

PLANNED DEVELOPMENT REQUEST

ZREZ-03-21-00125

- Case history
- Presentation
- Application
- Public Input

Post & Courier

CHARLESTON COUNTY COUNCIL PUBLIC HEARING **Tuesday, June 8, 2021 at 6:30 PM**

Charleston County Council will hold a public hearing on the matters listed below beginning at 6:30 p.m., Tuesday, June 8, 2021, in Council Chambers (second floor of the Lonnie Hamilton, III, Public Services Building, located at: 4045 Bridge View Drive, North Charleston, SC 29405). Packet information can be found online at: <https://www.charlestoncounty.org/departments/zoning-planning/>. The meeting will be livestreamed at: <https://www.charlestoncounty.org/departments/county-council/cctv.php>. Public comments may be made in person, or written public comments may be emailed to CCPC@charlestoncounty.org or mailed to the address listed above by noon on Tuesday, June 8, 2021. Contact the Zoning and Planning Department at (843)202-7200 or CCPC@charlestoncounty.org for additional information.

- a. ZREZ-03-21-00123: Request to rezone TMS 286-00-00-601, 1491 Bees Ferry Road, from the Industrial (I) Zoning District to the Mixed-Style Residential (M-12) Zoning District.
- b. ZREZ-03-21-00125: Request to rezone TMS 711-00-00-052, 7820 N Highway 17, from the Agricultural Preservation 10 (AG-10) Zoning District to Planned Development 181 (PD-181) Zoning District, High School/Middle School in Awendaw.

This Public Notice is in accordance with Section 6-29-760 of the Code of Laws of South Carolina.

Kristen L. Salisbury
Clerk of Council

High School/ Middle School in Awendaw

PD-181: ZREZ-03-21-00125

Case History

Planning Commission: May 10, 2021

Public Hearing: June 8, 2021

Planning and Public Works Committee: June 17, 2021

First Reading: June 22, 2021

Second Reading: July 27, 2021

Third Reading: August 31, 2021

CASE INFORMATION

Applicant: Mary Martinich, Seamon Whiteside

Owner: Quarry Lake Plantation LLC

Location: 7820 N Highway 17

Parcel Identification: 711-00-00-052

Application: Request to rezone TMS 711-00-00-052, located at 7820 N. Highway 17 (East County area), from the Agricultural Preservation 10 (AG-10) Zoning District to the Planned Development, PD-181, *High School/Middle School in Awendaw*, Zoning District.

Council District: 2 (Schweers)

Property Size: 107.2 acres

Zoning History: The subject property was zoned Agricultural General prior to the adoption of the Zoning and Land Development Regulations Ordinance in 2001, which changed the zoning to the Agricultural Preservation District (AG-10). In 2020, an application submitted to rezone this property from AG-10 to PD-176, "High School/Middle School in Awendaw" was submitted. On June 22, 2020, Planning Commission recommended approval (vote: 8-0) of the request with one condition: during Site Plan Review, the applicant and staff shall work to maximize the size of the buffer beyond 25 feet at James Turner and Jenkins Hill Roads. County Council held the public hearing for this request on July 14, 2020. At the August 6, 2020 County Council Planning/Public Works Committee Meeting, a motion to disapprove the application failed (4-4), and as a result, the application was considered denied and did not move forward.

A request from the applicant for a waiver from the one-year waiting period to reapply for the rezoning was recommended for approval by the County Council Planning/Public Works Committee on March 23, 2021 (vote: 8-0-1). On March 25, 2021, County Council approved the waiver request (vote: 9-0) and applicant submitted this new rezoning application.

Adjacent Zoning: The subject property is currently used as a farm. The properties to the North and East are zoned Resource Management (RM) and are part of the Francis Marion National Forest. Other properties to the East are Agricultural Residential (AGR) and contain mobile homes and single-family dwellings. Properties within the County to the West are zoned Agricultural Preservation (AG-10) and those within the Town of Awendaw are zoned Agricultural General (AG), and contain either single-family dwellings or mobile homes. The property to the South, across N Highway 17, is zoned Resource Management (RM) and is undeveloped.

Overview of Requested PD Guidelines:

The applicant is requesting to rezone from Agricultural Preservation District (AG-10) to PD-181, High School/Middle School in Awendaw. The requested guidelines for PD-181 are identical to those recommended for approval with conditions by Planning Commission in June of 2020, with the exception of

two changes: increasing the vegetated buffer along Jenkins Hill Rd from 25 to 35 feet and adding two understory trees and 10 shrubs per 100 linear feet; and adding language concerning maintenance of the property. Once under CCSD ownership, the property will be leased back to Quarry Lake LLC for continued use as a hay field, and two dilapidated structures will be demolished within six months of closing on the property. The following proposed guidelines are identical to those included in the previous rezoning application:

- One academic building, maximum of 255,000 square feet;
- Accessory buildings:
 - Fieldhouse, maximum of 10,000 square feet;
 - Press box for concessions, maximum of 5,000 square feet;
 - Well house, maximum of 500 square feet;
 - Three storage buildings, combined maximum of 9,000 square feet;
- Total lot coverage of 5.9% and total building area maximum 279,500 square feet;
- Athletic fields and areas: One football field, one practice field, middle school multi-use field, one baseball field, one softball field, bleachers, one paved track, and six tennis courts;
- Resource extraction of timber and soil during the construction of the school building, facilities and stormwater detention pond;
- All utilities to serve the listed facilities, including water well/service, septic service (including waste treatment drip field), electrical service, stormwater detention pond, and a well house will be included for water;
- Paved parking will be provided per Art. 9.3, *Off-Street Parking and Loading*, of the ZLDR in effect at the time of approval;
- All signs shall comply with Art. 9.11, *Signs*, and Art. 9.6.4.C, *Site Lighting*:
 - One monument style, externally lit, freestanding sign to address Highway 17
 - Secondary signage addressing the entrance along Jenkins Hill Road
 - Internal directional signage
 - Light Emitting Diode (LED) Message Boards
- Lighting for the sports and recreation areas shall follow the IES guidelines for Sports and Recreational Area Lighting:
 - Illumination levels for field sports shall not exceed 50 foot-candles;
 - Light poles shall not exceed 80 feet in height;
- Tree protection, preservation, and replacement shall meet or exceed regulations outlined in Art. 9.4, *Tree Protection and Preservation*, of the ZLDR;
- Will follow AG-10 standards of the ZLDR in effect at the time of approval for anything not specified in the PD Guidelines, including if the property is not developed as a school;

Municipalities Notified/Response: The Town of Summerville, Town of Sullivan's Island, Town of Seabrook Island, Town of Ravenel, Town of Mt Pleasant, Town of Meggett, Town of McClellanville, Town of Lincolnville, Town of Kiawah Island, Town of James Island, Town of Hollywood, Town of Awendaw, City of North Charleston, City of Isle of Palms, City of Folly Beach, City of Charleston, and Colleton County were notified of the request and have not responded.

STAFF RECOMMENDATION

According to Section §4.23.9 E (9) of the *Zoning and Land Development Regulations Ordinance (ZLDR)*, applications for PD Development Plans may be approved only if County Council determines that the following criteria are met:

- A. The PD Development Plan complies with the standards contained in this Article;

Staff Response: *The PD complies with the standards contained in this Article.*

- B. The development is consistent with the intent of the *Comprehensive Plan* and other adopted policy documents;

Staff Response: *The PD is consistent with the intent of the Comprehensive Plan and other adopted policy documents, as CCSD seeks to provide community facilities for a currently underserved area*

of Charleston County, while maintaining the rural character of the community. Additionally, a school is allowed on the subject parcel under the current AG-10 zoning, contingent upon BZA's approval of a Special Exception. The applicant has chosen to pursue a PD due to the lapse of approval that BZA imposes (12 months plus an option for a 12-month extension, if eligible).

- C. The County and other agencies will be able to provide necessary public services, facilities, and programs to serve the development proposed, at the time the property is developed.

Staff Response: The County and other agencies will be able to provide services to the proposed development pursuant to the letters of coordination submitted by the applicant.

Because the Planned Development application meets all of the approval criteria, staff recommends approval.

PLANNING COMMISSION MEETING: May 10, 2021

Recommendation: Approval (8-0), with Commissioner Miller absent.

Speakers: Lee Gastley of Seamon + Whiteside spoke in support of the rezoning request and provided a brief summary of public outreach efforts by the applicant. Two individuals spoke in opposition: Miriam Green, Mayor of the Town of Awendaw and Thomas Colleton, CCSD District 1 Constituent Board Chair.

Public Input: One letter of opposition received from the Town of Awendaw suggested this development be moved to a different site located near the intersection of Seewee Road and N. Highway 17.

Notifications: 144 notification letters were sent to owners of property located within 300 feet of the boundaries of the subject parcel and individuals on the East Cooper Interested Parties List on April 23, 2021. Additionally, this request was noticed in the *Post & Courier* on April 23, 2021.

PUBLIC HEARING: June 8, 2021

Speakers: The Mayor of Awendaw spoke in opposition, two individuals spoke in support, and five individuals made general comments about the need for a school in this area. One person stated that the alternate site proposed by the Town of Awendaw is not for sale.

Notifications: 144 notification letters were sent to owners of property located within 300 feet of the boundaries of the subject parcel and individuals on the East Cooper Interested Parties List on May 21, 2021. Additionally, this request was noticed in the *Post & Courier* on May 21, 2021.

PLANNING & PUBLIC WORKS COMMITTEE: June 17, 2021

PLANNED DEVELOPMENT REQUEST

ZREZ-03-21-00125

- Case history
- Presentation
- Application
- Public Input



Charleston County Planned Development Zoning Map Amendment Request

Planning and Public Works Committee: June 17, 2021

First Reading: June 22, 2021

Second Reading: July 27, 2021

Third Reading: August 31, 2021

PD-181 High School/Middle School in Awendaw

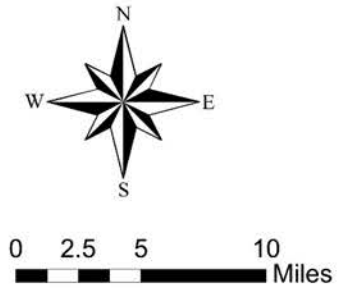
Request to rezone TMS 711-00-00-052, located at 7820 N. Highway 17 (East County area), from the Agricultural Preservation 10 (AG-10) Zoning District to the Planned Development, PD-181, *High School/Middle School in Awendaw*, Zoning District.

- East Cooper Area: 7820 N Highway 17
- Parcel I.D.: 711-00-00-052
- Owner: Quarry Lake Plantation LLC
- Applicant: Mary Martinich, Seamon Whiteside
- Property Size: 107.2 acres
- Council District: 2 - Schweers

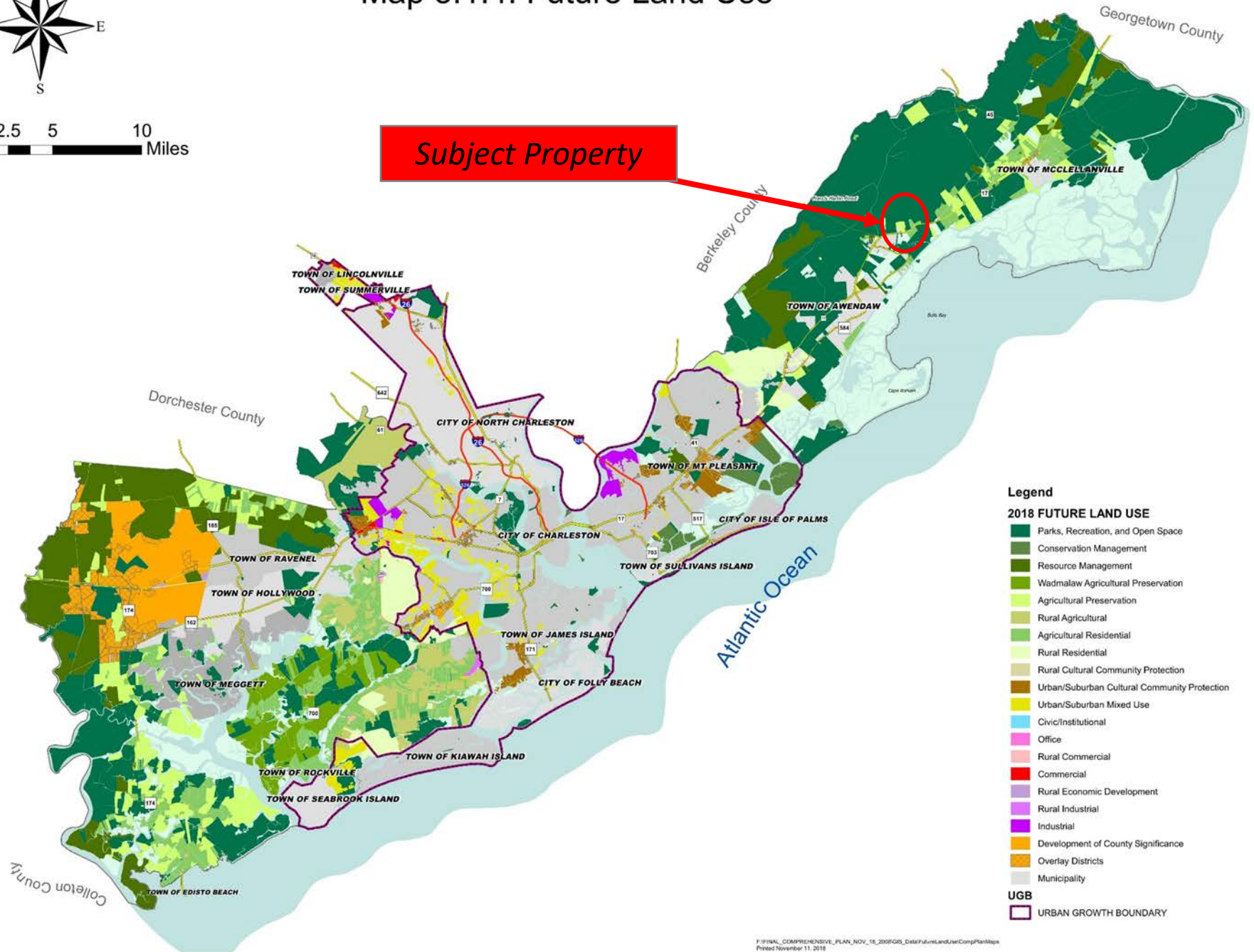
Zoning History

- The subject property was zoned Agricultural General prior to the adoption of the Zoning and Land Development Regulations Ordinance in 2001, which changed the zoning to the Agricultural Preservation District (AG-10).
- In 2020, an application submitted to rezone this property from AG-10 to PD-176, “High School/Middle School in Awendaw” was submitted.
- On June 22, 2020, Planning Commission recommended approval (vote: 8-0) of the request with one condition: during Site Plan Review, the applicant and staff shall work to maximize the size of the buffer beyond 25 feet at James Turner and Jenkins Hill Roads.
- County Council held the public hearing for this request on July 14, 2020.
- At the August 6, 2020 County Council Planning/Public Works Committee Meeting, a motion to disapprove the application failed (4-4), and as a result, the application was considered denied and did not move forward.
- A request from the applicant for a waiver from the one-year waiting period to reapply for the rezoning was recommended for approval by the County Council Planning/Public Works Committee on March 23, 2021 (vote: 8-0-1).
- On March 25, 2021, County Council approved the waiver request (vote: 9-0) and applicant submitted this new rezoning application.

Map 3.1.4: Future Land Use



Subject Property



Legend

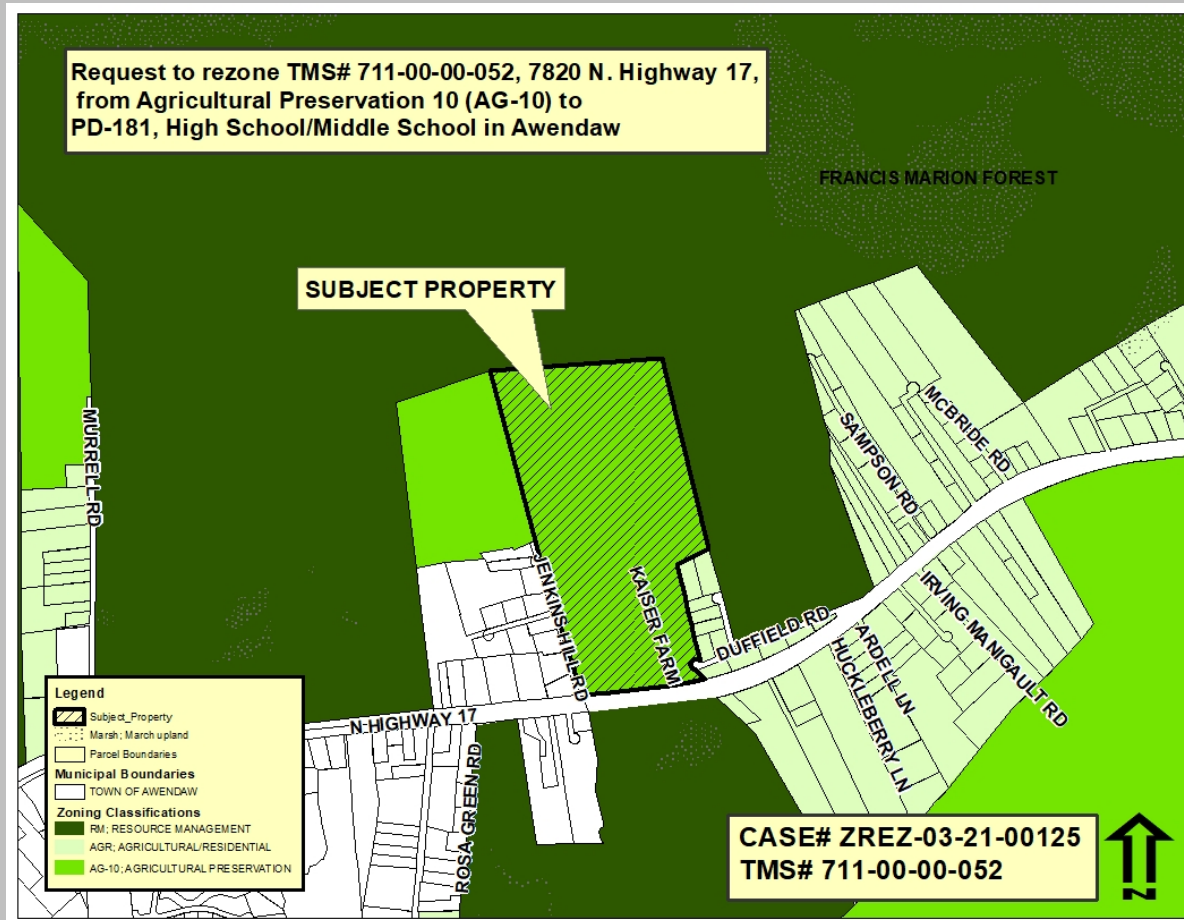
2018 FUTURE LAND USE

- Parks, Recreation, and Open Space
- Conservation Management
- Resource Management
- Wadmalaw Agricultural Preservation
- Agricultural Preservation
- Rural Agricultural
- Agricultural Residential
- Rural Residential
- Rural Cultural Community Protection
- Urban/Suburban Cultural Community Protection
- Urban/Suburban Mixed Use
- Civic/Institutional
- Office
- Rural Commercial
- Commercial
- Rural Economic Development
- Rural Industrial
- Industrial
- Development of County Significance
- Overlay Districts
- Municipality

UGB

- URBAN GROWTH BOUNDARY

Current Zoning



The subject property is currently used as a farm. The properties to the North and East are zoned Resource Management (RM) and are part of the Francis Marion National Forest. Other properties to the East are Agricultural Residential (AGR) and contain mobile homes and single-family dwellings. Properties within the County to the West are zoned Agricultural Preservation (AG-10) and those within the Town of Awendaw are zoned Agricultural General (AG), and contain either single-family dwellings or mobile homes. The property to the South, across N Highway 17, is zoned Resource Management (RM) and is undeveloped.

Aerial View to the West



Aerial View to the North



Site Photos



1 – Subject Property

2 – Subject Property



Site Photos



**3 – Adjacent Property
TMS 711-00-00-119**

**4 – Adjacent Property
TMS 711-00-00-129**



PD-181 Requested PD Guidelines

The applicant is requesting to rezone from Agricultural Preservation District (AG-10) to PD-181, High School/Middle School in Awendaw. The requested guidelines for PD-181 are identical to those recommended for approval with conditions by Planning Commission in June of 2020, with the exception of two changes: increasing the vegetated buffer along Jenkins Hill Rd from 25 to 35 feet and adding two understory trees and 10 shrubs per 100 linear feet; and adding language concerning maintenance of the property. Once under CCSD ownership, the property will be leased back to Quarry Lake LLC for continued use as a hay field, and two dilapidated structures will be demolished within six months of closing on the property. The following proposed guidelines are identical to those included in the previous rezoning application:

- One academic building, maximum of 255,000 square feet
- Accessory buildings: fieldhouse, maximum of 10,000 square feet, press box for concessions, maximum of 5,000 square feet, well house, maximum of 500 square feet, and three storage buildings, combined maximum of 9,000 square feet
- Athletic fields and areas: One football field, one practice field, middle school multi-use field, one baseball field, one softball field, bleachers, one paved track, and six tennis courts

Requested PD Guidelines Cont'd

- Resource extraction of timber and soil during the construction of the school building, facilities and stormwater detention pond
- All utilities to serve the listed facilities, including water well/service, septic service (including waste treatment drip field), electrical service, stormwater detention pond, and a well house will be included for water
- Total lot coverage of 5.9% and total building area maximum 279,500 square feet
- Paved parking will be provided per Art. 9.3, *Off-Street Parking and Loading*, of the ZLDR in effect at the time of approval
- All signs shall comply with Art. 9.11, *Signs*, and Art. 9.6.4.C, *Site Lighting*
 - One monument style, externally lit, freestanding sign to address Highway 17
 - Secondary signage addressing the entrance along Jenkins Hill Road
 - Internal directional signage
 - Light Emitting Diode (LED) Message Boards
- Lighting for the sports and recreation areas shall follow the IES guidelines for Sports and Recreational Area Lighting
 - Illumination levels for field sports shall not exceed 50 foot-candles
 - Light poles shall not exceed 80 feet in height
- Tree protection, preservation, and replacement shall meet or exceed regulations outlined in Art. 9.4, *Tree Protection and Preservation*, of the ZLDR
- Will follow AG-10 standards of the ZLDR in effect at the time of approval for anything not specified in the PD Guidelines, including if the property is not developed as a school

PD-181 Site Plan



General Notes:

Owner:
Quarry Lake Plantation, LLC
PO Box 873
Charleston, SC 29405

Developer:
Charleston County School District
75 Calhoun
Charleston, SC 29401
Contact: Angela Somette
email: angela_somette@charleston.k12.sc.us
Phone: (843) 501-5500

Engineers/Land Planners:
Seamon Whiteside
501 Wando Park Blvd., Ste. 200
Mount Pleasant, SC 29464
Contact: Lee Gwiley
email: lgwiley@seamonwhiteside.com
Phone: 843 884-1987

Site Information

TMS NO: 71-1-05-05-052
Property is located in Flood Zone X as indicated from
FIRM Panel No. 45019C 0185J dated November 17,
2004.
NONJURIDICAL WETLAND 25.87 AC
LULAND 1355.33 AC
TOTAL DEVELOPMENT: 157.2 AC

Proposed Uses

HIGH SCHOOL / MIDDLE SCHOOL (100%):
MAIN BUILDING (100% expansion) 14,700
FIELD HOUSE 12,115
DRIVING INSTRUCTOR ACCESS 8,115
POSSIBLE NEW 47,132
TOTAL 42,047
TOTAL 157.2 AC
OPEN SPACE:
ATHLETIC FIELDS/COURTS 4,825
WATER TREATMENT 548-AREA 41,420
WATER TREATMENT 548-AREA 41,420
LANDSCAPED OPEN SPACE 408.08
TOTAL 87,673 AC

* Unstructured open space includes, but is not limited to, wetlands, areas used for the collection and storage of water, and areas used for the collection and storage of water. These areas may be utilized as potential access or general landscape or natural areas.
** Remaining area is unstructured open space that is not to be used for any other purpose. This area may be utilized as potential access or general landscape or natural areas.

Note: All areas indicated are approximate and based on the current plan as shown. Final lot percentages of individual lots will not exceed the amounts shown, and Total open space will not be less than shown.

Sketch Plan Notes

- This Sketch Plan is conceptual in nature and final location of features may be adjusted to allow for specific conditions. The final layout, however, will maintain the general intent shown on this plan.
- All areas designated for future expansion or not intended for immediate improvement or development shall remain in natural state until such time as development permits are approved.
- Maximum 4% building coverage.
- Maximum height of structures shall be 32' measured from base level elevation to the highest point between the eave and the peak of the highest roof element.

Legend

- proposed building / building expansion
- pond
- parking / internal drives
- drainage swale
- unstructured open space
- athletic fields / courts
- land use buffer
- existing grand tree (24" dbh)
- existing protected tree (8" dbh)

Site Location Map



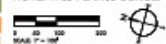
AERIAL CONCEPTUAL SKETCH PLAN

AWENDAW / MCCLELLANVILLE
HIGH SCHOOL / MIDDLE SCHOOL
CHARLESTON COUNTY SCHOOL DISTRICT
CHARLESTON COUNTY, SOUTH CAROLINA

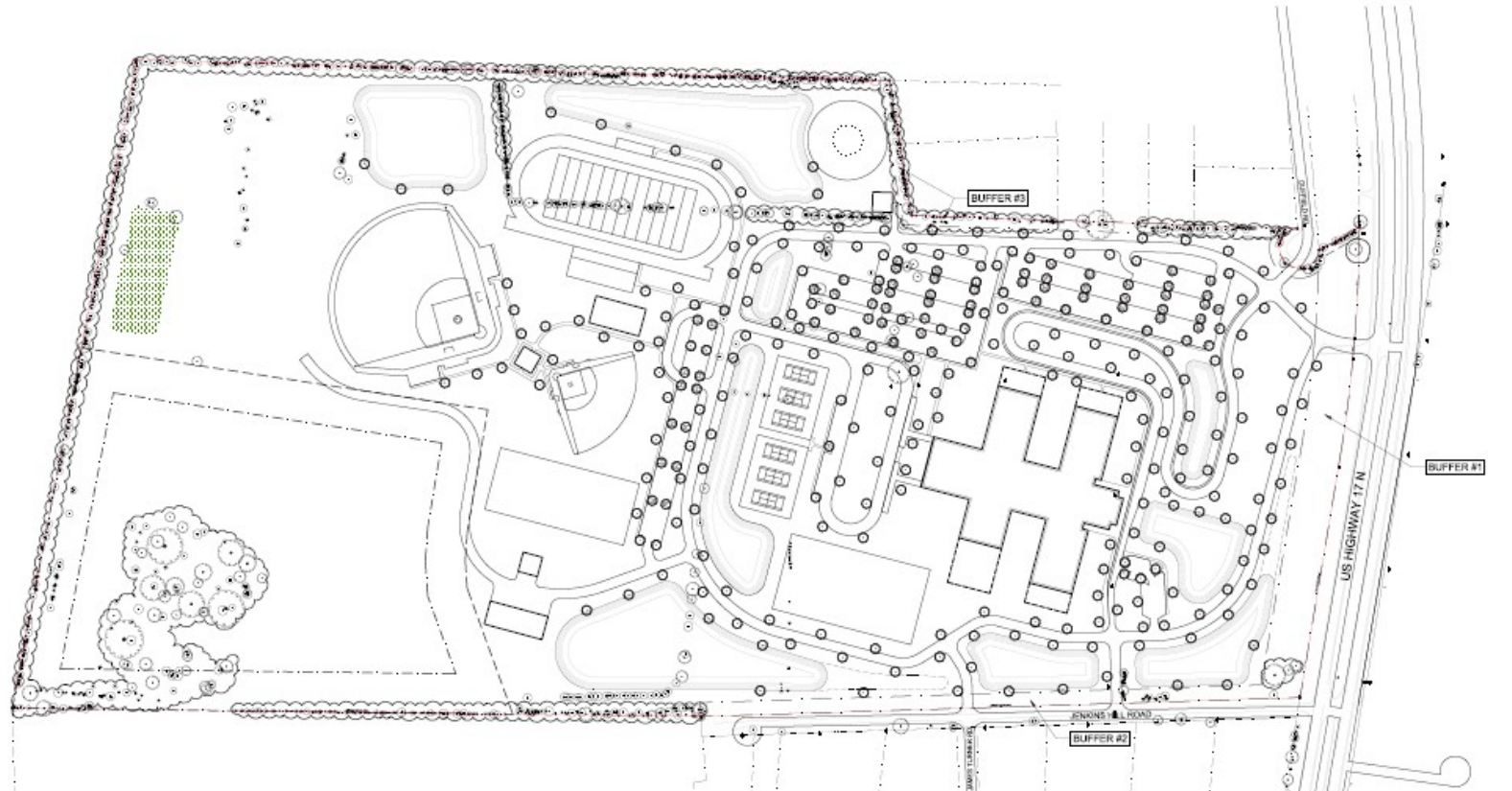
08/19/2008



NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE.



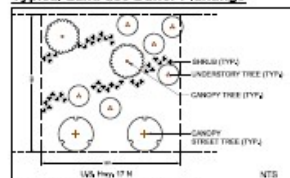
PD-181 Landscape Plan



Legend

- existing grand tree (24"-48")
- existing protected tree (37"-24" dbh)

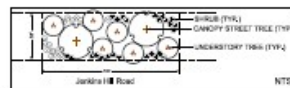
Typical Land use Buffer Plantings



Buffer #1 (located along U.S. Hwy 17 N)

150' Type S3 • total length 1,193'

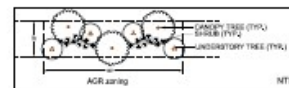
plant type	per 100'	multiplier	total
canopy/street tree	4	11,93	48
understory tree	6	11,93	72
shrubs	40	11,93	478



Buffer #2 (located along Jenkins Hill Road)

35' • total length 1,411'

plant type	per 100'	multiplier	total
canopy/street tree	2	14,11	28
understory tree	6	14,11	85
shrubs	40	14,11	565



Buffer #3 (located along west property line adj. to AGR zoning)

25' Type B • total length 1,538'

plant type	per 100'	multiplier	total
canopy/street tree	3	15,38	47
understory tree	4	15,38	62
shrubs	20	15,38	308

Notes:

1. Per Charleston County ZI.D.R. 2 street trees are required per 100' in S3 buffers and may count toward the canopy tree requirements.
2. Existing trees may count toward canopy tree requirements.
3. Typical Buffer Plantings shown are conceptual. Quantities will be met per requirements noted with final planting locations to be determined and approved by Charleston County Planning Staff.

Site Location Map



Approval Criteria—Section 4.23.9(E)(9)

According to Section §4.23.9 E (9) of the Zoning and Land Development Regulations Ordinance (ZLDR), applications for PD Development Plans may be approved only if County Council determines that the following criteria are met:

A. The PD Development Plan complies with the standards contained in this Article;

Staff Response: The PD complies with the standards contained in this Article.

B. The development is consistent with the intent of the Comprehensive Plan and other adopted policy documents;

Staff Response: The PD is consistent with the intent of the Comprehensive Plan and other adopted policy documents, as CCSD seeks to provide community facilities for a currently underserved area of Charleston County, while maintaining the rural character of the community. Additionally, a school is allowed on the subject parcel under the current AG-10 zoning, contingent upon BZA's approval of a Special Exception. The applicant has chosen to pursue a PD due to the lapse of approval that BZA imposes (12 months plus an option for a 12-month extension, if eligible).

C. The County and other agencies will be able to provide necessary public services, facilities, and programs to serve the development proposed, at the time the property is developed.

Staff Response: The County and other agencies will be able to provide services to the proposed development pursuant to the letters of coordination submitted by the applicant.

Recommendations

**Both staff and Planning Commission
recommend approval.**

(Planning Commission vote: 8 to 0)

Public Input

- Two letters of opposition were received, one from the Town of Awendaw and one from a concerned resident.
- One letter of support was received from the Town of McClellanville.

Notifications

April 23, 2021

- 144 notification letters were sent to owners of property located within 300 feet of the boundaries of the subject parcel and individuals on the East Cooper Interested Parties List
- Request was noticed in the *Post & Courier*

May 21, 2021

- 144 notification letters were sent to owners of property located within 300 feet of the boundaries of the subject parcel and individuals on the East Cooper Interested Parties List
- Request was noticed in the *Post & Courier*



Charleston County Planned Development Zoning Map Amendment Request

Planning and Public Works Committee: June 17, 2021

First Reading: June 22, 2021

Second Reading: July 27, 2021

Third Reading: August 31, 2021

ZONING CHANGE APPLICATION



Zoning/Planning
Department
Lonnie Hamilton, III
Public Services Building
4045 Bridge View Drive
North Charleston, SC 29405
(843) 202-7200
1-800-524-7832
Fax: (843) 202-7222

CASE _____ PD 711-00-00-052

PROPERTY INFORMATION

CURRENT DISTRICT AG-10 REQUESTED DISTRICT PD

PARCEL ID(S) 7110000052

CITY/AREA OF COUNTY Mt. Pleasant, SC 29458

STREET ADDRESS 0 N. Highway 17 ACRES 107.2 ac.

DEED RECORDED: BOOK 0510 PAGE 591 DATE 10/13/2015

PLAT RECORDED: BOOK NA PAGE NA DATE NA APPROVAL # _____

APPLICANT—OWNER—REPRESENTATIVE

APPLICANT Seamon Whiteside, & Associates HOME PHONE _____
MAIL ADDRESS 501 Wando Park Blvd. Suite 201 WORK PHONE 843-884-1667
CITY, STATE, ZIP Mt. Pleasant, SC 29464 CELL PHONE _____
EMAIL mmartinich@seamonwhiteside.com

OWNER Quarry Lake Plantation LLC HOME PHONE _____
(IF OTHER THAN APPLICANT)
MAIL ADDRESS PO Box 973 WORK PHONE _____
CITY, STATE, ZIP Charleston, SC 29403 CELL PHONE _____
EMAIL _____

REPRESENTATIVE Angela Barnette, CCSD HOME PHONE _____
(IF OTHER THAN APPLICANT)
MAIL ADDRESS 3999 Bridge View Drive WORK PHONE (843) 566-1995
CITY, STATE, ZIP North Charleston SC 29405 CELL PHONE _____
EMAIL angela_barnette@charleston.k12.sc.us

CERTIFICATION

This application will be returned to the applicant within fifteen (15) business days if these items are not submitted with the application or if any are found to be inaccurate;

- ✓ Copy of Approved and Recorded Plat showing present boundaries of property
- ✓ Copy of Current Recorded Deed to the property (Owner's signature must match documentation.)
- ✓ Copy of Signed Restricted Covenants Affidavit
- ✓ Copy of Signed Posted Notice Affidavit
- ✓ Fee \$150.00 plus \$10.00 per acre (Fees vary for Planned Developments.)

I (we) certify that _____ is the authorized representative for my (our) zoning change request. I also accept the above requirements for submitting my zoning change application. To the best of my knowledge, all required information has been provided and all information is correct.

Signature of Owner(s)

2/20/2020
Date

Signature of Applicant/ Representative (if other than owner)

Date

Planner's Signature

Date

Zoning Inspector's Signature

Date

OFFICE USE ONLY

Amount Received _____ Cash ? ☐ Check? ☐ # _____ Invoice Number _____



Daniel C. Pennick, AICP
Director

PLANNING DEPARTMENT

843.202.7200
1.800.524.7832
Fax: 843.202.7222
Lonnie Hamilton, III
Public Services Building
4045 Bridge View Drive
North Charleston, SC 29405-7464

PERMIT APPLICATION: RESTRICTIVE COVENANTS AFFIDAVIT

I, Angela Barnette, have reviewed the restrictive
[Print]

covenants applicable to Parcel Identification Number(s) 7110000052,

located at (address) 0 N. Highway 17, and the

proposed permit application is not contrary to, does not conflict with, and is not

prohibited by any of the restrictive covenants, as specified in South Carolina

Code of Laws, Section 6-29-1145,

[Signature] 2/20/2020
[Date]

Angela Barnette
[Print Name]

Explanation:

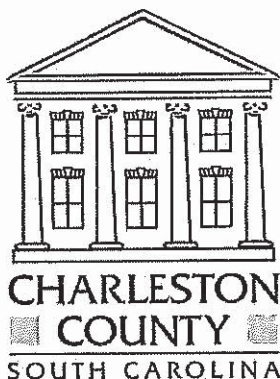
Effective July 1, 2007, South Carolina Code of Laws Section 6-29-1145 requires local governments to inquire in the permit application, or in written instructions provided to the applicant, if a tract or parcel of land is restricted by a recorded covenant that is contrary to, conflicts with or prohibits an activity for which a permit is being sought.
[Section 6-29-1145 is copied on the back of this page]

For Staff Use Only:

Received by _____

Date _____

Application Number _____



Daniel C. Pennick, AICP
Zoning/Planning Director

843.202.7200
1.800.524.7832
Fax: 843.202.7222
Lonnie Hamilton, III
Public Services Building
4045 Bridge View Drive
North Charleston, SC 29405-7464

POSTED NOTICE AFFIDAVIT

This Affidavit must be filled out and signed by all owner(s) of the subject parcel(s)

I, Angele Barnett, have reviewed §3.1.6(B)(2), Posted Notice on
[Print Name(s)]

the back of this affidavit and understand that a sign(s) will be posted on

Parcel Identification Number(s)

7110000052, located at (address)

0 N. Highway 17, at least 15 calendar days prior to the
public hearing date for which my request is scheduled.

I also understand that once the notice has been posted, the owner(s) of the subject property are responsible for notifying the Zoning/Planning Department in writing if the Posted Notice is removed or damaged prior to the public hearing, meeting or date of action that is the subject of the notice. Failure to notify the Zoning/Planning Department in writing of removed or damaged Posted Notice may result in rescheduling of the public hearing and a delay in decision from the decision-making body.

[Signature] 2/20/2020
[Property Owner(s) Signature(s)] [Date]
Angele Barnett
[Print Name(s)]

For Staff Use Only:

Received by _____

Date _____

Application Number _____

High School / Middle School in Awendaw

Charleston County, South Carolina

TMS711-00-00-052

4/23/2021



PD Prepared for:

Charleston County School District

Prepared By/Applicant:



501 Wando Park Blvd Suite 200 Mount Pleasant, SC | (843) 884-1667 | seamonwhiteside.com

Project # 8067

High School/Middle School in Awendaw PD

1. Statement of Objectives.....	3
2. Intent and Results of Proposed PD	3
3. Site Information	5
4. Allowed Land Uses.....	5
5. Maximum Density	6
6. Impact Assessment/Analysis.....	6
a. Utilities.....	6
b. Traffic/Roads.....	7
c. Emergency Services	7
d. Drainage	7
e. Garbage Disposal	8
7. Development Schedule.....	8
8. Open Space	8
9. Streets	8
10. Compliance with ZLDR	8
11. Historical and Archaeological Survey.....	10
12. Letters of Coordination.....	10
13. Dimensional Standards	11
14. Architectural Guidelines.....	11
15. Lots to Abut Upon Common Open Space.....	11
16. Access	12
17. Commercial Areas	12
18. Industrial Areas.....	12
19. Areas Designated for Future Use.....	12
20. Signs and Lighting	12
21. Parking.....	12
22. Tree Protection.....	13
23. Resource Areas	13
24. Common Open Space	13
25. Special Events	13
26. Maintenance.....	13

27. Appendices

- A. Site Location Map & Current Aerial
- B. Tax Map, Existing Land Use Map
- C. As-built Survey/Tree Survey
- D. Aerial Conceptual Sketch Plan
- E. Wetland Letter Application & Receipt
- F. Architectural Site Plan
- G. Landscape Sketch Plan
- H. Utility Plans
- I. Circulation Plan
- J. Traffic Impact and Access Study
- K. Historical & Archaeological Survey
- L. Site Photography
- M. Letters of Coordination
- N. Existing Buildings

1. Statement of Objectives

The objective of the High School/Middle School in Awendaw PD (Planned Development) is to create flexibility within the existing AG-10 zoning to allow for a high school and middle school with associated facilities such as parking, football, track, baseball, softball and tennis.

A Conceptual Site Plan for the school and surrounding facilities is included in Appendix D of this report.

2. Intent and Results of Proposed PD

Intent and results of the proposed school use meets with the objectives of §4.23.4 of the ZLDR in the following ways:

- A. A maximum choice in the types of environment available to the public by allowing a development that would not be possible under the strict application of the standards of this Ordinance that were designated primarily for development on individual lots:
 - 1. Educational and recreational facilities are accessible to residents of the area and of Charleston County.
 - 2. A centrally located community 'hub' for the towns of McClellanville and Awendaw is provided.
- B. A greater freedom in selecting the means to provide access, light, open space and design amenities:
 - 1. Increased access to the site is available to residents through sport fields and facilities versus the current privately-owned agricultural use.
- C. Quality design and environmentally sensitive development by allowing development to take advantage of special site characteristics, locations and land use arrangements:
 - 1. Development of the school, including utilities will occur in areas already cleared of vegetation, minimizing the need for tree removal.
 - 2. Quality open spaces and sports/recreation fields are provided for the school and community.
 - 3. The conceptual site plan (see Appendix D) provides interconnected stormwater detention ponds, minimizing the need for below-ground drainage.

D. A development pattern in harmony with the applicable goals and strategies of the Comprehensive Plan, the proposed school use meets the following:

- 2.2.1 Land Use: Provides needed community facilities for an underserved area of the county, centrally situated and easily accessible by the adjacent highway. Additional buffer widths will be provided where the site is adjacent to private property, respecting the rights of the neighbors.
- 2.2.2 Economic Development: Provides job opportunities for area residents, as well as needed services for healthy local governments.
- 2.2.5 Population: Accommodates the socioeconomic diverse and growing population of Awendaw, McClellanville, and the surrounding area with needed educational facilities in an environmentally and fiscally sustainable manner.
- 2.2.7 Transportation: Utilizes existing highway and local roadways to serve the proposed school, maintaining the existing community character.
- 2.2.8 Community Facilities: Community facilities and services will be provided, coordinated with Charleston County, ensuring capacity for expected growth.
- LU 1. The proposed school will not affect any critical line areas.
- LU 2. A 100-foot buffer, planted to meet S-3 planting requirements, will be provided between Highway 17 and school structures.
- LU 4. The school will be located along existing road systems that will accommodate the expected traffic.
- LU 6. Utilizes the implementation tool of a Planned Development Zoning District as well as increases the level of service (LOS) of the CCSD by centrally locating the new school between the towns of Awendaw and McClellanville.
- LU 16. This PD will follow the approval process for amending the BCDCOG 208 Water Quality Management Plan, if applicable.

E. The permanent preservation of common open space, recreation areas and facilities:

- 1. Recreation areas and facilities provided on the site will be available for use by the school and students as well as residents.

- F. An efficient use of the land resulting in more economical networks of utilities, streets, schools, public grounds and buildings, and other facilities:
 - 1. The conceptual plan (See Appendix D) provides all elements (buildings, parking, sports fields, etc.) carefully arranged to best utilize the site while providing accessibility to all areas from the centrally located school structure.
 - 2. Well water will be utilized to provide potable water for the site, and a new septic system will be created to serve the school, with the drip area located in an existing field with a minimum of 100 feet of buffer on all sides per SCDHEC requirements.
- G. A creative approach to the use of land and related physical facilities that results in better development and design and the construction of amenities:
 - 1. Given the underserved community, the location of a new middle/high school at this site will allow for the provision of needed recreational and athletic amenities that will serve both students and the community.

3. Site Information

The property is a 107.2-acre tract of land composed of 106.4 acres upland, 0.8 ac non-jurisdictional pond and is located along the north side of Highway 17 in Charleston County near Awendaw, South Carolina. Access to the property is provided by U.S. Highway 17 and three roads. Unimproved private Kaiser Farm Road connects internal to the property; Jenkins Hill Road is a public road and is adjacent to the site along the west side; and Duffield Road is a public road that connects to the property at the southeast corner. Along Highway 17, there are residential properties on both sides of the property and the Francis Marion National Forest is located to the north and east of the property.

The site is a currently used as a farm and is made up of farmland and agricultural uses. A large portion of the site is open, with relatively few trees. There are several grand trees including live oaks, water oaks, and black gums. There is a notable cluster of live oaks in the northwest corner of the property. Historic use of the property consists of rural residential, farmland and open pasture.

4. Allowed Land Uses

Middle and high school facilities are planned for the entirety of the site. All facilities are available to the public for use and may or may not require application to the CCSD to do so. Facilities included as part of this PD are as follows:

- A. School Buildings (all areas are listed as maximum square feet):
 - 1. One main academic building (260,000 sf).
 - 2. Anticipated ancillary buildings including but not limited to a fieldhouse (10,000 sf), press box for concessions (5,000 sf), well house (500sf), and three storage buildings (10,000 sf).

3. The exact number of buildings will be determined during programming and the design phase of the project.
- B. The maximum building lot coverage percentage is 30-percent.
- C. Utilities: All utilities to serve the listed facilities, including water well/service, septic service (including waste treatment drip field), electrical service, and stormwater detention pond. A well house will be included for water.
- D. Parking: Paved parking will be provided for allowed facilities based on ZLDR requirements.
- E. Athletic Fields: One football field, one practice field, middle school multi-use field, one baseball field, one softball field and bleachers are anticipated.
- F. Paved Track
- G. Tennis Courts (6)
- H. Resource Extraction: Due to construction of the school and school related facilities, site activities, including the digging of stormwater detention ponds and tree removal, may result in the extraction of soil or lumber from the site.

5. Maximum Density

No residential uses are proposed for this Planned Development.

6. Impact Assessment/Analysis

A. Utilities

1. Water: A well to be dug onsite will provide potable water for the schools and associated recreational facilities on the site.
2. Wastewater: A septic system will be utilized to service the schools and associated athletic facilities. Wastewater disposal shall be coordinated with South Carolina Department of Health and Environmental Control (SCDHEC) and serviced through septic services approved by SCDHEC. Prior to applying for Site Plan Review, the applicant shall submit a letter to the Zoning and Planning Department requesting a determination by the County regarding whether an amendment to the 208 Water Quality Management Plan is required for the septic system. If the County determines an amendment to the BCDCOG 208 Water Quality Management Plan is required, the amendment must be approved by the BCDCOG prior to submittal of any zoning permit applications for land disturbance activities/development or any Site Plan Review applications.
3. Electrical: Power will be provided to the site from existing overhead electric lines located along the north side of Highway 17.

B. Traffic/Roads

1. A Traffic and Access Impact Study has been performed by Ridgeway Traffic Consulting, LLC and is provided in its entirety in Appendix I. Conclusions of this study state, in part:

“Turn lane improvements have been recommended for the main intersection to US 17 and the intersection of US 17 at Jenkins Hill Road that will minimize impacts on US 17 through volumes and provide for good traffic operations. Conflicting traffic volumes along Jenkins Hill Road are expected to be minimal although a right-turn lane is recommended at the southern access to separate passenger vehicles and buses that will continue north.”

2. Roadway improvements to both Highway 17 and Jenkins Hill Road are anticipated as part of the school project. Along with recommended turn lanes provided by Ridgeway Traffic, pavement upgrades to Highway 17 may be warranted with utility and drainage relocations. Portions of Jenkins Hill Roads may require upgrades that include pavement, realignment, signage striping, and utility relocation.

C. Emergency Services

1. This site is currently under the jurisdiction of Charleston County Sherriff's Office and the Charleston County Emergency Services.
2. Refer to Appendix M, Letters of Coordination, regarding all necessary utility and infrastructure connection coordination and additional services needed for this parcel.

D. Drainage

1. The planned development shall comply with all Charleston County Stormwater Ordinances and South Carolina Department of Health and Environmental Control (SCDHEC) Regulatory requirements. For site locations within sensitive drainage basins, additional stormwater design and construction requirements may be required by the Director of Public Works prior to Stormwater permit approval and issuance. Sensitive drainage basins may include but are not limited to areas which incur flooding conditions, are designated as Special Protection Areas, discharge to water bodies with restrictive Water Quality conditions, and/or are governed by other restrictive Water Quality and Water Quality conditions. Where possible and allowed by permit, the proposed site may connect its stormwater system with existing conveyances. Best Management Practices (BMP's) shall be utilized, installed, and maintained in compliance with applicable approved permits throughout all phases including, but not limited to, site development, construction, and post construction.
2. Applicant shall comply with Charleston County Stormwater Ordinances and SCDHEC Regulatory requirements for pre and post construction water quality and quantity. Stormwater design, construction, and maintenance

shall be in compliance with applicable approved Charleston County Stormwater Permits. Comprehensive Master Drainage Plan must be provided for proposed site and incorporate all development phasing, future development, existing drainage systems and conveyances, and proposed drainage systems and conveyances. The Comprehensive Stormwater Master Plan shall also include discharge management plans for specialized activities within the development. Utilization of approved and permitted Low Impact Design elements is encouraged within a comprehensive site Master Drainage Plan.

3. The maintenance of all stormwater devices, structures, and facilities will be the responsibility of the Developer and/or Charleston County School District. A Covenants For Permanent Maintenance of Stormwater Facilities shall be established by responsible party and recorded at the Registrar of Deeds office.

E. Garbage Disposal

1. No public garbage collection is currently available. The property will utilize private contract waste disposal.

7. Development Schedule

- A. The exact year for school construction is unknown at this time and will depend on enrollment growth or the attendance zone reaching the 500 minimum student population threshold per school. The District does not typically approve funds for new school construction for a student population that is less than 500.
- B. The site will remain in its natural state until it is developed.
- C. If phasing is to occur, it will be determined during the design phase.

8. Open Space

- A. Open space will be owned and maintained by the school.
- B. See Common Open Space for more information.

9. Streets

No public rights of way are planned for this development. All internal drives will be owned and maintained by the CCSD.

10. Compliance with ZLDR

- A. Items not specifically addressed within this Planned Development Guidelines shall comply with and reference the Charleston County Zoning and Land Development Regulations (ZLDR) for the AG-10 Zoning District in effect at the time of the subsequent application submittal.
- B. The PD agrees to proceed with proposed development in accordance with the provisions of these zoning regulations, applicable provisions of the Charleston County Comprehensive Plan, and with such conditions as may be attached to any rezoning to the applicable PD district.
- C. The provisions of Article 3.10, Variances, of this Ordinance shall not apply to the planned development and all major changes to the planned development

must be approved by County Council. Tree variances may be granted in accordance with this Article and all other sections of this Ordinance.

- D. This Planned Development intends to meet the application criteria listed in Chapter 4, Article, 4.23 of the Charleston County Zoning and Land Development Regulations Ordinance (ZLDR).
- E. No person shall erect or alter any building, structure, or sign on any tract of land or use any tract of land within the PD except in conformance with these guidelines and regulations. Unless modified herein, definitions of terms used in the Planned Development Guidelines shall follow definitions listed in the Charleston County Zoning and Land Development Regulations Ordinance (ZLDR) for the AG-10 Zoning District, as amended from time to time.
- F. Administration and enforcement of the Planned Development Guidelines shall follow the Charleston County Zoning and Land Development Regulations Ordinance (ZLDR).
- G. Approval Criteria

The PD complies with the standards contained in Article 4.23.9(E)(9) per the ZLDR as outlined below.

Applications for PD Development Plan approval may be approved only if the County Council determines that the following criteria are met:

1. *The PD Development Plan complies with the standards contained in this Article;*
 - i. The PD Development plan complies with the standards contained in Article 4.23 in the following ways:
 1. A Pre- Application meeting occurred on October 8th, 2019 with the client, consultant and Charleston County Staff.
 2. A Conceptual PD Development Plan was presented to Charleston County Planning Commission at a Planning Commission Workshop on December 9th, 2019.
 3. Three community workshops were held as part of the community outreach for the PD with a total of 157 people in attendance.

Community Meeting 1

Date: December 5th, 2019

Location: St. James Santee Elementary School

Number of Attendees: 58 participants

Community Meeting 2

Date: January 21st, 2020

Location: St. James Santee Elementary School

Number of Attendees: 76 participants

Community Meeting 3

Date: January 23rd, 2020

Location: Wando Mt. Pleasant Library

Number of Attendees: 23 participants

4. A Draft Plan Development Plan Submittal was made to Charleston County for staff review. Charleston County Staff provided comments that were addressed in this PD.
 5. The complete PD Development Plan Application was submitted to the County including all required items as specified by the County.
2. *The development is consistent with the intent of the Comprehensive Plan and other adopted policy documents; and*
 - i. The PD will provide educational, recreational and community facilities for an underserved area of the County that is accessible to all residents of Charleston County. The project is located off Highway 17 and has access off existing roads, minimizing the overall impact of the site. Buffers adjacent to the road and existing residential uses is provided to screen incompatible land uses and enhance the school property. Overall, the proposed use is consistent with the intent of the Comprehensive Plan and other adopted policy documents as further detailed in the "Intent and Results of Proposed PD" section.
 3. *The County and other agencies will be able to provide necessary public services, facilities, and programs to serve the development proposed, at the time the property is developed.*
 - i. Letters of coordination are provided from SCDOT, Charleston County Sheriff, US Postal Service, Fire, EMS, Berkeley Electric, and Charleston County Stormwater that state the County and other agencies will be able to provide the necessary public services, facilities, and programs to serve the development proposed, at the time the property is developed. See the Letters of Coordination in Appendix M.

11. Historical and Archaeological Survey

There are no known historical or cultural artifacts on this property. See Appendix K for Historical and Archaeological Site Assessment.

12. Letters of Coordination

See Appendix M for the Letters of Coordination.

13. Dimensional Standards

DENSITY/INTENSITY AND DIMENSIONAL STANDARDS TABLE	
MINIMUM SETBACKS (SCHOOL BUILDING)	
FRONT/STREET SIDE	100 FEET
INTERIOR SIDE	100 FEET
REAR	100 FEET
MINIMUM SETBACKS (ALL OTHER BUILDINGS SUCH AS STORAGE BUILDINGS, PRESS BOX)	
FRONT/STREET SIDE	100 FEET
INTERIOR SIDE	25 FEET
REAR	10 FEET
MINIMUM BUFFERS	
HWY 17	100 FEET, S3
NORTH SIDE (RM-FOREST)	0 FEET
EAST SIDE (RM-FOREST)	0 FEET
EAST SIDE (AGR-RESID.)	25 FEET, TYPE B
WEST SIDE (AG-10)	0 FEET
JENKINS HILL ROAD	35 FEET
FRESHWATER WETLAND*	15 FEET
OCRM CRITICAL LINE	50 FEET
MAXIMUM HEIGHT	
HEIGHT – SCHOOL	50 FEET
HEIGHT- ALL OTHER USES	35 FEET
MINIMUM LOT AREA	
MINIMUM LOT AREA	1 ACRE
MINIMUM LOT WIDTH	135 FEET
MAXIMUM BUILDING COVER	30% OF LOT

*Note: Freshwater wetland does not include the existing non-jurisdictional pond.

14. Architectural Guidelines

- A. Architectural design for the school will reflect the local rural character. See Appendix F for a conceptual plan for the school.
- B. Architectural standards shall comply with Article 9.6 of the Charleston County Zoning and Land Development Regulations Ordinance (ZLDR).
- C. An architectural wall is not required when ten (10) or more parking spaces are located between the right-of-way and front façade of a building. There is a 100' required buffer along Highway 17 and the school building is setback from the road far enough to provide an effective visual buffer for the parking area.

15. Lots to Abut Upon Common Open Space

No individual lots are planned for this site.

16. Access

- A. Access to the site shall be primarily provided via U.S. Highway 17 and Jenkins Hill Road. SCDOT approval and applicable encroachment permit shall be required for all activity within the highway right of way. Any improvements or access to Jenkins Hill Road will require approval by Charleston County.
- B. Within the site, paved vehicular accessways will be provided in 24-foot and 15' minimum widths for two and one lane traffic. Lanes specifically designed for student drop-off and for buses, including stacking space for both, will be provided to serve the schools. Areas between structures shall be covered by easements where necessary for access, maintenance and utility service.

17. Commercial Areas

There are no commercial areas associated with this PD.

18. Industrial Areas

There are no industrial areas associated with this PD.

19. Areas Designated for Future Use

Development will remain in its natural state until such time as development permits are approved.

20. Signs and Lighting

- A. One monument style, externally lit, free standing sign that complies with the requirements of ZLDR Art. 9.11 will be provided to address Highway 17. Light Emitting Diode LED Message Boards are allowed and do not require a special exception. LED Message Boards shall comply with Article 9.11 Signs of the ZLDR and be incorporated into the monument style sign.
- B. One secondary sign addressing the entrance along Jenkins Hill Road that complies with the requirements of ZLDR Art. 9.11 is allowed.
- C. Directional signage shall be allowed internal to the site and shall comply with ZLDR Article 9.11.
- D. All site lighting shall comply with Article 9.6.4.C. of the ZLDR.
- E. Lighting for the sports and recreation areas shall follow the IES guidelines for Sports and Recreational Area Lighting. Illumination levels for field sports shall not exceed 50 foot-candles. Light poles shall not exceed 80 feet in height. If other specifications have not been determined, lighting for recreation fields shall comply with Article 9.6.4.C. of the ZLDR.

21. Parking

- A. Parking is per CCSD standards for schools: one (1) space per each vehicle owned and operated by the school, plus two (2) per employee (including faculty, administrative, etc.), plus 1 per 8 students.
- B. Parking shall comply with Article 9.3 of the ZLDR.

22. Tree Protection

Tree protection, preservation, and replacement shall meet or exceed regulations outlined in Article 9.4 of the Charleston County Zoning and Land Development Regulations Ordinance (ZLDR).

23. Resource Areas

- A. Several large hardwood trees that are found in the northwest corner of the site will remain. Existing irrigation ditches and the primarily pine trees that have grown along them will be filled and removed as necessary to provide for the development of the site and for the safety of students. Tree protection, preservation and replacement shall meet or exceed regulations outlined in Article 9.4 of the ZLDR.
- B. The PD does not anticipate plans to change the non-jurisdictional pond located at the rear of the property however, if necessary, the pond may be modified, altered or removed.

24. Common Open Space

- A. Landscaping shall meet or exceed regulations outlined in Article 9.5 Landscaping, Screening and Buffers of the ZLDR.
- B. As illustrated on the Aerial Conceptual Sketch Plan, in Appendix D, proposed Common Open Space will include +/-74.88 acres, or a minimum of 70% of the overall 107.2 acres. Areas include all athletic fields and recreational structures, and septic drip field with surrounding 100' buffer.
- C. All fencing shall be commensurate with the type of facility provided. All fencing shall meet or exceed regulations outlined in the ZLDR at the time of subsequent development application. School fencing shall meet Charleston County School District requirements for safety.

25. Special Events

Special events shall meet regulations in Article 6.7 Special Events Use of the ZLDR.

26. Maintenance

It is the intent of CCSD to maintain the property by leasing the property to the current owner to continue use as a hay field. Once purchased by CCSD, if the prior owner chooses not to lease the property, it will be placed under the current CCSD maintenance contracts, or by other means.

The ownership group conducted a review of the buildings on site and determined what needed to remain for the property to continue to be a working hayfield. It was determined that two structures (See Images 1 and 4 in Appendix N: Existing Buildings) will be demolished six months upon closing of the property.

APPENDIX A:

**SITE LOCATION MAP
& CURRENT AERIAL**

Francis Marion National Forest

PROJECT SITE

AG - 10

+/-107.2 ac.

Jenkins Hill Rd

Kaiser Farm

Duffield Rd

Hwy. 17

Sam Thompson Dr

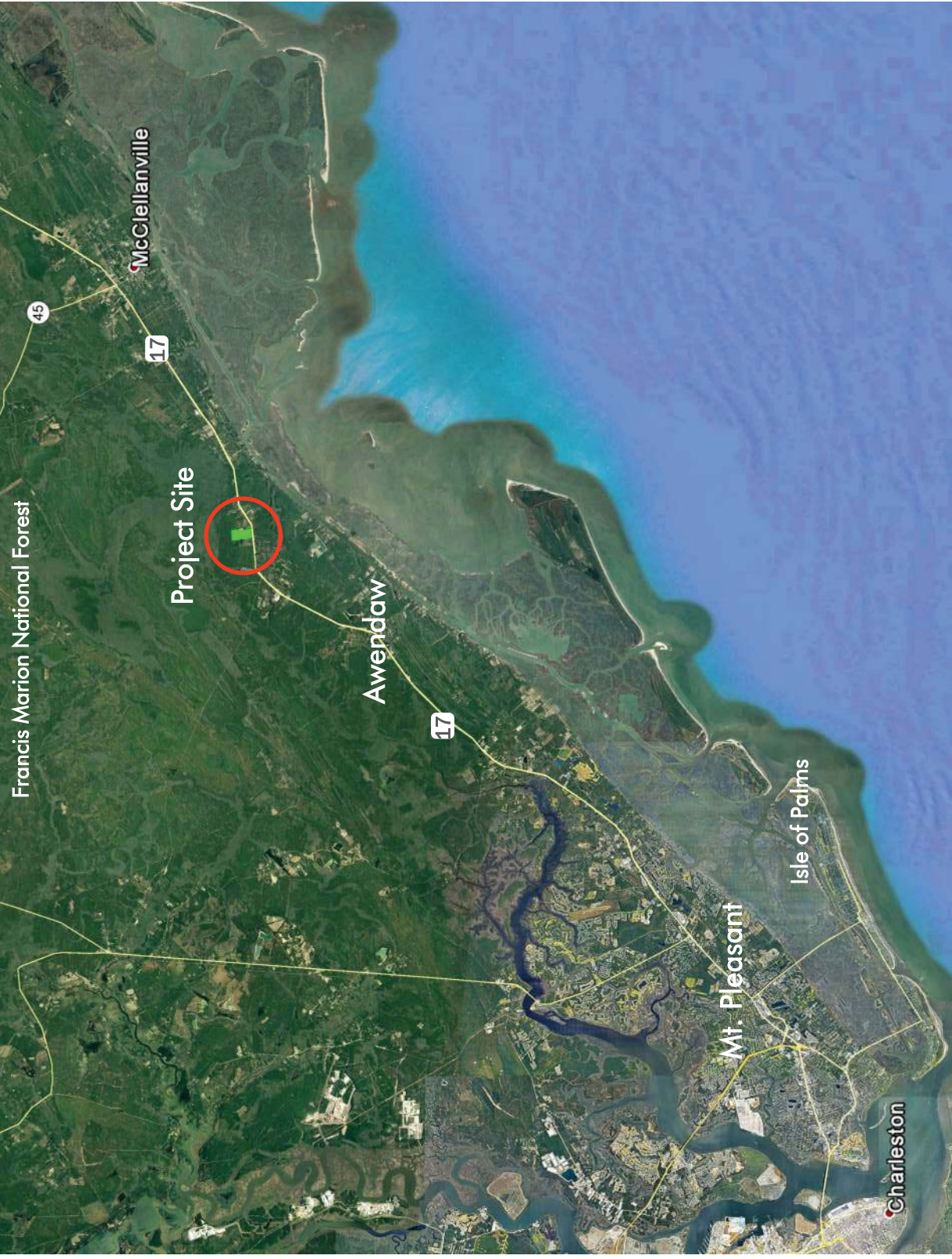
25 Mile Rd



NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE.



EXISTING CONDITIONS MAP
CHARLESTON COUNTY PUBLIC SCHOOLS
12/9/2019

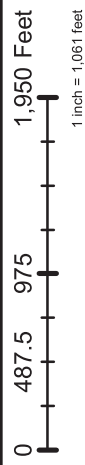


APPENDIX B:

**TAX MAP
& EXISTING LAND USE MAP**

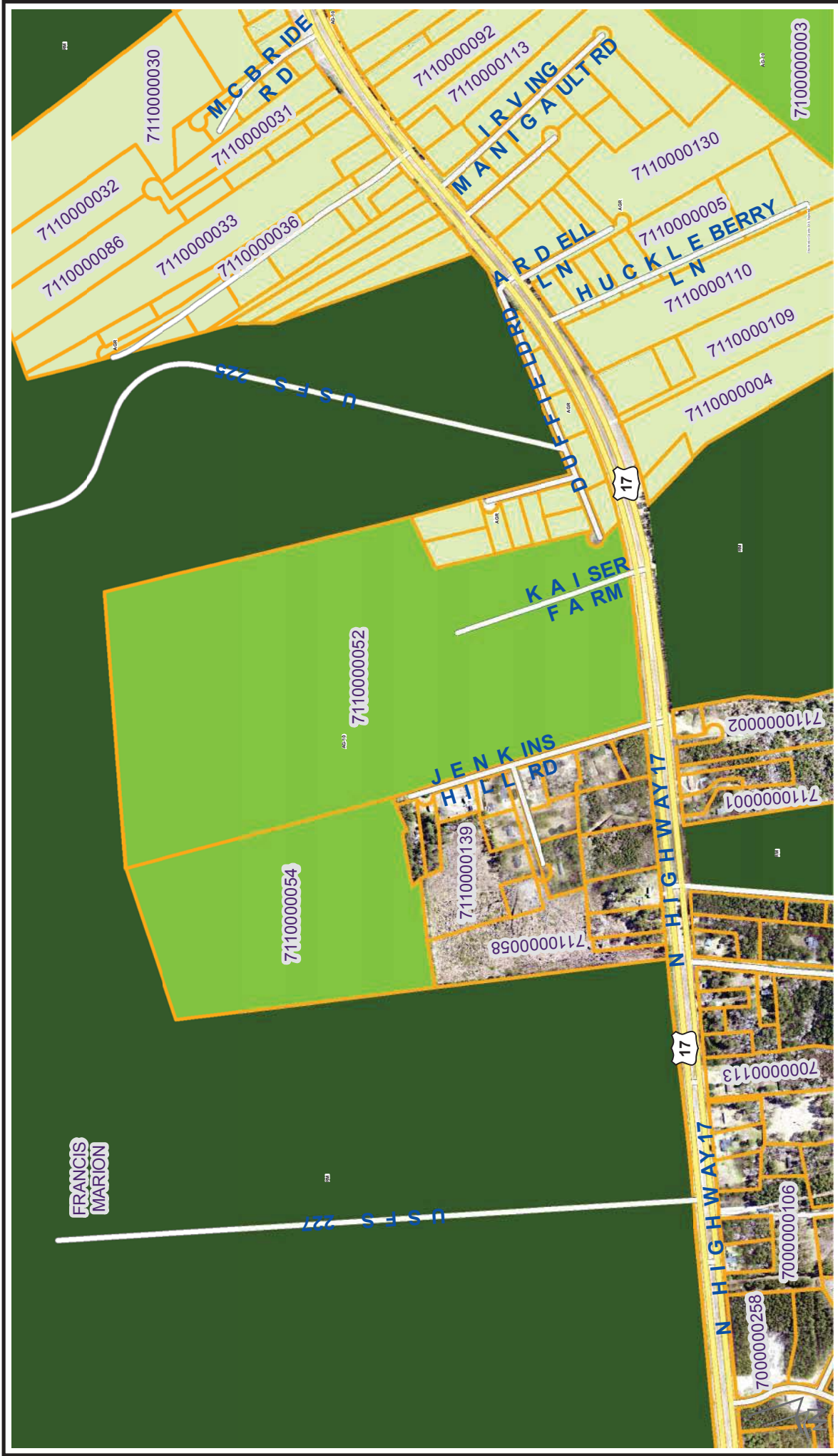


kaiser tract



Note: The Charleston County makes every effort possible to produce the most accurate information. The layers contained in the map service are for information purposes only. The Charleston County makes no warranty, express or implied, nor any guaranty as to the content, sequence, accuracy, timeliness or completeness of any of the information provided. The County explicitly disclaims all representations and warranties. The reader agrees to hold harmless the Charleston County for any cause of action and costs associated with any causes of action which may arise as a consequence of the County providing this information.

Author: Charleston County SC
Date: 2/18/2019



Charleston County SC



Note: The Charleston County makes every effort possible to produce the most accurate information. The layers contained in the map service are for information purposes only. The Charleston County makes no warranty, express or implied, nor any guaranty as to the content, sequence, accuracy, timeliness or completeness of any of the information provided. The County explicitly disclaims all representations and warranties. The reader agrees to hold harmless the Charleston County for any cause of action and costs associated with any causes of action which may arise as a consequence of the County providing this information.

Author: Charleston County SC
Date: 11/26/2019

APPENDIX C:
AS-BUILT SURVEY/ TREE SURVEY

NO.	DATE	DESCRIPTION	BY

SOUTHEASTERN
LAND SURVEYING LLC

1035 B JENKINS ROAD
CHARLESTON, SC 29407
(843) 955-9330

A TREE AND TOPOGRAPHICAL SURVEY OF
KAISER FARM
TMS #711-00-00-052
OWNED QUARRY LAKE PLANTATION, LLC
LOCATED NEAR THE TOWN OF AWENDAW
CHARLESTON COUNTY, SOUTH CAROLINA

DATE:	09-18-2019
DRAWN:	MAS
CHECK:	PRB
CC:	SS
JOB:	19131
DWG:	19131TOPO
SHEET:	1 OF 6



VICINITY MAP NOT TO SCALE

LEGEND	
●	PROPERTY CORNER FOUND, AS DESCRIBED
○	PROPERTY CORNER, SET
—	POWER POLE
—	ADJACENT PROPERTY LINE
—	OVERHEAD POWER LINE
—	UNDERGROUND POWER LINE
—	ELECTRIC POLE
—	TRAIL, AS DESCRIBED
—	STORM DRAINAGE LINE
—	GAS LINE
—	GRASSY TREE, AS DESCRIBED (24" +)

REFERENCE	PLAT BOOK	PAGE
1	870	185
2	870	185
3	870	185
4	870	185
5	870	185
6	870	185
7	870	185
8	870	185
9	870	185
10	870	185
11	870	185
12	870	185
13	870	185
14	870	185
15	870	185
16	870	185
17	870	185
18	870	185
19	870	185
20	870	185
21	870	185
22	870	185
23	870	185
24	870	185
25	870	185
26	870	185
27	870	185
28	870	185
29	870	185
30	870	185
31	870	185
32	870	185
33	870	185
34	870	185
35	870	185
36	870	185
37	870	185
38	870	185
39	870	185
40	870	185
41	870	185
42	870	185
43	870	185
44	870	185
45	870	185
46	870	185
47	870	185
48	870	185
49	870	185
50	870	185
51	870	185
52	870	185
53	870	185
54	870	185
55	870	185
56	870	185
57	870	185
58	870	185
59	870	185
60	870	185
61	870	185
62	870	185
63	870	185
64	870	185
65	870	185
66	870	185
67	870	185
68	870	185
69	870	185
70	870	185
71	870	185
72	870	185
73	870	185
74	870	185
75	870	185
76	870	185
77	870	185
78	870	185
79	870	185
80	870	185
81	870	185
82	870	185
83	870	185
84	870	185
85	870	185
86	870	185
87	870	185
88	870	185
89	870	185
90	870	185
91	870	185
92	870	185
93	870	185
94	870	185
95	870	185
96	870	185
97	870	185
98	870	185
99	870	185
100	870	185



NOTE:

1. ANYTHING SHOWN OUTSIDE THE DEFINED BOUNDARY OF THIS PLAT IS FOR DESCRIPTIVE PURPOSE ONLY.
2. AREA DETERMINED BY COORDINATE GRID METHOD.
3. THE PROPERTY LINES SHOWN ARE ONLY FOR THE PURPOSE OF THE ESTABLISHMENT OF THE BOUNDARY OF THIS PROPERTY. THEY ARE NOT TO BE USED FOR ANY OTHER PURPOSE.
4. THE PROPERTY IS LOCATED IN FLOOD ZONE X, AS SCALED FROM F.I.M. PANEL NO. 461000181, REVISED NOV. 17, 2004.
5. THE LOCATION OF OBVIOUS ACCESSIBLE UTILITIES WERE PHYSICALLY SURVEYED. UNDERGROUND INACCESSIBLE UTILITIES ARE SHOWN IN AN APPROXIMATE LOCATION ONLY.
6. COORDINATES ARE BASED ON NAD 83.
7. ELEVATIONS ARE BASED ON NGVD 1985.
8. EASEMENTS MAY EXIST OUTSIDE THE BOUNDARY OF THE SURVEY FOR WHICH WERE NOT SHOWN ON THE REFERENCE PLATS.

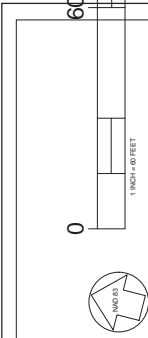
*BENCHMARK INFORMATION
 CONTROL POINT NO. 1
 SOUTHEASTERN LAND SURVEYING, LLC
 09-18-2019

PARCEL CURVE TABLE				
Curve #	Length	Radius	Delta	Chord Length
C1	272.76	3768.72	004.1437	N82°50'05"E 272.70
C2	19.60	3768.72	000.2980	N80°11'39"E 19.60
C3	281.36	3768.72	004.2764	N77°25'37"E 281.88
C4	225.76	50.00	298.6843	N29°31'19"E 77.33



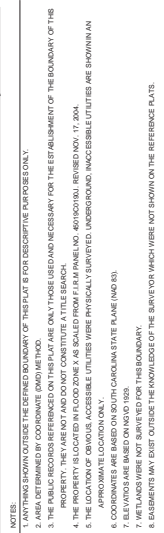
I HEREBY STATE TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THAT THE FOREGOING SURVEY WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR SURVEYING IN THE STATE OF SOUTH CAROLINA, AND THAT I AM A LICENSED SURVEYOR IN THE STATE OF SOUTH CAROLINA.

JOHN T. BYRNESS III
 S.C.P.L.S. No. 19131



A TREE AND TOPOGRAPHICAL SURVEY OF
TMS #711-00-00-052
KAISER FARM
OWNED QUARRY LAKE PLANTATION, LLC
LOCATED NEAR THE TOWN OF AWEENDAW
CHARLESTON COUNTY, SOUTH CAROLINA

DATE:	09-18-2019
DRAWN:	MAS
CHECK:	PRB
CC:	SS
JOB:	19131
DWG:	19131.TPO
SHEET:	2 OF 6



REFERENCES	
PLAT BOOK	PAGE
BW	108
CO	119
S18	0245
BW	4
N	100
O	94
DEED BOOK PAGE	
R166	275
G180	564
SC DOT DOCKET NO. 10.743	
SHEET 30.31	

LEGEND	
●	PROPERTY CORNER FOUND, AS DESCRIBED
○	PROPERTY CORNER, SET
◐	POWER POLE
◑	ELECTRIC BOX
□	UTILITY POLE
◻	THREE, AS DESCRIBED
◼	GRAND TREE, AS DESCRIBED (of +)
—	PROPERTY LINE
· · · · ·	ADJACENT PROPERTY LINE
—○—	OVERHEAD POWER LINE
—○—	UNDERGROUND POWER LINE
—○—	STORM DRAINAGE LINE
—○—	GAS LINE



I HEREBY STATE TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARDS OF PRACTICE MANUAL FOR LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "A" SURVEY AS SPECIFIED THEREIN.

JOHN T. BYRNES III

S.C.P.L.S. No. 16115

LEGEND

PROPERTY CORNER FOUND, AS DESCRIBED

- PROPERTY CORNER, SET
- ◆ POWER POLE
- OVERHEAD POWER LINE
- TELEPHONE LINE
- TELEPHONE POLE
- STORM DRAINAGE LINE
- GAS LINE
- ⊙ TREE, AS DESCRIBED
- ⊕ GRAND TREE, AS DESCRIBED (24" +)

LEGEND

PROPERTY LINE	PAGE
ADJACENT PROPERTY LINE	19
OVERHEAD POWER LINE	19
TELEPHONE LINE	19
TELEPHONE POLE	19
STORM DRAINAGE LINE	19
GAS LINE	19
TREE, AS DESCRIBED	19
GRAND TREE, AS DESCRIBED (24" +)	19

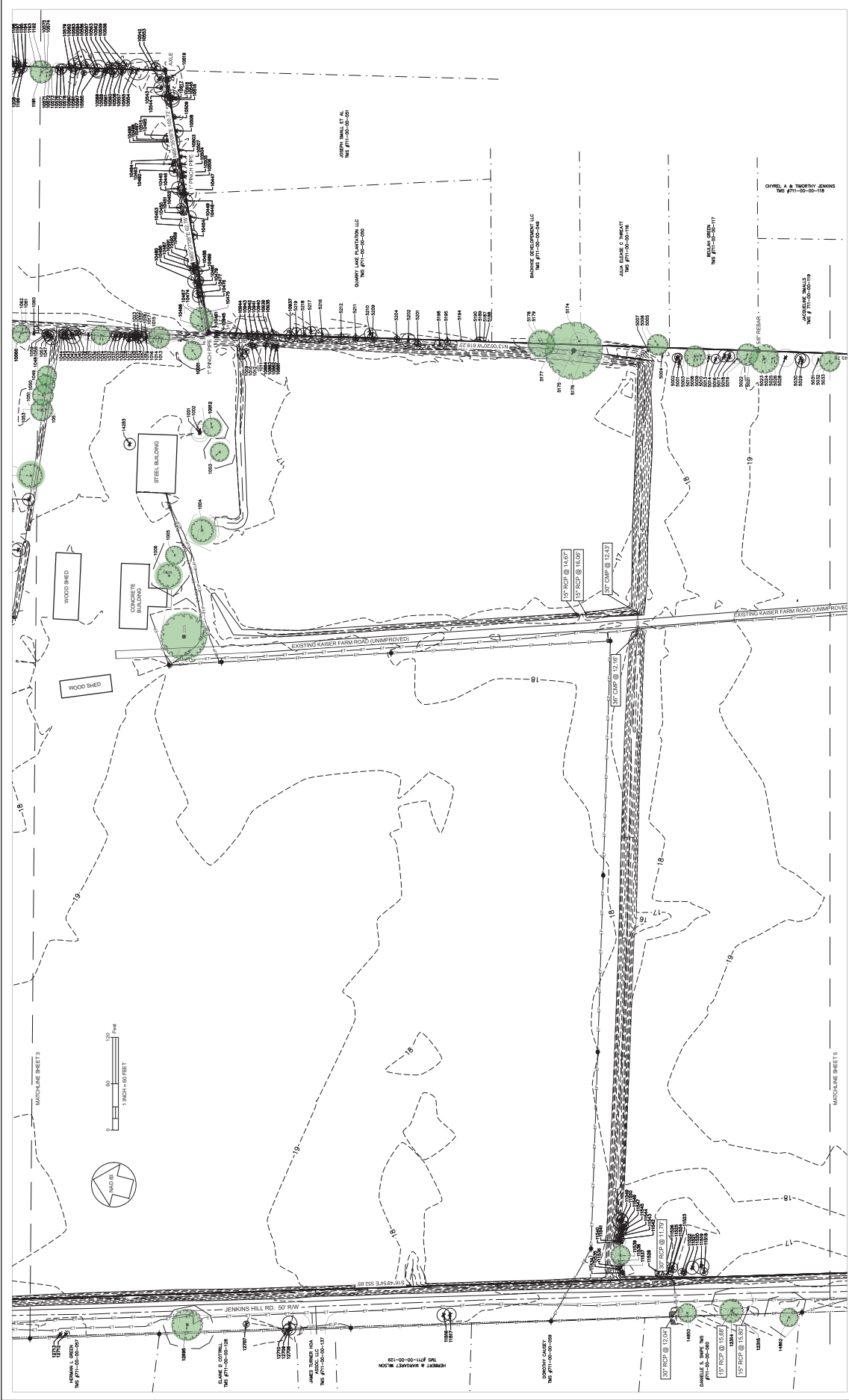
NO.	DATE	DESCRIPTION	BY



SOUTHEASTERN
LAND SURVEYING LLC
(843) 956-9330
1035 B JENKINS ROAD
CHARLESTON, SC 29407

A TREE AND TOPOGRAPHICAL SURVEY OF
KAISER FARM
TMS #711-00-00-052
 OWNED QUARRY LAKE PLANTATION, LLC
 LOCATED NEAR THE TOWN OF AWDENAW
 CHARLESTON COUNTY, SOUTH CAROLINA

DATE:	09-18-2019
DRAWN:	MAS
CHECK:	PRB
CC:	SS
JOB:	19131
DWG:	19131TOP
SHEET:	4 OF 6



NOTES:

1. ANYTHING SHOWN OUTSIDE THE DEFINED BOUNDARY OF THIS PLAT IS FOR DESCRIPTIVE PURPOSE ONLY.
2. AREA DETERMINED BY COORDINATE GRID METHOD.
3. THE PUBLIC RECORDS REFERENCED ON THIS PLAT ARE ONLY THOSE USED AND NECESSARY FOR THE ESTABLISHMENT OF THE BOUNDARY OF THIS PLAT.
4. THE PROPERTY IS LOCATED IN FLOOD ZONE X AS SCALED FROM FIRM PANEL NO. 4001001M, REVISED NOV. 17, 2004.
5. THE LOCATION OF OBVIOUS ACCESSIBLE UTILITIES WERE PHYSICALLY SURVEYED. UNDERGROUND, INACCESSIBLE UTILITIES ARE SHOWN IN AN APPROXIMATE LOCATION ONLY.
6. COORDINATES ARE BASED ON 2011 CAROLINA STATE PLANE (NAD 83).
7. WETLANDS WERE NOT SURVEYED FOR THIS BOUNDARY.
8. EASEMENTS MAY EXIST OUTSIDE THE KNOWLEDGE OF THE SURVEYOR WHICH WERE NOT SHOWN ON THE REFERENCE PLATS.

LEGEND:

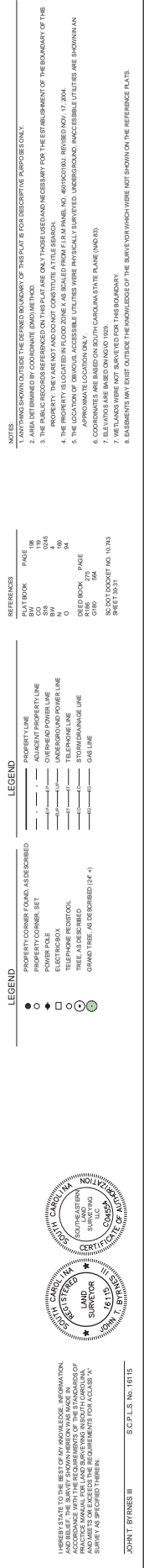
PROPERTY CORNER (ROUND, AS DESCRIBED) POWER POLE ELECTRIC POLE TELEPHONE POLE GRAND TREE (AS DESCRIBED 24' +)	<p>LEGEND:</p> <table border="0"> <tr><td>---</td><td>PROPERTY LINE</td></tr> <tr><td>---</td><td>ADJACENT PROPERTY LINE</td></tr> <tr><td>---</td><td>OVERHEAD POWER LINE</td></tr> <tr><td>---</td><td>UNDERGROUND POWER LINE</td></tr> <tr><td>---</td><td>TELEPHONE LINE</td></tr> <tr><td>---</td><td>UNDERGROUND TELEPHONE LINE</td></tr> <tr><td>---</td><td>GAS LINE</td></tr> </table>	---	PROPERTY LINE	---	ADJACENT PROPERTY LINE	---	OVERHEAD POWER LINE	---	UNDERGROUND POWER LINE	---	TELEPHONE LINE	---	UNDERGROUND TELEPHONE LINE	---	GAS LINE
---	PROPERTY LINE														
---	ADJACENT PROPERTY LINE														
---	OVERHEAD POWER LINE														
---	UNDERGROUND POWER LINE														
---	TELEPHONE LINE														
---	UNDERGROUND TELEPHONE LINE														
---	GAS LINE														

REFERENCES:

PLAT BOOK	PAGE
B77	198
B78	199
B79	200
B80	201
B81	202
B82	203
B83	204
B84	205
B85	206
B86	207
B87	208
B88	209
B89	210
B90	211
B91	212
B92	213
B93	214
B94	215
B95	216
B96	217
B97	218
B98	219
B99	220
B00	221
B01	222
B02	223
B03	224
B04	225
B05	226
B06	227
B07	228
B08	229
B09	230
B10	231
B11	232
B12	233
B13	234
B14	235
B15	236
B16	237
B17	238
B18	239
B19	240
B20	241
B21	242
B22	243
B23	244
B24	245
B25	246
B26	247
B27	248
B28	249
B29	250
B30	251
B31	252
B32	253
B33	254
B34	255
B35	256
B36	257
B37	258
B38	259
B39	260
B40	261
B41	262
B42	263
B43	264
B44	265
B45	266
B46	267
B47	268
B48	269
B49	270
B50	271
B51	272
B52	273
B53	274
B54	275
B55	276
B56	277
B57	278
B58	279
B59	280
B60	281
B61	282
B62	283
B63	284
B64	285
B65	286
B66	287
B67	288
B68	289
B69	290
B70	291
B71	292
B72	293
B73	294
B74	295
B75	296
B76	297
B77	298
B78	299
B79	300
B80	301
B81	302
B82	303
B83	304
B84	305
B85	306
B86	307
B87	308
B88	309
B89	310
B90	311
B91	312
B92	313
B93	314
B94	315
B95	316
B96	317
B97	318
B98	319
B99	320
B00	321
B01	322
B02	323
B03	324
B04	325
B05	326
B06	327
B07	328
B08	329
B09	330
B10	331
B11	332
B12	333
B13	334
B14	335
B15	336
B16	337
B17	338
B18	339
B19	340
B20	341
B21	342
B22	343
B23	344
B24	345
B25	346
B26	347
B27	348
B28	349
B29	350
B30	351
B31	352
B32	353
B33	354
B34	355
B35	356
B36	357
B37	358
B38	359
B39	360
B40	361
B41	362
B42	363
B43	364
B44	365
B45	366
B46	367
B47	368
B48	369
B49	370
B50	371
B51	372
B52	373
B53	374
B54	375
B55	376
B56	377
B57	378
B58	379
B59	380
B60	381
B61	382
B62	383
B63	384
B64	385
B65	386
B66	387
B67	388
B68	389
B69	390
B70	391
B71	392
B72	393
B73	394
B74	395
B75	396
B76	397
B77	398
B78	399
B79	400
B80	401
B81	402
B82	403
B83	404
B84	405
B85	406
B86	407
B87	408
B88	409
B89	410
B90	411
B91	412
B92	413
B93	414
B94	415
B95	416
B96	417
B97	418
B98	419
B99	420
B00	421
B01	422
B02	423
B03	424
B04	425
B05	426
B06	427
B07	428
B08	429
B09	430
B10	431
B11	432
B12	433
B13	434
B14	435
B15	436
B16	437
B17	438
B18	439
B19	440
B20	441
B21	442
B22	443
B23	444
B24	445
B25	446
B26	447
B27	448
B28	449
B29	450
B30	451
B31	452
B32	453
B33	454
B34	455
B35	456
B36	457
B37	458
B38	459
B39	460
B40	461
B41	462
B42	463
B43	464
B44	465
B45	466
B46	467
B47	468
B48	469
B49	470
B50	471
B51	472
B52	473
B53	474
B54	475
B55	476
B56	477
B57	478
B58	479
B59	480
B60	481
B61	482
B62	483
B63	484
B64	485
B65	486
B66	487
B67	488
B68	489
B69	490
B70	491
B71	492
B72	493
B73	494
B74	495
B75	496
B76	497
B77	498
B78	499
B79	500
B80	501
B81	502
B82	503
B83	504
B84	505
B85	506
B86	507
B87	508
B88	509
B89	510
B90	511
B91	512
B92	513
B93	514
B94	515
B95	516
B96	517
B97	518
B98	519
B99	520
B00	521
B01	522
B02	523
B03	524
B04	525
B05	526
B06	527
B07	528
B08	529
B09	530
B10	531
B11	532
B12	533
B13	534
B14	535
B15	536
B16	537
B17	538
B18	539
B19	540
B20	541
B21	542
B22	543
B23	544
B24	545
B25	546
B26	547
B27	548
B28	549
B29	550
B30	551
B31	552
B32	553
B33	554
B34	555
B35	556
B36	557
B37	558
B38	559
B39	560
B40	561
B41	562
B42	563
B43	564
B44	565
B45	566
B46	567
B47	568
B48	569
B49	570
B50	571
B51	572
B52	573
B53	574
B54	575
B55	576
B56	577
B57	578
B58	579
B59	580
B60	581
B61	582
B62	583
B63	584
B64	585
B65	586
B66	587
B67	588
B68	589
B69	590
B70	591
B71	592
B72	593
B73	594
B74	595
B75	596
B76	597
B77	598
B78	599
B79	600
B80	601
B81	602
B82	603
B83	604
B84	605
B85	606
B86	607
B87	608
B88	609
B89	610
B90	611
B91	612
B92	613
B93	614
B94	615
B95	616
B96	617
B97	618
B98	619
B99	620
B00	621
B01	622
B02	623
B03	624
B04	625
B05	626
B06	627
B07	628
B08	629
B09	630
B10	631
B11	632
B12	633
B13	634
B14	635
B15	636
B16	637
B17	638
B18	639
B19	640
B20	641
B21	642
B22	643
B23	644
B24	645
B25	646
B26	647
B27	648
B28	649
B29	650
B30	651
B31	652
B32	653
B33	654
B34	655
B35	656
B36	657
B37	658
B38	659
B39	660
B40	661
B41	662
B42	663
B43	664
B44	665
B45	666
B46	667
B47	668
B48	669
B49	670
B50	671
B51	672
B52	673
B53	674
B54	675
B55	676
B56	677
B57	678
B58	679
B59	680
B60	681
B61	682
B62	683
B63	684
B64	685
B65	686
B66	687
B67	688
B68	689
B69	690
B70	691
B71	692
B72	693
B73	694
B74	695
B75	696
B76	697
B77	698
B78	699
B79	700
B80	701
B81	702
B82	703
B83	704
B84	705
B85	706
B86	707
B87	708
B88	709
B89	710
B90	711
B91	712
B92	713
B93	714
B94	715
B95	716
B96	717
B97	718
B98	719
B99	720
B00	721
B01	722
B02	723
B03	724
B04	725
B05	726
B06	727
B07	728
B08	729
B09	730
B10	731
B11	732
B12	733



DATE:	09-18-2019
DRAWN:	MAS
CHECK:	PRB
CC:	SS
JOB:	19131
DWG:	19131.TPO
SHEET:	5 OF 6



JOHN T. BYRNES III S.C.P.L.S. No. 16115

SOUTHEASTERN
LAND SURVEYING LLC
1035-B JENKINS ROAD
CHARLESTON SC 29407
(843) 795-9330

DATE:	09-18-2019
DRAWN:	MAS
CHECK:	PRB
CC:	SS
JOB:	19131
DWG:	19131.TPO
SHEET:	6 OF 6

I HEREBY STATE TO THE BEST OF MY KNOWLEDGE, INFORMATION, AND BELIEF, THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH THE REQUIREMENTS OF THE STANDARDS OF PRACTICE MANUAL FOR LAND SURVEYING IN SOUTH CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS 'A'.

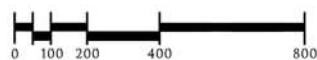
APPENDIX D:
AERIAL CONCEPTUAL SKETCH PLAN



CONCEPTUAL MASTER PLAN

NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE BASED ON FINAL SURVEY DATA, DEVELOPMENT PROGRAM INFORMATION, MUNICIPAL AND REGULATORY INPUT, ETC. IT IS INTENDED TO BE USED ONLY AS A RESOURCE TO ESTABLISH THE POTENTIAL FOR VARIOUS DEVELOPMENT SCENARIOS.

02/28/2020



APPENDIX E:

**WETLAND LETTER APPLICATION
& RECEIPT**



DEPARTMENT OF THE ARMY
CHARLESTON DISTRICT, CORPS OF ENGINEERS
69A HAGOOD AVENUE
CHARLESTON, SOUTH CAROLINA 29403-5107

FEB - 5 2019

Regulatory Division

Mr. William Wilson
Sabine & Waters, Inc.
PO Box 1072
Summerville, South Carolina 29483

COPY

Dear Mr. Wilson:

This letter is in response to your request for an Approved Jurisdictional Determination (AJD) (SAC-2018-01542) received in our office on September 26, 2018, for a 107.2-acre site located on Kaiser Farm in McClellanville, Charleston County, South Carolina (Latitude: 33.0437°N, Longitude: -79.5984 °W). An AJD is used to indicate that this office has identified the presence or absence of wetlands and/or other aquatic resources on a site, including their accurate location(s) and boundaries, as well as their jurisdictional status pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S.C. § 1344) and/or navigable waters of the United States pursuant to Section 10 of the Rivers and Harbors Act of 1899 (RHA) (33 U.S.C. § 403).

The site in question is shown on the enclosed depiction entitled "Site Map – Kaiser Tract Ravenel Commercial Properties Charleston County, SC" and dated July 3, 2018, prepared by Sabine & Waters, Inc. Based on an on-site inspection, a review of aerial photography, topographic maps, National Wetlands Inventory maps, LIDAR, soil survey information, and Wetland Determination Data Form(s), this office has determined that the referenced site, as shown on the referenced depiction, does not contain any aquatic resources that are subject to regulatory jurisdiction under Section 404 of the CWA or Section 10 of the RHA.

Enclosed is a form describing the basis of jurisdiction for the area(s) in question. It should also be noted that some or all of these areas may be regulated by other state or local government entities. Specifically, you are encouraged to contact the South Carolina Department of Health and Environmental Control, Bureau of Water or the Department of Ocean and Coastal Resource Management, to determine the limits of their jurisdiction.


Please be advised that this AJD is valid for five (5) years from the date of this letter unless new information warrants revision before the expiration date. This AJD is an appealable action under the Corps of Engineers administrative appeal procedures defined at 33 CFR Part 331. The administrative appeal options, process and appeals request form is attached for your convenience and use.

This AJD has been conducted pursuant to Corps of Engineers' regulatory authority to identify the limits of Corps of Engineers' jurisdiction for the particular site identified in this request. This AJD may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service, prior to starting work.

In all future correspondence concerning this matter, please refer to file number SAC-2018-01542. A copy of this letter is being forwarded to certain State and/or Federal agencies for their information. If you have any questions concerning this matter, please contact Leslie Estill, Project Manager, at (843) 329-8039.

Y9000

Sincerely,



Tracy Sanders
Biologist

Enclosures:

Approved Jurisdictional Determination Form

Notification of Appeal Options

Depiction entitled "Site Map – Kaiser Tract Ravenel Commercial Properties Charleston County, SC"

Copies Furnished:

Mr. Barry Gumb
Qyarry Lake Plantation, LLC
525 East Bay Street, Suite 100
Charleston, South Carolina 29403

South Carolina Department of
Health and Environmental Control
Bureau of Water
2600 Bull Street
Columbia, South Carolina 29201

South Carolina Department of Health
and Environmental Control
Office of Ocean and Coastal
Resource Management
1362 McMillan Avenue, Suite 400
Charleston, South Carolina 29405



EXTERNAL SOURCES: NAIP 2017 TRUE COLOR AERIAL, U.S. CENSUS ROADS, CHARLESTON COUNTY GIS PARCEL

Created By: Stephen Bennett
 Date Created: July 2, 2018
 Copyright 2018 Sabine & Waters, Inc.
 R: consult@ravenel.commercial
 support@kaiser-mapdata.com

Sabine & Waters, Inc.
 Environmental Land Management Consultants
 P.O. Box 1072 Summerville, SC 29486
 843.971.5383 (phone) 843.971.2050 (fax)
<http://www.sabine.com>

Disclaimer: This map is a graphic representation of data obtained from various sources. All efforts have been made to ensure the accuracy of this map. However, Sabine & Waters, Inc. disclaims all responsibility and liability for the use of this map.

REVISED: 7/3/2018

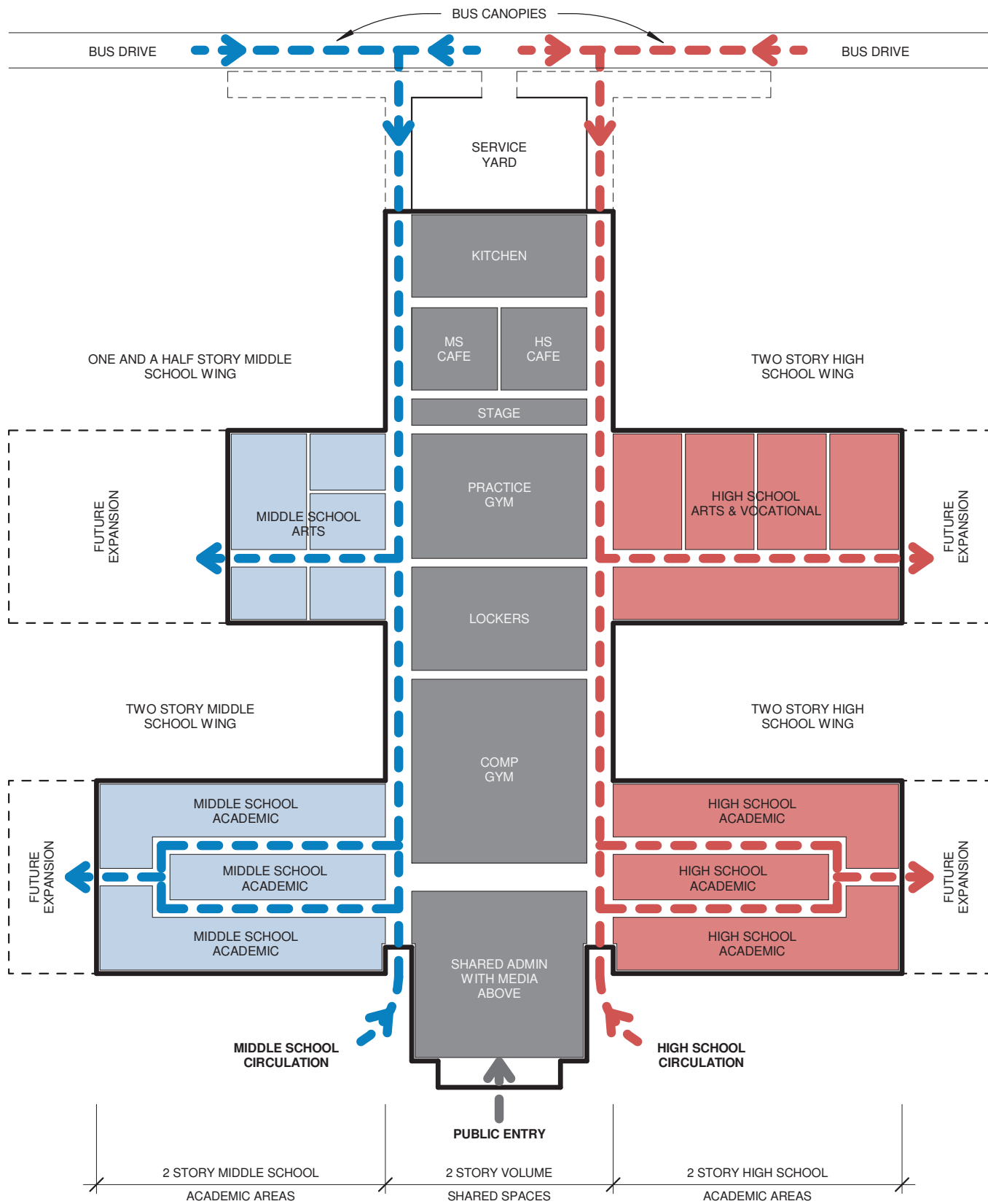
**SITE MAP - KAISER TRACT
 RAVENEL COMMERCIAL PROPERTIES
 CHARLESTON COUNTY, SC**



LEGEND

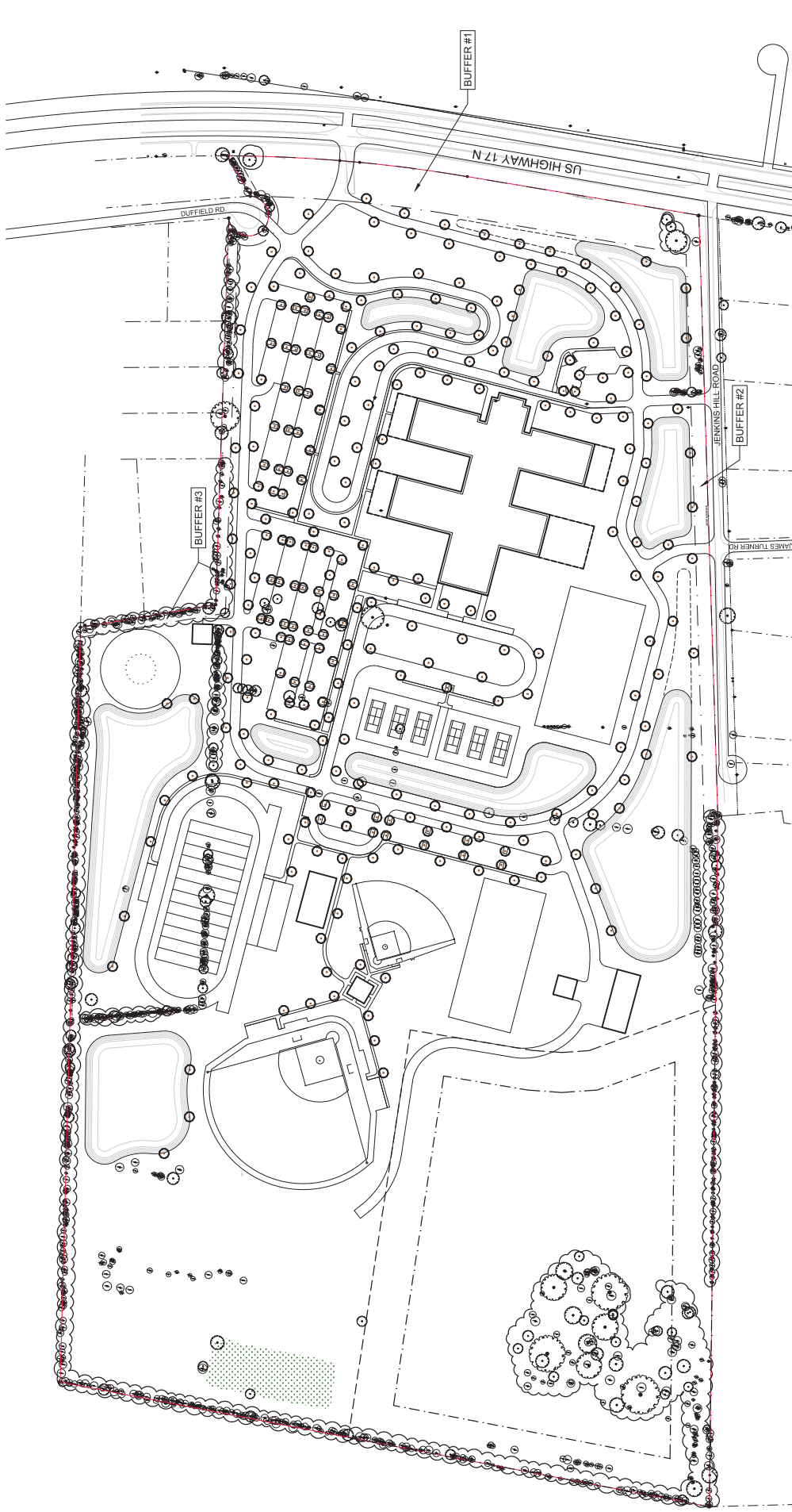
- PROPERTY BOUNDARY: +/- 107.2 AC
- ROADS

APPENDIX F:
ARCHITECTURAL SITE PLAN



PROPOSED MASSING DIAGRAM

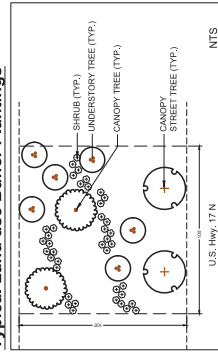
APPENDIX G:
LANDSCAPE SKETCH PLAN



Legend

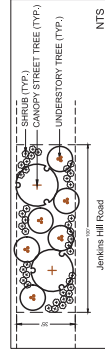
- existing grand tree (24" dbh)
- existing protected tree (8-24" dbh)

Typical Land use Buffer Plantings

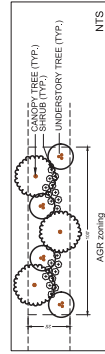


Buffer #1 (located along U.S. Hwy 17 N)
100' Type S3 - total length 1,193 ft

- Notes:
- Per Charleston County ZLDR, 2 street trees are required per 100 ft in S3 buffers and may count toward the canopy tree requirement.
 - Typical Buffer Plantings shown are conceptual. Quantities will be met per requirements noted with final planting locations to be determined and approved by Charleston County Planning Staff.



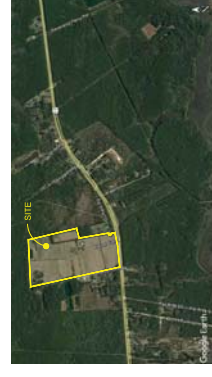
Buffer #2 (located along Jenkins Hill Road)
35' Type B - total length 1,411 ft



Buffer #3 (located along west property line adj. to AGR zoning)
25' Type B - total length 1,538 ft

- Notes:
- Per Charleston County ZLDR, 2 street trees are required per 100 ft in S3 buffers and may count toward the canopy tree requirement.
 - Typical Buffer Plantings shown are conceptual. Quantities will be met per requirements noted with final planting locations to be determined and approved by Charleston County Planning Staff.

Site Location Map



LANDSCAPING SKETCH PLAN

AWENDAW / MCCLELLANVILLE HIGH SCHOOL / MIDDLE SCHOOL

CHARLESTON COUNTY SCHOOL DISTRICT
CHARLESTON COUNTY, SOUTH CAROLINA

02/17/2020

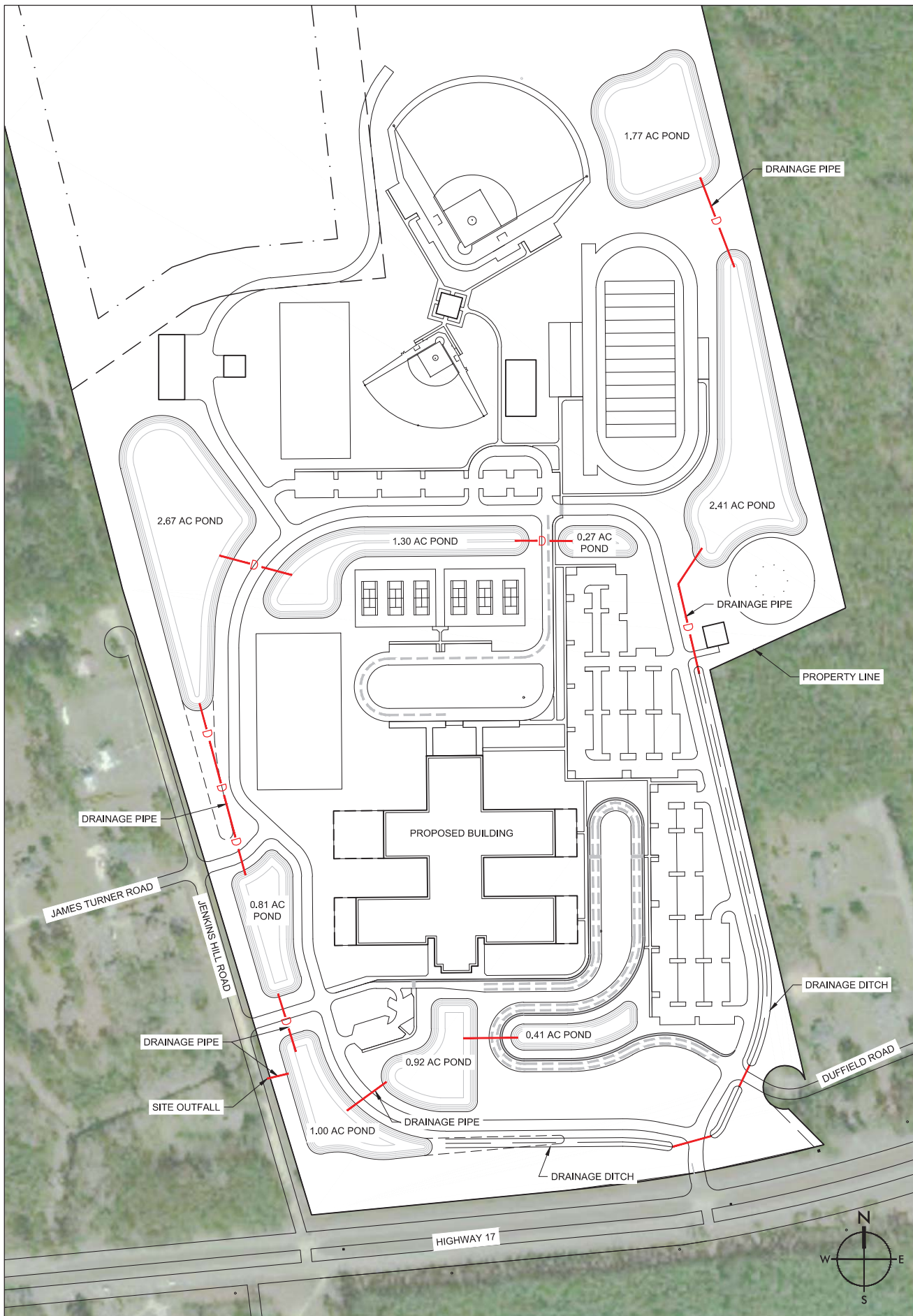
NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE.



SCALE 1" = 100'

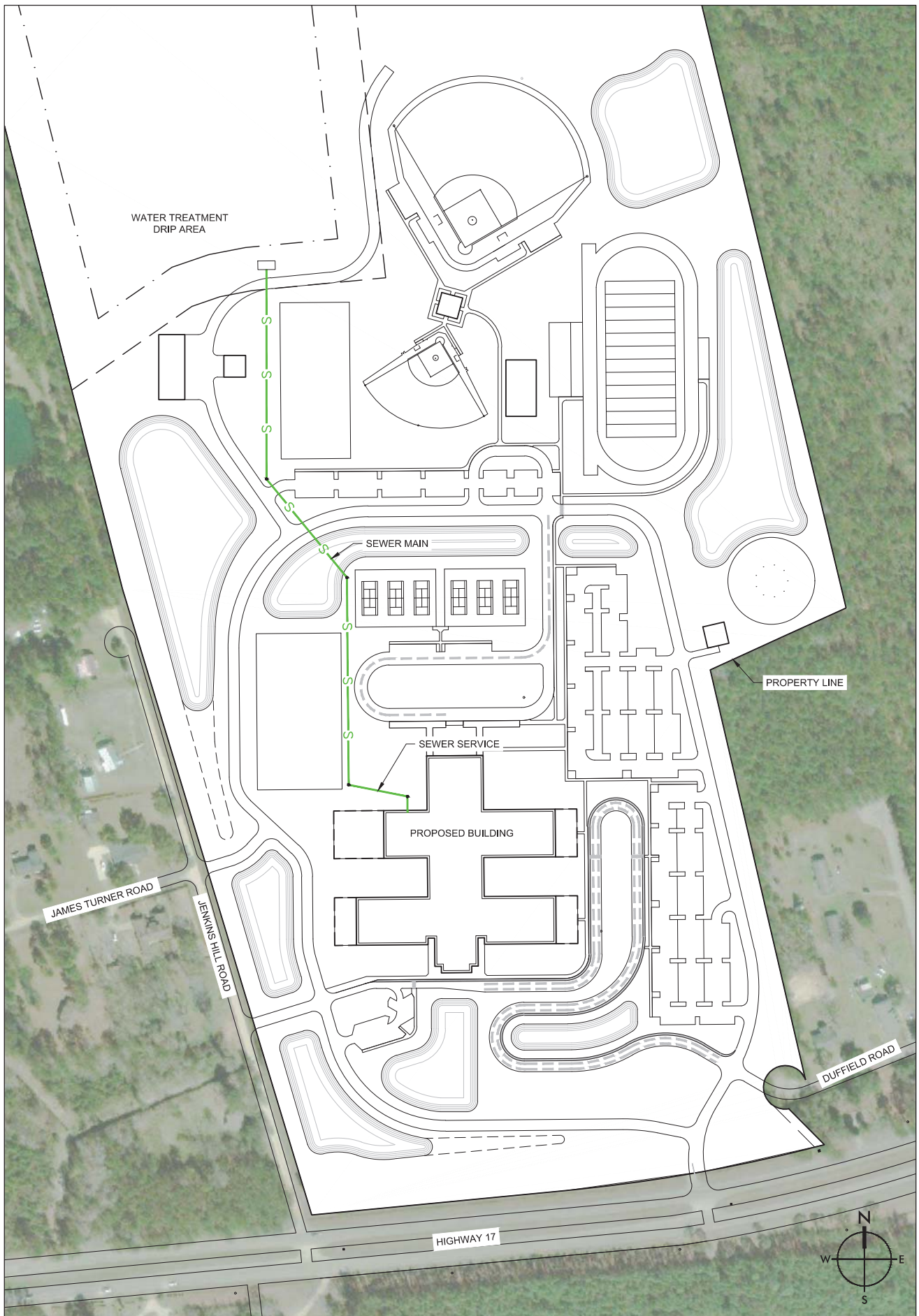
APPENDIX H:

UTILITY PLANS



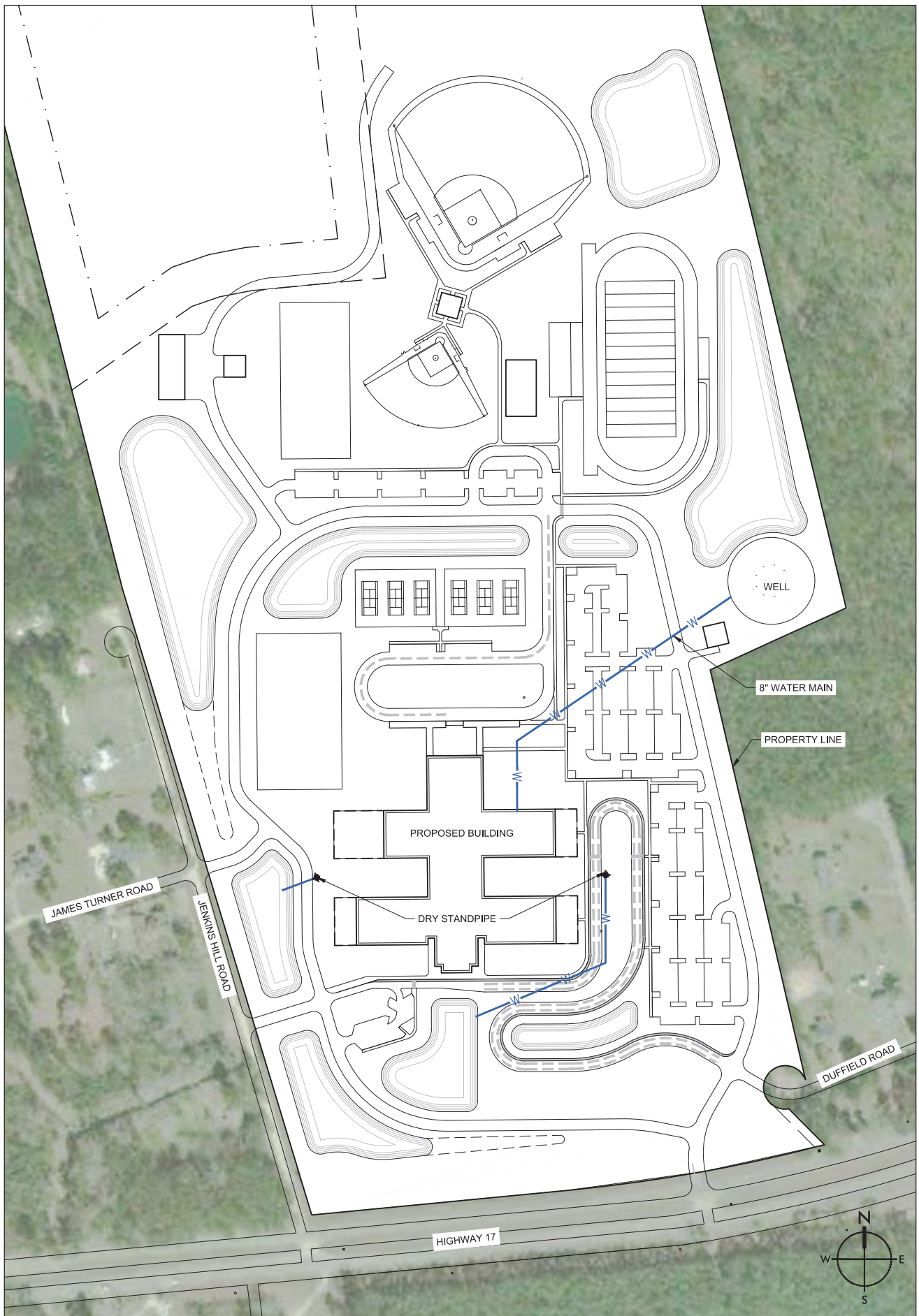
AWENDAW / MCCLELLANVILLE HIGH / MIDDLE SCHOOL
 PROJECT #8067
 DATE: 02/18/20
 SCALE: 1:200

CONCEPTUAL DRAINAGE
 PLAN

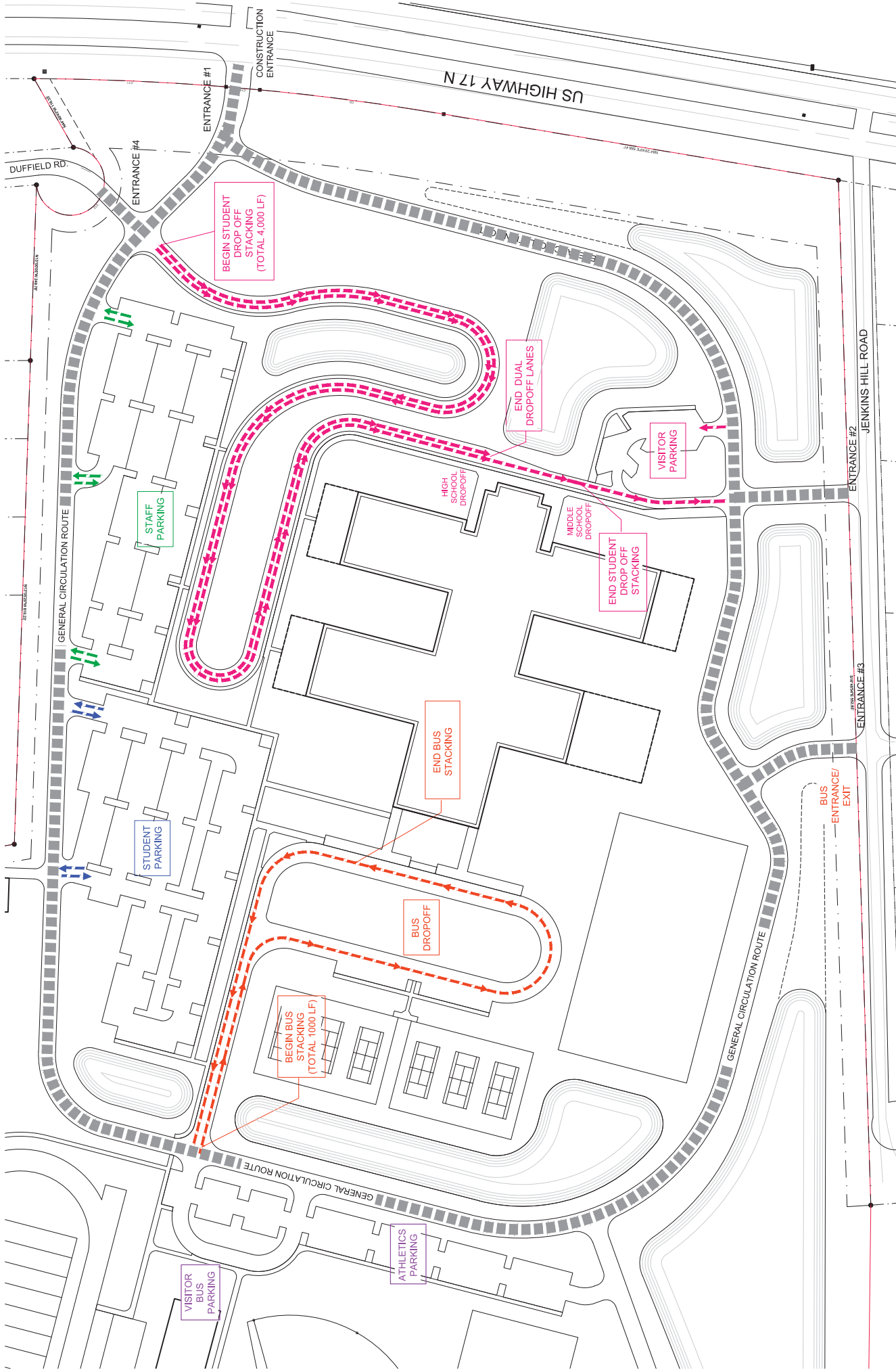


AWENDAW / MCCLELLANVILLE HIGH / MIDDLE SCHOOL
PROJECT #8067
DATE: 02/18/20
SCALE: 1:200

CONCEPTUAL SEWER
PLAN

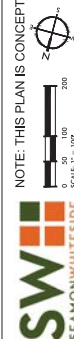


APPENDIX I:
CIRCULATION PLAN



TRAFFIC CIRCULATION PLAN
 AWENDAW / MCCLELLANVILLE
 HIGH SCHOOL / MIDDLE SCHOOL
 CHARLESTON COUNTY SCHOOL DISTRICT
 CHARLESTON COUNTY, SOUTH CAROLINA
 02/17/2020

NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE.



APPENDIX J:

**TRAFFIC IMPACT
& ACCESS STUDY**

TRAFFIC IMPACT AND ACCESS STUDY

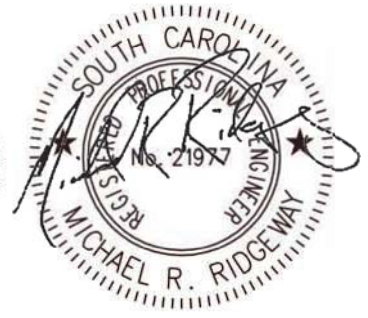
HIGH SCHOOL/MIDDLE SCHOOL IN AWENDAW CHARLESTON COUNTY, SC

Prepared for:

SEAMON WHITESIDE + ASSOCIATES
501 Wando Park Boulevard, Suite 200
Mount Pleasant, SC 29464

Prepared by:

RIDGEWAY TRAFFIC CONSULTING, LLC
1720 Dutch Fork Road, Suite F
Irmo, SC 29063



2/27/20

RIDGEWAY
TRAFFIC CONSULTING
803-361-9044

SUBMITTED FEBRUARY 2020

PROJECT DESCRIPTION & EXISTING CONDITIONS

Ridgeway Traffic Consulting (RTC) has been retained to evaluate the traffic and transportation impacts resulting from the construction of a new high school/middle school campus for the Charleston County School District near Awendaw, South Carolina.

Evaluation of the transportation impacts associated with the proposed project first requires a thorough description and quantification of the proposed project and the project site, which is included in the following sections.

PROJECT DESCRIPTION

The project proposal is to construct a new combined high school/middle school campus along the north side of US 17 in the proximity of Kaiser Farm Road in rural Charleston County near Awendaw, South Carolina.

Figure 1 depicts the site location in relation to the local and regional roadway system.

Access for the school is currently proposed via a main entrance for students, staff and parent drop-offs/pick-ups to US 17 in the current location Kaiser Farm Road where an existing median break is provided. A second entrance for students, staff and parent drop-offs will be provided to Jenkins Hill Road. The bus loop will be serviced via a separate connection to Jenkins Hill Road. Connectivity to the east to Duffield Road is also proposed.

Details/recommendations for the site access drives are provided in the Mitigation section of this report.

Under the current development plan, the school is anticipated to open in the Fall of 2025, which is the horizon year analyzed for this report. **Figure 2** depicts the conceptual plan for the school.

GEOMETRICS AND TRAFFIC CONTROL

A comprehensive field inventory of the site and study area has been conducted. The field inventory included a collection of geometric data, traffic volumes, and traffic control within the study area.

Study Area Roadway

US 17 – is a four-lane divided major arterial across site frontage with two lanes provided in each direction separated by a grassed median. The posted speed limit across site frontage is currently 60 miles-per-hour (mph). This roadway is maintained by the SCDOT.

The existing lane geometrics and traffic control characteristics for the study area roadways/intersections are graphically depicted in **Figure 3**.



Figure 2
PROPOSED SITE PLAN
High School/Middle School In Awendaw

RIDGEWAY
TRAFFIC CONSULTING
 803-361-9044

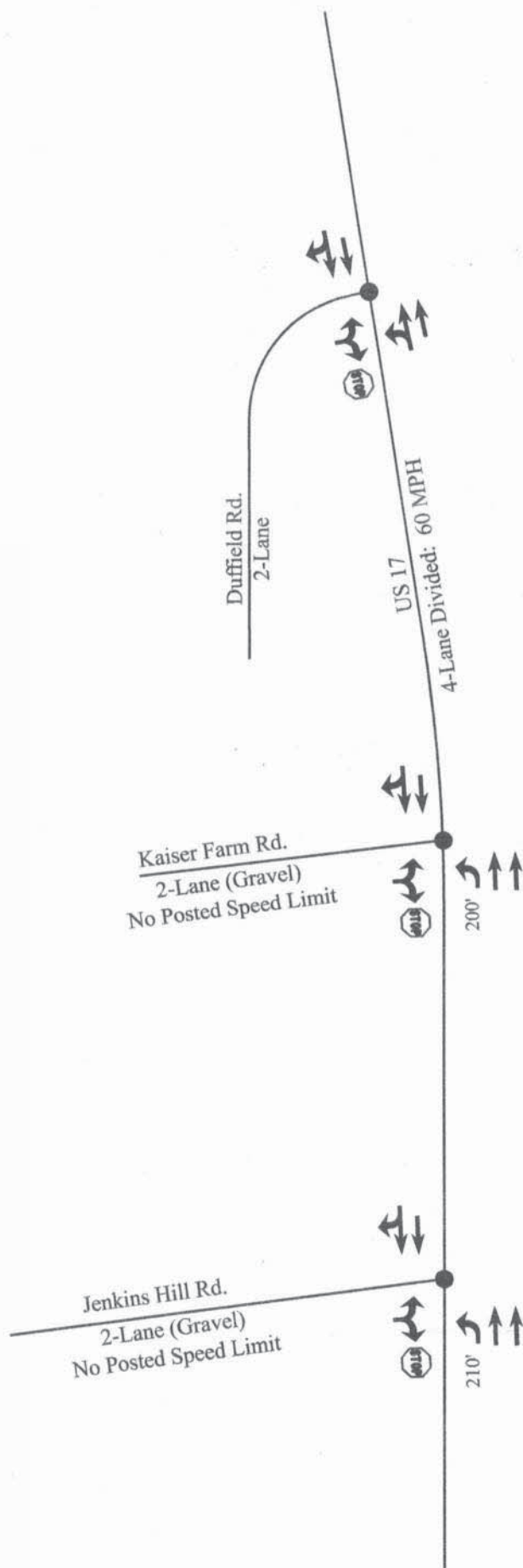
TRAFFIC VOLUMES

In order to determine the existing traffic volume flow patterns within the study area, manual turning movement counts were gathered for the weekday morning (7:00-9:00 AM) and afternoon (2:00 – 6:00 PM) peak time periods for the following study area intersections along US 17:

- US 17 at Jenkins Hill Road; and
- US 17 at Duffield Road.

The PM peak hour was expanded by two hours to pick up times when the school is anticipated to peak in the afternoon, which is before the commuter PM peak. The AM peak hour for the school is anticipated to coincide with the typical commuter peak.

The existing peak-hour traffic flow networks for the weekday AM, School PM and Commuter PM peak-hour periods are shown graphically in **Figures 4A-4C**.



NOT TO SCALE

- = Unsignalized Intersection
- ↔ = Lane Designation
- 000' = Storage Length

IRIDGEWAY
TRAFFIC CONSULTING

Figure 3
EXISTING GEOMETRY &
TRAFFIC CONTROL

High School/Middle School In Awendaw

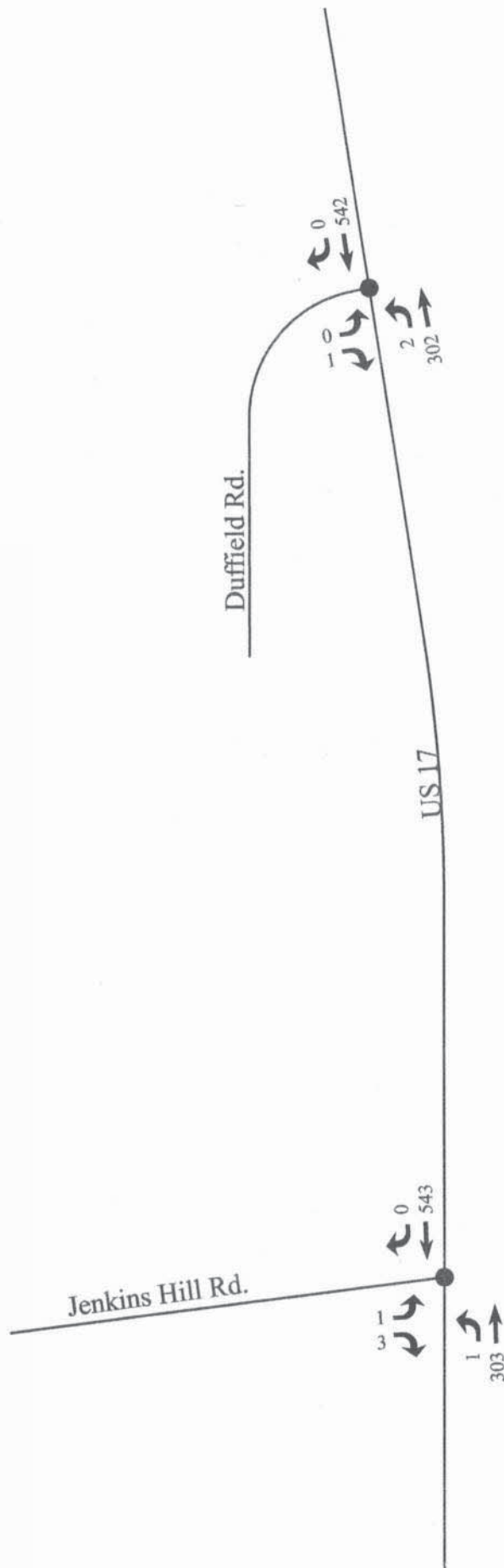
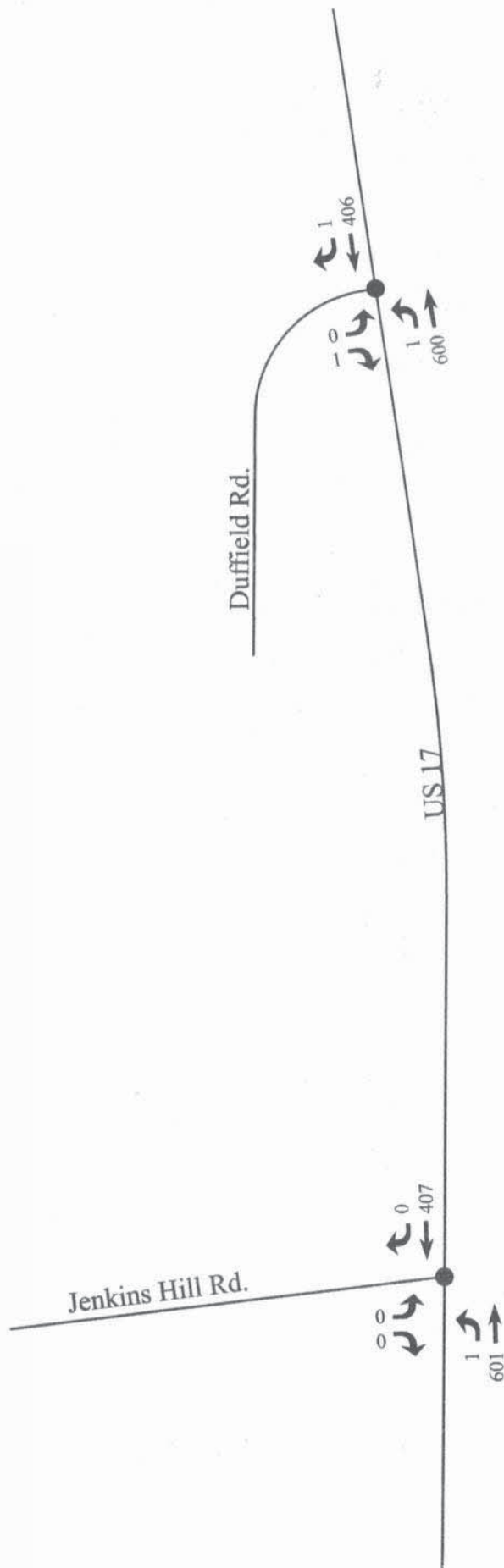


Figure 4A
 EXISTING 2019 TRAFFIC VOLUMES
 AM PEAK HOUR
 High School/Middle School In Awendaw

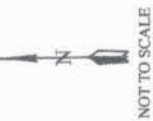
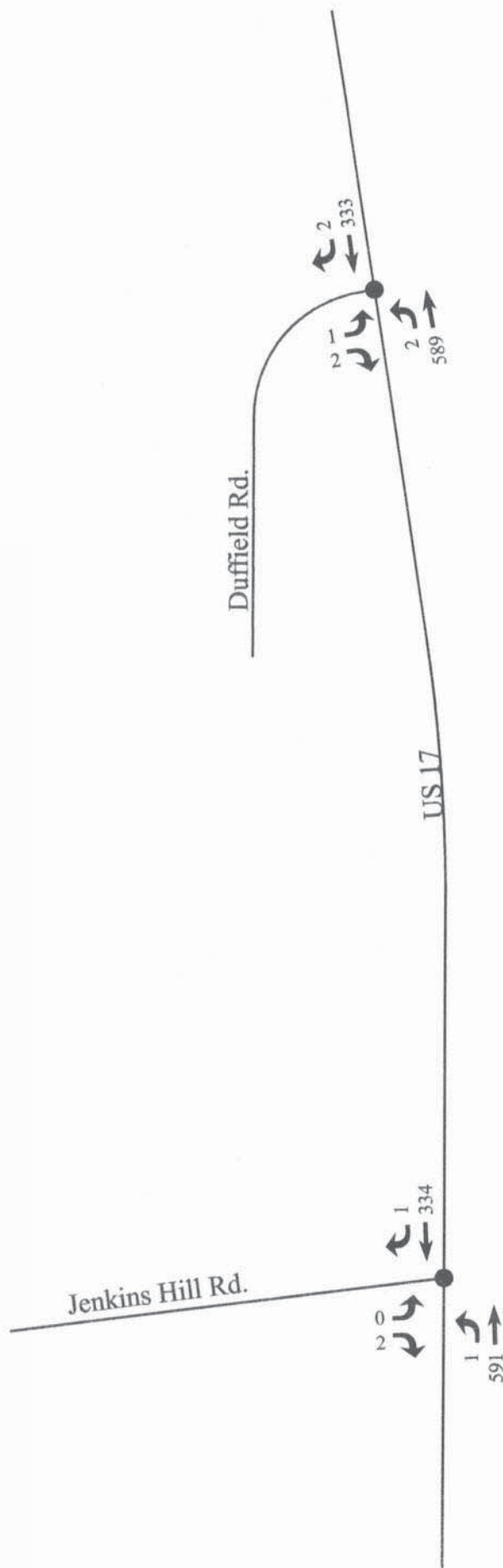
RIDGEWAY
 TRAFFIC CONSULTING



● - Unsignalized Intersection

RIDGEWAY
TRAFFIC CONSULTING

Figure 4B
EXISTING 2019 TRAFFIC VOLUMES
SCHOOL PM PEAK HOUR
High School/Middle School In Awendaw



● = Unsignalized Intersection

IRIDGEWAY
TRAFFIC CONSULTING

Figure 4C
EXISTING 2019 TRAFFIC VOLUMES
PM PEAK HOUR
High School/Middle School In Awendaw

PROBABLE IMPACTS OF THE PROJECT

To estimate the impact of site-generated traffic volumes on the roadway network under Future conditions, Existing traffic volumes in the study area were projected to the Year 2025, which is when the proposed school is expected to be constructed and operational. Traffic volumes on the roadway network at this time will include all existing traffic, any new traffic due to normal traffic growth, and any traffic related to specific developments that are presently approved and expected to be completed by 2025 (in excess of normal traffic volume growth). Consideration of these factors resulted in the development of 2025 No-Build traffic volumes. Anticipated site-generated traffic volumes were then super-imposed upon the 2025 No-Build traffic flow networks to reflect 2025 Build conditions including the proposed development.

BACKGROUND TRAFFIC GROWTH

Traffic growth on area roadways is a function of the expected land development both within the immediate area as well as the surrounding region. Several methods can be used to estimate this growth. A procedure frequently employed identifies the location and type of approved/permitted development. This produces a realistic estimate of growth for local traffic. However, the drawback of this procedure is that the potential growth in population and traffic growth external to the study area would not be accounted for in the traffic projections.

An alternative procedure estimates an annual percentage increase in traffic growth and applies that percentage to all traffic volumes under study. The drawback to such a procedure is that some turning movement volumes may be growing at either a higher or lower rate at particular intersections. To provide a conservative analysis framework, both procedures have been applied.

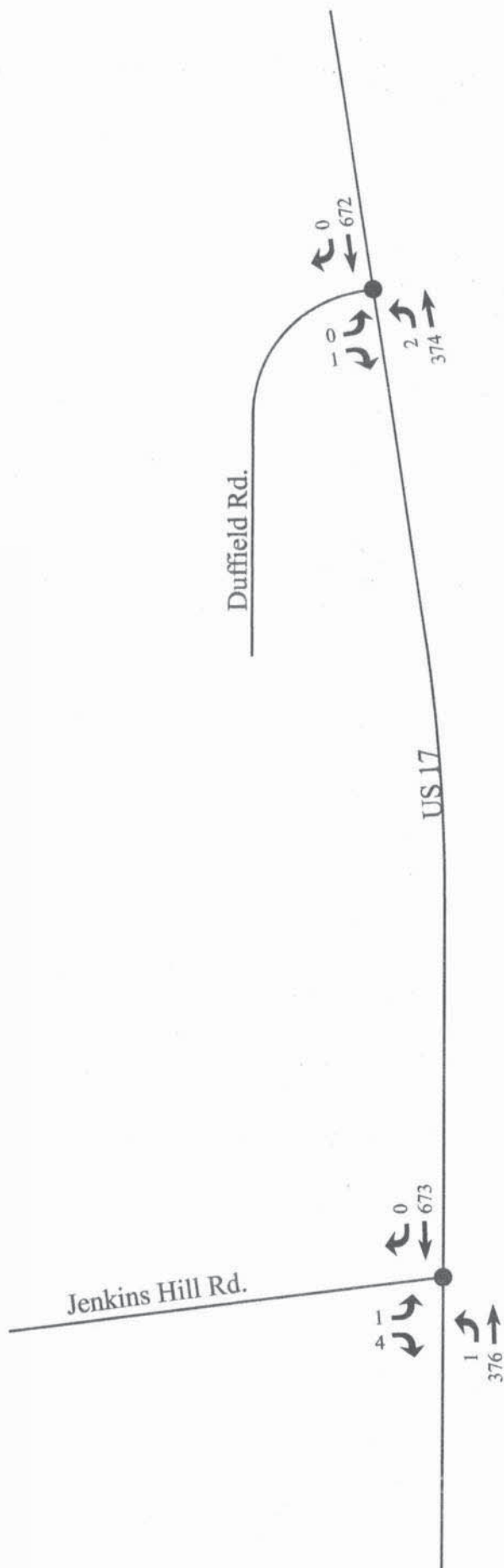
Specific Development

No specific background developments were identified for inclusion in future traffic volumes beyond normal annual growth.

Annual Growth

Based on a review of historical SCDOT traffic data for US 17 between Awendaw and McClellanville (Station #137), growth has been moderate over the past five years based on a 2013 reported volume of 9,400 vehicles-per-day (vpd) and a 2018 reported volume of 11,100 vpd. Based on this data, a 4-percent annual growth rate was developed and utilized for this report.

The anticipated 2025 No-Build AM and PM peak-hour traffic volumes, which include the 4-percent annual growth rate, are graphically depicted in **Figures 5A-5C** for the AM, School PM and Commuter PM peak hours.



● = Unsignalized Intersection

BRIDGEWAY
TRAFFIC CONSULTING

Figure 5A
2025 NO-BUILD TRAFFIC VOLUMES
AM PEAK HOUR
High School/Middle School In Awendaw

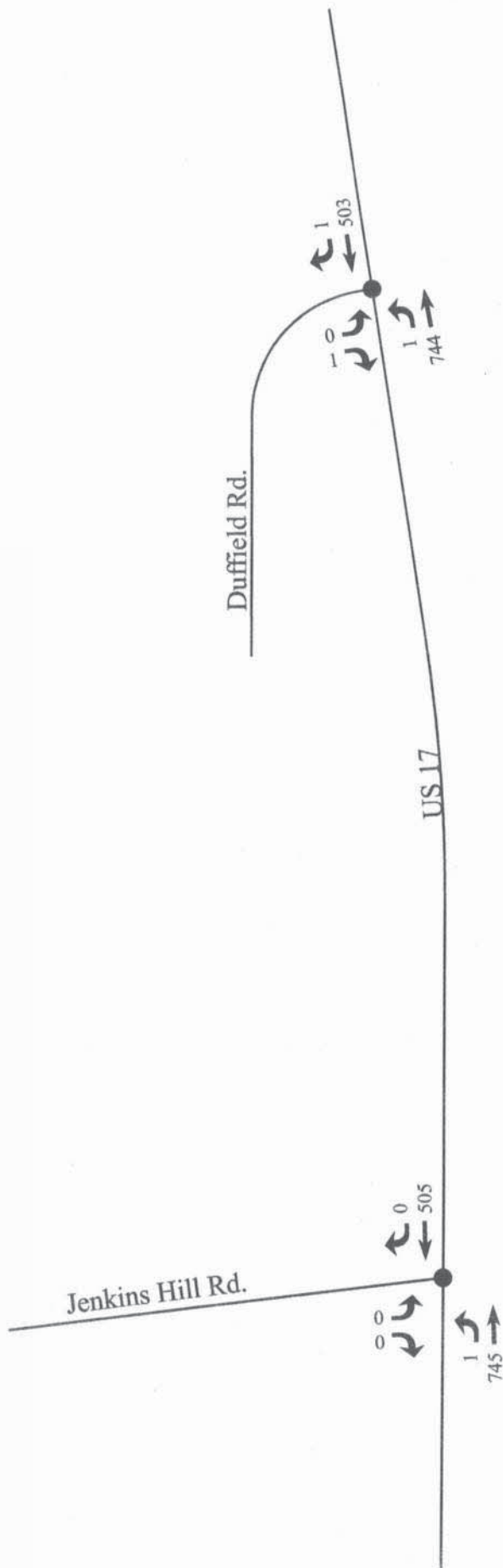
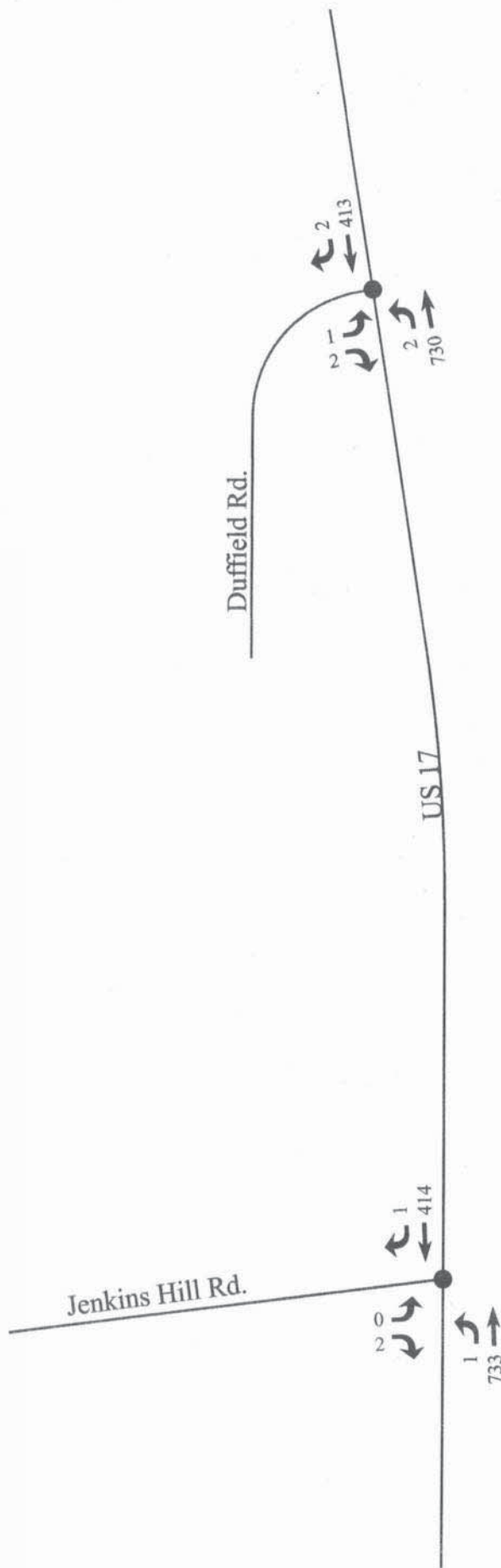


Figure 5B
 2025 NO-BUILD TRAFFIC VOLUMES
 SCHOOL PM PEAK HOUR
 High School/Middle School In Awendaw

IRIDGEWAY
 TRAFFIC CONSULTING



● - Unsignalized Intersection

IR RIDGEWAY
TRAFFIC CONSULTING

Figure 5C
2025 NO-BUILD TRAFFIC VOLUMES
PM PEAK HOUR
High School/Middle School In Awendaw

PLANNED ROADWAY IMPROVEMENTS

No funded roadway improvement projects were identified within the study area that are expected to add capacity by the time the project is completed.

SITE-GENERATED TRAFFIC

Traffic volumes generated by the proposed school campus were forecasted using the Tenth Edition of the Institute of Transportation Engineers (ITE) *Trip Generation* Manual¹. Land-Use codes #522 (Middle School/Junior High School) and #530 (High School) were used to project site traffic. **Table 1** summarizes the anticipated trip generation characteristics for the campus.

Table 1
PROJECT TRIP GENERATION SUMMARY¹
High School/ Middle School In Awendaw

Time Period	500 Student Middle School (a)	500 Student High School (b)	Total Trips (a+b)
AM Peak-Hour			
Enter	157	174	331
Exit	<u>133</u>	<u>86</u>	<u>219</u>
Total	290	260	550
PM Peak-Hour (School)			
Enter	80	68	148
Exit	<u>95</u>	<u>144</u>	<u>239</u>
Total	175	212	387
PM Peak-Hour (Commuter)			
Enter	42	34	76
Exit	<u>43</u>	<u>36</u>	<u>79</u>
Total	85	70	155

¹ ITE *Trip Generation* manual, 10th Edition: LUC 522 (Middle/Jr. High School) & LUC 530 (High School)

As shown, the proposed campus is expected to generate a total of 550 trips (331 entering, 219 exiting) during the AM peak-hour, with 387 trips (148 entering, 239 exiting) during the school PM peak-hour. During the typical commuter PM peak hour, a total of 155 trips (76 entering, 79 exiting) can be expected.

Distribution Pattern

Traffic for the new school been assigned based on observed patterns in the area and information provided by the School District. This pattern is shown in **Table 2**. In general, 70-percent of students for the campus are expected to arrive from the west (Awendaw and Mount Pleasant), with the balance from the east (McClellanville). Exiting movements during the AM are expected to be more heavily weighted to the west due to parents that drop a student from the east and then continue towards Mount Pleasant. This pattern is expected to be reversed during the PM hours.

¹ *Trip Generation*, Tenth Edition; Institute of Transportation Engineers; Washington, DC.

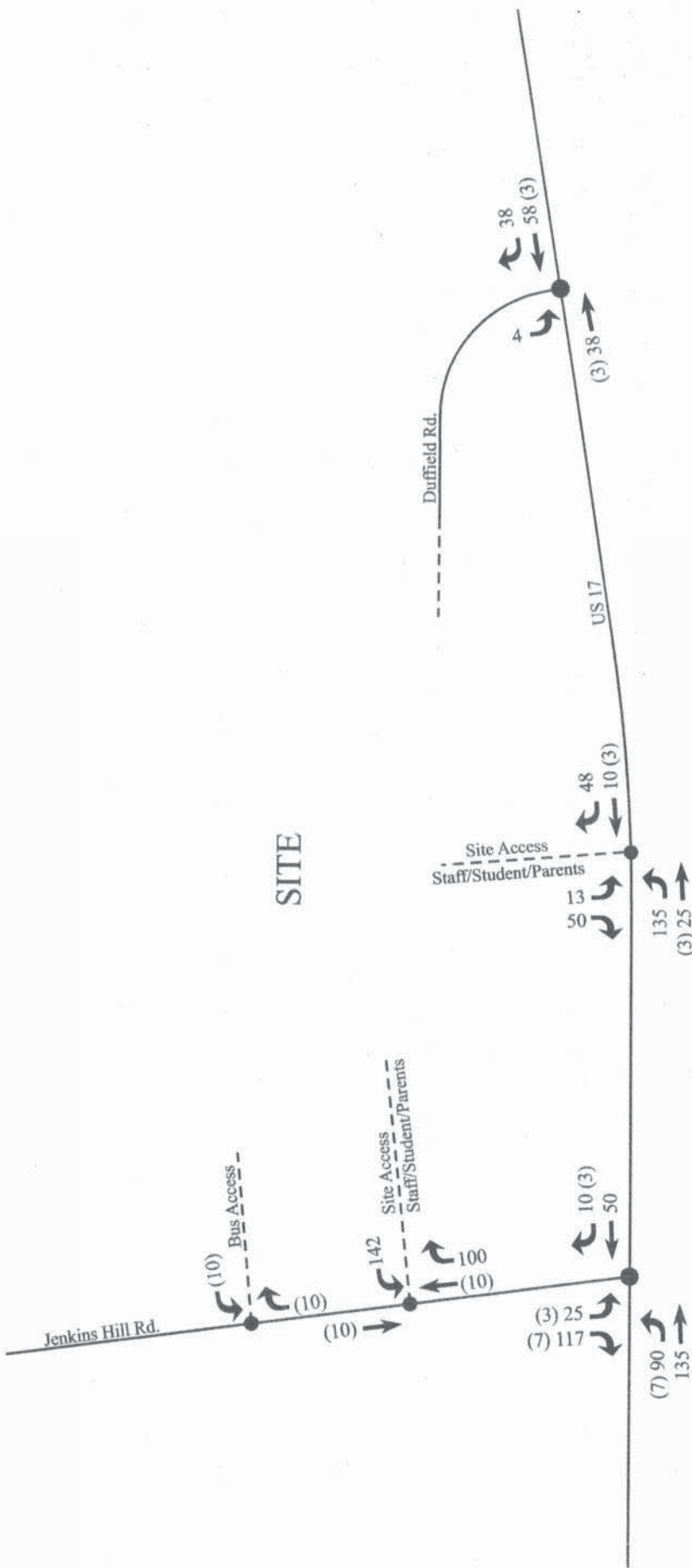
Table 2
PROJECT TRIP-DISTRIBUTION SUMMARY¹
High School/ Middle School In Awendaw

Roadway	Direction To/From	AM PEAK-HOUR		PM PEAK-HOUR SCHOOL		PM PEAK-HOUR COMMUTER	
		Enter	Exit	Enter	Exit	Enter	Exit
US 17	East (McClellanville)	30	20	20	30	20	30
	West (Awendaw/ Mt. Pleasant)	70	80	80	70	80	70
	Total	100	100	100	100	100	100

The site-generated traffic presented in Table 1 has been distributed within the study area roadway network as shown by the distribution pattern shown in Table 2. This has resulted in the site-generated specific volumes for the study area as depicted in **Figures 6A-6C**.

BUILD TRAFFIC VOLUMES

The site-generated traffic volumes shown in Figures 6A-6C have been added to the 2025 No-Build traffic volumes (Figures 5A-5C) to represent 2025 Build traffic volume conditions which are depicted graphically in **Figures 7A-7C**. These volumes were used as the basis for analysis to determine potential improvement measures necessary to mitigate traffic impacts caused by the project.



● = Unsignalized Intersection
 000 = Passenger Vehicles
 (000) = Buses

N
 NOT TO SCALE

RIDGWAY
TRAFFIC CONSULTING

Figure 6A
SITE-GENERATED TRAFFIC VOLUMES
AM PEAK HOUR
High School/Middle School In Awendaw

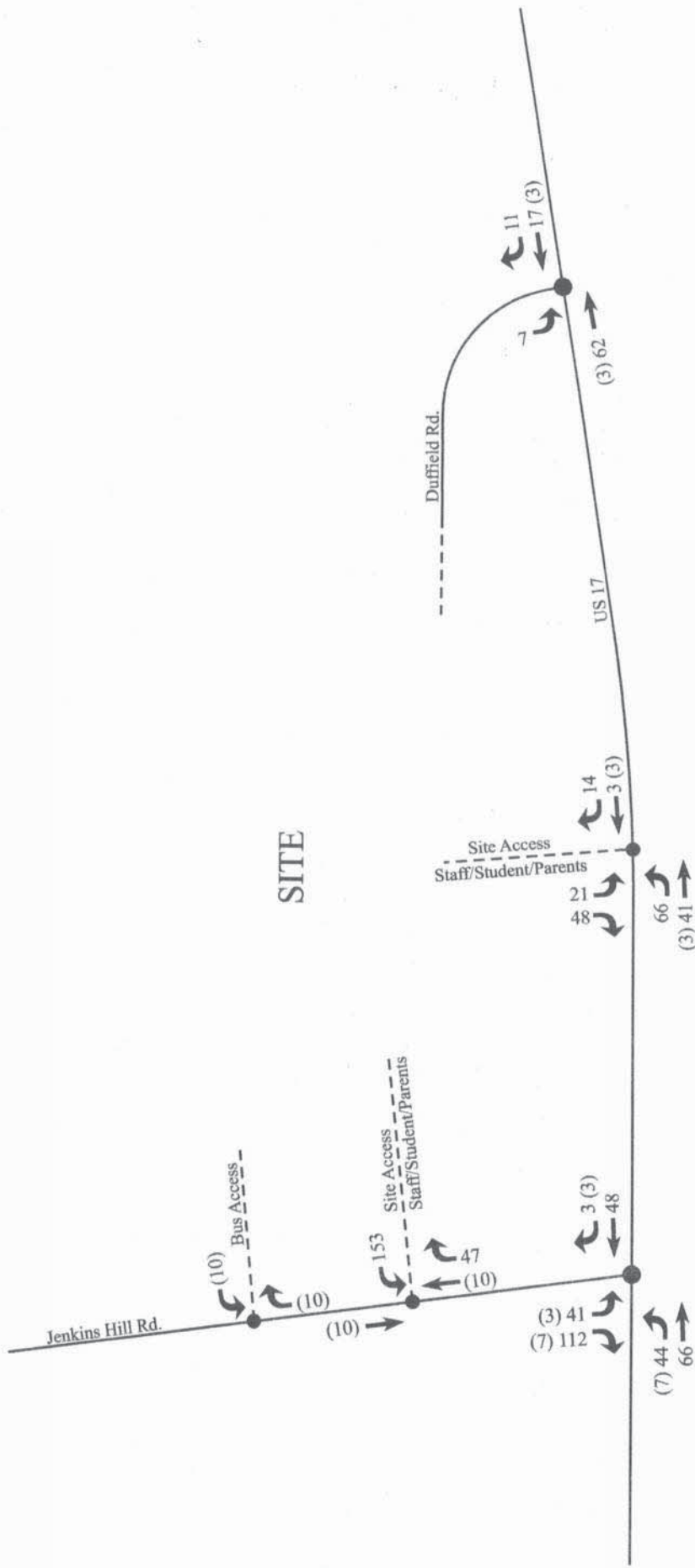
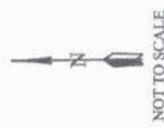


Figure 6B
 SITE-GENERATED TRAFFIC VOLUMES
 SCHOOL PM PEAK HOUR
 High School/Middle School In Awendaw

IRIDGEWAY
 TRAFFIC CONSULTING

NOT TO SCALE

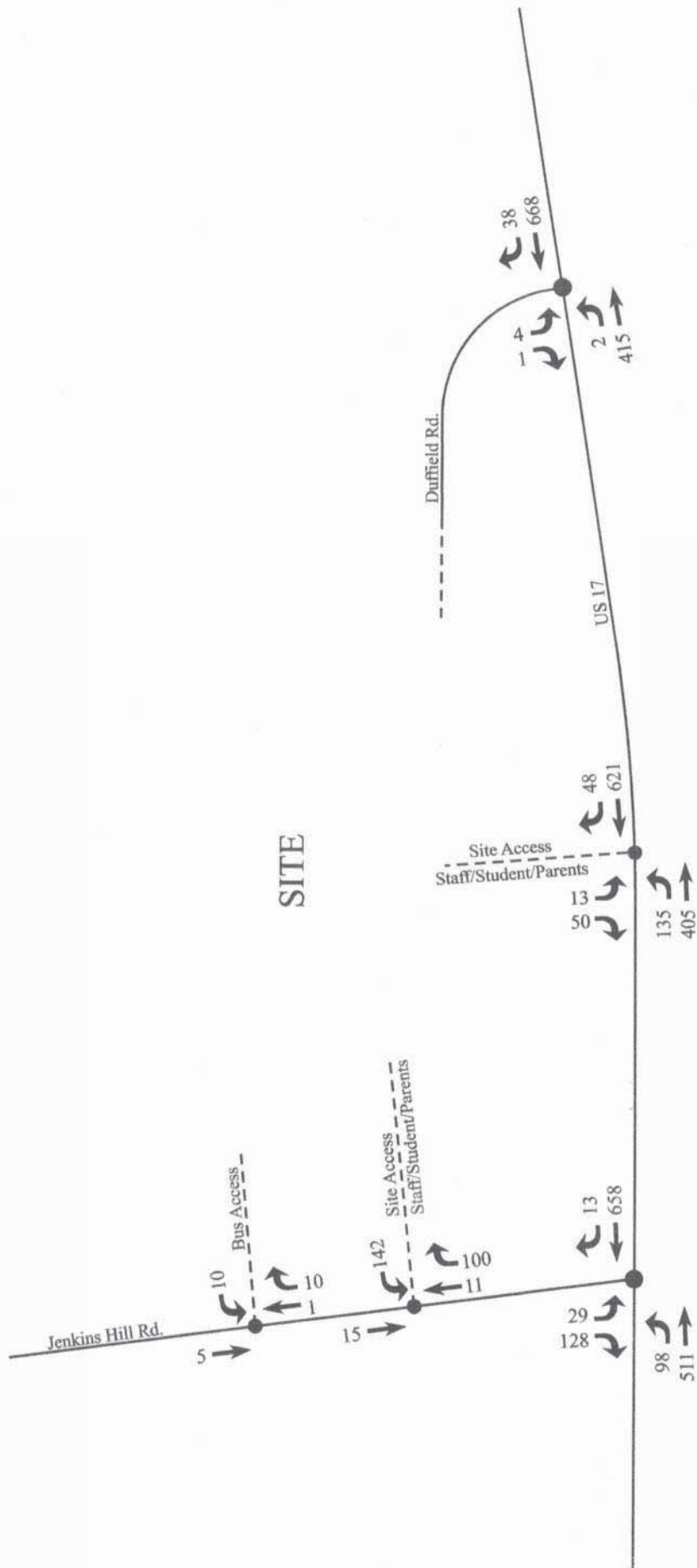
● = Unsignalized Intersection
 000 = Passenger Vehicles
 (000) = Buses



● = Unsignalized Intersection
000 = Passenger Vehicles

IRIDGEWAY
TRAFFIC CONSULTING

Figure 6C
SITE-GENERATED TRAFFIC VOLUMES
PM PEAK HOUR
High School/Middle School In Awendaw



● = Unsignalized Intersection
 000 = Passenger Vehicles
 (000) = Buses

N
 NOT TO SCALE

RIDGWAY
TRAFFIC CONSULTING

Figure 7A
 2025 BUILD TRAFFIC VOLUMES
 AM PEAK HOUR
 High School/Middle School In Awendaw

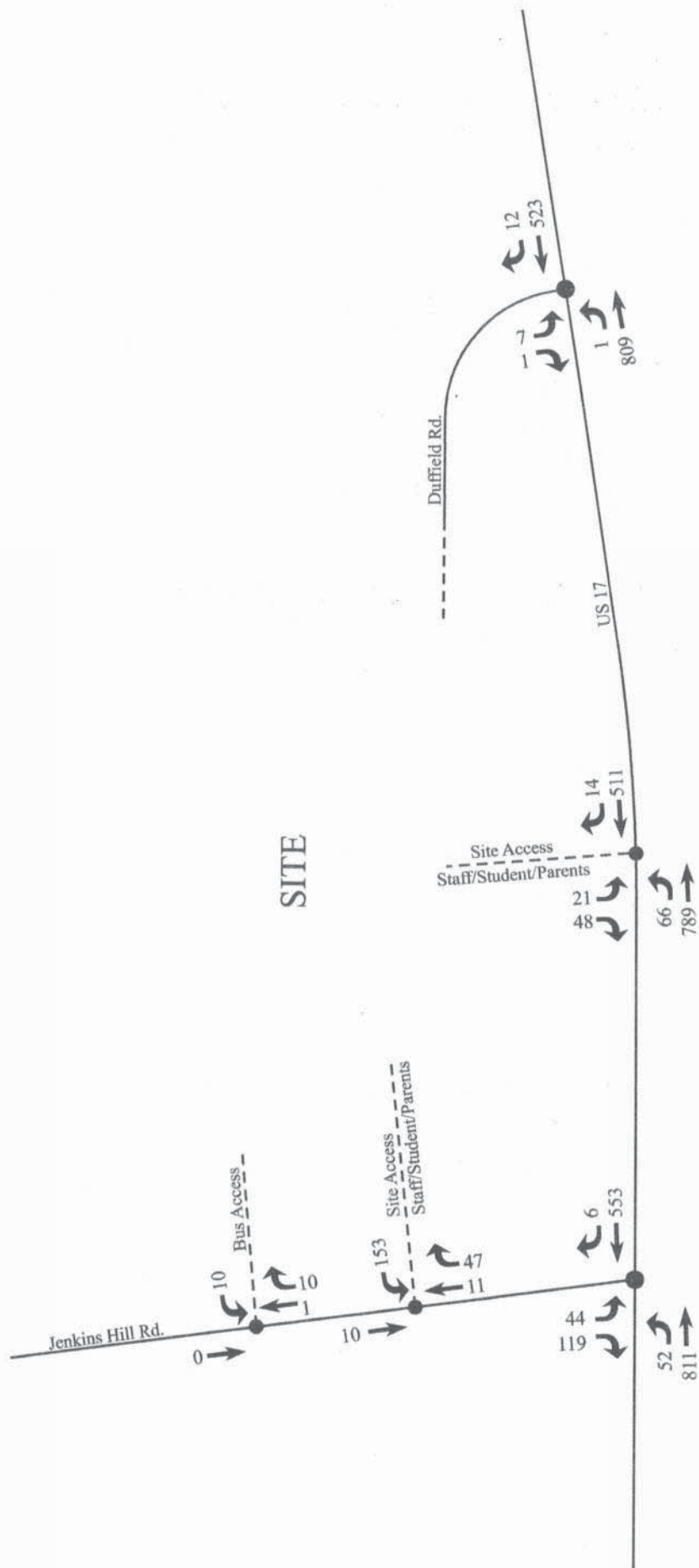
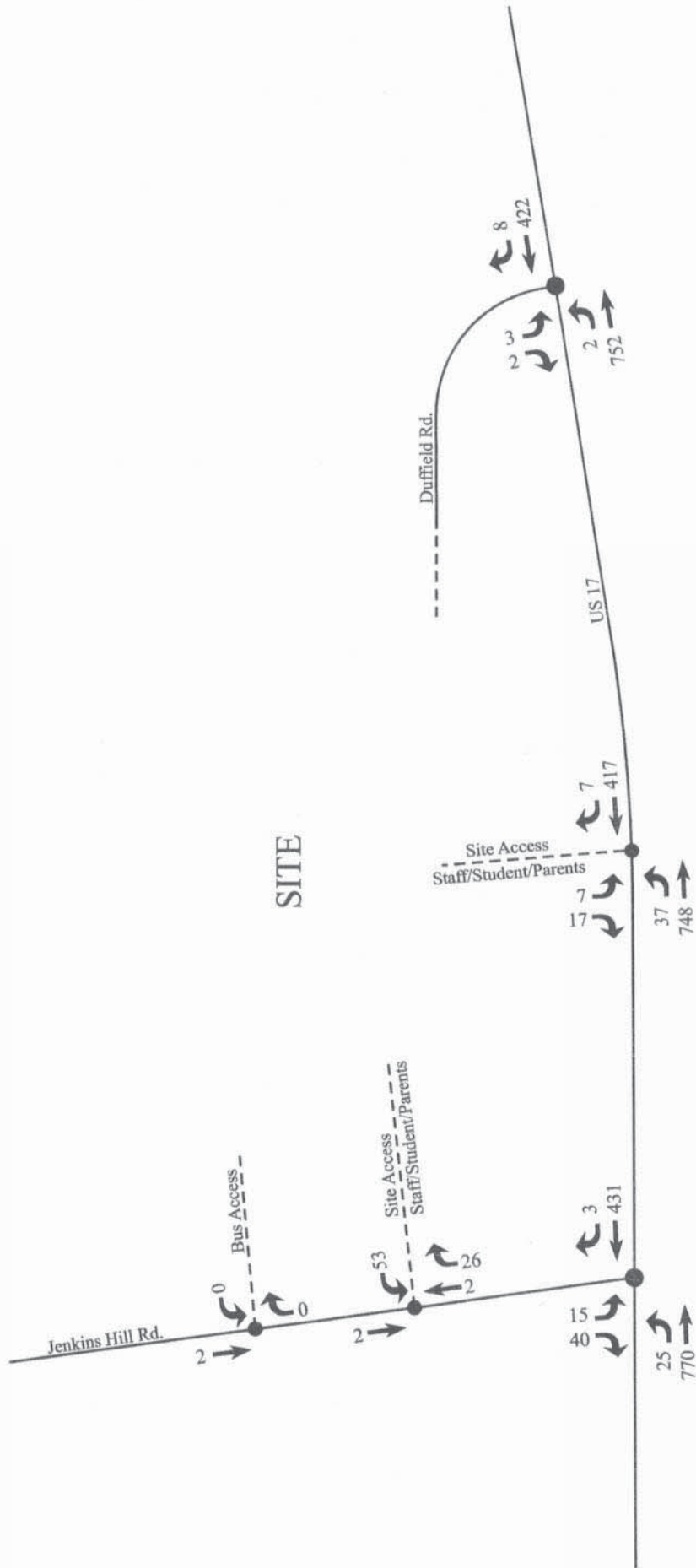


Figure 7B
2025 BUILD TRAFFIC VOLUMES
SCHOOL PM PEAK HOUR
High School/Middle School In Awendaw

IRIDGEWAY
TRAFFIC CONSULTING





NOT TO SCALE

IRIDGEWAY
TRAFFIC CONSULTING

TRAFFIC OPERATIONS ANALYSIS

Measuring existing and future traffic volumes quantifies traffic flow within the study area. To assess quality of flow, capacity analyses were conducted under Existing, No-Build, and Build traffic volume conditions. Capacity analyses provide an indication of how well the study area intersections serve existing and future traffic demands.

METHODOLOGY

Level-of-Service

A primary result of capacity analyses is the assignment of level-of-service (LOS) to traffic facilities under various traffic flow conditions. The concept of level-of-service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six levels-of-service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst.

Since the level-of-service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of levels-of-service, depending on the time of day, day of week, or period of a year.

ANALYSIS RESULTS

Intersection analyses have been conducted for the study area intersections under Existing, and Future 2025 (No-Build & Build) conditions. The results of these analyses are shown in **Table 3**. The intersection analysis worksheets are contained in the Appendix at the end of this report.

Table 3
LEVEL-OF-SERVICE SUMMARY
High School/ Middle School In Awendaw

		EXISTING 2019 CONDITIONS		FUTURE 2025 NO-BUILD CONDITIONS		FUTURE 2025 BUILD CONDITIONS	
<u>Unsignalized Intersections</u>	<u>Time Period</u>	<u>Delay^a</u>	<u>LOS^b</u>	<u>Delay</u>	<u>LOS</u>	<u>Delay</u>	<u>LOS</u>
US 17 at Jenkins Hill Road	AM	10.8	B	11.6	B	20.0	C
	PM School	8.2	A	8.5	A	18.8	B
	PM	9.5	A	9.8	A	12.1	B
US 17 at Duffield Road	AM	10.1	B	10.7	B	13.8	B
	PM School	9.6	A	10.0	B	13.2	B
	PM	10.2	B	10.8	B	11.8	B
US 17 at Main School Access (Students, Staff, Parents)	AM					14.0	B
	PM School					12.9	B
	PM					11.1	B
Jenkins Hill Road at Site Access (Students, Staff, Parents)	AM					10.7	B
	PM School					10.3	B
	PM					9.0	A
Jenkins Hill Road at Bus Access	AM					8.7	A
	PM School					8.6	A
	PM					-	A

a. Delay in seconds-per-vehicle.

b. LOS = Level-of-Service.

GENERAL NOTES:

1. For unsignalized intersections, Delay is representative of the critical movement.

As shown, under Existing conditions, analyses indicate good operations for both unsignalized intersections along US 17 on each side of the proposed school site. Volumes along US 17 are moderate during the peak hours, however STOP controlled movements are currently low at both intersections and acceptable gaps are available for side-street traffic.

Under 2025 No-Build conditions, which account for 4-percent annual background growth in traffic, operations are expected to remain similar to Existing conditions, with only slight increases in delay.

Analysis of 2025 Build Conditions indicate that acceptable service levels (LOS C or better) will be present within the study area. A drop in one service level is anticipated at the US 17 at Jenkins Hill Road during each peak hour, however no significant delays are projected. It should be noted that these service levels are projected based on existing geometry. Recommendations for this intersection based on SCDOT requirements adjacent to school sites are provided and analyzed in the next section of this report. The US 17 at Duffield Road intersection is expected to maintain LOS B as with No-Build Conditions.

The direct school access to US 17 is expected to operate well at LOS B during all peak hours with the incorporation of recommended geometry and traffic control detail in the next section of this report.

The direct site access drives to Jenkins Hill Road are expected to operate with low delays due to minimal conflicting traffic along Jenkins Hill Road. Recommendations for these two access points are detailed in the next section of this report.

MITIGATION

The final phase of the analysis process is to identify mitigating measures which may either minimize the impact of the project on the transportation system or tend to alleviate poor service levels not caused by the project. Measures considered necessary to mitigate roadway system deficiencies are discussed below as they relate to the impacts of the proposed project.

PROPOSED SITE ACCESS

Access for the proposed campus is proposed via a direct access to US 17, two connections to Jenkins Hill Road (one for buses only) and a connection to Duffield Road to the east. Recommendations for each access drive are provided as follows:

US 17 at Site Access: This intersection will serve as a primary access for the campus serving parent drop-offs/pick-ups, student drivers and staff, etc. This access is proposed in the location of the existing Kaiser Farm Road, for which a median break exists within US 17. The following geometry is recommended for this intersection:

- ***Eastbound (US 17) Approach:*** The existing left-turn lane for this approach will need to be upgraded to provide for 250-ft of storage with 200-ft. of taper. The existing storage for this lane is approximately 200-ft. Final design should be coordinated with SCDOT and may require an offset design as the existing turn lane is a standard parallel design;
- ***Westbound (US 17) Approach:*** SCDOT standards call for a dedicated right-turn with 250-ft. of storage and 200-ft. of taper. Due to the driveway for a single-family home to the east, the storage and taper will need to be modified for the approximate 370-ft. of available frontage. One option would be a 170-ft lane with 200-ft. of taper as storage is not anticipated to be an issue; and
- ***Southbound (Site Access):*** Construct new access with one entering lane and two exiting lanes designated as a separate left-turn lane and separate right-turn lane. A minimum of 200-ft of storage is recommended for the right-turn lane. Place new approach under STOP sign control.

Jenkins Hill Road at Southern Access: This intersection will also serve as a primary access for the campus serving parent drop-offs/pick-ups, student drivers and staff, etc. This access is proposed approximately 450-ft. north of US 17, which is considered good separation. The following geometry is recommended for this intersection:

- ***Northbound (Jenkins Hill Road) Approach:*** A dedicated right-turn lane is recommended for this approach to separate traffic entering the school from bus traffic that will continue north;
- ***Southbound (Jenkins Hill Road) Approach:*** Movements from the north into the access are expected to be negligible and a dedicated left-turn lane is not recommended; and

- ***Westbound (Site Access):*** Construct new access with one entering lane and one exiting lane. Place new approach under STOP sign control.

Jenkins Hill Road at Northern Access (Buses): This intersection will service only bus traffic during school operations and is located approximately 400-ft. north the southern access, which is considered good separation. Based on the minimal conflicting volumes, single lane approaches are recommended for all approaches to this intersection. Turning radii should be designed for bus traffic. The westbound site access approach should be placed under STOP sign control.

Duffield Road Connectivity: The existing master plan calls for an extension of Duffield Road into the site. While this would provide an additional connection to US 17, the following should be noted:

- 1) While Duffield Road can be expected to service some school traffic oriented to/from the east, these movements could be accommodated at the other school access drives. Analyses for this option are presented later in this report.
- 2) While it would not be logical for school traffic oriented from Awendaw/Mount Pleasant to utilize this intersection, the eastbound left-turn movement would still be allowed, which may require a dedicated left-turn lane within the median of US 17, not based on traffic volumes, but based on safety due to the high-speed nature of US 17 in this area. If the connection to the school is provided, it is likely also that a westbound right-turn deceleration lane would be required.

Stacking

The conceptual plan for the school indicates approximately 4,000-feet of double-lane stacking, which exceeds SCDOT guidelines, and should be more than enough accommodate anticipated on-site stacking.

OFF-SITE IMPROVEMENTS

US 17 at Jenkins Hill Road

This intersection will be critical for school traffic as all bus traffic will utilize this intersection as well as significant entrances and exists for passenger vehicles. The following improvements are recommended for this intersection:

- ***Eastbound (US 17) Approach:*** The existing left-turn lane for this approach will need to be upgraded to provide for 250-ft of storage with 200-ft. of taper. The existing storage for this lane is approximately 210-ft. Final design should be coordinated with SCDOT and may require an offset design as the existing turn lane is a standard parallel design;
- ***Westbound (US 17) Approach:*** SCDOT standards call for a dedicated right-turn with 250-ft. of storage and 200-ft. of taper.
- ***Southbound (Jenkins Hill Road):*** Widen the southbound approach to provide for separate left and right-turn lanes. A minimum of 200-ft of storage is recommended for the right-turn lane. Maintain STOP sign control for the intersection.

Capacity analyses have been conducted to evaluate the proposed mitigation measures for the intersection of US 17 at Jenkins Hill Road and for the intersection of US 17 at the direct site access with the Duffield Road connection eliminated and volumes reassigned. The results of these analyses are shown in **Table 4**.

Table 4
MITIGATED LEVEL-OF-SERVICE SUMMARY
High School/ Middle School In Awendaw

<u>Unsignalized Intersections</u>	Time <u>Period</u>	FUTURE 2025 NO-BUILD CONDITIONS		FUTURE 2025 BUILD CONDITIONS		FUTURE 2025 BUILD CONDITIONS MITIGATED	
		<u>Delay</u> ^a	<u>LOS</u> ^b	<u>Delay</u>	<u>LOS</u>	<u>Delay</u>	<u>LOS</u>
US 17 at Jenkins Hill Road	AM	11.6	B	20.0	C	15.0	C
	PM School	8.5	A	18.8	B	14.1	B
	PM	9.8	A	12.1	B	11.5	B
US 17 at Main School Access (Students, Staff, Parents)	AM			14.0	B	14.8	B
	PM School			12.9	B	13.6	B
	PM			11.1	B	11.3	B

a. Delay in seconds-per-vehicle.

b. LOS = Level-of-Service.

GENERAL NOTES:

1. For unsignalized intersections, Delay is representative of the critical movement.

As shown, the proposed turn-lane improvements for the US 17 at Jenkins Hill Road will have a positive impact on the intersection. Analysis also indicate that the US 17 at site access intersection could accommodate additional volumes that were assigned to the Duffield Road connection without significant increases in delay.

CONCLUSIONS

The traffic study has been prepared to evaluate the traffic impacts and access needs for a combined high school/middle school campus along the north side of US 17 in the proximity of Kaiser Farm Road in rural Charleston County near Awendaw, South Carolina. The school is being planned for 500 middle school students and 500 high school students. A horizon year of 2025 has been reviewed for this report.

Access for the school is currently proposed via a main entrance for students, staff and parent drop-offs/pick-ups to US 17 in the current location Kaiser Farm Road where an existing median break is provided. A second entrance for students, staff and parent drop-offs will be provided to Jenkins Hill Road. The bus loop will be serviced via a separate connection to Jenkins Hill Road. Connectivity to the east to Duffield Road is also proposed.

Turn lane improvements have been recommended for the main intersection to US 17 and the intersection of US 17 at Jenkins Hill Road that will minimize impacts on US 17 through volumes and provide for good traffic operations. Conflicting traffic volumes along Jenkins Hill Road are expected to be minimal although a right-turn lane is recommended at the southern access to separate passenger vehicles and buses that will continue north.

While the proposed extension of Duffield Road into the site would service some traffic oriented to/from the east (McClellanville), analyses indicate that the site can function acceptably without this connection. If this connection is provided, there may be improvements required for the US 17 at Duffield Road intersection as there is currently not a deceleration lane for US 17 in either direction.

APPENDIX

- Count Data
- Capacity Analyses

COUNT DATA

S H O R T C O U N T S , L L C

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : US 17 @ Jenkins Hill Rd

Site Code : 00092619

Start Date : 09/26/2019

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Jenkins Hill Rd Southbound				US 17 Westbound				Northbound				US 17 Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	0	0	1	0	0	124	1	0	0	0	0	0	0	66	0	1	193
07:15	0	0	2	0	0	141	0	0	0	0	0	0	0	78	0	0	221
07:30	0	0	1	0	0	145	0	0	0	0	0	0	0	73	0	0	219
07:45	1	0	0	0	0	126	0	0	0	0	0	0	0	70	1	0	198
Total	1	0	4	0	0	536	1	0	0	0	0	0	0	287	1	1	831
08:00	0	0	0	0	0	131	0	0	0	0	0	0	1	63	0	0	195
08:15	0	0	0	0	0	110	0	0	0	0	0	0	0	68	0	0	178
08:30	0	0	2	0	0	113	0	0	0	0	0	0	0	73	0	0	188
08:45	0	0	0	0	0	105	0	0	0	0	0	0	1	62	0	0	168
Total	0	0	2	0	0	459	0	0	0	0	0	0	2	266	0	0	729
14:00	1	0	0	0	0	79	1	0	0	0	0	0	0	128	0	1	210
14:15	1	0	0	0	0	91	0	0	0	0	0	0	0	121	0	0	213
14:30	0	0	0	0	0	118	0	0	0	0	0	0	2	146	1	0	267
14:45	0	0	0	0	0	90	1	0	0	0	0	0	1	152	0	0	244
Total	2	0	0	0	0	378	2	0	0	0	0	0	3	547	1	1	934
15:00	0	0	0	0	0	107	0	0	0	0	0	0	1	148	0	0	256
15:15	0	0	0	0	0	105	0	0	0	0	0	0	0	141	0	0	246
15:30	0	0	0	0	0	111	0	0	0	0	0	0	0	140	0	0	251
15:45	0	0	0	0	0	84	0	0	0	0	0	0	0	170	0	0	254
Total	0	0	0	0	0	407	0	0	0	0	0	0	1	599	0	0	1007
16:00	0	0	1	0	0	91	0	0	0	0	0	0	0	151	0	0	243
16:15	0	0	1	0	0	98	0	0	0	0	0	0	1	176	0	0	276
16:30	0	0	0	0	0	69	0	0	0	0	0	0	0	142	0	0	211
16:45	0	0	0	0	0	76	1	0	0	0	0	0	0	122	0	0	199
Total	0	0	2	0	0	334	1	0	0	0	0	0	1	591	0	0	929
17:00	0	0	2	0	0	91	1	0	0	0	0	0	0	140	0	0	234
17:15	1	0	1	0	0	87	0	0	0	0	0	0	0	134	0	0	223
17:30	0	0	0	0	0	63	1	0	0	0	0	0	0	123	0	0	187
17:45	0	0	0	0	0	85	1	0	0	0	0	0	0	118	0	0	204
Total	1	0	3	0	0	326	3	0	0	0	0	0	0	515	0	0	848
Grand Total	4	0	11	0	0	2440	7	0	0	0	0	0	7	2805	2	2	5278
Apprch %	26.7	0	73.3	0	0	99.7	0.3	0	0	0	0	0	0.2	99.6	0.1	0.1	
Total %	0.1	0	0.2	0	0	46.2	0.1	0	0	0	0	0	0.1	53.1	0	0	
Passenger Vehicles	4	0	11	0	0	2316	7	0	0	0	0	0	7	2654	1	2	5002
% Passenger Vehicles	100	0	100	0	0	94.9	100	0	0	0	0	0	100	94.6	50	100	94.8
Heavy Vehicles	0	0	0	0	0	100	0	0	0	0	0	0	0	131	1	0	232
% Heavy Vehicles	0	0	0	0	0	4.1	0	0	0	0	0	0	0	4.7	50	0	4.4
Buses	0	0	0	0	0	24	0	0	0	0	0	0	0	20	0	0	44
% Buses	0	0	0	0	0	1	0	0	0	0	0	0	0	0.7	0	0	0.8

S H O R T C O U N T S , L L C

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

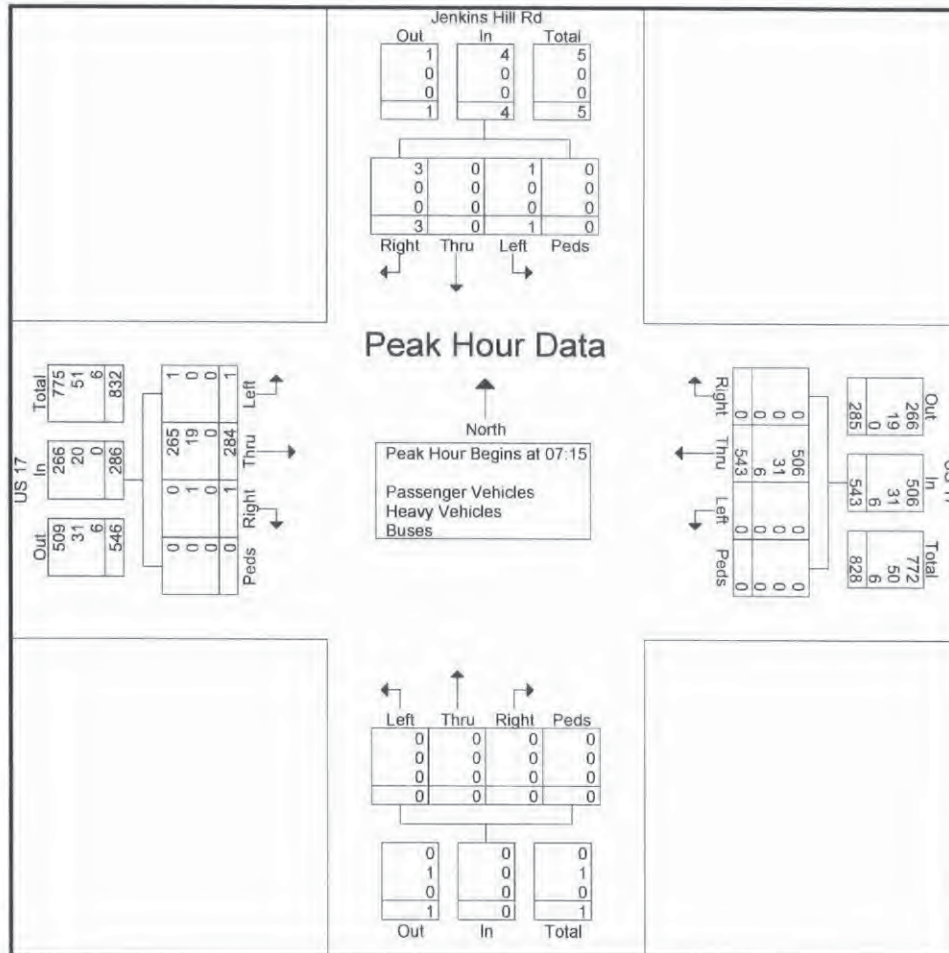
File Name : US 17 @ Jenkins Hill Rd

Site Code : 00092619

Start Date : 09/26/2019

Page No : 3

	Jenkins Hill Rd Southbound					US 17 Westbound					Northbound					US 17 Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15																					
07:15	0	0	2	0	2	0	141	0	0	141	0	0	0	0	0	0	78	0	0	78	221
07:30	0	0	1	0	1	0	145	0	0	145	0	0	0	0	0	0	73	0	0	73	219
07:45	1	0	0	0	1	0	126	0	0	126	0	0	0	0	0	0	70	1	0	71	198
08:00	0	0	0	0	0	0	131	0	0	131	0	0	0	0	0	1	63	0	0	64	195
Total Volume	1	0	3	0	4	0	543	0	0	543	0	0	0	0	0	1	284	1	0	286	833
% App. Total	25	0	75	0		0	100	0	0		0	0	0	0		0.3	99.3	0.3	0		
PHF	.250	.000	.375	.000	.500	.000	.936	.000	.000	.936	.000	.000	.000	.000	.000	.250	.910	.250	.000	.917	.942
Passenger Vehicles	1	0	3	0	4	0	506	0	0	506	0	0	0	0	0	1	265	0	0	266	770
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	31	0	0	31	0	0	0	0	0	0	19	1	0	20	51
% Heavy Vehicles	0	0	0	0	0	0	5.7	0	0	5.7	0	0	0	0	0	0	6.7	100	0	7.0	6.1
Buses	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	6
% Buses	0	0	0	0	0	0	1.1	0	0	1.1	0	0	0	0	0	0	0	0	0	0	0.7



S H O R T C O U N T S , L L C

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

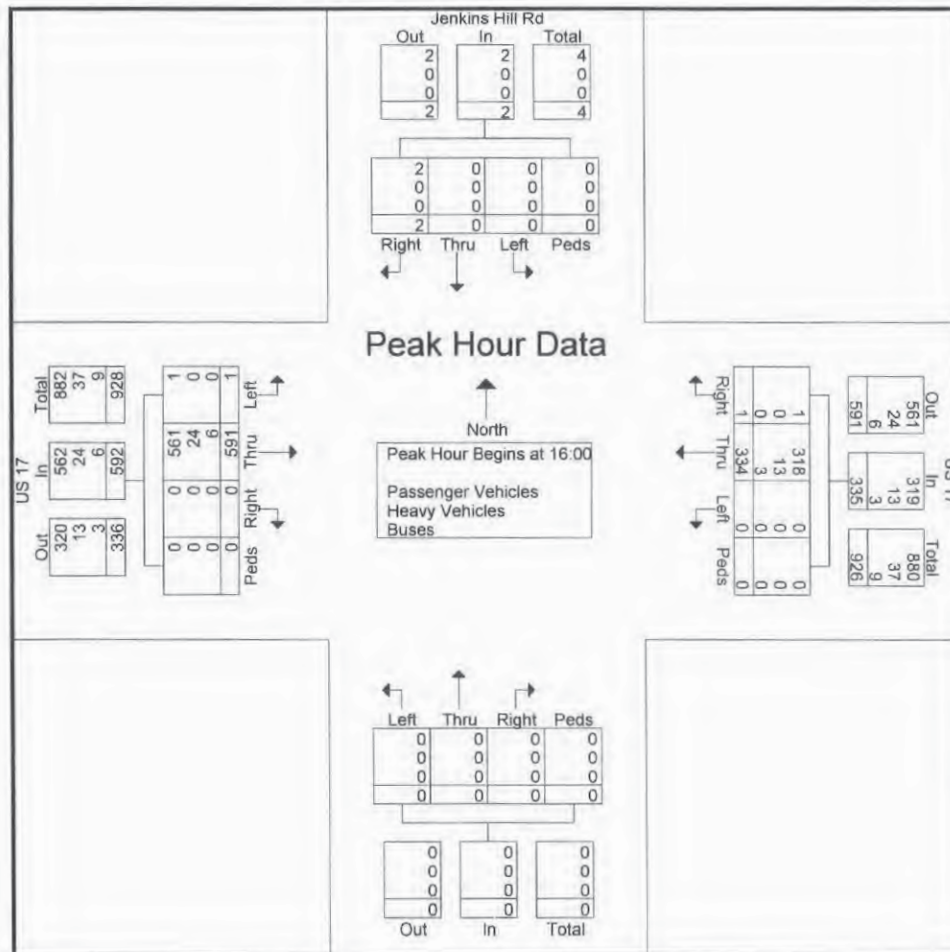
File Name : US 17 @ Jenkins Hill Rd

Site Code : 00092619

Start Date : 09/26/2019

Page No : 5

	Jenkins Hill Rd Southbound					US 17 Westbound					Northbound					US 17 Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	0	1	0	1	0	91	0	0	91	0	0	0	0	0	0	151	0	0	151	243
16:15	0	0	1	0	1	0	98	0	0	98	0	0	0	0	0	1	176	0	0	177	276
16:30	0	0	0	0	0	0	69	0	0	69	0	0	0	0	0	0	142	0	0	142	211
16:45	0	0	0	0	0	0	76	1	0	77	0	0	0	0	0	0	122	0	0	122	199
Total Volume	0	0	2	0	2	0	334	1	0	335	0	0	0	0	0	1	591	0	0	592	929
% App. Total	0	0	100	0		0	99.7	0.3	0		0	0	0	0	0	0.2	99.8	0	0		
PHF	.000	.000	.500	.000	.500	.000	.852	.250	.000	.855	.000	.000	.000	.000	.000	.250	.839	.000	.000	.836	.841
Passenger Vehicles	0	0	2	0	2	0	318	1	0	319	0	0	0	0	0	1	561	0	0	562	883
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	24	0	0	24	37
% Heavy Vehicles	0	0	0	0	0	0	3.9	0	0	3.9	0	0	0	0	0	0	4.1	0	0	4.1	4.0
Buses	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6	0	0	6	9
% Buses	0	0	0	0	0	0	0.9	0	0	0.9	0	0	0	0	0	0	1.0	0	0	1.0	1.0



SHO R COUNTS, LLC

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

File Name : US 17 @ Duffield Rd

Site Code :

Start Date : 09/19/2019

Page No : 1

Groups Printed- Passenger Vehicles - Heavy Vehicles - Buses

Start Time	Duffield Rd Southbound				US 17 Westbound				Northbound				US 17 Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
07:00	0	0	1	0	0	113	0	0	0	0	0	0	0	63	0	0	177
07:15	0	0	0	0	0	139	0	0	0	0	0	0	1	76	0	0	216
07:30	0	0	0	0	0	140	0	0	0	0	0	0	0	72	0	0	212
07:45	0	0	0	0	0	131	0	0	0	0	0	0	1	91	1	0	224
Total	0	0	1	0	0	523	0	0	0	0	0	0	2	302	1	0	829
08:00	0	0	0	0	0	116	0	0	0	0	1	0	0	60	0	0	177
08:15	0	0	0	0	0	103	0	0	0	0	0	0	0	67	0	0	170
08:30	0	0	1	1	0	113	0	0	0	0	0	0	0	72	0	0	187
08:45	0	0	1	0	0	107	0	0	0	0	0	0	0	64	0	0	172
Total	0	0	2	1	0	439	0	0	0	0	1	0	0	263	0	0	706
14:00	0	0	2	0	0	82	1	0	0	0	0	0	1	130	0	0	216
14:15	0	0	0	0	0	92	0	0	0	0	0	0	0	122	0	0	214
14:30	1	0	1	0	0	114	2	0	0	0	0	0	2	145	0	0	265
14:45	1	0	0	0	0	94	0	0	0	0	0	0	1	151	0	0	247
Total	2	0	3	0	0	382	3	0	0	0	0	0	4	548	0	0	942
15:00	0	0	0	0	0	109	0	0	0	0	0	0	0	150	0	0	259
15:15	0	0	0	0	0	104	0	0	0	0	0	0	0	136	1	0	241
15:30	0	0	0	0	0	107	1	0	0	0	0	0	1	139	0	0	248
15:45	0	0	1	0	0	80	0	0	0	0	0	0	0	175	0	0	256
Total	0	0	1	0	0	400	1	0	0	0	0	0	1	600	1	0	1004
16:00	0	0	1	0	0	94	1	0	0	0	0	0	0	150	0	0	246
16:15	0	0	0	0	0	93	0	0	0	0	0	0	2	177	0	0	272
16:30	1	0	1	0	0	74	1	0	0	0	1	0	0	134	0	0	212
16:45	0	0	0	0	0	71	0	0	0	0	0	0	0	120	0	0	191
Total	1	0	2	0	0	332	2	0	0	0	1	0	2	581	0	0	921
17:00	0	0	0	0	0	96	1	0	0	0	0	0	0	146	0	0	243
17:15	0	0	1	0	0	81	0	0	0	0	0	0	0	135	0	0	217
17:30	0	0	2	0	0	70	0	0	0	0	0	0	1	120	0	0	193
17:45	0	0	0	0	0	77	0	0	0	0	0	0	0	118	0	0	195
Total	0	0	3	0	0	324	1	0	0	0	0	0	1	519	0	0	848
Grand Total	3	0	12	1	0	2400	7	0	0	0	2	0	10	2813	2	0	5250
Apprch %	18.8	0	75	6.2	0	99.7	0.3	0	0	0	100	0	0.4	99.6	0.1	0	
Total %	0.1	0	0.2	0	0	45.7	0.1	0	0	0	0	0	0.2	53.6	0	0	
Passenger Vehicles	3	0	12	1	0	2210	6	0	0	0	2	0	10	2612	2	0	4858
% Passenger Vehicles	100	0	100	100	0	92.1	85.7	0	0	0	100	0	100	92.9	100	0	92.5
Heavy Vehicles	0	0	0	0	0	166	1	0	0	0	0	0	0	180	0	0	347
% Heavy Vehicles	0	0	0	0	0	6.9	14.3	0	0	0	0	0	0	6.4	0	0	6.6
Buses	0	0	0	0	0	24	0	0	0	0	0	0	0	21	0	0	45
% Buses	0	0	0	0	0	1	0	0	0	0	0	0	0	0.7	0	0	0.9

S H O R T C O U N T S , L L C

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

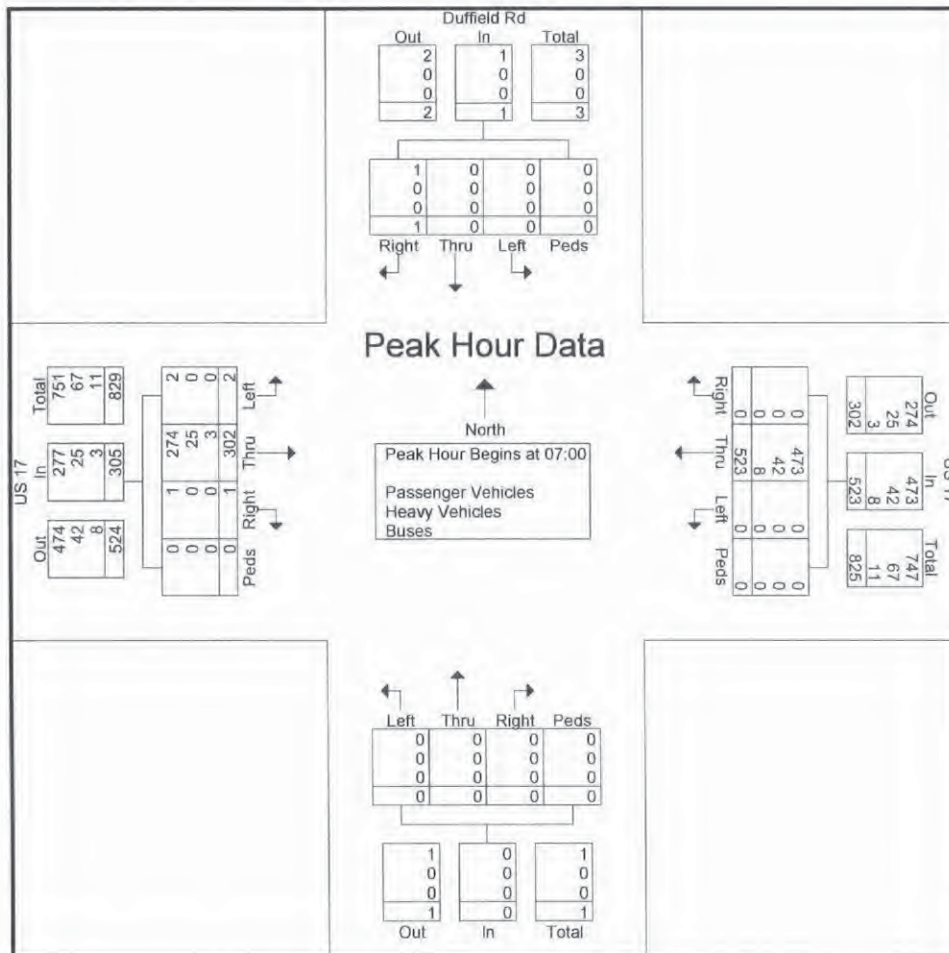
File Name : US 17 @ Duffield Rd

Site Code :

Start Date : 09/19/2019

Page No : 3

	Duffield Rd Southbound					US 17 Westbound					Northbound					US 17 Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 08:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00																					
07:00	0	0	1	0	1	0	113	0	0	113	0	0	0	0	0	0	63	0	0	63	177
07:15	0	0	0	0	0	0	139	0	0	139	0	0	0	0	0	1	76	0	0	77	216
07:30	0	0	0	0	0	0	140	0	0	140	0	0	0	0	0	0	72	0	0	72	212
07:45	0	0	0	0	0	0	131	0	0	131	0	0	0	0	0	1	91	1	0	93	224
Total Volume	0	0	1	0	1	0	523	0	0	523	0	0	0	0	0	2	302	1	0	305	829
% App. Total	0	0	100	0		0	100	0	0		0	0	0	0		0.7	99	0.3	0		
PHF	.000	.000	.250	.000	.250	.000	.934	.000	.000	.934	.000	.000	.000	.000	.000	.500	.830	.250	.000	.820	.925
Passenger Vehicles	0	0	1	0	1	0	473	0	0	473	0	0	0	0	0	2	274	1	0	277	751
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	42	0	0	42	0	0	0	0	0	0	25	0	0	25	67
% Heavy Vehicles	0	0	0	0	0	0	8.0	0	0	8.0	0	0	0	0	0	0	8.3	0	0	8.2	8.1
Buses	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	3	0	0	3	11
% Buses	0	0	0	0	0	0	1.5	0	0	1.5	0	0	0	0	0	0	1.0	0	0	1.0	1.3



S H O R T C O U N T S , L L C

735 Maryland St
Columbia, SC 29201

We can't say we're the Best, but you Can!

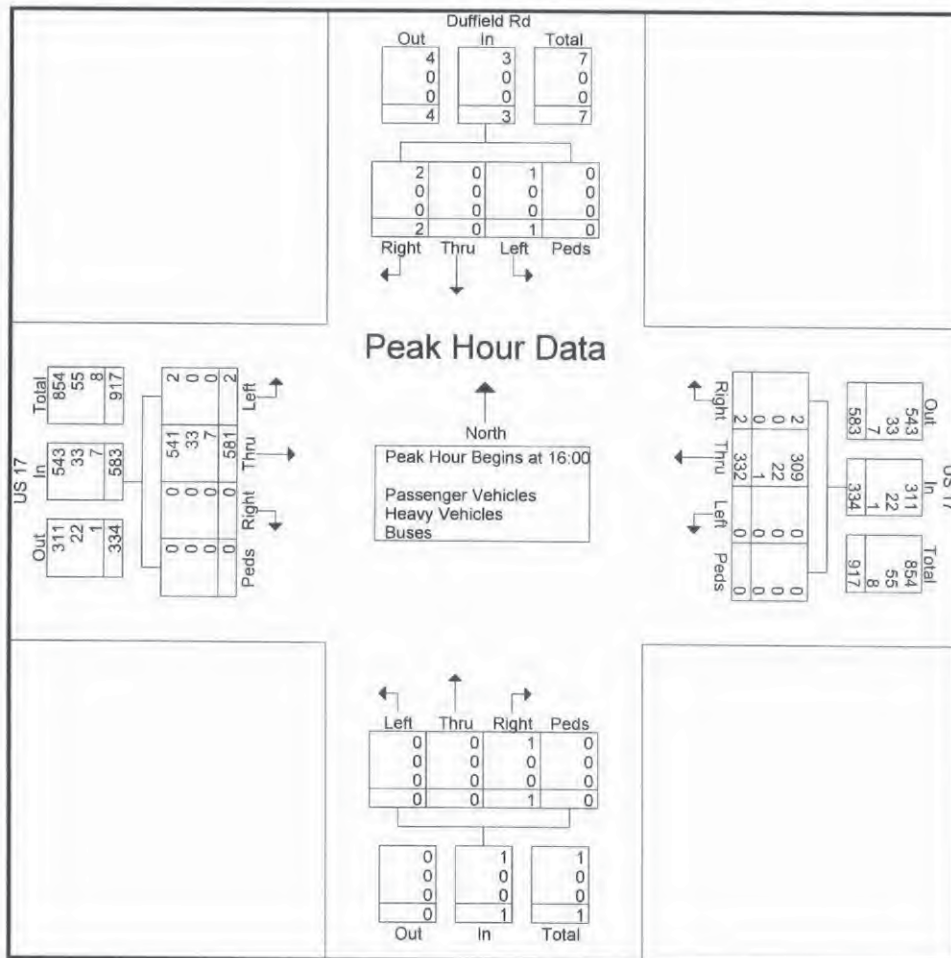
File Name : US 17 @ Duffield Rd

Site Code :

Start Date : 09/19/2019

Page No : 5

	Duffield Rd Southbound					US 17 Westbound					Northbound					US 17 Eastbound					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 16:00 to 17:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 16:00																					
16:00	0	0	1	0	1	0	94	1	0	95	0	0	0	0	0	0	150	0	0	150	246
16:15	0	0	0	0	0	0	93	0	0	93	0	0	0	0	0	2	177	0	0	179	272
16:30	1	0	1	0	2	0	74	1	0	75	0	0	1	0	1	0	134	0	0	134	212
16:45	0	0	0	0	0	0	71	0	0	71	0	0	0	0	0	0	120	0	0	120	191
Total Volume	1	0	2	0	3	0	332	2	0	334	0	0	1	0	1	2	581	0	0	583	921
% App. Total	33.3	0	66.7	0		0	99.4	0.6	0		0	0	100	0		0.3	99.7	0	0		
PHF	.250	.000	.500	.000	.375	.000	.883	.500	.000	.879	.000	.000	.250	.000	.250	.250	.821	.000	.000	.814	.847
Passenger Vehicles	1	0	2	0	3	0	309	2	0	311	0	0	1	0	1	2	541	0	0	543	858
% Passenger Vehicles																					
Heavy Vehicles	0	0	0	0	0	0	22	0	0	22	0	0	0	0	0	0	33	0	0	33	55
% Heavy Vehicles	0	0	0	0	0	0	6.6	0	0	6.6	0	0	0	0	0	0	5.7	0	0	5.7	6.0
Buses	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	7	0	0	7	8
% Buses	0	0	0	0	0	0	0.3	0	0	0.3	0	0	0	0	0	0	1.2	0	0	1.2	0.9



CAPACITY ANALYSES

EXISTING AM

7: US 17 & Jenkins Hill Rd.

11/12/2019

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑	↑↑		↗	
Traffic Vol, veh/h	1	303	543	0	1	3
Future Vol, veh/h	1	303	543	0	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	329	590	0	1	3

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	590	0	0 757 295
Stage 1	-	-	- 590 -
Stage 2	-	-	- 167 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	982	-	- 344 701
Stage 1	-	-	- 517 -
Stage 2	-	-	- 845 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	982	-	- 344 701
Mov Cap-2 Maneuver	-	-	- 476 -
Stage 1	-	-	- 516 -
Stage 2	-	-	- 845 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	982	-	-	-	627
HCM Lane V/C Ratio	0.001	-	-	-	0.007
HCM Control Delay (s)	8.7	-	-	-	10.8
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

EXISTING AM
9: US 17 & Duffield Rd.

11/12/2019

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	2	302	542	0	0	1
Future Vol, veh/h	2	302	542	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	328	589	0	0	1

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	589	0	0	757	295
Stage 1	-	-	-	589	-
Stage 2	-	-	-	168	-
Critical Hdwy	4.14	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	3.52	3.32
Pot Cap-1 Maneuver	982	-	-	344	701
Stage 1	-	-	-	517	-
Stage 2	-	-	-	844	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	982	-	-	343	701
Mov Cap-2 Maneuver	-	-	-	476	-
Stage 1	-	-	-	516	-
Stage 2	-	-	-	844	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	10.1
HCM LOS	B		

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	982	-	-	-	701
HCM Lane V/C Ratio	0.002	-	-	-	0.002
HCM Control Delay (s)	8.7	0	-	-	10.1
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

EXISTING PM SCHOOL
11: US 17 & Jenkins Hill Rd.

11/12/2019

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑		↰	
Traffic Vol, veh/h	1	601	407	0	0	0
Future Vol, veh/h	1	601	407	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	653	442	0	0	0

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	442	0	0	771	221
Stage 1	-	-	-	442	-
Stage 2	-	-	-	329	-
Critical Hdwy	4.14	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	3.52	3.32
Pot Cap-1 Maneuver	1114	-	-	337	783
Stage 1	-	-	-	615	-
Stage 2	-	-	-	701	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1114	-	-	337	783
Mov Cap-2 Maneuver	-	-	-	517	-
Stage 1	-	-	-	614	-
Stage 2	-	-	-	701	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1114	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.2	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

EXISTING PM SCHOOL
13: US 17 & Duffield Rd.

11/12/2019

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	
Traffic Vol, veh/h	1	600	406	1	0	1
Future Vol, veh/h	1	600	406	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	652	441	1	0	1
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	442	0	-	0	770	221
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	328	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1114	-	-	-	337	783
Stage 1	-	-	-	-	615	-
Stage 2	-	-	-	-	702	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1114	-	-	-	337	783
Mov Cap-2 Maneuver	-	-	-	-	518	-
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	702	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		9.6		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1114	-	-	-	783	
HCM Lane V/C Ratio	0.001	-	-	-	0.001	
HCM Control Delay (s)	8.2	0	-	-	9.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0	

EXISTING PM
15: US 17 & Jenkins Hill Rd.

11/12/2019

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑		↰	
Traffic Vol, veh/h	1	591	334	1	0	2
Future Vol, veh/h	1	591	334	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	704	398	1	0	2

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	399	0	0 753 200
Stage 1	-	-	- 399 -
Stage 2	-	-	- 354 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	1156	-	- 346 808
Stage 1	-	-	- 647 -
Stage 2	-	-	- 681 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1156	-	- 346 808
Mov Cap-2 Maneuver	-	-	- 528 -
Stage 1	-	-	- 646 -
Stage 2	-	-	- 681 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1156	-	-	-	808
HCM Lane V/C Ratio	0.001	-	-	-	0.003
HCM Control Delay (s)	8.1	-	-	-	9.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

EXISTING PM
17: US 17 & Duffield Rd.

11/12/2019

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		Y	
Traffic Vol, veh/h	2	589	333	2	1	2
Future Vol, veh/h	2	589	333	2	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	693	392	2	1	2

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	394	0	0	744	197
Stage 1	-	-	-	393	-
Stage 2	-	-	-	351	-
Critical Hdwy	4.14	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	3.52	3.32
Pot Cap-1 Maneuver	1161	-	-	350	811
Stage 1	-	-	-	651	-
Stage 2	-	-	-	684	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1161	-	-	349	811
Mov Cap-2 Maneuver	-	-	-	531	-
Stage 1	-	-	-	649	-
Stage 2	-	-	-	684	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1161	-	-	-	690
HCM Lane V/C Ratio	0.002	-	-	-	0.005
HCM Control Delay (s)	8.1	0	-	-	10.2
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

NO-BUILD AM
7: US 17 & Jenkins Hill Rd.

11/12/2019

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑		↱	
Traffic Vol, veh/h	1	303	543	0	1	3
Future Vol, veh/h	1	303	543	0	1	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	408	732	0	1	4

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	732	0	938
Stage 1	-	-	732
Stage 2	-	-	206
Critical Hdwy	4.14	-	6.84
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	2.22	-	3.52
Pot Cap-1 Maneuver	868	-	263
Stage 1	-	-	437
Stage 2	-	-	808
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	868	-	263
Mov Cap-2 Maneuver	-	-	403
Stage 1	-	-	437
Stage 2	-	-	808

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	868	-	-	-	553
HCM Lane V/C Ratio	0.002	-	-	-	0.01
HCM Control Delay (s)	9.2	-	-	-	11.6
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		Y	
Traffic Vol, veh/h	2	302	542	0	0	1
Future Vol, veh/h	2	302	542	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	407	731	0	0	1

Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	731	0	-	0	941	366
Stage 1	-	-	-	-	731	-
Stage 2	-	-	-	-	210	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	869	-	-	-	262	631
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	805	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	869	-	-	-	261	631
Mov Cap-2 Maneuver	-	-	-	-	401	-
Stage 1	-	-	-	-	435	-
Stage 2	-	-	-	-	805	-

Approach	EB	WB		SB		
HCM Control Delay, s	0.1	0		10.7		
HCM LOS				B		

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	869	-	-	-	631	
HCM Lane V/C Ratio	0.003	-	-	-	0.002	
HCM Control Delay (s)	9.2	0	-	-	10.7	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

NO-BUILD PM SCHOOL
11: US 17 & Jenkins Hill Rd.

11/12/2019

Intersection

Int Delay, s/veh 0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑		↰	
Traffic Vol, veh/h	1	601	407	0	0	0
Future Vol, veh/h	1	601	407	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	810	549	0	0	0

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	549	0	0 956 275
Stage 1	-	-	- 549 -
Stage 2	-	-	- 407 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	1017	-	- 256 722
Stage 1	-	-	- 542 -
Stage 2	-	-	- 641 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1017	-	- 256 722
Mov Cap-2 Maneuver	-	-	- 448 -
Stage 1	-	-	- 541 -
Stage 2	-	-	- 641 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1017	-	-	-	-
HCM Lane V/C Ratio	0.001	-	-	-	-
HCM Control Delay (s)	8.5	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

NO-BUILD PM SCHOOL
13: US 17 & Duffield Rd.

11/12/2019

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	
Traffic Vol, veh/h	1	600	406	1	0	1
Future Vol, veh/h	1	600	406	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	809	547	1	0	1
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	548	0	-	0	955	274
Stage 1	-	-	-	-	548	-
Stage 2	-	-	-	-	407	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1018	-	-	-	256	724
Stage 1	-	-	-	-	543	-
Stage 2	-	-	-	-	641	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1018	-	-	-	255	724
Mov Cap-2 Maneuver	-	-	-	-	449	-
Stage 1	-	-	-	-	542	-
Stage 2	-	-	-	-	641	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		10		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1018	-	-	-	724	
HCM Lane V/C Ratio	0.001	-	-	-	0.002	
HCM Control Delay (s)	8.5	0	-	-	10	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑		↰	
Traffic Vol, veh/h	1	591	334	1	0	2
Future Vol, veh/h	1	591	334	1	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	872	493	1	0	3
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	494	0	-	0	932	247
Stage 1	-	-	-	-	494	-
Stage 2	-	-	-	-	438	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1066	-	-	-	265	753
Stage 1	-	-	-	-	579	-
Stage 2	-	-	-	-	618	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1066	-	-	-	265	753
Mov Cap-2 Maneuver	-	-	-	-	461	-
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	618	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		9.8		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1066	-	-	-	-	753
HCM Lane V/C Ratio	0.001	-	-	-	-	0.004
HCM Control Delay (s)	8.4	-	-	-	-	9.8
HCM Lane LOS	A	-	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0

Intersection						
Int Delay, s/veh	0					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		Y	
Traffic Vol, veh/h	2	589	333	2	1	2
Future Vol, veh/h	2	589	333	2	1	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	3	859	486	3	1	3
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	489	0	-	0	924	245
Stage 1	-	-	-	-	488	-
Stage 2	-	-	-	-	436	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1070	-	-	-	268	755
Stage 1	-	-	-	-	583	-
Stage 2	-	-	-	-	619	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1070	-	-	-	267	755
Mov Cap-2 Maneuver	-	-	-	-	462	-
Stage 1	-	-	-	-	580	-
Stage 2	-	-	-	-	619	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		10.8		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1070	-	-	-	623	
HCM Lane V/C Ratio	0.003	-	-	-	0.007	
HCM Control Delay (s)	8.4	0	-	-	10.8	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0	

Intersection						
Int Delay, s/veh	4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑↑	↑↑		↘	
Traffic Vol, veh/h	98	511	658	13	29	128
Future Vol, veh/h	98	511	658	13	29	128
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	163	555	715	22	48	213
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	737	0	-	0	1330	369
Stage 1	-	-	-	-	726	-
Stage 2	-	-	-	-	604	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	865	-	-	-	146	628
Stage 1	-	-	-	-	440	-
Stage 2	-	-	-	-	508	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	865	-	-	-	119	628
Mov Cap-2 Maneuver	-	-	-	-	260	-
Stage 1	-	-	-	-	357	-
Stage 2	-	-	-	-	508	-
Approach	EB	WB		SB		
HCM Control Delay, s	2.3	0		20		
HCM LOS				C		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	865	-	-	-	498	
HCM Lane V/C Ratio	0.189	-	-	-	0.525	
HCM Control Delay (s)	10.1	-	-	-	20	
HCM Lane LOS	B	-	-	-	C	
HCM 95th %tile Q(veh)	0.7	-	-	-	3	

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	
Traffic Vol, veh/h	2	415	668	38	4	1
Future Vol, veh/h	2	415	668	38	4	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	451	726	63	7	2

Major/Minor	Major1	Major2		Minor2	
Conflicting Flow All	789	0	-	0	988 395
Stage 1	-	-	-	-	758 -
Stage 2	-	-	-	-	230 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	827	-	-	-	244 604
Stage 1	-	-	-	-	423 -
Stage 2	-	-	-	-	786 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	827	-	-	-	243 604
Mov Cap-2 Maneuver	-	-	-	-	388 -
Stage 1	-	-	-	-	422 -
Stage 2	-	-	-	-	786 -

Approach	EB	WB		SB	
HCM Control Delay, s	0	0		13.8	
HCM LOS	B				

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	827	-	-	-	418
HCM Lane V/C Ratio	0.003	-	-	-	0.02
HCM Control Delay (s)	9.4	0	-	-	13.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑	↑↑	↗	↘	↗
Traffic Vol, veh/h	135	405	621	48	13	50
Future Vol, veh/h	135	405	621	48	13	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	225	440	675	80	22	83
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	755	0	-	0	1345	338
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	670	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	851	-	-	-	143	658
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	470	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	851	-	-	-	105	658
Mov Cap-2 Maneuver	-	-	-	-	209	-
Stage 1	-	-	-	-	344	-
Stage 2	-	-	-	-	470	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.6	0		14		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	851	-	-	-	209	658
HCM Lane V/C Ratio	0.264	-	-	-	0.104	0.127
HCM Control Delay (s)	10.7	-	-	-	24.2	11.3
HCM Lane LOS	B	-	-	-	C	B
HCM 95th %tile Q(veh)	1.1	-	-	-	0.3	0.4

BUILD AM

19: Jenkins Hill Rd. & Site Access

11/12/2019

Intersection

Int Delay, s/veh 5.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		↑			↑
Traffic Vol, veh/h	142	0	11	100	0	15
Future Vol, veh/h	142	0	11	100	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	237	0	18	167	0	25

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	127	102	0
Stage 1	102	-	-
Stage 2	25	-	-
Critical Hdwy	6.42	6.22	-
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	-
Pot Cap-1 Maneuver	868	953	-
Stage 1	922	-	-
Stage 2	998	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	868	953	-
Mov Cap-2 Maneuver	868	-	-
Stage 1	922	-	-
Stage 2	998	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	868	1390
HCM Lane V/C Ratio	-	-	0.273	-
HCM Control Delay (s)	-	-	10.7	0
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	1.1	0

BUILD AM

21: Jenkins Hill Rd. & Bus Access

11/12/2019

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	10	0	1	10	0	5
Future Vol, veh/h	10	0	1	10	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	0	2	17	0	8
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	19	11	0	0	19	0
Stage 1	11	-	-	-	-	-
Stage 2	8	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	998	1070	-	-	1597	-
Stage 1	1012	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	998	1070	-	-	1597	-
Mov Cap-2 Maneuver	998	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	8.7	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	998	1597	-	
HCM Lane V/C Ratio	-	-	0.017	-	-	
HCM Control Delay (s)	-	-	8.7	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑		↰	
Traffic Vol, veh/h	52	811	553	6	44	119
Future Vol, veh/h	52	811	553	6	44	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	87	882	601	10	73	198

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	611	0	-	0	1221	306
Stage 1	-	-	-	-	606	-
Stage 2	-	-	-	-	615	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	964	-	-	-	172	690
Stage 1	-	-	-	-	507	-
Stage 2	-	-	-	-	502	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	964	-	-	-	157	690
Mov Cap-2 Maneuver	-	-	-	-	325	-
Stage 1	-	-	-	-	461	-
Stage 2	-	-	-	-	502	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	18.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	964	-	-	-	529
HCM Lane V/C Ratio	0.09	-	-	-	0.514
HCM Control Delay (s)	9.1	-	-	-	18.8
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	2.9

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕↕	↕↕		↕	
Traffic Vol, veh/h	1	809	523	12	7	1
Future Vol, veh/h	1	809	523	12	7	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1	879	568	20	12	2
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	588	0	-	0	1020	294
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	442	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	983	-	-	-	233	702
Stage 1	-	-	-	-	524	-
Stage 2	-	-	-	-	615	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	983	-	-	-	233	702
Mov Cap-2 Maneuver	-	-	-	-	428	-
Stage 1	-	-	-	-	523	-
Stage 2	-	-	-	-	615	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		13.2		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	983	-	-	-	450	
HCM Lane V/C Ratio	0.001	-	-	-	0.03	
HCM Control Delay (s)	8.7	0	-	-	13.2	
HCM Lane LOS	A	A	-	-	B	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	1.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑	↱	↰	↱
Traffic Vol, veh/h	66	789	511	14	21	48
Future Vol, veh/h	66	789	511	14	21	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	110	858	555	23	35	80
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	578	0	-	0	1204	278
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	649	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	992	-	-	-	177	719
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	482	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	992	-	-	-	157	719
Mov Cap-2 Maneuver	-	-	-	-	310	-
Stage 1	-	-	-	-	479	-
Stage 2	-	-	-	-	482	-
Approach	EB	WB		SB		
HCM Control Delay, s	1	0		12.9		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	992	-	-	-	310	719
HCM Lane V/C Ratio	0.111	-	-	-	0.113	0.111
HCM Control Delay (s)	9.1	-	-	-	18.1	10.6
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.4	0.4

BUILD PM SCHOOL
27: Jenkins Hill Rd. & Site Access

11/12/2019

Intersection						
Int Delay, s/veh	7.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T			T
Traffic Vol, veh/h	153	0	11	47	0	10
Future Vol, veh/h	153	0	11	47	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	255	0	18	78	0	17
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	74	57	0	0	96	0
Stage 1	57	-	-	-	-	-
Stage 2	17	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	930	1009	-	-	1498	-
Stage 1	966	-	-	-	-	-
Stage 2	1006	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	930	1009	-	-	1498	-
Mov Cap-2 Maneuver	930	-	-	-	-	-
Stage 1	966	-	-	-	-	-
Stage 2	1006	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	10.3	0	0			
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	930	1498		
HCM Lane V/C Ratio	-	-	0.274	-		
HCM Control Delay (s)	-	-	10.3	0		
HCM Lane LOS	-	-	B	A		
HCM 95th %tile Q(veh)	-	-	1.1	0		

BUILD PM SCHOOL
29: Jenkins Hill Rd. & Bus Access

11/12/2019

Intersection

Int Delay, s/veh 3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	10	0	1	10	0	0
Future Vol, veh/h	10	0	1	10	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	0	2	17	0	0

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	13	11	0
Stage 1	11	-	-
Stage 2	2	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	1006	1070	1597
Stage 1	1012	-	-
Stage 2	1021	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	1006	1070	1597
Mov Cap-2 Maneuver	1006	-	-
Stage 1	1012	-	-
Stage 2	1021	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.6	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1006	1597
HCM Lane V/C Ratio	-	-	0.017	-
HCM Control Delay (s)	-	-	8.6	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑		↰	
Traffic Vol, veh/h	25	770	431	3	15	40
Future Vol, veh/h	25	770	431	3	15	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	84	84	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	917	513	5	25	67

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	518	0	0	1059	259
Stage 1	-	-	-	516	-
Stage 2	-	-	-	543	-
Critical Hdwy	4.14	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	3.52	3.32
Pot Cap-1 Maneuver	1044	-	-	220	740
Stage 1	-	-	-	564	-
Stage 2	-	-	-	546	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1044	-	-	211	740
Mov Cap-2 Maneuver	-	-	-	396	-
Stage 1	-	-	-	541	-
Stage 2	-	-	-	546	-

Approach	EB	WB	SB
HCM Control Delay, s	0.4	0	12.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1044	-	-	-	598
HCM Lane V/C Ratio	0.04	-	-	-	0.153
HCM Control Delay (s)	8.6	-	-	-	12.1
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5

Intersection

Int Delay, s/veh 0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↑↑	
Traffic Vol, veh/h	2	752	422	8	3	2
Future Vol, veh/h	2	752	422	8	3	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	885	496	13	5	3

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	509	0	0 950 255
Stage 1	-	-	- 503 -
Stage 2	-	-	- 447 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	1052	-	- 258 744
Stage 1	-	-	- 573 -
Stage 2	-	-	- 611 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1052	-	- 257 744
Mov Cap-2 Maneuver	-	-	- 454 -
Stage 1	-	-	- 571 -
Stage 2	-	-	- 611 -

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1052	-	-	-	538
HCM Lane V/C Ratio	0.002	-	-	-	0.015
HCM Control Delay (s)	8.4	0	-	-	11.8
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱↱	↱↱	↰	↰	↰
Traffic Vol, veh/h	37	748	417	7	7	17
Future Vol, veh/h	37	748	417	7	7	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	813	453	12	12	28

Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	465	0	-	0	984	227
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	531	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1093	-	-	-	246	776
Stage 1	-	-	-	-	607	-
Stage 2	-	-	-	-	554	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1093	-	-	-	232	776
Mov Cap-2 Maneuver	-	-	-	-	406	-
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	554	-

Approach	EB	WB	SB			
HCM Control Delay, s	0.6	0	11.1			
HCM LOS	B					

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1093	-	-	-	406	776
HCM Lane V/C Ratio	0.056	-	-	-	0.029	0.037
HCM Control Delay (s)	8.5	-	-	-	14.1	9.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.1

BUILD PM

31: Jenkins Hill Rd. & Site Access

11/12/2019

Intersection						
Int Delay, s/veh	5.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	Y		T			T
Traffic Vol, veh/h	53	0	2	26	0	2
Future Vol, veh/h	53	0	2	26	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	88	0	3	43	0	3

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	28	25	0	0	46
Stage 1	25	-	-	-	-
Stage 2	3	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12
Critical Hdwy Stg 1	5.42	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218
Pot Cap-1 Maneuver	987	1051	-	-	1562
Stage 1	998	-	-	-	-
Stage 2	1020	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	987	1051	-	-	1562
Mov Cap-2 Maneuver	987	-	-	-	-
Stage 1	998	-	-	-	-
Stage 2	1020	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	987	1562
HCM Lane V/C Ratio	-	-	0.089	-
HCM Control Delay (s)	-	-	9	0
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0

BUILD PM

33: Jenkins Hill Rd. & Bus Access

11/12/2019

Intersection						
Int Delay, s/veh	0					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Vol, veh/h	0	0	2	0	0	2
Future Vol, veh/h	0	0	2	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	60	60	60	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	3	0	0	3
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	6	3	0	0	3	0
Stage 1	3	-	-	-	-	-
Stage 2	3	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	1015	1081	-	-	1619	-
Stage 1	1020	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Platoon blocked, %			-	-	-	-
Mov Cap-1 Maneuver	1015	1081	-	-	1619	-
Mov Cap-2 Maneuver	1015	-	-	-	-	-
Stage 1	1020	-	-	-	-	-
Stage 2	1020	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	0	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1619	-	
HCM Lane V/C Ratio	-	-	-	-	-	
HCM Control Delay (s)	-	-	0	0	-	
HCM Lane LOS	-	-	A	A	-	
HCM 95th %tile Q(veh)	-	-	-	0	-	

BUILD MITIGATED AM
7: US 17 & Jenkins Hill Rd.

11/12/2019

Intersection						
Int Delay, s/veh	3.2					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↗	↗	↰	↰	↰
Traffic Vol, veh/h	98	511	658	13	29	127
Future Vol, veh/h	98	511	658	13	29	127
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	200
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	163	555	715	22	48	212

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	737	0	0 1319 358
Stage 1	-	-	- 715 -
Stage 2	-	-	- 604 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	865	-	- 149 638
Stage 1	-	-	- 446 -
Stage 2	-	-	- 508 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	865	-	- 121 638
Mov Cap-2 Maneuver	-	-	- 262 -
Stage 1	-	-	- 362 -
Stage 2	-	-	- 508 -

Approach	EB	WB	SB
HCM Control Delay, s	2.3	0	15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	865	-	-	-	262	638
HCM Lane V/C Ratio	0.189	-	-	-	0.184	0.332
HCM Control Delay (s)	10.1	-	-	-	21.8	13.4
HCM Lane LOS	B	-	-	-	C	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.7	1.4

BUILD MITIGATED AM
23: US 17 & Site Access

11/12/2019

Intersection						
Int Delay, s/veh	2.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↑↑	↑↑	↱	↰	↱
Traffic Vol, veh/h	135	405	621	86	17	50
Future Vol, veh/h	135	405	621	86	17	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	225	440	675	143	28	83
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	818	0	-	0	1345	338
Stage 1	-	-	-	-	675	-
Stage 2	-	-	-	-	670	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	806	-	-	-	143	658
Stage 1	-	-	-	-	467	-
Stage 2	-	-	-	-	470	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	806	-	-	-	103	658
Mov Cap-2 Maneuver	-	-	-	-	207	-
Stage 1	-	-	-	-	337	-
Stage 2	-	-	-	-	470	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.8	0		14.8		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	806	-	-	-	207	658
HCM Lane V/C Ratio	0.279	-	-	-	0.137	0.127
HCM Control Delay (s)	11.2	-	-	-	25.1	11.3
HCM Lane LOS	B	-	-	-	D	B
HCM 95th %tile Q(veh)	1.1	-	-	-	0.5	0.4

BUILD MITIGATED PM SCHOOL
11: US 17 & Jenkins Hill Rd.

11/12/2019

Intersection

Int Delay, s/veh 2.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↗
Traffic Vol, veh/h	52	811	553	6	44	119
Future Vol, veh/h	52	811	553	6	44	119
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	200
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	87	882	601	10	73	198

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	611	0	0 1216 301
Stage 1	-	-	- 601 -
Stage 2	-	-	- 615 -
Critical Hdwy	4.14	-	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	2.22	-	- 3.52 3.32
Pot Cap-1 Maneuver	964	-	- 173 695
Stage 1	-	-	- 510 -
Stage 2	-	-	- 502 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	964	-	- 157 695
Mov Cap-2 Maneuver	-	-	- 326 -
Stage 1	-	-	- 464 -
Stage 2	-	-	- 502 -

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	964	-	-	-	326	695
HCM Lane V/C Ratio	0.09	-	-	-	0.225	0.285
HCM Control Delay (s)	9.1	-	-	-	19.2	12.2
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.3	-	-	-	0.8	1.2

BUILD MITIGATED PM SCHOOL
25: US 17 & Site Access

11/12/2019

Intersection						
Int Delay, s/veh	1.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↗↗	↗↗	↰	↰	↰
Traffic Vol, veh/h	66	789	511	25	28	48
Future Vol, veh/h	66	789	511	25	28	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	110	858	555	42	47	80
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	597	0	-	0	1204	278
Stage 1	-	-	-	-	555	-
Stage 2	-	-	-	-	649	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	976	-	-	-	177	719
Stage 1	-	-	-	-	539	-
Stage 2	-	-	-	-	482	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	976	-	-	-	157	719
Mov Cap-2 Maneuver	-	-	-	-	310	-
Stage 1	-	-	-	-	478	-
Stage 2	-	-	-	-	482	-
Approach	EB	WB		SB		
HCM Control Delay, s	1	0		13.6		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	976	-	-	-	310	719
HCM Lane V/C Ratio	0.113	-	-	-	0.151	0.111
HCM Control Delay (s)	9.2	-	-	-	18.7	10.6
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.4	-	-	-	0.5	0.4

BUILD MITIGATED PM
15: US 17 & Jenkins Hill Rd.

11/12/2019

Intersection						
Int Delay, s/veh	0.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↗↗	↗↗	↰	↰	↰
Traffic Vol, veh/h	25	770	431	3	15	40
Future Vol, veh/h	25	770	431	3	15	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	200
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	84	84	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	917	513	5	25	67
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	518	0	-	0	1056	257
Stage 1	-	-	-	-	513	-
Stage 2	-	-	-	-	543	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1044	-	-	-	221	742
Stage 1	-	-	-	-	566	-
Stage 2	-	-	-	-	546	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1044	-	-	-	212	742
Mov Cap-2 Maneuver	-	-	-	-	397	-
Stage 1	-	-	-	-	543	-
Stage 2	-	-	-	-	546	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.4	0		11.5		
HCM LOS				B		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1044	-	-	-	397	742
HCM Lane V/C Ratio	0.04	-	-	-	0.063	0.09
HCM Control Delay (s)	8.6	-	-	-	14.7	10.3
HCM Lane LOS	A	-	-	-	B	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.2	0.3

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↰	↱↱	↱↱	↰	↰	↰
Traffic Vol, veh/h	37	748	417	13	9	17
Future Vol, veh/h	37	748	417	13	9	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	200	0	0
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	60	92	92	60	60	60
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	62	813	453	22	15	28
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	475	0	-	0	984	227
Stage 1	-	-	-	-	453	-
Stage 2	-	-	-	-	531	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	1083	-	-	-	246	776
Stage 1	-	-	-	-	607	-
Stage 2	-	-	-	-	554	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1083	-	-	-	232	776
Mov Cap-2 Maneuver	-	-	-	-	406	-
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	554	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.6	0		11.3		
HCM LOS	B					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1083	-	-	-	406	776
HCM Lane V/C Ratio	0.057	-	-	-	0.037	0.037
HCM Control Delay (s)	8.5	-	-	-	14.2	9.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0.1	0.1

APPENDIX K:

**HISTORICAL
& ARCHAEOLOGICAL SURVEY**

6.0 HISTORICAL USE INFORMATION

6.1 Aerial Photograph Review

ECS reviewed aerial photographs of the subject property and immediately surrounding properties for evidence of former usage which may indicate potential environmental issues. The aerial photographs were obtained from EDR. The aerial photographs reviewed were dated 1941, 1953, 1958, 1960, 1968, 1979, 1983, 1989, 1994, 2005, 2009, 2013, and 2017. Aerial photographs dated prior to 1941 were not available for review. The ECS review is dependent on the quality and scale of the photographs. The following is a description of relevant information from the aerial photographs:

Year(s)	Subject Property	Adjoining Properties	REC? (yes or no)
1946	A school is located on the southwest corner of the subject property, a residence is depicted north of the school building and a residence is located on the east side of the property. Agricultural land is located on the southern portion of the property and wooded land on the northern portion of the property	North - Wooded land East - Agricultural land, a residence, and wooded land South - Highway 17 followed by wooded land West - Agricultural land, residences, and wooded land	No
1953	Similar to the 1946 Aerial Photograph, except there appear to be additional structures on the east side of the subject property.	North - Wooded land East - Agricultural land, wooded land, and residences South - Highway 17 followed by wooded land West - Residences, agricultural land, and wooded land	No
1958 and 1960	Similar to the 1953 Aerial photograph, except the school buildings have been removed on the southwest corner of the subject property and some of the residences no longer appear to be on the east side of the property.	North - Wooded land East - Wooded land, agricultural land, and residences South - Highway 17 followed by wooded land West - Residences, agricultural land, and residences	No

Year(s)	Subject Property	Adjoining Properties	REC? (yes or no)
1968	The subject property contains agricultural structures, agricultural land, and dirt roads running from Highway 17 to the central portion of the property with a round-a-bout.	North - Wooded land East - Agricultural land and residences followed by wooded land South - Highway 17 followed by wooded land West - Residences and wooded land	No
1979	Similar to the 1968 Aerial Photograph, except there are several additional agricultural structures depicted on the property and a small pond appears to the north of the round-a-bout.	North - Wooded land East - Wooded land and residences South - Highway 17 followed by wooded land and a residence West - Wooded land and residences	No
1983 and 1989	The subject property is developed with agricultural land throughout the property, associated agricultural structures on the south side of the property, and a small pond on the northwest side of the subject property.	North - Wooded land East - Wooded land and residences South - Highway 17 followed by wooded land and a residence West - Wooded land and residences	No
1994	Similar to the 1989 Aerial photograph, except a pond appears on the northeast corner of the property.	Similar to the 1989 Aerial Photograph, except properties to the east and west appear to be under development.	No
2005, 2009, 2013, and 2017	The subject property is developed with three agricultural structures on the central portion of the subject property and agricultural land and a lake at the northeast corner of the subject property.	North - Wooded land East - Wooded land and residences South - Highway 17 followed by wooded land and residences West - Jenkins Hill Road followed by residences, wooded land, and ponds	No

6.2 Sanborn Fire Insurance Map Review

In an effort to identify past uses, ECS utilized EDR to search for historical Sanborn Fire Insurance

Maps (Sanborn) for the subject property and surrounding area. Sanborn maps were not available for this area. The absence of such maps generally indicates that the subject property is located in an area where Sanborn maps were not produced because the area was rural or it was not economically feasible. ECS does not expect the lack of Sanborn maps to impact our ability to render a professional opinion concerning the subject property given the amount of historical information obtained from our research, the USGS topographic map, aerial photographs, city directories, and other historical records obtained. A copy of the Unmapped Property report is included within Appendix IV.

6.3 Property Tax Files

Property tax files may include records of past ownership, appraisals, maps, sketches, photos or other information kept by the local jurisdiction for property tax assessment purposes. According to the Charleston County tax assessor on-line information, the subject property is owned by Quarry Lake Plantation, LLC. The subject property is listed as a 107.20-acre parcel with an identification number of 7110000052. Additionally, the Charleston County tax assessor on-line information indicated the subject property was developed with a 576 square foot detached living area constructed in 1971, a 3,024 square foot general purpose building constructed in 1971, a 3,750 square foot general purpose building constructed in 1986, a 2,688 square foot hay storage building, a 1,160 square foot hay storage building, and a 120 square foot utility shed built in 1971.

6.4 Recorded Land Title Records

Recorded land title records may include leases, land contracts, and AULs recorded by the local jurisdiction. Land title records may provide only a list of the names of previous owners and may be of limited use; however, they may provide useful information about uses or occupancy of the property when employed in combination with other sources.

ECS was not provided with Land Title Records. ECS reviewed the following deeds available on the Charleston County Register of Deeds we

- Deed Book 0510, Page 591, dated October 13, 2015. Quarry Lake Plantation, LLC, a South Carolina Limited Liability Company, obtained the property from Juvar, LLC, a South Carolina Limited Liability Company.
- Deed Book C544, Page 845, dated July 7, 2005. Juvar, LLC, a South Carolina limited liability company, obtained the property from Ursula S Kaiser, as a capital contribution to and in return for memberships in Juvar, LLC.
- Deed Book Y393, Page 095, dated December 31, 2001. The Kaiser Company, a South Carolina limited partnership, by Ursula S. Kaiser as President of U.S. Kaiser, LLC obtained the property from Ursula S. Kaiser.
- Deed Book F295, Page 107, dated December 30, 1997. Kaiser Company, a partnership, obtained the property from Robert L. Kaiser, Jr., Ann Marie K. Forsberg, Vincent P. Kaiser, Ursula K. Ferguson, and Jane L. K. Clarkin.

6.5 Historical USGS Topographic Maps

Topographic maps are produced by the United States Geological Survey (USGS) for various time periods. ECS reviewed topographic maps of the subject property and immediately surrounding

properties for evidence of former usage which may indicate potential environmental issues. The topographic maps were obtained from EDR and were dated 1943, 1973, 1992, and 2014. Topographic maps dated prior to 1943 were not available for review. The following is a description of relevant information from the topographic maps:

Year(s)	Subject Property	Adjoining Properties	REC? (yes or no)
1943	Two residences and two buildings apparently associated with St James School appear on the south side of the property, with wooded land and an old railroad grade on the northern portion of the subject property.	North - Steed Creek Swamp East - An unpaved Road South - A primary highway followed by wooded land and residences West - An unpaved road followed by residences	No
1973 and 1992	In addition to the four buildings depicted on the 1943 Topographic Map, six commercial structures and a road with a roundabout are depicted on the central portion of the subject property	North - Steed Creek Swamp East - A commercial building followed by a road South - A primary highway followed by wooded land and a residence West - Residences and commercial buildings	No
2014	Due to the level of detail of the 2014 Topographic Maps, no structures are depicted on the subject property or the surrounding properties. Kaiser Fram road is depicted on the southern portion of the subject property	North - Wooded land East - Wooded land followed by Duffield Road South - Highway 17 followed by wooded land West - Wooded land	No

6.6 City Directory Review

One of the ASTM standard historical sources to be reviewed for previous subject property uses is local street directories, commonly known as City Directories. The purpose of the directory review is to identify past occupants of the subject property, adjoining properties, or nearby properties. In some rural areas, street directories information is limited.

ECS reviewed city directories obtained from EDR. The directories reviewed were dated 1992, 1995, 2000, 2005, 2010, and 2014. The directories reviewed prior to 1992 did not provide listings for the subject property or surrounding area. Directories dated prior to 1992 were not available for review. The subject property address utilized for the research was US Highway 17. A copy of the city directory

report is included in Appendix IV. The following is a description of relevant information from the city directories:

Year(s)	Subject Property	Adjoining Properties	REC? (yes or no)
1992	No Listings	West - Residence (1175 Jenkins Hill Road)	No
1995	No Listings	West - Residences (7743 N Hwy 17, 1161 Jenkins Hill Road, and 1175 Jenkins Hill Road)	No
2000	No Listings	West - Residences (1119, 1169, and 1175 Jenkins Hill Road)	No
2005	Horse Haven Farms (7820 N Hwy 17)	West - Residences (1119 and 1175 Jenkins Hill Road)	No
2010	No Listings	West - (1119, 1131, 1161, and 1175 Jenkins Hill Road)	No
2014	Occupant Unknown, Steven P Tockmakis	West - Residences (1119 and 1175 Jenkins Hill Road)	No

6.7 Building Department Records

The term building department records means those records of the local government indicating permissions of the local government to construct, alter or demolish improvements on the property.

ECS contacted the Charleston County Building Services Department to determine if they had historical information regarding construction dates, inspections, or other information regarding the subject property. A Freedom of Information Act request was submitted to the Building Department on August 20, 2019. No information has been received at the time of the report completion. If information is received that changes the conclusions or recommendations of this report, ECS will forward the information to the Client.

6.8 Zoning/Land Use Records

The term zoning/land use records refers to records of the local government indicating the uses permitted by the government in particular zones within its jurisdictions.

ECS reviewed zoning/land use records obtained from the Charleston County GIS Map. The subject property is currently zoned for agricultural use (AG-10).

6.9 Other Historical Sources

Other credible historical sources may be reviewed to identify past uses of the subject property. These

sources may include websites, county or state road maps, historical society documents, or local library information.

The SC DHEC was contacted to determine if they had historical information regarding environmental issues or responses at the subject property. A Freedom of Information Act request was submitted to the SC DHEC on August 20, 2019. According to the SC DHEC, there were no regulatory files available for review for the subject property.

6.10 Previous Reports

Newkirk Environmental Inc. previously conducted a Phase I Environmental Site Assessment for the subject property in December 14, 2018. The report indicated that the subject property consisted of undeveloped agricultural land with farm buildings. The report did not identify on-site or off-site RECs at the time the Phase I ESA was completed. ECS cannot attest to the accuracy of the information reviewed.

6.11 Historical Use Summary

According to historical research, it appears that the subject property was developed with St. James School on the southwest corner of the property, residences on the southwest and east side of the property and agricultural land from at least the early 1940's through the early 1950's. The school structures and residential structures were removed from the subject property in the early 1950's. From the mid-1950's through present day, the subject property has been utilized for agricultural purposes with varying configurations of associated agricultural outbuildings and a residence on the central portion of the property. Historical records prior to 1941 were not reasonably ascertainable for the subject property.

The subject property was historically and is currently used as agricultural land. Such use of the subject property may have included the storage and use of beneficial agricultural products such as fungicides, herbicides, and/or fertilizers. The legal use (i.e., in accordance with the manufacturers' specifications and customary practices) of such substances, in the course of standard operational practices does not constitute a "release to the environment." Further, reasonably ascertainable information was not observed during the course of our assessment, including historical records review, or field reconnaissance observations regarding current site use and site history, that a past release of such substances had occurred. Therefore, the mere presence of this historical land use does not meet the definition of a REC.

Historical aerial photographs depict apparent residential structures on the subject property that were not located on the subject property during our site reconnaissance. ECS does not have technical evidence how these structures were heated, or if the structures utilized septic tanks or water supply wells. Based on the age, it is possible that the structures were heated with oil stored in USTs. ECS did not observe evidence of USTs, septic tanks, or water supply wells associated with these historic structures during our site reconnaissance. While not considered a REC, if encountered during site development, USTs, septic systems, and water supply wells should be closed in accordance with applicable laws.

Our review of historical information for adjoining or nearby properties identified the area as

originally agricultural and rural that transitioned to residential and rural.

No obvious indications of RECs were identified in the historical data review.

Rice/Kaiser Tract

N HIGHWAY 17

MC CLELLANVILLE, SC 29458

Inquiry Number: 5753289.8

August 16, 2019

The EDR Aerial Photo Decade Package



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free 800 352 0050
www.edrnet.com

EDR Aerial Photo Decade Package

08/16/19

Site Name:

Rice/Kaiser Tract
N HIGHWAY 17
MC CLELLANVILLE, SC 29451
EDR Inquiry # 5753289.8

Client Name:

ECS Southeast, LLP
3820 Faber Place Drive
North Charleston, SC 29405
Contact: Nicole Miller



Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

<u>Year</u>	<u>Scale</u>	<u>Details</u>	<u>Source</u>
2017	1"=500'	Flight Year: 2017	USDA/NAIP
2013	1"=500'	Flight Year: 2013	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2005	1"=500'	Flight Year: 2005	USDA/NAIP
1994	1"=750'	Flight Date: February 25, 1994	USGS
1989	1"=500'	Acquisition Date: February 09, 1989	USGS/DOQQ
1983	1"=500'	Flight Date: March 22, 1983	USDA
1979	1"=500'	Flight Date: October 27, 1979	USDA
1968	1"=500'	Flight Date: April 26, 1968	USGS
1960	1"=500'	Flight Date: September 14, 1960	USGS
1958	1"=500'	Flight Date: January 27, 1958	USGS
1953	1"=500'	Flight Date: March 27, 1953	USDA
1941	1"=500'	Flight Date: November 03, 1941	USDA

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.



INQUIRY #: 5753289.8

YEAR: 2017

— = 500'





INQUIRY #: 5753289.8

YEAR: 2013

— = 500'





INQUIRY #: 5753289.8

YEAR: 2009

— = 500'





INQUIRY #: 5753289.8

YEAR: 2005

— = 500'





INQUIRY #: 5753289.8

YEAR: 1994

— = 750'



Subject boundary not shown because it exceeds image extent or image is not georeferenced.



INQUIRY #: 5753289.8

YEAR: 1989

= 500'





INQUIRY #: 5753289.8

YEAR: 1983

— = 500'





INQUIRY #: 5753289.8

YEAR: 1979

— = 500'





INQUIRY #: 5753289.8

YEAR: 1968

= 500'





IQUIRY #: 5753289.8

YEAR: 1960

— = 500'





INQUIRY #: 5753289.8

YEAR: 1958

— = 500'





INQUIRY #: 5753289.8

YEAR: 1953

— = 500'





INQUIRY #: 5753289.8

YEAR: 1941

— = 500'



Rice/Kaiser Tract
N HIGHWAY 17
MC CLELLANVILLE, SC 29458

Inquiry Number: 5753289.3

August 14, 2019

Certified Sanborn® Map Report



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free 800 352 0050
www.edrnet.com

Certified Sanborn® Map Report

08/14/19

Site Name:

Rice/Kaiser Tract
N HIGHWAY 17
MC CLELLANVILLE, SC 29458
EDR Inquiry # 5753289.3

Client Name:

ECS Southeast, LLP
3820 Faber Place Drive
North Charleston, SC 29405
Contact: Nicole Miller



The Sanborn Library has been searched by EDR and maps covering the target property location as provided by ECS Southeast, LLP were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # 543B-44E3-AF30

PO # Rice/Kaiser Tract

Project Rice/Kaiser Tract



Sanborn® Library search results

Certification #: 543B-44E3-AF30

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

Limited Permission To Make Copies

ECS Southeast, LLP (the client) is permitted to make up to FIVE photocopies of this Sanborn Map transmittal and each fire insurance map accompanying this report solely for the limited use of its customer. No one other than the client is authorized to make copies. Upon request made directly to an EDR Account Executive, the client may be permitted to make a limited number of additional photocopies. This permission is conditioned upon compliance by the client, its customer and their agents with EDR's copyright policy; a copy of which is available upon request.

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Rice/Kaiser Tract
N HIGHWAY 17
MC CLELLANVILLE, SC 29458

Inquiry Number: 5753289.4
August 14, 2019

EDR Historical Topo Map Report

with QuadMatch™



6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free 800.352.0050
www.edrnet.com

EDR Historical Topo Map Report

08/14/19

Site Name:

Rice/Kaiser Tract
N HIGHWAY 17
MC CLELLANVILLE, SC 29456
EDR Inquiry # 5753289.4

Client Name:

ECS Southeast, LLP
3820 Faber Place Drive
North Charleston, SC 29405
Contact: Nicole Miller



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by ECS Southeast, LLP were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

P.O.# Rice/Kaiser Tract
Project: Rice/Kaiser Tract

Latitude: 33.043741 33° 2' 37" North
Longitude: -79.59841 -79° 35' 54" West
UTM Zone: Zone 17 North
UTM X Meters: 630871.39
UTM Y Meters: 3657009.03
Elevation: 18.00' above sea level

Maps Provided:

2014
1992
1973
1943

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT. Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2019 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Topo Sheet Key

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2014 Source Sheets



Awendaw

7.5-minute, 24000

1992 Source Sheets



Awendaw

7.5-minute, 24000

Aerial Photo Revised 1973

1973 Source Sheets



Awendaw

7.5-minute, 24000

Aerial Photo Revised 1973

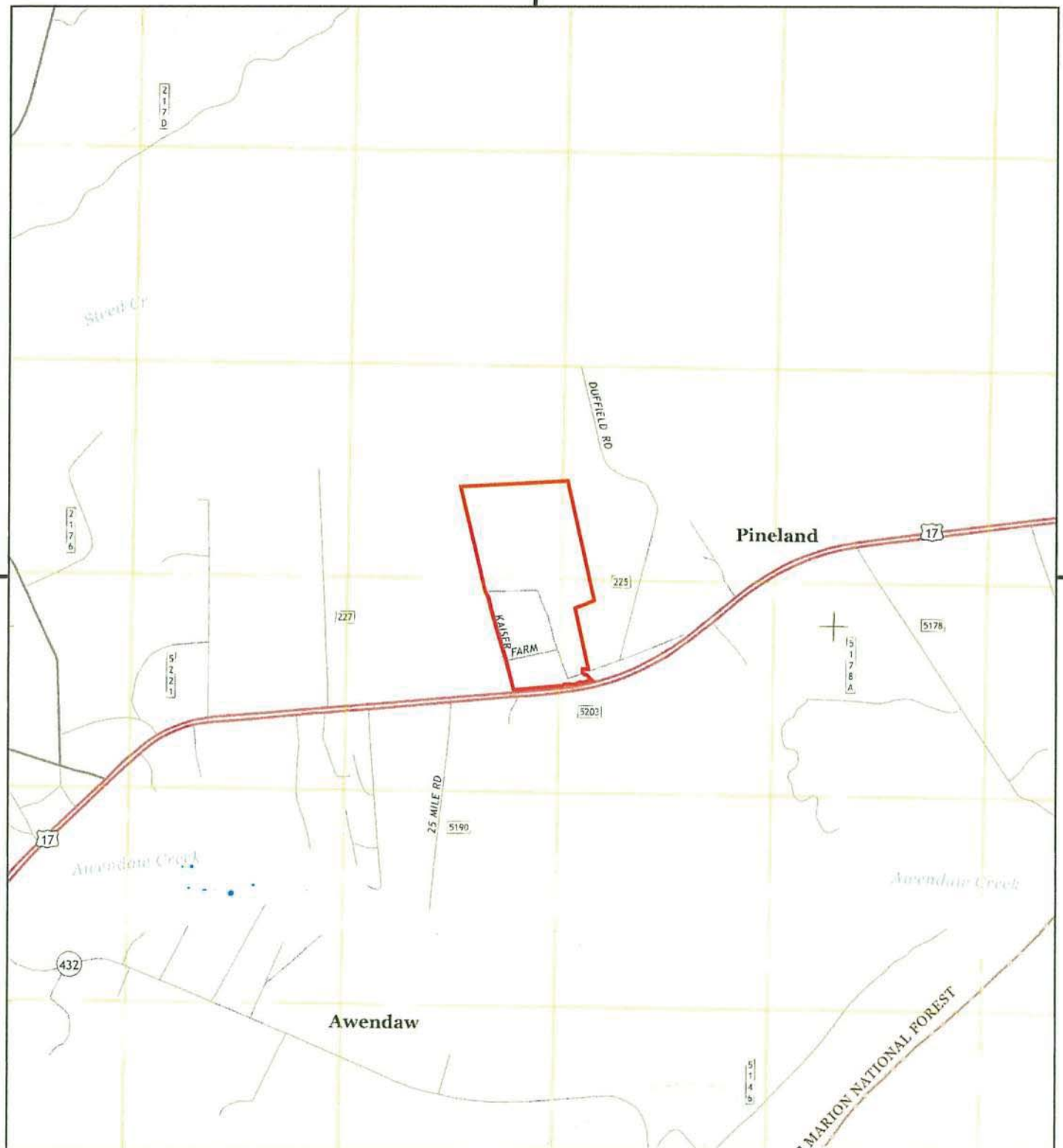
1943 Source Sheets



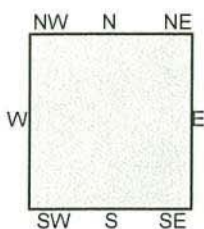
Awendaw

7.5-minute, 24000

Aerial Photo Revised 1942



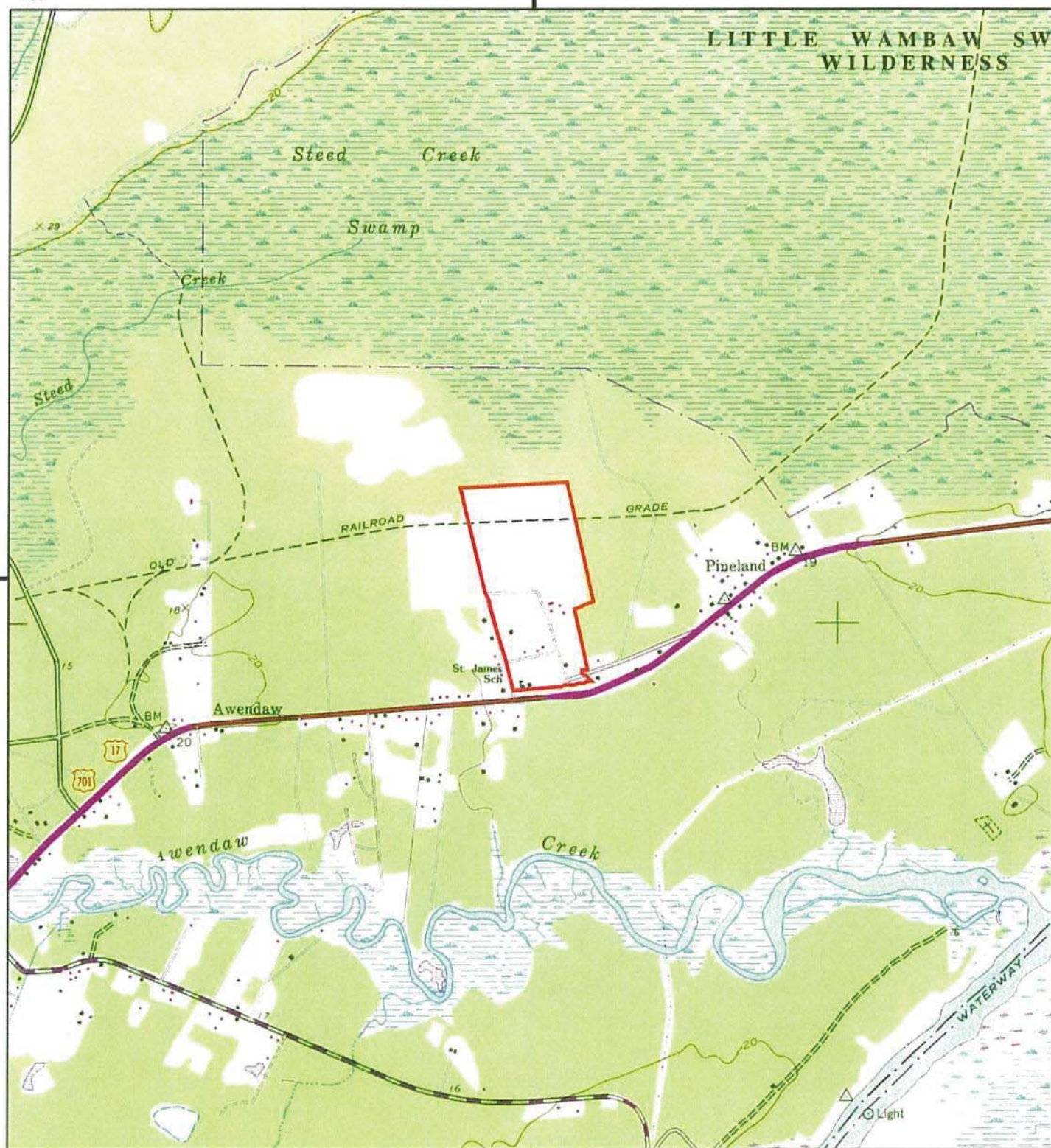
This report includes information from the following map sheet(s).



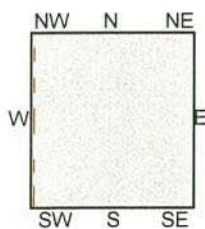
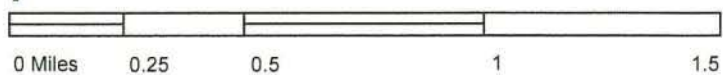
TP, Awendaw, 2014, 7.5-minute

SITE NAME: Rice/Kaiser Tract
 ADDRESS: N HIGHWAY 17
 MC CLELLANVILLE, SC 29458
 CLIENT: ECS Southeast, LLP





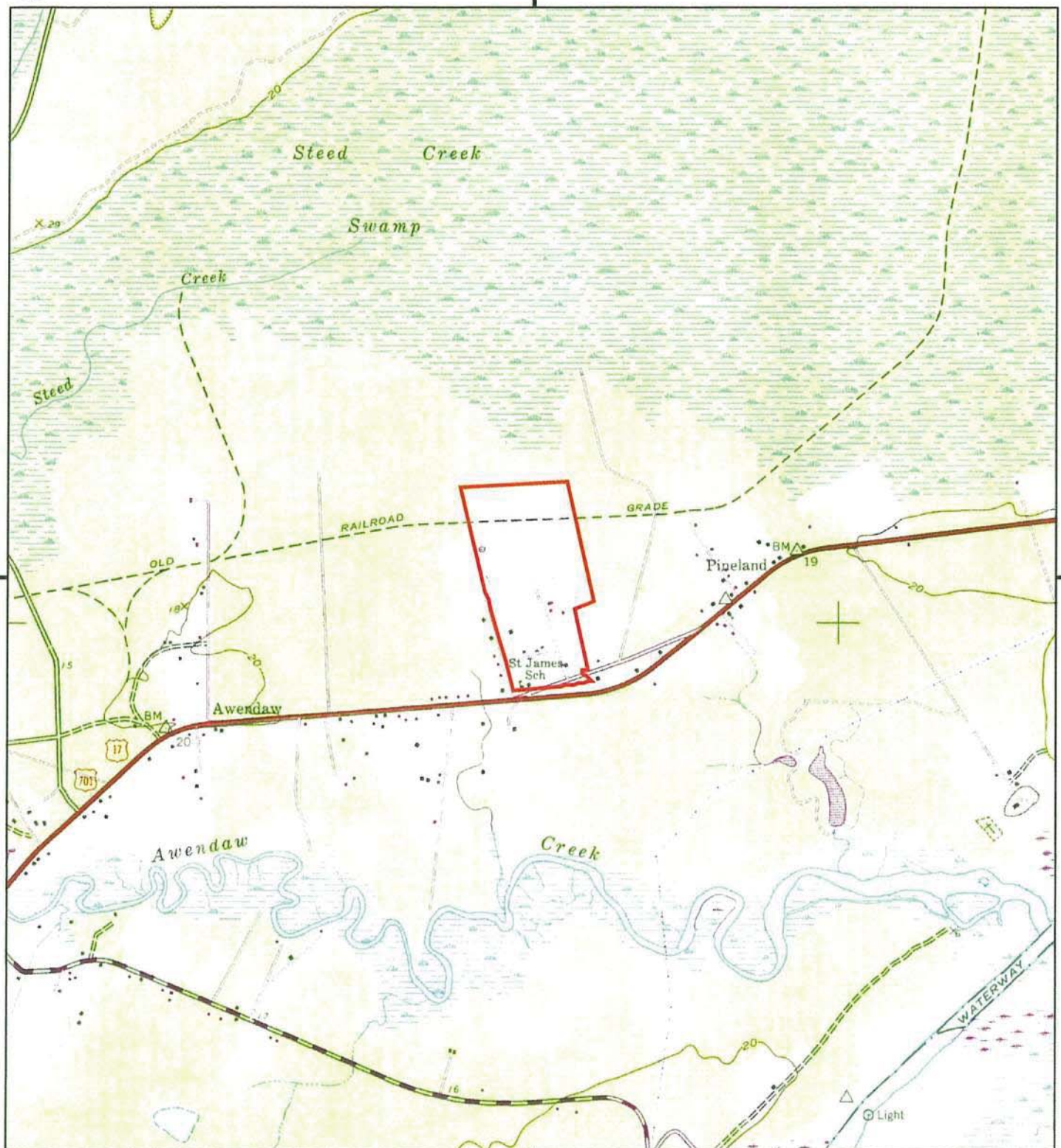
This report includes information from the following map sheet(s).



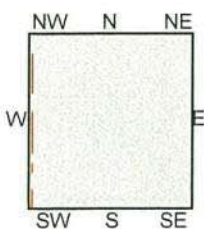
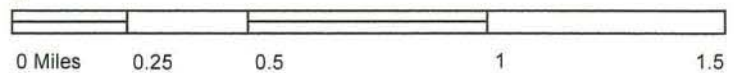
TP, Awendaw, 1992, 7.5-minute

SITE NAME: Rice/Kaiser Tract
 ADDRESS: N HIGHWAY 17
 MC CLELLANVILLE, SC 29458
 CLIENT: ECS Southeast, LLP





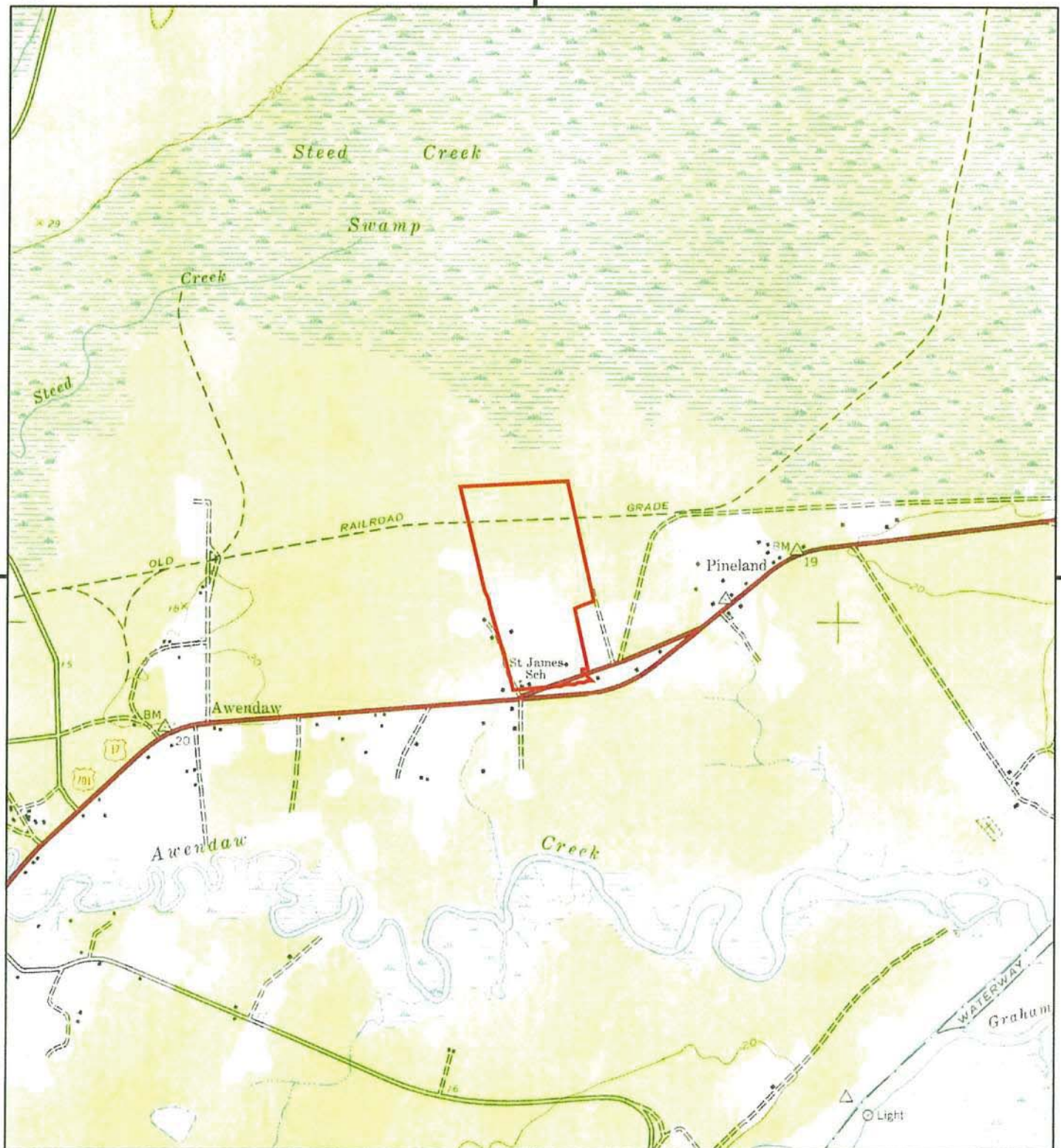
This report includes information from the following map sheet(s).



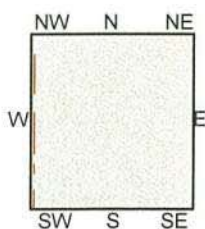
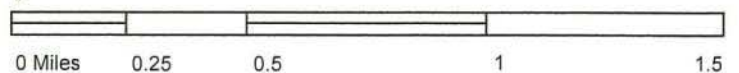
TP, Awendaw, 1973, 7.5-minute

SITE NAME: Rice/Kaiser Tract
ADDRESS: N HIGHWAY 17
MC CLELLANVILLE, SC 29458
CLIENT: ECS Southeast, LLP





This report includes information from the following map sheet(s).



TP, Awendaw, 1943, 7.5-minute

SITE NAME: Rice/Kaiser Tract
 ADDRESS: N HIGHWAY 17
 MC CLELLANVILLE, SC 29458
 CLIENT: ECS Southeast, LLP



Rice/Kaiser Tract

N HIGHWAY 17

MC CLELLANVILLE, SC 29458

Inquiry Number: 5753289.5

August 19, 2019

The EDR-City Directory Image Report



EDR®

Environmental Data Resources Inc

6 Armstrong Road
Shelton, CT 06484
800.352.0050
www.edrnet.com

APPENDIX L:
SITE PHOTOGRAPHY



1 VIEW LOOKING NORTHEAST AT SITE FROM HWY. 17



2 VIEW LOOKING NORTH AT SITE FROM HWY. 17



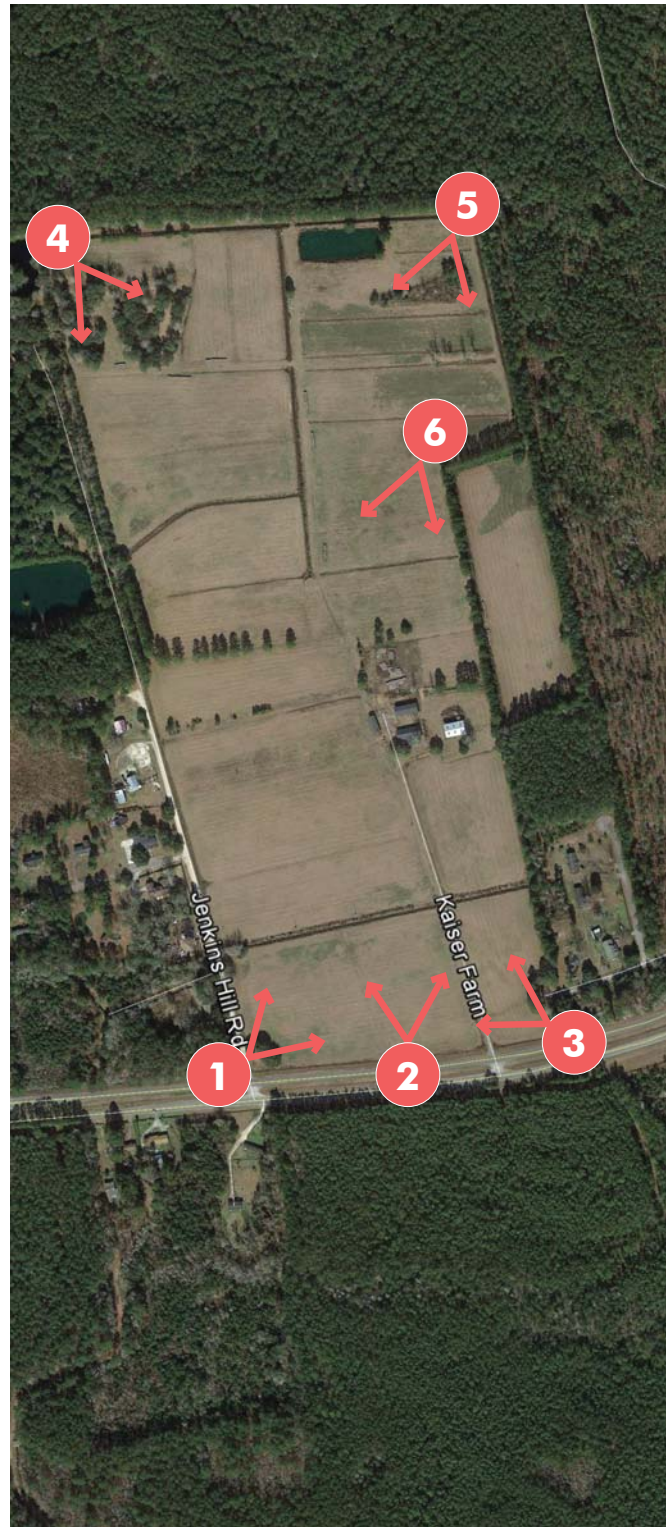
3 VIEW LOOKING NORTHWEST AT SITE FROM HWY. 17



4 VIEW LOOKING SOUTHEAST



5 VIEW LOOKING SOUTHWEST



AERIAL OF PROJECT SITE



6 VIEW LOOKING SOUTHWEST



NOTE: THIS PLAN IS CONCEPTUAL IN NATURE AND SUBJECT TO CHANGE.



EXISTING CONDITIONS PHOTOS
CHARLESTON COUNTY PUBLIC SCHOOLS
12/5/2019

APPENDIX M:
LETTERS OF COORDINATION



**Berkeley Electric
Cooperative, Inc.**

® Your Touchstone Energy® Cooperative 

February 19, 2020

Seamon Whiteside
C/o: Preston Busbee
501 Wando Park Boulevard, Suite 200
Mount Pleasant, SC 29464

**Re: Power Availability for New School Site Located in McClellanville
Charleston County, SC
TMS 711-00-00-052**

Dear Preston:

Berkeley Electric Cooperative will supply the electrical distribution requirements for the above referenced location. We look forward to extending our facilities to meet the needs of this property.

All services that are rendered will be under our service rules and regulations at the time of service. If you have any questions, please don't hesitate to give me a call.

Sincerely,



Kevin Mims
Supervisor of Distribution Design

KM/ts

Enclosure

Cc: Thomas Barnette, Manager of Construction and Maintenance
Nick VanAllen, Awendaw District Line Superintendent
Paul Elsey, Awendaw District Service Planner
Preston Busbee, Seamon Whiteside (emailed copy)
File

Berkeley Electric Cooperative, Inc. is an equal opportunity provider and employer.

Post Office Box 1234
Moncks Corner, SC 29461
(843) 761-8200
Fax (843) 572-1280

Post Office Box 128
Johns Island, SC 29457
(843) 559-2458
Fax (843) 559-3876

Post Office Box 1549
Goose Creek, SC 29445
(843) 553-5020
Fax (843) 553-6761

Post Office Box 340
Awendaw, SC 29429
(843) 884-7525
Fax (843) 884-3044

www.berkeleyelectric.coop

DAVID ABRAMS, JD
Director



Emergency Medical Services

843.202.6700
Fax: 843.202.6712
dabrams@charlestoncounty.org
Lonnie Hamilton, III Public Services Building
4045 Bridge View Drive, Suite B309
North Charleston, SC 29405-7464

February 13, 2020

Ms. Anna Lewis
Seamon Whiteside
501 Wando Park Blvd.
Suite 200
Mount Pleasant, SC 29464

RE: TMS# 710-00-00-052

Dear Ms. Lewis,

The Charleston County Emergency Medical Services (EMS) Department acknowledges your intention to rezone the above referenced properties. Charleston County EMS is the advanced life support paramedic first response and transport agency for this location – and all medical and trauma related incidents will need to be reported to this agency. This can be accomplished through the Charleston County Consolidated Dispatch Center by dialing 911.

EMS staff will be available to attend your scheduled Site Plan Review with Charleston County Planning Staff should our input be needed. If you have any questions or concerns please do not hesitate in contacting me.

Sincerely,

James Ciali
Assistant Chief

Preston Busbee

From: Mike S. Bowers <MBowers@charlestoncounty.org>
Sent: Thursday, February 27, 2020 11:55 AM
To: Preston Busbee
Cc: Larry D. Hall
Subject: Re: Letter of coordination

To whom it may concern,

Please allow this e-mail to serve as our (Awendaw-McClellanville Consolidated Fire Protection District) part of the required Letter of Coordination for the project at Hwy 17 and Jenkins Hill Road (Kaiser Farm). We provided Fire and First Responder Medical Response to this property as it is part of our Fire Protection District.

If you have any questions, or concerns, please contact me using the information below.

Michael S. Bowers
C-Shift Battalion Chief
Public Information Officer/Training Officer
Awendaw-McClellanville Consolidated Fire District
6384 Maxville Road
Awendaw, SC 29429
Cell (803) 600-7338
Work (843) 928-3000
Call Sign Battalion 902

"In many cases fires don't kill firefighters, and equipment doesn't save them. Decisions Do"

From: Preston Busbee <PBusbee@SeamonWhiteside.com>
Sent: Thursday, February 27, 2020 10:41 AM
To: Mike S. Bowers <MBowers@charlestoncounty.org>
Subject: RE: Letter of coordination

CAUTION: This email originated outside of Charleston County. Do not click links or open attachments from unknown senders or suspicious emails. If you are not sure, please contact IT helpdesk.

Chief Mike,

Thanks for reaching out.

The specific site is located at Kaiser Farm at TMS 711-00-00-052 and I have attached a location map for reference. The letter would just state that your departments provides fire service for this location.

Thank you and let me know if you have any questions.



Preston Busbee

From: Meekins, David J <MeekinsDJ@scdot.org>
Sent: Wednesday, March 11, 2020 8:39 AM
To: Preston Busbee; JuLeigh Fleming
Cc: Mary Martinich
Subject: RE: District 1 Middle High School (TMS 710-00-00-052) - Proof of Coordination Letter

Preston,

Thank you for providing the conceptual plan for the proposed new Lincoln Middle / High School Campus to be located outside of McClellanville on US 17 near the intersection of Duffield Road. Per our site review on February 4, 2020, and as stated in the subsequent report issued on February 12, 2020, we have assessed potential access locations and necessary roadway improvements to accommodate the additional traffic generated by the school.

Moving forward, SCDOT Headquarters and District Six Traffic Engineering offices will coordinate with your office during the plan phase and will issue a final concurrence once all items are addressed on the plans. Once concurrence has been received, you may initiate the permitting process for work performed on SCDOT maintained roadways. Please be aware that any work performed on Charleston County roadways will require additional coordination with the County regarding any requirements they may have, including their permitting process.

Please let me know if I can be of further assistance.

David J. Meekins

SCDOT - Traffic Engineering
School Operations – Room 217
955 Park Street
Post Office Box 191
Columbia, SC 29201-3959
803-737-1911
Meekinsdj@scdot.org



Safety 1st – Live By It!
Let 'em Work, Let 'em Live!

From: Preston Busbee <PBusbee@SeamonWhiteside.com>
Sent: Tuesday, March 10, 2020 4:20 PM
To: Meekins, David J <MeekinsDJ@scdot.org>; Fleming, Juleigh B. <FlemingJB@scdot.org>

SCHOOL SITE INFORMATION

Date Reviewed	2/4/2020
County	Charleston
Location	US 17 & Jenkins Hill Rd (Off-System) with Duffield Rd (Off-System)
School Type	Lincoln Middle & High Schools - Combined Facility

Recommendations

Attending - Rick Holt (Cumming Corp), Eric Aichele (LS3P), Preston Busbee (Seamon Whiteside), Jack Bonnette (OSF), David Meekins (SCDOT)
<p>This property was reviewed for the purpose of constructing a combined Middle and High School facility. The property is located 8 miles west of McClellanville and has approximately 1,185-feet of frontage along US 17 and 1,530-feet along Jenkins Hill Road (Off-System). Proposed student enrollment is 1000 total (500 MS/500 HS) with 250 student parking spaces and 120 staff.</p> <p>US 17 is a four-lane divided highway (earthen median) with a posted speed limit of 60 MPH and an Annual Average Daily Traffic (AADT) volume of 11,100. Existing left-turn lane provisions at median breaks on US 17 occur at the intersections with Jenkins Hill Road and the Kaiser Farm driveway. A conceptual plan illustrated proposed access occurring from Jenkins Hill Road, the Kaiser Farm driveway, and at the end of Duffield Road. SCDOT indicated that roadway improvements are necessary and include right-turn lanes at all the proposed access locations, modifications to offset and increase storage of the existing left-turn lanes at Jenkins Hill Road and the Kaiser Farm driveway, and a new offset left turn lane at Duffield Road.</p> <p>Jenkins Hill Road is a narrow dirt road that presently serves several residences, therefore, it was indicated that improvements are necessary to widen and pave to a width of 24-feet and include a four-lane configuration at its intersecting with US 17, consisting of 2-ingress lanes (left/right) and 2-egress lanes (left/right) to accommodate the increase and change in use by school traffic. Since Jenkins Hill Road is an Off-System road, the engineer should contact Charleston County to inquire about any standards and requirements they may have regarding this construction.</p> <p>Duffield Road is approximately 18-feet wide and 1,650-feet long that presently serves several residences and dead ends at the east side of the property. It was proposed as low volume use only for staff or emergency access. Since Jenkins Hill Road is also an Off-System road, the engineer should contact Charleston County to inquire about any guidelines they may have regarding the proposed change in use.</p> <p>All roadway improvements are to be completed prior to the school's opening and the associated costs are the responsibility of the School District. These cost could include additional right-of-way and any above or below ground utility relocations. Therefore, the School District should anticipate and budget accordingly for these improvements as part of the overall construction costs.</p> <p>Finally, SCDOT recommended that the architect and engineer hired by the School District work closely with SCDOT's Traffic Engineering Headquarters office in Columbia, SC (David Meekins) on any conceptual site layout. The school site and roadway improvement plans would need to be reviewed and concurred with by SCDOT's Traffic Engineering Headquarters office prior to applying online for an encroachment permit from SCDOT.</p>

Office of the Sheriff



County of Charleston

Sheriff J. Al Cannon, Jr.

February 26, 2020

Seamon, Whiteside and Associates, Inc.
Attn: Mary Martinich
501 Wando Park Blvd.
Suite 200
Mt. Pleasant, SC, 29464

re: Letter of Coordination

Ms. Martinich,

The Charleston County Sheriff's Office acknowledges your intention to develop property located in the area of 1119 Jenkins Hill Road, Awendaw, South Carolina, 29429. This location is currently under the jurisdiction of this agency.

Please understand that *all* law enforcement matters will need to be reported to this agency. This can be accomplished by calling the **Charleston County Consolidated Dispatch Center** at **843-743-7200** or dialing **911 for emergencies**. Additional information can be accessed on our agency website at www.ccsso.charlestoncounty.org.

If you have any questions, feel free to contact this office via telephone or by email.

Regards,

Sgt. H. M. Phillips

Sergeant Harold M. Phillips
Community Affairs
Charleston County Sheriff's Office
(843) 529-6221
hphillips@charlestoncounty.org

Administrative Office

3691 Leeds Avenue
N. Charleston, SC 29405
~ Sheriff ~
Voice (843) 554-2230
Fax (843) 554-2243

Law Enforcement Division

3691 Leeds Avenue
N. Charleston, SC 29405
~ Patrol ~
Voice (843) 202-1700
Fax (843) 554-2234

Al Cannon Detention Center

3841 Leeds Avenue
N. Charleston, SC 29405
Voice (843) 529-7300
Fax (843) 529-7406

Judicial Center

100 Broad Street, Suite 381
Charleston, SC 29401
Voice (843) 958-2100
Fax (843) 958-2128

Preston Busbee

From: McCall, Danny W - Taylors, SC <dwayne.mccall@usps.gov>
Sent: Monday, January 27, 2020 3:13 PM
To: Preston Busbee
Cc: Nelson, Ronice N - McClellanville, SC; McCall, Danny W - Taylors, SC
Subject: RE: District 1 Middle High School Coordination Letter

Mr. Busbee,

Thank you for contacting the US Postal Service. Below is the coordination information requested.

The Postal Service will deliver mail to any customer provided the delivery points meet the following requirements:

- Roads or Streets must be passible.
- Roads or Streets must be non-private.
- Roads or Streets must be properly maintained.
- Mail carriers must not be subjected to loose or feral animals.
- A centralized location must be established to prevent the mail carrier from leaving the conveyance of the vehicle and traveling on foot a long distance. Location must be approved by Local Postal Official.
- The delivery point is established with safety considerations for mail carrier and customer.
- The delivery point offers a means to properly turn around without backing.
- The delivery point must not exceed half mile one way from the mail carrier's previous delivery point.
- The delivery apparatus must be postal approved.
- There must not be any barriers, gates, ravines, ditches or load limited bridges preventing the mail carrier from safely and efficiently conducting mail delivery.

It is highly recommended you or a representative contact the Awendaw/McClellanville Postmaster, Ms. Ronice Nelson, for further dialogue on the selected area and discuss the mode of mail delivery and its location.

Thank you,

Wayne McCall
Operations Programs Support Specialist
Growth Management Coordinator
Greater S.C. District
864-244-1896
803-206-4862

From: Preston Busbee [mailto:PBusbee@SeamonWhiteside.com]
Sent: Monday, January 27, 2020 3:04 PM
To: McCall, Danny W - Taylors, SC <dwayne.mccall@usps.gov>

Cc: Anna Lewis <ALewis@SeamonWhiteside.com>; Betsy Ellingson <BELLingson@SeamonWhiteside.com>; Mary Martinich <MMartinich@seamonwhiteside.com>

Subject: [EXTERNAL] District 1 Middle High School Coordination Letter

Danny,

I hope you are well. We are working on a proposed Middle/High School located in McClellanville off of HWY 17. The site location is known as Kaiser Farm and is located at TMS: 710-00-00-052. I have attached a site location map for your reference.

In order for this project to move forward, we are submitting a Planned Development to Charleston County. As part of the guidelines, the county is asking us to compile Proof of Coordination letters from several different service providers. Can you provided a USPS proof of coordination for this proposed school site.

Thank you for your help.



Preston Busbee
Civil Engineering Project Manager
(803) 606-4972 cell
PBusbee@SeamonWhiteside.com
www.seamonwhiteside.com

8067
1

Steven L. Thigpen, P. E.
Director of Public Works



843.202.7600
Fax: 843.202.7601
sthigpen@charlestoncounty.org
Lonnie Hamilton III Public Services Building
4045 Bridge View Drive, Suite A301
North Charleston, SC 29405

February 20, 2020

Ms. Mary Martinich
Seamon Whiteside
501 Wando Park Boulevard, Suite 200
Mount Pleasant, SC 29464

RE: AWENDAW / MCCLELLANVILLE MIDDLE SCHOOL HIGH SCHOOL
PLANNED DEVELOPMENT TMS # 711-00-00-052

Dear Ms. Martinich:

We have reviewed the draft Awendaw / McClellanville Middle School High School Planned Development for construction of an institutional / educational development on Highway 17 at TMS No. 711-00-00-052. At present, this letter represents sufficient coordination with the Public Works Stormwater Division in order to continue the revised planned development rezoning process for the property.

As long as the proposed operations development is in compliance with the Charleston County Stormwater Program Permitting Standards and Procedures Manual you should be able to obtain a permit. Additional review, coordination, and approval by the Public Works Department will be required during the County Stormwater permitting review and process.

Sincerely,

Chris Wannamaker, P.E.
Stormwater Program Manager

cc: Niki Grimball - Charleston County Planning Department

APPENDIX N:

EXISTING BUILDINGS

Kaiser Farm Structures



4 (Carriage House front and back)

Community Meeting Memo

PROJECT NAME: HIGH SCHOOL/MIDDLE SCHOOL IN
AWENDAW PD

PROJECT NUMBER: 8076

PREPARED BY: MEM

DATE: 2/27/2020

COMMUNITY MEETINGS HELD FOR THE PD:

1. Community meeting #1
 - a. Location: St. James Santee Elementary School in Awendaw
 - b. Date: December 5, 2020
 - c. 58 Participants
 - d. Activities: Presentation, Open House, Community Table Programming Game & Feedback
2. Community meeting #2
 - a. Location: St. James Santee Elementary School in Awendaw
 - b. Date: January 21, 2020
 - c. 76 Participants
 - d. Activities: Presentation, Open House, Community Feedback
3. Community meeting #3
 - a. Location: Wando Mt. Pleasant Library in Mt. Pleasant
 - b. Date: January 23, 2020
 - c. 23 Participants
 - d. Activities: Presentation, Open House, Community Feedback

See attached presentations and flyers for each community meeting.

SECOND COMMUNITY MEETING

**TOPIC: Next Steps for Planning Development
Zoning Process for Future Middle/High
School in Awendaw**

All Community Members Welcome

**Thursday, January 23, 2020
6:00pm-7:00pm
Wando Mt. Pleasant Library
1400 Carolina Park Blvd
Mt Pleasant, SC 29466**

**Please visit CCSD's Planning & Real Estate Webpage to review the
Powerpoint from the previous meeting.**

"Coming together is a beginning. Keeping together is progress. Working together is success." – HENRY FORD

SECOND COMMUNITY MEETING

**TOPIC: Next Steps for Planning Development
Zoning Process for Future Middle/High
School in Awendaw**

All Community Members Welcome

**Tuesday, January 21, 2020
6:00pm-7:00pm
St. James-Santee Elementary
8900 North Hwy 17
McClellanville, SC 29458**

**Please visit CCSD's Planning & Real Estate Webpage to review the
Powerpoint from the previous meeting.**

"Coming together is a beginning. Keeping together is progress. Working together is success." – HENRY FORD

ZREZ-03-21-00125

Public Input

From: wallace.awendaw@tds.net
To: [CCPC](#)
Cc: [Thomas Colleton](#); ksalisbury@charlestoncounty.org
Subject: Charleston County School Board rezoning
Date: Friday, May 07, 2021 10:23:16 AM

CAUTION: This email originated outside of Charleston County. Do not click links or open attachments from unknown senders or suspicious emails. If you are not sure, please contact IT helpdesk.

The Town of Awendaw is opposed to the application ZREZ-03-21-00125 to rezone TMS 711-00-00-052 from AG-10 to PD-181. This is a very poor location for a new school facility. It is an isolated site that does not contribute to the citizen's needs in Awendaw or McClellanville. A school is not merely a box to place children in for a few hours a day. It must fit into the long range plans of the surrounding communities. The Town continues to believe that a site near the intersection of Seewee Road and N. Highway 17 is a much better location. We feel that the School Board has not made a reasonable effort to consider that site. Water and sewer are available at that location and not at the proposed rezoning site. The majority of students to be attend the new high school would live near that site and could bike or walk to school on the Town's proposed East Coast Greenway which would run through that location. The CCSD proposed location in not near any existing or proposed residential areas large enough to provide an adequate number of students. Every student would have to travel several miles by car or bus to reach the school. Please consider the overall impact on the community to be served and not just the ease of development on the proposed CCSD site. Thank you for your consideration of our position.

--

Bill Wallace, FAICP
Town of Awendaw Administrator
843.928.3100

Mayor
Rutledge B. Leland, III

Town Council
Aaron L. Baldwin
Christopher B. Bates
Robert J. Gannon
James E. Scott



405 Pinkney Street
McClellanville, SC 29458

Town Administrator
Michelle A. McClellan

Zoning Administrator
Kathryn S. Basha

Phone: (843) 887-3712

Fax: (843) 887-3094

Friday, June 04, 2021

Charleston County Council
4045 Bridge View Drive
N. Charleston, SC 29405

Dear Council Members:

I am writing to express support of Charleston County School District's request to rezone TMS 711-00-00-052 (Kaiser Farm Tract) located at 7820 N. Highway 17 from the Agricultural Preservation 10 Zoning District to the Planned Development, PD-176, High School/Middle School in Awendaw Zoning District.

The location of the proposed school is within a reasonable driving distance to the Town of McClellanville and we feel that having a school at this location would be a positive step for the future as growth in the McClellanville area continues to rise.

McClellanville Town Council supports the School District's application to rezone the Kaiser Farm Tract to Planned Development. Please do not hesitate to contact me if you have any questions. Thank you for your time and consideration.

Sincerely,

Rutledge B. Leland III, Mayor
Town of McClellanville

From: [chyrel57](#)
To: [CCPC](#)
Subject: Rezoning of TMS 711 00 00 052
Date: Saturday, May 15, 2021 1:22:30 PM

CAUTION: This email originated outside of Charleston County. Do not click links or open attachments from unknown senders or suspicious emails. If you are not sure, please contact IT helpdesk.

I am a longtime resident of this area born and raised. The zone in which you want to use is far to close to the homes of alot of the area's older people that's resided here in this area for many many years. And to have a school in the area that close to homes will be by far way to much Noise!!. This area has always been a peaceful place to live, now you're wanting to put a school there would definitely be disruptive, not to mention that you'd also be disturbing the wildlife that surrounds this area. With all of the building going on around us now..you've already managed to migrated animals into our area that's always been & stayed away from humans but now they have no other choice but to roam, and find their way into our yards.

It seems that you are more Interested in making money than showing concerns about people in the rural areas. We all live in the COUNTRY for a reason and really don't want our area to become overwhelmed as Mt.Pleasants' become(Not to mention the TRAFFIC).Please don't get me wrong, I am all for change but our neighborhood is just as we've lived, loved & enjoyed this long and totally enjoying our Peacefulness. Please do take that into consideration!!!

I thank you for giving me this chance to voice my thoughts and opinions!

Out Here its called the COUNTRY for a PEACEFUL REASON. Thank You again.

--Chyrel A. Jenkins

Sent via the Samsung Galaxy S7 edge, an AT&T 4G LTE smartphone