

TOWN OF HILLSBOROUGH
ENGINEERING STATUS REPORT
FEBRUARY 2012

Kenneth P. Keel, PE
919-732-1270 ext 75, kenny.keel@hillsboroughnc.org

PROJECT	BUDGET	STATUS
WWTP Discharge Compliance	-	We were compliant with our discharge permit limits in December. Our sludge management program is in good condition.
WWTP Expansion Construction	\$ 18,894,640	Construction is underway. \$201,000 in savings has been identified for electrical components and piping restraint. Construction photos are being posted on the <i>Hillsborough NC Water & Sewer Utilities</i> Facebook page. The construction completion date is March 21, 2014.
Sewer Spill Summary	-	The Town had no reportable sewage spills in January, and only one in 2011. There have been no reportable bypass events at the WWTP in 2012.
West Fork of the Eno Reservoir	-	The reservoir is about 1.6 feet below full, with approximately 379 days of supply remaining. We are currently releasing the minimum release for February, which is 3.5 cubic feet per second (2.26 MGD).
WFER - Completion of Wetlands and related permit requirements	\$ 1,120,000	Construction on the water quality impoundments modifications and planting of shrubs along the wetland banks is complete. Mitigation work at the Hatley farm site in Person County will begin soon. Some additional area will be required, which could cost up to \$200K, but different options that could greatly reduce or eliminate the cost are currently being evaluated. All of this work is required to bring us into compliance with our US Army Corps of Engineers (USACE) permit.
Lake Ben Johnston Dredging/Repair & WTP Backwash Pump Replacement	\$ 610,000	Permits to perform the dredging of Lake Ben Johnston will be attained in the coming months, with dredging and miscellaneous dam structure repairs to follow. Calculations need to be made to determine the exact conditions for the replacement backwash pumps, which will then be ordered (waiting on loan fund availability). Pump delivery is likely to take 8-12 weeks.
Total Trihalomethanes (TTHM) Compliance	-	The 4th Quarter 2011 testing was performed in mid-November. These results were 15 ppb higher than the 2010 4th Quarter, increasing our 4th Quarter average to 64 parts per billion, which makes our current running annual average increase to 51 ppb (annual average limit is 80 ppb). We were making some changes to our carbon feed system, which made us unable to feed carbon in November. That is the major contributor to our increase in TTHMs this quarter. The new carbon feed equipment is now installed and operational. The Town remains compliant with TTHM levels. 1st Quarter 2012 testing will be in mid-February.
Water Restrictions	-	No restrictions are in effect for Town customers, and no withdrawal restrictions due to the rate of flow in the Eno. Lake Orange was 31 inches below full as of December 28th, but is being maintained at that level to accommodate some rehabilitation work on the spillway. Otherwise, Lake Orange would be above this level.
Water System Flushing	-	The Spring water system flushing will be performed in March. The Fall flushing was completed in mid-October. 5,095,300 gallons were flushed during this cycle.
"Unaccounted-for" Water	-	Miscellaneous repairs have been proceeding. A water leak was repaired in Beckett's Ridge Subdivision in January.
Miscellaneous Water Projects	-	Most water work performed by our crews has been on the new water line on Exchange Park Lane (part of Orange Grove project).
Orange Grove Road Water Improvements	\$ 326,553	Construction is ongoing along Exchange Park Lane, with completion of Phases 1 & 2 (of 4) expected no later than August 2012. The bore under OG Road was completed in January. The package booster pump station will be ordered in early 2012, for installation in the Spring. Most of the construction will be performed by Town crews, with just the road bore and creek crossing contracted out. Additional funding will be needed in FY13 to complete the final 2 phases of the project.
Riverside & Crawford Water Improvements	\$ 200,000	Design work is complete, and permits being attained. Town crews will likely complete the construction work. New water lines, valves, and hydrants will be installed along Riverside Drive & Crawford Rd to replace aging infrastructure.
GIS Development	\$ 50,000	Work continues to fine-tune the data to ensure accuracy of buried features that could not be uncovered for locating. Work will continue in future FYs to keep the GIS up-to-date and tweak the data. Most repair needs that were uncovered have been addressed.
Sewer Rehabilitation & Repairs	\$ 500,000	Replacement of some sewer lines near Gold Park is currently underway. Evaluation of the Eno River Outfall is being scheduled. Additional sewer services in North Fairview will be replaced over the next few months, as well as additional sewer relining.
Elizabeth Brady PS Upgrade & Relocation	\$ 600,000	Bids will be opened on February 23rd, and a pre-bid meeting to be held on the 16th. We hope to have the Town Board award the construction contract at the March 12th meeting. We are seeking a construction loan to get this project underway, which will be available in March.
In-House Work (Trailer Construction)	-	Attached are photos of an equipment trailer which Richard Terry constructed from scratch to transport our new mini-excavator. It is an example of how our staff uses their skills and talents to provide for the needs of the Hillsborough Utilities Department.