

DISTRICT THREE DESIGN NEWSLETTER



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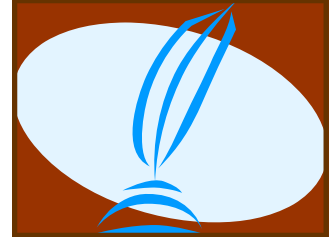
October—December, 2007

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From the Editor's Desk

Scott Golden, P.E., District Design Engineer



The District Three Design Office has seen many changes this past year. Larry Kelley moved from his position as the DDE to assume the helm of District Three as District Secretary. Jason Peters left Design to become the new Intermodal Systems Development Manger. Ronnie Peel retired. Bobby Ellis became the District Consultant Project Management Engineer. Miranda Glass became the District Roadway Design Engineer.

I think that we have a lot to look forward to and a lot of challenges ahead of us this year. We may be in a period of reduced revenues for transportation projects, but the people and visitors in the State of Florida still expect us to “provide a safe transportation system that ensures the mobility of people and goods, enhances economic prosperity and preserves the quality of our environment and communities.” I want each of you to look critically at each of your District Three projects. How is each element of your design supporting the FDOT’s mission (quoted above)? Is that element a “have to do, need to do or want to do?” Is there a better or cheaper way to do it? If each of you finds a way to save \$100,000 in construction costs on your project, we would be able to fund additional projects.

With these many challenges and changes, we have a great deal of work ahead of us. Some of our goals this year are to: continue to build and maintain strong teams in Design; reduce project costs; simplify the process; deliver a quality product to our customers. I encourage each of you to establish similar goals and objectives. Together, we can do it. “Together we are better.”

Strive for perfection and settle for excellence. Have a safe and Happy New Year!



Post Design Survey Services

Danny Deal, P.S.M., District Surveyor

The questions have been arising as to what survey services are necessary on our design projects under post design. Before construction begins the project surveyor will set the begin and end of project from the plans, repaint centerline stationing for POT’s, PC’s, PT’s, etc, and recon/repaint all horizontal and vertical control for the project. The purpose of this service is to make sure that project control is in place and ready for the CEI firm and contractor prior to beginning construction. Typically we have a 3 to 4 year time span between when the design survey was completed and construction begins. Centerline paint fades away and we almost always have a few horizontal and vertical control monuments disturbed or destroyed during this time. These services insure that we have adequate project control in place that the design plans were based upon. On projects that have acquired right of way the project surveyor will set right of way monumentation along with centerline stationing at POT’s, PC’s, PT’s, etc after construction is complete. The project surveyor provides to FDOT a certified right of way monumentation survey which will in turn get mapped in Right of Way Mapping. As you can see, the survey effort necessary for these services are typically basic in nature but very much necessary for a smooth construction phase and quality project.

District III Quarterly Design Newsletter

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Design Spotlight - Bobby Ellis, P.E.

Scott Golden, P.E., District Design Engineer

Bobby Ellis graduated from Clemson University in December of 1994 with a B.S. in Civil Engineering. He started his FDOT career as an OPS Employee at Bonifay Construction Feb. – April of 1995. In May of 1995 he was accepted into the FDOT Trainee Program.

After the 2 year Trainee Program, he accepted a position in DeFuniak Maintenance and was there approximately 5 and a half years. In December of 2002, he accepted the position of District Utilities Engineer in Design in Chipley and has served in the capacity of District Utility/Specifications Engineer until recently being selected for District Consultant Project Management Engineer.

Bobby enjoys fishing and hunting and is a Big sports fan. Bobby has been married to his wife Stacey for eight years and has two sons, Colton and Griffin. He also has many talents. “I sing a country song occasionally if the moon is right. Scott says I have the gift of gab, I do enjoy talking more than listening, or maybe that is just when I am around Scott.”



Synthetic Bales

Joy Giddens, District Permits Coordinator

The Department mandated synthetic bales at the beginning of 2007. Central Office determined the use of straw hay bales was not environmentally friendly, nor a suitable erosion control device. A new Erosion and Sediment Control Designer and Reviewer Manual was released by FDOT in June 2007. In this manual, it states:

“Use of straw or hay bales has traditionally been one of the more popular methods used in trying to reduce sediment from construction sites. Unfortunately, their widespread use does not justify the fact that they are relatively ineffective. It is for this and other reasons that the FDOT does not allow use of straw or hay bale barriers on construction sites.”

This District was using a lot of hay bales as an erosion control device prior to these changes. I have reviewed many Erosion Control plans where hay bales are installed in front of, or behind, Type III silt fence. Prior to the implementation of synthetic bales, I was advocating the reduction of hay bales. It was my experience to see hay bales installed improperly and not maintained. Hay bales were rarely removed after construction. Most erosion control plans did not warrant the double row of silt fence and hay bales. A couple of years ago, one project saved almost \$500,000 by eliminating the hay bales altogether.

So when are synthetic bales a good erosion control option? That’s a good question. It was recently brought to my attention how expensive they are; approximately \$45-50 per bale. As the Permits Coordinator, I often get the same question from designers and Construction – What do the environmental agencies want to see?

Answer: They want to see clear water running off our site, and maintained erosion control devices; whatever works.

I advocate the use of Type III silt fence as much as possible. Be creative. As a designer, look at the flow direction (and rate) of runoff vs. the streams/wetlands within your project. Ask yourself - What are you trying to prevent? Do you want the water to flow through your control for turbidity reasons, or are you trying to keep sediment from slumping into wetlands/private property off-site? If you want water to flow through your project and then discharge, plan on using sediment sumps and floating turbidity barriers. If you have inlets: curb, storm drain, drop; you want water to flow into them. Maybe a synthetic bale is the best application. I’ve seen small weirs of sand bags used in front of inlets, if there is enough room. Temporary ditch blocks out of gabion mats, or rock bags, do a lot for slowing down flows and allowing sediment to fall out before over topping. Don’t forget existing grassed swales and shoulders offer erosion control too. Use temporary seeding or mulching on exposed areas to minimize runoff and sediment loss. A good resource is the Florida Stormwater Erosion and Sedimentation Control Inspector’s Manual. This manual was produced by FDEP in cooperation with FDOT. Construction offers a training class for NPDES inspectors and this manual is taught in the class. Best Management Practices (BMPs) are given in detail and in accordance with FDOT specifications. Be sure to include pay items to cover your erosion control plan.

The Department is cutting costs everywhere these days. We need to be smarter about where we are spending money. Don’t wrap your job in erosion control devices if it isn’t warranted. If three to four projects can save \$150-200,000, that adds up to funding another whole project. The effort is worth it.

Expectations

Bobby Ellis, P.E., District Consultant Project Management Engineer

I was asked to write on the above topic, and with my recent selection for a new position, I find it very appropriate. I had my first meeting with my new staff, and during it, I highlighted some expectations that I have that I believe can apply to anyone.

The first expectation was bringing solutions and opinions, not just the problem. So often we have a problem, and it is so tempting to just pass it up the ladder and let someone else solve it because we are either afraid of making the wrong decision or we may think that our opinion won't count anyway. Obviously, some problems require upper management involvement, but that doesn't mean that you shouldn't have an opinion or be afraid to express it. I find that when you have a proposed solution or give a choice of solutions, upper management will generally involve you in the decision making process. Choosing an option to present to upper management will make you familiar with your subject, and it will make it easier to answer questions should they be posed. The bottom line is being involved and having solutions will help you learn.

The second expectation was something that has been required of all of us recently. Don't just meet your schedules, try to get things done ahead of time. As you know, acquiring funding is getting more and more difficult. Even if funding is about to be acquired, it does the district no good if we aren't ready, and our community could lose a much needed project. We realize that certain aspects of projects are beyond the control of the FDOT and the Consultants, but those aspects that are in your control should be completed as soon as possible. I find that when you complete your tasks early, the person you pass it on to will tend to make the same effort. Using the schedule as a crutch/excuse, doesn't do anyone any good. If you are being held up for what ever reason, pick up the phone and call the person responsible. Sending an email and copying in the world may accomplish your task, but could hurt your future relationship. Think about it this way, by exceeding the schedule, you could be saving a project for the community.

Finally, I have always preached the expectation of teamwork. No one can take on every aspect by themselves and finish on schedule. We need the "one fails, we all fail attitude". Whether you are an FDOT employee or a consultant, if one fails to meet a target, we all look bad (no matter how hard you've worked!!). Don't be afraid to ask for help and don't be afraid to offer help. These are two of the easiest things to do yet sometimes our pride or our busy schedule will not allow it. Sometimes a simple phone call from you could save a co-worker hours. When we work together, we learn and accomplish more. Most of us know what is expected. What is said above can help us accomplish our goals. If you require more of yourself than the people who work with you or the people you work for, you will seldom disappoint. What more can anyone expect?

Few things help an individual more than to place responsibility upon him and to let him know that you trust him.

~Booker T. Washington

Supplemental Agreement Report– September–November, 2007

Scott Golden, P.E., District Design Engineer

The supplemental agreement report will be in the next issue.

Tell me, I'll forget. Show me, I may remember. But involve me, and I'll understand.

~Chinese Proverb