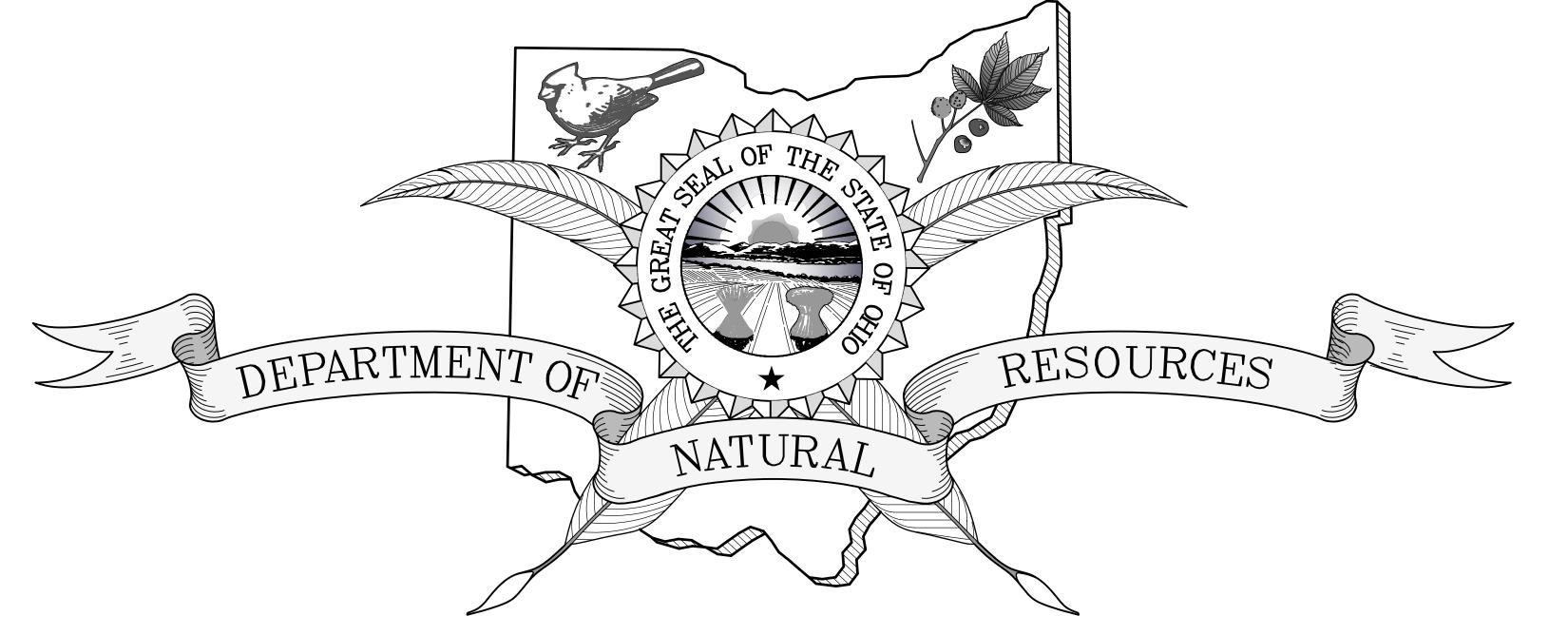
DESIGN UNIT ZALESKI OFFICE N.R.E.4 R. WARNER, P.E N.R.E.2 KRIS GILLESPIE P.O. K. CUNNINGHAM



DIVISION OF MINERAL RESOURCES MANAGEMENT

# COMBO PERRY CO. RECLAMATION 2024

RECLAMATION PROJECT NUMBER: CO-PR-24

# **GENERAL SUMMARY**

SPEC	ITEM	SALT LICK QUANTITIES	JOHNSON QUANTITIES	SALEM HOLLOW QUANTITIES	GRAND TOTAL
2100 2121 2200 2301 2702 3130 3211 3231 3233 3410 3451 3454 4446 4516 6100 6310 9420 9421 9931 9991	MOBILIZATION/ACCESS CLEARING AND GRUBBING EARTHWORK (EST. 15,227 CY) DEBRIS REMOVAL AND DISPOSAL SPECIFIC WORK ALLOWANCE TYPE C ROCK CHANNEL PROTECTION FILTER FABRIC PREFABRICATED BLOCK CHANNEL LINING TEMPORARY STREAM CROSSING SILT FENCE #3 & #4 STONE #57 STONE (Road) DEWATERING (Pumping) POLYURETHANE FOAM FILL STANDARD REVEGETATION LIME OIL/GAS WELL ABANDONMENT GAS LINE RELOCATION MISC (SHAFT MARKER) SURVEYING	0.7 (LS) 3.5 (ACRE) 0.98 (LS) 20.0 (TON) 5000 (EA) 30 (TON) 117 (SY) 6975 (SF) - 1400 (LF) 28 (TON) 80 (TON) 3.5 (ACRE) 9 (TON) 1.0 (LS) 1000 (LF) - 1.0 (LS)	0.1 (LS) 0.1 (ACRE) 500 (EA) 20 (TON) - 90 (CF) 0.1 (ACRE) 0.5 (TON)	0.02 (LS)  - 500 (EA)  3 (EA) 100 (LF) 12 (TON) 40 (TON) 1.0 (LS) 1874 (CF)	1.0 (LS) 4.1 (ACRE) 1.0 (LS) 20.0 (TON) 6000 (EA) 30 (TON) 117 (SY) 6975 (SF) 3 (EA) 1500 (LF) 40 (TON) 140 (TON) 1.0 (LS) 1964 (CF) 4.1 (ACRE) 10 (TON) 1.0 (LS) 1000 (LF) 1.0 (EA) 1.0 (LS)

# **CONTACT INFORMATION**

OHIO DEPARTMENT OF NATURAL RESOURCES 9900 BRICK CHURCH RD. CAMBRIDGE, OHIO 43725 PH: (740) 439-9079

PROJECT OFFICER KATIE CUNNINGHAM PH: (740) 274-4963

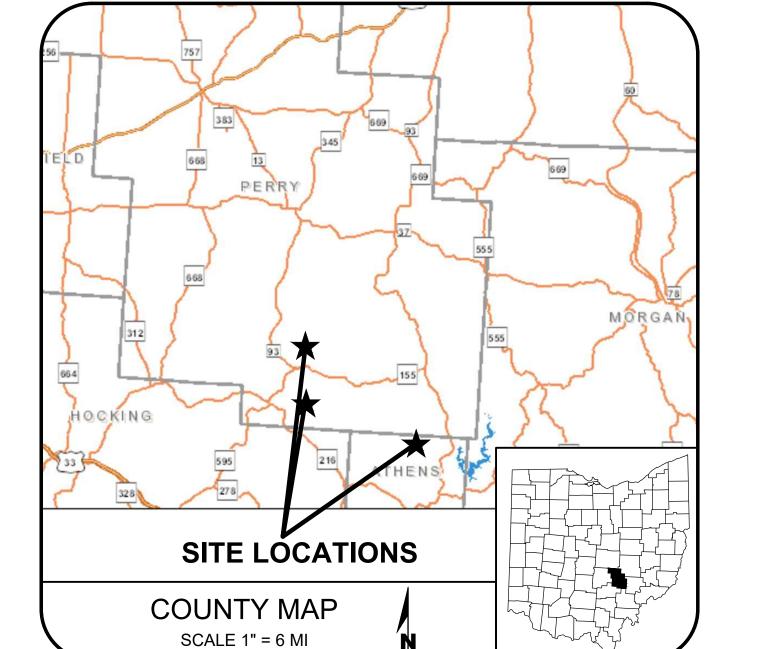
PROJECT ENGINEER RON WARNER, P.E. PH: (740) 303-4209

# SHEET INDEX

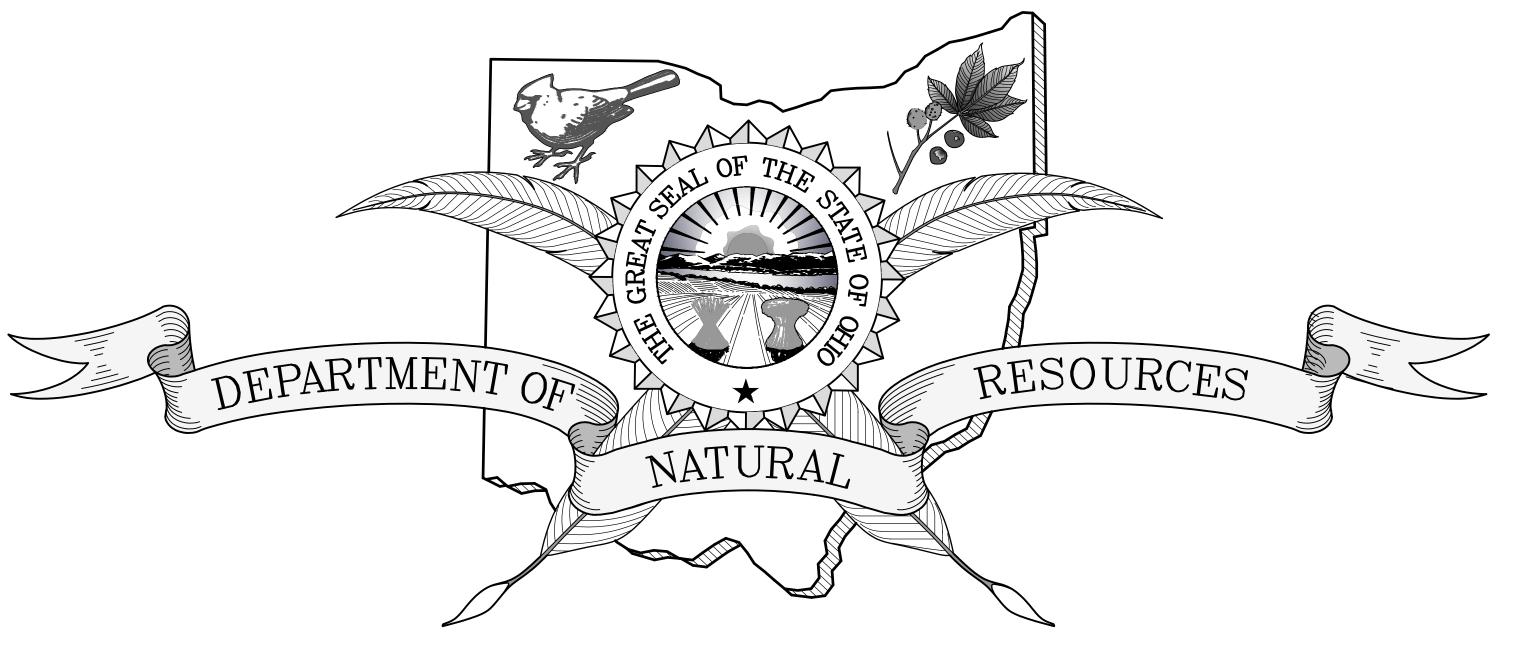
TITLE COMBO PERRY COUNTY RECLAMTION 2024 TITLE SHEET	SHEET 1
SALT LICK TITLE SHEET	2
SALT LICK AERIAL	3
SALT LICK EXISTING SITE	4
SALT LICK PROPOSED	5
SALT LICK CROSS SECTIONS	6-10
SALT LICK DETAILS	11-13
JOHNSON RUN TITLE SHEET	14
JOHNSON RUN AERIAL	15
JOHNSON RUN PROPOSED	16
SALEM HOLLOW AERIAL	17
SALEM HOLLOW PROPOSED	18
SALT LICK/JOHNSON RUN DETAILS	19-20

THIS DOCUMENT WAS ORIGINALLY ISSUED BY RONALD A. WARNER, P.E. THIS DOCUMENT IS NOT CONSIDERED A SEALED DOCUMENT. FOR BIDDING PURPOSE ONLY.

OHIO DEPARTMENT OF NATURAL RESOURCES



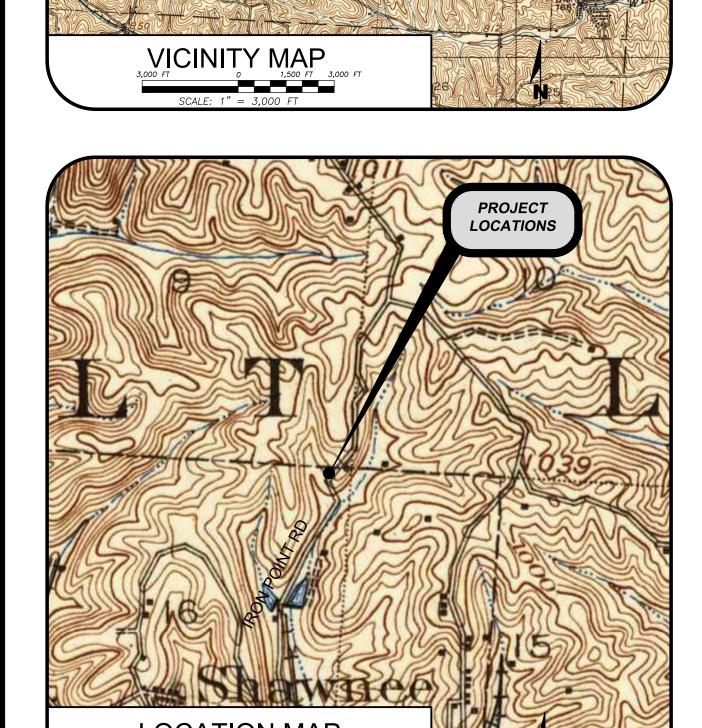
PROJECT VICINITY



**DIVISION OF MINERAL RESOURCES MANAGEMENT** 

# SALT LICK VERTICAL OPENINGS

SALT LICK TOWNSHIP, PERRY COUNTY RECLAMATION PROJECT No. PR-SI-38



### PROJECT DESCRIPTION

THE INTENT OF THIS PROJECT IS TO FILL AND CAP TWO STREAM CAPTURES AND BACKFILL A HIGHWALL IN CLOSE PROXIMITY TO A TOWNSHIP ROAD ON USFS PROPERTY IN PERRY COUNTY OHIO. THE VERTICAL OPENING MEASURES 18' X 10' WIDE WITH A DEPTH OF 8' THAT CAPTURES A SMALL EPHEMERAL TRIBUTARTY FED BY A ROAD DITCH FROM IRON POINT ROAD. THE OPEN PORTAL MEASURE 4' X 9' CAPTURES HIGH FLOW FLOODING.

MAJOR WORK ITEMS INCLUDE CLEARING AND GRUBBING, ESTIMATED 15,000 CY EARTHWORK, FLEXAMAT CHANNEL, AND REVEGETATION.

### SHEET INDEX

TITLE	SHEE
TITLE SHEET	2
SALT LICK AERIAL	3
SALT LICK EXISTING SITE	4
SALT LICK PROPOSED	5
SALT LICK CROSS SECTIONS	6-10
SALT LICK DETAILS	11-13

### LAND OWNERS

NELSONVILLE, OHIO 45732

## **CONTACT INFORMATION**

OHIO DEPARTMENT OF NATURAL RESOURCES 29371 WHEELABOUT ROAD, MCARTHUR, OHIO 45651 PH: (740) 274-4943 FAX: (740) 274-4937



1-800-925-0988

OIL & GAS PRODUCERS UNDERGROUND

### UTILITY CONTACT INFORMATION

UTILITY COMPANY	UTILITY	PHONE #	MEMBER	NON-MEMBER
AEP OHIO	ELECTRIC	1-800-277-2177	X	
AT&T	PHONE	1-800-288-2747	X	
SOUTHERN PERRY COUNTY WATER	WATER	740-347-9030	X	





IATION 2024 CT No. CO-PR-2

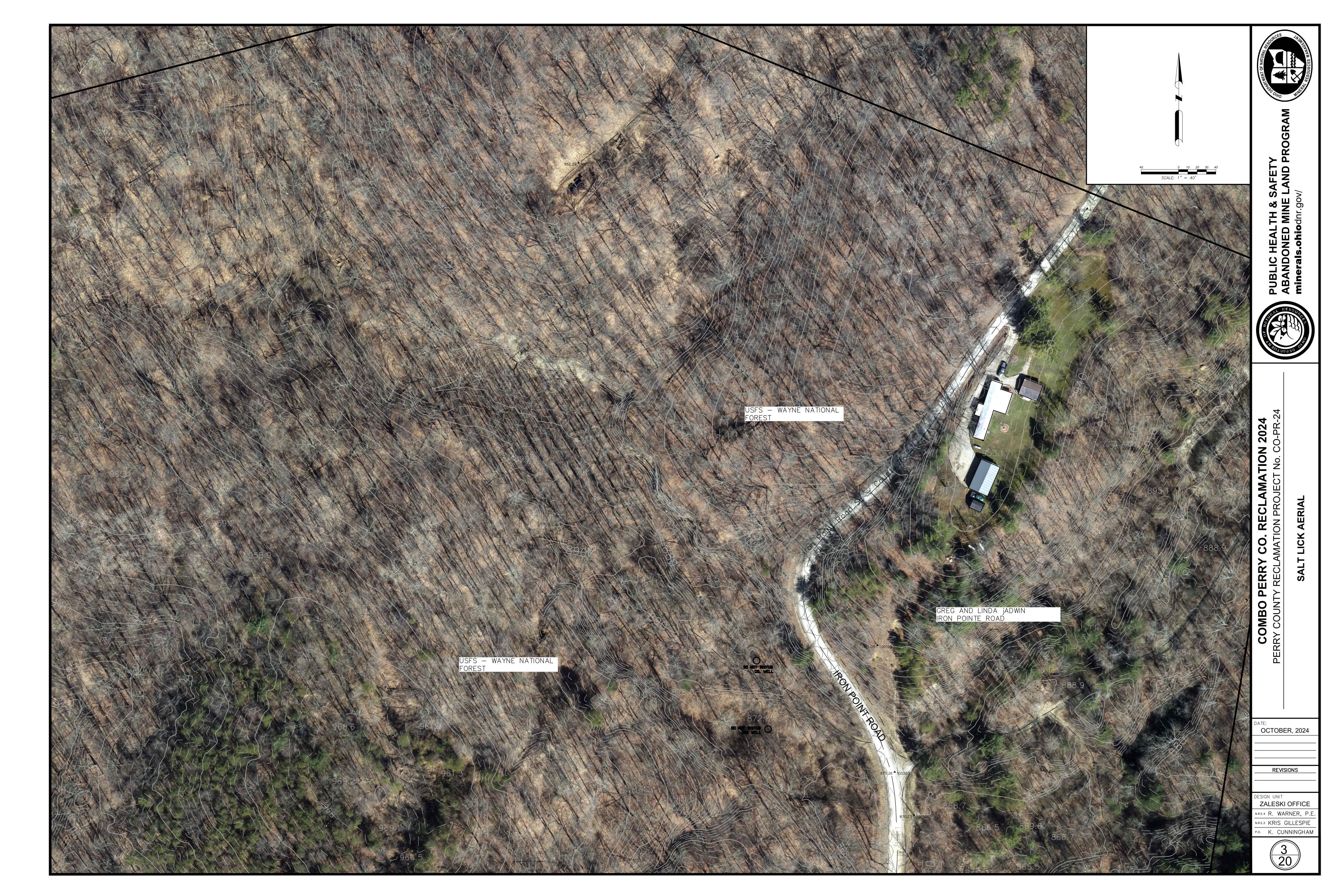
OCTOBER, 2024

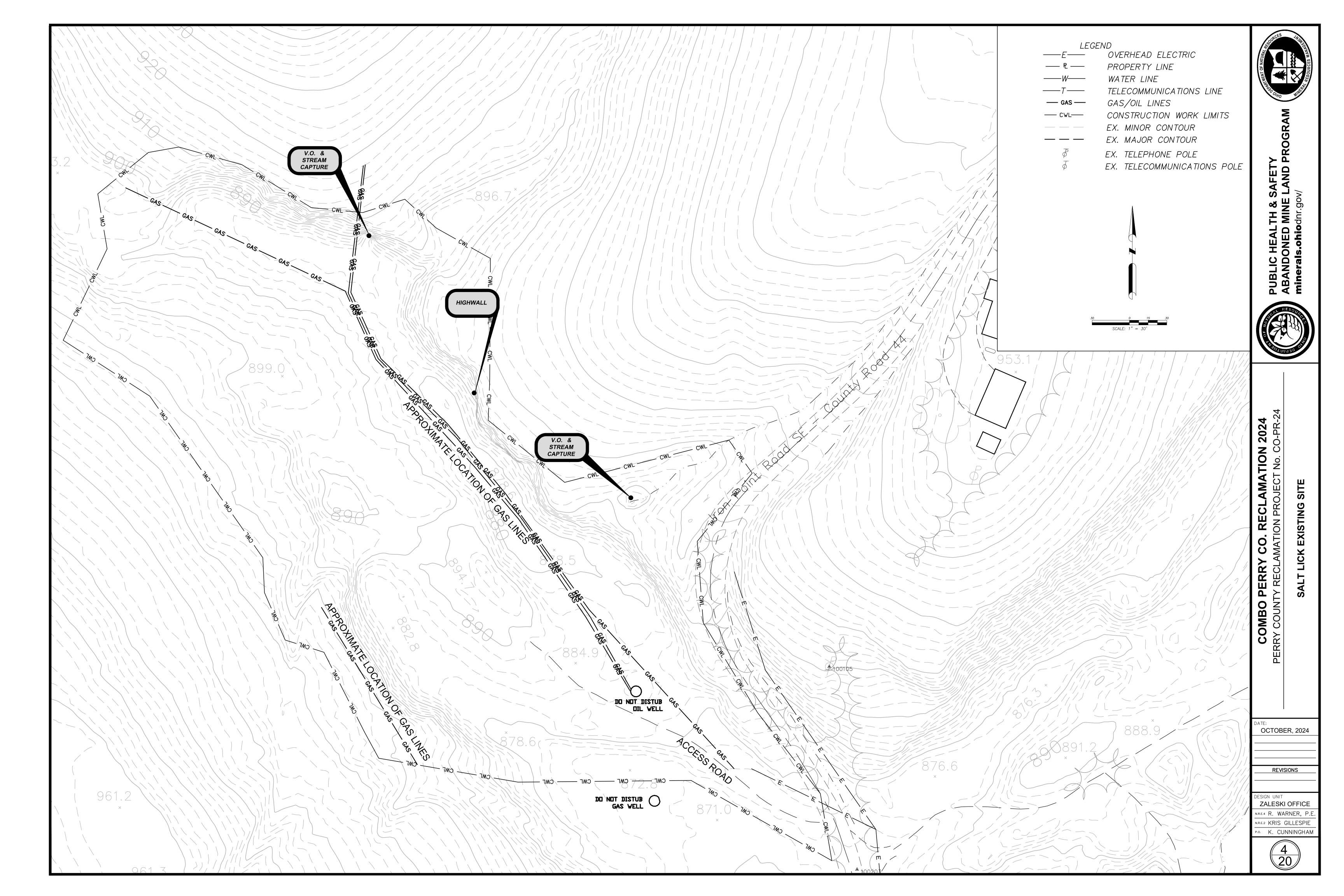
REVISIONS

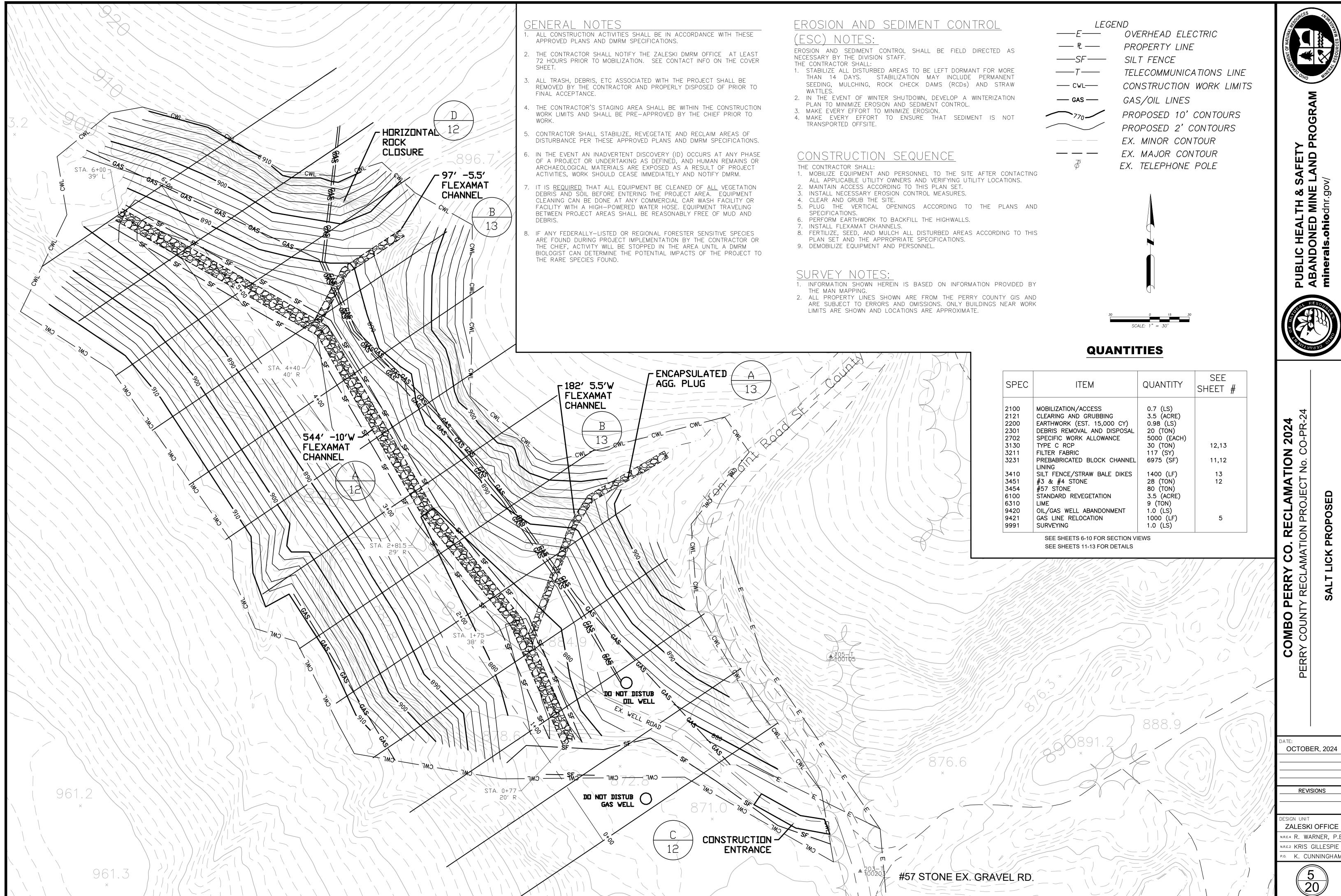
ZALESKI OFFICE N.R.E.4 R. WARNER, P.F

N.R.E.2 KRIS GILLESPIE ... K. CUNNINGHAM



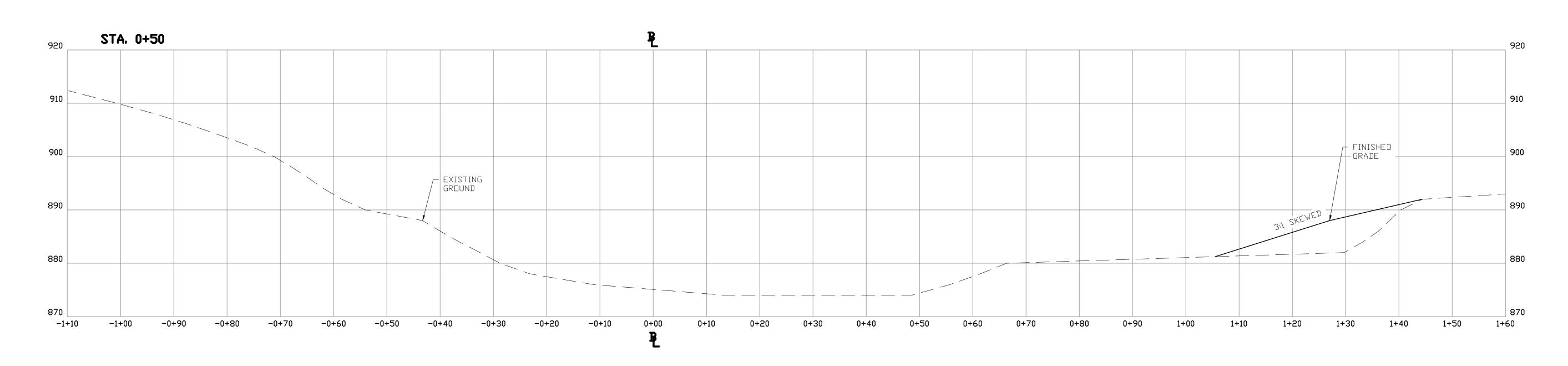


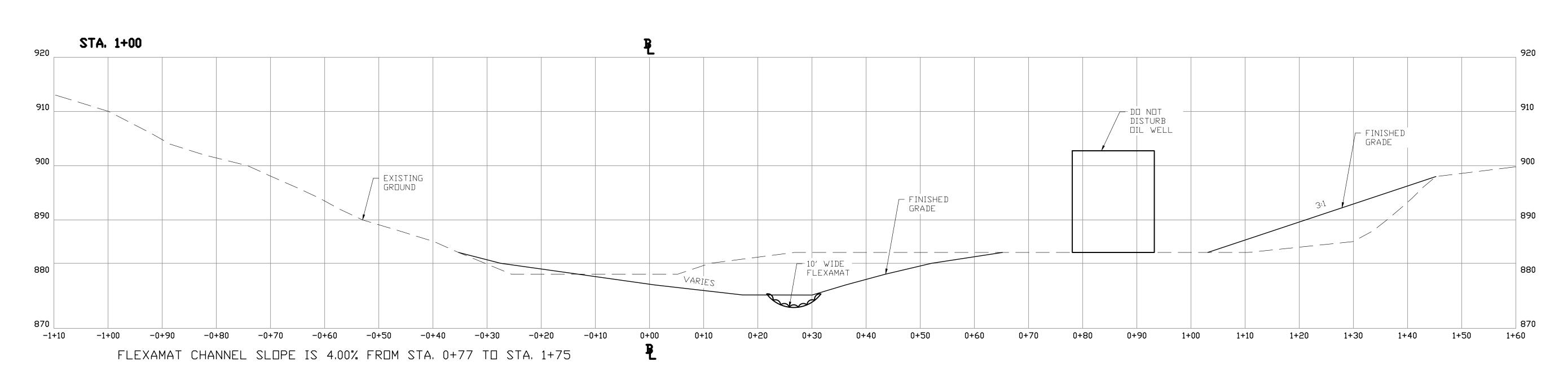


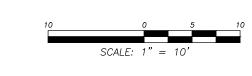




i.r.e.4 R. WARNER, P.I R.E.2 KRIS GILLESPIE







COMBO PERRY CO. RECLAMATION 2024
PERRY COUNTY RECLAMATION PROJECT No. CO-PR-24

OCTOBER, 2024

REVISIONS

DESIGN UNIT

ZALESKI OFFICE N.R.E.4 R. WARNER, P.E. N.R.E.2 KRIS GILLESPIE P.O. K. CUNNINGHAM



FLEXAMAT CHANNEL SLOPE IS 1.50% FROM STA. 2+81 TO STA. 5+88





COMBO PERRY CO. RECLAMATION 2024
PERRY COUNTY RECLAMATION PROJECT No. CO-PR-24

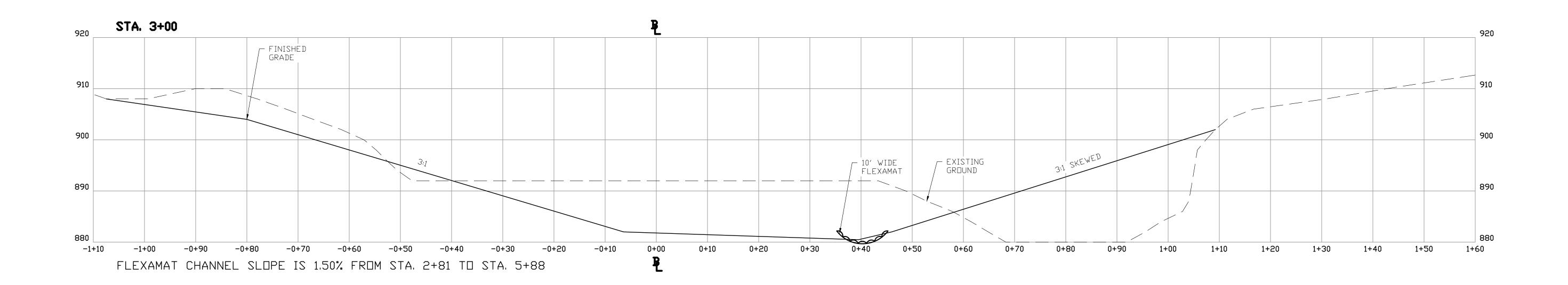
OCTOBER, 2024

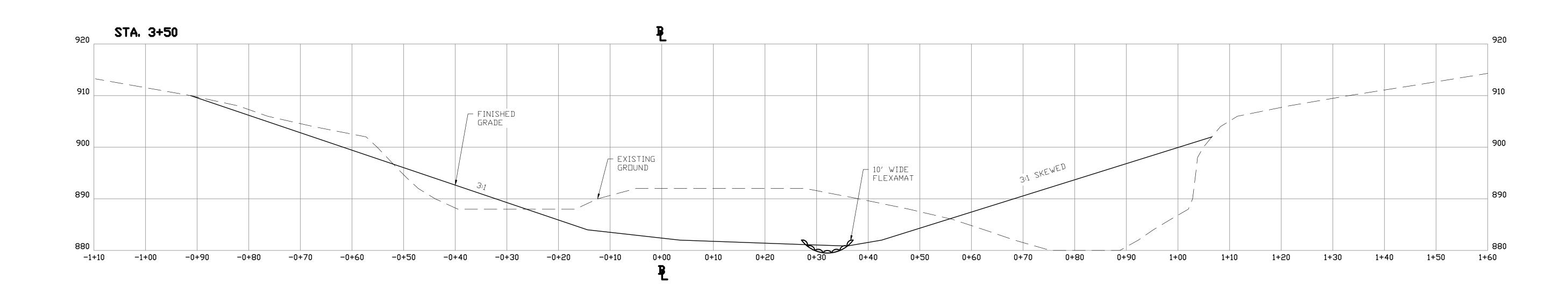
REVISIONS

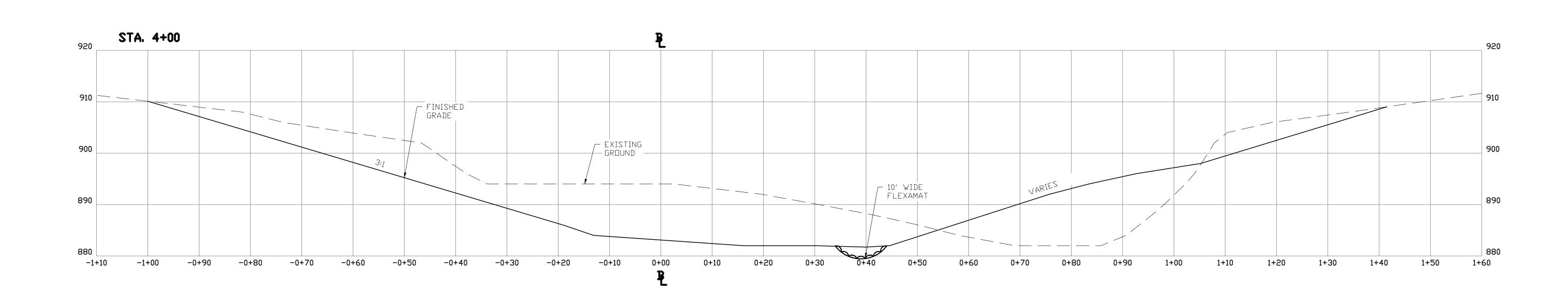
DESIGN UNIT ZALESKI OFFICE N.R.E.4 R. WARNER, P.E.

P.O. K. CUNNINGHAM

N.R.E.2 KRIS GILLESPIE







0 5 10 SCALE: 1" = 10' COMBO PERRY CO. RECLAMATION 2024
PERRY COUNTY RECLAMATION PROJECT No. CO-PR-24

**CROSS SECTIONS** 

ATE:

DATE:
OCTOBER, 2024

REVISIONS

DESIGN UNIT

ZALESKI OFFICE

N.R.E.4 R. WARNER, P.E.

N.R.E.2 KRIS GILLESPIE

P.O. K. CUNNINGHAM



<u>|</u>

OCTOBER, 2024

REVISIONS

DESIGN UNIT

ZALESKI OFFICE

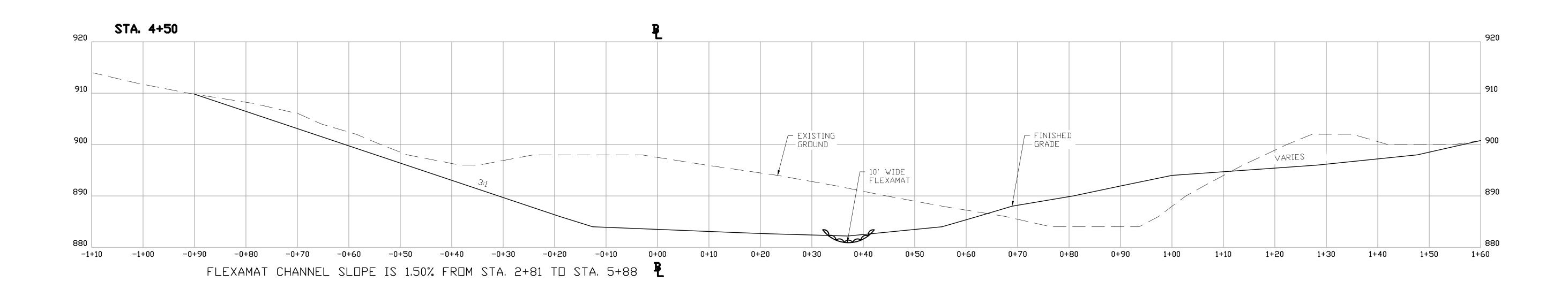
N.R.E.4 R. WARNER, P.E.

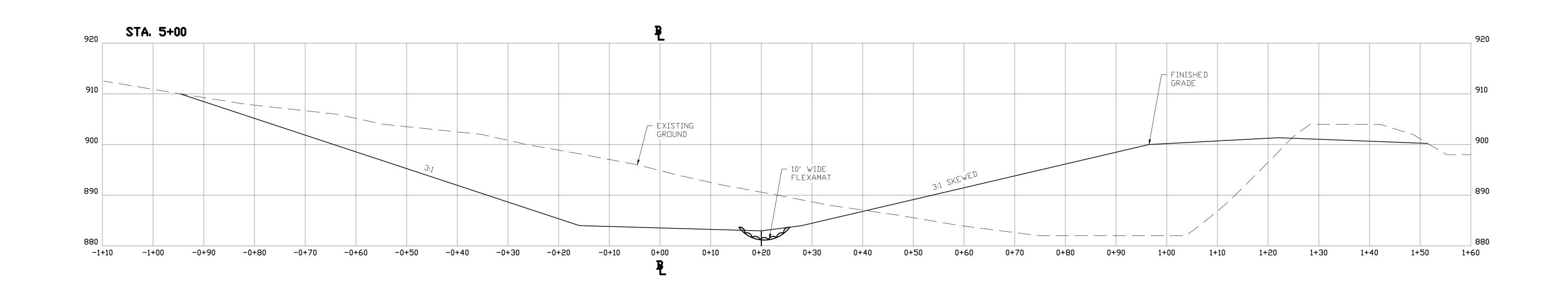
N.R.E.2 KRIS GILLESPIE

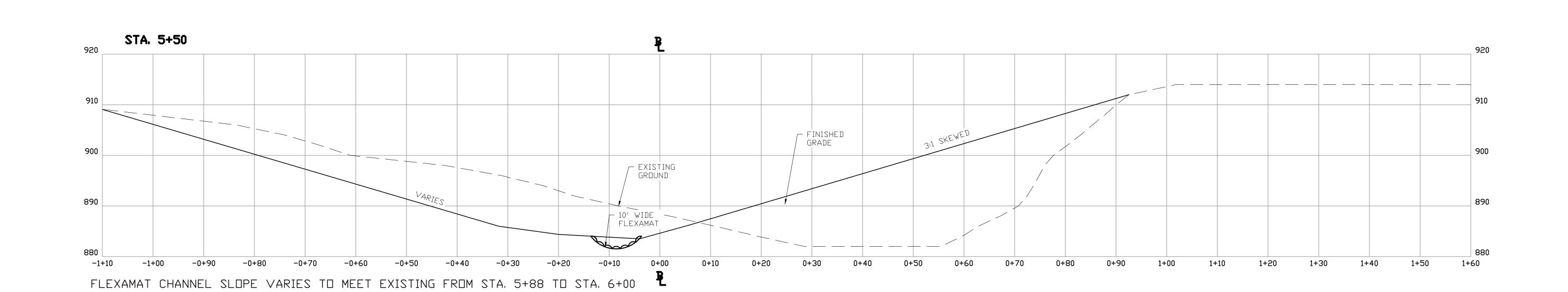
P.O. K. CUNNINGHAM

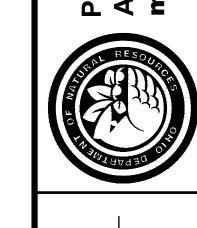
P.O. K. CUNNINGHAM

9
20







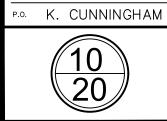


COMBO PERRY CO. RECLAMATION 2024
PERRY COUNTY RECLAMATION PROJECT No. CO-PR-24

OCTOBER, 2024

REVISIONS

DESIGN UNIT
ZALESKI OFFICE N.R.E.4 R. WARNER, P.E. N.R.E.2 KRIS GILLESPIE



-WHEN NO SURFACE FLOW IS

ENTERING CHANNEL, DUTSIDE

TO BE RECESSED.

EDGE OF MAT DOES NOT NEED

ZALESKI OFFICE N.R.E.4 R. WARNER, P.

i.r.e.2 KRIS GILLESPIE o. K. CUNNINGHAM

-ANCHOR TRENCH INITIAL LEADING EDGE OF MAT 18". FILL AND COMPACT ANCHOR TRENCH. VARIES V—18″ ″U″ ANCHORS FLEXAMAT— INSTALLED IN 2' INCREMENTS ACROSS

EDGE EXPOSED TO SHEET FLOW:-RECESS TWO OUTSIDE BLOCKS 12" INTO SUBGRADE.

# TIED CONCRETE BLOCK MAT (TCBM)

# **CONSTRUCTION NOTES:**

- 1. GRADE CHANNEL SO THAT WATER WILL FLOW DOWN THE CENTER OF THE CHANNEL AND BE CONTAINED TO THE CHANNEL, ALL SUBGRADE SURFACES PREPARED FOR PLACEMENT OF MATS SHALL BE SMOOTH AND FREE OF ALL ROCKS, STICKS, ROOTS, OTHER PROTRUSIONS, OR DEBRIS OF ANY KIND. THE PREPARED SURFACE SHALL PROVIDE A FIRM UNYIELDING FOUNDATION FOR THE MATS WITH NO SHARP OR ABRUPT BREAKS IN THE GRADE
- 2. APPLY SEED DIRECTLY TO THE PREPARED SOIL PRIOR TO FLEXAMAT INSTALLATION, USE SEED PER PROJECT SPECIFICATIONS.
- 3. INSTALL FLEXAMAT ROLLS, AVAILABLE WIDTHS ARE 4', 5.5', 8', 10', 12', & 16' AVAILABLE IN CUSTOM LENGTHS, FOR WIDER WIDTHS, INSTALL MATS ADJACENT TO EACH OTHER, (CONTACT MANUFACTURER FOR DETAIL ADDRESSING LONGITUDINAL SEAMS.)
- 4. AT THE TOP OF THE CHANNEL, THE INITIAL LEADING EDGE OF FLEXAMAT EXPOSED TO CONCENTRATED FLOWS SHALL BE EMBEDDED 18" VERTICALLY INTO THE SUB GRADE TO SERVE AS AN ANCHOR TRENCH. THE TRENCH SHALL BE FILLED AND COMPACTED WITH SUITABLE FILL OR OTHER.
- 5. FOR ADDITIONAL SECTIONS OF MAT, OVERLAP THE DOWNSTREAM SECTION 18" WITH UPSTREAM SECTION OF MAT. PRIDR TD INSTALLING OVERLAP, FLIP UPSTREAM MAT BACK 24". EXCAVATE 2.25" OF SOIL 18" FROM END OF UPSTREAM MAT. DOWNSTREAM SECTION IS LAID IN THE SHALLOW TRENCH, LIGHTLY SPREAD TOPSOIL OVER INITIAL EDGE, FLIP END OF UPSTREAM MAT OVER THE SOIL COVERED INITIAL LEADING EDGE OF DOWNSTREAM MAT.
- 6. INSTALL 18" "U" ANCHORS IN 2' INCREMENTS ACROSS THE OVERLAP. INSTALL ANCHORS DIRECTLY BEHIND BLOCKS. "U" ANCHORS CONSIST OF #2 REBAR "U" ANCHOR WITH 18" LEGS.
- 7. AT THE END OF THE ARMORED CHANNEL, EMBED THE MAT 18" IN A TERMINATION TRENCH. FILL AND COMPACT TERMINATION TRENCH WITH SUITABLE FILL.

FLEXAMAT® CHANNEL DETAIL

**FLEXAMAT INFORMATION** 

THE CHANNEL

Manufacturer: Motz Enterprises, Inc. Product Name: Flexamat®

3153 Madison Road Address Cincinnati, Ohio 45209 513-772-MOTZ (6689)

Telephone 513-772-6690 Faxi Contact Matt Motz

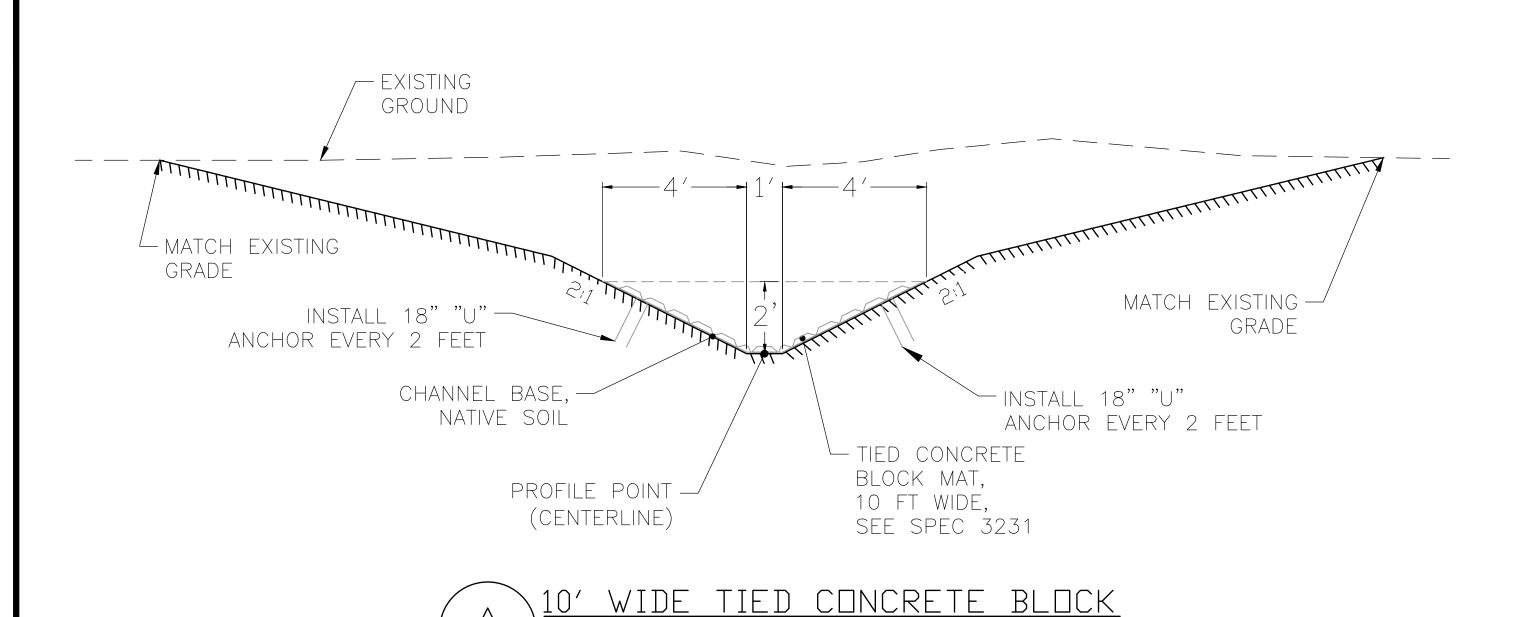
Matt@Flexamat.com Email: Website www.Flexamat.com

OCTOBER, 2024

REVISIONS

ZALESKI OFFICE N.R.E.4 R. WARNER, P.E N.R.E.2 KRIS GILLESPIE

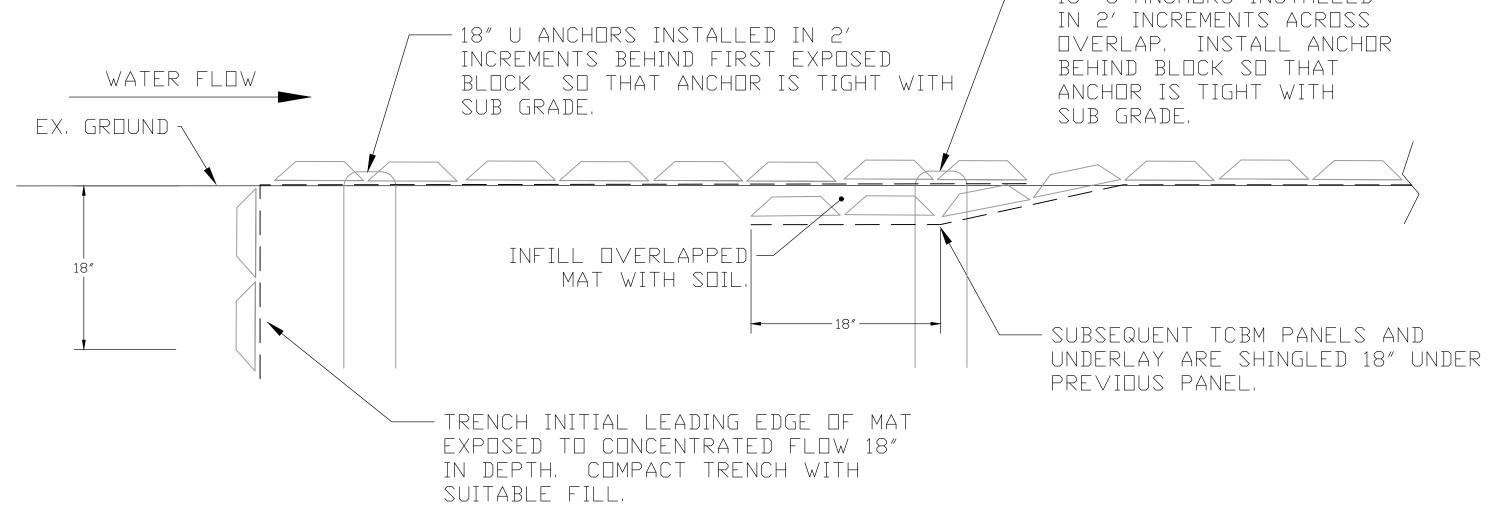
P.O. K. CUNNINGHAM



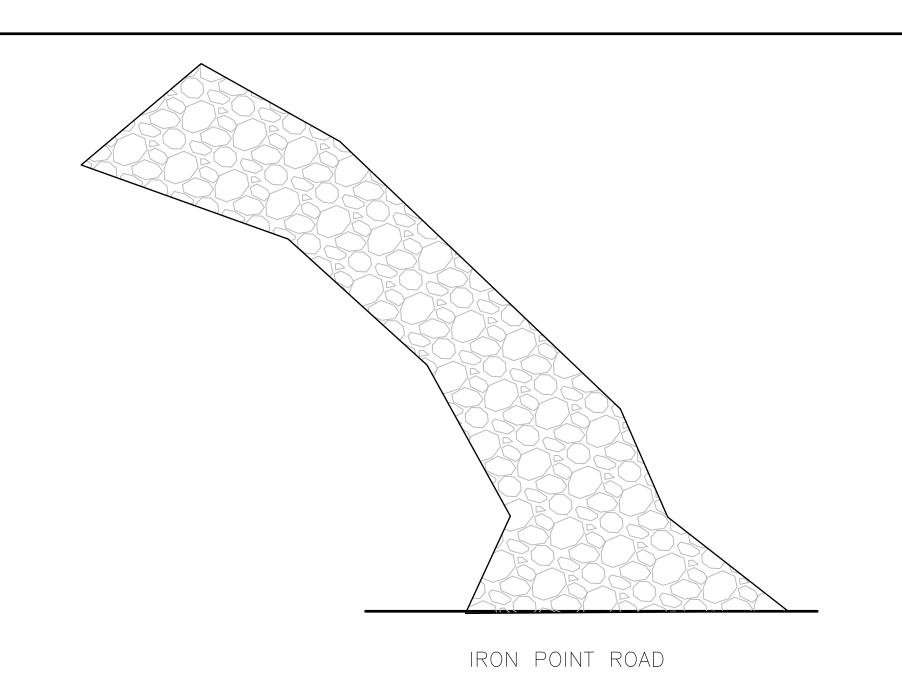
MATTING (TCBM) CHANNEL

X-SECTION (TYP.)

N.T.S.



LEADING EDGE & JOINT DETAIL (TYP.)



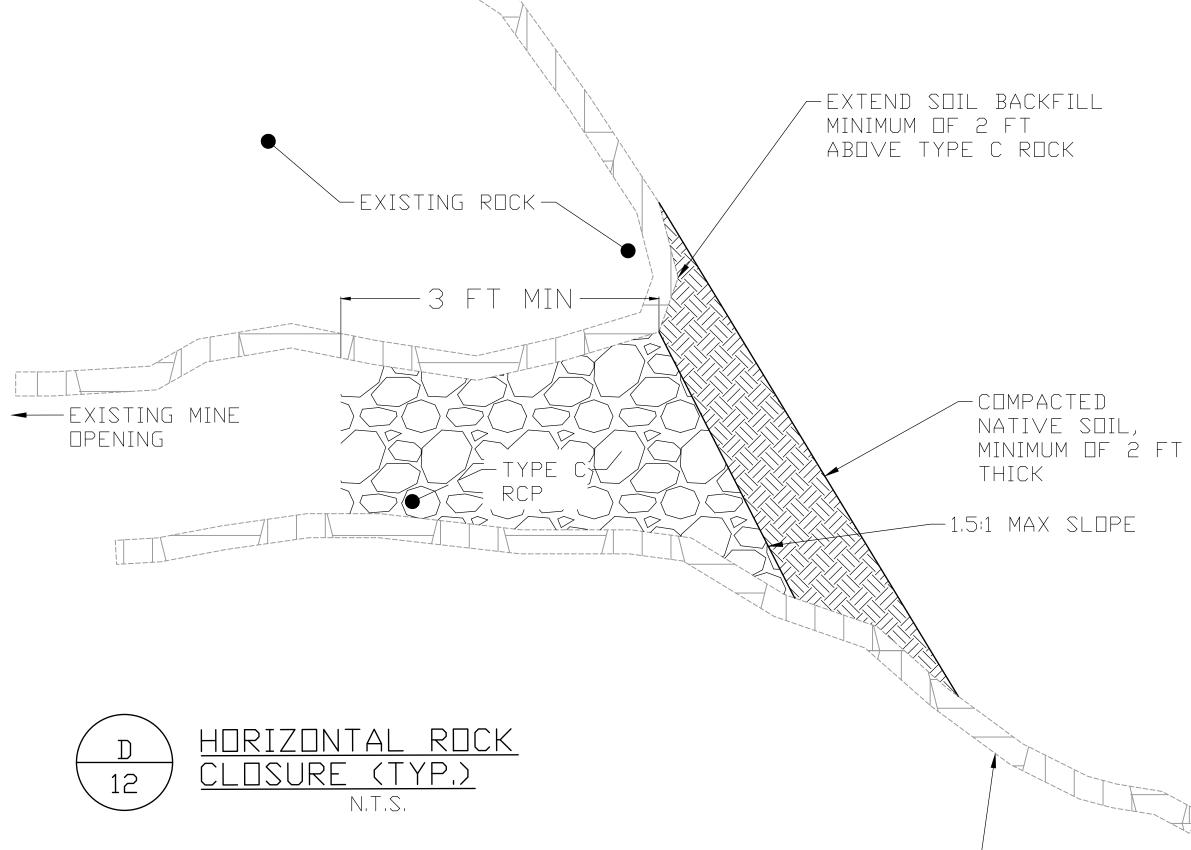
CONSTRUCTION ENTRANCE

70' x 12' CONSTRUCTION ENTRANCE N.T.S.

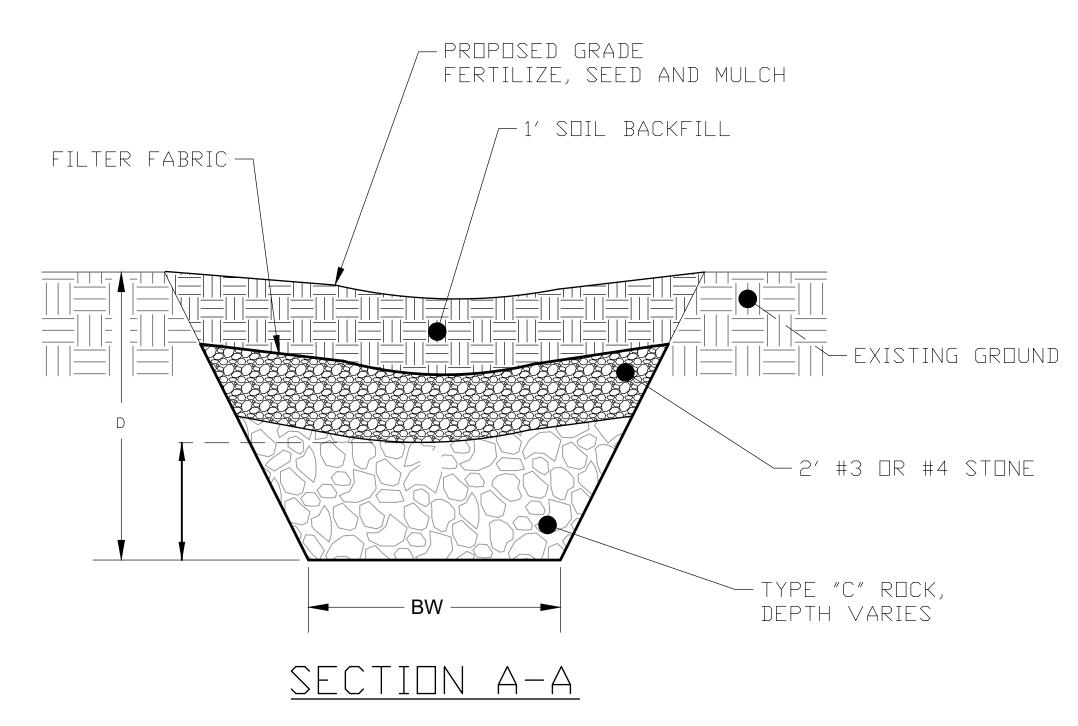
SHALL BE 3" OF #3/#4 STONE.

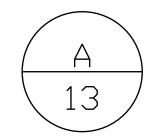
TIED CONCRETE BLOCK MATTING (TCBM) DITCH N.T.S.





EXISTING GROUND —

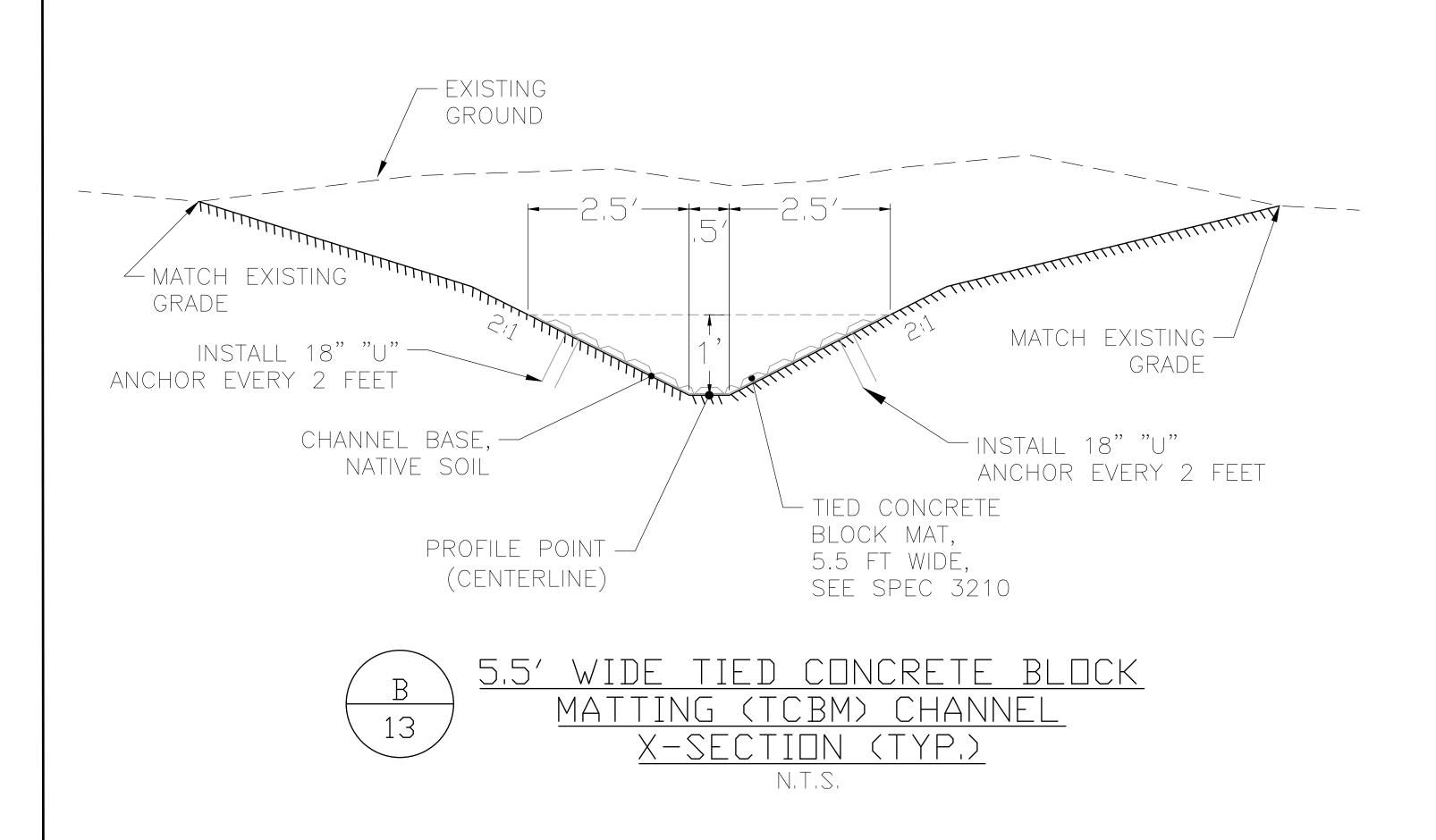


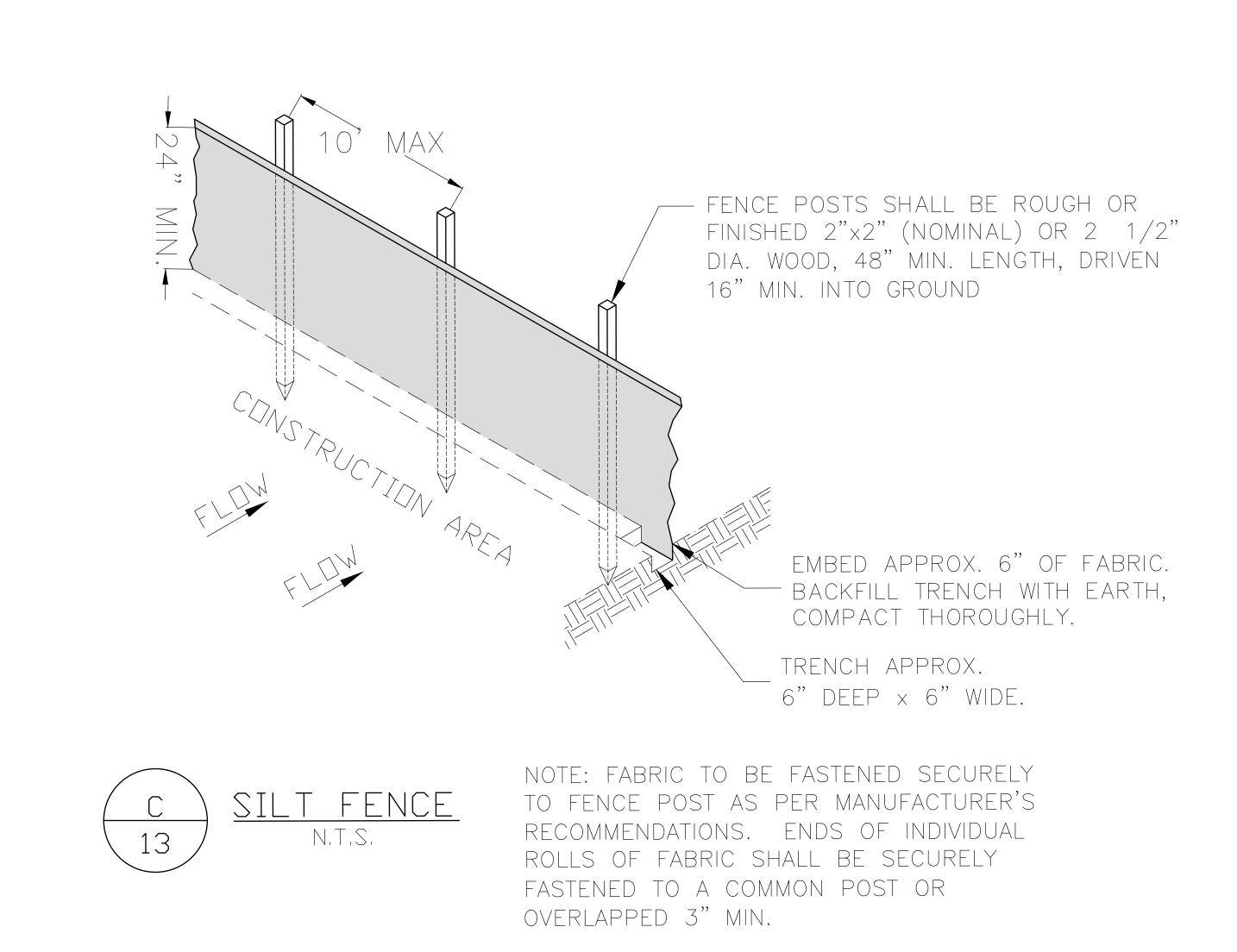


# 10'x18' ENCAPSULATED AGGREGATE PLUG (TYP.) N.T.S.

### NOTES:

- 1. SEE THE ESTIMATED CLOSURE QUANTITIES TABLE ON **SHEET 5** FOR THE ESTIMATED DIMENSIONS OF EACH EAP. ACTUAL DIMENSIONS TO BE DETERMINED BY SITE CONDITIONS AND THE CHIEF. QUANTITIES TO BE VERIFIED IN THE FIELD.
- 2. EXISTING ACCESS ROADS SHALL BE MAINTAINED IN A CONDITION THAT IS EQUAL TO OR BETTER THAN BEFORE CONSTRUCTION.
- 3. A "SAFETY ZONE" SHALL BE ESTABLISHED AROUND THE VOID BY THE CONTRACTOR. THE SAFETY ZONE SHALL EXTEND 50 FEET BEYOND THE LIMITS OF THE DEPRESSION OF THE VOID. THE SAFETY ZONE SHALL BE CLEARLY MARKED IN THE FIELD AND PRESENT A VISIBLE BARRIER TO PERSONNEL WORKING IN THE AREA.
- 4. FILTER FABRIC SHALL BE POSITIONED AS SHOWN IN THE EXCAVATED AREA AND SHALL BE STAKED DOWN. ONCE STONE HAS BEEN PLACED, THE LOOSE FABRIC SHALL BE LAID BACK OVER THE STONE.
- 5. UNDERGROUND UTILITY LINES AND APPURTENANCES ARE SHOWN AS LOCATED IN THE FIELD AND/OR AS REPORTED BY THE RESPECTIVE OWNERS. NOT ALL OF THE NUMBERS, TYPES, SIZES, OR LOCATIONS CAN BE GUARANTEED; THEREFORE, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES.





REVISIONS

DESIGN UNIT

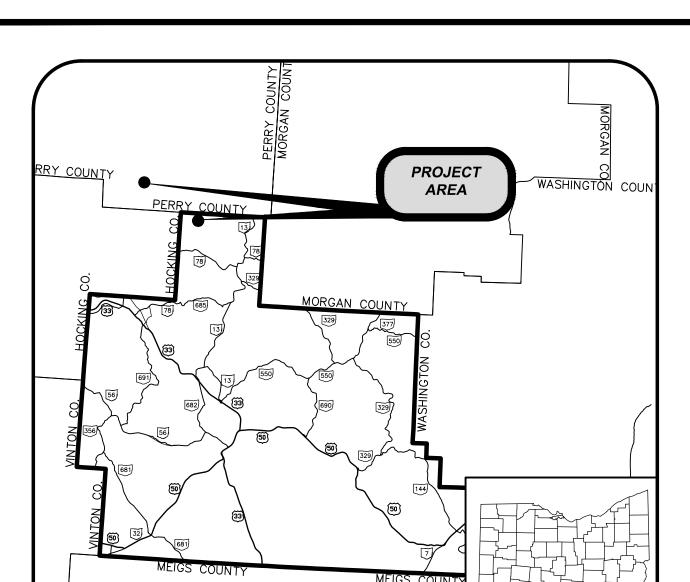
ZALESKI OFFICE

NR.E.4 R. WARNER, P.E.

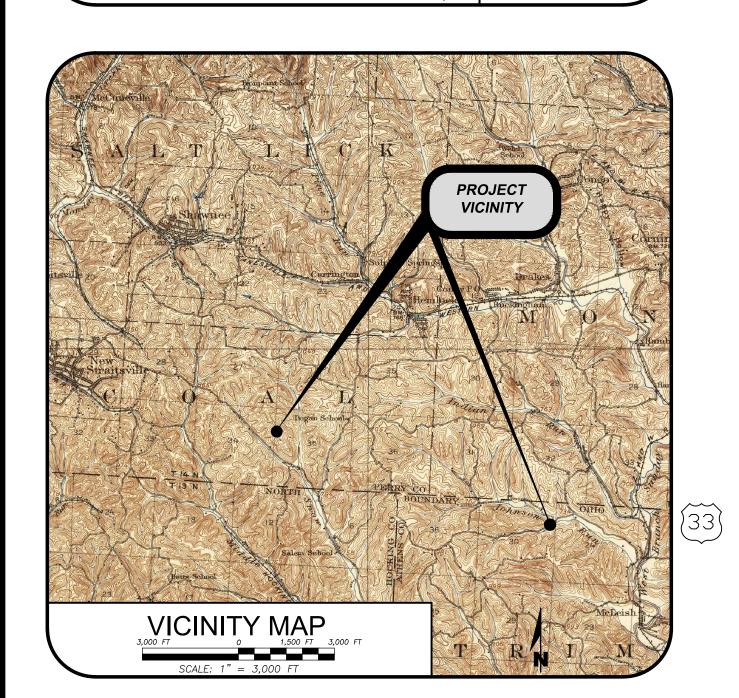
N.R.E.2 KRIS GILLESPIE

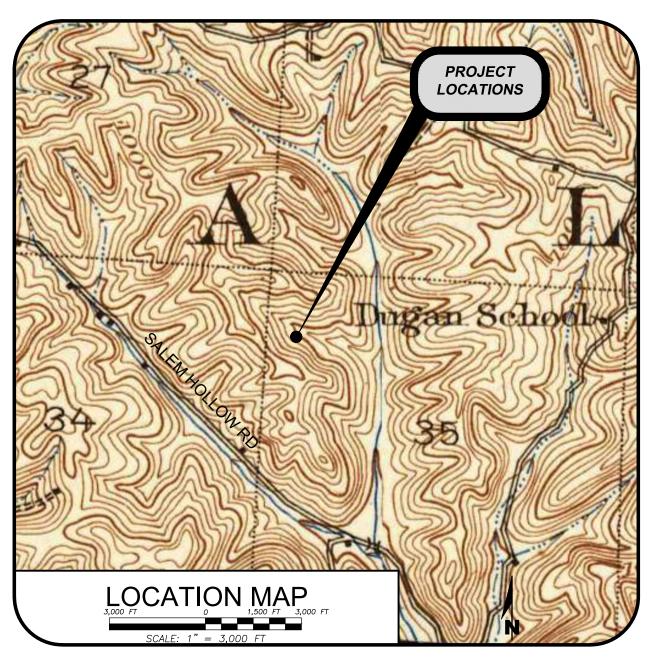


OCTOBER, 2024

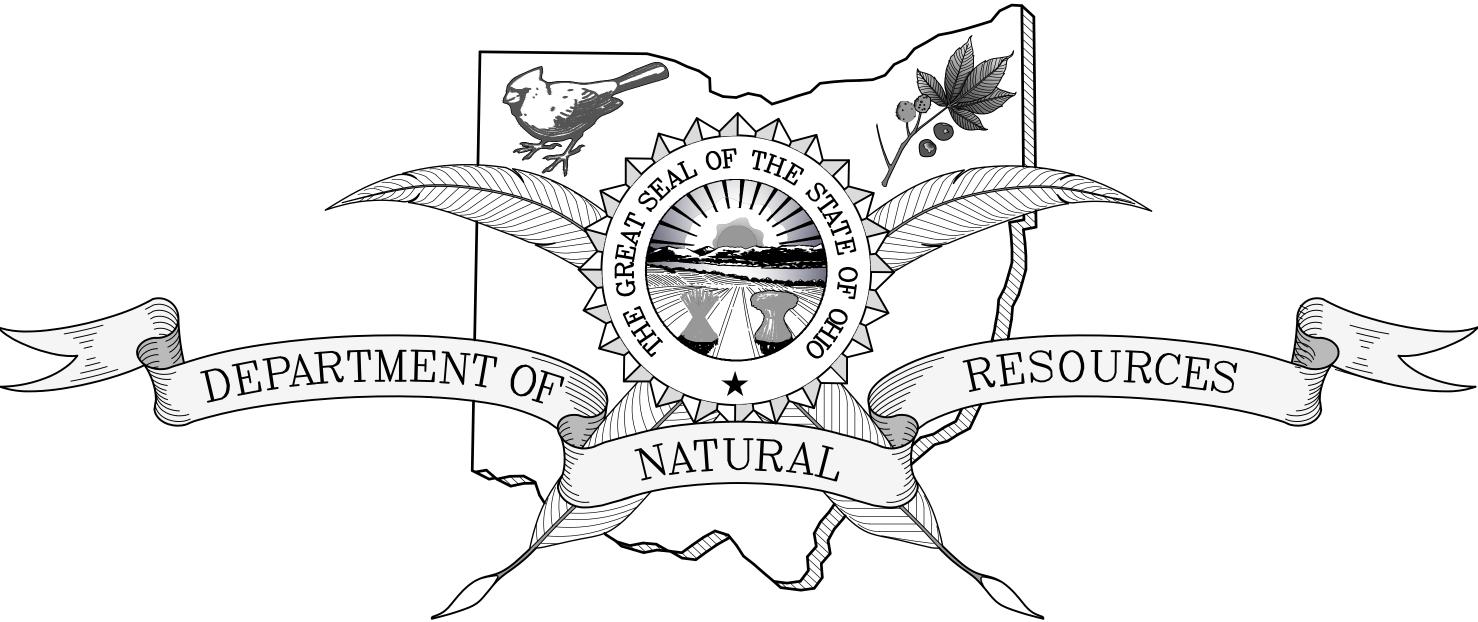


ATHENS COUNTY MAP









DIVISION OF MINERAL RESOURCES MANAGEMENT

# JOHNSON RUN PORTALS

TRIMBLE TOWNSHIP, ATHENS COUNTY COAL TOWNSHIP, PERRY COUNTY **RECLAMATION PROJECT No. AT-Tm-29** 

# **CONTACT INFORMATION**

LAND OWNERS

SHEET INDEX

OHIO DEPARTMENT OF NATURAL RESOURCES 29371 WHEELABOUT ROAD, MCARTHUR, OHIO 45651 PH: (740) 274-4943 FAX: (740) 274-4937



TITLE SHEET

JOHNSON RUN AERIAL

SALEM HOLLOW AERAIL

JOHNSON RUN PROPOSED

SALEM HOLLOW PROPOSED

NELSONVILLE, OHIO 45732

### PROTECTION SERVICE (www.ogpups.com) 1-800-925-0988

## UTILITY CONTACT INFORMATION

UTILITY COMPANY	UTILITY	PHONE #	MEMBER	NON-MEMBER
AEP OHIO	ELECTRIC	1-800-277-2177	X	
AT&T	PHONE	1-800-288-2747	X	
SOUTHERN PERRY COUNTY WATER	WATER	740-347-9030	X	
OLD STRAIGHTSVILLE WATER ASSOCIATION.	WATER	740-385-0120	X	

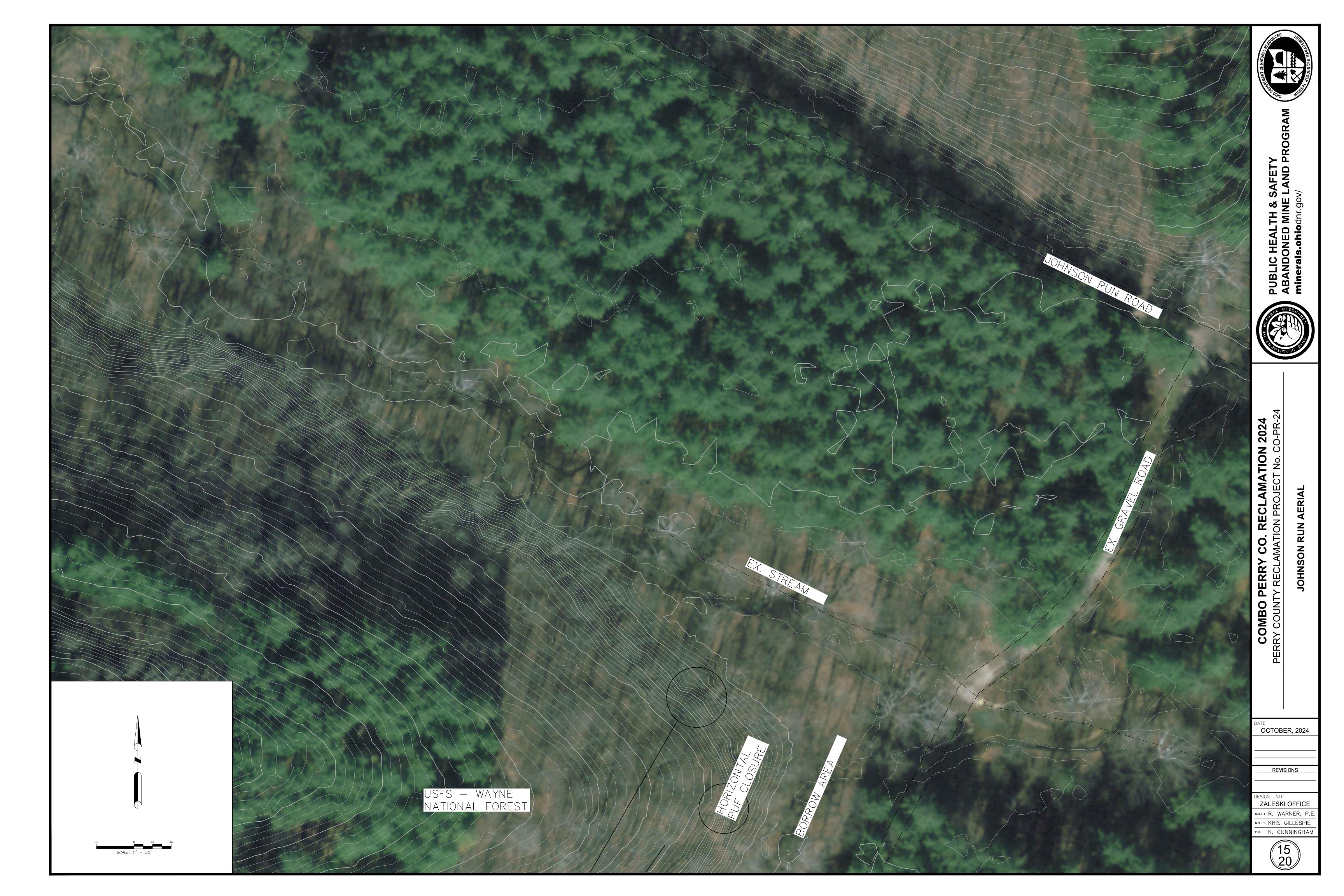
### PROJECT DESCRIPTION

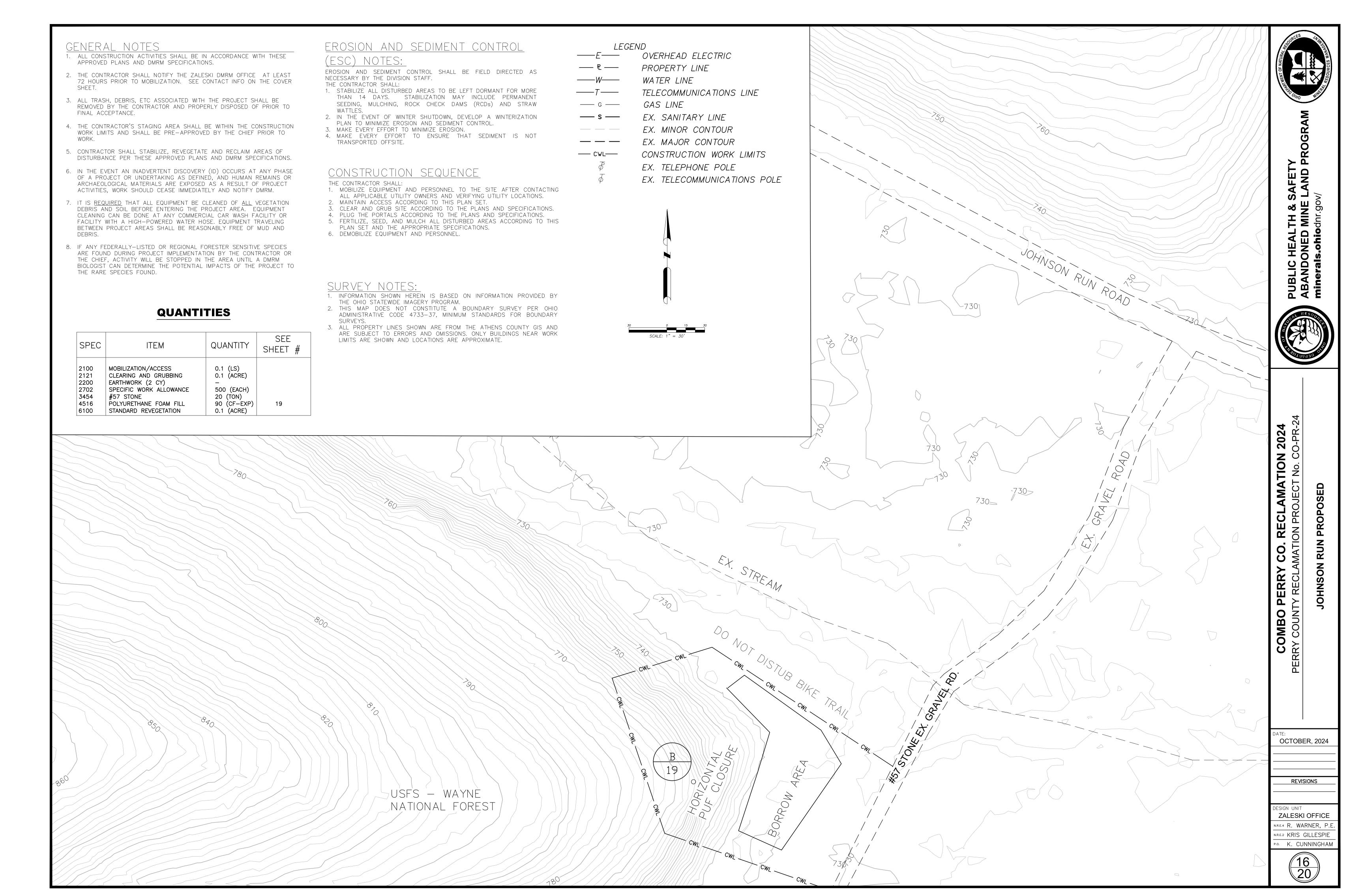
THE INTENT OF THIS PROJECT IS TO FILL AND CAP MULTIPLE SUBSIDENCES AND MULTIPLE PORTALS LOCATED ON THE U.S. FOREST SERVICE PROPERTY IN ATHENS AND PERRY COUNTY. THE FIRST SITE IS LOCATED OFF OF JOHNSON RUN ROAD AND CONSISTS OF TWO SMALL PORTALS (3'  $\times$  3'  $\times$  10' DEEP)TO BE CAPPED WITH PUF AND NATIVE SOIL.

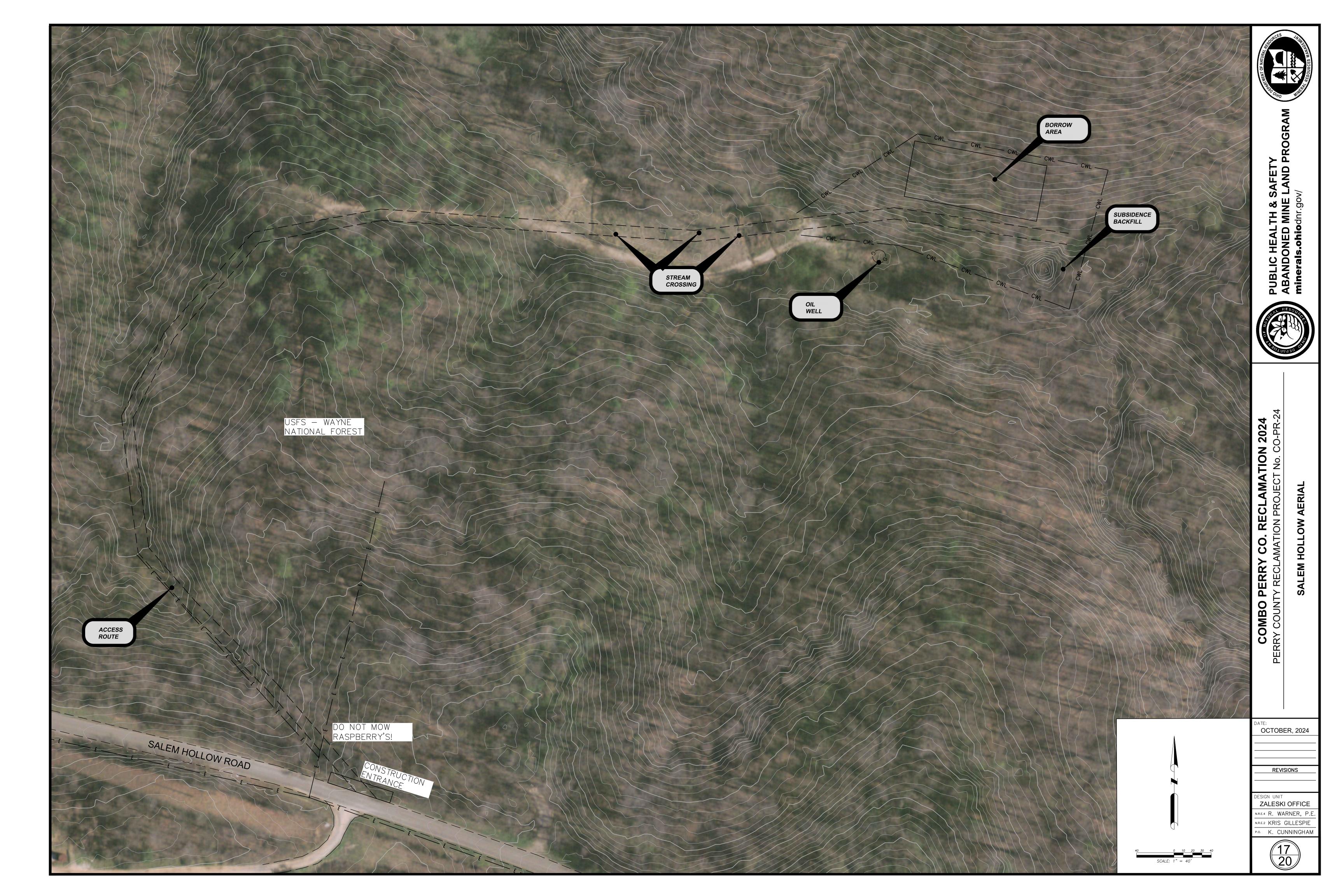
THE SECOND SITE WILL BE ACCESSED VIA AN OIL PATH TRAIL CONNECTED TO SALEM HOLLOW ROAD. MULTIPLE STREAM CROSSINGS WILL BE REQUIRED TO ACCESS THE SUBSIDENCE MEASURING (37' x 47' x 25' DEEP). PUF WILL BE USED TO PLUG THE SUBSIDENCE AND NATIVE SOIL ADJACENT TO THE SITE WILL BE USED FOR A CAP. ALL FEATURES WILL BE REVEGETATED AND THE DRIVEWAY CAPPED WITH STONE.

JOHNSON RUN PROJECT

**LOCATION MAP** 







ROUTE

DO NOT MOW

RASPBERRY'S!

CONSTRUCTION

ENTRANCE "

### GENERAL NOTES

- 1. ALL CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH THESE APPROVED PLANS AND DMRM SPECIFICATIONS.
- 2. THE CONTRACTOR SHALL NOTIFY THE ZALESKI DMRM OFFICE AT LEAST 72 HOURS PRIOR TO MOBILIZATION. SEE CONTACT INFO ON THE COVER
- 3. ALL TRASH, DEBRIS, ETC ASSOCIATED WITH THE PROJECT SHALL BE REMOVED BY THE CONTRACTOR AND PROPERLY DISPOSED OF PRIOR TO FINAL ACCEPTANCE.
- 4. THE CONTRACTOR'S STAGING AREA SHALL BE WITHIN THE CONSTRUCTION WORK LIMITS AND SHALL BE PRE-APPROVED BY THE CHIEF PRIOR TO
- 5. CONTRACTOR SHALL STABILIZE, REVEGETATE AND RECLAIM AREAS OF DISTURBANCE PER THESE APPROVED PLANS AND DMRM SPECIFICATIONS.
- 6. IN THE EVENT AN INADVERTENT DISCOVERY (ID) OCCURS AT ANY PHASE OF A PROJECT OR UNDERTAKING AS DEFINED, AND HUMAN REMAINS OR ARCHAEOLOGICAL MATERIALS ARE EXPOSED AS A RESULT OF PROJECT ACTIVITIES, WORK SHOULD CEASE IMMEDIATELY AND NOTIFY DMRM.
- 7. IT IS <u>REQUIRED</u> THAT ALL EQUIPMENT BE CLEANED OF <u>ALL</u> VEGETATION DEBRIS AND SOIL BEFORE ENTERING THE PROJECT AREA. EQUIPMENT CLEANING CAN BE DONE AT ANY COMMERCIAL CAR WASH FACILITY OR FACILITY WITH A HIGH-POWERED WATER HOSE. EQUIPMENT TRAVELING BETWEEN PROJECT AREAS SHALL BE REASONABLY FREE OF MUD AND
- 8. IF ANY FEDERALLY-LISTED OR REGIONAL FORESTER SENSITIVE SPECIES ARE FOUND DURING PROJECT IMPLEMENTATION BY THE CONTRACTOR OR THE CHIEF, ACTIVITY WILL BE STOPPED IN THE AREA UNTIL A DMRM BIOLOGIST CAN DETERMINE THE POTENTIAL IMPACTS OF THE PROJECT TO THE RARE SPECIES FOUND.

### EROSION AND SEDIMENT CONTROL

### (ESC) NOTES:

EROSION AND SEDIMENT CONTROL SHALL BE FIELD DIRECTED AS NECESSARY BY THE DIVISION STAFF. THE CONTRACTOR SHALL:

- 1. STABILIZE ALL DISTURBED AREAS TO BE LEFT DORMANT FOR MORE THAN 14 DAYS. STABILIZATION MAY INCLUDE PERMANENT SEEDING, MULCHING, ROCK CHECK DAMS (RCDs) AND STRAW
- 2. IN THE EVENT OF WINTER SHUTDOWN, DEVELOP A WINTERIZATION PLAN TO MINIMIZE EROSION AND SEDIMENT CONTROL.
- 3. MAKE EVERY EFFORT TO MINIMIZE EROSION.
  4. MAKE EVERY EFFORT TO ENSURE THAT SEDIMENT IS NOT TRANSPORTED OFFSITE.

# CONSTRUCTION SEQUENCE

- THE CONTRACTOR SHALL:
- 1. MOBILIZE EQUIPMENT AND PERSONNEL TO THE SITE AFTER CONTACTING ALL APPLICABLE UTILITY OWNERS AND VERIFYING UTILITY LOCATIONS.
- 2. MAINTAIN ACCESS ACCORDING TO THIS PLAN SET.
  3. INSTALL TEMPORARY STREAM CROSSINGS.
- 4. INSTALL NECESSARY EROSION CONTROL MEASURES. 5. PLUG THE SUBSIDENCE FEATURES ACCORDING TO THE PLANS AND
- SPECIFICATIONS. 6. INSTALL MINE SHAFT MARKER.
- 7. FERTILIZE, SEED, AND MULCH ALL DISTURBED AREAS ACCORDING TO THIS PLAN SET AND THE APPROPRIATE SPECIFICATIONS.
- 8. DEMOBILIZE EQUIPMENT AND PERSONNEL.

- 1. INFORMATION SHOWN HEREIN IS BASED ON INFORMATION PROVIDED BY THE OHIO STATEWIDE IMAGERY PROGRAM.
- 2. THIS MAP DOES NOT CONSTITUTE A BOUNDARY SURVEY PER OHIO ADMINISTRATIVE CODE 4733-37, MINIMUM STANDARDS FOR BOUNDARY
- 3. ALL PROPERTY LINES SHOWN ARE FROM THE HOCKING COUNTY GIS AND ARE SUBJECT TO ERRORS AND OMISSIONS. ONLY BUILDINGS NEAR WORK LIMITS ARE SHOWN AND LOCATIONS ARE APPROXIMATE.

**PERR'** IY RECL COMBO RRY COUNT

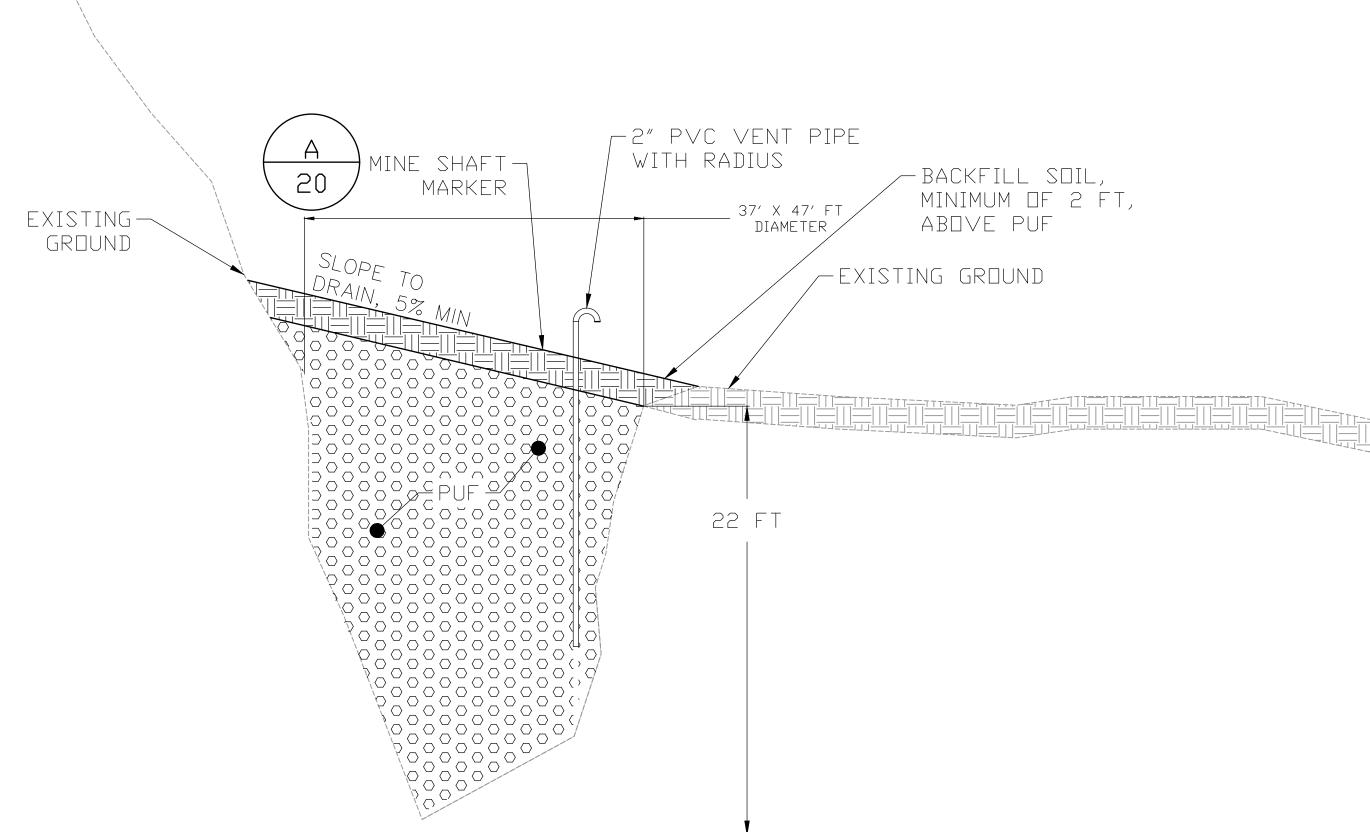
OCTOBER, 2024

REVISIONS

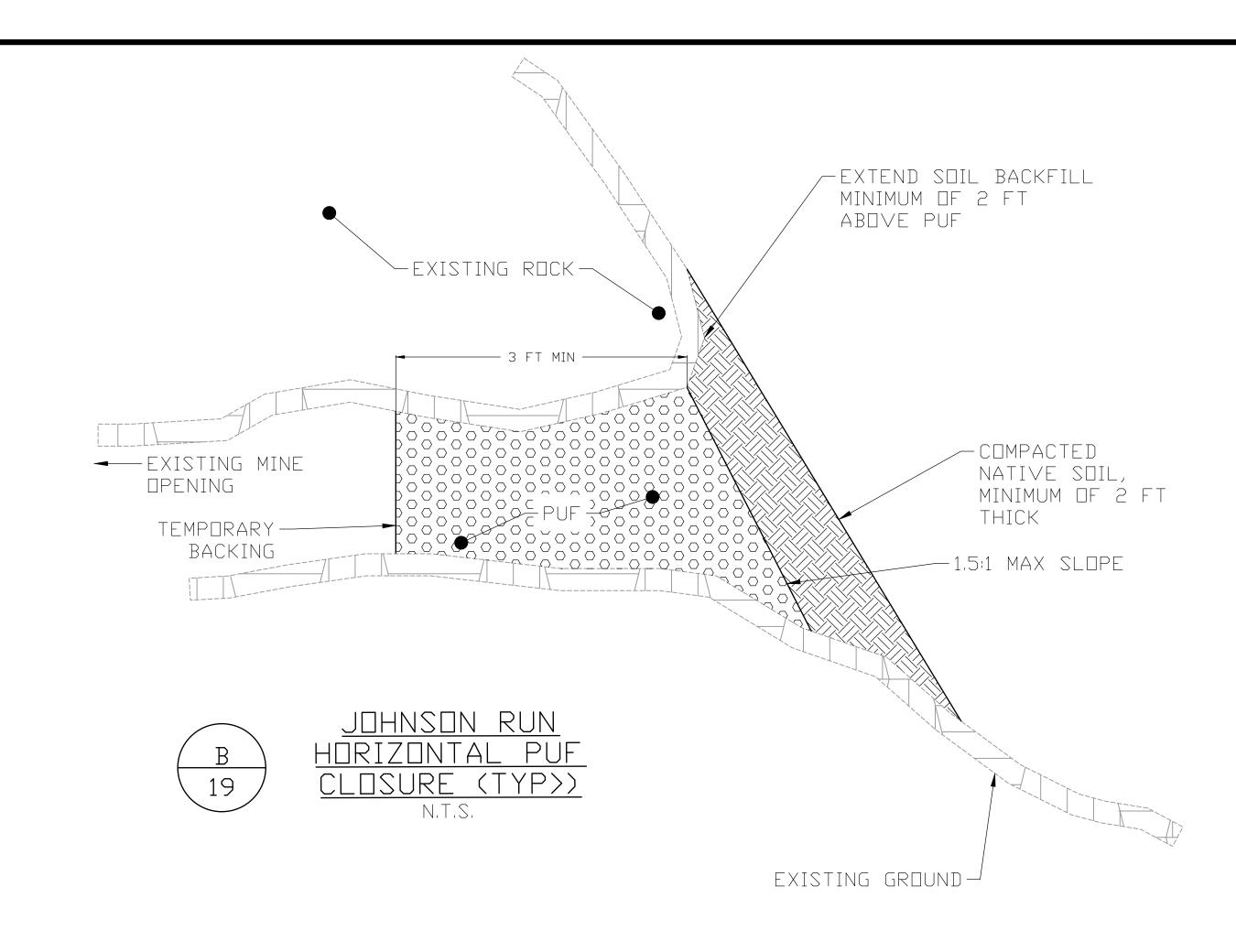
ZALESKI OFFICE

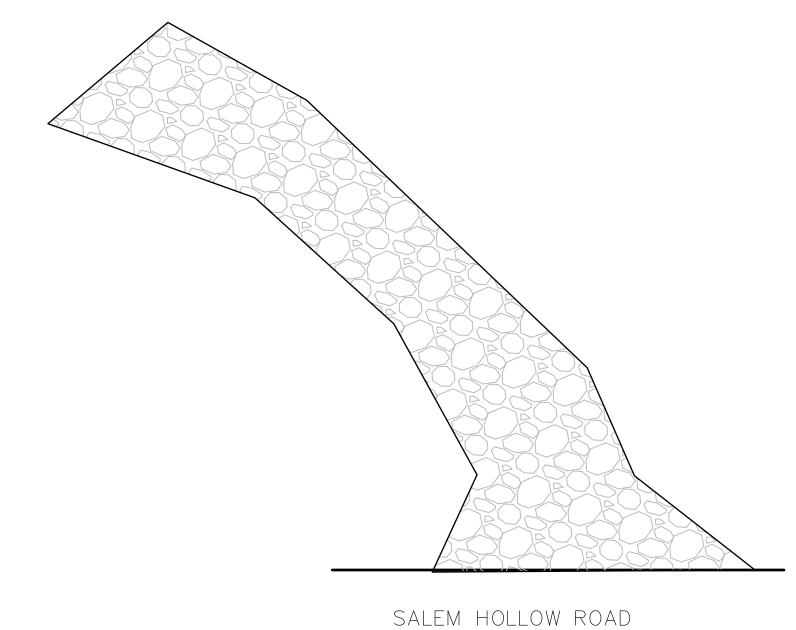
N.R.E.4 R. WARNER, P.E N.R.E.2 KRIS GILLESPIE P.O. K. CUNNINGHAM



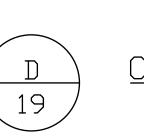


SALEM HOLLOW VERTICAL PUF CLOSURE (TYP.) N.T.S.





CONSTRUCTION ENTRANCE SHALL BE 3" OF #3/#4 STONE.



70' x 12' CONSTRUCTION ENTRANCE N.T.S.





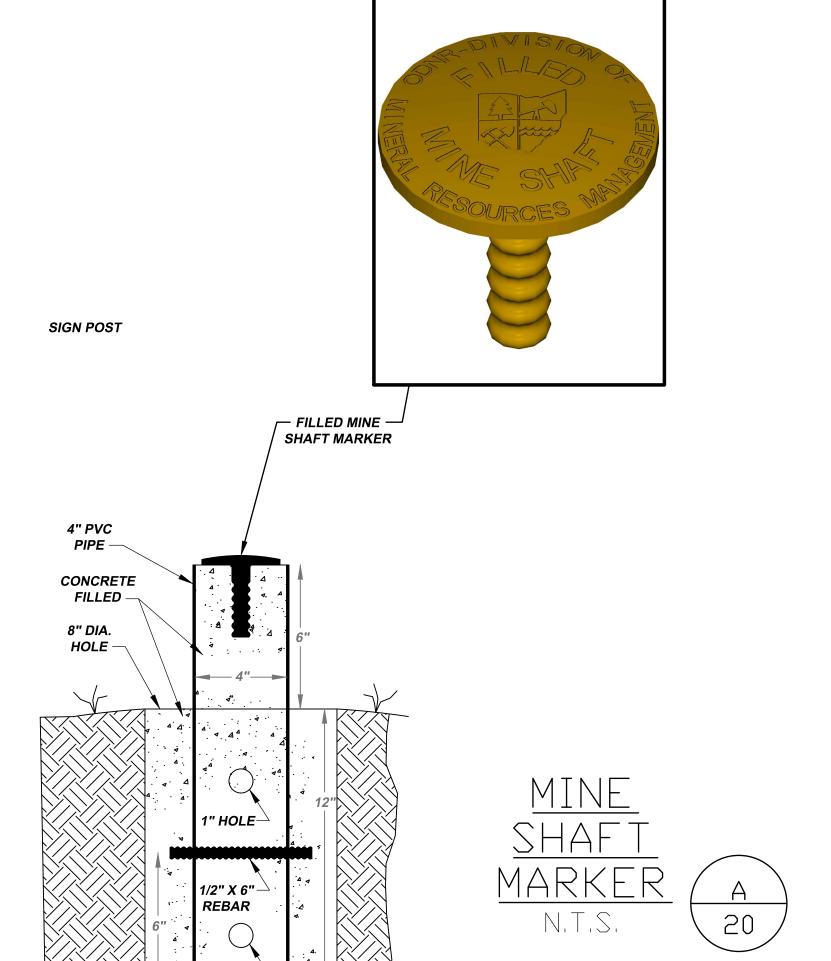
COMBO PERRY CO. RECLAMATION 2024
PERRY COUNTY RECLAMATION PROJECT No. CO-PR-24

OCTOBER, 2024

REVISIONS

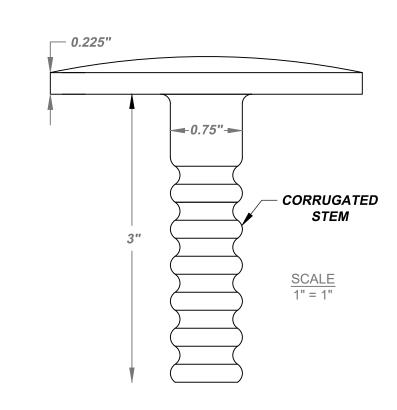
ZALESKI OFFICE N.R.E.4 R. WARNER, P.E N.R.E.2 KRIS GILLESPIE

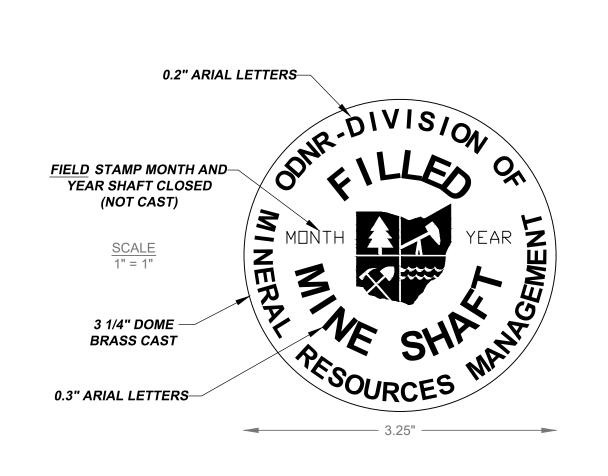




NOTES:
CONCRETE MAY BE CAST-IN-PLACE IN NEAT HOLES WITHOUT THE USE OF FORMS, EXCEPT WHERE FORMS ARE SHOWN ON THE PLANS. THE SIZE OF THE HOLE SHOULD BE 12" DEEP BY 8" DIAMETER. CUT AN 18" SECTION OF 4" PVC PIPE. PLACE A 6" LONG PIECE OF REBAR IN THE CENTER OF THE HOLE THROUGH THE PIPE. DRILL ADDITIONAL 1" HOLES IN PIPE AS SHOWN. MIX ONE 60 POUND BAG
OF QUIKRETE AND FILL HOLE AND PIPE PER DETAIL. STATE—FURNISHED BRASS "FILLED MINE SHAFT"
MARKERS SHALL BE PLACED IN CONCRETE MONUMENTS BEFORE THE CONCRETE HAS ACQUIRED ITS
INITIAL SET AND SHALL BE FIRMLY BEDDED IN THE CONCRETE. THE DISK SHALL BE PLACED IN THE
CENTER OF THE CONCRETE MONUMENT. AFTER THE MONUMENTS HAVE BEEN CONSTRUCTED AS SPECIFIED, ANY OPEN SPACE AROUND THEM SHALL BE FILLED WITH EARTH. THE SIGN POST SHALL BE EMBEDDED 12" INTO THE GROUND 12" ADJACENT TO THE SHAFT MARKER WITH AN OMUTCD TYPE 2 OBJECT MARKER (OM2-2V). THE SIGN POST SHALL BE A GALVANIZED METAL POST TYPICAL TO SIGN POST INSTALLATION AND SHALL BE CONFIGURED ACCORDING TO THE DETAIL ABOVE.

TYPICAL MONUMENT





DETAILS JOHNSON

OCTOBER, 2024

REVISIONS

ZALESKI OFFICE N.R.E.4 R. WARNER, P.E N.R.E.2 KRIS GILLESPIE P.O. K. CUNNINGHAM

