

COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HARRISBURG, PENNSYLVANIA

TOM WOLF, GOVERNOR PATRICK MCDONNELL, SECRETARY

PROJECT NO. D06-434-101.1 NEW KERNSVILLE DAM SEDIMENT REMOVAL PROJECT

TILDEN AND WINDSOR TOWNSHIPS
BERKS COUNTY, PENNSYLVANIA

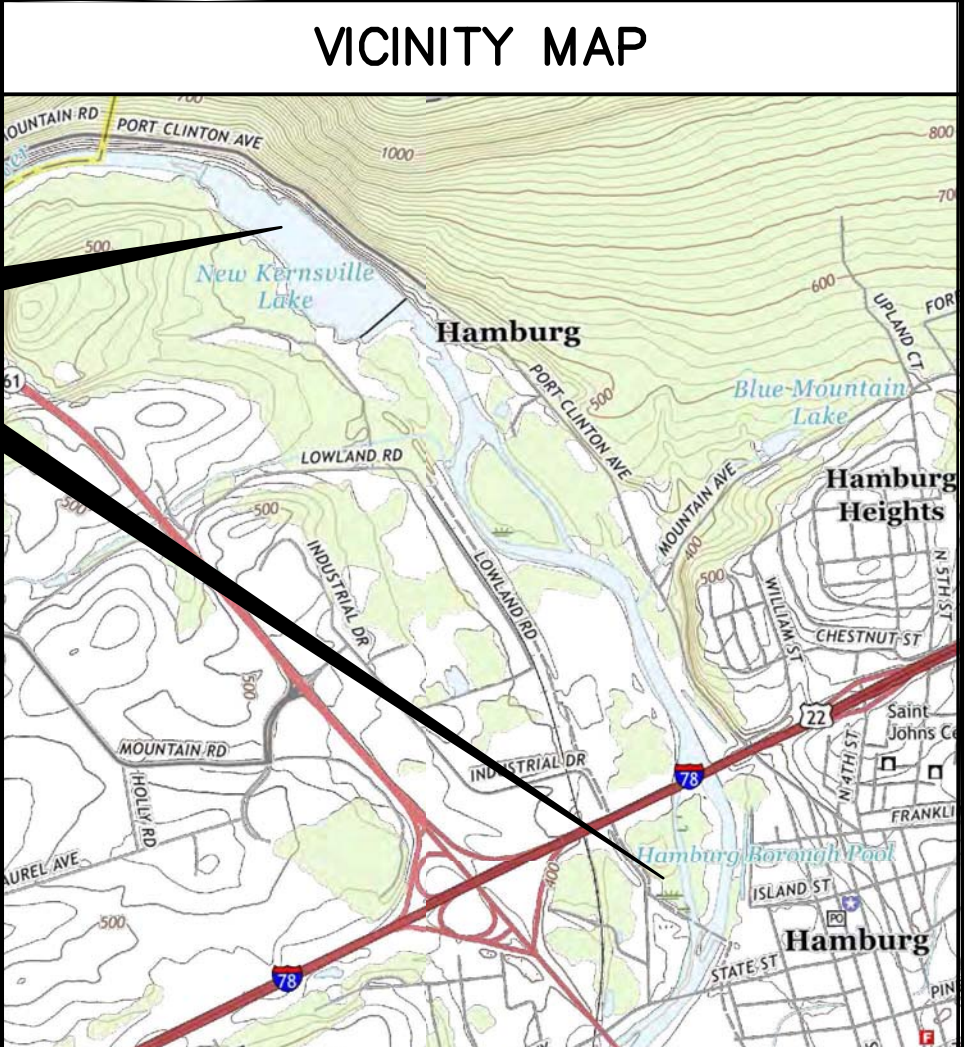
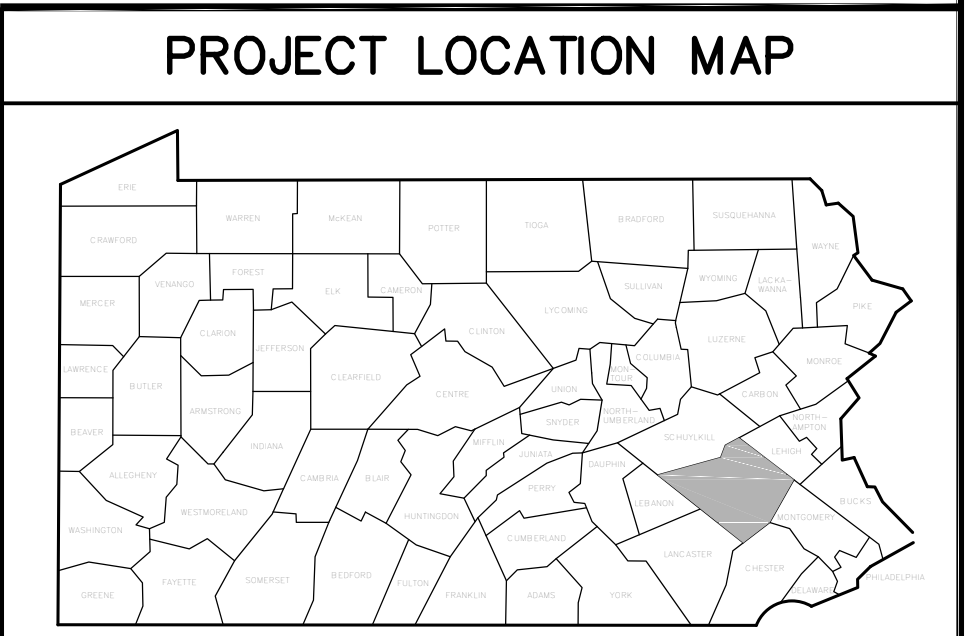


DESIGN PROFESSIONAL

DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATERWAYS ENGINEERING AND WETLANDS
HARRISBURG, PENNSYLVANIA

INDEX TO DRAWINGS

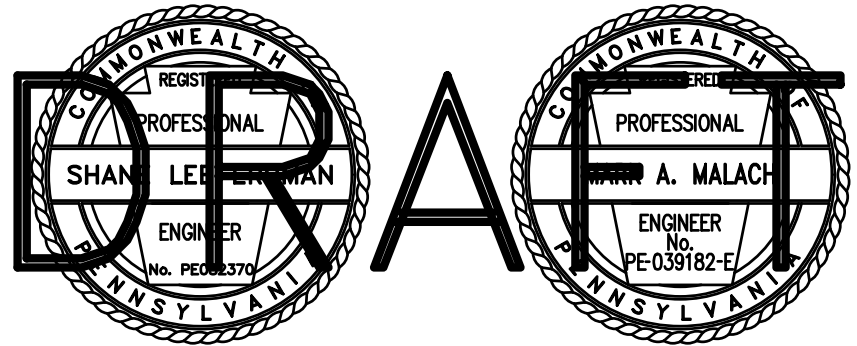
- CS-1 Cover Sheet
- GP-1 General Plan
- P-1 Sediment Removal Plan, Profile and Cross Sections
- P-2 Sediment Disposal Plan
- D-1 Details



APPROVALS

APPROVED _____ DATE _____
DOUGLAS HILL, CHIEF
DIVISION OF PROJECT DEVELOPMENT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPROVED _____ DATE _____
ROGER ADAMS, DIRECTOR
BUREAU OF WATERWAYS ENGINEERING AND WETLANDS
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PROFESSIONAL'S SIGNATURE _____ DATE _____

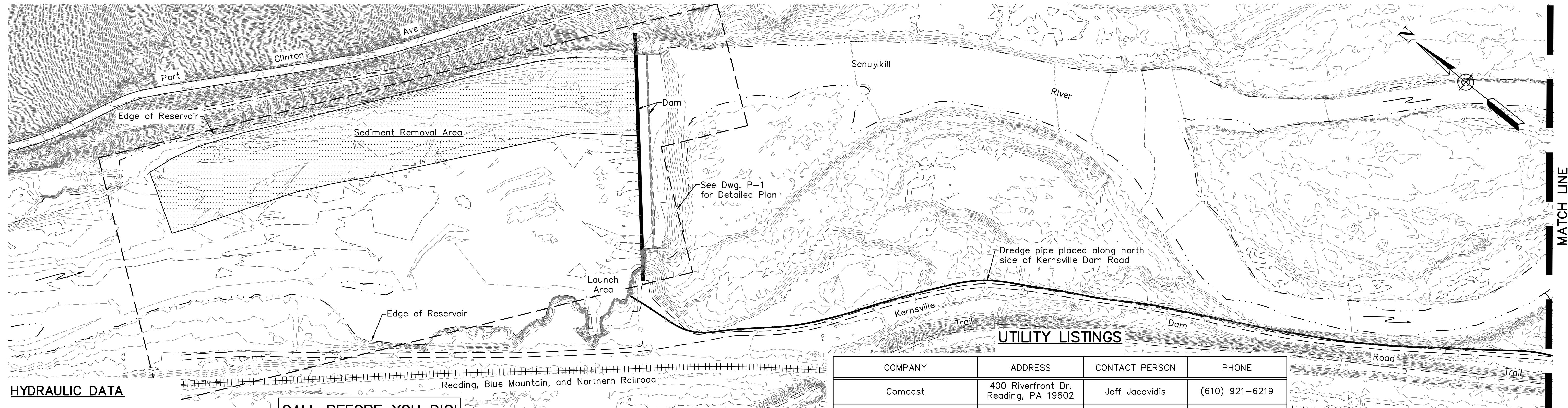
COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF WATER PROGRAMS

PROJECT NO. D06-434-101.1

**NEW KERNSVILLE DAM
SEDIMENT REMOVAL PROJECT**
SCHUYLKILL RIVER
TILDEN TOWNSHIP WINDSOR TOWNSHIP BERKS COUNTY

COVER SHEET

| | | |
|--------------------|-------------------|---------------------|
| DRAWN BY S.L.E. | DATE | DRAWING NO. CS-1 |
| CHECKED BY | SCALE As Shown | |



HYDRAULIC DATA

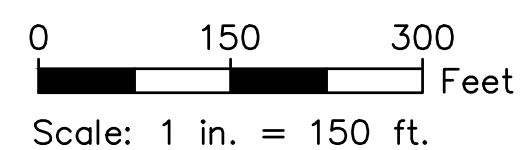
Drainage Area = 340 Square Miles
 100-YR FEMA FIS Discharge = 42,800 CFS
 Mean Annual Flow = 707 CFS

Normal Pool:
 Area = 54 Acres
 Length = 1.25 Miles
 Capacity = 190,000,000 Gallons

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW REQUIRES
 3 WORKING DAYS NOTICE FOR
 CONSTRUCTION PHASE AND 10 WORKING
 DAYS IN DESIGN STAGE - STOP CALL

PA ONE CALL SYSTEM, INC.
 POCS SERIAL NUMBER
 20182640871 (Tilden Twp.)
 20182640872 (Windsor Twp.)
 1-800-242-1776 or 8-1-1

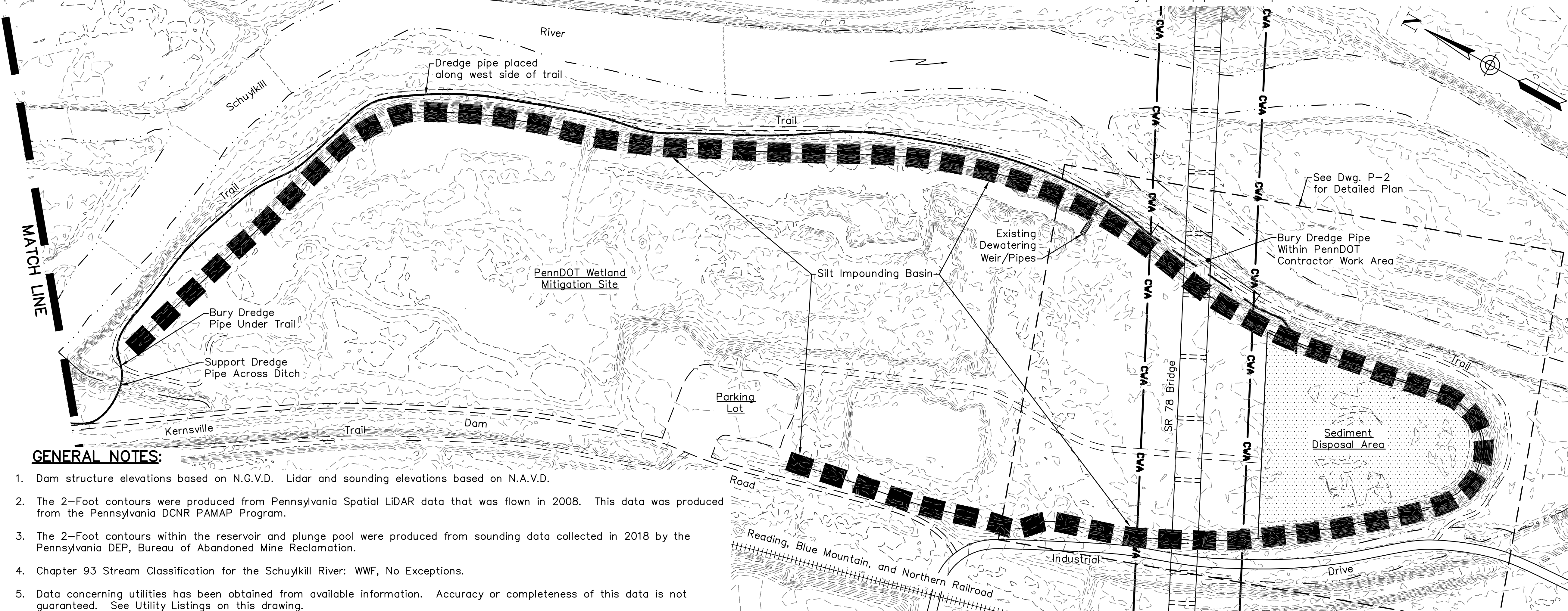
GENERAL PLAN



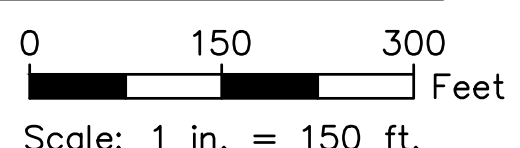
UTILITY LISTINGS

| COMPANY | ADDRESS | CONTACT PERSON | PHONE |
|-----------------------------|---|------------------|----------------|
| Comcast | 400 Riverfront Dr. Reading, PA 19602 | Jeff Jacovidis | (610) 921-6219 |
| FirstEnergy Corp. | 76 S. Main St. Akron, OH 443081890 | Office Personnel | 1-800-545-7741 |
| Hamburg Municipal Authority | 61 N. 3rd St. Hamburg, PA 19526 | Keith Brobst | (610) 562-7821 |
| Tilden Township | 874 Hex Hwy Hamburg, PA 19526 | Michael Quick | (610) 223-8596 |

Note: The Contractor shall comply with Act 287 of the General Assembly, as amended, which defines the procedures for notification to Public Utilities prior to excavation, drilling or demolition work using power equipment or explosives.

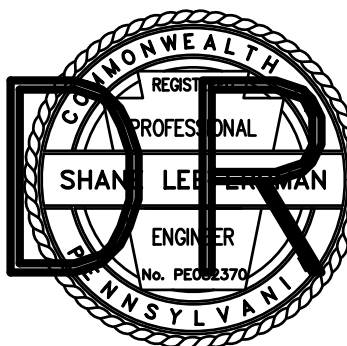
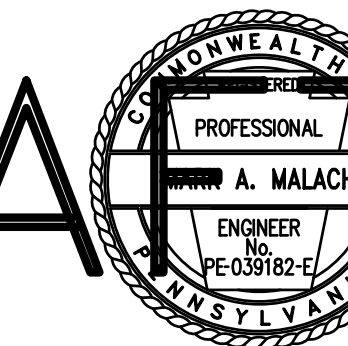


GENERAL PLAN

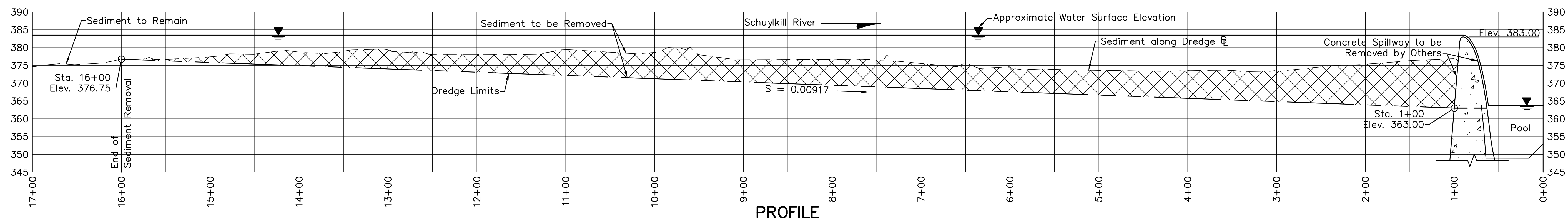


GENERAL NOTES:

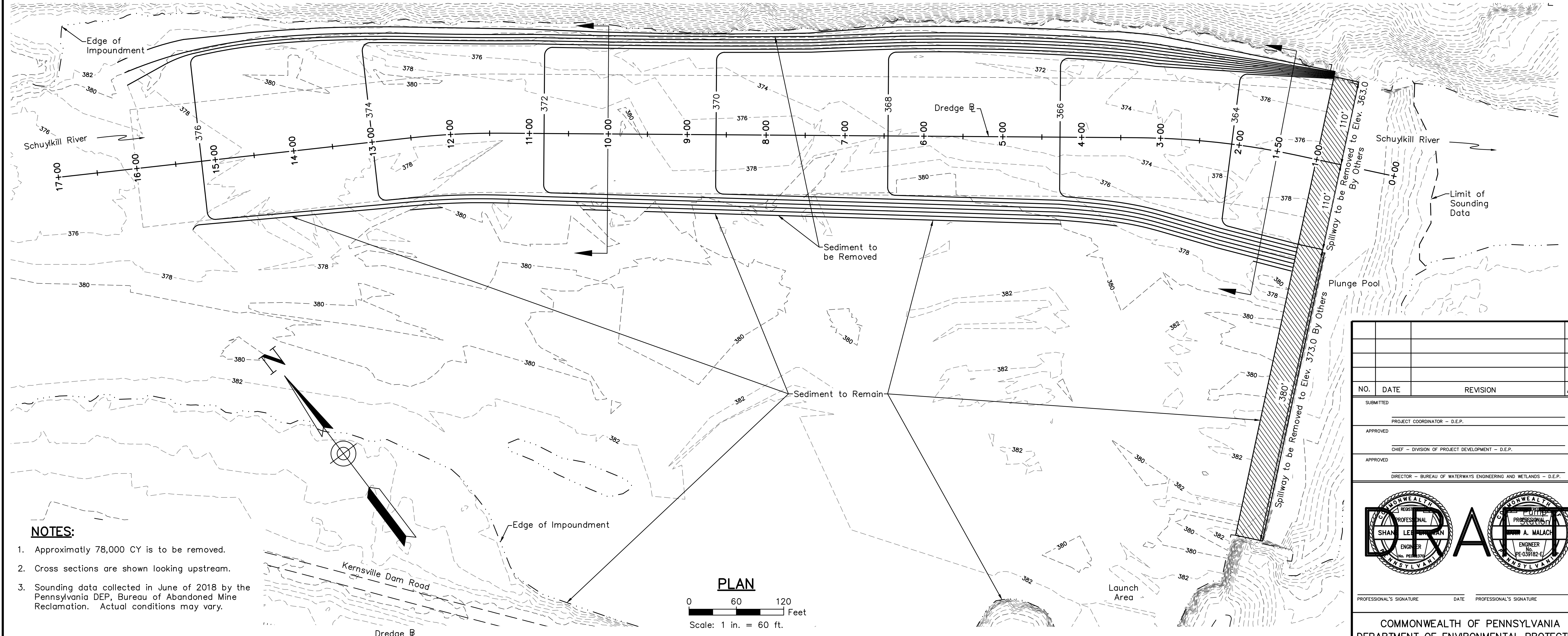
- Dam structure elevations based on N.G.V.D. Lidar and sounding elevations based on N.A.V.D.
- The 2-Foot contours were produced from Pennsylvania Spatial LiDAR data that was flown in 2008. This data was produced from the Pennsylvania DCNR PAMAP Program.
- The 2-Foot contours within the reservoir and plunge pool were produced from sounding data collected in 2018 by the Pennsylvania DEP, Bureau of Abandoned Mine Reclamation.
- Chapter 93 Stream Classification for the Schuylkill River: WWF, No Exceptions.
- Data concerning utilities has been obtained from available information. Accuracy or completeness of this data is not guaranteed. See Utility Listings on this drawing.
- CWA is Contractor's Work Area and is also the Limit of Disturbance. Clear only as necessary to access work areas and perform contract work.
- Access the site using Kernville Dam Road. Kernville Dam Road connects to Industrial Drive south of the dam. The left side of the dam can be accessed from Port Clinton Avenue. Left and right sides are referenced looking downstream.

| NO. | DATE | REVISION | APPR. |
|--|--------|---|-------------|
| | | | |
| SUBMITTED | | | |
| PROJECT COORDINATOR - D.E.P. | | | |
| APPROVED | | | |
| CHIEF - DIVISION OF PROJECT DEVELOPMENT - D.E.P. | | | |
| APPROVED | | | |
| DIRECTOR - BUREAU OF WATERWAYS ENGINEERING AND WETLANDS - D.E.P. | | | |
|  | |  | |
| PROFESSIONAL'S SIGNATURE | DATE | PROFESSIONAL'S SIGNATURE | DATE |
| COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF WATER PROGRAMS | | | |
| PROJECT NO. D06-434-101.1 | | | |
| NEW KERNSVILLE DAM SEDIMENT REMOVAL PROJECT SCHUYLKILL RIVER | | | |
| TILDEN TOWNSHIP | | BERKS COUNTY | |
| GENERAL PLAN | | | |
| DRAWN BY | S.L.E. | DATE | DRAWING NO. |
| CHECKED BY | SCALE | As Shown | GP-1 |

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY CONTRACTOR AT THE SITE.

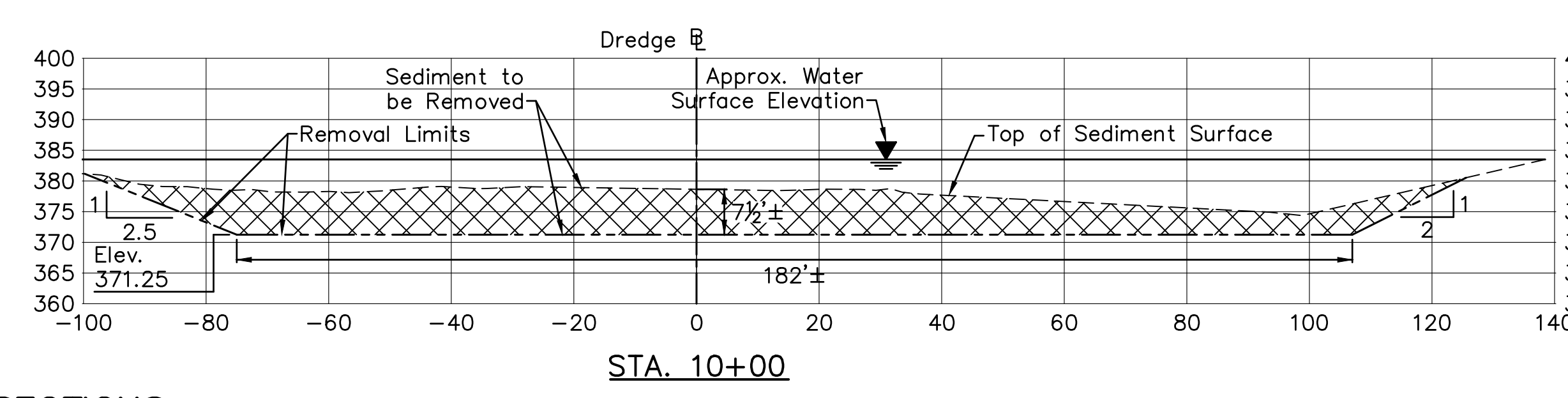
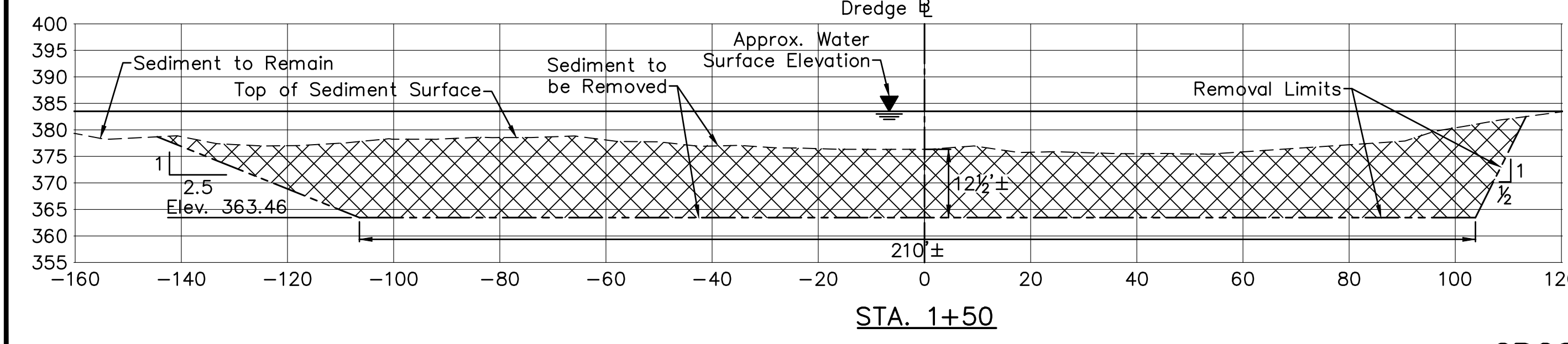


PROFILE
 0 60 120 Feet
 0 15 30 Feet
 Horizontal Scale: 1 in. = 60 ft. Vertical Scale: 1 in. = 15 ft.

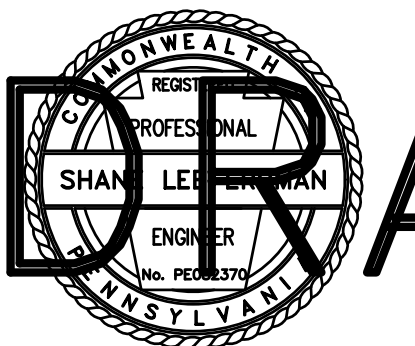
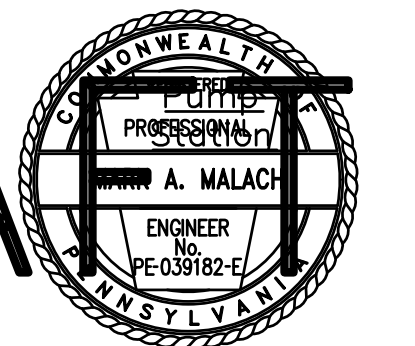


PLAN
 0 60 120 Feet
 Scale: 1 in. = 60 ft.

- NOTES:**
1. Approximately 78,000 CY is to be removed.
 2. Cross sections are shown looking upstream.
 3. Sounding data collected in June of 2018 by the Pennsylvania DEP, Bureau of Abandoned Mine Reclamation. Actual conditions may vary.



CROSS SECTIONS
 0 20 40 Feet
 Scale: 1 in. = 20 ft.

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| APPROVED | | | |
| CHIEF - DIVISION OF PROJECT DEVELOPMENT - D.E.P. | | | |
| APPROVED | | | |
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|  PROFESSIONAL'S SIGNATURE | |  PROFESSIONAL'S SIGNATURE | |
| DATE | | DATE | |

COMMONWEALTH OF PENNSYLVANIA
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**NEW KERNSVILLE DAM
 SEDIMENT REMOVAL PROJECT
 SCHUYLKILL RIVER**

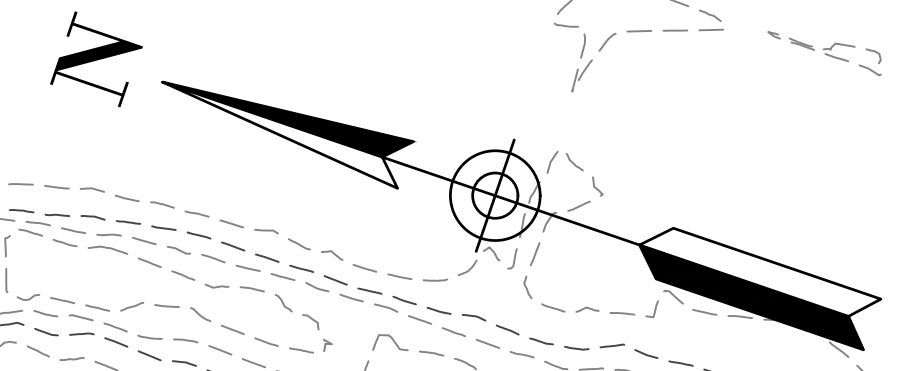
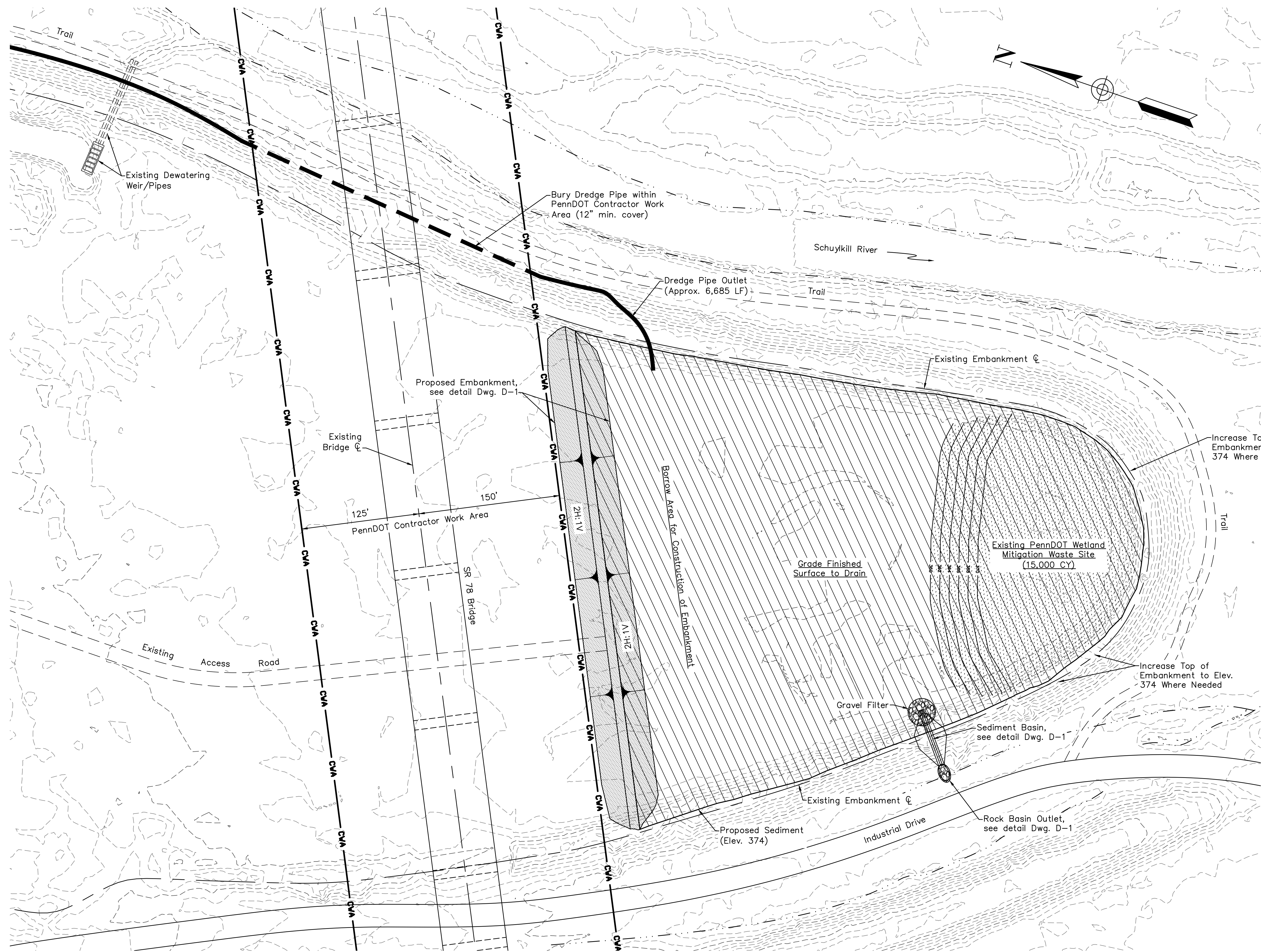
TILDEN TOWNSHIP WINDSOR TOWNSHIP BERKS COUNTY

**SEDIMENT REMOVAL PLAN,
 PROFILE AND CROSS SECTIONS**

| | | |
|------------|----------|-------------|
| DRAWN BY | DATE | DRAWING NO. |
| CHECKED BY | SCALE | |
| | As Shown | |

P-1

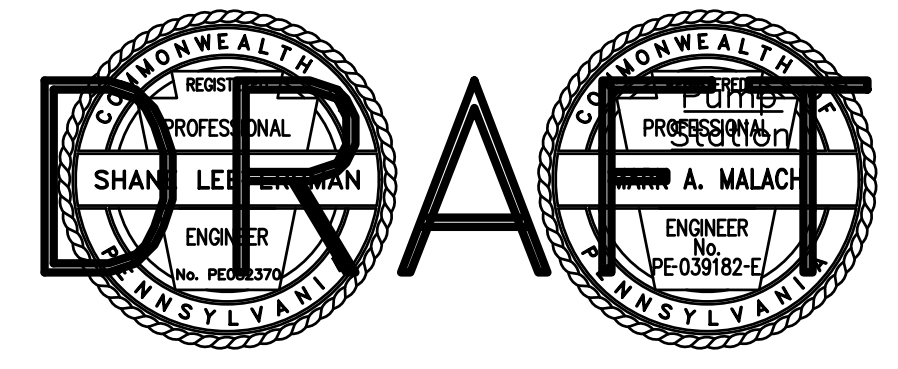
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PLAN
 0 50 100 Feet
 Scale: 1 in. = 50 ft.

| NO. | DATE | REVISION | APPR. |
|-----|------|----------|-------|
| | | | |
| | | | |

SUBMITTED
 PROJECT COORDINATOR - D.E.P.
 APPROVED
 CHIEF - DIVISION OF PROJECT DEVELOPMENT - D.E.P.
 APPROVED
 DIRECTOR - BUREAU OF WATERWAYS ENGINEERING AND WETLANDS - D.E.P.



PROFESSIONAL'S SIGNATURE DATE PROFESSIONAL'S SIGNATURE DATE

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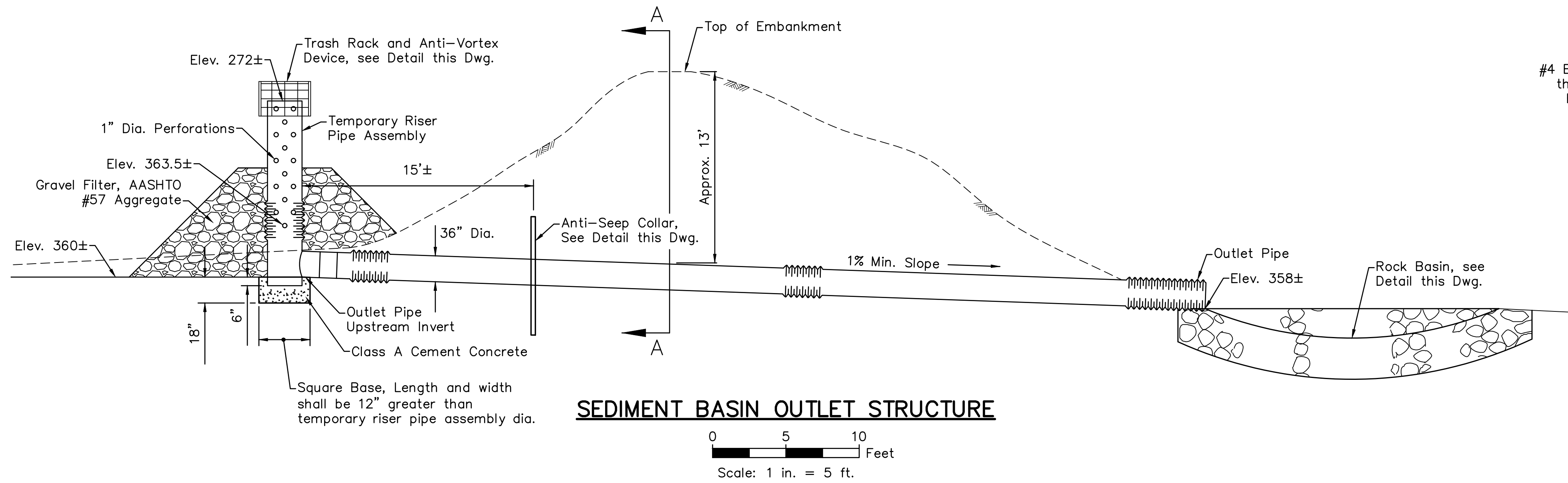
**NEW KERNSVILLE DAM
 SEDIMENT REMOVAL PROJECT
 SCHUYLKILL RIVER**

TILDEN TOWNSHIP WINDSOR TOWNSHIP BERKS COUNTY

SEDIMENT DISPOSAL PLAN

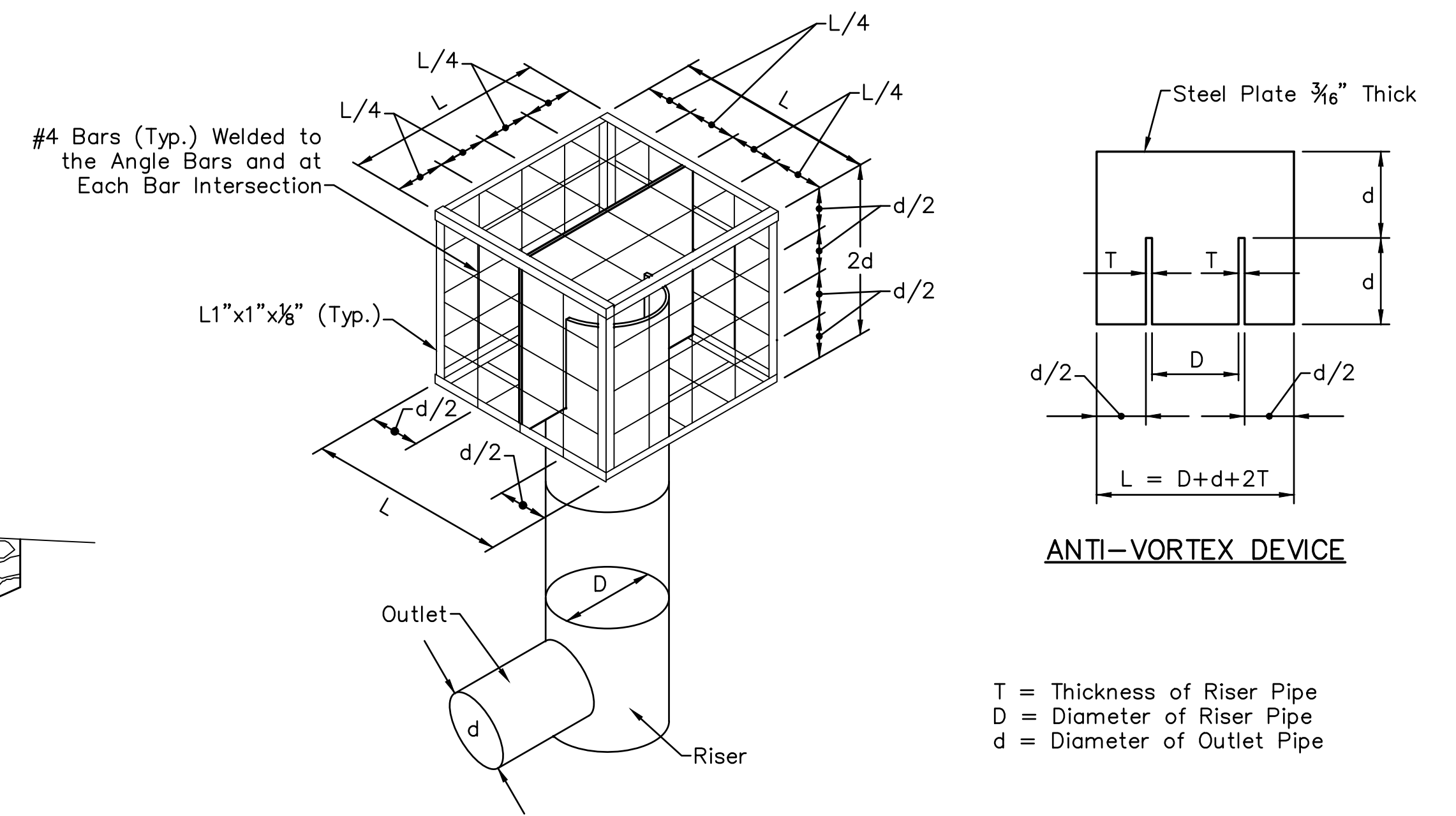
DRAWN BY: S.L.E. DATE: SCALE: As Shown DRAWING NO. P-2
 CHECKED BY: DATE: SCALE: As Shown

ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY CONTRACTOR AT THE SITE.



SEDIMENT BASIN OUTLET STRUCTURE

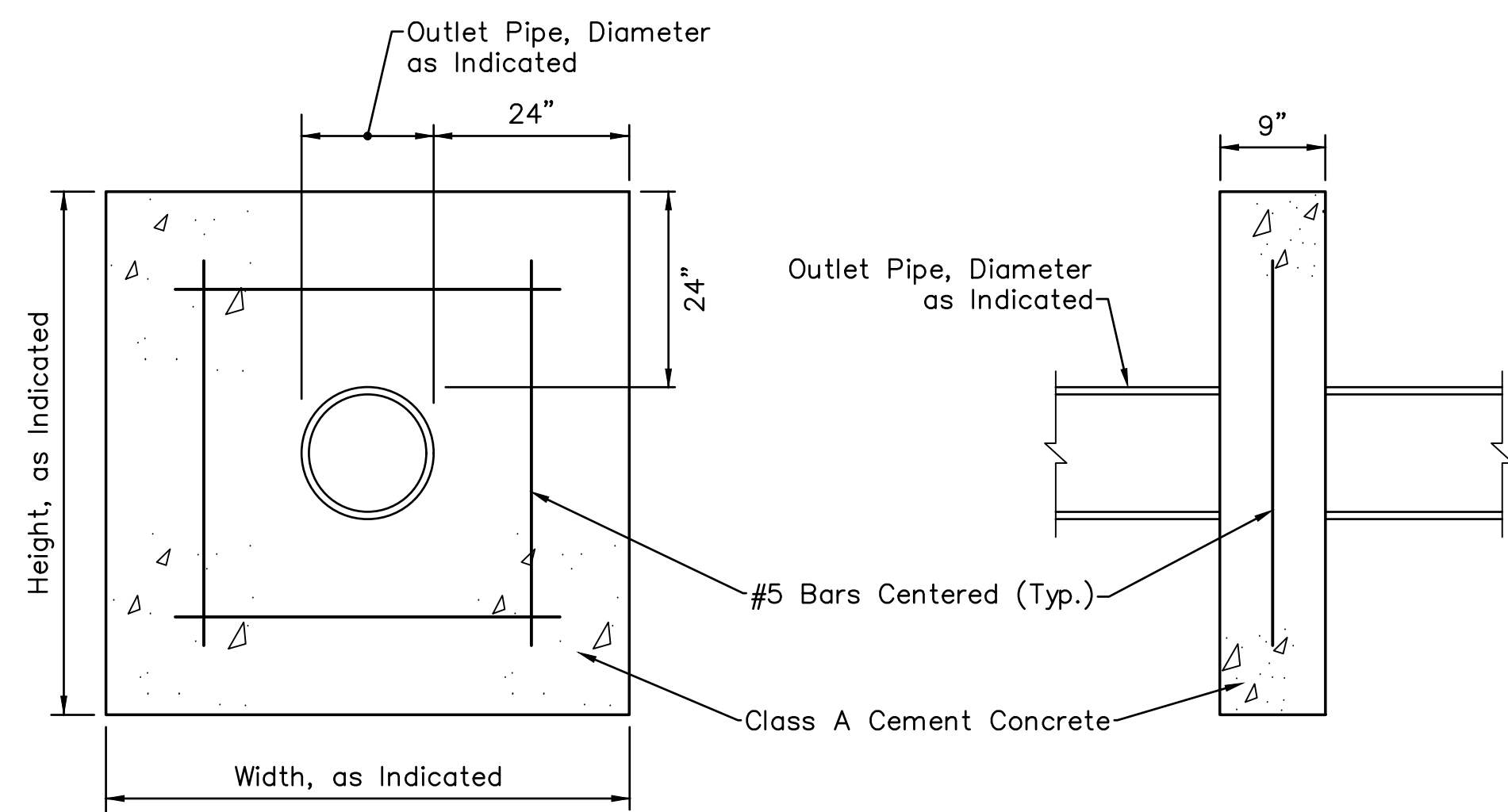
0 5 10 Feet
Scale: 1 in. = 5 ft.



TRASH RACK AND ANTI-VORTEX DEVICE

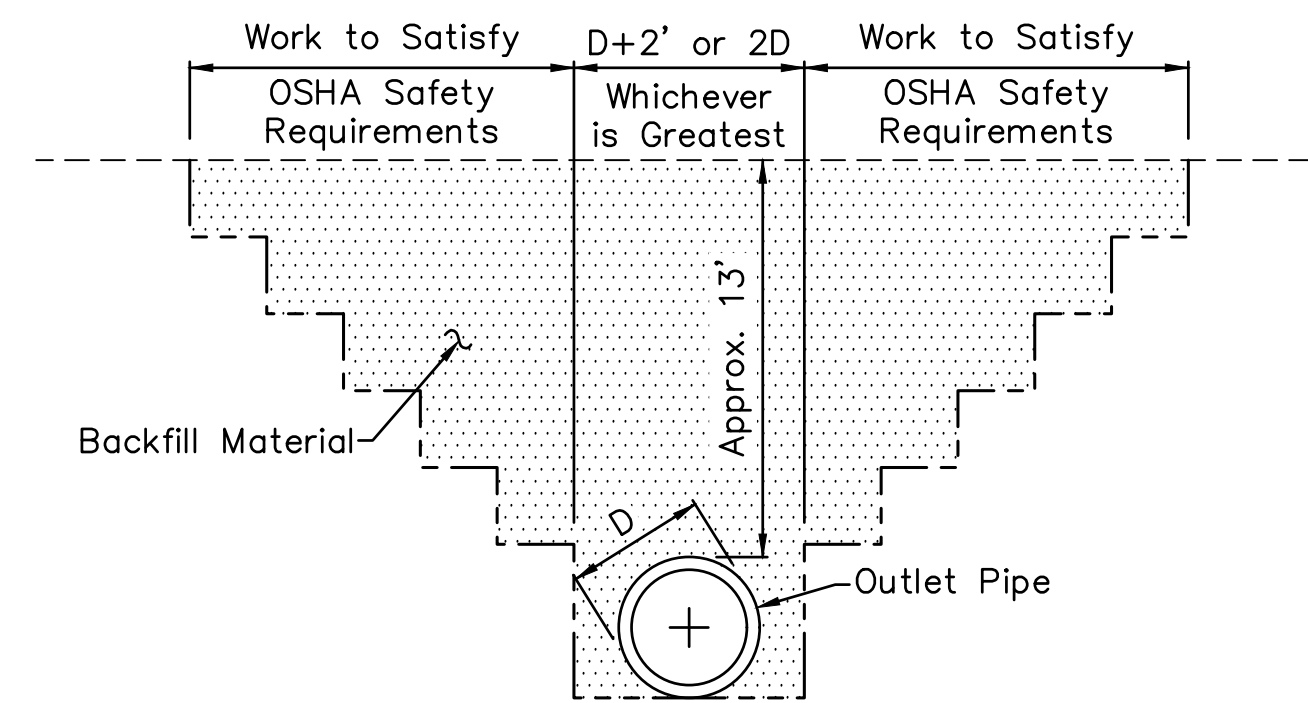
No Scale

T = Thickness of Riser Pipe
D = Diameter of Riser Pipe
d = Diameter of Outlet Pipe



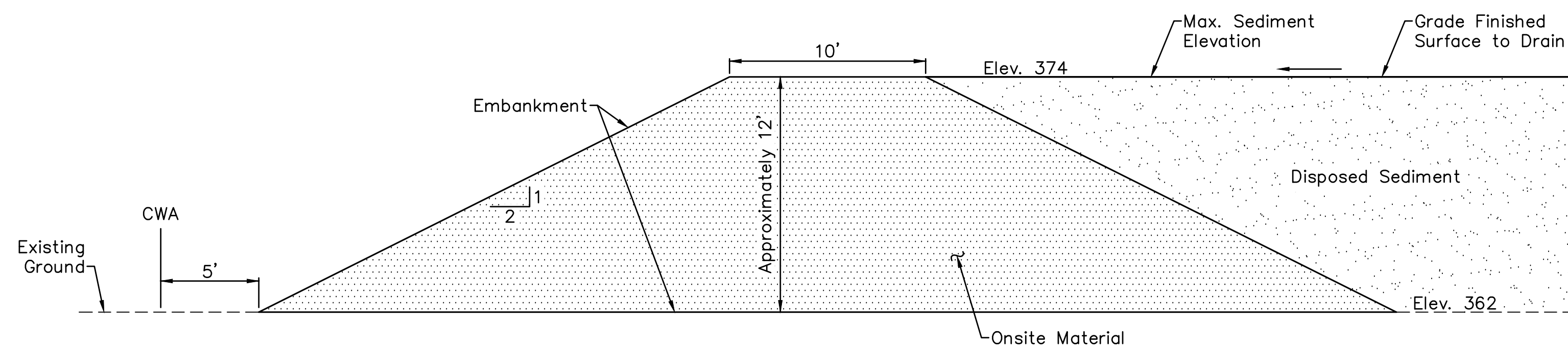
CONCRETE ANTI-SEEP COLLAR

No Scale



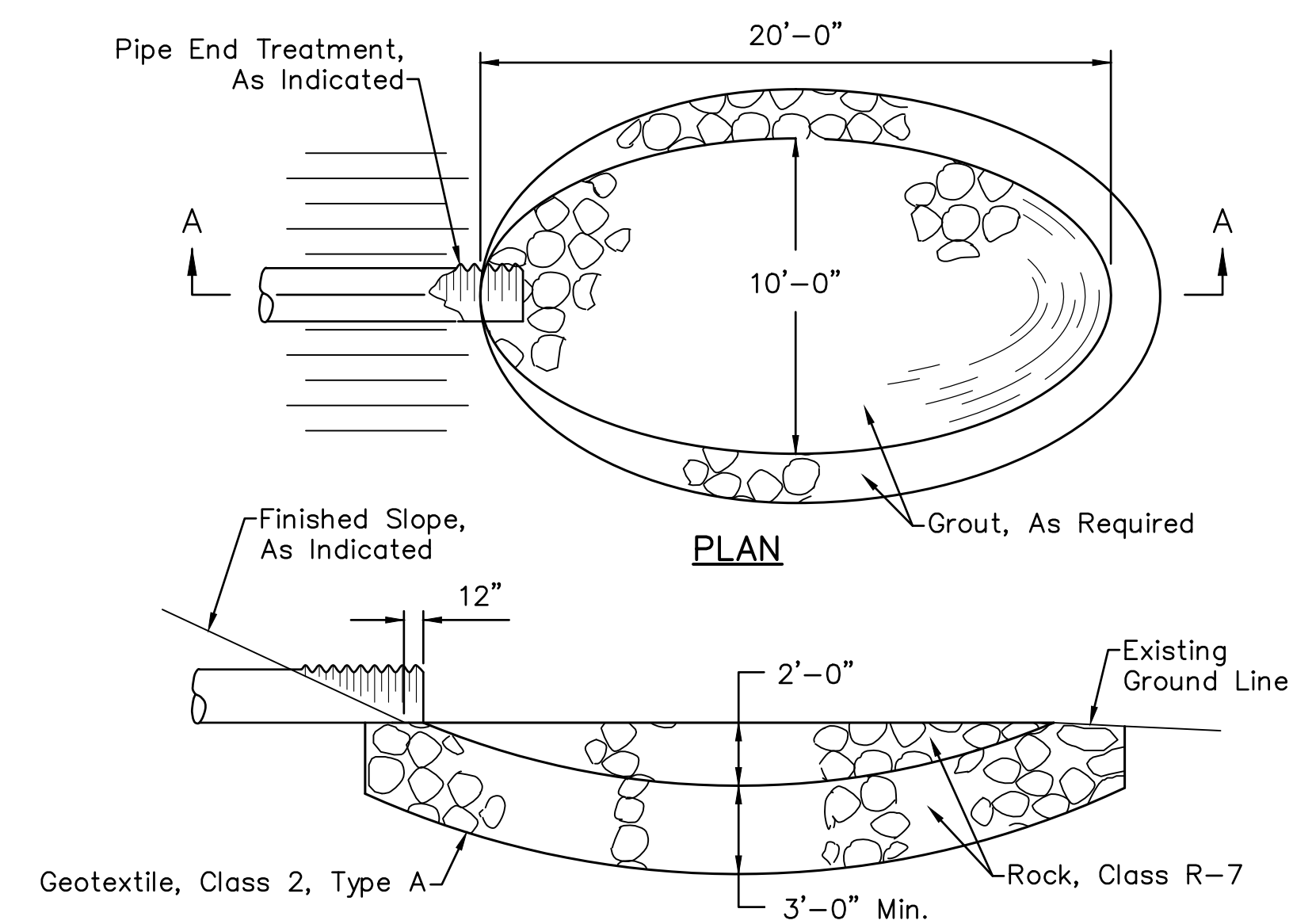
SECTION A-A

0 5 10 Feet
Scale: 1 in. = 5 ft.



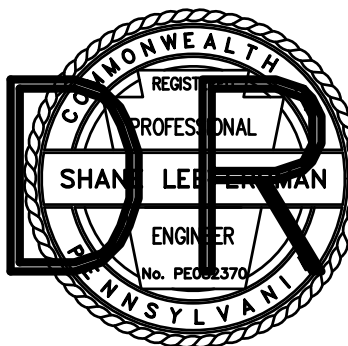
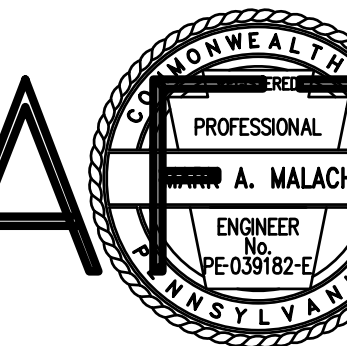
EMBANKMENT DETAIL

0 5 10 Feet
Scale: 1 in. = 5 ft.



**SECTION A-A
ROCK BASIN**

No Scale

| NO. | DATE | REVISION | APPR. |
|--|-------|---|-------|
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