



Conditional Use Permit Application

Cell VII Landfill and Soil Borrow and Vegetative
Composting in Future Cells VIII and IX Area

SPSA Regional Landfill

Suffolk, Virginia

June 2016



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City of Suffolk – Conditional Use Permit Application

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City of Suffolk, Virginia

Department of Planning & Community Development

Division of Planning

Conditional Use Permit

This application should be used to petition for a permit for certain uses which, because of their unique characteristics or potential impacts on adjacent land uses, are not generally permitted in certain zoning districts as a matter of right, but which may, under the right set of circumstances and conditions be acceptable in certain specific locations. The following application requirements are consistent with the procedure set forth in Section 31-306 "Conditional Use Permits" and Appendix B, Section B-5 of the Unified Development Ordinance.

DO NOT WRITE IN THIS SPACE
(For Office Use Only)

Application: C - _____

Fees Paid _____

Submission Date: _____

Tax Query: [] Current [] Delinquent

1. **APPLICATION FOR:**

[X] Conditional Use Permit

This use is listed as Conditional Use in the M-2 zoning district as per Table 406-1 in Article 4 of the Unified Development Ordinance.

Project Name: SPSA Cell VII Landfill and Borrow Areas

Proposed Use or Activity: Solid Waste Management Facility (Cell VII), Sand and Gravel Excavation and Vegetative Waste Composting System (Future Cells VIII and IX area)

2. **PROPERTY DESCRIPTION:**

Property Address (if any): #1 Bob Foeller Drive, Suffolk, VA 23434

Name of Subdivision (if applicable): _____

Total Acreage (existing): 525 Ac (202 Acres for Cells VII, VIII and IX)

Zoning District: Mixed M-2 and A (A District to be Conditionally Rezoned to M-2 Contemporaneously)

Tax Assessor's Map and Parcel # 27*28A

Tax Account Number: 304305400

3. **APPLICANT INFORMATION (complete if different from the property owner):**

Name: Rowland R. Taylor, Executive Director

Company: Southeastern Public Service Authority

Address: 723 Woodlake Drive, Chesapeake, VA 23320

Telephone Number: 757-961-3740

Fax Number: 757-965-9528

Email: rtaylor@spsa.com

Applicant's Signature

Date

Applicant's Signature

Date

4. AUTHORITY FOR APPLICATION

This application must be signed by the owner(s) of the subject property or must have attached to it written evidence of the owner’s consent, which may be in the form of a binding contract of sale with the owner’s signature or a letter signed by the owner(s) authorizing the applicant to act as his or her agent. Signing this application shall constitute the granting of authority of the City to enter onto the property for the purpose of conducting site analyses.

PROPERTY OWNER(S):

Name(s): Southeastern Public Service Authority

Address: 723 Woodlake Drive, Chesapeake, VA 23320

Telephone Number: 757-961-3740 Fax Number: 757-965-9528

Email: rtaylor@spsa.com

Property Owner Signature *Date* *Property Owner Signature* *Date*

Name(s): _____

Address: _____

Telephone Number: _____ Fax Number: _____

Email: _____

Property Owner Signature *Date* *Property Owner Signature* *Date*

Name(s): _____

Address: _____

Telephone Number: _____ Fax Number: _____

Email: _____

Property Owner Signature *Date* *Property Owner Signature* *Date*

AGENT REPRESENTING THE APPLICANT:

Name(s): Jeffrey S. Murray, P.E.

Company: HDR Engineering, Inc.

Address of Applicants(s): 555 Fayetteville Street, Suite 900, Raleigh, NC 27601

Telephone Number: 919-232-6682 Fax Number: 919-232-6642

Email: jeffrey.murray@hdrinc.com

Agent’s Signature *Date* *Agent’s Signature* *Date*

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

Remit Application to: City of Suffolk Planning Department
442 West Washington Street · P.O. Box 1858, Suffolk, Virginia 23439-1858 ·
Phone (757) 514-4060 · Fax (757) 514-4099 www.suffolkva.us



CONDITIONAL USE PERMIT

In accordance with Appendix B, Section B-5, of the Unified Development Ordinance, Permit shall include for a conditional use, the following information shall be submitted for a Conditional Use Permit Application.

No application for a conditional use permit shall be certified as complete unless the following information is provided:

1. A properly completed and signed application form and fee. The property owner(s) must sign the application.
2. A narrative description of the property which shall include the Tax Map and Parcel Number or, in the case of a recorded subdivision, the Subdivision name, Section, Block, and Lot Number.
3. A narrative description of the proposed use(s) of the property.
4. 15 (24" x 36") FOLDED plans of the site with one reduction, 11"x 17", prepared to a scale to show all existing and proposed physical improvements and such other information as is necessary to clearly indicate to the Planning Commission and the City Council that adequate provisions shall be made for compliance with all standards for that particular use and the extent of the property to be so used on a given parcel or parcels. See enclosed Drawings 00C-01 Master Plan and 00C-02 Site Plan
5. Property owner's signature or written consent.
6. Such supplemental material (i.e. traffic studies, environmental assessments, etc.) as may be necessitated by the proposal itself or the district in which located or proposed to be located including, at a minimum*, the following with the designated number of copies (x):
 - a. A Public Facilities Report in accordance with Appendix B, Section B-19 of the Unified Development Ordinance. (3)
 - b. A Traffic Impact Study in accordance with Appendix B, Section B-21 of the Unified Development Ordinance. (5)
 - c. A Major Water Quality Impact Assessment if located within the Chesapeake Bay Preservation Overlay District (in accordance with Appendix B, Section B-13 of the Unified Development Ordinance. (4)
 - d. A Fiscal Impact Analysis Appendix B, § B-14 (3) – For cluster development with a bonus density increase. (3)

e. An Environment Site Assessment – Required for residential, assembly, day care, group home, recreation, library or similar use. In accordance with Section 31-616 of the Unified Development Ordinance and Appendix B, Submittal Requirements – Copies (2)

7. Such other information as may be necessary to demonstrate compliance with any applicable standard of this ordinance.

8. All real estate taxes must be paid and current at the time of submittal; otherwise, the submittal will be refused at the counter.

* Any request for a waiver from any supplemental item must be submitted to the Director of Planning and approved prior to submittal of the Conditional Use Permit application.

See letter from HDR to Mr. Robert Goumas dated June 7, 2016, regarding request for waivers.

This form must accompany all Conditional Use Permit applications and be signed by the responsible party certifying that the items noted above have fully addressed as part of their submittal.

I, _____ certify that this application is complete.

Name

Date

1 Purpose and Project Summary

This narrative is being submitted as part of the Southeastern Public Service Authority's (SPSA) application for a Conditional Use Permit for modification to its Regional Landfill, located at #1 Bob Foeller Drive in the City of Suffolk. The modification includes the proposed Solid Waste Management Facility use with the construction of a new landfill cell, Cell VII, on the existing landfill site. Cell VII will be located adjacent to the eastern boundary of Cell V and will be comprised of approximately 73 acres, of which approximately 56.1 acres will be disposal area. Cell VII will be constructed within the area currently permitted by the City for soil borrow operations under ESC-2009-00002. Cell VII received construction approval from the Virginia Department of Environmental Quality (VADEQ) on June 8, 2011 as an amendment to its solid waste facility permit, Permit #417.

It is anticipated that construction of Cell VII will take place one to two years prior to the completion of waste filling operations in Cells V and VI. Cell V and VII operations are anticipated to continue through at least 2024, based on current and anticipated disposal rates, and could possibly extend up to 2040 depending on the success of planned alternative waste disposal strategies. Therefore, SPSA is requesting that the scope of the approval for establishing, discontinuing, and maintaining the conditional uses as described in this project summary be indefinite, as opposed to the 2-year time frame and term per Section 31-306(f) of the UDO.

In addition to development of Cell VII, SPSA is requesting approval of a conditional use for the operation of a sand or gravel extraction area (soil borrow) within the future Cells VIII and IX area. The Cells VIII and IX area encompasses approximately 129 acres and includes the future waste cell boundaries and ancillary support systems for access roadways and stormwater management. The development of the soil borrow area will likely be required prior to construction of Cell VII in order to support ongoing landfill operations. SPSA is also requesting approval of a conditional use for the operation of a vegetative waste composting system within the 129 acre area, concurrent with soil borrow operations.

Drawings 00C-01 and 00C-02 (attached) depict a Master Plan, and a Site Plan for the proposed conditional uses. The Master Plan includes the approximate boundaries of future landfill cells in relation to the existing solid waste management facilities and the preserved, restored and enhancement wetland areas on the site. The Site Plan depicts the proposed areas covered by the Conditional Use Permit Application, existing facilities, existing utility easements, wetland preservation areas, and proposed property line and tree buffer for Cell VII.

2 Background

The Southeastern Public Service Authority (SPSA) is the regional solid waste disposal agency for eight communities in southeastern Virginia. These communities include the cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk and Virginia Beach and the counties of Isle of Wight and Southampton. SPSA's 2000-square mile service area is home to more than 1.1 million residents who generate more than one million tons of solid waste each year. SPSA provides for the safe disposal of municipal wastes generated within its member communities.



SPSA operates an integrated solid waste management system, which includes the Regional Landfill in Suffolk, nine transfer stations located throughout the service area, and contracts for disposal of processible waste at Wheelabrator Technologies, Inc. (Wheelabrator) waste-to-energy facility located in Portsmouth, Virginia. The contract with Wheelabrator expires in January 2018, and SPSA has entered into an agreement with RePower South, LLC (RePower), with respect to a new facility proposed to be constructed in Chesapeake, Virginia. The RePower facility will process the disposed waste stream to remove additional recyclables and to produce fuel pellets for use at coal and biomass power generating facilities. The residue from the RePower and non-processible wastes are anticipated to be disposed of at the SPSA Regional Landfill.

Other components of SPSA's solid waste system include recycling programs, three permanent household hazardous waste collection facilities, and several landfill ancillary facilities described below. In 2015, SPSA handled over 1 million tons of waste, of which approximately 39% was delivered by the member communities. In 2015 approximately 295,000 tons of waste were managed at SPSA for disposal at the Regional Landfill.

3 Project Description

The Regional Landfill is located on an 833-acres property of US 58, approximately 2.5 miles southwest of the City of Suffolk and Chesapeake line. The property is comprised of three parcels Tax Map #'s 27*37, 27*37*1, and 27*28A. The existing landfill Cells I-VI are located on portions of the property zoned M-2. Cell VII is proposed to be constructed in an area of Map #27*28*A that is also zoned M-2, however the soil borrow area within the future Cells VIII and IX are located on the part of 27*28A that is currently zoned A. An application for Conditional Rezoning of that part of the property to M-2 is being submitted concurrent with this Conditional Use Permit Application.

The following ancillary facilities are also located on the Landfill site:

- Clearfield MMG Soil Processing Facility
- Tire Processing Facility
- BioGas Energy Solutions Landfill Gas-to-Energy Plant
- Administration/maintenance Building
- Household Hazardous Waste Collection Facility
- White Goods/Scrap Metals Collection Area
- Vehicle and Equipment Wash Facility
- Leachate ponds and pump-station
- Citizen's Waste Drop-off Area
- Transfer Station
- A Scalehouse

Cells I through VI of the landfill encompass approximately 191 acres of the project site that is used for actual disposal of solid waste. Cell VII was permitted in 2011 by VADEQ for an additional 56.1 acres and 10 million cubic yards of disposal. The design of Cells VII exceeds



current federal and state regulatory design requirements. Cells V and VI are expected to provide disposal capacities until at least 2024 at the current disposal capacity; however SPSA is requesting a Conditional Use Permit for Cell VII so that all approvals are in place in advance of construction being required. Cell VII is anticipated to provide capacity for at least 15 to 20 years, depending on waste volumes and densities achieved during placement.

Cell VII will be excavated below grade to a level generally consistent with that of Cells V and VI, which runs approximately 15 to 40 feet below grade. The soil borrow area currently being operated in the Cell VII area is providing soil materials required for facility operations and is being conducted in a manner to begin to establish the subgrade elevations of the proposed Cell VII. A summary of the operational highlights of the existing and proposed soil borrow area is provided in Attachment A of this document

In advance of construction of Cell VII, SPSA desires to establish additional soil borrow area with the 129 acres of future Cells VIII and IX area. The request for conditional use of this area for Soil or Gravel Extraction and a Vegetative Waste Composting System will provide SPSA the opportunity to design and permit a soil borrow area for continued operation of Cell V and VI and operation of Cell VII. The area including the 129 acres is predominantly wetlands and will require 401/404 permitting through VADEQ and the U.S. Army Corp of Engineers for disturbance of wetlands. A jurisdictional determination package will be prepared by Davis Environmental Consultants Inc. in the summer of 2016 and an exact area of wetlands will be determined for Cell VIII and IX.

SPSA is requesting the conditional use of composting be granted so that SPSA could permit the operation of such a facility to manage collected leaf and yard waste materials, should the SPSA member communities deem that it is desired. A summary of the design and operational highlights of the future composting system is provided in Attachment B of this document

The construction and operation of a sanitary landfill is a heavily regulated activity and requires the approval of both state and local authorities. SPSA has obtained several permits from different regulatory agencies for the operation of Cells I-VII. These permits are listed in the table below and copies of the permits may be found in Appendix A of the landfill's Operations Manual, which is attached for informational purposes only. A summary of the operational highlights of the existing landfill may also be found in Attachment C of this document.



SPSA Regional Landfill Regulatory Permits

Permit Type	Permit #	Issuing Agency/ Authority	Permitted Activity
Conditional Use Permit	C-13-82 C-13-00	City of Suffolk	Construction and operation of MSW landfill
Solid Waste Permit	417	Virginia Department of Environmental Quality (DEQ)	Construction and operation of MSW landfill Cells I - VII
Industrial Wastewater Discharge	0087	Hampton Roads Sanitation District	Discharge of leachate to local POTW
VA Pollutant Discharge Elimination Permit	VA 0090034	DEQ-Water Division	Discharge of storm water and process waste water to Burnett's Mill Creek
Section 401 of Clean Water Act	Virginia Water Protection Individual Permit 88-0707	VADEQ	Impact of 12 acres of forested wetlands for Cell VII development
Section 404 of the Clean Water Act	88-0707-12	US Army Corp of Engineers	Impact of 12 acres of forested wetlands for Cell VII development

In summary, SPSA is requesting CUP approval from the City of Suffolk to modify the Regional Landfill by constructing Cell VII located adjacent to and east of active Cell V on a 73 acre part of the property, and to conduct soil borrow and vegetative waste composting operations on a 129 acre part of the property to the north of Cell VII and east of existing Cells I-IV.

4 Supplemental Materials

4.1 Traffic Impacts

In accordance with Appendix B-5(f) and B-21 of the Unified Development Ordinance (UDO), HDR has completed a Traffic Impact Study to assess the transportation impacts created by the proposed Cell VII, Soil Borrow Area, and Compost Facility operations. The study identified the existing traffic conditions at the intersection of landfill entrance roadway, Bob Foeller Drive, and Route 13/58/460, and assessed the proposed future traffic conditions in 2018 and 2036. The study determined that the existing median crossing utilized by eastbound traffic on 13/58/460 to enter the facility has a level of service (LOS) rating of F, due to the heavy through movements on westbound 13/58/460. The majority of vehicles utilizing the median crossing are City of Suffolk Refuse Division trucks accessing the transfer station at the Regional Landfill, and area residents accessing the transfer station, household hazardous waste facility or tire processing facility.

The development and operation of Cell VII and the soil borrow or composting system operation uses requested as part of this application would not cause further measurable deterioration at the intersection. The delay associated with the median entrance during peak traffic hours will continue to worsen over time due to population growth in the region. The existing exit configuration and weave movement for all vehicles has an acceptable LOS of B under the current conditions and future conditions.

It is understood that the Virginia Department of Transportation is evaluating the construction of a state funded flyover between east bound and west bound 13/58/460, to the east of the Regional Landfill. The flyover would provide City of Suffolk solid waste and residential traffic an alternative to enter the facility without using the median crossing. If the flyover is not constructed by the time that Cell VII operations are planned to commence, SPSA would propose for consideration an alternative that would include the permitting and construction of a one-way rear entrance roadway to provide access for Suffolk refuse trucks and residents to the Regional Landfill site, and that the entrance to the landfill via the median crossing be eliminated.

Additional information regarding the existing and future traffic conditions for the existing entrance and exit and proposed rear entrance roadway alternatives are detailed in the enclosed full Traffic Impact Study, prepared by HDR, dated June 2016.

4.2 Major Water Quality Impact Assessment

In accordance with Appendix B-5(h) and B-13 of the UDO, HDR has completed a Major Water Quality Impact Assessment (WQIA) to identify the impacts of the proposed development on water quality and lands within the Resource Protection Areas of the Chesapeake Bay Preservation Overlay District.

The enclosed WQIA report dated June 2016, prepared by HDR provides a detailed summary of the potential impacts from the development of Cells VII and soil borrow area within future Cells VIII and IX, as would be permitted by granting the Conditional Use Permit.

Much of the information required by the WQIA was previously included in the Final Environmental Impact Statement prepared by the US Army Corps of Engineers (Norfolk District) completed May 1995 regarding expansion options for the Regional Landfill. Supplemental wetland delineation and vegetation characterization work and assessment of threatened and endangered species have been completed in support of the WQIA.


4.3 Visual Screening Buffer

As a condition of a conditional use permit previously received for Cell VII SPSA was required to establish a 50-foot wide evergreen vegetative buffer, located within the 200 foot property line buffer, to provide a visual screen from traffic on 13/58/460. An evergreen buffer has become well established in some areas, but the proposed buffer has been interrupted by the City of Chesapeake Raw Water Transmission Line that was established through the site, and other recent disturbances. In the Fall of 2015 SPSA staff City of Suffolk staff had reviewed the location and nature of the existing tree buffer that has been established at the site and considered whether it could satisfy the requirements of the evergreen buffer.

In June 2016 Davis Environmental reviewed the nature of the existing evergreen buffer for SPSA and found that an effective 25'+ wide vegetative buffer is currently in place along most of the eastern 3/4 of the required buffer (east of the stream crossing near sediment basin #2). Loblolly pine is the dominant species, and provides (and will continue to provide) an effective visual buffer. Areas that currently are relatively thin are sufficiently stocked with smaller trees that will soon fill in the gaps. A photolog of the buffer area is included as Attachment D.

Davis Environmental noted that the portions of the existing buffer area (west of the stream crossing) currently lack an effective visual buffer north of the water line due to impacts from the installation of the water line or recent cutting. Along much of this distance, components of a buffer (seedlings, small saplings, shrubs) are in place and could soon form a buffer. Given the natural seed source from mature trees along Bob Foeller Drive, much of the buffer area would likely re-colonized naturally in a short period of time.

However, in order to assist with the re-establishment and or enhancement of the buffer, SPSA proposes to install between 1000 to 2000 Loblolly pine seedlings and hand plant them during this winter-spring planting season, when ground moisture and soil conditions will be optimal for proper planting and seedling survival. A dense planting of seedlings along the berms and a strip along the north side of the required clear zone for the water line would ensure the establishment of a full and effective visual buffer. Once established, Loblolly pine typically grow 2-3 feet per year and provide dense foliage.



A

Attachment A – Soil Borrow Operational Highlights



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Soil Borrow Operational Highlights

The soil from within the Cell VII footprint and future Cells VIII and IX area will be excavated for daily operations, intermediate cover soils, landfill closure construction of Cells V and VI, and miscellaneous landfill projects. The soil types anticipated to be excavated are lean clay (CL), silty sand (SM), coarse sand (SP or SP-SM), clay sand (SC), silty clay (CL-ML), organic clay (OL), peat layer mixed with coarse sand, and topsoil. The erosion and sediment control measures for the soil borrow areas have been and will be based on guidelines and procedures set forth in the Virginia Erosion and Sediment Control Handbook.


The following erosion and sediment control measures are proposed to be used during the soil borrow area operation:

- Sediment basins will be installed where there is a potential sediment runoff from the disturbed area that will exceed three (3) acres as per Standard and Specification 3.14 of the Virginia Erosion and Sediment Control Handbook. The basin will retain sediment long enough for the majority of the sediment to settle out. Design of each sediment basin was completed with assistance from Standard and Specification 3.14.
- Stormwater channels will be established during excavation to convey the flow of runoff away from the excavation and towards the sediment basins. Installation of the stormwater channels will be in accordance with Standard and Specification 3.17.
- The temporary diversion dikes will be installed along the perimeter of the soil borrow area to divert off-site stormwater around the soil borrow area. The temporary diversion dikes will be vegetated for stabilization and installed in accordance with Standard and Specification 3.09 of the Virginia Erosion and Sediment Control Handbook.
- Vegetative stabilization will be in accordance with the seeding schedule referenced in the project specifications and on the plans. The seeding schedule was prepared with reference to the Virginia Erosion and Sediment Control Handbook and seeding regimes used in the geographic location.

All erosion and sedimentation control devices are inspected at regular intervals and immediately following any significant rainfall event. Repairs will be made as needed, and accumulated sediment removed when half of the sediment storage capacity is depleted. All sediments that are removed will be disposed of in an approved manner.



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Attachment B – Vegetative
Waste Composting System
Design/Operational
Highlights



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Vegetative Waste Composting System Design/Operational Highlights

The Vegetative Waste Composting System will be designed and operated in accordance with the requirements of 9VAC20-81-330 and 9VAC20-81-340, respectively. The facility will compost only Category I vegetative and yard waste feedstocks.

The facility will include the following components:

- A handling area and equipment to segregate the vegetative and yard waste from noncompostable components;
- Areas used for mixing, composting, curing, screening, and storing shall be graded to prevent run-on, collect runoff, and provided with a drainage system to route the collected runoff to a treatment, disposal or holding facility, discharged under a VPDES permit, or recirculated within the composting process;
- All weather road will be provided for access to the unloading, handling, composting, and storage areas.

Highlights of the planned operations include the following:

- Non-compostable or other undesirable solid waste shall be segregated from the material to be composted, and managed in accordance with the solid waste regulations;
- The facility will compost only Category I wastes;
- Access to the composting facility shall be permitted only when an attendant is on duty.
- Dust, odors, and vectors shall be controlled so they do not constitute nuisances or hazards.
- A safety program shall be developed and enforced and a fire prevention and suppression program designed to minimize hazards.
- Open burning shall be prohibited on the facility property.
- Leachate or other runoff from the facility will be collected and actively managed and shall not be permitted to drain or discharge directly into surface waters, unless authorized by a VPDES permit.



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C

Attachment C - Landfill Operational Highlights



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Landfill Operational Highlights

The attached Operations Manual describes in detail the operation of the Regional Landfill. Some of the highlights of those operations are provided below:

- Currently the landfill is permitted to operate 24-hours per day, 7 days per week. The facility is closed to the general public on Sundays, and holidays (Christmas Day, 4th of July, Thanksgiving Day, and New Year's Day).
- A landfill superintendent and an assistant landfill superintendent oversee 12 employees who operate the landfill. A complete list of the landfill staff may be found in the Operations Manual.
- The landfill is permitted to accept agricultural, commercial, construction, institutional and municipal solid wastes. Hazardous and liquid wastes are not accepted at the facility. A complete list of the acceptable and unacceptable wastes at the facility may be found on page 4-3 of the Operations Manual.
- The working face(s) of the landfill is(are) maintained throughout the day so that litter does not create a nuisance. Daily cover material is placed atop the working face as required by regulation. Litter blown onto non-disposal areas is picked up on a daily and as needed basis.
- A Safety Plan has been developed to ensure a safe working environment for landfill employees and users of the facility. The Safety Plan may be found on page 5-1 of the Operations Manual.
- SPSA conducts groundwater and gas monitoring at the landfill on a quarterly basis, as required by applicable regulations and permits.



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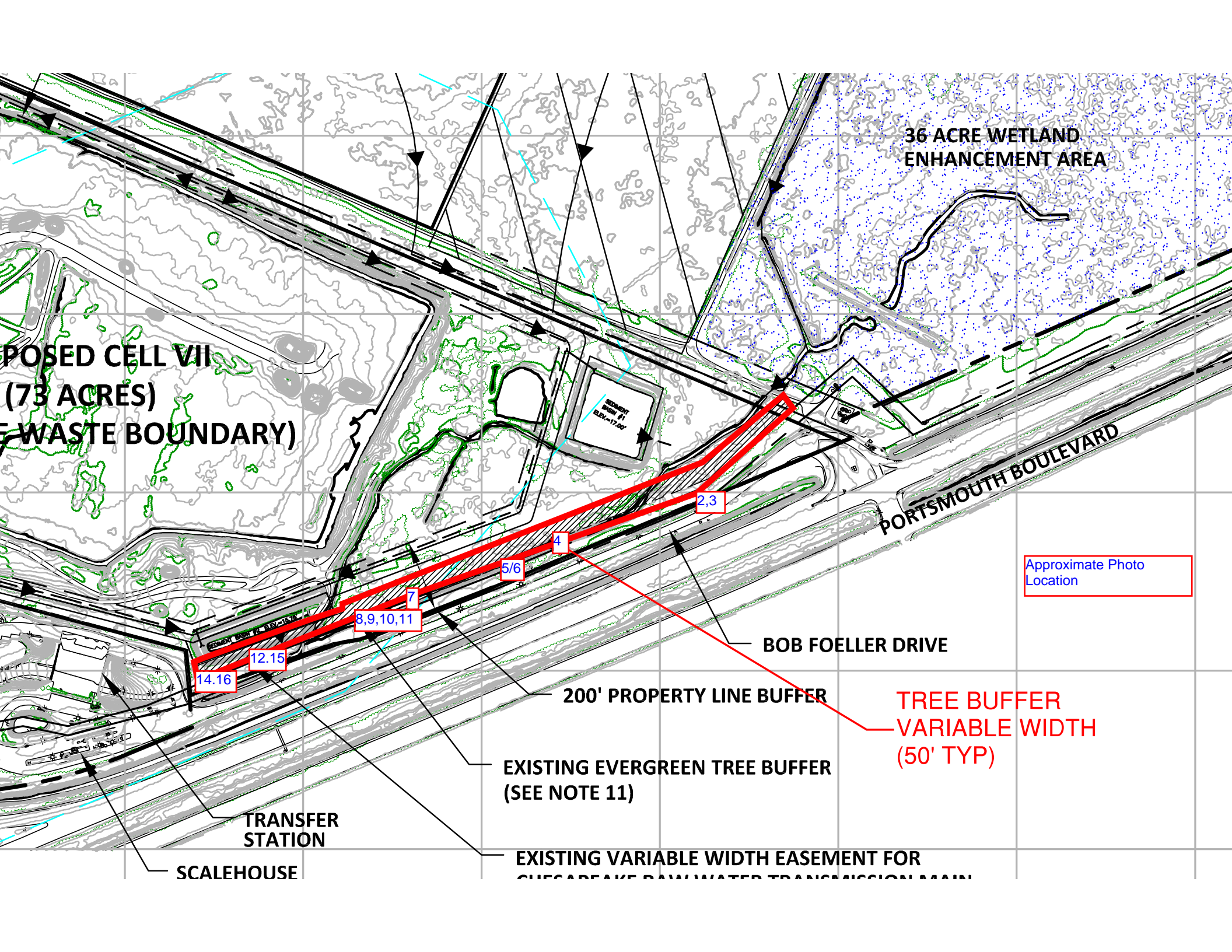


D

Attachment D - Evergreen Buffer Photo Log



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36 ACRE WETLAND ENHANCEMENT AREA

PROPOSED CELL VII (73 ACRES) (WASTE BOUNDARY)

PORTSMOUTH BOULEVARD

Approximate Photo Location

BOB FOELLER DRIVE

200' PROPERTY LINE BUFFER

TREE BUFFER VARIABLE WIDTH (50' TYP)

EXISTING EVERGREEN TREE BUFFER (SEE NOTE 11)

TRANSFER STATION

SCALEHOUSE

EXISTING VARIABLE WIDTH EASEMENT FOR CHECADAKE DAM WATER TRANSMISSION MAIN

14,16

12,15

8,9,10,11

7

5/6

4

2,3

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GPS Coordinates for SPSA Buffer Photos

Suffolk, VA

14 June 2016

Buffer along North side of Water Line along Bob Foeller Drive

<u>Photo</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Direction</u>	<u>Photo</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Direction</u>
1	N 36° 46.416'	W 76° 30.584'	+/- Due W	2	N 36° 45.377'	W 76° 30.683'	S 85 W



Edge of gas line ROW at entrance. Loblolly pine +/-30' tall (6-10" DBH), sweetgum in understory, switchcane (4-6' tall).



+/-350' west of #1 at bend of water line ROW. Loblolly pine >15' tall on N.side of stream; sweetgum 6-8' tall along S.edge of ditch.

3	N 36° 45.377'	W 76° 30.683'	+/-NW	4	N 36° 45.355'	W 76° 50.734'	+/- Due N
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Two bend in stream; scattered loblolly pine, sweetgum 5-10' tall south of stream (big gap); scattered loblolly pine (thin along stream); N side of stream: 30' gap then thick lob.pine >15' tall.



At valve box. Lob.pine >15' tall across stream (dense).

GPS Coordinates for SPSA Buffer Photos

Suffolk, VA

14 June 2016

Buffer along North side of Water Line along Bob Foeller Drive

<u>Photo</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Direction</u>	<u>Photo</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Direction</u>
5	N 36° 45.345'	W 76° 30.770'	NE	6	N 36° 45.345'	W 76° 30.770'	NW



+/-200' W of #4 (3ple Cherrybark Oak); Scattered Lob.Pine 15-20' tall on South stream bank, dense lob.pine >15' on North site stream



+/-200' W of #4 (3ple Cherrybark Oak); Few scattered Lob.Pine, Sweetgum on south stream bank; dense lob.pine 10-15' tall (thick) on N.stream bank.

7	N 36° 45.323'	W 76° 30.822'	N
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+/-300' W of #5/6. Lob.pine <3' tall along S stream bank; lob.pine 10-15' tall along N stream bank - thick along stream; many but thian areas w/lob.pine 3-6' tall behind.

GPS Coordinates for SPSA Buffer Photos

Suffolk, VA

14 June 2016

Buffer along North side of Water Line along Bob Foeller Drive

<u>Photo</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Direction</u>	<u>Photo</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Direction</u>
8	N 36° 45.310'	W 76° 30.879'	NE	9	N 36° 45.310'	W 76° 30.879'	N



Big pine @ stream crossing. West end of veg.buffer: scattered lob.pine, sweetgum, sycamore, baccharis <3' tall on berm N of stream. Wet swale behind (N of) berm.



Big pine @ stream crossing. N: Similar veg. <3' tall on berm, rock N of stream. Vegetation on berm had been cut; now regenerating; though fewer pines than before.

10	N 36° 45.310'	W 76° 30.879'
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Big pine @ stream crossing. NW: Scattered Lob.pine, sweetgum, baccharis on berms, logs NW stream.

11	N 36° 45.310'	W 76° 30.879'
----	---------------	---------------



Big pine @ stream crossing. +/-W: Looking twd scales, transfer station.

GPS Coordinates for SPSA Buffer Photos

Suffolk, VA

14 June 2016

Buffer along North side of Water Line along Bob Foeller Drive

<u>Photo</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Direction</u>	<u>Photo</u>	<u>Latitude</u>	<u>Longitude</u>	<u>Direction</u>
12	N 36° 45.323'	W 76° 30.890'	E	13	N 36° 45.323'	W 76° 30.890'	W



+/-E along berm. 2ndary berm behind wet swale: scat. Lob.pine, baccharis; was much more lob.pine before cut.



+/-W along berm. 2ndary berm behind wet swale: scat. Lob.pine, baccharis; was much more lob.pine before cut.

14	N 36° 45.295'	W 76° 30.936'	
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At culvert: NE: Mostly herbaceous veg. on waterline ROW, shrubs, saplings on berm; scattered sweetgum, baccharis south of berm.

15	N 36° 56.976'	W 76° 35.642'	
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At culvert: NE: Mostly herbaceous veg. on waterline ROW, shrubs, saplings on berm; scattered sweetgum, baccharis south of berm.



Figures



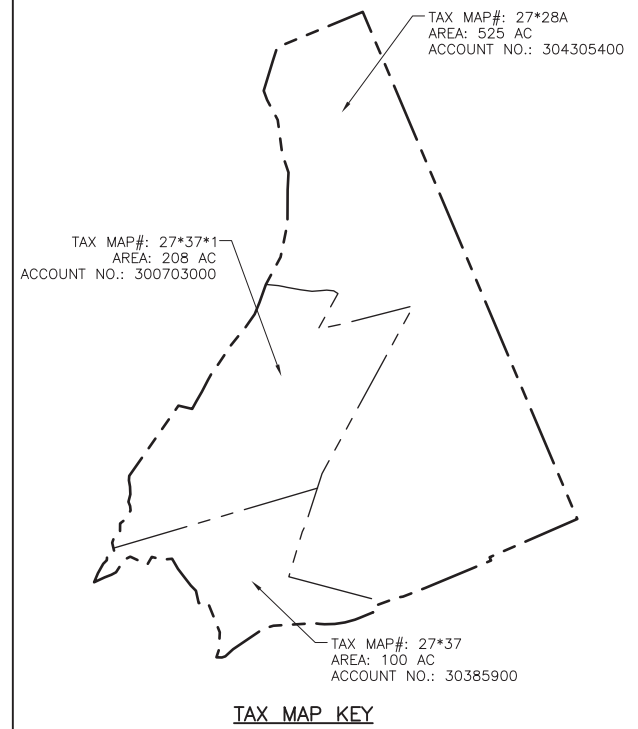
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NOTES:

1. EXISTING TOPOGRAPHY WITHIN TAX MAP# 27*28A SUPPLIED BY HOGGARD-EURE ASSOCIATES BASED ON AERIAL PHOTOGRAPHY DATED MARCH 22, 2016. BASE PLAN AND TOPOGRAPHY OF AREAS OUTSIDE TAX MAP# 27*28A COMPILED FROM AERIAL AND FIELD SURVEYS FROM 2005 - 2015.
2. ELEVATIONS REFER TO NGS MEAN SEA LEVEL HORIZONTAL CONTROL BASED UPON VIRGINIA STATE PLANE COORDINATE SYSTEM SOUTH ZONE NAD 1983.
3. PROPERTY LINE BOUNDARY FROM VANASSE HANGEN BRUSTLIN DATED FEBRUARY 29, 2000.
4. WETLAND PRESERVATION, RESTORATION AND ENHANCEMENT AREAS FROM THE US ARMY CORP OF ENGINEERS, SECTION 404 WETLAND PERMIT (88-0707-12) ISSUED NOVEMBER 30, 2002 AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY, SECTION 401 WETLAND PERMIT (88-0707) ISSUED JUNE 3, 2002, FOR THE PROPOSED 12 ACRES OF WETLAND DISTURBANCE REQUIRED FOR THE CELL VII EXPANSION OF THE REGIONAL LANDFILL. PERMIT APPLICATIONS WERE PREPARED BY TELLUS ENVIRONMENTAL ASSOCIATES, INC. AND DAVIS ENVIRONMENTAL CONSULTANTS, INC..
5. CONSTRUCTION OF PROPOSED CELL VII AND ANCILLARY FACILITIES IS LIMITED TO THE 56.1 ACRE AREA DEPICTED IN THIS DRAWING.
6. PROPOSED CELL VII AREA WILL BE UTILIZED AS A SOIL STOCKPILE AREA OR BORROW SOURCE PRIOR TO CONSTRUCTION AND OPERATION OF CELL VII.
7. PROPOSED CELL VII IS ANTICIPATED TO TIE INTO CELL V TO FORM ONE CONTIGUOUS LANDFILL CELL.
8. APPROVAL FOR THE CONSTRUCTION AND OPERATION OF THE CELL VII EXPANSION WAS GRANTED BY THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY WITH THE ISSUANCE OF THE PERMIT AMENDMENT TO PERMIT #417, ON JUNE 8, 2011. CONSTRUCTION START DATE FOR CELL VII IS NOT YET DETERMINED AND WILL DEPEND ON THE REMAINING LIFE OF EXISTING CELL VI, WHICH IS ANTICIPATED TO REMAIN OPERATIONAL THROUGH AT LEAST 2024 AND MAY BE AS LONG AS THROUGH 2040.
9. SOIL DISTURBANCE WITHIN CELL VII AREA BORROW OPERATIONS IS BEING COMPLETED IN ACCORDANCE WITH EROSION AND SEDIMENT CONTROL PERMIT ISSUED BY THE CITY OF SUFFOLK (ESC-2009-00002), MARCH 26, 2009.
10. DISTURBANCE OF SOILS AND WETLANDS WITHIN FUTURE CELLS VIII AND IX 129 ACRE AREA WILL REQUIRE 404 AND 401 WETLAND PERMITS THROUGH US ARMY CORP OF ENGINEERS AND VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY, AND EROSION AND SEDIMENT CONTROL PERMIT THROUGH THE CITY OF SUFFOLK. THE FUTURE CELL VIII AND IX AREA IS PLANNED FOR USE AS A SAND OR GRAVEL EXTRACTION (SOIL BORROW) AREA TO SUPPORT LANDFILL CONSTRUCTION AND OPERATION, AND MAY BE UTILIZED AS A VEGETATIVE WASTE COMPOST SYSTEM AREA, SUBJECT TO STATE AND LOCAL PERMITTING. THE 129 ACRE DEVELOPMENT AREA INCLUDES ANCILLARY FACILITIES INCLUDING PERIMETER BERMS, ACCESS ROADS, AND STORMWATER AND LEACHATE MANAGEMENT AREAS.
11. EXISTING VARIABLE WIDTH EVERGREEN TREE BUFFER (TYP 25' WIDTH) TO BE SUPPLEMENTED WITH LOBLOLLY PINE SEEDLINGS TO RE-ESTABLISH AND ENHANCE VISUAL BUFFER WEST OF STREAM CROSSING.
12. EXISTING VARIABLE WIDTH EASEMENT FOR CITY OF CHESAPEAKE RAW WATER TRANSMISSION MAIN (TYP 40' WIDTH). LOCATIONS OBTAINED FROM CITY OF CHESAPEAKE RAW WATER TREATMENT PLANT RAW WATER TRANSMISSION MAIN DRAWINGS, ISSUED FOR CONSTRUCTION SEPTEMBER 2012, PREPARED BY HDR ENGINEERING, INC.



- PROPOSED DRAINAGE CHANNEL
- EXISTING DRAINAGE CHANNEL
- - - CHESAPEAKE BAY PRESERVATION AREA
- STREAMS
- PROPERTY LINE
- INTERNAL PROPERTY LINE
- FACILITY BOUNDARY (APPROXIMATE)
- EASEMENT
- [Hatched Box] WETLAND PRESERVATION AREA
- [Cross-hatched Box] WETLAND RESTORATION AREA
- [Dotted Box] WETLAND ENHANCEMENT AREA



HDR Engineering, Inc.
555 Fayetteville Street, Suite 900
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919.232.6600

ISSUE	DATE	DESCRIPTION

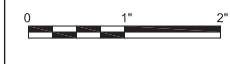
PROJECT MANAGER	J. MURRAY, P.E.
PROJECT ENGINEER	T. PREDDY, E.I.
DRAWN BY	T. PREDDY, E.I.
PROJECT NUMBER	107091-279011-018



SUFFOLK

Southeastern Public Service Authority
Conditional Use Permit Application

VIRGINIA



SITE PLAN

FILENAME 00C-02.DWG
SCALE 1"=400'

SHEET 00C-02

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