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WATER INFRASTRUCTURE PROJECT NARRATIVE

Background

The Dunstable Water Department (DWD) owns and operates a public water system that consists of two wells. The distribution system is pressurized using two buried 5,000-gallon hydro-pneumatic tanks. The well pumps operate to maintain pressure in the distribution system. The system serves a drinking water population of approximately 598 persons per day in the winter and 234 persons per day in the summer when school is out. The service area has 101 service connections which consists of 90 residential, 7 municipal (including the School), and 4 commercial/industrial users.

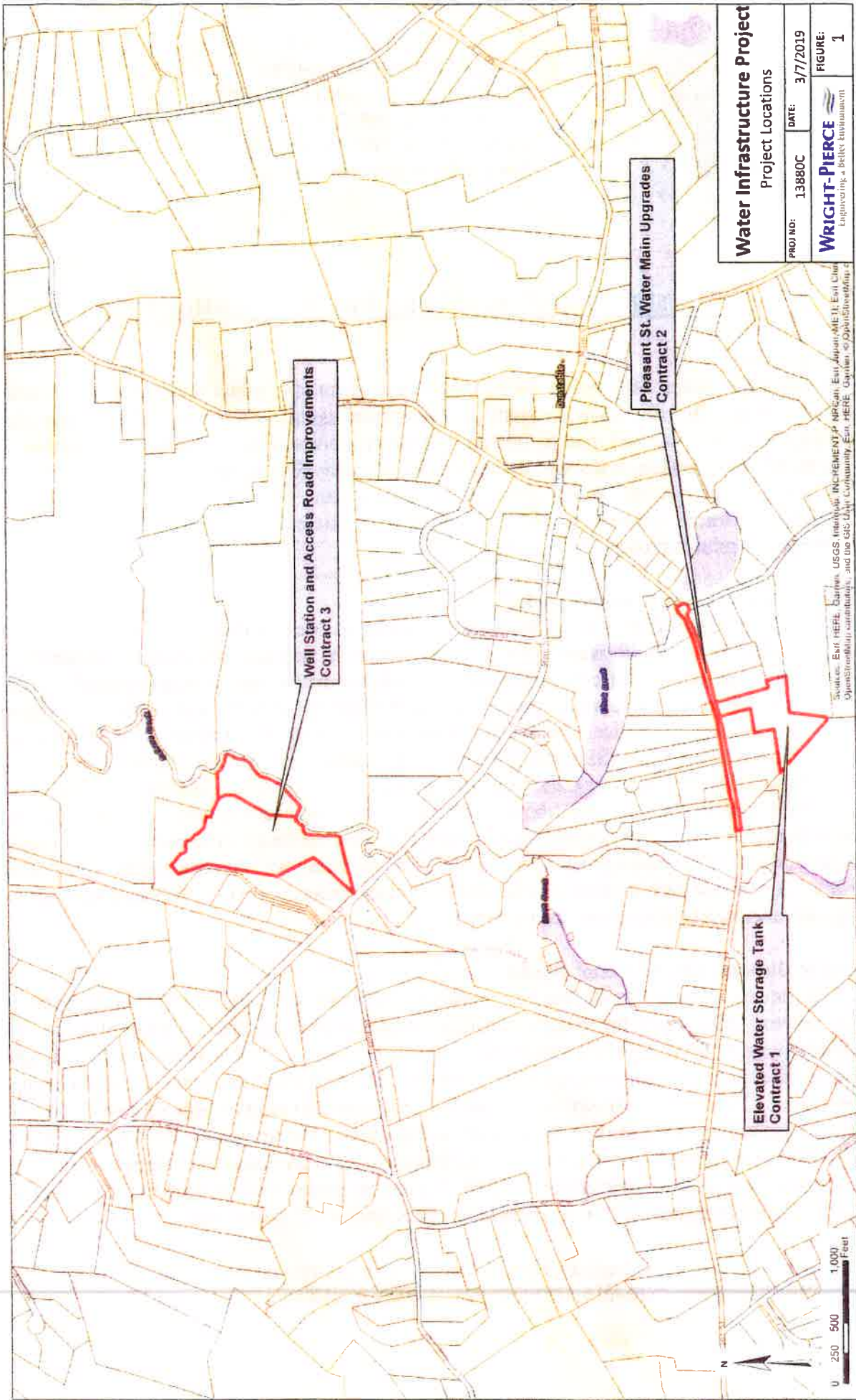
Public Health Issues/Consent Order

Most of the system infrastructure is over 100 years old and does not comply with current regulatory requirements for a public water system -with respect to storage, redundancy, sanitation, and emergency connection. Currently the reliability and water quality cannot be guaranteed, and public health and safety is threatened if there were to be a failure with the hydro-pneumatic tanks or corrosion system. A Notice of Noncompliance (NON) from the Massachusetts Department of Environmental Protection (MassDEP) based on the findings during their Sanitary Survey in June 2017. MassDEP subsequently issued an Administrative Consent Order with Penalty in May 2018. The Order requires the construction of a new water tank and replacement of water main (1800 linear feet and 12" diameter) along Pleasant Street (see attached map). The condition of the existing tanks is a potential serious threat to the public. The new tank will be constructed at 108 Pleasant Street. The project also includes access and control upgrades to the two well stations to properly regulate and manage flow from the two wells.

Project Budget and Financial Impact

The engineers estimate for all these improvements is \$2,495,000. The Town is being approved a low interest loan from the State's Drinking Water Revolving Loan Fund subject to voter authorization at Town Meeting. Assuming a 20 year term and a 2.6% interest rate, the first annual debt service payment is estimated to be \$160,000. Based on the municipal and school usage of the system, 25% of the debt service cost will be built into the tax rate going forward, this would result in an average increase of \$36 to residential taxpayers. The remaining 75% of the debt service cost would be passed onto the water users through a rate increase, the average increase for a residential rate payer is estimated at \$1,165. These cost impacts will not affect the tax rate/water rate until the fiscal year following completion of the project at the earliest.

The project will be considered at Annual Town Meeting as Article 19, on May 13, 2019 at 7 p.m. at the Swallow Union School and Question 1 at the Annual Town Election on May 21, 2019.



Water Infrastructure Project Project Locations

PROJ NO: 13880C DATE: 3/7/2019

WRIGHT-PIERCE
Engineering & Design Solutions

FIGURE:
1

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Beijing), Swisstopo, IGN, etc., and the GIS User Community. Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS User Community.