

INITIAL SAFETY FACTOR ASSESSMENT

40 CFR 257.73 (e)

Ash Pond
Cabin Creek Site
Chelyan, WV

May, 2026

Prepared for: Appalachian Power Company

Prepared by: American Electric Power Service Corporation

1 Riverside Plaza
Columbus, OH 43215

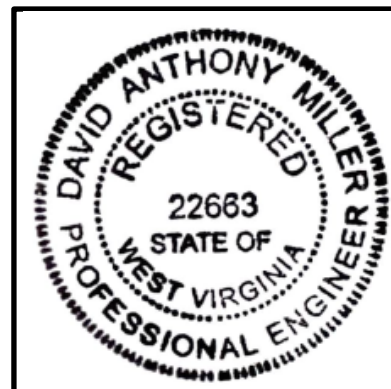


Cabin Creek Site
Ash Pond
Initial Safety Factor Assessment

PREPARED BY _____ DATE _____
Dan Murphy, P.E.

REVIEWED BY _____ DATE _____
Blake Arthur, P.E.

APPROVED BY David Anthony Miller DATE 05.04.2026
David Anthony Miller, P.E.
Director- Ash Management Services



I certify to the best of my knowledge, information, and belief that the information contained in this safety factor assessment meets the requirements of 40 CFR § 257.73(e)

Table of CONTENTS

1.0 OBJECTIVE	4
2.0 DESCRIPTION OF THE CCR UNIT	4
3.0 SAFETY FACTOR ASSESSMENT 257.73(e)	5

Attachment A: Initial Safety Factor Assessment Report

1.0 OBJECTIVE

The “Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments”, 89 Fed. Reg. 38950 (May 8, 2024) (amending 40 C.F.R. §257) requires owners and operators of facilities with a legacy coal combustion residual (CCR) surface impoundment to prepare an initial safety factor assessment document for each legacy CCR surface impoundment at the facility.

The Ash Pond at the Cabin Creek Site is subjected to this rule.

2.0 DESCRIPTION OF THE CCR UNIT

The Cabin Creek site is located near Chelyan, West Virginia, near the intersection of MacCorkle Ave SE and Cabin Creek Rd., Cabin Creek, WV 25035. The latitude/longitude of the facility is: 38°11'52"N / 81°29' 6" W. The Ash Pond is approximately 19 acres. The Cabin Creek Power Plant was placed in service in 1914, stopped generating electricity in 1977, retired in 1981 and the site was razed in 1985-1987. The Ash Pond was constructed sometime around 1956.

The Ash Pond is located near the Kanawha River on the west side of the plant property. The Ash Pond was located on the west side of Cabin Creek, and the Power Plant was located on the East side of Cabin Creek.

According to the 1956 U.S. Army Corps Permit application, the ash pond was constructed by building a dike around Cabin Creek Island and filling the former river backchannel with dredged river sediments. To offset the loss of channel volume, approximately 200,000 cubic yards of compensatory dredging was completed adjacent to the Cabin Creek Island within the main river channel. The dike included a 650-foot-long southwest section reinforced with 35-foot-deep wood piling and rockfill, and a similarly long northeast section protecting the shoreline with riprap armor. The exterior slope of the dike was designed at 2H:1V and the interior slope was designed at 1.5H:1V. The 2H:1V slope extends below the navigational pool of the Marmet Lock and Dam (590 ft-msl) to an elevation of 575 ft-msl, 15 below the normal pool.

The former discharge structure is a pipe and riser type structure located at the western end of the Ash Pond. The riser structure is made of concrete and has grooves for receiving stop logs for controlling the pool level when the pond was active. The outlet pipe is a 24-inch-diameter reinforced concrete pipe. The discharge structure no longer functions, and the facility no longer impounds water.

3.0 SAFETY FACTOR ASSESSMENT 257.73(e)

The Initial Safety Factor Assessment was prepared by WSP USA, Inc. and is included as Attachment A.

Available records for the Cabin Creek Ash Pond indicate timber piling was installed along the normal pool of the Kanawha River for at least a partition of the dikes length. Remnants of the timber pile system were observed during previous annual inspections. The timber pile system provides additional resistance to slope failure along the critical failure section of the perimeter dike. A revised Safety Factor Assessment will be issued within 30 days of completing the final pile inspection & investigation.

ATTACHMENT A

Initial Safety Factor Assessment Report



REPORT

Initial Safety Factor Assessment

Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, West Virginia

Submitted to:

Ms. Jane Petrie

American Electric Power Company, Inc.
Project Manager
1 Riverside Plaza,
Columbus, OH 43215

Submitted by:

WSP USA Inc.

3348 Peachtree Road NE, Suite 1100, Atlanta, Georgia, 30326

+1 404 237 2115

US0041868.3924

April 24, 2026



Distribution List

Dan Murphy (dsmurphy1@aep.com)

Benjamin J Hackett (bjhackett@aep.com)

Table of Contents

1	INTRODUCTION	1
1.1	Purpose and Regulatory Basis	1
1.2	Site Description and History	1
1.3	Scope of Assessment	1
2	BACKGROUND.....	1
3	SAFETY FACTOR ASSESSMENT REQUIREMENTS.....	2
4	SAFETY FACTOR ASSESSMENT	3
5	REFERENCES	3

FIGURES

Figure 1: Site Location Plan

Figure 2: Site Topographic Map

APPENDICES

APPENDIX A

Historical Drawings

CERTIFICATION

Professional Engineer Certification Statement [40 CFR §257.73(e)]

I hereby certify that, having reviewed the attached documentation and being familiar with the provisions of Title 40 of the Code of Federal Regulations Section § 257.73 (40 CFR Part §257.73(e)), I attest that this Safety Factor Assessment Report is accurate and has been prepared in accordance with good engineering practices, including the consideration of applicable industry standards, and with the requirements of 40 CFR Part §257.73(e) initial and periodic safety factor assessments.

WSP USA Inc.



Signature

April 24, 2026

Date of Report Certification

Steven J. Moeller, PE (AL, GA, NC, SC, TN, WV)

Name

27354

Professional Engineering Certification Number



1 INTRODUCTION

WSP USA Inc. (WSP) was retained by Appalachian Power Company, a subsidiary of American Electric Power Company, Inc. (AEP), to perform this initial Safety Factor Assessment for the Cabin Creek Ash Pond, an inactive Coal Combustion Residuals (CCR) surface impoundment. This assessment has been prepared in accordance with the requirements of 40 CFR Part §257, Subpart D (CCR Rule), specifically §257.73(e).

1.1 Purpose and Regulatory Basis

The objective of this assessment is to evaluate the stability of the Cabin Creek Ash Pond under various loading conditions and confirm compliance with the minimum safety factors required by the CCR Rule. Per 40 CFR §257.73(e), owners and operators of CCR surface impoundments must demonstrate that the unit meets specified safety factors for static, seismic, and liquefaction conditions.

1.2 Site Description and History

The Former Cabin Creek Power Station (Plant), owned and operated by the Appalachian Power Company, is located along West Virginia State Route 61, adjacent to the Kanawha River (Figure 1). Cabin Creek is located between the former Plant and the ash pond and discharges into the Kanawha River, as shown in Figure 2. Operations at the Plant began in 1914 and ceased in 1977. The Plant and associated structures were demolished in 1981, and the ash pond was closed in compliance with applicable state regulations at that time. The ash pond covers approximately 19 acres and is surrounded by commercial and residential properties.

1.3 Scope of Assessment

For this initial assessment, WSP conducted a field investigation program to characterize the subsurface conditions at the ash pond site. The results of the field program are presented in the Geotechnical Data Report (GDR) for the Cabin Creek Power Station (WSP 2026). This assessment includes an evaluation of the factors of safety assessment for the Cabin Creek Ash Pond.

2 BACKGROUND

The former Cabin Creek Power Station utilized a single surface impoundment, the Cabin Creek Ash Pond, to manage sluiced ash. This impoundment is located west of Cabin Creek and is classified as a legacy CCR impoundment under the United States Environmental Protection Agency's (USEPA) Legacy CCR Final Rule (May 28, 2024), which established regulatory requirements for legacy CCR surface impoundments and CCR management units.

The Cabin Creek Ash Pond is an inactive impoundment, which no longer impounds surface water, surrounded by an earthen berm that ranges in height from approximately 590 to 620 feet Mean Sea Level (MSL). The thickness of the ash within the bermed area ranges between approximately 5 and 33 feet. Only limited design and construction drawings are available, primarily from a Corps of Engineers permit application from the 1950s (Appendix A).

The ash pond was constructed in the 1950s by dredging alluvial materials and sediments from the Kanawha River north of Cabin Creek Island and placing the dredged materials in the back channel on the southern side of the island. Historical drawings and boring logs indicate that these dredged materials were used to construct the perimeter dike to an approximate elevation of 605 feet MSL. Original drawings show a wooden pile retaining wall along a portion of the northern dike adjacent to the Kanawha River. Initial field observations (Appendix B) indicate that the north side of the pilings has filled in with sediments, and the top of the wall no longer projects above the

river. During the annual inspection of the ash pond performed in September 2025, AEP located remnants of these wooden piles along the shoreline of the ash pond's northern dike. The images 1a and 1b (shown below) were taken in the western portion of the ash pond's northern dike and show the piles at the approximate locations depicted in the 1950 drawings (Appendix A).



Image 1a



Image 1b

Images 1a and 1b: Wood piles along the shoreline in the western half of the ash pond's northern dike

The Cabin Creek Ash Pond received CCR material from the former Plant between approximately 1958 and 1977, after which it ceased operation. During its active period, bottom ash and fly ash were sluiced into the pond, and water levels were controlled via an outfall structure located on the western end that conveyed stormwater to the Kanawha River. Based on a review of the embankment boring logs, it appears that the perimeter dike was raised at least twice to its current elevation of approximately 620 feet MSL. Initially, CCR materials were used to raise the height of the perimeter dike, followed by the use of a CCR and soil mixture to construct the uppermost section of the dike.

Prior to 2025, the Cabin Creek Ash Pond was overgrown with vegetation and trees. In April and May 2025, AEP cleared vegetation from the top of the ash pond in preparation for subsequent investigations.

3 SAFETY FACTOR ASSESSMENT REQUIREMENTS

In accordance with § 257.73(e)(1), the owner or operator of a CCR surface impoundment must conduct initial and periodic safety factor assessments and document whether the calculated factors of safety (Fos) achieve the

minimum safety factors specified for the critical cross-section of the embankment. The critical cross-section is the cross-section anticipated to be the most susceptible of all cross-sections to structural failure based on appropriate engineering considerations, including loading conditions. The safety factor assessments must be supported by appropriate engineering calculations. The minimum safety factors specified in §257.73(e)(1)(i) through(iv) include:

- The calculated static FoS under the long-term, maximum storage pool loading condition must equal or exceed 1.50;
- The calculated static FoS under the maximum surcharge pool loading condition must equal or exceed 1.40;
- The calculated seismic FoS must equal or exceed 1.00; and
- For dikes constructed of soils that have susceptibility to liquefaction, the calculated liquefaction factor of safety must equal or exceed 1.20.

The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment specified in §257.73(e)(1) meets the requirements of this section.

4 Safety Factor Assessment

At the time of this assessment, an investigation of the existing pile system along the ash pond's northern slope adjacent to the Kanawha River is ongoing. The pile system, if intact, provides additional resistance to slope failure along the potential critical failure sections on the north side of the perimeter dike. Upon completion of the pile investigation and receipt of the investigation findings, stability analyses for the ash pond will be conducted, as appropriate. A revised Safety Factor Assessment Report incorporating the inspection results and updated analyses will be prepared and issued within 30 days of receipt of the final pile investigation documentation.

5 REFERENCES

Hynes-Griffin, M. E., & Franklin, A. G. (1984). Rationalizing the seismic coefficient method. U.S. Army Corps of Engineers, Waterways Experiment Station.

Morgenstern, N. R., & Price, V. E. (1965). The analysis of the stability of general slip surfaces. *Géotechnique*, 15(1), 79–93.

Rocscience Inc. (2023). SLIDE2 (Version 9.026). Retrieved from <https://www.rocscience.com/>

USGS. (2023). Earthquake Hazards Program. United States Geological Survey. Retrieved from <https://earthquake.usgs.gov/>

WSP USA Inc. (WSP). (2025). Geotechnical Data Report. Cabin Creek Ash Pond, Former Cabin Creek Power Plant, Cabin Creek, West Virginia. December 8, 2025.

Youd, T. L., Idriss, I. M., Andrus, R. D., et al. (2001). Liquefaction resistance of soils: Summary report from the 1996 NCEER and 1998 NCEER/NSF workshops on evaluation of liquefaction resistance of soils. *Journal of Geotechnical and Geoenvironmental Engineering*, 127(10), 817–833.

Signature Page

WSP USA Inc.



Naveen Kumar Ganji, PE (GA, TN, TX, VA)
Senior Consultant



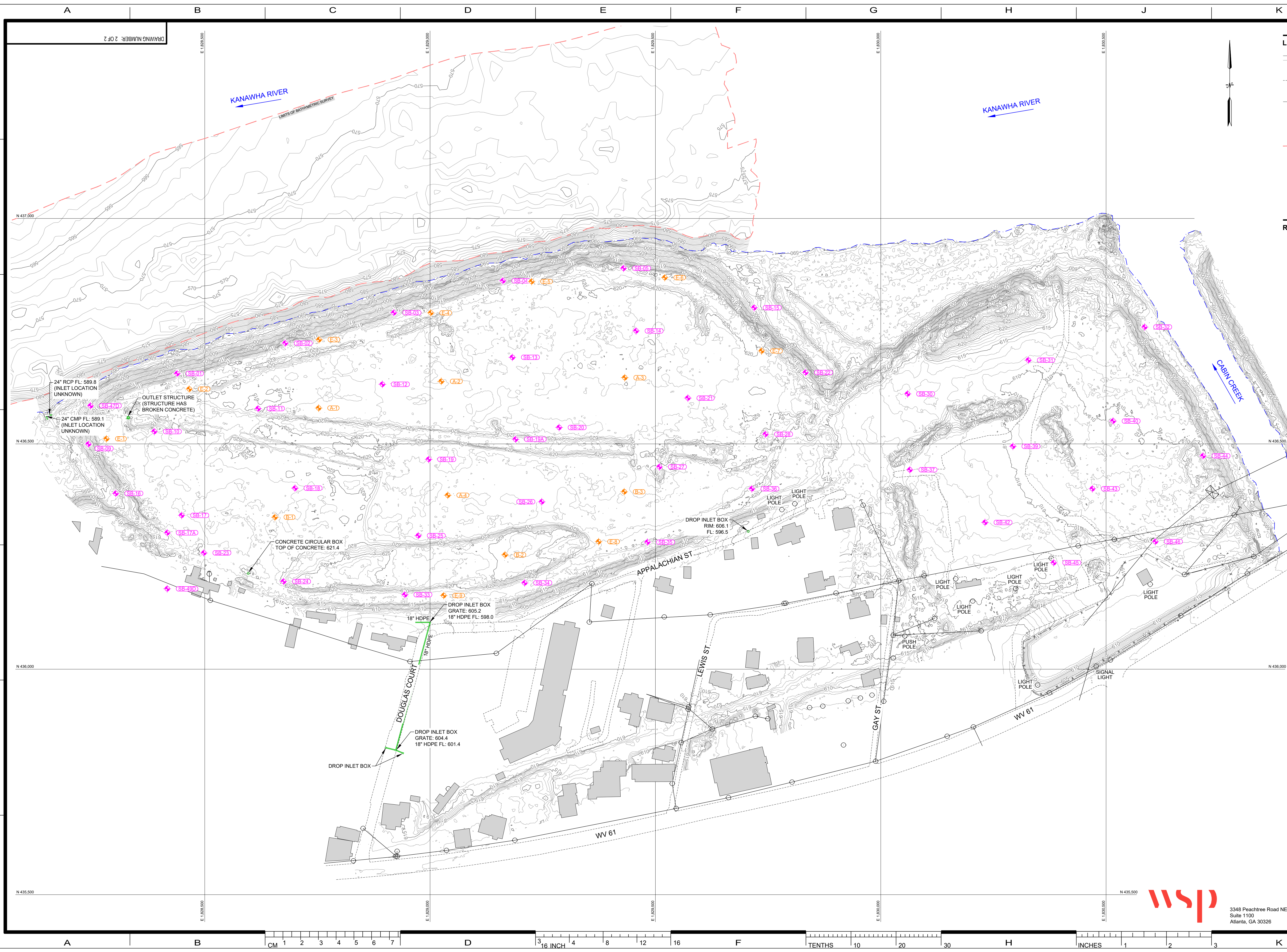
Steven J. Moeller, PE (AL, GA, NC, SC, TN, WV)
Senior Vice President

NG/SM/ng

[https://wspnlinenam.sharepoint.com/sites/us-aep-cabin-creek-c/shared documents/5 technical work/safety factor assessment/sfa_cabin_creek_ashpond_ccr_engsupport.docx](https://wspnlinenam.sharepoint.com/sites/us-aep-cabin-creek-c/shared%20documents/5%20technical%20work/safety%20factor%20assessment/sfa_cabin_creek_ashpond_ccr_engsupport.docx)

Figures

G:\American Electric Power\Cabin Creek\Cabin Creek Site Factor of Safety Assessment\Production2 - Slope Stability Section Locations.dwg LAYOUT: 2 SAVED: 12/24/2024 2:49 PM PAGESETUP: PLOTTED: 4/24/2026 POWELL, CHRIS



LEGEND

- EXISTING CONTOURS
- EXISTING ROADS
- EXISTING FENCE
- EXISTING UTILITY POLES
- LIMITS OF BATHYMETRIC SURVEY
- WSP BORING LOCATIONS
- AEP/EHS GEOPROBE LOCATIONS

REFERENCES

- EXISTING TOPOGRAPHY AND BATHYMETRY PROVIDED BY AMERICAN ELECTRIC POWER.



DATE	NO.	DESCRIPTION	APPD.

REVISIONS

THIS DRAWING IS CLASSIFIED AS:

REFERENCE AEP'S CORPORATE INFORMATION SECURITY POLICY

THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST.

APPALACHIAN POWER COMPANY

CABIN CREEK ASH POND

CABIN CREEK WEST VIRGINIA

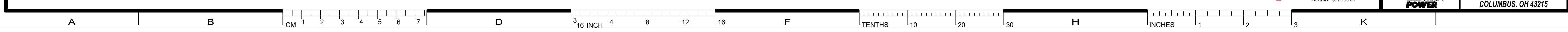
SITE TOPOGRAPHIC MAP

UNIT: FEET	DRAWING NUMBER: 2 OF 2	REV: -
SCALE: 1" = 100'	APPROVED BY:	
DR: CCP		
CH: NKG		
SUP: NKG		
ENG: SJM		
DATE: 12/04/2025		



3348 Peachtree Road NE
Suite 1100
Atlanta, GA 30326

AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215



APPENDIX A

Historical Drawings

W.6 (Zentral - Base
Dredging) - 14.91

21 January 1956

Appalachian Electric Power Company
30 Church Street
New York 6, New York

Gentlemen:

In accordance with your written request dated 6 January 1956, the revised plans hereto attached are approved to supersede the plans for the works authorized by the Secretary of the Army, in letter dated 24 April 1954, from the Acting District Engineer at Huntington, West Virginia, to construct a dike around Cabin Creek Island, dredge approximately 200,000 cubic yards of material along the island and fill the back channel of the island, in the Kanawha River, at Cabin Creek Junction, West Virginia, 74.0 miles above the mouth of the river.


The revised plans provide for the addition of a line of wood piles, with rock fill landward of the piling, for a distance of 650 feet along the downstream riverward portion of the dike, and stone riprap for a distance of 650 feet along the upstream riverward portion of the dike.

The conditions to which the work is made subject remain in full force and effect.

Please acknowledge receipt of this letter.

By authority of the Secretary of the Army:

Drawing No. S-SK 13153,
in 3 sheets, revised
6 January 1956, attached

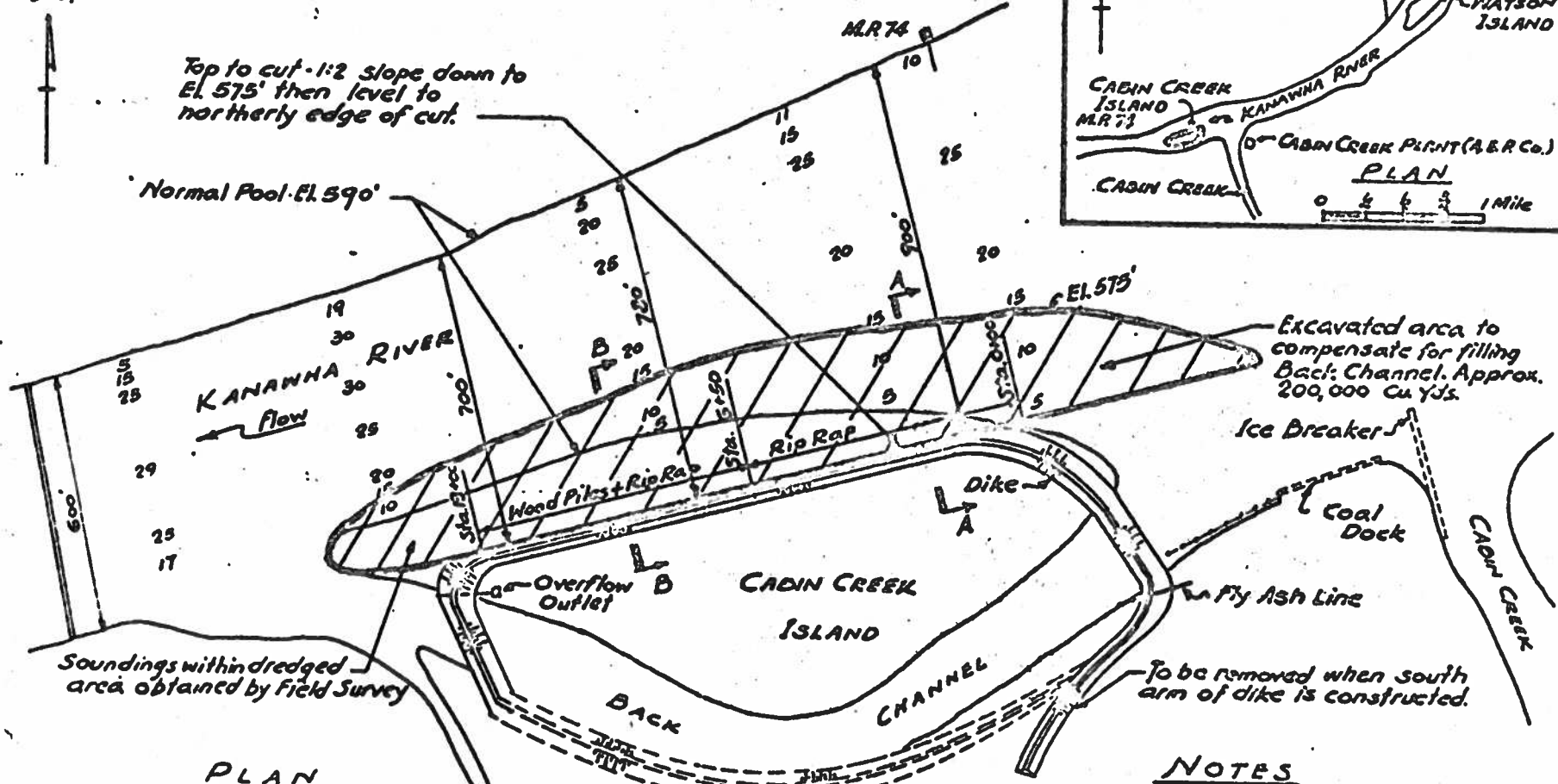
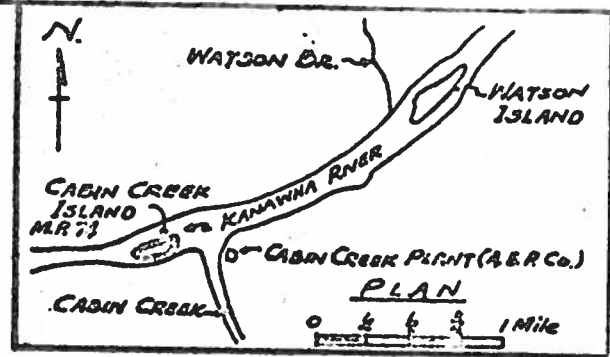

G. T. DERBY
Colonel, Corps of Engineers
District Engineer

W.6 (Kanawha R. - Dike & Dredging) - 14.91



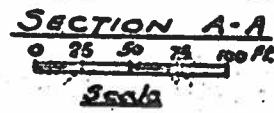
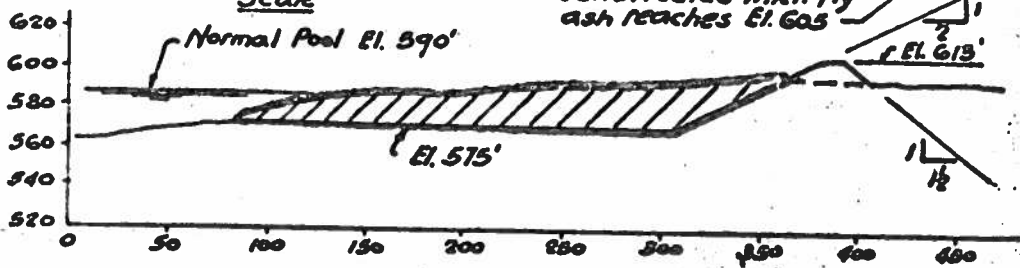
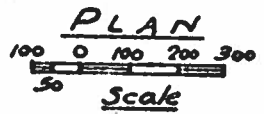
Top to cut - 1:2 slope down to El. 575' then level to northerly edge of cut.

Normal Pool - El. 590'



Excavated area to compensate for filling Back Channel. Approx. 200,000 Cu Yds.

Soundings within dredged area obtained by Field Survey



NOTES

Ref: U.S. Engineers Survey Sheet 15, Cabin Creek is located 74.3 miles above the mouth of the Kanawha River. Elevations are referred to M.S.L. Sandy Hook Datum.

Normal Pool of the Kanawha River is 590'. High Water of the Kanawha River is 617.6'. Dredged material, where suitable, to be used for construction of dike. Remainder to be deposited on island or in Back Channel within proposed dike.

Application By:
Appalachian Electric Power Company,
Cabin Creek, West Virginia.
October 21, 1953

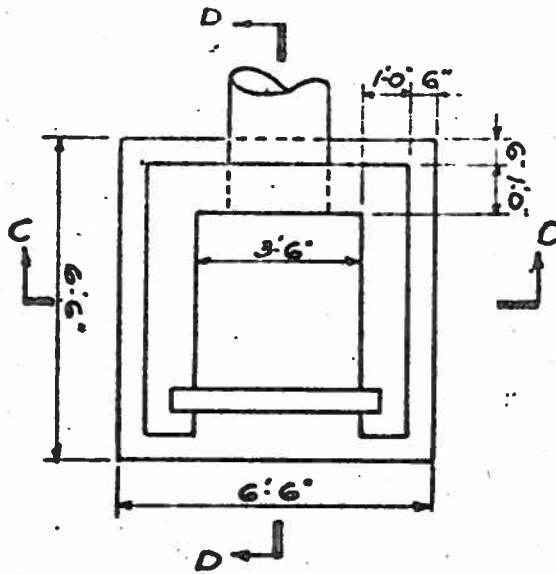
Revised 2-13-54
1-6-

PROPOSED FLY ASH STORAGE
AT CABIN CREEK ISLAND
CABIN CREEK POWER PLANT

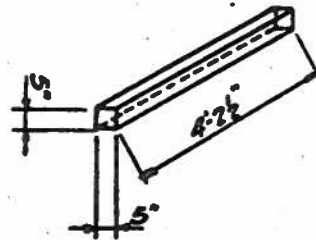
Application By:
 Appalachian Electric Power Company
 Cabin Creek, West Virginia
 October 24, 1958

Revised 1-6-58

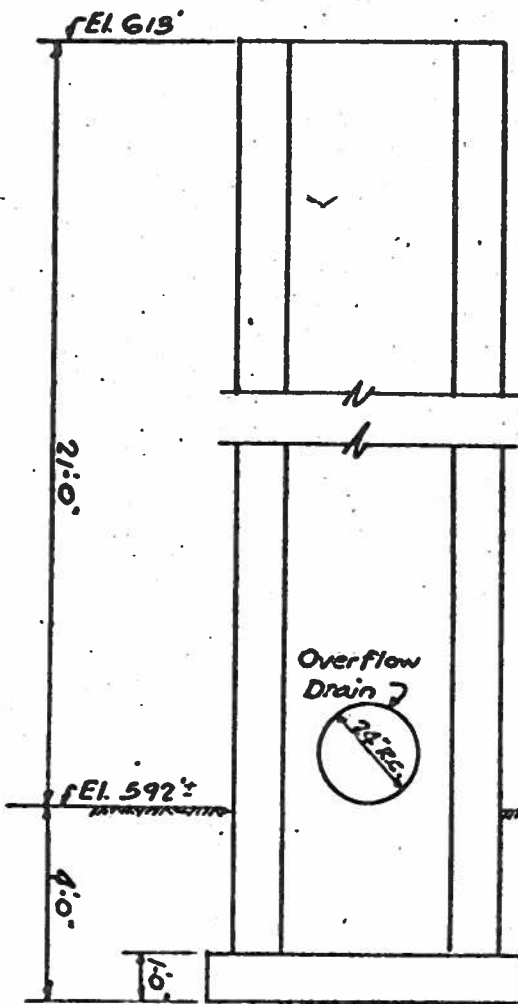
DETAIL OF OVERFLOW OUTLET
 IN FLY ASH STORAGE AREA
 AT CABIN CREEK ISLAND
 CABIN CREEK POWER PLANT
 D-1 NA 5-2-1153



PLAN

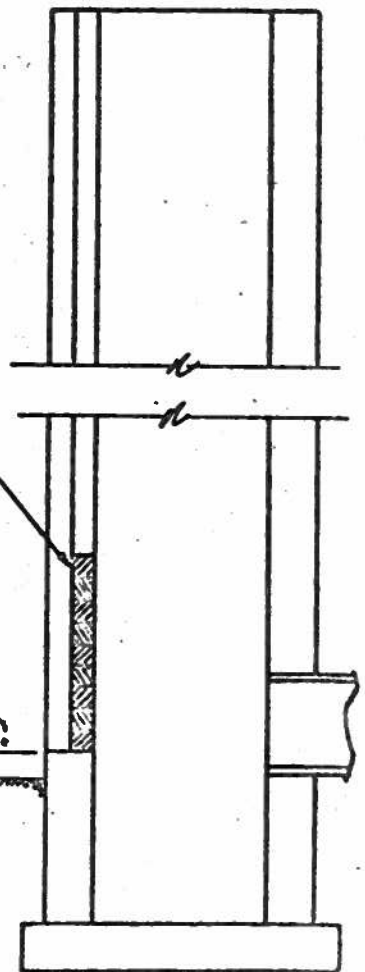


DETAIL OF CONCRETE PLANK

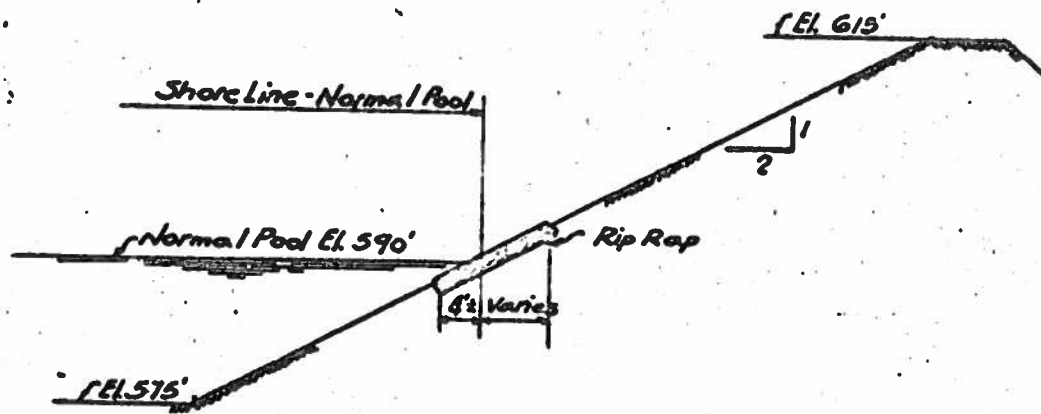


SECTION C-C

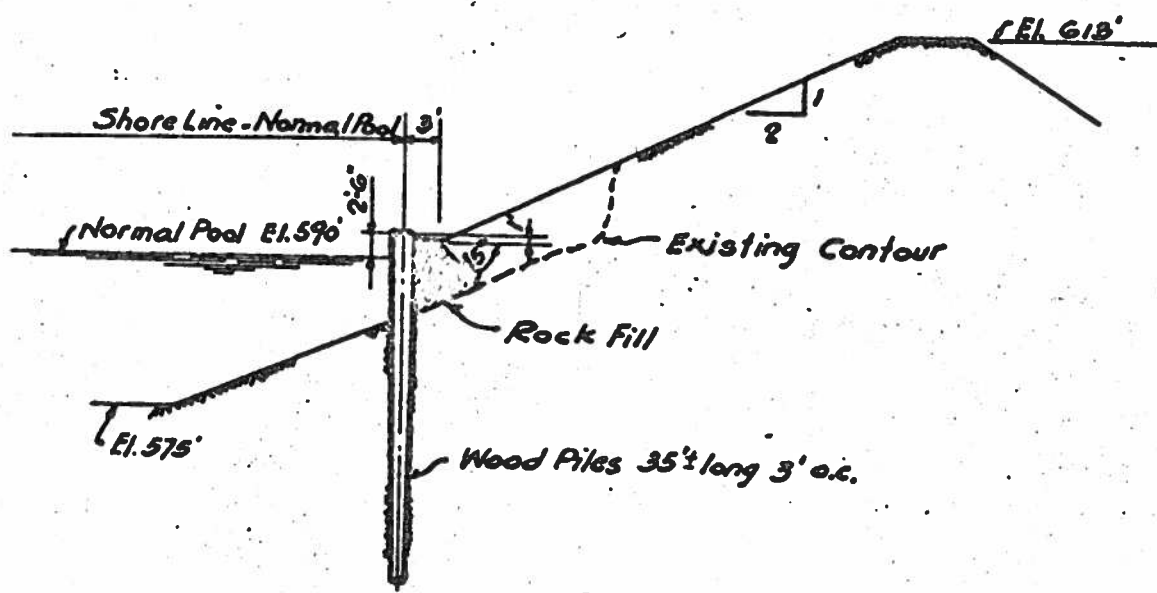
Planks installed
 as required



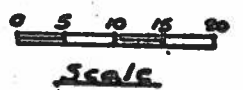
SECTION D-D



SECTION A-A (ENLARGED)
Typical For Stations 0+00-6+50



SECTION B-B
Typical For Stations 6+50-13+00



Application By:
 Appalachian Electric Power Company
 Cabin Creek, West Virginia
 January 6, 1956

PROPOSED FLY ASH STORAGE
 AT CABIN CREEK ISLAND
 CABIN CREEK POWER PLANT
 Sheet No. 13 of 15
 Date 1-5-56

DEPARTMENT OF THE ARMY

NOTE.—It is to be understood that this instrument does not give any property rights either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State, or local laws or regulations, nor does it obviate the necessity of obtaining State assent to the work authorized. IT EXPRESSLY EXPRESSES THE ASSENT OF THE FEDERAL GOVERNMENT SO FAR AS CONCERNS THE PUBLIC RIGHTS OF NAVIGATION. (See *Crummey v. Chicago*, 188 U. S., 410.)

16-17104-2

PERMIT

Huntington District
Corps of Engineers.
Huntington 18, W. Va.
18 April, 1954

Appalachian Electric Power Company
30 Church Street
New York 6, New York

Gentlemen:

Referring to written request dated 19 February 1954 (signed by H. A. Kanzer, Vice President) addressed to the District Engineer, Huntington District, Corps of Engineers, U. S. Army, P. O. Box 2127, Huntington, West Virginia,

I have to inform you that, upon the recommendation of the Chief of Engineers, and under the provisions of Section 10 of the Act of Congress approved March 3, 1899, entitled "An act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes," you are hereby authorized by the Secretary of the Army.

to construct a dike around Cabin Creek Island, dredge approximately 200,000 cubic yards of material along the island and fill the back channel of the island,

(Here describe the proposed structure or work.)

in the Kanawha River,

(Here to be named the river, harbor, or waterway concerned.)

at Cabin Creek Junction, West Virginia, 74.0 miles above the mouth of the river,
(Here to be named the nearest well-known locality—preferably a town or city—and the distance in miles and tenths from some definite point in the same, stating whether above or below or giving direction by points of compass.)

in red

in accordance with the plans shown on the drawing attached hereto marked "Proposed Fly Ash Storage at Cabin Creek Island #24, Dwg. No. S-SK-10153," in two sheets, dated 21 October 1953, revised 16 February 1954,

subject to the following conditions:

(a) That the work shall be subject to the review and approval of the District Engineer, Corps of Engineers, in charge of the locality, who may temporarily suspend the work at any time, if in his judgment the interests of navigation so require.

(b) That any material dredged in the prosecution of the work herein authorized shall be removed evenly and no large refuse piles, ridges across the bed of the waterway, or deep holes that may have a tendency to cause injury to navigable channels or to the banks of the waterway shall be left. If any pipe, wire, or cable hereby authorized is laid in a trench, the formation of permanent ridges across the bed of the waterway shall be avoided and the back filling shall be so done as not to increase the cost of future dredging for navigation. Any material to be deposited or dumped at the locality shown on the drawing hereto attached, and if so prescribed thereon, within or behind a good and substantial bulkhead or bulkheads, such as will prevent escape of the material in the waterway. If the material is to be deposited in the harbor of New York, or in its adjacent or tributary waters, or in Long Island Sound, a permit therefor must be previously obtained from the Supervisor of New York Harbor, Whitehall Building, New York City.

(c) That there shall be no unreasonable interference with navigation by the work herein authorized.

(d) That if inspections or any other operations by the United States are necessary in the interest of navigation, all expenses connected therewith shall be borne by the permittee.

(e) That no attempt shall be made by the permittee or the owner to forbid the full and free use by the public of all navigable waters at or adjacent to the work or structure.

(f) That if future operations by the United States require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army, it shall cause unreasonable obstruction to the free navigation of said water, the owner will be required upon due notice from the Secretary of the Army, to remove or alter the structural work or obstructions caused thereby without expense to the United States, so as to render navigation reasonably free, easy, and unobstructed; and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners shall, without expense to the United States, and to such extent and in such time and manner as the Secretary of the Army may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable capacity of the watercourse. No claim shall be made against the United States on account of any such removal or alteration.

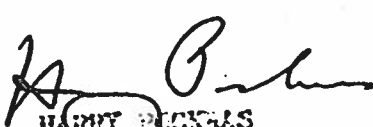
(g) That the United States shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the Government for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

(h) That if the display of lights and signals on any work hereby authorized is not otherwise provided for by law, such lights and signals as may be prescribed by the U. S. Coast Guard, shall be installed and maintained by and at the expense of the owner.

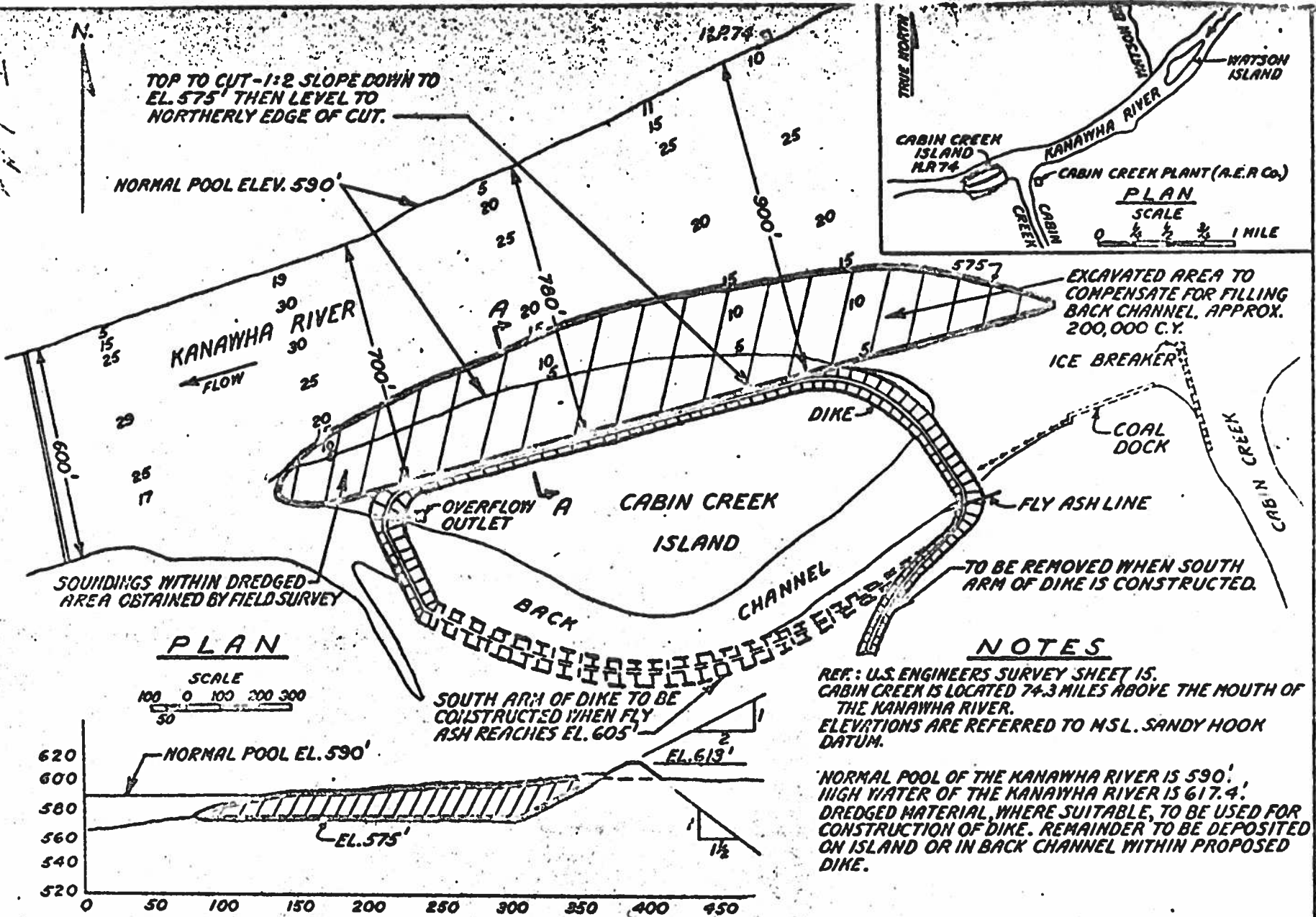
(i) That the permittee shall notify the said district engineer at what time the work will be commenced, and as far in advance of the time of commencement as the said district engineer may specify, and shall also notify him promptly, in writing, of the commencement of work, suspension of work, if for a period of more than one week, resumption of work, and its completion.

(j) That if the structure or work herein authorized is not completed on or before thirty-first (31st) day of October, 1917, this permit, if not previously revoked or specifically extended, shall cease and be null and void.

By authority of the Secretary of the Army:


HARRY BECKWITH
Chief Engineer, Assistant
Acting District Engineer

Incl. 1



TOP TO CUT - 1:2 SLOPE DOWN TO EL. 575' THEN LEVEL TO NORTHERLY EDGE OF CUT.

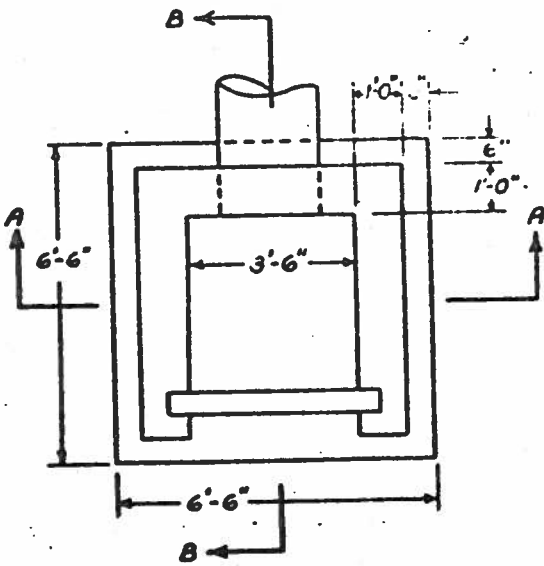
NORMAL POOL ELEV. 590'

EXCAVATED AREA TO COMPENSATE FOR FILLING BACK CHANNEL. APPROX. 200,000 C.Y.

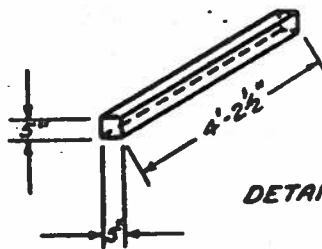
TO BE REMOVED WHEN SOUTH ARM OF DIKE IS CONSTRUCTED.

APPLICATION BY:
APPALACHIAN ELECTRIC POWER COMPANY
CABIN CREEK, WEST VIRGINIA
OCTOBER 21, 1952 REVISED 2-15-54

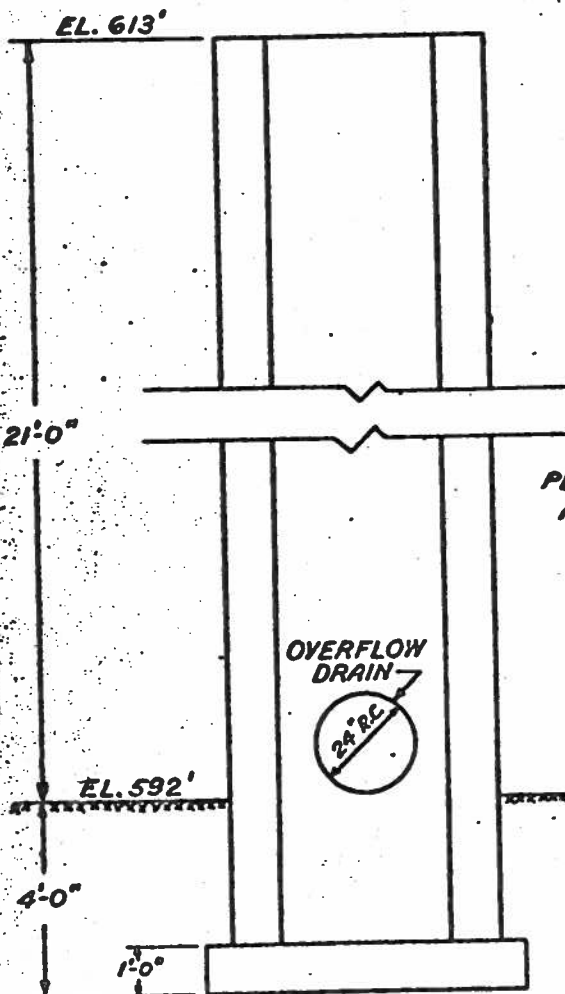
PROPOSED FLY ASH STORAGE
AT CABIN CREEK ISLAND
CABIN CREEK POWER PLANT
SHEET 1052 DWG No. S-SK-10153



PLAN

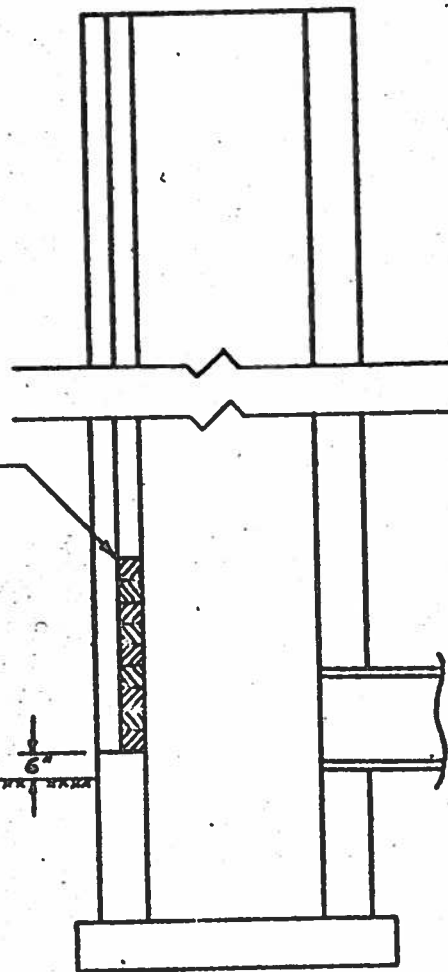


DETAIL OF CONCRETE PLANK



SECTION A-A

PLANKS INSTALLED AS REQUIRED



SECTION B-B

DETAIL OF OVERFLOW OUTLET
 FLY ASH STORAGE AREA
 CABIN CREEK POWER PLANT
 SHEET 2 OF 2 - DWG. No. S-SK-10153
 SCALE: 1/4" = 1'-0"

APPLICATION BY:
 APPALACHIAN ELECTRIC POWER COMPANY
 CABIN CREEK, WEST VIRGINIA
 OCTOBER 21, 1953

WAR DEPARTMENT

NOTE.—It is to be understood that this instrument does not give any property rights either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to private property or invasion of private rights, or any infringement of Federal, State, or local laws or regulations, nor does it obviate the necessity of obtaining State assent to the work authorized. IT MERELY EXPRESSES THE ASSENT OF THE FEDERAL GOVERNMENT SO FAR AS CONCERNS THE PUBLIC RIGHTS OF NAVIGATION. (See *Cummings v. Chicago*, 183 U. S., 410.) 10-13143

PERMIT

United States Engineer Office.
Ohio River Division
Columbus, Ohio August 2, 1943.

Appalachian Electric Power Company
201 Virginia Street
Charleston, West Virginia

Gentlemen:

Referring to written request dated July 10, 1943 (signed by De Fe Montague, Civil Engineer) addressed to the District Engineer, United States Engineer Office, Huntington, West Virginia—

I have to inform you that, upon the recommendation of the Chief of Engineers, and under the provisions of Section 10 of the Act of Congress approved March 3, 1899, entitled "An act making appropriations for the construction, repair, and preservation of certain public works on rivers and harbors, and for other purposes," you are hereby authorized by the Secretary of War,

to construct a 16-inch sanitary sewer outlet and concrete handrail,

(Here describe the proposed structure or work.)

in Kanawha River, left bank,

(Here to be named the river, harbor, or waterway concerned.)

at Cabin Creek, West Virginia, 5400 feet above the mouth of Cabin Creek, 71.0

(Here to be named the nearest well-known locality—preferably a town or city—and the distance in miles and tenths from some definite point in the same, stating whether above or below or giving direction by points of compass.)

miles above the mouth of the Kanawha River.

In accordance with the plans shown on the drawing attached hereto marked "Proposed

(Or drawing; give file number or other definite identification marks.)

Handrail & Outlet for a 16" Sanitary Sewer 0 0 0", in case sheet dated July 16, 1943

subject to the following conditions:

INCL. 272

(a) That the work shall be subject to the supervision and approval of the District Engineer, Engineer Department at Large, in charge of the locality, who may temporarily suspend the work at any time, if in his judgment, the interests of navigation so require.

(b) That any material dredged in the prosecution of the work herein authorized shall be removed evenly, and no large refuse piles, ridges across the bed of the waterway, or deep holes that may have a tendency to cause injury to navigable channels or to the banks of the waterway shall be left. If any pipe, wire, or cable hereby authorized is laid in a trench, the formation of permanent ridges across the bed of the waterway shall be avoided and the back filling shall be so done as not to increase the cost of future dredging for navigation. Any material to be deposited or dumped under this authorization, either in the waterway or on shore above high-water mark, shall be deposited or dumped at the locality shown on the drawing hereto attached, and, if so prescribed thereon, within or behind a good and substantial bulkhead or bulkheads, such as will prevent escape of the material into the waterway. If the material is to be deposited in the harbor of New York, or in its adjacent or tributary waters, or in Long Island Sound, a permit therefor must be previously obtained from the Supervisor of New York Harbor, Army Building, New York City.

(c) That there shall be no unreasonable interference with navigation by the work herein authorized.

(d) That if inspections or any other operations by the United States are necessary in the interests of navigation, all expenses connected therewith shall be borne by the permittee.

(e) That no attempt shall be made by the permittee or the owner to forbid the full and free use by the public of all navigable waters at or adjacent to the work or structure.

(f) That if future operations by the United States require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Secretary of War, it shall cause unreasonable obstruction to the free navigation of said water, the owner will be required, upon due notice from the Secretary of War, to remove or alter the structural work or obstructions caused thereby without expense to the United States, so as to render navigation reasonably free, easy, and unobstructed; and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners shall, without expense to the United States, and to such extent and in such time and manner as the Secretary of War may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable capacity of the watercourse. No claim shall be made against the United States on account of any such removal or alteration.


(g) That the United States shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the Government for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

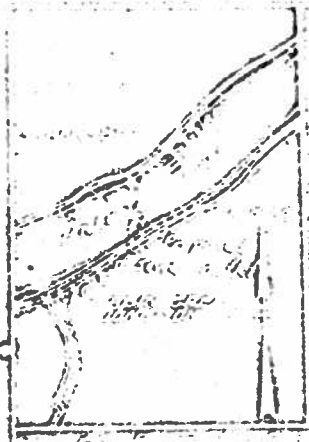
(A) That if the display of lights and signals on any work hereby authorized is not otherwise provided for by law, such lights and signals as may be prescribed by the U. S. Coast Guard, shall be installed and maintained by and at the expense of the owner.

(i) That the permittee shall notify the said district engineer at what time the work will be commenced, and as far in advance of the time of commencement as the said district engineer may specify, and shall also notify him promptly, in writing, of the commencement of work, suspension of work, if for a period of more than one week, resumption of work, and its completion.

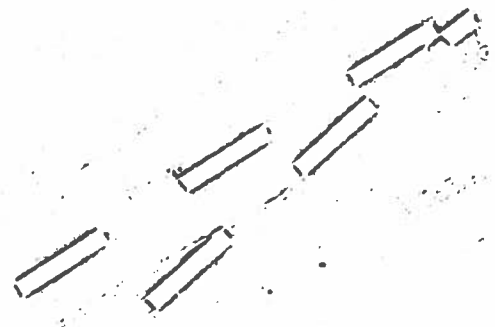
(j) That if the structure or work herein authorized is not completed on or before ~~the~~ the ~~first~~ the ~~day~~ day of ~~the~~ the ~~month~~ month of ~~the~~ the ~~year~~ year, 191, this permit, if not previously revoked or specifically extended, shall cease and be null and void.

By authority of the Secretary of War:


Colonel, Corps of Engineers
Division Engineer

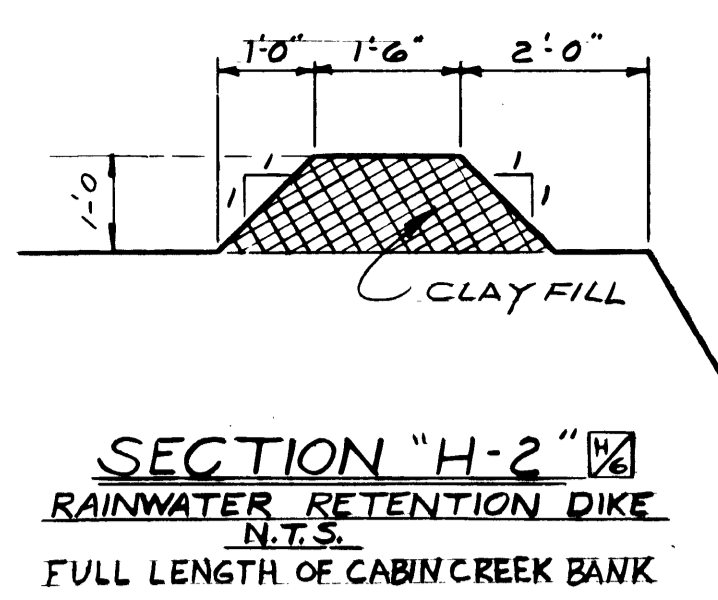
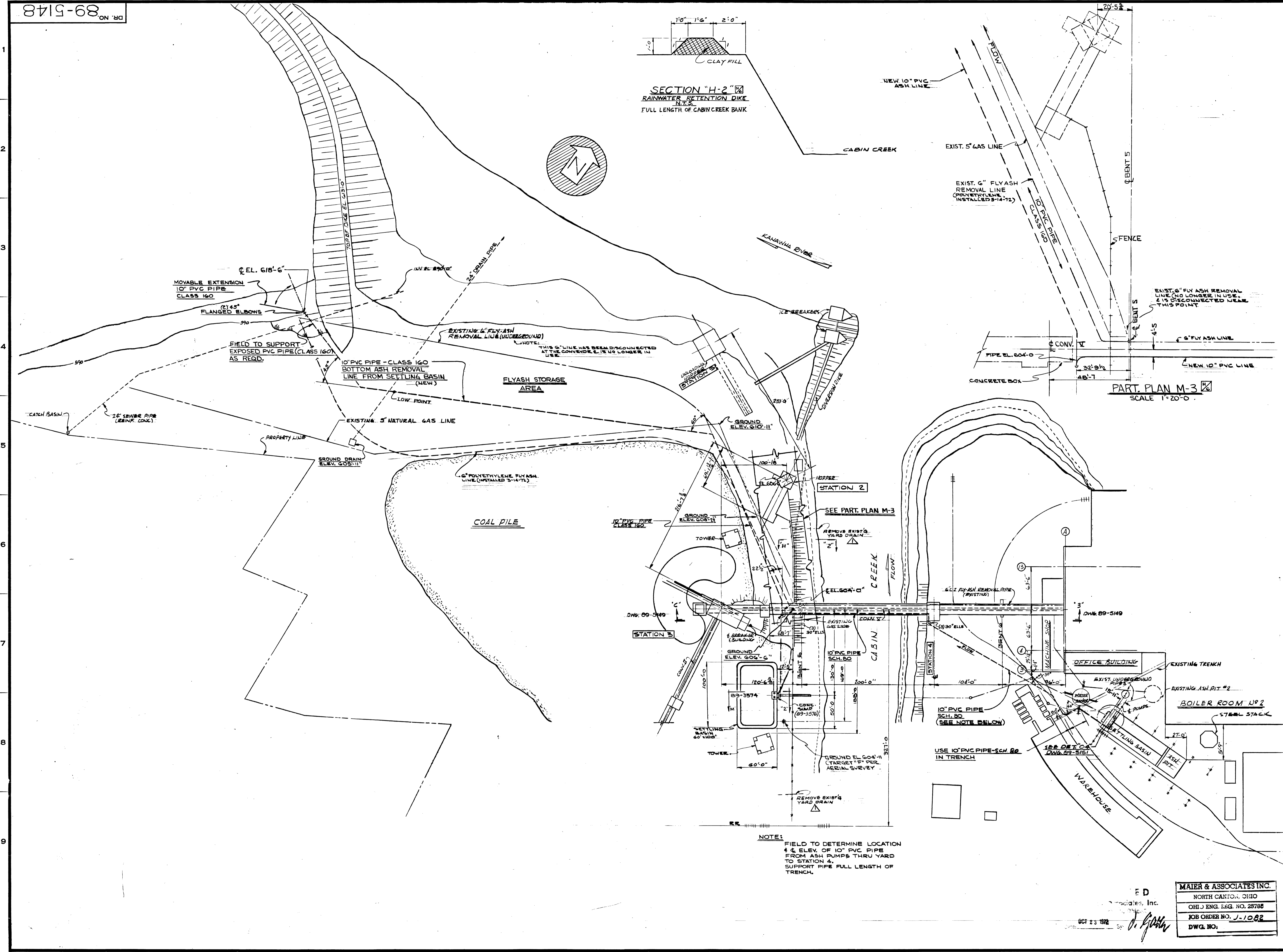


Note
 Height 8500 ... 6104



18 1/2 1/4 1/4
 ...

...
 ...
 ...
 ...



PART PLAN M-3
SCALE 1\"/>

NOTE: FIELD TO DETERMINE LOCATION # 4 ELEV. OF 10\"/>

REFERENCE DWGS

SECTIONS & DETAILS	89-5149
SECTIONS & DETAILS	89-5150
SECTIONS & DETAILS	89-5151

REVISIONS

DATE	NO.	DESCRIPTION	APP'D.
1/24/92	1	REMOVED EXIST. DRAIN FROM COAL PILE TO CREEK ADDED DINK SECT 'H-2', NEW 10\"/>	

"THIS DRAWING IS THE PROPERTY OF THE AMERICAN ELECTRIC POWER SERVICE CORP. AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE AEP SERVICE CORP. OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST."

APPALACHIAN ELECTRIC POWER CO.
CABIN CREEK PLANT
CABIN CREEK, W. VA.

BOILER NOS. 81, 82, 91, & 92
ASH SETTLING BASIN
BOTTOM ASH REMOVAL PIPE

DR. NO. 89-5148-1

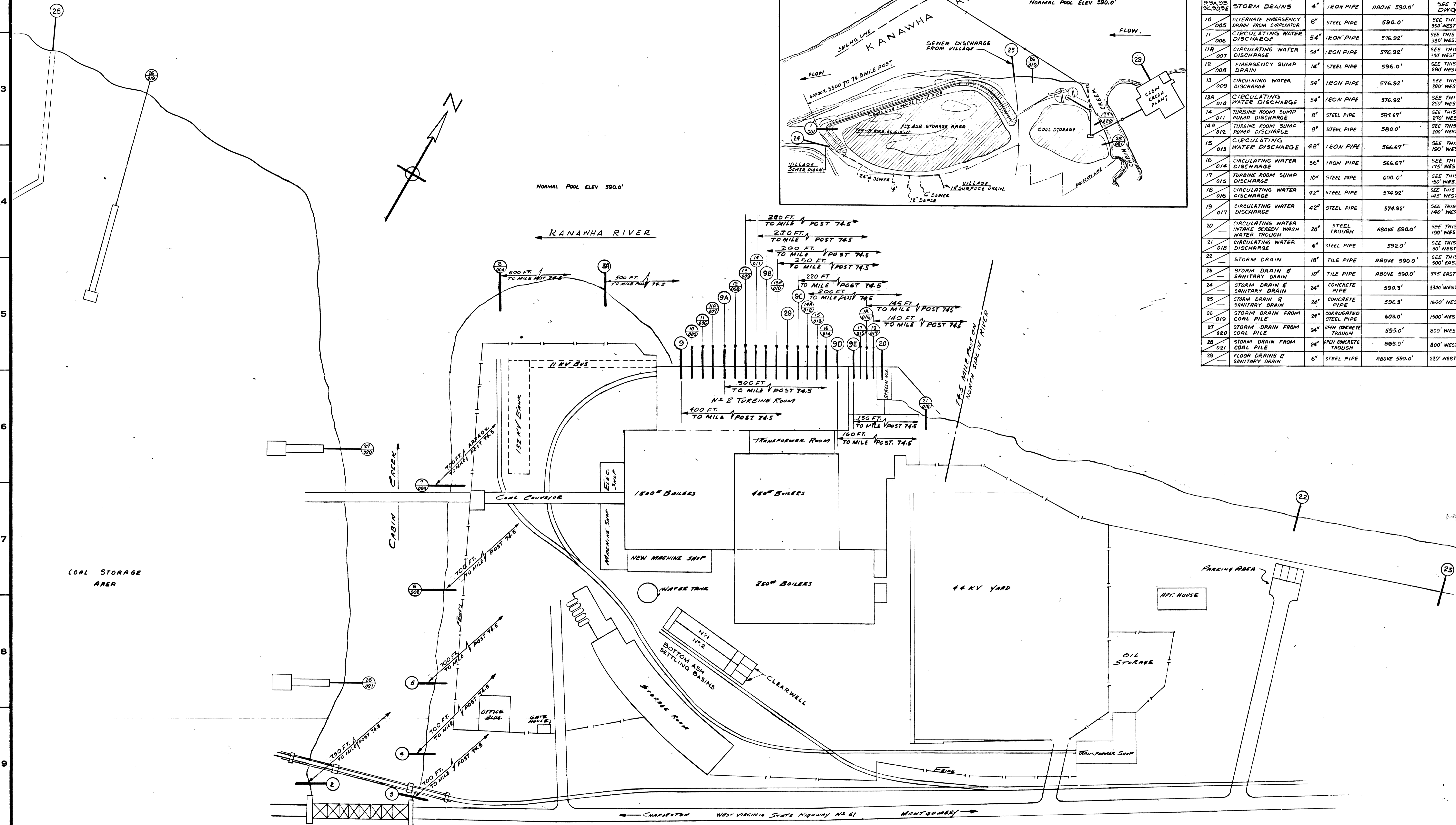
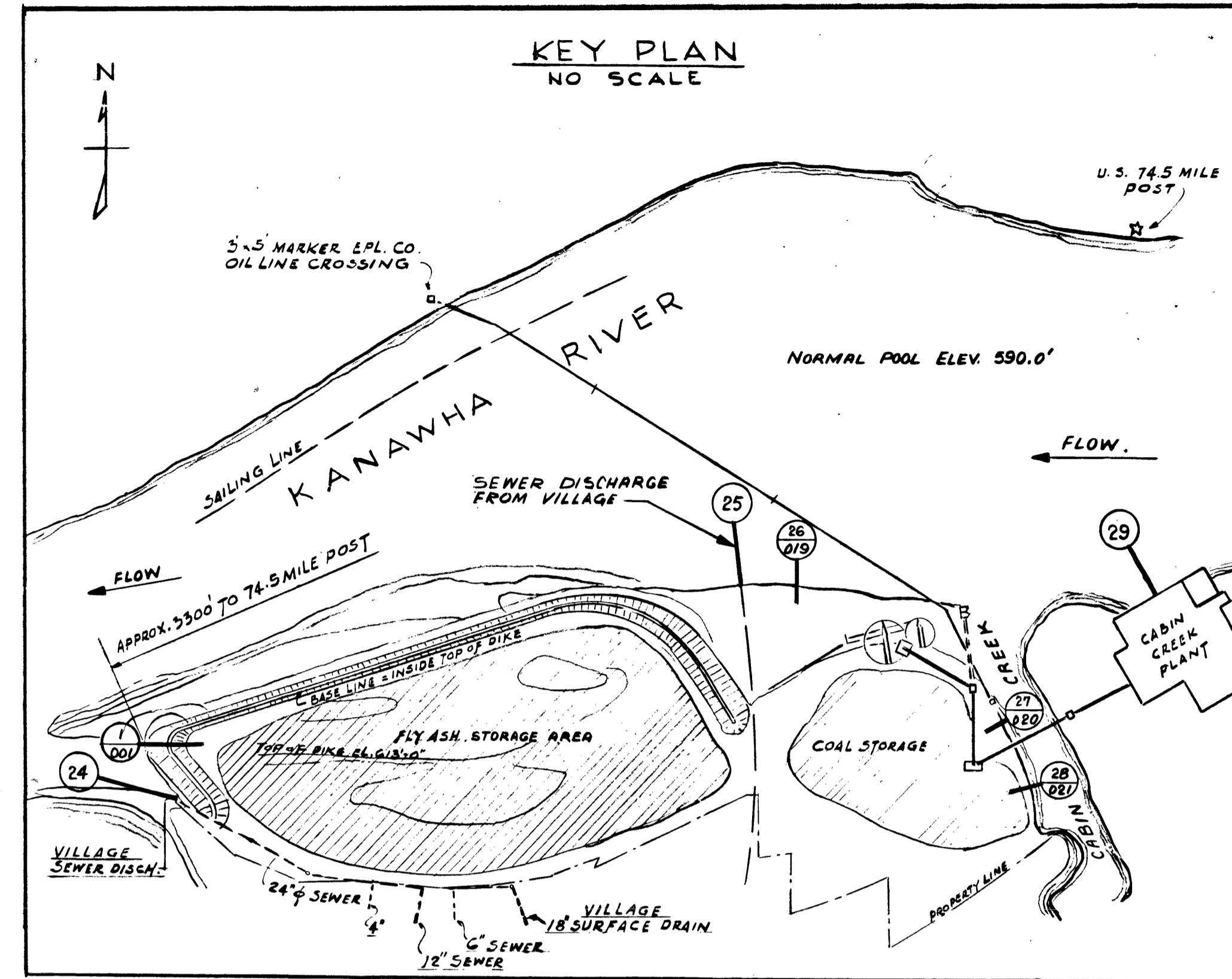
ARCH.	ELEC.	MECH.	STR.
SCALE 1\"/>	ENGINEERED BY	DATE	
DR. 7/6 C. F. H.	<i>C. Poligian</i>	12/7/91	
CH.	DESIGN DIV.		
NO. LDR.			
DATE 8-15-91			

MAIER & ASSOCIATES INC.
NORTH CANTON, OHIO
OHIO ENG. REG. NO. 28788
JOB ORDER NO. J-1082
DWG. NO.

AMERICAN ELECTRIC POWER SERVICE CORP.
P. O. BOX 487 CANTON, OHIO, 44701

SCHEDULE OF RIVER OUTFALLS

OUTFALL NO. & SERVICE	SIZE	CONSTRUCTION	INVERT ELEVATION AT DISCHARGE	LOCATION	REMARKS
1 001 FLY ASH STORAGE AREA OVERFLOW	24"	CONCRETE PIPE	590.0'	SEE THIS DWG. H/3	INTERMITTENT FLOW NEAR SKIMMER FOR SOLIDS RETENTION AT OVERFLOW
2 STORM DRAIN & SANITARY DRAIN	30"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. D/3	UNCONTAMINATED STORM WATER & TREATED SANITARY WASTES
3 & 3A STORM DRAINS	8"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. D/3	UNCONTAMINATED STORM WATER (2 PIPES)
4 STORM DRAIN	20"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. D/3	UNCONTAMINATED STORM WATER
5 STORM DRAIN & SANITARY DRAIN	24"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. D/3	UNCONTAMINATED STORM WATER & TREATED SANITARY WASTES
6 STORM DRAIN, FILTER BACKWASH DRAIN & BALKER ROOM DRAIN	20"	TILE PIPE	591.16'	SEE THIS DWG. D/7	UNCONTAMINATED STORM WATER & INTERMITTENT DISCHARGE OF PROCESS WASTES FROM FILTERS
7 BOTTOM ASH PIT OVERFLOW	30"	TILE PIPE	595.0'	SEE THIS DWG. D/4	NEAR SKIMMER FOR SOLIDS RETENTION AT OVERFLOW
8 STORM DRAIN, SANITARY DRAIN, BALKER ROOM DRAIN	24"	TILE PIPE	598.0'	SEE THIS DWG. F/5	UNCONTAMINATED STORM WATER, TREATED SANITARY WASTES, UNTREATED PROCESS WASTES
9A, 9B, 9C STORM DRAINS	4"	IRON PIPE	ABOVE 590.0'	SEE THIS DWG. G/6, H/6	UNCONTAMINATED STORM WATER (3 PIPES)
10 ALTERNATE EMERGENCY DRAIN FROM EVAPORATOR	6"	STEEL PIPE	590.0'	SEE THIS DWG. G/5 300' WEST M.P. 74.5	EMERGENCY PROCESS DRAIN UNTREATED PROCESS WASTES
11 CIRCULATING WATER DISCHARGE	54"	IRON PIPE	576.92'	SEE THIS DWG. G/5 330' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER # 9
11A CIRCULATING WATER DISCHARGE	54"	IRON PIPE	576.92'	SEE THIS DWG. G/5 300' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER # 5
12 EMERGENCY SUMP DRAIN	14"	STEEL PIPE	596.0'	SEE THIS DWG. G/5 290' WEST M.P. 74.5	UNCONTAMINATED TURBINE ROOM FLOOR DRAINS
13 CIRCULATING WATER DISCHARGE	54"	IRON PIPE	576.92'	SEE THIS DWG. G/5 280' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER # 8
13A CIRCULATING WATER DISCHARGE	54"	IRON PIPE	576.92'	SEE THIS DWG. G/5 250' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER # 8
14 TURBINE ROOM SUMP PUMP DISCHARGE	8"	STEEL PIPE	587.67'	SEE THIS DWG. G/5 270' WEST M.P. 74.5	INTERMITTENT DISCHARGE UNCONTAMINATED PROCESS WASTES
14A TURBINE ROOM SUMP PUMP DISCHARGE	8"	STEEL PIPE	588.0'	SEE THIS DWG. H/5 200' WEST M.P. 74.5	INTERMITTENT DISCHARGE UNCONTAMINATED PROCESS WASTES
15 CIRCULATING WATER DISCHARGE	48"	IRON PIPE	566.67'	SEE THIS DWG. H/5 190' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER # 6 INACTIVE - COLD RESERVE
16 CIRCULATING WATER DISCHARGE	36"	IRON PIPE	566.67'	SEE THIS DWG. H/5 175' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER # 5, INACTIVE - COLD RESERVE
17 TURBINE ROOM SUMP DISCHARGE	10"	STEEL PIPE	600.0'	SEE THIS DWG. H/5 150' WEST M.P. 74.5	INACTIVE - NO FLOW # 5 & 4 TURBINE DEACTIVATED
18 CIRCULATING WATER DISCHARGE	42"	STEEL PIPE	574.92'	SEE THIS DWG. H/5 145' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER # 4 INACTIVE - COLD RESERVE
19 CIRCULATING WATER DISCHARGE	42"	STEEL PIPE	574.92'	SEE THIS DWG. H/5 140' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER CONDENSER # 3 INACTIVE - COLD RESERVE
20 CIRCULATING WATER INTAKE SCREEN WASH WATER TROUGH	20"	STEEL TROUGH	ABOVE 590.0'	SEE THIS DWG. H/5 100' WEST M.P. 74.5	THE RETURN TO THE RIVER OF THE RIVER TRASH WASHED OFF THE INTAKE SCREENS
21 CIRCULATING WATER DISCHARGE	6"	STEEL PIPE	592.0'	SEE THIS DWG. J/6 30' WEST M.P. 74.5	UNCONTAMINATED COOLING WATER FROM TRANSFORMERS
22 STORM DRAIN	18"	TILE PIPE	ABOVE 590.0'	SEE THIS DWG. M/7 500' EAST M.P. 74.5	UNCONTAMINATED STORM WATER
23 STORM DRAIN & SANITARY DRAIN	10"	TILE PIPE	ABOVE 590.0'	775' EAST M.P. 74.5	UNCONTAMINATED STORM WATER & TREATED SANITARY WASTES
24 STORM DRAIN & SANITARY DRAIN	24"	CONCRETE PIPE	590.3'	3300' WEST M.P. 74.5	UNCONTAMINATED STORM WATER & SANITARY WASTES FROM VILLAGE OF CABIN CREEK
25 STORM DRAIN & SANITARY DRAIN	24"	CONCRETE PIPE	590.3'	1600' WEST M.P. 74.5	UNCONTAMINATED STORM WATER & SANITARY WASTES FROM VILLAGE OF CABIN CREEK
26 STORM DRAIN FROM COAL PILE	24"	CORRUGATED STEEL PIPE	603.0'	1500' WEST M.P. 74.5	STORM WATER RUNOFF FROM COAL STORAGE AREA
27 STORM DRAIN FROM COAL PILE	24"	OPEN CONCRETE TROUGH	595.0'	800' WEST M.P. 74.5	STORM WATER RUNOFF FROM COAL STORAGE AREA
28 STORM DRAIN FROM COAL PILE	24"	OPEN CONCRETE TROUGH	595.0'	800' WEST M.P. 74.5	STORM WATER RUNOFF FROM COAL STORAGE AREA
29 FLOOR DRAINS & SANITARY DRAIN	6"	STEEL PIPE	ABOVE 590.0'	230' WEST M.P. 74.5	UNCONTAMINATED FLOOR DRAINS & SANITARY WASTES FROM VILLAGE OF CABIN CREEK

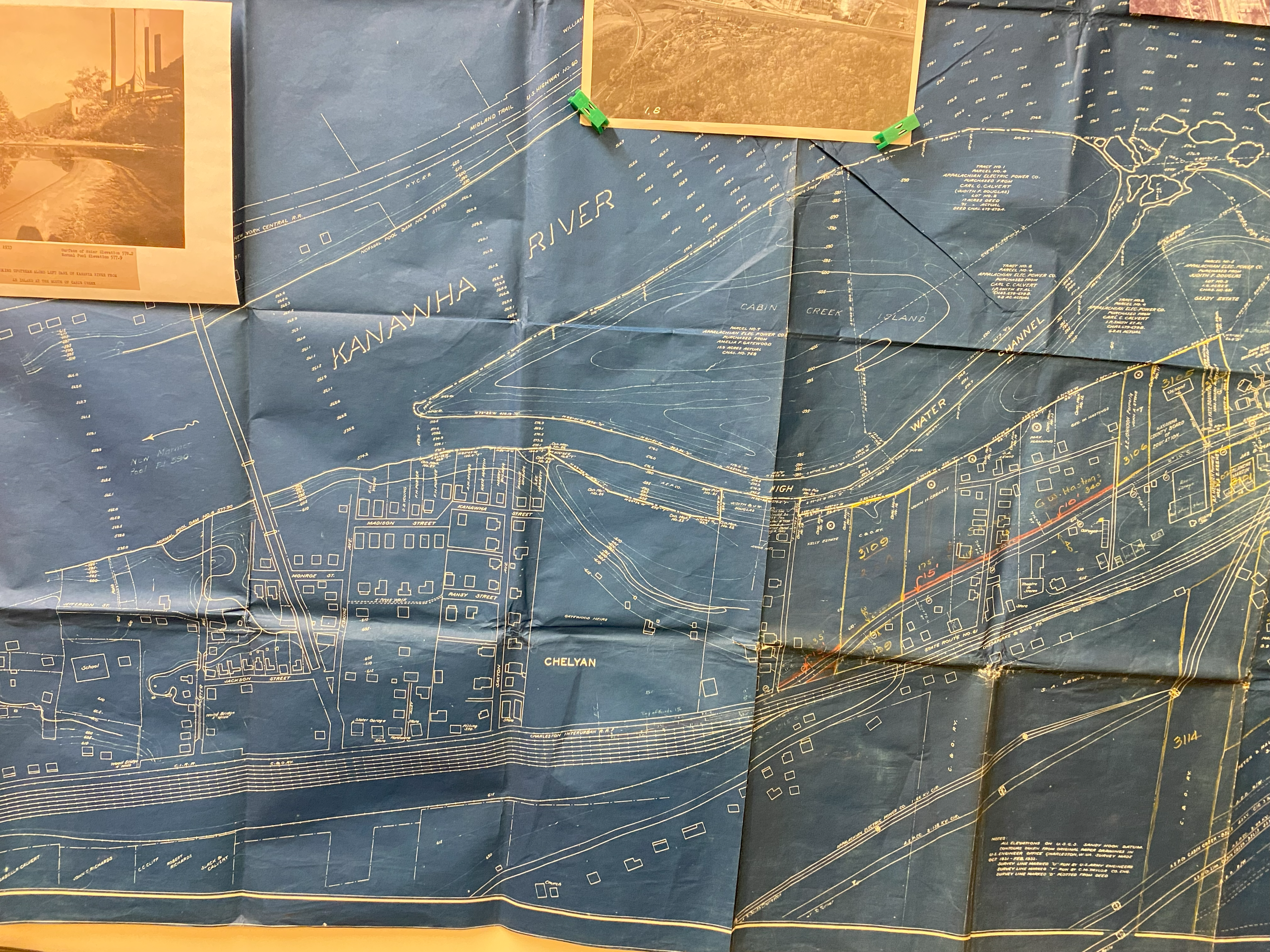


NO.	DATE	DESCRIPTION	APP'D.
1	12/1/72	ADDED: ARMY CORPS OF ENGINEERS DISCHARGE SERIAL NO. FOR OUTFALLS H/1, H/1A, H/1B, H/1C, H/1D, H/1E, H/1F, H/1G, H/1H, H/1I, H/1J, H/1K, H/1L, H/1M, H/1N, H/1O, H/1P, H/1Q, H/1R, H/1S, H/1T, H/1U, H/1V, H/1W, H/1X, H/1Y, H/1Z, H/2, H/3, H/4, H/5, H/6, H/7, H/8, H/9, H/10, H/11, H/12, H/13, H/14, H/15, H/16, H/17, H/18, H/19, H/20, H/21, H/22, H/23, H/24, H/25, H/26, H/27, H/28, H/29, H/30, H/31, H/32, H/33, H/34, H/35, H/36, H/37, H/38, H/39, H/40, H/41, H/42, H/43, H/44, H/45, H/46, H/47, H/48, H/49, H/50, H/51, H/52, H/53, H/54, H/55, H/56, H/57, H/58, H/59, H/60, H/61, H/62, H/63, H/64, H/65, H/66, H/67, H/68, H/69, H/70, H/71, H/72, H/73, H/74, H/75, H/76, H/77, H/78, H/79, H/80, H/81, H/82, H/83, H/84, H/85, H/86, H/87, H/88, H/89, H/90, H/91, H/92, H/93, H/94, H/95, H/96, H/97, H/98, H/99, H/100, H/101, H/102, H/103, H/104, H/105, H/106, H/107, H/108, H/109, H/110, H/111, H/112, H/113, H/114, H/115, H/116, H/117, H/118, H/119, H/120, H/121, H/122, H/123, H/124, H/125, H/126, H/127, H/128, H/129, H/130, H/131, H/132, H/133, H/134, H/135, H/136, H/137, H/138, H/139, H/140, H/141, H/142, H/143, H/144, H/145, H/146, H/147, H/148, H/149, H/150, H/151, H/152, H/153, H/154, H/155, H/156, H/157, H/158, H/159, H/160, H/161, H/162, H/163, H/164, H/165, H/166, H/167, H/168, H/169, H/170, H/171, H/172, H/173, H/174, H/175, H/176, H/177, H/178, H/179, H/180, H/181, H/182, H/183, H/184, H/185, H/186, H/187, H/188, H/189, H/190, H/191, H/192, H/193, H/194, H/195, H/196, H/197, H/198, H/199, H/200, H/201, H/202, H/203, H/204, H/205, H/206, H/207, H/208, H/209, H/210, H/211, H/212, H/213, H/214, H/215, H/216, H/217, H/218, H/219, H/220, H/221, H/222, H/223, H/224, H/225, H/226, H/227, H/228, H/229, H/230, H/231, H/232, H/233, H/234, H/235, H/236, H/237, H/238, H/239, H/240, H/241, H/242, H/243, H/244, H/245, H/246, H/247, H/248, H/249, H/250, H/251, H/252, H/253, H/254, H/255, H/256, H/257, H/258, H/259, H/260, H/261, H/262, H/263, H/264, H/265, H/266, H/267, H/268, H/269, H/270, H/271, H/272, H/273, H/274, H/275, H/276, H/277, H/278, H/279, H/280, H/281, H/282, H/283, H/284, H/285, H/286, H/287, H/288, H/289, H/290, H/291, H/292, H/293, H/294, H/295, H/296, H/297, H/298, H/299, H/300, H/301, H/302, H/303, H/304, H/305, H/306, H/307, H/308, H/309, H/310, H/311, H/312, H/313, H/314, H/315, H/316, H/317, H/318, H/319, H/320, H/321, H/322, H/323, H/324, H/325, H/326, H/327, H/328, H/329, H/330, H/331, H/332, H/333, H/334, H/335, H/336, H/337, H/338, H/339, H/340, H/341, H/342, H/343, H/344, H/345, H/346, H/347, H/348, H/349, H/350, H/351, H/352, H/353, H/354, H/355, H/356, H/357, H/358, H/359, H/360, H/361, H/362, H/363, H/364, H/365, H/366, H/367, H/368, H/369, H/370, H/371, H/372, H/373, H/374, H/375, H/376, H/377, H/378, H/379, H/380, H/381, H/382, H/383, H/384, H/385, H/386, H/387, H/388, H/389, H/390, H/391, H/392, H/393, H/394, H/395, H/396, H/397, H/398, H/399, H/400, H/401, H/402, H/403, H/404, H/405, H/406, H/407, H/408, H/409, H/410, H/411, H/412, H/413, H/414, H/415, H/416, H/417, H/418, H/419, H/420, H/421, H/422, H/423, H/424, H/425, H/426, H/427, H/428, H/429, H/430, H/431, H/432, H/433, H/434, H/435, H/436, H/437, H/438, H/439, H/440, H/441, H/442, H/443, H/444, H/445, H/446, H/447, H/448, H/449, H/450, H/451, H/452, H/453, H/454, H/455, H/456, H/457, H/458, H/459, H/460, H/461, H/462, H/463, H/464, H/465, H/466, H/467, H/468, H/469, H/470, H/471, H/472, H/473, H/474, H/475, H/476, H/477, H/478, H/479, H/480, H/481, H/482, H/483, H/484, H/485, H/486, H/487, H/488, H/489, H/490, H/491, H/492, H/493, H/494, H/495, H/496, H/497, H/498, H/499, H/500, H/501, H/502, H/503, H/504, H/505, H/506, H/507, H/508, H/509, H/510, H/511, H/512, H/513, H/514, H/515, H/516, H/517, H/518, H/519, H/520, H/521, H/522, H/523, H/524, H/525, H/526, H/527, H/528, H/529, H/530, H/531, H/532, H/533, H/534, H/535, H/536, H/537, H/538, H/539, H/540, H/541, H/542, H/543, H/544, H/545, H/546, H/547, H/548, H/549, H/550, H/551, H/552, H/553, H/554, H/555, H/556, H/557, H/558, H/559, H/560, H/561, H/562, H/563, H/564, H/565, H/566, H/567, H/568, H/569, H/570, H/571, H/572, H/573, H/574, H/575, H/576, H/577, H/578, H/579, H/580, H/581, H/582, H/583, H/584, H/585, H/586, H/587, H/588, H/589, H/590, H/591, H/592, H/593, H/594, H/595, H/596, H/597, H/598, H/599, H/600, H/601, H/602, H/603, H/604, H/605, H/606, H/607, H/608, H/609, H/610, H/611, H/612, H/613, H/614, H/615, H/616, H/617, H/618, H/619, H/620, H/621, H/622, H/623, H/624, H/625, H/626, H/627, H/628, H/629, H/630, H/631, H/632, H/633, H/634, H/635, H/636, H/637, H/638, H/639, H/640, H/641, H/642, H/643, H/644, H/645, H/646, H/647, H/648, H/649, H/650, H/651, H/652, H/653, H/654, H/655, H/656, H/657, H/658, H/659, H/660, H/661, H/662, H/663, H/664, H/665, H/666, H/667, H/668, H/669, H/670, H/671, H/672, H/673, H/674, H/675, H/676, H/677, H/678, H/679, H/680, H/681, H/682, H/683, H/684, H/685, H/686, H/687, H/688, H/689, H/690, H/691, H/692, H/693, H/694, H/695, H/696, H/697, H/698, H/699, H/700, H/701, H/702, H/703, H/704, H/705, H/706, H/707, H/708, H/709, H/710, H/711, H/712, H/713, H/714, H/715, H/716, H/717, H/718, H/719, H/720, H/721, H/722, H/723, H/724, H/725, H/726, H/727, H/728, H/729, H/730, H/731, H/732, H/733, H/734, H/735, H/736, H/737, H/738, H/739, H/740, H/741, H/742, H/743, H/744, H/745, H/746, H/747, H/748, H/749, H/750, H/751, H/752, H/753, H/754, H/755, H/756, H/757, H/758, H/759, H/760, H/761, H/762, H/763, H/764, H/765, H/766, H/767, H/768, H/769, H/770, H/771, H/772, H/773, H/774, H/775, H/776, H/777, H/778, H/779, H/780, H/781, H/782, H/783, H/784, H/785, H/786, H/787, H/788, H/789, H/790, H/791, H/792, H/793, H/794, H/795, H/796, H/797, H/798, H/799, H/800, H/801, H/802, H/803, H/804, H/805, H/806, H/807, H/808, H/809, H/810, H/811, H/812, H/813, H/814, H/815, H/816, H/817, H/818, H/819, H/820, H/821, H/822, H/823, H/824, H/825, H/826, H/827, H/828, H/829, H/830, H/831, H/832, H/833, H/834, H/835, H/836, H/837, H/838, H/839, H/840, H/841, H/842, H/843, H/844, H/845, H/846, H/847, H/848, H/849, H/850, H/851, H/852, H/853, H/854, H/855, H/856, H/857, H/858, H/859, H/860, H/861, H/862, H/863, H/864, H/865, H/866, H/867, H/868, H/869, H/870, H/871, H/872, H/873, H/874, H/875, H/876, H/877, H/878, H/879, H/880, H/881, H/882, H/883, H/884, H/885, H/886, H/887, H/888, H/889, H/890, H/891, H/892, H/893, H/894, H/895, H/896, H/897, H/898, H/899, H/900, H/901, H/902, H/903, H/904, H/905, H/906, H/907, H/908, H/909, H/910, H/911, H/912, H/913, H/914, H/915, H/916, H/917, H/918, H/919, H/920, H/921, H/922, H/923, H/924, H/925, H/926, H/927, H/928, H/929, H/930, H/931, H/932, H/933, H/934, H/935, H/936, H/937, H/938, H/939, H/940, H/941, H/942, H/943, H/944, H/945, H/946, H/947, H/948, H/949, H/950, H/951, H/952, H/953, H/954, H/955, H/956, H/957, H/958, H/959, H/960, H/961, H/962, H/963, H/964, H/965, H/966, H/967, H/968, H/969, H/970, H/971, H/972, H/973, H/974, H/975, H/976, H/977, H/978, H/979, H/980, H/981, H/982, H/983, H/984, H/985, H/986, H/987, H/988, H/989, H/990, H/991, H/992, H/993, H/994, H/995, H/996, H/997, H/998, H/999, H/1000.	U/BB
2	12/1/72	ADDED: SEWER DISCHARGE FROM VILLAGE H/3, H/3A, H/3B, H/3C, H/3D, H/3E, H/3F, H/3G, H/3H, H/3I, H/3J, H/3K, H/3L, H/3M, H/3N, H/3O, H/3P, H/3Q, H/3R, H/3S, H/3T, H/3U, H/3V, H/3W, H/3X, H/3Y, H/3Z, H/4, H/5, H/6, H/7, H/8, H/9, H/10, H/11, H/12, H/13, H/14, H/15, H/16, H/17, H/18, H/19, H/20, H/21, H/22, H/23, H/24, H/25, H/26, H/27, H/28, H/29, H/30, H/31, H/32, H/33, H/34, H/35, H/36, H/37, H/38, H/39, H/40, H/41, H/42, H/43, H/44, H/45, H/46, H/47, H/48, H/49, H/50, H/51, H/52, H/53, H/54, H/55, H/56, H/57, H/58, H/59, H/60, H/61, H/62, H/63, H/64, H/65, H/66, H/67, H/68, H/69, H/70, H/71, H/72, H/73, H/74, H/75, H/76, H/77, H/78, H/79, H/80, H/81, H/82, H/83, H/84, H/85, H/86, H/87, H/88, H/89, H/90, H/91, H/92, H/93, H/94, H/95, H/96, H/97, H/98, H/99, H/100, H/101, H/102, H/103, H/104, H/105, H/106, H/107, H/108, H/109, H/110, H/111, H/112, H/113, H/114, H/115, H/116, H/117, H/118, H/119, H/120, H/121, H/122, H/123, H/124, H/125, H/126, H/127, H/128, H/129, H/130, H/131, H/132, H/133, H/134, H/135, H/136, H/137, H/138, H/139, H/140, H/141, H/142, H/143, H/144, H/145, H/146, H/147, H/148, H/149, H/150, H/151, H/152, H/153, H/154, H/155, H/156, H/157, H/158, H/159, H/160, H/161, H/162, H/163, H/164, H/165, H/166, H/167, H/168, H/169, H/170, H/171, H/172, H/173, H/174, H/175, H/176, H/177, H/178, H/179, H/180, H/181, H/182, H/183, H/184, H/185, H/186, H/187, H/188, H/189, H/190, H/191, H/192, H/193, H/194, H/195, H/196, H/197, H/198, H/199, H/200, H/201, H/202, H/203, H/204, H/205, H/206, H/207, H/208, H/209, H/210, H/211, H/212, H/213, H/214, H/215, H/216, H/217, H/218, H/219, H/220, H/221, H/222, H/223, H/224, H/225, H/226, H/227, H/228, H/229, H/230, H/231, H/232, H/233, H/234, H/235, H/236, H/237, H/238, H/239, H/240, H/241, H/242, H/243, H/244, H/245, H/246, H/247, H/248, H/249, H/250, H/251, H/252, H/253, H/254, H/255, H/256, H/257, H/258, H/259, H/260, H/261, H/262, H/263, H/264, H/265, H/266, H/267, H/268, H/269, H/270, H/271, H/272, H/273, H/274, H/275, H/276, H/277, H/278, H/279, H/280, H/281, H/282, H/283, H/284, H/285, H/286, H/287, H/288, H/289, H/290, H/291, H/292, H/293, H/294, H/295, H/296, H/297, H/298, H/299, H/300, H/301, H/302, H/303, H/304, H/305, H/306, H/307, H/308, H/309, H/310, H/311, H/312, H/313, H/314, H/315, H/316, H/317, H/318, H/319, H/320, H/321, H/322, H/323, H/324, H/325, H/326, H/327, H/328, H/329, H/330, H/331, H/332, H/333, H/334, H/335, H/336, H/337, H/338, H/339, H/340, H/341, H/342, H/343, H/344, H/345, H/346, H/347, H/348, H/349, H/350, H/351, H/352, H/353, H/354, H/355, H/356, H/357, H/358, H/359, H/360, H/361, H/362, H/363, H/36	



1933
Surface of Reser Elevation 570.2
Normal Pool Elevation 577.9

LAND UPSTREAM ALONG LEFT BANK OF KANAWHA RIVER FROM
AS LOCATED AT THE MOUTH OF GALEN CREEK



KANAWHA RIVER

KANAWHA RIVER

CABIN CREEK ISLAND

CHELYAN

WATER CHANNEL

HIGH

NOTES:
ALL ELEVATIONS ON U.S.G.S. SANDY MOUNT DATUM.
CONTOUR INDICATED FROM ORIGINAL BENCH MARKS IN
U.S. ENGINEER OFFICE CHARLESTON, W. VA. SURVEY MADE
OCT. 1931 - FEB. 1932.
SURVEY LINE MARKED 'Y' RUN BY U.S. ARMY ENGINEERS
SURVEY LINE MARKED 'T' RUN BY C.A. TAYLOR CO. ENG.
SURVEY LINE MARKED 'D' PLOTTED FROM DEED

3114

3109

3105

C.W. Hastings
3105, 3106

New Market
Pool PL 530

NORMAL POOL DAM NO. 4 577.90

NORMAL POOL DAM NO. 3 577.90

CHARLESTON INTERURBAN R.R.

APPALACHIAN ELECTRIC POWER CO. 1-66 KV CIR.

A.P.C.C. 2-138 KV CIR.

REPO CABIN CREEK - DAM

ALSO SEE JOHN CALVERT - 1931

A.P.C.C. 2-138 KV CIR.

A.P.C.C. 2-138 KV CIR.

A.P.C.C. 2-138 KV CIR.

wsp

wsp.com