GOOCHLAND COUNTY

Hickory Haven/Samary Forest Community Meeting

October 28, 2019

Public Sewer Project

Hickory Haven/Samary Forest

Agenda

- Introductions/Sign-in Sheet
- Project History
- Design Process
- Information Gathered
- Available Data & Resources
- Cost Overview
- Sewer Location Options
- Questions

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Project History

- October 2017 – Feasibility Study completed

- January 31, 2018 – 1st community meeting
  - Discussed TCSD and community interest in project

- February / March 2018 – Interest Survey sent
  - An overwhelming majority of homeowners were interested in participating in the project, or would consider connecting in the future

- April 2018 – BOS adopted 25-year CIP to include HH/SF sewer project

- May 16, 2018 – 2nd community meeting
  - Discussed timeline, potential homeowner costs, connection fees & Interest Form

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Project History

- November 2018 – Contracted with engineering firm and began design based on community feedback

- March - July 2019 – survey, environmental, geotechnical services

- August 13, 2019 – 3rd community meeting
  - Discussed the design, easements, timeline, construction impacts

- August - October 2019 – continued to engage with residents on feedback, made individual site visits, evaluated additional alternate alignments

- October 28, 2019 – 4th community meeting

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Design Process

1. Feasibility Study
   - Completed in 2017 to determine if gravity sewer could technically work
   - Alignment placed in roads for purpose of the study
   - Study showed that many residences would be required to have pump stations

2. Preliminary Design
   - Evaluate resident feedback from 2nd community meeting to alter alignments
   - Combine available as-built, GIS, topographic, wetlands, and drain field information to determine preliminary alignment options
   - Develop preliminary project costs

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Design Process

- Feedback from 2nd community meeting:

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Design Process

3. 60% Design (presented at 3rd community meeting)
   - Incorporate field data and re-evaluate preliminary alignment based on actual, current field conditions
   - Update project cost estimate

4. Continue to evaluate resident feedback and develop options and alternatives

5. Today = 4th Community Meeting

6. Next Steps – Finalize Design Plans
   - Evaluate any additional feedback from residents
   - Finalize sewer design plans
     - E&S plans, geotechnical information, construction notes & details, specifications, permanent & temporary easements
   - Update project cost estimate

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Design Process

6. Final Construction Documents
   - Finalize project cost estimate
   - Prepare formal “Invitation for Bids” (IFB)

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Notifications

- Mailed letters to homeowners
- Mailed letters to landowners
- Door hangers were placed at all homes
- Alert posted on County website
- 2 posts in the Goochland Gazette

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Information Gathered To-Date:

- As-built and GIS info
  - Existing waterlines, contours, parcel/assessor data
- Technical Data
  - Survey, Environmental, Geotechnical
- Cemeteries
  - Goochland County Historical Society (GCHS) was contacted in October 2019.
  - GCHS staff confirmed there are no known conflicts with this project.
  - During construction, contractor will notify appropriate authorities if any conflict are discovered.
- Columbia Gas
  - Contacted by County in October 2019 and received feedback that there has historically not been enough interest from residents to install natural gas in the neighborhood.

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Information Gathered To-Date:

- VDOT stated that they will surface treat the neighborhood roads at some point after the project is complete
- County will communicate with VDOT upon completion of project

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Information Gathered:

- Existing drain field records per Virginia Department of Health
  - FOIA request sent to VDH in July 2017 for all available drain field records for all lots in HH & SF
  - Records for 21 lots sent to engineering firm as a result of the request
  - Resident feedback suggests missing data from original FOIA
  - Additional request for information sent to VDH staff on October 7th, 2019
  - County assisted VDH with additional records search

Freedom of Information Request

CHICKAHOMINY HEALTH DISTRICT

Date: 7/18/2017

Requestor's Name: Bruce Strickland, P.E.

Requestor's Phone: (804)200-6389 Fax: (804)560-1016 Requestor's email: bruce.strickland@timmons.com

Documents Requested: On-site septic system information.

Location of primary and secondary drain fields. Sewer lateral locations and elevation.

Environmental Requests:

GPIN/Tax Map Number of Property: See attachment

Property Address and City: Multiple

Acreage of Property: See attachment

Approximate Age of Residence: Unknown

Name of Establishment (if applicable): Hickory Haven and Samary Forrest Subdivisions

For Office Use Only: Action taken: (Check all that apply)

____ Requested records will be provided.

____ Records requested are considered confidential under FOIA guidelines and therefore are exempt from public disclosure.

____ A portion of the request is exempt from public disclosure and will be omitted from the release.

____ We are unable to provide the information requested within five (5) working days and have notified the customer. Under FOIA guidelines, government agencies are granted seven (7) additional working days to fulfill the request.

____ The records requested do not exist.

FEES:

Description of Procedure	Amount	Qty	Total
Copies per page	.15 cents/page		
Mailing Fee	based on weight/class		
OSS research time	$15/hour		
EHSS/PHN research time	$26/hour		
Manager's research time	$35/hour		
Total Amount			

Explanation of charges:

OSS/PHN/EH and manager amounts are based on average salary/2080 hours. Mailing fees are charged only if copies are mailed. If copies are to be mailed and research time is less than one hour, a $15 mailing fee will be applied and not a research fee. Copy fee based on a 12 month average and reviewed annually.

Processed By: _____ Date: _____

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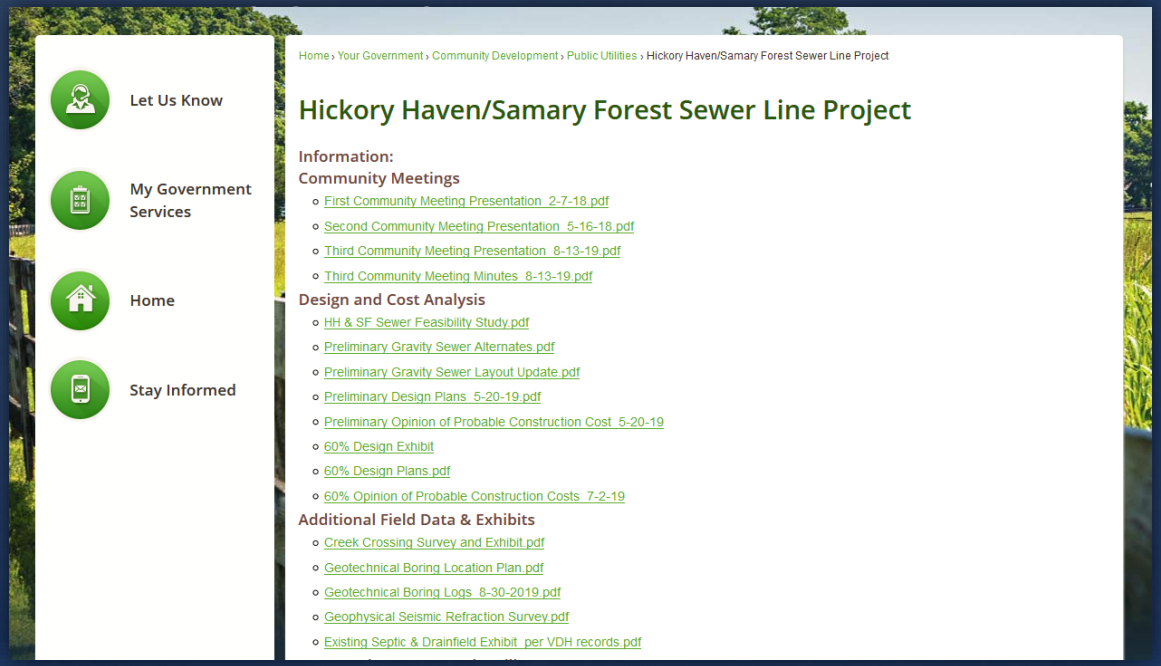
Available Data & Resources:

- Project Website:
  http://www.goochlandva.us/1042/Hickory-HavenSamary-Forest-Sewer-Line-Pr
  - Community meeting presentations
  - Community mailings
  - Engineering reports and data
  - Design plans
  - Capital Improvement Plan information
  - Utility Master Plan information



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Potential Cost (participation is voluntary)

- Connection fee = $6,000 (locked in if you participate in the project)
- Estimated Homeowner's private service line = $500+ (Homeowner's Responsibility)
- Approximate Cost = $6,500+
  - Depth of sewer will impact depth and cost of service lines
  - Possible additional cost for private pump station
  - All easements considered donated in-kind
- Recurring Cost: Bimonthly sewer charge (Minimum charge is for 4,000 gallons)
- Septic fields are not required to be abandoned but VDH recommends you do

Andy Carter – andrew.carter@vdh.virginia.gov

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Potential Cost

- Projected future costs (if you connect later):
  - Connections fees have already increased and could increase again
  - Construction cost for private service lines could increase or decrease.
  - Many construction cost indices are trending upward but can be unpredictable.

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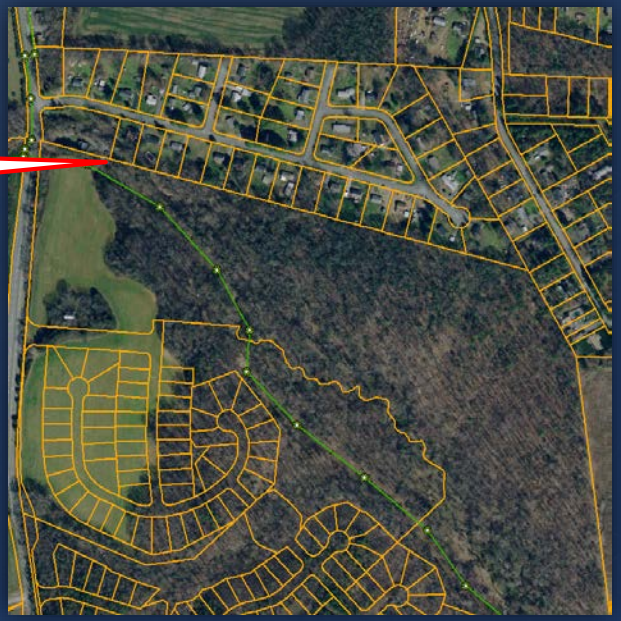
Development Impacts of Project

- The project is to provide public sewer for property owners and residents of Hickory Haven, Samary Forest, and adjacent TCSD properties where feasible.

- Adjacent developments and properties may connect to the public system where feasible and applicable, and if capacity is available.

Hickory Haven wastewater will flow through Readers Branch



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Options

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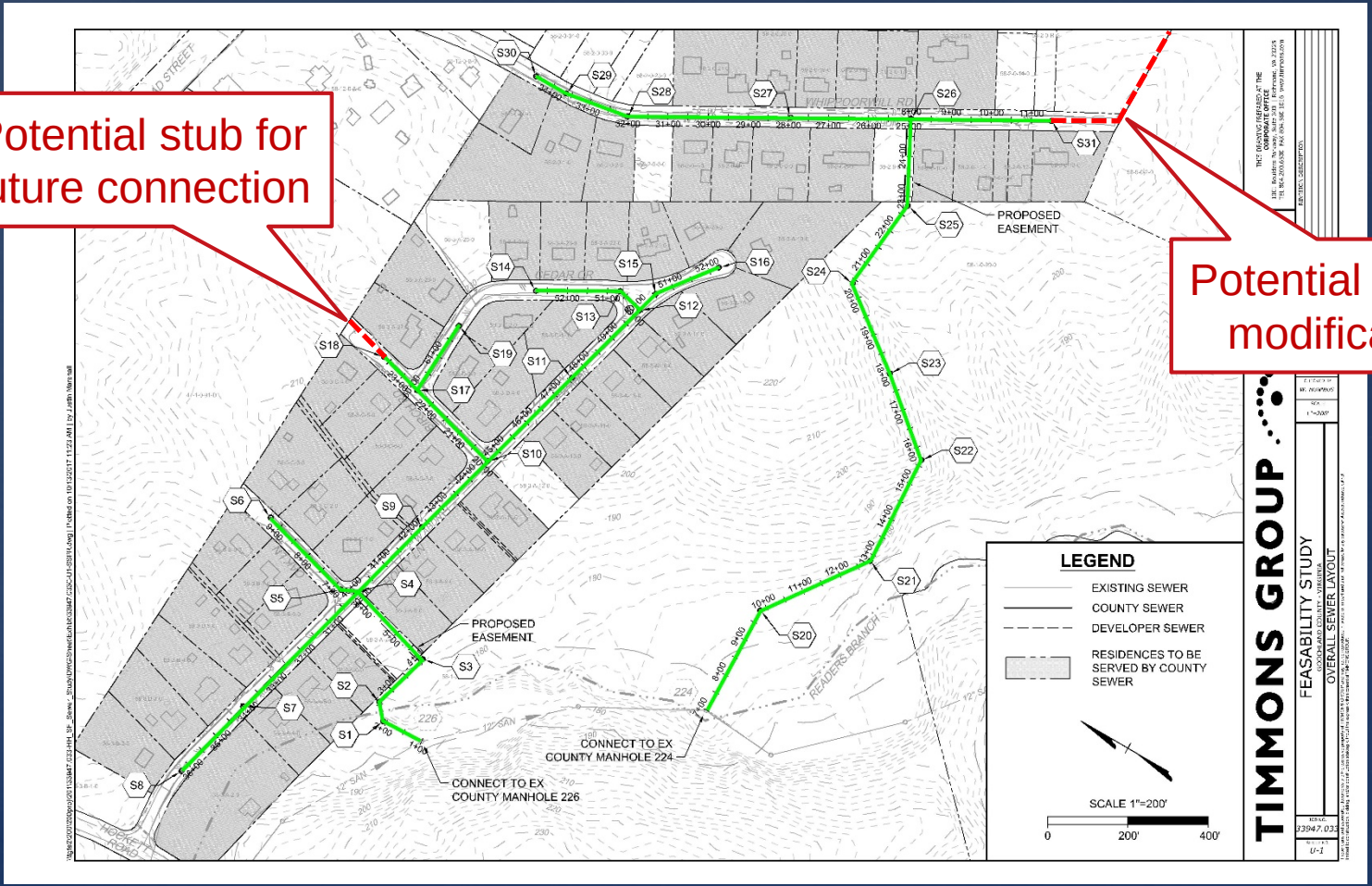
Alignment Option 1

- Install sewer per Feasibility Study:



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Alignment Option 1

- Pros:
  - Least impact to residents' back yards
  - Least pipe and manholes

- Cons:
  - More private grinder pump stations needed
  - Samary Forest service area limited, undeveloped lots could require pumps and additional easements
  - Most traffic impacts, will disrupt traffic flow through neighborhoods
  - Most disturbance to front yards, landscaping, and driveways
  - Longer construction schedule
  - Deeper stubs = higher cost to homeowner
  - Highest total cost

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Alignment Option 1

- Miscellaneous:
  - Length of Pipe = 5,861 L.F.
  - Number of Manholes = 27
  - Estimated No. of Private Pump Stations = 9
  - Cost Estimate = $2.33M
  - Cost per Foot = $397

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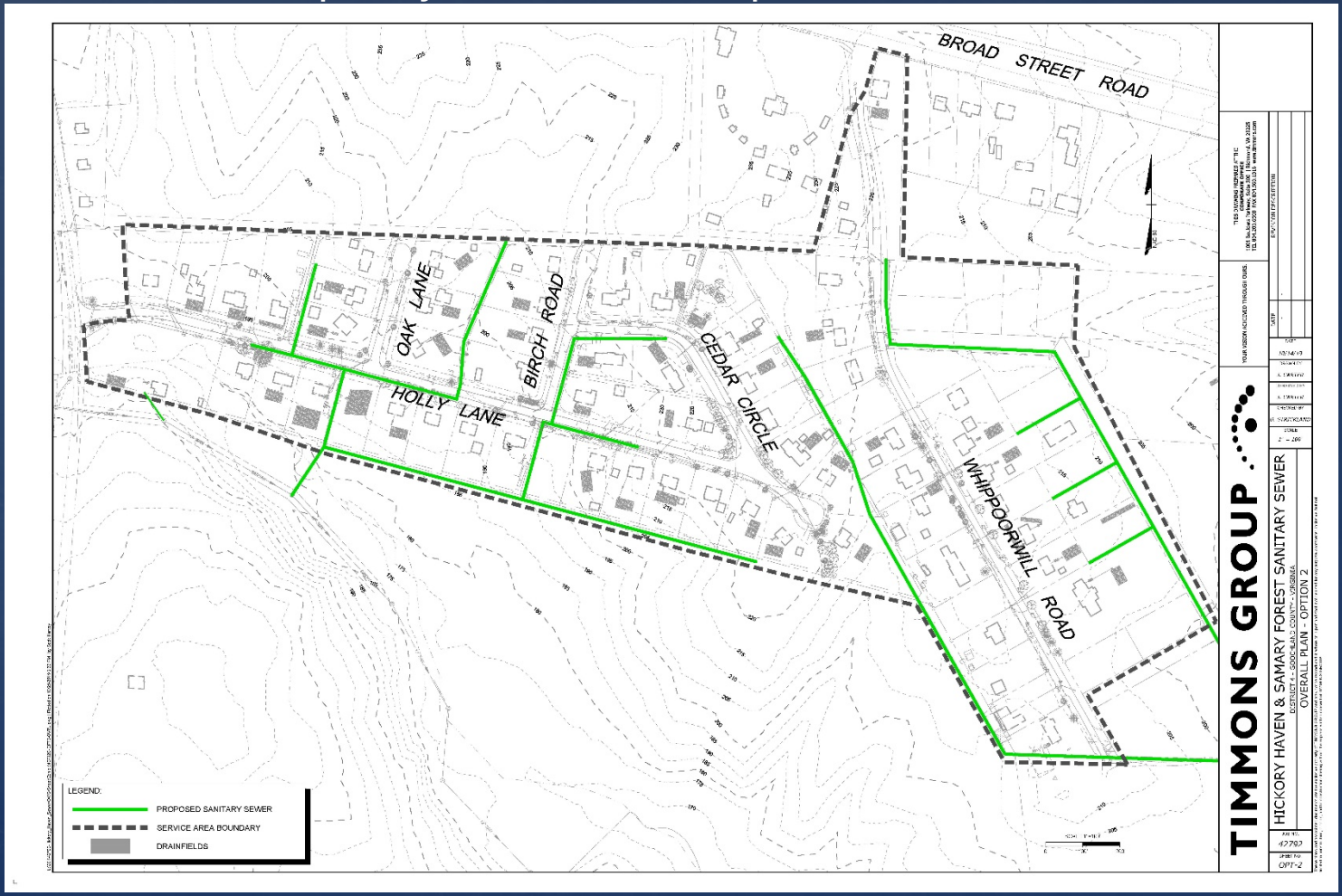
Alignment Option 2

- Sewer installed in back yards per feedback at 2nd community meeting, field data, and with septic systems added to plan:



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Alignment Option 2

- Pros:
  - Greater gravity sewer service area coverage for parcels within Samary Forest
  - Main lines overall shallower for easier, cheaper homeowner connection
  - Less lots will require private pump stations, including lots with basements
  - Main lines closer to many existing septic systems for easier homeowner connection = cheaper
  - Least traffic impacts
  - Least disturbance to front yards, landscaping, and driveways

- Cons:
  - Larger impact to some homeowners' back yards and site features (landscaping, sheds) than in Option 1; However, every effort will be made to maneuver sewer lines around existing site features
  - Additional pipe and manholes

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Alignment Option 2

- Miscellaneous
  - Length of Pipe = 8,328 L.F.
  - Number of Manholes = 35
  - Estimated No. of Private Pump Stations = 3
  - Cost Estimate = $2.20M
  - Cost per Foot = $264

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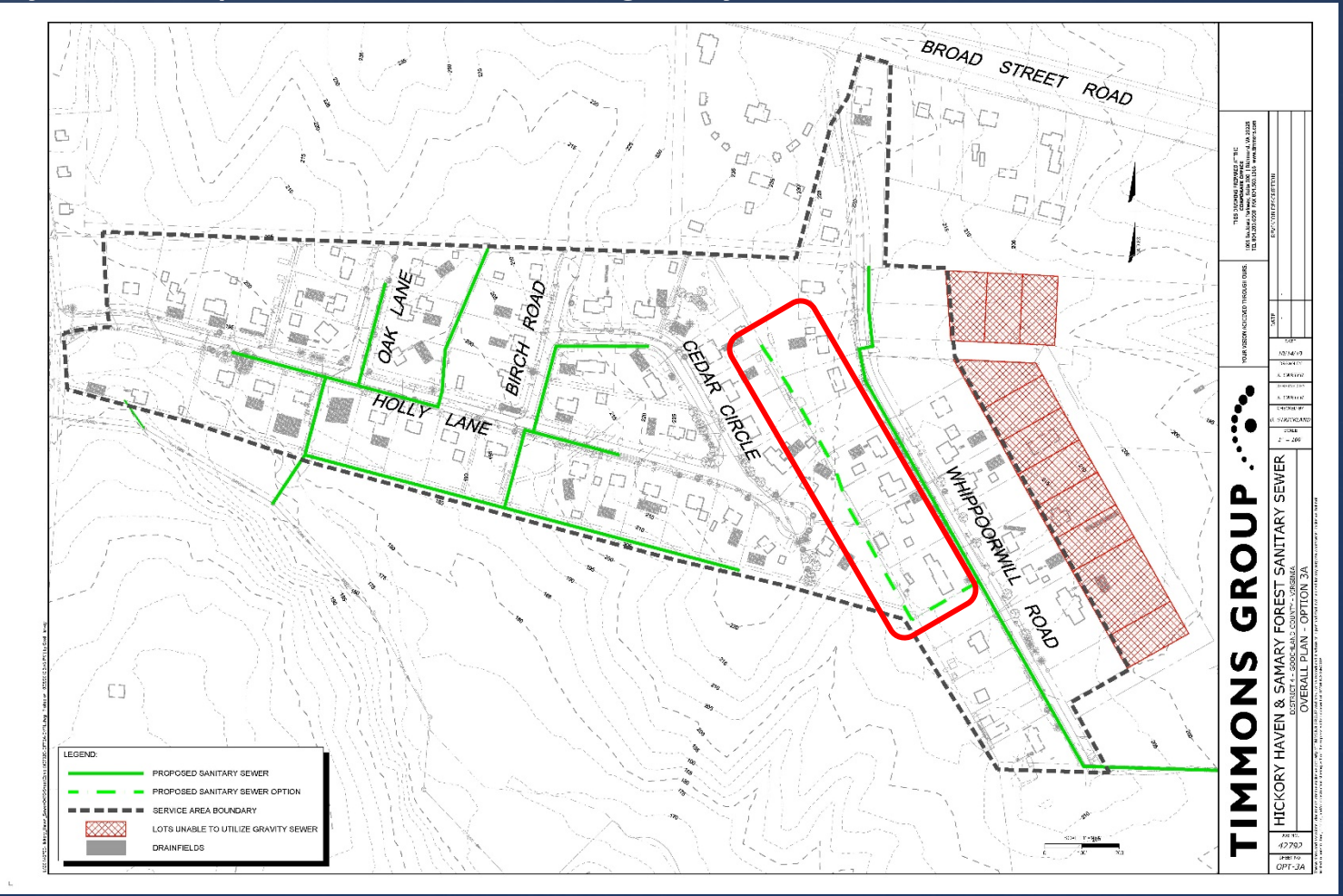
Alignment Option 3A

After more neighborhood feedback….

- Hybrid of Options 1 & 2, with all gravity sewer:



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Alignment Option 3A

- Pros:
  - Main line installed in Whippoorwill Road per resident feedback
  - Less private pump stations than Options 1 and 3B
  - Less disturbance to front yards, landscaping, and driveways than Options 1 and 3B
  - Less traffic impacts than Options 1 and 3B

- Cons:
  - Greater impact to homeowners' back yards and site features (landscaping, sheds) than in Option 1
    - However, every effort will be made to maneuver sewer lines around existing site features
  - Samary Forest service area limited, undeveloped lots could require pumps
  - Has the most lots with disturbance in front and back yards

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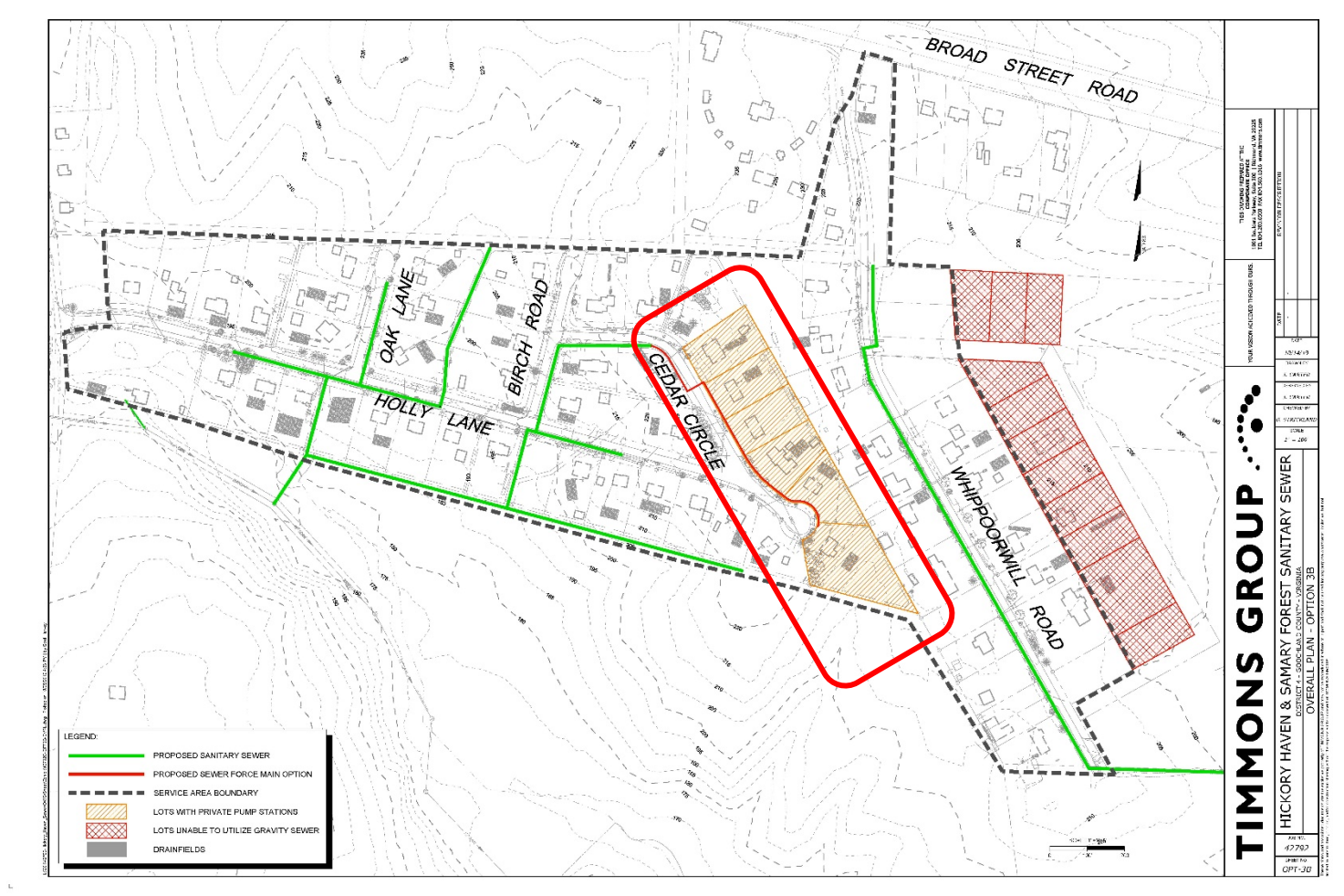
Alignment Option 3B

- Hybrid of Options 1 & 2, with force main option:



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Alignment Option 3B

- Pros:
  - Main line installed Whippoorwill Road per resident feedback
  - Less pipe and manholes than Options 2 and 3A
  - Less impact to homeowners' back yards than Option 3A
  - Lowest total county cost

- Cons:
  - More private pump stations needed than Options 2 and 3A
  - Samary Forest service area limited, undeveloped lots could require pumps
  - More traffic impacts than Options 2 and 3A
  - More disturbance to front yards, landscaping, and driveways than Options 2 and 3A
  - More lots with disturbance in both front and back yards than Options 1 and 2

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Alignment Options 3A

- Miscellaneous
  - Length of Pipe = 7,461 L.F.
  - Number of Manholes = 34
  - Estimated No. of Private Pump Stations = 3
  - Cost Estimate = $2.28M
  - Cost per Foot = $305

Alignment Options 3B

- Miscellaneous
  - Length of Pipe = 6,407 L.F.
  - Number of Manholes = 29
  - Estimated No. of Private Pump Stations = 9
  - Cost Estimate = $2.15M
  - Cost per Foot = $335

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County Recommendation

- Due to ease of homeowner connection, sewer depth limitations, and inclusion of the entire Samary Forest service area, the County recommends Option 2.

- However, the County will move forward with the residents' most preferred option after this meeting.

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QUESTIONS?