



February 22, 2016

TO: Mr. Chris Dunbar,
FROM: Kenny Treadway, Water Resources Engineering Department
SUBJECT: Water and Sewer Feasibility Study for
1114 Sedalia Crossing Lane Properties

Per your request the City has reviewed the above properties to determine the feasibility of providing water and sewer service. The majority of the referenced properties are within Greensboro's "Tier 2 Growth Area" on the Growth Strategy Map in the Comprehensive Plan. The proposed property will need to be approved for annexation before you can extend water and sewer. The remaining properties referenced within the Town of Sedalia will need to have an executed agreement approved between the two Municipalities, governing authorities allowing infrastructure to be extended into Sedalia's incorporated limits.

Water is currently available to the north of the properties as a 16" main along the north side of Burlington Road. An 8" main will need to be extended from the intersection at Palmer Road and Burlington Road going south along the east side of Palmer Road across the frontage of the property as shown on the attached map. Our water model indicates with a demand of 2,000 gpm we can provide approximately 2,000 gpm at 30 psi on the proposed 8" line along Palmer Farm Road. If your demand is higher than this you will need to contact us to determine how we can meet your demands. An 8" main will need to be extended from the existing main on Burlington Road going south on-site and possibly tie into existing 8" line on Sedalia Crossing Lane creating a loop feed. Easements for any water main that crosses private properties will have to be obtained and dedicated exclusive to the City of Greensboro for service. The engineer will have to demonstrate to Water Resources staff that the existing water main can provide adequate pressure and flow for both domestic service and fire protection for the proposed development.

Sewer is currently available to the south of the properties as an existing 21" sewer line outfall. A 12" sewer line will need to be extended from the existing manhole going north across Millstream Road and I-85 to the properties as shown on attached map. The developer will be eligible for oversizing reimbursement on the difference (10" to 12"). Easements for any sewer outfall that crosses private properties will have to be obtained and dedicated exclusive to the City of Greensboro for service. The engineer will have to demonstrate to Water Resources staff that the existing downstream sewers have adequate capacity to handle the projected flows from the proposed development.

The lift station that serves this area, Rock Creek, is at capacity; however upgrades by the City are in process. The upgrades are expected to be completed by 2016; however, until that time there is no additional capacity to allow this development to move forward.

Note that if the project moves forward then the engineer will need to start the Fire flow tracking and Sewer flow allocation processes with Water Resources staff. This study is only valid for a

period of one year from the date of this letter. A revised study will be required if flow conditions or development plans change other than what was originally stated in this study. We will recommend approval of these extensions at the owner / developer's expense, subject to funding availability (if applicable), approval by the City of Greensboro Planning Department for compliance with the Comprehensive Plan and final approval by the City of Greensboro City Council.

Please see the attached map for line routing and quantities. The estimated cost of providing service to this site is:

If we can be of further assistance, please call (336) 373-2055.

Sedalia Crossing Lane 1114 Properties

Estimated Total Construction Costs

Category	Importance	Item Description	Units	Unit Cost	Subtotal
Utility Crossings		16'' Bore & Encasement	120 LF	\$200	\$24,000
Water Mains		8'' Water Main	3,179 LF	\$52	\$165,308

Subtotal \$189,308

20% Engineering & Contingency \$37,862

Total Water \$227,170

Category	Importance	Item Description	Units	Unit Cost	Subtotal
Sewer Lines		8'' Sanitary Sewer	5,069 LF	\$72	\$364,968
Sewer Lines		10'' Sanitary Sewer	1,071 LF	\$80	\$85,680
Sewer Manholes		4' Sewer Manhole	15 EACH	\$2,600	\$39,000
Utility Crossings		16'' Bore & Encasement	402 LF	\$200	\$80,400

Subtotal \$570,048

20% Engineering & Contingency \$114,010

Total Sewer \$684,058

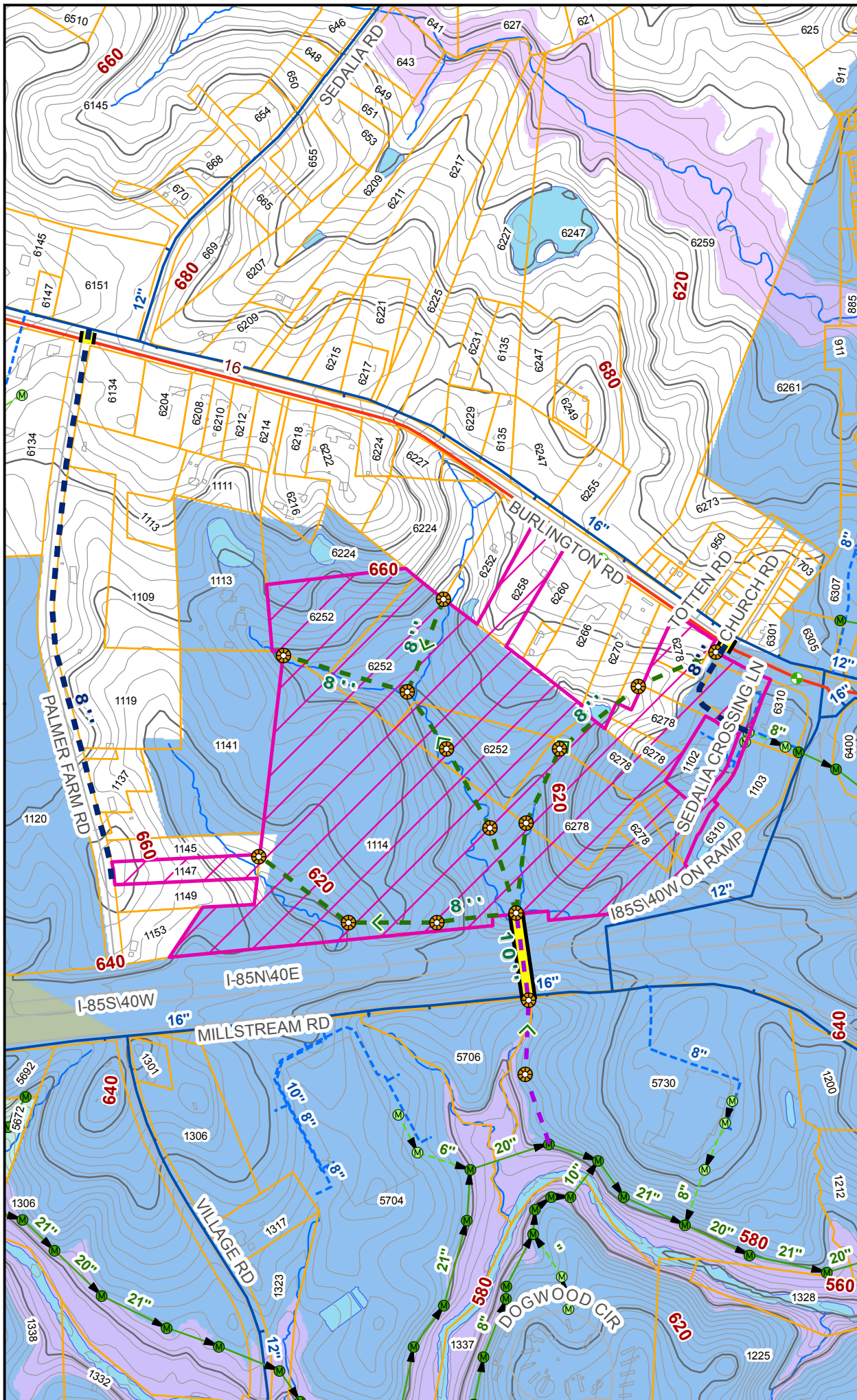
Total Project	\$911,227
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JKT
Attachment



1 inch = 600 feet
Date: 2/22/2016

Water and Sewer Study For: 1114 Sedalia Crossing Lane Property



- Legend**
- Proposed 8" Water Line
 - Proposed Sewer Manhole
 - Proposed 8" Sewer Line
 - Proposed 10" Sewer Line
 - Proposed Utility Crossing
 - Proposed Feasibility Site
 - Private
 - Public
 - Private
 - Public
 - Sewer Valves
 - Private
 - Public
 - Private
 - Public
 - Private
 - Public
 - Contour at 20 feet
 - Contour at 2 feet
- Proposed Urbanloop**
- Start After 2012
 - Flood Hazard Areas
 - Water/Sewer Boundary
 - City Limits
 - Growth Tier 1: 2013-2019
 - Growth Tier 2: 2019-2025
 - Growth Tier 3: 2025+