Town of Pittsboro Wastewater Treatment System Improvements

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October 13, 2016 BOC Workshop

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Project Overview

- BOC workshop September 17, 2015 – discuss alternatives
- BOC resolution September 28, 2015 – Alternative 2 (Pump to Sanford and operate WWTP at existing capacity)
- Engineering Report/Environmental Information Document (ER/EID) submitted February 29, 2016 (Phased approach)
- NC DEQ/DWI comments June 17, 2016 (~ 4 months)
  - Population and flow adjustments (peak hour/day)
  - Interbasin Transfer (IBT), 2 mgd daily, 3 mgd peak day
  - Draft Sanford and Chatham Park agreements needed
- Submitted response to comments July 25, 2016
- Monthly meetings w/DWI initiated (August 25th and Sept 23rd)

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Projections (Year 2035)

- **Population Summary**
  - Pittsboro and ETJ Areas 16,345
  - Chatham Park 31,297
  - Total Projected 2035 Population **47,642**
- **Wastewater Flows**
  - Pittsboro and ETJ Areas, mgd 1.75
  - Chatham Park Wastewater Flow, mgd 2.66
  - Total Projected 2035 Wastewater Flow, mgd **4.41**

* *Note: Town currently supplies 3M 55,000 gpd reclaimed water*

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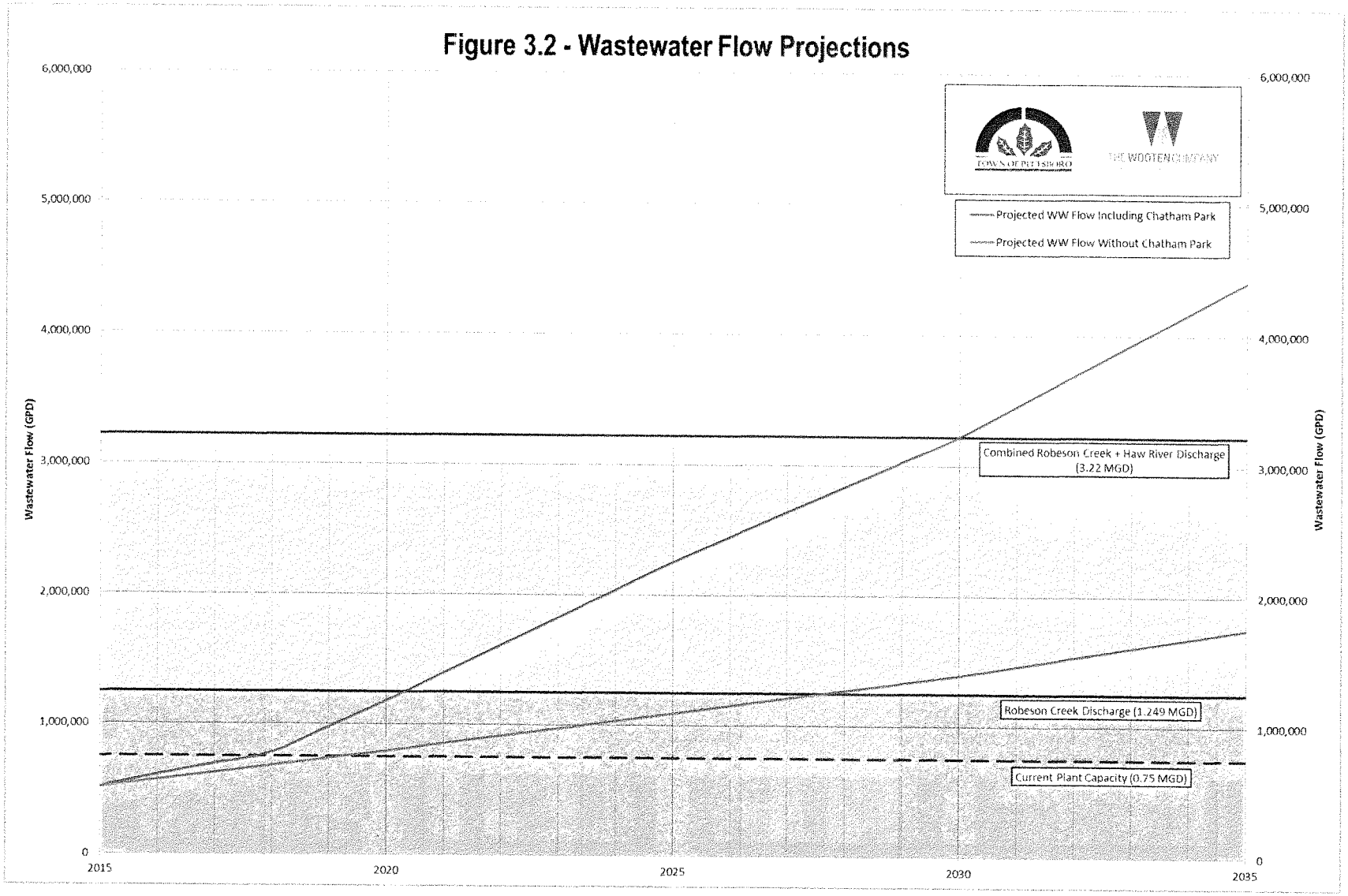
Wastewater Flow Projections



Alternative Change

- Change recommended alternative from Alternative 2 to a "Modified" Alternative 4
- Alternative 2 – Pump to Sanford and refurbish and operate WWTP at existing capacity.
- Alternative 4 – Original was Pump to Sanford and Decommission Pittsboro WWTP (take off-line)
- "Modified" Alternative 4
  - Pump to Sanford and increase pumping capacity to 3 mgd
  - Convert Pittsboro WWTP to equalization function (1.1 mg EQ volume)
  - Chatham Park (CP) build 0.25 mgd Decentralized Water Reclamation Facility (WRF), expandable to 0.5 mgd in future
  - Treated effluent from CP WRF pumped to Pittsboro WWTP for discharge and to supply reclaimed water to 3M

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Why the Change?

- Sanford Agreement
  - Pump all wastewater up to 2 mgd to Big Buffalo WWTP
  - More negotiating leverage on rates if sending all wastewater to Sanford
- Alternative 2 does not increase WWTP capacity
- "Modified" Alternative 4
  - Provides additional EQ capacity
  - Still supply 3M reclaim water (chlorination and pumping)
  - Take treatment units off-line (not demolish)
  - Capital Cost ~ $1.8 M less than Alternative 2
  - CP pay for portion of their own treatment directly (at their WRF)
- Does require Finding of No Significant Impact (FONSI)
  - Triggered by state regulations due to larger pump station
  - Some additional environmental work and FONSI process

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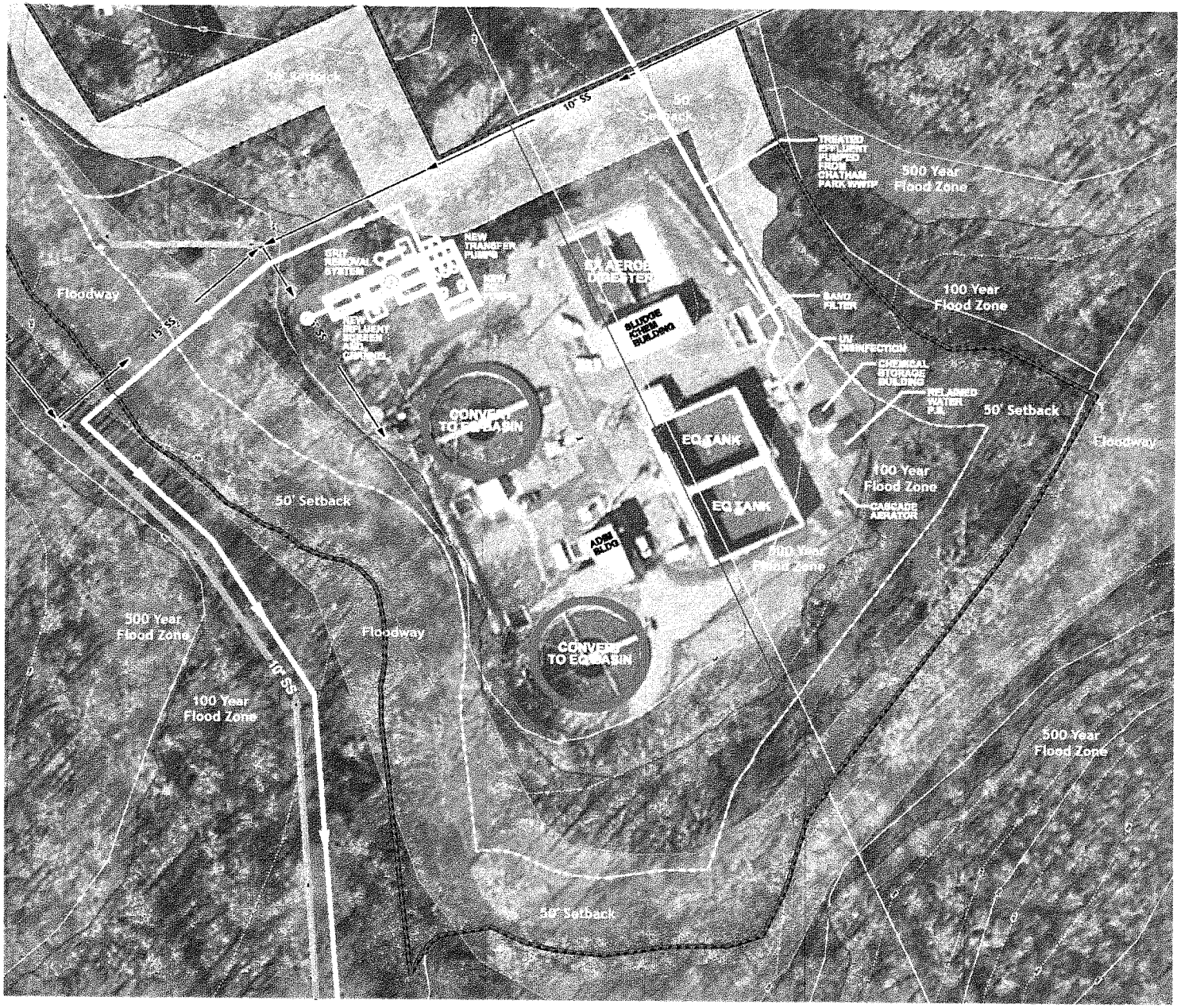

LEGEND

WWTP PROPERTY LINE

WWTP PROPERTY SETBACK

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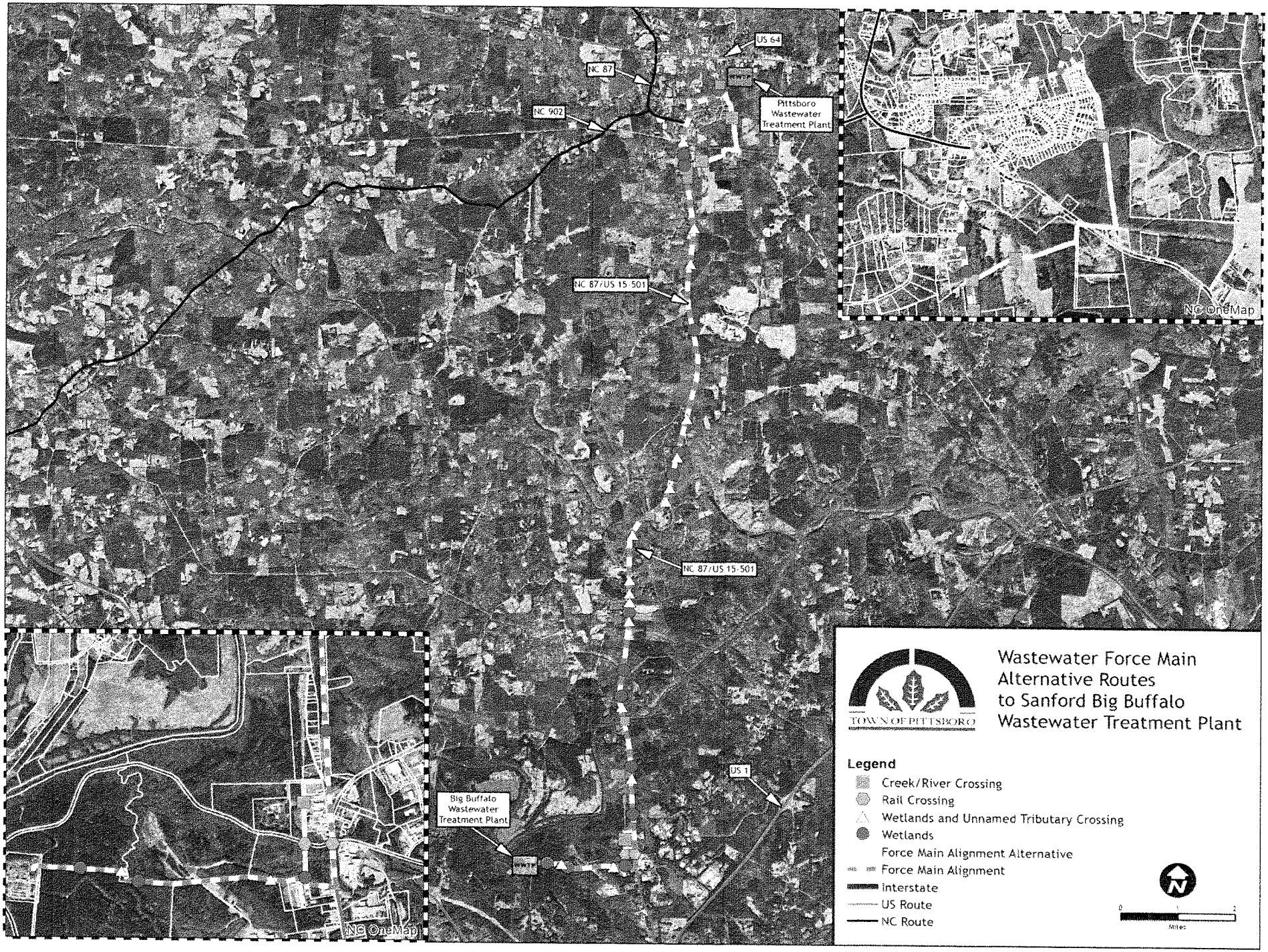
TOWN OF PITTSBORO

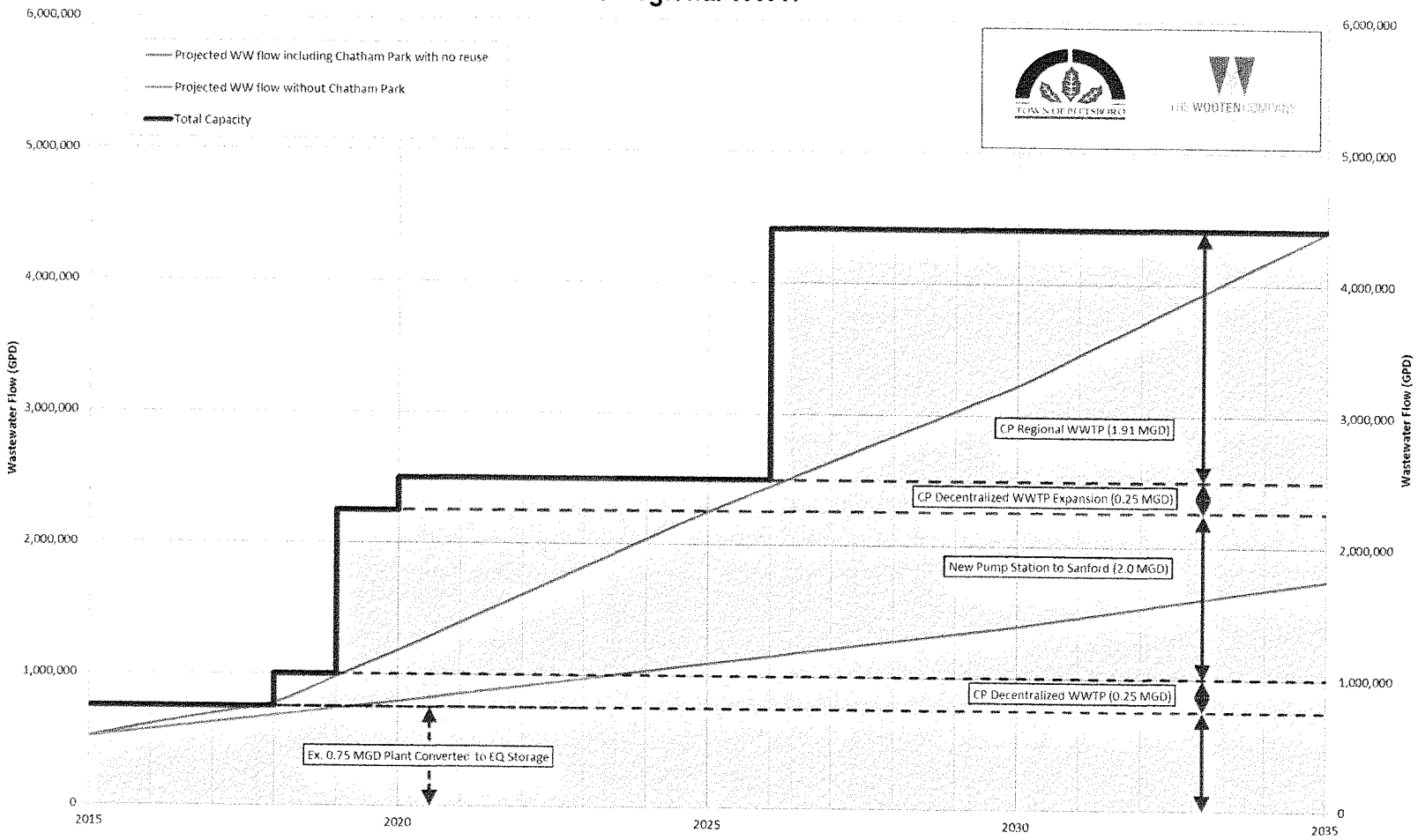
Figure 6.1
Pittsboro WWTP
Plan Aerial

Pittsboro ER / EID


US 64
NC 87
NC 902
Pittsboro Wastewater Treatment Plant
NC 87/US 15-501
NC 87/US 15-501
US 1
Big Buffalo Wastewater Treatment Plant
WWTP
NC OneMap
NC OneMap
TOWN OF PITTSBORO
Wastewater Force Main Alternative Routes to Sanford Big Buffalo Wastewater Treatment Plant
Legend
Creek/River Crossing
Rail Crossing
Wetlands and Unnamed Tributary Crossing
Wetlands
Force Main Alignment Alternative
Force Main Alignment
Interstate
US Route
NC Route
0
1
2
Miles

Capacity Graph

Figure 5.4 - Alternative 4: 2 MGD to Sanford, Ex. WWTP Conversion to Additional Equalization, Future Regional WWTP



CWSRF Funding

- Clean Water State Revolving Fund Intent to Fund
  - Administered by NC Dept. of Water Infrastructure (DWI)
  - DWI intent to fund letter received February 1, 2016
  - Maximum loan available for project = $21,585,000
  - Actual loan amount based on actual costs after Contractor bidding.
- Procedures
  - Project deadlines for ER/EID approval, design submittal, bidding and construction dates
  - Based on DWI meetings, Town to provide update on project schedule by November 1, 2016
  - Will be future monthly meetings with DWI

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Next Steps

- Board approve Modified Alternative 4 by resolution
- Submit new project schedule to DWI by November 1, 2016
- Perform additional environmental work for ER/EID
- Submit revised ER/EID to DWI and DWI start FONSI process (public notice period and address any comments)
- Submit draft Sanford agreement and CP financial arrangements to DWI for ER/EID approval
- DWI indicates design and ER/EID approval can occur simultaneously to keep project moving
- Start design in early November 2016

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Questions?

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