

# DISTRICT THREE DESIGN NEWSLETTER



Volume 16, Issue 1

January—March, 2011

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## *New Thermoplastic Policy*

Miranda Glass, P.E., District Roadway Design Engineer

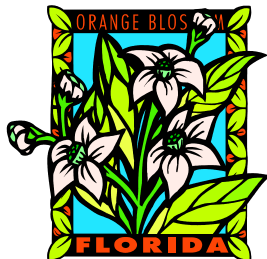
The decision has been made in the Third District to remove thermoplastic from roadway projects beginning with September 2011 lettings. We will go back to using two applications of paint on the final surface to be paid under the 0710-90 pay item. The note included at the bottom of the Tabulation of Quantities Sheet will need to be changed to match that shown in Exhibit 23 -1 in Volume II of the Plans Preparation Manual. Another implication of this change is a reduction in Contract Time. Some projects have already received time memos that include 30 days for asphalt curing prior to thermoplastic placement. Since many projects that were formerly including thermoplastic may be nearing Final Plans submittal, a revision of the Construction Contract Memorandum may be required.



There will be some exceptions to this policy. Design build projects will continue including thermoplastic within the contract as a requirement. Off-system bridge projects may require thermoplastic where the section's existing markings are also thermoplastic. There may be other types of projects, such as Safety, Push-Button, or Local Agency Participation, that may also use thermoplastic. Be sure and contact your Project Manager if your project falls within this category.

Now that thermoplastic will not be part of the plans, the application of thermoplastic will be handled through Maintenance Contracts. The Design Consultant will still be responsible for the thermoplastic and audible & vibratory pay items and quantities for the project. Thermoplastic quantities will be provided by the Design Consultant utilizing a spreadsheet entitled "Thermoplastic Quantities Worksheet" that has been posted on the District 3 Roadway Design and Surveying website under Design Links. This information will be submitted to the Project Manager for use by Maintenance in their stand alone striping contracts.

As always, your diligence and hard work is appreciated in the District's efforts to produce quality and cost-effective plans. I trust that together, we will continue to strive for perfection in order to obtain the best possible product within our grasp.



***District III Quarterly Design Newsletter***

Editor.....Scott Golden

Layout/Graphics...Teresa Barfield

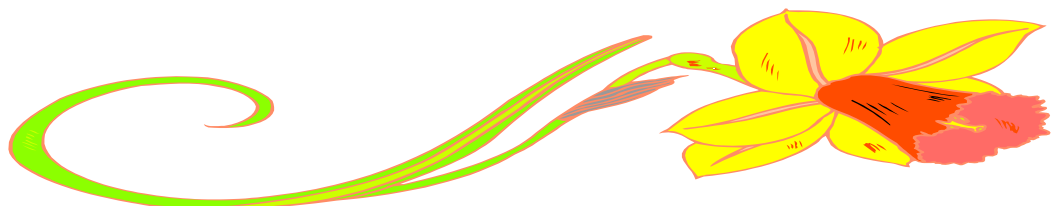
**CONTRIBUTORS:**

.....Greg Rogers

.....Lester Forrest

.....Miranda Glass

.....Kenny Rudd



## Design Spotlight— Lisa Stone

### Scott Golden, P.E., District Design Engineer



Lisa began her FDOT career in November 1997. She started her career in Utilities and then moved to Drainage Design. For the last 10 years, Lisa has worked as a Project Manager. Lisa is married to Henry Stone and together they are a blended family that include five children (Kristen 20, Katherine 20, Leigh Ellen 19, Samantha 11, Ethan 8). She enjoys spending her free time with family and friends. Lisa has recently accepted a position in the Quality Control section of the District Three Design office. Her wealth of knowledge and experience in Project Management, Drainage and Utilities will be a great benefit to the Department in her role reviewing construction documents. Please join me in welcoming Lisa in her new role.

## *Supplemental Agreement Report – Jan. 2011– March, 2011*

### Miranda Glass, P.E., District Roadway Design Engineer

Following is a sample of Supplemental Agreements for the first quarter of 2011 (January through March). The two (2) categories of Supplemental Agreements that are included in this summary are 108 and 305. This summary is included in the Quarterly Design Newsletter as a tool to inform designers of errors and omissions that can lead to Supplemental Agreements and unnecessary cost to the public. Below are brief descriptions of those errors or omissions and the Department's responses.

**Description Code:** 108 – Plans do not describe scope of work.

**Reason:** Resurfacing project with ADA sidewalk upgrades.

The Department and Contractor desire to amend this contract to address the repair of distressed asphalt pavement. As a result of investigation by the Department, it was determined the existing foundation of Lane R-2, sta. 75+70 to 79+00, was in poor condition causing a depression of the roadway. It was recommended by the District Bituminous Engineer to remove the existing base and subgrade 14" deep and backfill with 14" of graded aggregate base (GAB) with Geogrid. This supplemental agreement is to compensate the contractor for added work and materials in the execution of the above described work.

**Granted Time:** 4 (four) days

**Increase:** \$34,058.00

**Response:** Unavoidable (no remedial action required) / no cost recovery action is recommended.

**Description Code:** 305– Cost savings initiative.

**Reason:** The improvements under this contract consist of bridge and multilane roadway reconstruction.

The Contractor proposed to eliminate the Sheet Pile Wall-Temporary and replace it with Soldier Pile Wall-Temporary. The proposed Soldier beam and Lagging system will help minimize construction issues the Contractor had with installing the original temporary sheet pile wall system, reduced the amount of vibration to the adjacent structures as well as the nearby CSX Railroad bed system, and provided cost savings to the Department.

**Granted Time:** 0 (zero) days

**Decrease:** \$126,182.00

**Response:** Unavoidable (no remedial action required)/ claim settlement.

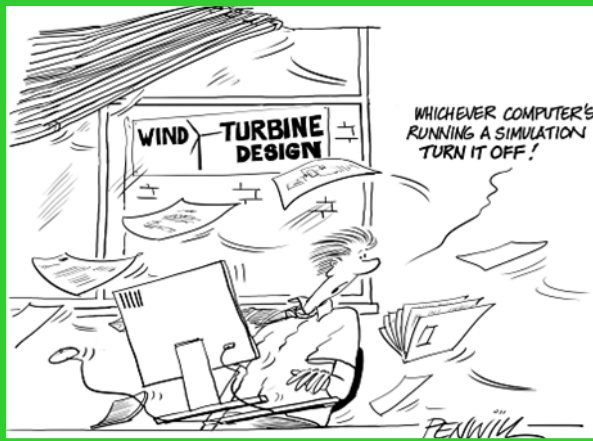
*Constant kindness can accomplish much. As the sun makes ice melt, kindness causes misunderstandings, mistrust, and hostility to evaporate.. – Albert Schweitzer, Medical missionary*

## Top Ten Quality Control Comments Jan.– March, 2011

1. Ensure that the areas for Treatment I are not included in the areas for Pay Item 0162-1-11 (6" Finish Soil Layer) for this is included in the costs for Performance Turf.
2. Indicate any Overbuild and/or Milling that will be necessary for Cross Slope Correction and/or Super elevation to obtain the indicated Cross Slopes on the Typical Sections. Add a Detail(s), Table and TN Note for the Overbuild to the Plans.
3. Revise the Key Sheet Applicable Design Standards Modification Date to reflect that of the project letting date.
4. Add the Clear Zone Note to the Typical Section Sheets. Add this Note: "Note: Design clear zone does not apply to clear zone widths for work zones."
5. Has sidewalk location been offset based on PPM, Volume 1, Chapter 8?
6. Break down the station locations on Typical Sections for different Design Speeds, even if the roadway configuration is the same.
7. Include additive PG76-22 in asphalt called for in pavement designs.
8. Include the pay item for steady burn lights (type c) and temporary crash cushion for use with the temporary barrier wall.
9. Rather than expressing the e rate as -2 or +2 use NC or RC.
10. Shoulder slope that leads to the guardrail is not compliant with SI 400 in that it should not be steeper than 1:10.

### ***CADD TRICKS , TIPS, UPDATES***

***Kenny Rudd, Senior Roadway Design CADD Specialist***



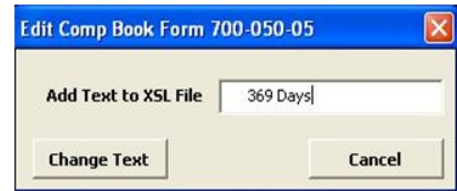
Having been in the CADD arena for a long time, people have been asking me questions about how to do things the quickest and best way. Some of the subjects probably seem “elementary” to some and an eye opener to others. Hopefully you will let me know if there is an area you want to see.

## How do we get the secondary unit of measure on those computation booklet sheets using Quantity Manager?

Geopak's Quantity Manager uses a style sheet to create forms. The style sheets are located in the ...Classes\samples\standards\reports directory. They are written in *xml* which is similar to *html* in nature. A user can edit these xml files and insert the secondary unit of measure in the proper place and it will print on the form. If you don't feel comfortable editing xml files (which is the case most of the time) we have provided a VBA which will do that for you.

While in MicroStation under the FDOT workspace click on:

**ACTIONS > Geopak VBA Utilities > Edit Comp Book form 700-050-05**



When the comp book sheet is run from QM the proper secondary unit of measure will print on the form

STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION

**LUMP SUM QUANTITIES**

Page No. \_\_\_\_\_  
FORM 700-050-05  
CONSTRUCTION  
06/02

PAY ITEM NO. 0102 1

PAY ITEM DESCRIPTION Maintenance of Traffic      DESIGNER QUANTITY (NO SECONDARY UNIT) \_\_\_\_\_  
 CONSTRUCTION FINAL QUANTITY \_\_\_\_\_  
 PAY ITEM DESCRIPTION \_\_\_\_\_      DESIGNER QUANTITY (WITH SECONDARY UNIT, SEE BELOW) 369 DA  
 CONSTRUCTION FINAL QUANTITY \_\_\_\_\_

**SECONDARY UNIT COMPUTATIONS**

STATION LOCATION	DESIGN ORIGINAL								CONSTRUCTION FINAL		
	AREA ITEMS			VOLUME	WEIGHT ITEMS	LINEAR ITEMS	EA. ITEMS	MISCELLANEOUS ITEMS*	REFERENCES	INCREASES OR DECREASES	REFERENCES
	LENGTH	WIDTH	AREA	VOLUME MEASURE	WEIGHT MEASURE	LINEAR MEASURE	EACH				
- ( )							1				

**Don't forget about the spring FLUG (Florida Local Users Group)  
 June 1-3, 2011  
 Radisson Resort at the Port  
 Cape Canaveral, Fl**

Users from all over can exchange ideas, get instructions from some of the best known instructors. Bentley as well as AutoCAD will be leading workshops and presentations all day. This will be some of the most cost effective training you can attend. In these economic times we need to take advantage of everything we can to make our jobs easier and more productive. By building a good base of knowledge we can reach new heights with CADD.