

INDOT Geotechnical Services 2021 Updates

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INDOT Geotechnical Services Division Website

- Geotechnical Manual Chapter 3 Revisions
- New Percolation and Infiltration Guidelines
- New Identifying Indiana Landslide Guidelines
- Appendix A and Appendix D Revisions
- Soil Modification and Procedure Guidelines (Appendix 1) Revision
- Geotechnical Design Memo No. 2021-01
- 2020 Geotechnical Conference Presentations
- Removed: 1996 Aquifer Protection Guidelines, Pavement Improvement Geotechnical Investigation Guidelines, and Surface Treatment Geotechnical Investigation Guidelines
- Website can be found at: <https://www.in.gov/indot/2804.htm>

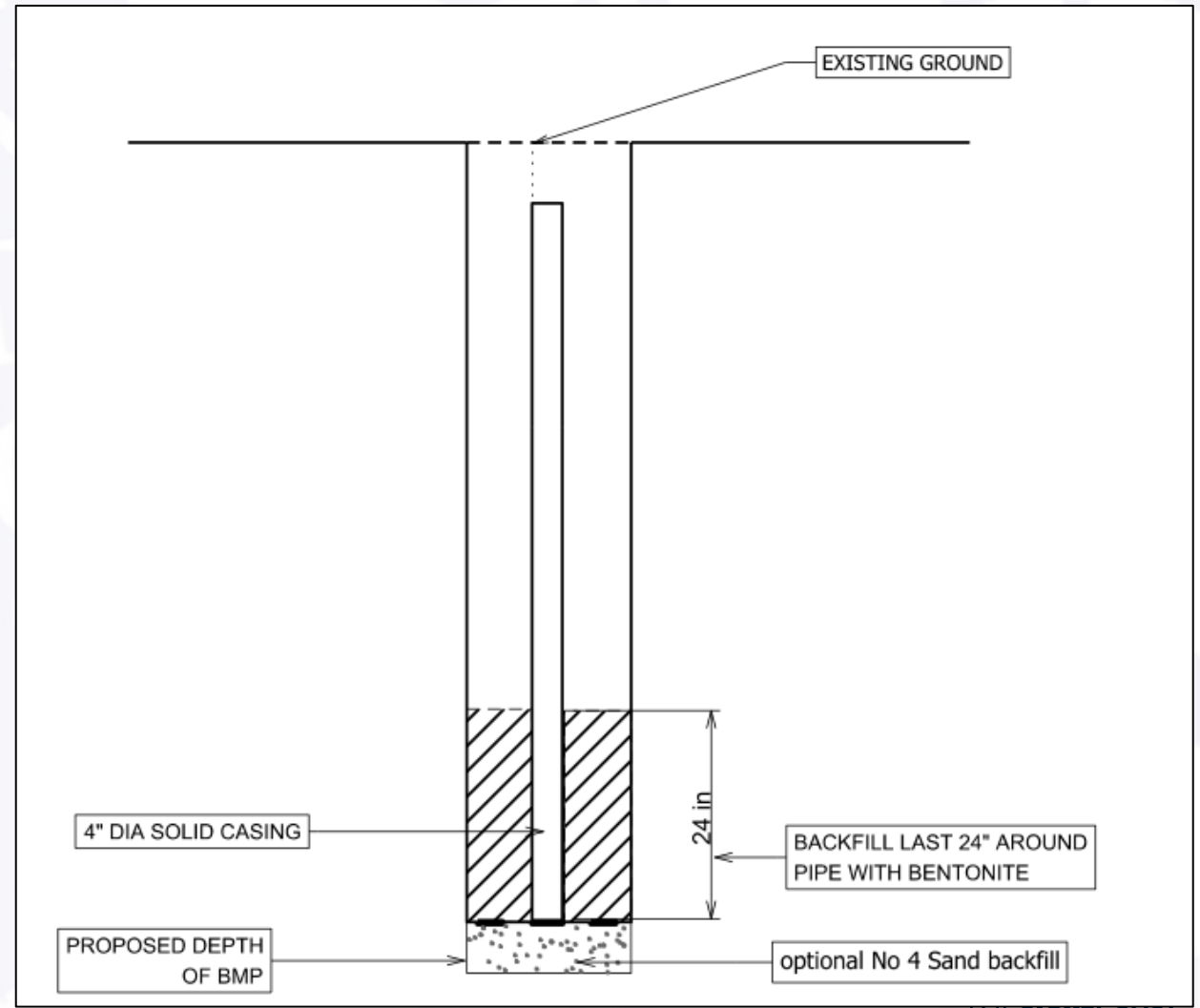
Geotechnical Manual Chapter 3

- Last updated on 5/19/2020
- Major changes include:
 - Updated guidance on Environmental Concerns and Toxic or Hazardous Areas (3.16.3)
 - New guidance for Pavement Replacement, Reconstruction, Rubblization, or Full Depth Reclamation (3.5.5): Divided highway clarification
 - Updated guidance for Pavement Improvement and Surface Treatment Projects (3.5.6): Boring frequency and divided highway clarification
 - New guidance for Noise Barrier Systems (3.5.11)
 - Updated guidance for Utilities (3.13): ITS CCTV or communication towers
 - Document can be found at: https://www.in.gov/indot/files/geotech_design_manual_ch03_geo-investigation-sampling.pdf



Percolation and Infiltration Guidelines

- For use in determining the infiltration rate to design infiltration basins
- Exploratory boring requirements
- Infiltration testing requirements
- Document can be found at: <https://www.in.gov/indot/files/percolation-Infiltration-guidelines.pdf>



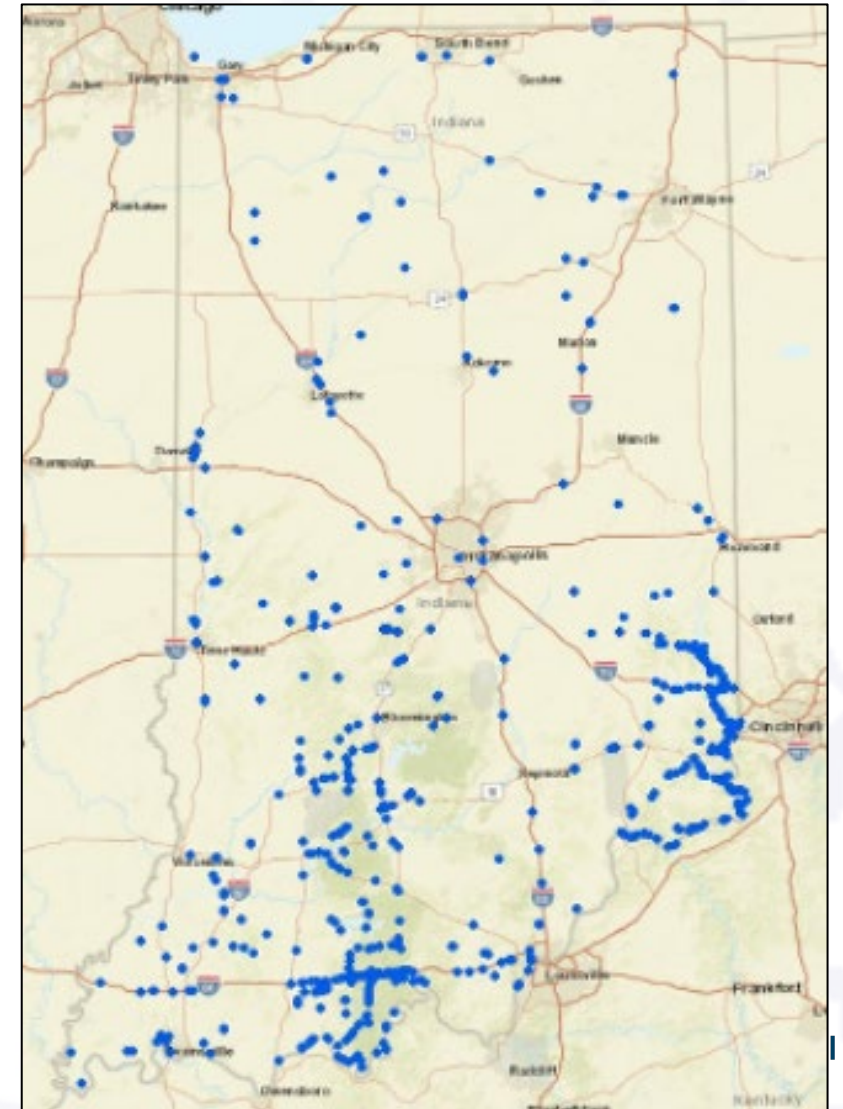
INDOT Infiltration Testing Diagram

Identifying Indiana Landslides Guidelines

- New document for INDOT district staff
- Includes common identifiable features of Indiana landslides
- Map of Indiana landslides
- Document can be found at: <https://www.in.gov/indot/files/IdentifyingLandslidesGuidelines.pdf>



Guardrail along SR 1



Map of INDOT Landslide Data (symbolized in blue)

Appendix A and Appendix D

- Updated with new contract agreements
- Appendix A can be found at: [Appendix A – Description of Geotechnical Pay Items](#)
- Appendix D can be found at: [Appendix D – Schedule of Geotechnical Pay Items](#)

APPENDIX “A” 2020

Services to be furnished by CONSULTANT:

The CONSULTANT shall complete the necessary geotechnical tasks as directed by the INDOT Director of Geotechnical Services Division.

Prior to entering upon private property for performing the work, the CONSULTANT shall follow IC 8-23-7-26 through IC 8-23-7-28. A copy of these instructions is on file with INDOT and is incorporated by reference.

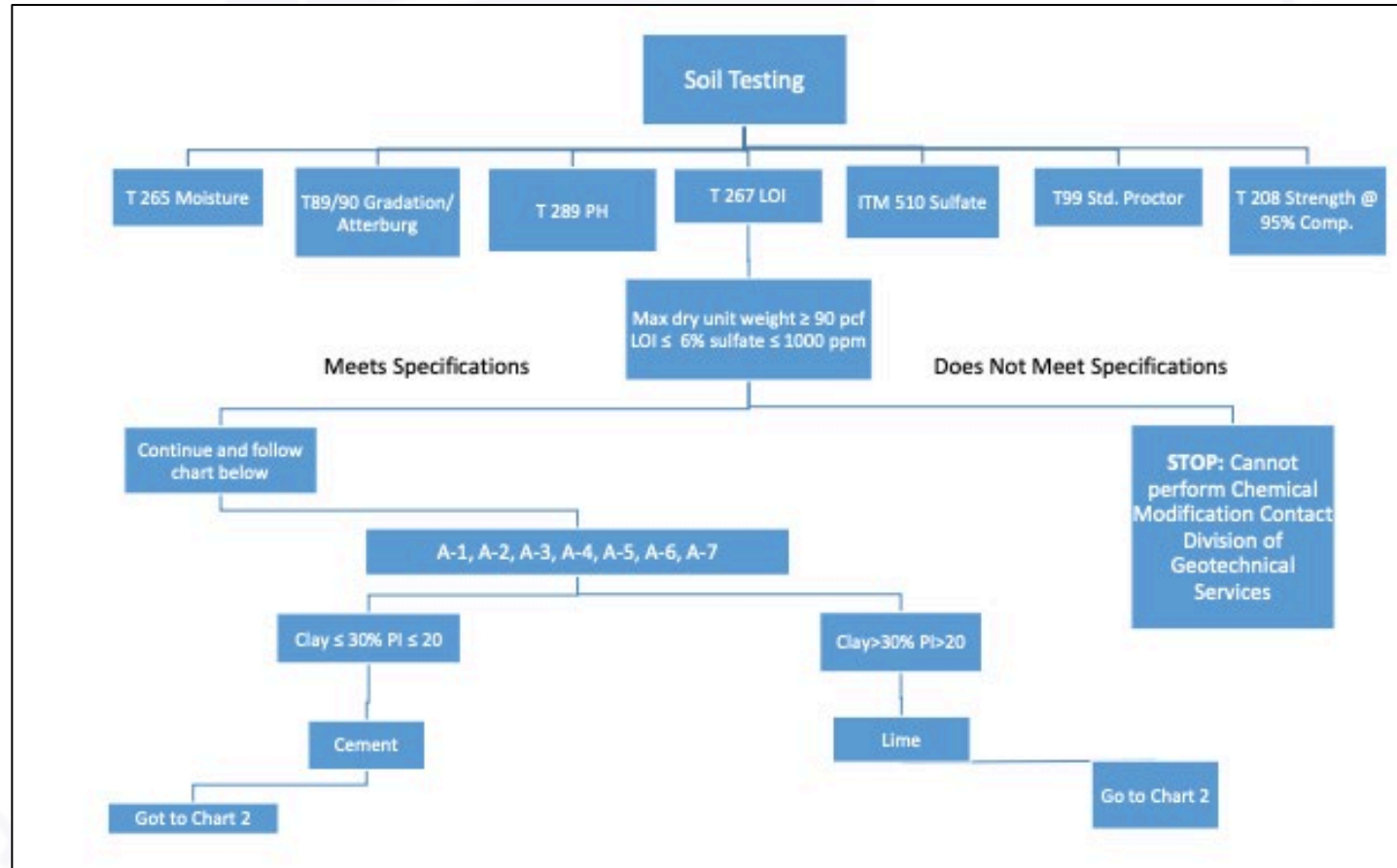
The work shall be performed in accordance with the requirements set out in the current INDOT Geotechnical Manual.

The consultant may be required to do all work per project or only a portion thereof, as determined by the INDOT Geotechnical Services Division. All services may not be required at all times.

For the services of Item Nos. 15, 16.a.ii, 32, 35, and 37, the Geotechnical CONSULTANT needs to obtain at least three (3) cost estimates before selecting the lowest bidder to perform the work. These estimates shall be submitted to INDOT Geotechnical Services Division with the invoices for the payment purposes.

Soil Modification and Procedure Guidelines

- Revised Max Dry Unit Weight ≥ 90 pcf LOI $\leq 6\%$ sulfate ≤ 1000 ppm in Appendix 1



Geotechnical Design Memo No. 2021-01

- Added 01/15/2021
- Subgrade Type IC as modified within the memo
- Subgrade Type ID in accordance with RSP 207-R-687

**Geotechnical Design Memorandum No. 2021-01
Technical Advisory**

January 15, 2021

TO: All Design, Operations, and District Personnel, and Consultants

FROM: Athar Khan 
Director, Geotechnical Services Division

SUBJECT: Subgrade Type ID

REVISES: Subgrade Treatment Type IC, Modified

EFFECTIVE: As Noted

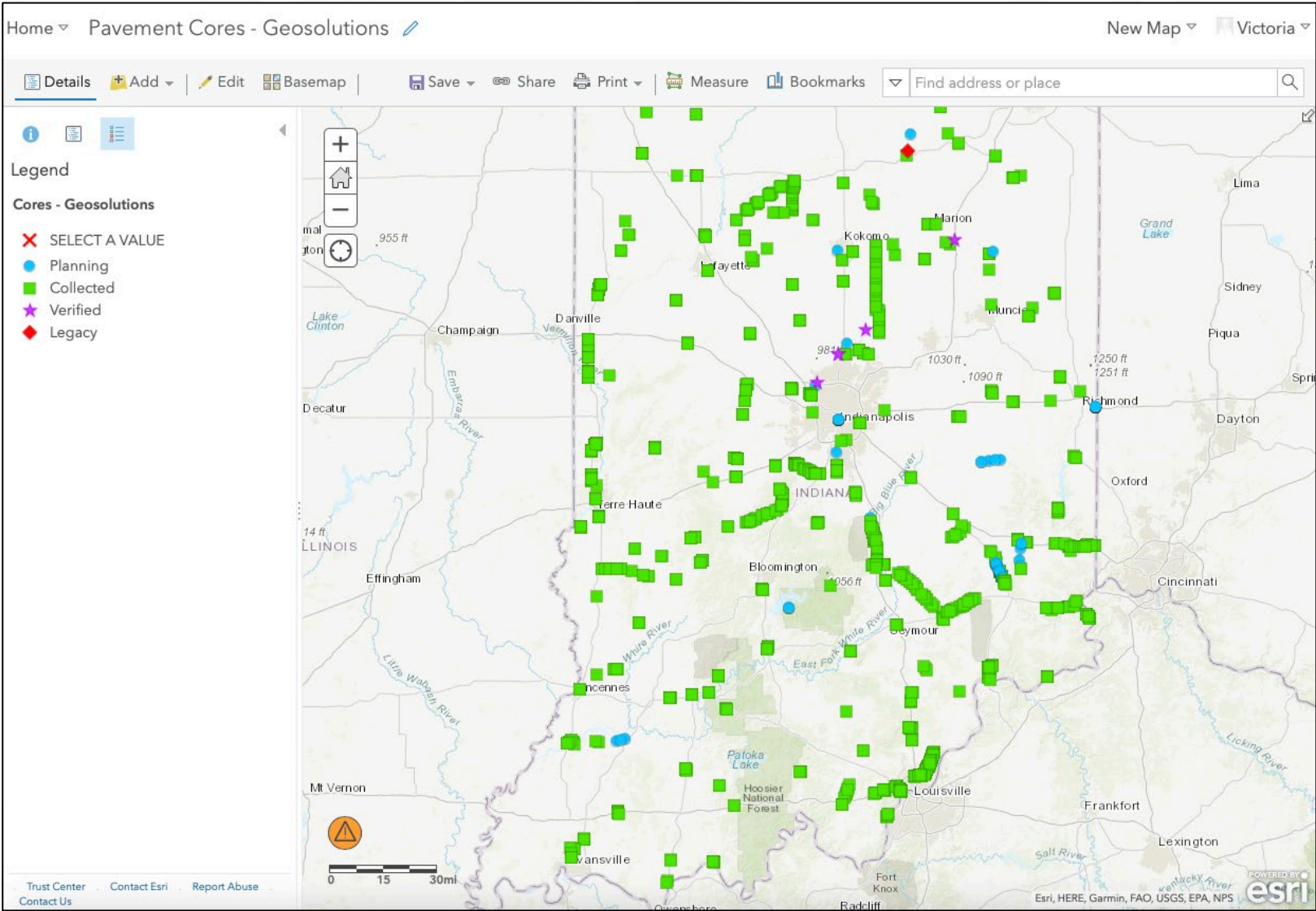
The Department has adopted Type ID subgrade treatment. Type ID will replace the Unique Special Provision for Type IC, Modified identified as: Type IC in accordance with 207.04 except that the subgrade treatment shall consist of 8 inches of aggregate INDOT #53, over 4 inches of coarse aggregate INDOT No.5 or No.2, with a geotextile in accordance with ISS 918.02(C) Type 2A placed at the bottom of aggregate.

Geotechnical subgrade treatment recommendations for Type IC, Modified, when identified as described herein, will be Type ID in accordance with RSP 207-R-687.

Drilling Updates

- Coordination with Indiana Toll Road is required prior to any work that may require lane restrictions or closures on toll roads or toll road ramps.
- Any work on interstates requires traffic control to be in accordance with INDOT Interstate Highway Congestion Policy.
- Drilling schedules
- 2020 Presentation: [Geotechnical Manual Updates and Drilling Inspections](#)

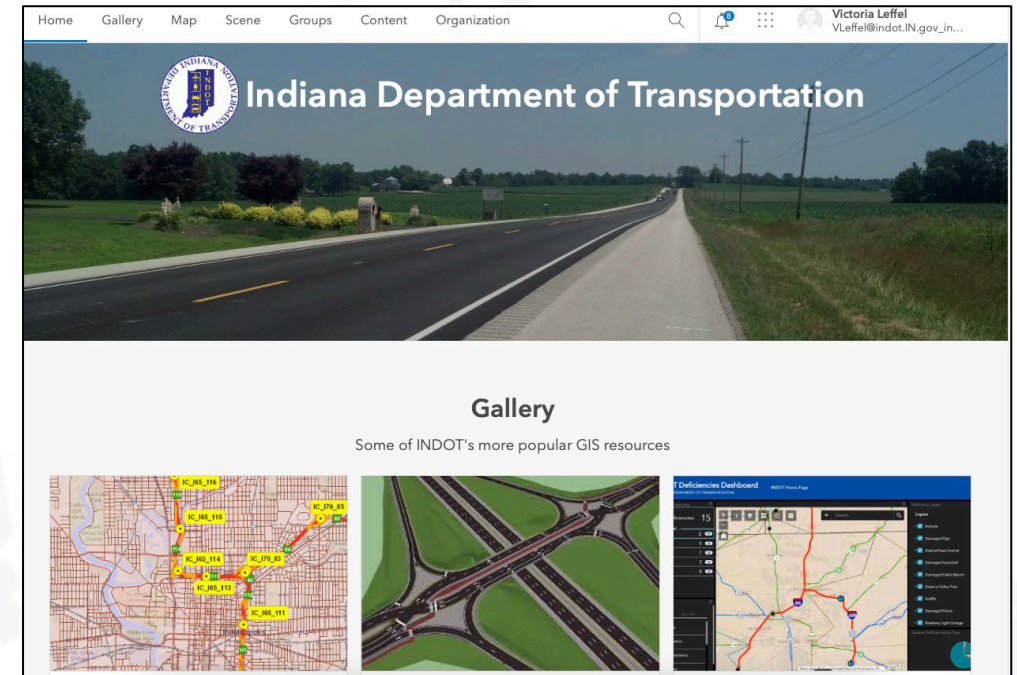
Pavement Core Collector Application



Pavement Core Application Access

Gaining Access:

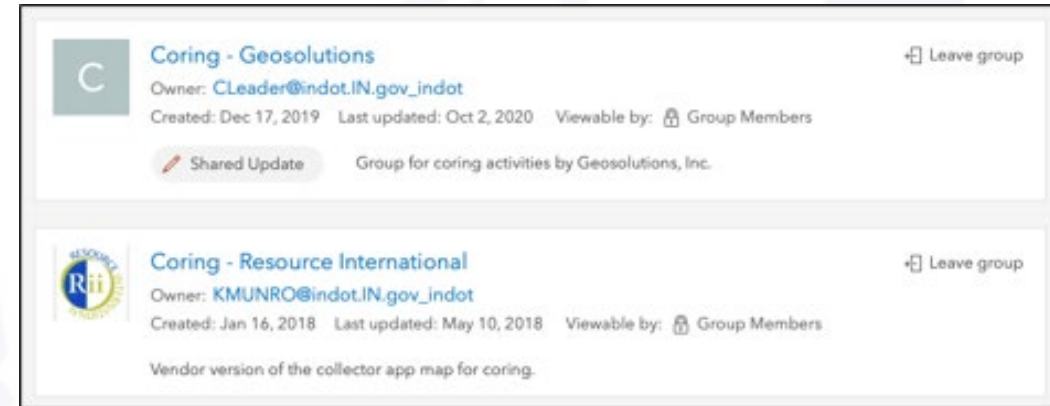
- Contact me at vleffel@indot.in.gov
- Fill out contractor account request spreadsheet
- I will submit the request form to IOT
- IOT will send account credentials
- Change password and additional account information
- Complete required trainings
- Once required trainings are complete, send me a request to be added to your firm-specific coring map



INDOT ArcGIS Website

Pavement Core Application Access

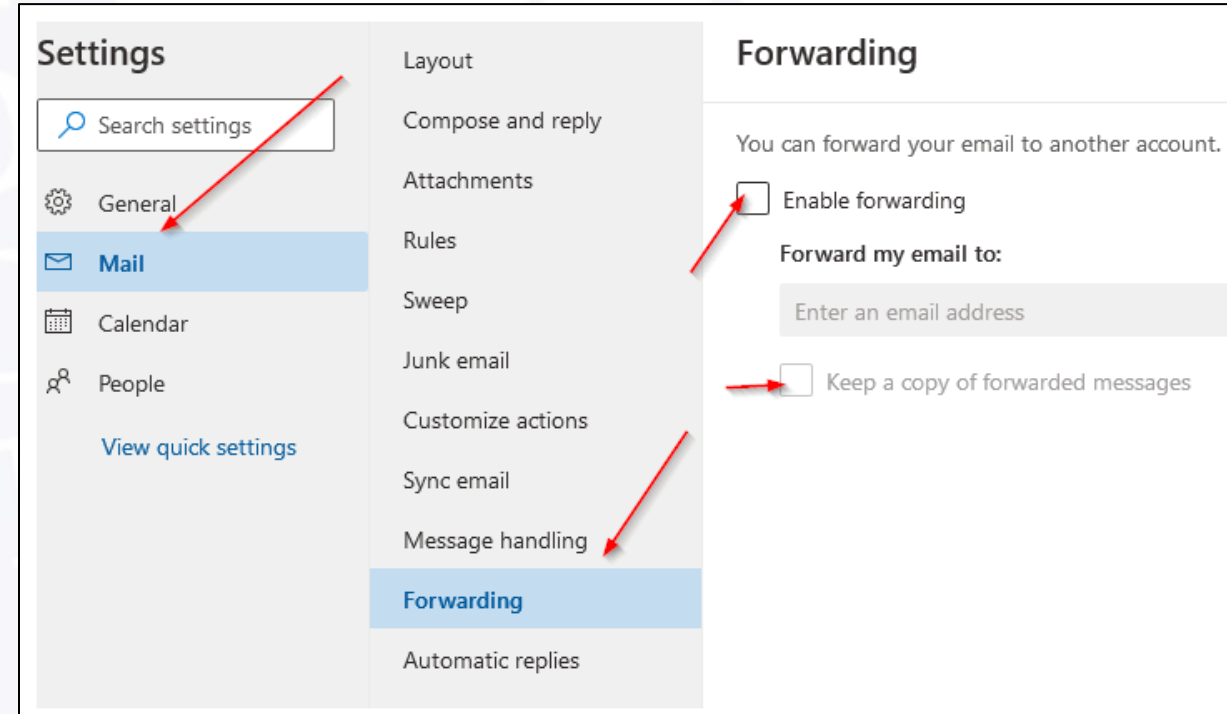
- Maintaining Access:
 - IOT will send an email notification monthly to your INDOT address and there will be a link to renew your INDOT account. You must complete this step, or your account will be deleted.
 - If your account is deleted, you will need to reapply for a new account.
 - I suggest setting a monthly calendar reminder or forwarding your email
 - Passwords will need to be changed every three months



Pavement Coring Groups

Forwarding Emails

- Login to webmail:
<https://outlook.office365.com>
- Click on gear icon on the top right
- Click on "view all Outlook settings"
- Click on mail tab on the left
- Click on forwarding
- Check both enable forwarding and keep a copy of forwarded messages



The screenshot displays the Outlook settings interface. On the left, the 'Settings' pane is open, with the 'Mail' tab selected. A red arrow points to the 'Mail' tab. In the center, a list of settings categories is shown, with 'Forwarding' highlighted. A red arrow points to the 'Forwarding' category. On the right, the 'Forwarding' settings page is visible. It includes a checkbox for 'Enable forwarding' (unchecked) and a checkbox for 'Keep a copy of forwarded messages' (unchecked). A red arrow points to the 'Enable forwarding' checkbox. Below these options is a text input field labeled 'Forward my email to:' with the placeholder text 'Enter an email address'. A red arrow points to the 'Keep a copy of forwarded messages' checkbox.

Pavement Core Collector Information Required:

VENDOR	Geosolutions Inc.
STATUS	Collected
DATE_	January 15, 2020
RTETYPE	
DIRECTION	NB
LANE	Outside Shoulder
DISTFRMCL	
LABEL	PC-4
CORETYPE	Thickness
DISTRTYPE	
DISTRSEVER	
LYR1THICK	6.00
LYR1TYPE	HMA
LYR2THICK	
LYR2TYPE	
LYR3THICK	
LYR3TYPE	
LYR4THICK	
LYR4TYPE	
NOTES	
GIS_ID	
ROUTEID	SR 66
MEAS	
DISTRICT	Vincennes

Pavement Core Collector Required Photos:

- Down core hole
- Location
- Core
- Subbase(if applicable)

