



TRAINING GUIDE

Work Orders and Requests



Work Orders

The *Lucity* suite offers you a comprehensive solution for Work Management. The Work modules allow you to establish your work flow, track customer requests, create work orders, establish a preventative maintenance plan, set priorities, provide timetables, track system rehabilitation, and perform budget forecasting.

In this booklet, we'll begin by discussing how to create Work Orders using the *Work* module, asset modules, and the GIS system. Then, we'll explain how to complete and close a work order. We'll also discuss the *Requests* module, and show you how to create a Work Order from a Request.

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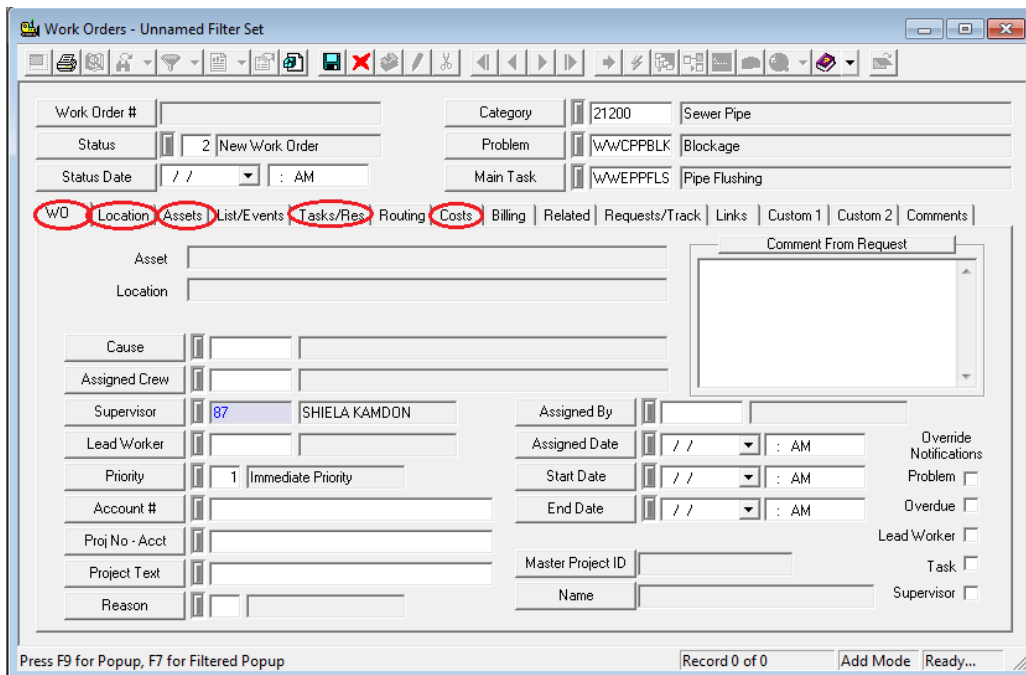
Work Orders

The *Work Orders* module allows you to schedule and track work tasks, personnel, equipment, and material usage. There are three versions of work orders offered: *Standard*, *Lite*, and *Daily Work*. All three modules integrate with the same data set. The *Standard* module is the most comprehensive of the three, offering additional functions such as cost, billing, and tracking. *Work Order Lite* contains only the basic functions of the *Work Order Standard* module. This allows for quick and easy data entry. *The Daily Work* module is the most basic of the three designed for quick data entry without your fingers ever having to leave the keyboard.

Creating a Work Order

As explained above, three work order modules are available. In this section, we'll discuss the *Standard Work Order* module, the most comprehensive of the three. To create a work order:

1. Open the *Work Order* module by selecting from the menu **Work>>Work Orders>>Standard**.
2. Click *Add* button  on the toolbar to enter *Add Mode*.
3. You'll typically enter information into following critical tabs:
 - **WO** - Containing general information about the Work Order.
 - **Tasks and Resources** - Indicating what the job is, who it's assigned to, and what materials will be used.
 - **Location AND/OR Asset** - Indicating where the job is or what specific asset will be worked on.
 - **Costs** - Stores cost information, such as quantity used, cost of materials, cost of labor, total duration of project, contractor costs, etc.



Work Orders - Unnamed Filter Set

Work Order # [] Category 21200 Sewer Pipe

Status 2 New Work Order Problem W/WCPPBLK Blockage

Status Date / / : AM Main Task W/WEPFELS Pipe Flushing

WO Location Assets List/Events Tasks/Res Routing Costs Billing Related Requests/Track Links Custom 1 Custom 2 Comments

Asset []

Location []

Cause [] []

Assigned Crew [] []

Supervisor 87 SHIELA KAMDON Assigned By [] []

Lead Worker [] [] Assigned Date / / : AM

Priority 1 Immediate Priority Start Date / / : AM

Account # [] End Date / / : AM

Proj No - Acct [] Master Project ID []

Project Text [] Name []

Reason [] []

Override Notifications

Problem

Overdue

Lead Worker

Task

Supervisor

Comment From Request []

Press F9 for Popup, F7 for Filtered Popup Record 0 of 0 Add Mode Ready...

Header Information

- Enter a **Category**. This is required; it indicates which problems, causes, assets, and tasks are available in the rest of the work order.
 - For our example, we've selected the Sewer Pipe Category
- Select a **Problem** if necessary.
 - Here, we've chosen the Blockage problem.
 - Note that any default data associated with the problem in *Work Flow Setup* will be carried over when you make your selection.
- Select a Main Task.
 - We've selected the associated main task, Pipe Flushing.
 - **Note:** The **Status** field will automatically be populated with 2—New Work Order. The **Status Date**, **Time**, and **Work Order #** will be populated when the record is saved.

Work Orders - Unnamed Filter Set

Work Order #		Category	21200	Sewer Pipe
Status	2 New Work Order	Problem	WwCPPBLK	Blockage
Status Date	// : AM	Main Task	WwEPPFLS	Pipe Flushing

WO Tab

- Select a Supervisor.
 - In our example below, the Supervisor, Sheila Kamdon and Immediate Priority, was carried over automatically when we selected the Blockage problem in the header. For additional information on setting up your work flow, please consult the related workbook, *Work Flow Setup*.
- You may select an Assigned Date, Start Date, and End Date, if known.
- You may select a Lead Worker, if known.

Work Orders - Unnamed Filter Set

WO Location Assets List/Events Tasks/Res Routing Costs Billing Related Requests/Track Links Custom 1 Custom 2 Comments

Asset		Comment From Request
Location		
Cause		
Assigned Crew		
Supervisor	87 SHEILA KAMDON	Assigned By
Lead Worker		Assigned Date
Priority	1 Immediate Priority	Start Date
Account #		End Date
Proj No - Acct		Master Project ID
Project Text		Name
Reason		Override Notifications
		Problem
		Overdue
		Lead Worker
		Task
		Supervisor

Record 0 of 0 Add Mode Ready...

Location OR Asset Tabs

- An asset is any individual item your organization maintains. For example, it could be a vehicle, a stretch of roadway, or a sewer manhole. Typically you will either include an asset OR a location on a work order. Either will indicate where the job is located, but adding an asset will also have the benefit of keeping a history of work against that asset.
- Open the **Location** tab. Enter Comments for crew: "Standing water and sewage material present. Clean and then flush sewer."
- You'll see the locations listed in the **Work Order Location** grid at the bottom of the screen.

Work Orders - Unnamed Filter Set

Work Order # [] Category [21200 Sewer Pipe]
Status [2 New Work Order] Problem [WWCPPBLK Blockage]
Status Date [/ /] : AM Main Task [WWEPPFLS Pipe Flushing]

WO **Location** Assets List/Events Tasks/Res Routing Costs Billing Related Requests/Track Links Custom 1 Custom 2 Comments

Department [41070200 Waste Water Collection]
Division []
Sub-Division []
Area []
Sub-Area []
Owner []
Location []
Classification []

Comment to Crew
Standing water and sewage material present. Clean and then flush sewer.

Work Order Location

No. /	Address	Address2	Loc X Coord.	Loc Y Coord.	General Location	Star
-------	---------	----------	--------------	--------------	------------------	------

Press F9 for pop-up selection Record 0 of 0 Add Mode Ready...

- To add a location to the grid, right click in the grid and select *Add Record*.




Work Order Location

No. /	Address	Address2	Loc X Coord.	Loc Y Coord.	General Location	Star
-------	---------	----------	--------------	--------------	------------------	------


Add Record
Show In Map

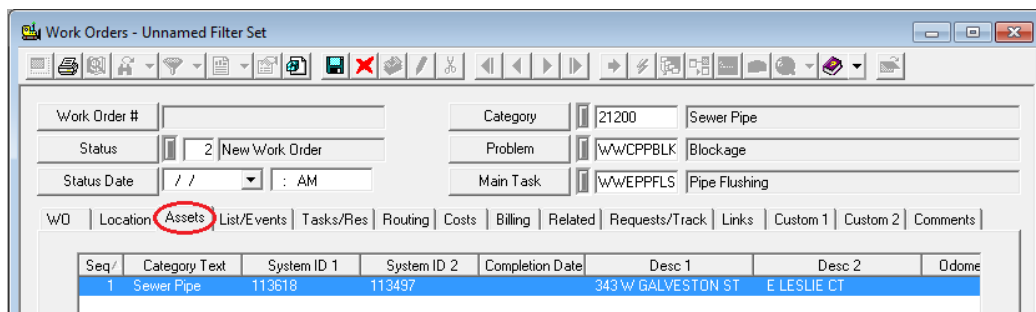
Record 0 of 0 Add Mode Ready...

- A new form will open allowing you to enter one or more locations.

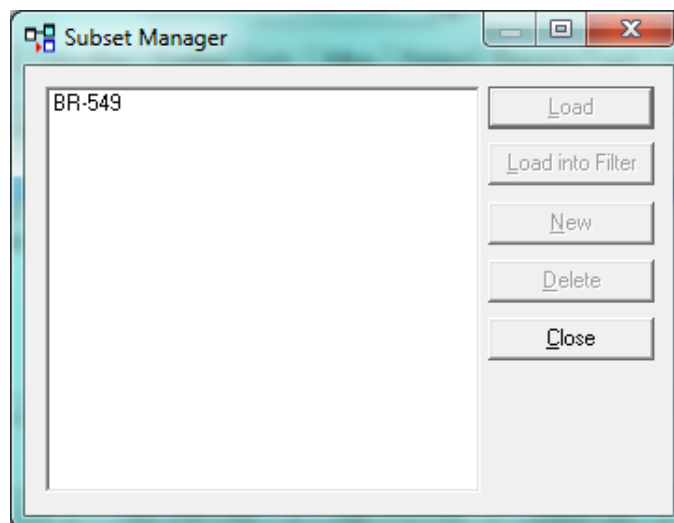
- Enter the address, general location, and any other details needed.
 - As you can see in the example above, this problem is located 343 W. Galveston St.
- Save  the record. You can now add  another address, or Close  the Work Locations form.
- Any addresses you entered will appear in the Work Order Location grid.
- Open the **Assets** tab. The assets are listed in the grid. To add an asset, right click in the grid and select *Add Record*. A new form will open.

US Structure▲	Pipe Rec #	DS Structure	Alt Pipe ID
113493	15603	113494	6549-622
113494	23823	113495	
113495	15587	113497	955-224
113496	18832	127239	113496
113497	21420	113498	113497
113498	21421	113499	113498
113499	21422	113500	113499
113500	25398	113501	
113501	18833	127235	113501
113616	27890	113618	
113617	15629	113619	684121
113618	25419	113497	
113619	15630	113618	462585
113620	25420	113488	
113621	21458	113620	113621
113622	27886	113621	
113623	27887	113500	

- On the Assets form, note that the Object Type (the type of asset you can add to your work order) is dictated by the **Category** chosen in the **Header**.
 - In this example, we have selected Pipe Maintenance as the category. This allows us to include sewer pipe assets in the work order.
 - You can select a different category, which allows you to add assets of different types.
- Click the **System ID 1** button. These System IDs identify our assets.
- Based on your Category, an Asset listing will pop up. Highlight an asset and click select.
 - In our example, the pick list contains sewer pipes in our network. We've selected structure number 113618 for the sewer pipe located on W Galveston Street, our work location.
- Save  the Asset record and the Asset will now be listed in your Work Order. You can add as many assets as you like.





- You can also create or load **Subsets** in the **Assets** tab. Subsets are groups of filtered records from one module that can be viewed in related modules.
 - For example, you can create a subset of sewer pipes in the *Pipe Inventory* module and then load that subset into the Work Order Asset grid.
 - You can also create a subset from a GIS map by selecting a set of features and saving them as a subset. You can then view the subset in *Lucity GIS* or another related module. These too can be added into the Work Order.
- To load a subset into the Assets grid, right click in the grid and select *Subsets>>Load Subset for Sewer Pipe*. The Subset Manager will appear:



- This dialog displays all available subsets of the asset type indicated by your selections in the header. Since the Category we chose in this example is for Pipe Maintenance, only sewer pipe subsets will be displayed.
 - In our example above, there is only one sewer pipe subset available, created in either the *Sewer Pipe Inventory* module or GIS map. We have chosen to load the subset titled “BR-549”, containing three pipe records.
- Highlight a subset name and click *Load*. All assets in that subset will be added to the grid.

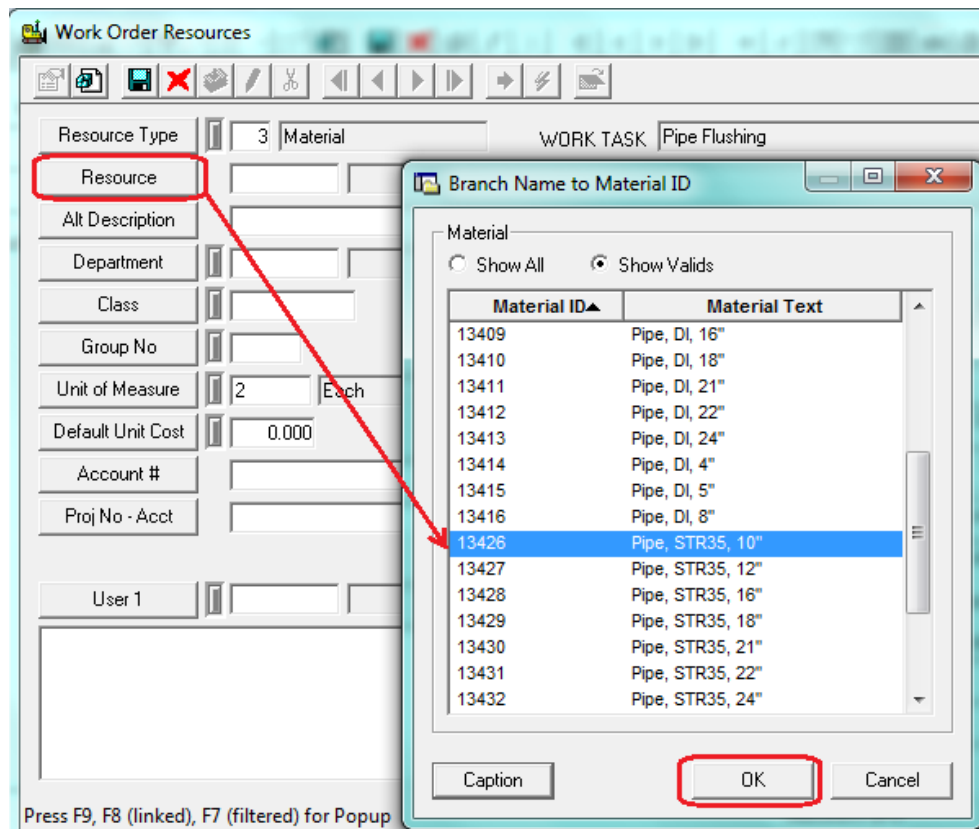
Seq/	Category Text	System ID 1	System ID 2	Completion Date	Desc 1	Desc 2	Odome
1	Sewer Pipe	113618	113497		343 W GALVESTON ST	E LESLIE CT	
2	Sewer Pipe	113495	113497		1424 S PROJECT DR	E LESLIE CT	
3	Sewer Pipe	113497	113498		E LESLIE CT	4626 E SEAGULL ST	
4	Sewer Pipe	113498	113499		4626 E SEAGULL ST	E DONATO DR	

Tasks & Resources Tab



- This tab contains two grids: Tasks and Resources. In the first, you’ll include the task (the job to be completed). In the second, you’ll name the resources used (employees, equipment, materials, fluids, contractors).
- An individual Task has the resources listed against it. You can name more than one task on a Work Order if necessary, but it is recommended to keep it simple by including only one.
- Resource entries contain details including the dates worked, hours worked for employees, units used for other resource types (materials, fluids, etc.), and the Project Number the work is assigned to. This is very important because it feeds information about the job back into a financial system that helps manage project costing and budgeting.
- To add a Task, right click in the **Work Tasks** grid and select *Populate Main Task*.
- To add a different Task, right click in the **Work Tasks** grid and select *Add Record*. The Work Order Tasks form will open.
 - Click the Task button to pop-up the task list. Select a Task from the list.
 - Click Save  and Close  the Work Order Tasks form. The task you selected will now appear on the work order.

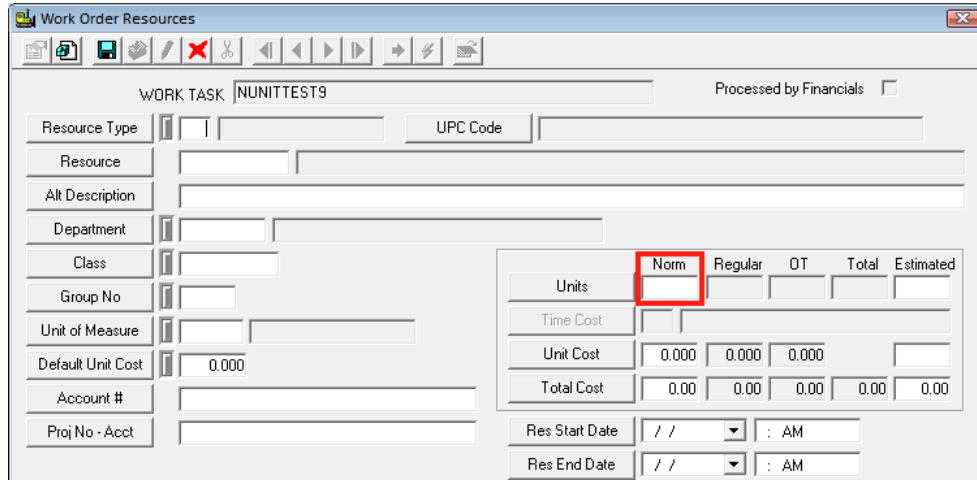
Notes:

- To add Resources, right click in the resources grid and select *Add Record*. The Work Order Resources form will appear.
 - Select a Resource Type (1 = Employee, 2 = Equipment, 3 = Materials, 4=Fluid, 5=Contractor).
 - Click the Resource button to see a list of available resources of the type you selected; then, select a resource.
 - In our example below, we've selected the material 'Pipe, STR35 10" '.

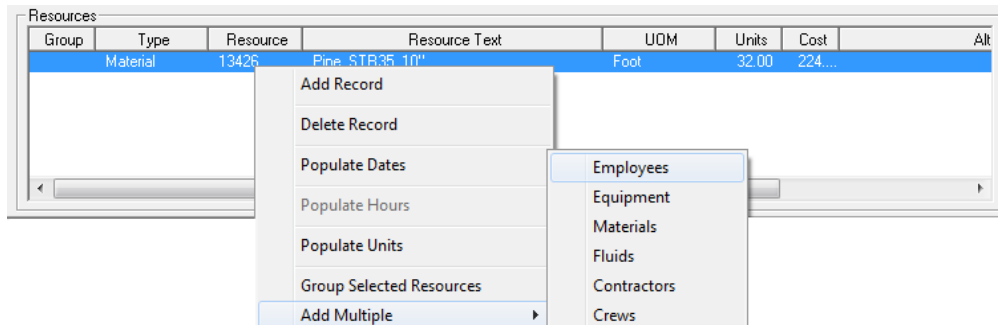


- Once you select the resource, the default data from the *Work Flow Setup, Resources* module will be carried over.
 - As you can see in our example, the default department (Waste Water Collection), unit of measure (Foot), and unit cost (\$7.00) has all been carried over from the inventory module.
- You can then enter the resource units used for this job. For employees and equipment, the units are hours. For materials, the units may be measured by feet, gallons, etc.
 - For this example, enter 32, representing the number of feet of pipe used.
- For employee resources, a *Time Cost* of Regular Time is entered automatically; however, this can be changed.
- Enter the dates the resource worked on the job. The Start Date and End Date must be the same. This means that an INDIVIDUAL RESOURCE ENTRY is required for each resource on each job for each day.

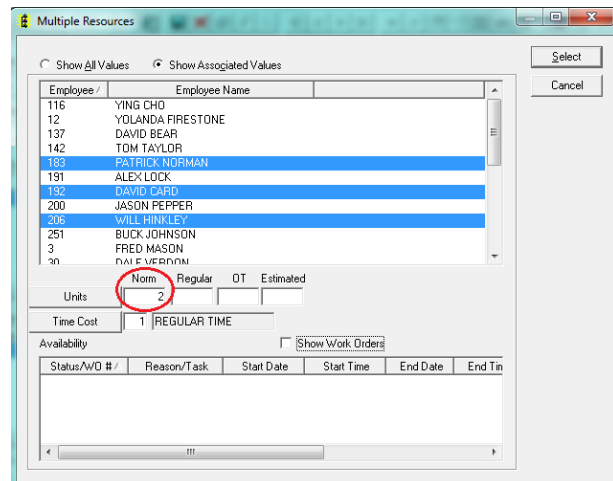
- Click Save  and Close  the Work Order Resources form. The resource you selected will now appear on the work order.



Adding Multiple Resources to Work Orders

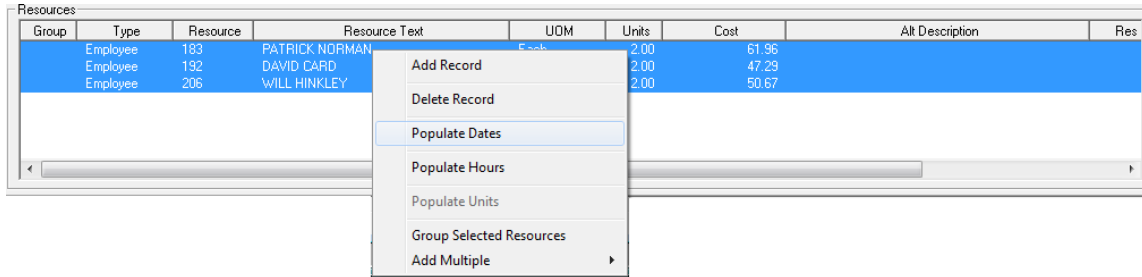


- To save time when entering several resources of the same type (for instance several employees); you can work with multiple records. First, *Add Multiple* lets you select several employees rather than using *Add Records* to add one at a time. Just right click in the **Resources** grid, highlight *Add Multiple*, then select *Employees*. This will open the Multiple Resources form.



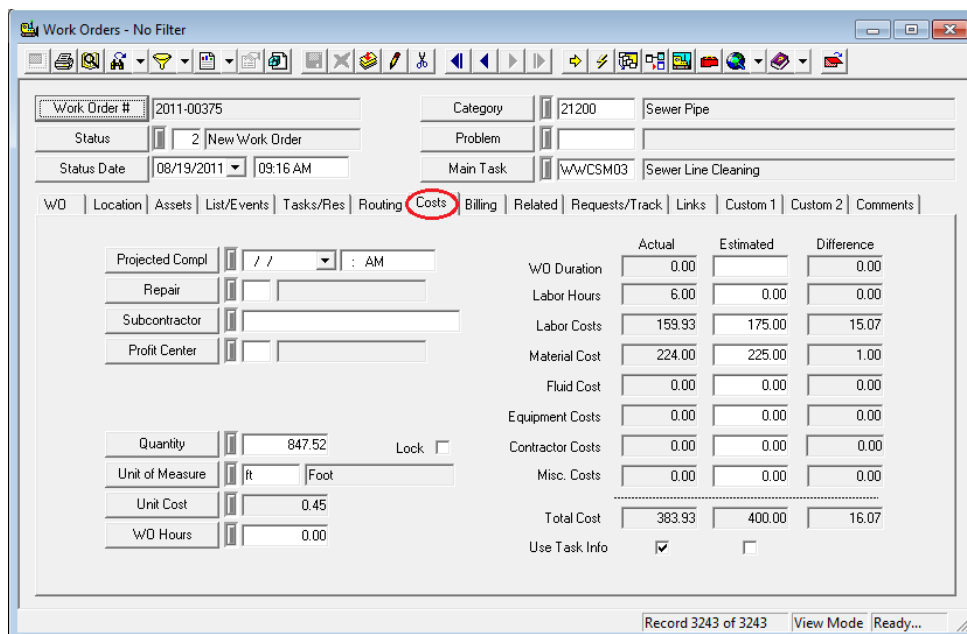
- The Multiple Resources form lists all the resources of a given type. You can select more than one record by pressing and holding the Control key (Ctrl) and clicking each entry you wish to select. (This is a standard Windows function.)
- Highlight each resource that belongs on the Work Order. Once you've selected the records you want, enter the number of units (In this case we are entering 2 hours), press *Select* and they'll be placed on the Work Order.

- Now that you have several resources listed in the **Resources** grid, you can add information to them in groups. Using the Ctrl key, highlight several records, right click on them, and select *Populate Dates*. A form with Start and End Dates will appear and the dates you enter will be applied to all resources you had highlighted. Of course, you can go back and change dates on individual resource records if needed.



Costs Tab

- This tab allows you to store cost information, such as quantity used, cost of materials, cost of labor, and total project duration.
- The three columns on the right-hand side of the screen allow you to compare your Actual work order costs with your estimated work order costs. You can use these columns in two ways: You can manually enter cost data into the fields provided, or have this data carried over from the Task information on the Tasks/Resources tab.
 - As you can see below, we've marked the "Use Task Info" checkbox below the Actual column. Thus, the system has carried over the actual labor hours, material cost, equipment costs, etc. based on what we entered in the Tasks/Resources tab.
 - Alternatively, we have not marked the "Use Task Info" checkbox below the Estimated column. Instead, we've manually typed estimated labor hours and costs into these fields.
 - The system has then automatically calculated the difference between the Actual cost information on the Task/Resources tab and the Estimated values we entered. As you can see below, the work order cost \$16.07 less than we estimated.



Several other fields on the Costs tab have special functions. Many of these fields are calculated by the system. These special functions are described below:

- Projected Completion Date - This is a calculated field. It represents Start Date + Estimated Duration.
- Quantity Field - This field may be automatically populated depending on how you defined the selected category in the *Work Flow Setup, Categories* module. If you assigned an inventory item to that category, UOM field would have been enabled.
 - The UOM field in the *Categories* module provides two options: Count and Sum. These options determine how this Quantity field will calculate assets. The "Count" option will count the number of assets in the Assets grid of the work order.
 - The "Sum" option will add the total measurements of the Assets listed. If you select "Sum", you'll need to include a UOM field to be summed. For instance, if you have linear assets such as pipes, you would probably want to add the length of the pipes; therefore, you would list the NT_LENGTH field in the UOM field. This commands the system to add the total length of all pipe assets in the Assets grid.
 - For additional information on setting up your Category to sum or count assets, consult the related workbook, *Work Flow Setup Training*.
- Lock Checkbox - When marked, the Lock checkbox allows you to enter the Quantity manually instead of having it automatically populated by the system. It also locks the quantity entered so that any changes made in the Assets grid will not affect this field.
- Unit Cost - This field provides the unit cost for the entire work order. It is automatically populated based on the Total Cost field and the Quantity field (Total Cost/Quantity = Unit Cost).
- Total Cost - These fields automatically sum the Estimated column, Actual Column, and the Difference column to show you the total cost for each. Remember, we discussed how these three columns are used on the previous page.

Creating a Work Order from Within another Work Order

The *Work Order Standard* and *Lite* modules allow you to manually create a new work order from within an existing work order. This will automatically link the two work orders together. There are three ways to achieve this, and each serves a different purpose. In the step-by-step examples below, we'll demonstrate each of these three methods.

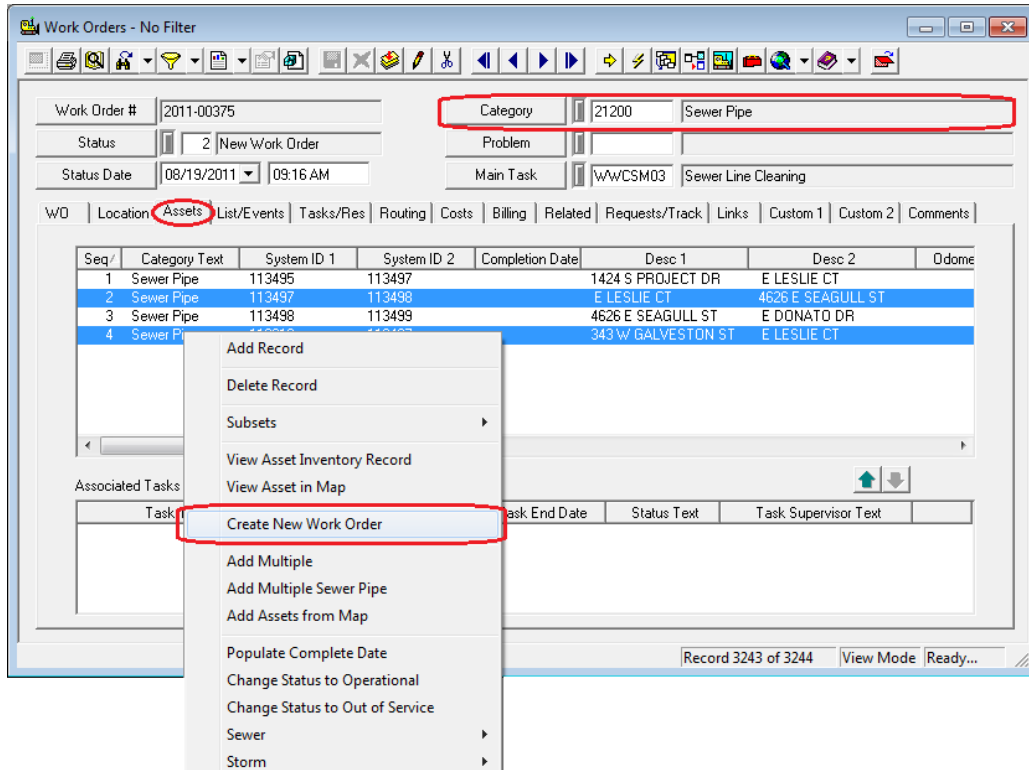
Creating a Work Order from the Asset Grid

When you create a work order from the Asset grid, the Category you selected in the header and any assets listed in the grid will be carried over to the new work order record. These two records will then be linked in the Related Work Orders grid.

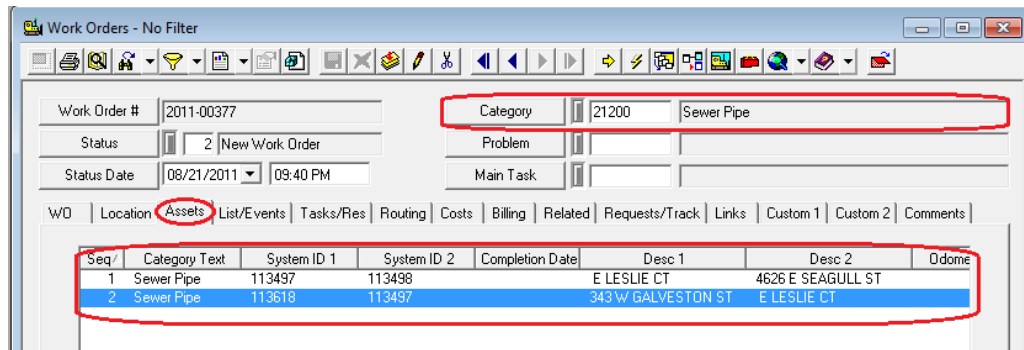
You may use this function if some of the assets in one work order need additional work done that is not covered by the tasks and resources selected in the current work order. For example, if you have a TV Inspection work order involving seven sewer pipes and three of those pipes also need to be cleaned, you can create another work order from the Asset grid for those three pipes. Follow the steps below:

1. Select the asset(s) you want included in the new work order. You can use the <Shift> or <Ctrl> keys to select multiple assets.

- Right click and select *Create New Work Order*. You will be prompted to view the work order at this time. Click "Yes" and it will open immediately. Click "No" and it will not open, although it will still be created.

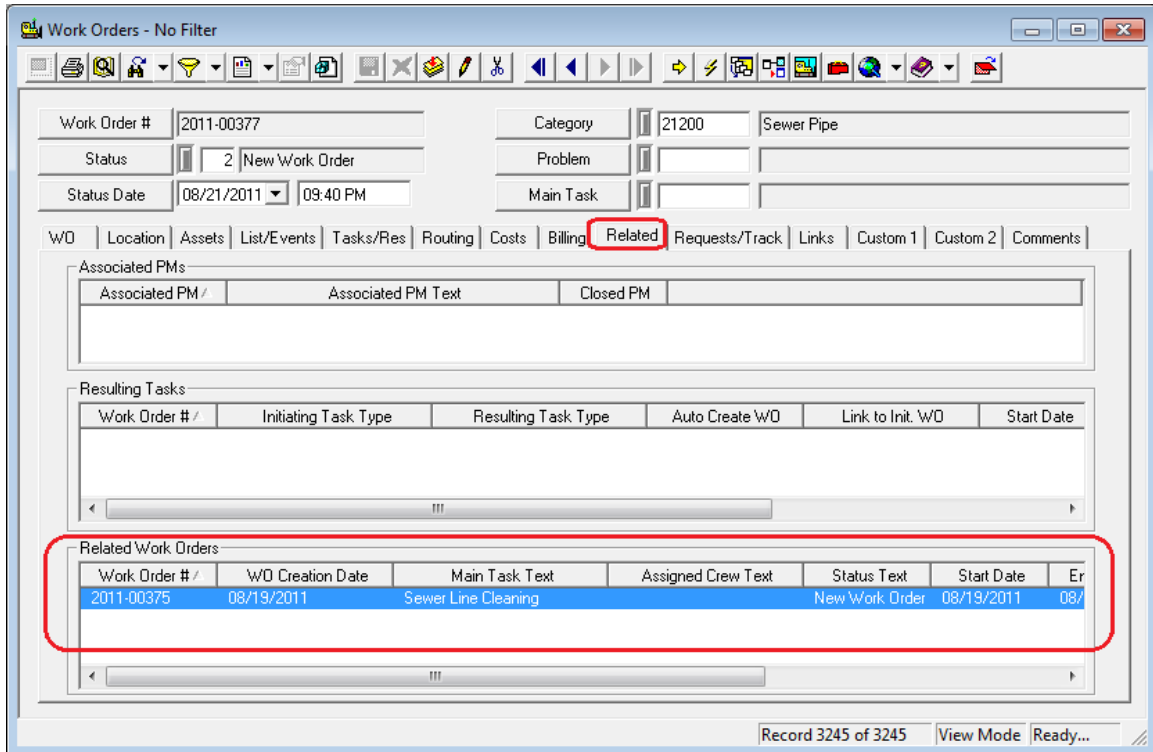


- As you can see below, the new work order contains the same Category as the previous work order (Pipe Maintenance) as well as the three assets you selected on the Assets tab.



Notes: _____

- The Related tab of both work orders will identify the related work order in the bottom grid. There, you'll see the related work order number, creation date, main task text, and additional information.



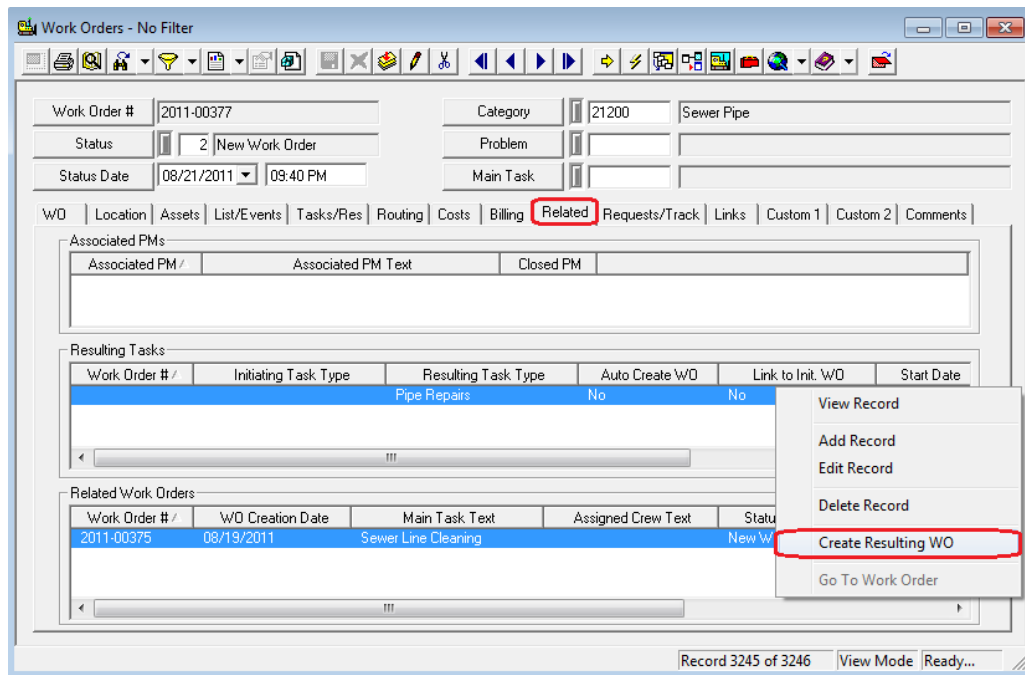
Notes: _____

Creating a Work Order from a Resulting Task

When you create a new work order from the Resulting Tasks grid of an existing work order, the Category, all listed assets, start date, and task will all be carried over into the new work order record. Like before, the two work orders will be linked in the Related Work Orders grid.

To create a resulting task work order, complete the following steps:


1. Select the task in the Resulting Tasks grid.
2. Right click on the task and select *Create Resulting WO*. You will again be prompted to view the new work order.



- Note that this option will be disabled if a work order already exists for the task. Only one work order can be generated per task.

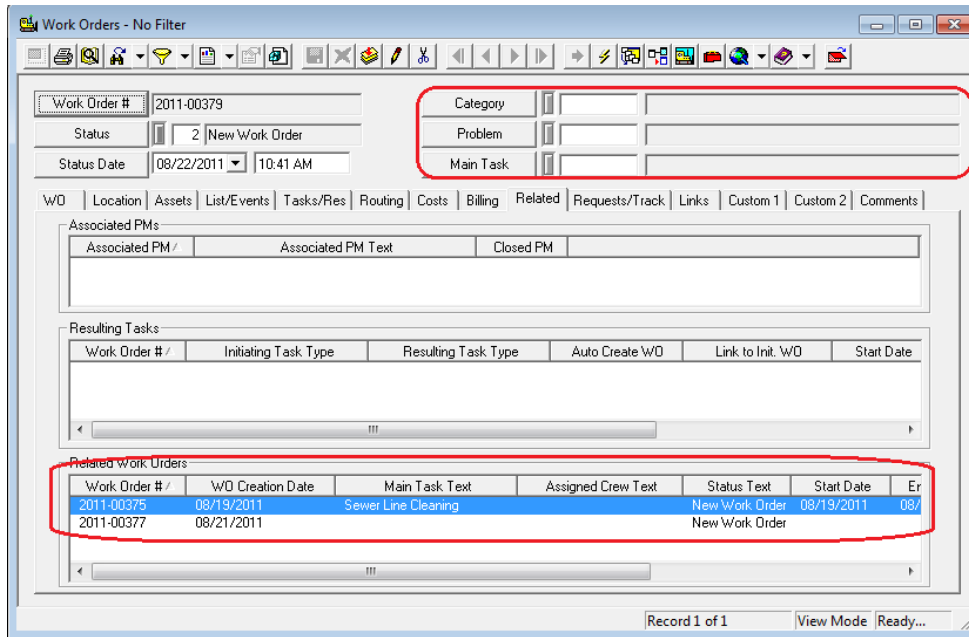
Creating a Work Order from the Toolbar Button

A third way in which you can create a work order from within another work order is by using the Create New Work Order button in the module toolbar. This will create a new, empty work order that is linked to the current work order in the Related Work Orders grid. This is useful when you want the current work order linked to a new one, but you don't want any data carried over into the new record.


1. Click the  button on the module toolbar in the current work order.
2. Like before, you will be prompted to view the new work order.

Notes: _____

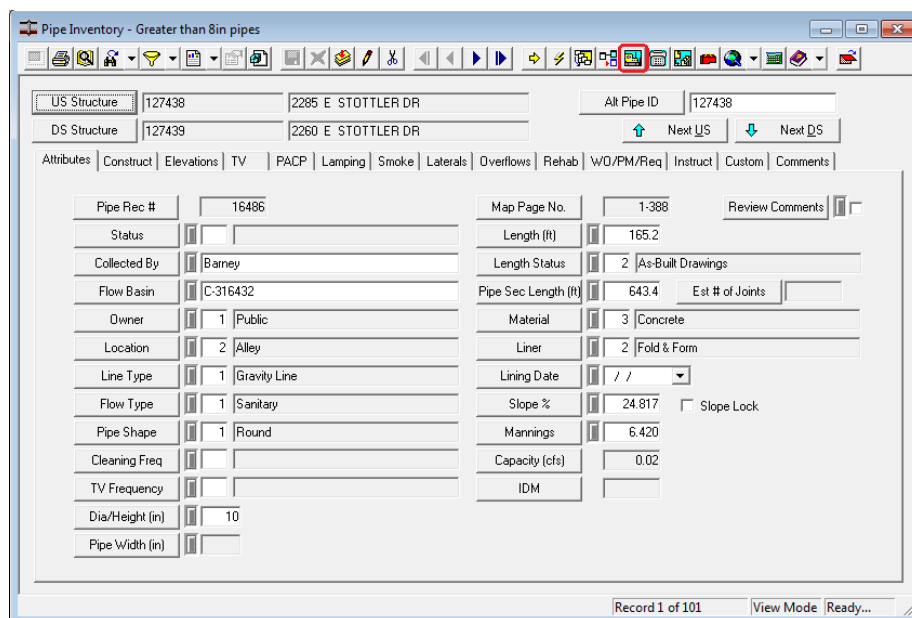
- As you can see below, the Category, Problem, and Main Task in the new work order's header are blank, but the related work order is identified on the Related tab.



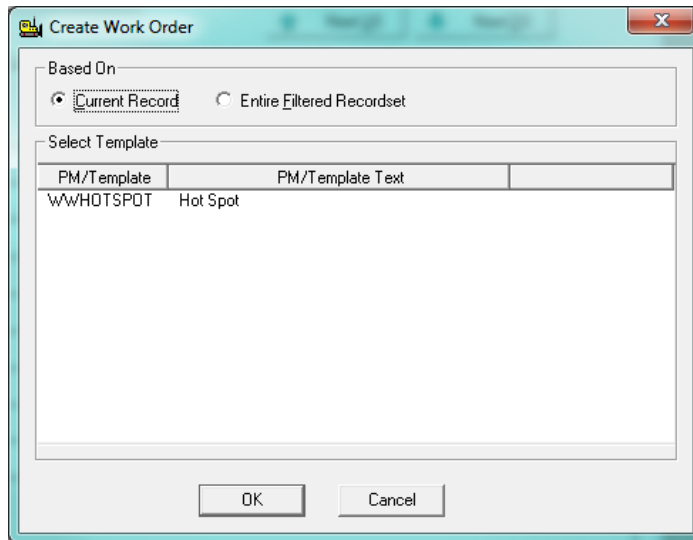
Creating a Work Order from an Asset Module

Our asset inventory modules also contain a Create New Work Order button . This feature allows you to create a work order directly from an asset record. The system will then include the asset and location information in the new work order. Let's look at an example using the *Pipe Inventory* module.

- Click on the Create New Work Order button.



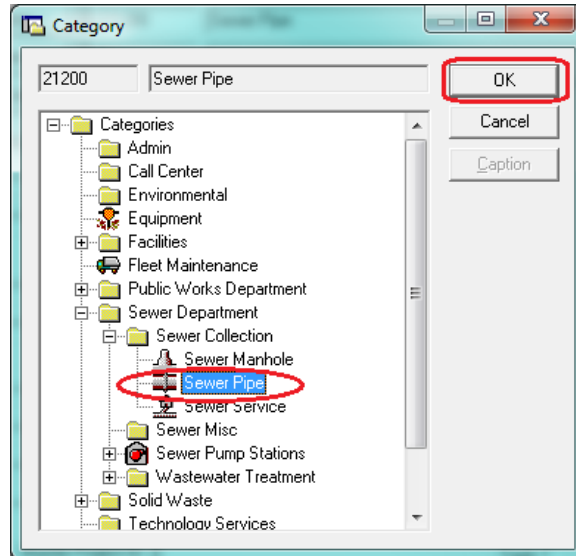
2. You'll need to select which records are included in the work order.
 - If you select 'Current Record', the new work order will include information on the current asset record only.



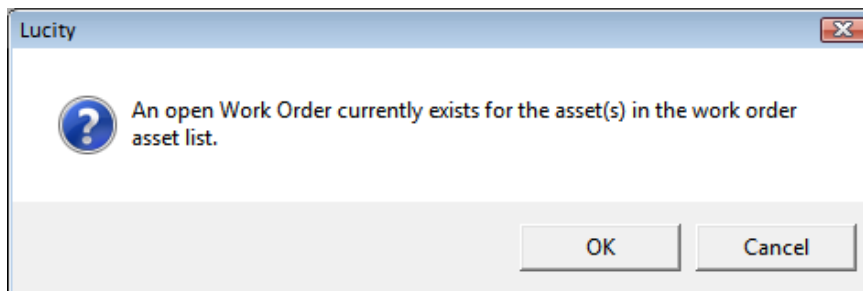
- By selecting 'Entire Filtered Recordset', the new work order will contain all assets included in the current filterset.
3. Next, you can choose a PM Template for the work order from the list. This is not required.
 - For our example, we'll be creating a work order based on the current record, without using a PM Template.
 4. Click *OK* to create the work order.

Notes: _____

5. Next, choose a category for your work order from the work flow category tree. For our pipe asset, we've chosen Sewer Pipe as the work flow category.
- If you used a PM Template, you'll skip this step.
 - Note that assets are associated with categories in *Work Flow Setup*. If you select a category that has not been associated with your asset, you'll receive a message asking you to select a new category
 - Note: The program will attempt to choose a Category on its own.



6. If there is an open work order for the asset the following pop-up will appear:



7. Click *OK* to create the work order or cancel to stop the process.


Notes: _____

8. When the work order is generated, the asset information will be entered into the WO tab and Asset tab. The category you chose will appear in the header. Default information associated with the category will be entered by the system. For additional information on setting up this default data, please consult the related workbook, *Work Flow Setup*.

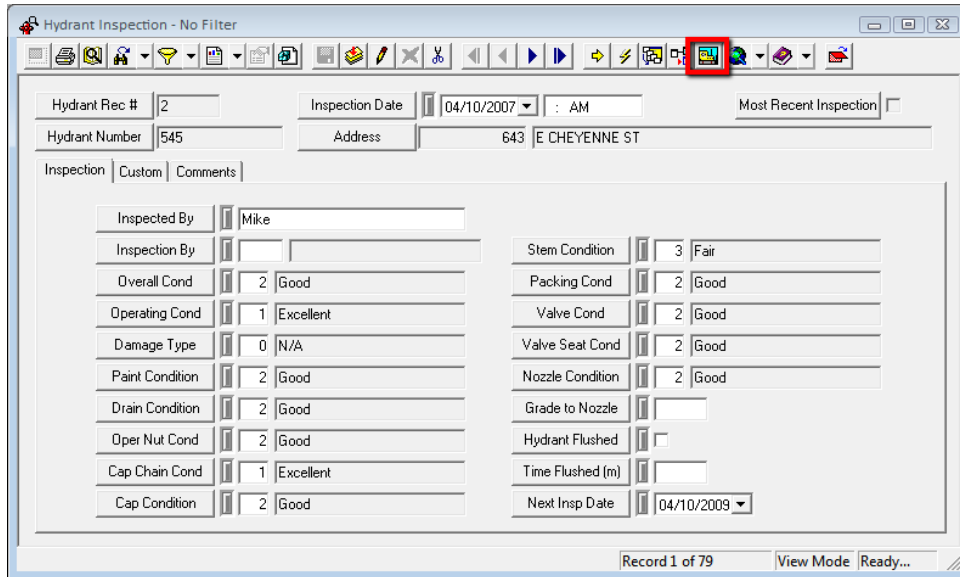
The screenshot shows a software window titled "Work Orders - Unnamed Filter Set". The interface includes a toolbar at the top with various icons. Below the toolbar, there are several input fields and tabs. The "Category" field is highlighted with a red box and contains the value "21200 Sewer Pipe". The "Asset" field is also highlighted with a red box and contains the value "127438 127439 2285 E STOTTLER DR". Other fields include "Work Order #", "Status", "Status Date", "Problem", "Main Task", "Cause", "Assigned Crew", "Supervisor", "Lead Worker", "Priority", "Account #", "Proj No - Acct", "Project Text", "Reason", "Assigned By", "Assigned Date", "Start Date", "End Date", "Master Project ID", and "Name". There are also checkboxes for "Override Notifications", "Problem", "Overdue", "Lead Worker", "Task", and "Supervisor". The bottom of the window shows "Record 1 of 1", "Edit Mode", and "Ready...".

Notes: _____

Creating a Work Order from an Inspection Module

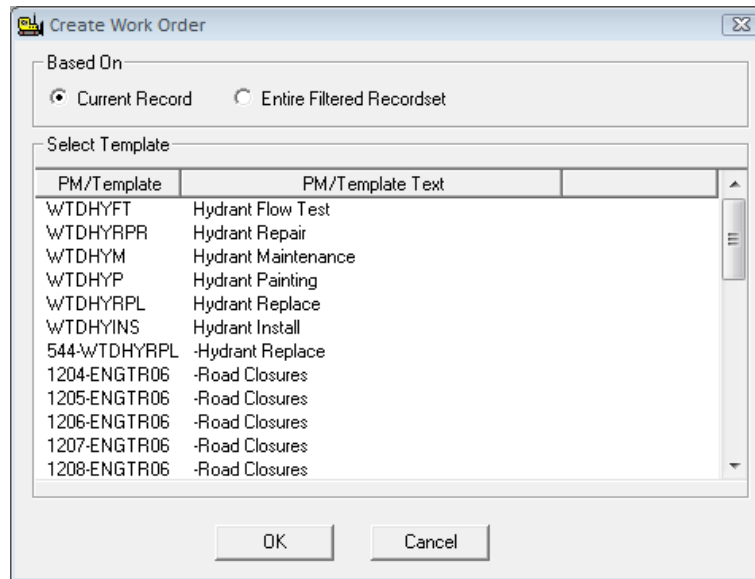
Our inspection modules also contain a Create New Work Order button . This feature allows you to create a work order for an asset directly from one of the assets inspection records. The system will then include the related asset and location information in the new work order and link the work order back to the inspection. Let's look at an example using the *Hydrant Inspection* module.

1. Click on the Create New Work Order button.



The screenshot shows the 'Hydrant Inspection - No Filter' window. The toolbar at the top contains various icons, with the 'Create New Work Order' button (a document with a plus sign) highlighted by a red box. Below the toolbar, the form displays inspection details: Hydrant Rec # 2, Inspection Date 04/10/2007, Hydrant Number 545, and Address 643 E CHEYENNE ST. The 'Inspected By' field is filled with 'Mike'. A grid of condition fields is visible, including Overall Cond (2 Good), Operating Cond (1 Excellent), and various component conditions like Stem, Packing, Valve, and Nozzle. The 'Next Insp Date' is set to 04/10/2009. The status bar at the bottom indicates 'Record 1 of 79' and 'View Mode Ready...'.

2. You'll need to select which records are included in the work order.
 - If you select 'Current Record', the new work order will include information on the asset related to the current inspection record.

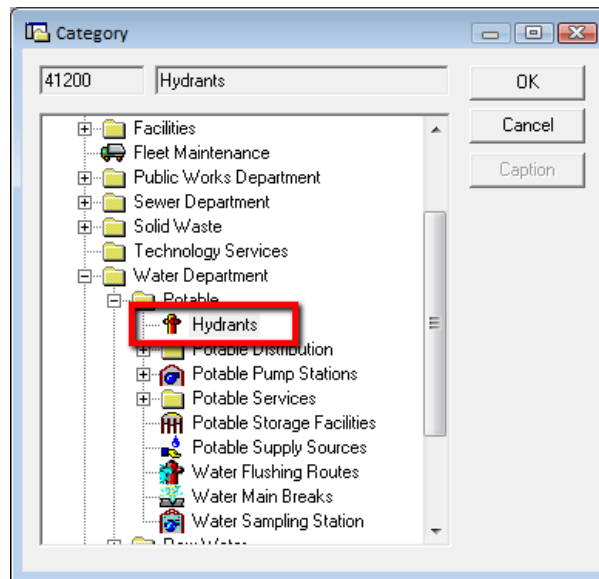


The screenshot shows the 'Create Work Order' dialog box. Under the 'Based On' section, the 'Current Record' radio button is selected. The 'Select Template' section contains a list of templates with their corresponding PM/Template Text:

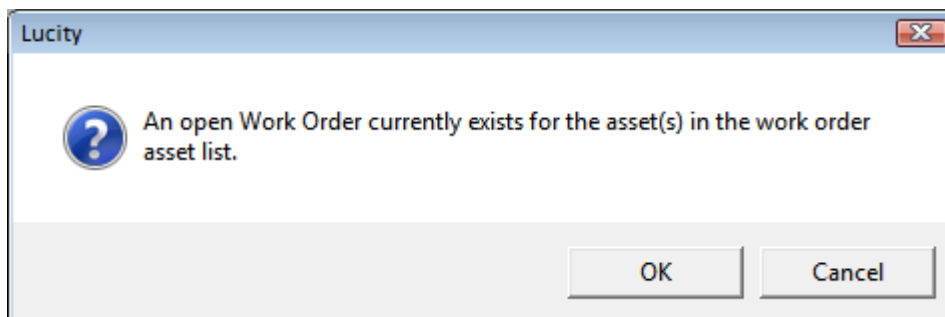
PM/Template	PM/Template Text
WTDHYFT	Hydrant Flow Test
WTDHYRPR	Hydrant Repair
WTDHYM	Hydrant Maintenance
WTDHYPL	Hydrant Painting
WTDHYRPL	Hydrant Replace
WTDHYINS	Hydrant Install
544-WTDHYRPL	-Hydrant Replace
1204-ENGTR06	-Road Closures
1205-ENGTR06	-Road Closures
1206-ENGTR06	-Road Closures
1207-ENGTR06	-Road Closures
1208-ENGTR06	-Road Closures

Buttons for 'OK' and 'Cancel' are located at the bottom of the dialog.

- By selecting 'Entire Filtered Recordset', the new work order will contain all assets related to the inspections included in the current filterset.
3. Next, you can choose a PM Template for the work order from the list. This is not required.
 - For our example, we'll be creating a work order based on the current record, without using a PM Template.
 4. Click *OK* to create the work order.
 5. Next, choose a category for your work order from the work flow category tree. For our pipe asset, we've chosen Sewer Pipe as the work flow category.
 - If you used a PM Template, you'll skip this step.
 - Note that assets are associated with categories in *Work Flow Setup*. If you select a category that has not been associated with your asset, you'll receive a message asking you to select a new category
 - Note: The program will attempt to choose a Category on its own.

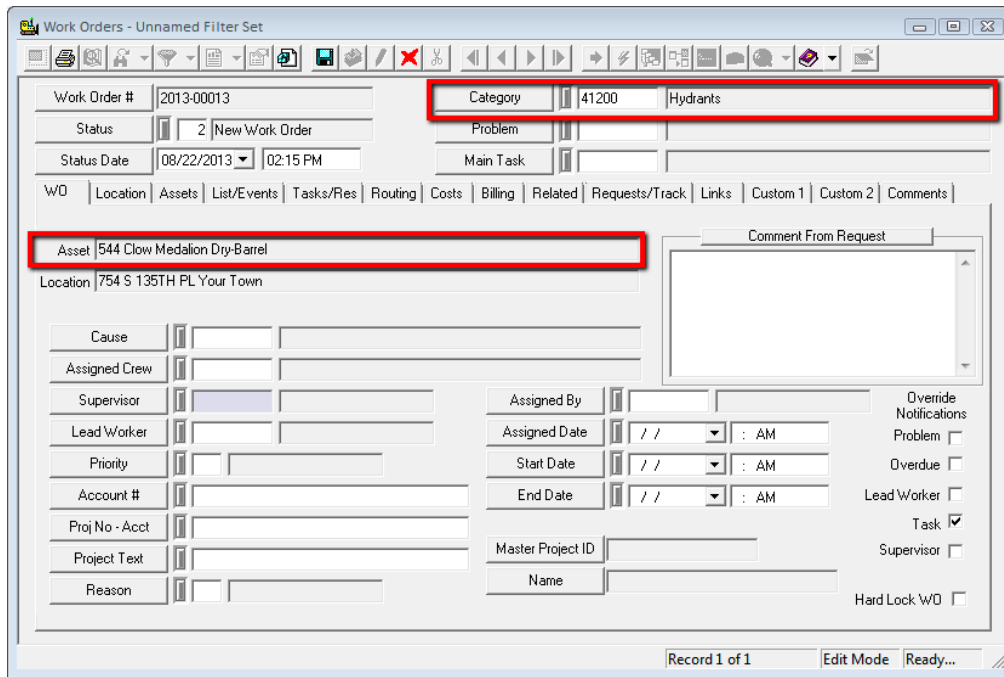


6. If there is an open work order for the asset the following pop-up will appear:



7. Click *OK* to create the work order or cancel to stop the process.



- When the work order is generated, the asset information will be entered into the WO tab and Asset tab. The category you chose will appear in the header. Default information associated with the category will be entered by the system. For additional information on setting up this default data, please consult the related workbook, *Work Flow Setup*.



- To view the inspection that is related to the work order, go to the **Asset** tab.
- Right-click on the fire hydrant record and select **View Asset Inspection Record**.

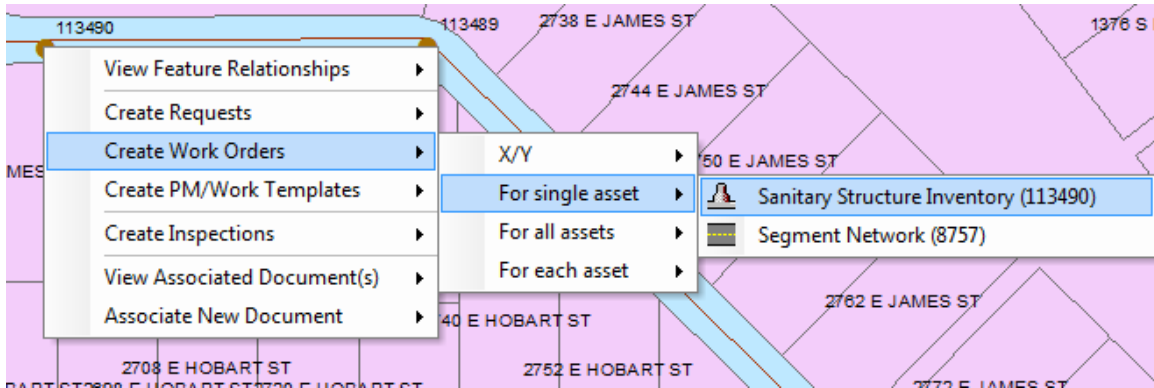
Creating a Work Order from ArcGIS

In addition to creating work orders from within the desktop, we also provide a tool to create work orders directly from ArcMap.

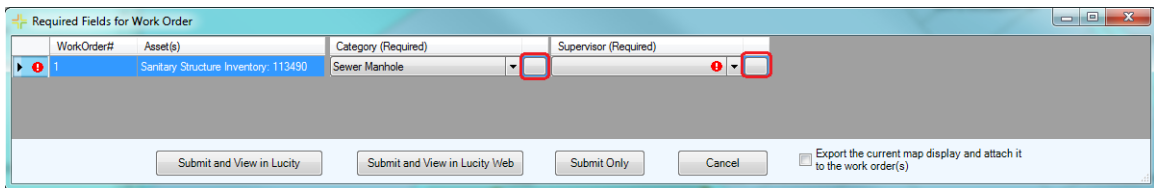
- Open your map project.
- Click on the Open Module tool  on the Lucity GIS toolbar.
- 
- Right click on a feature in the map. You'll see the menu pictured below.

Notes: _____

5. Select Create Work Order and then select which asset or X/Y coordinate you would like associated with the new work order. All available asset types will appear in the list.
 - You have the ability to create work orders for a single asset, all assets (a single work order with all selected assets on it), or each asset (separate work orders for each asset selected).
 - In the example below, we've chosen to create a new work order for the sewer structure asset number 113490.

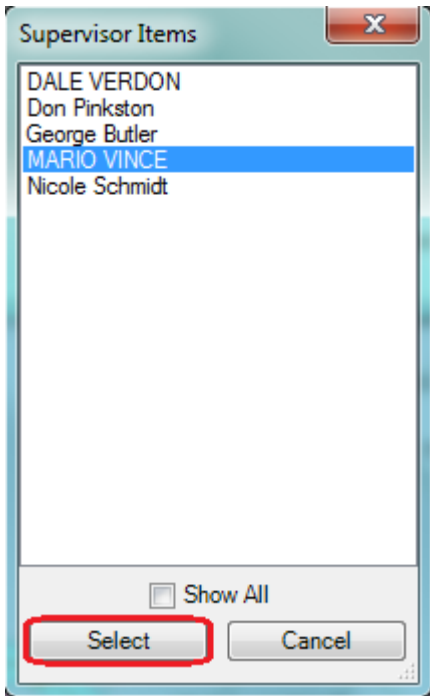


6. The work order dialog shows the fields required to create a work order. You may need to select a category of work or Supervisor using the buttons to the right. As you can see below, the Sewer Manhole category has already been selected for our work order.

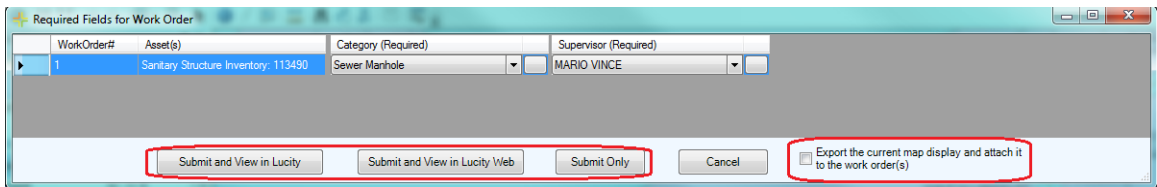


Notes: _____

7. Select the supervisor using the dialog box.

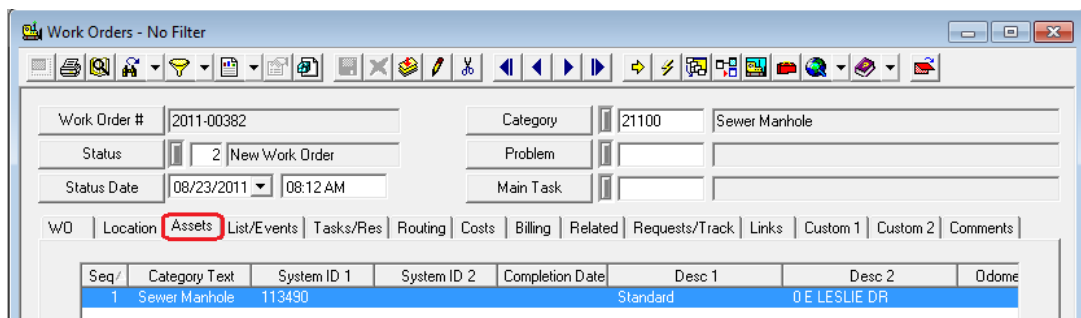
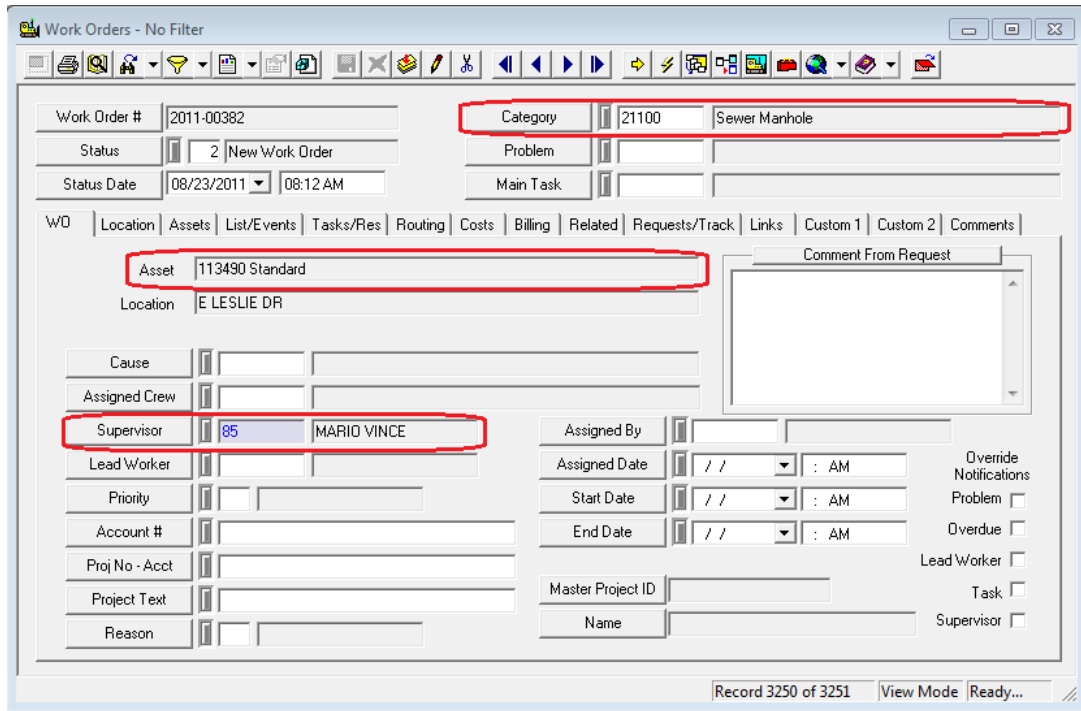


8. After meeting all of the Work Order requirements, select one of the three available submit buttons.



Notes: _____


9. The new work order will contain the category and asset you selected.
 - As you can see below, the Sewer Manhole category appears in the header. The sewer structure asset we selected in the map, number 113490, appears on both the WO and Assets tabs, and work order was assigned to Mario Vince.

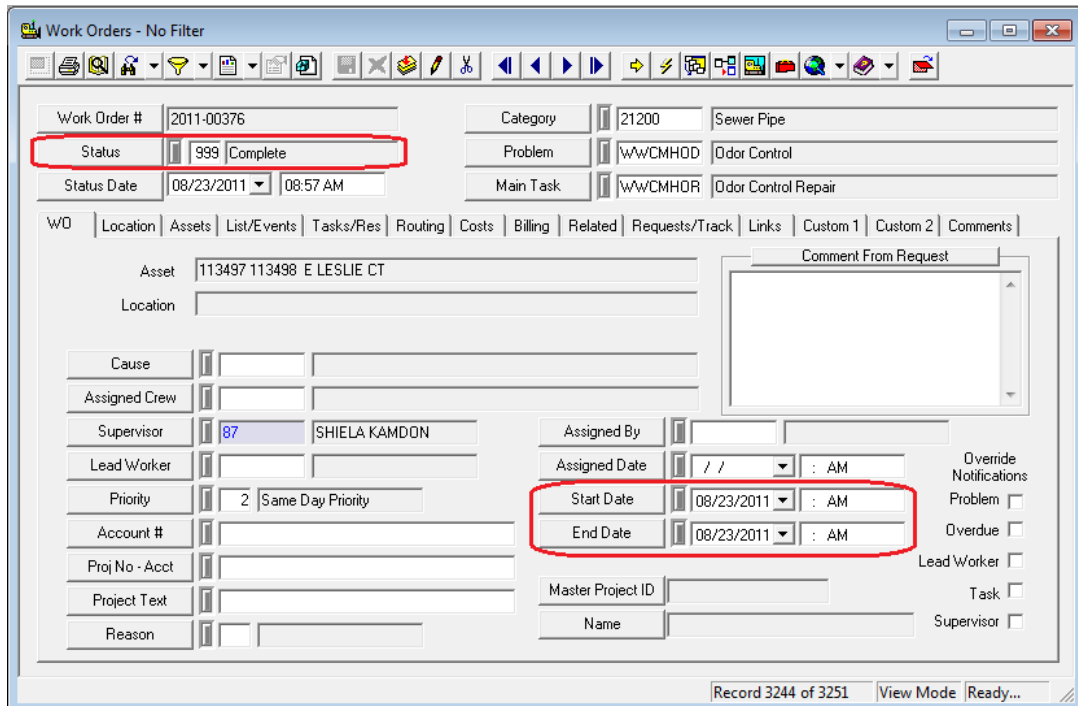


Completing the Work Order

Now that you've created the work order, selected a category, problem, and main task, entered a work location, assets, tasks, and resources, you're ready to complete your work and close the work order.

1. First, double check all of the information in the work order (especially the resource information) and then return to the first tab, WO.
2. Check the information on this tab. The Start and End Dates are important.

- Finally, change the Work Order **Status** in the header to Complete (code 999) and Save  the record. That's it! This completes the Work Order.




The screenshot shows the 'Work Orders - No Filter' application window. The 'Status' field is highlighted with a red box and contains '999 Complete'. The 'Start Date' and 'End Date' fields are also highlighted with a red box and contain '08/23/2011 : AM'. Other fields include 'Work Order # 2011-00376', 'Category 21200 Sewer Pipe', 'Problem WWCMMHOD Odor Control', and 'Main Task WWCMMHOR Odor Control Repair'. The 'Assigned By' field is empty, and the 'Assigned Date' is set to '/ / : AM'. The 'Priority' is set to '2 Same Day Priority'. The 'Supervisor' is '87 SHIELA KAMDON'. The 'Asset' is '113497 113498 E LESLIE CT'. The 'Location' is empty. The 'Comment From Request' field is empty. The 'Override Notifications' checkbox is checked. The 'Problem', 'Overdue', 'Lead Worker', 'Task', and 'Supervisor' checkboxes are unchecked. The status bar at the bottom shows 'Record 3244 of 3251 View Mode Ready...'.

Work Requests

This module lets you log customer requests. Requests store contact data about the requester as well as information about the problem being reported. Since these requests are designed to be carried over to work orders, much of the data you enter into this module is similar to that entered into *Work Orders*.

Creating a Work Request

- Open the *Work Request* module by selecting **Work>>Requests** from the desktop application main menu.
- There are three critical tabs you'll use to enter information:
 - Customer** - Used to record information about the caller.
 - Request** - Used to record details about the complaint or problem.
 - Scripts** - Used to record what was said in the call.
- Click the Add button  on the toolbar to enter *Add Mode*.

- The information at top in the Header is automatically populated when you save the record.

- On the **Customer** tab, enter information about the caller:
 - Add the phone number.
 - When your cursor is in the Phone # field, the **Status Bar** at the bottom of the screen will contain shortcut information. Press F4 to copy the customer information from the last Request entered, press F8 to search for customers with the same phone number, or press F7 to look up previously recorded Requests with the same phone number. If you find a matching customer using any of these shortcuts, the name, address, and contact information will be automatically entered by the system.
 - Add the Customer's Name.
 - Note the shortcut; you can search for address by Name (F8).
 - Add the Customer's address.
 - Note the shortcuts; you can search for customer by address (F8). The F9 shortcut will pop-up the street name list. This F9 shortcut is used throughout the desktop application.

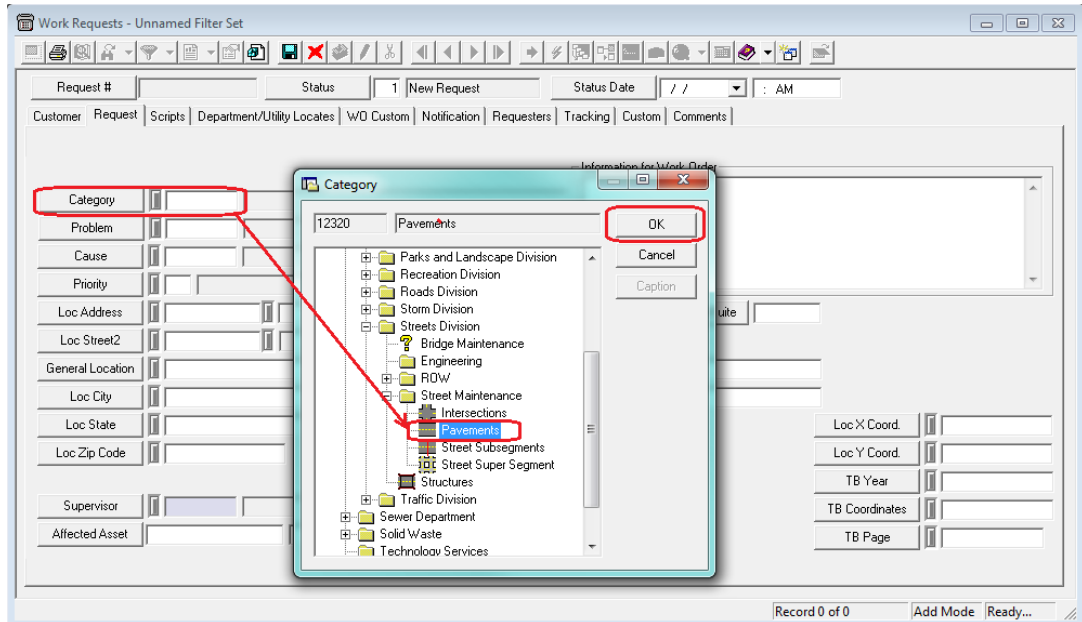
Notes: _____



- At bottom is a comments box. Enter any comments about the caller here. We'll enter comments about the issue being called about on a later tab.

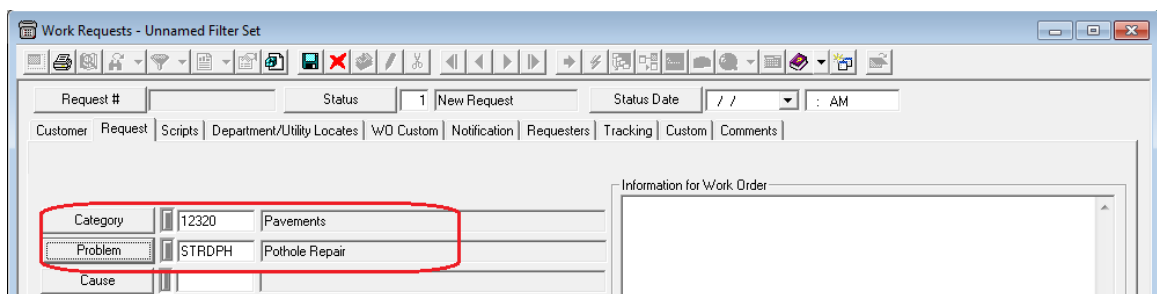
- In our example above, we've begun to enter a request from George N. Thomas. Using his phone number and the F8 shortcut, we searched for matching address and contact information. This allowed us to easily enter details about the caller.

Notes: _____

6. Now, open the Request tab. We'll use this tab to enter information about the reason for the call.
 - Click the Category button and a list of categories will appear.
 - Click the plus [+] sign beside a folder to open a category group; then select the appropriate category for the caller's concern.



- In the example above, our customer, George N. Thomas has called in to report a pothole. Thus, we've selected the Pavements category.
- **Tip:** Remember to select a category with an icon  instead of a folder . This will allow you to associate individual assets with your request and work order.
- Next, select a Problem and Cause (if known) in the same manner you chose a Category.

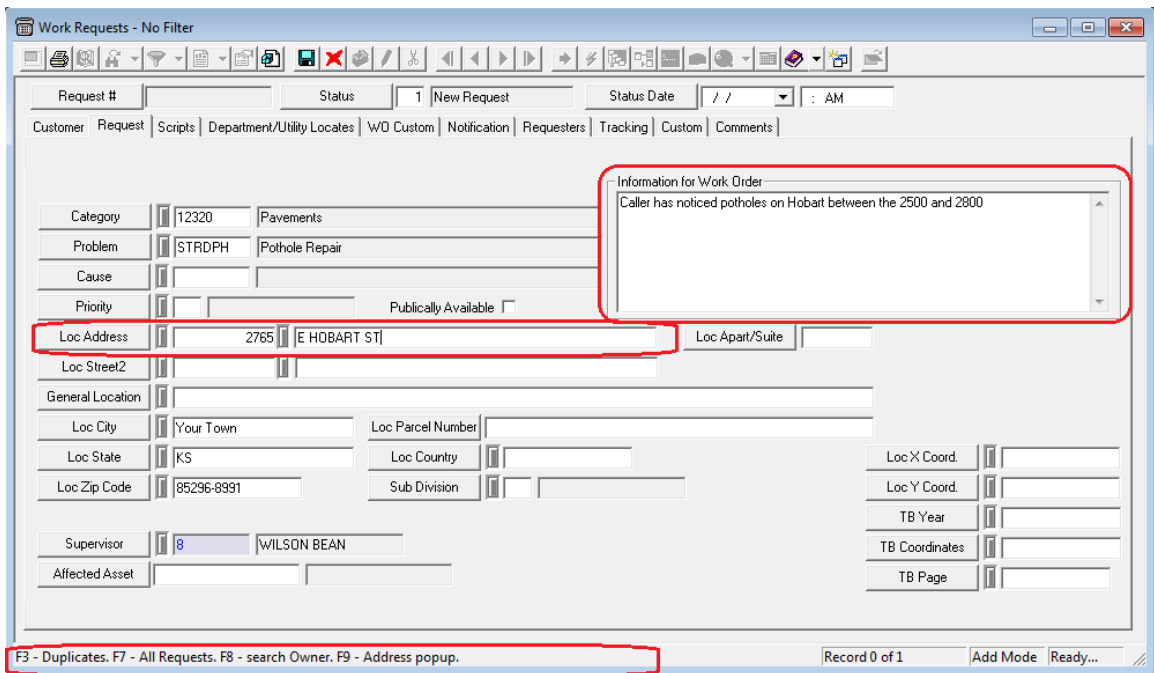


- In our example, we've chosen STRDPH - Pothole Repair as the problem being reported.

Notes: _____

7. Enter the address OF THE ISSUE (not the caller's address).

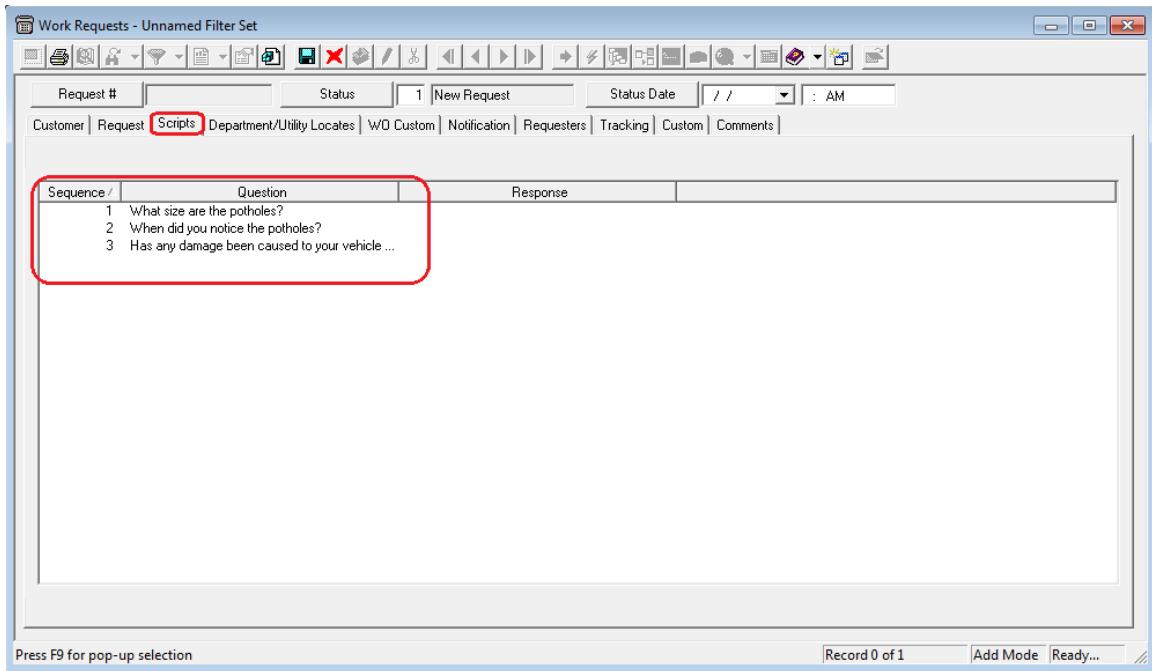
- Note the shortcut; if the Request address is the same as the caller's address on the previous tab, you can press F4 to carry it forward.





- In our example, George N. Thomas has called in to report a pothole in front of his home residence. Thus, we have used the F4 function to carry his address forward to this tab.
- To enter additional comments to be carried over to the work order, simply place your cursor in the bottom grid and begin typing.
 - In the example above, we have noted that the potholes have been found between the 2500 and 2800 blocks of Hobart.

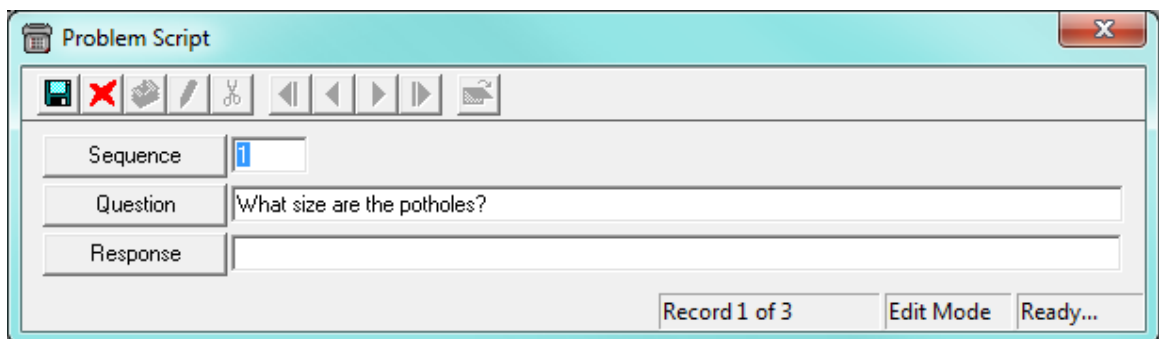
Notes: _____

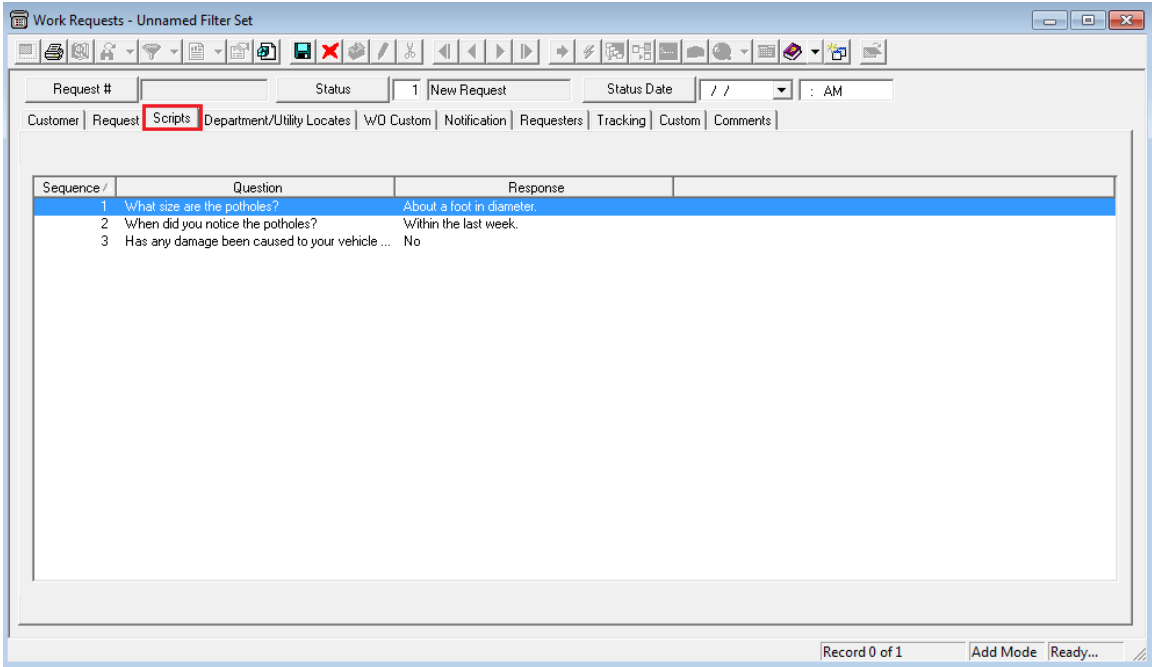
10. Now, open the **Scripts** tab. You'll see two grids. The top grid contains problem scripts and allows you to enter responses. The bottom grid allows you to enter additional comments that will be carried over to the work order.
- Scripts are associated with the problem in the *Work Flow Setup, Problems* module. When you select a problem in the Request tab, any scripts associated with that problem will be carried over automatically.




11. To enter a response to a script, complete the following steps:

- Double click on a question in the grid. The Problem Script dialog will appear.
- Click the Edit button  and type the caller's response in the field provided.
- Save  the record and the response will be added to the grid.



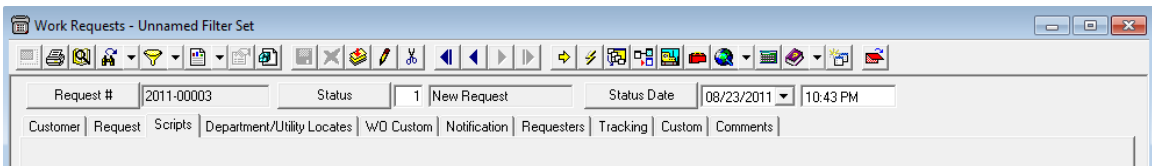


- In our example, we have recorded responses to the problem scripts. Within the last week, the caller has noticed potholes that are approximately one foot in diameter. No damage has been caused to the caller's vehicle at this time.

12. The Request is now complete. Check the data and press the save button  in the toolbar.

13. The Request Number, Status, and Status Date will be populated automatically in the header.

- As you can see in the example below, the status has been set to "1 - New Request".

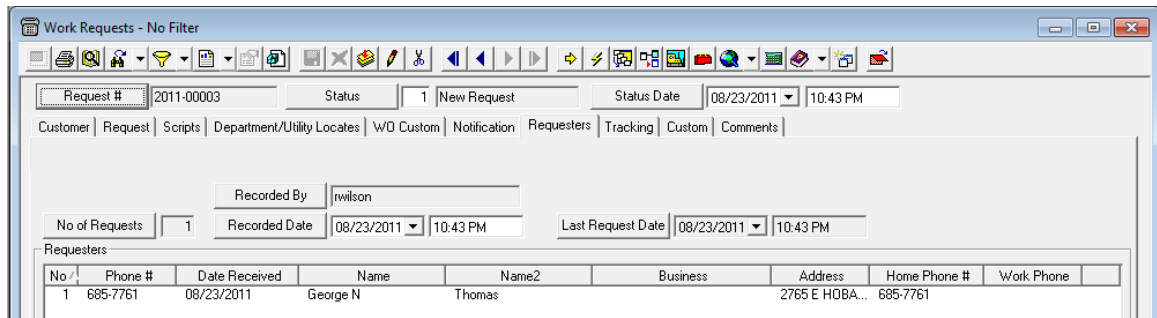


Notes: _____

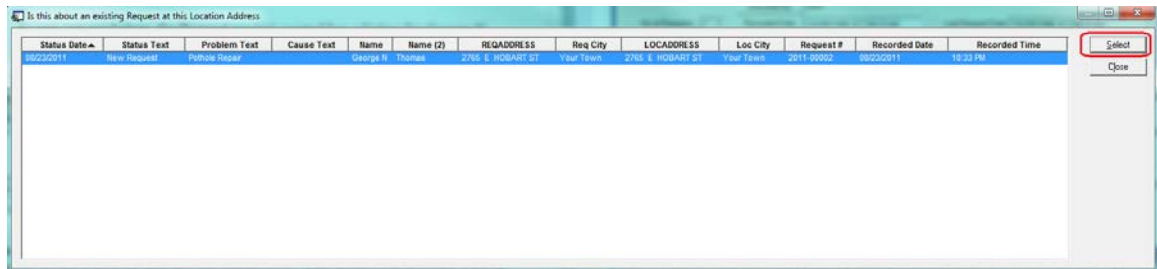
Duplicate Requests

The Requesters tab in the *Requests* module is specifically designed to handle duplicate requests. This tab allows you to log multiple customer calls regarding the same problem at one location.

1. Upon creating the initial request, the requester's name and information will be carried over from the Customer tab to create a record in the Requesters grid.
 - As you can see below, the Request we just created has a listing for George N. Thomas on the Requesters tab.



2. Each time you receive a subsequent request for the same problem at that location, you should record it directly into this Requesters grid. This allows you to create a list of requesters calling about the same problem at the same address. This data is helpful in determining how many complaints have been received regarding this problem.
3. When a subsequent request is called in, you can begin filling out the request as usual on the Customer tab. When you reach the **Request** tab, use the F7 function to search for existing requests. You'll see a dialog similar to the one below.
 - Find your request in the list, highlight it, and click *Select*.



- The *Requests* module will then open directly to the existing record you selected.

Notes: _____

4. On the Requesters tab, right click and select *Add Record*. The following window will appear:


- Enter the new requester’s phone number, name, address, and contact information.
- This dialog is identical to the Customer tab. Like in the Customer tab, several fields in this window have special functions. You can use these fields to search for a customer by phone number or name and enter the customer’s address.
- Once you save the record, a new listing will be added to the Requesters tab.
- Additionally, the top portion of the screen automatically documents when the last requester log was recorded and which user recorded it.

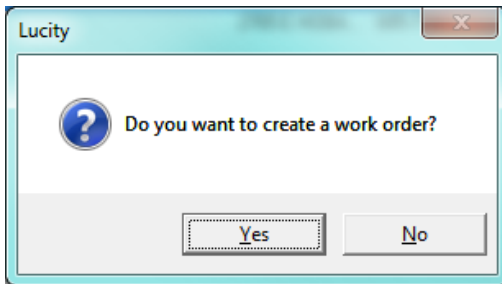
No.	Phone #	Date Received	Name	Name2	Business	Address	Home Phone #	Work Phone
1	685-7761	08/23/2011	George N	Thomas		2765 E HOBA...	685-7761	
2	685-7761	08/24/2011	George N	Thomas		2765 E HOBA...	685-7761	

Notes:

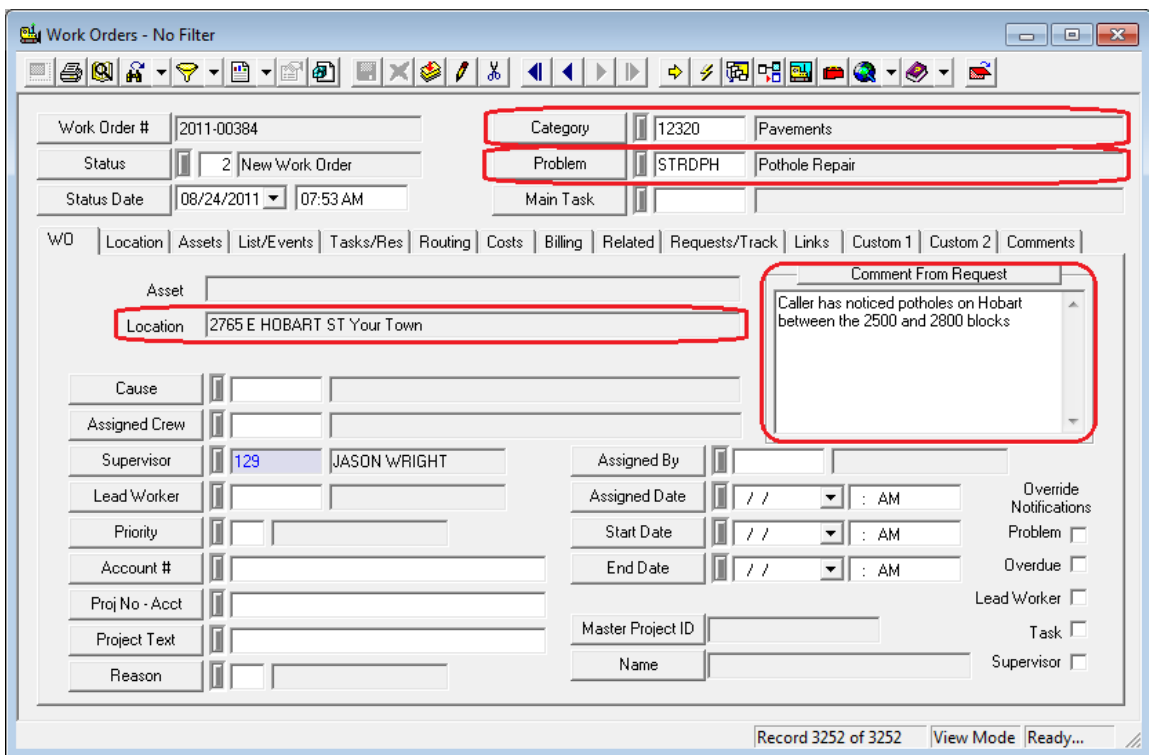
Creating a Work Order from a Work Request

You can generate a work order directly from a request. This will allow you to carry over data to a new work order from the request you just entered.

1. Click the Create Work Order button  at the top of the *Requests* module. A prompt will appear asking if you want to create a work order. Click Yes to continue.



2. The new work order will contain all of the Request information (but not Customer information), and will have an automatically assigned Work Order number.

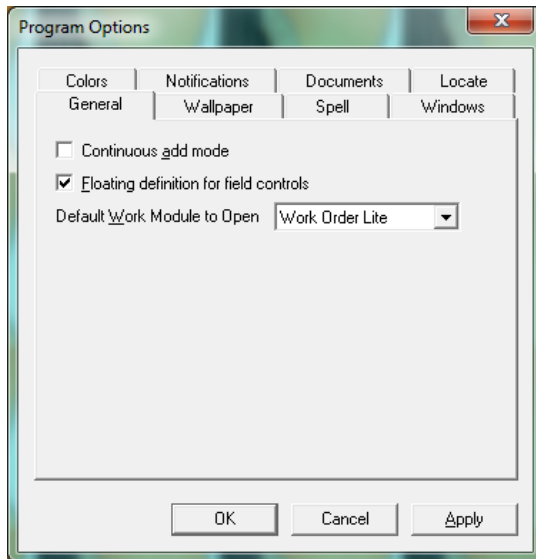


The screenshot shows the 'Work Orders - No Filter' application window. The form contains the following fields and values:

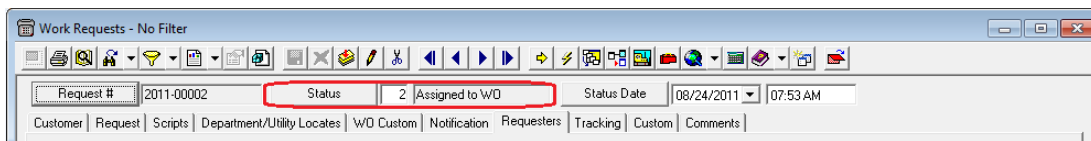
- Work Order #: 2011-00384
- Status: 2 New Work Order
- Status Date: 08/24/2011 07:53 AM
- Category: 12320 Pavements
- Problem: STRDPH Pothole Repair
- Location: 2765 E HOBART ST Your Town
- Comment From Request: Caller has noticed potholes on Hobart between the 2500 and 2800 blocks
- Supervisor: 129 JASON WRIGHT
- Assigned By: [Empty]
- Assigned Date: / / : AM
- Start Date: / / : AM
- End Date: / / : AM
- Master Project ID: [Empty]
- Name: [Empty]

- As you can see in this example, the new work order includes the Category (Pavements), Problem (Pothole Repair), Location (2765 E. Hobart St.), and Request Comments for Work Order that we entered into the sample *Requests* record above.

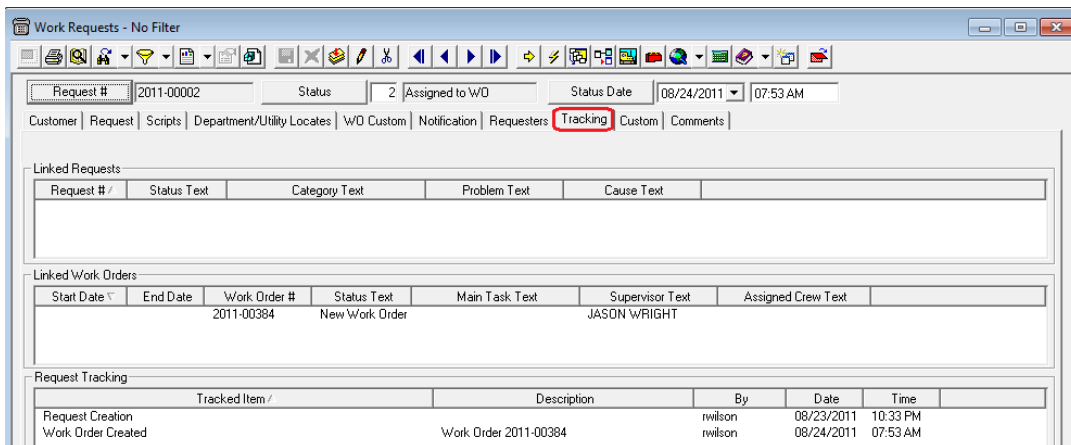
3. **Note:** You may have the “Work Orders Lite” module pop up instead of Standard “Work Orders”. To select which version of Work Orders opens by default, go to **System>>Configuration>>Program Options** and choose the default work order module from the drop-down list on the General tab.



4. Now that you’ve created a Work Order from the Request, the Request will take care of itself.
 - Look back at the Request; the Status has been changed automatically to “2 - Assigned to Work Order”.

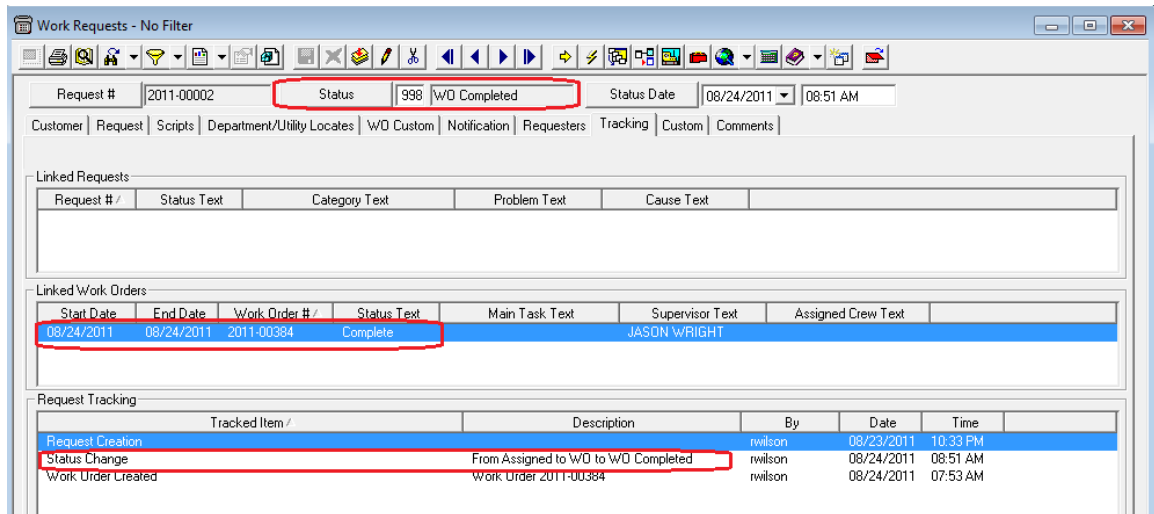


5. On the Tracking tab, information about the Request’s history is automatically recorded. Here, you can see the date the Request was originally created and when the work order was generated.



- To access a generated work order, simply double click on a listing in the grid. You can close the work order by setting its status to “999 - Complete”.

- When the Work Order is closed, the status of the Request will automatically change to "998 - WO Completed". The Tracking tab will show when this change occurred.



Linking a Work Order

To link a work order with the current request, complete the following steps:

- Right click in the Linked Work Orders grid of the Tracking tab and select *Associate Work Orders With*. The following drop-down menu will appear:
- Select the characteristic(s) that you want the linked work order and request to have in common. Your choices are as follows:
 - Same Problem** - Allows you to link any or all work orders that have the same problem as your request.
 - Same Infrastructure** - Allows you to link any or all work orders that have the same affected asset as the request.
 - Same Problem and Infrastructure** - Allows you to link any or all work orders that have the same problem and affected asset as the request.
 - Street Block** - Allows you to link any or all work orders with a street address within a street block of the problem's location in the current request.
 - Work Order Number** - A dialog will appear prompting you to enter the number of the work order you wish to link to the current request.
 - Any Incomplete Work Order** - You will see a list of all incomplete work orders to select from.

Notes: _____

- For our example below, we've chosen to link work orders within the same street block. We've then chosen two work orders within the Pavements category, both related to pothole repair.

Work Order #	Category	Category	Main Task	Main Task Text	Status Text	Status Date	Start Date	Supervisor	Supervisor Text	Problem	Problem Text	Cause	Cause Text
2006-02507	41200	Hydrants			New Work Order	12/15/2006		GBA	George Butler				
2006-02507	41200	Hydrants			New Work Order	12/15/2006		GBA	George Butler				
2006-02507	41200	Hydrants			New Work Order	12/15/2006		GBA	George Butler				
2006-02507	41200	Hydrants			New Work Order	12/15/2006		GBA	George Butler				
2006-02716	32950	Median			New Work Order	11/02/2006		143	TRAVIS SOX	STMSC	Maculiferous		
2006-02274	32950	Median			New Work Order	11/02/2006		143	TRAVIS SOX	STMSC	Maculiferous		
2005-03734	41200	Water Blocks			New Work Order	05/15/2007		GBA	George Butler				
2011-00367	12300	Pavements			New Work Order	07/22/2011							
2006-02288	12300	Pavements			New Work Order	11/03/2006		179	JASON WRIGHT	STRUCK	Pickup - Roadway De...		
2007-01489	41500	Service Tags	WTDISLDS	Service Line Disconnect	New Work Order	02/06/2007	02/06/2007	105	COREY COLA				
2007-01591	41500	Service Tags	WTDISLDR	Service Line Repair	New Work Order	02/06/2007	02/06/2007	105	COREY COLA				
2011-00368	21100	Sewer Manhole	WVCEGFMN	Flow Monitoring	New Work Order	07/22/2011		87	SHEILA KANDON				
2011-00369	21100	Sewer Manhole			New Work Order	08/23/2011		85	MARCO VINCE				
2011-00362	21100	Sewer Manhole			New Work Order	08/23/2011		85	MARCO VINCE				
2011-00363	21100	Sewer Manhole			New Work Order	08/23/2011		85	MARCO VINCE				

- After associating the work orders, both the Linked Work Orders and Request Tracking grids have been updated. You'll see the Work Orders listed by number and the action, Associate WO & Request, identified in the bottom grid

Request # /	Status Text	Category Text	Problem Text	Cause Text
2006-03606	Completed	Pavements	Pickup - Roadway De...	

Start Date	End Date	Work Order # /	Status Text	Main Task Text	Supervisor Text	Assigned Crew Text
		2006-02288	New Work Order		JASON WRIGHT	
		2011-00367	New Work Order			

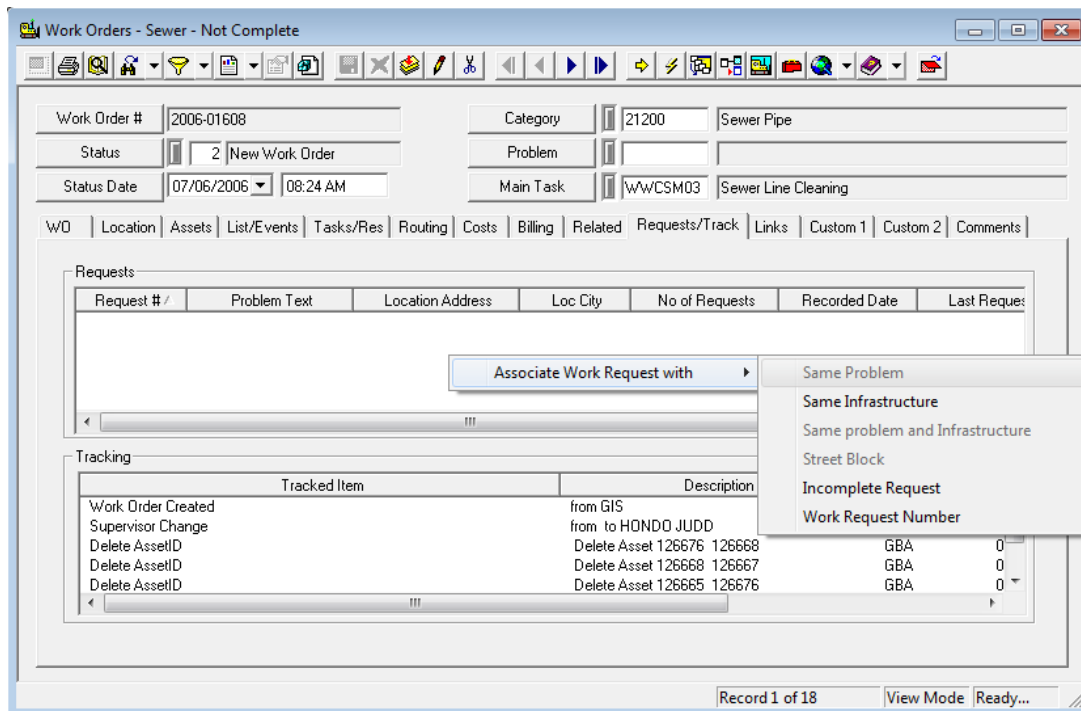
Tracked Item /	Description	By	Date	Time
Associate WO & Request	Work Order 2011-00367	rwilson	08/24/2011	09:14 AM
Associate WO & Request	Work Order 2006-02288	rwilson	08/24/2011	09:14 AM
Request Creation		rwilson	08/23/2011	10:43 PM
Status Change	From New Request to Assigned to WO	rwilson	08/24/2011	09:14 AM

Notes:

Associating Work Orders with Requests

Several functions in the *Work Orders* module allow you to associate your current work order with an existing request. These options are very similar to the ones we just discussed in the *Requests* module.

1. On the Requests/Tracking tab of the Work Order, right click in the Requests grid and select *Associate Work Request with*. The following menu will appear.
 - Note that individual options are disabled if the work order does not contain the necessary data. For example, you will be unable to associate a request with the same problem if there is no problem identified in the work order.



2. Select the characteristic(s) that you want the linked work order and request to have in common. Your choices are as follows:
 - **Same Problem** - Allows you to link any or all requests that have the same problem as your work order
 - **Same Infrastructure** - Allows you to link any or all requests that have the same affected asset as the work order.
 - **Same Problem and Infrastructure** - Allows you to link any or all requests that have the same problem and affected asset as the work order.
 - **Street Block** - Allows you to link any or all requests with a street address within a street block of the problem's location in the current work order.
 - **Incomplete Requests** - You will see a list of all incomplete requests to select from.
 - **Request Number** - A dialog will appear prompting you to enter the number of the request you wish to link to the current work order.
3. Just as you saw in the *Requests* module, the Requests grid in the Work Order will be updated after you have selected the associated records. You'll see the Requests listed by number, problem, location, and other identifying information in the grid.