drilled shaft elevations shown in the Contract Documents.

The Engineer will base all adjustments in payment on the unit prices as shown in Table 9-3.

Table 9-3

Item Description	Unit	Unit Price

# Stream Line Lump Sum Contracts



## **MEASUREMENT AND PAYMENT.**

**(REV 10-12-09) (FA 11-9-09) (7-10)**

### **9-2.2.3 Adjustment to the Lump Sum Payment for Deleted Items of Work:**

When items such as pipe culverts, inlets, manholes, mitered end sections, etc. are shown in the Contract Documents to be constructed or installed and due to actual field conditions, it is determined by the Engineer that the item is not needed, then a negative adjustment will be made based on the invoice price for the actual cost of the item and the Contractor will retain ownership. This adjustment will not exceed \$5,000.00. Should the amount of the adjustment exceed \$5,000.00, it will be considered a significant change and an adjustment will be processed in accordance with 4-3.2.

# Stream Line Lump Sum Contracts



- **What about Quality?**

**Tonnage is less than 2000 Tons, no CPF's**

- **What about Deficiencies?**

**See Spec 9-1.3**

# Stream Line Lump Sum Contracts



## STREAMLINE LUMP SUM

### MEASUREMENT AND PAYMENT.

(REV 10-12-09) (FA 11-9-09) (7-10)

SUBARTICLE 9-1.3 (Page 95) is deleted and the following substituted:

**9-1.3 Determination of Pay Reduction :** In measurement of areas of work, where pay reductions are to be assessed, the Engineer will use the lengths and widths in the calculations based upon station to station dimensions in the Contract Documents, the station to station dimensions actually constructed within the limits designated by the Engineer; or the final dimensions measured along the final surface of the completed work within the neat lines shown in the Contract Documents or designated by the Engineer. The Engineer will use the method or combination of methods of measurement which will reflect with reasonable accuracy, the actual surface area of the finished work as the Engineer determines.

Failure on the part of the Contractor to construct any item of work in compliance with the contract requirements; or to plan or authorized dimensions within the specification tolerances will result in: reconstruction to acceptable tolerances at no additional cost to the Department; or acceptance at no pay at the discretion of the Engineer.

# Stream Line Lump Sum Contracts



**EXPECTED IMPLEMENTATION JANUARY 2011**

## MEASUREMENT AND PAYMENT.

(REV 4-7-10) (FA 5-24-10) (1-11)

SUBARTICLE 9-1.3 (of the Special Provisions) is deleted and the following substituted:

**9-1.3 Determination of Pay Reduction :** In measurement of areas of work, where pay reductions are to be assessed, the Engineer will use the lengths and widths in the calculations based upon station to station dimensions in the Contract Documents, the station to station dimensions actually constructed within the limits designated by the Engineer; or the final dimensions measured along the final surface of the completed work within the neat lines shown in the Contract Documents or designated by the Engineer. The Engineer will use the method or combination of methods of measurement which will reflect with reasonable accuracy, the actual surface area of the finished work as the Engineer determines.

Failure on the part of the Contractor to construct any item of work in compliance with the contract requirements; or to plan or authorized dimensions within the specification tolerances will result in: reconstruction to acceptable tolerances at no additional cost to the Department; or acceptance at no pay at the discretion of the Engineer.

When acceptance at no pay occurs for any material not listed in 9-2, the Engineer will apply a reduction in payment for the material in question based on the weighted average unit price in the Six Month Moving Statewide Averages report. The dates will be the six months prior to the letting date for this Contract.



## Florida Department of Transportation

CHARLIE CRIST  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

STEPHANIE C. KOPELOUSOS  
SECRETARY

August 31, 2010



**DCE MEMORANDUM NO: 14-10**

*(FHWA Approved: 9/2/10)*

**TO:** DISTRICT CONSTRUCTION ENGINEERS

**FROM:** David A. Sadler, PE., Director, Office of Construction 

**COPIES:** Bob Burleson (FTBA), Chris Richter (FHWA), Brian Blanchard, Rafiq Darji (FHWA), Abraham Scott (FHWA)

**SUBJECT:** STREAMLINE LS CONTRACTS

It is stated in the new streamline contract specification 9-1.3 that "Failure on the part of the Contractor to construct any item of work in compliance with the contract requirements; or to plan or authorized dimensions within the specification tolerances will result in: reconstruction to acceptable tolerances at no additional cost to the Department; or acceptance at no pay at the discretion of the Engineer." For consistency in the exercising of that discretion afforded in the contract, a "no pay" option will be handled as follows.

When acceptance at no pay occurs for any material not listed in 9-2, the Engineer will apply a reduction in payment for the material in question based on the weighted average unit price in the Six Month Moving Statewide Averages report. The dates will be the six months prior to the letting date for this Contract.

If you have further questions, please contact David Chason at 850 414-4171.

DS/cw

# Stream Line Lump Sum Contracts



<http://www.dot.state.fl.us/specificationsoffice/Estimates/HistoricalCostInformation/SixMthMovingHist.shtm>

# Stream Line Lump Sum Contracts



## MEASUREMENT AND PAYMENT.

(REV 10-12-09) (FA 11-9-09) (7-10)

SUBARTICLE 9-5.1 (Pages 100 and 101) is deleted and the following substituted:

**9-5.1 General:** The Engineer will make partial payments based on the amount of work that the Contractor completes during the month (including delivery of certain materials, as specified herein below). The Department will base the amount of such payments on certified monthly invoices submitted by the Contractor for progress payments each month, less any retainage withheld. The Contractor must make a request for payment no later than 12 O'clock noon, Monday, after the estimate cut-off date or as directed by the Engineer, based on the amount of work done or completed. The invoice shall include the Contract Number, the Financial Project Number, the Invoice Number, the Invoice Date, and the time period that the invoice represents.

# Stream Line Lump Sum Contracts



## **MEASUREMENT AND PAYMENT.**

**(REV 10-12-09) (FA 11-9-09) (7-10)**

SUBARTICLE 9-8.1 (Pages 104 - 105) is deleted and the following substituted:

### **9-8 Acceptance and Final Payment.**

**9-8.1 Acceptance and Final Payment Documents:** Upon final inspection and final acceptance of the Contract as provided in 5-10 and 5-11, and subject to the terms of 8-11, the Contractor shall submit a final invoice for work completed and accepted by the Department. The Department will pay the invoice, less any sums that the Department may have deducted or retained under the provisions of the Contract, provided the Contractor has met the requirements below.

# Stream Line Lump Sum Contracts



- **Fuels: N/A, Deleted**
- **Bituminous Material: N/A, Deleted**
- **Deficiencies: N/A, Deleted/ Spec 9-1.3**
- **Asphalt Design Thickness/Spread Rate: N/A, Deleted**
- **Asphalt Overbuild: Based on the unit prices shown in Table 9-2.**
- **Foundations: Based on the unit prices shown in Table 9-3.**
- **Adjustment to the Lump Sum Payment for Deleted Items of Work: Pipe culverts, inlets, manholes, mitered end sections, etc.**
- **Work Orders/SA's**

# Stream Line Lump Sum Contracts



- **Required Documentation for Final Estimates**
  - 1. As-built Plans (P&D Manual Chapter 4)**
  - 2. Contractors Invoices (Spec 9-5 and 9-8)**
  - 3. Adhoc Final Estimates Sheet**
  - 4. Changes, WO's, SA's.**
  - 5. Time Folder**

# Stream Line Plan Quantity Contracts



If it is a Streamline Plan Quantity Project

## **STREAMLINE PLAN QUANTITY**

### **SCOPE OF THE WORK – INTENT AND SCOPE.**

*(REV 9-16-09) (FA 11-9-09) (7-10)*

*ARTICLE 4-1 (Page 19) is deleted and the following substituted:*

#### **4-1 Intent and Scope.**

*The improvements under this Contract consist of \_\_\_\_\_ . This is a Streamline Plan Quantity contract. For this contract, all pay items are Plan Quantity items as Defined in Subarticle 9-1.3.2.*

# Stream Line Plan Quantity Contracts



## MEASUREMENT AND PAYMENT.

(REV 10-13-09) (FA 11-9-09) (7-10)

SUBARTICLE 9-1.3.2 (Page 95) is deleted and the following substituted:

**9-1.3.2 Plan Quantity:** For this Contract, all pay items are Plan Quantity items.  
All references to pay item adjustments contained in the Contract Documents are superseded by this Specification and do not apply except as provided for in this Subarticle and the provisions of 9-3.2.

# Stream Line Plan Quantity Contracts



## MEASUREMENT AND PAYMENT.

(REV 10-13-09) (FA 11-9-09) (7-10)

SUBARTICLE 9-1.3.2 (Page 95) is deleted and the following substituted:

**9-1.3.2 Plan Quantity:** For this Contract, all pay items are Plan Quantity items. All references to pay item adjustments contained in the Contract Documents are superseded by this Specification and do not apply except as provided for in this Subarticle and the provisions of 9-3.2.

SUBARTICLES 9-2.1.1 and 9-2.1.2 (Pages 96 - 98) are deleted.

9-2.1.1 Fuel Adjustment is deleted.

9-2.1.2 Bituminous Adjustment is deleted.

# Stream Line Plan Quantity Contracts



## 9-3.2 Payment Based on Plan Quantity:

**9-3.2.1 Error in Plan Quantity:** As used in this Article, the term “substantial error” is defined as the smaller of (a) or (b) below:

(a) a difference between the original plan quantity and final quantity of more than 5%,

(b) a change in quantity which causes a change in the amount payable of more than \$5,000.

On multiple job Contracts, changes made to an individual pay item due to substantial errors will be based on the entire Contract quantity for that pay item.

Where the pay quantity for any item is designated to be the original plan quantity, the Department will revise such quantity only in the event that the Department determines it is in substantial error. In general, the Department will determine such revisions by final measurement, plan calculations, or both, as additions to or deductions from plan quantities.

In the event that either the Department or the Contractor contends that the plan quantity for any item is in error and additional or less compensation is thereby due, the claimant shall submit, at their own expense, evidence of such in the form of acceptable and verifiable measurements or calculations. The Department will not

# Stream Line Plan Quantity Contracts



**9-3.2.2 Authorized Changes in Limits of Work:** Where the Department designates the pay quantity for any item to be the original plan quantity and authorizes a plan change which results in an increase or decrease in the quantity of that item, the Department will revise the plan quantity accordingly. In general, the Department will determine such revisions by final measurement, plan calculations or both.

# Stream Line Plan Quantity Contracts



## MEASUREMENT AND PAYMENT. (REV 10-12-09) (FA 11-9-09) (7-10)

SUBARTICLE 9-3.2.3 (Page 99) is deleted and the following substituted:

**9-3.2.3 Determination of Pay Reduction:** In measurement of areas of work, where pay reductions are to be assessed, the Engineer will use the lengths and widths in the calculations based upon station to station dimensions in the Contract Documents, the station to station dimensions actually constructed within the limits designated by the Engineer, or the final dimensions measured along the final surface of the completed work within the neat lines shown in the Contract Documents or designated by the Engineer. The Engineer will use the method or combination of methods of measurement, which will reflect with reasonable accuracy, the actual surface area of the finished work as the Engineer determines.

Failure on the part of the Contractor to construct any item of work in compliance with the contract requirements or to plan or authorized dimensions within the specification tolerances will result in reconstruction to acceptable tolerances at no additional cost to the Department or acceptance at no pay at the discretion of the Engineer.

# Stream Line Plan Quantity Contracts



## MEASUREMENT AND PAYMENT.

(REV 10-12-09) (FA 11-9-09) (7-10)

SUBARTICLE 9-5.1 (Pages 100 and 101) is deleted and the following substituted:

**9-5.1 General:** The Engineer will make partial payments based on the amount of work that the Contractor completes during the month (including delivery of certain materials, as specified herein below). The Department will base the amount of such payments on certified monthly invoices submitted by the Contractor for progress payments each month, less any retainage withheld. The Contractor must make a request for payment no later than 12 O'clock noon, Monday, after the estimate cut-off date or as directed by the Engineer, based on the amount of work done or completed. The invoice shall include the Contract Number, the Financial Project Number, the Invoice Number, the Invoice Date, and the time period that the invoice represents.

# Stream Line Plan Quantity Contracts



**MEASUREMENT AND PAYMENT.**  
(REV 10-12-09) (FA 11-9-09) (7-10)

SUBARTICLE 9-8.1 (Pages 104 - 105) is deleted and the following substituted:

**9-8.1 Acceptance and Final Payment Documents:** Upon final inspection and final acceptance of the Contract (as provided in 5-10 and 5-11), and subject to the terms of 8-11, the Contractor shall submit a final invoice for work completed and accepted by the Department. The Department will pay the invoice, less any sums that the Department may have deducted or retained under the provisions of the Contract, provided the Contractor has met the requirements below.

# Design Build / Lump Sum Contracts



## 105-2 Additional Requirements for Lump Sum Projects.

Prepare and submit to the Engineer a project-specific list of material items and quantities to be used on the project as a Job Guide Schedule in the same format as the current Sampling, Testing, and Reporting Guide 21 calendar days prior to commencement of construction. Provide up-to-date quantities for the items on the Job Guide Schedule to the Engineer with each monthly progress estimate. The Department may not authorize payment of any progress estimate not accompanied by updated Job Guide Schedule quantities. Maintain the Job Guide Schedule throughout the project including the quantity placed since the previous submittal, and total to date quantity and any additional materials placed. Do not commence work activities that require testing until the Job Guide Schedule has been reviewed and accepted by the Engineer. At final acceptance, submit a final Job Guide Schedule that includes all materials used on the project in the same format as the monthly reports.

# Stream Line Plan Quantity Contracts



- **Fuels: N/A, Deleted**
- **Bituminous Material: N/A, Deleted**
- **Deficiencies: N/A, Deleted/ Spec 9-1.3**
- **Adjustments are deleted. (No CPF's, Thickness Etc.)**
- **Plan Errors Analysis Required.**
- **Authorized Changes need to be measured**
- **Work Orders/SA's**

# Stream Line Plan Quantity Contracts



- **Required Documentation for Final Estimates**
  1. **As-built Plans (P&D Manual Chapter 4)**
  2. **Contractors Invoices (Spec 9-5.1)**
  3. **Adhoc Final Estimates Sheet**
  4. **O&U's**
  5. **Comp Book and, or Plan Matrix**
  6. **Changes, WO's, SA's.**
  7. **Time Folder**

# Lump Sum Contracts



## SCOPE OF WORK.

(REV 2-15-10) (FA 2-17-10) (7-10)

ARTICLE 4-1 (Page 19) is deleted and the following substituted:

### 4-1 Intent and Scope.

The Improvements under this Contract consist of (Place description here).

This is a Lump Sum Contract with only one pay item listed in the Contract.

All references to payment under individual pay item numbers, regardless of where those references are contained in the Contract Documents or when in time any such pay item reference is incorporated in the Contract Documents, are superseded by the pay item references in this Special Provision.

Payment for all work in this Contract will be made under:

Item No. (Place Item Number Here) Lump Sum Contract - LS

Pay adjustments as shown in the Contract Documents, regardless of where those pay adjustments are referenced, shall not apply, except as provided for in 9-2 Scope of Payments.

# Lump Sum Contracts



**9-2.1.1 Fuels:** On Contracts with an original Contract Time in excess of 120 calendar days, the Department will make price adjustments on each applicable progress estimate to reflect increases or decreases in the price of gasoline and diesel from those in effect during the month in which bids were received. The Contractor will not be given the option of accepting or rejecting these adjustments. Price adjustments for these fuels will be made only when the current fuel price (CFP) varies by more than 5% from the price prevailing in the month when bids were received (BFP), and then only on the portion that exceeds 5%.

The Contractor will certify the number of gallons of fuel (gasoline and/or diesel) used on this Contract during the period represented by each invoice.

The Department will determine the API for each month by averaging quotations in effect on the first day of the month at all terminals that could reasonably be expected to furnish fuel to projects in the State of Florida.

# Lump Sum Contracts



**9-2.1.2 Bituminous Material:** On Contracts having an original Contract Time of more than 365 calendar days, or more than 5,000 tons of asphalt concrete, the Department will adjust the bid unit price for bituminous material, excluding cutback and emulsified asphalt to reflect increases or decreases in the Asphalt Price Index (API) of bituminous material from that in effect during the month in which bids were received. The Contractor will not be given the option of accepting or rejecting this adjustment. Bituminous adjustments will be made only when the current API (CAPI) varies by more than 5% of the API prevailing in the month when bids were received (BAPI), and then only on the portion that exceeds 5%.

# Lump Sum Contracts



## 9-2.2 General Basis of Adjusted Pay:

**9-2.2.1 Deficiencies:** When a deficiency occurs that results in the acceptance of a material at a reduced payment level as defined in these Specifications, the Engineer will apply a reduction in payment for the material in question based on the unit prices shown in Table 9-1.

Table 9-1

Item Description	Unit	Unit Prices

**9-2.2.2 Asphalt Design Thickness/Spread Rate:** The average spread rate per subplot will be used to determine if the amount of asphalt placed on the project meets the minimum requirements specified in the Contract Documents. Before placing asphalt mix, propose a target spread rate for each layer, which when combined with other layers, will meet the design thickness or spread rate specified in the Contract Documents. The weight of the mixture will be determined as provided in 320-2 (including the provisions for automatic recordation system).

On projects specifying a thickness in the Contract Documents for asphalt, the conversion of design thickness to target spread rate will be established by multiplying the maximum specific gravity of the asphalt mix (as indicated on the verified mix design) by 43.3 lbs/sy for every inch of asphalt.

On projects specifying a total spread rate of mix in the Contract Documents for asphalt, calculate the average spread rate per subplot (as defined in Section 334) by the following formula:

Average spread rate per subplot = Total weight of asphalt mix (lbs)  
for the subplot/area covered by that subplot (sy)

During construction, monitor the mix spread rate of each subplot at frequent intervals in accordance with 330-2.2 in order to meet the target spread rate for each subplot. Document the actual spread rate of each subplot on the Roadway QC Form.

The Engineer will determine if the material of the roadway pavement is acceptable to remain in place at full pay, remain in place at reduced pay or corrected at no cost to the Department. Final disposition of the finished roadway pavement will be based upon the comparison between the design spread rate specified in the Contract Documents and the combined value of the average spread rate of each subplot at the same area (including FC-6, but excluding FC-5). The acceptable tolerance of the combined spread rate evaluation of the roadway pavement is  $\pm 5\%$ .

Reductions in pay will be determined per subplot by applying a proportional reduction in payment for the material in question, based on a ratio of the average spread rate for the subplot to the design spread rate, which will then be applied using the unit price(s) as shown in Table 9-1. Any quantity over the designed spread rate specified in the Contract Documents shall not be paid.

# Lump Sum Contracts



**9-2.2.3 Asphalt Overbuild:** Where overbuild is called for in the plans for the correction of cross-slope, the Engineer will make an adjustment in payment should the quantity of material placed be less than the specified spread rate. In addition, should the material placed exceed the specified spread rate with no negative effect to the correction of cross-slope, an upward adjustment will be made representing the additional material placed. The upward adjustment in payment is limited to 5% of the original material required for overbuild.

Adjustments in pay will be determined for the entire project by applying a proportional adjustment in payment for the material in question, based on a ratio of the average spread rate to the design spread rate, which will then be applied using the unit prices as shown in Table 9-2.

Table 9-2

Item Description	Unit	Unit Prices

An average spread rate, per calculations as specified in 9-2.2, will be used to determine verification of the required amount of asphalt for the project.

# Lump Sum Contracts



**9-2.2.4 Foundations:** Adjustment in the lump sum payment will be made for actual quantities installed of Piling and Drilled Shafts, as additions or deletions for the total project quantity determined from the pile/drilled shaft elevations shown in the Contract Documents.

The Engineer will base all adjustments in payment on the unit prices as shown in Table 9-3.

Table 9-3

Item Description	Unit	Unit Prices

Payment listed above for Piling and Drilled Shafts includes all work required to install the foundation element to the required capacity/depth.

# Lump Sum Contracts



**9-2.2.5 Quality:** Where an adjustment of payment for quality is called for in the Contract Documents, the Engineer will make such adjustments for the corresponding quantity of material based on the unit prices shown in Table 9-4.

Table 9-4

Item Description	Unit	Unit Prices

# Lump Sum Contracts



## **9-2.2.6 Adjustment to the Lump Sum Payment for Deleted Items of Work:**

When items such as pipe culverts, inlets, manholes, mitered end sections, etc. are shown in the Contract Documents to be constructed or installed and due to actual field conditions, it is determined by the Engineer that the item is not needed, then a negative adjustment will be made based on the invoice price for the actual cost of the item and the Contractor will retain ownership. This adjustment will not exceed \$5,000.00. Should the amount of the adjustment exceed \$5,000.00, it will be considered a significant change and an adjustment will be processed in accordance with 4-3.2.

# Lump Sum Contracts



## 9-11 Submittals.

**9-11.1 Submittal Instructions:** The Contractor will prepare a progress invoice for each project in the Contract. Submit the progress invoice to the Engineer. The Engineer will not pay for any item of work until the progress invoice is approved.

**9-11.2 Contractor's Invoice:** The Contractor must make a request for payment by submitting an invoice, no later than 12 O'clock noon, Monday, after the estimate cut-off date or as directed by the Engineer, based on the amount of work done or completed. The Contractor's invoice must consist of the following:

- (a) Contract Number, Financial Project Identification Number, Invoice Number, Invoice Date and the period that the invoice represents.
- (b) The basis for arriving at the amount of the progress invoice including approximate quantities of work completed, less payments previously made and less an amount previously retained or withheld.
- (c) Contract Summary showing the percentage of dollar value of completed work based on the present Contract amount and the percentage of days used based on the present Contract Days.
- (d) Certify the number of gallons of gasoline used during the invoice period.
- (e) Certify the number of gallons of diesel used during the invoice period.
- (f) Certify the number of gallons of bituminous material used during the invoice period.
- (g) Certify weight of steel for indexed items.

# Lump Sum Contracts



## 105-2 Additional Requirements for Lump Sum Projects.

Prepare and submit to the Engineer a project-specific list of material items and quantities to be used on the project as a Job Guide Schedule in the same format as the current Sampling, Testing, and Reporting Guide 21 calendar days prior to commencement of construction. Provide up-to-date quantities for the items on the Job Guide Schedule to the Engineer with each monthly progress estimate. The Department may not authorize payment of any progress estimate not accompanied by updated Job Guide Schedule quantities. Maintain the Job Guide Schedule throughout the project including the quantity placed since the previous submittal, and total to date quantity and any additional materials placed. Do not commence work activities that require testing until the Job Guide Schedule has been reviewed and accepted by the Engineer. At final acceptance, submit a final Job Guide Schedule that includes all materials used on the project in the same format as the monthly reports.

# Lump Sum Contracts



- **Fuel Adjustment: If Contract Time Is Longer Than 120 days.**
- **Bituminous Adjustment: If Contract Time Is Longer Than 365 days, Or more than 5,000 Tons.**
- **Deficiencies: Spec 9-2.2.1 (Prices as shown in Table 9-1)**
- **Asphalt Design Thickness/Spread Rate: 9-2.2.2 (Prices as shown in Table 9-1).**
- **Asphalt Overbuild: 9-2.2.3 (Prices as shown in Table 9-2).**
- **Foundations: 9-2.2.4 (Prices as shown in Table 9-3).**
- **Quality: 9-2.2.5 (Prices as shown in Table 9-4).**
- **Adjustment to the Lump Sum Payment for Deleted Items of Work: Pipe culverts, inlets, manholes, mitered end sections, etc.**
- **Work Orders/ SA's**

# Lump Sum Contracts



- **Required Documentation for Final Estimates**
  1. **As-built Plans (P&D Manual Chapter 4)**
  2. **Contractors Invoices (Spec 9- 11)**
  3. **Adhoc Final Estimates Sheet**
  4. **Lot Packages (If Tonnage is not visual only) (334-5).**
  5. **Changes, WO's, SA's.**
  6. **Time Folder**

# Design Build / Lump Sum Contracts



The Design-Build Boilerplate\* is the Division I Master Document to be used in the Request for Proposal (RFP) for Design-Build projects.

## DESIGN-BUILD SPECIFICATIONS.

(2-17-10) (7-10)

### DIVISION I

#### GENERAL REQUIREMENTS AND COVENANTS

SECTION	TITLE	PAGE NO(s).
1	Definitions and Terms	2-11
2	Proposal Requirements and Conditions	11-15
3	Award and Execution of Contract	15-19
4	Scope of the Work	19-26
5	Control of the Work	27-46
6	Control of Materials	46 - 50
7	Legal Requirements and Responsibility to the Public	51 - 76
8	Prosecution and Progress	76 - 98
9	Measurement and Payment	98 - 108

# Design Build / Lump Sum Contracts



## Request for Proposal. (RFP)

The package to be provided to the short-listed design-build firms in the adjusted score design-build method and to those design-build firms requesting a RFP in the low bid design-build method. The RFP defines all functions and responsibilities by the firm.

# Design Build / Lump Sum Contracts



The Design/Build Firm shall use the edition of the Standard Specifications for Road and Bridge Construction (Divisions II & III), Special Provisions and Supplemental Specifications, Design Standards and Design Standard Modifications in effect at the time the bid price proposals are due in the District Office.

# Design Build / Lump Sum Contracts



*Florida Department of Transportation  
District X*

## **DESIGN/BUILD REQUEST FOR PROPOSAL**

**For**

**<Project Description, County>**

<b>I.</b>	<b>Introduction.....</b>	<b>1</b>
A.	Design/Build Responsibility.....	1
B.	Department Responsibility.....	2

# Design Build / Lump Sum Contracts



## A. Design/Build Responsibility

The Design/Build Firm shall be responsible for survey, geotechnical investigation, design, acquisition of all permits not acquired by the Department, any required modification of permits acquired by the Department, maintenance of traffic, demolition, and construction on or before the date indicated in their proposal. The Design/Build Firm will coordinate all utility relocations.

The Design and Construction Criteria (Section VI) sets forth requirements regarding survey, design, construction, and maintenance of traffic during construction, requirements relative to project management, scheduling, and coordination with other agencies and entities such as state and local government, utilities and environmental permitting agencies, and the public.

The Design/Build Firm shall demonstrate good project management practices while working on this project. These include communication with the Department and others as necessary, management of time and resources, and documentation.

# Design Build / Lump Sum Contracts



## **B. Department Responsibility**

The Department will provide contract administration, management services, construction engineering inspection services and quality acceptance reviews of all work associated with the development and preparation of the contract plans and construction of the improvements. The Department will provide job specific information and/or functions as outlined in this document.

# Design Build / Lump Sum Contracts



## SECTION 4 SCOPE OF THE WORK

### 4-1 Intent of Contract.

The intent of the Contract is to provide for the engineering services, furnishing of materials, construction, and completion in every detail of the work described in this Contract. The Design-Build Firm shall furnish all engineering and all of its associated direct and indirect costs, construction labor, materials, equipment, supervision, tools, transportation, and supplies required to complete the work in accordance with the requirements of the Contract Documents. The terms and conditions of this Contract are fixed price and fixed time. The Contractor's submitted bid (time and cost) is to be a lump sum bid for completing the scope of work detailed in the Contract.

The Design-Build Firm shall have all liability and responsibility for all unknowns and/or differing site conditions; and including but not limited to any or all utilities, subsoil conditions, permits, etc. of any nature or kind, unless otherwise stated in the Contract. In the event that unforeseeable work is provided for in the Contract, such work shall be paid for in accordance with 4-3.2.

No substantial change, as determined at the sole discretion of the Engineer, in general plan or character of the work shall be made without written agreement by the Engineer. The plans shall be dated, stamped, and signed and sealed by the EOR and shall be transmitted to the Engineer for the project records. The Design-Build Firm shall schedule the transmittal so that the Engineer receives the plans and shop drawings at least 15 working days prior to commencement of any portion of work described in the plans.

Pay adjustments as shown in the Contract Documents, regardless of where those pay adjustments are referenced, shall not apply, except as provided in 9-2, Scope of Payments.

# Design Build / Lump Sum Contracts



**9-2.1.1 Fuels:** The Department will, in the Contract Documents, provide an estimated quantity for fuel requirements for gasoline and diesel to cover the work specified in the Contract. Price adjustments will be made only for the amount of gasoline and diesel fuel estimated by the Department as required to complete the Contract. The requirement of each type of fuel for each pay item is estimated by multiplying the Department's standard fuel factor for that pay item by the quantity of that pay item. Price adjustments made for fuel used after expiration of the last allowable Contract Day (including any time extensions) will be limited to the increases or decreases dictated by the index in effect on the last allowable Contract Day. On Contracts with an original Contract Time in excess of 120 calendar days, the Department will make price adjustments on each applicable progress estimate to reflect increases or decreases in the price of gasoline and diesel from those in effect during the month in which bids were received. The Contractor will not be given the option of accepting or rejecting these adjustments.

# Design Build / Lump Sum Contracts



**9-2.1.2 Bituminous Material:** On Contracts having an original Contract Time of more than 365 calendar days, or more than 5,000 tons of asphalt concrete, the Department will adjust the bid unit price for bituminous material, excluding cutback and emulsified asphalt to reflect increases or decreases in the Asphalt Price Index (API) of bituminous material from that in effect during the month in which bids were received. The Contractor will not be given the option of accepting or rejecting this adjustment. Bituminous adjustments will be made only when

# Design Build / Lump Sum Contracts



**9-2.3.1 Deficiencies:** When a deficiency occurs that results in the acceptance of a material at a reduced payment level as defined in these Specifications, the Engineer will apply a reduction in payment for the material in question based on the unit prices as determined using the six-month State wide pay item averages. The dates will be the six months prior to the letting date for this Contract.

**9-2.3.2 Asphalt Design Thickness/Spread Rate:** The average spread rate per subplot will be used to determine if the amount of asphalt placed on the project meets the minimum requirements specified in the Contract Documents. Before placing asphalt mix, propose a target spread rate for each layer, which when combined with other layers, will meet the design thickness or spread rate specified in the Contract Documents. The weight of the mixture will be determined as provided in 320-2 (including the provisions for automatic recordation system).

On projects specifying a thickness in the Contract Documents for asphalt, the conversion of design thickness to target spread rate will be established by multiplying the maximum specific gravity of the asphalt mix (as indicated on the verified mix design) by 43.3 lbs/sy for every inch of asphalt.

On projects specifying a total spread rate of mix in the Contract Documents for asphalt, calculate the average spread rate per subplot (as defined in Section 334) by the following formula:

Average spread rate per subplot = Total weight of asphalt mix (lbs)  
for the subplot/area covered by that subplot (sy)

During construction, monitor the mix spread rate of each subplot at frequent intervals in accordance with 330-2.2 in order to meet the target spread rate for each subplot. Document the actual spread rate of each subplot on the Roadway QC Form.

The Engineer will determine if the material of the roadway pavement is acceptable to remain in place at full pay, remain in place at reduced pay or corrected at no cost to the Department. Final disposition of the finished roadway pavement will be based upon the comparison between the design spread rate specified in the Contract Documents and the combined value of the average spread rate of each subplot at the same area (including FC-6, but excluding FC-5). The acceptable tolerance of the combined spread rate evaluation of the roadway pavement is  $\pm 5\%$ .

Reductions in pay will be determined per subplot by applying a proportional reduction in payment for the material in question, based on a ratio of the average spread rate for the subplot to the design spread rate, which will then be applied in accordance with 9-2.3.1. Any quantity over the designed spread rate specified in the Contract Documents shall not be paid.

# Design Build / Lump Sum Contracts



**9-2.3.3 Quality:** Where an adjustment of payment for quality is called for in the Contract Documents, the Engineer will make such adjustments for the corresponding quantity of material based on the unit prices as determined using the six month State wide pay item averages. The dates will be the six months prior to the letting date for this Contract.

# Design Build / Lump Sum Contracts



## **9-2.3.4 Adjustment to the Lump Sum Payment for Deleted Items of Work:**

When items such as pipe culverts, inlets, manholes, mitered end sections, etc. are shown in the Contract Documents to be constructed or installed and due to actual field conditions, it is determined by the Engineer that the item is not needed, then a negative adjustment will be made based on the invoice price for the actual cost of the item and the Contractor will retain ownership.

# Design Build / Lump Sum Contracts



## 9-5 Partial Payments.

**9-5.1 General:** The Engineer will make partial payments on monthly estimates based on the amount of work that the Contractor completes during the month (including delivery of certain materials, as specified herein below) based on a Contractor approved payout schedule (schedule of values). The Engineer will make approximate monthly payments, and the Department will correct all partial estimates and payments in the subsequent estimates and in the final estimate and payment.

# Design Build / Lump Sum Contracts



## 9-11 Submittals.

**9-11.1 Submittal Instructions:** The Contractor will prepare a progress invoice for each project in the Contract. Submit the progress invoice to the Engineer. The Engineer will not pay for any item of work until the progress invoice is approved.

**9-11.2 Contractor's Invoice:** The Contractor must make a request for payment by submitting an invoice, no later than Twelve O'clock noon, Monday, after the estimate cut-off date or as directed by the Engineer, based on the amount of work completed. The Contractor's

# Design Build / Lump Sum Contracts



## 105-2 Additional Requirements for Lump Sum Projects.

Prepare and submit to the Engineer a project-specific list of material items and quantities to be used on the project as a Job Guide Schedule in the same format as the current Sampling, Testing, and Reporting Guide 21 calendar days prior to commencement of construction. Provide up-to-date quantities for the items on the Job Guide Schedule to the Engineer with each monthly progress estimate. The Department may not authorize payment of any progress estimate not accompanied by updated Job Guide Schedule quantities. Maintain the Job Guide Schedule throughout the project including the quantity placed since the previous submittal, and total to date quantity and any additional materials placed. Do not commence work activities that require testing until the Job Guide Schedule has been reviewed and accepted by the Engineer. At final acceptance, submit a final Job Guide Schedule that includes all materials used on the project in the same format as the monthly reports.

# Design Build / Lump Sum Contracts



- **Fuel Adjustment: If Contract Time Is Longer Than 120 days.**
- **Bituminous Adjustment: If Contract Time Is Longer Than 365 days, Or more than 5,000 Tons.**
- **Deficiencies: Spec 9-2.3.1 (Prices Based on Six Month Prior to Letting Weighted Average)**
- **Asphalt Design Thickness/Spread Rate: 9-2.3.2 (Prices Based on Six Month Prior to Letting Weighted Average).**
- **Quality: 9-2.3.3 (Prices Based on Six Month Prior to Letting Weighted Average).**
- **Adjustment to the Lump Sum Payment for Deleted Items of Work: Pipe culverts, inlets, manholes, mitered end sections, etc.**
- **Work Orders/ SA's**

# Design Build / Lump Sum Contracts



- **Required Documentation for Final Estimates**
  1. **As-built Plans (P&D Manual Chapter 4)**
  2. **Contractors Invoices (Spec 9- 11)**
  3. **Adhoc Final Estimates Sheet**
  4. **Lot Packages (If Tonnage is not visual only) (334-5).**
  5. **Changes, WO's, SA's.**
  6. **Time Folder**

# Design Build / Lump Sum Contracts



***ANY  
QUESTIONS?***





# Straight Edge Documentation



The process will be as follows for all straightedge penalties that we are leaving in place at no pay, once you have finished straight edging the PA will send the final report to Rich Hewitt, DBE, Rich will review, concur/deny and return to the PA, the PA will forward to John Burnette, he will review calculations and forward to Frank O'Dea, DCE, Frank will review, concur/deny and return to John Burnette , John will forward back to PA , PA will scan into hummingbird, and place final hard copy in the Penalty Folder to be turned in with Final Estimate, forward to Certifications and Contractor.



If we are leaving in place at full pay or partial pay then we must get approval from the State Construction Engineer!



## FINAL STRAIGHTEDGE REPORT Email Transmittal

**Date:**

**To:** John Burnette, District Final Estimates Manager, (John.Burnette@dot.state.fl.us)

**From:**

**Subject:** FINAL STRAIGHTEDGE REPORT

Financial Project ID:

Federal Project ID:

Contract #:

County:

Road # / Job Description:

Contractor:

Type of Mix:

The friction course was straightedged and the following areas did not meet the specification requirements. These areas shall be left in place with penalties assessed.

\*The friction course was straightedged by \_\_\_\_\_.

Document Name: Final Straightedge Report  
March 2007



**FINAL STRAIGHTEDGE REPORT**  
**Email Transmittal**

**Date:** 12-9-08

**To:** John Burnette, District Final Estimates Manager, (John.Burnette@dot.state.fl.us)

**From:** Tim McGlone, Resident Asphalt Specialist, (tim.mcglone@dot.state.fl.us)

**Subject:** FINAL STRAIGHTEDGE REPORT  
Financial Project ID: 415464-1-52-01, 410082-1-52-01 & 416194-1-52-01  
Federal Project ID: N/A  
Contract #: T5230  
County: Volusia  
Road # / Job Description: SR-483 / Clyde Morris Blvd.  
Contractor: P&S Paving  
Type of Mix: FC12.5

The friction course was straightedged and the following areas did not meet the specification requirements. These areas shall be left in place with penalties assessed.

**FC-12.5**

**Bi-Directional Turn Lane**

131+00 (+3/16) High 100'

**Southbound Left Roadway Outside Lane / L2**

166+55 (+3/16) High 100'

\*The friction course was straightedged by

Document Name: Final Straightedge Report  
March 2007

June 06, 2007

Mr. Frank O'Dea  
District Construction Engineer  
Florida Department of Transportation  
719 South Woodland Blvd.  
Deland, Florida 32720

SR-

Fin:

Contract Number:

County:

Contractor:

Subject: Engineer's Statement of Asphalt Left in Place

Mr. O'Dea:

Based on an engineering determination the deficiencies are sufficiently separated so as not to significantly affect the ride quality of the pavement and additional corrective action would unnecessarily mar the appearance of the finished pavement.

Sincerely,

Project Administrator

cc:



**ASPHALT CONCRETE  
PAY ITEM REDUCTION SHEET**



Date: \_\_\_\_\_ Type Mix: \_\_\_\_\_ Mix Design No.: \_\_\_\_\_

Financial Project ID: \_\_\_\_\_ Contract No.: \_\_\_\_\_

District: \_\_\_\_\_ County: \_\_\_\_\_ Plan Thickness: \_\_\_\_\_ Gmm: \_\_\_\_\_

Pay Item No.: \_\_\_\_\_ Contractor: \_\_\_\_\_

	Surface Tolerance Deficiency Station to Station	Length of Deficiency	Total Length	Width	Quantity of Material SY/Tons
	<b>R O A D W A Y</b>	Area Left in place at "No Pay"			
	Area Left in place at "Full/Partial Pay"				

Project Administrator: \_\_\_\_\_ Resident Engineer: \_\_\_\_\_

Remarks: \_\_\_\_\_

District Bituminous Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

Remarks: \_\_\_\_\_

District Construction Engineer: \_\_\_\_\_ Date: \_\_\_\_\_

Remarks: \_\_\_\_\_

State Construction Engineer\*: \_\_\_\_\_ Date: \_\_\_\_\_

Remarks: \_\_\_\_\_

\* Required when the Contractor requests to leave the deficient area(s) uncorrected at "Full" or "Partial Pay". Obtain concurrence before notifying the Contractor with decision.

DISTRIBUTION  
State Materials Engineer  
Contractor





# Instruction for Completion of Asphalt Pavement Straightedge Test Report

*No erasures accepted, strikeout mistakes only*

- 1 **Date** - Indicate the date this report was generated.
- 2 **Page Number** - Indicate the page number of this sheet.
- 3 **District** - Enter the name of the County on which the project is located.
- 4 **County/Section No.** - Indicate the county's name and the section number on which the project is located.
- 5 **Fin. Project ID** - Enter the Financial Project ID on which the test was performed.
- 6 **Type of Mix** - Indicate asphalt mix type, e.g., FC - 5, FC - 6, SP - 9.5, etc.
- 7 **Type of Pavement** - Enter X in the  to indicate the type of pavement on which the testing is performed.
- 8 **Type of Straightedge** - Enter X in the  to indicate the type of straightedge being used for the testing.
- 9 **Contractor** - Enter the name of the Contractor for this project.
- 10 **Engineer** - Enter X in the  to indicate the name of Engineer.
- 11 **Lanes** - The lane where the test was performed. Right or left should be determined by standing on the centerline on the median, facing the direction of increasing stations, and number the lanes L1, L2, L3 etc., or R1, R2, R3 etc. This indicates that L1 is the first lane to the left of the centerline. Center lanes should be identified with the letter C. Turn lane is identified by RTL ( right turn lane), LTL (left turn lane).
- 12 **Width** - Indicate the width of the lane being tested.
- 13 **Station to Station** - Enter the beginning and the ending stations of the lane being tested.
- 14 **Description of the Deficiencies or Surface Problem(s)** - Describe the smoothness deficiencies such as + 5/16 inch or - 1/4 inch and/or pavement surface problem(s) such as rutting depth 0.3 inch, cracking 1/8 inch with 15 inches in length, raveling with 25 feet in length, segregation 10 square feet, etc.
- 15 **Remarks** - Comments pertinent to the straightedge testing which are not shown elsewhere on the report. Any immediate corrections are needed and instruction was issued to the Contractor, etc. If no deficiencies were found during straightedge testing, the Report shall specifically state "No Deficiencies Were Found" in the Remark.
- 16 **QC Technician Signature** - To be signed by the Qualified Asphalt QC Technician who performed the testing.
- 17 **Verification Technician Signature** - To be signed by the Qualified Asphalt Verification Technician who verified the report at the job site during Contractor's testing.
- 18 **QC TIN Number** - Enter the QC Technician TIN Number.
- 19 **VT TIN Number** - Enter the VT Technician TIN Number.
- 20 **Disposition Code** - Enter the Following Disposition Code for the Deficiency:
  - RR: Remove and Replace.
  - LN: Leave in Place with No Payment.
  - LR: Leave in Place with Reduced Payment.
  - LF: Leave in Place with Full Payment



# District Construction Engineer's Meeting

## June 25 , 2010 8:30 AM

The districts asked for clarification as to when SCO approval must be obtained for straightedge deficiencies which will be left in place at full or partial pay (Refer to Specification 330-12.4.5 & CPAM 11.2.5). Request by a contractor to leave in place at full or partial pay any straightedge deficiency in excess of 3/16" discovered in mainline pavement shall be submitted to SCO for review and approval. Straightedge deficiencies discovered in the following areas described in Specification 330-12.4.5.2 may be left in place at full or partial pay after approval is obtained from both the DBE and DCE:

- shoulders
- intersections
- tapers
- crossovers
- parking lots
- turnlanes less than 250 feet in length
- acceleration lanes less than 250 feet in length
- deceleration lanes less than 250 feet in length
- side streets less than 250 feet in length
- transverse joints at the beginning and end of the project where the deficiency is determined to be beyond the control of the contractor
- transverse joints at the beginning and end of bridge structures where the deficiency is determined to be beyond the control of the contractor
- ramps where the geometric orientation of the pavement results in an inaccurate measurement with the rolling straightedge
- superelevated sections where the geometric orientation of the pavement results in an inaccurate measurement with the rolling straightedge

SCO will review CPAM 11.2.5 to determine if additional information/clarification should be included.

# Flow Chart , With Links



E:\DFE Meeting 2009

*What  
Questions do  
you have?*



# EXPECTED IMPLEMENTATION JANUARY 2011

**D** AFADs may be either a remotely controlled Stop/Slow AFAD mounted on either a trailer or a movable cart system, or a remotely controlled Red/Yellow Lens AFAD.

AFADs will not be paid for separately. AFADs may be used as a supplement or an alternate to flaggers in accordance with Index 603. Include the cost for AFADs in Maintenance of Traffic Lump Sum.

SUBARTICLE 102-11 (Pages 120 - 122) is expanded by the following Subarticle:

**102-11.20 Temporary Raised Rumble Strips:** The quantity of temporary raised rumble strip sets to be paid for will be the number of temporary raised rumble trip sets installed and accepted.

**R** SUBARTICLE 102-13.12.1 (Page 124) is deleted and the following substituted:

**102-13.12.1 Redirective:** Price and payment will be full compensation for furnishing, installing, maintaining (including restoring or replacing damaged) and subsequently removing such crash cushions.