A G E N D A
ISLE OF WIGHT COUNTY PLANNING COMMISSION
June 28, 2022

1. CALL TO ORDER

INVOCATION

PLEDGE OF ALLEGIANCE

2. ROLL CALL/DETERMINATION OF A QUORUM

BRIAN CARROLL, CHAIRMAN
BOBBY BOWSER, VICE-CHAIRMAN
CYNTHIA TAYLOR
JAMES FORD
THOMAS DUERIG
JENNIFER S. BOYKIN
GEORGE RAWLS
THOMAS J. DISTEFANO

3. ACTION ON REQUESTS TO WITHDRAW OR TABLE PENDING AGENDA ITEMS

4. APPROVAL OF AGENDA

5. CONSENT AGENDA

A. MAY 19, 2022 ACTION LIST BOARD OF SUPERVISORS

B. MAY 24, 2022 REGULAR MEETING MINUTES

6. CITIZENS' COMMENTS

7. PUBLIC HEARINGS

A. SMITHFIELD SPORTS COMPLEX CLUB

Application of Anthony Landes and Derek Joyner, applicants, and Vincent Carollo, property owner, for a conditional use permit (CUP-9-21) to establish a private club, specifically a sports club, on property located at 14353 Benns Church Boulevard (Rte. 10) with tax parcel number 32-01-093. The property is in the Suburban Residential zoning district.

B. WHITLEY-HAWKINS BORROW PIT CUP REQUEST

Application of Curtis Contracting, Inc., applicant, and Whitley-Hawkins Holdings, LLC, property owner, for approval of conditional use permit (CUP-6-21) to expand an existing resource extraction use, specifically a sand borrow pit, on eleven acres located at 32083 Airport Drive on properties with tax map numbers 68-01-001 and 68-02-002. The property is in the Rural Agricultural Conservation zoning district.

C. WAWA CONVENIENCE STORE AND GASOLINE STATION CUP REQUEST

Application of Remus Brustur of Frontier Development, applicant, and the William G. Yeoman, III, Trust, property owner, for a conditional use permit (CUP-8-21) for a

Wawa convenience store and gas station on 5.69 acres located on the southwest corner of Turner Drive (Rte. 644) and Benns Church Boulevard (Rte. 10) on property with tax map number 32-01-007

D. GERALD W. PEADE ZONING AMENDMENT REQUEST

Application of Gerald W. Peade, property owner, for an amendment to conditional zoning (ZA-2-22) to add motor vehicle repair service (major) and garden center uses to conditional zoning uses on a 1.25-acre parcel, located at 12728 Courthouse Highway on property with tax map number 21-01-026C. The property is zoned Conditional - General Commercial (C-GC) and no change in zoning classification is proposed.

8. OLD BUSINESS

A. SAWCO SELF-STORAGE CONDITIONAL ZONING AMENDMENT REQUEST

Application of Carrollton Ventures, LLC, property owner, for a change in conditional zoning to allow 120,000 square feet of mini-warehouses, also known as self-storage units, and outdoor motor vehicle storage on 8.08 acres located at 15411 Carrollton Blvd. (Rte. 17) on property with tax parcel numbers 34-01-108 and 34-01-108B

9. NEW BUSINESS

A. COUNTY ATTORNEY'S REPORT

B. PLANNING DIRECTOR'S REPORT

10. CLOSED MEETING

11. ADJOURNMENT

PLANNING REPORT

ATTACHMENTS:

Description	Type	Upload Date
MAY 19, 2022 ACTION LIST BOARD OF SUPERVISORS	Cover Memo	6/21/2022

Action List
Board of Supervisors
May 19, 2022

1. Approval of Agenda: Supervisor McCarty moved that the agenda be approved as presented. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

   Chairman Jefferson moved that the special presentation to recognize Investigator Bert Nurney be moved in front of the special presentation to discuss the FY2022-23 School's Budget. The motion was adopted unanimously (4-0) with Supervisors Jefferson, McCarty, Rosie and Acree voting in favor of the motion; no Supervisor voting against the motion; and Supervisor Grice absent for the vote.

2. Closed Meeting

   There was no action following the closed meeting.

3. Citizens' Comments

   A. Mike Munford of Carrollton requested the Board's approval of no parking signs on Northgate Drive and Bridgewater.

      Assignment: Oliver

   B. The following individuals spoke in favor of the Board's motion at its May 12, 2022 to adopt the Ordinance as amended by reducing the School's **B**udget by $1,572,507 and placing those funds into the County's Contingency line item:

      . Volpe Boykin of District 5
      . Jason Maresh of District 4
      . Laura Fletcher of Great Spring Road
      . Shelley Perry of District 3
      . Herb DeGroft

C. Reverend W. L. Williams of District 5 remarked that the Board's action to cut the School Board's budget has nothing to do with accountability but rather about an effort to stop America from bonding.

D. The following individuals spoke in favor of the Board returning the $1.572,507 to the School Board's budget:

. Bessie Cameron of Carrollton
. Martha Jackson of District 3
. Brianna Benning
. Wendy Thompson of District 3

E. Richard Cassell of Vellines Lane requested the Board's assistance with addressing the dumping of trash along Kings Cove Way.

4. Consent Agenda

A. Regional Groundwater Memorandum of Agreement Regional Memorandum of Agreement (MOA) for Groundwater Mitigation

Assignment: Jennings

B. Smithfield Volunteer Fire Department Loan Agreement for IRS Compliance

C. Resolution to Budget and Appropriate Insurance Proceeds from VACoRP Risk Management and Progressive Insurance for Repairs of County Property ($15,278)

Assignment: S. Humphries

D. Resolution to Amend the Budget and Appropriate Funding from the Virginia Tourism Corporation ($10,000)

Assignment: S. Humphries

E. Resolution to Amend the Budget and Appropriate Funding from the Virginia Tourism Corporation ($20,000)

Assignment: S. Humphries

F. Resolution to Amend the Budget and Appropriate Community Flood Preparedness Grant Funding ($90,701)

Assignment: S. Humphries

G. Minutes

. March 17, 2022 Regular Meeting Minutes
. April 21, 2022 Regular Meeting Minutes
. May 5, 2022 Budget Work Session Minutes

Assignment: Storm

Supervisor McCarty moved that the Consent Agenda be adopted as presented. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

5. Regional and Inter-Governmental Reports

A. Hampton Roads Transportation Planning Organization: Supervisor McCarty advised that the HRTPO received a report today that the ports will be the deepest and the widest on the east coast.

B. Hampton Roads Workforce Council: Supervisor Grice announced that leaders in the community will be having lunch tomorrow with the culinary class at Smithfield High School and will be discussing work force issues affecting the County.

6. Appointments

A. Commission on Aging: Supervisor McCarty moved that Thomas Finderson be reappointed to represent District 2. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Storm

B. Economic Development Authority: Supervisor McCarty moved that Carroll Keen, Jr. be reappointed to represent District 2. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Storm

C. Hampton Roads Workforce Council: Supervisor McCarty moved to reappoint L'Tanya Johnson. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Storm

D. Commission on Aging: Supervisor Acree moved to reappoint Ruth Hartsfield to represent District 4. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Storm

E. Camp Community College: Supervisor Grice moved to reappoint Dr. Richard Antcliff. The motion was adopted unanimously (5-0) with

Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Storm

F. Social Services Board: Supervisor Grice moved to reappoint Barbara Stafford to represent District 1. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Storm

G. Blackwater Regional Library Board: Chairman Jefferson moved to reappoint Sylvia Claggett to represent District 3. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Storm

7. Special Presentations / Appearances

A. Investigator Bert Nurney was recognized by Sheriff Clarke upon his retirement.

B. FY2022-23 Public Schools Budget Discussion of Impact of FY2022-23 Public Schools Budget: Supervisor Grice moved that County Administrator Keaton be authorized to make a transfer from the Contingency line item of $760,000 to the Instructional category of the school's budget. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: S. Humphries

8. Public Hearings

A. Emmanuel Baptist Church Cemetery Expansion Conditional Use Permit Request Application of Morris G. Hall, Deacon, and the Trustees of Emmanuel Baptist Church, Property Owner, for a Conditional Use Permit for the Expansion of an Existing Cemetery on Property Not Currently Used as a Church Cemetery Located at 11150 Emmanuel Church Road": Chairman Jefferson moved that the Conditional Use Permit be approved. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Ring

B. Griffin Conditional Rezoning Application of Earl S. and Diane P. Griffin and Christine Piersall TRS SE & DP Irrevocable Trust, Owners, for a Change in Zoning Classification from Rural Agricultural Conservation to Conditional Rural Residential for 13.59 Acres on Vellines Lane (Rte. 712) for Single Family Residential Use: Supervisor McCarty moved that the application be approved with the proffered conditions. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Ring

C. Application of Saunders and Ojeda, P.C., Applicant, on Behalf of James River Crossings, Inc., Property Owner, for a Change in Zoning from Rural Agricultural Conservation to Conditional Planned Development – Mixed Use for 12.24 Acres Located at 23067 Channell Way for 52 Single-Family Detached Residences: Supervisor McCarty moved that the application be tabled to the Board's June 2, 2022 work session. In the meantime, the Board is to forward all concerns to County Administrator Keaton. The motion was adopted unanimously (5-0)

with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: Ring

9. County Administrator's Report

A. 2021 Economic Development Annual Report: County Administrator Keaton drew the Board's attention to the Annual Report for Economic Development for 2021 which was placed at the Board's seat prior to the meeting.

B. County Administrator Keaton advised that he had attended last night's Suffolk City Council meeting regarding the borrow pit on Shady Pine. The developer has requested the application be delayed for 90 days and it has been rescheduled for August 17, 2022.

C. "Share the Isle: Isle of Wight County's Plan for an Age and Mixed Ability Inclusive Community": The Director of Community Development will present this at a future meeting.

D. Bay DisposalCurbside Service: County Administrator Keaton addressed the Board regarding the addition of a 20% fuel surcharge fee added to the monthly rates for curbside pickup.

10. New Business

A. Schools Carryover Request Resolution to Amend the Budget and Appropriate Carryover Funding ($197,444): Supervisor McCarty moved that the Resolution be adopted. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: S. Humphries

B. Resolution to Amend the Budget and Appropriate Federal Funding for Before and After School Programs ($573,168): Supervisor McCarty moved that the Resolution be adopted. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: S. Humphries

C. Revised Memorandum of Understanding for the Emergency Communications Center: Supervisor McCarty moved that the Chairman be authorized to execute the revised Emergency Communications Center MOU. The motion was adopted unanimously (5-0) with Supervisors Jefferson, McCarty, Grice, Rosie and Acree voting in favor of the motion and no Supervisor voting against the motion.

Assignment: P. Humphries

PLANNING REPORT

ATTACHMENTS:

Description	Type	Upload Date
MAY 24, 2022 REGULAR MEETING MINUTES	Cover Memo	6/23/2022

MINUTES OF THE MEETING OF THE ISLE OF WIGHT COUNTY PLANNING COMMISSION HELD ON THE TWENTY-FOURTH DAY OF MAY IN THE YEAR TWO THOUSAND AND TWENTY-TWO

CALL TO ORDER

Brian Carroll, Chairman, called the Isle of Wight County Planning Commission meeting to order at 6:00 PM on May 24, 2022, in the Board of Supervisors Room at the Isle of Wight County Courthouse, Isle of Wight, Virginia.

INVOCATION

Art Stafford, associate Pastor at Harvest Fellowship Baptist Church, delivered the invocation.

PLEDGE OF ALLEGIANCE

Chairman Carroll invited everyone present to join in the Pledge of Allegiance.

ROLL CALL/DETERMINATION OF A QUORUM

PRESENT
Brian Carroll, Chairman
Bobby Bowser, Vice-Chairman
Cynthia Taylor
Jennifer S. Boykin
Thomas Duerig
Thomas Distefano

A quorum was determined.

ABSENT
James Ford
George Rawls

ALSO IN ATTENDANCE
Robert W. Jones, Jr., County Attorney
Amy Ring, Community Development Director
Jeryl Phillips, Assistant Director of Planning and Zoning
Amanda Landrus, Secretary

ACTION ON REQUESTS TO WITHDRAW OR TABLE PENDING AGENDA ITEMS

Chairman Carroll asked if there were any requests to table or withdrawal agenda items. Amy Ring, Community Development Director, stated there were no requests.

APPROVAL OF AGENDA

Chairman Carroll called for a vote to approve the agenda. Commissioner Bowser made a motion to approve the agenda. Commissioner Taylor seconded the motion. Chairman Carroll asked for all in favor to signify by saying aye. The motion passed unanimously.

APPROVAL OF CONSENT AGENDA

Chairman Carroll called for a vote to approve the consent agenda. Commissioner Bowser made a motion to approve the consent agenda. Commissioner Boykin seconded the motion. Chairman Carroll asked for all in favor to signify by saying aye. The motion passed unanimously.

CITIZENS' COMMENTS

Chairman Carroll opened the floor for any citizen comments. There being no comments, Chairman Carroll closed citizen comments.

PUBLIC HEARINGS

Chairman Carroll called for the public hearing on the following application:

Application of Kenneth Turner, PE, applicant, and Smithfield Packing Company Inc., property owner, for a conditional use permit for the Route 10 waterline booster pump station on 1.01 acres located at 10200 Old Stage Highway (Rte. 10) on property with tax map number 21-01-001B. The application also includes a request for an exception to Section 6-1010.A.11 of the Highway Corridor Overlay (HCO) District requirements to allow a six foot tall black vinyl coated chainlink fence.

Amy Ring, Community Development Director, gave and overview by giving the following PowerPoint presentation.

Route 10 Waterline Booster Pump Station Conditional Use Permit (CUP-5-22) & HCO Exception Requests

Local Roots, Global Reach

Planning Commission Regular Meeting
May 24, 2022

SITE DESCRIPTION

Tax Map ID#:	21-01-001B
Location :	10200 Old Stage Highway (Rte. 10)
Current Zoning :	Rural Agricultural Conservation (RAC)
Election District:	D5
Proposed Use:	To allow a major utility, specifically a booster pump station, & a HCO exception for a black vinyl chainlink fence

Local Roots, Global Reach

SITE LOCATION

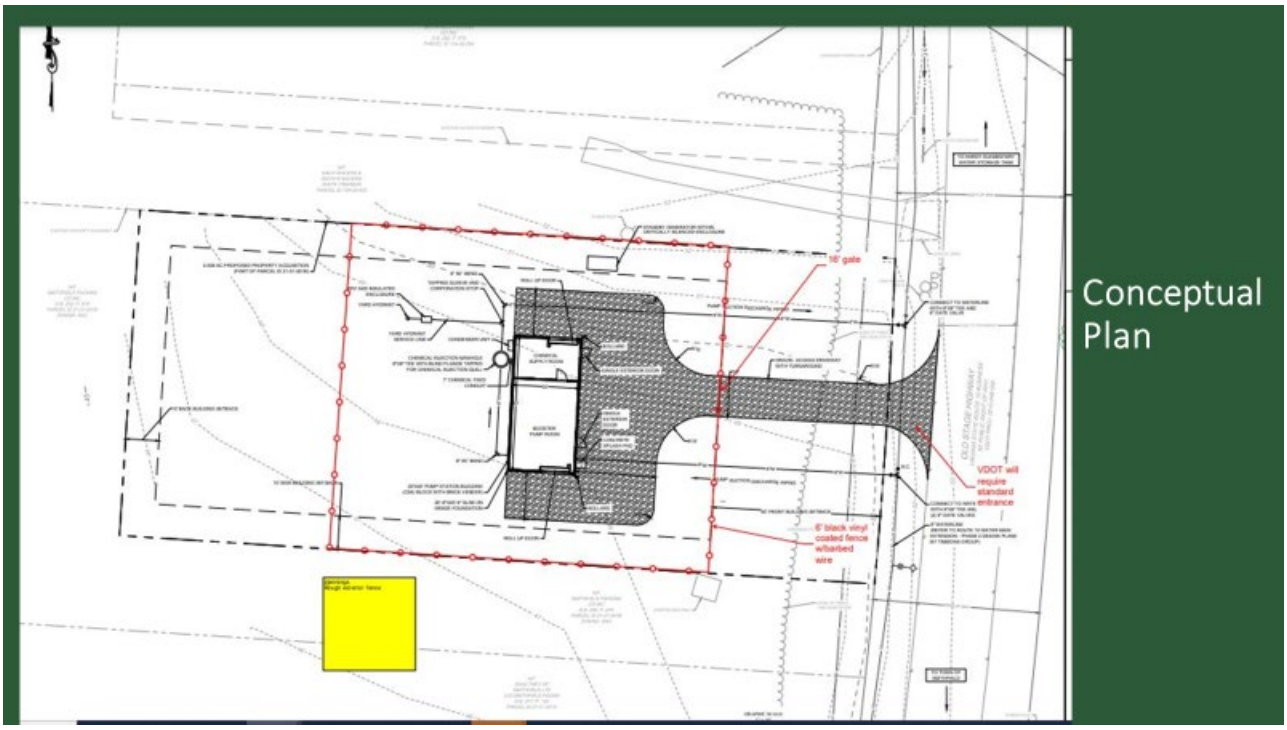
ZONING MAP

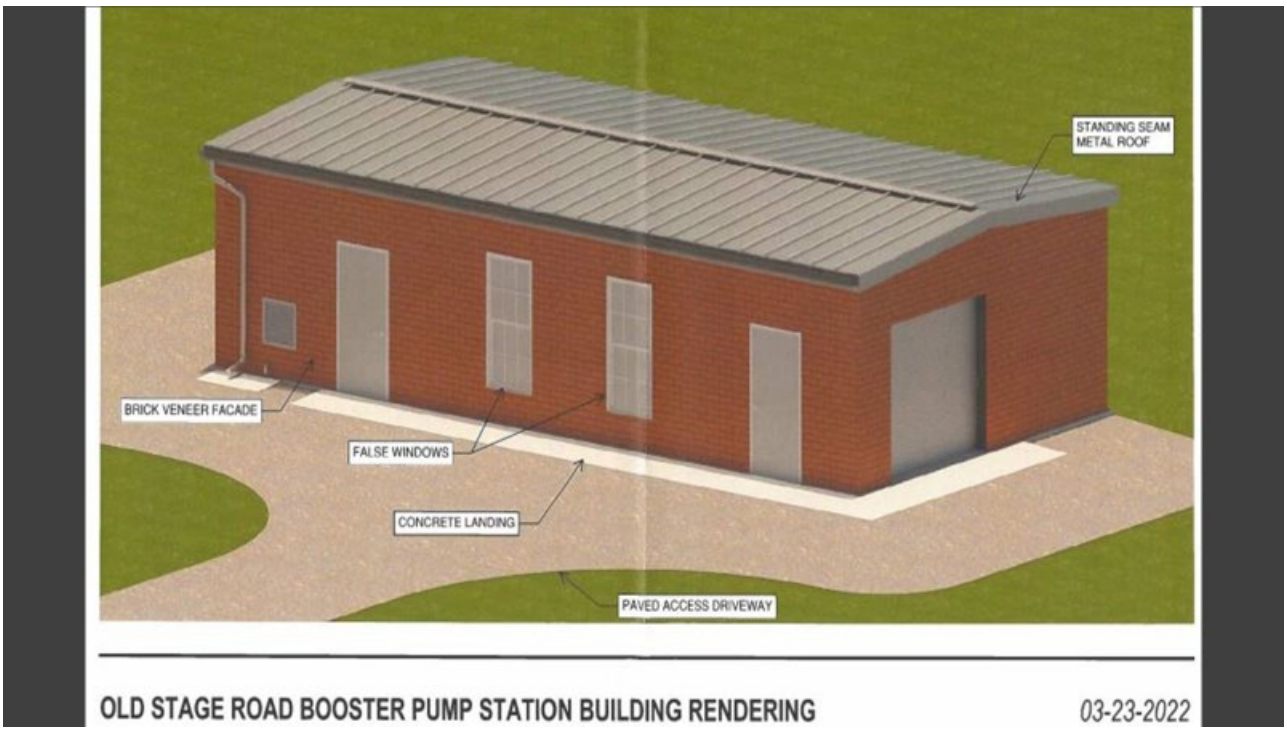
FUTURE RECOMMENDED LAND USE MAP

BACKGROUND

- Pump station needed for new waterline between Smithfield and Hardy Elementary School to serve the new school & provide pressure to fill the elevated water storage tank behind the school
- Water tank will provide the minimum fire suppression flow & adequate pressure for future public water service to nearby County community well systems
- 20 ft X 40 ft (800 square feet) concrete building with brick veneer and a gabled roof for pump and associated equipment
- Site will be accessed by a single gravel driveway and turnaround area.
  - Building itself will be surrounded by a black vinyl coated chainlink fence for which the applicant seeks a HCO district exception.

Local Roots, Global Reach


Conceptual Plan
16' gate
VDOT will require standard entrance
6' black vinyl coated fence w/barbed wire


STANDING SEAM METAL ROOF
BRICK VENEER FACADE
FALSE WINDOWS
CONCRETE LANDING
PAVED ACCESS DRIVEWAY
OLD STAGE ROAD BOOSTER PUMP STATION BUILDING RENDERING
03-23-2022

DEPARTMENTAL & AGENCY REVIEW

Staff distributed the application documents to the following departments and agencies for review and comment:

- **Virginia Department of Transportation** - Staff stated they had no concerns.
- **Isle of Wight County Museum (Historic Resources)** - Staff stated they had no concerns with the application as proposed.
- **Environmental Planning** - Staff verified the absence of sensitive features on site.

Local Roots, Global Reach

CRITERIA FOR CUP CONSIDERATION (Section 1-1017)

1. Will not be detrimental to or endanger the public health, safety, and general welfare;
2. Will not be injurious to the use and enjoyment of other nearby property nor substantially impair the use of other property within the immediate proximity;
3. Adequate utilities, water, sewer or septic system, access roads, storm drainage and/or other necessary public facilities and improvements will be provided;
4. Adequate measures will be taken for ingress and egress/traffic control;
5. Not contrary to the goals and objectives of the Comprehensive Plan;
6. Will conform to ordinance regulations; and
7. Will not result in a multiplicity or saturation of similar uses in the same general neighborhood of the proposed use.

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ADDITIONAL CONSIDERATIONS FOR BOARD

1. Number of persons working on the site & proposed hours of operation;
2. Conditions, for roads, sidewalks, parking facilities, vehicle access, and peak periods of traffic,
3. Orderly growth of the community and the fiscal impact on the County;
4. Effect of odors, dust, gas, smoke, fumes, vibration, glare, and noise;
5. Impacts to public facilities and the ability of the County or persons to supply public services;
6. Consistency with acceptable engineering and planning practices;
7. Location of structures in the vicinity of schools, houses of worship, theaters, hospitals, and similar places of public use;
8. Consistency of the proposal with County ordinances and plans;
9. Environmental impacts and opportunities for recreation and open space; and
10. Preservation of cultural and historic resource landmarks.

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STAFF ANALYSIS

Strengths:

1. The proposed use will conform with the general character of the surrounding community and rural nature of adjacent uses;
2. The proposed use is generally consistent with the future recommended land use designation;
3. The proposed use will not negatively impact public services or facilities; and
4. The proposed use will provide safe drinking water and fire suppression capability for the new school and water service customers.

Weaknesses:

1. The application includes a request for an exception from the HCO district ordinance to allow a chainlink fence.

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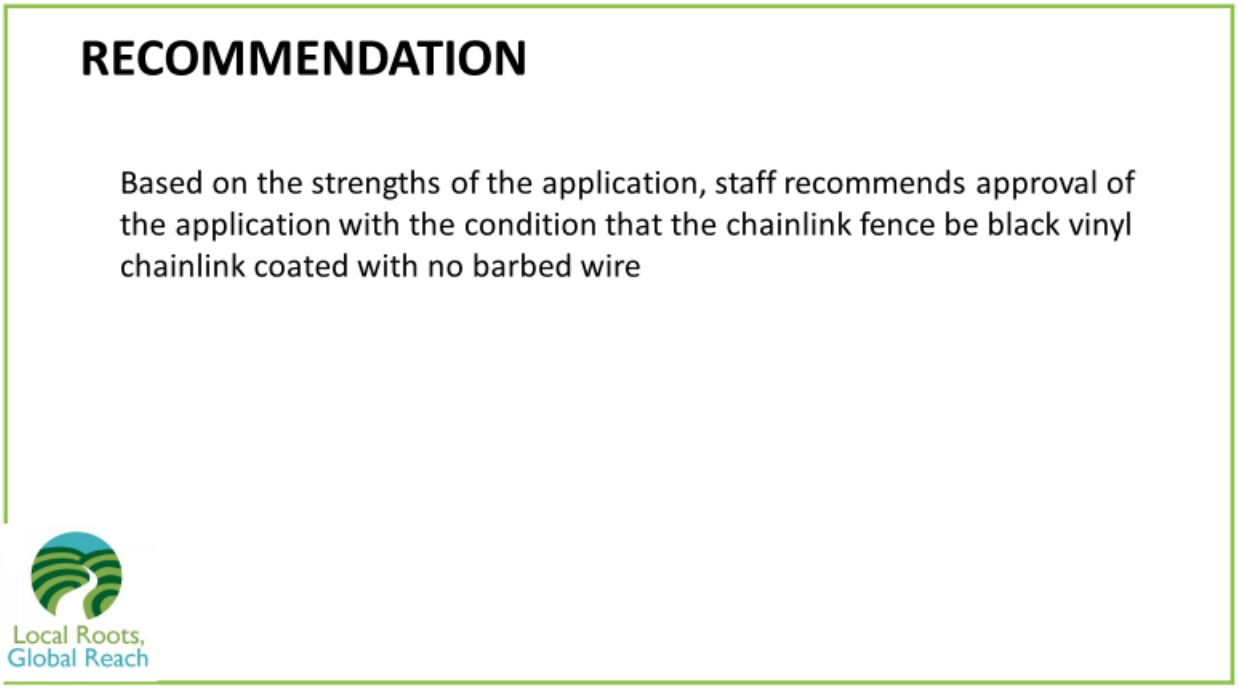


Chairman Carroll opened the public hearing and invited the applicant to speak.

Ken Turner PE, applicant, gave an overview of his application with a PowerPoint presentation.

Chairman Carroll closed the public hearing and called for conversation from the Planning Commission.

Commissioner Duerig asked for location of the fence.

Amy Ring confirmed it was at the sixty-foot building setback line.

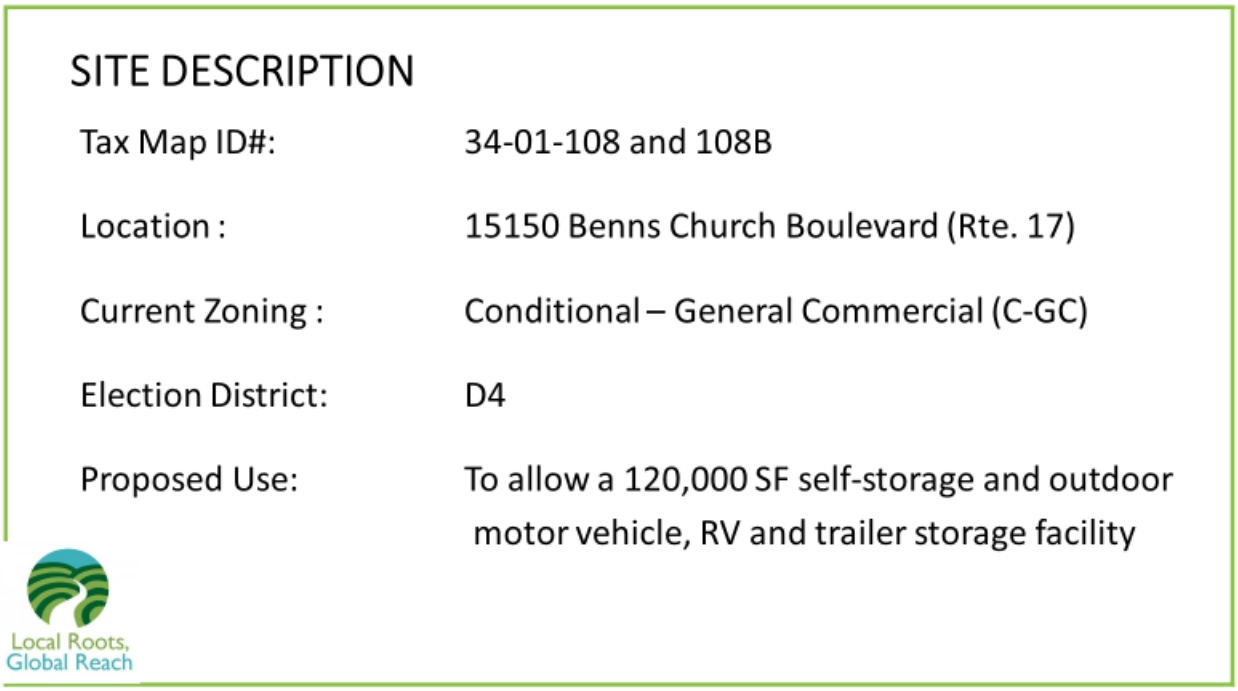
Commissioner Duerig made the motion to recommend approval of the Conditional Use Permit to include the HCO exception as recommended by staff to the Board of Supervisors. Commissioner Bowser seconded the motion, which was adopted with Commissioners Bowser, Boykin, Distefano, Duerig, Taylor, and Carroll voting in favor of the motion, an no Commissioners voting against the motion (6-0).

Motion was carried and will go to the Board of Supervisors on June 16, 2022.

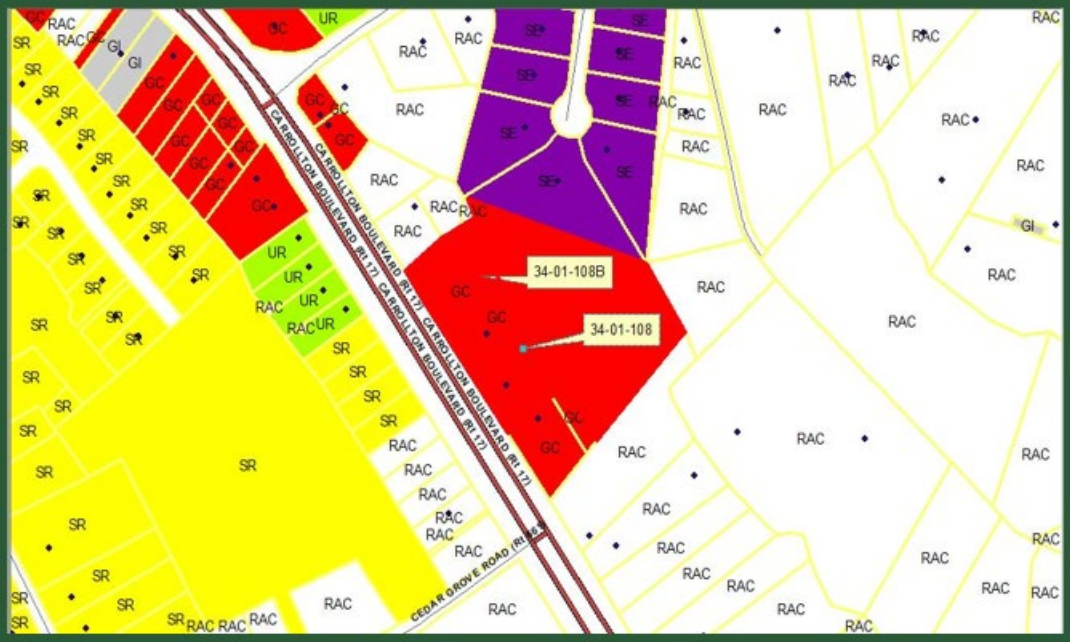
Chairman Carroll called for the public hearing on the following application:

Application of Carrollton Ventures, LLC, property owner, for a change in conditional zoning to allow 120,000 square feet of mini-warehouses, also known as self-storage units, and outdoor motor vehicle storage on 8.08 acres located at 15411 Carrollton Blvd. (Rte. 17) on property with tax parcel numbers 34-01-108 and 34-01-108B

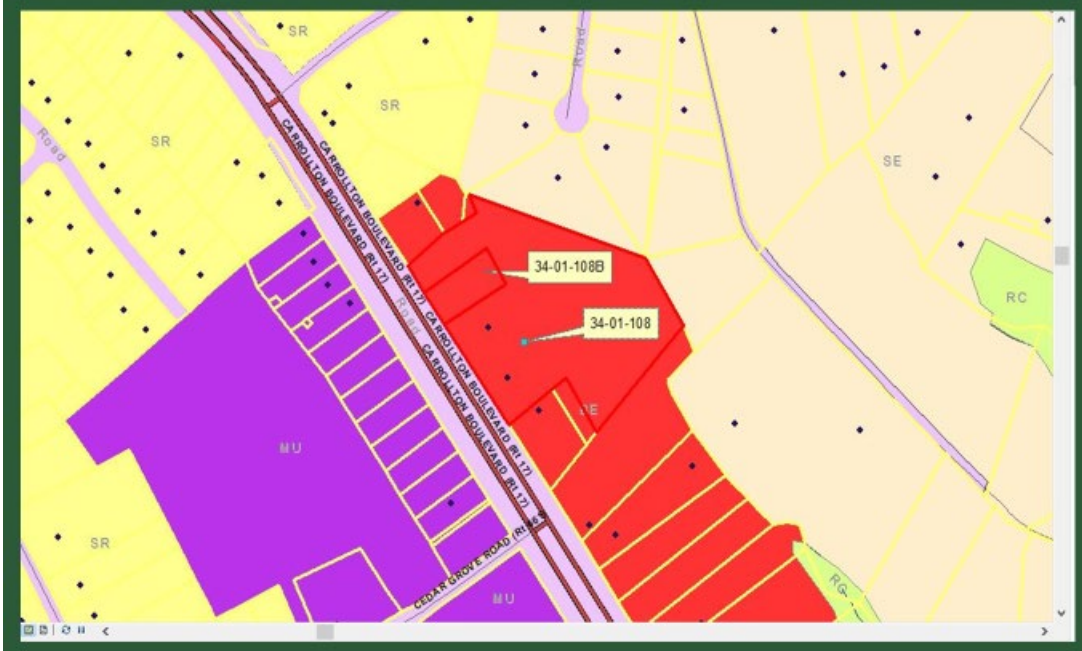
Amy Ring, Community Development Director, gave and overview by giving the following PowerPoint presentation.



SITE LOCATION



ZONING MAP



FUTURE RECOMMENDED LAND USE MAP

BACKGROUND

- Original change in zoning in 2009 from Rural Agricultural Conservation (RAC) to Conditional General Commercial (C-GC) for a 94,500 SF office condominium and retail development
- Original proffered conditions prohibited mini-warehouses, or self-storage units, and outdoor motor vehicle storage
- New proffers would allow the development of a 120,000 SF self-storage development with outdoor storage for motor vehicles, trailers, and recreational vehicles and includes a new concept plan

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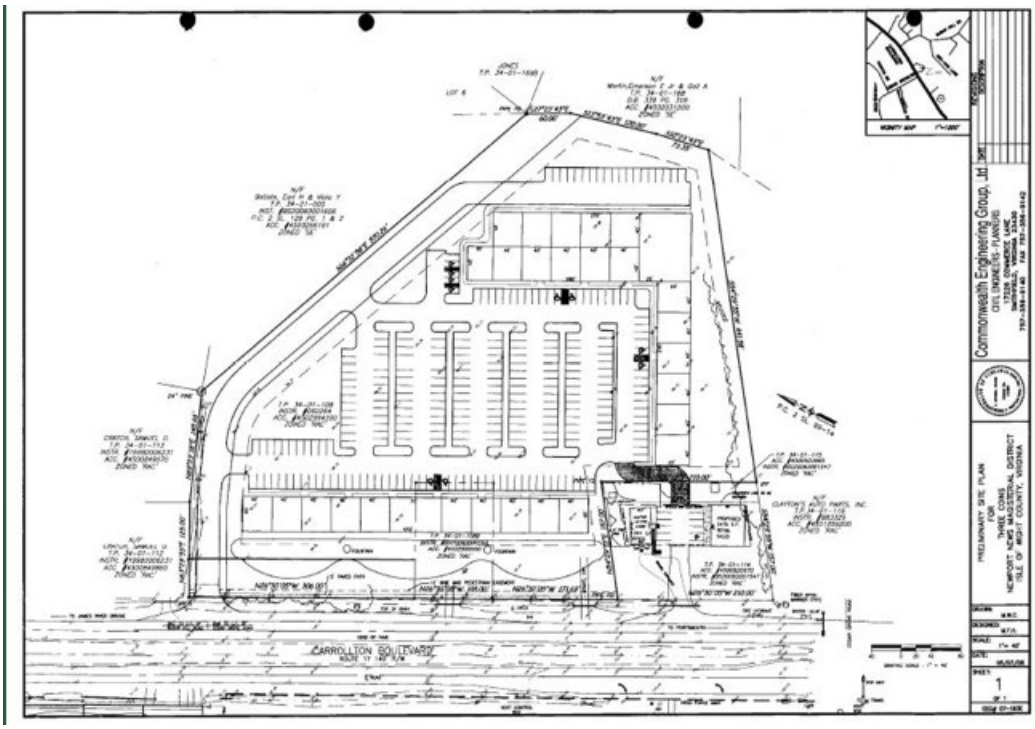
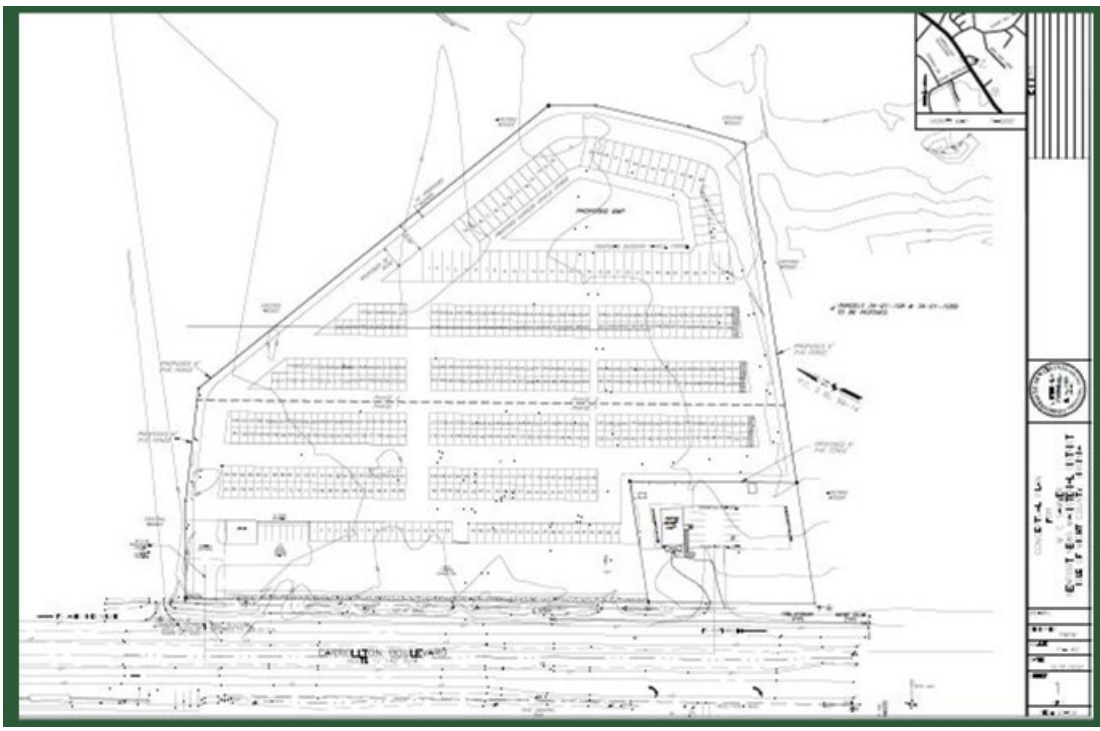


Original Conceptual Plan 2009



Revised Concept Plan

PROFFER CHANGES SUMMARY & NEXT STEPS

- 120,000 square foot self-storage development with outdoor storage for motor vehicles, trailers, and recreational vehicles
- New concept plan
- Single right-in/right-out only entrance and remove the proffered turn lane improvements
- Applicant has indicated their willingness to address VDOT's comments upon submittal of the preliminary site plan
- Multipurpose trail across the frontage of the parcel
- Following approval, the applicant would be required to submit a site plan demonstrating compliance with proffered conditions, zoning district, and overlay district requirements for administrative review and approval

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DEPARTMENTAL & AGENCY REVIEW

Staff distributed the application documents to the following departments and agencies for review and comment:

- **VDOT** - Applicant has agreed to address concerns in regard to entrance spacing and cross parcel access at site plan submittal.
- **County Attorney** - Proffered conditions are enforceable as written.
- **Utility Services** - Department has no concerns.
- **Environmental Planning** - Staff has no concerns.
- **Emergency Services** - Staff has no concerns.
- **Economic Development** - Staff has no concerns.

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STAFF ANALYSIS

Strengths:

1. The proposed commercial use is generally consistent with the future recommended land use BE designation.
2. The proposed use will create three new jobs in the County.
3. The proposed use will not negatively impact public services or facilities.

Weaknesses:

1. The current proffer statement does not include the property owner's stated commitment to establish an easement for a cross-parcel connection for shared access which could be remedied prior to the Board of Supervisor's public hearing.

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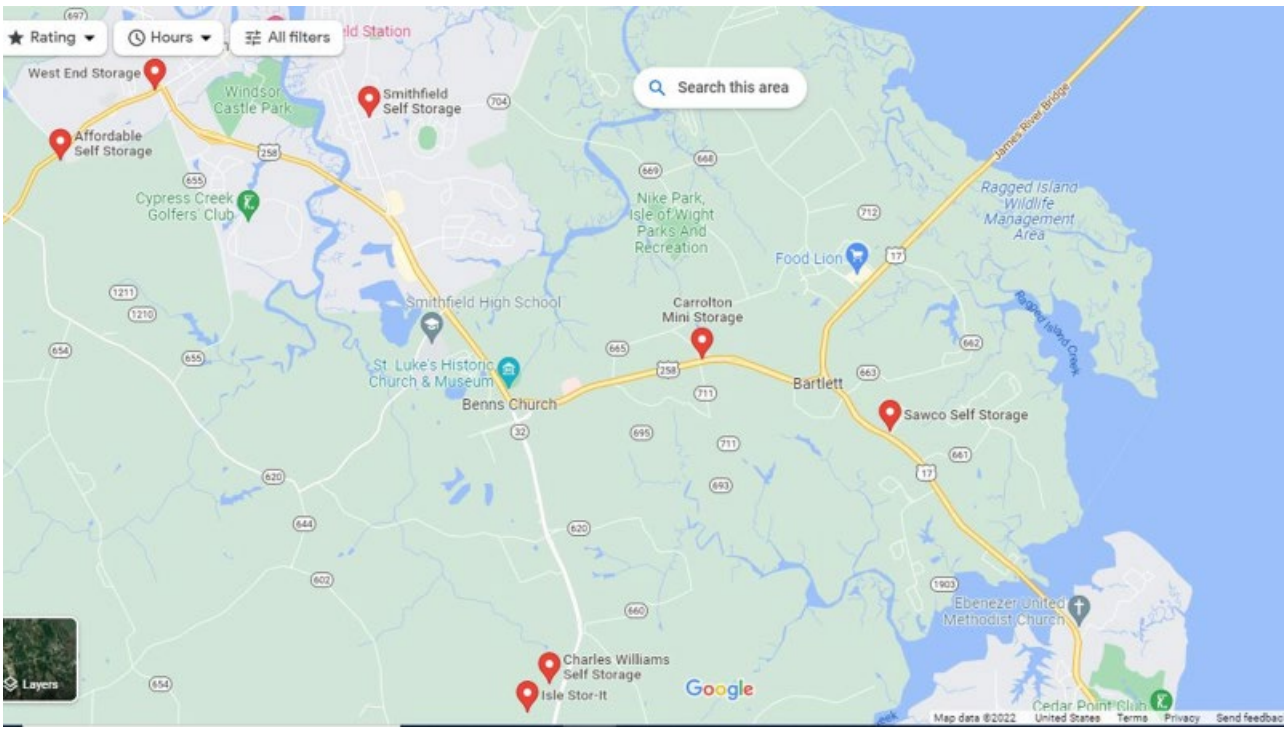
RECOMMENDATION

Based on the strengths of the application, staff recommends approval of the application with the proffered conditions amended to include the property owner's commitment to establish an easement for a future cross parcel connection to enable shared access for future commercial development.

Local Roots, Global Reach



Chairman Carroll opened the public hearing and invited the applicant to speak.

Beverly Walkup, representing applicant, stated the applicant is agreeable to amend the proffer conditions to include the cross-access easement and VDOT will be working with the applicant to address the access management standards. Ms. Walkup stated the applicant and herself are available to answer any questions.

Sam Cratch, 15355 Carrollton Boulevard, spoke in favor of the application stating any development Mr. Sawyer has done in the County has been done in a nice way.

Sherry Vincent, 15423 Carrollton Boulevard, spoke in favor of the application and felt it would be a good improvement for the county and Route 17.

Chairman Carroll closed the public hearing and called for conversation from the Planning Commission.

Commissioner Distefano asked what the current density of storage units were in the northern district and asked if we are close to or at market saturation.

Amy Ring stated she did a search of storage facilities within a three-to-five-mile radius and found seven self-storage facilities. Ms. Ring added at this time she was not able to obtain square footage or how many units were at each facility. Ms. Ring stated to obtain a market study it was recommended to look at square footage of the facilities within a three-to-five-mile radius per capita. Ms. Ring stated on average in the state of Virginia there is 5.18 square feet per capita, the national average is 5.4 square foot per person. Ms. Ring stated herself or the applicant could complete that assessment and bring it back to the Planning Commission.

Commissioner Distefano suggested that the density study should include both inside as well as outside storage. Mr. Distefano asked if the counties current market provide a demand for additional storage facility.

Beverly Walkup stated that Mr. Sawyer operates the Sawco Self Storage facility and is currently running out of space. Ms. Walkup added that she believes demand speaks for itself and believes that Mr. Sawyer would not make this investment if he didn't feel the need was there. Beverly Walkup stated the current density in this DSD provides small lots and no room for RV or boat storage.

Commissioner Distefano stated he would like further detail on the status of storage in the county and how that compares to demand for self-storage in general and anything the applicant can provide to show the market demand is needed.

Commissioner Taylor asked if there will only be a right turn in to this facility.

Ms. Ring stated this facility would provide a right turn in and a right turn out only.

Commissioner Duerig asked how close the facility fence would be the single-family dwelling lot directly behind the storage facility.

Ms. Ring stated there is a ten-foot buffer yard with required landscaping.

Commissioner Bowser asked if Cypress Creek provides recreational vehicle storage for their community.

Commissioner Duerig stated that Cypress Creek does provide storage for their residents with an existing small lot as well as plans for a future lot to accommodate new development in Cypress Creek.

Commissioner Distefano made the motion to table the Conditional Zoning Amendment to the next meeting and requested feedback on density and need. Commissioner Taylor seconded the motion, which was adopted with Commissioners Boykin, Distefano, Duerig, and Taylor voting in favor of the motion, and Commissioner Bowser and Carroll voting against the motion (4-2).

OLD BUSINESS

Amy Ring confirmed there were no Old Business items.

NEW BUSINESS

Amy Ring confirmed there were no New Business items.

COUNTY ATTORNEY'S REPORT

Bobby Jones confirmed there was no items for the County Attorney's Report.

CLOSED MEETING

Chairman Carroll confirmed there were no items to discuss in closed meeting.

ADJOURNMENT

There being no further information to discuss, Chairman Carroll adjourned the meeting at 6:40 PM.

Adopted this _____day of _____, 2022.

_____

Chairman, Isle of Wight County Planning Commission

Attest: _____
Secretary

PLANNING REPORT

APPLICATION:

Application of Anthony Landes and Derek Joyner, applicants, and Vincent Carollo, property owner, for a conditional use permit (CUP-9-21) to establish a private club, specifically a sports club, on property located at 14353 Benns Church Boulevard (Rte. 10) with tax parcel number 32-01-093. The property is in the Suburban Residential zoning district.

ELECTION DISTRICT:

District 1

LOCATION:

The property is approximately 25 acres and is located at 14353 Benns Church Boulevard on the east side of Benns Church Boulevard (Rte. 10). The property is approximately 175 feet to the northwest of St. Luke's Cemetery and 1,000 feet from the entrance to St. Luke's Church. Adjacent uses include a cemetery and single family detached housing. All adjacent property lies within the Rural Agricultural Conservation zoning district.

BACKGROUND:

The project site is in one of the former James River Christian Academy buildings. The property has a total of 24,000 square feet of brick, single story academic buildings and seven existing townhome units that were originally built as teacher housing. The school facility itself includes three separate buildings including two, one-story brick buildings that house classrooms, office space, and a cafeteria as well as a gymnasium building.

The First Will Baptist Church was built on the property in 1970 followed by two classroom buildings built in 1970 and 1972. The gymnasium building was built in 1980. The property was rezoned in 1985 from A-1, the former Agricultural Limited zoning district, to conditional R-2, the conditional Residential General zoning district, to allow for the construction of ten townhouses. The James River Christian Academy closed in 2007. A conditional use permit for a child care center was approved in October 2021. The club is is proposed in another existing building on site.

DESCRIPTION:

The property owner requests a conditional use permit to allow a private club in one of the existing buildings which is a 6,300 square foot existing gymnasium. Club is a civic use type that can be defined as a use providing meeting, or social facilities for social clubs, fraternal/sororal organizations, lodge, and similar organizations and associations, primarily for use by members and guests. No other improvements are proposed with this application.

The applicant is proposing to provide sports training facilities for youth sports on a membership basis. They hours of operation are:

- Monday - Friday , 5:30 PM to 9 PM
- Saturday 9:00 AM to 1:00 PM, by appointment only
- Closed Sunday.

The club currently has eighteen members and is estimated to grow to no more than ninety members. Training sessions will have no more than twenty members present at a time. There is an existing row of parking on the west side of the property that satisfies the parking requirement for this use.

The existing gymnasium will be used to for all training sessions. There is a existing ball field on the northern portion of the site that will be used on occasion when weather permits for baseball instruction. The traffic is limited to dropping off and picking up participants from training sessions. The business is to operate after the closing of the child care center daily. Based on a submitted turn-lane analysis. a turn-lane is not warranted at this time.

COMPREHENSIVE LAND USE PLAN:

The property is designated as Mixed Use (MU) and Resource Conservation (RC) on the Future Recommended Land Use Map in the County Comprehensive Plan. The Plan describes MU areas as areas with housing mixed with office, commercial, and other uses. The MU land use designation consists of one or multiple detached or attached single family homes, multi-plex and apartment style housing options, along with office or commercial uses. The proposed use is consistent with the future recommended use, because the property already contains a mix of uses, including residential, recreational and civic uses.

ORDINANCE REVIEW:

Section 4-7003.C of the Zoning Ordinance permits club as a conditional use in the SR zoning district. The property also lies within the Chesapeake Bay Preservation Area, Newport Development Service Overlay (NDSO), and St. Luke's Historic Overlay districts. Any new improvements will need to meet the regulations applicable to these districts in addition to any zoning district requirements.

Section 1-1017 of the Zoning Ordinance provides the following criteria for review of a conditional use permit application that the Planning Commission and Board of Supervisors shall consider before granting the permit:

1. That the establishment, maintenance, and operation of the conditional use will not be detrimental to or endanger the public health, safety, and general welfare;
2. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially impair the use of other property within the immediate proximity;
3. That adequate utilities, water, sewer or septic system, access roads, storm drainage and/or other necessary public facilities and improvements have been or will be provided;
4. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion on the public streets;
5. That the proposed conditional use is not contrary to the goals and objectives of the Isle of Wight County Comprehensive Plan;
6. That the conditional use shall, in all other respects, conform to the applicable regulations of the zoning district classification in which it is located and to the special requirements established for the specific use; and
7. That the use(s) at the location proposed will not result in a multiplicity or saturation of similar uses in the same general neighborhood of the proposed use.

In addition to the standards and other guidelines set forth in the Zoning Ordinance, the Board may impose reasonable conditions or limitations on any approval, including the posting of performance guarantees. Such conditions may include, but are not necessarily limited to:

1. The number of persons living or working in the immediate area and the proposed hours of operation, as may applicable;
2. Traffic conditions, including facilities for pedestrians, such as sidewalks and parking facilities; the access of vehicles to roads; peak periods of traffic; and

proposed roads, but only if construction of such roads will commence within the reasonably foreseeable future;
3. The orderly growth of the neighborhood and community and the fiscal impact on the County;
4. The effect of odors, dust, gas, smoke, fumes, vibration, glare, and noise upon the use of surrounding properties;
5. Facilities for police, fire protection, sewerage, water, trash and garbage collection and disposal, and the ability of the County or persons to supply such services;
6. The degree to which the development is consistent with generally accepted engineering and planning principles and practices;
7. The structures in the vicinity such as schools, houses of worship, theaters, hospitals, and similar places of public use;
8. The purposes set forth in this ordinance, the County's Comprehensive Plan, and related studies for land use, roads, parks, schools, sewers, water, population, recreation, and the like;
9. The environmental impact, the effect on sensitive natural features, and opportunities for recreation and open space; and
10. The preservation of cultural and historic resources or landmarks.

Following approval of the conditional use permit, the applicant will be required to submit a simplified site plan for review and approval.

AGENCY REVIEW:

Staff distributed the application to the following departments and agencies for their review and comment.

- General Services, Economic Development, Sheriff's Office, Emergency Services, County Attorney - No Concerns
- Virginia Department of Health - If the conditional use permit is approved, the applicant will have to provide projected usage information and an engineer's certification letter.
- Virginia Department of Transportation (VDOT) - Installation of 200' storage x 200' taper lane not recommended at this time. It is noted that any further development or additional uses will trigger the need in the future.

STAFF CONCLUSIONS:

Staff performed an analysis of the application and identified the following strengths and weaknesses.

Strengths:

1. The application proposes the reuse of an existing building.
2. The project is a use not commonly seen in the county and will serve a recreation need.

Weaknesses:

1. Staff has not identified weaknesses with the application.

Staff's analysis of the project finds that the criteria for granting the conditional use permit, including protecting the health, safety, and welfare of the public from the effects of the project and ensuring that the use remains as unobtrusive as possible to adjoining properties, is met by the proposed use with the following conditions:

1. The private club will be limited to the use of the former gymnasium building and adjacent ball field.
2. No more than 25 people at any one training session.
3. Hours of operation of 5:30 PM to 9 PM Monday through Friday, by appointment only 9:00 AM to 1:00 PM on Saturday, and closed Sunday.
4. The club must be private.
5. Club membership may not exceed 100 members.
6. Any expansion of the use or additional uses on the property will require a turn lane analysis and the installation of any recommended improvements.

STAFF RECOMMENDATION:

Staff recommends approval of the proposed club with the following conditions: 1) The private club will be limited to the use of the former gymnasium building and adjacent ball field. 2) No more than 25 people at any one training session. 3) Hours of operation of 5:30 PM to 9 PM Monday through Friday, by appointment only 9:00 AM to 1:00 PM on Saturday, and closed Sunday. 4) The club must be private. 5) Club membership may not exceed 100 members. 6) Any expansion of the use or additional uses on the property will require a turn lane analysis and the installation of any recommended improvements.

ATTACHMENTS:

Description	Type	Upload Date
Application	Backup Material	6/10/2022

Concept Plan	Backup Material	6/15/2022
Location Map	Backup Material	6/15/2022
Location Closeup Map	Backup Material	6/15/2022
Zoning Map	Backup Material	6/15/2022
Land Use Map	Backup Material	6/15/2022
Smithfield Sportsplex CUP PC Resolution	Backup Material	6/21/2022

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

APPLICATION FOR CONDITIONAL / SPECIAL USE PERMIT

This application should be used to petition for a permit for certain uses which, because of their unique characteristics or potential impacts on adjacent land uses, are not generally permitted in certain zoning districts as a matter of right, but which may, under the right set of circumstances and conditions be acceptable in certain specific locations. The following application requirements are consistent with the procedures set forth in Section 1-1017, *Conditional Uses,* and Section 1-1018, *Special Use Permits for Uses Not Provided For,* of the Isle of Wight County Zoning Ordinance, as amended.

A. APPLICATION FOR (CHECK ALL THAT APPLY):

☑ Conditional Use Permit (Are applicant proposed conditions attached?): ✓ Yes ____ No

The proposed use or activity is listed as a conditional use in the SR zoning district as per Section ____ in Article IV of the Isle of Wight County Zoning Ordinance.

☐ Special Use Permit (Are applicant proposed conditions attached?): ____ Yes ____ No

Proposed Use or Activity: Youth sports training for private team workouts

B. PROJECT DESCRIPTION:

Project Name: Smithfield Sports Complex Club

Property Address (if any): 14353 Benns Church Blvd Smithfield VA

Election District: Windsor

Comprehensive Plan Designation: ____

The use permit will apply to 2.5 acres out of 24 total acres

Tax Parcel Identification # 32-01-093 Number of acres to be effected: 2.5

Tax Parcel Identification # ____ Number of acres to be effected: ____

Tax Parcel Identification # ____ Number of acres to be effected: ____

Proposed Utilities (check all that apply): Public Water ↗ Private Well ____

↑ (existing) Public Sewer ↗ Private Septic ____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Anthony Landes / Derek Joyner

Address: 28188 Parsons Dr /

City, State, Zip Code: Windsor VA 23487 /

Phone No.: 7573832244 Email: Smithfieldsports@gmail.com Fax No.: _____

Property Owner(s) Name(s): Vincent Carollo

Address: 22 Main St

City, State, Zip Code: Smithfield VA 23430

Phone No.: _____ Email: _____ Fax No.: _____

Applicant Signature 12/29/2021 Date

Owner Signature *if different* 12-29-2021 Date

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [ ] Current [ ] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Anthony Landes / Derek Joyner

Address 28188 Parsons Dr / 15765 Breezy Hill Ln
Street

Windsor / Smithfield VA 23487 / 23430
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
14353 Benns Church Blvd	TP# 32-01-093

OTHER OWNERS OF AFFECTED REAL ESTATE
(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes[ ] No[X]
If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct, and true.

Applicant: Anthony Landes / Derek Joyner Applicant: [signature] Date: 1/3/2022
Printed or Typed Name Signature

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Lori Anne Kello,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 3 day of January, 2022.

Lori Anne Kello
Notary Public

My Commission Expires June 30 2023

LORI ANNE KELLO
NOTARY PUBLIC
REG #7132025
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES June 30, 2023

- Please note that additional information on the site layout may be requested by the Zoning Administrator during the review process to **review the application and prepare the staff reports for the Planning Commission and Board of Supervisors more effectively**.

Ten (10) copies of such supplemental material as may be necessitated by the proposal itself or the district in which located or proposed to be located, and in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Isle of Wight County Zoning Ordinance.

A WQIA (Water Quality Impact Assessment) if located in the Chesapeake Bay Preservation Area.

All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter. Proof of the most recent tax payment to the County must accompany the application.

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete and correct information available. I understand that any section not completed in its entirety may delay processing of this application and the date of the Planning Commission public hearing and that the submittal of a complete application does not guarantee the application will be placed on the next available Planning Commission agenda.

Anthony Landes / Derek Joyner

Printed or Typed Name

Signature

1/3/2022

Date

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Anthony Landes / Derek Joyner

Address 28188 Parsons Dr / 15765 Breezy Hill Ln
Street

Windsor / Smithfield VA 23487 / 23430
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
14353 Benns Church Blvd	TP# 32-01-093

OTHER OWNERS OF AFFECTED REAL ESTATE
(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address
Vincent Carrollo	1807 S Church St Smithfield, VA

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes[ ] No[X]
If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct, and true.

Applicant: Anthony Landes / Derek Joyner Applicant: [signature] Date: 1/3/2022
Printed or Typed Name Signature

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Lori Anne Kello,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 3 day of January, 2022.

Lori Anne Kello
Notary Public

My Commission Expires June 30 2023

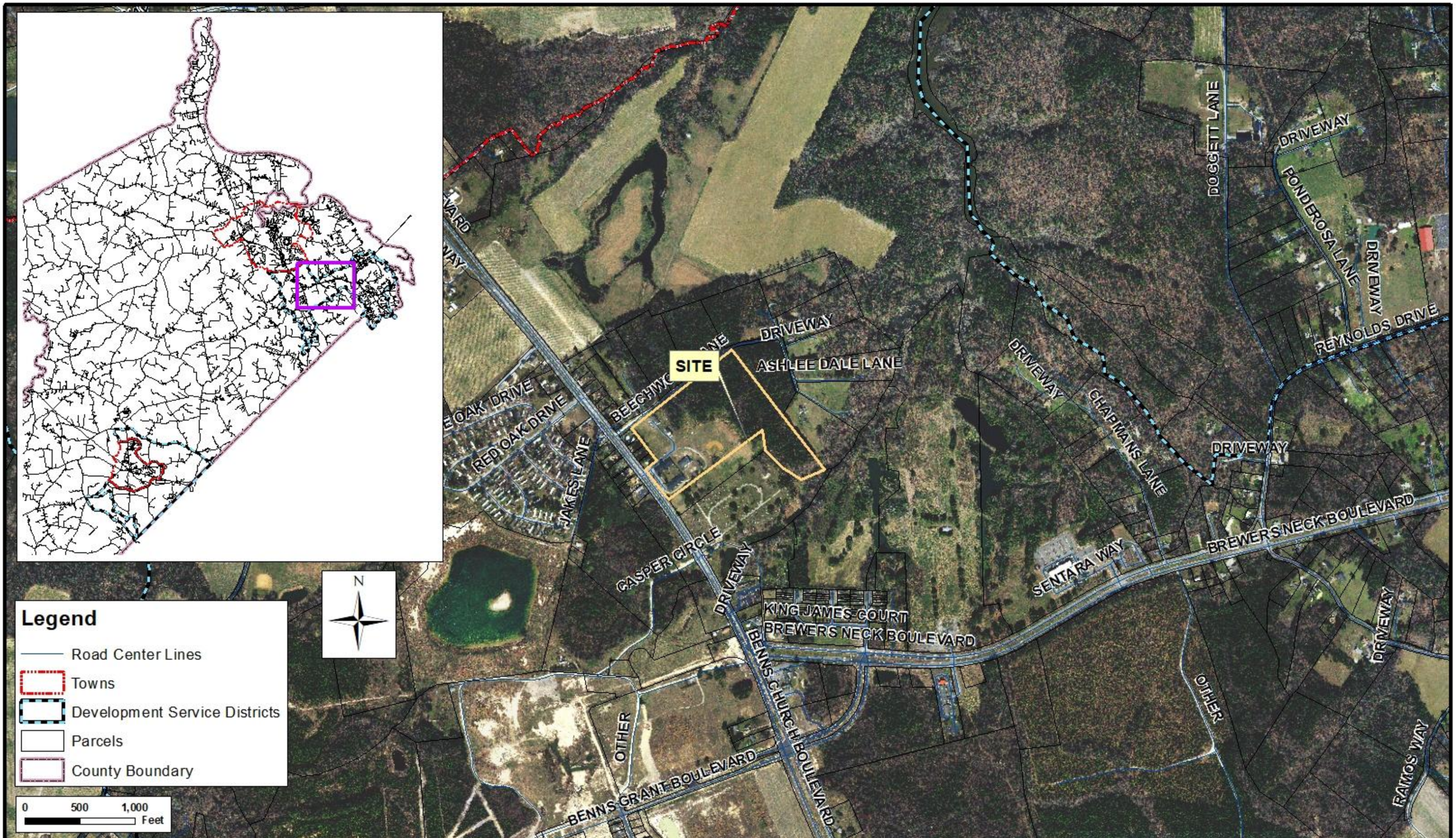
LORI ANNE KELLO
NOTARY PUBLIC
REG #7132025
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES June 30, 2023

11/7/22

Concept Plan for Smithfield Sports Complex Club

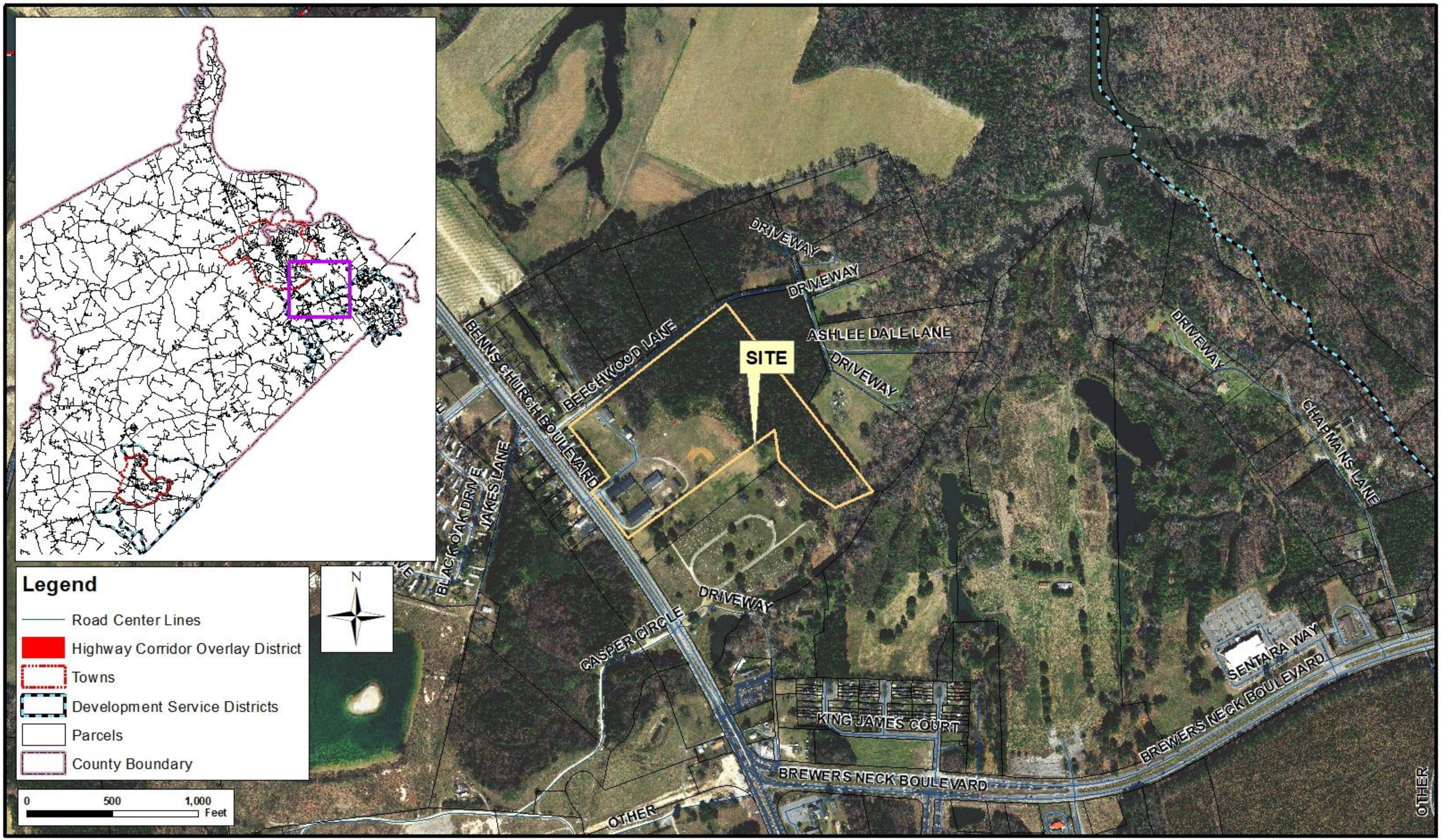
CUP-09-21 Conditional Use Permit - Location Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA



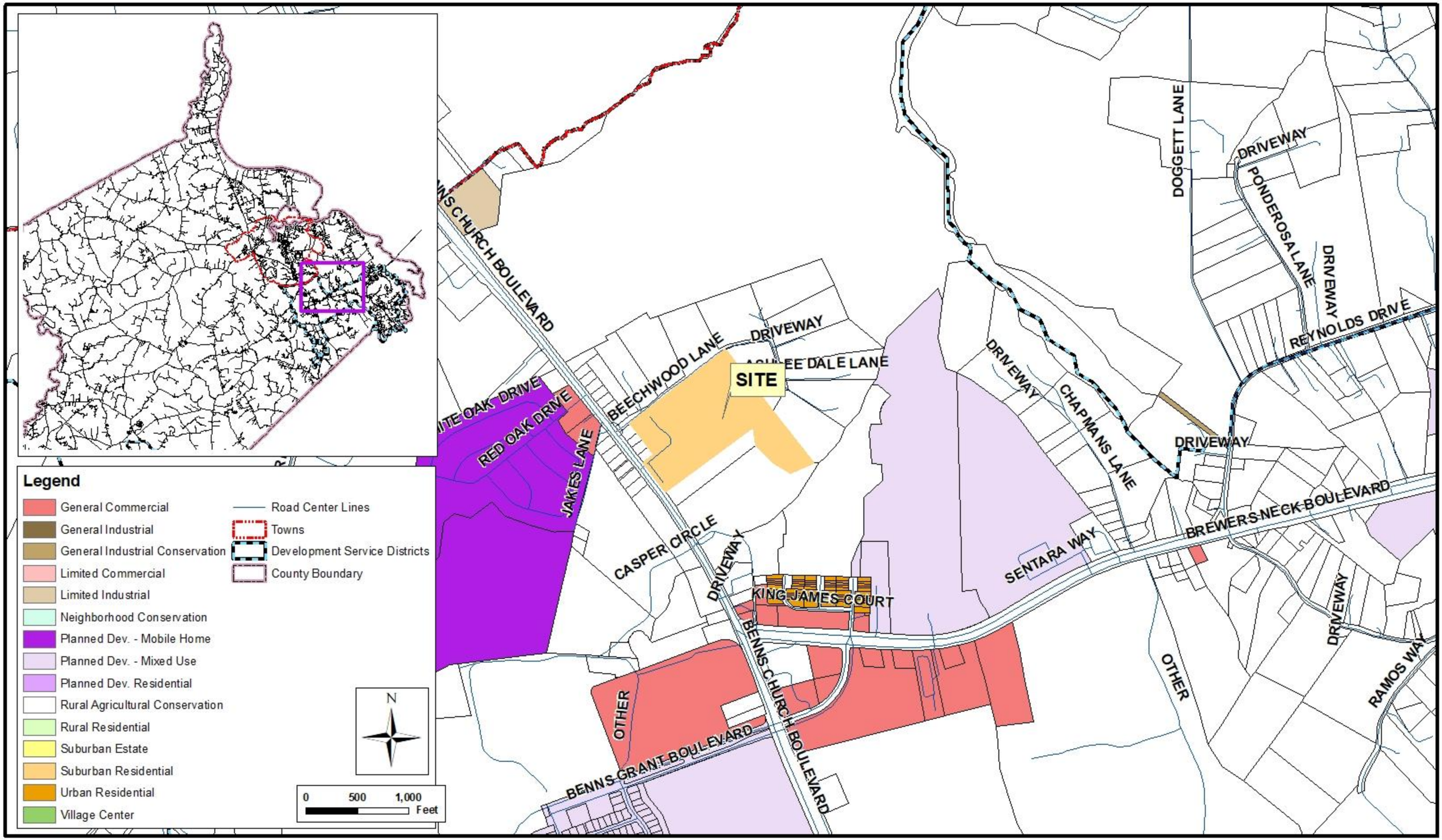
CUP-09-21 Conditional Use Permit - Location Closeup

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA



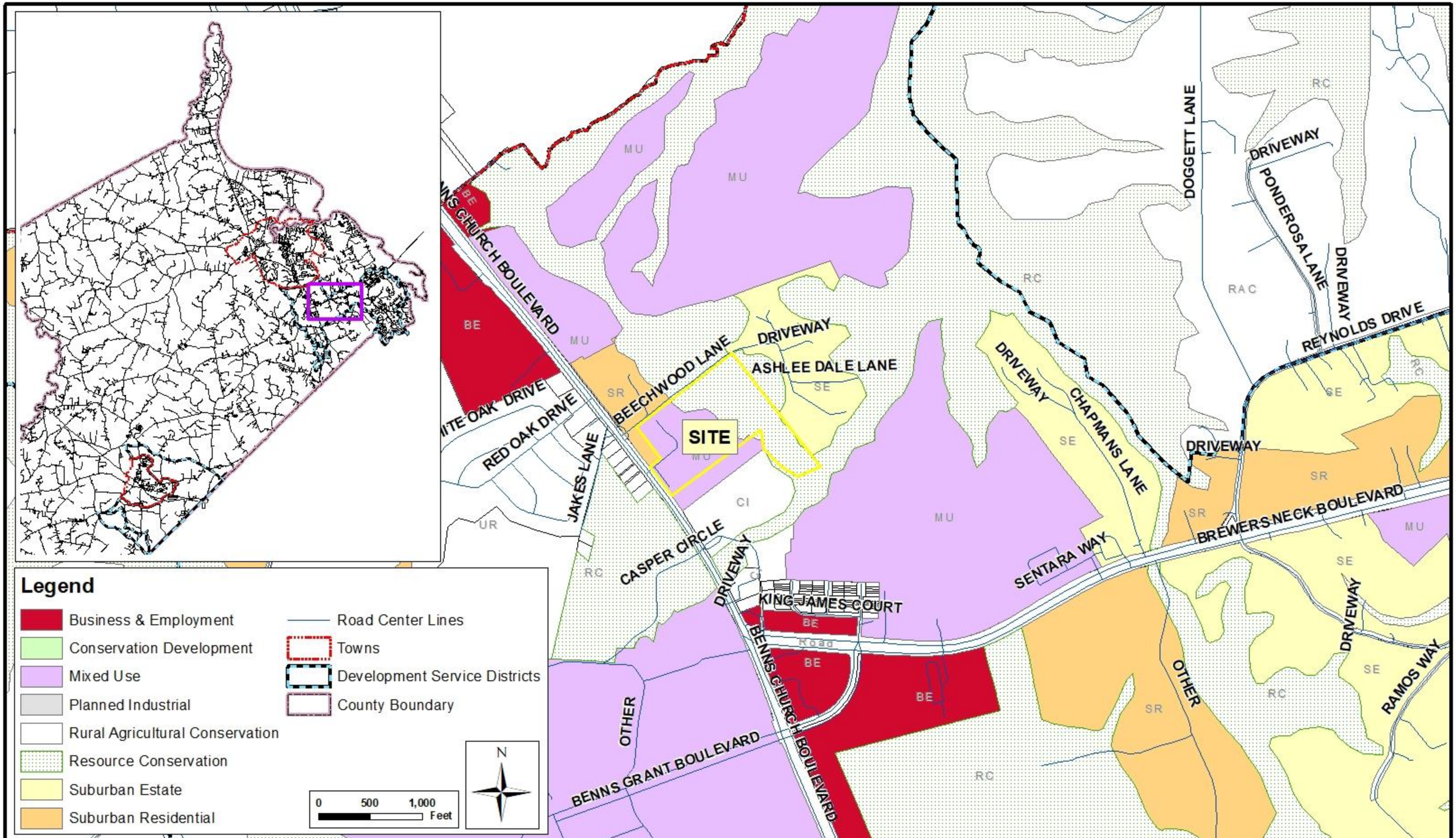
CUP-09-21 Conditional Use Permit- Zoning Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA



CUP-09-21 Conditional Use Permit - Land Use Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA



RESOLUTION NUMBER PC-22-07

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS RELATING TO CONDITIONAL USE PERMIT REQUEST CUP-09-21 TO ALLOW A CLUB, SPECIFICALLY A PRIVATE CLUB, ON PROPERTY WITH TAX MAP PARCEL 32-01-93

WHEREAS, Anthony Landes and Derek Joyner, applicant, on behalf of Vincent Carollo of Benns Saint Luke, LLC, property owner, has requested issuance of a conditional use permit for a portion of a certain tract of land with tax parcel number 32-01-093 situated in Isle of Wight County; and

WHEREAS, the specific request is to permit a club, specifically a private club, in accordance with sections 1-1017 and 5-5003 of the Zoning Ordinance;

WHEREAS the procedural requirements for the consideration of this request by the Planning Commission have been met.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

_____ A. The Isle of Wight County Planning Commission finds that the proposed amendment to conditional zoning is reasonable and warranted due to a change in circumstances affecting the property and has considered the following factors and finds that the proposed rezoning does not conflict with:

1. the existing use and character of property within the County;
2. the Comprehensive Plan;
3. the suitability of the property for various uses;
4. the trends of growth or change;
5. the current or future requirements of the community as to land for various purposes as determined by population and economic studies and other studies;
6. the transportation requirements of the community;
7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;
8. the conservation of natural resources;
9. the preservation of floodplains;
10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values; and

12. the encouragement of the most appropriate use of land throughout the County.

_____ B. The Isle of Wight County Planning Commission does not find that the proposed zoning map amendment is reasonable based on the consideration of the factors listed herein.

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, CUP-09-21, be:

___ a. Granted as submitted, and that the Board of Supervisors adopt the proposed Ordinance without modification.

___b. Denied, and that Board of Supervisors not adopt the proposed Ordinance.

___c. Granted with the modifications set forth on the attached listing of specific recommendations, and that the Board of Supervisors adopt the proposed Ordinance with such modifications.

DATE: _____

READ AND PASSED: _____
Chairman, Isle of Wight County Planning Commission

TESTE: _____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

PLANNING REPORT

APPLICATION:

Application of Curtis Contracting, Inc., applicant, and Whitley-Hawkins Holdings, LLC, property owner, for approval of conditional use permit (CUP-6-21) to expand an existing resource extraction use, specifically a sand borrow pit, on eleven acres located at 32083 Airport Drive on properties with tax map numbers 68-01-001 and 68-02-002. The property is in the Rural Agricultural Conservation zoning district.

ELECTION DISTRICT:

District 5

LOCATION:

The subject property is located at the end of Airport Drive in Camptown. The two subject parcels which are part of the Whitley Hawkins borrow pit operation total 290.39 acres. To the north and east of the property are Parcels 64-01-050, 64-01-045, 64-01-047, 69-01-002, and 69-01-006A, which are undeveloped except for ongoing silvicultural use. All of the adjacent parcels are zoned Rural Agricultural Conservation (RAC). Although not directly adjacent, the Franklin Municipal Airport is situated nearby to the southeast. Undeveloped marshland located in the City of Franklin and Southampton County is situated to the south and west of the site.

BACKGROUND:

According to County records, the subject property contains a commercial sand mine (borrow pit) owned and operated by E. Carson Whitley Enterprises, Inc. (later Whitley-Hawkins Holdings, LLC), which was originally approved on June 5, 1975. On July 7, 1988, the Board of Supervisors amended the Zoning Ordinance to limit the time period for which conditional use permits (CUPs) for borrow pits may be issued to five years. The amendment retroactively limited the term of approval for any borrow pit operating in the County for which no date of termination was originally established in the conditions of approval. The owner was required to obtain approval of the first such five-year CUP in 1993 and to apply for an extension prior to expiration of the permit. Permits extending the term of approval were subsequently issued by the County in 1998, 2004, and, most recently, in 2009. The Board amended the Ordinance again in 2018 to do away

with the five year limit on borrow pit CUPs.

The FEMA 100-year floodplain (Zone AE) associated with the Blackwater River encumbers a significant proportion of the subject parcels. In January of 2004, the applicant applied for, and received approval of, a variance from the Board of Zoning Appeals to excavate material within the 100-year floodplain on 215 acres of the site. In 2004, the Board of Supervisors, following approval of the variance by the BZA, approved a five-year extension of the conditional use permit for a part of the site lying closest to the Blackwater River. This pit, which has since been reclaimed, lies adjacent to the area which is the subject of the current application. The current proposal will reopen a portion of this pit.

The property contains a main office and maintenance building and three pole-style accessory buildings on the south-central portion of the site, all of which are located outside the 100-year floodplain. The main building is served by a well and on-site septic system. There is a small cemetery and homesite on the southern parcel to the south of the access road.

DESCRIPTION:

The applicant is seeking a conditional use permit to continue the resource extraction use by expanding a 31.4-acre former borrow pit on the western side of the site by approximately eleven acres as shown on Sheets C102 and C104 of the Erosion and Sediment Control Plan, which also serves as the concept plan for this project. The proposed excavation area currently consists of a gravel access road and an adjacent field to the west. No extension of the gravel road is needed to access the proposed excavation area. This access road leads east past the maintenance buildings to a level area where a temporary shed and scale will be constructed. From this point, the haul road turns south along the Blackwater River before reaching Airport Drive at a gate at the end of the public road. Airport Drive is a paved, public road which leads southeast to intersect with Carrsville Highway (U.S. Route 58 Business) after approximately 0.85 miles. The haul road is shown on Sheet C108 and has served as the haul route for the existing operation.

Operations and Reclamation Plan: The operations and reclamation plan, as required by Sec. 5-5006.H.4 of the Zoning Ordinance, describes the applicant's proposal to continue utilizing the property for extracting sand for use as a source of construction material. The plan describes the methods for removing and stockpiling overburden, excavating sand at the depths expected, and routing stormwater runoff to downstream impoundments to allow for settling of material

suspended in the water column. The equipment used to remove sand from the pit will consist of a tracked excavator and wheel loader. The mine is currently permitted through the Virginia Department of Energy (formerly the Department of Mines, Minerals and Energy or DMME) Permit No. 90400AA, a copy of which has been provided to staff. The permit encompasses 72.03 acres, including the acreage to be mined as part of this request, and was originally issued on April 2, 1998.

Operations are anticipated to begin immediately upon County approval of the zoning permit and are expected to be completed within five (5) years from the start date. Reclamation activities are anticipated to take approximately six months following completion of extraction operations. The borrow pit will operate from 7:00 A.M. to 5:30 P.M, Monday through Friday, with occasional work on Saturdays. The applicant anticipates approximately 8-15 trucks per day on Airport Drive hauling material from the pit. The operations plan summarizes methods for treating the access road to reduce dust from trucks hauling material to the public road.

Wetland Delineation: The site proposed for resource extraction lies at least 10 feet in elevation above, and at least 244 feet from, the Blackwater River in a relatively level area next to a former pit. This area does not contain wetlands, and the drainage divides shown on Sheets C102 and C104 demonstrate that runoff from the area being disturbed is being directed entirely toward existing pits and away from the Blackwater River. A delineation was required for wetlands lying along the river closest to the excavation area, and a preliminary jurisdictional determination from the Army Corp of Engineers is currently pending. No disturbances to jurisdictional wetlands are proposed or anticipated. The applicant will preserve streams, wetlands, and existing mature forest cover on the site, including riparian buffers and forested wetlands on bottomlands adjacent to the Blackwater River, in order to enhance water quality.

Environmental Site Assessment (ESA): The ESA prepared by Commonwealth Environmental Associates, Inc. (CEA) identified the property as the former site of two separate farms, known as the Howell and Bunch Farms, which have been used for quarrying activities since 1975. Utilizing site reconnaissance and a search of available public records, the assessment found no obvious visual evidence of recognized environmental conditions (RECs). The assessment identified one business environmental risk associated with the six aboveground storage tanks (ASTs) in the vicinity of the building complex. These were determined in the aggregate to be subject to the EPA Spill Prevention, Control, and Countermeasure (SPCC) Rule and, therefore, are required to have an SPCC plan in place.

Although no visual evidence of spills or leaks was detected, the report noted that the ASTs did not appear to be registered with the Virginia Department of Environmental Quality (VDEQ) as required by Virginia AST regulations.

Cultural Resources: The County GIS depicts the area to be mined as having high potential for containing archaeological resources. In accordance with Sec. 7-1004.A.1.e of the Zoning Ordinance, where County studies have indicated a moderate or high probability that archeological resources may exist on the property, a Phase I archeological study, in coordination with the Virginia Department of Historic Resources, shall be conducted. Parcel 68-01-002 also contains two known archaeological sites south of the access road and southwest of the buildings at least a thousand feet from the area to be mined. One of the sites is the concrete-covered cemetery noted in the ESA. A Phase I Cultural Resources Assessment will be conducted following approval of the CUP, but prior to approval of the site plan, in order to ascertain the nature and extent of these features and recommend mitigation measures, if any.

Following approval of the conditional use permit, the applicant will be required to submit a simplified site plan in accordance with County ordinances and any required conditions prior to beginning construction.

COMPREHENSIVE LAND USE PLAN:

The subject property is located in an area designated for future Rural Agricultural Conservation (RAC) and Environmental Conservation (EC) on the Countywide Recommended Future Land Use Map ("Envision the Isle"). The RAC designation is intended primarily to facilitate agricultural and forestal uses, although certain other specified uses, including resource extraction, may be appropriate if sited correctly. The EC designation was established to protect a variety of sensitive environmental features such as marshes, rivers, streams, and forested wetlands. The perimeter of the property, in particular, contains significant areas of these features, and the applicant proposes to locate the proposed activity in such a way as to protect sensitive environmental resources on the site. Therefore, the proposed activity is considered generally consistent with the policies of the Comprehensive Plan.

ORDINANCE REVIEW:

The procedural and substantive zoning requirements applicable to resource extraction uses are found in Sec. 5-5006.H of the Zoning Ordinance. This section requires an application for a County permit to be filed with the Zoning

Administrator, which contains certain information and accompanying documentation concerning the proposed activity as set forth in Subsection 3. Information required by paragraphs a.- j. and m.- q. are summarized in a table on pages 4-5 of the Project Narrative. Accompanying maps and plans required by paragraphs k.- l. are provided in the Erosion and Sediment Control Plan prepared by Chesapeake Bay Site Solutions. Staff has reviewed the narrative and plan and determined that all information required by Article 5 has been provided by the applicant.

In addition to these standards, Sec. 1-1007 contains the following criteria for reviewing conditional use permits generally:

1. That the establishment, maintenance, and operation of the conditional use will not be detrimental to or endanger the public health, safety, and general welfare;
2. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially impair the use of other property within the immediate proximity;
3. That adequate utilities, water, sewer or septic system, access roads, storm drainage and/or other necessary public facilities and improvements have been or will be provided;
4. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion on the public streets;
5. That the proposed conditional use is not contrary to the goals and objectives of the Isle of Wight County Comprehensive Plan;
6. That the conditional use shall, in all other respects, conform to the applicable regulations of the zoning district classification in which it is located and to the special requirements established for the specific use;
7. That the use(s) at the location proposed will not result in a multiplicity or saturation of similar uses in the same general neighborhood of the proposed use.

Due to the remoteness and large size of the subject property, and the lack of residences or other uses in close proximity to the site, many of these criteria are either not applicable, or only minimally related, to the proposed conditional use. However, the use of Airport Drive by haul trucks, which pass through a neighborhood of approximately 11 residences before reaching Carrsville Highway, was noted. The applicant anticipates approximately 8-15 trucks per day hauling material from the pit on the haul road and Airport Drive. The conditions recommended below (under "Recommendations") are intended to address the

impacts of the project and ensure that the use will not be injurious to the use of other property in the vicinity or detrimental to public health, safety, and general welfare generally.

Conditions imposed on the establishment of a conditional use in a particular zoning district may include, but are not limited to, limitations or requirements related to:

1. The number of persons living or working in the immediate area and the proposed hours of operation, as may applicable;
2. Traffic conditions, including facilities for pedestrians, such as sidewalks and parking facilities; the access of vehicles to roads; peak periods of traffic; and proposed roads, but only if construction of such roads will commence within the reasonably foreseeable future;
3. The orderly growth of the neighborhood and community and the fiscal impact on the County;
4. The effect of odors, dust, gas, smoke, fumes, vibration, glare, and noise upon the use of surrounding properties;
5. Facilities for police, fire protection, sewerage, water, trash and garbage collection and disposal, and the ability of the county or persons to supply such services;
6. The degree to which the development is consistent with generally accepted engineering and planning principles and practices;
7. The structures in the vicinity such as schools, houses of worship, theaters, hospitals, and similar places of public use;
8. The purposes set forth in this ordinance, the county's comprehensive plan, and related studies for land use, roads, parks, schools, sewers, water, population, recreation, and the like;
9. The environmental impact, the effect on sensitive natural features, and opportunities for recreation and open space;
10. The preservation of cultural and historic resources or landmarks.

Staff utilized this guidance in recommending the conditions below (under "Recommendations").

AGENCY REVIEW:

Staff forwarded the application materials to the following County departments and agencies:

- Emergency Services - No concerns noted with CUP.
- Economic Development - No concerns noted with CUP.

- General Services - No concerns noted with CUP.
- Environmental Planner - Variance previously granted in 2004 for mining operations in the floodplain for up to 250 acres. No new structures or improvements in the floodplain proposed.
- Transportation Project Manager - No concerns noted with CUP.
- VDOT - No concerns noted with CUP.
- Sheriff's Office - No concerns noted with CUP.
- County Attorney - No concerns noted with CUP.

STAFF CONCLUSIONS:

The relative strengths and weaknesses of this application are discussed below:

Strengths:

1. The applicant proposes to locate the borrow pit a significant distance from waterways and grade the site so that runoff from disturbed areas is directed back toward the interior of the pit and away from streams and rivers. As a result, the proposed use is considered generally consistent with the policies of the Comprehensive Plan that aim to protect sensitive environmental features from the effects of development.
2. The proposed mining area is located a considerable distance from adjoining buildings and uses. Mining operations have been occurring on the property continuously for 46 years with no history of complaints from property owners neighboring the site. The volume of truck traffic expected on Airport Drive from the proposed borrow pit expansion is consistent with what residents have experienced from past operations, according to County records from past CUP approvals.
3. The proposed commercial mining activity is anticipated to confer a positive economic benefit to the County from the additional tax revenue being generated.
4. The forests along the edges of the property will be maintained to protect the riparian buffer along the Blackwater River, streams, and wetland areas, enhancing water quality for the benefit of the public.

Weaknesses:

1. The existing aboveground storage tanks (ASTs) represent a potential environmental risk to ground and surface water in the event of spills or leaks. Registration of the tanks with VDEQ, and creation and implementation of a comprehensive Spill Prevention, Control, and Countermeasure (SPCC) Plan

in accordance with EPA standards, would serve to mitigate this weakness.

STAFF RECOMMENDATION:

Due to the preponderance of the strengths cited herein, staff recommends approval of the conditional use permit subject to the following conditions: 1. The conditional use permit shall be for a maximum of eleven (11) acres as depicted in the Erosion and Sediment Control Plan dated April 27, 2022. 2. The applicant shall register the aboveground storage tanks (ASTs) located on the property with the Virginia Department of Environmental Quality (VDEQ) as required by the Virginia Facility and Aboveground Storage Tank (AST) Regulations (9VAC25-91-10 et seq). Evidence of such registration shall be provided to the Zoning Administrator prior to issuance of the zoning permit. 3. The applicant shall comply in all respects with the Environmental Protection Agency (EPA) Spill Prevention, Control, and Countermeasure (SPCC) Rule in accordance with Section 311(j)(1)(C) of the federal Clean Water Act, as amended by the Oil Pollution Act of 1990, to include development, maintenance, and implementation of an oil spill prevention, or SPCC, plan. Evidence of the plan shall be provided to the Zoning Administrator prior to issuance of the zoning permit for the project. 4. Operations associated with the conditional use shall be conducted between 7:00 A.M. and 5:30 P.M., Monday through Friday. If work is to be conducted on Saturdays, operations shall be limited to these same hours. No operations shall occur on Sundays. 5. The applicant shall monitor and control the access road for dust in accordance with the methods described in the approved Operations and Reclamation Plan dated April 26, 2022. The entrance gate to the access road shall kept locked at all times when not in use. 6. The applicant shall submit a Phase 1 Cultural Resources Survey for staff review at the time of site plan submittal and resource limits identified and marked on the site during pit operations.

ATTACHMENTS:

Description	Type	Upload Date
CUP-6-21 Whitley Hawkins Borrow Pit application	Backup Material	6/22/2022
Project Narrative	Backup Material	6/14/2022
Concept Plan and E&S Plan	Backup Material	6/14/2022
Location Map	Backup Material	6/14/2022
Property Map	Backup Material	6/14/2022
Zoning Map	Backup Material	6/14/2022
Site Photos	Backup Material	6/14/2022
VDE Permit	Backup Material	6/14/2022
CUP-6-21 Whitley Borrow Pit PC Resolution		

Local Roots, Global Reach

ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF PLANNING AND ZONING

SUBMITTAL CHECKLIST FOR CONDITIONAL / SPECIAL USE PERMITAPPLICATIONS

In conjunction with Section 1-1017, *Conditional Uses*, and Section 1-1018, *Special Uses Permits for Uses Not Provided For*, of the Isle of Wight County Zoning Ordinance, as amended, the following information shall be submitted for a Conditional / Special Use Permit Application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for a Conditional / Special Use shall be certified as complete unless the following information is provided, unless the Zoning Administrator reduces the number of required copies.

1. Fifteen (15) copies of the original, executed application and one (1) original executed application. Both the applicant(s) and the property owner(s) must have their signature(s) notarized on page No. 2 of the application.

2. The appropriate fees have been submitted with the application. Checks should be made payable to: Treasurer, Isle of Wight County.

3. Fifteen (15) copies of a statement of the reasons for seeking such permit, and if applicable, a statement of conditions.

4. Fifteen (15) copies) of a narrative description of the property which shall include the Tax Parcel Identification Number.

5. One (1) copy of the most recent deed(s) for the property(s) associated with the application.

6. A concept plan of the property showing all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the Planning Commission and Board of Supervisors that adequate provisions shall be made for compliance with all standards for that particular use and the extent of the property to be so used on a given parcel or parcels. Such document shall be drawn to scale and shall include the following information:
   - A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
   - Title of drawing
   - Date of drawing
   - Existing wood line
   - North arrow
   - Scale bar
   - Current zoning of parcel(s) to be rezoned, including tax map number(s) and owner(s)
   - Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
   - Street names including route number and width(s) of the right-of-way(s)
   - Fifteen (15) full size copies, with one (1) reduced 11 inch X 17 inch copy shall be submitted
   - Please note that additional information on the site layout may be requested by the Zoning Administrator during the review process in order to more effectively review the application and prepare the staff reports for the Planning Commission and Board of Supervisors.

☐ 7. Fifteen (15) copies of such supplemental material as may be necessitated by the proposal itself or the district in which located or proposed to be located, and in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Isle of Wight County Zoning Ordinance.

✓ 8. All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter. Proof of the most recent tax payment to the County must accompany the application.

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete and correct information available. I understand that any section not completed in its entirety may delay processing of this application and the date of the Planning Commission public hearing and that the submittal of a complete application does not guarantee the application will be placed on the next available Planning Commission agenda.

William A. Riddick III
Printed or Typed Name

Signature

8-31-2021
Date

ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING & ZONING

APPLICATION FOR CONDITIONAL / SPECIAL USE PERMIT

This application should be used to petition for a permit for certain uses which, because of their unique characteristics or potential impacts on adjacent land uses, are not generally permitted in certain zoning districts as a matter of right, but which may, under the right set of circumstances and conditions be acceptable in certain specific locations. The following application requirements are consistent with the procedures set forth in Section 1-1017, *Conditional Uses*, and Section 1-1018, *Special Use Permits for Uses Not Provided For*, of the Isle of Wight County Zoning Ordinance, as amended.

A. APPLICATION FOR (CHECK ALL THAT APPLY):

[x] Conditional Use Permit (Are applicant proposed conditions attached?): x Yes _____ No

The proposed use or activity is listed as a conditional use in the RAC zoning district as per Section 4-2003.E in Article IV of the Isle of Wight County Zoning Ordinance.

[ ] Special Use Permit (Are applicant proposed conditions attached?): _____ Yes _____ No

Proposed Use or Activity: _____

B. PROJECT DESCRIPTION:

Project Name: Whitley-Hawkins Sand Quarry

Property Address (if any): 32082 Airport Drive, Franklin, VA

Election District: Carrsville

Comprehensive Plan Designation: RC

The use permit will apply to ~~150~~ 11 acres out of 290.39 total acres

Revised 6/16/22 by AMR based on application documents & applicant confirmation

Tax Parcel Identification # 68-01-001 Number of acres to be effected: _____

Tax Parcel Identification # 68-01-002 Number of acres to be effected: _____

Tax Parcel Identification # _____ Number of acres to be effected: _____

Proposed Utilities (check all that apply): Public Water _____ Private Well x

Public Sewer _____ Private Septic x

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Curtis Contracting, Inc.

Address: P.O. Box 769

City, State, Zip Code: West Point, VA 23181

Phone No.: 804-514-0358 Email: a.curtis@curtiscontracting.net Fax No.:

Property Owner(s) Name(s): Whitley-Hawkins Holdings, LLC

Address: 22225 Harvest Drive

City, State, Zip Code: Franklin, VA 23851

Phone No.: Email: Fax No.:

Applicants/Owners Affidavit (including compliance with all deed restrictions and covenants)

This application must be signed by the owner(s) of the subject property or must have attached written evidence of the owner's consent, which may be in the form of a binding contract of sale with the owner's signature or a letter signed by the owner(s), containing written authorization to act with full authority on the owner(s) behalf in filing this use permit application. Signing this application shall certify the owner's compliance with all deed restrictions and covenants, and shall constitute the granting of authority of the County to enter onto the property for the purpose of conducting site analyses and compliance with Federal, State and County regulations.

CRYSTAL LORENE RAMMELL
NOTARY PUBLIC
REG. #7731862
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES JUNE 30, 2025

Applicant: Curtis Contracting, Inc.
Printed or Typed Name

Applicant: _____ Date: 8/9/2021
Signature

Commonwealth of Virginia
City/County of New Kent
Subscribed and sworn to before me Crystal Rammell,
A Notary Public in and for the County of Isle of Wight,
Commonwealth of Virginia, this 9 day of August, 2021

Crystal Lorene Rammell
Notary Public

My Commission Expires June 30, 2025

Owner: Whitley-Hawkins Holdings, LLC
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight,
Commonwealth of Virginia, this __day of _____, 2021

_____
Notary Public

My Commission Expires _____

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight,
Commonwealth of Virginia, this ___day of _____, 20___

_____
Notary Public

My Commission Expires _____

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight,
Commonwealth of Virginia, this __day of _____, 20__

_____
Notary Public

My Commission Expires _____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Curtis Contracting, Inc.

Address: P.O. Box 769

City, State, Zip Code: West Point, VA 23181

Phone No.: 804-514-0358 Email: a.curtis@curtiscontracting.net Fax No.: _____

Property Owner(s) Name(s): Whitley-Hawkins Holdings, LLC

Address: 22225 Harvest Drive

City, State, Zip Code: Franklin, VA 23851

Phone No.: _____ Email: _____ Fax No.: _____

Applicants/Owners Affidavit (including compliance with all deed restrictions and covenants)

This application must be signed by the owner(s) of the subject property or must have attached written evidence of the owner's consent, which may be in the form of a binding contract of sale with the owner's signature or a letter signed by the owner(s), containing written authorization to act with full authority on the owner(s) behalf in filing this use permit application. Signing this application shall certify the owner's compliance with all deed restrictions and covenants, and shall constitute the granting of authority of the County to enter onto the property for the purpose of conducting site analyses and compliance with Federal, State and County regulations.

Applicant: Curtis Contracting, Inc.
Printed or Typed Name

Applicant: _____ Date: _____
Signature

~~County of Isle of Wight~~, Commonwealth of Virginia
City/County of _____
Subscribed and sworn to before me _____.
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this ___ day of _____, 20___

_____
Notary Public

My Commission Expires _____

Owner: Whitley-Hawkins Holdings, LLC
Printed or Typed Name

Owner: Sandra W. Hawkins Date: 7/22/21
Signature

Southampton (my)
County of ~~Isle of Wight~~, Commonwealth of Virginia

Subscribed and sworn to before me Melissa N. Jackson.
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 22 day of July, 2021

Melissa N. Jackson
Notary Public

My Commission Expires 3/31/2025

MELISSA N. JACKSON
Notary Public
Commonwealth of Virginia
My Commission Expires March 31, 2025
Registration # 181781

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____.
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this ___ day of _____, 20___

_____
Notary Public

My Commission Expires _____

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____.
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this ___ day of _____, 20___

_____
Notary Public

My Commission Expires _____

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: 5/9/22 Fees Paid: $1,200
Tax Query: [X] Current [ ] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

- ✓ Department of Conservation & Recreation
- ✓ Economic Development
- ✓ Emergency Services
- ✓ General Services
- ✓ Environmental Planner
- ✓ Health Department
- ✓ Transportation Manager
- ____ Commission of Revenue
- ✓ Other ACOE / DEQ (WETLANDS)
- ____ Inspections
- ____ Sheriff's Office
- ____ Town of Smithfield
- ____ Town of Windsor
- ✓ VDOT
- ____ Schools
- ✓ Budget & Finance
- ✓ County Attorney

Verified By: _____ Date: 6/2/22

Revised August 13, 2014

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Curtis Contracting, Inc.

Address P.O. Box 769
Street

West Point, VA 23181
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
32082 Airport Drive, Franklin, VA	Tax Map. Nos. 68-0-001 & 68-01-002

OTHER OWNERS OF AFFECTED REAL ESTATE

(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address
Whitley-Hawkins Holdings, LLC	22225 Harvest Drive Franklin VA 23851

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? ~~Yes~~ No

If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct and true.

Applicant: Curtis Contracting,Inc. (Printed or Typed Name) Applicant: _____ (Signature) Date: 8/9/2021

Commonwealth of Virginia
~~County of Isle of Wight~~ City/County of New Kent

Subscribed and sworn to before me Crystal Rammell.
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 9 day of August, 2021.

Crystal Lorene Rammell
Notary Public

My Commission Expires June 30, 2025

CRYSTAL LORENE RAMMELL
NOTARY PUBLIC
REG. #7731862
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES JUNE 30, 2025

PROJECT NARRATIVE

FOR

WHITLEY-HAWKINS BORROW PIT EXPANSION

32083 AIRPORT ROAD

FRANKLIN, VA 23851

18 April 2022

Applicant: Curtis Contracting, Inc.
Attn: Martin Harrell
West Point, Virginia 23181
Ph.: 1-804-843-4633

Prepared By:
Gregory O. Milstead, P.E.
P.O. Box 6663
Virginia Beach, VA 23456
www.chesapeakebaysitesolutions.com
Ph: 757.575.3715

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The purpose of this Project Narrative is to provide a general overview and discussion regarding the history of the site, zoning, and planned use of the subject site.

PROPERTY LOCATION

The project site currently operates as the Whitley-Hawkins sand quarry is located at the end of State Rte. 616, 32083 Airport Road, Franklin, VA. 23851. The project site consists of (2) parcels having the following legal descriptions and legal acreage:

1- ADJ ALEX HOWELL PLAT BK5/176 – 215.39 ACRES
2- 75 AC & STRIP 75 AC PLAT BK5/176 – 75 ACRES

DESCRIPTION OF PROPERTY

As noted above the total property area is 290.39 acres and currently operates as a sand quarry. The improvements located on the south side of the site include four (4) pole style sheds. The remainder of the site includes active borrow pits, former reclaimed borrow pits that are ponds, agricultural fields, wooded areas, and wetlands. The site is accessible via a gravel road extending from Airport Drive. The site is bound by the Blackwater River to the north, west and south and undeveloped properties to the east. The property is serviced by on-site well and septic.

ZONING

A desktop analysis of Isle of Wight County's online parcel viewer shows the parcels having zoning designation of RAC – Rural Agricultural Conservation District.

PROJECT DESCRIPTION

The purpose of this project is to expand an existing quarry pit located on the parcels. The project will involve ongoing borrow pit operations to include excavating, loading, and hauling natural sand fill excavated from the borrow pit. Proposed improvements associated with this project will include a new temporary scale for weighing trucks and a temporary scale house to house the scale operator during operations. The total acreage associated with this conditional use permit application is approximately 11 Acres.

DRAINAGE CONDITIONS

The site is generally graded such that all runoff is directed towards the existing ponds onsite. Water levels in the ponds are controlled by the earthen spillways. The spillways drain to grassed overflow channels before draining to Blackwater River then to the Chowan River, ultimately draining to the Albemarle Sound. The proposed project will not alter any drainage, drainage patterns will remain the same as currently existing.

It is important to note that the project is in a Map floodway per FEMA Firm Map# 51093C031E (Rev. 12/2/2015) and has previously been permitted for the same use. It is also important to note that the Base flood elevation according to FEMA map is at elevation 20'. The proposed use associated with this application is for subsurface mining beginning around elevations of 14' and 13'. No vertical construction that could alter the floodway elevation is proposed with this application.

ENVIRONMENTAL

As part of this project a Phase I Environmental Site Assessment (ESA) was conducted in June of 2021. The Findings report is included in the Appendix of this report for reference. The Phase I ESA summary findings noted one environmental risk associated with the property, Aboveground Storage Tanks (AST)

for agricultural use on site. It is important to note that the existing ASTs on site will remain unused, if the tanks are put back into use, they will be registered with Virginia Department of Environmental Quality. A stormwater prevention plan including a spill prevention plan will be provided with land disturbance application.

Per Supplementary Use Regulation Section 5-5006 – Supplementary Use Regulations for Industrial Use Types, H. Resource Extraction, sections H3a-j, and n-q:

Supplementary Use Regulation Information Table for Resource Extraction (Section 5-5006. H.3 a-j, n-q)		
a.	The common name and geologic title, where applicable, of the mineral, ore or other solid matter to be extracted	Common Fill Sand
b.	A description of the land upon which the applicant proposes to conduct mining operations, which description shall set forth the location of its boundaries and any other description of the land to be disturbed in order that it may be located and distinguished from other lands and easily ascertainable as shown by a map attached thereto showing the amount of land to be disturbed;	The property is an existing sandpit consisting of several impoundments that have been excavated over the last 20 years. The total parcel size is 290 acres. Some of the existing ponds can be expanded while new impoundments will be created, all while maintaining the proper buffers to all boundaries and wetlands. See maps included with this application.
c.	The name and address of the owner or owners of the surface of the land	Curtis Contracting, Inc. P.O. Box 769 West Point Va. 23181
d.	The name and address of the owner or owners of the mineral, ore or other solid matter	Curtis Contracting, Inc. P.O. Box 769 West Point Va. 23181
e.	The source of the operator's legal right to enter and conduct operations on the land to be covered by the permit;	Recorded Deed
f.	The total number of acres of land to be covered by the permit;	±11 Acres
g.	A reasonable estimate of the number of acres of land that will be disturbed by mining operations on the area to be covered by the permit during the ensuing year;	3 Acres
h.	Whether any borrow pit permits of any type are now held by the applicant and the number thereof;	None
i.	Name and address of the applicant, if an individual; the names and addresses of all partners, if a partnership; the state of incorporation and the name and address of its registered agent, if a corporation; or the name and address of the trustee, if a trust;	Curtis Contracting, Inc. P.O. Box 769 West Point Va. 23181
J.	If known, where the applicant or any subsidiary or affiliate or any partnership, association, trust or corporation controlled by or under common control with the applicant, or any person required to be identified by subsection 3.i. of this section, has ever had a borrow permit of any type issued under the laws of this or any other state revoked or has ever had a mining or other bond, or security deposit in lieu of bond, forfeited;	No
n.	Provide an estimation of the total number of cubic yards to be excavated;	300,000 Cubic Yards
p.	Provide the proposed date on which excavation operations will commence, the proposed date on which such operation will be	Excavation will begin immediately upon County Authorization and is anticipated to be completed

	completed and the proposed date all required restoration measures will be completed	5 years from start date and reclamation activities will take approximately 6 months.
q.	The name and address of the operator.	Curtis Contracting, Inc. P.O. Box 769 West Point Va. 23181

APPENDIX (Phase I Environmental Site Assessment Findings Report & Operations Plan)

Commonwealth Environmental Associates, Inc.
7411 Iron Bridge Rd. • Richmond, VA 23237 • 804.275.9320 • Fax: 804.275.9322

FINDINGS REPORT
ENVIRONMENTAL SITE ASSESSMENT
WHITLEY-HAWKINS QUARRY PROPERTY
TWO PARCELS – 32083 AIRPORT DRIVE
FRANKLIN, VIRGINIA 23851

Prepared for:

Curtis Contracting, Inc.
West Point, Virginia

Prepared by:

Commonwealth Environmental Associates, Inc.
Richmond, Virginia

June 29, 2021

Commonwealth Environmental Associates, Inc.
7411 Iron Bridge Rd. • Richmond, VA 23237 • 804.275.9320 • Fax: 804.275.9322

FINDINGS REPORT
ENVIRONMENTAL SITE ASSESSMENT
WHITLEY-HAWKINS QUARRY PROPERTY
TWO PARCELS – 32083 AIRPORT DRIVE
FRANKLIN, VIRGINIA

Prepared for:

Curtis Contracting, Inc.
West Point, Virginia

Prepared by:

Commonwealth Environmental Associates, Inc.
Richmond, Virginia

June 29, 2021

Commonwealth Environmental Associates, Inc.
7411 Iron Bridge Rd. • Richmond, VA 23237 • 804.275.9320 • Fax: 804.275.9322

June 29, 2021

Curtis Contracting, Inc.
7481 Theron Road
West Point, Virginia 23181

Attn: Mr. Martin Harrell

RE: Phase I Environmental Site Assessment
Whitley-Hawkins Quarry Property
Two Parcels – 32083 Airport Drive
Franklin, Virginia 23851
CEA Project No. 28221

Gentlemen,

Commonwealth Environmental Associates, Inc. (CEA) is pleased to submit this Phase I Environmental Site Assessment Findings report for the above referenced project. These services have been performed in accordance with your request and our standard terms and limitations. The contents of this report or performance of this study should not be construed as CEA's recommendation to either purchase, finance, sell or develop the property.

CEA appreciates the opportunity to work with you as your environmental consultant on this project. Please do not hesitate to contact us if you have any questions concerning the report or any aspect of the project.

Sincerely,

COMMONWEALTH ENVIRONMENTAL ASSOCIATES, INC.

By:

W. Fred Mayes
Project Manager

By:

Andrew W. Mayes
Vice President

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1.0 EXECUTIVE SUMMARY

Based upon the results of studies performed to date, which included a review of readily available public records as well as a site reconnaissance visit by senior level personnel, the following is a summary of key findings and comments:

- The subject property includes two (2) tax parcels at 32083 Airport Drive in Franklin, Virginia. The site operates as the Whitley-Hawkins sand quarry. The improvements at the site include a pole style shed and office structure and three (3) pole style sheds. The improvements are located on the south side of the site. The remainder of the site includes active borrow pits, former borrow pits that are ponds, agricultural fields, wooded areas and wetlands. The site is accessible via a gravel road extending from Airport Drive.

- A review of available Federal, state, and local regulatory information did not include the subject or adjoining properties on any of the tracked regulated site inventories including SEMS, National Priorities List, Leaking Underground Storage Tanks (LUST), Registered Underground Storage Tanks (RSTs) or the Toxic Release Inventory.

- Based upon interviews with personnel familiar with the site, aerial photographs viewed by CEA personnel, information obtained during the site reconnaissance and historical maps, the site appears to have been two (2) separate farms identified as the Howell and Bunch Farms. A family cemetery labeled as Saunders / Beale is located on the south side of the site. The properties appeared to have both contained single family homes and agricultural fields through the 1960's. Borrow pit / quarry activities appear to have been initiated in 1975 according to Isle of Wight records. The remainder of the site has been utilized for undeveloped or agricultural uses.

- CEA completed the site reconnaissance of the subject site on June 14, 2021. The review revealed a borrow pit and agricultural use property with no obvious visual evidence of recognized environmental conditions (RECs).

- There was one (1) business environmental risk noted at the subject site. Multiple Aboveground Storage Tanks (ASTs) are located at the property. The ASTs do not appear to be registered with VDEQ as required. In addition, and due to the aggregate storage of the ASTs, the facility is subject to the EPA Spill Prevention, Control, and Countermeasure (SPCC) rule. A facility is covered by the SPCC rule if it has an aggregate aboveground oil storage capacity greater than 1,320 U.S. gallons or a completely buried storage capacity greater than 42,000 U.S. gallons and there is a reasonable expectation of an oil discharge into or upon navigable waters of the U.S. or adjoining the shorelines. The purpose of the SPCC rule is to help facilities prevent a discharge of oil into navigable waters or adjoining shorelines. The SPCC rule requires facilities to develop, maintain, and implement an oil spill prevention plan, called an SPCC Plan. These Plans help facilities prevent oil spill, as well as control a spill should one occur. CEA would recommend that the ASTs are properly registered with the VDEQ and a SPCC plan is prepared for the property. This may require adjustments in spill containment and prevention facilities and equipment on the subject site.

2.0 OBJECTIVES

2.1 Purpose and Scope

The purpose of this Phase I Environmental Site Assessment was to expend reasonable effort to identify environmental considerations related to the subject site.

2.2 Definition

A "recognized environmental condition" is defined within the ASTM Standard 1527-13 as the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water, or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be de minimis are not recognized environmental conditions.

2.3 Process

Our services addressing an assessment the property inclusive of two (2) tax parcels located at 32083 Airport Drive in Franklin, Virginia, included:

- A review of ownership, including a chain-of-title search, for the past eighty years to determine if undesirable activities may have occurred at the site or surrounding facilities which may have had a negative impact on the environment.

- A review of readily available federal, state, and local environmental databases to determine if the subject site or adjacent sites are indicated as having violations to any existing regulatory laws.

- A review of readily available aerial photographs and Sanborn Maps for significant site usages or development history.

- A site walkover and area reconnaissance, conducted by senior level personnel, to determine if environmental concerns were evident at the subject site or adjacent parcels.

- Interviews with individuals familiar with the site concerning the subject site and adjacent property, if available.

2.4 Limitations

These services have been performed for the exclusive use of Curtis Contracting, Inc. and/or their agents or lenders pursuant to our contract terms. These services have been performed in accordance with generally accepted environmental practices. No other warranty expressed or implied is made. Our conclusions and recommendations are based upon information provided to us by others and our site observations. Our observations are based upon conditions readily visible at the site at the time of the site visit. However, the site observations are not intended to address specific subsurface soil and groundwater conditions, which can only be determined by performing a detailed program.

The contents of this report or performance of this study should not be construed as CEA's recommendation to either, purchase, sell or develop the subject property. The following services were not included in this phase of the project: surveying for line and grade, quantity, and cost estimates, building and/or structural representation, detailed plans and specifications, waste characterization and treatment schemes, comprehensive asbestos surveys, radon surveys, soil and water sampling, wetlands assessments, attendance at meeting or services not specifically defined herein.

3.0 SITE OVERVIEW

3.1 Site Description / Uses

The subject site includes two (2) tax parcels at 32083 Airport Drive in Franklin, Virginia. The site operates as the Whitley-Hawkins sand quarry. The improvements at the site include a pole style shed and office structure and three (3) pole style sheds. The improvements are located on the south side of the site. The remainder of the site includes active borrow pits, former borrow pits that are ponds, agricultural fields, wooded areas and wetlands. The site is accessible via a gravel road extending from Airport Drive. The site is bound by the Blackwater River to the north, west and south and undeveloped properties to the east. The area is serviced by private water and sewer systems. The general vicinity of the site is illustrated on the site vicinity map presented as Appendix 1, Figure 1.

3.2 Property Size

Per Isle of Wight County, Virginia tax information, the subject site consists of two (2) parcels totaling 290.39 acres. The parcels include the following:

Parcel	***Acres***	***Improvements***	***Size (sq. ft.)***	***Year Built***
68-01-001	75	None		
68-01-002	215.39	Miscellaneous	320	2010
		Miscellaneous	3,360	2010
		Miscellaneous	1,200	2010
		Miscellaneous	7,200	2010

The reviewed tax information is included within Appendix 2.

3.3 Zoning

Per Isle of Wight County, Virginia zoning maps and personnel, the parcels are currently zoned Rural Areas.

4.0 SITE BACKGROUND/OPERATING HISTORY

4.1 Current/Historical Ownership Information

The ownership was researched at the Isle of Wight County Clerk of Court office. Both parcels are listed as owned by Whitley-Hawkins Holdings, LLC. The chain of title per the researched deeds follows:

Parcel 68-01-001 – 75 Acres – Howell Farm

Grantee	*Date*	*Deed Book / Page*
Whitley-Hawkins Holdings, LLC	12/26/97	975384
E. Carson Whitley, Jr. & wife	08/12/80	800001470
Joe Whitley	04/12/66	183 / 170
Kenneth G. Howell	10/28/41	119 / 224
Arthur G. Howellet.al.	10/17/41	
P.J. Powell	01/05/1880	45 / 206
John Robertson		

Parcel 68-01-002 - 215.39 Acres – Bunch Farm

Grantee	*Date*	*Deed Book / Page*
Whitley-Hawkins Holdings, LLC	12/26/97	975384
E. Carson Whitley, Jr. & wife	08/12/80	800001470
Joe Whitley	03/09/55	146 / 30
Joseph C. Bunch	12/27/24	95 / 590
A.H. Saunders		
H.P. Saunders		

CEA reviewed a recorded deed for the two parcels in August 1945 between the then owners and the United States of America which indicated a perpetual easement and right of way "for the free and unobstructed passage of aircraft in, through and across the airspace" of the properties. The easement required the removal of all trees from the properties. The mentioned deed and other additional ownership information is presented as Appendix 2.

4.2 Aerial Photographs

Available photographs of the subject site and adjacent properties as documented by the United States Geological Survey (USGS) show developments/improvements to the property and the surrounding area. Photographs from 1950, 1959, 1964, 1973, 1982, 1994, 2003, 2005, 2008, 2009, 2011, 2012, 2014, 2016 and 2018 were readily available and reviewed by CEA personnel. The photographs are presented as Appendix 3. A brief description of each photograph is presented below:

1950 – 1973 There appears to be a residential structure located on the north side of the study area. The remainder is undeveloped or agricultural use.

1982 There are no structures illustrated at the site. There is some quarry work within the central area of the property. The remainder is undeveloped or agricultural use.

1994	Two (2) of the pole style barns are located on the site. Some quarry work is being completed on a central area of the property. The remainder is undeveloped or agricultural use.
2003 – 2018	The current four (4) pole style buildings can be viewed. Sand pit operations can be viewed.

4.3 Historical City Directories/Sanborn Maps/Historical Topographical Maps

4.3.1 City Directories

City directories as provided by ERIS were readily available for the area of the subject site from 1992 – 2017. The address is not listed between 1992 and 2017.

4.3.2 Sanborn Maps

CEA reviewed the available Sanborn maps and historical insurance drawings as provided by Environmental Data Resources (ERIS). The review indicated that the Sanborn Company did not map the area of the subject site.

4.3.3 Topographical Maps

CEA personnel reviewed the readily available historical topographical maps as documented by the USGS for the subject site. The reviewed USGS topographical maps included those dated 1920, 1943, 1957, 1967, 1973, 1980, 1986 and 2016. A summary of each map is presented below. The maps are presented as Appendix 8.

Year	Description
1920 - 1957	There appears to be a structure on the south and north sides of the property.
1967 / 1973	There are no improvements illustrated on the site. A cemetery is illustrated on the south side of the site.
1980	There are quarry operations on the east side of the site. There are no structures illustrated on the map. A cemetery is illustrated on the south side of the site.
1986	There are no structures illustrated on the map. A cemetery is illustrated on the south side of the site.
2016	No structures are illustrated on this series of maps. There are topographical differences on the west side of the site due to the quarry operations between the 1986 and 2016 maps.

4.4 Owner / Other Party Interviews

CEA interviewed the owner, owner representatives, regulatory and other readily accessible parties toward the completion of this report in general accordance with the ASTM guidance. The personnel interviewed are summarized within Appendix 5.

4.5 Historical Recognized Environmental Conditions (HREC)

A historical recognized condition is defined within the ASTM Environmental Site Assessments: Phase I Environmental Site Assessment Process Standard E 1527 – 13 as "a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls). Before calling the past release an HREC, the EP must determine whether the past release is a REC at the time the Phase I ESA is conducted (e.g., if there has been a change in the regulatory criteria)." No historical recognized environmental conditions were noted for the property.

4.6 Controlled Recognized Environmental Conditions (CREC)

A controlled recognized condition is defined within the ASTM Environmental Site Assessments: Phase I Environmental Site Assessment Process Standard E 1527 - 13 as "a REC resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (e.g., as evidenced by the issuance of a NFA letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (e.g., property use restrictions, AULs, institutional controls, or engineering controls). A condition considered by an environmental professional to be a CREC shall be listed in the Findings Section of the Phase I ESA report, and as a REC in the Conclusions Section of the Phase I ESA report." No controlled recognized environmental conditions were noted for the property.

4.7 List / Summary of Reviewed Previously Prepared Reports

CEA was not provided any previously prepared environmental reports for the site by the current owner, client, or Virginia Department of Environmental Quality (VDEQ).

5.0 ASTM USER PROVIDED INFORMATION

In order to qualify for one of the Landowner Liability Protections offered by the Small Business Liability and Brownfields Revitalization Act of 2001, the user must provide the following information as available. Failure to provide this information may result in a determination that "all appropriate inquiry" is not complete. The completed questionnaire is presented as Appendix 9.

5.1 Title Records

The client did not provide any title record information.

5.2 Environmental Liens or Activity Use Limitations

The client did not provide any information pertaining to known environmental liens or use restrictions.

5.3 Specialized Knowledge

The client provided no specialized knowledge of the site or nearby properties.

5.4 Commonly Known or Reasonably Ascertainable Information

The client did not provide any information regarding the past use of the property, the use of any chemicals on the property, any spills that occurred at the property or any previous environmental cleanups of the subject site.

5.5 Valuation Reduction for Environmental Issues

The client did not report any value reductions for environmental issues.

5.6 Owner, Property Manager and Occupant Information

CEA was provided the contact information for an owner representative.

5.7 Reason for Performing the Phase I ESA

The client indicated that the Phase I ESA was being completed as a part of routine commercial real estate refinancing due diligence.

6.0 ENVIRONMENTAL SETTING

6.1 Soils Conditions

The site is located within the Coastal Plain of Virginia region. The soils are mapped as Peawick - Chickahominy Association. These soils are moderately – poorly drained and have a clayey subsoil. These soils are on broad, flat uplands. A review of the Isle of Wight County Soil Survey indicates the majority of the subject site contains four (4) general soil types. The west side if the subject site includes Alaga fine sand. These soils are very deep and excessively drained. These soils formed in sandy, unconsolidated marine sediment on uplands and stream terraces. The north, west and south property boundaries along the Blackwater River are mapped with Nawney loam. These soils are very deep and very poorly drained. These soils formed in loamy fluvial and marine sediment on flood plains. The central area of the site and north side are mapped with Slagle fine sandy loam. These soils are very deep and moderately well drained. These soils formed in loamy unconsolidated

marine sediments on upland areas. The southeastern fields are mapped with Udorthents loam. These soils are well drained and in areas that have been reshaped and smoothed or consists of cuts and excavations that extend several feet into the underlying unconsolidated marine sediment. None of the soils are the site are supportive of wetland plants or conditions.

6.2 Surface Water Conditions

The Blackwater River borders the north, west and south property boundaries. There are multiple ponds on the property due to previous quarry / borrow pit activities. There are multiple areas mapped within the National Wetland Inventory on the site including the areas bordering the Blackwater River, the northeast corner of the property a some select drainage areas centrally. A wetland delineation would be required to define the specific limits of the wetland area. Except for the two agricultural fields on the southeast corner of the study area, the property is located within the 100 and 500-year flood plain.

6.3 Groundwater Conditions

Groundwater flow would be expected to follow topographical features. Groundwater would be expected at depths from the surface to more than 10 feet below ground surface throughout the site.

7.0 SITE RECONNAISSANCE

A site reconnaissance of the subject site was performed on June 14, 2021 by CEA personnel. The intent of this service was to assist in identifying potential adverse environmental activities which were currently or previously conducted on the subject site or on adjacent parcels. The General Site Map (Appendix 1) presents general characteristics of the subject site. The site photographs and their descriptions and locations are included as Appendix 6. Interviews with people familiar with the subject site offer additional information presented in Appendix 5.

The subject site includes two (2) tax parcels at 32083 Airport Drive in Franklin, Virginia. The site operates as the Whitley-Hawkins sand quarry. The improvements at the site include a pole style shed and office structure and three (3) pole style sheds. The improvements are located on the south side of the site. The remainder of the site includes active borrow pits, former borrow pits that are ponds, agricultural fields, wooded areas and wetlands. The site is accessible via a gravel road extending from Airport Drive. The site is bound by the Blackwater River to the north, west and south and undeveloped properties to the east. The area is serviced by private water and sewer systems.

CEA reviewed the property for areas of concern. The building improvements are located on the south side of the site. There is a pole style storage shed with an enclosed office. The materials stored beneath the structure included personal vehicles and equipment of the owner. There was a used oil storage vessel within one service bay. There is some limited oil staining in the area of the

storage vessel on the concrete floor. This spill would be considered de minimis. A propane AST is located on the east side of the building. There is a 550-gallon and a 1,000-gallon AST located on the west side of the building. The ASTs were labeled as off-road diesel. A 275-gallon empty AST is also located in this area. There was no visual evidence of any leaking or spills in the area such as soil staining or petroleum odors.

There is a pole style storage building west of the main / office storage building. The building is utilized to store agricultural equipment. There was a stained area west of this building apparently due to a debris fire. No areas of concern were noted in this area.

There are two (2) pole sheds south of the access road from the main storage / office shed. One (1) building contains two (2) 10,000-gallon ASTs situated within a concrete containment structure. There was no visual evidence of any spillage or leaks within the containment area or in the area around the ASTs. There is a large pole style shed with agricultural equipment stored beneath. No issues of concern were noted in or around this improvement. There was a pile of tires stored south of these structures. No obvious areas of concern were viewed in this area of the site.

CEA reviewed the remainder of the property. A concrete covered cemetery was noted west of the building improvements on the property. The active and previous borrow pit activities were observed on the west side of the property. A pole style picnic pavilion structure was noted on the west side of the property along the Blackwater River. A review of the remainder of the property revealed wooded, wetland and agricultural fields.

CEA reviewed undeveloped areas of the subject site for visual evidence of potential concern. A review of the property revealed no obvious areas of dumping, filling or other activities of concern were noted. No storage of bulk hazardous materials or petroleum was noted in the undeveloped area reviewed. No suspicious activities or hazardous materials handling, or storage activities were noted. A review of the property revealed no visual evidence of activities or conditions of concern.

A review of the adjoining properties did not reveal any obvious visual evidence that the activities or conditions on the adjoining properties are adversely impacting the subject property. The site reconnaissance of the subject site on June 14, 2021 revealed a borrow pit and undeveloped use property with no obvious visual evidence of potential adverse environmental conditions or activities.

8.0 ENVIRONMENTAL/REGULATORY AGENCY INQUIRIES

8.1 Federal Regulatory Considerations

As part of this study, a review of federal agency records was conducted. Due to the time frame required, this work was subcontracted to Environmental Risk Information Services (ERIS). The report generated is included in Appendix 4. The subject and adjoining properties were not tracked on any of the regulatory databases. CEA submitted a FOIA request to the VDEQ to confirm the database findings. There were no unplottable listings within the area searched by ERIS.

8.1.1 NPL - National Priorities List (Superfund)

The NPL is a subset of SEMS, formerly known as CERCLIS, and identifies more than 1,200 sites for a priority cleanup under the Superfund Program. Sites are added from the SEMS list according to a hazard ranking system which seeks to identify high priority sites. The review of information on NPL indicated no listed sites within a 1.0-mile radius of the subject site.

8.1.2 Superfund Enterprises Management System (SEMS)– formerly CERCLIS

The Superfund Enterprises Management System (SEMS) list, formerly known as the CERCLIS, contains information more than 34,000 sites identified by the EPA as abandoned, inactive or uncontrolled hazardous waste sites which may require a cleanup. The review of information on SEMS indicated no reported sites within a 1.0-mile radius of the subject site.

8.1.3 TRI - Toxic Release Inventory

TRI includes all facilities which release any toxic chemical in reportable quantities to the air, water or land as required under SARA (Superfund Amendments and Reauthorization Act of 1986), Title III, Section 313. Reporting covers approximately 20,000 sites and is required (Form R) each July 1st for the previous year. The review of information reported on the TRIS did not reveal the subject site.

8.1.4 RCRIS - Resource Conservation and Recovery Information System

RCRIS includes selective information on more than 324,000 sites pertaining to hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). RCRIS is divided into three (3) categories:

8.1.4A RCRIS-TS - Treatment, Storage, or Disposal Facilities

RCRIS-TS contains information pertaining to those facilities that either treat, store, or dispose of hazardous waste. Review of this documentation revealed no facilities listed within the subject vicinity as treating and/or disposing of hazardous waste.

8.1.4B RCRIS-LG - Large Quantity Generators

RCRIS-LG contains information pertaining to facilities that either generate more than 1000 kg. of hazardous waste per month or meet other applicable requirements of the Resource Conservation and Recovery Act. Review of these documents did not reveal any sites within a 1.0-mile radius of the subject site.

8.1.4C RCRIS-SG - Small Quantity Generators

RCRIS-SG contains information pertaining to facilities that either generate between 100 kg. and 1000 kg. of hazardous waste per month or meet other applicable requirements of the Resource Conservation and Recovery Act. Review of this documentation revealed no listed facilities within 0.25 miles of the subject site. There are no RCRIS- Conditionally Exempt Small Quantity Generator sites located within 0.25 miles of the subject site.

8.2 State Regulatory Considerations

As part of this study, a review of state agency records was conducted. This work was subcontracted to EDR, the report generated is included in Appendix 4.

8.2.1 LUST - Leaking Underground Storage Tank Incident Reports

LUST records contain an inventory of reported leaking UST incidents. Not all states maintain these records, and the information stored varies by state. The subject and adjoining properties are not listed. There are no LUST sites within 0.25 miles of the subject site.

8.2.2 SSWF - State Solid Waste Facilities

SSWF contains a listing of any landfills registered within the Commonwealth of Virginia. There were no sites listed within a 0.5-mile radius of the subject site.

8.3 Other Local Regulatory Considerations

As part of this study, a review of state agency records was conducted. Due to time constraints, this work was subcontracted to EDR. The report generated is included in Appendix 4.

8.3.1 UST - Registered Underground Storage Tanks

USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. The registration information varies by individual state program. There are no listed sites within 0.25 miles of the subject site. The owner of any UST discovered to be leaking is responsible for any investigation, clean up and damages due to the leaking tanks.

8.3.2 State Hazardous Waste Site

The State Hazardous Waste Site list is the equivalent to the federal CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds are identified along with sites where a cleanup will be paid for by potentially responsible parties. There were no sites listed within a 1.0-mile radius of the subject site.

8.3.3 Drycleaners List

The list includes registered drycleaners in the area. There were no registered drycleaners within a 0.5-mile radius of the subject site.

8.3.4 Hazardous Substance Disposal Site

The Hazardous Substance Disposal Site list includes uncontrolled and unregulated hazardous waste sites. No sites were listed within 1.0 miles of the subject site.

8.3.5 AST - Aboveground Storage Tanks

There are no registered AST facilities within 0.25 miles of the subject site.

9.0 ADDITIONAL ENVIRONMENTAL INFORMATION SUMMARY

9.1 Asbestos

The improvements on the property include four (4) pole style sheds and a picnic pavilion. These buildings are generally unfinished and no potential asbestos containing materials were observed. While asbestos can occur naturally within soils, it is not expected to be a concern at this property.

9.2 Hazardous Materials

A review of the subject property did not reveal any visual evidence of the bulk storage or release of hazardous materials.

9.3 Storage Tanks

No obvious visual evidence of any underground storage tanks (USTs) such as fill, or vent pipes were noted within the study area. CEA observed six (6) aboveground storage tanks (ASTs) located at the site. The tanks include one (1) 275-gallon empty AST, one (1) 550-gallon off-road diesel AST, one (1) 1,000-gallon off-road diesel AST, two (2) 10,000-gallon off-road diesel ASTs and a propane AST. The two (2) 10,000-gallon ASTs are situated beneath a shed and within a concrete containment area. The 550 and 1,000-gallon ASTs are

skid style ASTs. There was no visual or olfactory evidence of any releases such as staining or noticeable odors in the areas of any of the ASTs. The ASTs are not included as being registered with the VDEQ.

9.4 Lead-Based Paint

The improvements on the property include four (4) pole style sheds and a pole style picnic pavilion which were reportedly constructed in the last 30 years. Lead paint was banned for use in the United States in 1978. Lead paint is not an issue at the site.

9.5 Drinking Water Supply Source

The area of the subject site is serviced by private water systems. A supply well is located near the office / storage building.

9.6 Polychlorinated biphenyls (PCBs)

Three (3) pole mounted electrical transformers were noted on the power lines on the property. The equipment was not marked as non-PCB. There was no visual evidence of any historical or ongoing leakage or spills of liquids from the equipment. The utility that owns the equipment would be responsible for any spills or issues relating to this equipment.

9.7 History of Property Use

Based upon interviews with personnel familiar with the site, aerial photographs viewed by CEA personnel, information obtained during the site reconnaissance and historical maps, the subject site appears to have been two (2) separate farms identified as the Howell and Bunch Farms. A family cemetery labeled as Saunders / Beale is located on the south side of the site. The properties appeared to have both contained single family homes and agricultural fields through the 1960's. Borrow pit / quarry activities appear to have been initiated in 1975 according to Isle of Wight records. The remainder of the site has been utilized for undeveloped or agricultural uses.

9.8 Neighborhood Hazardous Waste Activities

A review of public records and interviews with local and state regulatory officials did not indicate definitive information relating to on-site impact due to off-site problems.

9.9 Unusual Odors

No unusual or obvious odors were noted in the areas inspected by CEA environmental personnel during site visit on June 14, 2021.

9.10 Radon

Radon is a radioactive gas that forms naturally when uranium, thorium, or radium, which are radioactive metals break down in rocks, soil, and groundwater. People can be exposed to radon primarily from breathing radon in air that comes through cracks and gaps in buildings and homes. EPA has assigned all areas of the United States into three zones based on predicted average indoor radon screening levels based on testing results. EPA Zone 1 includes counties with predicted average indoor radon screening levels greater than 4 pCi/L. Buildings with screening levels greater than 4 pCi/L require mitigation activities. EPA Zone 2 includes counties with predicted average indoor radon screening levels from 2 to 4 pCi/L. Buildings with these levels are recommended to consider mitigation activities. EPA Zone 3 includes counties with predicted average indoor radon screening levels less than 2 pCi/L. No remedial actions are recommended for structures with these levels. Isle of Wight County including the subject site is located within Zone 1. Testing would be required to determine if elevated levels of radon are present within the structures.

9.11 Adjoining Property Use Summary

North, West & South - The property is bordered by the Blackwater River to the north, west and south. The properties across the Blackwater River have remained undeveloped since the early 1900's. These adjoining properties are located downgradient of the subject site.

East – The adjoining properties to the east are undeveloped. These properties appear to have remained undeveloped since the early 1900's. Theses adjoining properties are located upgradient of the subject site.

9.12 Vapor Encroachment Review

The subject site contained two (2) single family homes and undeveloped or agricultural use fields through the 1960's. The site has included borrow pit, agricultural use or undeveloped properties since the 1970's. Multiple petroleum ASTs were noted on the property. There was no visual evidence of any spills noted during the site visit. A review of the subject property during this study did not reveal an obvious potential vapor intrusion issue. A reconnaissance of the general area surrounding the subject site and a government records review did not identify any properties adjacent to or in the immediate area of the subject site, which are suspected to cause vapor encroachment issues for the subject property.

10.0 CONCLUSIONS

The Environmental Site Assessment of the subject property containing two (2) contiguous tax parcels at 32083 Airport Drive in Franklin, Virginia, was completed on June 29, 2021. CEA, Inc. performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Standard E 1527-13 of the subject property containing two (2) contiguous tax parcels at 32083 Airport Drive in Franklin, Virginia. Any exceptions to, or deletions from, this practice is described in Section 11.0 of this report. This assessment revealed no evidence of potential recognized environmental conditions in connection with the property.

11.0 BUSINESS ENVIRONMENTAL RISK

Business Environmental Risk is Defined by ASTM as "a risk which can have a material environmental or environmentally-driven impact on the business associated with the current or planned use of a parcel of commercial real estate, not necessarily limited to those environmental issues required to be investigated in this practice (ESA, ASTM E1527-13). Consideration of business environmental risk issues may involve addressing one or more non-scope considerations." The following business environmental risk was noted:

- *Aboveground Storage Tanks* - Multiple Aboveground Storage Tanks (ASTs) are located at the property. The ASTs do not appear to be registered with VDEQ as required. In addition, and due to the aggregate storage of the ASTs, the facility is subject to the EPA Spill Prevention, Control, and Countermeasure (SPCC) rule. A facility is covered by the SPCC rule if it has an aggregate aboveground oil storage capacity greater than 1,320 U.S. gallons or a completely buried storage capacity greater than 42,000 U.S. gallons and there is a reasonable expectation of an oil discharge into or upon navigable waters of the U.S. or adjoining the shorelines. The purpose of the SPCC rule is to help facilities prevent a discharge of oil into navigable waters or adjoining shorelines. The SPCC rule requires facilities to develop, maintain, and implement an oil spill prevention plan, called an SPCC Plan. These Plans help facilities prevent oil spill, as well as control a spill should one occur. CEA would recommend that the ASTs are properly registered with the VDEQ and a SPCC plan is prepared for the property. This may require adjustments in spill containment and prevention facilities and equipment on the subject site.

12.0 DEVIATIONS FROM ASTM STANDARD E 1527

CEA prepared this report in general conformance with the ASTM Standard E 1527-13.

13.0 ENVIRONMENTAL PERSONNEL INFORMATION

The following environmental personnel conducted the environmental site assessment at the subject site.

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental professional as defined in 312.10 of 40 CFR 213. We have the specific qualifications based on education, training, and experience to assess a property of the nature, history and setting of the subject property. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

W. Fred Mayes, Environmental Scientist, Principal, has more than 28 years of experience completing Phase I and II Environmental Site Assessments, Asbestos Surveys and Underground Storage Tank assessments and remediation. Mr. Mayes has been with Commonwealth Environmental Associates, Inc. for 23 years. Mr. Mayes is an US EPA certified asbestos building inspector licensed in multiple states.

Andrew W. Mayes, Environmental Scientist, Vice President, has more than 25 years of experience completing Phase I and II Environmental Site Assessments, Asbestos Surveys and Underground Storage Tank assessments and remediation. Mr. Mayes has been with Commonwealth Environmental Associates, Inc. for 22 years. Mr. Mayes is an US EPA certified asbestos building inspector licensed in multiple states.

BIBLIOGRAPHY

SGS 7.5 Minute Series Topographic Map, Franklin, Multiple Years.
U.S.D.A. “Web Soil Survey – Isle of Wight, Virginia” November 4, 2020
U.S.F.W.S “Online Wetlands Mapper – Isle of Wight, Virginia” November 4, 2020

COMMONWEALTH ENVIRONMENTAL ASSOCIATES, INC. DISCLAIMER

The information contained in this report has been obtained from publicly available data sources and other secondary sources of information produced by entities other than Commonwealth Environmental Associates, Inc. Although great care has been taken by Commonwealth Environmental Associates, Inc. in compiling and checking the information contained in this report to ensure that it is current and accurate, and/or Commonwealth Environmental Associates, Inc. disclaims any and all liability for any errors, omissions or inaccuracies in such information and data, whether attributable to inadvertence or otherwise, and for any consequence arising therefrom. The data provided hereunder neither purports to be, nor constitutes legal or medical advice. It is further understood that Commonwealth Environmental Associates, Inc. makes no representations or warranties of any kind, including, but not limited to, the warranties of fitness for a particular purpose of merchantability, nor are such representations or warranties to be implied with respect to the data furnished, and Commonwealth Environmental Associates, Inc. assumes no responsibility with respect to its employees, clients, or customers use thereof. Commonwealth Environmental Associates, Inc. shall not be liable for any special, consequential, or exemplary damages resulting, in whole or in part, from customer's use of the data. Liability on the part of Commonwealth Environmental Associates, Inc. is limited to the monetary value paid for this report. The report is valid only for the geographic parameters specified on the cover page of this report, and any alterations or deviation from this description will require a new report. This report does not constitute a legal opinion.

APPENDIX 1

FIGURES

FIGURE 1

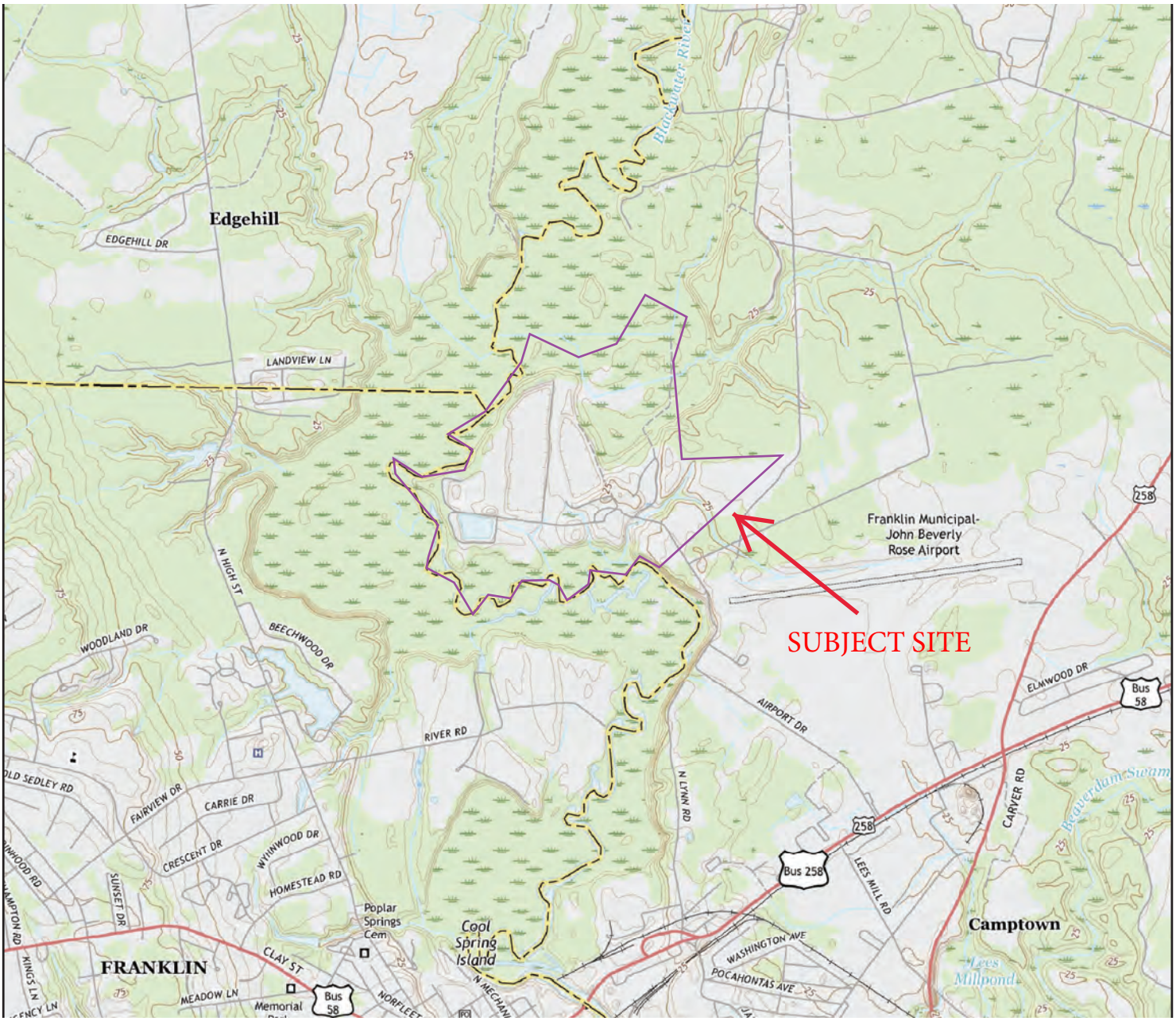
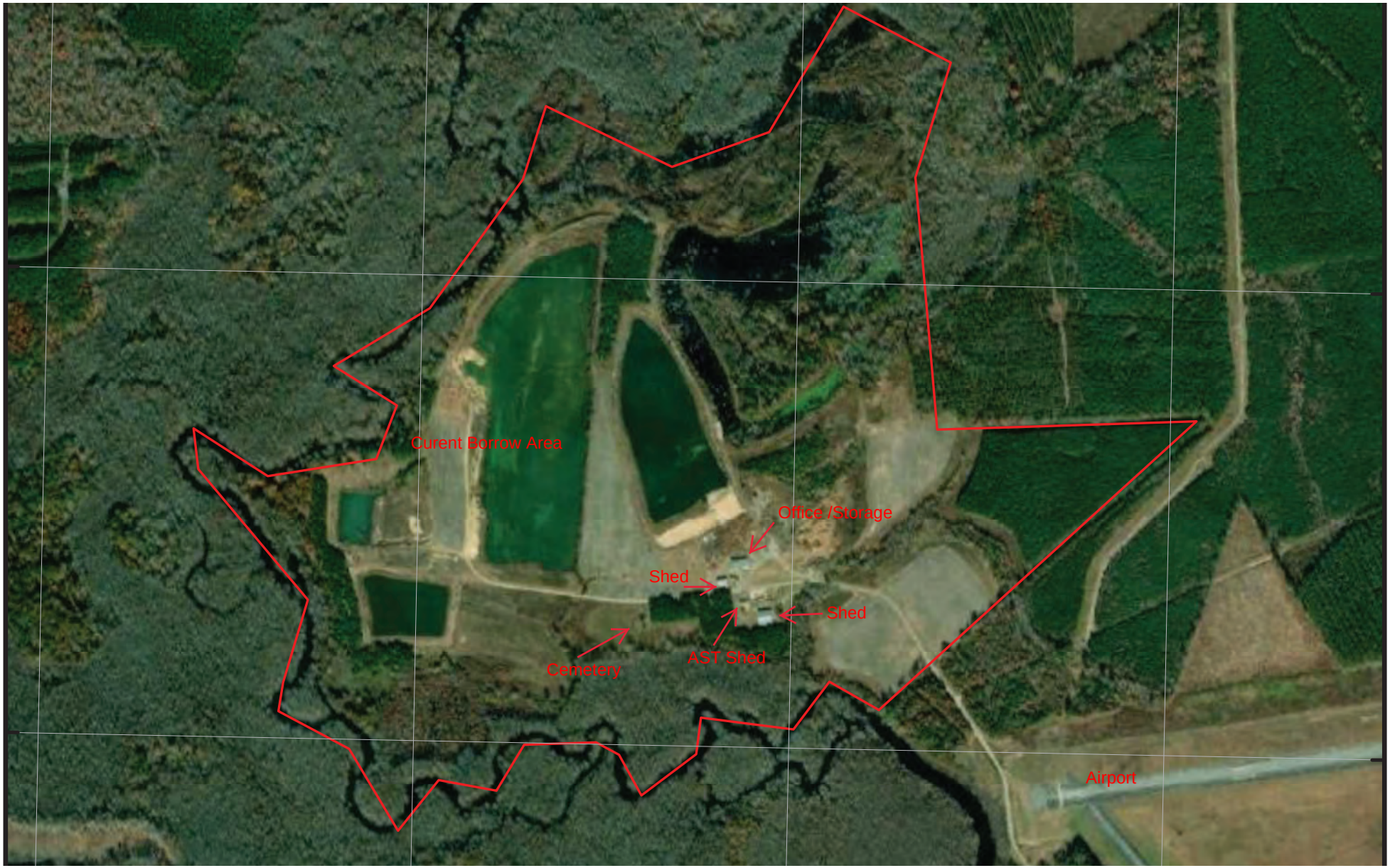

Edgehill
EDGEHILL DR
LANDVIEW LN
Blackwater River
Franklin Municipal-
John Beverly
Rose Airport
SUBJECT SITE
N HIGH ST
BEECHWOOD DR
WOODLAND DR
RIVER RD
AIRPORT DR
ELMWOOD DR
Bus 58
258
CARVER RD
N LYNN RD
LEES MILL RD
Bus 258
Camptown
Lees Millpond
Beaverdam Swam
FAIRVIEW DR
CARRIE DR
CRESCENT DR
WITHINWOOD DR
HOMESTEAD RD
SUNSET DR
Poplar
Springs
Cem
Cool
Spring
Island
FRANKLIN
CLAY ST
MEADOW LN
Memorial
WASHINGTON AVE
POCAHONTAS AVE

FIGURE 2


N
36°42'30"N
36°42'30"N
36°42'N
36°42'N
Curent Borrow Area
Office /Storage
Shed
Shed
AST Shed
Cemetery
Airport

APPENDIX 2

CHAIN OF TITLE

APPENDIX 2
Chain of Title

The ownership was researched at the Isle of Wight County Clerk of Court office. Both parcels are listed as owned by Whitley-Hawkins Holdings, LLC. The chain of title per the researched deeds follows:

Parcel 68-01-001 – 75 Acres – Howell Farm

Grantee	*Date*	*Deed Book / Page*
Whitley-Hawkins Holdings, LLC	12/26/97	975384
E. Carson Whitley, Jr. & wife	08/12/80	800001470
Joe Whitley	04/12/66	183 / 170
Kenneth G. Howell	10/28/41	119 / 224
Arthur G. Howellet.al.	10/17/41	
P.J. Powell	01/05/1880	45 / 206
John Robertson		

Parcel 68-01-002 - 215.39 Acres – Bunch Farm

Grantee	*Date*	*Deed Book / Page*
Whitley-Hawkins Holdings, LLC	12/26/97	975384
E. Carson Whitley, Jr. & wife	08/12/80	800001470
Joe Whitley	03/09/55	146 / 30
Joseph C. Bunch	12/27/24	95 / 590
A.H. Saunders		
H.P. Saunders		

CEA reviewed a recorded deed for the two parcels in August 1945 between the then owners and the United States of America which indicated a perpetual easement and right of way “for the free and unobstructed passage of aircraft in, through and across the airspace” of the properties. The easement required the removal of all trees from the properties.

Isle of Wight, Virginia

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Parcel

Parcel ID	Alt. PIN	Parcel Address	AV - Tot. Lnd & Improv.	Data as of
68-01-002	14813	32083 AIRPORT DR, FRANKLIN	$1,020,300	6/7/2021

Property Owner Information

Property Owner	WHITLEY-HAWKINS HOLDINGS L L C
Property Owner Address	22225 HARVEST DR FRANKLIN VA 23851
Transfer Date	12/29/1997
Document No.	970005384
Document Reference No.	

Location Information

Tax Group Code	50	Routing No.	
Township No.	001,	Legal Desc.	ADJ ALEX HOWELL PLAT BK5/176
Parcel Address	32083 AIRPORT DR, FRANKLIN		
Legal Acreage	215.3900		

Parcel Information

Property Class Code	AGR/UNDEV 100 UP ACR
Neighborhood Code	149
Neighborhood Factor	100.00
Neighborhood Type	B

Assessment Information

Current AV - Total Land	$961,700	Adj. Factor Applied	0.00
Current AV - Total Improv.	$58,600	Average AV/Acre	$0
AV - Tot. Lnd & Improv.	$1,020,300	Appraisal Date	5/11/2018
Reason for Change Code	19		
Prior AV - Total Land	$959,400		
Prior AV - Total Improv.	$64,400		

Isle of Wight, Virginia

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Improvements

Parcel ID	Alt. PIN	Parcel Address	AV - Tot. Lnd & Improv.	Data as of
68-01-002	14813	32083 AIRPORT DR, FRANKLIN	$1,020,300	6/7/2021

Improvements

Improvement Type Code	ID No.	Constructed Year	Grade	Total Area	Assessed Value
MISC	01	2010	C	320	$1,000
MISC	02	2010	C	3,360	$19,600
MISC	03	2010	C	1,200	$17,500
MISC	05	2010	C	7,200	$20,500

Isle of Wight, Virginia

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Land

Parcel ID	Alt. PIN	Parcel Address	AV - Tot. Lnd & Improv.	Data as of
68-01-002	14813	32083 AIRPORT DR, FRANKLIN	$1,020,300	6/7/2021

Land Type - 25 Cutover

Dimensional Attribute				Valuation			
Effective Frontage	.0	Actual Frontage	.0	Base Rate	1200.00	Assessed Value	$152,900
Effective Depth	.0						
Acreage	127.39						
Square Footage	.00						

Land Type - 8 Barrow Pit

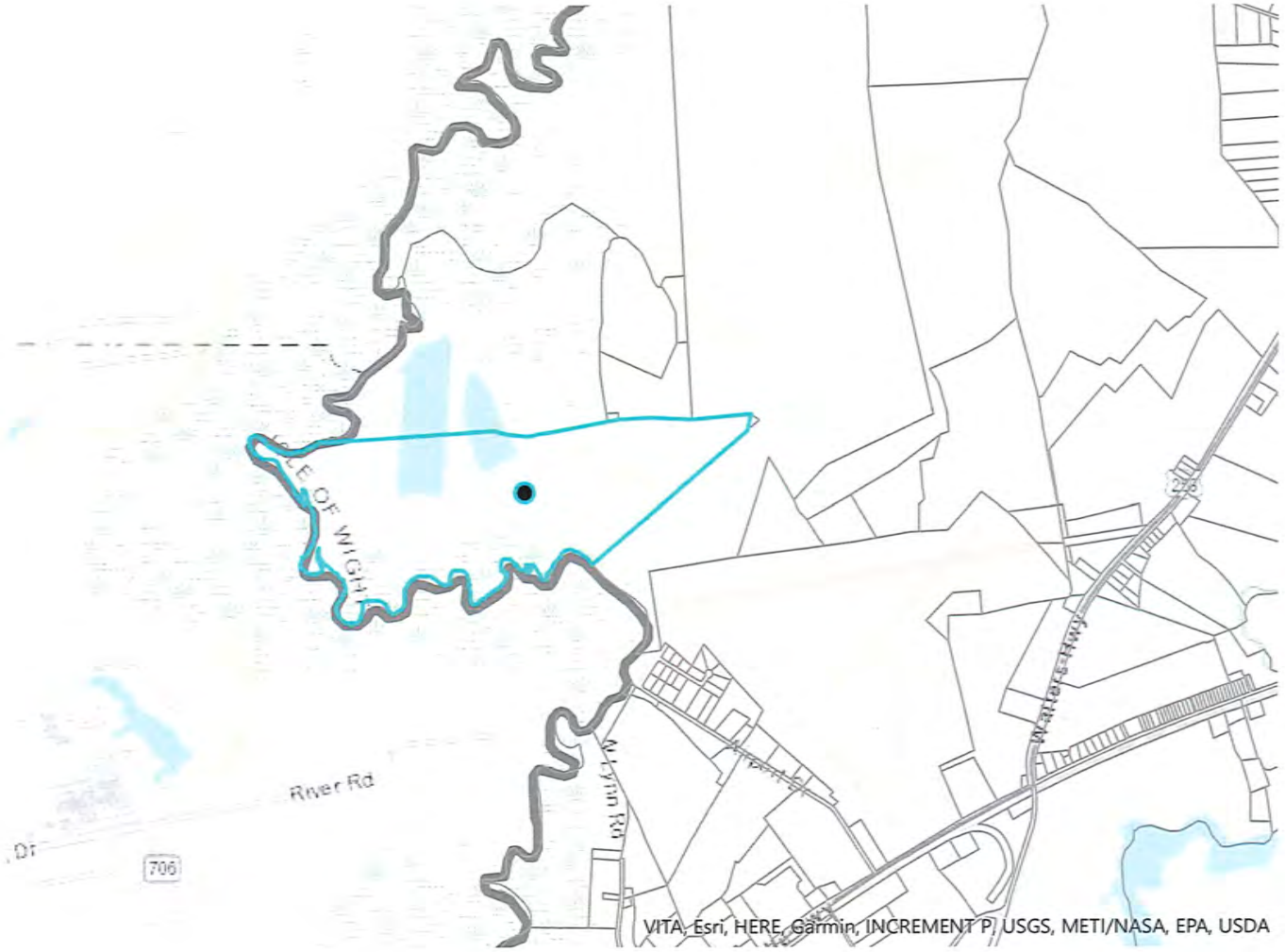
Dimensional Attribute				Valuation			
Effective Frontage	.0	Actual Frontage	.0	Base Rate	10000.00	Assessed Value	$880,000
Effective Depth	.0						
Acreage	88.00						
Square Footage	.00						

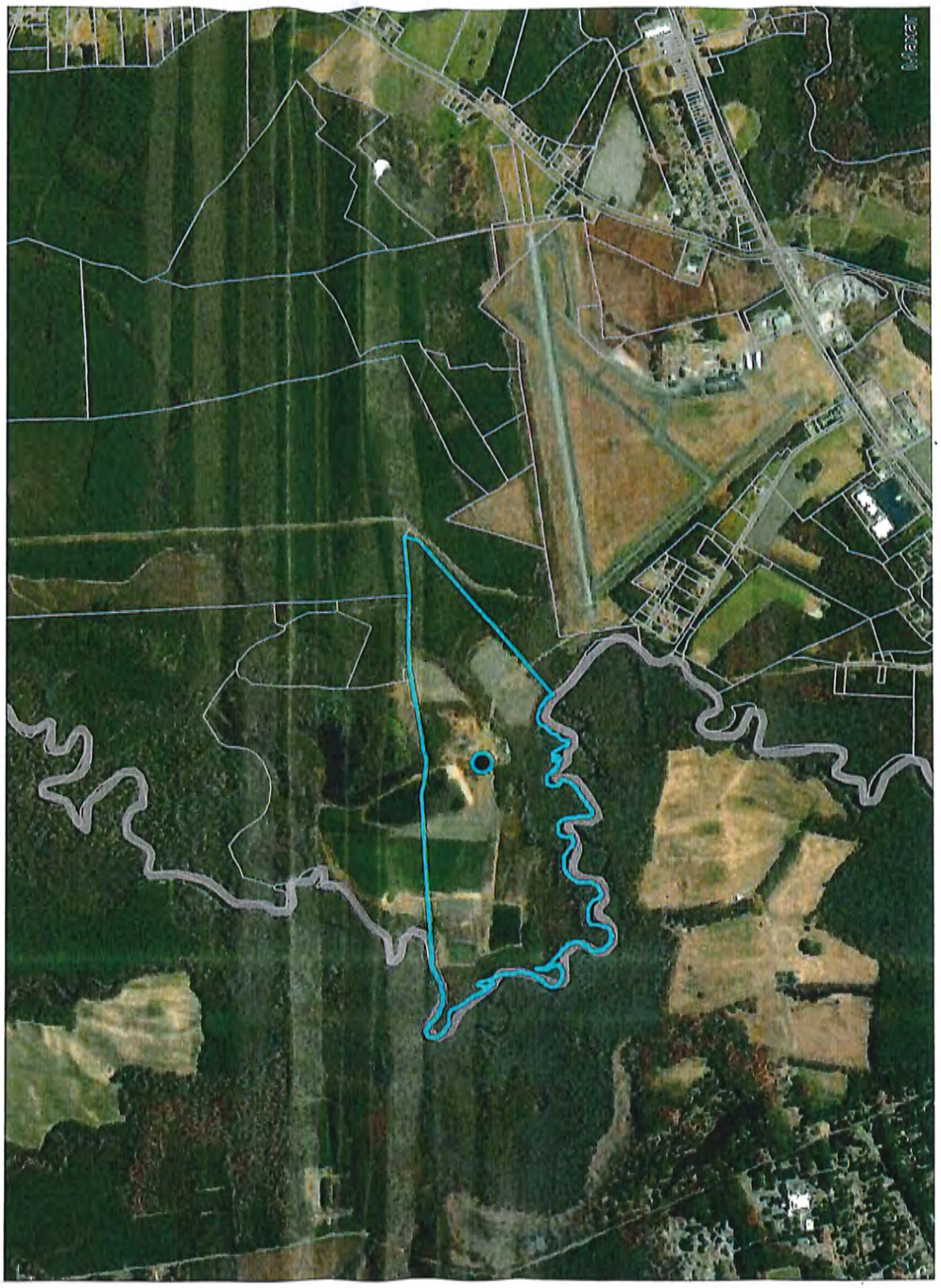
Land Type - FL Land Use - Woodland

Dimensional Attribute				Valuation			
Effective Frontage	.0	Actual Frontage	.0	Base Rate	641.00	Assessed Value	$81,700
Effective Depth	.0						
Acreage	127.39						
Square Footage	.00						

Land Type - FO Land Use - Non Qualifing

Dimensional Attribute				Valuation			
Effective Frontage	.0	Actual Frontage	.0	Base Rate	10000.00	Assessed Value	$880,000
Effective Depth	.0						
Acreage	88.00						
Square Footage	.00						


River Rd
706
Waters Hwy
VITA, Esri, HERE, Garmin, INCREMENT P, USGS, METI/NASA, EPA, USDA



975384 PG 5 DEC 29 1997

Exempt from recording taxes: Grantors are entitled to receive not less than fifty percent of the profits and surplus of the grantee limited liability company and the transaction is therefore exempt from recording taxes pursuant to Sections 58.1-811.A.10 and 58.1-811.C. of the Code of Virginia.

BARGAIN AND SALE DEED

THIS DEED, made this 26th day of December, 1997, by and between E. CARSON WHITLEY, JR., and MARGARET G. WHITLEY (together "Grantors"), husband and wife, and WHITLEY-HAWKINS HOLDINGS, L.L.C. ("Grantee"), a Virginia limited liability company, which has a mailing address of 33030 Green Oaks Lane, Franklin, Virginia 23851.

WITNESSETH:

That for and in consideration of the sum of Ten and No/100 Dollars ($10.00), cash in hand paid, and other good and valuable consideration and receipt of which is hereby acknowledged, the Grantors do hereby grant, bargain, sell and convey with Special Warranty unto the Grantee all of the property described on Exhibit A attached hereto which is made a part hereof.

This Deed is made expressly subject to the conditions, restrictions, reservations and easements which are contained in duly recorded deeds, plats and other instruments constituting constructive notice in the chain of title to the property hereby conveyed which have not expired by a time limitation contained therein or otherwise become ineffective.

B1-11202.3/TAR:MLO
12/26/97

This document prepared by:
Willcox & Savage, P.C.
Norfolk, Virginia

PG 6 DEC 29 1997

WITNESS the following signatures and seals:

E. Carson Whitley, Jr. (SEAL)

Margaret G. Whitley (SEAL)

Commonwealth of Virginia
City/County of Isle of Wight, to-wit:

I, Elizabeth I. Schwartz a notary public in and for the State and City/County aforesaid, hereby certify that E. Carson Whitley, Jr., and Margaret G. Whitley, whose names are signed to the foregoing Deed, dated the 26th day of December, 1997, have acknowledged the same before me in my State and City/County aforesaid.

Given under my hand and seal this 29th day of December, 1997.

Elizabeth I. Schwartz
Notary Public

My Commission Expires:

My Commission Expires March 31, 2000

B1-11202.3/TAR:MLO
12/26/97

PG 7 DEC 29 1997

EXHIBIT A

PARCEL A:

(1) All that certain tract or parcel of land lying, situate and being in Windsor Magisterial District, County of Isle of Wight, State of Virginia, containing by estimation Seventy-five (75) acres, more or less, and bounded as follows, to wit: on the West by Blackwater River; on the South by the land formerly owned by Spike Beale (now or formerly J. C. Bunch); on the North by the land formerly owned by Billy Rose (now or formerly Camp Manufacturing Company); and on the East by the land now or formerly owned by Camp Manufacturing Company and others; and

(2) A certain strip of land Twenty (20 ft.) feet wide lying and situate in Isle of Wight County, Virginia, being about Six Hundred fifty (650 ft.) feet in length, and running from A. J. Howell's land on the West to the Cool Spring road on the East; the Saunders' tract of land at the Western end of same and being One Hundred forty (140 ft.) feet from said Saunders' tract at its Eastern end and touching on said Cool Spring road, said strip being granted to A. J. Howell for the purpose of a right-of-way from his land to said Cool Spring road.

The foregoing parcels (1) and (2) are subject to a certain avigation agreement with the United States of America dated August 16, 1945 and recorded on September 8, 1945 in Deed Book 123 at page 278 in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia.

(3) All of that certain tract, piece or parcel of land situate, lying and being in Windsor Magisterial District, County of Isle of Wight, State of Virginia, containing Two Hundred Seventeen (217) acres, more or less, and bounded on the North by A. J. Howell, on the East by the lands now or formerly belonging to Edward Hutcheson and the Timothy Hayes estate, and on the South and West by the Blackwater River, and known as the Spikes Beale Place;

This conveyance is made subject to a certain avigation agreement with the United States of America dated August 15th, 1945, of record January 29th, 1946, in the Clerk's Office of the Circuit Court of Isle of Wight County, in Deed Book 124, page 124, reference to which is hereby specifically made as to the nature and extent thereof, and said conveyance is further subject to the exception of a certain tract containing 1.13 acres, conveyed by Joseph C. Bunch, and wife, by deed dated October 3rd, 1945, to the Town of Franklin, Virginia, which deed was recorded on October 6th, 1945, in the Clerk's Office of the Circuit Court of Isle of Wight County, in Deed Book 123, page 360, reference to which is hereby specifically made for the metes and bounds hereof.

(4) All that certain parcel of land in Windsor Magisterial District, Isle of Wight County, Virginia, containing .60 acres according to a survey thereof made by J. C. Davis in July, 1965, a plat of which survey entitled "Pt. U.B.C. tract 844 I. O. W. Co., Va." was to have been attached and made a part of the deed described in the next paragraph; and being more particularly described with reference to said plat as follows: Beginning at a concrete marker beside a pine stump at the southwest corner of Tract #844; thence N 88 ° 00' E 248 feet to an oak; thence N 89° 30' E 14 feet to a concrete marker; thence N 5° 00' W 112 feet to a concrete marker on the south side of a path; thence along the south side of said path S 84° 00' W 265 feet to a concrete marker; thence S 00° 30' E 12 feet to a S. L. Oak; and thence S 05° 00' E 74 feet to the point of beginning; This property adjoins land devised to Carson Whitley, Jr. for life with remainder to Jerry Whitley.

It being the same property conveyed to Grantors by deed dated August 12, 1980 from Robert H. Whitley, Jr., and Betty S. Whitley, his wife; Jerry P. Whitley and Linda F. Whitley, his wife and E. Carson Whitley, Jr., and Margaret G. Whitley, his wife, and recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia.

PARCEL B:

All that certain lot, tract or parcel of land lying situate and being in Windsor Magisterial District, Isle of Wight County, Virginia containing by estimate 20 acres, more or less, this conveyance being in the gross and as a parcel, however, and not by the acre, the same being more particularly bounded and described in accordance with a certain plat entitled "Plat showing property for Franklin Plant Food & Chemicals, Inc., located in Windsor Mag. Dist., Isle of Wight County, Virginia, Scale 1" = 200', April 16, 1971, made by S. V. Camp, III & Associates, Certified Land Surveyor, Courtland, Va.", a copy of said plat being of record in Plat Book 5 at page 176 in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, as follows:

Beginning at a point, an iron pin, in the center line of the 100 foot right of way of the Seaboard Coast Line Railroad, and in the center of Virginia Route #1603, a 30 foot right of way, which crosses said railroad and intersects U. S. Highway #58 and U. S. Highway #258, running thence along the center line of Virginia Route #1603, the following courses and distances: South 4° 25' West 500 feet to a point, iron pin; thence South 9° 19' West 100.00 feet to a point, iron pin; thence South 28° 49' West 100.00 feet to a point, iron pin; thence South 37° 53' West 100.00 feet to a point, iron pin; thence South 42° 03' West 200.00 feet to a point, iron pin; thence South 40° 42' West 150.00 feet to a point, iron pin; thence South 34° 28' West 100.00 feet to a point, iron pin; thence South 48° 39' West 100.00 feet to a point, iron pin; thence South 55° 22' West 204.50 feet to a point, iron pin, designated "A"; thence North 32° 18' West 15.00 feet to a point, iron pin, in the northern boundary of Virginia Route #1603 along the dividing line of the within described parcel and property of the Robert A. Johnson Estate, the following courses and distances: North 32° 18' West 369.90 feet along a fence to a point, iron pin; thence North 37° 56' West 241.00 feet along said fence to a point, iron pin; thence North 38° 18' West 207.00 feet

along said fence to a point, iron pin; thence North 23° 30' West 268.00 feet along said fence to a point, iron pin, designated point "B", and in the southern boundary line of the right of way of the Seaboard Coast Line Railroad; thence continuing right of way of Seaboard Coast Line Railroad; thence along the center line of the Seaboard Coast Line Railroad the following courses and distances to the point of beginning: North 66° 17' East 217.00 feet to a point, iron pin; thence North 66 ° 47' East 200.00 feet to a point, iron pin; thence North 67° 12' East 200.00 feet to a point, iron pin; thence North 67° 30' East 200.00 feet to a point, iron pin; thence North 67° 48' East 200.00 feet to a point, iron pin; thence North 68° 12' East 200.00 feet to a point, iron pin; thence North 68° 40' East 200.00 feet to a point, iron pin; thence North 69° 07' East 200.00 feet to the iron pin, the point of beginning;

TOGETHER WITH all right, title and interest of Grantors under and by virtue of a certain agreement dated May 31, 1978 by and between the Seaboard Coast Line Railroad Company and Franklin Plant Food and Chemicals, Inc., and all such rights accruing to the said Franklin Plant Food and Chemicals Inc., under and by virtue of said agreement are hereby assigned to the Grantee herein.

There is excepted from the conveyance of Parcel B hereunder the following:

(1) That certain lot, tract or parcel of land conveyed to Roger Lee Duke and Lullian Carr Duke by deed dated April 26, 1974, and of record in the aforesaid Clerk's Office in Deed Book 226 at page 335, said lot containing 2.20 acres by survey and is shown on plat of record in the aforesaid Clerk's Office in Plat Book 6 at page 61;

(2) That portion of the above described property conveyed to the Commonwealth of Virginia by deed dated May 9, 1973 and of record in the aforesaid Clerk's Office in Deed Book 219 at page 264 for the purpose of widening Virginia State Route 1603 from 30 feet to 50 feet; and

(3) That portion of the above described property for which a Certificate of the State Highway and Transportation Commissioner of Virginia dated July 29, 1977 was recorded in the aforesaid Clerk's Office in Deed Book 247 at page 391.

It being the same property conveyed to Grantors, by deed from Franklin Plant Food and Chemicals, Inc., dated March 13, 1979 and of record in the aforesaid Clerk's Office.

PARCEL C:

PARCEL ONE: All that certain lot, piece or parcel of land, lying situate and being on the South side of and adjacent to the right of way of the Seaboard Airline Railway Company, in Windsor Magisterial District, County of Isle of Wight, State of Virginia, about two miles East of the Town of Franklin, Virginia, containing about seventy-three (.73) one hundredths of an acre,

more or less, according to a survey thereof made by Roy Brinkley on March 23, 1956, a plat of said survey entitled "Property Being Conveyed to Arthur Kline Griffin by Carson E. Whitley and Hortense D. Whitley, Windsor Mag. Dist., Isle of Wight Co.", made a part of the deed dated November 4, 1965, and recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, in Deed Book 181, at Page 221, and more particularly described with reference to said plat as follows, to-wit:

Commencing on the South right of way line of the Seaboard Airline Railway Company at an iron pin at the Northeast corner of the land of Adolph Cutchin, Jr., and running thence according to the survey aforesaid along the line of Adolph Cutchin, Jr., S. 9° 45' E. 150 feet. to an iron pin; thence N. 75° E. 214 feet 6 in. to an iron pin; thence N. 11° 50' W. 107 ft. to a sweet gum; and thence continuing N. 11 ° 50' W. 43 feet to the South right of way line of the Seaboard Airline Railway Company; and thence along the South right of way line of the Seaboard Airline Railway Company S. 75° W. 208 ft. 2 in. to the point of beginning.

PARCEL TWO: All that certain lot, tract or parcel of land, lying situate and being in Windsor Magisterial District, Isle of Wight County, Virginia, containing one (1) acre according to survey, more particularly bounded and described in accordance with a plat of "Property being conveyed to Arthur Kline Griffin by Adolph A. Cutchins, Jr., Windsor Mag. District, Isle of Wight County, Virginia," made a part of the deed dated November 4, 1965, and recorded in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia, in Deed Book 181, at Page 221, and more particularly described with reference to said plat as follows, to-wit:

Beginning at a point, an iron pin, on the right of way of the Seaboard Airline Railroad, a corner for the Seaboard Airline Railroad right of way, of the property of Adolph A. Cutchins, Jr., et als, and the within described lot; thence N. 75° E. 290 feet along the right of way of the Seaboard Airline Railroad to a point, an iron pin, a corner for the right of way of the Seaboard Airline Railroad, property of Arthur Kline Griffin and the within described property; thence S. 9° 45' E. 150 feet to a point, an iron pin, a corner for property of Arthur Kline Griffin, Carson E. Whitley, Adolph A. Cutchin, Jr., et als, and the within described property; thence S. 75° W. 290 feet to a point, an iron pin, a corner for the other property of Adolph A. Cutchin, Jr., et als and the within described property; thence N. 9° 45' W. 150 feet to the point of beginning on the right of way of the Seaboard Airline Railroad.

It being the same two parcels of land conveyed to E. Carson Whitley, Jr. and Margaret G. Whitley by deed dated June 18, 1993, from Coastal Chemical Corporation, recorded in Deed Book 418, at Page 580, in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia.

PG 11 DEC 29 1997

PARCEL D:

That certain lot, tract or parcel of land lying, situate and being in Windsor Magisterial District, Isle of Wight County, Virginia, containing 6.6 acres, more or less, as shown on plat of the "Property of Davis Bryant Spiers, Jr., Isle of Wight County, Scale 1" = 100', Nov. 1951", made by J. E. Henry, Registered Engineer, more particularly bounded and described as follows:

Beginning at a point at an iron stake, corner for this tract and other property of Davis Bryant Spiers, Jr., and in the line of the property of Carson Whitley, as shown on said plat, running thence along said present Spiers line South 75° 25' West 208.75 feet to a point, an iron stake, corner for this tract and in the line of property formerly of the Estate of Mary W. Cutchin; thence South 11° 46' East 867.5 feet to a stake; thence South 6° 24' East 270.6 feet to a stake; thence South 2° 54' East 200 feet to a stake, corner; thence South 82° 44' East 212 East to a gum, corner; thence North 2° 54' West 243.8 feet to an oak; thence North 6° 24' West 286.7 feet to a large pine; thence North 11° 46' West 887.2 feet, more or less, to a stake, to the point of beginning;

LESS, SAVE and EXCEPT therefrom, that certain parcel of land conveyed to Bruce Wayne Hawkins and Sandra W. Hawkins, husband and wife, by deed from Hortense D. Whitley, widow, et als., dated July 20, 1993 and recorded in the Clerk's Office aforesaid in Deed Book 427, at page 599, said excepted parcel containing 2.358 acres and shown on that plat entitled "PHYSICAL SURVEY SHOWING PROPERTY OF BRUCE W. HAWKINS & SANDRA W. HAWKINS LOCATED AT 33006 GREEN OAKS LANE WINDSOR MAGISTERIAL DISTRICT ISLE OF WIGHT COUNTY, VIRGINIA SCALE 1" = 100' APRIL 12, 1994 WILLIAMS & VANN - LAND SURVEYORS FRANKLIN, VIRGINIA", said plat having been recorded contemporaneously with the aforementioned deed.

It being part of the same property conveyed to Grantors by deed dated January 16, 1984 from Hortense D. Whitley, widow, recorded in the Clerk's Office aforesaid in Deed Book 292, at page 397.

Verified and mailed to
Willcox + Savage
POB 61888 VB
this ____ day of ____, ____

INSTRUMENT #970005384
RECORDED IN THE CLERK'S OFFICE OF
ISLE OF WIGHT COUNTY ON
DECEMBER 29, 1997 AT 10:11AM
WILLIAM E. LAINE JR., CLERK
BY: _____ (DC)

B1-11202.3/TAR:MLO
12/26/97

In event of the resignation, or death, incapacity, disability, removal or absence from the State of the trustee named herein, the said parties of the first part do, hereby grant unto the beneficiary hereunder, its successors or assigns, the right and power to appoint a substitute trustee in accordance with the provisions of Chapter 110 of the 1934 Acts of the General Assembly of Virginia, page 162 of said Acts.

In event no default is made in the payment of the aforesaid bond, the insurance premiums hereinabove provided for, or the breach of any covenant herein contained, then upon the request of the said parties of the first part a good and sufficient deed of release shall be made and executed to them at their own proper cost and charge.

Witness the following signatures and seals:

C. H. Duck (SEAL)

Belva E Duck (SEAL)

State of Virginia,

County of Isle of Wight, to-wit:

I, James O. Heptinstall, a Notary Public in and for the County of Isle of Wight, State of Virginia, do hereby certify that C. H. Duck and Belva E. Duck, whose names are signed to the writing hereto annexed bearing date the 21st., day of January, 1946, have this day acknowledged the same before me in my said County.

Given under my hand this the 28th day of January, 1946.

James O. Heptinstall
Notary Public

My commission expires 2/5/49.

VIRGINIA: Clerk's Office of the Circuit Court of the County of Isle of Wight, Jan. 29th., 1946, at 2:50 O'clock P. M. this deed was received and with the certificate annexed, admitted to record.

Teste R. C. Edwards Clerk.

-.-.-.

All of that certain tract, piece or parcel of land situate, lying and being in Windsor Magisterial District, County of Isle of Wight, State of Virginia, containing 217 acres, more orless, and bounded on the north by the lands of A. J. Powell, on the east by the land of Ed Hutcheson and Timothy Hayes Estate, and on the south and west by the Blackwater River and known as the "Spikes" Beale place.

. Being the same property in which an undivided one-half interest was conveyed to Joseph C Bunch by deed from A. H. Saunders dated December 27, 1924, recorded December 30, 1924, in Deed Book 95, page 590 and in which the other undivided one-half interest was conveyed to said Joseph C Bunch by deed from Lillian P. Bunch dated December 6, 1933, recorded December 6, 1933, in Deed Book 105, page 504, Clerk's Office, Circuit Court, Isle of Wight County, Virginia.

For convenience only and without limitation of the generality of the foregoing description that part of the Grantor(s) land lying within the runway approach zone(s) hereinabove referred to is substantially as shown upon plan entitled, "Avigation Easements to be acquired, Franklin Field, Isle of Wight County, Virginia" dated Julyy 25, 1945, and recorded in said Clerk's Office Book 2, page 234, the description of which is substantially as follows:

"Beginning at a corner common to Joseph Bunch and Chesapeake-Camp Corporation, approximately 1200 feet West of the center line of runway #14 thence N. 48° 30' E for 824 feet, thence N. 34° 44' W for 1335 feet, thence S 82° 00' W. 298 feet, thence S. 47° 11' W for 978 feet, thence S 50° 54' E for 1482 feet to the point of beginning, containing 34.9 acres, more or less."

The timber standing on this tract of land is to be felled, the tops and all branches removed, and the brush burned by the United States at its cost and expense. All timber so felled shall be available to the land owner for a period of 90 days, after which, if not removed, the Unites States is authorized to enter on the said premises and to remove and dispose of all timber within a reasonable period of time and no further claim shall exist against the United States by reason of any action taken in removing and disposing of the timber.

The runway approach zone(s) for which this easement is granted, as shown on said plan, start(s) at a point on the center line of the said runway of the Franklin Field, level with and at the outer end of said runway; thence turns to the right forming an angle of 90° with the line in prolongation of the center line of the runway and runs 250 feet to a point; thence turns to the left forming an interior angle of 98° 05' with the last mentioned line and runs 2647 feet to a point; thence turns left again forming an interior angle of 81° 55' with the line last mentioned and runs 1250 feet to a point; thence turns left again forming an interior angle of 81° 55' with the line last mentioned and runs 2604 feet to a point 250 feet from the point of beginning; thence turns left again forming an interior angle of 98° 05' with said last mentioned line and runs 250 feet to the point of beginning.

The glide angle plane above referred to is a trapezoidal plane extending over the runway approach zone, starting from the line 500 feet long, forming the narrower end of the runway approach zone, and sloping upwards at a rate of one foot vertically for each 40 feet horizontally and extending over the entire approach zone as above-described, and is subject to any further restrictions as are set forth in the preceding paragraphs.

The easement and rights granted include the continuing right to clear and keep clear the above land of any and all obstructions infringing upon or extending into or above said glide angle plane, and for this purpose to cut and remove trees, underbrush and soil, and to demolish and remove buildings or any other structures or obstructions infringing upon or extending into or above said plane, whether located on or extending over so much of the above-described land as lies within said runway approach;zone; and the continuing right to install and maintain such obstruction lights as may be found necessary for the safe operation of airplanes on any obstacle not removed from said runway approach zone; together with the right of ingress to and egress from and passage on and over the Grantors land for the purpose of effecting and maintaining such clearance and obstruction lighting. Reserving to the said Grantors their heirs, executors, administrators, successors and assigns all such rights and privileges as may be exercised and enjoyed by them without interfering with or abridging the rights, privileges and authority granted unto the Government.

The Grantor(s) further agrees that before any structure is erected within the runway approach zone that the proposal will be referred to the Navy Department of its duly authorized representative, to obtain approval for such construction, and that no construction will be undertaken until such approval has been obtained.

The Grantors covenants that Joseph C Bunch is seized in fee simple of said land, and has the right to convey the interests herein described to the Government, and has done no act to encumber said land other than as described herein, that the Government shall have quiet possession of said interests free from all encumbrances and that the Grantors will execute such further assurance of the said interests as may be requisite.

WHEREAS, the Grantors did by certain deed of trust bearing date November 24, 1933, and recorded in said Clerk's Office, Deed Book 104 page 411, convey the above described premises to the Trustee to secure the Creditor the payment of a certain bond set forth and described therein and the Grantors and the Government desire the above described easement and rights hereby conveyed be released from the lien of the said deed of trust and the Trustee and Creditor have agreed to release the same.

NOW, THEREFORE, in consideration of the above described joint payment, and at the request and with the consent of the Creditor, testified to by its becoming a party to this indenture and causing it to be signed by its officers thereunto duly authorized, and its corporate seal to be hereunto affixed, the Trustee doth hereby grant, bargain, sell, assign, release and confirm unto the Government the above described easement and rights with Special Warranty, and the Creditor doth hereby release unto the Government all its claim, title, right and equitites in and to the aforesaid easement and rights.

IN WITNESS WHEREOF, the undersigned have hereunto set their hands and affixed their seals the day and year first above written.

Witness J F Matthews
Franklin Va

Joseph C Bunch
His X Mark (SEAL)
Grantor

H B Powers
Wellesley Mass

Lillian A Bunch (SEAL)

Commonwealth of Virginia

County of Southampton, SS

I, J Fenton Matthews, a Notary Public in and for the County aforesaid in the Commonwealth of Virginia, do hereby certify that Joseph C Bunch, and Lillian A Bunch, whose names are signed to the foregoing indenture, bearing date August 15, 1945, have acknowledged the same before me in the County aforesaid, this 15th day of August, 1945.

Kenneth G. Howell et ux
To: # 353
United States of America

[illegible] Virginia and made a [illegible] on the 24 day of Sept 1945 [illegible] Clerk

THIS INDENTURE, made this 16th day of August, 1945, by and between Kenneth G. Howell and Helen W. Howell, his wife, their heirs, executors, administrators, successors and assigns, hereinafter called the Grantor(s) and the United States of America, and its assigns hereinafter called the Government.

WITNESSETH: That for and in consideration of the payment to the Grantor(s) of the sum of Ten and no/100 dollars ($10.00), the receipt of which is hereby acknowledged, the Grantor(s), hereby grant and convey with General Warranty unto the Government, a perpetual easement and right of way for the free and unobstructed passage of aircraft in, through and across the airspace above the glide angle plane, hereinafter described, over so much of the following described parcel(s) of land in Isle of Wight County, Commonwealth of Virginia, as lies within the runway approach zone(s) hereinafter more particularly described, for the number 14 runway(s) of the Franklin Airport.

All of that certain tract, piece or parcel of land situate, lying and being in Windsor Magisterial District, containing 75 acres, more or less, and bounded on the west by Blackwater River, on the south by "Spikes" Beale place, now J. C. Bunch, on the north by the land formerly of Billy Rose, now Camp Manufacturing Company, and on the east by Camp Manufacturing Company and others, together with a strip of land 20 feet wide and 650 feet in length running from the above described land to Cool Spring Road on the east, the southern boundary of said strip being 80 feet from the Saunders tract of land at the western end of same and 140 feet from said Saunders tract at its eastern end. Said strip of land having been granted to A. J. Howell, a former owner of the above described tract, as a right of way to Cool Spring Road.

Being the same property conveyed to Kenneth G. Howell by deed from Arthur Howell et al, dated October 17, 1941, recorded October 18, 1941 in Book 119, page 224, Clerk's Office, Circuit Court, Isle of Wight County, Virginia.

For convenience only and without limitation of the generality of the foregoing description that part of the Grantors(s) land lying within the runway approach zone(s) hereinabove referred to is substantially as shown upon plan entitled, "Avigation Easements to be Acquired, Franklin Field, Isle of Wight County, Virginia" dated July 24, 1945, and recorded in said Clerk's Office, Book 2, page 234, the description of which is substantially as follows:

"Beginning at a corner common to Kenneth Howell and Joseph Bunch, approximately 2500 feet West of the center line end of runway #14, thence N. 34° 44' W for 172 feet, thence S. 47° 11' W for 272 feet, thence N 82° 00' E for 298 feet, to the point of beginnigg, containing 0.5 of an acre, more or less".

The timber standing on this tract of land is to be felled, the tops and all branches removed, and the brush burned by the United States at its cost and expense. All timber so felled shall be available to the land owner for a period of 90 days, after which, if not removed, the United States is authorized to enter on the said premises and to remove and dispose of all timber within a reasonable period of time and no further claim shall exist against the United States by reason of any action taken in removing and disposing of the timber.

APPENDIX 3

AERIAL PHOTOGRAPHS

Aerial Photographs

Available photographs of the subject site and adjacent properties as documented by the United States Geological Survey (USGS) show developments/improvements to the property and the surrounding area. Photographs from 1950, 1959, 1964, 1973, 1982, 1994, 2003, 2005, 2008, 2009, 2011, 2012, 2014, 2016 and 2018 were readily available and reviewed by CEA personnel. A brief description of each photograph is presented below:

1950 – 1973	There appears to be a residential structure located on the north side of the study area. The remainder is undeveloped or agricultural use.
1982	There are no structures illustrated at the site. There is some quarry work within the central area of the property. The remainder is undeveloped or agricultural use.
1994	Two (2) of the pole style barns are located on the site. Some quarry work is being completed on a central area of the property. The remainder is undeveloped or agricultural use.
2003 – 2018	The current four (4) pole style buildings can be viewed. Sand pit operations can be viewed.

Year: 2018
Source: NAIP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

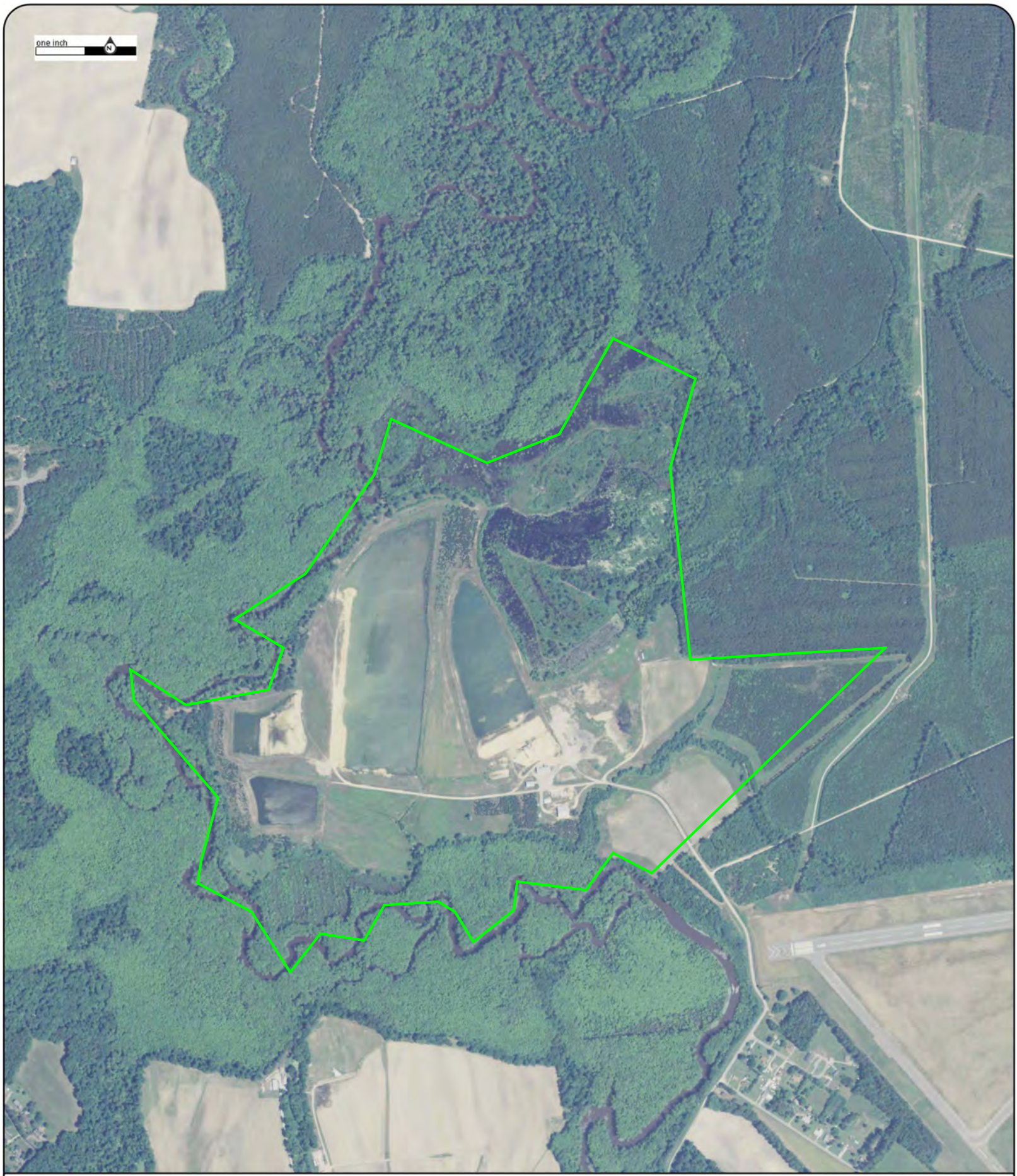
ERIS

Year: 2016
Source: NAIP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

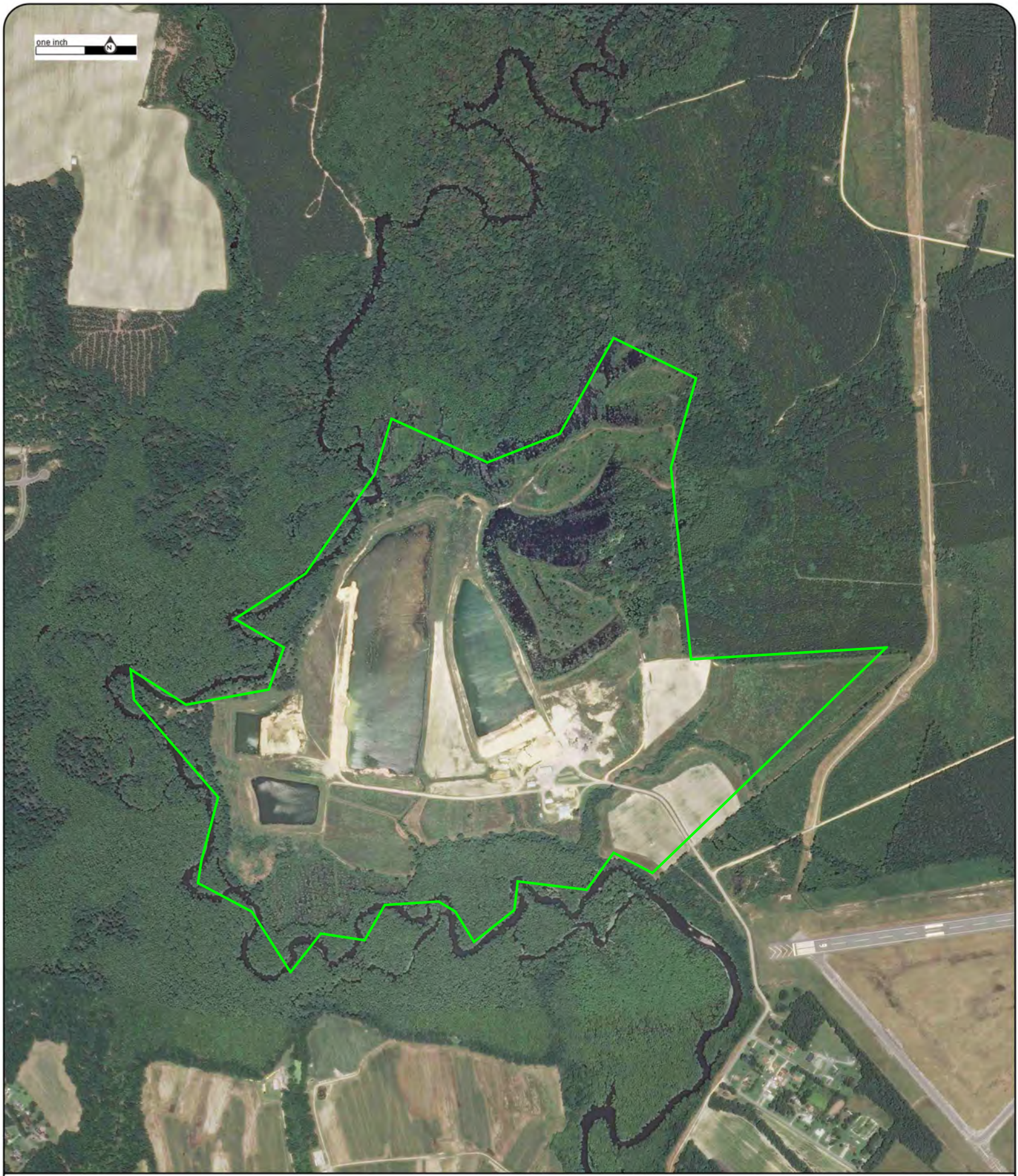


Year: 2014
Source: NAIP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

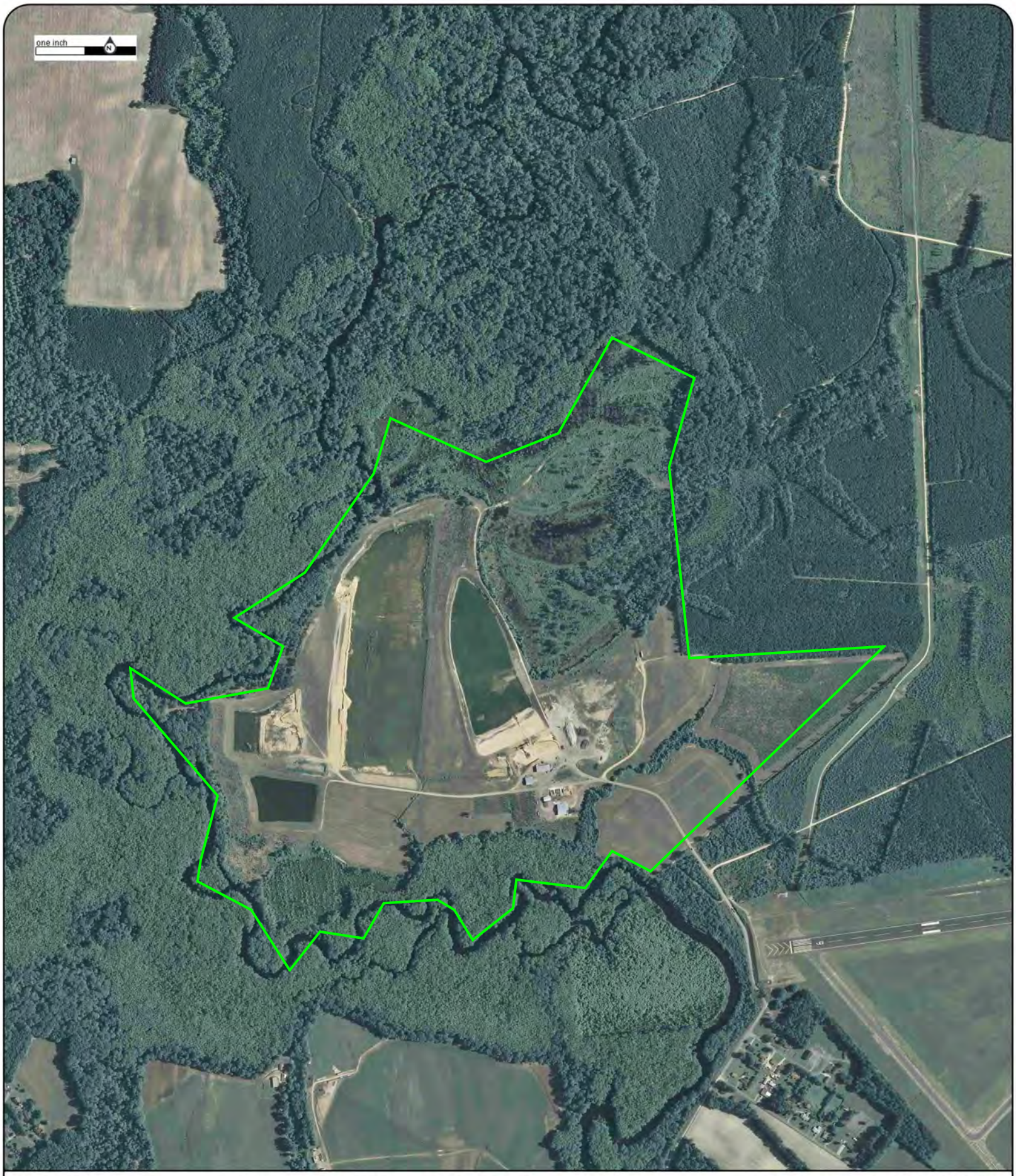


Year: 2012
Source: NAIP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

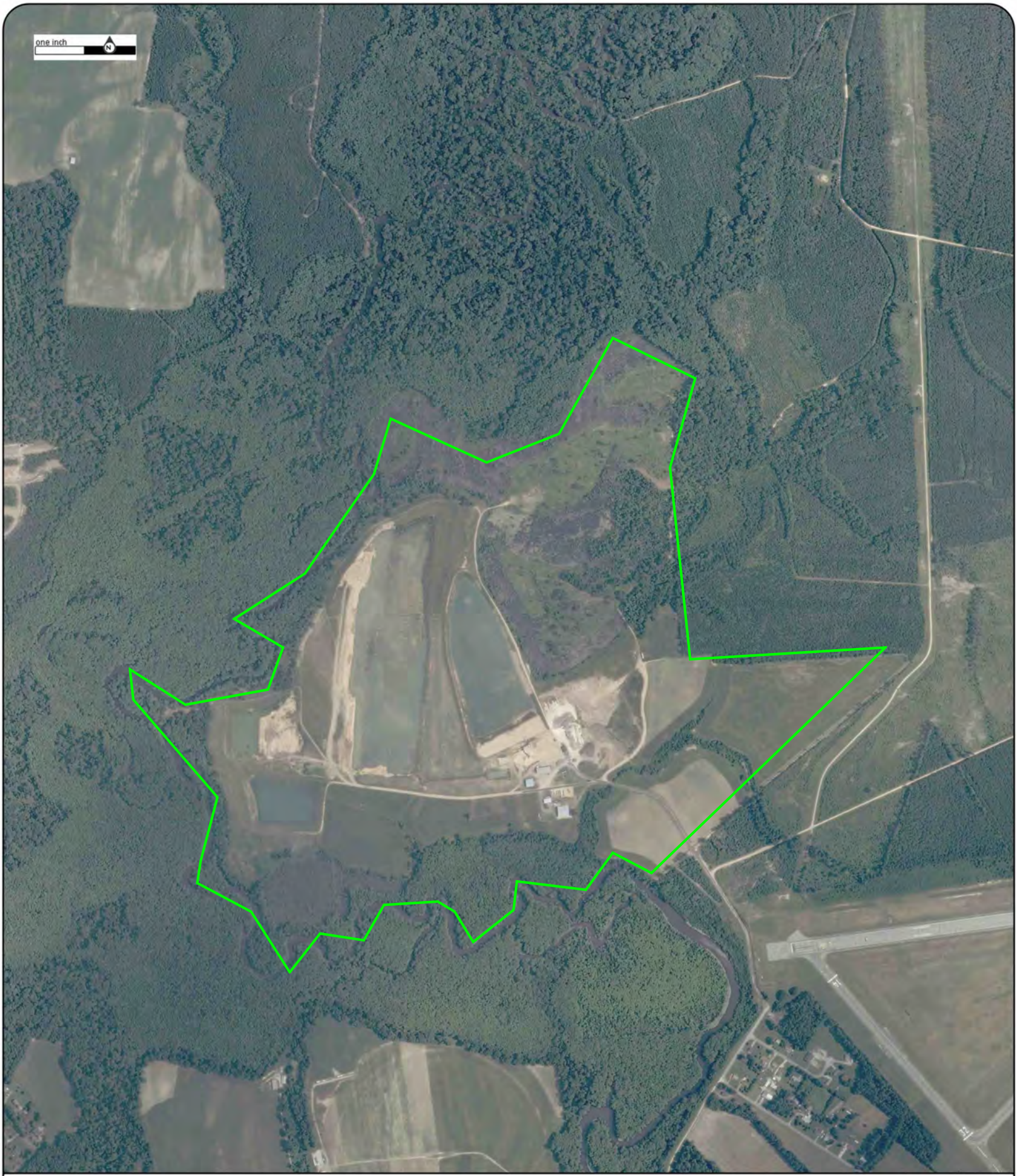


Year: 2011
Source: NAIP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

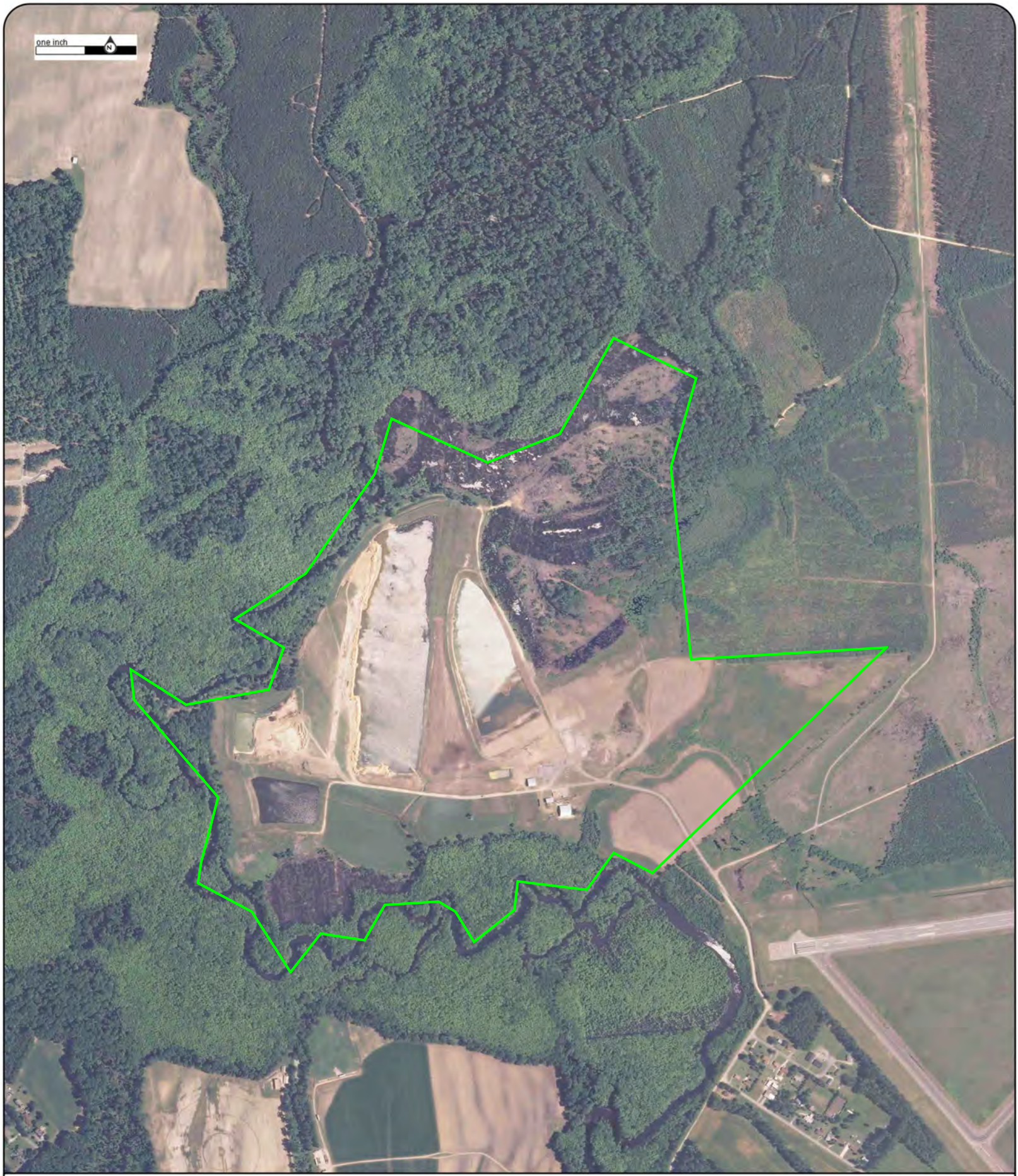


Year: 2009
Source: NAIP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

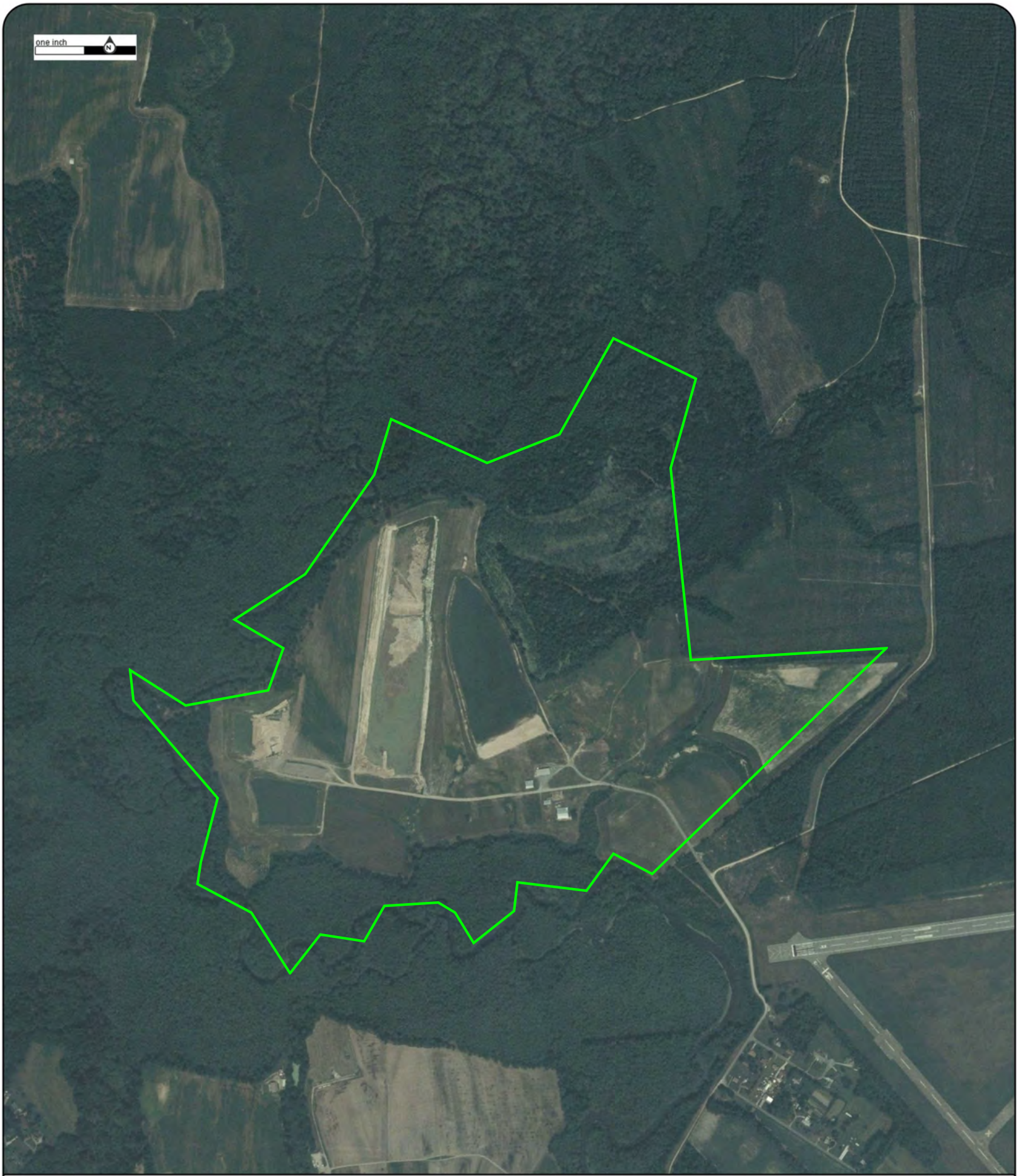


Year: 2008
Source: NAIP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

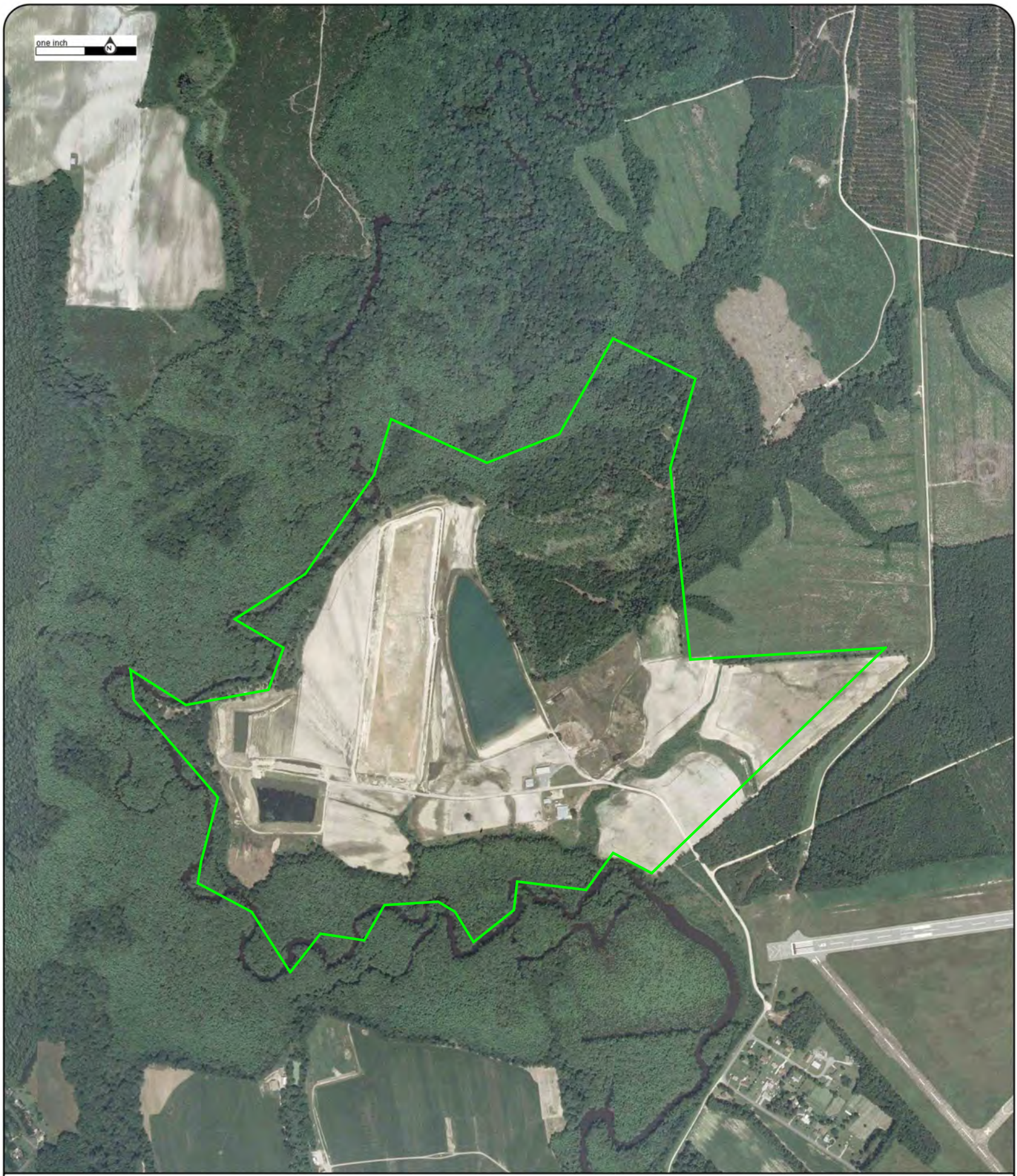


Year: 2005
Source: NAIP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS



Year: 2003
Source: NAIP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

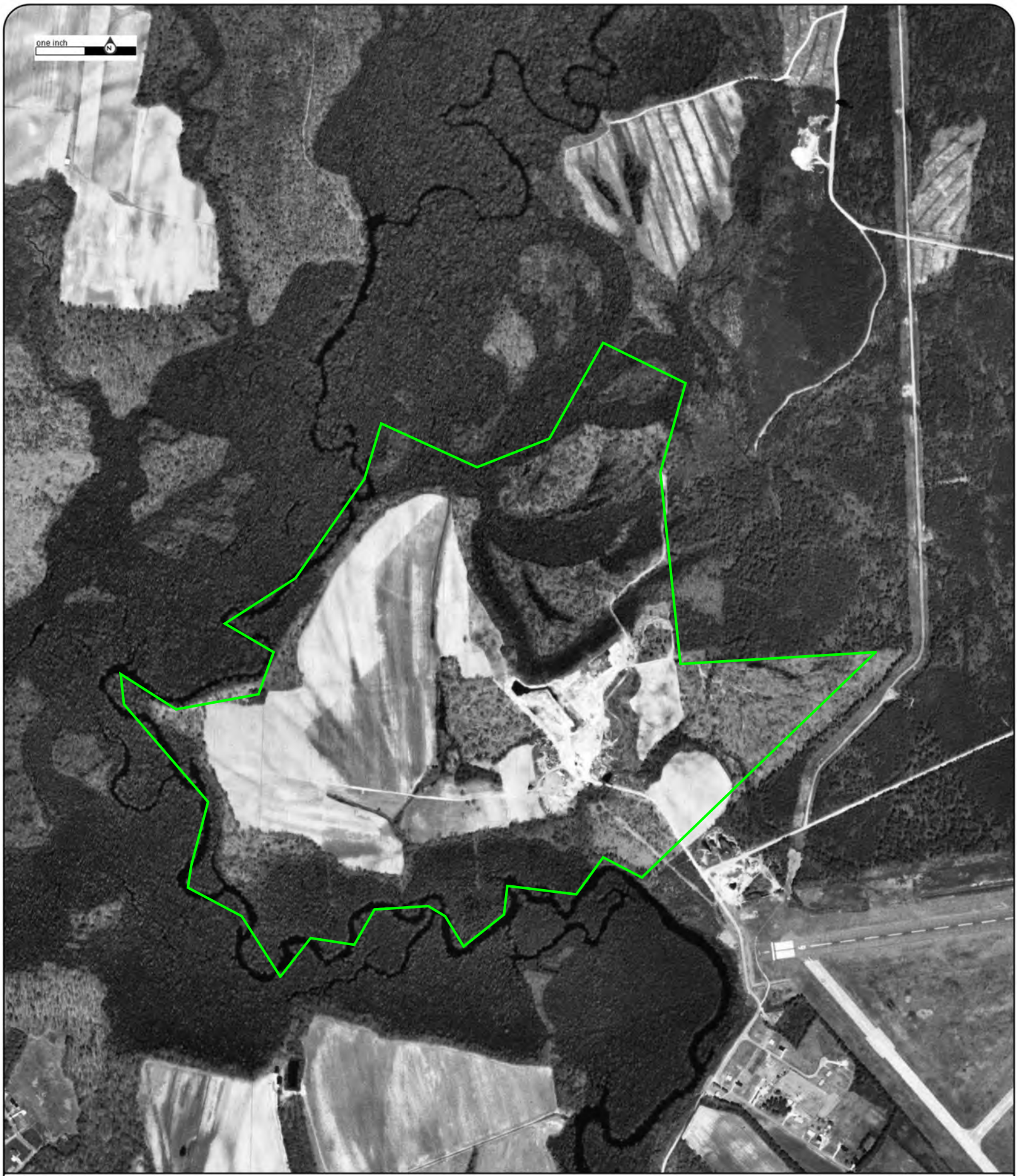
ERIS

Year: 1994
Source: USGS
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

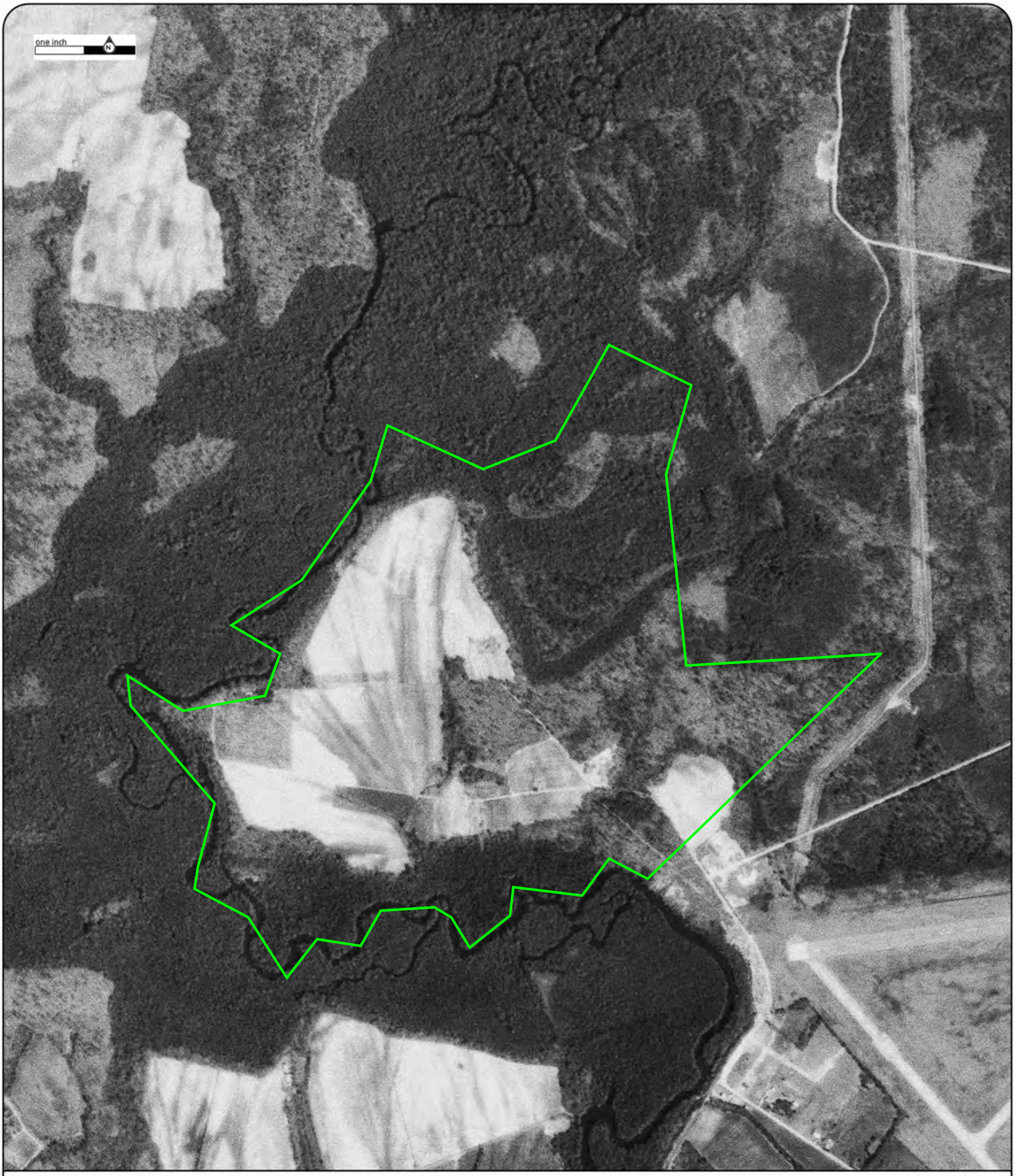


Year: 1982
Source: NHAP
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

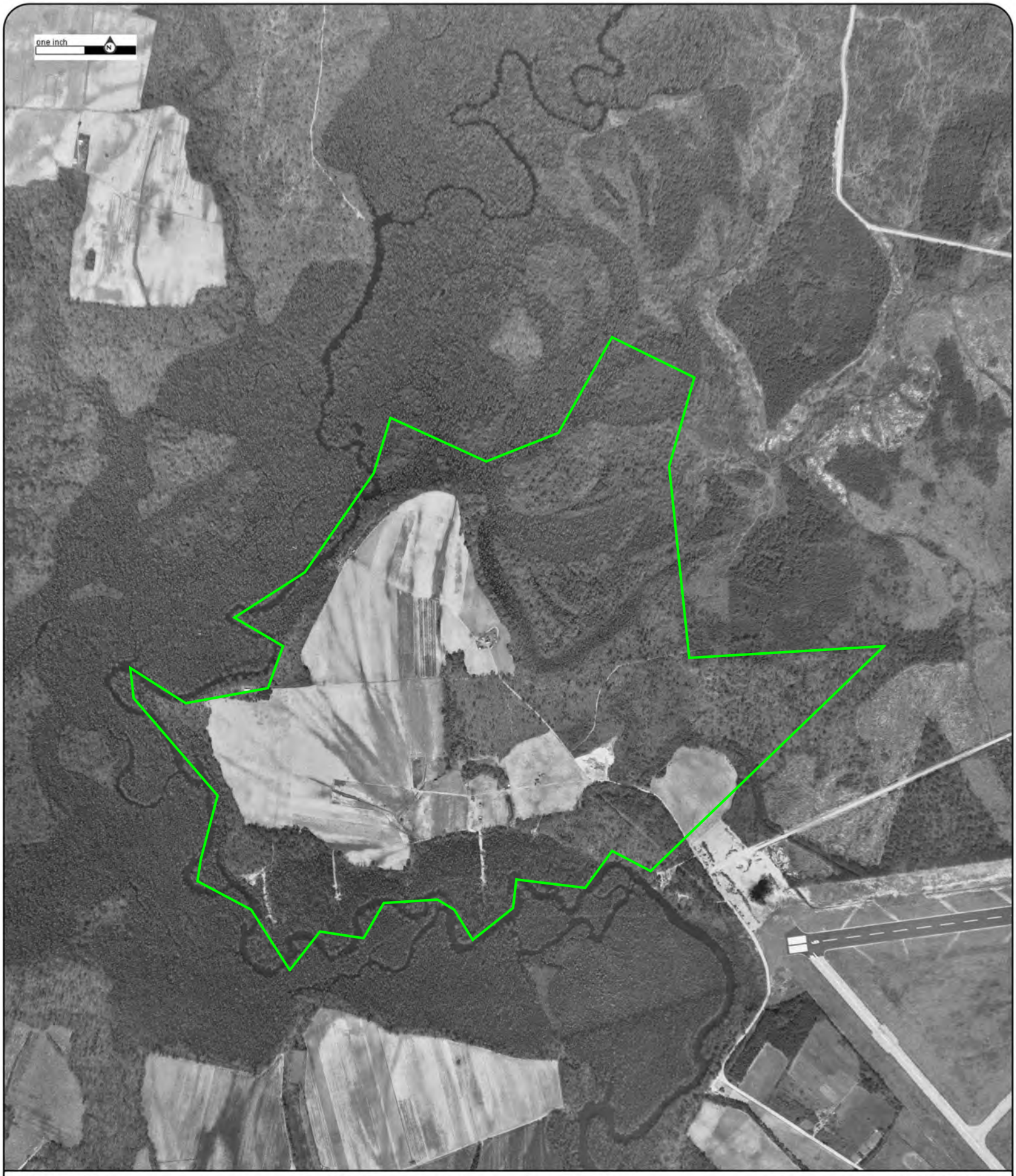


Year: 1973
Source: USGS
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

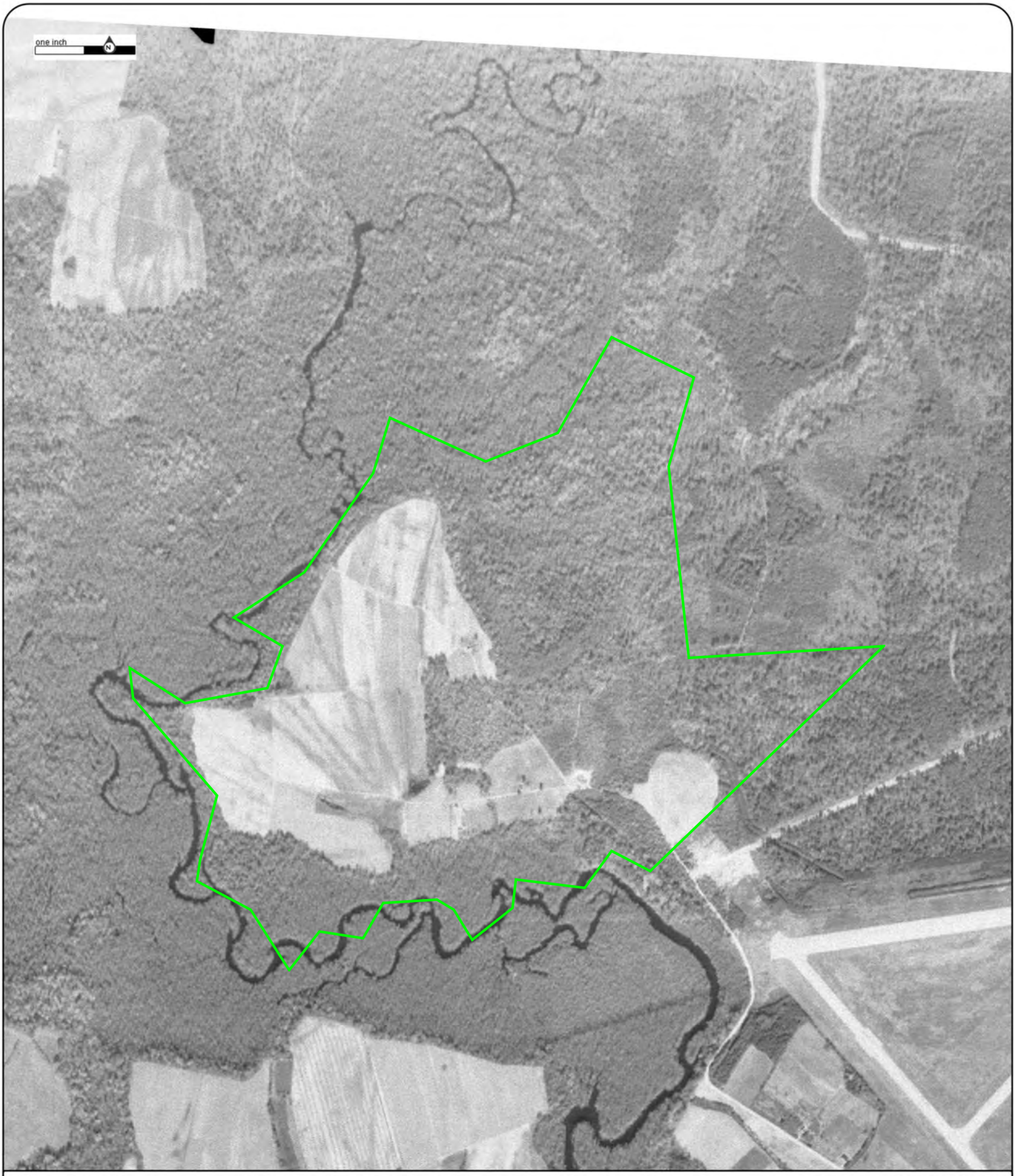


Year: 1964
Source: USGS
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

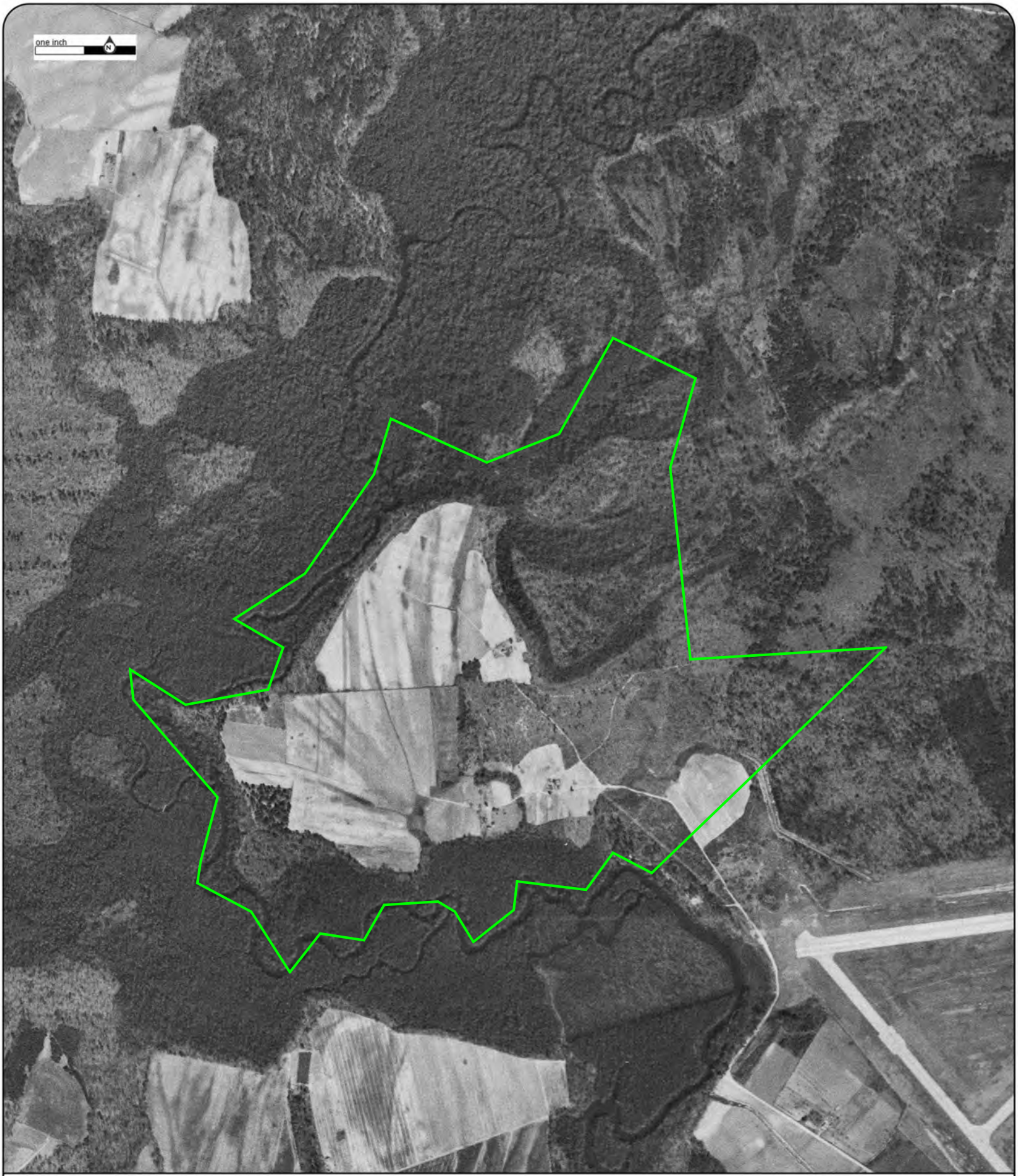


Year: 1959
Source: USAF
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS



Year: 1950
Source: AMS
Scale: 1" to 1000'
Comment:

Address: 32082 Airport Drive, Franklin, VA
Approx Center: -76.91943415,36.70515031

Order No: 21060800097

ERIS

APPENDIX 4

EDR REPORT 21060800097

DATABASE REPORT

Project Property:	*Whitley Hawkins Sand Quarry* *32082 Airport Drive* *Franklin VA 23851*
Project No:	*28221*
Report Type:	*Database Report*
Order No:	*21060800097*
Requested by:	*Commonwealth Environmental Associates, Inc.*
Date Completed:	*June 8, 2021*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

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Executive Summary

Property Information:

Project Property:		*Whitley Hawkins Sand Quarry* *32082 Airport Drive Franklin VA 23851*
Project No:		*28221*
Coordinates:		
	Latitude:	*36.70515031*
	Longitude:	*-76.91943415*
	UTM Northing:	*4,063,881.40*
	UTM Easting:	*328,549.89*
	UTM Zone:	*UTM Zone 18S*
Elevation:		*8 FT*

Order Information:

Order No:	*21060800097*
Date Requested:	*June 8, 2021*
Requested by:	*Commonwealth Environmental Associates, Inc.*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (Boundaries)*
City Directory Search	*CD - 2 Street Search*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*
Topographic Map	*Topographic Maps*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
DOE FUSRAP	Y	1	0	0	0	0	0	0
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	0	0	-	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
SWF/LF	Y	0.5	0	0	0	0	-	0
LST	Y	0.5	0	0	0	0	-	0
DELISTED LST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
AST	Y	0.25	0	0	0	-	-	0
TANK	Y	0.25	0	0	0	-	-	0
DELISTED TANK	Y	0.25	0	0	0	-	-	0
INST	Y	0.5	0	0	0	0	-	0
VRP	Y	0.5	0	0	0	0	-	0
BROWNFIELDS	Y	0.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED ILST	Y	0.5	0	0	0	0	-	0
DELISTED IUST	Y	0.25	0	0	0	-	-	0
County	***No County standard environmental record sources available for this State.***							
Additional Environmental Records								
Federal								
PFAS NPL	Y	0.5	0	0	0	0	-	0
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	**1**	0	**1**
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	0	0	0	0	0
URANIUM	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCB	Y	0.5	0	0	0	0	-	0
State								
SPILLS	Y	0.125	0	0	-	-	-	0
PC SPILLS	Y	0.125	0	0	-	-	-	0
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
Tribal	***No Tribal additional environmental record sources available for this State.***							
County	***No County additional environmental record sources available for this State.***							
Total:			0	0	0	**1**	0	**1**

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	FUDS	FRANKLIN	NO CITY VA	ESE	0.49 / 2,583.52	20	15

Executive Summary: Summary by Data Source

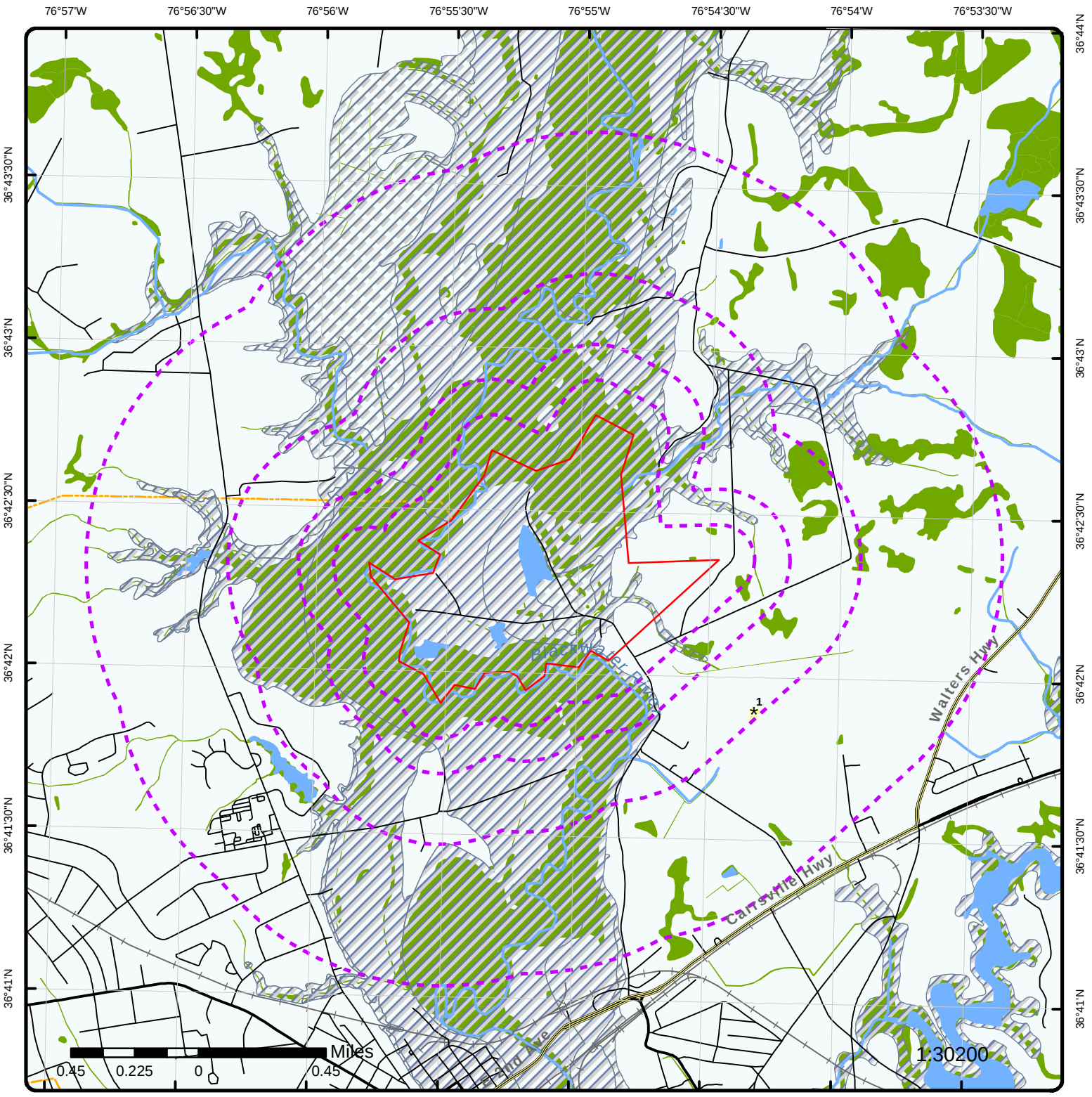
Non Standard

Federal

FUDS - Formerly Used Defense Sites

A search of the FUDS database, dated Jan 28, 2020 has found that there are 1 FUDS site(s) within approximately 1.00 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
FRANKLIN	NO CITY VA	ESE	0.49 / 2,583.52	1



Map: 1.0 Mile Radius

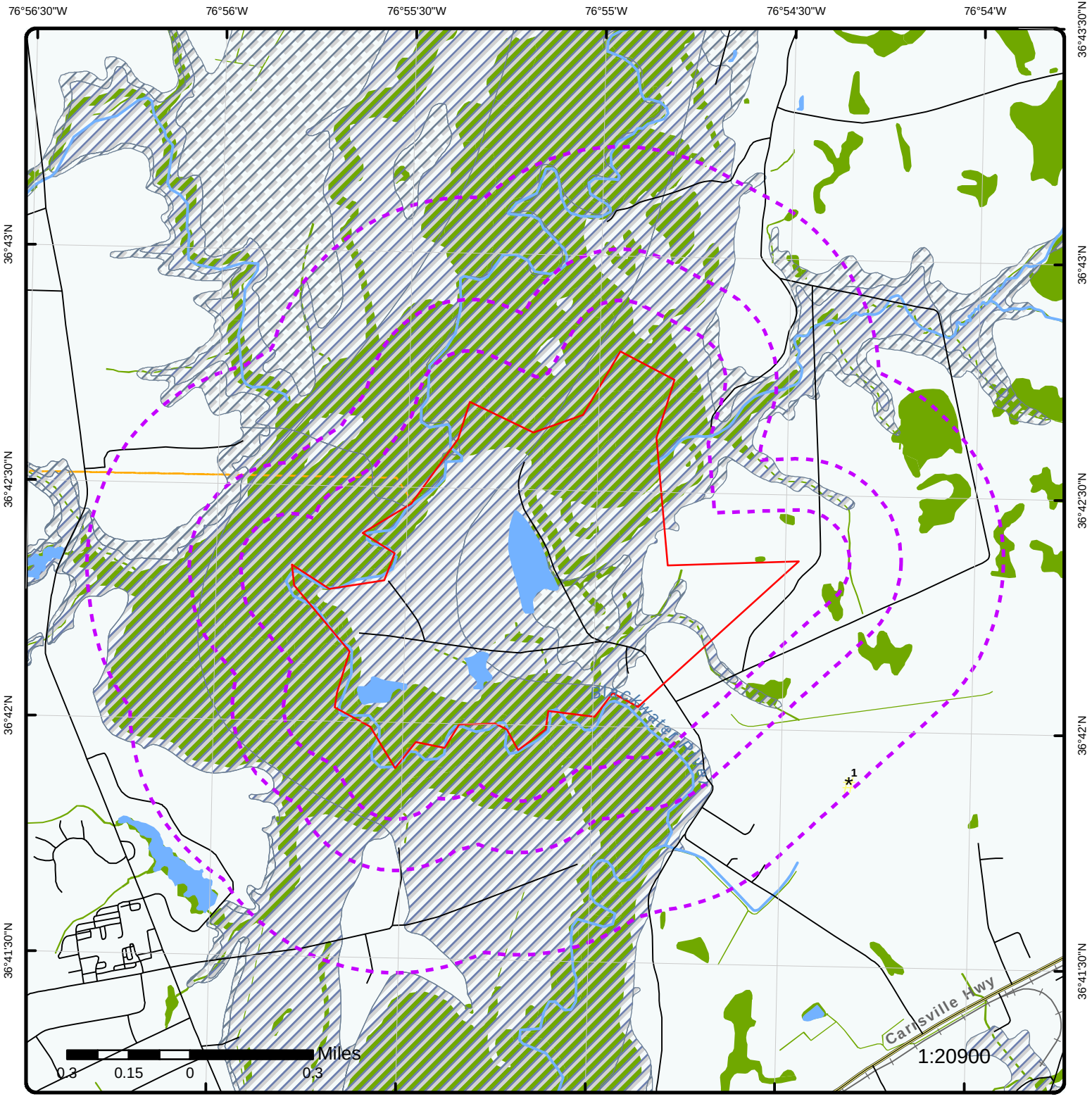
Order Number: 21060800097

Address: 32082 Airport Drive, Franklin, VA

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- County Boundary
- Rails
- Major Highways
- Major Highways Ramps
- Major Roads
- Major Roads Ramps
- Secondary Roads
- Secondary Roads Ramps
- Local Roads and Ramps
- State Boundary
- National Priority List Sites
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- Historic Fill
- FWS Special Designation Areas
- State Brownfield Sites
- State Brownfield Areas
- State Superfund Areas:Dept. of Defense
- State Superfund Areas:NPL
- WQARF Areas
- Federal Lands: Dept. of Defense (owned/administered areas)

Source: © 2016 ESRI

© ERIS Information Inc.



Map: 0.5 Mile Radius

Order Number: 21060800097

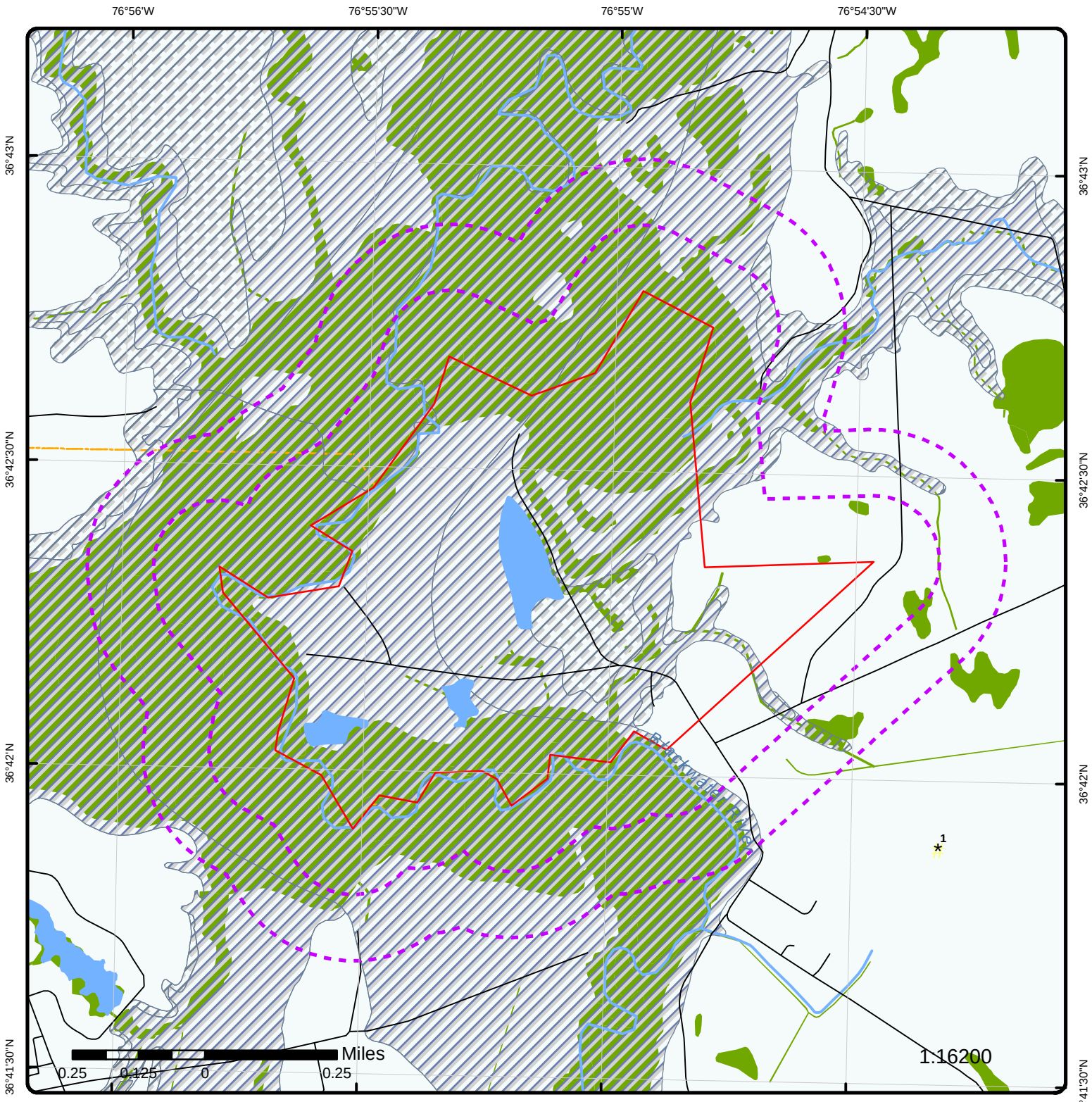
Address: 32082 Airport Drive, Franklin, VA

ERIS

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- County Boundary
- Rails
- Major Highways
- Major Highways Ramps
- Major Roads
- Major Roads Ramps
- Secondary Roads
- Secondary Roads Ramps
- Local Roads and Ramps
- State Boundary
- National Priority List Sites
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- Historic Fill
- FWS Special Designation Areas
- State Brownfield Sites
- State Brownfield Areas
- State Superfund Areas:Dept. of Defense
- State Superfund Areas:NPL
- WQARF Areas
- Federal Lands: Dept. of Defense (owned/administered areas)

Source: © 2016 ESRI

© ERIS Information Inc.



Map: 0.25 Mile Radius

Order Number: 21060800097

Address: 32082 Airport Drive, Franklin, VA

ERIS

Project Property	Rails	State Boundary	FWS Special Designation Areas
Buffer Outline	Major Highways	National Priority List Sites	State Brownfield Sites
Eris Sites with Higher Elevation	Major Highways Ramps	National Wetland	State Brownfield Areas
Eris Sites with Same Elevation	Major Roads	Indian Reserve Land	State Superfund Areas:Dept. of Defense
Eris Sites with Lower Elevation	Major Roads Ramps	100 Year Flood Zone	State Superfund Areas:NPL
Eris Sites with Unknown Elevation	Secondary Roads	500 Year Flood Zone	WQARF Areas
County Boundary	Secondary Roads Ramps	Historic Fill	Federal Lands: Dept. of Defense (owned/administered areas)
	Local Roads and Ramps		

Source: © 2016 ESRI

© ERIS Information Inc.

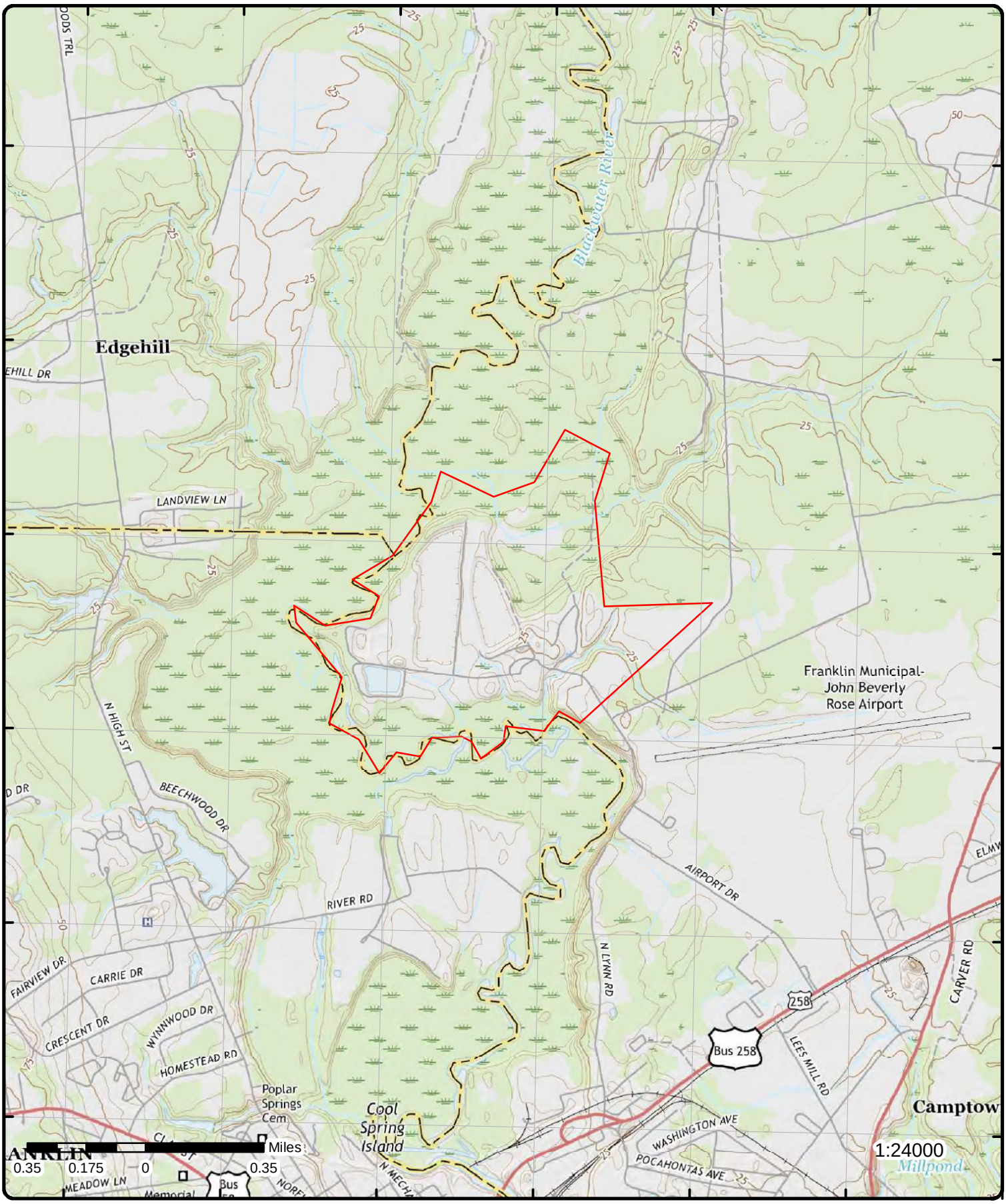
Aerial **Year: 2019**

Order Number: 21060800097

Address: 32082 Airport Drive, Franklin, VA

Source: ESRI World Imagery

© ERIS Information Inc.



Topographic Map

Year: 2016

Order Number: 21060800097

Address: 32082 Airport Drive, VA

Quadrangle(s): Franklin, VA; Holland, VA

Source: USGS Topographic Map

© ERIS Information Inc.

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 1	ESE	0.49 / 2,583.52	27.70 / 20	FRANKLIN NO CITY VA	FUDS

FUDS No:	C03VA0306	**EPA Region:**	03
INST ID:	VA39799F169800	**CONG DIST:**	04
Object ID:	2995	**County:**	
NPL Status:	Not Listed	**County Code:**	Baltimore District (NAB)
Status:	Properties without projects	**Latitude:**	36.69805556
FY:	2018	**Longitude:**	-76.90527778
Eligibility:	Eligible	**Has Projects:**	No
Current Owner:	Local Government		
EMS Map Link:	https://fudsportal.usace.army.mil/ems/ems/inventory/map/map?id=59381		

Unplottable Summary

Total: 1 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
RCRA NON GEN	PIONEER AVIATION	FRANKLIN MUNICIPAL AIRPRT ***EPA Handler ID:*** VAD000019729	FRANKLIN VA	23851	810166213

Unplottable Report

Site: ***PIONEER AVIATION***
FRANKLIN MUNICIPAL AIRPRT FRANKLIN VA 23851

RCRA NON GEN

EPA Handler ID:	VAD000019729
Gen Status Universe:	No Report
Contact Name:	ENVIRONMENTAL COORDINATOR
Contact Address:	FRANKLIN MUNICIPAL AIRPRT , , FRANKLIN , VA, 23851 , US
Contact Phone No and Ext:	215-555-1212
Contact Email:	
Contact Country:	US
County Name:	FRANKLIN CITY
EPA Region:	03
Land Type:	
Receive Date:	19800818
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note: NO RECORDS: As of April 2021, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	19800818
Handler Name:	PIONEER AVIATION
Source Type:	Notification
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street 1:***	OWNERSTREET
Name:	OWNERNAME	***Street 2:***	
Date Became Current:		***City:***	OWNERCITY
Date Ended Current:		***State:***	AK
Phone:	215-555-1212	***Country:***	
Source Type:	Notification	***Zip Code:***	99999

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Private	***Street 1:***	OPERSTREET
Name:	OPERNAME	***Street 2:***	
Date Became Current:		***City:***	OPERCITY
Date Ended Current:		***State:***	AK
Phone:	215-555-1212	***Country:***	
Source Type:	Notification	***Zip Code:***	99999

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

Formerly Utilized Sites Remedial Action Program: DOE FUSRAP

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

Government Publication Date: Mar 4, 2017

National Priority List: NPL

National Priorities List (Superfund)-NPL: EPA's (United States Environmental Protection Agency) list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action.

Government Publication Date: Apr 27, 2021

National Priority List - Proposed: PROPOSED NPL

Includes sites proposed (by the EPA, the state, or concerned citizens) for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment.

Government Publication Date: Apr 27, 2021

Deleted NPL: DELETED NPL

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Government Publication Date: Apr 27, 2021

SEMS List 8R Active Site Inventory: SEMS

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

Government Publication Date: Mar 23, 2021

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites: SEMS ARCHIVE

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Government Publication Date: Mar 23, 2021

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Apr 5, 2021

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Government Publication Date: Apr 5, 2021

RCRA Generator List: RCRA LQG

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Apr 5, 2021

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Apr 5, 2021

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Apr 5, 2021

RCRA Non-Generators: RCRA NON GEN

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Apr 5, 2021

Federal Engineering Controls-ECs: FED ENG

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Feb 23, 2021

Federal Institutional Controls- ICs: FED INST

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

Government Publication Date: Feb 23, 2021

Land Use Control Information System: LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Nov 9, 2020

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 6, 2021

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

List of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Dec 2, 2020

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

Government Publication Date: Jul 10, 2020

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

Government Publication Date: Apr 28, 2020

LIEN on Property: SEMS LIEN

The EPA Superfund Enterprise Management System (SEMS) provides LIEN information on properties under the EPA Superfund Program.

Government Publication Date: Mar 23, 2021

Superfund Decision Documents: SUPERFUND ROD

This database contains a listing of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD), along with other associated memos and files. This information is maintained and made available by the US EPA (Environmental Protection Agency).

Government Publication Date: Feb 23, 2021

State

Solid Waste Landfills: SWF/LF

The solid waste program in the Department of Environmental Quality (DEQ) is designed to encourage the reuse and recycling of solid waste and to regulate the disposal and treatment of solid waste, including regulated medical waste, and to ensure that hazardous waste is properly managed. Standards are designed to protect human health and the environment and driven by regulatory requirements.

Government Publication Date: Feb 16, 2021

Leaking Petroleum Storage Tanks: LST

When a release occurs from an aboveground or underground storage tank, the owner and/or operator of the tank is required to report the release to the Department of Environmental Quality (DEQ). This database contains a listing of releases from tanks both above and underground.

Government Publication Date: Mar 22, 2021

Delisted Leaking Petroleum Storage Tanks: DELISTED LST

Facilities which have been removed from the list of leaking petroleum storage tanks made available by the Virginia Department of Environmental Quality (DEQ). Facilities may be removed from the lists of leaking petroleum tanks when it is determined that the release reported is not an actual release, or the released substance is not petroleum - these sites may still have endured non-petroleum hazardous substance releases.

Government Publication Date: Mar 22, 2021

Underground Storage Tanks: UST

A listing of registered underground storage tanks, made available by the Virginia Department of Environmental Quality (DEQ). Includes records from Tank Registration files as well as records from the Virginia DEQ Open Data Portal.

Government Publication Date: Mar 22, 2021

Aboveground Storage Tanks: AST

Virginia Department of Environmental Quality (DEQ). Includes records from Tank Registration files as well as records from the Virginia DEQ Open Data Portal.

Government Publication Date: Mar 22, 2021

Storage Tank Facilities: TANK

A list of tank facilities where tank details are not available. This list is made available by the Virginia Department of Environmental Quality (DEQ). Includes records from Tank Registration files as well as records from the Virginia DEQ Open Data Portal.

Government Publication Date: Mar 22, 2021

Delisted Tanks: DELISTED TANK

Facilities which have been removed from the list of registered aboveground and/or underground storage tanks made available by the Virginia Department of Environmental Quality (DEQ). Facilities may be removed from the lists of registered tanks when it is determined that the tank does not require registration, for example, due to capacity or contents.

Government Publication Date: Mar 22, 2021

Institutional Controls: INST

Institutional controls are legal or contractual restrictions on property use that remain effective after remediation is completed and are used to satisfy remediation levels. This list is maintained by the Department of Environmental Quality (DEQ).

Government Publication Date: Mar 8, 2021

Voluntary Remediation Program: VRP

The Voluntary Remediation Program is to encourage hazardous substance cleanups that might not otherwise take place. The program is a streamlined mechanism for site owners or operators to voluntarily address contamination at sites with concurrence from the Department of Environmental Quality (DEQ).

Government Publication Date: Mar 8, 2021

Brownfields Site Specific Assessments: BROWNFIELDS

Brownfields are idled, underutilized, or abandoned industrial or commercial properties where expansion or redevelopment is complicated by real or perceived environmental contamination. Examples include factories, railyards, landfills, dry cleaners, etc. This list is maintained by the Department of Environmental Quality (DEQ).

Government Publication Date: Jan 8, 2021

Tribal

Leaking Underground Storage Tanks (LUSTs) on Tribal/Indian Lands: INDIAN LUST

Leaking Underground Storage Tanks (LUSTs) on Tribal/Indian Lands in EPA Region 3, which includes Virginia. There are no LUST records in Virginia at this time.

Government Publication Date: Apr 12, 2019

Underground Storage Tanks (USTs) on Indian Lands: INDIAN UST

Listing of Underground Storage Tanks (USTs) on Tribal/Indian Lands in EPA Region 3, which includes Virginia. There are no UST records in Virginia at this time.

Government Publication Date: May 4, 2018

Delisted Tribal Leaking Storage Tanks: DELISTED ILST

Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.

Government Publication Date: Apr 14, 2020

Delisted Tribal Underground Storage Tanks: DELISTED IUST

Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.

Government Publication Date: Apr 14, 2020

County

No County standard environmental record sources available for this State.

Additional Environmental Record Sources

Federal

PFOA/PFOS Contaminated Sites: PFAS NPL

List of sites where PFOA or PFOS contaminants have been found in drinking water or soil. Made available by the Federal Environmental Protection Agency (EPA).

Government Publication Date: Mar 1, 2021

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Nov 2, 2020

Toxics Release Inventory (TRI) Program: TRIS

The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U. S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

Government Publication Date: Feb 19, 2020

Perfluorinated Alkyl Substances (PFAS) Releases: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances. The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment.

Government Publication Date: Feb 19, 2020

Perfluorinated Alkyl Substances (PFAS) Water Quality: PFAS WATER

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.

Government Publication Date: Jul 20, 2020

Hazardous Materials Information Reporting System: HMIRS

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

Government Publication Date: Sep 1, 2020

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department") provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Oct 5, 2020

Toxic Substances Control Act: TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).

Government Publication Date: Apr 11, 2019

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.

Government Publication Date: Apr 27, 2021

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.

Government Publication Date: Mar 24, 2021

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) online search. The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: Feb 17, 2021

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: Feb 17, 2021

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.

Government Publication Date: Jan 28, 2020

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 1, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

A list of flagged pipeline incidents made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types.

Government Publication Date: Jul 7, 2020

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.

Government Publication Date: Nov 3, 2020

Surface Mining Control and Reclamation Act Sites: SMCRA

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of Abandoned Mine Land (AML) impacts, as well as information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Government Publication Date: Dec 18, 2020

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2006

Uranium Mill Tailings Radiation Control Act Sites: URANIUM

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

Government Publication Date: Mar 4, 2017

Alternative Fueling Stations: ALT FUELS

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

Government Publication Date: Apr 27, 2021

Registered Pesticide Establishments: SSTS

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.

Government Publication Date: Apr 13, 2021

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: Nov 19, 2020

State

Spills: SPILLS

The Department of Environmental Quality (DEQ) Pollution Response Program (PREP), provides for responses to air, water and waste pollution incidents in order to protect human health and the environment. PREP staff often work to assist local emergency responders, other state agencies, federal agencies, and responsible parties, as may be needed, to manage pollution incidents. Oil spills, fish kills, and hazardous materials spills are examples of incidents that may involve the DEQ's PREP Program.

Government Publication Date: Apr 16, 2021

Pollution Complaint: PC SPILLS

The database contains a listing of Pollution Complaints from 1986 to 1994 that include petroleum releases and other releases on state land and waters. This list is maintained by the Department of Environmental Quality (DEQ).

Government Publication Date: 1986-1994

Dry Cleaning Facilities: DRYCLEANERS

A listing of registered drycleaners maintained by the Department of Environmental Quality.

Government Publication Date: Apr 23, 2021

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental record sources available for this State.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

APPENDIX 5

FIELD INTERVIEWS

Individuals familiar with the site were contacted for additional information on the site and its past usages.

Mr. Brian Vaughn – Current Owner Representative

CEA contacted Mr. Brian Vaughn regarding the current and historical uses of the site. According to Mr. Vaughn, the property was purchased by his family in 1972. He indicated there were two (2) farms at that time. He reported the site today is what it generally has been since they purchased the property. The property was mainly agricultural use when they purchased it. Trees have been removed as required or harvested over the years. He reported there were no USTs at the site. The two (2) 10,000-gallon ASTs were installed by them after a concrete containment was constructed. He indicated the only spills he is aware of is if there were any over fills. He indicated that they had automatic shut off nozzles to eliminate that as much as possible. He reported that the only material fill he was aware of on the site was when limbs and stumps were piled up and burned and then used in backfill in some former quarry locations. He indicated that they were being regularly inspected by the VDEQ and mining regulators so they had to make sure everything was in order. He was unaware of any tire piles, landfills or other issues at the site. He was unaware of any environmental issues.

Administrative Staff – Isle of Wight County Tax Assessment Office

CEA contacted the Isle of Wight County Tax Assessment Office regarding any current or historic tax information. CEA was provided a copy of the current property and historical property cards.

Kayleigh Evans, Virginia Department of Environmental Quality (VDEQ)

CEA forwarded a Freedom of Information Act request to Kaleigh Evens of the VDEQ regarding any known regulatory files associated with the property. Ms. Evans was unable to locate any pollution complaints for property. She was able to forward the pollution complaint files for a nearby property.

Administrative Staff – Isle of Wight County Zoning & Building Inspections

CEA contacted the Isle of Wight County Buildings Inspections office on to inquire about any available permits issued the site for above or underground storage tank installation or removal or building demolition, the current zoning designation, and any historical use information. CEA was informed the sire is zone Rural Area. CEA was informed they had no historical use records. CEA has not received any response regarding and records regarding the installation or removal of any underground storage tanks.

Patrick Humphries, Isle of Wight County Fire Department

CEA contacted Patrick Humphries of the Isle of Wight County Fire Department regarding any responses to the site for Haz Mat, petroleum spills or major fires as well as any UST removal / installation permits / records. CEA has not received a response to date. spills and there are no records of any underground storage tank removals / disposals.

Fred Mayes

From: kayleigh.evans@deq.virginia.gov on behalf of FOIA, TRO <trofoias@deq.virginia.gov>
Sent: Wednesday, June 16, 2021 1:45 PM
To: Fred Mayes
Subject: FOIA #21-931 No Records

Thank you for your FOIA request for records made in accordance with the Virginia Freedom of Information Act (§ 2.2-3700 etc seq).

The Tidewater Regional Office of the Department of Environmental Quality has searched our files and no information was located for the addresses in your FOIA request. If you asked for Pollution Response/spill records, please note that these records have a five year retention policy.

If I can be of further assistance, please do not hesitate to contact me.

Thank you.

On Wed, Jun 16, 2021 at 8:17 AM Fred Mayes <fmayes@commonwealthenvironmental.com> wrote:

> Good Morning:
>
> Please find our request for information for the Whitley – Hawkins Sand & Gravel facility at 32083 Airport Drive in Franklin, Virginia attached. Thank you in advance for any assistance with this.
>
> Have a great week.
>
> W. Fred Mayes
>
> CEA, Inc.
>
> 7411 Iron Bridge Road
>
> Richmond, VA 23237
>
> (804) 275-9320, ext. 11
>
> (804) 275-9322 (fax)

Fred Mayes

From: Fred Mayes
Sent: Wednesday, June 16, 2021 8:35 AM
To: srobinso@iwus.net
Subject: Quick Zoning Question - Whitley-Hawkins Holdings - 32083 Airport Drive - Franklin, VA - Parcels 68-01-001 & 68-01-002

Good Morning:

We are completing an assessment of the Whitley-Hawkins Holdings at 32083 Airport Drive in Franklin, VA (Parcels 68-01-001 & 68-01-00). We are interested in the zoning designation as well as any historical development records that may be available. Thank you in advance for any assistance with this. Have a great week.

W. Fred Mayes

CEA, Inc.
7411 Iron Bridge Road
Richmond, VA 23237

(804) 275-9320, ext. 11
(804) 275-9322 (fax)
(804) 347-0313 (cell)

www.commonwealthenvironmental.com

Fred Mayes

From: Fred Mayes
Sent: Wednesday, June 16, 2021 8:17 AM
To: FOIA, TRO
Subject: Request - Whitley-Hawkins Sand & Gravel- 32083 Airport Drive - Franklin, Virginia
Attachments: FOIA - Whitley-Hawkins Gravel - Whitley-Hawkins Gravel - 32083 Airport Drive - Franklin, Va.pdf

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Have a great week.

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Department of Environmental Quality

Freedom of Information Act Request Form

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Online FOIA Resources

Requestor Information

Name: W. Fred Mayes

Company: Commonwealth Environmental Associates, Inc.

Complete Address:

Street: 7411 Iron Bridge Road

City: Richmond

State: VA

Zip Code: 23237

Office Phone: +1 (804) 275-9320

Cell Phone: +1 (804) 347-0313

E-mail Address: fmayes@commonwealthenvironmental.com

Requested Site Information

Facility Name (if applicable): Whitley-Hawkins Sand & Gravel

Former Name/Owner (if applicable):

Complete Address:

*Please Note: DEQ is unable to search latitude/longitude, parcel or tax ids, radii, or adjacent properties without an address. To add **multiple addresses**, please use the plus (+) and minus (-) buttons below.*

Street (Required)	City	Zip Code	
32083 Airport Drive	Franklin	23851	+ -

Additional Information: List each property individually and include the PC#, IR#, Facility ID, Permit #, EPA ID#, or adjacent properties if known.

Whitley-Hawkins Sand & Gravel - 32083 Airport Drive - Franklin, Va - We are interested in any UST registration, pollution complaint and RCRA files. We are not aware of any.

What Date Range is this request for?

○ Last 12 Months ○ Last 5 years ○ _____ to _____

Requested Information

Please be specific as possible in describing the information you are requesting.

Whitley-Hawkins Sand & Gravel - 32083 Airport Drive - Franklin, Va - We are interested in any UST registration, pollution complaint and RCRA files. We are not aware of any.

Please provide past history and current usage of property. Any information is helpful. (Example: private residence, undeveloped land, current operating business, former business, industrial property, etc.

The site has been used as for quarry, residential and agricultural purposes since the early 1900's.

*Depending on the form and/or volume of information available, there may be charges for your request. If a potential charge applies, you will be contacted prior to request fulfillment.

Where to Send This Form

To determine where your request should be submitted, select either the DEQ regional office where your site(s) is located, Central Office or entire state to include multiple locations.

Tidewater

To submit this FOIA request for entire state or Central Office, please email this form to deqfoias@deq.virginia.gov. Questions about your request can be answered by calling (540) 574-7886.

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E-mail Address: fmayes@commonwealthenvironmental.com

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>
> (804) 275-9322 (fax)

Information Request - 32083 Airport Drive, Franklin, VA

Donald T. Robertson <droberts@isleofwightus.net>

Wed 6/16/2021 3:23 PM

To: ceainc@msn.com <ceainc@msn.com>
Cc: Amber Johnson <ajohnson@isleofwightus.net>

4 attachments (86 KB)

68-01-002 Whitley Borrow Pit 2009 CUP.pdf; 68-01-002 Whitley Borrow Pit 2004 CUP.pdf; 68-01-002 Whitley Borrow Pit Expansion 1975.pdf; 68-01-002 Whitley Borrow Pit 1998 CUP.pdf;

Mr. Mayes:

We have searched our records and we do not have any documents for underground storage tank installation or removal. Attached is correspondence relative to a conditional use permits issued for a borrow pit on parcel 68-01-002.

Should you have questions or need additional information, please let me know.

Don Robertson
Isle of Wight County

We are completing an assessment of the Whitley-Hawkins Holdings properties at 32083 Airport Drive in Franklin, Virginia. (Tax Parcels 68-01-002 & 68-01-001). We are primarily interested in any permits for underground storage tank installation or removal. We would appreciate any information regarding previous structures at the site if available as well.

68-01-002 E.C. Whitley Enterprises, Inc (CUP-04-09)

COUNTY of ISLE OF WIGHT

THE COURTHOUSE

August 27, 2009

Ms. Sandra W. Hawkins
Whitley-Hawkins Holdings, LLC
33006 Green Oaks Lane
Franklin, VA 23851

RE: The application of E. C. Whitley Enterprises Inc., applicant, and Whitley-Hawkins Holdings LLC, owner, for a Conditional Use Permit to extend the life of a borrow pit operation for an additional five (5) years. The borrow pit totals ten (10) acres of land located on a private road, six tenths of a mile off of Airport Drive, in the Carrsville Election District, for the purpose of processing and the removal of sand for commercial sale. The mining operation will create a lake to provide for farm irrigation and wildlife habitat.

Dear Ms. Hawkins:

The Isle of Wight County Board of Supervisors, at its meeting on August 20, 2009, considered and approved the above-referenced application with the condition that the bond amount is maintained at $1,000.00 per acre.

Should you have any questions regarding this matter, please feel free to contact this office.

Sincerely,

Beverly H. Walkup
Director of Planning and Zoning

BHW\mjg

CUP - Borrow Pit
Approved 8/20/09

COUNTY of ISLE OF WIGHT

THE COURTHOUSE February 5, 2004

Mr. Whitley-Hawkins Holding, LLC
33006 Green Oaks Lane
Franklin, Va. 23851

Dear Mr. Whitley:

Your request for a Conditional Use Permit for a borrow pit is scheduled to be considered by the Isle of Wight County Board of Supervisors on Thursday, February 19, 2004 beginning at 7:00 p.m., in the Board of Supervisors Room.

The Isle of Wight County Board of Zoning Appeals granted your variance on January 5, 2004 and the Isle of Wight County Planning Commission recommended approval of the application at its January 13, 2004 meeting.

You or your agent must be present to represent the application.

Sincerely,

Sandy W. Robinson, Secretary
Isle of Wight County
Planning Commission

P.O. BOX 80 • ISLE OF WIGHT • VIRGINIA 23397 • (757) 357-3191 • www.co.isle-of-wight.va.us

68112

ırson Whitley, Jr.
ıte 1, Box 58
ınklin, VA 23851

off Routes 58 & 616
Windsor Magisterial District

ɔroved: 6-5-75
* July 7, 1993 expiration date
enlarge borrow pit 50 acres

ıd = $25,000.00
id $50.00 - 11-10-75 - application for
nuary 1, through June 30, 1976 - 4,490
ubic yards removed - paid 314.30 - 9-2-76

ond issued on January 30, 1976 with Dept.
f Conservation and Economic Development.
Fidelity & Guaranty Co. # 66-0130-3506-75,
permit # M-144.

COUNTY of ISLE OF WIGHT

THE COURTHOUSE

March 23, 1998

Mr. Carson Whitley
Whitley Hawkins Holdings LLC
33030 Green Oaks Lane
Franklin, Va. 23851

Dear Mr. Whitley:

Your application for a Conditional Use Permit to operate a borrow pit containing eight (8) acres of land located on the Bunch Farm, off Airport Drive, was considered and approved by the Isle of Wight County Board of Supervisors at its meeting held on March 19, 1998.

If you have any questions regarding this matter, please feel free to contact this office.

Sincerely,

Jonathan W. Hartley
Director of Planning and Zoning

JWH/sww

Fred Mayes

To: phumphries@isleofwightus.net
Subject: Response Questions - Whitley Hawkins Sand Quarry - 32082 Airport Drive - Franklin, Va.

Good Morning:

We are completing an assessment of the Whitley Hawkins Sand Quarry Property at 32082 Airport Drive - Franklin, Virginia. We are interested in any responses to the address for any major fires, petroleum spills or Haz-Mat. Any information regarding historical uses would also be appreciated.

Thank you in advance for your help. Have a safe day.

W. Fred Mayes

CEA, Inc.
7411 Iron Bridge Road
Richmond, VA 23237

(804) 275-9320, ext. 11
(804) 275-9322 (fax)
(804) 347-0313 (cell)

www.commonwealthenvironmental.com

APPENDIX 6

SITE PHOTOGRAPHS / DESCRIPTIONS / LOCATION MAP

View of one of the pole shed located on the south central area of the site.

View of the office/storge pole building on the south central area of the site.

View of the three (3) ASTs located on the west end of the office/storage building.

View of the limited soil staining noted on the concrete pad of the office/storage building.

View of the propane AST and the office/storage building looking west.

View of the supply well and a pole transformer located south of the office / storge building.

View of the pole shed with the 10,000-gallon ASTs and a concrete containment.

View of the 10,000-gallon ASTs and concrete containment.

View of the pole shed with the ASTs looking north.

View of the pole storage building looking east.

View of some truck tires and some wood debris.

View of stored equipment on the central area of the site.

View of a pole shed on the south central area of the site.

View of the agricultural field on the southeast corner of the site.

View of the agricultural field on the southeast corner of the site.

View of the entrance road into the property from Airport Drive.

View of a agricultural field on the east side of the site.

View of the southeast property boundary looking northeast.

View of the southeast property boundary looking northeast.

View of the north property boundary looking west.

View of the east side of the site.

View of the east side of the site.

View of the east side of the site.

View of the east side of the site.

View of the central area of the site looking south.

View of a former borrow area.

View of a former borrow area.

View within a wetland are on the northside of the site.

View of the north side of the site.

View of the area being leveled on the south central area of the site.

View o the west side of the site looking northwest.

View of the cemetery located on the south side of the site.

View of the southwest corner of the site.

View of one of the former borrow pits.

View of one of the former borrow pits.

View of one of the former borrow pits.

View of a picnic pavilion on the west side of the site.

View of the Blackwater River along the west property.

View of a area west of the active borrow pits with piles of overburden.

View of one of the former borrow pits.

View of some vegetative debris on the north side of the site.

View of the Blackwater River on the north side of the site.

View of a pile of overburden on the north side of the active pits.

View of the wetland on the northeast corner of the site.

View of a former burn pile area on the site.

APPENDIX 7

SANBORN FIRE INSURANCE MAPS

Appendix 7

Sanborn Fire Insurance Maps

CEA reviewed the available Sanborn maps and historical insurance drawings as provided by Environmental Data Resources (ERIS). The review indicated that the Sanborn Company did not map the area of the subject site.

ERIS

FIRE INSURANCE MAPS

Project Property:	Whitley Hawkins Sand Quarry 32082 Airport Drive Franklin VA 23851
Project No:	28221
Requested By:	Commonwealth Environmental Associates, Inc.
Order No:	21060800097
Date Completed:	June 08, 2021

Please note that no information was found for your site or adjacent properties.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

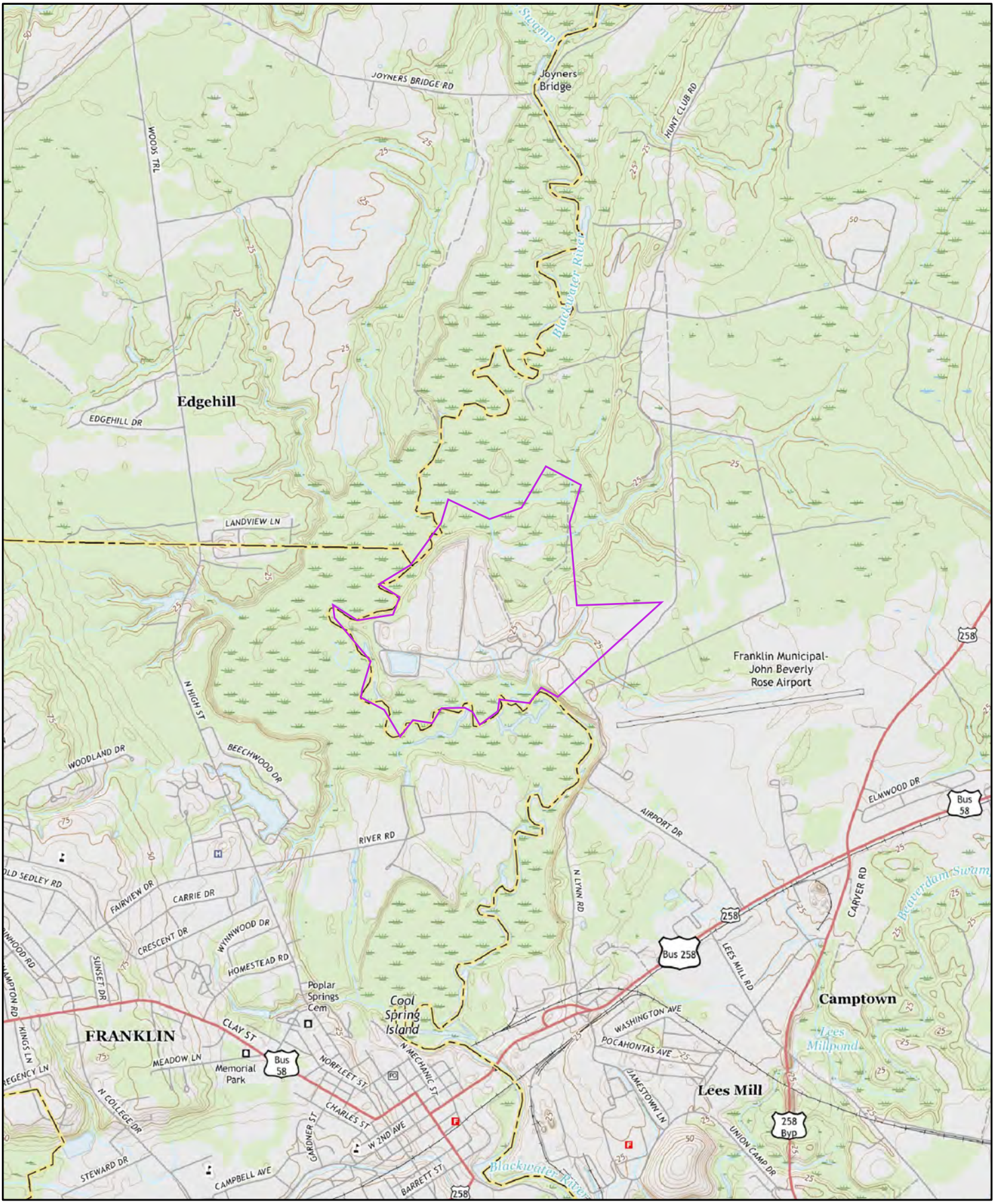
APPENDIX 8

HISTORICAL TOPOGRAPHICAL MAPS

Appendix 8
Historical Topographical Maps

CEA personnel reviewed the readily available historical topographical maps as documented by the USGS for the subject site. The reviewed USGS topographical maps included those dated 1920, 1943, 1957, 1967, 1973, 1980, 1986 and 2016. A summary of each map is presented below.

Year	Description
1920 - 1957	There appears to be a structure on the south and north sides of the property.
1967 / 1973	There are no improvements illustrated on the site. A cemetery is illustrated on the south side of the site.
1980	There are quarry operations on the east side of the site. There are no structures illustrated on the map. A cemetery is illustrated on the south side of the site.
1986	There are no structures illustrated on the map. A cemetery is illustrated on the south side of the site.
2016	No structures are illustrated on this series of maps. There are topographical differences on the west side of the site due to the quarry operations between the 1986 and 2016 maps.



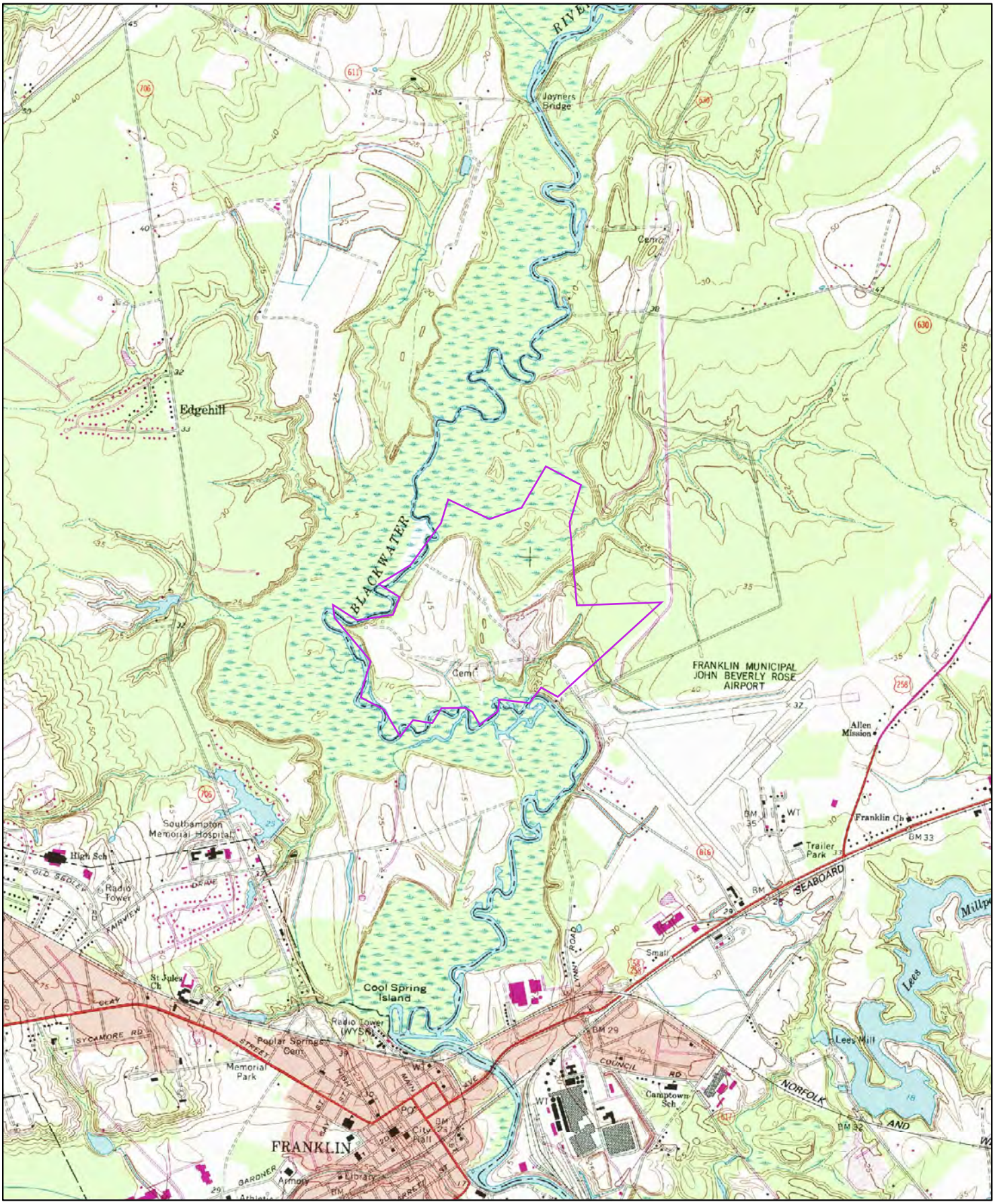
2016

0 0.2 0.4 0.8 1.2 Miles

Order No. 21060800097

Quadrangle(s): Franklin,VA

Source: USGS 7.5 Minute Topographic Map



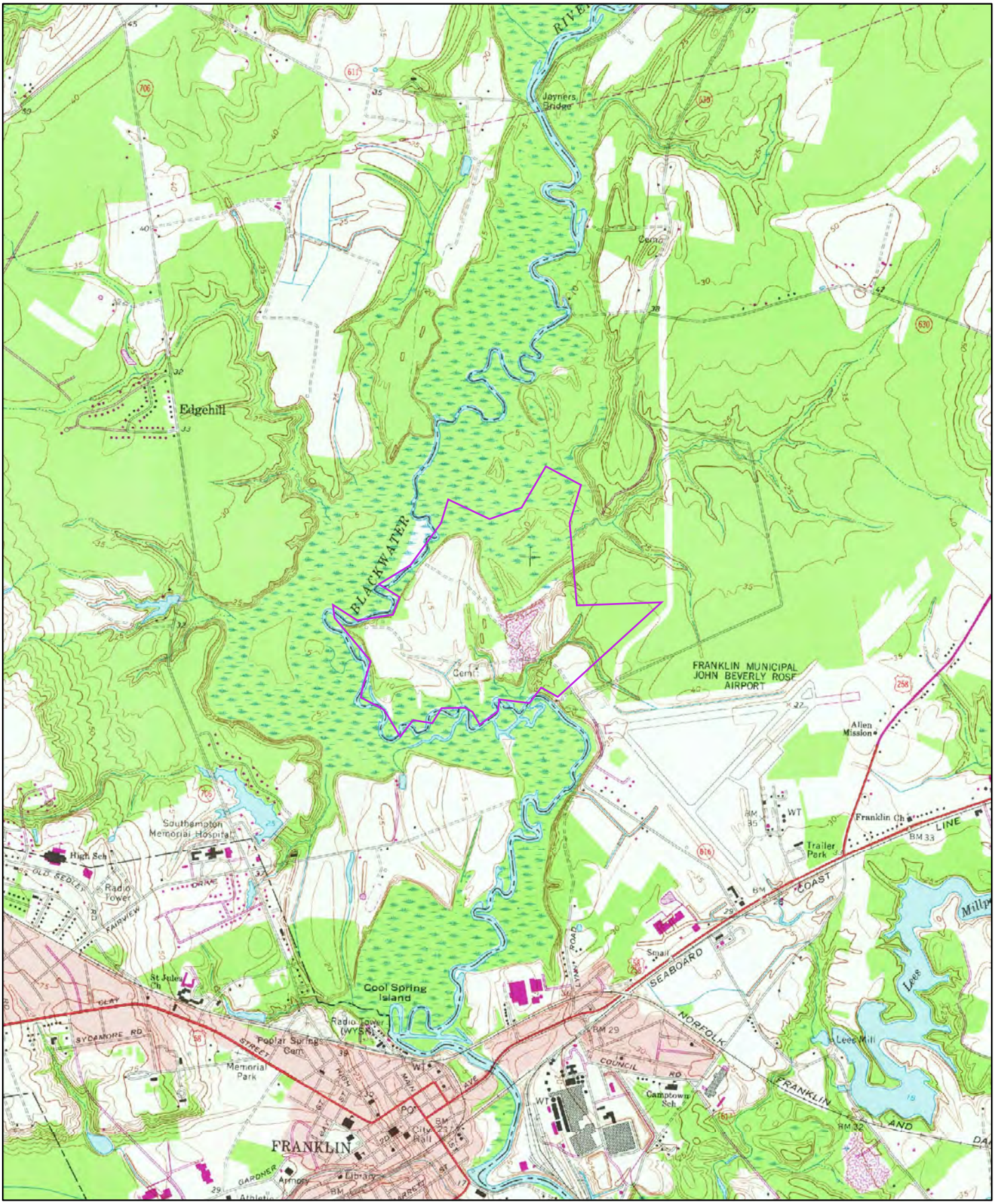
1986

0 0.2 0.4 0.8 1.2 Miles

Order No. 21060800097

Quadrangle(s): Franklin,VA

Source: USGS 7.5 Minute Topographic Map



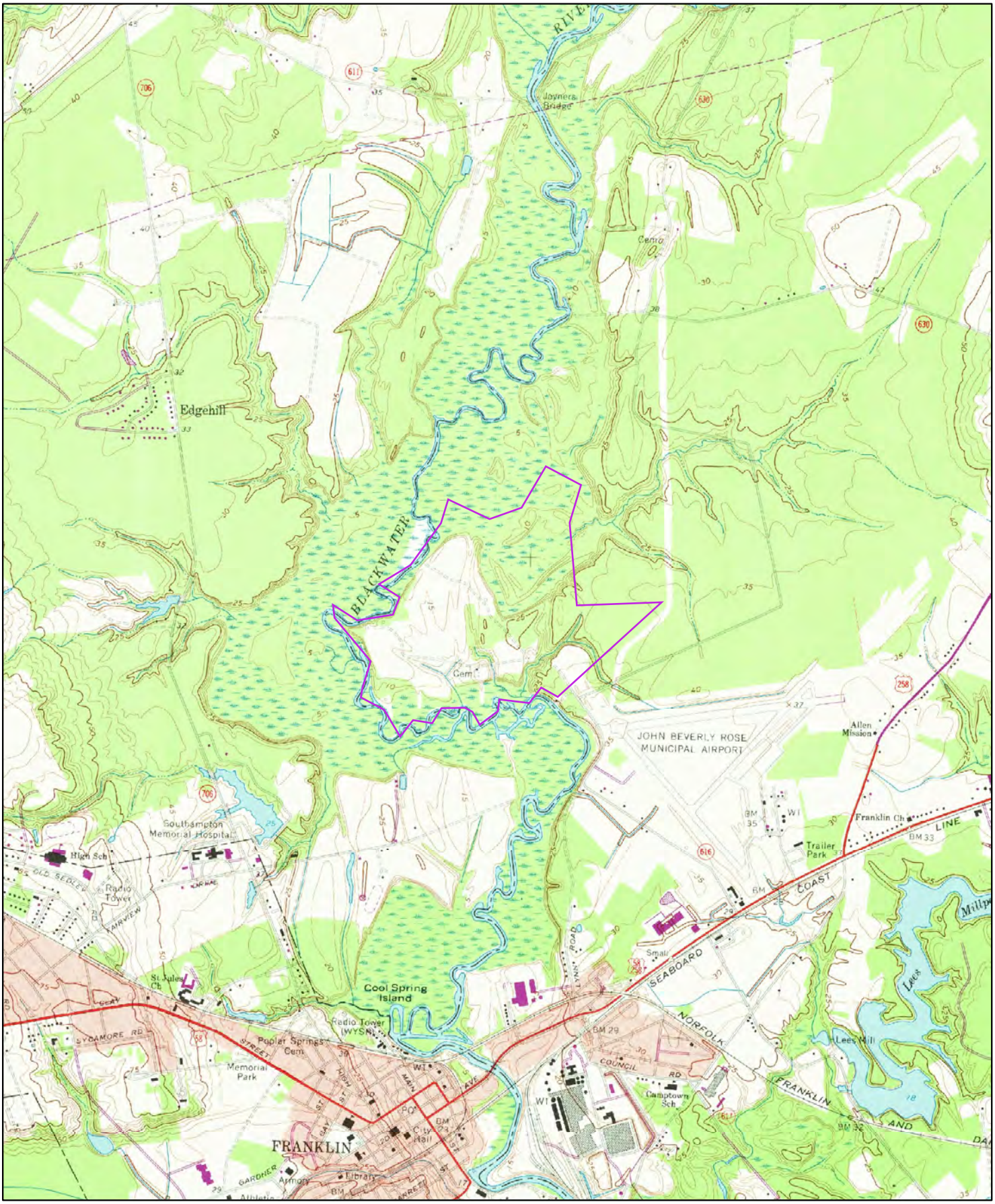
1980

0 0.2 0.4 0.8 1.2 Miles

Order No. 21060800097

Quadrangle(s): Franklin,VA

Source: USGS 7.5 Minute Topographic Map



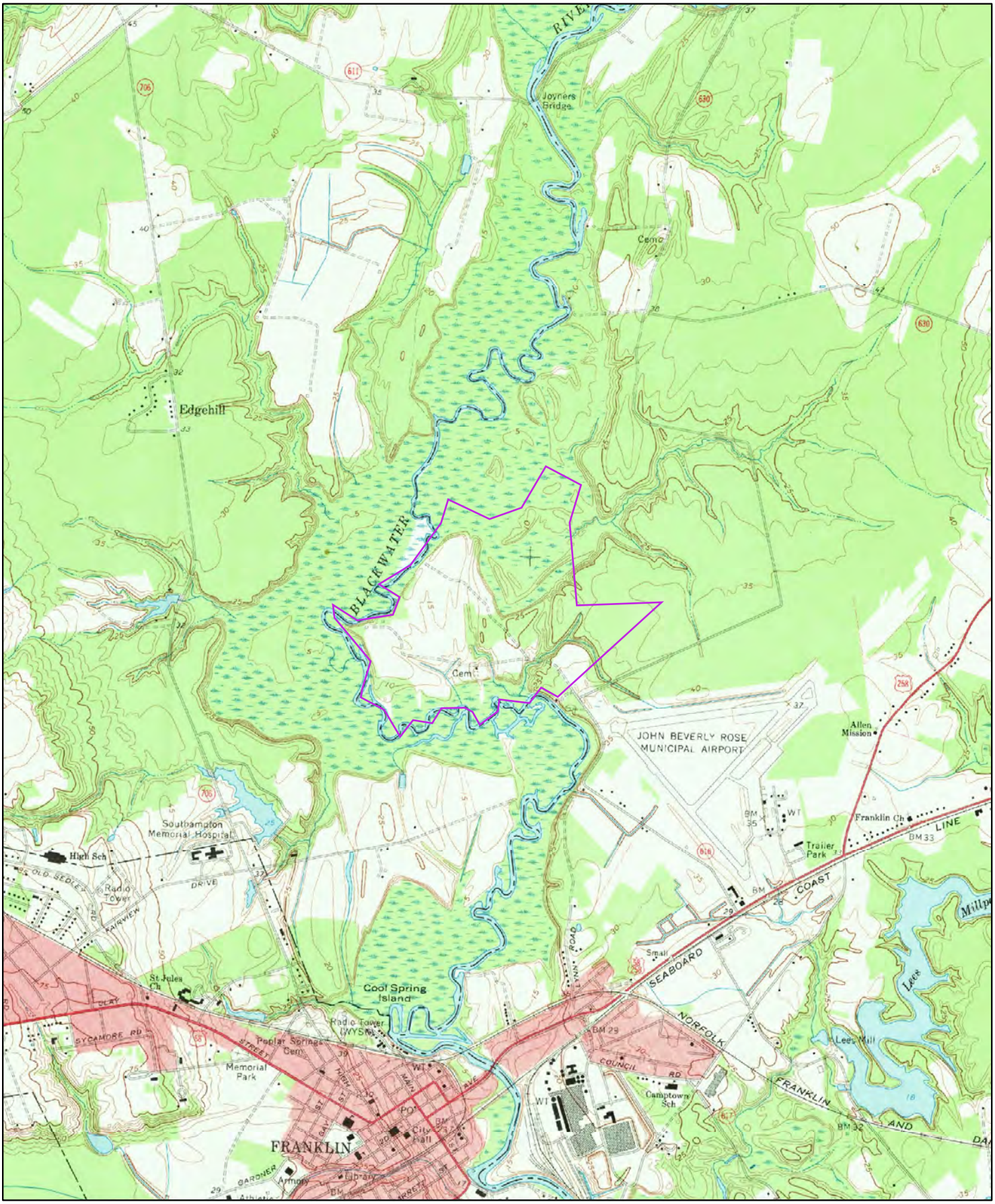
1973

0 0.2 0.4 0.8 1.2 Miles

Order No. 21060800097

Quadrangle(s): Franklin,VA

Source: USGS 7.5 Minute Topographic Map



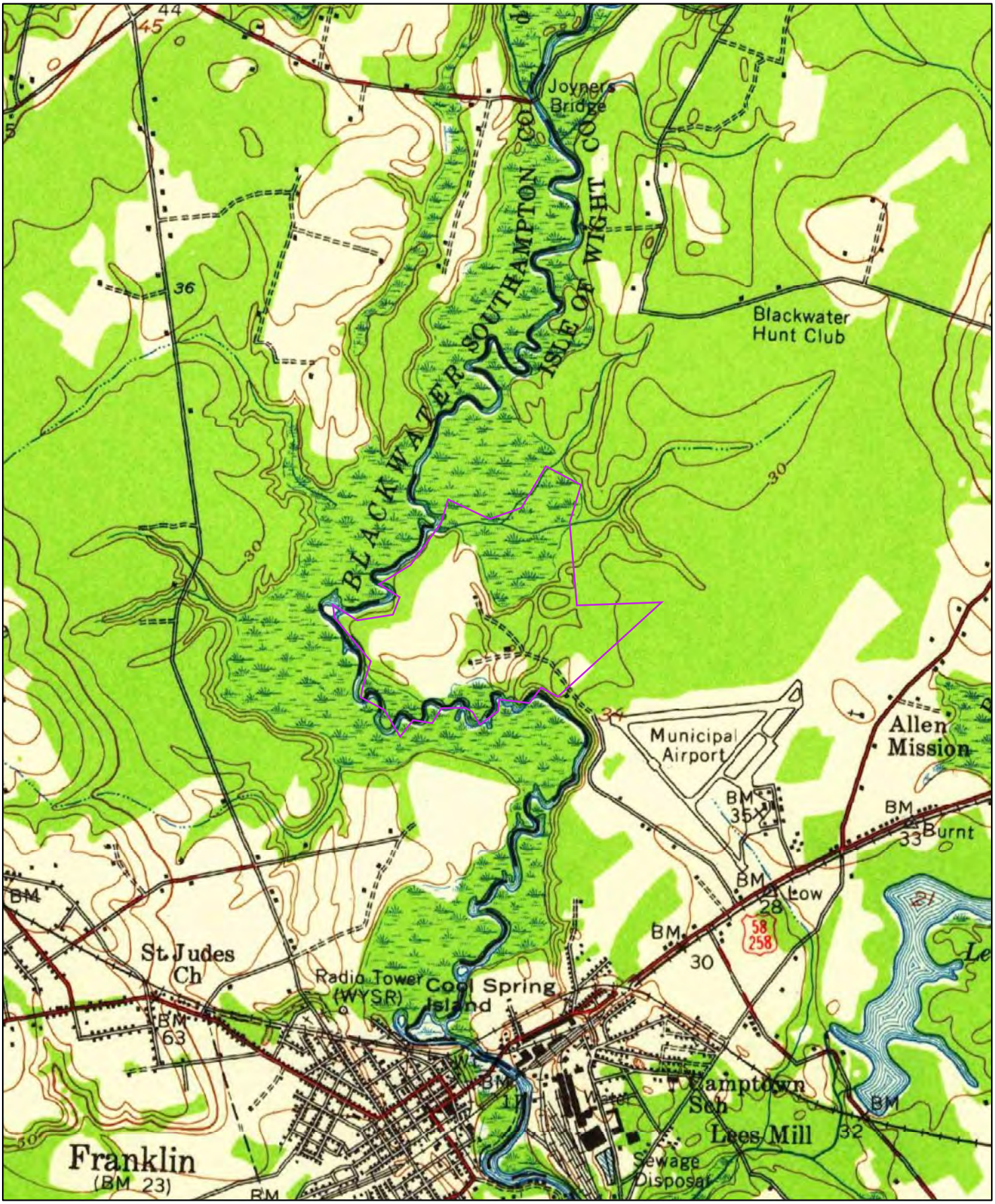
1967

0 0.2 0.4 0.8 1.2 Miles

Order No. 21060800097

Quadrangle(s): Franklin,VA

Source: USGS 7.5 Minute Topographic Map



1957

0 0.2 0.4 0.8 1.2 Miles

Order No. 21060800097

Quadrangle(s): Holland,VA

Source: USGS 15 Minute Topographic Map

1943

0 0.2 0.4 0.8 1.2 Miles

Order No. 21060800097

Quadrangle(s): Holland,VA

Source: USGS 15 Minute Topographic Map

1920

0 0.2 0.4 0.8 1.2 Miles

Order No. 21060800097

Quadrangle(s): Holland,VA

Source: USGS 15 Minute Topographic Map

APPENDIX 9

ASTM QUESTIONNAIRE

ASTM User Questionnaire

In order to qualify for one of the Landowner Liability Protections offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the user must provide the following information (if available) to the environmental professional. Failure to provide this information could result in a determination that "all appropriate inquiry" is not complete.

(1.) Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25). Are you aware of any environmental cleanup liens against the *property* that are filed or recorded under federal, tribal, state or local law? No

(2.) Activity and land use limitations that are in place on the or that have been filed or recorded in a registry (40 CFR 312.26).
Are you aware of any AULs, such as *engineering controls*, land restrictions or *institutional controls* that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law? No

(3.) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).
As the *user* of this *ESA* do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used in this type of business? The LLP is in the construction industry

(4.) Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29).
Does the purchase price being paid for this property reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property?
Purchase price was negotiated and based upon a fair market vale.

(5.) Commonly known or *reasonably ascertainable* information about the *property* (40 CFR 312.30).

Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example, as user, Active sand borrow pit.

(a.) Do you know of any past uses of the *property*?
Farming & Sand Borrow Pit.

(b.) Do you know of any specific chemicals that are present or once were present at the *property*?
No

(c.) Do you know of spills or chemical releases that have taken place at the *property*?
No

(d.) Do you know of any environmental cleanups that have taken place at the *property*?
No

(6.) The degree of obviousness of the presence of likely presence of contamination at the *property*, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the *user* of this *ESA*, based on your knowledge and experience related to the *property* are there any obvious indicators that point to the presence or likely presence of contamination at the *property*? No

X3.1 In addition, certain information should be collected, if available, and provided to the *environmental professional* selected to conduct the Phase I. This information is intended to assist the *environmental professional* but is not necessarily required to qualify for one of the LLPs.

This information includes:

(a) the reason why the Phase I is required.
Typical due diligence of a property transaction.

(b) the type of *property* and type of *property* transaction, for example, sale, purchase, exchange, etc.
Purchase property

(c) the complete and correct address for the *property* (a map or other documentation showing *property* location and boundaries is helpful), 32082 Airport Drive

(d) the scope of services desired for the Phase I (including whether any parties to the *property* transaction may have a required standard scope of services on whether any considerations beyond the requirements of Practice E 1527 are to be considered), 1527-13

(e) identification of all parties who will rely on the Phase I *report*,
Curtis Contracting

(f) identification of the site contact and how the contact can be reached,
Brian Vaughn (757) 641-9000

(g) any special terms and conditions which must be agreed upon by the *environmental professional*, and

(h) any other knowledge or experience with the property that may be pertinent to the *environmental professional* (for example, copies of any available prior *environmental site assessment reports*, documents, correspondence, etc., concerning the *property* and its environmental condition.)
No

CURTIS CONTRACTING, INC.
Post Office Box 769
West Point, Virginia 23181
(804) 843-4633/FAX: (804) 843-2545
website: www.curtiscontracting.net

April 26, 2022

OPERATIONS & RECLAMATION PLAN

Curtis Contracting, Inc. plans to utilize this property as a commercial source for the sale of sand material. This location will provide a much needed source for the construction industry, as well as homeowners, in Isle of Wight County and the surrounding area.

This property is currently permitted through the Department of Mines and Mineral Energy (permit number 90400AA copy attached) and will be operated under strict accordance with their laws and regulations, along with the requirements of Isle of Wight County.

We have requested a permit for approximately 150 acres, which will encompass all future mining possibilities on the property. This site will potentially operate Monday through Friday, from 7:00 am to 5:30 pm, with occasional work on Saturdays.

The excavation area is .9 miles from the nearest public road or residence and 3200 feet from the end of a public road. The proposed haul road is shown on the map included with this package. A gate is in place at the property line that will remain locked when the site is not in use. The haul road will be maintained with gravel and monitored for dust control. Dust is to be controlled with a spray type water truck and/or calcium chloride.

We anticipate approximately 1-2 feet of topsoil overburden, which will be stockpiled in the middle of the property, away from waterways and hauls roads and utilized for reclamation purposes. Stockpiles will be tracked and seeded to be used for reclamation purposes, and/or screened to sell.

Excavation of all sand materials will be removed from the impounded area via tracked excavator and loaded with a wheel loader. A temporary scale will be installed on the property, along with a small shelter to house the scale equipment and technician. Signs will be posted for proper ingress and egress of trucks through the property.

Overburden is estimated to be approximately 12 inches. Excavation is anticipated to be from 5-10 feet in most locations. There are some area where the sand deposit could reach 15 feet. There will be occasions where a screen will be used to process multiple gradations of material.

Any and all disturbance will occur inside the limits of the impoundment. There will be no possibility of erosion, or runoff affecting outside areas. As the limits of an area are reached, we plan to shape all

finished slopes to a 3:1 grade. All disturbed areas will be stabilized with a permanent seed mixture at a rate of 85 pounds/acre. Finished slopes will be completed and stabilized in phases as the limits of the excavation will allow.

This proposed facility will be operated in a safe and professional manner. Care will be taken to protect the environment, as well as our neighbors and the public.

DMME will provide constant inspection of the site, while in operation, monitoring safety and environmental compliance. A certified mining Foreman will be assigned to the property to supervise all activities associated with the facility.

This site could produce enough sand material to allow mining operations to continue for another 30+ years. Once the excavation operation ceases, all pond slopes will be stabilized with topsoil and vegetation. Contours outside of the ponds will be not be disturbed and existing vegetation will be preserved. Impoundments that are created from mining operations will remain intact and produce habitat for fish, waterfowl and other indigenous species to thrive. The surrounding property will remain as agricultural and/or potential camp ground/park.

EROSION & SEDIMENT CONTROL PLAN

FOR

WHITLEY-HAWKINS BORROW PIT EXPANSION

AT

32083 AIRPORT ROAD,
FRANKLIN, VIRGINIA 23851

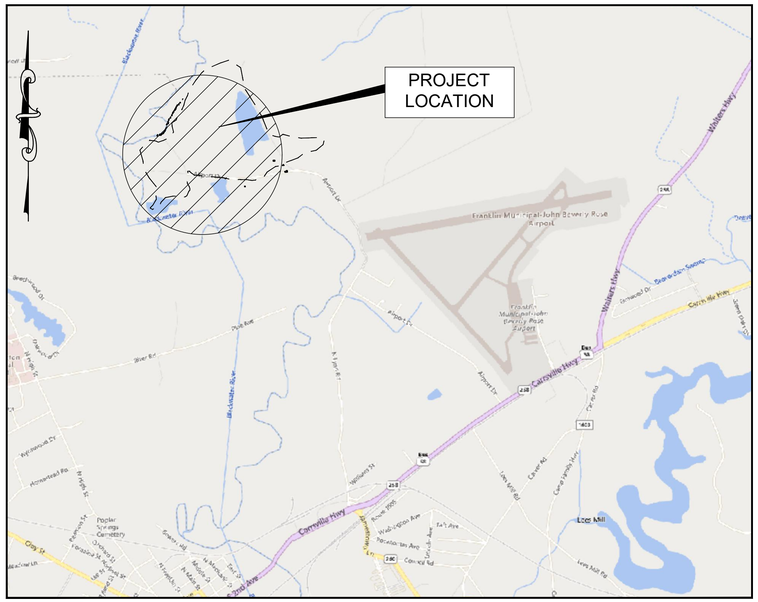
INDEX OF SHEETS	
NUMBER	SHEET TITLE
C001	COVER SHEET
C101	OVERALL PLAN
C102	EROSION & SEDIMENT CONTROL PLAN
C103	EROSION & SEDIMENT CONTROL PLAN
C104	EROSION & SEDIMENT CONTROL PLAN
C105	EROSION & SEDIMENT CONTROL PLAN
C106	E & SC NARRATIVE & MS-19 CHECKLIST, MISC. DETAILS
C107	DETAILS & OPERATIONS PLAN
C108	HAUL PLAN
C109	PRIOR APPROVAL HISTORY & APPLICANT INFO

EROSION & SEDIMENT CONTROL LEGEND

- (CE) STD. 3.02 - TEMPORARY CONSTRUCTION ENTRANCE
- (CRS) STD. 3.03 - CONSTRUCTION ROAD STABILIZATION
- (DD) STD. 3.09 - TEMPORARY DIVERSION DIKE
- (CD) STD. 3.20 ROCK CHECK DAMS
- (SCC) STD. 3.17 STORMWATER CONVEYANCE CHANNEL
- (TO) STD. 3.30 - TOPSOILING
- (TS) STD. 3.31 - TEMPORARY SEEDING
- (PS) STD. 3.32 PERMANENT SEEDING
- (DC) STD. 3.39 - DUST CONTROL

SEQUENCE OF CONSTRUCTION:

1. CALL VA811
2. OBTAIN ALL REQUIRED PERMITS.
3. HOLD A PRE-CONSTRUCTION MEETING ON-SITE WITH CIVIL INSPECTOR.
4. INSTALL ALL EROSION CONTROLS AS SHOWN ON PLAN.
5. PERFORM MINING/EXCAVATING ACTIVITIES.
6. COMPLETE FINAL RECLAMATION PLAN.
7. FINE GRADE SITE AND STABILIZE SITE WITH ACCEPTABLE GROUNDCOVER.
8. REMOVE ALL TEMPORARY EQUIPMENT, CONSTRUCTION MATERIALS, AND DEBRIS FROM THE SITE.
9. ALL TEMPORARY EROSION CONTROLS SHALL BE REMOVED 30 DAYS AFTER FINAL STABILIZATION OR AS DIRECTED BY THE CIVIL INSPECTOR.



VICINITY MAP
SCALE: 1" = 1500'

GRAPHIC SCALE
0 1500' 3000'
SCALE 1" = 1500'

va811.com Dig With CARE

For ALL excavation work ANYWHERE in Virginia!
Call 811 or 1-800-552-7001

DMME PERMIT # 90400AA

SITE DATA:

OWNER: WHITLEY HAWKINGS HOLDINGS, LLC
22225 HARVEST DRIVE
FRANKLIN, VA 23851

OTHER D.M.M.E. BORROW PIT PERMITS HELD BY APPLICANT: # 90498AA

PARCEL IDS: 68-01-001 & 68-01-002

LEGAL: 75 AC & STRIP 75 AC PLAT BK & ADJ ALEX HOWELL PLAT BK5/176

RESPONSIBLE LAND DISTURBER:
NAME: _____
CERTIFICATE NUMBER: _____

COUNTY APPROVAL STAMPS

GENERAL EROSION AND SEDIMENT CONTROL NOTES

ES-1: UNLESS OTHERWISE INDICATED, ALL VEGETATED AN STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS 4VAC50-30.

ES-2: THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION

ES-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.

ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES

ES-5: PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION AND CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

ES-6: THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION AND CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

ES-7: ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

ES-8: URING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.

ES-9: THE CONTRACTOR SHALL INSPECT ALL EROSION AND CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN EFFECTIVENESS OF EROSION AND CONTROL DEVICES SHALL BE IMMEDIATELY.

CHESAPEAKE BAY SITE SOLUTIONS
CIVIL ENGINEERING CONSULTING
P.O. BOX 6663
VIRGINIA BEACH, VA. 23456
PH.: 757-575-3715
www.chesapeakebaysitesolutions.com

PLAN REVISION MODIFICATION

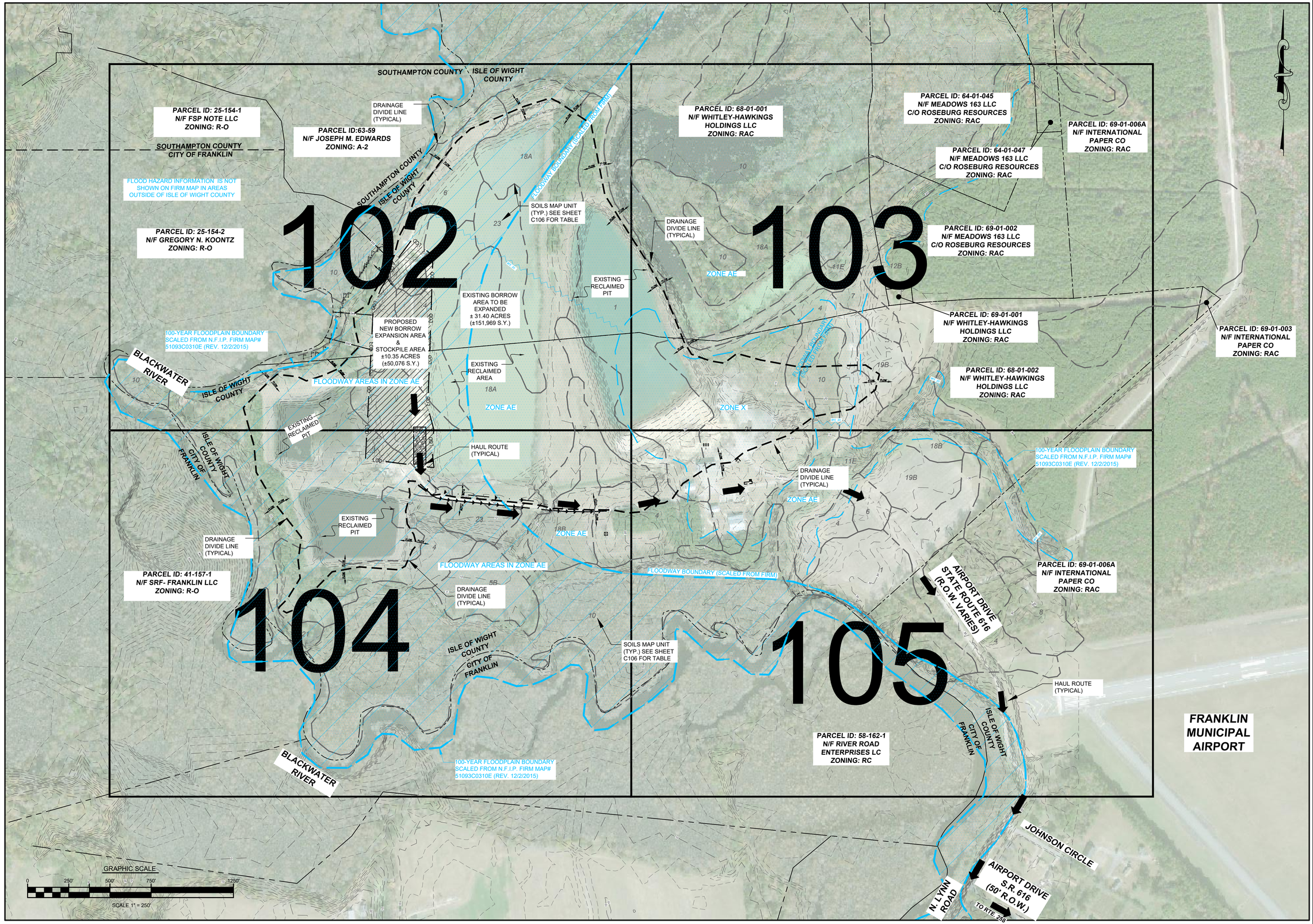
DATE

COMMONWEALTH OF VIRGINIA
GREGORY O. MILSTEAD
Lic. No. 047323
4/27/2022
PROFESSIONAL ENGINEER

COVER SHEET

WHITLEY-HAWKINS BORROW PIT EXPANSION
32083 AIRPORT DRIVE
FRANKLIN, VA 23851

SHEET NO.
C001



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PLAN REVISION MODIFICATION

DATE

COMMONWEALTH OF VIRGINIA
GREGORY O. MILSTEAD
Lic. No. 047323
4/27/2022
PROFESSIONAL ENGINEER

OVERALL PLAN

WHITLEY-HAWKINS BORROW PIT EXPANSION

32083 AIRPORT DRIVE
FRANKLIN, VA 23851

SHEET NO.
C101

DURING BORROW ACTIVITES, ALL SOIL STOCK PILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON THE SITE.

PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREA WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THIS SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR. IN ACCORDANCE WITH MS-1. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM AND MATURE ENOUGH TO SURVIVE AND INHIBIT EROSION.

DRAINAGE DIVIDE LINE (TYPICAL)

100-YEAR FLOODPLAIN BOUNDARY SCALED FROM N.F.I.P. FIRM MAP# 51093C0310E (REV. 12/2/2015)

FLOOD HAZARD INFORMATION IS NOT SHOWN ON FIRM MAP IN AREAS OUTSIDE OF ISLE OF WIGHT COUNTY

LIMITS OF WETLANDS FLAGGING (TYPICAL)

355'

AS EXCAVATION / BORROW ACTIVITIES PROGRESS GRADE ALL FINISHED SLOPES S 3:1 OR BETTER AND IMMEDIATELY STABILIZE WITH TOPSOIL AND PERMANENT SEEDING AT A RATE OF 85 LBS/ACRE (TYPICAL)

EDGE OF EXCAVATION OF BORROW PIT EXPANSION SHALL BE LOCATED NO LESS THAN TWO HUNDRED (200) FEET FROM ADJOINING PROPERTY LINES AND THAT SETBACK AREA CANNOT BE USED FOR ANY PURPOSE DURING THE PERIOD OF EXCAVATION, INCLUDING OVERBURDEN AND SPOIL STORAGE, EXCEPT AS ACESS AND TEMORARY TOPSOIL STORAGE.

244'

292'

PROPOSED NEW BORROW EXPANSION AREA ±10.35 ACRES (±450686 S.F.)

EXISTING BORROW AREA TO BE EXPANDED ± 31.40 ACRES (±151,969 S.Y.)

DRAINAGE DIVIDE LINE (TYPICAL)

FLOODWAY BOUNDARY SCALED FROM FIRM

BFE 20

RECLAIMED PIT

RECLAIMED PIT

INSTALL CONSTRUCTION ENTRANCE OR RUMBLE RACK TO REMOVE LOOSE DEBRIS FROM TRUCKS PRIOR TO HAULING

FLOODWAY AREAS IN ZONE AE

ZONE X

ZONE AE

TO PS DC CE

FLOW

GRAPHIC SCALE
0 100' 200' 300' 500'
SCALE 1" = 100'

MATCH LINE, SEE PLAN SHEET C103

MATCH LINE, SEE PLAN SHEET C104

CHESAPEAKE BAY SITE SOLUTIONS
CIVIL ENGINEERING CONSULTING
P.O. BOX 6663
VIRGINIA BEACH, VA. 23456
PH.: 757-575-3715
www.chesapeakebaysitesolutions.com

PLAN REVISION MODIFICATION

DATE

COMMONWEALTH OF VIRGINIA
GREGORY O. MILSTEAD
Lic. No. 047323
4/27/2022
PROFESSIONAL ENGINEER

EROSION & SEDIMENT CONTROL PLAN

WHITLEY-HAWKINS BORROW PIT EXPANSION

32083 AIRPORT DRIVE
FRANKLIN, VA 23851

SHEET NO.
C102

MATCH LINE, SEE PLAN SHEET C102

ZONE AE

100-YEAR FLOODPLAIN BOUNDARY
SCALED FROM N.F.I.P. FIRM MAP#
51093C0310E (REV. 12/2/2015)

10

20

15

FLOW

FLOW

FLOW

FLOW

FLOW

FLOW

ZONE AE

100-YEAR FLOODPLAIN BOUNDARY
SCALED FROM N.F.I.P. FIRM MAP#
51093C0310E (REV. 12/2/2015)

ZONE AE

DRAINAGE
DIVIDE LINE
(TYPICAL)

RECLAIMED
PIT

ZONE AE

ZONE X

BFE 20

BFE 20

MATCH LINE, SEE PLAN SHEET C105

DURING BORROW ACTIVITES, ALL SOIL STOCK PILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON THE SITE.

PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREA WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THIS SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR, IN ACCORDANCE WITH MS-1. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM AND MATURE ENOUGH TO SURVIVE AND INHIBIT EROSION.

GRAPHIC SCALE
0 100' 200' 300' 500'
SCALE 1" = 100'

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WHITLEY-HAWKINS BORROW PIT EXPANSION

32083 AIRPORT DRIVE
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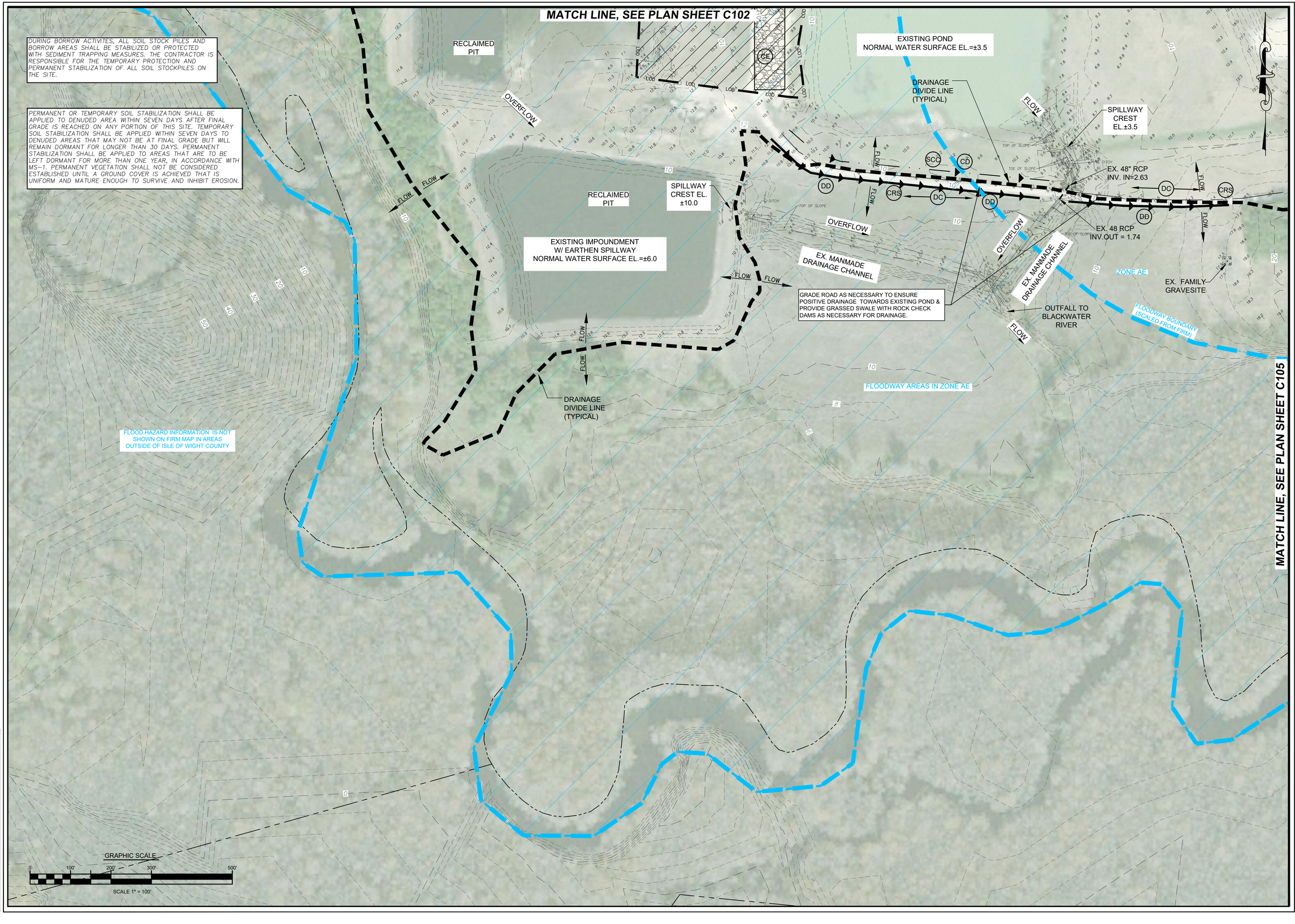
SHEET NO.
C103



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32083 AIRPORT DRIVE
FRANKLIN, VA 23851

SHEET NO.
C104

5 OF 10

MATCH LINE, SEE PLAN SHEET C103

MATCH LINE, SEE PLAN SHEET C104

ZONE X

ZONE AE

APPROXIMATE LOCATION OF EXISTING SEPTIC FIELD

APPROXIMATE LOCATION OF EXISTING WELL

DRAINAGE DIVIDE LINE (TYPICAL)

APPROXIMATE LOCATION OF TEMPORARY SCALE SHED AND SCALE (ZONE X)

100-YEAR FLOODPLAIN BOUNDARY SCALED FROM N.F.I.P. FIRM MAP# 51093C0310E (REV. 12/2/2015)

FLOODWAY AREAS IN ZONE AE

BFE 20

DURING BORROW ACTIVITES, ALL SOIL STOCK PILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE CONTRACTOR IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON THE SITE.

PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREA WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THIS SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR, IN ACCORDANCE WITH MS-1. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT IS UNIFORM AND MATURE ENOUGH TO SURVIVE AND INHIBIT EROSION.

WHERE HAUL ROAD MEETS PAVED ASPHALT ON US STATE RT. 616 CONTRACTOR WILL CLEAN ROAD THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA.

GRAPHIC SCALE

0 100' 200' 300' 500'

SCALE 1" = 100'

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EROSION & SEDIMENT CONTROL PLAN

WHITLEY-HAWKINS BORROW PIT EXPANSION

32083 AIRPORT DRIVE
FRANKLIN, VA 23851

SHEET NO.
C105

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO EXPAND AN EXISTING SAND BORROW PIT. THE PROJECT WILL INVOLVE ONGOING BORROW PIT OPERATIONS TO INCLUDE EXCAVATING, LOADING, AND HAULING NATURAL SAND FILL EXCAVATED FROM THE BORROW PIT. IMPROVEMENTS WILL INCLUDE A NEW SCALE AND SMALL SCALE HOUSE. THE PROJECT SITE IS LOCATED AT 32083 AIRPORT ROAD, FRANKLIN, VA. 23851. TOTAL LAND DISTURBANCE IS APPROXIMATELY ± 150 ACRES (MAX. REMAINING MINING POTENTIAL).

EXISTING SITE CONDITIONS

THE EXISTING SITE IS A MIX OF AGRICULTURAL LAND AND PONDS FROM PREVIOUS BORROW ACTIVITIES. THE SITE IS CURRENTLY SERVED MY SEPTIC AND WELL. MINING AND EXCAVATION ACTIVITIES ON THE SITE ARE ONGOING AND WILL CONTINUE FOR THE FORESEEABLE FUTURE. EXISTING IMPROVEMENTS ON SITE INCLUDE (4) - FOUR POLE STYLE SHEDS FOR EQUIPMENT STORAGE AND ACCESS ROADS TO EXISTING BORROW AREAS. THE SITE IS GENERALLY GRADED SUCH THAT ALL RUNOFF IS DIRECTED TOWARDS THE EXISTING CONVERTED PONDS ONSITE. EXISTING SLOPES ON SITE RANGE GENERALLY FROM 3% TO 10% WITH STEEPER SLOPES OF 30% PERCENT AROUND THE BANKS OF THE EXISTING PONDS. THE SITE IS WELL STABILIZED WITH EXISTING GROUND COVER. THE PROJECT SITE IS LOCATED IN THE ALBEMARLE SOUND AND RUNOFF FROM THE SITE DRAINS TO THE BLACKWATER RIVER BEFORE ENTERING THE CHOWAN RIVER, ULTIMATELY DRAINING TO THE ALBEMARLE SOUND.

ADJACENT SITE

THE PROJECT AREA IS GENERALLY BOUND TO THE NORTH, EAST, AND WEST BY BLACKWATER RIVER AND TO THE EAST BY EXISTING AGRICULTURAL LAND , FLOODPLAN AND FRANKLIN MUNICIPAL AIRPORT.

OFF-SITE AREAS

THERE WILL BE NO OFF-SITE AREAS DISTURBED AS A RESULT OF THIS PROJECT. THE CONTRACTOR SHALL LOCATE TEMPORARY SOIL STOCKPILES AS SHOWN ON THE PLANS OR AS APPROVED BY THE COUNTY INSPECTOR. SOIL STOCKPILES SHALL BE PROTECTED WITH TEMPORARY SILT FENCE AND STABILIZED WITH SEED AND MULCH OR OTHERWISE BE PROTECTED WITH SEDIMENT TRAPPING MEASURES.

CRITICAL EROSION AREAS

STEEP SLOPES HAVE BEEN AVOIDED TO THE GREATEST EXTENT POSSIBLE AND AREAS WITH DISTURBANCE WILL RECEIVE STABILIZATION MEASURES TO REDUCE THE AMOUNT OF EROSION. ALL OTHER AREAS WITHIN THE PROJECT SITE CONSISTS OF GENTLE SLOPES WITH SOILS THAT HAVE SLIGHT TO MODERATE ERODIBILITY.

EROSION AND SEDIMENT CONTROL AREAS

EROSION AND SEDIMENT CONTROL MEASURES WILL INCLUDE A COMBINATION, CONSTRUCTION ENTRANCES, CONSTRUCTION ROAD STABILIZATION, DUST CONTROL, DIVERSION DIKES, STORMWATER CONVEYANCE CHANNELS, ROCK CHECK DAMS, AND VEGETATIVE STABILIZATION (TEMPORARY & PERMANENT SEEDING, TOP SOILING). WHEN BORROW LIMITS ARE REACHED FOR AN AREA, ALL SLOPES WILL BE GRADED 3:1 OR BETTER AND IMMEDIATELY STABILIZED WITH PERMANENT SEEDING AND TOPSOIL AS NECESSARY UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION, 1992 AND THE MINIMUM STANDARDS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS. THE COUNTY EROSION AND SEDIMENT CONTROL INSPECTOR HAS THE AUTHORITY TO ADD OR DELETE EROSION AND SEDIMENT CONTROLS AS NECESSARY IN THE FIELD AS SITE CONDITIONS CHANGE.

TEMPORARY CONSTRUCTION ENTRANCE - STD. & SPEC. 3.02 - THE CONTRACTOR WILL INSTALL A CONSTRUCTION ENTRANCE OR RUMBLE RACK TO REDUCE THE AMOUNT OF MATERIAL TRANSPORTED OFF-SITE BY CONSTRUCTION VEHICLES. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED FOR THE DURATION OF THE LAND DISTURBING ACTIVITIES.

TEMPORARY SEEDING - STD. & SPEC. 3.31 - ALL DENUDED AREAS LEFT DORMANT FOR EXTENDED PERIODS OF TIME WILL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED AND BASED ON VA ESC TEMPORARY SEEDING TABLE FOR COASTAL PLAIN.

PERMANENT SEEDING - STD. & SPEC. 3.32 - AT COMPLETION OF FINAL GRADING ACTIVITIES, CONTRACTOR WILL APPLY SEED TO ALL DENUDED AREAS AT A RATE OF 85LBS / ACRE AND IN ACCORDANCE WITH VA ESC PERMANENT SEEDING TABLE FOR COASTAL PLAIN.

DUST CONTROL - STD. & SPEC. 3.39 - THE CONTRACTOR WILL CONTROL DUST GENERATED FROM LAND DISTURBING ACTIVITIES USING A COMBINATION OF WATER TRUCK IN COMBINATION WITH OTHER LISTED EROSION SEDIMENT CONTROLS. A WATER TRUCK WILL BE KEPT ON SITE AT ALL TIMES. DURING DRY MONTHS WATER THE ROAD EVERY 2- 3 HOURS FOR DUST CONTROL AS NEEDED. WATERING WILL BE CONDUCTED ALONG THE ENTIRE GRAVEL ACCESS ROAD. STREET SWEEPING AND SEDIMENT REMOVAL WILL BE PERFORMED WHERE ACCESS ROAD MEETS PAVED ROADWAY.

DIVERSION DIKE - STD. & SPEC. 3.09 - CONTRACTOR WILL UTILIZE DIVERSION DIKES AS NECESSARY TO DIVERT RUNOFF AWAY FROM UNPROTECTED DISTURBED AREAS AND SLOPES.

CONSTRUCTION ROAD STABILIZATION - STD. & SPEC. 3.03 - CONTRACTOR WILL STABILIZE ALL ACCESS ROADS AS NECESSARY IMMEDIATELY AFTER GRADING.

STORMWATER CONVEYANCE CHANNEL - STD. & SPEC. 3.17 - CONTRACTOR WILL INSTALL AND MAINTAIN GRASS-LINED CONVEYANCE CHANNELS TO DIVERT RUNOFF IN ACCORDANCE WITH THE PLANS AND VA ESC STD & SPEC. 3.17.

ROCK CHECK DAMS - STD. & SPEC. 3.20 - CONTRACTOR WILL INSTALL AND MAINTAIN ROCK CHECK DAMS IN ACCORDANCE WITH THE PLANS AND VA ESC STD & SPEC. 3.17

PERMANENT STABILIZATION

PERMANENT SEEDING SHALL BE APPLIED TO ALL DISTURBED AREAS THROUGHOUT THE PROJECT. THE ACTUAL SEEDING SCHEDULES ARE DEPICTED ON SHEET C-102.

STORMWATER RUNOFF

ALL STORMWATER RUNOFF FROM LAND DISTURBANCING ACTIVITIES WILL BE DIRECTED TOWARDS THE EXISTING PONDS ON SITE. DUE TO THE NATURE OF THE LAND DISTURBING ACTIVITY NO INCREASE IN RUNOFF, SEDIMENT DEPOSITION OR EROSION FOR ANY PROPERTIES UPSTREAM OR DOWNSTREAM OF THE PROJECT IS ANTICIPATED.

MAINTENANCE SCHEDULE

IN GENERAL, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED DAILY, MAINTAINED CONTINUOUSLY, RELOCATED AS NECESSARY, AND SHALL BE WATERED, FERTILIZED, RESEEDED AND MULCHED AS NECESSARY TO OBTAIN A DENSE STAND OF GRASS. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

1. STONE HAUL ROADS WILL BE MONITORED DAILY FOR DUST AND MAINTAINED WITH A WATER TRUCK TO CONTROL DUST. CONTRACTOR WILL MONITOR CONNECTION POINT WHERE TRUCKS TRANSITION FROM STONE HAUL ROAD TO PUBLIC PAVED ROADWAY AND SWEEP DAILY AS NECESSARY.
2. THE SEEDED AREAS WILL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RE-SEED AS NEEDED.
3. THE TEMPORARY CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

SOILS

MULTIPLE SOILS TYPES EXIST ON SITE; THREE (3) MAIN SOIL TYPES ARE FOUND IN THE EXCAVATION LIMITS. THESE SOILS ARE ALAGA FINE SAND (HSG 'A'), CHIPPLEY SAND (HSG 'A') AND SLAGLE FINE SANDY LOAM (HSG 'C'). ALL SOILS ARE CLASSIFIED AS WELL DRAINED OR BETTER AND HAVE A RUNOFF CLASS OF LOW OR BETTER.

PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, OR THE FINAL RELEASE OF ANY PERMIT AUTHORIZING A LAND-DISTURBING ACTIVITY, ALL DISTURBED OR DENUDED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL LAW AND REGULATIONS BY SUCH METHODS AS, BUT NOT LIMITED, TEMPORARY SEEDING, PERMANENT SEEDING, SOD OR SOIL STABILIZATION BLANKETS AND MATTING. THE BUILDING CODE OFFICIAL MAY AUTHORIZE A TEMPORARY CERTIFICATE OF OCCUPANCY WITHOUT THE REQUIRED SOIL STABILIZATION IF THE FAILURE TO STABILIZE IS DUE TO CIRCUMSTANCES BEYOND THE CONTROL OF THE PERMIT HOLDER.

PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL LAW AND REGULATIONS.

Virginia Erosion and Sediment Control Plan Minimum Standards (MS) Checklist

Yes	N/A	4VAC50-30-40 Minimum Standards	Describe how MS is addressed on plan
X		MS1: Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site. Temporary soil stabilization shall be applied within seven days to denuded areas that may not be at final grade but will remain dormant for longer than 14 days. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year.	NOTE IS PROVIDED ON PLAN
X		MS2: During construction of the project, soil stock piles and borrow areas shall be stabilized or protected with sediment trapping measures. The applicant is responsible for the temporary protection and permanent stabilization of all soil stockpiles on site as well as borrow areas and soil intentionally transported from the project site.	NOTE IS PROVIDED ON PLAN
X		MS3: A permanent vegetative cover shall be established on denuded areas not otherwise permanently stabilized. Permanent vegetation shall not be considered established until a ground cover is achieved that is uniform, mature enough to survive and will inhibit erosion.	NOTE IS PROVIDED ON PLAN
	X	MS4: Sediment basins and traps, perimeter dikes, sediment barriers and other measures intended to trap sediment shall be constructed as a first step in any land-disturbing activity and shall be made functional before upslope land disturbance takes place.	NOT APPLICABLE
	X	MS5: Stabilization measures shall be applied to earthen structures such as dams, dikes and diversions immediately after installation.	NOT APPLICABLE
	X	MS6: Sediment traps and sediment basins shall be designed and constructed based upon the total drainage area to be served by the trap or basin. a. The minimum storage capacity of a sediment trap shall be 134 cubic yards per acre of drainage area and the trap shall only control drainage areas less than three acres. b. Surface runoff from disturbed areas that is comprised of flow from drainage areas greater than or equal to three acres shall be controlled by a sediment basin. The minimum storage capacity of a sediment basin shall be 134 cubic yards per acre of drainage area. The outfall system shall, at a minimum, maintain the structural integrity of the basin during a 25-year storm of 24-hour duration. Runoff coefficients used in runoff calculations shall correspond to a bare earth condition or those conditions expected to exist while the sediment basin is utilized	NOT APPLICABLE
x		MS7: Cut and fill slopes shall be designed and constructed in a manner that will minimize erosion. Slopes that are found to be eroding excessively within one year of permanent stabilization shall be provided with additional slope stabilizing measures until the problem is corrected.	NOTE IS PROVIDED ON PLAN
	X	MS8: Concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure.	NOT APPLICABLE
	X	MS9: Whenever water seeps from a slope face, adequate drainage or other protection shall be provided.	NOT APPLICABLE
	X	MS10: All storm sewer inlets that are made operable during construction shall be protected so that sediment-laden water cannot enter the conveyance system without first being filtered or otherwise treated to remove sediment.	NOT APPLICABLE
X		MS11: Before newly constructed stormwater conveyance channels or pipes are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel.	NOTE IS PROVIDED ON PLAN
	X	MS12: When work in a live watercourse is performed, precautions shall be taken to minimize encroachment, control sediment transport and stabilize the work area to the greatest extent possible during construction. Nonerodible material shall be used for the construction of causeways and cofferdams. Earthen fill may be used for these structures if armored by nonerodible cover materials.	NOT APPLICABLE
	X	MS13: When a live watercourse must be crossed by construction vehicles more than twice in any six-month period, a temporary vehicular stream crossing constructed of nonerodible material shall be provided.	NOT APPLICABLE
	X	MS14: All applicable federal, state and local chapters pertaining to working in or crossing live watercourses shall be met.	NOT APPLICABLE
	X	MS15: The bed and banks of a watercourse shall be stabilized immediately after work in the watercourse is completed.	NOT APPLICABLE
	X	MS16: Underground utility lines shall be installed in accordance with the following standards in addition to other applicable criteria: a. No more than 500 linear feet of trench may be opened at one time. b. Excavated material shall be placed on the uphill side of trenches. c. Effluent from dewatering operations shall be filtered or passed through an approved sediment trapping device, or both, and discharged in a manner that does not adversely affect flowing streams or off-site property. d. Material used for backfilling trenches shall be properly compacted in order to minimize erosion and promote stabilization. e. Restabilization shall be accomplished in accordance with this chapter. f. Applicable safety chapters shall be complied with.	NOT APPLICABLE
X		MS17: Where construction vehicle access routes intersect paved or public roads, provisions shall be made to minimize the transport of sediment by vehicular tracking onto the paved surface. Where sediment is transported onto a paved or public road surface, the road surface shall be cleaned thoroughly at the end of each day. Sediment shall be removed from the roads by shoveling or sweeping and transported to a sediment control disposal area. Street washing shall be allowed only after sediment is removed in this manner. This provision shall apply to individual development lots as well as to larger land disturbing activities.	NOTES ARE PROVIDED ON THE PLANS INDICATING THAT THE CONTRACTOR IS TO CLEAN SURFACE AT THE END OF EACH DAY AND WILL PROVIDE CONTINUAL DUST CONTROL MEASURES
X		MS18: All temporary erosion and sediment control measures shall be removed within 30 days after final site stabilization or after the temporary measures are no longer needed, unless otherwise authorized by the VESCP authority. Trapped sediment and the disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion and sedimentation.	NOTE IS PROVIDED ON PLANS
	X	MS19: Properties and waterways downstream from development sites shall be protected from sediment deposition, erosion and damage due to increases in volume, velocity and peak flow rate of stormwater runoff for the stated frequency storm of 24-hour duration in accordance with the following standards and criteria. Stream restoration and relocation projects that incorporate natural channel design concepts are not man-made channels and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels: a. Concentrated stormwater runoff leaving a development site shall be discharged directly into an adequate natural or man-made receiving channel, pipe or storm sewer system. For those sites where runoff is discharged into a pipe or pipe system, downstream stability analyses at the outfall of the pipe or pipe system shall be performed. b. Adequacy of all channels and pipes shall be verified in the following manner: 1) The applicant shall demonstrate that the total drainage area to the point of analysis within the channel is one hundred times greater than the contributing drainage area of the project in question; or 2) (a) Natural channels shall be analyzed by the use of a two-year storm to verify that stormwater will not overtop channel banks nor cause erosion of channel bed or banks. (b) All previously constructed man-made channels shall be analyzed by the use of a ten-year storm to verify that stormwater will not overtop its banks and by the use of a two-year storm to demonstrate that stormwater will not cause erosion of channel bed or banks; and (c) Pipes and storm sewer systems shall be analyzed by the use of a ten-year storm to verify that stormwater will be contained within the pipe or system. c. If existing natural receiving channels or previously constructed man-made channels or pipes are not adequate, the applicant shall: 1) Improve the channels to a condition where a ten-year storm will not overtop the banks and a two-year storm will not cause erosion to channel the bed or banks; or 2) Improve the pipe or pipe system to a condition where the ten-year storm is contained within the appurtenances; 3) Develop a site design that will not cause the pre-development peak runoff rate from a two year storm to increase when runoff outfalls into a natural channel or will not cause the predevelopment peak runoff rate from a ten-year storm to increase when runoff outfalls into a manmade channel; or 4) Provide a combination of channel improvement, stormwater detention or other measures which is satisfactory to the VESCP authority to prevent downstream erosion. d. The applicant shall provide evidence of permission to make the improvements. e. All hydrologic analyses shall be based on the existing watershed characteristics and the ultimate development condition of the subject project. f. If the applicant chooses an option that includes stormwater detention, he shall obtain approval from the VESCP of a plan for maintenance of the detention facilities. The plan shall set forth the maintenance requirements of the facility and the person responsible for performing the maintenance. g. Outfall from a detention facility shall be discharged to a receiving channel, and energy dissipators shall be placed at the outfall of all detention facilities as necessary to provide a stabilized transition from the facility to the receiving channel. h. All on-site channels must be verified to be adequate. i. Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property shall be diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility. j. In applying these stormwater management criteria, individual lots or parcels in a residential, commercial or industrial development shall not be considered to be separate development projects. Instead, the development, as a whole, shall be considered to be a single development project. Hydrologic parameters that reflect the ultimate development condition shall be used in all engineering calculations. k. All measures used to protect properties and waterways shall be employed in a manner which minimizes impacts on the physical, chemical and biological integrity of rivers, streams and other waters of the state. l. Any plan approved prior to July 1, 2014, that provides for stormwater management that addresses any flow rate capacity and velocity requirements for natural or man-made channels shall satisfy the flow rate capacity and velocity requirements for natural or man-made channels if the practices are designed to i. detain the water quality volume and to release it over 48 hours; ii. detain and release over a 24-hour period the expected rainfall resulting from the one year, 24- hour storm; and iii. reduce the allowable peak flow rate resulting from the 1.5, 2, and 10-year, 24-hour storms to a level that is less than or equal to the peak flow rate from the site assuming it was in a good forested condition, achieved through multiplication of the forested peak flow rate by a reduction factor that is equal to the runoff volume from the site when it was in a good forested condition divided by the runoff volume from the site in its proposed condition, and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels as defined in any regulations promulgated pursuant to § 10.1-562 or 10.1-570 of the Act. m. For plans approved on and after July 1, 2014, the flow rate capacity and velocity requirements of § 10.1-561 A of the Act and this subsection shall be satisfied by compliance with water quantity requirements in the Stormwater Management Act (§ 10.1-603.2 et seq. of the Code of Virginia) and attendant regulations, unless such land disturbing activities are in accordance with 4VAC50-60-48 of the Virginia Stormwater Management Program (VSMP) Permit Regulations. n. Compliance with the water quantity minimum standards set out in 4VAC50-60-66 of the Virginia Stormwater Management Program (VSMP) Permit Regulations shall be deemed to satisfy the requirements of Minimum Standard 19.	NOT APPLICABLE

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1	Alaga fine sand	64.9	7.5%
3	Chickahominy silt loam	29.6	3.4%
4	Chipley sand	42.3	4.9%
5B	Emporia fine sandy loam, 2 to 6 percent slopes	5.0	0.6%
6	Kenansville loamy sand	8.8	1.0%
7	Kinston loam	16.7	1.9%
8	Leon-Chipley sands	4.3	0.5%
10	Nawney loam	119.0	13.8%
11E	Nevarc and Remlik soils, 15 to 35 percent slopes	21.8	2.5%
12A	Peawick silt loam, 0 to 2 percent slopes	96.4	11.2%
12B	Peawick silt loam, 2 to 6 percent slopes	24.5	2.8%
18A	Slagle fine sandy loam, 0 to 2 percent slopes	51.2	5.9%
18B	Slagle fine sandy loam, 2 to 6 percent slopes	5.5	0.6%
19A	Uchee loamy sand, 0 to 2 percent slopes	3.1	0.4%
19B	Uchee loamy sand, 2 to 6 percent slopes	7.5	0.9%
21	Udorthents, loamy	28.7	3.3%
23	Yemassee fine sandy loam	8.4	1.0%
W	Water	20.1	2.3%
Subtotals for Soil Survey Area		**557.6**	**64.7%**
Totals for Area of Interest		**862.0**	**100.0%**

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
1B	Alaga loamy sand, 0 to 6 percent slopes	0.1	0.0%
4A	Bibb sandy loam, 0 to 2 percent slopes, frequently flooded	250.1	29.0%
10A	Craven fine sandy loam, 0 to 2 percent slopes	3.3	0.4%
17A	Nansemond loamy fine sand, 0 to 2 percent slopes	6.4	0.7%
18F	Nevarc and Remlik soils, 15 to 65 percent slopes	13.3	1.5%

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
21A	Pactolus loamy fine sand, 0 to 2 percent slopes, rarely flooded	6.3	0.7%
22A	Riverview sandy loam, 0 to 2 percent slopes, frequently flooded	1.7	0.2%
26A	Slagle fine sandy loam, 0 to 2 percent slopes	0.1	0.0%
W	Water	22.9	2.7%
Subtotals for Soil Survey Area		**304.3**	**35.3%**
Totals for Area of Interest		**862.0**	**100.0%**

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P.O. BOX 6663
VIRGINIA BEACH, VA. 23456
PH.: 757-575-3715
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PLAN REVISION MODIFICATION

DATE

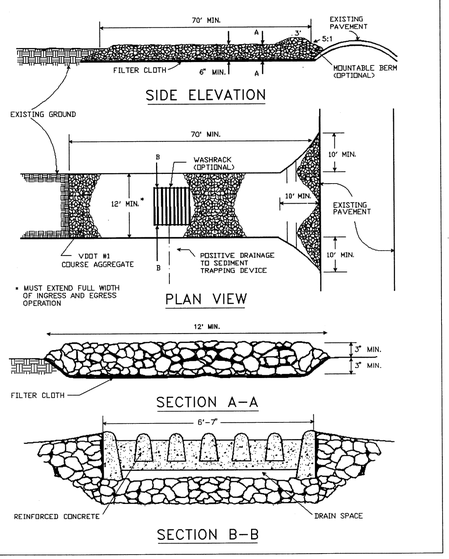
COMMONWEALTH OF VIRGINIA
GREGORY O. MILSTEAD
Lic. No. 047323
4/27/2022
PROFESSIONAL ENGINEER

E & SC NARRATIVE & MS-19 CHECKLIST MISCELLANEOUS DETAILS

WHITLEY-HAWKINS BORROW PIT EXPANSION
32083 AIRPORT DRIVE
FRANKLIN, VA 23851

SHEET NO.
C106

STONE CONSTRUCTION ENTRANCE



Source: Adapted from 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC

Plate 3.02-1

TABLE 3.32-E
(Revised June 2003)
PERMANENT SEEDING SPECIFICATIONS FOR COASTAL PLAIN AREA

SEED[1]		
LAND USE	**SPECIES**	**APPLICATION RATES**
Minimum Care Lawn (Commercial or Residential)	Tall Fescue[1] **or** Bermudagrass[1]	175 - 200 lbs. 75 lbs.
High-Maintenance Lawn	Tall Fescue[1] **or** Bermudagrass[1] (seed) **or** Bermudagrass[1] (by other vegetative establishment method, see Std. & Spec. 3.34)	200-250 lbs. 40 lbs. (unhulled) 30 lbs. (hulled)
General Slope (3:1 or less)	Tall Fescue[1] Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop[2]	128 lbs. 2 lbs. 20 lbs. TOTAL: 150 lbs.
Low-Maintenance Slope (Steeper than 3:1)	Tall Fescue[1] Bermudagrass[1] Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop[2] Sericea Lespedeza[3]	93-108 lbs. 0-15 lbs. 2 lbs. 20 lbs. 20 lbs. TOTAL: 150 lbs.

1 - When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.cses.vt.edu/html/Turf/turf/publications/publications2.html

2 - Use seasonal nurse crop in accordance with seeding dates as stated below:

February, March - April	Annual Rye
May 1st - August	Foxtail Millet
September, October - November 15th	Annual Rye
November 16th - January	Winter Rye

3 - May through October, use hulled seed. All other seeding periods, use unhulled seed. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 -40 lbs/acre.

FERTILIZER & LIME

- Apply 10-20-10 **fertilizer** at a rate of **500** lbs. / acre (or 12 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:
- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
- Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
- When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

TABLE 3.31-B
(Revised June 2003)
TEMPORARY SEEDING SPECIFICATIONS
QUICK REFERENCE FOR ALL REGIONS

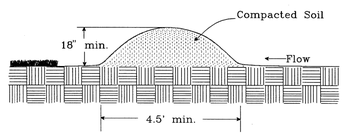
SEED		
APPLICATION DATES	**SPECIES**	**APPLICATION RATES**
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (lolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	50 -100 (lbs/acre)
Feb. 16 - Apr. 30	Annual Ryegrass (lolium multi-florum)	60 - 100 (lbs/acre)
May 1 - Aug. 31	German Millet	50 (lbs/acre)

FERTILIZER & LIME

- Apply 10-10-10 **fertilizer** at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

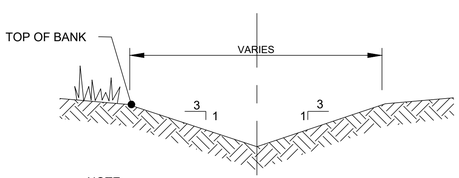
NOTE:
1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
2 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
3 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

TEMPORARY DIVERSION DIKE



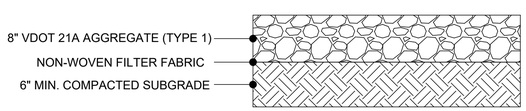
Source: Va. DSWC

Plate 3.09-1



NOTE:
THE SWALE MUST BE STABILIZED IMMEDIATELY AFTER GRADING WITH JUTE MESH

GRASSED SWALE TYPICAL SECTION
NOT TO SCALE



GRAVEL ROADWAY SECTION
NOT TO SCALE

CURTIS CONTRACTING, INC.
Post Office Box 769
West Point, Virginia 23181
(804)843-4633/FAX: (804) 843-2545
website: www.curtiscontracting.net

April 26, 2022

OPERATIONS & RECLAMATION PLAN

Curtis Contracting, Inc. plans to utilize this property as a commercial source for the sale of sand material. This location will provide a much needed source for the construction industry, as well as homeowners, in Isle of Wight County and the surrounding area.

This property is currently permitted through the Department of Mines and Mineral Energy (permit number 90400AA copy attached) and will be operated under strict accordance with their laws and regulations, along with the requirements of Isle of Wight County.

We have requested a permit for approximately 150 acres, which will encompass all future mining possibilities on the property. This site will potentially operate Monday through Friday, from 7:00 am to 5:30 pm, with occasional work on Saturdays.

The excavation area is .9 miles from the nearest public road or residence and 3200 feet from the end of a public road. The proposed haul road is shown on the map included with this package. A gate is in place at the property line that will remain locked when the site is not in use. The haul road will be maintained with gravel and monitored for dust control. Dust is to be controlled with a spray type water truck and/or calcium chloride.

We anticipate approximately 1-2 feet of topsoil overburden, which will be stockpiled in the middle of the property, away from waterways and hauls roads and utilized for reclamation purposes. Stockpiles will be tracked and seeded to be used for reclamation purposes, and/or screened to sell.

Excavation of all sand materials will be removed from the impounded area via tracked excavator and loaded with a wheel loader. A temporary scale will be installed on the property, along with a small shelter to house the scale equipment and technician. Signs will be posted for proper ingress and egress of trucks through the property.

Overburden is estimated to be approximately 12 inches. Excavation is anticipated to be from 5-10 feet in most locations. There are some area where the sand deposit could reach 15 feet. There will be occasions where a screen will be used to process multiple gradations of material.

Any and all disturbance will occur inside the limits of the impoundment. There will be no possibility of erosion, or runoff affecting outside areas. As the limits of an area are reached, we plan to shape all finished slopes to a 3:1 grade. All disturbed areas will be stabilized with a permanent seed mixture at a rate of 85 pounds/acre. Finished slopes will be completed and stabilized in phases as the limits of the excavation will allow.

This proposed facility will be operated in a safe and professional manner. Care will be taken to protect the environment, as well as our neighbors and the public.

DMME will provide constant inspection of the site, while in operation, monitoring safety and environmental compliance. A certified mining Foreman will be assigned to the property to supervise all activities associated with the facility.

This site could produce enough sand material to allow mining operations to continue for another 30+ years. Once the excavation operation ceases, all pond slopes will be stabilized with topsoil and vegetation. Contours outside of the ponds will be not be disturbed and existing vegetation will be preserved. Impoundments that are created from mining operations will remain intact and produce habitat for fish, waterfowl and other indigenous species to thrive. The surrounding property will remain as agricultural and/or potential camp ground/park.

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PLAN REVISION MODIFICATION

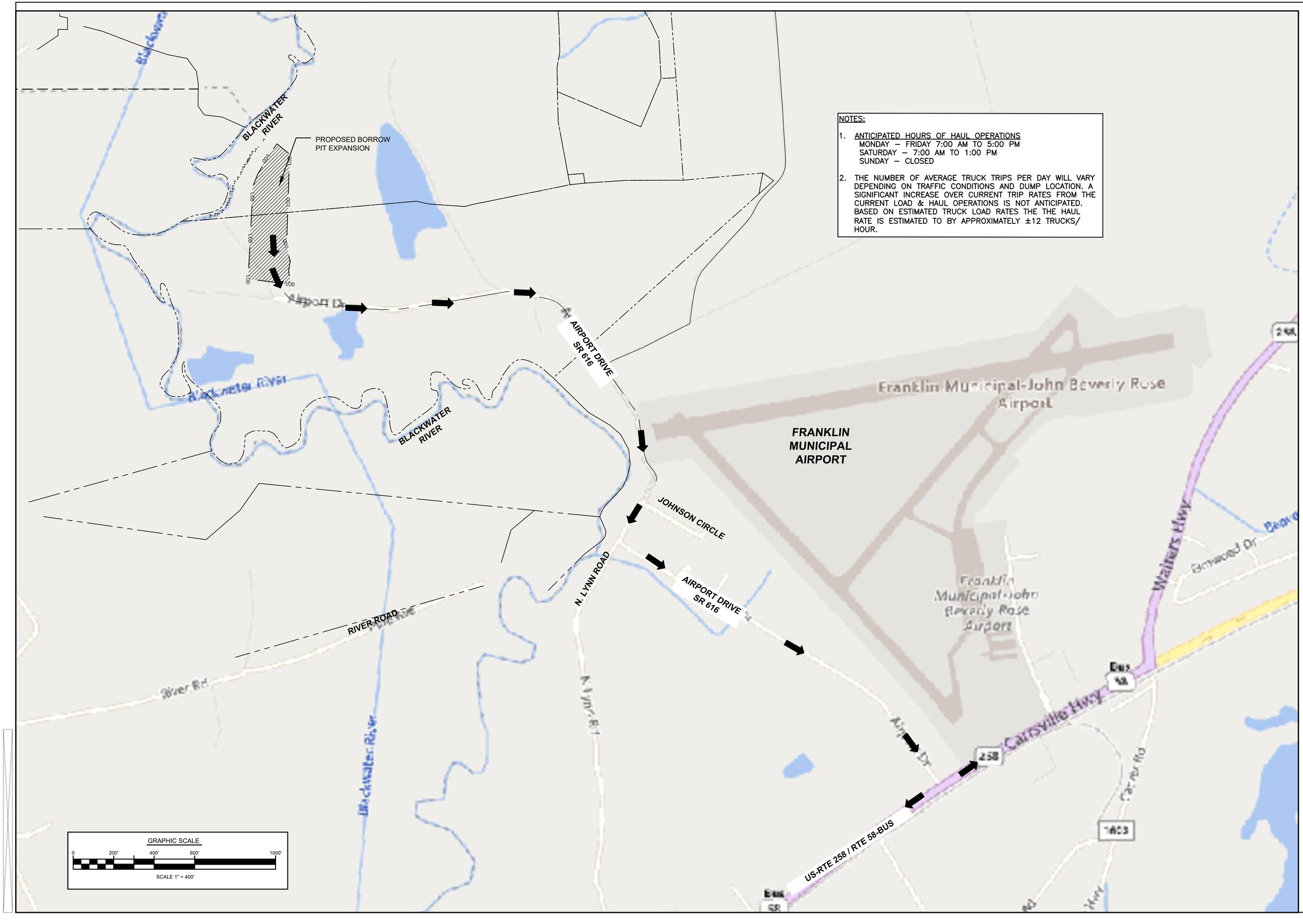
DATE

COMMONWEALTH OF VIRGINIA
GREGORY O. MILSTEAD
Lic. No. 047323
4/27/2022
PROFESSIONAL ENGINEER

DETAILS & OPERATIONS PLAN

WHITLEY-HAWKINS BORROW PIT EXPANSION
32083 AIRPORT DRIVE
FRANKLIN, VA 23851

SHEET NO.
C107



NOTES:

1. ANTICIPATED HOURS OF HAUL OPERATIONS
   MONDAY – FRIDAY 7:00 AM TO 5:00 PM
   SATURDAY – 7:00 AM TO 1:00 PM
   SUNDAY – CLOSED

2. THE NUMBER OF AVERAGE TRUCK TRIPS PER DAY WILL VARY DEPENDING ON TRAFFIC CONDITIONS AND DUMP LOCATION. A SIGNIFICANT INCREASE OVER CURRENT TRIP RATES FROM THE CURRENT LOAD & HAUL OPERATIONS IS NOT ANTICIPATED. BASED ON ESTIMATED TRUCK LOAD RATES THE THE HAUL RATE IS ESTIMATED TO BY APPROXIMATELY ±12 TRUCKS/ HOUR.

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PLAN REVISION MODIFICATION

DATE

COMMONWEALTH OF VIRGINIA
GREGORY O. MILSTEAD
Lic. No. 047323
4/27/2022
PROFESSIONAL ENGINEER

HAUL PLAN

WHITLEY-HAWKINS BORROW PIT EXPANSION

32083 AIRPORT DRIVE
FRANKLIN, VA 23851

SHEET NO.
C108

COUNTY of ISLE OF WIGHT
THE COURTHOUSE

February 26, 2004

Mr. Whitley-Hawkins Holding, LLC
33006 Green Oaks Lane
Franklin, Va. 23851

Dear Mr. Whitley:

Your request for a Conditional Use Permit for a borrow pit was considered and approved by the Isle of Wight County Board of Supervisors at its meeting on February 16, 2004. This approval has a time limitation of five (5) years from the date of approval.

Should you have any questions regarding this matter, please feel free to contact me.

Sincerely,

Jonathan W. Hartley
Director of Planning and Zoning

JWH/swr

P.O. BOX 80 • ISLE OF WIGHT • VIRGINIA 23397 • (757) 357-3191 • www.co.isle-of-wight.va.us

STAFF REPORT

APPLICATION:

The application of Whitley-Hawkins Holdings LLC for a variance to Section 4306 "Use Regulations" of the Flood Plain Management District in the Isle of Wight County Zoning Ordinance. This section prohibits certain uses within the Flood Plain Management District. The variance will allow a borrow pit operation on 215 acres of land known as the "Bunch Farm" located off of Airport Drive (Rt. 616) in the Carrsville Election District.

BACKGROUND:

The applicant has operated a borrow pit on the property of some magnitude for the past 28 years. In evaluating an application for a new operating permit (proposed Conditional Use Permit) it was determined that the proposed site is located in the Flood Plain and Floodway along the Blackwater River. Section 4306 of the County Zoning Ordinance prohibits surface mining and borrow pits in the floodplain. The applicant is applying for a variance to continue to use the property for a small borrow pit operation.

The floodplain regulations contained in Section 4300 et al of the Zoning ordinance are intended to minimize and reduce property damage during flooding events. These provisions also contain specific criteria to be considered by the Board of Zoning Appeals when a variance is requested, in addition to the general requirements of Section 12003. A copy of these criteria is attached.

The applicant has addressed each one of the criteria in their letter dated December 2, 2003. The most critical issue with a borrow pit is to assure that floodwaters are not displaced or diverted so as to increase downstream flooding.

FINDINGS:

In accordance with Section 12003 of the Zoning Ordinance, the Board of Zoning Appeals shall not authorize a variance unless it finds:

1) **That the strict application of the Zoning Ordinance would produce an undue hardship.**

The property in question has been used as a borrow pit for almost three decades. The outright prohibition under the flood plain management regulations in Section 4203 would now prohibit that use, unless a variance is granted. However, this operation has occurred with little to no know impact on the floodplain to date. In addition the owner has indicated a willingness to not impede or displace floodwaters in the operation of the pit. Depriving the applicant of the continued use as a borrow pit, under the circumstances, might be viewed as a hardship.

2) **That such hardship is not shared generally by other properties in the same zoning district and same vicinity.**

This borrow pit is the only such operation in the vicinity, and is unique as to its location and operation.

3) **That the authorization of such variance will not be of substantial detriment to adjacent property and the character of the district will not change by the granting of the variance.**

The property in question is located in a very remote uninhabited location adjacent to the Blackwater River. The continued operation of the borrow pit will have little to no impact on the surrounding properties or the zoning district.

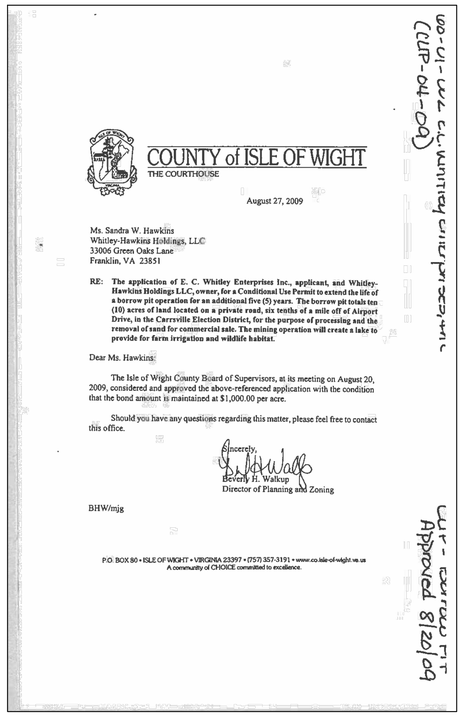
4) **That the condition or situation of the property is not of so general or recurring a nature as to make reasonable practical the formulation of a general regulation to be adopted as an amendment to the ordinance.**

OPERATIONS SCHEDULE	
ESTIMATED START OF EXCAVATION ACTIVITIES	UPON APPROVAL
ESTIMATED END DATE OF EXCAVATION ACTIVITIES	5 YEARS

In the opinion of staff, the circumstances associated with the proposed borrow pit are not so general or recurring a nature as to warrant an amendment of the zoning ordinance.

STAFF RECOMMENDATION:

The variance requested is unique in that it represents one of the first to be considered by the County from the flood plain regulations. However, if one looks at the intent and purpose of the requirements, it is to protect life and property from damage during a major flood event. In the specific instance posed by the applicant, the intent is to avoid any mining or borrow pit operation that would berm low areas or otherwise divert or deflect floodwaters in a manner that would increase flood elevations or modify the areas that could be impacted by flooding. The applicant has indicated a willingness to prevent such occurrences. **Therefore, staff recommends approval of the variance requested.**



COUNTY of ISLE OF WIGHT
THE COURTHOUSE

August 27, 2009

Ms. Sandra W. Hawkins
Whitley-Hawkins Holdings, LLC
33006 Green Oaks Lane
Franklin, VA 23851

RE: **The application of E. C. Whitley Enterprises Inc., applicant, and Whitley-Hawkins Holdings LLC, owner, for a Conditional Use Permit to extend the life of a borrow pit operation for an additional five (5) years. The borrow pit totals ten (10) acres of land located on a private road, six tenths of a mile off of Airport Drive, in the Carrsville Election District, for the purpose of processing and the removal of sand for commercial sale. The mining operation will create a lake to provide for farm irrigation and wildlife habitat.**

Dear Ms. Hawkins:

The Isle of Wight County Board of Supervisors, at its meeting on August 20, 2009, considered and approved the above-referenced application with the condition that the bond amount is maintained at $1,000.00 per acre.

Should you have any questions regarding this matter, please feel free to contact this office.

Sincerely,

Beverly H. Walkup
Director of Planning and Zoning

BHW/mjg

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A community of CHOICE committed to excellence.

08-01-WEL E.C. Whitley enterprises (CUP-04-09)

CUP - Extend 5 yr Approved 8/20/09

APPLICANT ZONING INFORMATION TABLE	
NAME OF MATERIAL TO BE MINED	NATURAL SAND
LAND DESCRIPTION	THE PROPERTY IS AN EXISTING SANDPIT CONSISTING OF SEVERAL IMPOUNDMENTS THAT HAVE BEEN EXCAVATED OVER THE LAST 20 YEARS. THE TOTAL PARCEL SIZE IS 290 ACRES, OF WHICH WE PLAN TO MINE APPROXIMATELY 150 ACRES. SOME OF THE EXISTING PONDS CAN BE EXPANDED WHILE NEW IMPOUNDMENTS WILL BE CREATED, ALL WHILE MAINTAINING THE PROPER BUFFERS TO ALL BOUNDARIES AND WETLANDS.
NAME AND ADDRESS OF THE OWNER OF THE SURFACE OF THE LAND	CURTIS CONTRACTING, INC. P.O. BOX 769 WEST POINT VA. 23181
NAME AND ADDRESS OF THE OWNER OF THE MINERAL, ORE, OR OTHER SOLID MATTER	CURTIS CONTRACTING, INC. P.O. BOX 769 WEST POINT VA. 23181
SOURCE OF OPERATOR'S LEGAL RIGHT TO ENTER AND CONDUCT OPERATIONS ON THE LAND TO BE COVERED BY PERMIT	RECORDED DEED
TOTAL NUMBER OF ACRES OF LAND COVERED BY THE PERMIT	±11 ACRES
ESTIMATE OF DISTURBED ACRES FROM MINING OPERATIONS ON THE AREA TO BE COVERED BY THE PERMIT DURING THE ENSUING YEAR	±3 ACRES
BORROW PIT PERMITS HELD BY APPLICANT	NONE
NAME AND ADDRESS OF APPLICANT	CURTIS CONTRACTING, INC. P.O. BOX 769 WEST POINT VA. 23181
IF KNOWN, WHERE THE APPLICANT OR ANY SUBSIDIARY OR AFFILIATE OR ANY PARTNERSHIP, ASSOCIATION, TRUST OR CORPORATION CONTROLLED BY OR UNDER COMMON CONTROL WITH THE APPLICANT, OR ANY PERSON REQUIRED TO BE IDENTIFIED BY SUBSECTION 3.I. OF THIS SECTION, HAS EVER HAD A BORROW PERMIT OF ANY TYPE ISSUED UNDER THE LAWS OF THIS OR ANY OTHER STATE REVOKED OR HAS EVER HAD A MINING OR OTHER BOND, OR SECURITY DEPOSIT IN LIEU OF BOND, FORFEITED;	NO
PROVIDE AN ESTIMATION OF THE TOTAL NUMBER OF CUBIC YARDS TO BE EXCAVATED;	2.5 MILLION CUBIC YARDS
PROVIDE THE PROPOSED DATE ON WHICH EXCAVATION OPERATIONS WILL COMMENCE, THE PROPOSED DATE ON WHICH SUCH OPERATION WILL BE COMPLETED AND THE PROPOSED DATE ALL REQUIRED RESTORATION MEASURES WILL BE COMPLETED;	PROPOSED COMMNENCEMENT DATE: APRIL 2022 COMPLETION DATE: TBD RESTORATION DATE: TBD
NAME AND ADDRESS OF OPERATOR	CURTIS CONTRACTING, INC. P.O. BOX 769 WEST POINT VA. 23181

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CIVIL ENGINEERING CONSULTING
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PLAN REVISION MODIFICATION

DATE

COMMONWEALTH OF VIRGINIA
GREGORY O. MILSTEAD
Lic. No. 047323
4/27/2022
PROFESSIONAL ENGINEER

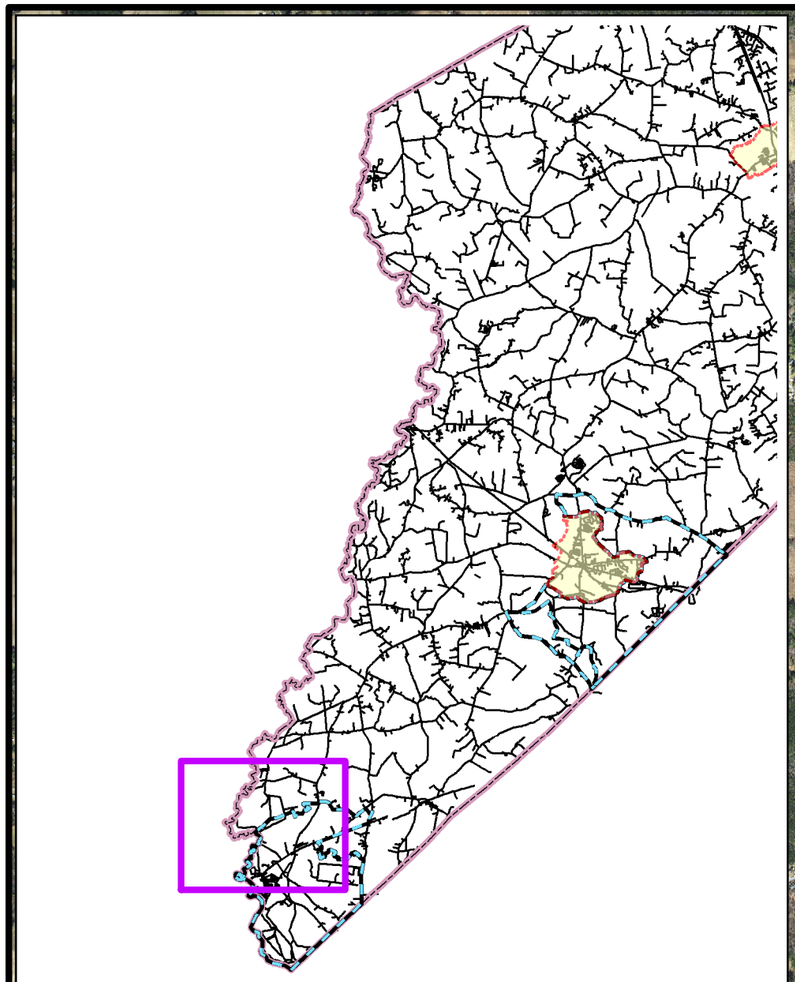
PRIOR PERMITS & APPLICANT INFORMATION

WHITLEY-HAWKINS
BORROW PIT EXPANSION
32083 AIRPORT DRIVE
FRANKLIN, VA 23851

SHEET NO.
C109
10 OF 10

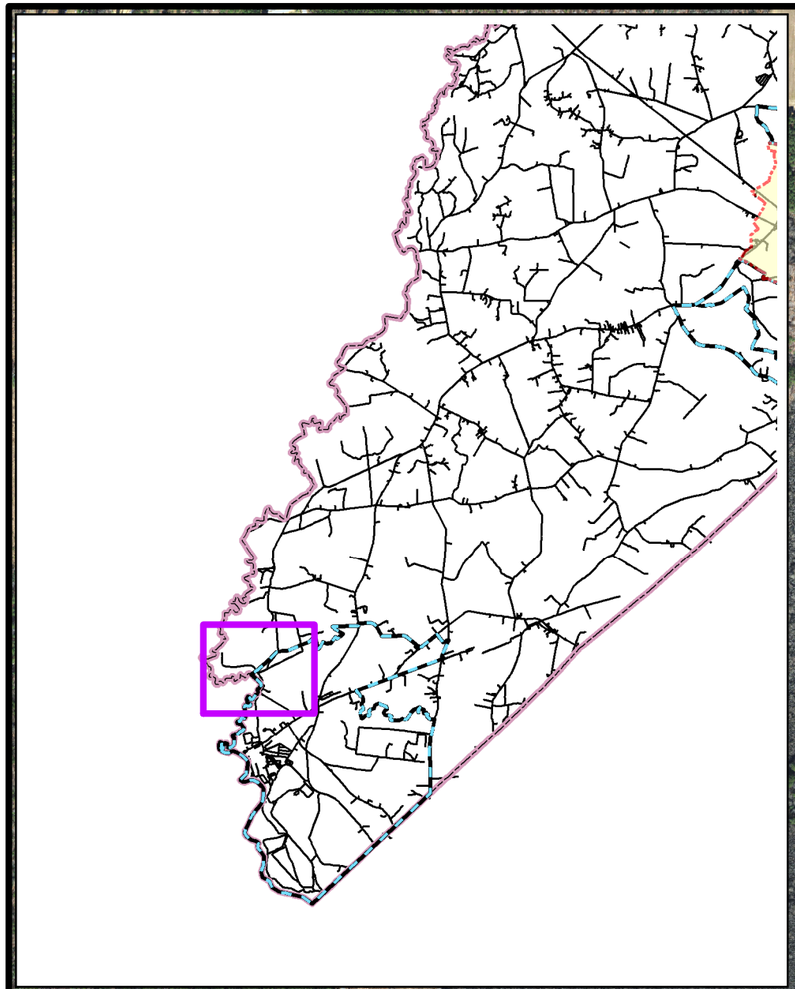
Whitley-Hawkins Borrow Pit CUP - Vicinity Map

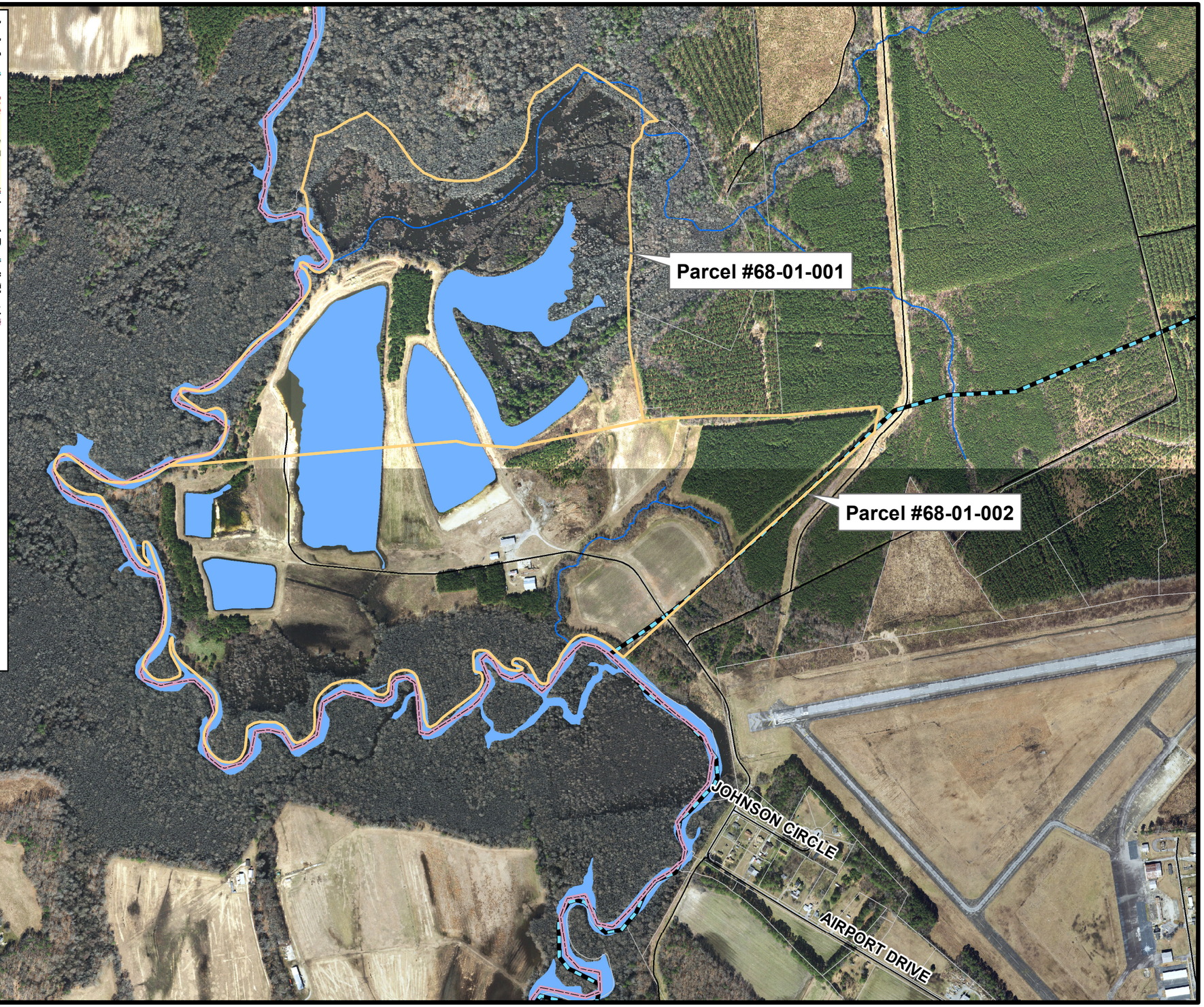
Local Roots, Global Reach
ISLE OF WIGHT COUNTY, VIRGINIA



Whitley-Hawkins Borrow Pit CUP - Property Map

Local Roots, Global Reach
ISLE OF WIGHT COUNTY, VIRGINIA





Legend

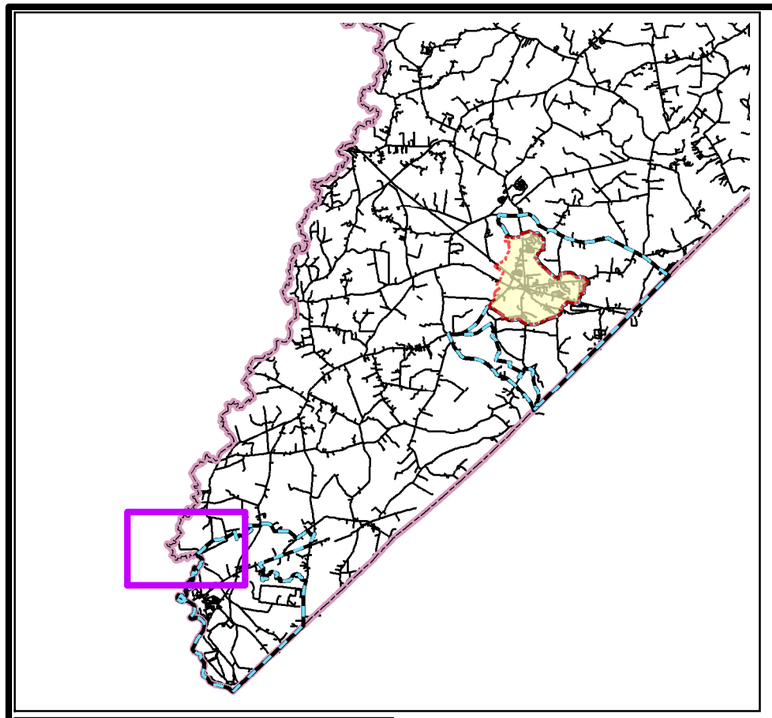
- Road Center Lines
- County Boundary
- Development Service Districts
- Parcels
- Rivers & Lakes

N

0 500 1,000 1,500 2,000 Feet

Whitley-Hawkins Borrow Pit CUP - Zoning Map

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA



Legend

- Road Center Lines
- Development Service Districts
- Parcels
- General Commercial
- General Industrial
- General Industrial Conservation
- Limited Commercial
- Limited Industrial
- Neighborhood Conservation
- Planned Dev. - Mobile Home
- Planned Dev. - Mixed Use
- Planned Dev. Residential
- Rural Agricultural Conservation
- Rural Residential
- Suburban Estate
- Suburban Residential
- Urban Residential
- Village Center

N

0 500 1,000 1,500 2,000 Feet

Rural Agricultural Conservation (RAC)

JOHNSON CIRCLE

AIRPORT DRIVE

WALTERS HIGHWAY

CARRSVILLE HIGHWAY

Entrance gate to the Whitley-Hawkins Borrow Pit at the end of Airport Drive.

A dump truck hauling material toward the entrance on Airport Drive.

Main office and maintenance building on Parcel No. 68-01-002.

Pole-style accessory buildings on Parcel No. 68-01-002.

Existing 31.4-acre former borrow pit which is the subject of the current request as seen from the dirt access/haul road.

The area of the proposed 10.6-acre expansion looking north from the dirt access/haul road.

The area of the proposed 10.6-acre expansion looking south from the dirt access/haul road.

Forested wetlands lying in the floodway of the Blackwater River adjacent the proposed borrow pit.

The dirt access/haul road looking east toward the building complex.

The outfall channel leading from the 31.4-acre borrow pit looking south from the dirt access/haul road.

The cemetery on Parcel No. 68-01-002.

Two aboveground storage tanks (ASTs) for storing fuel in one of the accessory buildings on the property.

Commonwealth of Virginia
Department of Mines, Minerals, and Energy
Division of Mineral Mining
900 Natural Resources Drive, Suite 400
Charlottesville, VA 22903
Telephone: (434) 951-6310

PERMIT / LICENSE TO OPERATE A MINE

Permit/License Number:	***90400AA***
Company issued to:	***E.C. WHITLEY ENTERPRISES, INC - WHITLEY-HAWKINS***
Whose main office location is:	***22225 Harvest Drive FRANKLIN, VA 23851***
For type of mineral(s):	***SAND***
Mine Type:	***OPEN PIT***
Exemption Type:	
County of:	***ISLE OF WIGHT***
Mine Type:	***OPEN PIT***
Originial Date Issued:	***04/02/1998***
Covering:	***Permitted: 72.03 Bonded: 27.93***
Issue Date:	***04/05/2021***
Anniversary Date:	***04/02/2022***
Receipt Number:	***166800***
Effective Date:	***04/05/2021***

THIS PERMIT IS ISSUED PURSUANT TO CHAPTER 14.1 AND 16, TITLE 45.1, CODE OF VIRGINIA (1950),

AS AMENDED Being an Act to require permits/licenses for certain mining operations and to affix conditions for issuance thereof; to provide that certain safety and reclamation requirements be performed by mine operators and for inspection thereof; and to advise on satisfactory compliance; to require an annual update on the progress of reclamation and tonnage of mineral mined; to provide for the certification of mineral mine workers; to provide for the Director to seek injunctive relief; and to provide for appeals from rulings and decisions of the Department.

THIS PERMIT/LICENSE MUST BE POSTED NEAR THE MINE OFFICE

OFFICIAL COPY

RESOLUTION NUMBER PC-22-8

ISLE OF WIGHT COUNTY PLANNING COMMISSION
RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION
TO THE BOARD OF SUPERVISORS RELATING TO A REQUEST CUP-6-21
FOR A CONDITIONAL USE PERMIT TO OPERATE A RESOURCE EXTRACTION USE ON A PORTION OF TAX PARCELS 68-01-001 AND 68-01-002 ZONED RURAL AGRICULTURAL CONSERVATION (RAC)

WHEREAS, Curtis Contracting, Inc., applicant, and Whitley-Hawkins Holdings, LLC, property owner, have requested a conditional use permit to operate a resource extraction use, specifically a sand borrow pit, on eleven acres of property with tax map numbers 68-01-001 and 68-01-002; and

WHEREAS the procedural requirements for the consideration of this request by the Planning Commission have been met.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

_____ A. The Planning Commission has considered the following criteria set forth in Section 1-1017.H of the Zoning Ordinance for conditional use permits and determined:

1. That the establishment, maintenance, and operation of the conditional use will not be detrimental to or endanger the public health, safety, and general welfare;

2. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially impair the use of other property within the immediate proximity;

3. That adequate utilities, water, sewer or septic system, access roads, storm drainage and/or other necessary public facilities and improvements have been or will be provided;

4. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion on the public streets;

5. That the proposed conditional use is not contrary to the goals and objectives of the Isle of Wight County Comprehensive Plan;

6. That the conditional use shall, in all other respects, conform to the applicable regulations of the zoning district classification in which it is located and to the special requirements established for the specific use;

7. That the use(s) at the location proposed will not result in a multiplicity or saturation of similar uses in the same general neighborhood of the proposed use;

_____ B. The Isle of Wight County Planning Commission does not find that the proposed

conditional use permit is reasonable based on the consideration of the factors listed herein.

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, CUP-6-21, be:

___ a. Granted as submitted, and that the Board of Supervisors adopt the proposed Ordinance without modification.

___b. Denied, and that Board of Supervisors not adopt the proposed Ordinance.

___c. Granted with the modifications set forth on the attached listing of specific recommendations, and that the Board of Supervisors adopt the proposed Ordinance with such modifications.

DATE: _____

READ AND PASSED: _____
Chairman, Isle of Wight County Planning Commission

TESTE: _____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

PLANNING REPORT

APPLICATION:

Application of Remus Brustur of Frontier Development, applicant, and the William G. Yeoman, III, Trust, property owner, for a conditional use permit (CUP-8-21) for a Wawa convenience store and gas station on 5.69 acres located on the southwest corner of Turner Drive (Rte. 644) and Benns Church Boulevard (Rte. 10) on property with tax map number 32-01-007

ELECTION DISTRICT:

D3

LOCATION:

The project site is located on the southwest corner of the intersection between Benns Church Boulevard (Rte. 10) and Turner Drive (Rte.644) on a property with tax map number 32-01-007. The property is bounded by Benns Church Boulevard to the northeast, by Turner Drive to the northwest, by Smithfield High School to the southwest, and by a residence and cropland to the southeast.

BACKGROUND:

The project site's past and current use is agricultural use. There are no existing structures or environmentally sensitive features on the site.

DESCRIPTION:

The applicant proposes to use the site for a Wawa convenience store and gasoline station. The convenience store will be 6,049 square feet and the gasoline station will have sixteen fuel pumps with an approximately fifteen foot canopy. Elevations of the proposed building are attached for your information.

The conceptual plan shows a right in/right out only entrance on Benns Church Boulevard as well as a full access site entrance on Turner Drive. Please note that the concept plan submitted as part of the application is for general illustrative purposes only, and a full site plan will be required for a full, formal review for compliance with County ordinances prior to construction.

The facility is a commercial use and will not have significant impacts on public services with the exception of adjacent local roadways. The project's traffic impact

assessment (TIA) shows that the facility is projected to generate 4,378 average daily weekday trips. During peak times in the morning and afternoons, the majority of traffic generated (63% and more) will be by people stopping at the business on their way to or from somewhere else.

The TIA find that the impacts of the development's additional traffic on local roadways will absorb most of the existing lane capacity and contribute to a declining level of service at the primary intersection of Turner Drive and Route 10, by causing additional delay for key turning movements. The existing Level of Service (LOS) at the intersection in the No Build scenario is a LOS D. With the increase in Wawa traffic, plus the mitigating traffic improvements the application has proposed in the submitted TIA, the future LOS continues as a D. Accounting for the proposed improvements, the Wawa is still expected to cause a minor increase in wait times for drivers taking northbound lefts and southbound rights exiting Turner Drive onto Route 10 during peak hours. There also continue to be particular concerns about driver safety and queuing issues for drivers trying to exit left at the Wawa's Turner Drive site entrance, heading towards Smithfield High School—particularly during morning peak hours which will overlap with school arrival hours, the student driver population, and heavy bus traffic.

The TIA recommends the following to address the safety, capacity, and delay issues:

1. Lengthen the westbound left-turn lane on Benns Church Boulevard to consist of 350 feet of storage and a 200-foot taper.
2. Reconfigure and shorten the existing shared through/left-turn lane on Turner Drive to an exclusive left-turn lane consisting of 200 feet of storage and a 100-foot taper.
3. Extend, modify, and reconfigure the existing exclusive right-turn lane to serve as a shared through/right-turn lane.
4. Construct one exclusive right-turn lane into the site from eastbound Benns Church Boulevard consisting of 200 feet of storage and a 100-foot taper.
5. Install pavement markings to for a "DO NOT BLOCK INTERSECTION" box and identification signage to include signage reflecting a potential fine for those observed/caught impeding intersection operations.
6. Widen Turner Drive to the south of the proposed Wawa Site Driveway for a distance of approximately 300 feet to provide the roadway transition necessary to support the introduction of the proposed southbound exclusive left-turn lane from Turner Drive into the Wawa development site. Widening will extend from the Wawa Site Driveway to a tie-in point with the existing three-lane section/transition portion of Turner Drive associated with the

southbound left-turn lane serving the Smithfield High School site access driveway.

An analysis of the traffic impacts are discussed further in the "Staff Conclusions" section of the staff report.

COMPREHENSIVE LAND USE PLAN:

The recommended future land use designation for this property is business and employment (BE) on the County's Future Recommended Land Use Map in the 2020 Comprehensive Plan. The primary role of BE is defined locations for employment creation and expansion. These areas should be developed with a mix of office, commercial, and light industrial uses. Expected development in BE might include medical offices, an office park in a campus like setting, supporting retail services, community shopping centers, light manufacturing, research and development, and other low intensity industrial uses which are compatible with surrounding development. Nonresidential uses may include parks and trails, or existing community facilities, but siting for new community facilities should be considered elsewhere first. BE should be connected to residential uses with vehicular and pedestrian access.

The BE land use is best located on major transportation routes and at major intersections. BE should be master planned for coordination with surrounding uses and quality of design internally. BE should also have access to public water and sewer infrastructure with capacity for more intense development.

The proposed uses of convenience store and gasoline station are defined as a commercial uses type in the Zoning Ordinance and can be considered generally consistent with the recommended future land use designation.

ORDINANCE REVIEW:

Both proposed the convenience store and gasoline station require approval of a conditional use permit in the Rural Agricultural Conservation (RAC) zoning district. The Zoning Ordinance also includes supplemental use regulations for both proposed uses in Article V.

The property lies both in the Chesapeake Bay Preservation Area Overlay district as well as the Newport Development Service Overlay (NDSO) district. The property does not contain any wetlands or stream features. Due to the project's size and no existing resource protection area features on site, a water quality

impact analysis is not required.

The project will be required to meet all nonresidential design criteria in the NDSO district regulations and supplemental use regulations for convenience stores and gas stations at site plan review.

The proposed site is currently in agricultural use and has no environmentally sensitive features or identified archeological or architectural resources. The site is shown as having high potential for archeological resources according to the County's 2005 archeological study. A review of the project site by historic resources staff yielded no concerns with the project. A Phase I Cultural Resources Analysis will be required at the time of site plan review.

Section 1-1017 of the Zoning Ordinance provides the following criteria for review of a conditional use permit application that the Planning Commission and Board of Supervisors shall consider before granting the permit:

1. That the establishment, maintenance, and operation of the conditional use will not be detrimental to or endanger the public health, safety, and general welfare;
2. That the conditional use will not be injurious to the use and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially impair the use of other property within the immediate proximity;
3. That adequate utilities, water, sewer or septic system, access roads, storm drainage and/or other necessary public facilities and improvements have been or will be provided;
4. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion on the public streets;
5. That the proposed conditional use is not contrary to the goals and objectives of the Isle of Wight County Comprehensive Plan;
6. That the conditional use shall, in all other respects, conform to the applicable regulations of the zoning district classification in which it is located and to the special requirements established for the specific use; and
7. That the use(s) at the location proposed will not result in a multiplicity or saturation of similar uses in the same general neighborhood of the proposed use.

In addition to the standards and other guidelines set forth in the Zoning Ordinance, the Board may impose reasonable conditions or limitations on any approval, including the posting of performance guarantees. Such conditions may include,

but are not necessarily limited to:

1. The number of persons living or working in the immediate area and the proposed hours of operation, as may applicable;
2. Traffic conditions, including facilities for pedestrians, such as sidewalks and parking facilities; the access of vehicles to roads; peak periods of traffic; and proposed roads, but only if construction of such roads will commence within the reasonably foreseeable future;
3. The orderly growth of the neighborhood and community and the fiscal impact on the County;
4. The effect of odors, dust, gas, smoke, fumes, vibration, glare, and noise upon the use of surrounding properties;
5. Facilities for police, fire protection, sewerage, water, trash and garbage collection and disposal, and the ability of the County or persons to supply such services;
6. The degree to which the development is consistent with generally accepted engineering and planning principles and practices;
7. The structures in the vicinity such as schools, houses of worship, theaters, hospitals, and similar places of public use;
8. The purposes set forth in this ordinance, the County's Comprehensive Plan, and related studies for land use, roads, parks, schools, sewers, water, population, recreation, and the like;
9. The environmental impact, the effect on sensitive natural features, and opportunities for recreation and open space; and
10. The preservation of cultural and historic resources or landmarks.

In addition to obtaining approval for a conditional use permit, the applicant will be required to submit a preliminary site plan that meets all Ordinance requirements and obtain any necessary state permits prior to establishing the use.

AGENCY REVIEW:

Upon receipt of the application, staff distributed it to the following departments and outside agencies for their review and comment.

<u>Departments and agencies with no outstanding concerns for the project:</u>

- Utility Services
- Emergency Services
- Isle of Wight County Museum
- Economic Development

Departments and Agencies with Outstanding Concerns:

- VDOT - Concern with additional delays and continued service level deterioration of the intersection, especially the deterioration of the right-turn movement from Turner Drive from a service level B to a service level D. Also has continued safety concerns with the "DO NOT BLOCK THE BOX" area and reliance on public safety resources for successful implementation. Final comment letter attached
- Transportation Manager - Concern with additional delays and continued service level deterioration of the intersection, especially with traffic generated by a potential new school adjacent to the high school. Also has continued safety concerns with the "DO NOT BLOCK THE BOX" area and reliance on public safety resources for successful implementation. Final comment letter attached.
- Town of Smithfield - concern with potential cut-through traffic from Turner Drive entrance to avoid the signal and exit Route 10. Recommends reconfiguring driveway, so it functions more like a roadway at the rear of the property to avoid parking areas.

STAFF CONCLUSIONS:

Based on an analysis of the project, staff identified the following strengths and weaknesses for the proposed uses:

Strengths:

1. The proposed uses are generally consistent with the County's future recommended land use plan;
2. The proposed uses will generate additional employment opportunities and tax revenues necessary to fund future public services and facilities; and
3. The proposed business will provide additional local retail and services to community members.

Weaknesses:

1. The proposed use will continue to contribute to the degradation of service of the intersection with Benns Church Boulevard and Turner Drive, to include increased wait times and safety concerns for left hand turns from the site onto Turner Drive.

Staff's analysis of the project finds that most of the criteria for granting the conditional use permit are met, however, additional measures need to be taken to

provide adequate ingress and egress to minimize traffic congestion on public streets and to protect public safety. There remains a safety concern with the proposed full access site entrance on Turner Drive as drivers exit the site to turn left on Turner Drive due to limited visibility for cars exiting the site. The applicant proposes installing pavement markings delineating an area not to block, also known as a "DO NOT BLOCK THE BOX" area, to make it easier for people to exit the site while traffic is waiting at the light. This remedy is dependent on continued County law enforcement resources for successful implementation, whether by providing a police presence at the site or with having to maintain and monitor a traffic camera.

In order to in order to help mitigate safety concerns and the further degradation of traffic conditions at the intersection of Benns Church Boulevard and Turner Drive, staff recommends the following conditions:

1. In lieu of the "DO NOT BLOCK THE BOX" improvements, submit an alternative intersection design for the Turner Drive site entrance with enhanced safety and greater functionality to reduce delays and drain on law enforcement resources, such as a single-lane roundabout, to the County and VDOT for review and approval at site plan submittal.
2. The property shall provide a shared entrance with the adjacent property onto Benn's Church Boulevard.
3. Provide a cross-access easement along the rear property line that meets VDOT standards for a future public cross parcel access road.
4. The proposed connection across the rear of the property from the Turner Drive entrance shall be designed to have sufficient throat distance from the intersection of Entrance 2 with Turner Drive to be submitted at site plan review.
5. The proposed multipurpose trail along the frontage with Benn's Church Boulevard shall meet the County's minimum trail specifications at the time of site plan submittal.
6. The proposed public sidewalk along Turner Drive shall meet VDOT minimum specifications at the time of site plan submittal.
7. With the exception of the signal timing optimization and coordination, the applicant shall be responsible for the design and construction of the all other recommended improvements not listed here provided in the project TIA received in Community Development on June 16, 2022. In addition to the signal changes proposed, the applicant shall install an ADA accessible curb ramp as part of the sidewalk and trail improvements and a pedestrian push button signal for their side of the intersection to provide pedestrian safety.

STAFF RECOMMENDATION:

Based on the strengths of the application, staff recommends approval with the conditions listed above in order to help mitigate safety concerns and delays at the intersection of Benns Church Boulevard and Turner Drive.

ATTACHMENTS:

Description	Type	Upload Date
Wawa Application	Backup Material	6/21/2022
Statement of Reason and Narrative Description	Backup Material	6/21/2022
Wawa Elevations and Concept Plan	Backup Material	6/21/2022
Wawa Traffic Impact Analysis June 16, 2022	Backup Material	6/21/2022
Wawa Site Property Location Map	Backup Material	6/21/2022
Wawa Site Zoning Map	Backup Material	6/21/2022
Wawa Site Future Recommended Land Use Map	Backup Material	6/21/2022
VDOT Comments June 15, 2022	Backup Material	6/21/2022
County Transportation Manager Comments	Backup Material	6/21/2022
Town of Smithfield Comments	Backup Material	6/21/2022
Town of Smithfield Comments	Backup Material	6/21/2022
Applicant Transportation Comment Response 061622	Backup Material	6/21/2022
CUP-8-21 Wawa CUP PC Resolution	Backup Material	6/21/2022

Local Roots, Global Reach
ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

CUP-8-21
MUNIS# 25060

APPLICATION FOR CONDITIONAL / SPECIAL USE PERMIT

This application should be used to petition for a permit for certain uses which, because of their unique characteristics or potential impacts on adjacent land uses, are not generally permitted in certain zoning districts as a matter of right, but which may, under the right set of circumstances and conditions be acceptable in certain specific locations. The following application requirements are consistent with the procedures set forth in Section 1-1017, *Conditional Uses,* and Section 1-1018, *Special Use Permits for Uses Not Provided For,* of the Isle of Wight County Zoning Ordinance, as amended.

A. APPLICATION FOR (CHECK ALL THAT APPLY):

[X] Conditional Use Permit (Are applicant proposed conditions attached?): _X_ Yes _____ No

The proposed use or activity is listed as a conditional use in the _RAC_ zoning district as per Section _4-2003_ in Article IV of the Isle of Wight County Zoning Ordinance.

[X] Special Use Permit (Are applicant proposed conditions attached?): _X_ Yes _____ No

Proposed Use or Activity: _To allow convenience store and gas station_

B. PROJECT DESCRIPTION:

Project Name: Wawa convenience store with gas station

Property Address (if any): Southwest corner of Turner Drive and Benns Church Blvd

Election District: Windsor

Comprehensive Plan Designation: Business & Employment

The use permit will apply to 3.8892 acres out of 3.8892 total acres

Tax Parcel Identification # 32-01-007 Number of acres to be effected: 3.8892

Tax Parcel Identification # _____ Number of acres to be effected: _____

Tax Parcel Identification # _____ Number of acres to be effected: _____

LEGAL ACREAGE 5.69 ACRES

Proposed Utilities (check all that apply): Public Water _X_ Private Well _____

Public Sewer _X_ Private Septic _____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): ~~Frontier Companies~~ Frontier Development

Address: ~~1001 SW 3rd Avenue, Suite 500~~ 2950 SW 27th Avenue, Suite 300

City, State, Zip Code: ~~Miami, Florida 33129~~ Miami, Florida 33133

Phone No.: 305-692-9992 Email: jleach@fdllc.com Fax No.:

Property Owner(s) Name(s): Yeoman William G III Trustee William G Y

Address: C/O Henry E Layden PO Box 231

City, State, Zip Code: Smithfield VA 23431

Phone No.: 757-438-3160 Email: henry.layden1@gmail.com Fax No.: N/A

Applicants/Owners Affidavit (including compliance with all deed restrictions and covenants)

This application must be signed by the owner(s) of the subject property or must have attached written evidence of the owner's consent, which may be in the form of a binding contract of sale with the owner's signature or a letter signed by the owner(s), containing written authorization to act with full authority on the owner(s) behalf in filing this use permit application. Signing this application shall certify the owner's compliance with all deed restrictions and covenants, and shall constitute the granting of authority of the County to enter onto the property for the purpose of conducting site analyses and compliance with Federal, State and County regulations.

Applicant: Remus Brustur
Printed or Typed Name

Applicant: _____ Date: 10/12/2021
Signature

MIAMI-DADE
County of ~~Isle of Wight, Commonwealth of Virginia~~ STATE OF FLORIDA

Subscribed and sworn to before me Jennifer Zurita,
A Notary Public in and for the County of ~~Isle of Wight~~ MIAMI-DADE
~~Commonwealth of Virginia~~, this 12 day of Oct., 2021
STATE OF FLORIDA

_____
Notary Public

My Commission Expires _____

JENNIFER ZURITA
Notary Public-State of Florida
Commission # HH 109084
My Commission Expires
March 24, 2025

Owner: HENRY LAYDEN
Printed or Typed Name

Owner: _____ Date: 10/20/21
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me Elizabeth Dixon Jones
A Notary Public in and for the County of Isle of Wight,
Commonwealth of Virginia, this 20th day of Oct., 2021

_____
Notary Public

My Commission Expires December 31, 2022

ELIZABETH DIXON JONES
NOTARY PUBLIC
Commonwealth of Virginia
Reg. # 7767629
Com. Exp. Dec. 31, 2022

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight,
Commonwealth of Virginia, this ___ day of _____, 20___

_____
Notary Public

My Commission Expires _____

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight,
Commonwealth of Virginia, this ___ day of _____, 20___

_____
Notary Public

My Commission Expires _____

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: 10-26-2021 Fees Paid: $1,200
Tax Query: [X] Current [ ] Delinquent Distribution Date: 10-29-2021
Posted/Date to Post: _____

AGENCIES REFERRALS:

___ Department of Conservation & Recreation	___ Inspections
X Economic Development	___ Sheriff's Office
X Emergency Services	X Town of Smithfield
X General Services (2)	___ Town of Windsor
___ Environmental Planner	X VDOT
___ Health Department	___ Schools
X Transportation Manager	___ Budget & Finance
___ Commission of Revenue	___ County Attorney
X Other IOW MUSEUM	

Verified By: Amy M. Bruce Date: 10/29/21

Revised August 13, 2014

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Remus Brustur

Address 2950 SW 27th Avenue, Suite 300
Street

Miami Florida 33133
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
32-01-007	SOUTHWEST CORNER OF TURNER DR. & RTE. 10

OTHER OWNERS OF AFFECTED REAL ESTATE

(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes (No)

If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct and true.

Applicant: Remus Brustur (Printed or Typed Name) Applicant: _____ (Signature) Date: 10/12/2021

STATE OF FLORIDA
~~Commonwealth~~ of ~~Virginia~~
County of ~~Isle of Wight~~ MIAMI DADE

Subscribed and sworn to before me Jennifer Zurita,
A Notary Public in and for the County of ~~Isle of Wight, Commonwealth of Virginia~~ MIAMI-DADE, STATE OF FLORIDA, this 12 day of Oct., 2021.

_____
Notary Public

My Commission Expires _____

JENNIFER ZURITA
Notary Public-State of Florida
Commission # HH 109084
My Commission Expires
March 24, 2025

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ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF PLANNING AND ZONING

SUBMITTAL CHECKLIST FOR CONDITIONAL / SPECIAL USE PERMITAPPLICATIONS

In conjunction with Section 1-1017, *Conditional Uses*, and Section 1-1018, *Special Uses Permits for Uses Not Provided For*, of the Isle of Wight County Zoning Ordinance, as amended, the following information shall be submitted for a Conditional / Special Use Permit Application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for a Conditional / Special Use shall be certified as complete unless the following information is provided, unless the Zoning Administrator reduces the number of required copies.

X 1. Fifteen (15) copies of the original, executed application and one (1) original executed application. Both the applicant(s) and the property owner(s) must have their signature(s) notarized on page No. 2 of the application.

X 2. The appropriate fees have been submitted with the application. Checks should be made payable to: Treasurer, Isle of Wight County.

X 3. Fifteen (15) copies of a statement of the reasons for seeking such permit, and if applicable, a statement of conditions.

X 4. Fifteen (15) copies) of a narrative description of the property which shall include the Tax Parcel Identification Number.

X 5. One (1) copy of the most recent deed(s) for the property(s) associated with the application.

X 6. A concept plan of the property showing all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the Planning Commission and Board of Supervisors that adequate provisions shall be made for compliance with all standards for that particular use and the extent of the property to be so used on a given parcel or parcels. Such document shall be drawn to scale and shall include the following information:

- A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
- Title of drawing
- Date of drawing
- Existing wood line
- North arrow
- Scale bar
- Current zoning of parcel(s) to be rezoned, including tax map number(s) and owner(s)
- Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
- Street names including route number and width(s) of the right-of-way(s)
- Fifteen (15) full size copies, with one (1) reduced 11 inch X 17 inch copy shall be submitted
- Please note that additional information on the site layout may be requested by the Zoning Administrator during the review process in order to more effectively review the application and prepare the staff reports for the Planning Commission and Board of Supervisors.

X 7. Fifteen (15) copies of such supplemental material as may be necessitated by the proposal itself or the district in which located or proposed to be located, and in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Isle of Wight County Zoning Ordinance.

X 8. All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter. Proof of the most recent tax payment to the County must accompany the application.

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete and correct information available. I understand that any section not completed in its entirety may delay processing of this application and the date of the Planning Commission public hearing and that the submittal of a complete application does not guarantee the application will be placed on the next available Planning Commission agenda.

JEREMY YEE

Printed or Typed Name

Signature

10/25/2021

Date

This deed is exempt from recordation taxes pursuant to § 58.1-811(A)(12) of the Code of Virginia, 1950, as amended.

PG 69 FEB17 2000

CONSIDERATION: $ -0-

GRANTEES' ADDRESS: 14096 Benn's Church Boulevard
Smithfield, Virginia 23430

THIS INSTRUMENT PREPARED BY: WILLIAM H. RIDDICK, III
BARLOW & RIDDICK, P.C.
353 MAIN STREET
P.O. BOX 190
SMITHFIELD, VIRGINIA 23431

THIS DEED OF GIFT, made and entered into this 17TH day of February, 2000, by and between WILLIAM GROVER YEOMAN, III, unmarried, Grantor, and WILLIAM G. YEOMAN, III, Trustee of the WILLIAM GROVER YEOMAN, III TRUST pursuant to a trust agreement dated February 22, 1991, Grantee.

WITNESSETH:

That for estate planning purposes and for no monetary consideration, the Grantor does give, grant and convey with General Warranty and English Covenants of Title, unto the Grantee, and his successor in trust, the following real estate, together with improvements thereon and appurtenances thereunto pertaining, to-wit:

PARCEL ONE:
All that certain tract, piece or parcel of land containing two hundred seventy-nine and eighty-four hundredths (279.84) acres by survey, but conveyed in gross and not by the acre, this being a conveyance of hazard as to acreage, situate, lying and being near Benns Church, in Newport Magisterial District, Isle of Wight County, Virginia; lying partly on both the East and West side of State Highway No. 10, and bounded by said Highway, the lands now or formerly of Daisy M. Bunkley, Philip F. Edwards, Jones' Creek, the lands now or formerly owned by George Yeoman, Christie Jordan, C. E. Johnson, J. F. Minton and others, and being the same land of which E. K. Batten and Maggie E. Batten, his wife, died seized and possessed.

PARCEL TWO:
All of that certain triangular tract, piece or parcel of land, situate, lying and being on the West side of State Highway No. 10 leading from Smithfield to Suffolk, said piece or parcel of land having its base on the East (on said Highway) and its apex on the West, containing six (6) acres, more or less, sale and conveyance in gross and not by the acre, and is bounded on the North by the secondary road leading from said State Highway No. 10 to Longview via Old Jordan's Mill, on the East by the aforesaid State Highway No. 10 leading from Smithfield to Suffolk, on the South by other lands now or formerly of W. Grover Yeoman, Jr., and on the West by the lands now or formerly of Jones Turner. The property hereby conveyed being a portion of the farm generally known and referred to as the Daisy Minton Bunkley Farm and a portion of the land conveyed to Junius M. Batten by deed from Rodham T. Delk, Special Commissioner, dated the 8th day of

March 1952 and recorded in the Clerk's Office of Isle of Wight County, Virginia.

LESS, SAVE AND EXCEPT those parcels of land conveyed to the Commonwealth of Virginia for the widening and improvement of Route 10.

The above-described real property was conveyed to Grantor by two separate deeds, both dated February 17, 2000, the first being from William Grover Yeoman, III as Trustee of the William Grover Yeoman, Jr. Family Trust and the second being from William Grover Yeoman, III as Trustee of the William Grover Yeoman, Jr. Marital Trust, both of which deeds are recorded prior to this deed in the Clerk's Office of the Circuit Court of Isle of Wight County, Virginia.

TO HAVE AND TO HOLD said property as Trustee under the William Grover Yeoman, III Trust, dated the 22nd day of February, 1991, as the same may be amended from time to time..

TO FURTHER HAVE AND TO HOLD the property with full power, right and authority hereby granted unto Grantee, and his successor in trust, to sell, lease, exchange, encumber and/or convey the said property, either in whole or in part, upon such terms and conditions and for such consideration, or no consideration, as Grantee may in the discretion of Grantee deem advantageous, with the further right to subdivide and re-subdivide said property and to dedicate such portions thereof for public use as Grantee shall deem desirable, together with the right to grant licenses and easements for utilities or other purposes across, over and under said property, and Grantee is hereby empowered to execute, acknowledge and deliver such deed, deeds of trust, leases and other instruments necessary to carry out the foregoing powers, and there shall be no obligation or liability upon any purchaser or purchasers, lessee or lessees of said property, or any part thereof, or upon any party or parties making any loans secured by deed or deeds of trust upon said property, or any part thereof, to see to the proper application of the proceeds of such sale, lease or loan.

Every deed, deed of trust, lease or other instrument executed by the Grantee, or his successor in trust, on behalf of either trust identified herein and in relation to the property described herein shall be conclusive evidence in favor of every person claiming any right, title or interest thereunder that: (1) at the time of the delivery of such instrument the trust was in full force and effect; (2) that such instrument was executed in accordance with the terms and conditions of the trust agreement establishing said trust, as the same may be amended from time to time, and is binding upon all beneficiaries under said trust; and (3) if such instrument is executed by successor(s) in trust to the Grantee, that such successor(s) in trust have been properly appointed and are fully vested with all the title, estate, rights, powers, duties and obligations of Grantees provided such successor(s) in trust certify in said instrument that such successor(s) in trust have been properly appointed.

This conveyance is made expressly subject to the conditions, restrictions, rights of way, and easements and other instruments of record, if any, legally affecting the aforementioned property.

WITNESS the following signature and seal:

William Grover Yeoman, III (SEAL)
WILLIAM GROVER YEOMAN, III

STATE OF VIRGINIA
COUNTY OF ISLE OF WIGHT, to wit:

The foregoing instrument was acknowledged this 17th day of February, 2000 by WILLIAM GROVER YEOMAN, III.

NOTARY PUBLIC

My commission: 3-31-2001

THIS DEED IS PREPARED WITHOUT BENEFIT OF TITLE EXAMINATION.

Verified and mailed to
Barlow & Riddick

this ___ day of ___, ___

INSTRUMENT #000000662
RECORDED IN THE CLERK'S OFFICE OF
ISLE OF WIGHT COUNTY ON
FEBRUARY 17, 2000 AT 04:33PM
WILLIAM E. LAINE JR., CLERK
BY: _____ (DC)

Kimley»Horn

Statement of Reason – Conditional Use Permit

The property lies within the Rural Agricultural Conservation (RAC) District. The purpose of the Conditional Use Permit is to allow the proposed Wawa convenience store and gasoline station. The project will comply with the standards as listed in section 5-5000 supplementary use regulations, specifically for item K. Convenience Store and item P. Gasoline Station, except for the following modifications:

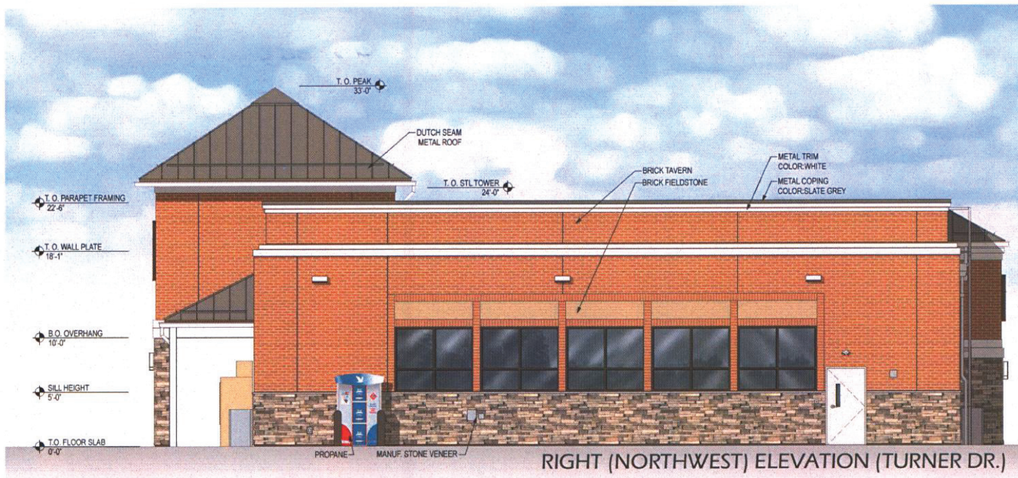
Item K. Convenience Store, 1.b. – The outdoor display of goods for sale shall prohibited except for the ice machine and propane gas as shown on site plan prepared by Kimley-Horn, dated 10-22-2021.

Item P. Gasoline Station, 1.j. – The gasoline station canopy measurements shall be consistent with the canopy elevations prepared by Cuhaci and Peterson, dated 10-20-2021.

Kimley»Horn

Narrative Description of The Property – Conditional Use Permit

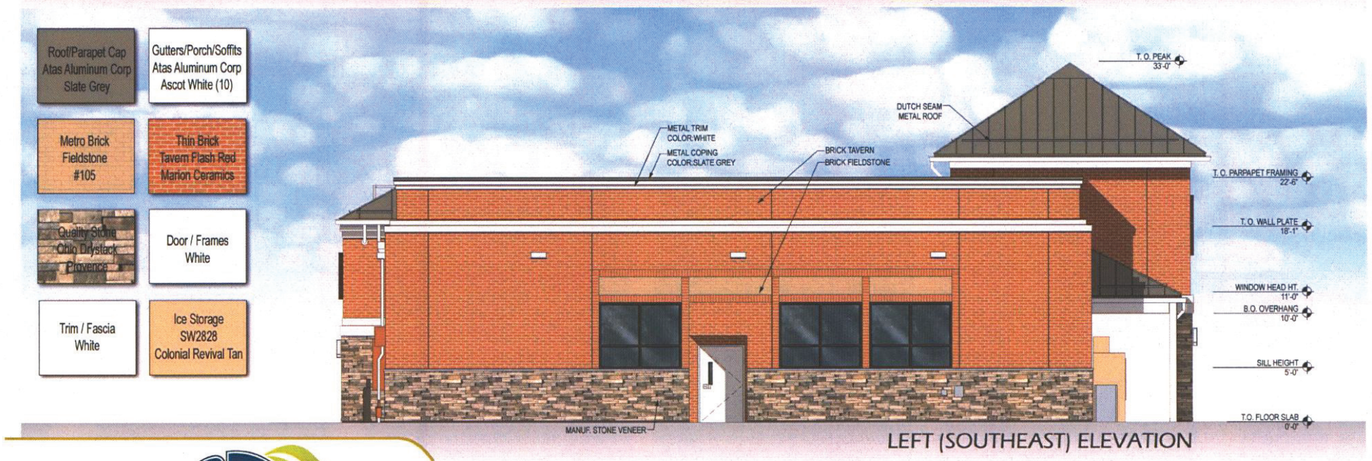
The property, Parcel A, is the lands of William G. Yeoman, III, Trust as recorded in instrument number 00662 having a parcel identification of 32-01-007. The total site area is 169,412 square feet or 3.8892 acres. The property is zoned Rural Agricultural Conservation (RAC).



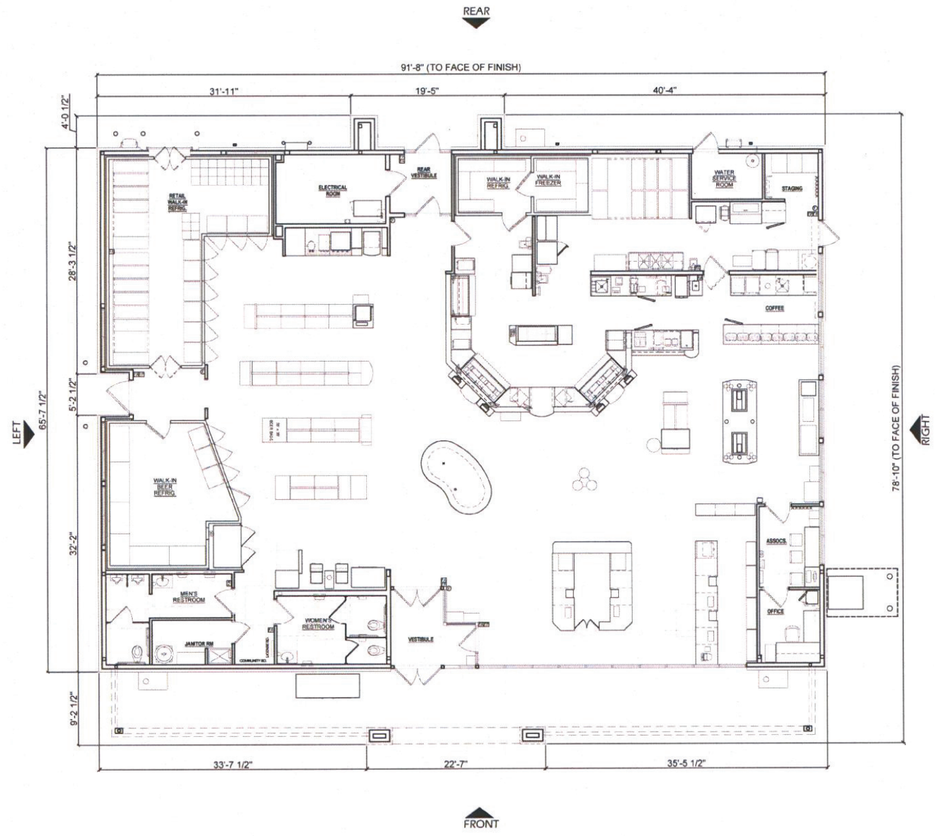
RIGHT (NORTHWEST) ELEVATION (TURNER DR.)

FRONT (NORTHEAST) ELEVATION (BENNS CHURCH BLVD.)

REAR (SOUTHWEST) ELEVATION



LEFT (SOUTHEAST) ELEVATION



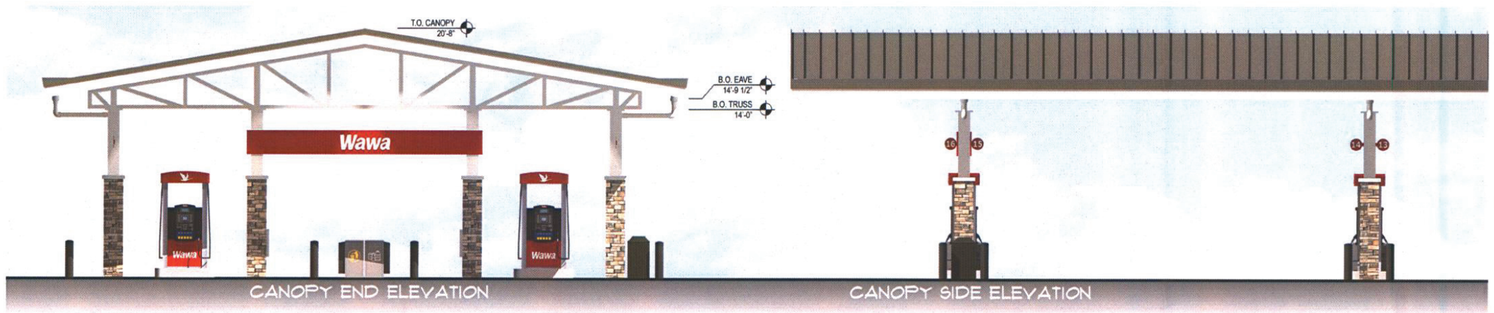
FLOOR PLAN

NOTE:
SIGNAGE IS SHOWN FOR REFERENCE ONLY
SEPARATE PERMIT REQUIRED

Cuhaci & Peterson
Architects Engineers Planners
ORLANDO • PHILADELPHIA

WAWA W50 FB VA M_v.2021.1

Benns Chruch & Turner Dr., Isle of Wight, VA • C&P Project #2210807 • 10-20-2021

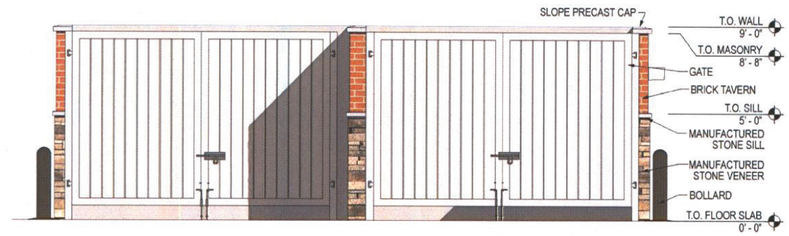


CANOPY END ELEVATION

CANOPY SIDE ELEVATION

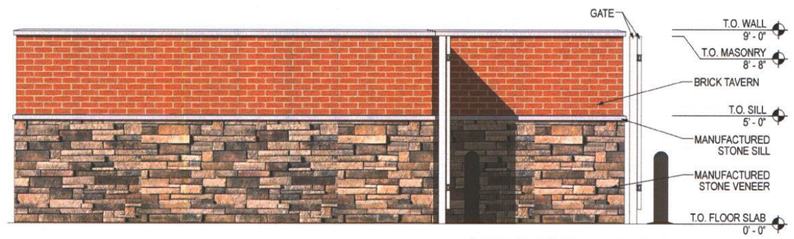
CANOPY PERSPECTIVE VIEW

The Wawa fuel canopy is a registered service mark in the U.S. Patent and Trademark Office. The fuel canopy, as well as Wawa's brand names, slogans, logos, service marks, and other trademarks of Wawa's goods, services, and promotions belong exclusively to Wawa, Inc. and/or, Wild Goose Holding Co., Inc. and are protected from copying and simulation under national and international trademark and copyright laws and treaties throughout the world.

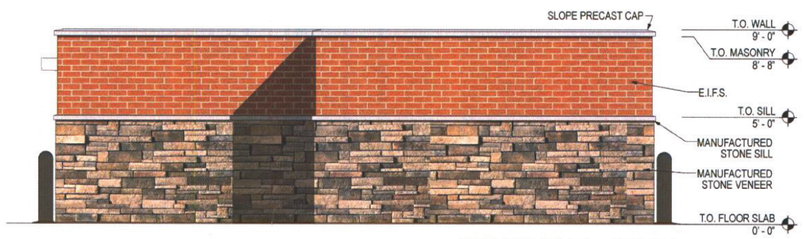


FRONT ELEVATION

RIGHT ELEVATION



LEFT ELEVATION



REAR ELEVATION

Cuhaci & Peterson
Architects Engineers Planners

WAWA GAS CANOPY® STACKED 8 - A-FRAME - TRASH COMPOUND MAOF17-R

Benns Church & Turner Dr., Isle of Wight, VA • C&P Project #2210807 • 10-20-2021

Plotted By:Mathews, Joe Sheet Set:Kha Layout:CUP LANDSCAPE PLAN October 25, 2021 09:55:32am K:\VAB_Civil_WAWA\116543041 – Wawa Benns Church\CADD\Exhibits\CUP\VA, Isle of Wight Wawa – CUP Site Plan.dwg
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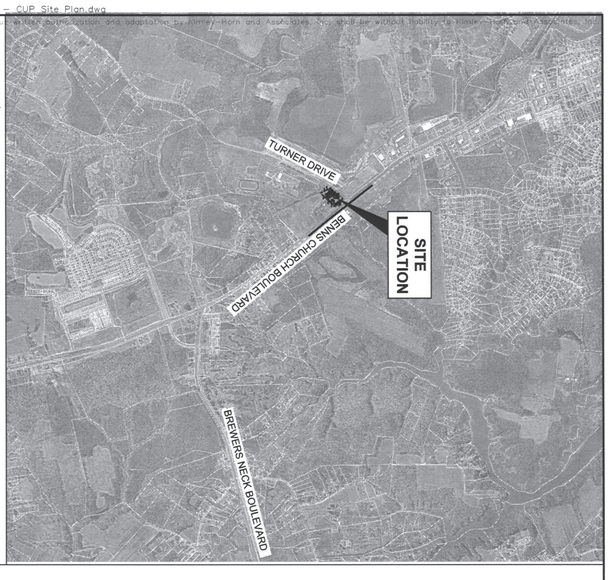
NORTH

VICINITY MAP
1"=2,000'



TURNER DRIVE VA RTE. 644

BENNS CHURCH BOULEVARD VA RTE 10

PERIMETER ZONE LANDSCAPING
10' LANDSCAPE BUFFER
FRONTAGE ZONE LANDSCAPING
PROPOSED SWM POND 1
PROPOSED SWM POND 2
PARKING ZONE LANDSCAPING
SCREENING ZONE LANDSCAPING
FOUNDATION ZONE LANDSCAPING
80' BUILDING SETBACK
50' LANDSCAPE BUFFER
ORNAMENTAL FENCE
MONUMENT SIGN
FOUNDATION ZONE LANDSCAPING REPRESENTING 50 PERCENT OF TOTAL REQUIRED TO BE LOCATED ELSEWHERE ON SITE
60' BUILDING SETBACK
POB PARCEL B
N44°14'39"E 568.42
S49°01'13"W
MODERN BARN
ADR=1,251 SF
BLDG HT= 43'7"

WAWA

ISLE OF WIGHT COUNTY VIRGINIA

CUP LANDSCAPE PLAN

BENNS CHURCH BOULEVARD & TURNER DRIVE

KHA PROJECT	116543041
DATE	10/22/2021
SCALE	AS SHOWN
DESIGNED BY	NJS
DRAWN BY	NJS
CHECKED BY	JY

Kimley»Horn

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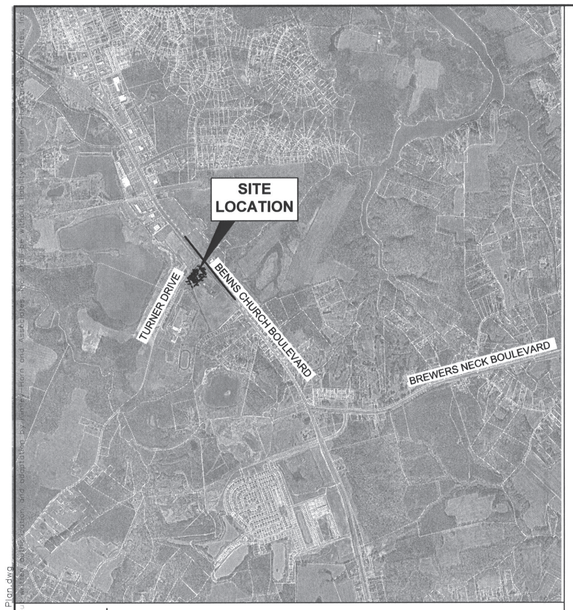
4525 MAIN STREET, SUITE 1000, VIRGINIA BEACH, VA 23462
PHONE: 757-213-8600 FAX: 757-213-8601
WWW.KIMLEY-HORN.COM

No.	REVISIONS	DATE	BY



VICINITY MAP
1"=2,000'

nearmap
Imagery © 2021 Nearmap, HERE

NORTH

SITE DATA

JURISDICTION	ISLE OF WIGHT COUNTY
EXISTING ZONING	RAC
PROPOSED ZONING	RAC
SEE "PARCEL A" DATA BELOW	
WAWA "PARCEL A" AREA	3.89 AC.±
BUILDING AREA	6,049 S.F.
MIN. PARKING REQUIRED	34 SPACES
PARKING PROVIDED	55 SPACES
FRONT SETBACK (BENNS CHURCH) FRONT SETBACK (TURNER) SIDE SETBACK REAR SETBACK	60 FT 85 FT 35 FT 35 FT
FRONT BUFFER YARD SIDE BUFFER YARD REAR BUFFER YARD	50 FT 10 FT 10 FT
# MPD'S	8

PARCEL A

LANDS N/F
WILLIAM G. YEOMAN, III, TRUSTEE
WILLIAM G. YEOMAN TRUST
INSTRUMENT NO. 00662
PARCEL ID 32-01-007
ZONED: RAC
AREA= 169,412 SQ. FT. OR
3.8892 ACRES

NO POSTED ADDRESS

BENNS CHURCH BOULEVARD VA RTE 10
VARIABLE WIDTH RIGHT-OF-WAY
(VARY FROM 300' TO 200')

TURNER DRIVER DRIVE VA RTE. 644
VARIABLE WIDTH RIGHT-OF-WAY
(VARY FROM 100' TO 50')

POB PARCEL A
POB PARCEL B

MONUMENT SIGN
EXISTING DITCH TOB
6'X8' CONC VENT STACK PAD
(2) 22,00 GAL COMPARTIMENTALIZED TANKS
(1) 20,000 GAL TANK
60' BUILDING SETBACK
50' LANDSCAPE BUFFER
PROPOSED 14' PEDESTRIAN EASEMENT
36" HIGH ORNAMENTAL FENCE
FUEL CANOPY
PROPANE GAS
50' LANDSCAPE BUFFER
85' BUILDING SETBACK
ICE MACHINE
Wawa
6,049 SF
PROPOSED 30' SHARED ACCESS EASEMENT
PROPOSED SHARED ACCESS EASEMENT
10' LANDSCAPE BUFFER
35' BUILDING SETBACK
AIR MACHINE ON CONC PAD W/ BOLLARDS
POTENTIAL EV SPACES
CHARGING POST (TYP)
CHARGING STATION EQUIPMENT.
PROPOSED SWM POND 1
PROPOSED SWM POND 2
PROPOSED 60' PRIVATE CROSS ACCESS EASEMENT
10' LANDSCAPE BUFFER
WOODEN BARN AREA=1,251 S.F. BOG ht.= 127
REBAR FOUND
50' TAPER
100' STACKING LANE
12' TURN LANE
N46°47'30"E 60.83'
N37°19'41"E 1.00'
N24°53'44"W 322.87'
N44°19'39"E 568.42'
N42°48'14"W 212.91'
N.F. 1,110.69'S
410.45'
R=11517.16'
L=247.78'
D=1°13'58"
CHB=S40°21'49"E
CHD=247.77'
R=11517.16'
L=319.16'
D=1°35'16"
CHB=S39°52'12"E
CHD=319.15'

GRAPHIC SCALE IN FEET
0 20 40 80

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No.	REVISIONS	DATE	BY

KHA PROJECT 116543041
DATE 10/22/2021
SCALE AS SHOWN
DESIGNED BY NJS
DRAWN BY NJS
CHECKED BY JY

CUP SITE PLAN
BENNS CHURCH BOULEVARD & TURNER DRIVE

WAWA
ISLE OF WIGHT COUNTY VIRGINIA

SHEET NUMBER
1

Plotted By:Mathews, Joe Sheet Set:Kha Layout:CUP PLAN October 25, 2021 09:55:11am K:\VAB_Civil_WAWA\116543041 — Wawa Benns Church\CADD\Exhibits\CUP\VA_Isle of Wight_Wawa _CUP Site Plan.dwg
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Traffic Impact Analysis
for
Wawa Convenience Market Development – Benns Church Boulevard at Turner Drive
Isle of Wight County, Virginia

Prepared for:
Frontier Development

Prepared by:

Kimley-Horn and Associates, Inc.
4525 Main Street, Suite 1000
Virginia Beach, VA 23462
P: 757.213.8600 F: 757.213.8601

Kimley-Horn Project Number: 116947000
June 2022

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1.0 EXECUTIVE SUMMARY

Kimley-Horn and Associates, Inc. (Kimley-Horn) was retained to perform a traffic impact analysis (TIA) for a proposed Wawa Convenience Market and Fuel Sales located in Isle of Wight County, Virginia. The proposed Wawa will consist of a 6,049 square foot (sf) convenience market with 16 fueling positions. The proposed development site is bounded by Benns Church Boulevard (State Route 10) to the north, Turner Drive to the west, Smithfield High School and Smithfield Middle School to the south, and residential/agricultural properties to the east/southeast as illustrated in **Figure 1**. A conceptual site plan is also illustrated in **Figure 2**.

This project is a part of a Conditional Use Permit (CUP) application. Based on conversations with the Virginia Department of Transportation (VDOT) and Isle of Wight County, it was determined that a VDOT 527 TIA would not be required; however, this TIA has been prepared to meet VDOT and Isle of Wight County TIA requirements for the CUP application. The purpose of this TIA is to examine existing and future traffic conditions within the agreed upon project study area, identify traffic impacts resulting from the proposed development on the surrounding local road network, as well as recommend transportation improvements that support the development and help maintain acceptable traffic operations.

The proposed development has the potential to generate 4,378 daily weekday trips. Out of the total weekday daily trips, 508 driveway trips are anticipated to occur during the AM peak hour and 393 driveway trips are expected to occur during the PM peak hour. Pass-by assumptions for the proposed development were determined to be 63% and 66% of the trips generated during the AM and PM peak hours respectively. As a result, the proposed development is estimated to generate a total of 188 new trips occurring during the AM peak hour and 134 new trips during the PM peak hour.

Based on the results of the traffic analysis, the future impacts associated with the proposed development are anticipated to be minimal overall, with some deterioration in operations expected at the signalized intersection of Benns Church Boulevard at Turner Drive.

Under all future year development scenarios, it is anticipated that overall intersection operations will be maintained at LOS D or better during the AM and PM peak hours for all study area intersections.

It is also acknowledged that there are select movements under current and future conditions that do and/or will periodically have the potential to experience greater periods of operational delay. To address these operational constraints, this TIA has identified several potential improvements focused on reducing vehicle delay and facilitating traffic progression along the corridor.

As documented in the TIA, Scenario 4 was included to focus specifically on the potential impacts associated with just the proposed Wawa development as a part of the CUP application. It was initially identified that a proposed site access driveway along Turner Drive would likely be within the functional area of the Benns Church Boulevard/Turner Drive signalized intersection. In an effort to mitigate this concern and in collaboration with VDOT and the County, the proposed Site Access Driveway # 2 has been located approximately 450 feet south of the Benns Church signalized intersection (i.e., approximately 115 feet more than the minimum spacing requirement of 335 feet). The location of Site Driveway # 2 is also complemented with the installation of a proposed exclusive left-turn lane to serve southbound traffic attempting to accessing the site and to ensure through traffic flow is not impeded. Therefore, it is anticipated that queue lengths will not extend as far south as the proposed Site Access Driveway #2 on any type of regularly basis throughout the day and with the proposed southbound left-turn lane it is expected that this full access intersection along Turner Driver will function safely and efficiently under peak and off-peak traffic conditions.

The recommended off-site roadway/intersection improvements are summarized below:

Benns Church Boulevard

- VDOT should continue to monitor and optimize traffic signal phasing and timing plans to accommodate peak hour/off-peak traffic volumes along Benns Church Boulevard
  - Coordinated signal timing optimization for the Turner Drive and Cypress Run intersections should occur following construction and approximately 90-days of operation and occupancy of the Wawa Convenience Market to account for the changes in traffic volumes/travel patterns
  - Signal coordination improvements should facilitate the progression of traffic along Benns Church Boulevard from Cypress Run Drive to Turner Drive

Benns Church Boulevard at Turner Drive

Benns Church Boulevard Westbound Approach

- Lengthen the westbound left-turn lane on Benns Church Boulevard to consist of 350 feet of storage and a 200-foot taper

Turner Drive Northbound Approach

- Reconfigure the existing shared through/left-turn lane to an exclusive left-turn lane consisting of 200 feet of storage and a 100-foot taper
- Extend, modify, and reconfigure the existing exclusive right-turn lane serve as a shared through/right-turn lane
- Construct/install the necessary traffic signal infrastructure (e.g., signal heads, signage, wiring, etc.) improvements to serve the new lane use designations/movements associated with the northbound Turner Drive approach to the intersection

Benns Church Boulevard at Cypress Run Drive

- VDOT should optimize existing signal timing plans (both AM and PM) and implement cycle lengths that are consistent with cycle lengths at the Turner Drive intersection to enhance traffic operations at the Cypress Run Drive intersection as well as better facilitate traffic progression along Benns Church Boulevard

Benns Church Boulevard at Proposed Wawa Site Driveway # 1

- Site access will function as Right-In/Right-Out (RIRO) Only
- Construct one exclusive right-turn lane, along eastbound Benns Church Boulevard consisting of 200 feet of storage and a 100-foot taper.
- The proposed Wawa site driveway will consist of one inbound lane and one outbound lane
- Install/provide STOP control for outbound movements (i.e., approach to Benns Church Boulevard)

Turner Drive at Proposed Wawa Site Driveway # 2

- Site access will function as Full Access/Full Movement
- Install supplemental signage and pavement markings to consist of the following:
  - “DO NOT BLOCK INTERSECTION” signage
  - Intersection pavement markings delineating the area not to block (i.e., the box)
  - Supplement with signage reflecting a potential fine for those observed/caught impeding intersection operations

- Widen Turner Drive to the south of the proposed Wawa Site Driveway # 2 for a distance of approximately 300 feet to provide the roadway transition necessary to support the introduction of the proposed southbound exclusive left-turn lane serving the Wawa development site.
    - Widening will extend from the Wawa Site Driveway # 2 intersection to a tie-in point with the existing three-lane section/transition portion of Turner Drive associated with the southbound left-turn lane serving the Smithfield High School site access driveway.

It is noted that the existing right-of-way (ROW) along this segment of Turner Drive is approximately 40-feet in width. Therefore, the proposed widening of Turner Drive is intended to be implemented within the existing ROW and match the existing cross section.

Proposed Wawa Site Driveway # 2 Westbound Approach

- Site driveway will consist of one inbound lane and one outbound lane
- Install/provide STOP control for outbound (driveway) approach

Turner Drive Southbound Approach

- Construct/delineate one exclusive left-turn lane consisting of 150 feet of storage and a 100-foot taper

Turner Drive Northbound Approach

- Construct a new travel lane along the east side of Turner Drive to account for/accommodate the proposed southbound left-turn lane

Beyond the above-mentioned improvements, no other off-site geometric or traffic control improvements are recommended as part of the proposed Wawa Convenience Market development.

This space intentionally left blank.

2.0 INTRODUCTION

Kimley-Horn and Associates, Inc. (Kimley-Horn) was retained to perform a traffic impact analysis (TIA) for a proposed Wawa Convenience Market and Fuel Sales located in Isle of Wight County, Virginia. The proposed Wawa will consist of a 6,049 square foot (sf) convenience market with 16 fueling positions. The proposed development site is bounded by Benns Church Boulevard (State Route 10) to the north, Turner Drive (State Route 644) to the west, Smithfield High School to the south, and residential/agricultural properties to the east/southeast as illustrated in **Figure 1**. A conceptual site plan is also illustrated in **Figure 2**.

This project is a part of a Conditional Use Permit (CUP) application. Based on conversations with the Virginia Department of Transportation (VDOT) and Isle of Wight County, it was determined that a VDOT 527 TIA would not be required; however, this TIA has been prepared to meet VDOT and Isle of Wight County TIA requirements for the CUP application. Additionally, a TIA Assumptions document was prepared and approved by VDOT and Isle of Wight County and included in **Appendix A** of this report.

It is noted that an additional analysis scenario has been included in this TIA (i.e., Build conditions without a proposed new Elementary School). This scenario consists of applying a growth rate to existing volumes to establish background traffic and includes only additional/new traffic associated with the proposed Wawa development under consideration. It excludes a proposed new 600 pupil elementary school from the background traffic. This scenario was added to provide a more clear and/or realistic picture of the trip generation impacts, and the anticipated operational conditions associated with the proposed development in 2023/2024. Concern was raised that the proposed but not approved new Elementary School was overstating near-term traffic volume estimates and/or the reduction in operational conditions along Turner Drive. The analysis scenario that includes the new elementary school should be used by Isle of Wight County in collaboration with Isle of Wight County Schools and/or VDOT for future planning purposes and not as a factor in the consideration of the CUP application.

The purpose of this TIA is to examine existing and future traffic conditions within the agreed upon project study area, identify traffic impacts resulting from the proposed development on the surrounding local road network, as well as recommend transportation improvements that support the development and help maintain acceptable traffic operations.

Throughout this TIA, the “proposed development” refers to the proposed Wawa.

3.0 PROJECT BACKGROUND

3.1 STUDY AREA

The study area for this analysis includes three (3) existing roadways, two (2) existing intersections, and two (2) future intersections/access points planned to support the proposed development. The study area roadways and intersections are as follows:

Roadways

- Benns Church Boulevard (State Route 10)
- Turner Drive (State Route 644)
- Cypress Run Drive

Intersections

Existing:

- Benns Church Boulevard at Turner Drive (signalized)
- Benns Church Boulevard at Cypress Run Drive (signalized)

Proposed:

- Benns Church Boulevard at Site Access Driveway #1: Unsignalized, Right-In/Right-Out (RI/RO) only
- Turner Drive at Site Access Driveway # 2: Unsignalized, Full-Movement

All study area roadways and intersections were identified and agreed to with VDOT and Isle of Wight County as referenced in the TIA Assumptions document provided in **Appendix A**.

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	Project Study Area	FIGURE 1

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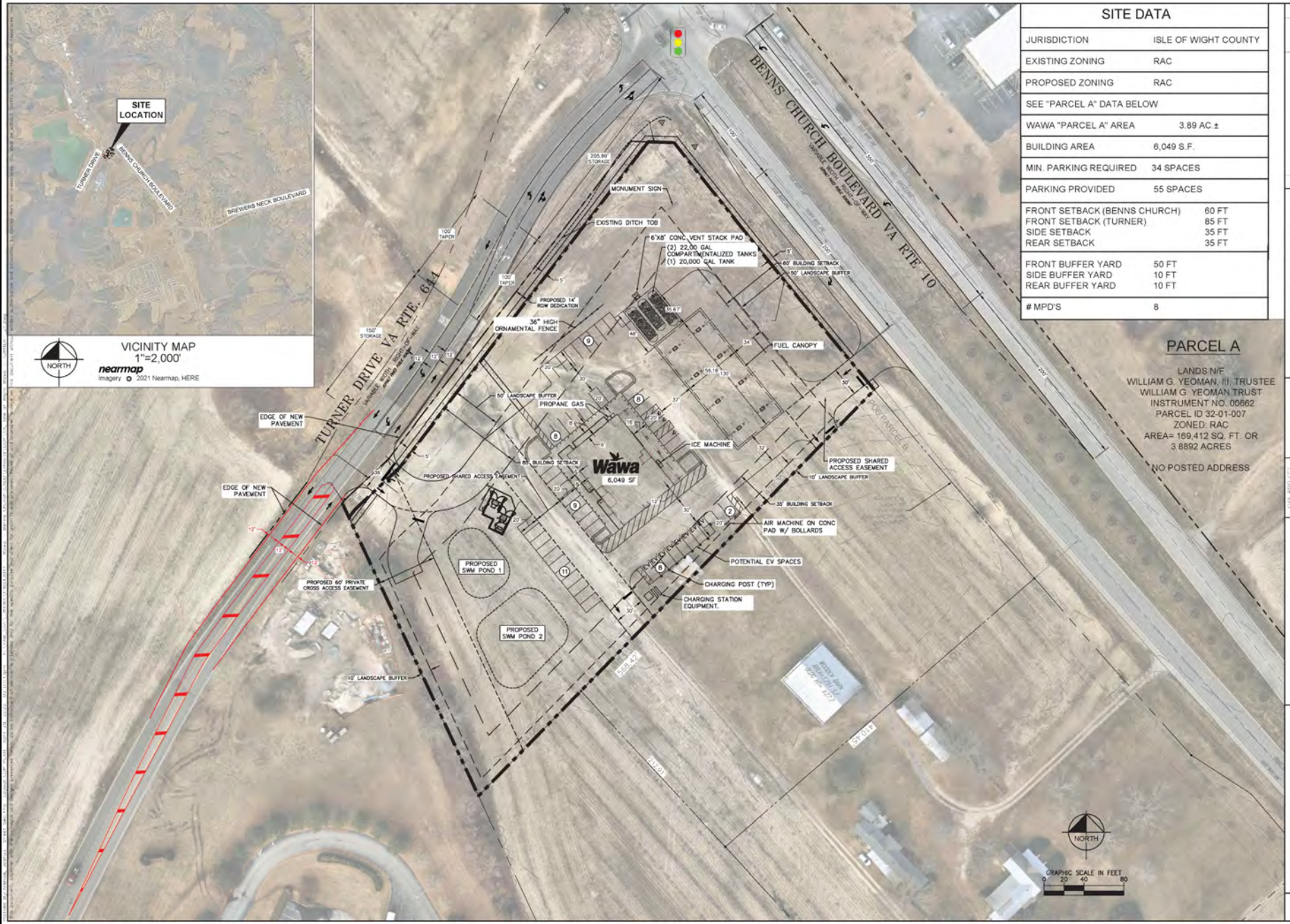

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	Conceptual Site Plan with Proposed Off-Site Improvements	FIGURE 2

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3.2 EXISTING CONDITIONS

Figure 3 depicts existing lane designations throughout the study area along with existing full width storage and taper lengths for exclusive turn lanes. The following provides a short description of the existing roadway characteristics for each facility:

- **Benns Church Boulevard (State Route 10)** – is a four-lane, divided minor arterial within the limits of the study area. Benns Church Boulevard is oriented in an approximate east/west direction with a posted speed limit of 45 miles per hour (mph). Based on VDOT historic counts reported for 2019, this section of Benns Church Boulevard carries approximately 27,000 vehicles per day (vpd).
- **Turner Drive (State Route 644)** – is primarily a two-lane, undivided major collector within the limits of the study area. Turner Drive runs in an approximate north/south direction. Based on VDOT historic counts reported in 2019, this section of Turner Drive carries approximately 3,200 vehicles per day (vpd). The posted speed limit is 40 mph.
- **Cypress Run Drive –** is primarily a two-lane, undivided local road within the limits of the study area. Cypress Run Drive is oriented in an approximate east/west direction. This roadway connects Benns Church Boulevard to a shopping center and a handful of residential homes. The posted speed limit is 15 mph.

Existing traffic signal timing data for the signalized intersection at Benns Church Boulevard at Turner Drive and Benns Church Boulevard at Cypress Run Drive was provided by VDOT.

3.3 EXISTING TRAFFIC VOLUMES

Kimley-Horn collected existing turning movement count (TMC) data on August 11, 2021 (Wednesday) at each study area intersection. The existing weekday TMC data was collected from 6:30 AM to 8:30 AM and from 3:30 PM to 6:30 PM.

Historical AAWDTs for Benns Church Boulevard are presented in **Table 1.** All raw traffic count data are provided in **Appendix B**. Uniform morning (AM) and evening (PM) peak hours were established from the TMC data. Based on the TMC data, the AM peak hour occurs from 7:15 AM to 8:15 AM and the PM peak hour occurs from 4:15 PM to 5:15 PM.

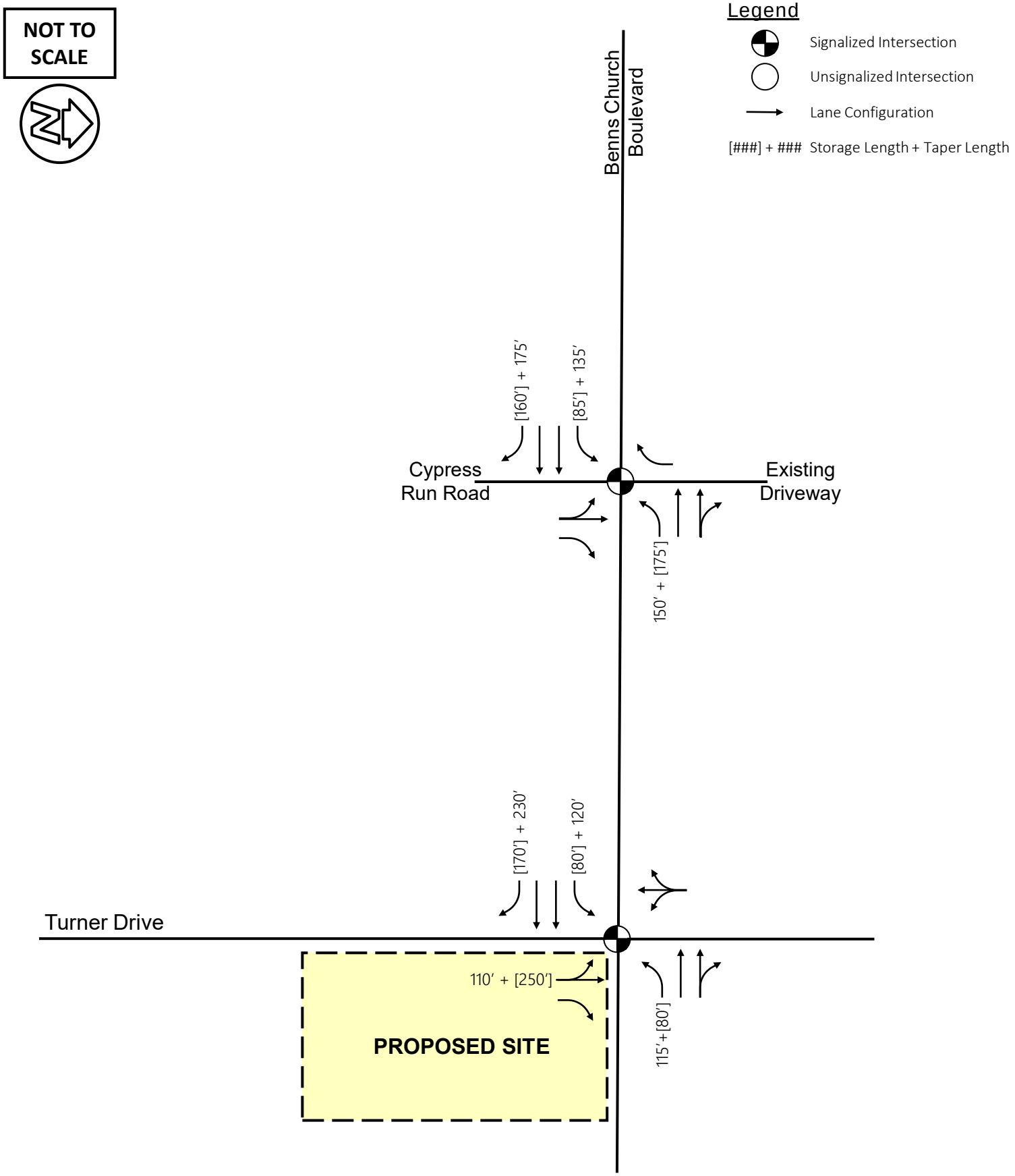
The existing (i.e., 2021) AM and PM peak hour traffic volumes have been adjusted to ensure school traffic was adequately accounted for in the operational analysis and are illustrated in **Figure 4**. The existing volumes were adjusted using the 2021 TMC data combined with historic TMC data (which accounts for influence of school related traffic/turning movements) to develop the adjusted 2021 traffic volumes. Heavy vehicle percentages were calculated for each individual intersection movement, while overall intersection peak hour factors were calculated and then applied to each intersection movement.

The existing traffic volumes have also been adjusted to account for COVID-19 related impacts. This was done by comparing the TMC data collected in August of 2021 to TMC data that was collected in August of 2017. A COVID factor was created for each individual movement by dividing the December 2016 TMC movement volume by the 2021 TMC movement volume. The 2021 data that was adjusted to account for school traffic was then multiplied by this factor to get the final adjusted 2021 volume data." It is noted that due to the timing of the data collection for 2017 and 2021 (i.e., August), Kimley-Horn intentionally selected volumes for specific movements that needed to be and/or were more directly representative of "school in session" volumes (i.e., December 2016 TMC data captures turning movements at the Benns Church Boulevard/Turner Drive signalized intersection with school fully in session).

Table 1: Study Area Roadway Historical AAWDTs

VDOT Historical Daily Traffic Volumes AAWDT						
Location	**2015**	**2016**	**2017**	**2018**	**2019**	**Average Annual Growth**
Southern Corporate Limits of the Town of Smithfield to Brewers Neck Boulevard	27,000	28,000	26,000	26,000	27,000	0.102%
					Average Annual Growth Rate	**0.10%**
					Proposed Annual Growth Rate	**1.0%**

Source: VDOT (i.e., 2015 to 2019 ADT)



Kimley»Horn	Wawa Development Benns Church Boulevard TIA	2021 Existing Lane Geometry	FIGURE 3

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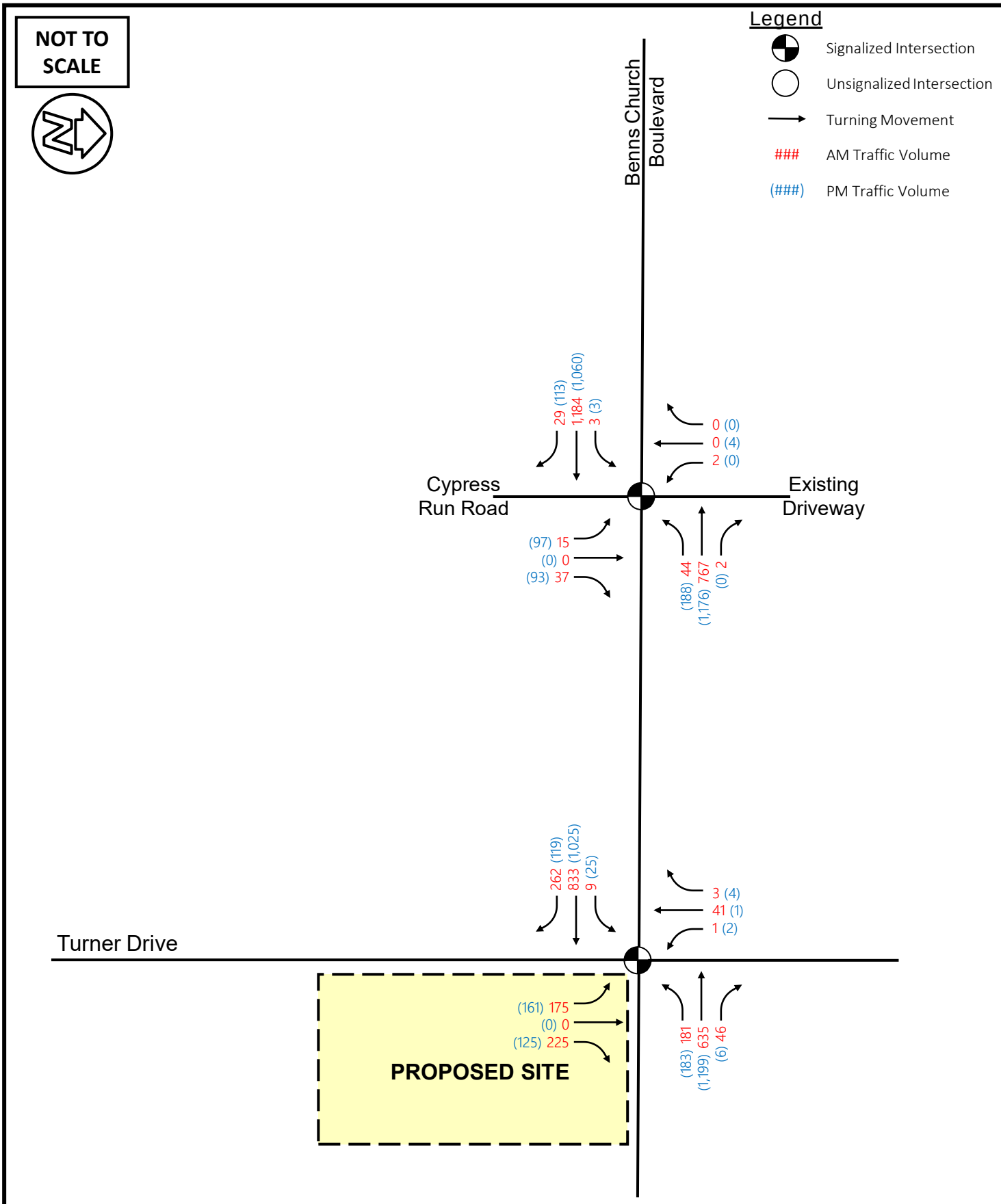

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	2021 Existing Peak Hour Volumes	FIGURE 4

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4.0 PROJECTED TRAFFIC VOLUMES

In addition to 2021 Existing Conditions, this study includes the analysis of three (3) Future Year (i.e., one (1) No Build and two (2) Build) scenarios. The proposed development is anticipated to open in 2023. The following analysis scenarios for the AM and PM peak hours were studied as part of this TIA. The peak hours for this intersection were determined by looking at the school hours of both Smithfield Middle and Smithfield High School combined with the historic traffic volume data from 2016 and 2017 collected by VDOT. A summary of general traffic conditions associated with each scenario is included below:

- **Scenario 1** – Existing (2021) traffic conditions
- **Scenario 2** – Future Year (2023) No-Build Conditions – Opening year traffic conditions with a future growth rate applied to approved base year traffic volumes plus background development trips (i.e., approved historical growth rate plus approved adjacent development traffic if applicable) but without traffic volumes generated by the proposed Wawa Convenience Market with Fuel development.
    - Background traffic for this TIA was assumed to include a New 600 Pupil Elementary School located along Turner Drive adjacent to Smithfield Middle School and Smithfield High School
- **Scenario 3** – Future Year (2023) Build-out conditions – Opening year traffic conditions with a future growth rate applied to approved base year traffic volumes plus background development trips (i.e., approved historical growth rate plus approved adjacent development traffic if applicable), with traffic volumes generated by the proposed Wawa Convenience Market with Fuel development
    - Background traffic for this TIA was assumed to include a New 600 Pupil Elementary School located along Turner Drive adjacent to Smithfield Middle School and Smithfield High School
- **Scenario 4*** – Future Year (2023) Build-out No Elementary School conditions – Opening year traffic conditions with a future growth rate applied to approved base year traffic volumes plus background development trips (i.e., approved historical growth rate), with traffic volumes generated by the proposed Wawa Convenience Market with Fuel development
    - Same as Scenario 3, however it does not include traffic volumes for a proposed New 600 Pupil Elementary School to the south of Smithfield High School along Turner Drive
    - Unlike Scenario 3 and 5, the northbound approach of Turner Drive at Benns Church Boulevard will consist of an exclusive left-turn lane and a shared though/right-turn lane
- **Scenario 5** – Future Year (2023) Build-out conditions – Opening year traffic conditions with a future growth rate applied to approved base year traffic volumes plus background development trips (i.e., approved historical growth rate plus approved adjacent development traffic if applicable), with traffic volumes generated by the proposed Wawa Convenience Market with Fuel development
    - Same as Scenario 3 and also includes a dedicated pedestrian phase as a part of signal operations at the signalized intersection of Benns Church Boulevard and Turner Drive

***Note:** Scenario 4 was added to provide a clearer and/or realistic picture of the trip generation impacts, and the anticipated operational conditions associated with the proposed development in 2023/2024. Concern was raised that the proposed but not approved new Elementary School was overstating near-term traffic volume estimates and/or the reduction in operational conditions along Turner Drive. The analysis scenario that includes the new elementary school should be used by Isle of Wight County in collaboration with Isle of Wight County Schools and/or VDOT for future planning purposes and not as a factor in the consideration of the CUP application.

4.1 BACKGROUND TRAFFIC GROWTH

A conservative 1% growth rate per year was used to account for general growth and other developments that may occur near or within the study area. This growth rate is consistent with overall County average growth rate used in other similar traffic studies.

The 2023 background peak hour traffic volumes were developed by applying a compounding 1.0% growth rate over a 2-year period to existing/base year (2021) volumes plus traffic associated with the approved/planned adjacent development as well as a proposed new 600 pupil elementary school). However, as noted previously, background traffic for Scenario 4 did not include the consideration of traffic associated with the proposed elementary school.

Trip generation associated with the proposed new elementary school is expected to result in an additional 1,134 daily weekday trips, as well as 402 trips during the AM peak hour (i.e., 217 entering and 185 exiting) and 102 trips during the PM peak hour (i.e., 49 entering and 53 existing) as shown in **Table 2**.

Table 2: Trip Generation for a Proposed New 600 Pupil Elementary School

ITE Code	ITE Description	Density	Unit	Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
520	Elementary School	600	Students	*1,134*	*402*	*217*	*185*	*102*	*49*	*53*
			New Site Trips	*1,134*	*402*	*217*	*185*	*102*	*49*	*53*

4.2 SITE ACCESS SPACING

Based on the conceptual site plan, access to the site is proposed at the following two locations:

- **Site Access #1** on Benns Church Boulevard, approximately 300 feet east of Turner Drive – This intersection will operate as an unsignalized, right-in/right-out (RIRO) driveway
- **Site Access #2** on Turner Drive, approximately 450 feet south of the Benns Church Boulevard – This intersection will operate as an unsignalized, full-movement (i.e., full access) intersection

Based on these proposed access locations and permitted movements, spacing requirements per VDOT's *Roadway Design Manual Appendix F Access Management Design Standards for Entrances and Intersections* were reviewed. The required intersection spacing was compared to the proposed intersection spacing for the site entrances and is summarized in ***Table 3***.

Table 3: Summary of Site Access Spacing

Site Access	Roadway	To	From	Minimum Spacing Requirement (feet)	Proposed Access Spacing (feet)	Meets Spacing Requirements?
Site Access #1 (Partial Access)	Benns Church Boulevard	Turner Drive	Site Access #1	250'	300'	Yes (+50')
Site Access #2 (Full Access)	Turner Drive	Benns Church Boulevard	Site Access #2	335'	450'	Yes (+115')

4.3 PROPOSED TRIP GENERATION, DISTRIBUTION, AND ASSIGNMENT

Traffic generation potential for the proposed development was obtained using *ITE Trip Generation 10th Edition* (2017). Trip generation estimates for the proposed site land uses are shown in **Table 4**. In addition, pass-by reductions were applied, consistent with the methods contained within the ITE *Trip Generation Handbook 10th Edition.* Trip generation estimates were developed and compared based on the number of fueling stations, convenience market square footage, and calculating the average using the volumes associated with fueling stations and square footage. Therefore, the proposed pass-by reduction was determined to be 63% and 66% of the trips generated for the AM and PM peak hours, respectively.

Table 4: Trip Generation for Proposed Development

ITE Code	ITE Description	Density	Unit	Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Trip Generation Based on Fueling Stations										
960	Super Convenience Market/Gas Station	16	Fueling Positions	3,688	449	225	224	367	184	183
Pass-By (63% AM, 66% PM)					(283)	(142)	(141)	(242)	(121)	(121)
New Site Trips				3,688	166	83	83	125	63	62
960	Super Convenience Market/Gas Station	6,049	Square Ft	5,067	566	283	283	419	210	209
Pass-By (63% AM, 66% PM)					(357)	(178)	(178)	(277)	(139)	(138)
New Site Trips				5,067	209	105	105	142	71	71
960	Super Convenience Market/Gas Station	Average		4,378	508	254	254	393	197	196
Pass-By (63% AM, 66% PM)					(320)	(160)	(160)	(259)	(130)	(129)
New Site Trips				4,378	188	94	94	134	67	67

The proposed Wawa development has the potential to generate a total of 4,378 daily weekday trips. Out of the total weekday trips, 508 driveway trips will occur during the AM peak hour and 393 driveway trips will occur during the PM peak hour. Pass-by assumptions for the proposed development were determined to be 63% and 66% of the trips generated during the AM and PM peak hours respectively.

As a result, the proposed development is estimated to generate a total of 188 new trips occurring during the AM peak hour and 134 new trips during the PM peak hour.

Site traffic distributions were preliminary determined from available traffic data, anticipated routes for vehicles entering and exiting the site, and a general familiarity of the study area. At the regional level it is anticipated that the majority of traffic will be traveling to/from Benns Church Boulevard located northeast of the project site.

Proposed distributions determined for the proposed Wawa Convenience Market with Fuel development are listed below:

- To/from the south on Turner Drive – 20%
- To/from the west on Benns Church Boulevard – 40%
- To/from the east on Benns Church Boulevard – 40%

Two (2) unsignalized access driveways are proposed with the development. The first access driveway will be located along eastbound Benns Church Boulevard, approximately 325 feet south of Turner Drive, and will operate with right-in-right-out (RI/RO) only operations. Site access driveway #2 will be located along Turner Drive, approximately 450 feet south of Benns Church Boulevard and will accommodate full movement operations.

Detailed trip distribution and assignment is shown in **Figure 5**.

AM and PM future traffic volumes for Scenarios 3 and 5 are illustrated in **Figure 6** and **Figure 7**.

AM and PM future traffic volumes for Scenario 4 are illustrated in **Figure 8** and **Figure 9**.

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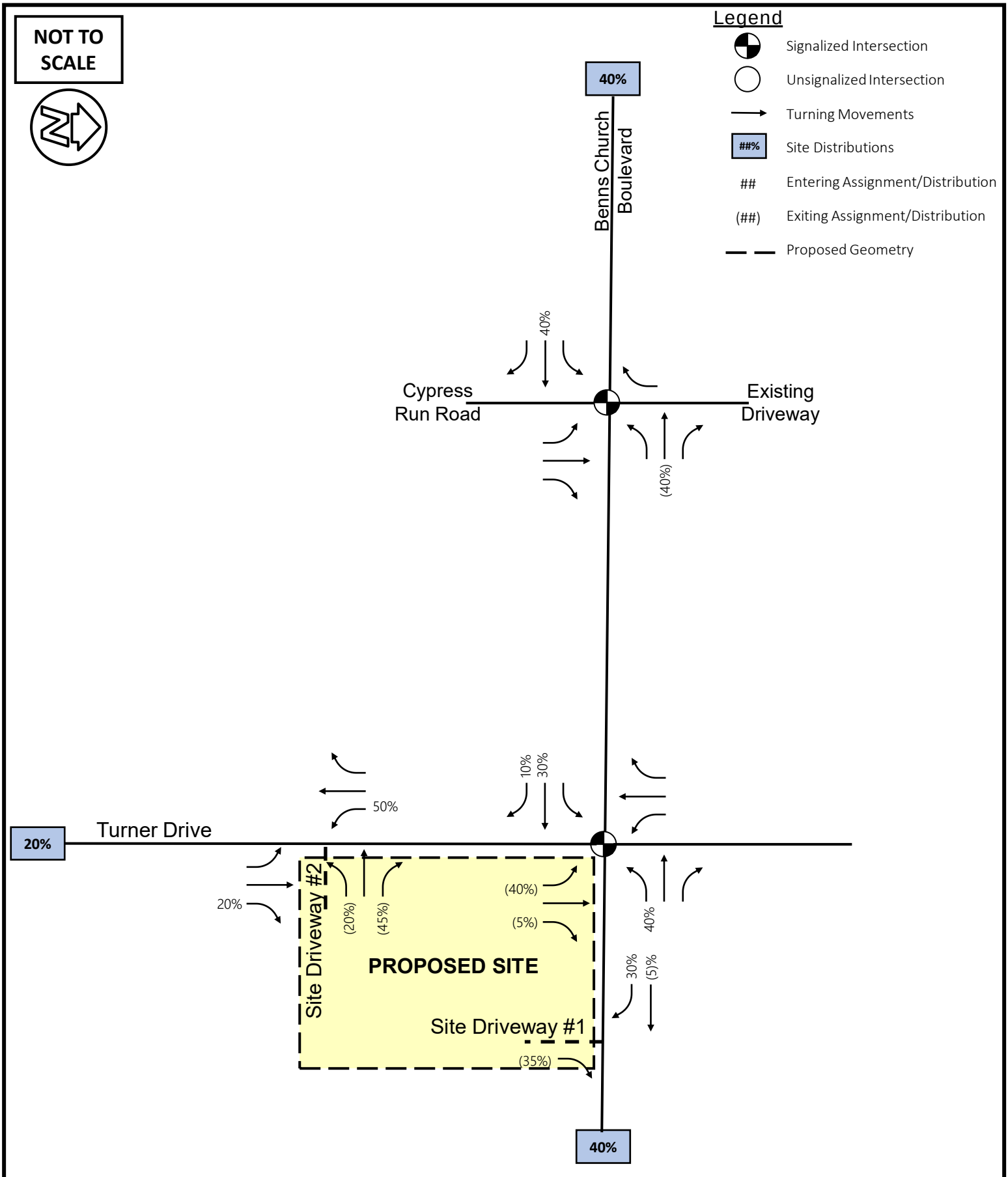

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	Proposed Trip Distributions	FIGURE 5

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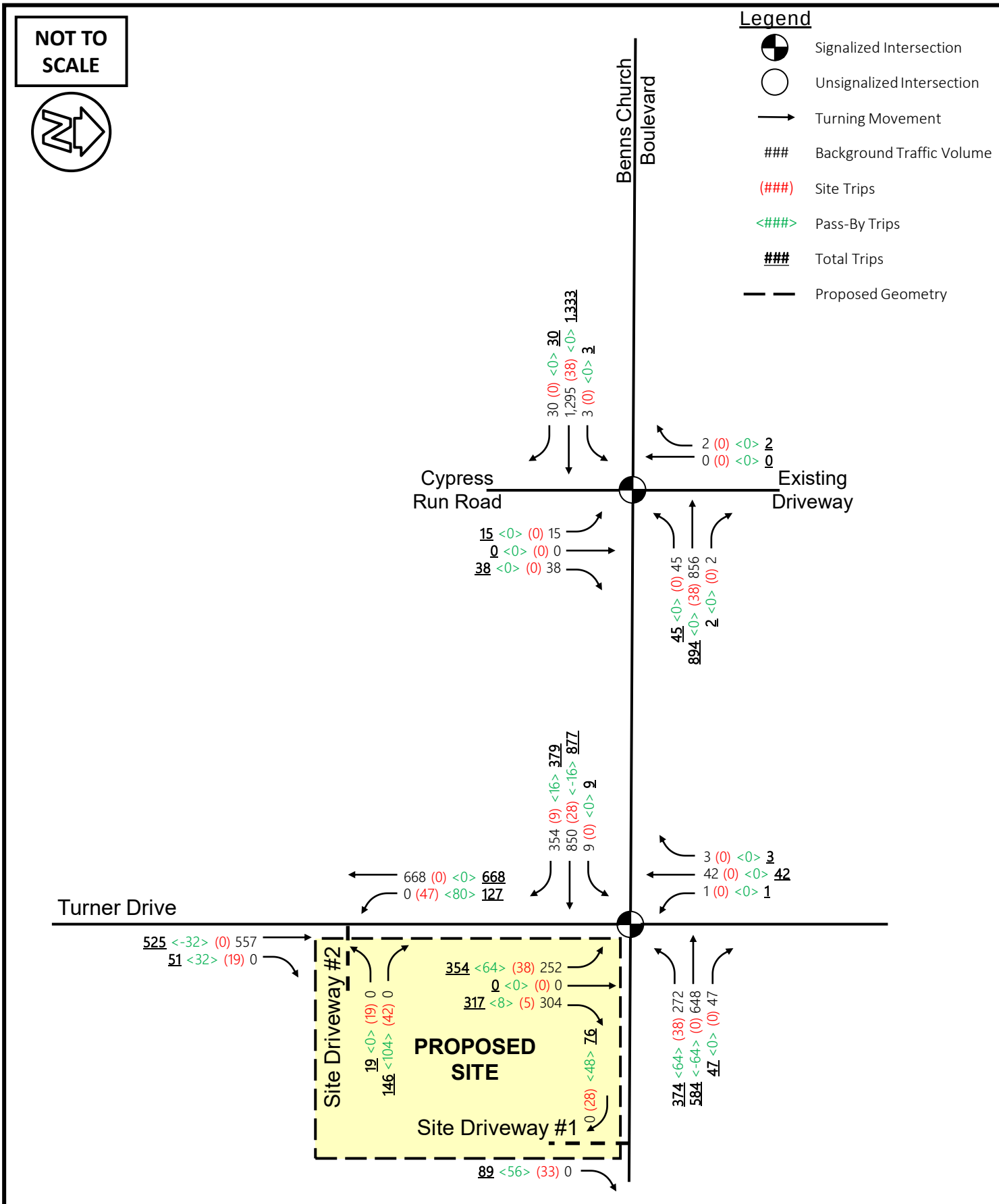

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	2023 AM Peak Hour Volumes for Scenarios 3 and 5	FIGURE 6

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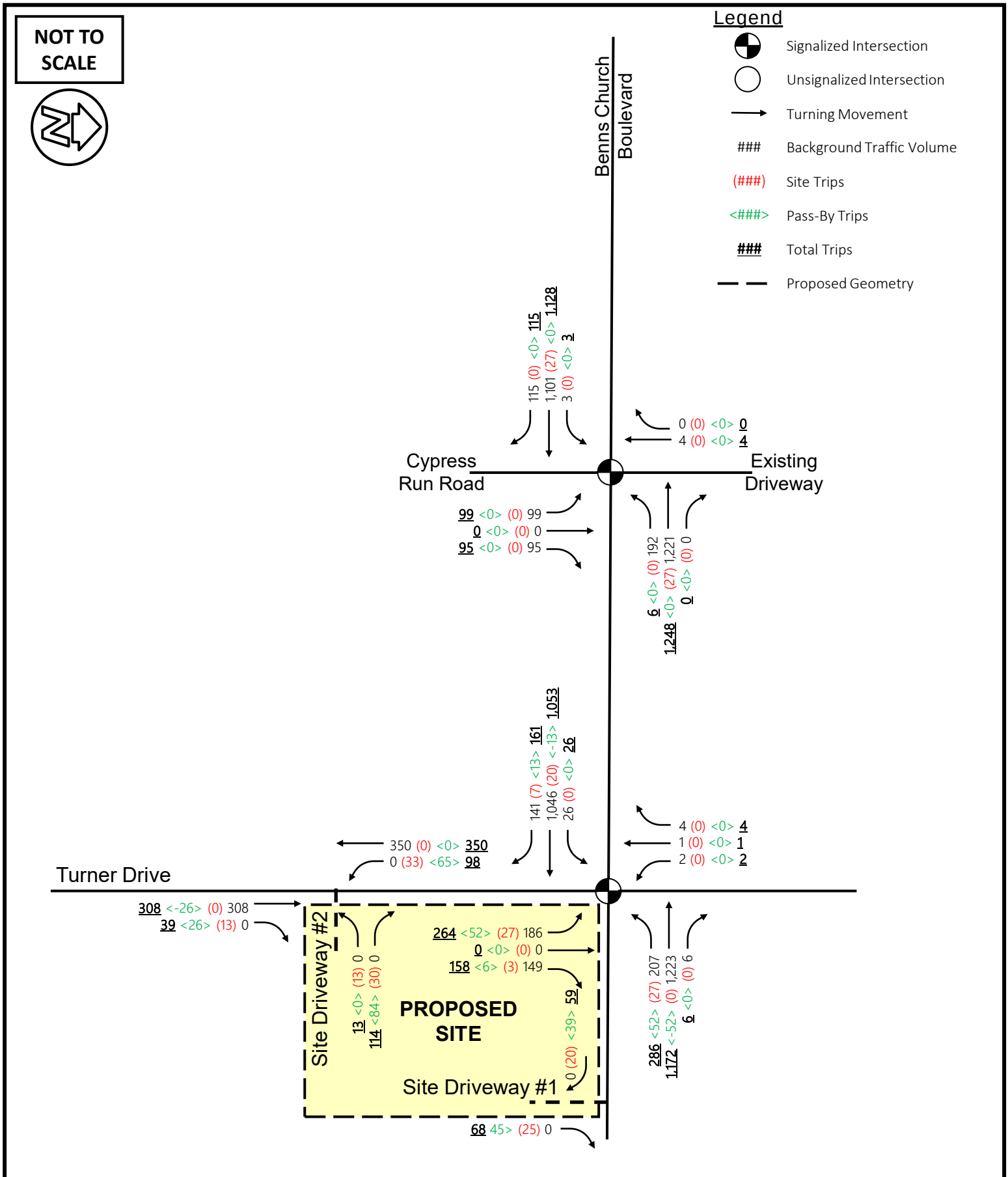

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	2023 PM Peak Hour Volumes for Scenarios 3 and 5	FIGURE 7

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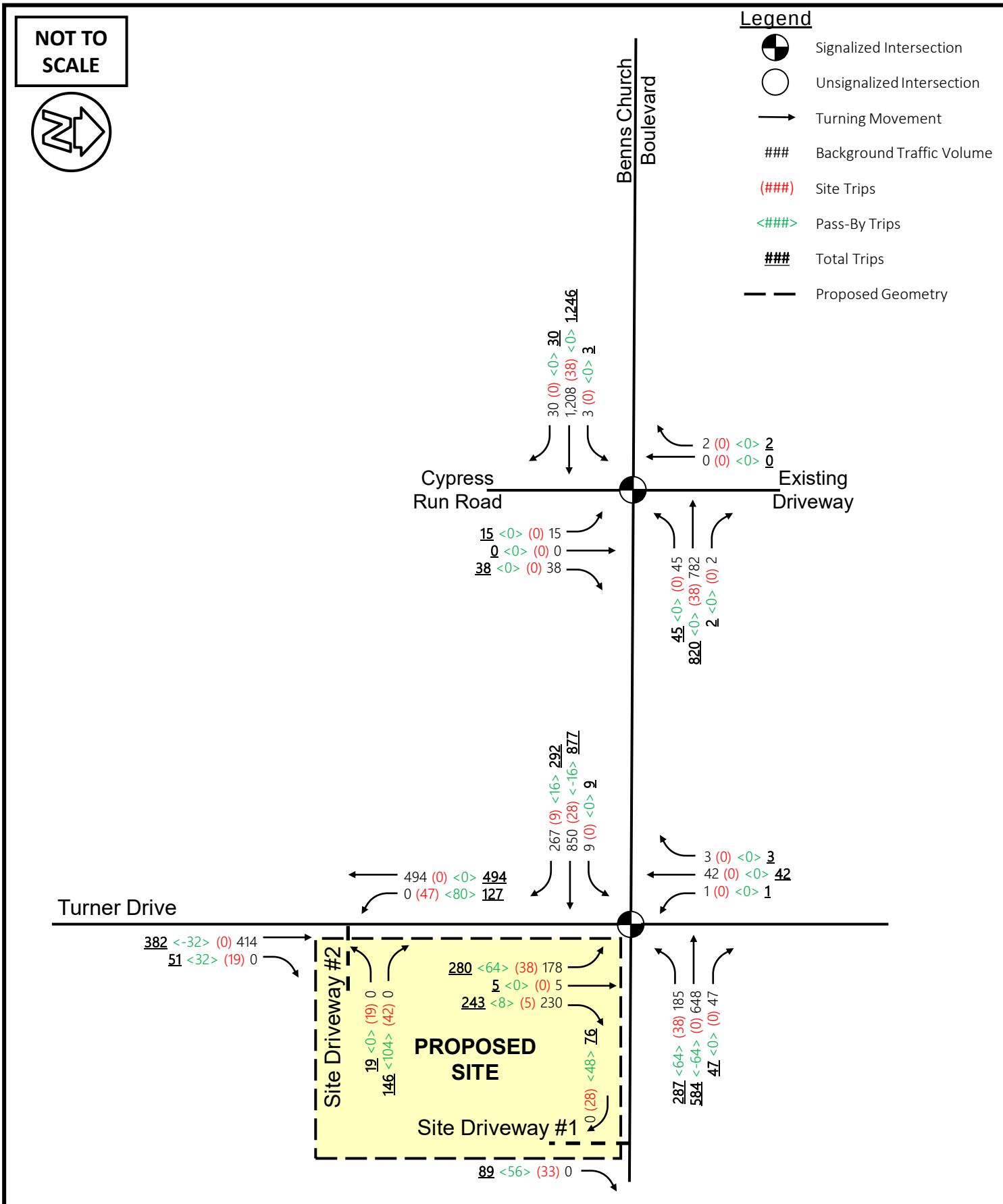

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	2023 AM Peak Hour Volumes for Scenario 4	FIGURE 8

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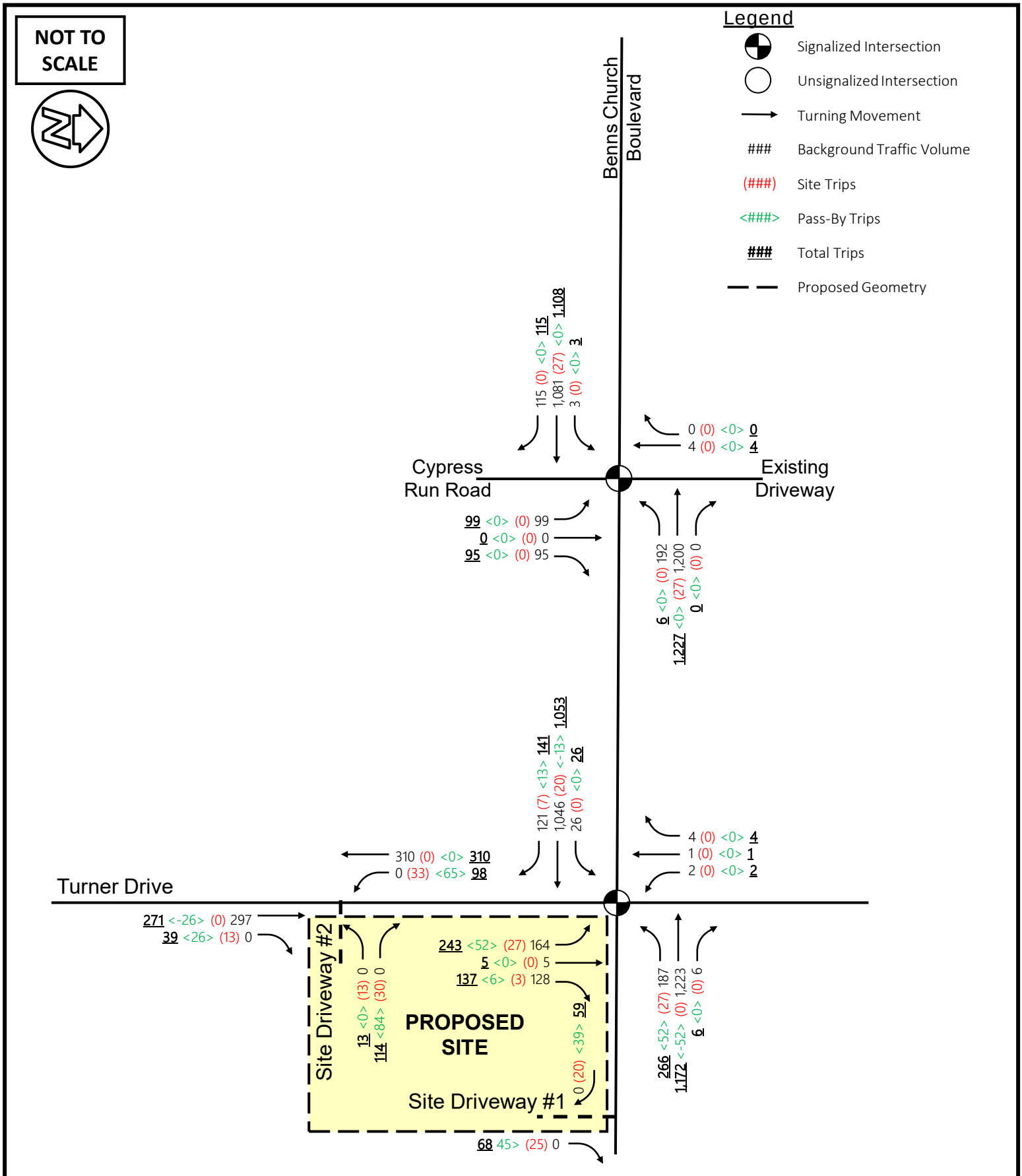

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	2023 PM Peak Hour Volumes for Scenario 4	FIGURE 9

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5.0 TRAFFIC ANALYSIS

5.1 TURN LANE WARRANT

A right-turn lane warrant analysis was performed for the eastbound approach of Benns Church Boulevard at the proposed RI/RO Site Access Driveway # 1 and for the eastbound approach of Benns Church Boulevard at Turner Drive. A left-turn lane warrant analysis was performed for the southbound approach of Turner Drive at the proposed Site Access Driveway # 2 and for the northbound approach of Turner Drive at Benns Church Boulevard. These were conducted to assess the need for any additional right-turn and/or left-turn treatments (i.e., new exclusive turn-lane or improvement of an existing turn-lane), due to the increase in traffic generated by the proposed development and anticipated to access the development site at these locations. This was conducted in accordance with VDOT turn-lane warrant analysis guidelines per *Appendix F Access Management Design Standards for Entrances and Intersections*. Detailed data sheets for the turn-lane warrants are provided in **Appendix C.**

A right-turn lane warrant analysis for the eastbound approach of Benns Church Boulevard at Turner Drive was completed No Build and Build Conditions. The existing right-turn lane consists of approximately 170 feet of full width storage and a 230-foot taper. Based on AM volumes for both scenarios, a capacity analysis was warranted to determine the appropriate storage lane length and a 200-foot taper is required. The SimTraffic Queue Reports were used to complete the capacity analysis. For the AM and PM scenarios, both the No-Build and Build-out scenarios are projected to have an approximate 280-foot max queue. While 280 feet is the current approximate storage in the right-turn lane, the SimTraffic software is only projecting the max queue to fill the storage lane because the through lanes are projected to continuously block the right-turn lane traffic in all scenarios. The only scenario where the right-turn lane is modeled to actually back up past the 280 feet of storage is in the AM Build with Pedestrian Phasing where the queue is projected to extend the full length of the storage bay for approximately 1% of the peak hour. Based on these findings, the Build-out volumes are not projected to add significantly to the future queueing when compared to future No-Build peak hour queuing conditions.

A left-turn lane warrant analysis for the northbound approach of Turner Drive at Benns Church Boulevard was completed for Scenario 4. Scenario 4 proposes the reconfiguration of the northbound approach to consist of an exclusive left-turn lane and a shared through/right-tun lane. The proposed left-turn lane will consist of approximately 200 feet of full width storage and a 100-foot taper. Per the requirements stated in the *Appendix F* guidelines, a minimum of 100 feet of storage is required for this movement.

For the eastbound approach of Benns Church Boulevard at the proposed RI/RO Site Access Driveway # 1 it was determined that a full-width right-turn lane and taper would be required to accommodate the future development traffic under all future Build conditions. Per the requirements stated in the *Appendix F* guidelines and through conversations with VDOT while preparing this study, the proposed right-turn lane should consist of 200 feet of full width storage and a 100-foot taper.

It was determined that an exclusive left-turn lane along southbound Turner Drive would be required to accommodate the future development traffic entering the site via Site Access Driveway # 2 under all future Build scenarios. Per the requirements stated in the *Appendix F* guidelines and through conversations with VDOT while preparing this study, the proposed left-turn lane should consist of 200 feet of full width storage and a 200-foot taper.

However, based on the operational analysis findings (e.g., vehicle arrival during peak hour conditions, queuing results for the left-turn movement, etc.), efforts to avoid significant geometric modifications (e.g., horizontal curvature) to the existing shared through/left-turn lane, and concerns over the significant construction costs associated with reconstructing approximately 800 feet to 1,000 feet of Turner Drive to accommodate the proposed southbound left-turn lane, it is recommended that the left-turn lane be configured to consist of 150 feet of storage and a 100-foot taper to serve this movement. With the adjustments to the intersection and left-turn lane spacing, the queues are expected to be contained fully within the storage lane and the overall intersection is anticipated to operate at a LOS A, with no impacts to the upstream signalized intersection of Benns Church Boulevard and Turner Drive.

5.2 INTERSECTION OPERATIONAL ANALYSIS

Capacity analyses for all study intersections were performed under weekday AM and weekday PM peak hour conditions for the following scenarios:

- 2021 Existing Conditions (Scenario 1)
- 2023 Future Year No Build (Scenario 2)
- 2023 Future Year Build (Scenario 3)
- 2023 Future Year Build with No School (Scenario 4)
- 2023 Future Year Build with pedestrian phasing (Scenario 5)

All signalized and unsignalized intersection capacity analyses were completed using *Synchro Professional (Version 11)* and *SimTraffic*, which is the microsimulation companion tool of *Synchro*. For future conditions analyses, traffic signal timings were optimized to account for increases in future traffic volumes (i.e., either due to background traffic growth or additional development related traffic) and/or changes in travel/turning movement patterns. Two (2) measures of effectiveness (MOE) were analyzed in the intersection capacity analyses – average vehicle delay (in seconds per vehicle) and maximum queue lengths (in feet, rounded up to the nearest five (5) feet). Average vehicle delays were obtained using *2000 Highway Capacity Manual (HCM)* methodologies contained within *Synchro*, while maximum queue lengths were obtained by averaging results from 10 individual *SimTraffic* simulation runs.

Accompanying HCM vehicle delays are HCM level of service (LOS) designations. LOS ranges from A to F— “A” indicating a condition of little or no congestion and “F” a condition with severe congestion, unstable traffic flow, and stop-and-go conditions. **Table 5** summarizes LOS thresholds by vehicle delay for signalized and unsignalized intersections.

Throughout this chapter, average vehicle delay, LOS, and queue length results are presented in tabular format, while software output results are included in **Appendix D**. In each queuing result table, “Effective Storage Length” distances are also included. For exclusive turn lanes, the effective storage length distances reflect actual storage lengths (i.e., full-width storage length) plus half of the taper. For continuous lanes, the effective storage lengths reflect the distance to the next upstream intersection. These distances, when compared to maximum queue length results, help in identifying potential queueing concerns at study area intersections. In each queueing summary table, queue length values were **bolded** if they are anticipated to be equal to or greater than effective storage lengths.

AM and PM Queue Lengths are shown graphically in **Figure 10** and **Figure 11** for each build condition scenario.

Lastly, queue lengths that are expected to be less than 25 feet in length (approximately 1 vehicle) have been reported as “< 25” in the queue length tables.

Table 5: LOS Control Delay Thresholds

LOS	Signalized Intersections Control Delay Per Vehicle [sec/veh]	Unsignalized Intersections Average Control Delay [sec/veh]	Relative Delay
A	≤ 10	≤ 10	Short Delays
	Free-flow traffic operations at average travel speeds. Vehicles completely unimpeded in ability to maneuver. Minimal delay at signalized intersections.		
B	> 10 – 20	> 10 – 15	
	Reasonably unimpeded traffic operations at average travel speeds. Vehicle maneuverability slightly restricted. Low traffic delays.		
C	> 20 – 35	> 15 – 25	
	Stable traffic operations. Lane changes becoming more restricted. Travel speeds reduced to half of average free flow travel speeds. Longer intersection delays.		
D	>35 – 55	> 25 – 35	Moderate Delays
	Small increases in traffic flow can cause increased delays. Delays likely attributable to increase traffic, reduced signal progression and adverse timing.		
E	>55 – 80	> 35 – 50	
	Significant delays. Travel speeds reduced to one third of average free flow travel speed.		
F	> 80	> 50	Long Delays
	Extremely low speeds. Intersection congestion. Long delays. Extensive traffic queues at intersections.		

Source: Highway Capacity Manual, Transportation Research Board, Washington, D.C., 2010

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	AM Build Queue Lengths	FIGURE 10

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NOT TO SCALE

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	PM Build Queue Lengths	FIGURE 11

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5.3 BENNS CHURCH BOULEVARD AT TURNER DRIVE

Under existing conditions, this intersection currently operates with overall LOS B during the AM peak hour and LOS C during the PM peak hour. Individual movements under all existing scenarios are shown to operate at LOS D or better. Based on the model simulation, the eastbound, westbound, and northbound through queues are shown to periodically block the adjacent turn lanes during the AM and PM peak hours.

Under future 2023 No-Build conditions, this intersection is anticipated to operate at an overall LOS C in the AM and PM peak hours. Through movement queues are also projected to lengthen, resulting in more instances of access to the turn lanes being impeded during these peak periods.

With the addition of the proposed site traffic and proposed background school traffic in 2023, this intersection is anticipated to operate with overall LOS D in the AM peak hour and LOS C in the PM peak hour. Compared to No Build conditions, the potential for queues blocking adjacent turn lanes is expected to increase by approximately 10% and 12% for eastbound and northbound through movements, respectively. While compared to No Build conditions, the AM queues are projected to decrease by approximately 13% and 1% for the westbound left and westbound through/right movements, respectively.

In Scenario 4 (i.e., Build with No Elementary School traffic), with the background plus proposed Wawa development traffic only, this intersection is anticipated to operate with an overall LOS C during both the AM and PM peak hours. Compared to Scenario 2 (i.e., No Build) all LOS movements are anticipated to remain consistent with No Build, except for the southbound left/through/right movement. Compared to Scenario 3 (i.e., Build with the proposed Elementary School), the westbound through and northbound left/through queueing in the AM Peak Hour is anticipated to decrease by approximately 300 ft and 150 feet, respectively. All other movement queues associated with Scenario 4 are anticipated to remain consistent with future No Build conditions.

One of the primary concerns initially expressed by VDOT is the location of proposed Site Access Driveway #2 being within the functional area of the intersection. Queuing associated with the northbound approach of Turner Drive at Benns Church Boulevard can periodically extend as far as 250 feet (i.e., the shared through/left-turn lane) to 305 feet (i.e., the exclusive right-turn lane) to the south of the intersection. With Scenario 4, queue lengths could increase to essentially a combined length of 308 feet (i.e., due to reducing the length of the exclusive right-turn lane to introduce the southbound exclusive left-turn lane) south of the Benns Church Boulevard intersection during the AM peak hour and have the potential for one to two vehicles to queue south of Site Driveway #2.

However, queuing south of the Site Access Driveway #2 under Scenario 4 is expected to be more of a product of northbound traffic stopping to provide gaps for traffic either attempting to exit the site or southbound traffic entering the site from the proposed exclusive left-turn lane. It is noted again that the proposed location of Site Access Driveway # 2 is approximately 450 feet south of the Benns Church signalized intersection (i.e., approximately 115 feet more than the minimum spacing requirement of 335 feet for a full access intersection). Therefore, it is anticipated that queue lengths will not extend as far south as the proposed Site Access Driveway #2 on any type of regularly basis throughout the day and with the proposed southbound left-turn lane it is expected that this full access intersection along Turner Driver will function safely and efficiently under peak and off-peak traffic conditions.

In Scenario 5, with added pedestrian phasing crossing Benns Church Boulevard on the west leg and Turner Drive on the south leg, overall LOS is anticipated to decrease to a LOS D in the AM and PM peak hour. Eastbound through queues are shown to block the adjacent turn lanes approximately 13% more in the AM peak hour and 6% more in the PM peak hour than Scenario 3 with no pedestrian phasing.

Currently, this signalized intersection operates with a cycle length of 130 seconds in the PM peak hour, while the intersection of Benns Church Boulevard and Cypress Run Drive operates with a cycle length of 120 seconds in the PM peak hour. For all future scenarios (i.e., No Build and Build) the cycle length time at the intersection of Benns Church Boulevard and Cypress Run Drive was updated to 130 seconds to optimize signal timing and traffic progression between the two intersections.

Results from the capacity and queuing analyses at this signalized intersection are shown in **Table 6** and **Table 7**, respectively.

Table 6: Benns Church Boulevard at Turner Drive Intersection LOS Summary

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)							
			Eastbound			Westbound		Northbound		Southbound
			LT	TH	RT	LT	TH/RT	LT	TH/RT	LT/TH/RT
Weekday AM Peak Hour										
2021 Existing	Signal	(B) 16.7	(A) 7.3	(B) 12.7	(A) 3.4	(B) 11.2	(B) 11.7	(D) 49.1	(D) 38.2	(D) 38.0
			(B) 10.4			(B) 11.6		(D) 43.0		(D) 38.0
2023 No Build	Signal	(C) 24.4	(B) 12.8	(C) 24.7	(B) 19.1	(B) 19.8	(B) 15.6	(D) 47.9	(C) 33.5	(C) 32.5
			(C) 23.0			(B) 16.8		(D) 40.0		(C) 32.5
2023 Build	Signal	(D) 37.0	(B) 19.9	(D) 35.6	(C) 28.9	**(E) 55.2**	(B) 17.5	**(E) 71.1**	(C) 31.1	(C) 29.8
			(C) 33.5			(C) 31.6		(D) 52.2		(C) 29.8
2023 Build with Pedestrian Phasing	Signal	(D) 38.6	(B) 12.1	(D) 41.8	(D) 45.7	(D) 49.7	(B) 19.1	**(E) 56.6**	(C) 29.4	(C) 28.1
			(D) 42.7			(C) 30.5		(D) 43.8		(C) 28.1
Weekday PM Peak Hour										
2021 Existing	Signal	(C) 20.8	(B) 10.4	(C) 21.2	(B) 14.7	(B) 12.6	(B) 15.7	(D) 53.7	(D) 43.7	(D) 43.0
			(C) 20.3			(B) 15.3		(D) 49.3		(D) 43.0
2023 No Build	Signal	(C) 20.8	(A) 9.9	(B) 15.2	(C) 26.7	(B) 17.3	(B) 18.8	(D) 50.2	(D) 40.6	(D) 39.7
			(B) 16.4			(B) 18.6		(D) 45.9		(D) 39.7
2023 Build	Signal	(C) 31.6	(B) 11.5	(C) 32.3	(C) 28.6	(D) 44.6	(C) 22.7	(D) 54.8	(D) 36.6	(D) 55.0
			(C) 31.4			(C) 27.0		(D) 48.0		(D) 55.0
2023 Build with Pedestrian Phasing	Signal	(D) 37.1	(B) 15.5	(D) 42.0	(D) 36.9	(D) 53.2	(C) 28.4	(D) 43.9	(C) 32.0	(D) 48.9
			(D) 40.8			(C) 33.2		(D) 39.4		(D) 48.9
Weekday AM Peak Hour										
2023 Build with No School	Signal	(C) 25.2	(B) 15.2	(C) 27.3	(B) 14.1	(C) 23.7	(B) 16.4	(D) 41.4	(C) 32.0	(D) 54.2
			(C) 24.0			(B) 18.6		(D) 37.0		(D) 54.2
Weekday PM Peak Hour										
2023 Build with No School	Signal	(C) 26.3	(B) 19.2	(C) 21.0	(A) 5.3	(D) 40.0	(C) 24.9	(D) 48.3	(D) 35.7	(D) 54.5
			(B) 19.2			(C) 27.7		(D) 43.8		(D) 54.5

Table 7: Benns Church Boulevard at Turner Drive Intersection Maximum Queue Summary

Scenario	Traffic Control	Maximum Queue Length by Movement (feet)							
		Eastbound			Westbound		Northbound		Southbound
		LT	TH	RT	LT	TH/RT	LT/TH	RT	LT/TH/RT
Effective Storage Length (Existing/No Build)		140	Cont.	280	130	Cont.	Cont.	305	185
Effective Storage Length (Build and Build with Ped Phasing)		140	Cont.	280	450	Cont.	Cont.	250	185
Weekday AM Peak Hour									
2021 Existing	Signal	47	239 **(8%)	73	**134** ***(2%)**	168 **(1%)	213	109	74
2023 No Build	Signal	117	363 **(17%)	**280**	**151** ***(13%)**	324 **(7%)	314	254	91
2023 Build	Signal	109	397 **(27%)	**280**	376	556 **(6%) ^(6%)	412 **(22%) ^(12%)	**323** ***(2%)**	90
2023 Build with Pedestrian Phasing	Signal	103	588 **(39%)	**335** ***(1%)**	415	848 **(25%) ^(25%)	370 **(9%) ^(3%)	**250** ***(1%)**	97
Weekday PM Peak Hour									
2021 Existing	Signal	122	345 **(9%)	194	**143** ***(2%)**	294 **(5%)	233	108	36
2023 No Build	Signal	100	256 **(6%)	105	**153** ***(9%)**	418 **(9%)	256	166	29
2023 Build	Signal	139	414 **(17%)	**280**	335	440 **(1%) ^(1%)	320 **(2%)	237	31
2023 Build with Pedestrian Phasing	Signal	122	498 **(23%)	**309**	364	628 **(4%) ^(4%)	310 **(2%)	224	38
		LT	TH	RT	LT	TH/RT	LT	TH/RT	LT/TH/RT
Effective Storage Length (Build No School)		140	Cont.	280	450	Cont.	250	Cont.	185
Weekday AM Peak Hour									
2023 Build with No School	Signal	85	399 **(19%)	**280**	284	222	**261** ***(3%)**	332 **(1%) ^(1%)	97
Weekday PM Peak Hour									
2023 Build with No School	Signal	104	361 **(15%)	216	310	370	238 *(1%)	217	35

Notes:
**(X%) - Maximum queue extends full length of storage bay for X% of the analysis period*
***(Y%) - Queue in lane adjacent to storage bay extends beyond end of storage bay for Y% of the analysis period*
^(Z%) - Maximum queue extends back to upstream intersection for Z% of the analysis period

5.4 BENNS CHURCH BOULEVARD AT CYPRESS RUN DRIVE

Under existing conditions, this intersection is operating at an overall LOS B in the AM and PM peak hours. The major through movements along Benns Church Boulevard operate at a LOS B or better during AM and PM peak hours, while the Cypress Run Drive side street movements operate at a LOS E or better. Model simulation shows queue lengths blocking the adjacent turn lane in the eastbound movement approximately 10% of the time in the PM peak hour.

Under all future peak hour scenarios, this intersection is anticipated to operate at an overall LOS B for the AM peak hour. In the PM peak hour, this intersection is anticipated to operate at an overall LOS C for the No Build scenario and LOS B for all Build scenarios. Under all scenarios, traffic along Benns Church Boulevard is anticipated to operate with movements as LOS C or better and traffic along Cypress Run Drive and the existing residential driveway are anticipated to operate at LOS E or better. With the addition of the proposed future site traffic, vehicle delays are expected to experience only minor increases (i.e., approximately 20 seconds) in the PM peak hour for all movements except the westbound through/right movement in comparison to No Build conditions. The westbound through/right movement is anticipated to decrease approximately 80 seconds or more in all PM Build scenarios and approximately 10 seconds or more in all AM Build scenarios in comparison to No Build conditions.

Based on model simulation of all future scenarios, eastbound through queues along Benns Church Boulevard are projected to block the adjacent turn lanes less than 10% of the time during the PM peak hours and less than 1% of the time during AM peak hours. Therefore, the addition of the proposed Wawa traffic is anticipated to have minimal impacts to this intersection with no additional improvements required.

Results from the capacity and queuing analyses at this signalized intersection are shown in **Table 8** and **Table 9**, respectively.

Table 8: Benns Church Boulevard at Cypress Run Road Intersection LOS Summary

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)							
			Eastbound			Westbound		Northbound		Southbound
			LT	TH	RT	LT	TH/RT	LT/TH	RT	LT/TH/RT
Weekday AM Peak Hour										
2021 Existing	Signal	(B) 11.2	(A) 5.1	(B) 10.9	(A) 6.6	(A) 9.2	(A) 9.1	(D) 53.4	(D) 51.8	**(E) 58.6**
			(B) 10.8			(A) 9.1		(D) 52.2		**(E) 58.6**
2023 No Build	Signal	(B) 11.3	(A) 5.2	(B) 11.6	(A) 6.6	(A) 9.3	(A) 8.3	(D) 53.4	(D) 51.8	**(E) 58.6**
			(B) 11.5			(A) 8.4		(D) 52.2		**(E) 58.6**
2023 Build	Signal	(B) 10.8	(A) 7.2	(B) 14.3	(A) 7.9	(A) 5.6	(A) 3.3	(D) 53.4	(D) 51.8	**(E) 60.2**
			(B) 14.2			(A) 3.4		(D) 52.2		**(E) 60.2**
2023 Build with Pedestrian Phasing	Signal	(B) 11.9	(A) 5.1	(B) 16.2	(A) 8.9	(A) 7.9	(A) 3.2	(D) 53.4	(D) 51.8	**(E) 60.2**
			(B) 16.0			(A) 3.5		(D) 52.2		**(E) 60.2**
Weekday PM Peak Hour										
2021 Existing	Signal	(B) 16.5	(A) 8.0	(B) 16.6	(B) 11.0	(B) 12.2	(B) 11.8	**(E) 55.3**	(D) 48.8	**(E) 62.7**
			(B) 16.0			(B) 11.9		(D) 52.1		**(E) 62.7**
2023 No Build	Signal	(C) 20.1	(A) 7.4	(B) 16.1	(B) 10.9	(C) 23.4	(B) 18.0	**(E) 61.0**	(D) 53.5	**(E) 68.6**
			(B) 15.6			(C) 18.7		**(E) 57.3**		**(E) 68.6**
2023 Build	Signal	(B) 14.4	(B) 13.2	(B) 15.9	(B) 10.6	(B) 11.2	(A) 7.2	**(E) 61.0**	(D) 53.5	**(E) 68.6**
			(B) 15.4			(A) 7.7		**(E) 57.3**		**(E) 68.6**
2023 Build with Pedestrian Phasing	Signal	(B) 13.7	(B) 13.2	(B) 15.9	(B) 10.6	(B) 15.3	(A) 4.9	**(E) 61.0**	(D) 53.5	**(E) 68.6**
			(B) 15.4			(A) 6.3		**(E) 57.3**		**(E) 68.6**
			LT	TH	RT	LT	TH/RT	LT	TH/RT	LT/TH/RT
Weekday AM Peak Hour										
2023 Build with No School	Signal	(B) 10.6	(A) 6.7	(B) 13.5	(A) 7.9	(A) 5.6	(A) 3.6	(D) 53.4	(D) 51.8	**(E) 60.2**
			(B) 13.4			(A) 3.7		(D) 52.2		**(E) 60.2**
Weekday PM Peak Hour										
2023 Build with No School	Signal	(B) 17.0	(A) 7.4	(C) 24.8	(B) 16.3	(B) 14.2	(A) 4.0	**(E) 61.0**	(D) 53.5	**(E) 68.6**
			(C) 23.9			(A) 5.4		**(E) 57.3**		**(E) 68.6**

Table 9: Benns Church Boulevard at Cypress Run Road Intersection Maximum Queue Summary

Scenario	Traffic Control	Maximum Queue Length by Movement (feet)							
		Eastbound			Westbound		Northbound		Southbound
		LT	TH	RT	LT	TH/RT	LT/TH	RT	LT/TH/RT
Effective Storage Length (Existing/No Build)		150	Cont.	245	255	Cont.	Cont.	180	Cont.
Effective Storage Length (Build)		150	Cont.	245	255	Cont.	Cont.	180	Cont.
Weekday AM Peak Hour									
2021 Existing	Signal	13	105	17	63	75	43	39	27
2023 No Build	Signal	20	201	41	91	113	82	68	48
2023 Build	Signal	22	190	36	86	85	58	73	31
2023 Build with Pedestrian Phasing	Signal	19	225 **(1%)	29	88	102	86	72	49
Weekday PM Peak Hour									
2021 Existing	Signal	32	317 **(6%)	82	184	243	160	114	27
2023 No Build	Signal	48	301 **(8%)	128	201	276	192	132	39
2023 Build	Signal	35	294 **(6%)	114	203	206	171	144	30
2023 Build with Pedestrian Phasing	Signal	48	321 **(7%)	134	219	188	173	128	32
Weekday AM Peak Hour									
2023 Build with No School	Signal	22	147	30	99	80	79	64	38
Weekday PM Peak Hour									
2023 Build with No School	Signal	26	318 **(10%)	154	210	195	149	116	38

Notes:
**(X%) - Maximum queue extends full length of storage bay for X% of the analysis period*
***(Y%) - Queue in lane adjacent to storage bay extends beyond end of storage bay for Y% of the analysis period*
^(Z%) - Maximum queue extends back to upstream intersection for Z% of the analysis period

5.5 BENNS CHURCH BOULEVARD AT PROPOSED SITE DRIVEWAY # 1

Under all peak hour scenarios, this intersection is anticipated to operate at an overall LOS A. Based on the model simulation, the northbound right-turn movement out of the proposed development is expected to experience queues of approximately 75 ft – 85 ft in both the AM and PM peak hours. Therefore, the addition of the proposed Wawa development traffic is anticipated to have minimal impacts to this intersection with no additional improvements required.

Results from the capacity and queuing analyses at this unsignalized intersection are shown in **Table 10** and **Table 11** respectively.

Table 10: Benns Church Boulevard at Proposed Site Driveway #1 Intersection LOS Summary

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)			
			Eastbound		Westbound	Northbound
			TH	RT	TH	RT
Weekday AM Peak Hour						
2021 Existing	Unsignalized					
2023 No Build	Unsignalized					
2023 Build	Unsignalized	(A) 0.4	(A) 0.0	(A) 0.0	(A) 0.0	(A) 9.9
			(A) 0.0		(A) 0.0	(A) 9.9
2023 Build with No School	Unsignalized	(A) 0.4	(A) 0.0	(A) 0.0	(A) 0.0	(A) 9.8
			(A) 0.0		(A) 0.0	(A) 9.8
2023 Build with Pedestrian Phasing	Unsignalized	(A) 0.4	(A) 0.0	(A) 0.0	(A) 0.0	(B) 10.0
			(A) 0.0		(A) 0.0	(B) 10.0
Weekday PM Peak Hour						
2021 Existing	Unsignalized					
2023 No Build	Unsignalized					
2023 Build	Unsignalized	(A) 0.3	(A) 0.0	(A) 0.0	(A) 0.0	(B) 10.2
			(A) 0.0		(A) 0.0	(B) 10.2
2023 Build with No School	Unsignalized	(A) 0.3	(A) 0.0	(A) 0.0	(A) 0.0	(A) 10.0
			(A) 0.0		(A) 0.0	(A) 10.0
2023 Build with Pedestrian Phasing	Unsignalized	(A) 0.3	(A) 0.0	(A) 0.0	(A) 0.0	(B) 10.3
			(A) 0.0		(A) 0.0	(B) 10.3

Table 11: Benns Church Boulevard at Proposed Site Driveway #1 Intersection Maximum Queue Summary

Scenario	Traffic Control	Maximum Queue Length by Movement (feet)			
		Eastbound		Westbound	Northbound
		TH	RT	TH	RT
Effective Storage Length (Existing/No Build)		Cont.	N/A	Cont.	150
Effective Storage Length (Build)		Cont.	250	Cont.	150
Weekday AM Peak Hour					
2021 Existing	Unsignalized				
2023 No Build	Unsignalized				
2023 Build	Unsignalized	0	0	0	84
2023 Build with No School	Unsignalized	0	0	0	88
2023 Build with Pedestrian Phasing	Unsignalized	0	0	0	81
Weekday PM Peak Hour					
2021 Existing	Unsignalized				
2023 No Build	Unsignalized				
2023 Build	Unsignalized	0	0	0	83
2023 Build with No School	Unsignalized	0	0	27	68
2023 Build with Pedestrian Phasing	Unsignalized	0	0	0	84

Notes:
**(X%) - Maximum queue extends full length of storage bay for X% of the analysis period*
***(Y%) - Queue in lane adjacent to storage bay extends beyond end of storage bay for Y% of the analysis period*
^(Z%) - Maximum queue extends back to upstream intersection for Z% of the analysis period

5.6 TURNER DRIVE AT PROPOSED SITE DRIVEWAY # 2

Under all peak hour scenarios, this intersection is anticipated to operate at an overall LOS A. The westbound movement out of the proposed development is expected to experience a LOS D or better in the AM peak hour and LOS B in the PM peak hour. Based on the Build model simulation, the northbound through/left-turn right movement on Turner Drive is expected to experience queues of approximately 300 ft in AM peak hour and 40 ft in the PM peak hour. When compared to the Build scenario with No Elementary School volumes, the anticipated queues drop down to approximately 30 ft in the AM and 15 ft in the PM. Therefore, the addition of the proposed Wawa traffic is anticipated to have minimal impacts to this intersection with no additional improvements required beyond those proposed/recommended.

Results from the capacity and queuing analyses at this unsignalized intersection are shown in **Table 12** and **Table 13**, respectively.

Table 12: Turner Drive at Proposed Site Driveway #2 Intersection LOS Summary

Scenario	Traffic Control	Overall LOS	Level of Service per Movement by Approach (Delay in sec/veh)			
			Westbound	Northbound	Southbound	
			LT/RT	TH/RT	LT	TH
Weekday AM Peak Hour						
2021 Existing	Unsignalized					
2023 No Build	Unsignalized					
2023 Build	Unsignalized	(A) 3.7	(D) 27.3	(A) 0.0	(A) 9.3	(A) 0.0
			(D) 27.3	(A) 0.0	(A) 1.5	
2023 Build with No School	Unsignalized	(A) 3.2	(C) 16.8	(A) 0.0	(A) 8.7	(A) 0.0
			(C) 16.8	(A) 0.0	(A) 1.8	
2023 Build with Pedestrian Phasing	Unsignalized	(A) 3.7	(D) 27.5	(A) 0.0	(A) 9.3	(A) 0.0
			(D) 27.5	(A) 0.0	(A) 1.5	
Weekday PM Peak Hour						
2021 Existing	Unsignalized					
2023 No Build	Unsignalized					
2023 Build	Unsignalized	(A) 2.6	(B) 12.7	(A) 0.0	(A) 8.3	(A) 0.0
			(B) 12.7	(A) 0.0	(A) 1.8	
2023 Build with No School	Unsignalized	(A) 2.8	(B) 12.0	(A) 0.0	(A) 8.1	(A) 0.0
			(B) 12.0	(A) 0.0	(A) 2.0	
2023 Build with Pedestrian Phasing	Unsignalized	(A) 2.6	(B) 12.7	(A) 0.0	(A) 8.3	(A) 0.0
			(B) 12.7	(A) 0.0	(A) 1.8	

Table 13: Turner Drive at Proposed Site Driveway #2 Intersection Maximum Queue Summary

Scenario	Traffic Control	Maximum Queue Length by Movement (feet)			
		Westbound	Northbound	Southbound	
		LT/RT	TH/RT	LT	TH
Effective Storage Length (Existing/No Build)		N/A	Cont.	Cont.	
Effective Storage Length (Build)		150	Cont.	200	Cont.
Weekday AM Peak Hour					
2021 Existing	Unsignalized				
2023 No Build	Unsignalized				
2023 Build	Unsignalized	138	301	73	0
2023 Build with No School	Unsignalized	112	82	79	0
2023 Build with Pedestrian Phasing	Unsignalized	127	196	88	0
Weekday PM Peak Hour					
2021 Existing	Unsignalized				
2023 No Build	Unsignalized				
2023 Build	Unsignalized	94	38	69	0
2023 Build with No School	Unsignalized	87	14	60	0
2023 Build with Pedestrian Phasing	Unsignalized	93	24	85	0

Notes:
**(X%) - Maximum queue extends full length of storage bay for X% of the analysis period*
***(Y%) - Queue in lane adjacent to storage bay extends beyond end of storage bay for Y% of the analysis period*
^(Z%) - Maximum queue extends back to upstream intersection for Z% of the analysis period

6.0 CONCLUSIONS AND RECOMMENDATIONS

This traffic impact analysis examined the potential impacts associated with the proposed Wawa Convenience Market and Fuel Sales in Isle of Wight County, Virginia. The proposed Wawa will consist of a 6,049-square foot (sf) convenience market with 16 fueling positions. The proposed development site is bounded by Benns Church Boulevard (State Route 10) to the north, Turner Drive (State Route 644) to the west, Smithfield High School and Smithfield Middle School to the south, and residential/agricultural properties to the east/southeast.

Based on the results of the traffic analysis, the future impacts associated with the proposed development are anticipated to be minimal overall, with some deterioration in operations anticipated at the signalized intersection of Benns Church Boulevard at Turner Drive. This study reviewed potential improvements for this signalized intersection by modifying the existing timings, phasing, and splits as well as by modifying the existing laneage along Turner Drive and at the intersection of Benns Church Boulevard and Turner Drive to better accommodate the additional traffic generated by the proposed development.

Based on the findings of this analysis and input provided by VDOT, it is recommended that the westbound left-turn lane along Benns Church Boulevard at the intersection of Benns Church Boulevard and Turner Drive be improved to consist of 350 feet of storage and a 200-foot taper. It is also recommended that a left-turn lane be added along southbound Turner Drive to serve traffic accessing the proposed Wawa Development via Site Access Driveway # 2 and to mitigate potential left-turn queuing from impacting through movement traffic operations.

Traffic signal timing plans (i.e., cycle lengths, splits, offsets, and coordination for the AM and PM peak periods) should also be updated to account for this change in traffic volume demand and general intersection operations. Traffic signal coordination along Benns Church Boulevard should consist of both the Turner Drive and Cypress Run Drive intersections to facility traffic progression.

To accommodate the projected traffic volumes accessing the development directly from eastbound Benns Church Boulevard, an exclusive right-turn lane will be constructed at the proposed right-in/right-out (RIRO) Only Site Access Driveway (i.e., Site Access Driveway # 1). Based on the requirements of the VDOT Road Design Manual: *Appendix F – Access Management Design Standards for Entrances and Intersections* and through conversation with VDOT, it is recommended that the right-turn lane should consist of a minimum 200 feet of full width storage and a 100-foot taper.

As documented in the TIA, Scenario 4 was included to focus specifically on the potential impacts associated with just the proposed Wawa development as a part of the CUP application. It was initially identified that a proposed site access driveway along Turner Drive would like within the functional area of the Benns Church Boulevard/Turner Drive signalized intersection. In an effort to mitigate this concern and in collaboration with VDOT and the County, the proposed Site Access Driveway # 2 has been located approximately 450 feet south of the Benns Church signalized intersection (i.e., approximately 115 feet more than the minimum spacing requirement of 335 feet for a full access intersection). The location of Site Driveway # 2 is also complemented with the installation of a proposed exclusive left-turn lane to serve southbound traffic attempting to accessing the site and to ensure through traffic flow is not impeded. Therefore, it is anticipated that queue lengths will not extend as far south as the proposed Site Access Driveway #2 on any type of regularly basis throughout the day and with the proposed southbound left-turn lane it is expected that this full access intersection along Turner Driver will function safely and efficiently under peak and off-peak traffic conditions.

The recommended off-site roadway/intersection improvements are summarized below:

Benns Church Boulevard

- VDOT should continue to monitor and optimize traffic signal phasing and timing plans to accommodate peak hour/off-peak traffic volumes along Benns Church Boulevard
  - Coordinated signal timing optimization for the Turner Drive and Cypress Run intersections should occur following construction and approximately 90-days of operation and occupancy of the Wawa Convenience Market to account for the changes in traffic volumes/travel patterns
  - Signal coordination improvements should facilitate the progression of traffic along Benns Church Boulevard from Cypress Run Drive to Turner Drive

Benns Church Boulevard at Turner Drive

Benns Church Boulevard Westbound Approach

- Lengthen the westbound left-turn lane on Benns Church Boulevard to consist of 350 feet of storage and a 200-foot taper

Turner Drive Northbound Approach

- Reconfigure the existing shared through/left-turn lane to an exclusive left-turn lane consisting of 200 feet of storage and a 100-foot taper
- Extend, modify, and reconfigure the existing exclusive right-turn lane serve as a shared through/right-turn lane
- Construct/install the necessary traffic signal infrastructure (e.g., signal heads, signage, wiring, etc.) improvements to serve the new lane use designations/movements associated with the northbound Turner Drive approach to the intersection

Benns Church Boulevard at Cypress Run Drive

- VDOT should optimize existing signal timing plans (both AM and PM) and implement cycle lengths that are consistent with cycle lengths at the Turner Drive intersection to enhance traffic operations at the Cypress Run Drive intersection as well as better facilitate traffic progression along Benns Church Boulevard

Benns Church Boulevard at Proposed Wawa Site Driveway # 1

- Site access will function as Right-In/Right-Out (RIRO) Only
- Construct one exclusive right-turn lane, along eastbound Benns Church Boulevard consisting of 200 feet of storage and a 100-foot taper.
- The proposed Wawa site driveway will consist of one inbound lane and one outbound lane
- Install/provide STOP control for outbound movements (i.e., approach to Benns Church Boulevard)

Turner Drive at Proposed Wawa Site Driveway # 2

- Site access will function as Full Access/Full Movement
- Install supplemental signage and pavement markings to consist of the following:
  - “DO NOT BLOCK INTERSECTION” signage
  - Intersection pavement markings delineating the area not to block (i.e., the box)
  - Supplement with signage reflecting a potential fine for those observed/caught impeding intersection operations

- Widen Turner Drive to the south of the proposed Wawa Site Driveway # 2 for a distance of approximately 300 feet to provide the roadway transition necessary to support the introduction of the proposed southbound exclusive left-turn lane serving the Wawa development site.
    - Widening will extend from the Wawa Site Driveway # 2 intersection to a tie-in point with the existing three-lane section/transition portion of Turner Drive associated with the southbound left-turn lane serving the Smithfield High School site access driveway.

It is noted that the existing right-of-way (ROW) along this segment of Turner Drive is approximately 40-feet in width. Therefore, the proposed widening of Turner Drive is intended to be implemented within the existing ROW and match the existing cross section.

Proposed Wawa Site Driveway # 2 Westbound Approach

- Site driveway will consist of one inbound lane and one outbound lane
- Install/provide STOP control for outbound (driveway) approach

Turner Drive Southbound Approach

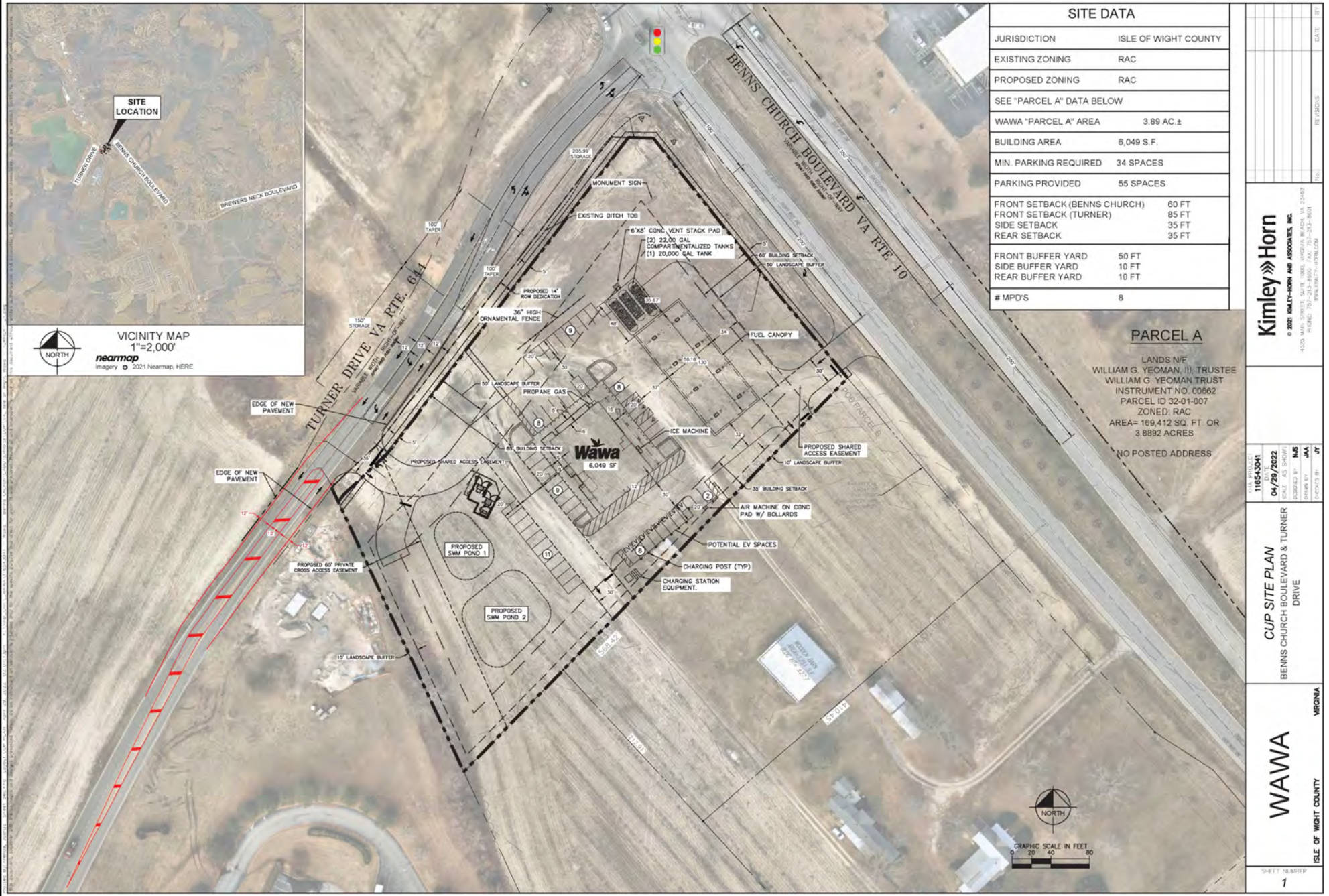
- Construct/delineate one exclusive left-turn lane consisting of 150 feet of storage and a 100-foot taper

Turner Drive Northbound Approach

- Construct a new travel lane along the east side of Turner Drive to account for/accommodate the proposed southbound left-turn lane

Figure 12 reflects the physical location and geometric configuration of the proposed off-site improvements.

Beyond the above-mentioned improvements, no other off-site geometric or traffic control improvements are recommended as part of the proposed Wawa Convenience Market development.



Kimley»Horn	Wawa Development Benns Church Boulevard TIA	Conceptual Site Plan with Proposed Off-Site Improvements	FIGURE 12

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTION BY KIMLEY-HORN AND ASSOCIATES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC.

Appendix A
TIA Assumptions Document

The following documentation outlines the traffic impact analysis (TIA) assumptions for the proposed Wawa Convenience Market with Fuel development located in Isle of Wight County, Virginia. The development consists of a 6,049 square foot (SF) convenience market with 16 fueling positions. (See **Attachment A**). The proposed Wawa Convenience Market with Fuel site is located in the southwest quadrant of the Benns Church Boulevard (U.S. Route 258/State Route 10) at Turner Drive (State Route 644) intersection.

Study Area

The study area for the TIA and the associated proposed development site consists of the following existing intersections:

- Benns Church Boulevard (U.S. Route 258/State Route 10) at Turner Drive (State Route 644) *(Signalized)*
- Benns Church Boulevard at Cypress Run Drive *(Signalized)*

The following proposed site driveways are also included in the study area as shown in **Attachment B**.

- Benns Church Boulevard at Site Driveway # 1:
    - *Right-In/Right-Out (RI/RO) only*
- Turner Drive at Site Driveway # 2 (*Full Movement*)

Data Collection

Kimley-Horn requests that Isle of Wight County and/or VDOT provide any recent intersection or roadway traffic count data from studies previously completed within the study area. Turning movement count (TMC) data will also be collected during the AM peak hour (6:30 AM – 8:30 AM) and the PM peak hour (3:30 PM – 6:30 PM). Kimley-Horn's subconsultant, The Data Collection Group, will collect existing TMC data during weekday (Tuesday, Wednesday, or Thursday) operations at the following two (2) intersections:

- Benns Church Boulevard at Turner Drive *(Signalized)*
- Benns Church Boulevard at Cypress Run Dr *(Signalized)*

Current traffic signal timing and phasing data will be provided by VDOT for all signalized intersections in the study area.

The peak hours for this intersection were determined by looking at the school hours of both Smithfield Middle and Smithfield High School combined with the historic traffic volume data from 2016 and 2017 collected by VDOT and/or Kimley-Horn. With this information the AM peak hour was determined to occur from 7:00 AM to 8:00 AM and the PM peak hour occurs from 4:45 PM to 5:45 PM.

Analysis Years

The proposed development is anticipated to be completed in 2023. Therefore, the following analysis scenarios for the AM and PM peak hours will be studied as part of this TIA.

- **Scenario 1** – Existing (2021) traffic conditions
- **Scenario 2** – Future Year (2023) No-Build conditions – Opening year traffic conditions with a future growth rate applied to approved base year traffic volumes plus background development trips (i.e., approved historical growth rate plus approved adjacent development traffic if applicable) but without traffic volumes generated by the proposed Wawa Convenience Market with Fuel development
    - Background traffic will also assume a New 600 Pupil Elementary School located along Turner Drive adjacent to Smithfield Middle School and Smithfield High School

- **Scenario 3** – Future Year (2023) Build-out conditions – Opening year traffic conditions with a future growth rate applied to approved base year traffic volumes plus background development trips (i.e., approved historical growth rate plus approved adjacent development traffic if applicable), with traffic volumes generated by the proposed Wawa Convenience Market with Fuel development.
    - Background traffic will include the proposed new 600 pupil Elementary School located along Turner Drive adjacent to Smithfield Middle School and Smithfield High School
- **Scenario 4** – Future Year (2023) Build-out No Elementary School conditions – Opening year traffic conditions with a future growth rate applied to approved base year traffic volumes plus background development trips (i.e., approved historical growth rate plus approved adjacent development traffic if applicable), with traffic volumes generated by the proposed Wawa Convenience Market with Fuel development.
    - Same as Scenario 3, however it does not include traffic volume estimates for a proposed New 600 Pupil Elementary School to the south of Smithfield High School along Turner Drive
    - Unlike Scenario 3 and 5, the northbound approach of Turner Drive at Benns Church Boulevard will consist of an exclusive left-turn lane and a shared though/right-turn lane
- **Scenario 5** – Future Year (2023) Build-out conditions – Opening year traffic conditions with a future growth rate applied to approved base year traffic volumes plus background development trips (i.e., approved historical growth rate plus approved adjacent development traffic if applicable), with traffic volumes generated by the proposed Wawa Convenience Market with Fuel development.
    - Same as Scenario 3 and will include a dedicated pedestrian phase at the signalized intersection of Benns Church Boulevard and Turner Drive

Volume Development

It is proposed that a growth rate of 1.0% per year (applied exponentially) be used for adjusting the projected background traffic volumes, to opening year 2023 for all turning movements. This growth rate was determined by reviewing the County average growth rate from VDOT as well as input from Isle of Wight County. In addition, other known developments approved for construction (i.e., if applicable) will be included as part of the future background traffic volumes. Kimley-Horn will coordinate with Isle of Wight County staff to identify any approved developments and/or obtain the associated traffic studies with relevant data that should be included in the development of future background volumes.

The known planned development for background traffic volumes is a new 600 Pupil Elementary School located along Turner Drive.

Table 1 reflects historical traffic volume trends of adjacent roadways within the study area over five (5) years (i.e., 2015 to 2019) The overall growth of traffic from 2015 to 2019 on Benns Church Boulevard within the study area (i.e., from southern corporate limits of the Town of Smithfield to Brewers Neck Boulevard) is around 0.1%.

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Table 1: Study Area Roadway Historic AAWDT

VDOT Historical Daily Traffic Volumes AAWDT						
Location	**2015**	**2016**	**2017**	**2018**	**2019**	**Average Annual Growth**
Southern Corporate Limits of the Town of Smithfield to Brewers Neck Boulevard	27,000	28,000	26,000	26,000	27,000	0.102%
					Average Annual Growth Rate	**0.10%**
					Proposed Annual Growth Rate	**1.0%**

Proposed Land Use

A conceptual site layout of the Wawa Convenience Market with Fuel development is included with these assumptions in **Attachment A.** Kimley-Horn will use *ITE Trip Generation 10th Edition* (2017) Trip Generation Rates and Land Uses for the proposed Wawa Convenience Market with Fuel development. Trip generation estimates were developed and compared based on the number of fueling stations, convenience market square footage, and calculating the average using the volumes associated with fueling stations and square footage.

It is proposed that the average of the trip generation rates based on the two independent variables (i.e., square footage and fueling positions) be used to evaluate the potential impacts to traffic operations as a result of the proposed development. Trip generation calculations for the proposed Wawa Convenience Market with Fuel development are shown in **Table 2**.

This space intentionally left blank.

Table 2: Proposed Trip Generation for the Proposed Development

ITE Code	ITE Description	Density	Unit	Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Trip Generation Based on Fueling Stations										
960	Super Convenience Market/Gas Station	16	Fueling Stations	3,688	449	225	224	367	184	183
*Convenience Market w/ Gasoline Pumps Pass-By (63% AM, 66% PM)				0	-283	-142	-141	-242	-121	-121
New Site Trips				3,688	166	83	83	125	63	63
Trip Generation Based on Square Footage										
960	Super Convenience Market/Gas Station	6,049	Square Feet	5,067	566	283	283	419	210	209
*Convenience Market w/ Gasoline Pumps Pass-By (63% AM, 66% PM)				0	-357	-178	-178	-277	-139	-138
New Site Trips				5,067	209	105	105	142	71	71
Average Convenience with Fuel Trip Generation										
960	Super Convenience Market/Gas Station	*Average*		*4,378*	*508*	*254*	*254*	*393*	*197*	*196*
*Convenience Market w/ Gasoline Pumps Pass-By (63% AM, 66% PM)				0	-320	-160	-160	-259	-130	-129
Net New Site Trips				*4,378*	*188*	*94*	*94*	*134*	*67*	*67*
Proposed Development Driveway Trips				*4,378*	*508*	*254*	*254*	*393*	*197*	*249*
Planned Elementary School Trip Generation										
520	Elementary School	600	Students	*1,134*	*402*	*217*	*185*	*102*	*49*	*53*
Net New Site Trips				*1,134*	*402*	*217*	*185*	*102*	*49*	*53*
TOTAL New Trips				*5,512*	*590*	*311*	*279*	*236*	*116*	*120*

Source: ITE Trip Generation Manual, 10th Edition, (2017)
**Pass-by percentages using Code 853 in ITE Trip Generation Handbook, 3rd Edition (2017)*

Site Access and Turn-Lane Warrant Analyses

As shown in the attached conceptual site layout (**Attachment A**), access to/from the proposed Wawa Convenience Market with Fuel development will occur at the following locations:

- Benns Church Boulevard at Site Driveway # 1:
  - *Right-In/Right-Out (RI/RO) only*
- Turner Drive at Site Driveway # 2 (*Full Movement*)

A left-turn lane warrant analysis will be conducted at the proposed Wawa site entrance intersection along Turner Drive as well as a right-turn lane warrant analysis at the proposed Wawa site entrance intersection along Benns Church Boulevard as required by VDOT. Turn-lane warrant analyses will be conducted using methodologies consistent with *Appendix F of the VDOT Road Design Manual*.

An Access Management Exception (AM-E) will be completed and recorded as an Appendix in the report.

Site Trip Distributions

Site trip distributions were preliminarily determined from available traffic data, anticipated routes for vehicles entering and exiting the proposed development site, and a general familiarity of the study area. At the regional level it is anticipated that the majority of traffic will be traveling to/from Benns Church Boulevard

located northeast of the project site. Proposed regional trip distributions determined for the Wawa Convenience Market with Fuel development are listed below.

- To/from the west on Turner Drive – **20%**
- To/from the north on Benns Church Boulevard – **40%**
- To/from the south on Benns Church Boulevard – **40%**

Detailed site driveway trip distributions are provided in **Attachment C**.

Traffic Operations Analysis

Operational analyses for the study area intersections will be conducted using traffic analysis tools (e.g., *Synchro 10.1 Professional*, SimTraffic 10.1) and Highway Capacity Manual (HCM) methodologies. The future conditions analyses will confirm the need and define the geometric configurations necessary for the proposed roadway and intersection operational or capacity improvements (e.g., signal timing adjustments, exclusive turn-lane storage and taper, etc.).

Measures of effectiveness that will be reported for each scenario will consist of delay per vehicle, level of service (LOS), and maximum queue lengths. These measures of effectiveness will be presented in tables and figures. Vehicle delay and LOS will be summarized by movement, approach, and overall intersection, while maximum queue lengths will be summarized for each movement.

Reporting

A TIA report with an accompanying technical appendix (including all analysis files) will be prepared that summarizes the analysis methodology and results. There will be two (2) electronic submittals of the technical report – DRAFT and FINAL (including supporting analytical files). One round of comprehensive comments will be addressed with each report submittal through conference call. This study assumes that all deliverables will be electronic submittals (PDF report and all supporting analytical files).

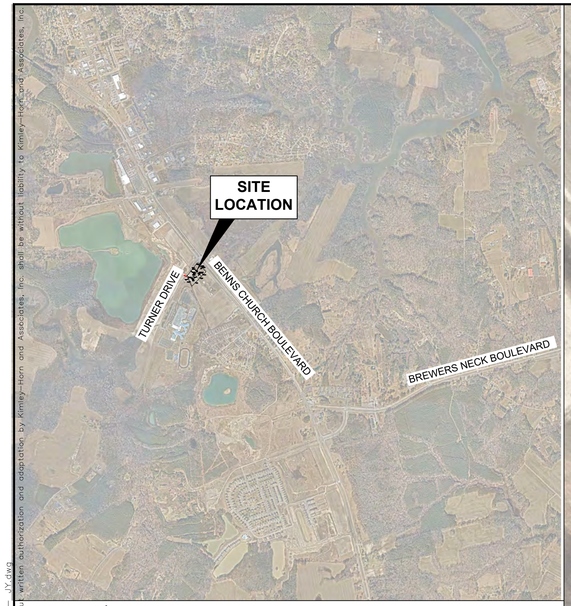
Attachments

Attachment A – Conceptual Site Layout

Attachment B – Study Area

Attachment C – Proposed Regional and Site Driveway Trip Distribution Percentages

Attachment A – Conceptual Site Layout



NORTH

VICINITY MAP
1"=2,000'

nearmap
Imagery © 2021 Nearmap, HERE

SITE DATA

JURISDICTION	ISLE OF WIGHT COUNTY
EXISTING ZONING	RAC
PROPOSED ZONING	RAC
SEE "PARCEL A" DATA BELOW	
WAWA "PARCEL A" AREA	3.89 AC.±
BUILDING AREA	6,049 S.F.
MIN. PARKING REQUIRED	34 SPACES
PARKING PROVIDED	55 SPACES
FRONT SETBACK (BENNS CHURCH) FRONT SETBACK (TURNER) SIDE SETBACK REAR SETBACK	60 FT 85 FT 35 FT 35 FT
FRONT BUFFER YARD SIDE BUFFER YARD REAR BUFFER YARD	50 FT 10 FT 10 FT
# MPD'S	8

PARCEL A

LANDS N/F
WILLIAM G. YEOMAN, III, TRUSTEE
WILLIAM G. YEOMAN TRUST
INSTRUMENT NO. 00662
PARCEL ID 32-01-007
ZONED: RAC
AREA= 169,412 SQ. FT. OR
3.8892 ACRES

NO POSTED ADDRESS

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

No.	REVISIONS	DATE	BY

Kimley»Horn
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
4525 MAIN STREET, SUITE 1000, VIRGINIA BEACH, VA 23462
PHONE: 757-213-8600 FAX: 757-213-8601
WWW.KIMLEY-HORN.COM

KHA PROJECT 116543041
DATE 04/29/2022
SCALE AS SHOWN
DESIGNED BY NJS
DRAWN BY JAA
CHECKED BY JY

CUP SITE PLAN
BENNS CHURCH BOULEVARD & TURNER DRIVE

WAWA
VIRGINIA
ISLE OF WIGHT COUNTY

SHEET NUMBER
1

Plotted By: Arenas, Joshua Sheet Set: Kha Layout: CUP PLAN April 29, 2022 02:07:13pm K:\VAB_Civil_WAWA\116543041 - Wawa - Benns Church\CADD\Exhibits\CUP\VA_Isle of Wight Wawa - TURNER - JY.dwg
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Attachment B – Project Study Area

Kimley»Horn	Wawa Development Benns Church Boulevard TIA	Project Study Area	ATTACHMENT B

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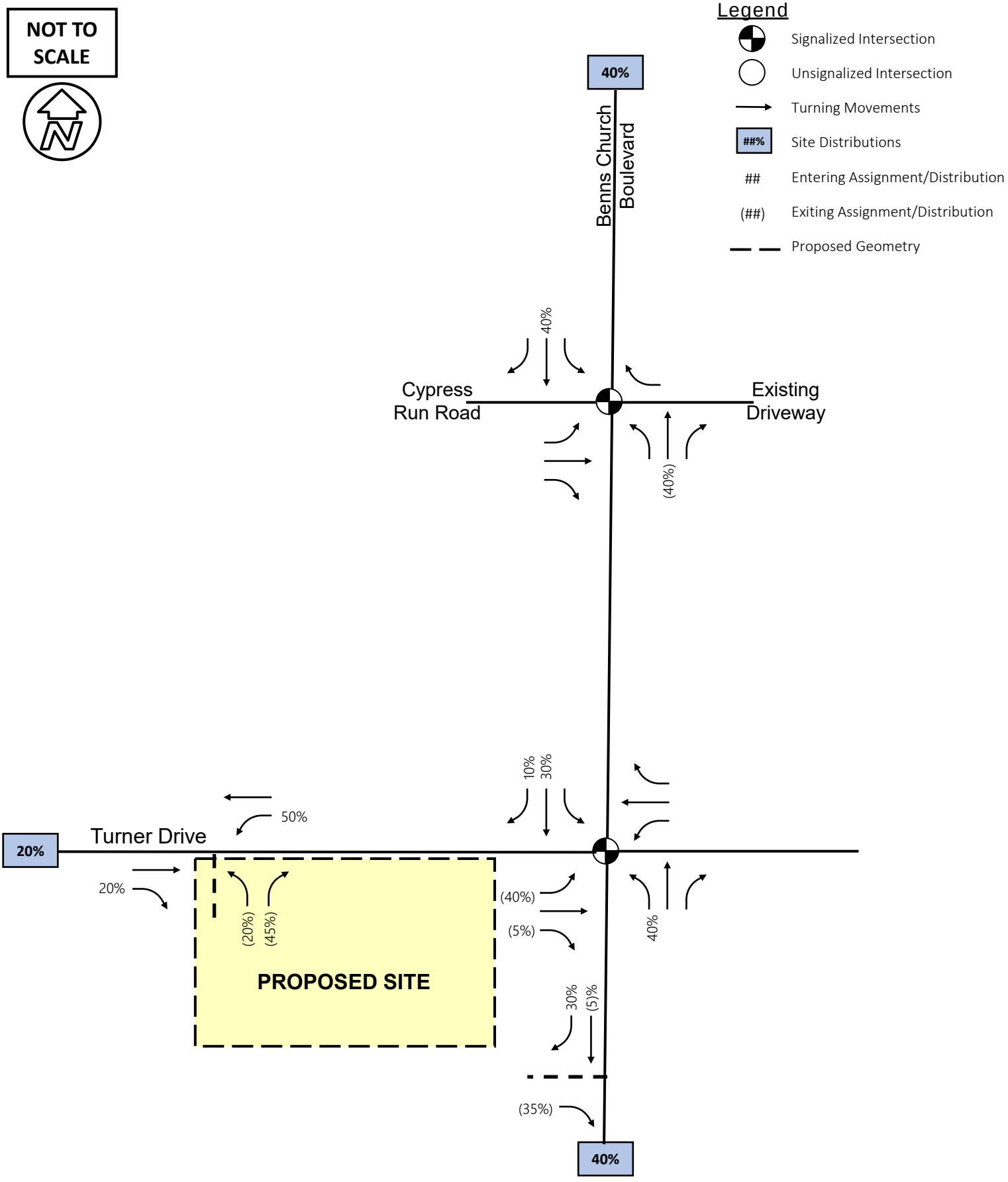
Attachment C – Proposed Regional and Site Driveway Trip Distribution Percentages



Kimley»Horn	Wawa Development Benns Church Boulevard TIA	Proposed Trip Distributions	ATTACHMENT C

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Appendix B
Data Collection

Data Collection Group

757.478.6761
LSmith@DataCollectionGroup.net

File Name : Benns Church and Turner
Site Code :
Start Date : 8/11/2021
Page No : 1

Groups Printed- Passenger Veh - Trucks

	Benns Church From North				Driveway From East				Benns Church From South				Turner From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
06:30 AM	5	197	2	204	0	0	0	0	1	147	4	152	17	0	5	22	378
06:45 AM	10	185	1	196	0	0	0	0	1	141	9	151	23	0	7	30	377
Total	15	382	3	400	0	0	0	0	2	288	13	303	40	0	12	52	755
07:00 AM	5	159	0	164	0	0	1	1	0	101	10	111	31	0	16	47	323
07:15 AM	1	194	3	198	0	0	0	0	0	150	4	154	29	0	3	32	384
07:30 AM	9	197	1	207	0	0	1	1	0	143	12	155	24	0	9	33	396
07:45 AM	12	158	2	172	2	0	0	2	1	173	25	199	17	0	12	29	402
Total	27	708	6	741	2	0	2	4	1	567	51	619	101	0	40	141	1505
08:00 AM	12	154	3	169	0	0	0	0	0	137	20	157	16	0	10	26	352
08:15 AM	12	151	2	165	1	0	0	1	1	156	21	178	19	0	11	30	374
Total	24	305	5	334	1	0	0	1	1	293	41	335	35	0	21	56	726
03:30 PM	20	167	10	197	1	0	0	1	0	246	20	266	13	0	7	20	484
03:45 PM	21	209	3	233	0	0	1	1	1	258	36	295	20	0	16	36	565
Total	41	376	13	430	1	0	1	2	1	504	56	561	33	0	23	56	1049
04:00 PM	11	178	3	192	1	0	1	2	1	275	47	323	25	0	16	41	558
04:15 PM	22	238	9	269	1	0	1	2	0	264	53	317	23	0	18	41	629
04:30 PM	32	224	8	264	1	0	1	2	2	218	45	265	24	0	22	46	577
04:45 PM	37	225	4	266	1	0	0	1	1	280	50	331	30	0	28	58	656
Total	102	865	24	991	4	0	3	7	4	1037	195	1236	102	0	84	186	2420
05:00 PM	23	243	3	269	1	1	0	2	3	253	28	284	43	0	22	65	620
05:15 PM	24	205	5	234	1	0	1	2	1	268	38	307	22	0	14	36	579
05:30 PM	25	192	10	227	1	0	1	2	0	273	44	317	20	0	14	34	580
05:45 PM	21	180	6	207	0	0	0	0	0	254	29	283	16	0	14	30	520
Total	93	820	24	937	3	1	2	6	4	1048	139	1191	101	0	64	165	2299
06:00 PM	33	168	6	207	0	0	0	0	0	142	14	156	9	0	14	23	386
06:15 PM	23	120	2	145	0	0	0	0	0	231	25	256	20	0	12	32	433
Grand Total	358	3744	83	4185	11	1	8	20	13	4110	534	4657	441	0	270	711	9573
Apprch %	8.6	89.5	2		55	5	40		0.3	88.3	11.5		62	0	38		
Total %	3.7	39.1	0.9	43.7	0.1	0	0.1	0.2	0.1	42.9	5.6	48.6	4.6	0	2.8	7.4	
Passenger Veh	356	3620	83	4059	11	1	8	20	13	3983	527	4523	435	0	265	700	9302
% Passenger Veh	99.4	96.7	100	97	100	100	100	100	100	96.9	98.7	97.1	98.6	0	98.1	98.5	97.2
Trucks	2	124	0	126	0	0	0	0	0	127	7	134	6	0	5	11	271
% Trucks	0.6	3.3	0	3	0	0	0	0	0	3.1	1.3	2.9	1.4	0	1.9	1.5	2.8

Data Collection Group

757.478.6761
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File Name : Benns Church and Turner
Site Code :
Start Date : 8/11/2021

	Benns Church From North				Driveway From East				Benns Church From South				Turner From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 12:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	1	194	**3**	198	0	0	0	0	0	150	4	154	**29**	0	3	32	384
07:30 AM	9	**197**	1	**207**	0	0	**1**	1	0	143	12	155	24	0	9	**33**	396
07:45 AM	**12**	158	2	172	**2**	0	0	**2**	**1**	**173**	**25**	**199**	17	0	**12**	29	**402**
08:00 AM	12	154	3	169	0	0	0	0	0	137	20	157	16	0	10	26	352
Total Volume	34	703	9	746	2	0	1	3	1	603	61	665	86	0	34	120	1534
% App. Total	4.6	94.2	1.2		66.7	0	33.3		0.2	90.7	9.2		71.7	0	28.3		
PHF	.708	.892	.750	.901	.250	.000	.250	.375	.250	.871	.610	.835	.741	.000	.708	.909	.954
Passenger Veh	34	662	9	705	2	0	1	3	1	574	57	632	86	0	33	119	1459
% Passenger Veh	100	94.2	100	94.5	100	0	100	100	100	95.2	93.4	95.0	100	0	97.1	99.2	95.1
Trucks	0	41	0	41	0	0	0	0	0	29	4	33	0	0	1	1	75
% Trucks	0	5.8	0	5.5	0	0	0	0	0	4.8	6.6	5.0	0	0	2.9	0.8	4.9

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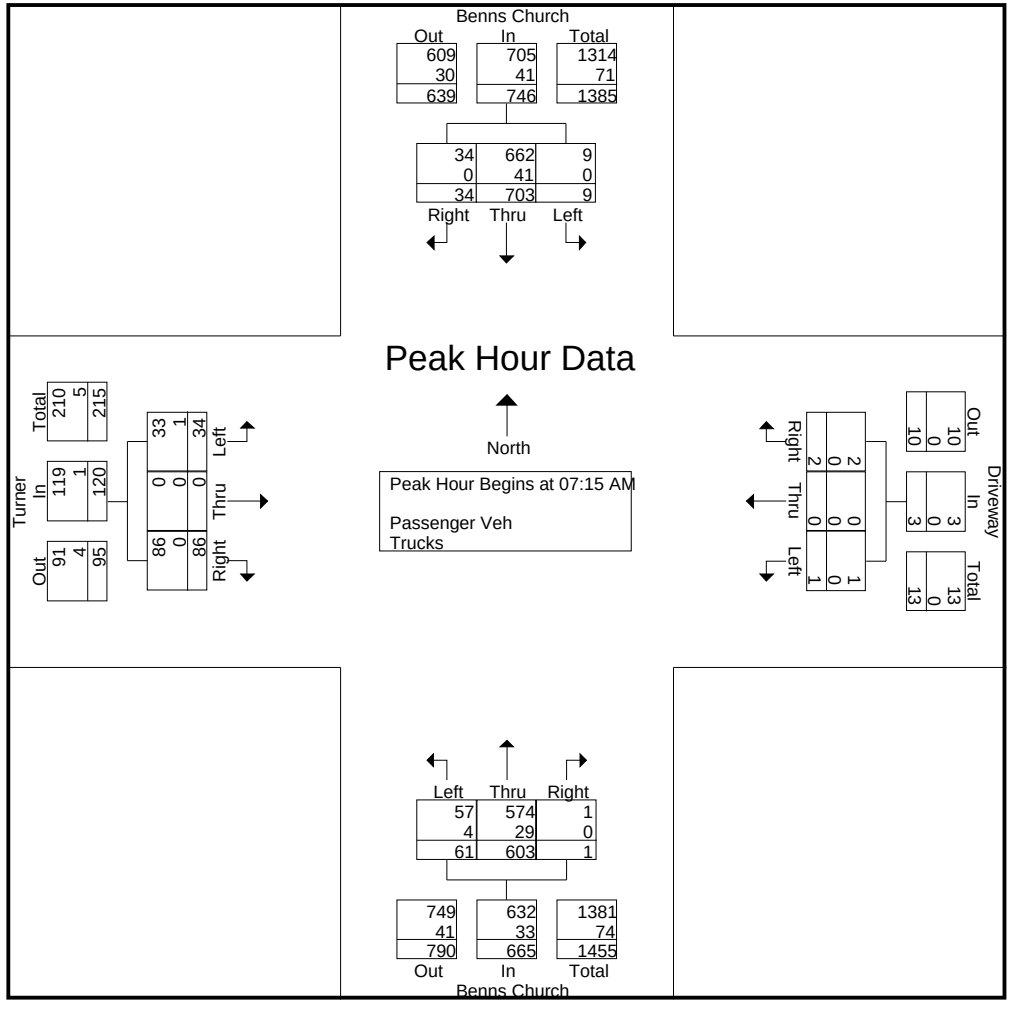
File Name : Benns Church and Turner
Site Code :
Start Date : 8/11/2021
Page No : 4



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File Name : Benns Church and Turner
Site Code :
Start Date : 8/11/2021

	Benns Church From North				Driveway From East				Benns Church From South				Turner From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 12:45 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	22	238	**9**	**269**	**1**	0	**1**	**2**	0	264	**53**	317	23	0	18	41	629
04:30 PM	32	224	8	264	1	0	1	2	2	218	45	265	24	0	22	46	577
04:45 PM	**37**	225	4	266	1	0	0	1	1	**280**	50	**331**	30	0	**28**	58	**656**
05:00 PM	23	**243**	3	269	1	**1**	0	2	**3**	253	28	284	**43**	0	22	**65**	620
Total Volume	114	930	24	1068	4	1	2	7	6	1015	176	1197	120	0	90	210	2482
% App. Total	10.7	87.1	2.2		57.1	14.3	28.6		0.5	84.8	14.7		57.1	0	42.9		
PHF	.770	.957	.667	.993	1.000	.250	.500	.875	.500	.906	.830	.904	.698	.000	.804	.808	.946
Passenger Veh	114	907	24	1045	4	1	2	7	6	993	175	1174	116	0	89	205	2431
% Passenger Veh	100	97.5	100	97.8	100	100	100	100	100	97.8	99.4	98.1	96.7	0	98.9	97.6	97.9
Trucks	0	23	0	23	0	0	0	0	0	22	1	23	4	0	1	5	51
% Trucks	0	2.5	0	2.2	0	0	0	0	0	2.2	0.6	1.9	3.3	0	1.1	2.4	2.1

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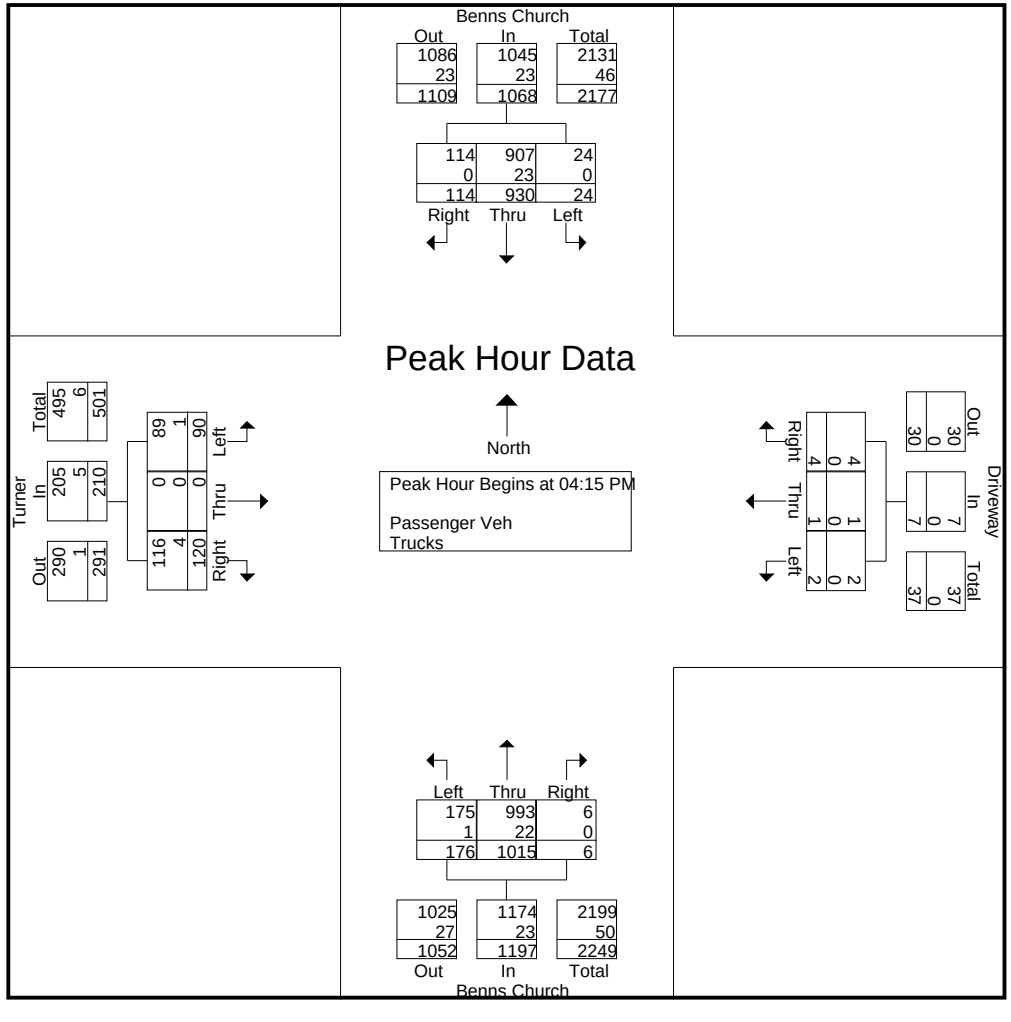
File Name : Benns Church and Turner
Site Code :
Start Date : 8/11/2021
Page No : 6



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File Name : Benns Church and Cypress Run
Site Code :
Start Date : 8/11/2021

Groups Printed- Passenger Veh - Trucks

	Benns Church From North				Driveway From East				Benns Church From South				Cypress Run From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
06:30 AM	4	208	0	212	0	0	0	0	0	148	4	152	1	0	1	2	366
06:45 AM	2	197	0	199	0	0	0	0	0	135	7	142	1	0	1	2	343
Total	6	405	0	411	0	0	0	0	0	283	11	294	2	0	2	4	709
07:00 AM	6	159	0	165	0	0	0	0	0	102	10	112	2	0	1	3	280
07:15 AM	4	186	0	190	0	0	0	0	0	155	11	166	4	0	4	8	364
07:30 AM	7	216	2	225	0	0	1	1	0	138	7	145	1	0	5	6	377
07:45 AM	5	165	1	171	0	0	0	0	0	188	10	198	4	0	2	6	375
Total	22	726	3	751	0	0	1	1	0	583	38	621	11	0	12	23	1396
08:00 AM	10	169	0	179	0	0	1	1	2	135	7	144	3	0	3	6	330
08:15 AM	4	171	0	175	2	0	0	2	0	161	14	175	4	0	3	7	359
Total	14	340	0	354	2	0	1	3	2	296	21	319	7	0	6	13	689
03:30 PM	22	178	0	200	1	0	0	1	0	218	33	251	20	1	20	41	493
03:45 PM	27	216	0	243	0	0	1	1	0	232	55	287	14	0	14	28	559
Total	49	394	0	443	1	0	1	2	0	450	88	538	34	1	34	69	1052
04:00 PM	24	176	1	201	0	0	0	0	0	244	34	278	13	0	29	42	521
04:15 PM	31	238	0	269	0	1	0	1	0	254	33	287	19	0	23	42	599
04:30 PM	12	248	0	260	0	0	0	0	0	228	34	262	17	0	15	32	554
04:45 PM	32	241	1	274	0	1	0	1	0	250	42	292	14	0	21	35	602
Total	99	903	2	1004	0	2	0	2	0	976	143	1119	63	0	88	151	2276
05:00 PM	31	249	1	281	0	0	0	0	0	260	29	289	18	0	15	33	603
05:15 PM	25	210	3	238	0	0	0	0	0	246	30	276	22	0	22	44	558
05:30 PM	32	203	0	235	0	0	0	0	0	249	27	276	16	0	15	31	542
05:45 PM	25	180	0	205	0	0	0	0	0	268	32	300	21	0	24	45	550
Total	113	842	4	959	0	0	0	0	0	1023	118	1141	77	0	76	153	2253
06:00 PM	20	169	2	191	0	0	0	0	0	157	17	174	19	0	23	42	407
06:15 PM	24	137	0	161	0	0	0	0	0	196	27	223	10	0	25	35	419
Grand Total	347	3916	11	4274	3	2	3	8	2	3964	463	4429	223	1	266	490	9201
Apprch %	8.1	91.6	0.3		37.5	25	37.5		0	89.5	10.5		45.5	0.2	54.3		
Total %	3.8	42.6	0.1	46.5	0	0	0	0.1	0	43.1	5	48.1	2.4	0	2.9	5.3	
Passenger Veh	339	3826	11	4176	3	2	2	7	2	3863	448	4313	223	1	260	484	8980
% Passenger Veh	97.7	97.7	100	97.7	100	100	66.7	87.5	100	97.5	96.8	97.4	100	100	97.7	98.8	97.6
Trucks	8	90	0	98	0	0	1	1	0	101	15	116	0	0	6	6	221
% Trucks	2.3	2.3	0	2.3	0	0	33.3	12.5	0	2.5	3.2	2.6	0	0	2.3	1.2	2.4

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File Name : Benns Church and Cypress Run
Site Code :
Start Date : 8/11/2021

	Benns Church From North				Driveway From East				Benns Church From South				Cypress Run From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 06:30 AM to 11:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	4	186	0	190	0	0	0	0	0	155	**11**	166	**4**	0	4	**8**	364
07:30 AM	7	**216**	**2**	**225**	0	0	**1**	**1**	0	138	7	145	1	0	**5**	6	**377**
07:45 AM	5	165	1	171	0	0	0	0	0	**188**	10	**198**	4	0	2	6	375
08:00 AM	**10**	169	0	179	0	0	1	1	**2**	135	7	144	3	0	3	6	330
Total Volume	26	736	3	765	0	0	2	2	2	616	35	653	12	0	14	26	1446
% App. Total	3.4	96.2	0.4		0	0	100		0.3	94.3	5.4		46.2	0	53.8		
PHF	.650	.852	.375	.850	.000	.000	.500	.500	.250	.819	.795	.824	.750	.000	.700	.813	.959
Passenger Veh	24	709	3	736	0	0	1	1	2	588	33	623	12	0	11	23	1383
% Passenger Veh	92.3	96.3	100	96.2	0	0	50.0	50.0	100	95.5	94.3	95.4	100	0	78.6	88.5	95.6
Trucks	2	27	0	29	0	0	1	1	0	28	2	30	0	0	3	3	63
% Trucks	7.7	3.7	0	3.8	0	0	50.0	50.0	0	4.5	5.7	4.6	0	0	21.4	11.5	4.4

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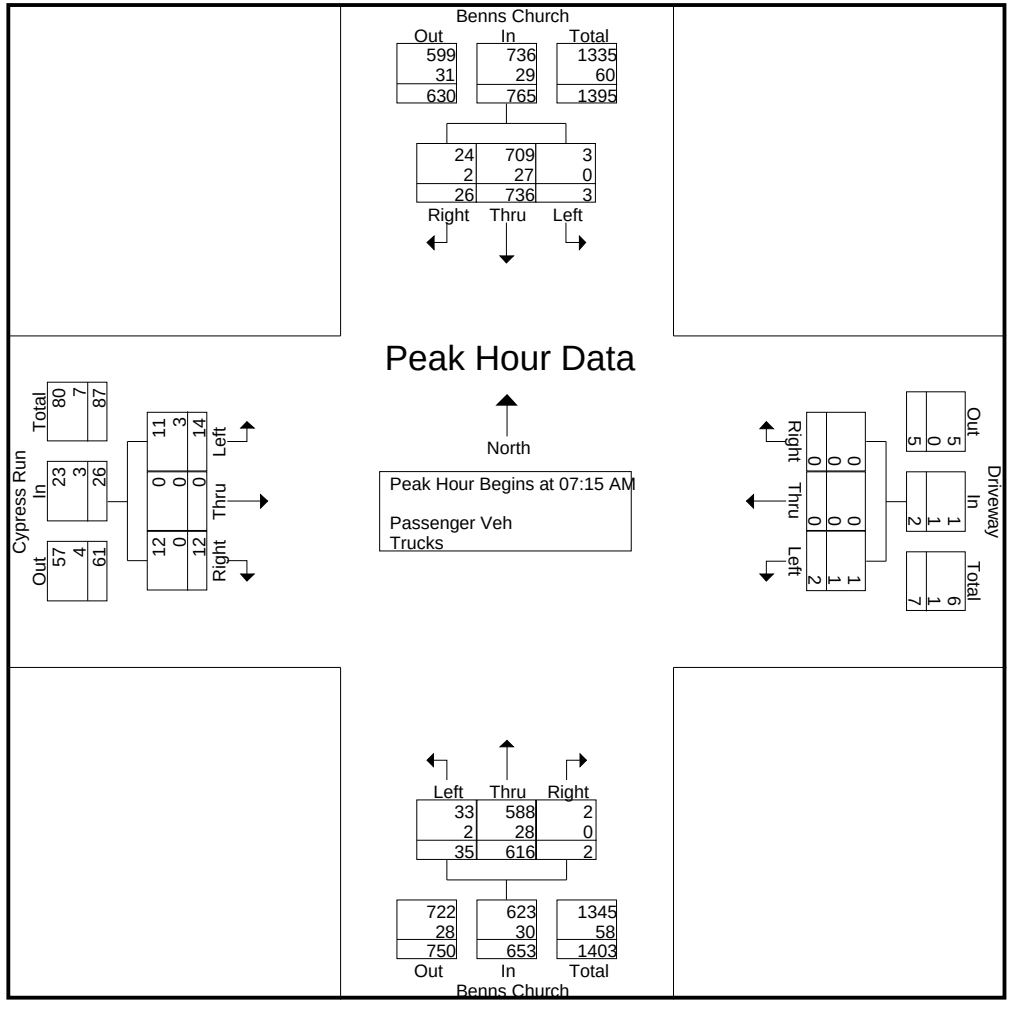
File Name : Benns Church and Cypress Run
Site Code :
Start Date : 8/11/2021
Page No : 4



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File Name : Benns Church and Cypress Run
Site Code :
Start Date : 8/11/2021

	Benns Church From North				Driveway From East				Benns Church From South				Cypress Run From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 12:00 PM to 06:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	31	238	0	269	0	**1**	0	**1**	0	254	33	287	**19**	0	**23**	**42**	599
04:30 PM	12	248	0	260	0	0	0	0	0	228	34	262	17	0	15	32	554
04:45 PM	**32**	241	**1**	274	0	1	0	1	0	250	**42**	**292**	14	0	21	35	602
05:00 PM	31	**249**	1	**281**	0	0	0	0	0	**260**	29	289	18	0	15	33	**603**
Total Volume	106	976	2	1084	0	2	0	2	0	992	138	1130	68	0	74	142	2358
% App. Total	9.8	90	0.2		0	100	0		0	87.8	12.2		47.9	0	52.1		
PHF	.828	.980	.500	.964	.000	.500	.000	.500	.000	.954	.821	.967	.895	.000	.804	.845	.978
Passenger Veh	105	956	2	1063	0	2	0	2	0	969	138	1107	68	0	74	142	2314
% Passenger Veh	99.1	98.0	100	98.1	0	100	0	100	0	97.7	100	98.0	100	0	100	100	98.1
Trucks	1	20	0	21	0	0	0	0	0	23	0	23	0	0	0	0	44
% Trucks	0.9	2.0	0	1.9	0	0	0	0	0	2.3	0	2.0	0	0	0	0	1.9

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Site Code :
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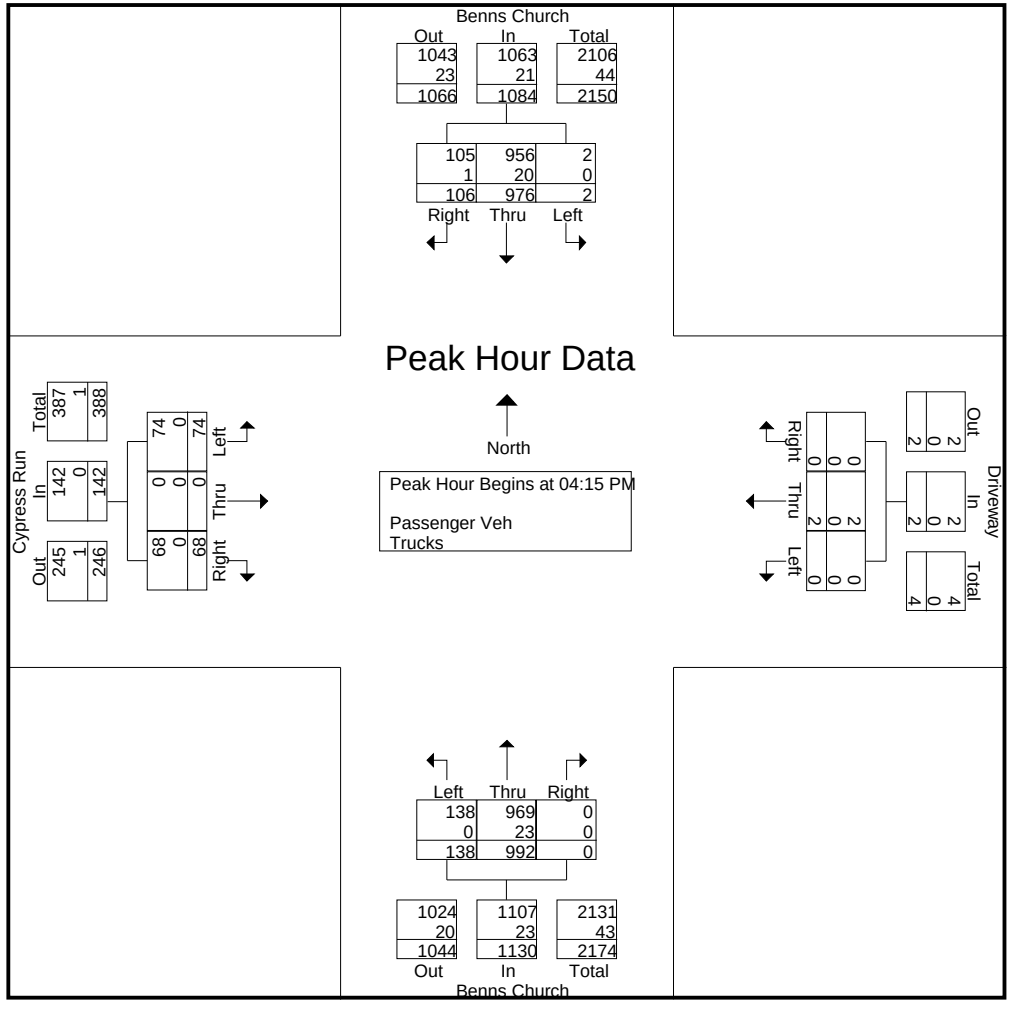


Appendix C
Wawa Development Trip Generation

Based on Fueling Stations

ITE Code	ITE Descriptions	Density	Unit	Daily	AM Peak Hour Total	AM Peak Hour Enter	AM Peak Hour Exit	PM Peak Hour Total	PM Peak Hour Enter	PM Peak Hour Exit
960	Super Convenience Market/Gas Station	16	Fueling Positions	3,688	449	225	224	367	184	183
Pass-By				**0**	**(283)**	**(142)**	**(141)**	**(242)**	**(121)**	**(121)**
New Site Trips				***3,688***	***166***	***83***	***83***	***125***	***63***	***62***
Pass-by %				0%	63%	63%	63%	66%	66%	66%

Based on Square Footage

ITE Code	ITE Descriptions	Density	Unit	Daily	AM Peak Hour Total	AM Peak Hour Enter	AM Peak Hour Exit	PM Peak Hour Total	PM Peak Hour Enter	PM Peak Hour Exit
960	Super Convenience Market/Gas Station	6049	Sq Ft	5,067	566	283	283	419	210	209
Pass-By				**0**	**(357)**	**(178)**	**(178)**	**(277)**	**(139)**	**(138)**
New Site Trips				***5,067***	***209***	***105***	***105***	***142***	***71***	***71***
Pass-by %				0%	63%	63%	63%	66%	66%	66%

Average/Blended

ITE Code	ITE Descriptions			Daily	AM Peak Hour Total	AM Peak Hour Enter	AM Peak Hour Exit	PM Peak Hour Total	PM Peak Hour Enter	PM Peak Hour Exit
960	Super Convenience Market/Gas Station	Average		4,378	508	254	254	393	197	196
520	Elementary School	600	Students	1,134	402	217	185	102	49	53
Gas Station Pass-By				**0**	**(320)**	**(160)**	**(160)**	**(259)**	**(130)**	**(129)**
New Site Trips				***5,512***	***590***	***311***	***279***	***236***	***116***	***120***
Pass-by %				0%	63%	63%	63%	66%	66%	66%

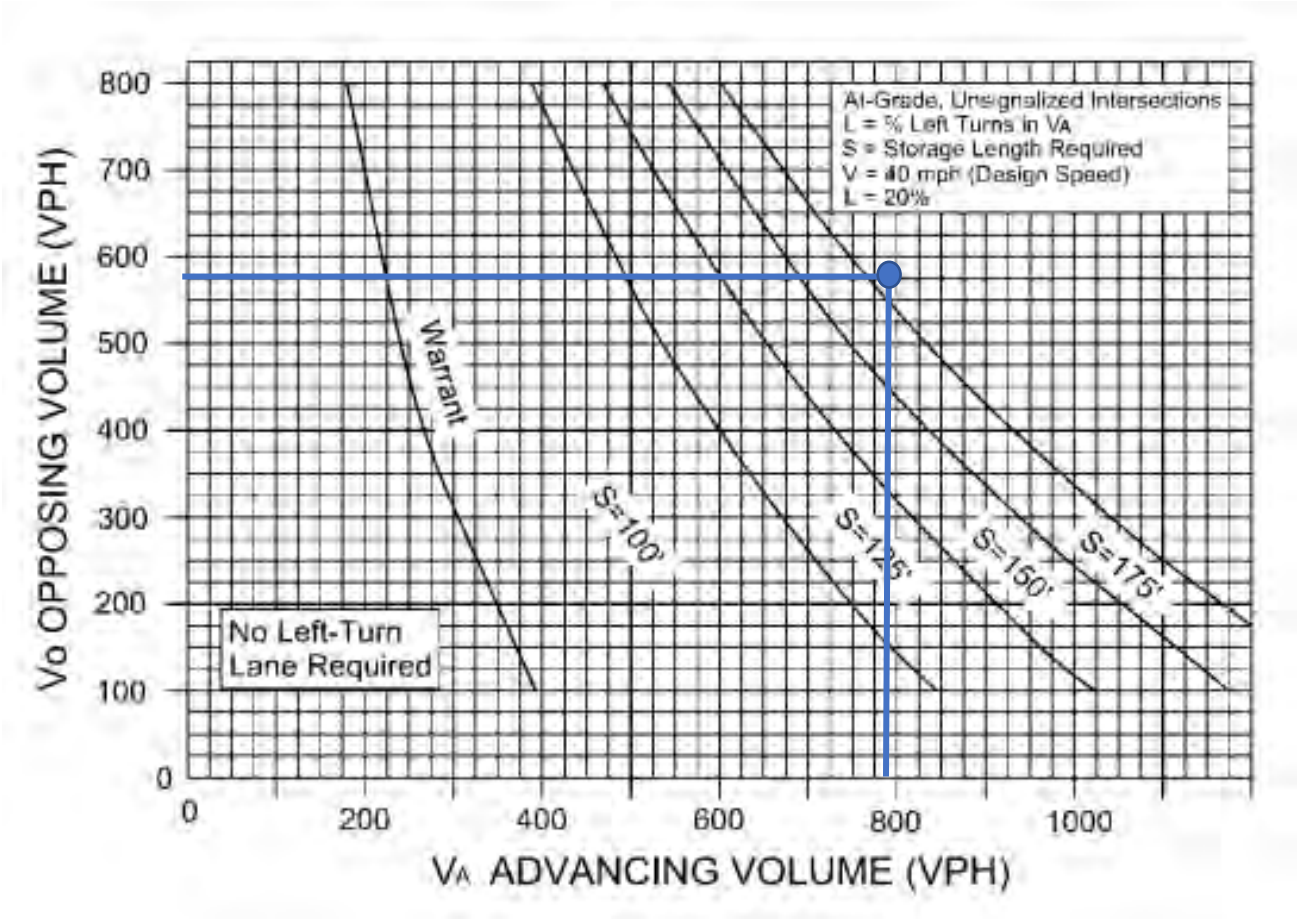
Appendix D
Turn-Lane Warrant Data Sheets

Left-Turn Lane Warrant Analysis for Site Driveway Access off Turner Drive for Build Scenarios 3 and 5

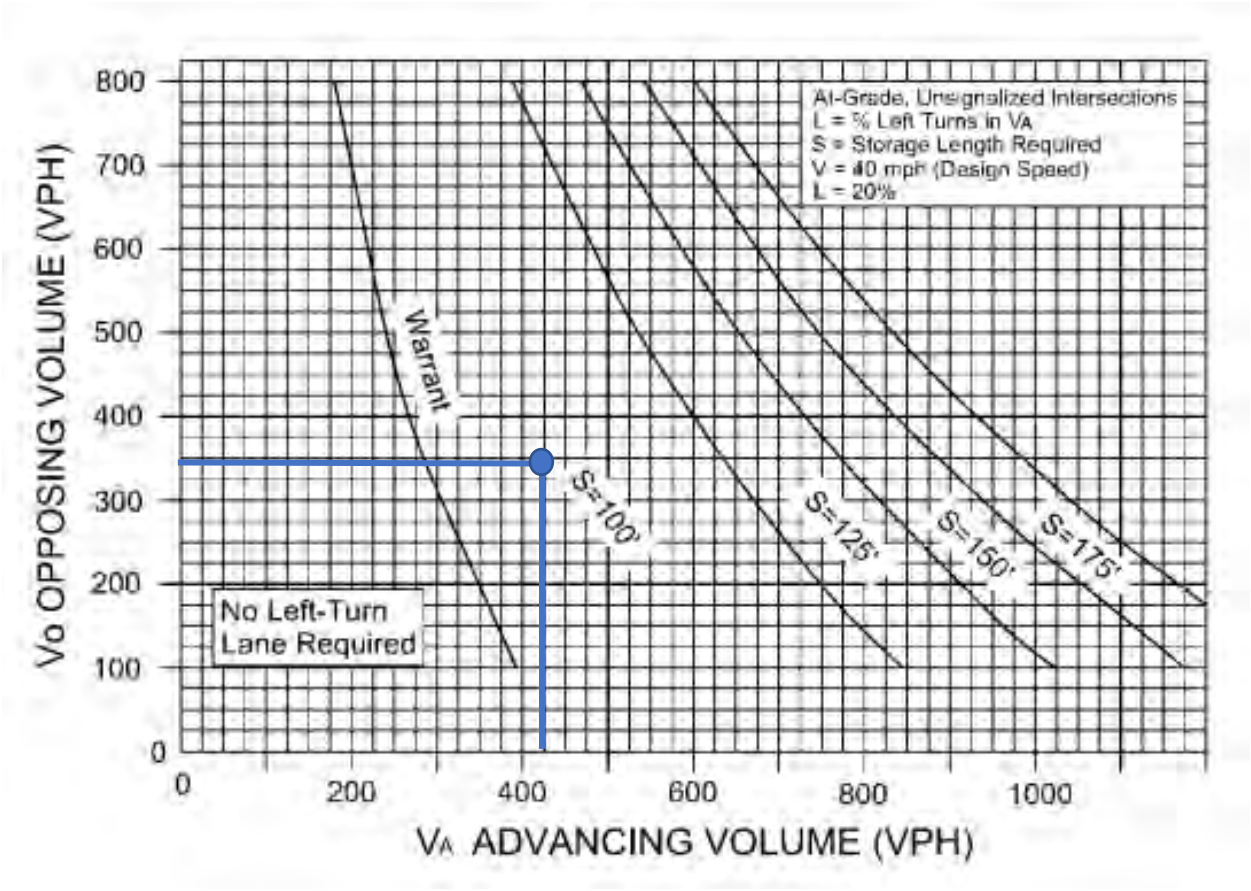
L = % Left Turns in Advancing Volume = 127 veh/795 veh (16%) in the AM and 98 veh/448 veh (22%) in the PM

V = 40 MPH

AM Peak Hour



PM Peak Hour

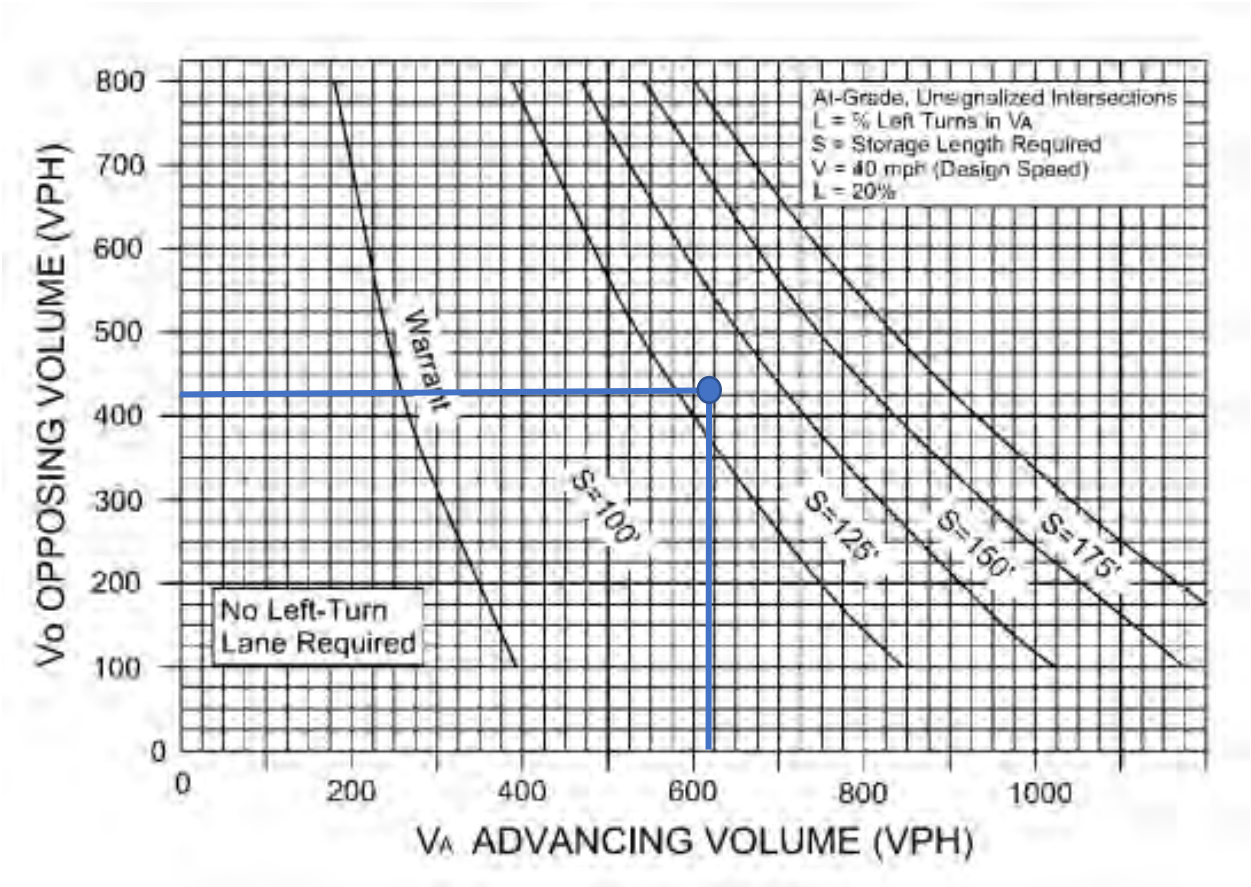

At-Grade, Unsignalized Intersections
L = % Left Turns in VA
S = Storage Length Required
V = 40 mph (Design Speed)
L = 20%
Warrant
S=100'
S=125'
S=150'
S=175'
No Left-Turn
Lane Required
Vo OPPOSING VOLUME (VPH)
VA ADVANCING VOLUME (VPH)
0
100
200
300
400
500
600
700
800
0
200
400
600
800
1000

Left-Turn Lane Warrant Analysis for Site Driveway Access off Turner Drive for Build Scenario 4

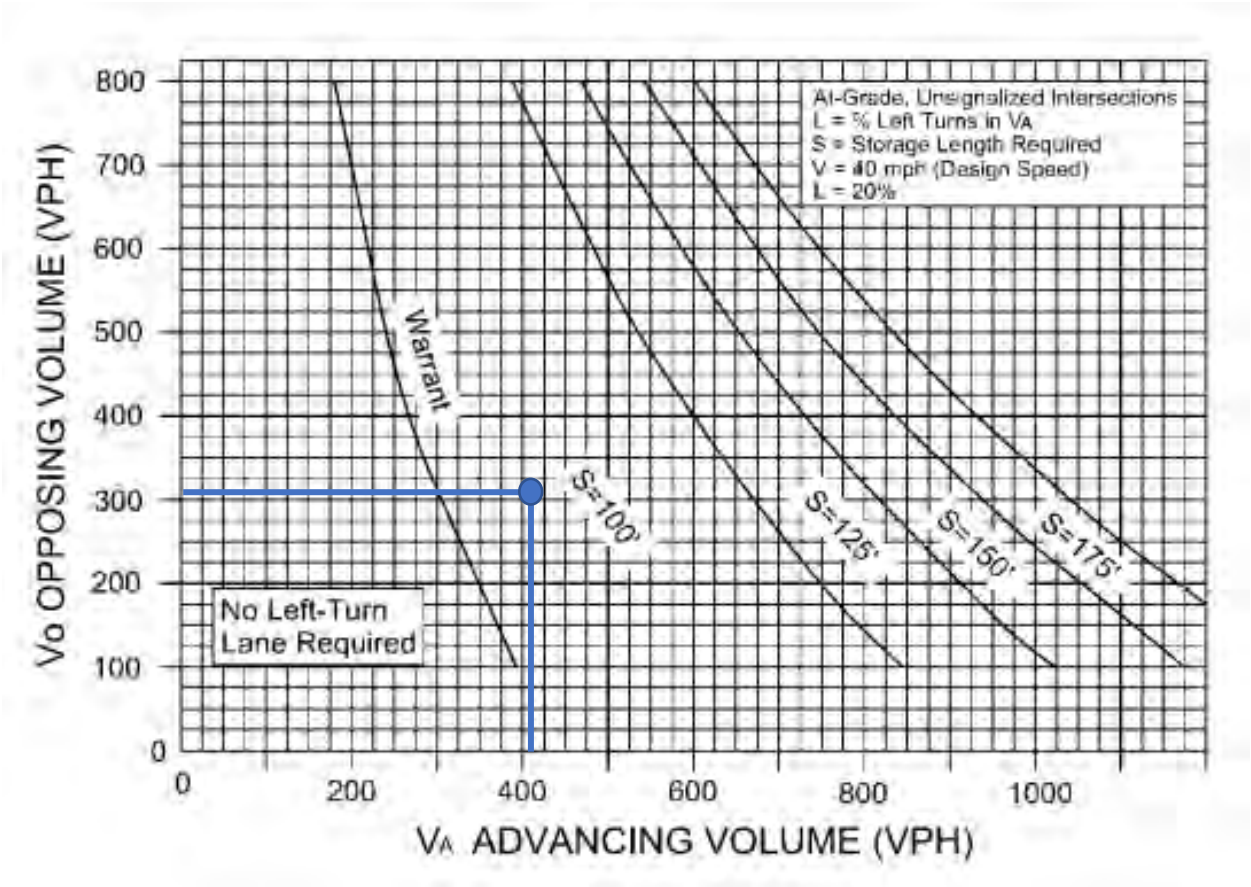
L = % Left Turns in Advancing Volume = 127 veh/621 veh (20%) in the AM and 98 veh/407 veh (24%) in the PM

V = 40 MPH

AM Peak Hour



PM Peak Hour

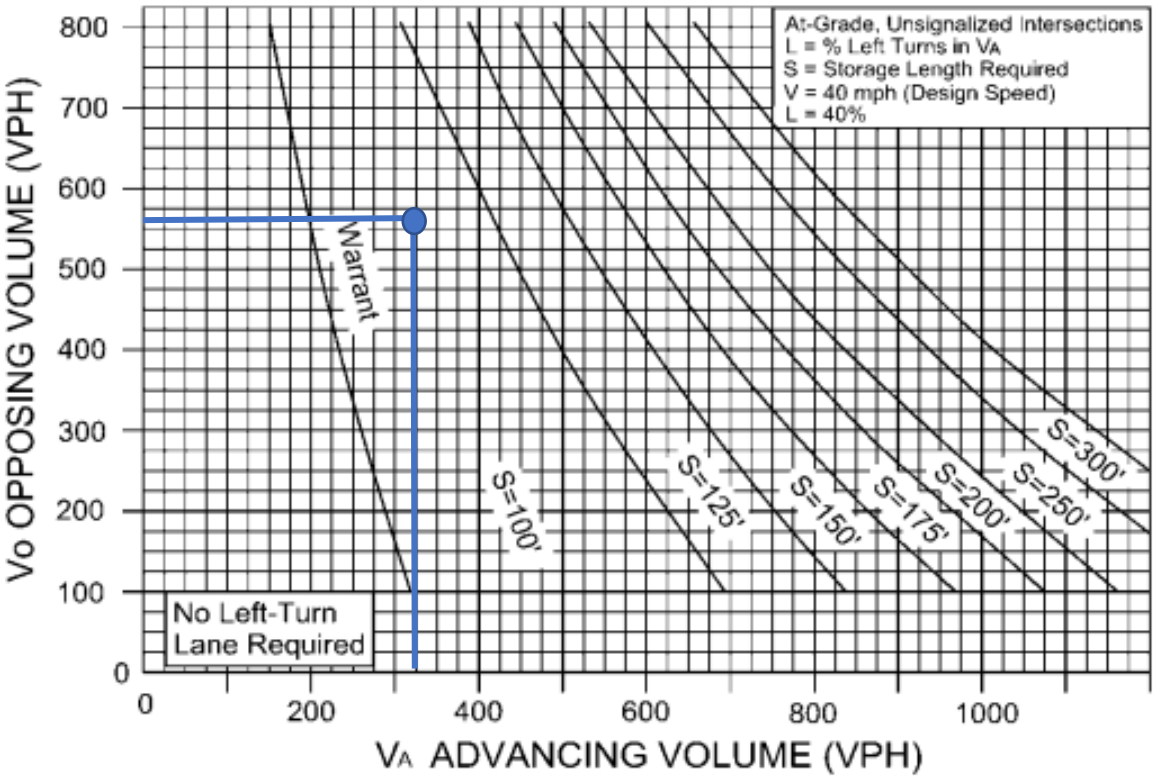

At-Grade, Unsignalized Intersections
L = % Left Turns in VA
S = Storage Length Required
V = 40 mph (Design Speed)
L = 20%
Warrant
S=100'
S=125'
S=150'
S=175'
No Left-Turn
Lane Required
Vo OPPOSING VOLUME (VPH)
VA ADVANCING VOLUME (VPH)
800
700
600
500
400
300
200
100
0
0
200
400
600
800
1000

Left-Turn Lane Warrant Analysis for Northbound Benns Church Boulevard at Turner Drive for Scenario 4

L = % Left Turns in Advancing Volume = 324 veh/567 veh (57%) in the AM and 243 veh/380 veh (64%) in the PM

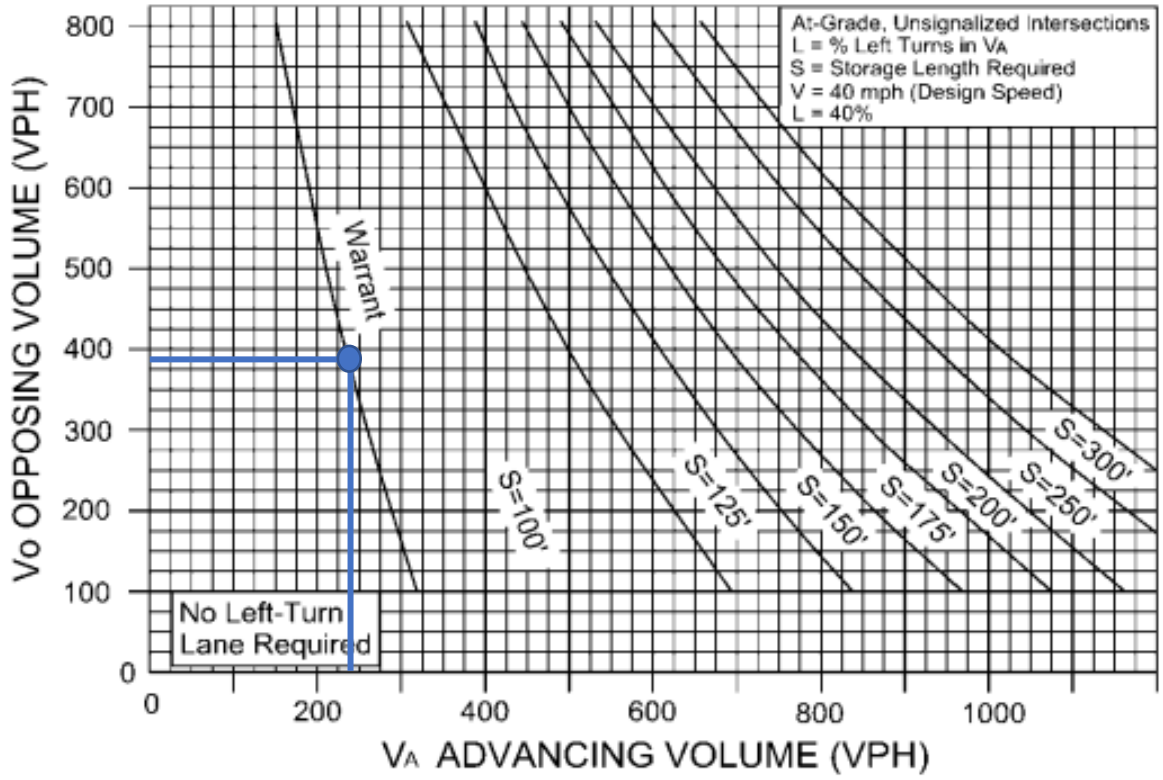
V = 40 MPH

AM Peak Hour



Left-Turn Lane Warrant Analysis for Eastbound Benns Church Boulevard at Turner Drive for Scenario 4

PM Peak Hour



Right Turn Lane Warrant Analysis for Site Driveway Access off of Benns Church Boulevard

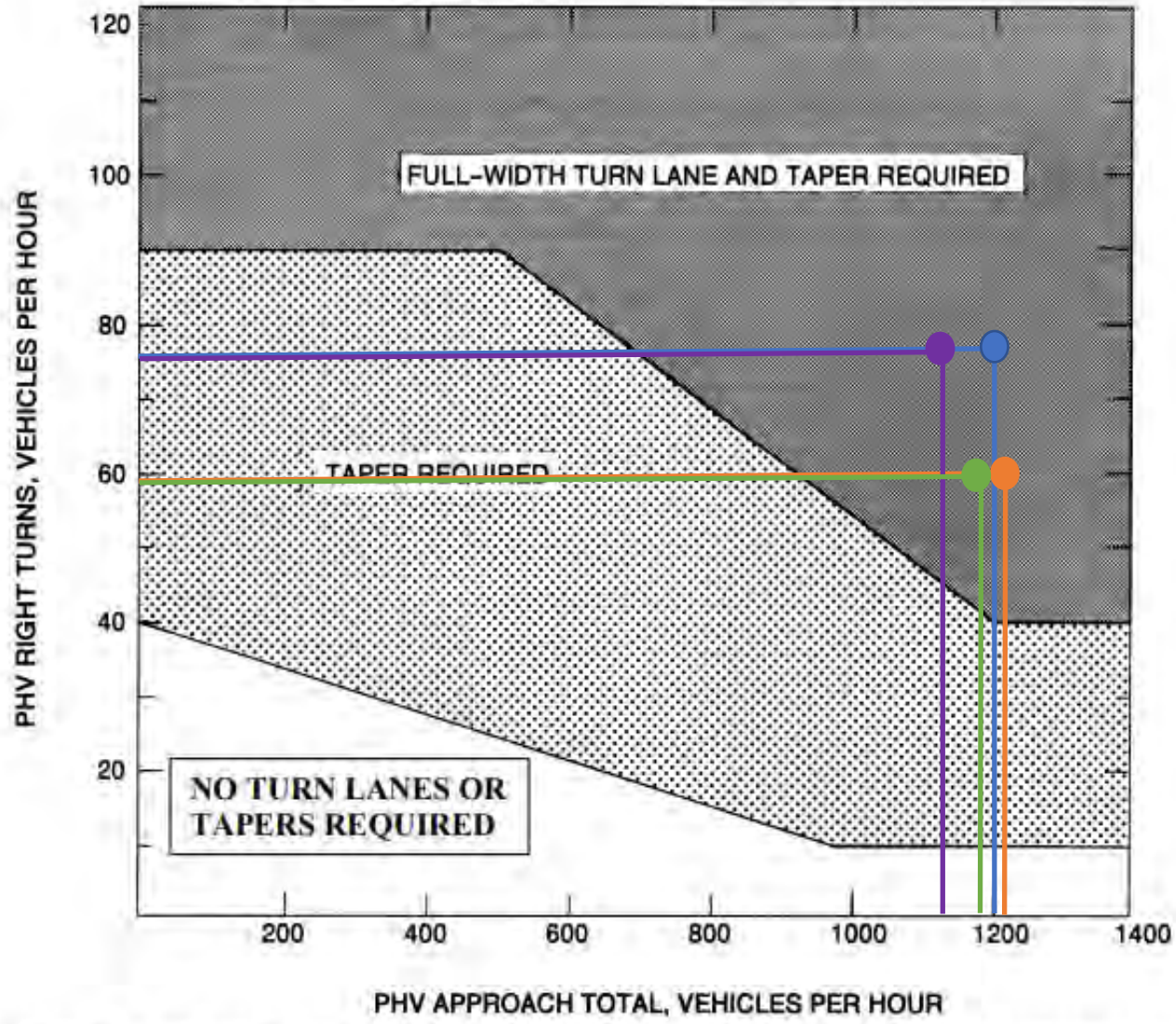


FIGURE 3-27 WARRANTS FOR RIGHT TURN TREATMENT (4-LANE HIGHWAY)

- AM Peak Hour – Scenario 3 & 5
- AM Peak Hour – Scenario 4
- PM Peak Hour – Scenario 3 & 5
- PM Peak Hour – Scenario 4

Right Turn Lane Warrant Analysis for No Build and Build Traffic Volumes on Eastbound Benns Church Boulevard at Turner Drive Intersection

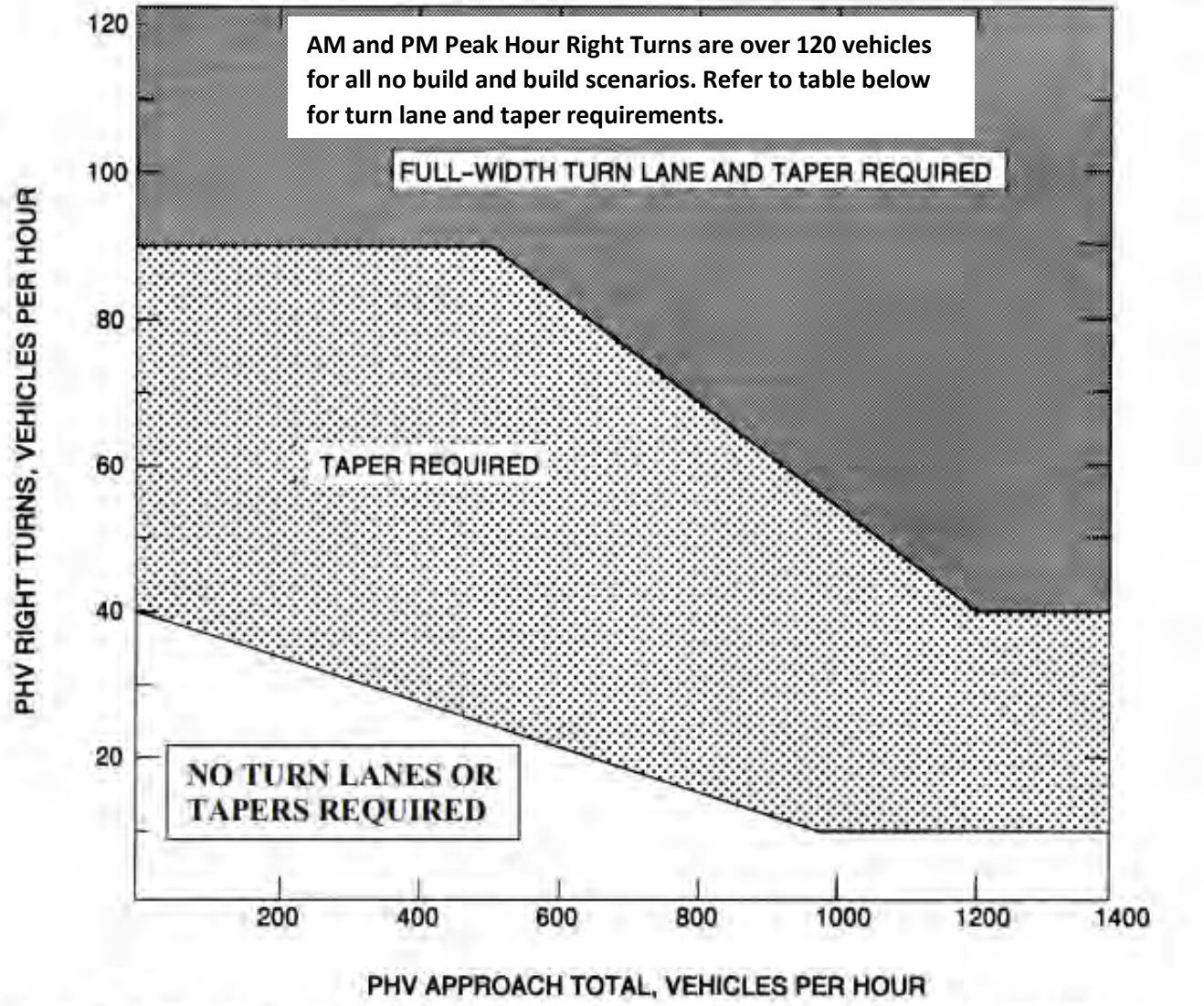


FIGURE 3-27 WARRANTS FOR RIGHT TURN TREATMENT (4-LANE HIGHWAY)

LENGTH OF STORAGE (*)		TAPER - Rural (*)	
Rural - For Design Speeds 50 MPH or Higher	*L - 200' min. (For 240 or fewer vehicles during peak hour, making turn)	- For Design Speeds 35 MPH or Higher	**T - 200' Min.
Rural - For Design Speeds 45 MPH or Less	*L - 100' min. (For 60 or fewer vehicles during peak hour, making turn)	- For Design Speeds 30 MPH or Less	**T - 100' Min. (single) **T - 200' Min. (dual)
*Distance L to be adjusted upward as determined by capacity analysis for Left and Right Turn Storage.		**Tapers are to be straight-line unless local policy requires reverse curves. In congested areas the taper length may be reduced to increase storage length. However, a design waiver shall be required.	
LENGTH OF STORAGE		TAPER - Urban	
Urban - Length determined by capacity analysis for Left and Right Turn Storage (100' Minimum)		- For Design Speeds 50 MPH or Higher	**T - 200' Min.
		- For Design Speeds 45 MPH or Less	**T - 100' Min. (single) **T - 150' Min. (dual)

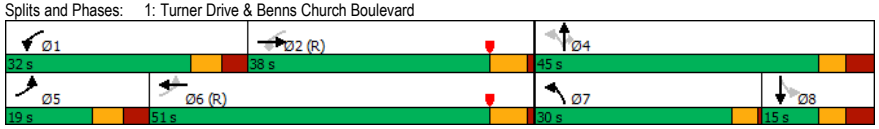
FIGURE 3-1 RIGHT AND LEFT TURN LANE CRITERIA FOR SINGLE AND DUAL LANES

Appendix E
Synchro/SimTraffic Reports

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	833	262	181	635	46	175	0	225	1	41	3
Future Volume (vph)	9	833	262	181	635	46	175	0	225	1	41	3
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.990				0.850		0.991	
Flt Protected	0.950			0.950				0.950			0.999	
Satd. Flow (prot)	1770	3406	1615	1805	3415	0	0	1787	1599	0	1842	0
Flt Permitted	0.347			0.247				0.726			0.994	
Satd. Flow (perm)	646	3406	1615	469	3415	0	0	1366	1599	0	1833	0
Satd. Flow (RTOR)			276		8				237		2	
Adj. Flow (vph)	9	877	276	191	668	48	184	0	237	1	43	3
Lane Group Flow (vph)	9	877	276	191	716	0	0	184	237	0	47	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Total Split (s)	19.0	38.0	38.0	32.0	51.0		30.0	45.0	45.0	15.0	15.0	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Act Effct Green (s)	75.6	57.7	57.7	69.6	75.9			22.9	22.9		22.9	
Actuated g/C Ratio	0.66	0.50	0.50	0.61	0.66			0.20	0.20		0.20	
v/c Ratio	0.02	0.51	0.29	0.44	0.32			0.68	0.47		0.13	
Control Delay	7.6	14.2	1.2	11.8	10.6			54.2	7.4		34.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	7.6	14.2	1.2	11.8	10.6			54.2	7.4		34.2	
LOS	A	B	A	B	B			D	A		C	
Approach Delay		11.1			10.9			27.9			34.2	
Approach LOS		B			B			C			C	

Intersection Summary		
Cycle Length: 115		
Actuated Cycle Length: 115		
Offset: 15 (13%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.68		
Intersection Signal Delay: 14.2	Intersection LOS: B	
Intersection Capacity Utilization 66.9%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



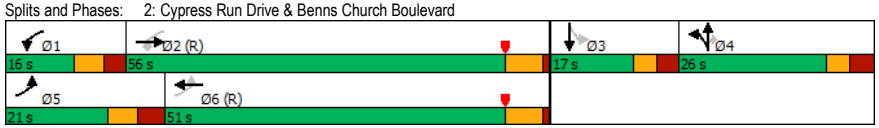
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	833	262	181	635	46	175	0	225	1	41	3
Future Volume (vph)	9	833	262	181	635	46	175	0	225	1	41	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99			1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1770	3406	1615	1805	3414			1787	1599		1843	
Flt Permitted	0.35	1.00	1.00	0.25	1.00			0.73	1.00		0.99	
Satd. Flow (perm)	646	3406	1615	468	3414			1366	1599		1834	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	877	276	191	668	48	184	0	237	1	43	3
RTOR Reduction (vph)	0	0	138	0	3	0	0	0	190	0	2	0
Lane Group Flow (vph)	9	877	138	191	713	0	0	184	47	0	45	0
Heavy Vehicles (%)	2%	6%	0%	0%	5%	0%	1%	0%	1%	0%	0%	33%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Actuated Green, G (s)	71.1	57.7	57.7	71.1	69.8			22.9	22.9		22.9	
Effective Green, g (s)	71.1	57.7	57.7	71.1	69.8			22.9	22.9		22.9	
Actuated g/C Ratio	0.62	0.50	0.50	0.62	0.61			0.20	0.20		0.20	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	412	1708	810	445	2072			272	318		365	
v/s Ratio Prot	0.00	c0.26		c0.05	c0.21							
v/s Ratio Perm	0.01		0.09	0.22				c0.13	0.03		0.02	
v/c Ratio	0.02	0.51	0.17	0.43	0.34			0.68	0.15		0.12	
Uniform Delay, d1	8.6	19.2	15.6	10.6	11.2			42.6	38.0		37.8	
Progression Factor	0.85	0.61	0.19	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.0	0.4	0.7	0.5			6.5	0.2		0.2	
Delay (s)	7.3	12.7	3.4	11.2	11.7			49.1	38.2		38.0	
Level of Service	A	B	A	B	B			D	D		D	
Approach Delay (s)		10.4			11.6			43.0			38.0	
Approach LOS		B			B			D			D	

Intersection Summary				
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.57			
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	25.0	
Intersection Capacity Utilization	66.9%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1184	29	44	767	2	15	0	37	2	0	0
Future Volume (vph)	3	1184	29	44	767	2	15	0	37	2	0	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	3471	1509	1641	3374	0	0	1492	1495	0	1203	0
Flt Permitted	0.328			0.180				0.950				
Satd. Flow (perm)	623	3471	1509	311	3374	0	0	1492	1495	0	1267	0
Satd. Flow (RTOR)			157						152			
Adj. Flow (vph)	3	1233	30	46	799	2	16	0	39	2	0	0
Lane Group Flow (vph)	3	1233	30	46	801	0	0	16	39	0	2	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Total Split (s)	21.0	56.0	56.0	16.0	51.0		26.0	26.0	26.0	17.0	17.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	91.8	85.3	85.3	88.2	93.4			7.5	7.5		7.3	
Actuated g/C Ratio	0.80	0.74	0.74	0.77	0.81			0.07	0.07		0.06	
v/c Ratio	0.01	0.48	0.03	0.15	0.29			0.17	0.16		0.03	
Control Delay	4.7	9.7	0.0	6.7	6.6			54.5	1.5		51.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	4.7	9.7	0.0	6.7	6.6			54.5	1.5		51.0	
LOS	A	A	A	A	A			D	A		D	
Approach Delay		9.4			6.6			16.9			51.0	
Approach LOS		A			A			B			D	

Intersection Summary			
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 6 (5%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 8.5		Intersection LOS: A	
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1184	29	44	767	2	15	0	37	2	0	0
Future Volume (vph)	3	1184	29	44	767	2	15	0	37	2	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.95	
Satd. Flow (prot)	1805	3471	1509	1641	3373			1492	1495		1203	
Flt Permitted	0.33	1.00	1.00	0.18	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	624	3471	1509	312	3373			1492	1495		1267	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	3	1233	30	46	799	2	16	0	39	2	0	0
RTOR Reduction (vph)	0	0	10	0	0	0	0	0	37	0	0	0
Lane Group Flow (vph)	3	1233	20	46	801	0	0	16	2	0	2	0
Heavy Vehicles (%)	0%	4%	7%	10%	7%	0%	21%	0%	8%	50%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Actuated Green, G (s)	81.2	76.5	76.5	81.7	80.0			6.1	6.1		1.7	
Effective Green, g (s)	81.2	76.5	76.5	81.7	80.0			6.1	6.1		1.7	
Actuated g/C Ratio	0.71	0.67	0.67	0.71	0.70			0.05	0.05		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	452	2308	1003	281	2346			79	79		18	
v/s Ratio Prot	0.00	c0.36		c0.01	c0.24			c0.01				
v/s Ratio Perm	0.00		0.01	0.11					0.00		c0.00	
v/c Ratio	0.01	0.53	0.02	0.16	0.34			0.20	0.03		0.11	
Uniform Delay, d1	5.1	10.0	6.5	6.2	7.0			52.1	51.6		55.9	
Progression Factor	1.00	1.00	1.00	1.44	1.25			1.00	1.00		1.00	
Incremental Delay, d2	0.0	0.9	0.0	0.3	0.4			1.3	0.1		2.7	
Delay (s)	5.1	10.9	6.6	9.2	9.1			53.4	51.8		58.6	
Level of Service	A	B	A	A	A			D	D		E	
Approach Delay (s)		10.8			9.1			52.2			58.6	
Approach LOS		B			A			D			E	

Intersection Summary					
HCM 2000 Control Delay	11.2	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.49				
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	26.0		
Intersection Capacity Utilization	59.8%	ICU Level of Service	B		
Analysis Period (min)	15				
c Critical Lane Group					

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	37	216	201	69	123	147	115	181	98	65
Average Queue (ft)	10	129	129	46	92	79	64	134	61	38
95th Queue (ft)	47	239	227	73	134	168	136	213	109	74
Link Distance (ft)		2175	2175			1928	1928	919		114
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	140			280	130				305	
Storage Blk Time (%)		8			2	1				
Queuing Penalty (veh)		1			7	3				

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	7	91	86	13	50	62	63	36	33	19
Average Queue (ft)	2	42	40	3	25	20	25	11	19	5
95th Queue (ft)	13	105	107	17	63	75	84	43	39	27
Link Distance (ft)		885	885			2175	2175	657		94
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)		0								
Queuing Penalty (veh)		0								

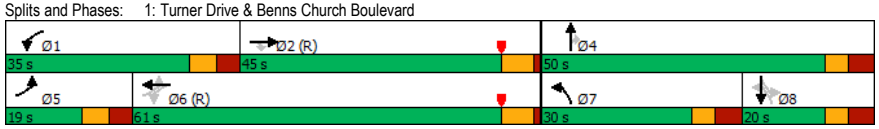
Network Summary

Network wide Queuing Penalty: 10

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	1025	119	187	1199	6	161	0	125	2	1	4
Future Volume (vph)	25	1025	119	187	1199	6	161	0	125	2	1	4
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850		0.923	
Flt Protected	0.950			0.950				0.950			0.986	
Satd. Flow (prot)	1787	3539	1615	1805	3536	0	0	1787	1568	0	1729	0
Flt Permitted	0.157			0.165				0.753			0.929	
Satd. Flow (perm)	295	3539	1615	314	3536	0	0	1417	1568	0	1629	0
Satd. Flow (RTOR)			227						151		4	
Adj. Flow (vph)	26	1079	125	197	1262	6	169	0	132	2	1	4
Lane Group Flow (vph)	26	1079	125	197	1268	0	0	169	132	0	7	0
Turn Type	D.P+P	NA	Perm	pm+pt	NA		D.P+P	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	6			8		4	8		
Total Split (s)	19.0	45.0	45.0	35.0	61.0		30.0	50.0	50.0	20.0	20.0	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Act Effct Green (s)	86.1	70.0	70.0	90.6	83.7			24.4	24.4		24.4	
Actuated g/C Ratio	0.66	0.54	0.54	0.70	0.64			0.19	0.19		0.19	
v/c Ratio	0.10	0.57	0.13	0.51	0.56			0.64	0.32		0.02	
Control Delay	8.9	23.7	0.3	12.6	16.5			58.6	6.1		28.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	8.9	23.7	0.3	12.6	16.5			58.6	6.1		28.0	
LOS	A	C	A	B	B			E	A		C	
Approach Delay		21.0			16.0			35.5			28.0	
Approach LOS		C			B			D			C	

Intersection Summary		
Cycle Length: 130		
Actuated Cycle Length: 130		
Offset: 0 (0%), Referenced to phase 2:EBT and 6:EBWB, Start of Yellow		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.64		
Intersection Signal Delay: 20.0	Intersection LOS: C	
Intersection Capacity Utilization 71.8%	ICU Level of Service C	
Analysis Period (min) 15		

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



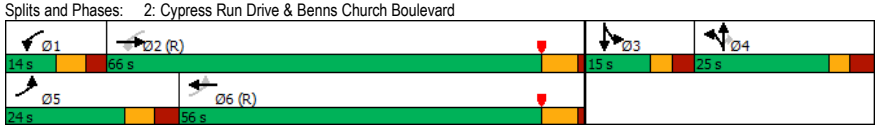
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	1025	119	187	1199	6	161	0	125	2	1	4
Future Volume (vph)	25	1025	119	187	1199	6	161	0	125	2	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.99	
Satd. Flow (prot)	1787	3539	1615	1805	3537			1787	1568		1729	
Flt Permitted	0.16	1.00	1.00	0.16	1.00			0.75	1.00		0.93	
Satd. Flow (perm)	295	3539	1615	313	3537			1417	1568		1628	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	26	1079	125	197	1262	6	169	0	132	2	1	4
RTOR Reduction (vph)	0	0	58	0	0	0	0	0	107	0	3	0
Lane Group Flow (vph)	26	1079	67	197	1268	0	0	169	25	0	4	0
Heavy Vehicles (%)	1%	2%	0%	0%	2%	0%	1%	0%	3%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	pm+pt	NA		D.P+P	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	6			8		4	8		
Actuated Green, G (s)	84.6	69.9	69.9	92.1	80.7			24.4	24.4		24.4	
Effective Green, g (s)	84.6	69.9	69.9	92.1	80.7			24.4	24.4		24.4	
Actuated g/C Ratio	0.65	0.54	0.54	0.71	0.62			0.19	0.19		0.19	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	236	1902	868	390	2195			265	294		305	
v/s Ratio Prot	0.00	0.30		c0.06	c0.36							
v/s Ratio Perm	0.07		0.04	0.30				c0.12	0.02		0.00	
v/c Ratio	0.11	0.57	0.08	0.51	0.58			0.64	0.08		0.01	
Uniform Delay, d1	10.2	20.0	14.5	11.6	14.6			48.7	43.6		43.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.2	1.2	0.2	1.0	1.1			5.0	0.1		0.0	
Delay (s)	10.4	21.2	14.7	12.6	15.7			53.7	43.7		43.0	
Level of Service	B	C	B	B	B			D	D		D	
Approach Delay (s)		20.3			15.3			49.3			43.0	
Approach LOS		C			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	28.5
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1060	113	188	1176	0	97	0	93	0	4	0
Future Volume (vph)	3	1060	113	188	1176	0	97	0	93	0	4	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950				
Satd. Flow (prot)	1805	3471	1553	1805	3539	0	0	1805	1615	0	1900	0
Flt Permitted	0.167			0.179				0.950				
Satd. Flow (perm)	317	3471	1553	340	3539	0	0	1805	1615	0	1900	0
Satd. Flow (RTOR)			150						214			
Adj. Flow (vph)	3	1152	123	204	1278	0	105	0	101	0	4	0
Lane Group Flow (vph)	3	1152	123	204	1278	0	0	105	101	0	4	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Total Split (s)	24.0	66.0	66.0	14.0	56.0		25.0	25.0	25.0	15.0	15.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	89.6	75.1	75.1	84.6	90.0			12.3	12.3		7.0	
Actuated g/C Ratio	0.75	0.63	0.63	0.70	0.75			0.10	0.10		0.06	
v/c Ratio	0.01	0.53	0.12	0.55	0.48			0.57	0.28		0.04	
Control Delay	6.3	15.2	1.6	11.8	8.9			62.7	2.0		54.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	6.3	15.2	1.6	11.8	8.9			62.7	2.0		54.2	
LOS	A	B	A	B	A			E	A		D	
Approach Delay		13.8			9.3			33.0			54.3	
Approach LOS		B			A			C			D	

Intersection Summary			
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.57			
Intersection Signal Delay: 13.0		Intersection LOS: B	
Intersection Capacity Utilization 68.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1060	113	188	1176	0	97	0	93	0	4	0
Future Volume (vph)	3	1060	113	188	1176	0	97	0	93	0	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1805	3471	1553	1805	3539			1805	1615		1900	
Flt Permitted	0.17	1.00	1.00	0.18	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	316	3471	1553	340	3539			1805	1615		1900	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	1152	123	204	1278	0	105	0	101	0	4	0
RTOR Reduction (vph)	0	0	51	0	0	0	0	0	91	0	0	0
Lane Group Flow (vph)	3	1152	72	204	1278	0	0	105	10	0	4	0
Heavy Vehicles (%)	0%	4%	4%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Actuated Green, G (s)	80.3	70.3	70.3	80.8	79.1			12.3	12.3		1.4	
Effective Green, g (s)	80.3	70.3	70.3	80.8	79.1			12.3	12.3		1.4	
Actuated g/C Ratio	0.67	0.59	0.59	0.67	0.66			0.10	0.10		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	226	2033	909	357	2332			185	165		22	
v/s Ratio Prot	0.00	0.33		c0.05	c0.36			c0.06			c0.00	
v/s Ratio Perm	0.01		0.05	c0.33					0.01			
v/c Ratio	0.01	0.57	0.08	0.57	0.55			0.57	0.06		0.18	
Uniform Delay, d1	8.0	15.4	10.8	10.0	10.9			51.3	48.6		58.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.2	0.2	2.2	0.9			4.0	0.2		4.0	
Delay (s)	8.0	16.6	11.0	12.2	11.8			55.3	48.8		62.7	
Level of Service	A	B	B	B	B			E	D		E	
Approach Delay (s)		16.0			11.9			52.1			62.7	
Approach LOS		B			B			D			E	

Intersection Summary				
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.58			
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	26.0	
Intersection Capacity Utilization	68.0%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	122	329	345	194	129	294	263	233	108	36
Average Queue (ft)	20	146	154	36	87	134	120	118	40	6
95th Queue (ft)	68	282	293	130	143	249	227	203	83	25
Link Distance (ft)		2172	2172			1930	1930	919		114
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	140			280	130				305	
Storage Blk Time (%)	0	9	1	0	2	5				
Queuing Penalty (veh)	0	2	1	0	12	10				

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	32	317	269	82	184	243	243	160	114	27
Average Queue (ft)	2	142	110	23	88	78	96	70	32	4
95th Queue (ft)	19	270	229	61	155	183	199	129	69	18
Link Distance (ft)		885	885			2172	2172	657		94
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)		6	0	0		0		0	0	
Queuing Penalty (veh)		0	0	0		0		0	0	

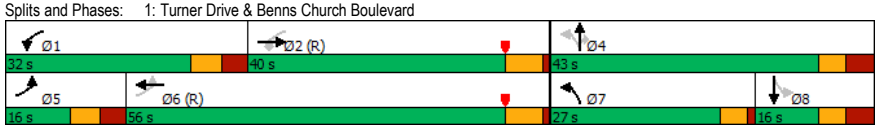
Network Summary

Network wide Queuing Penalty: 27

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	850	354	272	648	47	252	0	304	1	42	3
Future Volume (vph)	9	850	354	272	648	47	252	0	304	1	42	3
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.990				0.850		0.992	
Flt Protected	0.950			0.950				0.950			0.999	
Satd. Flow (prot)	1770	3406	1615	1805	3415	0	0	1787	1599	0	1845	0
Flt Permitted	0.325			0.187				0.726			0.994	
Satd. Flow (perm)	605	3406	1615	355	3415	0	0	1366	1599	0	1836	0
Satd. Flow (RTOR)			373		8				320		2	
Adj. Flow (vph)	9	895	373	286	682	49	265	0	320	1	44	3
Lane Group Flow (vph)	9	895	373	286	731	0	0	265	320	0	48	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Total Split (s)	16.0	40.0	40.0	32.0	56.0		27.0	43.0	43.0	16.0	16.0	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Act Effct Green (s)	68.7	45.3	45.3	62.7	68.9			29.8	29.8		29.8	
Actuated g/C Ratio	0.60	0.39	0.39	0.55	0.60			0.26	0.26		0.26	
v/c Ratio	0.02	0.67	0.43	0.66	0.36			0.75	0.49		0.10	
Control Delay	12.3	27.1	4.0	23.8	13.9			52.1	6.0		29.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	12.3	27.1	4.0	23.8	13.9			52.1	6.0		29.3	
LOS	B	C	A	C	B			D	A		C	
Approach Delay		20.2			16.7			26.9			29.3	
Approach LOS		C			B			C			C	

Intersection Summary			
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 42 (37%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 20.5		Intersection LOS: C	
Intersection Capacity Utilization 76.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



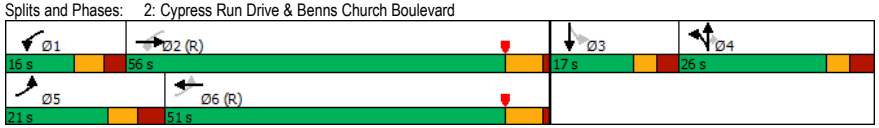
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	850	354	272	648	47	252	0	304	1	42	3
Future Volume (vph)	9	850	354	272	648	47	252	0	304	1	42	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99			1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1770	3406	1615	1805	3414			1787	1599		1844	
Flt Permitted	0.33	1.00	1.00	0.19	1.00			0.73	1.00		0.99	
Satd. Flow (perm)	606	3406	1615	355	3414			1365	1599		1835	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	895	373	286	682	49	265	0	320	1	44	3
RTOR Reduction (vph)	0	0	226	0	4	0	0	0	237	0	1	0
Lane Group Flow (vph)	9	895	147	286	727	0	0	265	83	0	47	0
Heavy Vehicles (%)	2%	6%	0%	0%	5%	0%	1%	0%	1%	0%	0%	33%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Actuated Green, G (s)	64.2	45.3	45.3	64.2	62.9			29.8	29.8		29.8	
Effective Green, g (s)	64.2	45.3	45.3	64.2	62.9			29.8	29.8		29.8	
Actuated g/C Ratio	0.56	0.39	0.39	0.56	0.55			0.26	0.26		0.26	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	351	1341	636	436	1867			353	414		475	
v/s Ratio Prot	0.00	c0.26		c0.11	0.21							
v/s Ratio Perm	0.01		0.09	0.26				c0.19	0.05		0.03	
v/c Ratio	0.03	0.67	0.23	0.66	0.39			0.75	0.20		0.10	
Uniform Delay, d1	11.6	28.7	23.2	16.2	15.0			39.2	33.3		32.4	
Progression Factor	1.11	0.78	0.79	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.0	2.3	0.7	3.5	0.6			8.7	0.2		0.1	
Delay (s)	12.8	24.7	19.1	19.8	15.6			47.9	33.5		32.5	
Level of Service	B	C	B	B	B			D	C		C	
Approach Delay (s)		23.0			16.8			40.0			32.5	
Approach LOS		C			B			D			C	

Intersection Summary				
HCM 2000 Control Delay	24.4	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	25.5	
Intersection Capacity Utilization	76.7%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1295	30	45	856	2	15	0	38	2	0	0
Future Volume (vph)	3	1295	30	45	856	2	15	0	38	2	0	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	3471	1509	1641	3374	0	0	1492	1495	0	1203	0
Flt Permitted	0.293			0.152				0.950				
Satd. Flow (perm)	557	3471	1509	263	3374	0	0	1492	1495	0	1267	0
Satd. Flow (RTOR)			157						152			
Adj. Flow (vph)	3	1349	31	47	892	2	16	0	40	2	0	0
Lane Group Flow (vph)	3	1349	31	47	894	0	0	16	40	0	2	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Total Split (s)	21.0	56.0	56.0	16.0	51.0		26.0	26.0	26.0	17.0	17.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	91.8	85.2	85.2	88.2	93.4			7.5	7.5		7.3	
Actuated g/C Ratio	0.80	0.74	0.74	0.77	0.81			0.07	0.07		0.06	
v/c Ratio	0.01	0.52	0.03	0.17	0.33			0.17	0.17		0.03	
Control Delay	4.7	10.3	0.0	6.4	6.0			54.5	1.5		51.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	4.7	10.3	0.0	6.4	6.0			54.5	1.5		51.0	
LOS	A	B	A	A	A			D	A		D	
Approach Delay		10.1			6.0			16.7			51.0	
Approach LOS		B			A			B			D	

Intersection Summary			
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 38 (33%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.52			
Intersection Signal Delay: 8.7		Intersection LOS: A	
Intersection Capacity Utilization 62.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1295	30	45	856	2	15	0	38	2	0	0
Future Volume (vph)	3	1295	30	45	856	2	15	0	38	2	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.95	
Satd. Flow (prot)	1805	3471	1509	1641	3373			1492	1495		1203	
Flt Permitted	0.29	1.00	1.00	0.15	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	557	3471	1509	262	3373			1492	1495		1267	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	3	1349	31	47	892	2	16	0	40	2	0	0
RTOR Reduction (vph)	0	0	10	0	0	0	0	0	38	0	0	0
Lane Group Flow (vph)	3	1349	21	47	894	0	0	16	2	0	2	0
Heavy Vehicles (%)	0%	4%	7%	10%	7%	0%	21%	0%	8%	50%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Actuated Green, G (s)	81.2	76.5	76.5	81.7	80.0			6.1	6.1		1.7	
Effective Green, g (s)	81.2	76.5	76.5	81.7	80.0			6.1	6.1		1.7	
Actuated g/C Ratio	0.71	0.67	0.67	0.71	0.70			0.05	0.05		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	406	2308	1003	248	2346			79	79		18	
v/s Ratio Prot	0.00	c0.39		c0.01	c0.27			c0.01				
v/s Ratio Perm	0.01		0.01	0.13					0.00		c0.00	
v/c Ratio	0.01	0.58	0.02	0.19	0.38			0.20	0.03		0.11	
Uniform Delay, d1	5.2	10.5	6.5	6.8	7.2			52.1	51.6		55.9	
Progression Factor	1.00	1.00	1.00	1.32	1.09			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.1	0.0	0.3	0.4			1.3	0.1		2.7	
Delay (s)	5.2	11.6	6.6	9.3	8.3			53.4	51.8		58.6	
Level of Service	A	B	A	A	A			D	D		E	
Approach Delay (s)		11.5			8.4			52.2			58.6	
Approach LOS		B			A			D			E	

Intersection Summary				
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.53			
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	26.0	
Intersection Capacity Utilization	62.9%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	117	330	363	280	129	324	288	314	254	91
Average Queue (ft)	11	182	181	98	114	156	123	158	92	32
95th Queue (ft)	60	297	303	223	151	288	236	268	197	75
Link Distance (ft)		2172	2172			1930	1930	919		114
Upstream Blk Time (%)										0
Queuing Penalty (veh)										0
Storage Bay Dist (ft)	140			280	130				305	
Storage Blk Time (%)	0	17	1	0	13	7		0	0	
Queuing Penalty (veh)	0	2	4	1	44	20		1	0	

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	20	201	183	41	91	102	113	82	68	48
Average Queue (ft)	1	49	43	3	28	19	25	16	21	4
95th Queue (ft)	10	136	122	19	67	67	80	55	51	25
Link Distance (ft)		885	885			2172	2172	657		94
Upstream Blk Time (%)										0
Queuing Penalty (veh)										0
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)		0	0							
Queuing Penalty (veh)		0	0							

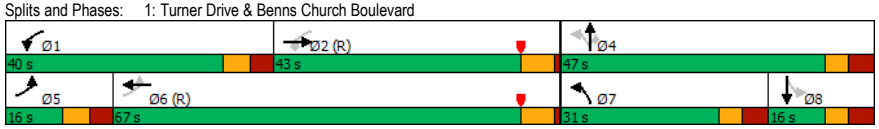
Network Summary

Network wide Queuing Penalty: 71

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	1046	141	207	1223	6	186	0	149	2	1	4
Future Volume (vph)	26	1046	141	207	1223	6	186	0	149	2	1	4
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850		0.923	
Flt Protected	0.950			0.950				0.950			0.986	
Satd. Flow (prot)	1787	3539	1615	1805	3536	0	0	1787	1568	0	1729	0
Flt Permitted	0.140			0.155				0.753			0.932	
Satd. Flow (perm)	263	3539	1615	294	3536	0	0	1417	1568	0	1634	0
Satd. Flow (RTOR)			227						157		4	
Adj. Flow (vph)	27	1101	148	218	1287	6	196	0	157	2	1	4
Lane Group Flow (vph)	27	1101	148	218	1293	0	0	196	157	0	7	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Total Split (s)	16.0	43.0	43.0	40.0	67.0		31.0	47.0	47.0	16.0	16.0	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Act Effct Green (s)	82.0	63.5	63.5	79.0	79.5			28.5	28.5		28.5	
Actuated g/C Ratio	0.63	0.49	0.49	0.61	0.61			0.22	0.22		0.22	
v/c Ratio	0.11	0.64	0.16	0.58	0.60			0.63	0.34		0.02	
Control Delay	8.5	17.3	0.5	19.4	19.8			54.0	7.2		25.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	8.5	17.3	0.5	19.4	19.8			54.0	7.2		25.1	
LOS	A	B	A	B	B			D	A		C	
Approach Delay		15.1			19.7			33.2			25.1	
Approach LOS		B			B			C			C	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 49 (38%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 19.4		Intersection LOS: B	
Intersection Capacity Utilization 74.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



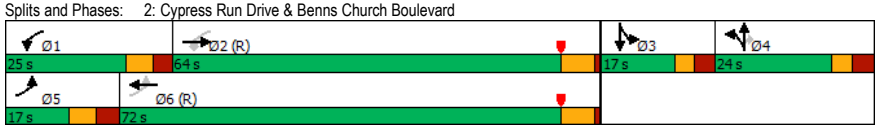
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	1046	141	207	1223	6	186	0	149	2	1	4
Future Volume (vph)	26	1046	141	207	1223	6	186	0	149	2	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.99	
Satd. Flow (prot)	1787	3539	1615	1805	3537			1787	1568		1729	
Flt Permitted	0.14	1.00	1.00	0.15	1.00			0.75	1.00		0.93	
Satd. Flow (perm)	263	3539	1615	294	3537			1417	1568		1633	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	27	1101	148	218	1287	6	196	0	157	2	1	4
RTOR Reduction (vph)	0	0	76	0	0	0	0	0	123	0	3	0
Lane Group Flow (vph)	27	1101	72	218	1293	0	0	196	34	0	4	0
Heavy Vehicles (%)	1%	2%	0%	0%	2%	0%	1%	0%	3%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Actuated Green, G (s)	80.5	63.5	63.5	80.5	76.5			28.5	28.5		28.5	
Effective Green, g (s)	80.5	63.5	63.5	80.5	76.5			28.5	28.5		28.5	
Actuated g/C Ratio	0.62	0.49	0.49	0.62	0.59			0.22	0.22		0.22	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	209	1728	788	379	2081			310	343		358	
v/s Ratio Prot	0.00	0.31		c0.08	c0.37							
v/s Ratio Perm	0.08		0.04	0.28				c0.14	0.02		0.00	
v/c Ratio	0.13	0.64	0.09	0.58	0.62			0.63	0.10		0.01	
Uniform Delay, d1	12.5	24.7	17.8	15.2	17.4			46.0	40.5		39.7	
Progression Factor	0.78	0.55	1.49	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.3	1.6	0.2	2.1	1.4			4.2	0.1		0.0	
Delay (s)	9.9	15.2	26.7	17.3	18.8			50.2	40.6		39.7	
Level of Service	A	B	C	B	B			D	D		D	
Approach Delay (s)		16.4			18.6			45.9			39.7	
Approach LOS		B			B			D			D	

Intersection Summary				
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.70			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	28.5	
Intersection Capacity Utilization	74.9%	ICU Level of Service	D	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1101	115	192	1221	0	99	0	95	0	4	0
Future Volume (vph)	3	1101	115	192	1221	0	99	0	95	0	4	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950				
Satd. Flow (prot)	1805	3471	1553	1805	3539	0	0	1805	1615	0	1900	0
Flt Permitted	0.180			0.191				0.950				
Satd. Flow (perm)	342	3471	1553	363	3539	0	0	1805	1615	0	1900	0
Satd. Flow (RTOR)			201						197			
Adj. Flow (vph)	3	1123	117	196	1246	0	101	0	97	0	4	0
Lane Group Flow (vph)	3	1123	117	196	1246	0	0	101	97	0	4	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Total Split (s)	17.0	64.0	64.0	25.0	72.0		24.0	24.0	24.0	17.0	17.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	99.3	83.3	83.3	94.3	99.7			12.6	12.6		7.0	
Actuated g/C Ratio	0.76	0.64	0.64	0.73	0.77			0.10	0.10		0.05	
v/c Ratio	0.01	0.51	0.11	0.49	0.46			0.58	0.29		0.04	
Control Delay	6.0	15.5	0.2	16.4	13.5			68.7	2.2		59.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	6.0	15.5	0.2	16.4	13.5			68.7	2.2		59.2	
LOS	A	B	A	B	B			E	A		E	
Approach Delay		14.1			13.9			36.1			59.3	
Approach LOS		B			B			D			E	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 35 (27%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 15.6		Intersection LOS: B	
Intersection Capacity Utilization 69.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1101	115	192	1221	0	99	0	95	0	4	0
Future Volume (vph)	3	1101	115	192	1221	0	99	0	95	0	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1805	3471	1553	1805	3539			1805	1615		1900	
Flt Permitted	0.18	1.00	1.00	0.19	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	341	3471	1553	364	3539			1805	1615		1900	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	3	1123	117	196	1246	0	101	0	97	0	4	0
RTOR Reduction (vph)	0	0	46	0	0	0	0	0	88	0	0	0
Lane Group Flow (vph)	3	1123	71	196	1246	0	0	101	9	0	4	0
Heavy Vehicles (%)	0%	4%	4%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Actuated Green, G (s)	90.0	78.4	78.4	90.5	88.8			12.6	12.6		1.4	
Effective Green, g (s)	90.0	78.4	78.4	90.5	88.8			12.6	12.6		1.4	
Actuated g/C Ratio	0.69	0.60	0.60	0.70	0.68			0.10	0.10		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	249	2093	936	387	2417			174	156		20	
v/s Ratio Prot	0.00	c0.32		c0.05	c0.35			c0.06			c0.00	
v/s Ratio Perm	0.01		0.05	0.31					0.01			
v/c Ratio	0.01	0.54	0.08	0.51	0.52			0.58	0.06		0.20	
Uniform Delay, d1	7.4	15.1	10.7	9.1	10.1			56.2	53.3		63.7	
Progression Factor	1.00	1.00	1.00	2.46	1.72			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.0	0.2	0.9	0.6			4.9	0.2		4.9	
Delay (s)	7.4	16.1	10.9	23.4	18.0			61.0	53.5		68.6	
Level of Service	A	B	B	C	B			E	D		E	
Approach Delay (s)		15.6			18.7			57.3			68.6	
Approach LOS		B			B			E			E	

Intersection Summary					
HCM 2000 Control Delay		20.1	HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio		0.55			
Actuated Cycle Length (s)		130.0	Sum of lost time (s)		26.0
Intersection Capacity Utilization		69.5%	ICU Level of Service		C
Analysis Period (min)		15			
c Critical Lane Group					

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	100	240	256	105	129	418	385	256	166	29
Average Queue (ft)	19	119	121	27	104	179	160	126	53	6
95th Queue (ft)	59	203	207	72	153	332	307	213	117	25
Link Distance (ft)		2172	2172			1930	1930	919		114
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	140			280	130				305	
Storage Blk Time (%)	0	6	0	0	9	9		0	0	
Queuing Penalty (veh)	0	2	0	0	55	19		0	0	

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	48	301	289	128	201	253	276	192	132	39
Average Queue (ft)	3	157	127	25	85	92	110	74	32	4
95th Queue (ft)	30	275	243	80	154	199	219	144	78	20
Link Distance (ft)		885	885			2172	2172	657		94
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)	0	8	0	0	0	0		1	0	
Queuing Penalty (veh)	0	0	0	0	0	0		1	0	

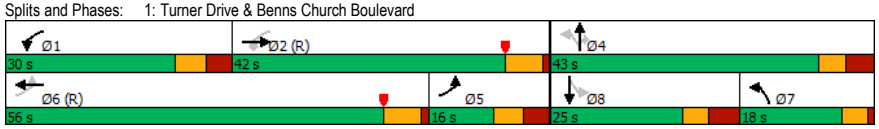
Network Summary

Network wide Queuing Penalty: 78

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	877	379	374	584	47	354	0	317	1	42	3
Future Volume (vph)	9	877	379	374	584	47	354	0	317	1	42	3
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.989				0.850		0.992	
Flt Protected	0.950			0.950				0.950			0.999	
Satd. Flow (prot)	1770	3406	1615	1770	3412	0	0	1787	1599	0	1845	0
Flt Permitted	0.349			0.125				0.726			0.993	
Satd. Flow (perm)	650	3406	1615	233	3412	0	0	1366	1599	0	1834	0
Satd. Flow (RTOR)			399		9				334		2	
Adj. Flow (vph)	9	923	399	394	615	49	373	0	334	1	44	3
Lane Group Flow (vph)	9	923	399	394	664	0	0	373	334	0	48	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Total Split (s)	16.0	42.0	42.0	30.0	56.0		18.0	43.0	43.0	25.0	25.0	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Act Effct Green (s)	65.2	37.8	37.8	59.2	65.0			33.3	33.3		33.3	
Actuated g/C Ratio	0.57	0.33	0.33	0.51	0.57			0.29	0.29		0.29	
v/c Ratio	0.02	0.83	0.50	0.92	0.34			0.94	0.48		0.09	
Control Delay	13.8	36.7	5.0	59.9	15.3			73.4	5.7		28.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	13.8	36.7	5.0	59.9	15.3			73.4	5.7		28.1	
LOS	B	D	A	E	B			E	A		C	
Approach Delay		27.0			31.9			41.4			28.1	
Approach LOS		C			C			D			C	

Intersection Summary			
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 2 (2%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.94			
Intersection Signal Delay: 31.9		Intersection LOS: C	
Intersection Capacity Utilization 87.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



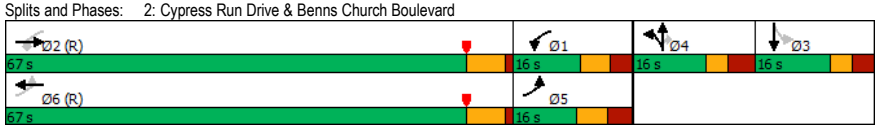
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	877	379	374	584	47	354	0	317	1	42	3
Future Volume (vph)	9	877	379	374	584	47	354	0	317	1	42	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99			1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1770	3406	1615	1770	3412			1787	1599		1844	
Flt Permitted	0.35	1.00	1.00	0.12	1.00			0.73	1.00		0.99	
Satd. Flow (perm)	649	3406	1615	233	3412			1365	1599		1834	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	923	399	394	615	49	373	0	334	1	44	3
RTOR Reduction (vph)	0	0	268	0	4	0	0	0	237	0	1	0
Lane Group Flow (vph)	9	923	131	394	660	0	0	373	97	0	47	0
Heavy Vehicles (%)	2%	6%	0%	2%	5%	0%	1%	0%	1%	0%	0%	33%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Actuated Green, G (s)	60.7	37.8	37.8	60.7	59.0			33.3	33.3		33.3	
Effective Green, g (s)	60.7	37.8	37.8	60.7	59.0			33.3	33.3		33.3	
Actuated g/C Ratio	0.53	0.33	0.33	0.53	0.51			0.29	0.29		0.29	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	359	1119	530	429	1750			395	463		531	
v/s Ratio Prot	0.00	0.27		c0.18	0.19							
v/s Ratio Perm	0.01		0.08	c0.30				c0.27	0.06		0.03	
v/c Ratio	0.03	0.82	0.25	0.92	0.38			0.94	0.21		0.09	
Uniform Delay, d1	16.8	35.6	28.2	30.9	16.9			39.9	30.9		29.8	
Progression Factor	1.18	0.83	0.99	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.0	6.1	1.0	24.3	0.6			31.1	0.2		0.1	
Delay (s)	19.9	35.6	28.9	55.2	17.5			71.1	31.1		29.8	
Level of Service	B	D	C	E	B			E	C		C	
Approach Delay (s)		33.5			31.6			52.2			29.8	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1333	30	45	894	2	15	0	38	2	0	0
Future Volume (vph)	3	1333	30	45	894	2	15	0	38	2	0	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	3471	1509	1641	3374	0	0	1492	1495	0	1203	0
Flt Permitted	0.280			0.133				0.950				
Satd. Flow (perm)	532	3471	1509	230	3374	0	0	1492	1495	0	1267	0
Satd. Flow (RTOR)			161						157			
Adj. Flow (vph)	3	1389	31	47	931	2	16	0	40	2	0	0
Lane Group Flow (vph)	3	1389	31	47	933	0	0	16	40	0	2	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Total Split (s)	16.0	67.0	67.0	16.0	67.0		16.0	16.0	16.0	16.0	16.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	92.3	86.1	86.1	88.5	93.7			7.5	7.5		7.0	
Actuated g/C Ratio	0.80	0.75	0.75	0.77	0.81			0.07	0.07		0.06	
v/c Ratio	0.01	0.53	0.03	0.19	0.34			0.17	0.16		0.03	
Control Delay	4.3	9.8	0.0	3.3	2.3			54.5	1.4		51.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	4.3	9.8	0.0	3.3	2.3			54.5	1.4		51.5	
LOS	A	A	A	A	A			D	A		D	
Approach Delay		9.6			2.3			16.6			51.5	
Approach LOS		A			A			B			D	

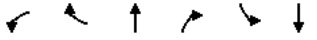
Intersection Summary			
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 19 (17%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 6.9		Intersection LOS: A	
Intersection Capacity Utilization 63.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



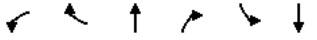
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1333	30	45	894	2	15	0	38	2	0	0
Future Volume (vph)	3	1333	30	45	894	2	15	0	38	2	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.95	
Satd. Flow (prot)	1805	3471	1509	1641	3373			1492	1495		1203	
Flt Permitted	0.28	1.00	1.00	0.13	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	531	3471	1509	230	3373			1492	1495		1267	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	3	1389	31	47	931	2	16	0	40	2	0	0
RTOR Reduction (vph)	0	0	11	0	0	0	0	0	38	0	0	0
Lane Group Flow (vph)	3	1389	20	47	933	0	0	16	2	0	2	0
Heavy Vehicles (%)	0%	4%	7%	10%	7%	0%	21%	0%	8%	50%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Actuated Green, G (s)	81.5	72.8	72.8	82.0	80.4			6.1	6.1		1.4	
Effective Green, g (s)	81.5	72.8	72.8	82.0	80.4			6.1	6.1		1.4	
Actuated g/C Ratio	0.71	0.63	0.63	0.71	0.70			0.05	0.05		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	388	2197	955	276	2358			79	79		15	
v/s Ratio Prot	0.00	c0.40		c0.01	c0.28			c0.01				
v/s Ratio Perm	0.01		0.01	0.11					0.00		c0.00	
v/c Ratio	0.01	0.63	0.02	0.17	0.40			0.20	0.03		0.13	
Uniform Delay, d1	7.2	12.9	7.8	15.8	7.2			52.1	51.6		56.2	
Progression Factor	1.00	1.00	1.00	0.34	0.40			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.4	0.0	0.2	0.4			1.3	0.1		4.0	
Delay (s)	7.2	14.3	7.9	5.6	3.3			53.4	51.8		60.2	
Level of Service	A	B	A	A	A			D	D		E	
Approach Delay (s)		14.2			3.4			52.2			60.2	
Approach LOS		B			A			D			E	

Intersection Summary					
HCM 2000 Control Delay	10.8	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.56				
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	26.0		
Intersection Capacity Utilization	63.9%	ICU Level of Service	B		
Analysis Period (min)	15				
c Critical Lane Group					



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	146	525	51	127	668
Future Volume (vph)	19	146	525	51	127	668
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.881		0.988			
Flt Protected	0.994				0.950	
Satd. Flow (prot)	1647	0	1840	0	1787	1881
Flt Permitted	0.994				0.950	
Satd. Flow (perm)	1647	0	1840	0	1787	1881
Adj. Flow (vph)	20	154	553	54	134	703
Lane Group Flow (vph)	174	0	607	0	134	703
Sign Control	Stop		Free			Free

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 57.8%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	19	146	525	51	127	668
Future Volume (Veh/h)	19	146	525	51	127	668
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	20	154	553	54	134	703
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						450
pX, platoon unblocked	0.82					
vC, conflicting volume	1551	580			607	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1562	580			607	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	77	70			86	
cM capacity (veh/h)	88	516			976	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	174	607	134	703
Volume Left	20	0	134	0
Volume Right	154	54	0	0
cSH	331	1700	976	1700
Volume to Capacity	0.53	0.36	0.14	0.41
Queue Length 95th (ft)	72	0	12	0
Control Delay (s)	27.3	0.0	9.3	0.0
Lane LOS	D		A	
Approach Delay (s)	27.3	0.0	1.5	
Approach LOS	D			

Intersection Summary				
Average Delay		3.7		
Intersection Capacity Utilization		57.8%	ICU Level of Service	B
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1119	76	0	1005	0	89
Future Volume (vph)	1119	76	0	1005	0	89
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	3471	1615	0	3438	0	1611
Flt Permitted						
Satd. Flow (perm)	3471	1615	0	3438	0	1611
Adj. Flow (vph)	1178	80	0	1058	0	94
Lane Group Flow (vph)	1178	80	0	1058	0	94
Sign Control	Free			Free	Stop	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1119	76	0	1005	0	89
Future Volume (Veh/h)	1119	76	0	1005	0	89
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1178	80	0	1058	0	94
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)	431					
pX, platoon unblocked			0.76		0.76	0.76
vC, conflicting volume			1258		1707	589
vC1, stage 1 conf vol					1178	
vC2, stage 2 conf vol					529	
vCu, unblocked vol			700		1293	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	89
cM capacity (veh/h)			686		260	821

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	589	589	80	529	529	94
Volume Left	0	0	0	0	0	0
Volume Right	0	0	80	0	0	94
cSH	1700	1700	1700	1700	1700	821
Volume to Capacity	0.35	0.35	0.05	0.31	0.31	0.11
Queue Length 95th (ft)	0	0	0	0	0	10
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.9
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.9
Approach LOS						A

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	43.1%	ICU Level of Service		A
Analysis Period (min)	15			

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	109	360	397	280	352	371	314	354	250	90
Average Queue (ft)	12	220	229	131	241	161	125	281	197	34
95th Queue (ft)	63	329	356	273	376	364	279	412	323	72
Link Distance (ft)		2164	2164			355	355	340		116
Upstream Blk Time (%)					5	6	0	12		0
Queuing Penalty (veh)					0	31	1	82		0
Storage Bay Dist (ft)	140			280	450				250	
Storage Blk Time (%)	0	27	2	0	5	6		22	2	
Queuing Penalty (veh)	0	2	9	1	15	23		69	5	

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	22	167	190	36	86	67	85	58	73	31
Average Queue (ft)	2	43	42	3	28	11	17	14	22	2
95th Queue (ft)	13	121	126	18	67	43	56	46	54	17
Link Distance (ft)		890	890			2164	2164	641		181
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)		0	0							
Queuing Penalty (veh)		0	0							

Intersection: 3: Proposed Driveway & Turner Drive

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	125	301	73
Average Queue (ft)	82	79	36
95th Queue (ft)	138	264	64
Link Distance (ft)	102	358	
Upstream Blk Time (%)	31	2	
Queuing Penalty (veh)	0	0	
Storage Bay Dist (ft)			200
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Proposed Driveway & Benns Church Boulevard

Movement	WB	WB	NB
Directions Served	T	T	R
Maximum Queue (ft)	184	128	84
Average Queue (ft)	35	20	35
95th Queue (ft)	185	136	68
Link Distance (ft)	1102	1102	79
Upstream Blk Time (%)			1
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

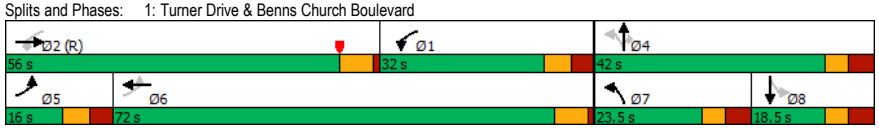
Network Summary

Network wide Queuing Penalty: 239

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	1053	161	286	1172	6	264	0	158	2	1	4
Future Volume (vph)	26	1053	161	286	1172	6	264	0	158	2	1	4
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850		0.923	
Flt Protected	0.950			0.950				0.950			0.986	
Satd. Flow (prot)	1805	3539	1615	1787	3536	0	0	1787	1568	0	1729	0
Flt Permitted	0.136			0.085				0.609			0.839	
Satd. Flow (perm)	258	3539	1615	160	3536	0	0	1146	1568	0	1471	0
Satd. Flow (RTOR)			164		1				166		4	
Adj. Flow (vph)	27	1108	169	301	1234	6	278	0	166	2	1	4
Lane Group Flow (vph)	27	1108	169	301	1240	0	0	278	166	0	7	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Total Split (s)	16.0	56.0	56.0	32.0	72.0		23.5	42.0	42.0	18.5	18.5	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Act Effct Green (s)	76.0	50.0	50.0	73.0	73.5			34.5	34.5		11.0	
Actuated g/C Ratio	0.58	0.38	0.38	0.56	0.57			0.27	0.27		0.08	
v/c Ratio	0.12	0.81	0.23	0.76	0.62			0.73	0.31		0.05	
Control Delay	8.3	28.5	5.1	55.0	21.7			54.0	7.0		41.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	8.3	28.5	5.1	55.0	21.7			54.0	7.0		41.6	
LOS	A	C	A	E	C			D	A		D	
Approach Delay		25.0			28.2			36.4			41.6	
Approach LOS		C			C			D			D	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 42 (32%), Referenced to phase 2:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 28.1		Intersection LOS: C	
Intersection Capacity Utilization 83.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



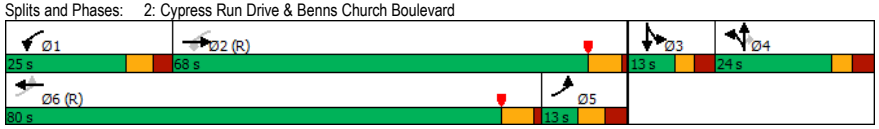
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	1053	161	286	1172	6	264	0	158	2	1	4
Future Volume (vph)	26	1053	161	286	1172	6	264	0	158	2	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.99	
Satd. Flow (prot)	1805	3539	1615	1787	3537			1787	1568		1729	
Flt Permitted	0.14	1.00	1.00	0.09	1.00			0.61	1.00		0.84	
Satd. Flow (perm)	259	3539	1615	160	3537			1146	1568		1471	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	27	1108	169	301	1234	6	278	0	166	2	1	4
RTOR Reduction (vph)	0	0	105	0	0	0	0	0	122	0	4	0
Lane Group Flow (vph)	27	1108	64	301	1240	0	0	278	44	0	3	0
Heavy Vehicles (%)	0%	2%	0%	1%	2%	0%	1%	0%	3%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Actuated Green, G (s)	74.5	47.0	47.0	74.5	70.5			34.5	34.5		11.0	
Effective Green, g (s)	74.5	47.0	47.0	74.5	70.5			34.5	34.5		11.0	
Actuated g/C Ratio	0.57	0.36	0.36	0.57	0.54			0.27	0.27		0.08	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	195	1279	583	435	1918			383	416		124	
v/s Ratio Prot	0.00	c0.31		0.15	c0.35			c0.09				
v/s Ratio Perm	0.07		0.04	0.25				c0.10	0.03		0.00	
v/c Ratio	0.14	0.87	0.11	0.69	0.65			0.73	0.11		0.03	
Uniform Delay, d1	15.2	38.6	27.6	39.9	21.0			43.4	36.1		54.6	
Progression Factor	0.74	0.65	1.02	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.3	7.3	0.3	4.7	1.7			11.4	0.5		0.4	
Delay (s)	11.5	32.3	28.6	44.6	22.7			54.8	36.6		55.0	
Level of Service	B	C	C	D	C			D	D		D	
Approach Delay (s)		31.4			27.0			48.0			55.0	
Approach LOS		C			C			D			D	

Intersection Summary				
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C	
HCM 2000 Volume to Capacity ratio	0.84			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	28.5	
Intersection Capacity Utilization	83.7%	ICU Level of Service	E	
Analysis Period (min)	15			
c Critical Lane Group				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1128	115	192	1248	0	99	0	95	0	4	0
Future Volume (vph)	3	1128	115	192	1248	0	99	0	95	0	4	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950				
Satd. Flow (prot)	1805	3471	1553	1805	3539	0	0	1805	1615	0	1900	0
Flt Permitted	0.173			0.185				0.950				
Satd. Flow (perm)	329	3471	1553	352	3539	0	0	1805	1615	0	1900	0
Satd. Flow (RTOR)			138						197			
Adj. Flow (vph)	3	1151	117	196	1273	0	101	0	97	0	4	0
Lane Group Flow (vph)	3	1151	117	196	1273	0	0	101	97	0	4	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Total Split (s)	13.0	68.0	68.0	25.0	80.0		24.0	24.0	24.0	13.0	13.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	99.3	84.1	84.1	94.3	99.7			12.6	12.6		7.0	
Actuated g/C Ratio	0.76	0.65	0.65	0.73	0.77			0.10	0.10		0.05	
v/c Ratio	0.01	0.51	0.11	0.51	0.47			0.58	0.29		0.04	
Control Delay	6.0	15.2	1.9	9.5	5.4			68.7	2.2		59.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	6.0	15.2	1.9	9.5	5.4			68.7	2.2		59.2	
LOS	A	B	A	A	A			E	A		E	
Approach Delay		14.0			5.9			36.1			59.3	
Approach LOS		B			A			D			E	

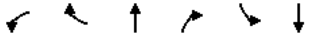
Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 11.5		Intersection LOS: B	
Intersection Capacity Utilization 70.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



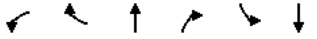
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1128	115	192	1248	0	99	0	95	0	4	0
Future Volume (vph)	3	1128	115	192	1248	0	99	0	95	0	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1805	3471	1553	1805	3539			1805	1615		1900	
Flt Permitted	0.17	1.00	1.00	0.18	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	329	3471	1553	351	3539			1805	1615		1900	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	3	1151	117	196	1273	0	101	0	97	0	4	0
RTOR Reduction (vph)	0	0	46	0	0	0	0	0	88	0	0	0
Lane Group Flow (vph)	3	1151	71	196	1273	0	0	101	9	0	4	0
Heavy Vehicles (%)	0%	4%	4%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Actuated Green, G (s)	90.0	79.2	79.2	90.5	88.9			12.6	12.6		1.4	
Effective Green, g (s)	90.0	79.2	79.2	90.5	88.9			12.6	12.6		1.4	
Actuated g/C Ratio	0.69	0.61	0.61	0.70	0.68			0.10	0.10		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	240	2114	946	370	2420			174	156		20	
v/s Ratio Prot	0.00	c0.33		0.05	c0.36			c0.06			c0.00	
v/s Ratio Perm	0.01		0.05	0.32					0.01			
v/c Ratio	0.01	0.54	0.08	0.53	0.53			0.58	0.06		0.20	
Uniform Delay, d1	13.2	14.9	10.4	9.3	10.1			56.2	53.3		63.7	
Progression Factor	1.00	1.00	1.00	1.09	0.64			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.0	0.2	1.1	0.6			4.9	0.2		4.9	
Delay (s)	13.2	15.9	10.6	11.2	7.2			61.0	53.5		68.6	
Level of Service	B	B	B	B	A			E	D		E	
Approach Delay (s)		15.4			7.7			57.3			68.6	
Approach LOS		B			A			E			E	

Intersection Summary					
HCM 2000 Control Delay		14.4	HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.57			
Actuated Cycle Length (s)		130.0	Sum of lost time (s)		26.0
Intersection Capacity Utilization		70.2%	ICU Level of Service		C
Analysis Period (min)		15			
c Critical Lane Group					



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	13	114	308	39	98	350
Future Volume (vph)	13	114	308	39	98	350
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.879		0.985			
Flt Protected	0.995				0.950	
Satd. Flow (prot)	1629	0	1867	0	1805	1900
Flt Permitted	0.995				0.950	
Satd. Flow (perm)	1629	0	1867	0	1805	1900
Adj. Flow (vph)	14	120	324	41	103	368
Lane Group Flow (vph)	134	0	365	0	103	368
Sign Control	Stop		Free			Free

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	114	308	39	98	350
Future Volume (Veh/h)	13	114	308	39	98	350
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	14	120	324	41	103	368
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						450
pX, platoon unblocked	0.89					
vC, conflicting volume	918	344			365	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	849	344			365	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	83			91	
cM capacity (veh/h)	271	698			1205	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	134	365	103	368
Volume Left	14	0	103	0
Volume Right	120	41	0	0
cSH	599	1700	1205	1700
Volume to Capacity	0.22	0.21	0.09	0.22
Queue Length 95th (ft)	21	0	7	0
Control Delay (s)	12.7	0.0	8.3	0.0
Lane LOS	B		A	
Approach Delay (s)	12.7	0.0	1.8	
Approach LOS	B			

Intersection Summary				
Average Delay		2.6		
Intersection Capacity Utilization		41.8%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1154	59	0	1464	0	68
Future Volume (vph)	1154	59	0	1464	0	68
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	3539	1615	0	3539	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	1615	0	3539	0	1611
Adj. Flow (vph)	1215	62	0	1541	0	72
Lane Group Flow (vph)	1215	62	0	1541	0	72
Sign Control	Free			Free	Stop	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 43.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1154	59	0	1464	0	68
Future Volume (Veh/h)	1154	59	0	1464	0	68
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1215	62	0	1541	0	72
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)	434					
pX, platoon unblocked			0.71		0.71	0.71
vC, conflicting volume			1277		1986	608
vC1, stage 1 conf vol					1215	
vC2, stage 2 conf vol					770	
vCu, unblocked vol			570		1569	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	91
cM capacity (veh/h)			718		226	769

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	608	608	62	770	770	72
Volume Left	0	0	0	0	0	0
Volume Right	0	0	62	0	0	72
cSH	1700	1700	1700	1700	1700	769
Volume to Capacity	0.36	0.36	0.04	0.45	0.45	0.09
Queue Length 95th (ft)	0	0	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	10.2
Lane LOS						B
Approach Delay (s)	0.0			0.0		10.2
Approach LOS						B

Intersection Summary				
Average Delay	0.3			
Intersection Capacity Utilization	43.8%	ICU Level of Service		A
Analysis Period (min)	15			

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	139	399	414	280	335	372	349	320	237	31
Average Queue (ft)	30	232	246	101	198	209	195	173	80	6
95th Queue (ft)	94	365	384	280	314	332	309	287	198	26
Link Distance (ft)		2169	2169			358	358	340		115
Upstream Blk Time (%)					0	1	0	0		
Queuing Penalty (veh)					0	5	1	2		
Storage Bay Dist (ft)	140			280	450				250	
Storage Blk Time (%)	0	17	4	0	0	1		2	0	
Queuing Penalty (veh)	0	4	6	2	1	2		3	0	

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	35	294	269	114	203	196	206	171	144	30
Average Queue (ft)	2	145	120	25	95	47	63	73	34	4
95th Queue (ft)	20	262	240	83	171	131	153	135	80	20
Link Distance (ft)		885	885			2169	2169	657		94
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)		6	0	0	0			0	0	
Queuing Penalty (veh)		0	1	0	0			0	0	

Intersection: 3: Proposed Driveway & Turner Drive

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	94	38	69
Average Queue (ft)	44	3	24
95th Queue (ft)	77	27	55
Link Distance (ft)	102	388	
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			200
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Proposed Driveway & Benns Church Boulevard

Movement	WB	WB	NB
Directions Served	T	T	R
Maximum Queue (ft)	68	40	83
Average Queue (ft)	4	1	30
95th Queue (ft)	43	29	64
Link Distance (ft)	1102	1102	78
Upstream Blk Time (%)			1
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

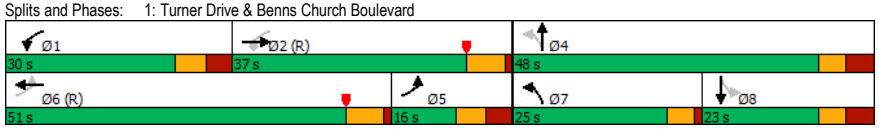
Network Summary

Network wide Queuing Penalty: 28

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	877	292	287	584	47	280	5	243	1	42	3
Future Volume (vph)	9	877	292	287	584	47	280	5	243	1	42	3
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.989			0.853			0.992	
Flt Protected	0.950			0.950			0.950				0.999	
Satd. Flow (prot)	1770	3406	1615	1805	3412	0	1787	1605	0	0	1845	0
Flt Permitted	0.353			0.158			0.620				0.983	
Satd. Flow (perm)	658	3406	1615	300	3412	0	1166	1605	0	0	1815	0
Satd. Flow (RTOR)			307		8			256			2	
Adj. Flow (vph)	9	923	307	302	615	49	295	5	256	1	44	3
Lane Group Flow (vph)	9	923	307	302	664	0	295	261	0	0	48	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4			8		
Total Split (s)	16.0	37.0	37.0	30.0	51.0		25.0	48.0		23.0	23.0	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0		4.5	7.5			7.5	
Act Effct Green (s)	68.5	43.9	43.9	62.5	68.3		33.0	30.0			8.3	
Actuated g/C Ratio	0.60	0.38	0.38	0.54	0.59		0.29	0.26			0.07	
v/c Ratio	0.02	0.71	0.38	0.71	0.33		0.67	0.43			0.36	
Control Delay	11.3	29.1	3.2	29.5	14.3		41.9	6.2			55.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	11.3	29.1	3.2	29.5	14.3		41.9	6.2			55.9	
LOS	B	C	A	C	B		D	A			E	
Approach Delay		22.6			19.1			25.2			55.9	
Approach LOS		C			B			C			E	

Intersection Summary			
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 112 (97%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 22.5		Intersection LOS: C	
Intersection Capacity Utilization 79.8%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



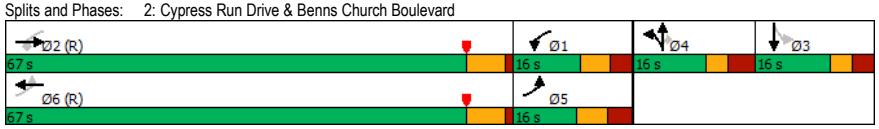
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	877	292	287	584	47	280	5	243	1	42	3
Future Volume (vph)	9	877	292	287	584	47	280	5	243	1	42	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0		4.5	7.5			7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	0.85			0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			1.00	
Satd. Flow (prot)	1770	3406	1615	1805	3412		1787	1605			1844	
Flt Permitted	0.35	1.00	1.00	0.16	1.00		0.62	1.00			0.98	
Satd. Flow (perm)	658	3406	1615	300	3412		1166	1605			1815	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	923	307	302	615	49	295	5	256	1	44	3
RTOR Reduction (vph)	0	0	194	0	4	0	0	186	0	0	2	0
Lane Group Flow (vph)	9	923	113	302	660	0	295	75	0	0	46	0
Heavy Vehicles (%)	2%	6%	0%	0%	5%	0%	1%	0%	1%	0%	0%	33%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4			8		
Actuated Green, G (s)	62.6	42.5	42.5	62.6	60.9		31.4	31.4			7.2	
Effective Green, g (s)	62.6	42.5	42.5	62.6	60.9		31.4	31.4			7.2	
Actuated g/C Ratio	0.54	0.37	0.37	0.54	0.53		0.27	0.27			0.06	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0		4.5	7.5			7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	374	1258	596	426	1806		424	438			113	
v/s Ratio Prot	0.00	c0.27		c0.12	0.19		c0.12	0.05				
v/s Ratio Perm	0.01		0.07	0.26			c0.07				0.03	
v/c Ratio	0.02	0.73	0.19	0.71	0.37		0.70	0.17			0.41	
Uniform Delay, d1	15.5	31.4	24.6	18.3	15.8		36.5	31.9			51.9	
Progression Factor	0.97	0.76	0.55	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.0	3.4	0.6	5.3	0.6		4.9	0.2			2.4	
Delay (s)	15.2	27.3	14.1	23.7	16.4		41.4	32.1			54.2	
Level of Service	B	C	B	C	B		D	C			D	
Approach Delay (s)		24.0			18.6			37.0			54.2	
Approach LOS		C			B			D			D	

Intersection Summary					
HCM 2000 Control Delay	25.2	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.75				
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	25.5		
Intersection Capacity Utilization	79.8%	ICU Level of Service	D		
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1246	30	45	820	2	15	0	38	2	0	0
Future Volume (vph)	3	1246	30	45	820	2	15	0	38	2	0	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	3471	1509	1641	3374	0	0	1492	1495	0	1203	0
Flt Permitted	0.308			0.155				0.950				
Satd. Flow (perm)	585	3471	1509	268	3374	0	0	1492	1495	0	1267	0
Satd. Flow (RTOR)			161						157			
Adj. Flow (vph)	3	1298	31	47	854	2	16	0	40	2	0	0
Lane Group Flow (vph)	3	1298	31	47	856	0	0	16	40	0	2	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Total Split (s)	16.0	67.0	67.0	16.0	67.0		16.0	16.0	16.0	16.0	16.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	92.3	86.1	86.1	88.5	93.7			7.5	7.5		7.0	
Actuated g/C Ratio	0.80	0.75	0.75	0.77	0.81			0.07	0.07		0.06	
v/c Ratio	0.01	0.50	0.03	0.17	0.31			0.17	0.16		0.03	
Control Delay	4.3	9.3	0.0	3.2	2.5			54.5	1.4		51.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	4.3	9.3	0.0	3.2	2.5			54.5	1.4		51.5	
LOS	A	A	A	A	A			D	A		D	
Approach Delay		9.1			2.6			16.6			51.5	
Approach LOS		A			A			B			D	

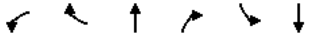
Intersection Summary			
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 10 (9%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 6.7		Intersection LOS: A	
Intersection Capacity Utilization 61.5%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



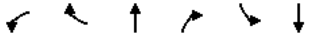
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1246	30	45	820	2	15	0	38	2	0	0
Future Volume (vph)	3	1246	30	45	820	2	15	0	38	2	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.95	
Satd. Flow (prot)	1805	3471	1509	1641	3373			1492	1495		1203	
Flt Permitted	0.31	1.00	1.00	0.15	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	585	3471	1509	267	3373			1492	1495		1267	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	3	1298	31	47	854	2	16	0	40	2	0	0
RTOR Reduction (vph)	0	0	11	0	0	0	0	0	38	0	0	0
Lane Group Flow (vph)	3	1298	20	47	856	0	0	16	2	0	2	0
Heavy Vehicles (%)	0%	4%	7%	10%	7%	0%	21%	0%	8%	50%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Actuated Green, G (s)	81.5	72.8	72.8	82.0	80.4			6.1	6.1		1.4	
Effective Green, g (s)	81.5	72.8	72.8	82.0	80.4			6.1	6.1		1.4	
Actuated g/C Ratio	0.71	0.63	0.63	0.71	0.70			0.05	0.05		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	426	2197	955	300	2358			79	79		15	
v/s Ratio Prot	0.00	c0.37		c0.01	c0.25			c0.01				
v/s Ratio Perm	0.00		0.01	0.10					0.00		c0.00	
v/c Ratio	0.01	0.59	0.02	0.16	0.36			0.20	0.03		0.13	
Uniform Delay, d1	6.7	12.4	7.8	13.9	7.0			52.1	51.6		56.2	
Progression Factor	1.00	1.00	1.00	0.39	0.46			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.2	0.0	0.2	0.4			1.3	0.1		4.0	
Delay (s)	6.7	13.5	7.9	5.6	3.6			53.4	51.8		60.2	
Level of Service	A	B	A	A	A			D	D		E	
Approach Delay (s)		13.4			3.7			52.2			60.2	
Approach LOS		B			A			D			E	

Intersection Summary				
HCM 2000 Control Delay	10.6	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.52			
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	26.0	
Intersection Capacity Utilization	61.5%	ICU Level of Service	B	
Analysis Period (min)	15			
c Critical Lane Group				



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	146	382	51	127	494
Future Volume (vph)	19	146	382	51	127	494
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.881		0.984			
Flt Protected	0.994				0.950	
Satd. Flow (prot)	1647	0	1833	0	1787	1881
Flt Permitted	0.994				0.950	
Satd. Flow (perm)	1647	0	1833	0	1787	1881
Adj. Flow (vph)	20	154	402	54	134	520
Lane Group Flow (vph)	174	0	456	0	134	520
Sign Control	Stop		Free			Free

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 50.3%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	19	146	382	51	127	494
Future Volume (Veh/h)	19	146	382	51	127	494
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	20	154	402	54	134	520
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						450
pX, platoon unblocked	0.90					
vC, conflicting volume	1217	429			456	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1184	429			456	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	88	75			88	
cM capacity (veh/h)	165	628			1110	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	174	456	134	520
Volume Left	20	0	134	0
Volume Right	154	54	0	0
cSH	475	1700	1110	1700
Volume to Capacity	0.37	0.27	0.12	0.31
Queue Length 95th (ft)	41	0	10	0
Control Delay (s)	16.9	0.0	8.7	0.0
Lane LOS	C		A	
Approach Delay (s)	16.9	0.0	1.8	
Approach LOS	C			

Intersection Summary				
Average Delay		3.2		
Intersection Capacity Utilization		50.3%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1045	76	0	918	0	89
Future Volume (vph)	1045	76	0	918	0	89
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	3471	1615	0	3438	0	1611
Flt Permitted						
Satd. Flow (perm)	3471	1615	0	3438	0	1611
Adj. Flow (vph)	1100	80	0	966	0	94
Lane Group Flow (vph)	1100	80	0	966	0	94
Sign Control	Free			Free	Stop	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 41.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1045	76	0	918	0	89
Future Volume (Veh/h)	1045	76	0	918	0	89
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1100	80	0	966	0	94
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)	431					
pX, platoon unblocked			0.77		0.77	0.77
vC, conflicting volume			1180		1583	550
vC1, stage 1 conf vol					1100	
vC2, stage 2 conf vol					483	
vCu, unblocked vol			646		1167	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	89
cM capacity (veh/h)			734		288	838

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	550	550	80	483	483	94
Volume Left	0	0	0	0	0	0
Volume Right	0	0	80	0	0	94
cSH	1700	1700	1700	1700	1700	838
Volume to Capacity	0.32	0.32	0.05	0.28	0.28	0.11
Queue Length 95th (ft)	0	0	0	0	0	9
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	9.8
Lane LOS						A
Approach Delay (s)	0.0			0.0		9.8
Approach LOS						A

Intersection Summary				
Average Delay		0.4		
Intersection Capacity Utilization		41.1%	ICU Level of Service	A
Analysis Period (min)		15		

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	LTR
Maximum Queue (ft)	85	372	399	280	284	222	190	249	332	97
Average Queue (ft)	11	198	203	88	145	89	87	175	111	43
95th Queue (ft)	56	325	338	218	241	176	163	261	256	87
Link Distance (ft)		2164	2164			365	365		340	116
Upstream Blk Time (%)						0			1	0
Queuing Penalty (veh)						0			4	0
Storage Bay Dist (ft)	140			280	450			250		
Storage Blk Time (%)	0	19	2	0		0		3	1	
Queuing Penalty (veh)	0	2	6	1		0		7	2	

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	20	173	159	29	71	97	86	76	59	42
Average Queue (ft)	1	45	40	3	23	13	18	18	21	3
95th Queue (ft)	11	122	116	16	54	52	60	53	47	20
Link Distance (ft)		890	890			2164	2164	641		181
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)		0	0							
Queuing Penalty (veh)		0	0							

Intersection: 3: Proposed Driveway & Turner Drive

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	108	48	82
Average Queue (ft)	53	3	33
95th Queue (ft)	92	24	66
Link Distance (ft)	102	358	
Upstream Blk Time (%)	1		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			200
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Proposed Driveway & Benns Church Boulevard

Movement	NB
Directions Served	R
Maximum Queue (ft)	88
Average Queue (ft)	34
95th Queue (ft)	70
Link Distance (ft)	79
Upstream Blk Time (%)	1
Queuing Penalty (veh)	0
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

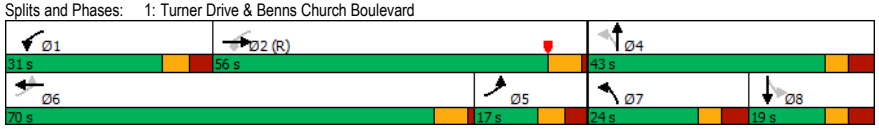
Network Summary

Network wide Queuing Penalty: 22

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	1053	141	266	1172	6	243	5	137	2	1	4
Future Volume (vph)	26	1053	141	266	1172	6	243	5	137	2	1	4
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999			0.855			0.923	
Flt Protected	0.950			0.950			0.950				0.986	
Satd. Flow (prot)	1805	3539	1615	1787	3536	0	1787	1579	0	0	1729	0
Flt Permitted	0.128			0.111			0.613				0.881	
Satd. Flow (perm)	243	3539	1615	209	3536	0	1153	1579	0	0	1545	0
Satd. Flow (RTOR)			164		1			144			4	
Adj. Flow (vph)	27	1108	148	280	1234	6	256	5	144	2	1	4
Lane Group Flow (vph)	27	1108	148	280	1240	0	256	149	0	0	7	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4			8		
Total Split (s)	17.0	56.0	56.0	31.0	70.0		24.0	43.0		19.0	19.0	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0		7.5	7.5			7.5	
Act Effct Green (s)	75.0	53.8	53.8	72.0	70.8		35.5	35.5			11.5	
Actuated g/C Ratio	0.58	0.41	0.41	0.55	0.54		0.27	0.27			0.09	
v/c Ratio	0.12	0.76	0.19	0.79	0.64		0.65	0.28			0.05	
Control Delay	8.6	21.6	1.1	43.9	24.1		49.0	7.6			41.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0			0.0	
Total Delay	8.6	21.6	1.1	43.9	24.1		49.0	7.6			41.0	
LOS	A	C	A	D	C		D	A			D	
Approach Delay		19.0			27.7			33.8			41.0	
Approach LOS		B			C			C			D	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 32 (25%), Referenced to phase 2:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 25.0		Intersection LOS: C	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



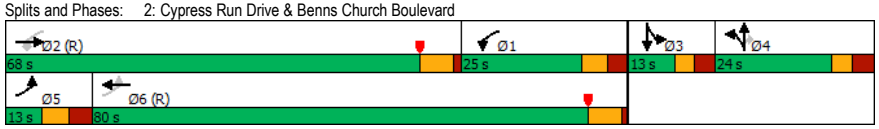
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	1053	141	266	1172	6	243	5	137	2	1	4
Future Volume (vph)	26	1053	141	266	1172	6	243	5	137	2	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0		7.5	7.5			7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	0.86			0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00			0.99	
Satd. Flow (prot)	1805	3539	1615	1787	3537		1787	1579			1729	
Flt Permitted	0.13	1.00	1.00	0.11	1.00		0.61	1.00			0.88	
Satd. Flow (perm)	243	3539	1615	210	3537		1153	1579			1544	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	27	1108	148	280	1234	6	256	5	144	2	1	4
RTOR Reduction (vph)	0	0	87	0	0	0	0	105	0	0	4	0
Lane Group Flow (vph)	27	1108	61	280	1240	0	256	44	0	0	3	0
Heavy Vehicles (%)	0%	2%	0%	1%	2%	0%	1%	0%	3%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA		Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4			8		
Actuated Green, G (s)	73.5	53.8	53.8	73.5	67.8		35.5	35.5			11.5	
Effective Green, g (s)	73.5	53.8	53.8	73.5	67.8		35.5	35.5			11.5	
Actuated g/C Ratio	0.57	0.41	0.41	0.57	0.52		0.27	0.27			0.09	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0		7.5	7.5			7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0			3.0	
Lane Grp Cap (vph)	205	1464	668	357	1844		395	431			136	
v/s Ratio Prot	0.01	0.31		0.12	c0.35		c0.08	0.03				
v/s Ratio Perm	0.07		0.04	c0.32			c0.09				0.00	
v/c Ratio	0.13	0.76	0.09	0.78	0.67		0.65	0.10			0.02	
Uniform Delay, d1	30.3	32.5	23.2	29.2	22.9		40.3	35.3			54.1	
Progression Factor	0.62	0.55	0.22	1.00	1.00		1.00	1.00			1.00	
Incremental Delay, d2	0.3	3.3	0.2	10.8	2.0		8.0	0.5			0.3	
Delay (s)	19.2	21.0	5.3	40.0	24.9		48.3	35.8			54.5	
Level of Service	B	C	A	D	C		D	D			D	
Approach Delay (s)		19.2			27.7			43.7			54.5	
Approach LOS		B			C			D			D	

Intersection Summary					
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.79				
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	28.5		
Intersection Capacity Utilization	81.5%	ICU Level of Service	D		
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1108	115	192	1227	0	99	0	95	0	4	0
Future Volume (vph)	3	1108	115	192	1227	0	99	0	95	0	4	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950				
Satd. Flow (prot)	1805	3471	1553	1805	3539	0	0	1805	1615	0	1900	0
Flt Permitted	0.178			0.156				0.950				
Satd. Flow (perm)	338	3471	1553	296	3539	0	0	1805	1615	0	1900	0
Satd. Flow (RTOR)			138						197			
Adj. Flow (vph)	3	1131	117	196	1252	0	101	0	97	0	4	0
Lane Group Flow (vph)	3	1131	117	196	1252	0	0	101	97	0	4	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Total Split (s)	13.0	68.0	68.0	25.0	80.0		24.0	24.0	24.0	13.0	13.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	99.3	77.3	77.3	94.3	99.7			12.6	12.6		7.0	
Actuated g/C Ratio	0.76	0.59	0.59	0.73	0.77			0.10	0.10		0.05	
v/c Ratio	0.01	0.55	0.12	0.46	0.46			0.58	0.29		0.04	
Control Delay	6.0	18.4	2.0	10.8	3.0			68.7	2.2		59.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	6.0	18.4	2.0	10.8	3.0			68.7	2.2		59.2	
LOS	A	B	A	B	A			E	A		E	
Approach Delay		16.9			4.1			36.1			59.3	
Approach LOS		B			A			D			E	

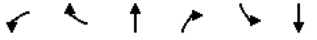
Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 16 (12%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 11.9		Intersection LOS: B	
Intersection Capacity Utilization 69.7%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



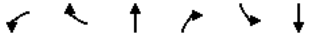
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1108	115	192	1227	0	99	0	95	0	4	0
Future Volume (vph)	3	1108	115	192	1227	0	99	0	95	0	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1805	3471	1553	1805	3539			1805	1615		1900	
Flt Permitted	0.18	1.00	1.00	0.16	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	339	3471	1553	296	3539			1805	1615		1900	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	3	1131	117	196	1252	0	101	0	97	0	4	0
RTOR Reduction (vph)	0	0	57	0	0	0	0	0	88	0	0	0
Lane Group Flow (vph)	3	1131	60	196	1252	0	0	101	9	0	4	0
Heavy Vehicles (%)	0%	4%	4%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Actuated Green, G (s)	90.0	66.5	66.5	90.5	88.9			12.6	12.6		1.4	
Effective Green, g (s)	90.0	66.5	66.5	90.5	88.9			12.6	12.6		1.4	
Actuated g/C Ratio	0.69	0.51	0.51	0.70	0.68			0.10	0.10		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	247	1775	794	484	2420			174	156		20	
v/s Ratio Prot	0.00	c0.33		0.07	c0.35			c0.06			c0.00	
v/s Ratio Perm	0.01		0.04	0.21					0.01			
v/c Ratio	0.01	0.64	0.08	0.40	0.52			0.58	0.06		0.20	
Uniform Delay, d1	7.4	23.0	16.1	26.6	10.1			56.2	53.3		63.7	
Progression Factor	1.00	1.00	1.00	0.52	0.34			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.8	0.2	0.4	0.6			4.9	0.2		4.9	
Delay (s)	7.4	24.8	16.3	14.2	4.0			61.0	53.5		68.6	
Level of Service	A	C	B	B	A			E	D		E	
Approach Delay (s)		23.9			5.4			57.3			68.6	
Approach LOS		C			A			E			E	

Intersection Summary				
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.62			
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	26.0	
Intersection Capacity Utilization	69.7%	ICU Level of Service	C	
Analysis Period (min)	15			
c Critical Lane Group				



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	13	114	271	39	98	310
Future Volume (vph)	13	114	271	39	98	310
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.879		0.983			
Flt Protected	0.995				0.950	
Satd. Flow (prot)	1629	0	1863	0	1805	1900
Flt Permitted	0.995				0.950	
Satd. Flow (perm)	1629	0	1863	0	1805	1900
Adj. Flow (vph)	14	120	285	41	103	326
Lane Group Flow (vph)	134	0	326	0	103	326
Sign Control	Stop		Free			Free

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 39.8%		ICU Level of Service A	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	114	271	39	98	310
Future Volume (Veh/h)	13	114	271	39	98	310
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	14	120	285	41	103	326
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						450
pX, platoon unblocked	0.92					
vC, conflicting volume	838	306			326	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	777	306			326	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	84			92	
cM capacity (veh/h)	307	734			1245	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	134	326	103	326
Volume Left	14	0	103	0
Volume Right	120	41	0	0
cSH	641	1700	1245	1700
Volume to Capacity	0.21	0.19	0.08	0.19
Queue Length 95th (ft)	20	0	7	0
Control Delay (s)	12.1	0.0	8.2	0.0
Lane LOS	B		A	
Approach Delay (s)	12.1	0.0	2.0	
Approach LOS	B			

Intersection Summary				
Average Delay		2.8		
Intersection Capacity Utilization		39.8%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1133	59	0	1444	0	68
Future Volume (vph)	1133	59	0	1444	0	68
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	3539	1615	0	3539	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	1615	0	3539	0	1611
Adj. Flow (vph)	1193	62	0	1520	0	72
Lane Group Flow (vph)	1193	62	0	1520	0	72
Sign Control	Free			Free	Stop	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 43.2%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1133	59	0	1444	0	68
Future Volume (Veh/h)	1133	59	0	1444	0	68
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1193	62	0	1520	0	72
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)	434					
pX, platoon unblocked			0.73		0.73	0.73
vC, conflicting volume			1255		1953	596
vC1, stage 1 conf vol					1193	
vC2, stage 2 conf vol					760	
vCu, unblocked vol			620		1572	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	91
cM capacity (veh/h)			712		225	795

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	596	596	62	760	760	72
Volume Left	0	0	0	0	0	0
Volume Right	0	0	62	0	0	72
cSH	1700	1700	1700	1700	1700	795
Volume to Capacity	0.35	0.35	0.04	0.45	0.45	0.09
Queue Length 95th (ft)	0	0	0	0	0	7
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	10.0
Lane LOS						A
Approach Delay (s)	0.0			0.0		10.0
Approach LOS						A

Intersection Summary				
Average Delay		0.3		
Intersection Capacity Utilization		43.2%	ICU Level of Service	A
Analysis Period (min)		15		

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	L	TR	LTR
Maximum Queue (ft)	104	344	361	216	310	370	343	238	217	35
Average Queue (ft)	24	159	172	47	168	213	204	148	62	6
95th Queue (ft)	69	282	294	151	279	322	309	238	146	26
Link Distance (ft)		2169	2169			366	366		340	115
Upstream Blk Time (%)					0	0	0		0	
Queuing Penalty (veh)					0	2	1		1	
Storage Bay Dist (ft)	140			280	450			250		
Storage Blk Time (%)	0	15	1	0	0	0		1	0	
Queuing Penalty (veh)	0	4	2	0	0	1		1	0	

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	48	327	298	208	172	191	194	168	131	38
Average Queue (ft)	4	176	145	35	87	69	86	75	33	4
95th Queue (ft)	35	303	274	114	149	155	166	136	77	22
Link Distance (ft)		885	885			2169	2169	657		94
Upstream Blk Time (%)										0
Queuing Penalty (veh)										0
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)	0	10	1	0		0		0	0	
Queuing Penalty (veh)	0	0	1	0		0		0	0	

Intersection: 3: Proposed Driveway & Turner Drive

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	84	14	58
Average Queue (ft)	42	1	21
95th Queue (ft)	69	12	51
Link Distance (ft)	103	388	
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			200
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Proposed Driveway & Benns Church Boulevard

Movement	WB	WB	NB
Directions Served	T	T	R
Maximum Queue (ft)	60	16	77
Average Queue (ft)	2	1	28
95th Queue (ft)	24	11	60
Link Distance (ft)	1102	1102	78
Upstream Blk Time (%)			1
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

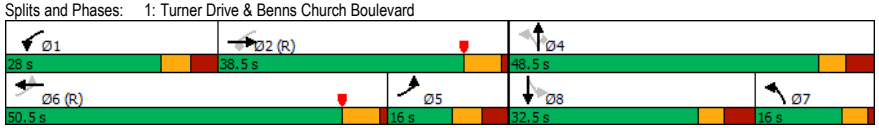
Network Summary

Network wide Queuing Penalty: 13

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	877	379	374	584	47	354	0	317	1	42	3
Future Volume (vph)	9	877	379	374	584	47	354	0	317	1	42	3
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.989				0.850		0.992	
Flt Protected	0.950			0.950				0.950			0.999	
Satd. Flow (prot)	1770	3406	1615	1805	3412	0	0	1787	1599	0	1845	0
Flt Permitted	0.342			0.118				0.726			0.994	
Satd. Flow (perm)	637	3406	1615	224	3412	0	0	1366	1599	0	1836	0
Satd. Flow (RTOR)			399		8				334		3	
Adj. Flow (vph)	9	923	399	394	615	49	373	0	334	1	44	3
Lane Group Flow (vph)	9	923	399	394	664	0	0	373	334	0	48	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Total Split (s)	16.0	38.5	38.5	28.0	50.5		16.0	48.5	48.5	32.5	32.5	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Act Effct Green (s)	62.8	34.0	34.0	56.8	62.6			35.7	35.7		35.7	
Actuated g/C Ratio	0.55	0.30	0.30	0.49	0.54			0.31	0.31		0.31	
v/c Ratio	0.02	0.92	0.53	0.89	0.36			0.88	0.46		0.08	
Control Delay	9.3	43.2	7.0	55.1	17.3			59.5	5.0		24.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	9.3	43.2	7.0	55.1	17.3			59.5	5.0		24.8	
LOS	A	D	A	E	B			E	A		C	
Approach Delay		32.1			31.4			33.8			24.8	
Approach LOS		C			C			C			C	

Intersection Summary		
Cycle Length: 115		
Actuated Cycle Length: 115		
Offset: 55 (48%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.92		
Intersection Signal Delay: 32.1	Intersection LOS: C	
Intersection Capacity Utilization 87.5%	ICU Level of Service E	
Analysis Period (min) 15		

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



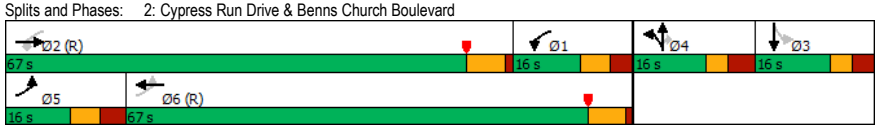
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	9	877	379	374	584	47	354	0	317	1	42	3
Future Volume (vph)	9	877	379	374	584	47	354	0	317	1	42	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99			1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1770	3406	1615	1805	3412			1787	1599		1844	
Flt Permitted	0.34	1.00	1.00	0.12	1.00			0.73	1.00		0.99	
Satd. Flow (perm)	638	3406	1615	224	3412			1365	1599		1834	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	9	923	399	394	615	49	373	0	334	1	44	3
RTOR Reduction (vph)	0	0	281	0	4	0	0	0	230	0	2	0
Lane Group Flow (vph)	9	923	118	394	660	0	0	373	104	0	46	0
Heavy Vehicles (%)	2%	6%	0%	0%	5%	0%	1%	0%	1%	0%	0%	33%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Actuated Green, G (s)	58.3	34.0	34.0	58.3	56.6			35.7	35.7		35.7	
Effective Green, g (s)	58.3	34.0	34.0	58.3	56.6			35.7	35.7		35.7	
Actuated g/C Ratio	0.51	0.30	0.30	0.51	0.49			0.31	0.31		0.31	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	340	1006	477	447	1679			423	496		569	
v/s Ratio Prot	0.00	c0.27		c0.19	0.19							
v/s Ratio Perm	0.01		0.07	0.26				c0.27	0.06		0.03	
v/c Ratio	0.03	0.92	0.25	0.88	0.39			0.88	0.21		0.08	
Uniform Delay, d1	18.5	39.1	30.8	31.6	18.4			37.6	29.2		28.0	
Progression Factor	0.66	0.74	1.45	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.0	12.7	1.1	18.1	0.7			18.9	0.2		0.1	
Delay (s)	12.1	41.8	45.7	49.7	19.1			56.6	29.4		28.1	
Level of Service	B	D	D	D	B			E	C		C	
Approach Delay (s)		42.7			30.5			43.8			28.1	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	25.5
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1333	30	45	894	2	15	0	38	2	0	0
Future Volume (vph)	3	1333	30	45	894	2	15	0	38	2	0	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950			0.950	
Satd. Flow (prot)	1805	3471	1509	1641	3374	0	0	1492	1495	0	1203	0
Flt Permitted	0.280			0.126				0.950				
Satd. Flow (perm)	532	3471	1509	218	3374	0	0	1492	1495	0	1267	0
Satd. Flow (RTOR)			157						223			
Adj. Flow (vph)	3	1389	31	47	931	2	16	0	40	2	0	0
Lane Group Flow (vph)	3	1389	31	47	933	0	0	16	40	0	2	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Total Split (s)	16.0	67.0	67.0	16.0	67.0		16.0	16.0	16.0	16.0	16.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	92.1	83.5	83.5	89.9	93.7			7.5	7.5		7.0	
Actuated g/C Ratio	0.80	0.73	0.73	0.78	0.81			0.07	0.07		0.06	
v/c Ratio	0.01	0.55	0.03	0.17	0.34			0.17	0.13		0.03	
Control Delay	4.3	11.5	0.0	3.8	2.3			54.5	0.9		51.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	4.3	11.5	0.0	3.8	2.3			54.5	0.9		51.5	
LOS	A	B	A	A	A			D	A		D	
Approach Delay		11.2			2.3			16.2			51.5	
Approach LOS		B			A			B			D	

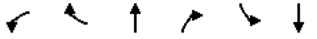
Intersection Summary			
Cycle Length: 115			
Actuated Cycle Length: 115			
Offset: 56 (49%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.55			
Intersection Signal Delay: 7.8		Intersection LOS: A	
Intersection Capacity Utilization 63.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



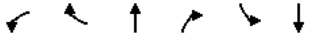
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1333	30	45	894	2	15	0	38	2	0	0
Future Volume (vph)	3	1333	30	45	894	2	15	0	38	2	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.95	
Satd. Flow (prot)	1805	3471	1509	1641	3373			1492	1495		1203	
Flt Permitted	0.28	1.00	1.00	0.13	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	531	3471	1509	217	3373			1492	1495		1267	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	3	1389	31	47	931	2	16	0	40	2	0	0
RTOR Reduction (vph)	0	0	12	0	0	0	0	0	38	0	0	0
Lane Group Flow (vph)	3	1389	19	47	933	0	0	16	2	0	2	0
Heavy Vehicles (%)	0%	4%	7%	10%	7%	0%	21%	0%	8%	50%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		4	4			3	
Permitted Phases	6		2	2					4	3		
Actuated Green, G (s)	81.5	70.1	70.1	82.0	80.3			6.1	6.1		1.4	
Effective Green, g (s)	81.5	70.1	70.1	82.0	80.3			6.1	6.1		1.4	
Actuated g/C Ratio	0.71	0.61	0.61	0.71	0.70			0.05	0.05		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	389	2115	919	302	2355			79	79		15	
v/s Ratio Prot	0.00	c0.40		0.02	c0.28			c0.01				
v/s Ratio Perm	0.01		0.01	0.09					0.00		c0.00	
v/c Ratio	0.01	0.66	0.02	0.16	0.40			0.20	0.03		0.13	
Uniform Delay, d1	5.1	14.6	8.9	16.8	7.2			52.1	51.6		56.2	
Progression Factor	1.00	1.00	1.00	0.46	0.39			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.6	0.0	0.2	0.4			1.3	0.1		4.0	
Delay (s)	5.1	16.2	8.9	7.9	3.2			53.4	51.8		60.2	
Level of Service	A	B	A	A	A			D	D		E	
Approach Delay (s)		16.0			3.5			52.2			60.2	
Approach LOS		B			A			D			E	

Intersection Summary					
HCM 2000 Control Delay		11.9	HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.60			
Actuated Cycle Length (s)		115.0	Sum of lost time (s)		26.0
Intersection Capacity Utilization		63.9%	ICU Level of Service		B
Analysis Period (min)		15			
c Critical Lane Group					



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	19	146	525	51	127	668
Future Volume (vph)	19	146	525	51	127	668
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.881		0.988			
Flt Protected	0.994				0.950	
Satd. Flow (prot)	1647	0	1840	0	1787	1881
Flt Permitted	0.994				0.950	
Satd. Flow (perm)	1647	0	1840	0	1787	1881
Adj. Flow (vph)	20	154	553	54	134	703
Lane Group Flow (vph)	174	0	607	0	134	703
Sign Control	Stop		Free			Free

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 57.8%		ICU Level of Service B	
Analysis Period (min) 15			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	19	146	525	51	127	668
Future Volume (Veh/h)	19	146	525	51	127	668
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	20	154	553	54	134	703
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						449
pX, platoon unblocked	0.82					
vC, conflicting volume	1551	580			607	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1562	580			607	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	77	70			86	
cM capacity (veh/h)	87	516			976	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	174	607	134	703
Volume Left	20	0	134	0
Volume Right	154	54	0	0
cSH	330	1700	976	1700
Volume to Capacity	0.53	0.36	0.14	0.41
Queue Length 95th (ft)	73	0	12	0
Control Delay (s)	27.5	0.0	9.3	0.0
Lane LOS	D		A	
Approach Delay (s)	27.5	0.0	1.5	
Approach LOS	D			

Intersection Summary				
Average Delay		3.7		
Intersection Capacity Utilization		57.8%	ICU Level of Service	B
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1119	76	0	1005	0	89
Future Volume (vph)	1119	76	0	1005	0	89
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	3471	1615	0	3438	0	1611
Flt Permitted						
Satd. Flow (perm)	3471	1615	0	3438	0	1611
Adj. Flow (vph)	1178	80	0	1058	0	94
Lane Group Flow (vph)	1178	80	0	1058	0	94
Sign Control	Free			Free	Stop	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 43.1%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1119	76	0	1005	0	89
Future Volume (Veh/h)	1119	76	0	1005	0	89
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1178	80	0	1058	0	94
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)	433					
pX, platoon unblocked			0.75		0.75	0.75
vC, conflicting volume			1258		1707	589
vC1, stage 1 conf vol					1178	
vC2, stage 2 conf vol					529	
vCu, unblocked vol			663		1265	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	88
cM capacity (veh/h)			697		266	808

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	589	589	80	529	529	94
Volume Left	0	0	0	0	0	0
Volume Right	0	0	80	0	0	94
cSH	1700	1700	1700	1700	1700	808
Volume to Capacity	0.35	0.35	0.05	0.31	0.31	0.12
Queue Length 95th (ft)	0	0	0	0	0	10
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	10.0
Lane LOS						B
Approach Delay (s)	0.0			0.0		10.0
Approach LOS						B

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	43.1%	ICU Level of Service		A
Analysis Period (min)	15			

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	103	546	588	280	356	417	356	352	250	97
Average Queue (ft)	12	281	292	185	295	268	187	237	160	34
95th Queue (ft)	59	464	496	335	415	498	383	370	300	76
Link Distance (ft)		2164	2164			356	356	339		115
Upstream Blk Time (%)					15	21	0	3		0
Queuing Penalty (veh)					0	105	2	22		0
Storage Bay Dist (ft)	140			280	450				250	
Storage Blk Time (%)	0	39	8	1	15	21		9	1	
Queuing Penalty (veh)	0	3	31	4	44	78		28	3	

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	19	225	223	29	88	90	102	86	72	49
Average Queue (ft)	1	50	47	2	26	13	20	17	20	4
95th Queue (ft)	11	156	147	13	66	56	70	57	51	25
Link Distance (ft)		890	890			2164	2164	641		181
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)		1	0							
Queuing Penalty (veh)		0	0							

Intersection: 3: Proposed Driveway & Turner Drive

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	127	196	88
Average Queue (ft)	71	22	40
95th Queue (ft)	123	112	74
Link Distance (ft)	102	358	
Upstream Blk Time (%)	9		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			200
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Proposed Driveway & Benns Church Boulevard

Movement	WB	WB	NB
Directions Served	T	T	R
Maximum Queue (ft)	350	304	81
Average Queue (ft)	108	62	32
95th Queue (ft)	330	243	63
Link Distance (ft)	1102	1102	78
Upstream Blk Time (%)			0
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

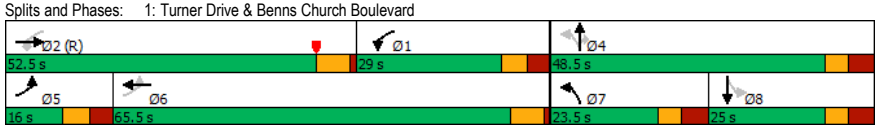
Network Summary

Network wide Queuing Penalty: 320

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	1053	161	286	1172	6	264	0	158	2	1	4
Future Volume (vph)	26	1053	161	286	1172	6	264	0	158	2	1	4
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850		0.923	
Flt Protected	0.950			0.950				0.950			0.986	
Satd. Flow (prot)	1805	3539	1615	1787	3536	0	0	1787	1568	0	1729	0
Flt Permitted	0.114			0.092				0.647			0.888	
Satd. Flow (perm)	217	3539	1615	173	3536	0	0	1217	1568	0	1557	0
Satd. Flow (RTOR)			164						166		4	
Adj. Flow (vph)	27	1108	169	301	1234	6	278	0	166	2	1	4
Lane Group Flow (vph)	27	1108	169	301	1240	0	0	278	166	0	7	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Total Split (s)	16.0	52.5	52.5	29.0	65.5		23.5	48.5	48.5	25.0	25.0	
Total Lost Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Act Effct Green (s)	69.5	46.5	46.5	66.5	66.9			41.0	41.0		17.5	
Actuated g/C Ratio	0.53	0.36	0.36	0.51	0.51			0.32	0.32		0.13	
v/c Ratio	0.14	0.88	0.25	0.85	0.68			0.61	0.27		0.03	
Control Delay	11.3	34.9	6.5	66.7	27.2			43.0	5.9		36.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	11.3	34.9	6.5	66.7	27.2			43.0	5.9		36.6	
LOS	B	C	A	E	C			D	A		D	
Approach Delay		30.7			34.9			29.1			36.6	
Approach LOS		C			C			C			D	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 44 (34%), Referenced to phase 2:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 32.5		Intersection LOS: C	
Intersection Capacity Utilization 83.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 1: Turner Drive & Benns Church Boulevard



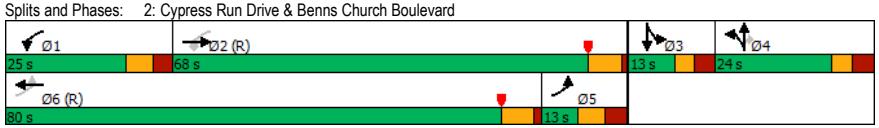
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	1053	161	286	1172	6	264	0	158	2	1	4
Future Volume (vph)	26	1053	161	286	1172	6	264	0	158	2	1	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		0.92	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		0.99	
Satd. Flow (prot)	1805	3539	1615	1787	3537			1787	1568		1729	
Flt Permitted	0.11	1.00	1.00	0.09	1.00			0.65	1.00		0.89	
Satd. Flow (perm)	217	3539	1615	173	3537			1217	1568		1556	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	27	1108	169	301	1234	6	278	0	166	2	1	4
RTOR Reduction (vph)	0	0	109	0	0	0	0	0	114	0	3	0
Lane Group Flow (vph)	27	1108	60	301	1240	0	0	278	52	0	4	0
Heavy Vehicles (%)	0%	2%	0%	1%	2%	0%	1%	0%	3%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		pm+pt	NA	Perm	Perm	NA	
Protected Phases	5	2		1	6		7	4			8	
Permitted Phases	6		2	2			4		4	8		
Actuated Green, G (s)	68.0	43.5	43.5	68.0	63.9			41.0	41.0		17.5	
Effective Green, g (s)	68.0	43.5	43.5	68.0	63.9			41.0	41.0		17.5	
Actuated g/C Ratio	0.52	0.33	0.33	0.52	0.49			0.32	0.32		0.13	
Clearance Time (s)	7.5	6.0	6.0	7.5	6.0			7.5	7.5		7.5	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	163	1184	540	394	1738			453	494		209	
v/s Ratio Prot	0.01	c0.31		0.14	c0.35			c0.08				
v/s Ratio Perm	0.08		0.04	0.26				c0.12	0.03		0.00	
v/c Ratio	0.17	0.94	0.11	0.76	0.71			0.61	0.11		0.02	
Uniform Delay, d1	19.1	41.9	29.9	44.6	25.9			37.8	31.5		48.8	
Progression Factor	0.79	0.68	1.22	1.00	1.00			1.00	1.00		1.00	
Incremental Delay, d2	0.4	13.5	0.4	8.5	2.5			6.1	0.4		0.1	
Delay (s)	15.5	42.0	36.9	53.2	28.4			43.9	32.0		48.9	
Level of Service	B	D	D	D	C			D	C		D	
Approach Delay (s)		40.8			33.2			39.4			48.9	
Approach LOS		D			C			D			D	

Intersection Summary					
HCM 2000 Control Delay	37.1	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.84				
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	28.5		
Intersection Capacity Utilization	83.7%	ICU Level of Service	E		
Analysis Period (min)	15				
c Critical Lane Group					

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1128	115	192	1248	0	99	0	95	0	4	0
Future Volume (vph)	3	1128	115	192	1248	0	99	0	95	0	4	0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850						0.850			
Flt Protected	0.950			0.950				0.950				
Satd. Flow (prot)	1805	3471	1553	1805	3539	0	0	1805	1615	0	1900	0
Flt Permitted	0.173			0.185				0.950				
Satd. Flow (perm)	329	3471	1553	352	3539	0	0	1805	1615	0	1900	0
Satd. Flow (RTOR)			138						197			
Adj. Flow (vph)	3	1151	117	196	1273	0	101	0	97	0	4	0
Lane Group Flow (vph)	3	1151	117	196	1273	0	0	101	97	0	4	0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Total Split (s)	13.0	68.0	68.0	25.0	80.0		24.0	24.0	24.0	13.0	13.0	
Total Lost Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Act Effct Green (s)	99.3	84.1	84.1	94.3	99.7			12.6	12.6		7.0	
Actuated g/C Ratio	0.76	0.65	0.65	0.73	0.77			0.10	0.10		0.05	
v/c Ratio	0.01	0.51	0.11	0.51	0.47			0.58	0.29		0.04	
Control Delay	6.0	15.2	1.9	11.6	3.7			68.7	2.2		59.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0			0.0	0.0		0.0	
Total Delay	6.0	15.2	1.9	11.6	3.7			68.7	2.2		59.2	
LOS	A	B	A	B	A			E	A		E	
Approach Delay		14.0			4.7			36.1			59.3	
Approach LOS		B			A			D			E	

Intersection Summary			
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:EBWB and 6:EBWB, Start of Yellow			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.58			
Intersection Signal Delay: 10.9		Intersection LOS: B	
Intersection Capacity Utilization 70.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: Cypress Run Drive & Benns Church Boulevard



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	1128	115	192	1248	0	99	0	95	0	4	0
Future Volume (vph)	3	1128	115	192	1248	0	99	0	95	0	4	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95			1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00			1.00	0.85		1.00	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00		1.00	
Satd. Flow (prot)	1805	3471	1553	1805	3539			1805	1615		1900	
Flt Permitted	0.17	1.00	1.00	0.18	1.00			0.95	1.00		1.00	
Satd. Flow (perm)	329	3471	1553	351	3539			1805	1615		1900	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	3	1151	117	196	1273	0	101	0	97	0	4	0
RTOR Reduction (vph)	0	0	46	0	0	0	0	0	88	0	0	0
Lane Group Flow (vph)	3	1151	71	196	1273	0	0	101	9	0	4	0
Heavy Vehicles (%)	0%	4%	4%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm		NA	
Protected Phases	5	2		1	6		4	4		3	3	
Permitted Phases	6		2	2					4			
Actuated Green, G (s)	90.0	79.2	79.2	90.5	88.9			12.6	12.6		1.4	
Effective Green, g (s)	90.0	79.2	79.2	90.5	88.9			12.6	12.6		1.4	
Actuated g/C Ratio	0.69	0.61	0.61	0.70	0.68			0.10	0.10		0.01	
Clearance Time (s)	7.5	6.0	6.0	7.0	6.0			6.5	6.5		6.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0		3.0	
Lane Grp Cap (vph)	240	2114	946	370	2420			174	156		20	
v/s Ratio Prot	0.00	c0.33		0.05	c0.36			c0.06			c0.00	
v/s Ratio Perm	0.01		0.05	0.32					0.01			
v/c Ratio	0.01	0.54	0.08	0.53	0.53			0.58	0.06		0.20	
Uniform Delay, d1	13.2	14.9	10.4	9.3	10.1			56.2	53.3		63.7	
Progression Factor	1.00	1.00	1.00	1.53	0.42			1.00	1.00		1.00	
Incremental Delay, d2	0.0	1.0	0.2	1.0	0.6			4.9	0.2		4.9	
Delay (s)	13.2	15.9	10.6	15.3	4.9			61.0	53.5		68.6	
Level of Service	B	B	B	B	A			E	D		E	
Approach Delay (s)		15.4			6.3			57.3			68.6	
Approach LOS		B			A			E			E	

Intersection Summary					
HCM 2000 Control Delay		13.7	HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio		0.57			
Actuated Cycle Length (s)		130.0	Sum of lost time (s)		26.0
Intersection Capacity Utilization		70.2%	ICU Level of Service		C
Analysis Period (min)		15			
c Critical Lane Group					

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	13	114	308	39	98	350
Future Volume (vph)	13	114	308	39	98	350
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.879		0.985			
Flt Protected	0.995				0.950	
Satd. Flow (prot)	1629	0	1867	0	1805	1900
Flt Permitted	0.995				0.950	
Satd. Flow (perm)	1629	0	1867	0	1805	1900
Adj. Flow (vph)	14	120	324	41	103	368
Lane Group Flow (vph)	134	0	365	0	103	368
Sign Control	Stop		Free			Free

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 41.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	114	308	39	98	350
Future Volume (Veh/h)	13	114	308	39	98	350
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	14	120	324	41	103	368
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)						451
pX, platoon unblocked	0.89					
vC, conflicting volume	918	344			365	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	845	344			365	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	95	83			91	
cM capacity (veh/h)	270	698			1205	

Direction, Lane #	WB 1	NB 1	SB 1	SB 2
Volume Total	134	365	103	368
Volume Left	14	0	103	0
Volume Right	120	41	0	0
cSH	599	1700	1205	1700
Volume to Capacity	0.22	0.21	0.09	0.22
Queue Length 95th (ft)	21	0	7	0
Control Delay (s)	12.7	0.0	8.3	0.0
Lane LOS	B		A	
Approach Delay (s)	12.7	0.0	1.8	
Approach LOS	B			

Intersection Summary				
Average Delay		2.6		
Intersection Capacity Utilization		41.8%	ICU Level of Service	A
Analysis Period (min)		15		

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1154	59	0	1464	0	68
Future Volume (vph)	1154	59	0	1464	0	68
Lane Util. Factor	0.95	1.00	1.00	0.95	1.00	1.00
Frt		0.850				0.865
Flt Protected						
Satd. Flow (prot)	3539	1615	0	3539	0	1611
Flt Permitted						
Satd. Flow (perm)	3539	1615	0	3539	0	1611
Adj. Flow (vph)	1215	62	0	1541	0	72
Lane Group Flow (vph)	1215	62	0	1541	0	72
Sign Control	Free			Free	Stop	

Intersection Summary			
Control Type: Unsignalized			
Intersection Capacity Utilization 43.8%		ICU Level of Service A	
Analysis Period (min) 15			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1154	59	0	1464	0	68
Future Volume (Veh/h)	1154	59	0	1464	0	68
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	1215	62	0	1541	0	72
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	Raised			Raised		
Median storage veh)	1			1		
Upstream signal (ft)	433					
pX, platoon unblocked			0.70		0.70	0.70
vC, conflicting volume			1277		1986	608
vC1, stage 1 conf vol					1215	
vC2, stage 2 conf vol					770	
vCu, unblocked vol			528		1544	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)					5.8	
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	90
cM capacity (veh/h)			732		230	756

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	NB 1
Volume Total	608	608	62	770	770	72
Volume Left	0	0	0	0	0	0
Volume Right	0	0	62	0	0	72
cSH	1700	1700	1700	1700	1700	756
Volume to Capacity	0.36	0.36	0.04	0.45	0.45	0.10
Queue Length 95th (ft)	0	0	0	0	0	8
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	10.3
Lane LOS						B
Approach Delay (s)	0.0			0.0		10.3
Approach LOS						B

Intersection Summary				
Average Delay		0.3		
Intersection Capacity Utilization		43.8%	ICU Level of Service	A
Analysis Period (min)		15		

Intersection: 1: Turner Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	122	484	498	280	354	398	372	310	224	38
Average Queue (ft)	29	272	284	120	238	257	237	162	71	6
95th Queue (ft)	91	431	451	309	364	392	359	268	161	26
Link Distance (ft)		2169	2169			358	358	341		116
Upstream Blk Time (%)					2	4	1	0		
Queuing Penalty (veh)					0	29	4	1		
Storage Bay Dist (ft)	140			280	450				250	
Storage Blk Time (%)	0	23	7	0	2	4		2	0	
Queuing Penalty (veh)	0	6	12	2	9	11		3	0	

Intersection: 2: Cypress Run Drive & Benns Church Boulevard

Movement	EB	EB	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	TR	LT	R	LTR
Maximum Queue (ft)	48	321	302	134	219	181	188	173	128	32
Average Queue (ft)	4	149	125	24	103	34	45	74	33	4
95th Queue (ft)	28	281	254	78	184	114	125	139	76	21
Link Distance (ft)		885	885			2169	2169	657		94
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	150			245	255				180	
Storage Blk Time (%)	0	7	1	0	0	0		0	0	
Queuing Penalty (veh)	0	0	1	0	1	0		0	0	

Intersection: 3: Proposed Driveway & Turner Drive

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	93	24	85
Average Queue (ft)	45	1	26
95th Queue (ft)	76	17	61
Link Distance (ft)	102	388	
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			200
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Proposed Driveway & Benns Church Boulevard

Movement	WB	WB	NB
Directions Served	T	T	R
Maximum Queue (ft)	230	156	84
Average Queue (ft)	32	18	31
95th Queue (ft)	175	126	66
Link Distance (ft)	1102	1102	78
Upstream Blk Time (%)			1
Queuing Penalty (veh)			0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 81

Appendix F
Access Management Exception (AM-E)

Virginia Department of Transportation

February 2015

ACCESS MANAGEMENT EXCEPTION REQUEST: AM-E

ACCESS MANAGEMENT REGULATIONS 24 VAC 30-73

SECTION 120

Submitted by:		**Date:**
Email Address:		**Phone:**
Address:		
Project Name:	**Rte #**	**Locality:**
Description of Project:		
VDOT District:	**Area Land Use Engineer:**	

NOTES:
(1). Submit this form and any attachments to one of the District's Area Land Use Engineers.
(2). See Section 120 of the Regulations for details on the requirements, exceptions, and exception request review process.
(3). Attach additional information as necessary to justify the exception request(s).
(4). If a traffic engineering study is required, the decision on the request will be based on VDOT engineering judgment.
(5). Use the LD-440 Design Exception or the LD-448 Design Waiver forms for *design and engineering standards*, e.g. radius, grade, sight distance. See IIM-LD-227 on VDOT web site for additional instructions.

Select the Exception(s) Being Requested

☐ **Exception to the shared commercial entrance requirement.** (Access M. Regulations Section 120 C.2)

Reason for exception:

☐ **A. An agreement to share the entrance could not be reached with adjoining property owner.**

☐ **Attached:** Written evidence that adjoining property owner will not share the entrance.

☐ **B. Physical constraints: topography, adjacent hazardous land use, stream, wetland, other.**

☐ **Specify constraint:**

☐ **Attached:** Documentation of constraint such as aerial photo or topographic map.

☐ **Exception to the vehicular connection to adjoining undeveloped property requirement.** (Section 120 C.4)

Reason for exception:

☐ **A. Physical constraints: topography, adjacent hazardous land use, stream, wetland, other.**

☐ **Specify constraint:**

☐ **Attached:** Documentation of constraint such as aerial photo or topographic map.

☐ **B. Other reason:**

☐ **Exception to the commercial entrance shall not be located within the functional area of an intersection requirement.** (See Regulation Section 120 C. 1; Appendix F, Rd Design Manual)

☐ **Attached:** A traffic engineering study documenting that the operation of the intersection and public safety will not be adversely impacted.

☐ **EXCEPTION TO THE SPACING STANDARDS FOR:**

- **Commercial entrances; intersections/median crossovers (Table 2-2);**
- **Commercial entrances/intersections near interchange ramps (Tables 2-3, 2-4);** or
- **Corner clearance (Figure 4-4).** Appendix F, Road Design Manual

Information on the Exception Request

☐ **ON A STATE HIGHWAY**

Functional classification: Principal Arterial: ☐ Minor Arterial: ☐ Collector: ☐ Local: ☐

Posted speed limit: _____mph

☐ **NEAR AN INTERCHANGE RAMP** (Submittal of a traffic engineering study required)

☐ **CORNER CLEARANCE** (Submittal of a traffic engineering study required)

Type of intersection/entrance: Signalized ☐ Unsignalized ☐ Full Access ☐ Partial Access ☐

Required spacing distance _____ft

Proposed spacing distance _____ft

Requested exception: Reduction in required spacing _____**ft**

REASON FOR EXCEPTION:

☐ **A. To be located on an older, established business corridor along a highway where existing spacing did not meet the standards prior to 7/1/08 or 10/14/09.** (Regulation Section 120 C.3.c)

☐ **Attached:** Dated aerial photo of corridor identifying proposed entrance/intersection location.

☐ **B. Not enough property frontage to meet spacing standard, but the applicant does not want a partial access right-in/right-out entrance.** (Section 120 C.3.f)

☐ **Attached:** A traffic engineering study documenting that left turn movements at the entrance will not have a negative impact on highway operation or safety.

☐ **C. To be located within a new urbanism mixed use type development.** (Section 120 C.3.d)

☐ **Attached:** The design of the development and compliance with intersection sight distance.

☐ **D. The proposed entrance meets the signal warrants but does not meet the signalized intersection spacing standard. The applicant requests an exception to the spacing standard.**

☐ **Attached:** A traffic engineering study that (i) evaluates the location's suitability for a roundabout and (ii) provides documentation that the proposed signal will not impact safety and traffic flow. (Section 120 C.5)

☐ **E. The development's 2nd (or additional) entrance does not meet the spacing standards but is necessary for the streets to be accepted into the secondary system.** (Section 120 C.3.e)

☐ **Attached:** Information on the development that identifies the location of entrances.

☐ **F. To be located within the limits of a VDOT and locality approved access management corridor plan.**

☐ **Attached:** Aerial photo of corridor identifying proposed entrance/intersection location. (Sect 120 C.3.b)

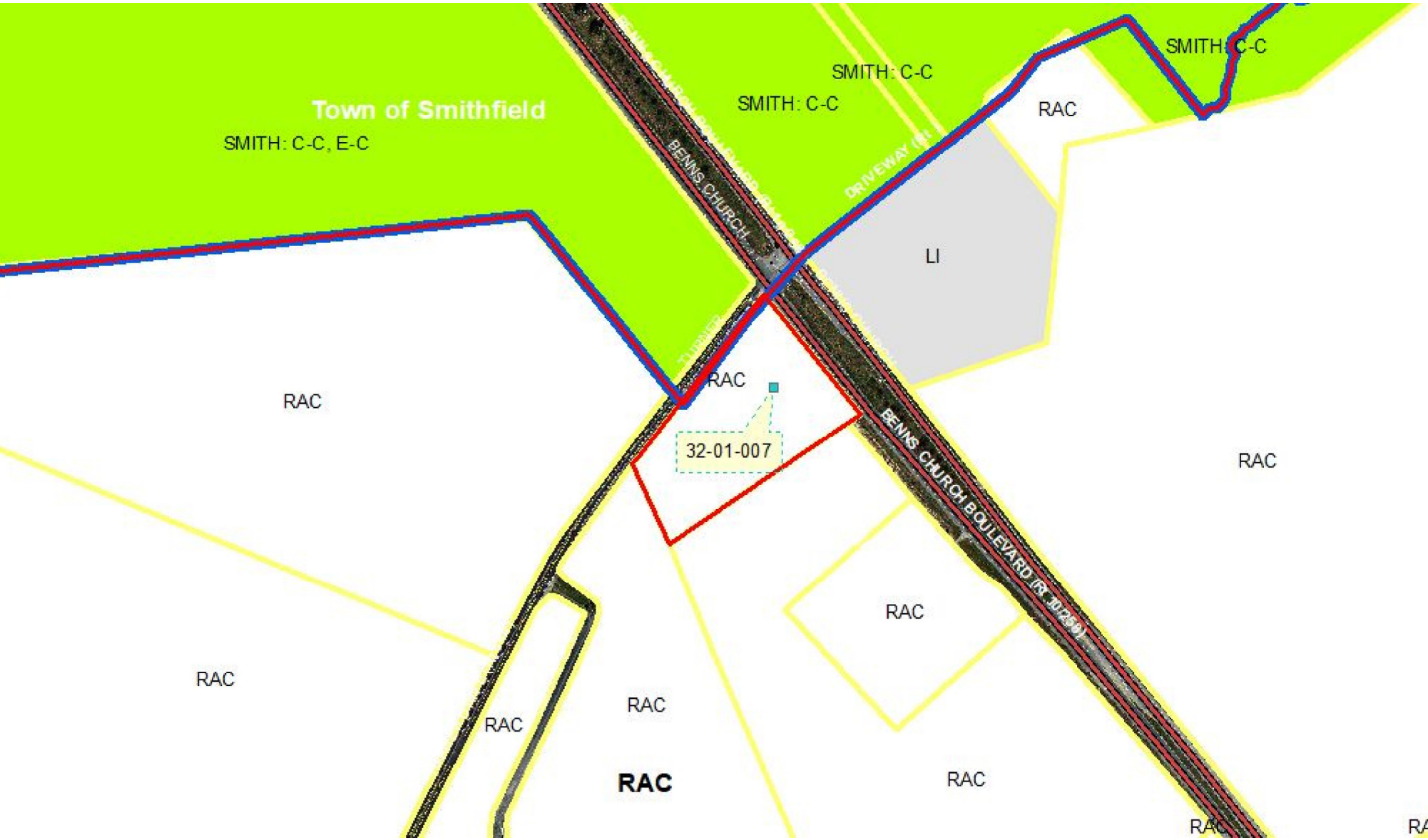
FOR VDOT USE ONLY

Recommendation on Exception Request: Approve ☐ Deny ☐	**Date:**
Area Land Use Engineer or:	**Name**
Remarks:	

Exception Request Action: Approved ☐ Denied ☐	**Date:**
District Administrator or Designee: **Name (and position if Designee)**	
Remarks:	

District Staff: Please email copy to Bradley.Shelton@VDOT.Virginia.gov

Town of Smithfield
BENNS CHURCH
DRIVEWAY (R)
TURNER
32-01-007
BENNS CHURCH BOULEVARD (R 30'ROW)
DRIVEWAY
DRIVEWAY (R)
CHURCH


Town of Smithfield
SMITH: C-C, E-C
SMITH: C-C
SMITH: C-C
SMITH: C-C
RAC
BENNS CHURCH
DRIVEWAY (R
LI
RAC
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32-01-007
BENNS CHURCH BOULEVARD (R
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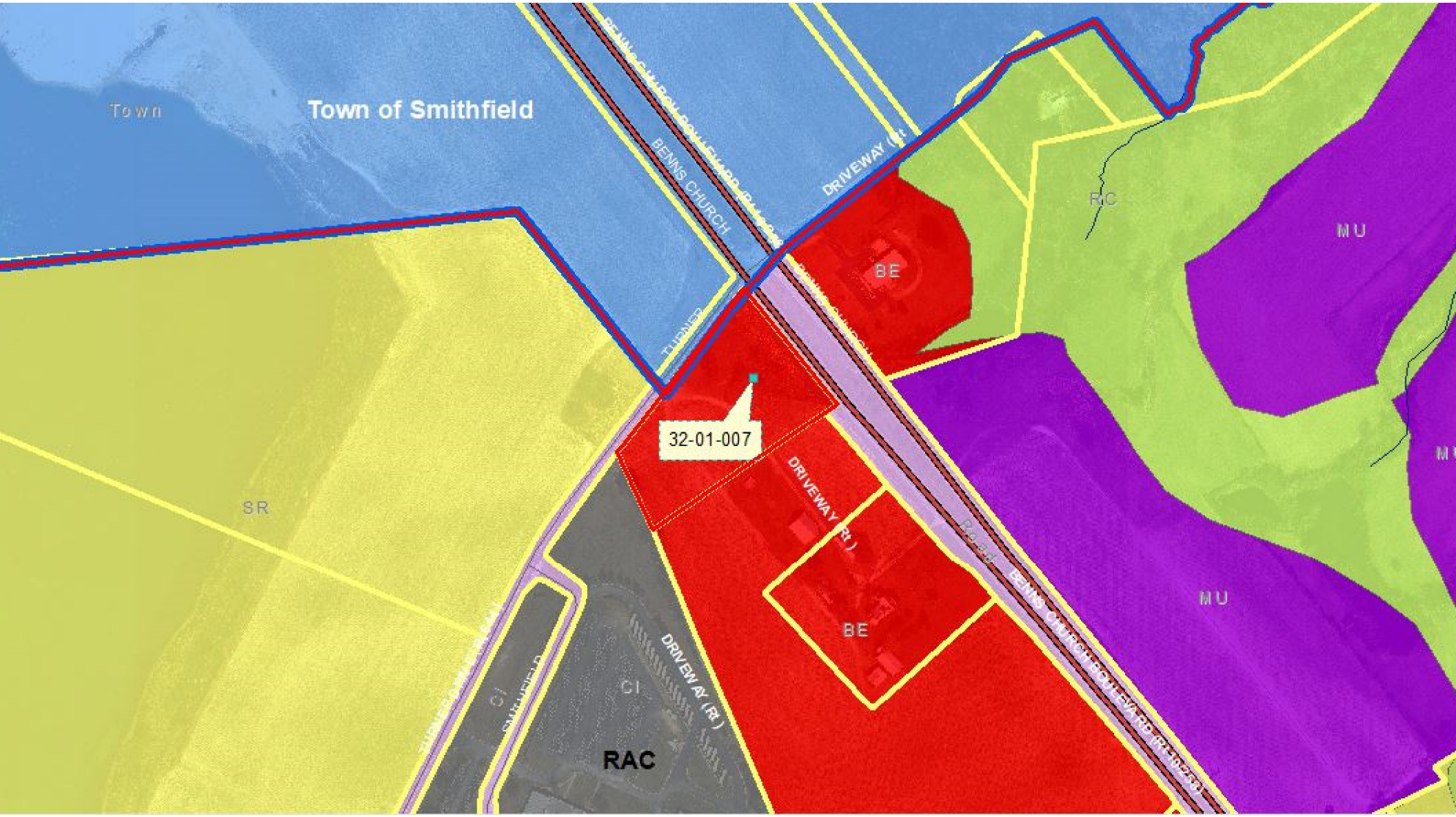

Town
Town of Smithfield
BENNS CHURCH BOULEVARD (R)
BENNS CHURCH
DRIVEWAY (R)
RC
MU
BE
32-01-007
SR
DRIVEWAY (R)
BE
MU
CI
CI
DRIVEWAY (R)
RAC

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
23116 Meherrin Road
COURTLAND, VIRGINIA 23837

June 15, 2022

Amy Ring, Director
Planning and Zoning
Isle of Wight County
P. O. Box 80
Isle of Wight, VA 23397

RE: CUP-08-21 WAWA
Route 10 (Benns Church Blvd)
TM #32-01-007

The Residency has completed its review of the submitted Traffic Impact Analysis (TIA) associated with the Conditional Use Permit application dated April 2022 and received by the VDOT Land Development Office on May 6, 2022 for the new WAWA. We offer the following comments:

General Comments

1) During peak hours, the existing Northbound Movements (coming from the school) at the intersection of Benn's Church Blvd and Turner Drive experience delays categorized as Level of Service (LOS) "D". With the additional traffic of the WAWA development it is projected that this LOS "D" remains.

2) During peak hours, the existing Westbound Left Turn Movements at the intersection of Benn's Church Blvd and Turner Drive experience delays categorized as LOS "B". Even with the improvements proposed in the TIA, with the additional traffic of the WAWA development it is projected that this movement will be reduced to LOS "D", adding an additional 20 seconds of delay. Mitigating this delay will require additional lanes on Turner Drive.

3) The entrance from Turner Drive to the WAWA is proposed with a "Do Not Block the Intersection" configuration, which will depend on enforcement by local police in order to function as proposed. If the entrance becomes blocked, there is a potential for traffic to back onto Benn's Church Blvd. There is also a potential for sight distance to be obstructed for vehicles making a left from the entrance headed toward the school. An alternate intersection design may be a safer option at this entrance.

4) Review and comments are focused on Scenario 4, which provides a build condition for the WAWA and background growth to account for approved development, but does not include a future elementary school. Introduction of the proposed future elementary school, (Scenario 3), or elementary school with

pedestrian phasing (Scenario 5), lead to extensive queuing and severe degradation of the Benn's Church/Turner Drive intersection operations.

5) The proposed change at the Turner Drive/Benn's Church Blvd. intersection will alter the dedicated right turn lane recently installed as part of a County LAP project from a dedicated right turn lane with 255' of storage and 120' of taper to a shared through/right lane. The through/left lane will transition to being a dedicated left, with 206' of storage and 100' taper. This change effectively increases the right turn/through storage to unlimited, but effectively reduces the left turn lane storage by 49' in storage and a 20' reduction in taper.

6) At the Northbound approach to Benn's Church Blvd, (coming from the school) the proposed through/right lane queues beyond the provided storage for the left lane in some model runs, blocking vehicles from accessing the left turn lane in peak conditions.

7) The concept plan is not dimensioned for analysis of the acceptability of the proposed roadway geometric changes. Lane transitions, curve geometry, etc. must comply with the VDOT Road Design Manual and receive approval during the site plan review process.

Entrance 1/Benn's Grant Blvd. Intersection

8) The proposed "shared access" entrance as shown in Figure 2 should be shown located on the property line, with half on each property, and an easement across the entirety. If an agreement cannot be reached with the adjacent property owner, then documentation of the property owner's declining to share an entrance shall be provided, and an easement can be recorded to the adjacent property to provide cross-parcel access. Comment response is acknowledged as to the shown entrance being the preferred alignment, however cross-parcel access requirements require the documentation of declined shared entrance on the property line be provided. This requirement can be handled during the site plan process.

Entrance 2/Turner Drive Intersection

9) The analysis shows and acknowledges the potential for queuing from the Benn's Church Blvd./Turner Drive intersection past the proposed full access Turner Drive entrance for limited times in all scenarios. The analysis relies on "Do Not Block Intersection" signage to assist drivers in not blocking the intersection.

10) The proposed connection across the rear of the property from the Turner Drive entrance does not appear to have sufficient throat distance from the intersection of Entrance 2 with Turner Drive. The connection will also frequently be blocked based on the queuing report at the Turner Drive/Entrance 2 intersection.

If you have any questions, please contact me at 757-346-3084 or Jason.fowler@vdot.virginia.gov.

Sincerely,

Jason C. Fowler, PE

Jason C. Fowler, PE
Area Land Use Engineer
Virginia Department of Transportation

Amy Ring

From: Jamie Oliver
Sent: Tuesday, June 14, 2022 11:33 AM
To: Amy Ring
Cc: Jason.Fowler@VDOT.Virginia.gov; Norris, Joshua (VDOT); Julie Boswell; Tony Wilson
Subject: Transportation Division Wawa CUP-08-21 Comments
Attachments: 22-0603 Wawa Turner Drive Comments.pdf

Good morning Amy,

I'm sorry this is so late getting to you. I was out several days recently for my daughter's high school graduation. Please see comments from the Transportation Division below…

1. We concur with VDOT's comments regarding the finding in the submitted TIA.

2. The Transportation Division has recently completed a turn lane project at the Turner Dr/Rt 10 intersection (UPC 103021). This project has provided the County with a in-depth understanding of the extensive utility operations in the area, which limit the operational improvements which can be achieved without significant utility relocations. *Without extensive relocation efforts, the functional capacity of the intersection is limited.*

3. As highlighted in VDOT's comments, when Wawa's traffic is added, the intersection's Level of Service (LOS) drops to and/or remains at a "D" and, through several TIA iterations proposing different solutions, has not been improved significantly. This is not normally a preferred outcome. The continuing challenge is that mitigating the delay would likely required adding additional lanes, and additional lane width may be uneconomical for the applicant due to utility relocation costs.

4. If the Wawa is accepted as proposed, please note, there is little to no remaining functional capacity at the intersection for any future public or commercial development utilizing Turner Dr. This could include future school growth and/or development on the north side of Turner Drive.

5. As noted in VDOT's comments, possible future school growth at the existing Smithfield High School/Middle School campus—which is included in the County's CIP--was not adequately accounted for in the TIA. Adding future school traffic volumes would degrade the projected Turner Dr/Route 10 intersection function further. Adding a secondary public ingress/egress for school traffic to have additional access to Route 10 could help alleviate the traffic volumes and delay at the Turner Drive intersection *as currently proposed*, as well as allowing capacity for future growth needs in the corridor.

6. Entrance 2/Turner Drive full access Intersection continues to be problematic in the analysis, with the TIA showing excessive queuing for certain periods in all scenarios. Considering both the volume of traffic and the character of traffic in the area (buses, teen drivers, etc.) the Transportation Division has significant concerns about both safety and functionality at this entrance.

    a. The "Do Not Block Intersection" Or Don't Block the Box scenarios are generally unenforceable unless the Sherriff's Office is actually on-site regularly to supervise traffic flow. This is an unrealistic option for the County.
    b. In this location, if "the Box" *is* blocked, queuing/gridlock would mean you could not get to the location to provide enforcement until the infraction was resolved.
    c. Currently, the most effective scenarios (outside of Virginia) seem to include the use of camera-ticket-enforcement.

d. These challenges only become more pronounced if you give consideration to any future development on the north side of Turner Drive which may want to use the existing road network.
e. An alternative intersection design, such as a single lane roundabout, may function as a safter and more efficient solution in this location, while allowing more capacity for future growth. It would need to be analyzed within the TIA.

7. Based on the submission, I am not clear if the pedestrian accommodations provided meet the requirements and expectations of the County's Bike and Pedestrian plan, or provide for cost sharing of future pedestrian improvements at the key intersection locations as adjacent improvements come online. It would be helpful for the project team to explain how they see this parcel contributing to the future multi-modal needs developing between the school campus, their parcel, the shopping center, and the residential communities further down Rt 10.
    a. Are their facilities 5' sidewalks, or 10' multi-use trails?
    b. Are their facilities providing functional connection to the adjacent school, or only extended to the property line?
    c. Are they providing driveway crosswalks and functional pedestrian access from the perimeter infrastructure to the store at the center of the parcel for non-vehicular, non-fuel customers?
    d. As a major intersection anchor, are they providing a plan or proposal for future "fair share" contributions to pedestrian accommodations at the Turner Dr/Route 10 intersection?

Thank you for giving our comments consideration, and please let me know if I can provide any revisions or clarifications for staff, since I am late providing them to you.

Jamie L. Oliver, Transportation Administrator
joliver@isleofwightus.net
(757) 365-1653……office
(757) 846-8600……cell

Isle of Wight County
Public Works—Transportation
PO BOX 80
Isle of Wight, VA 23397

From: Fowler, Jason <jason.fowler@vdot.virginia.gov>
Sent: Friday, June 3, 2022 3:32 PM
To: Amy Ring <aring@isleofwightus.net>
Cc: Jamie Oliver <joliver@isleofwightus.net>; Joshua Norris <joshua.norris@vdot.virginia.gov>
Subject: WAWA

See attached.

Jason Fowler
Franklin Residency / Hampton Roads District
23116 Meherrin Road
Courtland, VA 23837
757.346.3084 Office

TOWN OF SMITHFIELD

Friday, November 19th, 2021

Isle of Wight County Planning and Zoning
C/O Amy Ring, AICP
17140 Monument Circle #201
Isle of Wight, VA 23397

Re: Conditional Use Permit Application of Wawa Convenience Store and Gasoline Station – Southwest Corner of Turner Drive and Benn's Church, Isle of Wight County
KHA #116543041

Mrs. Ring,

The Town of Smithfield Community Development and Planning Department is in receipt of the letters and conceptual plans from Kimely Horn, dated Monday, October 25th, 2021, concerning the Conditional Use Permit Application submitted to Isle of Wight County for the proposed Wawa Convenience and Gasoline Station located at the southwest corner of Turner Drive and Benn's Church Boulevard (TPIN: 32-01-007) in Isle of Wight County (see Enclosures 1).

At its Tuesday, November 9th, 2021 meeting, the Smithfield Planning Commission discussed the proposed entrance for the Wawa off of Turner Drive. Their discussion centered around reconfiguring the entrance from Turner Drive so that it functioned more as a defined roadway at the rear of the property, which would extend across the back of the property and provide access to the parking lot. They were concerned about cars cutting through the parking lot to access Benn's Church without traveling to the traffic light and making a right turn.

Please contact me at 1-(757)-365-4200 or tclary@smithfieldva.gov with any questions.

Sincerely,

Tammie

Tammie Clary
Community Development & Planning Director

Cc: File

Enclosures:
(1) Letter, Ring to Clary, 2021-10-25

Local Roots, Global Reach

ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF COMMUNITY DEVELOPMENT

MEMORANDUM

TO: Don Jennings, Utility Services
Joshua Norris, VDOT
Jamie Oliver, Transportation Manager
Steve Henson, Emergency Services
Jennifer England, Isle of Wight County Museum
Chris Morello, Economic Development
Tammie Clary, Town of Smithfield ✓

FROM: Amy Ring, Director

RE: Wawa Gasoline Station and Convenience Store Conditional Use Permit Application (CUP-08-21) on Benns Church Boulevard (Rte. 10) with tax parcel number 32-01-007

DATE: October 29, 2021

Please find attached a copy of the Conditional Use Permit (CUP) application for the proposed Wawa gasoline station and associated convenience store located at the intersection of Benns Church Boulevard and Turner Drive (munis project number 25060).

Please find copies of the following application documents attached:

1. CUP application received on October 25, 2021;
2. Statement of reasons for seeking the permit;
3. Narrative description of the properties;
4. Building and canopy elevations;and
5. Conceptual plans.

Please review the attached documents and send me any comments or concerns you may have by Friday, November 19, 2021.

As always, please feel free to give me a call at 365-6210, or by email at aring@iwus.net, if you have any questions.

Kimley»Horn

October 25, 2021

Amy Ring, AICP
Director of Community Development
Isle of Wight County
17140 Monument Circle
Suite 101
Isle of Wight County, VA 23397

RE: Conditional Use Permit Application of Wawa Convenience Store and Gasoline Station – Southwest Corner of Turner Drive and Benns Church, Isle of Wight County
KHA #: 116543041

Dear Ms. Ring:

Enclose please find Conditional Use Permit Application that we file on behalf of Frontier Development with respect to the proposed Wawa Convenience Store and Gasoline Station located at southwest corner of Turner Drive and Benns Church Blvd., in Isle of Wight County, VA. Please accept these materials and place these items on the next available Planning Commission agenda.

Thank you for your assistance with this matter.

Sincerely,

Jeremy Yee, PE

Enclosures

Kimley»Horn

Statement of Reason – Conditional Use Permit

The property lies within the Rural Agricultural Conservation (RAC) District. The purpose of the Conditional Use Permit is to allow the proposed Wawa convenience store and gasoline station. The project will comply with the standards as listed in section 5-5000 supplementary use regulations, specifically for item K. Convenience Store and item P. Gasoline Station, except for the following modifications:

Item K. Convenience Store, 1.b. – The outdoor display of goods for sale shall prohibited except for the ice machine and propane gas as shown on site plan prepared by Kimley-Horn, dated 10-22-2021.

Item P. Gasoline Station, 1.j. – The gasoline station canopy measurements shall be consistent with the canopy elevations prepared by Cuhaci and Peterson, dated 10-20-2021.

Kimley»Horn

Narrative Description of The Property – Conditional Use Permit

The property, Parcel A, is the lands of William G. Yeoman, III, Trust as recorded in instrument number 00662 having a parcel identification of 32-01-007. The total site area is 169,412 square feet or 3.8892 acres. The property is zoned Rural Agricultural Conservation (RAC).

Local Roots, Global Reach

ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF PLANNING AND ZONING

SUBMITTAL CHECKLIST FOR CONDITIONAL / SPECIAL USE PERMITAPPLICATIONS

In conjunction with Section 1-1017, *Conditional Uses*, and Section 1-1018, *Special Uses Permits for Uses Not Provided For*, of the Isle of Wight County Zoning Ordinance, as amended, the following information shall be submitted for a Conditional / Special Use Permit Application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for a Conditional / Special Use shall be certified as complete unless the following information is provided, unless the Zoning Administrator reduces the number of required copies.

X 1. Fifteen (15) copies of the original, executed application and one (1) original executed application. Both the applicant(s) and the property owner(s) must have their signature(s) notarized on page No. 2 of the application.

X 2. The appropriate fees have been submitted with the application. Checks should be made payable to: Treasurer, Isle of Wight County.

X 3. Fifteen (15) copies of a statement of the reasons for seeking such permit, and if applicable, a statement of conditions.

X 4. Fifteen (15) copies) of a narrative description of the property which shall include the Tax Parcel Identification Number.

X 5. One (1) copy of the most recent deed(s) for the property(s) associated with the application.

X 6. A concept plan of the property showing all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the Planning Commission and Board of Supervisors that adequate provisions shall be made for compliance with all standards for that particular use and the extent of the property to be so used on a given parcel or parcels. Such document shall be drawn to scale and shall include the following information:

- A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
- Title of drawing
- Date of drawing
- Existing wood line
- North arrow
- Scale bar
- Current zoning of parcel(s) to be rezoned, including tax map number(s) and owner(s)
- Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
- Street names including route number and width(s) of the right-of-way(s)
- Fifteen (15) full size copies, with one (1) reduced 11 inch X 17 inch copy shall be submitted
- Please note that additional information on the site layout may be requested by the Zoning Administrator during the review process in order to more effectively review the application and prepare the staff reports for the Planning Commission and Board of Supervisors.

X 7. Fifteen (15) copies of such supplemental material as may be necessitated by the proposal itself or the district in which located or proposed to be located, and in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Isle of Wight County Zoning Ordinance.

X 8. All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter. Proof of the most recent tax payment to the County must accompany the application.

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete and correct information available. I understand that any section not completed in its entirety may delay processing of this application and the date of the Planning Commission public hearing and that the submittal of a complete application does not guarantee the application will be placed on the next available Planning Commission agenda.

JEREMY YEE
Printed or Typed Name

Signature

10/25/2021
Date

Local Roots, Global Reach

ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

APPLICATION FOR CONDITIONAL / SPECIAL USE PERMIT

This application should be used to petition for a permit for certain uses which, because of their unique characteristics or potential impacts on adjacent land uses, are not generally permitted in certain zoning districts as a matter of right, but which may, under the right set of circumstances and conditions be acceptable in certain specific locations. The following application requirements are consistent with the procedures set forth in Section 1-1017, *Conditional Uses,* and Section 1-1018, *Special Use Permits for Uses Not Provided For,* of the Isle of Wight County Zoning Ordinance, as amended.

A. APPLICATION FOR (CHECK ALL THAT APPLY):

[X] Conditional Use Permit (Are applicant proposed conditions attached?): X Yes _____ No

The proposed use or activity is listed as a conditional use in the RAC zoning district as per Section 4-2003 in Article IV of the Isle of Wight County Zoning Ordinance.

[X] Special Use Permit (Are applicant proposed conditions attached?): X Yes _____ No

Proposed Use or Activity: To allow convenience store and gas station

B. PROJECT DESCRIPTION:

Project Name: Wawa convenience store with gas station

Property Address (if any): Southwest corner of Turner Drive and Benns Church Blvd

Election District: Windsor

Comprehensive Plan Designation: Business & Employment

The use permit will apply to 3.8892 acres out of 3.8892 total acres

Tax Parcel Identification # 32-01-007 Number of acres to be effected: 3.8892

Tax Parcel Identification # _____ Number of acres to be effected: _____

Tax Parcel Identification # _____ Number of acres to be effected: _____

Proposed Utilities (check all that apply): Public Water X Private Well _____

Public Sewer X Private Septic _____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): ~~Frontier Companies~~ Frontier Development

Address: ~~4801 SW 3rd Avenue, Suite 590~~ 2950 SW 27th Avenue, Suite 300

City, State, Zip Code: ~~Miami, Florida 33129~~ Miami, Florida 33133

Phone No.: 305-692-9992 Email: jleach@fdllc.com Fax No.:

Property Owner(s) Name(s): Yeoman William G III Trustee William G Y

Address: C/O Henry E Layden PO Box 231

City, State, Zip Code: Smithfield VA 23431

Phone No.: 757-438-3160 Email: henry.layden1@gmail.com Fax No.: N/A

Applicants/Owners Affidavit (including compliance with all deed restrictions and covenants)

This application must be signed by the owner(s) of the subject property or must have attached written evidence of the owner's consent, which may be in the form of a binding contract of sale with the owner's signature or a letter signed by the owner(s), containing written authorization to act with full authority on the owner(s) behalf in filing this use permit application. Signing this application shall certify the owner's compliance with all deed restrictions and covenants, and shall constitute the granting of authority of the County to enter onto the property for the purpose of conducting site analyses and compliance with Federal, State and County regulations.

Applicant: Remus Brustur
Printed or Typed Name

Applicant: _____ Date: 10/12/2021
Signature

County of ~~Isle of Wight, Commonwealth of Virginia~~ MIAMI-DADE STATE OF FLORIDA

Subscribed and sworn to before me Jennifer Zurita,
A Notary Public in and for the County of ~~Isle of Wight, Commonwealth of Virginia~~ MIAMI-DADE STATE OF FLORIDA, this 12 day of Oct., 2021

_____
Notary Public

My Commission Expires _____

JENNIFER ZURITA
Notary Public-State of Florida
Commission # HH 109084
My Commission Expires
March 24, 2025

Owner: HENRY LAYDEN
Printed or Typed Name

Owner: _____ Date: 10/20/21
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me Elizabeth Dixon Jones
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 20th day of Oct, 2021

_____
Notary Public

My Commission Expires December 31, 2022

ELIZABETH DIXON JONES
NOTARY PUBLIC
Commonwealth of Virginia
Reg. # 7767629
Com. Exp. Dec. 31, 2022

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this ___ day of _____, 20___

_____
Notary Public

My Commission Expires _____

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this ___ day of _____, 20___

_____
Notary Public

My Commission Expires _____

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [ ] Current [ ] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

Revised August 13, 2014

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Remus Brustur

Address 2950 SW 27th Avenue, Suite 300
Street

Miami | Florida | 33133
City | State | Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description

OTHER OWNERS OF AFFECTED REAL ESTATE

(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes No

If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct and true.

Applicant: Remus Brustur (Printed or Typed Name) Applicant: _____ (Signature) Date: 10/12/2021

~~Commonwealth of Virginia~~ STATE OF FLORIDA
County of ~~Isle of Wight~~ MIAMI DADE

Subscribed and sworn to before me Jennifer Zurita,
A Notary Public in and for the County of ~~Isle of Wight, Commonwealth of Virginia~~ MIAMI-DADE, STATE OF FLORIDA, this 12 day of Oct., 2021.

_____
Notary Public

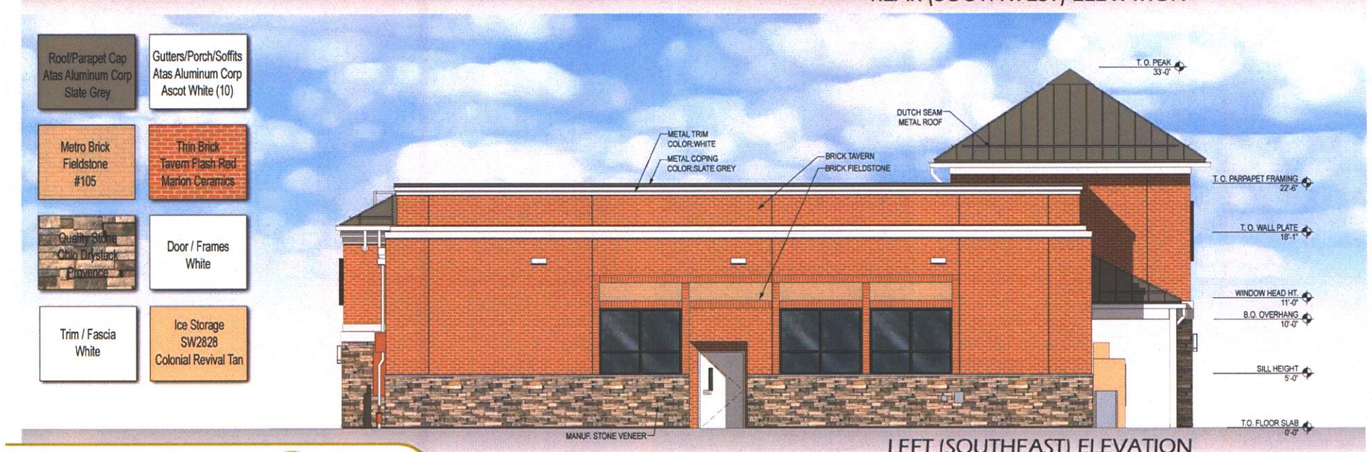
My Commission Expires _____

JENNIFER ZURITA
Notary Public-State of Florida
Commission # HH 109084
My Commission Expires
March 24, 2025

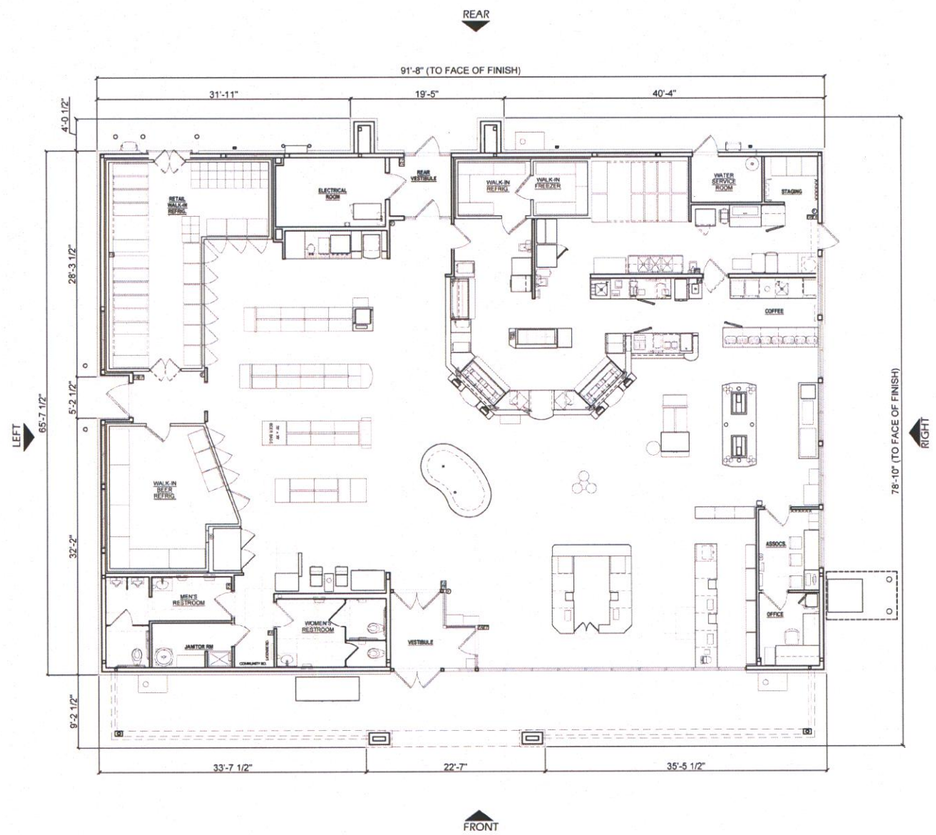
RIGHT (NORTHWEST) ELEVATION (TURNER DR.)

FRONT (NORTHEAST) ELEVATION (BENNS CHURCH BLVD.)

REAR (SOUTHWEST) ELEVATION



LEFT (SOUTHEAST) ELEVATION



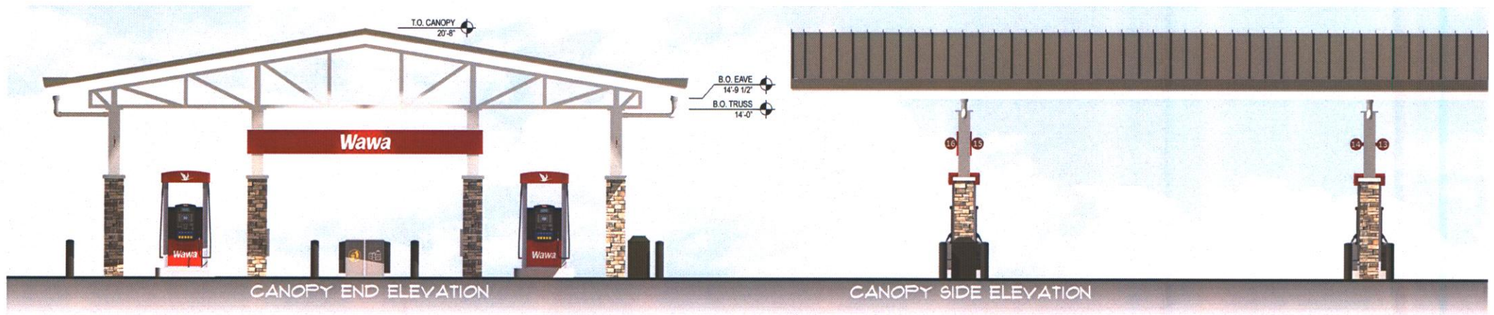
FLOOR PLAN

NOTE:
SIGNAGE IS SHOWN FOR REFERENCE ONLY
SEPARATE PERMIT REQUIRED

Cuhaci & Peterson
Architects Engineers Planners
ORLANDO • PHILADELPHIA

WAWA W50 FB VA M_v.2021.1

Benns Chruch & Turner Dr., Isle of Wight, VA • C&P Project #2210807 • 10-20-2021



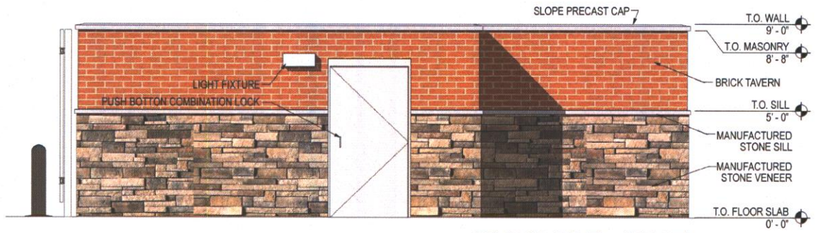
CANOPY END ELEVATION

CANOPY SIDE ELEVATION

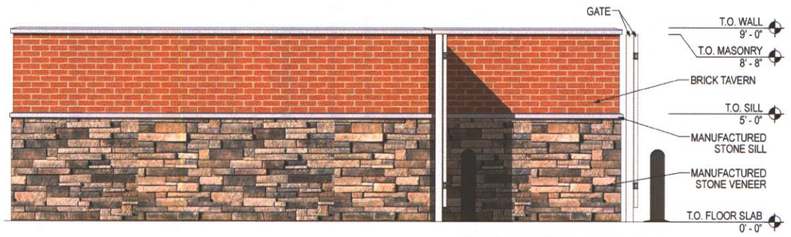
CANOPY PERSPECTIVE VIEW

The Wawa fuel canopy is a registered service mark in the U.S. Patent and Trademark Office. The fuel canopy, as well as Wawa's brand names, slogans, logos, service marks, and other trademarks of Wawa's goods, services, and promotions belong exclusively to Wawa, Inc. and/or, Wild Goose Holding Co., Inc. and are protected from copying and simulation under national and international trademark and copyright laws and treaties throughout the world.

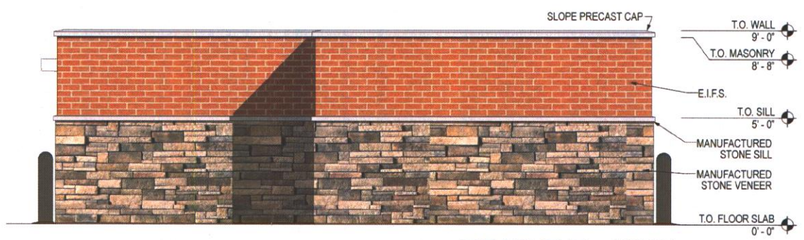
FRONT ELEVATION



RIGHT ELEVATION



LEFT ELEVATION



REAR ELEVATION

Cuhaci & Peterson
Architects Engineers Planners

WAWA GAS CANOPY® STACKED 8 - A-FRAME - TRASH COMPOUND MAOF17-R

Benns Church & Turner Dr., Isle of Wight, VA • C&P Project #2210807 • 10-20-2021

Plotted By:Mathews, Joe Sheet Set:Kha Layout:CUP LANDSCAPE PLAN October 25, 2021 09:55:32am K:\VAB_Civil_WAWA\116543041 – Wawa Benns Church\CADD\Exhibits\CUP\VA, Isle of Wight Wawa – CUP Site Plan.dwg
This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

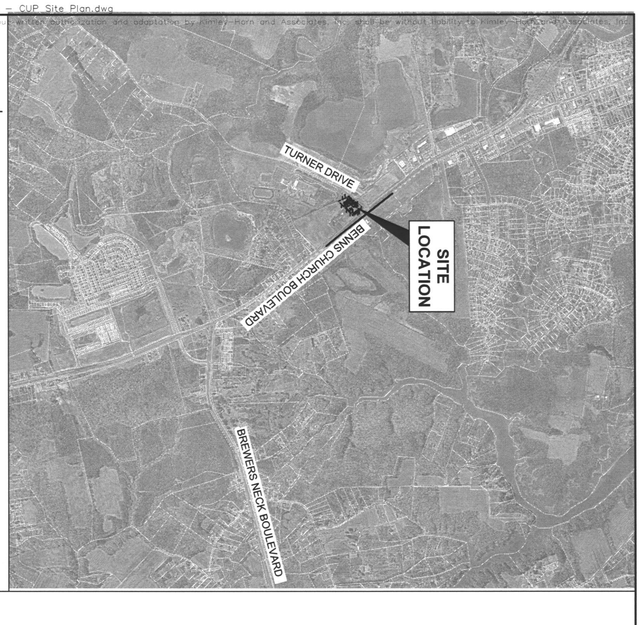
GRAPHIC SCALE IN FEET
0 20 40 80

NORTH

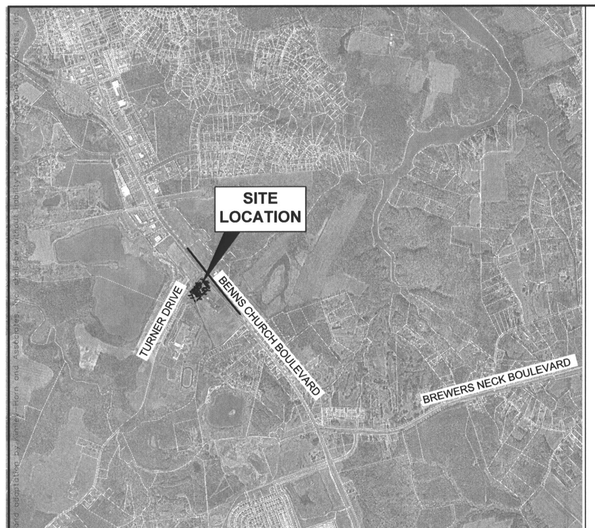
NORTH

VICINITY MAP
1"=2,000'

nearmap
Imagery © 2021 Nearmap, HERE



TURNER DRIVE VA RTE. 644
VARIABLE WIDTH RIGHT-OF-WAY
(OPEN / PAVED PUBLIC ROADS)
EDGE OF PAVEMENT
SOLID WHITE LINE
DOUBLE YELLOW LINE
SOLID WHITE LINE
EDGE OF PAVEMENT
24" RCP
MH=42.59
MH=44.43
MH=42.59
MH=44.21
MH=41.22
MH=38.73
MH=39.00
MH=38.43
MH=41.22
MH=42.59
24" RCP
24" RCP
24" RCP



NORTH

VICINITY MAP
1"=2,000'

nearmap
Imagery © 2021 Nearmap, HERE

SITE DATA		
JURISDICTION	ISLE OF WIGHT COUNTY	
EXISTING ZONING	RAC	
PROPOSED ZONING	RAC	
SEE "PARCEL A" DATA BELOW		
WAWA "PARCEL A" AREA	3.89 AC.±	
BUILDING AREA	6,049 S.F.	
MIN. PARKING REQUIRED	34 SPACES	
PARKING PROVIDED	55 SPACES	
FRONT SETBACK (BENNS CHURCH)		60 FT
FRONT SETBACK (TURNER)		85 FT
SIDE SETBACK		35 FT
REAR SETBACK		35 FT
FRONT BUFFER YARD		50 FT
SIDE BUFFER YARD		10 FT
REAR BUFFER YARD		10 FT
# MPD'S	8	

PARCEL A

LANDS N/F
WILLIAM G. YEOMAN, III, TRUSTEE
WILLIAM G. YEOMAN TRUST
INSTRUMENT NO. 00662
PARCEL ID 32-01-007
ZONED: RAC
AREA= 169,412 SQ. FT. OR
3.8892 ACRES

NO POSTED ADDRESS

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

Kimley»Horn AND ASSOCIATES, INC.
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
4525 MAIN STREET, SUITE 1000, VIRGINIA BEACH, VA 23462
PHONE: 757-213-8600 FAX: 757-213-8601
WWW.KIMLEY-HORN.COM

NO.	REVISIONS	DATE	BY

KHA PROJECT 116543041
DATE 10/22/2021
SCALE AS SHOWN
DESIGNED BY NJS
DRAWN BY NJS
CHECKED BY JY

CUP SITE PLAN
BENNS CHURCH BOULEVARD & TURNER DRIVE

WAWA
VIRGINIA
ISLE OF WIGHT COUNTY

SHEET NUMBER
1

Plotted By:Mathews, Joe Sheet Set:Kha Layout:CUP PLAN October 25, 2021 09:55:11am K:\VAB_Civil_WAWA\116543041 – Wawa Benns Church\CADD\Exhibits\CUP\VA, Isle of Wight Wawa – CUP Site Plan.dwg
Xrefs: Boundary Survey.dwg
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TOWN OF SMITHFIELD

Friday, November 19th, 2021

Isle of Wight County Planning and Zoning
C/O Amy Ring, AICP
17140 Monument Circle #201
Isle of Wight, VA 23397

Re: Conditional Use Permit Application of Wawa Convenience Store and Gasoline Station – Southwest Corner of Turner Drive and Benn's Church, Isle of Wight County
KHA #116543041

Mrs. Ring,

The Town of Smithfield Community Development and Planning Department is in receipt of the letters and conceptual plans from Kimely Horn, dated Monday, October 25th, 2021, concerning the Conditional Use Permit Application submitted to Isle of Wight County for the proposed Wawa Convenience and Gasoline Station located at the southwest corner of Turner Drive and Benn's Church Boulevard (TPIN: 32-01-007) in Isle of Wight County (see Enclosures 1).

At its Tuesday, November 9th, 2021 meeting, the Smithfield Planning Commission discussed the proposed entrance for the Wawa off of Turner Drive. Their discussion centered around reconfiguring the entrance from Turner Drive so that it functioned more as a defined roadway at the rear of the property, which would extend across the back of the property and provide access to the parking lot. They were concerned about cars cutting through the parking lot to access Benn's Church without traveling to the traffic light and making a right turn.

Please contact me at 1-(757)-365-4200 or tclary@smithfieldva.gov with any questions.

Sincerely,

Tammie

Tammie Clary
Community Development & Planning Director

Cc: File

Enclosures:
(1) Letter, Ring to Clary, 2021-10-25

Local Roots, Global Reach

ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF COMMUNITY DEVELOPMENT

MEMORANDUM

TO: Don Jennings, Utility Services
Joshua Norris, VDOT
Jamie Oliver, Transportation Manager
Steve Henson, Emergency Services
Jennifer England, Isle of Wight County Museum
Chris Morello, Economic Development
Tammie Clary, Town of Smithfield ✓

FROM: Amy Ring, Director

RE: Wawa Gasoline Station and Convenience Store Conditional Use Permit Application (CUP-08-21) on Benns Church Boulevard (Rte. 10) with tax parcel number 32-01-007

DATE: October 29, 2021

Please find attached a copy of the Conditional Use Permit (CUP) application for the proposed Wawa gasoline station and associated convenience store located at the intersection of Benns Church Boulevard and Turner Drive (munis project number 25060).

Please find copies of the following application documents attached:

1. CUP application received on October 25, 2021;
2. Statement of reasons for seeking the permit;
3. Narrative description of the properties;
4. Building and canopy elevations;and
5. Conceptual plans.

Please review the attached documents and send me any comments or concerns you may have by Friday, November 19, 2021.

As always, please feel free to give me a call at 365-6210, or by email at aring@iwus.net, if you have any questions.

Kimley»Horn

October 25, 2021

Amy Ring, AICP
Director of Community Development
Isle of Wight County
17140 Monument Circle
Suite 101
Isle of Wight County, VA 23397

RE: Conditional Use Permit Application of Wawa Convenience Store and Gasoline Station – Southwest Corner of Turner Drive and Benns Church, Isle of Wight County
KHA #: 116543041

Dear Ms. Ring:

Enclose please find Conditional Use Permit Application that we file on behalf of Frontier Development with respect to the proposed Wawa Convenience Store and Gasoline Station located at southwest corner of Turner Drive and Benns Church Blvd., in Isle of Wight County, VA. Please accept these materials and place these items on the next available Planning Commission agenda.

Thank you for your assistance with this matter.

Sincerely,

Jeremy Yee, PE

Enclosures

Kimley»Horn

Statement of Reason – Conditional Use Permit

The property lies within the Rural Agricultural Conservation (RAC) District. The purpose of the Conditional Use Permit is to allow the proposed Wawa convenience store and gasoline station. The project will comply with the standards as listed in section 5-5000 supplementary use regulations, specifically for item K. Convenience Store and item P. Gasoline Station, except for the following modifications:

Item K. Convenience Store, 1.b. – The outdoor display of goods for sale shall prohibited except for the ice machine and propane gas as shown on site plan prepared by Kimley-Horn, dated 10-22-2021.

Item P. Gasoline Station, 1.j. – The gasoline station canopy measurements shall be consistent with the canopy elevations prepared by Cuhaci and Peterson, dated 10-20-2021.

Kimley»Horn

Narrative Description of The Property – Conditional Use Permit

The property, Parcel A, is the lands of William G. Yeoman, III, Trust as recorded in instrument number 00662 having a parcel identification of 32-01-007. The total site area is 169,412 square feet or 3.8892 acres. The property is zoned Rural Agricultural Conservation (RAC).

Local Roots, Global Reach

ISLE OF WIGHT COUNTY, VIRGINIA

DEPARTMENT OF PLANNING AND ZONING

SUBMITTAL CHECKLIST FOR CONDITIONAL / SPECIAL USE PERMITAPPLICATIONS

In conjunction with Section 1-1017, *Conditional Uses*, and Section 1-1018, *Special Uses Permits for Uses Not Provided For*, of the Isle of Wight County Zoning Ordinance, as amended, the following information shall be submitted for a Conditional / Special Use Permit Application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for a Conditional / Special Use shall be certified as complete unless the following information is provided, unless the Zoning Administrator reduces the number of required copies.

X 1. Fifteen (15) copies of the original, executed application and one (1) original executed application. Both the applicant(s) and the property owner(s) must have their signature(s) notarized on page No. 2 of the application.

X 2. The appropriate fees have been submitted with the application. Checks should be made payable to: Treasurer, Isle of Wight County.

X 3. Fifteen (15) copies of a statement of the reasons for seeking such permit, and if applicable, a statement of conditions.

X 4. Fifteen (15) copies) of a narrative description of the property which shall include the Tax Parcel Identification Number.

X 5. One (1) copy of the most recent deed(s) for the property(s) associated with the application.

X 6. A concept plan of the property showing all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the Planning Commission and Board of Supervisors that adequate provisions shall be made for compliance with all standards for that particular use and the extent of the property to be so used on a given parcel or parcels. Such document shall be drawn to scale and shall include the following information:

- A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
- Title of drawing
- Date of drawing
- Existing wood line
- North arrow
- Scale bar
- Current zoning of parcel(s) to be rezoned, including tax map number(s) and owner(s)
- Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
- Street names including route number and width(s) of the right-of-way(s)
- Fifteen (15) full size copies, with one (1) reduced 11 inch X 17 inch copy shall be submitted
- Please note that additional information on the site layout may be requested by the Zoning Administrator during the review process in order to more effectively review the application and prepare the staff reports for the Planning Commission and Board of Supervisors.

X 7. Fifteen (15) copies of such supplemental material as may be necessitated by the proposal itself or the district in which located or proposed to be located, and in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Isle of Wight County Zoning Ordinance.

X 8. All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter. Proof of the most recent tax payment to the County must accompany the application.

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete and correct information available. I understand that any section not completed in its entirety may delay processing of this application and the date of the Planning Commission public hearing and that the submittal of a complete application does not guarantee the application will be placed on the next available Planning Commission agenda.

JEREMY YEE
Printed or Typed Name

Signature

10/25/2021
Date

Local Roots, Global Reach

ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

APPLICATION FOR CONDITIONAL / SPECIAL USE PERMIT

This application should be used to petition for a permit for certain uses which, because of their unique characteristics or potential impacts on adjacent land uses, are not generally permitted in certain zoning districts as a matter of right, but which may, under the right set of circumstances and conditions be acceptable in certain specific locations. The following application requirements are consistent with the procedures set forth in Section 1-1017, *Conditional Uses,* and Section 1-1018, *Special Use Permits for Uses Not Provided For,* of the Isle of Wight County Zoning Ordinance, as amended.

A. APPLICATION FOR (CHECK ALL THAT APPLY):

[X] Conditional Use Permit (Are applicant proposed conditions attached?): X Yes _____ No

The proposed use or activity is listed as a conditional use in the RAC zoning district as per Section 4-2003 in Article IV of the Isle of Wight County Zoning Ordinance.

[X] Special Use Permit (Are applicant proposed conditions attached?): X Yes _____ No

Proposed Use or Activity: To allow convenience store and gas station

B. PROJECT DESCRIPTION:

Project Name: Wawa convenience store with gas station

Property Address (if any): Southwest corner of Turner Drive and Benns Church Blvd

Election District: Windsor

Comprehensive Plan Designation: Business & Employment

The use permit will apply to 3.8892 acres out of 3.8892 total acres

Tax Parcel Identification # 32-01-007 Number of acres to be effected: 3.8892

Tax Parcel Identification # _____ Number of acres to be effected: _____

Tax Parcel Identification # _____ Number of acres to be effected: _____

Proposed Utilities (check all that apply): Public Water X Private Well _____

Public Sewer X Private Septic _____

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): ~~Frontier Companies~~ Frontier Development

Address: ~~4801 SW 3rd Avenue, Suite 590~~ 2950 SW 27th Avenue, Suite 300

City, State, Zip Code: ~~Miami, Florida 33129~~ Miami, Florida 33133

Phone No.: 305-692-9992 Email: jleach@fdllc.com Fax No.:

Property Owner(s) Name(s): Yeoman William G III Trustee William G Y

Address: C/O Henry E Layden PO Box 231

City, State, Zip Code: Smithfield VA 23431

Phone No.: 757-438-3160 Email: henry.layden1@gmail.com Fax No.: N/A

Applicants/Owners Affidavit (including compliance with all deed restrictions and covenants)

This application must be signed by the owner(s) of the subject property or must have attached written evidence of the owner's consent, which may be in the form of a binding contract of sale with the owner's signature or a letter signed by the owner(s), containing written authorization to act with full authority on the owner(s) behalf in filing this use permit application. Signing this application shall certify the owner's compliance with all deed restrictions and covenants, and shall constitute the granting of authority of the County to enter onto the property for the purpose of conducting site analyses and compliance with Federal, State and County regulations.

Applicant: Remus Brustur
Printed or Typed Name

Applicant: _____ Date: 10/12/2021
Signature

County of ~~Isle of Wight, Commonwealth of Virginia~~ MIAMI-DADE STATE OF FLORIDA

Subscribed and sworn to before me Jennifer Zurita,
A Notary Public in and for the County of ~~Isle of Wight, Commonwealth of Virginia~~ MIAMI-DADE STATE OF FLORIDA, this 12 day of Oct., 2021

_____
Notary Public

My Commission Expires _____

JENNIFER ZURITA
Notary Public-State of Florida
Commission # HH 109084
My Commission Expires
March 24, 2025

Owner: HENRY LAYDEN
Printed or Typed Name

Owner: _____ Date: 10/20/21
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me Elizabeth Dixon Jones
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 20th day of Oct, 2021

_____
Notary Public

My Commission Expires December 31, 2022

ELIZABETH DIXON JONES
NOTARY PUBLIC
Commonwealth of Virginia
Reg. # 7767629
Com. Exp. Dec. 31, 2022

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this ___ day of _____, 20___

_____
Notary Public

My Commission Expires _____

Owner: _____
Printed or Typed Name

Owner: _____ Date: _____
Signature

County of Isle of Wight, Commonwealth of Virginia

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this ___ day of _____, 20___

_____
Notary Public

My Commission Expires _____

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [ ] Current [ ] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

Revised August 13, 2014

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Remus Brustur

Address 2950 SW 27th Avenue, Suite 300
Street

Miami | Florida | 33133
City | State | Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description

OTHER OWNERS OF AFFECTED REAL ESTATE

(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Yes No

If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct and true.

Applicant: Remus Brustur (Printed or Typed Name) Applicant: _____ (Signature) Date: 10/12/2021

~~Commonwealth of Virginia~~ STATE OF FLORIDA
County of ~~Isle of Wight~~ MIAMI DADE

Subscribed and sworn to before me Jennifer Zurita,
A Notary Public in and for the County of ~~Isle of Wight, Commonwealth of Virginia~~ MIAMI-DADE, STATE OF FLORIDA, this 12 day of Oct., 2021.

_____
Notary Public

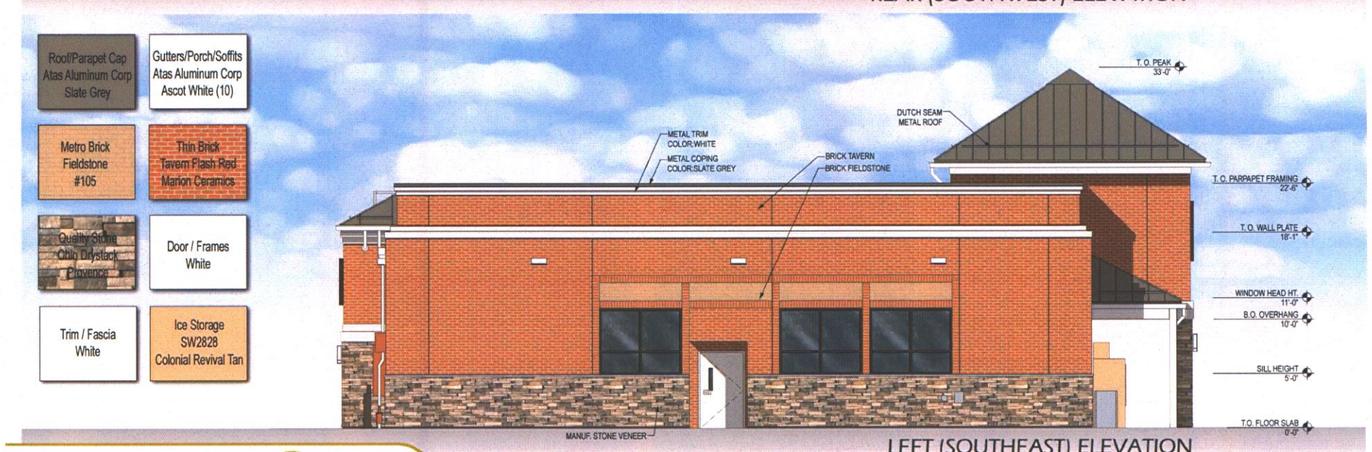
My Commission Expires _____

JENNIFER ZURITA
Notary Public-State of Florida
Commission # HH 109084
My Commission Expires
March 24, 2025

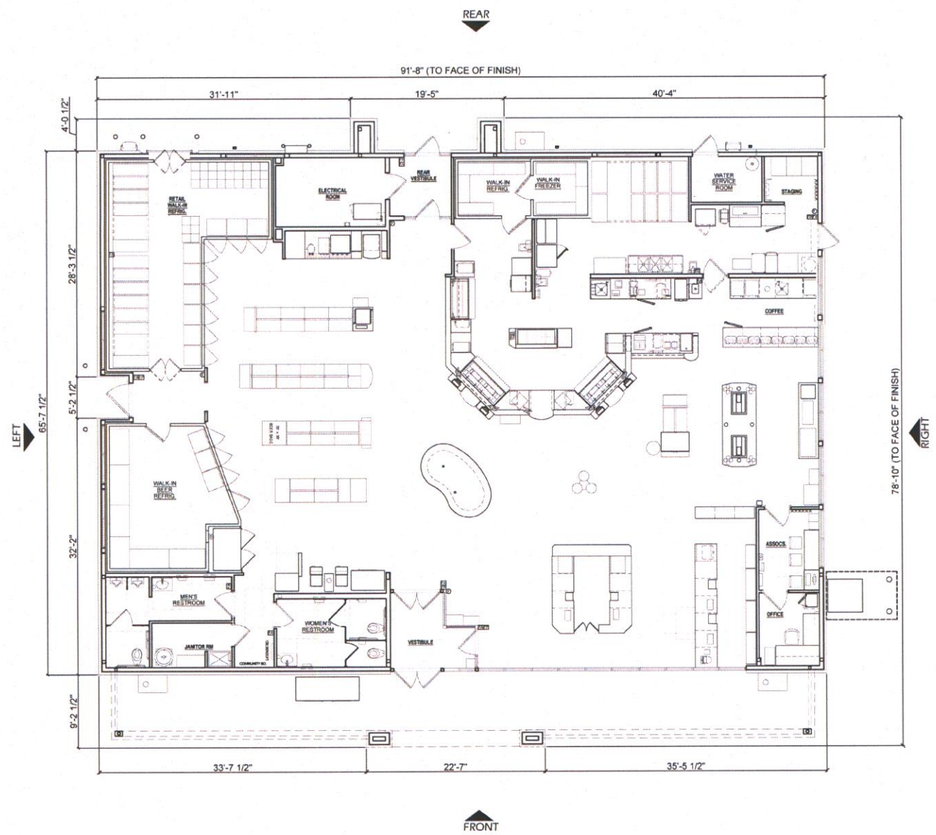
RIGHT (NORTHWEST) ELEVATION (TURNER DR.)

FRONT (NORTHEAST) ELEVATION (BENNS CHURCH BLVD.)

REAR (SOUTHWEST) ELEVATION



LEFT (SOUTHEAST) ELEVATION



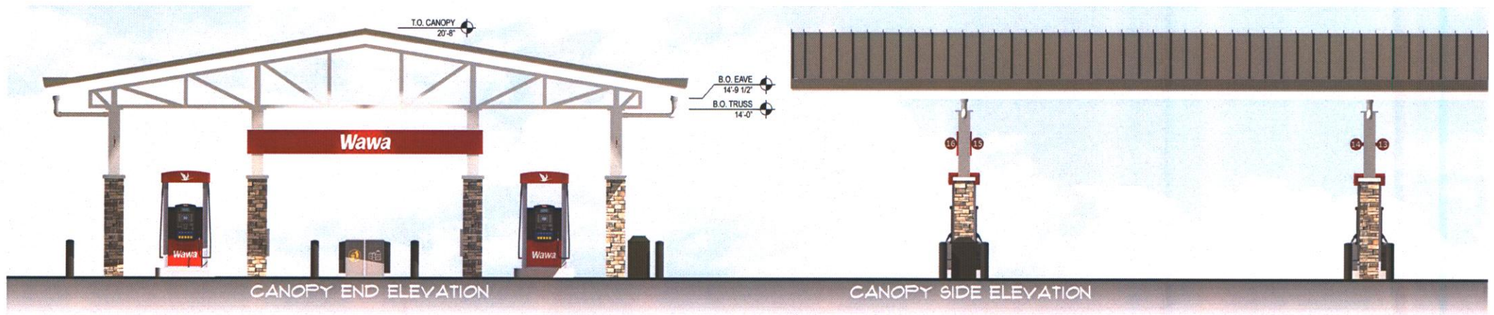
FLOOR PLAN

NOTE:
SIGNAGE IS SHOWN FOR REFERENCE ONLY
SEPARATE PERMIT REQUIRED

Cuhaci & Peterson
Architects Engineers Planners
ORLANDO • PHILADELPHIA

WAWA W50 FB VA M_v.2021.1

Benns Chruch & Turner Dr., Isle of Wight, VA • C&P Project #2210807 • 10-20-2021



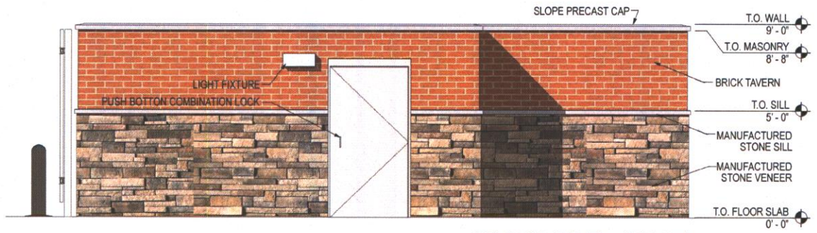
CANOPY END ELEVATION

CANOPY SIDE ELEVATION

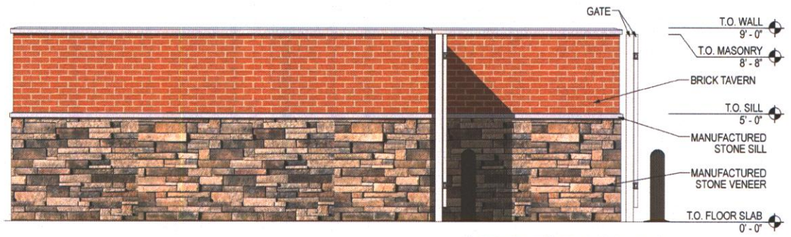
CANOPY PERSPECTIVE VIEW

The Wawa fuel canopy is a registered service mark in the U.S. Patent and Trademark Office. The fuel canopy, as well as Wawa's brand names, slogans, logos, service marks, and other trademarks of Wawa's goods, services, and promotions belong exclusively to Wawa, Inc. and/or, Wild Goose Holding Co., Inc. and are protected from copying and simulation under national and international trademark and copyright laws and treaties throughout the world.

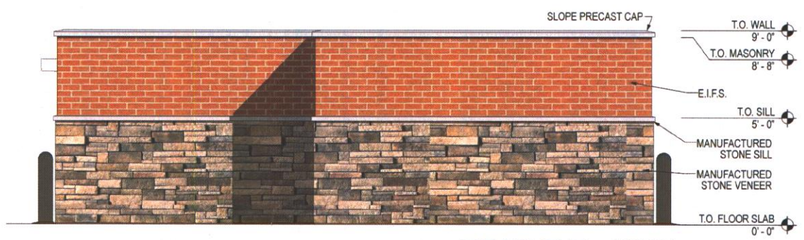
FRONT ELEVATION



RIGHT ELEVATION



LEFT ELEVATION



REAR ELEVATION

Cuhaci & Peterson
Architects Engineers Planners

WAWA GAS CANOPY® STACKED 8 - A-FRAME - TRASH COMPOUND MAOF17-R

Benns Church & Turner Dr., Isle of Wight, VA • C&P Project #2210807 • 10-20-2021

Plotted By:Mathews, Joe Sheet Set:Kha Layout:CUP LANDSCAPE PLAN October 25, 2021 09:55:32am K:\VAB_Civil_WAWA\116543041 – Wawa Benns Church\CADD\Exhibits\CUP\VA, Isle of Wight Wawa – CUP Site Plan.dwg
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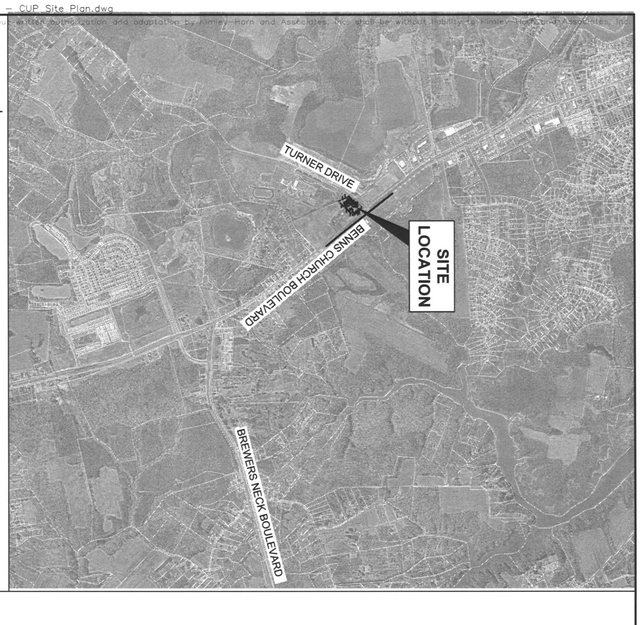
GRAPHIC SCALE IN FEET
0 20 40 80

NORTH

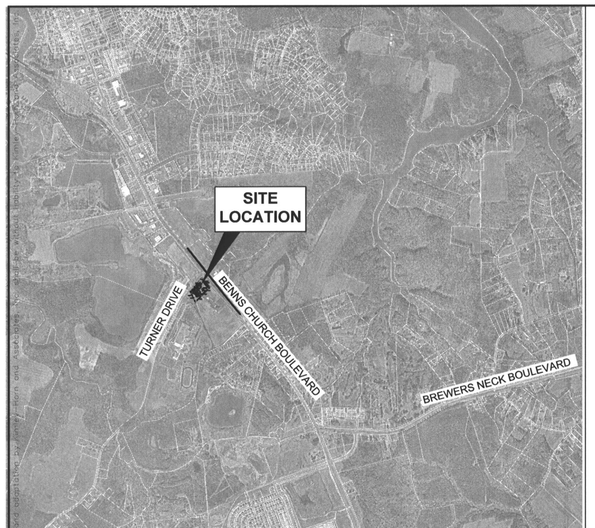
NORTH

VICINITY MAP
1"=2,000'

nearmap
Imagery © 2021 Nearmap, HERE



TURNER DRIVE VA RTE. 644
VARIABLE WIDTH RIGHT-OF-WAY
(OPEN / PAVED PUBLIC ROADS)
EDGE OF PAVEMENT
SOLID WHITE LINE
DOUBLE YELLOW LINE
SOLID WHITE LINE
EDGE OF PAVEMENT
24" RCP
MH=42.59
MH=44.43
MH=42.59
MH=44.21
MH=41.22
MH=38.73
MH=39.00
MH=38.43
MH=41.22
MH=42.59
24" RCP
24" RCP
24" RCP



NORTH

VICINITY MAP
1"=2,000'

nearmap
Imagery © 2021 Nearmap, HERE

SITE DATA		
JURISDICTION	ISLE OF WIGHT COUNTY	
EXISTING ZONING	RAC	
PROPOSED ZONING	RAC	
SEE "PARCEL A" DATA BELOW		
WAWA "PARCEL A" AREA	3.89 AC.±	
BUILDING AREA	6,049 S.F.	
MIN. PARKING REQUIRED	34 SPACES	
PARKING PROVIDED	55 SPACES	
FRONT SETBACK (BENNS CHURCH)		60 FT
FRONT SETBACK (TURNER)		85 FT
SIDE SETBACK		35 FT
REAR SETBACK		35 FT
FRONT BUFFER YARD		50 FT
SIDE BUFFER YARD		10 FT
REAR BUFFER YARD		10 FT
# MPD'S	8	

PARCEL A

LANDS N/F
WILLIAM G. YEOMAN, III, TRUSTEE
WILLIAM G. YEOMAN TRUST
INSTRUMENT NO. 00662
PARCEL ID 32-01-007
ZONED: RAC
AREA= 169,412 SQ. FT. OR
3.8892 ACRES

NO POSTED ADDRESS

NORTH

GRAPHIC SCALE IN FEET
0 20 40 80

Kimley»Horn AND ASSOCIATES, INC.
© 2021 KIMLEY-HORN AND ASSOCIATES, INC.
4525 MAIN STREET, SUITE 1000, VIRGINIA BEACH, VA 23462
PHONE: 757-213-8600 FAX: 757-213-8601
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Kimley»Horn

June 16, 2022

Amy Ring
Community Development Director
Isle of Wight County, Virginia
301 Jericho Road
Smithfield, VA 23430

RE: ***CUP-08-21 WAWA***
Route 10 (Benns Church Blvd)
Kimley-Horn #116947000
TM #32-01-007

Dear Ms. Ring,

In response to the Residency's review comments on the above-referenced project received by Kimley-Horn from Isle of Wight County on June 15, 2022, we offer the following responses.

Comment Responses

1. We concur with VDOT's comments regarding the finding in the submitted TIA.
   - *Acknowledge. Understood.*
2. The Transportation Division has recently completed a turn lane project at the Turner Dr/Rt 10 intersection (UPC 103021). This project has provided the County with a in-depth understanding of the extensive utility operations in the area, which limit the operational improvements which can be achieved without significant utility relocations. *Without extensive relocation efforts, the functional capacity of the intersection is limited.*
   - *Acknowledge. Understood.*
3. As highlighted in VDOT's comments, when Wawa's traffic is added, the intersection's Level of Service (LOS) drops to and/or remains at a "D" and, through several TIA iterations proposing different solutions, has not been improved significantly. This is not normally a preferred outcome. The continuing challenge is that mitigating the delay would likely require adding additional lanes, and additional lane width may be uneconomical for the applicant due to utility relocation costs.
   - *Acknowledge. Understood and concur.*
4. If the Wawa is accepted as proposed, please note, there is little to no remaining functional capacity at the intersection for any future public or commercial development utilizing Turner Dr. This could include future school growth and/or development on the north side of Turner Drive.
   - *Comment acknowledged.*

5. As noted in VDOT's comments, possible future school growth at the existing Smithfield High School/Middle School campus—which is included in the County's CIP--was not adequately accounted for in the TIA. Adding future school traffic volumes would degrade the projected Turner Dr/Route 10 intersection function further. Adding a secondary public ingress/egress for school traffic to have additional access to Route 10 could help alleviate the traffic volumes and delay at the Turner Drive intersection *as currently proposed*, as well as allowing capacity for future growth needs in the corridor.
   - *At the initiation of the TIA the new school was proposed but it was our understanding that the school project at the time was not officially approved nor was it a funded project.*
   - *We acknowledge and understand that with the school related traffic it is the desire of the County and/or IOW Schools Public schools to pursue the implementation of secondary ingress/egress access point to the school site.*

6. Entrance 2/Turner Drive full access Intersection continues to be problematic in the analysis, with the TIA showing excessive queuing for certain periods in all scenarios. Considering both the volume of traffic and the character of traffic in the area (buses, teen drivers, etc.) the Transportation Division has significant concerns about both safety and functionality at this entrance.
   a. The "Do Not Block Intersection" Or Don't Block the Box scenarios are generally unenforceable unless the Sherriff's Office is actually on-site regularly to supervise traffic flow. This is an unrealistic option for the County.
      - *Adherence to the signage and the associated guidance to "not block the box" is not intended to be monitored at all times by County law enforcement resources. It is anticipated/proposed that County Law enforcement resources periodically observe the intersection during peak times and throughout the day to enforce the restriction and address violations as/when needed.*
      - *Depending on driver behavior, etiquette, and/or courtesies there may always be the potential that queued vehicles could block the intersection and impede vehicles from making a left-turn movement from southbound Turner Drive into the site.*

   b. In this location, if "the Box" *is* blocked, queuing/gridlock would mean you could not get to the location to provide enforcement until the infraction was resolved.
      - *This proposed striping of "Do Not Block the Box" will reduce the likelihood of drivers blocking the driveway to the proposed Wawa development. Alternative measures, including camera-ticket-enforcement, can be considered in conjunction with the proposed striping.*

   c. Currently, the most effective scenarios (outside of Virginia) seem to include the use of camera-ticket-enforcement.
      - *"Do Not Block the Box" would be the recommended measure, however, if installing camera-ticket-enforcement is feasible, this could be a more effective solution to mitigate this issue. This would be considered with the*

understanding that once installed, it would be the responsibility of the County to maintain.

d. These challenges only become more pronounced if you give consideration to any future development on the north side of Turner Drive which may want to use the existing road network.
   - *Acknowledge.*

e. An alternative intersection design, such as a single lane roundabout, may function as a safter and more efficient solution in this location, while allowing more capacity for future growth. It would need to be analyzed within the TIA.
   - *Consideration is being given to an alternative intersection/traffic control (e.g., a roundabout) concept at this intersection location to mitigate operational and/or safety concerns. The acquisition of right-of-way (ROW) from properties along both sides of the roadway (i.e., Turner Drive) will be critical to the ability to implement any alternative intersection concepts under consideration.*

7. Based on the submission, I am not clear if the pedestrian accommodations provided meet the requirements and expectations of the County's Bike and Pedestrian plan, or provide for cost sharing of future pedestrian improvements at the key intersection locations as adjacent improvements come online. It would be helpful for the project team to explain how they see this parcel contributing to the future multi-modal needs developing between the school campus, their parcel, the shopping center, and the residential communities further down Rt 10.
   a. Are their facilities 5' sidewalks, or 10' multi-use trails?
      - *The Wawa development is planning to design and install 5' paved sidewalk along both street frontages of the site on Benns Church Boulevard and Turner Drive. The development would consider the cost sharing option with the County to help implement the County's Bike and Pedestrian Plan and include 10' multi-use trails on both street frontages of the site.*

   b. Are their facilities providing functional connection to the adjacent school, or only extended to the property line?
      - *Assuming this is referring to a pedestrian connection, it seems unnecessary for a private development to have a private pedestrian connection to a public school. The sidewalk or multi-use trail on Turner Drive should meet the intention of public pedestrian connection.*

   c. Are they providing driveway crosswalks and functional pedestrian access from the perimeter infrastructure to the store at the center of the parcel for non-vehicular, non-fuel customers?
      - *Designated crosswalks will be provided to the pedestrian from public sidewalk to the store.*

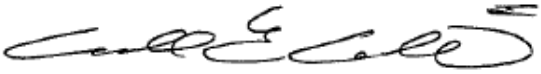
d. As a major intersection anchor, are they providing a plan or proposal for future "fair share" contributions to pedestrian accommodations at the Turner Dr/Route 10 intersection?

- *The developer will need to understand the details of "fair share" contributions before being able to provide a response.*

Please contact me at (757) 213-8616 or carroll.collins@kimley-horn.com should you have any questions or need additional information.

Sincerely,

KIMLEY-HORN AND ASSOCIATES



Carroll E. Collins, AICP
Project Manager

Cc: James Leach, Frontier Companies
Jeremy Yee, P.E., Kimley-Horn and Associates

RESOLUTION NUMBER PC-22-10

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS RELATING TO CONDITIONAL USE PERMIT REQUEST CUP-8-21 TO ALLOW A CONVENIENCE STORE AND GASOLINE STATION ON 5.69 ACRES ON PROPERTY WITH TAX MAP PARCEL 32-01-007

WHEREAS, Remus Brustur of Frontier Development, applicant, and the William G. Yeoman, III, Trust, property owner, have requested issuance of a conditional use permit for a portion of a certain tract of land with tax parcel number 32-01-007 situated in Isle of Wight County; and

WHEREAS, the specific request is to permit a convenience store and gasoline station in accordance with sections 1-1017 of the Zoning Ordinance; and

WHEREAS the procedural requirements for the consideration of this request by the Planning Commission have been met.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

_____ A. The Isle of Wight County Planning Commission finds that the proposed conditional use permit is reasonable and warranted due to a change in circumstances affecting the property and has considered the following factors and finds that the proposed conditional use permit does not conflict with:

1. the existing use and character of property within the County;

2. the Comprehensive Plan;

3. the suitability of the property for various uses;

4. the trends of growth or change;

5. the current or future requirements of the community as to land for various purposes as determined by population and economic studies and other studies;

6. the transportation requirements of the community;

7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;

8. the conservation of natural resources;

9. the preservation of floodplains;

10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values; and

12. the encouragement of the most appropriate use of land throughout the County.

_____ B. The Isle of Wight County Planning Commission does not find that the proposed conditional use permit is reasonable based on the consideration of the factors listed herein.

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, CUP-05-22, be:

___ a. Granted as submitted, and that the Board of Supervisors adopt the proposed Ordinance without modification.

___b. Denied, and that Board of Supervisors not adopt the proposed Ordinance.

___c. Granted with the modifications set forth on the attached listing of specific recommendations, and that the Board of Supervisors adopt the proposed Ordinance with such modifications.

DATE: _____

READ AND PASSED: _____
Chairman, Isle of Wight County Planning Commission

TESTE: _____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

PLANNING REPORT

APPLICATION:

Application of Gerald W. Peade, property owner, for an amendment to conditional zoning (ZA-2-22) to add motor vehicle repair service (major) and garden center uses to conditional zoning uses on a 1.25-acre parcel, located at 12728 Courthouse Highway on property with tax map number 21-01-026C. The property is zoned Conditional - General Commercial (C-GC) and no change in zoning classification is proposed.

ELECTION DISTRICT:

D3 (formerly Hardy)

LOCATION:

The subject property is a developed parcel located on the west side of Route 258 at 12728 Courthouse Highway and is just south of the Town of Smithfield. It the site of the former Smithfield Glass & Mirror and Action Tire & Brake businesses. The adjacent parcels 21-01-026 and 21-01-026C1 to the north are west are zoned Rural Agricultural Conservation (RAC) and are undeveloped. The adjacent parcel 21-01-026B to the south, located across a 30' private lane, is zoned General Commercial (GC) and is developed with a medical office use (Smithfield Dental), as are parcels 21-01-044B and 21-01-044A immediately across Courthouse Highway, with the former being undeveloped and the latter developed with a funeral home. Courthouse Highway is located in the Route 258 Highway Corridor Overlay District (HCOD).

BACKGROUND:

The subject property was rezoned from A-2, Agricultural General Commercial to Conditional B-1, Conditional Business General on February 4, 1988, specifically to allow for the operation of the Smithfield Glass and Mirror Shop. The business provided minor motor vehicle repair services. There is a vacant, masonry and metal commercial building, which contains an office and vehicle service bays, a gravel parking area, and a freestanding sign located on the property.

The property is served by an onsite domestic water supply well and sewage disposal system with a gravity drainfield. The sewage system was permitted by the Health Department in 1988 and construction approved with an Operation Permit

issued in 1989. The original operation involved a commercial business, whose source of wastewater was typical office sewage. There were no industrial operations that generated wastewater, no food service, or unusual volume of wastewater.

DESCRIPTION:

The applicant would like to lease the property to a prospective tenant for general commercial uses, including both major and minor vehicle repair services and garden center uses for retail-only mulch and topsoil sales, and has applied for this amendment to conditional zoning to allow for these additional uses. The applicant has voluntarily proffered these uses as conditions of use of the property, in addition to continuing the prior approved minor motor vehicle repair services use of the property. The prospective tenant would operate both the motor vehicle repair business and the garden center using the existing building. While no overnight or outside vehicle storage is proposed at this time, should there be a need for such in the future, any vehicle storage area would be fully screened in accordance with the Zoning Ordinance. A new enclosed bulk mulch and topsoil sales storage area would be constructed behind the existing building and screened from the public right-of-way in accordance with the Highway Corridor Overlay District regulations. No additional public service needs are anticipated for the proposed uses.

COMPREHENSIVE LAND USE PLAN:

The subject property is designated as Rural Agricultural Conservation (RAC) on the Future Recommended Land Use Map in the County Comprehensive Plan. The RAC land use is meant for very limited development and, therefore, is located almost exclusively outside of the Development Service Districts (DSDs). These areas should remain largely in agriculture and forest uses. Non-farm uses, such as agricultural and forest product processing and distribution, resource extraction, and uses reliant on large areas of land such as solar farms and agritourism activities, may also be appropriate when sited correctly. Scattered or small clusters of residential uses are typical, but should be oriented to avoid stripping out the road frontage.

The property was developed as a commercial use following rezoning approval in 1988 to Conditional B-1, Conditional - Business General (now referred to a C-GC, Conditional – General Commercial). It is part of a cluster of small businesses located along this section of Courthouse Highway. While the C-GC zoning of the property is not generally consistent with the RAC land use, motor vehicle repair

service (major and minor) and garden center uses are by-right uses in the GC zoning district with supplementary use regulations and, therefore, could be considered generally compatible with rural agricultural uses. The proposed use will minimally alter the site/building layout and will have minimal impact on the property or neighboring properties with regard to traffic, noise, and impacts to the existing character of the surrounding area.

ORDINANCE REVIEW:

Section 4-1005 of the Zoning Ordinance states that major motor vehicle repair service and garden center uses are permitted by right in the General Commercial zoning district, subject to the supplementary use regulations for these specific commercial uses found in Sections 5-5005Z and 5-5005O, respectively, of the Zoning Ordinance.

The subject property is located is the Chesapeake Bay Preservation Area's Resource Management Area (RMA).

The subject property is located in the Route 258 Highway Corridor Overlay District (HCOD).

The County's GIS information shows this property as having moderate probability for archaeological resources based on the County's 2005 Archaeological Assessment. Consultation with historic resources staff revealed no further concern with this site.

AGENCY REVIEW:

Staff distributed the application to the following departments for review and comment:

1. Economic Development - Supports the application, allowing for a new or existing business or business to occupy a vacant commercial building on a major roadway, and helps to create or retain jobs in the community. With the proposed additional uses being automotive repair and mulch sales, is there a plan to have a visual barrier from any outside storage (vehicles, mulch piles, etc.)? This would help to protect the visual aesthetic of the highway for other businesses and residents.
2. Utilities/Stormwater - Utilities: No comment, no public water or sanitary sewer present onsite. Stormwater: Approved as submitted; all stormwater management requirements will be addressed at applicant's Site Plan submittal.

3. Public Works/Transportation - Based on the information received, the applicant is not proposing to expand the building on the site. With only 4,500 square feet of use, even with both uses at 100% simultaneously, no turn lane warrants are met for ingress/egress. A review of historical data for vehicle crashes at this site reveals none; however, there have been three (3) at the nearby DOG Daycare entrance just north of this site on US Route 258. An unaddressed issue is onsite internal circulation. With the previous site design, glass repair services were done on vehicles that were fully operational. How vehicles are brought to the site for repair under the new use proposed may change. With bulk much and topsoil sales, storage areas are needed with loading and vehicle parking and turn-around areas. This will likely also mean an increase in vehicle trailers and commercial-sized vehicles; therefore, internal stacking at the ingress/egress points needs to be considered and designed for onsite as part of the internal circulation plan. A Concept Plan is needed to ensure that there is a plan for managing onsite circulation without causing unanticipated off-site congestion along US Route 258.
4. Emergency Services - No comments, concerns, or questions at this time. 5. Planning & Zoning/Environmental - The subject property is located in the Chesapeake Bay Preservation Area's Resource Management Area (RMA). If the property is rezoned and proceeds with development/redevelopment with the proposed use(s), please be advised that all new development and redevelopment within RMAs that exceeds two thousand five hundred square feet of land disturbance shall be subject to a Plan of Development review, including approval of a site plan in accordance with the provisions of Section 5000 of the County's Zoning Ordinance. However, at this time, no other environmental comments are warranted.
6. County Attorney - No comment.
7. Health Department (2nd review) - Based on the information provided the existing septic system is adequate for the proposed use.
8. Virginia Department of Transportation - There appear to be no additional impacts to the State maintained right of way with this amendment to zoning.

STAFF CONCLUSIONS:

Strengths:

The application enables reuse of an existing vacant commercial building and site with new commercial uses limited only to those listed in the conditions voluntarily proffered.

Weaknesses:

Since this site was previously developed, reuse and development of the property for the proposed conditional uses will necessitate compliance with current regulations.

STAFF RECOMMENDATION:

Staff recommends approval of this amendment to existing conditional zoning with the proffered conditions.

ATTACHMENTS:

Description	Type	Upload Date
Gerald W. Peade Zoning Amendment Application	Backup Material	6/21/2022
Prior Zoning Action Card	Backup Material	6/21/2022
Proffer Statement	Cover Memo	6/22/2022
Concept Plan - Property Survey	Backup Material	6/21/2022
Concept Plan & Traffic Flow	Backup Material	6/21/2022
Studies - Traffic	Backup Material	6/21/2022
Studies - On-Site Water & Sewer	Backup Material	6/21/2022
Location Map	Backup Material	6/22/2022
Land Use Map	Backup Material	6/22/2022
Zoning Map	Backup Material	6/21/2022
PC Resolution	Cover Memo	6/22/2022

ISLE OF WIGHT
COUNTY, VIRGINIA
DEPARTMENT OF PLANNING AND ZONING

APPLICATION FOR REZONING/CONDITIONAL ZONING AMENDMENT

This application should be used to petition for a change to the Official Zoning Map or for an amendment of zoning conditions. The following application requirements are consistent with the procedures set forth in Section 1-1015, *Amendments*, of the Isle of Wight County Zoning Ordinance, as amended.

[ ] Rezoning

[ ] Conditional Rezoning (Are voluntary proffered conditions attached?):_____Yes _____ No

Request to change the subject property(s) from the_____ to the_____zoning district.

Proposed Use or Activity: _____

_____

[X] Amendment to Conditional Zoning

Request to change conditional zoning as follows (Attach current and proposed conditions): _____

Add approved uses: motor vehicle service, major Landscaping mulch sales & TOP SOIL SALES

B. PROJECT DESCRIPTION:

Project Name: _____

Property Address (if any): 12728 Courthouse Highway

Election District: Hardy

Comprehensive Plan Designation: RAC

The rezoning will apply to 1.25 acres out of 1.25 total acres

Tax Parcel Identification # 21-01-026C Number of Acres to be Rezoned: 1.25

Requesting Zoning District Change from: C-GC to C-GC

Tax Parcel Identification #_____Number of Acres to be Rezoned: _____

Requesting Zoning District Change from:_____to _____

Tax Parcel Identification #_____Number of Acres to be Rezoned: _____

Requesting Zoning District Change from:_____to _____

Proposed Utilities (check all that apply): Public Water_____Private Well X

Public Sewer_____Private Septic X

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Gerald W. Peade

Address: 4733 Courthouse Rd.

City, State, Zip Code: Prince George, VA 23875

Phone No.: 757-897-6291 Email: gpeade@icloud.com Fax No.:

Property Owner(s) Name(s): Gerald W. Peade

Address: 4733 Courthouse Rd.

City, State, Zip Code: Prince George, VA 23875

Phone No.: 757-897-6291 Email: gpeade@icloud.com Fax No.:

Gerald W. Peade 4/6/2022

Applicant Signature **Date**

Owner Signature *if different* **Date**

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: 4/12/2022 * Fees Paid: ✓

Tax Query: [ ] Current [ ] Delinquent Distribution Date: 4/12/2022

Posted/Date to Post:

AGENCIES REFERRALS:

___ Department of Conservation & Recreation	___ Inspections
✓ Economic Development	___ Sheriff's Office
✓ Emergency Services	___ Town of Smithfield
___ General Services	___ Town of Windsor
✓ Environmental Planner	✓ VDOT
✓ Health Department	___ Schools
✓ Transportation Manager	___ Budget & Finance
___ Commission of Revenue	✓ County Attorney
✓ Other IOW Museum	

Verified By: Jeffrey Phillips, AICP Date: 4/12/2022

* completed Disclosure form needed, already signed
* Voluntary Proffer Statement to be drafted and signed once review complete
* all outstanding items received on 6/10/2022

COUNTY OF ISLE OF WIGHT
DISCLOSURE OF REAL ESTATE HOLDINGS

Applicant Gerald W. Reade

Address 4733 Courthouse Rd.
Street

Prince George VA 23875
City State Zip

REAL ESTATE HOLDINGS TO BE AFFECTED

Location or Address	Description
12728 Courthouse Hwy	MP 21-01-026C

OTHER OWNERS OF AFFECTED REAL ESTATE

(Not Required for Corporation whose stock is traded on a national or local stock exchange or having more than 500 shareholders.)

Name of Individuals Corporation/Partnership Business Association	Address

Does any member of the Isle of Wight County Planning Commission or governing body have any interest in such property, either individually, by ownership of stock in a corporation owning such land, partnership, as the beneficiary of a trust, or the settlor of a revocable trust, or whether a member of the immediate household of any member of the Planning Commission or governing body has any such interest? Y Yes (Y No)

If yes, names of members:

I do solemnly swear that the foregoing statement(s) and attachments(s), if any, are complete, correct, and true.

Applicant: Gerald W. Reade (Printed or Typed Name) Applicant: Gerald W. Reade (Signature) Date: 04/06/2022

Commonwealth of Virginia
County of Isle of Wight

Subscribed and sworn to before me Diane M. Stevenson (DS) April 6th 2022 Gerald W. Reade
A Notary Public in and for the County of Isle of Wight, Commonwealth of Virginia, this 6th day of April, 2022.

Diane M. Stevenson (DS)
Notary Public

My Commission Expires 05/31/2025

DIANE M STEVENSON
NOTARY PUBLIC
COMMONWEALTH OF VIRGINIA
MY COMMISSION EXPIRES MAY 31, 2025
COMMISSION # 7295290

REZONING/CONDITIONAL ZONING AMENDMENT APPLICATION CHECKLIST

****Both checklist and application required upon submission to central permitting or application will not be accepted****

In conjunction with Section 1-1015, *Amendments*, of the Isle of Wight County Zoning Ordinance, as amended, the following information shall be submitted for a Rezoning/Conditional Zoning Amendment Application. Please note that it is the applicant's responsibility to ensure that the application is in compliance with all Federal, State and County regulations.

No application for a rezoning shall be certified as complete unless the following information is provided. The required number of copies may be reduced with permission of the Zoning Administrator.

- ☐ Application: Ten (10) copies of the original, executed application, one (1) digital copy of all application documents, and one (1) original executed application. Both the applicant(s) and the property owner(s) must have their signature(s) notarized on page 3 of the application.

- ☐ Fees. Application fee must be submitted with the application. Checks should be made payable to: Treasurer, Isle of Wight County.

- ☐ Statement of the reasons for seeking such amendment, and if applicable, a statement of proffered conditions with owner(s) original, notarized signature. Ten (10) copies required.

- ☐ Narrative description. Description of current condition and use of the property, to include the Tax Parcel Identification Number. Ten (10) copies required.

- ☐ Concept plan. Ten (10) of plan DRAWN TO SCALE showing the following items:
  - A vicinity map at a scale of no less than one (1) inch equals two thousand (2,000) feet
  - Title of drawing
  - Date of drawing
  - Existing wood line
  - North arrow
  - Scale bar
  - Current zoning of parcel(s) to be rezoned, including tax map number(s) and owner(s)
  - Current zoning of adjacent parcel(s), including tax map number(s) and owner(s)
  - Street names including route number and width(s) of the right-of-way(s)

- N/A Supplemental material. Ten (10) copies of any additional information required for the proposed use in accordance with Section 5-5000, *Supplementary Use Regulations,* of the Zoning Ordinance.

- ☐ Community Impact Statement. Required for residential subdivisions of five (5) or more lots, planned development, commercial, industrial, or miscellaneous rezoning/conditional zoning amendment applications. Please refer to Section 1-1015.F for detailed requirements of the Community Impact Statement. Ten (10) copies required.

N/A Water Quality Impact Assessment. Ten copies for any rezoning in the Chesapeake Bay Preservation Area prepared in accordance with Appendix B-1 of the County Code for applications containing any of the following:

- will disturb any portion of the 100-foot buffer area of a Resource Protection Area (RPA), or any component identified in Section 3000.B.1 of the Chesapeake Bay Preservation Area Ordinance;
- contains ten (10) acres or more for any use, other than a development of single family detached residential lots;
- contains twenty-five (25) acres or more for the development of single family detached residential lots; or,
- any other development that may warrant such assessment due to the unique characteristics of the site or intensity of the proposed use or development, as may be required by the Zoning Administrator.

N/A Planned Development supplemental information. Ten (10) copies shall be submitted in accordance with Section 4-14005, *Submission Requirements,* of the Zoning Ordinance.

☐ All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter.

☑ Voluntary Proffer Statement if applicable

N/A Waiver and Release of Claims if cash proffer is proposed

I, the undersigned, certify that this application is complete, accurate and contains all required and requested information, documents and other submittals, and that all statements made herein are, to the best of my knowledge, true and correct. I further certify that I have exercised due diligence to obtain the most recent, complete and correct information available. I understand that any section not completed in its entirety may delay processing of this application and the date of the Planning Commission public hearing and that the submittal of a complete application does not guarantee the application will be placed on the next available Planning Commission agenda.

Signature

June 9, 2022

re: Rezoning of property located at12278 Courthouse Highway (former Smithfield Glass location)

I am requesting a change in conditional zoning to include a full service automotive repair shop as well as a bulk mulch sales area. While this is two different uses the perspective tenant will operate both business with the same employees and the same office. There would not be employee vehicular or person traffic for multiple businesses. Much like I did previously when I operated Smithfield Glass and Action Tire & Brake simultaneously in this location.

I am requesting a rezoning to allow for the following uses:
Services to include:
Air Conditioning maintenance and repairs
Brake maintenance and repairs
Battery testing and replacement
Vehicle diagnostics
Complete Engine and Transmission changes and/or rebuilds
Oil changes
Tire repair and sales
State inspections for vehicles and trailers

I would also like an additional conditional rezoning to allow for retail (only) sales of bulk mulch/topsoil. The storage area for these bulk products would be located behind the existing building. This storage area, as well as entrance and egress to this area for loading and unloading would be contained within the property boundaries of said property.

Sincerely,
Gerald W. Peade
Property owner
757-897-6291

ZA-63-87

~~pt.~~ 21 (1) 26

Quincy B. Gilliam, Jr., owner
Cecil B. Peade, prospective owner
901 Main Street
Post Office Box 1034
Smithfield, Virginia 23430

Approved: February 4, 1988 Route 258

Change in zoning classification from A-2, Agricultural General to Conditional B-1, Conditional Business General, 1.15 acres of land located on the west side of Route 258, between Route 620 and Route 709, in Hardy Magisterial District. The purpose of the application is for Smithfield Glass and Mirror Shop.

COUNTY OF ISLE OF WIGHT
VOLUNTARY PROFFER STATEMENT

Applicant's Name(s): Gerald W. Peade

Owner's Name(s): Gerald W. Peade

Project Name: Application for Conditional Zoning Amendment for 1.25 acres of property located at 12728 Courthouse Highway

Date: June 10, 2022

Parcel-Tax Map Number(s) and Deed Book Reference: 21-01-026C; D.B. 341, Pg. 808, D.B. 263, Pg. 197

These proffers are made as of the 10th day of June, 2022, by Gerald W. Peade ("Owner") for Tax Map Number 21-02-026C, containing approximately 1.25 acres of land, which is referred to herein as the "Property." Owner has filed an application for Conditional Zoning Amendment with the Isle of Wight County Planning and Zoning Department requesting an amendment to conditional zoning, C-GC (Conditional – General Commercial) to allow additional uses on the property, but not a change in existing zoning classification; it is proposed to remain C-GC. Owner voluntarily proffers that the development of the Property proposed for amendment to conditional zoning shall be in strict accordance with the conditions set forth below.

These proffered conditions ("Proffers") are the only conditions offered on this amendment to conditional zoning and any prior proffered conditions on the Property are hereby superseded by these proffers.

All improvements, land, easements, dedications, gifts, proffers, and other conveyances to the County shall be in fee simple, without cloud of title or encumbrance of any kind.

I. Development of the Property

Development of the Property associated with this amendment to conditional zoning shall be generally consistent as determined by the reviewing authority with the "Concept Plan" and narrative description prepared by the applicant/Owner and submitted with the application, as determined during preliminary and final site plan approval.

II. Land Use

1. The Property shall be used as permitted under the C-GC, Conditional – General Conditional zoning district and more specifically for the following uses:

    a. Motor vehicle service and repair/minor (as per prior Conditional Rezoning approval ZA-63-87, February 4, 1988)

b. Motor vehicle service and repair/major
c. Garden center (bulk mulch and topsoil retail-only sales)

2. The following uses shall be expressly prohibited on the Property:

a. Any other than listed in II.1. above.

III. Water and Sewer Improvements

The parcel shall be served by private well and septic system. Owner will provide documentation showing an approved permit from the Isle of Wight County Health Department for private well and septic system design for these uses prior to Final Site Plan approval.

IV. General

1. Successors and Assigns – This Proffer Agreement shall be binding upon and shall inure to the benefit of the parties hereto, and their respective heirs, successors and/or assigns. Any obligation(s) of Owner hereunder shall be binding upon and enforceable against any subsequent owner or owners of the Property or any portion thereof.

2. Severability – In the event of any clause, sentence, paragraph, subparagraph, section or subsection of these Proffers shall be judged by any court of competent jurisdiction to be invalid or unenforceable for any reason, including a declaration that it is contrary to the Constitution of the Commonwealth of Virginia or of the United States, or if the application thereof to any owner of any portion of the Property or to any government agency is held invalid, such judgment or holding shall be confined in is operation to the clause, sentence, paragraph, subparagraph, section or subsection hereof, or the specific application thereof directly involved in the controversy in which the judgment or holding shall have been rendered or made, and shall not in any way affect the validity of any other clause, sentence, paragraph, subparagraph, section or provision hereof.

3. Void if Application is not approved – In the event that the Application is not approved by the County, these Proffers shall be null and void.

SIGNATURE PAGE

Applicant: Gerald W. Peaple
Printed or Typed Name
Applicant: Gerald W. Peaple Date: 6/10/22
Signature

Commonwealth of VirginiaCounty of
Isle of Wight

Subscribed and sworn to before me Sandra Walker Robinson,
A Notary Public in and for the County of Isle of Wight, Commonwealthof
Virginia, this 10 day of June, 2022.

Sandra Walker Robinson
Notary Public
My Commission Expires 08/31/2024

SANDRA W. ROBINSON NOTARY REG # 150490 PUBLIC COMMONWEALTH OF VIRGINIA

Owner: Gerald W. Peaple
Printed or Typed Name
Owner: Gerald W. Peaple Date: 6/10/22
Signature

Commonwealth of VirginiaCounty of
Isle of Wight

Subscribed and sworn to before me Sandra Walker Robinson,
A Notary Public in and for the County of Isle of Wight, Commonwealthof
Virginia, this 10 day of June, 2022.

Sandra Walker Robinson
Notary Public
My Commission Expires 08/31/2024

SANDRA W. ROBINSON NOTARY REG # 150490 PUBLIC COMMONWEALTH OF VIRGINIA

Owner: _____

Printed or Typed Name
Owner: _____ Date: _____
Signature

Commonwealth of VirginiaCounty of
Isle of Wight

Subscribed and sworn to before me _____,
A Notary Public in and for the County of Isle of Wight, Commonwealthof
Virginia, this _____ day of _____, 20____.

Notary Public
My Commission Expires _____

11"X17" 2-36-8

PLAT #734

NOTE: FOR ADDITIONAL ISLE OF WIGHT CO. NOTES SEE ATTACHED 734-A DATED 4-10-96

PROPERTY ADDRESS
12728 COURTHOUSE HWY.
SMITHFIELD VA. 23430

LEGEND
IPF: IRON FOUND
R: PROPERTY LINE
℄: CENTER LINE
R/W: RIGHT OF WAY
POL: POINT ON R/
•: UTILITY POLES

VICINITY MAP
SMITHFIELD
709
697
HOLLY CREEK
SITE
620
SCALE: 1" = 2 MILE

NOTE: THIS IS TO CERTIFY THAT ON 2-1-93 I SURVEYED THE PROPERTY SHOWN ON THIS PLAT AND THE TITLE LINES AND IMPROVEMENTS ARE SHOWN. THE IMPROVEMENTS STAND STRICTLY WITHIN THE TITLE LINES AND THERE ARE NO ENCROACHMENTS OR VISIBLE EASEMENTS EXCEPT AS SHOWN. J.R. Stanback III

NOTE: THE SUBJECT PROPERTY WAS REZONED TO CONDITIONAL RURAL RESIDENTIAL ON OCTOBER 19, 1995 BY THE ISLE OF WIGHT COUNTY BOARD OF SUPERVISORS.

THE PROPERTY SHOWN HEREON IS LOCATED IN FLOOD ZONE "X" PANEL # 510303-00358 EFFECTIVE AUG. 19, 1991
J.R. Stanback III

REV. 4-10-96
TO SHOW 50' ACCESS R/W AND UPDATES
PLAT # 734

SEAL
J. R. STANBACK III
No. 1337
LAND SURVEYOR

SURVEY SHOWING PARCEL "D" AND RESIDUE PARCEL "C"
PROPERTY OF CECIL B. READE
DB 344 PG. 808 TAX 21-1-26C
ISLE OF WIGHT COUNTY, VA.
HARDY MAGISTERIAL DISTRICT
SCALE: 1" = 100FT.
SURVEYED BY: EAST COAST SURVEYORS CLARKSVILLE VA. 23927
REV. 3/5/93
REV. 2/24/93
FEBRUARY 1, 1993

REV. 4-18-96
LETTER SIZE

R.D. EDWARDS
TAX 21-1-28A
D.B. 238 PG. 582

21-01-026C1
& Reade
WOODS

21-01-026
S. Garofalis

21-01-026A
J. McDowell

21-01-026C
& Reade

21-01-026B
12746 Courthouse Hwy. LLC,

PARCEL "D"
4.3437 AC.

PARCEL "C"
RESIDUE
1.1482 AC.

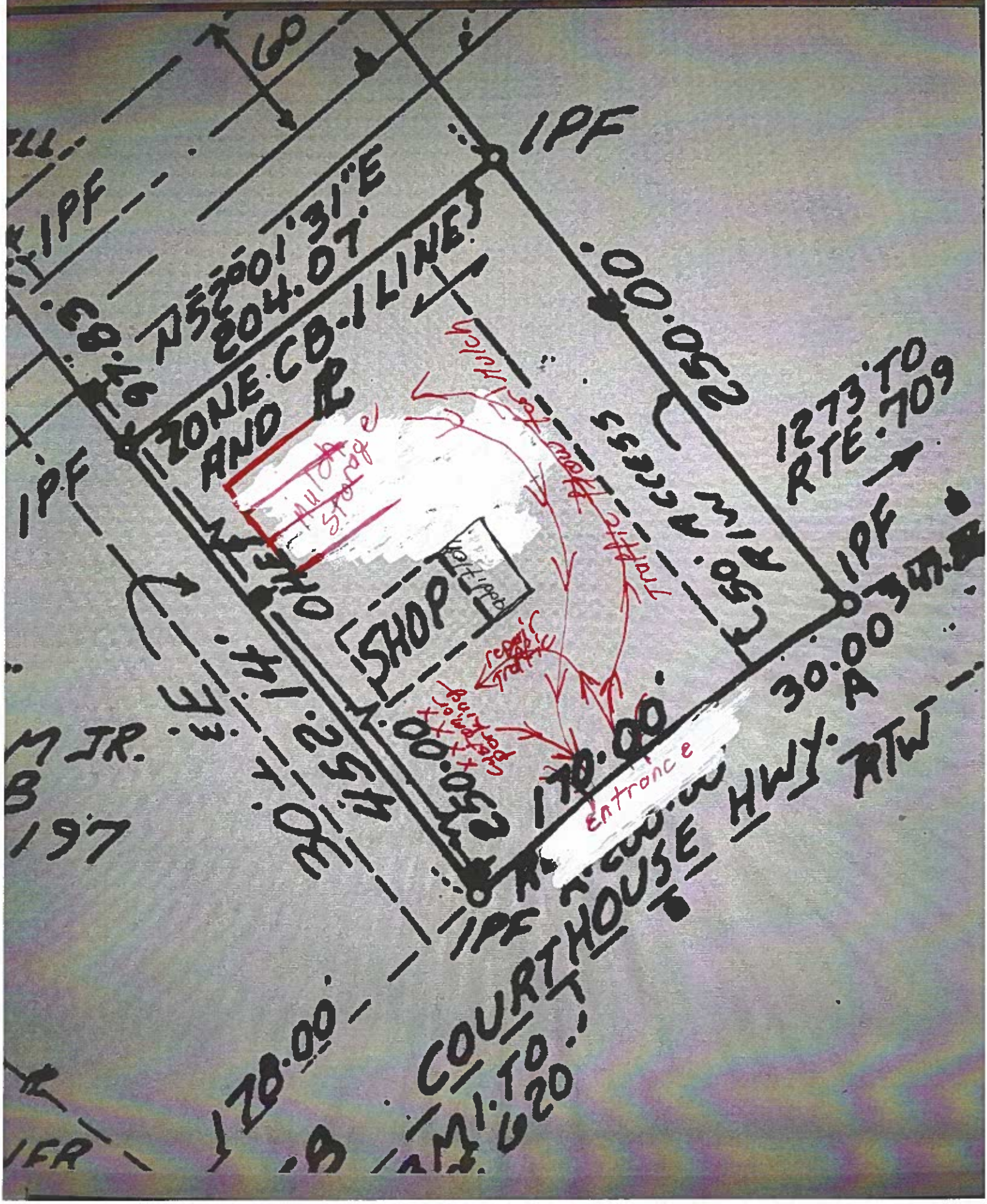
PARCEL "B"
Q.B. GILLIAM JR.
TAX 21-1-26B
D.B. 263 PG. 197

CLEAR
WOODS
SHOP
WELL
20" PINE POL
12" GUM
IPF
IPF POL
BUILDING LINE
50' VA. POWER ESMT.
VA. POWER
OHE
ZONE CB-1 AND R
ZONE CB-1 LINES
VA. RTE. 258 (50' R/W)
COURTHOUSE HWY. RTW
RTE. 709
R/W

REFERENCES
TAX 21-1-26C
D.B. 341 PG. 808
D.B. 263 PG. 197
P.B. 9 PG. 45
ECS PLAT # 698

2-36-8

CONCEPT PLAN



Assumptions:

- Used 4,500 sf (building)
- Assumed 4500 sf of **both** uses simultaneously, which will be an accepted **OVER** estimation
- Use 942 Automobile Care Center (ITE 9th ed)
  - AM Peak 2.83/1k sf 56%/44% enter/exit split
  - PM Peak 3.51/1k sf 49%/51% enter/exit split
- Use 817 Nursery Garden Center(ITE 7th ed)
  - AM Peak 4.41/1k sf 52%/48% enter/exit split
  - PM Peak 4.97/1k sf 51%/49% enter/exit split

- Total AM Peak Entering: 17.45 – 18
- Total PM Peak Entering: 19.15 – 20

- Rt. 258 Traffic Volume – 4900 vpd
- Directional Factor - .548
- Peak Hour Factor – 0.093

- Assumed 80/20 directional split from Smithfield/Windsor
- Resulted in AM Peak of 4 lefts, 14 rights
- Resulted in PM Peak of 4 lefts, 16 rights

TIA

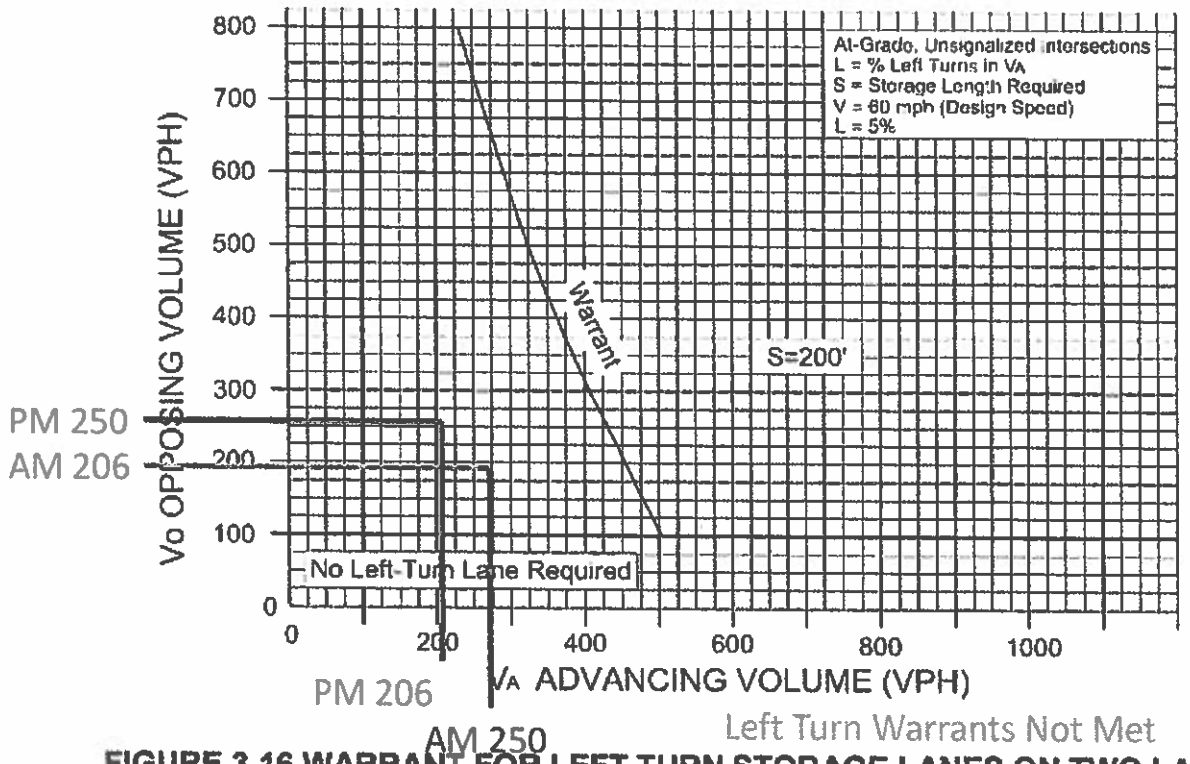


FIGURE 3-16 WARRANT FOR LEFT TURN STORAGE LANES ON TWO LANE HIGHWAY

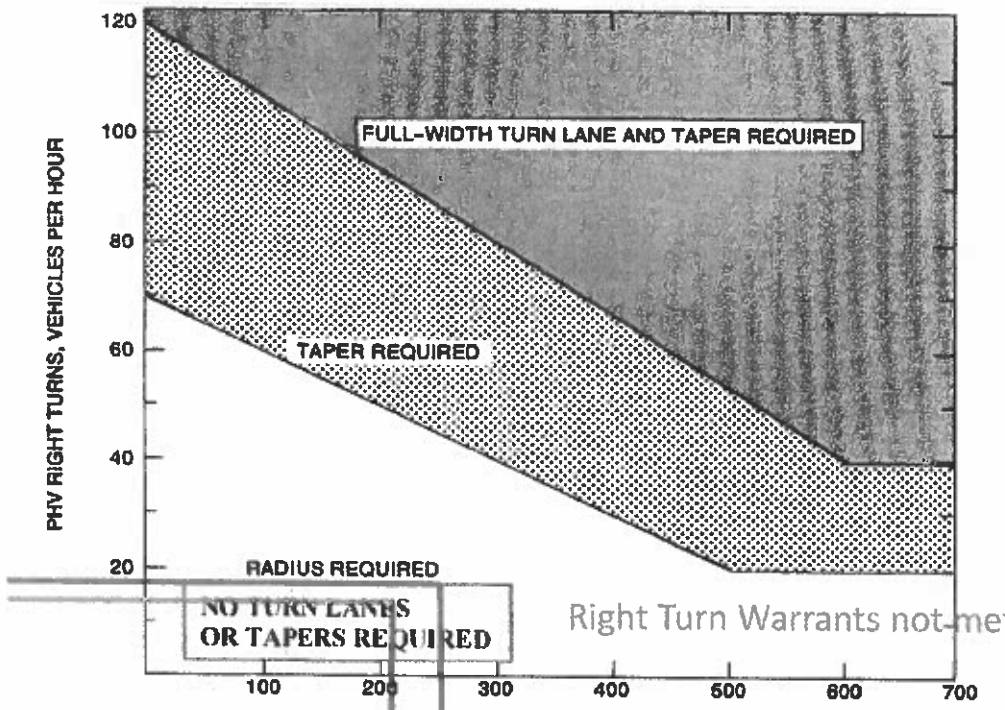


FIGURE 3-26 WARRANTS FOR RIGHT TURN TREATMENT (2-LANE HIGHWAY)

PM 16
AM 14

Right Turn Warrants not met

AM 206 PM 250

Conclusions:

1) Site can support both use as a full service automotive center and bulk mulch sales simultaneously with no turn lanes necessary.
2) Site as laid out does not support the installation of cross-parcel access. As an amendment to an already approved conditional zoning, the site should be grandfathered in without this requirement.

MSA, P.C.
5032 Rouse Drive, Suite 200
Virginia Beach, VA 23462-3764
757-490-9264 | www.msaonline.com

Environmental Sciences • Surveying • Civil & Environmental Engineering

May 19, 2022

Gerald Peade
4733 Courthouse Road
Prince George, Virginia 23875

RE: Smithfield Glass & Mirror
Tax Parcel 21 (1) 26; HD-ID 146-88-36
Sewage System Evaluation-Revised 5/17/22
MSA Project #22010

Dear Mr. Peade,

The subject property, located at 12728 Courthouse Highway, is served by an onsite domestic water supply well and sewage disposal system. The property is undergoing a change in zoning and that has prompted the Zoning Department to verify with the local Health Department that the sewage system would be adequate should the zoning be changed as requested and the property use be subsequently changed. We reviewed the current system design and permit and considered the proposed change in property use. A letter report (1/17/22) found that the system was suitable for the identified change in use. After review of the findings and recommendations, the County requested additional information regarding design sewage flows, hours of operation, number of employees and patrons, etc. This letter report is a revision of the original and intended to satisfy the County questions.

The sewage system was permitted by the Health Department in 1988 and construction approved with an Operation Permit issued in 1989. Based on the soil type and estimated 75-gpd water use, the system design called for 210-sf of drainfield trench bottom. The constructed system includes four 35-ft leach lines of 2-ft wide trenches (280-sf) on 6-ft centers and a 750-gallon septic tank. Therefore, the septic tank volume and disposal area are appropriate.

The original operation involved a commercial business (Smithfield Glass & Mirror) whose source of wastewater was typical office sewage. There were no industrial operations that generated wastewater, no food service, or unusual volume of wastewater such as a hair salon. As such, the conventional septic tank treatment and gravity drainfield disposal are appropriate.

The property is being re-zoned and is intended to be used for a new operation (automotive repair). Since the initial evaluation, it has been proposed to include a bulk mulch sales outlet. The proposed change in property use will not change the nature of sewage being generated or disposed of. No floor drains will be installed, no automobile washing, or other such industrial sources of wastewater produced. The facility will continue to dispose of typical office wastewater from restrooms at an estimated rate of 75-gpd. As such, the current treatment and disposal capacity of the existing system is appropriate for the new use.

Per the County request, additional information is presented below.

ORIGINAL OPERATION

Type of establishment generating wastewater:

Auto glass repair shop; private restrooms.

Design Wastewater Quality:

Domestic sewage, nothing industrial.

For simple, residential strength, wastewater systems such as these, the Health Department does not require formal calculations on wastewater quality. Instead, typical values are utilized. The following parameters are normal concentrations used in design and accepted by the Health Department for this type of wastewater and should have been expected for the original operation:

BOD = 150 mg/L
TSS = 150 mg/L
TN = 30 mg/L

Design Sewage Flows: Sewage system design was based on estimates of daily water use. The total flow below was based on anticipated water use. With the large septic tank, the system may be able to handle more flow, although it should at least be able to handle the original design rate.

Total flow = 75-gpd (per design and VDH Construction Permit)

NEW OPERATION

Type of establishment generating wastewater:

Auto repair shop; private restrooms.
Potential outdoor mulch sales operation.

Wastewater Quality:

Same as original operation. Domestic sewage, nothing industrial, private restroom:
BOD = 150 mg/L
TSS = 150 mg/L
TN = 30 mg/L

Sewage Flows: Sewage system design based on estimates of daily flow rate.

Hours of operation = 9-hrs/day
Number of users = 6 employees
Flow rate per person = 10-gpd/person
Public use = 0-gpd (private restrooms)
Total estimated flow: 6 persons x 10-gpd/person = 60-gpd

Restrooms are private, but in the event of personal emergency:
2-persons x 3-gal/person = 6-gpd + 60-gpd = 66-gpd

Based on these findings, the current sewage system has the capability and capacity to handle the proposed change in use and no modification or upgrades are necessary at this time. From the perspective of onsite wastewater disposal, we recommend that the zoning change request be approved.

A copy of system records provided by the Health Department is attached. This assessment report is also being provided to the Health Department for their review and comment to assist Zoning Department reviewers understand the content.

Please do not hesitate to contact me with any questions or clarification required on our review, findings, or recommendations.

Sincerely,

Doug Will, P.E.
President

Attachment: existing permit
Copy: Butler (VDH)
Phillips (IOW-Zoning)

Sewage Disposal System Construction Permit

PAGE 1 OF

Commonwealth of Virginia
Department of Health
Isle of Wight Health Department

Health Department Identification Number 146-88-36
Map Reference 21(1)26

General Information

New ☒ Repair ☐ Expanded ☐ Conditional ☐ FHA ☐ VA ☐ Case No. _____

Based on the application for a sewage disposal system construction permit filed in accordance with Section 3.13.01, a construction permit is hereby issued to: Smithfield Glass/Cecil B. Peade Telephone 357-6858

Owner _____

Address 901 Main St., Smithfield, VA 23430

For a Type II Sewage disposal system which is to be constructed on/at _____

Subdivision N/A Section/Block _____ Lot 26 (Part of)

Actual or estimated water use 75 GPD

DESIGN

Water supply, existing: (describe) _____

To be installed: class III
cased 20 min. grouted 20 min.

Building sewer:
3"-4" I.D. PVC 40, or equivalent.
Slope 1.25" per 10' (minimum).
☐ Other _____

Septic tank: Capacity 750 gals. (minimum).
☐ Other _____

Inlet-outlet structure:
PVC 40, 4" tees or equivalent.
☐ Other _____

Pump and pump station:
No ☐ Yes ☐ describe and show design.
If yes: N/A

Gravity mains: 3" or larger I.D., minimum 6" fall per 100', 1500 lb. crush strength or equivalent.
☐ Other _____

Distribution box:
Precast concrete with 4 ports.
☐ Other _____

Header lines:
Material: 4" I.D. 1500 lb. crush strength plastic or equivalent from distribution box to 2' into absorption trench. Slope 2" minimum.
☐ Other _____

Percolation lines:
Gravity 4" plastic 1000 lb. per foot bearing load or equivalent, slope 2" 4" (min. max.) per 100'.
☐ Other _____

Absorption trenches:
Square ft. required 210 : depth from ground surface to bottom of trench 20" ; aggregate size ½-1½" ;
Trench bottom slope 2" 4" /100 ; center to center spacing 6' ; trench width 2' ;
Depth of aggregate 12" ;
Trench length 35' ; Number of trenches 3

NOTE: INSPECTION RESULTS

Water supply location: Satisfactory yes ☐ no ☐ comments _____
G.W.2 Received: yes ☐ no ☐ not applicable ☒

Building sewer: yes ☒ no ☐ comments
Satisfactory
ABS Conn. to Septic Tank

Pretreatment unit: yes ☒ no ☐ comments
Satisfactory

Inlet-outlet structure: yes ☒ no ☒ comments
Satisfactory

Pump & pump station: yes ☐ no ☐ comments
Satisfactory N/A

Conveyance method: yes ☒ no ☐ comments
Satisfactory

Distribution box: yes ☒ no ☒ comments
Satisfactory

Header lines: yes ☒ no ☐ comments
Satisfactory

Percolation lines: yes ☒ no ☐ comments
Satisfactory

Absorption trenches: yes ☒ no ☐ comments
Satisfactory

Date 1-23-89 Inspected and approved
S. Lewis
Sanitarian

C.H.S. 202A Revised 6/84

Sewage Disposal System Operation Permit

Commonwealth of Virginia
Department of Health

Health Department
Identification No. 146-89-36
Isle of Wight Health Department

Tax Map No. 21(1)26

Smithfield Glass/Cecil B. Peade is Hereby Granted Pe

to Operate a (Type) II Sewage Disposal System Having a Design Capacity of 75

SUBDIVISION	SECTION/BLOCK	LOT
N/A	1	26 (part of)

This permit is issued in Accordance with the Provisions of 32.1, Chapter 6 of the Code of Virginia as Amended and Se
3.22 of the Sewage Handling and Disposal Regulations of the Virginia Department of Hea

with Previously Issued permits Construction Permit

Dated ~~xxxxxxx~~ 11/17/88

with the understanding that the Owner and/or any Subsequent Owner will operate the Sewage Disposal System in Acco
with the Sewage Handling and Disposal Regulations of the Virginia Department of Health and any Variances or Conditions G
Issuance of an Operating Permit does not imply or Guarantee that the Sewage Disposal System will Function for any S
Period of Time.

C.M.G. Buttery,

VARIANCES GRANTED
☑ NONE ☐ SEE ATTACHED

SPECIAL CONDITIONS
☑ NONE ☐ SEE ATTACHED

4-21-89
Effective Date

J. Duell
Recommended (Sanitarian)

Approved (State Health Commis

C.H.S. 205 Rev. 4/83

Soil Absorption System 450' (nearest point). Property Line 750' Other
Site graded where necessary to divert water away from well? Yes ☐ ☐ No n.a. ☐

3. Construction, General: (see Section 18.02 05, and 18.02 02)
Total depth of well 430 feet. Type of casing SDR 17 . Depth of casing 400 feet
of casing 4½ inches. Casing extends 12 inches above ground. Exterior space around casi
with neat cement grout to a depth of 20 feet. Screens constructed of STAINLESS STEEL
free of rough edges and irregularities, with positive watertight seal between screen and casing? ☑ yes
n.a. ☑ Well head and opening to the interior protected? yes ☑ no ☐ Type of well seal SANITARY
Pitless adapter used? yes ☐ no ☑ n.a. ☐ Properly installed? yes ☐ no ☐ n.a. ☑ Proper ven
yes ☑ no ☐ n.a. ☐

4. Quantity: Yield and drawdown determined by continuous pumping of 1 hours. Drawdown 10
Yield 45 GPM. Type of storage PRESSURE TANK

5. Quality: Sample tap provided at entry into system? yes ☑ no ☐ Sample(s) collected? yes ☑ no ☐
Results of samples. Satisfactory ☑ Unsatisfactory ☐ (attach copy of results to this form)

Based on the Inspection of this water supply system and the information contained on the water well completion re
attached, this water supply is approved. ☑
Remarks: ABOVE INFORMATION TAKEN FROM GW-2 FORM

Date 4-7-89 Signed J. Duell

Date 4-21-89 Signed Dallas H. Sadler Sanitarian

Date Signed Supervisory Sanitarian

O.H.S. 204 Rev. 4/83 Regional Sanitarian (If V.A. or F.H.A.)

...tion for a Sewage Disposal System Construc...

...ealth of Virginia
...ment of Health
Wight County Health Department
P. O. Box 309
402 Grace Street
Smithfield, Virginia 23430

For Department Use Only
Receipt #
11025762
Health Department

Health Department Identification Number
Map Reference
Date Received 11/16/88

To Be Completed By The Applicant

Type sewage system: ☐ New ☐ Repair ☐ Expanded ☐ Condition
FHA/VA yes ☐ no ☐

Owner Cecil B. Pearce Address 901 Main St. Smithfield Va. Phone 357

Agent _____ Address _____ Phone _____

Directions to Property RT. 258

Subdivision _____ Section _____ Block _____ Lot _____

Other Property Identification _____

Dimensions/size of Lot/Property 5½ acres

Other Application Information

I. **Building/facility**
Intermittent Use ☑ New ☐ Existing
☐ Yes ☐ No If yes, describe: Warehouse

II. **Residential Use**
Termite Treatment ☐ Yes ☒ No
☐ Yes ☒ No
Basement ☐ Single Family ☐ Multifamily Number of Units ___ Number of Bedroo
Fixtures in Basement ☐ Yes ☒ No
☐ Yes ☒ No

III. **Commercial Use** ☑ Yes ☐ No Describe: 3 employees

Commercial/Wastewater ☑ Yes ☐ No Number of Patrons ___ Number of Employees
If yes, give volumes and describe _____

IV. **Water Supply:** ☐ Public ☑ New Describe: Shallow well
☑ Private ☐ Existing

V. **Proposed Installation:** ☐ Septic tank and drainfield ☐ Other
If other, describe _____

SITE PLAN Attach a site plan (rough sketch) showing dimensions of property, proposed and/or existing structures and driveways, underground utilities, adjacent soil absorption systems, bodies of water, drainage ways, and well and springs within 200 feet radius of the center of the proposed building or drainfield. Distances may be paces or estimated.

The property lines and building location are clearly marked and the property is sufficiently visible to see the topography. I give permission to the Department to enter onto the property described for the purpose of processing this application.

Cecil B. Pearce 11-16-88
Signature of owner/agent Date

C.H.S. 220 Revised 4/88

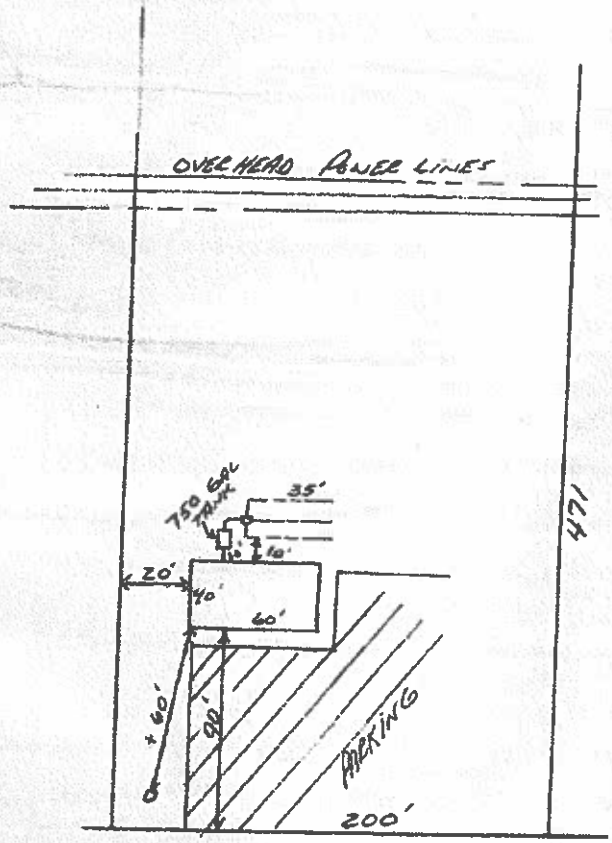
Health Department
Identification Number 146-88-76

Schematic drawing of sewage disposal system and topographic features.

PAGE 2 OF

Show the lot lines of the building lot and building site, sketch of property showing any topographic features which may impact on the desig the system, all existing and/or proposed structures including sewage disposal systems and wells within 100 feet of sewage disposal system reserve area. The schematic drawing of the sewage disposal system shall show sewer lines, pretreatment unit, pump station, conveyance and subsurface soil absorption system, reserve area, etc. When a nonpublic drinking water supply is to be located on the same lot show of pollution within 100 feet.

☑ The information required above has been drawn on the attached copy of the sketch submitted with the applicati
ch additional sheets as necessary to illustrate the design.



ALL UTILITIES (ELECTRICAL, TELEPHONE, WATERLINES) TO BE LOCATED A MIN OF 10 FT. FROM SEPTIC TANK AND DRAINFIELD.

1-750 GAL TANK

TOP OF TANK TO BE SEVERAL INCHES ABOVE GROUND SURFACE

PROVIDE FOR 20" TRENCH DEPTH

3-35 FT. LINES, 2FT. WIDE

BOTTOM OF TRENCHES TO BE 20" BELOW GROUND SURFACE

CLASS III WELL TO BE 100 FT. FROM SEPTIC TANK AND DRAINFIELD.

WELL DRILLER TO SUBMIT CHEMICAL ANALYSIS

A SATISFACTORY WATER SAMPLE MUST BE OBTAINED

SINCE BUILDING TO BE ON SLAB, FOUNDATION TO BE RAISED UP SEVERAL INCHES.

The sewage disposal system is to be constructed as specified by the permit ☑ or attached plans and specifications ☐

This sewage disposal system construction permit is null and void if (a) conditions are changed from those shown on the application (b) conditions are changed from those shown on the construction permit.

No part of any installation shall be covered or used until inspected, corrections made if necessary, and approved, by the local health department or unless expressly authorized by the local health dept. Any part of any installation which has been covered prior to approval shall be uncovered, if necessary, upon the direction of the Department.

Date: 11-17-88 Issued by: Larry C. Griffin
Sanitarian

Date: 11-23-88 Reviewed by: Jay Durell
Supervisory Sanitarian

This Construction Permit Valid until 5-17-89

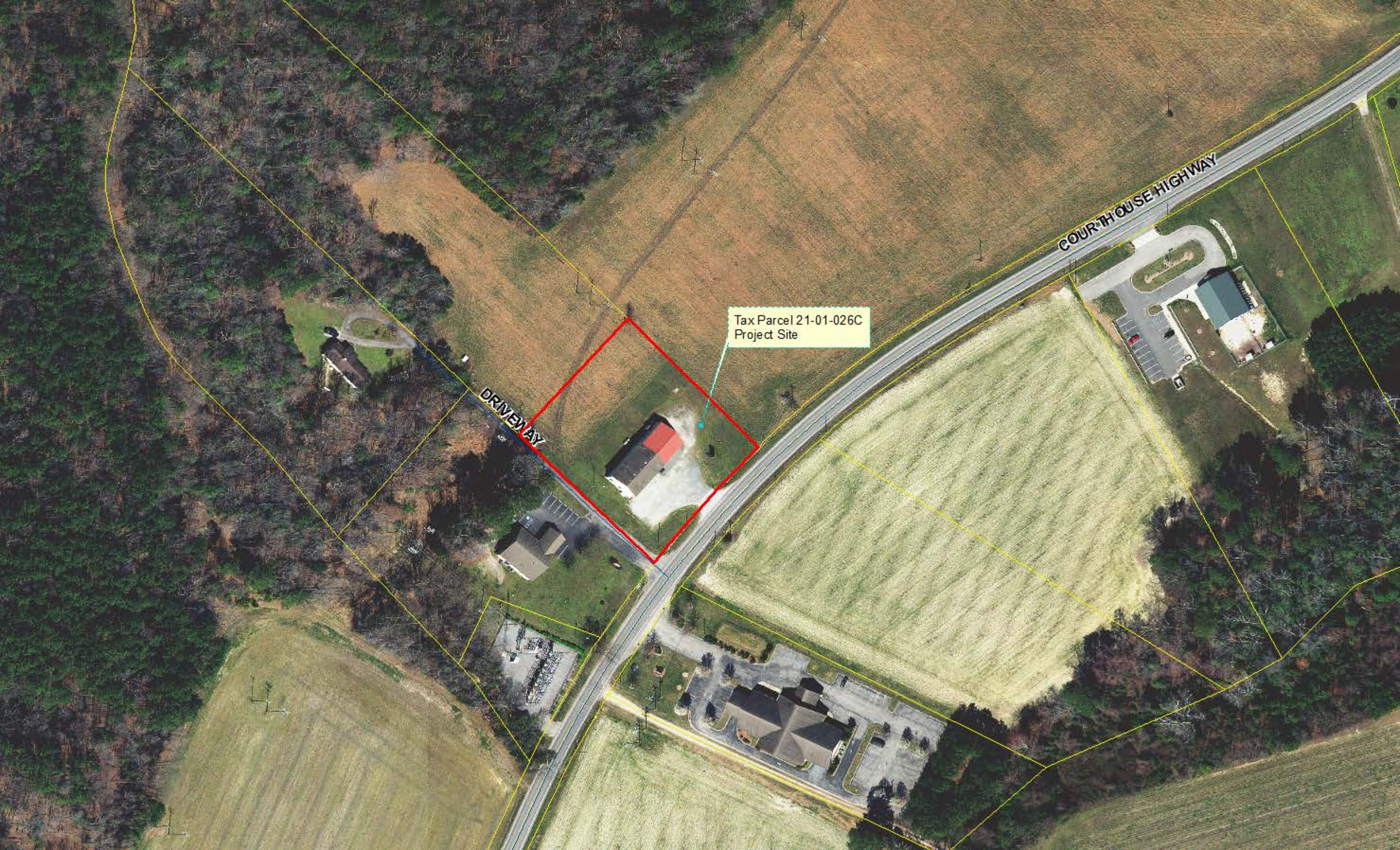
If FHA or VA financing

Reviewed by Date _____ _____ Date _____
Supervisory Sanitarian

C.H.S. 2028 Revised 6/84

II-2A

ORIGINAL


Tax Parcel 21-01-026C
Project Site
COURTHOUSE HIGHWAY
DRIVEWAY

COURTHOUSE HIGHWAY
Tax Parcel 21-01-026C
Project Site
DRIVEWAY
Road D
RAC
RC
RAC
RC

RAC
21-01-026
RAC
21-01-026C1
RAC
21-01-026A
12740
COURTHOUSE HIGHWAY
12647
RAC
21-01-044C
RAC
GC
21-01-026C
12728
RAC
21-01-044
RAC
21-01-028A1
GC
21-01-026B
12746
GC
21-01-044B
12762
RAC
21-01-027
GC
21-01-044A
12749
RAC
21-01-036
RAC
21-01-043
Virginia Geographic Information Network (VGIN)

RESOLUTION NO. PC-22-09

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION
TO THE BOARD OF SUPERVISORS RELATING TO REZONING REQUEST ZA-02-22
TO AMEND CONDITIONAL ZONING OF 1.25 ACRES OF LAND IDENTIFIED AS
TAX MAP PARCEL 21-01-026C

WHEREAS, Gerald W. Peade, owner, has requested an amendment to conditional zoning for property located at 12728 Courthouse Highway with tax map number 21-01-026C to specifically allow the uses of minor motor vehicle repair service, major motor vehicle repair service, and garden center uses for retail-only sales of bulk mulch and topsoil only; and,

WHEREAS, the procedural requirements for the consideration of this request by the Planning Commission have been met.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

A. The Isle of Wight County Planning Commission finds that the proposed rezoning is reasonable, and warranted due to a change in circumstances affecting the property, and has considered the following factors and finds that the proposed rezoning does not conflict with:

1. the existing use and character of property within the County;

2. the Comprehensive Plan;

3. the suitability of the property for various uses;

4. the trends of growth or change;

5. the current or future requirements of the community as to land for various purposes as determined by population and economic studies and other studies;

6. the transportation requirements of the community;

7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;

8. the conservation of natural resources;

9. the preservation of flood plains;

10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values;

12. the encouragement of the most appropriate use of land throughout the County;

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, PC-22-09, be:

___ a. Granted as submitted, and that the Board of Supervisors adopt the proposed Ordinance without modification.

___b. Denied, and that Board of Supervisors do not adopt the proposed Ordinance.

___c. Granted with the modifications set forth on the attached listing of specific recommendations, and that the Board of Supervisors adopt the proposed Ordinance with such modifications.

READ AND PASSED: _____

TESTE: _____

Approved as to Form:

_____
Bobby Jones, County Attorney

PLANNING REPORT

APPLICATION:

Application of Carrollton Ventures, LLC, property owner, for a change in conditional zoning to allow 120,000 square feet of mini-warehouses, also known as self-storage units, and outdoor motor vehicle storage on 8.08 acres located at 15411 Carrollton Blvd. (Rte. 17) on property with tax parcel numbers 34-01-108 and 34-01-108B

ELECTION DISTRICT:

District 2

LOCATION:

The proposed project will be located at 15411 Carrollton Blvd. (Rte. 17) on two parcels with tax parcel numbers 34-01-108 and 34-01-108B. Both properties currently have existing residential and accessory structures. The property is bounded to the west by Carrollton Boulevard (Rte. 17), to the north and east by single family residential uses, and to the south by commercial properties, including an insurance office and a scrap and salvage business. Properties directly across Carrollton Boulevard include single family residential uses. The property is located in the Newport Development Service District.

BACKGROUND:

The Board of Supervisors approved a change in zoning for both properties in 2009 from Rural Agricultural Conservation (RAC) to Conditional General Commercial (C-GC) for the purposes of creating a 94,500 square foot office condominium and retail development. The original proffered conditions expressly prohibited mini-warehouses, or self-storage units, and outdoor motor vehicle storage as permitted uses. The proposed amendment to the existing proffered conditions would permit both of these uses on the property. The property owner also proposes a new concept plan for the property which is attached to this report for your review.

The Planning Commission held a public hearing on the proposed conditional zoning amendments at its May 24, 2022, regular meeting. Following the public hearing, the Planning Commission approved a motion to continue their discussion of the item until their next regular meeting in order to receive market information for self-storage facilities from staff and from the applicant.

Since the hearing, staff has found that there is approximately 55,800 square feet of existing indoor self-storage within a three mile radius of the proposed facility site. The 2020 Census population for the Carrollton Census Designated Place is 7,498 people. According to industry websites selfstorage.com and sparefoot.com, the national average of indoor self-storage is 5.9 square feet per capita. In Virginia, the average is 5.18 square feet per person. Within the search radius, this average is approximately 9.08 square feet per person. Staff was unable to identify an equivalent information for outdoor motor vehicle storage.

On June 9, the applicant submitted a revised conceptual plan showing the main entrance located further south in order to meet VDOT's commercial entrance separation requirement. The concept plan does not show the location of the cross access easement. The revised concept plan is attached for your review.

DESCRIPTION:

The property owner proposes to amend the proffered conditions in order to allow the development of a 120,000 square foot self-storage development with outdoor storage for motor vehicles, trailers, and recreational vehicles. The new proffer statement, concept plan, and illustrative building elevation are included with this staff report for your information.

The site is currently forested but the environmental site assessment found no environmentally sensitive resources on site. In addition, the Phase I cultural resources assessment submitted for the property found no evidence of resources on the site. The existing single family residence will be removed, and the two parcel combined in order to develop the property.

According to the community impact statement, the new use will generate approximately 300 vehicle trips per day, which is a decrease from the 2,709 trips per day projected for the originally planned office and retail development. Due to the decrease in projected traffic, the applicant proposes to install a single right-in/right-out only entrance and remove the proffered turn lane improvements.

Although the concept plan shows the proposed site entrance adjacent to the northern side property line, the Virginia Department of Transportation (VDOT) submitted a comment which indicated the entrance did not meet the minimum commercial entrance separation requirements. They recommend that the entrance be relocated further south to meet the minimum distancing requirements and that a cross parcel access easement be created to allow shared access for future adjacent

commercial development. The applicant has indicated their willingness to address VDOT's comments upon submittal of the preliminary site plan and has submitted a revised concept plan showing the new location of the entrance for your review. The applicant has proffered to install a multipurpose trail across the frontage of the parcel in accordance with County specifications.

The application states the new facility will have three full-time employees with operating hours of 8:00 AM until 7:00 PM seven days a week. The new facility will utilize public water and sewer.

COMPREHENSIVE LAND USE PLAN:

The recommended future land use designation for this property is business and employment (BE) on the County's Future Recommended Land Use Map in the 2020 Comprehensive Plan. The primary role of BE is defined locations for employment creation and expansion. These areas should be developed with a mix of office, commercial, and light industrial uses. Expected development in BE might include medical offices, an office park in a campus like setting, supporting retail services, community shopping centers, light manufacturing, research and development, and other low intensity industrial uses which are compatible with surrounding development. Nonresidential uses may include parks and trails, or existing community facilities, but siting for new community facilities should be considered elsewhere first. BE should be connected to residential uses with vehicular and pedestrian access.

The BE land use is best located on major transportation routes and at major intersections. BE should be master planned for coordination with surrounding uses and quality of design internally. BE should also have access to public water and sewer infrastructure with capacity for more intense development.

The proposed use of self-storage is defined as a commercial use type in the Zoning Ordinance and can be considered generally consistent with the recommended future land use designation.

ORDINANCE REVIEW:

The property is in the Conditional-General Commercial zoning district. The property also lies within the Newport Development Service Overlay (NDSO) District and the Chesapeake Bay Preservation Area Overlay District. Due to the project's size and no existing resource protection area features on site, a water quality impact analysis is not required.

Should the amendment to the proffered conditions be approved by the Board of Supervisors, the property owner will be required to submit a site plan demonstrating compliance with all General Commercial zoning District, NDSO district, any proffered conditions, and supplemental use regulations for mini-warehouse and outdoor motor vehicle storage uses.

AGENCY REVIEW:

Staff distributed the application documents to the following departments and agencies for review and comment:

- VDOT - Outstanding comments are attached. The applicant has agreed to address these comments at site plan submittal.
- County Attorney - Proffered conditions are enforceable as written.
- Utility Services - The department has no concerns.
- Environmental Planning - Staff has no concerns.
- Emergency Services - Staff has no concerns.
- Economic Development - Staff has no concerns.

STAFF CONCLUSIONS:

Strengths:

1. The proposed commercial use is generally consistent with the future recommended land use BE designation.
2. The proposed use will create three new jobs in the County.
3. The proposed use will not negatively impact public services or facilities.

Weaknesses:

1. The current proffer statement does not include the property owner's stated commitment to establish an easement for a cross-parcel connection for shared access which could be remedied prior to the Board of Supervisor's public hearing.

STAFF RECOMMENDATION:

Based on the strengths of the application, staff recommends approval of the application with the proffered conditions amended to include the property owner's commitment to establish an easement for a future cross parcel connection to enable shared access for future commercial development.

ATTACHMENTS:

Description	Type	Upload Date
Sawco Project Narrative	Backup Material	5/18/2022
Sawco Community Impact Statement	Backup Material	5/18/2022
Sawco Amended Proffer Statement	Backup Material	5/18/2022
Sawco Concept Plan	Backup Material	5/18/2022
Sawco Building Elevation	Backup Material	5/18/2022
Environmental Assessment	Backup Material	5/18/2022
Phase I CRA	Backup Material	5/18/2022
Carrollton Village 2009 Proffers	Backup Material	5/18/2022
Carrollton Village Concept Plan 2008	Backup Material	5/18/2022
Future Recommended Land Use Map	Backup Material	5/18/2022
Zoning Map	Backup Material	5/18/2022
Planning Commission Resolution	Backup Material	5/18/2022
Sawco Traffic Impact Assessment	Backup Material	5/19/2022
VDOT Comments	Backup Material	5/20/2022
Revised Concept Plan received June 9	Backup Material	6/15/2022

March 1, 2022

Mrs. Amy Ring
Director of Planning and Zoning
P. O. Box 80
Isle of Wight, VA 23397

RE: Carrollton Ventures, LLC – Request to amend conditional zoning to accommodate the proposed Sawco South Mini-Warehouse facility, Newport District (Tax Parcel # 34-01-108 and 108B)

Dear Mrs. Ring:

Please find attached my application and supporting documents requesting to amend conditional zoning as referenced above.

The subject parcel consists of 8.028 acres and was originally rezoned to accommodate office condominium and retail development. The property has been sold and Carrollton Ventures, LLC as the new owner is proposing to develop the property with 120,000 square feet of mini-warehousing and associated outdoor storage of motor vehicles, trailers and recreational vehicles.

I hope that the staff will support this request. Should you need further information, please contact Mitch Wilcox at 757-651-8933 or Beverly Walkup at 757-651-4843.

Sincerely,

W. C. Sawyer
Carrollton Ventures, LLC

Attachment(s)

COMMUNITY IMPACT STATEMENT

Narrative

This request is to amend conditional zoning on tax parcel numbers 34-01-108 and 34-01-108B, containing approximately 8.028 acres of land. The property was rezoned to Conditional-General Commercial (C-GC) on September 15, 2009 for a proposed office condominium and retail development. Since then, the property has been sold and the new owner, Carrollton Ventures, LLC proposes to develop the property with 120,000 square feet of mini-warehousing, including outdoor storage of motor vehicles, trailers, and recreational vehicles. To accomplish this change requires that the conditions of zoning be amended, which is the basis for this request.

The property is located at 15411 Carrollton Boulevard. The property is on the east side of Carrollton Boulevard (Rt. 10) south of Sugar Hill Road (Rt. 661). There is currently a single-family home located on the property which will be demolished to accommodate the proposed use. The design of the property will mimic the applicant's existing mini-warehouse business Sawco Self Storage located at 15111 Carrollton Boulevard with vinyl warehouse units, and a brick office building located on the property's frontage, facing Carrollton Boulevard. See attached preliminary site plan dated December 1, 2021, prepared by Commonwealth Engineering Group, LTD.

The property is located in the Newport Development Service District and has roughly 540 linear feet of frontage along Carrollton Boulevard. The site will

comply with the requirements of the Newport Development Service Overlay District as well as the supplementary use regulations for mini-warehouse facilities.

Adequacy of Existing Public Facilities and Services

A. Water and Sewer Facilities:

The office building will be connected to public water and sewer. There will be approximately three (3) employees on a full-time shift with hours of operation between 8 am and 7 pm. Based upon this, the proposed usage is equivalent to or less than a single-family home.

B. Drainage Facilities and Environmental Considerations:

The site is predominantly forested. No wetlands or resource protection areas have been identified on the site. Preliminary engineering proposes a stormwater pond which will be designed to provide water quality and quantity to satisfy the requirements of both the Chesapeake Bay Preservation Area Act and Isle of Wight County stormwater requirements.

C. School Facilities:

There will be no school impact for this proposed commercial use.

D. Emergency Service Facilities:

The property is located within the primary emergency service area for the Carrollton Volunteer Fire Department and the Isle of Wight Rescue Squad. The site is located within .3 mile of the fire department and 8.1 miles (13 min.) from the rescue squad.

The Isle of Wight Sheriff's Department has the primary responsibility for providing law enforcement to the site. The site is located approximately 14.3 miles (19 min.) from the Sheriff's Office; however, patrol areas are designated to provide strategic response times to the site and throughout the County.

E. Transportation Facilities:

The original rezoning for office condominiums and retail was assigned 2,709 vehicles per day. The new use is proposed to generate 300 vehicle trips per day, a decrease of 2,409 trips. A right-in/right-out entrance with no turn lanes or tapers is deemed sufficient to accommodate the new use. See attached Traffic Data report prepared by Commonwealth Engineering Group, Ltd.

F. Conclusion

With the existing and future density slated for the Newport Development Service District, County residents have shown a need for the type of storage provided by mini-warehousing facilities. This facility will supplement the existing sites within the County which have been filling as quickly as developed demonstrating additional need for these sites/services.

TTC Corporation

Business Solutions and Environmental Science since 1989

Wetlands Delineation and CBPA Compliance

Conducted on:
15395 Carrollton Blvd.
Carrolton, Virginia 23314
Project Number: 21035T.WD

For:
Mr. W. C. Sawyer
Carrollton Ventures, LLC
15111 Carrollton Boulevard
Carrollton, Virginia 23314
Issue Date: January 17, 2022

ENVIRONMENTAL CERTIFICATION

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in S312.10 of this part [40 CFR Part 312]. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Environmental due diligence was performed in accordance with the applicable Federal, State and Local Laws, Regulations and Guidelines, that all known information on environmental conditions has been disclosed, that the information presented to Carrollton Ventures, LLC is complete and truthful to the best of his/her knowledge, the report is intended to be used and relied upon by Carrollton Ventures, LLC , the subject property is suitable for residential or public land use.

K M Miller

Keith M. Miller, CES, CWD
President
TTC Corporation

13561 Courthouse Highway
Smithfield, Virginia 23430
Cell 757-409-2869
Email: TTCCorporation@aol.com

Revised Proffer Statement #1 for Rezoning of
Tax Parcel Identification Numbers 34-01-108 and 34-0108B

APPLICANT/OWNER'S NAME: Carrollton Ventures, LLC

PROJECT NAME: Sawco South (Self Storage)

DATE: April 12, 2022

These proffers are made as of the 28th of February, 2022 by Carrollton Ventures LLC ("Owner"), of Tax Map Number 34-01-108 and 108B, containing approximately 8.028 acres of land which is referred to herein as the "Property". Owner is filing an application to amend Conditional-General Commercial (C-GC) zoning to remove Mini Warehouse, and associated outdoor storage of motor vehicles, trailers and recreational vehicles, as a prohibited use.

The Owner does hereby voluntarily proffer the following conditions with respect to the development of the property proposed for amended conditional zoning under this application shall be as follows:

I. These proffered conditions ("Proffers") shall replace and supersede the voluntary conditions dated September 15, 2009 and are the only conditions offered on this property, and any prior proffered conditions on the Property are hereby superseded by these proffers. These revised proffers shall be applicable to, and binding upon, the property.

II. There is incorporated by reference and submitted with this application that certain document entitled, Conceptual Plan for W. C. Sawyer, dated December 1, 2021, prepared by Commonwealth Engineering Group, LTD, hereinafter referred to as (the "Plan"). The property shall be developed in general conformance with the Plan and shall be subject to the requirements of the Zoning Ordinance in effect at the time of site plan submittal.

III. Carrollton Ventures LLC proposes to develop a self-storage facility to include indoor storage as well as outside storage of motor vehicles, trailers and recreational vehicles, etc., hereinafter referred to as (the "Project").

a. The following uses shall remain prohibited on the property as defined in the Zoning Ordinance dated August 2005 as Amended:
    1. Nursing Home
    2. Park and Ride Facility
    3. Public Park and Recreational Area
    4. Commercial Assembly and Repair of all equipment normally used in Agricultural, Silvicultural, and Horticultural Operation
    5. Farm Supplies, Equipment Sales and Service, except for Garden Equipment
    6. Farm and Forestry Implement Storage, Sales and Service
    7. Auction Establishment

8. Bed and Breakfast
9. Funeral Home
10. Golf Course
11. Hospital
12. Hotel/Mote1/Motor Lodge/lnn
13. Marina
14. Motor Vehicle Dealership New
15. Motor Vehicle Repair Service/Minor
16. Construction Yard;
17. Timbering Operation
18. Livestock Auction Market
19. Commercial Stable not in conjunction with residence
20. Assisted Living Facility
21. Church Cemetery
22. Public Maintenance and Service Facility
23. Commercial Outdoor Entertainment/Sports and Recreation
24. Commercial Outdoor Swimming Pool and Tennis Facility
25. Crematorium
26. Dance Hall
27. Gasoline Station
28. Golf Driving Range
29. Manufactured Home Sale
30. Motor Vehicle Dealership, Used
31. Motor Vehicle Repair Service/Major
32. Motor Vehicle Repair Service/Minor
33. Recreational Vehicle Sales and Service
34. Truck Stop
35. Convenience Center
36. Landfill, Rubble
37. Recycling Center
38. Parking Facility, Surface/Structure
39. Reconstructed Wetland
40. Commercial Accessory Apartments
41. Assembly Repair of Farm Equipment
42. Forestry Operation
43. Amateur Radio Tower

IV. Infrastructure

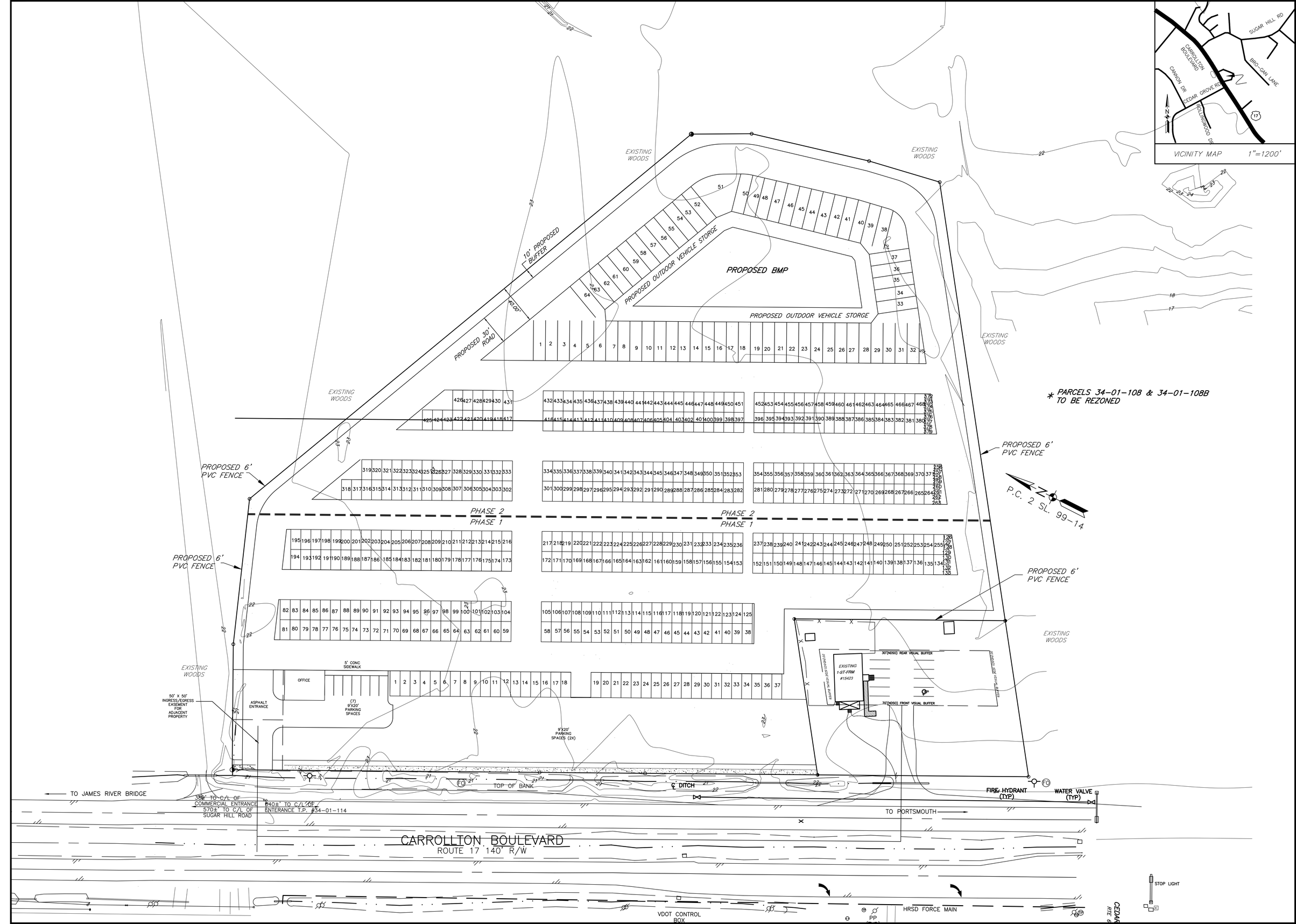
The Applicant shall install a single right-in/right-out entrance to the site per the Traffic Data report accompanying this application. No turn lanes or tapers are required per the analysis.

V. Easements, Right-of-Ways and Buffers

a. Applicant shall provide a twelve-foot easement to the County for the construction of a pedestrian travel way within the Newport Development Service Overlay District 50-foot setback along Route 17. This path shall be designed and constructed by the Applicant in accordance with the specifications approved by the Zoning Administrator.

_____

Applicant signature Date



REVISIONS

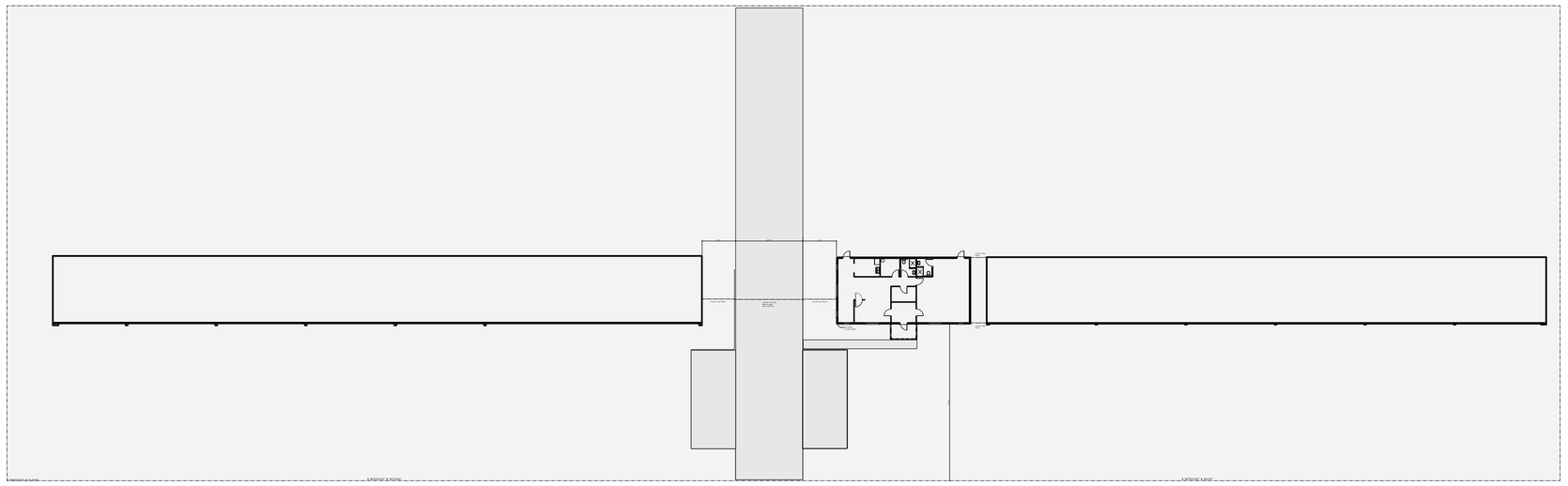
COMMONWEALTH OF VIRGINIA
R. MITCHELL WILCOX
Lic. No. 018691
12-1-21
LICENSED PROFESSIONAL ENGINEER

CONCEPTUAL PLAN
FOR
W. C. SAWYER
NEWPORT NEWS MAGISTERIAL DISTRICT
ISLE OF WIGHT COUNTY, VIRGINIA

DRAWN:	
DESIGNED:	RMRW
SCALE:	1"= 40'
DATE:	12/01/2021
SHEET:	1 OF 1
CEG# 21-151	

3D ARTIST RENDERING - ENTRY VIEW

3D ARTIST RENDERING - FULL VIEW



SITE PLAN - CONCEPT

SCALE: 1" = 30'-0"

SAWCO SELF STORAGE SOUTH

BUILDING CONSULTANTS
Titus Creek Lane
Carrollton
VA
23314
PHONE:757-651-9094
FAX:
MOBILE:757-651-9094
starnestommy@aol.com

SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

SAWCO SELF STORAGE SOUTH
carrollton Blvd
Carrollton
VA
23314
PHONE: 757-870-1982
FAX:
MOBILE:757-870-1982
wcsawyer21@gmail.com

SCALE: 1" = 30'-0"
DRAWN BY:
DATE: Thursday, December 9, 2021

SECTION LETTER A
PAGE NUMBERS 1/1

APPROVED:
CHECKED BY:

PAGE: 1/1
SITE PLAN

TTC Corporation

Business Solutions and Environmental Science since 1989

Wetlands Delineation and CBPA Compliance

Conducted on:
15411 & 15395 Carrollton Blvd.
Carrolton, Virginia 23314
Project Number: 21035T.WD

For:
Mr. W. C. Sawyer
Carrollton Ventures, LLC
15111 Carrollton Boulevard
Carrollton, Virginia 23314
Issue Date: January 17, 2022

ENVIRONMENTAL CERTIFICATION

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in S312.10 of this part [40 CFR Part 312]. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed the all appropriate inquires in conformance with the standards and practices set forth in 40 CFR Part 312.

Environmental due diligence was performed in accordance with the applicable Federal, State and Local Laws, Regulations and Guidelines, that all known information on environmental conditions has been disclosed, that the information presented to Carrollton Ventures, LLC is complete and truthful to the best of his/her knowledge, the report is intended to be used and relied upon by Carrollton Ventures, LLC , the subject property is suitable for residential or public land use.

K M Miller

Keith M. Miller, CES, CWD
President
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ENVIRONMENTAL PROFESSIONAL

Environmental Professional means:

A person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases on, at, in, or to a property, sufficient to meet the objectives and performance factors.

SUMMARY

Based on a detailed field inspection of the property and surrounding parcels, the National wetlands Inventory Map, the Isle of Wight County CBPA Map and historical aerial photography there are no potential jurisdictional wetlands or CBPA resources located on the subject property.

INTRODUCTION

TTC Corporation was requested by Mr. Sawyer perform a wetlands and CBPA site Assessment of the property located at 15411 and 15395 Carrollton Boulevard in Carrollton, Virginia. TTC Corporation utilizes the standards set by the 1986 CWA Regulations, the 1987 Wetlands Delineation Manual, Atlantic and Gulf Coast Regional Supplement, SWANCC and Rapanos Guidance as currently followed by the US ACOE, EPA and USDA and, the Isle of Wight County CBPA Ordinance (8-21-06) Section 62.1-44. 15:67 et seq. Code of Virginia. It is understood that Mr. Sawyer and his agents and assignees are using this information as part of their decision making process regarding the site, as such, the information in this report may be relied upon for the purpose of due diligence.

PURPOSE AND SCOPE OF ESA

The purpose of this Wetlands and CBPA site Assessment is to identify and record existing, potential or suspect conditions that may impose environmental liabilities to, or restrict the use of the subject property.

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Email: TTCCorporation@aol.com

This Environmental Assessment has four major components:

1. Records review - The purpose of the Records review is to obtain and review records that will help identify recognized environmental conditions in connection with the property.

2. Site Reconnaissance - A physical inspection of the property to observe and record information indicating the likelihood of identifying recognized environmental conditions in connection with the property.

3. Interviews - Interviews with current and past owners, property managers, individuals familiar with the subject property and Government officials that may lead to information indicating the presence of recognized environmental conditions on the property.

4. Report - The Report will spell out our Observations, Conclusions and Recommendations in accordance with the guidelines as set forth in ASTM E1527 - 21.

This Assessment does not include any sampling or testing of suspect Environmental Conditions such as soil, water, air, Hazardous or non hazardous materials, debris, general waste or special waste materials.

By performing this Assessment and subsequent report the Environmental Professional has not taken on any role as Environmental Manager of the subject property and is not recommending any remedial activity or removal and disposal of hazardous or non hazardous materials.

On January 14, 2022 we visited the above referenced site and conducted an Environmental Site Assessment at your request. The following report will spell out our OBSERVATIONS, CONCLUSIONS and RECOMMENDATIONS regarding this property.

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This work has been performed using reasonable care within the scope of work and in accordance with budgetary limitations, in keeping with industry standards and in accordance with generally accepted environmental science standards and practices. No other warranty expressed or implied is made.

DETAILED SCOPE OF SERVICES

The following tasks were completed during the course of this assessment:

Records review (including but not limited to) examination of city records, maps, surveys, zoning and any other information pertaining to property location and use.

Site reconnaissance (including but not limited to) site visit and assessment, site conditions, topography, land use, adjoining property and it's uses past and present, roads, water, sewer, exterior and interior observations, and other potential environmental liabilities on the subject property.

Review of zoning requirements, types of businesses and activities operating in the area, surrounding land uses to reveal potential environmental influence on the subject property.

Review of other available historical records and agency lists to reveal potential concern of prior impacts on the property.

Performance of appropriate interviews with individuals knowledgeable of environmental practices affecting the property.

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Period of investigation: January 12th through 17th , 2022. The weather was seasonable with temperatures in the 40's.

SIGNIFICANT ASSUMPTIONS

Our Conclusions and Recommendations are based upon our observations at the site, the reviewed documentation, any test results reviewed, interviews and other information provided and our previous experience in this area. The Conclusions And Recommendations assume that data and other information provided are reasonably accurate. It must be recognized that available agency records and other information reviewed in this assessment are often incomplete, contain errors, may not be current, may list alternative facility names or addresses, or may provide otherwise misleading data. Verification of agency data, determination of facility locations that are listed by post office box, continuous updating and other tasks related to data base information are generally beyond the scope and cost allowance of this assessment. However, the Environmental Professional performing the review has made a reasonable effort to compensate for errors or insufficiencies in the information reviewed that are in light of other information actually known to the Environmental Professional. It should also be recognized that information may be available which was not found or reviewed in this assessment. The Conclusions and Recommendations are based on a limited review of the site and cannot provide complete assurance that all liabilities were detected. The Conclusions and Recommendations do not reflect variations in site conditions not visually apparent or which could exist intermediate of the sample locations or which could exist in the future.

TTC Corporation has analyzed the information obtained in this audit in keeping with existing guidelines and regulations, but cannot accurately predict what actions or interpretations any given agency or individual may take presently.

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This Environmental Assessment does not constitute an Environmental Compliance Audit or a Business Environmental Risk Audit. These services are considered to be outside the scope of this Assessment.

This Assessment is partially based on information that is practically reviewable. Practically Reviewable means that information that is relevant to the property without the need for extraordinary analysis of irrelevant data. The form of the information shall be such that the user can review the records for a limited geographic area. Records that cannot be feasibly retrieved be reference to the location of the property or a geographic area in which the property is located are not generally practically reviewable.

USER RELIANCE

TTC Corporation is pleased to assist Mr. Sawyer in the assessment of environmental conditions at the subject property, as outlined in this report. This report has been prepared for the exclusive use of Mr. Sawyer, his agents and assignees for specific application to the property as assessed and may be relied upon for the purpose of due diligence.

SITE DESCRIPTION

LOCATION and DESCRIPTION

The property is located on the east side of Carrollton Boulevard in Carrollton, Virginia. The property consists of approximately 8.028 acres of land. The surrounding area is residential and commercial. The site is topographically flat with grades of 1 % to 2% with surface drainage generally to the east into the stream system.

CURRENT USE of the PROPERTY:

The site is currently utilized as vacant land

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FINDINGS AND CONCLUSIONS

Conclusions

We have performed an Environmental Assessment for the presence of Jurisdictional Wetlands and CBPA Resources in conformance with the scope and limitations of the current Wetlands Regulations and Guidelines and the applicable CBPA Regulations and Local Ordinance of the property located at 15395 Carrolton Boulevard in Carrollton, Virginia. There were no Potential Jurisdictional Wetlands or CBPA Resource areas noted the day of our site assessment and no further investigation is warranted.

Recommendations

There are no environmental recommendations at this time.

SITE ASSESSMENT DISCLAIMER AND LIMITATIONS

TTC Corporation is pleased to assist Mr. Sawyer in the assessment of environmental conditions at the subject property, as outlined in this report. This report has been prepared for the exclusive use of Mr. Sawyer, his agents and assignees for specific application to the property as assessed.

Our Conclusions and Recommendations are based upon our observations at the site, the reviewed documentation, any test results reviewed, interviews and other information provided and our previous experience in this area. It must be recognized that available agency records and other information reviewed in this assessment are often incomplete, contain errors, or may provide otherwise misleading data.

However, the Environmental Professional performing the review has made a reasonable effort to compensate for errors or insufficiencies in the information reviewed that are in light of other information actually known to the Environmental Professional. It should also be recognized that information may be available which was not found or reviewed in this assessment. The Conclusions and Recommendations are based on a limited review of the site and cannot provide complete assurance that all liabilities were detected. The Conclusions and Recommendations do not reflect variations in site conditions not visually apparent or which could exist intermediate of the sample locations or which could exist in the future.

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TTC Corporation has analyzed the information obtained in this audit in keeping with existing guidelines and regulations, but cannot accurately predict what actions or interpretations any given agency or individual may take presently, or what standards and practices may apply to the site in the future. Should such variations in regulations, guidelines or site conditions become apparent in the future, it will be necessary to reevaluate our Conclusions and Recommendations based upon additional analyses and on-site observations as appropriate.

Unless known conditions indicate other durations, it is generally assumed that a site assessment is valid for a period of 90 days.

Thank you for the opportunity to be of service to you at this time.

Signature of Environmental Professional

Sincerely,

K M Miller

Keith M. Miller, CES, CWD
President
TTC Corporation

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Smithfield, Virginia 23430
Cell 757-409-2869
Email: TTCCorporation@aol.com

CRI Project No.1309

May 7, 2008

A PHASE IA CULTURAL RESOURCES ASSESSMENT OF APPROXIMATELY 10.6 ACRES AT THE COHEN PROPERTY IN ISLE OF WIGHT COUNTY, VIRGINIA

DRAFT REPORT

Prepared for:

Commonwealth Engineering Group
17226 Commerce Lane
Smithfield, VA 23430

Prepared by:
Kevin Goodrich
Project Archaeologist
Aimee J. Leithoff
Principal Investigator
Jocelyn Pitts
Assistant Architectural Historian
Ellen M. Brady
Vice President

Cultural Resources, Inc.
2200 Colonial Avenue, Suite 226
Norfolk, VA 23517
(757) 626-0558

ABSTRACT

In April 2008, Cultural Resources, Inc. (CRI) conducted a cultural resource assessment of two tracts of land totaling approximately 10.6-acres in Isle of Wight County, Virginia. The study area is located in Carrollton, and consists of two areas (east and west of Carrollton Blvd) north of the intersection of Route 17 and Cedar Grove Road. The tract of land on the west side of Carrollton Boulevard (Tax Parcels 34B-01-14 through 34B-01-18) is approximately 2.58 acres and consists of four house lots and one vacant lot. The house lots contain lawns, driveways, and some wooded areas throughout. The vacant lot contains a drainage ditch and an associated wetland/ swampy area. The tract of land on the east side of Carrollton Boulevard (Tax Parcels 34-01-108 and 34-01-108B) is approximately 8.02 acres and consists of two house lots, a large wooded area, and a fallow field.

This Phase IA cultural resources assessment was conducted at the request of Commonwealth Engineering Group. A Phase IA assessment report may not completely satisfy state or federal regulatory requirements for a Phase I-level cultural resources identification survey, but it does allow clients to quickly review the nature and scope of previously identified and possible cultural resource issues associated with a potential undertaking. The goal of the assessment fieldwork was to determine the nature of the soils and topography of the study area, as well as to provide information on previously identified cultural resources such as prehistoric sites, historic domestic farmsteads, gravesites, standing structures, or military encampment areas present within the bounds of the study area. This effort also identifies areas of high and low potential for cultural resources within the tract and has been developed to serve as a possible planning tool for proposed development within the study area. Determinations of high and low potential were based upon soil properties, drainage, and topography as well as observations made in the field.

To facilitate systematic testing, factors such as slope, soils, and water are examined, allowing the study area to be classified in zones of varying probability for the location of archaeological remains. The total study area consisted of approximately 10.6 acres. The entire 10.6 acres of land was classified as retaining a low potential for archaeological resources. The majority of the project area is residential and is characterized by a fallow field, a large wooded area, a vacant lot with a ditch and wetlands, six house lots with lawns, driveways, sheds, and wooded areas throughout. The project area is characterized as low probability with saturated soils and low swampy areas except right around the houses. The house pads are likely artificial landforms that have been infilled to allow for construction. The fallow field contains an area of standing water, possibly wetlands and may have been planted at one time but has not been for a number of years. The large wooded area contains a swamp in the northwest section. All of the house lots and commercial lot have been graded/ landscaped prior to construction and therefore have been disturbed.

No additional archaeological fieldwork is recommended for this project. The entire project area retains a low probability for the recovery of intact archaeological deposits.

A total of 11 shovel tests, encompassing an approximate 10% sample of the area were excavated during the Phase IA investigation.

Six standing structures are present within the project area. Two of these buildings date to the 1960s and do not meet the criteria for consideration as historic resources. Three of the remaining four buildings are one-story dwellings that are just over 50 years in age. These dwellings are typical of the mid-twentieth century development of the Route 17 corridor in Suffolk and Isle of Wight County. All of the dwellings are in poor condition and do not exhibit exceptional defining traits and therefore, no further work is recommended.

V. PROJECT RESULTS

The Phase IA fieldwork examined all areas of the 10.6-acre study area in Isle of Wight County, Virginia. The field work consisted of a visual survey and walk-over of the property, along with selected subsurface archaeological testing consisting of judgmental excavation of 11 shovel tests (Figures 11-12). Also included in the fieldwork was a photographic documentation of four houses on the approximate three acre tract of land on the west side of Carrollton Boulevard and two houses on the approximate eight acre tract of land on the east side of Carrollton Boulevard. The project area is located within a high sensitivity area based on William and Mary's 2005 study *More than Meets the Eye: An Archaeological Assessment of Isle of Wight County and the Towns of Smithfield and Windsor, Virginia* (Monroe et al 2005). The assessment identified potential areas of high and low probability for archaeological resources.

Archaeology

The results of the walkover survey and judgmental shovel testing contributed to the development of a map that presents potential for high and low probability areas for archaeological resources within the project area (Figures 11-12). These divisions were based upon soil type, drainage, topography, and areas of previous disturbance. The project area was systematically walked-over in order to identify disturbances or other notable features. No areas of high probability were identified during the assessment. The northwest section of east side of Carrollton Boulevard contains a swamp (wetlands) which is low probability. Nearly all of the western section of Carrollton Boulevard are house lots with saturated flat lawns and some areas of wetlands present and are therefore considered to be low probability.

The majority of the project area is residential and is characterized by a fallow field (Figure 13) , a large wooded area (Figure 14), a vacant lot with a ditch (Figure 15) and wetlands (Figure 16), six house lots with lawns, driveways, sheds, and wooded areas throughout (See architecture below). The majority of the project area is low probability with saturated soils and low swampy areas except right around the houses. The fallow field contains an area of standing water, possibly wetlands and may have been planted at one time but has not been for a number of years. The large wooded area contains a swamp in the northwest section. The vacant lot (lot # 34B-01-016) contains a wetland swamp with a drainage ditch. All of the house lots and commercial lot have been graded/ landscaped prior to construction and therefore have been disturbed.

A total of 11 shovel tests were judgmentally placed and excavated in the project area to determine the potential for cultural resources. Five shovel tests were placed in the project area on the west side of Carrollton Boulevard, one on each house lot and one on the vacant lot. Six shovel tests were placed in the project area on the east side of Carrollton Boulevard, three in the wooded area, two in the fallow field, and one in the lawn area behind the house at 15411 Carrollton Boulevard. The subsurface archaeological testing

PR# 081309

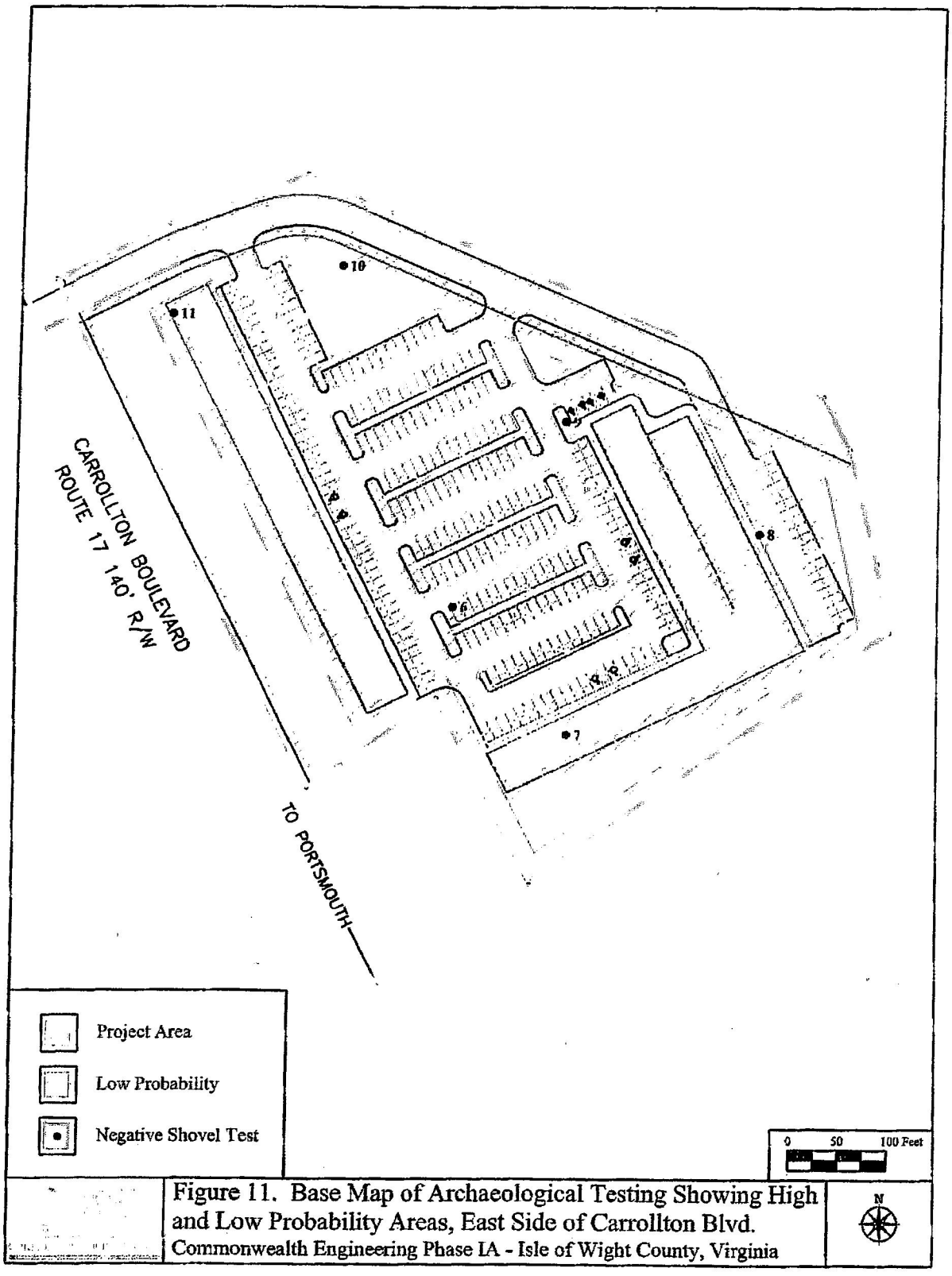


Figure 11. Base Map of Archaeological Testing Showing High and Low Probability Areas, East Side of Carrollton Blvd.
Commonwealth Engineering Phase IA - Isle of Wight County, Virginia

PR# 081309

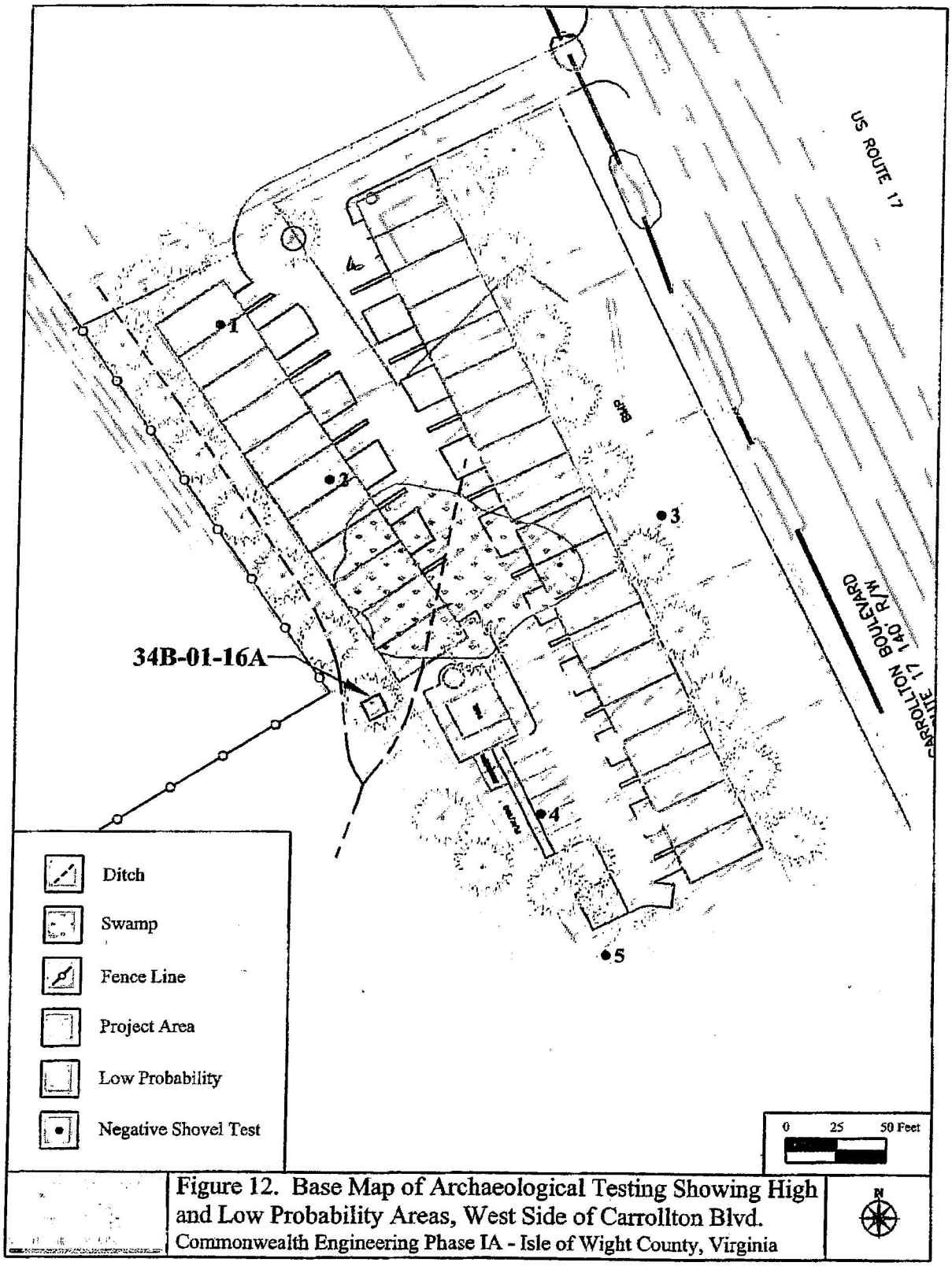


Figure 12. Base Map of Archaeological Testing Showing High and Low Probability Areas, West Side of Carrollton Blvd.
Commonwealth Engineering Phase IA - Isle of Wight County, Virginia

Figure 13. View of grassy field on East parcels from STP 7, facing north northeast.

Figure 14. View of wooded area on east parcel, from STP 9, facing southeast.

Figure 15. View of ditch that runs through west parcels, facing north.

Figure 16. View of wetlands from STP 3, facing east.

for a Phase IA does not represent a systematic and complete archaeological survey of the study area. The soil conditions do not significantly vary much across the project area.

A representative soil profile (Figures 17-18) from a shovel test (ST 6) placed in a back lawn next to a wooded area on the larger tract of land of the project area (east side of Carrollton Boulevard) consisted of stratigraphy with one strata sealing sterile subsoil. Stratum I was a very dark grayish brown (10YR3/2) sandy silt loam that extended to a depth of 0.6 feet below ground surface. Stratum II consisted of a grayish brown (10YR5/2) sterile sandy silt clay mottled with a yellowish brown (10YR5/8) sandy clay subsoil that was excavated to a depth of 1.2 feet below the ground surface. This soil contains redoximorphic features that are diagnostic of a hydrated soil.

A soil profile in the west side of Carrollton Boulevard was represented by ST 4 (Figures 17 & 19). Shovel Test 4 was located in the back yard of lot # 34B-01-017. This area consists of a marshy lawn with a lightly wooded area behind the lot. Three strata were present. Stratum I consisted of a brown (10YR4/3) sandy silt loam that extended to a depth of 0.4 feet. Stratum II was composed of a light yellowish brown (10YR6/4) sandy clay extending 0.8 feet below ground surface. Stratum III consisted of a light yellowish brown (10YR6/4) sterile sandy clay subsoil mottled with a yellowish brown (10YR5/6) sandy clay and was excavated to a depth of 1.2 feet below the ground surface. This soil is also a hydrated soil containing features that are diagnostic of a hydrated soil.

All 11 shovel tests were negative. No artifacts were found and no archaeological sites, locations, or isolated finds were identified.

Architecture

No previously recorded architectural resources were located in the project area, however, six existing buildings (five houses and one business) located within the project area were photographed (Figure 20). These were built between 1948 and 1968, and are described below.

Structure 1: Garage, 15300 Carrollton Boulevard

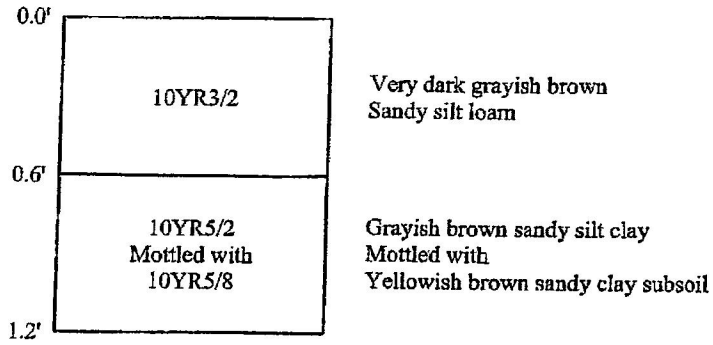
Located west of Carrollton Boulevard, Structure 1 is a ca. 1948 garage that is utilized for commercial purposes. Facing east, this one-story garage is constructed of concrete block. Other features include a garage door, a four-light two-panel door, decorative wood shingles within the gable end, a front-gable metal roof, and an interior brick chimney flue (Figures 20-21).

Structure 2: House, 15344 Carrollton Boulevard

Located west of Carrollton Boulevard, Structure 2 is a ca. 1950 house (Figures 20, 22). Facing east, this one-story dwelling is constructed of concrete-block and clad in stucco siding. Along the primary elevation are an engaged full-width screen porch with wooden posts, a centrally-located door, and double-hung sash windows. Other features include

PR#081309

Representative Shovel Test 6



Representative Shovel Test 4

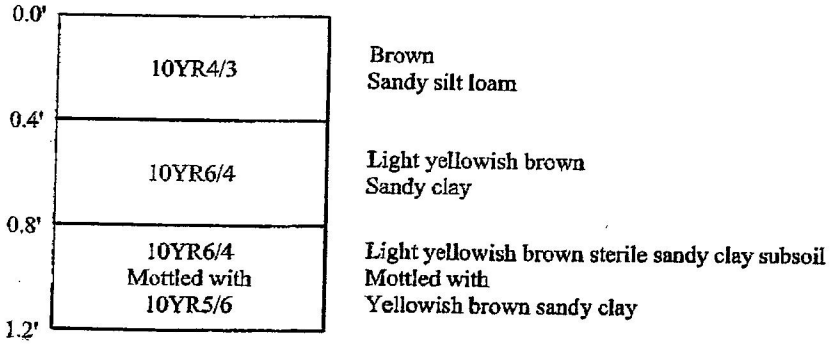


Figure 17. Representative Shovel Test Profiles.
Commonwealth Engineering Phase IA
Isle of Wight County, Virginia

Figure 18. View of STP 6.

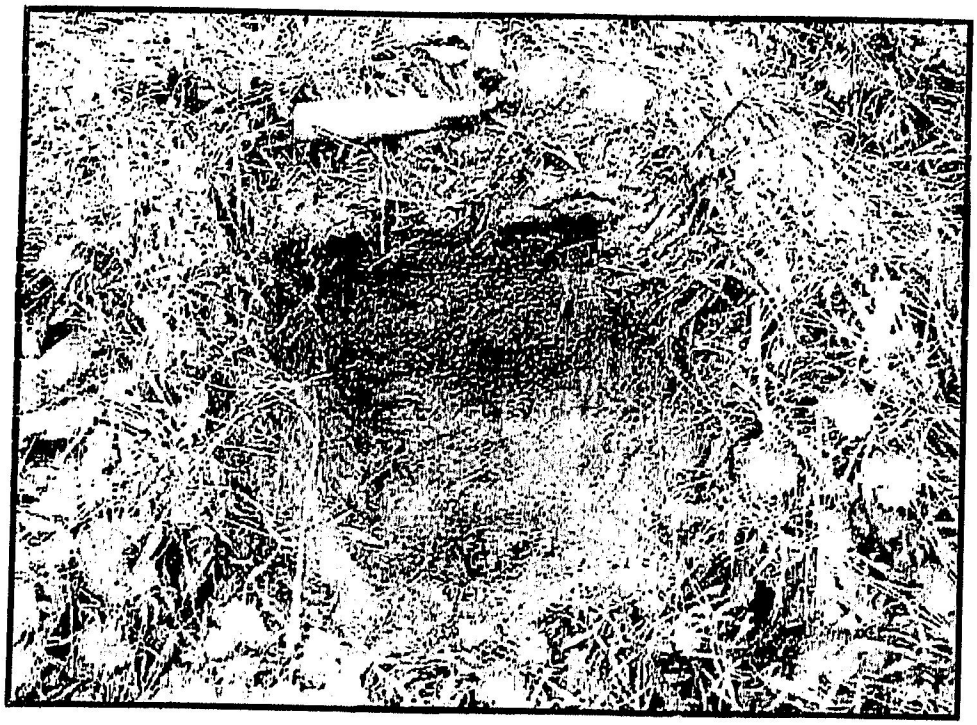


Figure 19. View of STP 4.

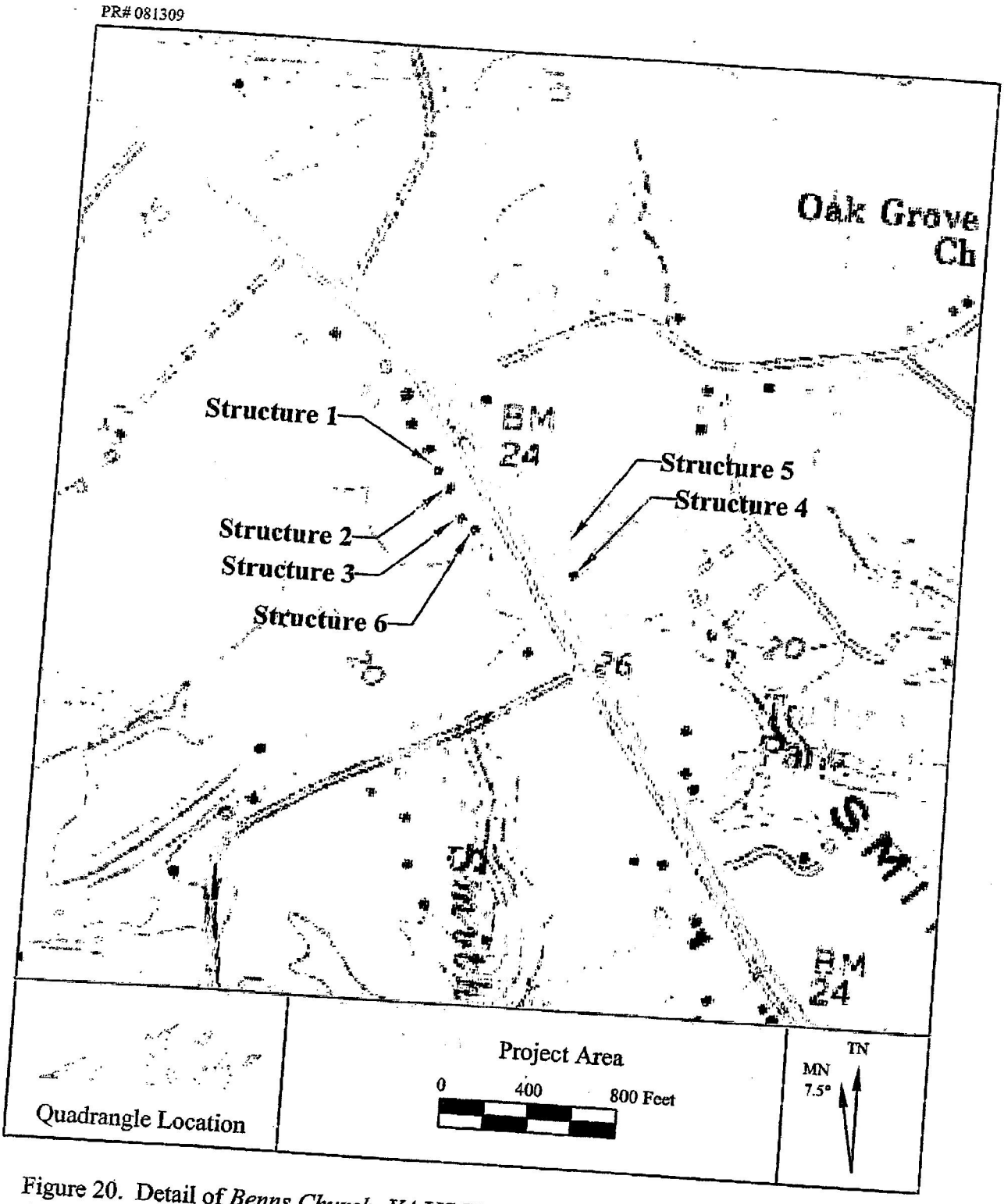


Figure 20. Detail of *Benns Church, VA* USGS 7.5 minute series Quadrangle Depicting Architectural Resources within the Project Area (USGS/Maptech 1998).

Figure 21. East Elevation of Garage (Structure 1) at 15300 Carrollton Boulevard.

Figure 22. Southeast Oblique of House (Structure 2) at 15344 Carrollton Boulevard.

exposed rafter tails, a hipped roof covered in asphalt shingles, and an exterior-end concrete-block chimney flue.

Structure 3: House, 15358 Carrollton Boulevard

Located west of Carrollton Boulevard, Structure 3 is a ca. 1952 house. Facing east, this one-story frame dwelling rests on a concrete-block foundation and is clad in vinyl siding. Along the primary elevation are a nine-light two-panel door and six-over-six double-hung sash windows. This house also features a side gable roof covered in asphalt shingles and an exterior-end brick chimney.

Structure 3a: Shed

Southwest of the house (Structure 3) is a one-story shed (Structure 3a). This frame shed is clad in weatherboard siding and features a six-over-six double-hung sash window, gable roof covered in asphalt shingles, and gable-roof addition sheathed in plywood on the northwest elevation (Figure 24). It likely dates to the period of the primary dwelling.

Structure 4: House, 15411 Carrollton Boulevard

Located east of Carrollton Boulevard, Structure 4 is a ca. 1954 house (Figure 25). Facing west, this one-story frame dwelling rests on a concrete-block foundation and is clad in aluminum siding. Along the primary elevation the main entrance is accessed from a one-bay entry porch. Windows on this elevation include paired six-over-six double-hung sash windows and a three-part window comprising of a single-light central window flanked by four-over-four double-hung sash windows. The windows also feature brick sills, louvered shutters, and metal awnings. Other features include a concrete-block porch with a metal roof along the southeast elevation, a side-gable roof sheathed in asphalt shingles, and an interior brick chimney.

Structure 4a: Garage

Southeast of the house (Structure 4) is a one-story, concrete-block garage (Structure 4a). This building features an open bay along the southwest elevation, a shed-roof addition on the northeast elevation, shingle siding within the gable ends, and a front-gable roof sheathed in tar paper (Figure 26).

Structure 5: House, 15395 Carrollton Boulevard

Located east of Carrollton Boulevard, Structure 5 is a ca. 1968 house (Figure 27), and does not meet the definition of a historic resource.

Structure 6: House, 15366 Carrollton Boulevard

Located west of Carrollton Boulevard, Structure 6 is a ca. 1961 house (Figure 28), and does not meet the definition of a historic resource.

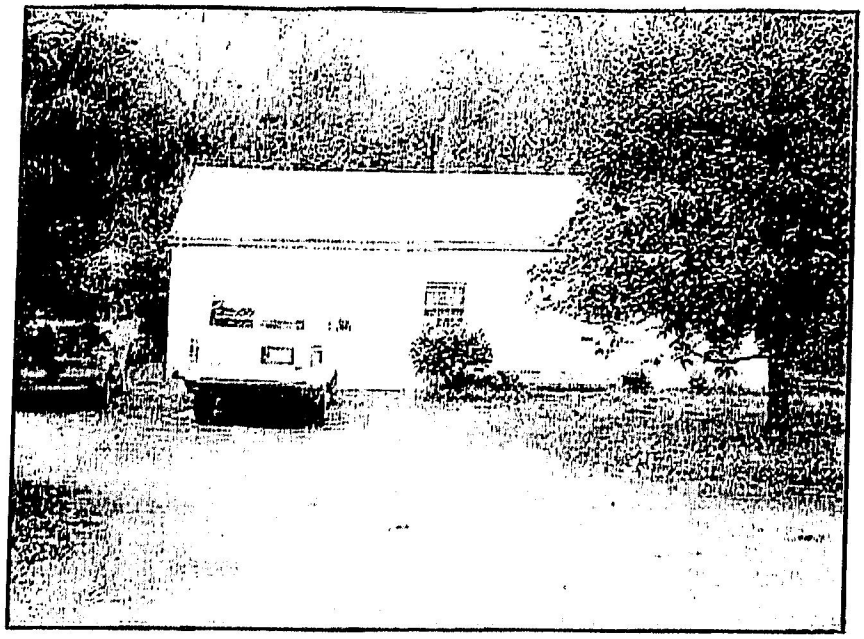


Figure 23. East Elevation of House (Structure 3) at 15358 Carrollton Boulevard.

Figure 24. View of House (Structure 3) and Shed (Structure 3a), Facing Northeast.

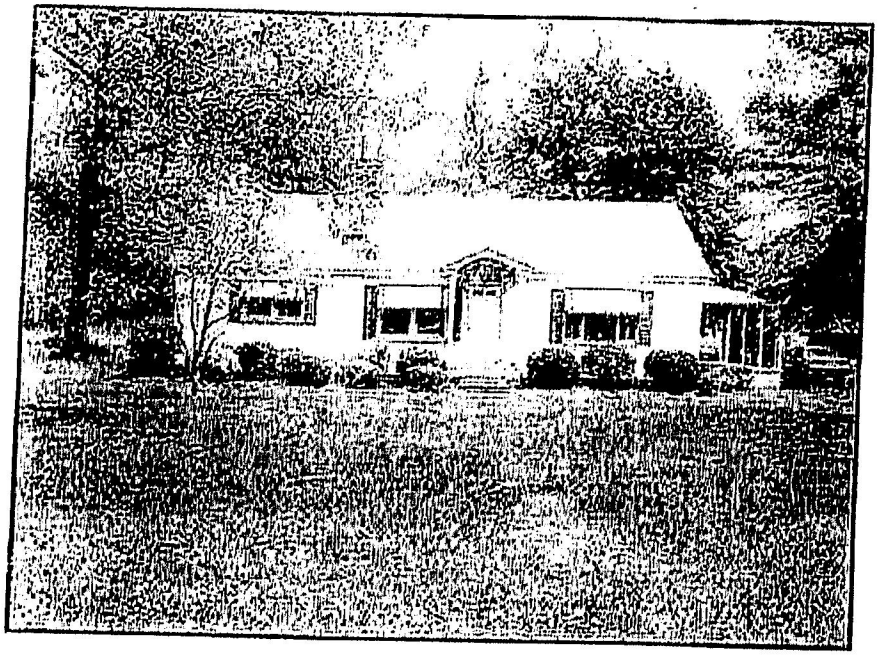


Figure 25. West Elevation of House (Structure 4) at 15411 Carrollton Boulevard.

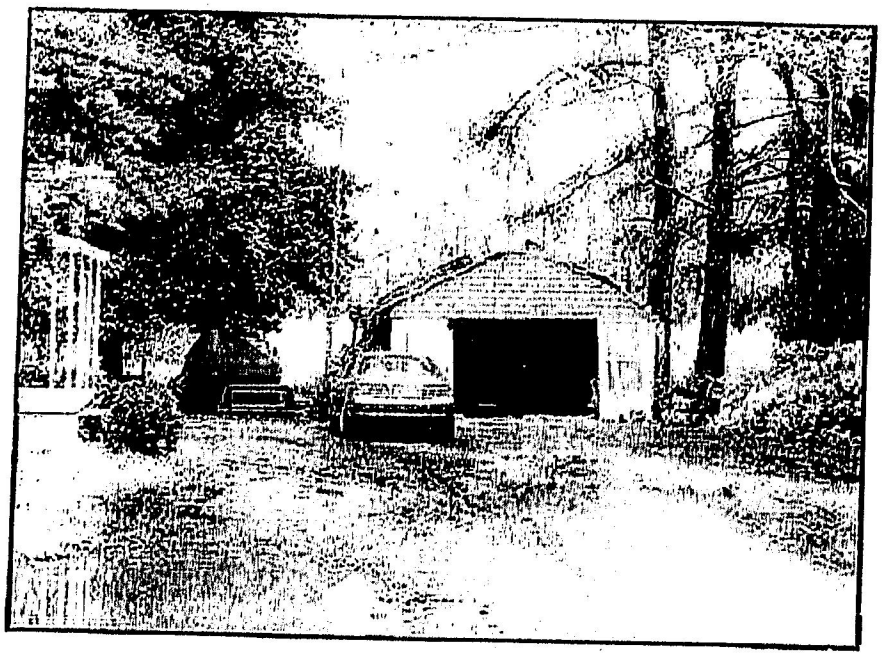


Figure 26. East Elevation of Garage (Structure 4a).

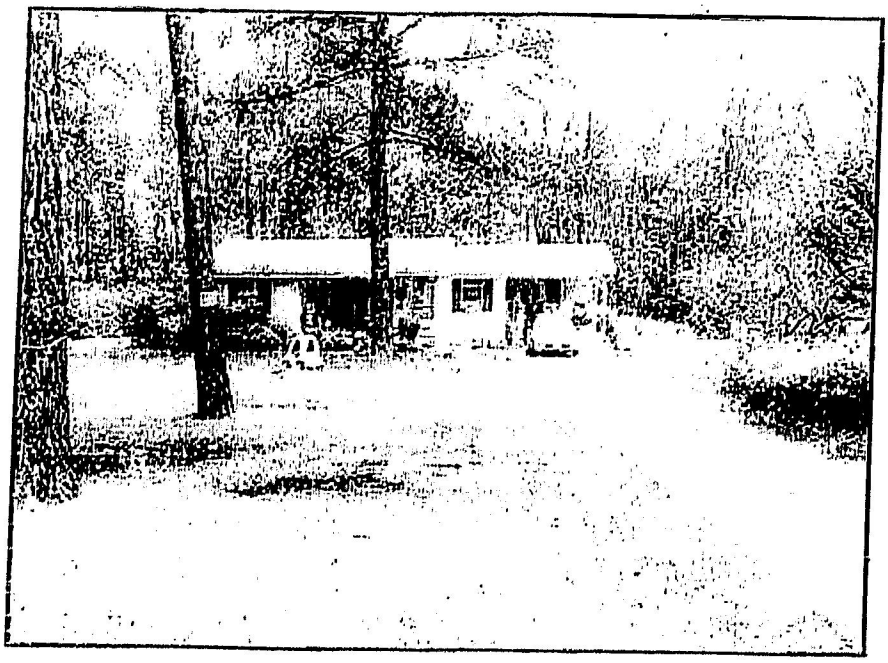


Figure 27. West Elevation of House (Structure 5) at 15395 Carrollton Boulevard.

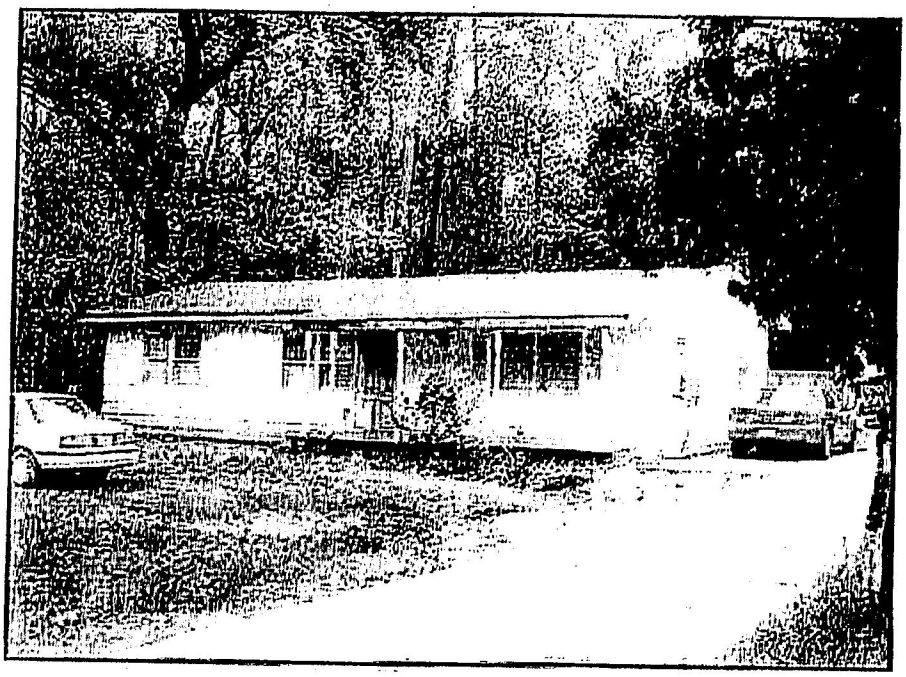


Figure 28. Northeast Oblique of House (Structure 6) at 15366 Carrollton Boulevard.

Isle of Wight grew at an unprecedented rate after the Second World War, and today the county has a total of 28,500 residents, more than double the population at the turn of the twentieth century. In 1975, the state took over the James River Bridge and removed the tolls; as a result, Isle of Wight County quickly developed into a bedroom community of Newport News, with residential developments springing up along the Route 17 corridor (King 1993). The six resources described above are a result of the growth in Isle of Wight County during the second half of the twentieth century. While four of the resources in the project area meet the definition of a historic resource, these houses do not represent significant examples of houses of this period. Structure 4 does retain some elements associated with the mid-twentieth century but does not represent an exceptional example of this style. Numerous houses of similar style are located throughout the Hampton Roads area. The houses were built individually over a period of years as a result of an expanding suburban area. Most of the dwellings and the commercial building are in poor condition and do not exhibit exceptional defining traits. These buildings do not exhibit significant elements qualifying them for inclusion on the NRHP. Therefore it is recommended that these buildings are not eligible for listing on the NRHP and no further documentation is necessary.

Summary

The results of the Phase IA assessment of the 10.6-acre project area indicate that there is a low probability for the identification of significant historic resources. While it is possible that deposits associated with the extant architectural resources may be present, these deposits would be characterized as modern trash deposits and not identified as archaeological sites. It is unlikely that archaeological deposits dating to either the prehistoric period or early historic periods would be present in the project area. As a whole, the project area appears to have been historically wet with numerous drainage ditches and areas of fill. The mid-twentieth century house sites appear to be situated on artificial uplands created specifically for the construction of these resources.

Native American sites are typically found in areas of well-drained soils and in close proximity to rivers, streams, and tributaries of the larger waterways. The current project area does not meet these general criteria and therefore, there is a low potential for the identification of Native American resources in the project area.

No areas of high probability for the identification of archaeological sites were documented during the assessment. A total of 11 shovel tests, resulting in an approximate 10% sample, were excavated in the low probability project area and no sites, locations, or isolated finds were discovered. Additionally, the architectural resources identified in the project area are typical examples of the mid-twentieth century development along the Route 17 corridor in Suffolk and Isle of Wight County. These resources are in generally poor condition and do not exhibit traits qualifying them for inclusion on the NRHP. Therefore it is recommended that no further work is necessary for this project area.

VI. CONCLUSION AND RECOMMENDATIONS

The project area encompasses approximately 10.6 acres. The current assessment considered the entire tracts of land. The entire project area was identified as having low probability.

Low Potential Areas

Based on topography, previous disturbance, drainages, and historic research, the entire 10.6 acre project was determined to retain a low probability for the identification of archaeological and historic resources. It is unlikely that cultural resources would be identified in the low-lying or swampy areas of the project area. The project area appears to have been historically wet and swampy. The project area appears to have been logged, drained, and otherwise disturbed further minimizing the potential for the identification of archaeological deposits.

Architecture

No previously recorded architectural resources were located in the project area, however, six standing structures, two with associated outbuildings, were identified during this assessment. These houses and a commercial building were constructed from 1948-1968. Isle of Wight grew at an unprecedented rate after the Second World War, and today the county has a total of 28,500 residents, more than double the population at the turn of the twentieth century. In 1975, the state took over the James River Bridge and removed the tolls; as a result, Isle of Wight County quickly developed into a bedroom community of Newport News, with residential developments springing up along the Route 17 corridor (King 1993). The six resources described above are a result of the growth in Isle of Wight County during the second half of the twentieth century. While four of the resources in the project area meet the definition of a historic resource, these houses do not represent significant examples of houses of this period. The houses were built individually over a period of years as a result of an expanding suburban area. All of the dwellings are in poor condition and do not exhibit exceptional defining traits and that these resources are not eligible for listing on the NRHP.

Recommendations

This Phase IA cultural resources assessment was conducted at the request of Commonwealth Engineering Group. The goal of the assessment fieldwork was to determine the nature of the soils and topography of the study area, as well as to provide information on previously identified cultural resources such as prehistoric sites, historic domestic farmsteads, gravesites, standing structures, or military encampment areas present within the bounds of the study area. This investigation also identifies areas of high and low potential for cultural resources within the property and has been developed to serve as a possible planning tool for proposed development within the study area. Determinations of high and low probability areas were based upon soil properties, drainage, and topography as well as observations made in the field.

To facilitate systematic testing, factors such as slope, soils, and water are examined, allowing the study area to be classified in zones of varying probability for the location of archaeological resources. The total study area consisted of approximately 10.6 acres. The total area was classified as retaining a low potential for archaeological resources is the entire 10.6 acres. It is generally recommended following a Phase IA assessment that 100% of high probability areas and 10% of low probability areas be examined for the potential identification of cultural resources. However, in this case, no areas of high potential were identified as the project area is generally low-lying and swampy except in the immediate vicinity of the extant buildings. During the course of this assessment, a ten percent sample of the low probability areas was achieved during the selective shovel testing. ***No archaeological sites, locations, or isolated finds were identified, therefore CRI recommends that no further archaeological work is necessary.***

In addition, the six architectural resources within the project area are typical examples of mid-twentieth century construction along the Route 17 in Suffolk and Isle of Wight County. Two of these resources do not meet the criteria to be considered historic. The remaining four resources date primarily to circa 1950-1954 and are in poor condition. These resources are not exceptional examples of mid-twentieth century architecture and are in varying states of repair. ***It is therefore recommended that these resources are not eligible for listing on the NRHP and no further documentation is necessary.***

COUNTY of ISLE OF WIGHT

THE COURTHOUSE

October 1, 2009

Mr. Elliot Cohen
Carrollton Village, LLC
3613 Point Elizabeth Drive
Chesapeake, VA 23321

RE: The request of Carrollton Village LLC, owner, and Commonwealth Engineering, applicant, for a rezoning of Tax Map Parcels 34-01-108 and 34-01-108B in the Newport Development Service District from Rural Agricultural Conservation (RAC) to Conditional-General Commercial (C-GC). Said property, approximately 8.028 acres, is located on the east side of Carrollton Boulevard (Rt. 17), south of Sugar Hill Road (Rt. 661) in the Newport Election District. The proposed use of the property is for a proposed office condominium and retail development.

Dear Mr. Cohen:

The Isle of Wight County Board of Supervisors, at its meeting on September 24, 2009, considered and approved the above-referenced application, as proffered per the attached "Revised Proffer Statement for Rezoning of Tax Parcel Identification Numbers 34-01-108 and 34-01-108B" dated September 15, 2009.

Should you have any questions regarding this matter, please feel free to contact this office.

Sincerely,

Beverly H. Walkup
Director of Planning and Zoning

BHW/mjg
Attachment
cc: Mr. R. Mitchell Wilcox, P.E.
Commonwealth Engineering Group, Ltd.
17226 Commerce Lane
Smithfield, VA 23430

Mr. Herb Finch, IT Department (Zoning Notification Form)

Revised Proffer Statement for Rezoning of
Tax Parcel Identification Numbers 34-01-108 and 34-01-108B

TO: The Honorable Board of Supervisors and Planning Commission for the County of Isle of Wight, Virginia

DATE: September 15, 2009

APPLICATION NUMBER: ZA-12-08

In reference to the above request for rezoning:

Conditions: The undersigned hereby proffers that the development of the above-referenced properties (individually and collectively, the "Property") shall be in accordance with the conditions in this submission.

Property Owner:

Carrollton Village, LLC

By: Elliot Cohen
Elliot Cohen, Owner

Introduction

There is incorporated by reference that certain document entitled, Conceptual Drawing submitted to the Planning Commission on October 28, 2008 and Conceptual Plan dated April 10, 2009 with this rezoning application hereinafter referred to as (the "Plan"). The Property shall be developed in general conformance with the Plan and shall be subject to the requirements of the Zoning Ordinance in effect at the time of site plan submittal.

Carrollton Village, LLC proposes to develop an office condominium and retail development on the Property for the purpose of providing neighborhood services for the residents of Isle of Wight County, hereinafter referred to as (the "Project").

These revised Proffers shall be applicable to, and binding upon, the Property, and upon approval of these Proffers by the Board of Supervisors and subsequent actions required by the County to officially effectuate this rezoning, then these revised Proffers supersede and replace all prior Proffers heretofore submitted with the rezoning application for the Property.

PROFFERS

The Property Owner, hereinafter referred to as (the "Applicant"), for rezoning does hereby voluntarily proffer the following conditions with respect to the Property subject to the rezoning as follows:

I. Design and Unit Count

A. The Applicant shall construct an office condominium and retail development not to exceed 94,500 square feet.

B. The building shall be generally consistent with the Conceptual Drawing dated October 28, 2008 and included with these proffers (attached). Building materials will be an alternating color scheme of brick veneer or alternating cementious siding with brick veneer with dormer windows and a peaked roof.

C. There shall be no outside storage or repair work on the site.

D. The following uses shall be prohibited on the property as defined in the Zoning Ordinance dated August 2005 as Amended:

1. Nursing Home

2. Park and Ride Facility

3. Public Park and Recreational Area

4. Commercial Assembly and Repair of all equipment normally used in Agricultural, Silvicultural, and Horticultural Operation

5. Farm Supplies, Equipment Sales and Service, except for Garden Equipment

6. Farm and Forestry Implement Storage, Sales and Service

7. Auction Establishment

8. Bed and Breakfast

9. Funeral Home

10. Golf Course

11. Hospital

12. Hotel/Motel/Motor Lodge/Inn

13. Marina

14. Motor Vehicle Dealership/New

15. Motor Vehicle Repair Service/Minor

16. Construction Yard;

17. Timbering Operation

18. Livestock Auction Market

19. Commercial Stable not in conjunction with residence

20. Assisted Living Facility

21. Church Cemetery

22. Public Maintenance and Service Facility

23. Commercial Outdoor Entertainment/Sports and Recreation

24. Commercial Outdoor Swimming Pool and Tennis Facility

25. Crematorium

26. Dance Hall

27. Gasoline Station

28. Golf Driving Range

29. Manufactured Home Sales

30. Mini Warehouse

31. Motor Vehicle Dealership, Used

32. Motor Vehicle /Outdoor Storage

33. Motor Vehicle Repair Service/Major

34. Motor Vehicle Repair Service/Minor

35. Recreational Vehicle Sales and Service

36. Truck Stop

37. Convenience Center

38. Landfill, Rubble

39. Recycling Center

40. Parking Facility, Surface/Structure

41. Reconstructed Wetland

42. Commercial Accessory Apartments

43. Assembly Repair of Farm Equipment

44 Forestry Operation

45. Amateur Radio Tower

II. Infrastructure

A. The Applicant shall install, when shopping center construction begins, improvements recommended in the Traffic Impact Assessment for Carrollton Boulevard Parcels, dated December 22, 2008, including off-site improvements, which include, at a minimum, the following:

1. A single right-in/right-out entrance to the site;
2. A 200-foot right turn lane with a 200-foot taper on Carrollton Boulevard northbound lane; and
3. The existing northbound and southbound left turn lanes on Route 17 at the intersections of Sugar Hill Road and with Cedar Grove Road shall be increased to a 200-foot taper with 200-foot storage.

B. In order to provide connectivity between adjacent parcels and minimize the need for traffic entering and exiting Carrollton Boulevard (Rt. 17), the Applicant shall grant cross access to provide unobstructed passage of vehicles and pedestrians between the Property and tax parcels 34-01-114 and 34-01-115. The Applicant shall construct a drive aisle on his property to the adjacent property line at the time building permits have been issued for both properties. No barriers, fences or other obstructions shall be erected or maintained on the Property that prevent or obstruct vehicular or pedestrian traffic thereon, except for temporary barriers of obstructions reasonably required in connection with the construction, replacement or repair of improvements located on the Property.

The Applicant reserves the right at any time and from time to time to exclude and restrain any person or entity from utilizing the access as thru-way to other property.

Relief from this provision may be granted by the Zoning Administrator, should the proposed use of tax parcels 34-01-114 and 34-01-015 be substantially altered from the use(s) proposed in the current Rezoning Application #ZA-14-08.

C. This property owner shall construct a connecting road within the boundary of this property to any future public road constructed adjacent to the property

III. Easements, Right-of-Ways and Buffers

A. Applicant shall provide a twelve foot easement to the County for the construction of a pedestrian travel way within the Newport Development Service Overlay District 70 foot setback along Route 17. This path shall be designed and constructed by the Applicant in accordance with the specifications approved by the Zoning Administrator.

B. The Applicant shall reserve a 50-foot right-of-way for a future connection road along the northern property line as shown on the Conceptual Plan dated April 10, 2009 and included with these proffers (attached).

IV. Property Owners' Association and Restrictive Covenants

A. Applicant shall form a Property Owners' Association which may also include sub-associations, in accordance with Virginia law. Upon the sale of 80% of the total units the Association shall become responsible for the maintenance of the following shared features and shall carry sufficient reserves and insurance to cover any damages thereto:

1. Stormwater Management Facilities (BMP's);

2. All shared private roadways;

3. All common areas; and

4. All community amenities provided for the use of more than any single owner, including, but not limited to, management office space, community meeting room, and parking areas.

B. Restrictive covenants and restrictions for the Property shall be recorded prior to any outsales in the land records of Isle of Wight County and shall contain all applicable items referred to in these proffers.

C. Trash pick up shall be restricted to no pick up on weekends. Regular pick up shall be no earlier than 7 a.m. provided there is a vendor willing to abide by these rules.

V. Cash Proffers

A. The Applicant proffers to pay $596.00 per 1,000 square feet of office space and $632.00 per 1000 square feet of retail space.

VI. Reversion of Zoning

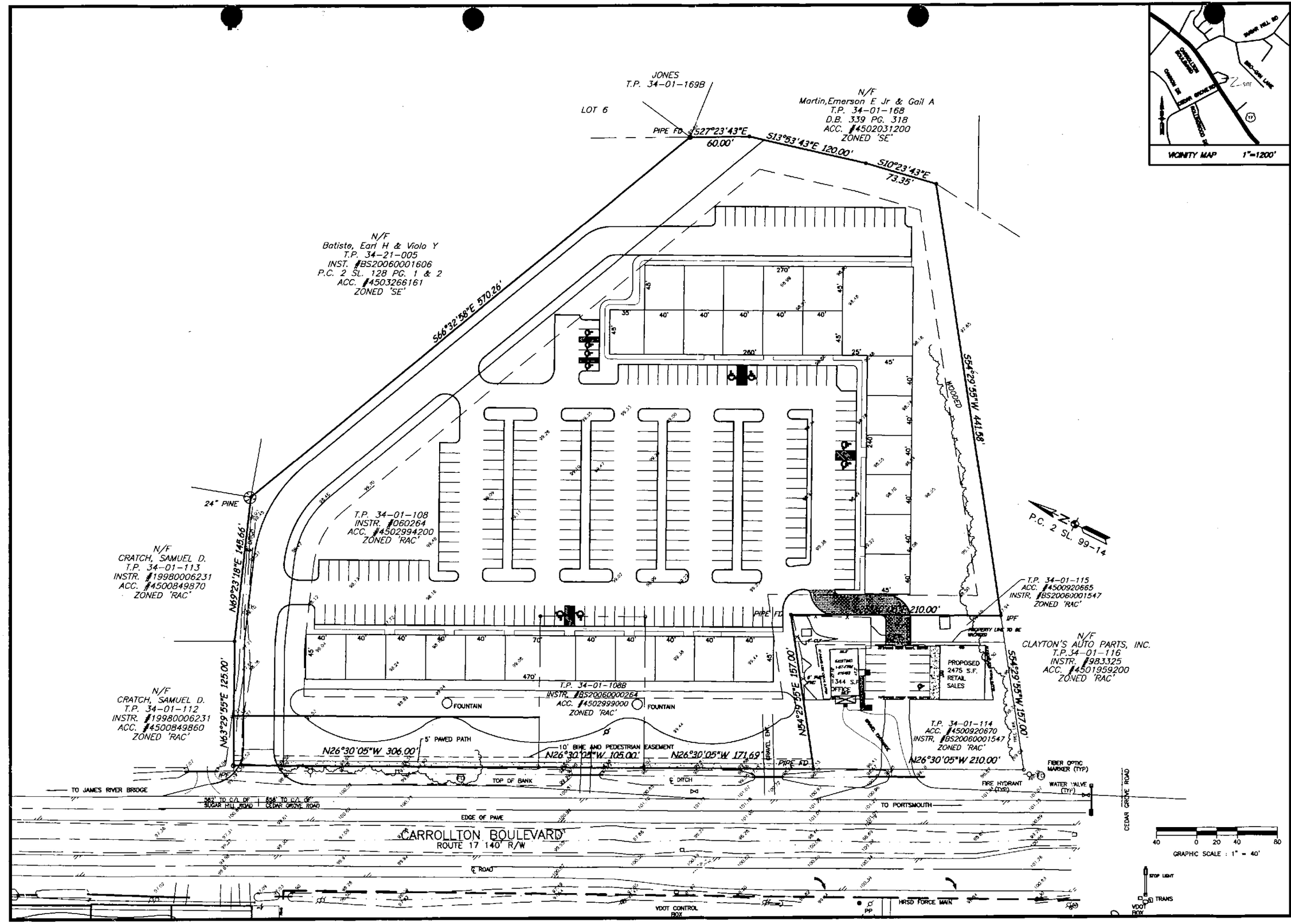
If a building permit is not issued by the County of Isle of Wight for approval in accordance with County ordinances within 7 years from the date of approval of this application for a change in zoning classification, then the Applicant shall not oppose any action taken by the Board of Supervisors to change the zoning classification back to its original zoning classification in effect prior to the filing of this application.

VII. **Landscaping**

1. Applicant agrees to install a 6' tall fence along the common property line with Tax Parcel 34-21-005. The landscape buffer shall use to the maximum extent possible the following plants:

Landscape Buffer List

ARBORVITAE BLUE CONE 7 GAL
CYPRESS LEYLAND* 15 GAL
CYPRESS DWARF HINOKI* 7 GAL
CYPRESS GOLD MOP* 3 GAL
BARBERRY CRIMSON PYGMY 3 GAL
JUNIPER ROBUSTA GREEN 7 GAL
AUCUBA GOLD DUST 7 GAL
CLEYERA JAPANESE 7 GAL
HOLLY BLUE GIRL (PP# 2434) 7 GAL
HOLLY BLUE BOY (PP# 2435) 3 GAL
HOLLY CARISSA* 3 GAL
LOROPETALUM ZHUZHOU* (ESP) 15 GAL
CRAPEMYRTLE CENTENNIAL SPIRIT- RED 7 GAL
CRAPEMYRTLE CATAWBA- PURPLE 3 GAL
NANDINA GULFSTREAM (PP# 5656) 3 GAL
NANDINA FIREPOWER DWARF 3 GAL



REVISIONS

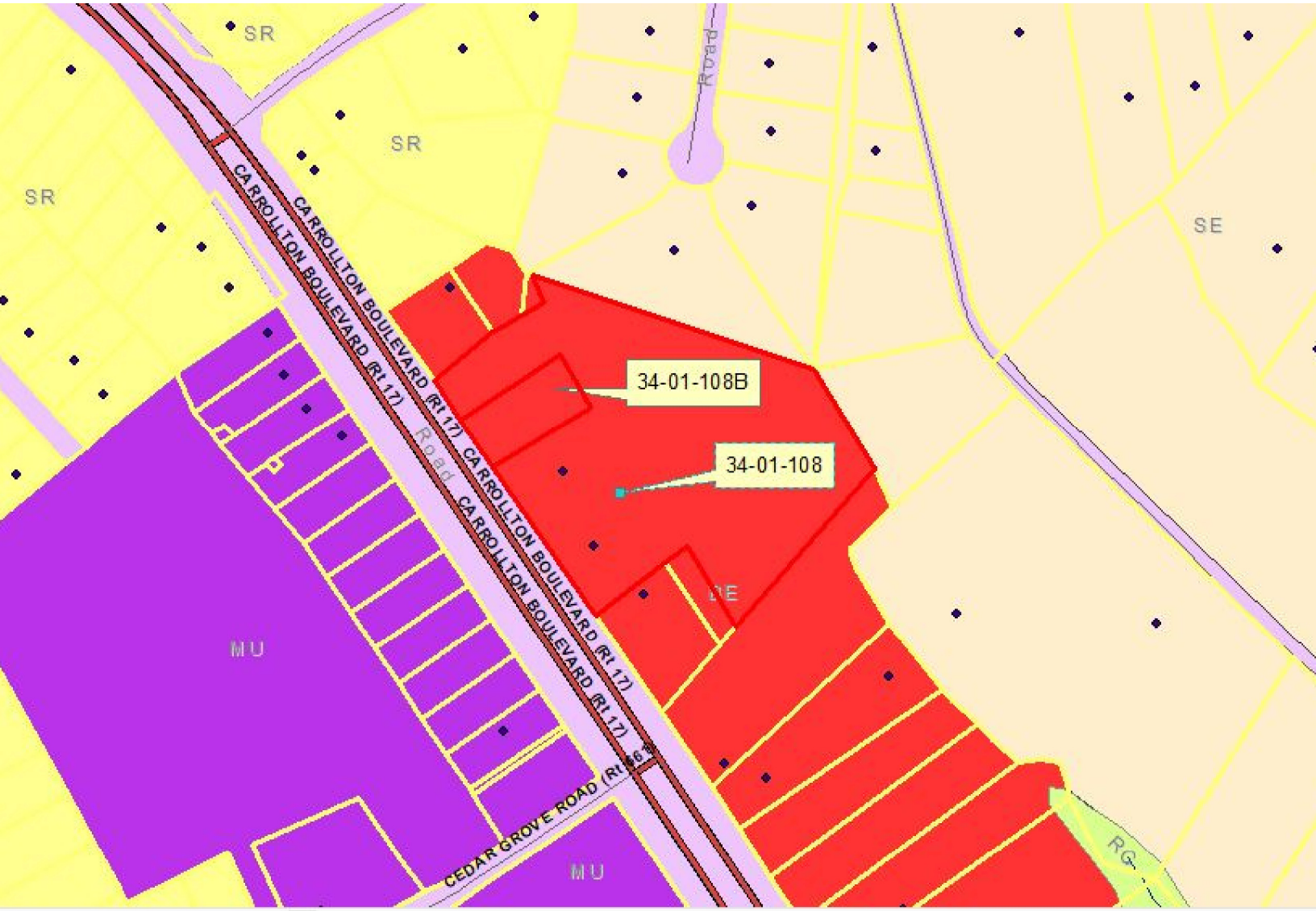
DATE	DESCRIPTION

Commonwealth Engineering Group, Ltd.
CIVIL ENGINEERS - PLANNERS
17226 COMMERCE LANE
SMITHFIELD, VIRGINIA 23430
757-356-9140 FAX 757-356-9142

COMMONWEALTH OF VIRGINIA MICHAEL TILSON Lic. No. 019887 PROFESSIONAL ENGINEER

PRELIMINARY SITE PLAN FOR THREE COINS NEWPORT NEWS MAGISTERIAL DISTRICT ISLE OF WIGHT COUNTY, VIRGINIA

DRAWN:	M.W.C.
DESIGNED:	M.F.H.
SCALE:	1"= 40'
DATE:	05/07/08
SHEET:	1 OF 1
CEG#	07-193E


SR
SR
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CARROLLTON BOULEVARD (RT 17)
CARROLLTON BOULEVARD (RT 17)
Road
CARROLLTON BOULEVARD (RT 17)
CARROLLTON BOULEVARD (RT 17)
Road
SE
34-01-108B
34-01-108
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MU
CEDAR GROVE ROAD (RT
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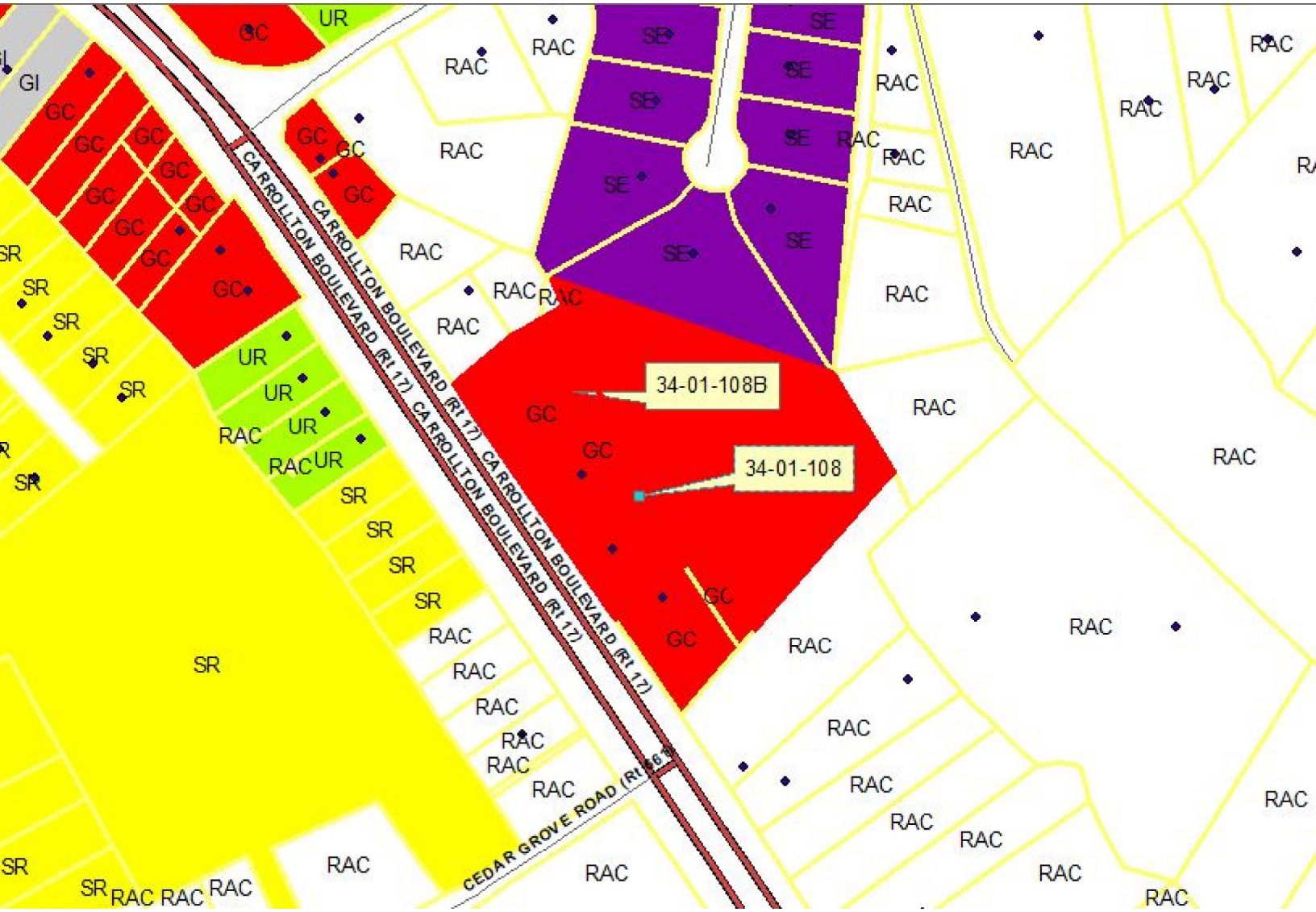

34-01-108B
34-01-108
CARROLLTON BOULEVARD (RT 17)
CEDAR GROVE ROAD (RT 66)
GC
SE
RAC
SR
UR
GI

RESOLUTION NUMBER PC-22-06

ISLE OF WIGHT COUNTY PLANNING COMMISSION
A RESOLUTION TO PRESENT A REPORT AND RECOMMENDATION TO THE BOARD OF SUPERVISORS FOR AN AMENDMENT TO CONDITIONAL ZONING REQUEST ZA-011-21 TO ALLOW FOR A MINI-WAREHOUSE USE WITH OUTDOOR MOTOR VEHICLE STORAGE ON PROPERTY WITH TAX MAP PARCELS 34-01-108 AND 34-01-108B

WHEREAS, Carrollton Ventures, LL, property owner, has requested an amendment to Conditional General Commercial zoning on property with tax map numbers 34-01-108 and 34-01-108B to allow up to 120,000 square feet of mini-warehouse storage units with outdoor storage for motor vehicles, trailers, and recreational vehicles; and

WHEREAS the procedural requirements for the consideration of this request by the Planning Commission have been met.

NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Isle of Wight County, that:

Section 1. Findings.

_____ A. The Isle of Wight County Planning Commission finds that the proposed amendment to conditional zoning is reasonable and warranted due to a change in circumstances affecting the property and has considered the following factors and finds that the proposed rezoning does not conflict with:

1. the existing use and character of property within the County;

2. the Comprehensive Plan;

3. the suitability of the property for various uses;

4. the trends of growth or change;

5. the current or future requirements of the community as to land for various purposes as determined by population and economic studies and other studies;

6. the transportation requirements of the community;

7. the requirements for airports, housing, schools, parks, playgrounds, recreation areas and other public services;

8. the conservation of natural resources;

9. the preservation of floodplains;

10. the preservation of agricultural and forestal land;

11. the conservation of properties and their values; and

12. the encouragement of the most appropriate use of land throughout the County.

_____ B. The Isle of Wight County Planning Commission does not find that the proposed zoning map amendment is reasonable based on the consideration of the factors listed herein.

Section 2. Recommendation to Board of Supervisors.

The Planning Commission recommends to the Board of Supervisors that the request, ZA-11-21, be:

___ a. Granted as submitted, and that the Board of Supervisors adopt the proposed Ordinance without modification.

___b. Denied, and that Board of Supervisors not adopt the proposed Ordinance.

___c. Granted with any proffered conditions and modifications set forth on the attached listing of specific recommendations, and that the Board of Supervisors adopt the proposed Ordinance with such modifications.

DATE: _____

READ AND PASSED:_____
Chairman, Isle of Wight County Planning Commission

TESTE:_____
Secretary, Isle of Wight County Planning Commission

Approved as to Form:

_____
Robert W. Jones, Jr., County Attorney

Traffic Data

For

T.P. 34-01-108 & 108B
Carrollton Ventures

COMMONWEALTH OF VIRGINIA
R. MITCHELL WILCOX
Lic. No. 018691
1-20-22
PROFESSIONAL ENGINEER

Prepared by

Commonwealth Engineering Group, Ltd.

Civil Engineers • Planners
12196 Redhouse Road • Windsor, Virginia 23487
(757) 356-9140

Commonwealth Engineering Group
ENGINEERS-PLANNERS
12196 Redhouse Road
Windsor, Virginia 23487
(757) 356-9140

Traffic Narrative

T.P. 34-01-108 &108B

The traffic analysis for the original rezoning was based on the construction of 56,000 square feet of retail and 60 apartments above the retail. This use would generate an average trip generation of 2,709 trips per day (Trip generation sheets enclosed). The peak driveway volume would be 136 vehicles entering in one hour. The traffic improvements originally proffered were based on these large counts.

The new use is for 120,000 square feet of mini storage. This use would generate an average trip generation of 300 trips per day (Trip generation sheets enclosed). The peak driveway volume would be 16 vehicles entering in one hour. Using Figure 3-27(figure enclosed) from the VDOT manual this number of trips would require a right in/right out entrance with no turn lanes or tapers required. This amendment however is proffering tapers on the entrance.

cohen
Summary of Trip Generation Calculation
For 60 Dwelling Units of Apartments
December 10, 2021

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	6.65	3.07	1.00	399
7-9 AM Peak Hour Enter	0.10	0.00	1.00	6
7-9 AM Peak Hour Exit	0.41	0.00	1.00	25
7-9 AM Peak Hour Total	0.51	0.73	1.00	31
4-6 PM Peak Hour Enter	0.40	0.00	1.00	24
4-6 PM Peak Hour Exit	0.22	0.00	1.00	13
4-6 PM Peak Hour Total	0.62	0.82	1.00	37
Saturday 2-Way Volume	6.39	2.99	1.00	383
Saturday Peak Hour Enter	0.00	0.00	1.00	0
Saturday Peak Hour Exit	0.00	0.00	1.00	0
Saturday Peak Hour Total	0.52	0.74	1.00	31

Note: A zero indicates no data available.
Source: Institute of Transportation Engineers
Trip Generation, 8th Edition, 2008.

TRIP GENERATION BY MICROTRANS

cohen
Summary of Trip Generation Calculation
For 56 Th.Sq.Ft. GLA of Shopping Center
December 10, 2021

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	42.94	21.38	1.00	2405
7-9 AM Peak Hour Enter	0.61	0.00	1.00	34
7-9 AM Peak Hour Exit	0.39	0.00	1.00	22
7-9 AM Peak Hour Total	1.00	1.38	1.00	56
4-6 PM Peak Hour Enter	1.83	0.00	1.00	102
4-6 PM Peak Hour Exit	1.90	0.00	1.00	106
4-6 PM Peak Hour Total	3.73	2.74	1.00	209
Saturday 2-Way Volume	49.97	22.62	1.00	2798
Saturday Peak Hour Enter	2.54	0.00	1.00	142
Saturday Peak Hour Exit	2.35	0.00	1.00	132
Saturday Peak Hour Total	4.89	3.10	1.00	274

+ 399 = 2764

Note: A zero indicates no data available.
Source: Institute of Transportation Engineers
Trip Generation, 8th Edition, 2008.

TRIP GENERATION BY MICROTRANS

Carrollton Ventures
Summary of Trip Generation Calculation
For 120 Th.Sq.Ft. GFA of Mini-Warehouse
January 07, 2022

	Average Rate	Standard Deviation	Adjustment Factor	Driveway Volume
Avg. Weekday 2-Way Volume	2.50	1.78	1.00	300
7-9 AM Peak Hour Enter	0.09	0.00	1.00	11
7-9 AM Peak Hour Exit	0.06	0.00	1.00	7
7-9 AM Peak Hour Total	0.15	0.39	1.00	18
4-6 PM Peak Hour Enter	0.13	0.00	1.00	16
4-6 PM Peak Hour Exit	0.13	0.00	1.00	16
4-6 PM Peak Hour Total	0.26	0.52	1.00	31
Saturday 2-Way Volume	2.33	1.69	1.00	280
Saturday Peak Hour Enter	0.00	0.00	1.00	0
Saturday Peak Hour Exit	0.00	0.00	1.00	0
Saturday Peak Hour Total	0.40	0.64	1.00	48

Note: A zero indicates no data available.
Source: Institute of Transportation Engineers
Trip Generation, 8th Edition, 2008.

TRIP GENERATION BY MICROTRANS

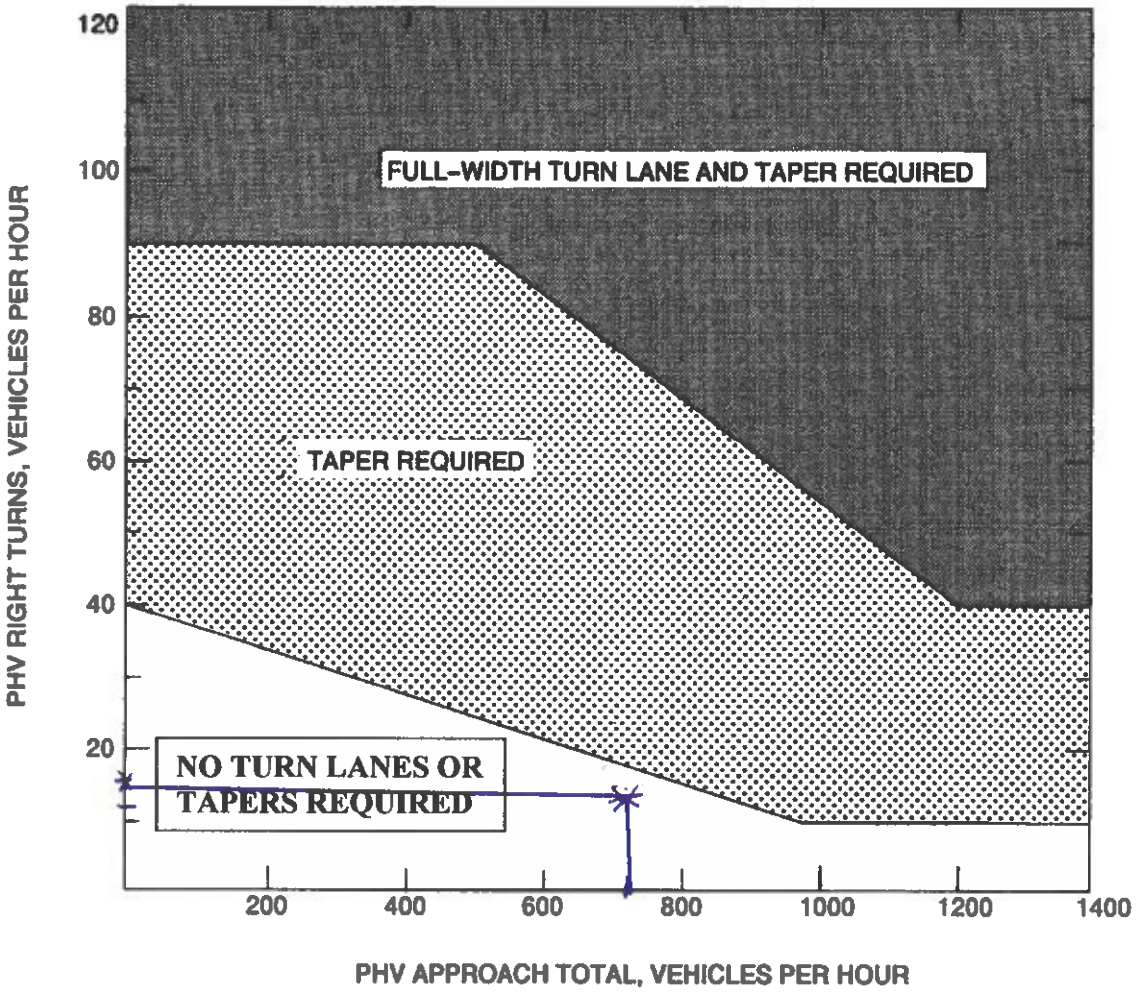


FIGURE 3-27 WARRANTS FOR RIGHT TURN TREATMENT (4-LANE HIGHWAY)

Appropriate Radius required at all Intersections and Entrances (Commercial or Private).

LEGEND

PHV- - Peak Hour Volume (also Design Hourly Volume equivalent)

Adjustment for Right Turns

If PHV is not known use formula: PHV = ADT x K x D

K = the percent of AADT occurring in the peak hour
D = the percent of traffic in the peak direction of flow

Note: An average of 11% for K x D will suffice.

When right turn facilities are warranted, see Figure 3-1 for design criteria.*

* Rev. 1/15

PHV = 14,000 X 0.096 X 0.542 = 728

Virginia Department of Transportation
Traffic Engineering Division
2020
Annual Average Daily Traffic Volume Estimates By Section of Route
Isle of Wight Maintenance Area

Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	Truck 2Axle	Truck 3+Axle	Truck 1Trail	Truck 2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW
	From: Surry County Line															
10 Old Stage Hwy	Isle of Wight County	4.12	6400	G	93%	1%	1%	1%	4%	0%	F	0.106	F	0.515	6400	G
	To: / From: Bus SR 10 West Of Smithfield															
10	Isle of Wight County	2.96	6300	G	96%	1%	1%	1%	2%	0%	C	0.110	F	0.508	6700	G
	To: / From: NCL Smithfield															
10	Town of Smithfield (Maint: 46)	0.78	8200	F	96%	1%	1%	1%	2%	0%	F	0.092	F	0.558	8700	F
	To: US 258 Main St West / From: Main St West															
10 258	Town of Smithfield (Maint: 46)	2.30	15000	F	95%	1%	1%	1%	2%	0%	C	0.092	F	0.523	16000	F
	To: / From: Bus US 258, Bus SR 10 Church St South															
10 258 Benns Church Blvd	Town of Smithfield (Maint: 46)	0.31	23000	F	95%	1%	1%	2%	2%	0%	F	0.092	F	0.521	24000	F
	To: / From: Old ECL Smithfield															
10 258 Benns Church Blvd	Town of Smithfield (Maint: 46)	0.65	20000	F	95%	1%	1%	2%	2%	0%	F	0.09	F	0.528	21000	F
	To: / From: SCL Smithfield															
10 258 Benns Church Blvd	Isle of Wight County	1.00	22000	G	95%	1%	1%	2%	2%	0%	F	0.09	F	0.528	23000	G
	To: SR 32 Brewers Neck Blvd / From: US 258 S, Brewers Neck Blvd															
10 32 Benns Church Blvd	Isle of Wight County	4.15	8300	F	95%	0%	1%	2%	2%	0%	C	0.088	F	0.504	8800	F
	To: NCL Suffolk / From: SR 10															
Bus Bus 10 258 South Church St		0.85	11000	F	99%	0%	0%	0%	0%	0%	F	0.098	F	0.555	12000	F
	To: / From: Battery Park Rd															
Bus Bus 10 258 South Church St	Town of Smithfield (Maint: 46)	0.79	9900	F	99%	0%	0%	0%	0%	0%	C	0.103	F	0.525	10000	F
	To: / From: Red Point Dr															
Bus Bus 10 258 Church St	Town of Smithfield (Maint: 46)	0.79	9600	F	99%	0%	0%	0%	0%	0%	F	0.121	F	0.509	10000	F
	To: Bus SR 258 Smithfield / From: Bus US 258 Main St															
Bus 10 North Church St	Town of Smithfield (Maint: 46)	0.85	5200	G	99%	0%	0%	0%	0%	0%	C	0.117	F	0.613	5500	G
	To: / From: Berry Hill Rd															
Bus 10 North Church St	Town of Smithfield (Maint: 46)	0.43	4600	F	99%	0%	0%	0%	0%	0%	F	0.113	F	0.639	4800	F
	To: / From: NCL Smithfield															
Bus 10 Old Stage Hwy	Isle of Wight County	0.76	3100	F	96%	2%	1%	1%	0%	0%	C	0.115	F	0.547	3100	F
	To: / From: 46-674 Blounts Corner Rd															
Bus 10 West Main St	Isle of Wight County	2.16	1300	F	97%	1%	1%	0%	1%	0%	C	0.107	F	0.682	1300	F
	To: SR 10 West of Smithfield / From: NCL Suffolk															
17 Carrolton Blvd	Isle of Wight County	2.43	14000	G	97%	0%	1%	1%	1%	0%	F	0.096	F	0.542	15000	G
	To: US 258; SR 32 Bartlett															

C. **APPLICATION INFORMATION:**

Applicant(s) Name(s): Carrollton Ventures, LLC

Address: P. O. Box 245

City, State, Zip Code: Carrollton, VA 23314

Phone No.: 757-870-1982 Email: wcsawyer21@gmail.com Fax No.: _____

Property Owner(s) Name(s): same as above

Address: _____

City, State, Zip Code: _____

Phone No.: _____ Email: _____ Fax No.: _____

W C Sawyer 3-4-22

Applicant Signature Date

_____

Owner Signature *if different* Date

NOTICE: THE ATTACHED CHECKLIST MUST BE COMPLETED, CERTIFIED, AND SUBMITTED OR THE APPLICATION WILL BE CONSIDERED INCOMPLETE.

Remit Application to: Isle of Wight County Central Permitting, 17140 Monument Circle, Suite 100
P. O. Box 80, Isle of Wight, Virginia 23397

FOR OFFICE USE ONLY:

Complete Application Received On: _____ Fees Paid: _____
Tax Query: [ ] Current [ ] Delinquent Distribution Date: _____
Posted/Date to Post: _____

AGENCIES REFERRALS:

_____ Department of Conservation & Recreation
_____ Economic Development
_____ Emergency Services
_____ General Services
_____ Environmental Planner
_____ Health Department
_____ Transportation Manager
_____ Commission of Revenue
_____ Other _____

_____ Inspections
_____ Sheriff's Office
_____ Town of Smithfield
_____ Town of Windsor
_____ VDOT
_____ Schools
_____ Budget & Finance
_____ County Attorney

Verified By: _____ Date: _____

COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
23116 Meherrin Road
COURTLAND, VIRGINIA 23837

May 12, 2022

Amy Ring, Director
Planning and Zoning
Isle of Wight County
P. O. Box 80
Isle of Wight, VA 23397

RE: ZA-11-21 Sawco Self Storage
Carrollton Boulevard (Route 17)
Isle of Wight County

The Residency has completed its review of the subject zoning amendment application dated April 15, 2022 and received by the VDOT Land Development Office on April 28, 2022. We offer the following comments:

1) The proposed RI/RO entrance off Route 17, as shown in the preliminary site plan, does not meet the required Access Management spacing standards. The proposed entrance was relocated to meet spacing from the existing commercial entrance to the south (serving TM 34-01-114), but now is separated from the commercial entrance (serving TM 34-01-110) to the north by only 382'. A minimum of 495' of spacing between partial access entrances is required. We recommend relocating the entrance so that it meets the minimum 495' in both directions (there is sufficient distance for compliance).

2) We recommend providing a cross-parcel access easement from a centered entrance that meets spacing standards to parcel 34-01-112.

SUPPORTING DOCUMENTS

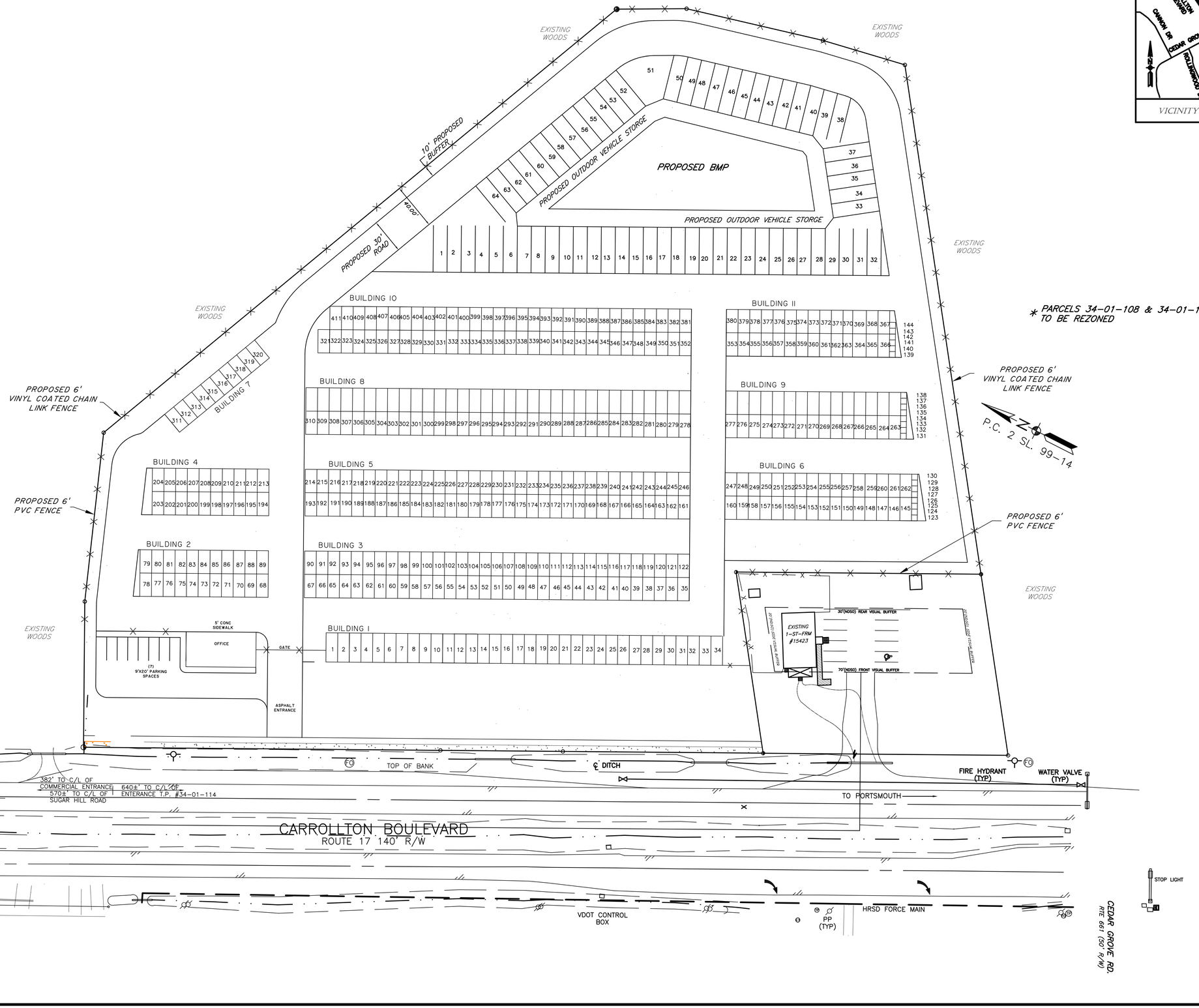
3) A detailed narrative which addresses each comment listed above must accompany your re-submittal package. Any revisions beyond those necessary to address the review comments listed above must be identified separately in the re-submittal narrative.

4) Please provide two (2) folded copies of the revised plans and two (2) copies of the detailed narrative with your re-submittal package.

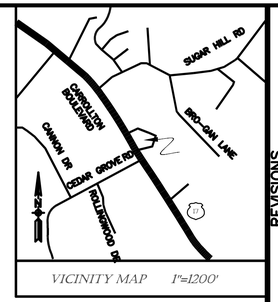
If you have any questions, please contact me at (757) 346-3068 or Joshua.Norris@vdot.virginia.gov.

Sincerely,

Joshua R. Norris
Land Use Engineer
Virginia Department of Transportation
Franklin Residency



* PARCELS 34-01-108 & 34-01-108B TO BE REZONED



REVISIONS

R. MITCHELL WILCOX
LIC. NO. 018651
12-1-21
COMMONWEALTH OF VIRGINIA
LICENSED PROFESSIONAL ENGINEER

CONCEPTUAL PLAN
FOR
W. C. SAWYER
NEWPORT NEWS MAGISTERIAL DISTRICT
ISLE OF WIGHT COUNTY, VIRGINIA

DRAWN:	
DESIGNED:	RMRW
SCALE:	1"= 40'
DATE:	12/01/2021
SHEET:	1 OF 1
CEG#	21-151