



Groundwater Monitoring System Certification per 40 CFR §257.91(f)
Yorktown Power Station – Industrial Landfill
Yorktown, Virginia

EPA's "Disposal of Coal Combustion Residuals from Electric Utilities" Final Rule, 40 CFR §257.91, requires the owner or operator of an existing Coal Combustion Residuals (CCR) unit to install a groundwater monitoring system. The owner or operator must obtain a certification from a qualified professional engineer stating that the groundwater monitoring system has been designed and constructed to meet the requirements of 40 CFR §257.91.

In 2020, Dominion Energy installed nine new groundwater monitoring wells (PC-01 through PC-09) around the perimeter of the landfill following the closure of the Industrial Landfill (the Unit) under Virginia Solid Waste Permit No. 457. The newly installed wells were sampled on a quarterly basis from 2020 through 2022, to collect eight rounds of background monitoring data. To ensure the groundwater monitoring network meets the requirements of 40 CFR §257.91, the monitoring well network is being replaced to include newly installed wells PC-01, PC-02, PC-03, PC-04, PC-06, PC-07, PC-08, and well 11R. Locations of the former compliance network and the revised monitoring network are provided in the attached Site Map (Figure 1). A piezometric surface map from April 2023 is included as Figure 2.

CERTIFICATION

Based on my review of the documentation described in 40 CFR §257.91(e)(1), I hereby certify that the groundwater monitoring system for the CCR unit located at Virginia Electric and Power Company's Yorktown Power Station (Industrial Landfill) in Yorktown, Virginia, has been designed and constructed to meet the requirements of 40 CFR §257.91.

As used herein, the word "certify" shall mean an expression of the Engineer's professional opinion to the best of his or her information, knowledge, and belief, and does not constitute a warranty or guarantee by the Engineer.

WSP USA INC.

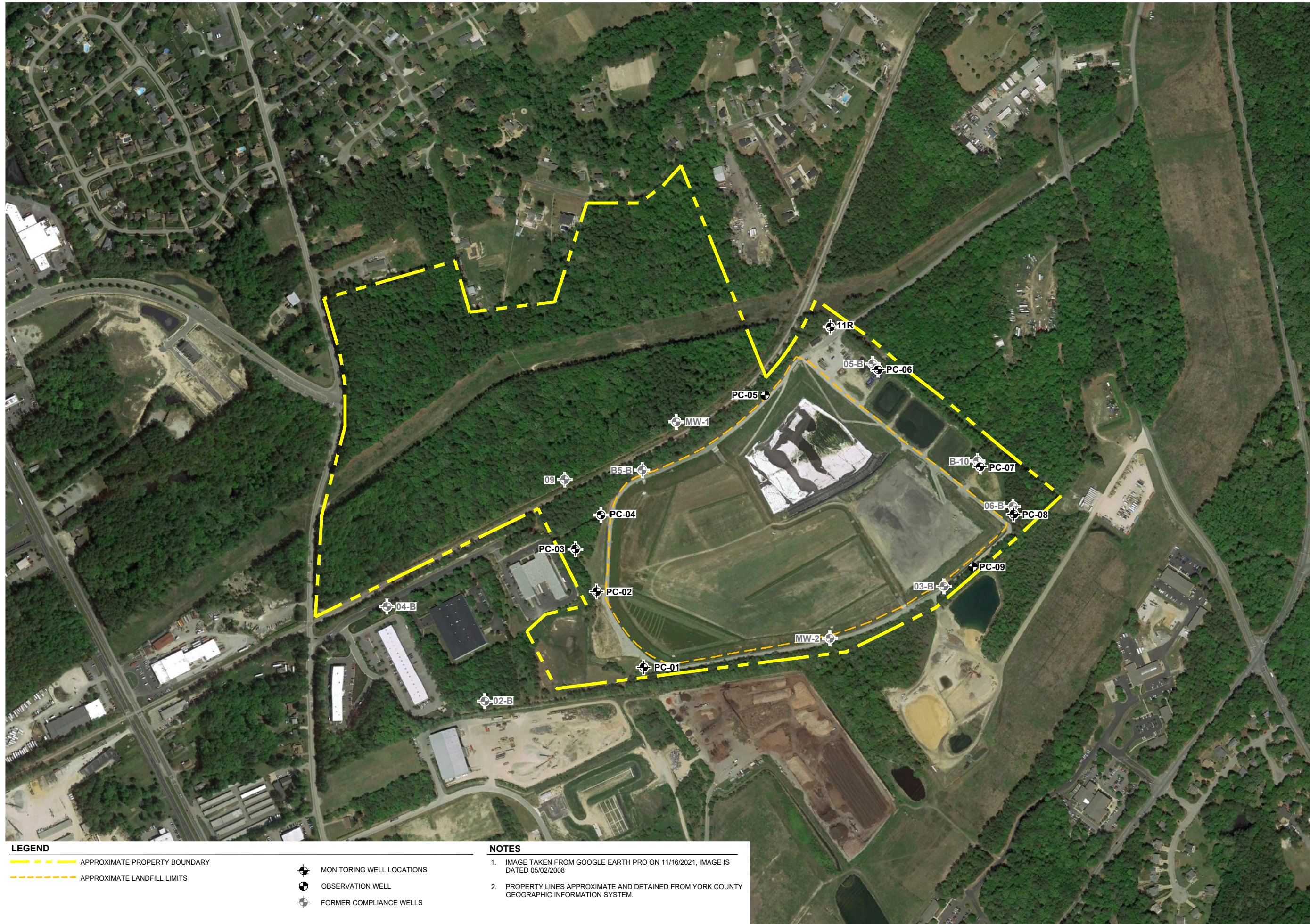


Donald Mayer, P.E.

Vice President

[https://wsponlinenam.sharepoint.com/sites/us-rvdominion/shared documents/yorktown/31406066.002 yt 2023 gw/6 deliverables/2023-08-xx ccr well cert/2023-08-xx yorktown_ccr_cert.docx](https://wsponlinenam.sharepoint.com/sites/us-rvdominion/shared%20documents/yorktown/31406066.002%20yt%202023%20gw/6%20deliverables/2023-08-xx%20ccr%20well%20cert/2023-08-xx%20yorktown_ccr_cert.docx)

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LEGEND

--- APPROXIMATE PROPERTY BOUNDARY

--- APPROXIMATE LANDFILL LIMITS

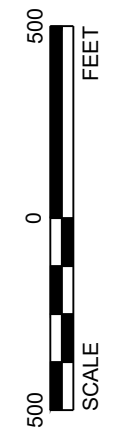
● MONITORING WELL LOCATIONS

● OBSERVATION WELL

○ FORMER COMPLIANCE WELLS

NOTES

1. IMAGE TAKEN FROM GOOGLE EARTH PRO ON 11/16/2021, IMAGE IS DATED 05/02/2008
2. PROPERTY LINES APPROXIMATE AND DETAINED FROM YORK COUNTY GEOGRAPHIC INFORMATION SYSTEM.



CLIENT
DOMINION ENERGY



CONSULTANT

DESIGNED	2023-09-05
PREPARED	SIB
REVIEWED	
APPROVED	

PROJECT
YORKTOWN LANDFILL
YORKTOWN, VIRGINIA

TITLE
MONITORING WELL PLAN

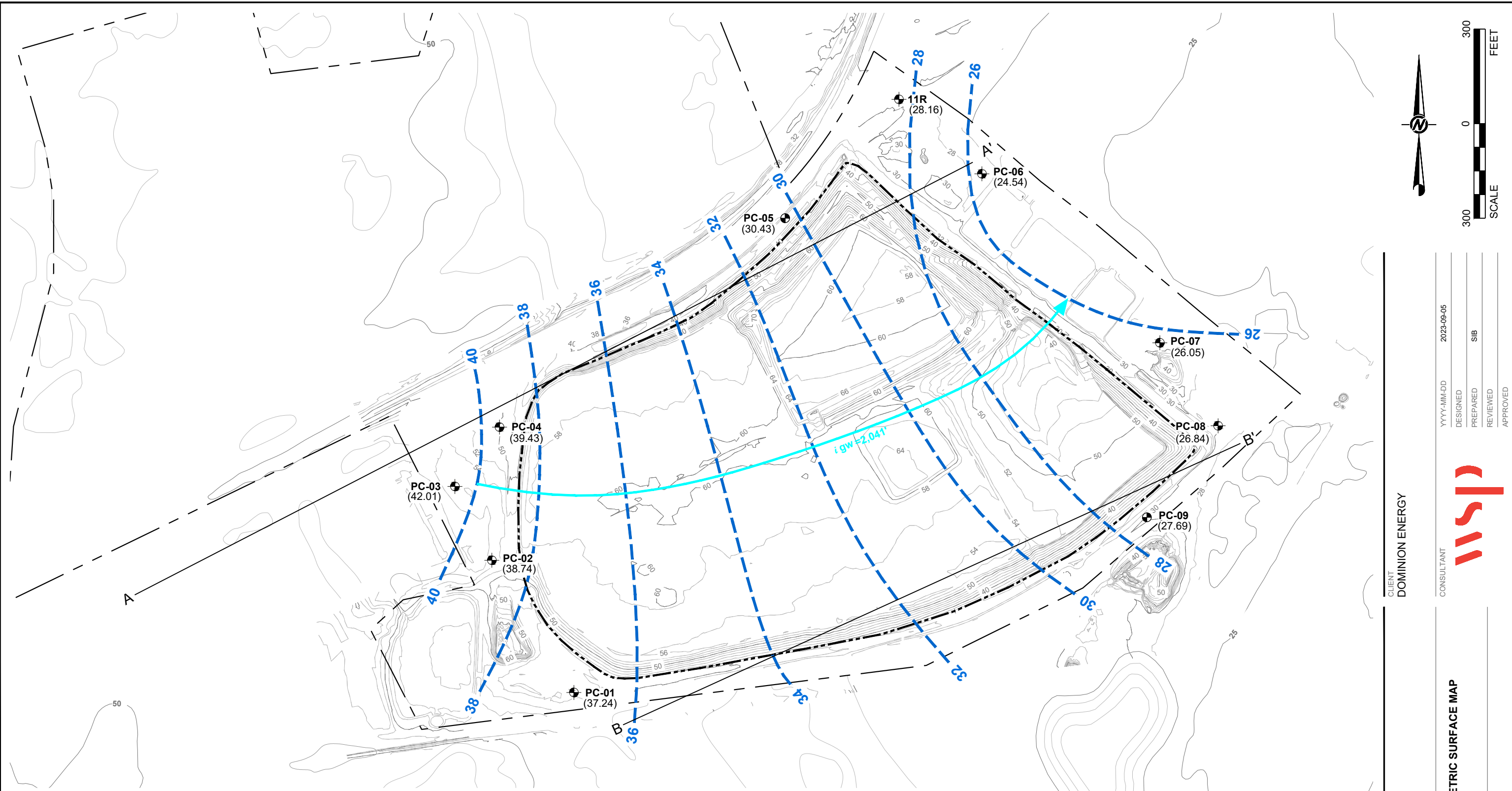
PROJECT NO.
31406066.002

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FIGURE
1

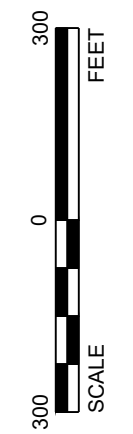
1" IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B

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LEGEND	
	APPROXIMATE PROPERTY BOUNDARY
	LIMITS OF CCR UNIT
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS)
	POTENTIOMETRIC SURFACE CONTOUR
	APPROXIMATE GROUNDWATER FLOW LINE
	GROUNDWATER FLOW PATH LENGTH (FEET)
	REPLACEMENT MONITORING WELL LOCATION AND IDENTIFICATION
	STATIC GROUNDWATER ELEVATION FOR APRIL 10, 2023 (FEET ABOVE MEAN SEA LEVEL)
	OBSERVATION WELL

- NOTES**
- TOPOGRAPHY INSIDE OF PROPERTY BOUNDARY PROVIDED BY D & M SURVEYORS, P.C. OF TAPPAHANNOCK, VIRGINIA. TOPOGRAPHY COMPILED FROM VARIOUS SURVEYS DONE IN 2013.
 - TOPOGRAPHY DATA OUTSIDE OF PROPERTY BOUNDARY DIGITIZED FROM USGS 7.5-MINUTE TOPOGRAPHIC QUADRANGLE NAMED POQUOSON WEST, VIRGINIA.
 - GROUNDWATER CONTOURS BASED ON LINEAR INTERPOLATION BETWEEN AND EXTRAPOLATION FROM KNOWN DATUM, TOPOGRAPHIC CONTOURS, AND KNOWN FIELD CONDITIONS. THEREFORE, GROUNDWATER CONTOURS MAY NOT REFLECT ACTUAL GROUNDWATER CONDITIONS.
 - GROUNDWATER CONTOUR LINES SHOW THE WATER TABLE SHAPE AND ELEVATION. THESE CONTOURS ARE INFERRED LINES FOLLOWING THE GROUNDWATER SURFACE AT A CONSTANT ELEVATION ABOVE SEA LEVEL. THE GROUNDWATER FLOW DIRECTION IS GENERALLY PERPENDICULAR TO THE GROUNDWATER SURFACE CONTOURS, SIMILAR TO THE RELATIONSHIP BETWEEN SURFACE WATER FLOW AND TOPOGRAPHIC CONTOURS.



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DOMINION ENERGY

DESIGNED	2023-09-05
PREPARED	SIB
REVIEWED	
APPROVED	



PROJECT
YORKTOWN LANDFILL
YORKTOWN, VIRGINIA

TITLE
GROUNDWATER POTENTIOMETRIC SURFACE MAP
APRIL 10, 2023

PROJECT NO.
31-406066

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FIGURE
2

1" = 300' IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI B