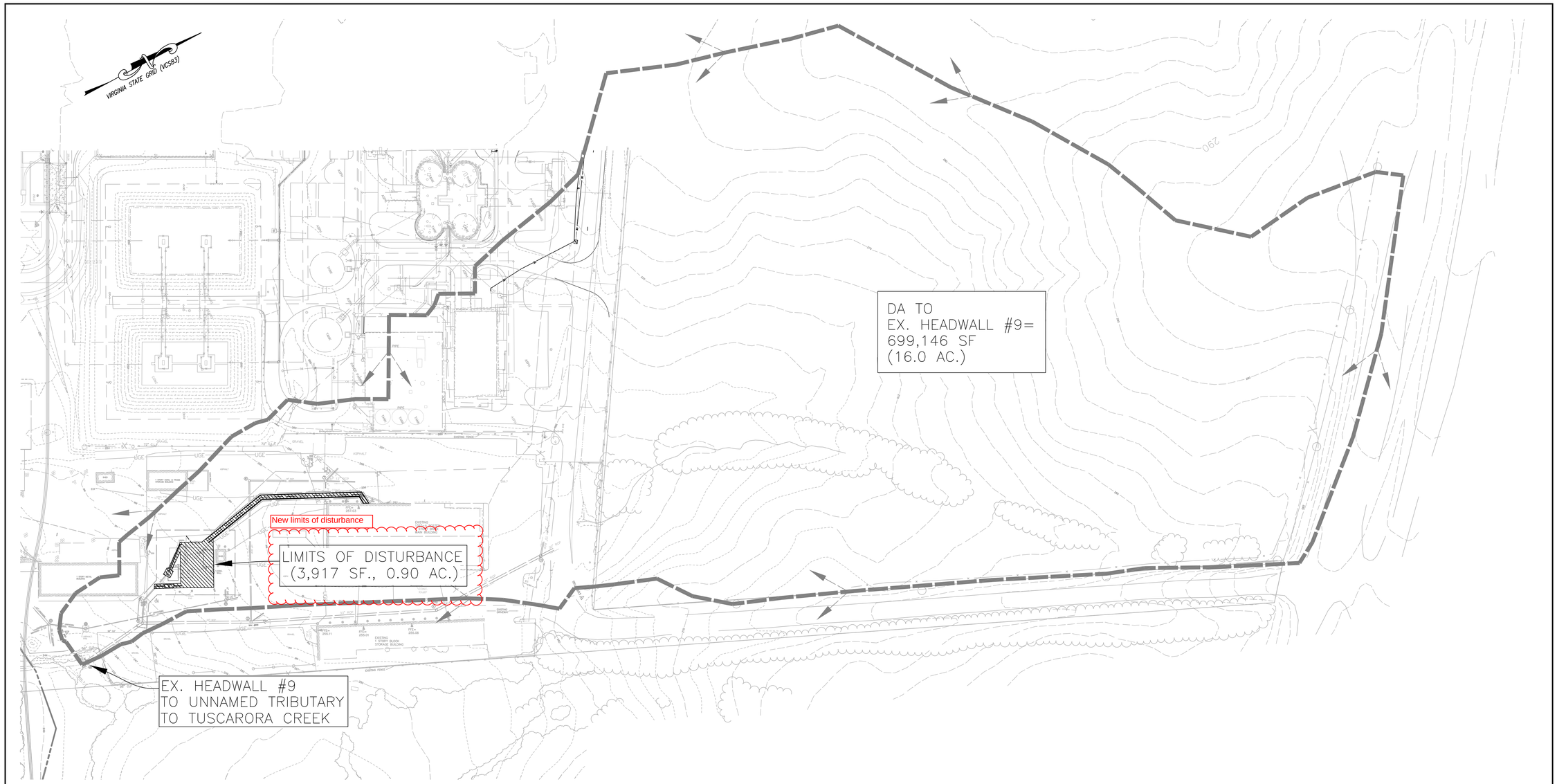

ADEQUATE OUTFALL NARRATIVE (1% RULE)

THE ENTIRE DRAINAGE BASIN IN WHICH THIS PROJECT IS LOCATED FLOWS TO THE EXISTING HEADWALL #9 AS SHOWN ON THIS SHEET. UNDER THE CURRENTLY GENERATED FLOW CONDITIONS, THERE ARE NO SIGNS OF SIGNIFICANT EROSION TAKING PLACE IN RECEIVING TUSCARORA CREEK. FURTHERMORE, BECAUSE THERE IS NO PROPOSED NET INCREASE IN THE AMOUNT OF IMPERVIOUSNESS IN THE DRAINAGE AREA, EXISTING CONDITIONS EROSIONAL PROCESSES TAKING PLACE IN THE STREAM WILL REMAIN UNCHANGED AS A RESULT OF THIS PROJECT. ADDTIONALLY, ADEQUATE OUTFALL CAN BE DEMONSTRATED FROM THE 1% RULE CONTAINED IN CHAPTER 4 OF THE VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION EROSION AND SEDIMENT CONTROL (E&SC) REGULATIONS; AS IS DEMONSTRATED BELOW:

TOTAL SITE CONSTRUCTION AREA (LIMITS OF DISTURBANCE) = 3,917 SF (0.09 AC)

TOTAL ON-SITE DRAINAGE AREA TO EX HW #9 = 699,146 SF (16.0 AC)

3,917 SF / 699,146 SF = 0.56% (LESS THAN 1% OF TOTAL DRAINAGE AREA TO EX HW #9)

calculations revised to reflect new limits of disturbance

ADEQUATE OUTFALL CERTIFICATION

THIS PLAN CERTIFIES THAT AN ADEQUATE OUTFALL IS PROVIDED WITH THIS PROJECT. NO NET CHANGE IN RUNOFF OR EXCESSIVE EROSION WILL RESULT IN THE EXISTING RECEIVING CHANNEL AS A RESULT OF COMPLIANCE WITH THE 1% RULE.

SECONDARY CONTAINMENT NARRATIVE

IN THE EVENT THAT AN ABOVE GROUND STORAGE TANK IS PUNCTURED OR LEAKS, SECONDARY CONTAINMENT HAS BEEN SET IN PLACE TO PREVENT DISTRIBUTION OF PETROLEUM PRODUCTS INTO THE SURROUNDING ENVIRONMENT. OUTER SHELL TANKS HOUSE EACH OF THE TWO 6,000 GALLON PRIMARY TANKS IN WHICH THE FUEL IS STORED. THESE TANKS HAVE A VOLUME THAT IS 110% OF THE PRIMARY TANKS (SHEET M001, "FUEL DISPENSING SCHEMATIC" NOTE #1). THE ENTIRE FUEL SYSTEM IS HOUSED WITHIN THE TANKS AND HIGH IMPACT RESISTENT BOLLARDS SURROUND THE TANKS' PERIMETER TO AFFORD ADDITIONAL PROTECTION. PORT VALVE CONNECTIVITY FROM THE TANKS TO THE DISPENSERS IS LOCATED IN UNDERGROUND SUMPS. THESE CONDITIONS SATISFY THE REQUIREMENTS OF SECONDARY CONTAINMENT AS PRESCRIBED IN CFR 40 PART 112(1997). ADDITIONALLY, AN OIL/WATER SEPARATOR WILL BE PROVIDED WHICH WILL TREAT ANY PETROLEUM CONTAMINATED RUNOFF FROM THE CONCRETE PAD. MINISCULE DROPLETS RELEASED DURING FUELING OPERATIONS OR EVEN MORE MODERATE AMOUNTS WHICH MAY BE ACCIDENTALLY DISCHARGED IN THE EVENT OF OVERFILLING WILL BE PROCESSED THROUGH THE OIL/WATER SEPARATOR. THIS ON-LINE DEVICE WILL BE SITUATED UNDERGROUND BETWEEN TRENCH DRAINS DRAINING SHEET FLOW FROM THE CONCRETE FUELING ISLAND PAD AND A LATERAL CONNECTION TO THE ADJACENT 6" SANITARY SEWER. CUMULATIVELY COLLECTED FUELS WILL BE DISPOSED OF ON A REGULAR BASIS DURING CLEANOUT INSPECTIONS.

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

COMMONWEALTH OF VIRGINIA
THOMAS M. HEIL
Lic. No. 044111
PROFESSIONAL ENGINEER

TOWN OF
LEESBURG, VIRGINIA

25 WEST MARKET STREET,
P.O. BOX 88,
LEESBURG, VA 20178

CENTRAL WAREHOUSE &
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FUEL ISLAND
UPGRADE

RK&K
10306 EATON PLACE
WILLOWWOOD II, SUITE 240
FAIRFAX, VA 22030
(P) 703 246-0028
(F) 703 246-0123

wendel
1420 King Street Suite 510
www.wendelcompanies.com
p:703.299.8718 f:703.299.8719

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NO.	BY	REVISIONS	DATE

DWG. TITLE

ADEQUATE
OUTFALL

DATE	04/29/11
SCALE	1" = 60'
DWN. KAB	CHK. WSS
PROJ. No.	
DWG. No.	C008

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