



**Overnight Mail**  
**Return Receipt Requested**

December 15, 2016

Ms. Beverley Carver  
Senior Water Permit Writer  
Virginia Department of Environmental Quality  
Valley Regional Office  
4411 Early Road, Harrisonburg, VA 22801

**RE: Dominion Bremo Power Station VPDES Permit No. VA0004138:**  
**Notice of Planned Change**

Dear Ms. Carver,

As discussed with you during a December 7, 2016 meeting with Dominion Environmental staff, Dominion has decided to close the Bremo Power Station's East Ash Pond by relocation of the ash to the North Ash Pond for permanent storage. This change in the manner of closure necessitates that we make some modifications to our plans for stormwater management, both during and after closure of the East Ash Pond. Our new plan, enclosed, involves a phased approach to ash excavation that will ensure the proper segregation and management of contact and non-contact stormwater throughout the process.

Dominion is submitting this Notice of Planned Change in accordance with Part II.J of the subject permit and requests DEQ concurrence with the modified stormwater management plan.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Please contact Ken Roller at (804) 273-3494 should you have any questions related to this submittal.

Sincerely,

A handwritten signature in cursive script that reads "Paula A. Hamel".

Paula A. Hamel  
Director, Generation Environmental Services

cc: Brandon Kiracofe: [brandon.kiracofe@deq.virginia.gov](mailto:brandon.kiracofe@deq.virginia.gov)  
Beverley Carver: [beverley.carver@deq.virginia.gov](mailto:beverley.carver@deq.virginia.gov)



## EAST ASH POND EXCAVATION STORMWATER MANAGEMENT PHASING PLAN

The East Ash Pond Stormwater Management Phasing Plan was created for stormwater management during the removal and relocation to the North Ash Pond (NAP) of the Coal Combustion Residuals (CCR) from the East Ash Pond (EAP) at the Bremono Power Station. The plan was designed with the following objectives:

- Close the EAP through removal of the CCR and repurpose the area as a stormwater management basin;
- Phase CCR removal activities to maintain separation of the CCR contact water and non-contact water throughout the period of CCR removal from the EAP through the use of separation berms and temporary lined areas (e.g., geomembrane rain cover material);
- Manage CCR contact water within the EAP during construction;
- Pump CCR contact water from areas of the EAP to the Centralized Source Water Treatment System (CSWTS) for treatment;
- Pump non-contact water from areas of the EAP to established permitted outfalls as appropriate;
- Maintain existing Outfall 003 as a non-contact stormwater discharge point until its retirement in the phased plan, and;
- Dismantle and refurbish existing Outfall 003 to become the newly established non-contact stormwater discharge point of Outfall 008.

The following sections provide a narrative description of the phased CCR removal activities and how stormwater (CCR contact and non-contact water) will be managed. The attached series of figures support this narrative description and represent the conceptual construction excavation and stormwater management plans to be implemented.

### Figure 1 - East Ash Pond Excavation Stormwater Management Phasing Plan

Figure 1 depicts an overview of the EAP locations associated with the 5 phases of CCR removal and stormwater management. Phase 1 begins in the southwest corner of the EAP with subsequent phases moving counterclockwise until Phase 5 is complete. Existing non-contact stormwater Outfalls 003 and 006 are depicted on this figure along the southern Dominion property line.

### Figure 2 - Existing Conditions

Figure 2 depicts the six existing drainage areas that will be affected by the phased project, stormwater flow directions, and stormwater type (i.e., CCR contact versus non-contact) for each area based on the existing field conditions pre-construction. As outlined in the figure, stormwater flows from each drainage area as follows:

- Areas A and B drain to the existing Stormwater Management Pond
- Area C infiltrates
- Area D drains to the railroad side ditch



## EAST ASH POND EXCAVATION STORMWATER MANAGEMENT PHASING PLAN

- Area E discharges through Outfall 003
- Area F is pumped to the CSWTS

### Figure 3 - Phase 1 and Phase 2

Figure 3 depicts the result of alternating CCR excavation between Phases 1 and 2 until both phases are complete. An existing non-CCR soil splitter dike will separate the Phase 1 and Phase 2 locations after CCR excavation, and each phase area will be separated into CCR contact and non-contact stormwater management areas by the construction of additional berms using clean fill material. The CCR contact stormwater will be pumped to the CSWTS for treatment prior to discharge through Outfall 002. The non-contact stormwater drainage areas will be temporarily lined, and the collected stormwater will be pumped to Outfall 006 or Outfall 003. Stormwater may also be pumped from one temporary lined area to another for management purposes.

Prior to the initiation of CCR excavation activities, a haul road will be constructed connecting the NAP and the EAP. The road will be graded to contain stormwater that contacts the road. Stormwater from the road will drain into the CCR contact stormwater management area created through Phase 1.

Non-contact stormwater will continue to drain from the existing non-contact drainage areas containing the stump pond and adjacent to the connecting NAP and EAP haul road (Areas A and B, respectively) to the Stormwater Management Pond.

The NAP toe drain water will continue to drain into Area B and ultimately discharge into the Stormwater Management Pond through the existing 24" culvert.

Non-contact stormwater from Area E will continue to drain into the existing non-contact Outfall 003.

### Figure 4 - Phase 3

Figure 4 depicts the result of the CCR excavation in the Phase 3 area. Prior to the Phase 3 CCR excavation, Outfall 003 will be sealed to prohibit discharges during the Phase 3 CCR excavation activities. CCR contact stormwater during excavation will be pumped to the CSWTS for treatment prior to discharge through Outfall 002.

After CCR removal, the newly created non-contact drainage area will be temporarily lined, and the stormwater will be pumped to Outfall 006 or 008 (Outfall 003 to reopen as Outfall 008 post CCR removal). Stormwater may also be pumped from one temporary lined area to another for management purposes. The road's CCR contact stormwater will continue to drain into the CCR contact stormwater management area created through Phase 1. Non-contact stormwater will continue to drain through the existing non-contact drainage areas A and B.



The NAP toe drain water will continue to drain in an existing non-contact drainage area (Area B) and ultimately discharge into the Stormwater Management Pond through the existing 24" culvert.

### Figure 5 - Phase 4

Figure 5 depicts the CCR removal in the Phase 4 area as well as the toe excavation of the NAP. Soil excavated from the NAP toe will be used to shape the final side slopes of the non-contact drainage area created in Phase 1. During excavation activities, CCR contact stormwater will be pumped to the CSWTS to be treated prior to discharge through Outfall 002. After the excavation and CCR removal, the former CCR contact stormwater management areas created by Phases 2 and 3 will be expanded by Phase 4 and become a non-contact drainage area. The northwestern corner will use the existing soil splitter dike as the drainage divide between the CCR contact stormwater management area created by Phase 1 and the non-contact drainage areas to the east of the splitter dike. Stormwater in the non-contact drainage areas may be pumped to Outfall 006 or 008. Stormwater may also be pumped from one temporary lined area to another for management purposes. The road's CCR contact stormwater will continue to drain into the CCR contact stormwater management area created through Phase 1.

Non-contact stormwater will continue to drain through the existing drainage areas A and B.

The NAP toe drain water will cease to drain during excavation of the NAP toe through installation of a series of dewatering wells installed on the NAP embankment. This dewatering water will be routed to the Stormwater Management Pond or CSWTS for treatment prior to discharge.

### Figure 6 - Phase 5

Figure 6 depicts the CCR removal in the Phase 5 area which includes the area known as the Stump Pond. A temporary non-contact water diversion berm will be created prior to the Phase 5 excavation, and the non-contact stormwater from the Stump Pond will be directed to the Stormwater Management Pond, Outfall 006, or Outfall 008 (Outfall 003 to reopen as Outfall 008 post CCR removal). Stormwater may also be pumped from one temporary lined area to another for management purposes. The 24" culvert previously used to drain Area A into the Stormwater Management Pond will be removed as well as the NAP and EAP haul road in part.

During the Phase 5 excavation, clean soil structural fill will be brought in to the NAP embankment to complete the buttress that was excavated as part of Phase 4. Prior to terminating the dewatering operations used during the Phase 4 excavation, the NAP toe drain system will be reconstructed, and a gravity drain system will be installed to collect the toe drain water.



---

## EAST ASH POND EXCAVATION STORMWATER MANAGEMENT PHASING PLAN

---

After CCR removal, temporary liners and their interim berms will be removed along with the splitter dike. Those clean soil fill sources will be used to shape the remainder of the EAP area for repurposing as a stormwater management basin.

### Figure 7 - Final Grading Plan

Figure 7 depicts the final grading plan of the proposed stormwater management basin. When the final grading plan is achieved, the CCR will have been removed from the EAP, the side slopes will have been reconstructed, and non-contact stormwater will be permitted to fill the area and discharge through the newly established Outfall 008. The permanent pool of water retained by the new stormwater management basin will be approximately 15-feet in depth due to the former EAP being an incised excavation. A permanent safety bench will be provided around the perimeter of the basin, and all areas will be stabilized with vegetation. All stormwater flowing into and from the new stormwater management basin will be post construction non-contact water and will discharge through Outfall 008.

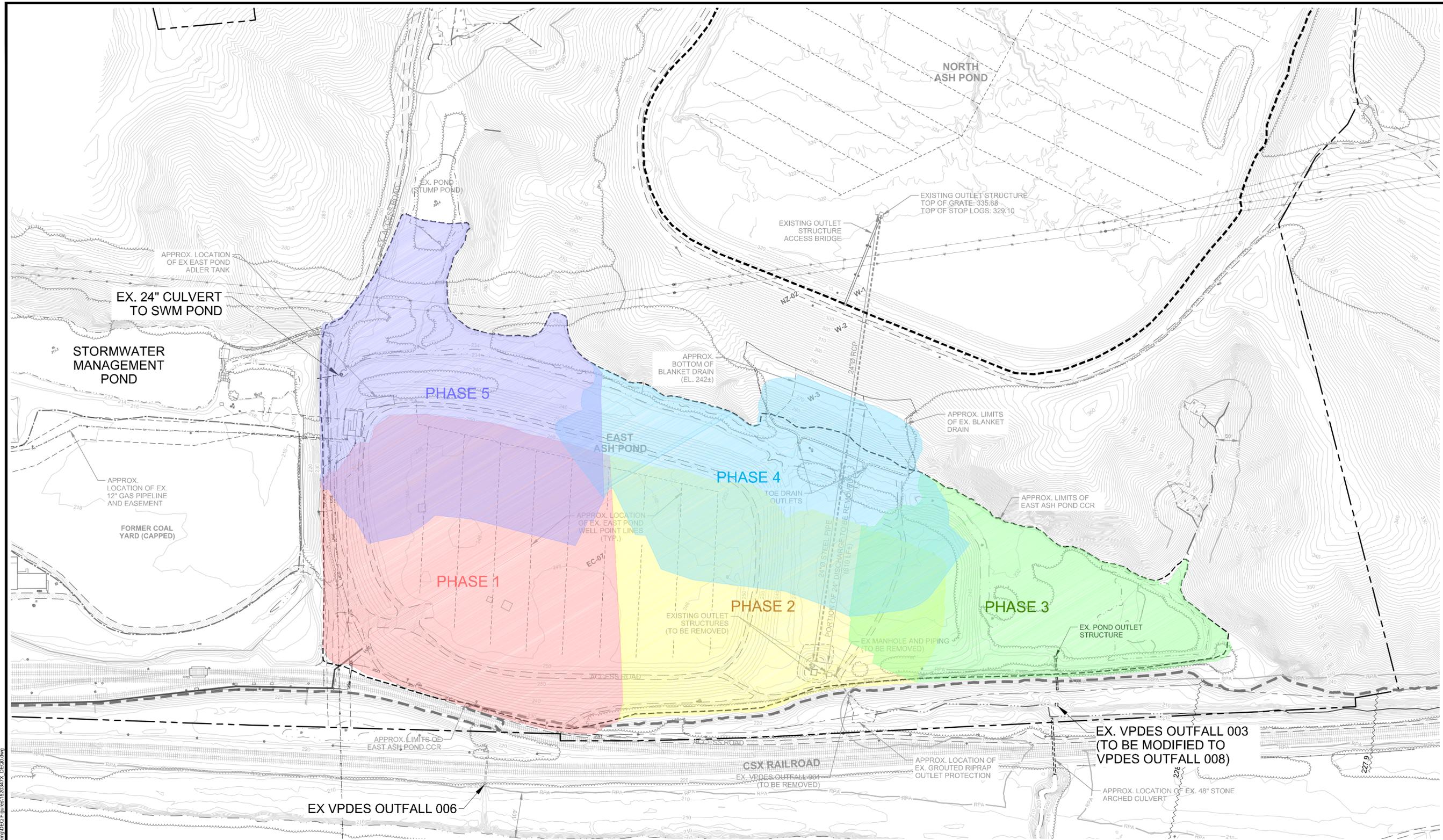
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	R/W

PROJECT  
**DOMINION  
 BREMO POWER STATION  
 EAST ASH POND EXCAVATION PLAN  
 FLUVANNA COUNTY, VIRGINIA**

TITLE  
**EAST ASH POND  
 EXCAVATION  
 STORMWATER  
 MANAGEMENT  
 PHASING PLAN**

PROJECT No.	15-20347
FILE No.	1520347X_DE00
REV. 0	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	
REVIEW	

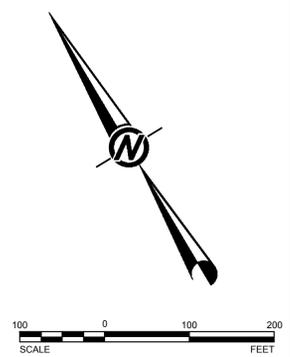
**FIGURE 1**



LEGEND	
	DOMINION PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	APPROX. LIMITS OF EX. ASH PONDS
	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EX. PAVED ROAD
	EX. UNPAVED ROAD
	EX. RAILROAD
	EX. TREE LINE
	EX. FENCE
	EX. OVERHEAD UTILITY LINE
	EX. MANHOLE
	CREEK/STREAM CENTERLINE
	APPROX. EDGE OF SURFACE WATER
	WETLANDS
	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
	LIMITS OF 100-YR FLOOD PLAIN
	BASE FLOOD ELEVATION
	EX. GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
	EX. PIEZOMETER AND IDENTIFICATION
	EX. WELL POINT LINES

**NOTES**

- GROUNDWATER MONITORING WELLS MW-6, 7, 8, 10, 16, 17, AND 18 TO BE ABANDONED AND REMOVED.



G:\Plan Production Data Files\15-20347X - Site Plan Rev0\Civil\_30\Working\DE0 Figures\1520347X\_DE00.dwg

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RW

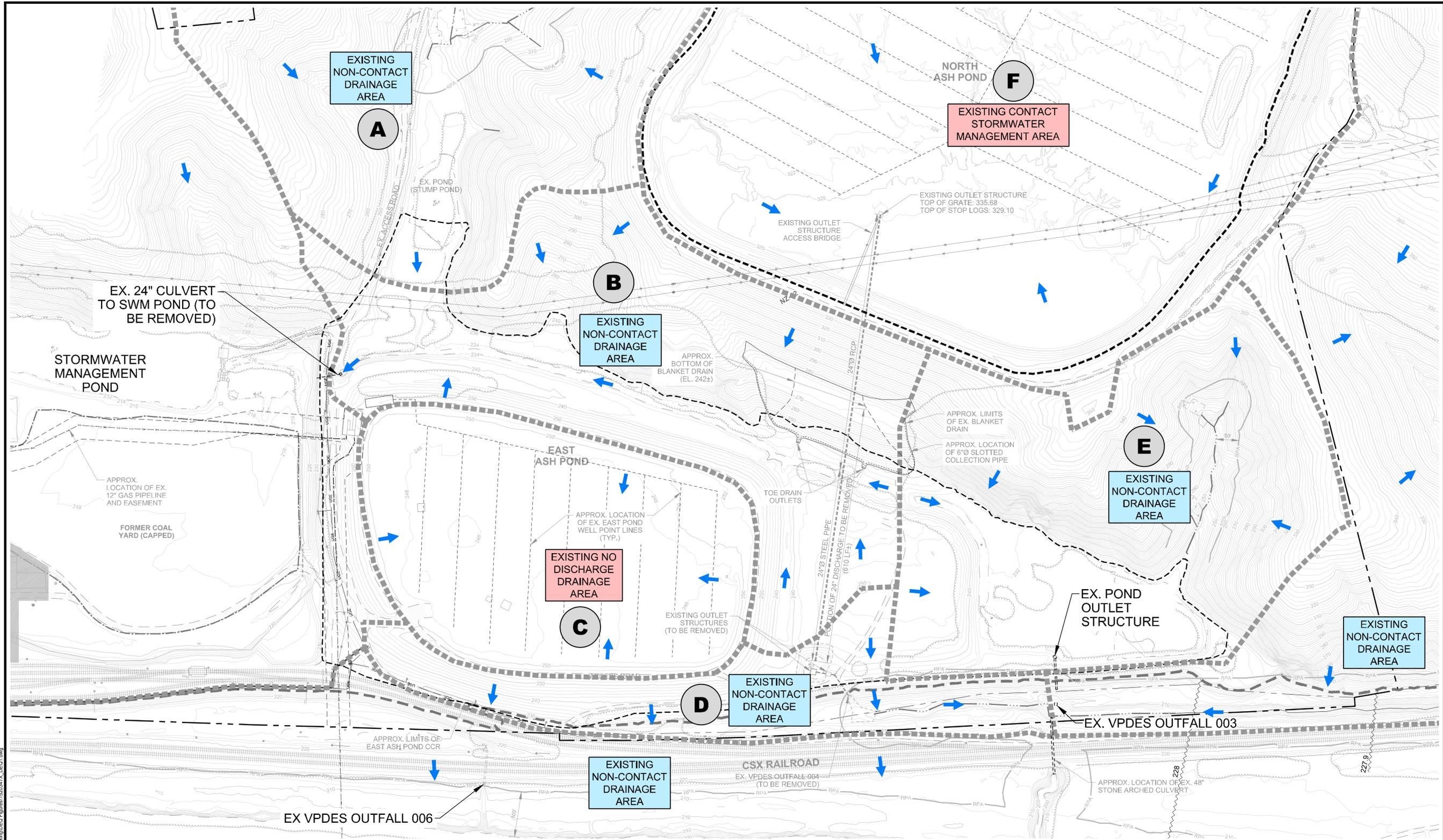
--	--	--	--	--	--	--

PROJECT  
**DOMINION  
 BREMO POWER STATION  
 EAST ASH POND EXCAVATION PLAN  
 FLUVANNA COUNTY, VIRGINIA**

TITLE  
**EXISTING CONDITIONS**

PROJECT No.	15-20347
FILE No.	1520347X_DEG1
REV. 0	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	
REVIEW	

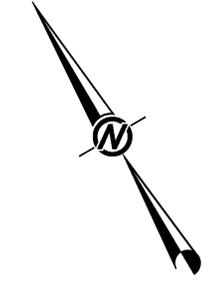
**FIGURE 2**



LEGEND	
	DOMINION PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	APPROX. LIMITS OF EX. ASH PONDS
	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EX. PAVED ROAD
	EX. UNPAVED ROAD
	EX. RAILROAD
	EX. TREE LINE
	EX. FENCE
	EX. OVERHEAD UTILITY LINE
	EX. MANHOLE
	CREEK/STREAM CENTERLINE
	APPROX. EDGE OF SURFACE WATER
	WETLANDS
	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
	LIMITS OF 100-YR FLOOD PLAIN
	BASE FLOOD ELEVATION
	EX. GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
	EX. PIEZOMETER AND IDENTIFICATION
	EX. WELL POINT LINES

**NOTES**

- GROUNDWATER MONITORING WELLS MW-6, 7, 8, 10, 16, 17, AND 18 TO BE ABANDONED AND REMOVED.



G:\Plan Production Data Files\15-20347X - Site Plan Rev\Civil\3d\Working\DEG\Figure1520347X\_DEG1.dwg

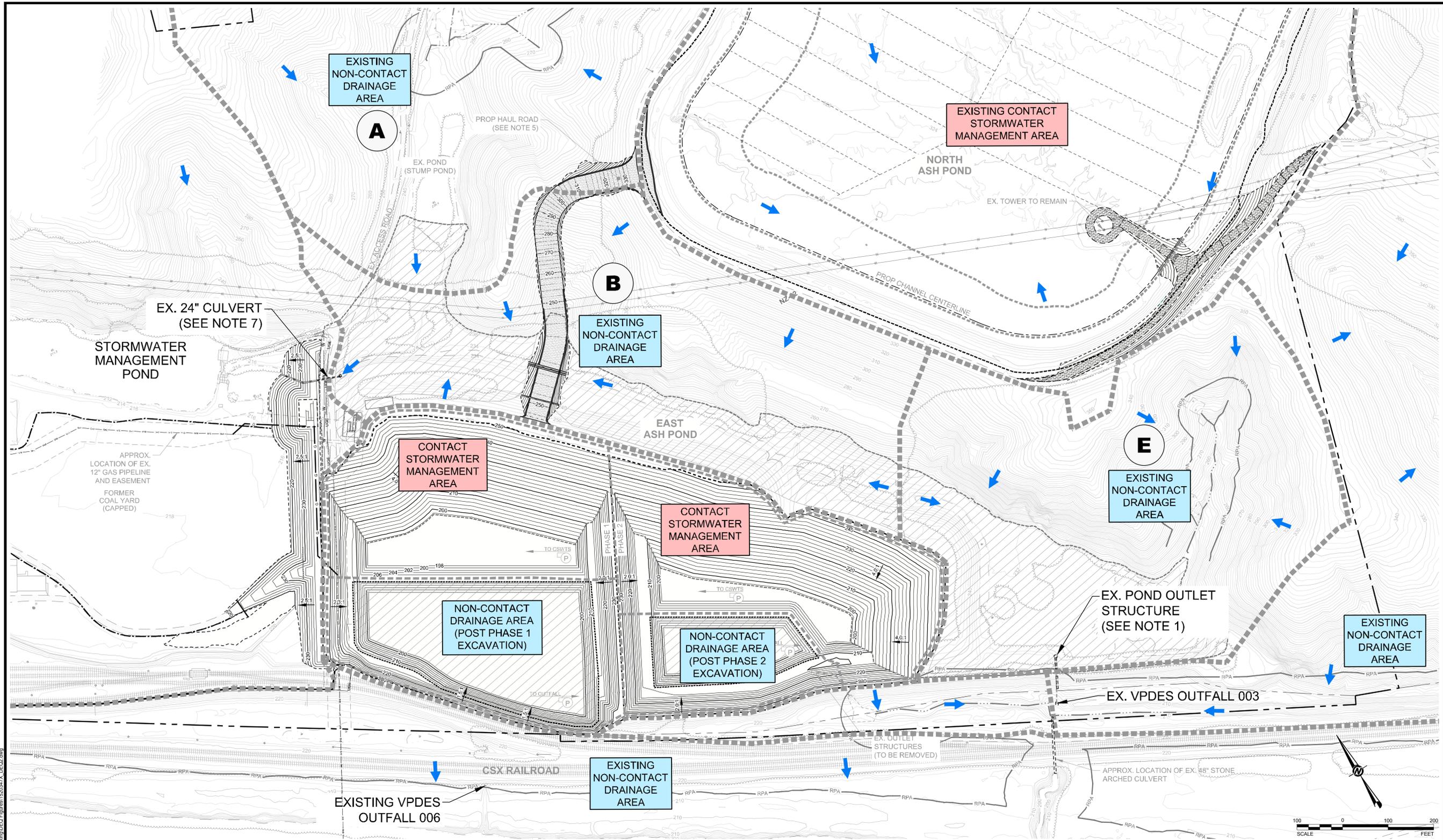
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	R/W

PROJECT
DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

TITLE
EAST ASH POND EXCAVATION PLAN (PHASE 1 & PHASE 2)

PROJECT No.	15-20347	
FILE No.	1520347X_DE02	
REV.	SCALE	AS SHOWN
DESIGN	JRD	11/01/16
CADD	ATN	11/01/16
CHECK		
REVIEW		

**FIGURE 3**



LEGEND	
	DOMINION PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	APPROX. LIMITS OF EX. ASH PONDS
	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EX. PAVED ROAD
	EX. UNPAVED ROAD
	EX. RAILROAD
	EX. TREE LINE
	EX. FENCE
	EX. OVERHEAD UTILITY LINE
	EX. MANHOLE
	CREEK/STREAM CENTERLINE
	APPROX. EDGE OF SURFACE WATER
	WETLANDS
	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
	EX. MONITORING WELL LOCATION AND IDENTIFICATION
	EX. PIEZOMETER AND IDENTIFICATION
	PROP. TREELINE
	PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	PROP. LIMITS OF CHANNEL UNDERCUT

EXCAVATION NOTES	
1. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND SAFETY OF ALL CUT AND FILL SLOPES DURING CONSTRUCTION, WITH ALL SLOPES EXCAVATED IN ACCORDANCE WITH OSHA REQUIREMENTS.	8. EXCAVATED SOIL SLOPES STEEPER THAN 2:1 SHALL BE AT THE CONTRACTOR'S OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
2. TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.	9. EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
3. CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.	10. ALL EXCAVATION SLOPES GREATER THAN 30 VERTICAL FEET SHALL BE PROTECTED FROM EROSION BY BENCHING OR TEMPORARY BERMS WITH DOWNCHUTES UNLESS APPROVED IN WRITING OTHERWISE BY OWNER.
4. RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).	11. ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.
5. EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 SHALL BE AT THE CONTRACTOR'S OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.	
6. EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.	
7. RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).	

NOTES	
1. EXISTING OUTFALL 003 TO REMAIN A NON-CONTACT STORM WATER OUTFALL THROUGH THE PHASE 1 & PHASE 2 EXCAVATION. AREA TO BE PROTECTED FROM CONTACT RUNOFF.	
2. CONTACT STORM WATER RUNOFF TO BE COLLECTED AND SENT TO CENTRALIZED SOURCE WATER TREATMENT SYSTEM (CSWTS).	
3. GAS PIPELINE RELOCATION TO BE SEQUENCED TO MINIMIZE STATION OUTFALL. CONTRACTOR SHALL BE RESPONSIBLE FOR SOIL BERM CONSTRUCTION, PIPE WORKS, AND PIG LAUNCHER BY OTHERS.	
4. PIPELINE TO REMAIN COVERED BY CCR UNTIL CONNECTION OF NEW LINE IS MADE.	
5. SEE DRAWINGS 23 & 24 FOR DETAILS. STORMWATER RUNOFF FROM HAUL ROAD TO BE COLLECTED AND SENT TO CSWTS.	
6. NAP ACCESS ROAD TO PROVIDE ACCESS FOR FILLING OPERATION. PORTION OF RAMP WITHIN LIMITS OF NAP MAY BE CONSTRUCTED OF COMPACTED CCR MATERIAL.	
7. EXISTING 24" CULVERT TO BE EXTENDED WITH 24" HDPE DURING CONSTRUCTION OF GAS PIPELINE BERM. EXTENSION AND EXISTING PIPE TO BE REMOVED PRIOR TO PHASE 5 EXCAVATION.	



G:\Plan Production Data Files\15-20347X - Site Plan Rev\Civil\30\Working\DE0 Figure1520347X\_DE02.dwg

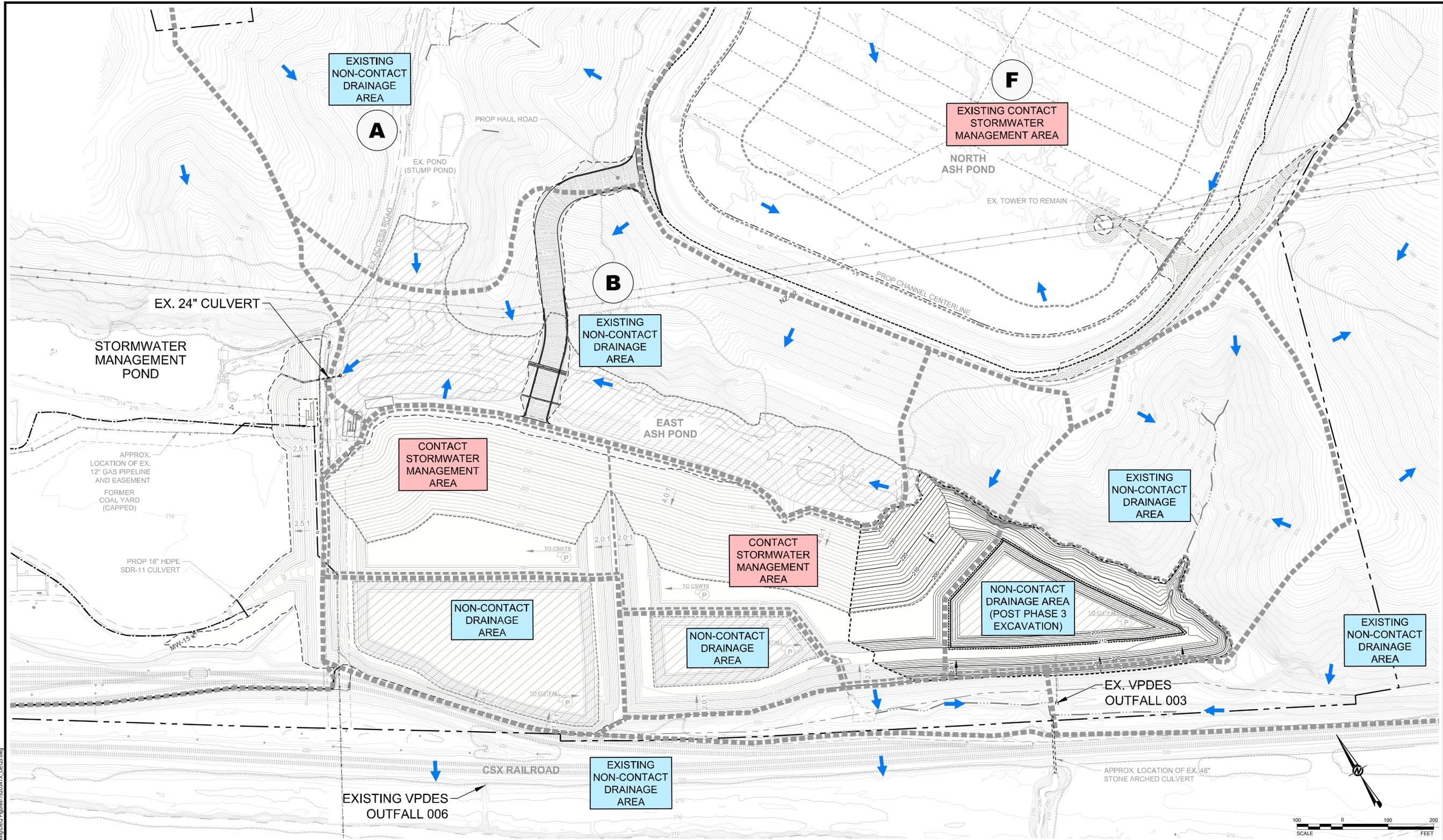
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RW

PROJECT
DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

PROJECT
DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

TITLE
EAST ASH POND EXCAVATION PLAN (PHASE 3)

PROJECT No.	15-20347
FILE No.	1520347X_DE03
REV. 0	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	
REVIEW	



**LEGEND**

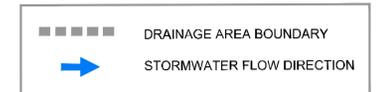
	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE
	ADJACENT PROPERTY BOUNDARY		APPROX. EDGE OF SURFACE WATER
	APPROX. LIMITS OF EX. ASH PONDS		WETLANDS
	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
	EX. PAVED ROAD		EX. MONITORING WELL LOCATION AND IDENTIFICATION
	EX. UNPAVED ROAD		EX. PIEZOMETER AND IDENTIFICATION
	EX. RAILROAD		PROP. TREELINE
	EX. TREE LINE		PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EX. FENCE		PROP. LIMITS OF CHANNEL UNDERCUT
	EX. OVERHEAD UTILITY LINE		
	EX. MANHOLE		

**EXCAVATION NOTES**

- CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND SAFETY OF ALL CUT AND FILL SLOPES DURING CONSTRUCTION, WITH ALL SLOPES EXCAVATED IN ACCORDANCE WITH OSHA REQUIREMENTS.
- TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
- CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
- EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 SHALL BE AT THE CONTRACTOR'S OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
- EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).
- EXCAVATED SOIL SLOPES STEEPER THAN 2:1 SHALL BE AT THE CONTRACTOR'S OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
- EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
- ALL EXCAVATION SLOPES GREATER THAN 30 VERTICAL FEET SHALL BE PROTECTED FROM EROSION BY BENCHING OR TEMPORARY BERMS WITH DOWNCHUTES UNLESS APPROVED IN WRITING OTHERWISE BY OWNER.
- ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

**NOTES**

- OUTLET STRUCTURE TO BE SEALED WITH TEMPORARY PLUG PRIOR TO PHASE 3 EXCAVATION.



**FIGURE 4**

G:\Plan Production Data Files\15-20347X - Site Plan Rev\Civil 3d\Working\DE03\Figure1520347X\_DE03.dwg

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RW

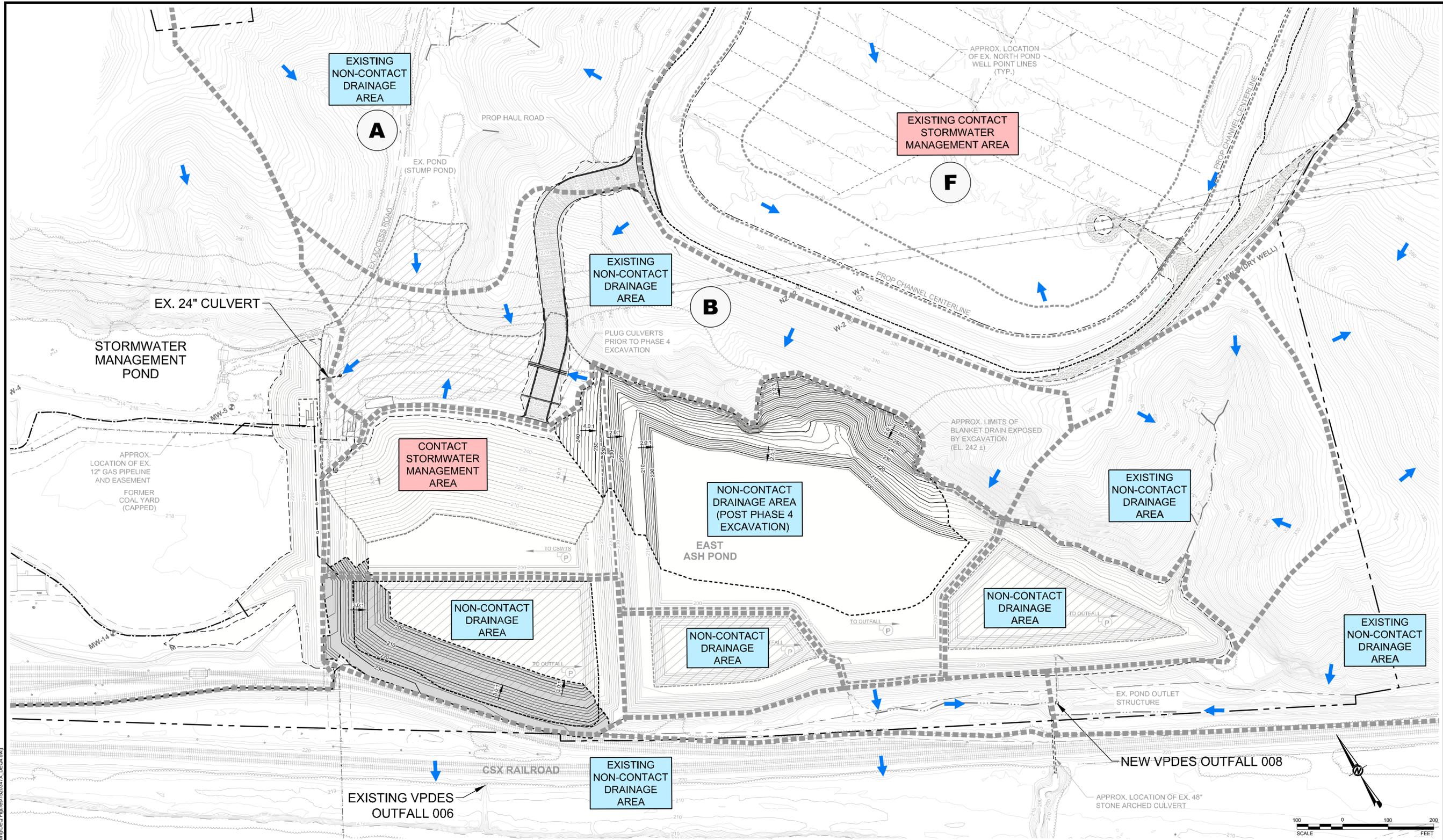
PROJECT
DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

PROJECT
DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

TITLE
EAST ASH POND EXCAVATION PLAN (PHASE 4)

PROJECT No.	15-20347
FILE No.	1520347X_DE04
REV. 0	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	
REVIEW	

**FIGURE 5**



LEGEND	
	DOMINION PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	APPROX. LIMITS OF EX. ASH PONDS
	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EX. PAVED ROAD
	EX. UNPAVED ROAD
	EX. RAILROAD
	EX. TREE LINE
	EX. FENCE
	EX. OVERHEAD UTILITY LINE
	EX. MANHOLE
	CREEK/STREAM CENTERLINE
	APPROX. EDGE OF SURFACE WATER
	WETLANDS
	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
	EX. MONITORING WELL LOCATION AND IDENTIFICATION
	EX. PIEZOMETER AND IDENTIFICATION
	PROP. TREELINE
	PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	PROP. LIMITS OF CHANNEL UNDERCUT

- ### EXCAVATION NOTES
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND SAFETY OF ALL CUT AND FILL SLOPES DURING CONSTRUCTION, WITH ALL SLOPES EXCAVATED IN ACCORDANCE WITH OSHA REQUIREMENTS.
  - TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
  - CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
  - RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
  - EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 SHALL BE AT THE CONTRACTORS OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
  - EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
  - RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).
  - EXCAVATED SOIL SLOPES STEEPER THAN 2:1 SHALL BE AT THE CONTRACTORS OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
  - EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL BE HAVE OWNER'S WRITTEN APPROVAL.
  - ALL EXCAVATION SLOPES GREATER THAN 30 VERTICAL FEET SHALL BE PROTECTED FROM EROSION BY BENCHING OR TEMPORARY BERMS WITH DOWNCHUTES UNLESS APPROVED IN WRITING OTHERWISE BY OWNER.
  - ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

- ### NOTES
- DRAINAGE AREA BOUNDARY
  - STORMWATER FLOW DIRECTION

G:\Plan Production Data\Final\Drawing Data Files\15-20347X - Site Plan Rev0\Civil\_3d\Working\DE04\Figure1520347X\_DE04.dwg

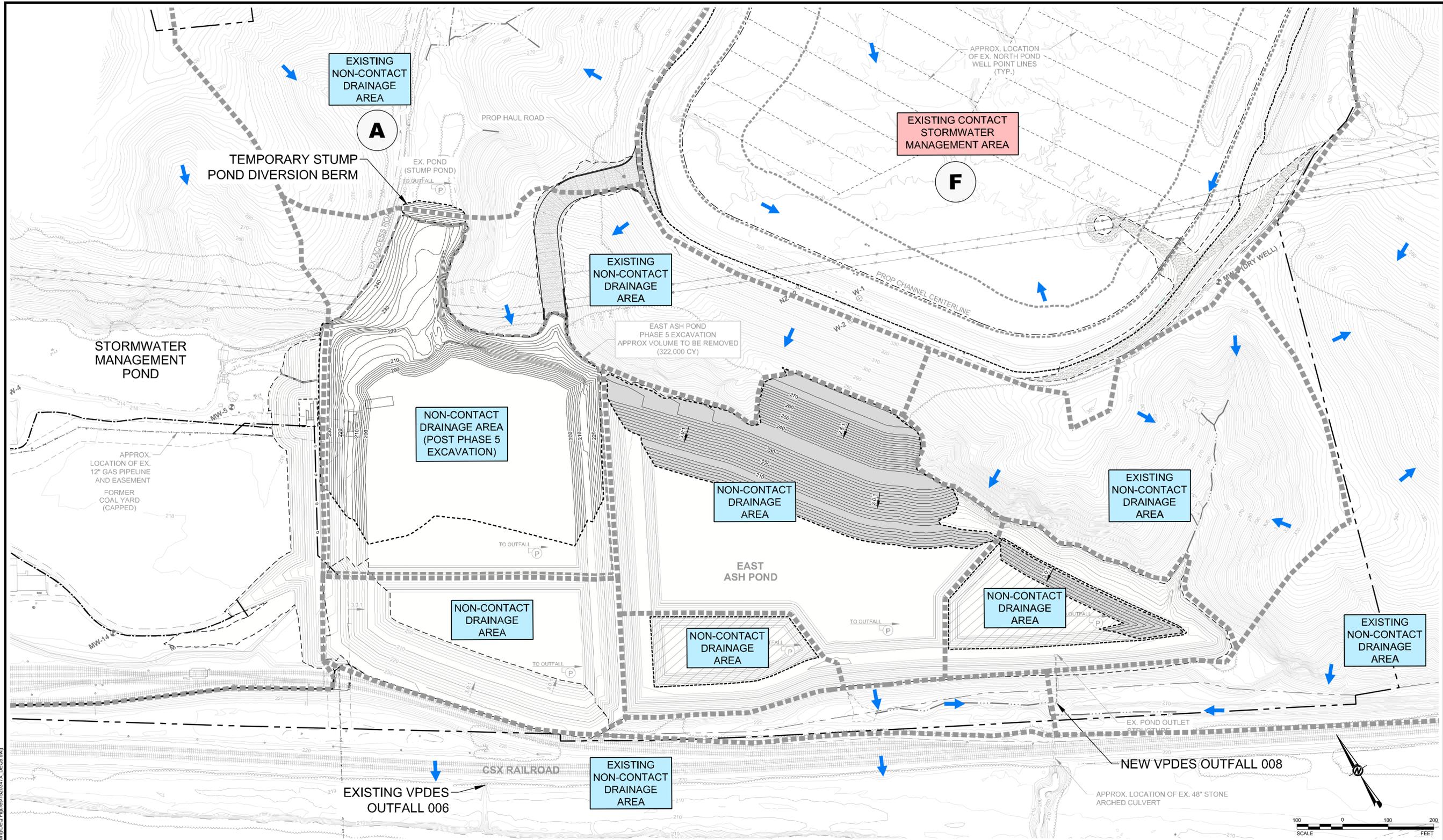
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RW

PROJECT
DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

PROJECT
DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

TITLE
EAST ASH POND EXCAVATION PLAN (PHASE 5)

PROJECT No.	15-20347
FILE No.	1520347X_DE05
REV. 0	SCALE AS SHOWN
DESIGN	JRD 11/01/16
CADD	ATN 11/01/16
CHECK	
REVIEW	



LEGEND	
	DOMINION PROPERTY BOUNDARY
	ADJACENT PROPERTY BOUNDARY
	APPROX. LIMITS OF EX. ASH PONDS
	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EX. PAVED ROAD
	EX. UNPAVED ROAD
	EX. RAILROAD
	EX. TREE LINE
	EX. FENCE
	EX. OVERHEAD UTILITY LINE
	EX. MANHOLE
	CREEK/STREAM CENTERLINE
	APPROX. EDGE OF SURFACE WATER
	WETLANDS
	LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
	EX. MONITORING WELL LOCATION AND IDENTIFICATION
	EX. PIEZOMETER AND IDENTIFICATION
	PROP. TREELINE
	PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	PROP. LIMITS OF CHANNEL UNDERCUT

EXCAVATION NOTES	
1.	CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY AND SAFETY OF ALL CUT AND FILL SLOPES DURING CONSTRUCTION. WITH ALL SLOPES EXCAVATED IN ACCORDANCE WITH OSHA REQUIREMENTS.
2.	TEMPORARY GRADES SHOWN ON THE PHASED EXCAVATION DRAWINGS ARE ESTIMATED LIMITS AND SHOULD NOT BE TAKEN AS ENGINEERED SLOPES.
3.	CONTRACTOR SHALL PROVIDE ADEQUATE DEWATERING TO MAINTAIN SLOPE STABILITY AT ALL TIMES.
4.	RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR CCR MATERIALS SHALL BE 4 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 4:1).
5.	EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 SHALL BE AT THE CONTRACTORS OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
6.	EXCAVATED CCR MATERIAL SLOPES STEEPER THAN 4:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL HAVE OWNER'S WRITTEN APPROVAL.
7.	RECOMMENDED MAXIMUM EXCAVATION SLOPES FOR SOIL MATERIALS SHALL BE 2 FEET HORIZONTAL TO 1 FOOT VERTICAL (I.E., 2:1).
8.	EXCAVATED SOIL SLOPES STEEPER THAN 2:1 SHALL BE AT THE CONTRACTORS OWN RISK AND SHALL NOT BE LEFT UNMONITORED FOR MOVEMENT FOR MORE THAN 14 CALENDAR DAYS.
9.	EXCAVATED SOIL SLOPES STEEPER THAN 2:1 LEFT FOR MORE THAN 14 CALENDAR DAYS SHALL BE HAVE OWNER'S WRITTEN APPROVAL.
10.	ALL EXCAVATION SLOPES GREATER THAN 30 VERTICAL FEET SHALL BE PROTECTED FROM EROSION BY BENCHING OR TEMPORARY BERMS WITH DOWNCHUTES UNLESS APPROVED IN WRITING OTHERWISE BY OWNER.
11.	ALL FINAL SOIL SLOPES SHALL BE LEFT NO STEEPER THAN 3:1 UNLESS APPROVED IN WRITING BY OWNER.

NOTES	
1.	24" PIPE AND RISER TO BE REMOVED.

	DRAINAGE AREA BOUNDARY
	STORMWATER FLOW DIRECTION

G:\Plan Production Data\Drawings Data Files\15-20347X - Site Plan Rev\Civil 3d\Working\DE05\Figure1520347X\_DE05.dwg

**FIGURE 6**

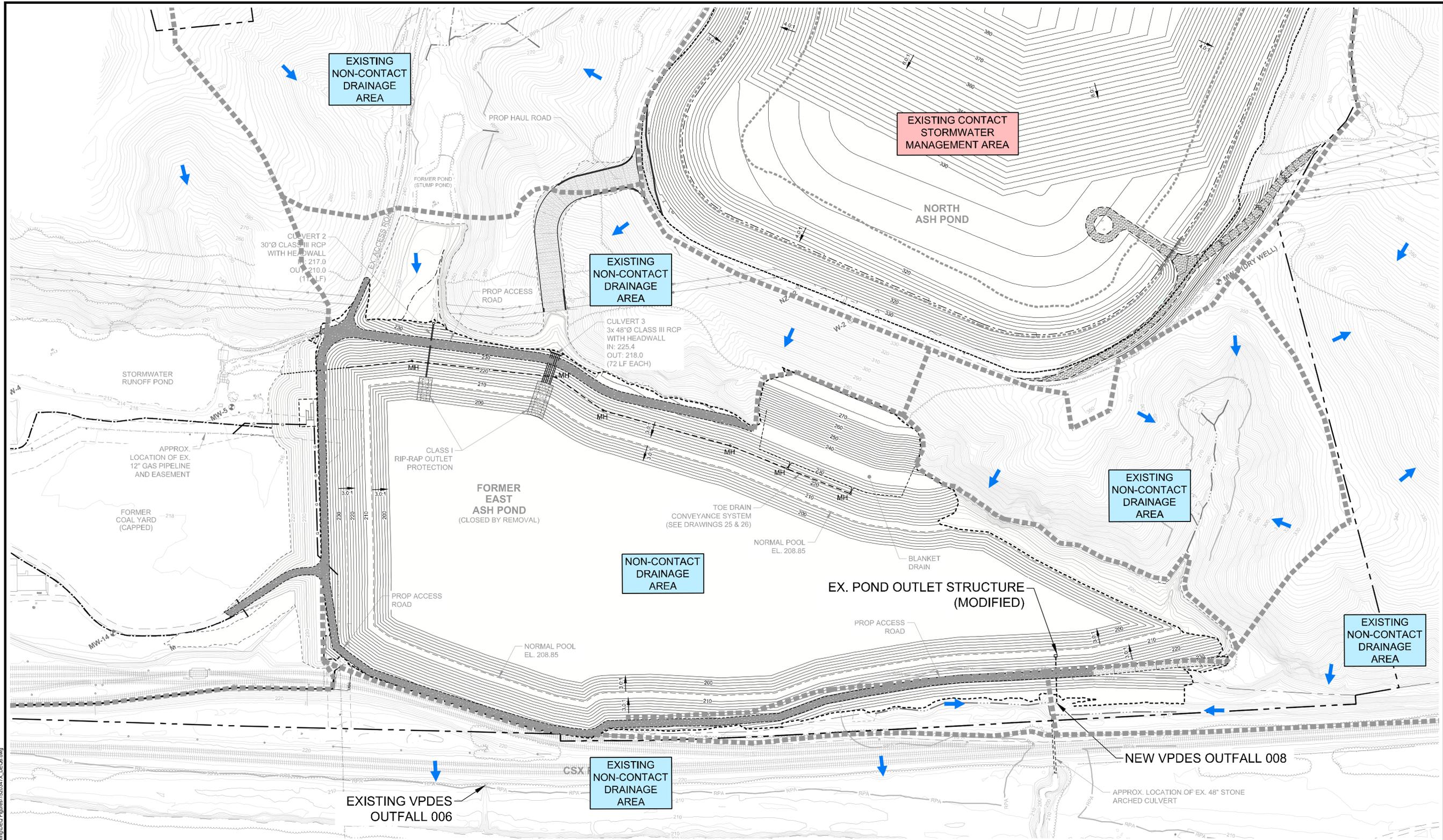
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RW

PROJECT
DOMINION BREMO POWER STATION EAST ASH POND EXCAVATION PLAN FLUVANNA COUNTY, VIRGINIA

TITLE
FINAL GRADING PLAN

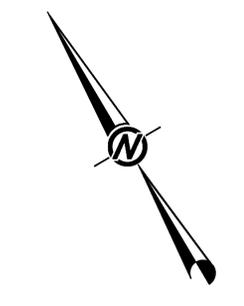
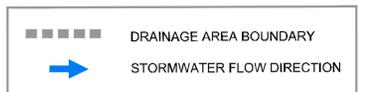
PROJECT No.	15-20347
FILE No.	1520347X_DE06
REV. 0	SCALE AS SHOWN
DESIGN	JRD 09/28/16
CADD	ATN 09/28/16
CHECK	
REVIEW	

**FIGURE 7**



**LEGEND**

	DOMINION PROPERTY BOUNDARY		CREEK/STREAM CENTERLINE
	ADJACENT PROPERTY BOUNDARY		APPROX. EDGE OF SURFACE WATER
	APPROX. LIMITS OF EX. ASH PONDS		WETLANDS
	EX. TOPOGRAPHIC CONTOURS (2' INTERVALS)		LIMITS OF RIPARIAN PROTECTION AREA (PER FLUVANNA COUNTY ORDINANCE)
	EX. PAVED ROAD		EX. GROUNDWATER MONITORING WELL LOCATION AND IDENTIFICATION
	EX. UNPAVED ROAD		EX. PIEZOMETER AND IDENTIFICATION
	EX. RAILROAD		PROP. LIMITS OF CLEARING
	EX. TREE LINE		PROP. TOPOGRAPHIC CONTOURS (2' INTERVALS)
	EX. FENCE		PROP. LIMITS OF CHANNEL UNDERCUT
	EX. OVERHEAD UTILITY LINE		
	EX. MANHOLE		



G:\Plan Production Data\Drawing Data Files\15-20347X - Site Plan Rev\Civil\3d\Working\DE06\Figure1520347X\_DE06.dwg