



Property Interest Map Viewer

Introduction

The Property Interest Map Viewer allows users to clearly visualize, search, filter, and update the District’s Property Interest data in a single location. The app enables users to view property interest (PI) records by type, project areas for both Engineering & Construction, and Stormwater Design & Construction, as well as all properties within the District service area. The data will be synced with NEXGEN CMMS in the future to allow the generation of notifications and reports for end-users.

This document is meant to guide users on the basic functionality within the application. Steps are provided to demonstrate how to search, filter, view, edit and add records.

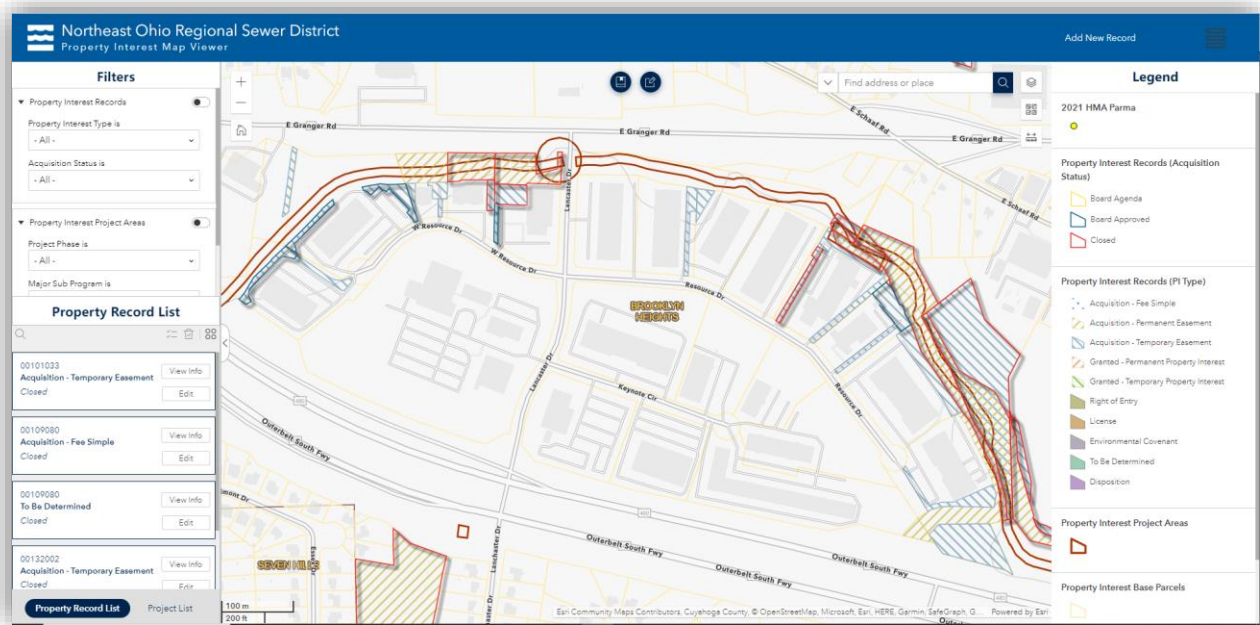


Table of Contents

Introduction..... 1

Search Data..... 3

Filter Data 3



View Feature Attributes	5
Edit Data	8
Upload Documents:	11
Request New Record	13
Field Descriptions	16
Data Rules	20
Data Maintenance in ArcGIS Pro (GIS Services Only)	23
Add New Base Parcel (parcel geometry)	23
Add New Record (parcel geometry)	23
Add New Record (easement geometry)	24
Update Existing Record (easement geometry)	25

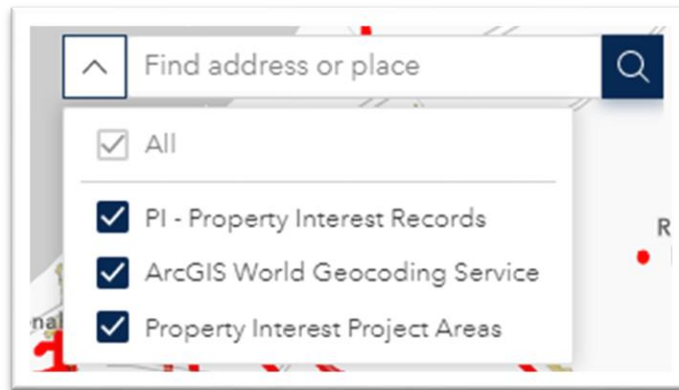


Search Data

The Search widget provides the ability to find features, records, or locations based on specific layers and locators. To search, users type a word or phrase in the search box and press Enter, click the search button, or choose from a list of suggestions that appear based on matching records.

There are two search boxes that provide the option to search by different attributes:

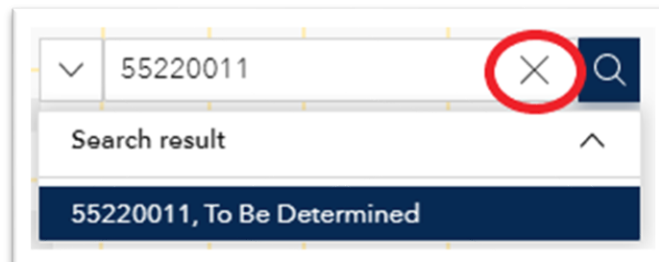
1. Upper right corner of map (search by Parcel ID, Oracle Project Number, or Address)



2. Top of Property Interest List (search by Parcel ID)



Both search boxes will filter the results in both the map and list widget. To clear search results, select the X in the search box.



Filter Data

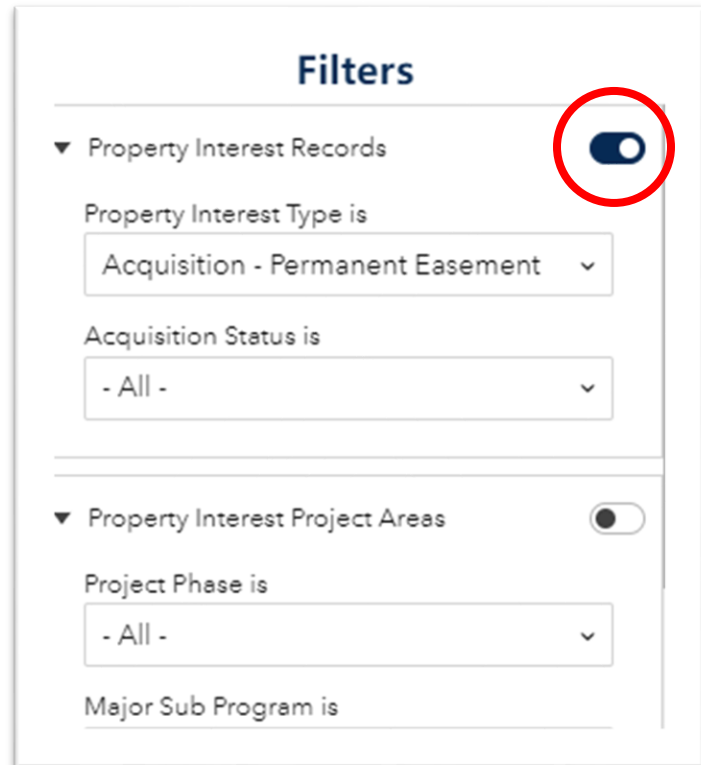


The filter widget limits the visibility of features in both the map and the list widget. There are two filter options for the Records layer and three filter options for the Project Area layer in the upper left-hand corner of the app to narrow search results. Only one selection per field can be applied at a time but multiple filters can be applied together.

For example, an acceptable filter would be to apply Closed, Acquisition – Permanent Easement to view all the permanent easements the District has acquired. However, it is not possible to apply a filter to view both Acquisition – Permanent Easement, and Acquisition – Temporary Easement.

To apply a filter, select the criteria and then click the slider button so the circle slides to the right and turns white. To turn the filter off, click the slider button again.

Scroll down within the Filters widget to view more available filters.





View Feature Attributes

The Feature Info widget displays feature attributes. There are two ways to view feature attributes:

Within the List widget, there is a “View Info” button. Selecting this button will launch a new window providing all the information related to the record: Base Parcel Information, Project Information, and Record Information. To close out of this window, select anywhere outside the box.





Parcel Information

Parcel ID	53130007
Parcel Retired by the County	No
Current Owner	BROOKLYN LANDFILL INC.
Address	1329 EAST SCHAAF RD, BROOKLYN HEIGHTS, OH 44131
Owner Update Date	01/11/2018
District Owned	No
RSS Asset on Property	Yes
Demo Status	

General Information

Property Interest Type	Acquisition - Permanent Easement
Acquisition Status	Closed
Target Date for Acquisition	
Easement ID	
Acres	0.9496
Facility Type	Stormwater
Grantor	Brooklyn Landfill, Inc.
Grantee	NEORSD
Ownership Type	Private
Easement in GIS	Proposed

Project Information

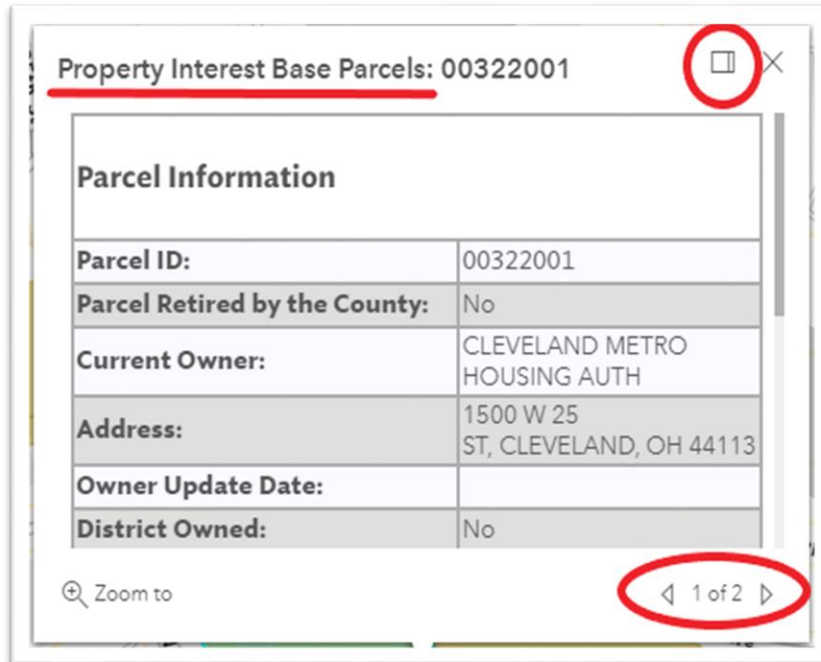
Project Number	1524
Project Name	West Creek Stabilization in Brooklyn Heights

Edit Property Interest Record
View Base Parcel Information
View Project Information
View Reg. Comp. Information
Close

The main window will show all related information to the selected record. The buttons at the bottom of the window can be used to switch between the other PI layers (Base Parcels, Project Areas, Regulatory Compliance) to limit the information shown in the pop-up.



To view info directly in the map pop-ups, select the feature (polygon) directly in the map viewer. Note:



if multiple features are stacked on top of one another, navigation arrows in the lower right corner will display along with the feature count. Confirm which layer is displayed by checking the title at the top. The pop-up can be expanded by clicking the square icon in the upper right corner.

The Property Interest Base Parcels layer and the Property Interest Project Areas layer both provide summary info of related data, either by Parcel ID or Project Number. In both tables there is a field that lists

those records. This information can be used to search in the respective table using the search widgets. See screenshots on next page.



Property Interest Base Parcels: 00306001

Parcel Retired by the County:	Yes
Current Owner:	ONTARIO STONE CORP
Address:	1246 RIVER RD, CLEVELAND, OH 44113
Owner Update Date:	
District Owned:	No
RSS Asset on Property:	No
Demo Status:	
Number of Property Interest Records Related to Base Parcel:	2
Property Interest Records Related to Base Parcel:	Acquisition - Permanent Easement - Closed Acquisition - Temporary Easement - Closed
Number of Regulatory Records Related to Base Parcel:	2
Regulatory Records Related to Base Parcel:	00306001 00306001

Property Interest Project Areas: Westerly Low Level Relief Sewer

Number of Property Interest Records Related to Project:	6
Property Interest Records Related to Project:	00316036 - Acquisition - Temporary Easement - Closed 00313004 - Acquisition - Permanent Easement - Closed 00306002 - Acquisition - Permanent Easement - Closed 00306001 - Acquisition - Permanent Easement - Closed 00306001 - Acquisition - Temporary Easement - Closed 00306002 - Acquisition - Temporary Easement - Closed

Edit Data



A primary function of this application is to enable users to edit data for property interest records. There is only one way to access the edit function and that is through the Property Record List. Within the list, each record will have a button labeled “Edit.”

1. Search for the record using one of the methods mentioned above
2. The list will filter to limit results
3. Confirm the correct record is selected by first viewing the info (check parcel id, property interest type, acquisition status, project number, easement id, etc.) (note: parcel may have multiple records with similar property interest types)
4. Select Edit
5. Update fields as necessary
6. **Select Update to save the changes**
7. Select Back or click outside the edit window to return to the map/attribute view



Edit Property Interest Record

< 53130007

General Information ^

Parcel ID
53130007

Property Interest Type
Acquisition - Permanent Easement

Acquisition Status
Closed

Target Date for Acquisition
MM/DD/YYYY

Project Number
1524

Easement ID
1

Facility Type

Update

Back

8. Follow the instructions listed above to switch between the feature info windows.
 - a. Below is a screenshot of the Project Information window
 - b. Select the Edit button



Project Information

Project Number	1524
Project Name	West Creek Stabilization in Brooklyn Heights
Project Acronym	WCBS
Project Phase	Bidding
Major Sub Program	District Stormwater
Minor Sub Program	Stormwater
Property Manager	Lilah Zautner
Project Manager	Denis Zaharija
Design Program Manager	Janet Popielski
Construction Supervisor	Eric Nycz
Construction Manager	Karrie Buxton
Regulatory Compliance	Sarah Rehner
Property Records Related to Project Area	<ul style="list-style-type: none"> 53128012 - Acquisition - Temporary Easement - Prospective 53128015 - Acquisition - Permanent Easement - Prospective 53122065 - Acquisition - Temporary Easement - Prospective 53124010 - Acquisition - Temporary Easement - Prospective 53122065 - Acquisition - Temporary Easement - Prospective 53128008 - Acquisition - Temporary Easement - Closed

[Edit](#)

[Back](#)



Upload Documents:

Document storage will be moving to OnBase soon. Until OnBase is set up, documents can be saved to the following folder: H:\EGISDATA\DOCUMENTS\PROPERTY_INTEREST. Be sure to save the document in the folder for the respective document type and year.

Save this URL to your bookmarks/favorites in your web browser:

http://gjmf05/EGISDATA/DOCUMENTS/PROPERTY_INTEREST/

Once the document is saved on the H:\ drive. Navigate to the link above in your web browser. Below is a screenshot of the webpage.

The screenshot shows a web browser window with the following tabs: 'Index of /EGISDATA/DOCUMENT...', 'Property Interest - Viewer', 'MyPlace Home', and 'NEORS GIS'. The address bar shows 'Not secure | gjmf05/EGISDATA/DOCUMENTS/PROPERTY_INTEREST/'. The browser's bookmark bar includes 'SWFT', 'CCB New', 'MyPlace', 'Cuyahoga County R...', 'Summit GIS Viewer', 'Lorain County Audi...', 'AGO', and 'Enterprise GIS Portal'.

Index of /EGISDATA/DOCUMENTS/PROPERTY_INTEREST

Name	Last modified	Size	Description
Parent Directory		-	
Appraisal & Appraisal Reviews/	2023-01-12 13:06	-	
BOARD_AGENDA/	2023-01-20 09:35	-	
BOARD_RESOLUTIONS/	2023-01-12 13:45	-	
LEGAL_DESCRIPTIONS/	2023-01-20 09:34	-	
RECORDED/	2023-01-20 09:34	-	
TITLE_REPORTS/	2023-01-12 12:23	-	

Apache/2.4.23 (Linux/SUSE) Server at gjmf05 Port 80



Navigate to the file location in the web browser the same way you would in file explorer. You can select “Parent Directory” to go back to the previous page.

Index of /EGISDATA/DOCUMENT x Property Interest - Viewer x MyPlace Home x NEORSD GIS x Information Technology Appli... x +

Not secure | gjmfs05/EGISDATA/DOCUMENTS/PROPERTY_INTEREST/RECORDED/2022/

SWFT CCB New MyPlace Cuyahoga County R... Summit GIS Viewer Lorain County Audi... AGO Enterprise GIS Portal Esri Community Nearmap Property Interest

Index of /EGISDATA/DOCUMENTS/PROPERTY_INTEREST/RECORDED/2022

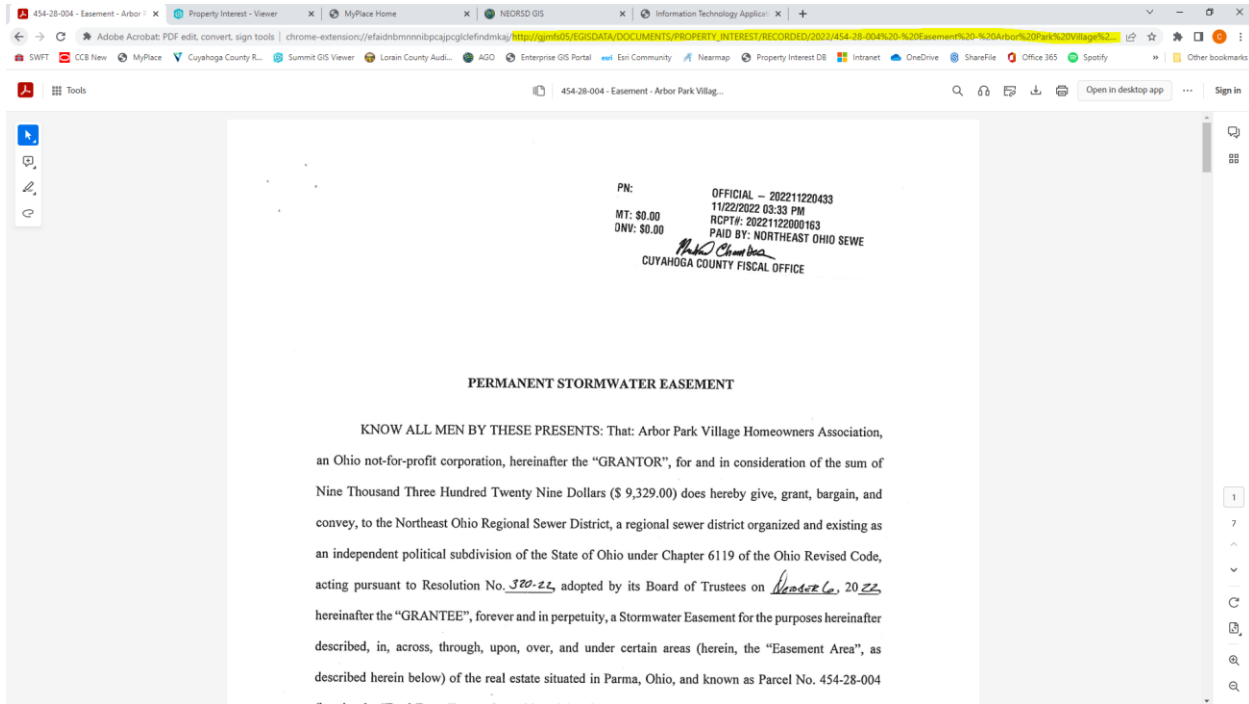
Name	Last modified	Size	Description
Parent Directory		-	
18-22_PEasement.pdf	2022-05-04 10:43	207K	
19-22_PEasement.pdf	2022-02-15 09:30	2.1M	
20-22_TEasement.pdf	2022-02-15 09:13	1.7M	
37-22_PEasement.pdf	2022-02-15 09:11	2.3M	
38-22_PEasement.pdf	2022-02-15 09:10	2.2M	
39-22_PEasement.pdf	2022-02-15 09:12	2.3M	
40-22_PEasement.pdf	2022-08-03 10:55	198K	
42-22_PEasement.pdf	2022-02-15 09:09	2.0M	
42-22_TEasement.pdf	2022-02-15 09:11	2.0M	
43-22_PEasement.pdf	2022-02-15 09:11	2.3M	
105-01-004 - Judgment Entry - P&R Ventures - 202211220440.pdf	2022-11-30 20:06	2.1M	
454-28-004 - Easement - Arbor Park Village HOA - 202211220433.pdf	2022-11-30 20:01	2.0M	
454-28-005 - Temp Easement - Arbor Ridge HOA - 202211220436.pdf	2022-11-30 19:20	2.1M	
454-31-001 - Easement - Arbor Park Village HOA - 202211220434.pdf	2022-11-30 19:31	2.4M	
454-31-001 - Temp Easement - Arbor Park Village HOA - 202211220435.pdf	2022-11-30 19:26	2.8M	
457-33-008 - Deed - Welby Gardens SFR Holdings - 202212190376.pdf	2023-01-10 11:18	1.0M	
457-34-015 - Deed - West Creek Conservancy - 202212010567.pdf	2022-12-05 08:59	599K	
472-30-005, 472-30-007, 472-30-052 - Temp Easement - Drug Mart - 202211220437.pdf	2022-11-30 19:13	4.8M	
472-30-007 & 472-30-052 - Easement - Drug Mart - 202211220438.pdf	2022-11-30 19:04	3.0M	
489-16-064 - Deed - Spisak - 202211300362.pdf	2022-12-06 09:41	699K	
531-30-007 - Easement - Brooklyn Landfill - 202211220444.pdf	2022-11-30 18:38	3.2M	
531-30-007 - Temp Easement - Brooklyn Landfill - 202211220439.pdf	2022-11-30 18:58	3.0M	
552-04-014 - Easement - Owens - 202211220441.pdf	2022-11-30 09:29	2.3M	



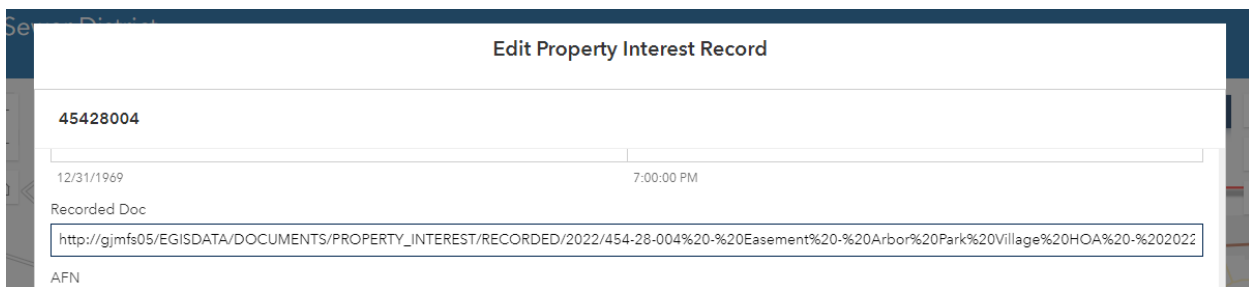
Select the file to open the PDF and copy the URL starting with <http://gjmfs05/> and ending with [.pdf](#)

The URL highlighted in the screenshot below is:

http://gjmfs05/EGISDATA/DOCUMENTS/PROPERTY_INTEREST/RECORDED/2022/454-28-004%20-%20Easement%20-%20Arbor%20Park%20Village%20HOA%20-%20202211220433.pdf



Paste the URL into the respective doc field within the GIS application.



Select Update to save your edits.

Request New Record

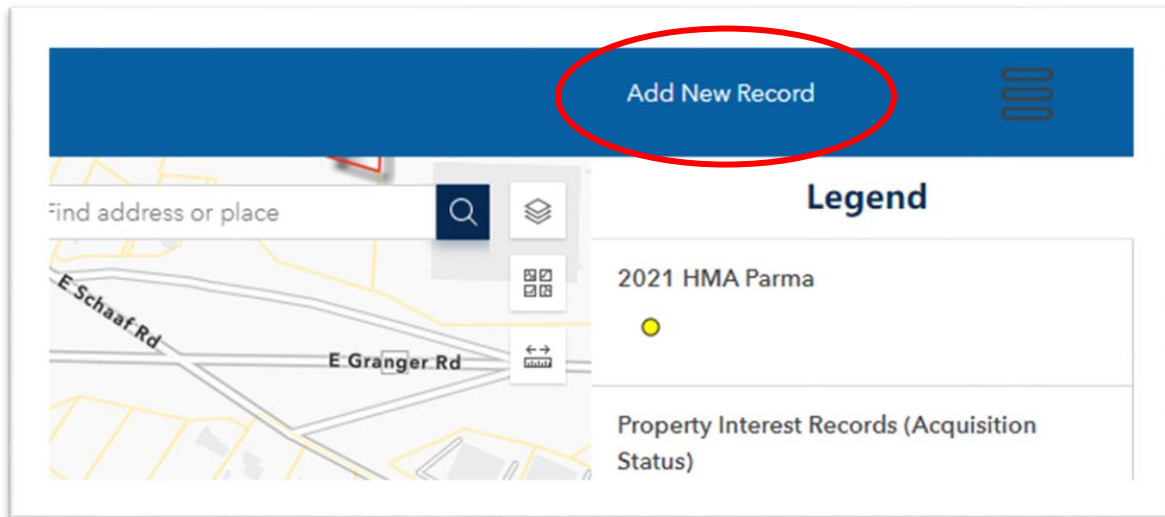
The majority of property interest records will be bulk loaded into the database when the District receives recommendations from the Design Consultants. However, there may be occasions when a one-



off property interest may arise. If a record does not exist in the database, a request to add the record can be made. It is necessary to submit a request for the geospatial component to be added.

Only one record can be entered at a time. The record will not show up in the database immediately. A notification will be sent to the GIS department to add the geospatial component to the map.

1. Select the parcel the record will be added to from the Base Parcel layer
2. Select the Add New Record button in the upper-right corner of the window



3. Confirm the Parcel ID AND the Parcel Geometry populated within the survey correctly (see screenshot on next page)
4. If the full parcel is not drawn in the Parcel Geometry window, navigate back to the map and select the base parcel again, followed by the Add New Record button
 - a. For some reason, this needs to be done twice the first time in order for the information to pull successfully
5. Enter the required information
 - a. If the easement description is available, please include it as an attachment
6. Select Submit
7. To return to the main page, select the icon in the upper-right corner and select Property Interest Map Viewer



New Property Interest Record - Test

Submit details for new property interest record.

Parcel ID

Parcel ID and Geometry are populated from the Base Parcel selected in the main map viewer. If incorrect, use the menu in the upper right corner to navigate back to the map viewer and select the correct Base Parcel.

53123018

Address



Parcel Geometry





Field Descriptions

PI Base Parcels		
Field Alias (Field Name)	Field Type	Field Definition
Parcel ID (PARCEL_ID)	Text	Parcel ID assigned by the County Auditor
Current Owner (CURRENT_OWNER)	Text	Current property owner (this field is currently updated yearly and should be reviewed in the County Auditor data)
District Owned Parcel (DISTRICT_OWNED_PARCEL)	Text	<i>Yes</i> = NEORSD owns this property <i>No</i> = NEORSD does not own this property
Owner Update Date (OWNER_UPDATE_DATE)	Date	Ownership transfer date
Address (ADDRESS)	Text	Street number and name
City (CITY)	Text	City name
State (STATE)	Text	State name (always Ohio)
Zip (ZIP)	Text	Zip code
RSS Asset on Property (RSS_ASSET_ON_PROPERTY)	Text	<i>Yes</i> = RSS Asset intersects the property <i>No</i> = RSS Asset does not intersect the property
County Retired Parcel (COUNTY_RETIRED_PARCEL)	Text	<i>Yes</i> = This parcel no longer exists in the County Auditor data. It has been split, consolidated, or assigned a new parcel ID <i>No</i> = This is a current parcel that can be located in the County Auditor data.
Demo Status (DEMO_STATUS)	Text	<i>Vacant</i> = Building has been demolished <i>Demo Needed</i> = Building will be demolished <i>Other</i> =

PI Project Areas		
Field Alias (Field Name)	Field Type	Field Definition
Project Number (PROJECT_NUMBER)	Text	
Project Name (PROJECT_NAME)	Text	
Project Acronym (PROJECT_ACRONYM)	Text	
Project Phase (PROJECT_PHASE)	Text	
Major Sub Program (MAJOR_SUB_PROGRAM_DESCRIPTION)	Text	
Minor Sub Program (MINOR_SUB_PROGRAM_DESCRIPTION)	Text	
Property Manager (PROPERTY_MANAGER)	Text	
Project Manager (PROJECT_MANAGER)	Text	
Design Program Manager (DESIGN_PROGRAM_MANAGER)	Text	
Construction Supervisor (CONSTRUCTION_SUPERVISOR)	Text	
Construction Manager (CONSTRUCTION_MANAGER)	Text	
Regulatory Compliance (REG_COMP)	Text	



PI Records		
Field Alias (Field Name)	Field Type	Field Definition
Parcel ID (PARCEL_ID)	Text	Parcel ID assigned by the County Auditor
Property Interest Type (PI_TYPE)	Text	
Acquisition Status (ACQUISITION_STATUS)	Text	
Target Date for Acquisition (TARGET_DATE)	Date	
Project Number (PROJECT_NUMBER)	Text	
Easement ID (EASEMENT_ID)	Text	
Facility Type (FACILITY_TYPE)	Text	
Legal Description & Plat Doc (LEGAL_PLAT_DOC)	Document Link	
ROW Consultant (ROW_CONSULTANT)	Text	
Title Report Doc (TITLERPT_DOC)	Document Link	
Appraiser (APPRAISER)	Text	
Review Appraiser (APPRAISER_REVIEW)	Text	
Appraised Value (APPRAISED_VALUE)	Numeric	
Appraisal Review Doc (APPRAISAL_REVIEW_DOC)	Document Link	
Appraisal Approval Flag (APPRAISAL_APPROVAL_FLAG)	Text	
Resolution Number (RESOLUTION_NUMBER)	Text	
Resolution Date (RESOLUTION_DATE)	Date	
Resolution Year (RESOLUTION_YEAR)	Text	
Resolution Value (RESOLUTION_VALUE)	Numeric	
Board Resolution Doc (BOARDRES_DOC)	Document Link	
Board Resolution Appropriation Doc (BOARDRES_APPROPRIATION_DOC)	Text	
Grantor (GRANTOR)	Text	
Grantee (GRANTEE)	Text	
Ownership Type (OWNERSHIP_TYPE)	Text	
Group Acquisition (GROUP_ACQ)	Text	
Comments 1 (COMMENTS_1)	Text	
Comments 2 (COMMENTS_2)	Text	
Offer Made Date (OFFER_MADE_DATE)	Date	
Accepted Value (ACCEPTED_VALUE)	Numeric	
Purchase Agreement Doc (PURCHASE_AGREEMENT_DOC)	Document Link	
Closing Value (CLOSING_VALUE)	Numeric	
Closing Doc (CLOSING_DOC)	Document Link	
Lease Doc (LEASE_DOC)	Document Link	
Recorded Date (RECORDED_DATE)	Date	
Recorded Doc (RECORDED_DOC)	Document Link	
AFN (AFN)	Text	
Volume (VOLUME)	Text	



Page (PAGE)	Text	
Acres (ACRES)	Numeric	
Other Doc (OTHER_DOC)	Document Link	
Owner Phone Number (OWNER_PHONE)	Text	
Owner Contacted (OWNER_CONTACTED)	Text	
Contact Comments (CONTACT_COMMENTS)	Text	
Owner Contacted By (CONTACTED_BY)	Text	
Owner Contacted Date (CONTACTED_DATE)	Date	
Leasing (LEASING)	Text	
Lease End Date (LEASE_END_DATE)	Date	
Move Out Date (MOVE_OUT_DATE)	Date	
Lease Comments (LEASE_COMMENTS)	Text	
General Comments (GEN_COMMENTS)	Text	
ROW Index (ROW_INDEX)	Numeric	Unique ID for the record from the original Intranet property interest application database
Easement in GIS (EASEMENT_GIS)	Text	Proposed = used when the easement was digitized before the final docs were recorded Final = used when the easement was digitized after the final docs were recorded N/A = easement not digitized, parcel boundaries are shown

PI Regulatory Compliance		
Field Alias (Field Name)	Field Type	Field Definition
Parcel ID (PARCEL_ID)	Text	Parcel ID assigned by the County Auditor
Project Number (PROJECT_NUMBER)	Text	
Env. Screen Rpt Status (ENVSCREEN_RPT)	Text	
Env. Screen Rpt Doc Link (ENVSCREEN_DOC)	Document Link	
Env. Screen Rpt Date (ENVSCREEN_DATE)	Date	
Env. Screen Cost (ENVSCREEN_COST)	Numeric	
Phase II Report Status (PHASEII_RPT)	Text	
Phase II Doc Link (PHASEII_DOC)	Document Link	
Phase II Rpt Date (PHASEII_DATE)	Date	
Phase II Cost (PHASEII_COST)	Numeric	
Phase I Report Status (PHASEI_RPT)	Text	
Phase I Doc Link (PHASEI_DOC)	Document Link	
Phase I Rpt Date (PHASEI_DATE)	Date	
Phase I Cost (PHASEI_COST)	Numeric	
Ecological Rpt Status (ECOLOGICAL_RPT)	Text	
Ecological Doc Link (ECOLOGICAL_DOC)	Document Link	
Ecological Rpt Date (ECOLOGICAL_DATE)	Date	
Ecological Cost (ECOLOGICAL_COST)	Numeric	



Total Assessment Cost (TOTAL_ASSESSMENT_COST)	Numeric	
Total Assessment Cost Comments (TOTAL_ASSESSMENT_COST_COMMENTS)	Text	
Env. Concerns (ENV_CONCERNS)	Text	
Env. Comments (ENV_SUMMARY)	Text	
Historical Issues (HISTORICAL_ISSUES)	Text	
Other Rpt Doc Link (OTHER_RPT_DOC)	Document Link	
Row Index (ROW_INDEX)	Numeric	Unique ID for the record from the original Intranet property interest application database



Data Rules

Scenarios

- No longer interested in a property/easement
- Lease following a fee-simple acquisition
- Appropriation or multiple Board resolutions for the same transaction
- A single easement acquired across two or more parcels
- Multiple easements or parcels acquired together under the same resolution
- Time extension of temporary easement
- Easements in ROW
- Project with no Oracle #/Nomination #
- Release of permanent and temporary easement that we have already obtained

No longer interested in a property/easement

The District may no longer be interested in pursuing an acquisition, easement, or other interest on a property. In order to maintain the District's interest history on a property the record will not be removed but retired.

1. Update Acquisition Status = Retired
2. Add notes to provide as much information as possible

***The record can be re-opened if needed? Lose the history of wanting it for another project

Lease following a fee-simple acquisition

The District may lease the property to the previous owners for some length of time following an acquisition.

1. Record all lease information under the fee simple acquisition record
2. Record resolution number and additional info in comments if it is separate from the original resolution

***We can add a filter that shows active leased properties

Appropriation or multiple Board resolutions for the same transaction

There may be multiple resolutions that go to the Board for the same transaction due to an appropriation or modification to the original request.

1. Enter the final resolution number and costs in the appropriate fields
2. In the comments, record the original resolution number, board date, and any additional information related to the acquisition
3. Include a note about appropriation



A single easement acquired across two or more parcels

In some instances, when the same person owns neighboring parcels, a single easement will be acquired across both parcels.

1. A record should be recorded for each parcel the easement intersects
2. Once the easement is digitized by GIS, it will be split along the parcel lines
3. Only record the costs under the parcel with the lowest Parcel ID
4. Group Acquisition = "Yes"
5. Insert a note on the other parcels that says "See PIN ###-##-### for costs"

Multiple easements or parcels acquired together under the same resolution

Similar to the scenario above, when the same person owns neighboring parcels, multiple easements or multiple fee simple acquisitions may occur together under the same Board resolution request.

1. A record should be recorded for every parcel involved in the resolution.
2. Only record the costs and resolution information under the parcel with the lowest Parcel ID.
3. Group Acquisition = "Yes" should be on all parcels involved.
4. Insert a note on the other parcels that says "See PIN ###-##-### for resolution information"

Time extension of temporary easement

Enter it into a new record as a new temporary easement. Change acquisition status to expired for old temporary easement.

Easements in ROW

If there is no parcel ID then it is in the public right of way and you do not get easements in the public right of way

Project with no Oracle #/Nomination

The District may acquire a property that does not fall under an Oracle #.

1. Record "SW-TBD" or "WW-TBD" in Project Number field.

Release of a permanent or temporary easement already obtained

The District has obtained easements and then got rid of them.



1. Update Acquisition Status = Released
Released – for easements legal process
Expired – no longer active



Data Maintenance in ArcGIS Pro (GIS Services Only)

Add New Base Parcel (parcel geometry)

Parcels are constantly being consolidated and split by the County. Most of these geometry changes will be captured during the annual update. In some circumstances, the District will have an interest in a parcel before the annual update. When this occurs, GIS services will need to add the new parcel geometry and retire or remove the old.

1. Download the most recent parcel export from the County's open data site
2. Load the County parcel layer into your Pro project map along with the PI and RSS services from Portal
3. Select by attribute the parcel ID from the County parcel layer and zoom to feature
4. Use the append geoprocessing tool to copy the parcel into the PI Records layer.
 - a. Use the field map settings to transfer the Parcel ID, Address, City, Zip, Owner, Owner Update Date (if available) into the PI Records layer.
 - b. Manually populate the State field (OH), District Owner Parcel (Yes/ or No), County Retired field (No), RSS on property (Yes or No), and Demo Status
5. Select the parcel(s) being replaced by the new parcel in the PI Base Parcels layer. Determine if there is are any existing records on the parcel.
 - a. If there are existing records on the parcel, update the County Retired Field to Yes
 - b. If there are no existing records on the parcel, delete the feature from the PI Base Parcels layer

Add New Record (parcel geometry)

In Progress



Add New Record (easement geometry)

If the District receives the proposed easement description at the time the new record needs to be loaded into the database, GIS can digitized the easement geometry for the record.

COGO Tools

Easements, parcel boundaries, lease agreements, etc. are added into GIS by using the coordinate geometry (COGO) descriptions found in the legal recorded document. The geometry of a straight line can be described using a direction and a distance while the geometry of a curved line can be described with parameters such as arc length, chord distance, radius, central angle, and tangent length.

Getting started:

1. Within your project geodatabase – create two new feature classes:
 - a. Polygon feature class (e.g. Easements)
 - i. Projected Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 (US Feet)
 - b. Line feature class which will contain the COGO lines (e.g. “Easements_COGO”)
 - i. Projected Coordinate System: NAD 1983 StatePlane Ohio North FIPS 3401 (US Feet)
 - ii. Run Enable COGO tool on this layer (adds COGO fields to attribute table of line feature)
 1. Select Analysis -> Tools -> Data Management -> Fields -> Enable COGO
 2. Input: Easements_COGO (line layer)
 3. Run
2. Add the following layers to your map document and symbolize as you wish:
 - a. SMPParcels -Billing Data portal service
 - b. Property Interest Records – PI portal service
 - c. Newly created polygon layer (e.g. Easements)
 - d. Newly created COGO line layer (e.g. Easements_COGO)
 - e. Nearmap imagery basemap (leaf-off)

*****Confirm the only editable layers are Easements and Easements_COGO*****

Using COGO:

1. In the top panel of the map document select “Edit”
2. Select “Modify” in the edit tab
3. Select “Traverse” under the construct section of the Modify Features window
4. Confirm the layer selected in the Easements_COGO line layer
5. Based on the easement description – select your starting location (confirm snapping is enabled)
 - a. The starting location tends to be on the parcel boundary or street centerline however it may even be a landmark
6. Enter the COGO descriptions in the directions and distance fields of the Traverse tool
Reference: <https://pro.arcgis.com/en/pro-app/help/editing/enter-a-traverse.htm>



- a. Directions for straight lines should be entered as such:
 - i. $N49^{\circ}-20'-43''W = 49-20-43-4$
 - ii. The last digit will be used to code for the direction (see table below)

Direction	Code
NE	-1
SE	-2
SW	-3
NW	-4

- b. Directions for curved lines should be entered as such:

(4) Along a curve to the left with a chord bearing, **North 78°05'25" East 101.43 feet**. Said curve having a radius of **260.00 feet**, an arc length of **102.08 feet**, and a central angle of **22°29'43"** thence,

- i. Direction: 78-5-25-1cb (add cb for chord bearing)
 - ii. Radius: -260 (negative because it is turning left)
 - iii. Arc Length: 102.08
7. Once all COGO descriptions have been entered, confirm the drawing is closed.
 - a. ALWAYS DOUBLE CHECK THE DATA ENTRIES

Construct Polygon:

1. Highlight all the COGO lines for the easement
2. Select the back arrow or "Edit" -> "Modify"
3. Select "Construct Polygons" under the construct section of the Modify Features window
4. Confirm the layer selected is the PI Records polygon layer
5. Select "Construct" at the bottom of the window
6. If the easement overlaps multiple parcels (split the easement along the parcel boundary)
7. Enter attributes in the PI Records polygon layer
 - a. Parcel ID, Property Interest Type, Acquisition Status = Proposed, Project Number, Easement ID, Legal Description & Plat Doc, Acres, Easement in GIS = Proposed
8. **Select the Base Parcel the easement is on and copy the GlobalID from the Base Parcel attribute table. Paste the GlobalID in the GUID field in the Records layer**

Update Existing Record (easement geometry)

There are many permanent easements within the property interest database that display the parcel boundaries instead of the easement boundaries. To better serve the District's inspection and maintenance teams, it would be beneficial to update the records to show the accurate permanent easement boundaries.



This section is meant to guide users on the steps to update the existing permanent easement records' geometry in ArcGIS Pro. Follow all of the steps listed above for setting up your map and Using COGO and then follow the steps below for Construct Polygon and Replace Geometry. The steps are a little different for an existing record.

Construct Polygon:

1. Highlight all the COGO lines for the easement
2. Select the back arrow or "Edit" -> "Modify"
3. Select "Construct Polygons" under the construct section of the Modify Features window
4. Confirm the layer selected is the Easements polygon layer
5. Select "Construct" at the bottom of the window
6. Enter attributes in the Easements polygon layer

Replace Geometry:

1. Turn editing on for the Property Interests Records layer
2. Select the feature to update from the Property Interests Records layer
3. Select the back arrow or "Edit" -> "Modify"
4. Select "Replace Geometry" under the reshape section of the Modify Features window
5. Confirm the layer selected is the Property Interest Records layer
6. Trace the new easement polygon that was just constructed in the Easements polygon layer in the steps above
7. Select "Replace Polygon" on the side panel
8. Ensure the correct record was updated
9. Change the Easement in GIS field to "Proposed"
 - a. This field can be updated to "Yes" once the final legal description has been recorded and final review is made of the feature
10. Enter the Easement ID, Legal Description & Plat Doc, and Acres
11. Save edits