

EMERGENCY ACTION PLAN

SURVEILLANCE, WARNING AND EVACUATION

**BRUNNER ISLAND SES ASH BASIN NO. 6 DAM
DEP NUMBER D67-496**

LOCATED ADJACENT TO THE SUSQUEHANNA RIVER AND BLACK GUT CREEK

EAST MANCHESTER TOWNSHIP, YORK COUNTY

LATITUDE 40° 04' 59" LONGTITUDE -76° 40' 58"

**SIZE CATEGORY "B"
HAZARD POTENTIAL CATEGORY "3" OR "SIGNIFICANT HAZARD"**

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I. PURPOSE AND SCOPE

- A. To safeguard the lives as well as to reduce property damage within the dam's potential downstream flood or inundation area.
- B. To provide for effective dam surveillance, prompt notification to local emergency management agencies, citizen warning and evacuation response, when required.
- C. To identify emergency actions to be taken by the dam owner/operator, public officials, emergency personnel, and to outline response actions in the event of a potential or imminent failure of the dam.

II. SITUATION

- A. The dam is 39 feet high, 8,300 feet long earthen embankment dam. The dam has a maximum capacity of 2,600 acre-feet. The basin is roughly 70 acres in size with a nominal crest elevation of 290 feet. The basin has been divided into three main areas. The northern part of the basin has been mostly filled with ash and continues to be reduced as the closure by removal is underway. The southern part of the basin has not been completely filled with ash and retains open water as a small settling pond. To the south of the main basin is a polishing pond separated from the main basin by a dike.
- B. The Ash Basin is located between the Black Gut creek to the West and the Susquehanna River to the East. Black Gut Creek eventually flows into the Susquehanna River south of the Ash Basin. The Ash Basin is located within York County, Pennsylvania and the boundary for Lancaster County is the western edge of the Susquehanna River. Refer to the Location Map at **Attachment C**.
- C. If the dam were to fail, the hazard inundation zone would not occupy any occupied structures or regularly occupied structures; therefore, there is no probable loss of human life indicated as a result of a failure. A failure of the dam would increase the Susquehanna River approximately 0.05' in the area around the dam and immediately downstream of the dam during the 1,000-year flood event. If the failure were to occur on a sunny day during normal river flow the Susquehanna River would not rise above the FEMA 100-year floodplain elevation. Sections of Wago road and Gut Road in York County are shown to be within the inundation area during a Sunny day dam failure with no impact to any roads in Lancaster County. Wago road and Gut Road in York County and a section of Locust Grove Road and Front Street in Lancaster County would have areas of inundation with or without a dam failure during the 1,000-year flood event. Refer to the Inundation Map at **Attachment A**.
- D. Transmission towers around Ash Basin No.6 could be affected by a dam failure along with a buried natural gas pipeline that is buried near the dam which is owned by Brunner Island LLC.

III. CONCEPT OF OPERATIONS

A. SURVEILLANCE – NORMAL CONDITIONS – (DAM OWNER OR OPERATOR)

1. The Plant Manager of the Brunner Island Steam Electric Station or a designated representative will send a qualified dam inspector to conduct an on-site visual inspection of the dam, the dam's spillway(s), control systems, and the toe area below the dam at a minimum of once every 7 days or less. Any abnormal or questionable conditions will be immediately brought to the attention of the owner's engineer and the Division of Dam Safety of DEP.

B. SURVEILLANCE – UNUSUAL EVENT CONDITIONS (DAM WATCH)

1. The Plant Manager of the Brunner Island Steam Electric Station or a designated representative will commence surveillance of conditions at the dam site when:
 - a. Severe thunderstorms, heavy rains with local flood warnings, tropical storms and hurricanes, or heavy rains with frozen ground and/or snow cover are occurring specifically when more than 3 inches of rain occurs in one hour or less.
 - b. The National Weather Service issues a flash flood watch or warning and conditions warrant.
 - c. Any abnormal or questionable conditions as identified in Section III.D.1.

C. EARLY WARNING NOTIFICATION

1. The Plant Manager of the Brunner Island Steam Electric Station or a designated representative is responsible for determining the dam's threat potential. The following conditions constitute a dam early warning notification to the York County 911 Center and require 24-hour around-the-clock surveillance.
 - a. The water level in the impoundment area has reached the threshold level of 12 inches below the top of dike crest (water level elevation 289).

- b. Following the occurrence of an earthquake in the general region of the dam.
- 2. Early warning notification will be relayed from the York County 911 Center to the York County EMA, the Lancaster County 911 Center, the PEMA State EOC and all applicable emergency responders and designated government officials and agencies. Refer to Section IV.B for additional notifications.

D. WARNING AND EVACUATION NOTIFICATION

- 1. The Plant Manager of the Brunner Island Steam Electric Station or a designated representative is responsible for determining the dam's threat potential. The following conditions constitute a dam emergency requiring warning and evacuation notification to the York County 911 Center.
 - a. Imminent failure of this dam might be indicated by observance of one or more of the following conditions at the dam site:
 - i. The pond level is at or near the top of the dam and water is flowing, or about to flow, over the top of the dam.
 - ii. The drainage pipe or spillway is damaged, or clogged with debris or ice, which is resulting in a rapid rise in the lake or pond level.
 - iv. Any sloughing or sliding of the embankment upstream or downstream slope. Also, earth slides in the spillway channel, either upstream or downstream of the dam's crest, which could impede the flow in the spillway.
 - v. Subsidence, sinkholes or cracks found in any part of the basin's embankment.
 - vi. Any new discharge of water is observed through the dam's embankment, adjacent to any conduit outlets, or under the dam, which appears as a boil along the downstream toe. Should such a discharge occur and the water is cloudy or muddy in color, then a very serious problem exists.
- 2. Warning and evacuation notification will be relayed from the York County 911 Center to the York County EMA, the Lancaster County 911 Center, the PEMA BEOC and all applicable emergency responders and

designated government officials and agencies. Refer to Section IV.B for additional notifications.

3. Emergency Management Officials will accomplish the needed actions, which are explained in the EAP, in accordance with their existing recommended operation guidelines and existing municipal or county emergency operations plans.
4. Warning and evacuation of the public must commence upon notification by the Plant Manager of the Brunner Island Steam Electric Station or a designated representative of a potential or imminent failure of the dam. Emergency responders should initiate action in accordance with the plan outline and any existing internal organizational recommended operating guidelines, and existing municipal or county operation plans.

E. TERMINATION OF SURVEILLANCE AND NOTIFICATIONS

1. The Plant Manager of the Brunner Island Steam Electric Station or a designated representative may terminate 24-hour surveillance of dam site conditions when:
 - a. All National Weather Service flash flood watches or warnings have expired, **and**
 - b. Heavy rains have ended and the water level in the lake has dropped 1 foot below the dam crest (water level elevation 289) and is receding.
 - c. After a personal inspection of the dam site has been conducted by a knowledgeable professional engineer following an earthquake, overtopping of the dam, or an evacuation of the inundation area as a result of this EAP, or other serious problems resulting in a notification of a dam site emergency and the Department concurs with the results of the inspection.
2. Upon termination of 24-hour surveillance of dam site conditions, The Plant Manager of the Brunner Island Steam Electric Station or a designated representative shall notify the York County 911 Center.

3. Termination of notifications will be relayed from the York County 911 Center to the York County EMA, the Lancaster County 911 Center, the PEMA State EOC and all applicable emergency responders and designated government officials and agencies. Refer to Section IV.B for additional notifications.

IV. RESPONSIBILITIES AND DUTIES – EMERGENCY RESPONSE

A. DAM OWNER OR DAM OPERATOR (DAM SITE EMERGENCY)

1. The Plant Manager of the Brunner Island Steam Electric Station or a designated representative will provide for 24-hour on -site dam surveillance and monitoring as required in Section III.C.1.and initiate early warning notification to the York County 911 Center.
2. When the situation meets the criteria under the warning and evacuation notification guidelines, presented in Section III.D.1, indicating a failure of the dam is possible or a significant threat condition is developing, the Plant Manager of the Brunner Island Steam Electric Station or a designated representative will initiate warning and evacuation communication to the York County 911 Center.

B. YORK COUNTY 911 CENTER

1. The York County 911 Center will notify the following:
 - a. York County EMA
 - b. Lancaster County 911
 - c. Eagle Fire Company No. 1
 - d. PA State Police – Troop H
 - e. Northeastern Regional Police Department
 - f. Northeast Area Emergency Medical Services
 - g. PEMA BEOC

C. YORK COUNTY EMA

1. York County EMA will notify:
 - a. East Manchester Township EMA
 - b. Media - Advisory and/or Warning (Activate EA S) refer to Attachment D
 - c. York County EOC staff, as necessary

- d. American Red Cross –Central PA Chapter (when mass care or family assistance is required.) Coordinate sheltering per Annex K of County EOP.
 - e. York County Elected Officials
 - f. Pennsylvania Emergency Management Agency
 - g. Northeastern School District (regarding closure of school bus routes)
 - h. PennDOT District 8 and the PennDOT District 8 York Office
 - i. Norfolk Southern (regarding potential flooding of their railroad tracks)
 - j. National Weather Service
- 2. The York County EMA will ascertain and report to PEMA any unmet needs or requirements.
 - 3. The York EMA will initiate Damage Assessment and Recovery procedures as the situation requires.

D. LANCASTER COUNTY 911 CENTER

- 1. The Lancaster County 911 Center will notify the following:
 - a. Lancaster County EMA
 - b. Bainbridge Fire Dept.
 - c. PA State Police – Troop J
 - d. Susquehanna Regional Police Department
 - e. Northwest EMS Ambulance Service

E. LANCASTER COUNTY EMA

- 1. Lancaster County EMA will notify:
 - a. Conoy Township EMA
 - b. Media - Advisory and/or Warning (Activate EAS) refer to Attachment D
 - c. Lancaster County EOC staff, as necessary
 - d. Lancaster County Elected Officials
 - e. Elizabethtown Area School District (regarding closure of school bus routes)
 - f. PennDOT District 8 Lancaster Office

F. MUNICIPAL EMA

- 1. East Manchester Township EMA
- 2. Conoy Township EMA

- a. Notify municipal elected officials.
- b. Advise municipal services (water, sewer, road crews, etc.)
- c. Keep the County EMA apprised of the situation.
- d. Coordinate the evacuation (when appropriate)
- e. Perform initial damage assessment.

G. FIRE DEPARTMENTS

- 1. Eagle Fire Company No. 1
- 2. Bainbridge Fire Department
 - a. Provide citizen notification and route alerting to advise residents
 - b. Assist in evacuation
 - c. Establish traffic control and access control points at predetermined locations (See inundation map – Attachment A)
 - d. Assist police and EMS as requested
 - e. Provide communications support if feasible and requested.

H. POLICE SERVICES

- 1. Northeastern Regional Police Department
- 2. Susquehanna Regional Police Department
- 3. PA State Police – Troop H
- 4. PA State Police –Troop J
 - a. Assist evacuation traffic flow (See inundation map - Attachment A).
 - b. Prevent unauthorized entry into emergency areas (See inundation map – Attachment A).
 - c. Provide assistance with route alerting, if requested.
 - d. Provide Emergency Preparedness Liaison Officer at the York and Lancaster County EOC to coordinate all Law Enforcement activities.

I. EMERGENCY MEDICAL SERVICES

- 1. Northeastern Area Emergency Medical Services (York County)
- 2. Northwestern EMS Ambulance Services (Lancaster County)
 - a. Provide evacuation transportation assistance and coordinate with designated fire service agencies for transportation of persons with disabilities and any other special needs.
 - b. Assist fire and police departments as requested.

- c. Provide EM support to any mass care center as requested.

J. AMERICAN RED CROSS

1. America Red Cross of Central Pennsylvania (As requested by the County EMA)
 - a. Identify and activate an appropriate shelter, as necessary.
 - b. Support and maintain operations of the reception center.
 - c. Maintain communications with County EMC, local EMA and reception center.

K. PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PENNDOT)

1. District 8 Office of PennDOT
 2. District 8 York Office
 3. District 8 Lancaster Office
- a. Provide services, signs, barricades and guidance on roads and bridges affecting the evacuation and recovery.

V. AUTHORITY AND REFERENCES

A. AUTHORITY

1. The Dam Safety and Encroachments Act (32 P. S. Sections 69.3. 169.327), May 16, 1985.
2. The Pennsylvania Code - Title 25, Chapter 105 Dam Safety and Waterways Management, Section 105.63 and 105.134.
3. Emergency Management Services Code, 35 Pa C.S. Section 7101et seq., as amended.

B. REFERENCES

1. Guidelines for Developing an Emergency Action Plan for Hazard Category 1 & 2 Dams. Prepared by the Department of Environmental Protection, Water Management, Bureau of Waterways Engineering, Division of Dam Safety and the Pennsylvania Emergency Management Agency, January 2009.
2. Inspection, Maintenance and Operation of Dams in Pennsylvania. Prepared by the Department of Environmental Protection, Water Management, Bureau of Waterways Engineering, Division of Dam Safety, February 2009.
3. York County Emergency Operations Plan.
4. Lancaster County Emergency Operations Plan

VI. DEFINITIONS

- A. ABUTMENT – The part of the valley’s hillside against which the dam abuts. Right and left abutments are those on respective sides of the dam as an observer looks downstream.
- B. AFFECTED COUNTIES/MUNICIPALITIES -Those jurisdictions within Pennsylvania or adjoining states that, according to the inundation map, may experience flooding as a result of a failure of the dam.
- C. BEOC- Business Emergency Operations Center
- D. BOIL - A disturbance in the surface layer of soil caused by water escaping under pressure from behind a water-retaining structure such as a dam or a levee. The boil may be accompanied by deposition of soil particles (usually sand or silt) in the form of a ring (miniature volcano) around the area where the water escapes.
- E. BREACH - An opening or a breakthrough of a dam sometimes caused by rapid erosion of a section of earth embankment by water.
- F. CONDUIT - A pipe used to convey water through or around or under a dam.
- G. CONTROL TOWER - A structure in the dam or reservoir used to control withdraw of water from the reservoir through pipes or culverts.
- H. CREST OF DAM - The crown of an overflow section of the dam. In the United States, the term "crest of dam" is often used when "top of dam" is intended. To avoid confusion, the terms crest of spillway and top of dam should be used for referring to the overflow section and dam proper, respectively.
- I. CULVERT - (a) A drain or waterway structure built transversely under a road, railway, or embankment. A culvert usually comprises a pipe or a covered channel of box section. (b) A gallery or waterway constructed through any type of dam, which is normally dry but is used occasionally for discharging water; hence the terms scour culvert, draw off culvert and spillway culvert.
- J. DAM - A barrier built across a watercourse for impounding or diverting the flow of water.
- K. DAM FAILURE - The uncontrolled release of a dam's impounded water. It is recognized that there are degrees of failure. Any malfunction or abnormality outside the design assumptions and parameters, which adversely affect a dam's primary function of impounding water, is properly considered a failure. Minor malfunctions or abnormalities can result in a sudden failure of a dam.

- L. EARTH DAM (EARTHFILL DAM) - An embankment dam in which more than 50% of the total volume is formed of compacted fine-grained earth.
- M. EMBANKMENT - Fill material, usually earth or rock, placed with sloping sides.
- N. EMERGENCY - A condition of serious nature which develops unexpectedly and endangers the structural integrity of a dam or endangers downstream property and human life. An emergency requires immediate action.
- O. EAP-Emergency Action Plan -A formal document that identifies potential emergency conditions at a dam and specifies preplanned actions to be followed to minimize property damage and loss of life. It contains procedures and information to assist the dam owner in issuing early warning and notification messages to responsible downstream emergency management authorities of the emergency situation. It also contains inundation maps to show the emergency management authorities of the critical areas for action in case of an emergency.
- P. EOP-Emergency Operations Plan - "The document which describes the hazards, vulnerabilities, emergency management situations and assumptions that affect the municipality, the concept of operations during an emergency, and the various roles and assignments of the elected officials, emergency management coordinator and other emergency response personnel, whether paid or volunteer." (From PEMA Directive D2007-1). The EOP includes checklists for known critical facilities, special facilities, critical personnel, hearing impaired residents, non-English speaking residents, residents requiring ambulance assistance, etc., as identified by local emergency management officials.
- Q. FACE - With reference to a structure, the external surface that limits the structure, e.g., the face of a wall or dam.
- R. FAILURE – An incident resulting in the uncontrolled release of water from an operating dam. See "Dam Failure".
- S. FOUNDATION OF DAM - The natural material on which the dam structure is placed.
- T. GROIN - That area along the contact (or intersection) of the face of a dam with the abutment.

- U. HAZARD - A situation which creates the potential for adverse consequences such as loss of life, property damage, and adverse social and environmental impacts. Impacts may be for a defined area downstream of a dam from flood waters released through spillways and outlet works of the dam or waters released by partial or complete failure of the dam. This could include an area upstream of the dam from effects of backwater flooding or effects of landslides around the reservoir perimeter.
- V. INUNDATION AREA - The downstream area that would be flooded or otherwise affected by the failure of a dam or large flows. This area can be subject to a fast-moving flood wave, 20 to 50 MPH is common, with a height of 1 foot to tens of feet. INUNDATION MAP - A map delineating the area that would probably be flooded in the event of a dam failure. This map must be prepared by a registered professional engineer.
- W. NOTIFICATION - To promptly inform appropriate individuals or emergency agency about an emergency condition so they can initiate appropriate actions.
- X. NORMAL WATER LEVEL (NORMAL WATER POOL) - For reservoir with a fixed overflow spillway crest, it is the lowest level of that crest.
- Y. OPERATOR - The person or position in a company or organization, who is responsible for a dam's operation and surveillance.
- AA. OUTLET - A constructed opening through which water can be safely discharged for a particular purpose from a reservoir.
- BB. OWNER - Any person, authority or agency that manages a dam or reservoir.
- CC. PEMA- Pennsylvania Emergency Management Agency
- DD. PSAP - Public Safety Answering Point - an agency in the United States, typically county or city controlled, responsible for answering 9-1-1 calls for emergency assistance from police, fire, and ambulance services.
- EE. SEEPAGE - The movement of water that might occur through the dam, its foundation or its abutments. Small amounts of clear water seepage are normal. Increase in the amount of water flow or change in color is a concern for a dam's safety.
- FF. SLIDE - The movement of a mass of earth down a slope. In embankments and abutments, this involves the separation of a portion of the slope from the surrounding materials.

- GG. SPILLWAY - A structure over or through which flows are discharged. If the flow is controlled by gates, it is considered a controlled spillway; if the elevation of the spillway crest is the only control, it is considered an uncontrolled spillway.
- HH. SPILLWAY CHANNEL - A channel conveying water from the spillway crest to the river downstream.
- II. TOE OF DAM - The junction of the downstream face of a dam with the ground surface. Also referred to as downstream toe. For an embankment dam, the junction of the upstream face with ground surface is called the upstream toe.
- JJ. TOP OF DAM - The elevation of the uppermost surface of a dam, usually a road or walkway, excluding any parapet wall, railings, etc.
- KK. TRAFFIC CONTROL POINT (TCP) - Manned or unmanned posts established at critical road junctions for the purpose of controlling or limiting traffic. TCPs are used to control evacuation movement and also limit entry into the inundation area when an emergency situation requires it.
- LL. VOAD - Voluntary Organizations Active in Disasters - collaboration of diverse organizations and citizens trained to meet community needs in the wake of a large-scale disaster.

VII. EXERCISE AND TRAINING

- A. The dam owner will advise and cooperate with the York County EMA of any exercises scheduled, and coordinate with the York County EMA to exercise all or portions of this EAP as part of the county's all-hazard exercise program schedule.
- B. The owner or operator is required by the EPA to conduct an annual face-to-face meeting or exercise between representatives of the owner or operator of the Coal Combustion Residual unit and the local emergency responders.

VIII. PLAN MAINTENANCE AND DISTRIBUTION

- A. This EAP will be reviewed every five years by the owner or the owner's engineer. During the five-year review:
 - 1. The owner or the owner's engineer will conduct an on-site review of the flood (inundation) area for any increase in downstream development and revise the Inundation Map, if needed.
 - 2. The owner's engineer will review and revise surveillance conditions as needed.
 - 3. The owner will coordinate with York and Lancaster County EMA if population increase or development within the inundation area could

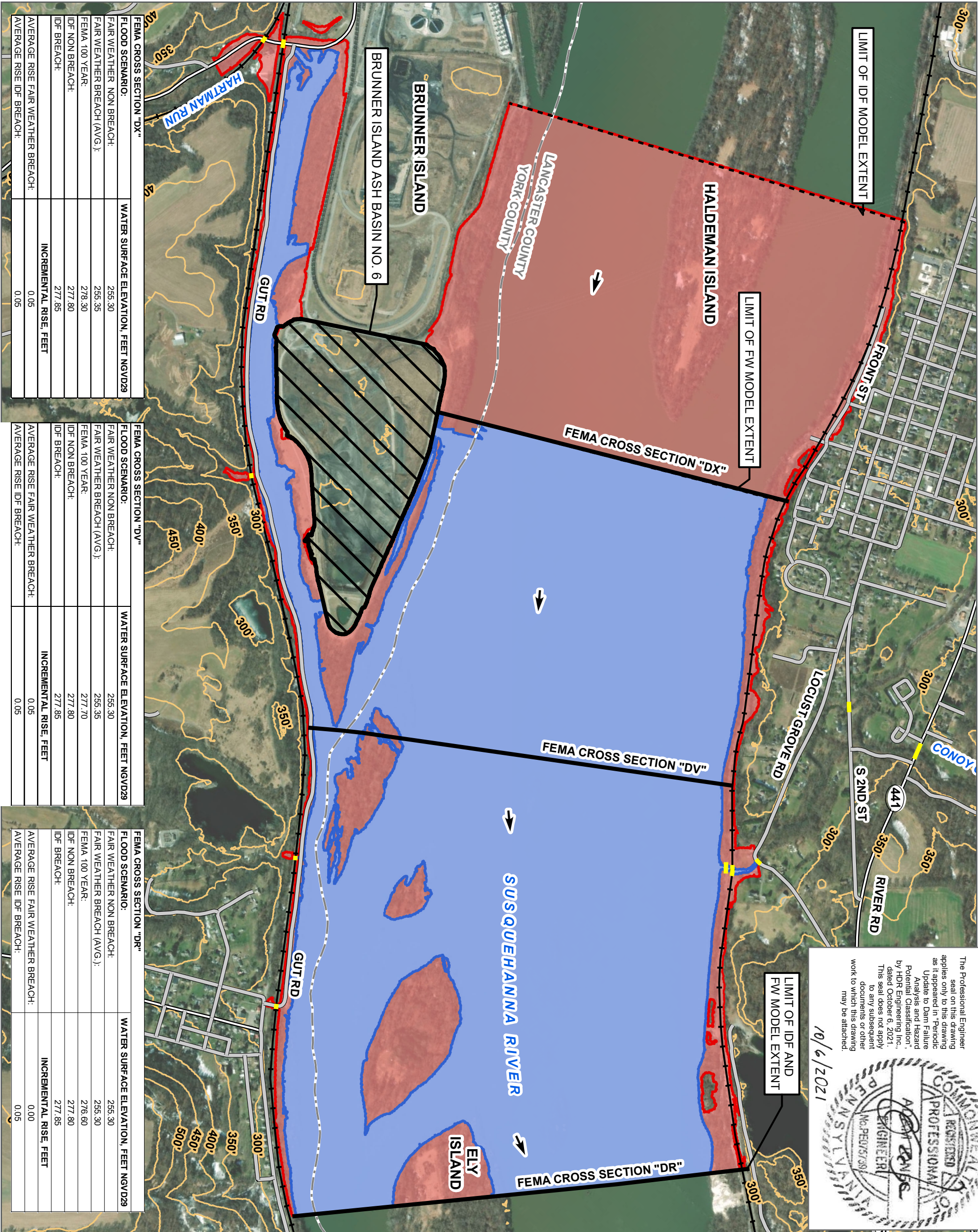
affect the emergency response requirements. If so a new or revised plan must be developed.

4. The owner will meet with and obtain concurrence from the York and Lancaster County EMCs.
5. The owner will submit 6 copies at a minimum of the revised plan to DEP for review and approval.

- B. A copy of the approved EAP will be distributed by the dam owner to those emergency response agencies listed in Section IV. DEP; Division of Dam Safety will distribute a copy of the approved EAP to PEMA's Area Office, the affected county Emergency Management Agency(s) and PSAP/911Center(s), the National Weather Service, and the DEP's Regional Office. Within 60 days, the dam owner will submit a letter certifying distribution of the approved EAP to the DEP, Division of Dam Safety.

ATTACHMENT A

INUNDATION MAP



The Professional Engineer seal on this drawing applies only to this drawing as it appeared in "Periodic Update to Dam Failure Analysis and Hazard Potential Classification," by HDR Engineering Inc., dated October 6, 2021. This seal does not apply to any subsequent documents or other work to which this drawing may be attached.

10/6/2021



BRUNNER ISLAND ASH BASIN NO. 6

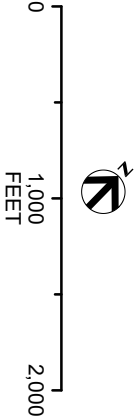
- LEGEND**
- FLOW DIRECTION MARKER
 - SELECTED MODEL CROSS SECTION
 - IDF BREACH INUNDATION AREA
 - FAIR WEATHER BREACH INUNDATION AREA
 - BRIDGE
 - RAIL ROAD
 - STATE ROUTE
 - LOCAL ROAD
 - COUNTY BOUNDARY
 - 10 FT. CONTOUR INTERVAL
 - 50 FT. CONTOUR INTERVAL

NOTES:

1. THE LIMITS OF FLOODING ARE APPROXIMATE AND SHOULD BE USED ONLY AS A GUIDELINE FOR EMERGENCY RESPONSE PLANNING. ACTUAL AREAS INUNDATED WOULD BE BASED ON ACTUAL FLOOD CONDITIONS AND MAY DIFFER FROM AREAS SHOWN ON THE MAP.
2. THE FLOOD CONDITIONS ON THIS MAP ARE BASED ON FEDERAL GUIDANCE AND REFLECT EVENTS OF AN EXTREMELY REMOTE NATURE. THESE RESULTS ARE NOT IN ANY WAY INTENDED TO REFLECT UPON THE INTEGRITY OF ANY PROJECT.
3. FAIR WEATHER FAILURE SCENARIO - THIS SCENARIO REPRESENTS THE COMPOSITE POTENTIAL FLOODING RESULTS FROM DAM FAILURE UNDER NORMAL OPERATING CONDITIONS FROM MULTIPLE EMBANKMENT BREACH LOCATIONS.
4. IDF FAILURE SCENARIO - THIS SCENARIO REPRESENTS THE COMPOSITE POTENTIAL FLOODING RESULTS FROM DAM FAILURE UNDER THE MOST OPERATING CONDITIONS FROM MULTIPLE EMBANKMENT BREACH LOCATIONS AT PEAK INFLOW DESIGN FLOOD (IDF) CONDITIONS. IDF IS THE 1,000 YEAR FLOOD BASED ON USEPA COAL COMBUSTION RESIDUAL (CCR) FINAL RULE.
5. MAXIMUM RISE - THE DIFFERENCE IN PEAK WATER SURFACE ELEVATIONS WITH AND WITHOUT DAM FAILURE.
6. TOPOGRAPHY IS REFERENCED TO VERTICAL DATUM: NAVD 1988; HORIZONTAL DATUM: NAD 1983 STATEPLANE PA SOUTH ZONE USFT; PROJECTION: LAMBERT CONFORMAL CONIC; CROSS SECTION DATA BASES ARE REFERENCED IN VERTICAL DATUM: NGVD29 (PLANT DATUM), WHICH IS APPROXIMATELY 0.8 FEET HIGHER THAN NAVD83.
7. SOURCES OF AERIAL BASEMAP: XYCP 2015 DIGITAL ORTHOIMAGERY FOR YORK COUNTY, PA; 1 FOOT RESOLUTION & 2015 NATIONAL AGRICULTURAL IMAGERY PROGRAM (NAIP); 1 METER RESOLUTION, NATURAL COLOR ORTHO IMAGERY.

BRUNNER ISLAND ASH BASIN NO. 6

INUNDATION MAPPING
AUGUST 2021



ATTACHMENT B

TRAFFIC CONTROL POINTS

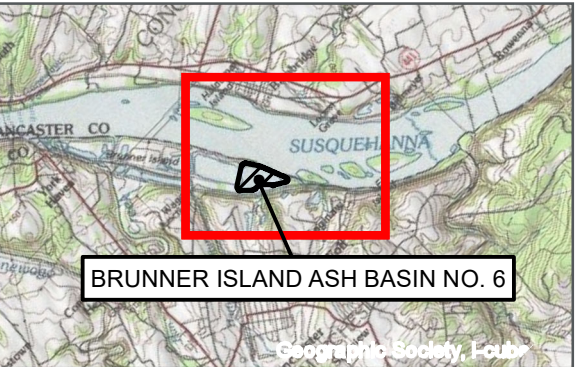
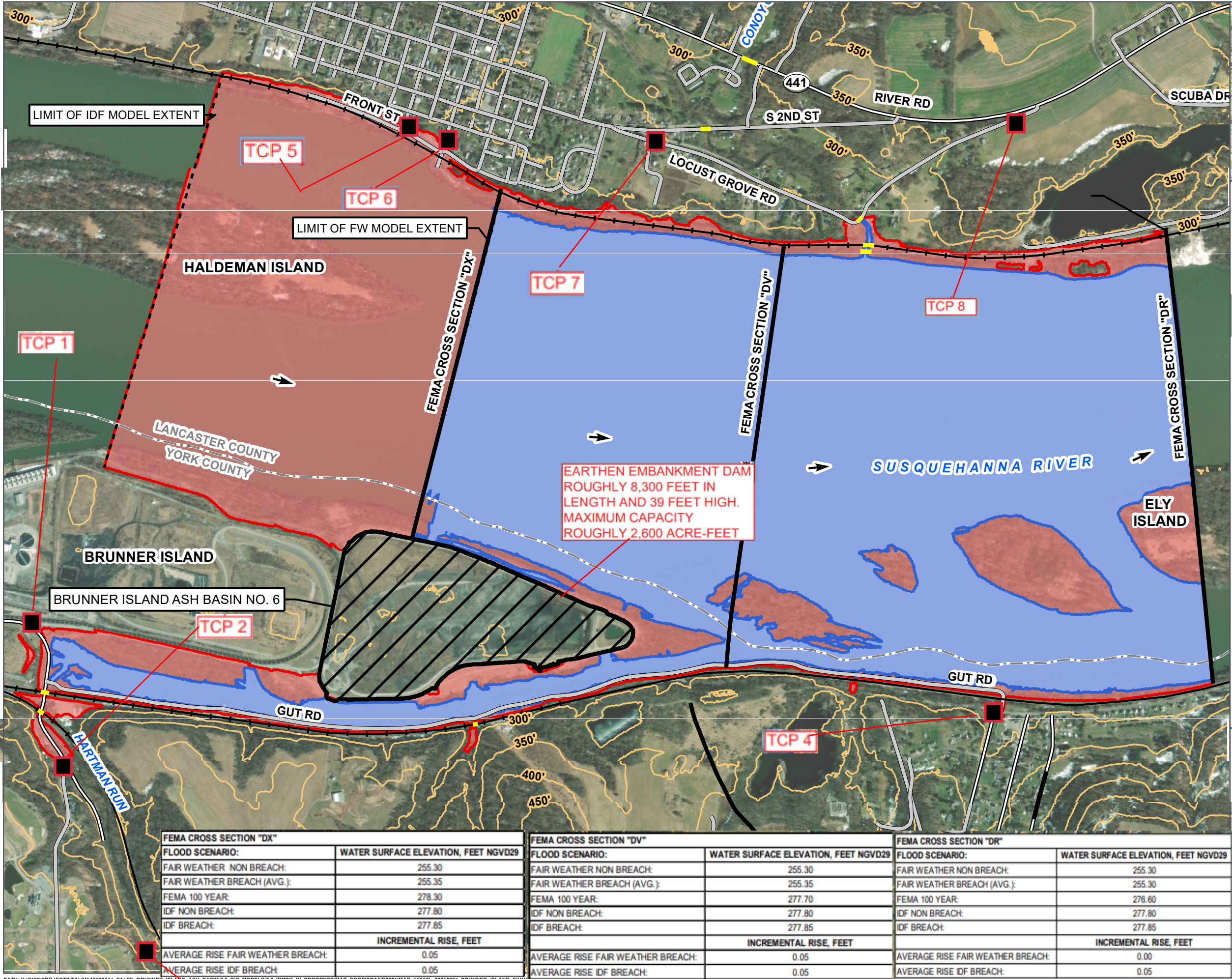
(Traffic Control Points are shown on the Map below)

York County:

- TCP#1 On Wago Road near power plant.
Assigned to: PennDOT or Eagle Fire Company No. 1
- TCP#2 On Board Road, at the intersection of Board Road and Wago Road
Assigned to: PennDOT or Eagle Fire Company No. 1
- TCP#3 On Wago Road between the intersections of Gravel Hill Road and Board Road.
Assigned to: PennDOT or Eagle Fire Company No. 1

Lancaster County:

- TCP#4 On Arch Street at the intersection of Arch Street and
Front StreetAssigned to: PennDOT or Bainbridge Fire
Department
- TCP#5 On Race Street at the intersection of Race Street and N Front Street
Assigned to: PennDOT or Bainbridge Fire Department
- TCP#6 On Locust Grove Road half a mile South of the intersection of
Locust Grove Road and S 2nd Street.
Assigned to: PennDOT or Bainbridge Fire Department
- TCP#7 On Locust Grove Road a quarter mile West of the intersection of
Locust Grove Road and River Road (route 441).
Assigned to: PennDOT or Bainbridge Fire Department
- TCP#8 On Locust Grove Road just south of the intersection of Locust
Grove Road and River Road (route 441).
Assigned to: PennDOT or Bainbridge Fire Department



LEGEND

- ➔ FLOW DIRECTION MARKER
- SELECTED MODEL CROSS SECTION
- IDF BREACH INUNDATION AREA
- FAIR WEATHER BREACH INUNDATION AREA
- BRIDGE
- RAIL ROAD
- STATE ROUTE
- LOCAL ROAD
- COUNTY BOUNDARY
- 10 FT. CONTOUR INTERVAL
- 50 FT. CONTOUR INTERVAL
- TCP 1 TRAFFIC CONTROL POINT

- NOTES:**
1. THE LIMITS OF FLOODING ARE APPROXIMATE AND SHOULD BE USED ONLY AS A GUIDELINE FOR EMERGENCY RESPONSE PLANNING. ACTUAL AREAS INUNDATED WILL DEPEND ON ACTUAL FAILURE CONDITIONS AND MAY DIFFER FROM AREAS SHOWN ON THE MAP.
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 4. IDF FAILURE SCENARIO - THIS SCENARIO REPRESENTS THE COMPOSITE POTENTIAL FLOODING RESULTS FROM DAM FAILURE UNDER NORMAL OPERATING CONDITIONS FROM MULTIPLE EMBANKMENT BREACH LOCATIONS AT PEAK INFLOW DESIGN FLOOD (IDF) CONDITIONS. IDF IS THE 1,000 YEAR FLOOD BASED ON USEPA COAL COMBUSTION RESIDUAL (CCR) FINAL RULE.
 5. MAXIMUM RISE - THE DIFFERENCE IN PEAK WATER SURFACE ELEVATIONS WITH AND WITHOUT-DAM FAILURE.
 6. TOPOGRAPHY IS REFERENCED TO: VERTICAL DATUM: NAVD 1988; HORIZONTAL DATUM: NAD 1983 STATEPLANE PA SOUT ZONE USFT; PROJECTION: LAMBERT CONFORMAL CONIC; CROSS SECTION DATA TABLES ARE REPORTED IN VERTICAL DATUM NGVD29 (PLANT DATUM), WHICH IS APPROXIMATELY 0.8 FEET HIGHER THAN NAVD88.
 7. SOURCES OF AERIAL BASEMAP: YCPC 2015 DIGITAL ORTHOIMAGERY FOR YORK COUNTY, PA, 1 FOOT RESOLUTION & 2015 NATIONAL AGRICULTURAL IMAGERY PROGRAM (NAIP), 1 METER RESOLUTION, NATURAL COLOR ORTHO IMAGERY.

BRUNNER ISLAND ASH BASIN NO. 6

INUNDATION MAPPING

AUGUST 2021

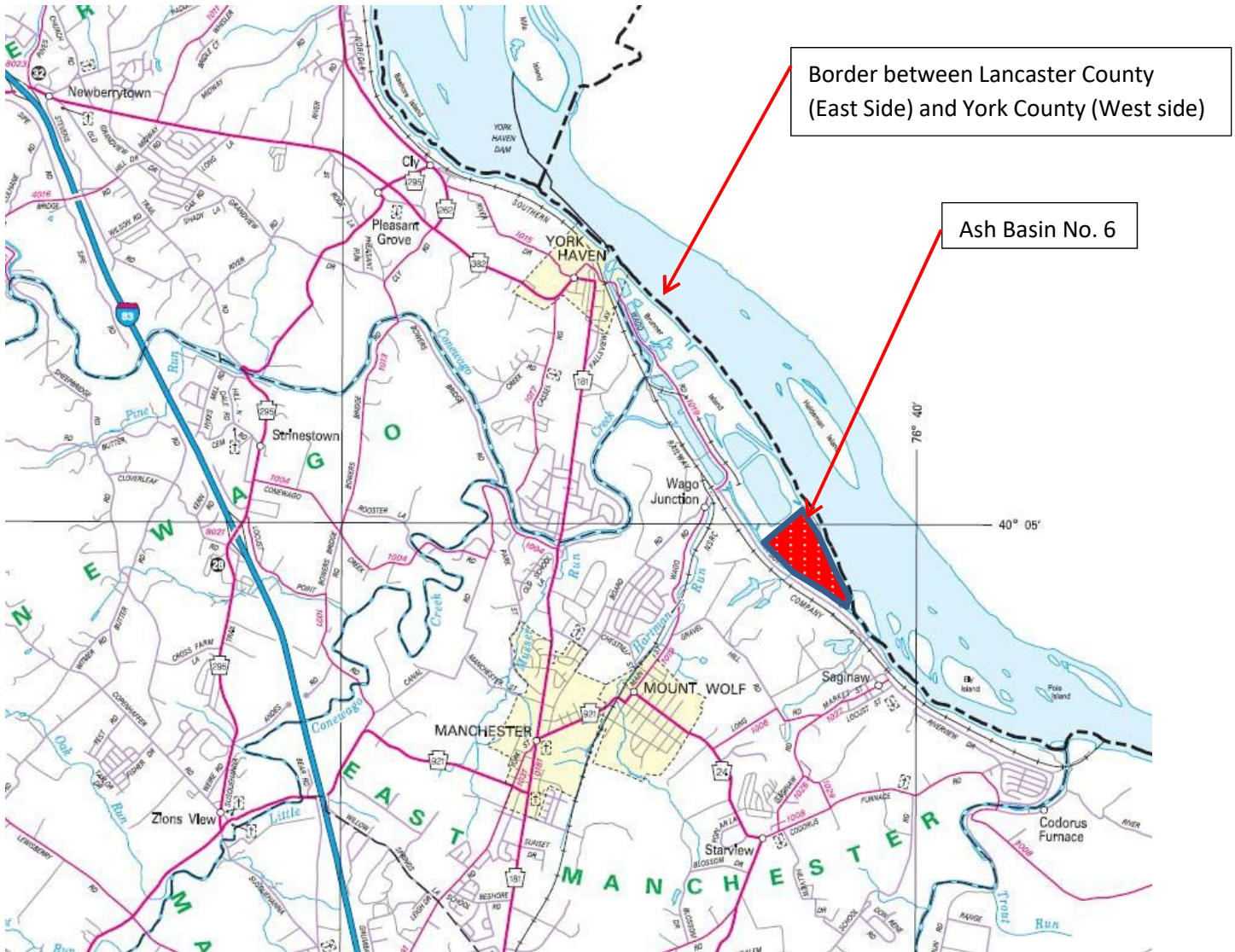
0 1,000 2,000
FEET

TALLEN ENERGY

PAGE 1 OF 1

ATTACHMENT C

LOCATION MAP



Directions to Brunner Island Ash Basin No. 6 Dam:

- From Harrisburg, PA travel south on I-83 for roughly 10.5 miles
- Take exit 32 for PA-382 toward Newberrytown
- Turn Left onto PA-382E for 4.8 Miles
- Continue onto Landvale St. for 0.1 Miles
- Turn Right onto Locust St. for 380 ft.
- Continue onto Wago Road for 1.9 Miles.
- Continue straight onto Talen's private access road for 0.7 miles to the dam

ATTACHMENT D

TELEPHONE ROSTER

	<u>DAYTIME PHONE NO.</u>	<u>24-HOUR EMERGENCY NO.</u>
Dam Owner	717-266-7510	717-268-2002
Dam Operator	717-266-7523	717-268-2002
York County 911 Ctr	717-854-5571	911
York County EMA	717-840-2990	911
East Manchester Township EMA	717-266-4279	911
Lancaster County EMA	717-664-1200	911
Conoy Township EMA	717-664-1190	717-572-8964
Bainbridge Fire Dept. (Lancaster Cnty)	717-426-2177	911
Eagle Fire Company No. 1 (York Cnty)	717-266-2342	911
Northeastern Area Emergency Medical Services (York Cnty)	717-266-5736	911
Northwest EMS Ambulance Service (Lancaster Cnty)	717-361-8220	911
Northeastern Regional Police Department (York Cnty.)	717-266-6195	911
Pennsylvania State Police: Troop H, York	717-428-1011	911

	<u>DAYTIME PHONE NO.</u>	<u>24-HOUR EMERGENCY NO.</u>
Susquehanna Regional Police Department (Lancaster Cnty.)	717-426-1164	911
Pennsylvania State Police: Troop J, Lancaster	717-299-7650	911
America Red Cross Central Pennsylvania	866-311-3832	866-311-3832
DEP Southcentral Regional Office	717-705-4700	866-825-0208
DEP Dam Safety Harrisburg	717-787-8568	717-787-4343 800-541-2050
PEMA	717-561-2001 800-424-7365	717-651-2001 800-424-7362
PennDOT Dist. 8	717-787-6653	717-265-7600
PennDOT Dist. 8 York Office	717-848-6230	717-265-7600
PennDOT Dist 8 Lancaster Office	717-299-7621	717-265-7600
Northeastern School District (York Cnty.)	717-266-3667	None Listed
Elizabethtown Area School District (Lancaster Cnty.)	717-367-1521	None Listed
Norfolk Southern	717-237-2595	800-453-2530

ATTACHMENT E

MEDIA ANNOUNCEMENT

EARLY WARNING MESSAGE

The York County and Lancaster County Emergency Management Agencies advise that due to conditions at the Brunner Island Steam Electric Station Ash Basin No. 6 Dam in East Manchester Township, the public should avoid the roads around the dam which is situated between the Black Gut Creek and the Susquehanna River, including Wago Road and Gut Road in East Manchester Township York County. The public should avoid Front Street and the area around the bridge over the Conoy Creek along Locust Grove Road in Conoy Township Lancaster County. Stay tuned for further information.

*****REPEAT PERIODICALL*****

WARNING MESSAGE

The York and Lancaster County Emergency Management Agencies are advising the public to evacuate the areas immediately around the Brunner Island Steam Electric Station Ash Basin No. 6 Dam in East Manchester Township including the shoreline of the Susquehanna River and unhabitated islands in the river. In Conoy Township, Lancaster County evacuate low areas around the Susquehanna River, Front Street along the Susquehanna River, and areas near Conoy Creek.

*****REPEAT PERIODICALLY*****

INCIDENT RESOLVED. SAFE TO RETURN

The York and Lancaster County Emergency Management Agencies are advising the public that the issue at the Brunner Island Ash Basin No. 6 dam has been resolved and that the areas around the dam in York and Lancaster counties are safe to return to.

*****REPEAT PERIODICALLY*****