# **Chapter 19**

# **Sealing Design Documents**

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## Chapter 19

## **Sealing Design Documents**

#### 19.1 General

This chapter is based on *Florida Statutes* as well as the *Florida Administrative Code* (*F.A.C.*). Though the intent of this chapter is to contain current and accurate information, it is not all-inclusive. The Laws and Rules referenced in this chapter are primarily those governing Professional Engineers and serve as a starting point for researching requirements. In some cases, other licensed professionals working on plans or other design documents will also be required to seal design documents, and those licensed professionals are required to follow the Laws and Rules applicable to their profession. The Laws and Rules regarding the signing and sealing of design documents continue to be amended, and it is the engineer's (or licensed professional's) responsibility to be aware of any changes. If there is ever a discrepancy between this chapter and the Laws and Rules regarding the sealing of documents, the Laws and Rules will govern.

This chapter explains the Department's requirements for signing/sealing design plans and other design documents prepared by or for the Department. **Section 334.175, Florida Statutes,** requires that all design plans and surveys prepared by or for the Department be sealed by the professional engineer, surveyor, architect, or landscape architect in responsible charge of the project work. It is the licensee's responsibility to comply with the sealing requirements applicable to their profession's Laws and Rules. It is the District's responsibility to verify that all record sets and documents are properly signed and/or sealed.

#### 19.2 Sealing of Contract Plans/Record Set

An Engineer of Record (EOR) is a Florida licensed professional engineer in responsible charge for the preparation of engineering documents. A Professional of Record (POR) is any Florida licensed professional in responsible charge for the preparation of design documents. An original set of the Contract Plans shall be sealed by the EOR or POR. This becomes the Record Set. Every sheet of the Record Set other than existing bridge plans (if present in the plan set) must be sealed by an EOR (or POR). The key sheet must be prepared and sealed by the EOR (or POR) who is the Prime Professional for that component. Other individual sheets of the Record Set may be sealed by a delegated engineer or professional, who in turn becomes the EOR (or POR) for that portion of the work. A plans set shall not make reference to a sealed copy of "District Standards" that are kept on file at the District Office. Any "District Standards" intended for use on a project must be included in the plans set and sealed by the EOR (or POR) for that project.

In accordance with *Rule 61G15-23.002*, each plan sheet shall contain a title block legibly showing either:

- 1. the printed name, address, and license number of the engineer who has sealed the plans, or
- 2. if practicing through a duly authorized engineering business, the name and license number of the engineer who has sealed the plans, and the name, address and certificate of authorization number of the engineering business.

Other PORs are required to show similar information in the title block of each plan sheet in accordance with the Laws and Rules of their profession.

Licensees working for local, State or Federal Government agencies shall legibly indicate their name and license number, and shall indicate the name and address of the agency on all documents that are to be sealed. See *Volume 2, Section 1.4*.

#### 19.2.1 Manual Sealing

The requirements for properly sealing a document are covered in the Laws and Rules for each licensee's profession.

Plans prepared by an employee of a Utility or other employees exempted under **Section 471.003**, **Florida Statutes**, that will be appended to Department plans, are not required to be sealed except as follows.

- 1. Utility plans that modify or detail attachments to a bridge or other structure belonging to the Department must have the sheets affecting such structure sealed.
- 2. Plans prepared by nonexempt parties for a Utility that will be appended to Department plans, must be sealed.

For detailed requirements refer to the *Utility Accommodation Manual, Topic No.* 710-020-001.

#### 19.2.2 Electronic Sealing

Information stored in electronic files representing plans, specifications, plats, reports, or other documents which must be sealed, shall be signed, dated and sealed by the professional in responsible charge.

Electronic files may be sealed by creating a "signature" file that contains the licensee's name and license number, a brief overall description of the design documents, and a list of the electronic files to be sealed. Each file in the list shall be identified by its file name utilizing relative Uniform Resource Locators (URL) syntax described in the *Internet Architecture Board's Request for Comments (RFC) 1738, December 1994*, which can be obtained from the Internet Website:

http://www.ietf.org/

Each file shall have an authentication code defined as an SHA-1 message digest described in *Federal Information Processing Standard Publication 180-1* "Secure *Hash Standard*," 1995 April 17, which can be obtained from the Internet Website:

http://www.itl.nist.gov/fipspubs/fip180-1.htm

A report shall be created that contains the licensee's name and license number, a brief overall description of the design documents in question and the authentication code of the signature file. This report shall be printed and manually sealed by the professional in responsible charge. The signature file is defined as sealed if its authentication code matches the authentication code on the printed, manually signed, dated and sealed report. Each electronic file listed in a sealed signature file is defined as sealed if the listed authentication code matches the file's computed authentication code.

For those sheets that are electronically signed and sealed, the following note shall be placed legibly on the sheet (outside and along the right sheet border line, within 1/8" of the line and beginning within 1" of the bottom sheet border line):

"NOTICE: THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE SIGNED AND SEALED UNDER RULE 61G15-23.003, F.A.C." \*

\* Note: The Rule number referenced is determined by the discipline of the professional that is signing and sealing (i.e., for Surveyors, this Rule is 5J-17.062, F.A.C.; for Geologists, this Rule is 61G16-2.005, F.A.C.; for Landscape Architects, this Rule is 61G10-11.011, F.A.C.; for Architects, this Rule is 61G1-16.005, F.A.C.).

#### 19.3 Sealing Other Design Documents

Other design documents include related plans, reports, calculations, specifications or criteria, used in the development of design plans. Bound design documents must be sealed on a signature page or cover letter by the EOR (or POR). If a document includes work by more than one EOR (or POR), the signature page or cover letter must have an index with sufficient information for the user to be aware of each portion of the document for which each licensee is responsible. With the exception of specifications, any document, report or computations not bound shall have all sheets sealed. Specifications will be sealed in accordance with the **Specifications Package Preparation Procedure**.

The following design documents shall be kept in the district's Project File(s).

- 1. Specifications Package
- 2. Pavement Design Package
- Typical Section Package
- 4. Drainage Computations
- 5. Hydraulics Reports
- 6. Bridge Development Report
- 7. Traffic Engineering Reports and Recommendations
- 8. Environmental Reports and Recommendations
- 9. Soil Survey Reports and Geotechnical Report
- 10. Value Engineering Record
- 11. Other Engineering Reports
- 12. Permit Documentation
- 13. Design Exceptions and Design Variations

Modification for Non-Conventional Projects:

Delete the items No. 6 and 10 above.

#### 19.4 Sealing of Revisions

Revisions are a partial modification of a design document after a plans package is sent to Tallahassee for contract letting. Whenever practical, revisions should be prepared by the original EOR (or POR).

#### 19.4.1 Plans

Revisions to a plans sheet prior to the contract letting shall be prepared as outlined in *Chapter 20* of this volume. Revised sheets will be appended to the plans set.

Any plans sheet revised after the contract letting will be sealed in accordance with **Chapter 4** of the **Preparation and Documentation Manual, Topic No. 700-050-010**.

#### 19.4.2 Other Design Documents

Each revised sheet shall be sealed by the EOR (or POR) who prepared the revision and placed immediately behind the cover sheet of the sealed document. Specifications will be revised in accordance with the **Specification Package Preparation Procedure, Topic No. 630-010-005**.

Modification for Non-Conventional Projects:

Delete **PPM** 19.4.

# 19.5 Support Documents

Engineering decisions are often made on the basis of support documents furnished by non engineering staff or offices. Two reports prepared in accordance with Department procedures will be attested as follows:

Exhibit 19	A 18 KIP Equivalent Single Axle Loads (ESAL)
Financial Project ID	
State Road No	
County	
design on this project.	8 KIP Equivalent Single Axle Loads to be used for pavement I hereby attest that these have been developed in accordance traffic Forecasting Procedure using historical traffic data and tion.
	Name
	Signature
	Title
	Organizational Unit

Date

# Exhibit 19-B **Project Traffic** Financial Project ID \_\_\_\_\_ State Road No. County I have reviewed the Project Traffic to be used for design on this project. I hereby attest that it has been developed in accordance with the FDOT Project Traffic Forecasting **Procedure** using historical traffic data and other available information. Name Signature Title Organizational Unit Date Modification for Non-Conventional Projects: Delete **PPM** 19.5 and see RFP for requirements.