

This tool is designed to help engineers, surveyors, and others prepare their data for the City of Durham Public Works Department’s as-built digital submittal process.

For more information about the as-built digital submittal process, please consult the City of Durham’s Reference Guide for Development.

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Check Your Data Files

1. Select the **Utility Data** to be checked.
2. Load the **Feature File**.
3. Load the **Pipe File**.



Pipe files require a relevant feature file in order to be accepted. Occasionally, however, a feature file may not require a pipe file. These are typically restricted to situations where only a service connection (e.g., water meter or sewer cleanout) is being provided.

Please see the discussion below about how to format the data file.

4. Click the **Check Files** button.
5. Any errors flagged by the check will appear in the **Results Box**. The map will zoom to the relevant area and display the features and lines with the associated **IDs**. Sanitary sewer will be displayed as **Green**, stormwater as **Orange** and water as **Blue**.
6. A print option will appear if there are any errors. Any text in the results window can also be selected and copied.
7. In addition to running the checker, please use the Zoom to Structures functionality to review where the data displays on the map and whether the correct pipes and structures are connected.

Data File Requirements

- Required file format: .txt, .csv
- Valid headers must be the first line of the file. All items in the header must be included, and following data must be formatted to match the order provided in the header. Valid headers are listed in the table below.

Valid Headers for Data Files

Sewer Features	ID,Type,Northing,Easting,Elevation,Invert,Material
Sewer Pipes	ID,Size,Material,USId,DSId,USI,DSI,Slope,Length
Stormwater Features	ID,Type,Northing,Easting,Elevation,Invert,Material
Stormwater Pipes	ID,Size,Material,USId,DSId,USI,DSI,Slope,Length
Water Features	ID,Type,Easting,Northing,Elevation,Description
Water Lines	ID,Size,Material,FeatureID1,FeatureID2

Note: If you correct a header in a file you must reload the corrected file.

- If data is missing for a particular field leave it blank. For example, data for a sewer cleanout, which do not require inverts, should be included like this:

ID,TYPE,EASTING,NORTHING,ELEVATION,INVERT,MATERIAL

CO-31,CLEANOUT,2011302.64,813072.53,308.1,,PVC

Note: ‘absent’ invert data is represented by the commas that precede and follow the place where the invert data would go. 0 will be interpreted by the program as an error.

- Do not include any special characters or units of measure e.g., %, “, feet, Ft, N/A, NA, or LF.
- Accepted material abbreviations for the checker match those shown in the tables below and can also be found in the current Reference Guide. Any materials that deviate from those values will be flagged as an error.

Valid Materials for New Sanitary Sewer Infrastructure

Material	Code
Ductile Iron	DI
Fiberglass Reinforced Polymer Mortar	FRP
High Density Polyethylene	HDPE
Polyvinyl Chloride	PVC
Precast Concrete	PRECAST
Reinforced Concrete	RC

Valid Materials for New Stormwater Infrastructure

Material	Code
Concrete Block	CONB
Corrugated Aluminum	CA
Corrugated Metal	CM
Ductile Iron Pipe	DI
High-density Polyethylene	HDPE
Polyvinyl Chloride	PVC
Precast Concrete	PRECAST

Valid Materials for New Water Infrastructure

Material	Code
Copper Pipe	CU
Ductile Iron Pipe	DI
Polyvinyl Chloride	PVC
Prestressed Concrete Cylinder	PCC

Check Control Points

1. Enter the Northing and Easting values into the text boxes in the left-hand pane.
2. Click the **Check** button.
3. If the Northing or Easting value is out of range, a pop-up box will appear for confirmation of the appropriate value.
4. If the Northing and Easting values are both in range, the map will zoom and center on a red circle added to the map to represent the control point.

Description of Updates

Additions made to Version 4 (January 2021)

- The web map has been renamed 'Public As-Built Digital Data Map'
- Splash screen updated to include recent updates to the checker.
- Back end updates made to bring parity with the internal checker.
 - The 'Check Data' panel can now be collapsed.
 - A 'Search' function has been added.
 - A 'Clear Results' button has been added.

Additions made to Version 3 (July 2020)

- Note added to the splash screen about compliance with Materials outlined in the Reference Guide.
- Updates to the code as it relates to material, type, and headers
- Link changed for the Reference Guide
- Functionality to check control points added

Additions made to Version 2 (January 2020)

- All features are symbolized even if the XY data are considered out of range.
- Original ID, Type, and Material values are displayed (as opposed to post-processed data used for analysis)
- Text in results window are now selectable.
- Print function added.
- Zoom to structures functionality added.
- Alert regarding clearing the data files is removed. Data files are maintained by default when the Utility Type is changed.
- Help updated.