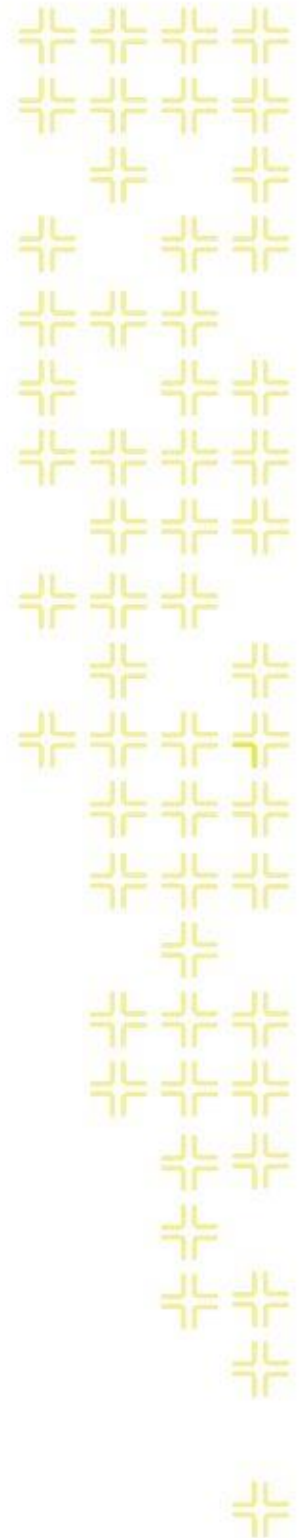




TRAINING GUIDE

# Web & Mobile Mapping For Work Orders and Requests



# Web and Mobile Mapping for Work Orders and Requests

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There are several options for creating and accessing Work Orders and Requests from the Web and Mobile Maps. This guide will go over these various options in Web, Android, and iOS.

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## Web Map

The web map is primarily launched by clicking the Web Map button  on the Home menu toolbar. Accessing the map this way will open the map to the last extent used by the current user or the default extent

The web map can also be launched from different modules using the Show in Map button. Accessing the map in this way will bring up the map, and then zoom to the assets, or Work Orders/Requests selected when the button was clicked.

## Web Map Work Tools


These tools can be accessed in a variety of ways but function the same no matter how they are accessed.

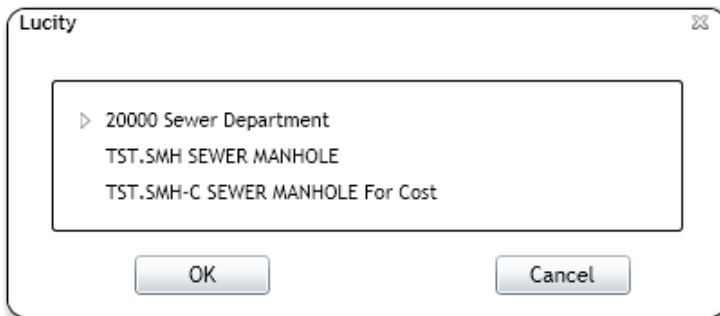
### Create Request



The **Create Request tool** allows you to create a request from the map based on an asset or point.

#### To create a Request

1. Highlight an asset, or User Point Graphic, in the **Data Table**
  - o User Point Graphics are created using the Create Work Point tool.
2. Click the  button.
3. If the highlighted asset does not have a **Default Work Category**, the following popup will appear allowing users to select a category:
  - o If a User Point Graphic is used, no category is required and this popup will be skipped.



4. Only categories that are associated to the highlighted asset will appear.

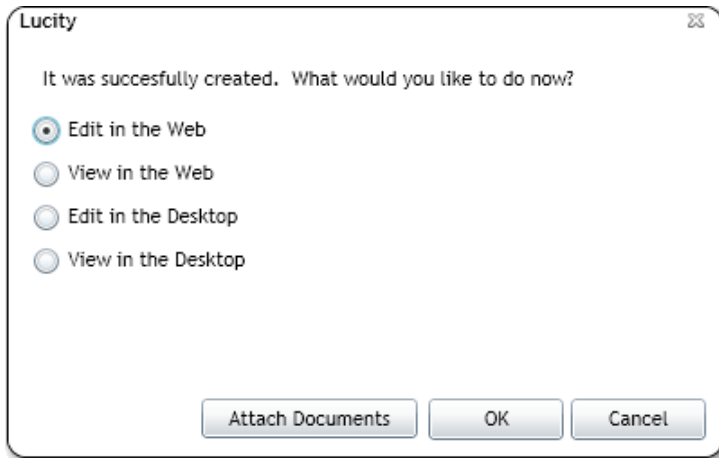
Notes: \_\_\_\_\_

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5. Select a category and click **OK**. This is required. The request will be created with the highlighted asset attached and the following popup will appear:




6. Clicking **Attach Document** will open up a browser window to let the user select a document to attach to the request.
7. Choose one of the **Edit** or **View** options and click **OK**.
8. **Lucy Web** or **Desktop** will open up the request module and go to the new record.

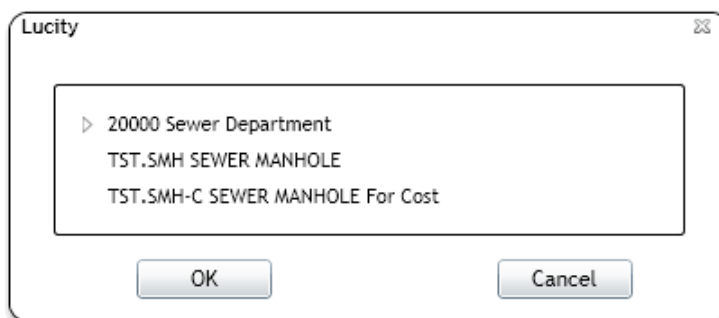
## Create Work Order



The **Create Work Order tool** allows users to create a work order from the map based on one or more assets or points.

### To create a work order

1. Highlight assets, or User Point Graphics, in the **Data Table**
  - o User Point Graphics are created using the Create Work Point tool.
2. Click the  button.
3. If the highlighted asset does not have a **Default Work Category**, the following popup will appear allowing users to select a category:



- o When assets are selected only categories that are associated to the highlighted asset will appear.
- o When User Point Graphics are used the category list will include all categories.

4. Select a category and click OK. This is required. A dialog similar to the following will appear:

The dialog box is titled "Select options for create Work Order". It contains the following elements:

- Section: "Create Work Order(s) for..."
  - Radio button:  Selected Records [2 total]
  - Radio button:  All records [5 total]
- Section: "Where"
  - Radio button:  ALL share a single Work Order
  - Radio button:  EACH Record has its own Work Order
- Section: "Select Template"

PM/Template	PM/Template Text
WWHOTSPOT	Hot Spot
- Buttons: "Cancel" and "OK"

5. If there is more than one asset/address/coordinate highlighted in the feature data grid, then you will have an option to create the work order for the highlighted records or all records. In addition you will have the option to create one work order with all the items, or a separate work order for each item (asset/address/coordinate). Finally, if there are Work Template records associated with the asset type, these will appear in the grid allowing you to use a template when creating the work order. Select the desired options and click OK.
6. The work order will be created with the highlighted assets attached and the following popup will appear:

The dialog box is titled "Lucy". It contains the following elements:

- Text: "It was succesfully created. What would you like to do now?"
- Radio buttons:
  - Edit in the Web
  - View in the Web
  - Edit in the Desktop
  - View in the Desktop
- Buttons: "Attach Documents", "OK", and "Cancel"

7. Clicking **Attach Document** will open up a browser window to let the user select a document to attach to the work order.
8. Choose one of the Edit or View options and click **OK**.
9. Lucy Web or Desktop will open up the work order module and go to the new record.
  - o After the work order is created the work order number is automatically entered into the Attach to Work Order tool. This allows users to create a work order, and the quickly highlight other assets, even on other tabs, and attach them to that same work order.

## Attach to Work Order


  The **Attach to Work Order tool** allows users to attach assets to a pre-existing work order.

### To attach assets to a work order

1. Select assets or User Point Graphics in the **Data Table**.
2. Click in the field section of the **Attach to Work Order tool** and type in a work order number.
3. Click the icon part **Attach to Work Order tool** and the selected asset or point will be attached to the work order.
  - o Assets are added to the Asset grid of the work order.
  - o User Point Graphics are added to the Location grid of the work order.
  - o The field part of the tool is automatically filled out by the last work order created using the Create Work Order tool.

## *Work Management Methods in Web Map*

### Create Work Point

 Using this tool you can create a point in the map and record its location. These points can be used to add an X/Y point to a work order or request. This will not tie the Work Order to an Asset, only a Location. Use this if you only have X/Y information.

### To create a Work Point

1. Select the **Create Work Point** tool and click on a location in the map.
2. A red pin will appear and the **Data Table** will be opened with a tab for UserPointGraphics.
3. Using the **Data Table** users can access the tools to Create Request, Create Work Order, or Attach to Work Order.
4. These points can be removed using the tools in the data table.

**Notes:** \_\_\_\_\_

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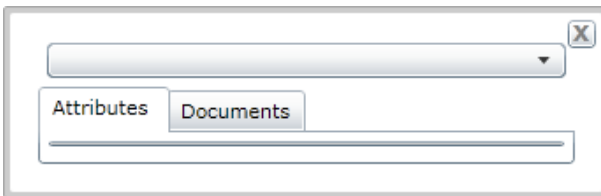
## Identify

- Use the Identify tool to create a Request or Work Order against one specific asset, or attach that asset to an existing Work Order.

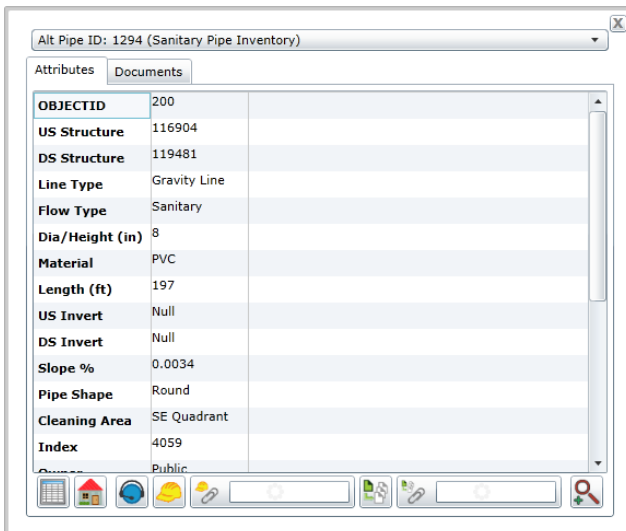
*Note: Some features might have the Identify tool disabled depending on settings controlled by the system admin.*

### To identify an asset

- Click , and then click on a feature in the map.
- If there is more than one visible feature at that location the identify popup will appear like this:



- Select the asset to identify from the drop down. This selection can be changed later.
- The Attributes tab will be filled out with the fields and attributes of the asset



- At the bottom of the Attributes tab several Lucy tools appear. These only work if the asset being identified is a Lucy asset.





## Selection



This tool allows you to select features. This icon may appear differently depending on which selection mode is currently being used. When the select tool is used the Data Table automatically pops up with the selected features. Use Select to create a Request or Work Order against multiple assets.

The Selection tool has three modes. The dropdown button to the right of the Selection tool in the Analysis toolbar allows you to toggle between these modes. Click on the button to select a different mode. Switching modes does not automatically select the Selection tool. After switching modes, click the Selection tool to use it. The last used selection mode is saved locally and will be used by default the next time the map is opened on the same machine by the same user.



**Select by Rectangle** This mode allows users to click and drag to create a rectangle. Click a point in the map and drag the mouse diagonally to select the area.



**Select by Polygon** This mode allows users to draw a selection polygon. Click to begin the polygon. Each new click creates a new corner for the polygon. Double clicking completes the polygon and selects anything that intersects it.



**Select by Point** This mode allows users to click one point in the map and selects everything near that point.

Remember that layer selectability is controlled using the Map Layers tool.

## Find



This tool searches for Addresses, Property IDs, Assets, and Customers based on criteria the user enters. Use Find if you know the address, Property ID, or Asset ID, but not where the asset is located in the map.

The Find tool allows you to quickly search for Addresses, XY coordinates, Property ID tags, Assets, and Customers. Some of these tools will only work if the agency tracks the data the tool is reliant on. For example, if they do not track property ids the Property ID search will not work.

### To use the find tool

1. Click on the Find tool and the following dialog will appear:

The screenshot shows a dialog box with five tabs: Address, Lat/Long, Property ID, Asset, and Customer. The 'Address' tab is selected. Below the tabs, there are four input fields: 'Address', '(Optional) Cross Street', '(Optional) Zip Code', and '(Optional) City'. At the bottom of the dialog, there are two buttons: 'Close' and 'Find'.

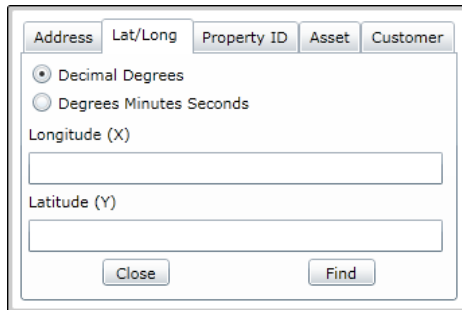
2. Select the type of search to perform.

## Address

1. Enter an **Address** and **Street**. The program will provide a dropdown list of matches as you type
2. Enter other optional information
3. Click **Find**.
4. A point will be put in the map at the address location. Use the tools in the Data Table to Create a Request or Work Order, or attach the point to an existing Work Order.

## Lat/Long

1. Click Lat/Long to find an XY coordinate

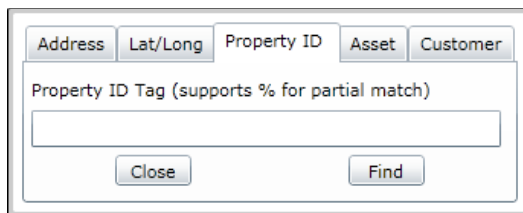


The screenshot shows a dialog box with five tabs: Address, Lat/Long, Property ID, Asset, and Customer. The Lat/Long tab is selected. Inside the dialog, there are two radio buttons: 'Decimal Degrees' (which is selected) and 'Degrees Minutes Seconds'. Below these are two text input fields labeled 'Longitude (X)' and 'Latitude (Y)'. At the bottom of the dialog are two buttons: 'Close' and 'Find'.

2. Select the types of Degrees being entered
3. Enter the coordinates in the Longitude and Latitude fields
4. Click **Find**.
5. A point will be put in the map at the XY location. Use the tools in the Data Table to Create a Request or Work Order, or attach the point to an existing Work Order.

## Property ID

1. Click Property ID to search based on Property ID tags

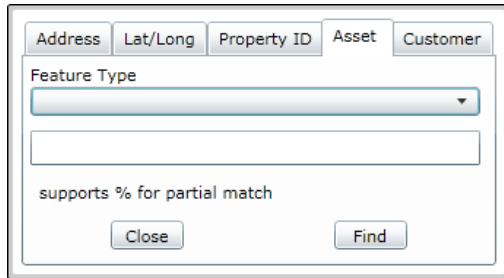


The screenshot shows a dialog box with five tabs: Address, Lat/Long, Property ID, Asset, and Customer. The Property ID tab is selected. Inside the dialog, there is a text input field labeled 'Property ID Tag (supports % for partial match)'. At the bottom of the dialog are two buttons: 'Close' and 'Find'.

2. Enter a Property ID number
3. Click **Find**
4. A point will be put in the map at the address location. Use the tools in the Data Table to Create a Request or Work Order, or attach the point to an existing Work Order.

## Asset

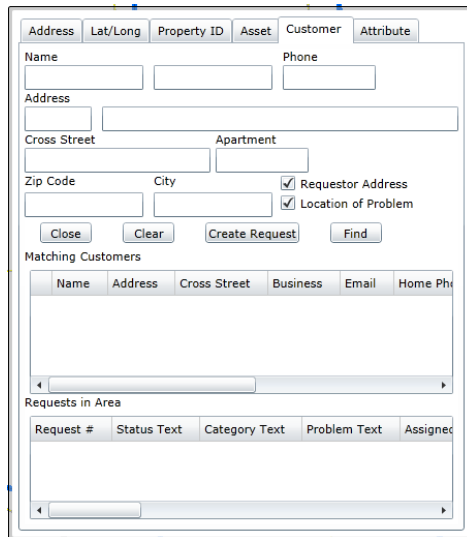
1. Click asset to search through the Lucity assets in the map



2. Select a feature type. This list is populated from the Lucity feature classes in the map
3. Type in an asset number
4. Click **Find**.
5. The assets will be selected in the map. Use the tools in the Data Table to Create a Request or Work Order, or attach the assets to an existing Work Order.

## Customer

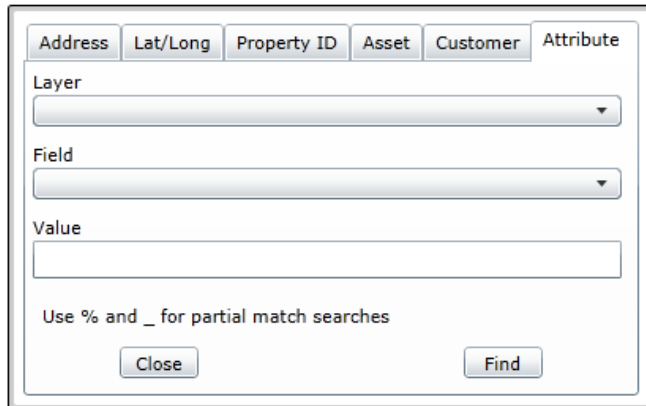
1. Click Customer to search for a Customer using name, address, or phone number



2. Type in any known information in the fields. Click **Find**. Any matching records will appear in the Matching Customers grid.
  - If the desired customer record appears in the Matching Customers grid, select it by checking the box.
    - The tool will try to locate the associated addresses for that record in the map.
    - Any information missing in the search fields will be filled out from the Customer/Address record.
  - To create a request mark if this is the above address is the **Requestor Address**, the **Location of Problem**, or both
  - Click **Create Request**.

## Attribute

1. Click Attribute to search a layer based upon field values




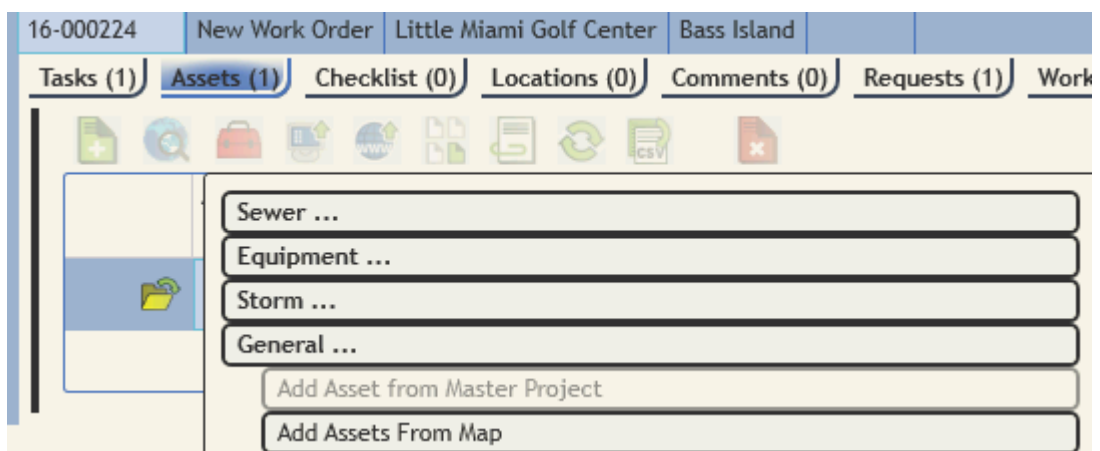
The image shows a dialog box titled 'Attribute' with several tabs: 'Address', 'Lat/Long', 'Property ID', 'Asset', 'Customer', and 'Attribute'. The 'Attribute' tab is selected. Inside the dialog, there are three main sections: 'Layer' with a dropdown menu, 'Field' with a dropdown menu, and 'Value' with a text input field. Below these sections is a note: 'Use % and \_ for partial match searches'. At the bottom of the dialog are two buttons: 'Close' and 'Find'.

2. Select a layer
3. Select a field
4. Enter a value to search on.
5. Click **Find**.
6. The asset(s) that meet the search criteria will be selected in the map. Use the tools in the Data Table to Create a Request or Work Order, or attach the assets to an existing Work Order.



## *Adding Web Map Assets from Lucity Web*

The Add Assets from Map toolkit allows for adding Web Map Assets from the perspective of a Work Order in Lucity Web.

Click the Asset tab (to the right of Tasks), then the red toolkit icon , then General > Add Assets From Map:



This opens the Web Map in a new window. Zoom to the desired map area and click the Select tool, then draw a polygon to include the desired asset. The Data Table will open with tabs for the different

asset types. Open the correct tab and highlight the asset in question. Click the Attach to Work Order button . A message will appear that the asset has been successfully attached; click OK. Return to the Work Order in Lucity Web. It may be necessary to click Refresh to see the asset listed .

## Work Management in iOS Map

When GIS is launched from the dashboard it opens the map to the last used map in the last extent.

### *Show In Map*

The Show in Map function is available for many modules and can work on one or more selected records. By default it will first try and find assets. If it does not find any assets on the selected record, it will plot points and addresses.

Performing a show in map will plot the feature and label the feature based on the configured display field for the layer.



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## iOS Map Work Tools

### Create Request



The **Create Request tool** allows you to create a request from the map based on an asset or point. The form is opened so that any further edits can be made.

### Create Work Order



The **Create Work Order tool** allows users to create a work order from the map based on one or more assets or points. When the work order button is clicked, a work order is created, the asset or point is added to the work order, and the work order is opened in a form.

At this point the work order can be filled in (and category can be changed, if desired). To view the asset or location added to the work order, click the “...” child views button and select “Assets” or “Locations”.

The work order is saved to the server before a form is displayed. Navigating away from the work order at this point will not cause the work order to be discarded.

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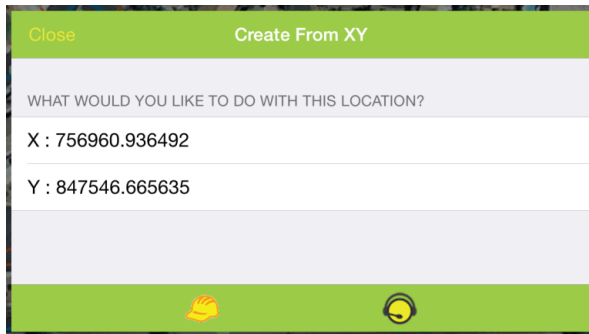
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## Work Management Methods in iOS Map

### Creating Requests or Work Orders at a Specified Point

If a work order or request is not being performed at a specific address or on a specific asset, using the XY tool  is a good way to identify the location of the work being done. Tap the location on the map where the work is. This will prompt for what to do with the specified point.



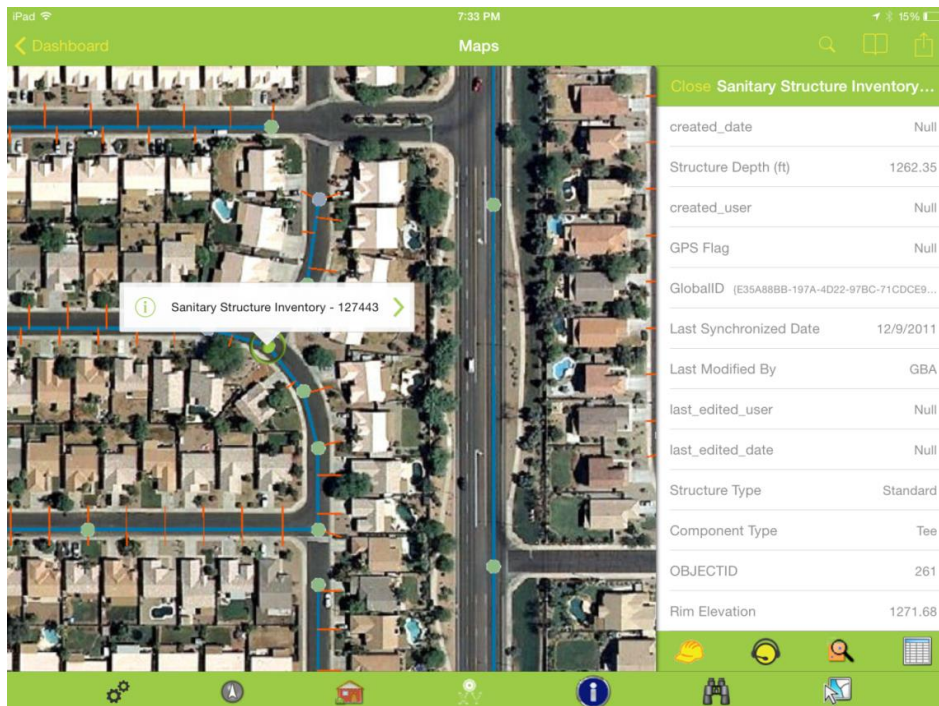
Creating a work order will create a new work order using the defined default category and add a location record with the specified XY. Creating a request will create a new request using the default category for the user/tablet and will put the XY on the request as the request location.

### Identify

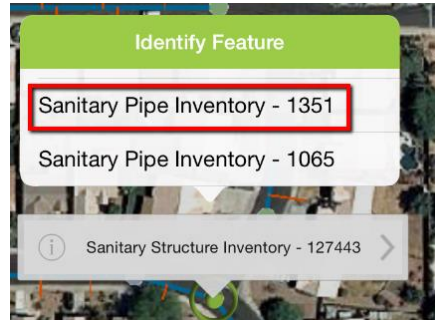


Use the Identify tool to create a Request or Work Order against one specific asset.

Tap the feature you want to use. This will pull up a popup with the type of feature as well as the display field for the feature. Additionally, a panel will open with the extended details about the feature.



There may be more than one feature at that location. To view other features at that tap point, click the green arrow to pull up a list of all features found. The popup is a scrollable list. Find the item you are interested in and select it from the popup list.



This will change the popup to show the new feature and will select the feature in the map. It will also update the details panel with information about the new feature.

At any time the details panel can be closed.

To create a work order for the current feature, click the Work Order button. This will create a new work order and attach the asset to the work order, and open the work order for further edits.

The category for the work order is assigned based on the default category defined in Lucity for the selected feature.


If there is no default category defined, the system finds the first available category in the category list with the correct asset type.

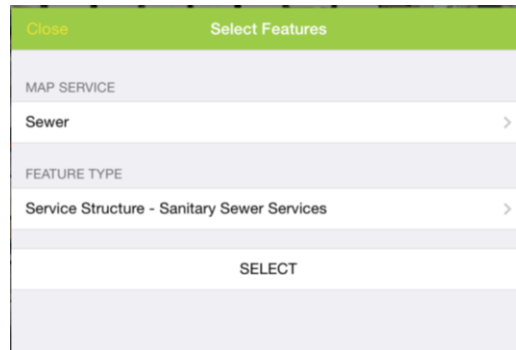
Creating a request works the same way as a work order from the identify dialog. Click the Create Request button and it will create the request for the asset, place the asset on the request and assign a category to the request based on the selected asset. The request form is then opened for any further edits.

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## Multiple select

It is possible to select and work with multiple assets at a time. This is done using the  tool on the lower toolbar. The tool prompts for which map service and layer you want to select features from:

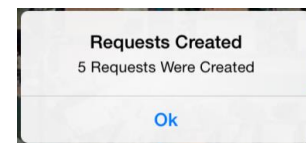


Clicking Select returns you to the map to start tapping the desired features to be added to the multi-select. Each feature in the selected layer that is tapped will be highlighted and the identifier will be added to the list of features in the Select Features pane.

To unselect a feature, swipe the identifier to the left in the select features list or click the edit button and tap the red minus. Then click delete.

Creating a work order creates one work order and attaches all assets to the work order. The work order form is opened for further editing.

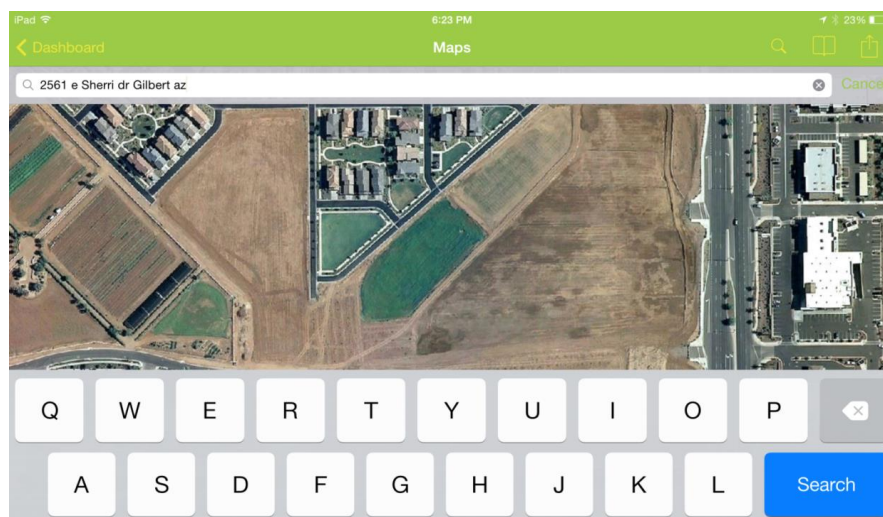
The Create Request function creates one request for each item. The system will prompt and display how many requests were created. No view or form is opened.



## Create from an Address: Searching for Addresses


To search for an address in the map, click the search button in the upper right toolbar 

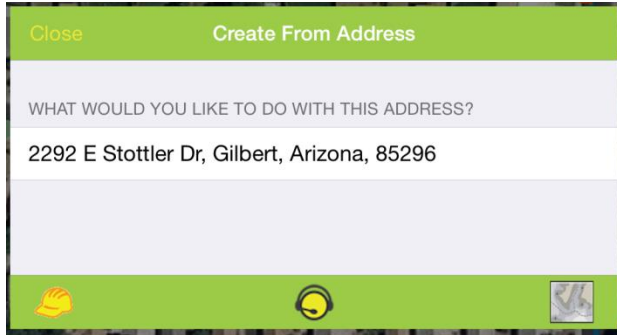
This opens this search bar:



Creating a Work Order or Request will create a work order or request using the default tablet category and will either attach the address as a location on the work order or carry the address information to the request as the location address.

## Create from an Address: Point to address

One of the other tools provided in the tablet map is the ability to tap a point on the map and have the map attempt to calculate what the address is for that location. To use this, click the  tool on the bottom toolbar and tap a location on the map. This will bring up a prompt showing the approximated address:



The work order, request, and driving directions tools on this dialog work the same as the address search dialog discussed earlier in the session.

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# Work Management in Android Map

## Android Map Work Tools

### Create Request



The **Create Request tool** allows you to create a request from the map based on an asset or point. The form is opened so that any further edits can be made.

### Create Work Order

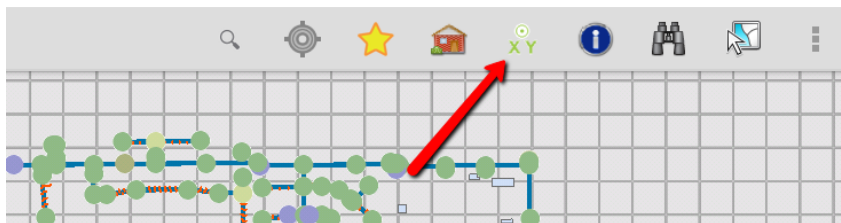


The **Create Work Order tool** allows users to create a work order from the map based on one or more assets or points. When the work order button is clicked, a work order is created, the asset or point is added to the work order, and the work order is opened in a form.

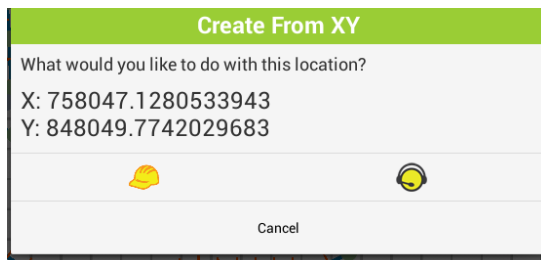
## Work Management Methods in Android Map

### Creating Requests or Work Orders at a Specified Point

If a work order or request is not being performed at a specific address or on a specific asset, using the XY tool is a good way to identify the location of the work being done.



Tap the location on the map where the work is. This will prompt for what to do with the specified point.



Creating a work order will create a new work order using the defined default category and add a location record with the specified XY. Creating a request will create a new request using the default category for the user/tablet and will put the XY on the request as the request location.

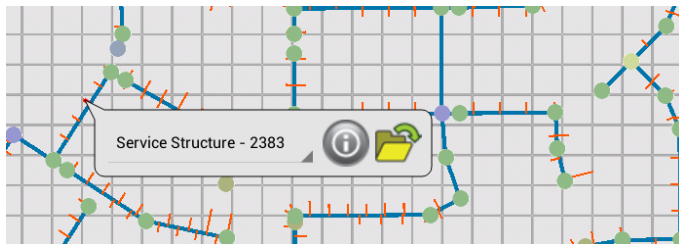
### Identify



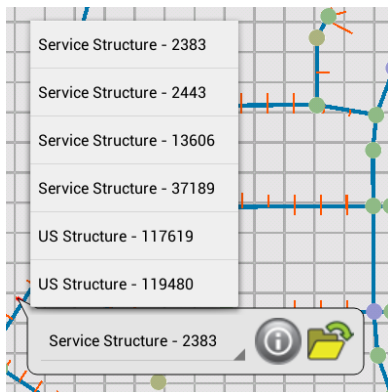
Use the Identify tool to create a Request or Work Order against one specific asset.



Tap the feature you want to use. This will pull up a popup with the name of the display field as well as value of the display field for the feature.

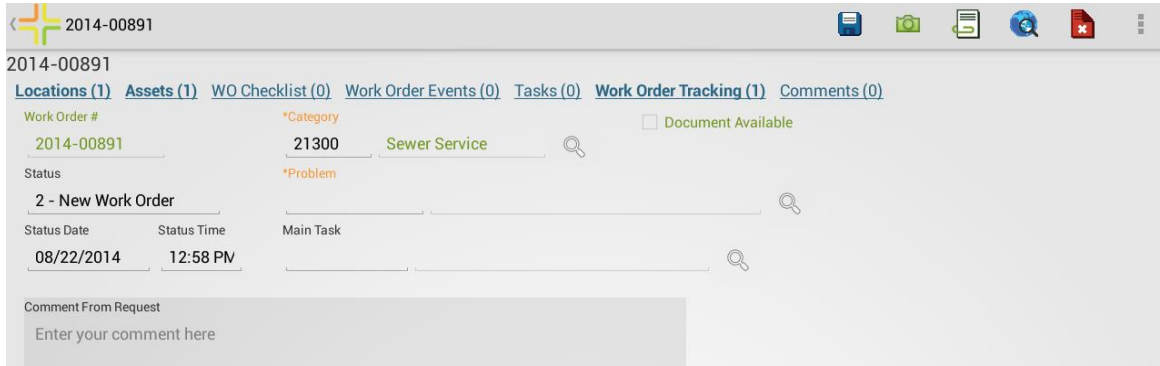


There may be more than one feature at that location. To view other features at that tap point, click the green arrow to pull up a list of all features found. The popup is a scrollable list. Find the item you are interested in and select it from the popup list.



**Notes:** \_\_\_\_\_  
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To create a work order for the current feature, click the Work Order button. This will create a new work order and attach the asset to the work order, and open the work order for further edits. The category for the work order is assigned based on the default category defined in Lucity for the selected feature. If there is no default category defined, the system finds the first available category in the category list with the correct asset type.

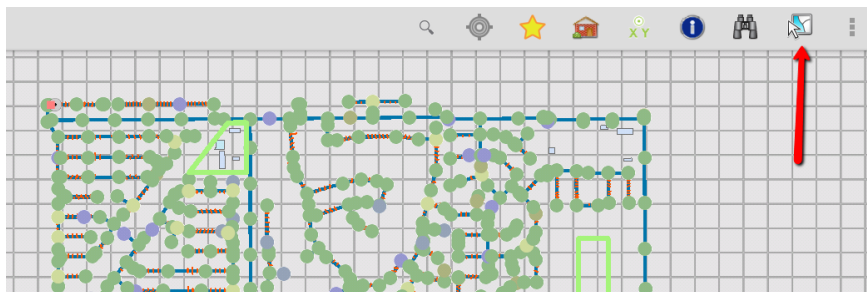


Click Back to go back to the map

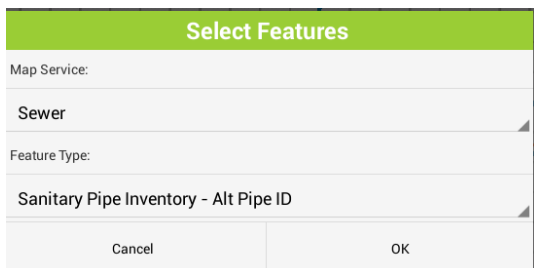
Creating a request works the same way as a work order from the identify dialog. Click the Create Request button and it will create the request for the asset, place the asset on the request and assign a category to the request based on the selected asset. The request form is then opened for any further edits.

## Multiple select

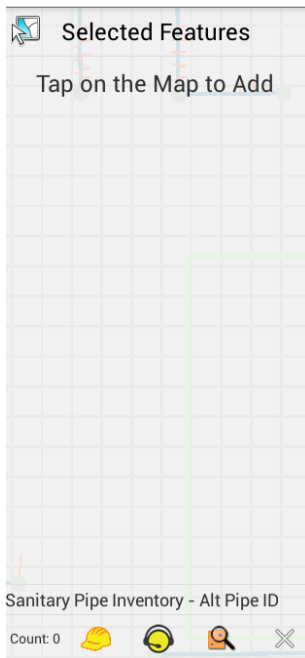
It is possible to create work orders and requests from multiple assets at a time using the multi-select tool:



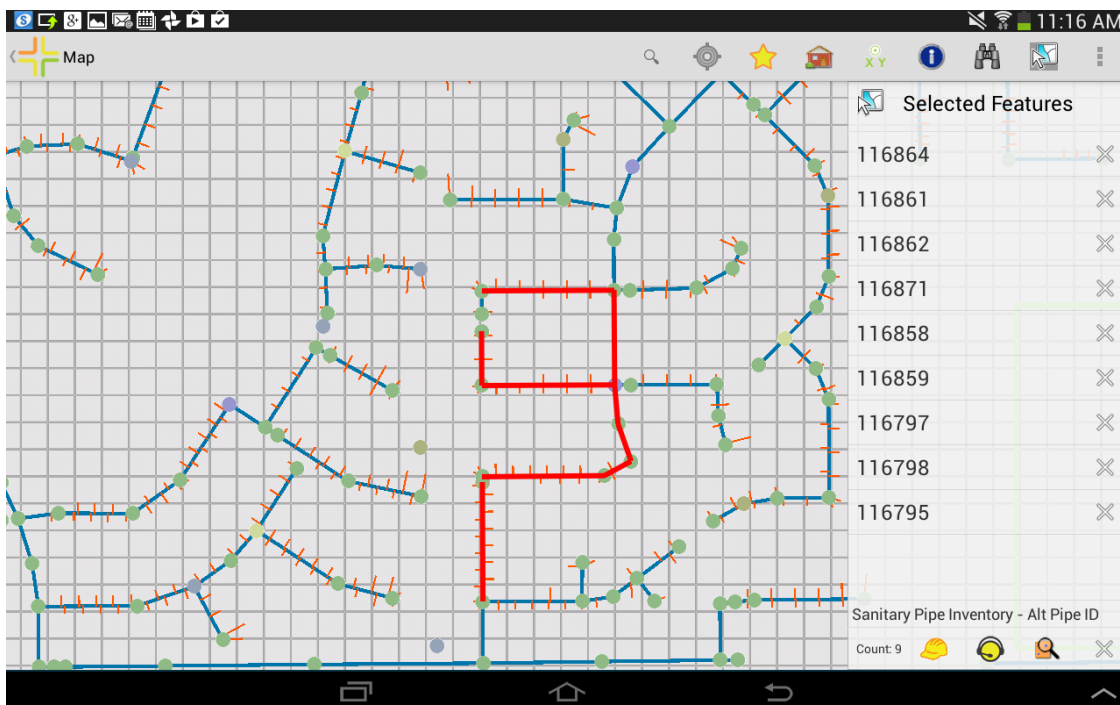
The tool prompts for which map service and layer you want to select features from:



The tool then expands in preparation to display the list of features you select.



Clicking Select returns you to the map to start tapping the desired features to be added to the multi-select. Each feature in the selected layer that is tapped will be highlighted and the identifier will be added to the list of features in the Select Features pane.



To unselect a feature, click the “X” next to the feature in the list. Tapping a feature in the pane will flash the feature in the map.

A running count of features is show at the bottom along with tools to create work orders and requests on the selected features.

Creating a work order creates one work order and attaches all assets to the work order. The work order form is opened for further editing.

2014-00892

Locations (0) Assets (9) WO Checklist (0) Work Order Events (0) Tasks (0) Work Order Tracking (1) Comments (0)

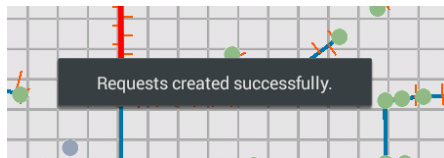
Work Order # 2014-00892 \*Category 21200 Sewer Pipe  Document Available

Status 2 - New Work Order \*Problem

Status Date 08/22/2014 Status Time 1:10 PM Main Task

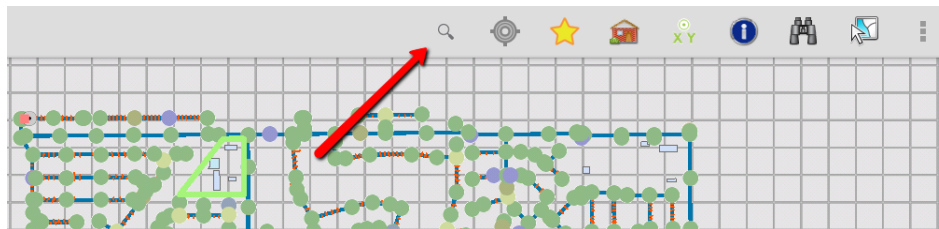
Comment From Request

The Create Request function creates one request for each item. The system will display a toast message to indicate that the creation was successful.



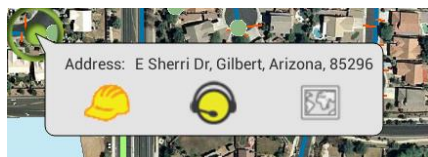
## Create from an Address: Searching for Addresses

To search for an address in the map, click the search button in the upper right toolbar



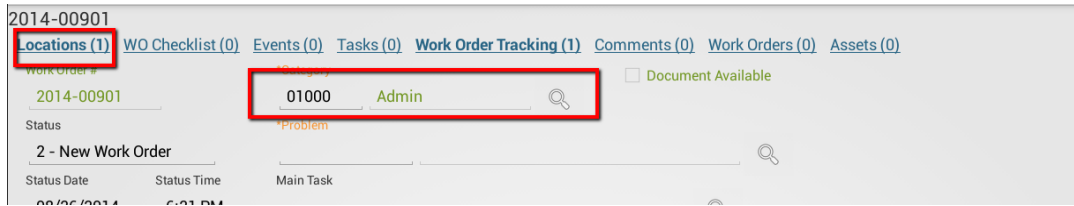
Tap into the search area and type the address and click the search icon on the keyboard. If the address is found, a green dot will be placed on the map at the calculated address location. Tap on the dot for more options including creating a request or work order for the selected address.

Notice in the following case it did not find an exact match.



Creating a request from an address search will create the request, default the category, and assign the location address of the request to the address from the search results. The form is opened so that any further edits can be made.

Creating a Work Order will create a work order using the default tablet category and will attach the address as a location on the work order.

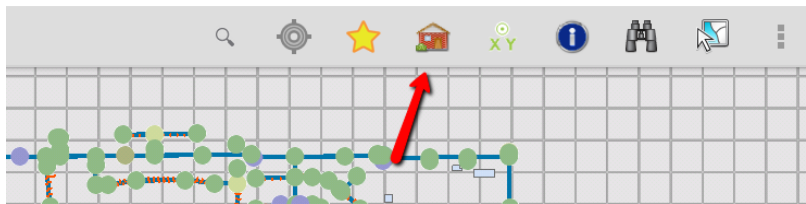


The address added to the work order or request is the located address, it is not the address searched. It is possible that the address locate may not find an exact match, but it will select the closest match. The match returned on the geolocate is what is placed in the work order/request location field.

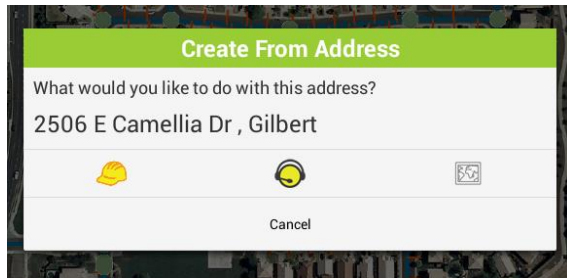
The work order is saved to the server before a form is displayed. Navigating away from the work order/request at this point will not cause the work order to be discarded.

## Point to address

One of the other tools provided in the tablet map is the ability to tap a point on the map and have the map attempt to calculate what the address is for that location.



Tap a location on the map to open a prompt showing the approximated address:



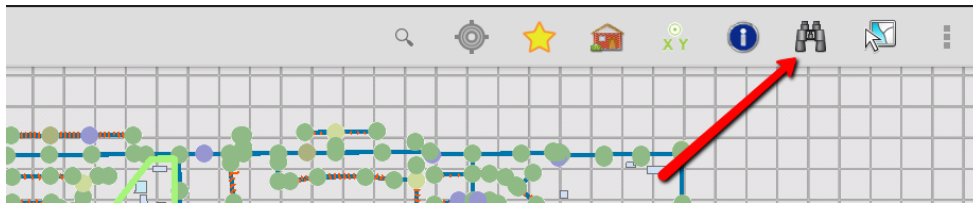
This reverse geocode uses the Esri world geocoding service. It does not use your own geocoding service for the search operation.

The work order, request, and driving directions tools on this dialog work the same as the address search dialog discussed earlier in the session.

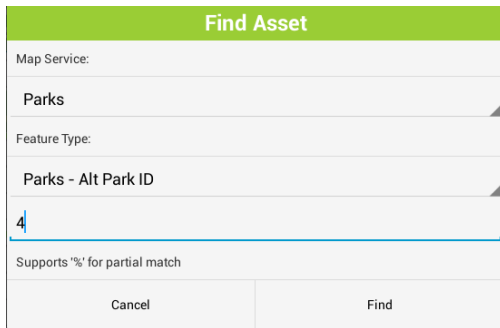


## Create from an Asset: Searching for Assets

The Lucity Android map application also allows searching for an asset based on full or partial common id of the asset. To search for an asset, click the Find button.



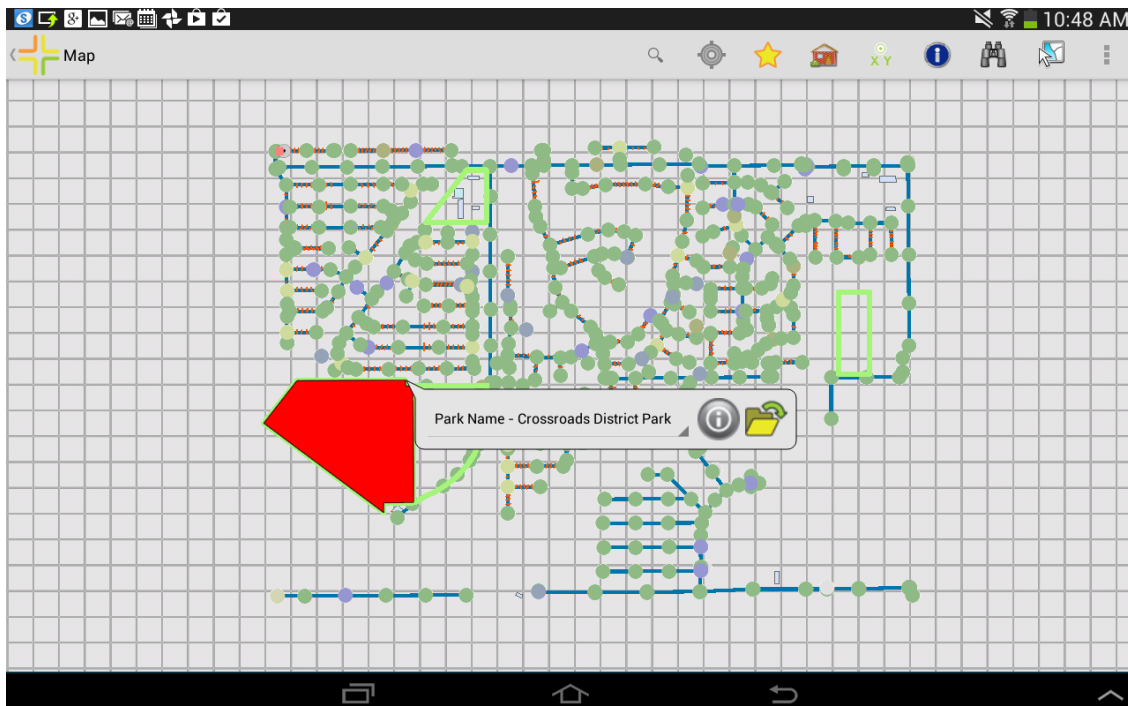
If there is more than one operational map service in the map, the dialog will allow you to select which map service the information is in and the type of feature to find. The Feature type picklist shows both the common name of the asset type as well as the name of the field in that layer that will be searched.




Enter the text to search for. Include a % to search for any character. For example to search for everything with the name South anywhere in the common id, enter %South%.




Click Find.

If features are found they will be selected in the map.



Tapping on the item will show more features that were found from the search. In the above example, only one feature was found.

Tapping the  will open a popup and show the details about the item that was found.

Parks Details	
GlobalID	: {1716A099-0F49-4907-B6EA-80E5607EB993}
Last Modified By	: Lucy
Owner Code	: 1
Alt Park ID	: 4
Last Synchronized Date	: 12/06/2011 8:00:00 AM
Last Modified date	: 12/07/2011 12:44:30 AM
SHAPE.STLength()	: 5982.228671649304
Area	: 1985277.0
SHAPE.STArea()	: 2060148.0505981445
In Lucity Database?	: 1
Park No.	: 1
Park Name	: Crossroads District Park
OBJECTID	: 1
  	
Close	

Creating a request from an asset search will create the request, default the category, and assign the asset to the request. The form is opened so that any further edits can be made.

Creating a Work Order will create a work order using the default tablet category and will attach the asset to the work order.

Notes: \_\_\_\_\_

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