



NDOR SiteManager Materials Management

Standard Operating Procedures and
Instructions

Asphaltic Concrete and Portland
Cement Concrete Pavement
Smoothness Verification Testing

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Updated Roles & Responsibilities	2/22/2013	Andi Clark

1. Introduction and Purpose

This document is intended to be used in conjunction with the existing training materials provided by the NDOR (Nebraska Department of Roads), M&R (Materials & Research) Division. Questions concerning initialization of the SMGR (SiteManager) application are addressed in this existing training material.

The NDOR Standard Specifications for Highway Construction, Section 502 – Asphaltic Concrete Pavement Smoothness and Section 602 – Portland Cement Concrete Pavement Smoothness, detail the NDOR pavement smoothness requirements. To document these requirements in SMGR, these materials were added September 2010:

- Pavement Smoothness Testing - Asphalt (Material Code 502P0001)
- Pavement Smoothness Testing – PCC (Material Code 602P0001)

1.1 Purpose:

The purpose of this document is to define the responsibilities of the M&R personnel and construction field inspectors during:

- Pre-construction
- Construction
- Post Construction

1.2 Roles and Responsibilities:

As of the publication date of this document, roles and responsibilities are defined as follows:

SiteManager Staff: 402.479.4760, DOR.SiteManagerMaterials@nebraska.gov

SiteManager Certification Records Coordinator: Jodi Gibson, 402.479.4337, Jodi.Gibson@nebraska.gov.

M&R Profilograph Staff: Jeremy.Weigel@nebraska.gov; Josh Kalin, 402.479.3864, Josh.Kalin@nebraska.gov.; Jared Rockemann, 402.479.4610, Jared.Rockemann@nebraska.gov

1.3 Abbreviations:

ID: Identification Number
M&R: NDOR Materials & Research
NDOR: Nebraska Department of Roads
SMGR: SiteManager

2. Pre-Construction

During the pre-construction phase, M&R Profilograph staff shall provide these services:

2.1 Certification:

2.1.1 Equipment Certification:

On an annual basis, certify contractor-owned profilographs are properly calibrated. The profilograph equipment certification records will be maintained at M&R. NDOR will provide a dated sticker with a tracking number which should to be placed on the contractor's equipment to indicate annual calibration has been performed by NDOR.

2.1.2 Technician Certification

Conduct and issue contractor technician certification for profilograph operation.

2.2 Documentation:

The personnel certification records will be maintained in SMGR by the M&R SMGR Certification Records Coordinator. On an annual basis, M&R Profilograph staff will provide the M&R SMGR Certification Records Coordinator with the names of the newly certified contractor technicians for inclusion into SMGR.

3. Construction:

3.1 Division of Responsibility:

3.1.1 Construction Field Inspector:

During the construction phase, the Construction Field Inspector staff shall provide these services:

3.1.1.1 Technician Verification:

Verify the contractor technician assigned to conduct profilograph testing is certified to do so by M&R Profilograph staff.

3.1.1.2 Equipment Verification:

Verify the contractor's profilograph has been calibrated by M&R Profilograph staff within the preceding year. A dated sticker with a tracking number issued by NDOR will appear on the equipment.

3.1.1.3 Sampling Checklist:

If the project was let with a surfacing pay item (rather than specifying concrete or asphalt paving), the material requirements for both asphalt and concrete smoothness testing will appear on the Sampling Checklist.

3.1.1.4 Coordination:

Once the Portland cement concrete and/or asphaltic concrete pavement is laid, the field construction inspector must notify a member of the M&R Profilograph staff to arrange for project site for verification testing.

The field inspector shall notify the M&R Profilograph staff which surfacing material will be used and the anticipated paving schedule.

Further, the field inspector is also responsible to advise the M&R SMGR Materials Administrator which surfacing material will be used so that potential material discrepancies can be addressed.

3.1.2 M&R Division:

During the construction phase, M&R shall provide these services:

3.1.2.1 Conduct Smoothness Verification Testing:

Upon arrival at the project site, M&R Profilograph staff will perform smoothness verification testing using an NDOR profilograph. The results will be analyzed and reviewed with the field construction inspection team. The profilograph results will be provided to the project field construction inspection team for project specific record keeping and archiving.

3.1.2.2 Records Maintenance:

The M&R Profilograph staff will keep a duplicate copy of the results and correspondence in accordance with the M&R archiving schedule.

3.1.2.3 Sample Creation:

Create and authorize the sample record to document the date smoothness testing verification was conducted.

3.2 SiteManager Requirements:

3.2.1 Sample Creation

The M&R Profilograph staff will be responsible for creating and authorizing the SMGR sample. It is imperative that the sample record be created in a timely manner so a material discrepancy does not exist when an estimate is created.

These procedures are specific to the entry of PCC and Asphaltic Concrete pavement smoothness entries.

3.2.2 Sample Record Frequency:

On routine paving projects, one SMGR sample per project will be required. In the rare instances, where both asphaltic concrete pavement and PCC pavement smoothness testing exists on the same project, two samples will be required.

3.2.2.1 Create Sample Record:

These instructions are provided to properly complete the Maintain Sample Information folder for pavement smoothness.

Log into SMGR and select the following icons:

Materials Management (+)

Sampling and Testing (+)

Sample Information

The Maintain Sample Information/Basic Sample Data tab will be displayed.

Follow these steps to complete the information required on the Basic Sample Data tab.

The screenshot shows the AASHTO SiteManager application window. The 'Maintain Sample Information' dialog box is open, with the 'Basic Sample Data' tab selected. The form contains the following fields:

- Sample ID: 00000
- States: Pending
- Revised By: [empty]
- Revising: [empty]
- Sample Date: 00/00/00
- Link To: [empty]
- Link From: [empty]
- Log Date: 00/00/00
- Sample Type: [empty]
- Acpt Meth: Spaces
- Material: [empty]
- Sampler: [empty]
- PYS: [empty]
- Type: [empty]
- City: [empty]
- Prod Nm: [empty]
- Molctr: [empty]
- Town: [empty]
- Geog Area: Spaces
- Inst User: [empty]
- Flagr City: 000
- Lab Control Number: [empty]
- Auth By: [empty]
- Auth Date: 00/00/00
- Lab Reference Number: [empty]

3.2.2.2 Basic Sample Tab, Sample ID:

Enter the Sample Identification Number in the Sample ID Field.

For more information about generating a Sample ID Number, see the instructional material for Sample Identification Numbering Scheme.

3.2.2.3 Basic Sample Tab, Status:

Set the status to the appropriate status for this sample. For field authorized materials, the available options on the drop down menu include: Complete, Fail, Invalid Sample, and Void. The default status is Pending.

Set the status to Complete.

3.2.2.4 Basic Sample Tab, Sample Date:

Enter the Sample Date in a MM/DD/YY format. This is a required value. Failure to set the Sample Date will prompt an error message which will preclude the user from exiting the Basic Sample Data tab.

Enter the Sample Date in a MM/DD/YY format.

3.2.2.5 Basic Sample Tab, Material:

Select one of the following material codes based on the smoothness testing being performed:

- 502P0001 – Pavement Smoothness Testing Asphalt
- 602P0001 – Pavement Smoothness Testing PCC

To select a material, hover over the field until a “Search” lens  appears. Right click to select search and scroll to find the appropriate material. The information presented in the Search Window can be sorted by these respective columns: Material Code, Material Full Name, and Material Category.

Select the appropriate Material from the search window.

SMGR will populate the Material code value and Material name.

Alternatively, enter the material code and tab out of the field (SMGR is case sensitive so the uppercase alpha character (A, B, C, etc) would be the appropriate keystroke).

3.2.2.6 Basic Sample Tab, Sampler:

From the dropdown menu, select the name of the certified profilograph technician/contractor employee who performed the acceptance testing. If someone other than the sampler is creating the sample record, use the creator’s SMGR number in the Sample ID and the name of the field staff in the sampler field.

SMGR will populate the Sampler User ID and the Sampler Name on the Basic Sample Data tab

3.2.2.7 Basic Sample Tab, P/S (Producer/Supplier):

Use the Search function to select the contractor who performed the acceptance testing. The information presented in the Search Window can be sorted by these respective columns: Producer/Supplier Code and Producer/Supplier Name. The available Producer/Suppliers have been linked to the material by the SMGR Materials Administrator. In the event the appropriate

Producer/Supplier is unavailable, please contact the SMGR Materials Administrator.

Select the contractor who performed the acceptance testing.

SMGR will populate the Producer/Supplier, Producer/Supplier code value and the Type.

3.2.2.8 Basic Sample Tab, Prod Nm:

Use the Search function to select the contractor who performed the acceptance testing. The information presented in the Search Window will be the available Products. The available Product Names have been linked to the material by the SMGR Materials Administrator. In the event the appropriate Product is unavailable, please contact the SMGR Materials Administrator.

Select the contractor who performed the acceptance testing.

SMGR will populate the Product Name, Manufacturer, the Producer Name code type and the Town on the Basic Sample Data Tab.

3.2.2.9 Basic Sample Tab, Geog Area:

Geographical Area is populated by means of a drop down list.

Select the district where the project is located.

3.2.2.10 Basic Sample Tab, Repr Qty:

Representative Quantity is a data entry field that requires a numerical value. This value is not a required field. Complete this data field as needed.

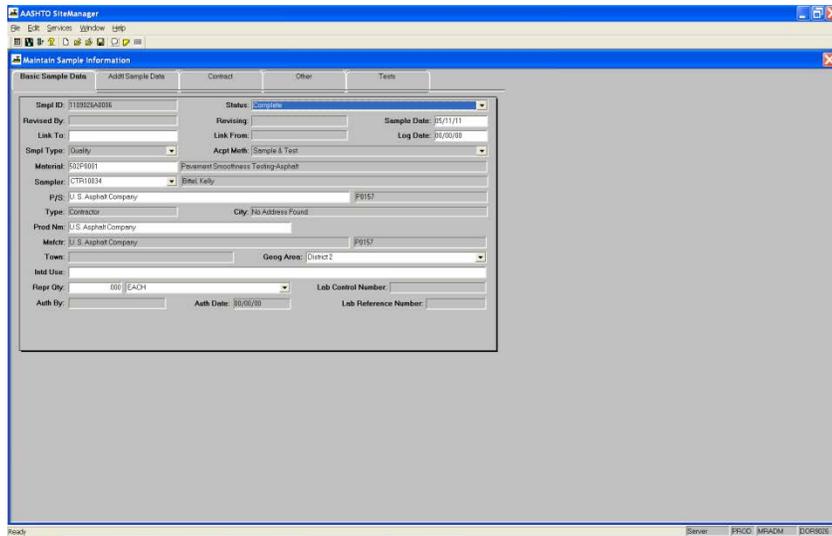
Unit of measure is populated by means of a drop down list. This value is a required field. Select the unit of measure from the dropdown menu.

3.2.2.11 Basic Sample Tab, Save:

When all of the required information has been updated on the Basic Sample Data tab, before proceeding to the Contract tab, press Save  to store the data.

3.2.2.12 Basic Sample Data Tab:

The completed Basic Sample Data tab will look like this.

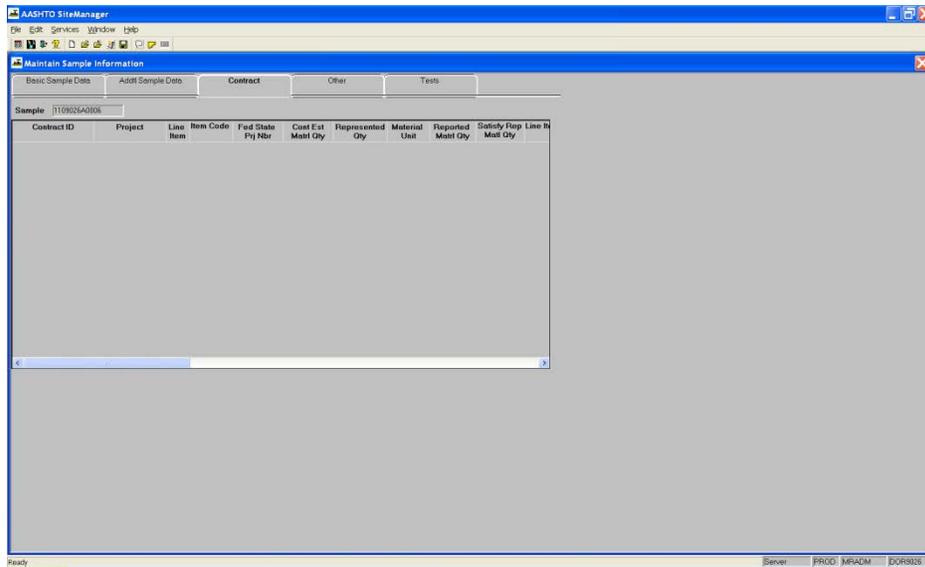


3.2.3 Addtl Sample Data Tab:

No information is necessary on the Additional Sample Data tab. Continue to the Contract tab.

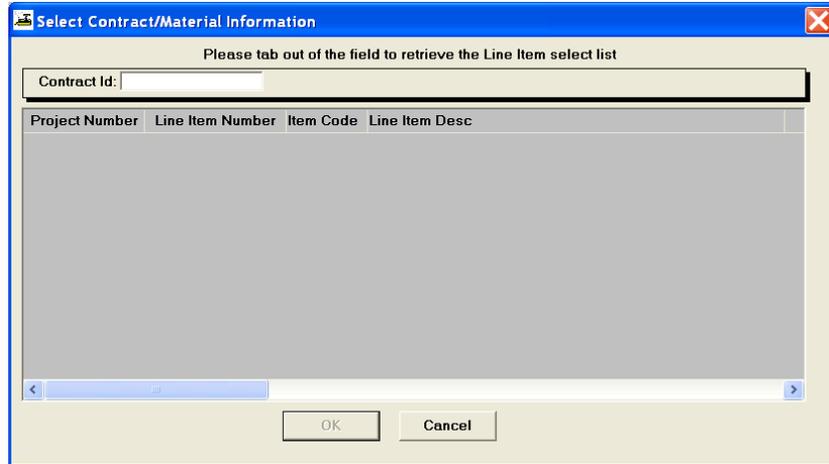
3.2.4 Contract Tab:

Follow these steps to complete the information required on the Contract tab.



3.2.4.1 Contract Tab, Add a Line Item:

From the menu of buttons, select the New  icon. The Select Contract/Material Information response window will be presented.

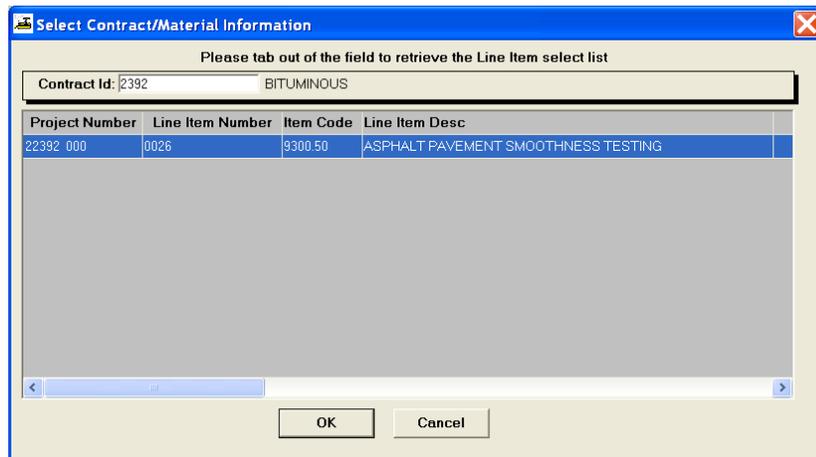


3.2.4.2 Contract Tab, Contract ID:

Using the Search function, select the appropriate Contract ID. Hover over the contract ID field, right click, and search. Select the contract ID.

Alternatively, enter the Contract ID and tab out of the field (SMGR is case sensitive so the uppercase alpha character (A, B, C, etc) would be the appropriate keystroke).

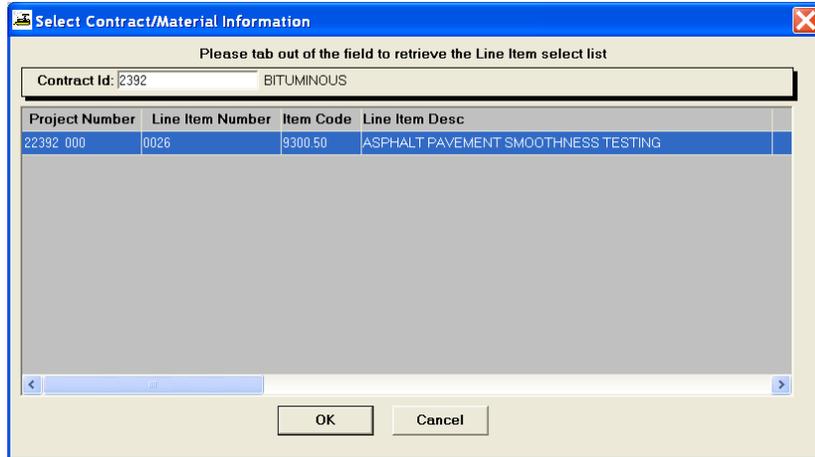
SMGR will populate the Select Contract/Material Information response window with the Project Number, Line Item Number, Item Code, and Line Item Description.



3.2.4.3 Contract Tab, Material Information:

Individual line items as well as multiple line items may be selected. Highlight the appropriate line item(s) and select OK.

Once selected, the contract line item(s) will display.



3.2.4.4 Contract Tab, Representative Quality

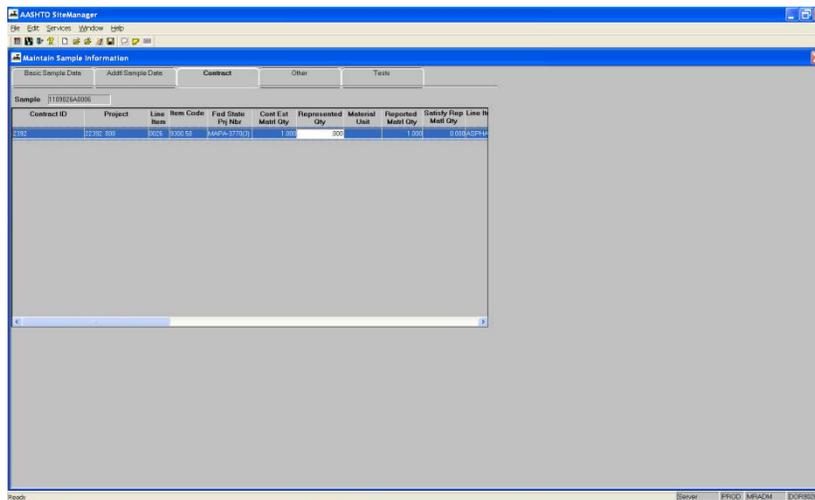
Representative Quantity is not a required field.

3.2.4.5 Contract Tab, Save:

When all of the required information has been updated on the Contract tab, before proceeding to the Tests tab, select Save to store the data.

3.2.4.6 Contract Tab:

The completed Contract tab will look like this.



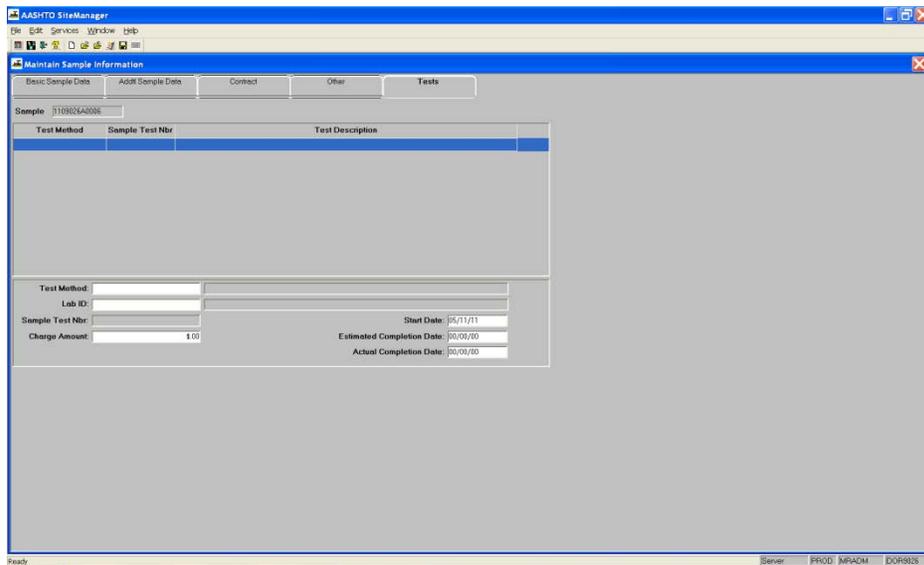
3.2.5 Other Tab

For Field Authorized material, no information is necessary on the Other tab. Continue to the Tests tab.

3.2.6 Tests Tab:

Material acceptance and test results are documented on the Tests tab. A blank Test data entry screen will be presented on the tab.

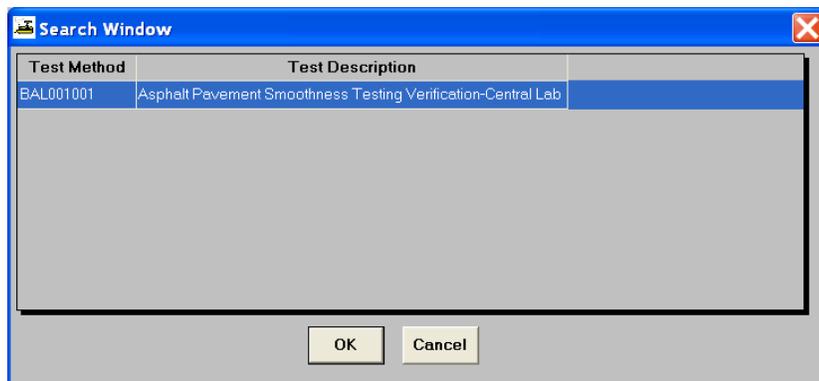
Follow these steps to complete the information required on the Tests tab.



3.2.6.1 Tests tab, Test Method:

Using the Search function, select the appropriate Test Method. Select the Test Method from the list presented. SMGR will populate the Test Method full name. To execute the search, right click.

A Search window will appear. Select the test method and then select OK.



3.2.6.2 Tests Tab, Actual Completion Date:

Enter the current date in the Actual Completion Date in a MM/DD/YY format.

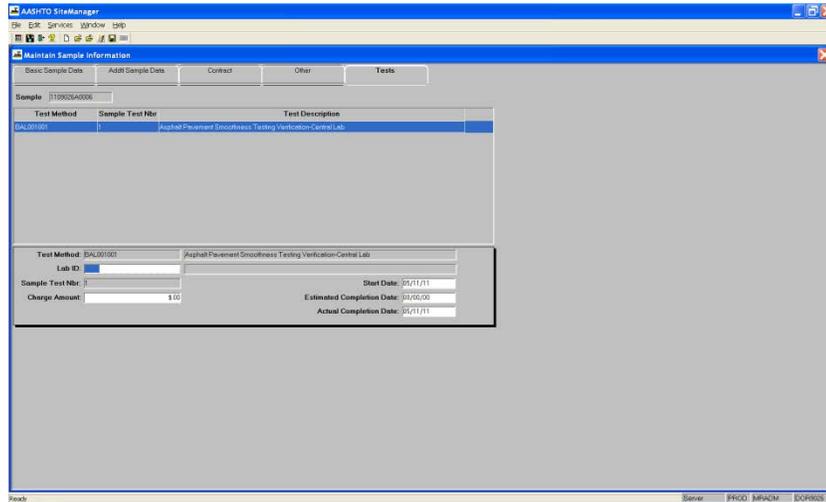
The Actual Completion Date is a required field. A sample may not be authorized without an Actual Completion.

3.2.6.3 Tests Tab, Save:

When all of the required information has been updated on the Tests tab, before proceeding to the custom template, select Save to store the data.

3.2.6.4 Tests Tab:

The completed Tests tab will look like this.



3.2.7 Template:

From the Services menu, select Enter/View Test Data from the menu. SMGR will present the custom template.

The custom templates will look like this.

3.2.7.1 Asphalt Smoothness Testing Verification:

Asphalt Smoothness Testing Verification

Laboratory Performed Test

NDOR M&R
 Mick Syslo, Pavement Design Engineer

Template ID: BAL001001
 Version: 20110602

NDOR M&R profilograph staff conducted random testing and verified contractor results to be within tolerable limits on this date //

Note: A copy of the M&R profilograph results are provided to the project field inspector for project record keeping.

Comments:

[Empty text area for comments]

3.2.7.2 PCC Smoothness Testing Verification:

PCC Pavement Smoothness Testing Verification
Laboratory Performed Test

NDOR M&R
Mick Syslo, Pavement Design Engineer

Template ID: PCL013001
Version: 20110603

NDOR M&R profilograph staff conducted random testing and verified contractor results to be within tolerable limits on this date

Note: A copy of the M&R profilograph results are provided to the project field inspector for project specific archiving and record keeping.

Comments:

3.2.7.3 Template, On-Site Test Date:

Enter the date that the M&R Profilograph staff performed on-site testing. Enter the On-Site Test Date in a MM/DD/YY format

3.2.7.4 Template Comments:

Enter comments to document any corrective action that took place as a result of the verification testing.

3.2.7.5 Template, Save:

Select Save to store the data.

3.2.7.6 Template, Print (Optional):

From the menu of buttons, select Print .

SMGR will open Adobe Reader and display the template including header and template body information. From the menu of buttons, select Print  and then OK to print the template.

Close Adobe Reader to return to SMGR.

3.2.7.7 Template, Exit:

Close the template and return to the Tests tab.

3.2.8 Sample Authorization:

Follow these steps to authorize a sample.

Select the Basic Sample Data tab

Select Services

Select Authorize

Note the data fields on an authorized sample are disabled. The Auth By and Auth Date field will be populated automatically. This step will lock the sample and no further modifications may be made to this sample.

However, should it be necessary to revise this sample record, contact the M&R SMGR Materials Administrator to un-authorize the sample.

After a sample has been authorized, the Auth By will display the NDOR User ID of the individual authorizing this sample. The Auth Date the date the sample was authorized.

The authorized sample will look like this.

The screenshot displays the 'AASHTO SiteManager' application window. The 'Maintain Sample Information' dialog box is open, with the 'Basic Sample Data' tab selected. The form contains the following fields and values:

Sample ID:	313992A5006	Status:	Complete		
Revised By:		Revising:		Sample Date:	05/11/11
Link To:		Link From:		Log Date:	05/08/00
Spec. Type:	Quality	Aspt Meth:	Sample & Test		
Material:	60P9001	Pavement Smoothness Testing/Asphalt			
Sampler:	CTR/6024	Elmer Kelly			
FYS:	U.S. Asphalt Company	P9152			
Type:	Contractor	City:	HO-Asphalt Found		
Prod No:	U.S. Asphalt Company				
Match:	U.S. Asphalt Company	P9152			
Trans:		Geog Area:	EMR02		
Intd Use:					
Rept Qty:	000	BACH	Lab Control Number:		
Auth By:	EDR006	Auth Date:	05/11/11	Lab Reference Number:	

At the bottom of the window, the status bar shows 'Ready' on the left and 'Server: PROD /M/ACM /DOR/02' on the right.

4. Post Construction:

4.1 Division of Responsibility:

4.1.1 Construction Field Inspector:

During the post construction phase, the Construction Field Inspector shall provide these services:

4.1.1.1 Final Review

The Construction Field Inspector is responsible for maintaining all original correspondence and documentation. In addition, the field inspector shall follow the NDOR Final Review Manual for project specific archiving procedures.

4.1.1 M&R Division:

During the post construction phase, M&R shall provide these services:

4.1.1.1 Records Maintenance:

A duplicate copy of the project related profilograph verification testing records will be maintained by M&R Profilograph staff for a period of five years in accordance with the NDOR M&R retention schedule.