Florida Department of
TRANSPORTATION

Guardrail Stamp Number Verification in MAC

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Contents

Introduction

Beginning with the January 2020 Specification workbook, contracts with guardrail no longer require certifications for the component materials or a final system certification from the contractor.

The method of acceptance for guardrail is Visual Inspection. Normally items that are visually inspected are not recorded in MAC. However, Guardrail Production Facilities stamp numbers are required to be tracked by the State Materials Office (SMO) Steel and Miscellaneous Metals QC Program Coordinator based on Specificatons Section 536 beginning with the January 2020 workbook. The visual inspection of guardrail and verifying that the stamp number on the panel is acceptable connects the field installation with the Producer QC Program requirements.

The SMO enters program samples under a MAC 967 program sample and records the stamp numbers for each guardrail production facility. To document the visual inspection, project personnel review a random number of the stamp numbers on the installed panels and enter them as project samples under a MAC 967 ***project*** sample. The SMO Physical Lab compares the project samples to the program samples. If the comparison is not acceptable, follow-up actions may need to be taken.

These instructions describe:
- How to perform the visual inspection
- How to enter the project samples in MAC
- How sample failures may impact MC Review
- A report that can help with sample data entry

Chapter 1 – Collecting Stamp Numbers

After the guardrail is installed, review the guardrail panels to ensure a stamp number is stamped on the back of the guardrail. Avoid areas where holes, slots and joining process may hinder stamp identification. Randomly select enough locations to record at least 1 stamp number for every 1,000 feet of guardrail. The maximum number of stamp numbers is 10 regardless of the number of linear feet on the contract. Make note of the station location for each recorded stamp number. End terminals / crash systems are not subject to this check. They are proprietary systems approved by an APL number and should be assessed for compliance with the APL process, not visual inspection.

The frequency for checking the stamp numbers is 1 stamp number for every 1,000 linear feet of guardrail panels. For example, 11,150 linear feet of guardrail would require 11 stamp numbers; however, the maximum number to be recorded is 10 so once the 10th number is documented, the frequency has been met.

A few guidelines:
- Do not collect the first 10 numbers
  - Space the numbers randomly over the length of the guardrail
- If the guardrail is placed in phases, do not collect all 10 in the same phase
  - Space the samples across all phases so that all the numbers are not collected in the 1st phase or the last phase.
- To assist project personnel collecting the stamp numbers by ensuring they have an example of a complete stamp number, the STRG instructions include formatting for many of the guardrail production facilities. These will appear on the project JGS as well.
  - If a stamp number appears incomplete, move to the next panel and see if there is a complete stamp number that can be recorded.

STRG											

Clear Criteria

Spec Authority	Owner	Spec Instructions	Sample Level	Method of Acceptance	Category	Sample Purpose	Normally Sampled By	Sample Size	Sample Instructions	Qualified Sampler Required	Qualification Areas
967 - Components for Guardrail, Supplemental Specification, 01/2020, v2.2											
4	Physical Lab	Create a sample in MAC for Steel Panel Stamp Number Review. Examples of each stamp panel are shown below: SPIG Industries - SPIGAASHTOM180Class A2XXXXXXXXXXXXXX Gregory Industries - GHM180A2XXXXX Trinity Highway (Lima) - TM180A2LXXXXX Trinity Highway (Orangeburg) - TM180A2OXXXXX Trinity Highway (Ft. Worth) - TM180A2FXXXXX RG Steel - RGXXXXM180 Highway Safety - HSM180A2XXXXXXX IMH Products - IMHM180XXXXXX	VT	Sampling And Testing	Guardrail Steel Elements / Steel Panels		Project Personnel		Randomly select 1 Stamp Number per 1000 feet of installed guardrail	No	

Chapter 2 – Creating a Stamp Number Sample

You must be in your company roles to create a guardrail stamp number sample. Create a sample for each stamp number identified during the visual inspection. Ensure you have identified enough stamp numbers so that you have met the minimum. You are not required to record or enter every stamp number on every installed panel.
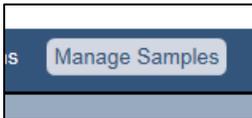
1. Click on Manage Samples menu option on the MAC menu
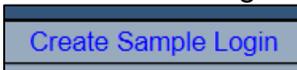
2. Click on Create Sample Login option.

The Create Sample Login dialog box will appear. It defaults to the sample category of Project. Leave it as the Project option.
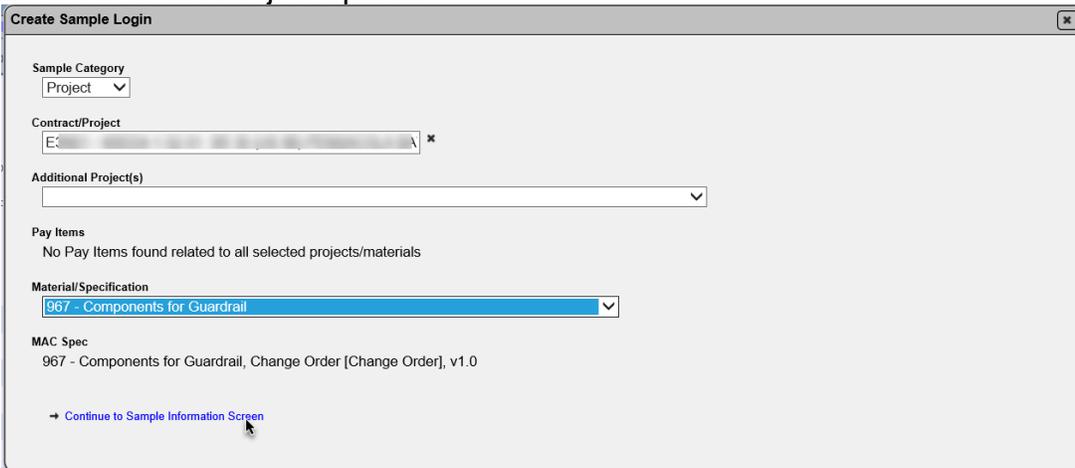
3. **Contract Project** – begin typing in the project or contract id in the Contract/Project field. MAC will search on either and return a list of entries that match the search criteria.
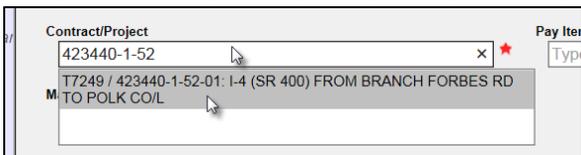
Select the appropriate entry from the returned list. If only one entry is returned, you must still click on it to select it or use the enter key to populate the field.

4. **Materials/Specification** – click on the Materials/Specification dropdown and select **967 - Components for Guardrail**.

5. **Pay Items** – pay items are optional and multi-select. Click on the dropdown list to select a pay item or pay items, if desired. Do **NOT** select the pay item if the contract is Lump Sum or Design Build.

NOTE: For projects let before January 2020, if the Project Administrator if wants to apply the new requirements, he MUST execute a no cost change order to delete the contract language requiring the submission of the certified mill analysis and replace it with the visual inspection. If he wants to keep the original requirements, he does not have to process a change order. He must ensure the Contactor submits the certification documents for the components and the final system. PAs should consult with the State Construction Office on questions for specific contracts. Once a copy of the executed CO is provided to the SMO Physical Lab, they will override any MAC Specs requiring a Certified Mill Analysis with the Project Specific MAC Spec 967 - Components for Guardrail, Change Order [01/2020], v1.x.

NOTE: For 967 – Components for Guardrail Project, MAC Supplemental 01/2020, v2 to show on a standard JGS, it must have a pay item that is assigned to the Material and a let date of 01/01/2020 or later. For it to show on a nonstandard JGS, the Material 967 – Components for Guardrail must be selected on the Materials tab and the project must have a let date of 01/01/2020 or later. If the let date is before that, for either type of JGS, a change order must be processed and the project specific MAC Spec must be assigned by the SMO.

Once you have selected a Material/Specification, a link to Continue to the Sample Information Screen will appear on the dialog box.
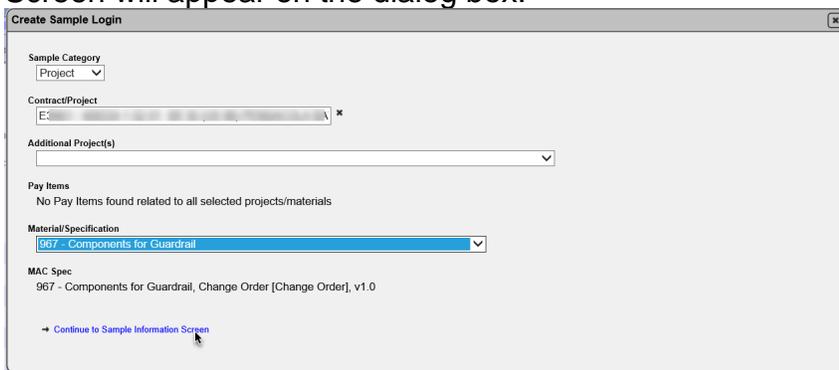
6. Click on the Continue to Sample Information Screen link to access more login fields.

As you begin to make selections, more fields will appear. The Category/type and sample level default because the Project MAC Spec only has one entry for sample level, category and type.

7. **Sampled By** – enter the name of the person who performed the inspection. This field is not connected to the CTQP database so any First Name, Last Name entry will be accepted; for example, John Doe.
8. **Date Sample Taken** – enter the date the stamp number was identified in the Date Sample Taken field.
9. **Stamp Number** – enter the stamp number.

Location Info

Station Sampled
[10]

Contact Info

Contact Name	Cell Phone #	Office Phone #	Email
[11]	[12]		[13]

10. **Station Sampled** – enter the station number where the stamp number was collected.

11. **Contact Name** – enter a contact name in the Contact Name field. This is someone who can answer specific questions about the stamp number; for example, did it appear to have been cut off during the panel cutting process.

12. **Contact Phone Numbers** – enter either contact phone number in the Cell Phone # or Office Phone Number field. Only one is required. When one is entered the red asterisk will disappear by the other field.

13. **Email** – enter an email address for the contact person in the Email field.

Comment

Comment
[14]

Document

Choose File   No file chosen
[15]
Description ?

Save   Save and Submit

14. Enter any comments about the inspection or stamp number in the comments field certification document in the comments box, if desired.

15. Upload the any documents to the sample, if desired

16. Save & Submit – select Save if you are not ready to sumbit the stamp number, but want to save the data you have entered so far. Select Save & Submit if you are ready for the SMO to review the stamp number.

The SMO Physical Lab will receive the sample and review the entry. If there is a question about the stamp number, they will contact the person listed as the contact.

The SMO Physical Lab will coordinate with the Steel and Miscellaneous Metals QC Program Coordinator, who may need to consult with the producer. The sample will remain in "Submitted for Lab Testing" status while this occurs. If determined the stamp number is not valid, an MC Review Finding will be generated that must be resolved.

When SMO Submits the sample for Verification, it will be auto-finalized. The PA does not have to finalize these samples. PAs will know if a sample failed when the MC Review is initiated or recalculated if they have subscribed to MC Review notifications with current filters applied.

Chapter 3 – MC Review Findings & Resolution

If the SMO Physical Lab indicates the material placed is not acceptable, a test comment will be made as to why; for example, the material is from a producer that does not meet the new Program MAC Spec requirements. Contractors and PAs need to know on contracts that are under the old requirements, there is a risk that the guardrail placed may not be acceptable under the new requirements. If found unacceptable, it must be removed and replaced with material from a producer meeting the new requirements.

The PA needs to respond to the system finding. When the PA's response is acceptable, the MC Reviewer will promote findings to MAR so the PA can designate the material was removed and replaced. If the material is removed and replaced, the finding is not an Exception to the Project Material Certification Letter (PMCL). These findings should not be Excluded or MC Resolved because they need to be designated as Removed and Replaced by the PA. If the guardrail is left in place, the disposition of the material must be documented, and consensus must be obtained. The left in place guardrail is an Exception to the PMCL under Nonstandard Material category or Qualification category if it came from a production facility that does not meet the Producer QC Program requirements.

Material Certification personnel will check the visual inspection samples in comparison to the amount of material placed. If the frequency requirement was not met, this could result in a Minimum Frequency Exception to the PMCL.

Chapter 4 – Stamp Number Project Report

There is a report in MAC that shows the current stamp numbers for each production facility. After documenting the stamp numbers, if you are not sure if they are correct, you can use this report to confirm the stamp numbers to double check if the stamp numbers have a typo or were cut off.

DO NOT use this report as the basis to reject material. If the stamp numbers are not on the report, enter them into MAC anyway. The SMO needs the data to build the database. Any missing stamp numbers will be addressed in the SMO review process.

1. Select the Reports option from the menu.
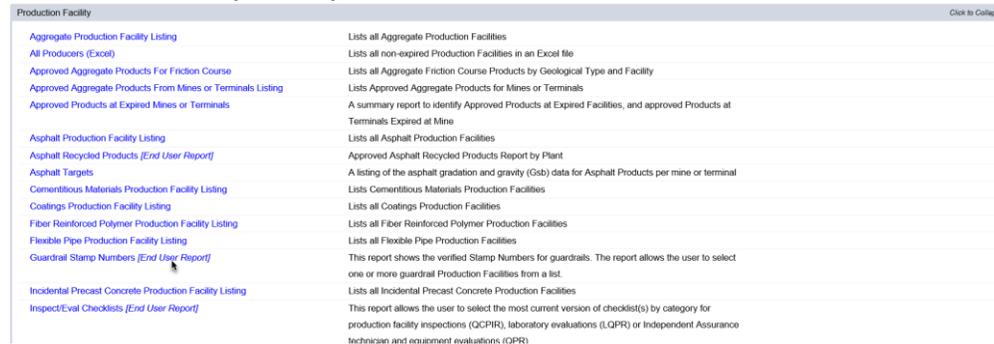
2. Under the Production Facility tab, select the Guardrail Stamp Numbers option.

A Guardrail Stamp Numbers dialog box appears.
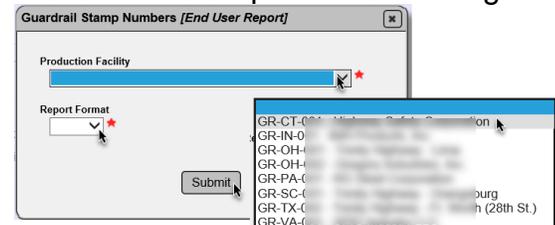
3. Select the production facility or facilities from the dropdown list. The list is derived from production facilities that comply with the Program MAC Spec requirements. As new production facilities meet the requirements, this list will be updated.

NOTE: The production facility is not required on the project sample. There can be situations where the material installed did not come from one of these producers. That is a possible reason for the material to be unacceptable.

4. Select the Submit option.

A file download dialog box appears. Open the downloaded file. If the stamp numbers you collected were not cut off or have a typo, and they are not on the report, **enter them into MAC anyway**. The vetting process will address this. The producer may be able to supply an acceptable Certified Mill Analysis with the stamp number you documented. The Program samples would then be updated to reflect this stamp number (which would then show up on this report) and SMO would indicate a passing result on the project sample.