

Contractor Self-Inspection Program

City of Carmel / PermiTrack

Insights
and Actions

Analysis
and
Questions

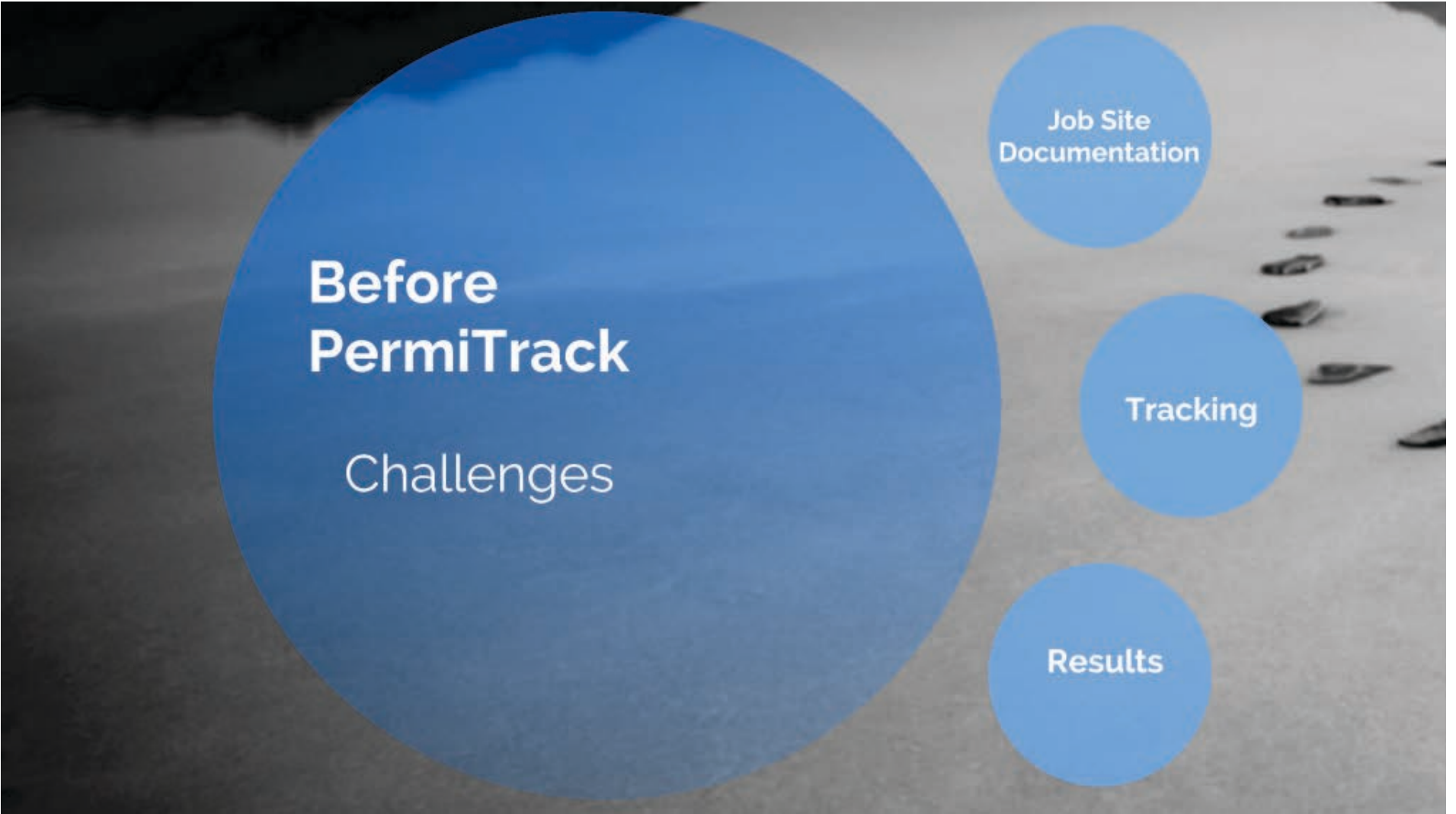
Before
PermiTrack

PermiTrack



PermiTrack

September 6th, 2018



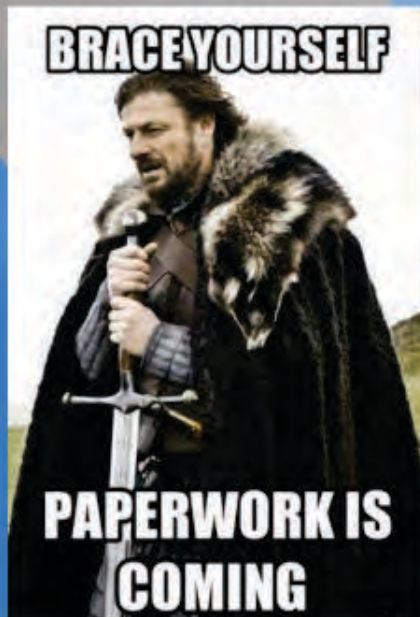
Before PermiTrack

Challenges

Job Site
Documentation

Tracking

Results



Job Site Documentation

- Had to visit site
- Accessibility
- No requirement to have inspections immediately available
- No required standard form

Hard Copy Submittal

- Mail, Fax, Email, Drop Off
 - No Consistency
- Tracking, Filing
 - Space
 - Paper Waste
- How Long to Keep
- Response Time
- Contractor Time
- Staff Time



Results

- Can't Efficiently Pull Analytical Data
- Difficult To Report on Compliance Rates
- Data is not a 1:1 comparison

COMMUNITY: WILSON PHASE: PHASE 1 7-DAY INSPECTION OR RAINFALL INSPECTION

SIGNATURE OF QUALIFIED INSPECTOR: [Signature] DATE: 7/23/07

1) Inspector should identify location where results are needed. (1 in. across basin, but a building if it exists continuously).
 2) For EPA, all data points required in 3 days, sediment settling ponds and other stored practices require in 10 days.
 3) For EPA, if control practice is not needed, provide evidence explaining why.

BEST MANAGEMENT PRACTICES	MAINTENANCE OR REPAIR OF BMPs NEEDED			LOCATION OF OBSERVATION		CORRECTION
	Code	Obs	Notes	Lot Number, Street	Quantity	
1. Erosion control practices installed & installed per BMP spec? Sediment less than 1/2 height of fence?	Y	N	N/A			
2. Catch basin inlet protection maintained and accumulated sediment removed?	Y	N	N/A			
3. Surface water storage (pond) drain inlet maintained and accumulated sediment removed?	Y	N	N/A			
4. Outlet protection facilities (log trap) maintained? Sediment removed weekly?	Y	N	N/A			
5. Sediment pond working properly & less than 1/2 full of sediment or basin depth?	Y	N	N/A			
6. Retention/Detention ponds kept clear of debris and sediment?	Y	N	N/A			

Evaluation for Construction Projects

A trained individual shall perform a written evaluation of the project site
 a. By the end of the next business day following each rainfall that exceeds 0.5"
 b. A minimum of one (1) time per week

Project Name: Village Green 2 Date of Inspection: 7/23/07

Name of Trained Individual: John Talbot

Is this Evaluation following a rainfall? ☒ yes ☐ no. If yes, date the rain stopped: 7/24/07 2.5 inches

No.	PROBLEM or CONCERN	Y E S	N O	Date Correct ed
1	Is the site information posted at the entrance and plans located onsite?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
2	Are all necessary permits obtained and special provisions being implemented?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
3	A designated washout area is established for concrete trucks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
4	A dumpster is onsite for trash disposal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5	Fuel tanks and other toxic materials are safely stored and protected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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September 6th, 2018

PermiTrack

Useful Tools

BMP
Library

Partners

Parties
Involved

Contractor
Guidance

Project
List

Event
Notification

Reporting

Site Map

Inspection
Example

Setup

- Develop BMP Library
- Custom Language
- Add Local Specifications
- Tell them What YOU Want
- Post- Construction BMPs

Construction Entrance



Construction Entrance 50' L x 20' W stone entrance required for projects two acres or less. 150' L x 20' W required for projects over two acres. Flare entrance where it meets the roadway. #2 stone over geotextile 6" deep required. Stone must be maintained to prevent off site tracking.



Rumble Plates Angle or channel iron mounted to metal plate. Make sure it is clean and in-line with drive path.



Sweeping and Scraping Site entrance and frontage must be kept free of sediment and construction debris. Significant tracking must be removed immediately. Minor tracking must be removed by end of day. Ensure material has been removed from gutter line. Do not wash down storm drain.



Wheel Wash Install and maintain wheel washing station. Ensure wash water is contained on site and prevented from entering storm system.

Conveyance Check



Check Dam - Coir Wattle/Fiber Logs Wattle should be trenched 2"-4" and staked every 2'. Dam should be lower in middle so that water goes over it and not around it.



Check Dam - Earth Confirm placement and stability of earth check dam. Dam should be lower in middle so that water goes over it and not around it.



Check Dam - Mulch Socks Confirm proper placement, anchoring and condition of mulch socks. Dam should be lower in middle so that water goes over it and not around it.



Check Dam - Rock Minimum 2' high, 3"-6" rip rap with 6" thickness of #8 stone on upstream side. Dam should be lower in middle so that water goes over it and not around it. Clean when sediment reaches 1/2 the height of the dam on the upstream side.



Sand Bags Confirm placement of sand bags in accordance with plan. Bags should be lower in middle so that water goes over it and not around it. Clean when sediment reaches 1/2 the height of the stacked bag on the upstream side.

Partners (Contractor List)

- Contractor Name
- Contact
- Phone
- Email
- Can be used for multiple projects

Partner

Organization Name: Alderson

Partner Type: Standard Partner

Address: 1030 American Way
Suite 210

City: Greenwood

State: IN

Zip Code: 46143

Primary Contact	Notify	First Name	Last Name	Phone Number	Email Address
<input checked="" type="radio"/>	Robert	Stanish		(317) 868-6351	RobertS@AldersonCommercial.com
<input type="radio"/>	Nate	Ward		317-371-8584	nward@aldersoncommercial.com

Click **Save** to re-send the account information for this Primary Contact via email.
If you change the Primary Contact Email Address the account information will be sent to this new address.






















Partner Name	Type	Contact	Phone	Email
Abby Taghouse, LLC	Standard Partner	Kevin Paul	317-339-7952	kpaul@bhsolutions.com
Alderson	Standard Partner	Robert Stanish	(317) 868-6351	RobertS@AldersonCommercial.com
Alpha EMC	Standard Partner	Nate Halberstadt		nhalberstadt@alphaemc.com
Alt Construction LLC	Standard Partner	Seth Alf	317-535-4468	seth@altconstruction.com
Armstrong Development, Inc.	Standard Partner	G. William Armstrong	317-255-1126	armdev@stcglobal.net
B and B Park	Standard Partner	Christian Browning	317-716-7979	ctb@moblwn.com
Beth Nelson	Standard Partner	Beth Nelson	317-450-6719	beth67199@gmail.com
Brandt	Standard Partner	Daniel Drake	317-636-3300	danetd@brandtconstruction.com
Brenwick Development Co., Inc.	Standard Partner	Keith Lash	317-574-3400	keithl@brenwick.com
Browning	Standard Partner	Eric Crouch	(317) 413-1553	ecrouch@browningnv.com
C and L Management	Standard Partner	Charles Key	317-753-0894	kk57@yahoo.com
CalAtlantic Homes of Indiana Inc.	Standard Partner	Keith Lash	317-659-3200	keith.lash@calatl.com
Calumet	Standard Partner	Jeffrey Thodon	317-715-6669	jthodon@calumetcivil.com
Capitol Construction	Standard Partner	Zach Naze	317-535-9475	znaze@capitolconstruct.com
Capitol Construction Services	Standard Partner	Mark Jordan	317-690-5152	mjordan@capitolconstruct.com
Clemmer Dads Club	Standard Partner	Josh Blackmore	317-846-1663	jblackmore@carneladadclub.org
Catalyst	Standard Partner	Ken Schultz	317-714-0563	kschultz@catalystcmi.com
Catamount Constructors, Inc.	Standard Partner	Rob Terral	(720) 301-0481	rterral@catamountinc.com
CESO	Standard Partner	Lance Oakes	937-272-1100	oakesl@cesonc.com
CESO Management, LLC	Standard Partner	Sam Mutkin	513-500-4294	mutkin@cesonc.com
Citimark	Standard Partner	Jingli Zhang	(317) 577-7900	JingliZ@Citimarkinc.com

projects

Address

rtS@AldersonCommercial.c

@aldersoncommercial.com

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 Abby Tap House, LLC	Standard Partner	Kevin Paul	317-339-7952	kpaul@bhsolutions.com
 Alderson	Standard Partner	Robert Stanish	(317) 868-6351	RobertS@AldersonCommercial.com
 Alpha EMC	Standard Partner	Nate Halberstadt		nhalberstadt@alphaemc.com
 Alt Construction LLC	Standard Partner	Seth Alt	317-538-4488	seth@altconstruction.com
 Armstrong Development, Inc.	Standard Partner	G. William Armstrong	317-258-1166	armdev@sbcglobal.net
 B and B Park	Standard Partner	Christian Browning	317-716-7979	ctb@mobiwm.com
 Beth Neilson	Standard Partner	Beth Neilson	317-450-6719	beth67199@gmail.com
 Brändt	Standard Partner	Darrell Drake	317-638-3300	darreld@brandtconstruction.com
 Brenwick Development Co., Inc.	Standard Partner	Keith Lash	317-574-3400	keithl@brenwick.com
 Browning	Standard Partner	Eric Crouch	(317) 413-1853	ecrouch@browninginv.com
 C and L Management	Standard Partner	Charles Key	317-783-0894	kic57@yahoo.com
 CalAtlantic Homes of Indiana Inc.	Standard Partner	Keith Lash	317-659-3200	keith.lash@calatl.com
 Calumet	Standard Partner	Jeffrey Thixton	317-716-6669	jthixton@calumetcivil.com
 Capitol Construction	Standard Partner	Zach Naze	317-538-9475	znaze@capitolconstruct.com
 Capitol Construction Services	Standard Partner	Mark Jordan	317-690-8152	mjordan@capitolconstruct.com
 Carmel Dads Club	Standard Partner	Josh Blackmore	317-846-1663	jblackmore@carmeladscub.org
 Catalyst	Standard Partner	Ken Schultz	317-714-0863	kschultz@catalystcmi.com
 Catamount Constructors, Inc.	Standard Partner	Rob Terral	(720) 301-0481	rterral@catamountinc.com
 CESO	Standard Partner	Lance Oakes	937-272-1100	oakesl@cesoinc.com
 CESO Management, LLC	Standard Partner	Sam Mullikin	513-500-4294	mullikin@cesoinc.com
 Citimark	Standard Partner	Jingli Zhang	(317) 577-7900	JingliZ@Citimarkinc.com

Partner

Organization Name Alderson

Partner Type * Standard Partner ▼

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Suite 210

City Greenwood

State IN

Zip Code 46143

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	<input type="radio"/>	Nate	Ward	317-371-8594	nate@aldersoncommercial.com

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Parties Involved

- Permit Authority
- Permittee
- Authorized Inspector
- Contacts

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Permit Authority

Permit Authority * City of Carmel, IN ESC ▼

Contact

Anderson, Kurt ▼ Remove

FirstName	Kurt		
LastName	Anderson		
Address	One Civic Square		
City, State, Zip	Carmel	IN	46032
Phone	(317) 571-2308		
Email	kanderson@carmel.in.gov		

Parties Involved

- Permit Authority
- Permittee
- Authorized Inspector
- Contacts

The screenshot displays two overlapping web forms. The background form, titled 'Permit Authority', has a dropdown menu for 'Permit Authority' set to 'City of Carmel, IN ESC'. Below it is a 'Contact' section with a dropdown menu. The foreground form, titled 'Permittee', has a dropdown menu for 'Permittee' set to 'City of Carmel City Projects'. Below this is a 'Contact' section with a dropdown menu set to 'G. Dan' and a 'Remove' button. At the bottom of the 'Permittee' form is a detailed contact information section with the following fields:

First Name	Dan		
Last Name	G.		
Address	One Civic Square		
City, State, Zip	Carmel	IN	46032
Phone	317-571-2307		
Email	dg@carmel.in.gov		

Parties Involved

- Permit Authority
- Permittee
- Authorized Inspector
- Contacts

The image displays three overlapping screenshots of a web application interface, illustrating the 'Parties Involved' in a permit process. The top-most screenshot shows the 'Permit Authority' section with a dropdown menu set to 'City of Carmel, IN ESC'. Below it, a 'Contact' dropdown is visible. The middle screenshot shows the 'Permittee' section with a dropdown menu set to 'City of Carmel City Projects'. The bottom-most screenshot shows the 'Authorized Inspector' section, which includes a dropdown menu set to 'City of Carmel, IN ESC', a 'Contact' dropdown set to 'Thomas, John' with a 'Remove' button, and a form with the following fields: First Name (John), Last Name (Thomas), Address (One Civic Square), City, State, Zip (Carmel, IN, 46032), Phone ((317) 571-2314), and Email (jthomas@carmel.in.gov).

PreConstruction Conference Guidance

- Contractor handout
- Pass/ Fail
- Enforcement policy




PermiTrack^{ESC} Inspection Guide



The City of Carmel requires storm water permit holders to complete weekly and after rain event (0.50" or greater) storm water self inspections. These inspections shall be submitted to **PermiTrack^{ESC}** every 7 days. Permit holders will receive an email with their username and temporary password. The following instructions will guide you through the submittal process. Contact the Engineering Department at 317-571-2308 with any questions. This guide will be attached to the online project file for future reference.

PermiTrack^{ESC} LOG IN – Go to <https://MyPermiTrack.com/>, and click on their **Client Login** link. On the login page, enter your user name and password. (Once in the application, click the **PermiTrack^{ESC}** tab if you have multiple PermiTrack applications.)

ADD INSPECTOR – Once logged in, click **Settings** on the top of the page. Click **Users** and then **New** to add another inspector. Once their contact information is entered, you will be able to select them as an authorized inspector on the project.


SELECT PROJECT – The **Projects** tab displays the **PermiTrack^{ESC}** projects you are associated with. Click the inspection icon  next to the project on the **Project List** you would like to inspect to start a **New Inspection**.

CONDUCT INSPECTION – When recording a new inspection, enter the following information. Fields marked with an * are required:

- **Inspector:** Select the inspector from the drop-down list.
- **Inspection Date:** Enter the inspection date in mm/dd/yyyy format, or pick from the calendar.
- **Inspection Time:** Enter the inspection time in hour and minutes of the day, AM or PM.
- **Weather Trends:** Describe recent weather conditions relevant to erosion/sediment control.
- **Last Precip. End Date:** Enter the date of the last precipitation, in mm/dd/yyyy format, or pick the date from the calendar.
- **Last Precip. Amount:** Enter the recent rainfall total in inches.
- **Source of Data:** Select the source of the precipitation data entered above.
- **Temperature:** Record the temperature in F (Fahrenheit) at the time of the inspection.
- **Reason for Inspection:** Select the reason this inspection is being performed.
- **Action Required:** Select a follow-up action, if one is required.
- **Comments:** Enter comments here, will be included on the inspection report.
- **Inspection Document:** Click the **Add Document** button to choose and upload an inspection document file from your computer or a network location.

COMPLETE INSPECTION ITEMS – The Inspection Items area of the page lists all of the BMPs associated with the project. If a BMP is required, you must record your observations and update the status.

- **Inspected:** Indicate whether this item was inspected during the visit to the project site.
- **BMP:** Displays the category and type of BMP from BMP library.
- **Status:** Status of the BMP at the time of the inspection.
- **Condition:** Select the condition from the drop-down list to indicate the effectiveness of the BMP application.
- **Comments:** Enter your inspection comments regarding this BMP, its condition, or more detailed information.
- **Photo:** Click the **Choose File** button to locate a photo from the project site. You can upload a photo from your mobile device, computer or a network location.
- **+ Add BMP:** Use this link to add a new BMP to this inspection record. Select a **Category** and **BMP** to add it to the bottom of the inspection record for your observations.
- **Save As** field: Select **Save As Draft** or as **Final**.
 - **Draft:** The inspection record is not complete and will be edited further before completing.
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SAVE INSPECTION RECORD – Click the **Save** button, bottom-right corner of the screen.

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Project List

- Lists Project Name
- Projects Permit #
- Projects Permit Holder
- Date of Last Completed Inspection
- Project Edit Function
- Initiate Inspection

Select New Corrective Actions					Active Projects		Apply	Choose Columns	Status	Status + Age
Filter					Project Name	Permit #	Permittee	Last Final Inspection		
Edit	Inspect	Log	Report	Form	Carmel Midtown West (15)	499	FA Wilhelm Construction Company	✓	8/23/18	Today
Edit	Inspect	Log	Report	Form	Kensington Green (53)	444	Turtle Pond Partners	✓	8/23/18	Today
Edit	Inspect	Log	Report	Form	Aurum Addition (24)	473	Old Town Design Group, LLC	✓	8/22/18	1 day ago
Edit	Inspect	Log	Report	Form	Goodman Campbell Medical Office Building (17)	498	Cornerstone	✗	8/22/18	1 day ago
Edit	Inspect	Log	Report	Form	Indiana Spine Group (121)	403	Browning	✓	8/22/18	1 day ago
Edit	Inspect	Log	Report	Form	Ill Health North Parking Lot Expansion (19)	501	Messer Construction Co	✓	8/22/18	1 day ago
Edit	Inspect	Log	Report	Form	KAR Global Headquarters (34)	495	Shiel Sexton	✓	8/22/18	1 day ago
Edit	Inspect	Log	Report	Form	Legacy PUD Retail Development (51)	472	Felderman Design Build	✓	8/22/18	1 day ago
Edit	Inspect	Log	Report	Form	The Kent (1)	505	HIS Constructors Inc	✗	8/22/18	1 day ago
Edit	Inspect	Log	Report	Form	Village of West Clay Uptown (39)	463	Onyx and East	✓	8/22/18	1 day ago
Edit	Inspect	Log	Report	Form	Aldi (6)	503	Dalo Construction Inc	✓	8/21/18	2 days ago
Edit	Inspect	Log	Report	Form	Hyatt Place Hotel (16)	496	Sohum Hospitality Management	✓	8/21/18	2 days ago
Edit	Inspect	Log	Report	Form	Jackson's Grant Section 1B, 3, 4, 5 (178)	377	Republic Development	✓	8/21/18	2 days ago

Permit #	Permittee	Last Final Inspection
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473	Old Town Design Group, LLC	 8/22/18 a day ago
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501	Messer Construction Co.	 8/22/18 a day ago

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Event Notification

- Customized event notification sent to all contractors.
- Able to insert compliance time limit

Select New

New Event

Select the type of the event	Rainfall <input type="button" value="v"/>
Enter the date the event occurred	08/21/2018
Enter a text description of the event	Rain Event
Enter text for the email notice of the event	1½ Inch of rain has fallen. Inspection is required.
Inspection Compliance Time Limit	<input type="radio"/> Enter a final date for inspection compliance
	08/22/2018
	or
	<input checked="" type="radio"/> Enter number of hours for inspection compliance
	24

Reporting

- Project Summary
- Inspection Summary
- Individual Inspector Pass/Fail
- Great for Annual MS4 Report



City of Carmel, IN ESC

Inspection Summary Report 2018-01-01 through 2018-08-23

Inspections by Status

Passed	Failed	Total
947	214	1161

Inspections by Project Type

Project Type	Active	Inactive	Incomplete	Archived	Closed	Auto-Activate	Complete	Total
Commercial	344	0	0	0	2	0	0	346
Residential	815	0	0	0	0	0	0	815
Total:	1159	0	0	0	2	0	0	1161

Project: Village of West Clay Section 10010-E

Type: Residential | Group: N/A

Project Name	Inspection Date	Failed BMP Name	BMP Condition
Village of West Clay Section 10010-E	2018-01-11	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-01-11	Sweeping and Scraping	Ineffective
Village of West Clay Section 10010-E	2018-01-23	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-02-01	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-02-09	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-02-20	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-02-20	Sweeping and Scraping	Ineffective
Village of West Clay Section 10010-E	2018-03-01	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-03-09	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-03-22	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-03-28	Portable Toilet	Ineffective

Document ID: 10010-E

Inspector: Jacques Clouseau

Inspector's Organization: Indiana Inspections, Inc.

Project Name	Permittee	Project Type	Passed	Failed	Total
Great Project 1	Super Developer	Residential	25	18	43
Great Project 2	Super Developer	Residential	21	2	23
Total:			46	20	66



City of Carmel, IN ESC

Project Summary Report

Project Type Summary

Project Type	Active	Inactive	Closed	Archived	Deleted	Total
Commercial	20	5	7	0	0	32
Municipal/Utility	1	0	1	0	0	2
Residential	30	5	6	0	2	43
Total:	51	10	14	0	2	77

Project Relationship Summary

Projects Owned by City of Carmel, IN ESC

Partner	Relationship Type	# of Related Projects	Permit Authority	Permittee	A
City of Carmel, IN ESC	Project Owner	100	100	0	0
Abby Tap House, LLC	Standard Partner	1	0	1	0
Alderson	Standard Partner	2	0	1	2
Alpha EMC	Standard Partner	5	0	0	5
Alt Construction LLC	Standard Partner	1	0	1	1
Armstrong Development, Inc.	Standard Partner	1	0	1	1
B and B Park	Standard Partner	1	0	1	0
Beth Neilson	Standard Partner	2	0	0	2
Brandt	Standard Partner	1	0	1	1
Brenwick Development Co., Inc.	Standard Partner	2	0	2	2
Browning	Standard Partner	4	0	3	4
C and L Management	Standard Partner	1	0	1	0

Page 1 of 5



City of Carmel, IN ESC

Project Summary Report

Project Type Summary

Project Type	Active	Inactive	Closed	Archived	Deleted	Total
Commercial	20	5	7	0	0	89
Municipal/ Utility	1	0	1	0	0	7
Residential	30	5	6	0	2	64
Total:	51	10	14	0	2	160

Project Relationship Summary

Projects Owned by City of Carmel, IN ESC

Partner	Relationship Type	# of Related Projects	Permit Authority	Permittee	Authorized Inspector
City of Carmel, IN ESC	Project Owner	160	160	0	0
Abby Tap House, LLC	Standard Partner	1	0	1	0
Alderson	Standard Partner	2	0	1	2
Alpha EMC	Standard Partner	5	0	0	5
Alt Construction LLC	Standard Partner	1	0	1	1
Armstrong Development, Inc.	Standard Partner	1	0	1	1
B and B Park	Standard Partner	1	0	1	0
Beth Neilson	Standard Partner	2	0	0	2
Brandt	Standard Partner	1	0	1	1
Brenwick Development Co., Inc.	Standard Partner	2	0	2	2
Browning	Standard Partner	4	0	3	4
C and L Management	Standard Partner	1	0	1	0



City of Carmel, IN ESC

Inspection Summary Report 2018-01-01 through 2018-08-23

Inspections by Status

Passed	Failed	Total
947	214	1161

Inspections by Project Type

Project Type	Active	Inactive	Incomplete	Archived	Closed	Auto-Activate	Complete	Total
Commercial	344	0	0	0	2	0	0	346
Residential	815	0	0	0	0	0	0	815
Total:	1159	0	0	0	2	0	0	1161

Project: Village of West Clay Section 10010-E

Type: Residential | Group: N/A

Project Name	Inspection Date	Failed BMP Name	BMP Condition
Village of West Clay Section 10010-E	2018-01-11	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-01-11	Sweeping and Scraping	Ineffective
Village of West Clay Section 10010-E	2018-01-23	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-02-01	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-02-08	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-02-20	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-02-20	Sweeping and Scraping	Ineffective
Village of West Clay Section 10010-E	2018-03-01	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-03-08	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-03-22	Silt Fence	Ineffective
Village of West Clay Section 10010-E	2018-03-28	Portable Toilet	Ineffective

Page 1 of 26

Project T

Project Type

Commercial

Municipal/ Util

Residential

Total:

Project R

Projects O

Partner

City of Carmel

Abby Tap Hou

Alderson

Alpha EMC

Alt Constructi

Armstrong De

B and B Park

Beth Neilson

Brandt

Brenwick Dev

Browning

C and L Mana

Inspector: Jacques Clouseau

Inspector's Organization: Indiana Inspections, Inc.

Project Name	Permittee	Project Type	Passed	Failed	Total
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Total:			46	20	66

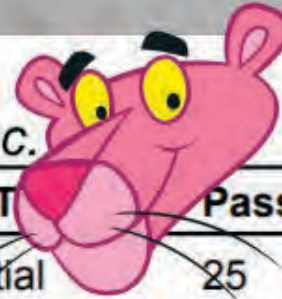


City of Carmel, IN ESC

Project Summary Report

Inspector: Jacques Clouseau

Inspector's Organization: Indiana Inspections, Inc.



Project Name	Permittee	Project Type	Passed	Failed	Total
Great Project 1	Super Developer	Residential	25	18	43
Great Project 2	Super Developer	Residential	21	2	23
Total:			46	20	66



City of Carmel, IN ESC

Project Summary Report



Site Map

- Quick Compliance Check
- Internal or External
- Public Comments

43. Tom Wood Parking Lot Phase II

Address: 9624 Day Drive, Carmel IN 46032

Permit #: 509

Parcel #: 17-14-07-04-06-017.000

Permit Authority: City of Carmel, IN ESC

Permittee: Alderson

[View Inspections](#) [Send Comments](#)

The image shows a map application interface. On the left, a smaller map view shows a location near Sky Zone and a lake, with a person icon and zoom controls (+/-). The main map view shows a location near Interstate 465 with several green and red pins. A popup window is open over one of the pins, displaying the following information:

43. Tom Wood Parking Lot Phase II

Address	9624 Day Drive, Carmel IN 46032
Permit #	509
Parcel #	17-14-07-04-06-017.000
Permit Authority	City of Carmel, IN ESC
Permittee	Alderson

At the bottom of the popup are two buttons: [View Inspections](#) and [Send Comments](#).

Inspection Example

White Oak Construction

Inspection Report

[View Project](#) [View Inspection](#)

Meijer Outlot C Retail

Address

1424 W Carmel Drive
Carmel, IN 46032

Inspector:

Jason Seibert 765-775-6194
jseibert@whiteoakconstruction.com

Inspection Date:

09/04/2018

Inspection Time:

04:58 PM

Weather Trends:

Sunny/Warm

Temperature:

92 F

Last Precip. Date:

08/25/2018

Last Precip. Amount:

.5 in

Last Precip. Source:

Estimate

Reason for Inspection:

Routine

Comments:

Inspection Items

Name: Admin / Site Management - Portable Toilet

Required: Yes

Inspected: Yes

Status: Active

Condition: Correct

Description: Portable toilet must be anchored on two corners, placed off of hard surface, on level ground, and away from storm inlets. Tipped portable toilets must be cleaned immediately and contaminated soil must be removed from site. Do not wash down storm drain.

Comment:

Page 1 of 9

Comment:

Name: Perimeter Control - Silt Fence

Required: Yes

Inspected: Yes

Status: Active

Condition: Correct

Description: Install/maintain silt fence that is trenched in a minimum of 8 inches into the ground with 4 inches laid on bottom of trench. Joints are to be wrapped and not overlapped. Any damage to the silt fence should be replaced.

Comment:



Name: Inlet Protection - Area Inlet Protection

Required: Yes

Inspected: Yes

Status: Active

Condition: Correct

Description: Ensure inlet protection is installed and maintained per plan. Inlet protection needs to be replaced if any tearing has occurred or sediment build up has reached 50%.

Page 7 of 9

Meijer Outlot C Retail

Address

1424 W Carmel Drive
Carmel IN 46032

Inspector:

Jason Seibert 765-775-6194
jseibert@whiteoakconstruction.com

Inspection Date:

09/04/2018

Inspection Time:

04:59 PM

Weather Trends:

Sunny/warm

Temperature:

92 F

Last Precip. Date:

08/25/2018

Last Precip. Amount:

.5 in

Last Precip. Source:

Estimate

Reason for Inspection:

Routine

Comments:

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Required: Yes

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Status: Active

Condition: Correct

Description: Install/ maintain silt fence that is trenched in a minimum of 8 inches into the ground with 4 inches laid on bottom of trench. Joints are to be wrapped and not overlapped. Any damage to the silt fence should be replaced.

Comment:



Inspection Example

White Oak Construction

Inspection Report

[View Project](#) [View Inspection](#)

Meijer Outlot C Retail

Address

1424 W Carmel Drive
Carmel IN 46032

Inspector:

Jason Seibert 765-775-6194
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Last Precip. Date:

08/25/2018

Last Precip. Amount:

.5 in

Last Precip. Source:

Estimate

Reason for Inspection:

Routine

Comments:

Inspection Items

Name: Admin / Site Management - Portable Toilet

Required: Yes

Inspected: Yes

Status: Active

Condition: Correct

Description: Portable toilet must be anchored on two corners, placed off of hard surface, on level ground, and away from storm inlets. Tipped portable toilets must be cleaned immediately and contaminated soil must be removed from site. Do not wash down storm drain.

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Page 1 of 9

Comment:

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Comment:



Name: Inlet Protection - Area Inlet Protection

Required: Yes

Inspected: Yes

Status: Active

Condition: Correct

Description: Ensure inlet protection is installed and maintained per plan. Inlet protection needs to be replaced if any tearing has occurred or sediment build up has reached 50%.

Page 7 of 9

Contractor Self-Inspection Program

City of Carmel / PermiTrack

Insights
and Actions

Analysis
and
Questions

Before
PermiTrack

PermiTrack



PermiTrack

September 6th, 2018

Carmel ESC Inspection Data and Questions



BMPs

Pass/ Fail

Frequency

Carmel ESC Inspection Data and Questions

What is the source of the information?



BMPs

Pass/ Fail

Frequency

What is the source of the information?



What is the source of the information?



144 Projects

- 80 Commercial
- 59 Residential
- 5 Municipal/ Utility

F

What is the source of the information?



144 Projects

- 80 Commercial
- 59 Residential
- 5 Municipal/ Utility

98 Permitted Companies

F

What is the source of the information?



144 Projects

- 80 Commercial
- 59 Residential
- 5 Municipal/ Utility

98 Permitted Companies

153 Inspectors

- 77 Inspector companies
- Most inspections by individual = 853
- All inspections by permit holder

What is the source of the information?



7,432 Inspections

- Overall, 69.3% "Pass"
- August 2013 - July 2018

144 Projects

- 80 Commercial
- 59 Residential
- 5 Municipal/ Utility

98 Permitted Companies

153 Inspectors

- 77 Inspector companies
- Most inspections by individual = 853
- All inspections by permit holder

What is the source of the information?

4,758 deficiencies

- 44 different BMPs
- Admin & technical practices

144 Projects

- 80 Commercial
- 59 Residential
- 5 Municipal/ Utility

7,432 Inspections

- Overall, 69.3% "Pass"
- August 2013 - July 2018



98 Permitted Companies

153 Inspectors

- 77 Inspector companies
- Most inspections by individual = 853
- All inspections by permit holder

By the number... ESC Inspection Data

What do the inspections tell us?

Which practices fail most frequently?

Which are often missing?

BMP Stats

BMP
Categories

Top 10
"Ineffective"

Top 10 "Not
Applied"

Ineffective vs.
Not Applied

Reported BMP Deficiencies by BMP Category

	Total	Ineffective	Not Applied	All BMP Categories	% of Total	Cumulative % Failures
1	1,343	730	613	Admin / Site Management	28.2%	28.2%
2	1,216	1,191	25	Perimeter Control	25.6%	53.8%
3	735	636	99	Construction Entrance	15.4%	69.2%
4	616	413	203	Wash Out Facilities	12.9%	82.2%
5	499	339	160	Inlet Protection	10.5%	92.7%
6	136	62	74	Conveyance Stabilization	2.9%	95.5%
7	80	6	74	Sediment Control	1.7%	97.2%
8	49	2	47	Post Construction BMPs	1.0%	98.2%
9	38	12	26	Conveyance Check	0.8%	99.0%
10	16	13	3	Slope Stabilization	0.3%	99.4%
11	13	1	12	Dewatering	0.3%	99.6%
12	10	1	9	Outlet Control	0.2%	99.9%
13	6	4	2	Ground Stabilization	0.1%	100.0%
14	1	1	-	Site Water Diversion	0.0%	100.0%
15	-	-	-	Dust Control	0.0%	100.0%
16	-	-	-	Enforcement Actions	0.0%	100.0%
	4,758	3,411	1,347			

Reported BMP Deficiencies by BMP Category

	Total	Ineffective	Not Applied	All BMP Categories	% of Total	Cumulative % Failures
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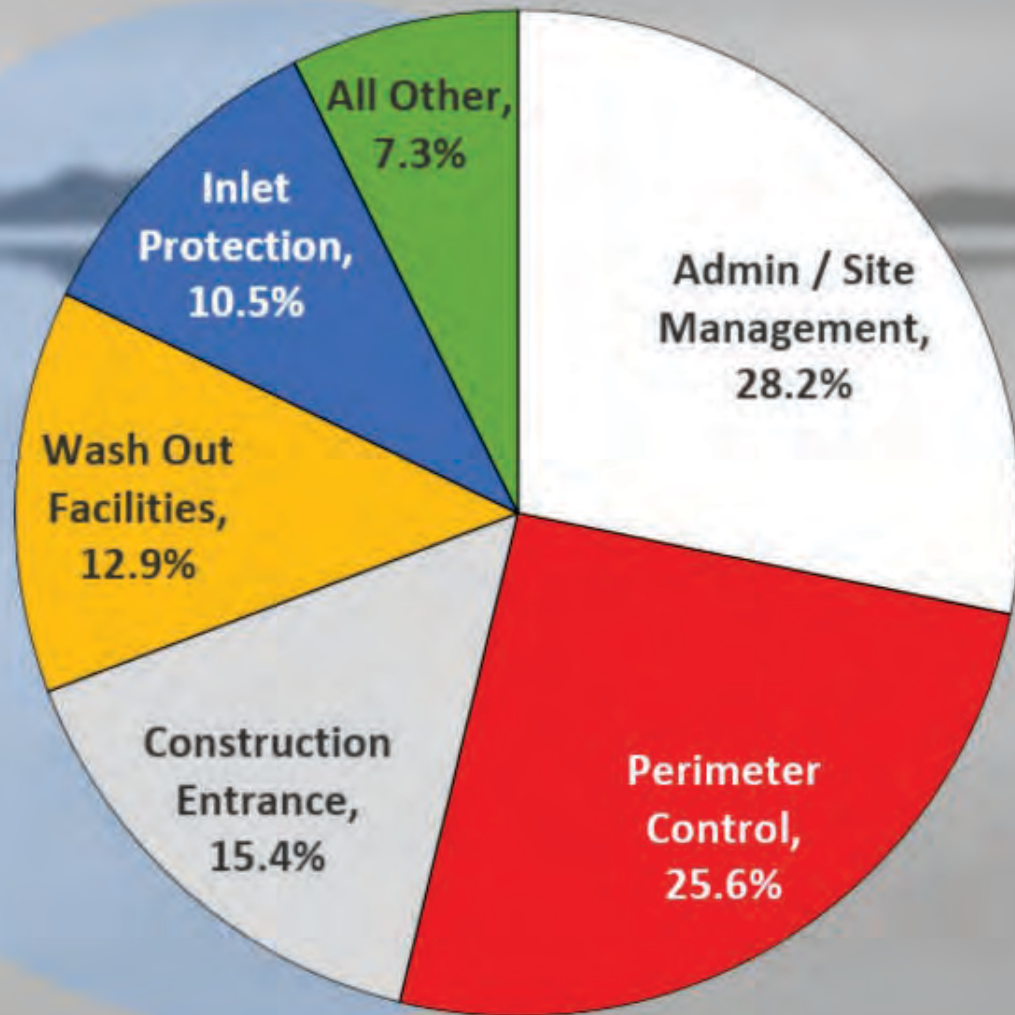
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Deficient BMPs by Category



Top 10 **Ineffective** Practices (65.4% of Total)

% of Total	Qty.	BMP	BMP Category
34.8%	1,188	Silt Fence	Perimeter Control
13.6%	463	Sweeping and Scraping	Construction Entrance
8.4%	286	Concrete Wash Out Area	Wash Out Facilities
7.4%	254	Permits and SWPPP Contact	Admin / Site Management
5.6%	191	Portable Toilet	Admin / Site Management
4.7%	161	Construction Entrance	Construction Entrance
4.4%	151	Curbed Inlet Protection	Inlet Protection
4.3%	148	Area Inlet Protection	Inlet Protection
4.1%	141	Trash Control	Admin / Site Management
3.7%	127	Concrete Washout Signage	Wash Out Facilities
8.8%	301	ALL OTHERS	

Top 10 <u>Ineffective</u> Practices (65.4% of Total)			
% of Total	Qty.	BMP	BMP Category
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13.6%	463	Sweeping and Scraping	Construction Entrance
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4.3%	148	Area Inlet Protection	Inlet Protection
4.1%	141	Trash Control	Admin / Site Management
3.7%	127	Concrete Washout Signage	Wash Out Facilities
8.8%	301	ALL OTHERS	

Top 10 **Not Applied** Practices (72.0% of Total)

% of Total	Qty.	BMP	BMP Category
11.3%	152	Trash Control	Admin / Site Management
8.9%	120	Portable Toilet	Admin / Site Management
8.6%	116	Concrete Washout Signage	Wash Out Facilities
7.7%	104	Spill Response	Admin / Site Management
6.6%	89	Permits and SWPPP Contact	Admin / Site Management
6.5%	88	Site Photo	Admin / Site Management
6.5%	87	Concrete Wash Out Area	Wash Out Facilities
6.2%	83	Curbed Inlet Protection	Inlet Protection
5.3%	72	Erosion Control Blanket	Conveyance Stabilization
4.4%	59	Sweeping and Scraping	Construction Entrance
28.0%	377	<i>ALL OTHERS</i>	

Top 10 **Not Applied** Practices (72.0% of Total)

% of Total	Qty.	BMP	BMP Category
11.3%	152	Trash Control	Admin / Site Management
8.9%	120	Portable Toilet	Admin / Site Management
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6.5%	88	Site Photo	Admin / Site Management
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6.2%	83	Curbed Inlet Protection	Inlet Protection
5.3%	72	Erosion Control Blanket	Conveyance Stabilization
4.4%	59	Sweeping and Scraping	Construction Entrance
28.0%	377	ALL OTHERS	

Compare Missing vs. Ineffective Practices

Top 10 **Not Applied** Practices (72.0% of Total)

% of Total	Qty.	BMP	BMP Category
11.3%	152	Trash Control	Admin / Site Management
8.9%	120	Portable Toilet	Admin / Site Management
8.6%	116	Concrete Washout Signage	Wash Out Facilities
7.7%	104	Spill Response	Admin / Site Management
6.6%	89	Permits and SWPPP Contact	Admin / Site Management
6.5%	88	Site Photo	Admin / Site Management
6.5%	87	Concrete Wash Out Area	Wash Out Facilities
6.2%	83	Curbed Inlet Protection	Inlet Protection
5.3%	72	Erosion Control Blanket	Conveyance Stabilization
4.4%	59	Sweeping and Scraping	Construction Entrance
28.0%	377	ALL OTHERS	

Top 10 **Ineffective** Practices (65.4% of Total)

% of Total	Qty.	BMP	BMP Category
34.8%	1,188	Silt Fence	Perimeter Control
13.6%	463	Sweeping and Scraping	Construction Entrance
8.4%	286	Concrete Wash Out Area	Wash Out Facilities
7.4%	254	Permits and SWPPP Contact	Admin / Site Management
5.6%	191	Portable Toilet	Admin / Site Management
4.7%	161	Construction Entrance	Construction Entrance
4.4%	151	Curbed Inlet Protection	Inlet Protection
4.3%	148	Area Inlet Protection	Inlet Protection
4.1%	141	Trash Control	Admin / Site Management
3.7%	127	Concrete Washout Signage	Wash Out Facilities
8.8%	301	ALL OTHERS	

Compare Missing vs. Ineffective Practices

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Top 10 Ineffective Practices (65.4% of Total)			
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Nearly 50% of the missing items are not actual ESC practices

Insights on Inspection Results

First, a word on "fuzzy" pass/ fail...

Inspector
Results

Company
Results

Permitted
Party
Results

Insights on Inspection Results

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"Pass" means an item is A-OK, right?

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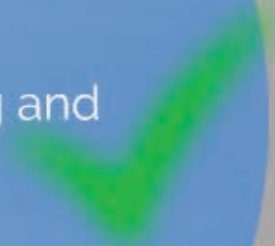
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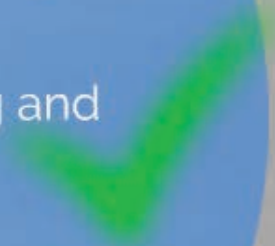
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"Fail" means an item is missing or not functional, right?

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Insights on Inspection Results

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"Pass" means an item is A-OK, right?

Or, it's okay, but slipping and should be attended to...



"Fail" means an item is missing or not functional, right?

Or, it's still functional, but soon will not be unless maintained...

Inspector
Results

Company
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Results

How consistently do inspectors judge projects?

Observations

- 153 inspectors, 7,432 inspections at **30.7% fail rate**
- **17 inspectors** did **HALF** the inspections at 32.9% fail rate
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- Does variation reflect difference in project performance or inspector diligence?

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Are there differences by type of inspector company?

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- 77 inspector companies, 30.7% fail rate
- 7 companies; 52.6% of inspections at 38.7% fail rate
- Pass-Fail rates varied dramatically by company

77 Inspector Companies		5,149	2,283	7,432	30.7%		
	Company	Company	Pass	Fail	Total	%-Fail	% of Total
1	C-P3	Residential	1,038	176	1,214	14%	16.3%
2	C-A2	Third Party	240	650	890	73%	28.3%
3	C-P5	National Res	216	345	561	61%	35.9%
4	C-R1	Residential	360	71	431	16%	41.7%
5	C-S3	Commercial	112	186	298	62%	45.7%
6	C-J1	Res/Com	192	74	266	28%	49.2%
7	C-G2	Commercial	238	9	247	4%	52.6%
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10	C-T1	Commercial	170	0	170	0%	60.1%
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8	C-E3	Res/Com	192	2	194	1%	55.2%
9	C-B4	Commercial	186	6	192	3%	57.8%
10	C-T1	Commercial	170	0	170	0%	60.1%
11	C-L1	Residential	77	90	167	54%	62.3%
12	C-B1	Third Party	99	62	161	39%	64.5%
13	C-K2	Commercial	152	0	152	0%	66.5%
14	C-O1	Residential	25	103	128	80%	68.2%
15	C-C14	Commercial	117	0	117	0%	69.8%
16	C-M4	Commercial	102	14	116	12%	71.4%
17	C-P2	Residential	95	14	109	13%	72.8%
18	C-F3	Residential	56	50	106	47%	74.3%
19	C-S1	Residential	102	1	103	1%	75.6%
20	C-W2	Res/Com	20	78	98	80%	77.0%

Are there differences by type of inspector company?

Observations

- 77 inspector companies, 30.7% fail rate
- 7 companies; 52.6% of inspections at 38.7% fail rate
- Pass-Fail rates varied dramatically by company

Questions

- How does inspector training compare between companies?
- Is there a difference by **TYPE** of company?

77 Inspector Companies 5,149 2,283 7,432 30.7%

	Company	Company	Pass	Fail	Total	%-Fail	% of Total
1	C-P3	Residential	1,038	176	1,214	14%	16.3%
2	C-A2	Third Party	240	650	890	73%	28.3%
3	C-P5	National Res	216	345	561	61%	35.9%
4	C-R1	Residential	360	71	431	16%	41.7%
5	C-S3	Commercial	112	186	298	62%	45.7%
6	C-J1	Res/Com	192	74	266	28%	49.2%
7	C-G2	Commercial	238	9	247	4%	52.6%
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YES!

Yes!

Analysis by Authorized Inspector Company Type

Type	Pass	Fail	Total	%-Fail
Municipal	2	9	11	82%
Third Party	340	759	1,099	69%
National Res	216	345	561	61%
Res/Com	438	158	596	27%
Residential	1,890	603	2,493	24%
Commercial	2,191	406	2,597	16%
Utility	72	3	75	4%
Totals	5,149	2,283	7,432	31%

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What about results by permitted company?

Observations

- 144 projects by 98 permitted companies; 30.7% fail rate
- 11 companies; 51.7% of inspections; 41.9% fail rate
- Again, dramatic variation

98 Permittees 5,149 2,283 7,432 30.7%

	Permittee	Pass	Fail	Total	%-Fail	% of Total
1	P-F2	537	99	636	16%	8.6%
2	P-P8	216	345	561	61%	16.1%
3	P-R2	360	71	431	16%	21.9%
4	P-M6	31	395	426	93%	27.6%
5	P-R3	181	208	389	53%	32.9%
6	P-P4	311	59	370	16%	37.8%
7	P-J1	144	73	217	34%	40.8%
8	P-S4	112	97	209	46%	43.6%
9	P-P2	108	99	207	48%	46.4%
10	P-O1	39	164	203	81%	49.1%
11	P-E2	192	2	194	1%	51.7%
12	P-B4	176	6	182	3%	54.2%
13	P-T1	170	0	170	0%	56.4%
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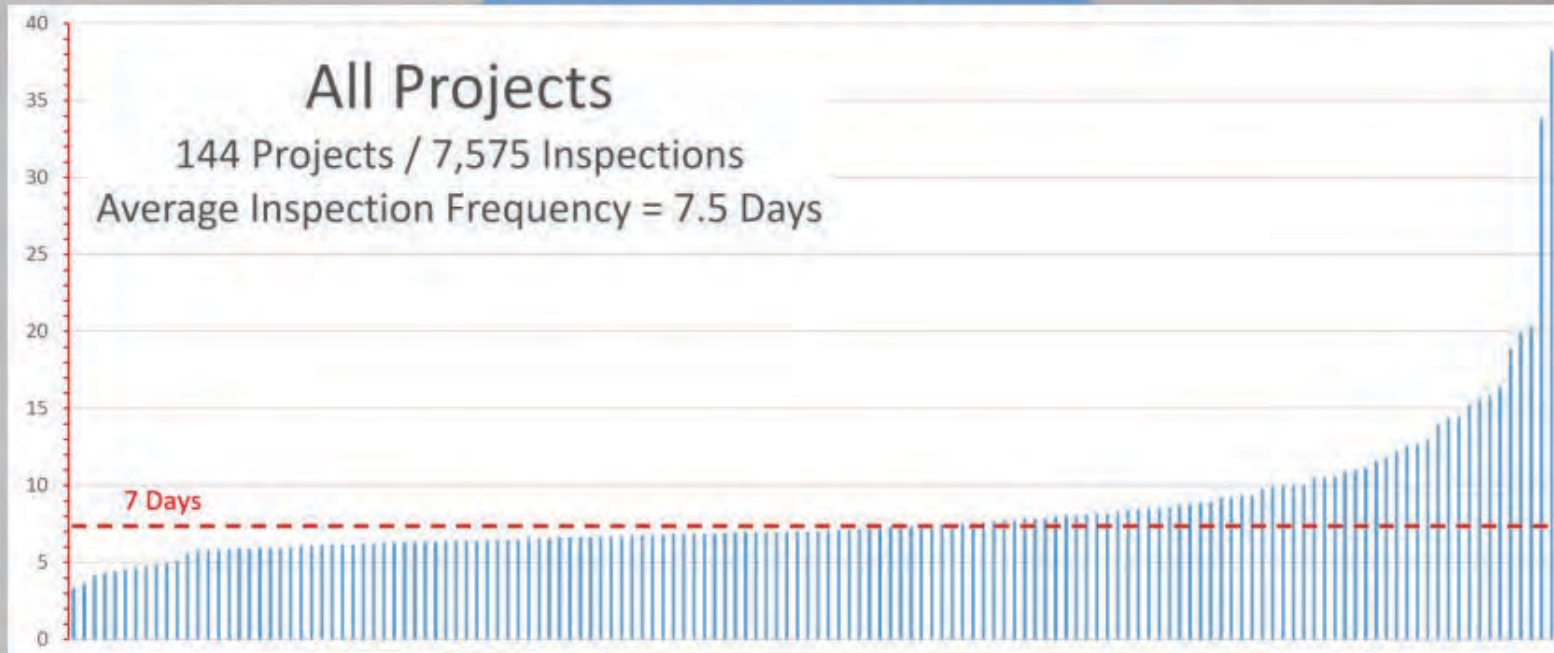
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- Are there such dramatic differences in company and contractor performance?
- Are inspection report statistics more closely tied to inspector philosophy and diligence?

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How frequently were projects inspected?

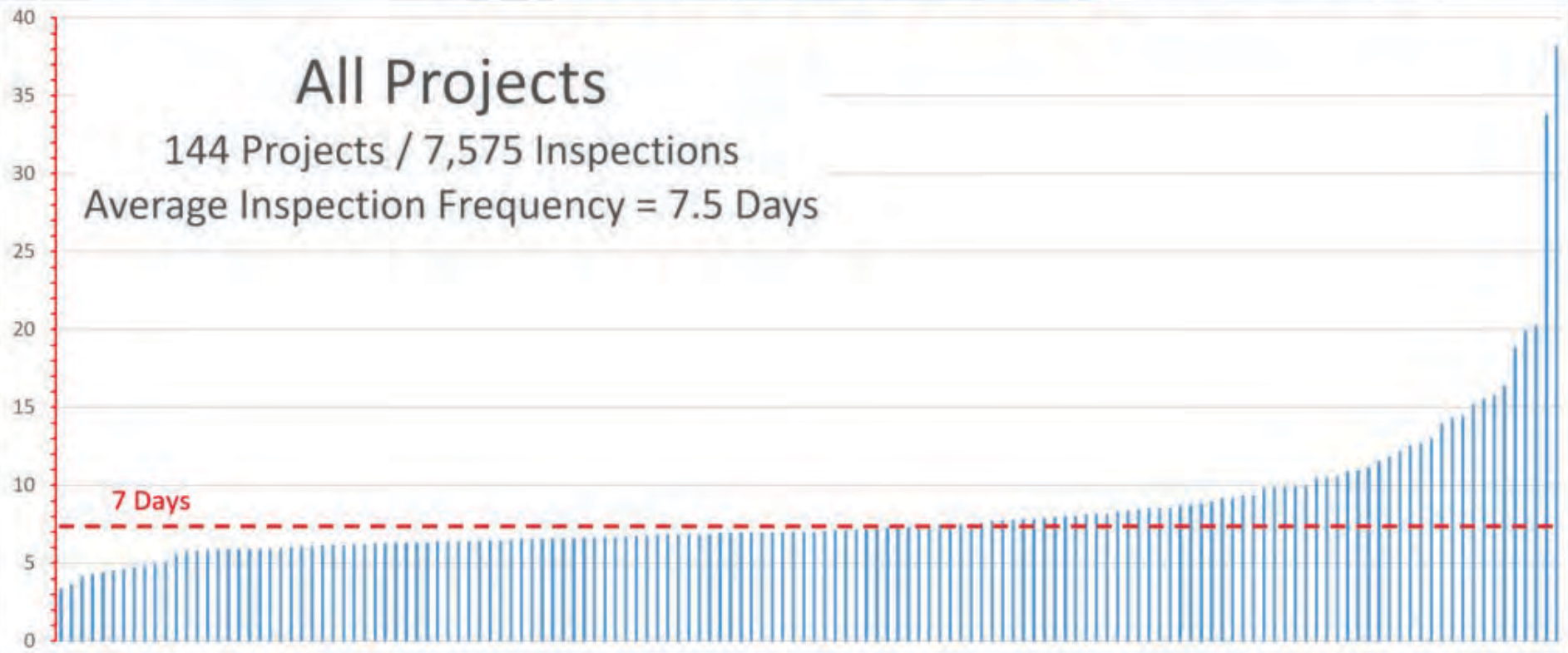


How frequently were projects inspected?

All Projects

144 Projects / 7,575 Inspections

Average Inspection Frequency = 7.5 Days



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- Clock ran year-round
- 83.3% of all projects inspected each 10 days or less



How frequently were projects inspected?

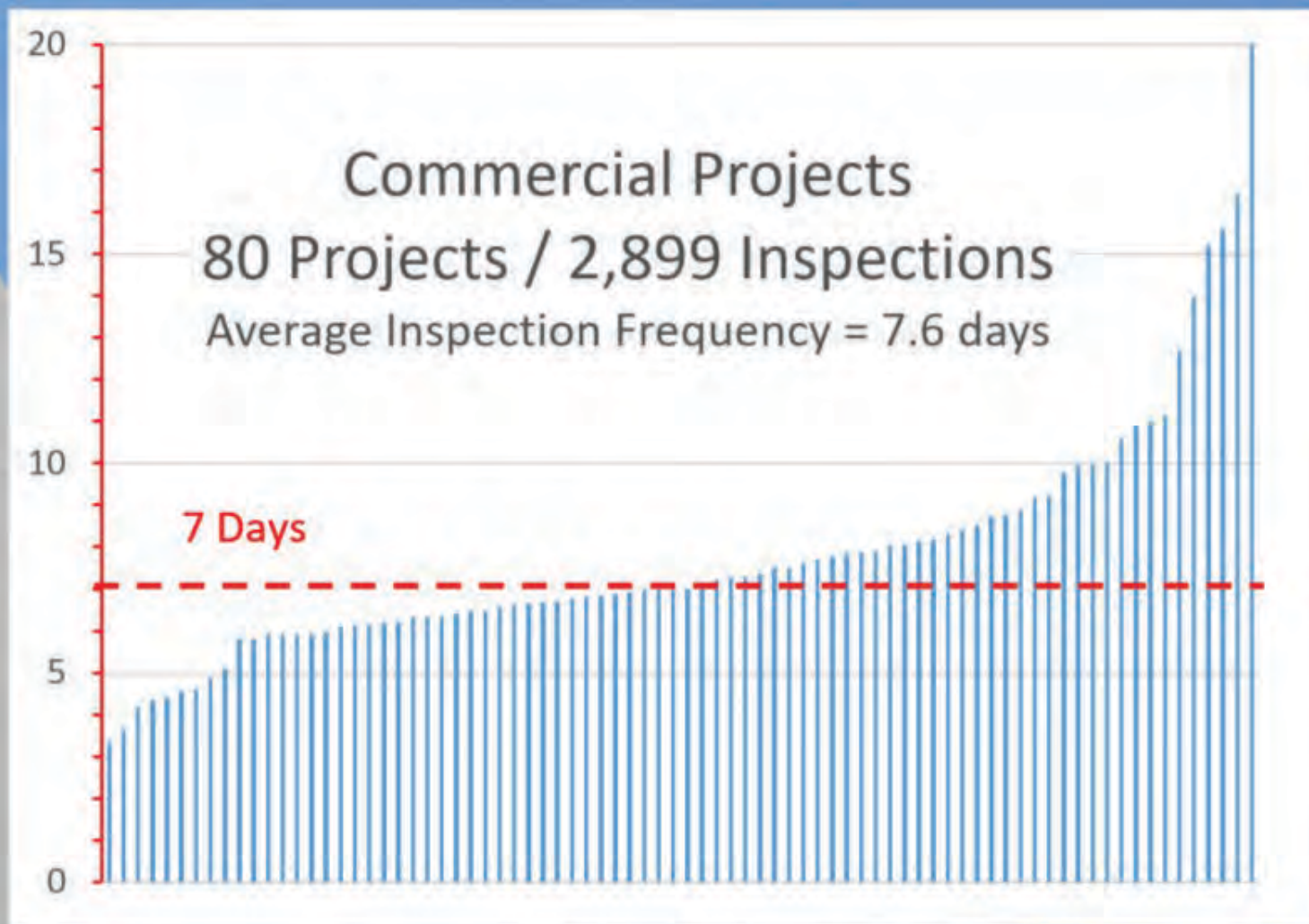
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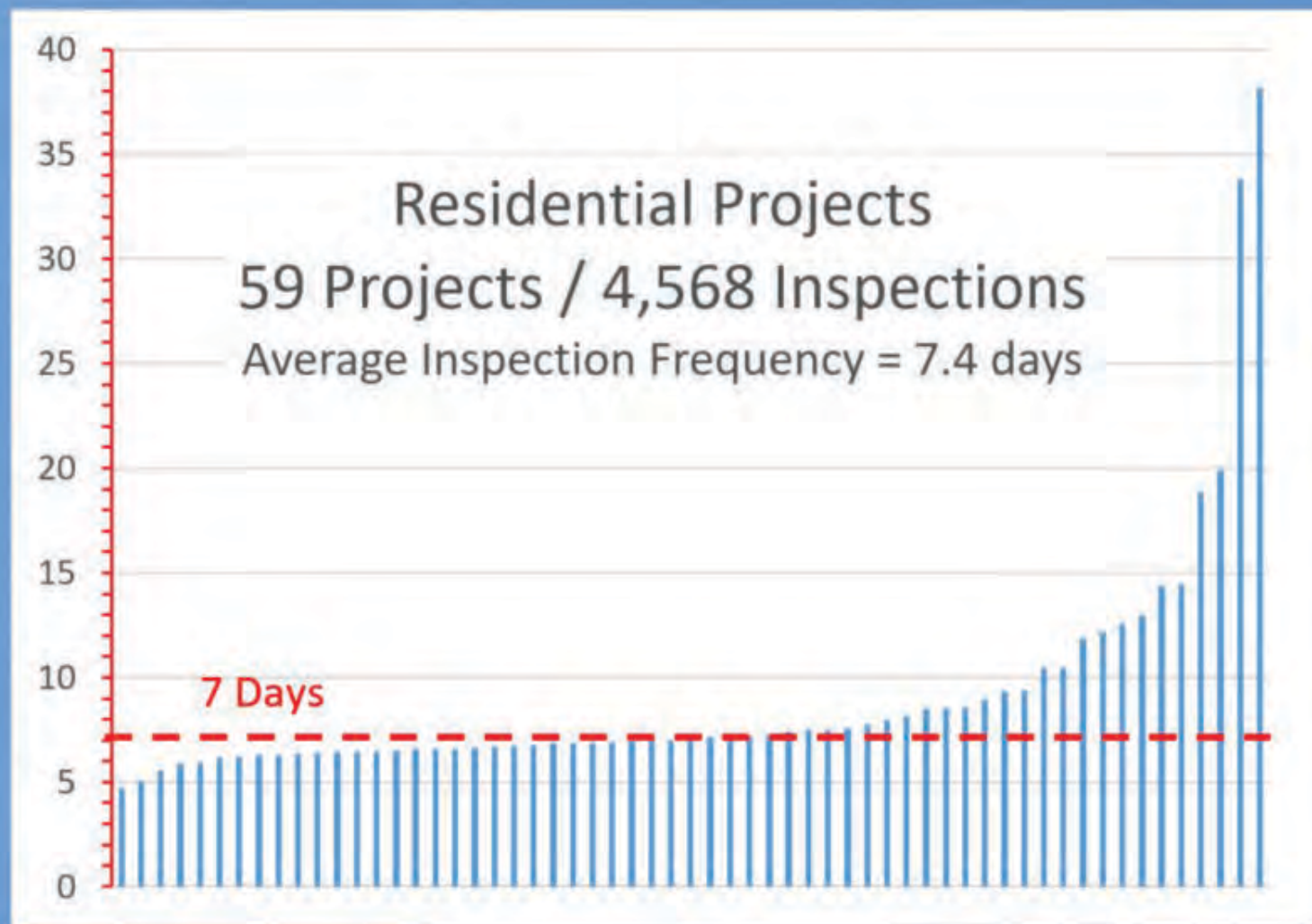
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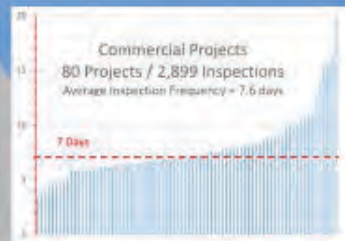
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How frequently were projects inspected?



Contractor Self-Inspection Program

City of Carmel / PermiTrack

Insights
and Actions

Analysis
and
Questions

Before
PermiTrack

PermiTrack



PermiTrack

September 6th, 2018



Insights Guide Actions

How will this information help?



Insights Guide Actions

How will this information help?

Use to focus limited resources for
greatest impact

Leveraged
Effort

Insights Guide Actions

How will this information help?

Use to focus limited resources for
greatest impact

Help clarify inspection philosophy and
impact inspector behavior

Leveraged
Effort

Philosophy
and
Behavior

Insights Guide Actions

How will this information help?

Use to focus limited resources for
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Help clarify inspection philosophy and
impact inspector behavior

May influence content of Trained
Individual objectives

Leveraged
Effort

Philosophy
and
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Training
Impact



Focus efforts on the most active inspectors and companies

Pay attention to those with -

- Low inspection frequency
- High pass rate
- Greatest number of projects

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Consider providing...

- More explicit instruction
- Specialized training
- Agency inspections
- Enforcement

Clarify philosophy and expectations...

Clarify philosophy and expectations...

Remember the fuzzy pass/ fail?



Clarify philosophy and expectations...

Remember the fuzzy pass/ fail?




We want the fail!




We want the fail!






**Can this
information help
improve training?**




Can this information help improve training?

- Incorporate inspector behavior and philosophy points



Can this information help improve training?

- Incorporate inspector behavior and philosophy points
- Use BMP and inspection analysis to enhance training



Can this information help improve training?

- Incorporate inspector behavior and philosophy points
- Use BMP and inspection analysis to enhance training
 - Use Event Notification Tool to promote timely inspection

Questions and Comments?

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YEARS

Contractor Self-Inspection Program

City of Carmel / PermiTrack

Insights
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