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PRODUCTION SUPPORT BULLETIN 16-01

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TO: District Directors of Transportation Operations, District Directors of

Transportation Development, District Design Engineers, District Construction Engineers, District Structures Design Engineers, District Roadway Design

Engineers, and Program Management Engineers

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SUBJECT: Signing and Sealing Plans

The use of a digital signature to represent a professional signature and seal on engineering documents for delivery is a relatively new practice at Florida Department of Transportation. Since full implementation of digital delivery on July 1, 2015 issues have emerged regarding the workflow of document production and the needs of the consumers of those engineering documents, primarily the construction contractor. The purpose of this bulletin is to remove ambiguity from the digital signature process and address the needs of the construction industry.

REQUIREMENTS

The act of signing, dating and sealing transmitted plans, specifications, reports or other documents is collectively referred to as 'Signing and Sealing'.

The new requirements address the following:

- Compliance with the Florida Administrative Code rules regarding digitally signed and sealed documents.
- Needs of the Program Management and Construction offices.
- Consistent process (Consistent Predictable Repeatable, CPR) for the delivery of documents.
- 1. Electronically transmit the contract plans set as individual Signed and Sealed PDFs of complete component plan sets. The list of component plan sets for Digital Delivery is comprised of the following:
 - fpid-PLANS-01-ROADWAY.PDF
 - fpid-PLANS-02-SIGNINGMARKING.PDF
 - fpid-PLANS-03-SIGNALIZATION.PDF

- fpid-PLANS-04-ITS.PDF
- fpid-PLANS-05-LIGHTING.PDF
- fpid-PLANS-06-LANDSCAPE.PDF
- fpid-PLANS-07-ARCHITECHTURAL.PDF
- fpid-PLANS-08-STRUCTURES.PDF
- fpid-PLANS-09-TOLLFACILITIES.PDF
- 2. A component plan set may require insertion of sheets into the project structure that were prepared early in, or prior to the design process; i.e. Early Work Sheets of Plan Sets. When necessary, these sheets may be contained in a separate Signed and Sealed PDF:
 - fpid-PLANS-01-ROADWAY-PNC.PDF
 - fpid-PLANS-01-ROADWAY-COREBORINGS.PDF
 - fpid-PLANS-01-ROADWAY-VERIFIEDUTILITIES.PDF
 - fpid-PLANS-01-ROADWAY-TREESURVEY.PDF

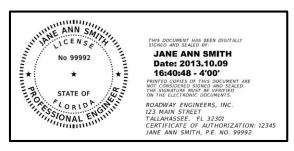
Place these sheets at the end of the numbered sequence of the index of roadway (or other component) plan sheets. Include an asterisk and note as shown in the following example:

49-52 TEMPORARY TRAFFIC CONTROL PLANS
53-57 UTILITY ADJUSTMENTS
58-62 SELECTIVE CLEARING AND GRUBBING
CTLI-CTL5* PROJECT SURVEY CONTROL SHEETS

* These sheets are included in the Index of Roadway Plans
only to indicate that they are part of the Roadway Plans
set. These sheets are contained in a separate digitally
signed and sealed document.

No sheets other than those listed above are to be submitted separate from a component plan set.

3. When a component plans set (or other PDF document) will be Signed and Sealed by a single professional (signatory), a signature block as shown to the right may be placed on the first sheet in lieu of using a Signature Sheet. Listing the sheets contained in the PDF to be Signed and Sealed is not required.



4. Revisions to a contract plan sets are to be packaged, and signed and sealed in a single PDF. When the revision PDF requires more than one signatory, a Signature Sheet containing signatory information for all components must be included. If the revision PDF requires only one signatory, a signature block (see item #3 above) can be used in lieu of using a Signature Sheet.

In the rare event that the delivery method required in 1 & 2 above can not be complied with, an approval may be granted for that project only. The approval process is as follows;

- A request to deviate from required process must be made in writing (email) by the District Plans, Specifications & Estimates Engineer to the Central Office, Program Management Office.
- The request must be specific regarding proposed file structure and delivery method that will be used for the project in question.
- The request should be made as early in the design phase as practical, but no later than Phase III Plans Submittal.
- Central Office, Program Management Office, will grant approval if the need for deviation is demonstrated and the proposed process is acceptable.
- An approval granted on one project may not be construed as to extend to other projects regardless of similar circumstances. Approvals are granted on a project by project basis.

BACKGROUND

In recent months a number of developments have taken place regarding the method of delivery for engineering documents to the FDOT. Office of Design Memorandum 14-01 requires the use of digital signatures as a means of signing and sealing on all FDOT project lettings after June 30, 2015. The Florida Administrative Code (F.A.C.) 61G15-23 SEALS, which regulates the application of digital signature for signing and sealing engineering documents, was reorganized and rewritten over the summer of 2015. The Engineering / CADD Systems Office published the 2015 CADD Manual on October 1, 2015 to accommodate the new F.A.C., and the Roadway Design Office adopted the new standards in the Plans Preparation Manual published January 2016. In the past eight months, new laws, rules & procedures are in effect regarding digital signature.

One property of digitally signed documents is that they cannot be altered once they are signed without invalidating the signature. Digitally signed documents cannot be inserted into another document or split apart into multiple documents and remain securely signed. One issue that has been realized is that when project plan sets are produced as a single PDF file, the work produced by different individuals over time cannot be inserted in the plan set without invalidating their signature. Some professionals produce, sign and seal their work early in the process. Many of them return after the plan set is completed and their work is included in the overall plan set to re-sign the combined document. Recognizing these as "early-works," this new procedure allows professionals of record to produce early-works as stand-alone documents that are included in the plan set by reference. In so doing, it is no longer necessary for the professionals who signed those early-works to return when the plans are completed to sign again, alleviating a number of problems including duplicate work.

Another issue realized since the implementation of fully digital plans delivery is that the construction contractors prefer to have plan sets delivered as components to meet the needs of the contractor and document management systems implemented in construction. Construction office personnel often split a project submitted as a single PDF file into its components, thus destroying the integrity of the original document along with its digital signatures. This new procedure will produce documents suitable to the needs of the State Construction Office and the construction contracting industry.

Meetings were held with Central Office Roadway Design, Engineering / CADD Systems Office, State Construction Office and District Production and Design personnel to devise a solution. As a

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result, the new procedures provided in this bulletin will eliminate any discrepancy and ambiguity in current practice, alleviate problems with workflow and create a more seamless process.

IMPLEMENTATION

These requirements will apply to contract plan sets that have not yet been Signed and Sealed for delivery to the District and where the Plans, Specifications and Estimates (PS&E) submittal to Tallahassee due date is not effected.

These requirements will be included in the next release of the Plans Preparation Manual (PPM) and CADD Manual.

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Attachments: none