



Florida Department of
TRANSPORTATION



Construction Academy
2022

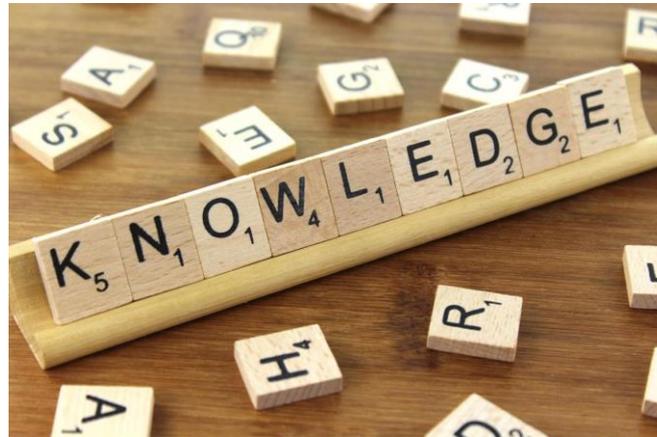
Materials Acceptance and Certification

- PA or **delegate** in responsible charge
- **System user** in the PA role
 - Not necessarily the actual PA



Materials Acceptance and Certification

- What do you need to know to do what you need to do?



Materials Acceptance and Certification

- Method of Acceptance (MOA)
- Specifications Section 6
- FDOT has 2
 - Somebody samples and tests or
 - Somebody certifies
 - APL is a subset of Certification MOA





Materials Acceptance and Certification

- The clay liner shall be of plastic soils consisting of A-5, A-6, A-7 or A-2-7 (AASHTO M145) material with more than 25% passing the No. 200 U.S. standard sieve. The clay soils shall be free of organic content and shall provide a minimum saturated unit weight of 115 pounds per cubic foot.

**MOA = Sampling and Testing
or Certification?**



Project Administrators and MAC

- Sampling and Testing
 - What Test(s)?
 - Who tests?
 - How often?
 - Does it need a qualified sampler, tester, lab?
 - Does it have to be produced at a facility under the Aggregate Control Program or QC Program?



Project Administrators and MAC

- Sampling and Testing
 - What is passing criteria?
 - What happens when there is a failure?
 - How bad is bad enough to remove & replace?
 - If contractor QC,
 - What is VT frequency?
 - What is the comparison criteria?
 - What is resolution process?



Project Administrators and MAC

Certification

931-1.1.5 Acceptance of Steel Bars: Acceptance of reinforcing steel shall be based on the manufacturer being on the National Transportation Product Evaluation Program (NTPEP) list of compliant producers, samples taken by the Department, and manufacturer's certified mill analysis. The test results shall meet the specification limits of the ASTM or AASHTO designation for the size, grade and any additional requirements. **The manufacturer's certified mill analysis for each heat, size, and grade per shipment of reinforcing steel shall be provided to the Engineer prior to use.**

The Engineer will select samples representing each LOT of reinforcing steel. A sample is defined as the reinforcing steel and the certified mill analysis corresponding to the sample. A LOT is defined as the weight of all bars, regardless of size, grade or pay item in consecutive shipments of 100 tons or less. Samples shall be cut from bundled steel that is shipped to the jobsite.

Projects with less than two tons of bars do not require Department sampling.

**Certification
MOA**

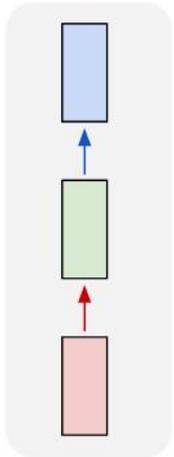
**Sampling &
Testing MOA
that includes a**

931-1.1.5 ACCEPTANCE OF STEEL BARS

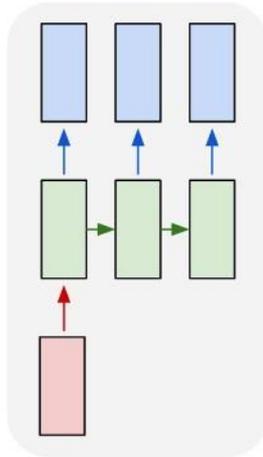
Project Administrators and MAC

- MOA is not a one-to-one relationship to anything

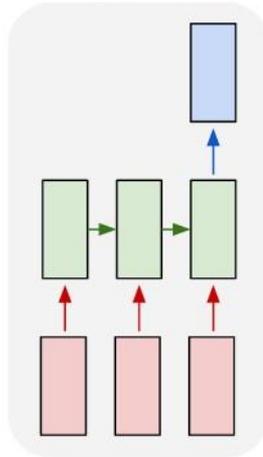
one to one



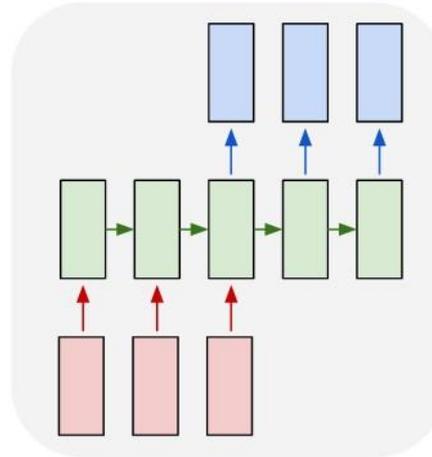
one to many



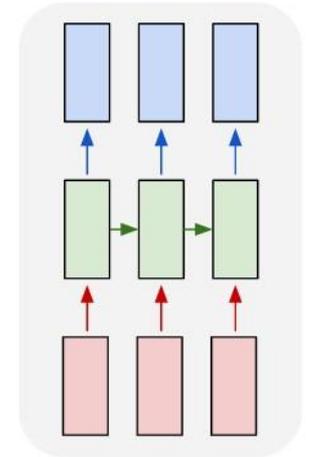
many to one



many to many



many to many





Project Administrators and MAC

0715 19 13 - HIGH MAST LIGHT POLE, FURNISH AND INSTALL, 120'

- 1 346 - Portland Cement Concrete
- 2 415 - Reinforcing Steel
- 3 925 - Curing Materials for Concrete
- 4 931 - Metal Accessory Materials for Concrete Pavement and Concrete Structures
- 5 415 - Reinforcing for Concrete
- 6 105 - Incidental Precast Concrete Product Certification
- 7 346 - Structural Portland Cement Concrete

&

APL

Last Updated By

On

0715 19 13 - HIGH MAST LIGHT POLE, FURNISH AND INSTALL, 120'

- | | | Last Updated By | On |
|---|-------------------------------------|-----------------|-----------|
| 1 | 415 - Reinforcing for Concrete | Susan Musselman | 10/2/2017 |
| 2 | 715 - Highway Lighting System | Susan Musselman | 9/4/2018 |
| 3 | 925 - Curing Materials for Concrete | Susan Musselman | 10/2/2017 |

Pay Item

Material

Last Updated By

	Material	Last Updated By	On	
00400 5 16 - HANDRAIL CONC (MISCELLANEOUS)				
1	346 - Structural Portland Cement Concrete	Susan Musselman	12/17/2019	Disassociate
0400 1 1 - CONCRETE CLASS I, CULVERTS				
2	346 - Structural Portland Cement Concrete	Susan Musselman	12/17/2019	Disassociate
0400 1 2 - CONCRETE CLASS I, ENDWALLS				
3	346 - Structural Portland Cement Concrete	Susan Musselman	12/17/2019	Disassociate
0400 1 5 - CONCRETE CLASS I, SUBSTRUCTURE				
4	346 - Structural Portland Cement Concrete	Susan Musselman	12/17/2019	Disassociate
0400 1 6 - CONC CLASS I(COUNTERWEIGHT)				
5	346 - Structural Portland Cement Concrete	Susan Musselman	12/17/2019	Disassociate
0400 1 8 - CONC CLASS I(BULKHEAD)				
6	346 - Structural Portland Cement Concrete	Susan Musselman	12/17/2019	Disassociate
0400 1 11 - CONCRETE CLASS I, RETAINING WALLS				
7	346 - Structural Portland Cement Concrete	Susan Musselman	12/17/2019	Disassociate
0400 1 12 - CONC CLASS I(TRENCH SLABS)				
8	346 - Structural Portland Cement Concrete	Susan Musselman	12/17/2019	Disassociate

Showing 1 to 50 of 2756 [Show Next 50](#) [Export Results](#)



Project Administrators and MAC

Do not use metal bar supports to support FRP reinforcing bars.

415-5.13.3 Plastic Bar Supports and Spacers: Use non-stackable plastic bar supports and spacers. Bar supports shall be able to meet the concentrated load requirements of 415-5.13 within a working temperature range of 20 to 150°F. Spacers shall be able to provide sufficient strength to support reinforcing steel in the required position without deformation and relaxation under job conditions. For drilled shafts, use wheel spacers with a smooth perimeter surface.

Submit protection from sunlight until placed in the form and mold in a configuration which does not restrict concrete flow and consolidation.

All plastic bar supports and spacers shall have a maximum water absorption of 0.5% at 7 days as per ASTM D570. Plastic bar supports and spacers made of recycled plastic products must meet the additional requirements of Section 972.

Submit to the Engineer independent lab test data and certification verifying that the plastic spacers meet the requirements specified herein.

Use plastic bar supports listed on the Department's APL. Provide each individual bar support with an identification number unique to the particular model permanent

Certification
MOA

APL



Project Administrators and MAC

- Multiple scenarios and we don't know what the Contractor is going to use
- PA is responsible for identifying the MOA and noting when one isn't used

Project Administrators and MAC

- Light Pole Base
- Can be precast
 - IPC plant on the Contractor QC Plan
 - Producer's certification (MAC Material 105)



Project Administrators and MAC

- Cast in place
 - Structural Concrete
 - Production Facility and Drilled Shaft Mix Design on Contractor QC Plan
 - Reinforcing Steel
 - Spacers
 - Curing Compound



Materials Acceptance and Certification



- 334 Structural
- 337 Friction
- 330 Smoothness



Materials Acceptance and Certification

Pay Item	Material	Last Updated By
<input type="text" value="0334 22 12 - SUPERPAVE ASPHALTIC CON"/>	<input type="text" value="Type Material Id or Name"/>	<input type="text" value="Start typing user name to get list"/>

Pay Item	Last Updated By	On
330 - Hot Mix Asphalt – General Construction Requirements		
1 0334 22 12 - SUPERPAVE ASPHALTIC CONC (TRAFFIC 2) (1 1/4")	Marcus Madison	5/20/2016
334 - Superpave Asphalt Concrete		
2 0334 22 12 - SUPERPAVE ASPHALTIC CONC (TRAFFIC 2) (1 1/4")	Marcus Madison	4/28/2016
916 - Bituminous Materials		
3 0334 22 12 - SUPERPAVE ASPHALTIC CONC (TRAFFIC 2) (1 1/4")	Susan Musselman	9/29/2016

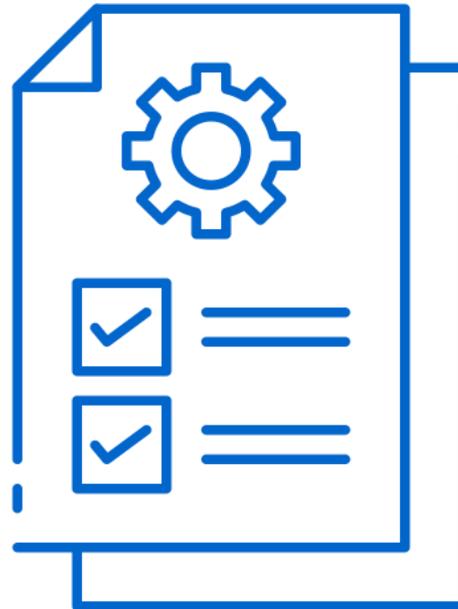
Project Administrators and MAC

- What does this have to do with the PA role in MAC?A yellow thinking face emoji with a hand on its chin, looking thoughtful.
- It's not just failing material
- You gotta know your contract!!



Materials Acceptance and Certification

Contractor QC Plan





Materials Acceptance and Certification

- Review and accept or reject Contractor QC Plan Materials
 - Are all materials included?
 - They don't all have to be there at the beginning
 - Flagged entries
 - Technicians
 - Labs 
 - Production Facilities



Materials Acceptance and Certification

- Lab Status is not an indicator if the lab has the test methods for the material

Structural Concrete (Addendum 11)

Technicians [18]

Labs [2]

Lab	City	Lab Status
10	Pensacola, FLORIDA	Qualified
10	Pensacola, FLORIDA	Qualified

Does lab have structural concrete test methods in a valid status?



Materials Acceptance and Certification

- MAC has a report
 - Lab Tab
 - Contractor QCP Lab Check
- Enter the lab id(s) from the Contractor QC Plan for each material

The screenshot shows a web form titled "Contractor QCP Lab Check". It contains three sections for selecting lab IDs:

- Asphalt Lab(s)**: A dropdown menu with the selected value "A0999 - John Doe Roads & Bridges, Inc. ✖". Below it is a text input field with the placeholder "Start typing Lab name or Lab ID to get a li".
- Structural Concrete Lab(s)**: Two dropdown menus. The first has "10998 - John Doe Roads & Bridges, Inc. ✖" and the second has "10999 - John Doe Roads & Bridges, Inc. ✖". Below them is a text input field with the placeholder "Start typing Lab name or Lab ID to get a li".
- Earthwork Lab(s)**: A dropdown menu with "10998 - John Doe Roads & Bridges, Inc. ✖" and a text input field with the placeholder "Start typing Lab name or Lab ID to get a li".

At the bottom, there is a "Report Format" section with a dropdown menu set to "PDF" and a "Submit" button.



Florida Department of TRANSPORTATION



Lab ID: I020	Lab Status: Qualified	Suitable for Earthwork : YES	Test status
AASHTOT267-Determination of Organic Content in Soils by Loss on Ignition			Valid
AASHTOT27-Sieve Analysis of Fine and Coarse Aggregates			Valid
AASHTOT88-Particle Size Analysis of Soils			Valid
AASHTOT89-Determining the Liquid Limit of Soils			Valid
AASHTOT90-Plastic Limit and Plasticity Index of Soils			Valid
AASHTOT99-Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop			Valid
FM1-T011-Total Amount of Material Finer Than 0.075 mm (No. 200) Sieve in Aggregate			Valid
FM1-T180-Moisture Density Relations of Soils Using a 10-lb. (4.54kg) Rammer and an 18-in. (457mm) Drop			Valid
FM5-515-Limerock Bearing Ratio			Valid

Lab ID: I020	Lab Status: Qualified	Suitable for Concrete : YES	Test status
ASTMC1231-Use of Unbonded Caps in Determination of Compressive Strength of Hardened Concrete Cylinders			Valid Unbonded Caps
ASTMC39-Compressive Strength of Cylindrical Concrete Specimens			Valid
ASTMC511-Moist Curing Room			Valid
ASTMC617-Capping Cylindrical Concrete Specimens			Valid Sulfur Mortar

Lab ID: A0	Lab Status: Qualified	Suitable for Asphalt : YES	Test status
AASHTOT312-Gyrations Compaction			Valid
FM1-T030-Mechanical Analysis of Extracted Aggregate			Valid
FM1-T166-Bulk Specific Gravity of Compacted Hot Mix Asphalt (HMA) Specimens			Valid
FM1-T209-Maximum Specific Gravity of Asphalt Paving Mixtures			Valid
FM5-563-Quantitative Determination of Asphalt Content from Asphalt Paving Mixtures by the Ignition			Valid



Materials Acceptance and Certification

Lab ID:103	l)	Lab Status:Qualified	Suitable for Earthwork : NO	Test status
AASHTOT267-Determination of Organic Content in Soils by Loss on Ignition				Not Assigned
AASHTOT27-Sieve Analysis of Fine and Coarse Aggregates				Suspended
AASHTOT88-Particle Size Analysis of Soils				Suspended
AASHTOT89-Determining the Liquid Limit of Soils				Valid
AASHTOT90-Plastic Limit and Plasticity Index of Soils				Valid
AASHTOT99-Moisture-Density Relations of Soils Using a 2.5-kg (5.5-lb) Rammer and a 305-mm (12-in.) Drop				Valid
FM1-T011-Total Amount of Material Finer Than 0.075 mm (No. 200) Sieve in Aggregate				Valid
FM1-T180-Moisture Density Relations of Soils Using a 10-lb. (4.54kg) Rammer and an 18-in. (457mm) Drop				Valid
FM5-515-Limerock Bearing Ratio				Valid

Materials Acceptance and Certification



Materials Acceptance and Certification

Notification of Placing Order – Section 105



Commercial Inspection

Order materials sufficiently in advance of their incorporation in the work to allow time for sampling, testing and [*commercial*] **inspection**. Notify the Engineer prior to placing orders for materials.

Materials Acceptance and Certification



Bridge Mounted Sign





Materials Acceptance and Certification

- Review the tab to ensure the Contractor designated items that require commercial inspection
- Make sure the fabricator(s) are listed



Materials Acceptance and Certification

Overhead Cantilever

Production Facilities [1]

Plastic Pipe

Precast Pipe

Precast Drainage Structures

Structural Concrete (Addendum 5)

Commercial Inspection

Are there steel and/or miscellaneous metal items on this project that require commercial inspection per section 105 Notification of Placing Order? [?]

Yes

Items to be Inspected	Component
700 - Highway Signing	Overhead Truss Cantilever
700 - Highway Signing	Overhead Truss Span
700 - Highway Signing	Sign Panel Overhead Mount



Materials Acceptance and Certification

- 3rd question – are there items that will not be commercially inspected?
 - High Strength Bolts for High Mast Lighting
 - If yes, a reminder is placed on the Contractor QC Plan

Are there steel and miscellaneous metal items on the project that will NOT have commercial inspection?

Yes

The Contractor should collect certified test reports and submit them to the PA on items not receiving commercial inspection.



Materials Acceptance and Certification

- 2nd question - PA lists items that don't require inspection, but you want inspected, field assistance, etc.

Are there other items on this project such as specialty fabrications, field assistance, etc. where commercial inspection should be performed?

Yes ▾

Detailed Scope Of Work





Florida Department of TRANSPORTATION



Materials Acceptance and Certification System

User: -- [Log In](#)

[Help](#)

[Reports](#)

INDUSTRY NOTIFICATION - [posted June 15, 2021](#)

MAC is the System of Record for data related to the Quality Assurance Procedure for Construction.

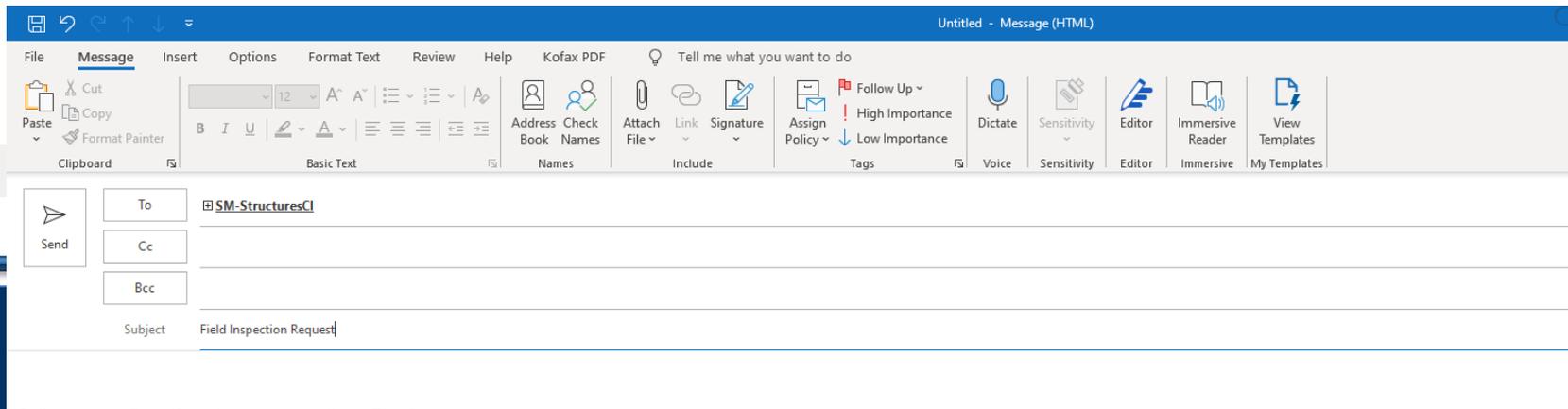
Listings for Production Facilities and Laboratories are now generated from MAC by selecting the Reports menu option and selecting the specific production facility or laboratory listing. You do not need MAC access or to log into MAC to generate the reports. Just select the Reports menu option to be taken to the Reports screen.

FDOT is migrating users from district domains to the DOT domain. MAC users who have migrated must use the DOT\ user id to log into the FDOT sign in portal. If you have migrated do not use your old domain; for example D1\.

The Earthwork Records System (ERS) is now available on the MAC menu but is not ready for use. The implementation date has been extended from **July 1, 2021 to October 1, 2021**. Training will be provided before full implementation for projects let on or after October 1, 2021. For more information, contact your local District Materials and Research Office Earthwork Section

For information on the material types for the Steel, Miscellaneous Metals and Coatings Quality Control Program contact the State Materials Office Commercial Inspection unit at SM-StructuresCI@dot.state.fl.us

Additional information on MAC is located at the following address: <http://www.fdot.gov/materials/mac/>.





Materials Acceptance and Certification

Job Guide Schedule (JGS)



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Job Guide Schedule

FDOT State Materials Office, 5007 N.E. 39th Avenue, Gainesville, FL 32609 (352) 955-6600

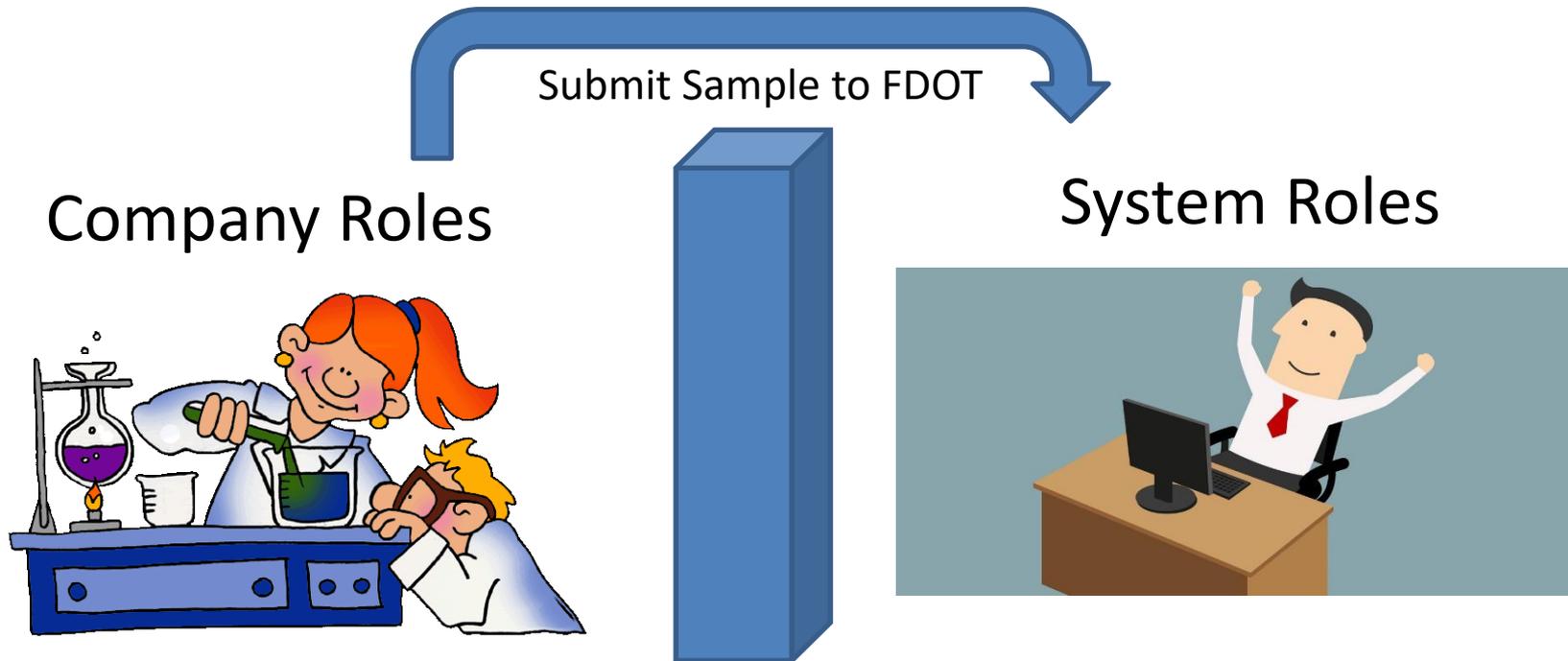
NOTE: The requirements of the contract and/or Florida Specifications take precedence over this guide schedule.

Materials Acceptance and Certification

Sample Status Progress



Materials Acceptance and Certification





Materials Acceptance and Certification

- Track sample status of open samples
- All project samples, not just VT
- A Finalized sample = or \neq "Closed"

Materials Acceptance and Certification

Finalized = Closed

- Logged
- Received
- Tested
- Submitted
- Finalized
 - Nothing else - DONE



Materials Acceptance and Certification

Finalized ≠ Closed

- Logged
- Received
- Tested
- Submitted
- Finalized
- ***Compares***



Some place else
to go after sample
screen



Materials Acceptance and Certification

- Sample search screen **by sample status**

[Generate Asphalt Random Number](#) [My Samples](#) [Search](#)

Filter Options Click

Sample Category <input type="text"/>	Material/Spec ID <input type="text" value="Type Spec Id or Name"/>	Material/Spec Name (Contains) <input type="text"/>	Category Name (Contains) <input type="text"/>	Sample Purpose (Contains) <input type="text"/>	Sample Levels <input type="text"/>	Methods of Acceptance <input type="text"/>
Company <input type="text" value="Start typing Company name to get a list of"/>	Created By <input type="text" value="Start typing user name to get list of users"/>	Sample Initiated Date <input type="text"/>				
Last Updated By <input type="text" value="Start typing user name to get list of users"/>	Last Updated On <input type="text"/>	Date Sample Taken (On or After) <input type="text"/>	Date Sample Taken (Before) <input type="text"/>			
Sample Status						
<input type="checkbox"/> Finalized	<input type="checkbox"/> Logged	<input type="checkbox"/> Pending Finalization	<input type="checkbox"/> Sample Data and Test Correction Needed	<input type="checkbox"/> Sample Data Correction Needed	<input type="checkbox"/> Submitted for Lab Testing	<input type="checkbox"/> Test Correction Needed



Material

ification

Open Sample Report

Contract
Type Contract Number/Description

Project ID
Type Item/Item Segment

Date Sample Taken On or After

Date Sample Taken Before

Sample Status
*

Material Section

Managing District

Lab ID
Start typing Lab name or Lab ID to get a list

Material ID
Type Material Id or Name

Sample Category

Missing Comparison/Resolution (for Open Samples Awaiting PA)

ERS Samples only?
 ✓

Report Format
*

Submit



Materials Acceptance and Certification

- Finalize **project** samples
 - Even ones tested by SMO

Sample 2200897939 [Pending Finalization]

Finalize Sample

- BUT FIRST



Materials Acceptance and Certification

- Use checklists to finalize samples
- Asphalt
 - Plant
 - Roadway
- Soils
- ERS
- Structural Concrete



M

ation

Soils/Earthwork Materials

(Material IDs 120, 125, 145, 160, and 548)

November 15, 2017

- A. Check to see that the following sample header is accurate. These items should be returned for sample data correction if they are incorrect:**
- Aggregate Mine Production Facility Id (if applicable)
 - Sample Number
 - LOT Number
 - Ensure that all samples identify the LOT Number
 - Ensure Verification Samples identify all QC LOTs that the sample represents in the LOTs represented field
- B. Check the following test data. These items can be returned for test correction if they are known to be incorrect:**
- Ensure test data is properly reported and look reasonable
 - Ensure AASHTO T88 soil gradation analysis does not have negative or null values for total percent passing
 - Accurate soil gradation analysis is required and dependent upon on accurate reporting of AASHTO M145 soil classification
- C. Check to ensure the following qualifications are valid. These would only be returned if the reason for the issue is data entry error. Do not return if the information that triggered the issue is correct:**
- Review each entered test method to ensure the Lab/Tech qualification status is valid for both the sampler and tester
 - Ensure correct TIN number is assigned to sample
 - Ensure that the Base Material Aggregate Production Facility is in approved status if applicable
 - Ensure that the laboratory is qualified in the appropriate test methods
- D. Other Verifications:**
- Ensure that all LOTs are sampled, tested, identified and reported on all samples (Refer to Specifications for frequency of sampling and testing)
 - Tests that are not performed have a note explaining the disposition of the material



Materials Acceptance and Certification

- B. Check the following test data. These items can be returned for test correction if they are known to be incorrect:**
- Ensure test data is properly reported and look reasonable
 - Ensure AASHTO T88 soil gradation analysis does not have negative or null values for total percent passing
 - Accurate soil gradation analysis is required and dependent upon on accurate reporting of AASHTO M145 soil classification



Materials Acceptance and Certification

Sieve Analysis

Sieve Size	Sieve Added	Mass Retained (g)	% Retained	% Finer	% Finer (Total)
3"	No				
2"	No				
1 1/2"	No				
1"	No				
3/4"	Yes	50.19	14.16	85.84	85.8
1/2"	No				
3/8"	Yes	62.40	17.61	82.39	82.4
#4	Yes	84.44	23.83	76.17	76.2
#8	No				
#10		128.90	36.37	63.63	63.6
#16	No				
#30	No				
#40		4.68	3.63	96.37	61.3
#50	Yes	16.52	12.82	87.18	55.5
#60	No				
#100	Yes	146.75	113.86	-13.86	-8.8
#200		82.59	64.08	35.92	22.9

Negative value check status?

Fail

Does not meet target/limit [Negative value check status? Equals (ignoring case) 'Pass']



Materials Acceptance and Certification

Specimen Info

Type of Specimen	4" x 8" Cylinder		
Is Hardened Density Needed?	No		
Age	28 Days		
	Specimen 1	Specimen 2	Specimen 3
Length 1 (in)	8.00	8.00	8.00
Diameter 1 (in)	4.01	4.00	3.99
Diameter 2 (in)	3.98	3.98	3.98
Average Diameter (in)	4.00	3.99	3.99
Area (in ²)	12.56637	12.50362	12.50362
Max Load (lbs)	70,300	72,545	7,915
Fracture Type	5	5	5
End Treatment Used	Unbonded Pads	Unbonded Pads	Unbonded Pads
Compressive Strength (psi)	5,594	5,802	633

Potential Error. Review Max Load Inputs

Average Compressive Strength (psi)

4,010

Does not meet target/limit [Average Compressive Strength >= 5,500]



Materials Acceptance and Certification

Filter Options

Sample Category Project ▼	Material/Spec ID 346 - Structural Portland Cement Concrete *	Material/Spec Name (Contains) [Text Box]	Category Name (Contains) [Text Box]
Company Start typing Company name to get a list of	Created By Start typing user name to get list of users	Sample Initiated Date [Text Box]	
Last Updated By Start typing user name to get list of users	Last Updated On [Text Box]	Date Sample Taken (On or After) [Text Box]	Date Sample Taken (Before) [Text Box]
Sample Status <input type="checkbox"/> Finalized <input type="checkbox"/> Logged <input checked="" type="checkbox"/> Pending Finalization <input type="checkbox"/> Removed for Rework <input type="checkbox"/> Sample Data and Test Correction Needed			
Sampled By Type Technician Name or TIN	Contact Name (Contains) [Text Box]	Tester Type Technician Name or TIN	
Contract T3701: CRS CONTRACTS [ANDERSON] *	Project Type Item/Item Segment	Pay Items Type Pay Item Number/Description	
Managing District [Dropdown]	Mix Design Type [Dropdown]	Mix Design 07-1241-05 *	

Currently selected criteria will yield 8 results

Search [Button] Clear Search [Button]



Florida Department of TRANSPORTATION



Materials Acceptance and Certification

1	2100755868	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	VT	Pending Finalization	2/24/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40006V	07-1241-05	6
2	2100756262	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	2/24/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40005Q	07-1241-05	5
3	2100756269	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	2/24/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40006Q	07-1241-05	6
4	2100756285	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	2/24/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40007Q	07-1241-05	7
5	2100761688	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	VT	Pending Finalization	3/8/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40010V	07-1241-05	6
6	2100762095	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	2/26/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40008Q	07-1241-05	8
7	2100762746	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	3/4/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40009Q	07-1241-05	9
8	2100773893	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	3/8/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40010Q	07-1241-05	10

Showing 1 to 8 of 8 [Export Results](#)



Florida Department of TRANSPORTATION



Materials Acceptance and Certification

[Generate Asphalt Random Number](#) [My Samples](#) [Search](#)

Sample 2100755868 [Pending Finalization]

Go To Sample

[Finalize Sample](#) [Return Sample](#) [Delete Sample](#) [View Sample Transmittal Information for Print](#) [View Sample Certificate of Analysis for Print](#) [View History](#)

Sample ID	Sample Status
2100755868	Pending Finalization

Sample Initiated By	Sample Initiated Date	Last Updated By	Last Updated On
Brian Meadows	2/25/2021	CRYSTAL ZURAFF	3/26/2021

Material Certification
[220495-7-52-01 \[Pending\]](#)



Florida Department of TRANSPORTATION



Materials Acceptance and Certification

Currently selected criteria will yield 8 results

Sample ID ^	MAC Spec	Sample Level	Sample Status	Date Sample Taken	Contract/Project(s)	FDOT Sample Number	Mix Design	LOT #	Sublot #	LOTs Represented
1	2100756262	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	2/24/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40005Q	07-1241-05	5	
2	2100756269	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	2/24/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40006Q	07-1241-05	6	
3	2100756285	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	2/24/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40007Q	07-1241-05	7	
4	2100761688	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	VT	Pending Finalization	3/8/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40010V	07-1241-05	6	
5	2100762095	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	2/26/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40008Q	07-1241-05	8	
6	2100762746	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	3/4/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40009Q	07-1241-05	9	
7	2100773893	346 - Structural Portland Cement Concrete, Supplemental Specification, 01/2020, v1.9	QC	Pending Finalization	3/8/2021	T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267	CC40010Q	07-1241-05	10	



Materials Acceptance and Certification

- If the FDOT sample number is wrong, **can you send the sample back for corrections?**

CC403v

cc4003v



Materials Acceptance and Certification

- If the Sampled By TIN is flagged, **do** you send it back?

Sample Information		
Company ABC Roads and Bridges, Inc.		
Method of Acceptance Sampling And Testing	Sample Level QC	Category Embankment Material using Standard Proctor
Sampled By Tech M24578064 *	Date Sample Taken 12/21/2021	



Materials Acceptance and Certification

- If the AASHTO T 88 test has null or negative results, do you send it back?

Materials Acceptance and Certification

- If the MAC Spec category is incorrect, **do** you send the sample back?





Materials Acceptance and Certification

Sample Information

Company
[Redacted]

Method of Acceptance Sampling And Testing	Sample Level QC	Category Class I (3000 PSI) / Conventional	Structural Concrete Production Facility [Redacted]	Mix Design 06-1649	Allow any Approved Mix Design No	Mix Design Category Class II (3400 PSI) / Conventional *
--	--------------------	---	---	-----------------------	-------------------------------------	--

Sampled By Tech [Redacted]	Date Sample Taken 9/17/2021
-------------------------------	--------------------------------

Higher Class in Lieu of Lower Class
No

FDOT Sample # (CC40001Q) CC20001Q	Quantity Represented 4.00	Unit of Measure Cubic Yard(s)	Batch/Delivery Ticket # 650886
--------------------------------------	------------------------------	----------------------------------	-----------------------------------

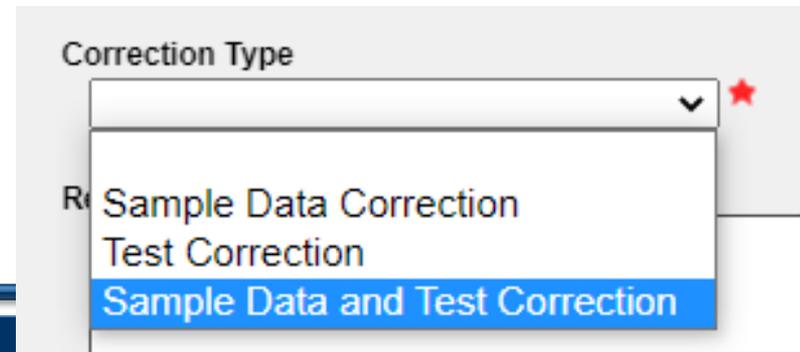
LOT #
1

Intended Use
Barrier Wall



Materials Acceptance and Certification

- If the FDOT sample number and the AASHTO T 88 test results need to be updated, you need to select the Sample Data & Test Correction option



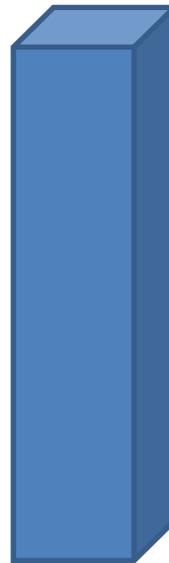
Correction Type

Re Sample Data Correction
Test Correction
Sample Data and Test Correction

Materials Acceptance and Certification



Company Roles



System Roles





Materials Acceptance and Certification

Sample Data and Test Correction Needed

Sample Data Correction Needed

Submitted for Lab Testing

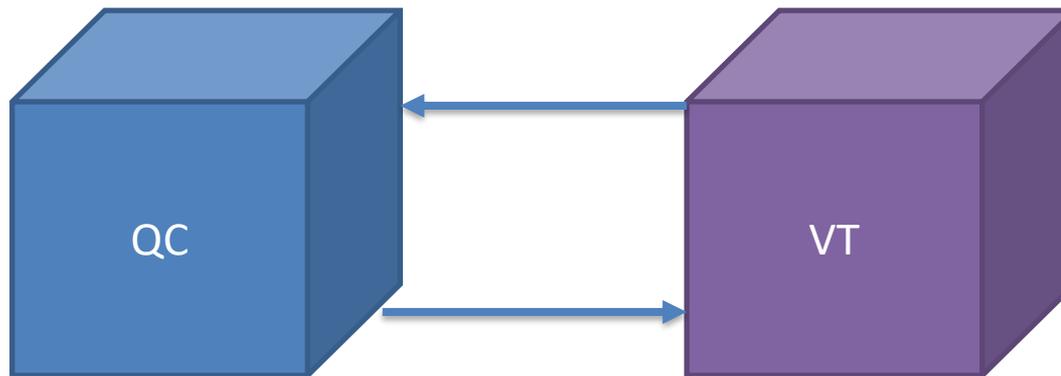
Test Correction Needed

- Need to be back in Pending Finalization status
 - User didn't make change
 - User made change and didn't resubmit

[Correction Made - Submit for FDOT Verification](#)

Materials Acceptance and Certification

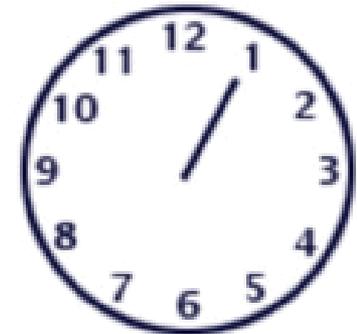
Project Comparison Packages





Materials Acceptance and Certification

- Structural concrete comparison packages
- How long does the lab have to perform resolution?





Materials Acceptance and Certification

- ***Don't wait*** for all the samples in the package to be finalized to create the package
- As ***soon*** as you finalize the original and verification samples, create the comparison package and ***run the comparison***
- Add associated samples later



Materials Acceptance and Certification

- Are samples in a comparison package with a comparison status of **Compares** open or closed?



Materials Acceptance and Certification

- Are samples in a comparison package with a comparison status of **Does Not Compare** open or closed?



Materials Acceptance and Certification

- How do you get them closed?
- 2 ways
 - Perform (Run) Resolution and get **any** resolution status or
 - If resolution is required and not performed, designate it as Resolution Not Performed



Materials Acceptance and Certification

- Get orphan samples into incomplete packages
- Incomplete packages don't always end up as an Exception

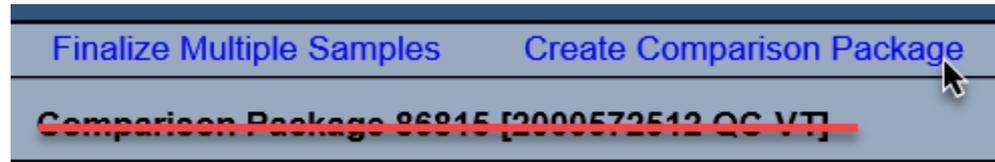
Incomplete Comparison Package Reason Code ★

Comparison Test(s) Not Performed
Missing or Damaged IV Sample
Missing or Damaged QC Sample
Missing or Damaged VT Sample
Random Number Did not Come Up
Sample(s) in LIMS
Small Quantities



Materials Acceptance and Certification

- Finalize samples in groups
- Then create comparison packages



- When you select this option...



Materials Acceptance and Certification

- These filters come from the last sample you finalized

Create Comparison Package Go To Comparison

1) Select MAC Spec/Comparison Logic

Material/Spec 346 - Structural Portland Cement Concrete *	Spec Edition 346 - Structural Portland Cement Concrete, Project, Supplemental Specification, 01/2020, v1	Spec Category Class IV (5500 PSI) / Increased Slump	Comparison Package Definition Compressive Strength
---	--	---	--

Incomplete Package

2) Filter Sample List

Contract/Project
T3701 / 220495-7-52-01: SR 369 (US 319) FROM SOUTH OF EAST IVAN ROAD TO NORTH OF SR 267 ✕

3) Additional Optional Filters

Mix Design <input type="text" value="Type Mix Design Name"/>	LOT # <input type="text"/>
Sampled On or After <input type="text"/>	Sampled Before <input type="text"/>
Production Facility <input type="text" value="Type Production Facility Name"/>	Product <input type="text" value="Start typing product name to get list of products"/>

Doesn't remember mix design

Materials Acceptance and Certification

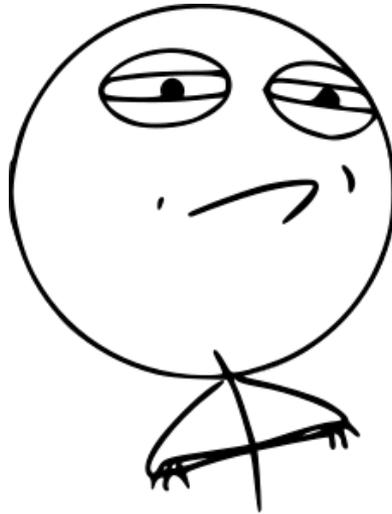
MC Review





Materials Acceptance and Certification

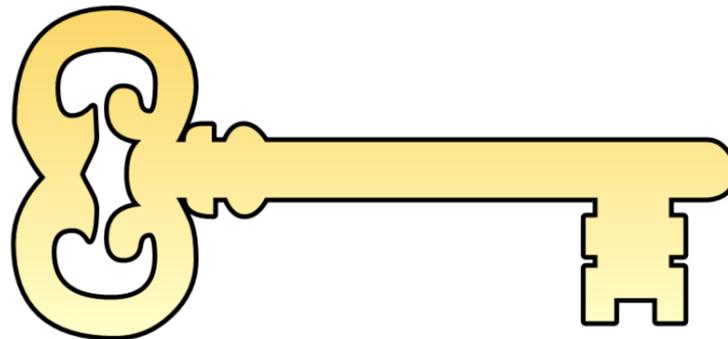
MAC Issues for PA





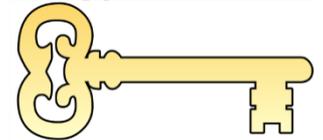
Materials Acceptance and Certification

Changing Key Fields on a Sample

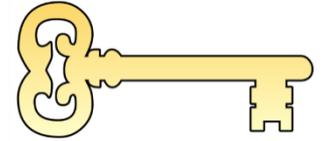
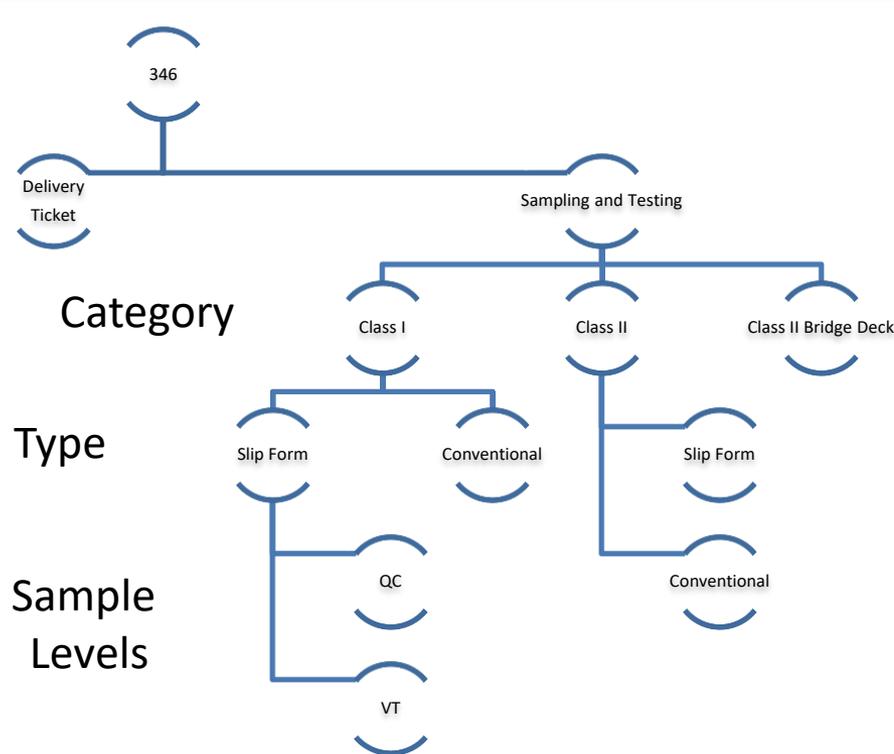


Materials Acceptance and Certification

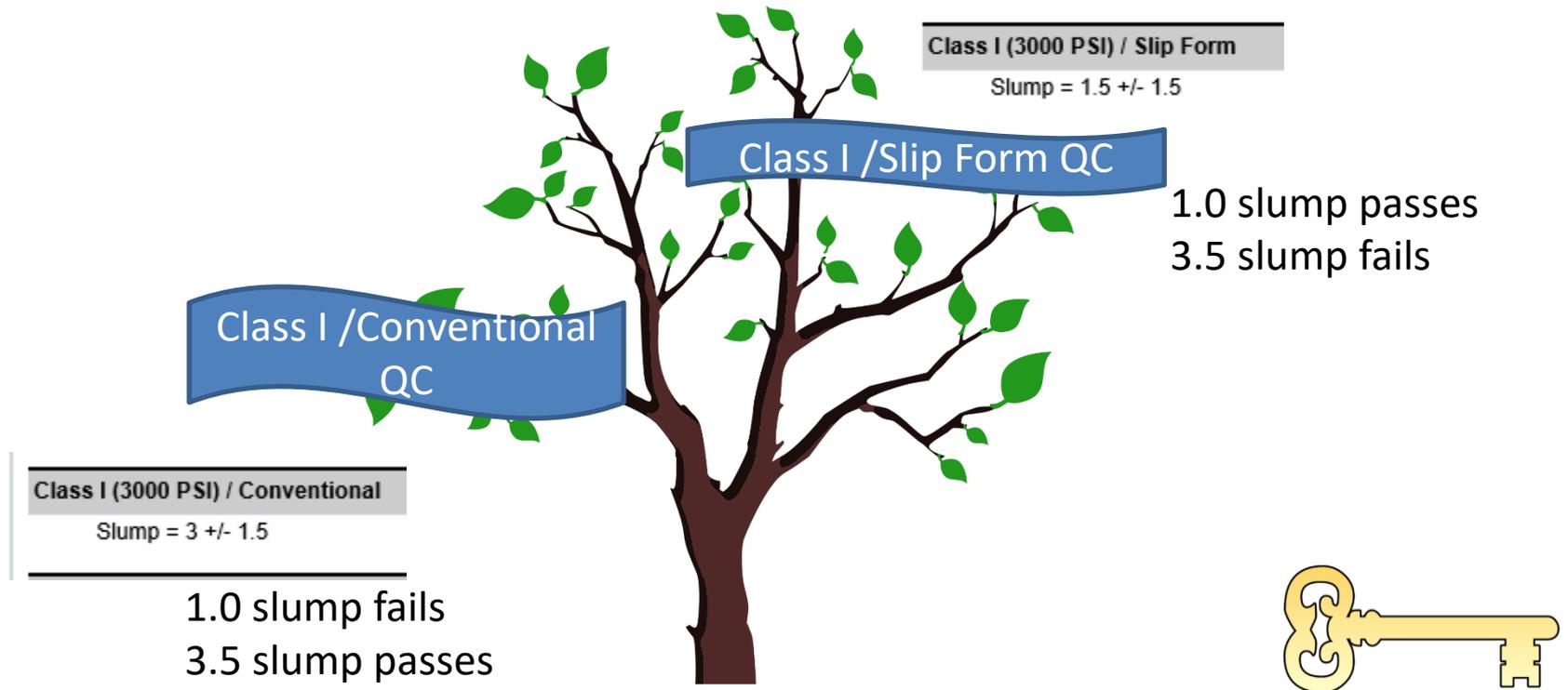
- User selected wrong MAC Spec, category, sample level, etc. on sample
- Don't change key fields
 - The system will **let** you, but it won't **work**
- New Sample Created Sample with correct key fields & processed through life cycle
- Then incorrect sample must be deleted



Materials Acceptance and Certification



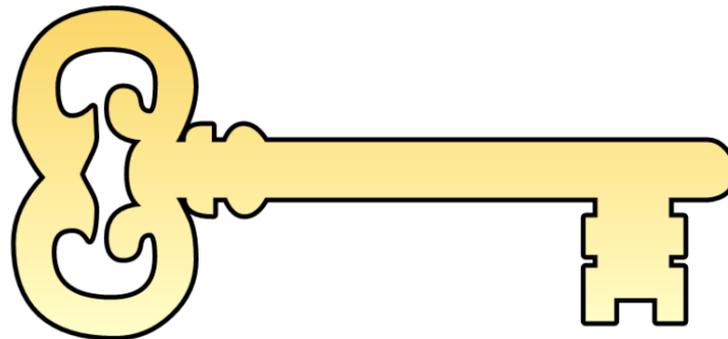
Materials Acceptance and Certification





Materials Acceptance and Certification

If you're not sure,
contact the DAC





Materials Acceptance and Certification

MAC workbook doesn't match contract let date

Contract	Type	Status
E7N54	DISTRICT CONSTRUCTION CONTRACT	EXECUTED CONTRACTS
Vendor Number	Vendor Name	Managing District
F273534317004	GOSALIA CONCRETE CONSTRUCTORS,	DISTRICT 7 - TAMPA

Dates						
Advertised	Awarded	Begin	End	Executed	Letting	
12/18/2020	2/19/2021	2/23/2021	7/22/2021	2/23/2021	1/29/2021	
Time Begin	Work Begin	Estimated Completion	Work Completed	Conditional Acceptance	Final Acceptance	
8/16/2021	8/16/2021	1/25/2022				

Material Information

Sample Category	Contracts	Projects
Project	E7N54: DISTRICT CONSTRUCTION CONTRACT [GOSALIA CONCRETE CONSTRUCTORS,]	434807-3-E
Pay Items		
Material	MAC Spec	
120 - Excavation and Embankment	120 - Excavation and Embankment, Supplemental Specification, 01/2009, v1.15	



Materials Acceptance and Certification

- When a new FDOT workbook with method of acceptance changes is published, we create a new MAC Spec workbook version with the effective workbook
 - 2.0 [01/2013]
 - 2.1 [01/2013]

MAC Spec

346 - Portland Cement Concrete, Supplemental Specification, 01/2013, v2.12



Materials Acceptance and Certification

- Impacts PA at comparison package creation:

1	1800267681	334 - Superpave Asphalt Concrete, Supplemental Specification, 01/2016, v4.7	QC	Pending Finalization	4
2	1800268439	334 - Superpave Asphalt Concrete, Supplemental Specification, 01/2016, v4.7	QC	Pending Finalization	4
3	1800283286	346 - Portland Cement Concrete, Supplemental Specification, 01/2013, v2.14	QC	Pending Finalization	5
4	1800283288	346 - Portland Cement Concrete, Supplemental Specification, 01/2013, v2.14	VT	Pending Finalization	5
5	1800293246	160 - Stabilizing, Supplemental Specification, 01/2016, v4.13	VT	Pending Finalization	6
6	1800293248	160 - Stabilizing, Supplemental Specification, 01/2016, v4.13	VT	Pending Finalization	6
7	1800294985	162 - Prepared Soil Layer, Supplemental Specification, 01/2014, v2.5	QC	Pending Finalization	6



Materials Acceptance and Certification

- Workbook Crosswalk

MAC Spec Workbook	to FDOT Contract Let Dates Crosswalk	
Revision Date: <u>12/21/2021</u>		
This crosswalk will assist project personnel for the MAC Supplemental Spec workbook version assigned to a Job Guide Schedule based on the let date. The MAC Spec Workbook version may not match the contract workbook.		
MAC Material	MAC Spec Workbook Version	Contract Let Dates
104 - Prevention, Control, and Abatement of Erosion and Water Pollution	01/2009 1.x	All contracts
105 - Incidental Precast Concrete Product Certification	01/2009 1.x	All contracts
120 - Excavation and Embankment	01/2009 1.x	01/01/2009 to 09/30/2021
	10/2021 2.x	All contracts on or after 10/01/2021 (to include ERS)
121 - Flowable Fill	01/2009 1.x	All contracts
125 Excavation for Structures and Pipe	125 has been disabled. 120 is assigned in it's place.	
145 - Geosynthetic Reinforcement	01/2009 1.x	01/01/2009 to 09/30/2021
	10/2021 2.x	All contracts on or after 10/01/2021 (to include ERS)
160 - Stabilizing	01/2009 1.x	01/01/2009 to 12/31/2012
	01/2013 2.x	01/01/2013 to 12/31/2014
	01/2015 3.x	01/01/2015 to 12/31/2015
	01/2016 4.x	01/01/2016 to 06/30/2018
	07/2018 5.x	07/01/2018 to 09/30/2021
	10/2021 6.x	All contracts on or after 10/01/2021 (to include ERS)
162 - Prepared Soil Layer	01/2009 1.x	01/01/2009 to 12/31/2013
	01/2014 2.x	01/01/2014 to 06/30/2017
		07/01/2017 to 06/30/2019



Materials Acceptance and Certification

- If you pick the wrong one = No Results found

1) Select MAC Spec/Comparison Logic

Material/Spec 346 - Portland Cement Concrete *	Spec Edition 346 - Portland Cement Concrete, Project, Supplemental Specification, 01/2009, v1	Spec Category
Comparison Package Definition Compressive Strength		
Incomplete Package <input type="checkbox"/>		

4) Select Samples for Comparison Package

No results found

- There are finalized concrete samples, just not under this MAC Spec

Materials Acceptance and Certification

Non-SiteManager jobs
don't have a let date





Materials Acceptance and Certification

- Nonstandard JGS
 - Need to coordinate with SMO
 - When the initial Materials are added
 - When any new materials are added



Florida Department of TRANSPORTATION



Materials Acceptance and Certification

CITY OF JACKSONVILLE
PUBLIC WORKS DEPARTMENT



ONE CITY. ONE JACKSONVILLE

SPECIFICATIONS
FOR

URBAN CORE RIVERFRONT REVITALIZATION AND COMPLETE STREETS: HART BRIDGE EXPRESSWAY & TALLEYRAND CONNECTOR

BID NO.: **CF-0043-20**
BID DATE: **December 18, 2019**
CITY DEV. NO.: 6256.202

LENNY CURRY
MAYOR

PREPARED FOR
ENGINEERING DIVISION

PREPARED BY

STV, INC.
5200 Belfort Road, Suite 400
Jacksonville, FL 32256



Materials Acceptance and Certification

Improvement on the FDOT system shall be ran through the FDOT permitting process. The Recipient shall commence the project's activities subsequent to the execution of this Agreement in accordance with the following schedule:

- a) Construction to be completed by - 12/31/2022
- b) Construction contract to be let by - 06/01/2021

The Recipient shall commence the project's activities subsequent to the execution of this Agreement and shall perform in accordance with the following schedule:

- a) Right-of-Way to be certified by 12/31/2019.
- b) Construction contract to be let by 06/30/2020.
- c) Construction to be completed by 02/09/2023.

If this schedule cannot be met, the Recipient will notify the Department in writing with a revised schedule or the project is subject to the withdrawal of funding.



Materials Acceptance and Certification

Rolling Straightedge Comparison Packages





Materials Acceptance and Certification

- On older projects, VT company had to create an RSE VT sample with Witnessed By TIN
- PA had to create a comparison package to connect QC to VT
- Manual Comparison Status to avoid a false MC Review finding



Materials Acceptance and Certification

- Witnessed By
 - QC identifies the VT's company
 - Data Reviewer in the VT company enters the VT's TIN on the QC Sample
 - No VT Sample
 - No Comparison Package



Materials Acceptance and Certification

- Witnessed By
 - QC says it's more work
 - It is not
 - It can delay the sample
 - To avoid delays, Data Reviewers from QC and Witnessed By companies need to subscribe to notifications



Materials Acceptance and Certification

Portland Cement Concrete

12/31/2019



Structural Portland
Cement Concrete

01/01/2020





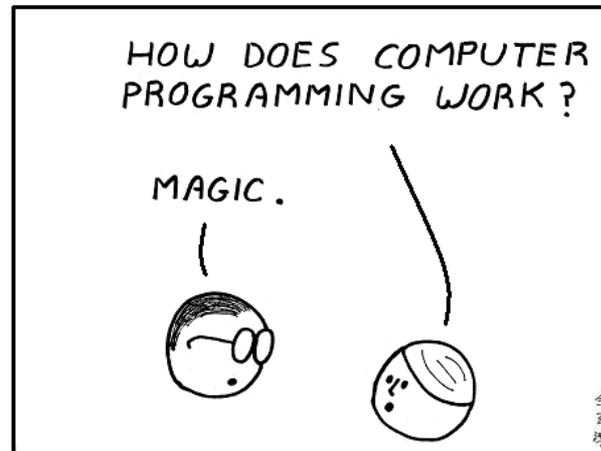
Materials Acceptance and Certification

- New MAC Material
- On NSJGS , if the wrong one is selected, no MAC Spec is assigned

530 - Riprap	01/2006 1.x	01/01/2006 - 06/30/2015 Specification Section Title Name change for contracts let on or after 07/01/2015.
530 - Riprap and Articulating Concrete Block Revetment Systems	07/2015 1.x	07/01/2015 - 12/31/2015 Specification Section Title Name change for contracts let between 07/01/2015 and 12/31/2015 only.
530 - Revetment Systems	01/2016 1.x	01/01/2016 to present Specification Section Title Name change for contracts let on or after 07/01/2016.

Materials Acceptance and Certification

Enhancements





Materials Acceptance and Certification

Notifications

Dashboard Reports STRG/JGS Material Certification/MAR Samples Contractor QC Plan Earthwork Reco

New Notifications for [redacted] Click to Collapse + 24 [Acknowledge](#)

Subject	Message	Date	Select All
2100844703 Returned for Sample Information Corrections	Sample 2100844703 on E4T70 / 435855-1-52-01 under MAC Material 120 previously submitted to FDOT for Verification has by returned by / [redacted] for corrections to the sample information. The reason(s) can be found under the Comments tab. Data Reviewers should review the reason(s), make necessary changes and resubmit the sample to FDOT. Do NOT make changes to key fields. If a key field is incorrect or if you are not sure if a field is a key field, notify the appropriate DAC.	9/27/2021 11:33:44 AM	<input type="checkbox"/>
2100832268 Returned for Sample Information Corrections	Sample 2100832268 on E4T70 / 435855-1-52-01 under MAC Material 160 previously submitted to FDOT for Verification has by returned by / [redacted] z for corrections to the sample information. The reason(s) can be found under the Comments tab. Data Reviewers should review the reason(s), make necessary changes and resubmit the sample to FDOT. Do NOT make changes to key fields. If a key field is incorrect or if you are not sure if a field is a	9/23/2021 9:43:49 AM	<input type="checkbox"/>



Materials Acceptance and Certification

- Opt in options to narrow down possible notifications for a role
- Program Maintenance User might be:
 - Material Type
 - Managing District of the Facility
- For PAs = Contract Number or FPN
 - What happens if you don't opt in?



My Notification Subscriptions

Email Notification Schedule [?]

Real Time

[Update](#)

Email Address

Susan.Musselman@dot.state.fl.us

Notification Event Type Group

Contractor QC Plans

Notification Event Type

Contractor QC Plan's Mix Design No Longer Approved

Update

User

Susan Musselman

Opt In/Opt Out?

Opt In

Send Type

Both Email and Dashboard

Filters?



Managing Districts

Contracts

Type Contract Number/Description

Production Facility Material Types

Companies

Start typing Company name to get a list of

User Who Created Record [?]

Is In Is NOT In

Start typing user name to get list of users

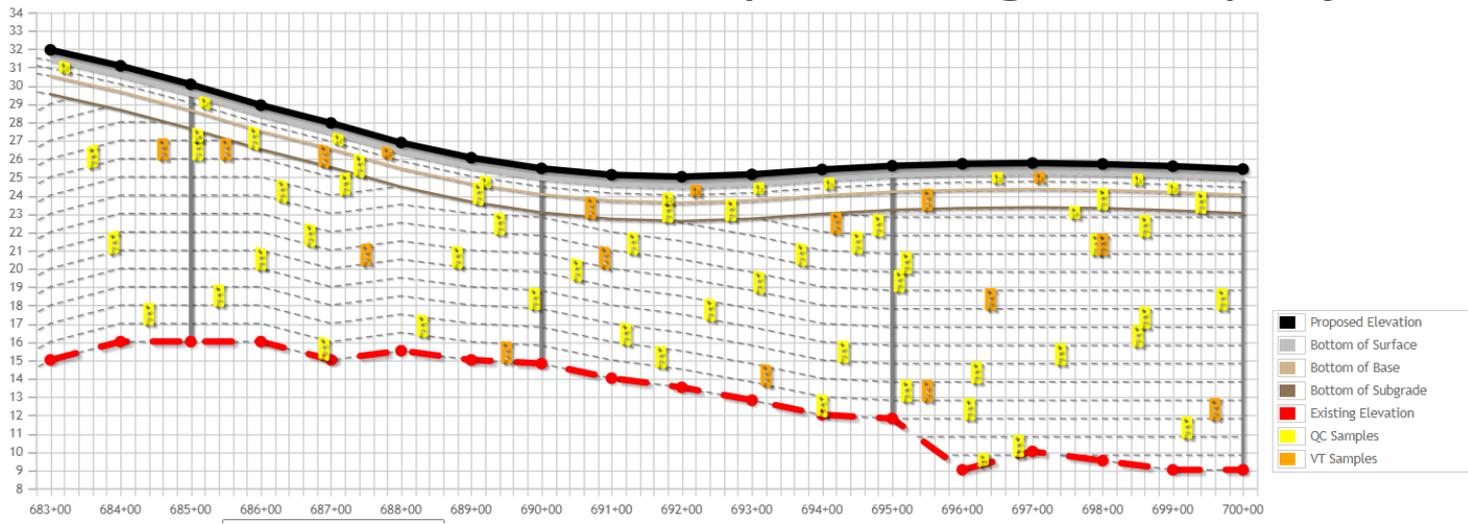
Save

PA

PMU

Materials Acceptance and Certification

- Earthwork Records System
 - Construction Academy winning team project



Project Administrator Information

MC Review and MAR for the Project Administrator	PDF (603KB) Video (28:50)
PA Concepts for MAC	PDF (7.77MB)
PA Concepts for MAC Video This optional training information provides detailed background information for users with the PA role. With the MAC implementation, responsibilities are being transferred to the PA. This video is designed to provide PAs who are unfamiliar with materials acceptance with the basic concepts	Video (56:47)

STRG/JGS for Project Administrator

MAC Spec Workbook Version to FDOT Contract Let Dates Crosswalk Updated	PDF (195KB)
PA Review of JGS Entry (MAC requirements) This document describes the MAC functions for the PA review of the standard JGS and non-standard JGS in MAC. Additional information for reviewing non-standard JGS entries for Lump Sum contracts to ensure contract compliance with Specifications Section can be found in the PA Instructions for LS JGS.	PDF (1.4MB)
PA instructions for LS JGS (contract compliance requirements) This document details the PA review of the non-standard JGS to ensure entries for Lump Sum contracts are compliant with Specifications Section 105.	PDF (1.0MB)
Approved Products and the Pay Item Tracking System This document details the PA and MC Reviewer's roles for APL products.	PDF (532KB)
FDOT Contractor QC Plan Review	PDF (4MB)

Sample Finalization Guide Lists

Asphalt Plant Samples	PDF (806KB)
Rolling Straightedge (Pre 07/2020)	PDF (207KB)
Rolling Straightedge (Post 07/2020)	PDF (210KB)
Soils/Earthwork Materials	PDF (791KB)
ERS Field Density	PDF (182KB)
Structural Concrete Materials	PDF (699KB)



Materials Acceptance and Certification



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