

Engineering Department Mapping Application User Guide

for applications designed with the Web App Builder

2/2/23

Burlington County IT Department,
GIS Section

Overview of Functionality

The screenshot displays the 'Engineering Mapping Application' interface, which includes a search bar, a toolbar with icons for zooming, searching, and measuring, a map of a region with various colored overlays, and a bottom panel with a scalebar, coordinates, and an attribute table. The application is powered by Esri.

1. Zoom in/out
(can also hold Shift while click & drag with mouse to zoom in on specific area)

2. Zoom to initial extent (full County)

3. Bookmarks

4. Search layers *(not all maps have searches)*

5. Measure

6. Location Search for:

- Municipality– Block-Lot
- Address

7. Legend

8. Layers List

- See list of all layers
- turn layers on/off

9. View Overview map-
(Not all maps have an Overview Map)

10. Scalebar

11. Coordinates

12. View Attribute tables

POWERED BY esri

Tools

1. Zoom in/out



1. Click the + to Zoom In or click the – to Zoom out on the center of the map or use the mouse scroll wheel
2. Define an area to zoom in to by holding the shift key and clicking and dragging a box with the mouse
3. Move around the map at the current scale by clicking and dragging with the mouse or use the arrow keys on the keyboard

2. Zoom to initial extent (full County)



3. Bookmarks



1. Choose from a predefined list including the County extent and individual municipalities
2. You can also add additional bookmarks by zooming to your desired location and clicking the + icon next to the text box

4. Search layers



1. Click to see a pre-defined set of query searches specific to the application (see the Search Layers by Query section for more details). *Note that not all maps have this tool or query searches.*

5. Measure

1. Click the icon to open the Measurement widget
2. Area measurements



- Click the Area measurement icon  and draw a polygon on the map by clicking three or more points. Double-click to finish drawing the polygon. The Measurement widget displays the total area of the polygon, using the defined **Default Area Unit**. To change the area unit, select the applicable unit of measure from the drop-down menu

3. Distance measurements



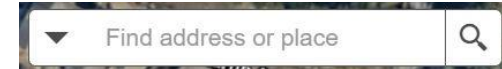
- Click the distance measurement icon  and draw a line on the map by clicking two or more points. Double-click to finish drawing the line. The Measurement widget displays the total length of the line, using the defined **Default Length Unit**. To change the length unit, select the applicable unit of measure from the drop-down menu.

4. Location

- Click the Location measurement icon  and click a point on the map. The Measurement widget displays the coordinates for the point in **Degrees** (decimal). You may change the coordinate display format to degrees/minutes/seconds by changing the **Degrees** drop-down to **DMS**.

Tools continued

6. Location Search: 4 options- click the drop down arrow to choose one



1. Burlco NJ Parcel Locator (only searches within Burlington County):
 1. Enter in format of CountycodeMunicipalcode-block-lot such as
0329-823.01-16
which would be Pemberton Township, block 823.01, lot 16.
Refer to “Municipal Codes” list below.
 2. This searches against data downloaded from the NJ Tax Board and will find the associated property boundary.
2. Burlco NJ Geocode (only searches within Burlington County):
 1. Start typing an address and town (ex 1900 Briggs Rd, Mount Laurel Twp) & choose from the list of possible addresses.
3. Esri World Geocoder or NJ Geocode:
 1. Start typing an address, city and state (ex. 1900 Briggs Rd, Mount Laurel, NJ) & choose from list. This will find a location along the roadway.
 2. In general the location may not be as good as the Burlco NJ Geocode option but may have a higher success rate of finding a location for difficult addresses & can search addresses outside Burlington County.

**Municipal
Codes**
(County code is 03)

BASS RIVER TWP	01 FLORENCE TWP	15 PEMBERTON TWP	29
BEVERLY CITY	02 HAINESPORT TWP	16 RIVERSIDE TWP	30
BORDENTOWN CITY	03 LUMBERTON TWP	17 RIVERTON BORO	31
BORDENTOWN TWP	04 MANSFIELD TWP	18 SHAMONG TWP	32
BURLINGTON CITY	05 MAPLE SHADE TWP	19 SOUTHAMPTON TWP	33
BURLINGTON TWP	06 MEDFORD TWP	20 SPRINGFIELD TWP	34
CHESTERFIELD TWP	07 MEDFORD LAKES BORO	21 TABERNACLE TWP	35
CINNAMINSON TWP	08 MOORESTOWN TWP	22 WASHINGTON TWP	36
DELANCO TWP	09 MOUNT HOLLY TWP	23 WESTAMPTON TWP	37
DELRAN TWP	10 MOUNT LAUREL TWP	24 WILLINGBORO TWP	38
EASTAMPTON TWP	11 NEW HANOVER TWP	25 WOODLAND TWP	39
EDGEWATER PARK TWP	12 NORTH HANOVER TWP	26 WRIGHTSTOWN BORO	40
EVESHAM TWP	13 PALMYRA BORO	27	
FIELDSBORO BORO	14 PEMBERTON BORO	28	

Tools continued

7. Legend

1. Clicking the Legend widget displays the Legend window. To close it, click the **X**.
2. Clicking the  arrows, will minimize the Legend window, clicking the  arrows will display it again.
3. The Legend window displays only the layers that are actually drawn. To see optional layers to draw or turn off drawn layers, you need to use the Layers List widget .
4. Descriptions of layers included in the application can be found in the Application Layers section.

8. Layers List

7. Clicking the Layer List widget displays a list of available layers
8. Draw a layer by clicking the box next to the name/ stop a layer from being drawn by click the checked box
9. Click a layer's name to expand groups of layers or see the map symbols for the layer
10. Note that the group's name will need to be drawn in addition to the layer within the group in order to display the layer
11. Descriptions of layers included in the application can be found in the Application Layers section of this document
12. Clicking the 3 dots (...) on the right side of a layer displays the layer menu, **which will include some or all of the following functions depending on the application:**
 - Zoom to—Sets the map extent to the extent of the layer.
 - Transparency--Sets the transparence for the layer.
 - Set visibility range – change the scale at which the layer is drawn
 - Enable Pop-up / Remove Pop-up — Enables or disables Pop-up for the feature layer. If a feature layer does not have pop-up configured in the map, clicking **Enable Pop-up** shows all field values from the feature layer.
 - Move up—Moves the layer one level up.
 - Move down—Moves the layer one level down.
 - View in attribute table—Opens the attribute table for the feature layer at the bottom of the map.
 - Description / Show Item Details—Opens the service description or the item details page for the service or the item associated with the layer, if available.

Layers List continued

In order for a layer in the group to draw (such as the wetlands) the group name must also be checked

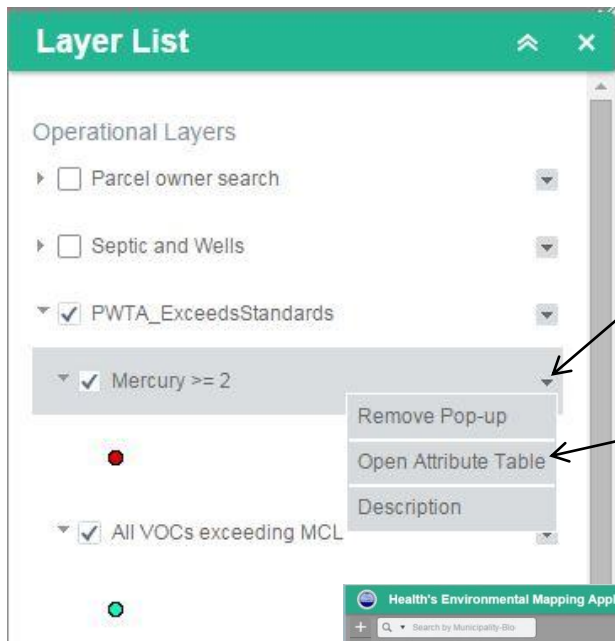
Toggle a layer to draw/stop drawing by clicking the box next to it's name



Click the group name to see the layers within the group.

Click a layer's name to see the map symbols

Layers List continued; menu



Click the arrow to see available menu options
(options will vary based on layer and application)

Clicking **View in Attribute Table** will display the attribute table below the map

Health's Environmental Mapping Application

Search by Municipality (Go)

Layer List

Operational Layers

- ☐ Parcel owner search
- ☐ Septic and Wells
- ☒ PWT_A_ExcelsStandards
- ☒ Mercury >= 2
- ☒ All VOCs exceeding MCL
- ☒ Gross Alpha Final >= 15

Options

Well - GPS location | Septic - GPS location | Mercury >= 2 | All VOCs exceeding MCL | Gross Alpha Final >= 15 | Benzene >= 1 | Carbon Tetrachloride >= 2 | meta-Dichlorobenzene >= 600 | ortho-Dichlorobenzene >= 600 | para-Dichlorobenzene >= 75 | 1,1-Dichloroethane >= 50 | 1,2-Dichloroethane >= 2 | 1,1-Dichloroethane >= 2

field sample code	data provider cert_num	sample date	requestor's first name	requestor's last name	requestor's address	requestor's city	requestor's state	requestor's zip code	requestor's country	property address	property municipality	property state	property zip code	property lot	property block
	03644	1/21/2003	Jennifer	Lynch	352 Stokes Road	Medford	NJ	08055-0000		34 Foxhill Drive	35	0335	NJ	08088-0000	5 209
J2807	15001	7/30/2003	Settlement	Express	1909 Route 70 E 2nd Floor	Cherry Hill	NJ	08003		19 Laurel Drive	35	0335	NJ	08088	20.09 803.01
Mar-75	3644	9/16/2003	Betty	Kohfeldt	3 Greentree Ct, Ste 201	Marlton	NJ	08053	USA	3 Santa Clara Trail	29	0329	NJ	08015	4 647
B4574	3886	12/11/2003	Weichert Realty	Weichert Realty	107 Taunton Rd	Medford	NJ	08055	USA	28 Foxhill Dr.	35	0335	NJ	08088	14 147.01

21 features 0 selected

Tools continued

9. Overview map (not all maps have an Overview map)

1. Click the expansion arrow  to see the Overview map
2. The Overview map displays the current extent of the map within the context of a larger area. It updates when the map extent changes.
3. The current extent is represented by a gray rectangle. Drag the gray rectangle to change the extent of the map being displayed in the main window.
4. When expanded, click the maximize icon  to temporarily maximize the overview map.
5. Exit the Overview window by clicking the  arrow, to minimize it or, when maximized, click the Maximize icon  again or drag the grey rectangle to another location and release.

10. Scalebar

1. The Scalebar appears in the lower left corner of the map and updates as the map scale changes

11. Coordinates



1. By default the coordinates are shown in Decimal Degrees and will change as the cursor moves over the map
2. You can obtain the coordinates for a specific location by clicking  and then clicking the map. You can copy the resulting coordinate display to paste into another program or document.
3. Optionally, you can click the up arrow to choose to capture coordinates for a specified location in NAD 1983 New Jersey Stateplane Feet.
4. To resume coordinates changing as the cursor moves, either click the arrow and click WGS84 Web Mercator

Tools continued

12. Attribute tables

1. Click the attribute table widget  to toggle showing/hiding attributes tables for layers in the application (*note, not all layers will have a table available*)
2. An attribute table for a specific layer can be opened by clicking the arrow to the right of the layer's name in the Layers List



3. In the Attribute Table window, scroll left/right and use arrow keys to see available tables. Click a table name to display it
4. Select a record by clicking it – the corresponding feature will be selected on the map
5. **Filter by map extent** – by default, tables only show the features in the current map extent, click **Filter by map extent** to toggle between filtering and showing all
6. Click the **Zoom to** button to zoom to the selected features
7. Clear your selections by clicking the **Clear Selection** button
8. Refresh – refreshes display
9. Click a field name to sort the table by that field
10. Show/hide fields by clicking + on right side of Attribute Table window
11. Number of selected records is shown at lower left of table
12. Click **Options** menu to see list of options including
 - Show selected records
 - Show related records (if the table has related data)
 - Filter – create a query to filter the records
 - Show/Hide columns
 - Export to CSV – will export the selected attributes to a .CSV file. If no records are selected, will export entire table up to the maximum number of records allowed by the application.

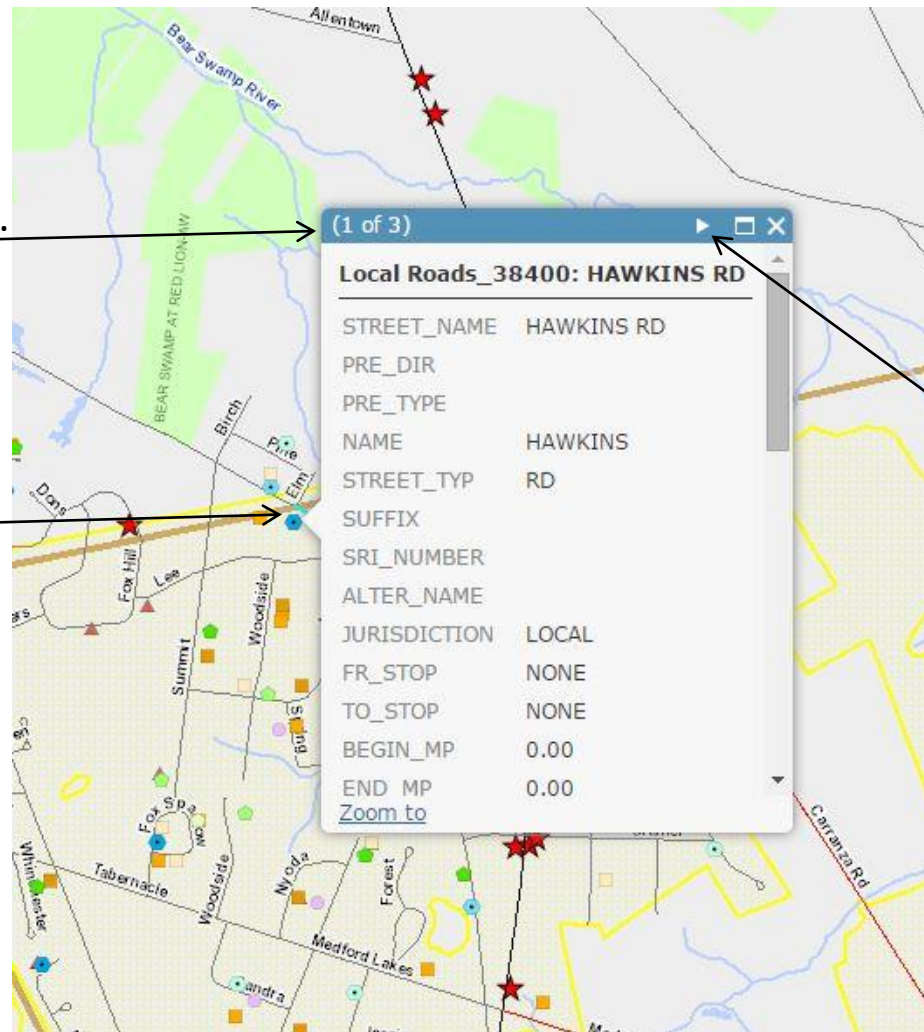


Pop-ups

Clicking most features on the map will cause a pop-up window to appear containing attributes about the features in that area. More than 1 feature may be detected. Use the arrows to scroll through the Pop-ups

More than 1 feature may be detected.
Here, 1 of 3 is displayed.

As you move through the Pop-ups
with the arrows, the corresponding
feature will be highlighted on the
map



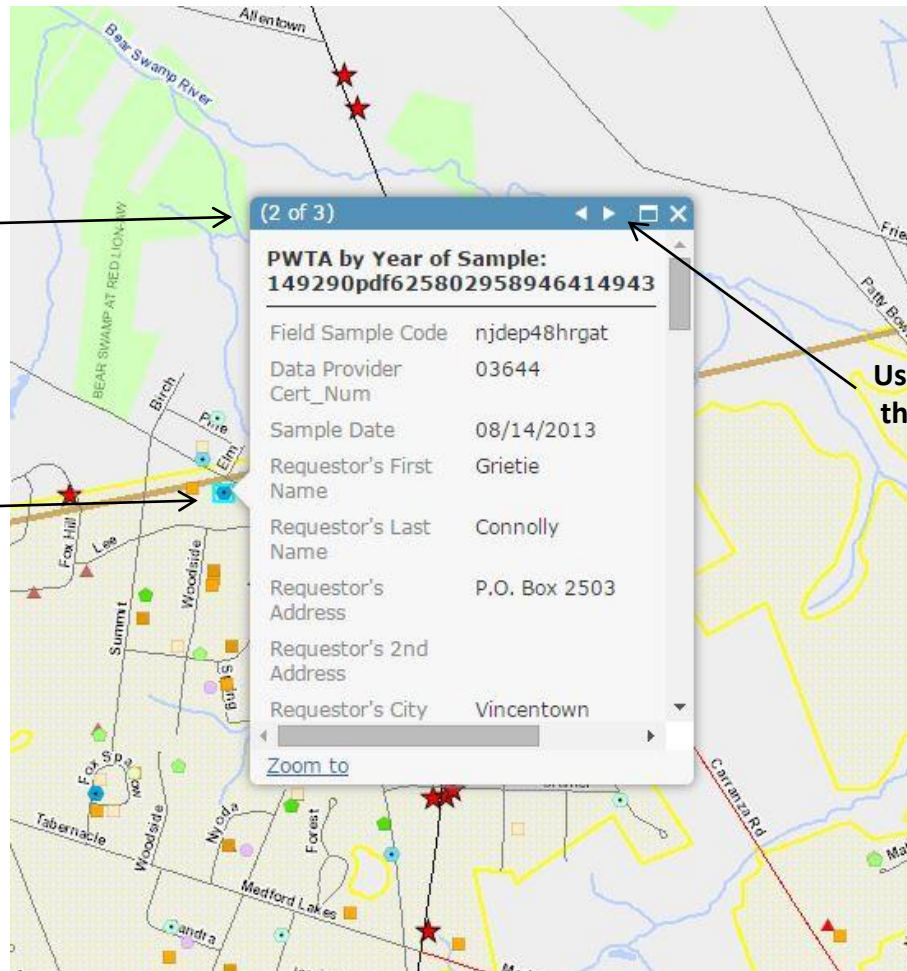
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Pop-ups

Clicking most features on the map will cause a pop-up window to appear containing attributes about the features in that area. More than 1 feature may be detected. Use the arrows to scroll through the Pop-ups

More than 1 feature may be detected.
Here, 2 of 3 is displayed.

As you move through the Pop-ups
with the arrows, the corresponding
feature will be highlighted on the
map



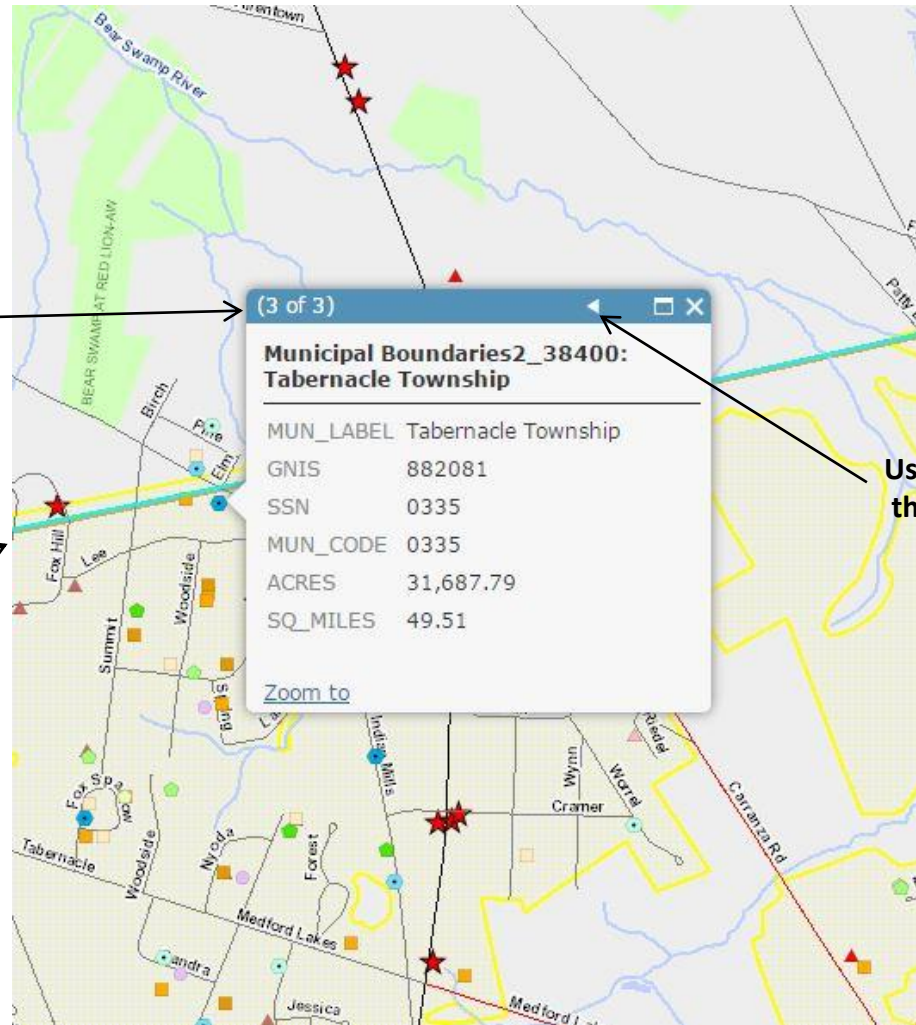
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Use the arrows to scroll
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Engineering Mapping Application Layers List:

<https://bit.ly/3kYDniF> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=861778a88d394f8caff405e64dab0595>

- **Joint Base MDL – 2 Mile Buffer** -2 mile buffer around boundary provided by JBMDL
- **Accidents from 2010-2014** – accidents reported on County routes from statewide crash reports which were submitted to NJ DOT.
- **Engineering Bridge Culvert Crossdrain Combined group:**
 - **Bridge closed** - Locations of closed bridges maintained by Engineering; mapped using GPS (+/- 3 ft).
 - **Weight-restricted bridges** – mapped using GPS (+/- 3 ft). Is a subset of bridges which shows only those with weight restrictions
 - **Bridges** - Locations of bridges maintained by Engineering; mapped using GPS (+/- 3 ft).
 - **Culverts**- Locations of culverts maintained by Engineering; mapped using GPS (+/- 3 ft).
 - **Crossdrains** - Locations of crossdrains maintained by Engineering; mapped using GPS (+/- 3 ft).
- **Engineering Signs Group** - Group containing layers showing various subsets of locations of signs maintained by the Engineering Traffic Section. All Mapped using Hstar and ProXH with locations <1ft
 - **Speed Advisory Sign**
 - **Speed Limit sign**
 - **Mile Marker sign**
 - **Signs – Engineering Grade**
 - **Signs** – all signs maintained by Engineering traffic which were collected by Burlington County using Hstar GPS +/- 1 ft
 - **Signs collected for SignCAD**- collected by SignCAD from video log. These are also maintained by Engineering Traffic
- **Stormwater Group** - county infrastructure
 - **Basins** – stormwater basins
 - **Outfall** - Locations of County maintained outfalls; mapped using GPS (+/- 3 ft).
 - **Manholes** - Locations of County maintained manholes; mapped using GPS (+/- 3 ft).
 - **Inlets** - Locations of County maintained inlets; mapped using GPS (+/- 3 ft).
 - **Stormflow Lines** - County-maintained flow patterns connecting inlets, manholes, outfalls. Created by heads-up digitizing.
- **Municipal Stormwater Group layer**
 - **Municipal Inlets** - Municipal-maintained stormwater inlets collected by various townships
 - **Municipal Outfalls** - Municipal-maintained stormwater inlets collected by various townships
- *Note – Group layers must be checked to draw in order to draw sub-groups or layers*



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- **Guide Rail Final Delivery** – Group containing Existing & Warranted data from the 2012 TWT Guide Rail Inventory
 - **Existing Guide Rail Display Options** – Group containing Layers representing Existing Guide Rail by different attributes
 - **Existing Guide Rail** - shows locations of all Existing Guide Rail in inventory
 - **FHWA Non-Compliant Guide Rail Segment Priority** (no data, compliant, minor damage, damaged but functional, non-functional)
 - **Non-FHWA Guide Rail Segment Evaluation** (no data, low priority, medium priority, high priority)
 - **Guide Rail Compliance** (no data, compliant, non-compliant)
 - **Leading End Condition** (no data, Acceptable, Not acceptable)
 - **Leading End Grading** (no data, Acceptable, Not acceptable)
 - **Trailing End Condition** (no data, Acceptable, Not acceptable)
 - **Trailing End Grading** (no data, Acceptable, Not acceptable)
 - **Post Spacing at Obstruction, Typical** (no data, Acceptable, Not acceptable)
 - **Grading in Vicinity of GR** (no data, Acceptable, Not acceptable)
 - **Rail Element Condition** (no data, Intact, Separated, Torn)
 - **Guide Rail Alignment** (no data, Aligned, <6" Out of Alignment, 6"-12" Out of Alignment, >12" Out of Alignment)
 - **2012 ADT (AASHTO design guide)** (<1,000, 1,001-5,000, 5,001-10,000, >10,000)
 - **Warranted Guide Rail** – Group containing Warranted Guide Rail layers
 - **Warranted Guide Rail Locations** – location where TWT determined Guide Rail was warranted
 - **Warranting Obstruction Type** – locations where TWT determined Guide Rail was warranted shown by the obstruction type requiring Guide Rail
 - **Conceptual Design for Warranted Guide Rail** – Group of layers containing conceptual designs prepared by TWT
 - **Warranted Guide Rail Design** – TWT's conceptual designs
 - **Annotation for Guide Rail Design** - labeling
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- **Address Numbers** – displays the address number for each address
- **Property Boundaries** – displays property boundary polygons
- **Road Easements/Jurisdictions** – shows jurisdictional responsibility for road intersections between County/State and County/Municipal
- **Abandoned Rail** – locations of abandoned rail lines
- **Highway Overlay**- Overlay is displayed by the year in which it was or is to be completed. Data covers years 2011-2022.
- **Highway Sections** – boundaries for Burlington County Highway sections
- **Pinelands Region** - Pinelands boundary
- **Burlington Roads and Municipalities** – Municipal boundaries and roads which draw in increasing detail as you zoom in on the map. Expand to see individual layers and sub-groups of layers
- **Waterbodies group** – waterbody data from NJDEP
 - **Streams**
 - **Lakes**
 - **Rivers and Bays**
- **Environmental constraints Group** – contains individual layers for wetlands, floodplains and soils. Expand to see individual layers
 - **Distressed vegetation (2012)** – from NJDEP
 - **NJDEP Wetlands (2012)** – from NJDEP
 - **FEMA Flood Zones** – from FEMA data released 2016, effective Dec 2017
 - **SSURGO Soils 2005**
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OPTIONS FOR 'BASEMAPS':

Note that the default basemap is Nearmap 3 inch resolution imagery which is updated 3 times a year and will always display the most recent imagery. To use one of the layers below, check the box to draw it. It will draw over the Nearmap imagery.

- **Basemap layers & "White Background"** – These 2 layers replace the default basemap from the old web mapping application. If you want to view data on a map without aerial background, check both these layers to draw them.
- **NJ 2020 Natural Color Aerial (1 ft, leaf off)** – provided by NJ OGIS. 1 foot resolution, leaf off
- **NJ 2019 Natural Color** – aerial imagery from NAIP (National Agriculture Imagery Program), 1 meter resolution, leaf on
- **NJ 2017 Natural Color** – aerial imagery from NAIP (National Agriculture Imagery Program), 1 meter resolution, leaf on
- **NJ 2015 Natural Color Aerial (1 ft, leaf off)** – provided by NJ OGIS. 1 foot resolution, leaf off
- **NJ 2013 Natural Color** – aerial imagery from NAIP (National Agriculture Imagery Program), 1 meter resolution, leaf on
- **NJ 2012 Natural Color**– aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 2012 Infrared**– aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 2010 Natural Color**– aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 2007 Natural Color** – aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 2007 Infrared**– aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 2006 Natural Color** – aerial imagery from NAIP (National Agriculture Imagery Program), 1 meter resolution, leaf on
- **NJ 2002 Infrared**– aerial from NJ OGIS, 1 foot resolution, leaf off
- **NJ 1995 Infrared**– aerial from NJ OGIS, 1 meter resolution, leaf off
- **NJ 1930 Black White** – black and white aerials from 1930s, low resolution, leaf on
- **NJ Topo 24K (Color 7.5 minute)** – provided by NJ OGIS
- **NJ Topo 24K (Black and white 7.5 minute)** – provided by NJ OGIS
- **NJ Topo 100K (color)** – provided by NJ OGIS
- **NJ Historical Maps (1881 – 1924)**– circa 1900s. – provided by NJ OGIS
- **Nearmap WMS Server** - 3 inch resolution imagery which is updated 3 times a year and will always display the most recent imagery. Provided by Nearmap through agreement with DVRPC. *This is the default basemap.*
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Engineering Traffic Mapping Application Layers List

<https://bit.ly/3jrtARU> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=e91f5ceb07d84451a735cf74ab707c76>

- **Accidents from 2010-2014** – accidents reported on County routes from statewide crash reports which were submitted to NJ DOT.
- **Engineering Signs group**
 - **Speed Advisory Sign** – locations of Speed Advisory signs maintained by the Engineering Traffic Section. All Mapped using Hstar and ProXH with locations <1ft
 - **Speed Limit Sign** – locations of Speed Limit signs maintained by the Engineering Traffic Section. All Mapped using Hstar and ProXH with locations <1ft
 - **Mile Marker Sign** – locations of Mile Marker signs maintained by the Engineering Traffic Section. All Mapped using Hstar and ProXH with locations <1ft
 - **Signs – Engineering grade** - locations of signs maintained by the Engineering Traffic Section which are Engineering Grade material. All Mapped using Hstar and ProXH with locations <1ft
 - **Signs** – all signs maintained by Engineering traffic which were collected by Burlington County using Hstar GPS +/- 1 ft
 - **Signs collected for SignCAD**- collected by SignCAD from video log. These are also maintained by Engineering Traffic
- **Engineering Traffic Group**– group containing layers prepared for Engineering’s Traffic Section
 - **Signs – Engineering Grade** – locations of signs maintained by the Engineering Traffic Section which are Engineering Grade material. All Mapped using Hstar and ProXH with locations <1ft
 - **Signs** – locations of signs maintained by the Engineering Traffic Section. All Mapped using Hstar and ProXH with locations <1ft
 - **DMS Boards** – locations of County’s DMS boards
 - **Traffic Cameras** – locations of traffic cameras at county road intersections
 - **School Flasher** – location of school flashers on County roads
 - **Pedestrian Walkway** – location of pedestrian walkways on County roads
 - **Blinker** – locations of County-maintained blinking lights
 - **Traffic Signals - Existing** – locations of existing traffic signals
 - **Traffic Signals – in Progress** – locations of traffic signals that are in progress
 - **Fiber Optic Markers** - locations of fiber marker ‘match sticks’ indicating the location of installed underground fiber optic cabling
 - **Fiber Conduit – Completed**- location of installed fiber optic cabling
- **County Facilities Group** – group containing county building an property layers
 - **Main County Offices** – locations of County offices. Includes pictures of buildings
 - **County Properties** – property boundaries of County-owned land shown by type (Multipurpose, Active Recreation, County Office, Court Space, Farm, Garage, Open Space, Park (Passive Recreation)). Displays as a colored polygon at small scales and as an outline at large scales
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- **Nearmap WMS Server** - 3 inch resolution imagery which is updated 3 times a year and will always display the most recent imagery. Provided by Nearmap through agreement with DVRPC. *This is the default basemap.*
- *Note – Group layers must be checked to draw in order to draw sub-groups or layers*



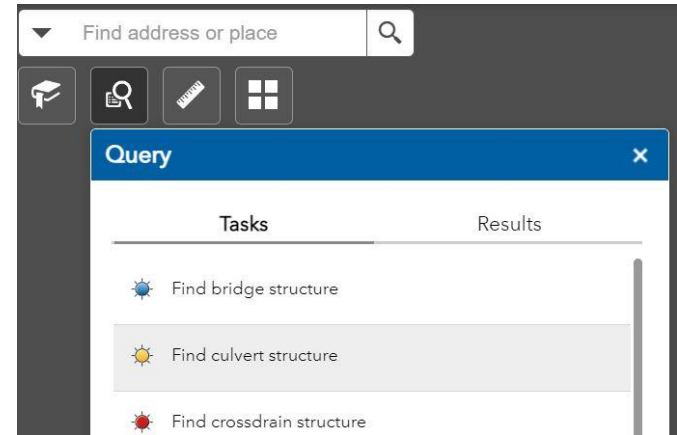
Engineering Mapping Application Search Layer Options

<https://bit.ly/3kYDniF> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=861778a88d394f8caff405e64dab0595>

- The Engineering Mapping Application contains multiple layer search/query options:

- Find Bridge Structure
- Find Culvert Structure
- Find Crossdrain Structure
- Find County Inlet
- Find County Manhole
- Find County Outfall
- Find Existing Guide Rail Section
- Find Warranted Guide Rail Locations
- Find Existing Guide Rail between mile posts



- Each search has this functionality:
 - **Use spatial filter to limit features – 2 options**
 - **Only return features within current map extent**– checking this option will apply the search to only features that are within the current map extent (default)
 - **Return features within full extent of map** – choosing this will apply search to all the layer’s features
 - **Result as operational layer**- checking this option will add the selected features to the Layers List.
 - Clicking the down arrow on the right side of a layer displays the layer menu, **which will include some or all of the following functions depending on the application/Layer**:
 - Zoom to—Sets the map extent to the extent of the layer.
 - Transparency--Sets the transparency for the layer.
 - Enable Pop-up / Remove Pop-up — Enables or disables Pop-up for the feature layer. If a feature layer does not have pop-up configured in the map, clicking **Enable Pop-up** shows all field values from the feature layer.
 - Move up—Moves the layer one level up.
 - Move down—Moves the layer one level down.
 - Open attribute table—Opens the attribute table for the feature layer.
 - Description / Show Item Details—Opens the service description or the item details page for the service or the item associated with the layer, if available.

Note – When Query dialog box is closed, search results will be removed from Layers and Legend



Engineering Mapping Application Search Layer Options, cont.

<https://bit.ly/3kYDniF> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=861778a88d394f8caff405e64dab0595>

The screenshot shows the Engineering Mapping Application search interface. At the top, there is a search bar with the placeholder text "Find address or place" and a magnifying glass icon. Below the search bar is a toolbar with five icons: a graduation cap, a magnifying glass, a ruler, a grid, and a square with the number "1".

The main panel is titled "Query" and has a close button (X) in the top right corner. It is divided into two columns: "Tasks" and "Results". The "Tasks" column contains a list of search tasks, each with a colored icon and a text label. The "Results" column is currently empty.

Tasks	Results
 Find bridge structure	
 Find culvert structure	
 Find crossdrain structure	
 Find County inlet	
 Find County manholes	
 Find County outfall	
 Find Existing Guide Rail section	



Engineering Mapping Application Search Layer Options, cont.

<https://bit.ly/3kYDniF> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=861778a88d394f8caff405e64dab0595>

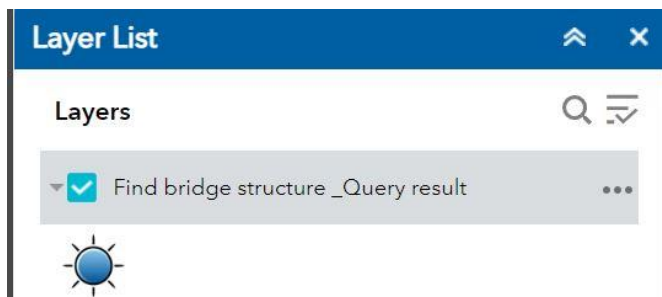
Example of Searching for a bridge, culvert or crossdrain

These searches allows the user to search for a bridge, culvert or crossdrain by the Structure Number:

- **Choose appropriate query for the type of structure you want to search for (bridge, culvert or crossdrain)**
- **Enter the structure number in the box**
- **Check any of the options you'd like to use**
- **Click Apply**

Choosing this option will apply the search to only features that are within the current map extent

The selected features will be added to the Layers List.
The attribute table could then be opened for viewing (click the 3 dots (...)) and optionally exported as a .CSV file which can be opened in Excel.



Query

Tasks Results

Find bridge structure

Query criteria

Bridge Structure number is

D4.13

D4.13

LOWER(Structure_num) = 'd4.13'

Spatial filters

Only return features within current map extent

Result layer name

Find bridge structure _Query result

Apply



Engineering Mapping Application Search Layer Options, cont.

<https://bit.ly/3kYDniF> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=861778a88d394f8caff405e64dab0595>

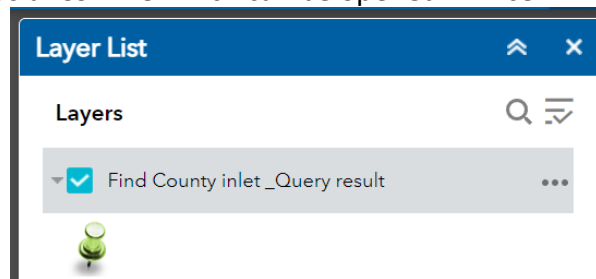
Example of Searching for a stormwater structure

These searches allows the user to search for a County stormwater infrastructure items by their identifier:

- **Choose appropriate query for the type of structure you want to search for (inlet, manhole, outfall)**
- **Enter the identifier in the box**
 - *manholes have the same identifier as the inlet to which they are connected but with an **m** at the end (ex. 1530174m)*
 - *outfalls have the same identifier as the inlet to which they are connected but with an **o** at the end (ex. 1530174o)*
- **Check any of the options you'd like to use**
- **Click Apply**

Choosing this option will apply the search to only features that are within the current map extent

The selected features will be added to the Layers List. The attribute table could then be opened for viewing (click the 3 dots (...)) and optionally exported as a .CSV file which can be opened in Excel.



Query

Tasks Results

← Find County inlet

Query criteria

Inlet identifier is

1528001

1528001

LOWER(IDENTIFIER) = '1528001'

Spatial filters

Only return features within current map extent

Result layer name

Find County inlet _Query result

Apply



Engineering Mapping Application Search Layer Options, cont.

<https://bit.ly/3kYDniF> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=861778a88d394f8caff405e64dab0595>

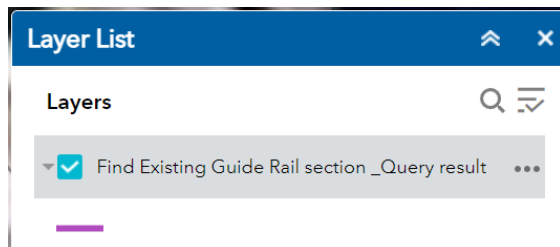
Example of Searching for an Existing Guide Rail Section or Warranted Guide Rail Location

These searches allows the user to search for Existing or Warranted Guide Rail locations GR_ID:

- **Choose appropriate query for the type of structure you want to search for**
 - Find Existing Guide Rail Section
 - Find Warranted Guide Rail Location
- Enter the GR_ID in the box
- Check any of the options you'd like to use
- Click Apply

Checking this option will apply the search to only features that are within the current map extent

The selected features will be added to the Layers List.
The attribute table could then be opened for viewing (click the 3 dots (...)) and optionally exported as a .CSV file which can be opened in Excel.



The Query dialog box is open, showing the search criteria and options. The 'Tasks' tab is selected. The search criteria is 'Find Existing Guide Rail section'. The 'Query criteria' section shows 'Existing Guide Rail ID (GR_ID) is' followed by a text box containing '1312'. Below the text box, the value '1312' is displayed, and the SQL query 'gr_id = 1312' is shown. The 'Spatial filters' section has a dropdown menu set to 'Only return features within current map extent'. The 'Result layer name' section shows 'Find Existing Guide Rail section _Query result'. A large green 'Apply' button is at the bottom.



Engineering Mapping Application Search Layer Options, cont.

<https://bit.ly/3kYDniF> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=861778a88d394f8caff405e64dab0595>

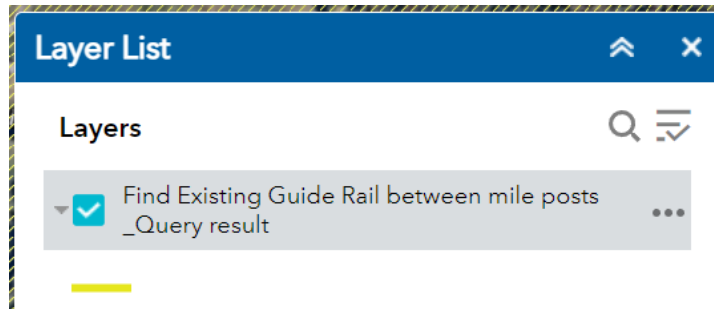
Example of Searching for Existing Guide Rail Sections between specified mile posts on a chosen County route

These searches allows the user to search for Existing or Warranted Guide Rail locations GR_ID:

- **Choose Find Existing Guide Rail between mile posts query**
- **Enter a County Route number**
- **Enter the starting mile post & ending mile post values**
- **Check any of the options you'd like to use**
- **Click Apply**

Choosing this option will apply the search to only features that are within the current map extent

The selected features will be added to the Layers List. The attribute table could then be opened for viewing (click the 3 dots (...)) and optionally exported as a .CSV file which can be opened in Excel.



Query ×

Tasks

Results

← Find Existing Guide Rail between mile posts

Query criteria

County Route Number is

530

530

Starting mile post is at least

2

2

Ending mile post is at most

5

5

(LOWER(cntyrtno) = '530' AND fr_mp_num >= 2) AND (To_mp_num <= 5)

Spatial filters

Only return features within current map extent ▼

Result layer name

Find Existing Guide Rail between mile posts _Query result

Apply



Engineering Traffic Mapping Application Layers List, cont.

<https://bit.ly/3jrtARU> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=e91f5ceb07d84451a735cf74ab707c76>

- The Engineering Mapping Application contains multiple layer search/query options:
 - **Find County building by name**
 - **Find County building by number**
 - **Find County building by address**

- Each search has this functionality:
 - **Use spatial filter to limit features – 2 options**
 - **Only return features within current map extent**– checking this option will apply the search to only features that are within the current map extent (default)
 - **Return features within full extent of map** – choosing this will apply search to all the layer’s features
 - **Result as operational layer**- checking this option will add the selected features to the Layers List.
 - Clicking the down arrow on the right side of a layer displays the layer menu, **which will include some or all of the following functions depending on the application/Layer**:
 - Zoom to—Sets the map extent to the extent of the layer.
 - Transparency--Sets the transparence for the layer.
 - Enable Pop-up / Remove Pop-up — Enables or disables Pop-up for the feature layer. If a feature layer does not have pop-up configured in the map, clicking **Enable Pop-up** shows all field values from the feature layer.
 - Move up—Moves the layer one level up.
 - Move down—Moves the layer one level down.
 - Open attribute table—Opens the attribute table for the feature layer.
 - Description / Show Item Details—Opens the service description or the item details page for the service or the item associated with the layer, if available.

Note – When Query dialog box is closed, search results will be removed from Layers and Legend



Engineering Traffic Mapping Application Layers List, cont.

<https://bit.ly/3irtARU> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=e91f5ceb07d84451a735cf74ab707c76>

Query	
Tasks	Results
 Search for County Facility by name	
 Search for County facility by building number	
 Search for County facility by address	



Engineering Traffic Mapping Application Layers List, cont.

<https://bit.ly/3irtARU> or

<https://gisportal.co.burlington.nj.us/portal/apps/webappviewer/index.html?id=e91f5ceb07d84451a735cf74ab707c76>

Example of Searching for a County building by name, number or address

These searches allows the user to search for County building by one of 3 options:

- **Choose appropriate way you want to search for the building:**
 - **Name (description)**
 - **Number (from Fixed Assets)**
 - **Address**
- **Enter the appropriate value in the box**
- **Check any of the options you'd like to use**
- **Click Apply**

Choosing this option will apply the search to only features that are within the current map extent

The selected features will be added to the Layers List.

The attribute table could then be opened for viewing (click the 3 dots (...)) and optionally exported as a .CSV file which can be opened in Excel.

Query [X]

Tasks Results

← Search for County Facility by name

Query criteria

Building name like

engineer

engineer

LOWER(BC.GIS.FA_COUNTY_BUILDINGS.BuildingDesc) LIKE '%engineer%'

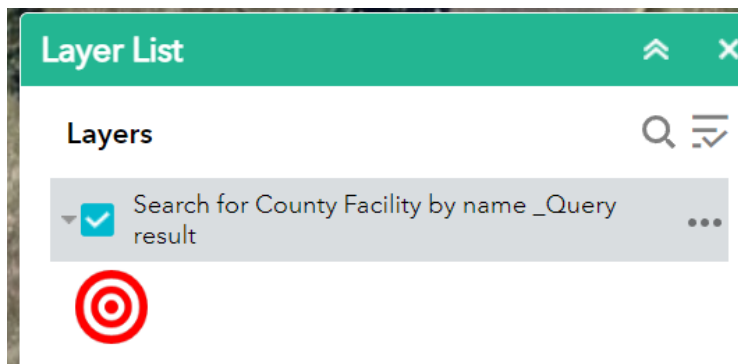
Spatial filters

Only return features within current map extent [v]

Result layer name

Search for County Facility by name _Query result

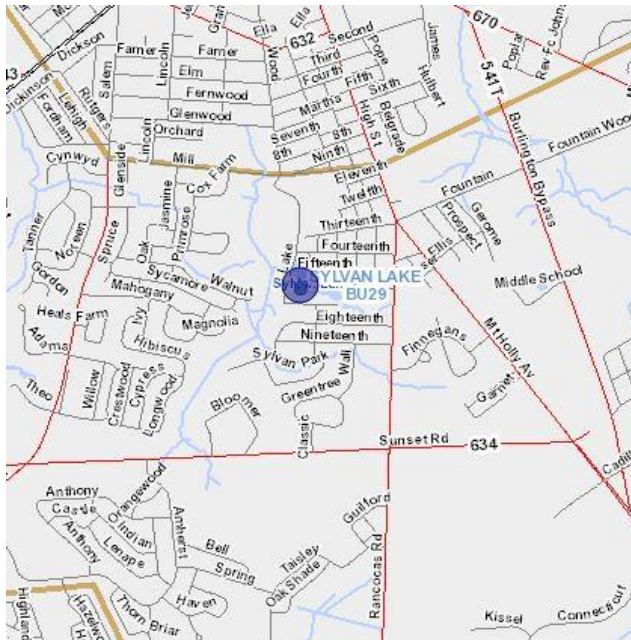
Apply





Example of Search query result:

- The results of the Search query will be displayed in the search window
- The feature(s) on the map will be highlighted
- The map will center on the selected feature(s)
- If multiple features were found, the list can be scrolled to view the results. Clicking any one will cause the map to center on it.



Query

TasksResults

Search for County Facility by name _Query result

...

Displayed features:2/2

Main County Office: 128 - Engineer Administration - Mt Laurel, mount laurel township

Building number128

Townshipmount laurel township

Notes128 - Engineer Administration - Mt Laurel

DatafileME110810B.cor

Front viewhttps://gisportal.co.burlington.nj.us/webpic:
- traffic administration - mount laurel - Front,

Side viewhttps://gisportal.co.burlington.nj.us/webpic:
- traffic administration - mount laurel - Side.jp

Building Type

created_user

created_date

last_edited_userMTORRES

last_edited_date10/28/2022, 3:44 PM

OBJECTID

BuildingKey

BuildingDesc

Street

City

State

ZipCode

Active