



# iWorQ

# Pavement Management

Quick Start Guide

# Welcome to Pavement Management

iWorQ is designed so you can customize the software to meet your pavement management needs. This guide was created to help you start performing common tasks in the Pavement Management system through step-by-step explanations and screen shots.

For additional help or questions, please call technical support at **888.655.1259**.

**Technical support and training are always free!**

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# Managing Road Segments

PAVEMENTS   FIELDS   RATINGS   TREATMENTS   REPORTS   BUDGET   MAP   GUEST MAP   ARCGIS TEST   R-GUEST

Pavements   Simple Search   Advanced Search   Open Saved Search   Add Pavement

## Creating a New Pavement

- 1. Click **Add Pavement** in the sub-menu.

### CREATE PAVEMENT

CREATE

Pavement Date:	<input type="text" value="11/25/20"/>	IMPORTANCE:	<input type="text" value="--"/>
Road Name:	<input type="text"/>	FUNCTIONAL CLASS:	<input type="text" value="--"/>
From Address:	<input type="text"/>	SPEED LIMIT:	<input type="text" value="--"/>
To Address:	<input type="text"/>	test:	<input type="text"/>
Length:	<input type="text"/>	Over Weight:	<input type="text" value="--"/>
Width:	<input type="text"/>	Road Approval:	<input type="text" value="--"/>
Area (Yd^2):	<input type="text" value="0"/>		
Subdivision:	<input type="text" value="--"/>		

- 2. Fill out the pavement information. This can be changed later if necessary.
- 3. Click the **Create** button.

To add additional fields or items to drop-down menus, see page 11.



# Modifying Pavement Data

1. To edit an existing pavement, click on the pavement row within the Pavement View table.
2. The Pavement Information window will display all the information attached to the pavement. Edit the necessary information.

## PAVEMENT

HISTORY SAVE≡ >

+ Add Work Order 📍 View On Map → Assign Work Order

Pavement #:	<input type="text" value="121"/>	IMPORTANCE:	<input type="text" value="LOW"/>
Pavement Date:	<input type="text" value="07/07/00"/>	FUNCTIONAL CLASS:	<input type="text" value="RESIDENTIAL"/>
Road Name:	<input type="text" value="800 W"/>	SPEED LIMIT:	<input type="text" value="25 MPH"/>
From Address:	<input type="text" value="3900 S"/>	test:	<input type="text" value="test"/>
To Address:	<input type="text" value="3875 S"/>	Over Weight:	<input type="text" value=".."/>
Length:	<input type="text" value="121.0"/>	Road Approval:	<input type="text" value=".."/>
Width:	<input type="text" value="36.0"/>		
Area (Yd^2):	<input type="text" value="484"/>		
Subdivision:	<input type="text" value="C"/>		

📄 Copy Pavement  
🖨 Print Pavement  
📝 Notes  
📁 Add Treatment  
📁 Upload File  
🌐 Map  
🌐 Open Guest Map  
🌐 Open ArcGis Test  
🌐 Open R-Guest

3. Click the **Save** button to preserve any changes made to the pavement.

# The Pavement Information Window

The screenshot shows the 'PAVEMENT' information window. It includes a header with 'HISTORY' and 'SAVE' buttons, and a main area with various input fields and a right-hand menu. Callouts provide the following descriptions:

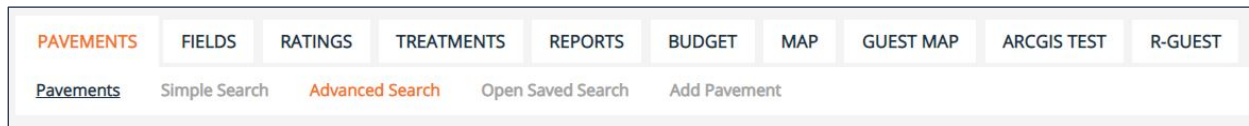
- Opens the quick find menu for the pavement (points to the left arrow icon)
- Saves changes made to the pavement (points to the 'SAVE' button)
- Creates a copy of the pavement, assigns it a new number, and immediately displays the new pavement (points to 'Copy Pavement')
- Prints any recorded data on the pavement (points to 'Print Pavement')
- Adds detailed notes to the pavement (points to 'Notes')
- Adds a treatment to the pavement (points to 'Add Treatment')
- Upload files to the pavement (points to 'Upload File')
- Open the map (points to the 'Map' menu item)

The main window contains the following fields and options:

- Buttons: + Add Work Order, View On Map, Assign Work Order
- Fields: Pavement #: 121, Pavement Date: 07/07/00, Road Name: 800 W, From Address: 3900 S, To Address: 3875 S, Length: 121.0, Width: 36.0, Area (Yd^2): 484, Subdivision: C
- Dropdowns: IMPORTANCE: LOW, FUNCTIONAL CLASS: RESIDENTIAL, SPEED LIMIT: 25 MPH, Over Weight: --, Road Approval: --
- Text Input: test
- Menu: Copy Pavement, Print Pavement, Notes, Add Treatment, Upload File, Map, Open Guest Map, Open ArcGis Test, Open R-Guest

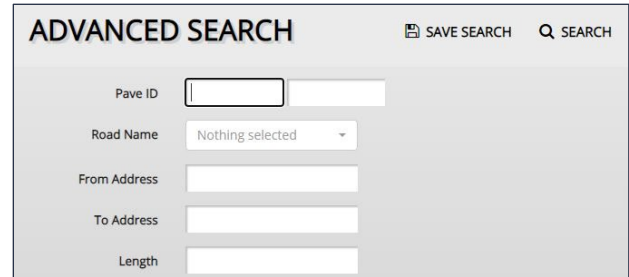
**Pop-up blockers must be disabled for iWorQ for many of these features to function.**

# Advanced Search



## Using the Advanced Search

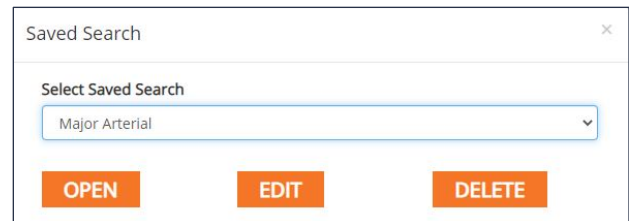
1. Click the **Advanced Search** button in the sub-menu.
2. The Advanced Search allows the user to search by any fields in the application. Enter the desired search parameters and click **Search**.
3. Searches can be saved for later ease of access. To save a search, click the **Save Search** button before clicking Search.



## Saved Searches

There are two methods to open a saved search.

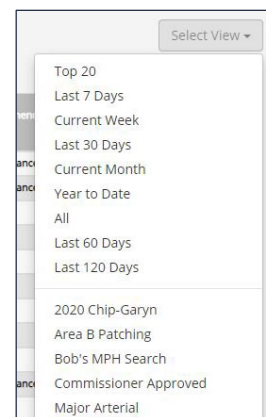
1. Click the **Open Saved Search** button in the sub-menu.
2. Select the saved search from the drop-down menu and click **Open**.
3. The user can also edit the search parameters of the saved search by clicking **Edit**.



Or

1. Select the saved search from the **Select View** drop-down menu in the upper right-hand corner of the Pavement View table.

Saved Searches can also be used when creating reports.



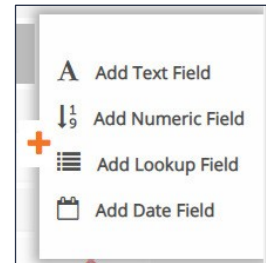
**If you have questions about saved searches, contact iWorQ for assistance: 888.655.1259.**

# Customizing Data Fields



## Adding Fields

In the Fields tab, the side menu on the right-hand side of the screen contains four options to add a new field: Text, Numeric, Lookup, and Date.



### Text Fields

The Text Field accepts text, symbols, and numbers.

1. Click **Add Text Field**.
2. Enter in the Field Name and a default value to display upon creation of a new pavement.

Add Field

Field Name:

Default Value:

**ADD FIELD**

### Numeric Fields

The Numeric Field accepts numbers and decimals.

1. Click **Add Numeric Field**.
2. Enter in the Field Name, the number of decimal places to be displayed, and a default value to display upon creation of a new pavement.

Add Field

Field Name:

Decimals:

Default Value:

**ADD FIELD**

### Date Fields

The Date Field accepts numbers formatted as dates.

1. Click **Add Date Field**.
2. Enter in the Field Name and enter a default number of days away from creation date of the pavement to display.

Add Field

Field Name:

Default Days From Creation Date:

**ADD FIELD**

## Lookup Fields

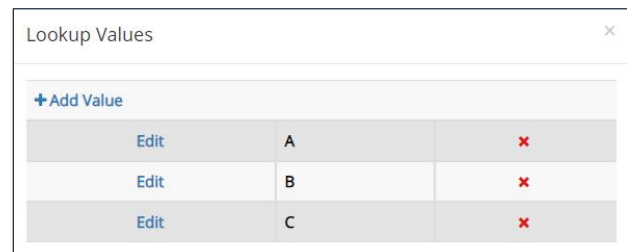
The Lookup Field creates a drop-down menu box.

1. Click **Add Lookup Field**.
2. Enter in the Field Name and click **Add Field**.
3. To add options in the drop-down menu, click on the blue **Values** button in the new field's row in the table.



Edit/View	Field ID	Field Name	Lookup Values	Type	Order	
	109637	Subdivision	Values	lookup	1	
	100007	IMPORTANCE	Values	lookup	2	

4. Click **Add Value**.
5. Enter in a value and click **Add**.
6. To edit an existing value, click the blue **Edit** button in the value's row. To delete an existing value, click the red X at the end of a value's row.



## Deleting Fields

To delete a field, click the red X at the end of a field's row and click Yes to delete the field.

## Reordering Fields

To reorder fields, click and drag fields within the table into the desired order. Changes to the order of fields are automatically saved.



# Ratings

PAVEMENTS   FIELDS   **RATINGS**   TREATMENTS   REPORTS   BUDGET   MAP   GUEST MAP   ARCGIS TEST   R-GUEST

[Ratings](#)

Ratings consider various stresses and conditions of a road segment to determine a road's Remaining Service Life (RSL). Based on these ratings, the system will provide a Recommended Treatment for the road segment to extend the segment's RSL and avoid extensive reconstructions.

## Add Ratings

1. Click the **Add Ratings** button in the side menu.
2. Enter in the Rating Name and click **Add**.
3. To add rating values, click the **Rating Values** button within the row of the new rating in the table.
4. Click **Add New**.
5. Enter in the rating information and click **Add**. Repeat for all necessary values.
6. Existing ratings can be deleted by clicking the red X at the end of the rating's row in the table.
7. Ratings can be reordered by dragging and dropping ratings into the preferred order. Changes to the order are automatically saved.

Add Rating ×

Rating Name

**ADD**

TRANSVERSE Rating Values ×

Rating	Description	RSL	Treatment	Order	
0:NONE	THE ROAD HAS NO VISIBLE SIGNS OF TRANSVERSE CRACKING	20	No Maintenance	0	Edit
1:LOW	CRACK WIDTH LESS THAN 1/4"-CRACKS FORMING LESS THAN 40 FEET	5	CHIP SEAL	1	Edit
2:LOW-MED	CRACK WIDTH LESS THAN 1/4"-CRACKS FORMING GREATER THAN 40 FEET APART AND LESS THAN 150 FEET APART	10	No Maintenance	2	Edit
3:LOW-HIGH	CRACK WIDTH LESS THAN 1/4"-CRACKS FORMING LESS THAN 40 FEET APART	8	CHIP SEAL	3	Edit
4:MED-LOW	CRACK WIDTH GREATER THAN 1/4" AND LESS THAN 3/4"-CRACKS FORMING GREATER THAN 150 FEET APART	10	Slurry Seal	4	Edit
5:MED-MED	CRACK WIDTH GREATER THAN 1/4" AND LESS THAN 3/4"-CRACKS FORMING GREATER THAN 40 FEET APART AND LESS THAN 150 FEET APART	8	CHIP SEAL	5	Edit
6:MED-HIGH	CRACK WIDTH GREATER THAN 1/4" AND LESS THAN 3/4"-CRACKS FORMING LESS THAN 40 FEET APART	6	CHIP SEAL	6	Edit
7:HIGH-LOW	CRACK WIDTH GREATER THAN 3/4"- CRACKS FORMING GREATER THAN 150 FEET APART	8	Slurry Seal	7	Edit
8:HIGH-MED	CRACK WIDTH GREATER THAN 3/4"-CRACKS FORMING GREATER THAN 40 FEET APART AND LESS THAN 150 FEET APART	6	2 in. Overlay with Fabric	8	Edit
9:HIGH-HIGH	CRACK WIDTH GREATER THAN 3/4"-CRACKS FORMING LESS THAN 40 FEET APART *	4	2 in. Overlay with Fabric	9	Edit

**ADD NEW**

Add Value ×

Rating

Rating Description

Remaining Service Life (RSL)

Recommended Treatment

Order

**ADD**

# Treatments

PAVEMENTS	FIELDS	RATINGS	<b>TREATMENTS</b>	REPORTS	BUDGET	MAP	GUEST MAP	ARCGIS TEST	R-GUEST
<u>Treatments</u>									

Treatments are used to extend the road segment's Remaining Service Life (RSL). The Treatments tab tracks the available treatments, their associated costs, and their extensions to a segments RSL.

## Add Treatments

1. Click the **Add Treatment button** in the side menu.
2. Enter in the treatment information.
3. Click **Add**.

Add Treatment ×

Treatment Name

Treatment Description

Maintenance Type

Cost/YD^2

Added life

Next Treatment

**ADD**

4. To edit an existing treatment, click on the treatment's row in the table.
5. To delete a treatment, click the red X at the end of the treatment's row in the table.

# Creating Reports

PAVEMENTS   FIELDS   RATINGS   TREATMENTS   **REPORTS**   BUDGET   MAP   GUEST MAP   ARCGIS TEST   R-GUEST

Pavement Reports

## Building a Report

1. In the Reports tab, choose from the list of options which report to run. Click the blue **Build** button at the end of the row of the report.

Report Name	Report Description	
Pavement General	Create custom pavement management reports.	Build
Pavement Detail	Create custom reports with details like treatment history and condition.	Build
Treatment History	Shows a history of segments treated.	Build
Rating History	Shows a history of ratings by date.	Build
Pavement RSL Distribution	Pavement RSL Distribution	Build

2. Select which data fields to display in the report. Reorder the fields into the desired order by clicking the up and down arrows for each field. Sorting and grouping rules are also available. Once finished, click the **Run** button.

3. Select the data range for the report. Use a saved search to further narrow results, if desired. Once the necessary criteria has been selected, click **Run** to view or print the report, **Cancel** to return and further build the report, or **Export as (.csv)** to download the data in a spreadsheet

Please contact iWorQ at 888.655.1259 for any questions on running reports.

# The Report Interface

The screenshot shows the 'Design Pavement Detail' report interface. At the top, a menu bar includes 'Save', 'Details', 'Calculate', 'Style', 'Refresh', and 'Run'. On the left, an 'Add Fields' panel lists various data points under 'Pavement Information'. The main area displays a table with columns for 'Columns', 'Field', 'Width', 'Format', 'Sum', 'Sort Order', and 'Sort Type'. The table lists fields like 'Segment ID', 'Road Name', 'From Address', 'To Address', 'Length (ft)', 'Width (ft)', 'FUNCTIONAL CLASS', and 'SPEED LIMIT'. Each field has a width of 1 and a 'Sort Order' of 'Add'. The 'Sort Type' column contains up and down arrows for editing field order. A 'Total Fields: 8' indicator is at the bottom right.

Callout boxes provide the following descriptions:

- Save the report to be accessed from the Report tab
- Add a calculation to the report
- Customize the color, font, and font size
- Refreshes the page and removes any unsaved changes
- Run the report
- Edit the name of the report
- Add fields to the report
- Change the width of the column for a field
- Include a sort order on the entries within each field
- Edit the order of the fields using the up and down arrows

# Budgets

[PAVEMENTS](#)
[FIELDS](#)
[RATINGS](#)
[TREATMENTS](#)
[REPORTS](#)
[BUDGET](#)
[MAP](#)
[GUEST MAP](#)
[ARCGIS TEST](#)
[R-GUEST](#)

Budgets

## Adding Budgets

1. Click **Add Budget** in the side menu.
2. Enter in the Budget Name. Optionally, select a saved search to act as the initial criteria for the budget. Click **Add**.

Add Budget ✕

Budget Name

Saved Search <--Optional--> ▼

**ADD**

Edit	Copy	Projection Chart	Budget Name	Delete
			2020 Pavement Budget	
			Brooking Test	
			Carton GA	
			Cherokee County	
			Cheyenne	

3. To view or edit a budget and add items, click on the row of the budget in the table.

### BUDGET INFORMATION SAVE

Projection Chart

Budget - 2020 Pavement Budget

Category	Year 1	% Sys	Year 2	% Sys	Year 3	% Sys	Year 4	% Sys	Year 5	% Sys	
Segments Not In Budget	--	--	--	--	--	--	--	--	--	--	Add to Budget
No Maintenance	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	Modify/Pr
Routine	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	Modify/Pr
Preventative	\$642,556.67	66.50	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	Modify/Pr
Rehabilitation	\$170,430.00	1.76	\$26,520.00	0.27	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	Modify/Pr
Reconstruction	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	Modify/Pr
<b>Total</b>	<b>\$812,986.66</b>		<b>\$26,520.00</b>		<b>\$0.00</b>		<b>\$0.00</b>		<b>\$0.00</b>		Modify/Pr

## Adding Segments to Budget

1. To add road segments not included in the saved search from which the budget was created, open the Budget Information Window.
2. Click the **Add to Budget** button in the upper right-hand corner of the annual budget table.

ADD SEGMENTS TO BUDGET					+ ADD TO BUDGET
ID	Road Name	From Address	To Address	Area (yd <sup>2</sup> )	<input checked="" type="checkbox"/>
401	1000 N	AL Street	800 E	12	<input checked="" type="checkbox"/>
30	1000 W	4400 S	4300 S	2087	<input checked="" type="checkbox"/>
31	1000 W	4300 S	4260 S	2235	<input checked="" type="checkbox"/>
32	1000 W	4260 S	4250 S	1535	<input checked="" type="checkbox"/>
33	1000 W	4250 S	4200 S	1311	<input checked="" type="checkbox"/>

3. In the Add Segments to Budget window, check the boxes of the road segments to add to the budget. Click **Add to Budget**.

## Adding to a Budget

1. To add to an existing budget, open the Budget Information window.
2. Below the annual budget table, there are two Quick Budget options. The first allows users to add to the budget for a treatment in number of total dollars. The second allows users to add to the budget for a treatment in a percentage of the total budget.
3. Add the desired Budget Amount or Percentage.
4. Select the budget year.
5. Click **Apply**.

Quick Budget (Using \$)	
Select Treatment	2 in. Overlay with Fabric
Budget Amount	<input type="text"/>
Year	NOT SELECTED
<b>APPLY \$</b>	

Quick Budget (Using %)	
Select Treatment	2 in. Overlay with Fabric
Percentage	<input type="text"/>
Year	NOT SELECTED
<b>APPLY %</b>	

# The Budget Information Window Interface

Saves any changes made to the budget

Shows the projected Remaining Service Life for the criteria of the budget

Add road segments to the budget from outside the saved search criteria

Change the type of maintenance required for each road segment and in which year it is budgeted

Prints a summary of that type of maintenance

**BUDGET INFORMATION** SAVE Projection Chart

Budget - Testing

Category	Year 1	% Sys	Year 2	% Sys	Year 3	% Sys	Year 4	% Sys	Year 5	% Sys	
Segments Not In Budget	--	--	--	--	--	--	--	--	--	--	Add to Budget
No Maintenance	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	Modify/Print
Routine	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	Modify/Print
Preventative	\$1,500.00	31.03	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	Modify/Print
Rehabilitation	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	\$0.00	0.00	Modify/Print
Reconstruction	\$0.00	0.00	\$0.00	0.00	\$13,888.89	57.47	\$0.00	0.00	\$0.00	0.00	Modify/Print
<b>Total</b>	<b>\$1,500.00</b>		<b>\$0.00</b>		<b>\$13,888.89</b>		<b>\$0.00</b>		<b>\$0.00</b>		Modify/Print

Quick Budget (Using %)

Select Treatment: 2 in. Overlay with Fabric

Percentage:

Year: NOT SELECTED

**APPLY %**

Budgets maintenance work based upon a certain percentage of your network. For example, if you can only afford to treat 2-3% of your roads each year, then select the desired type of treatment, enter 3%, and select the year. Click Apply %.

Quick Budget (Using \$)

Select Treatment: 2 in. Overlay with Fabric

Budget Amount:

Year: NOT SELECTED

**APPLY \$**

Budgets maintenance work based upon dollar amounts. For example, if you can only spend \$5,000 on Crack Seal in Year 3, select the Crack Seal treatment, enter \$5,000, and select Year 3. Then click Apply \$.



# Using the Map

## The Map Interface

The screenshot shows the iWorQ map interface in a Google Chrome browser window. The interface includes a map of South Ogden, Utah, with various streets and landmarks. A sidebar on the left contains navigation and search tools. A table at the bottom displays a list of pavement records. Callout boxes provide detailed descriptions of key interface elements.

**Callout Boxes:**

- Centers map on active application
- Finds current location
- Clear selection
- Show or hide side menu
- Select which information layers to display
- Select the active application on the map
- Display a saved search on the map
- Choose which color to display results in
- Show or hide records list
- View and edit records in the active application
- Edit map preferences

**Table Data:**

Edit	View	Date	Pave ID	Road Name	From Address	To Address	Length	Width	Subdivision	IV
		11/26/2019	435	Brookshire Drive	West	East	100.0	30.0	C	
		11/25/2019	434	W437S	East	West	100.0	50.0	C	
		11/25/2019	433	W437S	West	East	100.0	30.0	C	
		11/22/2019	432	W4567	12th	13th	60.0	30.0	C	L
		07/28/2017	431	Sherry Lane	587 South	1587 South	0.0	0.0	C	
		06/03/2016	428	4000 S.	100 W.	400 W.	400.0	4.0	C	

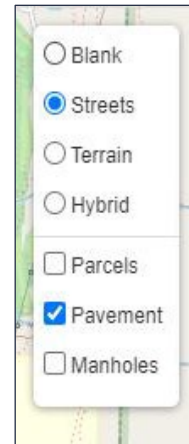
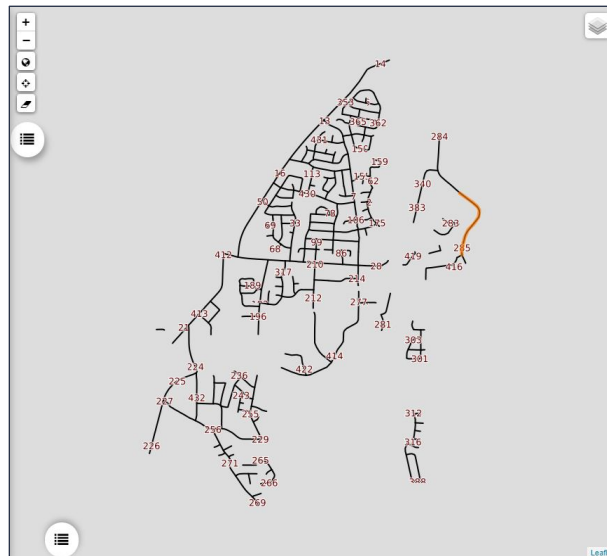


# Using the Map

## Changing the Map View

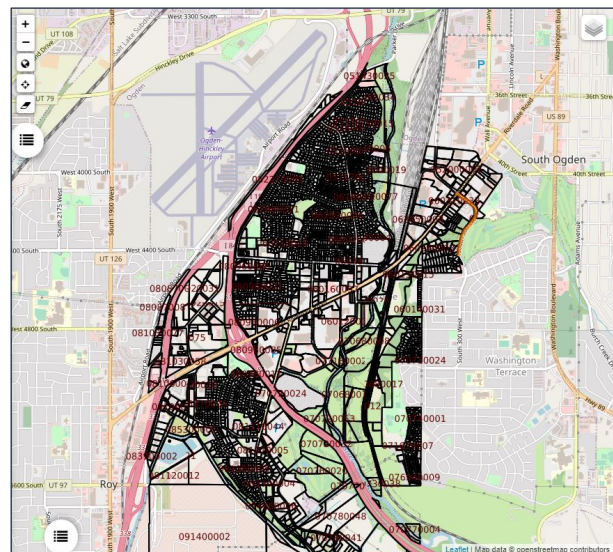
### Changing the Background Layer

1. To change the background layer, click on the layers button in the top right-hand corner of the window.
2. Select which option to display as the background map layer.



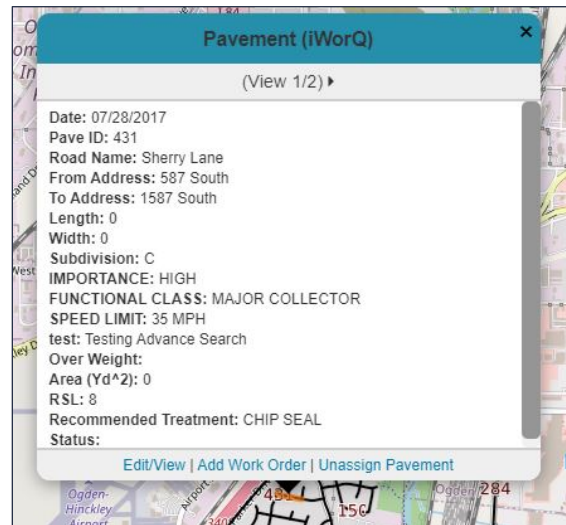
### Changing the Information Layer

1. To change the information layer, click on the layers button in the top right-hand corner of the window.
2. Check and uncheck which information layers to display and hide, respectively.



# Viewing and Editing Information from the Map

1. To view and edit information for a record through the map, select the active application for the map.
2. On the map, click on the record to view and edit.
3. A dialog window displays with basic information on the record. At the bottom of the dialog window, options to open, view, and edit the record are available.



**Even if an information layer has been selected to display within the Layers button, records will not be available to select from the map if they are not from the active application.**

4. Alternatively, select the record from the records list at the bottom of the map window.

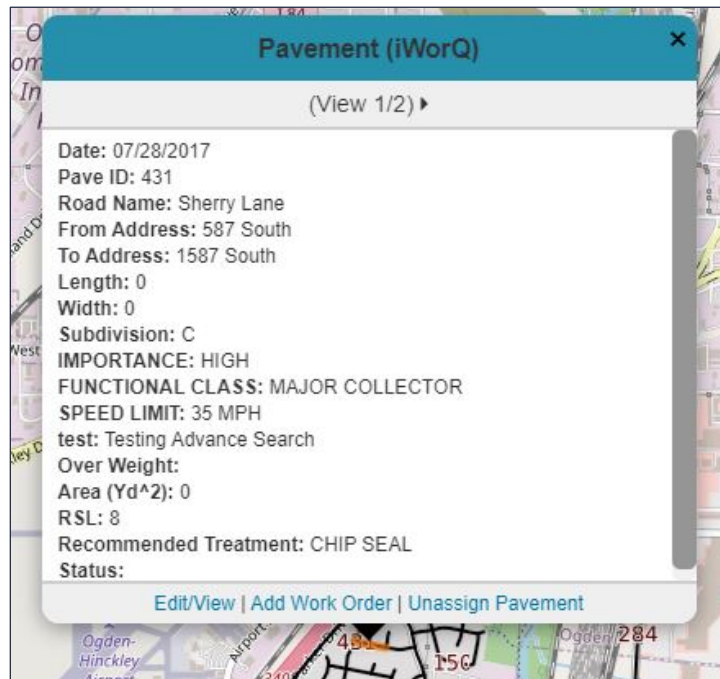
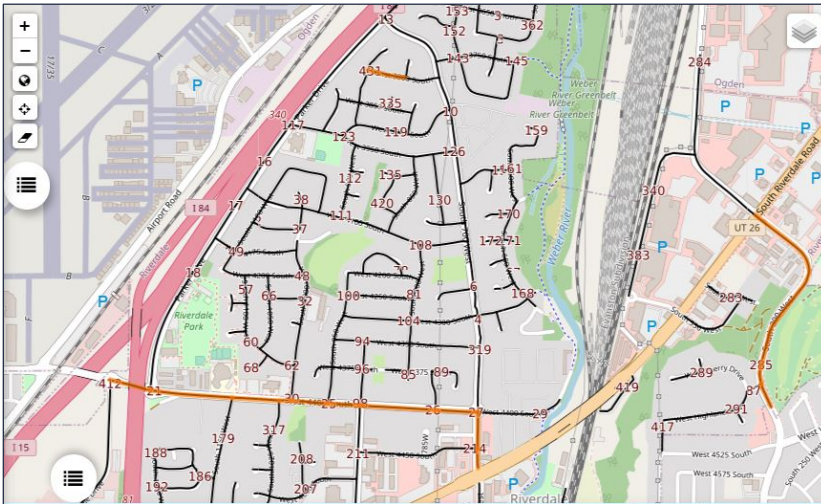
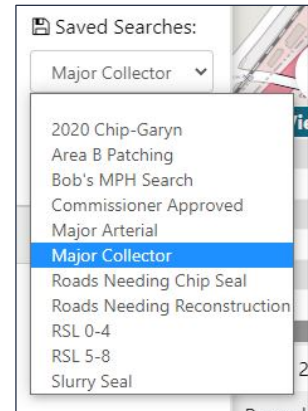
Edit/View	Permit Number	Permit Date	Parcel	Property Address	Owner	Subdivision
	13	02/23/2017				
	12	11/16/2017				
	11	11/23/2016	0171920412013	1245 South Winchester	Dr. Leo Marvin	
	10	11/22/2016	0171920403040		Joe Jackson	
	9	11/21/2016	026-138-28-0-20-08-003.00-0	504 W 37TH ST		
	8	11/20/2016	026-138-28-0-20-08-003.00-0	504 W 37TH ST		

1 2

Records: 1 to 6 of 11

# Viewing a Saved Search

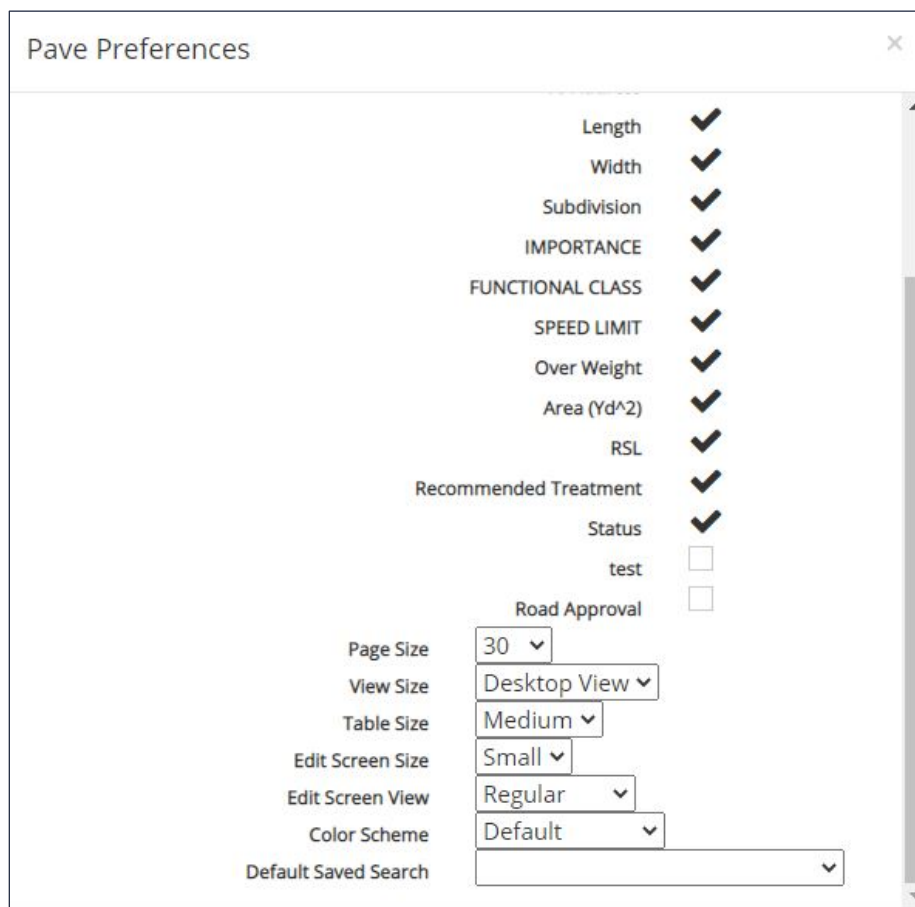
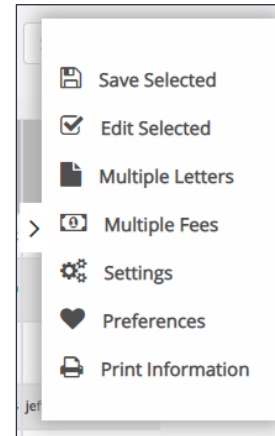
1. To view the results of a saved search on the map, select the saved search from the drop-down box within the side menu.
2. Results will be highlighted on the map. To display information from a result, click on the highlighted result on the map.



# Dashboard Preferences

## Setting Preferences

1. To customize the display of the Pavement Management application, select the **Preferences** button within the side menu.
2. In the Pave Preferences window, select which fields to display in the Pavement View table (this does not remove a field from the application and fields can still be viewed in the Pavement Information window if unchecked in the Preferences window). Select the number of lines displayed on each page as well as the size the information is displayed at.



# Dashboard Overview

Search by pavement ID or road name

Search by any field within the application

Open a previously saved advanced search

Add a new pavement

Select a date range or a saved search to view pavements

The screenshot shows a dashboard with a top navigation bar containing tabs: PAVEMENTS, FIELDS, RATINGS, TREATMENTS, REPORTS, BUDGET, MAP, GUEST MAP, ARCGIS TEST, and R-GUEST. Below this is a sub-navigation bar with buttons: Pavements, Simple Search, Advanced Search, Open Saved Search, and Add Pavement. A 'Select View' dropdown is on the right. The main area is titled 'ALL RECORDS' and contains a table with 17 columns: Selected, Date, Pav ID, Road Name, From Address, To Address, Length, Width, Subdivision, IMPORTANCE, FUNCTIONAL CLASS, SPEED LIMIT, Over Weight, Area (10^2), RSL, Recommended Treatment, Status, and Edit/View. The table lists seven pavement records. On the right side of the table, there is a vertical toolbar with icons for selection, deletion, and printing.

Click on a pavement's row to open the Pavement Information window and edit information

Save or edit selected pavements, add multiple treatments or ratings, edit preferences, and print information