

Materials & Tests Unit



Standard Operating Procedure Inspection of Stay In Place Form

Objectives:

The purpose of this SOP is to establish guidelines for the inspection, the acceptance and the reporting of SIP. The SOP is designed to insure all inspectors/technicians follow the same procedures and comply with all NCDOT, ASTM and AASHTO specifications. The inspectors/technicians will insure quality control techniques, quality control records, and testing equipment are being followed.

This SOP is a quick reference guide and does not cover any specialty items. Inspection of the specialty items will require the technician to reference the project plans or contract special provisions.

Materials Inspection and Acceptance:

It is Mandatory for inspectors/technicians to follow the process of this SOP in order to establish, manage and monitor quality control, quality assurance and quality documentation. Following the proper Inspection process will ensure effectiveness and efficiency in the quality systems of the NCDOT.

Safety Equipment List:

- Steel-toed boots
- Hard Hats
- Safety Vest
- Gloves

Safety Concerns:

- Sharp edges can/will cut you
- Storage location can sometimes be a challenge
- Cutting shipping bands

Equipment Required for SIP Form Inspection:

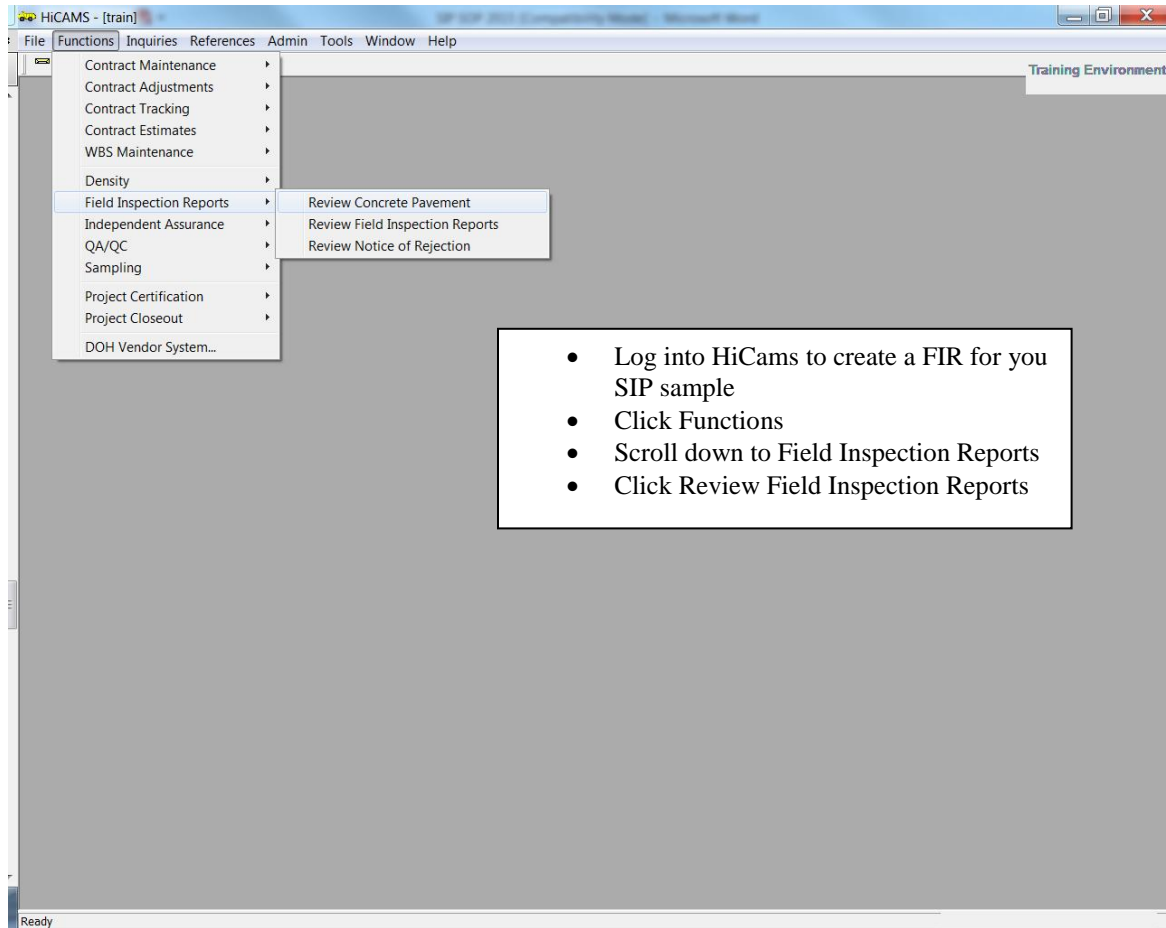
- Paperwork, including that from manufacturer, BOL, M&T Form 411 6-79, approved drawings
- Micrometer
- Magnagage
- Tape Measure
- Wire Cutters
- Rectangular “NCDOT Approved” Stamp
- Black Spray Paint

M&T Inspector’s Duties for SIP Form Inspection:

1. Obtain approved drawings from the manufacturer and verify that manufacturer is approved.
2. Locate the SIP Forms on the jobsite
3. Put on all safety equipment and get all measuring equipment out.
4. Inspection of the pans:
 - Use the magnagage to take 3 random readings on the top of the pan, then flip the pan over to get 3 random readings on the bottom of the pan (zinc readings are to be 1.7oz/sqft).
 - Use the micrometer to take gage measurements on pans, making sure these match what is on the plans (if the reading is too low, the pans should be rejected).
 - Use the measuring tape to measure the depth, pitch, length, and width (cover).
5. Inspection of angles (including closure angles):
 - Use the magnagage to take 6 random readings (both sides) along the angle-do this for each size angle (zinc readings are to be 1.7oz/sqft).
 - Use the micrometer to take gage measurements on each size angle.
 - Use the tape measure to measure each side of the angle (closeures have 3 measurements).
6. Record all information on the M&T 411 6-99 Form.
7. If all information agrees with what is on the drawings, stamp the top pan to indicate they have been inspected.
8. Calculate the zinc average for all pieces (multiply each by 1.7 before entering into Hicams).
9. Calculate the square footage of the deck-this will be calculated by taking the length times width of a single pan and multiplying that area by the number of pans they have. If there are several different size pans you will do that for each pan size then add all the area’s together.
10. Create a FIR and enter it in Hicams.

Standards:

Sample Prep and Submittal:



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Review Field Inspection Reports Training Environment

Filter

Contract: C201994 Material Type: Metal Stay-In-Place Forms - English

Report Name: Stay-In-Place Inspected By: Shearer, Eric L

Report ID: Section: 5 Inspection Date: 03/03/2015

Report Status: In Process Inspection Result: Meets Specs

Test Category: Acceptance

Retrieve
Reset
New

Report Name	Report ID	Contract	Material Type	Inspector	Inspection Date	Section	Inspection Result	Report Status	Test Category
<p>Enter in the following information then click the "New" tab</p> <ul style="list-style-type: none">• Contract #• Report Name• Section• Report Status• Test Category• Material Type• Inspected By• Inspection Date• Inspection Results• Click NEW									

of 0 FIR

Details NOR Save As

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Training Environment

Review Stay-In-Place (New)

Report Name: Stay-In-Place **Report ID:** **Report Status:** New

Contract: C201994 **Contractor:** **Status:**

Description: Triangle Parkway **WBS:** 39942.5.TA1

General Results Report History

Material Type: Metal Stay-In-Place Forms - English **County:** Durham

Material: Fabricated Metal Stay-In-Place Forms- Square Feet

Line Item: 1 W1338 - REINF CONCRETE DECK SLAB

Sample From: Project **Testing Category:** Acceptance

Accepted: 22,945.000 Square Feet **Rejected:** .000 Square Feet

Station: 0 + 0 **Location:** NC 54 over Triangle Parkway

Search by Plant ID: **Section:** 5

Producer: Consolidated Systems, Inc., Consolidated Systems - Columbia, SC - SP3

Fabricator:

Inspection Results

Inspector: Shearer, Eric L **Inspection Result:** Meets Specs

Inspection Date: 12/30/2014 **Notice of Rejection:**

Comment:

Disposition

Accepted: .000 **Pay Adjusted:** .000 **PAR** **Comment:**

Removed: .000 **Test ID:**

Ready

Click the "General" Tab and enter in the following fields

- Material Type
- Material
- Line Item
- Sample From
- Accepted
- Station
- Location
- Section
- Producer
- County
- Testing Category
- Inspector
- Inspection Date
- Inspection Result

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Review Stay-In-Place (New) Training Environment

Report Name: Stay-In-Place **Report ID:** **Report Status:** New

Contract: C201994 **Contractor:** **Status:**

Description: Triangle Parkway **WBS:** 39942.5.TA1

General Results Report History

From Stock:

Gage	Metal Thickness	Avg. Zinc Reading	Zinc Coating	Description (Pit)
	.000 *	.00		

Click the "Results" Tab then click the "insert" icon at the top left, 4th icon in

- Add your Pan information just below "From Stock"
- Add your angles and closures just below Accessories.
- SAVE your entries often!

Accessories:

Gage	Metal Thickness	Avg. Zinc Reading	Zinc Coating	Mark	Dimension
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Ready

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Review Stay-In-Place (Report ID: 57687)

Report Name: Stay-In-Place

Contract: C201994

Description: Triangle Parkway

General Results Report History

- Save the FIR and click the "Report" tab
- Print a copy for your records
- Change the report status to "Complete"

Report Status: New

Status:

WBS: 39942.5.TA1

Inspection Result: Meets Specs Page 1 of 1
03/05/2015

North Carolina Department of Transportation
Division of Highways, Materials and Tests Unit
1801 Blue Ridge Rd. Raleigh, NC 27607
Report on Metal Stay-In-Place Forms

Report ID: 57687 **WBS:** 39942.5.TA1 **Report Status:** New

Contract: C201994 **County:** Durham, Wake **Inspection Date:** 12/30/2014

Station: 0 + 0 **RE:** Gibson, PE, George C **Inspector:** Shearer, Eric L

Location: NC 54 over Triangle Parkway **Sample From:** Project

Contractor: **Test Category:** Acceptance

Section: 5

Producer: Consolidated Systems, Inc., Consolidated Systems - Columbia, SC - SP3

From Stock:		Metal	Zinc	Zinc	Description	Length	Width
Gage	Thickness	Reading	Coating	(Pitch vs. Depth)			
20	.039	3.90	2.29	6x15	4	30	

Accessories:		Metal	Zinc	Zinc	Mark	Dimension
Gage	Thickness	Reading	Coating			
12	1.040 *	3.80	2.24	STG1A	3x5	

Ready

Documentation Submittal: