



## MEMORANDUM

**Date:** April 15, 2022

**To:** Donald Whipple, AICP

**From:** Emily Drahos, PWD, PWS

**Subject:** Battle Road Apartments Investigation

**CC:** Kim Mikel (City of Hampton), Taylor Sprenkle (WRA), Lynn Allsbrook (WRA)

**Work Order Number:** 19282-003

**Contract Number:** 19282

**Project:** Battle Road Apartments

Mr. Whipple:

On March 16, 2022, WRA conducted a site visit and third party review of a previous wetland delineation conducted at the proposed Battle Road Apartments Site (aka Sarah Bonwell Hudgins property). The previous delineation was conducted by Wetland Studies and Solutions, Inc. (WSSI) on August 30, 2021. Additionally, WRA conducted a site reconnaissance of the Hampton School Board Parcel (PIN 5000038) directly north of the proposed Battle Roads Apartments Site to investigate if the RPA previously determined by the City on the Mallory property (based off the delineation depicted on the AES figure dated November 21, 2017) extended to the Battle Road Apartments Site (see Attachment 1) . Below are our findings.

- In our professional opinion, the wetland delineation lines depicted on WSSI's RPA figure, dated December 14, 2021, are correct. Please note that WSSI's wetland delineation lines are subject to USACE confirmation.
- Based on our site reconnaissance, the attached documentation, AES's figure dated November 21, 2017, and the City's previous RPA determination on the AES wetlands, it is our opinion that the entire School Board Parcel (PIN 5000038) is made up of non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow, as defined in the City's zoning ordinance. Please note that the site reconnaissance conducted on the School Board Parcel does not constitute a formal wetland delineation or jurisdictional determination. A formal wetland delineation involves the preparation of a delineation report and a jurisdictional determination requires submittal of a delineation report to regulatory agencies for their approval.
- Based on our site reconnaissance, AES's figure dated November 21, 2017, and the City's previous RPA determination on the AES wetlands, the RPA would extend through the School Board Parcel (PIN 5000038) to the proposed Battle Roads Apartments site (see Attachment 1). It is our opinion that the green wetlands depicted on WSSI's wetland delineation figure, dated December 14, 2021, would be nontidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow. The pink wetlands (isolated wetlands) depicted on WSSI's figure would not be connected by surface flow and would not be contiguous to tidal wetlands or water bodies with perennial flow; therefore, these isolated wetlands would not be RPA features. Please note that the isolated nature of wetlands is determined by USACE and is subject to USACE confirmation.

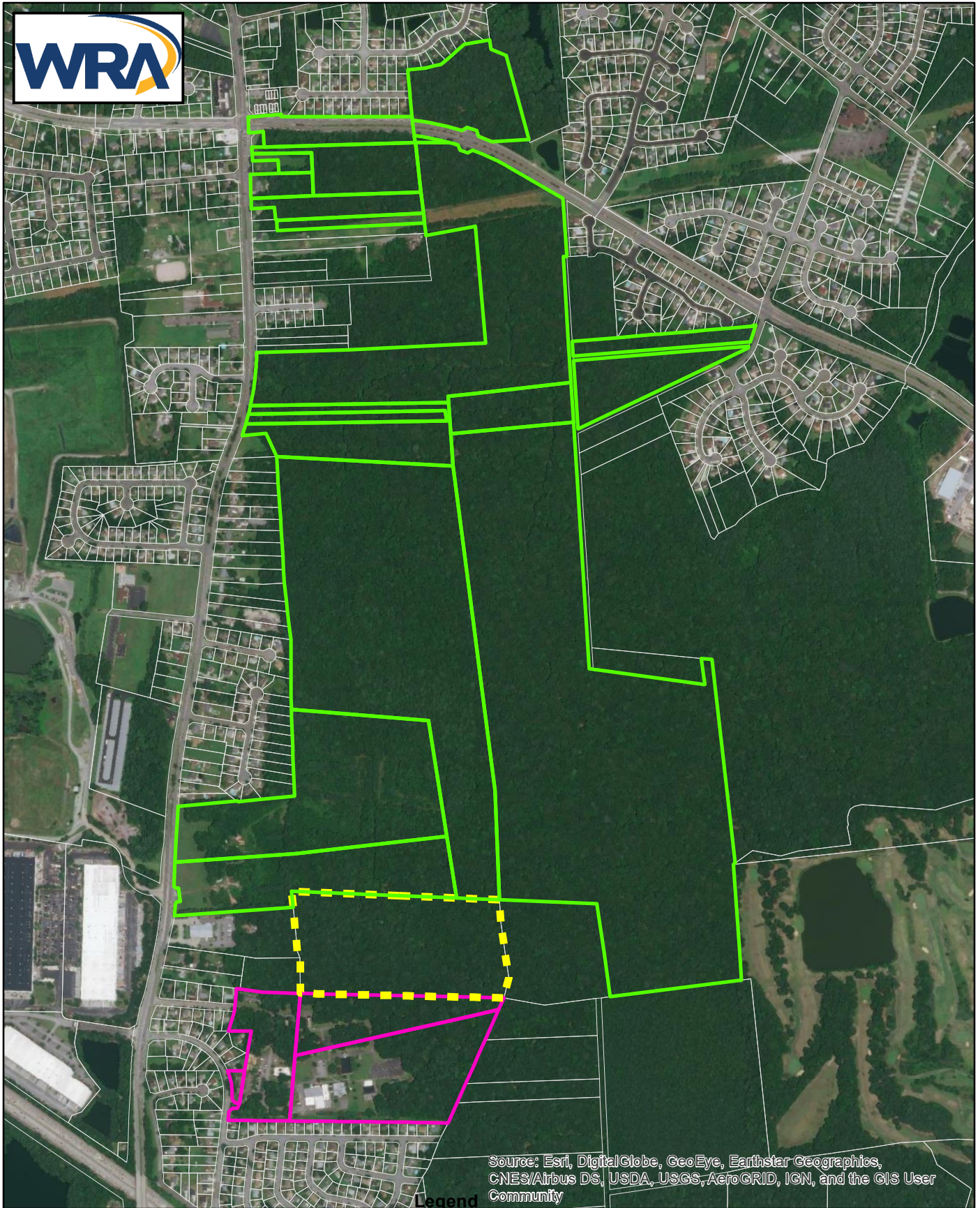
Please contact me at edrahos@wrallp.com or 804-327-5227 if you have any questions or require any additional information.

Thank you,

Emily C. Drahos

# Attachment 1: Project Vicinity





Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

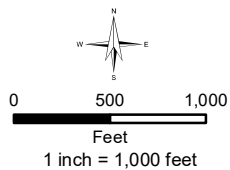
**Legend**

- Mallory Property - Approx. AES Delineation Area
- Hampton School Board Parcel (PIN 5000038)
- Battle Road Apartments Site - WSSI Delineation Area
- Parcels

**WRA Project No.:**  
19282-003

**Title: Battle Road Apts Investigation**  
City of Hampton, Virginia

**Date:** 3/25/2022



**Source:** Hampton Roads Planning District Commission

**Exhibit 1:**  
Project Vicinity

# Attachment 2: School Board Parcel Data Point

**WETLAND DETERMINATION DATA FORM – Atlantic and Gulf Coastal Plain Region**

Project/Site: Battle Road Apartments RPA Investigation City/County: City of Hampton Sampling Date: 03/16/2022  
 Applicant/Owner: City of Hampton State: VA Sampling Point: FDP-Wet-1  
 Investigator(s): ED, LK Section, Township, Range: \_\_\_\_\_  
 Landform (hillslope, terrace, etc.): Flat Local relief (concave, convex, none): None Slope (%): 0-2%  
 Subregion (LRR or MLRA): LRR T; MLRA 153B Lat: 37.070863 Long: -76.420984 Datum: NAD 1983  
 Soil Map Unit Name: Tomotley-Urban land complex, 0 to 2 percent slopes NWI classification: PFO  
 Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No \_\_\_\_\_ (If no, explain in Remarks.)  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ significantly disturbed? Are "Normal Circumstances" present? Yes  No \_\_\_\_\_  
 Are Vegetation \_\_\_\_\_, Soil \_\_\_\_\_, or Hydrology \_\_\_\_\_ naturally problematic? (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No _____ Hydric Soil Present? Yes <input checked="" type="checkbox"/> No _____ Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No _____	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No _____
Remarks:   	

**HYDROLOGY**

<b>Wetland Hydrology Indicators:</b> Primary Indicators (minimum of one is required; check all that apply)	<b>Secondary Indicators (minimum of two required)</b>
<input checked="" type="checkbox"/> Surface Water (A1)      _____ Aquatic Fauna (B13) <input checked="" type="checkbox"/> High Water Table (A2)      _____ Marl Deposits (B15) <b>(LRR U)</b> <input checked="" type="checkbox"/> Saturation (A3)      _____ Hydrogen Sulfide Odor (C1) _____ Water Marks (B1)      _____ Oxidized Rhizospheres along Living Roots (C3) _____ Sediment Deposits (B2)      _____ Presence of Reduced Iron (C4) _____ Drift Deposits (B3)      _____ Recent Iron Reduction in Tilled Soils (C6) _____ Algal Mat or Crust (B4)      _____ Thin Muck Surface (C7) _____ Iron Deposits (B5) <input checked="" type="checkbox"/> Other (Explain in Remarks) _____ Inundation Visible on Aerial Imagery (B7) <input checked="" type="checkbox"/> Water-Stained Leaves (B9)	_____ Surface Soil Cracks (B6) _____ Sparsely Vegetated Concave Surface (B8) _____ Drainage Patterns (B10) _____ Moss Trim Lines (B16) _____ Dry-Season Water Table (C2) _____ Crayfish Burrows (C8) _____ Saturation Visible on Aerial Imagery (C9) _____ Geomorphic Position (D2) _____ Shallow Aquitard (D3) <input checked="" type="checkbox"/> FAC-Neutral Test (D5) _____ Sphagnum moss (D8) <b>(LRR T, U)</b>
<b>Field Observations:</b> Surface Water Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>2"</u> Water Table Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0"</u> Saturation Present? Yes <input checked="" type="checkbox"/> No _____ Depth (inches): <u>0"</u> (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: <b>Microtopographic relief and buttressed trunks.</b>	



**VEGETATION (Four Strata) – Use scientific names of plants.**

Sampling Point: FDP-Wet-1

Tree Stratum (Plot size: <u>30 feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u><i>Pinus taeda</i></u>	25	Yes	FAC
2. <u><i>Quercus bicolor</i></u>	20	Yes	FACW
3. <u><i>Quercus alba</i></u>	15	Yes	FACU
4. <u><i>Acer rubrum</i></u>	10	No	FAC
5. <u><i>Liquidambar styraciflua</i></u>	5	No	FAC
6. _____			
7. _____			
8. _____			
	75 = Total Cover		
	50% of total cover: <u>37.5</u>	20% of total cover: <u>15</u>	

Sapling/Shrub Stratum (Plot size: <u>30 feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u><i>Liquidambar styraciflua</i></u>	15	Yes	FAC
2. <u><i>Acer rubrum</i></u>	10	Yes	FAC
3. <u><i>Vaccinium fuscatum</i></u>	10	Yes	FACW
4. <u><i>Ilex opaca</i></u>	5	No	FAC
5. _____			
6. _____			
7. _____			
8. _____			
	40 = Total Cover		
	50% of total cover: <u>20</u>	20% of total cover: <u>8</u>	

Herb Stratum (Plot size: <u>30 feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. <u><i>Chasmanthium laxum</i></u>	15	Yes	FACW
2. <u><i>Smilax rotundifolia</i></u>	1	No	FAC
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			
	16 = Total Cover		
	50% of total cover: <u>8</u>	20% of total cover: <u>3.2</u>	

Woody Vine Stratum (Plot size: <u>30 feet</u> )	Absolute % Cover	Dominant Species?	Indicator Status
1. _____			
2. _____			
3. _____			
4. _____			
5. _____			
	0 = Total Cover		
	50% of total cover: <u>0</u>	20% of total cover: <u>0</u>	

**Dominance Test worksheet:**

Number of Dominant Species That Are OBL, FACW, or FAC: 6 (A)

Total Number of Dominant Species Across All Strata: 7 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 86% (A/B)

**Prevalence Index worksheet:**

Total % Cover of:	Multiply by:
OBL species _____	x 1 = <u>0</u>
FACW species _____	x 2 = <u>0</u>
FAC species _____	x 3 = <u>0</u>
FACU species _____	x 4 = <u>0</u>
UPL species _____	x 5 = <u>0</u>
Column Totals: <u>0</u> (A)	<u>0</u> (B)

Prevalence Index = B/A = \_\_\_\_\_

- Hydrophytic Vegetation Indicators:**
- 1 - Rapid Test for Hydrophytic Vegetation
  - 2 - Dominance Test is >50%
  - 3 - Prevalence Index is ≤3.0<sup>1</sup>
- Problematic Hydrophytic Vegetation<sup>1</sup> (Explain)

<sup>1</sup>Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

**Definitions of Four Vegetation Strata:**

**Tree** – Woody plants, excluding vines, 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

**Sapling/Shrub** – Woody plants, excluding vines, less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

**Herb** – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

**Woody vine** – All woody vines greater than 3.28 ft in height.

**Hydrophytic Vegetation Present?** Yes  No

Remarks: (If observed, list morphological adaptations below).

**SOIL**

Sampling Point: FDP-Wet-1

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		
0-4	10YR 3/1	100					Sandy loam	
4-8	10YR 3/1	50					Sandy loam	Mixed matrix
	10YR 4/2	50					Sandy loam	
8-16	10YR 6/1	90	10YR 6/6	10	C	M	Sandy loam	
16-18	10YR 6/1	80	10YR 6/6	10	C	M	Sandy clay loam	
			7.5Y 5/8	10	C	M	Sandy clay loam	

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

<sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Organic Bodies (A6) (LRR P, T, U)
- 5 cm Mucky Mineral (A7) (LRR P, T, U)
- Muck Presence (A8) (LRR U)
- 1 cm Muck (A9) (LRR P, T)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Coast Prairie Redox (A16) (MLRA 150A)
- Sandy Mucky Mineral (S1) (LRR O, S)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7) (LRR P, S, T, U)

- Polyvalue Below Surface (S8) (LRR S, T, U)
- Thin Dark Surface (S9) (LRR S, T, U)
- Loamy Mucky Mineral (F1) (LRR O)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR U)
- Depleted Ochric (F11) (MLRA 151)
- Iron-Manganese Masses (F12) (LRR O, P, T)
- Umbric Surface (F13) (LRR P, T, U)
- Delta Ochric (F17) (MLRA 151)
- Reduced Vertic (F18) (MLRA 150A, 150B)
- Piedmont Floodplain Soils (F19) (MLRA 149A)
- Anomalous Bright Loamy Soils (F20) (MLRA 149A, 153C, 153D)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) (LRR O)
- 2 cm Muck (A10) (LRR S)
- Reduced Vertic (F18) (outside MLRA 150A,B)
- Piedmont Floodplain Soils (F19) (LRR P, S, T)
- Anomalous Bright Loamy Soils (F20) (MLRA 153B)
- Red Parent Material (TF2)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

Remarks: