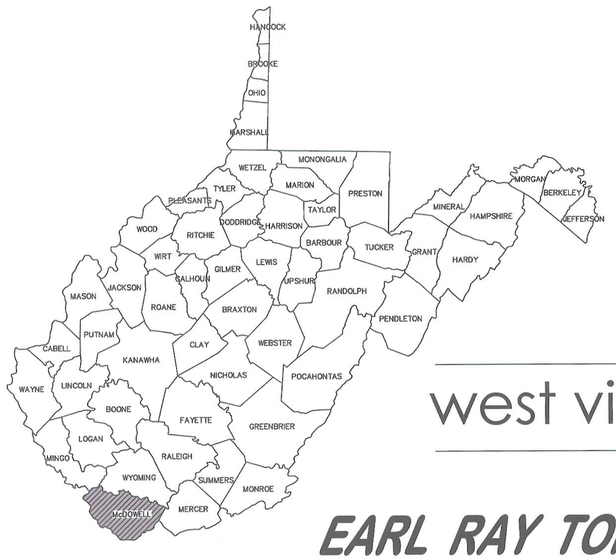



dep

west virginia department of environmental protection

STATE OF WEST VIRGINIA
JUNE 20 1863
MONTANI SEMPER LIBERI

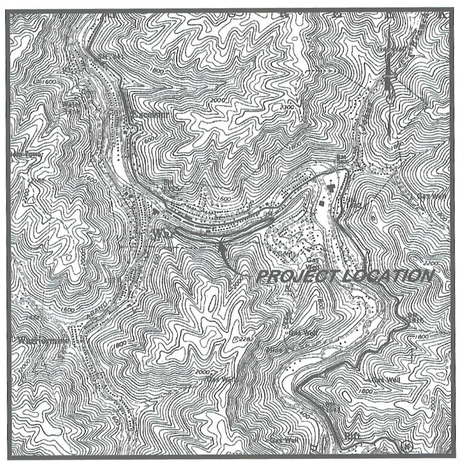
***EARL RAY TOMBLIN, GOVERNOR*** ***RANDY C. HUFFMAN, CABINET SECRETARY***

## *OFFICE OF ABANDONED MINE LANDS AND RECLAMATION*

# *CITY OF WAR MINE PORTALS*

*IN WAR,*
*McDOWELL COUNTY, WEST VIRGINIA*

*VICINITY MAP*




*USGS 7.5' QUAD (WAR)*

*INDEX TO SHEETS*

| SHEET NO. | DESCRIPTION |
|---|---|
| 2 | EXISTING CONDITIONS AND TAX MAP OVERLAY |
| 3 ~ 6 | EROSION AND SEDIMENT CONTROL PLAN |
| 7 ~ 10 | RECLAMATION PLAN |
| 11 | BAT GATE DETAIL |
| 12 | MISCELLANEOUS DETAILS |

JONATHAN R. HOLBERT
REGISTERED
18459
STATE OF WEST VIRGINIA
PROFESSIONAL ENGINEER
4/29/15

*PREPARED BY: POTESTA & ASSOCIATES, INC.*
*ENGINEERS AND ENVIRONMENTAL CONSULTANTS*
*7012 MAC CORKLE AVE. S.E., CHARLESTON, WV 25034*
*TEL: (304) 342-1400 FAX: (304) 343-9031*
*E-MAIL ADDRESS: potesta@potesta.com*

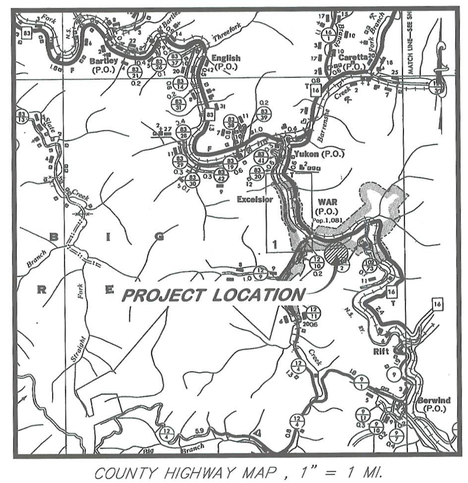
*APPROVED*

*X/X/2015*
*DATE*

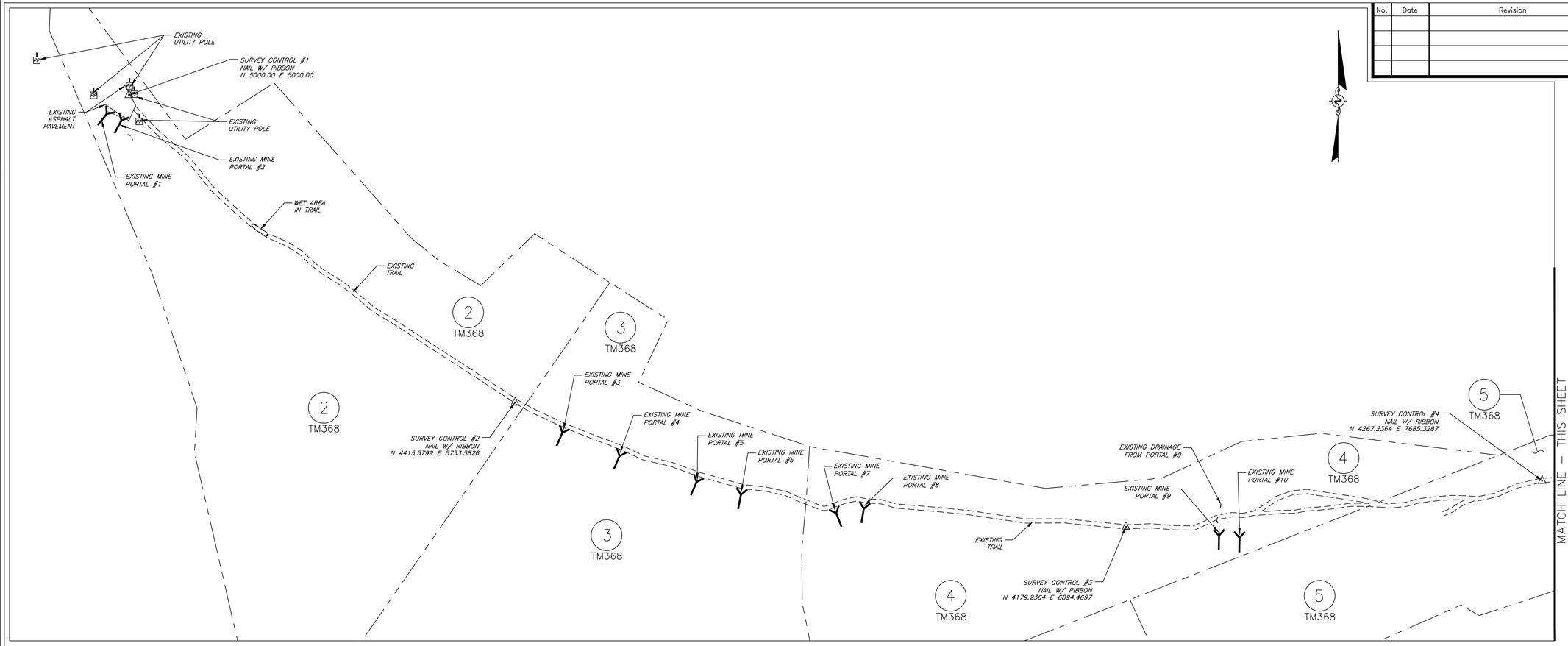
*BID SCHEDULE*

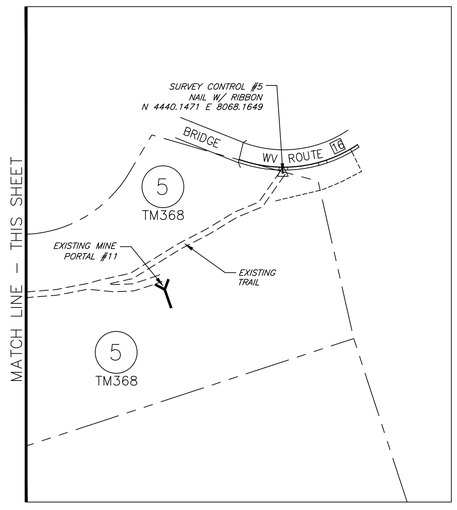
| ITEM NO. | DESCRIPTION | QUANTITY |
|---|---|---|
| 1.0 | MOBILIZATION AND DEMOBILIZATION (LIMITED TO 10% OF TOTAL BID) | LS |
| 2.0 | CONSTRUCTION LAYOUT (LIMITED TO 5% OF TOTAL BID) | LS |
| 3.0 | QUALITY CONTROL (LIMITED TO 3% OF TOTAL BID) | LS |
| 4.1 | SITE PREPARATION (LIMITED TO 10% OF TOTAL BID) | LS |
| 4.2 | GRAVEL TRAIL REHABILITATION (6' WIDE X 3" DEEP) | 275 TONS |
| 5.1 | SILT FENCE SEDIMENT CONTROL | 655 LF |
| 5.2 | STABILIZED CONSTRUCTION ENTRANCE (70' X 12' WIDTH) | 50 TONS |
| 6.0 | REVEGETATION | LS |
| 7.1 | LOW WATER CROSSING | 2 EA. |
| 7.2 | 4' X 4' SPLASH PAD | 1 EA. |
| 9.1 | DRY MINE SEAL WITH GRAVEL BULKHEAD (PORTALS 5, 8 AND 11) | 3 EA. |
| 9.2 | MINE SEAL BULKHEAD FOR BAT GATE SEAL (PORTALS 3, 6, 7 AND 9) | 4 EA. |
| 9.3 | MINE SEAL BULKHEAD FOR BAT GATE SEAL (PORTAL 10) | 1 EA. |
| 9.4 | 36" HDPE BAT GATE MINE SEAL PIPE (PORTALS 3, 6, 7 AND 9) | 112 LF |
| 9.5 | 60" HDPE BAT GATE MINE SEAL PIPE (PORTAL 10) | 50 LF |
| 9.6 | 36" HDPE MINE SEAL BAT GATE | 5 EA. |
| 9.7 | 60" HDPE MINE SEAL BAT GATE | 2 EA. |

*LOCATION MAP*




*COUNTY HIGHWAY MAP , 1" = 1 MI.*

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| LEGEND | |
|---|---|
| SYMBOL | DESCRIPTION |
| | EXISTING DRAIN OR WATER COURSE |
| | EXISTING UTILITY OR LIGHT POLE |
| | EXISTING SURVEY CONTROL |
| | EXISTING OR PROBABLE MINE OPENING |
| | APPROXIMATE PROPERTY LINE |
| 1 TM368 | TAX MAP AND PARCEL NO. |

NOTE:
TAX MAP INFORMATION WAS TAKEN FROM DIGITAL COURTHOUSE TAX MAP 368, BIG CREEK-WAR DISTRICT 3, McDOWELL COUNTY, WEST VIRGINIA. LAST REVISION DATE JULY, 1985.

GRAPHIC SCALE
100 50 0 100 200

MAPPING REFERENCE:
BASE MAPPING AS PROVIDED TO POTESTA & ASSOCIATES, INC. BY WVDEP, SEPTEMBER 2013.

ISSUE DATE 11-21-13

PRELIMINARY

DESIGN
CAD File No.
RGL
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1"=100'
Scale:
NOV. 2013
Date:
12-0201-001
Project No.

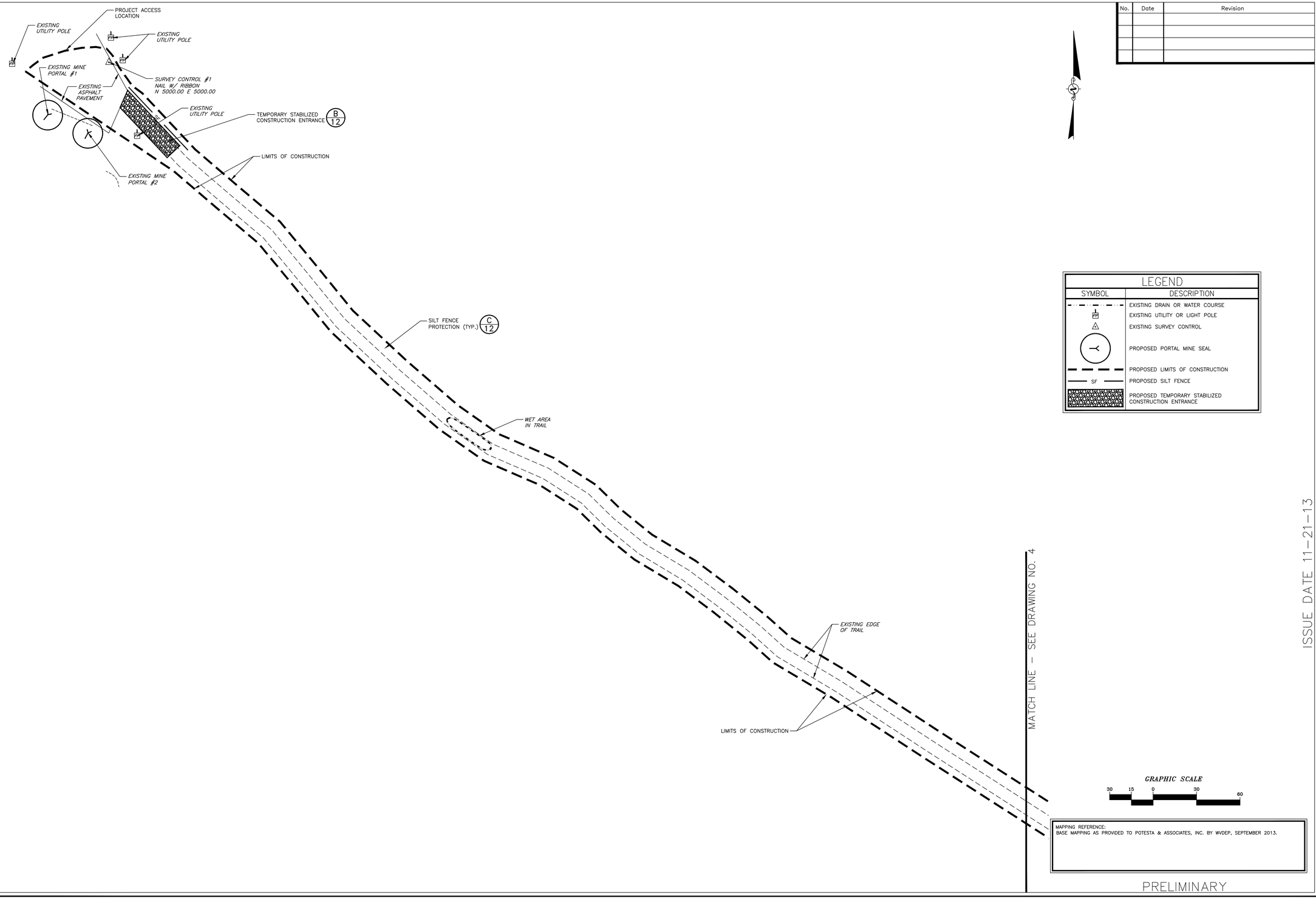
POTESTA & ASSOCIATES, INC.
ENGINEERS AND ENVIRONMENTAL CONSULTANTS
7012 MacCorkle Ave. SE. Charleston, WV 25304
TEL. (304) 342-1400 FAX. (304) 343-9031
E-Mail Address: potesta@potesta.com

POTESTA

Client:
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
601 57TH STREET S.E.
CHARLESTON, WEST VIRGINIA 25304

Title:
EXISTING CONDITIONS / TAX MAP OVERLAY
CITY OF WAR PORTALS
McDOWELL COUNTY, WEST VIRGINIA

2
Drawing No.

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LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | EXISTING DRAIN OR WATER COURSE |
| PM | EXISTING UTILITY OR LIGHT POLE |
| | EXISTING SURVEY CONTROL |
| | PROPOSED PORTAL MINE SEAL |
| | PROPOSED LIMITS OF CONSTRUCTION |
| SF | PROPOSED SILT FENCE |
| | PROPOSED TEMPORARY STABILIZED CONSTRUCTION ENTRANCE |

MAPPING REFERENCE:
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ISSUE DATE 11-21-13

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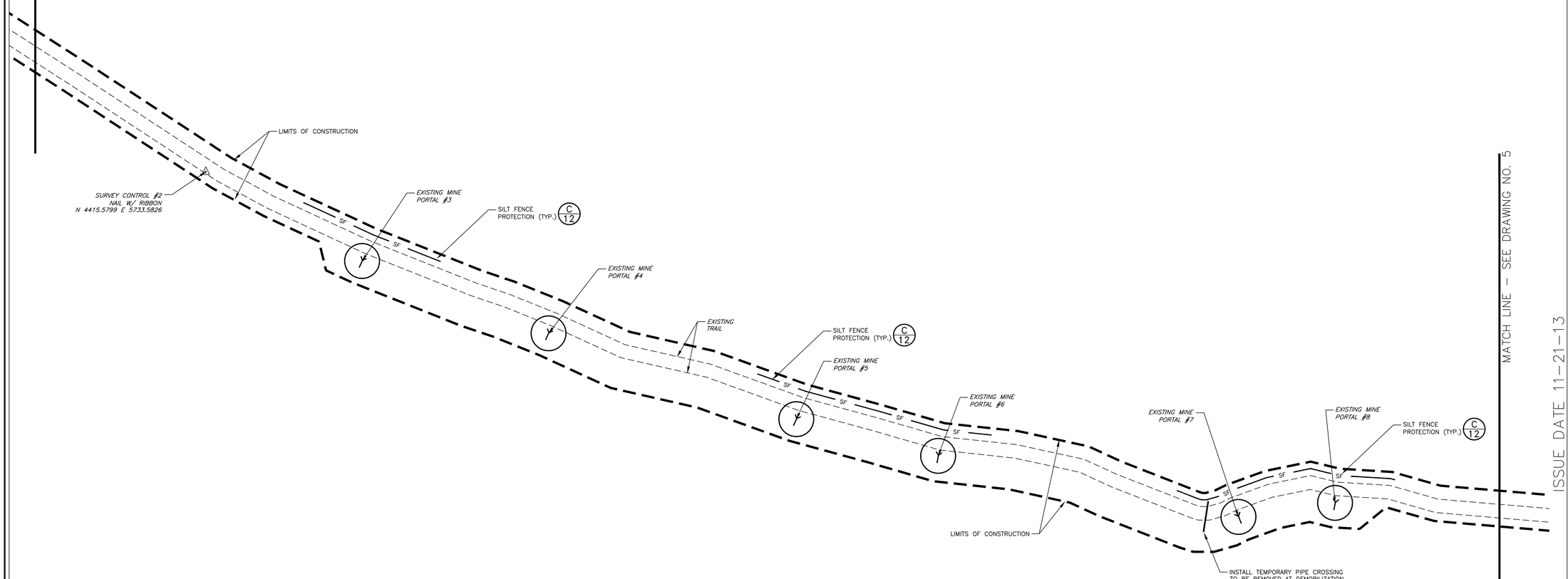
Title
EROSION & SEDIMENT CONTROL PLAN
CITY OF WAR PORTALS
MCDOWELL COUNTY, WEST VIRGINIA

3
Drawing No.

MATCH LINE – SEE DRAWING NO. 3




MATCH LINE – SEE DRAWING NO. 5

ISSUE DATE 11-21-13

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LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | EXISTING DRAIN OR WATER COURSE |
| EP | EXISTING UTILITY OR LIGHT POLE |
| | EXISTING SURVEY CONTROL |
| | PROPOSED PORTAL MINE SEAL |
| | PROPOSED LIMITS OF CONSTRUCTION |
| SF | PROPOSED SILT FENCE |

GRAPHIC SCALE

30 15 0 30 60

MAPPING REFERENCE:
BASE MAPPING AS PROVIDED TO POTESTA & ASSOCIATES, INC. BY WVDEP, SEPTEMBER 2013.

PRELIMINARY

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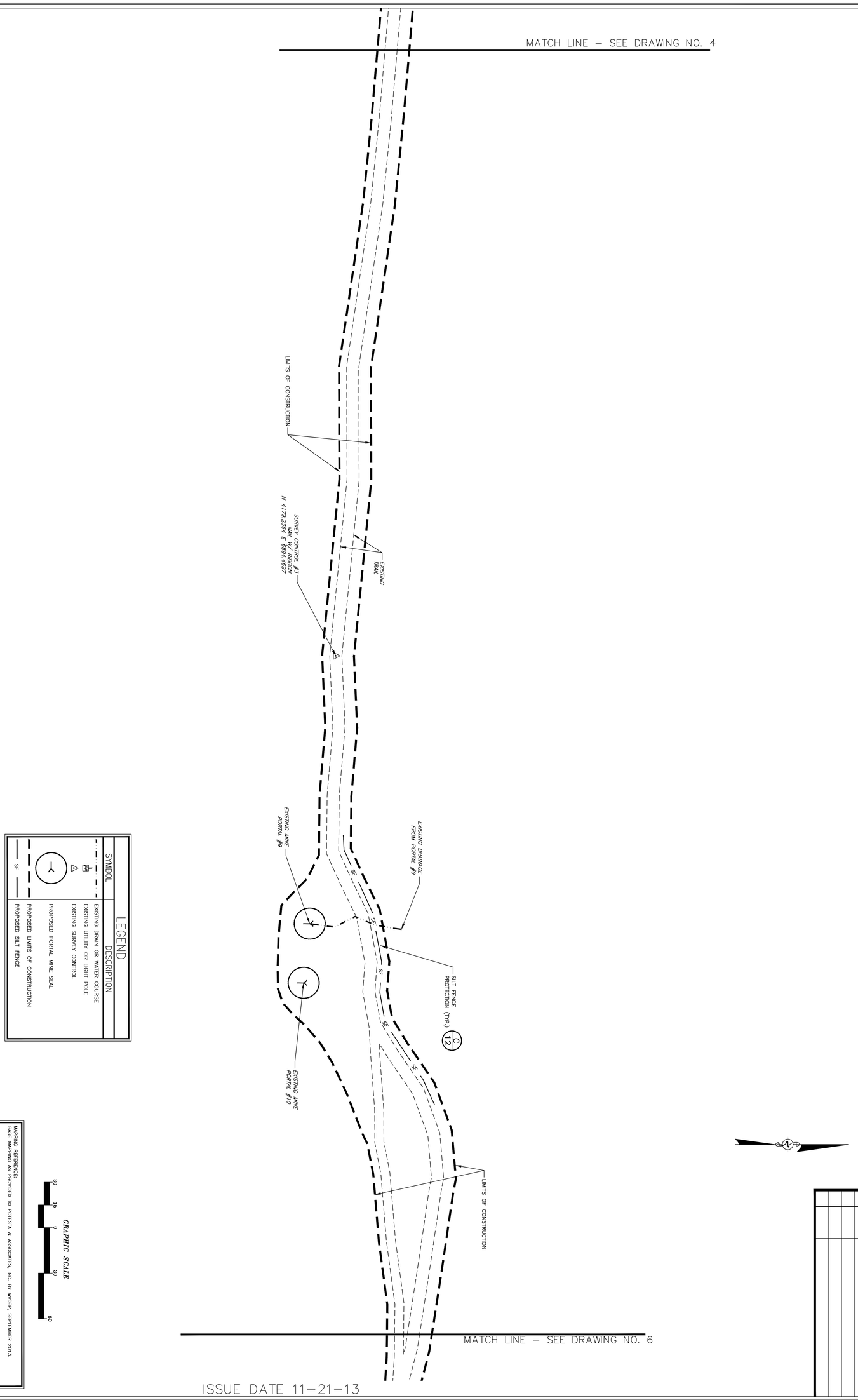
CHARLESTON, WEST VIRGINIA 25304

Title
EROSION & SEDIMENT CONTROL PLAN
CITY OF WAR PORTALS
MCDOWELL COUNTY, WEST VIRGINIA

4
Drawing No.




| No. | Date | Revision |
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Drawing No. 5

Title: EROSION & SEDIMENT CONTROL PLAN
CITY OF WAR PORTALS
MCDOWELL COUNTY, WEST VIRGINIA

Client: WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
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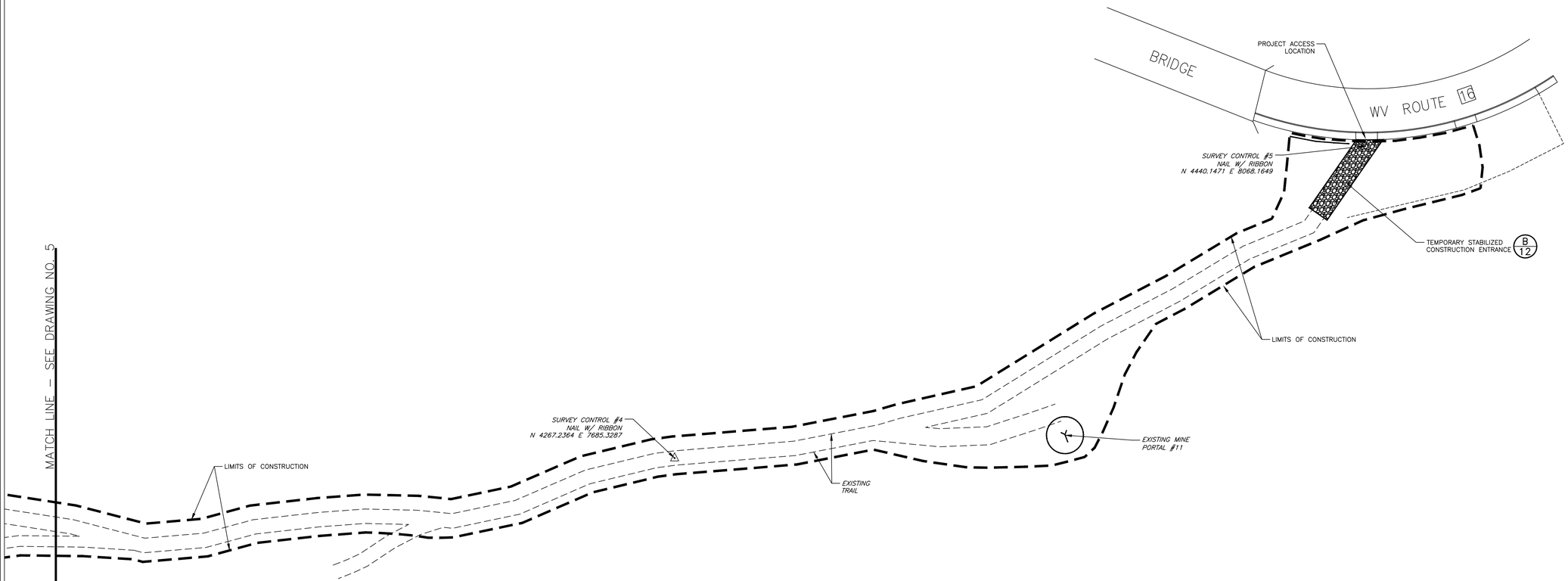


| LEGEND | |
|---|---|
| SYMBOL | DESCRIPTION |
| | EXISTING DRAIN OR WATER COURSE |
| P28 | EXISTING UTILITY OR LIGHT POLE |
| | EXISTING SURVEY CONTROL |
| | PROPOSED PORTAL MINE SEAL |
| | PROPOSED LIMITS OF CONSTRUCTION |
| SF | PROPOSED SILT FENCE |
| | PROPOSED TEMPORARY STABILIZED CONSTRUCTION ENTRANCE |

GRAPHIC SCALE

30 15 0 30 60

MAPPING REFERENCE:
BASE MAPPING AS PROVIDED TO POTESTA & ASSOCIATES, INC. BY WVDEP, SEPTEMBER 2013.

ISSUE DATE 11-21-13

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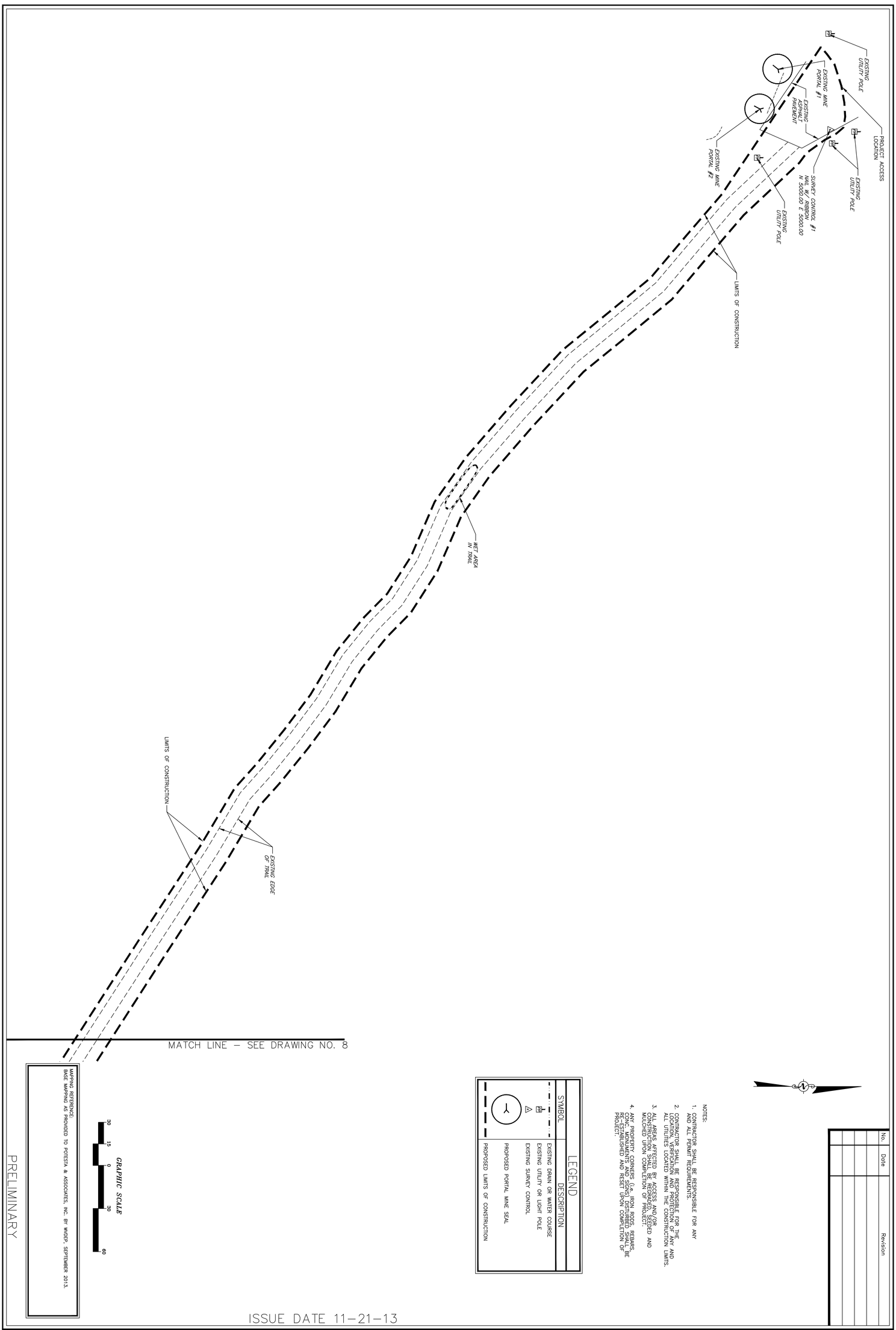
Title
EROSION & SEDIMENT CONTROL PLAN
CITY OF WAR PORTALS
MCDOWELL COUNTY, WEST VIRGINIA

6
Drawing No.




LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | EXISTING DRAIN OR WATER COURSE |
| | EXISTING UTILITY OR LIGHT POLE |
| | EXISTING SURVEY CONTROL |
| | PROPOSED PORTAL MINE SEAL |
| | PROPOSED LIMITS OF CONSTRUCTION |

NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL PERMIT REQUIREMENTS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION AND REPLACEMENT OF ALL UTILITIES LOCATED WITHIN THE CONSTRUCTION LIMITS.
3. ALL AREAS AFFECTED BY ACCESS AND/OR CONSTRUCTION SHALL BE REGRADED, SEEDED AND MULCHED UPON COMPLETION OF PROJECT.
4. ALL PROPERTY CORNERS, MONUMENTS, REBARS, CONC. MONUMENTS AND SIGNS DISTURBED SHALL BE RE-ESTABLISHED AND RESET UPON COMPLETION OF PROJECT.

MAPPING REFERENCE:
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GRAPHIC SCALE
30 15 0 30 60

PRELIMINARY

ISSUE DATE 11-21-13

| No. | Date | Revision |
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Drawing No. 7

Title
RECLAMATION PLAN
CITY OF WAR PORTALS
MCDOWELL COUNTY, WEST VIRGINIA

Client
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
601 57TH STREET S.E.
CHARLESTON, WEST VIRGINIA 25304

POTESTA

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E-Mail Address: potesta@potesta.com

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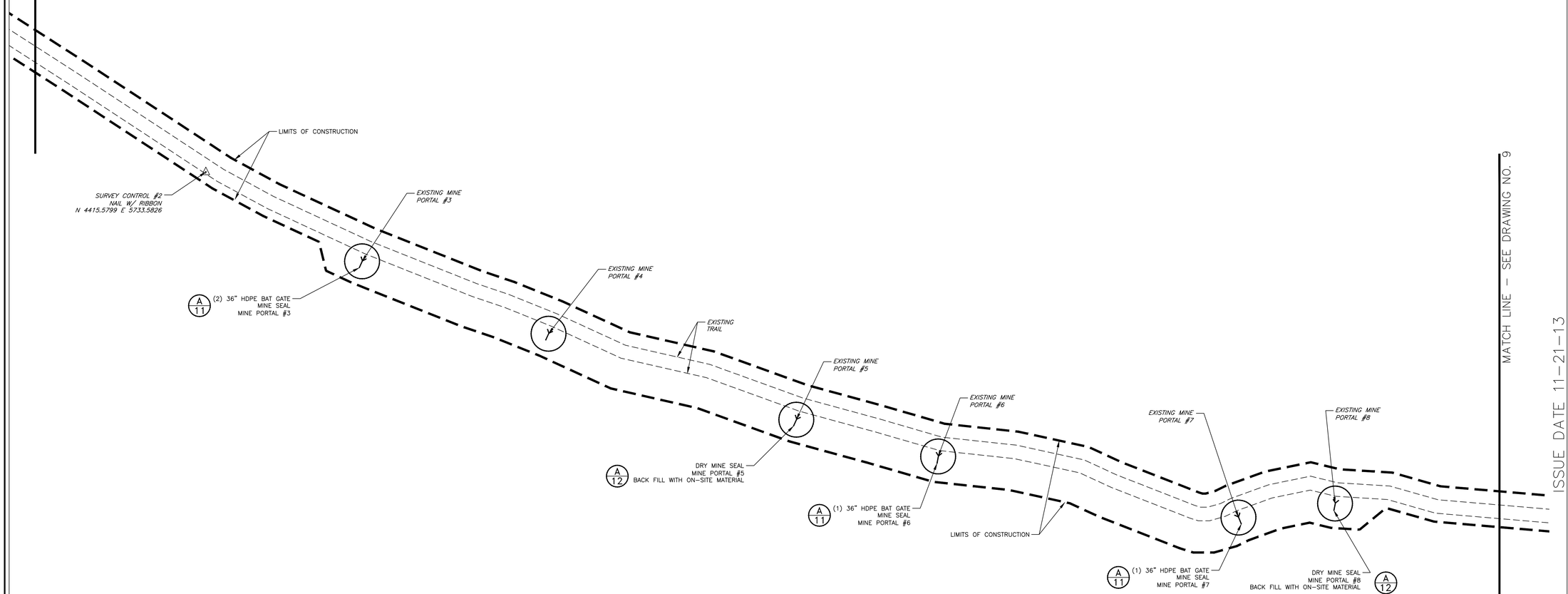
Scale: 1"=30'
Date: NOV. 2013
Project No. 12-0004-0001

MATCH LINE – SEE DRAWING NO. 7




MATCH LINE – SEE DRAWING NO. 9

ISSUE DATE 11–21–13

| LEGEND | |
|---|---|
| SYMBOL | DESCRIPTION |
| | EXISTING DRAIN OR WATER COURSE |
| PP | EXISTING UTILITY OR LIGHT POLE |
| | EXISTING SURVEY CONTROL |
| | PROPOSED PORTAL MINE SEAL |
| | PROPOSED LIMITS OF CONSTRUCTION |

NOTES:

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3. ALL AREAS AFFECTED BY ACCESS AND/OR CONSTRUCTION SHALL BE REGRADED, SEEDED AND MULCHED UPON COMPLETION OF PROJECT.
4. ANY PROPERTY CORNERS (i.e. IRON RODS, REBARS, CONC. MONUMENTS AND SIGNS) DISTURBED SHALL BE RE–ESTABLISHED AND RESET UPON COMPLETION OF PROJECT.

GRAPHIC SCALE

30 15 0 30 60

MAPPING REFERENCE:
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PRELIMINARY

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NOV. 2013
Date:
12–0201–001
Project No.


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601 57TH STREET S.E.
CHARLESTON, WEST VIRGINIA 25304

Title
RECLAMATION PLAN
CITY OF WAR PORTALS
MCDOWELL COUNTY, WEST VIRGINIA

Drawing No.
8

MATCH LINE – SEE DRAWING NO. 8

MATCH LINE – SEE DRAWING NO. 10

LIMITS OF CONSTRUCTION

EXISTING DRAINAGE FROM PORTAL #9

EXISTING TRAIL

SURVEY CONTROL #3
NAIL W/ RIBBON
N 4179.2364 E 6894.4697

LIMITS OF CONSTRUCTION

EXISTING MINE PORTAL #9

EXISTING MINE PORTAL #10

DANGEROUS OVERHANG. CONTRACTOR TO PROTECT WORKERS ACCORDINGLY.

(1) 36" HDPE BAT GATE
MINE SEAL W/ 4' SPLASH PAD
MINE PORTAL #9
A/11

(2) 60" HDPE BAT GATE
MINE SEAL
MINE PORTAL #10
A/11

ISSUE DATE 11-21-13

| No. | Date | Revision |
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## LEGEND

| SYMBOL | DESCRIPTION |
|---|---|
| | EXISTING DRAIN OR WATER COURSE |
| | EXISTING UTILITY OR LIGHT POLE |
| | EXISTING SURVEY CONTROL |
| | PROPOSED PORTAL MINE SEAL |
| | PROPOSED LIMITS OF CONSTRUCTION |

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MCDOWELL COUNTY, WEST VIRGINIA

9
Drawing No.

| No. | Date | Revision |
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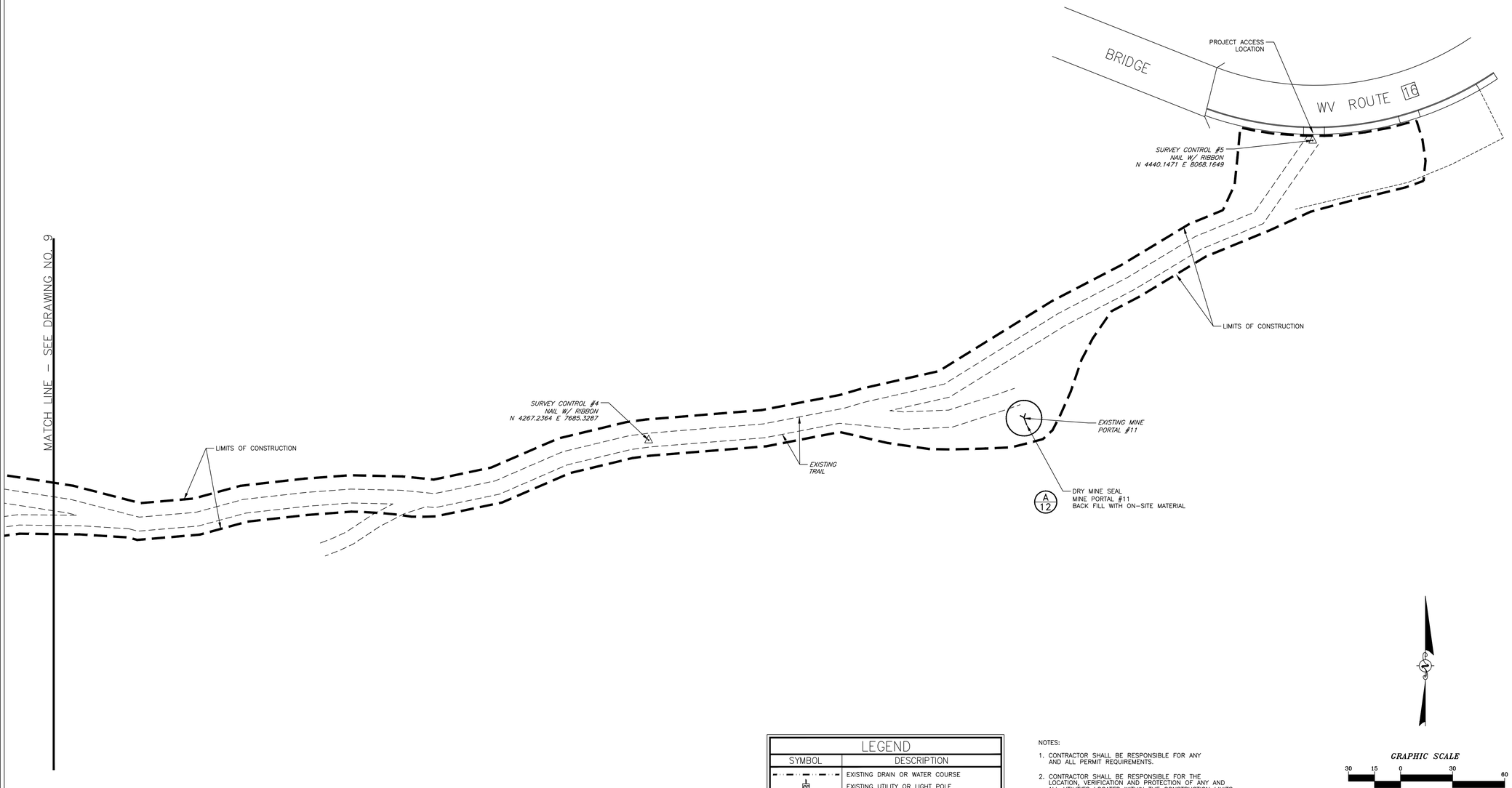


| LEGEND | |
|---|---|
| SYMBOL | DESCRIPTION |
| | EXISTING DRAIN OR WATER COURSE |
| PP | EXISTING UTILITY OR LIGHT POLE |
| | EXISTING SURVEY CONTROL |
| | PROPOSED PORTAL MINE SEAL |
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Title
RECLAMATION PLAN
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10
Drawing No.

| No. | Date | Revision |
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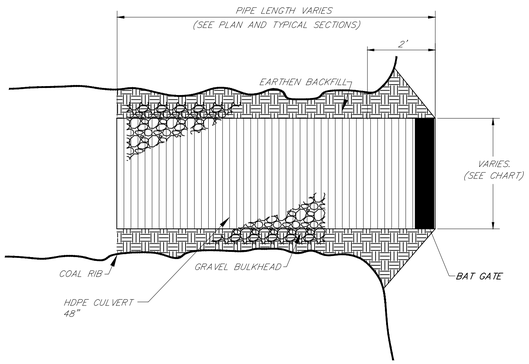
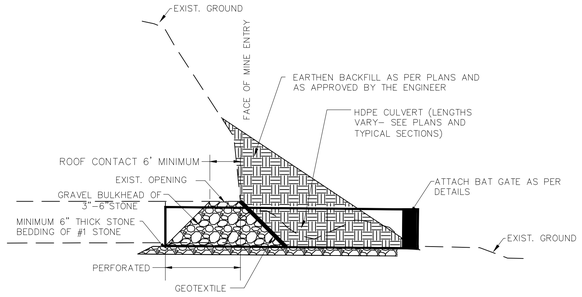


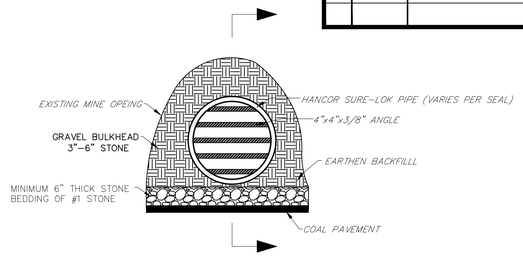

**PLAN**



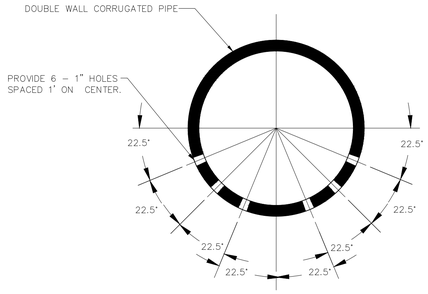

THE HDPE CULVERT, SHALL BE INSTALLED AT A 2% MINMUM GRADE, TYPICAL OF ALL.

## TYPICAL CONSTRUCTION DETAILS

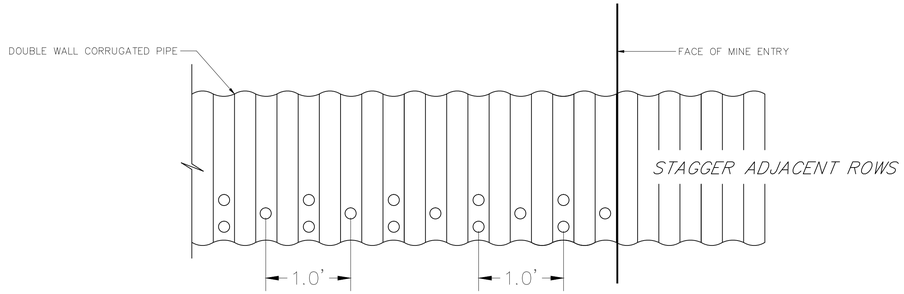
*(APPLICABLE TO ALL BAT GATES)*




**END VIEW**

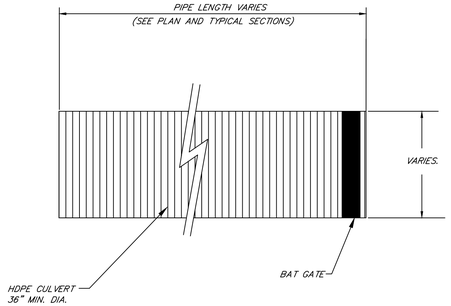



NOTE; PERFORATE ON PIPE WALLS NOT ON RIBS.

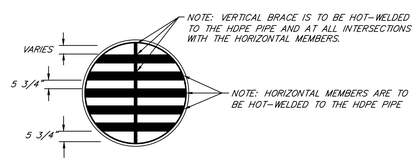



NOTE; PERFORATE ON PIPE WALLS NOT ON RIBS.

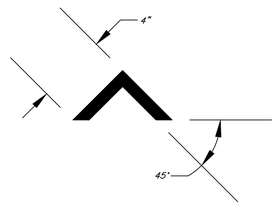
**PERFORATION DETAIL**



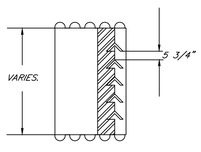

**PLAN VIEW**




**CROSS SECTION**

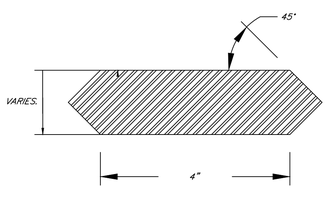



**CROSS SECTION HORIZONTAL BAR**




**CROSS SECTION**

HORIZONTAL BAR SPACINGS ARE NOT TO BE ALTERED. AN ADDITIONAL HORIZONTAL "FLAT" BAR MAY BE REQUIRED TO MAINTAIN SPACINGS THROUGHOUT ENTIRE HEIGHT OF CULVERT. THESE MODIFICATIONS ARE TO BE APPROVED BY THE ENGINEER PRIOR TO BEING PERFORMED.




**PROFILE VIEW OF VERTICAL BRACE**

A/11

PRELIMINARY

*_DETAILS
CAD File No.
RGL
Drawn
DMK
Checked
DMK
Approved
NOTED
Scale:
NOV. 2013
Date:
12-0201-001
Project No.


POTESTA & ASSOCIATES, INC.
ENGINEERS AND ENVIRONMENTAL CONSULTANTS
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E-Mail Address: potesta@potesta.com


POTESTA

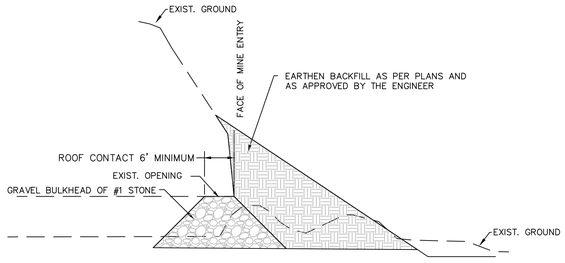
ISSUE DATE 11-21-13

Client
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
601 57TH STREET S.E.
CHARLESTON, WEST VIRGINIA 25304

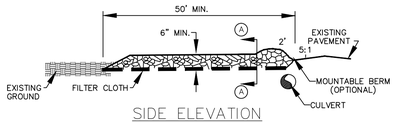
Title
BAT GATE DETAIL
CITY OF WAR PORTALS
MCDOWELL COUNTY, WEST VIRGINIA

11
Drawing No.

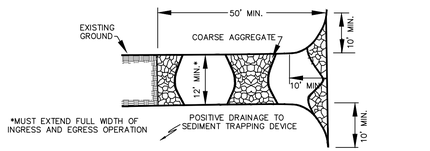
| No. | Date | Revision |
|---|---|---|
| | | |
| | | |
| | | |
| | | |



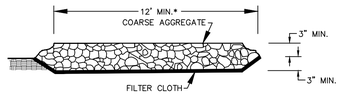

DRY MINE SEAL DETAIL (A 1 2)
N.T.S. (PLOT SCALE: 1=2)




SIDE ELEVATION

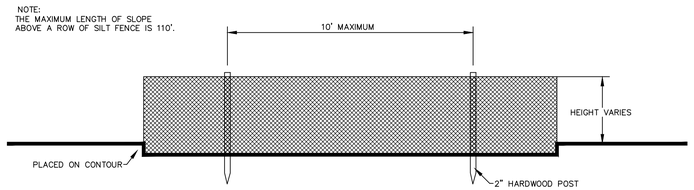



PLAN VIEW

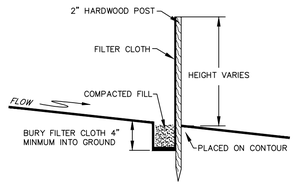



SECTION A–A

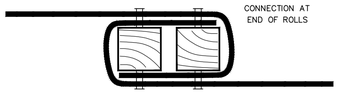
TEMPORARY STABILIZED
STONE CONSTRUCTION ENTRANCE (B 1 2)
N.T.S. (PLOT SCALE: 1=1)



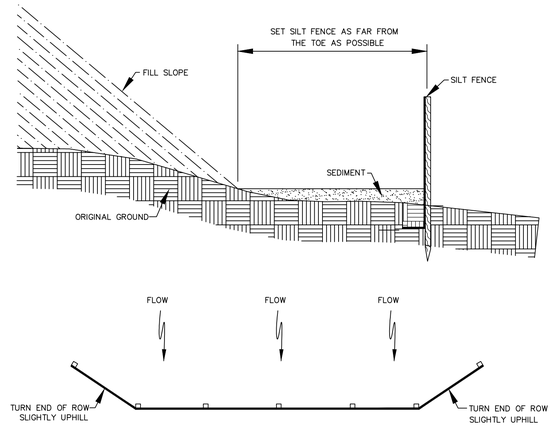

FRONT ELEVATION




SIDE ELEVATION

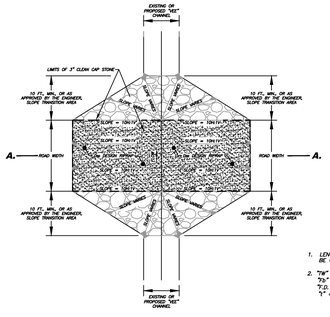



TOP VIEW




PLACEMENT OF SILT FENCE

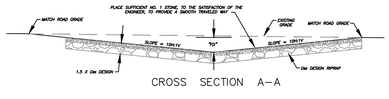
SILT FENCE DETAIL (C 1 2)
N.T.S. (PLOT SCALE: 1=1)




PLAN VIEW

ROCK RIPRAP SIZING

| GRADATION | $D_{50}$ = 12" | $D_{50}$ = 18" | $D_{50}$ = 24" |
|---|---|---|---|
| 50% | 12" – 18" | 18" – 27" | 24" – 36" |
| 35% | 6" – 12" | 9" – 18" | 12" – 24" |
| 15% | 3" – 6" | 4.5" – 9" | 6" – 12" |




CROSS SECTION A–A

NOTES:

1. LENGTH AND WIDTH OF TRAVEL AREA OF CROSSING SHALL BE CAPPED WITH A LAYER OF 3" (NO.1) CLEAN STONE.
2. "TW" = TOP WIDTH
   "FB" = FREEBOARD DEPTH
   "F.D." = FLOW DEPTH
   "T" = THICKNESS

RIPRAP VEE
CHANNEL ROAD CROSSING

PRELIMINARY

ISSUE DATE 11–21–13

* DETAILS
CAD File No.
RGL
Drawn
DMK
Checked
DMK
Approved
NOTED
Scale:
NOV. 2013
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12–0201–001
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POTESTA

Client
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601 57TH STREET S.E.
CHARLESTON, WEST VIRGINIA 25304

Title
MISCELLANEOUS DETAILS
CITY OF WAR PORTALS
MCDOWELL COUNTY, WEST VIRGINIA

12
Drawing No.