Florida Department of Transportation

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JARED W. PERDUE, P.E.
SECRETARY

PROGRAM MANAGEMENT BULLETIN 22-03
ROADWAY DESIGN MEMORANDUM 22-01
DCE MEMORANDUM NO. 22-16
MATERIALS BULLETIN NO. 22-05
OFFICE OF MAINTENANCE MEMORANDUM 22-01
(FHWA Approved: 12-5-22)

DATE: December 5, 2022

TO: District Directors of Transportation Operations, District Directors of Transportation Development, District Design Engineers, District Consultant Project Management Engineers, District Construction Engineers, District Maintenance Engineers, District Roadway Design Engineers, District Traffic Operations Engineers, Program Management Engineers, Project Development Engineers, District Materials Engineers, District Specifications Engineers, District Estimates Engineers, District Safety Administrators

FROM: Stefanie Maxwell, P.E., Manager, Program Management Office
DocuSigned by: Stefanie D. Maxwell A28BFCA3708C422...

Michael Shepard, P.E., Director, Office of Design
DocuSigned by: Michael A. Shepard E6B6BEAEB9A54B0...

Tim Lattner, P.E., Director, Office of Construction
DocuSigned by: Tim Lattner C7704ED8972C440...

Xiaoyan (Sue) Zheng, P.E., Director, State Materials Office
DocuSigned by: Xiaoyan Zheng 0480C09F74244B2...

Scott Arnold, P.E., Interim Director, Office of Maintenance
DocuSigned by: Scott Arnold 2AEED26D20304A2...

COPIES: Will Watts, Dan Hurtado, Daniel Strickland, Karen Byram, David Wagner, Susan Musselman, David Cerlanek, Jose Ortiz (FHWA), Khoa Nguyen (FHWA), Greg Hall (FHWA), and Bren George (FHWA)

SUBJECT: **Build America, Buy America Act- Specification, FDM, and CPAM Changes**

On November 15, 2021, President Biden signed the Infrastructure Investment Jobs Act (IIJA), which includes the Build America, Buy America (BABA) Act. With the passing of IIJA, the domestic preference has been expanded to include the following permanently incorporated construction materials consisting primarily of non-ferrous metals, plastic and polymer-based products, glass, lumber, and drywall; in addition to iron and steel which must remain in accordance with 23 CFR 635.410 for all projects receiving Federal Funds.

FDOT will be using the Approved Products List (APL) to document product level BABA certification and the Material Acceptance and Certification (MAC) to document project installation information based on method of acceptance requirements of the Job Guide Schedule (JGS). The APL will be expanded to include permanently installed construction materials primarily consisting of non-ferrous metals, plastic and polymer-based products, glass, lumber, and drywall. Products will not be removed from the APL for failure to provide BABA documentation but will be identified on the APL with a limitation as “Not-

Eligible for Federal Funding". Manufactured products, as noted on the APL, may be exempt from BABA compliance.

REQUIREMENTS

To ensure compliance with BABA the following Department publications have been or will be modified as noted:

- **FDOT Standard Specifications for Road and Bridge Construction:** See Attachment 1 for draft modifications to Section 6 of the Specifications
- **FDOT Design Manual (FDM):** ***FDM 110.5.6*** was updated in the ***2023 FDM*** to provide direction for the appropriate considerations of BABA during the design process. The ***2023 FDM*** is available at the following link: https://www.fdot.gov/roadway/fdm
- **Construction Project Administration Manual (CPAM):** See Attachments 2 and 3 for draft modifications to CPAM 5.7, 5.8, and 5.12.

IMPLEMENTATION

These changes are effective for all construction projects with a letting date on or after January 1, 2023. BABA compliance is not required for state funded maintenance contracts.

TRAINING

Training dates will be announced through FDOT's Contact Mailer.

CONTACTS

Karen Byram, State Product Evaluation Administrator
Program Management Office
Karen.Byram@dot.state.fl.us
Product.Evaluation@dot.state.fl.us

Attachment 1: Redline/strikeout copy of Section 6

Attachment 2: Redline/strikeout copy of CPAM Section 5.8

Attachment 3: Redline/strikeout copy of CPAM Section 5.12

Attachment 1
Section 6 changes

CONTROL OF MATERIALS.
(REV 12-5-22) (FA 12-5-2022) (FY 2023-24)

SUBARTICLE 6-1.3.1.1 is deleted and the following substituted:

6-1.3.1.1 Approved Product List: This list provides assurance to Contractors, consultants, designers, and Department personnel that specific products and materials are approved for use on Department facilities. The Department will limit the Contractor's use of products and materials that require use of APL items to those listed on the APL effective at the time of placement. Where the terms Qualified Products List (QPL) appear in the Contract Documents, they will be synonymous with Approved Product List (APL).

Manufacturers seeking to have a product evaluated for the APL must submit ~~a Request for Product Consideration~~an application, available on the Department's website at the following URL: https://www.fdot.gov/programmanagement/ProductEvaluation/Default.shtm. Applications must include the following documentation:

1. S~~s~~upporting documentation as required by the Specifications, Standard Plans, and APL approval process. A sample may be requested to verify the product, in accordance with the specifications.
2. A photograph displaying the product as shipped with packaging.
3. A list displaying all components within the shipped packaging, if applicable.
4. Installation instructions and materials, if applicable.
5. Product packaging or product labels as required by the Specifications.
6. Construction material percentages and country source of materials.
7. Last two manufacturing steps and country of manufacture.
8. Manufacturer name and material designation (product name, product model/part number/style number, etc.) must be as identified on the product, product packaging, and product labels.
9. Applications must be signed by a legally responsible person employed by the manufacturer of the product.

Required test reports must be conducted by an independent laboratory or other independent testing facility. ~~and r~~Required drawings and calculations must be signed and sealed by a Professional Engineer licensed in the State of Florida. ~~unless defined otherwise in the Specifications, Standard Plans, and APL approval process requirements. Applications must be signed by a legally responsible person employed by the manufacturer of the product. Manufacturer name and material designation (product name, product model/part number/style number, etc.) submitted on the application must be as identified on the product, product packaging or product labels as required by the Specifications.~~

Products that have successfully completed the Department's evaluation process are eligible for inclusion on the APL. ~~Unless defined otherwise in the Specifications, Standard Plans, or APL approval process requirements, products listed on the~~

~~APL must have an associated photograph, drawing, or product label submitted by the product manufacturer before listing on the APL.~~ Manufacturers are required to submit requests to the Department for approval of any modifications or alterations made to a product listed on the APL. This includes, but is not limited to, design, raw material~~s~~, ~~fabrication methods~~ or manufacturing process ~~or operational~~ modifications. Modification or alteration requests must be submitted along with supporting documentation that the product continues to meet Section 6, the Specification, or Standard Plans requirements. A product sample and additional product testing and documentation may be required for the modification evaluation. Any marked variations from original test values, failure to notify the Department of any modifications or alterations, or any evidence of inadequate performance of a product ~~as a result of product modification or alteration,~~ may result in removal of the product from the APL.

Manufacturers must submit supporting documentation to the Department for a periodic review and re-approval of their APL products on or before the product's original approval anniversary. APL products that are not re-approved may be removed from the APL. Documentation requirements for the product review and re-approval, including schedule and criteria, are available on the Department's website at the following URL: https://www.fdot.gov/programmanagement/ProductEvaluation/Default.shtm.

ARTICLE 6-5 is deleted and the following substituted:

6-5 Products and Source of Supply.

6-5.1 Source of Supply–Convict Labor (Federal-Aid Contracts Only): Do not use materials that were produced after July 1, 1991, by convict labor for Federal-aid highway construction projects unless the prison facility has been producing convict-made materials for Federal-aid highway construction projects before July 1, 1987.

Use materials that were produced prior to July 2, 1991, by convicts on Federal-aid highway construction projects free from the restrictions placed on the use of these materials by 23 U.S.C. 114. The Department will limit the use of materials produced by convict labor for use in Federal-aid highway construction projects to:

1. Materials produced by convicts on parole, supervised release, or probation from a prison or,
2. Materials produced in a qualified prison facility.

The amount of such materials produced for Federal-aid highway construction during any 12-month period shall not exceed the amount produced in such facility for use in such construction during the 12-month period ending July 1, 1987.

6-5.2 Source of Supply: Comply with Section 70914 of Public Law No. 117-58, §§ 70901-52, also known as the Infrastructure Investment and Jobs Act (IIJA), Public Law 117-58, which includes the Build America, Buy America Act (BABA). Domestic compliance for all affected products will be listed on the APL.

6-5.2.1 ~~Source of Supply~~ Steel and Iron: Use steel and iron manufactured in the United States, in accordance with the Buy America provisions of 23 CFR 635.410, as amended. Ensure that all manufacturing processes for this material occur in the United States. As used in this specification, a manufacturing process is any process that modifies the chemical content, physical shape or size, or final finish of a product, beginning with the initial melting and continuing through the final shaping and coating. If a steel or iron product is taken outside the United States for any manufacturing process, it becomes foreign source material. When using

steel or iron materials as a component of any manufactured product (e.g., concrete pipe, prestressed beams, corrugated steel pipe, etc.), these same provisions apply. Foreign steel and iron may be used when the total actual cost of such foreign materials does not exceed 0.1% of the total Contract amount or $2,500, whichever is greater. These requirements are applicable to all steel and iron materials incorporated into the finished work, but are not applicable to steel and iron items that the Contractor uses but does not incorporate into the finished work. Submit a certification from the manufacturer of steel or iron, or any product containing steel or iron, stating that all steel or iron furnished or incorporated into the furnished product was produced and manufactured in the United States or a statement that the product was produced within the United States except for minimal quantities of foreign steel and iron valued at $ (actual cost). Submit each such certification to the Engineer prior to incorporating the material or product into the project. Prior to the use of foreign steel or iron materials on a project, submit invoices to document the actual cost of such material, and obtain the Engineer's written approval prior to incorporating the material into the project.

6-5.2.2 Manufactured Products: Use Manufactured Products that are consumed in, incorporated into, or affixed to an infrastructure project that are manufactured in the United States, in accordance with BABA requirements and applicable waivers.

6-5.2.3 Construction Materials: Use non-ferrous metals, plastic and polymer-based products, glass, lumber, and drywall articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project that are manufactured in the United States, in accordance with BABA requirements.

6-5.2.4 Exemptions to Build America, Buy America: Temporary devices, equipment, and other items removed at or before the completion of the project are exempt from BABA funding eligibility requirements. Aggregates, cementitious materials, and aggregate binding agents or additives are exempted from BABA funding eligibility requirements.

6-5.3 Contaminated, Unfit, Hazardous, and Dangerous Materials: Do not use any material that, after approval and/or placement, has in any way become unfit for use. Do not use materials containing any substance that has been determined to be hazardous by the State of Florida Department of Environmental Protection or the U.S. Environmental Protection Agency (EPA). Provide workplaces free from serious recognized hazards and to comply with occupational safety and health standards, as determined by the U.S. Department of Labor Occupational Safety and Health Administration (OSHA).

Attachment 2
CPAM, Section 5.8 changes

Section 5.8
CONTROL OF MATERIALS

5.8.1 Purpose

To establish a uniform standard for the control of materials on construction projects.

5.8.2 Authority

Sections 20.23(3)(a) and 334.048(3), ***Florida Statutes***

5.8.3 References

Standard Specifications for Road and Bridge Construction

Federal-Aid Policy Guide, 23 Code of Federal Regulations (CFR) 637

Procedure No. 675-000-000, Materials Manual

5.8.4 General

The ***Contract Documents*** contain ***Specifications*** and guidance relevant to the acceptance of all materials incorporated into a project. The Job Guide Schedule (JGS***)***, included in the Materials Acceptance and Certification system (MAC), indicates who samples and tests each of these materials and at what frequency. The Final Project Materials Certification Letter (PMCL) for materials used on a contract will be accomplished according to instructions from the State Materials Office (SMO) ***Materials Manual Section 5.4, Final Project Material Certification***.

The ***JGS*** lists materials and designates the methods of acceptance normally required under each material. For all contract types, the ***JGS*** includes project specific MAC Specifications created for ***Special Provisions***, ***Technical Special Provisions, Developmental Specifications***, ***Plan Notes*** and ***Change Orders*** with requirements for material method of acceptance. The JGS is generated for contracts with conventional pay items from MAC based on the pay items on the contract and project specific assignments. For Lump Sum and Design-Build contracts, the Contractor will create a project specific JGS in MAC, in accordance with ***Specifications Section 105,*** known as a nonstandard JGS**.**

(A) Resident Level Responsibilities

The Project Administrator (PA) is responsible for reviewing the ***Contract Documents*** to ensure the JGS is correct and complete. If there are missing material assignments, the PA must contact the SMO technical unit to ensure the JGS is complete. Project specific materials are included in the ***Special Provisions***, ***Technical Special Provisions***, ***Developmental Specifications***, ***Plan Notes*** and ***Change Orders*** that designate a method of acceptance. If any exist, the PA is responsible to ensure that the JGS includes these entries.

5.8.5 Source of Supply~~Buy America~~

~~**NOTE**: Buy America Certification is not a method of material acceptance. See ***CPAM 5.8.6*** for ***Method of Acceptance***.~~

~~***Buy America Requirements***, (***Part 23, Section 635.410, CFR,*** as amended) and~~ ***Specifications Section 6-5.2***~~,~~ requires the Contractor to use domestically sourced structural steel, ~~and~~ iron, and construction materials ~~manufactured in the United States~~. These requirements pertain to non-ferrous metals, plastic and polymer-based products, glass, lumber, and drywall articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project~~all steel and iron materials incorporated into the finished work and do not pertain to items the Contractor uses, but does not incorporate into the finished work~~. Temporary devices, equipment, and other items removed at or before the completion of the project are exempt. Temporary items determined to be left in place are not exempt and must be domestically sourced. Aggregates, cementitious materials, and aggregate binding agents or additives are also exempt.

For iron and steel, ~~M~~miscellaneous components ~~are also included under the Buy America provisions~~ including subcomponents and hardware necessary to encase, assemble, and construct the finished work are included. The ***Specifications*** require a ***Certification of Compliance*** from the manufacturer that states the steel or iron, and the products containing steel or iron were manufactured in the United States. Ensure the certification includes the Federal Aid Project Number, the Financial Project Number, and the applicable Pay Item Number(s). Certifications attesting to this must be submitted to the PA prior to incorporating the material into the project. PA will enter the certification into the Electronic Document Management System (EDMS). Non-domestically source materials must be tracked in the Foreign Steel Tracking agency view within AASHTOware Project Construction (PrC).

For assistance with the PrC agency view, contact the ***State Construction Office Systems Section***.

~~For assistance, see the ***Buy America Tracking Report*** via the ***SiteManager Quick Help website***.~~

~~5.8.6 Change of Source~~

~~5.8.7 If there is any indication or reason to believe that the manufacturer may have switched sources of steel or iron during the life of the project, the PA will require an updated *Certification of Compliance* from the manufacturer.~~

~~5.8.8~~5.8.6 Method of Acceptance

There are three methods of material acceptance: 1) certification; 2) visual inspection; and 3) sampling and testing.

(1) Certification

A contractor, manufacturer, or supplier provides a written certification stating the material supplied meets ***Specifications*** requirements at the time of delivery or prior to placement. The CEI Inspector shall verify that the certification is complete, correct, and meets ***Specifications*** requirements. The CEI Inspector shall visually inspect or verify that these products or materials meet all the ***Specifications*** and any other contract requirements, and that the delivered products or materials match the certification document descriptions in expected appearance and size, and are free from defects and contamination.

Product certification from an approved aggregate source should include the bill of lading/shipping ticket with the phrase “Certified for FDOT” or “Cert. for FDOT”, FDOT Source number, date, FDOT material code, aggregate description, and quantity in tons.

In some instances, the Department requires that manufacturers submit samples of certified materials for independent verification purposes. The CEI Inspector shall collect the sample or verify that the sample has been submitted for testing.

(a) Product Certification

Certification per product, per project is required in the ***Specifications*** and as shown in ***Section 5, Materials Manual, Topic No. 675-000-000***. The PA shall be responsible for

obtaining the certification prior to allowing the incorporation of any products into the project.

(b) Approved Products and Producers

The Department maintains a list of products and producers acceptable for use on construction projects. Products and producers will be included on Department lists when documentation (certification and periodic test results) is received assuring the material conforms to ***Specifications*** requirements. The CEI Inspector shall verify that such approved products and producers meet ***Specifications*** requirements. These lists are available at: ***Approved Product List*** and ***Production Facility Listing***.

(2) Visual Examination

The ***Specifications*** provide guidelines concerning material that may be accepted by visual examination, for example certain materials incorporated into Witness-and-Hold projects. Visual Inspection may also be an alternate method of acceptance for sampling and testing when the material quantity meets the definition of small quantities. The CEI Inspector should visually inspect or verify that the delivered products or materials match the expected appearance and size specified in the ***Contract Documents***, and are free from defects and contamination.

(3) Sampling and Testing

(A) Resident Level Responsibilities

It is the PA's responsibility to ensure that only materials meeting the ***Specifications***, or properly documented and approved exceptions, are incorporated into the project. MAC contains several reports and search screens that can be used to track the status of samples for each project. The PA will make sure the samples are current **at all times** by ensuring prompt entry of sample data and field test results into MAC. The PA will finalize all project samples and create comparison packages for materials that require comparison. When the samples do not meet the comparison criteria (i.e., “Does Not Compare” in MAC), the PA will ensure that Resolution sampling and testing is performed, that the Resolution samples and test results are entered in a timely manner, and are included in the comparison packages. When it is not possible to perform a required comparison and/or Resolution, the PA will denote it was not possible on the comparison package and include the reason for not performing the required testing.

~~5.8.9~~5.8.7 Materials Acceptance Resolution

If a material is designated by the Materials Certification Review personnel to require resolution of the material acceptance, it will be promoted to the Materials Acceptance Resolution (MAR) process in MAC. All materials with acceptance issues will be promoted to MAR and final resolution determined. The life cycle of the issue will depend on the original issue and the nature of the material acceptance needing resolution. Some issues can be resolved directly by the PA without additional input. Some issues will require input from the District Materials and Research Engineer (DMRE), the District Construction Engineer (DCE), and the Directors, Office of Construction (DOC) and Office of Materials (DOM). This procedure is outlined in the ***Material Acceptance Resolution Flow Chart (Attachment 5.8-1)***. Regardless of the final resolution, the PA must provide detailed descriptions of the issue including location information.

(1) Materials Acceptance Resolution by Specifications

For straightedge deficiencies, the procedures shall follow the requirements of ***CPAM Section 11.5, Testing and Correcting Asphalt Pavement Surface Deficiencies***.

For other material acceptance within ***Specifications***, the PA will document the final resolution on the MAR issue in MAC. These determinations are designated by selecting one of the following options:

a) Asphalt Follow-up Sample Passed – The material is resampled and the results are acceptable in accordance with ***Materials Manual Section 3.1 District Materials Activities for Asphalt Pavement Construction***.
b) Complete Removal and Replacement – The Contractor chooses to remove the material and replace it without requesting an Engineering Analysis Report (EAR)**.**
c) Material Rejected for Use – The material was sampled from a stockpile and the material is removed from use on the project before it is placed.
d) Pay Reduction per Specifications – The ***Specifications*** allow a pay reduction to be assessed if a material falls within the pay reduction criteria.
e) Reworked and Remixed – The material allows for rework, and sample is taken for the rework that designates that the reworked material is acceptable.

(A) Resident Level Responsibilities

If the material is accepted based on the ***Contract Documents*** (i.e., Leave in Place at No Pay or Pay Reduction per ***Specifications***), the PA will document the final resolution on the MAR issue in MAC. Once the PA has

recorded the final recommendation, the issue is considered resolved. The PA will enter additional payment information in MAC if the final resolution includes reduced payment. The payment information is not relevant to the final resolution~~,~~ but ~~–~~is recorded to assist Construction personnel with tracking the payment requirement.

(2) Determining the Use of an EAR

If the material is determined to be defective in accordance with ***Specifications Section 6-4*** and the Contractor requests the use of an EAR in accordance with the material specific ***Specifications*** to determine the materials acceptance resolution, the PA, DMRE, and DCE must determine if an EAR will be used. Material not meeting any of the method of acceptance requirements is considered to be defective. Defective material is limited to requirements related to material acceptance. For example, improper Maintenance of Traffic is not a valid reason for defective material. However, defective material is not exclusive of material failing acceptance limits. For example, material required to be tested by a qualified technician, but tested by someone not holding the appropriate qualification at the time of testing is considered defective, regardless of the whether or not the test results pass the acceptance limits. There must be an evaluation of the defective material to determine if the defect requires analysis by EAR or other means of addressing the defect to ascertain the final resolution. The decision will be made based on the nature, location, severity and/or frequency of the defect.

Table 5.1

EAR Decision Table

	Case 1	Case 2	Case 3	Case 4
PA Recommends	EAR	EAR	No EAR	No EAR
DMRE Recommends	No EAR	EAR	EAR	No EAR
DCE Recommends	EAR	No EAR	No EAR	EAR
Final Decision	EAR Required	DOC obtains final decision	DOC obtains final decision	EAR Required

*See escalation and concurrence required below

(A) Resident Level Responsibilities

The PA will document their recommendation for the use of an EAR on the MAR issue by selecting the option “EAR” or “No EAR” in MAC.

Once the determination for the use of an EAR is made, the PA will coordinate with the DMRE regarding the scope of the EAR. The PA will provide the EAR scope to the Contractor and the EAR will be performed. The PA will attach the EAR to the specific MAR issue under the documents tab in MAC.

(B) District Level Responsibilities

The DMRE will determine if an EAR is needed and document their recommendation on the MAR issue by selecting “EAR” or “No EAR” in MAC. Once the determination for an EAR has been made, the DMRE will recommend the EAR scope including types of testing needed to ensure the EAR will yield the necessary information to determine the resolution of the defective material.

The DCE will determine if an EAR is needed and document their recommendation on the MAR issue by selecting “EAR” or “No EAR” in MAC.

If the DCE and DMRE concur, the DCE’s determination is final.

If the DCE and DMRE do not concur, follow the direction provided in the appropriate column of ***Table 5.1*** based on the recommendations provided by DCE, DMRE and PA. For Cases 2 and 3, the MAR issue will be escalated to the DOC and DOM.

NOTE: This is not the final resolution of the material, but only addresses whether or not an EAR will be allowed to be used to determine the final material disposition.

(C) Central Office Responsibilities

For Cases 2 and 3, if the DCE and DMRE do not concur, the DOC and DOM will have the final decision.

If the DOC and DOM do not concur, the MAR issue will be escalated to the Chief Engineer (CE) for the final decision.

Upon notification in MAC of Case 2 or 3, the DOC will ensure concurrence is obtained at the appropriate level.

(3) Determining the Use of Delineation

Some materials are allowed by ***Specifications*** to use delineation as the method to determine the material acceptance resolution. If the MAC Spec Material Id allows for delineation, additional information must be provided. The Contractor must request the use of delineation from the PA.

(A) Resident Level Responsibilities

The PA will document their recommendation for the use of delineation on the MAR issue by selecting "No EAR – Delineation", "EAR", or "No EAR" in MAC. The "No EAR – Delineation" option is only available when ***the*** *MAC Spec Material Id* indicates delineation is allowed based on the ***Specifications*** requirements.

(B) District Level Responsibilities

The DMRE will review the PA's recommendation. The DMRE will provide a recommendation of "No EAR – Delineation", "EAR" or "No EAR" in MAC.

The DCE will review the PA and DMRE recommendation for the material resolution. The DCE will provide a recommendation of "No EAR – Delineation", "EAR" or "No EAR" in MAC.

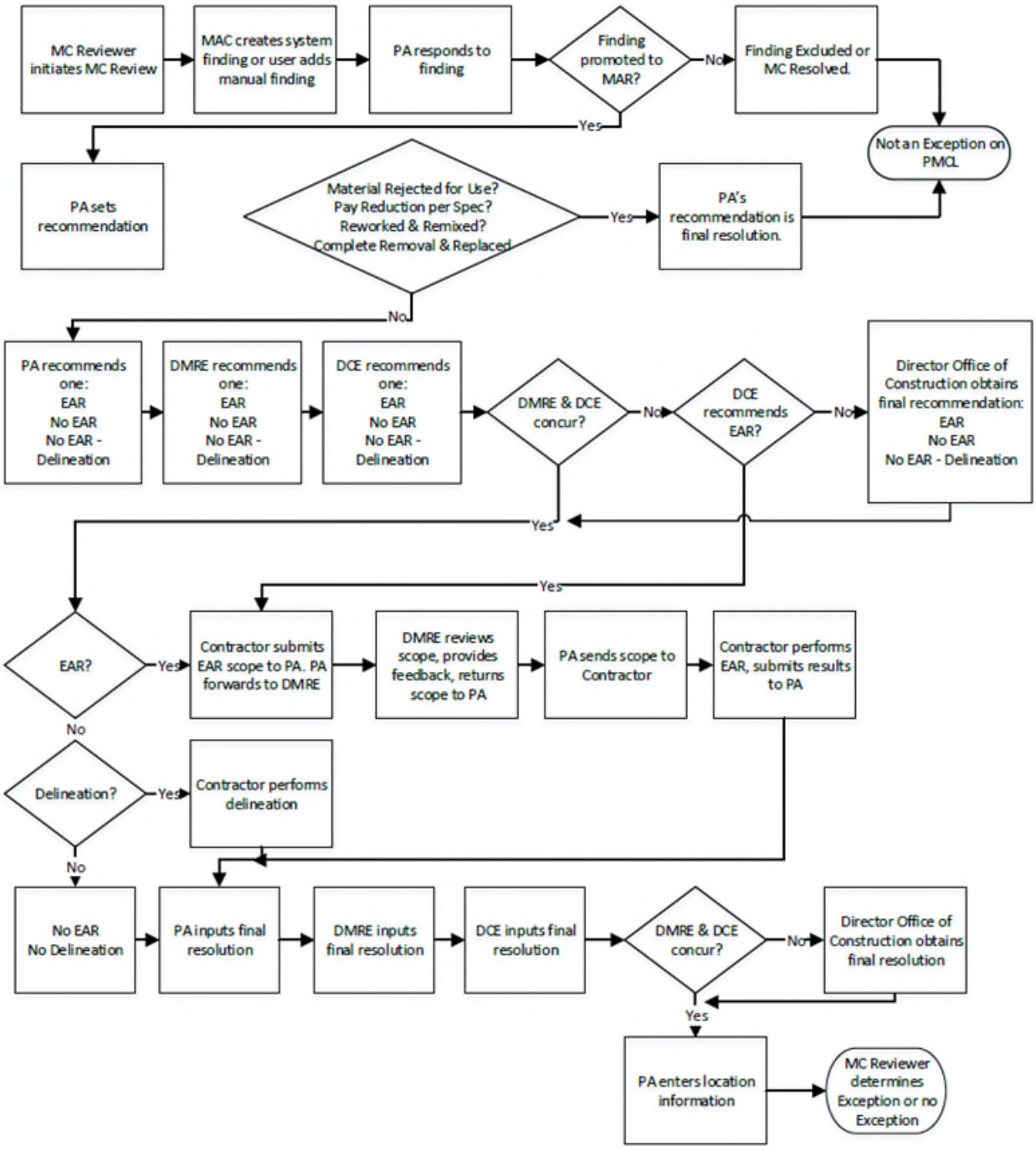
If the DCE concurs with the DMRE, the DCE's recommendation is used as the final resolution.

If the DCE does not concur with the DMRE's recommendation, the issue is elevated to the DOC for final decision, when DMRE designates "EAR" and DCE designates "No EAR- Delineation" or "No EAR". Otherwise, EAR is required. (i.e. Direction for these cases follow ***Table 5.1*** as well.)

~~5.8.10~~5.8.8 Attachments

Attachment 5.8-1 .....Material Acceptance Resolution Flow Chart

Attachment 5.8-1
Material Acceptance Resolution Flow Chart



Attachment 3
CPAM, Section 5.12 changes

Section 5.12
FINAL AS-BUILT PLANS PROCESS

5.12.1 Purpose

This procedure defines the process for preparing ***Final As-Built Plans***. The standards provided are applicable to recording final quantities, revisions, and changes during construction in the ***Final As-Built Plans***, as well as detailing the process to digitally sign and seal revisions and changes, where applicable.

5.12.2 Authority

Sections **20.23(3)(a)** and **334.048(3)**, Florida Statutes (F.S.)

5.12.3 References

Section 337.015(3), **471.025**, and **668.003(3), F.S.**

Rule 61G15-23 and **Rule 61G15-27.001, F.A.C.**

Standard Specifications for Road & Bridge Construction

Review and Administration Manual, Topic No. 700-050-05

FDOT Design Manual, Topic 625-000-002

CADD Manual, Topic No. 625-050-001

Records Management Procedure, Topic No. 050-020-025

5.12.4 General

One complete set of the original Contract Plans, digitally signed and sealed by the Engineer of Record (EOR), shall be saved in the Department's collaboration site [currently ProjectSolve Sharepoint (PSSP)]. A separate complete set of extracted (i.e. EOR digital signature removed) Contract Plans shall be maintained as the ***Final As-Built Plans*** for each construction project in the Department's collaboration site.

Contents of the ***Final As-Built Plans*** will vary, but shall always contain those sheets necessary to completely cover all work performed. The ***Final As-Built Plans*** shall include all revisions and changes, both design and construction, that indicate precisely how the project was constructed. At the conclusion of the project, the ***Final As-Built Plans*** shall be made available for review to the District Final Estimates Office (DFEO).

5.12.5 Digital Signing, Sealing, and Certifying for As-Built Plans

The Department requires the use of digital certificates acquired from a Public Key Infrastructure (PKI) approved provider on the ***Business Identity and Credentials*** section of the **GSA IDManagement.gov Trust Services List** when signing documents digitally. The digital certificate contains a unique digital ID that can be validated for authenticity. ***Section 668.003(3), F.S.*** defines using a certificate as a digital signature. For more information on digital signatures:

http://www.fdot.gov/Construction/eConstruction/DigitalSignatures.shtm

Rule 61G15.23, F.A.C. states that affixing a digital signature shall constitute the signing and sealing of engineering work as defined in ***Section 471.025, F.S.*** The pictorial representation of the seal is not required. Affixing a digital signature can be done in two ways:

(1) **Digitally signed** means the document is locked to prevent any modifications to the document. Modifications to the document after the digital signature is applied will invalidate the digital signature. The document must be extracted to "break" the certificate and allow editing. Contract Plans and revisions from the EOR are digitally signed.

(2) **Digitally certified** means the document is digitally signed, but will allow markups and additional digital signatures to be added without breaking the original certificate. Markups are akin to "post its" in the paper world. Markups "float on top of" the signed document and are not bound by the digital signature. Digital signatures can still be validated after markups are added. The ***Final As-Built Plans*** shall be **digitally certified** by the responsible professional engineer (PE) prior to submittal to DFEO.

5.12.6 Receiving the Set of Contract Plans

(A) District Level Responsibilities

The District Construction Office is responsible for providing the Contract Plans and Back up Files to the Resident Office (RO) for use during construction.

(B) Resident Level Responsibilities

The original electronic Contract Plans set should be saved to the Original Plans folder within the Department's collaboration site upon receipt. The Contract Plans should be extracted by the RO, separated into the different components (if not provided by component), then saved to the As-Built Plans folder within the Department's collaboration

site. All changes made to the contract will be electronically reflected on the extracted set of plans within the Department's collaboration site. No pages shall be discarded from the extracted set of plans. All revisions will be added to the extracted set of plans. This extracted set of plans is the ***Final As-Built Plans*** and will be made a part of the ***Final Estimates Documentation***.

5.12.7 Updating the Plans after Contract Award

(A) Revisions by EOR

There are situations when it is necessary or desirable to require the modification of the Contract Plans by the EOR after a project is awarded: the Contract Plans may have contained errors or omissions; field conditions may have changed; or the scope of the project may have been revised. Once the EOR has provided the electronically revised sheet(s) to the District, it is the responsibility of the Resident Engineer to ensure the sheet(s) are saved in the collaboration site. The revised sheets will be extracted from the signed and sealed file and inserted into the ***Final As-Built Plans*** file. The original sheet(s) will be voided out. A Contract modification will be issued to incorporate revised plans into the contract per CPAM 7.3 and 7.4.

(B) Changes by Resident Office

Once all changes are reflected on the ***Final As-Built Plans*** (the extracted set of plans from **CPAM Section 5.12.6 (B)**), the responsible Engineer will "**flatten**" the changes into the document to incorporate the changes. The responsible PE will **digitally certify** the document to sign and seal the ***Final As-Built Plans***. By certifying the document, it allows the DFEO to apply markups during the Post Audit Review (PAR). The markups applied by the DFEO are not bound by the digital signature, but "**float on top**" of the ***Final As-Built Plans***.

When the responsible PE makes changes to the Contract Plans that reflect the as-built conditions of a project, the responsible PE is not considered a "successor engineer". There is no requirement that the same PE who designs the project must perform the as-built services, therefore, a PE who only prepares, and digitally signs and seals the as-built drawings is not a "successor engineer" as discussed in ***Rule 61G15-27.001, F.A.C.*** and need not follow the provisions of that Rule.

For changes not made by the EOR, the proper statement of disclaimer is required on the ***Final As-Built Plans***. The statement will be added to the ***Final As-Built Signature Sheet(s)***. This language should note that, by signing and sealing the disclaimer, the responsible PE is only taking responsibility: (1) for the changes in the plans and not the entire set of plans; (2) and for the specific change(s) only shown in redline, not for the entire page.

(1) Disclaimer to use when changes have been made:

"The above-named professional engineer shall be responsible for the following changes, indicated in redline revision, in accordance with Rule 61G15-23.004, F.A.C. This project was constructed in substantial compliance with these plans as provided by the Engineer of Record."

(2) If ***Final As-Built Plan*** sets have no changes, the responsible PE shall digitally sign and seal the ***Final As-Built Signature Sheet(s)*** with a disclaimer that states:

"This project was constructed in substantial compliance with these plans as provided by the Engineer of Record. These plans reflect "as-built" conditions and no changes were made to the plan sheets."

If the RO chooses to use CADD to make changes, the requirements in this chapter, and the ***CADD Manual*** must be met. The RO should use the cloud revision utility from the Bar Menu in MicroStation or other mark-up tools in other software. The ***CADD Manual, Section 5.7*** describes the process of generating the proper naming convention and standards for updating the CADD files electronically. If changes are performed other than by cloud revision, such as completely manipulating the native CADD file, all changes will conform to the same procedures and requirements outlined in the ***CADD Manual, Chapters 2, 4, and 5*** and the ***FDM Chapters 130, 131, and 132***. After the native CADD file has been revised to reflect as-built conditions, a PDF version shall be provided for submittal with the ***Final As-Built Plans***.

(C) As-Built Drawings by Contractor and Revisions by Contractor or Specialty Engineer

As-Built Drawings by Contractor required by the ***Specifications*** for miscellaneous items (such as Intelligent Transportation Systems (ITS), signals, conduit, and lighting) and revisions to the Contract Plans made by the Contractor's EOR or a Specialty Engineer shall follow the criteria in the ***Specifications*** (including but not limited to ***Section 611, 630, and 715***) and ***FDM*** for revisions. As-built Drawings and revisions shall be submitted in PDF format. It is recommended that As-built Drawings required by the ***Specifications*** be entered into EDMS and the EDMS document number be referenced on the ***Final As-Built Plans*** in the applicable location. Revisions to the Contract Plan sheets should be inserted in the ***Final As-Built Plans*** per **CPAM Section 5.12.8(B)**.

5.12.8 Final As-Built Plans Process

The ***Final As-Built Plans*** shall be updated with all additions, deletions, and changes clearly delineated to reflect the actual conditions of the project as the job progresses. Quantities should be entered within 30 days of pay item closeout. Delaying updates to the ***Final As-Built Plans*** increases the risk of errors and omissions.

Attachment 5.12-1A and **Attachment 5.12-1B** are flow charts of the Final As-Built Plans Process.

The ***Final As-Built Plans*** will be **digitally certified**, per **CPAM Section 5.12.5**, to allow the DFEO personnel to make comments where appropriate. No pages shall be discarded from this set.

(A) Marking Conventions

The following procedure shall be performed when making changes to the ***Final As-Built Plan*** set(s):

(1) Resident Level Responsibilities

All changes by project personnel shall be made electronically on the ***Final As-Built Plan*** Set(s) with redline revision. It is recommended to cloud changes on plan sheets.

All changes by the Quality Assurance project personnel shall be made electronically in orange.

(2) District Level Responsibilities

All markups by the Initial Reviewer during the District's Quality Control (QC) or Independent Assurance (IA) Review shall be made with blue line revision.

All markups by the Overviewer during the Post Audit Review (PAR) shall be made with green line revision.

If a consultant is hired, on behalf of the DFEO, they shall follow the appropriate marking conventions for the role they are supplementing. The function of the DFEO Initial Reviewer and Overviewer are detailed in the ***Review and Administration Manual, Section 3.5***.

NOTE 1: The use of layers to further differentiate markups/comments within the ***Final As-Built Plans*** PDF file(s) is encouraged, but not required. If layers are utilized, ensure layer names are appropriate for the type of mark up (i.e. position/name of personnel, such as

Inspector, Contract Support Specialist, or PA) or type of review (IA, QA, QC, or PAR). (Also see requirement under **CPAM Section 5.12.8(B)(2)b**.)

(B) Plan Set Sheets

If an entire plan sheet is revised, the original plan sheet shall have **VOID** imprinted using red text on it and the new plan sheet shall be inserted after the original (old) sheet in the set of ***Final As-Built Plans***, with exception of the ***Key Sheet***. The voided ***Key Sheet(s)*** should follow the revised ***Key Sheet(s)***. All revised sheets will be defined on the ***Key Sheet(s)*** of the appropriate component.

(1) The Key Sheet

The ***Key Sheet*** of each component of ***Final As-Built Plans*** shall show the following data (see **Attachment 5.12-2** for example ***Key Sheet***):

(a) ***Final As-Built Plans*** shall be prominently redlined across the top of the sheet in place of or above the “Contract Plans” preprinted line and those words shall be lined through or completely deleted.

(b) On the right side and near the lower corner, the following information shall be displayed in red ink on the ***Key Sheet***:

(i) Name of Prime Contractor

(ii) Name of Prime Consultant Construction Engineering Inspection (CCEI) (If In-House Project, so state)

(iii) Name of District Secretary (at time of final acceptance)

(iv) Name of Resident Engineer

(v) Name of FDOT Project Manager

(vi) Name of Project Administrator

(vii) Date Work Started

(viii) Date of Final Acceptance

(c) A complete ***Component Index*** of the documents (with corresponding EDMS document numbers) related to the plan component shall be shown on the left side of the ***Key Sheet***, **not to exclude the following:**

(i) Additional plans, such as shop drawings, etc.

(ii) Other As-Built Drawings, such as Jack & Bore, Boring Path Reports, Bore Logs, Plowing, or Signalization shall be listed as well.

(iii) All project descriptions, Financial Project ID Numbers, length, etc., shown on the ***Key Sheet*** shall be corrected to agree with the actual construction.

NOTE 2: It is the responsibility of the Resident Engineer to ensure Boring Path Reports meet the requirements of the ***Specifications*** prior to acceptance and payment.

(2) The Design and Final As-Built Signature Sheet

Each plan component will have its own ***Final As-Built Signature Sheet(s)*** inserted behind the respective ***Key Sheet(s)***. **Attachment 5.12-3** is an example ***Final As-Built Signature Sheet***. The ***Final As-Built Signature Sheet*** can be downloaded from the State Construction As-Built Plans website at:

http://www.fdot.gov/construction/eConstruction/AsBuiltPlans.shtm.

If a Design Signature Sheet(s) is included in a plan component from the EOR, it will not be voided when inserting the ***Final As-Built Signature Sheet***. All changes made in the field not requiring an engineering evaluation will be indexed on the ***Final As-Built Signature Sheet(s)*** and **digitally certified** and signed and sealed by the responsible PE. ***Rule 61G15.23, F.A.C.*** requires text to be included with a digital signature to indicate a document has been digitally signed and sealed and printed copies are not considered signed and sealed. The Department's recommended signature appearance to comply with this requirement is shown in **Attachment 5.12-3**.

(a) The responsible engineer must include the company name and address, for each component's ***Final As-Built Signature Sheet(s).***

(b) All changes to the ***Final As-Built Plans*** during construction shall be shown on the ***Final As-Built Signature Sheet(s)*** for each component. The information shall include:

(1) Sheet number on which the change is shown in the plans

(2) A brief description of the change

If more space than provided is needed, an additional page(s) can be added to the ***Final As-Built Plans***.

(c) As the project progresses, each person applying markups or changes to the ***Final As-Built Plans*** and all reviewers throughout the project shall print his/her name followed by the applicable position/reviewer type, the

change/review date, and his/her agency/company name on the ***Final As-Built Signature Sheet***. This applies to all project personnel (SPE, PA, CSS, Inspectors), all QA/QC/IA reviewers (internal company reviews and Department reviews), and DFEO staff after final acceptance. If more space than provided is needed, an additional page can be added to the ***Final As-Built Plans***.

(3) Typical Section Sheets

Authorized changes to the typical section shall be marked appropriately. Documentation for such changes shall be included as a part of the ***Final Estimates Documentation***. Some typical examples include:

(a) Increase or decrease in thickness

(b) Change in type of material

(c) Substitution of pay items

(d) Change in limits of work

(e) Addition/Deletion of items of work

(f) Other Geometric designs (such as varied cross slope)

(4) Summary of Pay Items

The ***Plan Summary Sheets*** for each of the major groups of pay items are to be included in the ***Final As-Built Plans***. Pay item quantities shall be updated on the Summary of Pay Items in the appropriate ***Pay Item Summary Box*** as detailed in ***CPAM Section 5.13***.

(5) Plan Sheets

The ***Plan Sheet*** details for all the major groups of plans become the permanent historical record of the construction project. All changes in construction that would constitute a conflict in this record shall be clearly delineated on the ***Final Plan Sheets***. Insert changes and cross out all incorrect data. The following changes must be noted:

(a) Changes to the horizontal and vertical alignments as shown on the original Contract Plans

(b) Stations or equations that have been introduced or revised during construction

(c) Intersection and crossover details that have been modified or relocated

(d) Inlets, manholes, box culverts, and end walls that were added, relocated, revised, or deleted

(e) All sidewalk that was modified in thickness or otherwise, and all curb and gutter, and shoulder gutter that was added, revised, or deleted

(f) All driveways that were not shown on the original Contract Plans, or were shown but are no longer in existence, or were modified in thickness or otherwise

(g) All ditch locations and grades that were adjusted during construction

(h) Changes in fencing items, including gate location

(i) Sign locations changed and pavement markings that were modified

(j) All signal details that changed during construction

(k) All Bridge, Approach Slab, and Lighting details that are different from the actual construction

(l) Benchmarks (BM) and their descriptions that were set during construction shall be added to the profile portion of the ***Plan Sheets***

(m) All Utility relocates and/or conflicts shall be reflected on the ***Utility Adjustment Sheets***

(6) Summary of Drainage Structures, Optional Materials Tabulation and Drainage Structure Sheets

Changes shall be made on the ***Final As-Built Plans*** set, to reflect:

(a) Plan lengths changed to reflect the actual construction length when an authorized field change is made or a plan error is noted

(b) Changes in flow line elevations shall be shown on the ***Plan Profile Sheets***

(c) Changes in stations or offset dimensions

(d) Changes in size of structures

(e) Added/Deleted structures

(f) Type of pipe material and thickness used at each structure shall be shown on the ***Drainage Structures Sheets*** and the ***Optional Materials***

Tabulation Sheets. The as-built column will be checked to indicate what type of pipe material and thickness was used at each structure.

(g) Types of inlets and manholes constructed shall be indicated

(h) When the method of measurement is plan quantity for cross drain and storm sewer pipes, plan errors shall be distinguished from field changes due to different tolerances being applicable.

(i) ***Lateral Ditch Sheets:*** All adjustments in horizontal alignment of flow line grade shall be delineated on the ***Plan and Profile Sheets***. The cross-section shall be adjusted to reflect the change if a pay quantity adjustment is required.

(7) Cross-Section Sheets

The disposition of the ***Cross-Section Sheets*** with regard to a set of ***Final As-Built Plans*** depends on the method of payment set up for the earthwork items (refer to the ***Special Provisions*** of each Contract).

(a) **Excavation Borrow Pits, Excavation Subsoil,** and **Excavation Channel on Cubic Yard Basis*:*** Final ***Cross-Section Sheets*** and volumetric computations are to be prepared and included in the ***Final As-Built Plans***. They are required to reflect the actual work accomplished and are the basis of final pay quantities. The original plan cross-sections shall remain a part of the ***Final As-Built Plans***.

(b) **Embankment, Regular Excavation,** and **Lateral Ditch Excavation on Cubic Yard Plan Quantity Basis*:*** The original design cross-sections are used as the basis for both plan and final pay quantities and to control grading operations. They are to be retained as part of the ***Final As-Built Plans***. Additional cross-sections to correct plan errors and/or to reflect field changes are prepared and added to the ***Final As-Built Plans***. Detailed instructions pertaining to earthwork are included in ***Section 5.16***.

(8) Final As-Built Bridge Plans

The Structures Designer and Facilities Engineers need to have accurate bridge records available for inspection, maintenance, rehabilitation, and emergency repair operations, and any future widening operations. The following information shall be recorded and/or referenced on the proper matrices, plans sheets, log books, and forms for bridge projects:

(a) As-Built load rating calculations, input files, output files and load rating summary sheets or letter from EOR stating that the as-bid load ratings

represent the as-built condition. Clearly list casting dates and stressing dates for all post-tensioned concrete components in the as-built load rating calculations. Load Ratings, based on as-built condition shall be recorded on the appropriate forms and entered into EDMS in the appropriate group and document type with structure number identified.

(b) Drill Shaft Inspection Records shall be recorded and appropriately marked as permanent record and entered into EDMS. Reference the EDMS number within the ***Final As-Built Plans***.

(c) Pile Driving Log Books/Pile Driving records shall be recorded and appropriately marked as permanent record and entered into EDMS. Reference the EDMS number within the ***Final As-Built Plans***.

(d) All crack observations on the structures shall be documented either through detailed sketches or "Crack Maps", it is the responsibility of the CCEI Inspector to perform this inspection (as outlined in the ***CPAM Section 10.3.5***).

(e) Shop Drawings shall be entered into EDMS. Reference the EDMS number within the ***Final As-Built Plans.***

(f) Engineer approved repairs due to Request for Corrections (RFC) not included in the ***Final As-Built Plans***. For further explanation see ***CPAM Section 8.11***.

The above items should be stored in EDMS in the appropriate directory and the EDMS document number should be referenced on the ***Final As-Built Plans*** in the applicable location. Original documents may be turned over to the District Structures and Maintenance Engineers for their use. Ensure all documents have been Quality Control reviewed to ensure correctness and legibility.

The electronic design files for the Category II (see ***FDM Chapter 121*** for category definitions) bridge plans will be updated to reflect as-built conditions in the native CADD format. The Districts will have the option to have the appropriate EOR or the CCEI consultant perform this CADD service. The plans shall be submitted with the ***Final Estimates Documentation***. The EOR shall update the bridge load ratings based on the as-built bridge plans or review load ratings submitted by the Contractor's EOR for contractor-initiated revisions per ***CPAM Section 10.11***.

The RE will markup sheets requiring minor (non-engineering evaluation) as-built changes and show those changes on the ***Final As-Built Signature Sheet(s)***. For major changes, the RE will send revisions back to the appropriate EOR as outlined in ***FDM Chapter 131***. Any revisions made by value engineering decisions will be digitally signed and sealed by

the Contractor's EOR. This may be a Cost Savings Initiative Proposal (CSIP) redesign or an original design of certain components including Shop Drawings. The Contractor's EOR will send the signed and sealed plan revisions back to the RE for inclusion into the ***Final As-Built Plan*** set.

Prior to submittal of the ***Final Estimates Documentation***, the electronic as-built bridge plans will be secured with a digital certification.

5.12.9 Design-Build Final As-Built Plans

Design-Build ***Final As-Built Plans*** shall be provided to the Department meeting the requirements of the Request for Proposal (RFP) and Design-Build Specifications. It is not necessary to apply a digital signature to each page of the Release for Construction Plans; one signature will suffice for the entire document. Any required changes to the ***Final As-Built Plans*** by the Department shall meet the requirements found within ***this section of CPAM***. The responsible Engineer shall also insert the ***Final As-Built Signature Sheet***, apply the appropriate statement of disclaimer per **CPAM Section 5.12.7(B)**, and sign and seal the ***Final As-Built Plans***.

5.12.10 Changes after Submittal of Final Estimates Documentation

(A) Resident Level Responsibilities

It will be the ROs responsibility to make any changes, required due to findings by the DFEO during the Post Audit Review (PAR), that modify the ***Final As-Built Plans***. All changes will be made in accordance with this Manual.

Exception to the above: Updates to an item's quantity by the DFEO after submittal of the ***Final Estimates Documentation***, with no corresponding modifications to the Plans, will not require changes or new digital signature by the RO.

5.12.11 As-Built Data Collection

(A) Final Quality Control Roadway Report (QCRR)

The PA is responsible for submitting the final QCRR (***Form 675-030-20A, Asphalt Roadway – Daily Report of Quality Control***) via email to the State Materials Office as a record of the as-built pavement data at the following email address: **SM-MACQCRRUpload@dot.state.fl.us**.

(B) Intelligent Transportation System Facility Management (ITSFM)

Feature Import Templates (as required in ***Specifications 611-2.3***) should be submitted by the Contractor to the Project Administrator (PA) for review and acceptance. The PA will submit the Feature Import Templates to the District Traffic Operations with the As-Built Plans for entry into the Department's ITSFM system and enter applicable correspondence in EDMS.

(C) Approved Product List (APL)

The PA is responsible for ensuring all APL data is entered into the ~~Pay Item Tracking System (PTS)~~Materials Acceptance and Certification (MAC) System and the information is complete and accurate. It is ~~recommended~~ required that APL data be entered at the time of installation. APL data is required to be entered into the ~~PTS~~ MAC prior to ~~submittal~~ approval of each~~the~~ monthly estimate. Please contact the **Product Evaluation Office** for more information on required APL tracking.

5.12.12 Final As-Built Plans Handling Process

(A) District Level Responsibilities

After the final close-out/PARs, the DFEO will ensure all required documents are included in the electronic files in EDMS.

Projects pending litigation will be kept available until they are finalized.

The Department's procedure for Record Retention shall be adhered to as outlined in the ***Records Management Procedure, Topic No. 050-020-025***.

5.12.13 Attachments

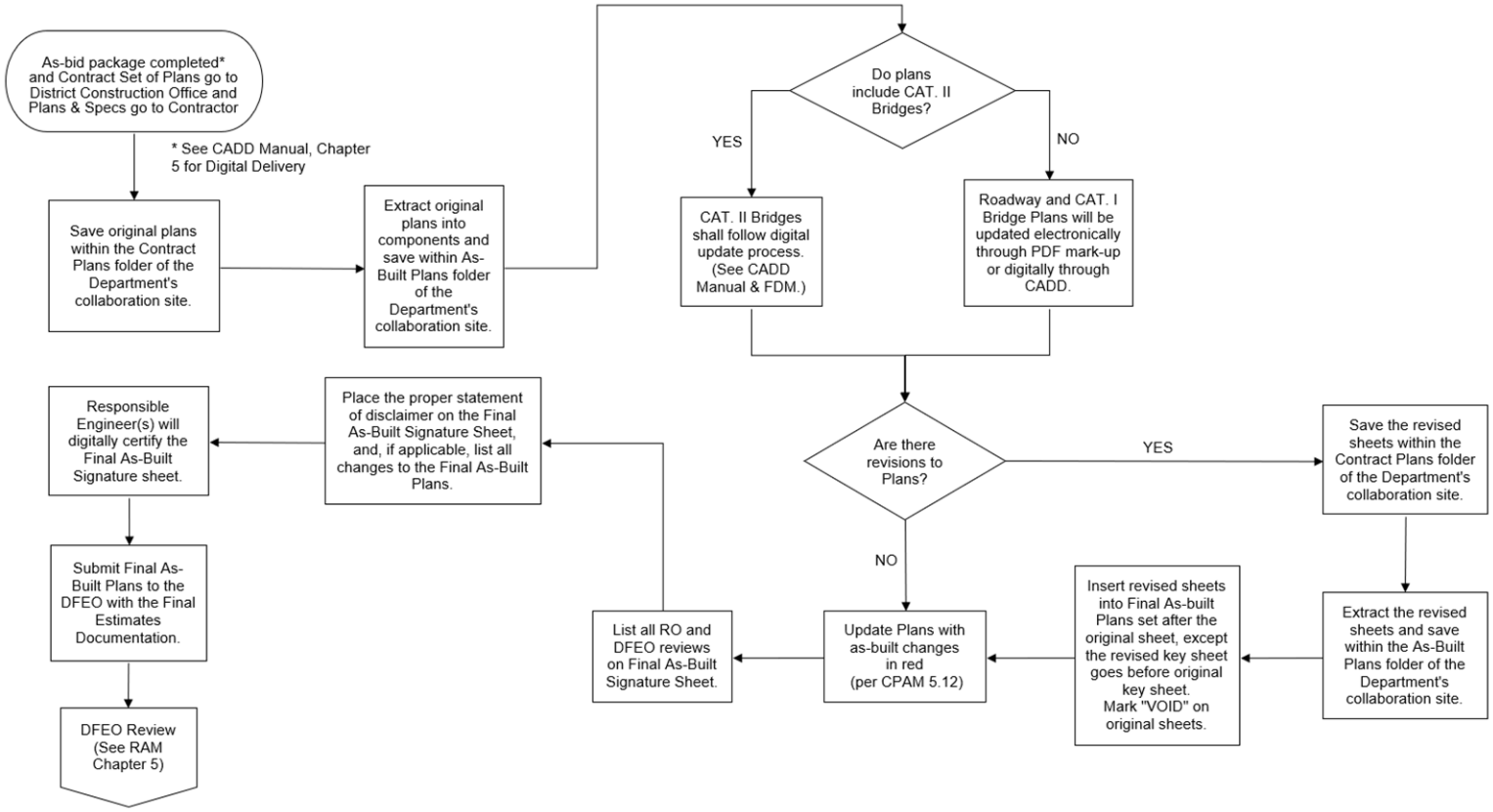
Attachment 5.12-1A.....Final As-Built Plans Process (Resident Office)

Attachment 5.12-1B..... Final As-Built Plans Process (District Final Estimates Office)

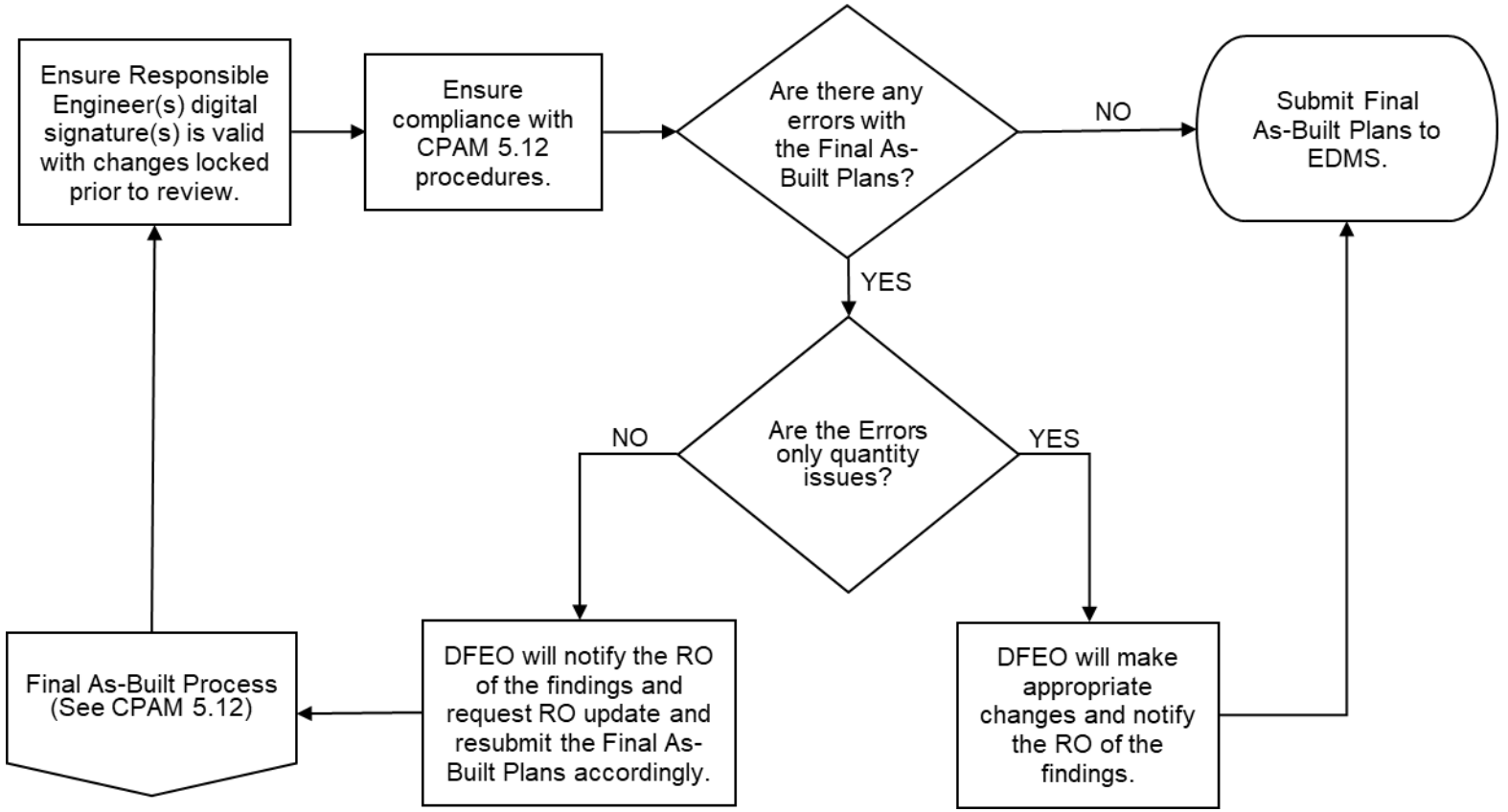
Attachment 5.12-2 .....Key Sheet

Attachment 5.12-3 .....Final As-Built Signature Sheet

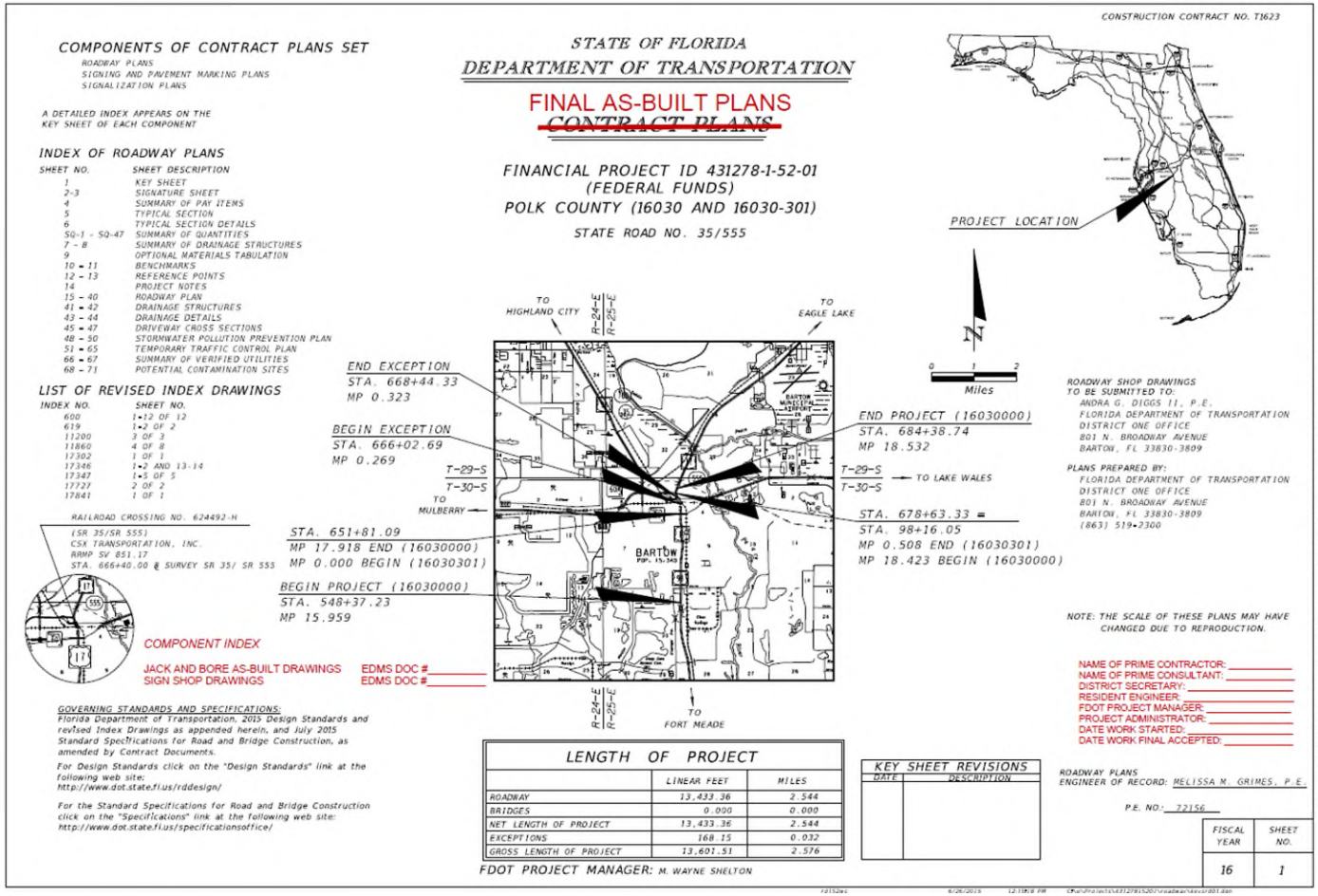
Attachment 5.12-1A
FINAL AS-BUILT PLANS PROCESS
Resident Office



Attachment 5.12-1B
FINAL AS-BUILT PLANS PROCESS
District Final Estimate Office



Attachment 5.12-2
KEY SHEET



CONSTRUCTION CONTRACT NO. T1623

COMPONENTS OF CONTRACT PLANS SET
ROADWAY PLANS
SIGNING AND PAVEMENT MARKING PLANS
SIGNALIZATION PLANS

A DETAILED INDEX APPEARS ON THE KEY SHEET OF EACH COMPONENT

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
1	KEY SHEET
2-3	SIGNATURE SHEET
4	SUMMARY OF PAY ITEMS
5	TYPICAL SECTION
6	TYPICAL SECTION DETAILS
SQ-1 - SQ-47	SUMMARY OF QUANTITIES
7 - 8	SUMMARY OF DRAINAGE STRUCTURES
9	OPTIONAL MATERIALS TABULATION
10 - 11	BENCHMARKS
12 - 13	REFERENCE POINTS
14	PROJECT NOTES
15 - 40	ROADWAY PLAN
41 - 42	DRAINAGE STRUCTURES
43 - 44	DRAINAGE DETAILS
45 - 47	DRIVEWAY CROSS SECTIONS
48 - 50	STORMWATER POLLUTION PREVENTION PLAN
51 - 65	TEMPORARY TRAFFIC CONTROL PLAN
66 - 67	SUMMARY OF VERIFIED UTILITIES
68 - 71	POTENTIAL CONTAMINATION SITES

LIST OF REVISED INDEX DRAWINGS

INDEX NO.	SHEET NO.
600	1 OF 12
619	1 OF 2
11200	3 OF 3
11860	4 OF 8
17302	1 OF 1
17346	1 OF 2 AND 13-14
17347	1 OF 5
17727	2 OF 2
17841	1 OF 1

RAILROAD CROSSING NO. 624492-H
(SR 35/SR 555)
CSX TRANSPORTATION, INC.
RRMP SV 851.17
STA. 666+40.00 @ SURVEY SR 35/ SR 555

COMPONENT INDEX
JACK AND BORE AS-BUILT DRAWINGS EDMS DOC #_____
SIGN SHOP DRAWINGS EDMS DOC #_____

GOVERNING STANDARDS AND SPECIFICATIONS:
Florida Department of Transportation, 2015 Design Standards and revised Index Drawings as appended herein, and July 2015 Standard Specifications for Road and Bridge Construction, as amended by Contract Documents.

For Design Standards click on the "Design Standards" link at the following web site:
http://www.dot.state.fl.us/rddesign/

For the Standard Specifications for Road and Bridge Construction click on the "Specifications" link at the following web site:
http://www.dot.state.fl.us/specificationsoffice/

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FINAL AS-BUILT PLANS
~~CONTRACT PLANS~~

FINANCIAL PROJECT ID 431278-1-52-01
(FEDERAL FUNDS)
POLK COUNTY (16030 AND 16030-301)

STATE ROAD NO. 35/555

PROJECT LOCATION

Miles

END EXCEPTION
STA. 668+44.33
MP 0.323

BEGIN EXCEPTION
STA. 666+02.69
MP 0.269

STA. 651+81.09
MP 17.918 END (16030000)
MP 0.000 BEGIN (16030301)

BEGIN PROJECT (16030000)
STA. 548+37.23
MP 15.959

END PROJECT (16030000)
STA. 684+38.74
MP 18.532

STA. 678+63.33 =
STA. 98+16.05
MP 0.508 END (16030301)
MP 18.423 BEGIN (16030000)

TO HIGHLAND CITY
TO EAGLE LAKE
TO MULBERRY
TO LAKE WALES
TO FORT MEADE
R-24-E
R-25-E
T-29-S
T-30-S
BARTOW

LENGTH OF PROJECT

	LINEAR FEET	MILES
ROADWAY	13,433.36	2.544
BRIDGES	0.000	0.000
NET LENGTH OF PROJECT	13,433.36	2.544
EXCEPTIONS	168.15	0.032
GROSS LENGTH OF PROJECT	13,601.51	2.576

FDOT PROJECT MANAGER: M. WAYNE SHELTON

KEY SHEET REVISIONS
DATE | DESCRIPTION

ROADWAY SHOP DRAWINGS TO BE SUBMITTED TO:
ANDRA G. DIGGS II, P.E.
FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT ONE OFFICE
801 N. BROADWAY AVENUE
BARTOW, FL 33830-3809

PLANS PREPARED BY:
FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT ONE OFFICE
801 N. BROADWAY AVENUE
BARTOW, FL 33830-3809
(863) 519-2300

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

NAME OF PRIME CONTRACTOR: _____
NAME OF PRIME CONSULTANT: _____
DISTRICT SECRETARY: _____
RESIDENT ENGINEER: _____
FDOT PROJECT MANAGER: _____
PROJECT ADMINISTRATOR: _____
DATE WORK STARTED: _____
DATE WORK FINAL ACCEPTED: _____

ROADWAY PLANS
ENGINEER OF RECORD: MELISSA M. GRIMES, P.E.

P.E. NO.: 72156

FISCAL YEAR	SHEET NO.
16	1

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

Attachment 5.12-3
FINAL AS-BUILT SIGNATURE SHEET