

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

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

Union Fuel #5  
Reclamation Project  
AML-GSaE-1903  
Sangamon County  
1LR

SCHEDULE OF DRAWINGS:

1. Cover Sheet
2. Summary of Quantities/General Notes/Location Map
- 3-4. Existing and Proposed Conditions
- 5-9. Cross Sections

Contract No. M1903

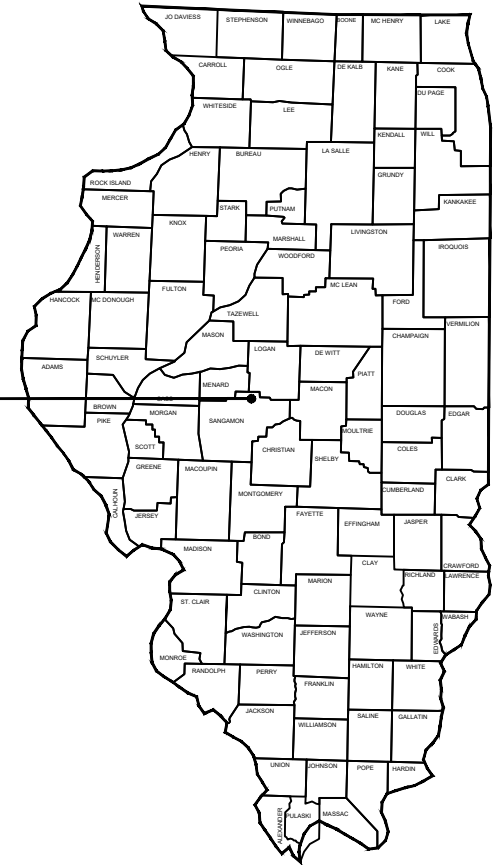
Prepared By IDNR Staff

Approved for Bidding:



Donald Stewart, Director  
Office of Mines & Minerals  
Illinois Dept. of Natural Resources

Union Fuel #5  
Sangamon County

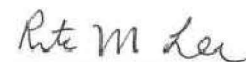


PRE-BID MEETING

A voluntary Pre-bid meeting is scheduled for this project at the project site at 11 A.M. on Friday, January 3, 2020.

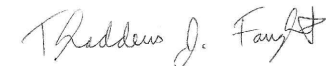
*Certified Copy*

Approved By:



Rita M. Lee, Manager  
AMLR Division

Approved By:



Thaddeus J. Faught  
IL Licensed Professional Engineer  
No. 062.069058



**Summary of Quantities**

Item No.	#	Item	Section	Quantity	Unit	Rates/Remarks
NRM20110	1	Special Clearing	201	1	L SUM	
NRM20210	2	Earth Excavation	202	40,319	CU YD	Compact per Section 205
NRM20230	3	Mine Refuse Excavation	202	44,690	CU YD	Compact per Section 205
NRM21510	4	Special Excavation	215	78	CU YD	
NRM25040	5	Nitrogen Fertilizer Nutrient	250	1,944	POUND	See Schedule – This Sheet
NRM25050	6	Phosphorous Fertilizer Nutrient	250	1,620	POUND	See Schedule – This Sheet
NRM25060	7	Potassium Fertilizer Nutrient	250	5,670	POUND	See Schedule – This Sheet
NRM25070	8	Agricultural Ground Limestone	250	40.5	TON	See Schedule – This Sheet
NRM25090	9	Seeding	250	8.1	ACRE	See Schedule – This Sheet
25100115	10	Mulch, Method 2	IDOT 251	8.1	ACRE	See Schedule – This Sheet Procedure 1
NRM25510	11	Mine Refuse Treatment – Limestone	255	75	TON	50 Ton/Acre
NRM25620	12	Incorporation – Mulch	256	8.1	ACRE	
NRM25810	13	Mowing	258	8.1	ACRE	
NRM28040	14	Perimeter Erosion Barrier	280	2,335	FOOT	Silt Fence
NRM66610	15	Mine Opening Marker	666	1	EACH	
NRM67110	16	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 specifications.

The contractor is responsible for locating and protecting all existing utility lines pertaining to the work.

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 damages done to any area outside the construction limits.

Application rates specified in the plans are shown in the Summary of Quantities table – Rates/Remarks column.

**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 specifications.

**TREE REMOVAL** – Trees removed shall be disposed of onsite per Section 201 of the specifications. Tree removal must be completed between October 15, 2019 and March 31, 2020.

**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 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.

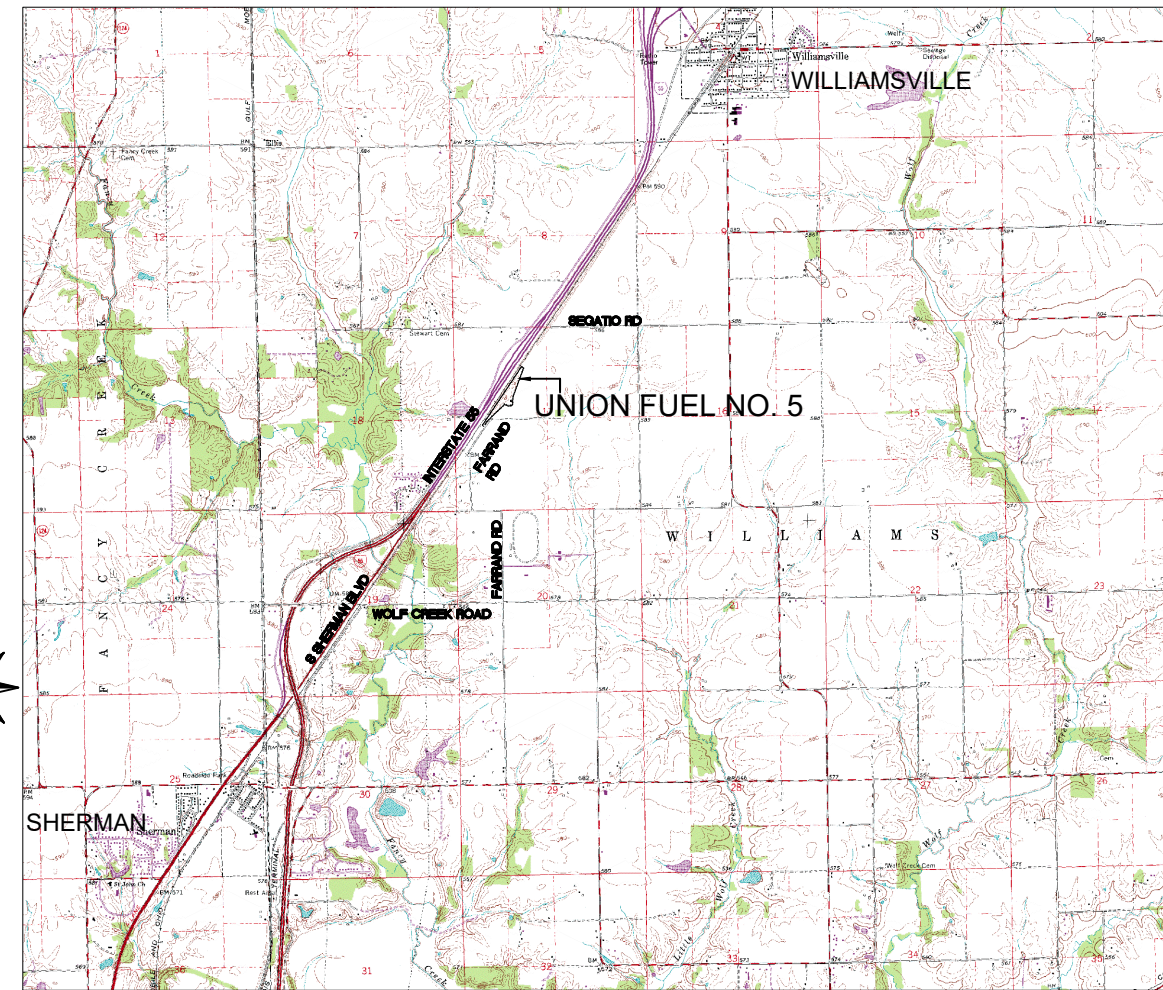
**AGRICULTURAL GROUND LIMESTONE**–Immediately prior to seed bed preparation, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the rates specified in the plans.

**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 specifications. If Excelsior or Special Excelsior Blanket is to be used, the blanket shall be placed the same day that the areas are seeded.

**MINE REFUSE TREATMENT** –After mine refuse has been graded to the subgrade shown in the plans, agricultural ground limestone shall be uniformly spread at the rate specified in the plans. A three-inch layer of soil shall then be spread over the mine refuse treatment area and blended to a depth of six inches with an industrial offset disk approved by the Engineer. Treated areas shall then be covered with soil as specified.

**UTILITY NOTES**

All construction operations shall maintain no less than fifteen (15) feet radial clearance from all utility facilities including towers, poles and overhead lines.



**Location Map**

**Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing**

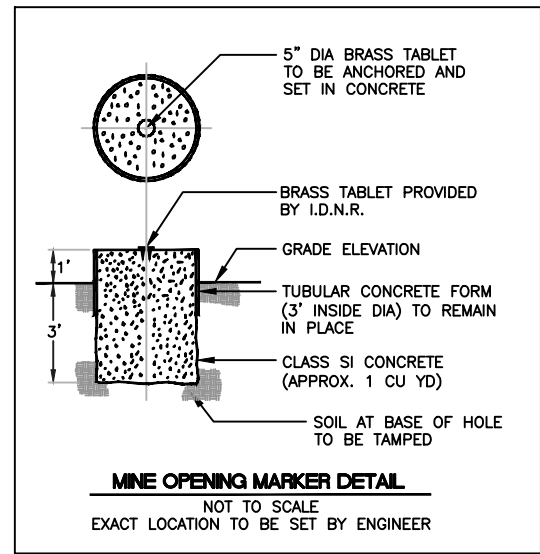
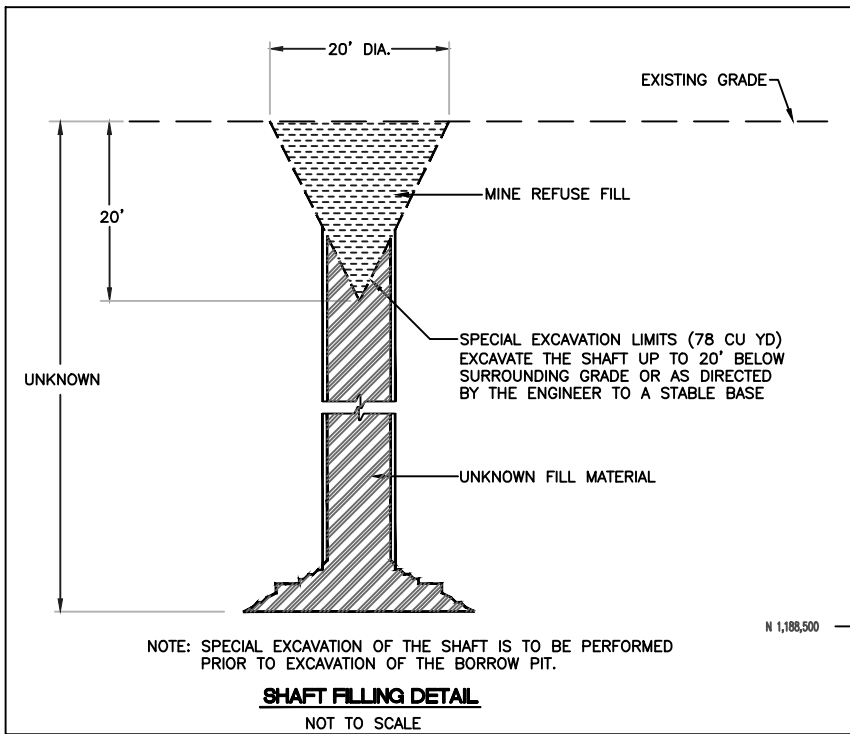
ITEM (Unit)	August 15th, 2020 – September 15th, 2020	Mowing Date to be set by Engineer	February 15th, 2021 – April 10th, 2021	TOTAL QUANTITY
SEEDING (Acres)	8.1 Acres			8.1 Acres
AGRICULTURAL GROUND LIMESTONE (Tons)	40.5 Tons (5 Tons/Acre)			40.5 Tons
NITROGEN FERTILIZER NUTRIENT (Pounds)	972 Pounds (120 Pounds/Acre)		972 Pounds (120 Pounds/Acre)	1,944 Pounds
PHOSPHOROUS FERTILIZER NUTRIENT (Pounds)	810 Pounds (100 Pounds/Acre)		810 Pounds (100 Pounds/Acre)	1,620 Pounds
POTASSIUM FERTILIZER NUTRIENT (Pounds)	2,835 Pounds (350 Pounds/Acre)		2,835 Pounds (350 Pounds/Acre)	5,670 Pounds
MULCH, METHOD 2 PROCEDURE 1 (Acres)	8.1 Acres (2 Tons/Acre)			8.1 Acres
MOWING (Acres)		8.1 Acres		8.1 Acres

State of Illinois  
Department of Natural Resources

Union Fuel # 5  
Reclamation Project  
AML-GSaE-1903  
Sangamon County

Drawn By: M-L Flowers  
Checked By: T. Faught  
Date: 5/31/2019  
7/26/2019

Summary of Quantities/  
General Notes/Location Map  
Sheet  
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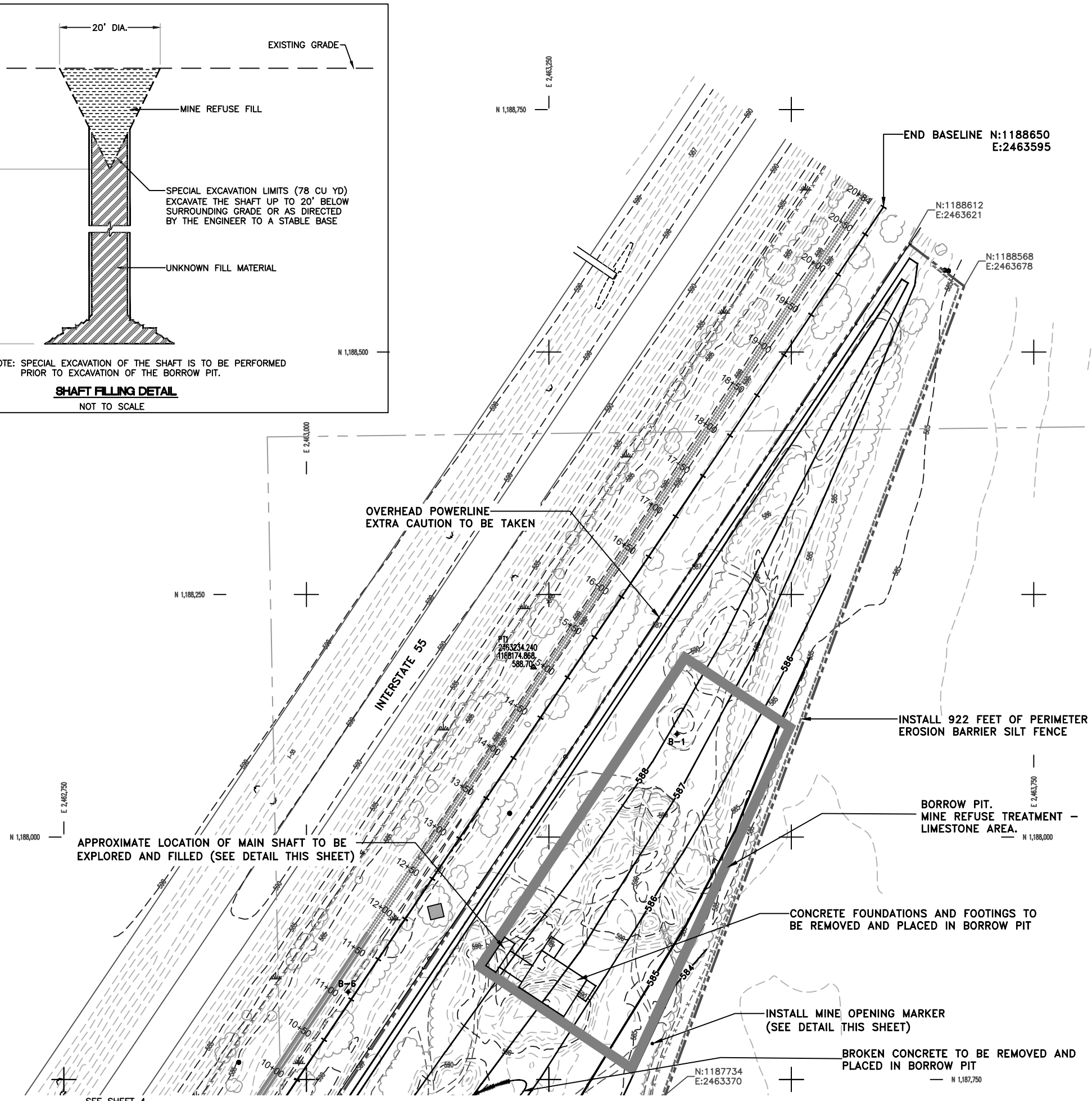
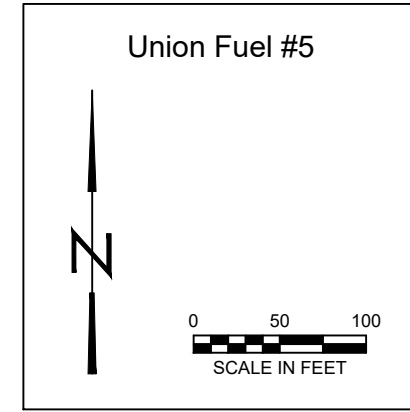


**NOTES:**  
DUE TO THE UNKNOWN CONDITIONS THAT EXIST IN AND AROUND THE SHAFT, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN PERFORMING WORK NEAR THE SHAFT. THE ENGINEER RESERVES THE RIGHT TO INCREASE OR DECREASE THE QUANTITY FOR SPECIAL EXCAVATION AND BACKFILLING MATERIALS AS DETERMINED BY THE EXACT CONDITIONS ENCOUNTERED DURING SPECIAL EXCAVATION.

LOCATIONS OF CONCRETE FOUNDATIONS AND BROKEN CONCRETE ARE APPROXIMATE. OTHER AREAS CONTAINING BROKEN CONCRETE MAY EXIST. ALL CONCRETE SHALL BE PLACED IN THE BORROW PIT, COVERED WITH MINE REFUSE AND THEN TOPPED WITH AT LEAST 3 FEET OF CLEAN SOIL.

--- 400 ---	EXISTING CONTOUR
— 400 —	PROPOSED CONTOUR
— — — —	CONSTRUCTION LIMITS
— — — —	EDGE OF ROAD
~~~~~	TREELINE
- - - - -	EDGE OF WATER
- - - - -	PERIMETER EROSION BARRIER SILT FENCE
■	BORROW PIT
△	SURVEY CONTROL POINT
B-4 +	BORING

Legend



State of Illinois  
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Drawn By: V. Patel	Date: 4/2019
Checked By: M-L. Flowers	5/2019
	7/2019

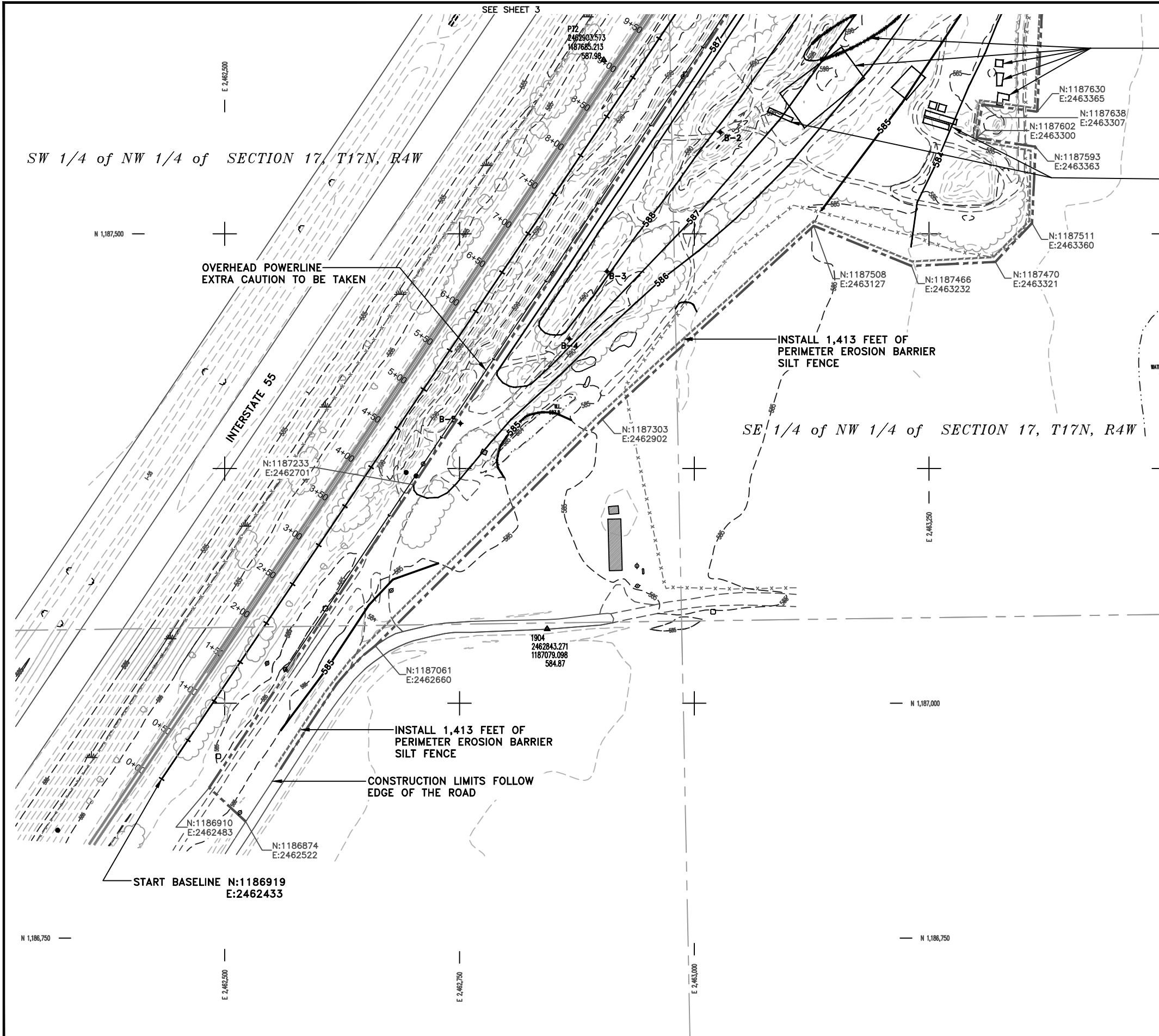
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Existing & Proposed  
Conditions  
Sheet  
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SW 1/4 of NW 1/4 of SECTION 17, T17N, R4W

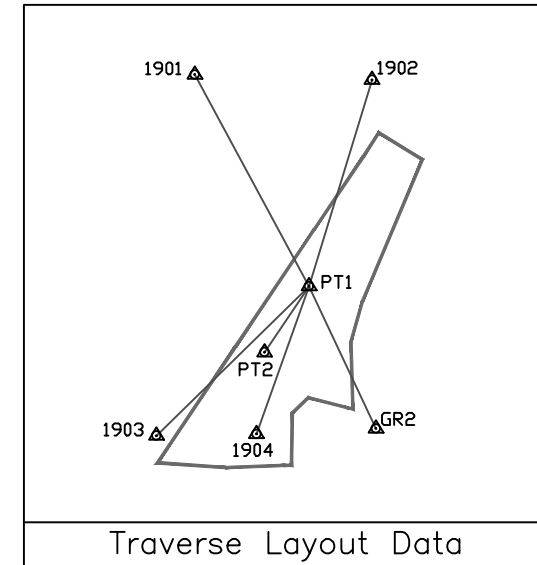
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CONCRETE FOUNDATIONS, FOOTINGS AND BROKEN CONCRETE TO BE REMOVED AND PLACED IN BORROW PIT.

CONCRETE FOUNDATIONS AND FOOTINGS TO BE REMOVED AND PLACED IN BORROW PIT.

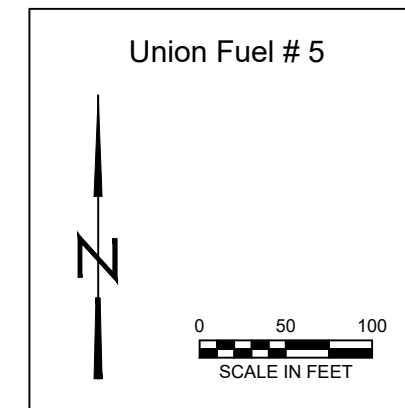
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Traverse Layout Data

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— — — —	EDGE OF ROAD
~~~~~	TREELINE
- - - - -	EDGE OF WATER
- x - x - x -	PERIMETER EROSION BARRIER SILT FENCE
▲	SURVEY CONTROL POINT
B-4+	BORING

Legend



State of Illinois  
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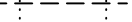
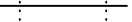






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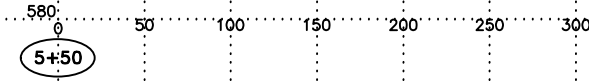
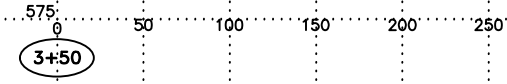
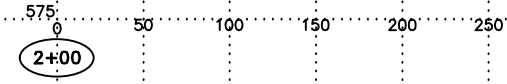
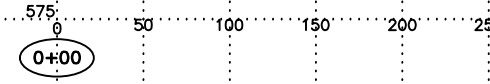
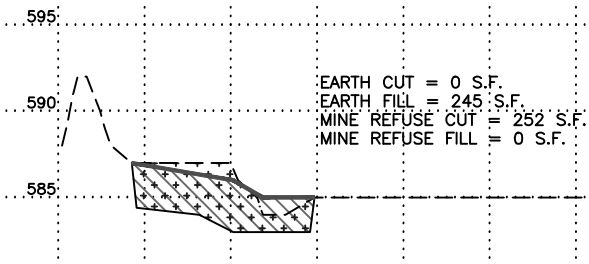
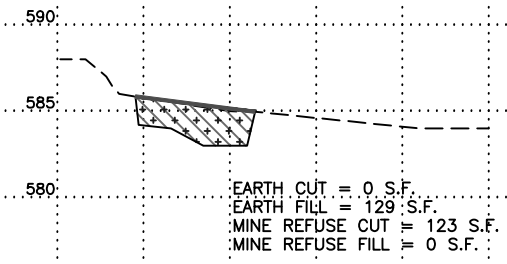
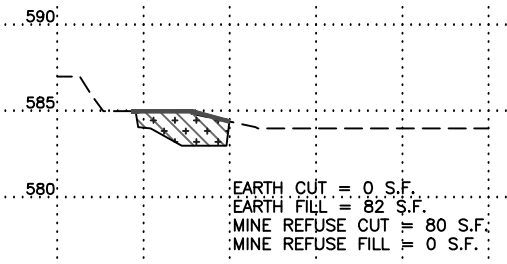
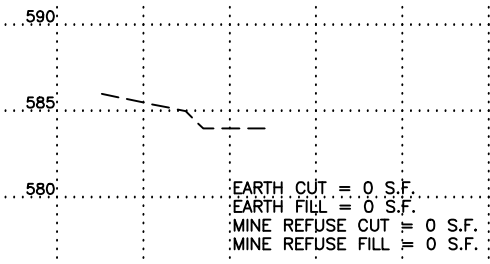
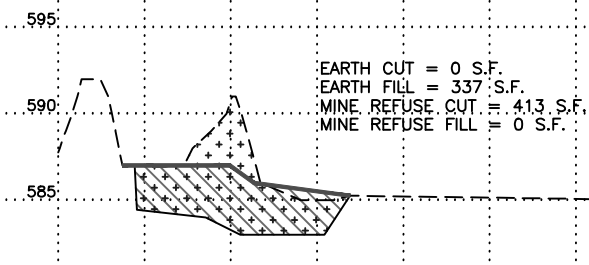
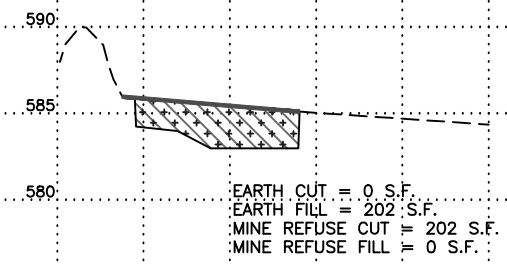
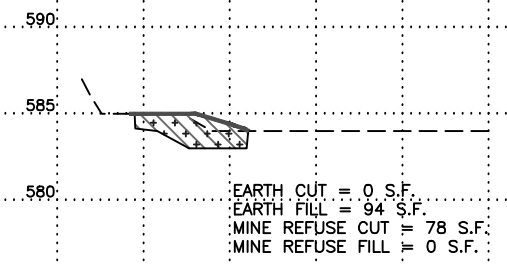
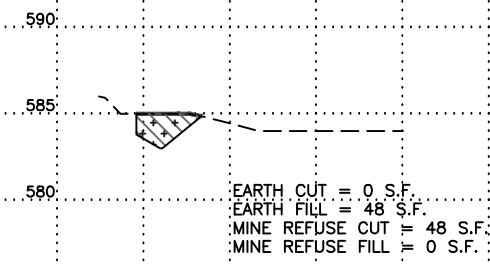
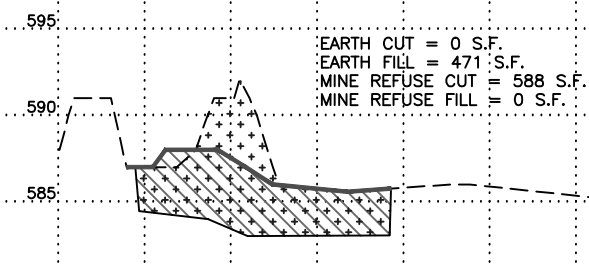
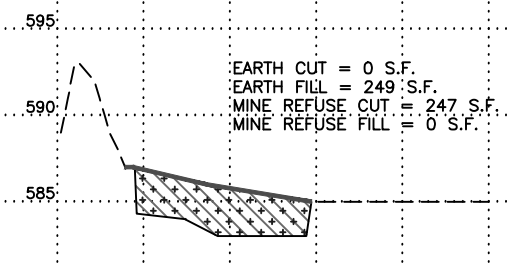
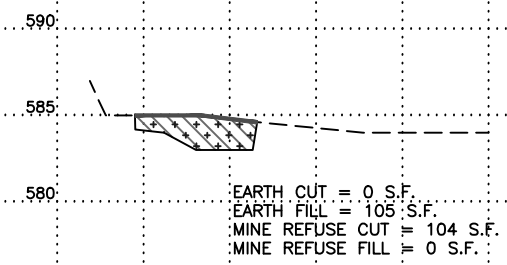
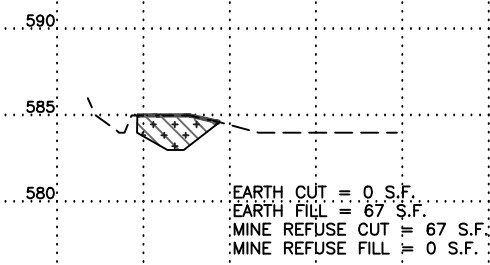
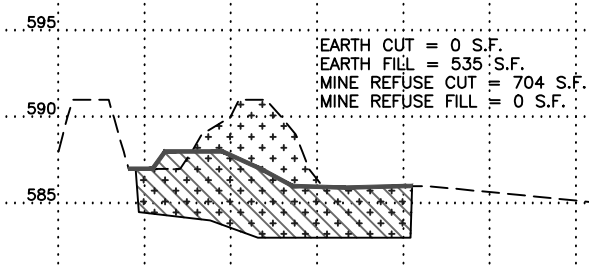
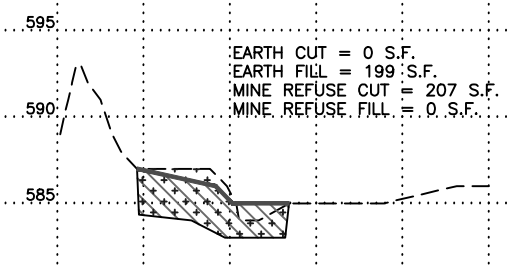
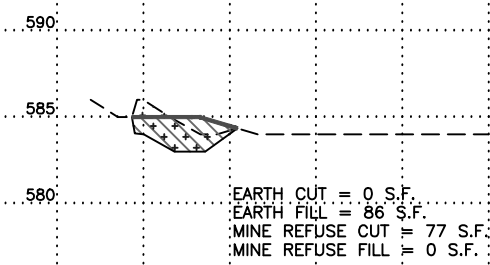
Drawn By: V. Patel  
Checked By: M-L. Flowers, T. Feught  
Date: 4/2019, 5/2019, 7/2019

Existing & Proposed  
Conditions  
Sheet  
4 of 9

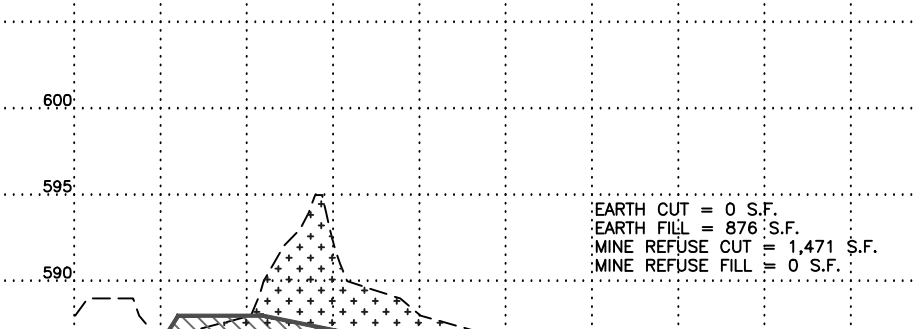
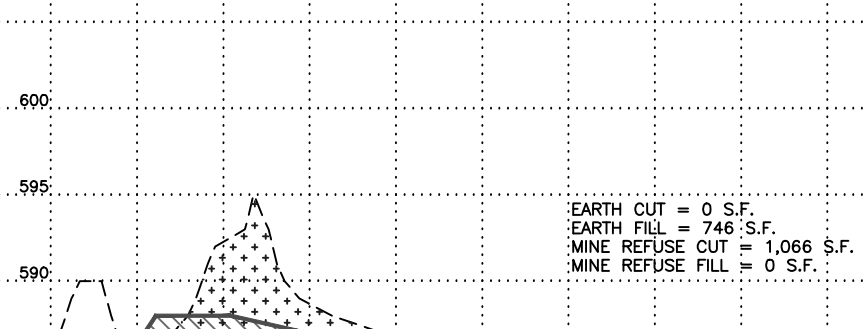
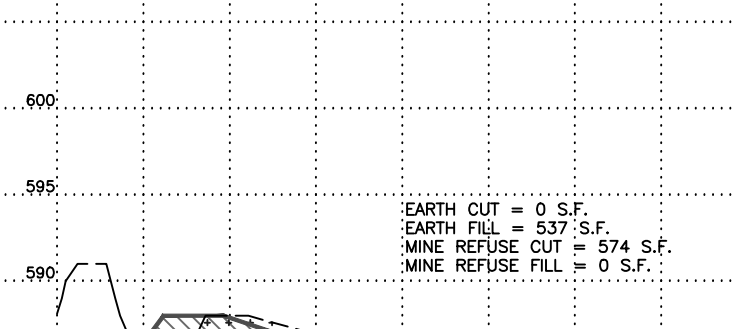
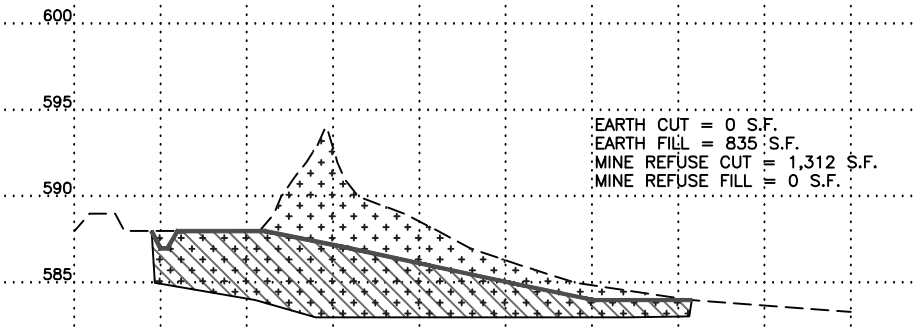
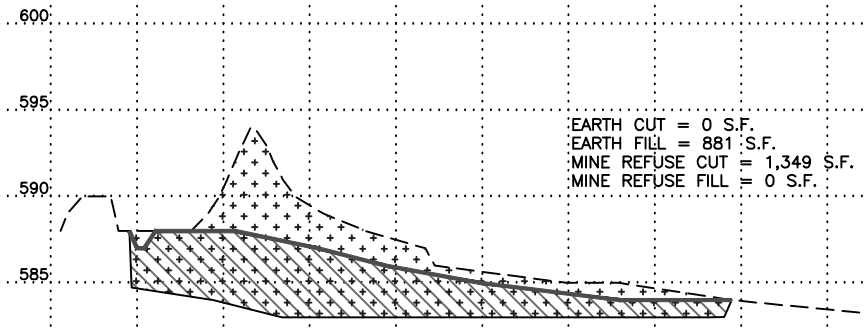
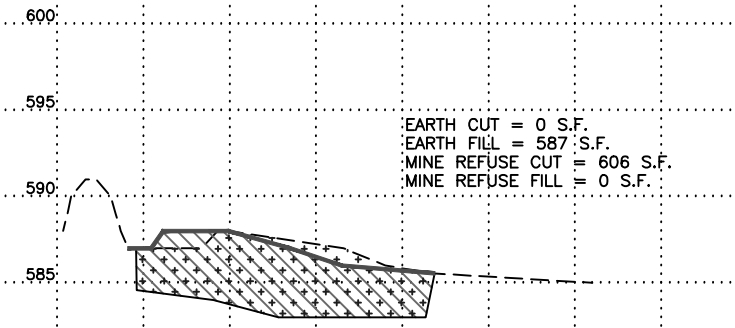
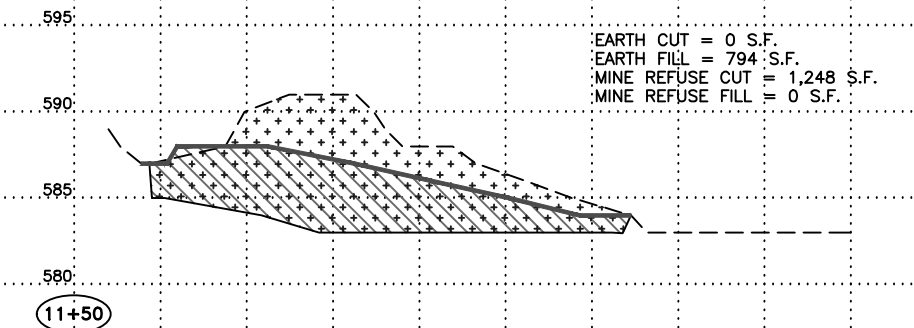
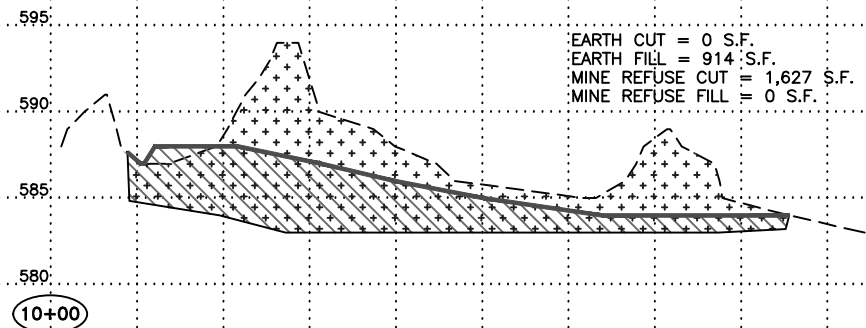
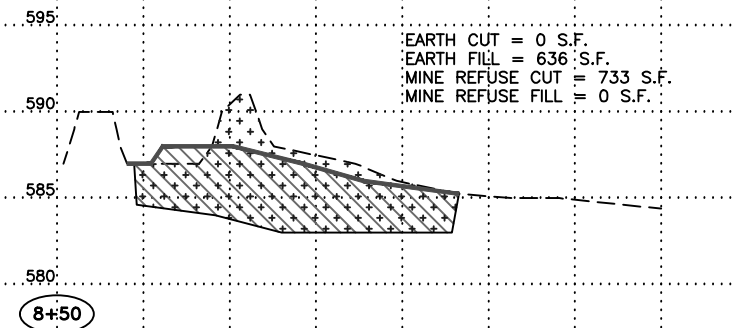
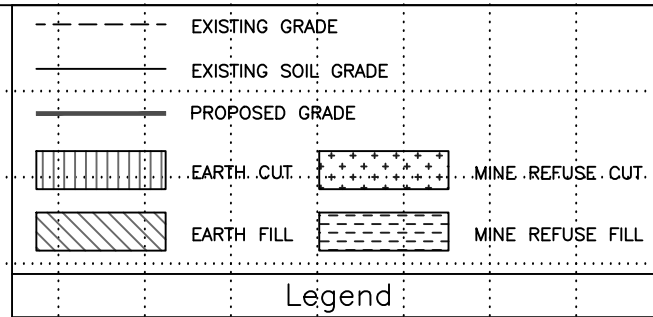
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Legend

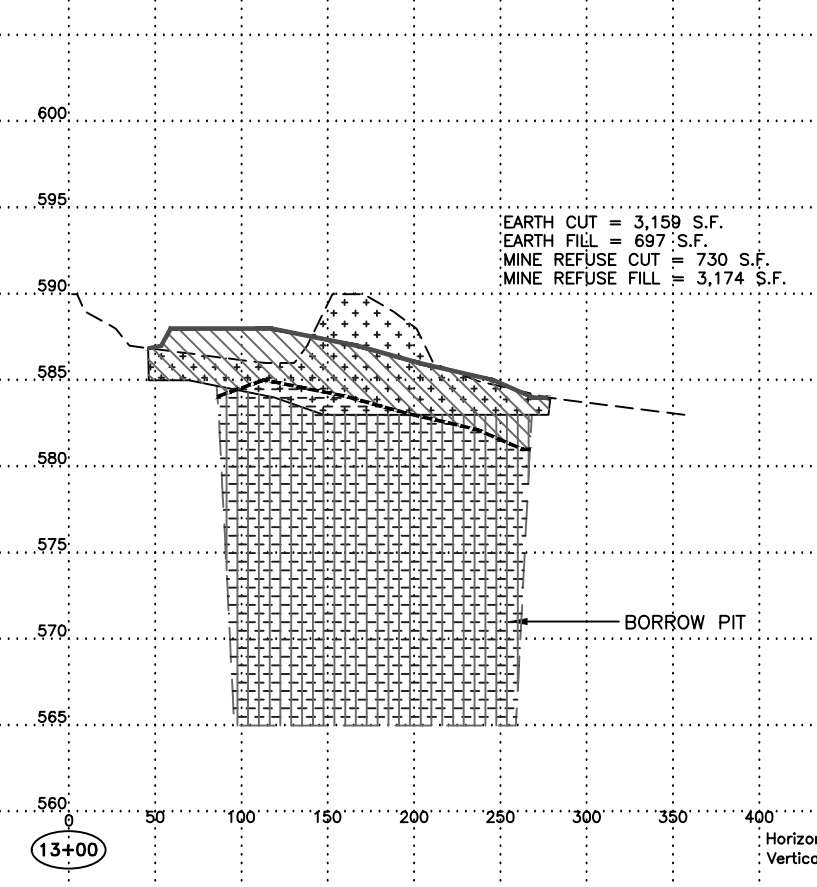
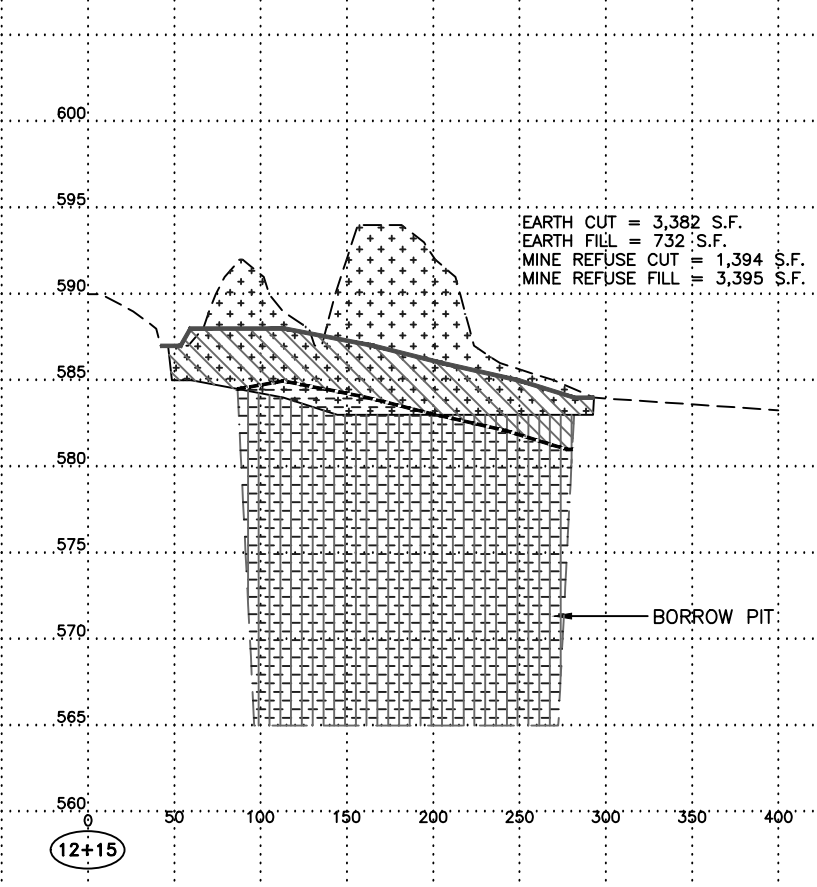
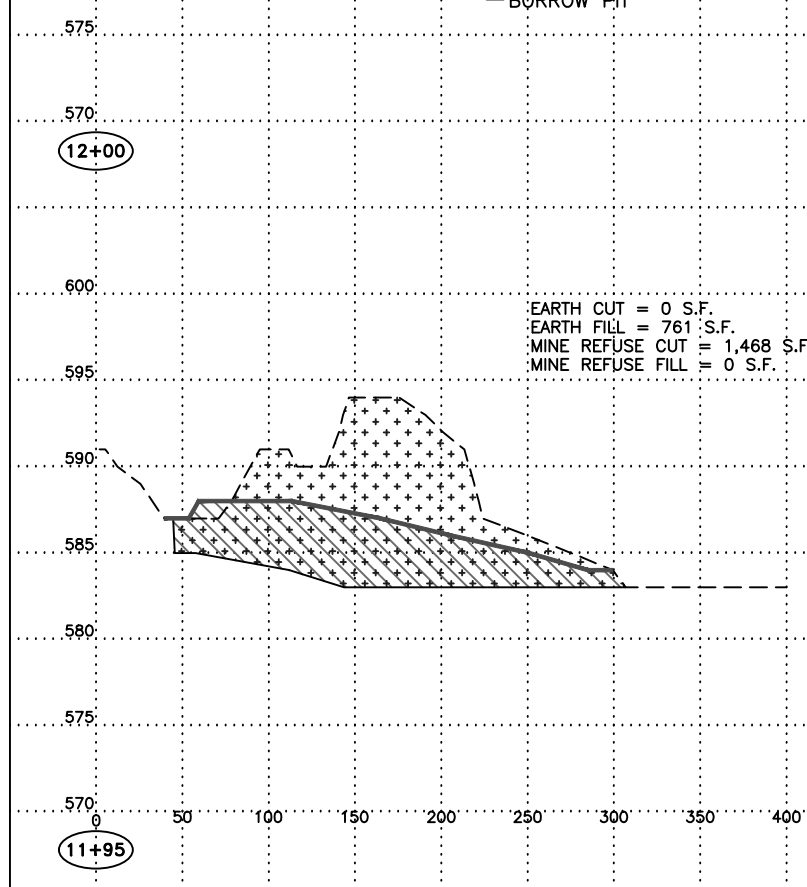
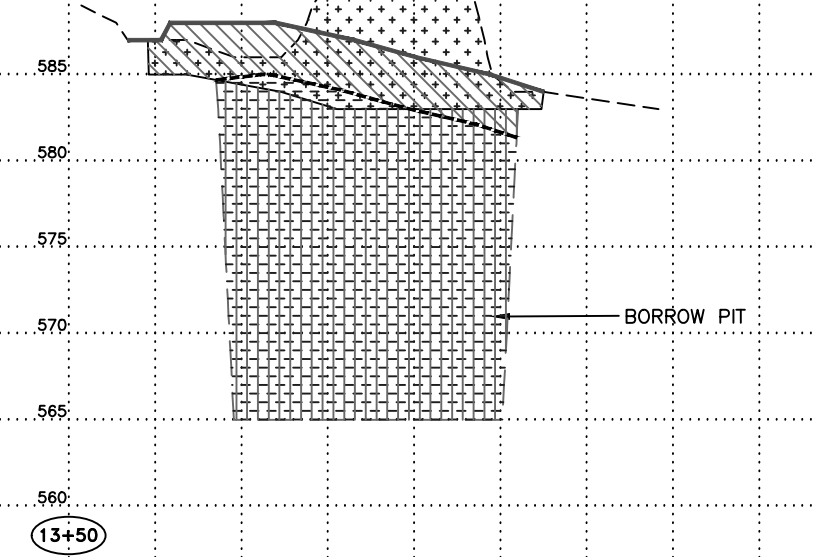
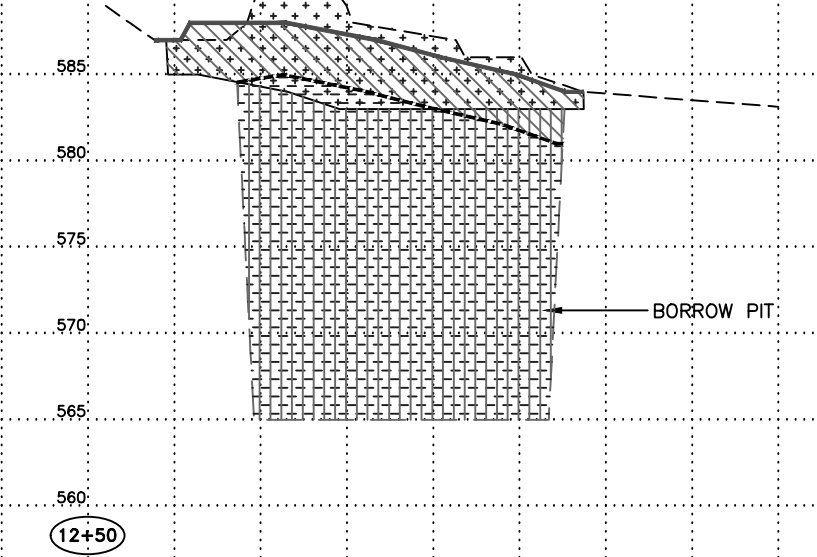
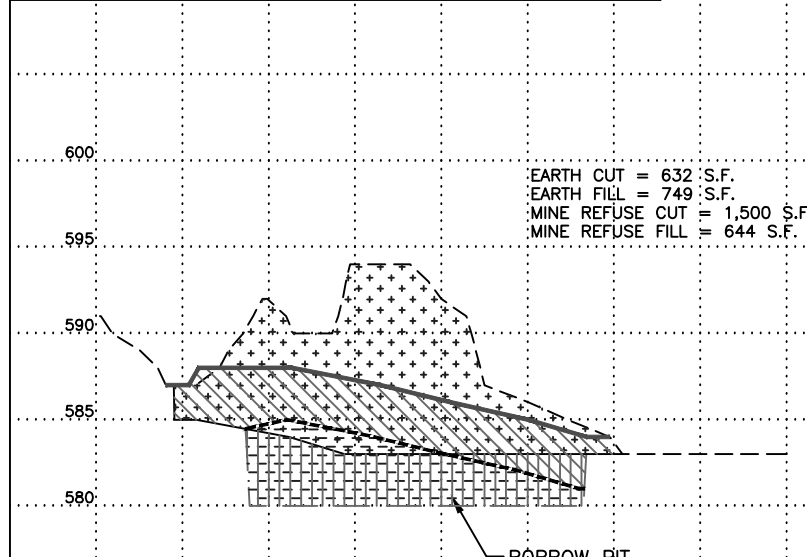
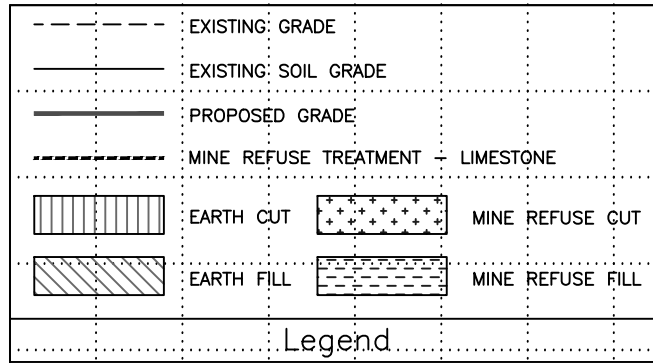
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	PROPOSED GRADE		EARTH CUT
	EARTH FILL		MINE REFUSE CUT
	MINE REFUSE FILL		MINE REFUSE FILL



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Vertical Scale 5

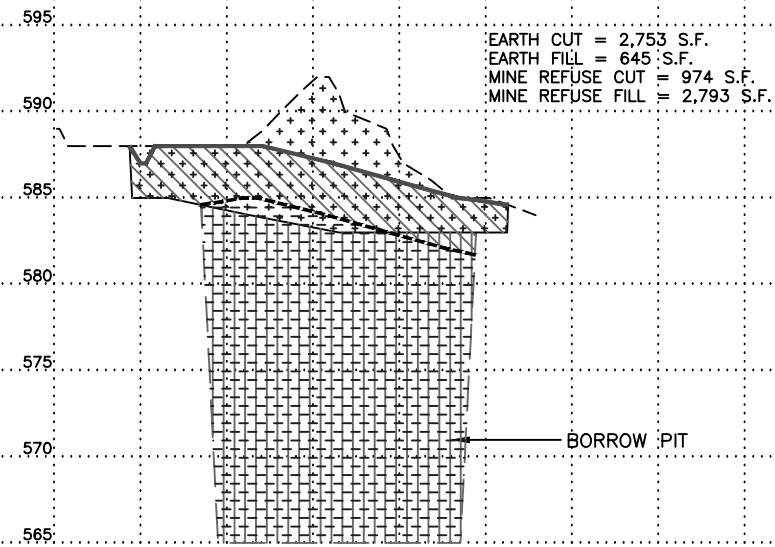
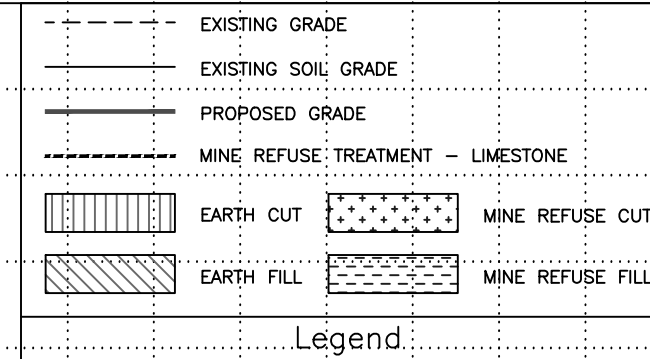


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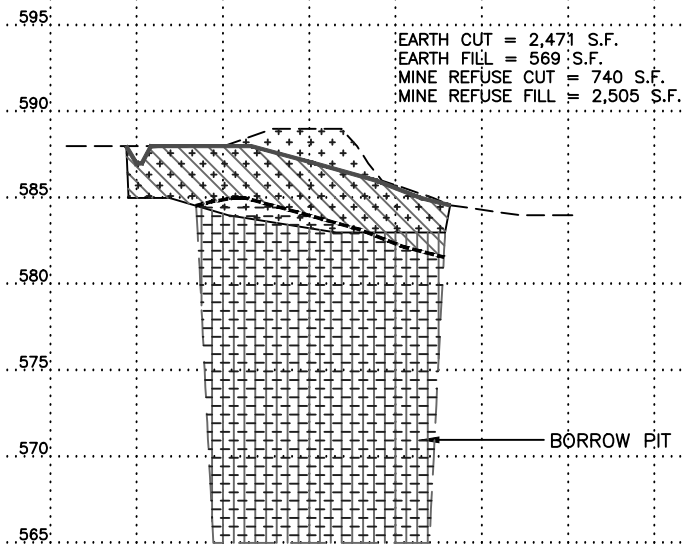


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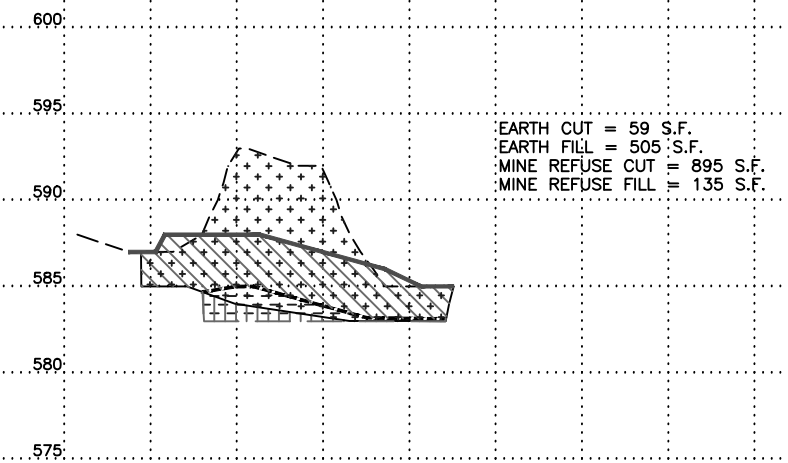
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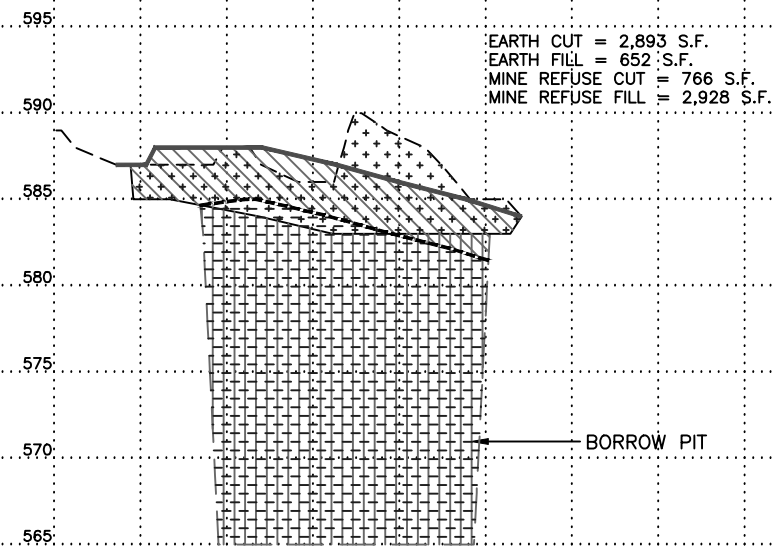
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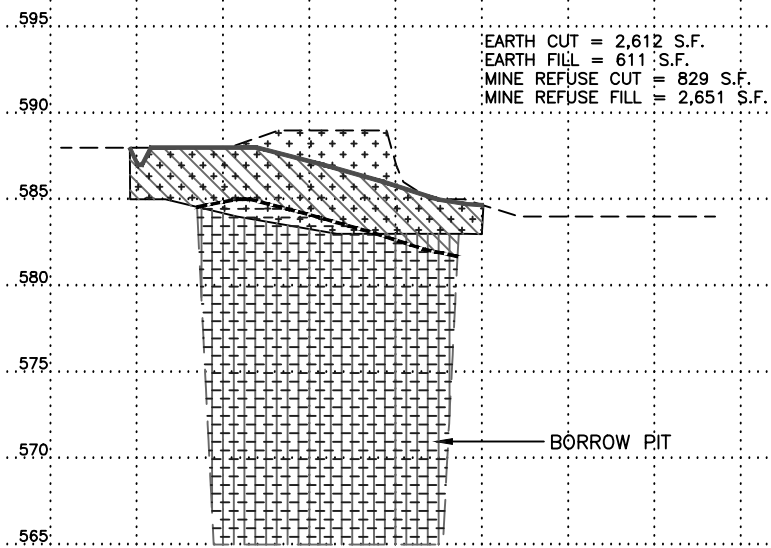
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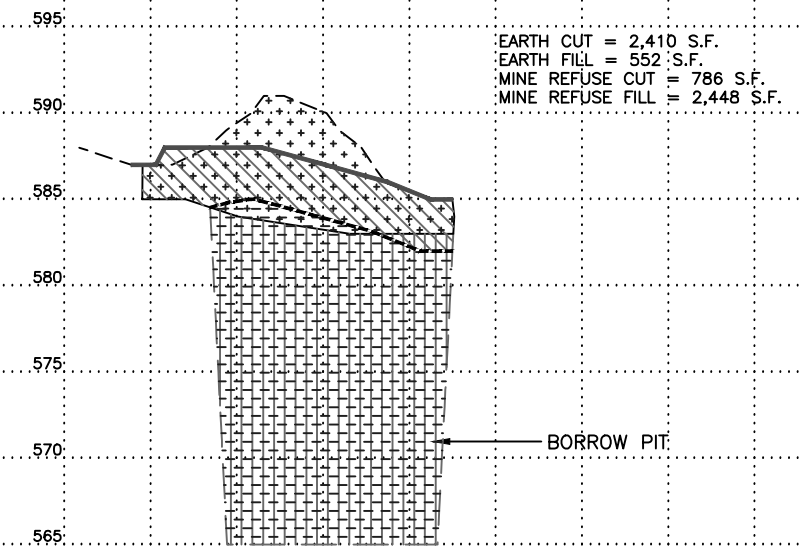
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14+00



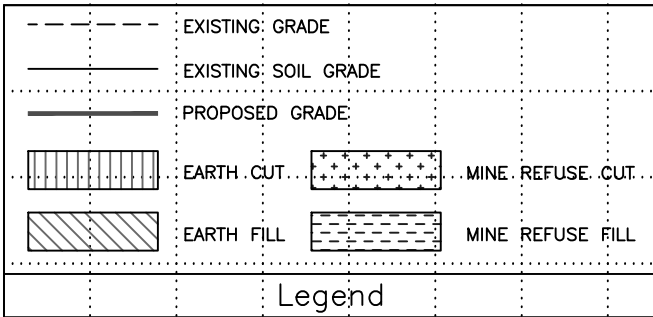
15+00



15+71

Horizontal Scale 50  
Vertical Scale 5





EARTH CUT = 0 S.F.  
 EARTH FILL = 480 S.F.  
 MINE REFUSE CUT = 520 S.F.  
 MINE REFUSE FILL = 0 S.F.

17+00

EARTH CUT = 0 S.F.  
 EARTH FILL = 495 S.F.  
 MINE REFUSE CUT = 613 S.F.  
 MINE REFUSE FILL = 0 S.F.

16+50

EARTH CUT = 0 S.F.  
 EARTH FILL = 541 S.F.  
 MINE REFUSE CUT = 775 S.F.  
 MINE REFUSE FILL = 0 S.F.

16+00

EARTH CUT = 0 S.F.  
 EARTH FILL = 287 S.F.  
 MINE REFUSE CUT = 251 S.F.  
 MINE REFUSE FILL = 0 S.F.

19+00

EARTH CUT = 0 S.F.  
 EARTH FILL = 331 S.F.  
 MINE REFUSE CUT = 270 S.F.  
 MINE REFUSE FILL = 0 S.F.

18+50

EARTH CUT = 0 S.F.  
 EARTH FILL = 377 S.F.  
 MINE REFUSE CUT = 268 S.F.  
 MINE REFUSE FILL = 0 S.F.

18+00

EARTH CUT = 0 S.F.  
 EARTH FILL = 430 S.F.  
 MINE REFUSE CUT = 394 S.F.  
 MINE REFUSE FILL = 0 S.F.

17+50

EARTH CUT = 0 S.F.  
 EARTH FILL = 0 S.F.  
 MINE REFUSE CUT = 0 S.F.  
 MINE REFUSE FILL = 0 S.F.

20+84.15

EARTH CUT = 0 S.F.  
 EARTH FILL = 13 S.F.  
 MINE REFUSE CUT = 0 S.F.  
 MINE REFUSE FILL = 0 S.F.

20+50

EARTH CUT = 0 S.F.  
 EARTH FILL = 156 S.F.  
 MINE REFUSE CUT = 142 S.F.  
 MINE REFUSE FILL = 0 S.F.

20+00

EARTH CUT = 0 S.F.  
 EARTH FILL = 237 S.F.  
 MINE REFUSE CUT = 210 S.F.  
 MINE REFUSE FILL = 0 S.F.

19+50

Horizontal Scale 50  
 Vertical Scale 5