

DISTRICT THREE DESIGN NEWSLETTER



Volume 15, Issue 4

October—December, 2010

Inside this issue:

Are You Ready?	1
Design Spotlight—Alicia King	2
Supplemental Agreement Report	2,3
Top Ten Quality Control Comments	3
CADD Tricks & Tips	4,5

Are you Ready?

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



The New Year is upon us and this year is coming to a close. It was an interesting year for District 3 to say the least. The ARRA projects and the fast tracking and scope changing of some of the Class I, VII projects had our consultants on their toes throughout the year. Thanks to all of you, District 3 was able to design and let all of its projects successfully. We truly had to work harder and smarter to accomplish our goals. I believe that if the economy remains in its current status, we will face similar challenges in the future. Speaking of the future, this year starts off with a bang with several capacity projects advertising in January. It also appears that District 3 will also advertise close to 30 projects for FY 11/12 that vary from RRR to small off-system bridges. The question is, "Are you one of those firms that can perform under pressure and adapt to the District's needs?" Think about the commitment it takes before answering that question. Most of you are already marketing and planning for the upcoming year. District 3 is looking at firms that best fit the anticipated work effort associated with the project. We are also looking harder at who you are teamed with, and if you lived up to what was presented on past proposals. Once firms are shortlisted, each firm has to understand that what has happened in the past (good or bad) doesn't matter. It is all about the current proposal that is being evaluated. No one is entitled!!! Those great jobs that have been done over the last several years placed you on the shortlist. If your last job didn't go so smoothly, this may be your last chance to make amends. Several categories are graded on the technicals/presentations, but it seems to always come down to detailing your knowledge of the projects issues, introducing some unique concept or cost saving, and how effectively you communicate with others. Attention to detail is always a plus. Reciting the scope in your presentation just doesn't cut it any more. You must demonstrate your knowledge of the project and the other projects that are adjacent to or within the limits of the current project. Presenting issues that may be a little outside of the scope, but adds value to the project from a safety standpoint at little additional cost is something that separates 1st from 2nd and 3rd. Good luck on your future projects with District 3.

Be safe on the roads during the holidays, and on behalf of myself and the entire Design staff, have a Happy New Year.



District III Quarterly Design Newsletter

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Design Spotlight— Alicia King

Scott Golden, P.E., District Design Engineer



Alicia King is the newest member of Design's Traffic Plans Section. She has been with the Department working in a roadway design crew since April of 2007. She is the daughter of Connie & Dennis Gainer and is married to Matt King who works in Traffic Operations. She is a graduate of Chipley High School, where she was active in student government and 4H. Alicia has an Associate's degree in Drafting & Design from Gulf Coast Community College and prior to coming to work for the Department, was employed as a CADD operator/designer drawing house plans for a local building contractor. She, and husband Matt, are active in their church, Poplar Springs Baptist, where they participate in mission trips and are currently serving as Youth Directors. Alicia works part time with her father on his Blueberry Farm. Her newest hobby is decorating the new home that she and Matt recently purchased. Alicia's quiet demeanor, good work ethic and eagerness to learn makes her a valuable employee for the Department now and will help her advance on into the future.

Supplemental Agreement Report – Oct. 2010 – Dec., 2010

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

Following is a sample of Supplemental Agreements for the fourth quarter of 2010 (October through December). The two (2) categories of Supplemental Agreements that are included in this summary are 503 and 112. 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: 503 – Change resulting from an engineering decision.

Reason: Resurfacing project with guardrail and sidewalk upgrades.

Sidewalk was added to connect two existing section of sidewalk that were approximately 200 feet apart. Also at this time a new driveway and curb was added.

The original plans called for no milling of the shoulders between the two bridges; in order to provide a more cohesive look and ride the plans have been revised to include the milling and paving of this addition area.

Granted Time: 0 (zero) days

Increase: \$13,225.83

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

Description Code: 112– Phasing or plan components not constructible as shown in plans.

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

After the installation of the test pile and during the installation of the temporary sheet pile wall system it was determined that the tip elevation of the production piling and the tip elevation of the temporary sheet piling would be in close proximity of each other and would result in capacity reduction of the production pile when the temporary sheet pile were removed. The contractor ceased installation of the temporary sheet pile while the Department determined a corrective action. The Department provided the Contractor with direction to remove the previously installed temporary sheet pile and install a Contractor designed temporary sheet pile system with internal bracing and approximately 10 feet shallower tip elevation to ensure separation between the production pile and the temporary sheet pile. The compensation provided for is solely the direct cost of idle equipment.

Granted Time: 12 (twelve) days

Increase: \$15,170.40

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

Description Code: 503 – Change resulting from an engineering decision.

Reason: The improvements under this contract consist of emergency bridge repairs.

Subsequent to beginning work on this project it became apparent that no pay item for yellow thermoplastic had been included for this project. Milling the existing surface had removed the thermoplastic which would have to be replaced prior to final acceptance. The Department and the Contractor proposed resolving this issue by adding a pay item number 711-11211 (Yellow Thermoplastic). The Contractor agreed to accept the current contract unit price for 6" white thermoplastic as pay for this added 6" yellow thermoplastic.

Granted Time: 0 (zero) days

Increase: \$3,615.75

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

Top Ten Quality Control Comments Oct. – Dec., 2010

1. Include this note under clear zone width in the Typical Section. "Note: Design clear zone does not apply to clear zone widths for work zones."
2. Replace Pay Item 0120-6 for Embankment with the Pay Item for Borrow Excavation on resurfacing projects even though cross sections are available, this will enable the quantities to be more easily verified in the field.
3. For Pay Item 0102-1 (Maintenance of Traffic), ensure that the number of days for the Secondary Unit of measure matches the number of days which is approved in a F.D.O.T Construction Contract Days Memorandum, the Computation Book and Trns*port.
4. Update Pay Item Note 710-11 with the following Note: "710- The totals shown on the Summary of Roadway pay items are for Painted Pavement Markings used for Maintenance of Traffic."
5. Cover requirements for proposed pipes are not being met.
6. Ensure the title block is correct and complete on all pages.
7. Call for detectable warnings if the curb ramp has none but is otherwise compliant with Index.
8. Floating turbidity barrier is typically placed along the shore line of the stream rather than across it.
9. Ensure that the Begin/End Mileposts match on the Key Sheet and in the FM system. Coordinate with the Project Manager to have the FM System updated for the appropriate Begin/End Mileposts.
10. Indicate the next incorporated town at the edge of the location map on the Key sheet.

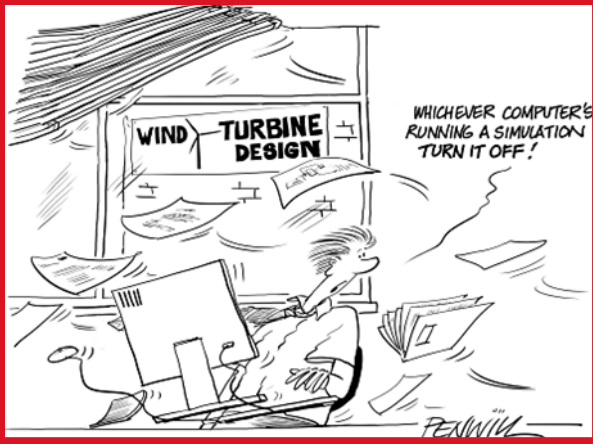
*Merry
Christmas*



A winner says, "It may be difficult, but it's possible. ." A loser says, "It may be possible, but it's too difficult. ." –Unknown

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. In the newsletters to come I hope to address some of the questions that seem to come up from time to time. Some of the subjects will 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.

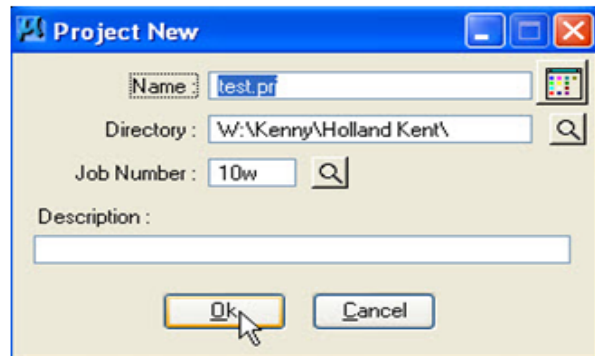
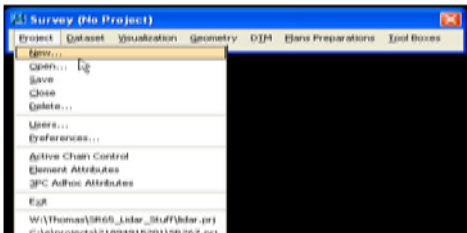
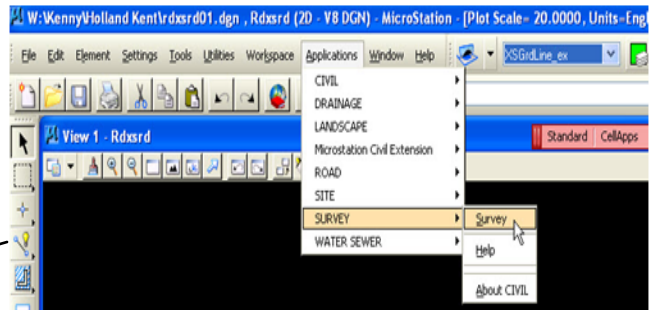
Creating Existing Ground Cross Sections

One of the calls I receive a lot has to do with existing ground cross sections. Just exactly how do you get the cross sections now that we do not import them into the “GPK” file? Maybe this will help. In order to plot existing ground cross sections users will need the following:

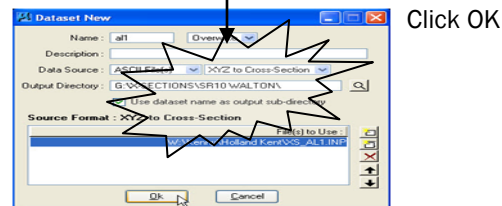
Cross Section file: This can be obtained by creating a MicroStation file in any method as long as the FDOTseedxs.dgn is used ASCII data: Northing, Easting Elevation and Station information Station Offset elevation X, Y, Z station. Almost any constant format will work. Example

In this instance the surveyor delivered Northing Easting Elevation and Station (comma delimited) AL1.inp
 36178.8141,1386106.5291,241.6960,125+58.35
 636171.1824,1386108.1561,241.9118,125+58.35
 636151.3909,1386112.0939,242.1855,125+58.35
 636140.3106,1386114.3084,242.4064,125+58.35

In Geopak Survey>Create a new project. Standard GPK file containing alignment information. Example Job01.gpk
 Create a survey project.



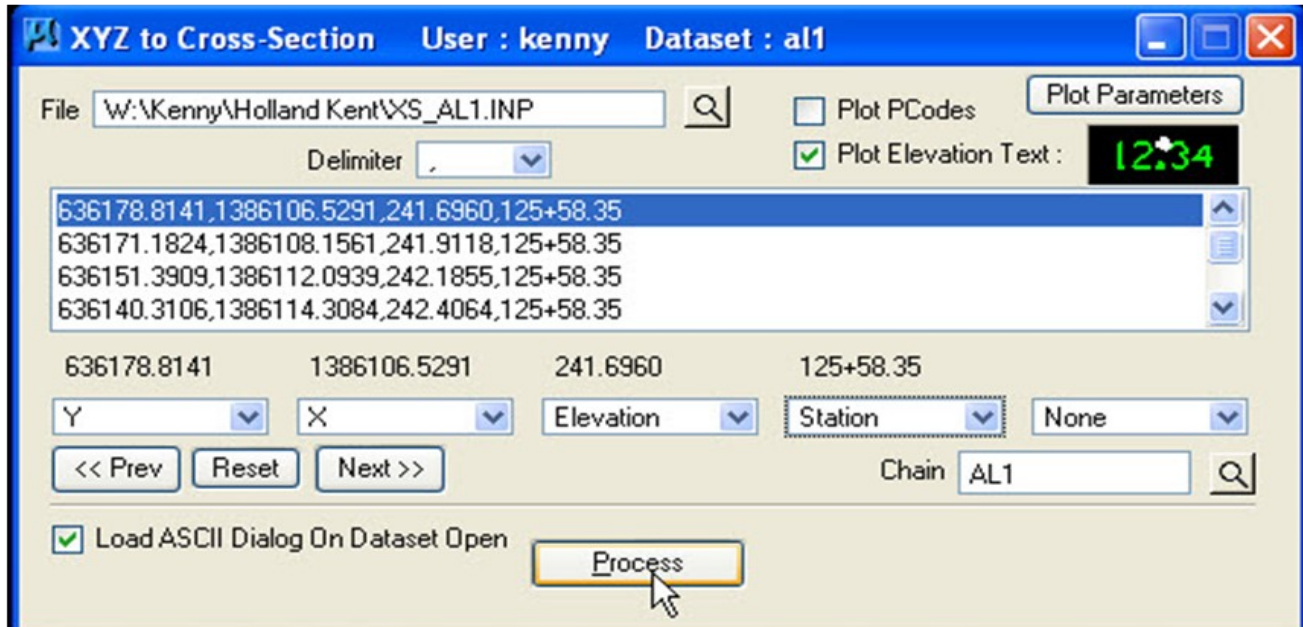
Create a dataset
 Make sure to choose XYZ to Cross Section



Click OK

CADD TRICKS , TIPS, UPDATES

Kenny Rudd, Senior Roadway Design CADD Specialist



Click on the delimiter type (most of the time either “space?” or “,”)

Click on a line in the collection box

Fill out as shown

Y = Northing

X = Easting

Elevation = elevation

Station column

Click process to create existing ground cross sections.

Happy New Year!