

City of Beacon

Asset Management Database User Manual

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1.0 PURPOSE

The City of Beacon did not previously have an inventory of its assets. Prior to this City of Beacon Asset Management and Capital Planning Project, asset information was dispersed across many different documents, departments, data sets and maps. An asset inventory is the essential foundation of management and planning, especially with regard to assets of high value and criticality such as sewer and water infrastructure. The creation of an inventory is a major step toward continuity of institutional knowledge as older, knowledgeable workers may retire, taking their knowledge with them, and leaving the City vulnerable to making decisions with incomplete information. The maintenance of an inventory is essential to the City's on-going ability to manage its assets. This Asset Management and Capital Planning Tool will assist the City in maintaining infrastructure and public assets at the desired level of service at the lowest life cycle cost. The products of this work are an Excel database tool, a User Manual and an Asset Management and Capital Planning Guide.

This User Manual describes the use and maintenance of the database Tool that includes an inventory of the City's major assets identifying current asset conditions and levels of service using Excel software.

The city will be able to use the Tool to prioritize investments in major repairs or replacements, including estimating costs and lifecycles, and to align similar or related projects for efficient implementation. In addition, the tool will be used to evaluate financing alternatives to allow for sound planning and implementation. The Tool enables the City to cross check asset inventories with insurance lists to ensure all critical assets are covered, and that assets that have been sold or demolished or otherwise are no longer part of the asset inventory are no longer covered under insurance.

As a stand-alone capital asset planning and management decision support tool, the database is not designed for tracking daily work and repair activities. More specifically the Tool is intended to be used to answer questions about assets. Different assets are listed on separate worksheets which allows the use to search for, sort and filter different aspects of those assets. Lists generated in answer to a specific question can also be mapped in a geographical information system (GIS) in most cases.

2.0 INTRODUCTION

The data in the database was compiled primarily from available reports and information supplied by the City of Beacon; including existing Geographical Information System (GIS) data, insurance information, facility plans and information provided by City staff. This information is organized in the database according to type, with one asset type to a worksheet.

The database data can also be tied to, and worked with, in a Geographical Information System. Lists of specific assets of interest can be generated within the database Tool and then visualized spatially in GIS. The database Tool is intended to be actively managed and updated by the City. It contains analysis features that allow the City to sort, view, rank, correlate and otherwise

analyze diverse asset information, and update this information as needed. Updates to the information on the assets within the tool are necessary to maintaining the tool's usefulness. The metadata file for the Tool is included in the Appendices of this User Manual and includes information helpful to understanding the information included in the database. As the City adds information to the database Tool, the metadata file should also be updated to reflect origin of data added.

The database Tool was designed to facilitate the City adding data, using drop-down menus and other tools, in ways that ensure the new data is added in a standardized format that permits filtering, ranking and sorting methods to function. The database Tool includes all data provided by the City during the project timeframe, and provides a structure for filling in data that the City develops as need arises.

This Tool is created in Microsoft Excel. Excel includes a "Help" tab in the main menu as well on-line assistance. This user manual is intended to demonstrate how to manage, update and utilize the Tool for answering City questions on assets and asset management at the level of a basic understanding of Excel.

3.0 SCOPE

Asset management is a process municipalities can use to make sure that planned maintenance can be conducted and capital assets can be repaired, replaced or upgraded on time and that funding is in place when needed. Asset management is the practice of managing infrastructure capital assets to minimize the total cost of owning and operating these assets while delivering the desired service levels. Information about assets is critical to this process. The database Tool is intended to assist in maintaining information about the assets of the City.

The Major Assets that populate the database tool include:

- *Wastewater Treatment
- *Sewer Collection System
- *Manholes
- *Water Treatment
- *Water Lines
- *Water Hydrants
- *Stormwater Pipes
- *Stormwater Features
- *Roads
- *Parking Lots
- *Bridges
- *Sidewalks
- *Vehicles
- *Fuel tanks
- *Generators
- *Buildings

- *Recreational Facilities
- *City Land
- *Streetlights
- *Traffic Signals
- *Wayfinding and Welcome Signage
- *University Settlement Camp

4.0 DEFINITIONS

These terms are used in this manner in this Manual;

Document Control – Management of document flow and storage in an organization through various functions and processes. These include maintaining files and using proper distribution and revision procedures to maintain quality.

Data Format – Excel lets you specify the way data is displayed in a cell, as a number, text or date, for example.

Drop-down menu – A list of valid entries that can be set for a data range; will make data entry easier and, by limiting entries to certain values, standardize spelling and other factors to ensure data can be filtered, sorted or otherwise analyzed consistently.

Revision History – Part of Document Control, a record of changes made to a document, by whom and for what purpose.

Workbook – in Excel, a single file consisting of at least one up to a large number of worksheets

Worksheet – in Excel, a single spreadsheet composed of rows and columns, each worksheet is identified as a tab across the bottom of the workbook.

5.0 RESPONSIBILITIES

The City of Beacon is responsible for the maintenance of this tool, both in document control and data updates. It is the decision of the City to whom to assign the responsibility of data management and document control (see Section 8.0 for recommendations). That individual may assign specific update tasks as needed, while always maintaining a Master version of the database for recovery/to prevent accidental deletions or corruption of the Tool/database. A copy of the database, with a department specific name, may be given to various City departments, as needed, for their use. Changing the name of each copy that is created/distributed will help avoid confusion with the Master.

The database has been populated with as much data on as many priority assets as possible during the development process. It is the responsibility of the City to add data to those assets that are not complete as the City moves forward.

6.0 SPECIFIC PROCEDURES

This Tool is created in Microsoft Excel, using tables. Microsoft maintains Excel “help” sites online and there is a “Help” tab in the main menu in Excel. Excel works with spreadsheets organized into columns and rows. In this database, there are many individual worksheets, identified by tabs along the bottom of the workbook open in the Excel window. Each tab has the title of the asset type on that worksheet, they are listed across the bottom of the Excel window. Click on a particular tab to view the worksheet with the data for that asset. Each worksheet row has information about a particular component of that tab’s asset type. The available information is kept in columns, with titles across the top.

The Database Tool can be “locked” to prevent changes, and “unlocked” for use when needed. When the database is protected, some functionality is unavailable. For example, if a worksheet is protected, and the database Tool “locked” the filter function will not be available.

6.1 ADDING DATA

On many worksheets, data is lacking for a particular asset. For example, for Traffic Signals there is no entry for “date installed/repaired” or “Condition”. As the City continues regular work on traffic signals, the information can be populated as appropriate.

To enter data, select the Tab (what asset type) at the bottom of the Excel database to open the correct worksheet. Find the asset row, identify the column of information to add, select the cell and type the information in (Figure 6.1). Often there will be a drop-down menu available so that standardized entries can be made (Figure 6.2).

FIGURE 6.1

Query ID	Location	Style	Metered?	Condition	Date Installed/Repaired	Expected Lifespan	Repair/Replace Date	Remaining Lifespan
TSG0001	Willow St & Verplanck Ave		Unmetered					
TSG0002	East Main & Main St		Unmetered					
TSG0003	Main St & Teller Ave		Metered					
TSG0004	Verplanck & Flinell		Metered					
TSG0005	North Ave & Verplanck Ave		Metered					
TSG0006	Flinell Ave & Mill St		Unmetered					
TSG0007	Wolcott & South/Denels Aves		Metered					
TSG0008	Route 90 / Main St		Metered					
TSG0009	Wolcott Ave & Torando		Metered					
TSG0010	Verplanck & Mathevan/N Cedar		Metered					
TSG0011	Main at N Chestnut/S Chestnut		Metered					
TSG0012	North (W Church) at Beekman		Metered					

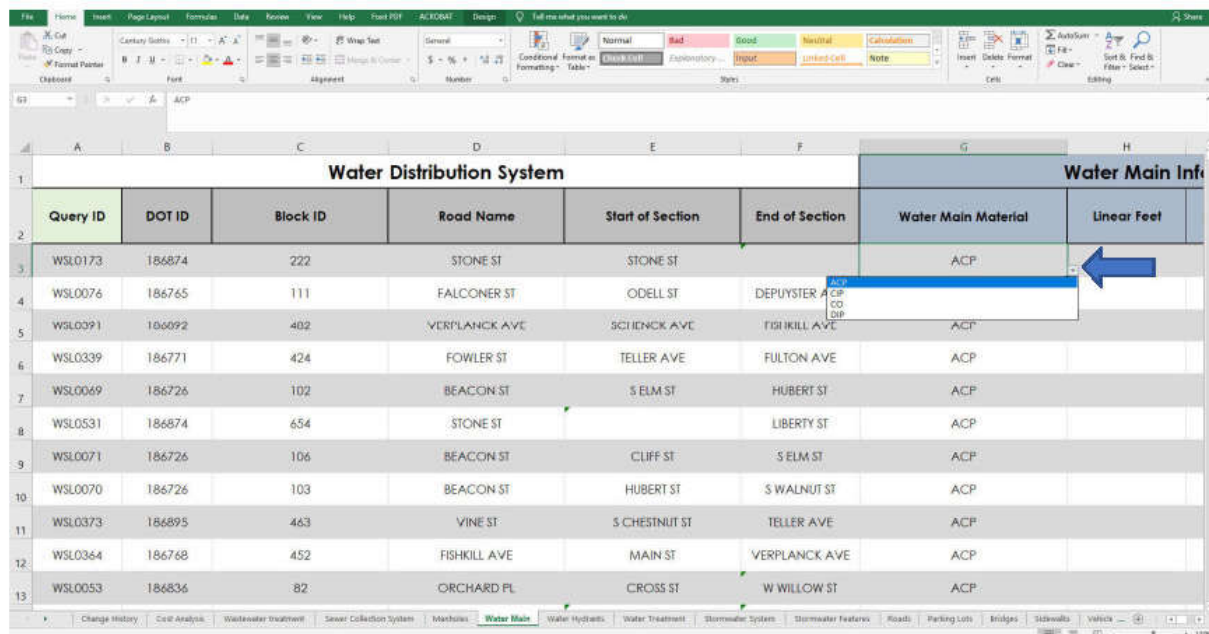
NOTE: to add install/repair date data for the Route 90/Main Street light, find the correct cell, select it, type the date, press Enter.

6.2 WRITING OVER EXISTING DATA

Often the existing information will need to be changed for a particular asset, such as the “installed” date on the Water Line worksheet. If a particular water line is replaced, the date can be changed simply by writing over the existing date in a particular cell. In some cases, such as the water line material, there are specific abbreviations for each type that can be chosen from a drop-down menu. This standardization of naming materials allows the sorting and filtering functions to create more useful lists. At the appropriate cell, chose the drop-down arrow to the right to reveal the list of materials and chose the correct updated material type (Figure 6.2).

If a section of waterline, for example, is replaced, the date, material and length of new pipe may all need to be updated.

FIGURE 6.2



Water Distribution System						Water Main Info	
Query ID	DOT ID	Block ID	Road Name	Start of Section	End of Section	Water Main Material	Linear Feet
WSL0173	186874	222	STONE ST	STONE ST		ACP	
WSL0076	186765	111	FALCONER ST	ODELL ST	DEPUYSTER	ACP	
WSL0091	186092	482	VERPLANCK AVE	SCHENCK AVE	TIGER KILL AVE	ACP	
WSL0339	186771	424	FOWLER ST	TELLER AVE	FULTON AVE	ACP	
WSL0049	186726	102	BEACON ST	S ELM ST	HUBERT ST	ACP	
WSL0531	186874	654	STONE ST		LIBERTY ST	ACP	
WSL0071	186726	106	BEACON ST	CLIFF ST	S ELM ST	ACP	
WSL0070	186726	103	BEACON ST	HUBERT ST	S WALNUT ST	ACP	
WSL0373	186895	463	VINE ST	S CHESTNUT ST	TELLER AVE	ACP	
WSL0364	186768	452	FISHKILL AVE	MAIN ST	VERPLANCK AVE	ACP	
WSL0053	186836	82	ORCHARD PL	CROSS ST	W WILLOW ST	ACP	

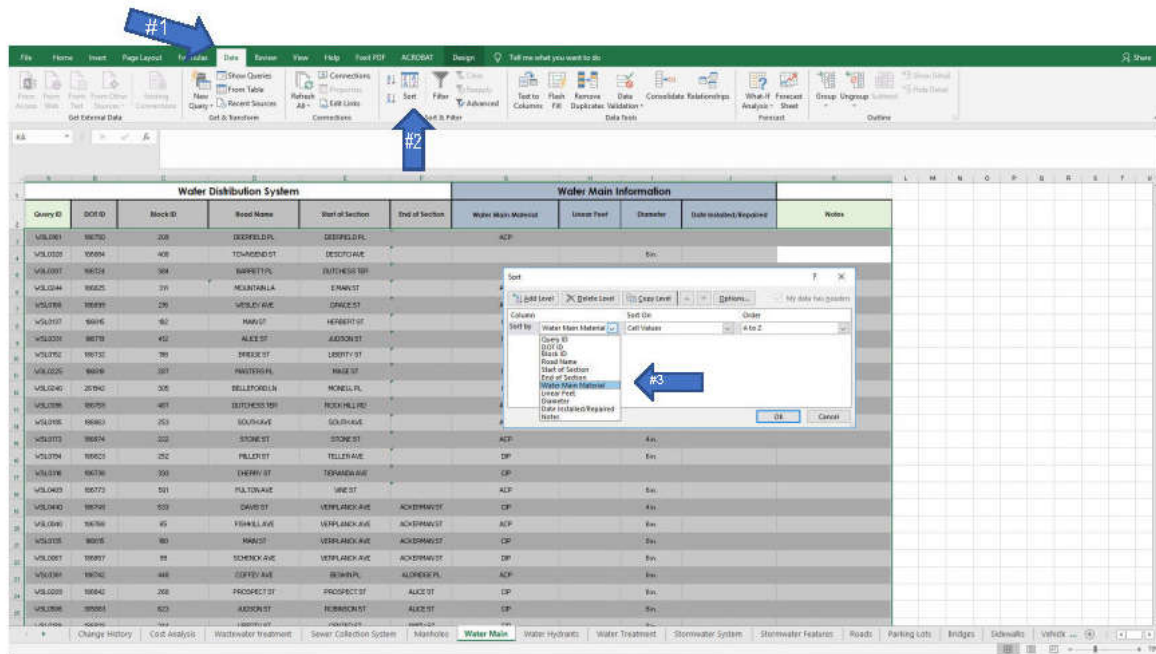
NOTE: Cells with drop-down menus will have a “down arrow” when the cell is selected. Click the down arrow and then scroll through the drop-down list to select the menu item to place in the cell.

6.3 SORTING Data

Each of the worksheets can be sorted. For example, one might want to have a list of water lines by pipe material for prioritization of replacement of a particular material. From the main menu across the top of the page choose the “Data” menu. Within the Data menu, choose “Sort”. A new window will open. In that Sort window, select the column you want to sort by using the drop-down menu (small arrow down). Then choose what to Sort On, using the next drop-down menu and then select the order for the list (Figure 6.3a). Click “OK”, and the list will be re-arranged as you selected (Figure 6.3b). If Water Main Material is sorted by AtoZ, all pipes of ACP will be listed first, then CIP, then DIP, etc. With this sorted list, you can sort again within each material

type. Open the Sort window again, and select “Add Level” and again choose which column to sort, diameter for example. The list will then be ordered by pipe material, and within each pipe material type the list will be ordered by diameter. This new list can be printed, or saved as a new worksheet in Excel outside of the database for use elsewhere.

FIGURE 6.3a



NOTE: 1 – Select Data Menu, 2 – Select Sort, 3 – Select Water Main Material to Sort By

FIGURE 6.3b

Water Distribution System										Water Main Information				Notes
Query ID	DOT ID	Block ID	Road Name	Start of Section	End of Section	Water Main Material	Linear Feet	Diameter	Date Installed/Required					
VSL0001	186760	208	DEERFIELD PL	DEERFIELD PL		ACP								
VSL0002	100804	408	TOLANDER ST	DEITCH AVE										
VSL0003	186528	384	BARNETT PL	BUTCHER TR										
VSL0004	186525	376	MOUNTAIN BL	ENHART										
VSL0005	186899	296	WESLEY AVE	GRACE ST										
VSL0006	186495	462	NAVY ST	HENRY ST										
VSL0007	186789	412	ALEX ST	ADDISON ST										
VSL0008	186732	384	BREXIT ST	LIBERTY ST										
VSL0009	186496	384	PAULSON PL	NADE ST										
VSL0010	201940	306	BELLFORD BL	MONTE PL										
VSL0011	186789	462	BUTCHER TR	ROCK HILL RD										
VSL0012	186863	252	SOUTH AVE	SOUTH AVE										
VSL0013	186854	322	STONE ST	STONE ST		ACP		4 in.						
VSL0014	186823	252	FELTON ST	TELLER AVE		CP		6 in.						
VSL0015	186736	332	CHERRY ST	TERESA AVE		CP		6 in.						
VSL0016	186773	501	PULTON AVE	WINE ST		ACP		6 in.						
VSL0017	186791	553	DAVIS ST	VERPLANCK AVE	ACKERMAN ST	CP		4 in.						
VSL0018	186760	49	VERPLANCK AVE	VERPLANCK AVE	ACKERMAN ST	ACP		6 in.						
VSL0019	186760	80	NAVY ST	VERPLANCK AVE	ACKERMAN ST	CP		6 in.						
VSL0020	186897	88	SCHENCK AVE	VERPLANCK AVE	ACKERMAN ST	CP		6 in.						
VSL0021	186742	448	COFFEY AVE	BEVERLY	ALONZO PL	ACP		6 in.						
VSL0022	186840	268	PROSPECT ST	PROSPECT ST	ALEX ST	CP		6 in.						
VSL0023	186863	623	ADDISON ST	REMBERT ST	ALEX ST	CP		6 in.						

NOTE: Result is Water Main sorted by Material and then Diameter

To save this new sorted list for use elsewhere (copy to Word as a table, copy to a new Excel spreadsheet for other work), select the columns and rows you want with the cursor, from the Home menu choose “copy” (on the left side of the menu bar) or simultaneously click Ctrl+C. Go to a new Excel sheet or Word document and select “Paste” from the Home menu, or click Ctrl+V. Your sorted list will be pasted.

The worksheet can be returned to its original order by again clicking Sort, selecting the second sorting level and clicking “Delete Level” and selecting to again sort by Query ID in the first level. Or simply do not save changes to the database after this sorting is completed before closing the database.

6.4 FILTERING DATA

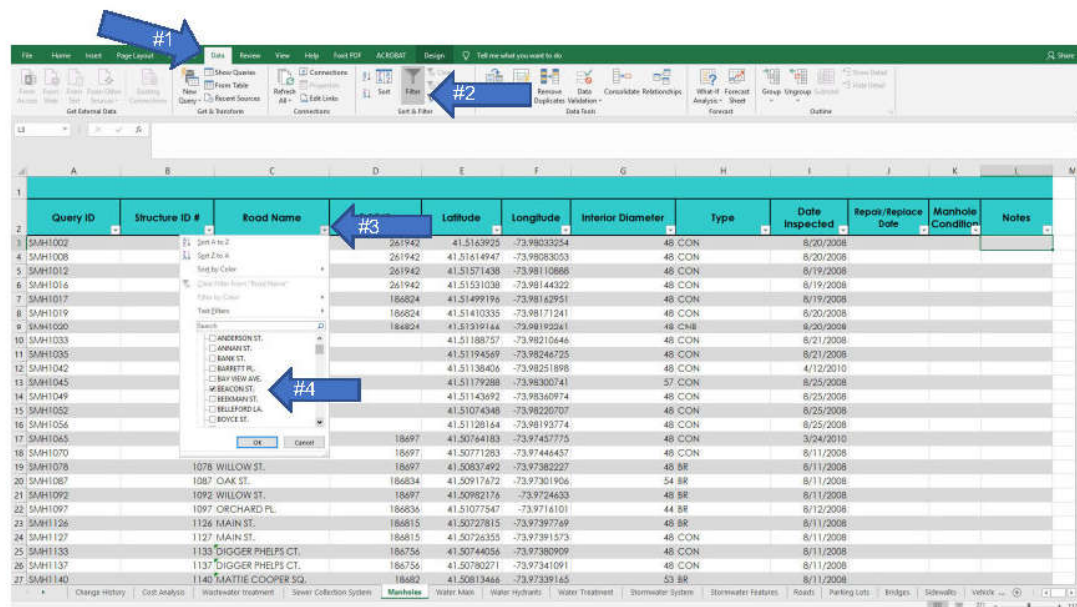
The Data Menu also includes a Filter symbol (a funnel shape) that allows one to see only the selected filtered items. Filtering data is possible for most asset types and characteristics. Once the City completes Condition data for major assets, the City will be able to filter by Condition to see the assets most in need of investment. The City owns over 100 vehicles, filtering the vehicle inventory by year, department, vehicle type or cost of replacement enables informed discussions about the overall vehicle fleet and assists the City in planning ahead for purchases. Also, using either the NYS DOT ID (a code assigned by Department of Transportation to street segments), BLOCK ID, or road names, a user can filter lists of assets such as water and sewer mains, to see which are located on that road segment.

For example, suppose work was going to be done on Beacon Street and one wanted a list of those manholes on Beacon Street. Go to the Manholes worksheet by selecting its tab at the bottom of the workbook page. From the main menu at the top of the page, choose “Data” to open the Data menu. Select the Filter symbol, the background behind the symbol will change color when Filter is selected. To de-select it, simply click it again.

With the Filter symbol selected, each column will have a down arrow on its right side. Click that arrow to see the drop-down menu of filterable selections. To choose to see manholes on Beacon Street, click the drop-down menu on the Road column. The default is “Select All”. Click the check box on “Select All” to select none. Then click the check box next to Beacon St in the drop-down menu (Figure 6.4a). Click “OK”. Now the only manholes visible will be those on Beacon St. (Figure 6.4b).

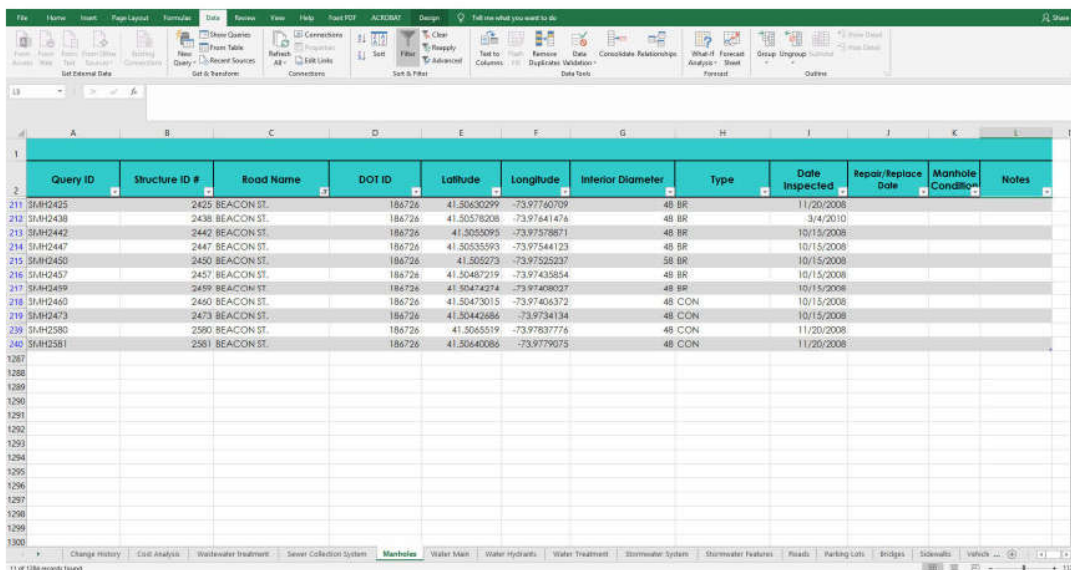
To save this new filtered list for use elsewhere (copy to Word as a table, copy to a new Excel spreadsheet for other work), select the columns and rows you want, from the Home menu choose “copy” (on the left side of the menu bar) or simultaneously click Ctrl+C. Go to a new Excel sheet or Word document and select “Paste” from the Home menu, or click Ctrl+V. Your filtered list will be pasted. Then save that new file with a new name, as you need.

FIGURE 6.4a



NOTE: 1 – Select Data Menu, 2 – Select Filter, 3 – at the Roads filter dropdown, uncheck “Select All” and 4 -check “Beacon St”

FIGURE 6.4b



NOTE: The result is a list of manholes on Beacon Street

However, if you are working with Excel 2010 or a previous version, the Copy and Paste operation may copy all cells in the filtered range you selected, visible (filtered) and invisible (filtered out). In this case, select the columns and rows you want to copy, i.e. your filtered list. On the Home menu, choose Find+Select (far right), go to “Go To Special” then select the circle

for Visible Cells Only, and Click OK. Use Ctrl+C or “Copy” from the Home menu. Then go to the Word document or new Excel spreadsheet and select Paste or use Ctrl+V. Only the filtered table elements will be pasted.

The worksheet can be returned to its original order by turning off the Filter (click it again). Or clicking on Select All in the Filter for that column. Or simply do not save changes to the database after this filtering is completed, and then close the database without saving.

6.5 COMBINING ASSET INFORMATION

Each worksheet can be sorted or filtered as needed to display the information wanted. If similar information is needed on more than one asset type, that data can be gathered from separate worksheets and/or mapped in the City’s Geographical Information System (GIS).

One main question the Tool can be used to answer is “what assets are located in this location”. For example, a particular stretch of road is to be reconstructed, and there might be water or sewer or stormwater pipes under that stretch that could be replaced at the same time. The Roads worksheet includes a column for the presence of water, sewer or stormwater for each road segment (Figure 6.5). More information on those pipes is available by filtering the Water Lines, Stormwater and Sewer Collection worksheets for the particular block of road and producing a list of pipe type, size and age (where that information is available). The lists that are produced can also be shared with other City staff to get other information on these assets, such as how often do water line breaks occur in that location on these pipes.

Figure 6.5

Road Info														Presence					
Block ID	DOT ID	Street Name	Start Intersection	End Intersection	Length (feet)	No. of Lanes	Sewer	Storm	Water	One Way	Type	Width	Depth						
1	184478	SLOCUM RD	ROUTE 90	N RIVER DR	843.37		Y				A Asphalt (flexible)								
2	184478	SLOCUM RD	FAIRWAYS LN	SLOCUM RD	536.49		Y				A Asphalt (flexible)								
3	100005	ROUTE 90	ROUTE 90	WOLCOTT AVE D	686.39						O Overlay								
4	301995	FAIRWAYS LN	FAIRWAYS LN	CUL DE SAC	208.01		Y	Y			A Asphalt (flexible)								
5	301995	FAIRWAYS LN	SLOCUM RD	CUL DE SAC	686.39		Y	Y			A Asphalt (flexible)								
6	184398	HENRY ST		WASHINGTON AVE	920.84						A Asphalt (flexible)								
7	184509	WASHINGTON AVE	OLD TOWN RD	HENRY ST	1452.30						A Asphalt (flexible)								
8	184509	WASHINGTON AVE	HENRY ST	WASHINGTON AVE	754.04						A Asphalt (flexible)								
9	184303	VAN NISS RD	ROUTE 90		1348.80		Y				A Asphalt (flexible)								
10	186898	WATER ST	SPRING VALLEY ST	E MAIN ST	498.65		Y	Y	Y	YES	A Asphalt (flexible)								
11	186763	ELIZA ST	CHURCH ST	OAK ST	335.57		Y	Y	Y		A Asphalt (flexible)								
12	186763	ELIZA ST	OAK ST	VERPLANCK AVE	298.03		Y	Y	Y		A Asphalt (flexible)								
13	186869	S WALNUT ST	BEACON ST	CATHERINE ST	250.34		Y	Y	Y		A Asphalt (flexible)								
14	186869	S WALNUT ST	CATHERINE ST	DEWINDT ST	172.05		Y	Y	Y		A Asphalt (flexible)								
15	186741	CLIFF ST	MAIN ST	COMMERCE ST	231.34		Y	Y	Y	YES	A Asphalt (flexible)								
16	186807	LEONARD ST	AMITY ST	GROVE ST	609.01		Y	Y	Y	YES	A Asphalt (flexible)								
17	186865	RED RUNN DR	BEEKMAN ST	LONG DOCK RD	244.00						A Asphalt (flexible)								

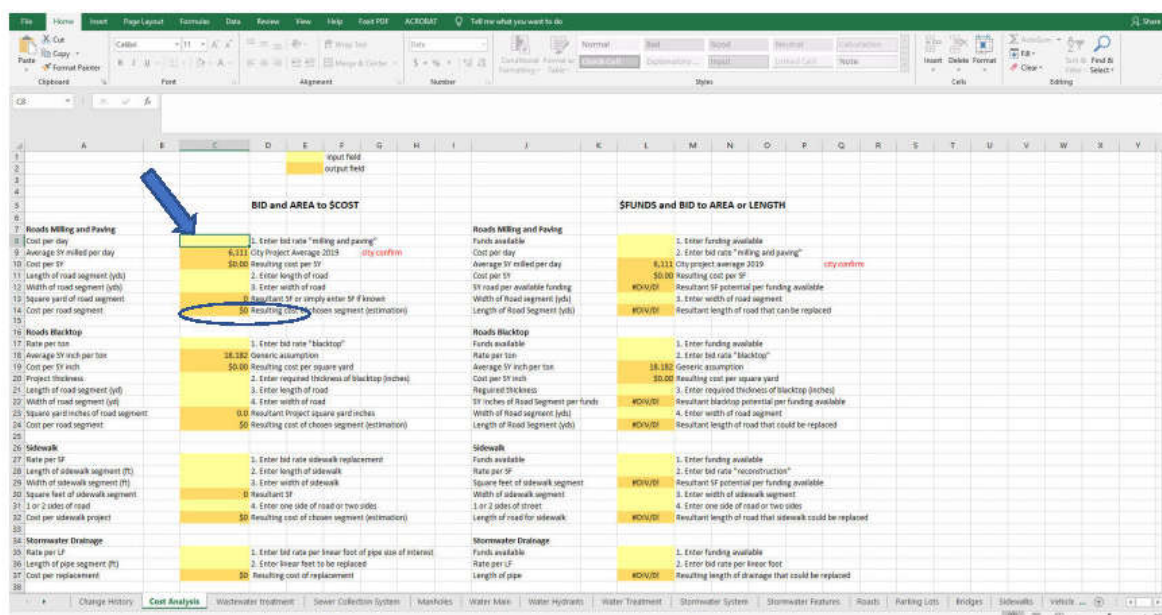
6.6 COST ANALYSIS WORKSHEET

The Cost Analysis worksheet (Figure 6.6) includes equations that can be used to estimate project costs, or to estimate how much of a project can be completed given funding availability. In each case the user will input either the bid price for a project and the extent of the project to estimate cost, or the amount of funding and bid price to estimate project extent.

There is a “total cost” cell at the bottom on the Project Cost side that will total all entries currently made in specific project types.

Directions on the worksheet indicate where inputs are needed. Other cells include calculations and are protected so that changes cannot be made accidentally. Information on the current bid for road work, water line replacement, etc., is necessary to utilize this cost estimation worksheet.

Figure 6.6



NOTE: Set-up of Cost Analysis worksheet, with spaces for your project information (input) and calculation results. The Left-side calculations are set up for accepting bid information and project area information and providing basic cost estimates. The Right-side calculations are set up for accepting information on the amount of funding available and bid information and providing project area or length estimates.

NOTE: enter the information specified in the input cells. Results will show in the output cells. There is a Total cost output cell at the bottom of the left-hand section for total costs with multiple project elements.

The Cost Analysis worksheet can be used to make calculations for a project and print the page to a hard copy or .pdf. The Cost Analysis worksheet can also be saved as an excel file with a different name for work apart from the database Tool. The cells in the calculation area are protected and cannot be chosen for copying directly to another excel file or word document until

unprotected. It is recommended that the Cost Analysis sheet be left blank after use in order to be ready for next user.

6.7 DROP-DOWN MENUS

Standardization of data is very important to being able to sort or filter that data. Specific information entered when updating the database needs to be entered in a standard format so that the filtering and sorting tools continue to function. For example, if the location data “Cedar Street” is typed in as “Cedar St”, and as “Cedar Street”, and as “Cdar St” by mistake, sorting for “Cedar Street” will not capture all locations. Dropdown menus have been created and linked to several worksheets to assist in the standardization of data entry.

Drop-down menus are listed on the worksheet named “Drop-down menus” by asset type. Each menu is connected to the relevant asset worksheet through data validation. Each menu also has several blank cells left ready at the bottom of the list. If new Street names or material types are added to those blank cells, the drop-down menu will be automatically updated. If major drop-down menu extensions are required, see Excel guidance on drop-down menus and data validation.

Note that there are different street naming conventions on several asset worksheets due to differing origins of data. The Drop-down menu for that page is connected to a consistent naming convention for that particular worksheet. For example, the Roads, Sewer Collection System and Water Line worksheets use the same format (PROSPECT ST.), while Storm Water Pipes and Hydrants worksheets uses another (PROSPECT ST). This is due to the Sewer Collection System and Water Line data coming from the same data source, while Storm Water data came from a different source and structure. These have been left as they were received so that this data can be worked with its original source data when necessary.

7.0 UPDATING THE TOOL

The Asset Management Tool includes information on many different types of assets. These assets are utilized by or maintained by different City departments. The maintenance needs and schedules for the different assets are different and therefore the need for updating data will also differ by department.

The City will assign an Asset Database Tool “keeper” to maintain the integrity of the database. This person should also be coordinating with the different City departments to maintain updated asset data. Communication between departments is important to keeping asset data up-to-date.

Any major changes to the database Tool, including the addition of data from new sources, should also be updated in the Metadata. The Metadata is included as the last worksheet within the database Tool, and is meant to document data sources and data creation methods.

Table 7.0 Update Schedule

Asset Type	Update Schedule
Water lines, stormwater, sewer lines, water treatment facility, wastewater treatment facility	Data update after replacement projects are completed
Roads	Data updated after pavement or reconstruction projects, especially important to update water, sewer and stormwater system work done at the same time in those worksheets
Vehicles	Update when a vehicle is added to or removed from the fleet
Streetlights, traffic lights, way-finding signs	Update when replaced
Buildings, City Land, University Settlement	Update when projects are completed or property ownership changes
Bridges, Stormwater MS4 inspections	Update asset when inspected under regulatory programs

7.1 ADDITIONAL DATA CAPTURE

There are assets in the database Tool for which additional information is needed. Most often there will be a need to update data as specific work projects or inspections are completed, as in Table 7.0, however specific needs for data capture identified include entry of hydrant replacement and re-numbering information that currently exists in handwritten form. The hydrants data provided in the database Tool is taken from the City of Beacon Access Database compiled by Lanc and Tully Engineering and Surveying PC. The information is outdated due to a hydrant replacement project between 2002 and 2009. The database Tool includes a worksheet of hydrant locations to assist the City in updating this information.

The City may also consider compilation of data that was not available to Delaware Engineering during the creation of the Tool, such as the department assignment for each vehicle, and area of each parking lot, for example.

7.2 STANDARDIZATION OF UNITS

There may also be discrepancies in the units of measure between different assets. The data in the Tool came from several different sources, and lengths, for example, may be in different units, such as feet or yards. Users should be aware of this. It may be best to keep each asset in the same units as the original data set for integration of lists created from the Tool with the original data. The City will have to determine how best to standardize units in the future.

8.0 DATABASE DOCUMENT CONTROL AND CHANGE HISTORY

Document Control includes maintaining databases and using proper distribution and revision procedures to maintain quality. Maintaining a history of changes and updates made to the

database Tool will be part of document control by keeping a record of what changes are made when and why. A Change History form is included as the first worksheet of the database Tool.

One or two City staff should be assigned primary roles in maintaining the database Tool and determining who may edit the database and upon what occasions. These people will maintain the current “Master” of the database Tool on the City network and any back-up media. When someone is assigned a database update duty, they will be the only one making changes at that time. Each Department should submit update needs and request updates (hydrants replace under X project, vehicles disposed of, etc.).

When changes are made the database Tool keepers will ensure that the Change History is completed (see Table 8.0 for example) and return the new database to Lock for use. While Locked, no changes can be made to the database Tool, however, the filtering and sorting functions will not be available.

Other departments may take a copy of the Tool for their own use but the copy will be renamed something different from the Master File name so that it is not returned to Master File status by mistake. For example, “Asset Tool Beacon 08062019”, may be copied to the DPW and called “DPW Asset Tool copy 08062019”. Thereafter that copy is the DPWs. Not to be confused with current Master File.

Table 8.0 Change History Form Example

Database Name	Date of Change	Purpose of Change	By Whom	New Name
Asset Tool 08062019	original		Delaware Engineering	
Asset Tool 08062019	11/05/2019	Update Hydrant data	DPW John Smith	Asset Tool 11052019

Change History Sheet Instructions

Database Name – current database that is being updated, current date in name “City of Beacon Asset Tool 08062019”

Date of Change – when are changes/updates made

Purpose of Change – list updates to what asset or tab, why (for example, Vehicle Tab updated to include purchase of new vehicles, or removal of vehicles from inventory)

By Whom – person and department making change

New Name – rename the database with date of change, example “City of Beacon Asset Tool 11052019”

