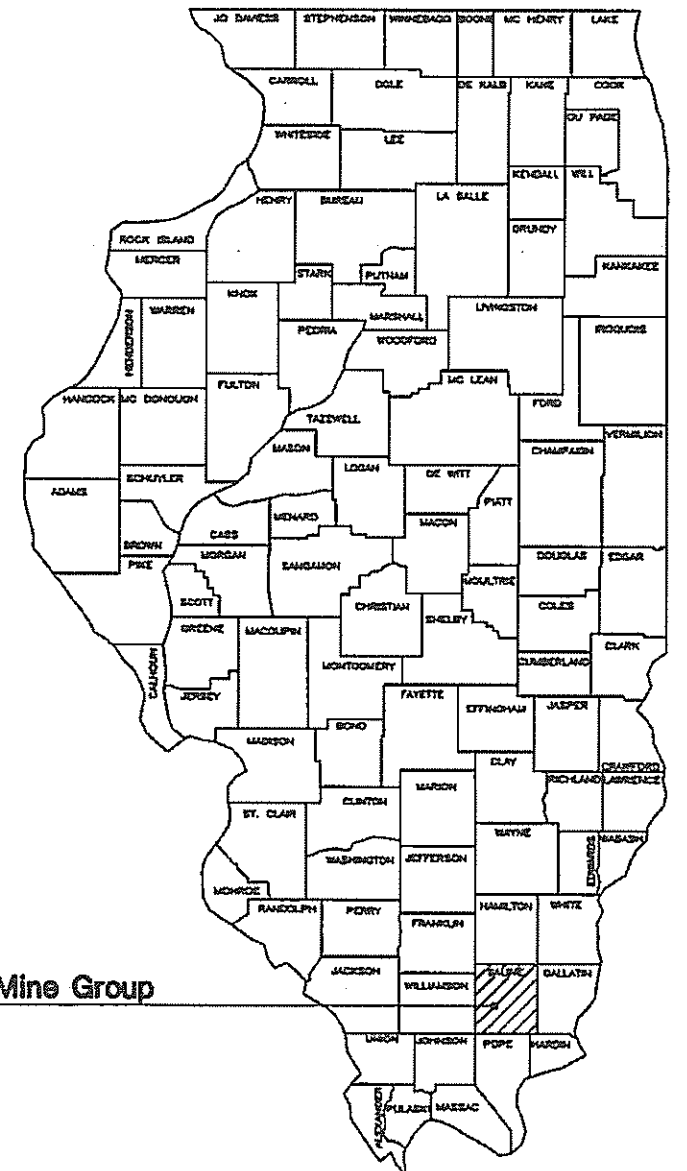


**State of Illinois**  
**Department of Natural Resources**  
**Office of Mines and Minerals**  
**Division of Abandoned Mined Lands Reclamation**

Funded by the  
 United States Department of Interior  
 Federal Office of Surface Mining

**Ledford Strip Mine Group**  
**Reclamation Project**  
**AML-GSIE-2105**  
**Saline County**  
**1LR**



**Ledford Strip Mine Group**  
**Saline County**

**SCHEDULE OF DRAWINGS:**

1. Cover Sheet
2. Summary of Quantities / General Notes / Location Map
3. Existing Conditions and Site Information
4. Proposed Conditions
- 5-11. Cross Sections
12. Details

CONTRACT NO. M2105

**PRE-BID MEETING**

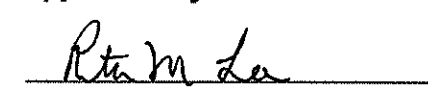
A PRE-BID MEETING IS SCHEDULED FOR THIS PROJECT ON TUESDAY FEBRUARY 22, 2022 AT 1:00 P.M. AT THE SITE ON BLUE HOLE ROAD, 1.5 MILES SOUTH OF RT. 45. BLUE HOLE ROAD IS APPROXIMATELY 1.2 MILES S.W. OF HARRISBURG ON RT. 45. ALL PRIME AND SUBCONTRACTORS ARE ENCOURAGED TO ATTEND.

Prepared By IDNR Staff

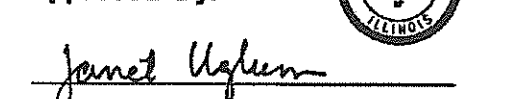
Approved for Bidding:

  
 Ronnie Huff, Director  
 Office of Mines and Minerals

Approved By:

  
 Rita Lee, Manager  
 AMLR Division

Approved By:

  
 Janet L. Uglum, P.E.  
 IL Licensed Professional Engineer  
 No. 062-054108



Summary of Quantities						
Item No.	#	Item	Section	Quantity	Unit	Rates/Remarks
NRM20110	1	SPECIAL CLEARING	201	1	L SUM	
NRM20210	2	EARTH EXCAVATION	202	15,693	CU YD	COMPACTION PER SECTION 205
NRM20480	3	FURNISHED EXCAVATION	204	5,325	CU YD	COMPACTION PER SECTION 205
20900110	4	POROUS GRANULAR BACKFILL	IDOT 209	163	CU YD	IDOT CA-6
NRM21510	5	SPECIAL EXCAVATION	215	2,124	CU YD	MINE OPENING & SEALING
NRM21621	6	CA FILL, CA-1	216	1,286	TON	
NRM21640	7	SHOT ROCK FILL	216	81,346	TON	
NRM21661	8	CLASS SI CONCRETE PLUG	216	92	CU YD	MINE OPENING & SEALING
NRM25040	9	NITROGEN FERTILIZER NUTRIENT	250	2,000	POUND	
NRM25050	10	PHOSPHORUS FERTILIZER NUTRIENT	250	1,300	POUND	SEE SCHEDULE BELOW
NRM25060	11	POTASSIUM FERTILIZER NUTRIENT	250	1,000	POUND	
NRM25070	12	AGRICULTURAL GROUND LIMESTONE	250	50	TON	5.0 TON / ACRE
NRM25090	13	SEEDING	250	10.0	ACRE	
25000314	14	SEEDING CLASS 4B	IDOT 250	0.5	ACRE	WETLAND SEEDING
25000350	15	SEEDING CLASS 7	IDOT 250	10.0	ACRE	TEMPORARY SEEDING
25100115	16	MULCH, METHOD 2	IDOT 251	10.0	ACRE	PROCEDURE 1, 2 TON/ACRE
NRM25810	17	MOWING	258	8.7	ACRE	
NRM28610	18	SPECIAL EXCELSIOR BLANKET	286	1,120	SQ YD	8 FOOT WIDE STRIPS
40200800	19	AGGREGATE SURFACE COURSE, TYPE B	IDOT 402	525.0	TON	CA-6 3" THICK
40300200	20	BITUMINOUS MATERIALS (PRIME COAT)	IDOT 403	4.4	TON	
40300400	21	BITUMINOUS MATERIALS (COVER/SEAL COAT)	IDOT 403	8.8	TON	
40300500	22	COVER COAT AGGREGATE	IDOT 403	29.2	TON	
40300600	23	SEAL COAT AGGREGATE	IDOT 403	29.2	TON	
542C0241	24	PIPE CULVERT CLASS C TYPE 1 36"	IDOT 542	20	FOOT	CORRUGATED PE, SMOOTH BORE
542C1069	25	PIPE CULVERT CLASS C TYPE 2 24"	IDOT 542	130	FOOT	CORRUGATED ALUMINUM
NRM66610	26	MINE OPENING MARKER	666	2	EACH	
NRM67110	27	MOBILIZATION (MAX 6% OF BID)	671	1	L SUM	

**GENERAL NOTES**

Unless otherwise noted on the plans, all disturbed areas within the construction limits will be amended with agricultural ground limestone, fertilizer nutrients, seeded, and mulched at the required rates specified in the plans.

The Contractor is responsible for visiting the site and familiarizing himself with the existing conditions and the proposed reclamation work prior to submitting a bid.

The Contractor shall provide and pay for all field engineering services to execute the project as specified in the Field Engineering section of the Special Provisions.

The Contractor is responsible for locating and protecting all existing utility lines pertaining to the work. Private wastewater discharges are not shown on the plans. The Contractor shall verify the locations and maintain service during construction. Any required adjustments shall be incidental to the contract price.

Unless noted on the plans, all onsite access roads may be used for construction and must be maintained during construction and restored to original or better condition at the completion of work by the contractor. Access roads to the site as designated in the plans are to be maintained to the satisfaction of the engineer.

The construction limits will be staked by the contractor prior to construction. The contractor is responsible for the repair and or restitution at his own expense for all damaged done to any area outside the construction limits.

**CONSTRUCTION NOTES**

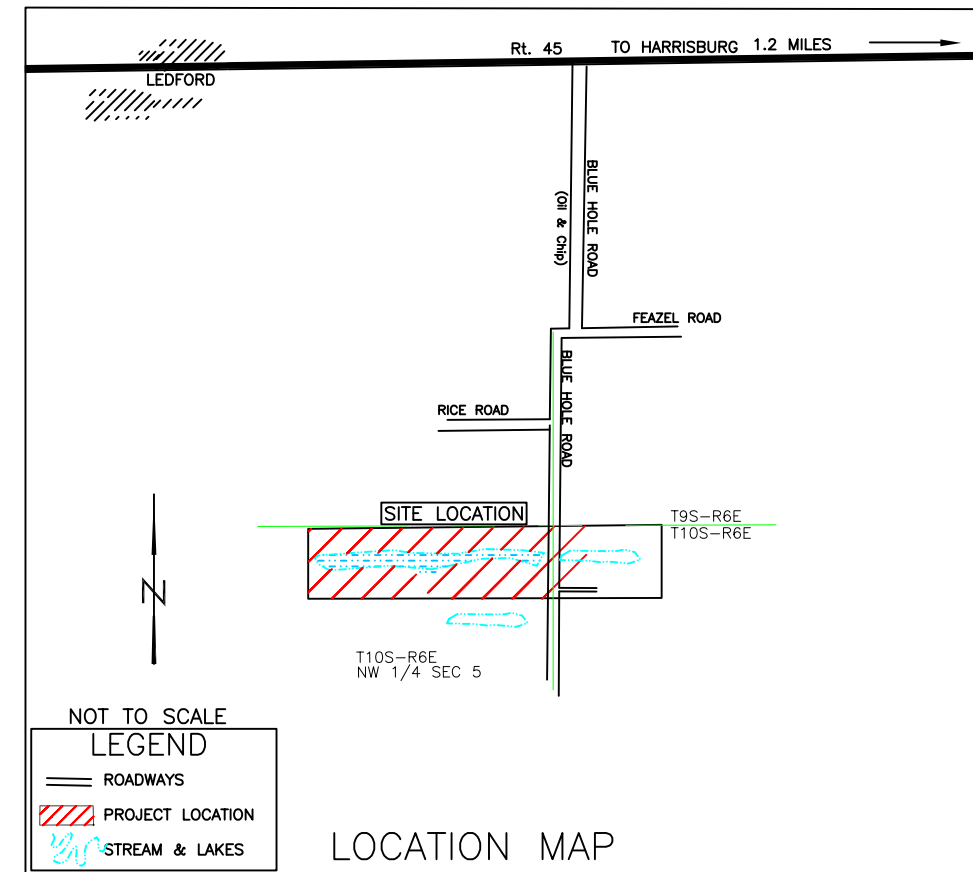
**BURIAL/REMOVAL OF MATERIAL** - Concrete and masonry debris designated for burial by the engineer shall be buried at least three feet below proposed final grade. Onsite organic debris and trash shall be disposed of in an engineer approved offsite landfill in accordance with Sections 201 and 501 of the Special Provisions.

**ACID WATER TREATMENT** - If acid mine drainage treatment is determined necessary by the engineer, and not otherwise specified in the plans, any water treatment will be paid for in accordance with Article 109.04 of the Standard Specifications.

**EROSION CONTROL** - The contractor shall schedule his operations and take such precautions that may be necessary to prevent or minimize erosion. Failure to comply with this requirement shall cause the contractor to be fully responsible for repairing any eroded areas and cleaning up areas or drainage structures that have become silted in or damaged.

**AGRICULTURAL GROUND LIMESTONE**-Immediately prior to seed bed preparation, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the rates specified in the plans.

**MULCHING** - Within 24 hours from the time seeding has been performed, the seeded area shall be given a covering of mulch at the rates specified in the plans. The mulch is to be anchored into the soil in accordance with the requirements for method 2, procedure 1 of Article 251.03 of the Standard Specifications. If Excelsior or Special Excelsior Blanket is to be used, the blanket shall be placed the same day that the areas are seeded.

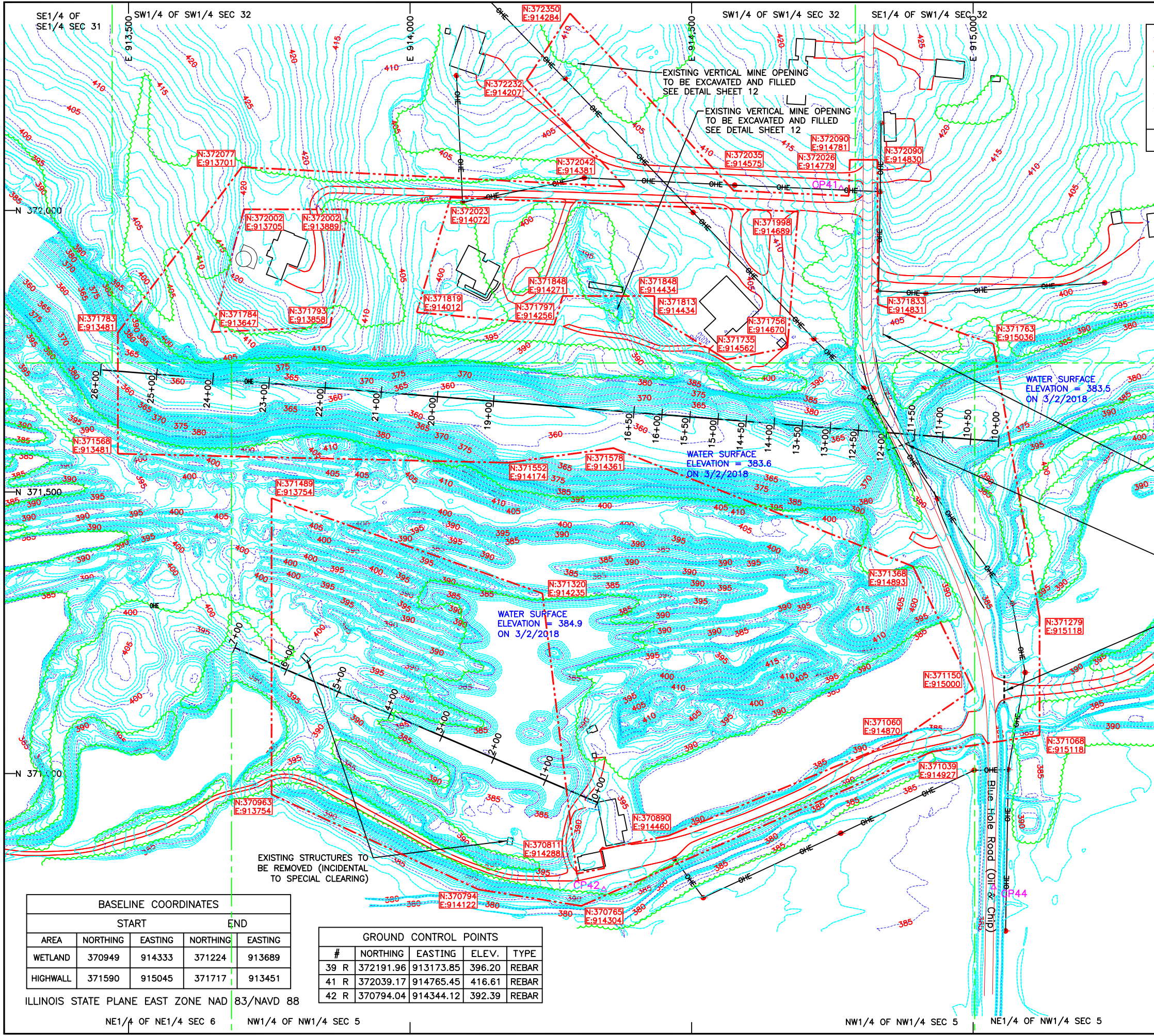


Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing				
ITEM (unit)	INITIAL APPLICATION AUG 20 -SEPT 30 2022	FINAL APPLICATION MAR 15-APRIL 30, 2023	SPRING MAY 15-JUNE 15, 2023	TOTAL QUANTITY
SEEDING (acres)	10.0			10.0
SEEDING 4B	0.5			0.5
AGRICULTURAL GROUND LIMESTONE (tons)	50			50
NITROGEN FERTILIZER NUTRIENT (pounds)	1,000 100 Lb./A	1,000 100 Lb./A		2,000
PHOSPHORUS FERTILIZER NUTRIENT (pounds)	1,300 130 Lb./A			1,300
POTASSIUM FERTILIZER NUTRIENT (pounds)	1,000 100 Lb./A			1,000
MULCH, METHOD 2 PROCEDURE 1 (acres)	10 2 T/A			10
MOWING (acres)			8.7	8.7



**LEGEND**

- EXISTING CONTOUR
- PROPOSED CONSTRUCTION LIMITS
- TREE LINE
- SECTION LINE
- OHE --- OVERHEAD ELECTRIC LINE
- EDGE OF WATER
- ▲ CONTROL POINT



T9S-R6E  
 T10S-R6E

WATER SURFACE ELEVATION = 383.5 ON 3/2/2018

WATER SURFACE ELEVATION = 383.6 ON 3/2/2018

PROPOSED CONSTRUCTION SIGN SEE DETAIL SHEET 12

EXISTING 24" CULVERT TO BE REMOVED (INCIDENTAL TO PROPOSED PIPE CULVERT)

EXISTING 36" HDPE CULVERT TO REMAIN

**Notes**

- EXISTING AGGREGATE SURFACES AT DRIVEWAYS AND ENTRANCES SHALL BE MAINTAINED AND REMAIN OPEN.
- TRAFFIC CONTROL ITEMS SUCH AS TEMPORARY SIGNS AND FLAGGING MAY BE REQUIRED FOR SOME CONSTRUCTION ACTIVITY (INCIDENTAL TO MOBILIZATION). THE CONTRACTOR SHALL COMPLY WITH GOVERNING IDOT STANDARDS FOR TRAFFIC CONTROL ON 2 LANE ROADWAYS AND IS INCIDENTAL. COORDINATE CLOSURES OR RESTRICTIONS WITH THE LOCAL ROAD COMMISSIONER.

**BASELINE COORDINATES**

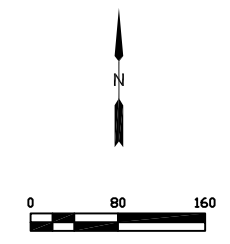
AREA	START		END	
	NORTHING	EASTING	NORTHING	EASTING
WETLAND	370949	914333	371224	913689
HIGHWALL	371590	915045	371717	913451

**GROUND CONTROL POINTS**

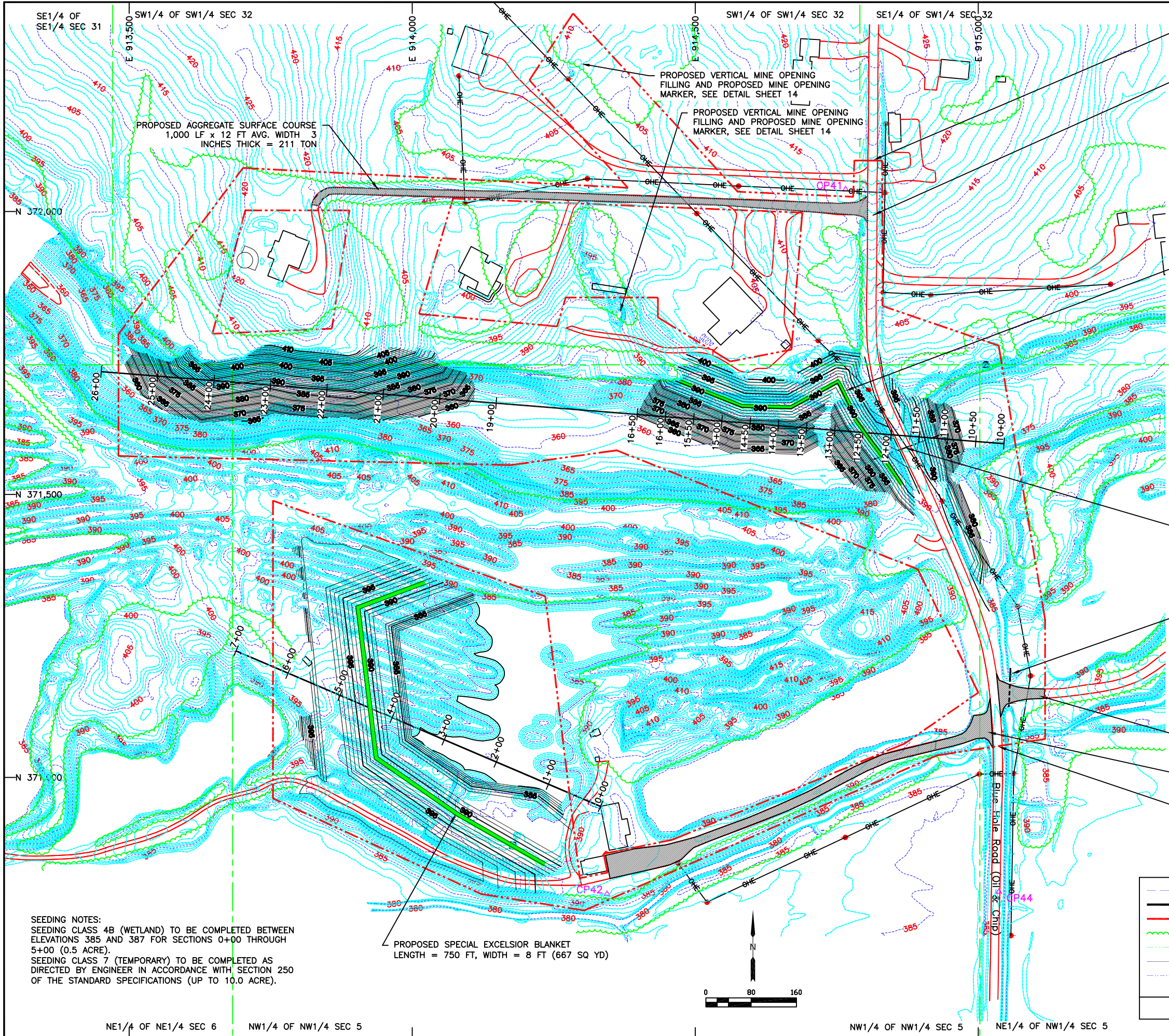
#	NORTHING	EASTING	ELEV.	TYPE
39 R	372191.96	913173.85	396.20	REBAR
41 R	372039.17	914765.45	416.61	REBAR
42 R	370794.04	914344.12	392.39	REBAR

ILLINOIS STATE PLANE EAST ZONE NAD 83/NAVD 88  
 NE1/4 OF NE1/4 SEC 6 NW1/4 OF NW1/4 SEC 5

NW1/4 OF NW1/4 SEC 5 NE1/4 OF NW1/4 SEC 5







END PROPOSED BITUMINOUS SURFACE TREATMENT, CLASS A-2 AT CONSTRUCTION LIMITS

BLUE HOLE ROAD WITHIN THE CONSTRUCTION LIMITS SHALL RECEIVE PROPOSED BITUMINOUS SURFACE TREATMENT, CLASS A-2, PER IDOT STANDARD SPECIFICATION 403.  
 1,075 FOOT LENGTH X 20' WIDTH  
 APPLY 0.5 GALLONS/SQ YD FOR EACH OF THE THREE BITUMINOUS MATERIAL LAYERS.  
 BITUMINOUS MATERIALS (PRIME COAT) = 4.4 TON  
 BITUMINOUS MATERIALS (COVER AND SEAL COATS) = 8.8 TON  
 APPLY UP TO 25 POUND/SQ YD FOR EACH OF THE TWO AGGREGATE LAYERS  
 COVER COAT AGGREGATE = 29.2 TON  
 SEAL COAT AGGREGATE = 29.2 TON

PROPOSED SPECIAL EXCELSIOR BLANKET  
 LENGTH = 510 FT, WIDTH = 8 FT (453 SQ YD)

T9S-R6E  
 T10S-R6E

PROPOSED PIPE CULVERT CLASS C, TYPE 1 24" (130 FOOT)  
 INLET AND OUTLET ELEVATIONS 384.5  
 POROUS GRANULAR BACKFILL, CA6 (163 TON)  
 FROM CULVERT BED TO ROAD SURFACE

EXTEND EXISTING 36" HDPE CULVERT WITH PROPOSED PIPE CULVERT CLASS C, TYPE 1 36" (20 FOOT)  
 MATCH TO EXISTING ELEVATION AND GRADE  
 GRANULAR BACKFILL FROM CULVERT BED TO MIDPOINT, CA-6 (INCIDENTAL)

PROPOSED AGGREGATE SURFACE COURSE  
 3 INCHES THICK 39 TON

PROPOSED AGGREGATE SURFACE COURSE  
 3 INCHES THICK 275 TON

END PROPOSED BITUMINOUS SURFACE TREATMENT, CLASS A-2 AT CONSTRUCTION LIMITS

SEEDING NOTES:  
 SEEDING CLASS 4B (WETLAND) TO BE COMPLETED BETWEEN ELEVATIONS 385 AND 387 FOR SECTIONS 0+00 THROUGH 5+00 (0.5 ACRE).  
 SEEDING CLASS 7 (TEMPORARY) TO BE COMPLETED AS DIRECTED BY ENGINEER IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS (UP TO 10.0 ACRE).

PROPOSED SPECIAL EXCELSIOR BLANKET  
 LENGTH = 750 FT, WIDTH = 8 FT (667 SQ YD)

	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED CONSTRUCTION LIMITS
	TREE LINE
	SECTION LINE
	OVERHEAD ELECTRIC LINE
	EDGE OF WATER
	CONTROL POINT

LEGEND

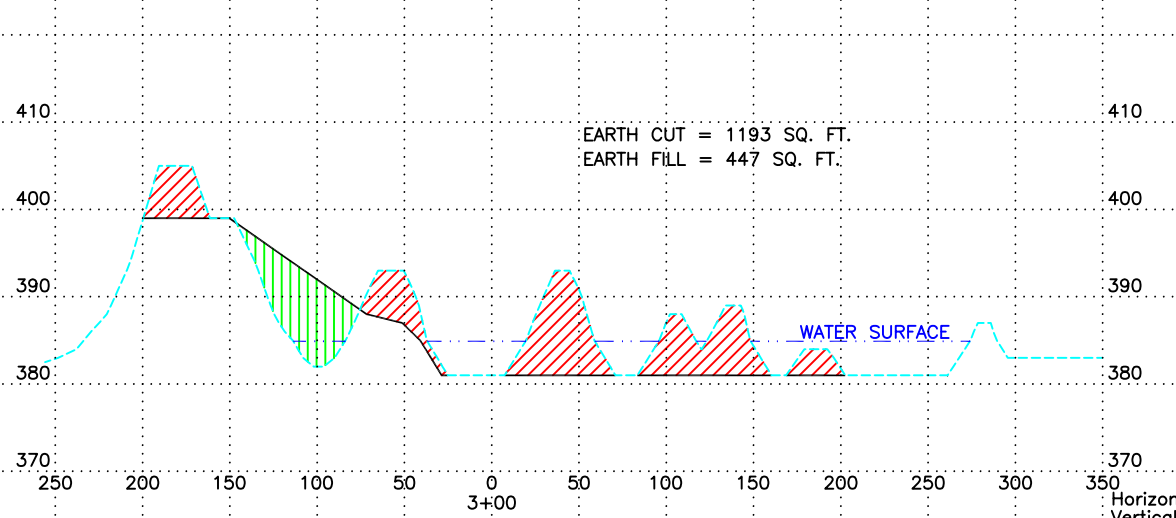
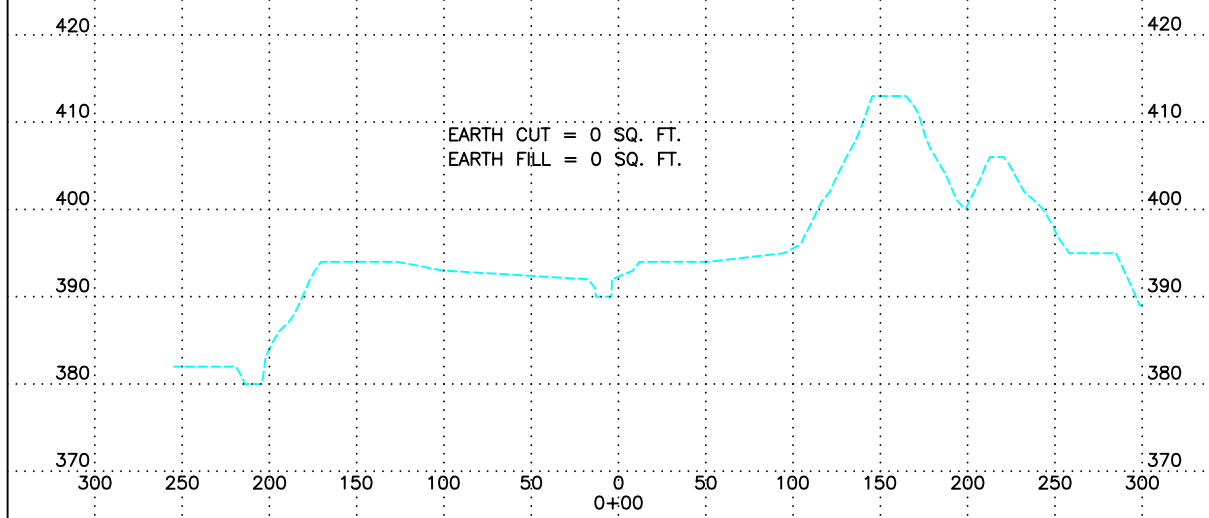
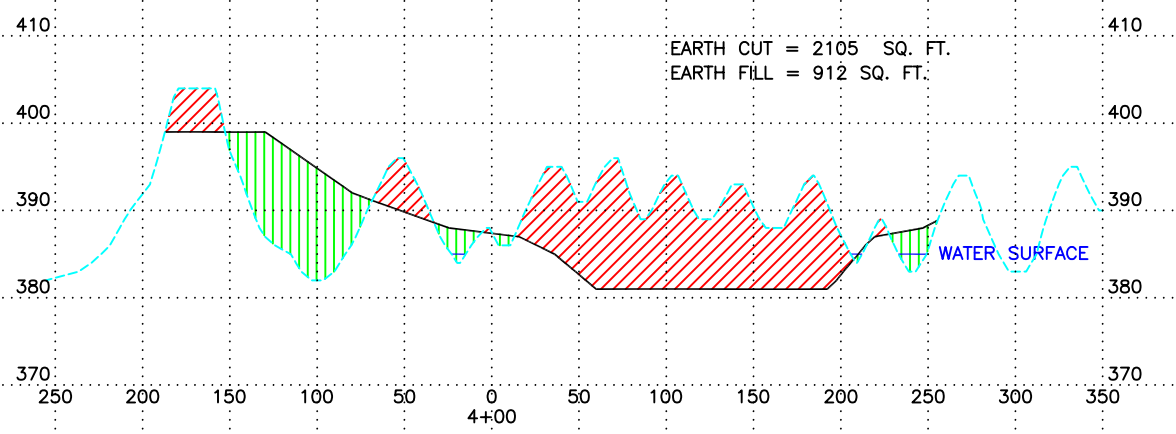
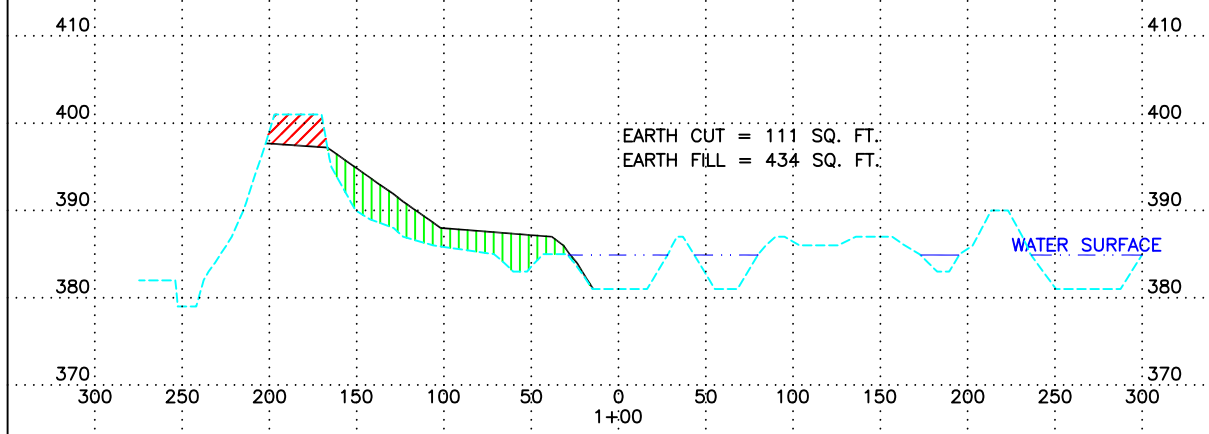
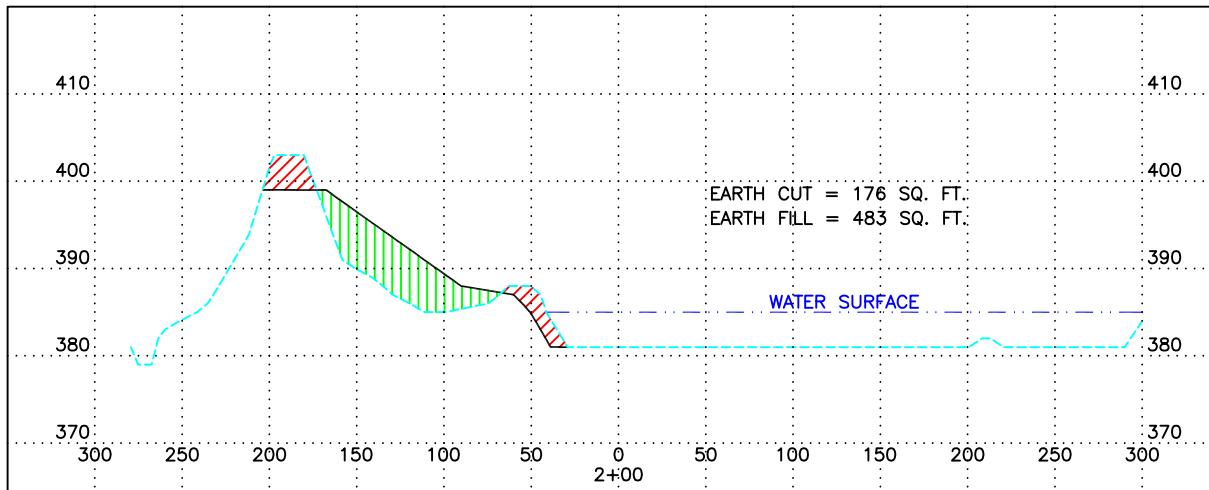
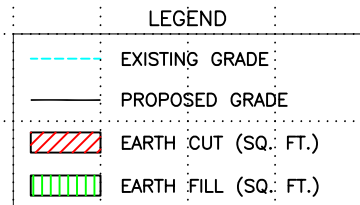
State of Illinois  
 Department of Natural Resources  
 Office of Mines and Minerals  
 Abandoned Mine Land Reclamation Division

Ledford Strip Mine Group  
 Reclamation Project  
 AML-GSIE-2105  
 Saline County

Drawn By : A. White, Date : 01/19/2022  
 Checked By : \_\_\_\_\_

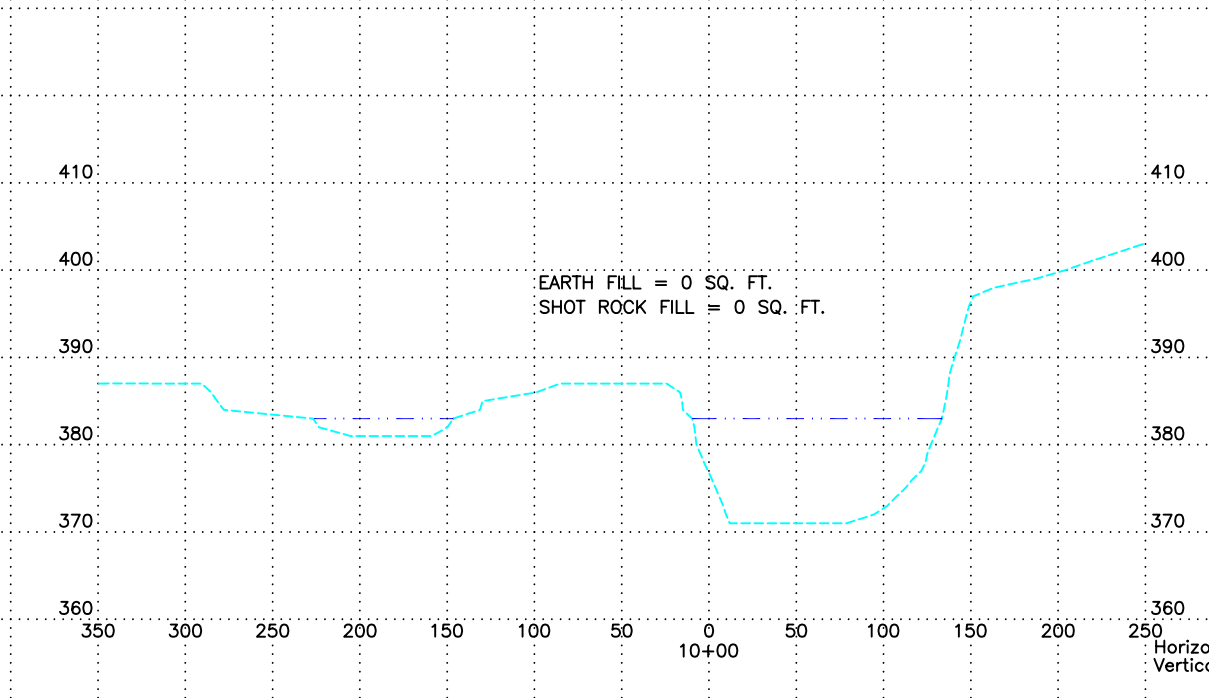
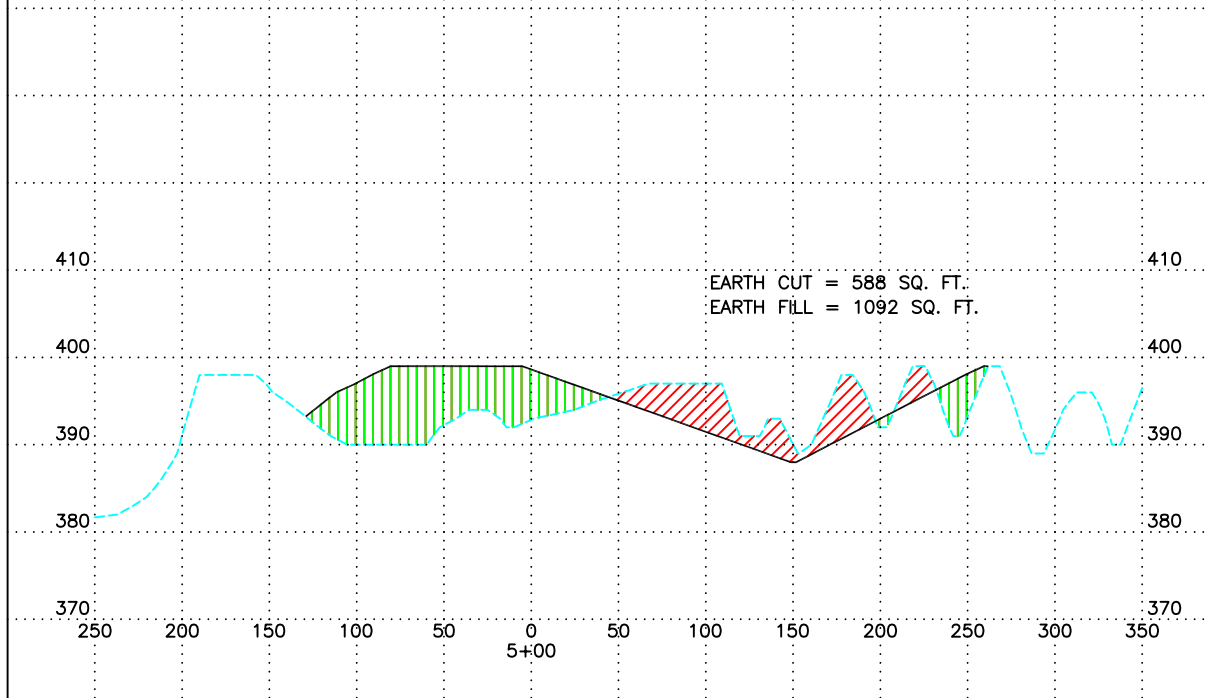
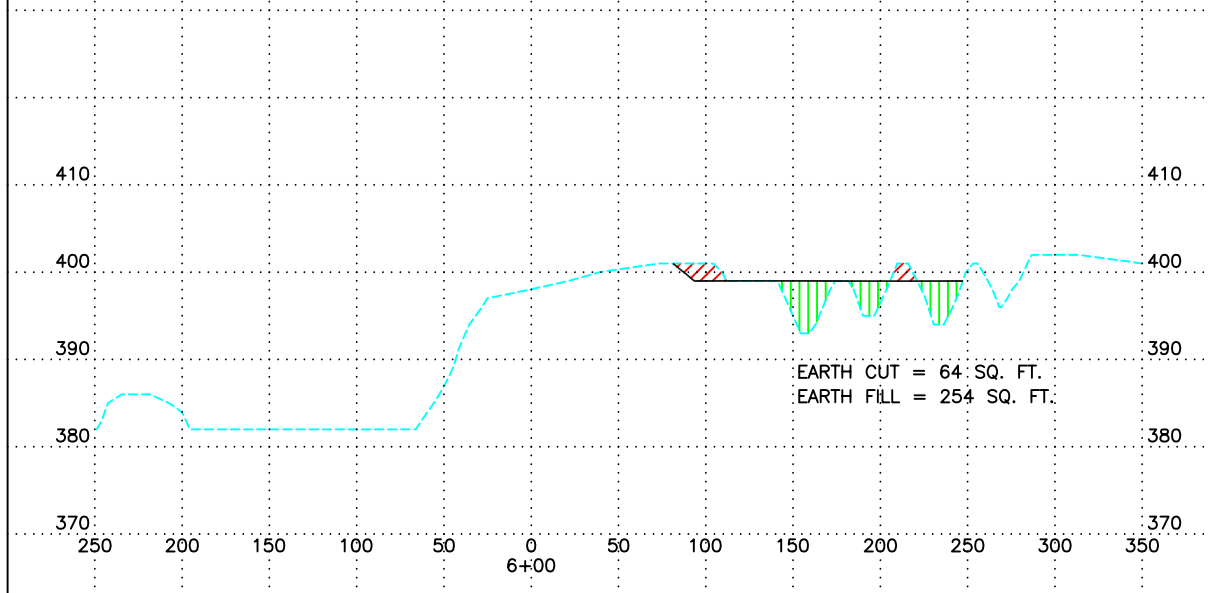
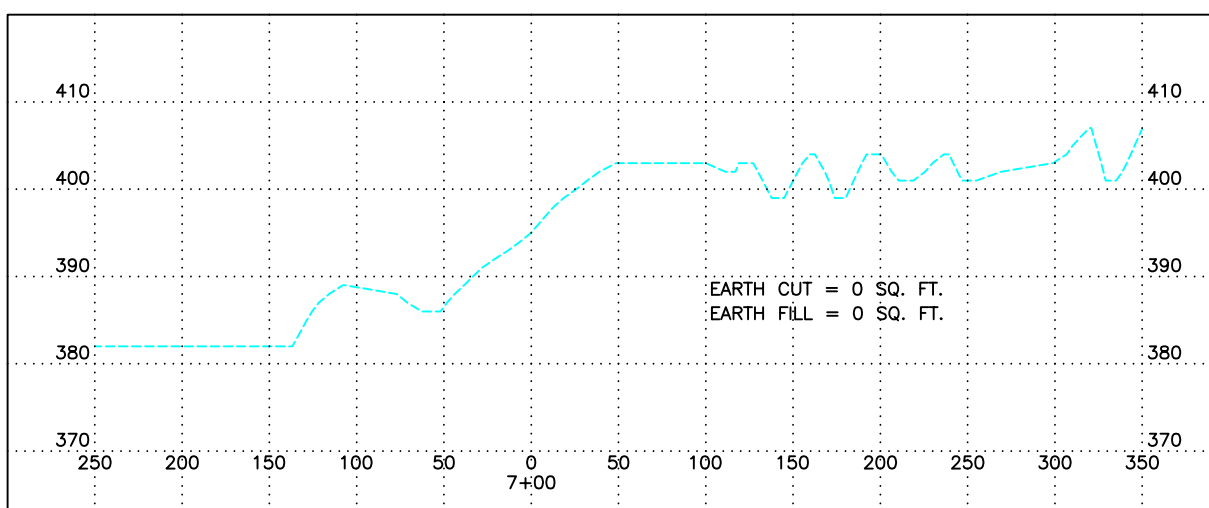
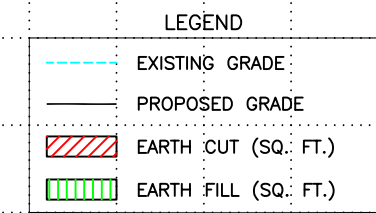
Proposed Conditions  
 Sheet 4 of 12





Horizontal Scale 50  
Vertical Scale 10













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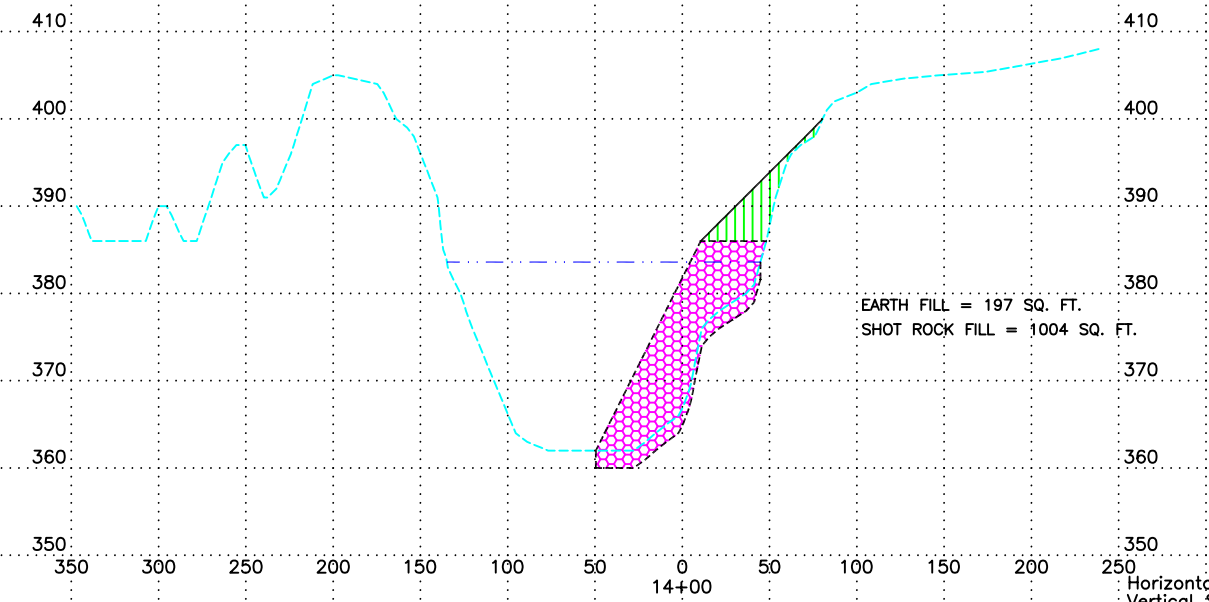
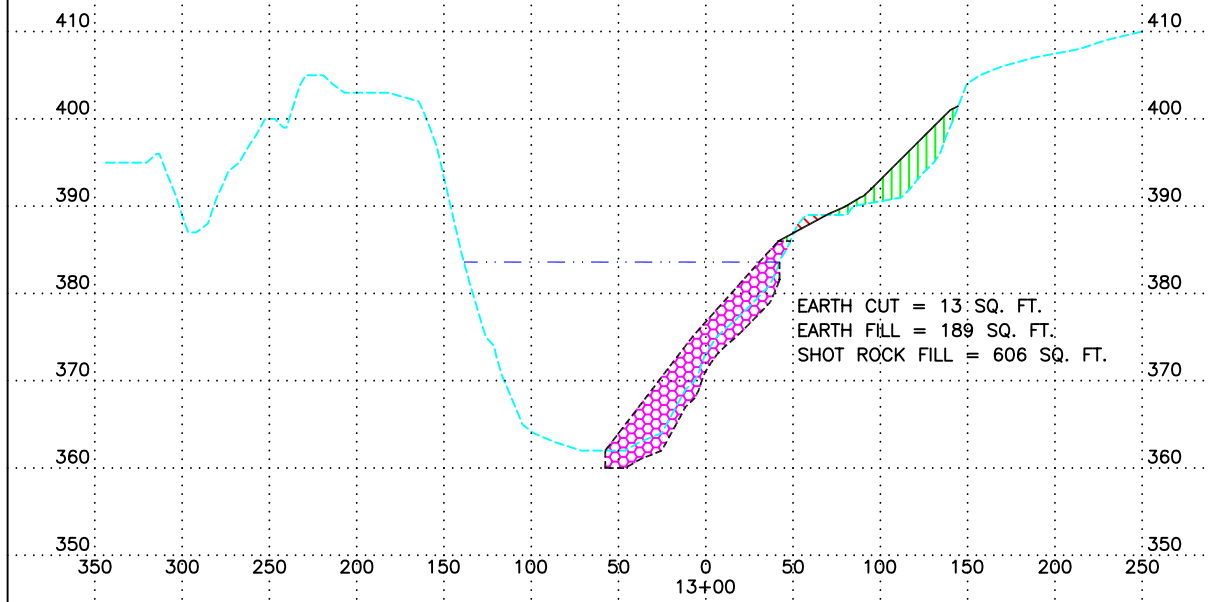
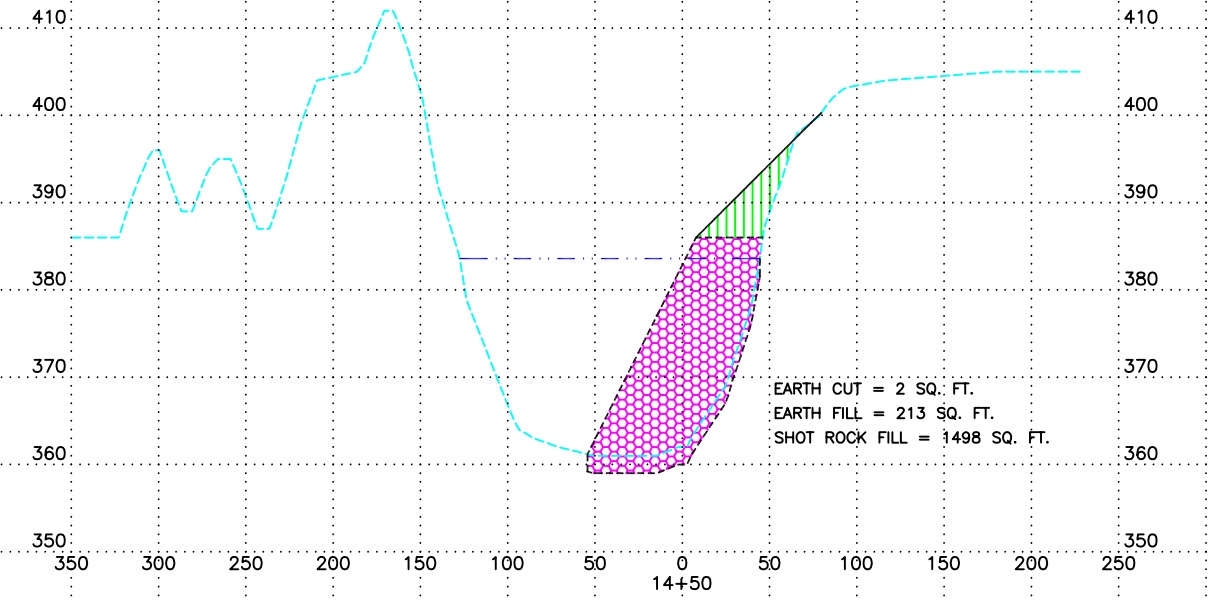
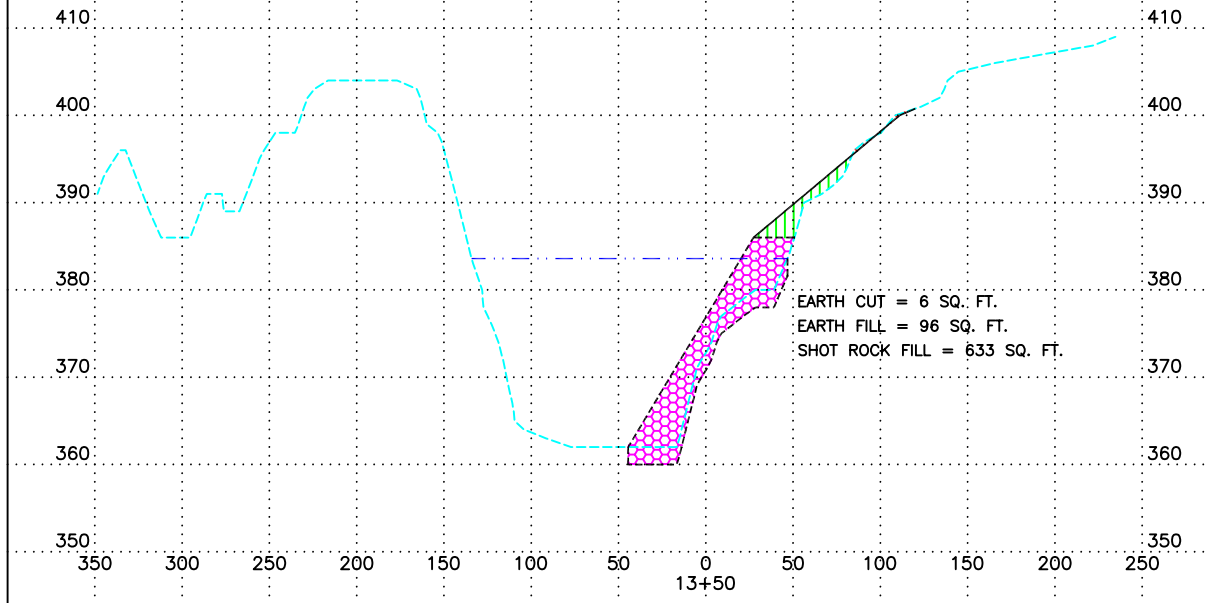




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





- |  |   |
|--|---|
|  EXISTING GRADE       |  EXISTING WATER SURFACE            |
|  PROPOSED GRADE       |  PROPOSED LIMITS OF SHOT ROCK FILL |
|  EARTH CUT (SQ. FT.)  |  SHOT ROCK FILL (SQ. FT.)          |
|  EARTH FILL (SQ. FT.) |  CA FILL, CA-1 (SQ. FT.)           |

NOTE: SHOT ROCK FILL EXTENDS 2 FT INTO BOTTOM UNDERWATER EXISTING GRADE TO ACCOUNT FOR SETTLEMENT INTO SOFT MATERIAL. FURNISHED EARTH FILL TO BE PLACED ON TOP OF SHOT ROCK FILL ABOVE ELEVATION 386.0 FOR SECTIONS 10+00 THROUGH 16+50.

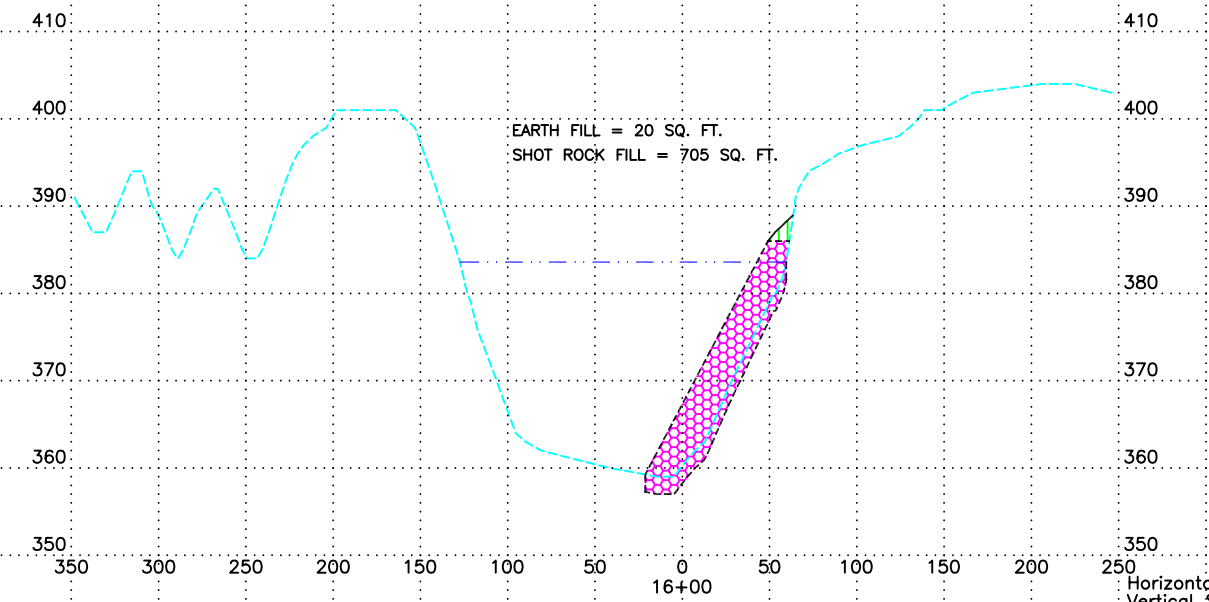
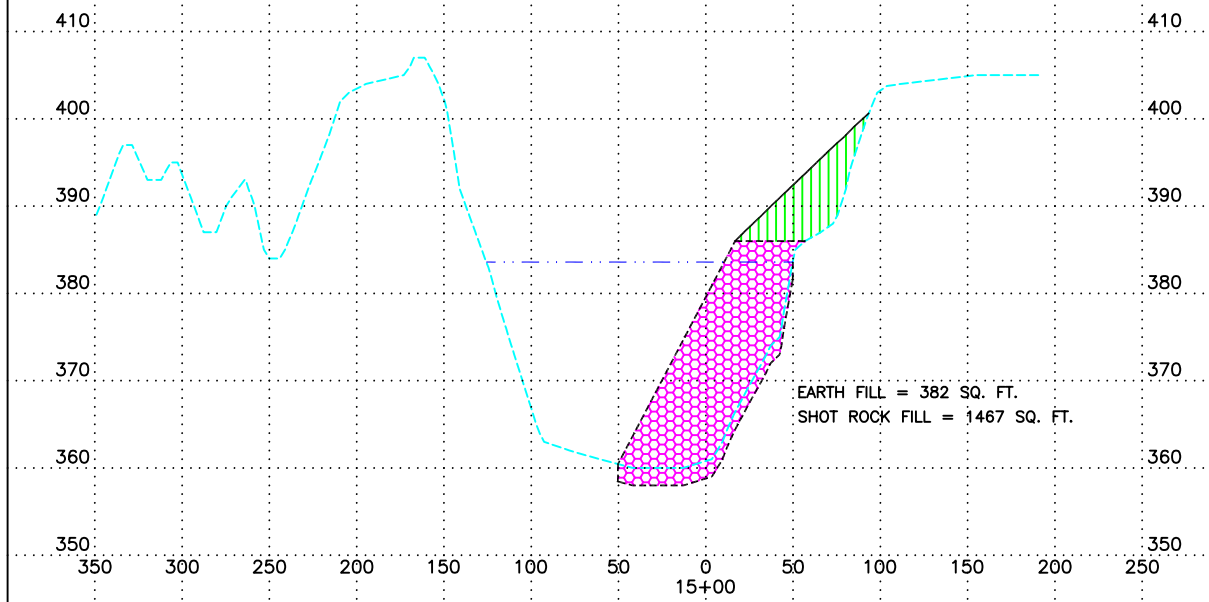
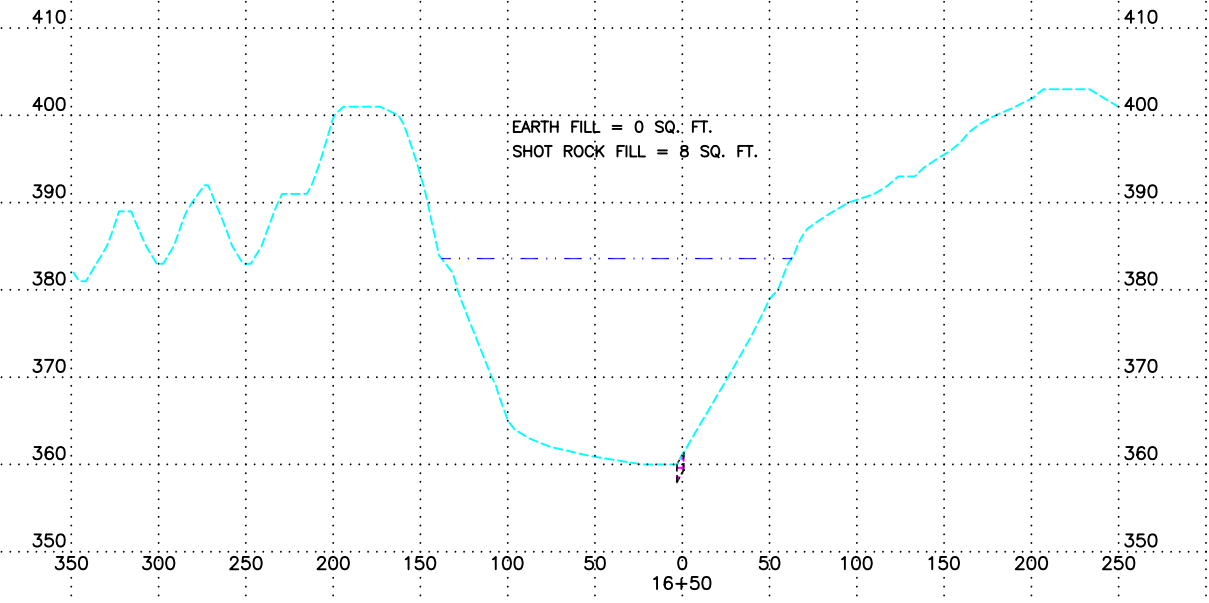
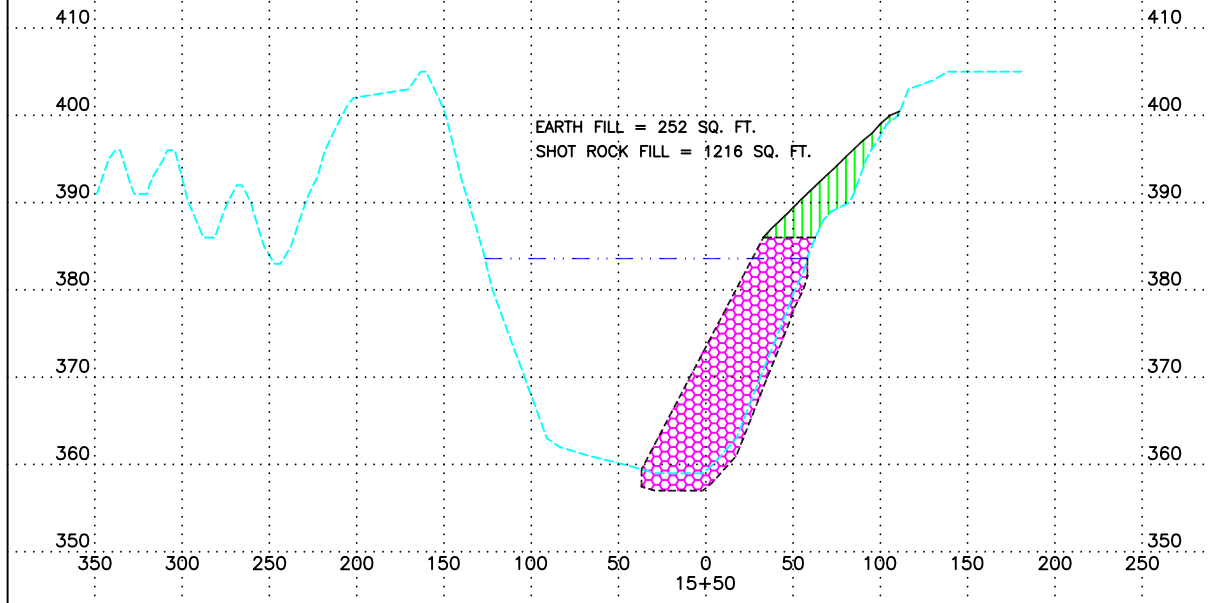


Horizontal Scale 50  
Vertical Scale 10

LEGEND

- |   |                      |   |                                   |
|---|----------------------|---|-----------------------------------|
|  | EXISTING GRADE       |  | EXISTING WATER SURFACE            |
|  | PROPOSED GRADE       |  | PROPOSED LIMITS OF SHOT ROCK FILL |
|  | EARTH CUT (SQ. FT.)  |  | SHOT ROCK FILL (SQ. FT.)          |
|  | EARTH FILL (SQ. FT.) |  | CA FILL, CA-1 (SQ. FT.)           |

NOTE: SHOT ROCK FILL EXTENDS 2 FT INTO BOTTOM UNDERWATER EXISTING GRADE TO ACCOUNT FOR SETTLEMENT INTO SOFT MATERIAL. FURNISHED EARTH FILL TO BE PLACED ON TOP OF SHOT ROCK FILL ABOVE ELEVATION 386.0 FOR SECTIONS 10+00 THROUGH 16+50.



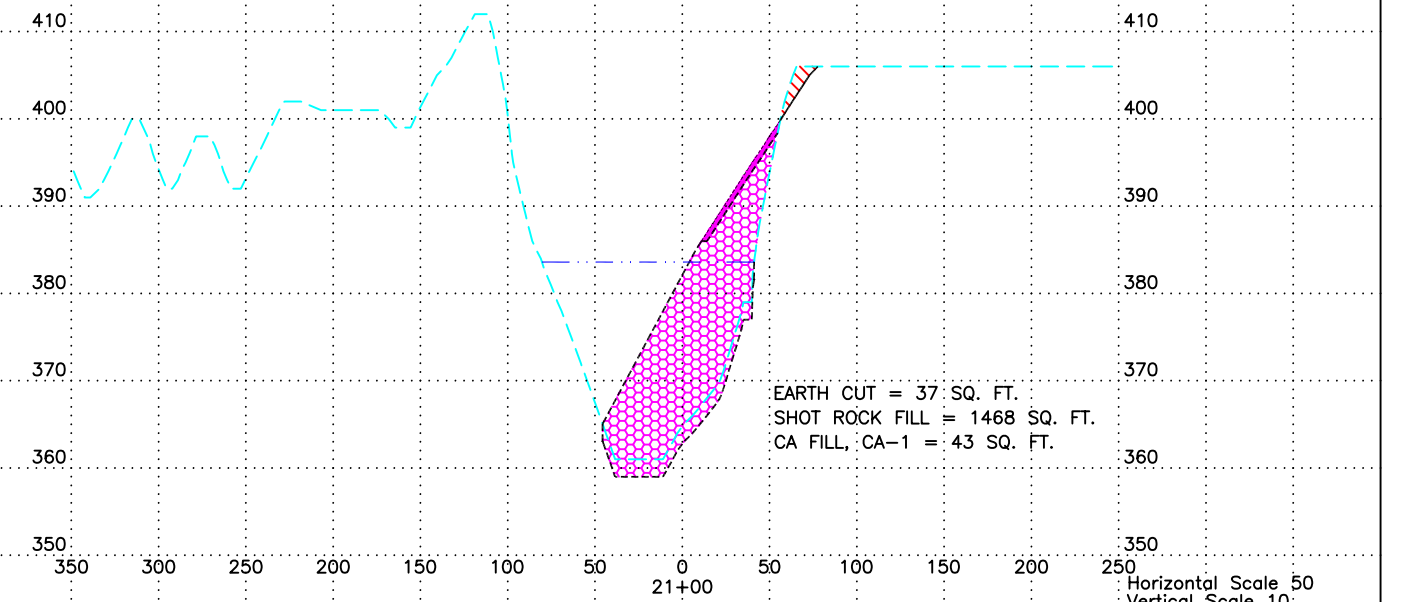
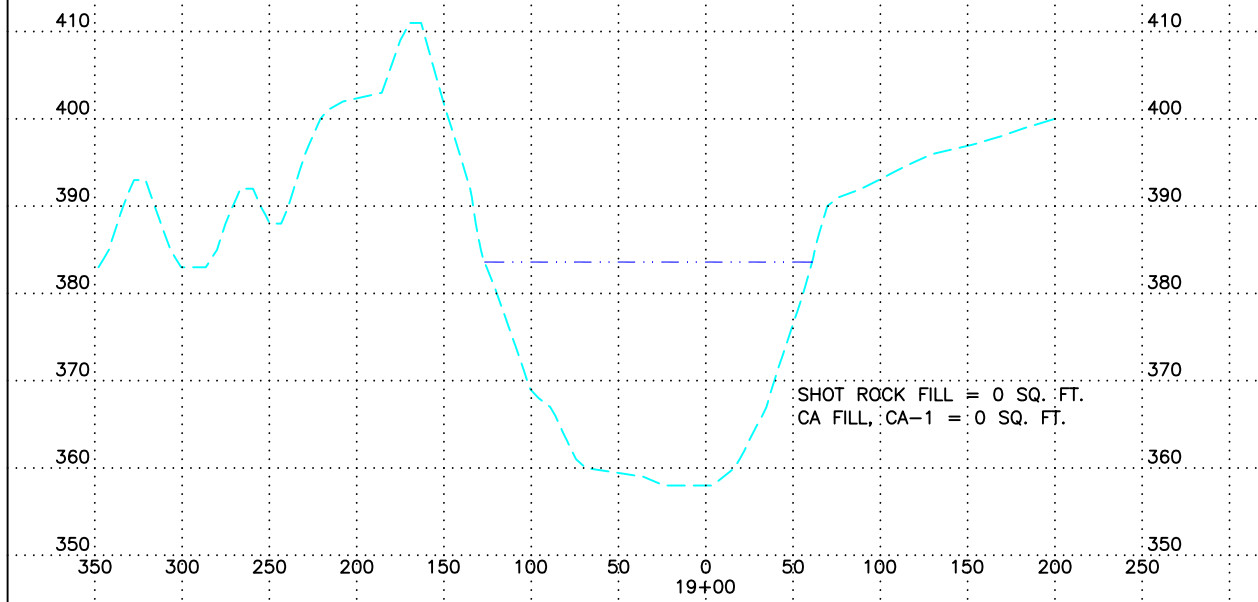
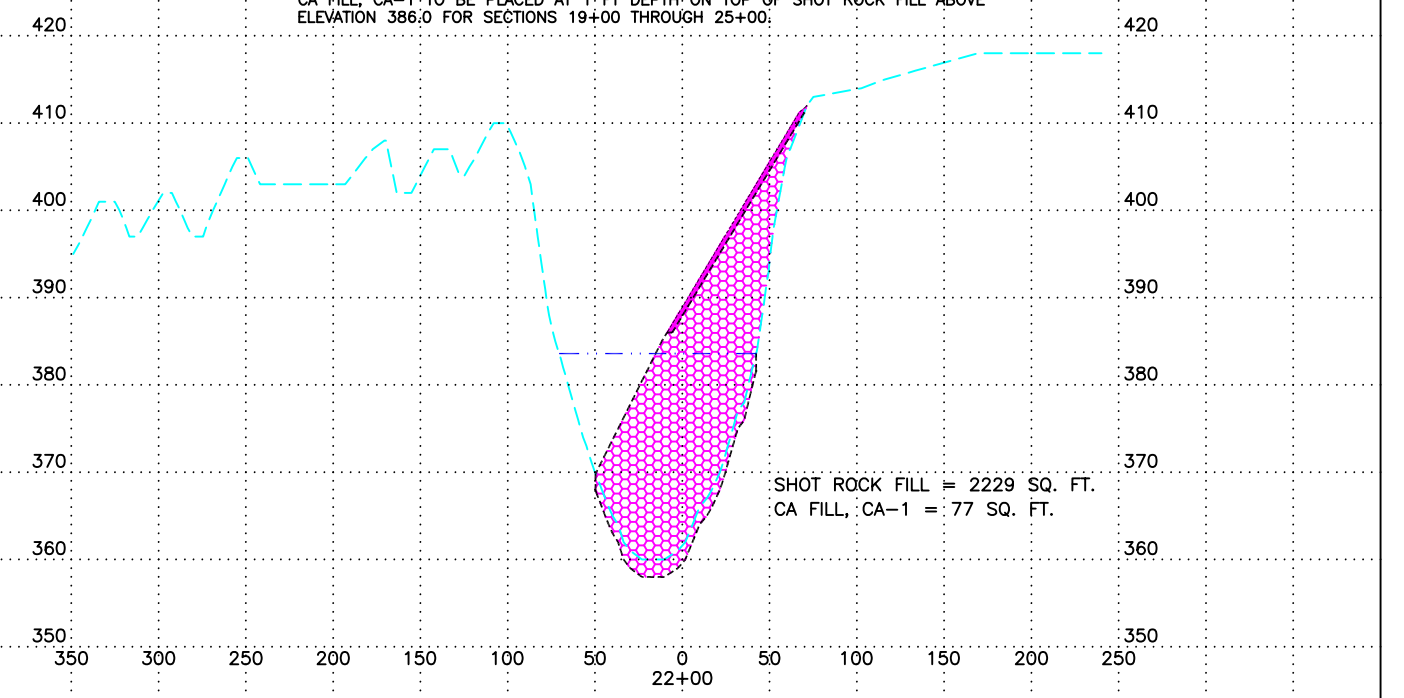
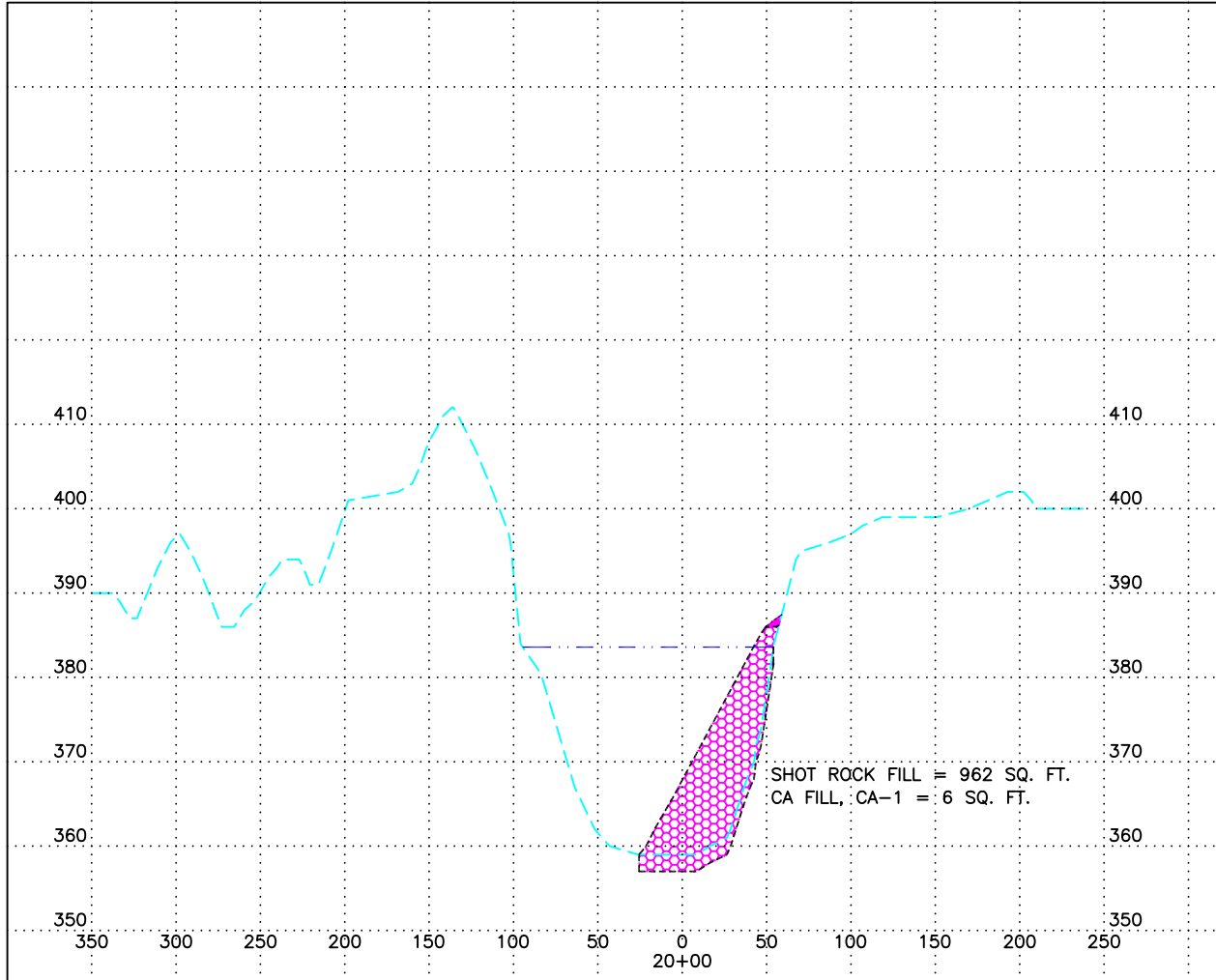
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LEGEND









- EXISTING GRADE
- EXISTING WATER SURFACE
- PROPOSED GRADE
- PROPOSED LIMITS OF SHOT ROCK FILL
- EARTH CUT (SQ. FT.)
- SHOT ROCK FILL (SQ. FT.)
- EARTH FILL (SQ. FT.)
- CA FILL, CA-1 (SQ. FT.)

NOTE: SHOT ROCK FILL EXTENDS 2 FT INTO BOTTOM UNDERWATER EXISTING GRADE TO ACCOUNT FOR SETTLEMENT INTO SOFT MATERIAL.  
CA FILL, CA-1 TO BE PLACED AT 1 FT DEPTH ON TOP OF SHOT ROCK FILL ABOVE ELEVATION 386.0 FOR SECTIONS 19+00 THROUGH 25+00.

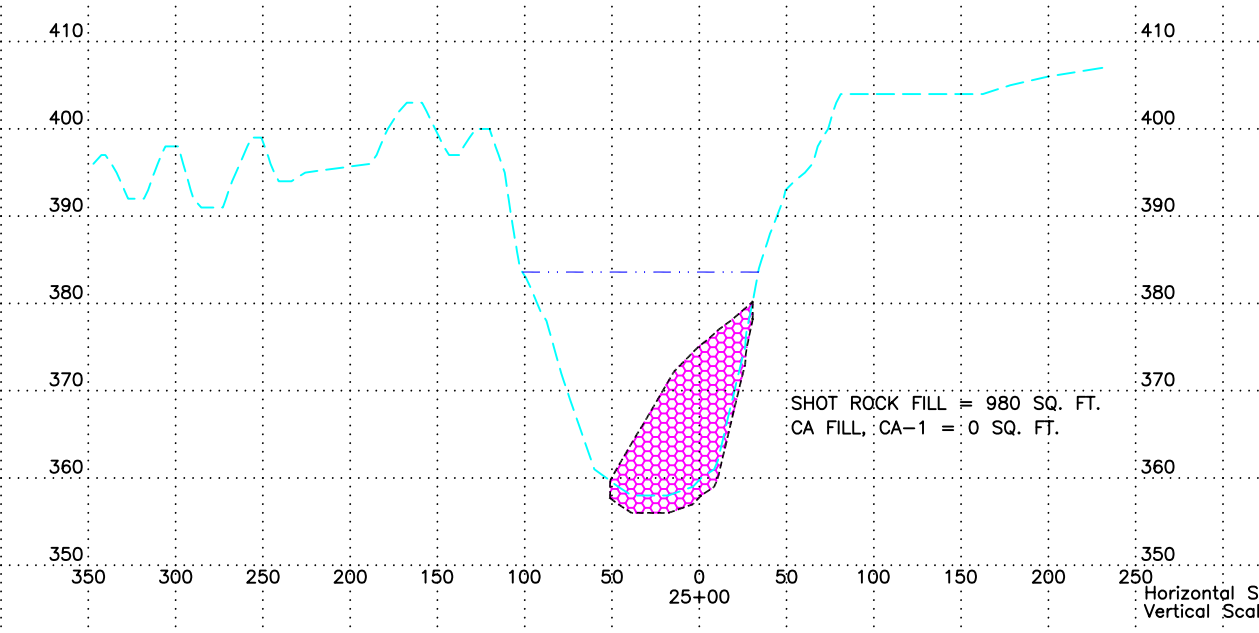
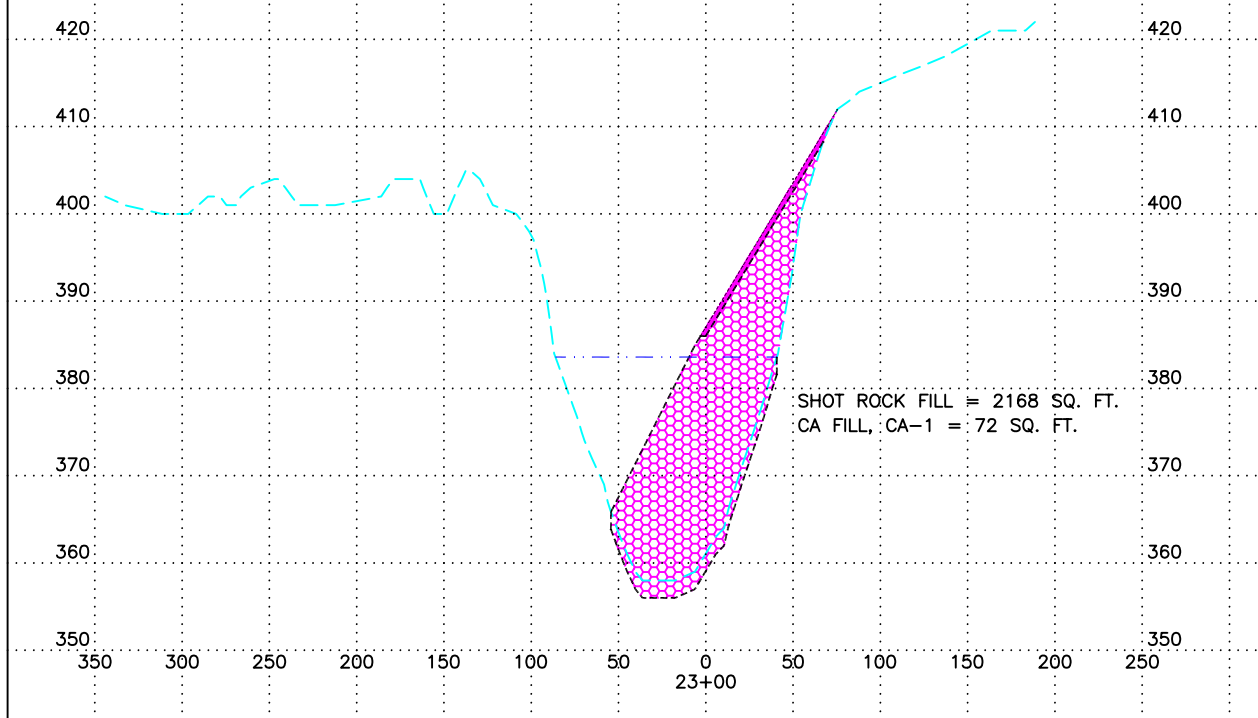
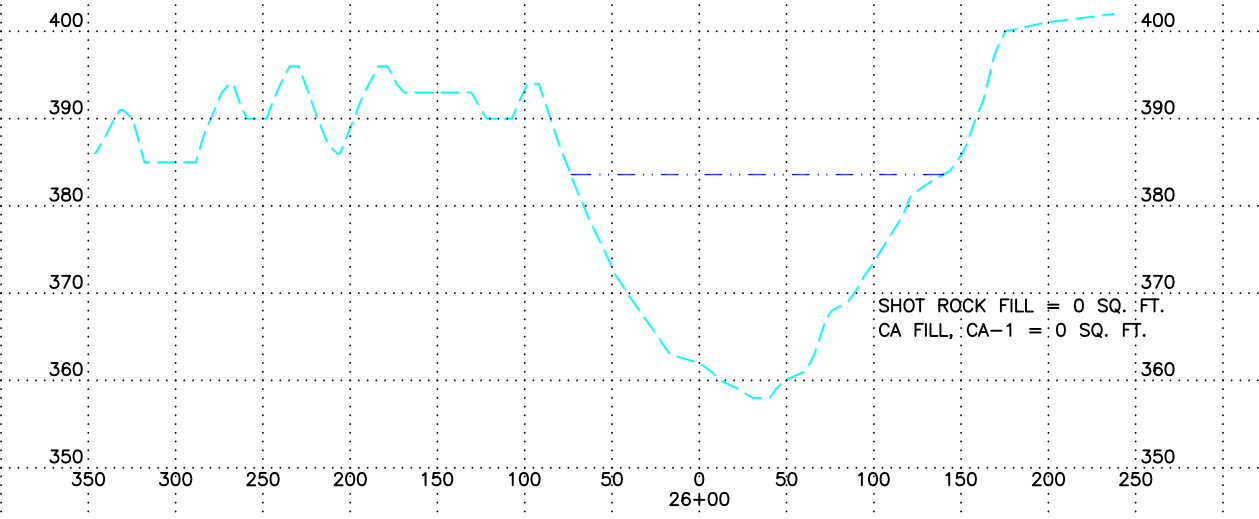
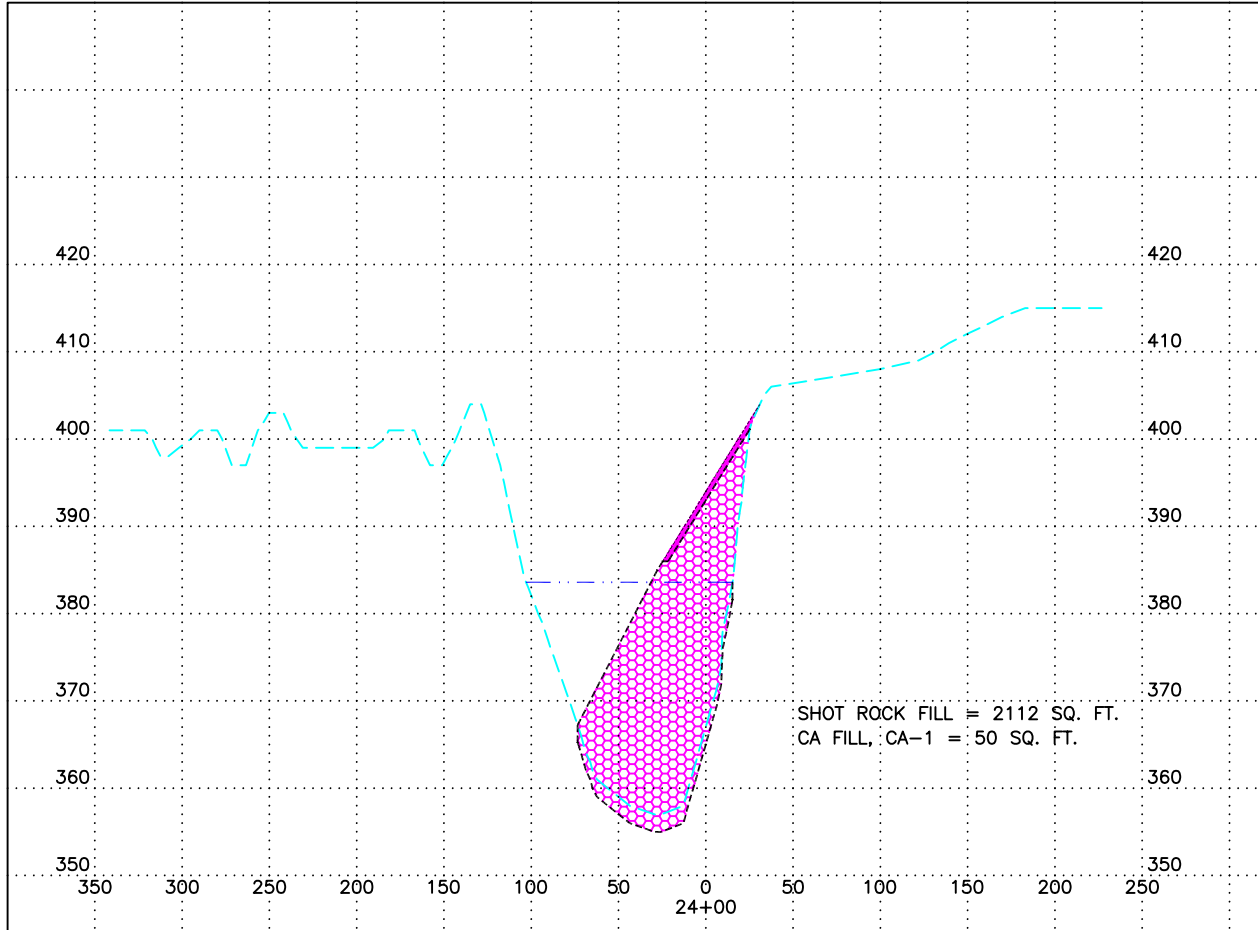


Horizontal Scale 50  
Vertical Scale 10

LEGEND

	EXISTING GRADE		EXISTING WATER SURFACE
	PROPOSED GRADE		PROPOSED LIMITS OF SHOT ROCK FILL
	EARTH CUT (SQ. FT.)		SHOT ROCK FILL (SQ. FT.)
	EARTH FILL (SQ. FT.)		CA FILL, CA-1 (SQ. FT.)

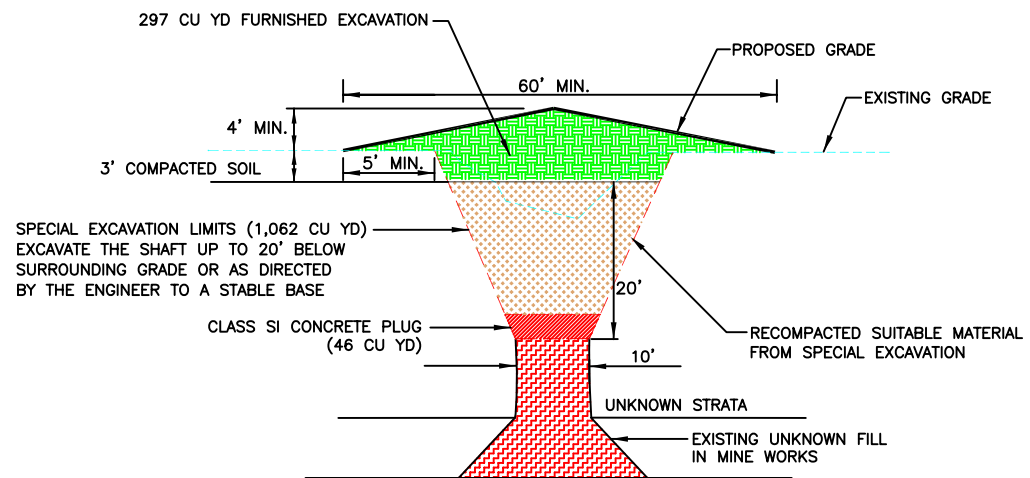
NOTE: SHOT ROCK FILL EXTENDS 2 FT INTO BOTTOM UNDERWATER EXISTING GRADE TO ACCOUNT FOR SETTLEMENT INTO SOFT MATERIAL.  
CA FILL, CA-1 TO BE PLACED AT 1 FT DEPTH ON TOP OF SHOT ROCK FILL ABOVE ELEVATION 386.0 FOR SECTIONS 19+00 THROUGH 25+00.



Horizontal Scale 50  
Vertical Scale 10



- NOTES:
1. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE VERTICAL OPENING AREAS DUE TO THE UNKNOWN CONDITIONS OF THE OPENINGS AND THE UNKNOWN STABILITY OF THE SURROUNDING AREAS.
  2. BASED UPON CONDITIONS ENCOUNTERED AS THE SPECIAL EXCAVATION PROCESS IS COMPLETED, THE ENGINEER RESERVES THE RIGHT TO INCREASE OR DECREASE THE VOLUME OF SPECIAL EXCAVATION AND BACKFILLING OF MATERIALS, AND THE ENGINEER RESERVES THE RIGHT TO ALTER THE METHOD OF BACKFILLING.
  3. THE DIMENSIONS OF SALINE GAS MINE VERTICAL OPENINGS ARE ESTIMATED TO BE 10' X 10'.
  4. THE CONTRACTOR SHALL SECURE THE AREA WITH TEMPORARY FENCING UNTIL FINAL PLACEMENT OF THE COMPACTED EARTH FILL AND MOUND IS COMPLETED. THE TEMPORARY FENCING SHALL BE INCIDENTAL. SUITABLE EXCAVATED MATERIALS SHALL BE COMPACTED AND RE-USED. UNSUITABLE MATERIALS SHALL BE DISPOSED OF AT AN APPROVED OFF SITE LOCATION/LANDFILL.

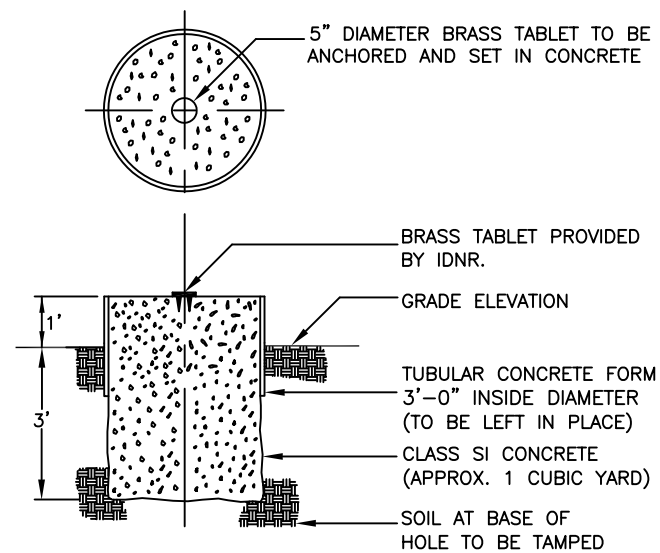


### VERTICAL MINE OPENING FILLING DETAIL

NOT TO SCALE

NOTE: REMOVE ALL TRASH AND DEBRIS FROM THE SHAFT TO A DEPTH OF 20 FT. OR TO STABLE EXISTING FILL OR AS DIRECTED BY THE PROJECT ENGINEER.

\* QUANTITIES ARE SHOWN PER SHAFT.



### MINE OPENING MARKER DETAIL

NOT TO SCALE

EXACT LOCATION TO BE DETERMINED BY THE ENGINEER

### SPACING LETTERS

4.5"
3.5"
1.5"
3.5"
2.5"
3.5"
3.5"
2.5"
3.5"
2.5"
1.5"
2.5"
3.0"
1.5"
2.0"
2.0"
4.5"

## ABANDONED MINED LANDS RECLAMATION PROJECT STATE OF ILLINOIS

J.B. PRITZKER, GOVERNOR

Department of Natural Resources  
Colleen Callahan, Director

Funding provided by the US Department of the Interior  
Office of Surface Mining, with fees paid by the Coal Industry



1. Furnishing, erecting and removing the sign shall be incidental to the contract.
2. The sign shall be painted on 1/2" or thicker exterior plywood (4' x 8'), color shall be black on white, and a 10" diameter Illinois state seal shall be provided by the D.N.R.
3. The posts shall be made of 4" x 4" wood or 2.5" metal pipe, and shall be 10' long. The sign shall be securely fastened to the posts with six 2.5" long, round head wood screws (for wood posts) or four 5" long, 3/8" diameter carriage bolts (for wood or metal posts).
4. The top of the sign shall be level with the top of the posts, and the posts shall be 1' from the edges of the sign. The posts shall be set in the ground 3', so that the bottom of the sign is 3' from the ground.

### CONSTRUCTION SIGN DETAIL

EXACT LOCATION TO BE SET BY ENGINEER