

CONSTRUCTION PLANS FOR BOYCE PARK ACID MINE DRAINAGE REMEDIATION

**COUNTY OF ALLEGHENY
DEPARTMENT OF PUBLIC WORKS
501 COUNTY OFFICE BUILDING
542 FORBES AVENUE
PITTSBURGH, PENNSYLVANIA 15219
(412) 350-4005**

DRAWING INDEX

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NOTES:

1. THE PA ONE-CALL SYSTEM WAS NOTIFIED FOR THIS PROJECT. THE SERIAL NUMBERS ASSIGNED TO THIS PROJECT WERE 0936785 AND 0936789.
2. THE CONTRACTOR SHALL LOCATE THE EXISTING WATER LINE SERVING THE BATH HOUSE AND RELOCATE, AS NECESSARY.
3. THE CONTRACTOR SHALL LOCATE, FLAG, AND AVOID THE EXISTING WATER LINE TO THE YARD HYDRANT.

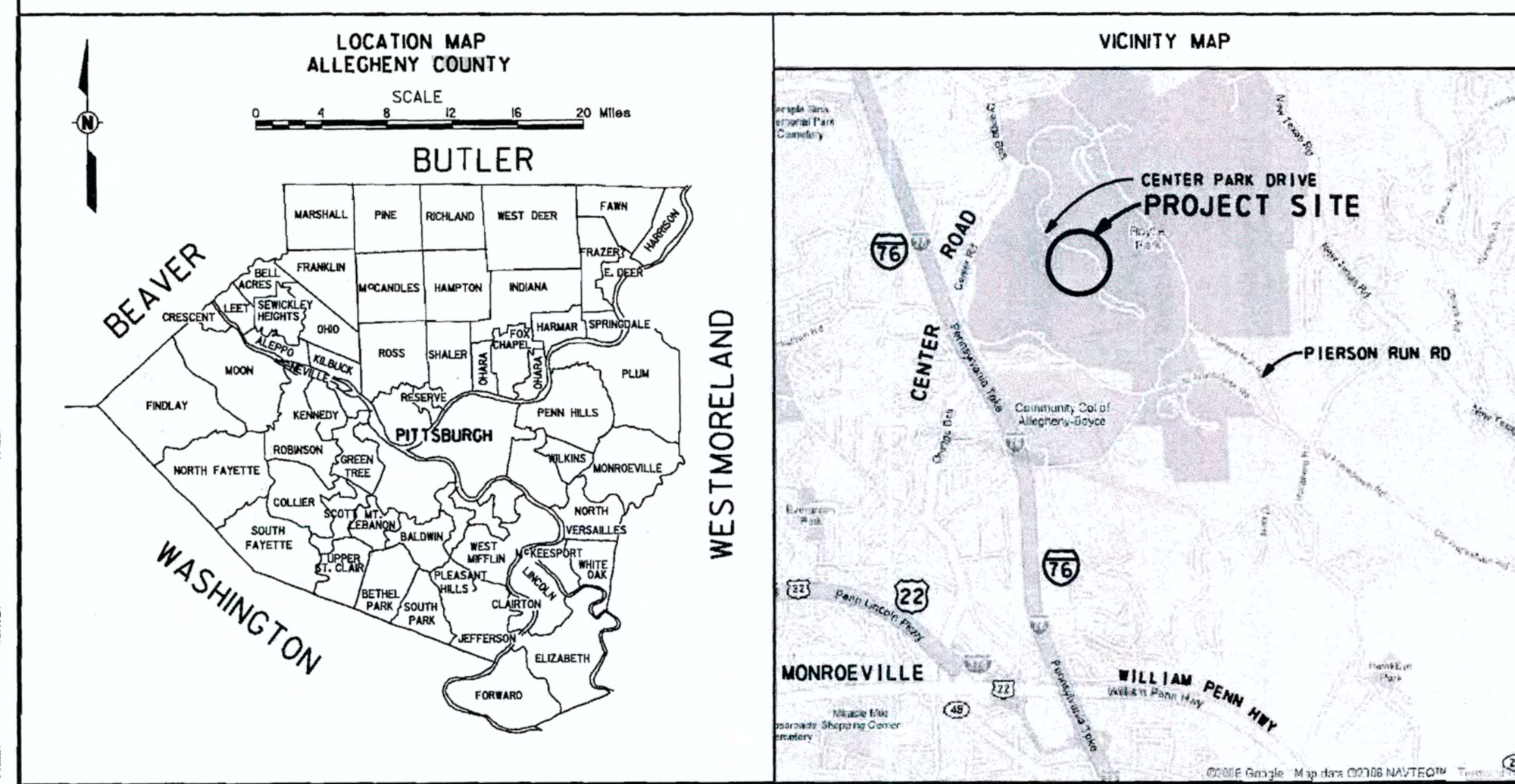
PA ONE-CALL

THE PA ONE-CALL SYSTEM HAS BEEN NOTIFIED FOR DESIGN PURPOSES TO OBTAIN BASE UTILITY LOCATION INFORMATION FOR THIS PROJECT. ONE-CALL SITE SERIAL NUMBERS 0936785 AND 0936789 HAVE BEEN ASSIGNED TO THIS PROJECT LOCATED IN PLUM BOROUGH. THE CONTRACTOR IS STILL RESPONSIBLE FOR CONTACTING THE ONE-CALL SYSTEM AT 1-800-242-1776 NO LESS THAN THREE (3) WORKING DAYS PLUS TWO (2) HOURS PRIOR TO THE BEGINNING OF WORK.



ASSIGNED SERIAL #0936785
ASSIGNED SERIAL #0936789

RECORD DRAWINGS 10/07/08



APPROVED

DEPARTMENT OF PUBLIC WORKS

DEPUTY DIRECTOR _____ DATE _____

DIRECTOR _____ DATE _____

ADOPTED

THIS PROJECT WAS AUTHORIZED TO BE
ADVERTISED FOR CONSTRUCTION BY THE
ALLEGHENY COUNTY MANAGER ON 02/05/2007.
EA NUMBER 5084-07.

FOR ACID MINE DRAINAGE
FILTRATION SYSTEM

PREPARED BY:
SKELLY AND LOY, INC.
ENGINEERS-CONSULTANTS
2801 NORTH FRONT STREET
HARRISBURG, PENNSYLVANIA
(717)232-0593 (800)892-6532 FAX (717)232-1799

APPROVAL RECOMMENDED _____ DATE _____

DESIGN PROJECT MANAGER _____ DATE _____

FOR CENTER PARK DRIVE
ROADWAY DRAINAGE SYSTEM

PREPARED BY:
AWK
CONSULTING ENGINEERS, INC.
10 DUFF ROAD, SUITE 304
PENN HILLS, PA 15235

APPROVAL RECOMMENDED _____ DATE _____

DESIGN PROJECT MANAGER _____ DATE _____

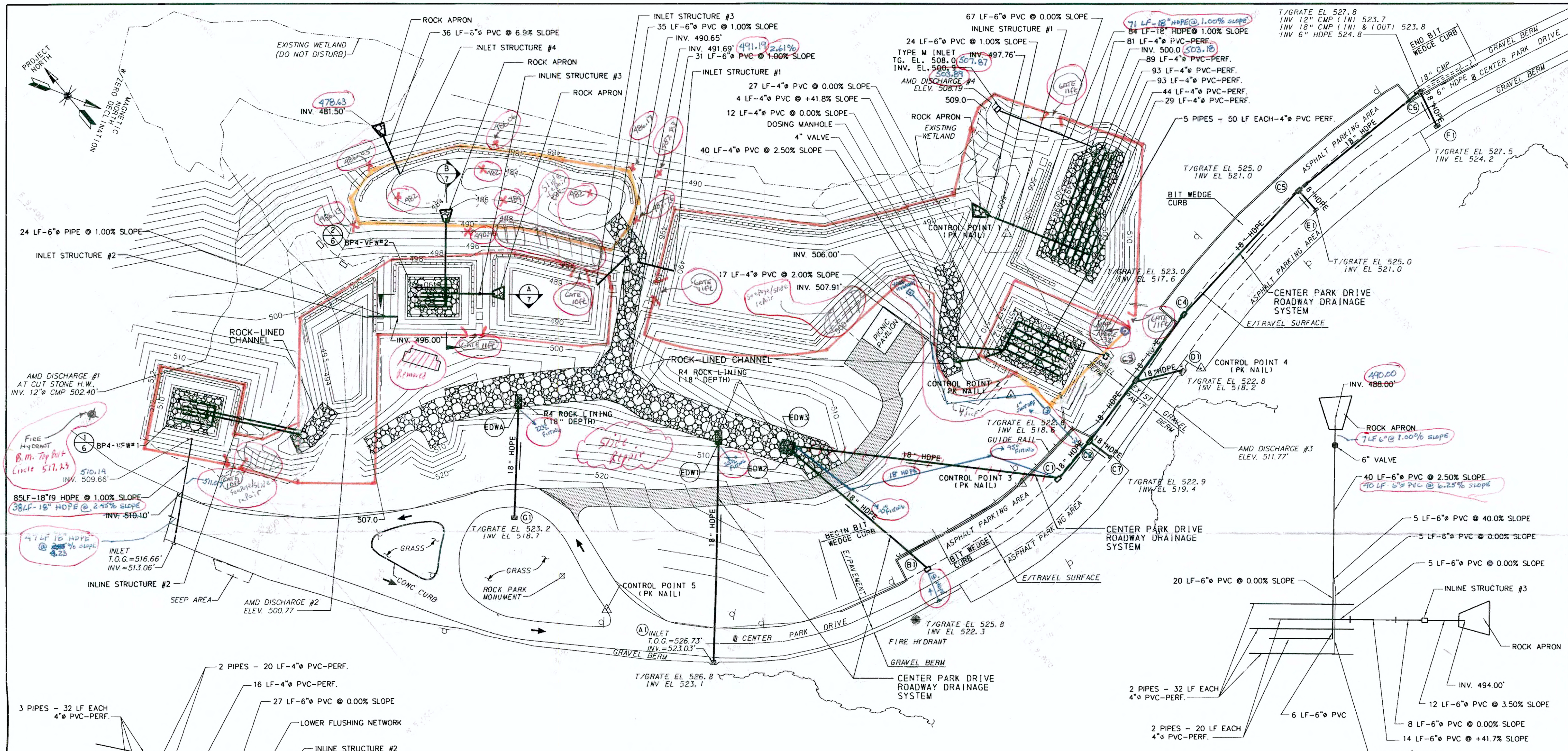
County of Allegheny

Pittsburgh, Pennsylvania
Department of Public Works

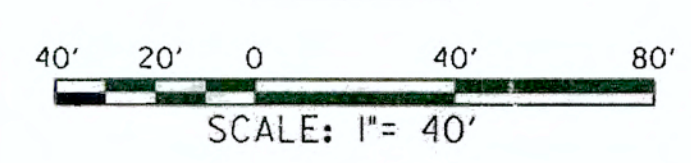
BOYCE PARK

**ACID MINE DRAINAGE
REMEDATION
PROJECT NO. ZCBP-AD01**

DR. BY: DAM	DES. BY: JRV	DATE: 03/19/07	M-323
CH. BY: ESA	SCALE: AS SHOWN	SHEET: 1 OF 14	

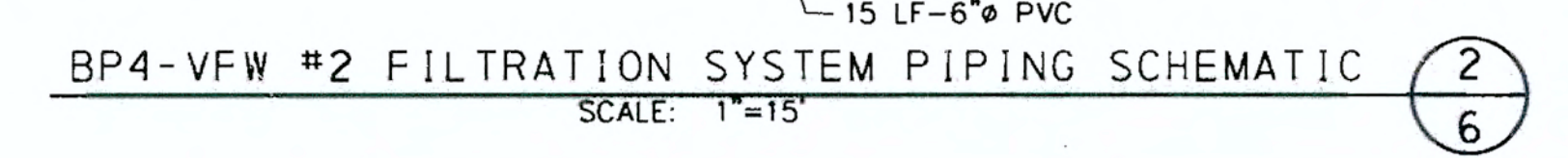
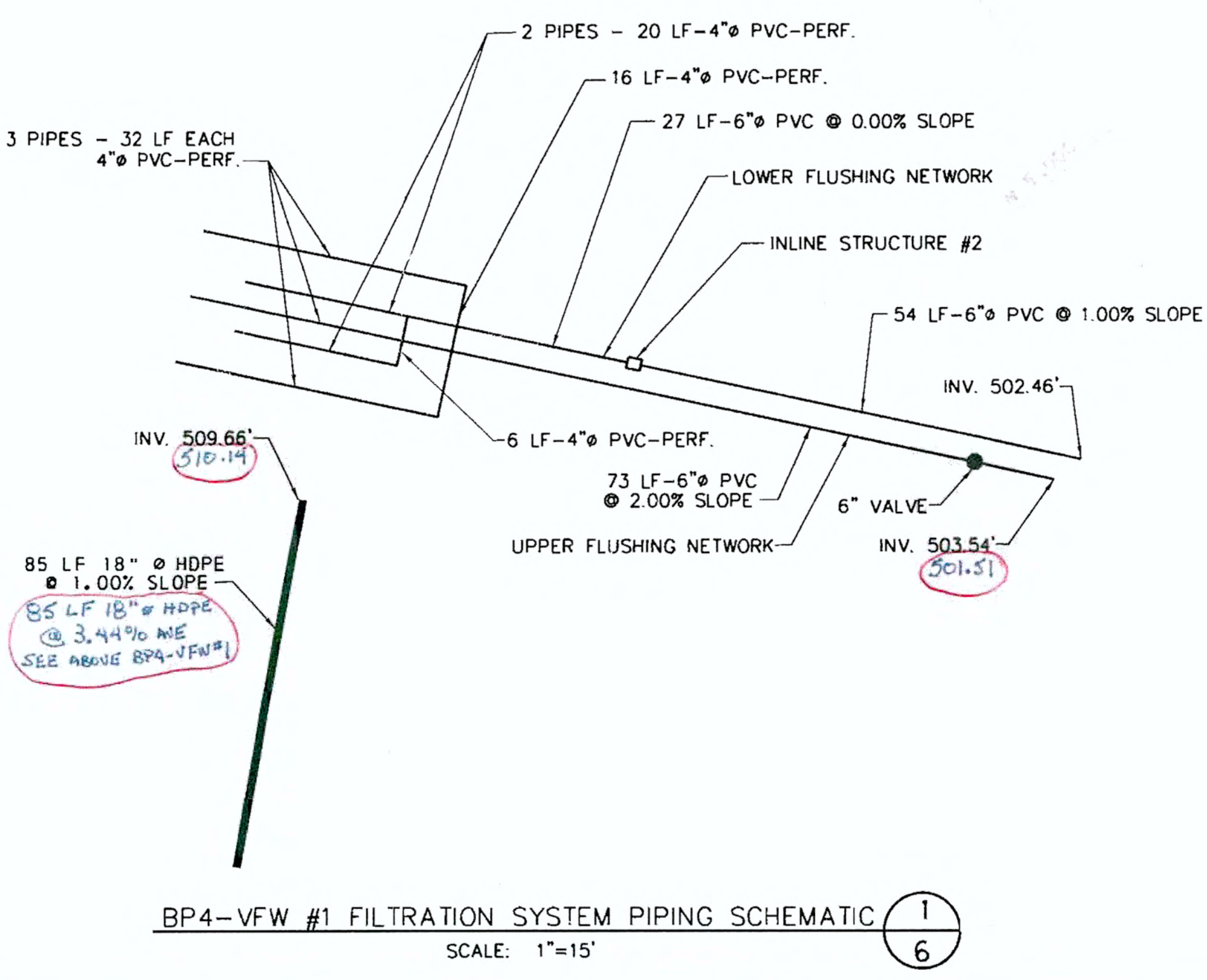


PLAN



- NOTE:**
- CHAIN LINK FENCE
 - SPLIT RAIL FENCE
 - GAP IN FENCE APPROX 3.50 FT
 - ELEVATION IN WETLAND (ACTUAL) WETLAND BASIN LOWERED 2 FT IN ELEVATION
 - GATE

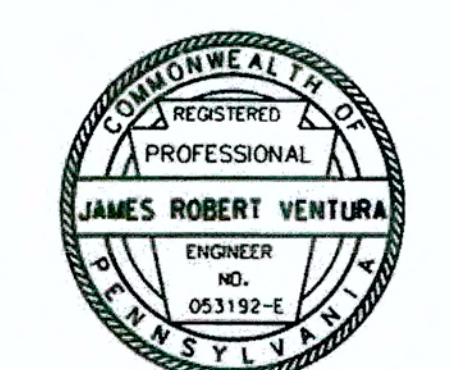
- NOTE:**
- FOR CENTER PARK DRIVE ROADWAY AND DRAINAGE STRUCTURE DATA, SEE SHEET NO. 12.



FOR ACID MINE DRAINAGE FILTRATION SYSTEM FOR CENTER PARK DRIVE ROADWAY DRAINAGE SYSTEM

PREPARED BY:
SKELLY AND LOY, INC.
ENGINEERS-CONSULTANTS
2001 NORTH FRONT STREET
HARRISBURG, PENNSYLVANIA
(717) 233-0900 (800) 892-9532 FAX (717) 233-1799

PREPARED BY:
AWK
CONSULTING ENGINEERS, INC.
10 DUFF ROAD, SUITE 304
PENN HILLS, PA 15235



REVISIONS

JH
7-12-08

County of Allegheny
Pittsburgh, Pennsylvania
Department of Public Works

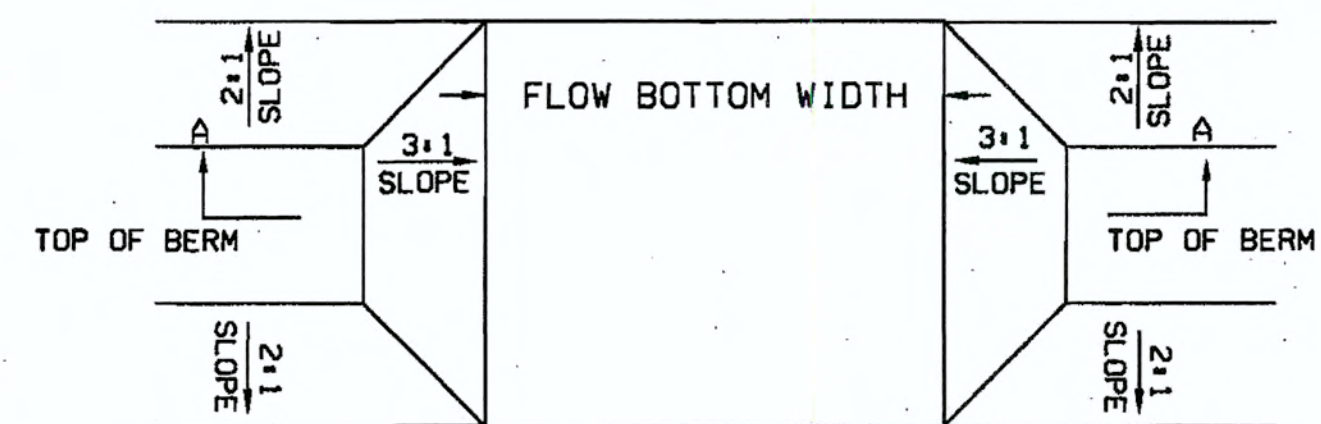
**ACID MINE DRAINAGE REMEDIATION
BOYCE PARK
OLD FRANKSTOWN ROAD
MONROEVILLE BOROUGH
FILTRATION SYSTEM PIPING
AND ROADWAY DRAINAGE PLAN
PROJECT NO. ZCBP-AD01**

DES. JRV	DRW. RW	CHK. ESA	M-323
DATE 11/17/06	SCALE AS SHOWN	SHEET 6 OF 14	

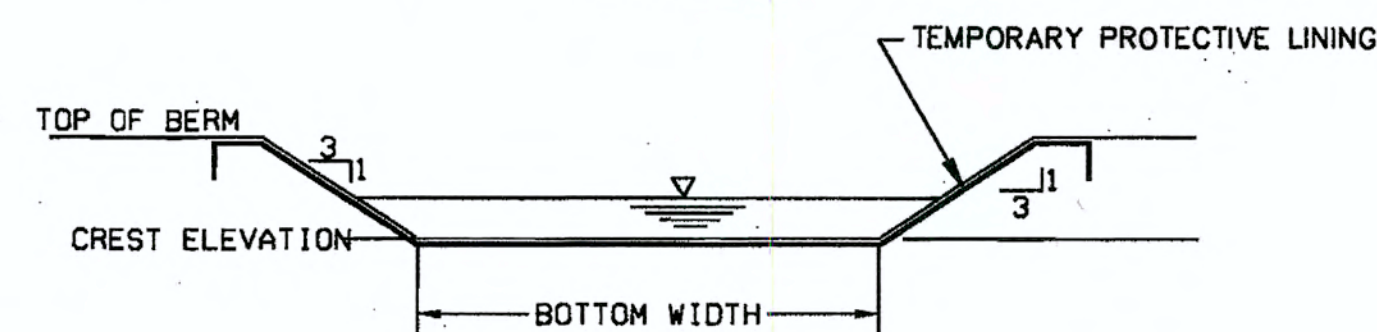
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BASIN	TOP OF BERM ELEV.	SPILLWAY CREST ELEV.	FLOW BOTTOM WIDTH (FT)	TEMPORARY SPILLWAY LINING
BP2-LIMESTONE POND	512.0	511.0	6	JUTE MAT
BP3-VFW	506.0	505.0	6	JUTE MAT
BP2/BP3-POND	496.0	495.0	6	JUTE MAT
BP4-VFW #1	512.0	511.0	6	JUTE MAT
BP4-POND #1	500.0	499.0	6	JUTE MAT
BP4-VFW #2	498.0	497.0	6	JUTE MAT
BP4-POND #2	496.0	495.0	6	JUTE MAT
WETLAND	488.0	487.0	6	JUTE MAT

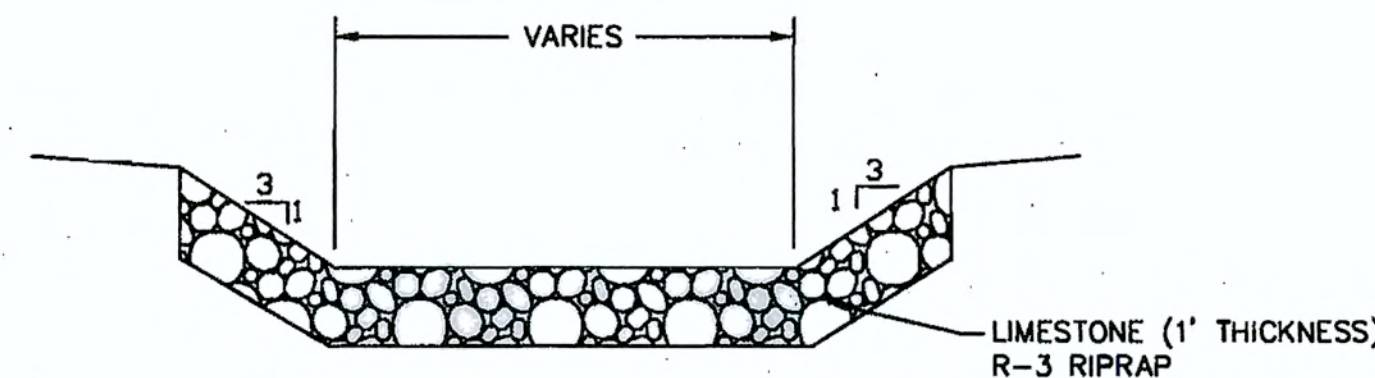
486.0 485.0



PLAN VIEW

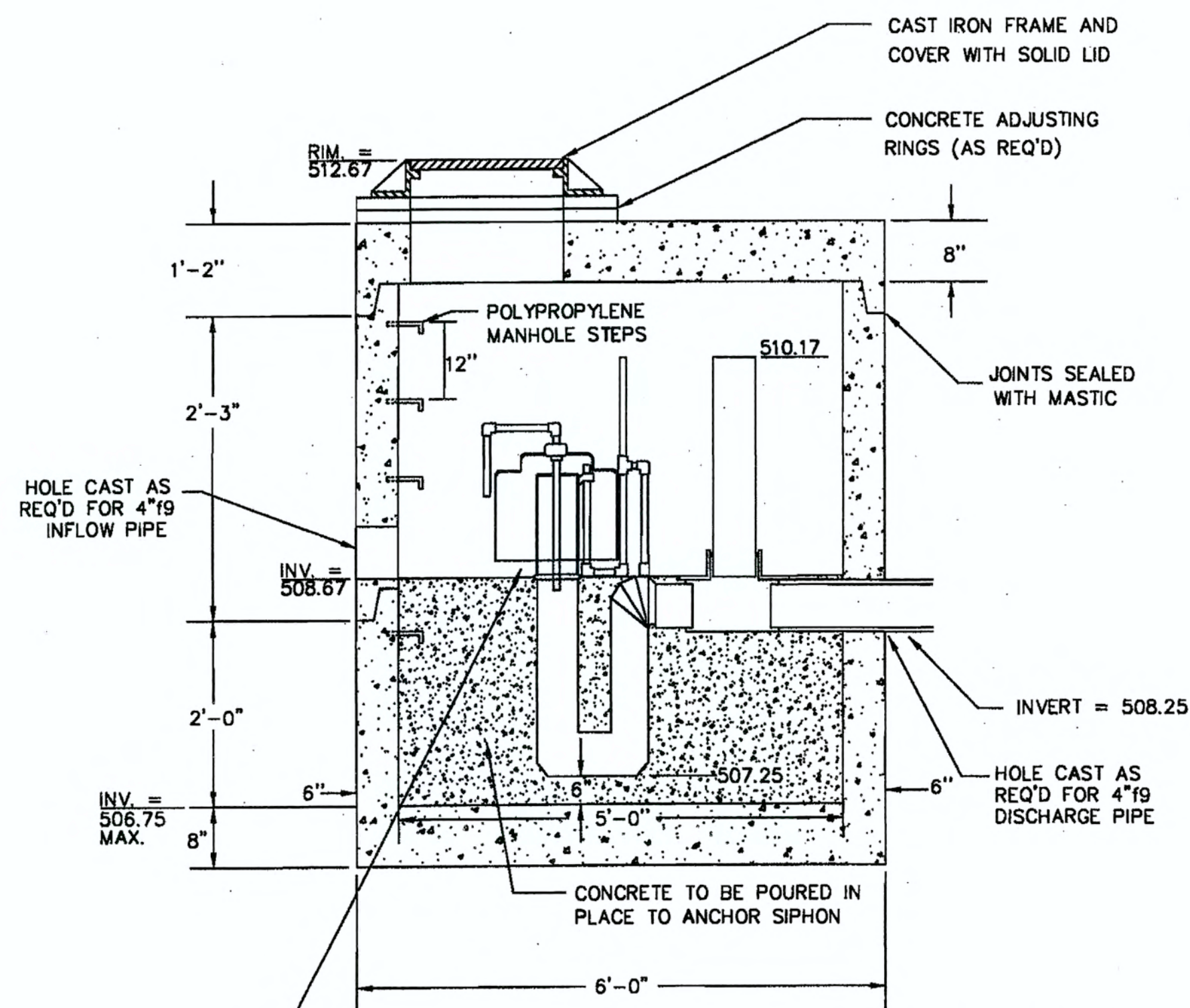


SECTION A-A



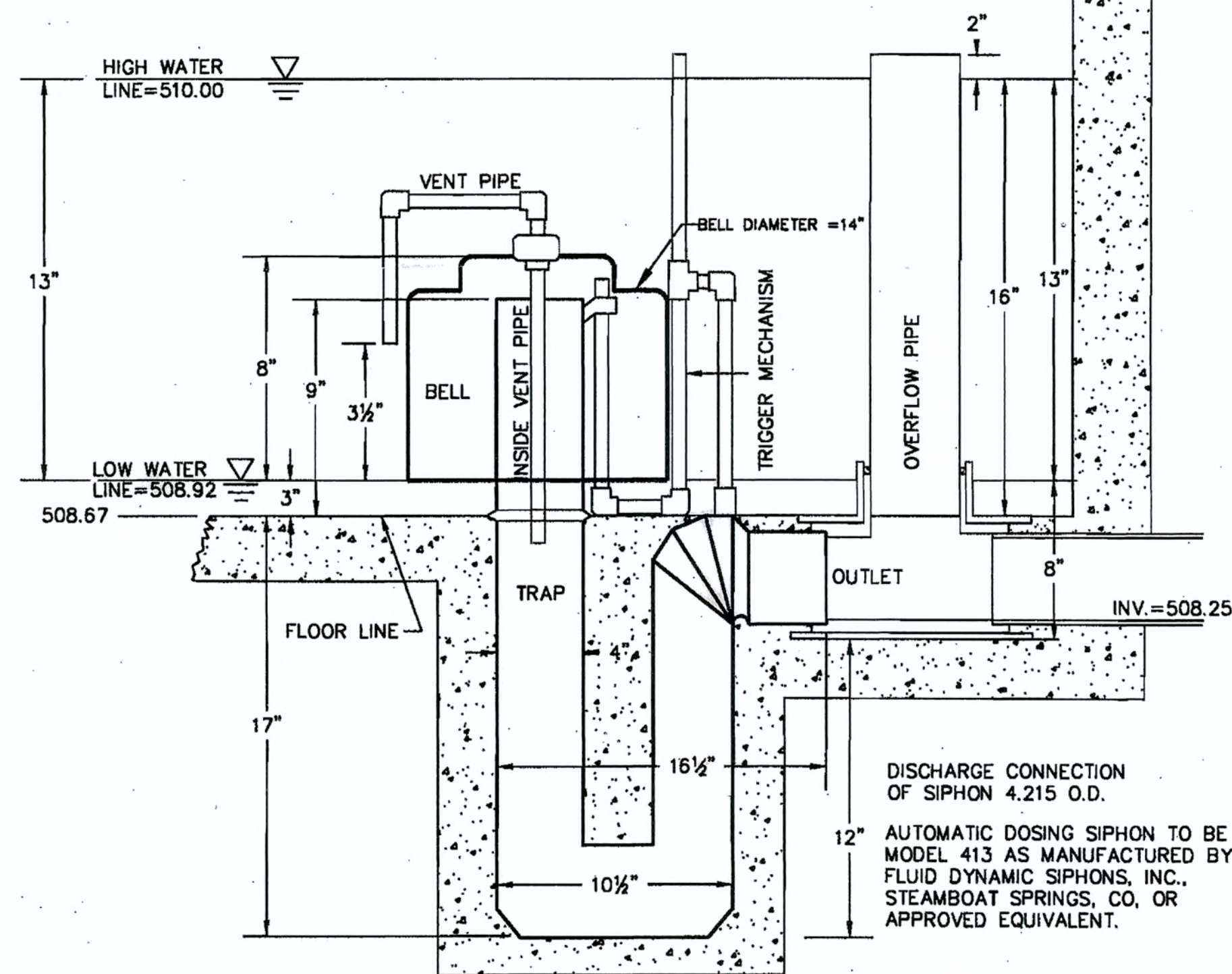
TYPICAL LIMESTONE CHANNELS SECTION
NO SCALE

TYPICAL GRASS-LINED EMERGENCY SPILLWAY DETAIL
NO SCALE



PRECAST CONCRETE MANHOLE - 5' DIAMETER
NO SCALE

BP2 DOSING MANHOLE
NO SCALE



AUTOMATIC DOSING SIPHON
NO SCALE

NOTE:
INSTALLED AS PER PLAN
UNLESS NOTED BY #

OK JH 9-12-08
NOTE

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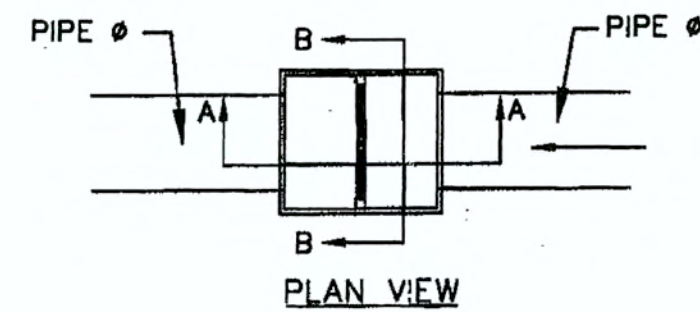
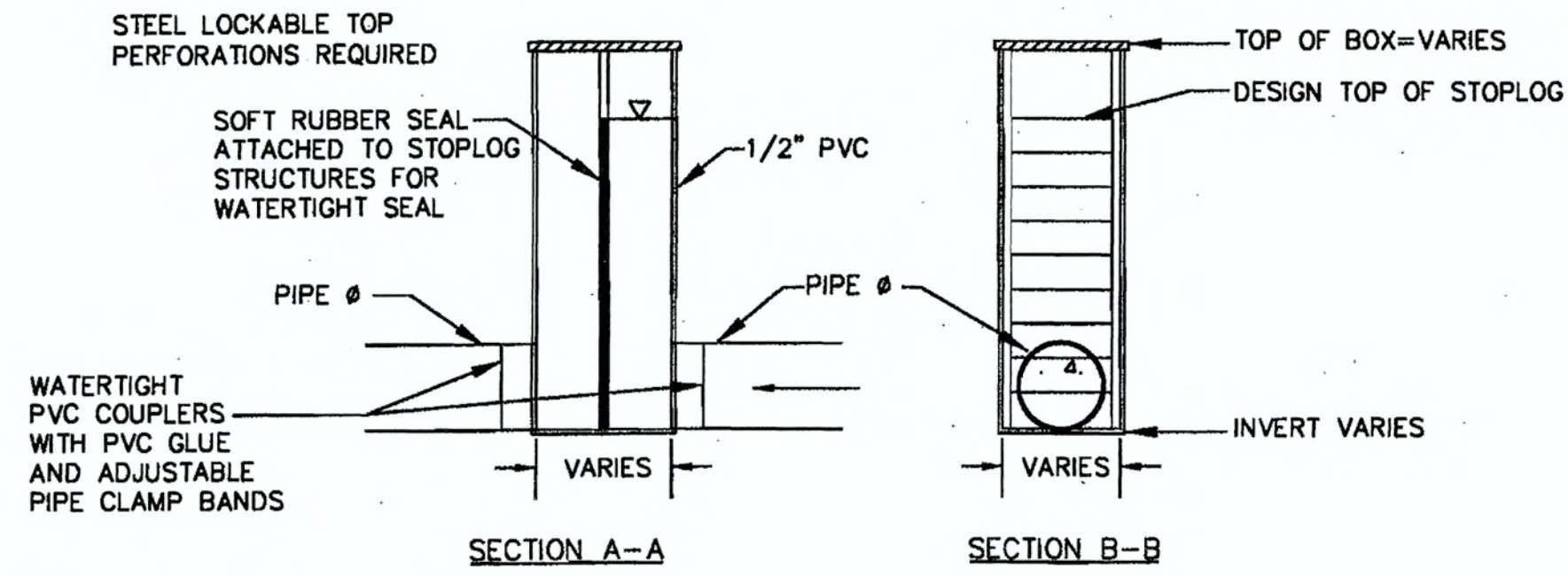
PREPARED BY:
SKELLY AND LOY, INC.
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2601 NORTH FRONT STREET
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717.222.0551 717.222.4502 FAX 717.222.1799

REVISIONS

County of Allegheny
Pittsburgh, Pennsylvania
Department of Public Works

**ACID MINE DRAINAGE REMEDIATION
BOYCE PARK
OLD FRANKSTOWN ROAD
MONROEVILLE BOROUGH
FILTRATION SYSTEM GRADING
AND PIPING DETAILS - 2
PROJECT NO. ZCBP-AD01**

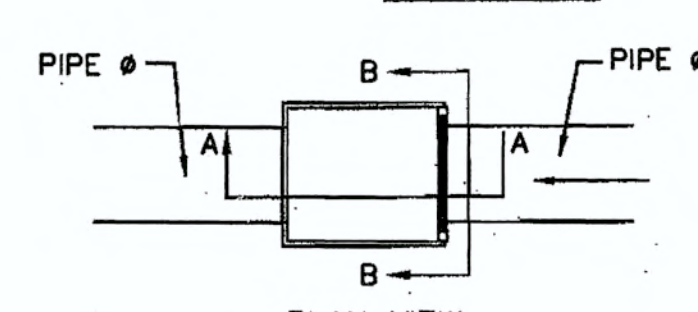
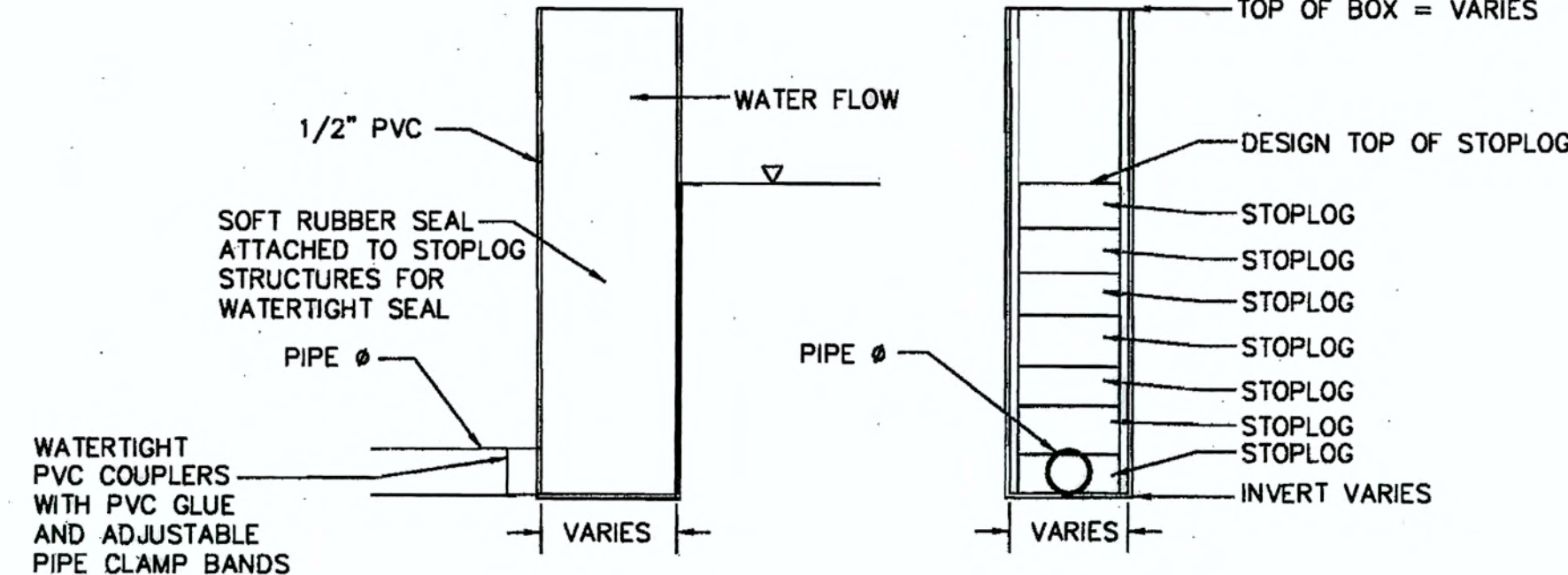
DES. NAW	DRW. BMS	CHK. TWS	M-323
DATE 11/19/06	SCALE NTS	SHEET 8 OF 14	



NOTES:
 INLINE WATER LEVEL CONTROL STRUCTURE, BAR GUARD, AND RODENT GUARD TO BE TYPE AS MANUFACTURED BY AGRI DRAIN CORP., ADAIR, IA, OR APPROVED EQUIVALENT.

INLINE STRUCTURE	TOP OF BOX ELEV.	INVERT BOX ELEV.	STRUCTURE HEIGHT (FT)	INSIDE DIMENSION WIDTH	INSIDE DIMENSION DEPTH	PIPE IN (IN)	PIPE OUT (IN)	PIPE TYPE IN/OUT	TOP STOPLOG ELEV.
#1	506.0	498.0	8	8"	10"	6	6	PVC SCH 40	504.0
#2	513.0	503.0	10	8"	10"	6	6	PVC SCH 40	509.5
#3	498.42	494.42	4	8"	10"	6	6	PVC SCH 40	496.0

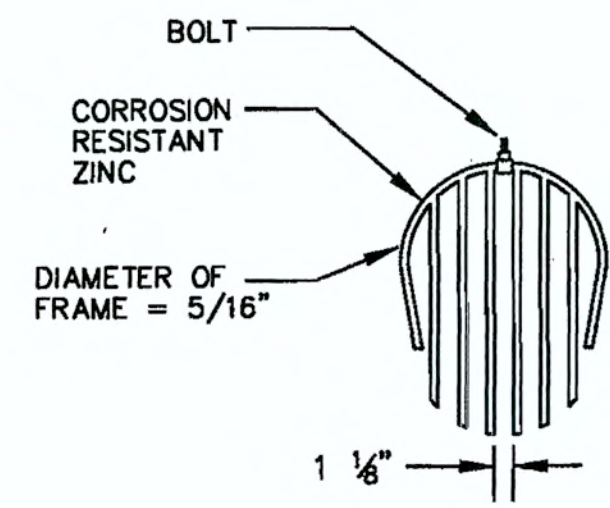
PVC INLINE WATER LEVEL CONTROL STRUCTURE
 NO SCALE



NOTES:
 INLET WATER LEVEL CONTROL STRUCTURE, BAR GUARD, AND RODENT GUARD TO BE TYPE AS MANUFACTURED BY AGRI DRAIN CORP., ADAIR, IA, OR APPROVED EQUIVALENT.

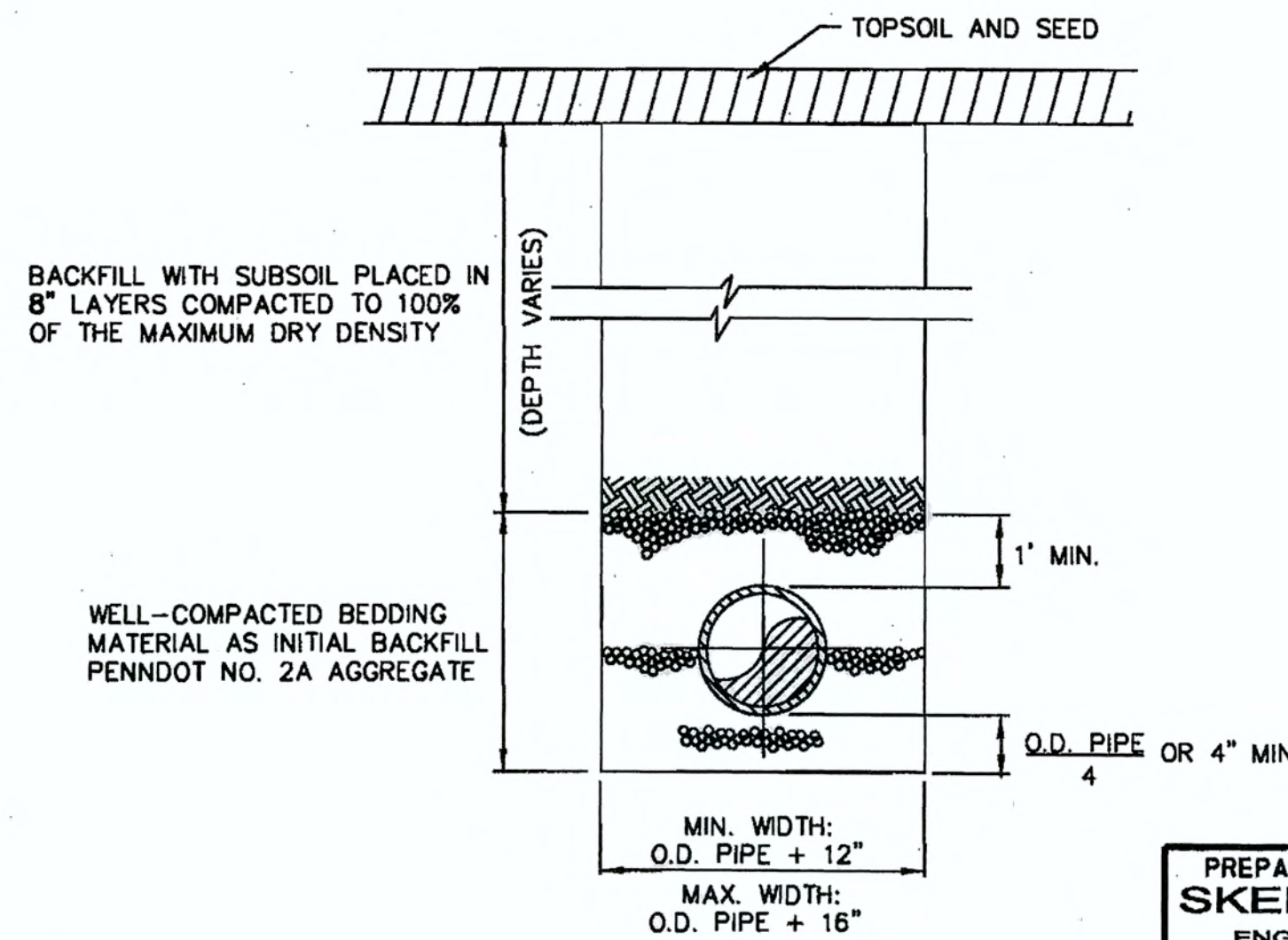
INLET STRUCTURE	TOP OF BOX ELEV.	INVERT BOX ELEV.	STRUCTURE HEIGHT (FT)	INSIDE DIMENSION WIDTH	INSIDE DIMENSION DEPTH	PIPE IN (IN)	PIPE OUT (IN)	PIPE TYPE IN/OUT	TOP STOPLOG ELEV.
#1	496.0	492.0	4	8"	5"	6	6	PVC SCH 40	494.0
#2	500.25	496.25	4	8"	5"	6	6	PVC SCH 40	498.25
#3	496.0	491.0	5	8"	5"	6	6	PVC SCH 40	494.0
#4	488.0	484.0	4	8"	5"	6	6	PVC SCH 40	486.0

PVC INLET WATER LEVEL CONTROL STRUCTURE
 NO SCALE



INSTALL AT DISCHARGE END OF PIPE.
 POSITION IN PIPE TO ALLOW GUARD TO SWIVEL AND LET TRASH PASS WITHOUT EXPOSING THE RODENT GUARD BEYOND THE PIPE.

RODENT CONTROL
 NO SCALE



TYPICAL TRENCH AND BEDDING DETAIL
 NO SCALE

PREPARED BY:
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REVISIONS

County of Allegheny
 Pittsburgh, Pennsylvania
 Department of Public Works

**ACID MINE DRAINAGE REMEDIATION
 BOYCE PARK
 OLD FRANKSTOWN ROAD
 MONROEVILLE BOROUGH
 FILTRATION SYSTEM GRADING
 AND PIPING DETAILS - 3
 PROJECT NO. ZCBP-AD01**

DES. MAN	DRW. BAS	CHK. TWS	M-323
DATE 11/19/06	SCALE NTS	SHEET 9 OF 14	

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DRAINAGE STRUCTURE DETAIL

EDW1 N 5,020.64 E 9,711.31 ENDWALL TYPE D <i>Top 509.19</i> R-4 RIP RAP, L=10', W=5', THICKNESS=1.5' INV ELEV 506.50 TO A1 <i>506.50 TO B1</i> 175.00 L.F.=18" HDPE <i>175.00 L.F.=18" HDPE</i>	A1 N 4,887.64 E 9,595.03 EXISTING TG.=526.73 <i>same</i> INV ELEV 523.10 FROM EDW1 <i>same</i>
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EDW2 N 4,977.28 E 9,753.03 ENDWALL TYPE D <i>Top 512.67</i> R-4 RIP RAP, L=10', W=10', THICKNESS=1.5' INV ELEV 509.80 TO B1 <i>509.79 TO B1</i> 145.78 L.F.=18" HDPE <i>145.00 L.F.=18" HDPE</i>	B1 N 4,834.06 E 9,777.19 TYPE M INLET TG = 525.80 <i>525.80</i> INV ELEV 521.00 FROM EDW2 <i>521.03</i>
--	--

EDW4 N 5147.44 E 9604.68 ENDWALL TYPE D <i>Top 509.33</i> R-4 RIP RAP, L=10', W=5', THICKNESS=1.5' INV ELEV 506.00 TO G1 <i>506.50 TO G1</i> 90.00 L.F.=18" HDPE <i>91 L.F.=18" HDPE</i>	G1 N 5079.96 E 9543.95 EXISTING INLET TG = 523.20 <i>same</i> INV ELEV 518.70 FROM EDW4 <i>518.65</i>
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EDW3 N 4,979.68 E 9,756.70 ENDWALL TYPE D <i>Top 512.67</i> R-4 RIP RAP, L=10', W=10', THICKNESS=1.5' INV ELEV 509.80 TO C1 <i>509.79 TO C1</i> 217.37 L.F.=18" HDPE <i>240.00 L.F.=18"</i>	
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C1 N 4,822.14 E 9,905.50 TYPE M INLET TG = 523.50 <i>523.40</i> <i>514.00</i> INV ELEV 514.02 FROM EDW3 INV ELEV 514.20 TO C2 <i>514.17</i> 36.27 L.F.=18" HDPE <i>37.00 L.F.</i>
--

C2 N 4,828.86 E 9,944.71 TYPE M INLET TG = 522.60 <i>522.55</i> INV ELEV 514.82 FROM C1 <i>514.83</i> INV ELEV 515.00 TO C3 <i>515.00</i> 58.22 L.F.=18" HDPE <i>58.00 L.F.</i> INV ELEV 518.80 TO C7 <i>515.00</i> 20.00 L.F.=18" HDPE <i>19.00 L.F.</i>
--

C3 N 4,842.04 E 10,005.21 TYPE S INLET TG = 522.50 <i>522.50</i> INV ELEV 516.12 FROM C2 <i>516.14</i> INV ELEV 516.30 TO C4 <i>516.31</i> 62.25 L.F.=18" HDPE <i>62.00 L.F.</i> INV ELEV 516.60 TO D1 <i>516.30</i> 38.35 L.F.=18" HDPE <i>36.50 L.F.</i>

C4 N 4,857.85 E 10,069.35 TYPE M INLET TG = 523.00 <i>523.00</i> INV ELEV 517.42 FROM C3 <i>517.31</i> INV ELEV 517.60 TO C5 <i>517.64</i> 132.88 L.F.=18" HDPE <i>132.50 L.F.</i>

C5 N 4,874.25 E 10,205.25 TYPE M INLET TG = 525.00 <i>525.00</i> INV ELEV 520.82 FROM C4 <i>520.71</i> INV ELEV 521.00 TO C6 <i>520.89</i> 123.10 L.F.=18" HDPE <i>122.50 L.F.</i> INV ELEV 521.00 TO E1 <i>521.07</i> 20.00 L.F.=18" HDPE <i>19.50 L.F.</i>

C6 N 4,871.88 E 10,332.37 EXISTING INLET TG = 527.80 <i>same</i> INV ELEV 523.52 FROM C5 <i>same</i> INV ELEV 523.70 TO F1 <i>same</i> 29.00 L.F.=18" HDPE <i>28.00 L.F.</i>

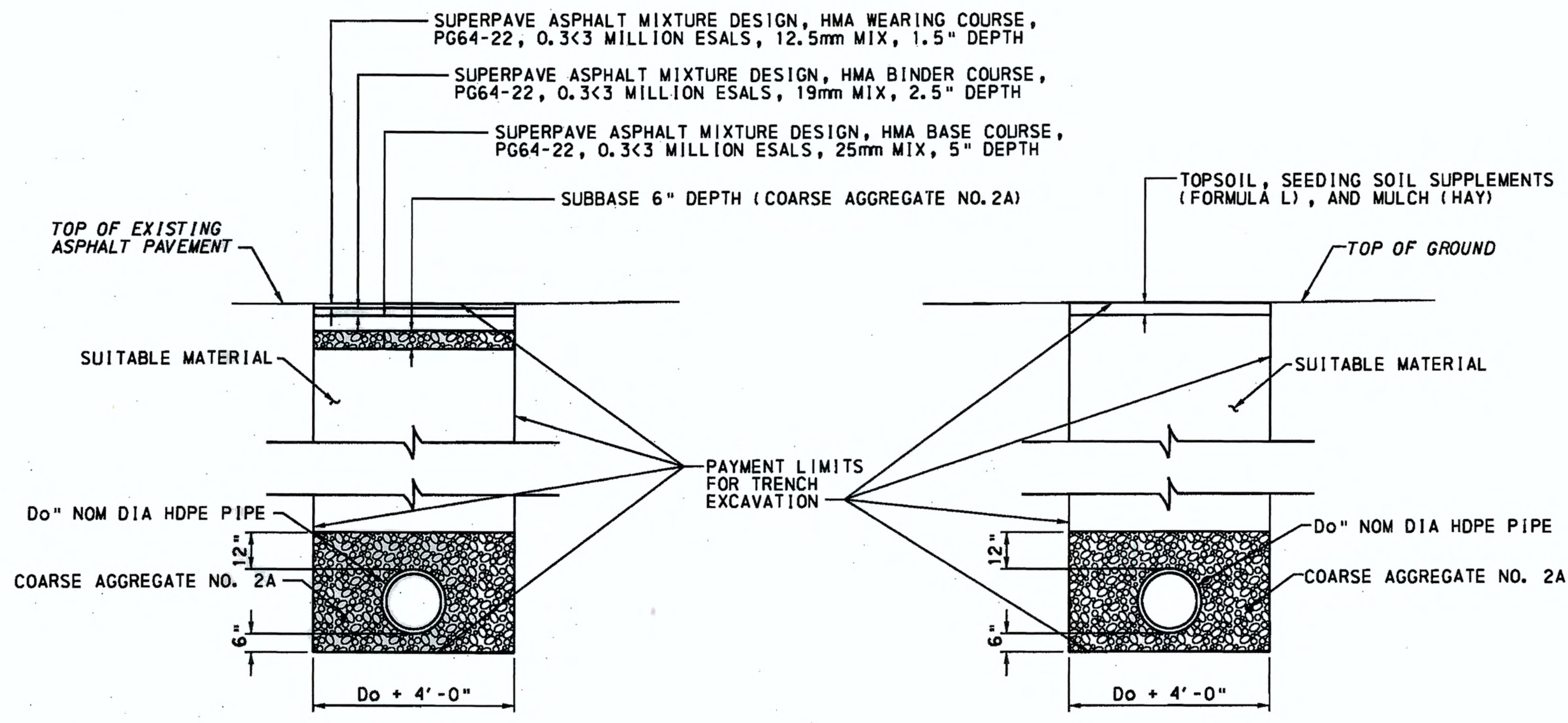
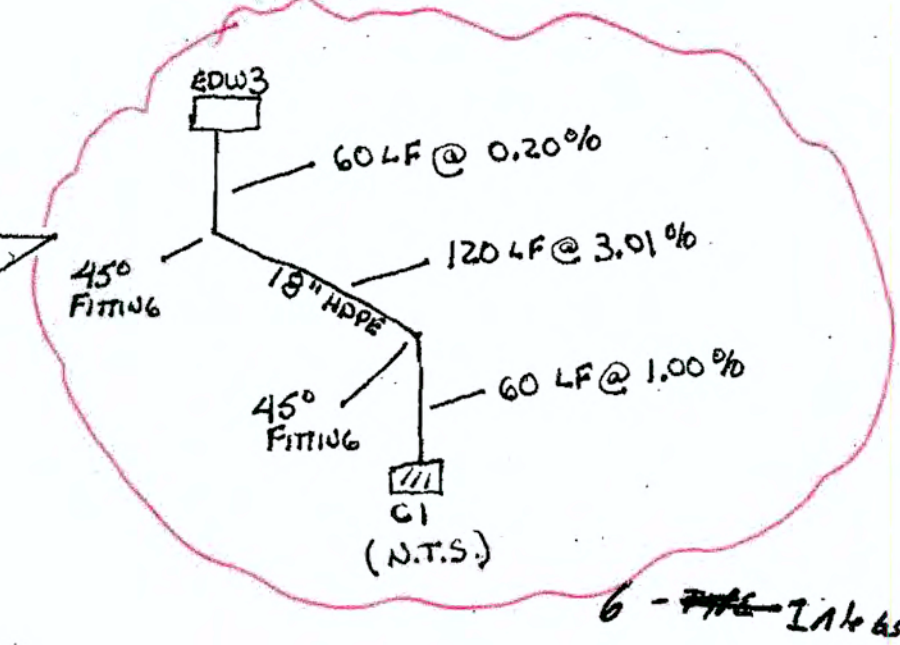
C7 N 4,806.17 E 9,950.07 EXISTING INLET TG = 522.90 <i>same</i> INV ELEV 519.40 FROM C2 <i>same</i>
--

D1 N 4,819.49 E 10,039.66 EXISTING INLET TG = 522.80 <i>same</i> INV ELEV 518.20 FROM C3 <i>same</i>

E1 N 4,850.58 E 10,206.13 EXISTING INLET TG = 525.00 <i>same</i> INV ELEV 521.50 FROM C5 <i>same</i>

F1 N 4,838.71 E 10,325.12 EXISTING INLET TG = 527.50 <i>same</i> INV ELEV 524.20 FROM C6 <i>same</i>

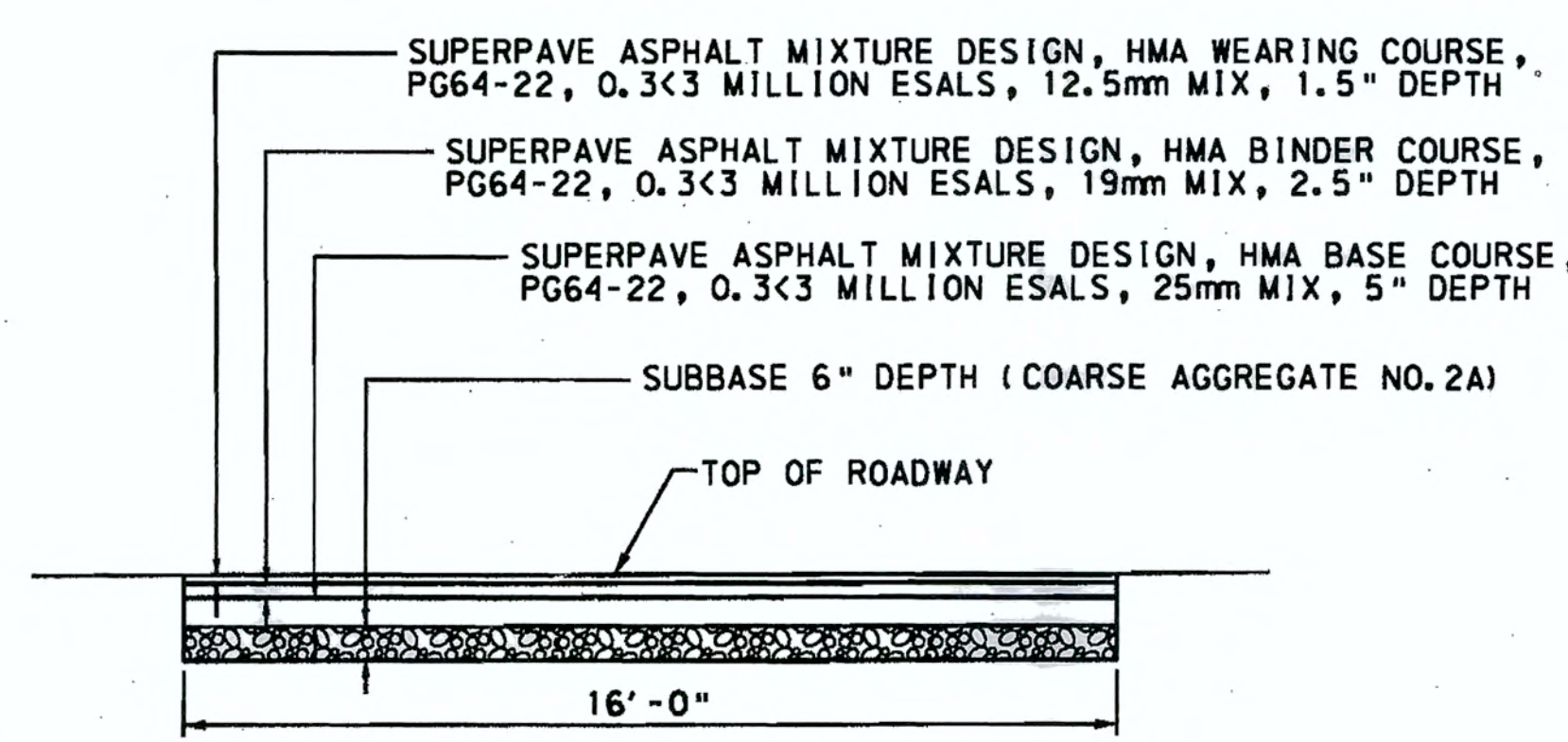
ADDITIONAL
B1 to EXISTING
Top EXISTING 525.80
INVERT IN 521.17
INVERT OUT - EXISTING C B
522.30



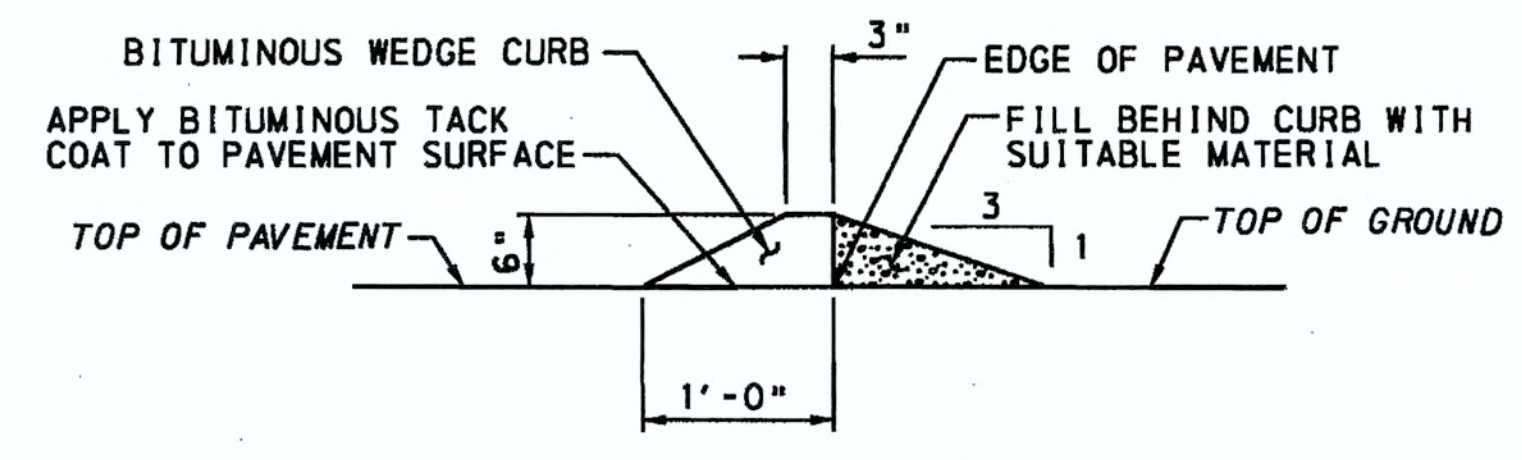
PAVEMENT REPLACEMENT AREAS

TOP SOIL REPLACEMENT AREAS

EXCAVATION AND DRAINAGE DETAILS



**ACCESS ROAD PAVEMENT SECTION
CENTER PARK DRIVE TO PAVILION**



BITUMINOUS WEDGE CURB DETAIL

NOTE:
1. THIS SHEET SHOWS ROADWAY AND DRAINAGE DETAILS FOR CENTER PARK DRIVE ONLY.

\$FILES\$
\$TIME\$
\$DATE\$

PREPARED BY:
ELK
CONSULTING ENGINEERS, INC.
10 DUFF ROAD, SUITE 304
PENN HILLS, PA 15235

REVISIONS

County of Allegheny
Pittsburgh, Pennsylvania
Department of Public Works

**ACID MINE DRAINAGE REMEDIATION
BOYCE PARK
OLD FRANKSTOWN ROAD
MONROEVILLE BOROUGH
PAVEMENT AND ROADWAY
DRAINAGE DETAILS
PROJECT NO. ZCBP-ADO1**

DES. JRV	DRW. RW	CHK. ESA	M-323
DATE 11/29/06	SCALE AS SHOWN	SHEET 12 OF 14	