



**BY ELECTRONIC MAIL**

February 5, 2021

Mr. Shawn Weimer  
Land Protection Manager  
Virginia Department of Environmental Quality  
Piedmont Regional Office  
4949-A Cox Road  
Glen Allen, VA 23060

**RE: DOMINION ENERGY VIRGINIA, CHESTERFIELD POWER STATION, CHESTERFIELD COUNTY, VIRGINIA  
PART B SOLID WASTE PERMIT APPLICATION FOR CLOSURE OF THE LOWER AND UPPER ASH  
PONDS**

Dear Mr. Weimer:

In accordance with the Virginia Solid Waste Management Regulations (9VAC20-81) and § 10.1-1402.03 of the Code of Virginia, Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion) is requesting a Part B Solid Waste Permit for closure of the Lower Ash Pond (LAP) and Upper Ash Pond (UAP) at the Chesterfield Power Station in Chesterfield County, Virginia. This permit is being requested as part of a comprehensive Coal Combustion Residuals (CCR) management action, which includes closure by removal of both the LAP and UAP. This Part B permit application package is being provided to the Virginia Department of Environmental Quality for review and to support the issuance of the requested Solid Waste Closure Permit. The following documents compose this application package:

- Attachment I Notice of Intent for Closure
- Attachment II Solid Waste Disposal Facility Part B Permit Application Form
- Attachment III Drawing sets – one for each pond
- Attachment IV Closure Plan – one for each pond
- Attachment V Groundwater Monitoring Plan

Please contact Mr. Dennis Slade at [dennis.a.slade@dominionenergy.com](mailto:dennis.a.slade@dominionenergy.com) with any questions or comments regarding this submittal.

Sincerely,

A handwritten signature in blue ink that reads 'Lisa C. Messinger'.

Lisa C. Messinger  
Director, Environmental Services

ecc Kathryn Perszyk, VA DEQ – [kathryn.perszyk@deq.virginia.gov](mailto:kathryn.perszyk@deq.virginia.gov)



**Attachment I**

**Notice of Intent for Closure**





**BY ELECTRONIC MAIL**

February 5, 2021

Mr. Shawn Weimer  
Land Protection Manager  
Virginia Department of Environmental Quality  
Piedmont Regional Office  
4949-A Cox Road  
Glen Allen, VA 23060

**RE: DOMINION ENERGY VIRGINIA CHESTERFIELD POWER STATION, CHESTERFIELD COUNTY, VIRGINIA**  
**NOTICE OF INTENT FOR PART B SOLID WASTE PERMIT APPLICATION FOR CLOSURE OF THE**  
**LOWER AND UPPER ASH PONDS**

Dear Mr. Weimer:

Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion) owns and operates the Chesterfield Power Station (Station), a coal and natural gas-fired power plant located at 500 Coxendale Road, Chesterfield County, Virginia 23836.

Pursuant to 9 VAC 20-81-450.B.1, Dominion is submitting this Notice of Intent (NOI) to apply for a Part B Solid Waste Permit for closure of the two Coal Combustion Residual (CCR) surface impoundments located at the Station, otherwise known as the Lower Ash Pond (LAP) and the Upper Ash Pond (UAP). Dominion intends to close both the LAP and UAP by removal of CCR material, pursuant to 40 CFR 257.102(c), 9VAC20-81-800, and § 10.1-1402.03 of the Code of Virginia. This NOI is being submitted as part of a Part B Solid Waste Permit Application package. The closure of the two CCR surface impoundments will occur under the Virginia Solid Waste Management Program.

The LAP and UAP are currently authorized to operate under Virginia Pollutant Discharge Elimination System (VPDES) permit number VA0004146. Applicable operating criteria of this permit will be superseded upon issuance of the solid waste permit.

An Area Map (Figure 1) and a Site Location Map (Figure 2) are attached to this letter as Attachments 1 and 2, respectively. The locations of the LAP and UAP are shown on the Site Location Map. The approximate central latitude and longitude of the two ponds are as follows:

<b>LAP</b>	Latitude: 37.3737°N	Longitude: 77.3795°W
<b>UAP</b>	Latitude: 37.3702°N	Longitude: 77.3698°W



In addition, as part of this NOI, Dominion is also providing the following information:

- DEQ Form DISC-01 – Applicant's Disclosure Statement (Attachment 3)
- DEQ Form DISC-02 – Key Personnel Disclosure Statement (Attachment 4)
- Plat and Deed for Proof of Ownership (Attachment 5)
- Virginia SCC Certificate of Good Standing (Attachment 6)

Please contact Mr. Dennis Slade at [dennis.a.slade@dominionenergy.com](mailto:dennis.a.slade@dominionenergy.com) with any questions or comments regarding this submittal.

Sincerely,



Lisa C. Messinger  
Director, Environmental Services

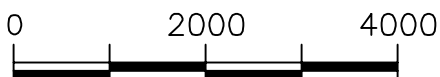
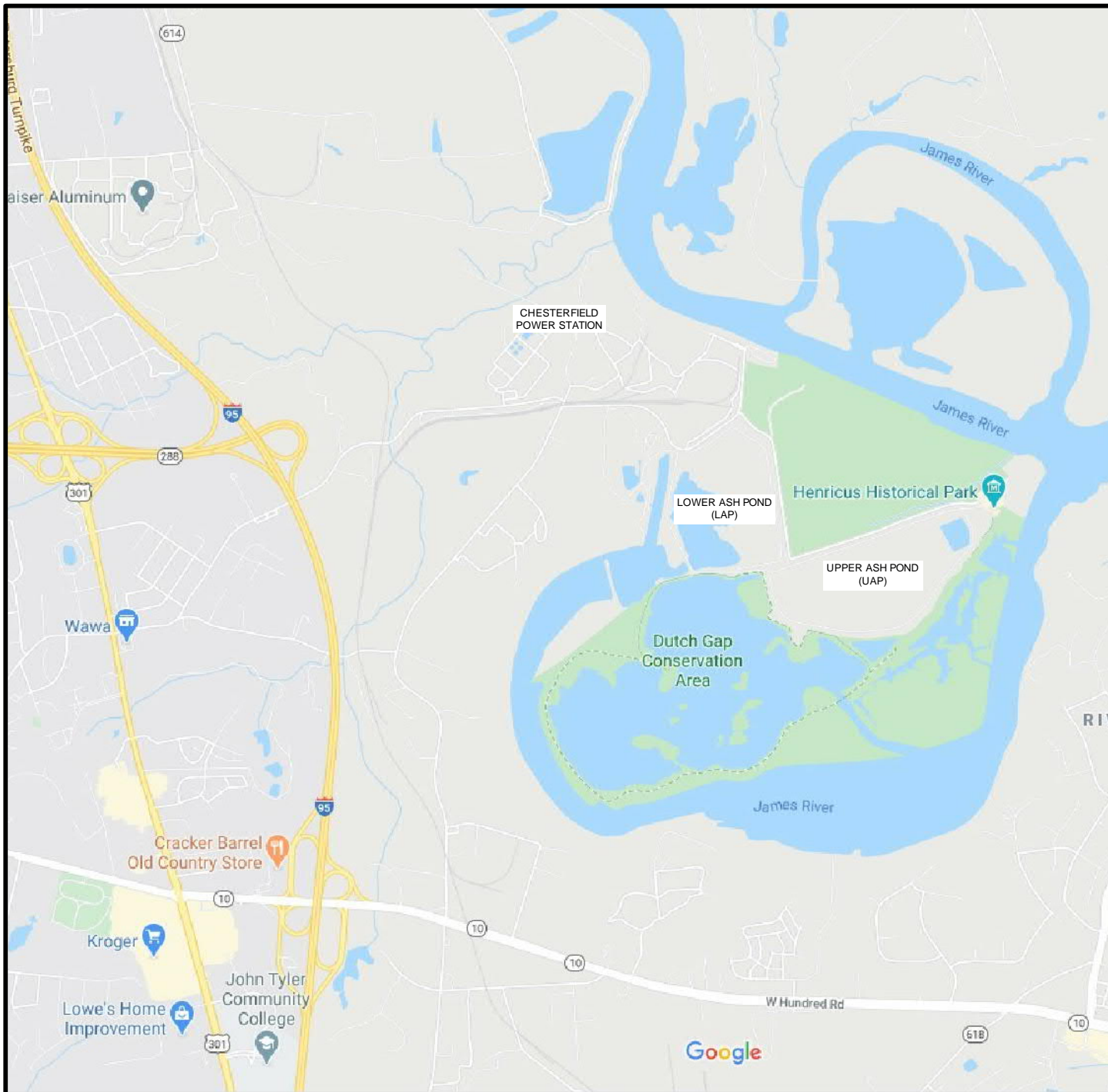
ecc Kathryn Perszyk, VA DEQ – [kathryn.perszyk@deq.virginia.gov](mailto:kathryn.perszyk@deq.virginia.gov)



## Attachment 1

### Figure 1 – Area Map





SCALE: 1"=2000'

# AECOM

525 VINE STREET, SUITE 1800  
CINCINNATI, OH 45202  
PHONE (513) 651-3440

## CHESTERFIELD POWER STATION UPPER ASH POND & LOWER ASH POND AREA MAP

CHESTERFIELD COUNTY, VIRGINIA

DRAWN BY: JBM	PROJ. CHECK: RJB	PROJECT NO: 60614683	DATE: 06/08/20	FIGURE NO: 1
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## Attachment 2

### Figure 2 – Site Location Map







## Attachment 3

DEQ Form DESC-01 – Applicant's Disclosure Statement





DEQ Form DISC-01  
SOLID WASTE MANAGEMENT FACILITY PERMIT  
APPLICANT'S DISCLOSURE STATEMENT

This Form must accompany the Solid Waste Notice of Intent or Permit-by-Rule Application, and must be updated upon any change in condition that renders any portion of this statement materially incomplete or inaccurate, in accordance with Virginia Solid Waste Management Regulations, [9 VAC 20-81-10 et seq.](#), and the Virginia Waste Management Act, [§ 10.1-1400 et seq.](#) Use continuation sheet if necessary to provide complete information. ☐ Check if updating previously submitted DISC-01

**Applicant:** Virginia Electric and Power Company d/b/a Dominion Energy Virginia

**Applicant's Interest:** ☒ Owner ☐ Operator ☐ Other \_\_\_\_\_

**Facility Name:** Chesterfield Power Station **Permit #:** 619

**Business Address:** 120 Tredegar Street

**City:** Richmond **Zip:** 23219

**Email:** dennis.a.slade@dominionenergy.com **Phone:** 804-317-7079

**KEY PERSONNEL:**

Enter below the names of all key personnel as defined in [9 VAC 20-81-10](#).

A separate DEQ Form DISC-02 must be completed for each individual, corporation, or entity listed.

#	Name	#	Name	#	Name
1.	Robert W. Sauer	5.		9.	
2.	Shane Young	6.		10.	
3.	Julie Williams-Daves	7.		11.	
4.		8.		12.	

**OTHER REGULATORY OVERSIGHT:**

List all agencies **outside the Commonwealth** that have regulatory responsibility over the applicant or have issued any environmental permit or license to the applicant **within the past ten years**, in connection with the applicant's collection, treatment, storage or disposal of solid or hazardous waste.

Agency Name and Permit or License Type	Expiration Date	State
WV DEP - WV0110256 NPDES/Solid Waste	June 20, 2021	WV

Does any member of the local governing body or planning commission in which the solid waste management facility is located or proposed to be located hold an equity interest in the facility? ☒ NO ☐ YES

If YES, provide full name and business address of that person or persons:

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**ORGANIZATIONAL STRUCTURE:** Provide an organizational and/or corporate structure as an **attachment** to this form, identifying directors, officers, partners, members and managing members, parent companies and subsidiaries, as applicable.

☐ Check if updating previously submitted organizational structure





DEQ Form DISC-01  
SOLID WASTE MANAGEMENT FACILITY PERMIT  
APPLICANT'S DISCLOSURE STATEMENT

**RESPONSIBLE OFFICIAL CERTIFICATION**

I certify under penalty of law that the information contained in this Disclosure Statement and all attachments are, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Applicant Signature: Robert W. Sauer Date: Feb 8, 2021  
Robert W. Sauer (Feb 8, 2021 08:28 EST)

Type or print full name: Robert W. Sauer Title: Vice President - System Operations

**Remarks or continuation from previous page:**



## Attachment 4

DEQ Form DISC-02 – Key Personnel Disclosure Statement





DEQ Form DISC-02  
SOLID WASTE MANAGEMENT FACILITY PERMIT  
KEY PERSONNEL DISCLOSURE STATEMENT

**Instructions:** A separate DEQ Form DISC-02 must be completed for each of the Key Personnel listed on DEQ Form DISC-01. The information provided on this form is specific to the "person" listed, whether that is an individual, corporation, partnership, association, government body or other legal entity, as defined in the Virginia Solid Waste Management Regulations, [9 VAC 20-81-10](#), and as required by the Virginia Waste Management Act, [§ 10.1-1400 et seq.](#)

**Key Personnel Name:** Robert W. Sauer

**Facility Name:** Chesterfield Power Station **Permit #:** 619

**Business Address:** 600 East Canal Street, Richmond, VA 23219

☐ Check if updating previously submitted DISC-02

**BUSINESS EXPERIENCE:**

Provide all information that reasonably relates to the qualifications and ability of the key personnel listed on this form to lawfully and competently operate a solid waste management facility in Virginia. Use continuation sheet, if needed.

EMPLOYER or ENTITY	DATES	POSITION Title & Responsibilities
VEPCO d/b/a Dominion Energy Virginia	11/1/2018- Current	Vice President - System Operations - Responsible for the safe and reliable operation of power generating stations in the Dominion Energy fleet

**PERMITS & LICENSES (past 10 years):**

List all permits or licenses issued to or held by the above named person within the past ten years, for the collection, transportation, treatment, storage, or disposal of solid or hazardous waste. Include waste management facility operator licensing, and agencies outside the Commonwealth which have or has had regulatory responsibility over the named person.

PERMIT / LICENSE	AGENCY	Current?
Solid Waste Permit No. 609	Virginia DEQ	Yes
NPDES/Solid Waste Permit WV0110256	West Virginia DEP	Yes

**Violations, Prosecutions, Enforcement Actions, License or Permit Suspensions, Felonies (past 10 years):**

List and explain any findings or allegations of civil or criminal violation of any law, regulation or requirement relating to the collection, transportation, treatment, storage or disposal of solid waste (pending or concluded, by the above named person or by any facility at which the person was key personnel); any license or permit suspensions in any state; and convictions of any crimes as specified in [§ 10.1-1400](#), definition of "Disclosure Statement," Item 5. ☒ Check if none

Does the above named person hold an equity interest of 5 percent or more in any entity that collects, transports, treats, stores, or disposes of solid waste or hazardous waste? ☒ NO ☐ YES

If YES, provide full name and address of that entity: \_\_\_\_\_

I certify, to the best of my knowledge and belief, that the information contained in this Disclosure Statement is true, accurate, and complete.

**Applicant Signature:** Robert W. Sauer  
Robert W. Sauer (Feb 8, 2021 12:42 EST)

**Date:** Feb 8, 2021

**Type or print full name:** Robert W. Sauer

**Title:** Vice President - System Operations





**DEQ Form DISC-02**  
**SOLID WASTE MANAGEMENT FACILITY PERMIT**  
**KEY PERSONNEL DISCLOSURE STATEMENT**

Per [§ 10.1-1408.1.C.3](#), this Disclosure Statement must be updated upon any change in condition that renders any portion of the statement materially incomplete or inaccurate.

**- Continuation Sheet -**

*Use this sheet if additional space is needed*

**Key Personnel Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Business Experience:**

**Permits and Licenses (past 10 years):**

**Violations, Prosecutions, Enforcement Actions, License or Permit Suspensions, Felonies (past 10 years):**

**Equity Interests:**





DEQ Form DISC-02  
SOLID WASTE MANAGEMENT FACILITY PERMIT  
KEY PERSONNEL DISCLOSURE STATEMENT

**Instructions:** A separate DEQ Form DISC-02 must be completed for each of the Key Personnel listed on DEQ Form DISC-01. The information provided on this form is specific to the "person" listed, whether that is an individual, corporation, partnership, association, government body or other legal entity, as defined in the Virginia Solid Waste Management Regulations, [9 VAC 20-81-10](#), and as required by the Virginia Waste Management Act, [§ 10.1-1400 et seq.](#)

**Key Personnel Name:** Shane Young

**Facility Name:** Chesterfield Power Station **Permit #:** 619

**Business Address:** 500 Coxendale Road, Chester, Virginia 23836

☐ Check if updating previously submitted DISC-02

**BUSINESS EXPERIENCE:**

Provide all information that reasonably relates to the qualifications and ability of the key personnel listed on this form to lawfully and competently operate a solid waste management facility in Virginia. Use continuation sheet, if needed.

EMPLOYER or ENTITY	DATES	POSITION Title & Responsibilities
VEPCO d/b/a Dominion Energy Virginia	6/2019 - present	Station Director - Chesterfield Power Station - Responsible for the safe and reliable operation of the Chesterfield Power Station, including the FFCP landfill

**PERMITS & LICENSES (past 10 years):**

List all permits or licenses issued to or held by the above named person within the past ten years, for the collection, transportation, treatment, storage, or disposal of solid or hazardous waste. Include waste management facility operator licensing, and agencies outside the Commonwealth which have or has had regulatory responsibility over the named person.

PERMIT / LICENSE	AGENCY	Current?
Solid Waste Permit No. 609	Virginia DEQ	Yes


**Violations, Prosecutions, Enforcement Actions, License or Permit Suspensions, Felonies (past 10 years):**

List and explain any findings or allegations of civil or criminal violation of any law, regulation or requirement relating to the collection, transportation, treatment, storage or disposal of solid waste (pending or concluded, by the above named person or by any facility at which the person was key personnel); any license or permit suspensions in any state; and convictions of any crimes as specified in [§ 10.1-1400](#), definition of "Disclosure Statement," Item 5. ☒ Check if none

Does the above named person hold an equity interest of 5 percent or more in any entity that collects, transports, treats, stores, or disposes of solid waste or hazardous waste? ☒ NO ☐ YES

If YES, provide full name and address of that entity: \_\_\_\_\_

I certify, to the best of my knowledge and belief, that the information contained in this Disclosure Statement is true, accurate, and complete.

**Applicant Signature:**   
Shane Young (Feb 3, 2021 11:03 EST)

**Date:** 02-03-2021

**Type or print full name:** Shane Young

**Title:** Station Director





DEQ Form DISC-02  
SOLID WASTE MANAGEMENT FACILITY PERMIT  
KEY PERSONNEL DISCLOSURE STATEMENT

Per [§ 10.1-1408.1.C.3](#), this Disclosure Statement must be updated upon any change in condition that renders any portion of the statement materially incomplete or inaccurate.

**- Continuation Sheet -**

*Use this sheet if additional space is needed*

**Key Personnel Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Business Experience:**

**Permits and Licenses (past 10 years):**

**Violations, Prosecutions, Enforcement Actions, License or Permit Suspensions, Felonies (past 10 years):**

**Equity Interests:**





DEQ Form DISC-02  
SOLID WASTE MANAGEMENT FACILITY PERMIT  
KEY PERSONNEL DISCLOSURE STATEMENT

**Instructions:** A separate DEQ Form DISC-02 must be completed for each of the Key Personnel listed on DEQ Form DISC-01. The information provided on this form is specific to the "person" listed, whether that is an individual, corporation, partnership, association, government body or other legal entity, as defined in the Virginia Solid Waste Management Regulations, [9 VAC 20-81-10](#), and as required by the Virginia Waste Management Act, [§ 10.1-1400 et seq.](#)

**Key Personnel Name:** Julie Williams-Daves

**Facility Name:** Chesterfield Power Station **Permit #:** 619

**Business Address:** 500 Coxendale Road, Chester, Virginia 23836

☐ Check if updating previously submitted DISC-02

**BUSINESS EXPERIENCE:**

*Provide all information that reasonably relates to the qualifications and ability of the key personnel listed on this form to lawfully and competently operate a solid waste management facility in Virginia. Use continuation sheet, if needed.*

EMPLOYER or ENTITY	DATES	POSITION Title & Responsibilities
VEPCO d/b/a Dominion Energy Virginia	6/2018-present	Project Leader - Chesterfield Power Station - Responsible for the technical and regulatory compliance of the Chesterfield Power Station FFCP landfill on a day-to-day basis

**PERMITS & LICENSES (past 10 years):**

*List all permits or licenses issued to or held by the above named person within the past ten years, for the collection, transportation, treatment, storage, or disposal of solid or hazardous waste. Include waste management facility operator licensing, and agencies outside the Commonwealth which have or has had regulatory responsibility over the named person.*

PERMIT / LICENSE	AGENCY	Current?
Solid Waste Permit No. 609	Virginia DEQ	Yes

**Violations, Prosecutions, Enforcement Actions, License or Permit Suspensions, Felonies (past 10 years):**

*List and explain any findings or allegations of civil or criminal violation of any law, regulation or requirement relating to the collection, transportation, treatment, storage or disposal of solid waste (pending or concluded, by the above named person or by any facility at which the person was key personnel); any license or permit suspensions in any state; and convictions of any crimes as specified in [§ 10.1-1400](#), definition of "Disclosure Statement," Item 5. ☒ Check if none*

Does the above named person hold an equity interest of 5 percent or more in any entity that collects, transports, treats, stores, or disposes of solid waste or hazardous waste? ☒ NO ☐ YES

If YES, provide full name and address of that entity: \_\_\_\_\_

I certify, to the best of my knowledge and belief, that the information contained in this Disclosure Statement is true, accurate, and complete.

**Applicant Signature:** Julie Williams-Daves

**Date:** 2/3/2021

**Type or print full name:** Julie Williams-Daves

**Title:** Project Leader





**DEQ Form DISC-02**  
**SOLID WASTE MANAGEMENT FACILITY PERMIT**  
**KEY PERSONNEL DISCLOSURE STATEMENT**

Per [§ 10.1-1408.1.C.3](#), this Disclosure Statement must be updated upon any change in condition that renders any portion of the statement materially incomplete or inaccurate.

**- Continuation Sheet -**

*Use this sheet if additional space is needed*

**Key Personnel Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Business Experience:**

**Permits and Licenses (past 10 years):**

**Violations, Prosecutions, Enforcement Actions, License or Permit Suspensions, Felonies (past 10 years):**

**Equity Interests:**



## Attachment 5

Plat and Deed for Proof of Ownership



# FILE COPY

CONNIE STANLEY

Richmond, Virginia

DOROTHY SCOTT

February 8, 1996

## CHESTERFIELD POWER STATION ASH POND

In December, 1994 when the Company purchased the Chesterfield Power Station Ash Pond Site from Tarmac Mid-Atlantic, Inc., the property was not surveyed. The total acreage, which was reported to the SCC, was estimated to be 150.5 Acres. A survey which has just been completed shows the site actually contains 144.1 acres. A Confirmation and Correction Deed and Easement Agreement correcting the acreage acquired by this transaction, a copy of which is enclosed, was recorded January 22, 1996 in the Clerk's Office, Circuit Court, Chesterfield County, Virginia in Deed Book 2808, Page 757. Would you please report this change to the State Corporation Commission.

If you need additional information regarding this matter, please call me on Extension 3692.

Dorothy B. Scott

DBS/dm  
Enclosure  
cc: C. B. Barber



VEPCO REAL ESTATE  
DEED FILE NO. 2811PLAT BOOK ITEM NO. 36VIRGINIA ELECTRIC AND POWER COMPANY  
REAL ESTATE PURCHASED IN 1994

County or City: Chesterfield County

District or Borough: Bermuda Magisterial District

Location and General Description: Coxendale Road at Chesterfield Power  
Station Ash Disposal Pond

Acreage: ~~150.5+~~ 144.1

Improvements: None

Grantor: Tarmac Mid-Atlantic, Inc.

Tax Exempt Grantor: No

Purchase Price: \$2,000,000 No Additional Consideration

Date of Deed: ~~December 13, 1994~~ August 31, 1995

Date Deed Delivered: ~~December 13, 1994~~ August 31, 1995

Date Deed Recorded: ~~December 15, 1994~~ January 22, 1996 Deed Book 2808 Page 757  
~~2634~~ 148

Previous Assessment: Land \$ --- Improvements \$ ---  
Part of --- Acres Assessed at \$ ---

Proposed 1994 Land Assessment

Project No: 6580

CAFR No. and Project: C0087381 Ash Disposal Pond Land Purchase

Recording Costs: \$ ~~4,014.00~~

(PLAT ATTACHED)

Note: Temporary plat is attached



*Mailed  
Jeff. Poole*

DP 2811

BOOK 2808 PAGE 757

1-23-96

EXEMPTION CLAIMED: §58.1-810(1) AND (2) - See Recitals Below

001981

CONFIRMATION AND CORRECTION DEED  
AND EASEMENT AGREEMENT

THIS CONFIRMATION AND CORRECTION DEED AND EASEMENT AGREEMENT ("Agreement") is made as of this 31st day of August, 1995, by and between TARMAC MID-ATLANTIC, INC., a Delaware corporation ("Tarmac"), to be indexed as a grantor and a grantee; and VIRGINIA ELECTRIC AND POWER COMPANY, a public service corporation ("Virginia Power"), to be indexed as a grantor and a grantee, the address of which is Post Office Box 26666, Richmond, Virginia 23261-6666, Attn: Real Estate/Facilities (OJRP 18).

**RECITALS:**

A. By deed and easement agreement ("Original Deed") dated December 13, 1994, and recorded in the Clerk's Office of the Circuit Court of Chesterfield County, Virginia ("Clerk's Office"), in Deed Book 2634, at page 148, Tarmac conveyed to Virginia Power certain real property, more particularly described on Exhibit A attached to the Original Deed. All terms not otherwise defined in this Agreement shall have the meanings set forth in the Original Deed.

B. Exhibit A attached to the Original Deed was a preliminary plat which generally gave the configuration of the Transfer Property, as defined in the Original Deed and as redefined below, since the surveyor had not yet completed the perimeter survey



of the Transfer Property and the parties had not yet agreed to the placement of the appropriate monuments delineating the Transfer Property. The surveyor has completed the perimeter survey of the Transfer Property and the parties have agreed on the location of the monuments defining the perimeter boundaries.

C. The parties now desire to confirm the conveyance of the Transfer Property by reference to the legal description and plat attached to this Agreement.

D. The parties also desire to confirm the location and boundaries of the "Ingress/Egress Easement Area" and the "Access Easement Area" all pursuant to the terms and conditions more particularly set forth below.

**AGREEMENT:**

For and in consideration of the consideration set forth in the Original Deed, and other good and valuable consideration, the receipt and sufficiency of which are acknowledged, the parties agree as follows:

1. Exhibit A to the Original Deed is hereby deleted in its entirety and **Exhibit A-1** attached to this Agreement is substituted in its place and stead. Tarmac grants and conveys with special warranty to Virginia Power the real property ("Transfer Property") more particularly described in the legal description attached as **Exhibit A-1** and as more particularly shown and described as "PARCEL '1' 144.1± ACRES" on a plat



("Plat") entitled "VIRGINIA ELECTRIC AND POWER CO. CHESTERFIELD POWER STATION PLAT TO ACCOMPANY DEED & EASEMENT AGREEMENT WITH TARMAC VIRGINIA, INC." dated August 2, 1995, and last revised September 18, 1995, prepared by Holly & Associates and is recorded in the Clerk's Office in Map Book 88, at page 79. Virginia Power accepts the Transfer Property as described in this Agreement and releases and reconveys to Tarmac any rights in and to the real property conveyed to Virginia Power pursuant to the Original Deed not expressly included in the description of the Transfer Property set forth in this Agreement.

2. Paragraph 2 of the Original Deed is deleted in its entirety and the following is substituted in its place and stead:

"2. Tarmac reserves a perpetual, nonexclusive easement ('Ingress/Egress Easement') for vehicular and pedestrian passage over, on and across those areas designated and shown as the '10' Access Road' and '10' Access Road Along Top Of Dam' on the Plat."

3. Paragraph 3 of the Original Deed is supplemented by insertion of the following sentence at the end of the existing paragraph:

"Tarmac further grants and conveys a temporary exclusive easement ('Access Easement') over, under, through and across that portion of the



Tarmac Property ('Access Easement Area') shown as 'PARCEL 2' ACCESS EASEMENT 0.204 Ac.' on the Plat for the purpose of gaining access to its monitoring wells located within the Access Easement Area and shall have such right to monitor, examine, maintain, repair and replace the monitoring wells located within the Access Easement Area.

(b) Tarmac grants and conveys to Virginia Power a nonexclusive utility easement ('Utility Easement') over, under, through and across that portion of the Tarmac Property ('Utility Easement Area') designated and shown as 'PARCEL 3 UTILITY EASEMENT 0.084 Ac.' on the Plat for the purpose of monitoring, examining, repairing, maintaining, installing and replacing a sump pump, underground and above ground utility lines, monitoring wells and related facilities. Virginia Power acknowledges that the Utility Easement granted pursuant to this paragraph is subject to the terms and conditions of an access easement previously granted by Tarmac to the County of Chesterfield, Virginia, for the purpose of ingress and egress ('Roadway') to the Henricus Park property located at the eastern terminus of the road which the Utility Easement is located upon. Virginia Power agrees to, and shall, notify Chesterfield County prior to undertaking any installation or repairs which would cause an interruption of the traffic flow on the Roadway into or out of the Henricus Park property and will use its best efforts to coordinate scheduling with



Chesterfield County so as to minimize the impact of Virginia Power's activities in the Utility Easement Area. Virginia Power shall promptly repair any damage to the Roadway arising from its use, operation, maintenance or repair of the Utility Easement so as to restore the Roadway to its approximate condition prior to Virginia Power undertaking repairs, replacement, installation, construction or replacement within the Utility Easement Area."

4. Notwithstanding anything in the Original Deed to the contrary, any reference to the "Access Easement Area" shall also be deemed to include the "Utility Easement Area" and any reference to the "Access Easement" shall also be deemed to include the "Utility Easement".

5. Virginia Power previously acquired certain real property (commonly known as the "Virginia Power Parcel") pursuant to a deed recorded in the Clerk's Office in Deed Book 581, page 189. The boundary line ("Boundary Line") between the Transfer Property and the Virginia Power Parcel located between the points marked "A" and "B" on the Plat has never been firmly defined. Tarmac and Virginia Power agree that Tarmac has conveyed to Virginia Power all property adjacent to or along the Boundary Line between the Transfer Property and the Virginia Power Parcel. Tarmac does not make any claim to any right, title except for the easements reserved in the Original Deed, as modified by this Agreement. Tarmac waives, releases and quitclaims all of its right, title



and interest, if any, and agrees not to make any claim to any property between the Transfer Property and the Virginia Power Property along the Boundary Line.

6. All of the terms and conditions of the Original Deed not expressly modified or amended by this Agreement shall remain in full force and effect.

7. To facilitate execution of this Agreement, this Agreement may be executed in counterparts. It shall not be necessary that the signature on behalf of each party appear on each counterpart. All counterparts or counterpart signature pages shall collectively constitute a single Agreement.

WITNESS the following signatures and seals:

TARMAC MID-ATLANTIC, INC.,  
a Delaware corporation

By: [Signature] (SEAL)  
Its: President

COMMONWEALTH OF VIRGINIA  
AT LARGE, to-wit:

The foregoing instrument was acknowledged before me in the City of Norfolk, Virginia, this 11th day of October, 1995, by John D. Carr, President of TARMAC MID-ATLANTIC, INC., a Delaware corporation, on its behalf.

[Signature]  
Notary Public

(SEAL)

My Commission Expires:

July 31, 1997



VIRGINIA ELECTRIC AND POWER  
COMPANY, a public service corporation

By: [Signature] (SEAL)  
Its: SVR

By: [Signature] (SEAL)  
Its: Assistant Corporate Secretary

COMMONWEALTH OF VIRGINIA  
AT LARGE, to-wit:

The foregoing instrument was acknowledged before me in the City of Richmond, Virginia, this 20<sup>th</sup> day of November, 1995, by W. R. Cartwright, Senior Vice President of VIRGINIA ELECTRIC AND POWER COMPANY, a public service corporation, on its behalf.

[Signature]  
Notary Public

(SEAL)  
My Commission Expires: 7/31/95

COMMONWEALTH OF VIRGINIA  
AT LARGE, to-wit:

The foregoing instrument was acknowledged before me in the City of Richmond, Virginia, this 20<sup>th</sup> day of November, 1995, by J. P. Carney, Assistant Corporate Secretary of VIRGINIA ELECTRIC AND POWER COMPANY, a public service corporation, on its behalf.

[Signature]  
Notary Public

(SEAL)  
My Commission Expires: 7/31/95



All that certain tract or parcel of land, with all improvements thereon and appurtenances thereto belonging, lying, being, and situated in Bermuda Magisterial District of Chesterfield County, Virginia, containing 144.1 acres, more or less, designated as Parcel "1" on that certain plat of survey prepared by Holly & Associates P. C., dated August 2, 1995, last revised September 18, 1995, entitled "VIRGINIA ELECTRIC AND POWER CO. CHESTERFIELD POWER STATION, PLAT TO ACCOMPANY DEED & EASEMENT AGREEMENT WITH TARMAC MID-ATLANTIC, INC.," a copy of which is recorded in the Clerk's Office of the Circuit Court of Chesterfield County, Virginia, in Map Book 88, at page 77, and being more particularly described as follows:

Beginning at a point located at the intersection of the center line of an 18' ingress/egress easement with the Southern right of way line of Coxendale Road, being 60 feet in width, and from such point S 09° 59' 05" W 1,087.9 feet to a point; thence along an arc of a curve to the left having a radius of 417.88', a delta angle of 37° 10' 38", an arc distance of 271.15' to a point; thence S 27° 11' 34" E 882.95 feet to a point; thence along an arc of a curve to the left having a radius of 152.94', a delta angle of 23° 58' 47", an arc distance of 64.01' to the true point of beginning; and from the true point of beginning S 89° 28' 16" E 591.00 feet to a pipe; thence N 79° 31' 05" E 1,169.99 feet to a rod; thence S 08° 53' 35" E 29.52 feet to a rod; thence N 70° 18' 57" E 636.60 feet to a rod; thence N 71° 32' 57" E 549.19 feet to a rod; thence N 70° 40' 32" E 315.88 feet to a rod; thence N 68° 42' 37" E 556.25 feet to a rod; thence N 68° 04' 32" E 249.10 feet to a rod; thence N 69° 38' 36" E 243.21 feet to a rod; thence N 71° 10' 02" E 378.92 feet to a rod; thence N 72° 11' 03" E 150.34 feet to a rod; thence N 83° 32' 50" E 238.46 feet to a rod; thence S 84° 55' 55" E 99.33 feet to a rod; thence along the arc of a curve to left having a radius of 343.22 feet (a chord bearing of N 70° 37' 19" E and a distance of 263.75 feet), an arc distance of 270.71' to a rod; thence S 37° 19' 04" E 219.09 feet to a rod; thence S 32° 53' 23" E 305± feet to the edge of the river's mean low water line; thence meandering along the river's mean low water mark 770± feet to a pipe; thence S 71° 08' 13" W 145.63 feet to a pipe; thence S 32° 33' 10" W 252.83 feet to a pipe; thence S 54° 17' 27" W 237.48 feet to a pipe; thence S 27° 20' 56" W 674.20 feet to a pipe; thence S 46° 20' 52" W 571.11 feet to a pipe; thence S 81° 58' 11" W 819.53 feet to a pipe; thence N 86° 57' 25" W 432.56 feet to a pipe; thence S 00° 13' 49" W 64.87 feet to a pipe; thence S 86° 33' 56" W 63.21 feet to a pipe; thence N 14° 11' 32" W 93.56 feet to a pipe; thence N 79° 20' 09" W 862.90 feet to a pipe; thence N 52° 05' 02" W 231.55 feet to a pipe; thence N 37° 01' 22" W 347.41 feet to a pipe; thence N 09° 09' 25" W 575.04 feet to a pipe; thence S 89° 07' 03" W 133.40 feet to a pipe; thence S 74° 56' 12" W 397.38 feet to a pipe; thence N 89° 29' 56" W 87.05 feet to a pipe; thence N 73° 34' 07" W 242.43 feet to a pipe; thence S 89° 14' 49" W 265.86 feet to a pipe; thence S 81° 00' 22" W 145.13 feet to a pipe; thence N 35° 57' 08" W 87.13 feet to a pipe; thence S 89° 28' 16" E 24.49 feet to the true point of beginning.

VIRGINIA:

IN THE CLERK'S OFFICE OF THE CIRCUIT COURT OF CHESTERFIELD COUNTY, THE 22 DAY OF JAN 1996, THIS DEED WAS PRESENTED AND WITH THE CERTIFICATE.....ADMITTED TO RECORD AT 11:30 O'CLOCK. THE TAX IMPOSED BY SECTION 58.1-802 IN THE AMOUNT OF \$.00 HAS BEEN PAID.

TESTE: JUDY L. NORTHINGTON, CLERK



STATE ROUTE No. 615  
COXENDALE ROAD  
(60' R/W)

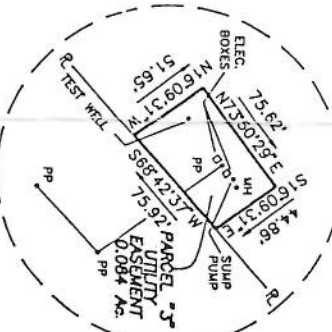
NOW OR FORMERLY  
VIRGINIA ELECTRIC AND POWER CO.  
DB 581, PG 189  
(VIRGINIA POWER PARCEL)

NOW OR FORMERLY  
TARMAC MID-ATLANTIC, INC.  
DB 2052, PG 1471  
TM 99-01-6

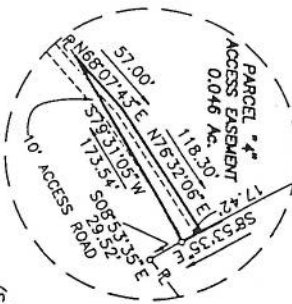
\* REFER TO PLAT DATED 3/15/95  
PREPARED BY LAPRADE BROS.  
CIVIL ENGINEERS & SURVEYORS  
RECORDED IN D.B. 2744 PG. 286.

\* PARCEL "A"  
DEDICATED TO THE VA  
DEPT. OF HIGHWAYS  
& TRANSPORTATION

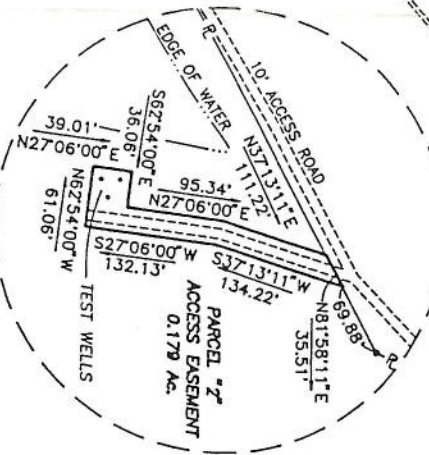
DETAIL C  
NOT TO SCALE



DETAIL D  
NOT TO SCALE

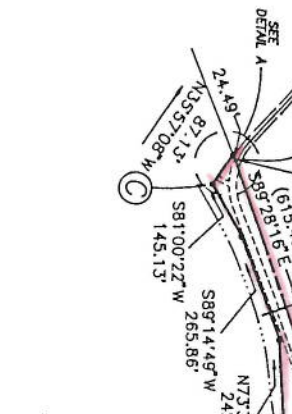
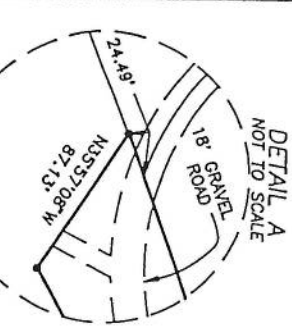


DETAIL B  
NOT TO SCALE



PARCEL "1"  
144.1± ACRES

NOW OR FORMERLY  
TARMAC MID-ATLANTIC, INC.  
DB 2052, PG 1471  
TM 99-01-6



REVISIONS				
4	3	2	09/18/95	1
			08/15/95	

VIRGINIA ELECTRIC AND POWER  
CHESTERFIELD POWER ST.  
PLAT TO ACCOMPANY DB 581, PG 189  
TARMAC MID-ATLANTIC, INC.  
COUNTY: CHESTERFIELD  
SCALE: 1"=100' FT.  
DRAWN BY: BERNARD  
DATE: 8/2/95  
NO. 1



NOTE: ALL IMPROVEMENTS  
NOT SHOWN  
● - DENOTES PIPE  
○ - DENOTES ROAD

NOW OR FORMERLY  
TARMAC MID-ATLANTIC  
DB 2052, PG 1471  
TM 99-01-6



## Attachment 6

Virginia SCC Certificate of Good Standing



# Commonwealth of Virginia



## State Corporation Commission

### CERTIFICATE OF GOOD STANDING

I Certify the Following from the Records of the Commission:

That Virginia Electric and Power Company is duly incorporated under the law of the Commonwealth of Virginia;

That the corporation was incorporated on June 29, 1909;

That the corporation's period of duration is perpetual; and

That the corporation is in existence and in good standing in the Commonwealth of Virginia as of the date set forth below.

Nothing more is hereby certified.



Signed and Sealed at Richmond on this Date:

January 4, 2021

A handwritten signature in black ink, appearing to read "Bernard J. Logan".

---

Bernard J. Logan, Clerk of the Commission




**Attachment II**

**Solid Waste Disposal Facility Part B Permit Application Form**



**Solid Waste Disposal Facility Part B Application, DEQ Form SW PTB**


		Solid Waste Permit No.		SWP		
		New Facility	<input type="checkbox"/>	Modification of existing Part B permit	<input type="checkbox"/>	
Facility Name:	Chesterfield Power Station, Upper and Lower Ash Ponds		Type of Landfill:	CCR Surface Impoundments - Closure by Removal		
Facility Location:	500 Coxendale Rd Chesterfield County Virginia					
Contact Person:	Dennis Slade					
Contact Number:	804-317-7079		Contact E-mail:	dennis.a.slade@dominionenergy.com		
Owner Name, Address, and Phone:			Operator Name, Address, and Phone:			
Robert Sauer Vice President, System Operations 600 East Canal Street Richmond, VA 23219 804-273-3685			Virginia Electric and Power Company Dba Dominion Energy Virginia 120 Tredegar Street Richmond, VA 23219 804-273-2658			
Total Property Acreage:	151 (LAP); 142 (UA)		Facility Boundary Acreage:	111 (LAP); 113 (UA)		
Disposal Unit Boundary Acreage:	N/A		Total Capacity (cubic yards):	14,600,000 (total)		
Daily Disposal Limit:	N/A		Estimated Site Life (years):	~13 yrs for closure		
Hours of Operation:	0700-1700 (typical) 7 days/week (24-hr operations as needed) - For Closure					
<b>Types of Wastes to be Accepted (check all that apply)</b>						
Agricultural Waste	<input type="checkbox"/>	Contaminated Soil <sub>1</sub>	<input type="checkbox"/>	Municipal Solid Waste	<input type="checkbox"/>	
Animal Carcasses	<input type="checkbox"/>	Debris Waste	<input type="checkbox"/>	Scrap Metal	<input type="checkbox"/>	
Asbestos, friable	<input type="checkbox"/>	Demolition Waste	<input type="checkbox"/>	Sludge, industrial	<input type="checkbox"/>	
Asbestos, non-friable	<input type="checkbox"/>	Fossil Fuel Combustion Products	<input checked="" type="checkbox"/>	Sludge, POTW	<input type="checkbox"/>	
Ash, non CCB/FFCP	<input type="checkbox"/>	Household Waste	<input type="checkbox"/>	Vegetative Waste	<input type="checkbox"/>	
Commercial Waste	<input type="checkbox"/>	Industrial Waste	<input type="checkbox"/>	Waste Tires	<input type="checkbox"/>	
Construction Waste	<input type="checkbox"/>	Institutional Waste	<input type="checkbox"/>	White Goods	<input type="checkbox"/>	
Other Special Wastes <sub>1</sub>	<input type="checkbox"/>	Please list: _____				
<b>Does this facility use or propose to use alternate cover materials? (Yes or No)</b>						<b>No</b>
If yes list material(s):	N/A - CCR ponds are being closed by removal					
<b>Solid Waste Management Activities (check all that apply)</b>						
Convenience Center	<input type="checkbox"/>	Material Salvage	<input type="checkbox"/>	Opening Burning	<input type="checkbox"/>	
Household Hazardous Waste Collection	<input type="checkbox"/>	Tire Processing (Chipping, Shredding, etc.)	<input type="checkbox"/>	Landfill Mining	<input type="checkbox"/>	
Mulching	<input type="checkbox"/>	Other	<input type="checkbox"/>	Please List: N/A		



Liner Design (check all that apply)			
Sanitary Landfill N/A		CDD or Industrial Landfills N/A	
Subtitle D Liner (9VAC20-81-130.J.1.a)	<input type="checkbox"/>	Compacted Clay (9VAC20-81-130.J.2.a)	<input type="checkbox"/>
Pre-approved Alternate (9VAC20-81-130.J.1.b)	<input type="checkbox"/>	Synthetic Liner (9VAC20-81-130.J.2.b)	<input type="checkbox"/>
Additional Alternate (9VAC20-81-130.J.1.c) <sub>2</sub>	<input type="checkbox"/>	Alternate Liner (9VAC20-81-130.J.2.c) <sub>2</sub>	<input type="checkbox"/>
		In-Place Soil (9VAC20-81-130.J.2.d) <sub>3</sub>	<input type="checkbox"/>
		Double Liner (9VAC20-81-130.J.2.e) <sub>4</sub>	<input type="checkbox"/>
Final Cover Design (check all that apply) N/A		Leachate Management (check all that apply) N/A	
Standard Final Cover (9VAC20-81-160.D.2.c)	<input type="checkbox"/>	Leachate Recirculation <sub>6</sub>	<input type="checkbox"/>
Pre-approved Alternate (9VAC20-81-160.D.2.d)	<input type="checkbox"/>	Discharged directly to WWTP	<input type="checkbox"/>
Pre-approved Alternate (9VAC20-81-160.D.2.e)	<input type="checkbox"/>	Treated onsite and discharged <sub>7</sub>	<input type="checkbox"/>
Additional Alternate (9VAC20-81-160.D.2.f) <sub>5</sub>	<input type="checkbox"/>	Transported by a vehicle to an offsite WWTP	<input type="checkbox"/>
		Other method <sub>8</sub>	<input type="checkbox"/>
<p>Stamp Professional Engineer in space provided, meaning to the best of my knowledge, information and belief, the selected landfill liner and final cover designs are, in my professional opinion, suitable for the above named facility based on site specific conditions and engineering principles. The designs proposed in the following Attachments are in compliance with applicable laws, codes, and ordinances.</p>			
Does this application include a Research Development and Demonstration Plan? (Yes or No) <sub>9</sub>			No
If yes:	The addition of liquids in addition to leachate and gas condensate from the same landfill for accelerated decomposition of the waste mass.		<input type="checkbox"/>
	Allowing run-on water to flow into the landfill waste mass.		<input type="checkbox"/>
	Allowing testing of the construction and infiltration performance or alternative final cover systems.		<input type="checkbox"/>
	Other measures to be taken to enhance stabilization of the waste mass.		<input type="checkbox"/>
Does this application include a variance request(s) to regulatory requirements? (Yes or No)			No
If yes list regulatory citation(s):			
<b>Footnotes:</b> <sub>1</sub> - These waste types require additional information, which should be included in Attachment XIII to receive approval. <sub>2</sub> - Alternate liner demonstration must be included in Attachment XIV. <sub>3</sub> - Laboratory test results documenting permeability of in-place soil must be included in Attachment XV. <sub>4</sub> - Witness zone monitoring program must be included on the Site Monitoring Plan in Attachment III. <sub>5</sub> - Alternate final cover demonstration must be included in Attachment XVI. <sub>6</sub> - To receive approval for recirculation the irrigated area must be a Sanitary Landfill and underlain by a composite liner or a Research, Development, or Demonstration Plan must be included in Attachment XVII. <sub>7</sub> - To receive approval for discharge of leachate to surface water an approved VPDES permit must be included in Attachment VIII. <sub>8</sub> - A description of the proposed method must be included in Attachment VIII. <sub>9</sub> - Only Sanitary landfills with a liner in accordance with 9VAC20-81-130.J.1 are eligible to submit RDD plans.			



<b>Attachments. The following attachments must be submitted in the order prescribed</b>
Attachment I: Notice of Intent
Attachment II: VDOT Adequacy Report and Approval Letter (If increasing Daily Disposal Limit) - Not Applicable
Attachment III: Design Plans (Drawings)
Attachment IV: Closure Plan
Attachment V: Post Closure Plan - Not Applicable - due to ponds being closed by removal
Attachment VI: Design Report - Not Applicable
Attachment VII: Construction Quality Assurance (CQA) Plan and Technical Specifications - Not Applicable
Attachment VIII: Leachate Management Plan - Not Applicable
Attachment IX: Landfill Gas Plans - Not Applicable
Attachment X: Groundwater Monitoring Plan
Attachment XI: Groundwater Corrective Action Plan - Not Applicable
Attachment XII: Financial Assurance Documentation - Not Applicable
Attachment XIII: Special Waste Documentation - Not Applicable
Attachment XIV: Alternate Liner Demonstration - Not Applicable
Attachment XV: Laboratory Test Results Documenting Permeability of In-place Soils - Not Applicable
Attachment XVI: Alternate Final Cover Demonstration - Not Applicable
Attachment XVII: Research, Development, and Demonstration Plan - Not Applicable

<b>Responsible Official Signature:</b>	
<p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete.</p>	
Robert W. Sauer	VP System Operations
Name:	Title:
 <small>Robert W. Sauer (Dec 18, 2020 09:34 EST)</small>	Dec 18, 2020
Signature:	Date:



**Attachment III**

**Drawings for LAP and UAP Closure**

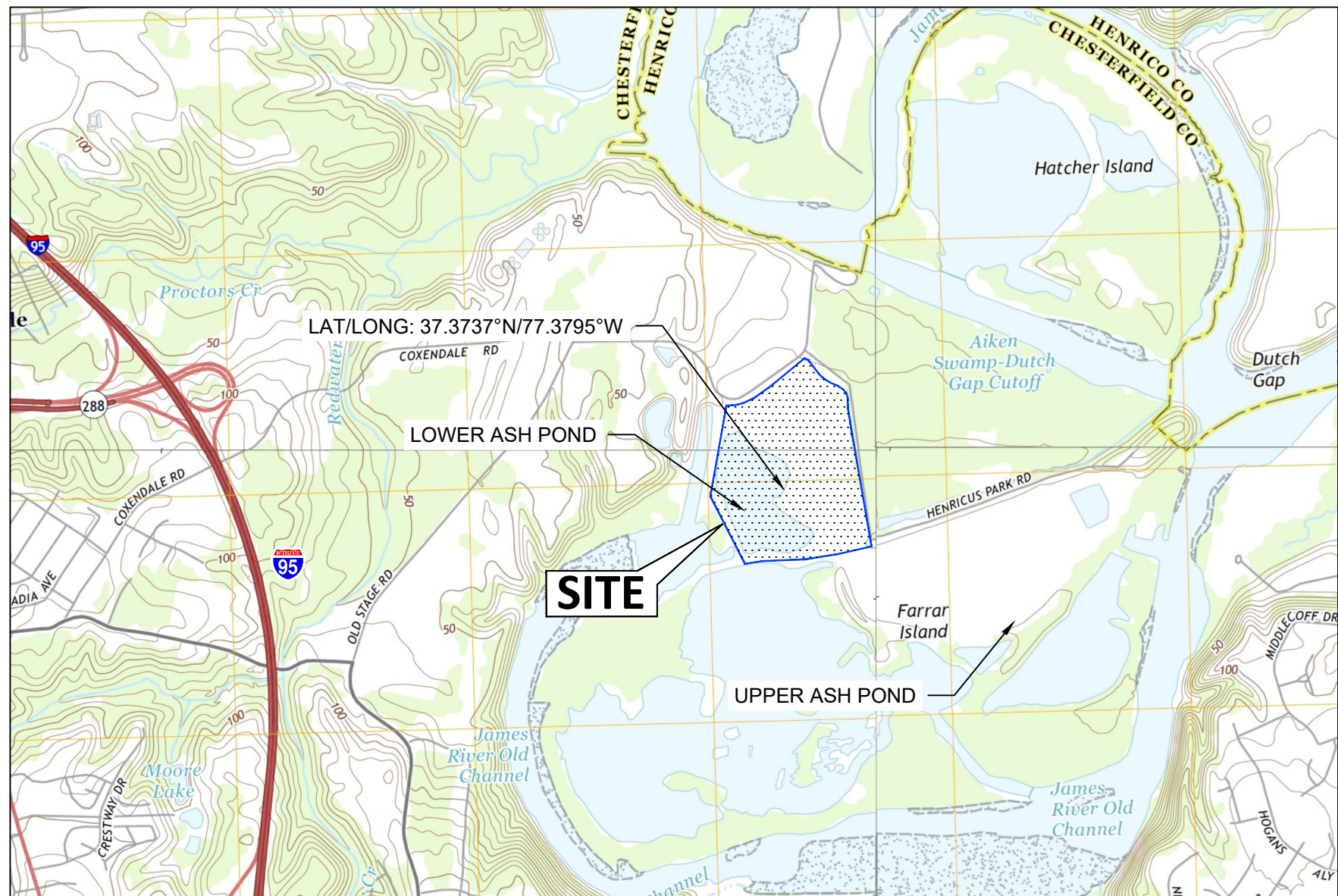


CONTACT INFORMATION

OWNER: DOMINION ENERGY  
CHRIS M. GEE  
600 E. CANAL ST.  
RICHMOND, VIRGINIA 23219  
PHONE: (804) 205-0527  
FAX: (804) 273-2876  
EMAIL: CHRIS.M.GEE@DOMINIONENERGY.COM

ENGINEER: AECOM  
GABE LANG, P.E.  
AECOM  
1600 PERIMETER PARK DR.  
MORRISVILLE, NC 27560  
919-461-1344  
EMAIL: GABE.LANG@AECOM.COM

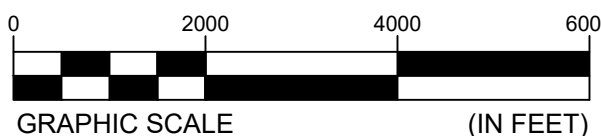
DOMINION ENERGY  
CHESTERFIELD POWER STATION  
CLOSURE PLAN - LOWER ASH POND  
PERMIT APPLICATION DRAWINGS  
NOT FOR CONSTRUCTION  
CHESTERFIELD COUNTY, VIRGINIA



SOURCE: 2013 USGS VIRGINIA QUAD MAPS: CHESTER, DREWRY'S BLUFF, DUTCH GAP AND HOPEWELL.

VICINITY MAP

1" = 2,000'



NO.

001  
002  
003  
004  
005  
006  
007  
008  
009  
010  
011  
012  
013

DWG DESCRIPTION

COVER SHEET  
EXISTING CONDITIONS AND UTILITY PLAN  
DEMOLITION PLAN  
ESTIMATED BOTTOM OF CCR MATERIAL PLAN  
FINAL GRADING PLAN  
EROSION AND SEDIMENT CONTROL PLAN  
FINAL GRADING PROFILE AND CROSS SECTIONS LAYOUT PLAN  
FINAL GRADING PROFILES AND CROSS SECTIONS I  
FINAL GRADING PROFILES AND CROSS SECTIONS II  
PROPOSED STORMWATER STRUCTURES  
FINAL GRADING AND STORMWATER DETAILS  
DAM DECOMMISSIONING PLAN  
DAM DECOMMISSIONING CROSS SECTIONS

VSMP COMPLIANCE

WATER QUALITY COMPLIANCE IN ACCORDANCE WITH 9VAC25-870-65 IS ACHIEVED THROUGH THE CHIAF PROJECT VSMP VAR10G662.

THIS PROJECT IS COVERED UNDER THE UMBRELLA VSMP VAR10G662.

GENERAL SITE INFORMATION

PARCEL ADDRESS (AS RECORDED IN CHESTERFIELD COUNTY GIS):	701 COXENDALE ROAD CHESTER, VIRGINIA 23836
LAT-LONG:	37.3737°N 77.3795°W
TAX ID:	808-6612255-00000
GPIN NUMBER:	8086612255
OFFSITE LAND DISTURBANCE:	NONE
COUNTY LAND DISTURBANCE PERMIT:	A CHESTERFIELD COUNTY LAND DISTURBANCE PERMIT IS REQUIRED FOR THIS PROJECT
VIRGINIA STORMWATER MANAGEMENT PROGRAM PERMIT (VSMP):	UMBRELLA VSMP VAR10G662 IS ALREADY IN PLACE.
FLOODPLAIN:	FLOOD ZONE A AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FIRM PANELS 51041C0335D AND 51041C0169D, EFFECTIVE DATE: DECEMBER 18, 2012.
NAME OF RECEIVING WATERS	JAMES RIVER
VA HU6 FOUR-DIGIT WATERSHED CODE	JL06
VA HU6 TWELVE-DIGIT WATERSHED CODE:	020802060106
FIRE:	EXISTING FIRE HYDRANT LOCATION SUFFICIENT FOR THIS PROJECT
WETLANDS:	WETLANDS AND RPA FIELD DELINEATED BY GOLDR ASSOCIATES JUNE 2018 AND BY AECOM ON MARCH 11, 2020.

ZONING/LAND USE INFORMATION

MAGISTERIAL DEVELOPMENT DISTRICT:	BERMUDA
ZONING/LAND USE OF AREA IN QUESTION:	I-3 (HEAVY INDUSTRIAL)
EXISTING ZONING/LAND USE OF WHOLE PROPERTY (PER CITIZEN GIS, 2010):	I-3 (HEAVY INDUSTRIAL)
LAND USE (PER CITIZEN GIS 2010):	INDUSTRIAL 151 ACRES
VPDES PERMIT NUMBER	VA0004146
ZONING CASE(S)	15SN0647

IMPACTS TO WETLAND AND OTHER WATERS OF THE U.S. ARE BEING SUBMITTED FOR APPROVAL UNDER SECTION 404 AND 401 OF THE CLEAN WATER ACT AND THE VIRGINIA TIDAL WETLANDS ACT THROUGH A PENDING MINOR PERMIT MODIFICATION REQUEST - CHESTERFIELD POWER STATION FOSSIL FUEL COMBUSTION PRODUCTS MANAGEMENT FACILITY, DEPARTMENT OF THE ARMY PERMIT NO. 2007-02441; 10-V1787 AND VIRGINIA WATER PROTECTION PERMIT NO. 10-1787. THESE PLANS MAY REQUIRE MODIFICATIONS PENDING PERMIT CONDITIONS AS REQUIRED BY FEDERAL OR STATE REVIEW AGENCIES. PERMIT CONDITIONS AMENDED TO THE PLANS SHALL BE FOLLOWED.

CBPA COMPLIANCE

- A. TIDAL WETLANDS MINIMALLY IMPACTED  
B. NON-TIDAL WETLANDS PERMITTED VIA USACE JD #NAO-2007-02441  
C. TIDAL SHORES NOT IMPACTED  
D. VEGETATED CONSERVATION AREA WITHIN 100 FEET OF PROPERTY LINE NOT IMPACTED  
E. 100-YEAR FLOODPLAIN NOT FILLED  
F. HIGHLY ERODIBLE SOILS OR STEEP SLOPES SHOWN ON PLANS AND PROTECTED BY EROSION AND SEDIMENT CONTROL MEASURES SHOWN IN THIS SITE PLAN  
G. NO HIGHLY PERMEABLE SOILS  
H. THE PURPOSE OF THE PROJECT IS TO COMPLY WITH THE FEDERAL CCR RULE TO PERMANENTLY CLOSE THE EXISTING CCR IMPOUNDMENT. WATER QUALITY COMPLIANCE IN ACCORDANCE WITH 9VAC 25-870-65.

THIS PROJECT WILL HAVE A LAND DISTURBANCE GREATER THAN 2,500 S.F.; THEREFORE THE VSMP REGULATIONS FOR STORMWATER ARE APPLICABLE AND ADMINISTERED BY THE COUNTY.

CALL MISS UTILITY  
BEFORE DIGGING

1-800-552-7001  
OR  
811

PREPARED FOR:  
DOMINION ENERGY (OWNER)  
500 COXENDALE RD  
CHESTER, VA 23836

PREPARED BY:  
AECOM  
4840 COX RD  
GLEN ALLEN, VA 23060

 SEAL 	TITLE <b>COVER SHEET</b>		
	CHESTERFIELD POWER STATION CLOSURE PLAN - LOWER ASH POND CHESTERFIELD COUNTY, VIRGINIA		
	FOR <b>PERMIT APPLICATION DRAWINGS</b>		
		SCALE: NONE DWG TYPE: .DWG JOB NO: 60614683 DATE: 11/13/2020	DES: AMC DFTR: AMC CHKD: RJB ENGR: GWL
	FILENAME: 001 COVER SHEET.DWG DWG SIZE: 22.0"x34.0"		APPD: GWL DRAWING NO. 001 REVISION 0

Stormwater Outfall Table														
Site Area (Acres)	116 +/-													
Drainage Area (Acres)	Outfall W1		Outfall W2		Outfall E1		Outfall E2		Outfall E3					
Runoff Reduction (cf)	39.3		31.8		10.7		9.8		15.6					
Channel Protection Compliance Method	Natural		Natural		Natural		Natural		Natural					
Flood Protection Compliance Method	N/A		N/A		N/A		N/A		N/A					
CN Existing <sup>1</sup>	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year
RV <sub>Existing</sub> (AC-FT) <sup>1</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Q <sub>Existing</sub> (CFS) <sup>1</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CN Developed	84		84		84		84		84					
RV <sub>Developed</sub> (AC-FT)	4.36	5.96	11.05	3.53	4.82	8.95	1.18	1.62	3.00	1.08	1.48	2.74	1.73	2.37
Q <sub>Developed</sub> (CFS)	30.35	41.10	71.22	25.49	34.60	61.54	12.93	17.56	30.70	13.75	18.75	33.82	20.78	28.09
Q <sub>Allowed</sub> (CFS) <sup>1</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V <sub>Developed</sub> (ft/s)	6.87	7.28	8.09	6.51	6.90	7.73	4.98	5.35	6.09	3.28	3.64	4.43	3.77	4.17
Outfall Location (Lats/Long)	N 37° 22' 30.41" W 77° 22' 58.18"		N 37° 22' 17.83" W 77° 22' 55.04"		N 37° 22' 43.44" W 77° 22' 40.89"		N 37° 22' 31.81" W 77° 22' 33.23"		N 37° 22' 20.54" W 77° 22' 30.84"					

<sup>1</sup>Not computed since the existing condition was a regulated basin.

Stormwater Compliance Table					
Site Area (acres)	116 +/-	BMP Type	A BMP is not needed because the TP load is zero following the VRRM		N/A
Required Removal for the Site (lbs)	0		Location of BMP (Lat/Long)		N/A
Total Load Removed (lbs)	0		Receiving water		James River
Offset Generating Facility			VAHUC6		20802
Amount of Phosphorus Purchased (lbs)			MS4 Operator		Dominion Virginia Power
Equivalent Nitrogen Amount (lbs)	N/A	N/A	TMDL		Not Required *
8-digit HUC of Generating Facility			Downstream BMP		N/A
			Location of storm sewer outfalls 30 inches in diameter		W1, W2, E1

\* The Farrar Gut is considered a category 4A water, and so a TMDL s not required because the TMDL for specific pollutant(s) is complete.

TOTAL SITE ACREAGE:	151 ±	DISTURBED AREA ACREAGE:	116 ±
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LEGEND

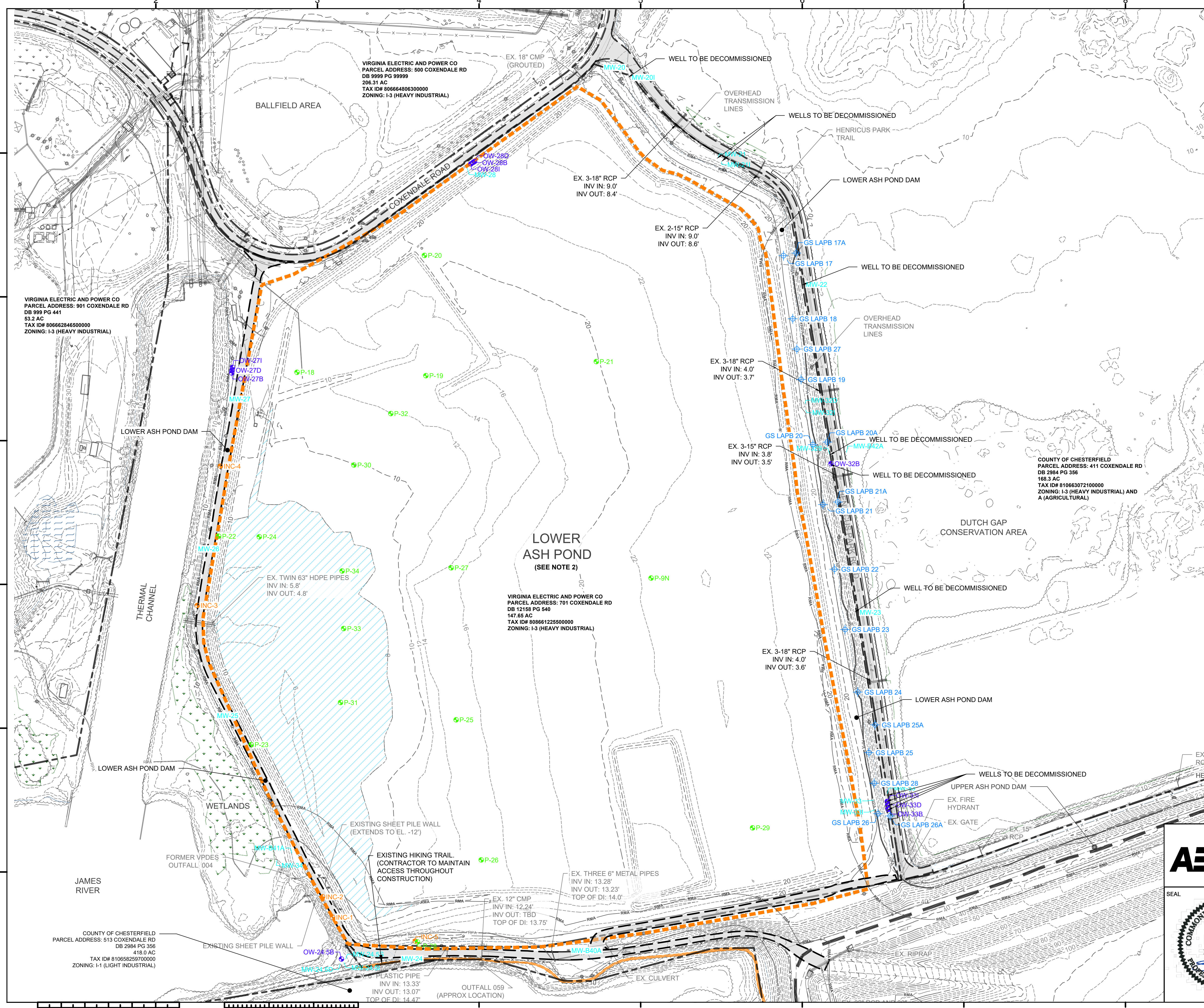
- 10 EXISTING TOPO MAJOR (10FT)
- 2 EXISTING TOPO MINOR (2FT)
- EXISTING HIKING TRAIL
- EXISTING ROAD
- ASH POND BOUNDARY (APPROX)
- 100-YEAR FLOOD ELEVATION
- EXISTING WATER LINE
- PROPERTY BOUNDARY
- RPA RESOURCE PROTECTION AREA
- RMA RESOURCE MANAGEMENT AREA
- EXISTING FENCELINE
- P-X EXISTING PIEZOMETER
- INC-X EXISTING INCLINOMETER
- OW-X EXISTING OBSERVATION WELL
- MW-X EXISTING MONITORING WELL
- GS-LAPB-X EXISTING BORING
- OVERHEAD TRANSMISSION LINE POLE
- FORESTED WETLANDS
- OPEN WATER WETLANDS
- PONDED WATER ON LINER COVER

NOTES

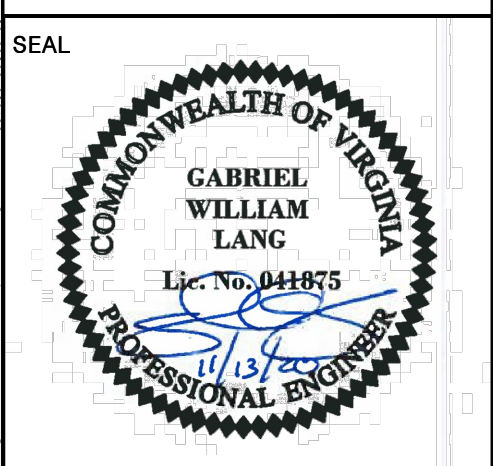
1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. LOWER ASH POND IS CURRENTLY PROTECTED BY WIND DEFENDER. CONTRACTOR TO REMOVE DURING EXCAVATION.
3. LOCATIONS AND EXTENTS OF EXISTING UTILITIES SHOWN ARE BASED ON THE BEST AVAILABLE INFORMATION AND ARE APPROXIMATE. THE LOCATIONS AND EXTENTS OF UTILITIES ARE TO BE FIELD VERIFIED BY THE CONTRACTOR.


REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
2. THE PROPERTY BOUNDARY PRESENTED IN THESE DRAWINGS IS BASED ON A METES AND BOUNDS SURVEY PERFORMED BY D&M SURVEYORS P.C. ON MARCH 16 AND 29, 2016.
3. THE EXISTING WETLANDS AND RESOURCE PROTECTION AREA (RPA) PRESENTED IN THESE DRAWINGS WERE OBTAINED FROM THE WETLAND DELINEATION MAP PREPARED BY GOLDER ASSOCIATES, DATED AUGUST 20, 2015, JUNE 2018 AND BY AECOM ON MARCH 11, 2020.
4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100-YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 51041C0169D, DATED APRIL 26, 2017.



**AECOM**



TITLE			EXISTING CONDITIONS AND UTILITY PLAN CHESTERFIELD POWER STATION CLOSURE PLAN - LOWER ASH POND CHESTERFIELD COUNTY, VIRGINIA		
FOR			PERMIT APPLICATION DRAWINGS		
 <b>Dominion Energy</b>		SCALE: 1"=150'		DES: AMC	
		DWG TYPE: DWG		DFTR: AMC	
		JOB NO: 60614683		CHKD: RJ/B	
		DATE: 11/13/2020		ENGR: GWL	
FILENAME: 002 EXISTING CONDITIONS AND UTILITY PLAN.DWG			APPD: GWL		
DWG SIZE		DRAWING NO.		REVISION	
ANSI D 22.0"x34.0"		002		0	







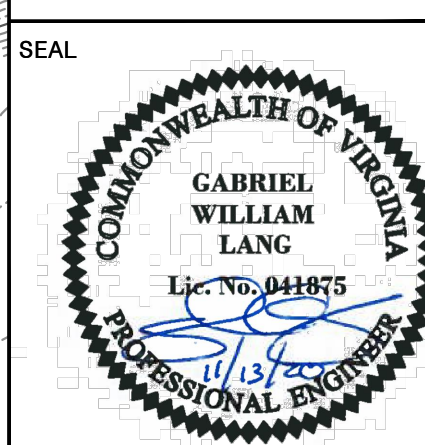
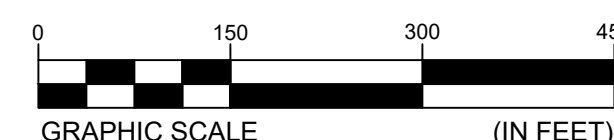


## REFERENCES


- ## NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD89.
2. THE ESTIMATED QUANTITY OF CCR MATERIAL (PROVIDED IN THE TABLE ON THIS SHEET) IS BASED ON A COMPARISON OF THE EXISTING TOPOGRAPHY AND THE ESTIMATED BOTTOM OF CCR MATERIAL GRADES UTILIZING AUTOCAD CIVIL 3D (VERSION 2018) AND IS APPROXIMATE AND SUBJECT TO CHANGE BASED ON ACTUAL CONDITIONS ENCOUNTERED IN THE FIELD.
3. ESTIMATED BOTTOM OF CCR MATERIAL GRADES SHOWN ARE APPROXIMATE AND ARE PROVIDED FOR REFERENCE PURPOSES ONLY. CONTRACTOR TO VERIFY ACTUAL BOTTOM OF CCR MATERIAL GRADES IN THE FIELD.
4. CONTRACTOR SHALL ASSUME THE MAXIMUM DEPTH OF CCR MATERIAL IS 5 FEET BELOW THE ESTIMATED GRADES SHOWN ON THIS SHEET FOR DEWATERING PURPOSES. CONTRACTOR SHALL MAINTAIN THE WATER ELEVATION A MINIMUM OF 5 FEET BELOW THE WORKING SURFACE/AREA (I.E., A MINIMUM OF 10 FEET BELOW THE GRADES SHOWN ON THIS SHEET).
5. ALL WATER, EXCEPT NON-CONTACT STORMWATER, WILL REQUIRE TREATMENT PRIOR TO BEING DISCHARGED.
6. CONTRACTOR TO KEEP CONTACT WATER, WATER FROM DEWATERING EFFORTS, AND ANY OTHER NON-STORMWATER FLOWS SEPARATE FROM STORMWATER AT ALL TIMES DURING CONSTRUCTION.
7. CONTRACTOR TO PROVIDE LINED CONTACT WATER BASINS WITH SUFFICIENT CAPACITY TO MANAGE CONTACT STORMWATER FROM A 100-YEAR, 24-HOUR STORM EVENT.
8. CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 0.9 PROBABLE MAXIMUM PRECIPITATION (PMP) EVENT UNTIL ALL CCR HAS BEEN REMOVED. ONCE CCR HAS BEEN REMOVED, CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 100-YEAR EVENT.
9. THE MINIMUM DAM ELEVATION MUST BE MAINTAINED AT ELEVATION 16.0 FEET OR HIGHER TO PREVENT THE 100-YEAR FLOODPLAIN FROM COMING IN CONTACT WITH CCR MATERIAL.
10. CONTRACTOR TO MAINTAIN COMPLIANCE WITH DCR AND VPDES PERMITS DURING ALL PHASES UNTIL ALL CCR HAS BEEN REMOVED.
11. ANY AREA CERTIFIED AS ACHIEVING CLOSURE BY REMOVAL IS TO BE PROTECTED FROM CCR AND CONTACT STORMWATER, AND MAY BE FILLED AND/OR RESHAPED AS NEEDED PRIOR TO ACHIEVING FINAL GRADES.
12. ACCUMULATED CCR SHALL BE REMOVED FROM SURFACES WITHIN THE POND LIMITS SUCH THAT NO CCR REMAINS VISIBLE.
13. FOLLOWING VISUAL-CLEAN CONDITIONS, OVER-EXCAVATE THE REMOVAL FOOTPRINT BY AT LEAST SIX INCHES.
14. VISUAL INSPECTION AND TARGETED SUBGRADE VISUAL SAMPLING TO BE OVERSEEN BY OWNER'S ENGINEER REPRESENTATIVE. SAMPLING TO BE PERFORMED AT A FREQUENCY OF AT LEAST ONE TEST PER ACRE. TARGETED SAMPLING TO CONSIST OF HAND-DUG HOLES AT LEAST SIX INCHES DEEP.

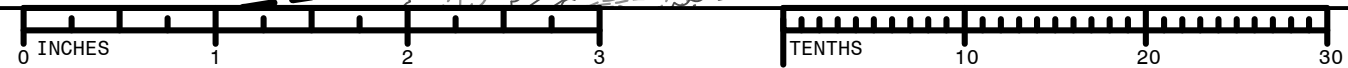
ESTIMATED CCR MATERIAL QUANTITIES (CY)		
CCR MATERIAL VOLUME	6-INCH OVEREXCAVATION VOLUME	TOTAL VOLUME
2,820,000	79,000	2,899,000



TITLE	ESTIMATED BOTTOM OF CCR MATERIAL PLAN CHESTERFIELD POWER STATION CLOSURE PLAN - LOWER ASH POND CHESTERFIELD COUNTY, VIRGINIA
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FOR			PERMIT APPLICATION DRAWINGS		
 <b>Dominion Energy®</b>		SCALE: 1"=150'	DES: AMC		
		DWG TYPE: DWG	DFTFR: AMC		
		JOB NO: 60614683	CHKD: RJB		
		DATE: 11/13/2020	ENGR: GWL		
FILENAME: 004 ESTIMATED BOTTOM OF CCR MATERIAL PLAN.DWG		APPD: GWL			
DWG SIZE	DRAWING NO.				REVISION
ANSI D 22.0"x34.0"	004				0






	EXISTING TOPO MAJOR (10FT)		OVERHEAD TRANSMISSION LINE POLE
	EXISTING TOPO MINOR (2FT)		FORESTED WETLANDS
	PROPOSED TOPO MAJOR (10FT)		OPEN WATER WETLANDS
	PROPOSED TOPO MINOR (2FT)		EXISTING ROAD
	STORMWATER FLOW PATH		PROPOSED ROAD
	PROPERTY BOUNDARY		TYPICAL CLOSURE BACKFILL
	RESOURCE PROTECTION AREA		PROPOSED CONCRETE-LINED STORMWATER CONVEYANCE CHANNEL
	RESOURCE MANAGEMENT AREA		PROPOSED SECURITY FENCE
	EXISTING FENCELINE		PROPOSED PRIVACY FENCE
	EXISTING HIKING TRAIL		APPROX. LIMIT OF DISTURBANCE
	PROPOSED HIKING TRAIL		

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
2. THE PROPERTY BOUNDARY PRESENTED IN THESE DRAWINGS IS BASED ON A METES AND BOUNDS SURVEY PERFORMED BY D&M SURVEYORS P.C. ON MARCH 16 AND 29, 2016.
3. THE EXISTING WETLANDS AND RESOURCE PROTECTION AREA (RPA) PRESENTED IN THESE DRAWINGS WERE OBTAINED FROM THE WETLAND DELINEATION MAP PREPARED BY GOLDER ASSOCIATES, DATED AUGUST 20, 2015, JUNE 2018, AND BY AECOM ON MARCH 11, 2020.
4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100-YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 5104I00169D, DATED APRIL 26, 2017.

2. CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 0.9 PROBABLE MAXIMUM PRECIPITATION (PMP) EVENT UNTIL ALL CCR HAS BEEN REMOVED. ONCE CCR HAS BEEN REMOVED, CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 100-YEAR EVENT.



TITLE			
FINAL GRADING PLAN			
CHESTERFIELD POWER STATION CLOSURE PLAN - LOWER ASH POND CHESTERFIELD COUNTY, VIRGINIA			
FOR			
PERMIT APPLICATION DRAWINGS			
 <b>Dominion Energy</b>	SCALE: 1"=150'		DES: AMC
	DWG TYPE: DWG		DFTR: AMC
	JOB NO: 60614683		CHKD: RJJB
	DATE: 11/13/2020		ENGR: GWL
FILENAME:	005 FINAL GRADING PLAN.DWG		APPD: GWL
DWG SIZE	DRAWING NO.		REVISION
ANSI D 22.0"x34.0"	005		0





0 150 300 450

GRAPHIC SCALE (IN FEET)




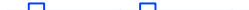


















1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
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4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100-YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 51041C0169D, DATED APRIL 26, 2017.




1. BASIS OF BEARINGS, NAD83, VIRGINIA STATE PLAN SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. ONCE VEGETATION IS ESTABLISHED AND SITE IS CONSIDERED STABILIZED, REMOVE TEMPORARY SEDIMENT BASINS AND TEMPORARY SEDIMENT BASIN RISERS AND RECONFIGURE WEST AND EAST OUTFLETS BASED ON FINAL POST CLOSURE CONDITIONS. TEMPORARY CULVERT INLET PROTECTION MAY BE REQUIRED IN THE INTERIM CONDITION.
3. CULVERT OUTFLET PROTECTION FOR OUTFLETS W1, W2, E2, AND E3 SHALL BE TIED CONCRETE BLOCK MAT. OUTFLET PROTECTION FOR E1 SHALL BE RIPRAP.
4. CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 0.9 PROBABLE MAXIMUM PRECIPITATION (PMP) EVENT UNTIL ALL CCR HAS BEEN REMOVED. ONCE CCR HAS BEEN REMOVED, CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 100-YEAR EVENT.
5. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL MEET THE GENERAL REQUIREMENTS OF THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ) EROSION & SEDIMENT CONTROL HANDBOOK (VESCH).



Legend:

- 10' — — — — — EXISTING TOPO MAJOR (10FT)
- EXISTING TOPO MINOR (2FT)
- 10' — — — — — PROPOSED TOPO MAJOR (10FT)
- PROPOSED TOPO MINOR (2FT)
- STORMWATER FLOW PATH
- 100-YEAR FLOOD ELEVATION
- PROPERTY BOUNDARY
- RPA — — — — — RESOURCE PROTECTION AREA
- RMA — — — — — RESOURCE MANAGEMENT AREA
- X — — — — — EXISTING FENCELINE
- EXISTING HIKING TRAIL
- PROPOSED HIKING TRAIL
- OVERHEAD TRANSMISSION LINE POLE
- FORESTED WETLANDS
- OPEN WATER WETLANDS
- EXISTING ROAD
- PROPOSED ROAD
- PROPOSED CONCRETE-LINED STORMWATER CONVEYANCE CHANNEL
- PROPOSED SECURITY FENCE
- PROPOSED PRIVACY FENCE

		SUPER SILT FENCE
		TURBIDITY CURTAIN
		HYDRAULICALLY APPLIED FLEXIBLE GROWTH MEDIUM (FLEXTERRA OR APPROVED EQUAL)
		CULVERT INLET PROTECTION
		CULVERT OUTLET PROTECTION (SEE NOTE 6)
		ROCK CHECK DAM
		INLET PROTECTION
		PERMANENT SEEDING
		MULCHING
		SEDIMENT BASIN
		CONCRETE-LINED STORMWATER CONVEYANCE CHANNEL

	TITLE EROSION AND SEDIMENT CONTROL PLAN		
	CHESTERFIELD POWER STATION CLOSURE PLAN - LOWER ASH POND CHESTERFIELD COUNTY, VIRGINIA		
	FOR PERMIT APPLICATION DRAWINGS		
		 <b>Dominion Energy</b> <sup>®</sup>	SCALE: NONE DWG TYPE: .DWG JOB NO: 60614683 DATE: 11/13/2020
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LEGEND

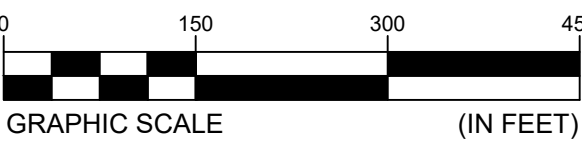
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	EXISTING TOPO MINOR (2FT)		FORESTED WETLANDS
	PROPOSED TOPO MAJOR (10FT)		OPEN WATER WETLANDS
	PROPOSED TOPO MINOR (2FT)		EXISTING ROAD
	STORMWATER FLOW PATH		PROPOSED ROAD
	PROPERTY BOUNDARY		PROPOSED CONCRETE-LINED STORMWATER CONVEYANCE CHANNEL
	RESOURCE PROTECTION AREA		PROPOSED SECURITY FENCE
	RESOURCE MANAGEMENT AREA		PROPOSED PRIVACY FENCE
	EXISTING FENCELINE		APPROX. LIMIT OF DISTURBANCE
	EXISTING HIKING TRAIL		EXISTING INCLINOMETER
	PROPOSED HIKING TRAIL		EXISTING OBSERVATION WELL
			EXISTING MONITORING WELL
			EXISTING BORING

REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA. THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH LOWER ASH POND INTERIM AS-BUILT SURFACE, SURVEY PERFORMED BY MCKIM & CREED ON AUGUST 8, 2019.
2. THE PROPERTY BOUNDARY PRESENTED IN THESE DRAWINGS IS BASED ON A METES AND BOUNDS SURVEY PERFORMED BY D&M SURVEYORS P.C. ON MARCH 16 AND 29, 2016.
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NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS BASED ON NAVD88.



**AECOM**

SEAL



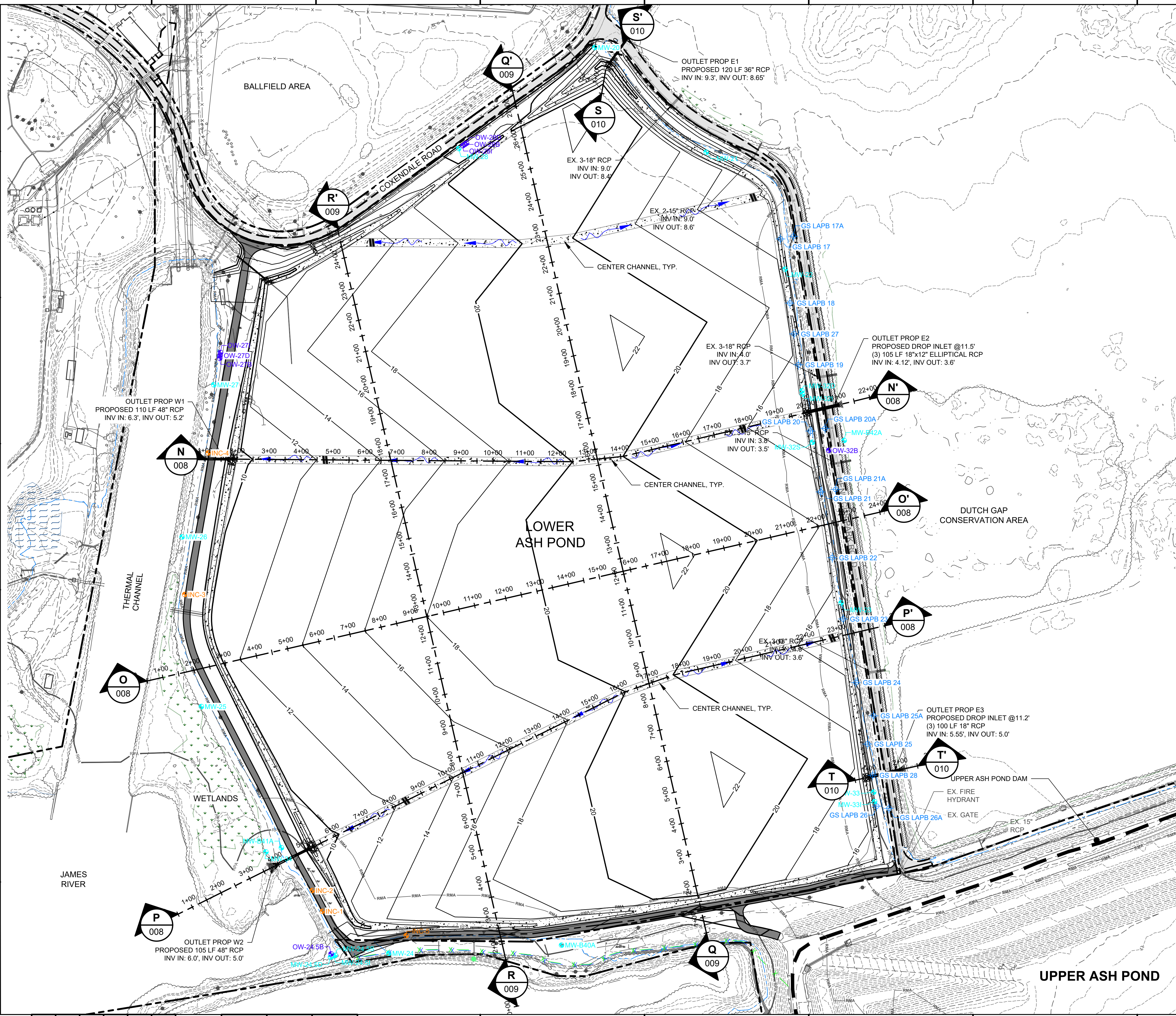
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SECTIONS LAYOUT PLAN  
CHESTERFIELD POWER STATION  
CLOSURE PLAN - LOWER ASH POND  
CHESTERFIELD COUNTY, VIRGINIA

FOR  
PERMIT APPLICATION DRAWINGS

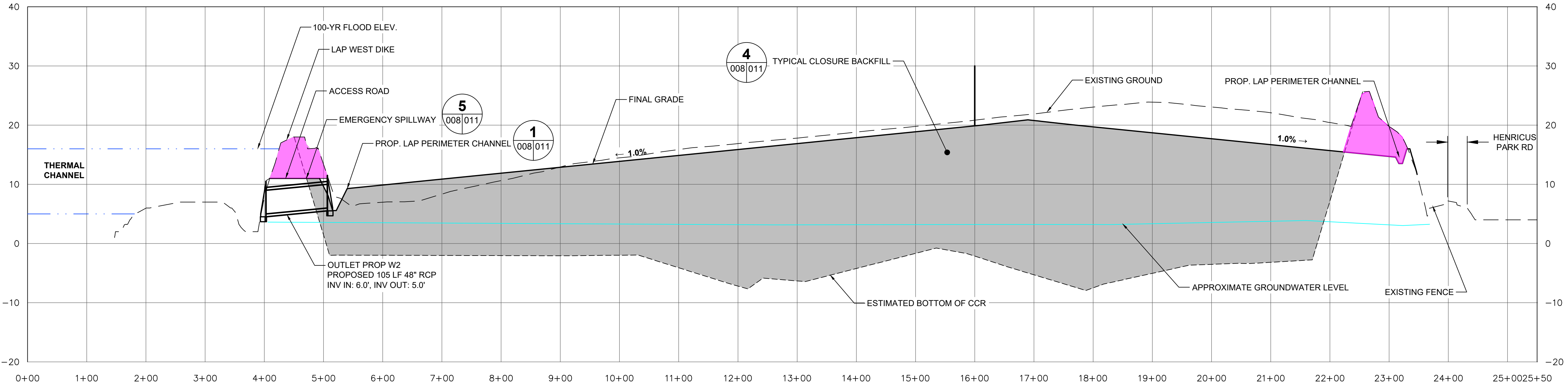
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DWG TYPE: DWG	DFTR: AMC
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DATE: 11/13/2020	ENGR: GWL

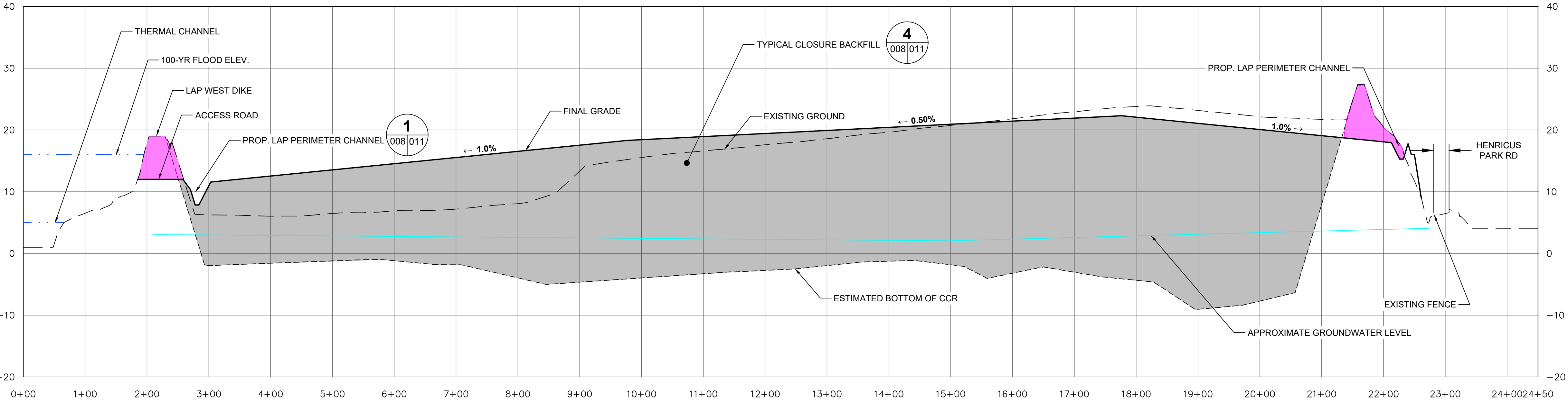
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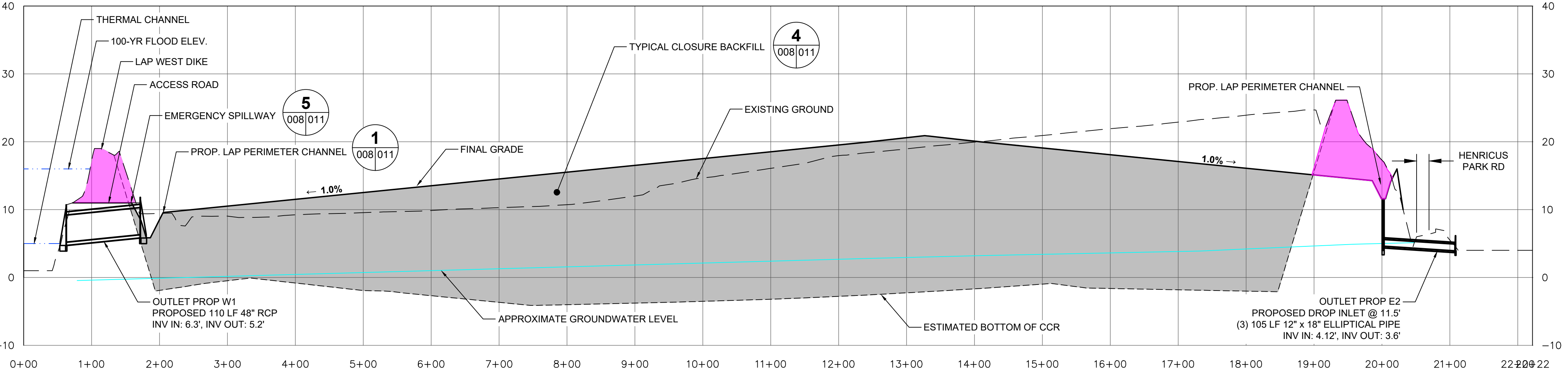




PROFILE - P-P'



PROFILE - O-O'



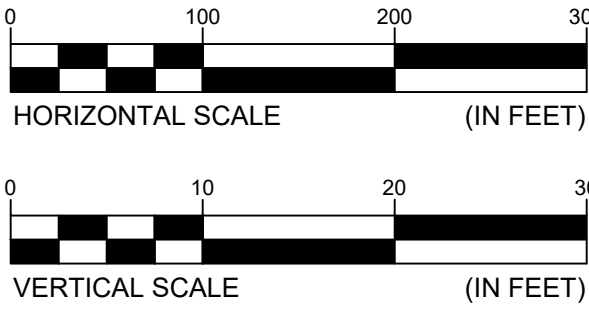
PROFILE - N-N'

LEGEND

- EXISTING GRADES
- ESTIMATED BOTTOM OF CCR
- ESTIMATED GROUNDWATER LEVEL
- WATER ELEVATION
- PROPOSED FINAL GRADE
- TYPICAL CLOSURE BACKFILL
- AREA OF DIKE REMOVAL

NOTES

- BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS BASED ON NAVD88.
- APPROXIMATE EXISTING GROUNDWATER LEVELS ARE BASED UPON A SINGLE DATA POINT AND ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR IS TO VERIFY INFORMATION PROVIDED IN DEVELOPMENT OF WATER MANAGEMENT PLAN.



SEAL

TITLE

FINAL GRADING PROFILES AND CROSS SECTIONS I

CHESTERFIELD POWER STATION

CLOSURE PLAN - LOWER ASH POND

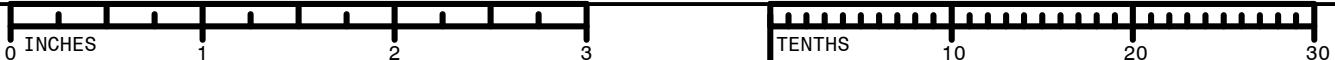
CHESTERFIELD COUNTY, VIRGINIA

FOR

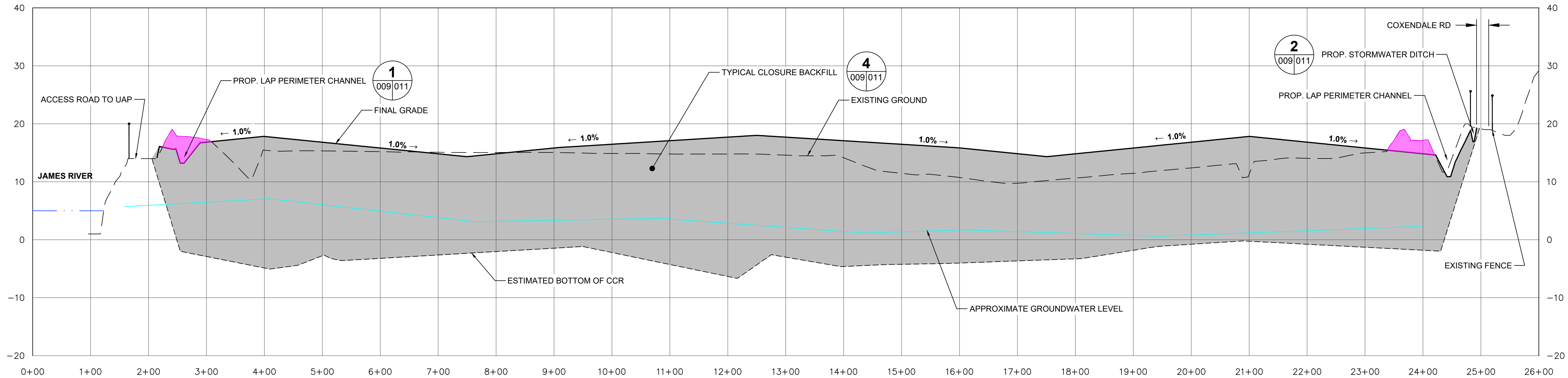
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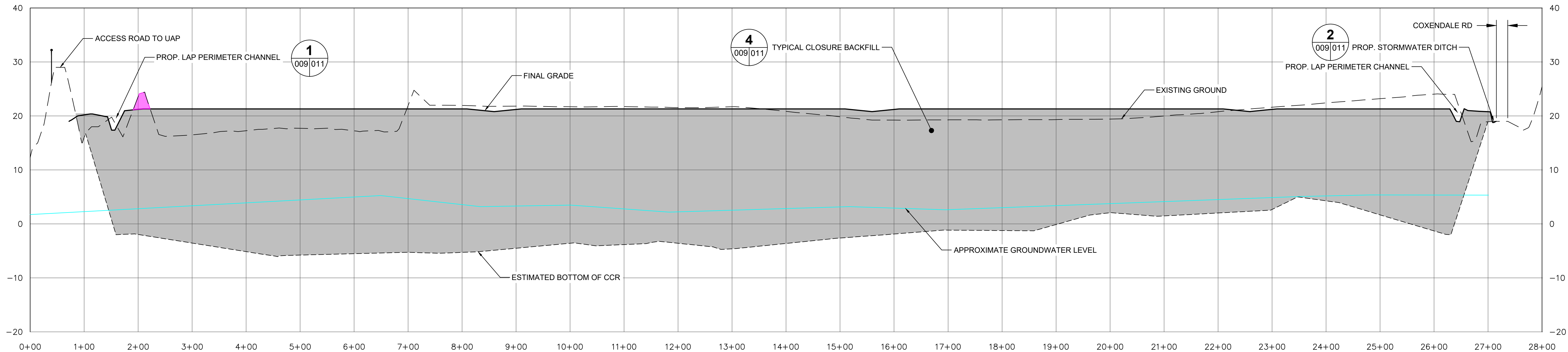
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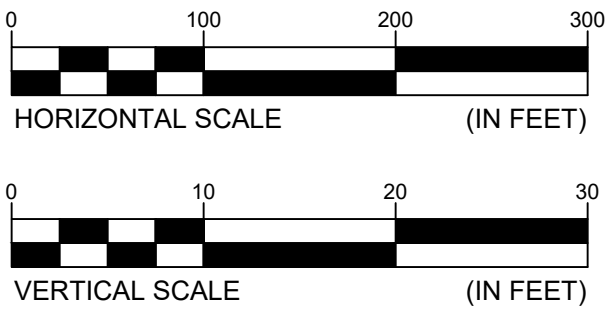




PROFILE - R-R'



PROFILE - Q-Q'



LEGEND

- EXISTING GRADES
- - - - - ESTIMATED BOTTOM OF CCR
- ESTIMATED GROUNDWATER LEVEL
- WATER ELEVATION
- PROPOSED FINAL GRADE
- █ TYPICAL CLOSURE BACKFILL
- █ AREA OF DIKE REMOVAL

NOTES

- BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS BASED ON NAVD88.
- APPROXIMATE EXISTING GROUNDWATER LEVELS ARE BASED UPON A SINGLE DATA POINT AND ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR IS TO VERIFY INFORMATION PROVIDED IN DEVELOPMENT OF WATER MANAGEMENT PLAN.

**TITLE**

FINAL GRADING PROFILES AND CROSS SECTIONS II  
CHESTERFIELD POWER STATION  
CLOSURE PLAN - LOWER ASH POND  
CHESTERFIELD COUNTY, VIRGINIA

**FOR**

PERMIT APPLICATION DRAWINGS

SCALE: 1"=100'	DES: AMC
DWG TYPE: .DWG	DFTR: AMC
JOB NO: 60614683	CHKD: RJB
DATE: 11/13/2020	ENGR: GWL

FILENAME: 007 FINAL GRADING CROSS SECTIONS II.DWG	APPD: GWL
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A

B

C

D

E

F

A

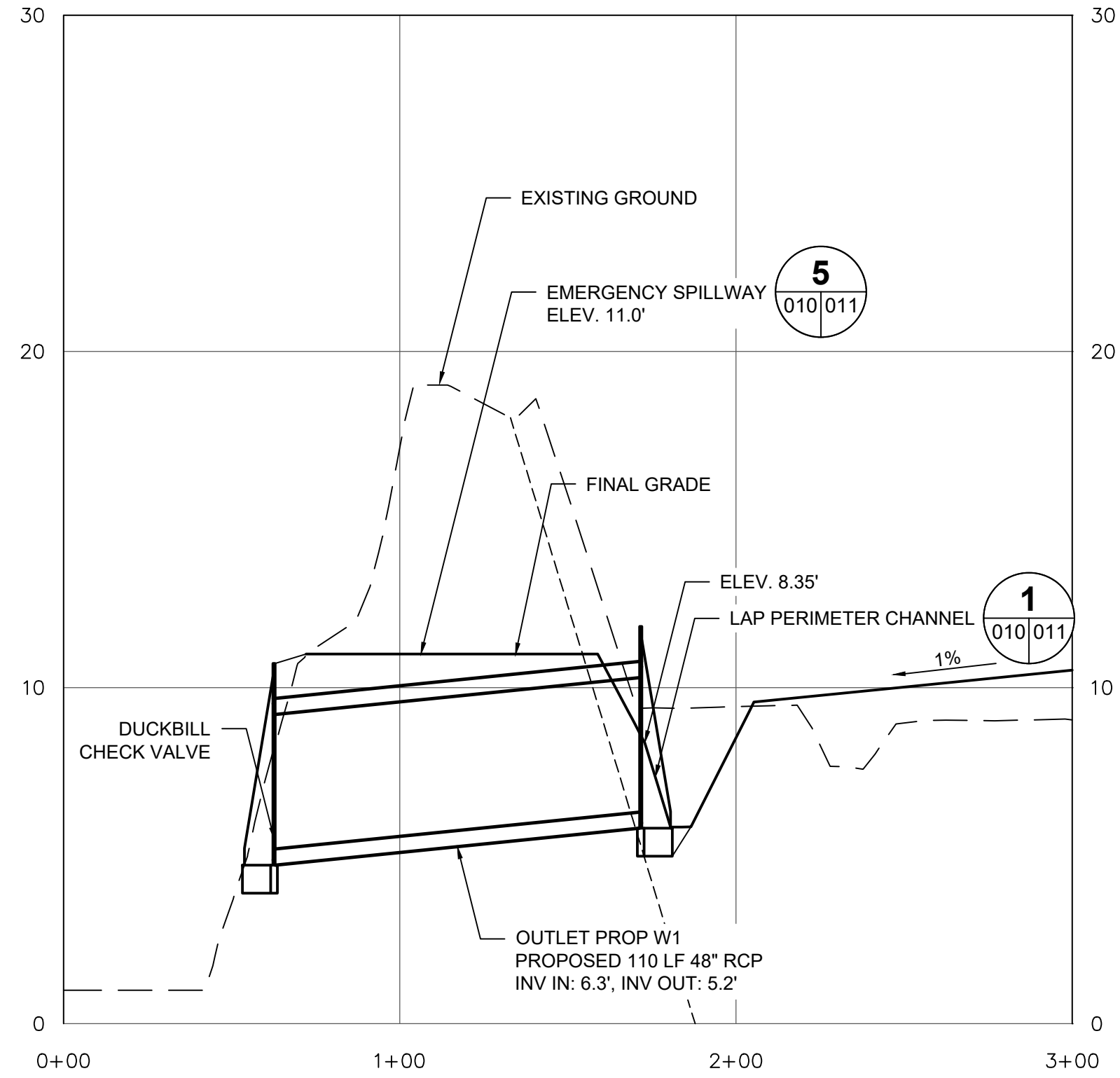
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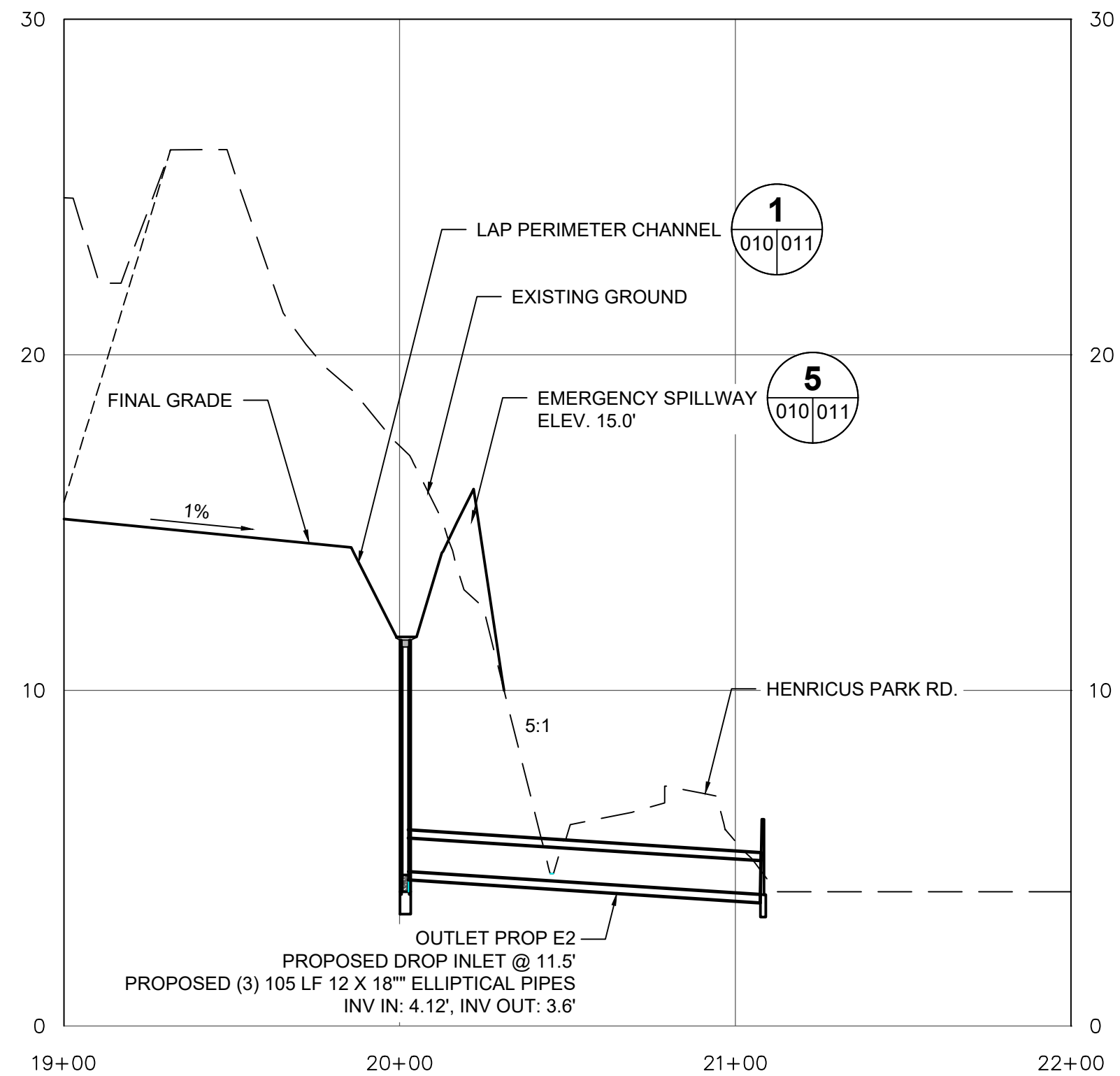
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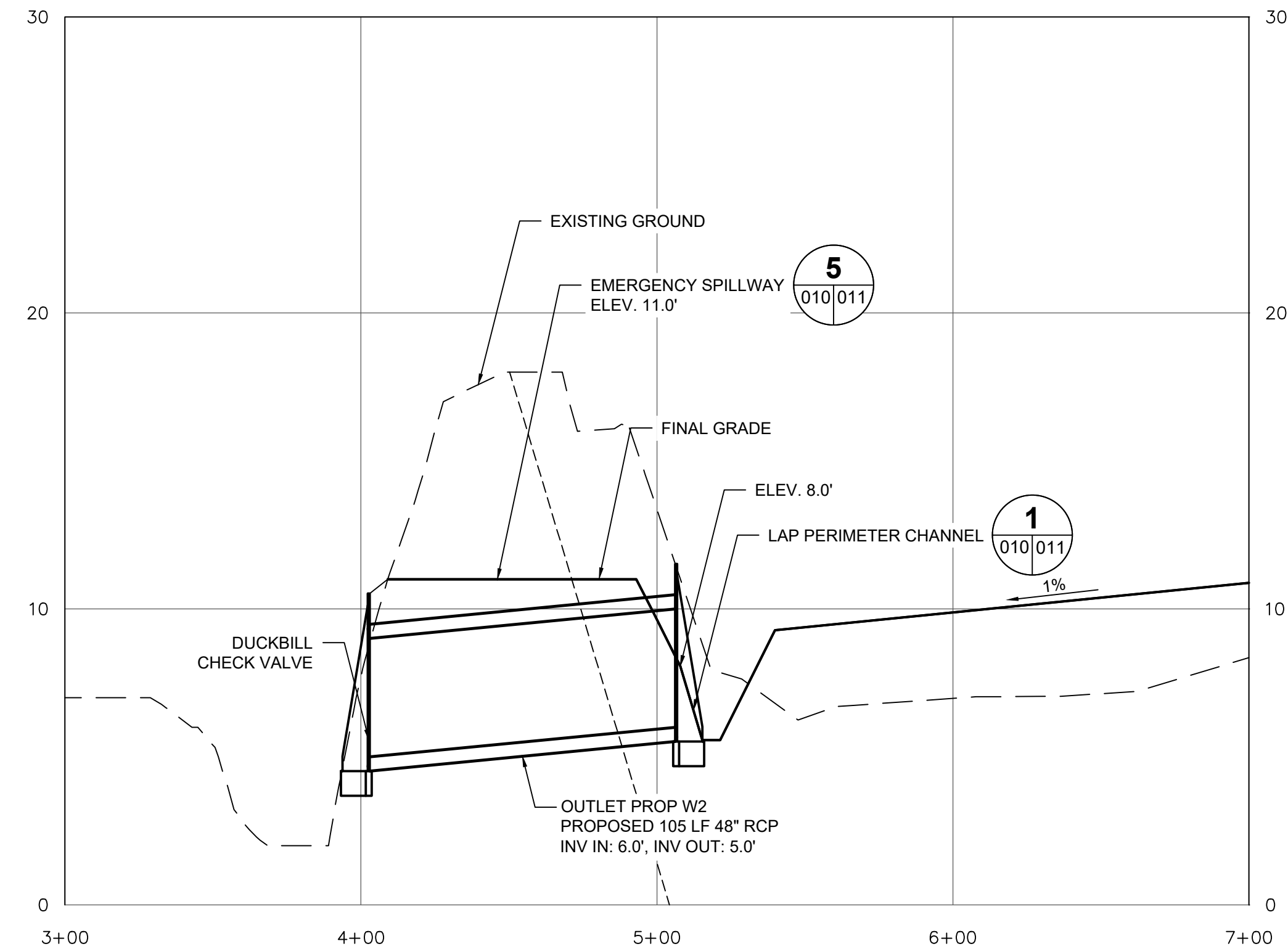
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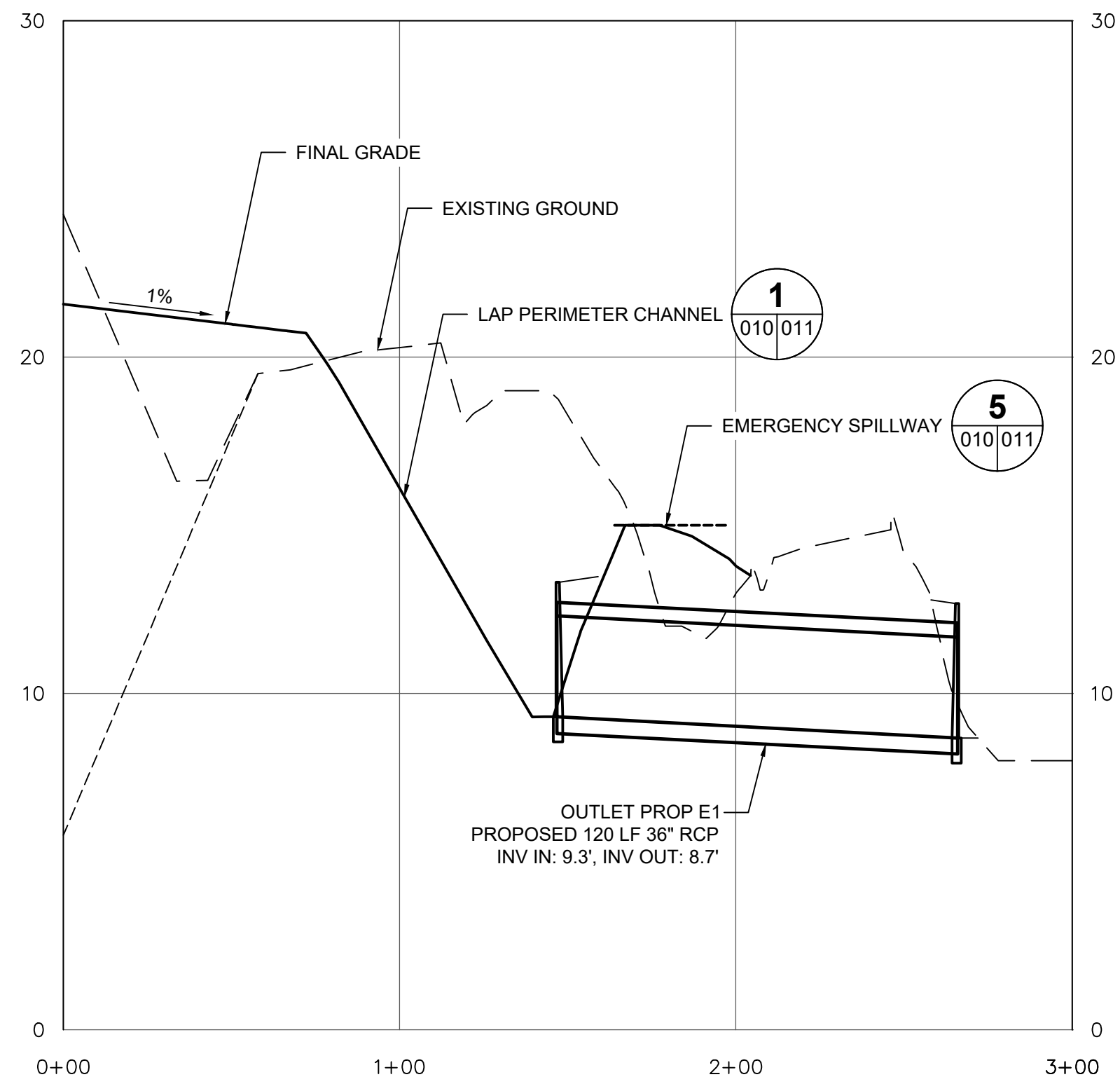
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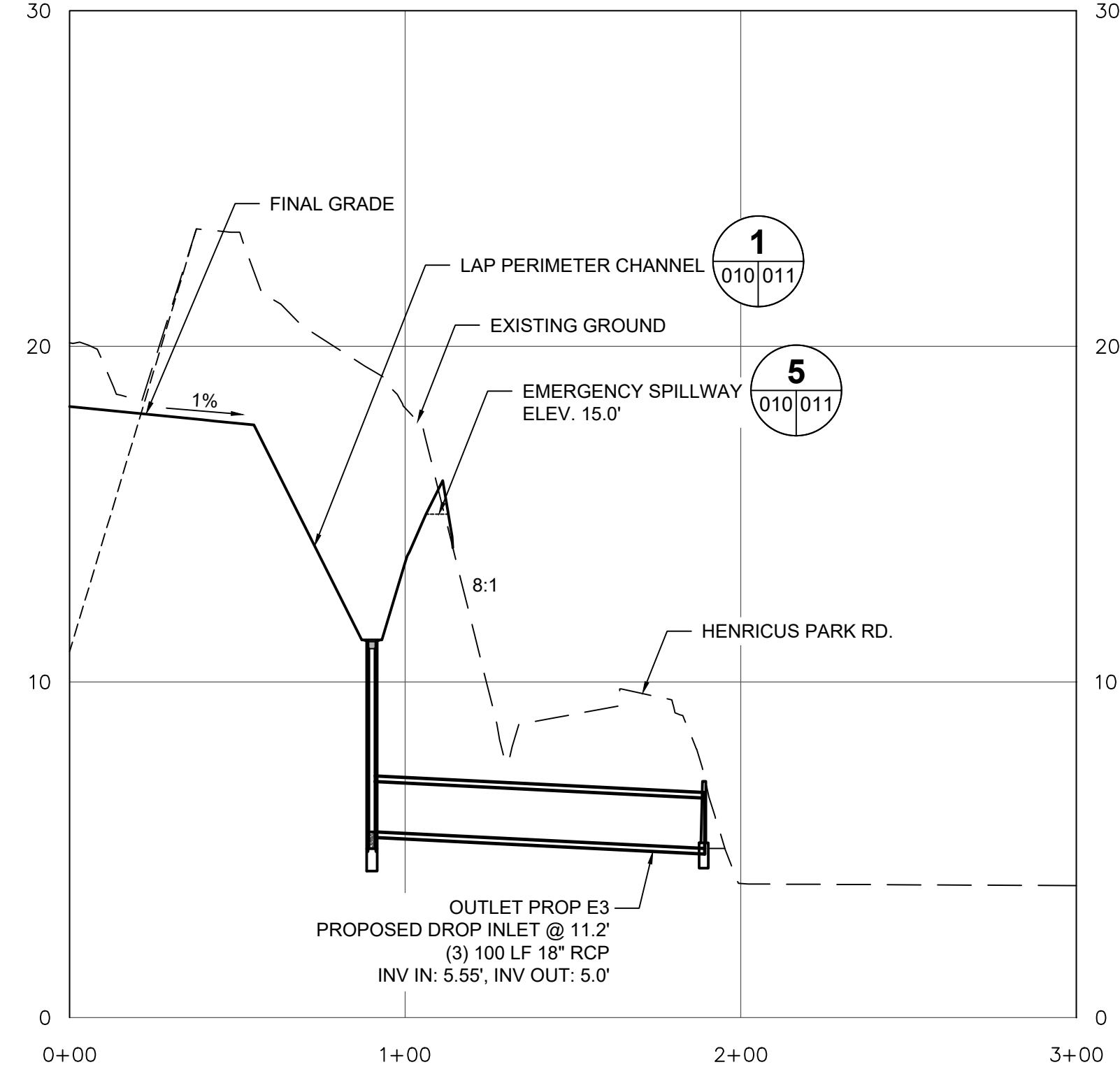
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PROFILE - (P-P') 3+00 TO 7+00



PROFILE - (S-S') 0+00 TO 3+00



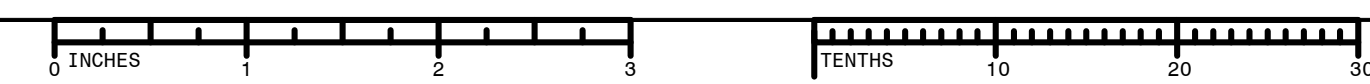
PROFILE - (T-T') 0+00 TO 3+00

LEGEND

- EXISTING GRADES
- ESTIMATED BOTTOM OF CCR
- PROPOSED FINAL GRADE

NOTE:

- FOR PROFILE REFERENCES, SEE FINAL GRADING CROSS SECTIONS PLAN, SHEET 007.



**PROPOSED STORMWATER STRUCTURES**

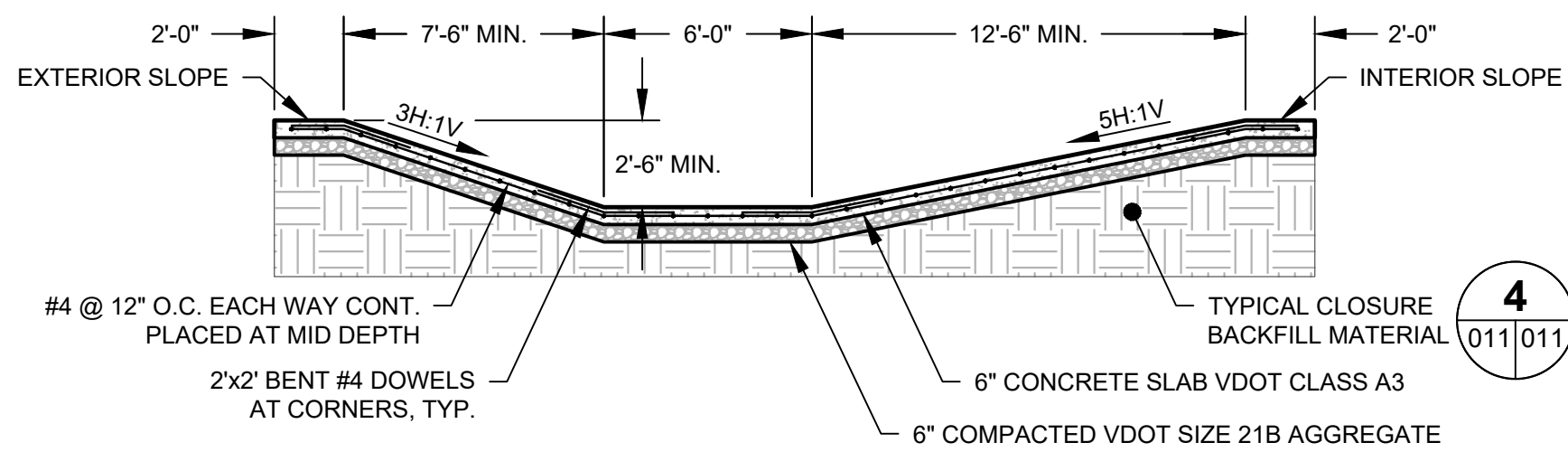
CHESTERFIELD POWER STATION  
CLOSURE PLAN - LOWER ASH POND  
CHESTERFIELD COUNTY, VIRGINIA

FOR PERMIT APPLICATION DRAWINGS

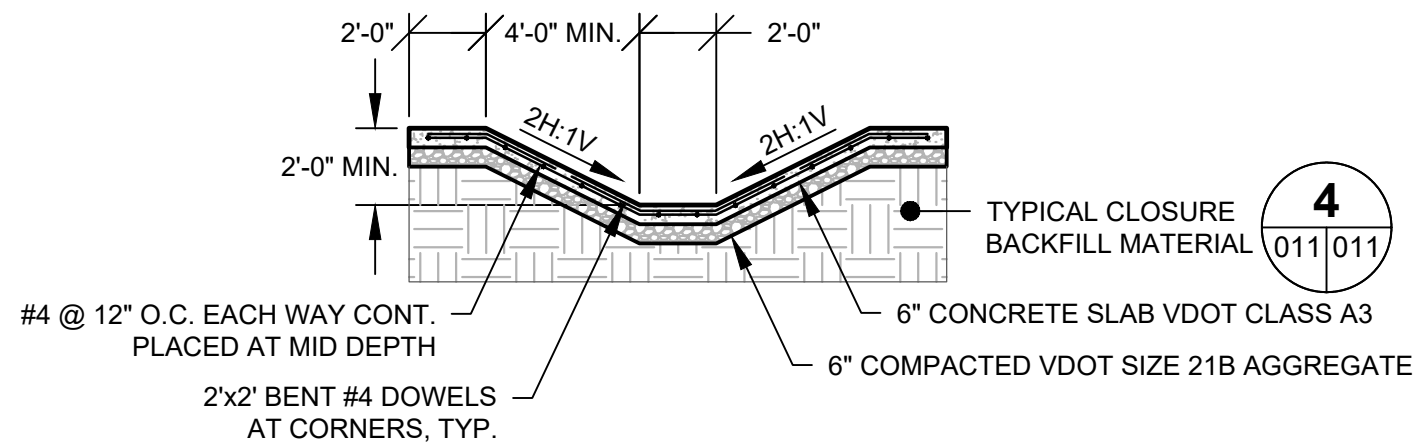
	SCALE: NONE	DES: AMC
	DWG TYPE: .DWG	DFTR: AMC
	JOB NO: 60614683	CHKD: RJB
	DATE: 11/13/2020	ENGR: GWL

FILENAME: 010 FINAL GRADING DETAILS I.DWG	APPD: GWL
DWG SIZE: ANSI D 22.0"x34.0"	REVISION: 010 0

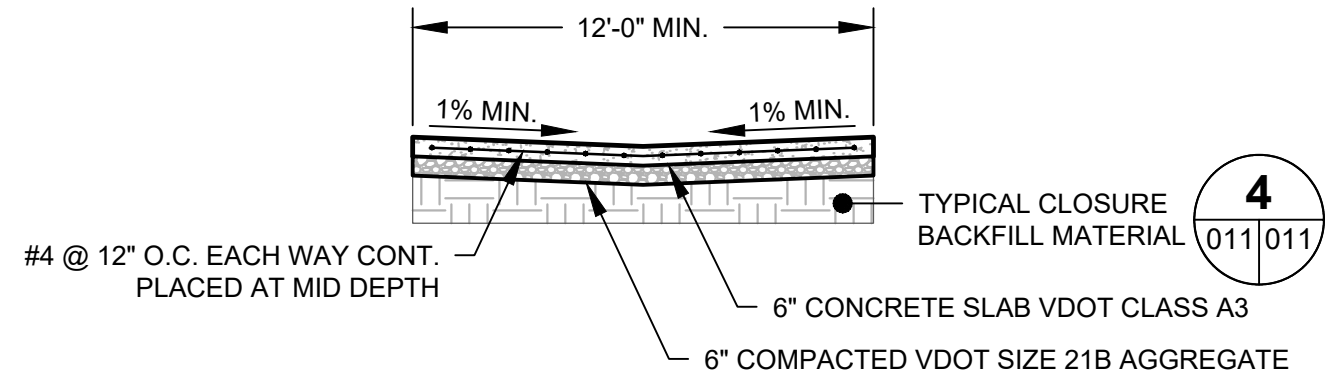




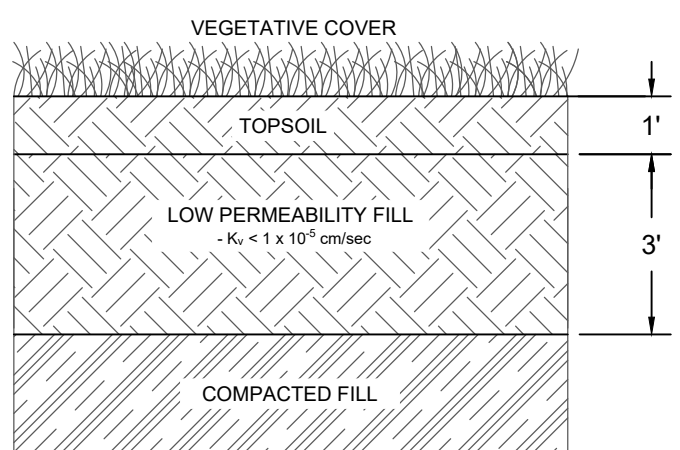
1 TYPICAL PERIMETER DITCH  
NOT TO SCALE



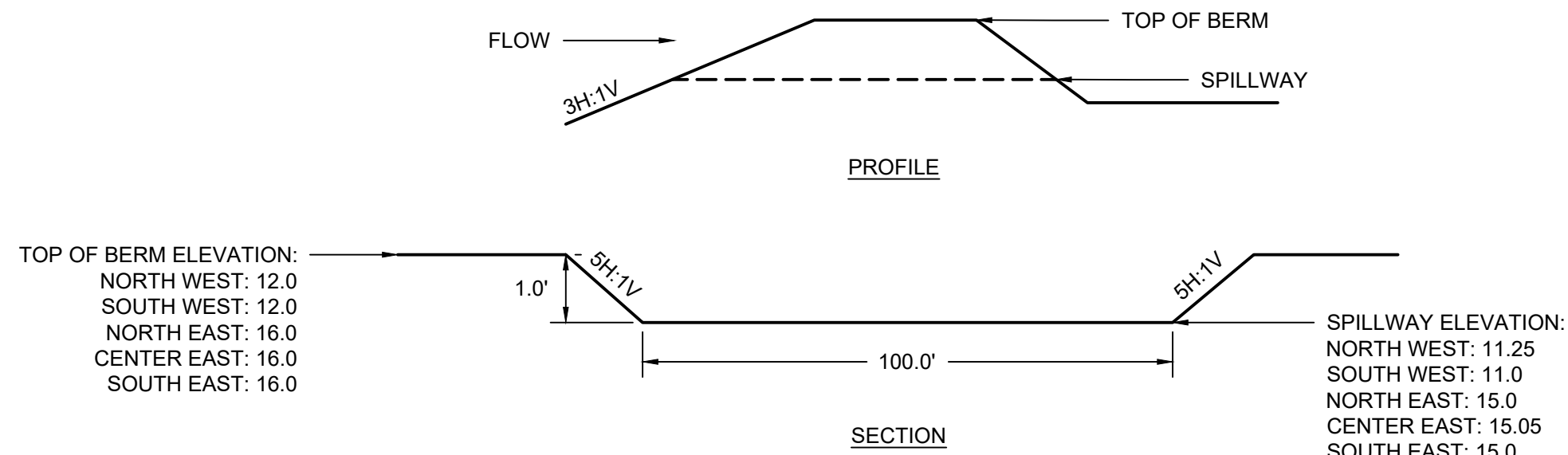
2 TYPICAL STORMWATER DITCH  
NOT TO SCALE



3 TYPICAL CENTER CHANNEL  
NOT TO SCALE

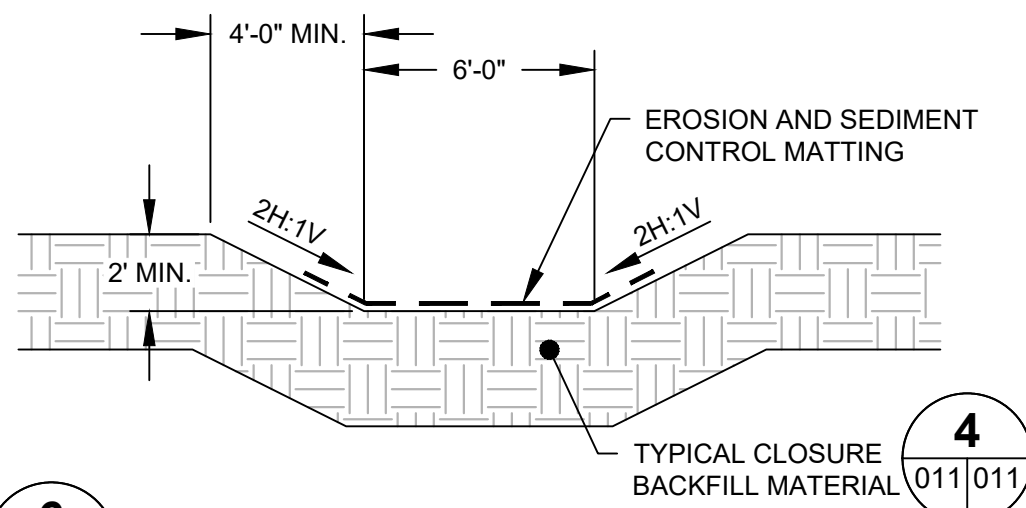


4 TYPICAL CLOSURE BACKFILL DETAIL  
NOT TO SCALE



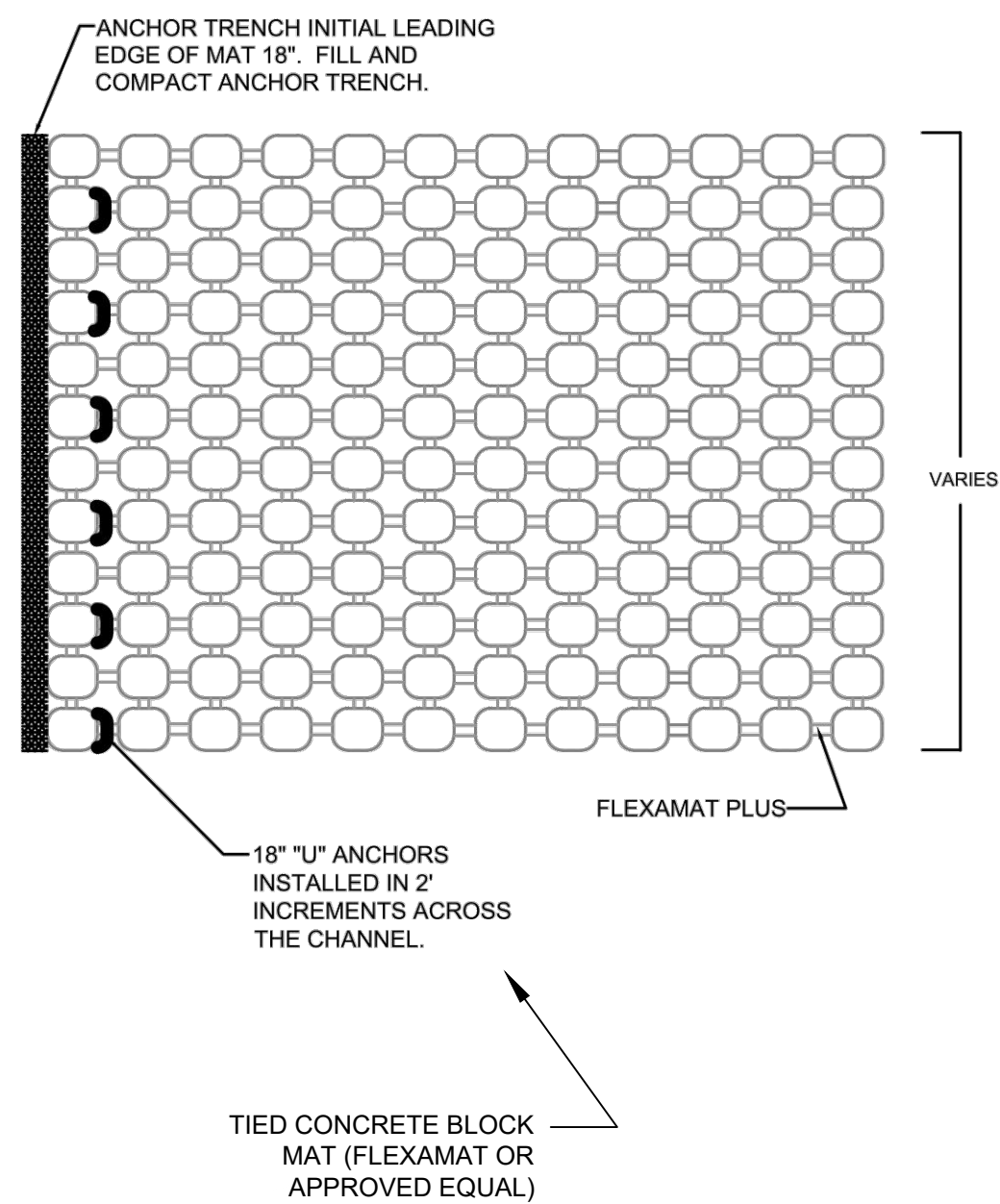
- NOTES:
1. SOIL STABILIZATION BLANKET AND MATTING SHALL BE INSTALLED AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN ON SHEET 006.
  2. EMERGENCY SPILLWAY SIZED TO CONVEY THE 100-YEAR STORM EVENT.
  3. THESE ELEVATIONS REPRESENT POST-CLOSURE CONDITIONS.

5 EMERGENCY SPILLWAY DETAIL  
NOT TO SCALE

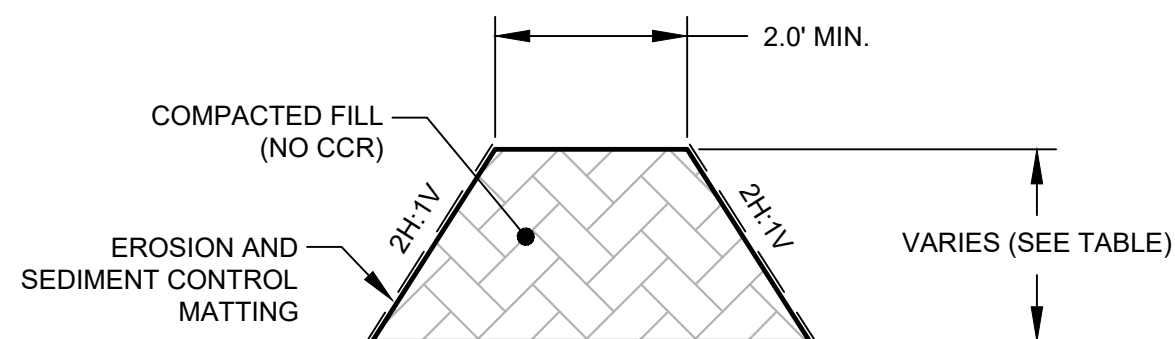
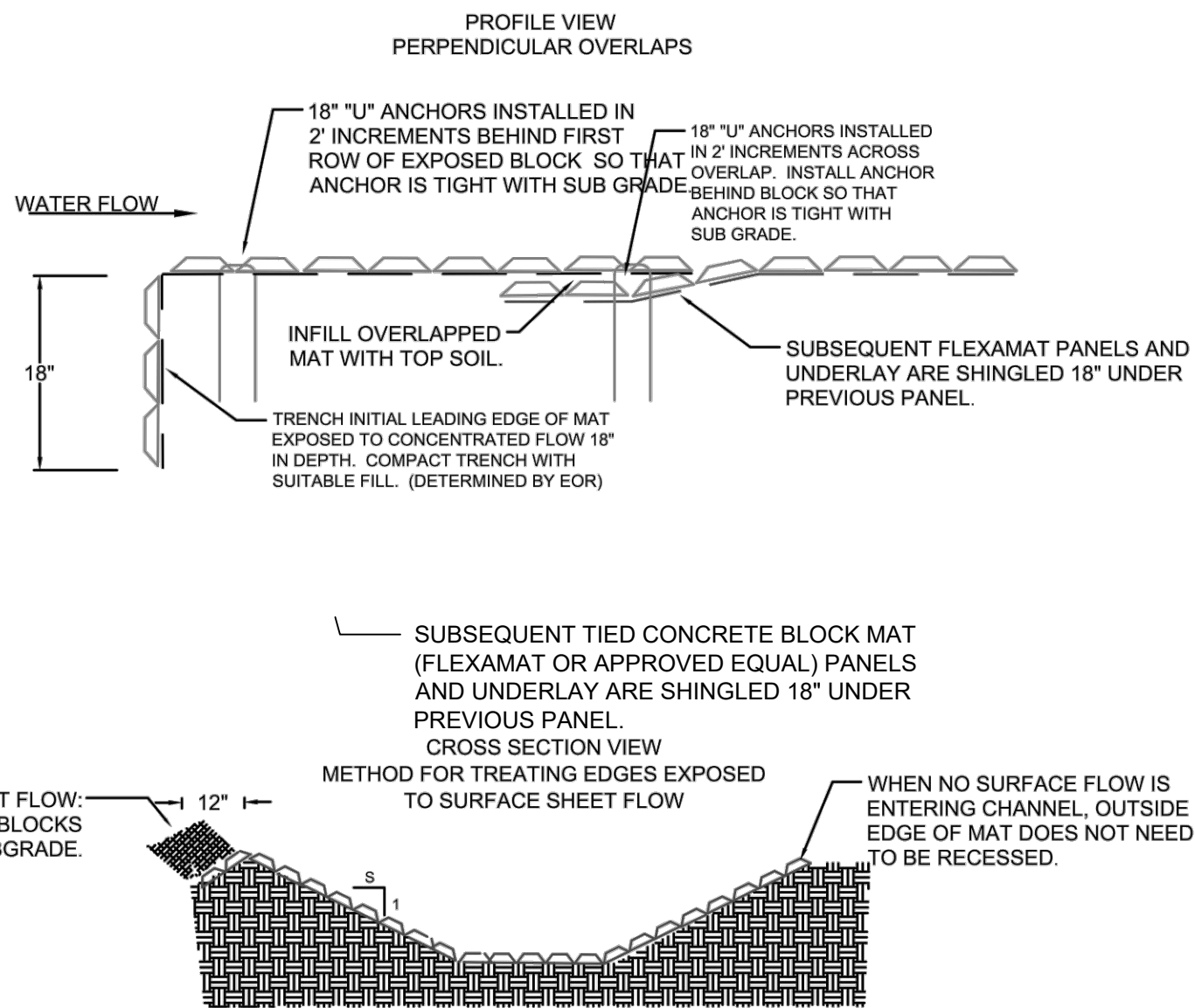


6 STORMWATER LETDOWN  
NOT TO SCALE

- NOTES:
1. EROSION AND SEDIMENT CONTROL MATTING TO EXTEND A MINIMUM HEIGHT OF 1 FOOT ABOVE DITCH INVERT.



7 TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) STORMWATER CONVEYANCE CHANNEL (ALTERNATE)  
NOT TO SCALE



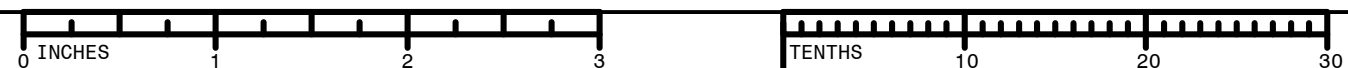
DRAINAGE ACREAGE	BERM HEIGHT (FT)
10	2.0
15	2.5
20	2.5
25	3.0
30	3.5
35	3.5
40	4.0

8 TYPICAL DIVERSION BERM  
NOT TO SCALE

- NOTES:
1. DIVERSION BERMS SIZED TO HANDLE THE 100-YEAR STORM EVENT WITHOUT OVERTOPPING.
  2. THE ESTIMATED BERM HEIGHT (PROVIDED IN THE TABLE ON THIS SHEET) IS BASED ON AN ESTIMATED DRAINAGE AREA. CONTRACTOR TO CONFIRM THE REQUIRED BERM HEIGHT BASED ON THE ACTUAL DRAINAGE AREA DURING CONSTRUCTION.

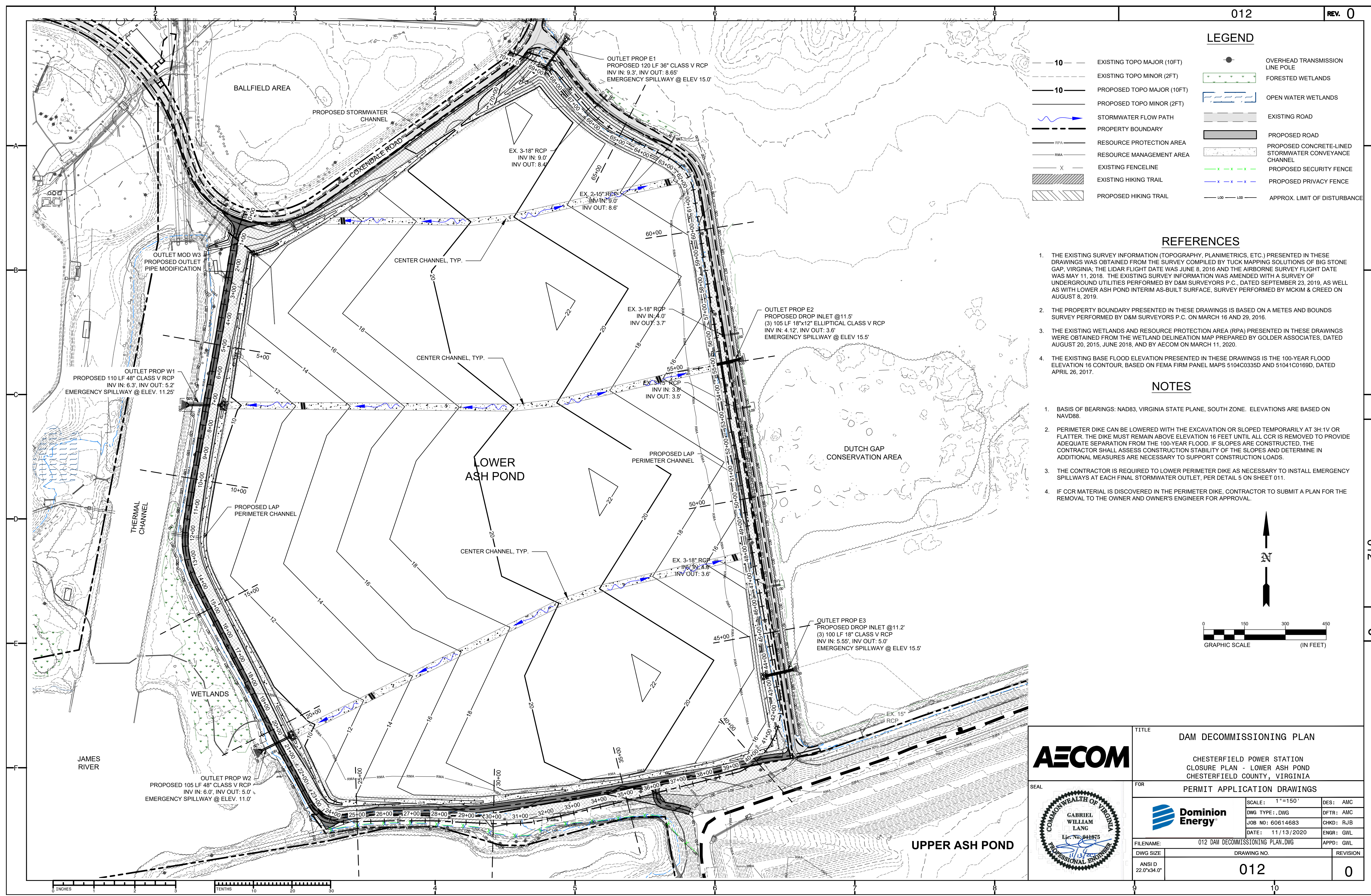
#### CONSTRUCTION NOTES:

1. GRADE CHANNEL SO THAT WATER WILL FLOW DOWN THE CENTER OF THE CHANNEL AND BE CONTAINED TO THE CHANNEL. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND. THE PREPARED SURFACE SHALL PROVIDE A FIRM, UNYIELDING FOUNDATION FOR THE MATS.
2. APPLY SEED DIRECTLY TO THE PREPARED SOIL PRIOR TO TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) INSTALLATION. USE SEED PER PROJECT SPECIFICATIONS.
3. INSTALL TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL). AVAILABLE WIDTHS ARE 5', 5.5', 8', 10', 12' & 16'. AVAILABLE IN CUSTOM LENGTHS. FOR WIDER WIDTHS, INSTALL MATS ADJACENT TO EACH OTHER. (CONTACT MANUFACTURER FOR DETAIL ADDRESSING LONGITUDINAL SEAMS.)
4. AT THE TOP OF THE CHANNEL, THE INITIAL LEADING EDGE OF TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) EXPOSED TO CONCENTRATED FLOWS SHALL BE EMBEDDED 18" VERTICALLY INTO THE SUBGRADE TO SERVE AS AN ANCHOR TRENCH. THE TRENCH SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL OR OTHER (AS SPECIFIED BY ENGINEER OF RECORD).
5. FOR ADDITIONAL SECTIONS OF MAT, OVERLAP THE DOWNSTREAM SECTION 18" WITH UPSTREAM SECTION OF MAT. PRIOR TO INSTALLING OVERLAP, FLIP UPSTREAM MAT BACK 24". EXCAVATE 2.25' OF SOIL 18" FROM END OF UPSTREAM MAT. DOWNSTREAM SECTION IS LAID IN THE SHALLOW TRENCH. LIGHTLY SPREAD TOPSOIL OVER INITIAL EDGE. FLIP END OF UPSTREAM MAT OVER THE SOIL-COVERED INITIAL LEADING EDGE OF DOWNSTREAM MAT.
6. INSTALL 18" "U" ANCHORS IN 2' INCREMENTS ACROSS THE OVERLAP. INSTALL ANCHORS DIRECTLY BEHIND BLOCKS. "U" ANCHORS CONSIST OF #3 REBAR "U" ANCHOR WITH 18" LEGS.
7. AT THE END OF THE ARMORED CHANNEL, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SOIL.



  SEAL 	TITLE FINAL GRADING AND STORMWATER DETAILS CHESTERFIELD POWER STATION CLOSURE PLAN - LOWER ASH POND CHESTERFIELD COUNTY, VIRGINIA		
	FOR PERMIT APPLICATION DRAWINGS		
		SCALE: NONE DWG TYPE: .DWG JOB NO: 60614683 DATE: 11/13/2020	DES: AMC DFTR: AMC CHKD: RJB ENGR: GWL
	FILENAME: 010 FINAL GRADING DETAILS I.DWG	APPD: GWL	
	DWG SIZE: ANSI D 22.0"x34.0"	DRAWING NO. 011	REVISION 0





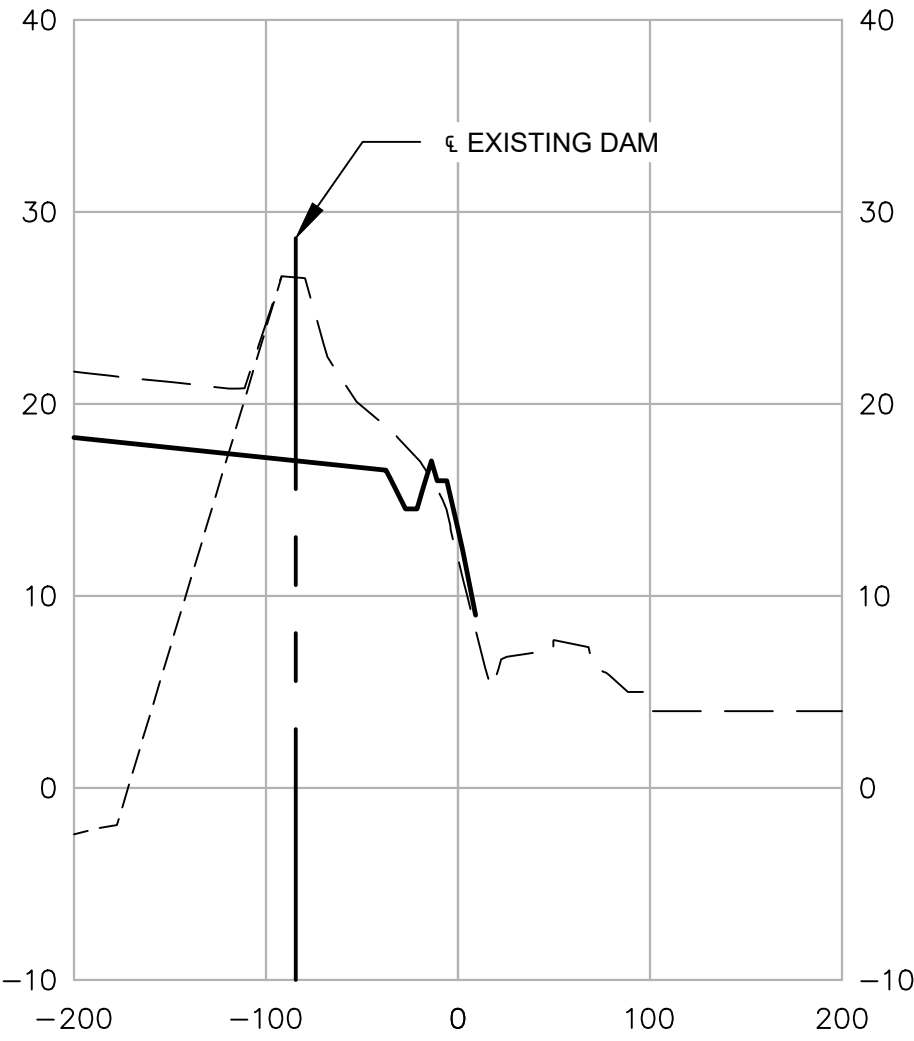
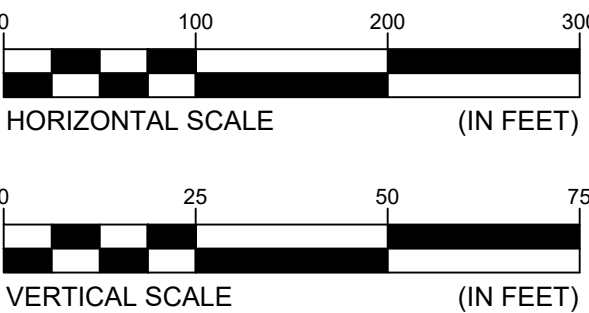


LEGEND

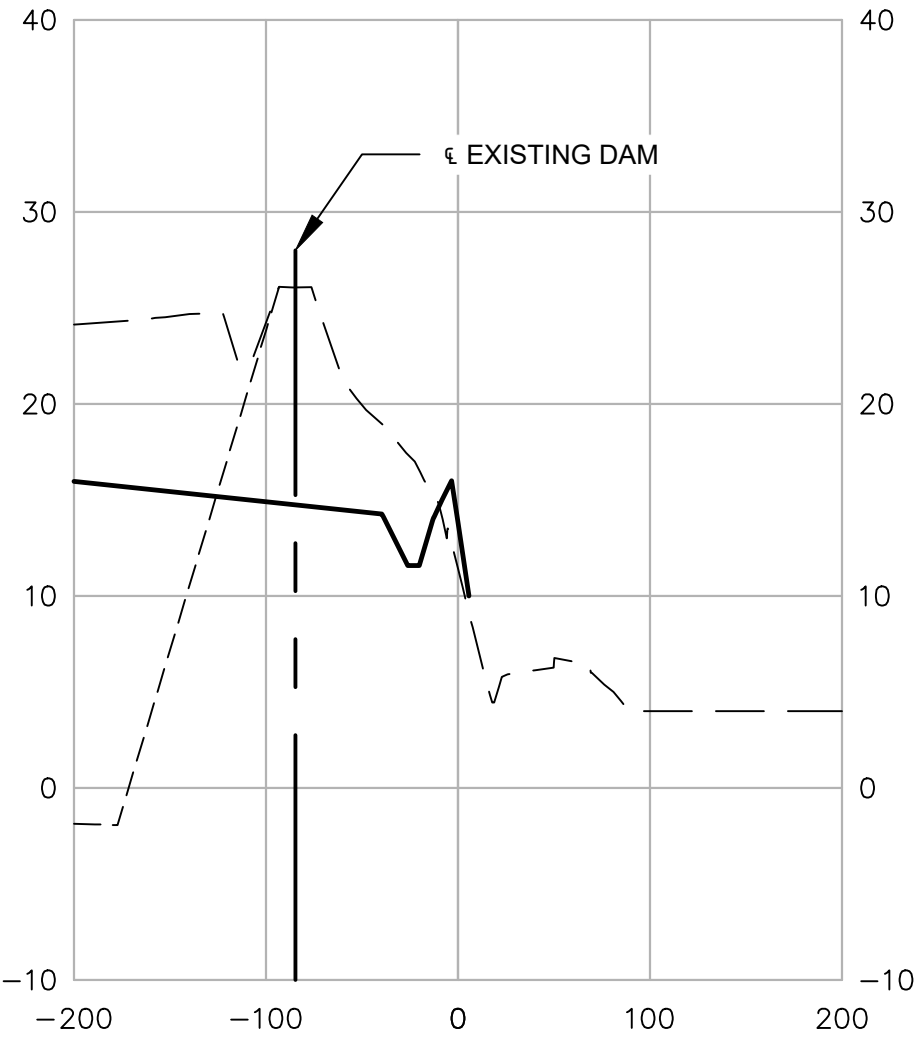
- EXISTING GRADES
- ESTIMATED BOTTOM OF ASH
- PROPOSED FINAL GRADE

NOTES

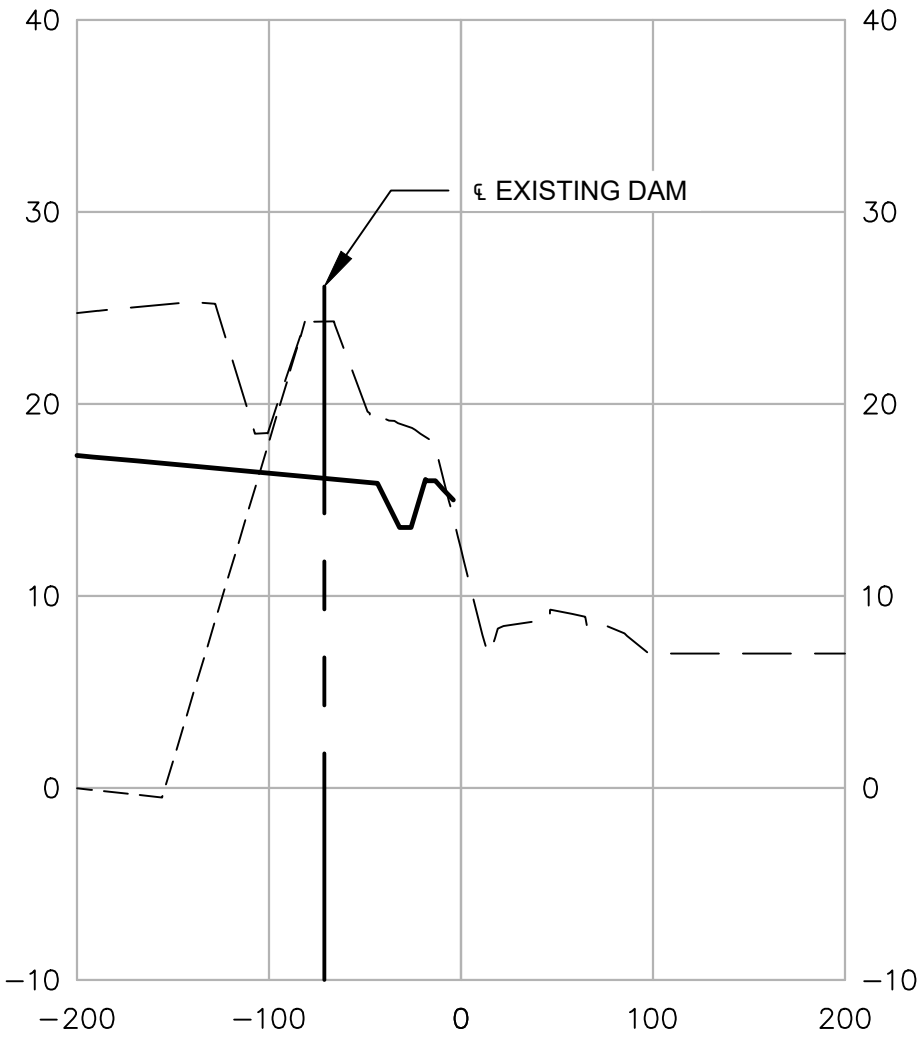
- BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
- PERIMETER DIKE CAN BE LOWERED WITH THE EXCAVATION OR SLOPED TEMPORARILY AT 3H:1V OR FLATTER. THE DIKE MUST REMAIN ABOVE ELEVATION 16 FEET UNTIL ALL CCR IS REMOVED TO PROVIDE ADEQUATE SEPARATION FROM THE 100-YEAR FLOOD. IF SLOPES ARE CONSTRUCTED, THE CONTRACTOR SHALL ASSESS CONSTRUCTION STABILITY OF THE SLOPES AND DETERMINE IN ADDITIONAL MEASURES ARE NECESSARY TO SUPPORT CONSTRUCTION LOADS.
- THE CONTRACTOR IS REQUIRED TO LOWER PERIMETER DIKE AS NECESSARY TO INSTALL EMERGENCY SPILLWAYS AT EACH FINAL STORMWATER OUTLET, PER DETAIL 5 ON SHEET 011.
- IF CCR MATERIAL IS DISCOVERED IN THE PERIMETER DIKE, CONTRACTOR TO SUBMIT A PLAN FOR THE REMOVAL TO THE OWNER AND OWNER'S ENGINEER FOR APPROVAL.



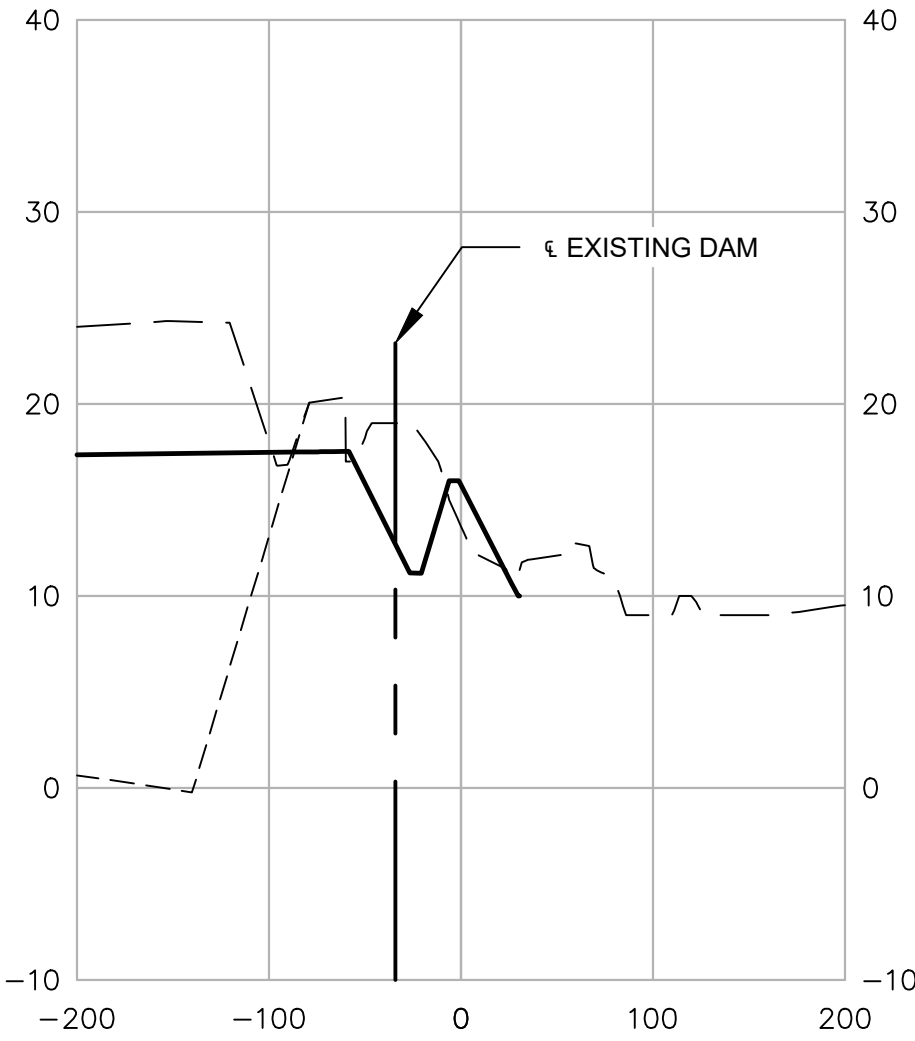
STA. 50+00



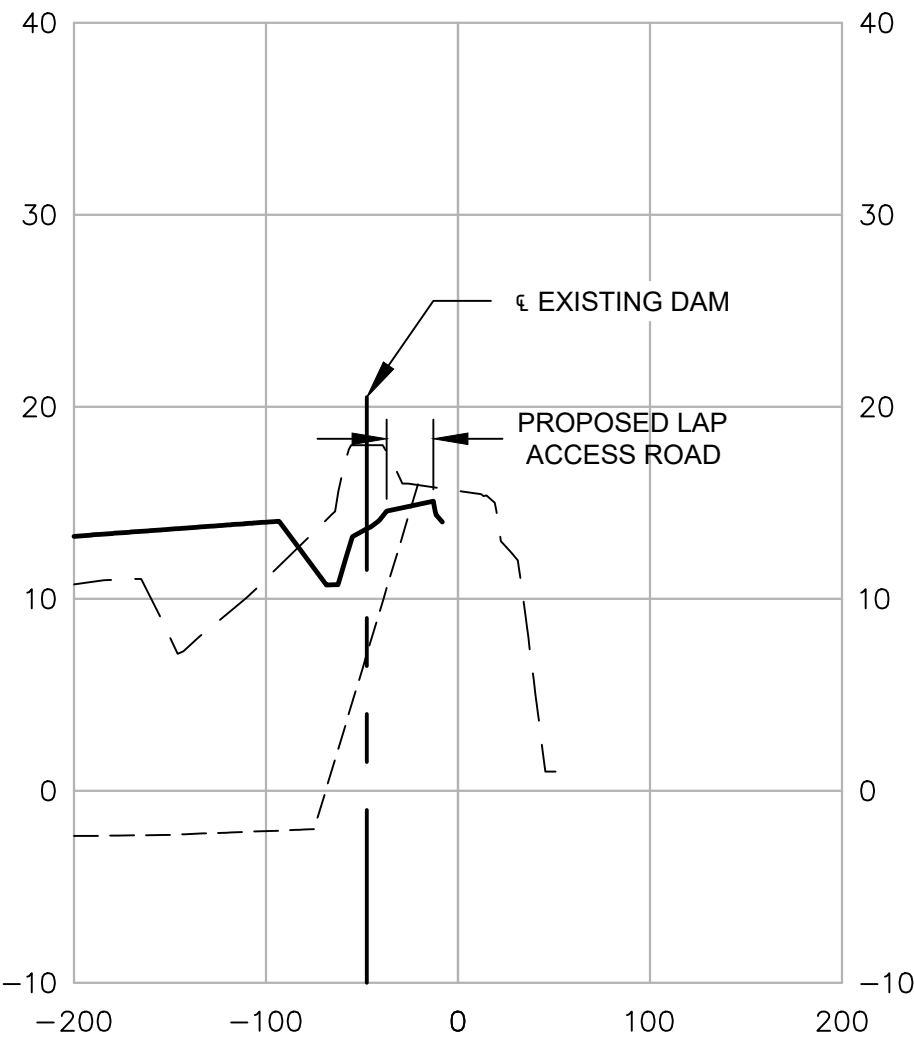
STA. 55+00



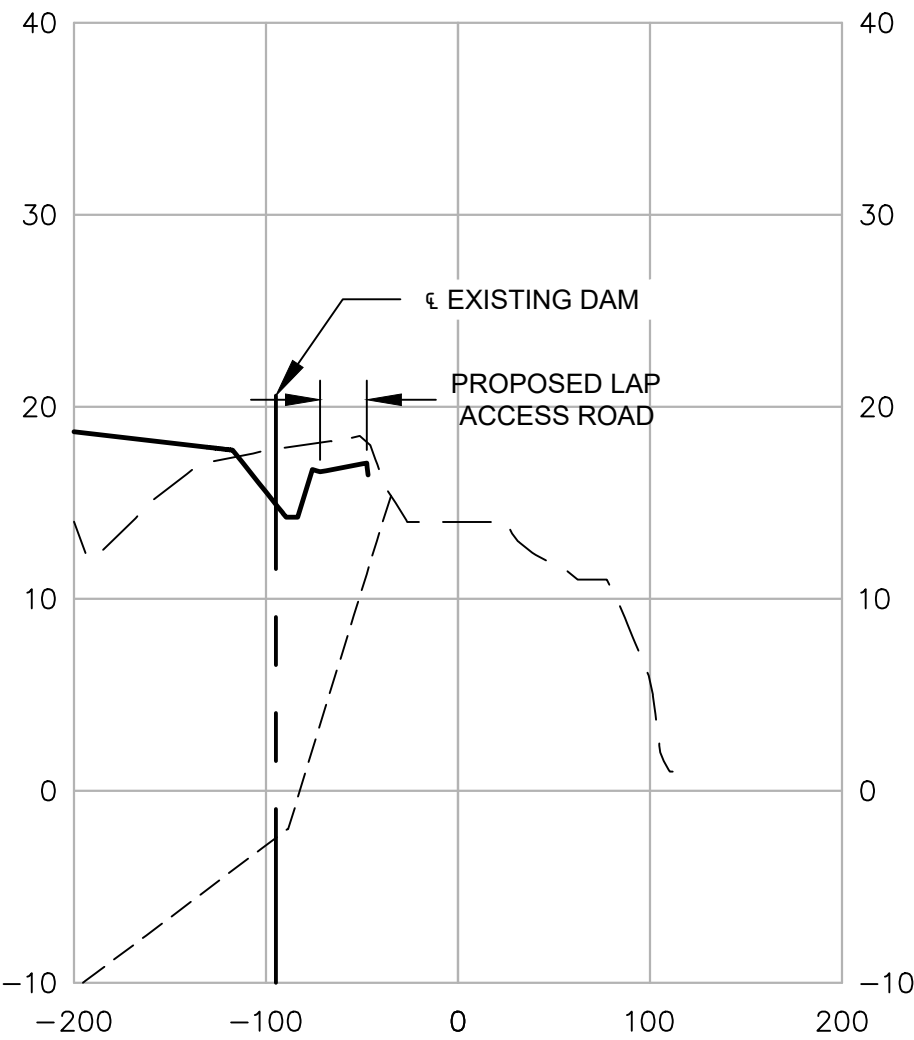
STA. 60+00



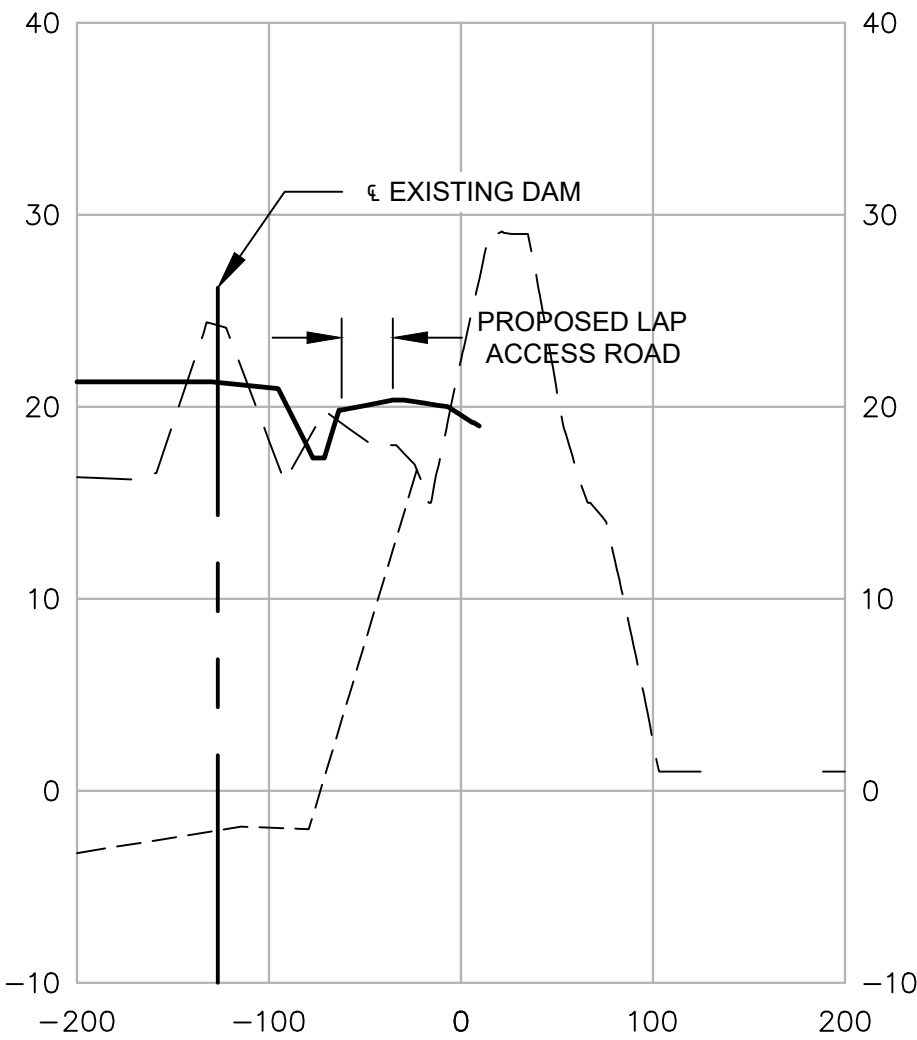
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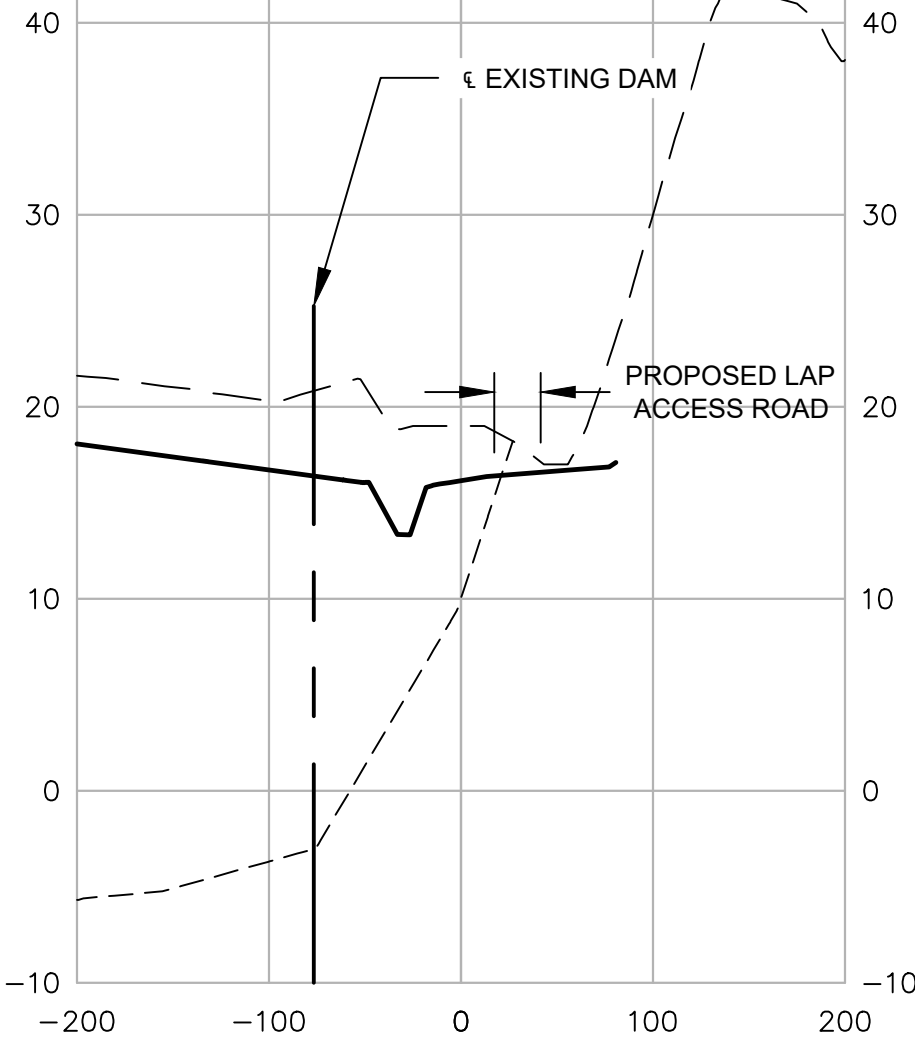
STA. 25+00



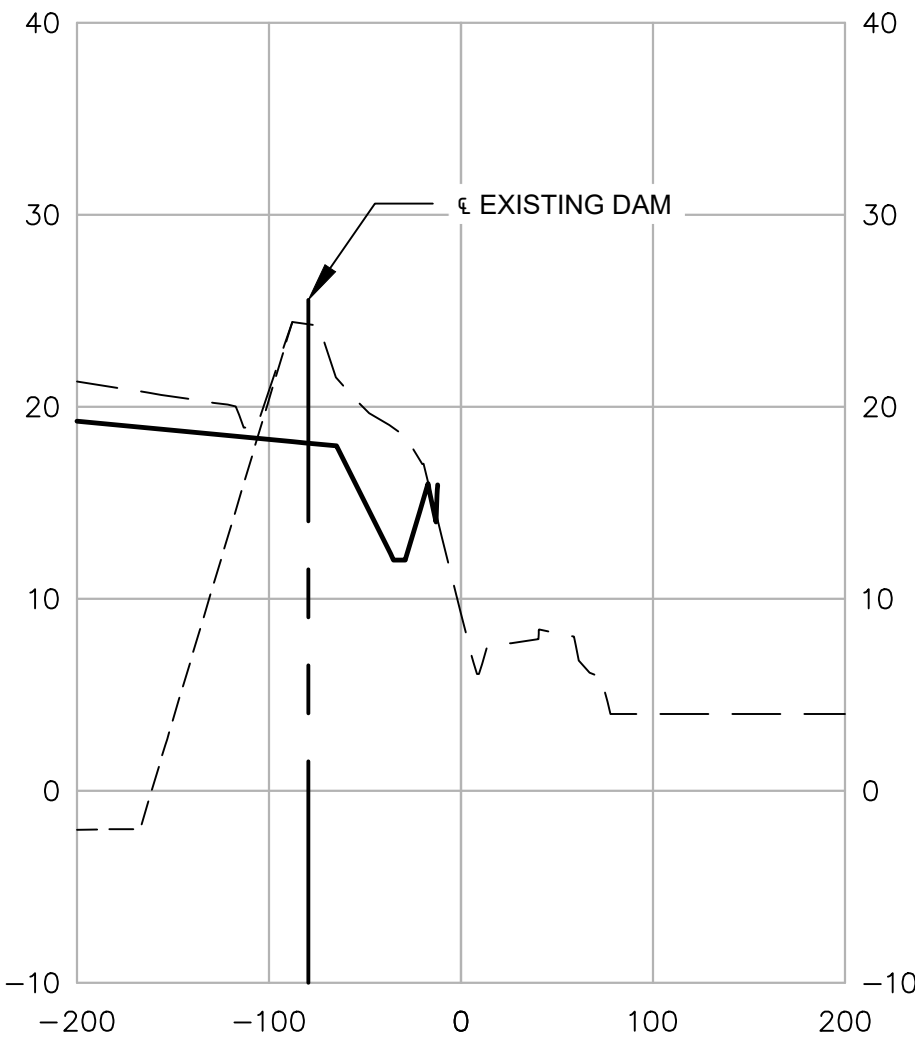
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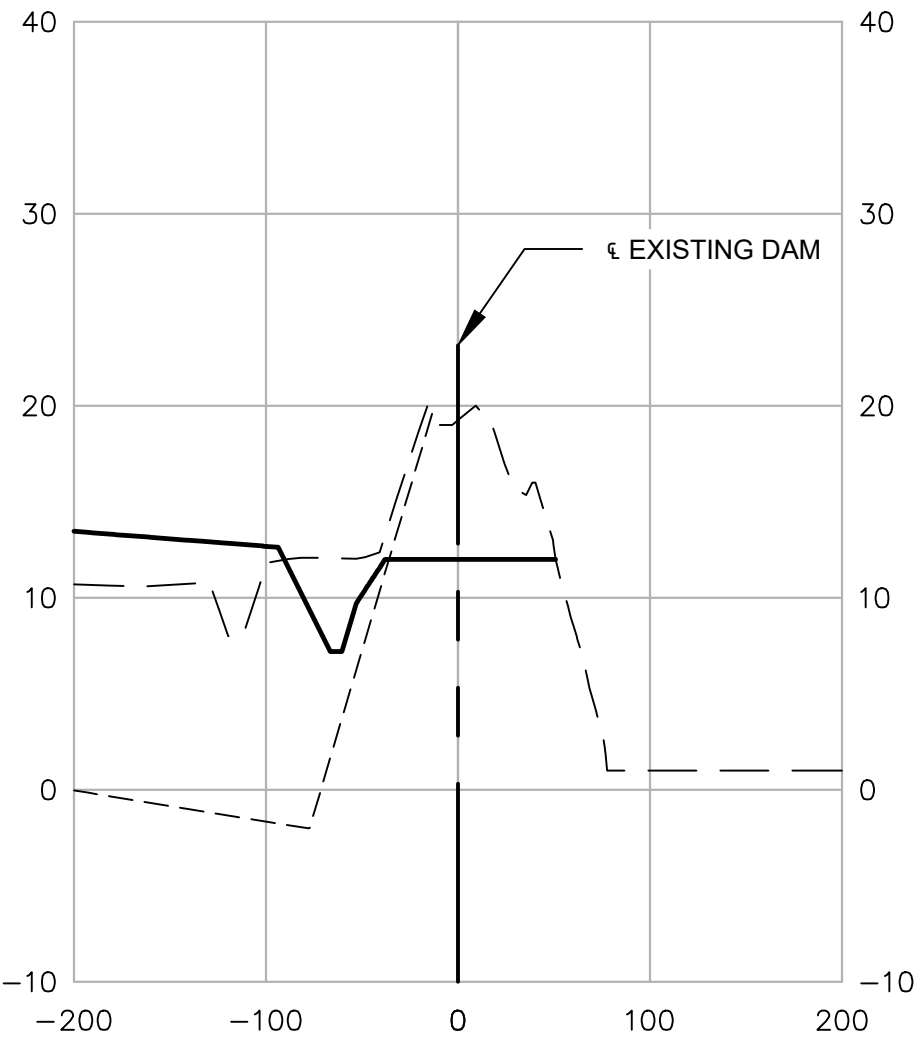
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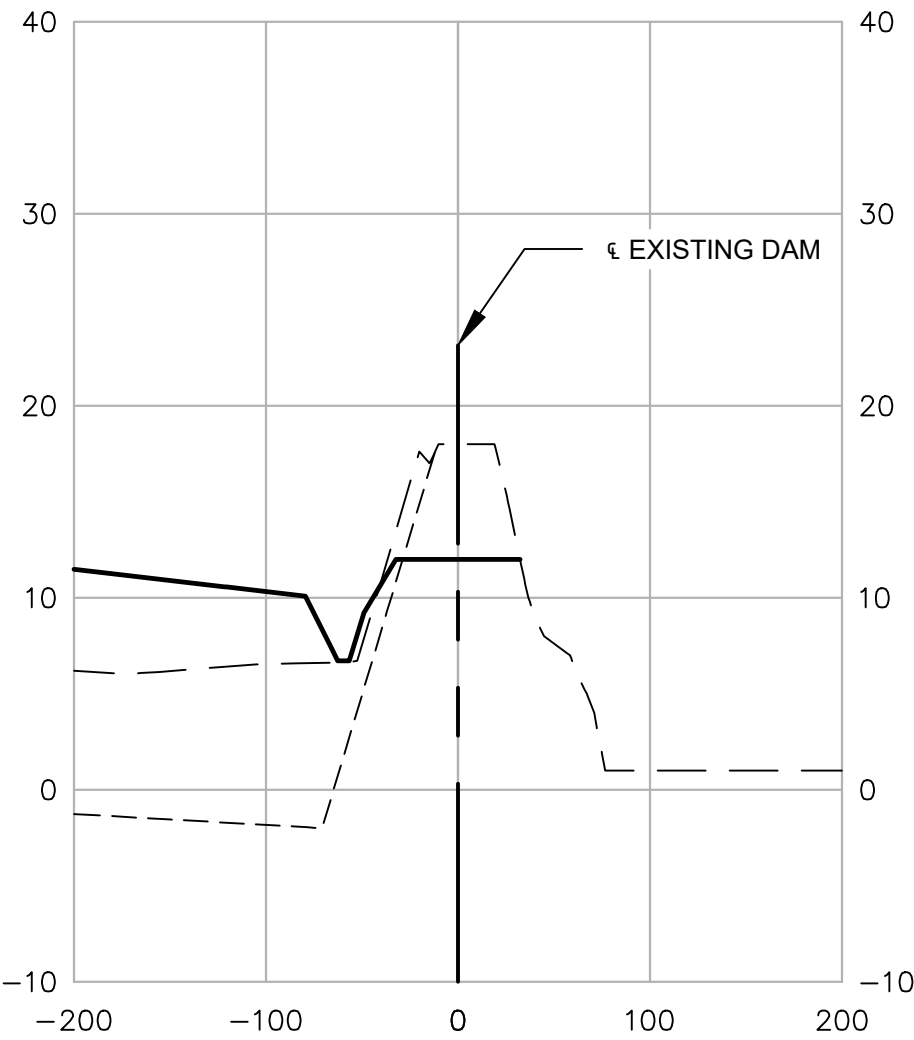
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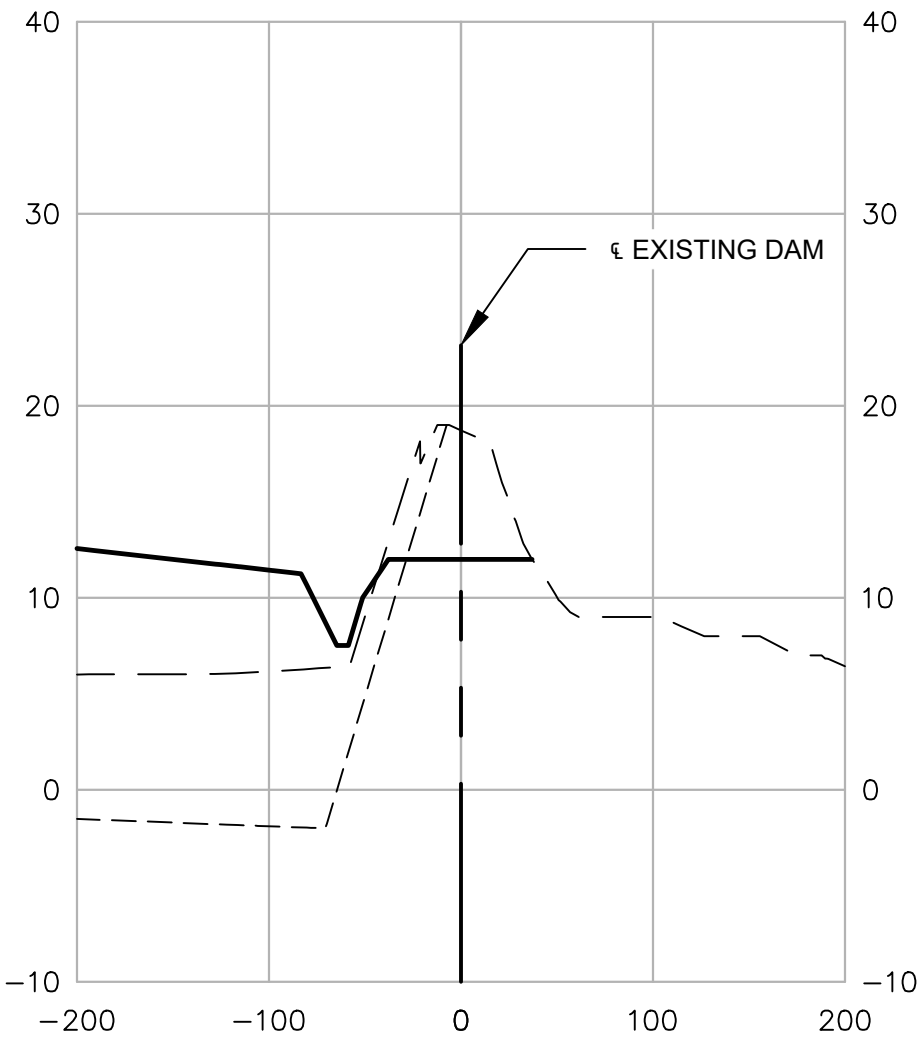
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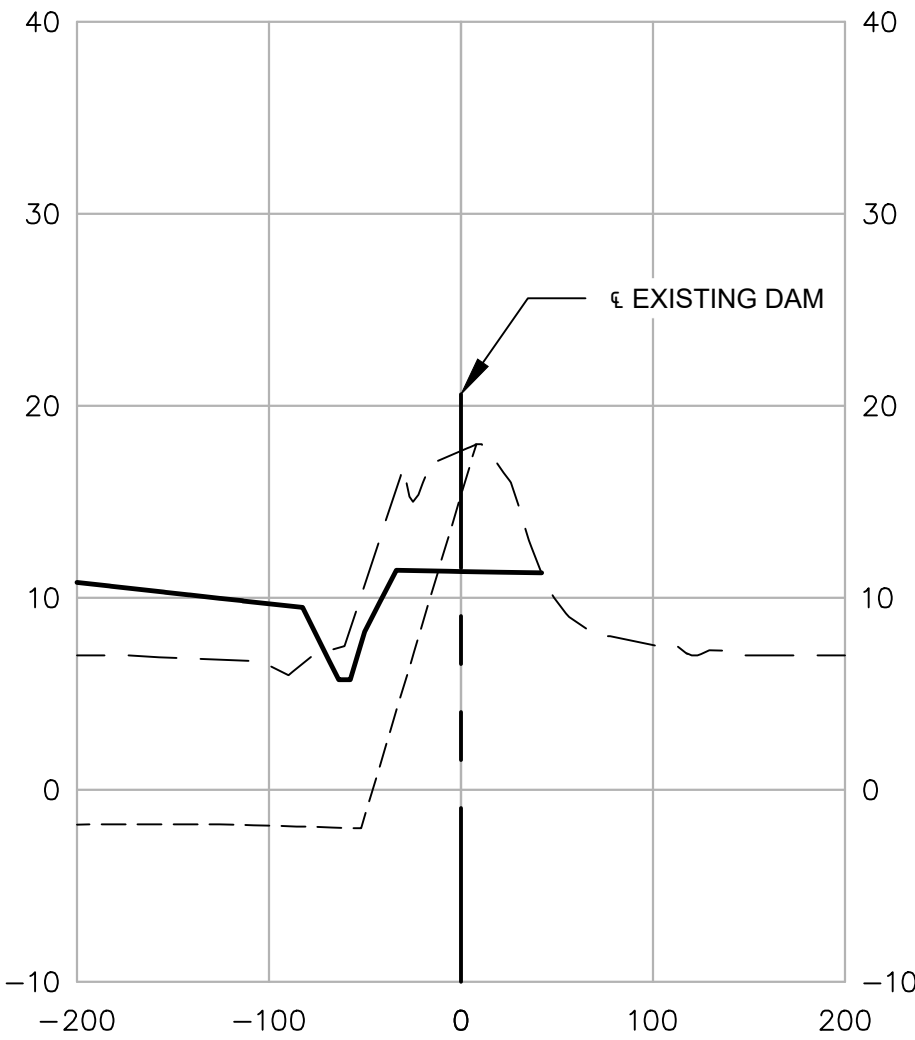
STA. 5+00



STA. 10+00



STA. 15+00



STA. 20+00

REVISIONS			
REV NO	DATE	INITIALS	DESCRIPTION
1	8/21/2020	AMC	UPDATE HENRICUS PARK RD GRADING, ADD PAVEMENT IMPROVEMENTS LOD

**TITLE**

DAM DECOMMISSIONING PLAN  
CROSS SECTIONS  
CHESTERFIELD POWER STATION  
CLOSURE PLAN - LOWER ASH POND  
CHESTERFIELD COUNTY, VIRGINIA

**FOR**

PERMIT APPLICATION DRAWINGS

SCALE: 1"=100'

DWG TYPE: .DWG

JOB NO: 60614683

DATE: 11/13/2020

DES: AMC

DFTR: AMC

CHKD: RJB

ENGR: GWL

FILENAME: 012 DAM DECOMMISSIONING PLAN.DWG

DWG SIZE: 22.0"x34.0"

APPD: GWL

DRAWING NO. 013

REVISION 0



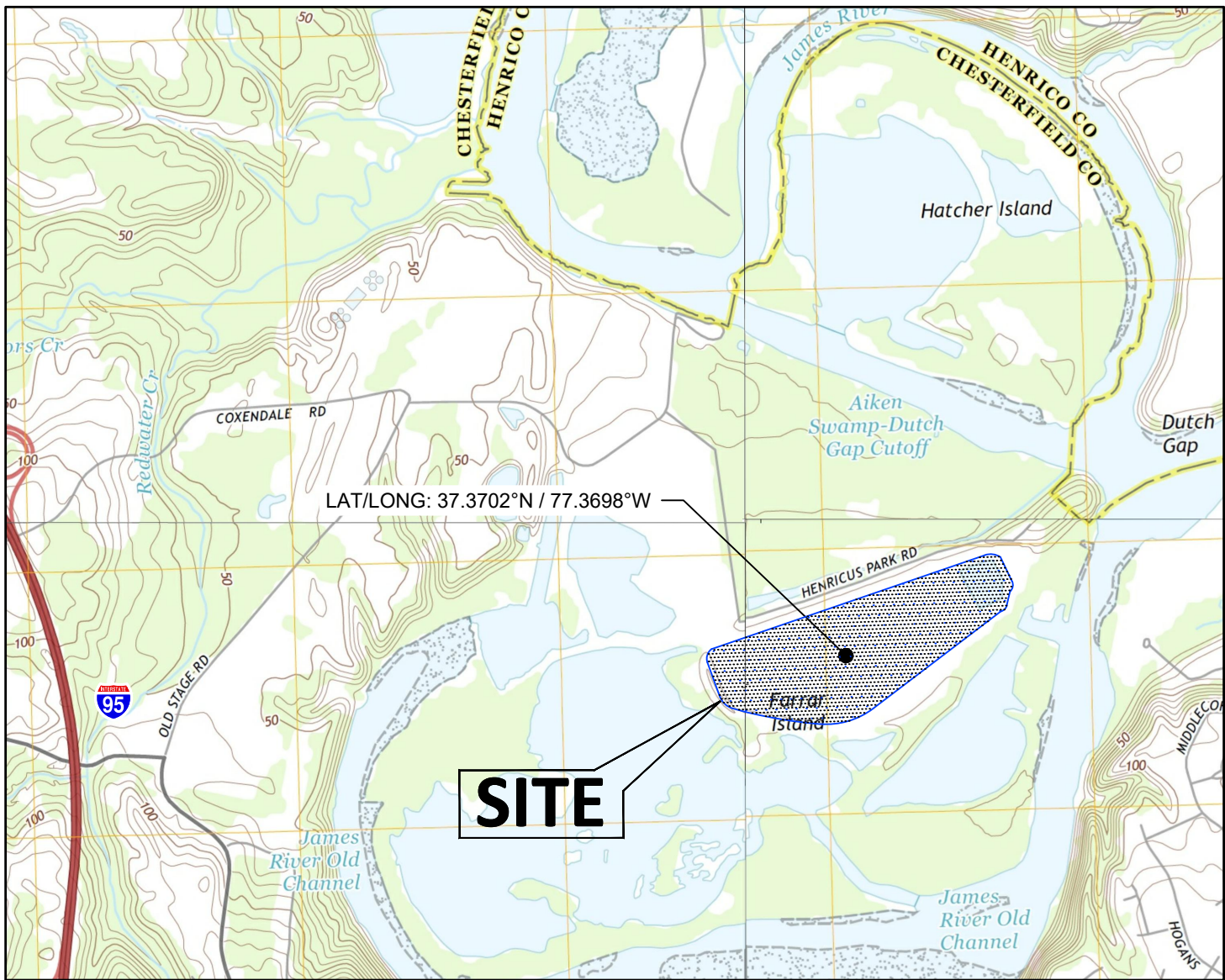


CONTACT INFORMATION

OWNER: DOMINION ENERGY  
CHRIS M. GEE  
600 E. CANAL STREET  
RICHMOND, VIRGINIA 23219  
PHONE: (804) 205-0527  
FAX: (804) 273-2876  
EMAIL: CHRIS.M.GEE@DOMINIONENERGY.COM

ENGINEER: AECOM  
GABE LANG, P.E.  
1600 PERIMETER PARK DR.  
MORRISVILLE, NC 27560  
919-461-1344  
EMAIL: GABE.LANG@AECOM.COM

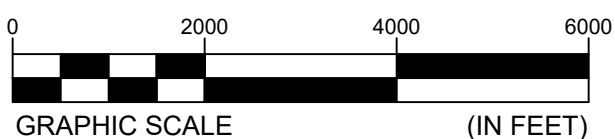
DOMINION ENERGY  
CHESTERFIELD POWER STATION  
CLOSURE PLAN - UPPER ASH POND  
PERMIT APPLICATION DRAWINGS  
NOT FOR CONSTRUCTION  
CHESTERFIELD COUNTY, VIRGINIA  
NOVEMBER 13, 2020



SOURCE: 2013 USGS VIRGINIA QUAD MAPS: CHESTER, DREWRY'S BLUFF, DUTCH GAP AND HOPEWELL.

VICINITY MAP

1" = 2,000'



Stormwater Outfall Table									
Site Area (Acres)	144 +/-								
	West Outfall			Middle Outfall			East Outfall		
Drainage Area (Acres)	46.2			51.5			25.8		
Runoff Reduction (CF)	0			0			0		
Receiving Channel Type (Natural, Restored, or Manmade)	Natural			Natural			Natural		
Channel Protection Compliance Method	N/A			N/A			N/A		
Flood Protection Compliance Method	N/A			N/A			N/A		
	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year	10 - Year	1 - Year	2 - Year	10 - Year
CN Existing <sup>1</sup>	N/A			N/A			N/A		
RV <sub>Existing</sub> (AC-FT) <sup>1</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Q <sub>Existing</sub> (CFS) <sup>1</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
CN Developed	84			84			84		
RV <sub>Developed</sub> (AC-FT)	5.14	6.99	12.96	5.73	7.79	14.45	2.88	3.91	7.25
Q <sub>Developed</sub> (CFS)	26.94	32.1	41.99	29.93	34.85	44.28	21.12	25.45	34.21
Q <sub>Allowed</sub> (CFS) <sup>1</sup>	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
V <sub>Developed</sub> (ft/s)	5.08	6.05	7.92	5.64	6.57	8.35	4.06	4.8	6.45
Outfall Location (Lat/Long)	N 37° 22' 05.87" W 77° 22' 32.91"			N 37° 22' 06.32" W 77° 22' 01.23"			N 37° 22' 19.04" W 77° 21' 48.91"		
<sup>1</sup> Not computed since the existing condition was a regulated basin.									

TOTAL SITE ACREAGE:	144 ±
DISTURBED AREA ACREAGE:	140 ±

Stormwater Compliance Table	
Site Area (acres)	144 +/-
Required Removal for the Site (lbs)	0
Total Load Removed (lbs)	0
Offset Generating Facility	
Amount of Phosphorus Purchased (lbs)	N/A
Equivalent Nitrogen Amount (lbs)	
8-Digit HUC of Generating Facility	N/A
BMP Type	A BMP is not needed because the TP load is zero following the VRRM
BMP Service Area (list sections/phases)	N/A
Design Removal Efficiency (%)	N/A
Drainage Area Used for Sizing BMP (Acres)	N/A
Previous Acres Treated	N/A
Treatment Volume (CF)	N/A
Load Removed (lbs)	N/A
Location of BMP (Lat/Long)	N/A
Receiving Water	James River
VAHUC6	20802
MS4 Operator	Dominion Virginia Power
TMDL	Not Required*
Downstream BMP	N/A
Location of storm sewer outfalls 30 inches in diameter and greater (excludes culverts)	N/A

\*The Farrar Gut is considered a category 4A water, and so a TMDL is not required because the TMDL for specific pollutants(s) is complete

CALL MISS UTILITY  
BEFORE DIGGING

1-800-552-7001  
OR  
811

PREPARED FOR:  
DOMINION ENERGY (OWNER)  
600 E. CANAL STREET  
RICHMOND, VA 23219

PREPARED BY:  
AECOM  
4840 COX RD  
GLEN ALLEN, VA 23060

GENERAL SITE INFORMATION

PARCEL ADDRESS (AS RECORDED IN CHESTERFIELD COUNTY GIS):	451 COXENDALE ROAD CHESTER, VIRGINIA 23836
LAT-LONG:	37.3702°N; 77.3698°W
TAX ID:	811-660-3332-00000
GPIN NUMBER:	8116603332
OFFSITE LAND DISTURBANCE:	NONE
COUNTY LAND DISTURBANCE PERMIT:	A CHESTERFIELD COUNTY LAND DISTURBANCE PERMIT IS REQUIRED FOR THIS PROJECT
VIRGINIA STORMWATER MANAGEMENT PROGRAM PERMIT (VSMP):	UMBRELLA VSMP VAR10G662 IS ALREADY IN PLACE.
FLOODPLAIN:	FLOOD ZONE A AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FIRM PANELS 51041C0335D AND 51041C0169D, EFFECTIVE DATE: DECEMBER 18, 2012.
NAME OF RECEIVING WATERS	JAMES RIVER
VA HU6 FOUR-DIGIT WATERSHED CODE	JL06
VA HU6 TWELVE-DIGIT WATERSHED CODE:	020802060106
FIRE:	EXISTING FIRE HYDRANT LOCATION SUFFICIENT FOR THIS PROJECT
WETLANDS:	WETLANDS AND RPA FIELD DELINEATED BY GOLDER ASSOCIATES JUNE 2018 AND BY AECOM ON MARCH 11, 2020.

ZONING/LAND USE INFORMATION

MAGISTERIAL DEVELOPMENT DISTRICT:	BERMUDA
ZONING/LAND USE OF AREA IN QUESTION:	I-3 (HEAVY INDUSTRIAL)
EXISTING ZONING/LAND USE OF WHOLE PROPERTY (PER CITIZEN GIS, 2010):	I-3 (HEAVY INDUSTRIAL)
LAND USE (PER CITIZEN GIS 2010):	INDUSTRIAL 144 ACRES
VPDES PERMIT NUMBER	VA0004146
ZONING CASE(S)	10SN0114, 19SN0554, 15SN0647

VSMP COMPLIANCE

WATER QUALITY COMPLIANCE IN ACCORDANCE WITH 9VAC25-870-65 IS ACHIEVED THROUGH THE CHIAF PROJECT VSMP VAR10G662.

THIS PROJECT IS COVERED UNDER THE UMBRELLA VSMP VAR10G662.

CBPA COMPLIANCE

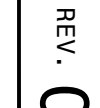
- A. TIDAL WETLANDS MINIMALLY IMPACTED  
B. NON-TIDAL WETLANDS PERMITTED VIA USACE JD #NAO-2007-02441  
C. TIDAL SHORES NOT IMPACTED  
D. VEGETATED CONSERVATION AREA WITHIN 100 FEET OF PROPERTY LINE NOT IMPACTED  
E. 100-YEAR FLOODPLAIN NOT FILLED  
F. HIGHLY ERODIBLE SOILS OR STEEP SLOPES SHOWN ON PLANS AND PROTECTED BY EROSION AND SEDIMENT CONTROL MEASURES SHOWN IN THIS SITE PLAN  
G. NO HIGHLY PERMEABLE SOILS  
H. THE PURPOSE OF THIS PROJECT IS TO COMPLY WITH FEDERAL CCR RULE TO PERMANENTLY CLOSE EXISTING CCR IMPOUNDMENT. WATER QUALITY COMPLIANCE IN ACCORDANCE WITH 9 VAC 25-870-65.

THIS PROJECT WILL HAVE A LAND DISTURBANCE GREATER THAN 2,500 S.F.; THEREFORE THE VSMP REGULATIONS FOR STORMWATER ARE APPLICABLE AND ADMINISTERED BY THE COUNTY.

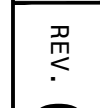
IMPACTS TO WETLAND AND OTHER WATERS OF THE U.S. ARE BEING SUBMITTED FOR APPROVAL UNDER SECTION 404 AND 401 OF THE CLEAN WATER ACT AND THE VIRGINIA TIDAL WETLANDS ACT THROUGH A PENDING MINOR PERMIT MODIFICATION REQUEST CHESTERFIELD POWER STATION FOSSIL FUEL COMBUSTION PRODUCTS MANAGEMENT FACILITY DEPARTMENT OF THE ARMY PERMIT NO. 2007-02441, 10-11787 AND VIRGINIA WATER PROTECTION PERMIT NO. 10-10787. THESE PLANS MAY REQUIRE MODIFICATIONS PENDING PERMIT CONDITIONS AS REQUIRED BY FEDERAL OR STATE REVIEW AGENCIES. PERMIT CONDITIONS AMENDED TO THE PLANS SHALL BE FOLLOWED.

	TITLE COVER SHEET		
	CHESTERFIELD POWER STATION CLOSURE PLAN - UPPER ASH POND CHESTERFIELD COUNTY, VIRGINIA		
	FOR PERMIT APPLICATION DRAWINGS		
			SCALE: AS SHOWN DES: MSR
			DWG TYPE: .DWG DFT: JBM
			JOB NO: 60614683 CHKD: RJB
			DATE: 11-13-2020 ENGR: GWL
FILENAME: COVER SHEET.DWG		APPD: GWL	
DWG SIZE ANSI D 22.0"x34.0"	DRAWING NO. 001		REVISION 0

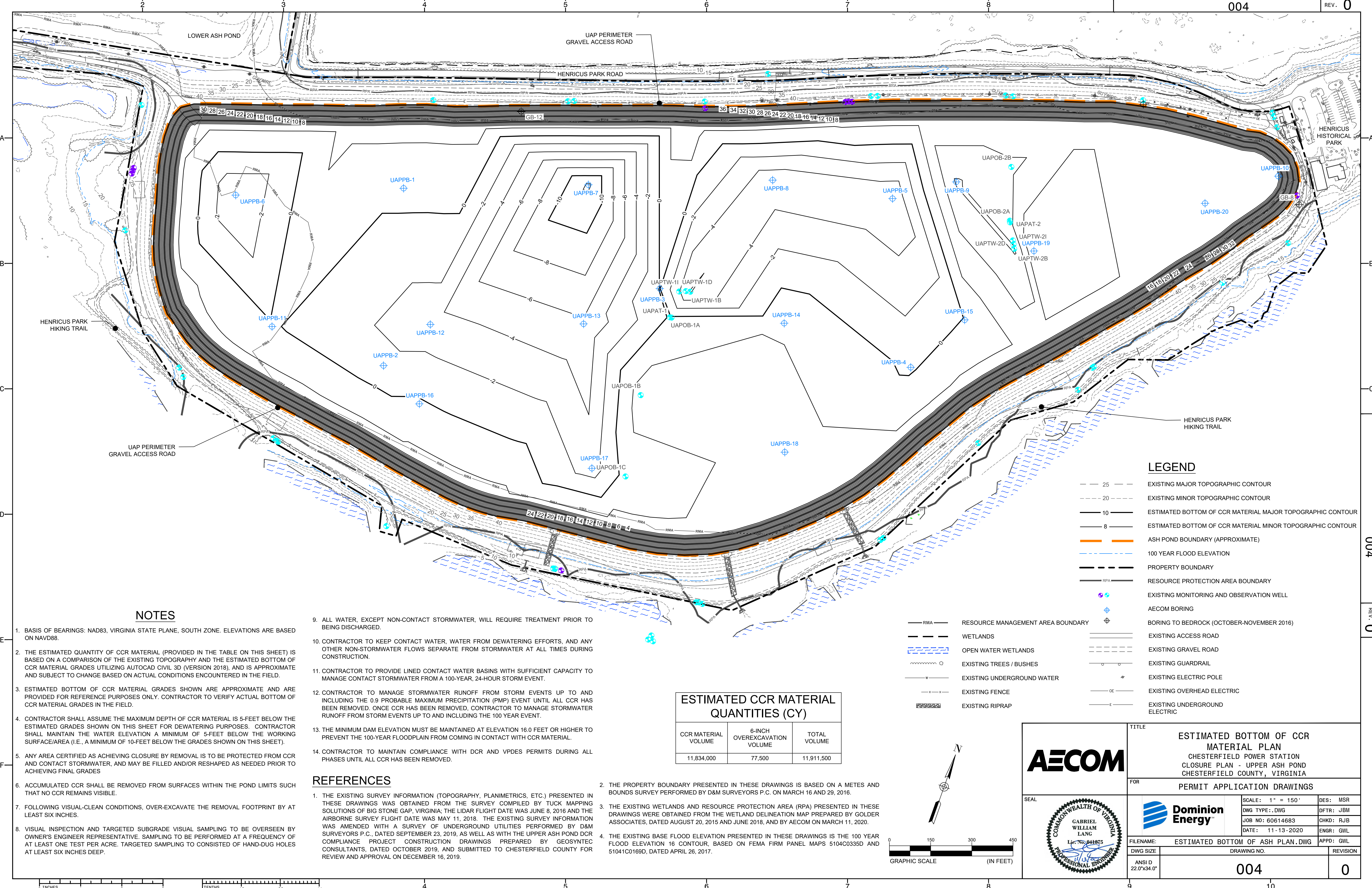












NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. THE ESTIMATED QUANTITY OF CCR MATERIAL (PROVIDED IN THE TABLE ON THIS SHEET) IS BASED ON A COMPARISON OF THE EXISTING TOPOGRAPHY AND THE ESTIMATED BOTTOM OF CCR MATERIAL GRADES UTILIZING AUTOCAD CIVIL 3D (VERSION 2018), AND IS APPROXIMATE AND SUBJECT TO CHANGE BASED ON ACTUAL CONDITIONS ENCOUNTERED IN THE FIELD.
3. ESTIMATED BOTTOM OF CCR MATERIAL GRADES SHOWN ARE APPROXIMATE AND ARE PROVIDED FOR REFERENCE PURPOSES ONLY. CONTRACTOR TO VERIFY ACTUAL BOTTOM OF CCR MATERIAL GRADES IN THE FIELD.
4. CONTRACTOR SHALL ASSUME THE MAXIMUM DEPTH OF CCR MATERIAL IS 5-FEET BELOW THE ESTIMATED GRADES SHOWN ON THIS SHEET FOR DEWATERING PURPOSES. CONTRACTOR SHALL MAINTAIN THE WATER ELEVATION A MINIMUM OF 5-FEET BELOW THE WORKING SURFACE/AREA (I.E., A MINIMUM OF 10-FEET BELOW THE GRADES SHOWN ON THIS SHEET).
5. ANY AREA CERTIFIED AS ACHIEVING CLOSURE BY REMOVAL IS TO BE PROTECTED FROM CCR AND CONTACT STORMWATER, AND MAY BE FILLED AND/OR RESHAPED AS NEEDED PRIOR TO ACHIEVING FINAL GRADES
6. ACCUMULATED CCR SHALL BE REMOVED FROM SURFACES WITHIN THE POND LIMITS SUCH THAT NO CCR REMAINS VISIBLE.
7. FOLLOWING VISUAL-CLEAN CONDITIONS, OVER-EXCAVATE THE REMOVAL FOOTPRINT BY AT LEAST SIX INCHES.
8. VISUAL INSPECTION AND TARGETED SUBGRADE VISUAL SAMPLING TO BE OVERSEEN BY OWNER'S ENGINEER REPRESENTATIVE. SAMPLING TO BE PERFORMED AT A FREQUENCY OF AT LEAST ONE TEST PER ACRE. TARGETED SAMPLING TO CONSISTED OF HAND-DUG HOLES AT LEAST SIX INCHES DEEP.

9. ALL WATER, EXCEPT NON-CONTACT STORMWATER, WILL REQUIRE TREATMENT PRIOR TO BEING DISCHARGED.
10. CONTRACTOR TO KEEP CONTACT WATER, WATER FROM DEWATERING EFFORTS, AND ANY OTHER NON-STORMWATER FLOWS SEPARATE FROM STORMWATER AT ALL TIMES DURING CONSTRUCTION.
11. CONTRACTOR TO PROVIDE LINED CONTACT WATER BASINS WITH SUFFICIENT CAPACITY TO MANAGE CONTACT STORMWATER FROM A 100-YEAR, 24-HOUR STORM EVENT.
12. CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 0.9 PROBABLE MAXIMUM PRECIPITATION (PMP) EVENT UNTIL ALL CCR HAS BEEN REMOVED. ONCE CCR HAS BEEN REMOVED, CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 100 YEAR EVENT.
13. THE MINIMUM DAM ELEVATION MUST BE MAINTAINED AT ELEVATION 16.0 FEET OR HIGHER TO PREVENT THE 100-YEAR FLOODPLAIN FROM COMING IN CONTACT WITH CCR MATERIAL.
14. CONTRACTOR TO MAINTAIN COMPLIANCE WITH DCR AND VPDES PERMITS DURING ALL PHASES UNTIL ALL CCR HAS BEEN REMOVED.

REFERENCES

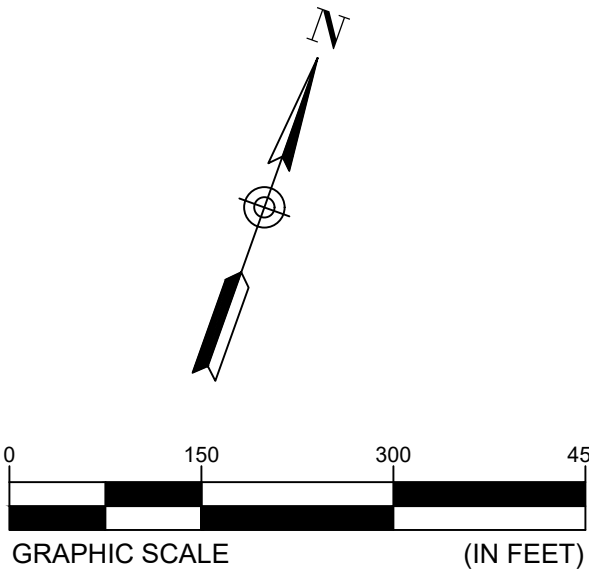
1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH THE UPPER ASH POND DCR COMPLIANCE PROJECT CONSTRUCTION DRAWINGS PREPARED BY GEOSYNTEC CONSULTANTS, DATED OCTOBER 2019, AND SUBMITTED TO CHESTERFIELD COUNTY FOR REVIEW AND APPROVAL ON DECEMBER 16, 2019.

2. THE PROPERTY BOUNDARY PRESENTED IN THESE DRAWINGS IS BASED ON A METES AND BOUNDS SURVEY PERFORMED BY D&M SURVEYORS P.C. ON MARCH 16 AND 29, 2016.
3. THE EXISTING WETLANDS AND RESOURCE PROTECTION AREA (RPA) PRESENTED IN THESE DRAWINGS WERE OBTAINED FROM THE WETLAND DELINEATION MAP PREPARED BY GOLDER ASSOCIATES, DATED AUGUST 20, 2015 AND JUNE 2018, AND BY AECOM ON MARCH 11, 2020.
4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100 YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 51041C0169D, DATED APRIL 26, 2017.

ESTIMATED CCR MATERIAL QUANTITIES (CY)

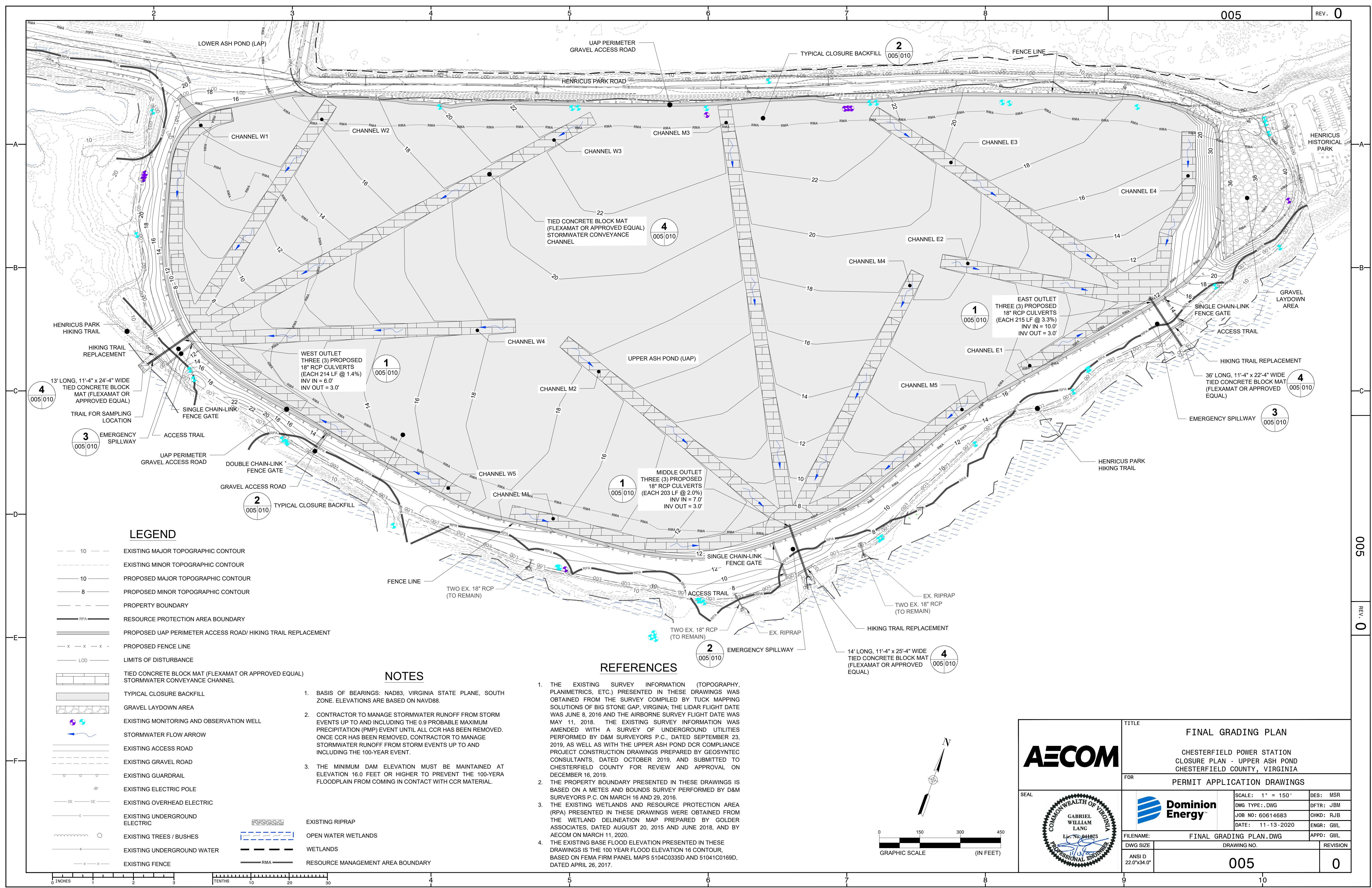
CCR MATERIAL VOLUME	6-INCH OVEREXCAVATION VOLUME	TOTAL VOLUME
11,834,000	77,500	11,911,500

- LEGEND**
- 25 --- EXISTING MAJOR TOPOGRAPHIC CONTOUR
  - 20 --- EXISTING MINOR TOPOGRAPHIC CONTOUR
  - 10 --- ESTIMATED BOTTOM OF CCR MATERIAL MAJOR TOPOGRAPHIC CONTOUR
  - 8 --- ESTIMATED BOTTOM OF CCR MATERIAL MINOR TOPOGRAPHIC CONTOUR
  - ASH POND BOUNDARY (APPROXIMATE)
  - 100 YEAR FLOOD ELEVATION
  - PROPERTY BOUNDARY
  - RESOURCE PROTECTION AREA BOUNDARY
  - EXISTING MONITORING AND OBSERVATION WELL
  - AECOM BORING
  - BORING TO BEDROCK (OCTOBER-NOVEMBER 2016)
  - EXISTING ACCESS ROAD
  - EXISTING GRAVEL ROAD
  - EXISTING GUARDRAIL
  - EXISTING ELECTRIC POLE
  - EXISTING OVERHEAD ELECTRIC
  - EXISTING UNDERGROUND ELECTRIC
  - RESOURCE MANAGEMENT AREA BOUNDARY
  - WETLANDS
  - OPEN WATER WETLANDS
  - EXISTING TREES / BUSHES
  - EXISTING UNDERGROUND WATER
  - EXISTING FENCE
  - EXISTING RIPRAP

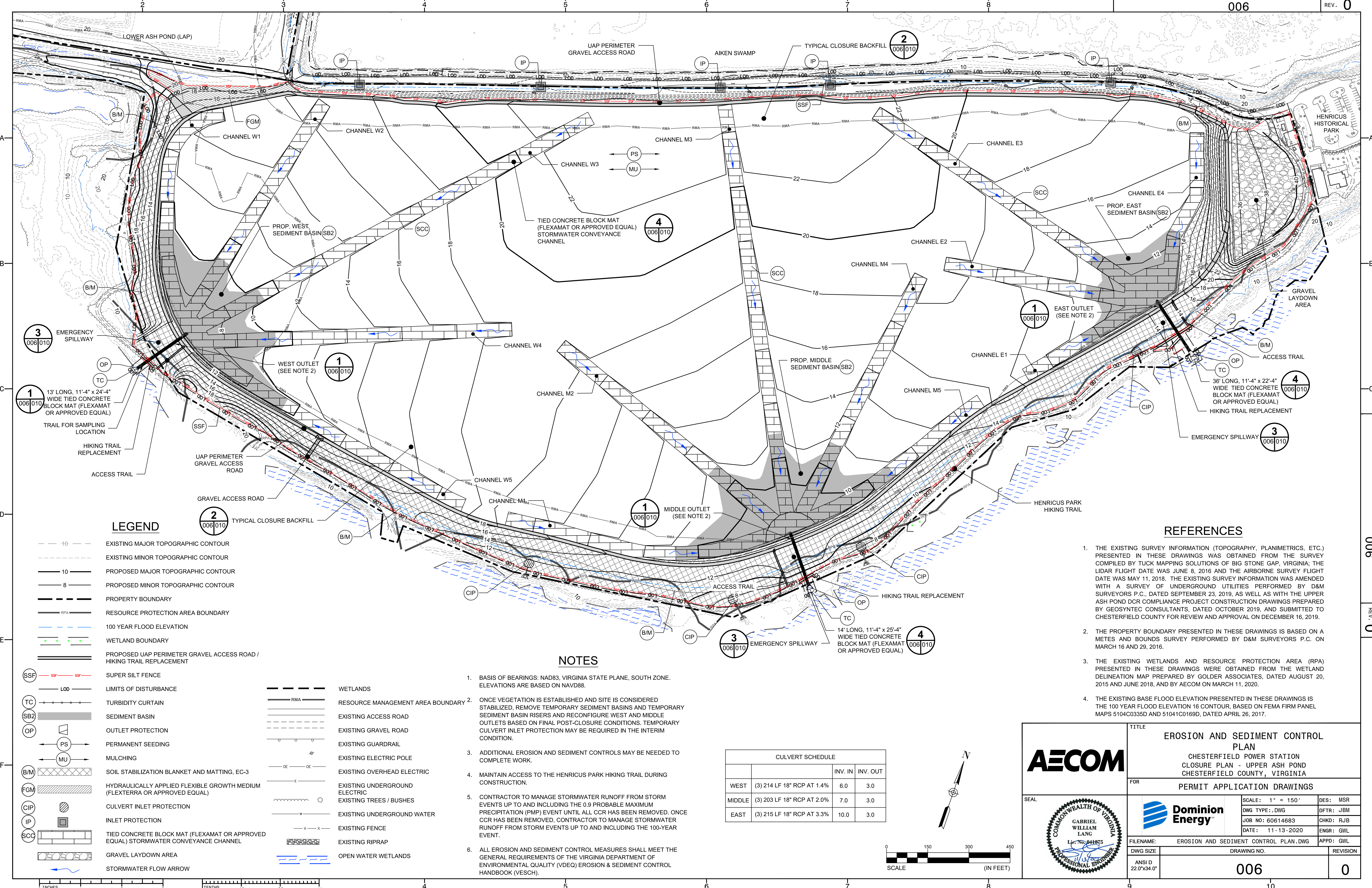


<b>AECOM</b>	TITLE <b>ESTIMATED BOTTOM OF CCR MATERIAL PLAN</b> CHESTERFIELD POWER STATION CLOSURE PLAN - UPPER ASH POND CHESTERFIELD COUNTY, VIRGINIA	
	FOR PERMIT APPLICATION DRAWINGS	
SEAL 		SCALE: 1" = 150' DWG TYPE: .DWG JOB NO: 60614683 DATE: 11-13-2020
	FILENAME: ESTIMATED BOTTOM OF ASH PLAN.DWG DWG SIZE: 22.0"x34.0"	DES: MSR DFTR: JBM CHKD: RJB ENGR: GWL APPD: GWL REVISION: 0









LEGEND

- 10 --- EXISTING MAJOR TOPOGRAPHIC CONTOUR
- 10 --- EXISTING MINOR TOPOGRAPHIC CONTOUR
- 10 --- PROPOSED MAJOR TOPOGRAPHIC CONTOUR
- 8 --- PROPOSED MINOR TOPOGRAPHIC CONTOUR
- PROPERTY BOUNDARY
- RPA --- RESOURCE PROTECTION AREA BOUNDARY
- 100 YEAR FLOOD ELEVATION
- WETLAND BOUNDARY
- PROPOSED UAP PERIMETER GRAVEL ACCESS ROAD / HIKING TRAIL REPLACEMENT
- SSF --- SUPER SILT FENCE
- LOD --- LIMITS OF DISTURBANCE
- TC --- TURBIDITY CURTAIN
- SB2 --- SEDIMENT BASIN
- OP --- OUTLET PROTECTION
- PS --- PERMANENT SEEDING
- MU --- MULCHING
- B/M --- SOIL STABILIZATION BLANKET AND MATTING, EC-3
- FGM --- HYDRAULICALLY APPLIED FLEXIBLE GROWTH MEDIUM (FLEXATERRA OR APPROVED EQUAL)
- CIP --- CULVERT INLET PROTECTION
- IP --- INLET PROTECTION
- SCC --- TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) STORMWATER CONVEYANCE CHANNEL
- GRAVEL LAYDOWN AREA
- STORMWATER FLOW ARROW
- WETLANDS
- RMA --- RESOURCE MANAGEMENT AREA BOUNDARY
- EXISTING ACCESS ROAD
- EXISTING GRAVEL ROAD
- EXISTING GUARDRAIL
- EXISTING ELECTRIC POLE
- EXISTING OVERHEAD ELECTRIC
- EXISTING UNDERGROUND ELECTRIC
- EXISTING TREES / BUSHES
- EXISTING UNDERGROUND WATER
- EXISTING FENCE
- EXISTING RIPRAP
- OPEN WATER WETLANDS

NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. ONCE VEGETATION IS ESTABLISHED AND SITE IS CONSIDERED STABILIZED, REMOVE TEMPORARY SEDIMENT BASINS AND TEMPORARY SEDIMENT BASIN RISERS AND RECONFIGURE WEST AND MIDDLE OUTLETS BASED ON FINAL POST-CLOSURE CONDITIONS. TEMPORARY CULVERT INLET PROTECTION MAY BE REQUIRED IN THE INTERIM CONDITION.
3. ADDITIONAL EROSION AND SEDIMENT CONTROLS MAY BE NEEDED TO COMPLETE WORK.
4. MAINTAIN ACCESS TO THE HENRICUS PARK HIKING TRAIL DURING CONSTRUCTION.
5. CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 0.9 PROBABLE MAXIMUM PRECIPITATION (PMP) EVENT UNTIL ALL CCR HAS BEEN REMOVED. ONCE CCR HAS BEEN REMOVED, CONTRACTOR TO MANAGE STORMWATER RUNOFF FROM STORM EVENTS UP TO AND INCLUDING THE 100-YEAR EVENT.
6. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL MEET THE GENERAL REQUIREMENTS OF THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (VDEQ) EROSION & SEDIMENT CONTROL HANDBOOK (VESCH).

CULVERT SCHEDULE				
		INV. IN	INV. OUT	
WEST	(3) 214 LF 18" RCP AT 1.4%	6.0	3.0	
MIDDLE	(3) 203 LF 18" RCP AT 2.0%	7.0	3.0	
EAST	(3) 215 LF 18" RCP AT 3.3%	10.0	3.0	

REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH THE UPPER ASH POND DCR COMPLIANCE PROJECT CONSTRUCTION DRAWINGS PREPARED BY GEOSYNTEC CONSULTANTS, DATED OCTOBER 2019, AND SUBMITTED TO CHESTERFIELD COUNTY FOR REVIEW AND APPROVAL ON DECEMBER 16, 2019.
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**EROSION AND SEDIMENT CONTROL PLAN**

CHESTERFIELD POWER STATION  
CLOSURE PLAN - UPPER ASH POND  
CHESTERFIELD COUNTY, VIRGINIA

FOR

**PERMIT APPLICATION DRAWINGS**

SCALE: 1" = 150'

DWG TYPE: .DWG

JOB NO: 60614683

DATE: 11-13-2020

DES: MSR

DFTR: JBM

CHKD: RJB

ENGR: GWL

FILENAME: EROSION AND SEDIMENT CONTROL PLAN.DWG

DWG SIZE: 22.0x34.0"

ANSI D

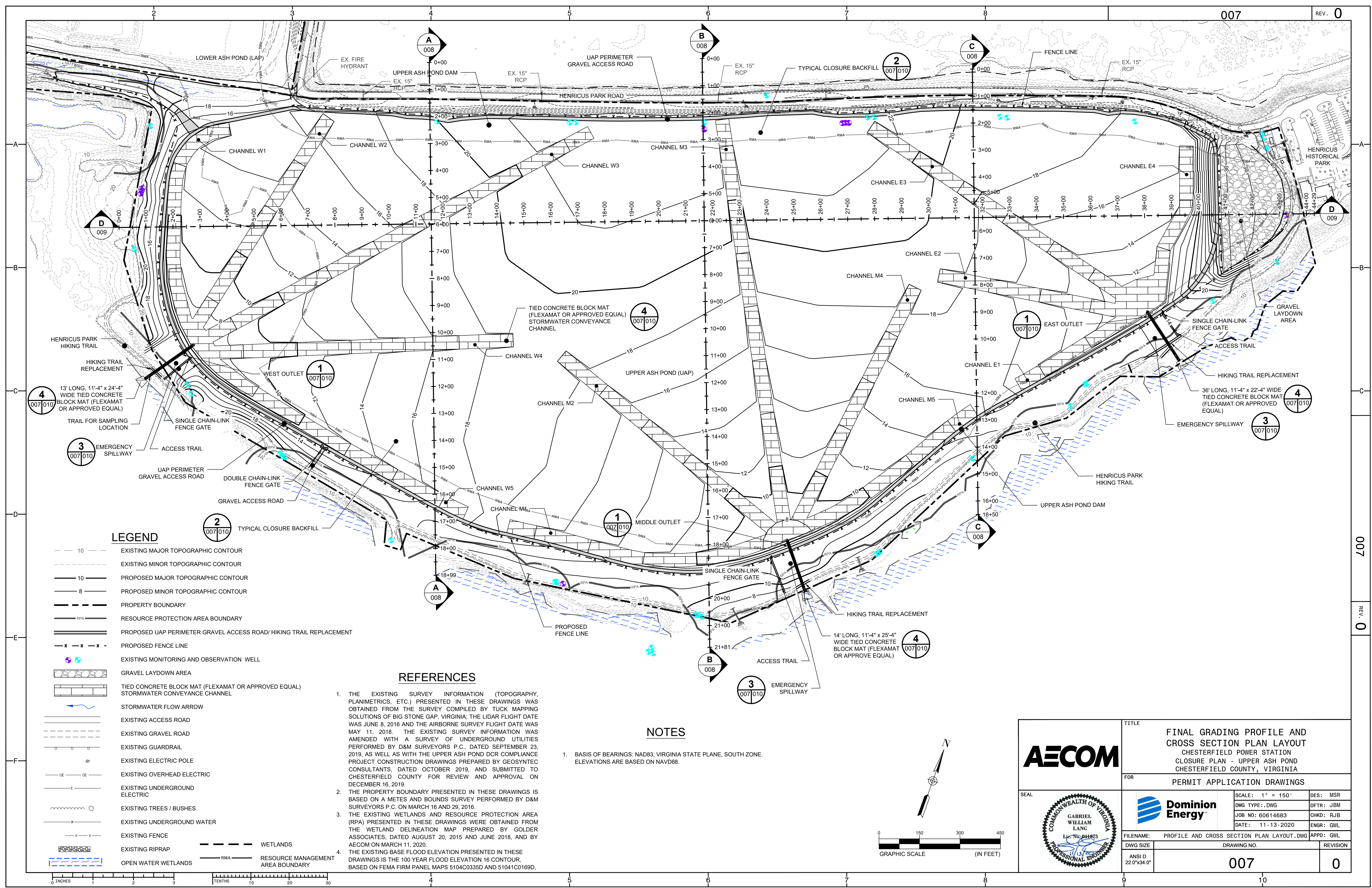
DRAWING NO.

**006**

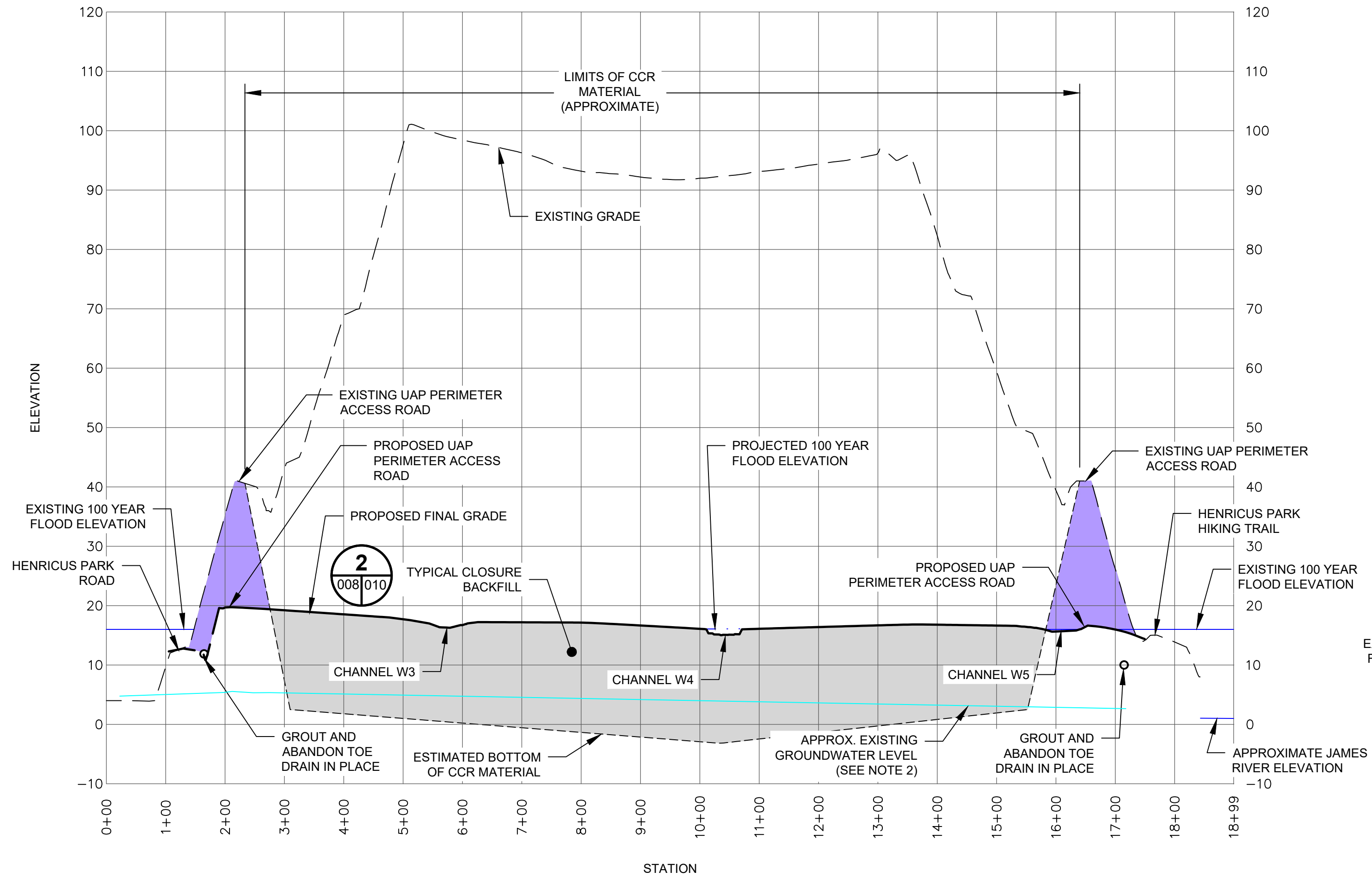
REVISION

**0**

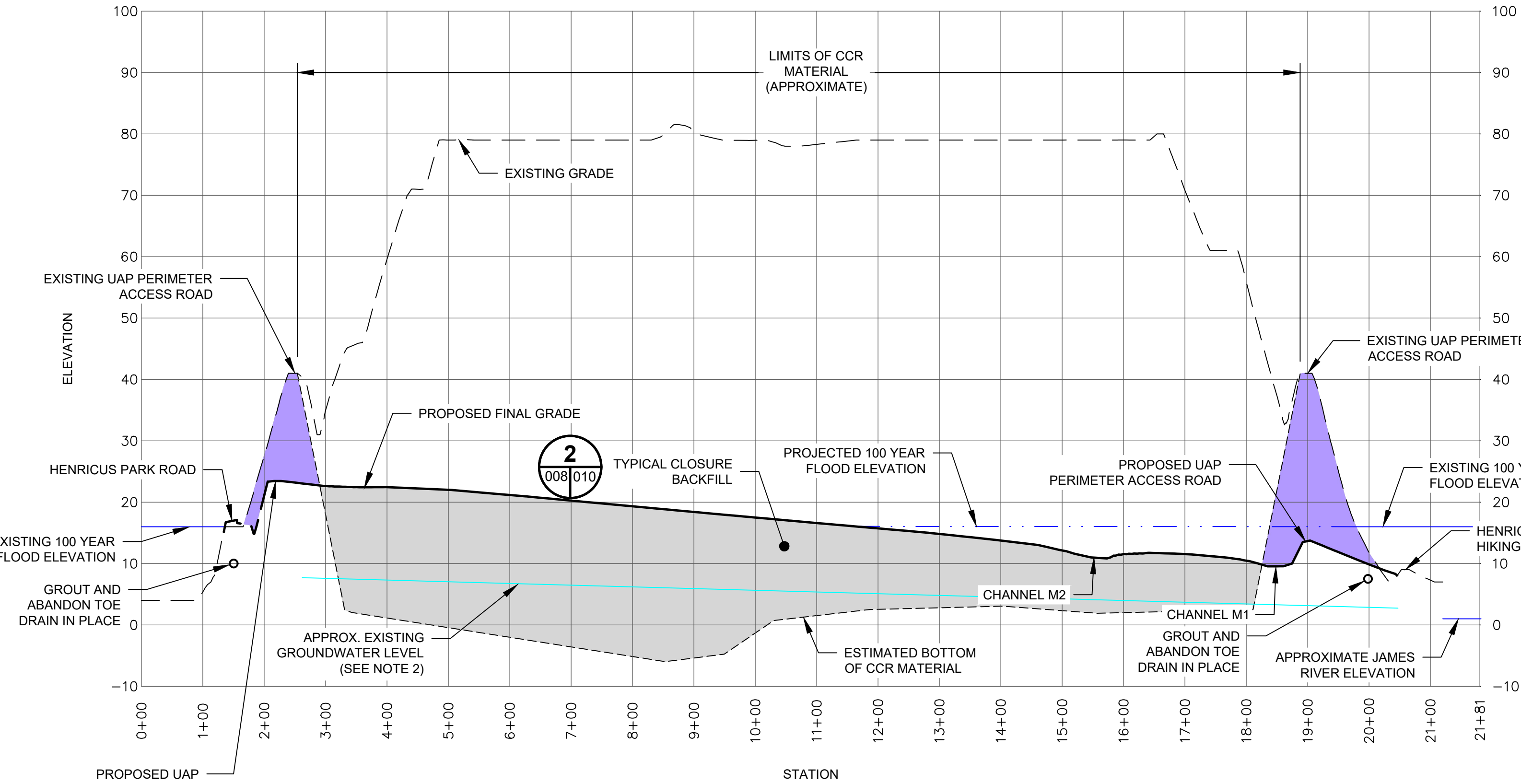




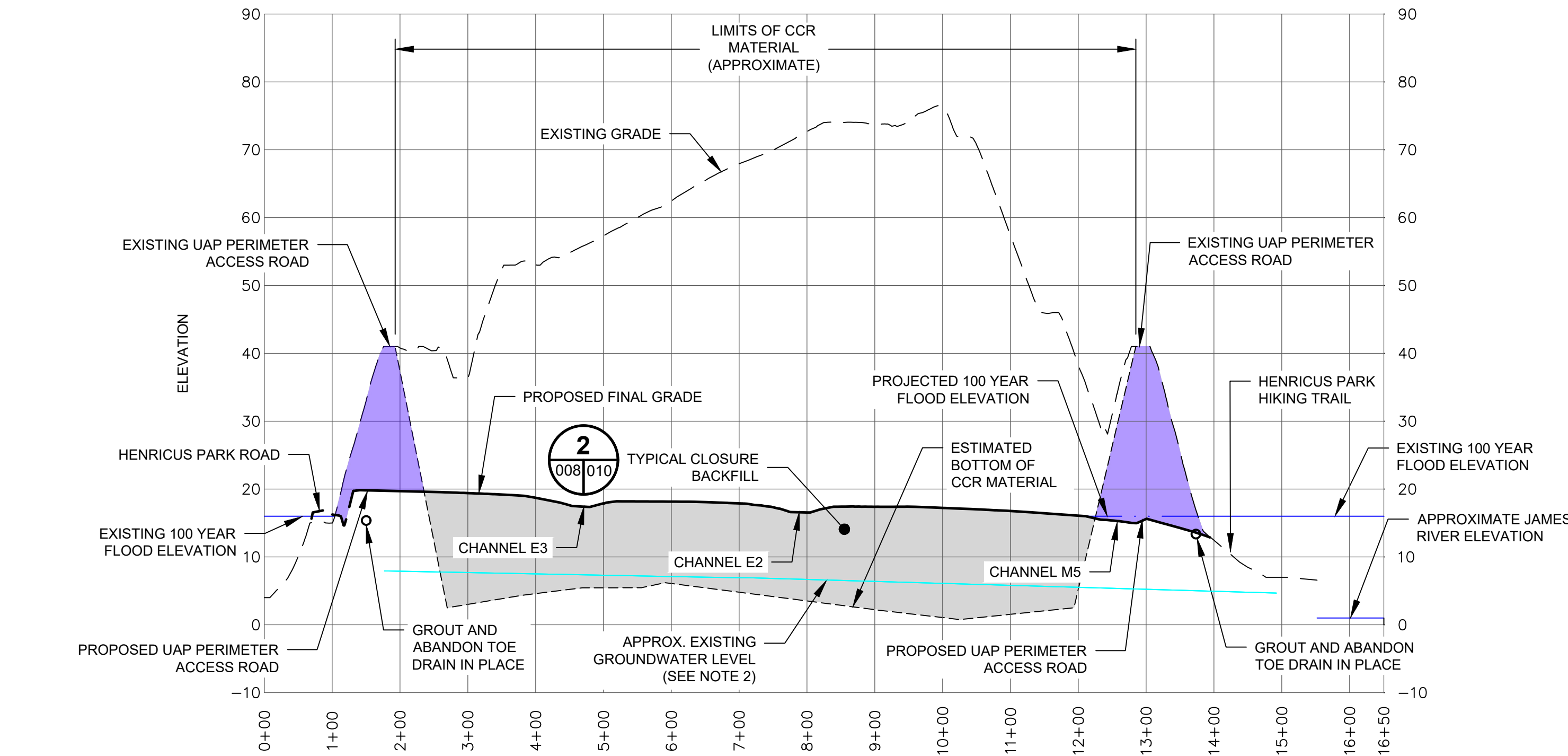




SECTION A-A



SECTION B-B

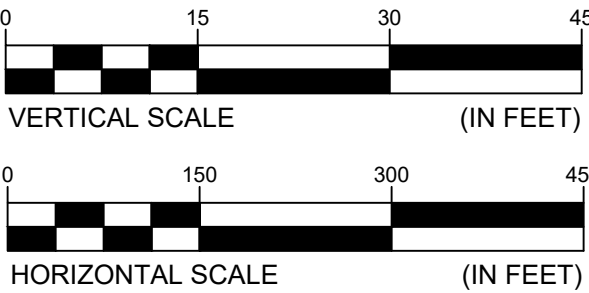


SECTION C-C

**LEGEND**

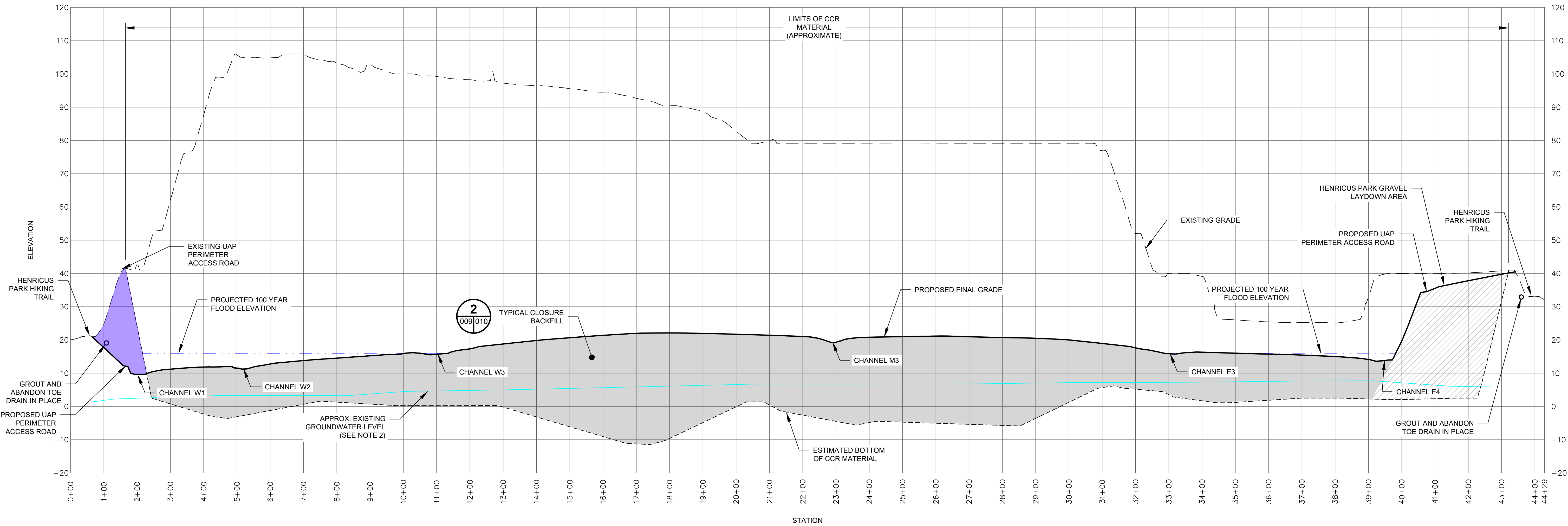
- EXISTING GRADE
- - - ESTIMATED BOTTOM OF CCR MATERIAL
- PROPOSED FINAL GRADE
- 100 YEAR FLOOD ELEVATION
- - - PROJECTED 100 YEAR FLOOD ELEVATION
- - - APPROXIMATE EXISTING GROUNDWATER LEVEL
- TYPICAL CLOSURE BACKFILL
- DIKE LOWERING AREA

- NOTES**
1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
  2. APPROXIMATE EXISTING GROUNDWATER LEVELS ARE BASED UPON A SINGLE DATA POINT AND ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR IS TO VERIFY INFORMATION PROVIDED IN DEVELOPMENT OF WATER MANAGEMENT PLAN.
  3. TOE DRAIN LOCATION IS APPROXIMATE; CONTRACTOR TO FIELD VERIFY.



<b>AECOM</b>	TITLE <b>FINAL GRADING PROFILES AND CROSS SECTIONS I</b> CHESTERFIELD POWER STATION CLOSURE PLAN - UPPER ASH POND CHESTERFIELD COUNTY, VIRGINIA	
	FOR <b>PERMIT APPLICATION DRAWINGS</b>	
SEAL 		SCALE: 1" = 150' DWG TYPE: .DWG JOB NO: 60614683 DATE: 11-13-2020
	FILENAME: CROSS SECTIONS.DWG ANSI D 22.0"x34.0"	DES: MSR DFTR: JBM CHKD: RJB ENGR: GWL APPD: GWL DRAWING NO. <b>008</b>
REVISION		<b>0</b>





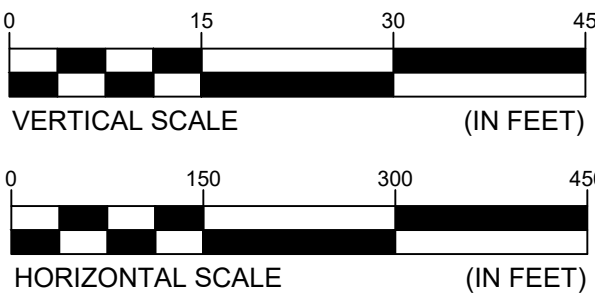
SECTION D-D

LEGEND

- EXISTING GRADE
- ESTIMATED BOTTOM OF CCR MATERIAL
- PROPOSED FINAL GRADE
- - - - - PROJECTED 100 YEAR FLOOD ELEVATION
- APPROXIMATE EXISTING GROUNDWATER LEVEL
- TYPICAL CLOSURE BACKFILL
- DIKE LOWERING AREA
- STRUCTURAL FILL

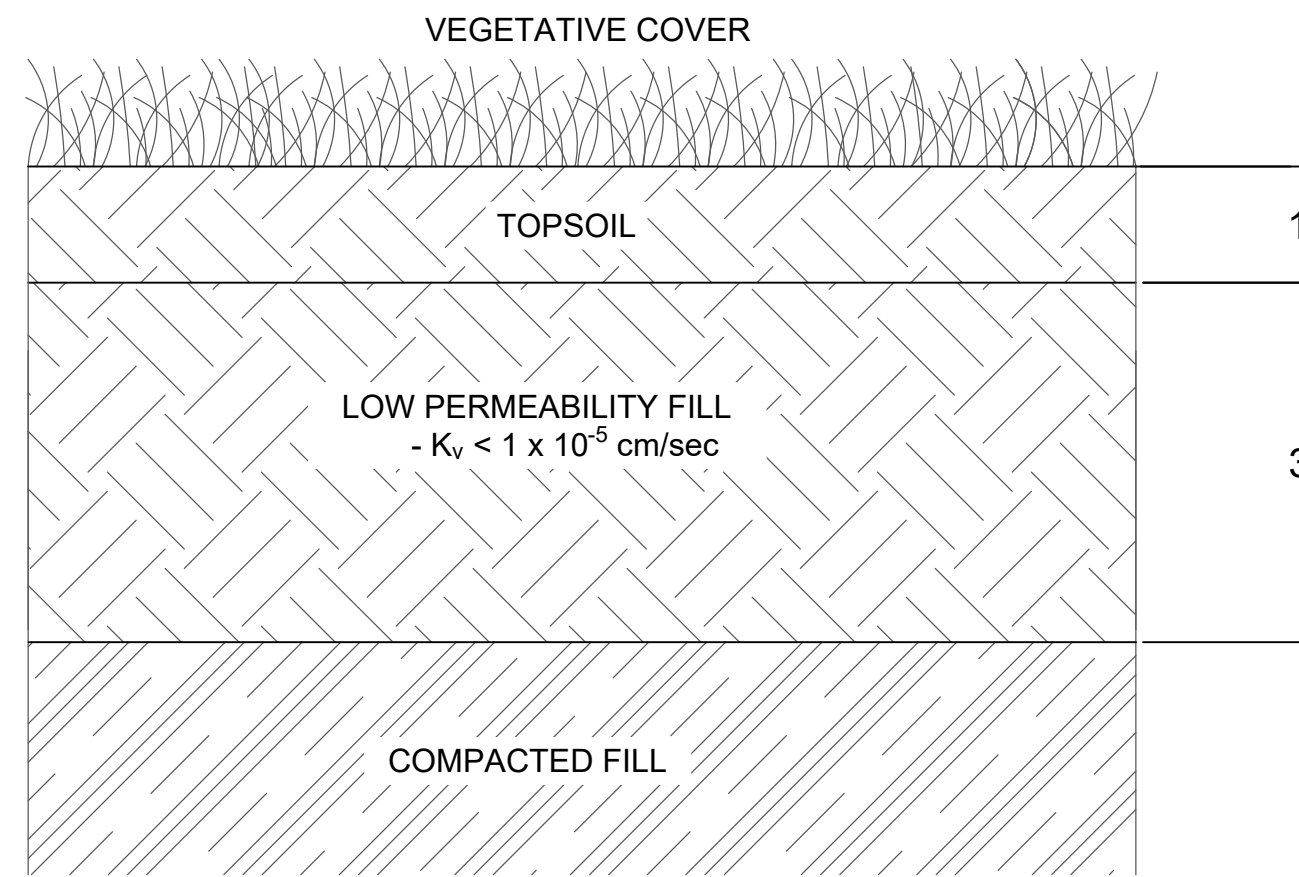
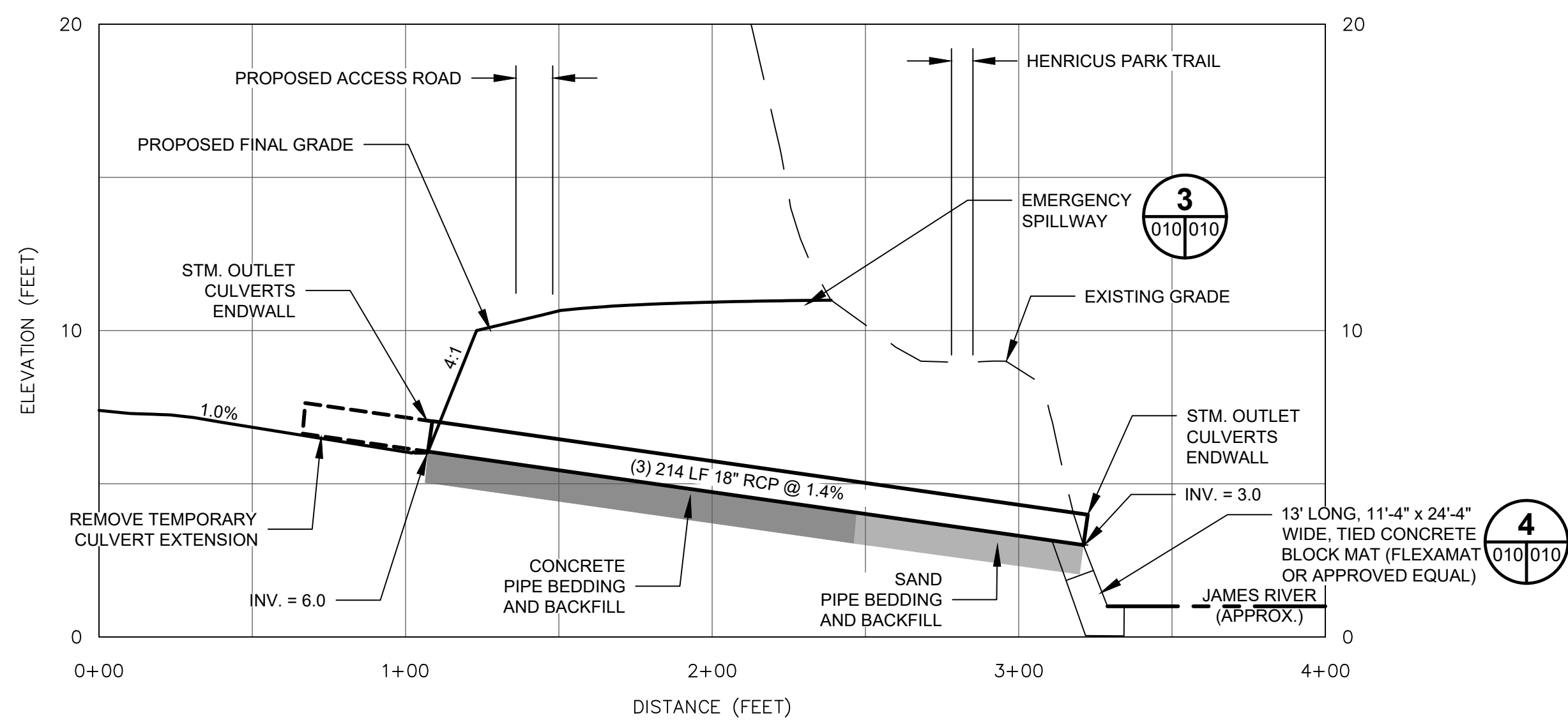
NOTES

- BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
- APPROXIMATE EXISTING GROUNDWATER LEVELS ARE BASED UPON A SINGLE DATA POINT AND ARE PROVIDED FOR REFERENCE ONLY. CONTRACTOR IS TO VERIFY INFORMATION PROVIDED IN DEVELOPMENT OF WATER MANAGEMENT PLAN.
- TOE DRAIN LOCATION IS APPROXIMATE; CONTRACTOR TO FIELD VERIFY.

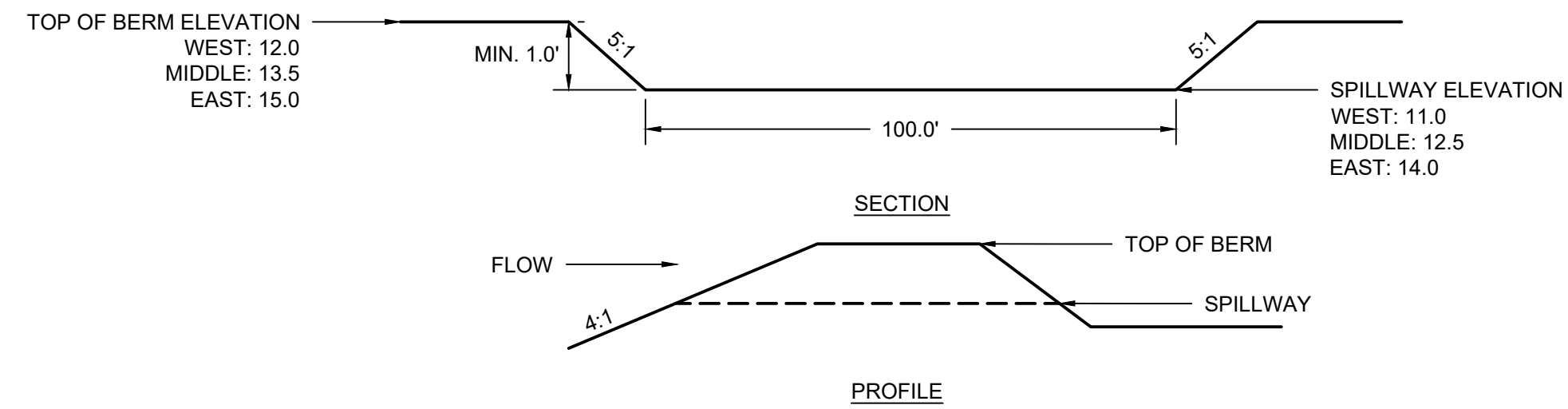


	TITLE FINAL GRADING PROFILES AND CROSS SECTIONS II CHESTERFIELD POWER STATION CLOSURE PLAN - UPPER ASH POND CHESTERFIELD COUNTY, VIRGINIA		
	FOR PERMIT APPLICATION DRAWINGS		
SEAL 		SCALE: 1" = 150'	DES: MSR
		DWG TYPE: .DWG	DFTR: JBM
		JOB NO: 60614683	CHKD: RJB
		DATE: 11-13-2020	ENGR: GWL
FILENAME: CROSS SECTIONS.DWG		APPD: GWL	
DWG SIZE ANSI D 22.0"x34.0"	DRAWING NO. 009		REVISION 0



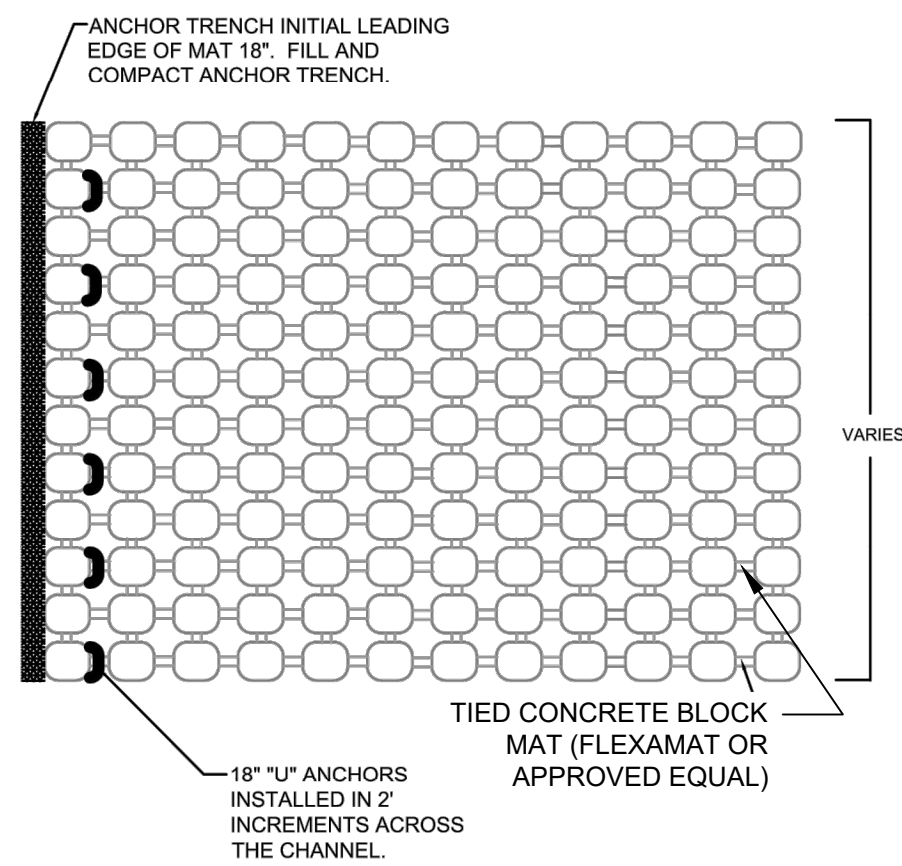
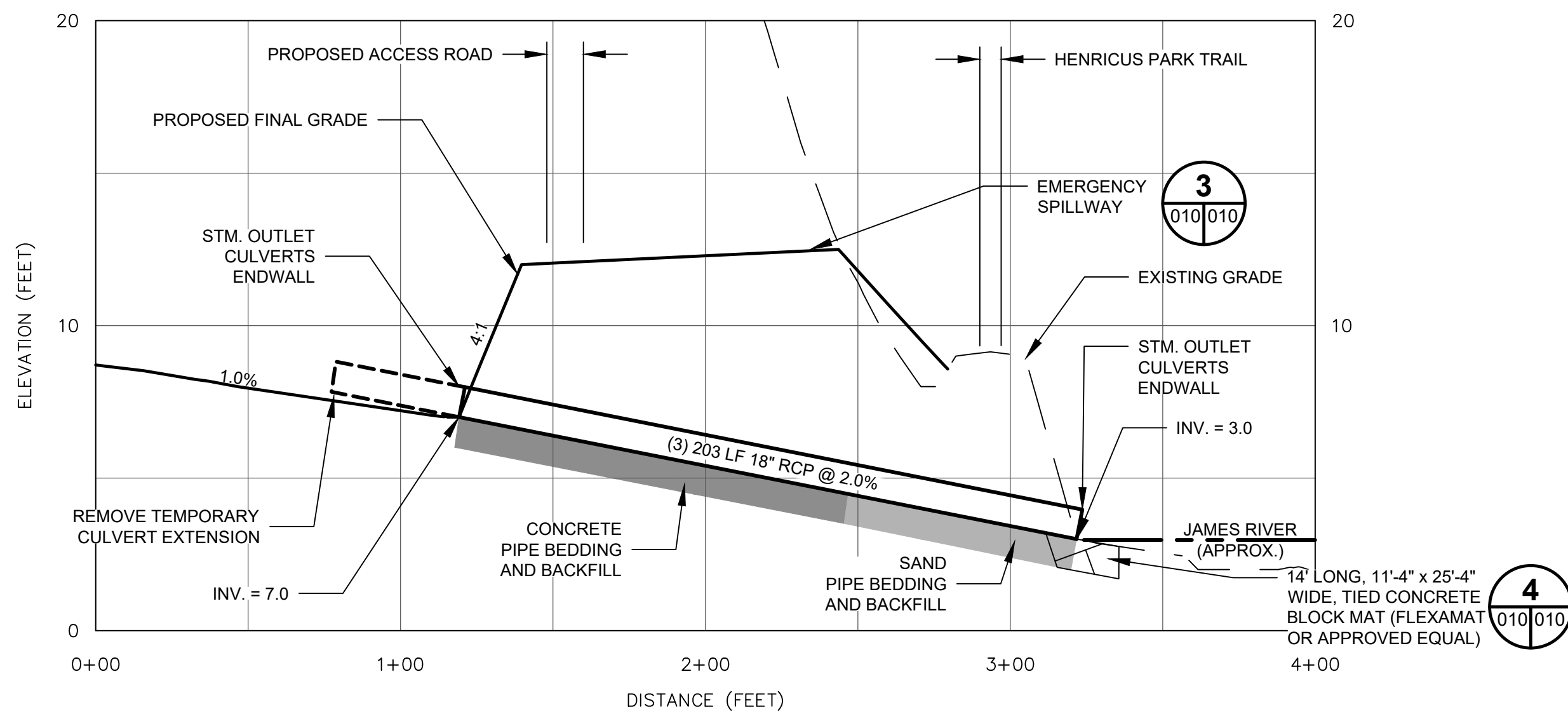


**2** TYPICAL CLOSURE BACKFILL DETAIL  
005/010 NOT TO SCALE  
006-009



- NOTES:
1. SOIL STABILIZATION BLANKET AND MATTING SHALL BE INSTALLED AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN ON SHEET 006.
  2. EMERGENCY SPILLWAY SIZED TO CONVEY THE 100-YEAR STORM EVENT.
  3. THESE ELEVATIONS REPRESENT POST-CLOSURE CONDITIONS.

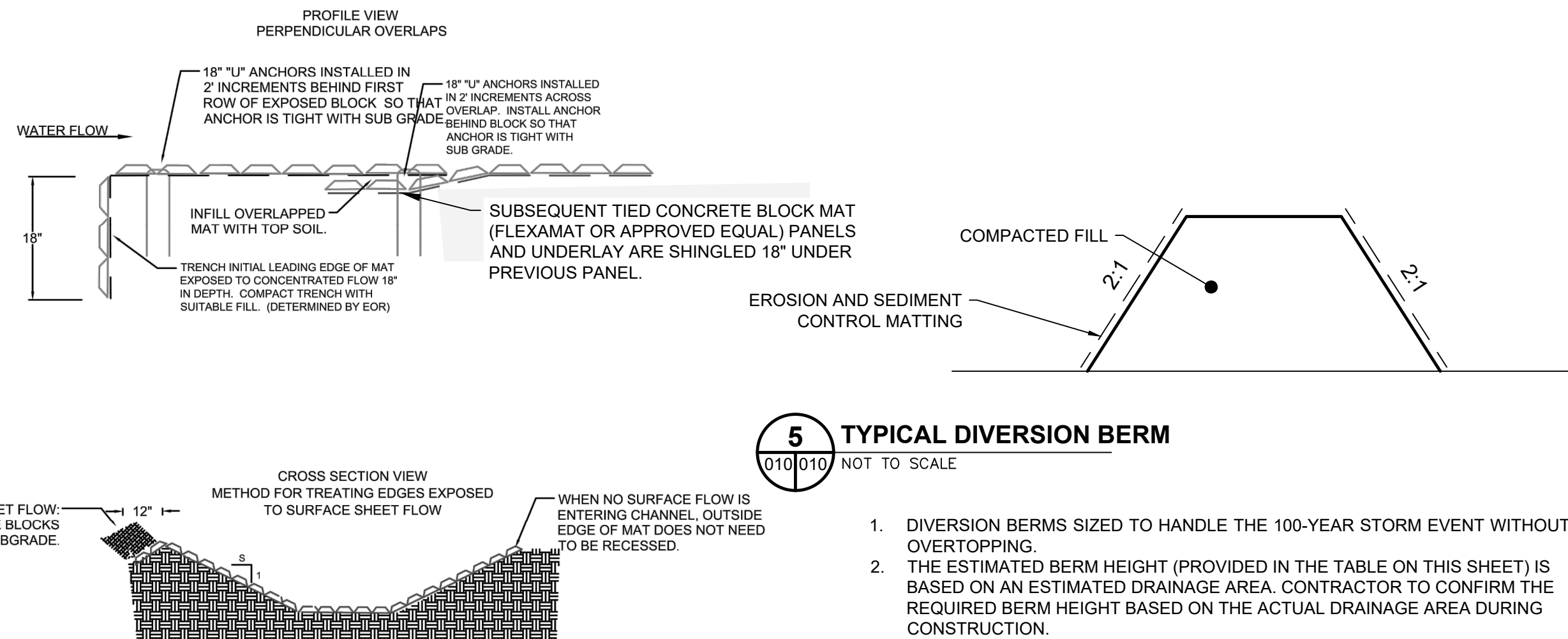
**3** EMERGENCY SPILLWAY DETAIL  
005/010 NOT TO SCALE  
006  
007  
010



**4** TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) STORMWATER CONVEYANCE CHANNEL  
005/010 NOT TO SCALE  
006  
007

**CONSTRUCTION NOTES:**

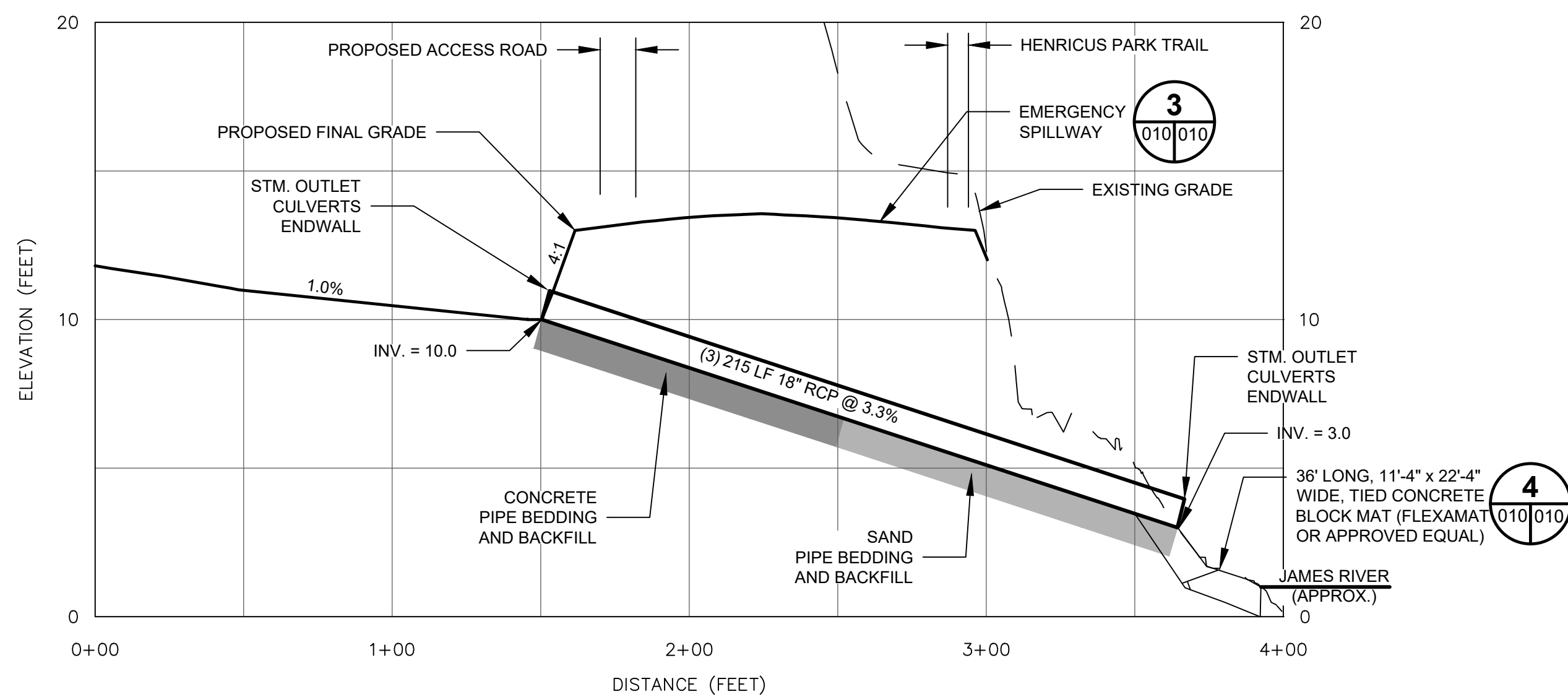
1. GRADE CHANNEL SO THAT WATER WILL FLOW DOWN THE CENTER OF THE CHANNEL AND BE CONTAINED TO THE CHANNEL. ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND. THE PREPARED SURFACE SHALL PROVIDE A FIRM UNYIELDING FOUNDATION FOR THE MATS.
2. APPLY SEED DIRECTLY TO THE PREPARED SOIL PRIOR TO TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) INSTALLATION. USE SEED PER PROJECT SPECIFICATIONS.
3. INSTALL TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL). AVAILABLE WIDTHS ARE 4', 5.5', 8', 10' 12' & 16' AVAILABLE IN CUSTOM LENGTHS. FOR WIDER WIDTHS, INSTALL MATS ADJACENT TO EACH OTHER. (CONTACT MANUFACTURE FOR DETAIL ADDRESSING LONGITUDINAL SEAMS.)
4. AT THE TOP OF THE CHANNEL, THE INITIAL LEADING EDGE OF TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) EXPOSED TO CONCENTRATED FLOWS SHALL BE EMBEDDED 18" VERTICALLY INTO THE SUB GRADE TO SERVE AS AN ANCHOR TRENCH. THE TRENCH SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL OR OTHER (AS SPECIFIED BY ENGINEER OF RECORD).
5. FOR ADDITIONAL SECTIONS OF MAT, OVERLAP THE DOWNSTREAM SECTION 18" WITH UPSTREAM SECTION OF MAT. PRIOR TO INSTALLING OVERLAP, FLIP UPSTREAM MAT BACK 24" EXCAVATE 2.25' OF SOIL 18" FROM END OF UPSTREAM MAT. DOWNSTREAM SECTION IS LAID IN THE SHALLOW TRENCH. LIGHTLY SPREAD TOPSOIL OVER INITIAL EDGE. FLIP END OF UPSTREAM MAT OVER THE SOIL COVERED INITIAL LEADING EDGE OF DOWNSTREAM MAT.
6. INSTALL 18" "U" ANCHORS IN 2' INCREMENTS ACROSS THE OVERLAP. INSTALL ANCHORS DIRECTLY BEHIND BLOCKS. "U" ANCHORS CONSIST OF #3 REBAR "U" ANCHOR WITH 18" LEGS.
7. AT THE END OF THE ARMORED CHANNEL, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SOIL.



**5** TYPICAL DIVERSION BERM  
010/010 NOT TO SCALE

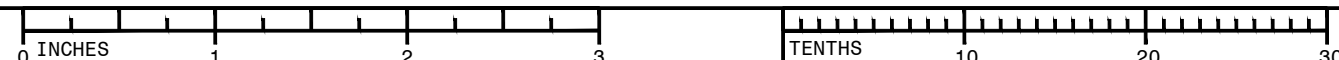
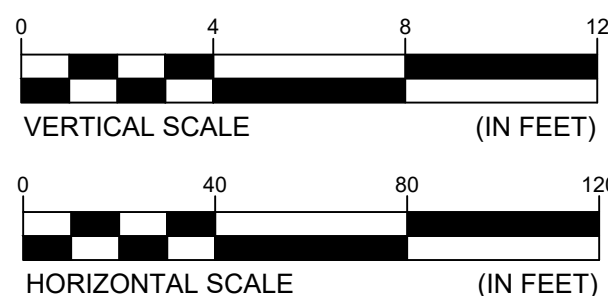
1. DIVERSION BERMS SIZED TO HANDLE THE 100-YEAR STORM EVENT WITHOUT OVERTOPPING.
2. THE ESTIMATED BERM HEIGHT (PROVIDED IN THE TABLE ON THIS SHEET) IS BASED ON AN ESTIMATED DRAINAGE AREA. CONTRACTOR TO CONFIRM THE REQUIRED BERM HEIGHT BASED ON THE ACTUAL DRAINAGE AREA DURING CONSTRUCTION.

DRAINAGE ACREAGE	BERM HEIGHT (FT)
10	2.0
15	2.5
20	2.5
25	3.0
30	3.5
35	3.5
40	4.0
45	4.5
50	4.5
55	5.0
60	5.5
65	5.5



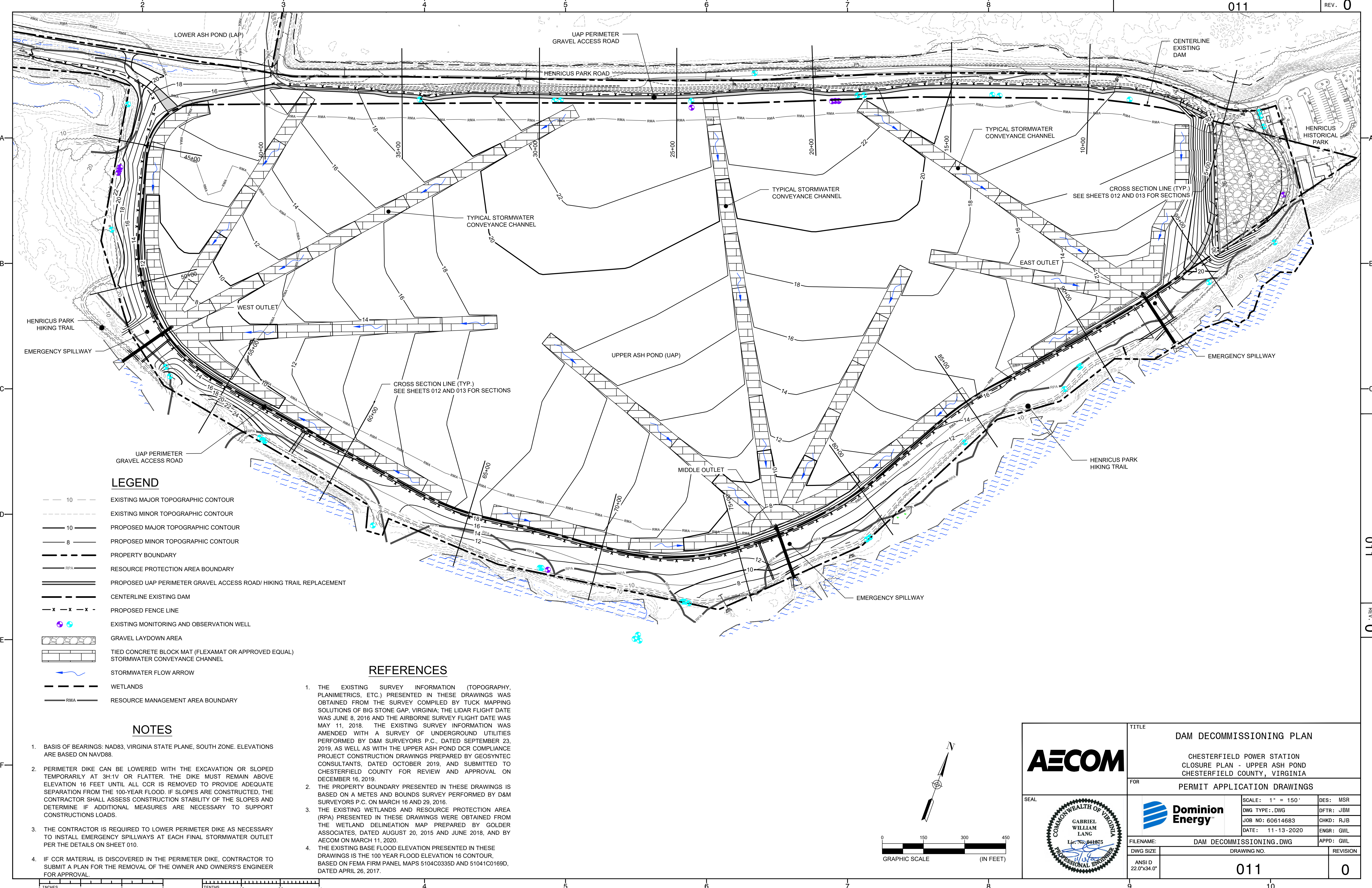
**1** STORMWATER OUTLET CULVERT DETAIL  
005/010

1. JAMES RIVER WATER ELEVATION (USGS) SHOWN IS APPROXIMATE.



<b>AECOM</b>	TITLE FINAL GRADING AND STORMWATER DETAILS CHESTERFIELD POWER STATION CLOSURE PLAN - UPPER ASH POND CHESTERFIELD COUNTY, VIRGINIA			
	FOR PERMIT APPLICATION DRAWINGS			
	<b>Seal</b> COMMONWEALTH OF VIRGINIA GABRIEL WILLIAM LANG Lic. No. 041875 PROFESSIONAL ENGINEER	<b>Dominion Energy</b>	SCALE: AS SHOWN DWG TYPE: .DWG JOB NO: 60614683 DATE: 11-13-2020	DES: MSR DFTR: JBM CHKD: RJB ENGR: GWL
		FILENAME: FINAL GRADING DETAILS.DWG DWG SIZE: 22.0"x34.0"		APPD: GWL REVISION
010		0		





LEGEND

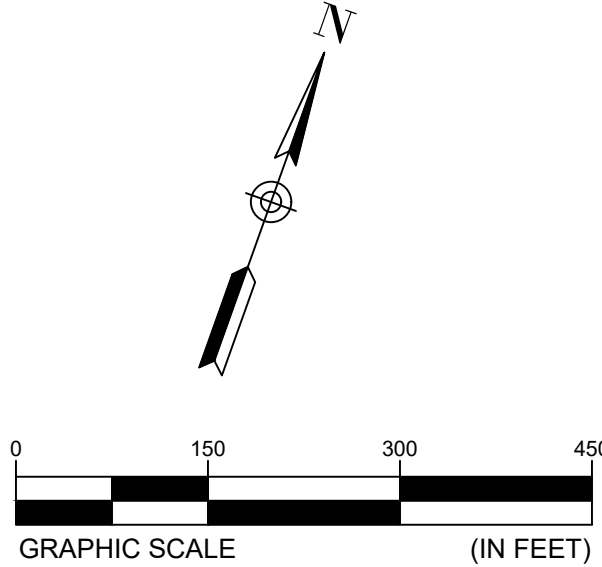
- 10 EXISTING MAJOR TOPOGRAPHIC CONTOUR
- 10 EXISTING MINOR TOPOGRAPHIC CONTOUR
- 10 PROPOSED MAJOR TOPOGRAPHIC CONTOUR
- 8 PROPOSED MINOR TOPOGRAPHIC CONTOUR
- PROPERTY BOUNDARY
- RPA RESOURCE PROTECTION AREA BOUNDARY
- PROPOSED UAP PERIMETER GRAVEL ACCESS ROAD/ HIKING TRAIL REPLACEMENT
- CENTERLINE EXISTING DAM
- PROPOSED FENCE LINE
- EXISTING MONITORING AND OBSERVATION WELL
- GRAVEL LAYDOWN AREA
- TIED CONCRETE BLOCK MAT (FLEXAMAT OR APPROVED EQUAL) STORMWATER CONVEYANCE CHANNEL
- STORMWATER FLOW ARROW
- WETLANDS
- RMA RESOURCE MANAGEMENT AREA BOUNDARY

NOTES

1. BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.
2. PERIMETER DIKE CAN BE LOWERED WITH THE EXCAVATION OR SLOPED TEMPORARILY AT 3H:1V OR FLATTER. THE DIKE MUST REMAIN ABOVE ELEVATION 16 FEET UNTIL ALL CCR IS REMOVED TO PROVIDE ADEQUATE SEPARATION FROM THE 100-YEAR FLOOD. IF SLOPES ARE CONSTRUCTED, THE CONTRACTOR SHALL ASSESS CONSTRUCTION STABILITY OF THE SLOPES AND DETERMINE IF ADDITIONAL MEASURES ARE NECESSARY TO SUPPORT CONSTRUCTIONS LOADS.
3. THE CONTRACTOR IS REQUIRED TO LOWER PERIMETER DIKE AS NECESSARY TO INSTALL EMERGENCY SPILLWAYS AT EACH FINAL STORMWATER OUTLET PER THE DETAILS ON SHEET 010.
4. IF CCR MATERIAL IS DISCOVERED IN THE PERIMETER DIKE, CONTRACTOR TO SUBMIT A PLAN FOR THE REMOVAL OF THE OWNER AND OWNERS'S ENGINEER FOR APPROVAL.

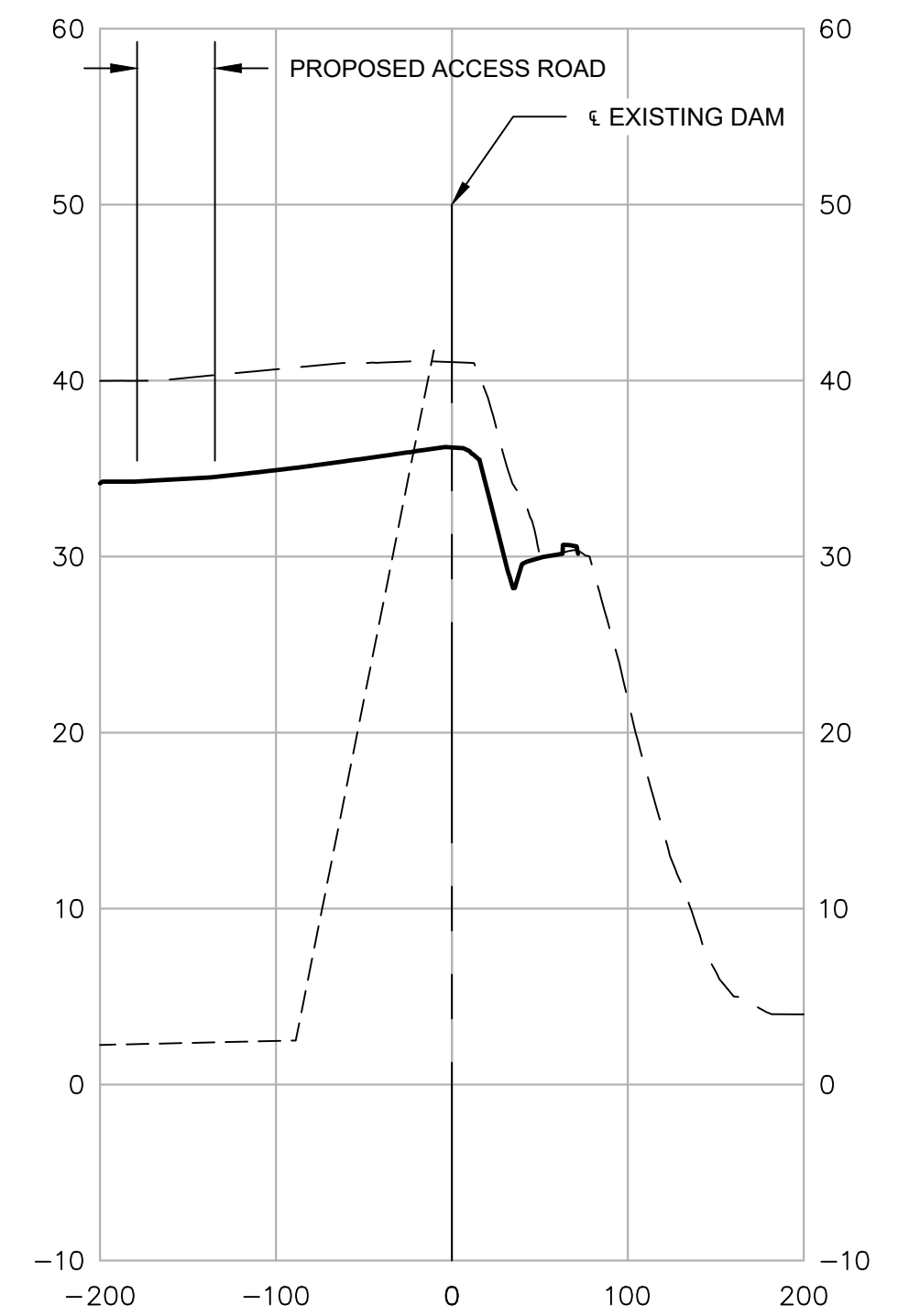
REFERENCES

1. THE EXISTING SURVEY INFORMATION (TOPOGRAPHY, PLANIMETRICS, ETC.) PRESENTED IN THESE DRAWINGS WAS OBTAINED FROM THE SURVEY COMPILED BY TUCK MAPPING SOLUTIONS OF BIG STONE GAP, VIRGINIA; THE LIDAR FLIGHT DATE WAS JUNE 8, 2016 AND THE AIRBORNE SURVEY FLIGHT DATE WAS MAY 11, 2018. THE EXISTING SURVEY INFORMATION WAS AMENDED WITH A SURVEY OF UNDERGROUND UTILITIES PERFORMED BY D&M SURVEYORS P.C., DATED SEPTEMBER 23, 2019, AS WELL AS WITH THE UPPER ASH POND DCR COMPLIANCE PROJECT CONSTRUCTION DRAWINGS PREPARED BY GEOSYNTEC CONSULTANTS, DATED OCTOBER 2019, AND SUBMITTED TO CHESTERFIELD COUNTY FOR REVIEW AND APPROVAL ON DECEMBER 16, 2019.
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4. THE EXISTING BASE FLOOD ELEVATION PRESENTED IN THESE DRAWINGS IS THE 100 YEAR FLOOD ELEVATION 16 CONTOUR, BASED ON FEMA FIRM PANEL MAPS 5104C0335D AND 51041C0169D, DATED APRIL 26, 2017.

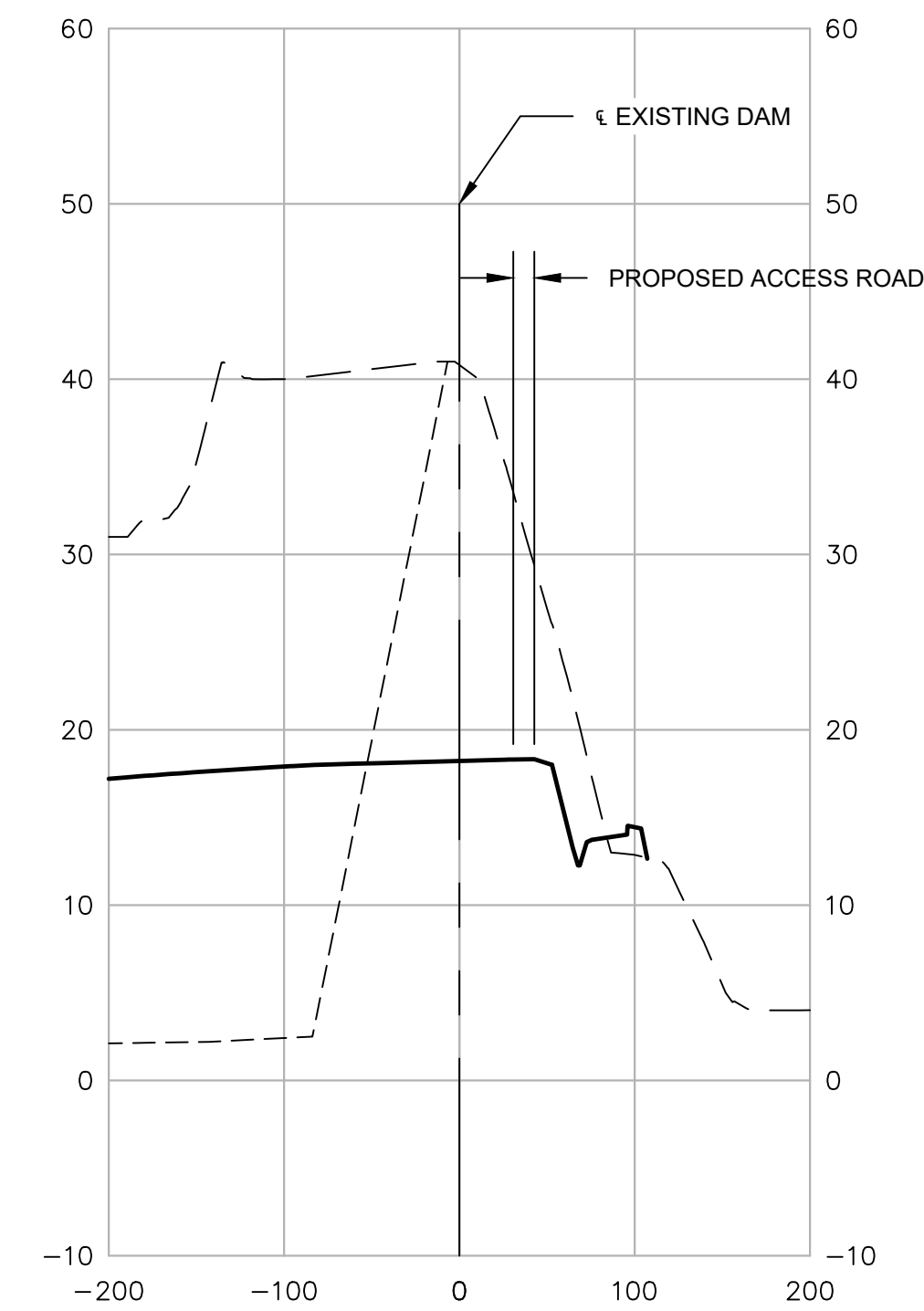


	TITLE DAM DECOMMISSIONING PLAN		
	CHESTERFIELD POWER STATION CLOSURE PLAN - UPPER ASH POND CHESTERFIELD COUNTY, VIRGINIA		
	FOR PERMIT APPLICATION DRAWINGS		
		SCALE: 1" = 150'	DES: MSR
FILENAME: DAM DECOMMISSIONING.DWG	DWG TYPE: .DWG	JOB NO: 60614683	DFTR: JBM
	ANSI D 22.0"x34.0"	DATE: 11-13-2020	CHKD: RJB
DRAWING NO. 011		ENGR: GWL	
		APPD: GWL	
		REVISION	
		0	

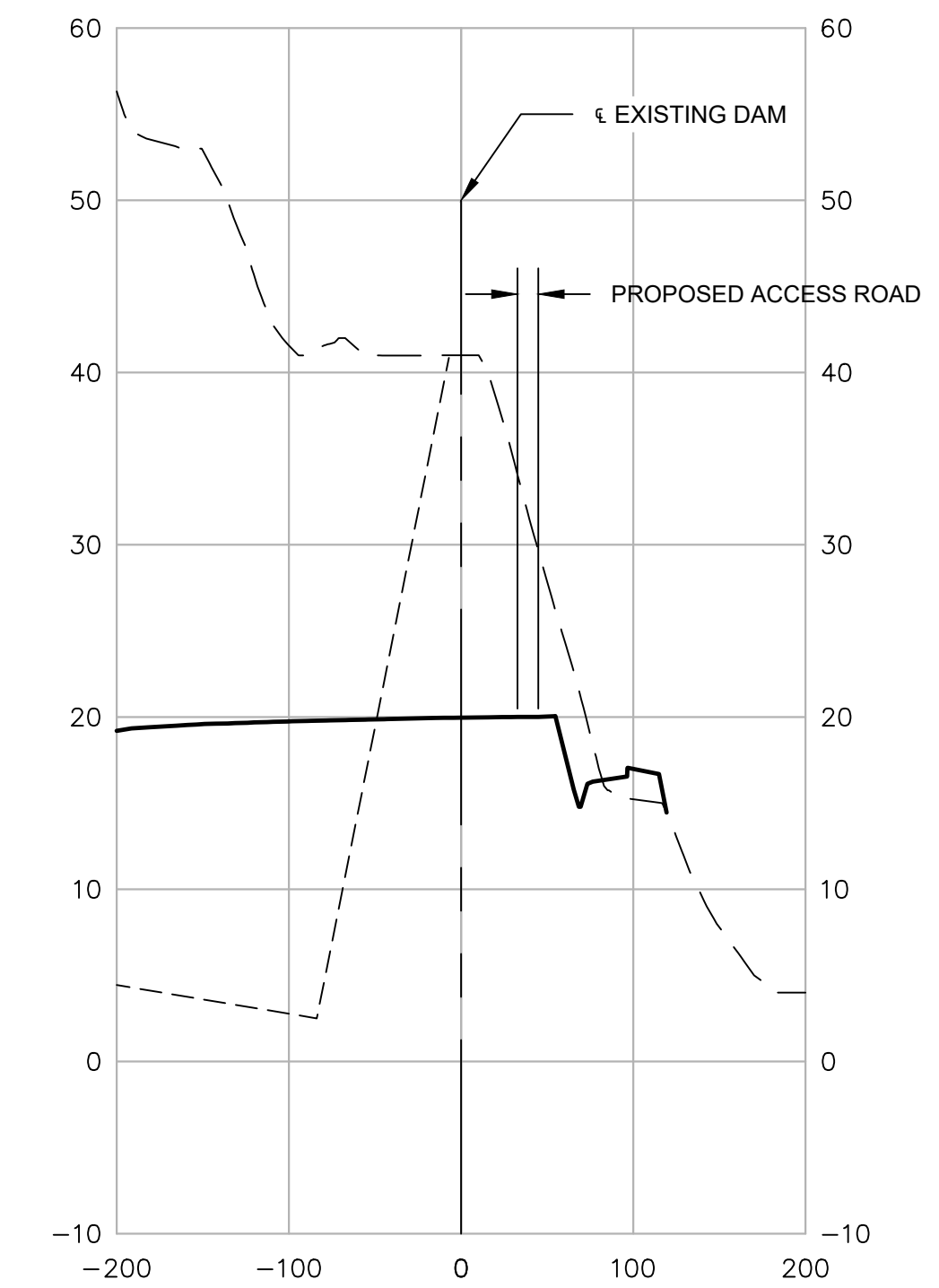




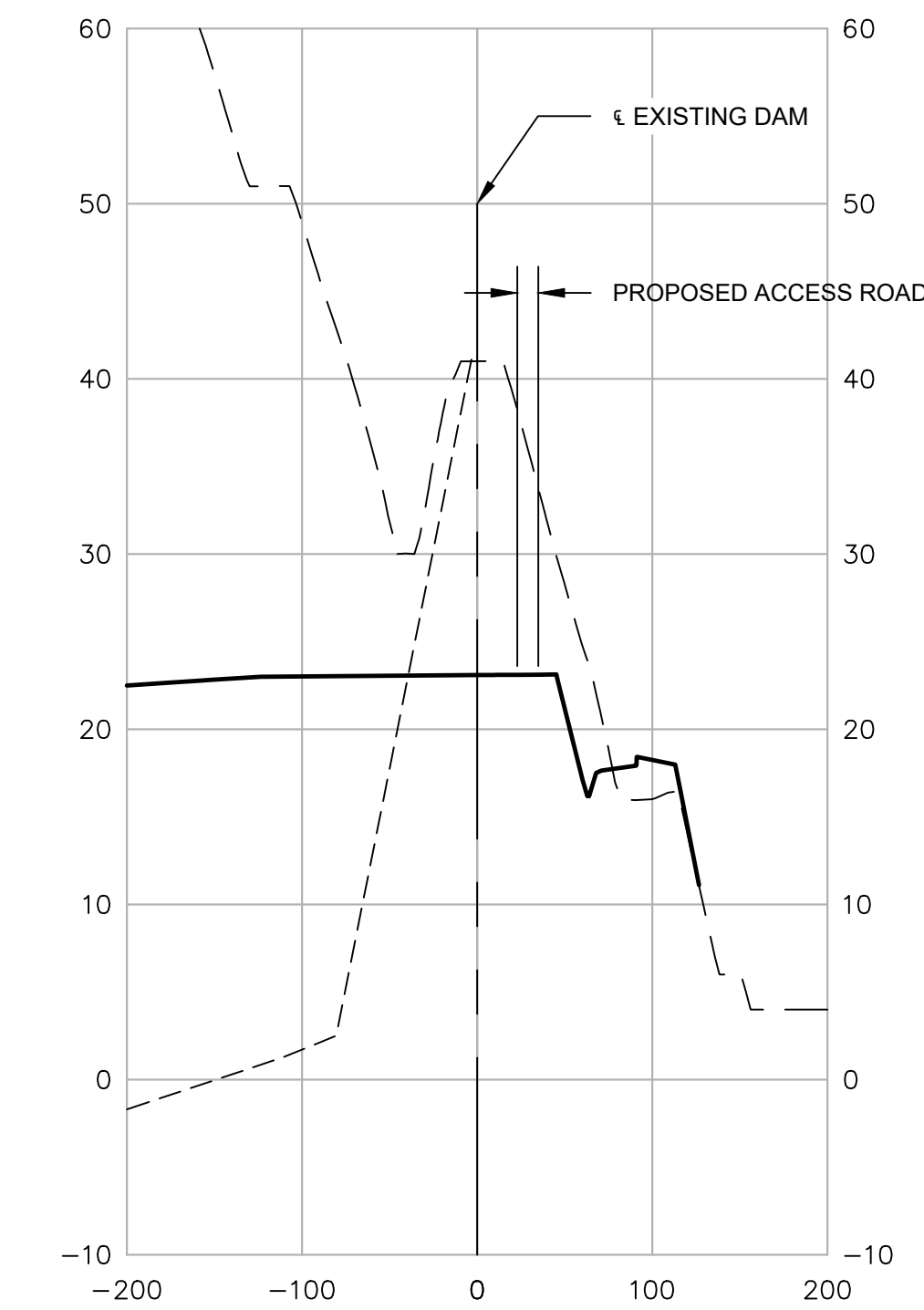
STA. 5+00



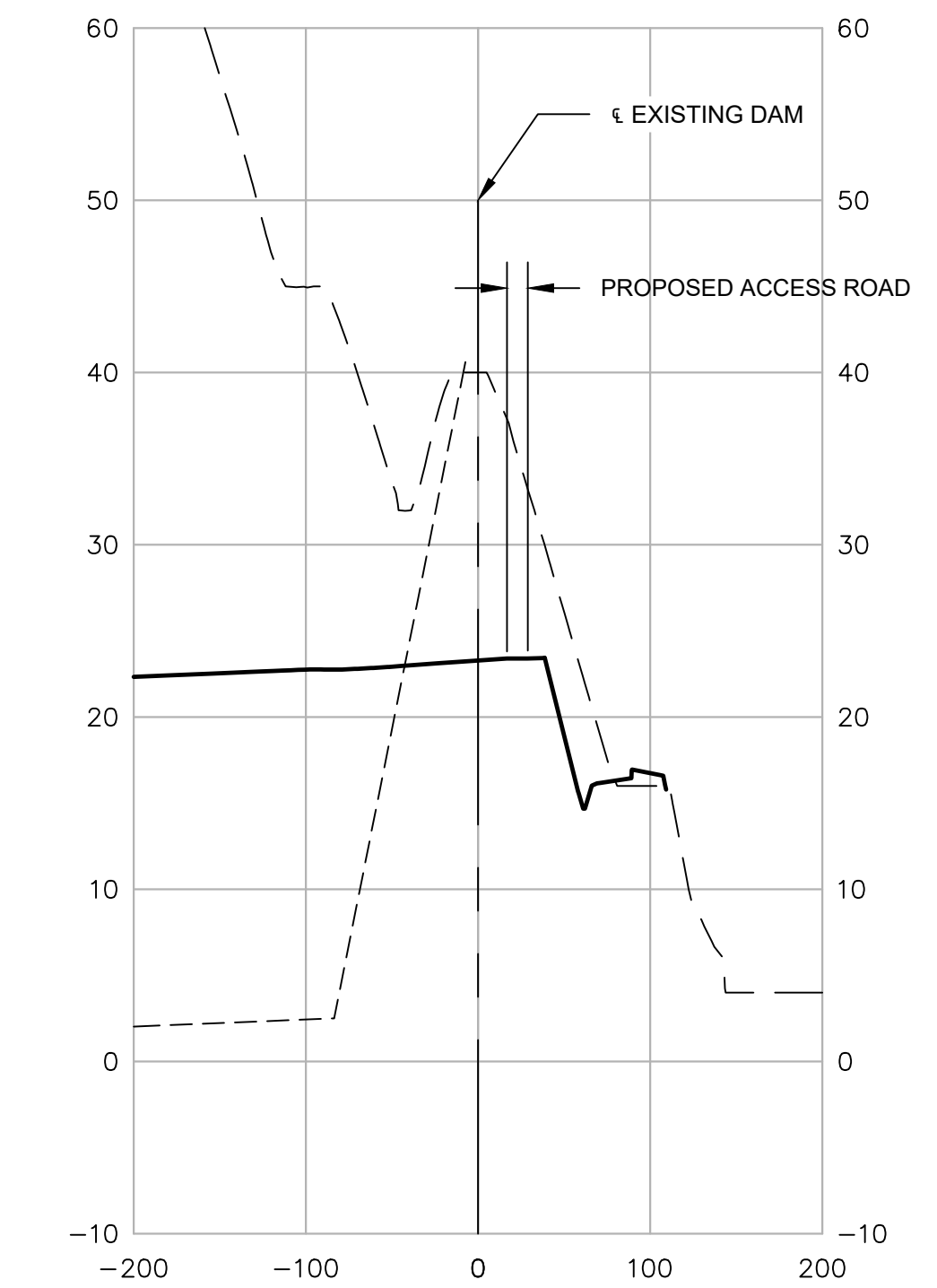
STA. 10+00



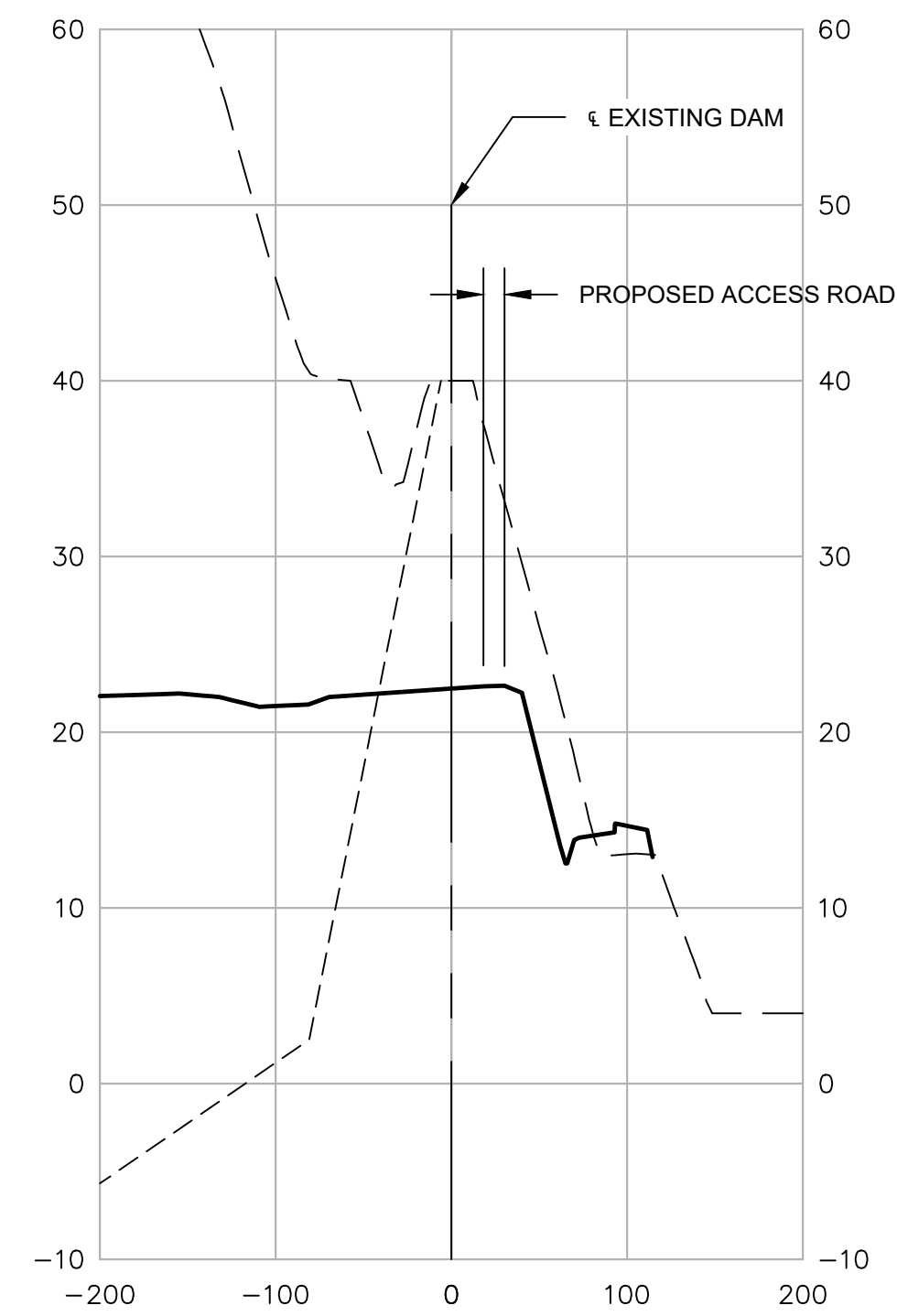
STA. 15+00



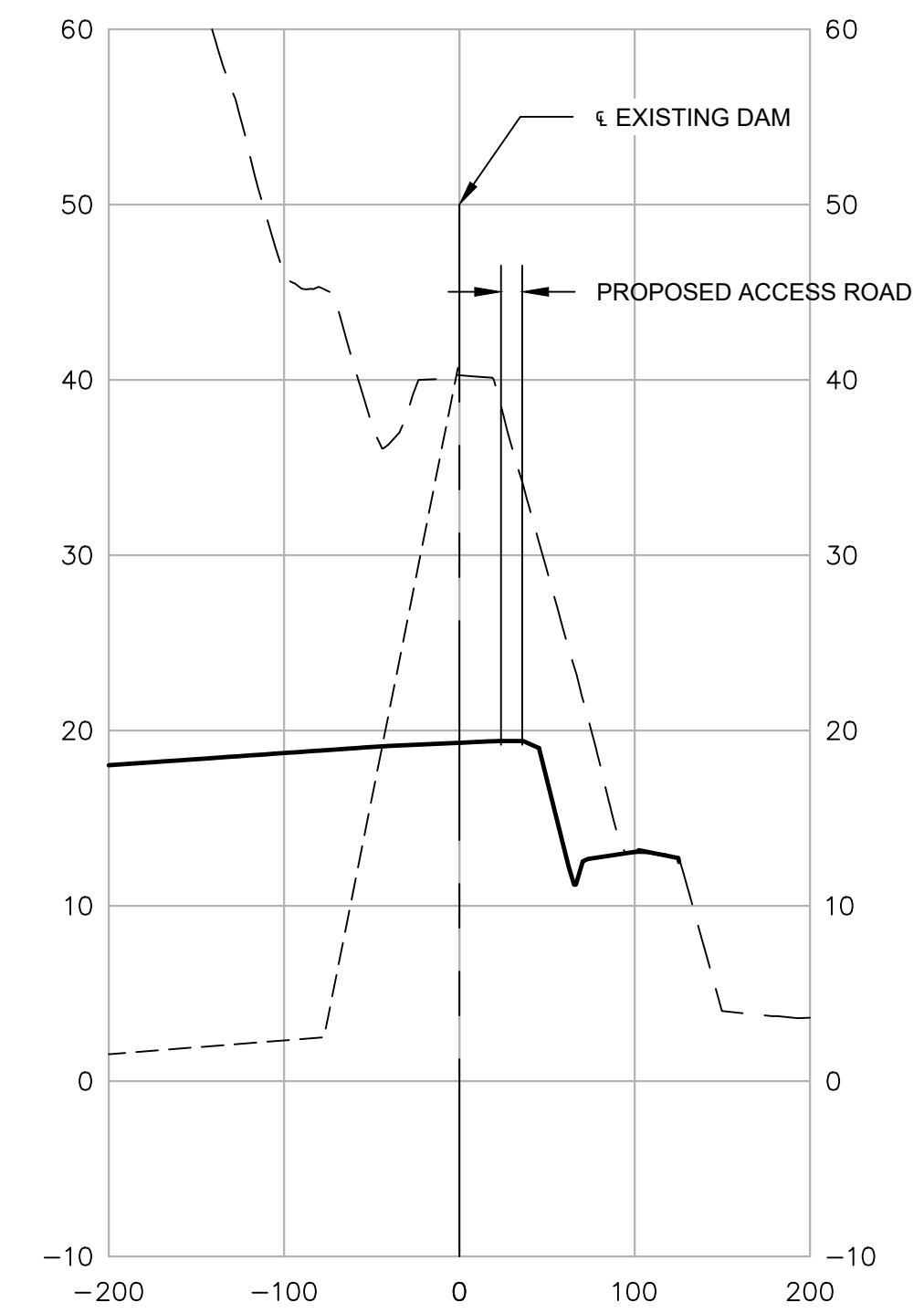
STA. 20+00



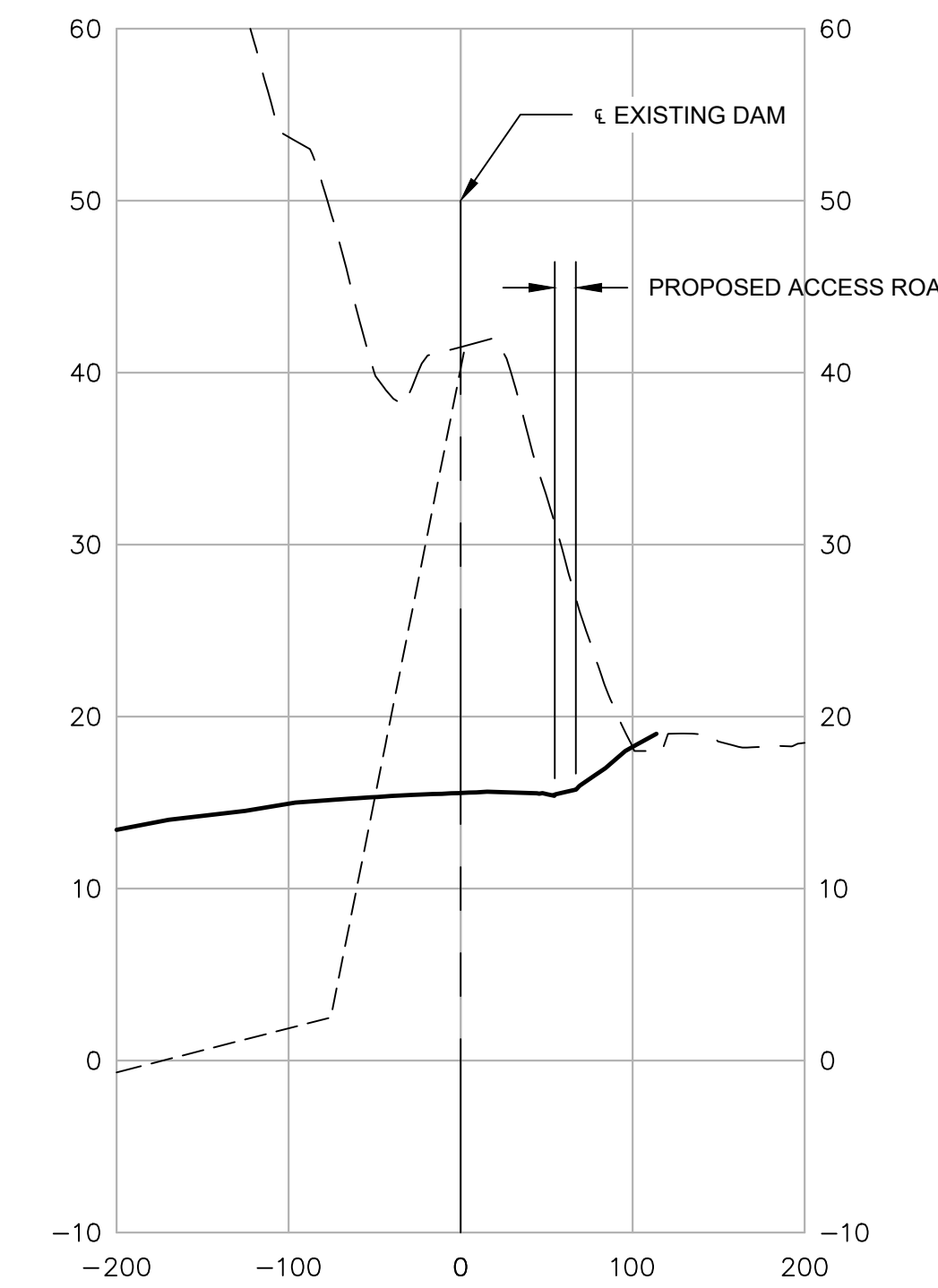
STA. 25+00



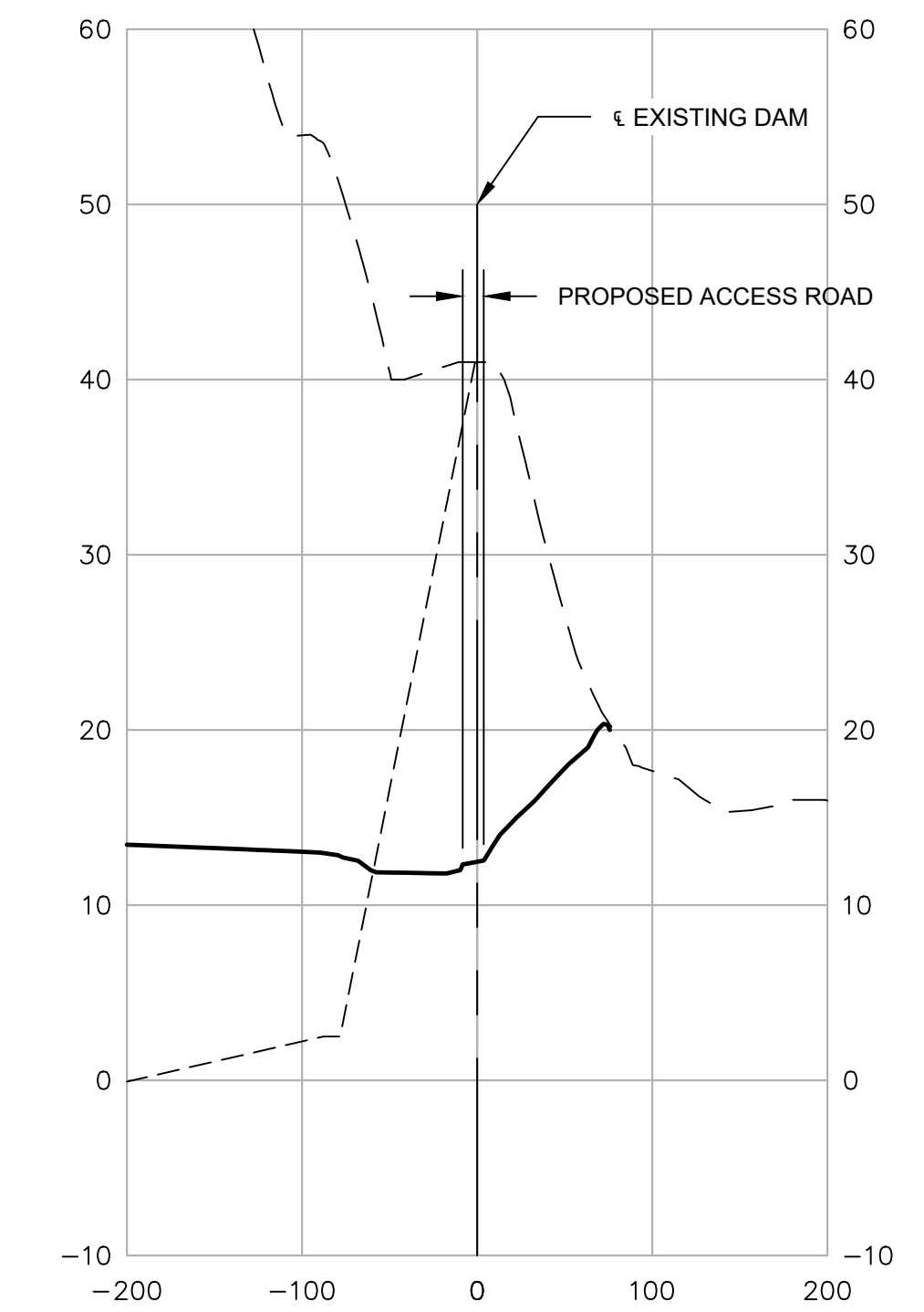
STA. 30+00



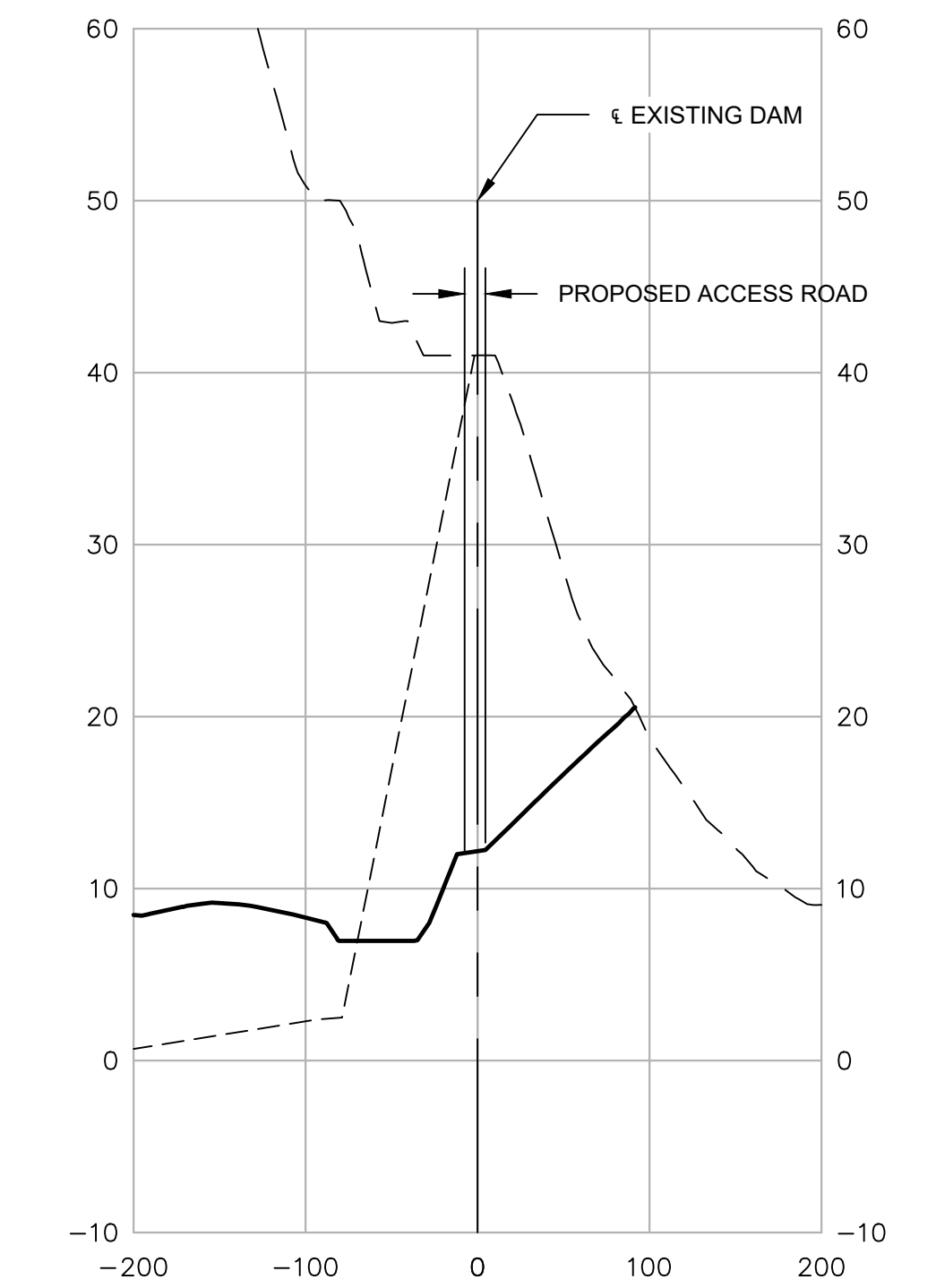
STA. 35+00



STA. 40+00



STA. 45+00



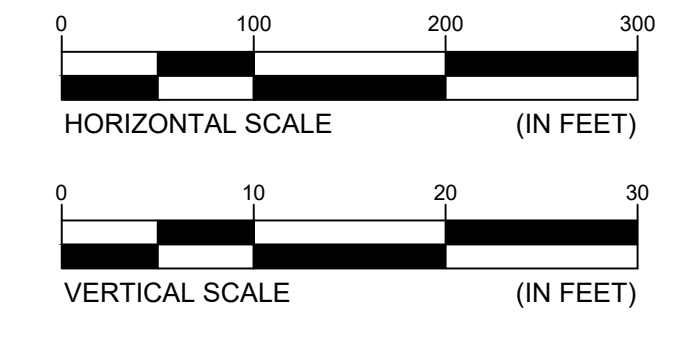
STA. 50+00

LEGEND

- EXISTING GRADE
- ESTIMATED BOTTOM OF CCR MATERIAL
- PROPOSED FINAL GRADE

NOTES

- BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.



**DAM DECOMMISSIONING**  
**CROSS SECTIONS I**  
CHESTERFIELD POWER STATION  
CLOSURE PLAN - UPPER ASH POND  
CHESTERFIELD COUNTY, VIRGINIA

FOR  
PERMIT APPLICATION DRAWINGS

SEAL

	SCALE: 1" = 100'	DES: MSR
	DWG TYPE: .DWG	DFTR: JBM
	JOB NO: 60614683	CHKD: RJB
	DATE: 11-13-2020	ENGR: GWL
FILENAME: DAM DECOMMISSIONING.DWG	APPD: GWL	
DWG SIZE	DRAWING NO.	REVISION
ANSI D 22.0"x34.0"	012	0

A

B

C

D

E

F

A

B

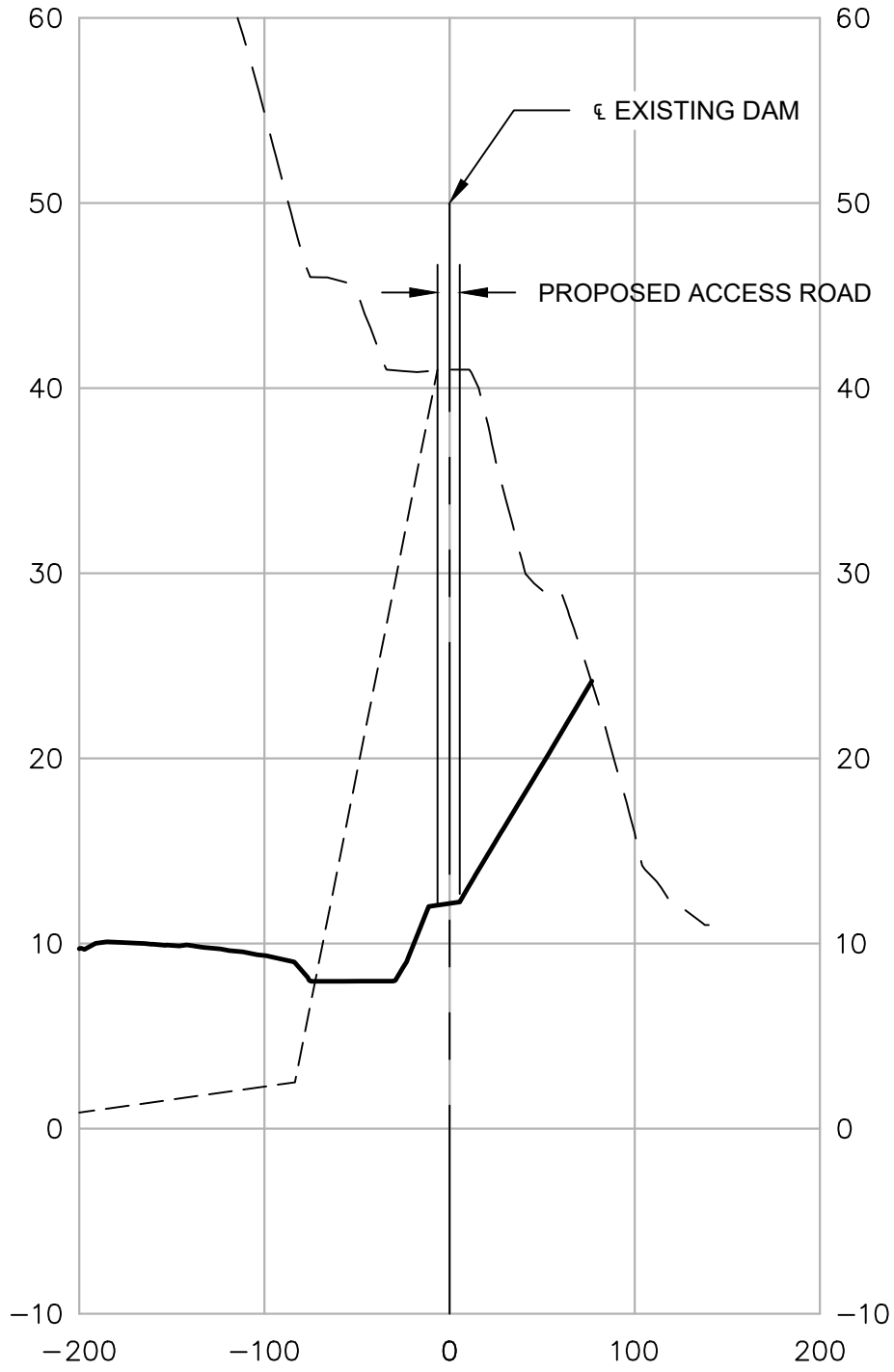
C

D

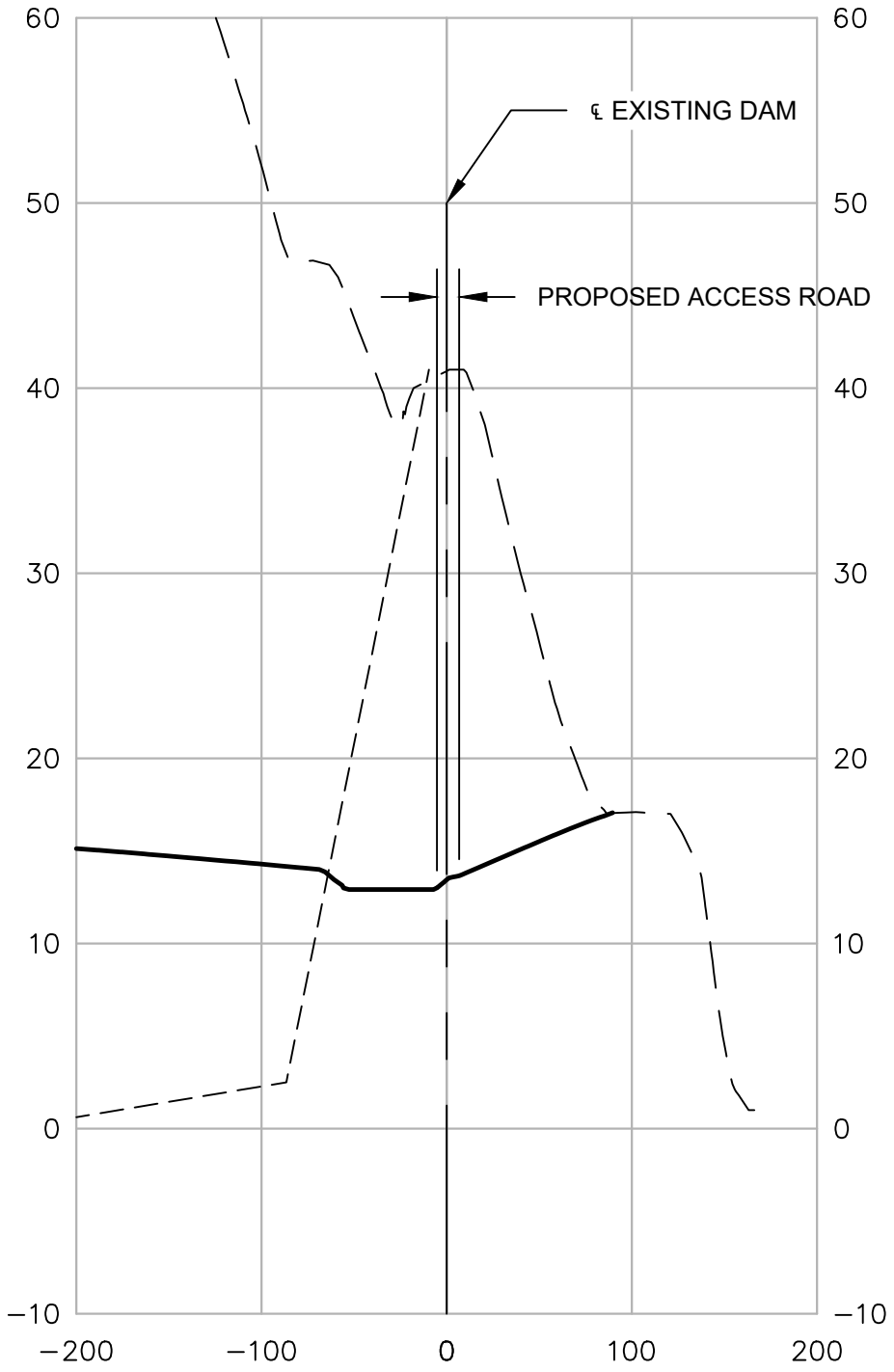
E

F

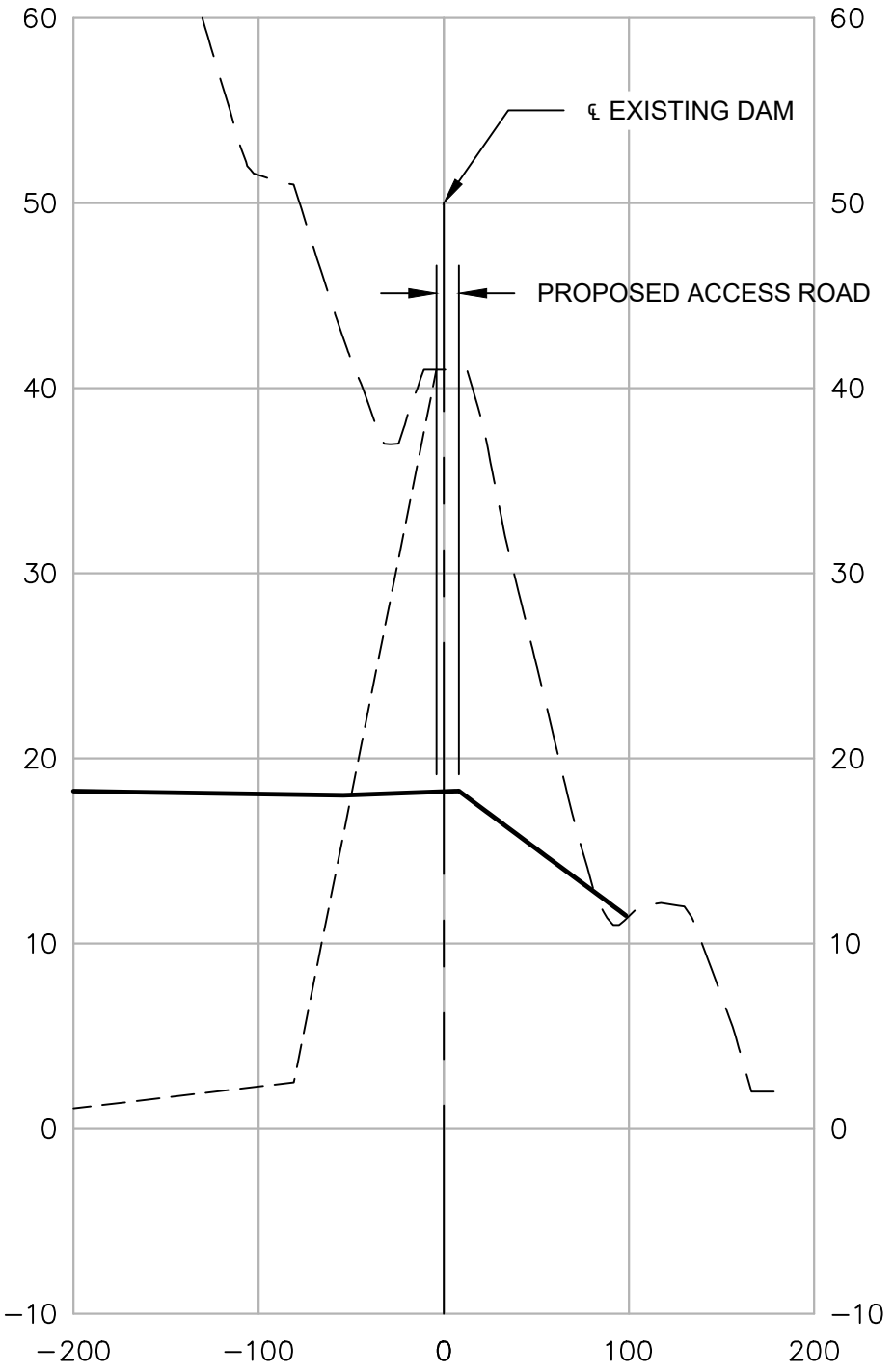




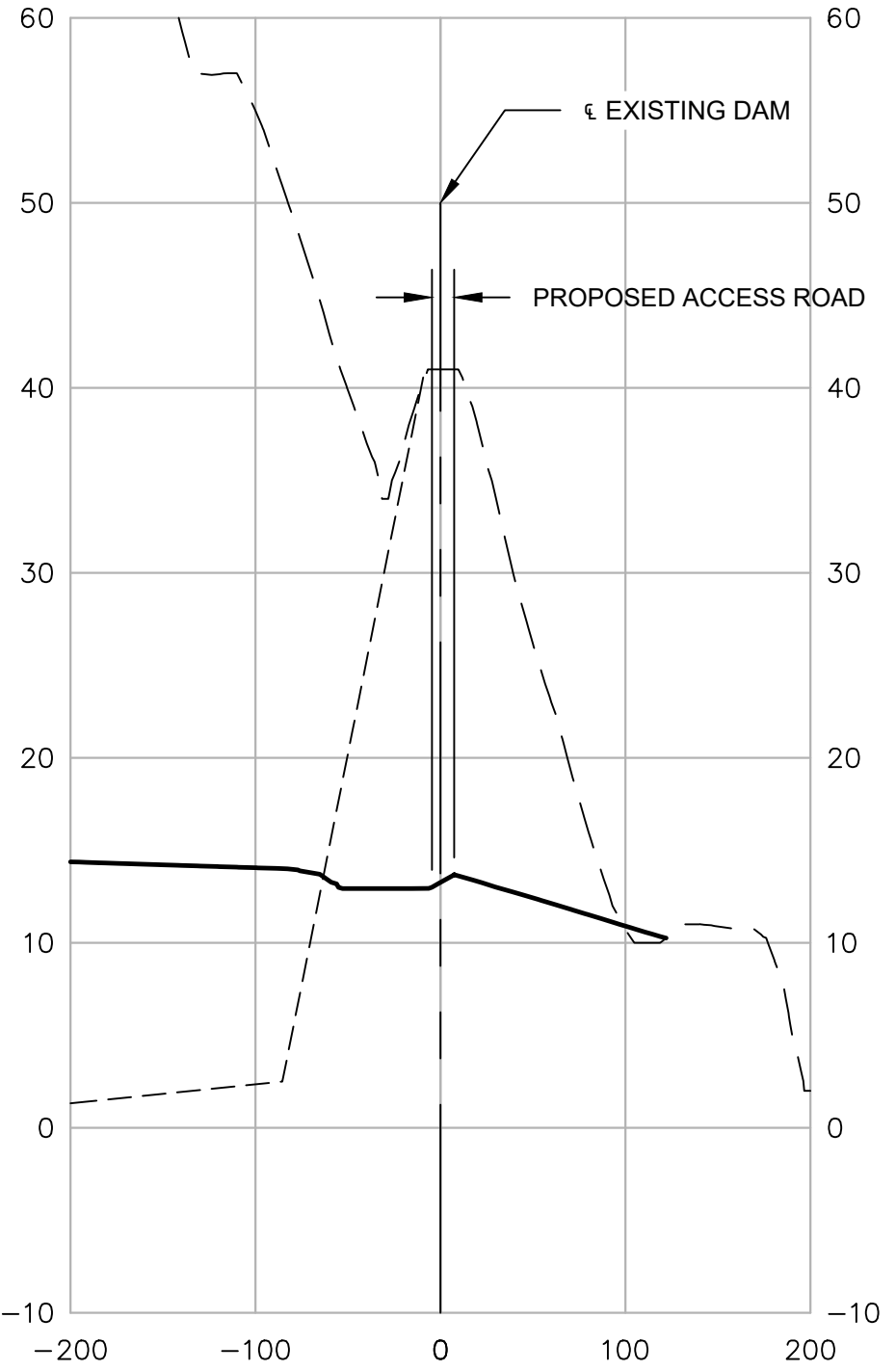
STA. 55+00



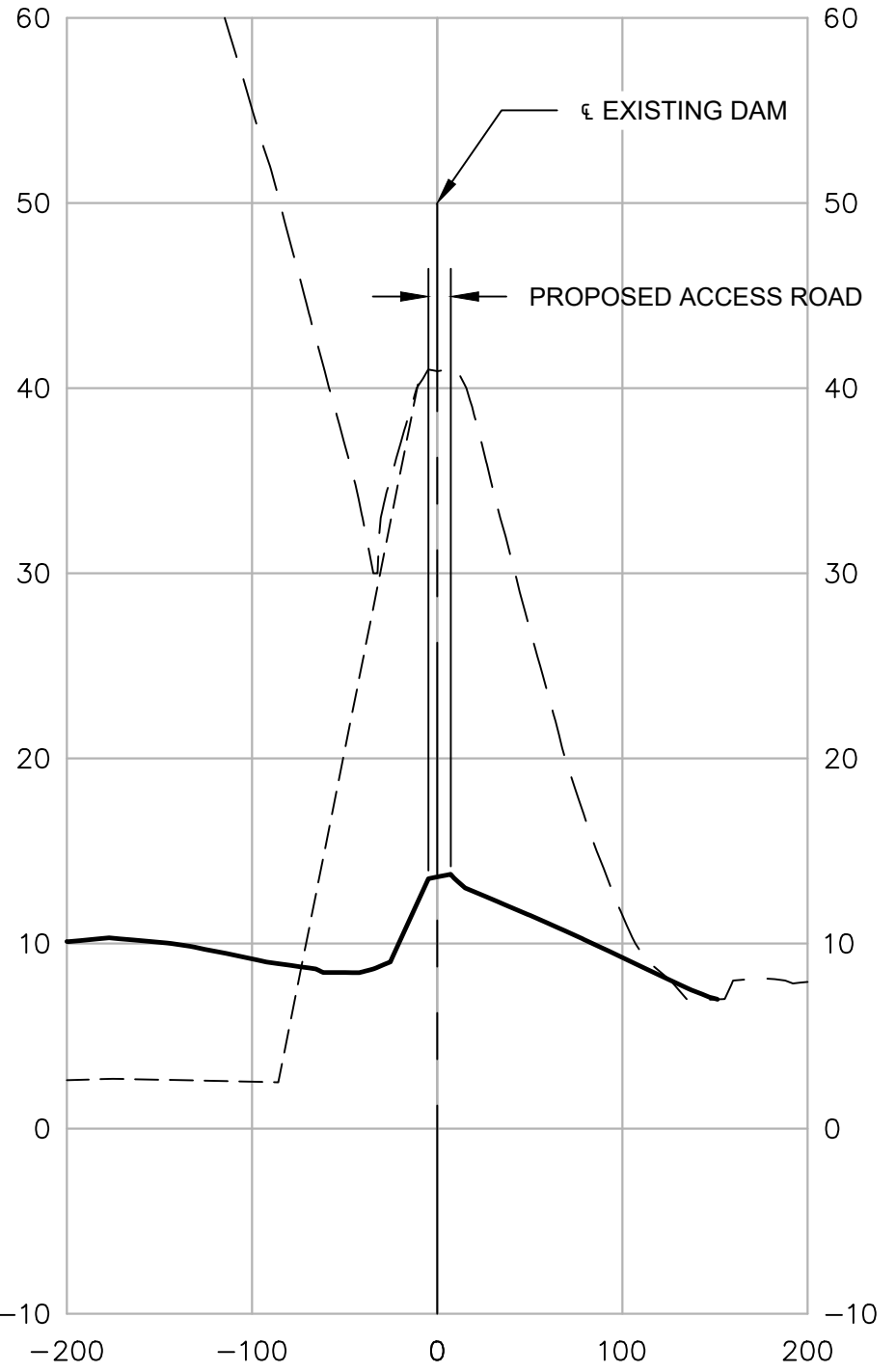
STA. 60+00



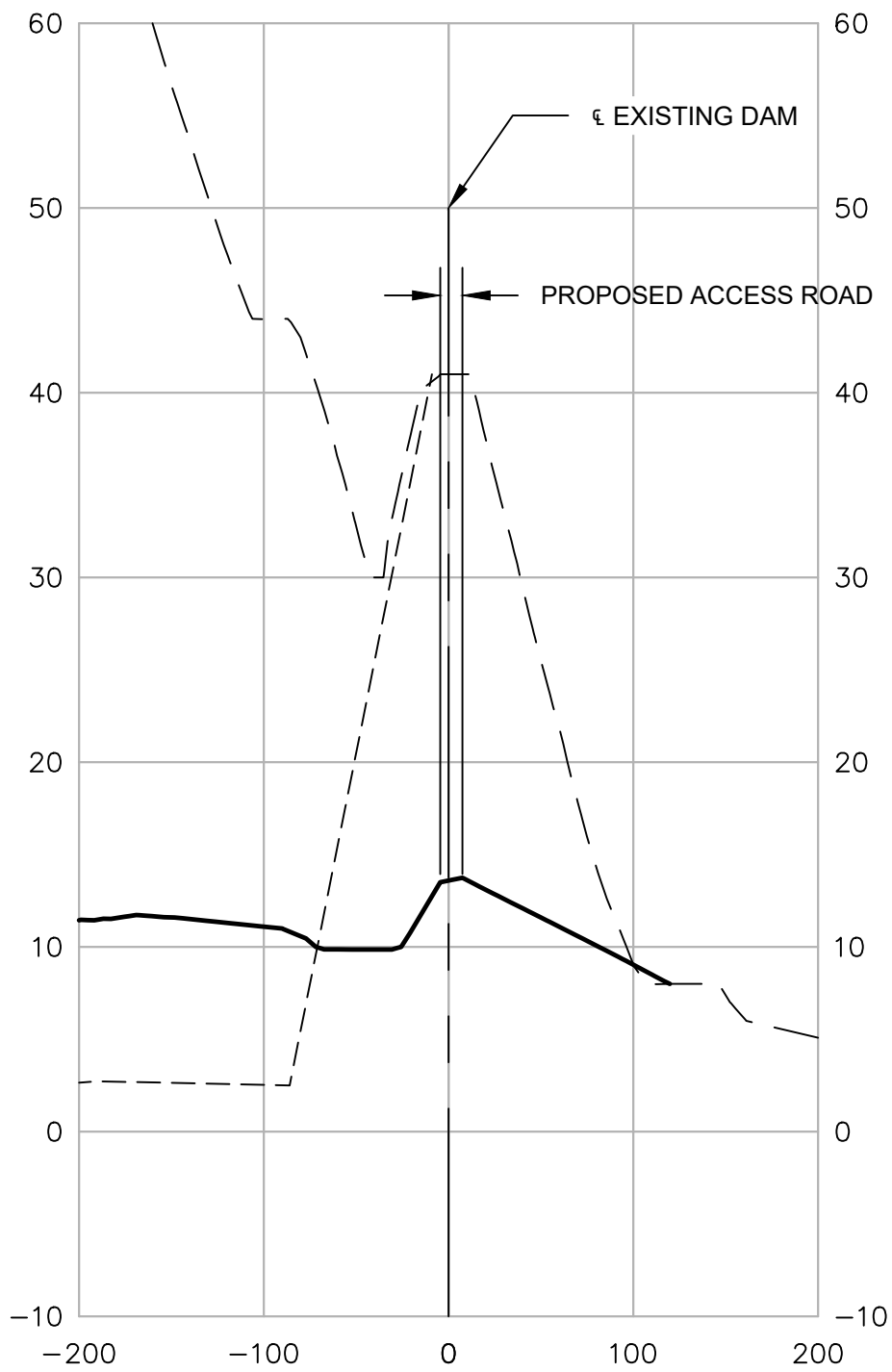
STA. 65+00



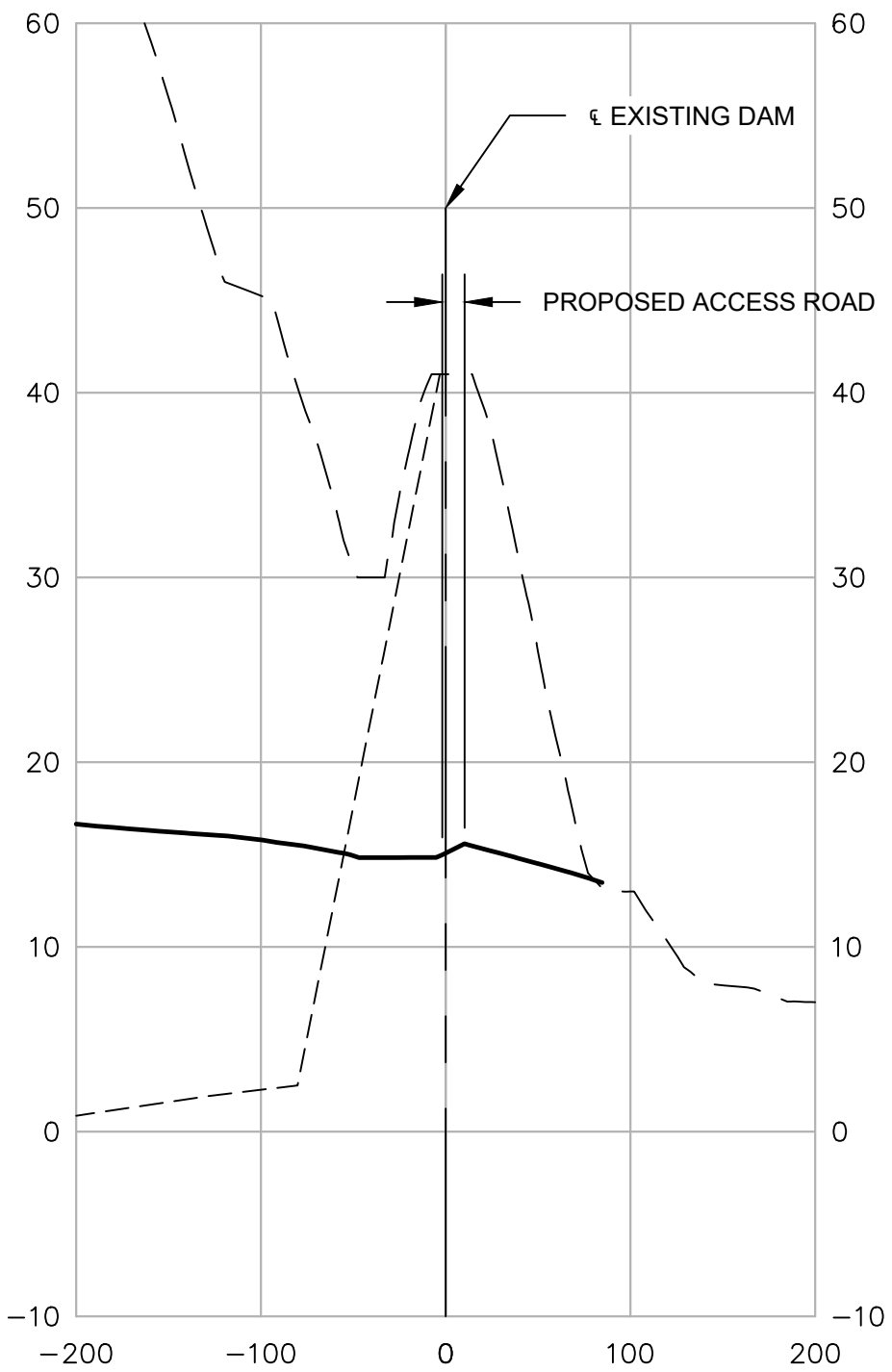
STA. 70+00



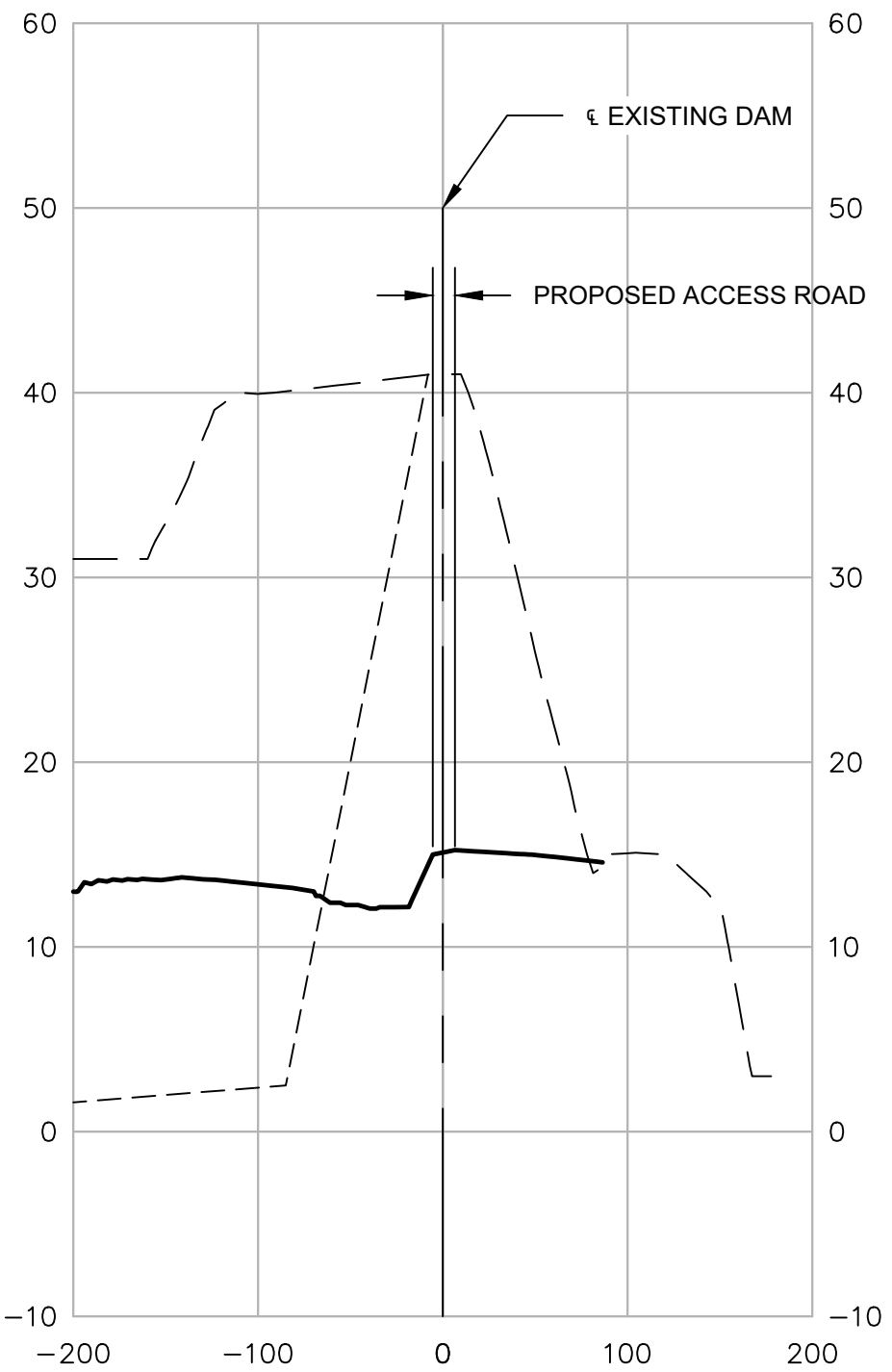
STA. 75+00



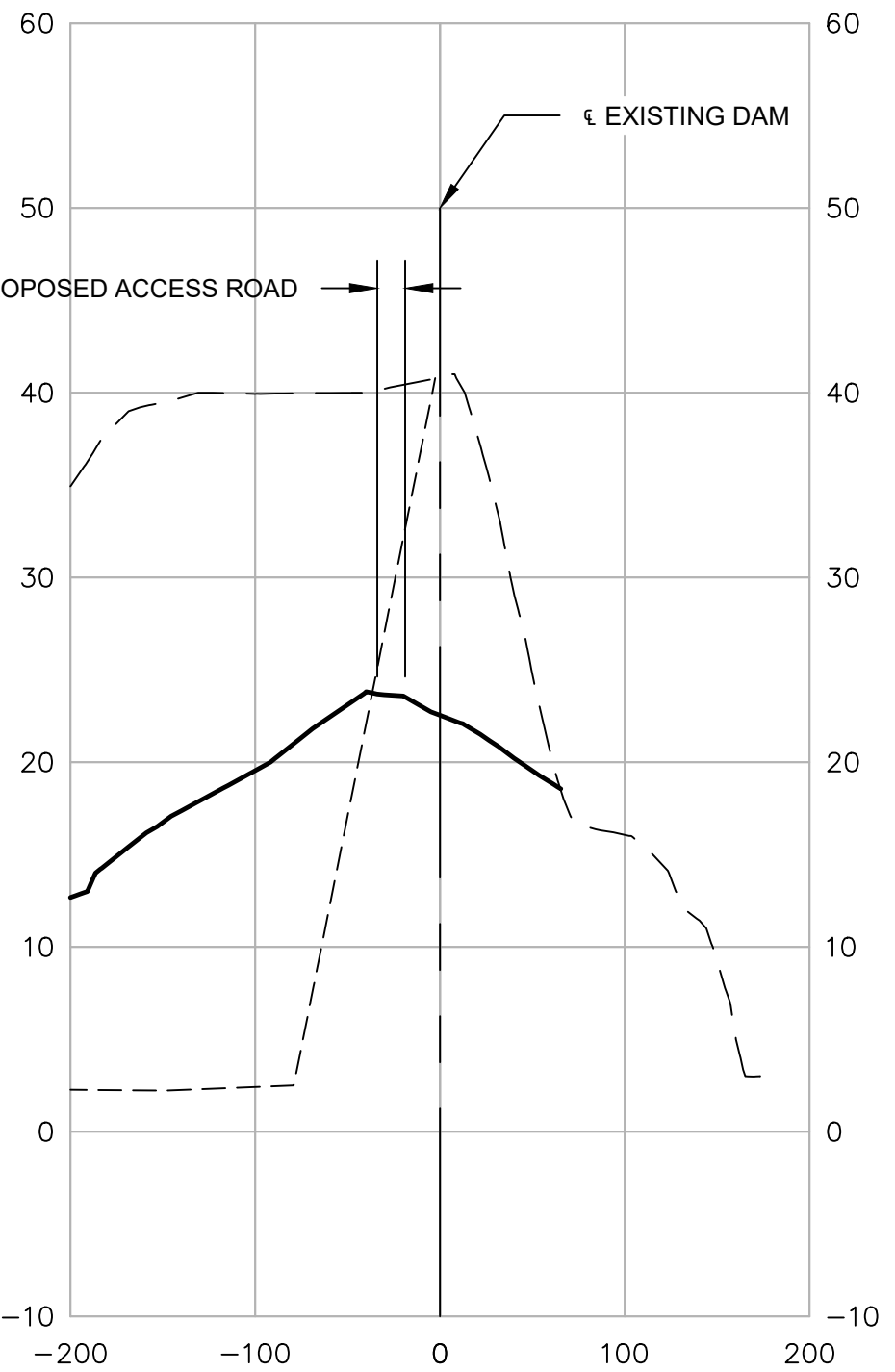
STA. 80+00



STA. 85+00



STA. 90+00



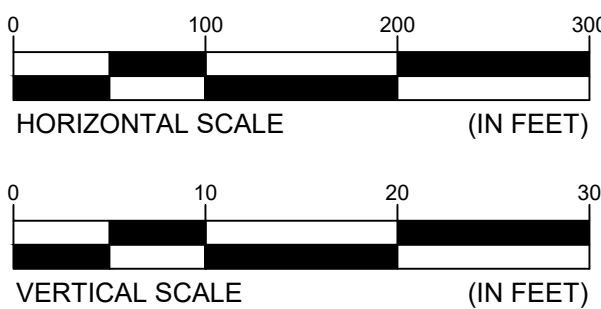
STA. 95+00

LEGEND

- EXISTING GRADE
- ESTIMATED BOTTOM OF CCR MATERIAL
- PROPOSED FINAL GRADE

NOTES

- BASIS OF BEARINGS: NAD83, VIRGINIA STATE PLANE, SOUTH ZONE. ELEVATIONS ARE BASED ON NAVD88.



**DAM DECOMMISSIONING**  
**CROSS SECTIONS II**  
CHESTERFIELD POWER STATION  
CLOSURE PLAN - UPPER ASH POND  
CHESTERFIELD COUNTY, VIRGINIA

FOR **PERMIT APPLICATION DRAWINGS**

SCALE: 1" = 100'	DES: MSR
DWG TYPE: .DWG	DFTR: JBM
JOB NO: 60614683	CHKD: RJB
DATE: 11-13-2020	ENGR: GWL

FILENAME: DAM DECOMMISSIONING.DWG	APPD: GWL
DWG SIZE: ANSI D 22.0"x34.0"	DRAWING NO. <b>013</b>
	REVISION <b>0</b>