

**The Buzzards Bay Stormwater Collaborative  
Illicit Discharge Investigation Trailer**



**Town of Dartmouth Report**

**August 2022**

**MassDEP MS4 Municipal Assistance Grant Program 2020-2021**

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**Collaborative Partners:** Massachusetts Maritime Academy, Buzzards Bay National Estuary Program and the municipalities of Bourne, Wareham, Marion, Mattapoisett, Fairhaven, Acushnet, Dartmouth, and Westport.

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## Dartmouth IDDE Report

Illicit Discharge Detection and Elimination Field Work during May 3<sup>rd</sup> through May 7<sup>th</sup> of 2021 and May 23<sup>rd</sup> through May 25<sup>th</sup> of 2022.

This report summarizes the findings from the Buzzards Bay Stormwater Collaborative discharge investigation under the 2021 MassDEP Stormwater Investigation Trailer grant and the 2022 MassDEP Stormwater Investigation Trailer grant. A total of 20 storm drain networks were examined for illicit connections. Each storm drain network is a collection of connected structures that discharge to one point and is referred to by the facility ID of the outfall pipe. Each network reflects the stormwater catchment in which the structures collect stormwater and runoff. The purpose of an IDDE is to detect issues that do not comply with the MS4 permit for stormwater discharges. As partners with the town, this report is an internal document for informational purposes only. It includes recommendations of possible actions to address identified issues.

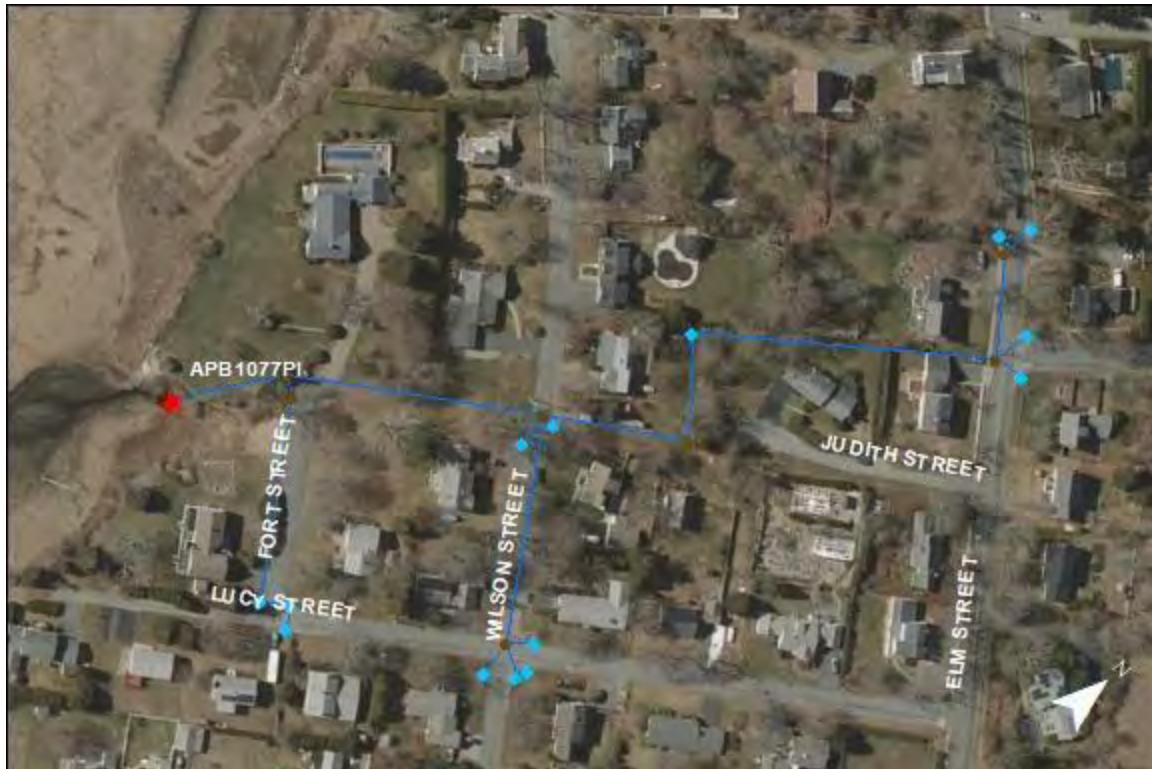
Within the networks surveyed, each structure was opened by the DPW and inspected for evidence of illicit connections. Any indications of odors, unusual colors, excessive trash or debris, sheens, suds, or structural issues were recorded. Each pipe entering the structure was recorded for size, type, and invert from the rim. Dry weather flow and standing water in the structure were also recorded. Direction to adjacent structures were verified and pipes with no apparent connection were checked with a camera or other method to best determine the situation. In areas with potential for a sewer cross connection the camera was used to inspect the pipe. Additionally, a few water samples were collected and analyzed for various parameters.

Some general observations for all the catchments visited: catchbasins are well maintained and clean; roadways and sidewalks are mostly free of pet waste; there were multiple structures that were in need of repair; the public that stopped by to chat are generally concerned for the environment.

The most significant feature observed during the investigation were multiple sump pump connections found in several catchbasins. Sump pumps and yard drains are acceptable under the MS4 permit and local policy provided that only groundwater is pumped into the storm drain network. Most sump pump connections were not running so no samples could be collected. There was one suspicious catchbasin on Faraday Street. Its specific locations is included below. An outreach effort on proper use of sump pumps is recommended. This could be done with a newspaper editorial as a cost effect approach to appeal to individuals willing to correct their own illicit connections. Other sump pump issues would need to be addressed on a case-by-case basis when discovered.

The data collected was used to update the Buzzards Bay National Estuary Program stormwater GIS. Despite the mapping of the Westport drain network that the team started with before the investigation, there were opportunities for some corrections and additions while going through the investigation process connecting pipes. Updated maps depicting the inspected networks are included below. Red stars indicate outfall pipes, light blue squares show catchbasins, brown circles show drain manholes, and blue lines show connecting pipes. Issues and recommendations are included in the text below each map.

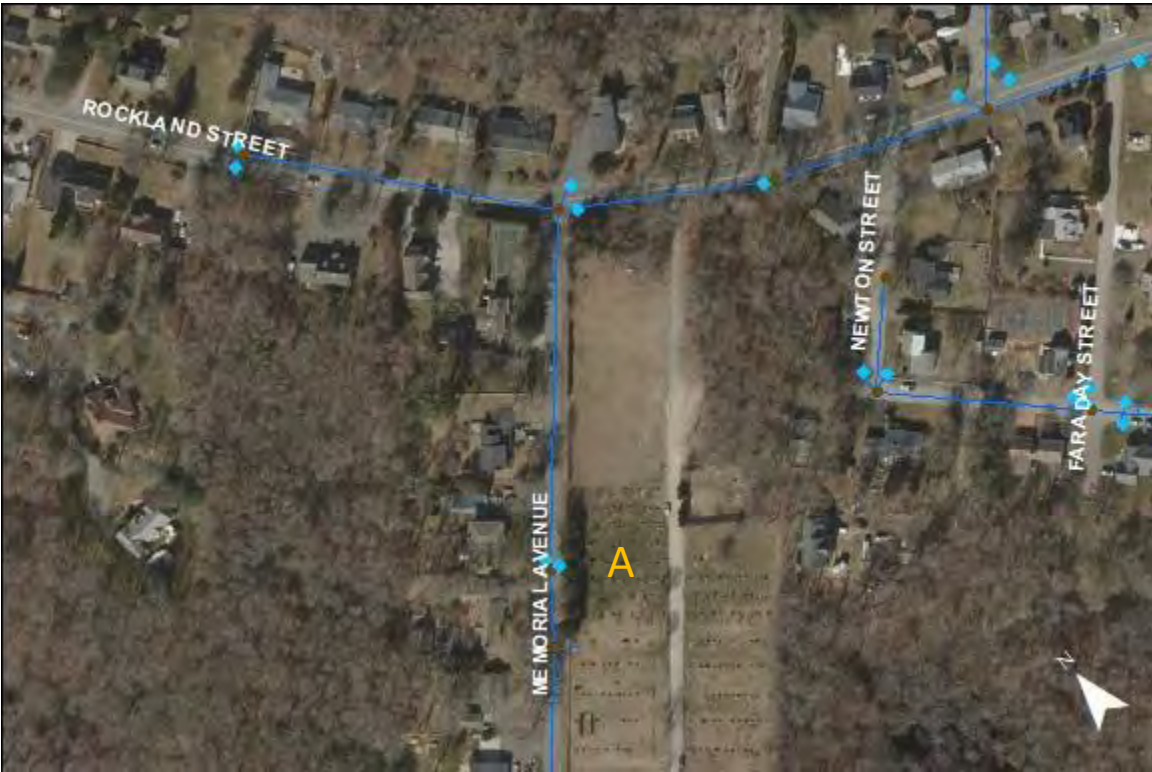
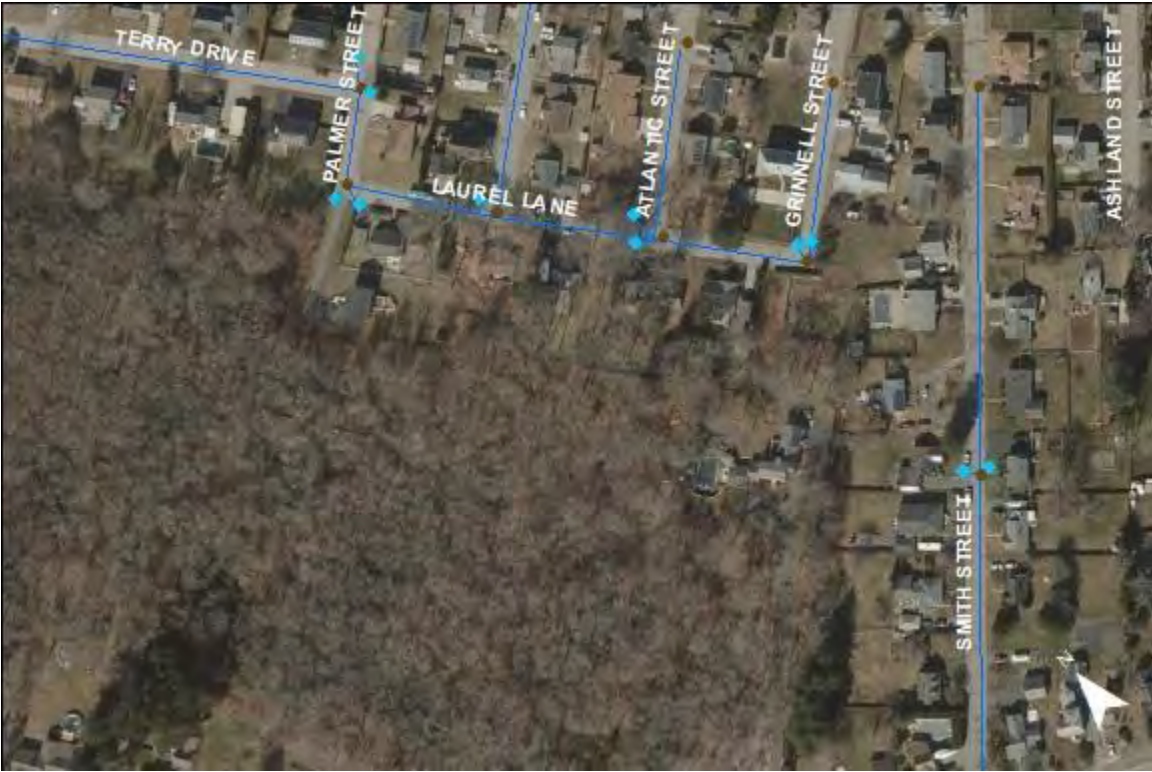
Below are the observations made for each of the 20 storm drain networks. Each drain system is referenced by the facility ID of the outfall pipe.



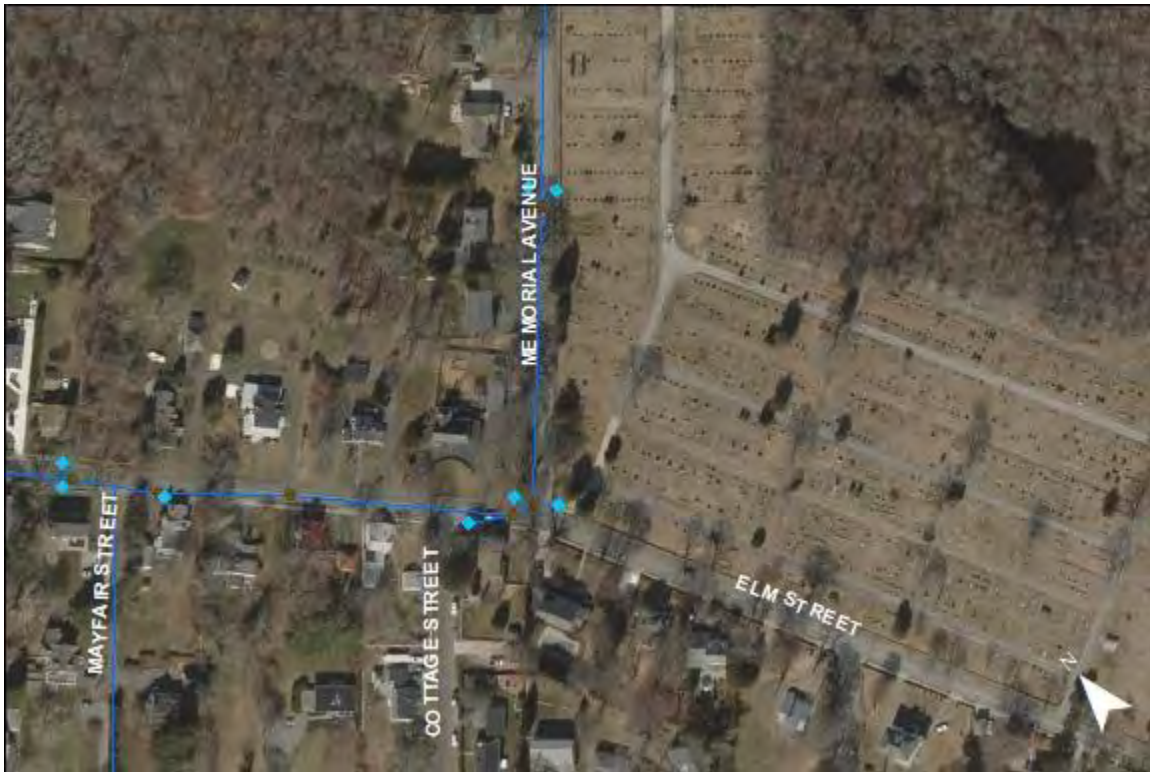
APB1077PI- Judith Street: No issues found; the structures on Elm Street were not inspected due to traffic.



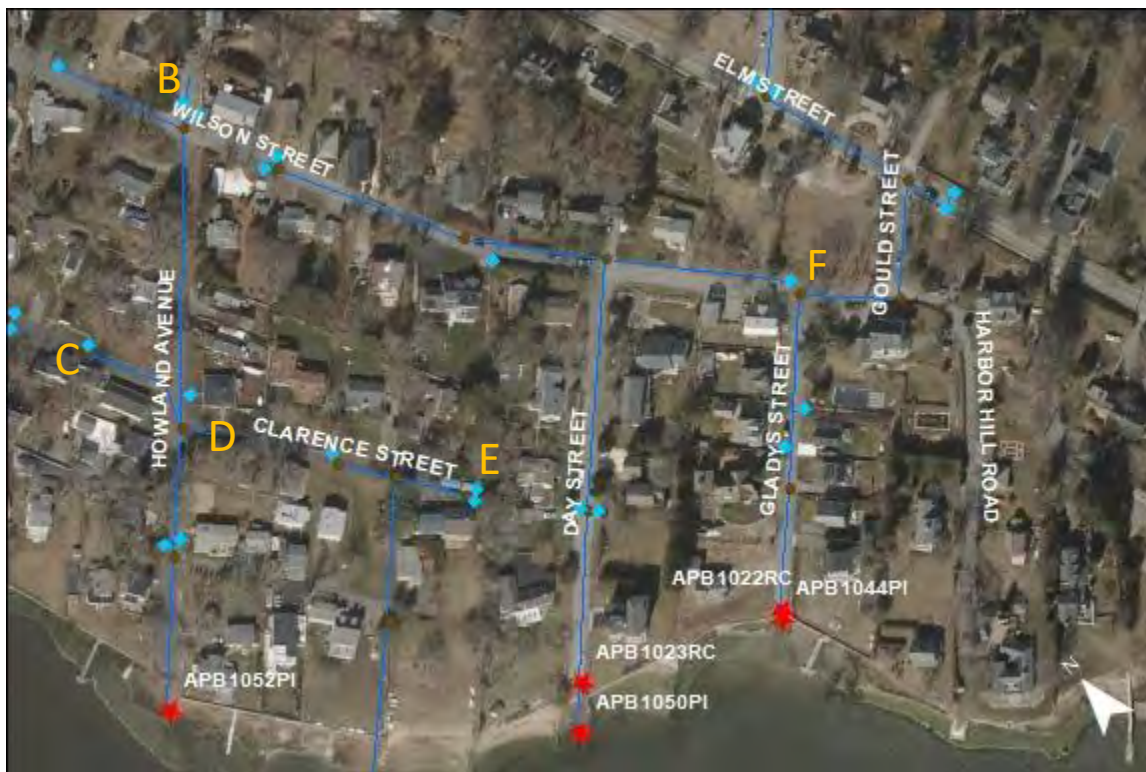
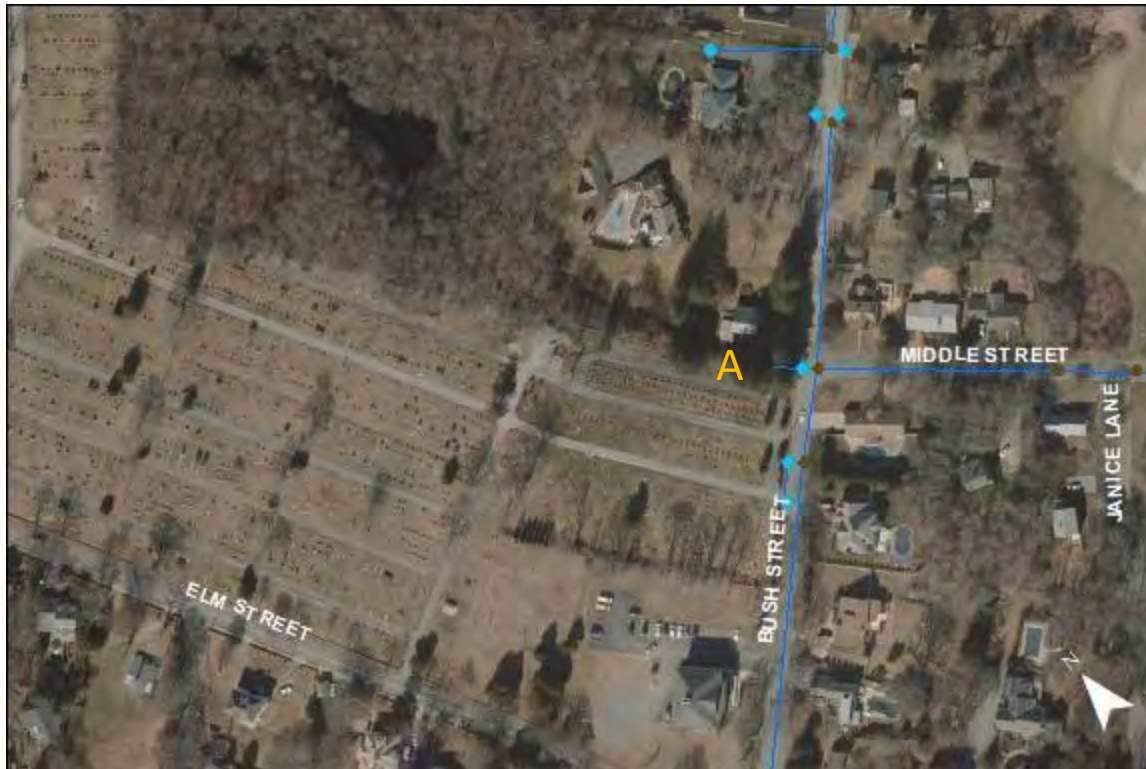
APB1079PI- Highland Street: No issues found; there is a buried manhole in front of 64 Wilson Street.  
APB1075PI- Delano Way: At point A there is a catchbasin slightly sunken; further inspection by DPW is recommended. APB1072PI- Shipyard Lane: No issues found.



See caption next page.



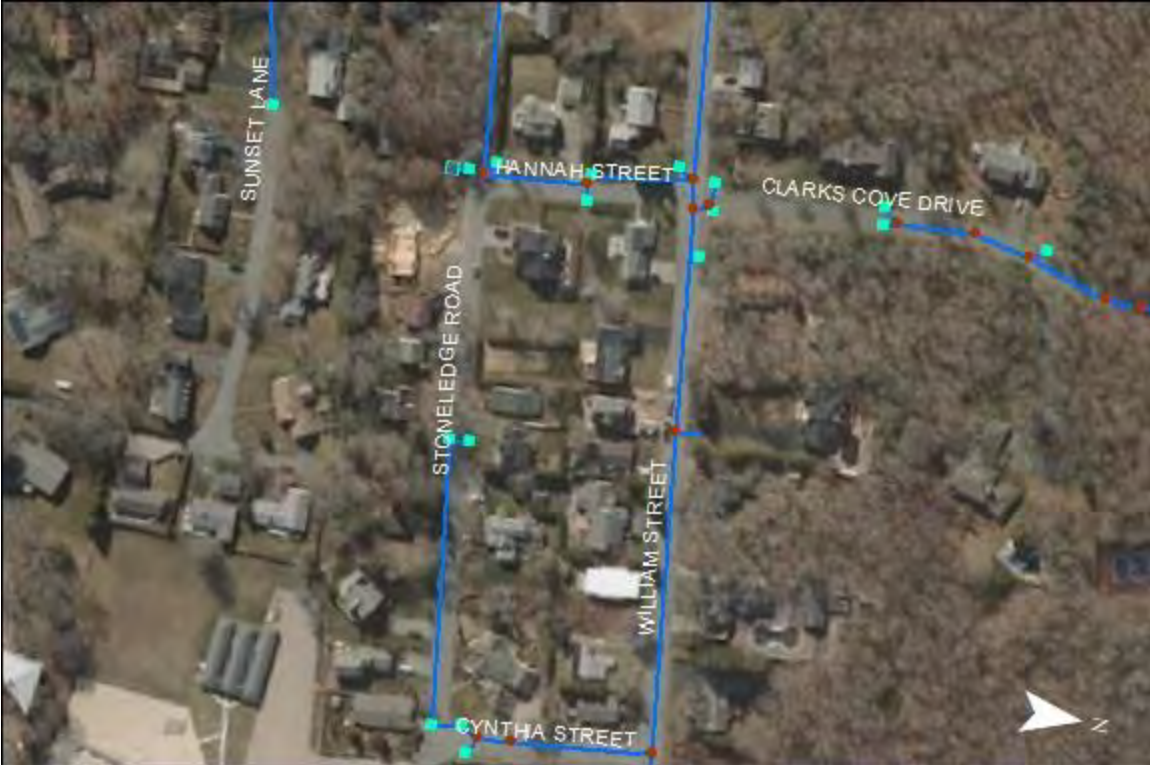
APB1059PI- Captains Lane: No significant issues found. There is a pipe connected to the catchbasin across from 21 Memorial Avenue, shown at point A. The pipe is coming in from the direction of the graveyard. Further investigation is needed to determine its origin. There is a buried manhole on Captains Lane, shown at point B. Please note the structures on Elm Street and Rockland Street could not be inspected due to high traffic. APB1056PI- Cottage Street: No issues found. APB1052PI- Howland Avenue: No issues found.

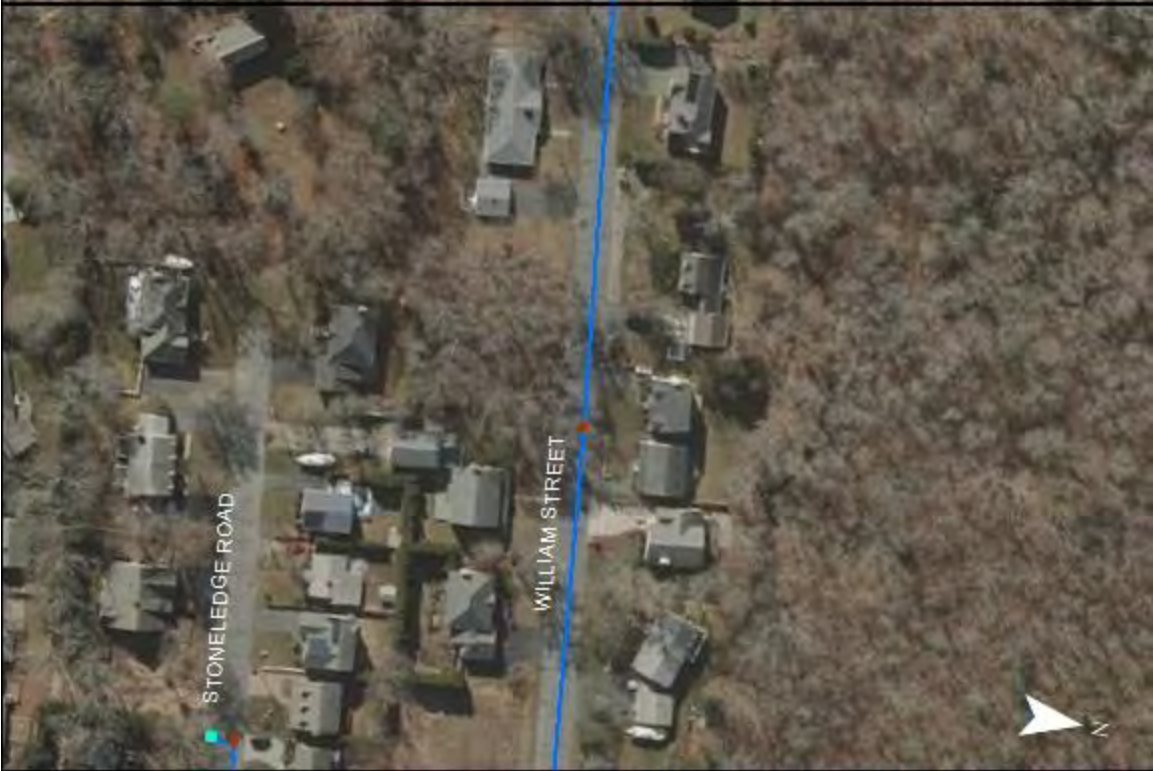
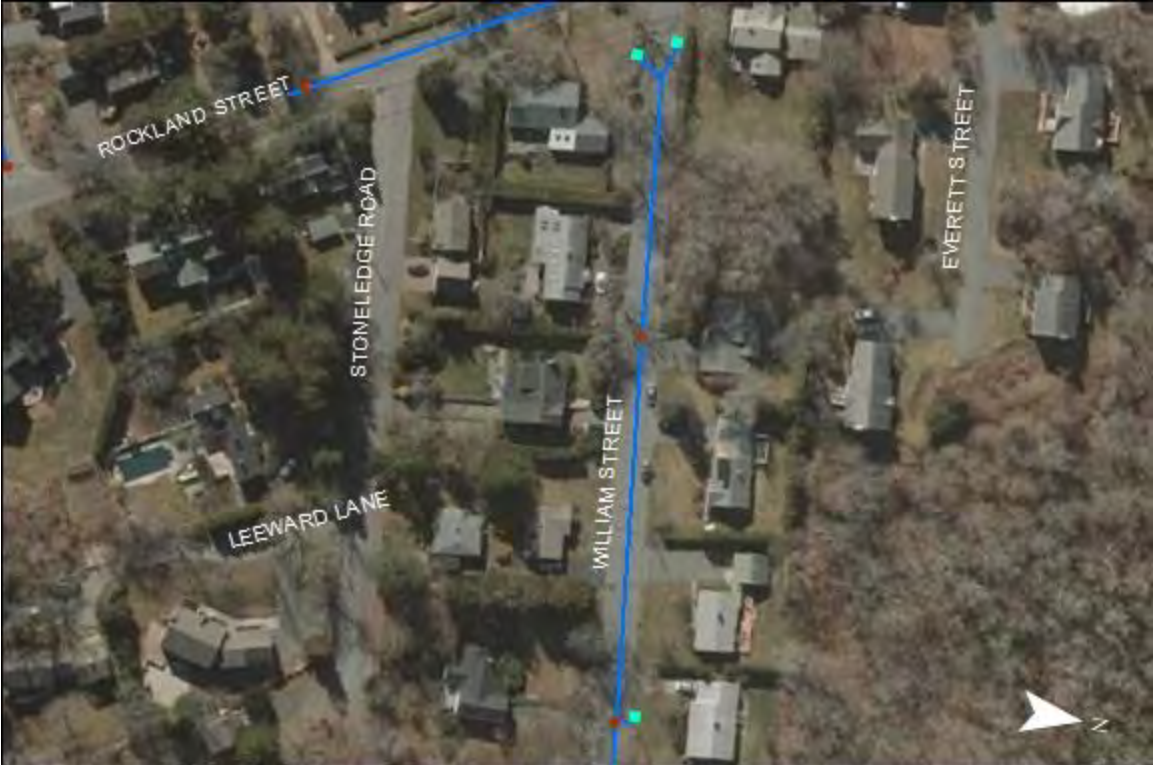


APB1022RC and APB1044PI- Gladys Street: No issues found. There is a pipe connecting to a catchbasin at the intersection of Bush Street and Middle Street, shown at point A. Further investigation needed.

APB1052PI- Howland Ave: No significant issues found. There is a buried manhole at the North side of Clarence Street connecting to the manhole on Howland Avenue, shown at point C on the South side of Clarence Street there is a pipe entering the manhole at point D. It is suspected that it is no longer in use.

APB1050PI- Day Street: No issues found. There is a pipe entering the manhole at the intersection of Wilson Street and Gladys Street, shown at point F. Further investigation needed. The catchbasins at point B and E are sinking. Further inspection by DPW is recommended.



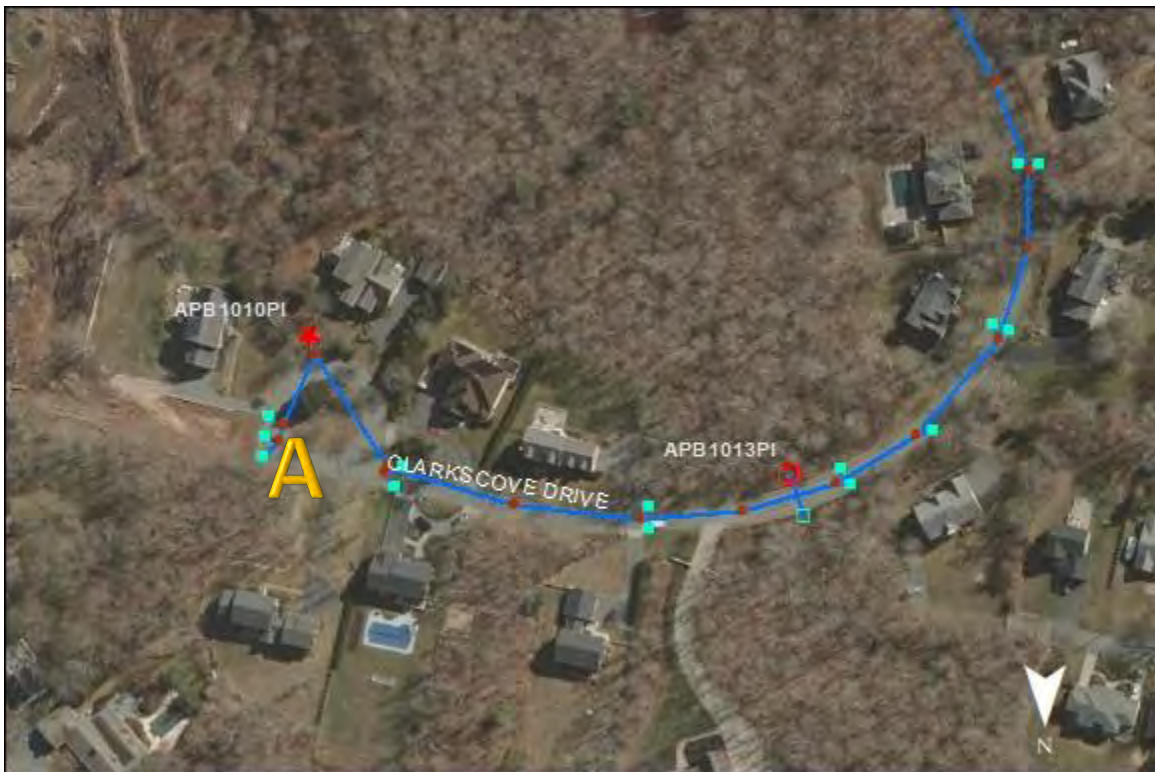
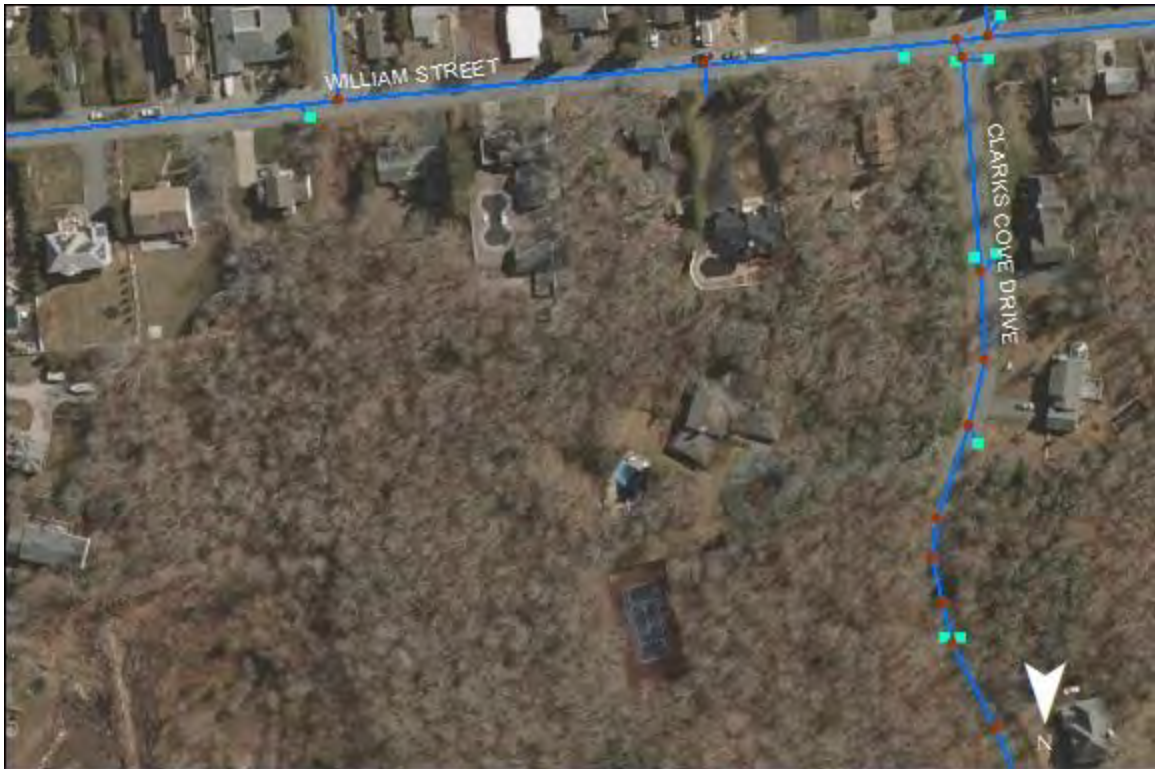




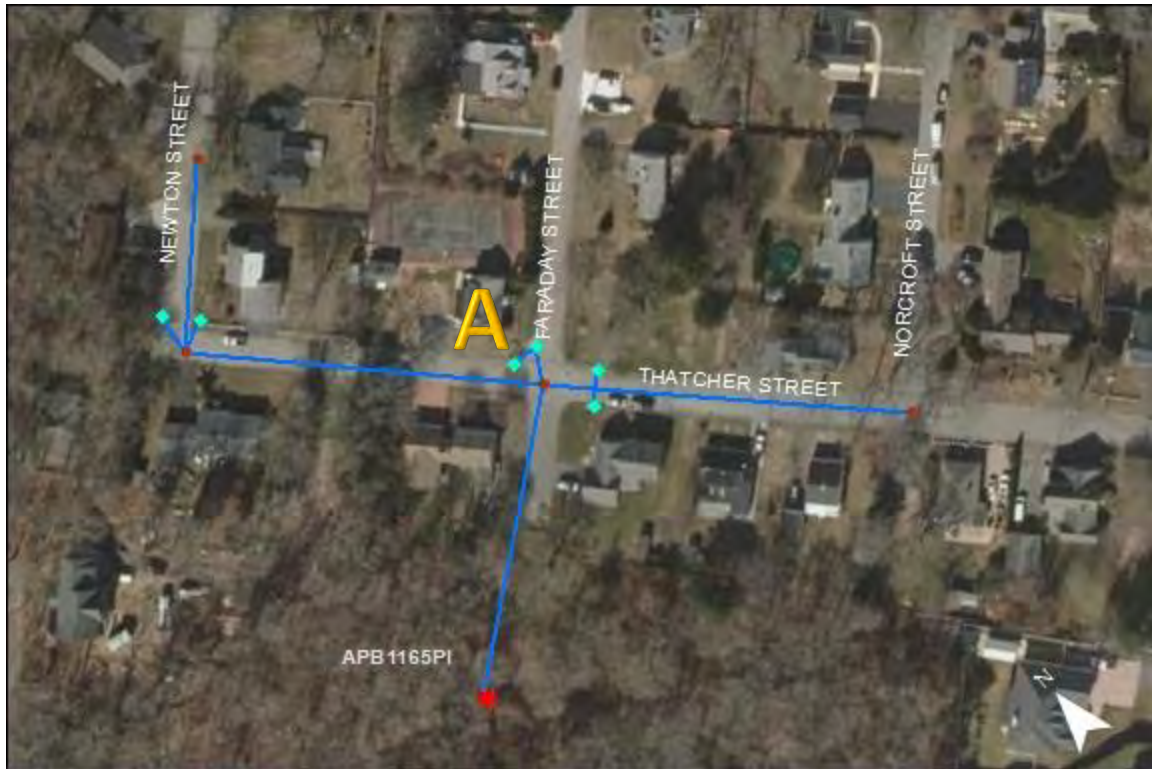




APB1002PI- William Street: At points A, B, and C pipes enter the structures. Their origins are unknown. Further investigation is suggested. The catchbasin at point D has begun to sink. Preventative measures are recommended.



APB1010PI- Clarks Cove: No significant issues found. The manhole at point A is paved over.



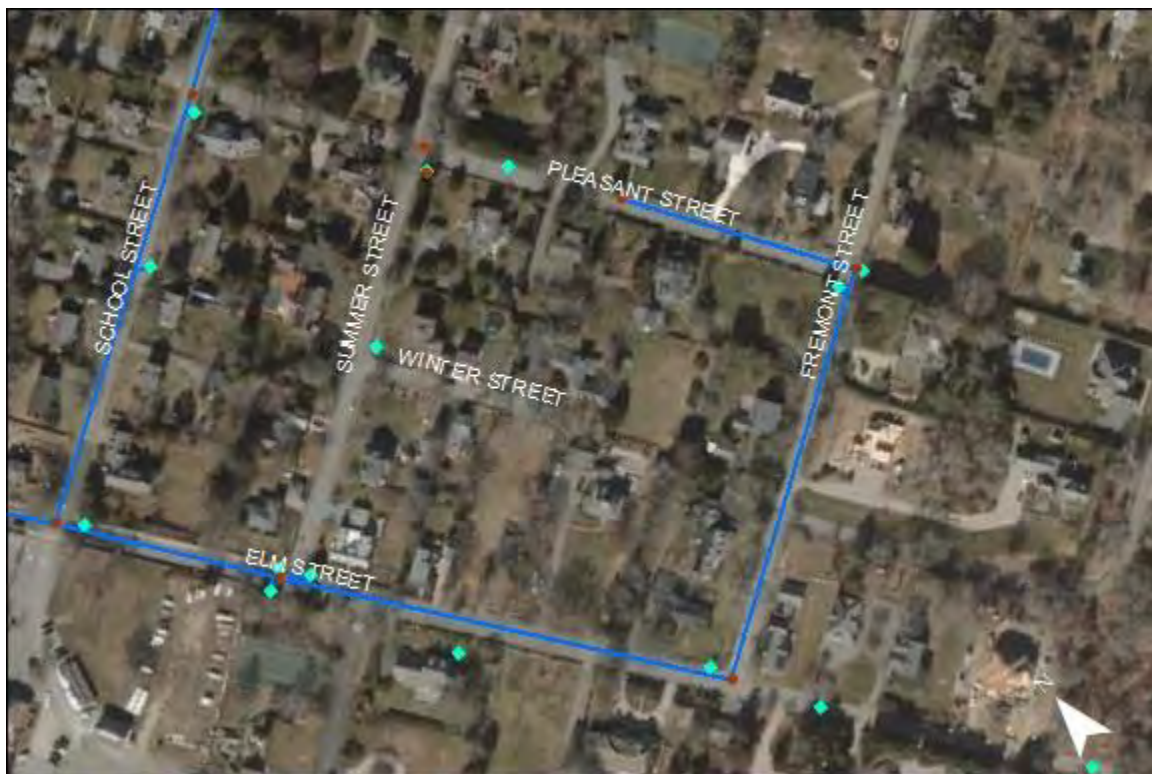
APB1165PI- Thatcher Street: At point A the catchbasin had grey water in it. There was a sump pump present. The catchbasin should be revisited and its sump water tested.



APB1038PI and APB1003RC- Water Street: No issues found.



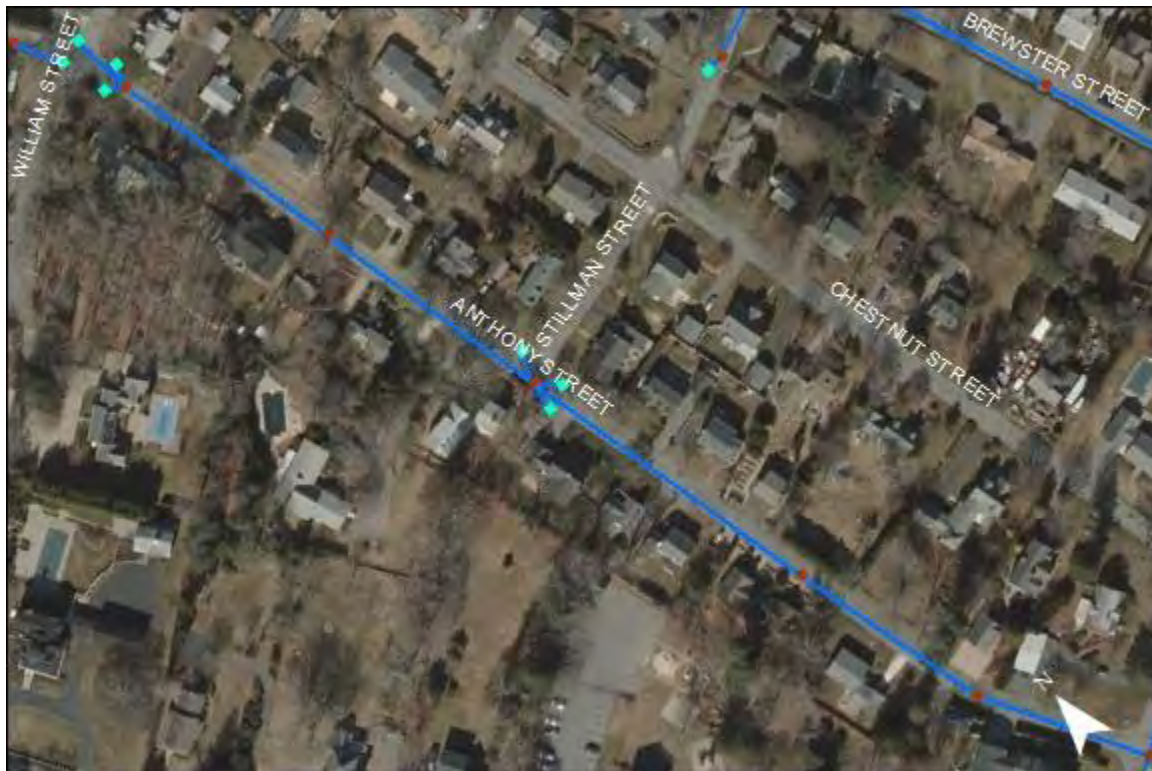
APB1033PI (1/7)-Elm Terrace and Harbor Street: At point A There are multiple pipes entering the manhole. Their origin and destination are unknown. Further investigation is recommended. At point B and C there are additional pipes with no known origin. Further investigation is recommended.



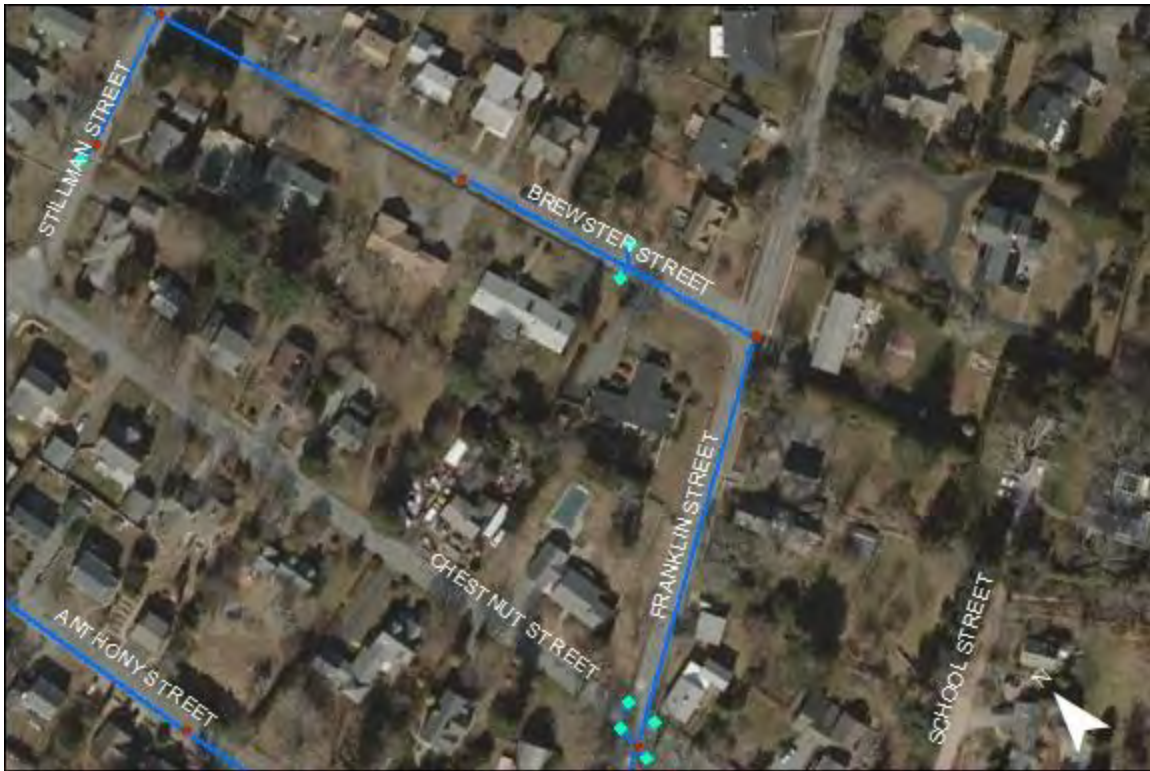
APB1033PI (2/7)- Elm Street, School Street, Fremont Street, and Pleasant Street: No issues found.



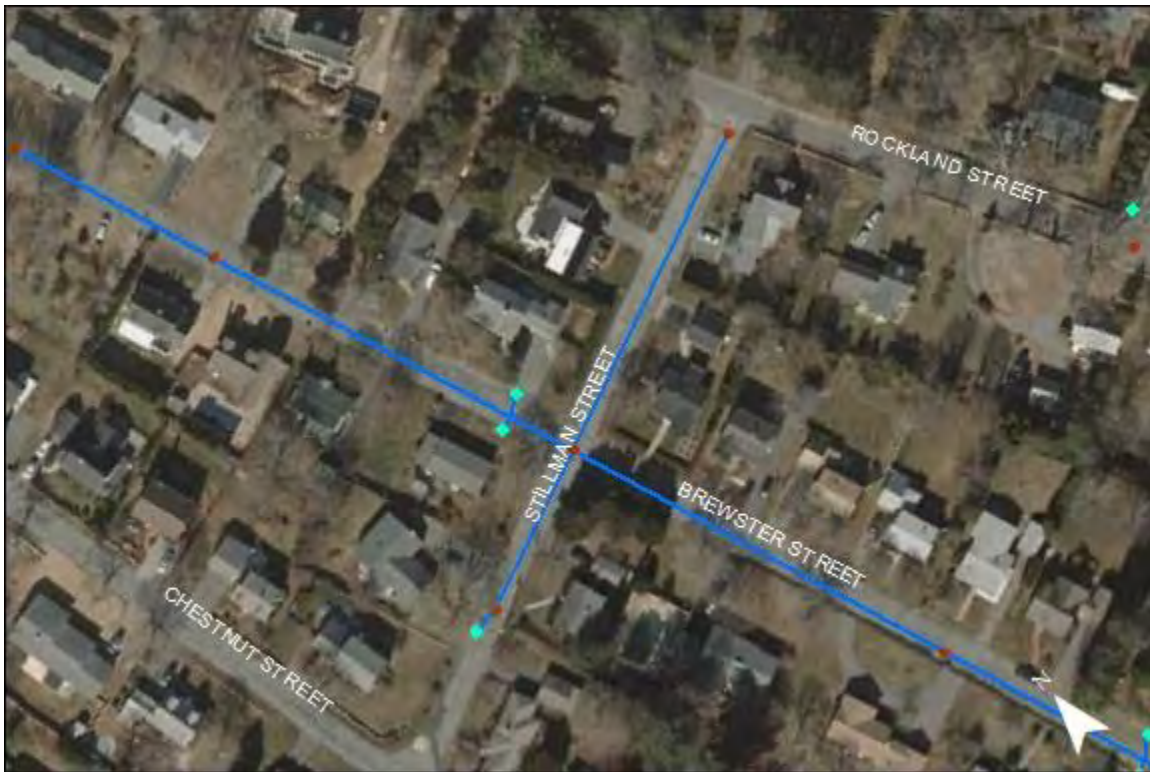
APB1033PI (3/7)- School Street, Franklin Street, and Anthony Street: The catchbasin and manhole at point A are showing signs of erosion. Further maintenance is recommended. At point B the pipe connecting the two catchbasins is clogged. Further maintenance is recommended.



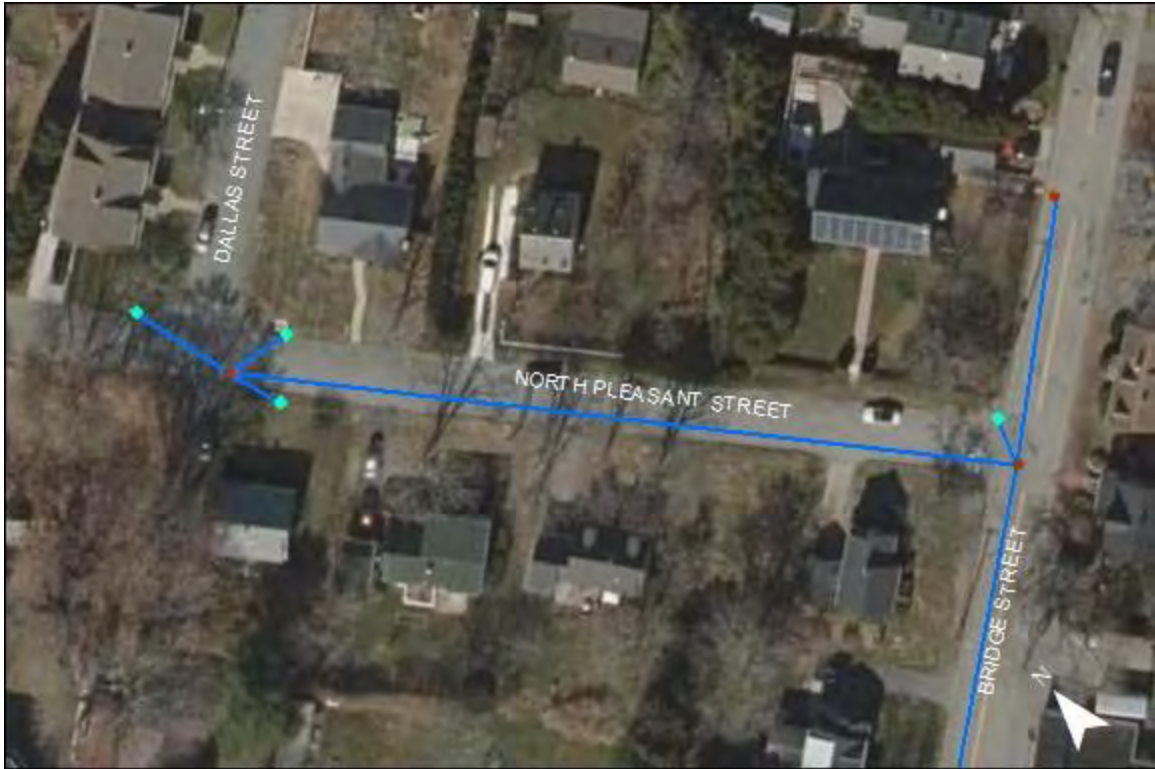
APB1033PI (4/7)- Anthony Street: No issues found.



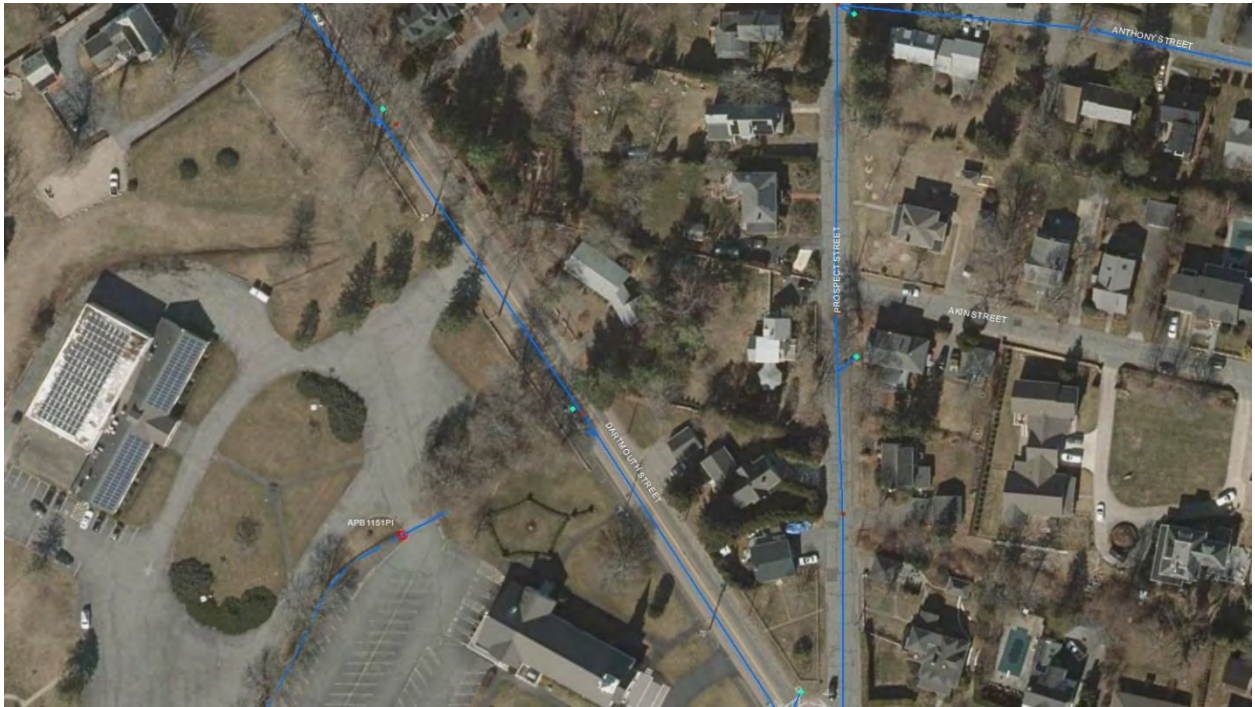
APB1033PI (5/7)- Franklin Street and Brewster Street: No issues found.



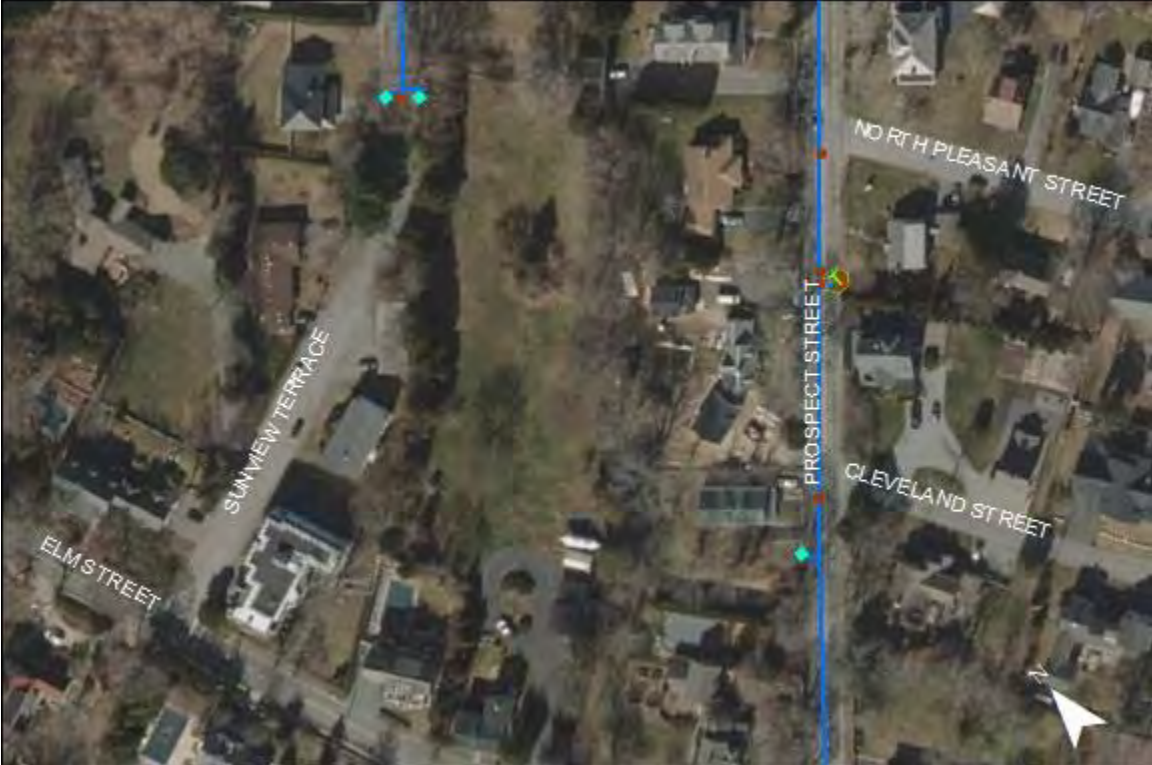
APB1033PI (6/7)- Brewster Street and Stillman Street: No issues found.

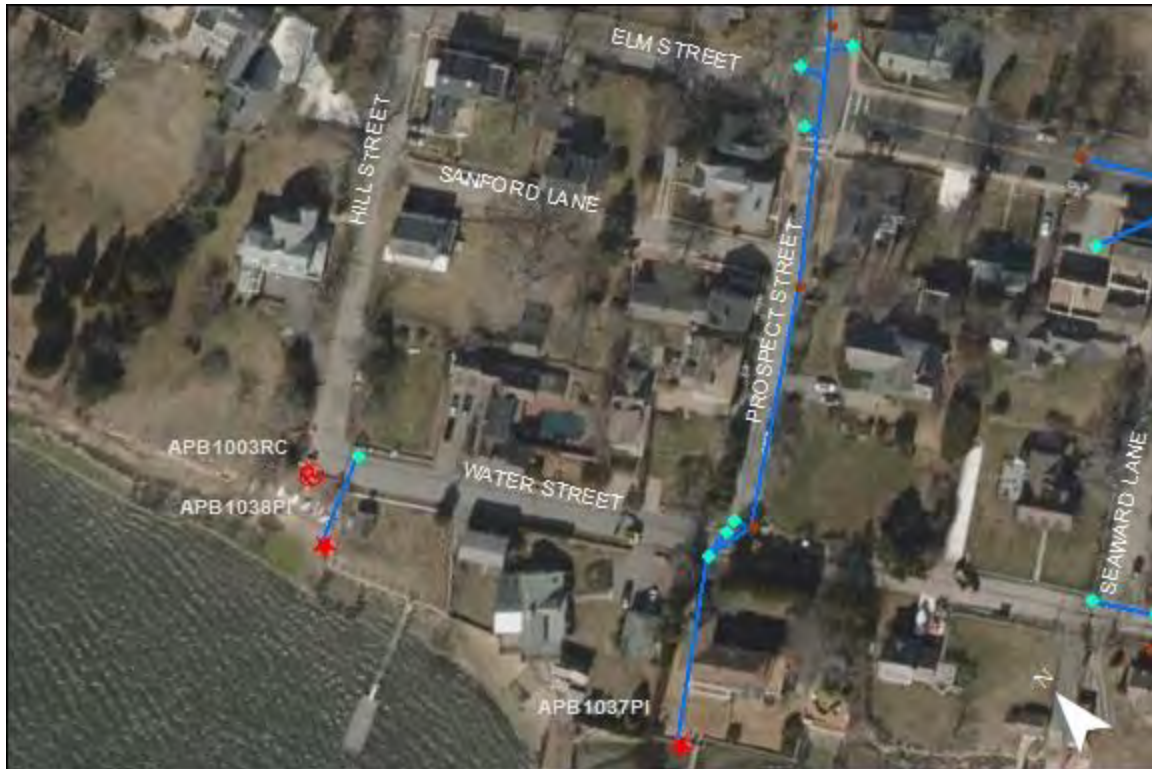


APB1033PI (7/7)- North Pleasant Street- No issues found.

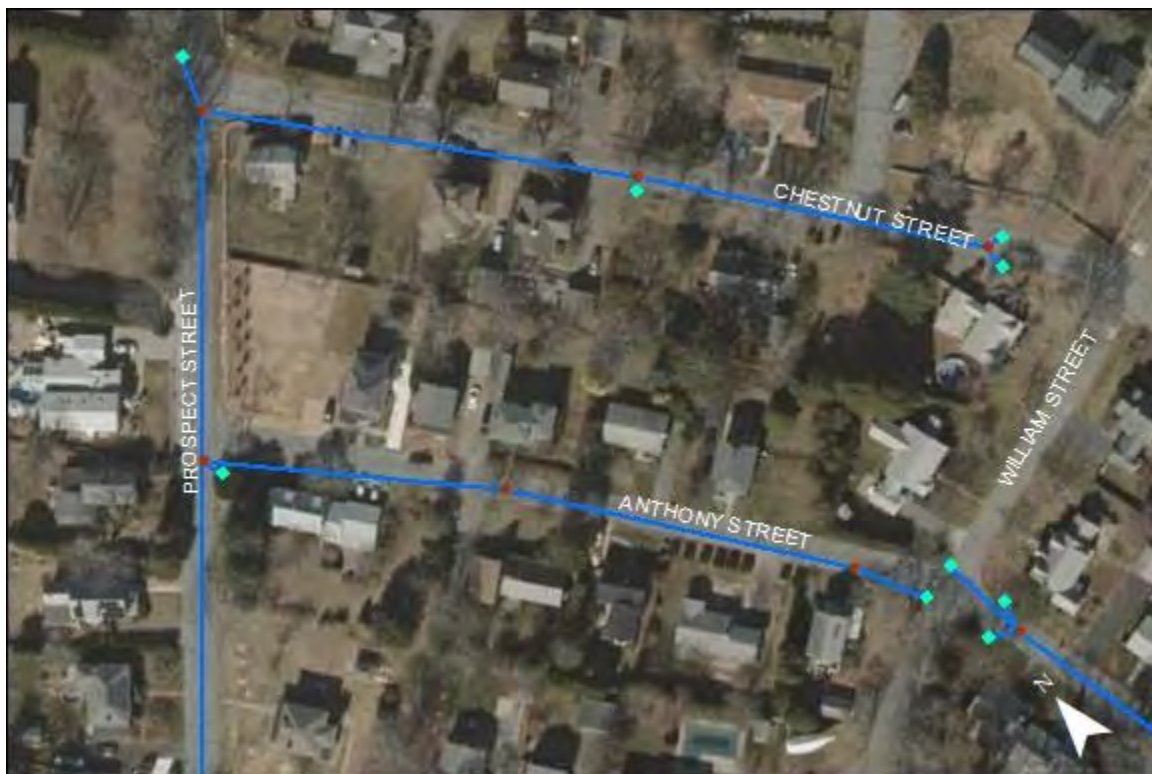




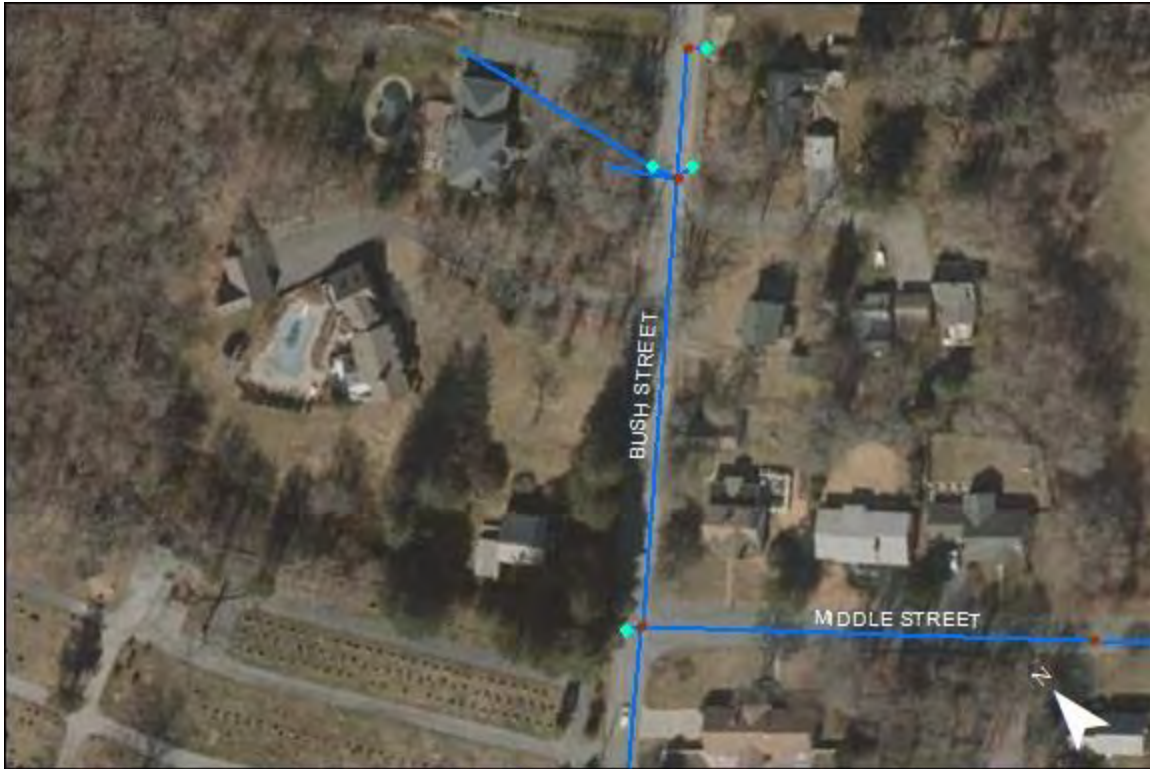




APB1037PI (1/3)- Prospect Street: No issues found. Catchbasin at point A is beginning to sink. Preventative measures are recommended. At point B a pipe enters the catchbasin its origin is unknown. Further investigation is suggested.



APB1037PI (2/3)- Prospect Street, Anthony Street, and Chestnut Street: No issues found.



APB1037PI (3/3)- Middle Street and Bush Street: No issues found. Bush Street South of Middle Street still needs to be completed.