11.0 GIS UPDATE

This Chapter presents the procedures and results of field investigations and data collection activities to update the City of Newport's GIS mapping for use in hydraulic modeling and to provide additional sanitary and drainage information to the City of Newport.

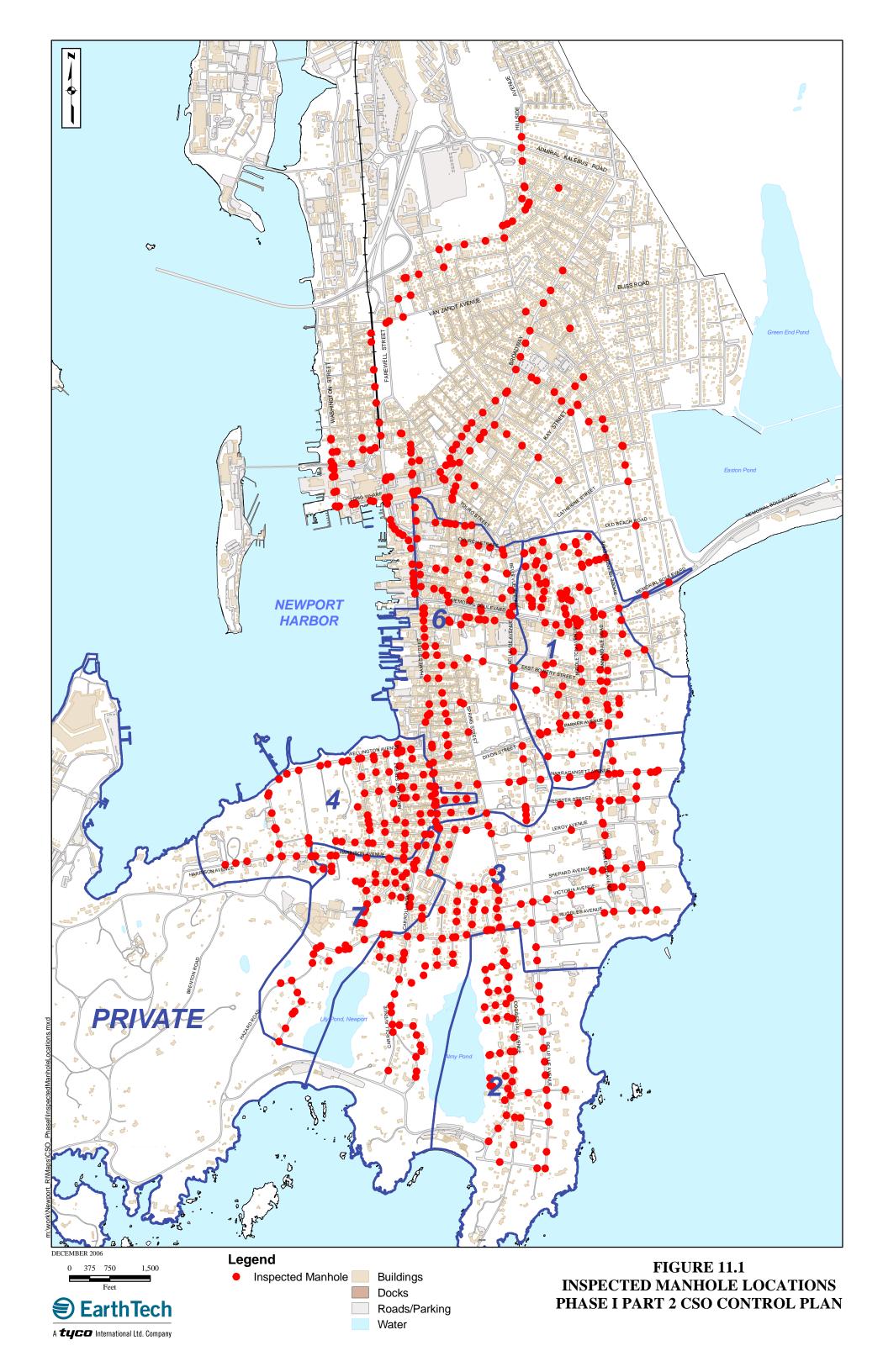
The City of Newport's GIS mapping currently contains "Horizontal" data which includes the location of manholes, catch basins, select outfalls, and associated topographical information. The GIS information also contained some topographic features including select swales and detention areas.

GIS Update

The update of information to the GIS mapping was obtained in 5 phases as follows:

- Addition of "Vertical" or depth to invert information for all Phase I manhole inspections
 within the priority sanitary sewer Catchment Areas 1, 3, 4, and 7 and select sanitary
 sewer manholes on the Thames Street Interceptor. The total number of manholes
 inspected was 408.
- Additional vertical manhole information from 403 sanitary sewer manhole inspections performed by ADS between November and December 2006 throughout the City of Newport
- Corrections to the existing horizontal information provided by Earth Tech Operations personnel at the Newport Pollution Control Plant
- Street address information for all buildings in Catchment Areas 1, 2, 3, 4, and 7.
- Sanitary sewer and storm drain structure information obtained during field visits and during the windshield survey of the 4 priority catchment areas
- Addition horizontal information for sanitary sewer and drainage structures from previous GPS ground survey.

Additional vertical information from the sanitary sewer manholes includes number of inlets and outlets, manhole material, invert elevation, pipe material, and overall condition. The locations of all manholes inspected in the City of Newport as part of the CSO Control Plan for the Wellington CSO Facility are shown on Figure 11.1.



Corrections to the existing GIS mapping provided by Earth Tech Operations includes incorrectly identified manhole structures, incorrectly identified storm drain structures (e.g. curb inlets noted as drain manholes), additional sewer or drain structures, and correction of misconnected or misdirected pipe segments.

Address information includes correlation of building address information with the building footprints shown on the mapping. A small number of catch basins that were not previously located in the original Newport GIS mapping were also added.

Conclusion

All information obtained in the GIS update will be submitted to the City electronically as soon as the reconnection of improperly connected public inflow sources has been completed and added to the maps. A copy of the updated GIS mapping will be provided to the City.