

Board of Supervisors

Meg Bohmke, Chairman
Gary F. Snellings, Vice Chairman
Jack R. Cavalier
Thomas C. Coen
L. Mark Dudenhefer
Wendy E. Maurer
Cindy C. Shelton

Thomas C. Foley
County Administrator

Infrastructure Committee Meeting AGENDA

April 3, 2018 – 1:30 pm
Conference Room A/B/C, Second Floor

Committee Members: Chairman Mark Dudenhefer, Meg Bohmke and Jack Cavalier

| Agenda Item | |
|-------------|---|
| 1. | Transportation: a. Update on Potomac Creek Drive Project b. Discussion of Smart Scale Regional Projects |
| 2. | Update for Embrey Mill Park Phase 3 bids |
| 3. | Discuss Options for Tiered Utilities Rates |
| 4. | Discuss Court Analysis Schedule |
| 5. | Discuss Moncure Elementary Evaluation |
| 6. | Discuss Telegraph Road Smart Scale Project |
| 7. | Discuss Completion Schedule for Mine Road |
| | Next IC meeting is scheduled for May 1, 2018 |

InfraAgenda/04.03.2018



Route 1 – Potomac Creek Drive Turn Lane Addition

- The 2008 Transportation Bond Referendum included a project to add a left turn lane southbound on Route 1 onto Potomac Creek Drive
- This is an intersection subject to rear end collisions due to stopped traffic in the left through lane waiting for an opening
- This project was estimated to cost \$1.3 million in 2008, and the current total estimated cost is \$1.8 million
- This project was successful in being awarded nearly \$1.3 million during the first round of Smart Scale, with the balance funded through the CMAQ program
- The project is being administered by VDOT, and the design is now underway
- VDOT recently posted a willingness to hold a public hearing, due to the minimal impacts to adjacent properties
- The preliminary design drawings are attached, and indicate a small amount of right of way is necessary on the west side of Route 1 along the southbound lanes
- The project is scheduled to enter the right of way acquisition phase in the next couple of months, and be advertised for construction by June of 2019

PROJECT MANAGER Nathan Huber (540) 899-4267 Fredericksburg District
SURVEYED BY, DATE Michael L. Bell, L.S. 10-17-804-313-2243
DESIGN BY Lankford E. Hankins Jr., P.E. 540-899-4044
SUBSURFACE UTILITY BY, DATE Rice Associates 9-12-17 703-968-3200

FOR INDEX OF SHEETS SEE SHEET 1B

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING
DESIGN PACKAGE (GEOPAK).
GEOPAK Computer Identification No. 111753

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED
STATE HIGHWAY

STAFFORD COUNTY
FROM: 0.151 MILES S. OF POTOMAC CREEK DRIVE
TO: 0.192 MILES N. OF POTOMAC CREEK DRIVE
JEFFERSON DAVIS HIGHWAY

FHWA 534 DATA 33111

| STATE | FEDERAL AID PROJECT | ROUTE | STATE PROJECT | SHEET NO. |
|-------|---|-------|---|--------------|
| VA. | NHPP- 5111 () (See Tabulation Below For Section Numbers) | 1 | (NFO) 0001-089-610 (See Tabulation Below For Section Numbers) | 1 |

| FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA | |
|--|--|
| RURAL OTHER PRINCIPAL ARTERIAL - ROLL - 60 MPH min. DES. SPEED (ST'D. GS-1 USED) | |
| | Fr: 0.150 Miles South Of Potomac Creek Drive To: 0.132 Miles North Of Potomac Creek Drive |
| ADT | 20,000 (2015) |
| ADT | 30,000 (2040) |
| DHV | 2,900 |
| D (%) (design hour) | 75/25 |
| T (%) (design hour) | 2 |
| V (MPH) | ⊗ |

⊗ See Plan And Profile Sheets For Horizontal And
Vertical Curve Design Speeds.

UTILITY FIELD
INSPECTION PLANS

THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.

| CONVENTIONAL SIGNS | |
|------------------------------|---------|
| STATE LINE | ---- |
| COUNTY LINE | ---- |
| CITY/TOWN OR VILLAGE | ---- |
| RIGHT OF WAY LINE | ---- |
| FENCE LINE | x-----x |
| UNFENCED PROPERTY LINE | ----- |
| FENCED PROPERTY LINE | x-----x |
| WATER LINE | ~~~~~ |
| SANITARY SEWER LINE | ----- |
| GAS LINE | ----- |
| ELECTRIC UNDERGROUND CABLE | ----- |
| TRAVELED WAY | ---- |
| GUARD RAIL | ---- |
| RETAINING WALL | ---- |
| RAILROADS | ---- |
| BASE OR SURVEY LINE | ---- |
| LEVEE OR EMBANKMENT | ---- |
| BRIDGES | ---- |
| CULVERTS | ---- |
| DROP INLET | ---- |
| POWER POLES | ---- |
| TELEPHONE OR TELEGRAPH POLES | ---- |
| TELEPHONE OR TELEGRAPH LINES | ---- |
| HEDGE | ---- |
| TREES | ---- |
| HEAVY WOODS | ---- |
| GROUND ELEVATION | ---- |
| GRADE ELEVATION | ---- |

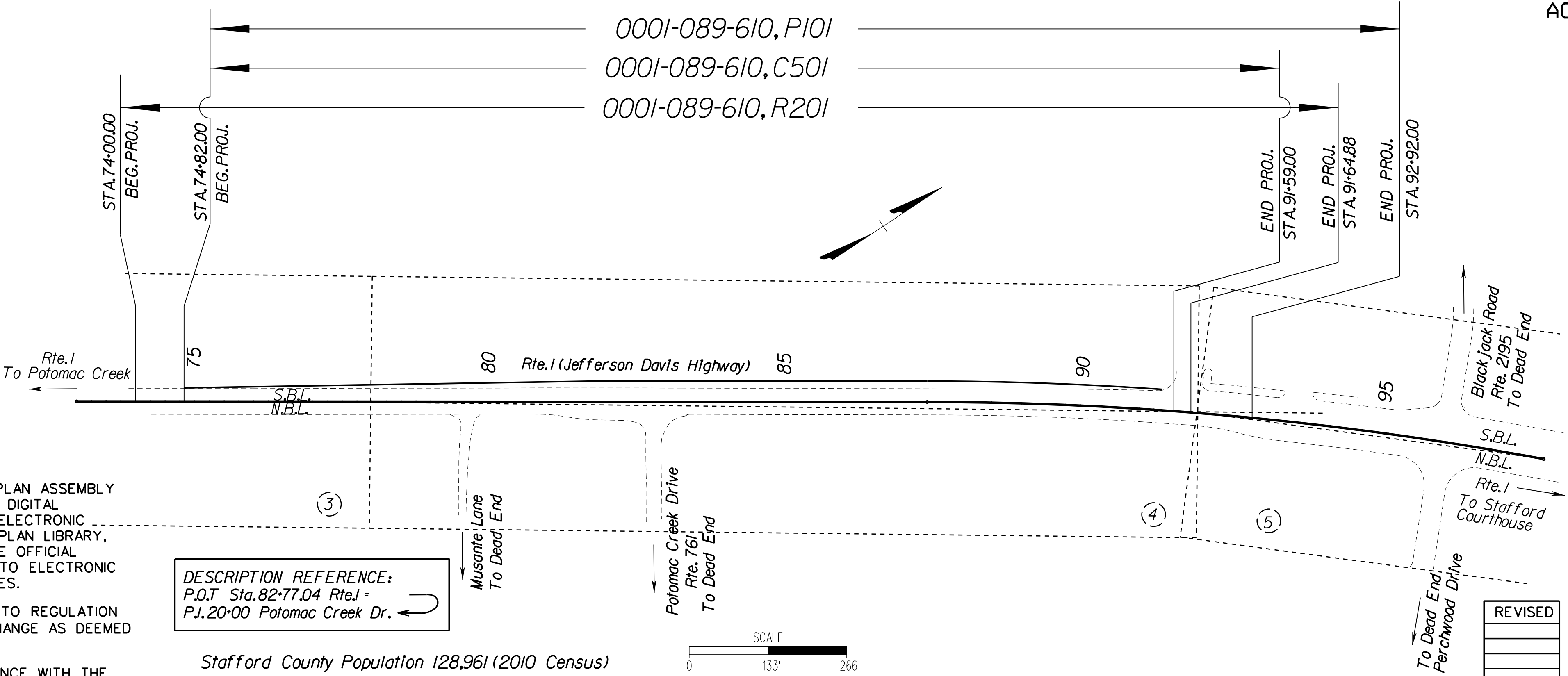
THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY
AS AWARDED, HAS BEEN SEALED AND SIGNED USING DIGITAL
SIGNATURES AND THE OFFICIAL PLAN ASSEMBLY IN ELECTRONIC
FORMAT IS STORED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY,
INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL
CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC
FILES AND LAYERED PLANS, SEE THE GENERAL NOTES.

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION
AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED
NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE
DEPARTMENT'S 2016 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD
AND BRIDGE STANDARDS, 2009 MUTCD, 2011 VIRGINIA SUPPLEMENT TO
THE MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL AND AS
AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC
PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND
WIDENED IN ACCORDANCE WITH STANDARD TC-5.11R, EXCEPT
WHERE OTHERWISE NOTED.

THE ORIGINAL APPROVED TITLE SHEET(S), INCLUDING ORIGINAL
SIGNATURES, ARE FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY.
ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES,
IS ILLEGAL AND ENFORCED TO THE FULL EXTENT OF THE LAW.



DESCRIPTION REFERENCE:
P.O.T. Sta. 82+77.04 Rte. 1 -
P.J. 20+00 Potomac Creek Dr.

Stafford County Population 128,961 (2010 Census)

| STATE PROJECT NO. | SECTION | FEDERAL AID PROJECT NO. | TYPE CODE | UPC NO. | LENGTH INCLUDING BRIDGE(S) | | LENGTH EXCLUDING BRIDGE(S) | | BRIDGE PLAN NO. | TYPE PROJECT | DESCRIPTION |
|-------------------------|---------|----------------------------|--------------|------------|-------------------------------|-------|-------------------------------|-------|-----------------------|-----------------|--|
| | | | | | FEET | MILES | FEET | MILES | | | |
| 0001-089-610 | C501 | | 1000 | 111753 | 1677.00 | 0.318 | 1677.00 | 0.318 | | Const. | Fr: 0.151 Miles S. of Potomac Creek Drive To: 0.167 Miles N. of Potomac Creek Drive |
| | R201 | | | 111753 | 1764.88 | 0.334 | 1764.88 | 0.334 | | Right of Way | Fr: 0.166 Miles S. of Potomac Creek Drive To: 0.168 Miles N. of Potomac Creek Drive |
| | P101 | NHPP-5111 (320) | | 111753 | 1810.00 | 0.343 | 1810.00 | 0.343 | | Prelm. Engr. | Fr: 0.151 Miles S. of Potomac Creek Drive To: 0.192 Miles N. of Potomac Creek Drive |
| | | | | | | | | | | | |

Project lengths are based on construction Baseline

| TIER 1 PROJECT | |
|--|--|
| RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION | |
| DATE | DISTRICT PLANNING AND INVESTMENT MANAGER |
| DATE | DISTRICT PROJECT DEVELOPMENT ENGINEER |
| APPROVED FOR RIGHT OF WAY ACQUISITION | |
| DATE | DISTRICT ENGINEER/ADMINISTRATOR |

| RECOMMENDED FOR APPROVAL FOR CONSTRUCTION | |
|--|--|
| DATE | DISTRICT PLANNING AND INVESTMENT MANAGER |
| DATE | DISTRICT PROJECT DEVELOPMENT ENGINEER |
| APPROVED FOR CONSTRUCTION | |
| DATE | DISTRICT ENGINEER/ADMINISTRATOR |

Copyright 20 , Commonwealth of Virginia

FREDERICKSBURG DISTRICT DESIGN UNIT

PROJECT MANAGER Nathan Huber (540) 899-4267 Fredericksburg District
SURVEYED BY, DATE Michael L. Bell, L.S. 10-17 804-313-2243
DESIGN BY Lonksford E. Hanks Jr. P.E. 540-899-4044
SUBSURFACE UTILITY BY, DATE Rice Associates 9-12-17 703-968-3200

Utility Contacts:

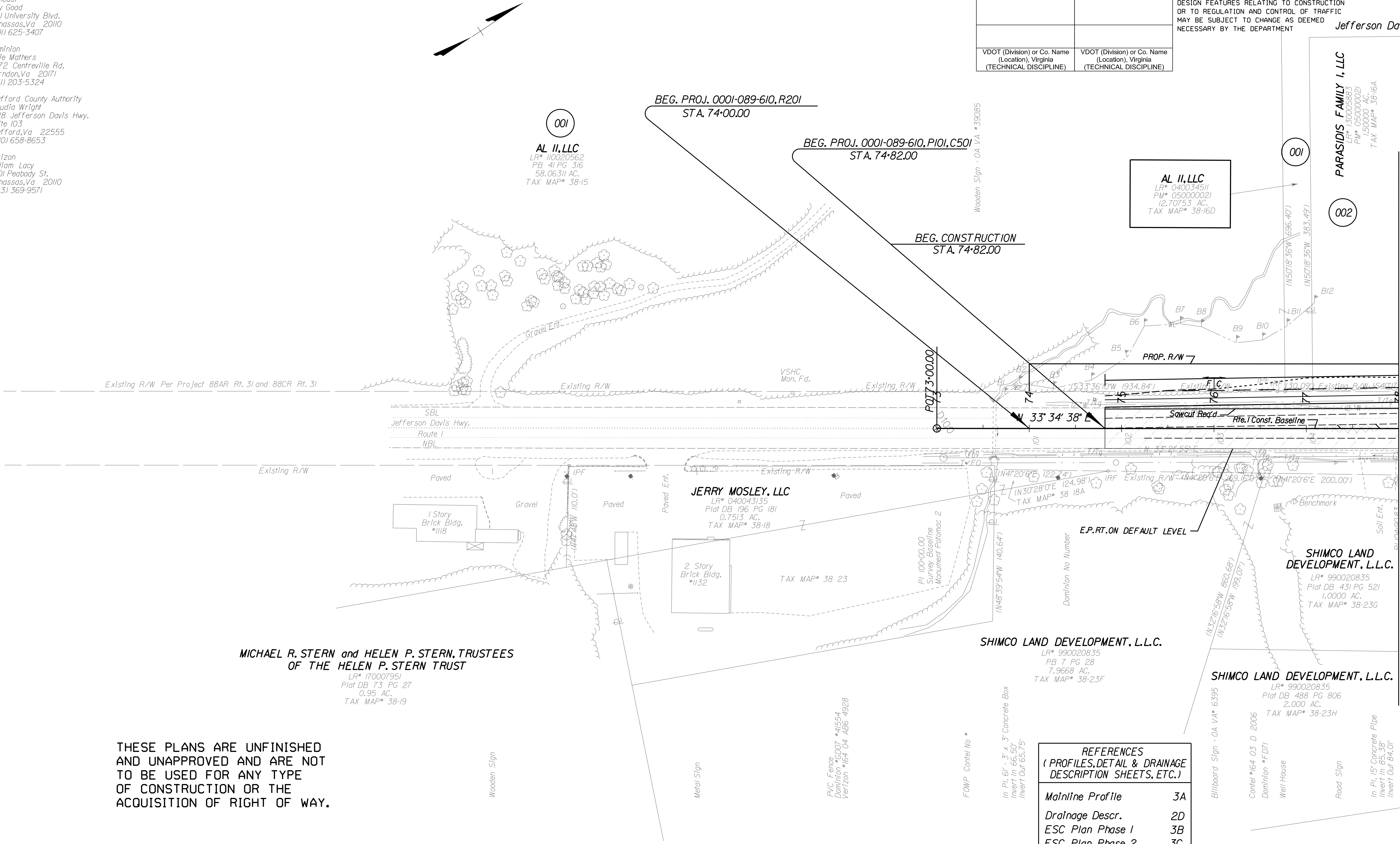
Comcast
Amy Goad
11101 University Blvd.
Manassas, Va 20110
(301) 625-3407

Dominion
Julie Mathers
3072 Centreville Rd.
Herndon, Va 20171
(571) 203-5324

Stafford County Authority
Claudia Wright
2128 Jefferson Davis Hwy.
Suite 103
Stafford, Va 22555
(540) 658-8653

Verizon
William Lacy
9401 Peabody St.
Manassas, Va 20110
(703) 369-9571

| | | | | | | |
|--|---|---------|-------|---------|----------------------------------|----------------------|
| | | REVISED | STATE | STATE | | SHEET NO. |
| | | | ROUTE | PROJECT | | |
| | | | VA. | 1 | 0001-089-610, P101, C501 R201 | |
| DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT | | | | | | Jefferson Davis Hwy. |
| VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE) | VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE) | 377 | | | | |



THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.

Denotes Demolition of Pavement (Flexible)

Denotes Construction Limits In Cuts

Denotes Construction Limits In Fills

Denotes Full depth pavement

Denotes Flexible Pavement Planting, 0'-2'

Denotes Pavement Buildup Variable depth.

REFERENCES
(PROFILES, DETAIL & DRAINAGE
DESCRIPTION SHEETS, ETC.)

| | |
|------------------|----|
| Mainline Profile | 3A |
| Drainage Descr. | 2D |
| ESC Plan Phase 1 | 3B |
| ESC Plan Phase 2 | 3C |



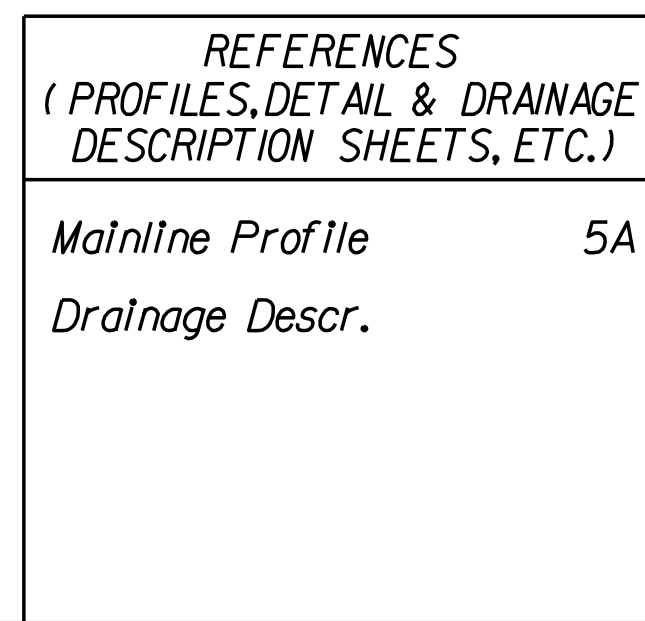
PROJECT
0001-089-610-

SHEET NO.
3


MATCH LINE STA 78+00 SHEET 4

| | |
|---------------|-----------|
| PROJECT | SHEET NO. |
| 0001-089-610- | 4 |

| | | | | | | |
|---|---|--|-------|-------|----------------------------------|-----------|
| | | REVISED | STATE | STATE | | SHEET NO. |
| | | | | ROUTE | PROJECT | |
| | | | VA. | 1 | 0001-089-610, P101, C501 R201 | 5 |
| | | DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT <i>Jefferson Davis Hwy.</i> | | | | |
| VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE) | VDOT (Division) or Co. Name (Location), Virginia (TECHNICAL DISCIPLINE) | | | | | |



THESE PLANS ARE UNFINISHED
AND UNAPPROVED AND ARE NOT
TO BE USED FOR ANY TYPE
OF CONSTRUCTION OR THE
ACQUISITION OF RIGHT OF WAY.

| | | |
|---|---------------------------------|----------------|
|  | PROJECT <i>0001-089-610-</i> | SHEET NO. 5 |
|---|---------------------------------|----------------|

Regional Smart Scale Projects

- The Board, by Resolution R18-80, authorized staff to prepare applications for District Grant Smart Scale funding for improvements to Enon Road, Winding Creek Road, Eskimo Hill Road, and the intersection of Mountain View and Stephaniga Roads
- The Board has not officially addressed projects being considered for Statewide High Priority projects funding, although discussions are underway by the FAMPO Policy Committee
- The projects under consideration by FAMPO are listed below, with the Stafford projects highlighted in yellow

| ID | Primary Improvement | Primary Improvement Type | Cost Estimate |
|----|--|--------------------------|---------------|
| A | I-95 SB widening from 3 to 4 lanes between Mile Point 128.7 and Exit 126 to include the Harrison Road bridge replacement (Spotsylvania County) | Highway | \$46,000,000 |
| B | Exit 126 interchange improvements identified in the VDOT STARS study which includes improving Route 1 NB to the I-95 NB ramp (Spotsylvania County) | Highway | \$25,000,000 |
| C | US 17 Business STARS Study improvements and US 17 Park-n-Ride lot improvements (Stafford County) | Highway | \$25,000,000 |
| D | US 17 Business STARS Study improvements and US 17 Park-n-Ride lot improvements plus Route 1 - Enon Rd intersection improvements (Stafford County) | Highway | \$35,000,000 |
| E | Route 3 STARS Study improvements and I-95 NB to Route 3 EB ramp improvement (City of Fredericksburg) | Highway | \$15,000,000 |
| F | Route 3 STARS Study improvements, I-95 NB to Route 3 EB ramp improvement, and Gateway Blvd extension from Route 3 to Cowan Blvd (City of Fredericksburg) | Highway | \$31,000,000 |
| G | Park-n-Ride lot improvements not included in other candidate applications to include Mine Road, Staffordboro, and/or Chatham Heights Road (Stafford), Route 3 East (Stafford), and Ladysmith Road (Caroline) | TDM | ? |
| H | US 301/Rte 207 Corridor Study improvements (King George County) | Highway | ? |

- Project D combines the STARS improvements identified as Project C with the Enon Road improvements to be submitted as a Stafford District Grant project.
- Additional information related to these projects is provided on the following pages
- Staff is seeking direction on whether they should assist the Board in examining these projects by engaging with FAMPO and VDOT staff

Update on Preliminary Smart Scale Round 3 Funding

Previous Guidance: \$800 Million to \$1.0 Billion

New Guidance based on VDOT Estimate from 3/14:

\$940 Million Total

- ~ \$470 Million for Statewide High Priority
- ~ \$470 Million for District Grant

Fredericksburg District Grant ~ \$32 to \$34 Million

- Assuming 6.86% of Total District Grant
- Potential \$2 Million not used in Round 2

Funding Estimates are still potentially subject to change

Draft Regional Projects – 4th SB Lane from Exit 130 to Exit 126

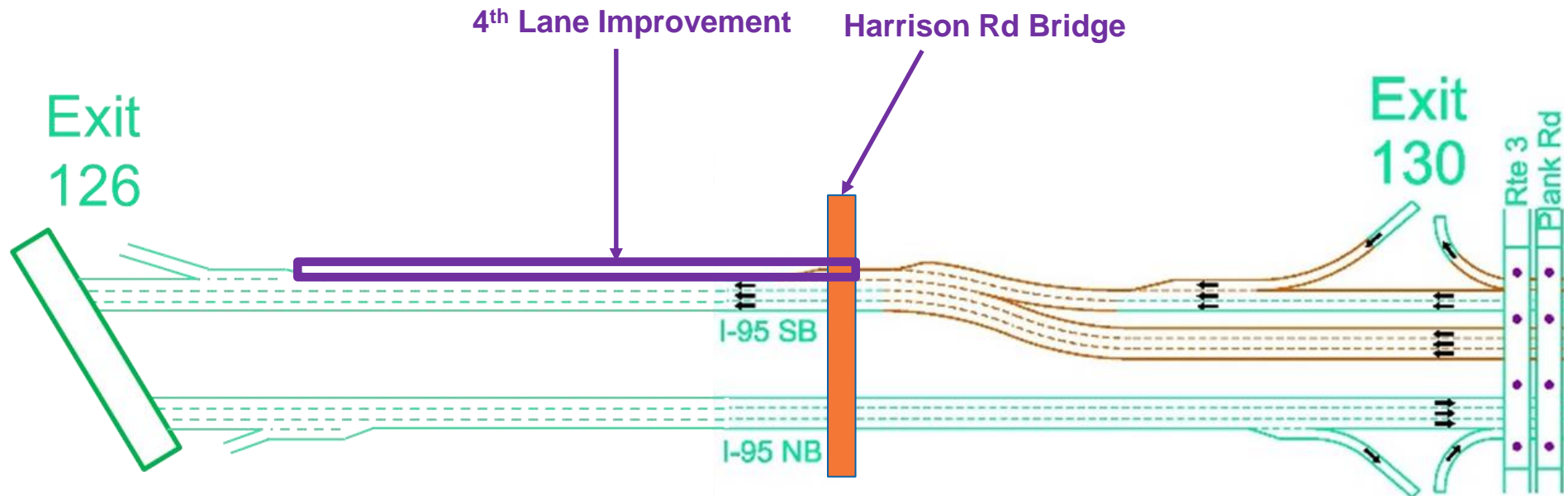
Study Support: I-95 Phase 2

Estimated Cost: \$46.2 Million (assuming Harrison Rd Bridge widening & replacement)

Need: By 2030

Leveraged Funding: \$0

Question: Does Harrison Rd Bridge definitely need to be replaced?



Draft Regional Projects – Exit 126 Interchange Improvement: Rte 1 to I-95 NB

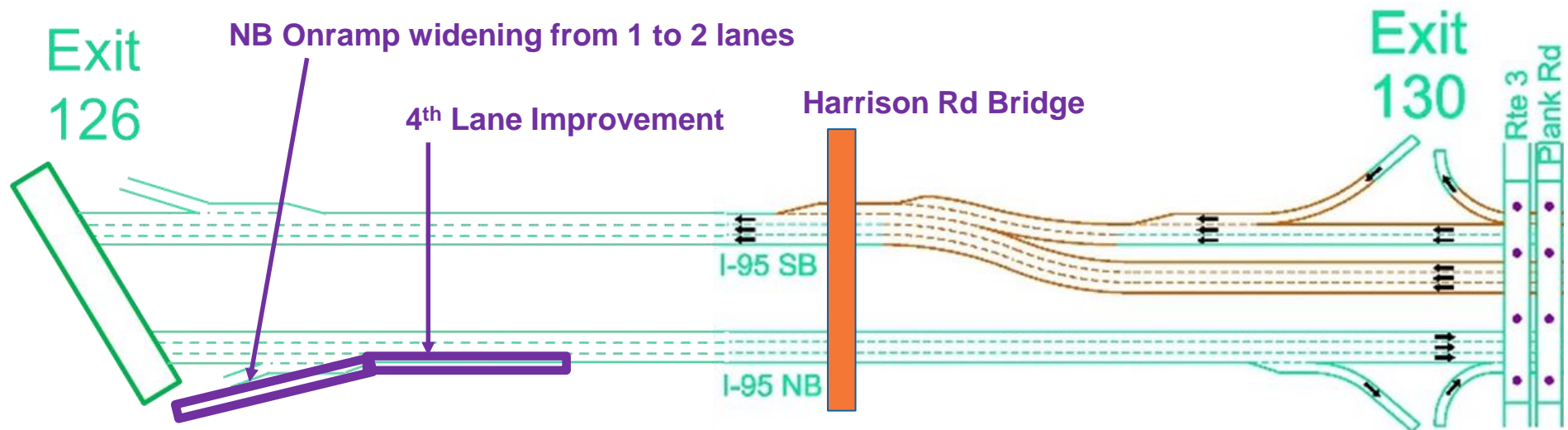
Study Support: Exit 126 STARS and I-95 Phase 2

Estimated Cost: \$25 Million

Need: By 2030

Leveraged Funding: \$0

Question: How much more would it cost to take a 4th lane to Exit 130?



Draft Regional Projects – Rte 17 Business STARS Study and PNR Lot

Study Support: Rte 17 Business STARS and I-95 Phase 2

Estimated Cost: \$25 Million

Need: By 2030

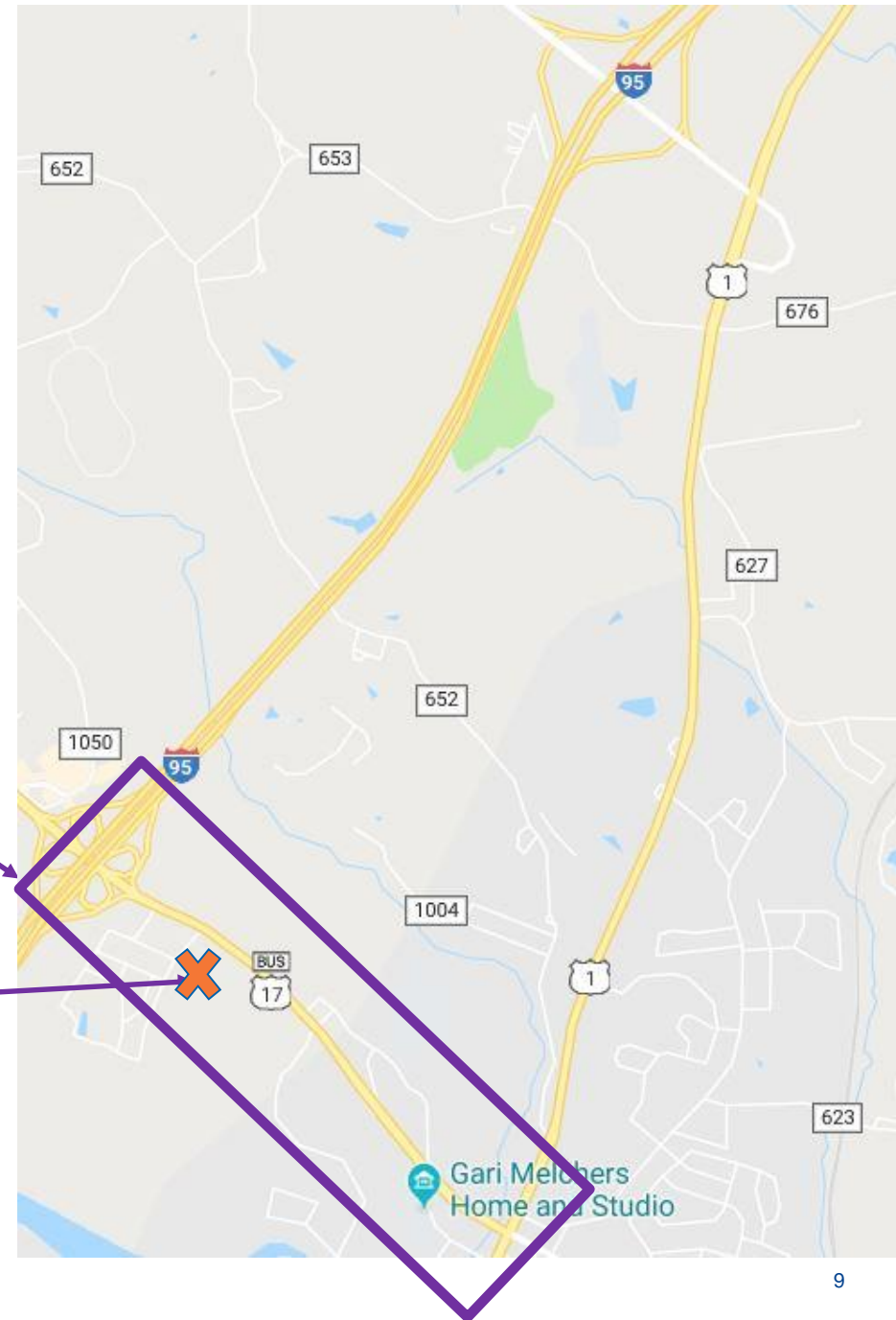
Leveraged Funding: \$0

Questions:

1. ITS Component?

Project Area

New PNR Lot
1200 Spaces



Draft Regional Projects – Rte 17 Business STARS Study, PNR Lot, + Enon Rd Intersection improvement & Rte 1/17 Business ITS

Study Support: Rte 17 Business STARS and I-95 Phase 2

Estimated Cost: \$35 Million?

Need: By 2030

Leveraged Funding: \$5 Million?

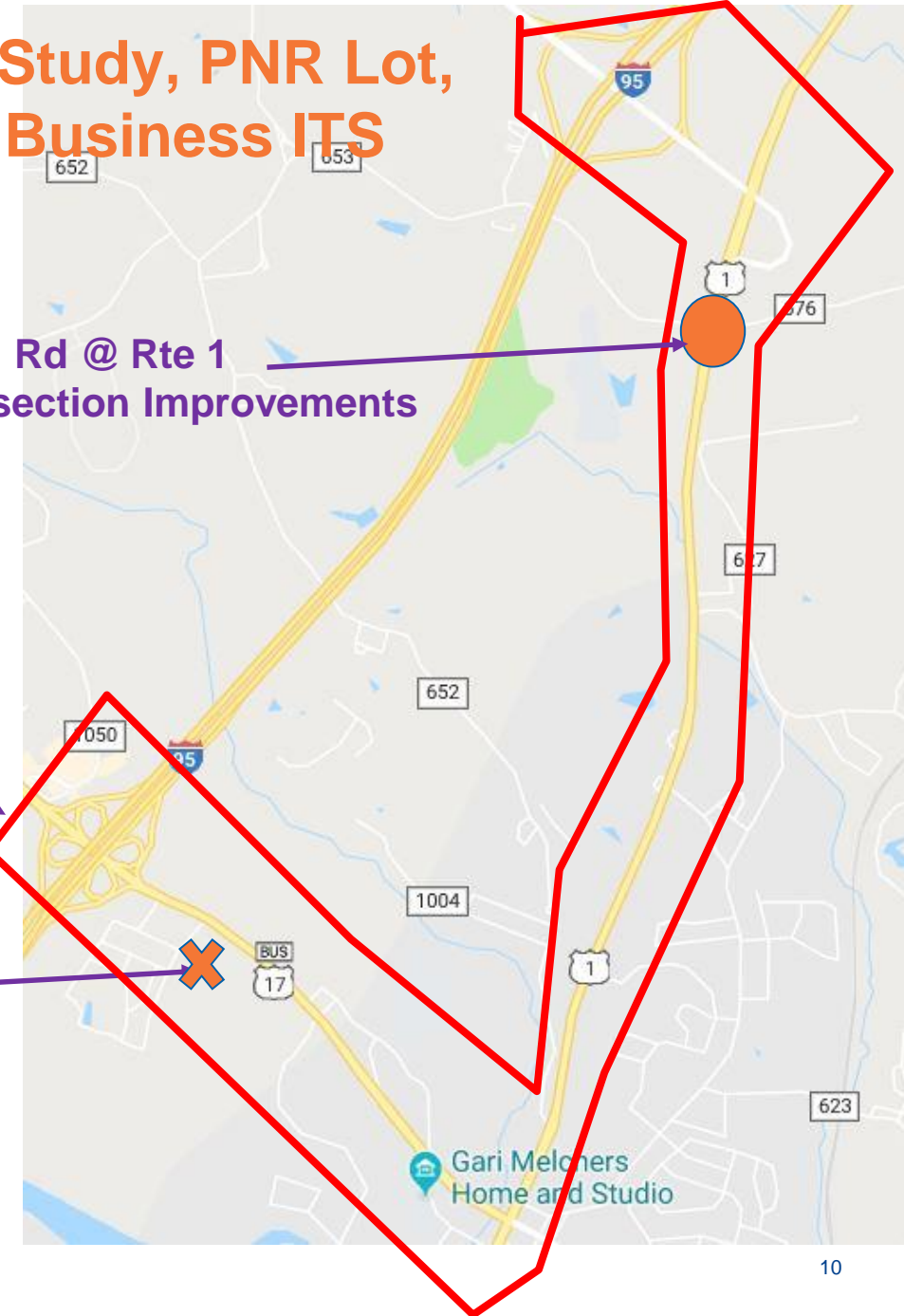
Questions:

1. Project Limits?
2. ITS Component?
3. Exit 136 Ramp improvements?

One Possible
Larger Project
Area

Enon Rd @ Rte 1
Intersection Improvements

New PNR Lot
1200 Spaces



Regional Projects – Rte 3 STARS Study

Study Support: Rte 3 STARS

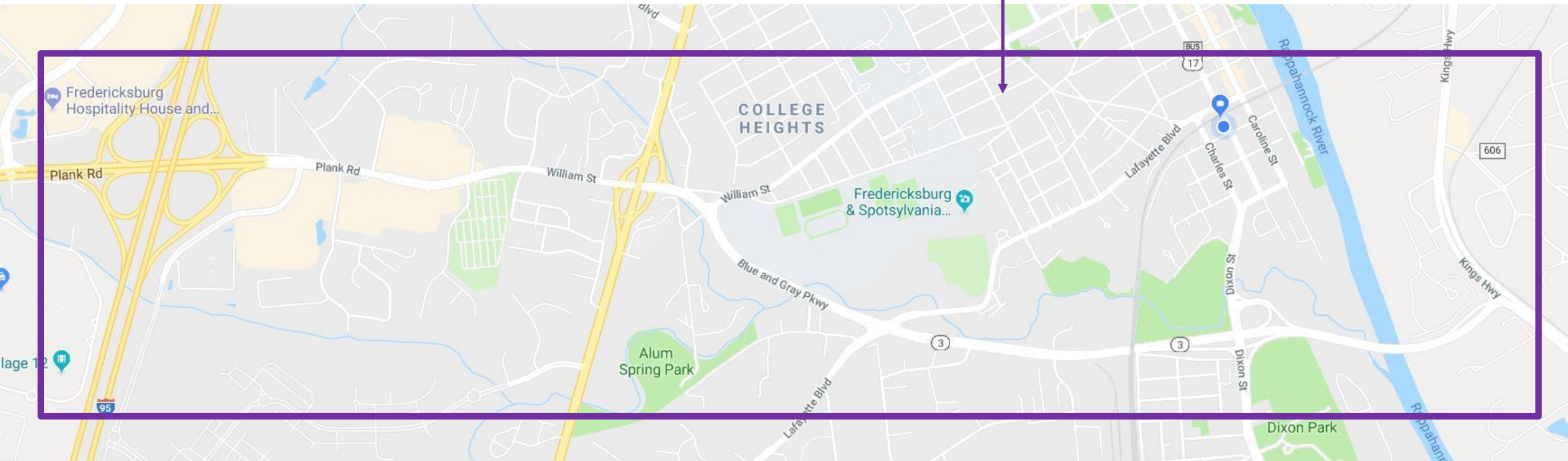
Estimated Cost: \$10 Million

Need: By 2030

Leveraged Funding: \$1 Million?

Question: Include Rte 3 Signal Optimization?

Project Area



Regional Projects – Rte 3 STARS Study + Gateway Blvd Extended

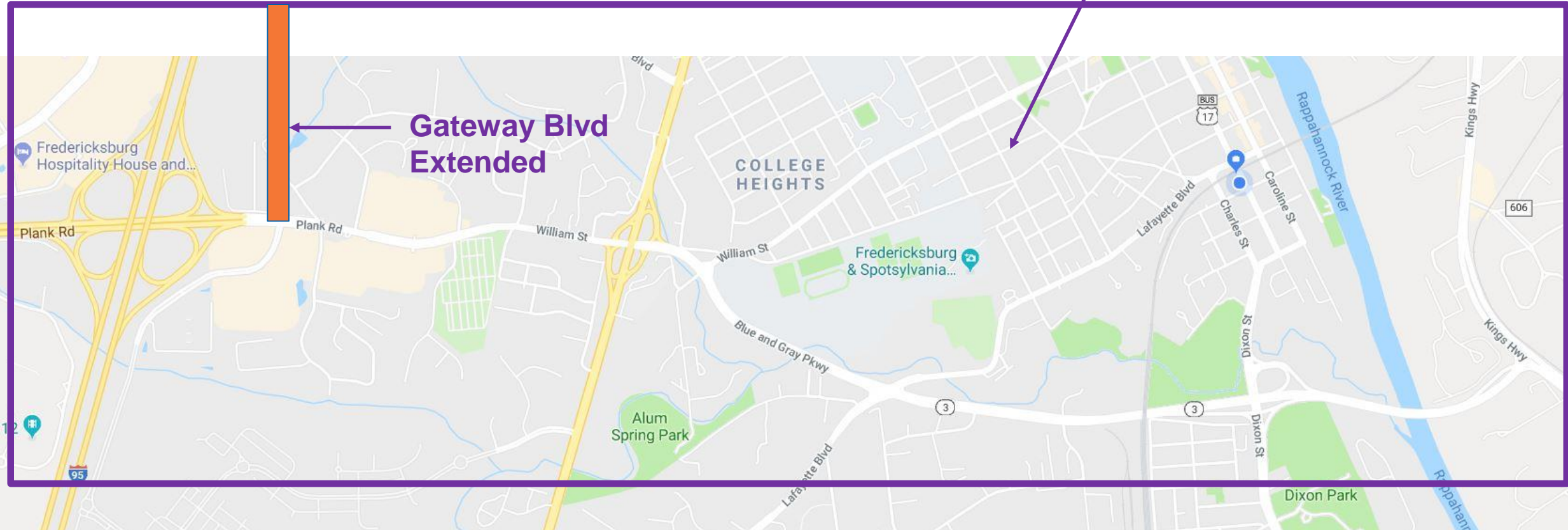
Study Support: Rte 3 STARS

Estimated Cost: \$28 Million

Need: By 2030

Leveraged Funding: \$1 Million?

Question: Include Rte 3 Signal Optimization?



PNR Lot Improvements

1. Garrisonville: Mine Rd or Staffordboro

- Smart Scale Round 2: Expand Mine Rd lot by 400 spaces: \$16 Million
- Structured parking at Mine Rd ~ \$50 Million? for 800 additional spaces
- Structured parking at Staffordboro \$50 Million? for 800 additional spaces

2. Chatham Heights: > \$2 Million for 80 spaces

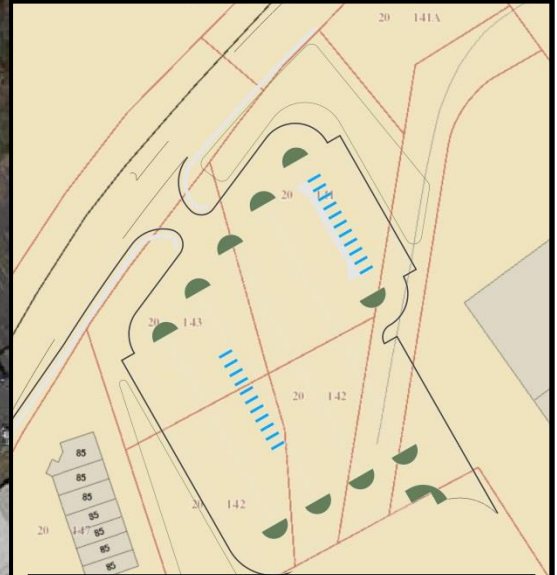
- FAMPO leasing spaces using CMAQ in this vicinity. Cost is about \$30K/year.

3. Rte 3 East: < \$4 Million for 150 spaces

4. Exit 110 – Ladysmith: < \$3 Million for 125 spaces

- GWRC leasing spaces in this vicinity.

POTENTIAL SMART SCALE PROJECT MINE ROAD PARK & RIDE EXPANSION



FOOTPRINT OF PROPOSED PARKING
LOT ON STAFFORD COUNTY TAX MAP

CONCEPTUAL

EXISTING MINE ROAD
PARK & RIDE

SALISBURY DR

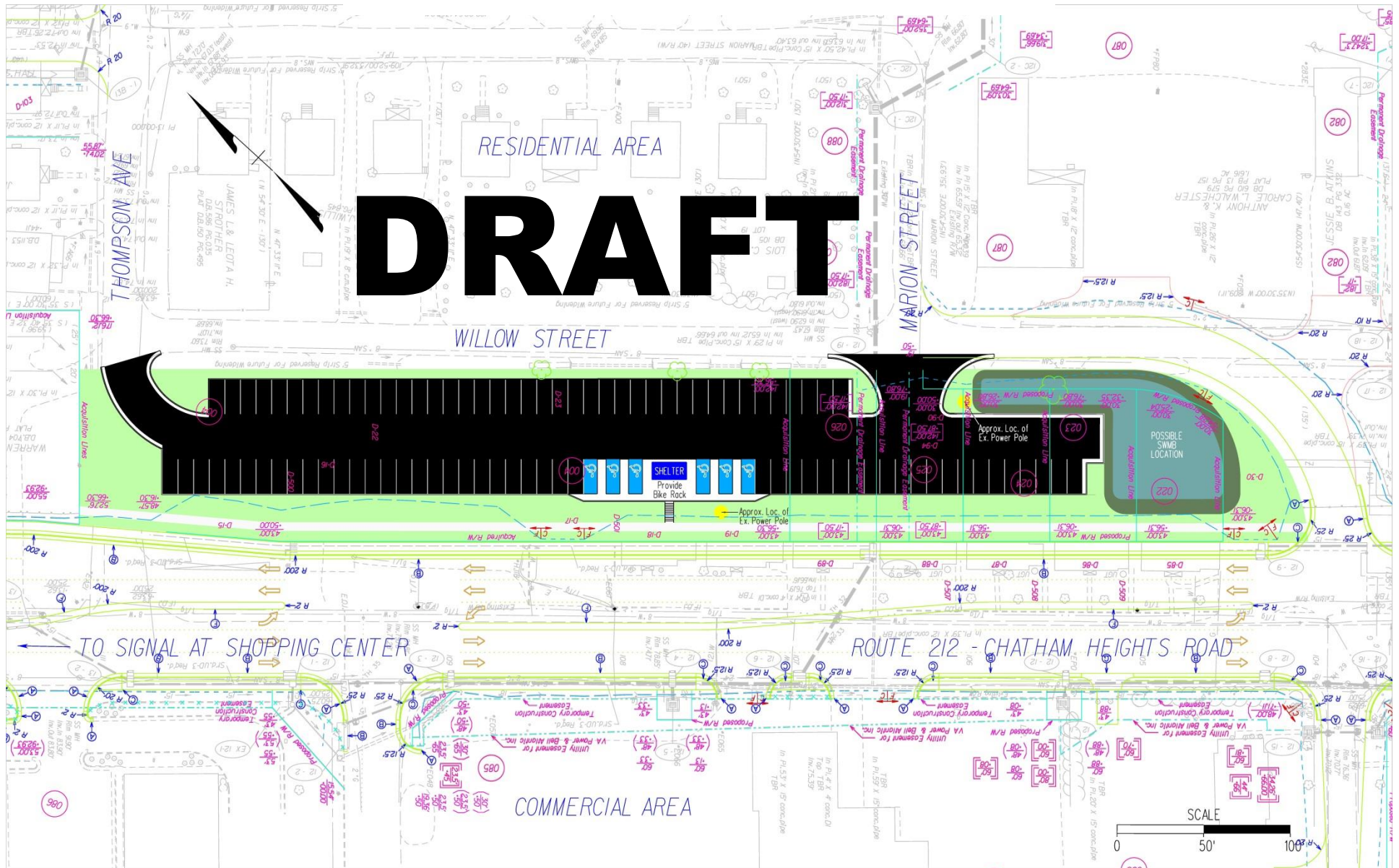


Chatham Heights Park and Ride

Approximately 95 Spaces

Preliminary (Pre-Scoping) Cost Estimate = \$2,358,000

PE = \$431,000, RW/UT = 101,000, CN = \$1,826,000 (8/17/17)



Embrey Mill Park Phase 3

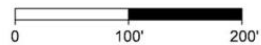
- The Board approved an eleven rectangular field complex at Embrey Mill Park
- Six fields, with four full-size artificial turf fields, were completed in late 2015, in time for the 2016 soccer season
- Two additional artificial turf fields were completed in 2017
- The final three fields are proposed along Mine Road as shown on the attached graphic. There are planned for smaller natural turf fields (2-U6 & 1-U8) with lights
- Funding in the amount of \$2.71 million is provided through bonds, and the design was updated and offered for public bids
- A single bid was received from The Mathews Group in the amount of \$1,917,777. This is about \$440,000 over the engineers estimate
- When engineering, field lighting, permitting and services during construction are included, the total cost for the project is estimated at \$2,591,497 leaving about \$120,000 for contingencies
- Subsequent discussions with the single bidder have resulted in lowering the price by another \$100k, providing over 200k for contingencies
- Due to the type of grass specified (Bermuda), it is not practical to re-bid the project for construction this season
- PRCF has indicated that field capacity is adequate if the decision is made to postpone field construction until 2019



EMBREY MILL

Optional Field Layout

May 19, 2014



TIMMONS GROUP
YOUR VISION ACHIEVED THROUGH OURS.

WWW.TIMMONS.COM

Tiered Rates

- Board approved Ordinance 005-09 established the tiered rate system beginning January 1, 2006.
- Tiered Rates were set up to encourage conservation of water and avoid unnecessary capacity improvements at the treatment facilities
 - Peak Day Flows are used to determine necessary plant capacity
 - Summertime produces peak water flows due to lawn watering, car washes, pool fills, etc.
- Tiered Rates were effective to reduce Peak Day demands by roughly 3MGD, allowing Utility Funds to be focused towards needed Capital, Operational and Economic Development projects
- The Lake Mooney Water Treatment Facility, which was brought on line in 2014, has expanded our treatment capacity; however, a significant increase in peak day demand may cause the health department to require expansion of the facilities 5-10 years earlier than currently projected on the CIP and Master Plan.
- Utilities customers have raised concerns over the tiered rates – particularly from new homeowners who are seeking to establish lawns (i.e. sod)
- The Board asked that the Utilities Commission to consider the tiered rates and make recommendations
- On February 13, 2018, staff presented to the Utilities Commission (UC) a comparative rate analysis of the surrounding Counties (Attached). The analysis shows that Stafford rates are very competitive however some of our customers have shared concerns that they are receiving high bills when they must use large amounts of water due to the requirement to have sod.
- County Code requires sod to be placed on all new residential lots less than 30,000 SF in size. Often builders will place the sod just before obtaining the occupancy permit/closing without properly establishing the sod with water. New sod can take 2 weeks to “knit” and up to 6 weeks to establish deep roots, making the first month critical to proper establishment
- 2017 Statistical Data was provided to the UC for their consideration:
 - On average 96% of all accounts fell between Tier 1 to Tier 4
 - Historically higher water consumption is observed between May and October, with the highest consumption in July. Less than 2% of accounts reached tier 6 last July.
- The UC discussed the Tiered Rates and recommended that the Utilities Department allow a onetime adjustment to customer accounts with high water consumption due to the establishment of new sod.
- The UC felt that by only charging the standard “non-conservation” rate for one month for all customers that could show they had applied sod, it would solve the issue for customers that must use high amounts of water.
- The program would create a “break” for the new homeowner while still encouraging conservation
- Although the UC recommended a one month adjustment to Tier level 4, the Board could also consider allowing adjustments to Tier 3 and/or allowing for a consecutive 2 month adjustment
- With either proposal, Staff would anticipate a minor impact to Revenue and little to no impact on overall, water demand (i.e. conservation)

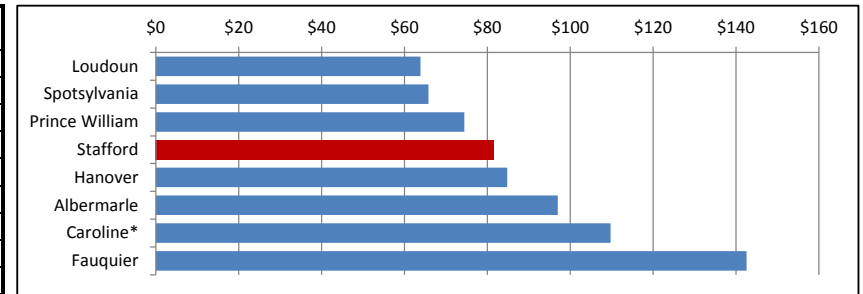
| Original Bill | | | | | | Adjustment to Tier 4 | | |
|---|----------------------------------|---------------------|----------------------|------------|----------------|----------------------------------|-----------------------|----------------|
| Tiers | Gallons of Water Billed Per Tier | Water Rate per tier | Current Water Charge | Sewer Rate | Sewer* | Gallons of Water Billed Per Tier | Adjusted Water Charge | Sewer* |
| Administrative Fees | | | \$10.69 | | \$13.39 | | \$10.69 | \$13.39 |
| 1 0 -2,000 | 2,000 | \$2.52 | \$5.04 | | | 2,000 | \$5.04 | |
| 2 2001-4,000 | 2,000 | \$3.51 | \$7.02 | | | 2,000 | \$7.02 | |
| 3 4,001-8,000 | 4,000 | \$4.81 | \$19.24 | \$5.98 | \$41.86 | 4,000 | \$19.24 | \$41.86 |
| 4 8,001-12,000 | 4,000 | \$9.66 | \$38.64 | | | 37,000 | \$357.42 | |
| 5 12,001-25.000 | 13,000 | \$12.25 | \$159.25 | | | | \$0.00 | |
| 6 25,001 and over | 20,000 | \$17.03 | \$340.60 | | | | | |
| | 45,000 | | \$569.79 | | \$55.25 | 45,000 | \$388.72 | \$55.25 |
| Total Original Bill \$ | | 625.04 | | | | | | |
| Total Adjusted Bill \$ | | 443.97 | | | | | | |
| Total Adjustments \$ | | (181.07) | | | | | | |
| * Note: Summer Sewer bills are capped at the 6 month winter average plus 20%. New accounts without an average are capped at 7k gallons. | | | | | | | | |

| Original Bill | | | | | | Adjustment to Tier 3 | | |
|---|----------------------------------|---------------------|----------------------|------------|----------------|----------------------------------|-----------------------|----------------|
| Tiers | Gallons of Water Billed Per Tier | Water Rate per tier | Current Water Charge | Sewer Rate | Sewer* | Gallons of Water Billed Per Tier | Adjusted Water Charge | Sewer* |
| Administrative Fees | | | \$10.69 | | \$13.39 | | \$10.69 | \$13.39 |
| 1 0 -2,000 | 2,000 | \$2.52 | \$5.04 | | | 2,000 | \$5.04 | |
| 2 2001-4,000 | 2,000 | \$3.51 | \$7.02 | | | 2,000 | \$7.02 | |
| 3 4,001-8,000 | 4,000 | \$4.81 | \$19.24 | \$5.98 | \$41.86 | 41,000 | \$197.21 | \$41.86 |
| 4 8,001-12,000 | 4,000 | \$9.66 | \$38.64 | | | | \$0.00 | |
| 5 12,001-25.000 | 13,000 | \$12.25 | \$159.25 | | | | \$0.00 | |
| 6 25,001 and over | 20,000 | \$17.03 | \$340.60 | | | | | |
| | 45,000 | | \$580.48 | | \$55.25 | 45,000 | \$219.96 | \$55.25 |
| Total Original Bill \$ | | 635.73 | | | | | | |
| Total Adjusted Bill \$ | | 275.21 | | | | | | |
| Total Adjustments \$ | | (360.52) | | | | | | |
| * Note: Summer Sewer bills are capped at the 6 month winter average plus 20%. New accounts without an average are capped at 7k gallons. | | | | | | | | |

COMPARATIVE RATE ANALYSIS

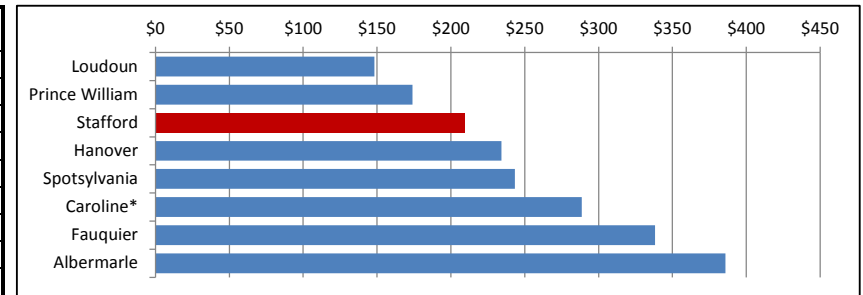
verified 1/31/18

| Peer Localities | | | | | |
|---|---------|---------|---------|----------|----------|
| Based on 6000 gallon winter residential consumption | Water | Sewer | Other | Total | Rankings |
| Loudoun | \$14.22 | \$27.96 | \$21.65 | \$63.83 | 1 |
| Spotsylvania | \$27.72 | \$26.26 | \$11.76 | \$65.74 | 2 |
| Prince William | \$20.10 | \$39.30 | \$15.05 | \$74.45 | 3 |
| Stafford | \$21.68 | \$35.88 | \$24.08 | \$81.64 | 4 |
| Hanover | \$16.22 | \$37.18 | \$31.37 | \$84.77 | 5 |
| Albermarle | \$36.99 | \$52.02 | \$7.92 | \$96.93 | 6 |
| Caroline* | \$9.74 | \$57.90 | \$42.07 | \$109.71 | 7 |
| Fauquier | \$33.02 | \$54.42 | \$55.06 | \$142.50 | 8 |
| Comparative Average | \$22.46 | \$41.37 | \$26.12 | \$89.95 | |



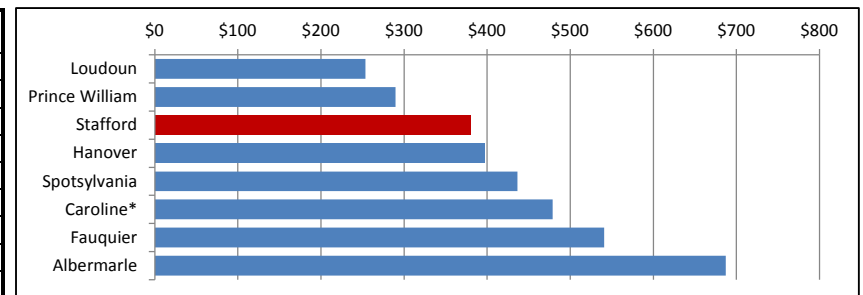
*current rate study increase ongoing

| Peer Localities | | | | | |
|---|----------|----------|---------|----------|----------|
| Based on 18,000 gallon summer residential consumption | Water | Sewer | Other | Total | Rankings |
| Loudoun | \$42.66 | \$83.88 | \$21.65 | \$148.19 | 1 |
| Prince William | \$99.90 | \$58.95 | \$15.05 | \$173.90 | 2 |
| Stafford | \$143.44 | \$41.86 | \$24.08 | \$209.38 | 3 |
| Hanover | \$79.31 | \$123.46 | \$31.37 | \$234.14 | 4 |
| Spotsylvania | \$136.50 | \$95.05 | \$11.76 | \$243.31 | 5 |
| Caroline* | \$60.78 | \$185.86 | \$42.07 | \$288.71 | 6 |
| Fauquier | \$119.90 | \$163.26 | \$55.06 | \$338.22 | 7 |
| Albermarle | \$221.94 | \$156.06 | \$7.92 | \$385.92 | 8 |
| Comparative Average | \$113.05 | \$113.55 | \$26.12 | \$252.72 | |



*current rate study increase ongoing

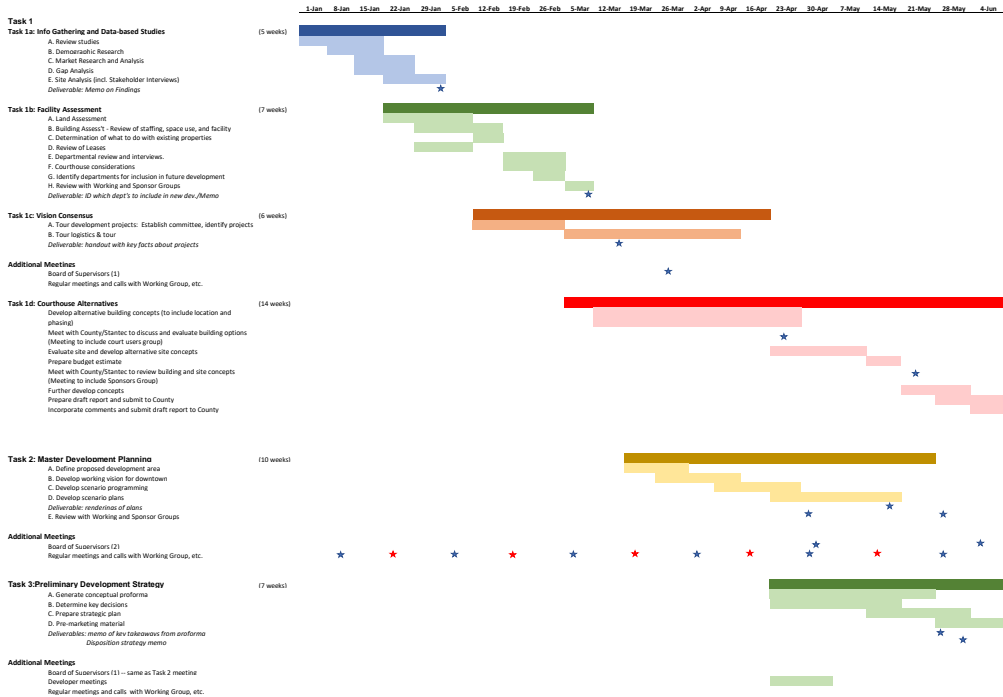
| Peer Localities | | | | | |
|--|----------|----------|---------|----------|----------|
| Based on 30,000 gallon "excessive" residential consumption | Water | Sewer | Other | Total | Rankings |
| Loudoun | \$92.25 | \$139.80 | \$21.65 | \$253.70 | 1 |
| Prince William | \$215.70 | \$58.95 | \$15.05 | \$289.70 | 2 |
| Stafford | \$314.34 | \$41.86 | \$24.08 | \$380.28 | 3 |
| Hanover | \$155.63 | \$209.74 | \$31.37 | \$396.74 | 4 |
| Spotsylvania | \$260.22 | \$164.41 | \$11.76 | \$436.39 | 5 |
| Caroline* | \$119.10 | \$317.86 | \$42.07 | \$479.03 | 6 |
| Fauquier | \$213.74 | \$272.10 | \$55.06 | \$540.90 | 7 |
| Albermarle | \$419.22 | \$260.10 | \$7.92 | \$687.24 | 8 |
| Comparative Average | \$223.78 | \$183.10 | \$26.12 | \$433.00 | |



*current rate study increase ongoing

[illegible]

Stafford Courthouse Area Redevelopment Schedule



Moncure Site Valuation

Summary of Findings

Assumptions

- Highest and Best Use is a mix of retail with commercial zoning (Property to be rezoned as B2)
- Current use is tax exempt and future development subject to commercial tax rate
- Current building will be demolished

Findings

- Current use value @ \$8.00/SF after demolition: \$2,984,800
- Future use value @ \$16.80/SF after demolition: \$6,818,080
- New development on site could accommodate 174,240 sf of development valued at approximately \$57,000,000
- Estimated annual property tax on new development \$564,300

Discussion and Questions

GREYSTONE

VALUATION

**PREPARED FOR:
STAFFORD COUNTY, VIRGINIA**

**IMPROVED PROPERTY LOCATED AT:
75 MONCURE LANE
STAFFORD, VIRGINIA 22556**

**PREPARED BY:
GREYSTONE MANAGEMENT SOLUTIONS
AND
STANTEC**

APRIL 3, 2018



To: Fred Presley, Deputy County Administrator, Stafford County

From: Charles Di Maggio, Chief Operating Officer, Greystone
Matthew Hunt, Senior Asset Manager
Melissa Chaput, Senior Asset Manager
Ryan McGrath, Financial Analyst

cc: Drew Leff, Stantec

Re: 75 Moncure Lane, Stafford, Virginia 22556
Valuation

Date: April 3, 2018

PURPOSE AND SCOPE OF EVALUATION

Stafford County (hereinafter, "the County") has requested a valuation of 75 Moncure Lane, Stafford County (the "Premises") to understand the value of the property upon disposition, and to project tax revenue that could be generated by redevelopment. We have based this valuation on the presumption that the highest and best use of the property is a grocery or big box anchored retail shopping center, which is consistent with predominant adjacent uses. In preparing this valuation we physically canvassed the submarket, contacted local brokers and consulted third party real estate databases for local listing information, reviewed available information from the County Assessor's office, and obtained information concerning recent school construction costs from the County of Stafford. This valuation is based on this available data, the assumptions below and provides the reasonable range in which we believe the property should be valued.

INTENDED USE

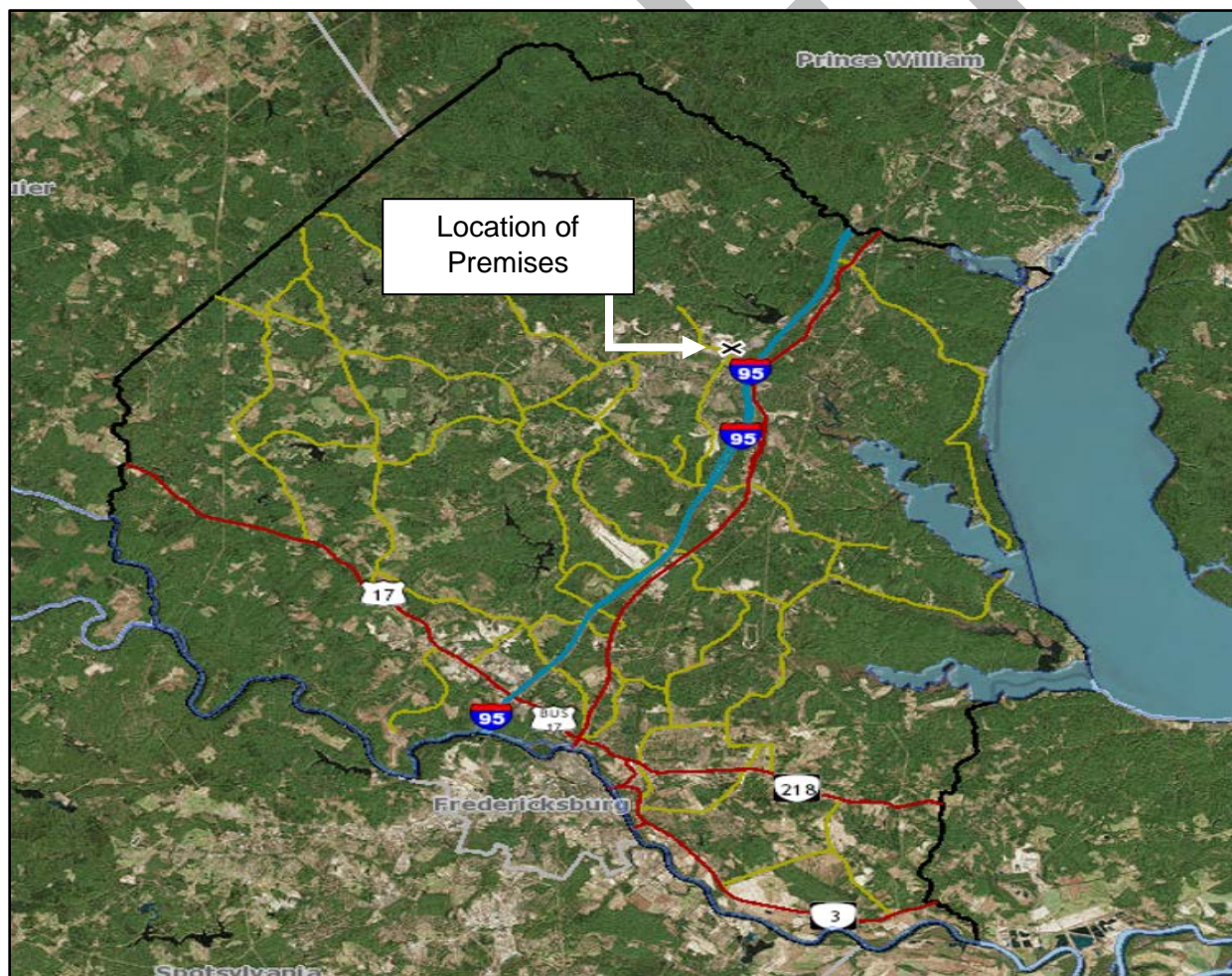
Stafford County is the intended user of this valuation for the sole purpose of assessing the potential fair market value for the Premises. The actual disposition value of the parcel will be dependent upon the developer's proposed plans, entitlements granted and if the entire parcel is included the disposition.

ASSUMPTIONS

- Current use is a school and ancillary parking for the school
- Highest and Best Use is a mix of retail with commercial zoning
- Valuation assumes disposition of absolute fee interest
- Assumes replacement cost of existing school must be factored into value
- Assumes \$200-250 per square foot for school replacement cost
- Existing site is exempt from real estate taxes
- Future development subject to existing commercial tax rate

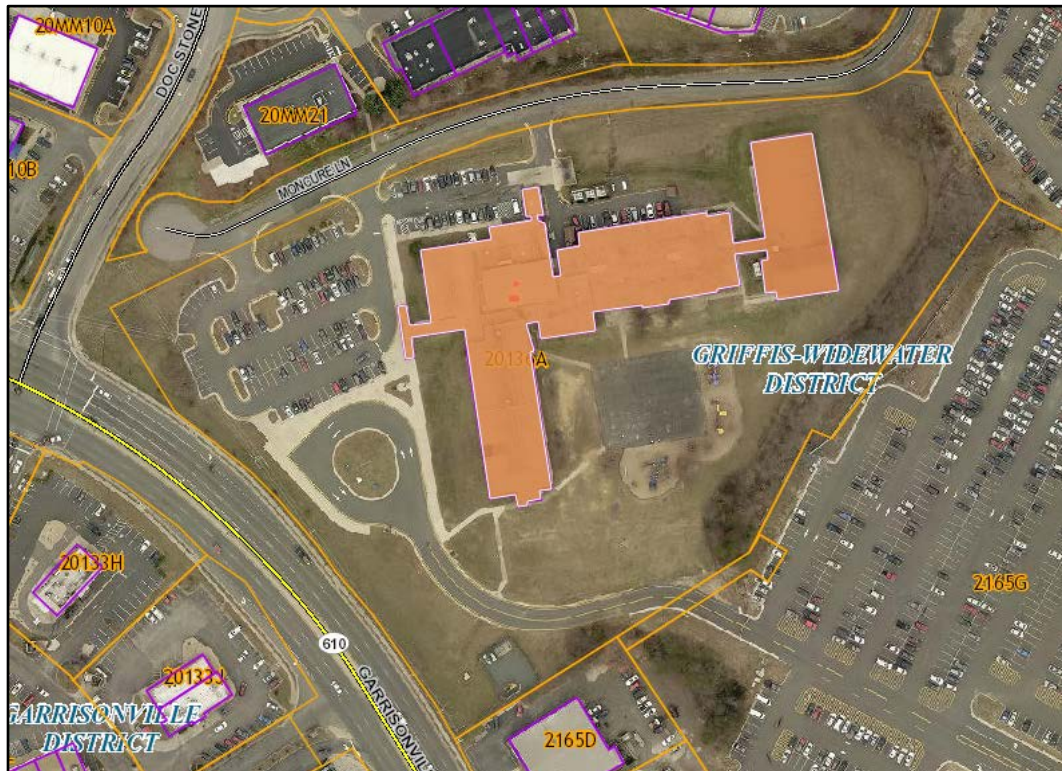
THE PREMISES

The Premises is situated in the Northeastern part of Stafford County in the Griffin Widewater District, just north of State Highway 610 and approximately one mile west of I-95, accessible from Exit 143B.



Stafford County, VA

The Premises is improved with a 62,042 square foot one-story concrete block building built on slab. The improvements are situated on a 10-acre site. The building was constructed by Stafford County and is currently used for the Anne E. Moncure Elementary School. Adjacent uses include big box retail centers including Stafford Market Place and the North Stafford Plaza. Uses north of the Premises are mostly a mix of residential structures.



The Premises (Building Highlighted)



The Premises (Property Boundary Outlined)

APPROACH

Although the current site is zoned for educational use, we have analyzed the site in the context of its surroundings to determine the probable use and zoning designation that would likely be sought by investors/developers that approach the site. The Premises is located adjacent to uses that are predominately retail in nature and that cater to major national brands, currently zoned under a B2 – Urban Commercial designation. Based on the adjoining uses currently in place and given the locale and submarket/market context, for the purposes of this valuation we presumed the highest and best use of the Premises would be a mix of commercial retail. Therefore, the basis of this valuation reflects a strategy that would see the Premises redeveloped as a commercial retail center.

As the current use of the Premises as a school is a specialized category, reuse in its existing configuration is very limited. Our approach assumes that an investor would redevelop the site. Absent a creative reuse of the existing structure, we assume that a typical investor would demolish the current school and rebuild the site according to the current retail standards. Therefore the existing school structure will need to be razed and a new structure put in place.

In accordance with this assumption, we considered demolition costs as well as the cost of developing a retail structure that would be in conformity with what is typical of the area. Of course, there would be opportunities for creative retail that exceeds these standards, but for the purposes of determining a baseline for value for the County, this approach is the most appropriate.

In considering retail approaches, we have conducted a review of existing area retail to consider what would be the appropriate retail type. Adjacent properties include national big box retail, as well as regional, and local retail uses. This review implies that larger non-specific box retail as well as specialized retail with larger fit-out cost could be likely for the reuse of the site. Utilizing the assessed values of the adjoining sites, we attributed a value to land and using this methodology applied a value to the currently entitled retail properties. The general approach therefore considers what development cost could be considered according to local typologies as well as what demolition costs would be, to determine a construction basis. From these we attribute a potential underlying land value for a future commercial use of the Premises.

Lastly, our assumption is that if the school were razed, it would need to be replaced. We have therefore conducted a high-level cost estimate of the replacement school. In this manner, the County would be capable of determining their total investment cost netted against the potential sale value of the Premises.

In addition to this first approach, we have also conducted a second analysis. This analysis looks at the valuation of the land from a market perspective. In this second method, we begin by understanding how retail transactions are valued in this market as well as within comparable markets in the region. The pricing paid for retail properties provides insight into how capitalization rates are applied to net operating income (NOI), and gives an

indication of how a future retail development on the subject site would be valued. We have analyzed a number of different retail sales comparables, including reviewing sales prices and leasing rates for Stafford County, to determine the market drivers of retail and determine what a developer or investor would expect to see on this site.

For a developer/investor to be attracted to such a market, it would also be critical to understand the underlying costs, most critically, construction costs and the underlying land cost. Our model includes a high-level cost analysis of a proposed retail development. Our approach was to ultimately to determine if, given the land value determined in the first analysis, a developer could achieve sufficient returns given the cost and revenues associated with such a development. If the Premises are valued too low, then a developer might earn windfall profits. If the Premises are valued too high, then development might not occur.

As a final check, we have also looked at land sale comparables in Stafford County to see if there are relevant examples of raw land transactions that might guide the County's understanding of the Premises. Using the methods described in this approach, we have been able to assess the value in several ways to ensure that there is a complete understanding of what the County expects should they elect to proceed with a disposition.

VALUATION ANALYSIS- ASSESSED VALUE APPROACH

The valuation analysis begins by considering both what the underlying land value is *in situ* as well as the value that is added from a superstructure being constructed on it. From a land value basis, we have considered the land tax basis. In Stafford County, land appraisals are conducted on an annual basis. While these appraisals might lag or depart from market considerations, the regularity of their updates implies that market values are captured and that real time data on comparable sales are utilized and inform the tax basis. Therefore it is expected that the County tax values can serve as a proxy for potential market values in a typical economic environment.

From an investment standpoint, one would seek to understand the following:

- The underlying land value;
- The potential developable value due to retail economics; and
- The deductive value due to demolition and repositioning costs of the current assets.

The valuation therefore assesses each of these points to determine the willingness of a developer/investor to acquire the site, demolish the current structure, and rebuild to current retail standards, given the retail rental rates and general market environment.

The current taxable basis of the land, according to Stafford County assessors, is \$3,484,800. As we have noted, the County conducts land and building value assessments on an annual basis. Given the overall dynamic of the County, there are ample

opportunities to observe and register market transactions in order to validate the assessed values. Therefore we believe that this value conforms to market standards given the level of regularity of review and ability of the County to monitor market conditions.

In order to secure the land as available for development, there would be a need to present the site as prepared for new development, indicating that demolition of the current structure would be required. We have estimated a demolition cost of \$500,000. This cost was derived from discussions with regional contracting companies, and would be subject to refinement based on such factors as environmental or structural review. Subtracting out this cost leaves a net land value of \$2,984,800, as seen below:

| Current Assessed Value - Premises | | |
|-----------------------------------|-------------|---------------------------|
| Category | Value | Source |
| Assessed Value - Land | \$3,484,800 | County Assessment Records |
| Demolition Costs | \$500,000 | Contractor Discussions |
| Net Value | \$2,984,800 | Net Land Assessment |

The Premises currently contain 435,600 square feet (10 Acres) of land. At the current Net Value, this translates to a value of \$8.00/SF for the land under its current zoning or use conditions. The need to demolish the building or otherwise prepare the land for development would reduce this value.

Using a similar process, we have reviewed the assessed values for both the land and buildings of the properties immediately adjacent to the Premises. We have extracted the assessed land value of the properties of retail use to determine comparable assessed land values should the Premises be “rezoned” or considered as a retail site. We utilized six typical properties in determining the potential assessed value of the Premises if rezoned:

| Adjacent Retail Land Value Assessments | | | | | |
|--|---------------------|-------------|------------------|-------------|---------|
| Asset Type | Assessed Land Value | Acres | SF | \$ / Acre | \$ / SF |
| Stafford Marketplace Big Box | \$8,001,200 | 13.1 | 571,507 | \$609,848 | \$14.00 |
| Stafford Marketplace Big Box | \$3,604,000 | 5.2 | 225,205 | \$697,099 | \$16.00 |
| Local Retail (Bank) | \$1,227,000 | 1.0 | 43,996 | \$1,214,851 | \$27.89 |
| Local Retail (Restaurant) | \$1,470,100 | 1.2 | 52,708 | \$1,214,959 | \$27.89 |
| Local Retail (Restaurant) | \$2,182,500 | 1.7 | 75,359 | \$1,261,561 | \$28.96 |
| Stafford Marketplace Big Box | \$4,223,200 | 6.1 | 263,974 | \$696,898 | \$16.00 |
| TOTALS | | 28.3 | 1,232,748 | | |

As seen in the chart above, 28.3 acres, or 1.2M square feet are located adjacent to the Premises. We observed both the typical “big box” retail as well as specialty retail to get

an indicative value of how each typology affects the underlying land value. Big box retail typically involves construction typologies that, while larger, are more simple and do not require extensive interior fit out. Additionally these sites contain significant portions of land that are used as parking. Sales volumes for these uses are large, but margins are typically lower. These characteristics are reflected in the lower costs of \$14.00-\$16.00/SF in the chart. Local retail typologies, such as restaurants, have more demanding requirements in terms of fit out, are on smaller parcels of land, and have a different economic profile, reflected in the higher costs of \$27.00-\$29.00/SF.

To determine a value for a potential retail site, the analysis adjusts the value of the retail comps according to their weighted averages. As seen above, the acreage/square foot difference vary significantly between big box and local retail.

| Weighted Assessed Land Values | | | | |
|-------------------------------|------------------|---------------|---------|----------------|
| Asset Type | SF | % of Total | \$ / SF | Weighted Value |
| Stafford Marketplace Big Box | 571,507 | 46.4% | \$14.00 | \$6.49 |
| Stafford Marketplace Big Box | 225,205 | 18.3% | \$16.00 | \$2.92 |
| Local Retail (Bank) | 43,996 | 3.6% | \$27.89 | \$1.00 |
| Local Retail (Restaurant) | 52,708 | 4.3% | \$27.89 | \$1.19 |
| Local Retail (Restaurant) | 75,359 | 6.2% | \$28.96 | \$1.77 |
| Stafford Marketplace Big Box | 263,974 | 21.4% | \$16.00 | \$3.43 |
| TOTALS | 1,232,748 | 100.0% | | \$16.80 |

The weighted average land assessed value for retail comps in this area is \$16.80, as seen above. This suggests that in a scenario where the school site, treated as land, was zoned for retail development, there would be significant value created above the current raw land value of \$8.00/SF. If the assessed land value of the Premises were considered under these retail terms, then the new land value would be \$7,317,340. Netting this value against the same demolition costs above yields a final assessed value of \$6,818,080.

| Revised Land Assessment | |
|----------------------------|--------------------|
| Current Assessment | \$3,484,800 |
| Land Assessment / SF | \$8.00 |
| New Assessment | \$7,317,340 |
| Land Assessment / SF | \$16.80 |
| Demolition Costs | \$500,000 |
| Net Land Assessment | \$6,818,080 |

Finally, our assumption stated above is that the removal of a school from the Premises would necessitate the provision of a new school. We have assumed that the replacement size of a new elementary school would be 100,000 square feet. We utilized data drawn from RS Means, a construction costing software, to determine the cost to the County. RS Means allows for costs to be determined according to building type (commercial, residential, etc.), but also for specialty products such as schools. Adjustments can be

made to these costs to account for style (luxury versus basic finish), structure (high-rise versus low-rise), location (by City, to account for local labor and material costs), and other factors. Using the factors appropriate for the new school and for its location in Stafford County, the following costs were determined:

| Construction Cost Estimate – New School | |
|---|--------------|
| New School Square Footage | 100,000 |
| \$/Sqft School Shell | \$221.50 |
| \$/Sqft School Fit Out | \$37.50 |
| Improvement Value Building Shell | \$22,150,000 |
| Improvement Value Finished School | \$27,200,000 |

The costs estimates included are inclusive of all hard and soft costs. This calculation does not include the costs of land for the replacement school. We were informed by the County that it has acquired land for a new school for a price of \$1,300,000. We looked at current land offerings to determine the ability of the County to acquire land at a similar price. Currently the land offerings that meet the County's needs are as follows:

| Comparable Land Availability for Replacement School | | | | | |
|---|---------------------------|-------|-------------|-----------|---------|
| City | Address | Acres | Price | SF | \$ / SF |
| Stafford | I-95 | 48.9 | \$7,999,000 | 2,130,084 | 3.76 |
| Stafford | 990 Garrison | 10.06 | \$1,500,000 | 438,214 | 3.42 |
| Stafford | 799 Garrisonville Rd | 24 | \$2,495,000 | 1,045,440 | 2.39 |
| Stafford | 1318 Jefferson Davis Hwy | 14.75 | \$750,000 | 642,510 | 1.17 |
| Stafford | 2705 Jefferson Davis Hwy | 28.88 | \$3,500,000 | 1,258,013 | 2.78 |
| Stafford | 33 Onville Rd | 6.5 | \$799,000 | 283,140 | 2.82 |
| Stafford | 799 Garrisonville Rd | 24 | \$2,495,000 | 1,045,440 | 2.39 |
| Stafford | 0 Courthouse Rd | 66 | \$750,000 | 2,874,960 | 0.26 |
| Stafford | Hope Road & Courthouse Rd | 8.28 | \$350,000 | 360,677 | 0.97 |
| Stafford | Kimberwick Ln & Ebenezer | 24 | \$1,500,000 | 1,045,440 | 1.43 |
| Average | | | | | 2.22 |

Given an average price per square foot of \$2.22, we project the County would expend approximately \$965,744 if they were to acquire a site of equal size to the current Premises.

VALUATION ANALYSIS- COMPARABLE SALES APPROACH

In addition to looking at adjacent assessed values for retail, we have considered an approach that looks at comparable retail trades in both the local area as well as similar areas in the greater Washington Metropolitan Statistical Area (MSA). Below is a series of retail transactions that have occurred over the past 24 months in both Stafford and in similar towns and counties in the Washington MSA.

| Sales in Past 24 Months | | | | | |
|-------------------------|-------------------------------|---|---------|-------------|--------------|
| City | Address | Uses | Land SF | Building SF | Sales Price |
| Fredericksburg | 1541 Carl D Silver Pkwy | Best Buy | 179,903 | 46,457 | \$5,547,100 |
| Stafford | 9 Center Street | Restaurant – Paddy's Steakhouse | 52,708 | 13,220 | \$3,800,000 |
| Manassas | 8100 Centreville Rd | Car Dealership | 262,567 | 24,505 | \$6,225,000 |
| Manassas | 13980 Estate Manor Drive | Daycare | 35,227 | 10,530 | \$4,595,000 |
| Stafford | 388-394 Garrisonville Rd | CVS | 148,975 | 14,600 | \$7,446,938 |
| Fredericksburg | 27 S. Gateway Dr | Target Petsmart Subway Panera WaWa Verizon | 170,842 | 40,631 | \$5,920,000 |
| Fredericksburg | 28 S. Gateway Dr | Strip mall Chipotle Quickway AT&T and Freddys | 78,408 | 9,560 | \$5,125,000 |
| Gainsville | 13093-13297 Gateway Center Dr | Strip Mall A tenants Justice Charming Charlie etc | 243,065 | 137,400 | \$44,600,000 |
| Gainsville | 7201 Heritage Village Pl | Health club | 180,534 | 46,526 | \$16,500,000 |
| Bristow | 7700 Progress Ct | Caliber Collison | 104,544 | 19,000 | \$3,850,000 |
| Manassas | 10830 Promenade Ln | Bob Evans | 43,560 | 6,111 | \$2,704,446 |
| Fredericksburg | 50 Sebring Dr | Mr Tire | 65,035 | 7,875 | \$2,000,000 |
| Bristow | 11675 Chapel Springs Rd | Everbrook Academy. No FAR/LandValue/PSF data avail | | 11,844 | \$6,010,000 |
| Stafford | 309-317 Worth Ave | Supermarket anchored Giant, Petco, Great Clips, others | 330,620 | 77,100 | \$24,524,806 |
| Stafford | 295 Worth Ave | Staples anchored power center | 98,881 | 23,924 | \$7,610,006 |

These sales represent a broad spectrum of retail investment, from big box to strip mall to standalone retail. As a potential investor in the Premises might be willing to pursue any or all of these strategies, it is not possible to say with certain what a potential transaction figure might be for future retail on this site. However, we can impute a potential value given the average sales value of comparable retail.

We have utilized capitalization rates, or “cap rates”, to estimate what the net operating income (NOI) was of each property in the sample transaction list. Cap rates are the value that investors assign to the income-producing capability of an asset. Cap rates may be thought of as the expected return that an investor is willing to achieve given the economics of a property. We have researched and catalogued the sales price of each transaction, as well as the cap rate that was used. Pricing and cap rates are published as part of transaction records. By multiplying the sales price by the cap rate, we can determine the NOI of each property in the set above.

| City | Address | Sales Price | Cap Rate | NOI |
|-----------------------|---------------------------|--------------|-------------|-------------|
| Fredericksburg | 1541 Carl D Silver Pkwy | \$5,547,100 | 8.5% | \$471,504 |
| Stafford | 9 Center Street | \$3,800,000 | 6.8% | \$258,400 |
| Manassas | 8100 Centreville Rd | \$6,225,000 | 4.4% | \$273,900 |
| Manassas | 13980 Estate Manor Drive | \$4,595,000 | 6.6% | \$300,973 |
| Stafford | 388-394 Garrisonville Rd | \$7,446,938 | 4.9% | \$364,900 |
| Fredericksburg | 27 S. Gateway Dr | \$5,920,000 | 7.0% | \$414,400 |
| Fredericksburg | 28 S. Gateway Dr | \$5,125,000 | 5.8% | \$296,738 |
| Gainesville | 13093/7 Gateway Center Dr | \$44,600,000 | 5.4% | \$2,408,400 |
| Gainesville | 7201 Heritage Village Pl | \$16,500,000 | 6.7% | \$1,100,550 |
| Bristow | 7700 Progress Ct | \$3,850,000 | 6.3% | \$242,935 |
| Manassas | 10830 Promenade Ln | \$2,704,446 | 5.6% | \$151,449 |
| Fredericksburg | 50 Sebring Dr | \$2,000,000 | 6.7% | \$134,600 |
| Bristow | 11675 Chapel Springs rd | \$6,010,000 | 6.5% | \$390,650 |
| Stafford | 309-317 Worth Ave | \$24,524,806 | 6.7% | \$1,643,162 |
| Stafford | 295 Worth Ave | \$7,610,006 | 6.7% | \$509,870 |
| Averages | | | 6.4% | |

We have analyzed land value in the previous section, and so we wish to test that assumption through this additional method to determine if that is in fact a reasonable value. In order for development to proceed on a particular site, a developer/investor would need to know that the ultimate rents or sales value achieved on a property must compensate for the price of both land acquisition and construction costs. Any new buildout on the site would need to conform to the Comprehensive Plan and the guidelines identified by the Planning & Zoning Department of Stafford County. The site area is contained within an “Urban Services Zone”, and zoned B2, Urban Commercial. According to the guidelines, the site would have a Floor Area Ratio (FAR) guideline of 0.4, meaning that the maximum buildout of the site could be 174,240 SF.

In addition to understanding cap rates and how they affect value, the sales-based approach also needs to regard the leasing market, as rental rates and ultimately NOI are what drives the building value for sale (or long-term hold by the owner). The following are recent lease comparables in the surrounding area:

| Active Leasing Comparables | | | | | | |
|----------------------------|-------------------------------|------------|-------------|----|-----------------|---|
| City | Address | Quoted PSF | Condition | TI | New or Existing | Comments |
| Fredericksburg | 833 Warrenton | \$30-\$35 | Vanilla box | 0 | New | Delivery 2019 |
| Fredericksburg | 833 Warrenton | \$40-\$45 | Vanilla box | 0 | New | Delivery 2019 |
| Stafford | 2848 Jefferson Davis Hwy | \$35 | Vanilla box | | Redevelop | Delivery 2019 |
| Stafford | 2848 Jefferson Davis Hwy | \$42 | Vanilla box | | Redevelop | Delivery 2020 |
| Stafford | 2773 Jefferson Davis Hwy | \$17-\$20 | Built 2007 | 0 | Existing | B-C grade strip center. |
| Stafford | 3247-3255 Jefferson Davis Hwy | \$23.60 | Built 1986 | 0 | Existing | C grade strip w/all non-credits |
| Fredericksburg | 840 Warrenton Rd | \$15 | Built 1990 | 0 | Existing | C grade strip. Dominos is the only national tenant |
| Stafford | 50 Dunn Dr | \$21 | Built 2002 | 0 | Existing | Outparcel strip in front of Home Depot. All B retail tenants in the strip today |
| Stafford | 15 Tech Pky | \$20 | Built 2007 | 0 | Existing | |

As seen above, most active lease comps are Class B or C retail strip centers. In both Fredericksburg and Stafford, however, there are new developments that seek to attain rents more in line with new product upon delivery in 2019 and 2020. While the ultimate leasing details of these developments, such as lease credits, tenant improvements, or indeed whether or not they attain these rents is yet to be confirmed, these figures are reasonable for financing new development.

Our projections reflect attainable rents in newer developments in the region. Rents in existing retail shopping centers should expect to be lower than this new product. We utilized a lower range of these new developments to be conservative. Lastly, in order to understand development feasibility, construction costs will need to be understood. There are numerous typologies of retail that can be built, with varying costs. Department stores, restaurants, banks, big box, and others all have different costs, and the specific type that a developer would choose will affect this. We have looked at a number of cost scenarios

through both data in RS Means and in speaking with a number of developers operating locally. For this analysis we believe that it is prudent and reasonable to assume a cost of \$175-\$200/SF for ground up development. These costs would exclude any special equipment or very high-end building features, but are a good baseline for understanding average construction costs.

With the information above on the various market transactions, comparables, and economics, this analysis looks to assess whether or not a development would be able to be successfully executed on the Premises. We have looked at understanding how a potential development, with its relevant construction costs, lease rates, and ultimate transaction values, would be evaluated given the underlying land value. The analysis considers whether or not the value derived in the first exercise is reasonable, given these parameters. If the land value is too low, then a developer could earn excess profits that could have accrued to the County. If the land value is too high, then a development would not be feasible, or it would not attract sufficient developer interest.

Based upon the current lease rates that are occurring for new developments, we have utilized \$30/SF as our baseline for rents. This is higher than the average rents in Stafford but more in line with the rates associated with the type of development that we would expect to see on the site. Based on the expected square footage, we can determine the gross income that a development may generate. Assuming that the operator of a development would expend 30% of this income on operating costs of the retail center, we have determined that the developer would achieve a 70% NOI. Based upon the average cap rate of 6.4% noted above, we can determine an indicative value for such a proposed development. When this value is netted out against construction and land costs, we can see whether or not a developer can make a sufficient margin to be interested in the site.

By varying the land value (cost) component of this equation, we can assess whether or not the value determined in the first analysis is reasonable or not. When we look at these components together, we see the following:

| Value | Category |
|---------------------|--------------------|
| 174,240 SF | SF of Buildout |
| \$30 | Avg. Rent PSF |
| \$5,227,200 | Income |
| 70% | Revenue Efficiency |
| \$3,659,040 | NOI |
| 6.4% | Cap Rate |
| \$57,172,500 | Asset Value |
| Less | |
| \$34,848,000 | Construction Cost |
| \$6,818,080 | Land Cost |
| \$15,524,500 | Return (\$) |
| 37.3% | Return (%) |

In order to estimate land costs we have applied to this calculation what a typical developer would need to earn as a return on investment in the retail space. This return would need to account for the risk associated with construction and financing of retail, as well as with the ability of the market to absorb the development. While there is no single objective measure of “return” that can validate the land pricing, we looked at the value from the initial exercise to see if this theoretical pricing would be either prohibitive to development or allow the developer to earn an outsized return. When this cost is considered, the return to the developer is 37.3%, which would be in line with expectations of a reasonable return on development. Therefore, we believe this pricing is reasonable.

Additionally we looked at land sale comparables within the area to determine if the values determined above are reasonable. The following land comparables have been analyzed:

| Land Sale Comparables | | | | | | |
|-----------------------|--------------------------|-------|-------------|---------|--------------|--|
| City | Address | Acres | Price | SF | \$/SF | Comments |
| Stafford | 8 Dorothy Lane | 0.3 | \$650,000 | 0 | 14.92 | Side Street to main retail corridor |
| Stafford | 200 Eustace Rd | 4.7 | \$2,500,000 | 203,861 | 12.26 | Side Street to main retail corridor. Behind a WAWA |
| Stafford | 955 Garrison Road | 1.6 | \$1,300,000 | 67,518 | 19.25 | Main retail corridor |
| Stafford | 3071 Jefferson Davis Hwy | 1.3 | \$499,900 | 58,370 | 8.56 | On mature retail corridor |
| Stafford | 2779 Jefferson Davis Hwy | 2.9 | \$2,695,000 | 125,888 | 21.41 | Retail Corridor |
| Stafford | Garrison & Shelton Road | 14.4 | \$6,900,000 | 625,957 | 11.02 | Main retail corridor |
| Average | | | | | 15.00 | |

Looking at recent land sales in Stafford County, an average of \$15.00/SF has been typical for site suitable for retail. More or less desirable locations have an impact on individual pricing, as does the size and configuration of the land, which determines the quantity and type of product that can be delivered. Of the examples listed above, the only site comparable in size to the Premises is the property at Garrison & Shelton Roads. We believe the Premises to be a superior location to this site, and a higher price would be justified. **If we consider the average price, then the Premises would be worth \$6.3M,** which is in line with what the other approaches have produced.

FISCAL IMPACT

The Comprehensive Plan for Stafford County has designated the area containing and surrounding the Premises as an “Urban Services Zone”. In addition, the zoning plan for the Premises and the surrounding sites call for “B2” zoning. B2 is the designation for “Urban Commercial” districts and sites. The Planning & Zoning Department of Stafford County notes that sites with these designations should be governed by a maximum Floor Area Ratio (FAR) of 0.4. FAR is the metric by which zoning regulations can govern overall density within an area without having to specify form or configuration of a specific site. The Premises is an even 10.0 acres in area. Were the site to be built out to its full capacity per the planning guidelines, this would mean the Premises could accommodate 174,240 SF of development. As we have noted above, we believe the value for such a retail development could be approximately \$57,000,000. Given that the current millage rate for commercial properties in Stafford County is \$0.99 per \$100 of value, this would mean that the **fiscal impact to the County in terms of property taxes could be approximately \$564,300 annually.**

CONCLUSIONS

As we have seen above, there are several approaches to understanding the potential land value of the Premises. Using the base assessment value of the surrounding retail comparables, and determining how the Premises’ underlying value would change under a similar zoning scenario, the value of the land would be approximately \$6.8M. We have also looked at retail sales, lease values, and new retail construction costs to determine what a developer might be willing to pay for land at this site. Using the figure derived in the first approach, we’ve determined a developer would receive an adequate return upon development. It is important to note that the actual disposition value will vary depending on a particular developer’s cost of capital, risk thresholds, and the type (cost) of product that is being built. This component of the analysis “backs into” the land cost based on an assumption of what a reasonable return is for a developer. The County can expect to see pricing either higher or lower than this depending on the specific developer and transaction that is anticipated.

Finally, we have looked at land sale comparables in the area and seen that a price of \$6.3M is reasonable, and in line with the other analyses. As is stated in the report above, this price can vary based upon the quality of the location of the site. In our opinion, the Premises must be considered a prime location and therefore this price can be justified.

Although the two analyses demonstrate a very close range of values, we believe that the County should expect a range of \$6.3M - \$7.0M for the Premises depending on the particular developer that is selected and the product that is planned.

Route 1-Telegraph Road Smart Scale Project

- The Board, by Resolution R18-65, authorized the award of a contract for the design of a new intersection with U. S. Route 1 between Woodstock Lane and Telegraph Road
- The new intersection, shown graphically in the attached exhibit, modifies the original Smart Scale application to provide a new signalized intersection
- Whereas the original successful application has been modified to the current concept, the VDOT Infrastructure Investment Division which manages the Smart Scale Program, has requested the following in the form of a Board resolution:
 - A statement that the public involvement process is complete and all resulting comments, if any, have been addressed
 - A commitment to include access improvements along Route 1 (2-way LTL/raised median) and that any cost savings from the revised concept would go back to enhance access on Route 1
 - A statement that we will be responsible for any cost increases and may not request additional funding from the state for any reason for this project
- The project as modified should result in a substantially lower total cost, provided VDOT doesn't add to the scope
- Meeting the public involvement request may be best addressed with a public hearing, although there are no statutory advertising requirements



SAFETY IMPROVEMENT FOR ROUTE 1
AND TELEGRAPH ROAD/WOODSTOCK LANE
STAFFORD, VA
2024 PROPOSED BUILD
VDOT PROJECT #: 0001-089-721
UPC: 109467
1-25-2018



SCALE
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