



# *COMMONWEALTH of VIRGINIA*

## *DEPARTMENT OF ENVIRONMENTAL QUALITY*

### VALLEY REGIONAL OFFICE

P.O. Box 3000, Harrisonburg, Virginia 22801

(540) 574-7800 Fax (540) 574-7878

Located at 4411 Early Road, Harrisonburg, VA

[www.deq.virginia.gov](http://www.deq.virginia.gov)

Matthew J. Strickler  
Secretary of Natural Resources

David K. Paylor  
Director

Amy Thatcher Owens  
Regional Director

October 1, 2019

Dennis A. Slade, CHMM  
Corporate Waste and Remediation Manager  
Virginia Electric and Power Company  
d/b/a Dominion Energy Virginia  
5000 Dominion Boulevard  
Glen Allen, VA 23060

RE: Bremono Bluff Power Station, Solid Waste Permit (SWP) 618  
Closure by Removal Construction Report – East Ash Pond  
Fluvanna County, Virginia

Dear Mr. Slade:

The Department has reviewed the following documents that were prepared on your behalf by Golder Associate Inc. (Golder) for the East Ash Pond in the Bremono Bluff Power Station, SWP618.

- *Closure by Removal Construction Report – East Ash Pond*, dated May 23, 2019 and received on July 25, 2019.
- A construction quality assurance certification, in accordance with the requirements of 9 VAC 20-81-160.D.4. of the Virginia Solid Waste Management Regulations (VSWMR) signed by Andrew T. North, P.E., of Golder and dated May 23, 2019.
- Bremono Closure By Removal Visual Inspection and Acceptance Memorandum For Record – Former CSX Property signed by Andrew T. North, P.E., of Golder and dated August 28, 2019.

The documentation provided and Department visual site inspection conducted on March 14, 2019 indicates that the Coal Combustion Residuals (CCR) in the East Ash Pond and CSX property have been visually removed and over-excavated in accordance with the Surface



Impoundment Closure Plan, Bremo Power Station-West and East Ash Ponds dated May 11, 2018. In addition, the documentation provided satisfies the facility Permit Condition I.F.9.

A copy of the above-mentioned documents and all record drawings must be retained for SWP 618 until closure of the West and East Ash Ponds has been confirmed by the Department. The remaining closure activities of the West and East Ash Ponds include the completions of the CCR removal in the West Ash Pond and the groundwater monitoring in accordance with the Permit Modules XI and XII.

If you have any questions, please do not hesitate to contact JengHwa Lyang, Solid Waste Permit Writer, at (540) 574-7826 or [jenghwa.lyang@deq.virginia.gov](mailto:jenghwa.lyang@deq.virginia.gov).

Sincerely,

A handwritten signature in black ink, reading "Graham H. Simmerman, Jr." with a stylized, cursive script.

Graham H. Simmerman, Jr., P.G.  
Regional Land Protection Manager

cc: Kathryn J. Perszyk, DEQ CO  
Gregory W. Adamson, DEQ VRO  
Laura A. Stuart, P.G., DEQ VRO  
JengHwa Lyang, Ph.D., P.E., DEQ VRO  
DEQ File – SWP 618





## Closure by Removal Construction

*Bremo Power Station*

*East Ash Pond (VDEQ Permit No. 618)*

Submitted to:

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

5000 Dominion Boulevard

Glen Allen, Virginia 23060

Submitted by:

**Golder Associates Inc.**

2108 West Laburnum Ave, Suite 200

Richmond, Virginia 23227

Project No. 15-20347

May 23, 2019





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## APPENDICES

**Appendix A** East Ash Pond Survey Package

**Appendix B** East Ash Pond Visually Clean Removal Inspection Documentation

**Appendix C** East Ash Pond Six-Inch Removal Inspection Documentation

**Appendix D** SWP #618 CCR Closure Plan



## EXECUTIVE SUMMARY

This report presents a summary of the Construction Quality Assurance (CQA) activities performed by Golder Associates Inc. (Golder) during the construction activities for the Closure by Removal (CBR) of the East Ash Pond at the Bremono Power Station in Bremono Bluff, Virginia. The East Ash Pond is approximately 26.5 acres in size. CBR construction began on approximately January 13, 2017 and was substantially complete on March 5, 2019. CBR construction was performed consistent with the Station solid waste permit (SWP #618) CCR Closure Plan (Appendix D).

The Coal Combustion Residuals (CCR) in the East Ash Pond were excavated and placed in the North Ash Pond. The CBR contractor made further excavation within the East Ash Pond to establish a baseline surface to be considered “Visually Clean”, meaning no residual CCR materials visible on the remaining soils. Following inspection and documentation of the visually clean (VC) surface by Golder, a topographic survey was performed to establish the horizontal and vertical limits of the VC surface. Over-excavation of the VC footprint by a minimum of six inches was performed, followed by inspection and documentation by Golder. In areas where subsurface rock layers were present, six-inch over-excavation was prevented. Upon completion of the over-excavation, test pits were hand excavated, at a minimum frequency of one per acre, to further verify the removal of CCR material. A total of thirty-three test pits were excavated. A final survey of the over-excavated area was performed to verify at least six inches of material had been removed and/or the presence of competent material preventing further excavation.

During excavation activities, the following approximate volumes were excavated:

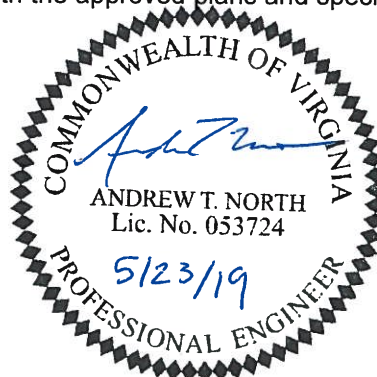
<b>Pond</b>	<b>VC Removal (CY)</b>	<b>Six-Inch Removal (CY)</b>	<b>Total (CY)</b>
East Ash Pond	1,540,800	36,800	1,577,600

Earthwork construction was performed by Glover Construction Company, Inc. of Pleasant Hill, NC. Surveying was provided by H&B Surveying and Mapping, LLC of Richmond, VA, under contract to Golder. A list of the key personnel who were involved in the CBR construction is included in Section 2.1 of this report.



## 1.0 CERTIFICATION

In accordance with the *Virginia Solid Waste Management Regulations 9VAC 20-81-800*, and the United States Environmental Protection Agency (USEPA) *Standards for the Disposal of Coal Combustion Residuals and Surface Impoundments 40CFR §257.102(c)*, this is to certify that the visual CCR removal and six-inch over-excavation for the East Ash Pond, as described in the Closure Plan for the West and East Ash Ponds, has been successfully carried out in accordance with the approved plans and specifications.



Andrew North, P.E.

Certifying Engineer

Dated Signature and Seal

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



## 2.0 INTRODUCTION

Golder, under contract to Dominion, performed CQA observation and documentation of the CCR and soil excavation portion of the CBR for the East Ash Pond at the Bremo Power Station in Bremo Bluff, Virginia. CBR construction began approximately January 13, 2017 and was substantially complete on March 5, 2019.

### 2.1 Primary Project Personnel

A list of the organizations and key personnel that participated in the CBR construction is presented below:

**Owner**

Dominion Energy Virginia  
Project Managers – Maria Gwynn and Chris Nunn

**Earthworks Contractor**

Glover Construction Co. Inc., Pleasant Hill, NC  
Superintendent – Jerry Walski

**Surveyor**

H&B Surveying and Mapping, LLC, Richmond, VA  
Project Manager – Alison Hanson, PLS

**CQA Engineer**

Golder Associates Inc., Richmond, Virginia  
Project Manager – Andrew North, P.E.  
Certifying Engineer – Andrew North, P.E.  
Field Manager – Wade Bowes  
Lead CQA Technician – Richard Siemaszkiewicz



### 3.0 CLOSURE BY REMOVAL PROTOCOL

CBR construction was performed consistent with the Station's solid waste permit (SWP #618) CCR Closure Plan. The protocol for closure by removal of the East Ash Pond involved removing accumulated CCR such that no residual materials remained visible, then over-excavating the removal footprint by at least six-inches. Removed CCR, CCR-mixed soil, and the six-inch over-excavation soil was consolidated in the North Ash Pond CCR impoundment. To facilitate stormwater management, construction, and/or structural stabilization of embankments or excavations, excavation was sequenced in phases.

Material removal against embankments involved excavation of embankment faces at 2:1 slopes up to near-vertical conditions. For rock, existing concrete designated to remain, or other similar hard surfaces (e.g. pipes or foundation supports to remain), the surface was cleaned to a visually-clean condition through mechanical means. Over-excavation was stopped prior to reaching six-inches in areas where subsurface rock layer was present to prevent further excavation.

#### 3.1 Visually Clean Removal, Inspection, and Survey

Golder provided full-time observation of the CCR excavation in the East Ash Pond. Following achievement of visually clean conditions in an area, Golder inspected the soil surface for evidence of CCR materials. Areas identified as still containing CCR were identified for further excavation and re-inspection. Underlying soils in the pond area included light-colored sands and clays, dark-colored organic layers, light to dark grey clay layers, and light to dark weathered rock and sand. In areas where darker material was observed, a hand microscope was used to verify the absence of cenospheres (shown below), which are a unique identifier for CCR.

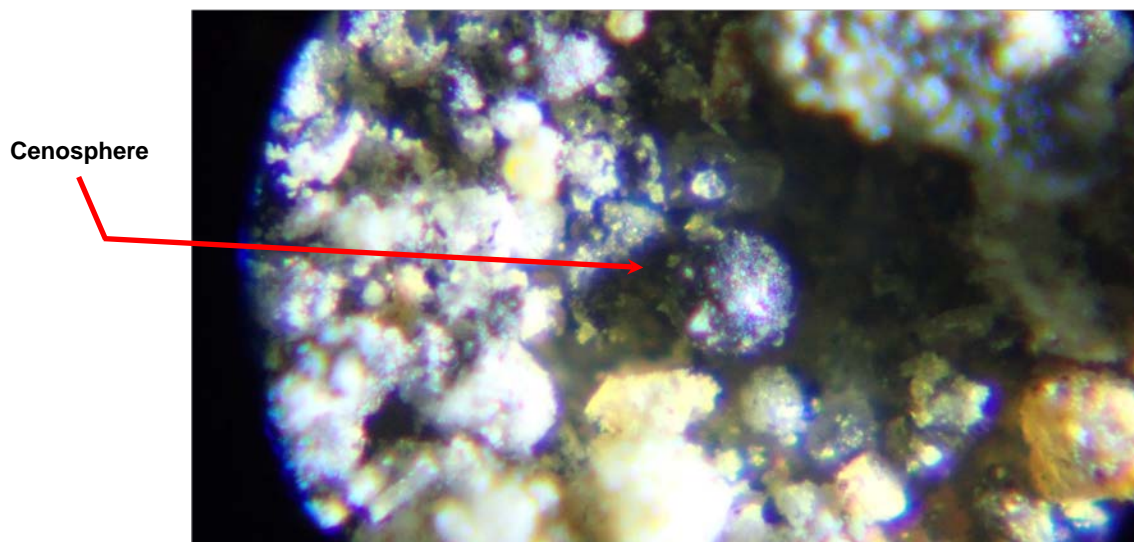


Figure 1: Cenospheres in Soil Matrix

Following Golder's visually clean inspection, areas were surveyed and marked with paint to designate the boundaries of the visually clean area. Construction traffic from non-cleaned areas was diverted around visually clean areas to prevent contact with CCR material.



### 3.2 Six-Inch Removal, Inspection, and Survey

After survey review and documentation for the visually clean areas, release was given by Golder to continue with the six-inch removal excavation. Removal of the six-inch material was sequenced by the contractor so that areas of potential CCR contact, such as haul roads or drainage channels, were avoided. Upon completion of six-inch over-excavation in an area, Golder again conducted a physical inspection of the area for the presence of CCR. If CCR was identified, the area was further excavated to at least six-inches below the last-identified CCR, then re-inspected. Golder hand-excavated targeted soil cores throughout the six-inch removal area at a frequency of at least one hole per acre to further verify removal of CCR. Once Golder's inspection and initial acceptance was determined, the area was again painted and surveyed to indicate the six-inch removal boundaries. Vertical or near-vertical sloped areas were over-excavated perpendicular to the surface to accomplish the six-inch removal criterion.

Pond	Size (Acres)	VC Removal (CY)	Six-Inch Removal (CY)	Total Removal (CY)	6-inch Test Holes
East Ash Pond	27.2	1,540,800	36,800	1,577,600	33

The surveyor compiled a topographic map with contours showing the limits of survey for both the visually clean and six-inch removal conditions. In addition, the surveyor prepared a point-to-point comparison (using a 50-foot grid) showing elevation differences between the visually clean and over-excavation surveys to verify six-inch removal. Over-excavation, inspection, and verification surveying was repeated until all areas within the pond limits were at least six-inch over-excavated beyond the visually clean condition survey. Six-inch over-excavation was not fully achieved in areas where subsurface rock layer was present to prevent further excavation. Surveys prepared by a licensed Professional Land Surveyor (PLS) for the Visual Clean and Six-Inch Removal for the East Ash Pond are presented in Appendices A.

### 3.3 Documentation of Removal

After each site visit inspection or major work milestone, a Memorandum for Record was prepared by the certifying engineer detailing the area inspected on that date, including a sketch map and representative photos of the inspected area. Visually Clean documents are included in Appendix B and Six-Inch Removal documents are included in Appendix C.

### 3.4 Regulatory Site Visits

Although the site's Solid Waste Permit had not yet been issued, representatives from the Virginia Department of Environmental Quality (DEQ) Valley Regional Office visited the site to observe the ongoing CBR progress. DEQ site visits were made on the following dates:

- May 31, 2018;
- June 12, 2018;
- June 18, 2018;
- July 30, 2018;
- August 22, 2018;
- October 9, 2018;
- October 30, 2018; and,
- March 14, 2019 (Completion Inspection).



## 4.0 CONCLUSION

Golder personnel provided full-time CQA services during the CBR excavation of the East Ash Pond at the Brema Power Station by observing and documenting the following:

- Visually clean excavation;
- Six-inch removal excavation;
- Targeted hand excavations at one per acre; and,
- Surveying of areas as they were completed.

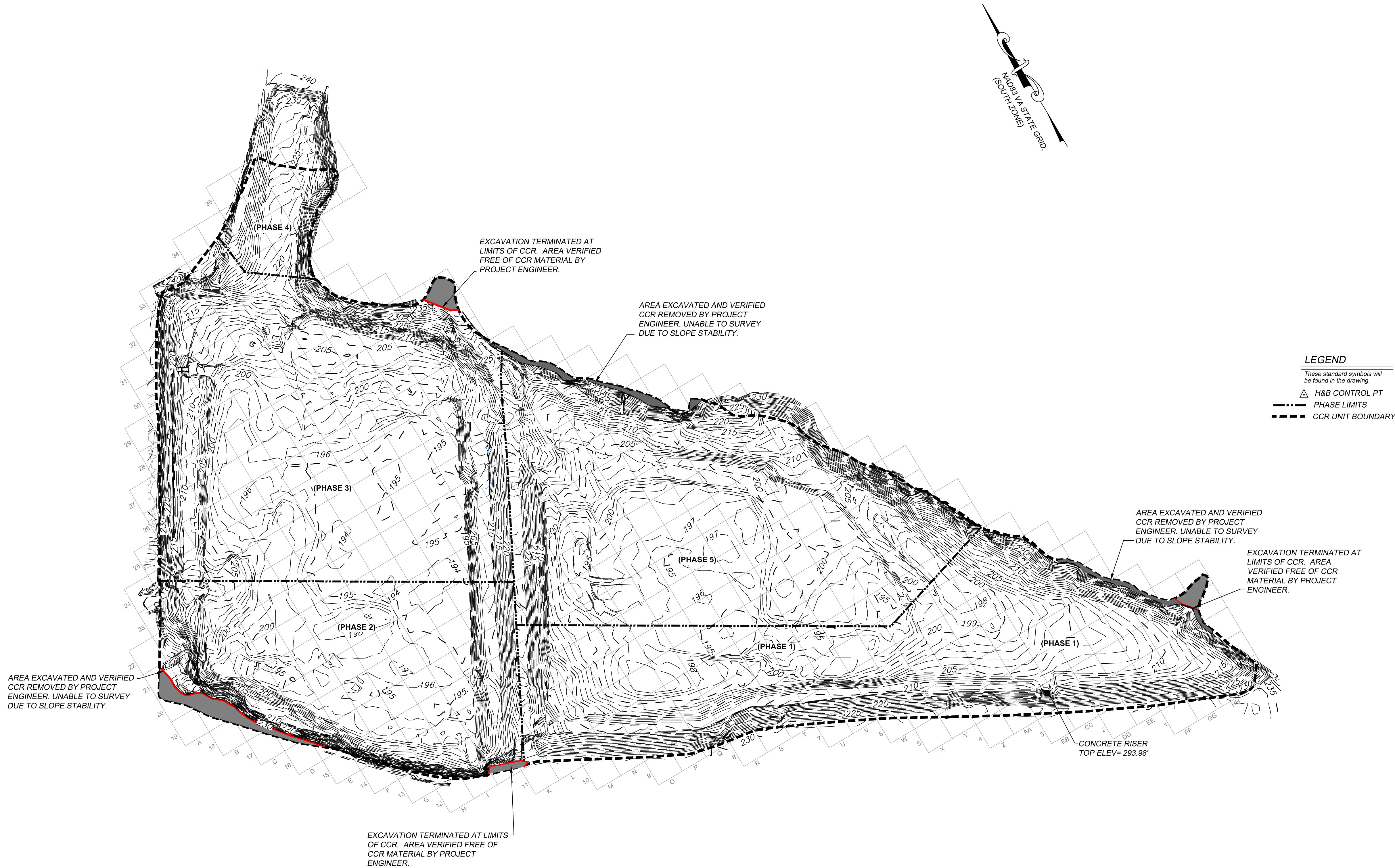
Based on the results of our observations and the completed surveys, it is the opinion of Golder that the CBR excavation has been carried out in general accordance with the approved Closure Plan referenced in Section 1.0.





**[golder.com](http://golder.com)**





- NOTES:**
- EXISTING GROUND SURFACE LOCATION PERFORMED BY CONVENTIONAL INSTRUMENT SURVEY.
  - THE HORIZONTAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN DATUM OF 1983 (NAD'83) AND VERTICAL DATUM (NAVD'88). COORDINATE VALUES AS SHOWN HEREON ARE ON THIS DATUM AND ARE REPORTED ON VIRGINIA STATE GRID COORDINATE SYSTEM, SOUTH ZONE. THE UNIT OF MEASURE FOR THIS SURVEY IS THE U.S. SURVEY FOOT.
  - UNDERGROUND UTILITIES WERE NOT DESIGNATED AS A PART OF THIS SURVEY.
  - THE PROPERTY SHOWN HEREON FALLS IN THE FOLLOWING FLOOD HAZARD ZONES: "AE ELEVATION"-BASE FLOOD ELEVATIONS DETERMINED (NAVD'88). THE APPROXIMATE BOUNDARY LIMITS OF THESE AREAS ARE SHOWN GRAPHICALLY, IF THEY FALL WITHIN THE LIMITS OF THIS SURVEY. AS SCALED FROM FEMA FLOOD INSURANCE RATE MAP, MAP NUMBER 51065C0280C, EFFECTIVE MAY 16, 2008.
  - NO PROPERTY LINES SHOWN ON THIS SURVEY.
  - THIS SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF ALISON W. HANSON, LS FROM AN ACTUAL GROUND SURVEY MADE UNDER HER SUPERVISION. THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED BETWEEN MAY 24, 2018 AND FEBRUARY 26, 2019. THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
  - SITE UNDER CONSTRUCTION AT TIME OF SURVEY.

TOPOGRAPHIC SURVEY OF  
VISUAL REMOVAL  
OF THE EAST ASH POND  
AT BREMO BLUFF POWER STATION

FORK UNION DISTRICT,  
FLUVANNA COUNTY, VIRGINIA  
SCALE 1"= 100'

Sheet Status:  
FINAL  
Submittal Date:  
05-22-2019

Job #: GO1701.02  
Date: 05-22-2019  
Sheet: 1 of 1  
Drawn By: RJE  
Checked By: AWH

Rev. #	Rev. Date

Professional Seal

COMMONWEALTH OF VIRGINIA  
Alison W. Hanson  
Lic. No. 002617  
LAND SURVEYOR  
Sealed: 05-22-2019  
License Expires: 01-31-2020

H&B Surveying and Mapping, LLC  
insightful solutions, quality service  
A DBE/WBE S/WaM Certified Business

2105 Electric Road SW, Suite 103  
Roanoke, VA 24224  
540.904.2559 Office

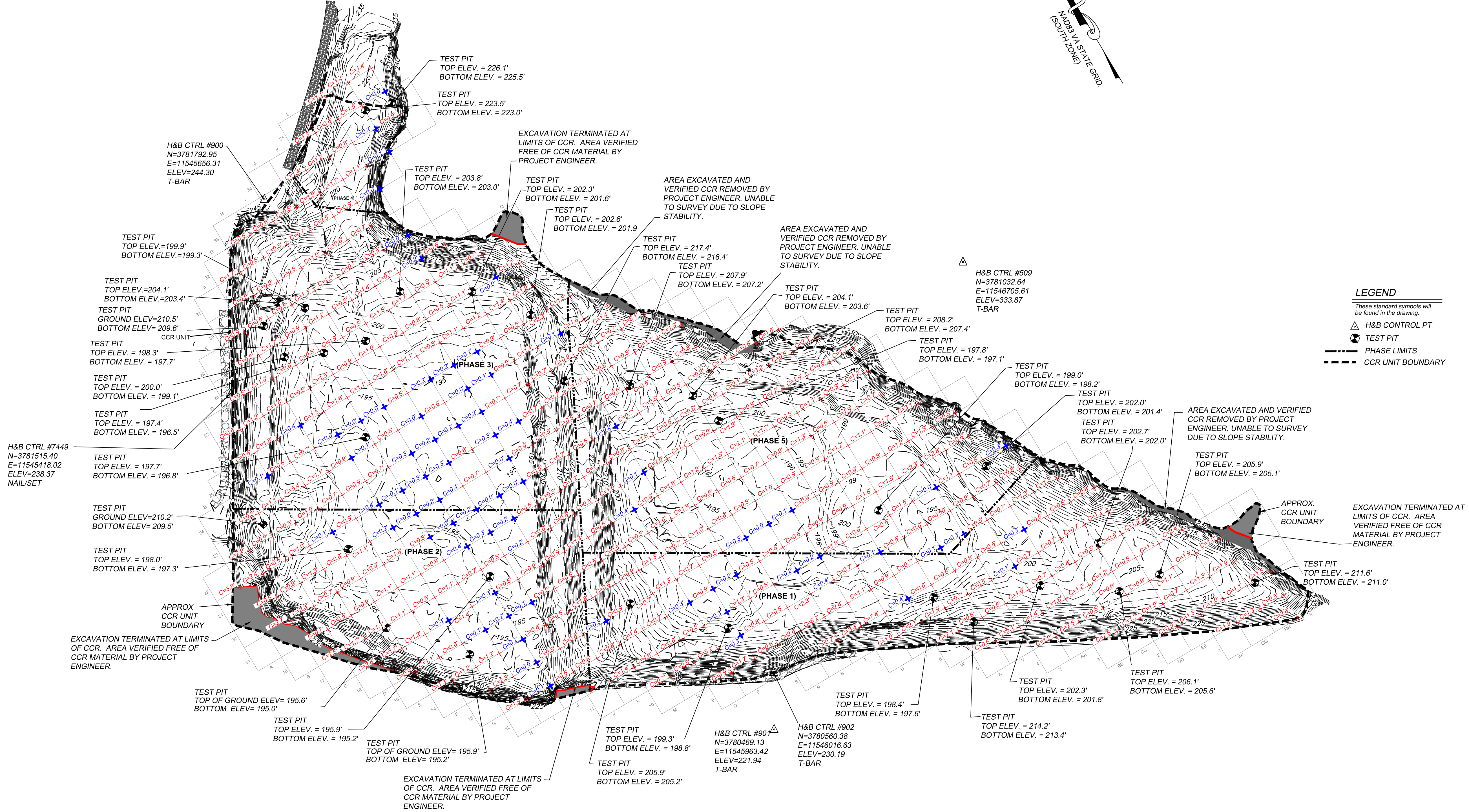
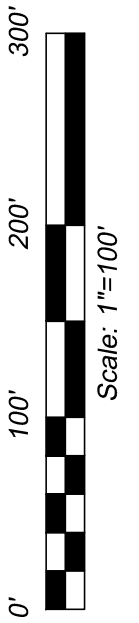
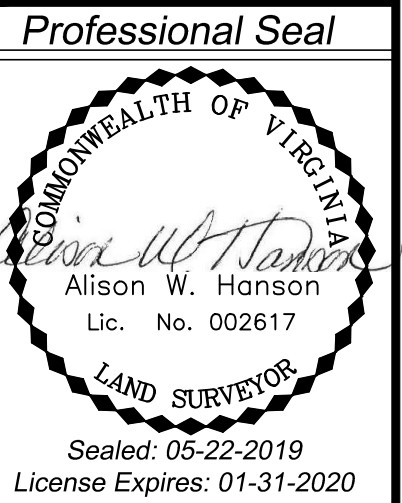
Survey  
Produced  
at Richmond  
Office Location

614 Moorefield Park Drive  
Richmond, VA 23236  
804.330.3781 Office 804.655.5330 Fax





Rev. #	Rev. Date
#1	05-23-19



- NOTES:**
- EXISTING GROUND SURFACE LOCATION PERFORMED BY CONVENTIONAL INSTRUMENT SURVEY.
  - THE HORIZONTAL DATUM FOR THIS SURVEY IS THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND VERTICAL DATUM (NAVD88). COORDINATE VALUES AS SHOWN HEREON ARE ON THIS DATUM AND ARE REPORTED ON VIRGINIA STATE GRID COORDINATE SYSTEM, SOUTH ZONE. THE UNIT OF MEASURE FOR THIS SURVEY IS THE U.S. SURVEY FOOT.
  - UNDERGROUND UTILITIES WERE NOT DESIGNATED AS A PART OF THIS SURVEY.
  - THE PROPERTY SHOWN HEREON FALLS IN THE FOLLOWING FLOOD HAZARD ZONES: "AE ELEVATION"-BASE FLOOD ELEVATIONS DETERMINED (NAVD88). THE APPROXIMATE BOUNDARY LIMITS OF THESE AREAS ARE SHOWN GRAPHICALLY, IF THEY FALL WITHIN THE LIMITS OF THIS SURVEY. AS SCALED FROM FEMA FLOOD INSURANCE RATE MAP, MAP NUMBER 51065C0280C, EFFECTIVE MAY 16, 2008.
  - NO PROPERTY LINES SHOWN ON THIS SURVEY.
  - THIS SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF ALISON W. HANSON, LS FROM AN ACTUAL GROUND SURVEY MADE UNDER HER SUPERVISION. THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED BETWEEN JUNE 18, 2018 AND MARCH 05, 2019, THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
  - SITE UNDER CONSTRUCTION AT TIME OF SURVEY.
  - CUT ELEVATIONS SHOWN HEREON REPRESENTS ELEVATION DIFFERENCE BETWEEN VISUAL INSPECTION REMOVAL SURFACE AND 6" SUBGRADE REMOVAL SURFACE. (C=0.5').
  - CUT ELEVATIONS HERE ON REPRESENTS ELEV DIFFERENCE BETWEEN VISUAL REMOVAL SURFACE AND AREAS WHERE ROCK WAS ENCOUNTERED (C=0.2').

REVISION #1: REVISED SURFACE DATA AND SPOT SHOT DATA.

TOPOGRAPHIC SURVEY OF  
**6" SUBGRADE REMOVAL  
OF THE EAST ASH POND  
AT BREMO BLUFF POWER STATION**

**FORK UNION DISTRICT,  
FLUVANNA COUNTY, VIRGINIA  
SCALE 1"= 100'**



**Appendix B - SUMMARY TABLE**

Visual Removal (VR) Certification					
Reference Number	Approx. Area (ac) +/-	Golder Inspection	DEQ Inspection	VR Survey	Misc. Notes
001	2.2	05/24/18	05/31/18	05/24/18	SE corner
	0.5	07/03/18	07/30/18		Reinspection
002	0.9	06/05/18	06/12/18	06/05/18	Gas Pipeline area
003	1.9	06/15/18	06/18/18	06/18/18	Stump Pond
004	0.5	07/19/18	07/30/18	07/19/18	NW corner (Access road)
005	1.9	07/19/18	07/30/18	07/19/18	SE berm
006	0.2	07/30/18	07/30/18	08/01/18	Gas pipeline toe of slope
007	0.1	08/22/18	08/22/18	08/22/18	Historic Culvert
008	2.4	10/02/18	N/A	10/02/18	Bottom of western portion
009	1.4	10/09/18	10/09/18	10/09/18	SOE toe of slope
010	0.9	10/16/18	N/A	10/16/18	SW berm
011	0.7	10/30/18	10/30/18	10/31/18	SW berm
012	0.7	12/06/18	N/A	12/06/18	Bottom of western portion
013	<0.1	12/06/18	N/A	12/06/18	Corner of Stump Pond
014	0.3	01/08/19	N/A	01/08/19	Haul Road
015	1.4	01/08/19	N/A	01/08/19	Bottom of eastern portion
016	1.8	01/23/19	N/A	01/23/19	Bottom of eastern portion
017	0.6	01/23/19	N/A	01/23/19	Bottom of western portion
018	3.3	02/01/19	N/A	02/05/19	Bottom of western portion
019	5.6	02/05/19	N/A	02/06/19	Bottom of eastern portion
020	0.9	02/14/19	N/A	02/15/19	Sides of Splitter Dike
021	1.1	02/26/19	N/A	02/26/19	Splitter Dike and Haul Road
<b>TOTAL</b>	27.2 (per survey)	DEQ final inspection 3/14/19			



Date: May 24, 2018  
Revised: July 30, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 001**

On May 24, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 001). The inspected area consisted of the eastern portion of Phase 1 (grid Y5 through II3) with an approximate size of 2.2 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny with clear skies. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

On May 31, 2018, Greg Adamson and Jeng Hun with the Virginia Department of Environmental Quality (DEQ) performed an inspection of the inspected area. No exceptions were taken aside from a small area of wash from the previous night's rainfall. It was agreed that the CCR in this area was to be removed and the area redocumented.

On July 3, 2018 Andrew North, P.E. with Golder Associates performed a re-inspection to verify the removal of CCR from within the area previously inspected on May 24, 2018 that was not certified due to wash from the previous night's rainfall. The inspected area was located at Phase 1 (grid EE5 through HH2) with an approximate size of 0.5 +/- acres. The weather conditions during the inspection were sunny with clear skies. Please find attached the photographs taken during the re-inspection to document the inspected area visually absent of CCR material.

On July 30, 2018, Greg Adamson with the DEQ performed a re-inspection of the re-inspected area. No exceptions were taken, and it was agreed that the additional 6-inch removal over the re-inspected area could proceed.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word "certify" in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.





CLOSURE BY REMOVAL  
VISUAL REMOVAL

Sincerely,

**GOLDER ASSOCIATES INC.**

A handwritten signature in blue ink that reads 'Andrew T. North'.

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection and Re-Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map



**Photo #1**  
**Observation:**

Eastern limit of Subject Area looking west, showing area where CCR has been Visually removed.

**Note:**  
 The white line denotes the limits of Visual Removal.



**Photo #2**  
**Observation:**

Southern limit of Subject Area looking east, showing the existing riser structure.

**Note:**  
 The white line denotes the limits of Visual Removal.





Photo #3  
Observation:

Western limit of  
Subject Area  
looking east.

Note:  
The white line  
denotes the limits  
of Visual  
Removal.



Photo #4  
Observation:

Bottom of Subject  
Area looking east.





**Photo #5**  
**Observation:**

Bottom of Subject Area looking south. Riser has been power washed to remove CCR material.



**Photo #6**  
**Observation:**

Eastern limit of Subject Area looking west, showing the northern limit of area along treeline.





**Photo #7**  
**Observation:**

Bottom of Subject Area looking west, showing removal of CCR from the southern embankment.



**Photo #1**  
**Re-Observation:**

Eastern end of Subject Area looking north, showing area where CCR has been Visually removed.





**Photo #2**  
**Re-Observation:**

Eastern end of  
Subject Area  
looking northwest,  
showing area  
where CCR has  
been Visually  
removed.





Date: June 12, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 002**

On June 5, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 002). The inspected area consisted of the western portion of Phases 2 and 3 (grid B23 through H30) with an approximate size of 0.9 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny with partly cloudy skies. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

On June 12, 2018, Greg Adamson with the Virginia Department of Environmental Quality (DEQ) performed an inspection of the inspected area. No exceptions were taken, and it was agreed that the additional 6-inch removal over the inspected area could proceed.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**



Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Northern limit of  
Subject Area,  
looking west.

Note:  
The white line  
denotes the limits  
of Visual  
Removal.

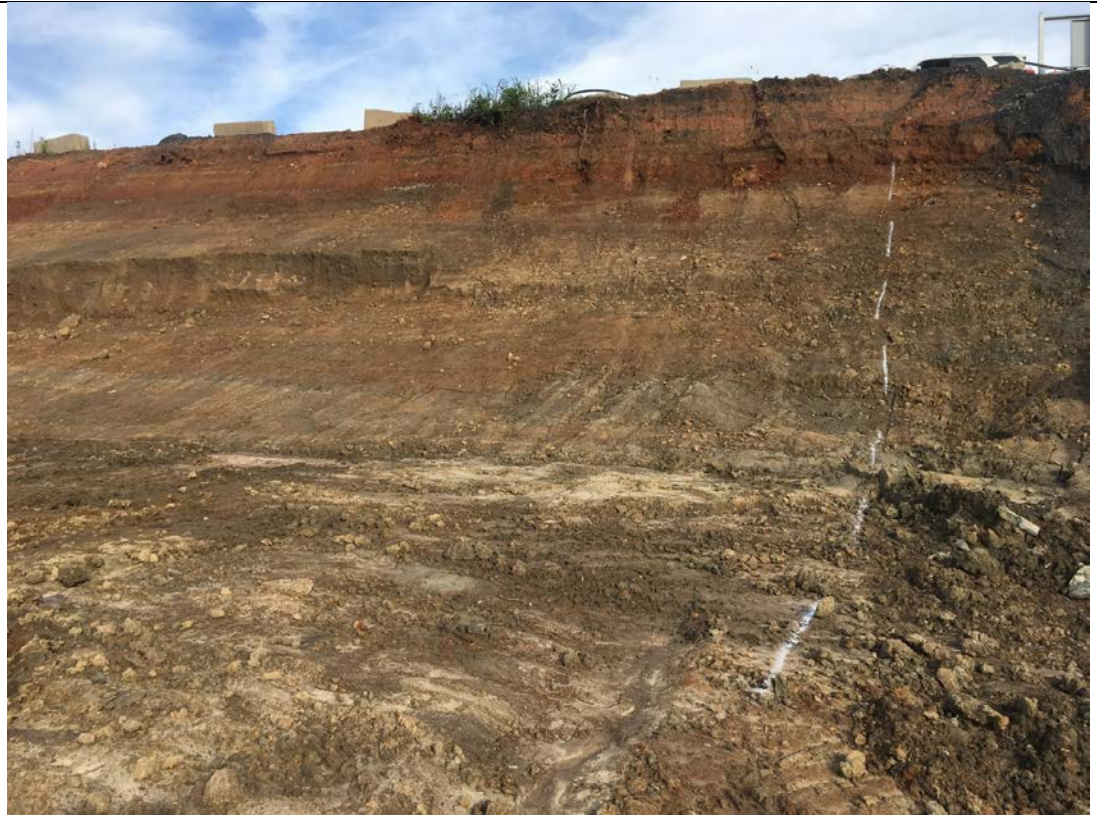


Photo #2  
Observation:

Northern limit of  
Subject Area  
looking south.

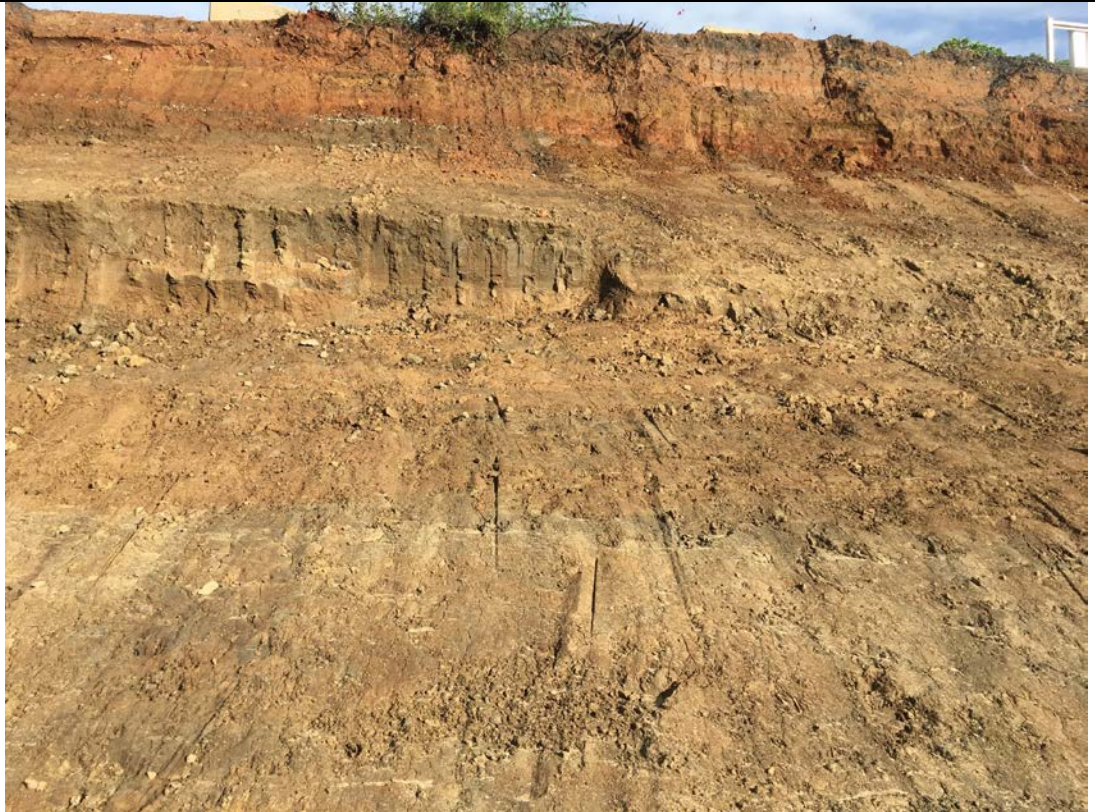
Note:  
The white line  
denotes the limits  
of Visual  
Removal.





**Photo #3**  
**Observation:**

Bottom of Subject  
Area looking west.



**Photo #4**  
**Observation:**

Bottom of Subject  
Area looking  
south.





**Photo #5**  
**Observation:**

Bottom of Subject Area looking north.



**Photo #6**  
**Observation:**

Bottom of Subject Area showing removal of CCR material.





**Photo #7**  
**Observation:**

Bottom of Subject  
Area looking west.



**Photo #8**  
**Observation:**

Bottom of Subject  
Area looking west.

**Note:**  
The white line  
denotes the limits  
of Visual  
Removal.





Date: June 18, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 003**

On June 15, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 003). The inspected area was located in Phase 4 and the northwestern portion of Phase 3 (grid H30 through P35) with an approximate size of 1.9 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny with clear skies. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

On June 15, 2018, Greg Adamson with the Virginia Department of Environmental Quality (DEQ) performed an inspection of the inspected area. No exceptions were taken, and it was agreed that the additional 6-inch removal over the inspected area could proceed.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word "certify" in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**



Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – "Visual Removal" Inspection Photos
- ☒ 2 – "Visual Removal" Area Sketch Map





Photo #1  
Observation:

North end of Subject Area looking northeast, showing area where CCR has been Visually removed.



Photo #2  
Observation:

East side of Subject Area looking east, showing area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

East side of Subject Area looking southeast, showing area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Western limit of Subject Area looking south, showing area where CCR has been Visually removed.







Photo #5  
Observation:

Bottom of Subject Area looking northeast.

Note:  
The white line denotes the limits of Visual Removal.



Photo #6  
Observation:

Western limit of Subject Area looking east.





**Photo #7**  
**Observation:**

Western limit of  
Subject Area  
looking south.



**Photo #8**  
**Observation:**

Bottom of subject  
Area looking  
south.

Note:  
The white line  
denotes the limits  
of Visual  
Removal.





Date: July 30, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 004**

On July 19, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 004). The inspected area was located in the northwestern portion of Phase 3 (grid F31 through J33) with an approximate size of 0.5 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny with clear skies. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

On July 30, 2018, Greg Adamson with the Virginia Department of Environmental Quality (DEQ) performed an inspection of the inspected area. No exceptions were taken, and it was agreed that the additional 6-inch removal over the inspected area could proceed.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

## Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Bottom of Subject Area looking west, showing area where CCR has been Visually removed from the embankment.



Photo #2  
Observation:

Bottom of Subject Area looking south, showing area where CCR has been Visually removed from the embankment.

Note:  
The white line denotes the limits of Visual Removal.







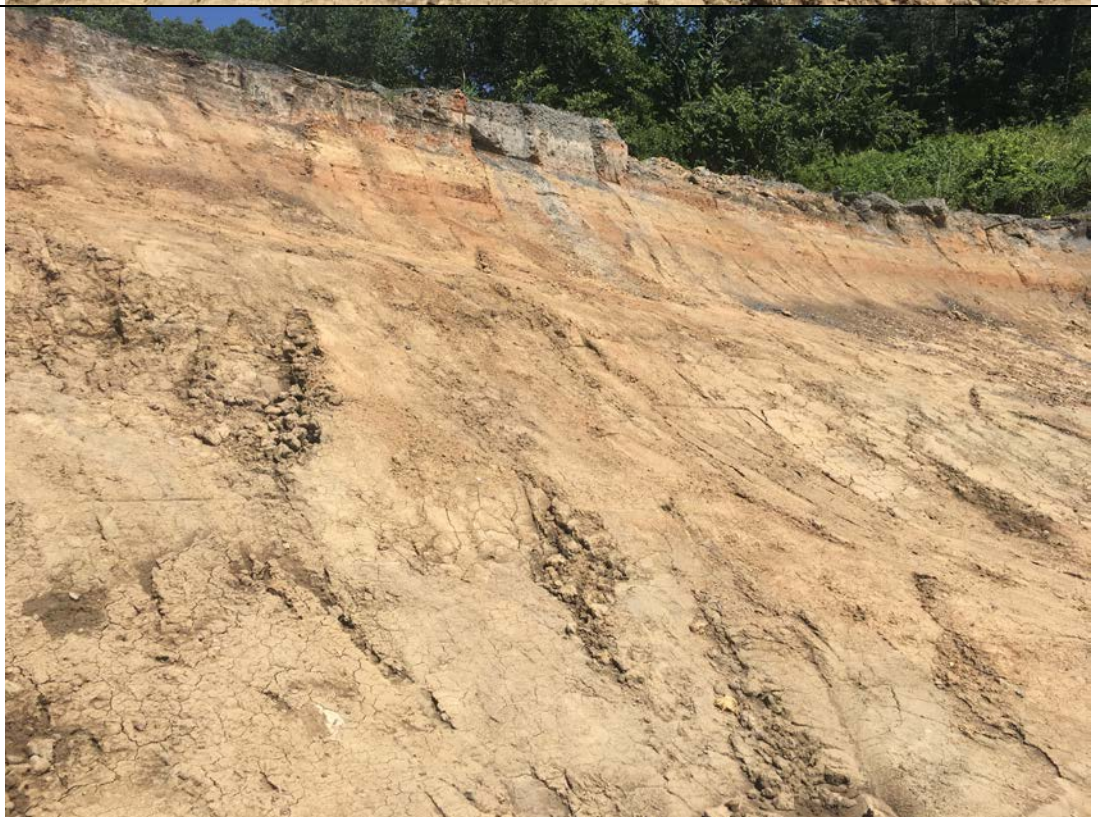
Photo #3  
Observation:

Bottom of Subject Area looking east, showing area where CCR has been Visually removed.



Photo #4  
Observation:

Bottom of Subject Area looking northwest, showing area where CCR has been Visually removed from the embankment.





**Photo #5**  
**Observation:**

Bottom of Subject  
Area.



**Photo #6**  
**Observation:**

Bottom of Subject  
Area looking  
south, showing  
area where CCR  
has been Visually  
removed.





**Photo #7**  
**Observation:**

Bottom of Subject Area looking southeast, showing area where CCR has been Visually removed.



**Photo #8**  
**Observation:**

Northern end of Subject Area looking northeast, showing area where CCR has been Visually removed from the embankment.





**Photo #9**  
**Observation:**

Eastern limit of Subject Area looking northwest, showing area where CCR has been Visually removed.

**Note:**  
The white line denotes the limits of Visual Removal.





Date: July 30, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 005**

On July 19, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 005). The inspected area consisted of the southern and eastern portion of Phase 1 (grid K12 through EE8) with an approximate size of 1.9 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny with partly cloudy skies. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

On July 30, 2018, Greg Adamson with the Virginia Department of Environmental Quality (DEQ) performed an inspection of the inspected area. No exceptions were taken, and it was agreed that the additional 6-inch removal over the inspected area could proceed.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

## Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Bottom of Subject Area looking southeast, showing area where CCR has been Visually removed from the embankment.



Photo #2  
Observation:

Bottom of Subject Area looking southwest, showing area where CCR has been Visually removed from the embankment.





**Photo #3**  
**Observation:**

Bottom of Subject Area looking west, showing area where CCR has been Visually removed.

Note:  
 The white line denotes the limits of Visual Removal.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking southwest, showing area where CCR has been Visually removed from the embankment.





**Photo #5**  
**Observation:**

Bottom of Subject Area looking west, showing area where CCR has been Visually removed.



**Photo #6**  
**Observation:**

Bottom of Subject Area looking southwest, showing area where CCR has been Visually removed.





**Photo #7**  
**Observation:**

Southern limit of Subject Area looking north, showing area where CCR has been Visually removed.



**Photo #8**  
**Observation:**

Southern limit of Subject Area looking west, showing area where CCR has been Visually removed.







CLOSURE BY REMOVAL  
VISUAL REMOVAL

Date: July 30, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 006**

On July 30, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 006). The inspected area consisted of the western portion of Phase 3 (grid F26 through I29) with an approximate size of 0.2 +/- acres, as shown in the attached Area Sketch Map. The weather condition during the inspection was overcast. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

On July 30, 2018, Greg Adamson with the Virginia Department of Environmental Quality (DEQ) performed an inspection of the inspected area. No exceptions were taken, and it was agreed that the additional 6-inch removal over the inspected area could proceed.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Bottom of Subject Area looking southeast, showing area where CCR has been Visually removed from the embankment.



Photo #2  
Observation:

Bottom of Subject Area looking southwest, showing area where CCR has been Visually removed from the embankment.





**Photo #3**  
**Observation:**

Bottom of Subject Area looking northwest, showing area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking north, showing area where CCR has been Visually removed.





**Photo #5**  
**Observation:**

Bottom of Subject Area, where CCR has been Visually removed.



**Photo #6**  
**Observation:**

Bottom of Subject Area looking south, showing area where CCR has been Visually removed.





Date: August 22, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 007**

On August 22, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 007). The inspected area consisted of the area surrounding a historic culvert located in Phase 3 (grid G30 through I30) with an approximate size of 0.1 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny with clear skies. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

On August 22, 2018, Greg Adamson with the Virginia Department of Environmental Quality (DEQ) performed an inspection of the inspected area. No exceptions were taken, and it was agreed that the additional 6-inch removal over the inspected area could proceed.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

## Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Western limit of Subject Area looking north, showing the area where CCR has been Visually removed from the embankment.



Photo #2  
Observation:

Western limit of Subject Area looking northeast, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

Bottom of Subject Area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking northwest, showing the area where CCR has been Visually removed.

**Note:**  
 The white line denotes the limits of Visual Removal.





**Photo #5**  
**Observation:**

Bottom of Subject Area looking west at the abandoned culvert, showing the area where CCR has been Visually removed.





Date: October 2, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 008**

On October 2, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 008). The inspected area consisted of the northwestern portion of Phase 2 and the remaining northwestern portion of Phase 3 (grid C22 through Q27) with an approximate size of 2.4 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny with partly cloudy skies. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 008 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

## Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Northern limit of Subject Area looking west, showing the area where CCR has been Visually removed.



Photo #2  
Observation:

Northern limit of Subject Area looking southwest, showing the area where CCR has been Visually removed.







Photo #3  
Observation:

Bottom of Subject Area looking south, showing the area where CCR has been Visually removed.



Photo #4  
Observation:

Bottom of Subject Area showing the area where CCR has been Visually removed.

Note:  
The white line denotes the limits of Visual Removal.





**Photo #5**  
**Observation:**

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.

Note:  
 The white line denotes the limits of Visual Removal.



**Photo #6**  
**Observation:**

Bottom of Subject Area showing the area where CCR has been Visually removed.

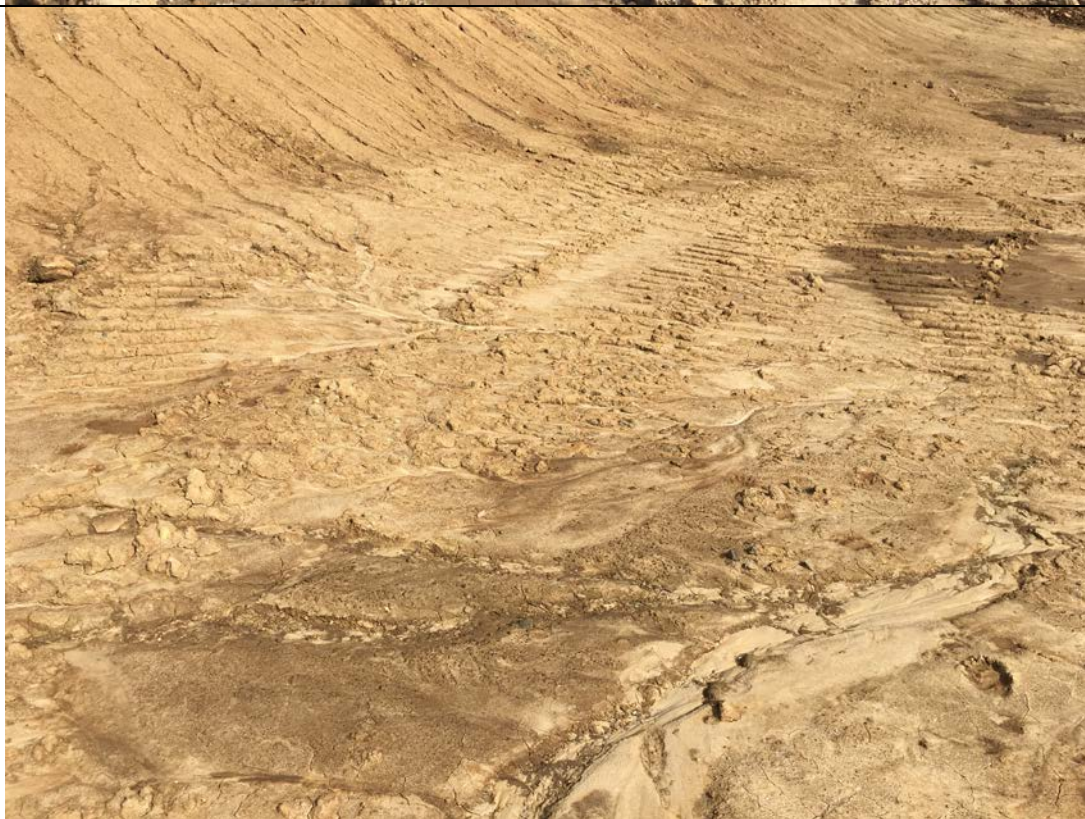






Photo #7  
Observation:

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.



Photo #8  
Observation:

Bottom of Subject Area looking northwest, showing the area where CCR has been Visually removed.





Date: October 9, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 009**

On October 9, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 009). The inspected area consisted of the northern portion of Phase 5 (grid R23 through AA13) with an approximate size of 1.4 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were cloudy and overcast. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

On October 9, 2018, Greg Adamson with the Virginia Department of Environmental Quality (DEQ) performed an inspection of the inspected area. No exceptions were taken, and it was agreed that the additional 6-inch removal over the inspected area could proceed.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

## Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Western limit of Subject Area looking east, showing the area where CCR has been Visually removed.



Photo #2  
Observation:

Southern limit of Subject Area looking northeast, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

Bottom of Subject Area looking east, showing the area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking east, showing the area where CCR has been Visually removed.





**Photo #5**  
**Observation:**

Bottom of Subject Area looking east, showing the area where CCR has been Visually removed.

Note:  
 The white line denotes the limits of Visual Removal.



**Photo #6**  
**Observation:**

Bottom of Subject Area looking northwest, showing the area where CCR has been Visually removed.







Photo #7  
Observation:

Bottom of Subject Area looking northeast, showing the area where CCR has been Visually removed.

Note:  
The white line denotes the limits of Visual Removal.



Photo #8  
Observation:

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.

Note:  
The white line denotes the limits of Visual Removal.







## CLOSURE BY REMOVAL VISUAL REMOVAL

Date: October 16, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE  
MEMORANDUM FOR RECORD – AREA 010**

On October 16, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 010). The inspected area consisted of the southwestern portion of Phases 2 and 3 (grid A20 through G23) with an approximate size of 0.9 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were cloudy and overcast. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 010 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Eastern limit of Subject Area looking west, showing the area where CCR has been Visually removed.



Photo #2  
Observation:

Bottom of Subject Area looking south, showing the area where CCR has been Visually removed from the embankment.







Photo #3  
Observation:

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.



Photo #4  
Observation:

Bottom of Subject Area looking southwest, showing the area where CCR has been Visually removed.

Note:  
The white line denotes the limits of Visual Removal.







Photo #5  
Observation:

Bottom of Subject Area showing the area where CCR has been Visually removed.



Photo #6  
Observation:

Bottom of Subject Area looking southwest, showing the area where CCR has been Visually removed.





Date: October 30, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 011**

On October 30, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 011). The inspected area consisted of the southeastern portion of Phases 2 (grid E16 through L13) with an approximate size of 0.7 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny and partially cloudy. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

On October 30, 2018, Greg Adamson with the Virginia Department of Environmental Quality (DEQ) performed an inspection of the inspected area. No exceptions were taken, and it was agreed that the additional 6-inch removal over the inspected area could proceed.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**



Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map



**Photo #1**  
**Observation:**

Eastern limit of Subject Area looking southwest, showing the area where CCR has been Visually removed.



**Photo #2**  
**Observation:**

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking south, showing the area where CCR has been Visually removed from the embankment.





**Photo #5**  
**Observation:**

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.







## CLOSURE BY REMOVAL VISUAL REMOVAL

Date: December 6, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE  
MEMORANDUM FOR RECORD – AREA 012**

On December 6, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 012). The inspected area consisted of the southern portion of Phase 2 (grid C20 through I13) with an approximate size of 0.7 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny and partially cloudy. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 012 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1

Observation:

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.



Photo #2

Observation:

Bottom of Subject Area looking northwest, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

Bottom of Subject Area looking northwest, showing the area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking southwest, showing the area where CCR has been Visually removed.







## CLOSURE BY REMOVAL VISUAL REMOVAL

Date: December 6, 2018

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE  
MEMORANDUM FOR RECORD – AREA 013**

On December 6, 2018, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 013). The inspected area consisted of the northeastern portion of Phase 4 with an approximate size of <0.1 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny and partially cloudy. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 013 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.



Photo #2  
Observation:

Bottom of Subject Area looking east, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

Bottom of Subject Area looking south, showing the area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking southwest, showing the area where CCR has been Visually removed.







CLOSURE BY REMOVAL  
VISUAL REMOVAL

Date: January 8, 2019

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 014**

On January 8, 2019, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 014). The inspected area consisted of the northeastern portion of Phase 3 (grid O24 through Q24) with an approximate size of 0.3 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny and partially cloudy. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 014 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.



Photo #2  
Observation:

Bottom of Subject Area showing the area where CCR has been Visually removed.







## CLOSURE BY REMOVAL VISUAL REMOVAL

Date: January 8, 2019

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE  
MEMORANDUM FOR RECORD – AREA 015**

On January 8, 2019, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 015). The inspected area consisted of the northeastern portion of Phase 5 (grid P21 through X17) with an approximate size of 1.4 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were sunny and partially cloudy. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 015 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Bottom of Subject Area looking northwest, showing the area where CCR has been Visually removed.



Photo #2  
Observation:

Bottom of Subject Area looking southwest, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

Bottom of Subject Area looking northeast, showing the area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.

**Note:**  
 The white line denotes the limits of Visual Removal.





**Photo #5**  
**Observation:**

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.



**Photo #6**  
**Observation:**

Bottom of Subject Area looking southwest, showing the area where CCR has been Visually removed.

**Note:**  
 The white line denotes the limits of Visual Removal.





**Photo #7**  
**Observation:**

Bottom of Subject Area looking southwest, showing the area where CCR has been Visually removed.

**Note:**  
 The white line denotes the limits of Visual Removal.



**Photo #8**  
**Observation:**

Bottom of Subject Area showing the area where CCR has been Visually removed.

**Note:**  
 The white line denotes the limits of Visual Removal.





Date: January 23, 2019

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 016**

On January 23, 2019, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 016). The inspected area consisted of the northwestern and eastern portion of Phase 1 and Phase 5, respectively (grid AA14 through EE8), and the southern portion of Phase 5 (grid S16 through Y13) with a combined approximate size of 1.8 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were cold and overcast. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 016 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**



Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Bottom of Subject Area looking northeast, showing the area where CCR has been Visually removed.



Photo #2  
Observation:

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

Bottom of Subject Area looking east, showing the area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.





**Photo #5**  
**Observation:**

Bottom of Subject Area looking northeast, showing the area where CCR has been Visually removed.



**Photo #6**  
**Observation:**

Bottom of Subject Area showing the area where CCR has been Visually removed.







## CLOSURE BY REMOVAL VISUAL REMOVAL

Date: January 23, 2019

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE  
MEMORANDUM FOR RECORD – AREA 017**

On January 23, 2019, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 017). The inspected area consisted of the northern portion of Phase 2 and the southern portion of Phase 3 (grid D20 through I19) with an approximate size of 0.6 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were cold and overcast. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 017 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Bottom of Subject Area looking northeast, showing the area where CCR has been Visually removed.

Note:  
The pink line denotes the limits of Visual Removal.



Photo #2  
Observation:

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.







Photo #3

Observation:

Bottom of Subject Area looking south, showing the area where CCR has been Visually removed.



Photo #4

Observation:

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.

Note:  
The pink line denotes the limits of Visual Removal.





Date: February 1, 2019

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 018**

On February 1, 2019, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 018). The inspected area consisted of the northern portion of Phase 2 and the southern portion of Phase 3 (grid F19 through O24) with an approximate size of 3.3 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were cold and overcast. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 018 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**



Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map





Photo #1  
Observation:

Bottom of Subject Area looking northeast, showing the area where CCR has been Visually removed.



Photo #2  
Observation:

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.





Date: February 5, 2019

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 019**

On February 5, 2019, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 019). The inspected area consisted of the northern portion of Phase 1 and the southern portion of Phase 5 (grid P20 through BB7) with an approximate size of 5.6 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were cold and partially cloudy. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 019 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**



Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map



**Photo #1**  
**Observation:**

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.

Note:  
 The pink line denotes the limits of Visual Removal.



**Photo #2**  
**Observation:**

Bottom of Subject Area looking south, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

Bottom of Subject Area looking northwest, showing the area where CCR has been Visually removed.



**Photo #4**  
**Observation:**

Bottom of Subject Area looking west, showing the area where CCR has been Visually removed.







CLOSURE BY REMOVAL  
VISUAL REMOVAL

Date: February 14, 2019

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 020**

On February 14, 2019, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 020). The inspected area consisted of the eastern portion of Phase 2 and Phase 3 and the western portion of Phase 1 and Phase 5 (grids J14 through O22 and M15 through P20) with an approximate size of 0.9 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were cool and sunny. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 020 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map



**Photo #1**  
**Observation:**

Bottom of Subject Area looking north, showing the area where CCR has been Visually removed.



**Photo #2**  
**Observation:**

Bottom of Subject Area looking south, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

Bottom of  
Subject Area  
looking  
northeast,  
showing the  
area where  
CCR has been  
Visually  
removed.







CLOSURE BY REMOVAL  
VISUAL REMOVAL

Date: February 26, 2019

Project No. 15-20347QA

Dominion Energy  
Bremo Power Station  
1038 Bremo Road  
Bremo Bluff, VA 23022

**RE: BREMO CLOSURE BY REMOVAL VISUAL INSPECTION AND ACCEPTANCE**  
**MEMORANDUM FOR RECORD – AREA 021**

On February 26, 2019, Andrew North, P.E. with Golder Associates performed an inspection of the East Ash Pond at the Bremo Power Station to verify the removal of Coal Combustion Residuals (CCR) from within the inspected area (Area 021). The inspected area consisted of the eastern portion of Phase 2 and Phase 3 and the western portion of Phase 1 and Phase 5 (grids K14 through Q27) with an approximate size of 1.1 +/- acres, as shown in the attached Area Sketch Map. The weather conditions during the inspection were cool and sunny. Please find attached the photographs taken during the inspection to document the inspected area visually absent of CCR material.

Per an email on August 20, 2018 and a conversation with Greg Adamson (DEQ) on August 22, 2018, it was agreed that the additional 6-inch removal over inspected areas could proceed without DEQ inspection, unless otherwise specified by DEQ. Golder documented the removal of CCR materials in Area 021 and recommended the additional 6-inch removal over the inspected area.

Golder Associates presents this acceptance statement for visual closure by removal of the CCR at the Bremo Power Station. This acceptance applies to the area in the East Ash Pond as described above. The area has been visually inspected and documented through field survey in accordance with the Bremo Power Station Inactive CCR Surface Impoundments Closure by Removal Plan (SWP #618). Based on visual inspection, I certify the area described above as visually absent of CCR material and recommend the additional 6-inch subgrade removal.

The use of the word “certify” in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty, or legal opinion.

Sincerely,

**GOLDER ASSOCIATES INC.**

Andrew T. North, P.E.  
Project Engineer

Attachments:

- ☒ 1 – “Visual Removal” Inspection Photos
- ☒ 2 – “Visual Removal” Area Sketch Map



**Photo #1**  
**Observation:**

Bottom of Subject Area looking southeast, showing the area where CCR has been Visually removed.



**Photo #2**  
**Observation:**

Bottom of Subject Area looking northeast, showing the area where CCR has been Visually removed.





**Photo #3**  
**Observation:**

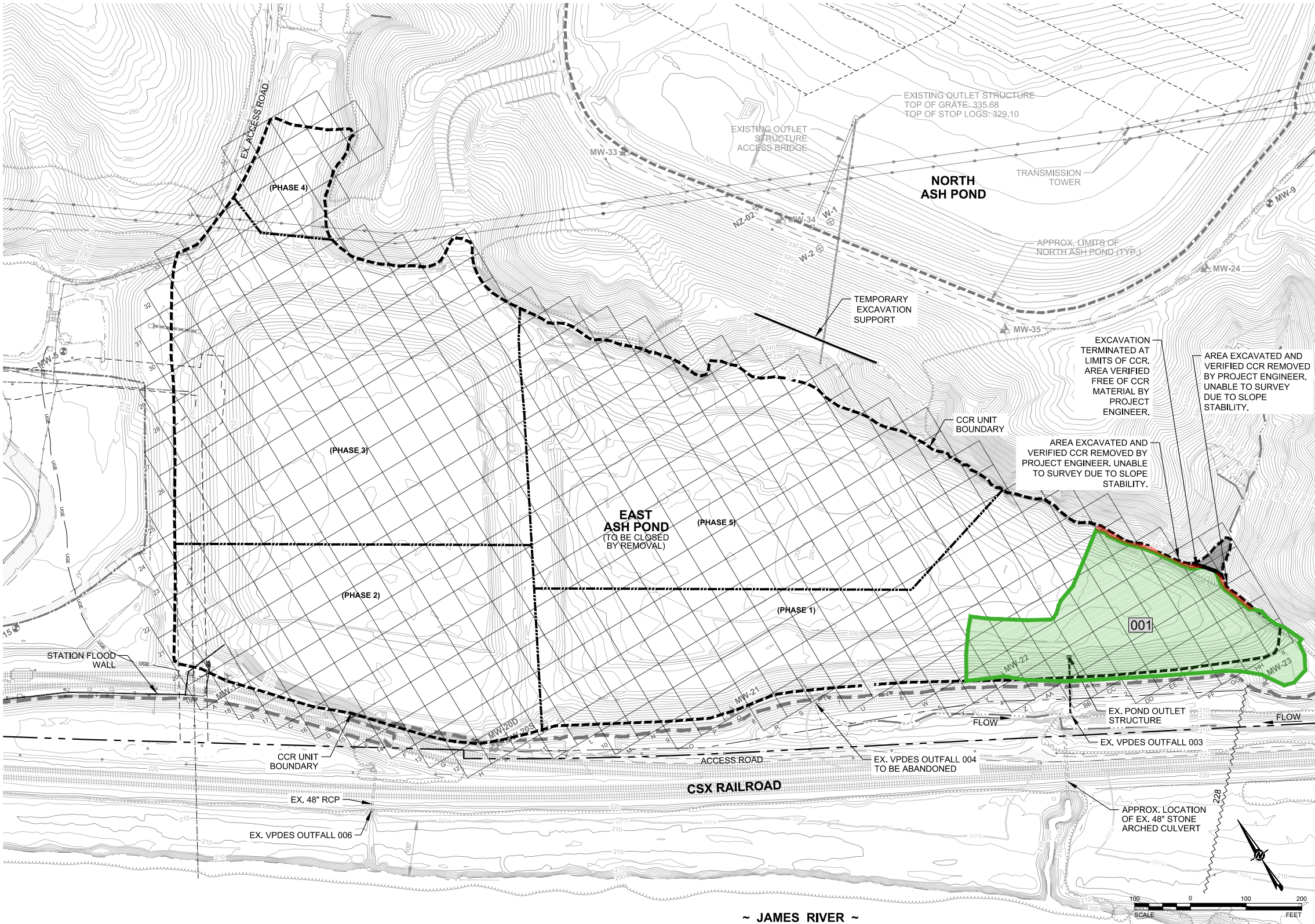
Bottom of Subject Area looking northeast, showing the area where CCR has been Visually removed.

Note:  
The pink line denotes the limits of Visual Removal.





Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA\100 - Field Information\Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 001.dwg



LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN		EXISTING MANHOLE
	APPROX. POND BOTTOM CONTOURS (2' INTERVALS) (SEE GENERAL NOTE 1c)		BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)		APPROXIMATE CLEAN CLOSURE PHASE LIMITS (SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING EXCAVATION AND MAY INCLUDE SUB-PHASES)
	EXISTING UNPAVED ROAD		EXISTING TREE LINE		
	EXISTING RAILROAD		EXISTING FENCE		
	WETLANDS		EXISTING OVERHEAD UTILITY LINE		
			EXISTING UNDERGROUND ELECTRIC LINE		

GENERAL NOTES

- EXISTING CONDITIONS COMPILED FROM:
  - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
  - BOUNDARY SURVEY PREPARED BY H&B SURVEYING AND MAPPING, LLC DATED 04/27/15.
  - TOPOGRAPHY WITHIN THE LIMITS OF THE EAST ASH POND BASED ON MONTHLY EXCAVATION SURVEY.
- SITE DATUM: NAD83 / NAVD88
- WETLAND DELINEATION BY DOMINION ENVIRONMENTAL SERVICES ON 01/30/15 & 02/05/15 AND BY GOLDER ASSOCIATES ON 03/16/15 & 03/25/15. WATERS OF THE U.S. CONFIRMED BY THE USACE DURING JUNE 4, 2015 SITE VISIT.
- 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.

CLOSURE BY REMOVAL NOTES

- TOPOGRAPHY SHOWN WITHIN LIMITS OF THE EAST ASH POND REPRESENTS THE APPROXIMATE BOTTOM BASED ON HISTORIC DRAWINGS AND FIELD INFORMATION. FOR REFERENCE ONLY.
- PHASED CLOSURE OF EAST ASH POND MAY BE SEQUENCED AS NECESSARY TO SUPPORT CONSTRUCTION AND MAY INCLUDE SUB-PHASES FOR REGULATORY APPROVAL TO SUPPORT ACCESS, SLOPE STABILITY, AND MINIMIZE CONTACT STORMWATER AREAS.
- ANY AREA CERTIFIED AS ACHIEVING CLOSURE BY REMOVAL IS TO BE PROTECTED FROM CCR AND CONTACT STORMWATER, AND MAY BE FILLED AND/OR RESHAPED PRIOR TO ACHIEVING FINAL GRADES.
- ACCUMULATED CCR SHALL BE REMOVED FROM SURFACES WITHIN THE POND LIMITS SUCH THAT NO CCR REMAINS VISIBLE.
- FOLLOWING VISUAL-CLEAN CONDITIONS, OVER-EXCAVATE THE REMOVAL FOOTPRINT BY AT LEAST SIX INCHES.
- 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.
- EXCAVATION OF SLOPES STEEPER THAN 2:1 SHALL BE SEQUENCED SUCH THAT THE SLOPES CAN BE EXCAVATED, INSPECTED, AND BACKFILLED IN THE SHORTEST TIME POSSIBLE. BACKFILL SLOPES WITH CLEAN SOIL FILL AT NO STEEPER THAN 2:1.
- EXCAVATED CCR AND SOIL-CCR MIXTURES SHALL BE CONSOLIDATED IN NORTH ASH POND OR TAKEN TO AN OFF-SITE DISPOSAL FACILITY AS DIRECTED BY DOMINION.

PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

CLIENT  
DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT  
GOLDER ASSOCIATES  
2108 WEST LABURNUM AVENUE  
SUITE 200  
RICHMOND, VA 23227  
(804) 358-7900  
www.golder.com

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

REV. 0

DATE  
07/30/18

DESCRIPTION  
Area Sketch Map

ATN

CADD

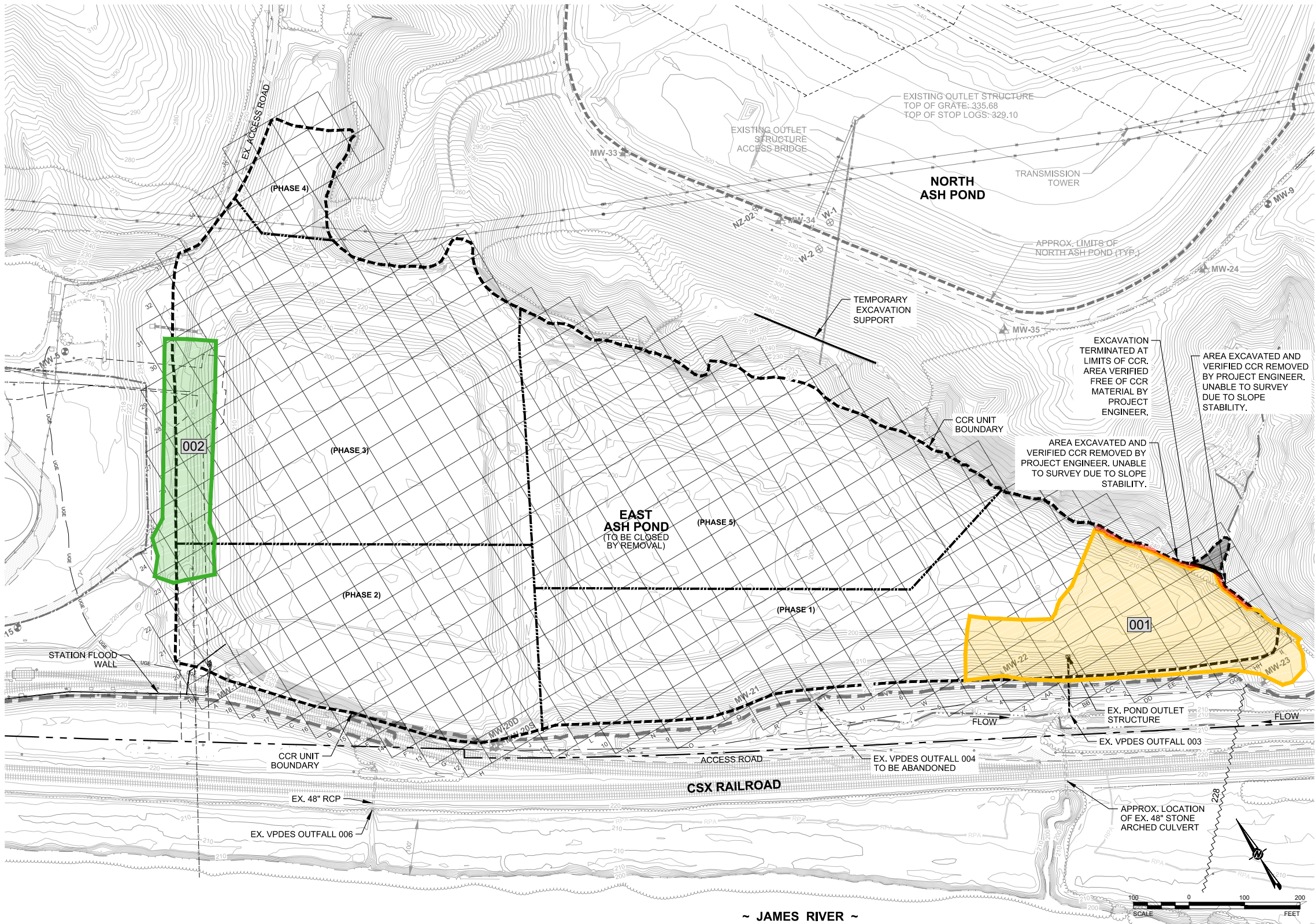
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REVIEW

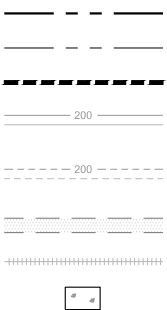
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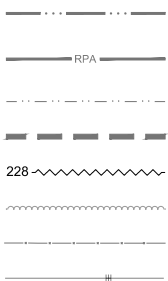
Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA\100 - Field Information\Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 002.dwg



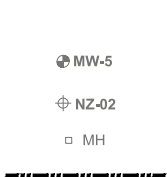
## LEGEND



DOMINION PROPERTY BOUNDARY  
ADJACENT PROPERTY BOUNDARY  
CCR UNIT BOUNDARY  
EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS)  
(FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)  
APPROX. POND BOTTOM CONTOURS (2' INTERVALS)  
(SEE GENERAL NOTE 1c)  
EXISTING UNPAVED ROAD  
EXISTING RAILROAD  
WETLANDS



CREEK/STREAM CENTERLINE  
LIMITS OF RIPARIAN PROTECTION AREA  
(PER FLUVANNA COUNTY ORDINANCE)  
APPROXIMATE EDGE OF SURFACE WATER  
LIMITS OF 100-YR FLOOD PLAIN  
BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)  
EXISTING TREE LINE  
EXISTING FENCE  
EXISTING OVERHEAD UTILITY LINE  
EXISTING UNDERGROUND ELECTRIC LINE



EXISTING UNDERGROUND GAS LINE  
EXISTING MONITORING WELL LOCATION AND  
IDENTIFICATION  
EXISTING PIEZOMETER AND IDENTIFICATION  
EXISTING MANHOLE  
APPROXIMATE CLEAN CLOSURE PHASE LIMITS  
(SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING  
EXCAVATION AND MAY INCLUDE SUB-PHASES)

Visual Removal (VR) Certification					
Reference Number	Approx. Area (ac) +/-	Golder Inspection	DEQ Inspection	VR Survey	Misc. Notes
002	0.9	06/05/18	06/12/18	06/05/18	Gas Pipeline area

## GENERAL NOTES

- EXISTING CONDITIONS COMPILED FROM:
  - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
  - BOUNDARY SURVEY PREPARED BY H&B SURVEYING AND MAPPING, LLC DATED 04/27/15.
  - TOPOGRAPHY WITHIN THE LIMITS OF THE EAST ASH POND BASED ON MONTHLY EXCAVATION SURVEY.
- SITE DATUM: NAD83 / NAVD88
- WETLAND DELINEATION BY DOMINION ENVIRONMENTAL SERVICES ON 01/30/15 & 02/05/15 AND BY GOLDER ASSOCIATES ON 03/16/15 & 03/25/15. WATERS OF THE U.S. CONFIRMED BY THE USACE DURING JUNE 4, 2015 SITE VISIT.
- 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.

## CLOSURE BY REMOVAL NOTES

- TOPOGRAPHY SHOWN WITHIN LIMITS OF THE EAST ASH POND REPRESENTS THE APPROXIMATE BOTTOM BASED ON HISTORIC DRAWINGS AND FIELD INFORMATION. FOR REFERENCE ONLY.
- PHASED CLOSURE OF EAST ASH POND MAY BE SEQUENCED AS NECESSARY TO SUPPORT CONSTRUCTION AND MAY INCLUDE SUB-PHASES FOR REGULATORY APPROVAL TO SUPPORT ACCESS, SLOPE STABILITY, AND MINIMIZE CONTACT STORMWATER AREAS.
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- EXCAVATED CCR AND SOIL-CCR MIXTURES SHALL BE CONSOLIDATED IN NORTH ASH POND OR TAKEN TO AN OFF-SITE DISPOSAL FACILITY AS DIRECTED BY DOMINION.

PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

REV.  
0

FIGURE  
2

CLIENT  
DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

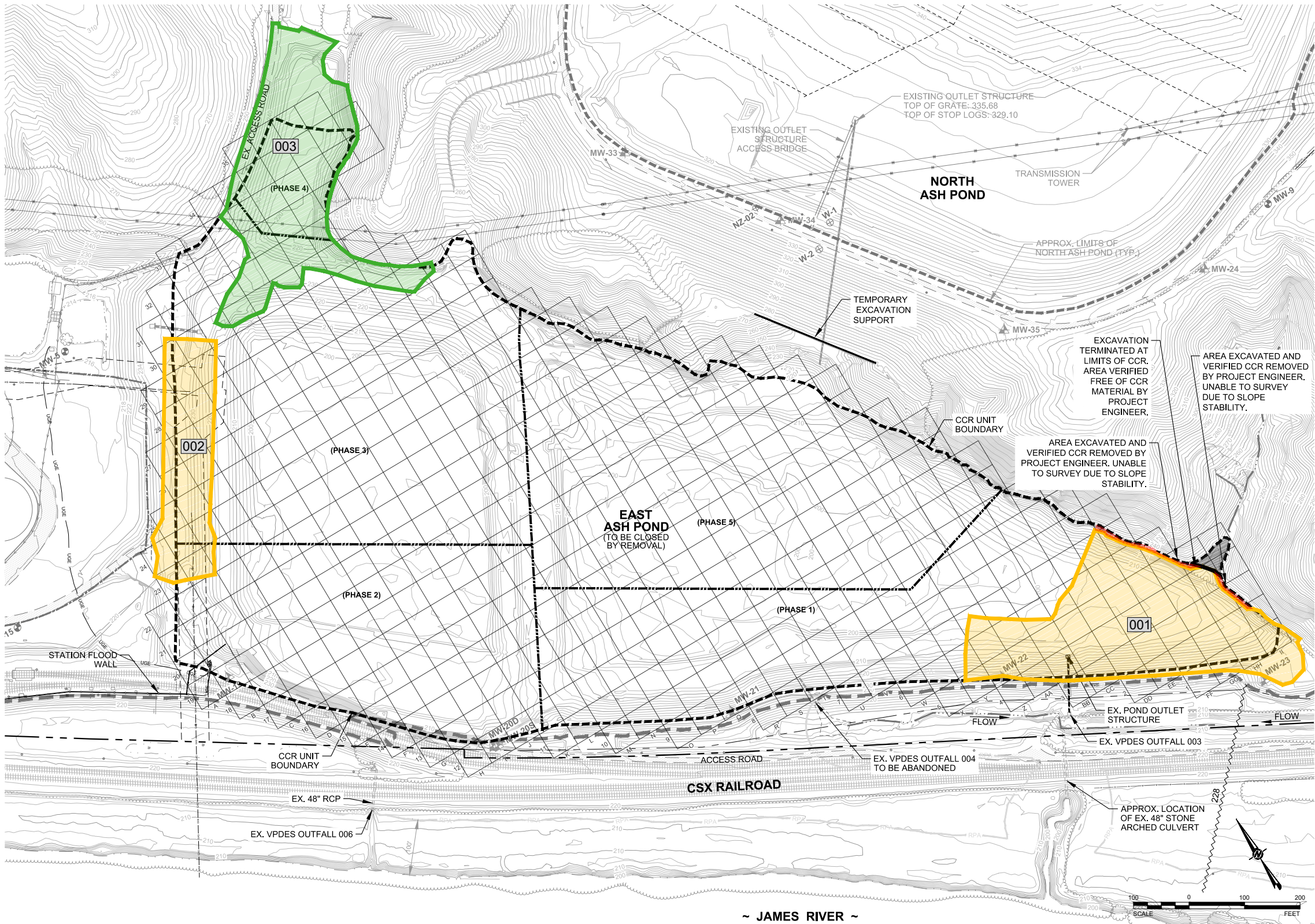
GOLDER ASSOCIATES  
2108 WEST LABURNUM AVENUE  
SUITE 200  
RICHMOND, VA 23227  
(804) 358-7900  
www.golder.com



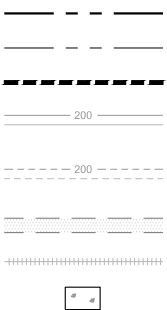
1" = 100' IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D



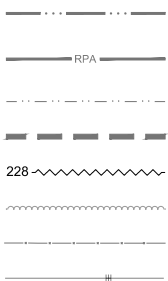
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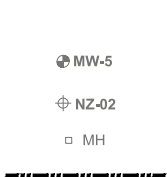
## LEGEND



DOMINION PROPERTY BOUNDARY  
ADJACENT PROPERTY BOUNDARY  
CCR UNIT BOUNDARY  
EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS)  
(FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)  
APPROX. POND BOTTOM CONTOURS (2' INTERVALS)  
(SEE GENERAL NOTE 1c)  
EXISTING UNPAVED ROAD  
EXISTING RAILROAD  
WETLANDS



CREEK/STREAM CENTERLINE  
LIMITS OF RIPARIAN PROTECTION AREA  
(PER FLUVANNA COUNTY ORDINANCE)  
APPROXIMATE EDGE OF SURFACE WATER  
LIMITS OF 100-YR FLOOD PLAIN  
BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)  
EXISTING TREE LINE  
EXISTING FENCE  
EXISTING OVERHEAD UTILITY LINE  
EXISTING UNDERGROUND ELECTRIC LINE



EXISTING UNDERGROUND GAS LINE  
EXISTING MONITORING WELL LOCATION AND IDENTIFICATION  
EXISTING PIEZOMETER AND IDENTIFICATION  
EXISTING MANHOLE  
APPROXIMATE CLEAN CLOSURE PHASE LIMITS  
(SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING EXCAVATION AND MAY INCLUDE SUB-PHASES)

Visual Removal (VR) Certification					
Reference Number	Approx. Area (ac) +/-	Golder Inspection	DEQ Inspection	VR Survey	Misc. Notes
003	1.9	06/15/18	06/18/18	06/18/18	Stump Pond

## GENERAL NOTES

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## CLOSURE BY REMOVAL NOTES

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PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

CLIENT  
DOMINION ENERGY  
BREMONT POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

GOLDER ASSOCIATES  
2108 WEST LABURNUM AVENUE  
SUITE 200  
RICHMOND, VA 23227  
(804) 358-7900  
www.golder.com



REV.  
0

FIGURE  
3

REV.	MM/DD/YY	DESCRIPTION	ATN	CADD	CHECK	REVIEW
0	06/18/18	Area Sketch Map	ATN			

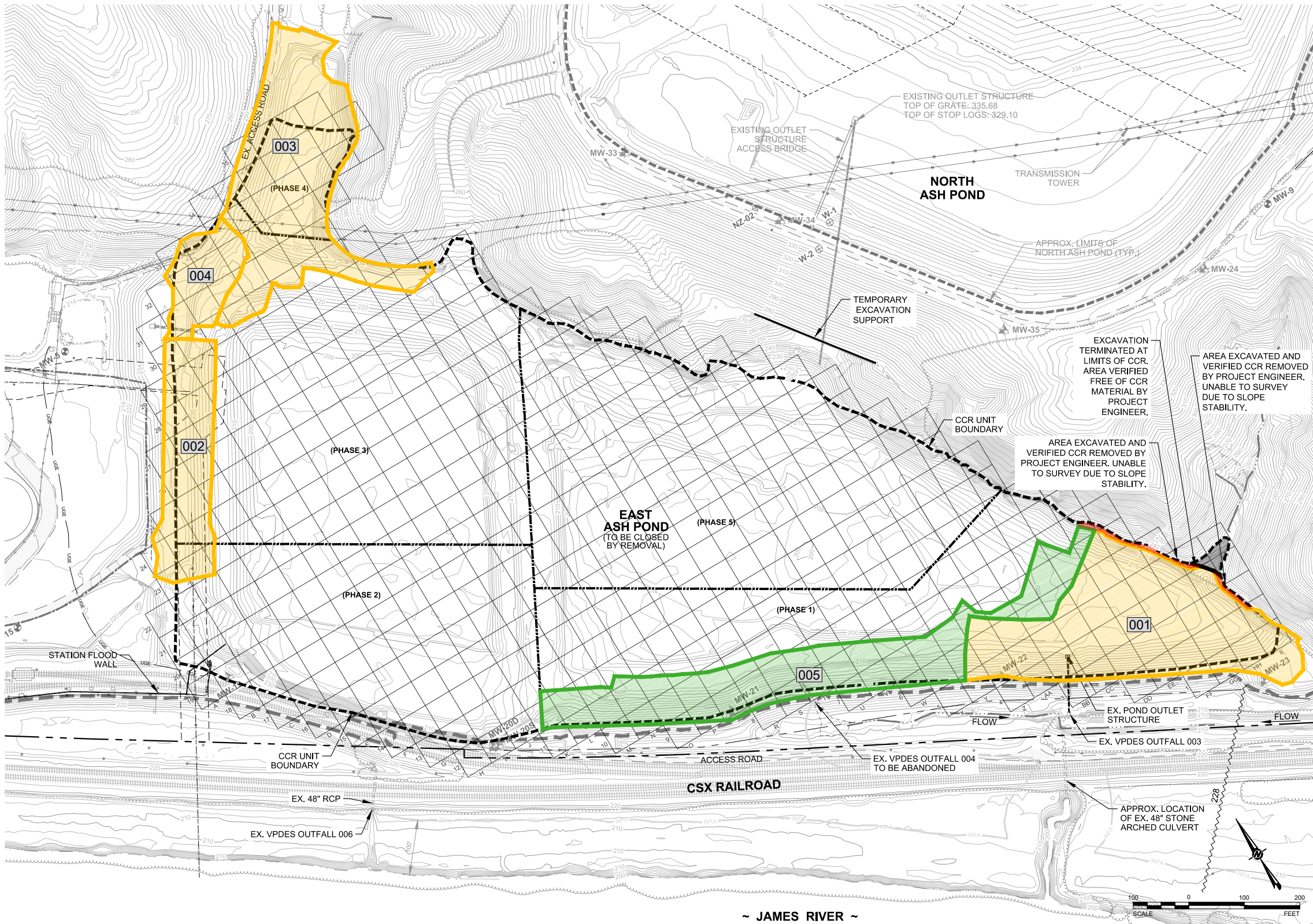
1" = 100' IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D







Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA\100 - Field Information\Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 005.dwg



## LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN		EXISTING MANHOLE
	APPROX. POND BOTTOM CONTOURS (2' INTERVALS) (SEE GENERAL NOTE 1c)		BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)		APPROXIMATE CLEAN CLOSURE PHASE LIMITS (SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING EXCAVATION AND MAY INCLUDE SUB-PHASES)
	EXISTING UNPAVED ROAD		EXISTING TREE LINE		
	EXISTING RAILROAD		EXISTING FENCE		
	WETLANDS		EXISTING OVERHEAD UTILITY LINE		
			EXISTING UNDERGROUND ELECTRIC LINE		

## GENERAL NOTES

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  - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
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- 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.

## CLOSURE BY REMOVAL NOTES

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PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

REV.  
0

FIGURE  
5

CLIENT  
DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

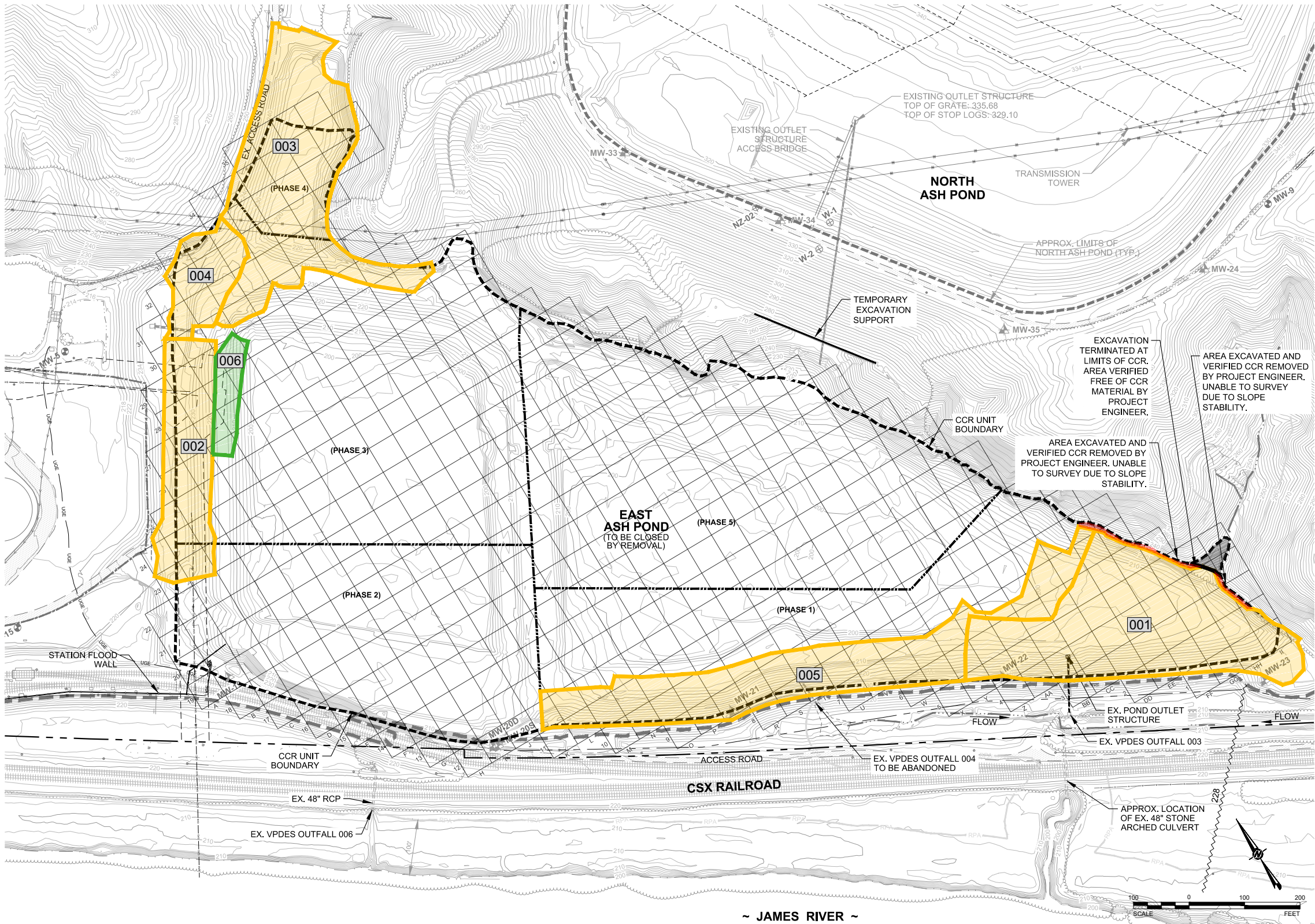
GOLDER ASSOCIATES  
2108 WEST LABURNUM AVENUE  
SUITE 200  
RICHMOND, VA 23227  
(804) 358-7900  
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1 in = 100 FEET  
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D



Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA\100 - Field Information\Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 006.dwg



LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN		EXISTING MANHOLE
	APPROX. POND BOTTOM CONTOURS (2' INTERVALS) (SEE GENERAL NOTE 1c)		BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)		APPROXIMATE CLEAN CLOSURE PHASE LIMITS (SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING EXCAVATION AND MAY INCLUDE SUB-PHASES)
	EXISTING UNPAVED ROAD		EXISTING TREE LINE		
	EXISTING RAILROAD		EXISTING FENCE		
	WETLANDS		EXISTING OVERHEAD UTILITY LINE		
			EXISTING UNDERGROUND ELECTRIC LINE		

GENERAL NOTES

- EXISTING CONDITIONS COMPILED FROM:
  - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
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- 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.

CLOSURE BY REMOVAL NOTES

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PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

CLIENT  
DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

GOLDER ASSOCIATES  
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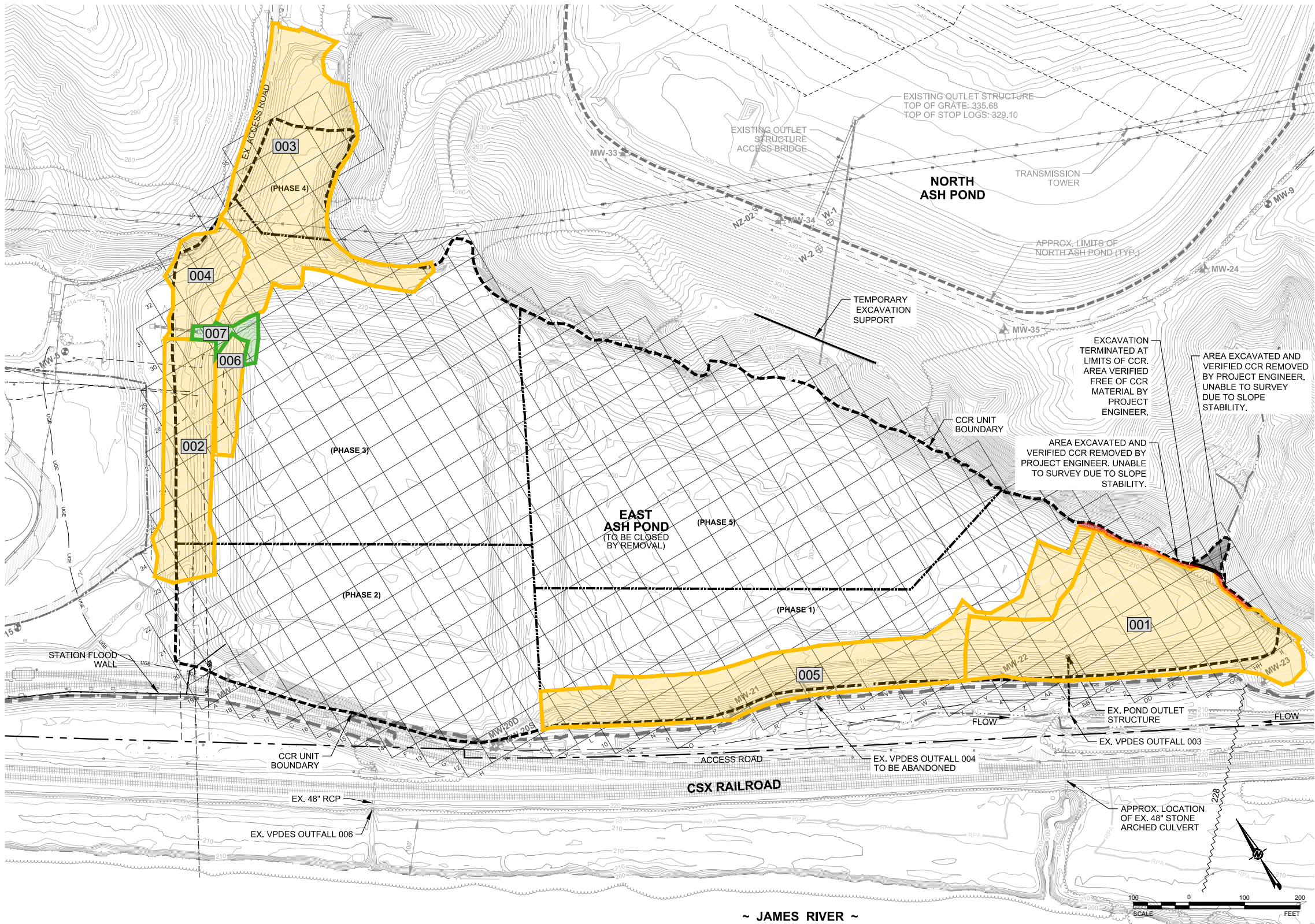
REV.  
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FIGURE  
6

1 in = 100 feet IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D



Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA\100 - Field Information\Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 007.dwg



## LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN		EXISTING MANHOLE
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PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

REV.  
0

FIGURE  
7

CLIENT  
DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

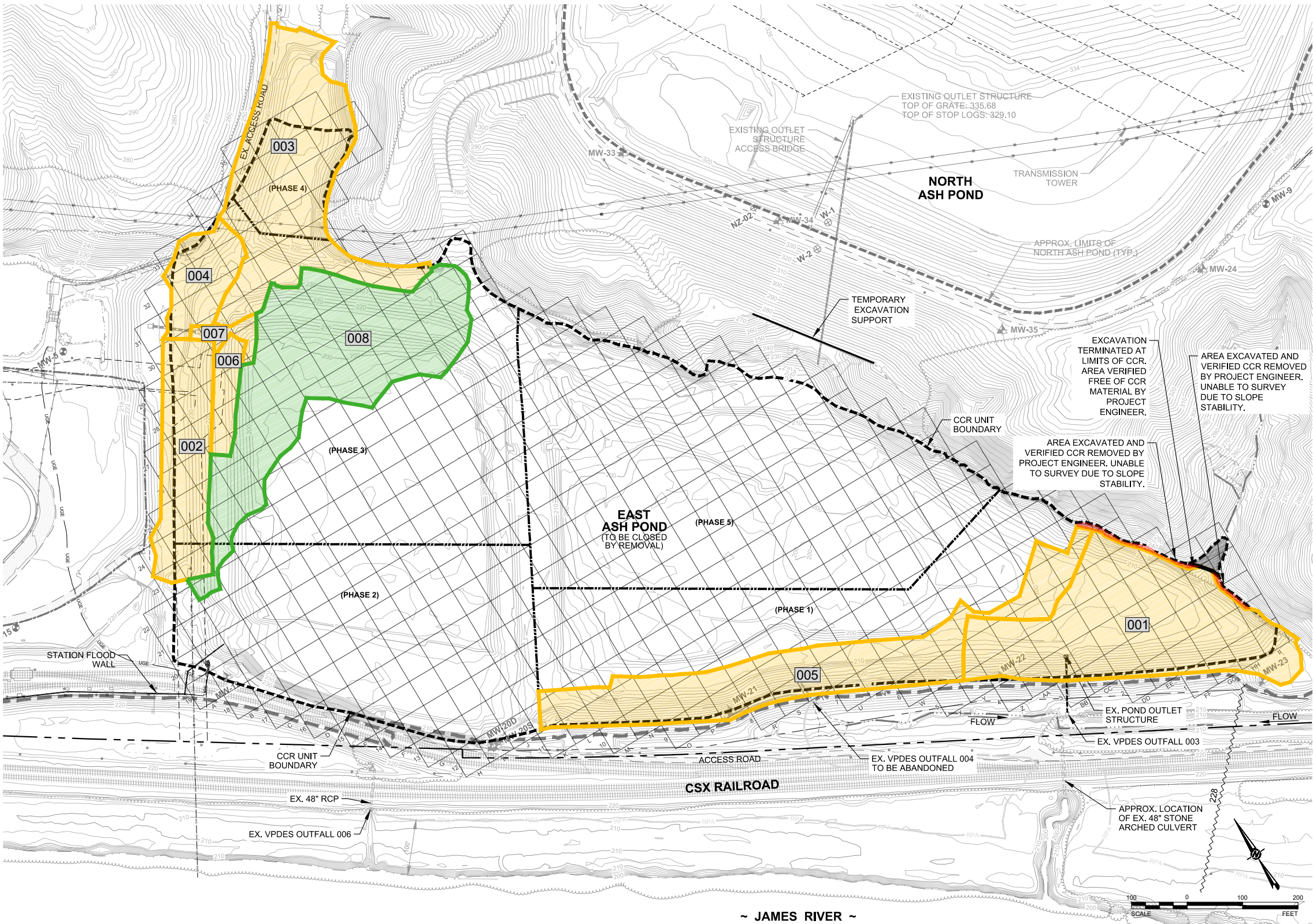
GOLDER ASSOCIATES  
2108 WEST LABURNUM AVENUE  
SUITE 200  
RICHMOND, VA 23227  
(804) 358-7900  
www.golder.com



1 in = 100 FEET (IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D)



Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA\100 - Field Information\Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 008.dwg



## LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN		EXISTING MANHOLE
	APPROX. POND BOTTOM CONTOURS (2' INTERVALS) (SEE GENERAL NOTE 1c)		BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)		APPROXIMATE CLEAN CLOSURE PHASE LIMITS (SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING EXCAVATION AND MAY INCLUDE SUB-PHASES)
	EXISTING UNPAVED ROAD		EXISTING TREE LINE		
	EXISTING RAILROAD		EXISTING FENCE		
	WETLANDS		EXISTING OVERHEAD UTILITY LINE		
			EXISTING UNDERGROUND ELECTRIC LINE		

## GENERAL NOTES

- EXISTING CONDITIONS COMPILED FROM:
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## CLOSURE BY REMOVAL NOTES

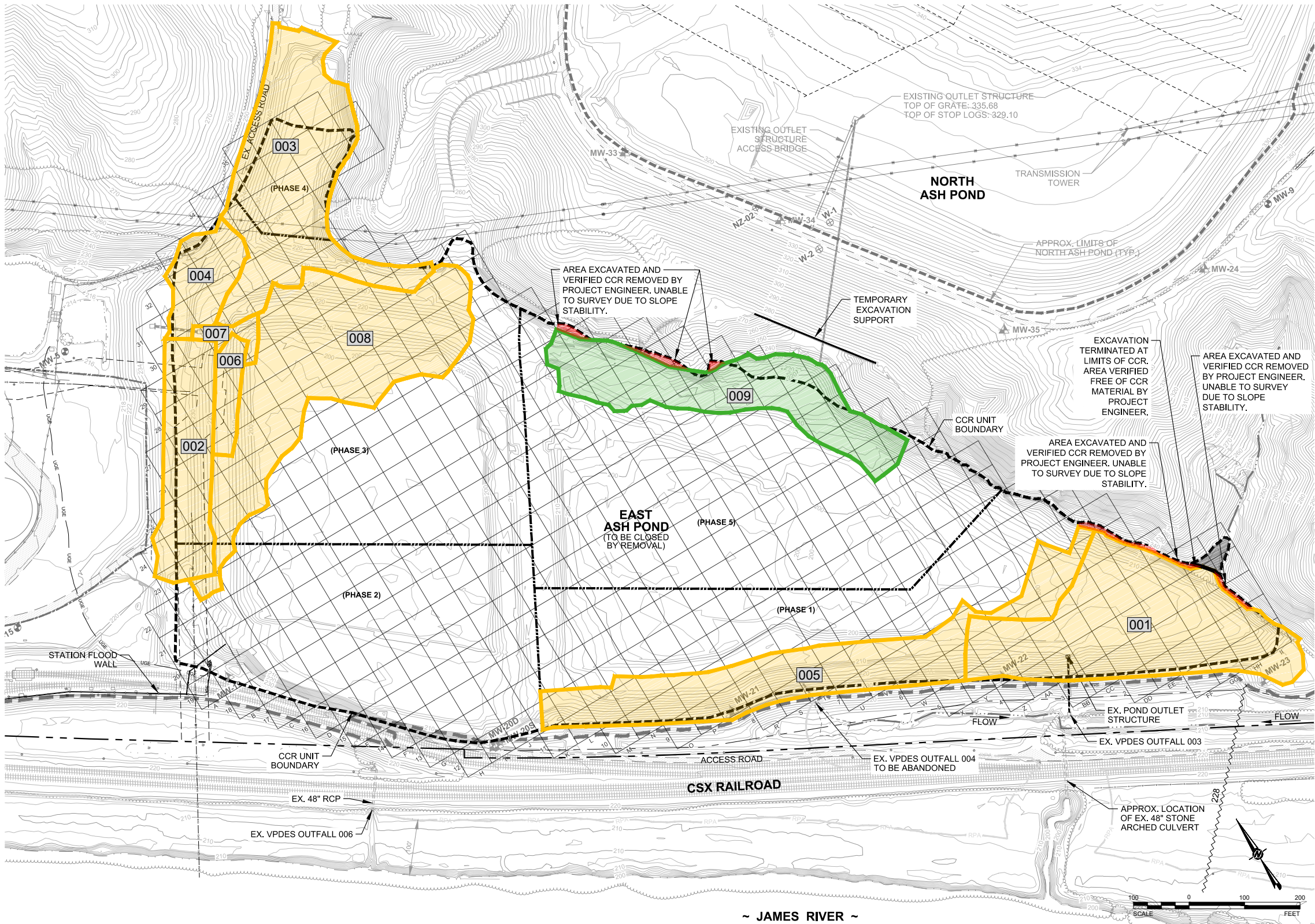
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PROJECT		CLIENT				
CLOSURE BY REMOVAL PLAN		DOMINION ENERGY				
WEST ASH POND & EAST ASH POND		BREM POWER STATION				
SOLID WASTE PERMIT No. 618		FLUVANNA COUNTY, VIRGINIA				
TITLE		CONSULTANT				
EAST ASH POND		GOLDER ASSOCIATES				
VISUAL REMOVAL CERTIFICATION		2108 WEST LABURNUM AVENUE				
CBR FIELD MAP		SUITE 200				
		RICHMOND, VA 23227				
		(804) 358-7900				
		www.golder.com				
PROJECT NO.		0	10/02/18	Area Sketch Map	ATN	ATN
15-20347QA		REV.	MM/DD/YY	DESCRIPTION	DESIGN	CADD
					CHECK	REVIEW

1 in = 100 FEET IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D



Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA\100 - Field Information\Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 003.dwg



LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
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	EXISTING RAILROAD		EXISTING FENCE		
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PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

REV.  
0

FIGURE  
9

CLIENT  
DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

GOLDER ASSOCIATES  
2108 WEST LABURNUM AVENUE  
SUITE 200  
RICHMOND, VA 23227  
(804) 358-7900  
www.golder.com



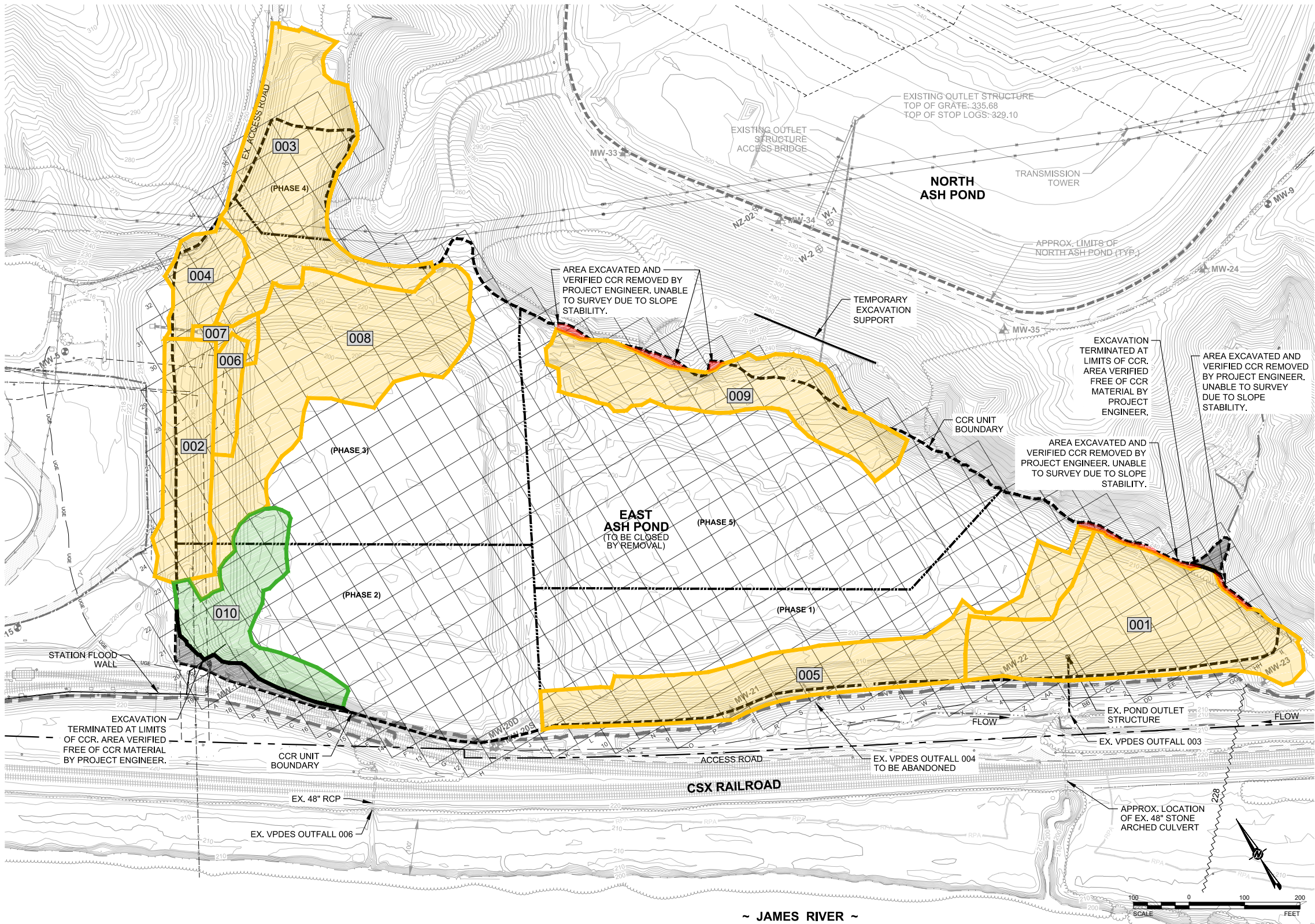
REV. 0  
10/09/18  
Area Sketch Map  
DESCRIPTION

ATN  
ATN  
DESIGN  
CADD  
CHECK  
REVIEW

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



Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA\100 - Field Information\Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 010.dwg



## LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
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PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

REV.  
0

FIGURE  
10

CLIENT  
DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

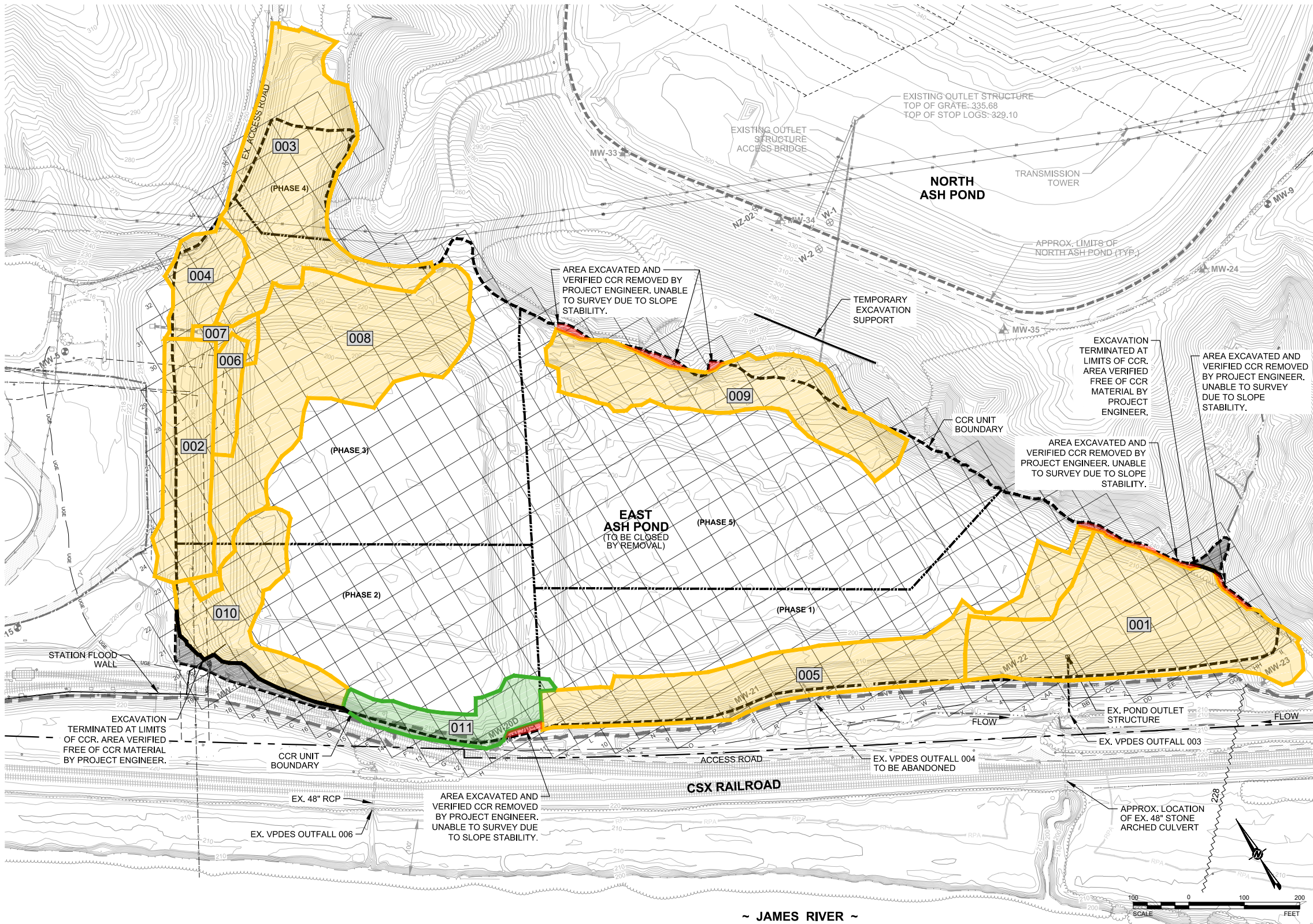
GOLDER ASSOCIATES  
2108 WEST LABURNUM AVENUE  
SUITE 200  
RICHMOND, VA 23227  
(804) 358-7900  
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1 in = 100 FEET  
IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D



Path: G:\Projects\Dominion\Brem15-20347QA Ash Pond COA\100 - Field Information\Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 011.dwg



## LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
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PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

REV.  
0

FIGURE  
11

CLIENT  
DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

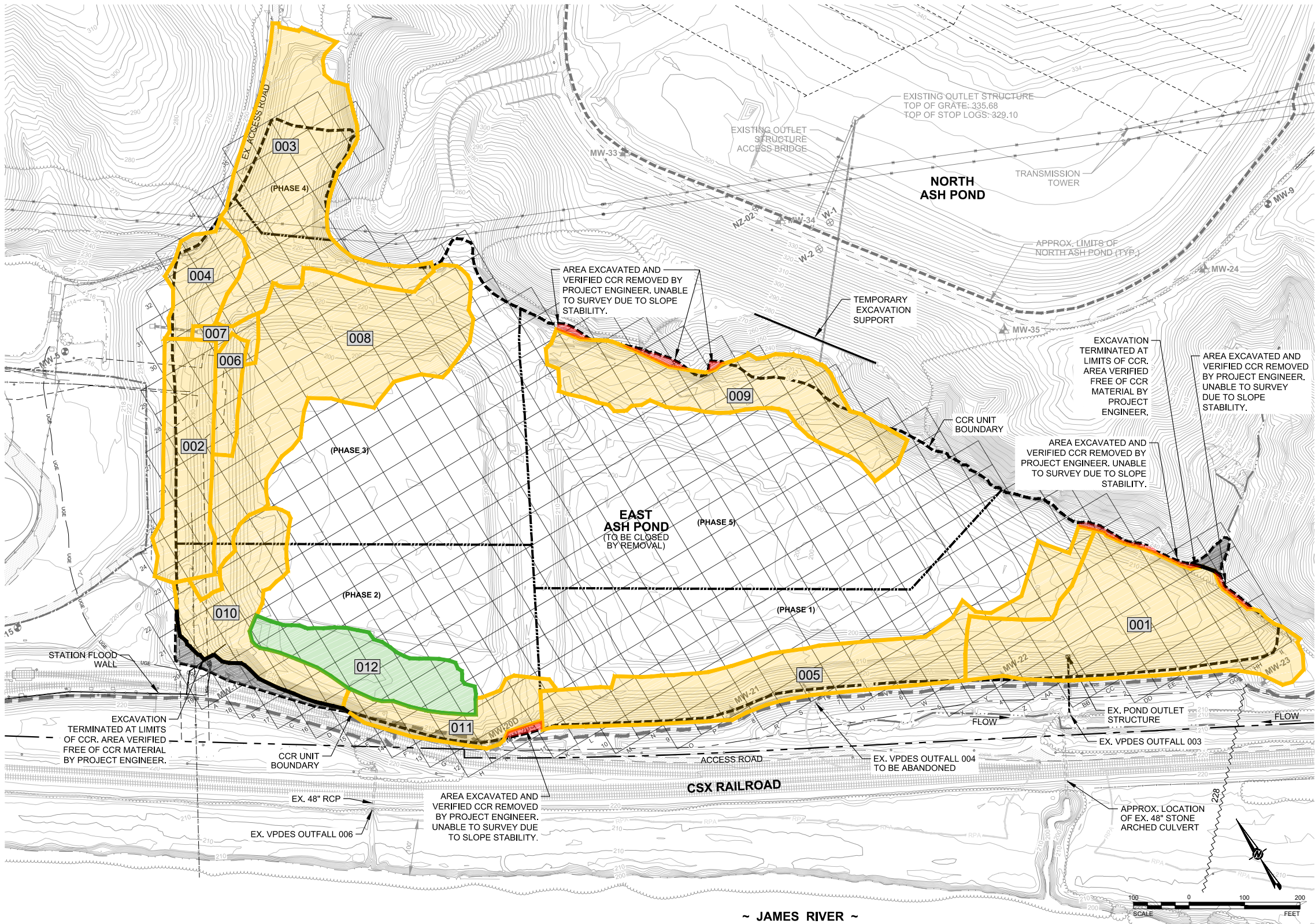
GOLDER ASSOCIATES  
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Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA100 - Field Information\Closure By Removal (CBR)\EAP01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 012.dwg



## LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
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PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

CLIENT

DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

GOLDER ASSOCIATES  
2108 WEST LABURNUM AVENUE  
SUITE 200  
RICHMOND, VA 23227  
(804) 358-7900  
www.golder.com



REV.  
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FIGURE  
12

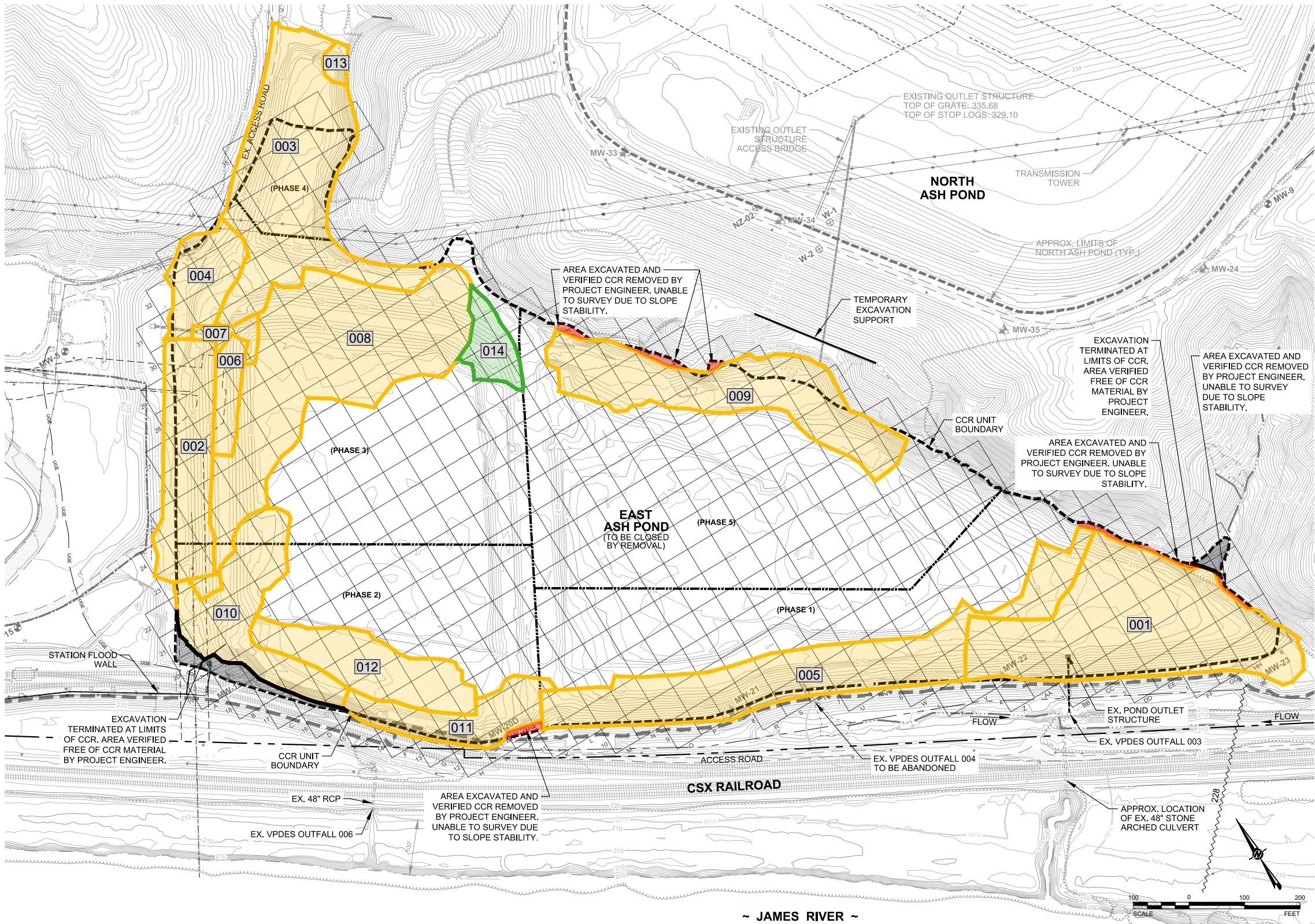
1 in. IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D







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LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		MW-5	EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		NZ-02	EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		MH	EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN			EXISTING MANHOLE
	APPROX. POND BOTTOM CONTOURS (2' INTERVALS) (SEE GENERAL NOTE 1c)		BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)			APPROXIMATE CLEAN CLOSURE PHASE LIMITS (SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING EXCAVATION AND MAY INCLUDE SUB-PHASES)
	EXISTING UNPAVED ROAD		EXISTING TREE LINE			
	EXISTING RAILROAD		EXISTING FENCE			
	WETLANDS		EXISTING OVERHEAD UTILITY LINE			
			EXISTING UNDERGROUND ELECTRIC LINE			

GENERAL NOTES

- EXISTING CONDITIONS COMPILED FROM:
  - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
  - BOUNDARY SURVEY PREPARED BY H&B SURVEYING AND MAPPING, LLC DATED 04/27/15.
  - TOPOGRAPHY WITHIN THE LIMITS OF THE EAST ASH POND BASED ON MONTHLY EXCAVATION SURVEY.
- SITE DATUM: NAD83 / NAVD88
- WETLAND DELINEATION BY DOMINION ENVIRONMENTAL SERVICES ON 01/30/15 & 02/05/15 AND BY GOLDER ASSOCIATES ON 03/16/15 & 03/25/15. WATERS OF THE U.S. CONFIRMED BY THE USACE DURING JUNE 4, 2015 SITE VISIT.
- 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.

CLOSURE BY REMOVAL NOTES

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REV.	MM/DD/YY	DESCRIPTION	ATN	CADD	CHECK	REVIEW
0	01/08/19	Area Sketch Map	ATN			

CLIENT	DOMINION ENERGY BREM POWER STATION FLUVANNA COUNTY, VIRGINIA
CONSULTANT	GOLDER ASSOCIATES 2108 WEST LABURNUM AVENUE SUITE 200 RICHMOND, VA 23227 (804) 358-7900 www.golder.com



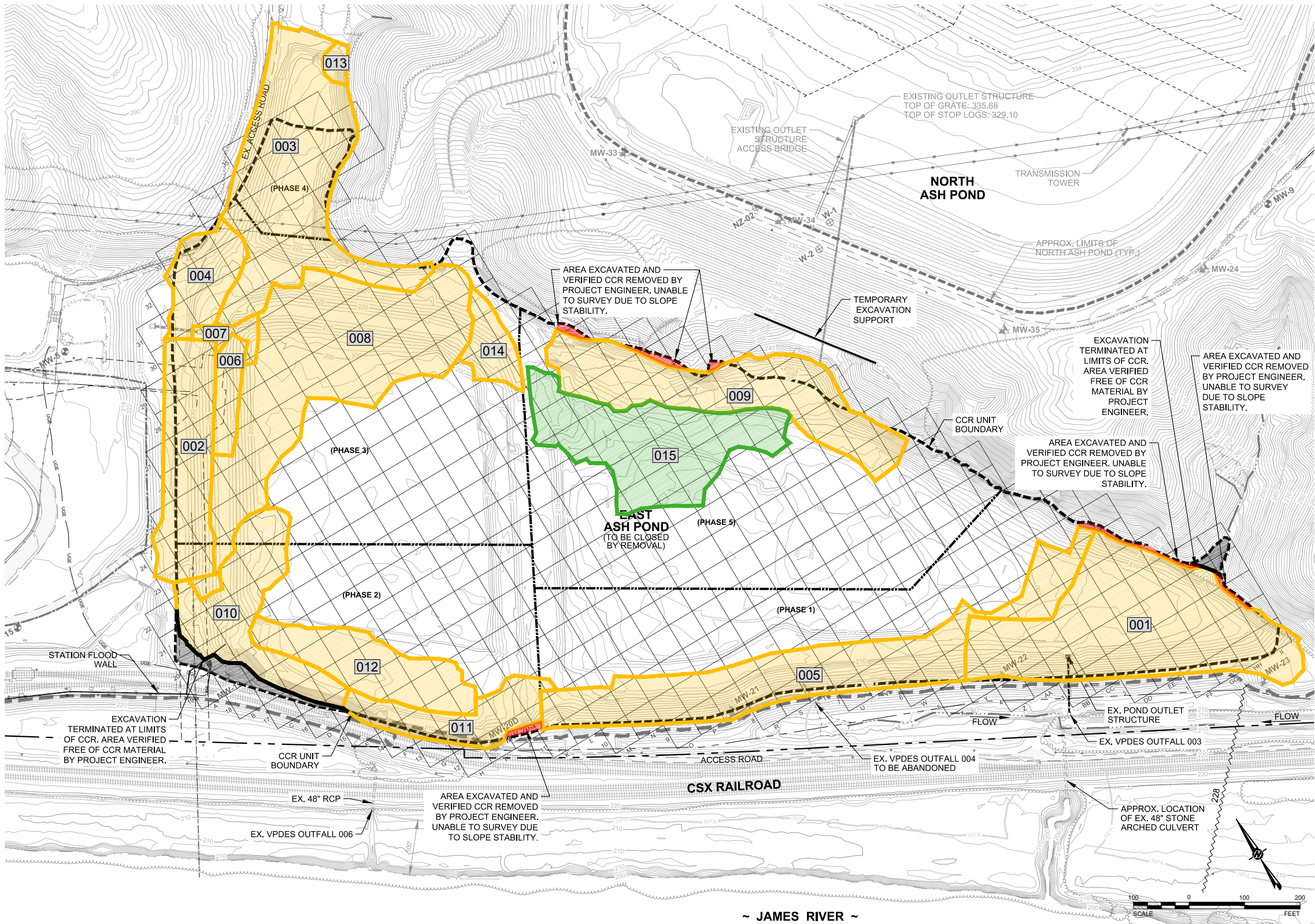
PROJECT	CLOSURE BY REMOVAL PLAN WEST ASH POND & EAST ASH POND SOLID WASTE PERMIT No. 618
TITLE	EAST ASH POND VISUAL REMOVAL CERTIFICATION CBR FIELD MAP
PROJECT NO.	15-20347QA

REV.	0	FIGURE	14
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1 in = 100 FEET IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D



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LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN		EXISTING MANHOLE
	APPROX. POND BOTTOM CONTOURS (2' INTERVALS) (SEE GENERAL NOTE 1c)		BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)		APPROXIMATE CLEAN CLOSURE PHASE LIMITS (SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING EXCAVATION AND MAY INCLUDE SUB-PHASES)
	EXISTING UNPAVED ROAD		EXISTING TREE LINE		
	EXISTING RAILROAD		EXISTING FENCE		
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			EXISTING UNDERGROUND ELECTRIC LINE		

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CLIENT

PROJECT

REV.

0

DOMINION ENERGY

CLOSURE BY REMOVAL PLAN

WEST ASH POND & EAST ASH POND

SOLID WASTE PERMIT No. 618

CONSULTANT

TITLE

FIGURE

15

GOLDER ASSOCIATES

EAST ASH POND

VISUAL REMOVAL CERTIFICATION

CBR FIELD MAP

2108 WEST LABURNUM AVENUE

SUITE 200

RICHMOND, VA 23227

(804) 358-7900

www.golder.com

01/08/19

Area Sketch Map

REV.

MM/DD/YY

DESCRIPTION

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ATN

CADD

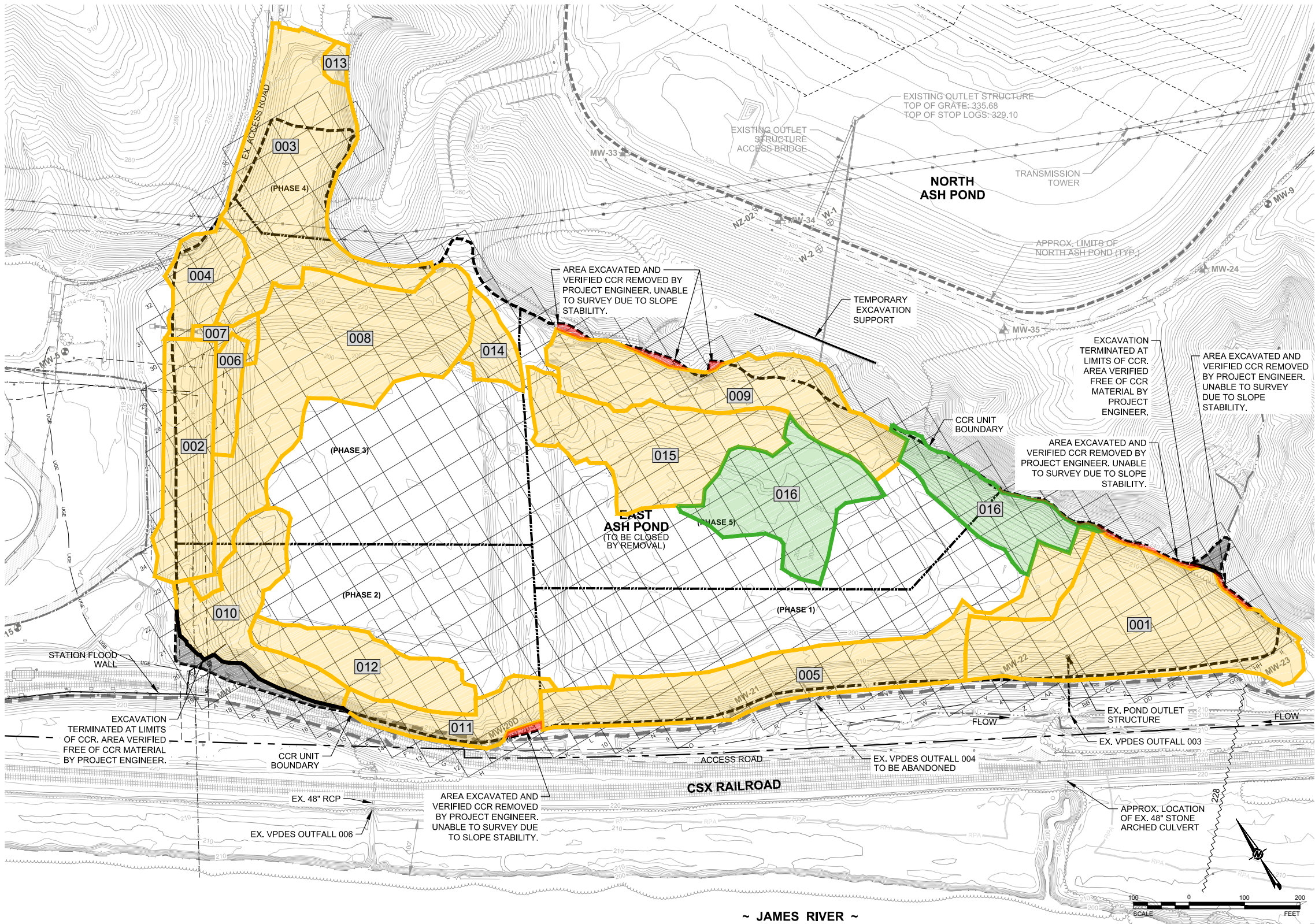
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REVIEW

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LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN		EXISTING MANHOLE
	APPROX. POND BOTTOM CONTOURS (2' INTERVALS) (SEE GENERAL NOTE 1c)		BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)		APPROXIMATE CLEAN CLOSURE PHASE LIMITS (SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING EXCAVATION AND MAY INCLUDE SUB-PHASES)
	EXISTING UNPAVED ROAD		EXISTING TREE LINE		
	EXISTING RAILROAD		EXISTING FENCE		
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CLIENT

PROJECT

REV.

0

DOMINION ENERGY

CLOSURE BY REMOVAL PLAN

WEST ASH POND & EAST ASH POND

SOLID WASTE PERMIT No. 618

CONSULTANT

TITLE

FIGURE

16

GOLDER ASSOCIATES

2108 WEST LABURNUM AVENUE

SUITE 200

RICHMOND, VA 23227

(804) 358-7900

www.golder.com

GOLDER

EAST ASH POND

VISUAL REMOVAL CERTIFICATION

CBR FIELD MAP

PROJECT NO.

15-20347QA

ATN

ATN

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DESIGN

CADD

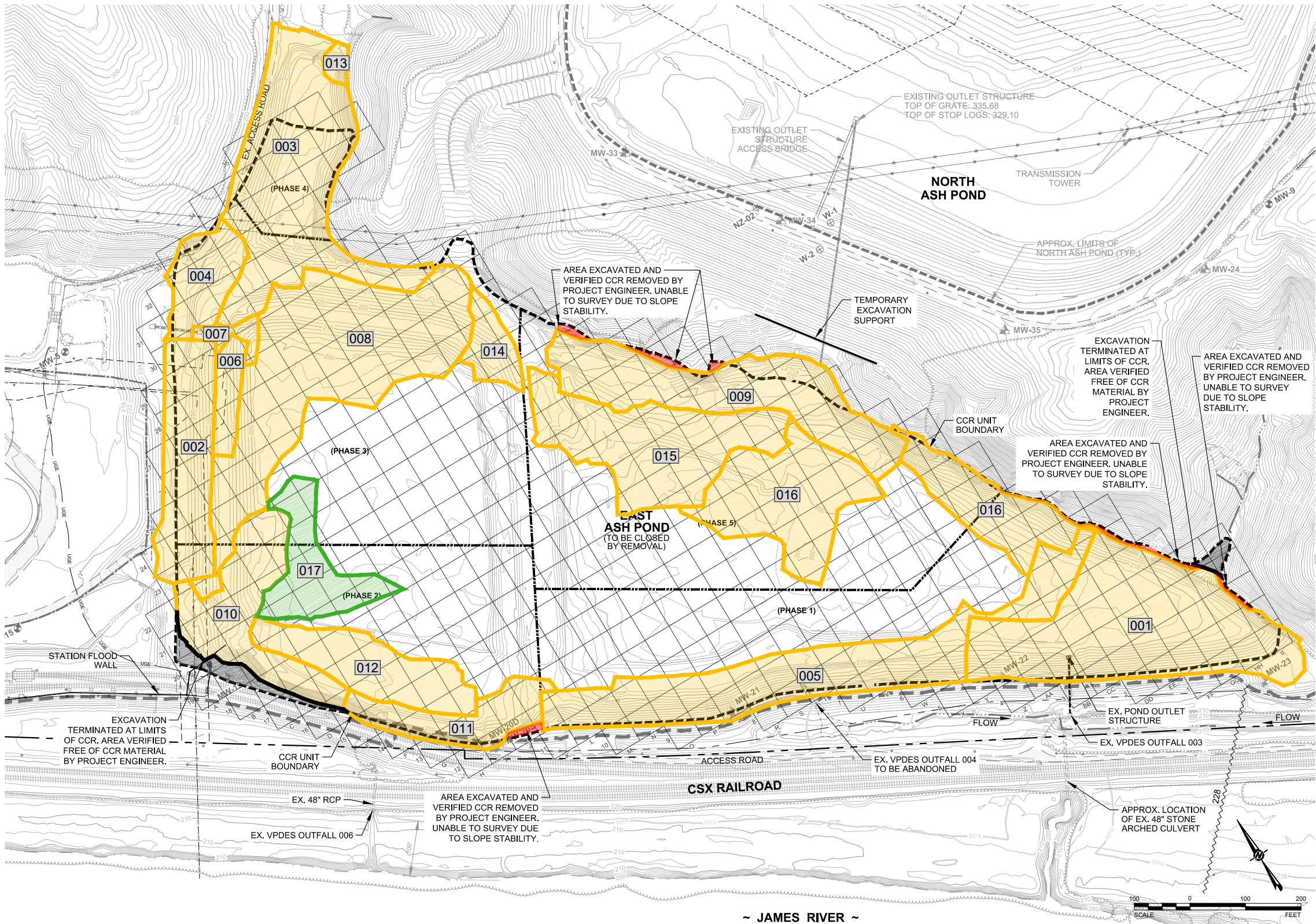
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REVIEW

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## LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		MW-5	EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		NZ-02	EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		MH	EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN			EXISTING MANHOLE
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CLIENT	PROJECT	TITLE	CONSULTANT
DOMINION ENERGY BREM POWER STATION FLUVANNA COUNTY, VIRGINIA	CLOSURE BY REMOVAL PLAN WEST ASH POND & EAST ASH POND SOLID WASTE PERMIT No. 618	EAST ASH POND VISUAL REMOVAL CERTIFICATION CBR FIELD MAP	GOLDER ASSOCIATES 2108 WEST LABURNUM AVENUE SUITE 200 RICHMOND, VA 23227 (804) 358-7900 www.golder.com
REV.	0	01/23/19	Area Sketch Map
REV.	MM/DD/YY	DESCRIPTION	ATN
DESIGN	CADD	CHECK	REVIEW
15-20347QA	FIGURE 17		

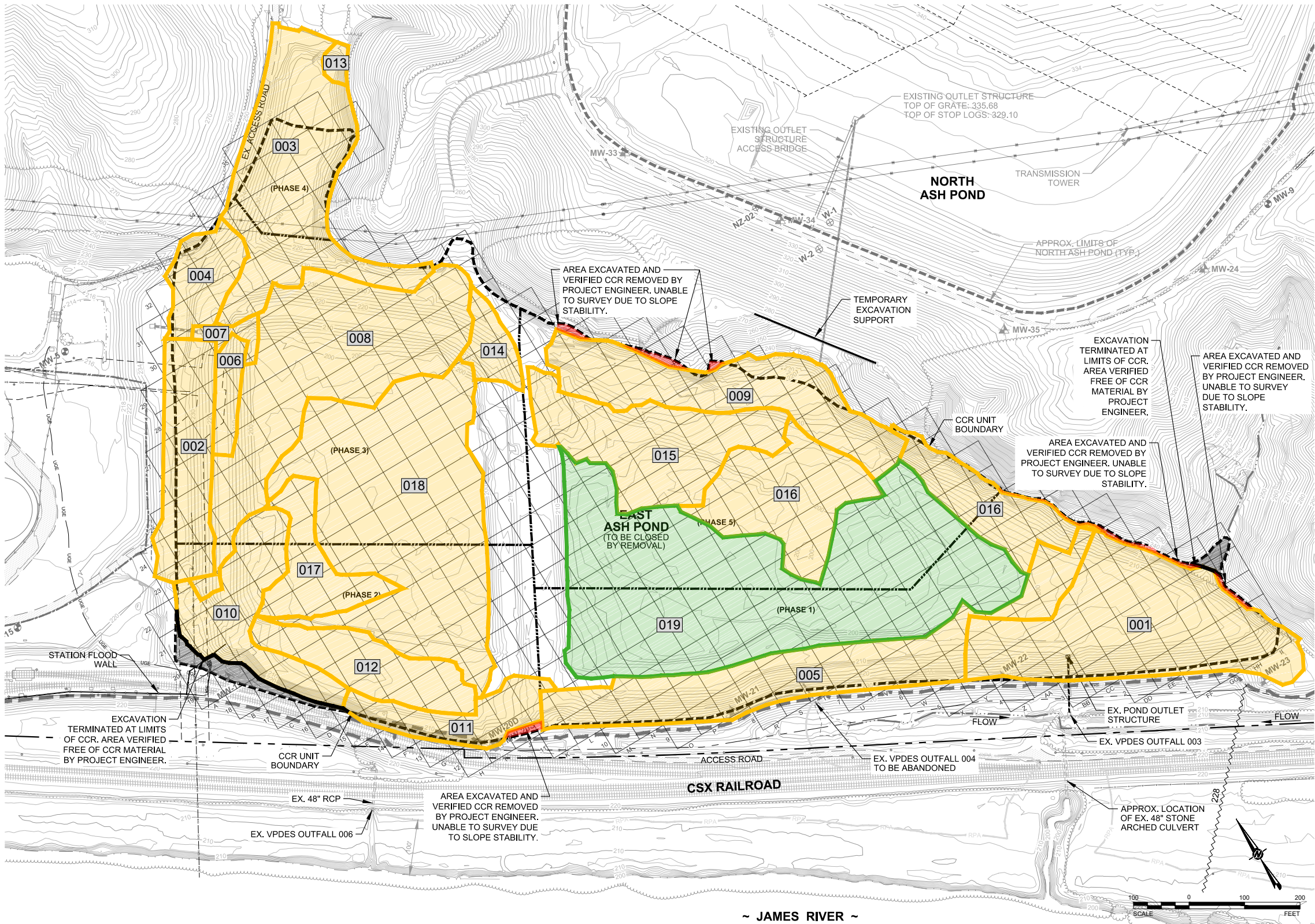
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LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
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CLIENT

PROJECT

REV.

0

DOMINION ENERGY

CLOSURE BY REMOVAL PLAN

WEST ASH POND & EAST ASH POND

SOLID WASTE PERMIT No. 618

CONSULTANT

TITLE

FIGURE

19

GOLDER ASSOCIATES

2108 WEST LABURNUM AVENUE

SUITE 200

RICHMOND, VA 23227

(804) 358-7900

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GOLDER

EAST ASH POND

VISUAL REMOVAL CERTIFICATION

CBR FIELD MAP

PROJECT NO.

15-20347QA

ATN

ATN

ATN

02/06/19

Area Sketch Map

REV.

MM/DD/YY

DESCRIPTION

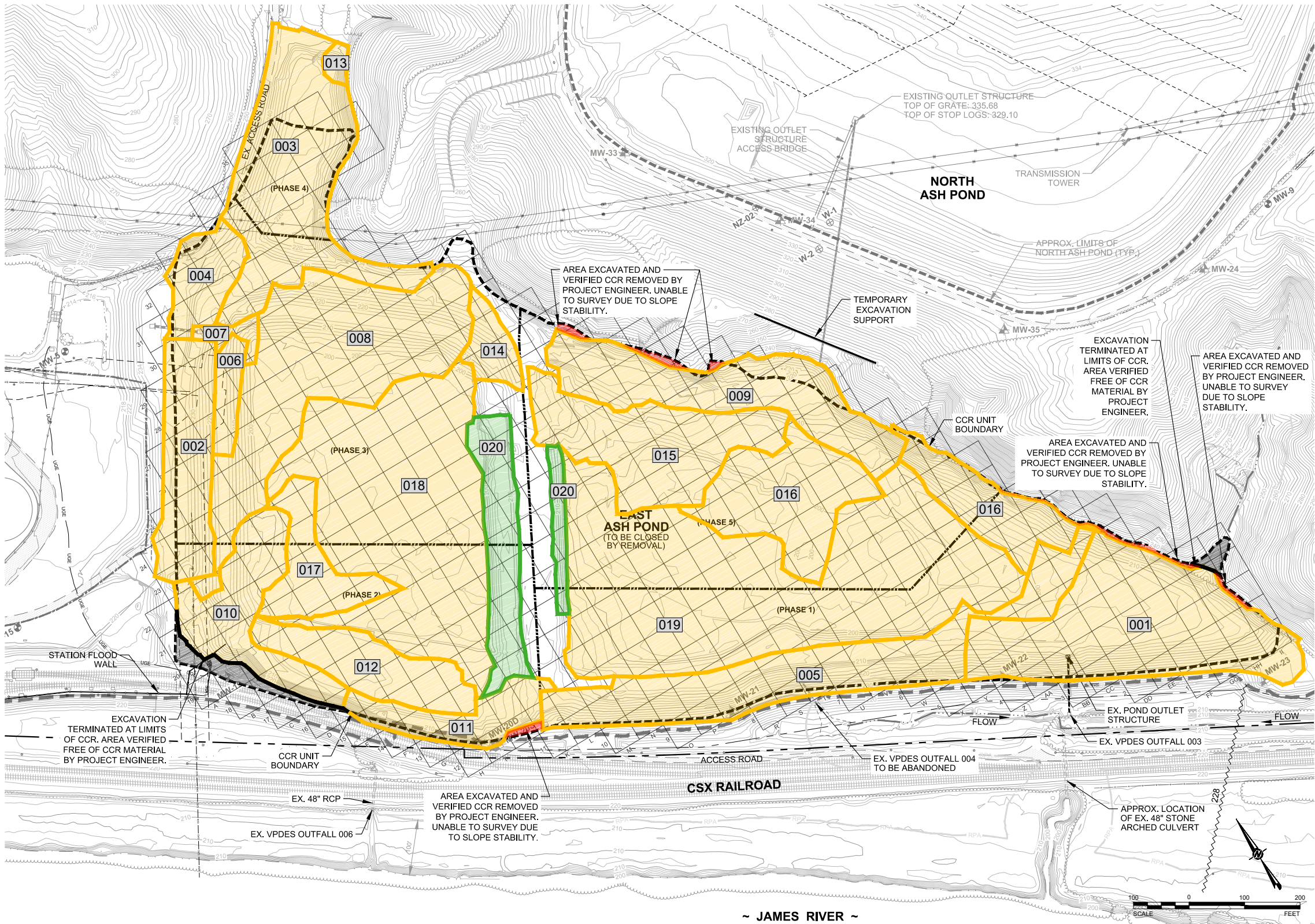
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IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D



Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond Closure By Removal (CBR)\EAP\01 - Visual Removal.dwg - VR Area Sketch Map\EAP - CBR VR Field Map 002.dwg



## LEGEND

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE		EXISTING UNDERGROUND GAS LINE
	ADJACENT PROPERTY BOUNDARY		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)		EXISTING MONITORING WELL LOCATION AND IDENTIFICATION
	CCR UNIT BOUNDARY		APPROXIMATE EDGE OF SURFACE WATER		EXISTING PIEZOMETER AND IDENTIFICATION
	EXISTING TOPOGRAPHIC CONTOURS (2' INTERVALS) (FROM AERIAL SURVEY - SEE GENERAL NOTE 1a)		LIMITS OF 100-YR FLOOD PLAIN		EXISTING MANHOLE
	APPROX. POND BOTTOM CONTOURS (2' INTERVALS) (SEE GENERAL NOTE 1c)		BASE FLOOD ELEVATION (100-YEAR, SEE NOTE 4)		APPROXIMATE CLEAN CLOSURE PHASE LIMITS (SUBJECT TO CHANGE BASED ON FIELD CONDITIONS DURING EXCAVATION AND MAY INCLUDE SUB-PHASES)
	EXISTING UNPAVED ROAD		EXISTING TREE LINE		
	EXISTING RAILROAD		EXISTING FENCE		
	WETLANDS		EXISTING OVERHEAD UTILITY LINE		
			EXISTING UNDERGROUND ELECTRIC LINE		

## GENERAL NOTES

- EXISTING CONDITIONS COMPILED FROM:
  - AERIAL TOPOGRAPHIC SURVEY PREPARED BY MCKENZIE SNYDER, INC., DATE OF AERIAL PHOTO: 1/16/15 [CONTROL PREPARED BY H&B SURVEYING & MAPPING (H&B)]
  - BOUNDARY SURVEY PREPARED BY H&B SURVEYING AND MAPPING, LLC DATED 04/27/15.
  - TOPOGRAPHY WITHIN THE LIMITS OF THE EAST ASH POND BASED ON MONTHLY EXCAVATION SURVEY.
- SITE DATUM: NAD83 / NAVD88
- WETLAND DELINEATION BY DOMINION ENVIRONMENTAL SERVICES ON 01/30/15 & 02/05/15 AND BY GOLDER ASSOCIATES ON 03/16/15 & 03/25/15. WATERS OF THE U.S. CONFIRMED BY THE USACE DURING JUNE 4, 2015 SITE VISIT.
- 100 YEAR FLOOD PLAIN DELINEATION BASED ON FLOOD ELEVATION DATA REPRESENTED ON FEMA FLOOD INSURANCE RATE MAP (FIRM), MAP NUMBER 51065C0260C, EFFECTIVE DATE: 05/16/2008.

## CLOSURE BY REMOVAL NOTES

- TOPOGRAPHY SHOWN WITHIN LIMITS OF THE EAST ASH POND REPRESENTS THE APPROXIMATE BOTTOM BASED ON HISTORIC DRAWINGS AND FIELD INFORMATION. FOR REFERENCE ONLY.
- PHASED CLOSURE OF EAST ASH POND MAY BE SEQUENCED AS NECESSARY TO SUPPORT CONSTRUCTION AND MAY INCLUDE SUB-PHASES FOR REGULATORY APPROVAL TO SUPPORT ACCESS, SLOPE STABILITY, AND MINIMIZE CONTACT STORMWATER AREAS.
- ANY AREA CERTIFIED AS ACHIEVING CLOSURE BY REMOVAL IS TO BE PROTECTED FROM CCR AND CONTACT STORMWATER, AND MAY BE FILLED AND/OR RESHAPED PRIOR TO ACHIEVING FINAL GRADES.
- ACCUMULATED CCR SHALL BE REMOVED FROM SURFACES WITHIN THE POND LIMITS SUCH THAT NO CCR REMAINS VISIBLE.
- FOLLOWING VISUAL-CLEAN CONDITIONS, OVER-EXCAVATE THE REMOVAL FOOTPRINT BY AT LEAST SIX INCHES.
- 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.
- EXCAVATION OF SLOPES STEEPER THAN 2:1 SHALL BE SEQUENCED SUCH THAT THE SLOPES CAN BE EXCAVATED, INSPECTED, AND BACKFILLED IN THE SHORTEST TIME POSSIBLE. BACKFILL SLOPES WITH CLEAN SOIL FILL AT NO STEEPER THAN 2:1.
- EXCAVATED CCR AND SOIL-CCR MIXTURES SHALL BE CONSOLIDATED IN NORTH ASH POND OR TAKEN TO AN OFF-SITE DISPOSAL FACILITY AS DIRECTED BY DOMINION.

PROJECT  
CLOSURE BY REMOVAL PLAN  
WEST ASH POND & EAST ASH POND  
SOLID WASTE PERMIT No. 618

TITLE  
EAST ASH POND  
VISUAL REMOVAL CERTIFICATION  
CBR FIELD MAP

PROJECT NO.  
15-20347QA

REV.  
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FIGURE  
20

CLIENT  
DOMINION ENERGY  
BREM POWER STATION  
FLUVANNA COUNTY, VIRGINIA

CONSULTANT

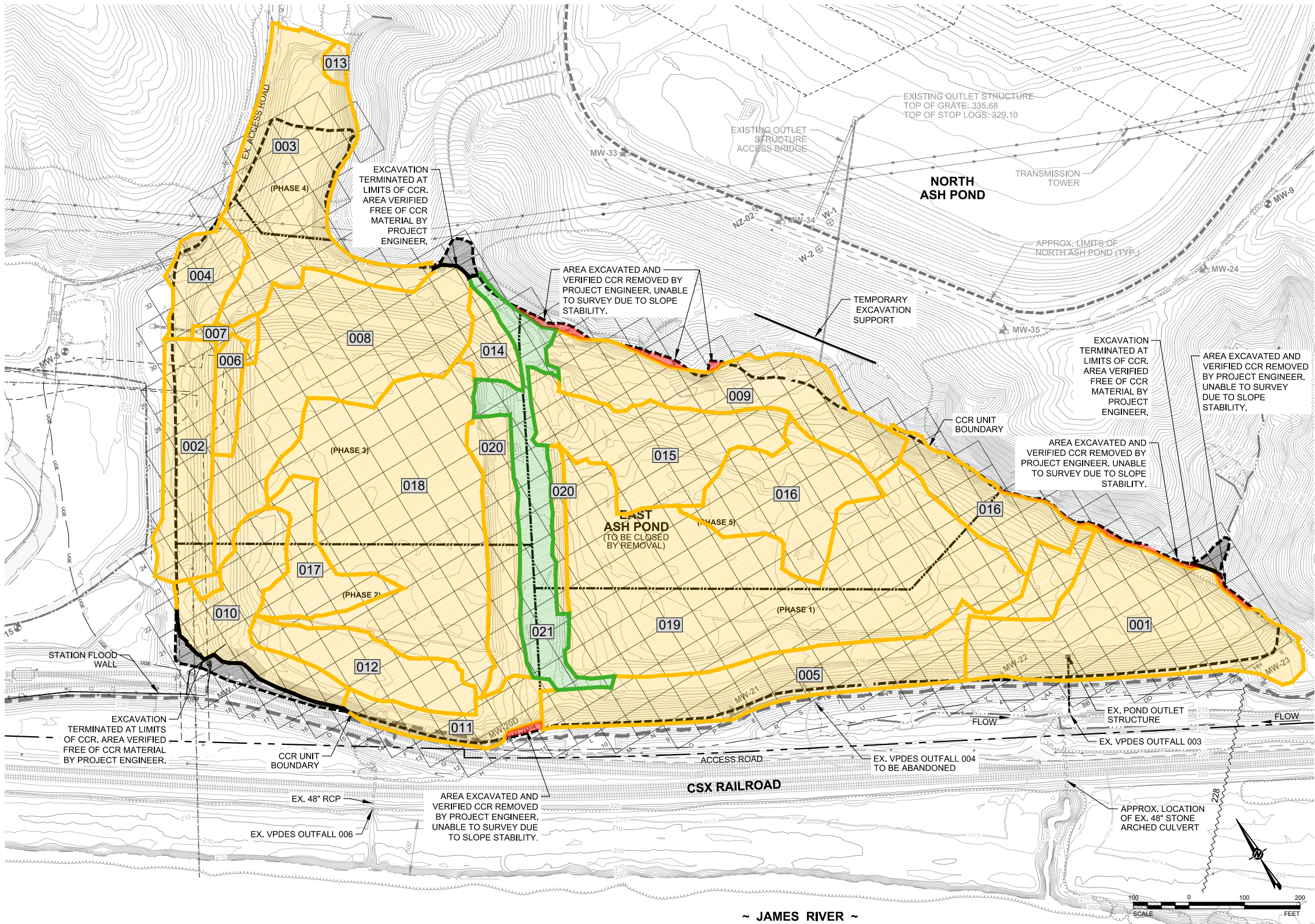
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Path: G:\Projects\Dominion\Brem152-20347QA Ash Pond COA100 - Field Information\Closure By Removal (CBR)\EAP01 - Visual Removal.dwg - VR Area Sketch Map/EAP CBR VR Field Map 001.dwg



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1" = 100' IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM ANSI D