

PID 114163 Conduit Inspections

Conduit inspection (approximately 28 conduits) within project limits of PID 114163, GEA/LAK SR 044 18.45/00.00 Rehab. Work will include MOT, cleanout (if necessary), and camera inspection. Consultants will be tasked to field collect conduit inventory data, conduit inspection data, or both as directed by the District Office.

The consultant will perform conduit inspection in accordance to the ODOT Conduit Management Manual (<https://www.transportation.ohio.gov/wps/portal/gov/odot/working/engineering/hydraulic/conduit-management/03/03-inspection>). This work includes inspection of conduits with span lengths from 12 inches to less than 120 inches. A list of conduits within the project limits is included, but shall be verified by consultant. The consultant shall follow the flow chart and ODOT field data collection technology terms and conditions to establish access to the ODOT conduit collector app. (see attached external user request workflow.pdf and ODOT field data technology terms conditions.pdf)

This work includes inspection for Class A, B, C, and D entry classes. Perform Class A (non-entry) inspections on conduits where a good view of the entire barrel may be obtained from the conduit ends. Inspection of conduits with a Class D entry class may require remote video inspection equipment or confined space equipment and training.

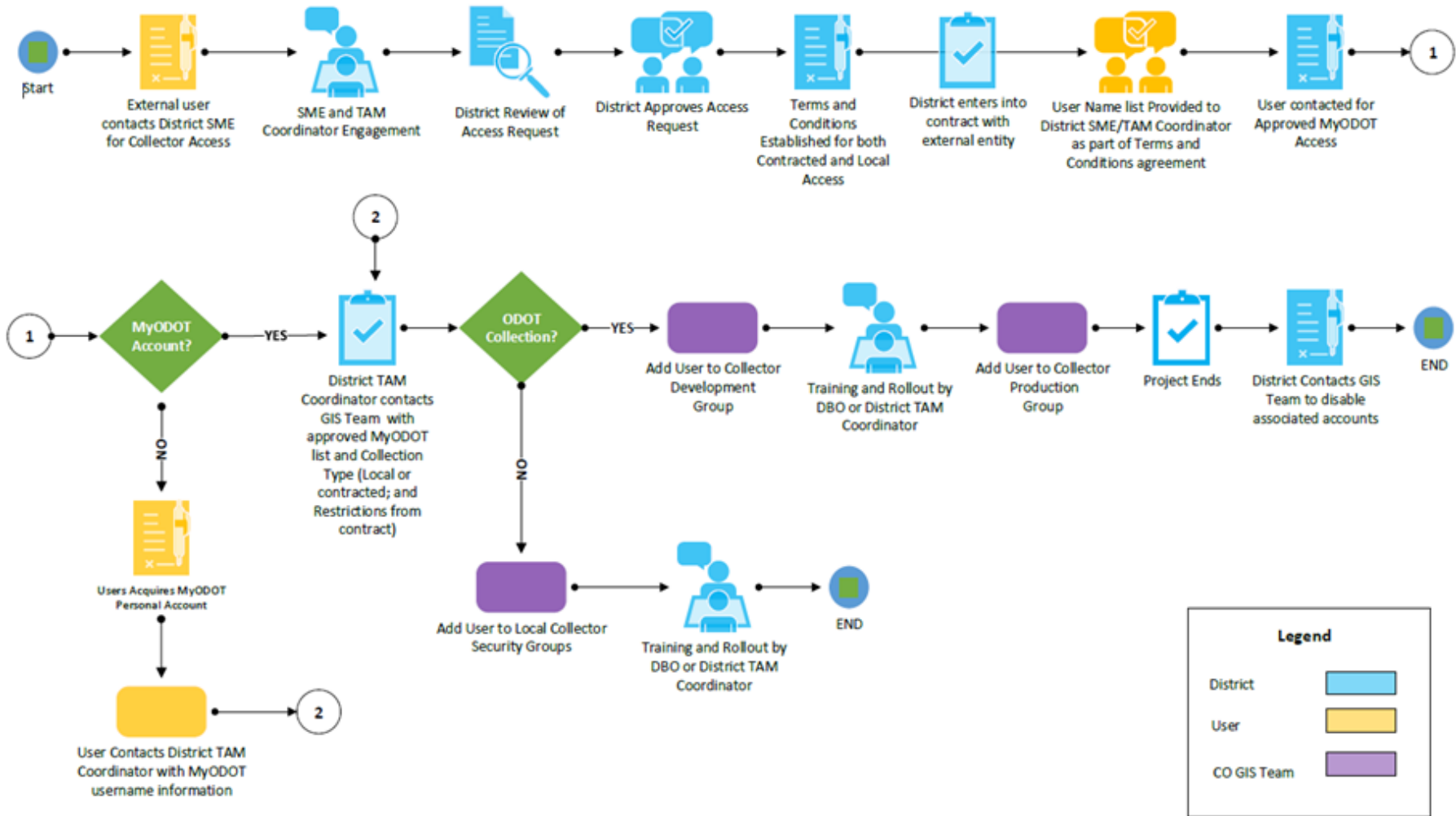
Consultant Requirements:

- Must have completed ODOT Conduit Inventory and Inspection Training (<http://www.dot.state.oh.us/Divisions/Planning/LocalPrograms/LTAP/Pages/technicalcourseinformation.aspx>). Attendance must be completed prior to performing work. Individuals qualified as ODOT bridge inspectors are not required to attend this training.
- Individuals must have experience in conduit design, installation, or maintenance activities.
- ODOT external access account as required for data uploads.

Deliverables:

- Conduit Inventory and Inspection data in electronic format. Delivered by sync to or upload directly to the ODOT conduit collector database.
- Video of Class D entry class conduits on a DVD or CD. Use the CFN to identify the video (ie: 720061321.avi)
- The minimum required digital photos of the conduit shall follow ODOT's conduit inspection manual. The consultant shall upload photos along with the inspections into the collector app and the consultant shall supply a cd/dvd with all inspection photos placed in a folder named with the corresponding CFN and year. Use the CFN with an underscore and the number of the photo (ie: 720061321_1.jpg or 720061321_2.jpg).

External Collector User Workflow



ODOT Field Data Collection Technology Terms & Conditions

Overview

The Ohio Department of Transportation (ODOT) deploys field data collection technology, to facilitate the inventory and inspection of many of ODOT's transportation assets. At this time (Fall 2018), this technology is the ESRI Collector, ESRI WebAppBuilder, and other related GIS applications (now referred to collectively as "Collector"). ODOT deploys this software on state IT infrastructure and can make it available for external vendors under contract to aid in the maintenance of this information. Benefits for vendors leveraging the ODOT infrastructure for these solutions include:

- new and updated inventory/inspection records are stored directly in ODOT databases, making the information available immediately for ODOT usage
- ensures consistent data as all enterprise asset collections will adhere to ODOT approved Collector infrastructure and application requirements
- reduces vendor contract requirements (vendors do not need to build & maintain their own solutions, and determine a method for transmitting data to ODOT)

Service Level Expectations

ODOT may provide vendors access to the following (some variation across solutions):

| Item | Comments |
|---|---|
| Named User Account for secured sign on access | Required for solution access https://myodot.dot.state.oh.us |
| Collector Maps for inventory / inspection | Accessed via mobile devices for field data collection The Collector application shall be downloaded from the Apple App Store |
| Web Apps | Accessed via web browsers for viewing and editing data Some require secured sign on for access |
| QC Reports | Automated reports which highlight data quality concerns. If QC Reports are included as part of a solution, shall be utilized by vendors to ensure data quality |
| Inventory Manuals | PDF documents which detail what and how information needs to be collected. Vendors shall collect data according to these specifications |
| Basemap Imagery Files (TPK file type) | ODOT has generated TPK imagery files for offline data collection. These can be made available for vendors if desired |
| Asset Contact Information | ODOT has established roles to ensure consistent management of asset information. Data Business Owners (DBO) reside in ODOT Central Office and manage the overall asset performance. Subject Matter Experts reside in District Offices, overseeing daily matters related to an asset. District Transportation Asset Management Coordinators are additional resources in each District which help coordinate asset management activities. They may also be contacted for support. |

ODOT Field Data Collection Technology Terms & Conditions

ODOT shall not provide vendors the following:

| Item | Comments |
|---------------------------------------|---|
| Mobile Devices (iPads, iPhones, etc.) | <p>Vendors shall supply their own equipment, and it is the vendor's exclusive responsibility to ensure compatibility with the ODOT solution. Mobile devices shall have GPS functionality to enable locational data collection. Mobile devices shall have sufficient memory and storage to support offline data connection (data collection when no cellular network is available).</p> <p>Supported Platform: Apple iOS version 11.2+</p> |
| Mobile Data Plans | <p>ODOT Collector solutions are designed to function in both online (connected to cellular network if available) or offline (requires cellular or WiFi connection to sync data) modes.</p> <p>ODOT shall not provide access to mobile data plans. Vendors shall determine their preferred method for transmitting data (ex. Cellular, WiFi).</p> <p>Some regions in Ohio may only work in offline mode due to limited cellular connectivity. Vendor selected mobile devices shall be able to perform to ODOT specifications in an offline mode should cellular connectivity be limited.</p> |

ODOT Service Level for Collector Infrastructure:

| Item | Comments |
|----------------------------------|---|
| General Solution Access & Uptime | <p>The solution is deployed on technology infrastructure (databases, servers) which operates 24/7/365, however periodic scheduled maintenance may occur, resulting in temporary unavailability. ODOT will communicate system maintenance periods in advanced as possible.</p> <p>In the event of an environment failure, ODOT will deploy best efforts to restore access within a reasonable time, but may be dependent on resource availability from another state agency (DAS OIT).</p> |
| Solution Support | <p>ODOT can provide phone or email support Monday – Friday, 7AM – 3:30PM, with exception to agency observed holidays.</p> <p>ODOT will make reasonable efforts to respond to requests within 24 hours of incident notice. Resolution time frames may vary depending on incident.</p> <p>The Office of Technical Services may be contacted for general Collector solution technical support.</p> |

ODOT Field Data Collection Technology Terms & Conditions

| Item | Comments |
|------------------|--|
| | Asset Data Business Owners (DBO) or Subject Matter Experts (SME) shall be contacted for all matters related to inventory / inspection workflows, data quality issues, inventory specifications, etc. |
| Solution Updates | DBO and SME will use best efforts to communicate solution changes within a reasonable time period. |

Standard Vendor Expectations

| Item | Comments |
|---------------|---|
| Training | <ul style="list-style-type: none">• All vendor staff shall receive inventory / inspection training to ensure data quality meets defined ODOT specifications.• The vendor shall ensure their staff complete any needed training and should be coordinated with ODOT Central Office DBO or District SME as appropriate.• If updates to a solution occur during a contract period, it is the vendor's responsibility to ensure their staff remain current. |
| Data Quality | Acceptable data quality to be supplied by the vendor will be determined by the DBO. |
| Communication | Vendors shall communicate any concerns or problems with the solution to ensure it can be resolved. |

| CRS | LATITUDE | LONGITUDE | DESIGNATION | CFN | OLD CFN | ENTRY CLASS | INTERSECTED | SHAPE | MATERIAL | SPAN (IN) | RISE (IN) | LENGTH FEET | SLOPE | SKEW (DEG) | INLET_END_TREATMENT | OUTLET_END_TREATMENT | CLOSED SYSTEM | MAX COVER (FT) | LAST INSPECTION YEAR | FREQ YEAR |
|---------------|-----------|------------|-----------------|---------|-----------|-------------|----------------------|------------------------|--------------------------|-----------|-----------|-------------|-------|------------|--------------------------------|--------------------------------|---------------|----------------|----------------------|-----------|
| GEA-44-18.426 | 41.59412 | -81.22803 | Mainline | 1814887 | 280441840 | A | By Mentor Road | Circular | ain or Reinforced Concre | 60 | 60 | 368 | | 24 | Catch Basin | Half Height Concrete Headwall | Y | 1 | 2013 | 5 |
| GEA-44-18.594 | 41.596393 | -81.229202 | Mainline | 1813480 | 280441859 | A | | Circular | ain or Reinforced Concre | 24 | 24 | 134 | 7 | 0 | Catch Basin | Half Height Concrete Headwall | Y | 4 | 2012 | 10 |
| GEA-44-18.603 | 41.596416 | -81.229741 | Mainline | 1813479 | 280441857 | A | | Circular | ain or Reinforced Concre | 24 | 24 | 100 | 3.5 | 0 | Catch Basin | Catch Basin | Y | 3 | 2012 | 10 |
| GEA-44-18.676 | 41.597542 | -81.229657 | Mainline | 1814899 | 280441865 | A | | Circular | ain or Reinforced Concre | 18 | 18 | 116 | 8.2 | 0 | Catch Basin | Half Height Concrete Headwall | Y | 3 | 2012 | 10 |
| GEA-44-18.680 | 41.597552 | -81.229853 | Mainline | 1813481 | 280441866 | A | | Circular | ain or Reinforced Concre | 18 | 18 | 94 | 9 | 0 | Catch Basin | Catch Basin | Y | 3 | 2012 | 10 |
| GEA-44-18.953 | 41.6014 | -81.2311 | Mainline | 1813482 | 280441894 | A | N | Circular | ain or Reinforced Concre | 18 | 18 | 212 | 5.2 | 0 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 12 | 2012 | 10 |
| GEA-44-19.026 | 41.60244 | -81.23136 | Mainline | 1813484 | 280441901 | A | N | Circular | ain or Reinforced Concre | 27 | 27 | 268 | 3.9 | 24 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 15 | 2012 | 10 |
| GEA-44-19.054 | 41.602699 | -81.232114 | Mainline | 1813485 | 280441903 | A | | Circular | ain or Reinforced Concre | 18 | 18 | 122 | 7.6 | 15 | Catch Basin | Catch Basin | Y | 10 | 2012 | 10 |
| GEA-44-19.061 | 41.6029 | -81.23166 | Mainline | 1813486 | 280441904 | A | N | Circular | ain or Reinforced Concre | 18 | 18 | 122 | 7.4 | 0 | Third Height Concrete Headwall | Catch Basin | Y | 8 | 2012 | 10 |
| GEA-44-19.194 | 41.60474 | -81.23243 | Mainline | 1814888 | 280441917 | A | N | Circular | ain or Reinforced Concre | 24 | 24 | 216 | 5.8 | 3 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 10 | 2012 | 10 |
| GEA-44-19.261 | 41.60569 | -81.23274 | Mainline | 1814889 | 280441924 | A | N | Circular | ain or Reinforced Concre | 18 | 18 | 213 | 1.5 | 0 | Catch Basin | Third Height Concrete Headwall | Y | 10 | 2012 | 10 |
| GEA-44-19.370 | 41.6072 | -81.233322 | Mainline | 1814890 | 280441934 | A | N | Circular | ain or Reinforced Concre | 21 | 21 | 232 | 3.5 | 23 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 8 | 2014 | 10 |
| GEA-44-19.491 | 41.608879 | -81.233957 | Mainline | 1814891 | 280441947 | A | | Circular | ain or Reinforced Concre | 15 | 15 | 108 | 2.6 | 0 | Catch Basin | Third Height Concrete Headwall | Y | 6 | 2012 | 10 |
| GEA-44-19.495 | 41.608935 | -81.233974 | Mainline | 1861391 | 280441949 | A | N | Circular | ain or Reinforced Concre | 27 | 27 | 244 | 2.5 | 42 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 4 | 2015 | 10 |
| GEA-44-19.690 | 41.61154 | -81.23553 | Mainline | 1814892 | 280441966 | D | HOSFORD | Circular | ain or Reinforced Concre | 42 | 42 | 156 | 1.7 | 19 | Third Height Concrete Headwall | Catch Basin | Y | 8 | 2012 | 10 |
| GEA-44-19.701 | 41.611719 | -81.235516 | Side Road Left | 1814893 | 280441969 | A | UNDER HOSFORD ROAC | Circular | ain or Reinforced Concre | 42 | 42 | 140 | 1.1 | 44 | Catch Basin | Third Height Concrete Headwall | Y | 8 | 2012 | 10 |
| GEA-44-20.031 | 41.61643 | -81.23663 | Mainline | 1814894 | 280442002 | A | N | Circular | ain or Reinforced Concre | 42 | 42 | 276 | 0.9 | 40 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 15 | 2012 | 10 |
| GEA-44-20.098 | 41.61733 | -81.23729 | Mainline | 1814895 | 280442009 | A | N | Circular | ain or Reinforced Concre | 60 | 60 | 264 | 1 | 33 | Half Height Concrete Headwall | Half Height Concrete Headwall | N | 12 | 2021 | 5 |
| GEA-44-20.419 | 41.62194 | -81.23809 | Mainline | 1814896 | 280442040 | A | N | Circular | ain or Reinforced Concre | 30 | 30 | 178 | 0.5 | 0 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 3 | 2013 | 10 |
| GEA-44-20.736 | 41.626565 | -81.238214 | Side Road Right | 1814897 | 280442072 | A | DER CLARK ROAD NB SF | Circular | ain or Reinforced Concre | 30 | 30 | 76 | 1 | 10 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 1 | 2012 | 10 |
| GEA-44-20.755 | 41.62678 | -81.238831 | Side Road Left | 1814898 | 280442073 | A | DER CLARK ROAD SB SF | Circular | ain or Reinforced Concre | 18 | 18 | 92 | 0.7 | 8 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 4 | 2012 | 10 |
| GEA-44-21.115 | 41.631935 | -81.239868 | Mainline | 1814900 | 280442109 | A | | Circular | ain or Reinforced Concre | 15 | 15 | 92 | 1.6 | 0 | Catch Basin | Third Height Concrete Headwall | Y | 3 | 2012 | 10 |
| GEA-44-21.261 | 41.634 | -81.2404 | Mainline | 1814901 | 280442124 | A | N | lloptical - Horizontal | ain or Reinforced Concre | 91 | 58 | 186 | 0.5 | 9 | Half Height Concrete Headwall | Half Height Concrete Headwall | N | 4 | 2021 | 5 |
| LAK-44-0.000 | 41.641192 | -81.241031 | Side Road Right | 1814902 | 280442173 | A | ER COLBURN ROAD NB S | Circular | ain or Reinforced Concre | 30 | 30 | 72 | 1 | 8 | Half Height Concrete Headwall | Half Height Concrete Headwall | N | 2 | 2012 | 10 |
| LAK-44-0.008 | 41.641196 | -81.241879 | Side Road Left | 1814903 | 280442174 | A | | Circular | ain or Reinforced Concre | 30 | 30 | 92 | 1 | 8 | Third Height Concrete Headwall | Third Height Concrete Headwall | N | 2 | 2012 | 10 |
| LAK-44-0.150 | 41.64328 | -81.24209 | Mainline | 1863924 | 430440015 | A | Channel | Circular | ain or Reinforced Concre | 54 | 54 | 234 | 1.8 | 13 | Full Height Concrete Headwall | Half Height Concrete Headwall | N | 14 | 2020 | 5 |
| LAK-44-0.402 | 41.64695 | -81.24198 | Mainline | 1814918 | 430440040 | A | Channel | Circular | Corrugated Metal - Pipe | 36 | 36 | 186 | 2.2 | 0 | Half Height Concrete Headwall | Half Height Concrete Headwall | N | 5 | 2013 | 10 |
| LAK-44-0.671 | 41.65084 | -81.24136 | Mainline | 1814919 | 430440067 | A | Channel | Circular | ain or Reinforced Concre | 24 | 24 | 209 | 1.2 | 0 | Third Height Concrete Headwall | Half Height Concrete Headwall | N | 8 | 2013 | 10 |