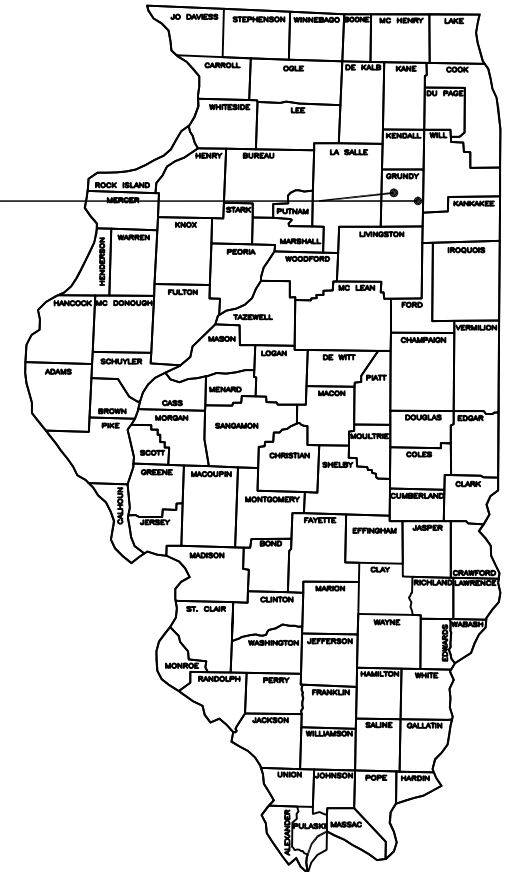


**State of Illinois**  
**Department of Natural Resources**  
**Office of Mines and Minerals**  
**Abandoned Mined Lands Reclamation Division**

Northwestern & Diamond #5 Mines  
 Grundy County



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

Northwestern & Diamond #5 Mines  
 Reclamation Project  
 AML-GGdE-1407  
 Grundy County  
 2LR

**Pre-Bid Meeting:**

A pre-bid meeting for this project is scheduled for 10:00 A.M.  
 Friday, November 14, 2014 at the city hall in Morris, Illinois  
 at the Intersection of Illinois Route 47 and Chapin Street.

*Certified Copy*

**SCHEDULE OF DRAWINGS:**

1. Cover Sheet
  2. Summary of Quantities/General Notes/Location Map
  3. Existing and Proposed Conditions - Northwestern
  - 4-8. Cross-Sections - Northwestern
  9. Existing and Proposed Conditions - Diamond #5
  - 10-13. Cross-Sections - Diamond #5
  14. Details
- IDOT Standard 280001-01


**Contract No. M1407**

Prepared By IDNR Staff

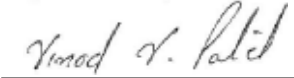
Approved for Bidding:

  
 James Haflinger, Acting Director  
 Office of Mines and Minerals

Approved By:

  
 Greg Pinto, Acting Manager  
 AMLR Division

Approved By:

  
 Vinodchandra V. Patel  
 IL Licensed Professional Engineer  
 No. 062.046043



Summary of Quantities								
Item No.	#	Item	Section	Quantities			Unit	Rates/Remarks
				Northwestern	Diamond #5 Mine	Totals		
NRM20110	1	Special Clearing	201	0.5	0.5	1	L SUM	
NRM20210	2	Earth Excavation	202	39,157	12,291	51,448	CU YD	Compact per Section 205
NRM20230	3	Mine Refuse Excavation	202	-	19,287	19,287	CU YD	Compact per Section 205
NRM21510	4	Special Excavation	215	-	148	148	CU YD	
NRM21621	5	CA Fill - CA 1	216	-	20	20	TON	
NRM21626	6	CA Fill - CA 6	216	-	230	230	TON	
NRM21643	7	Rock Fill - RR 3	216	-	26	26	TON	
NRM25040	8	Nitrogen Fertilizer Nutrient	250	2,736	1,200	3,936	POUND	See Schedule - This Sheet
NRM25050	9	Phosphorous Fertilizer Nutrient	250	2,280	1,000	3,280	POUND	See Schedule - This Sheet
NRM25060	10	Potassium Fertilizer Nutrient	250	5,700	2,500	8,200	POUND	See Schedule - This Sheet
NRM25070	11	Agricultural Ground Limestone	250	57	32	89	TON	See Schedule - This Sheet
NRM25090	12	Seeding	250	11.4	5.0	16.4	ACRE	See Schedule - This Sheet
25100115	13	Mulch, Method 2, Procedure 1	IDOT 251	11.4	5.0	16.4	ACRE	See Schedule - This Sheet
NRM25510	14	Mine Refuse Treatment - Limestone	255	-	56	56	TON	20 Tons/Acre
NRM25620	15	Incorporation - Mulch	256	11.4	5.0	16.4	ACRE	See Schedule - This Sheet
NRM25810	16	Mowing	258	11.4	5.0	16.4	ACRE	
28100107	17	Stone Riprap, Class A4	IDOT 281	195	-	195	SQ YD	
28200200	18	Filter Fabric	IDOT 282	195	-	195	SQ YD	
NRM28610	19	Special Excelsior Blanket	286	2,064	-	2,064	SQ YD	
NRM50101	20	Removal of Existing Structures	501	-	1	1	L SUM	
NRM55303	21	Drainage Tile - 4" Dia. Perforated Corrugated Poly (PE) Tubing w/ Sleeve	553	-	670	670	FEET	
NRM55306	22	Pipe Wye 4"	553	-	1	1	EACH	
NRM55307	23	Pipe End Cap 4"	553	-	1	1	EACH	
NRM55309	24	Pipe Tee 6" x 4"	553	-	1	1	EACH	
NRM55318	25	Pipe Inlet 6"	553	-	1	1	EACH	
NRM61410	26	Dewatering Impoundment	614	1	-	1	L SUM	
66500105	27	Woven Wire Fence - 4' High	IDOT 665	-	1,010	1,010	FEET	
NRM66610	28	Mine Opening Marker	666	-	2	2	EACH	
NRM67110	29	Mobilization (Max. 6% of Bid)	671	0.5	0.5	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-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.

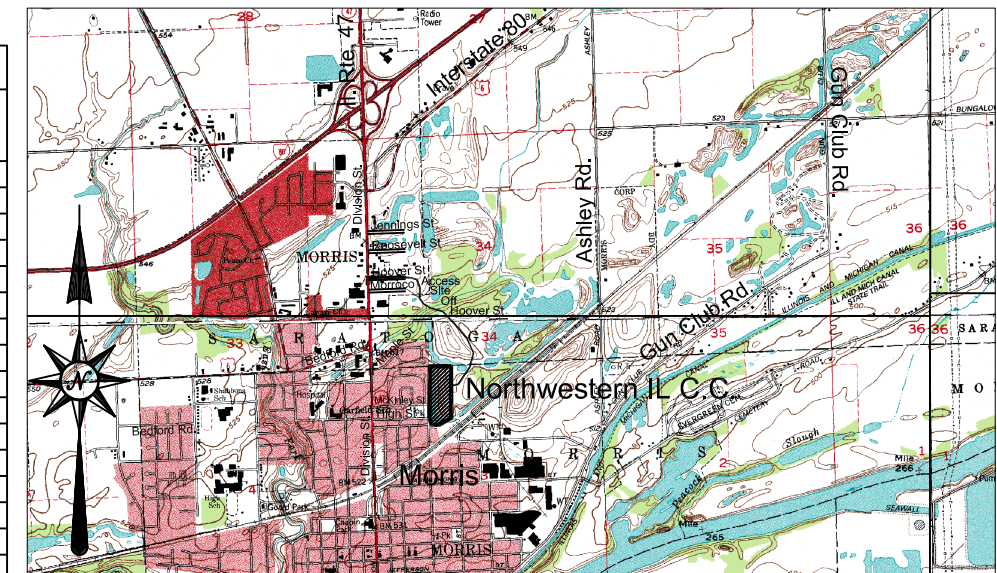
**ACID WATER TREATMENT** - If acid mine drainage treatment is determined necessary by the Engineer, and not otherwise specified in the plans, any water treatment will be paid for in accordance with Article 109.04 of the specifications.

**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.

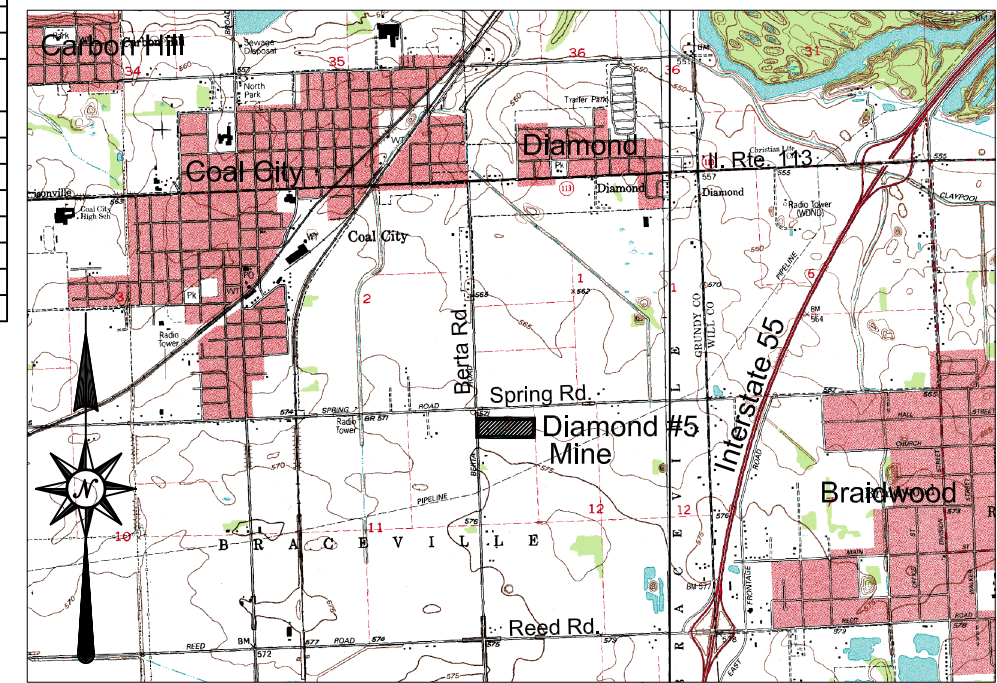
**AGRICULTURAL GROUND LIMESTONE** - Immediately prior to seed bed preparation, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the rates specified in the plans.

**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 specified amounts of soil.



Location Map - Northwestern IL C.C.



Location Map - Diamond #5 Mine

Northwestern IL C.C. Site				
Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing				
ITEM (Unit)	August 1st, 2015 - Sept. 1st, 2015	April 1st, 2016 - May 1st, 2016	May 1st, 2016 - June 1st, 2016	TOTAL QUANTITY
SEEDING (Acres)	11.4			11.4
AGRICULTURAL GROUND LIMESTONE (Tons)	57			57
NITROGEN FERTILIZER NUTRIENT (Pounds)	1,368		1,368	2,736
PHOSPHOROUS FERTILIZER NUTRIENT (Pounds)	1,140		1,140	2,280
POTASSIUM FERTILIZER NUTRIENT (Pounds)	2,850		2,850	5,700
MULCH, METHOD 2 PROCEDURE 1 (tons)	11.4 Acres			11.4
MOWING (acres)		11.4		11.4

Diamond #5 Mine Site				
Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing				
ITEM (Unit)	March 1st, 2015 - April 20th, 2015	June 15th, 2015 - July 15th, 2015	August 1st, 2015 - Sept. 1st, 2015	TOTAL QUANTITY
SEEDING (Acres)	5			5
AGRICULTURAL GROUND LIMESTONE (Tons)	32			32
NITROGEN FERTILIZER NUTRIENT (Pounds)	600		600	1,200
PHOSPHOROUS FERTILIZER NUTRIENT (Pounds)	500		500	1,000
POTASSIUM FERTILIZER NUTRIENT (Pounds)	1,250		1,250	2,500
MULCH, METHOD 2 PROCEDURE 1 (Tons)	5 Acres			5
MOWING (acres)		5 Acres		5



ALL COST ASSOCIATED WITH ADJUSTING/EXTENDING CULVERTS IS TO BE CONSIDERED INCIDENTAL TO STONE RIPRAP A-4 DITCH

INSTALL 49 S.Y. OF STONE RIPRAP A-4 DITCH AT DISCHARGE OF EXISTING CMP CULVERT.  
CULVERT TO BE ADJUSTED/EXTENDED AS NECESSARY TO CONFORM TO PROPOSED GRADES

INSTALL 146 S.Y. OF STONE RIPRAP A-4 DITCH AT DISCHARGE OF EXISTING CULVERTS.  
CULVERTS TO BE ADJUSTED/EXTENDED AS NECESSARY TO CONFORM TO PROPOSED GRADES

EXISTING CMP AND CLAY PIPES (SEE NOTE BELOW)

INSTALL 1,042 S.Y. OF SPECIAL EXCELSIOR BLANKET 8' WIDE

INSTALL 1,022 S.Y. OF SPECIAL EXCELSIOR BLANKET 8' WIDE

IMPOUNDMENT TO BE DEWATERED PER SPECIAL PROVISION 614 IN A MANNER THAT ENSURES THE STABILITY OF THE WESTERN EMBANKMENT AND TO THE EXTENT REQUIRED TO FACILITATE EARTH EXCAVATION.

DEWATERING SHALL BE COORDINATED WITH AND SHALL BE AT RATES AND TIMES APPROVED BY THE DIRECTOR OF PUBLIC WORKS FOR THE CITY OF MORRIS, JIM GRETTECORD, PHONE NUMBER 815-942-5063.

EXISTING PUMP STRUCTURE TO BE PROTECTED AT ALL TIMES

NW1/4 of NW1/4 Sec3 T33N-R7E

NE1/4 of NW1/4 Sec3 T33N-R7E

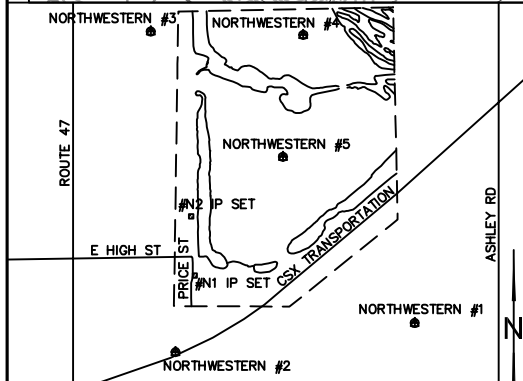
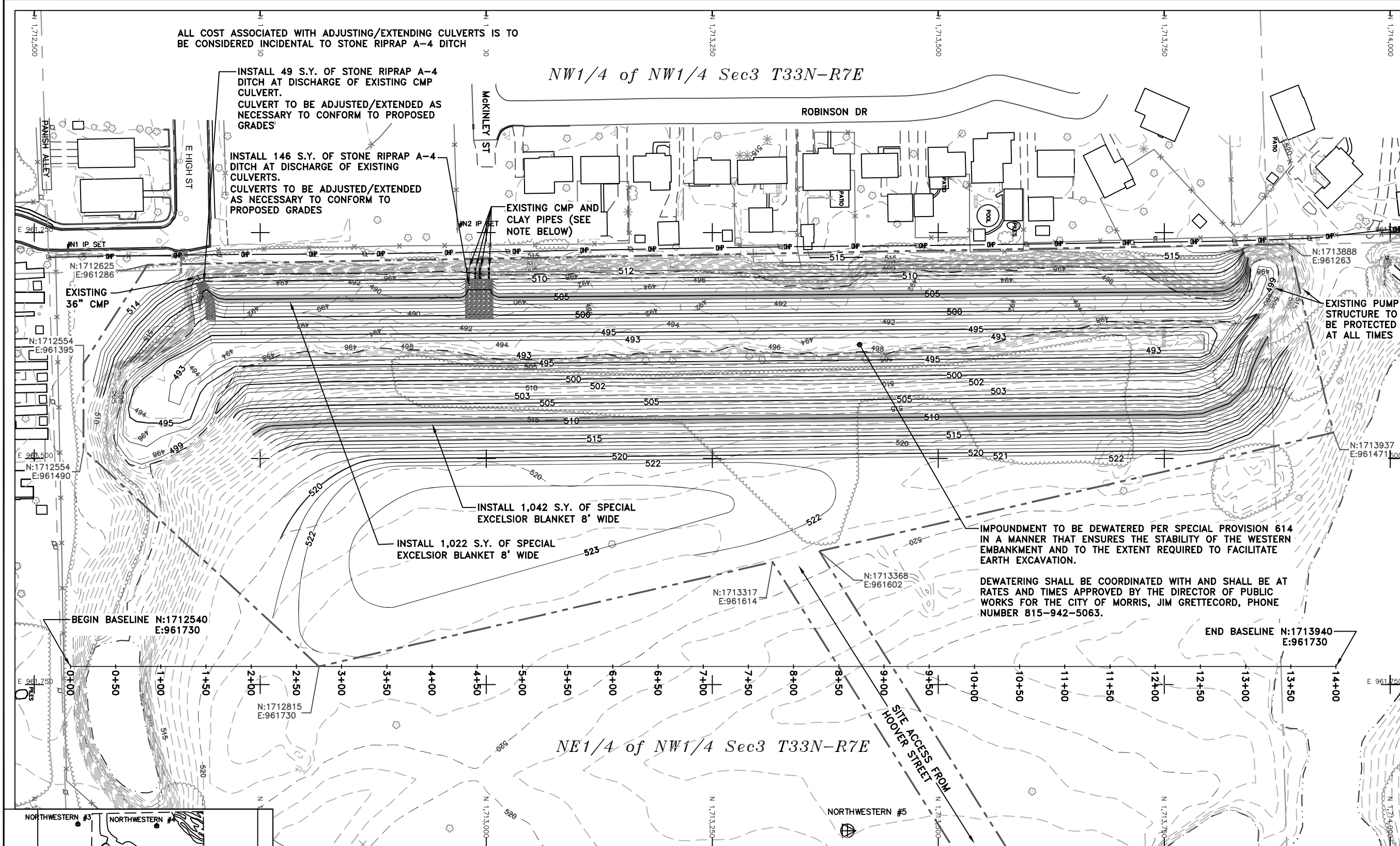
BEGIN BASELINE N:1712540 E:961730

END BASELINE N:1713940 E:961730

N:1712815 E:961730

N:1713317 E:961614

N:1713368 E:961602

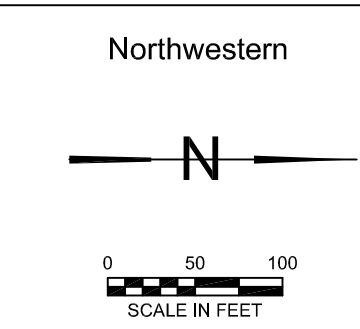


Traverse Layout Data

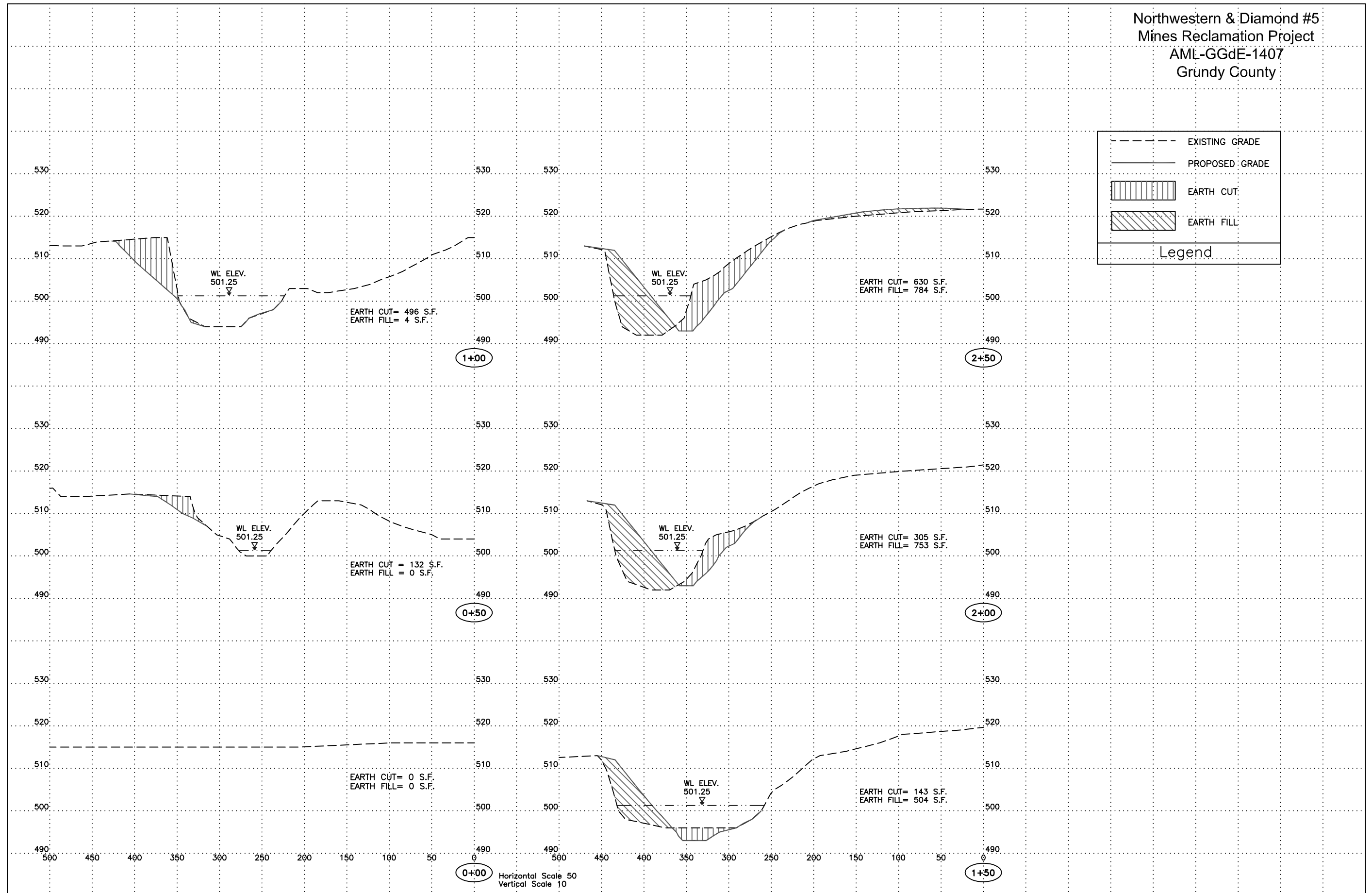
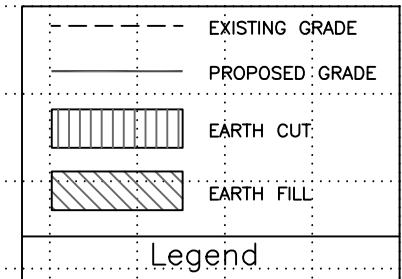
**SPECIAL NOTE:**  
WORK HOURS AT THE NORTHWESTERN C.C. SITE WILL BE RESTRICTED TO MONDAY-FRIDAY FROM 7:00 A.M. TO 6:00 P.M.

CMP AND CLAY PIPES	
17 FEET SOUTH OF THE NORTH RIGHT-OF-WAY 12" CMP	
27 FEET SOUTH OF THE NORTH RIGHT-OF-WAY 12" CLAY	
32 FEET SOUTH OF THE NORTH RIGHT-OF-WAY 12" CLAY	
40 FEET SOUTH OF THE NORTH RIGHT-OF-WAY 24' CMP	

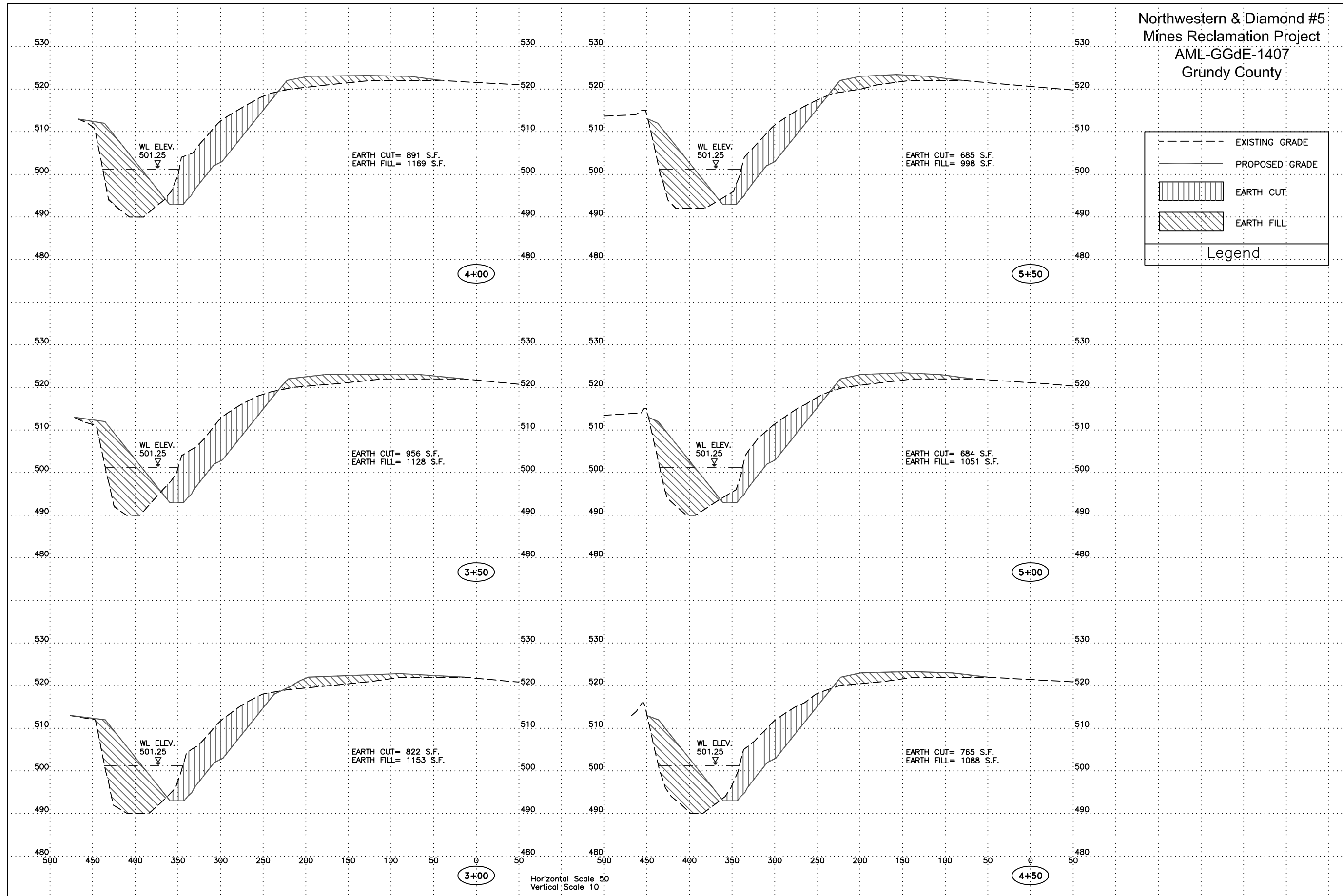
Legend	
— 400 —	EXISTING CONTOUR
— 400 —	PROPOSED CONTOUR
---	CONSTRUCTION LIMITS
—	EDGE OF ROAD
~	TREELINE
- - -	EDGE OF WATER
•	SURVEY CONTROL POINT
▨	SPECIAL EXCELSIOR BLANKET



Northwestern & Diamond #5  
Mines Reclamation Project  
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Grundy County



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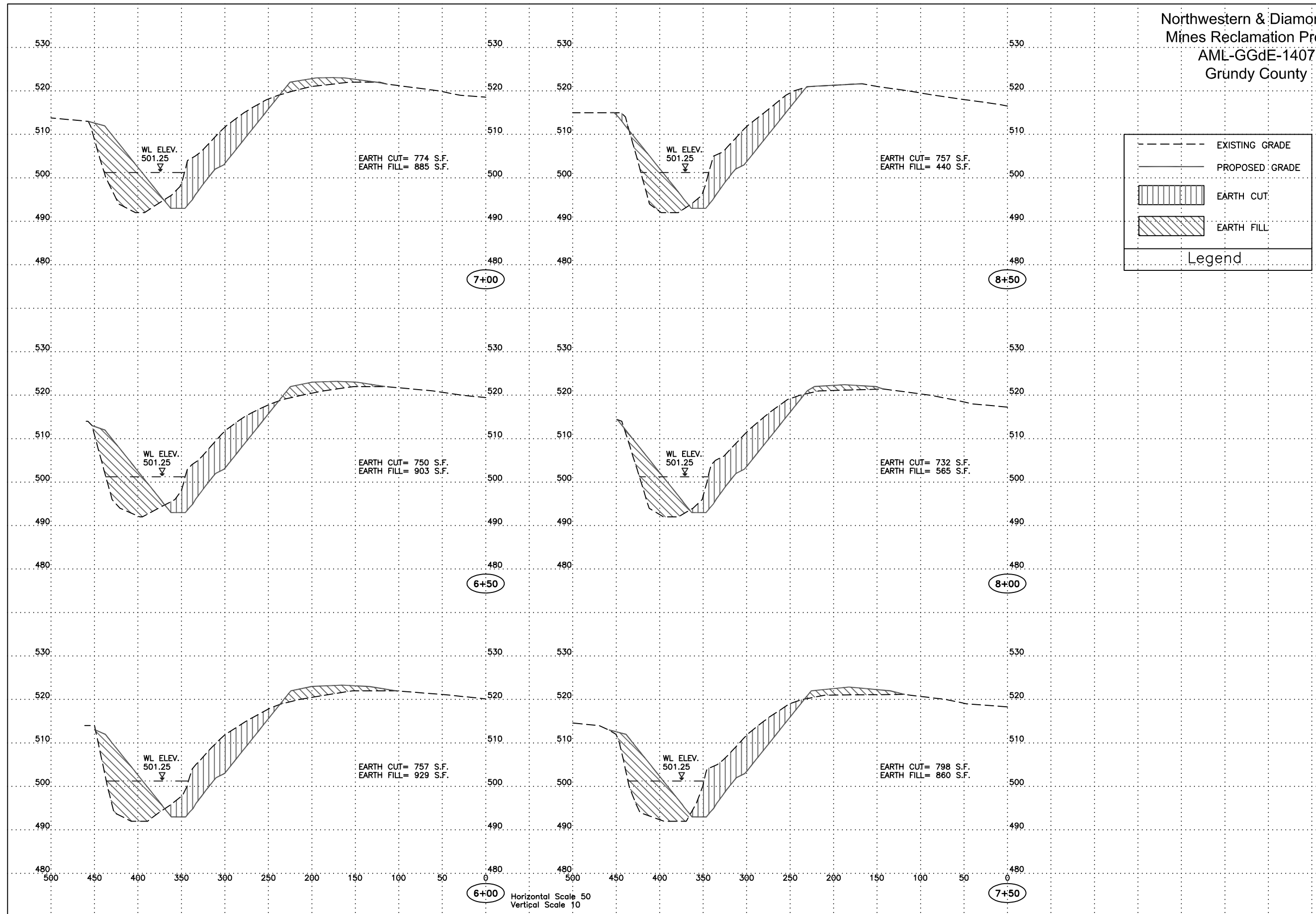


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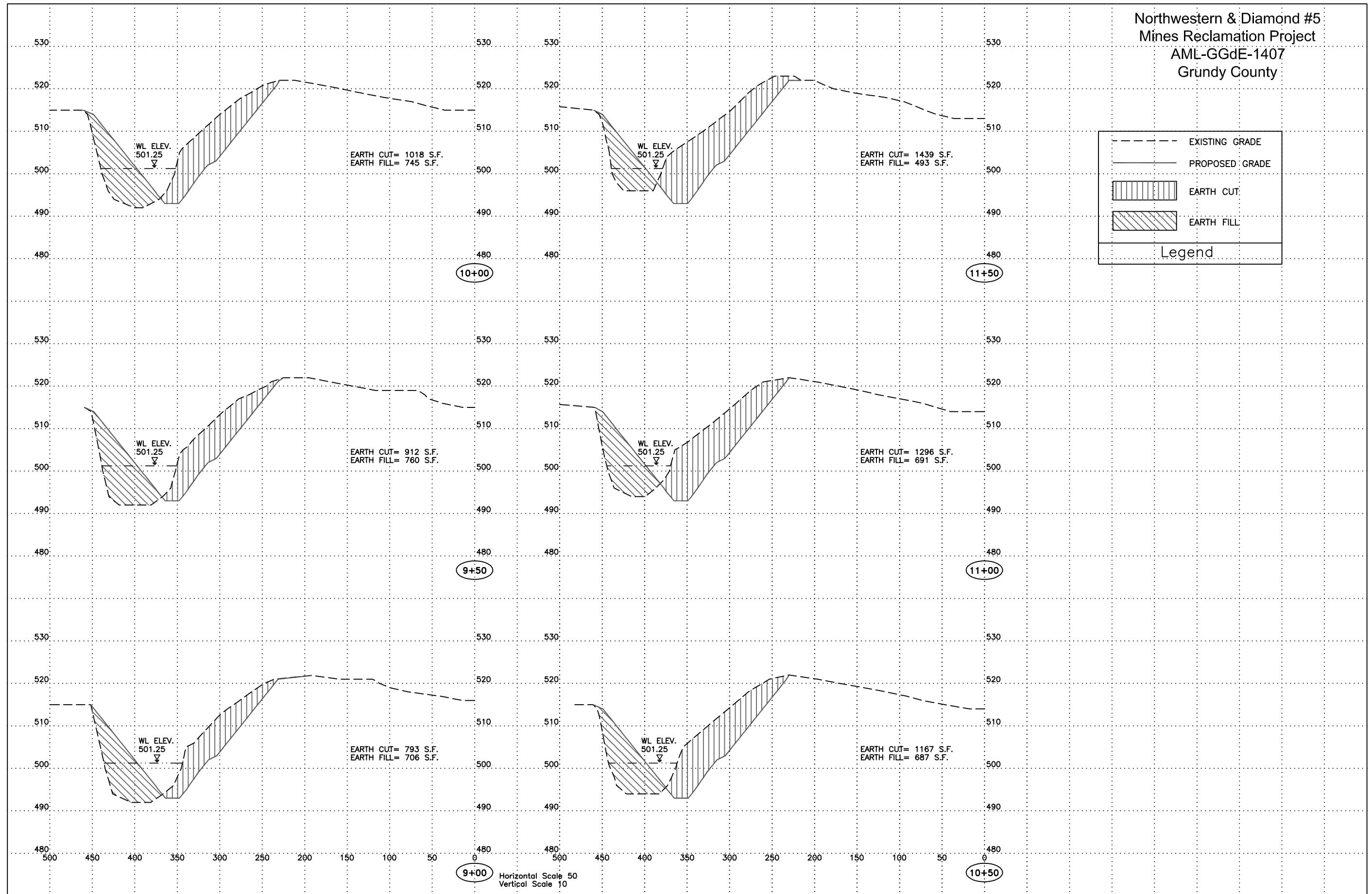
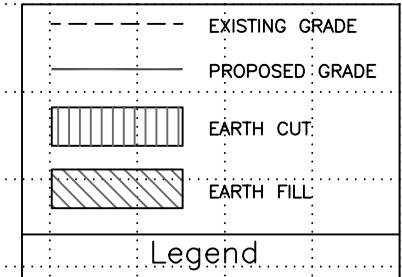
- EXISTING GRADE
- PROPOSED GRADE
- ▨ EARTH CUT
- ▩ EARTH FILL

Horizontal Scale 50  
Vertical Scale 10

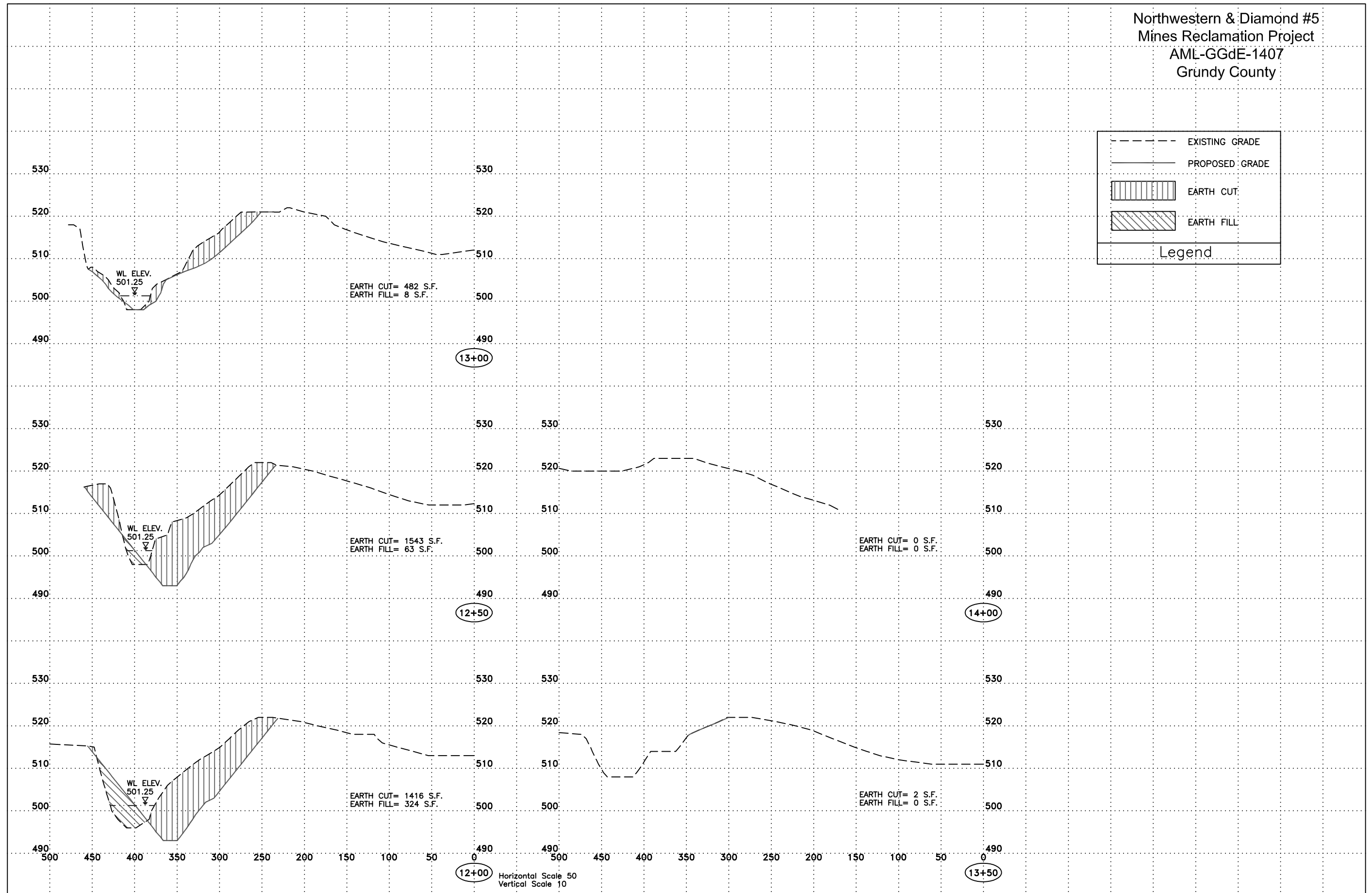
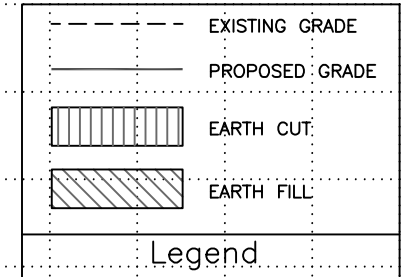
Northwestern & Diamond #5  
Mines Reclamation Project  
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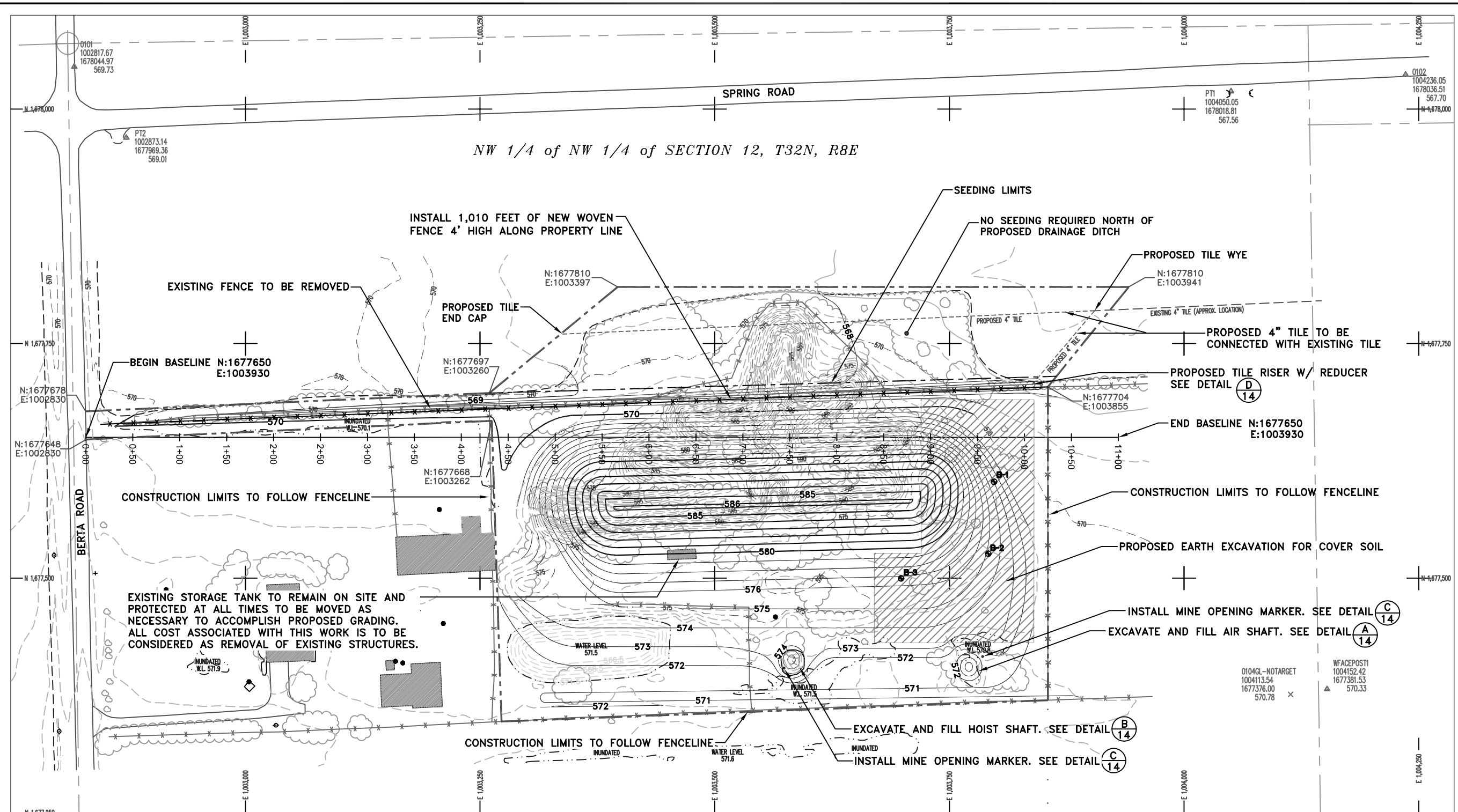
Northwestern & Diamond #5  
Mines Reclamation Project  
AML-GGdE-1407  
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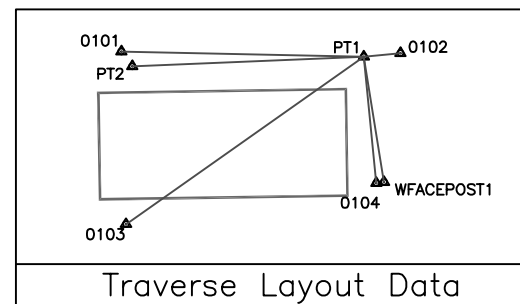




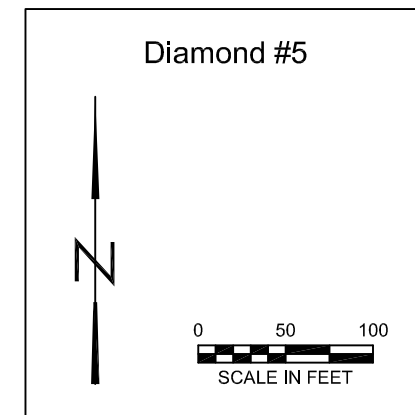


**SPECIAL NOTE:**

AGRICULTURAL FIELD WITHIN CONSTRUCTION LIMITS NORTH OF PROPOSED WOVEN WIRE FENCE TO BE TREATED WITH AGRICULTURAL GROUND LIMESTONE AT A RATE OF 2 TONS/ACRE AND NO SEEDING WILL BE REQUIRED IN AGRICULTURAL FIELD.

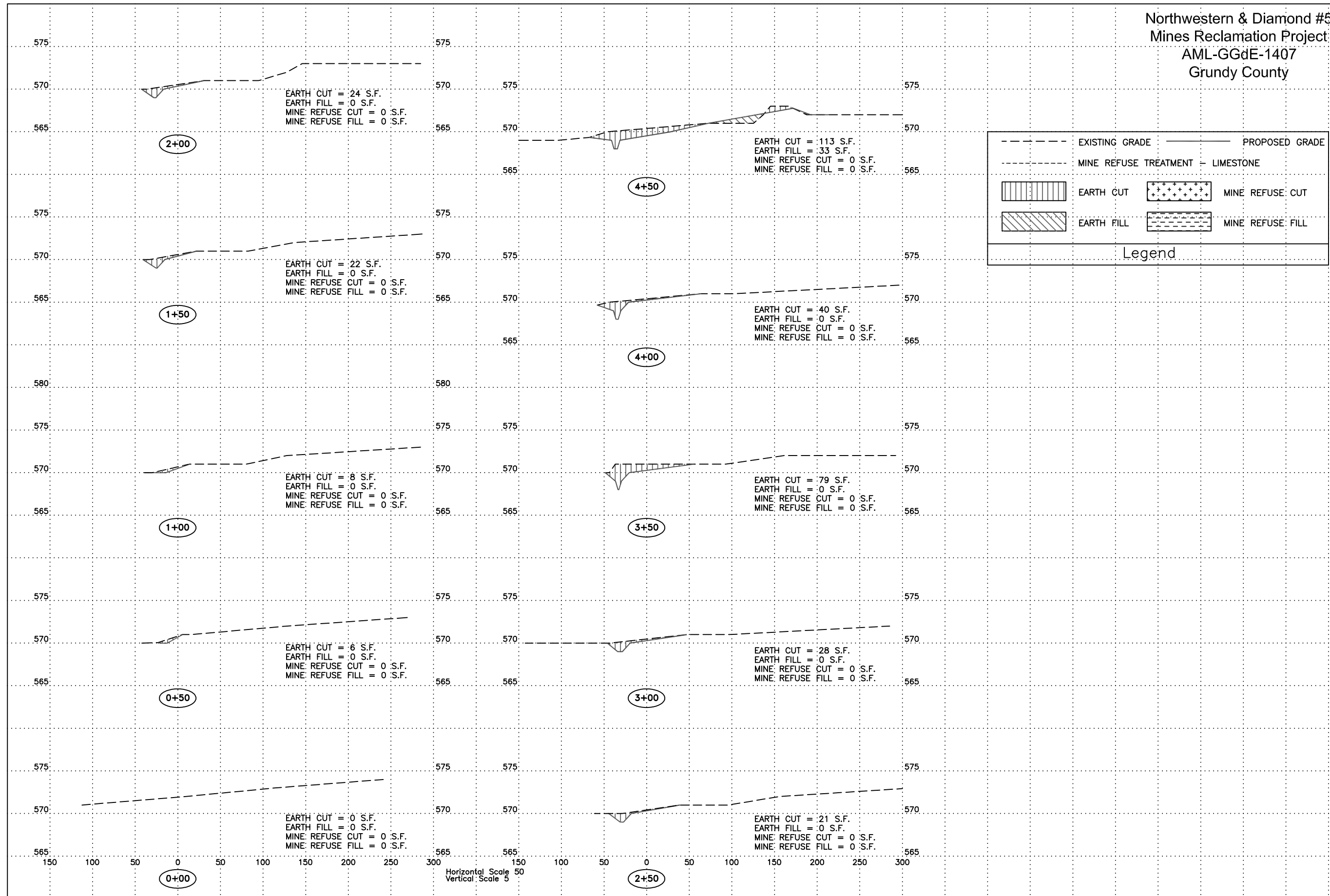


Symbol	Description
---400---	EXISTING CONTOUR
—400—	PROPOSED CONTOUR
---	CONSTRUCTION LIMITS
---	EDGE OF ROAD
~~~~~	TREELINE
---	EDGE OF WATER
▨	PROPOSED EARTH EXCAVATION FOR SOIL COVER
▲	SURVEY CONTROL POINT

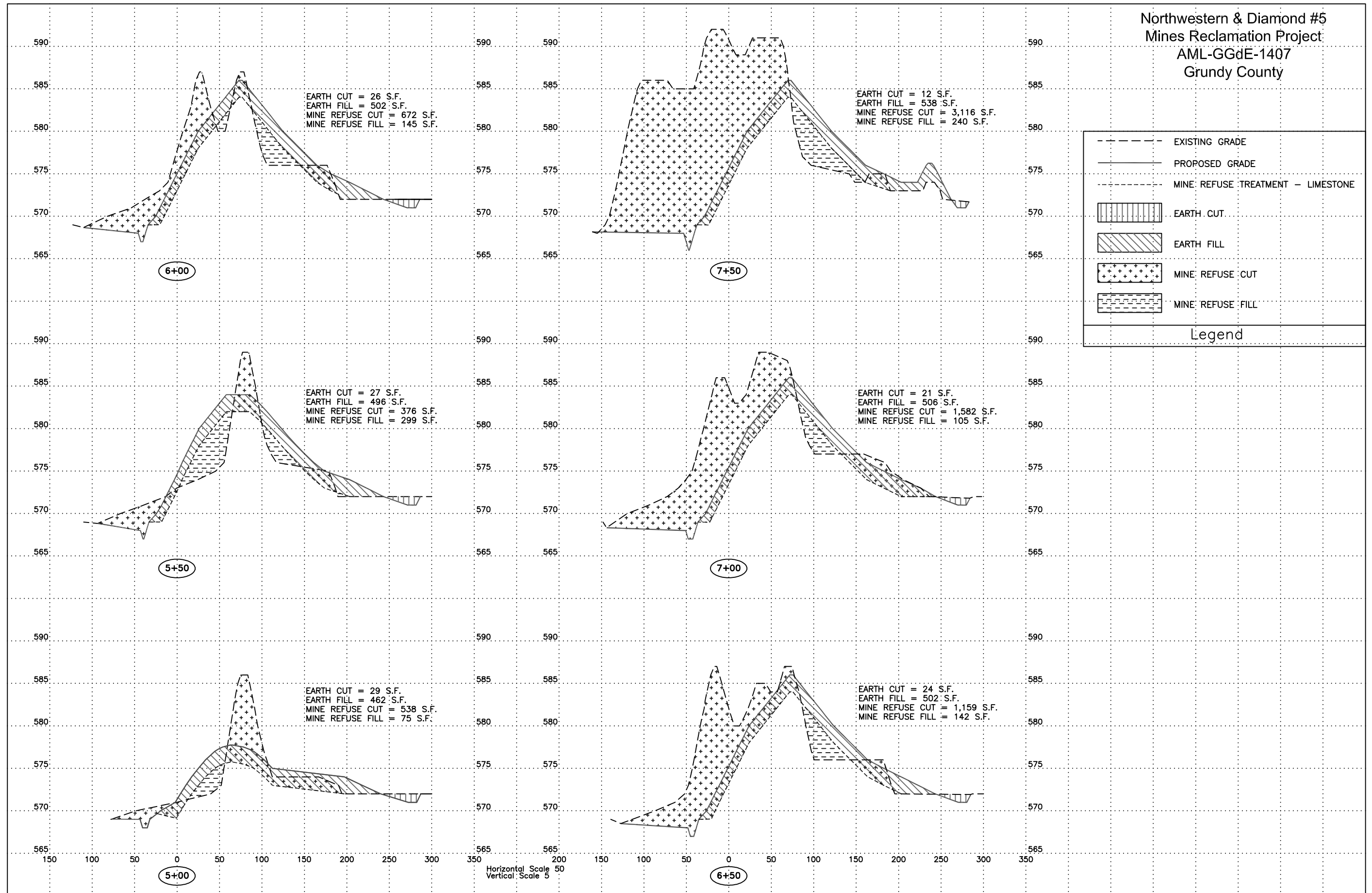


Diamond #5

Northwestern & Diamond #5  
Mines Reclamation Project  
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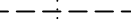

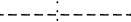


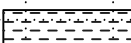
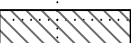


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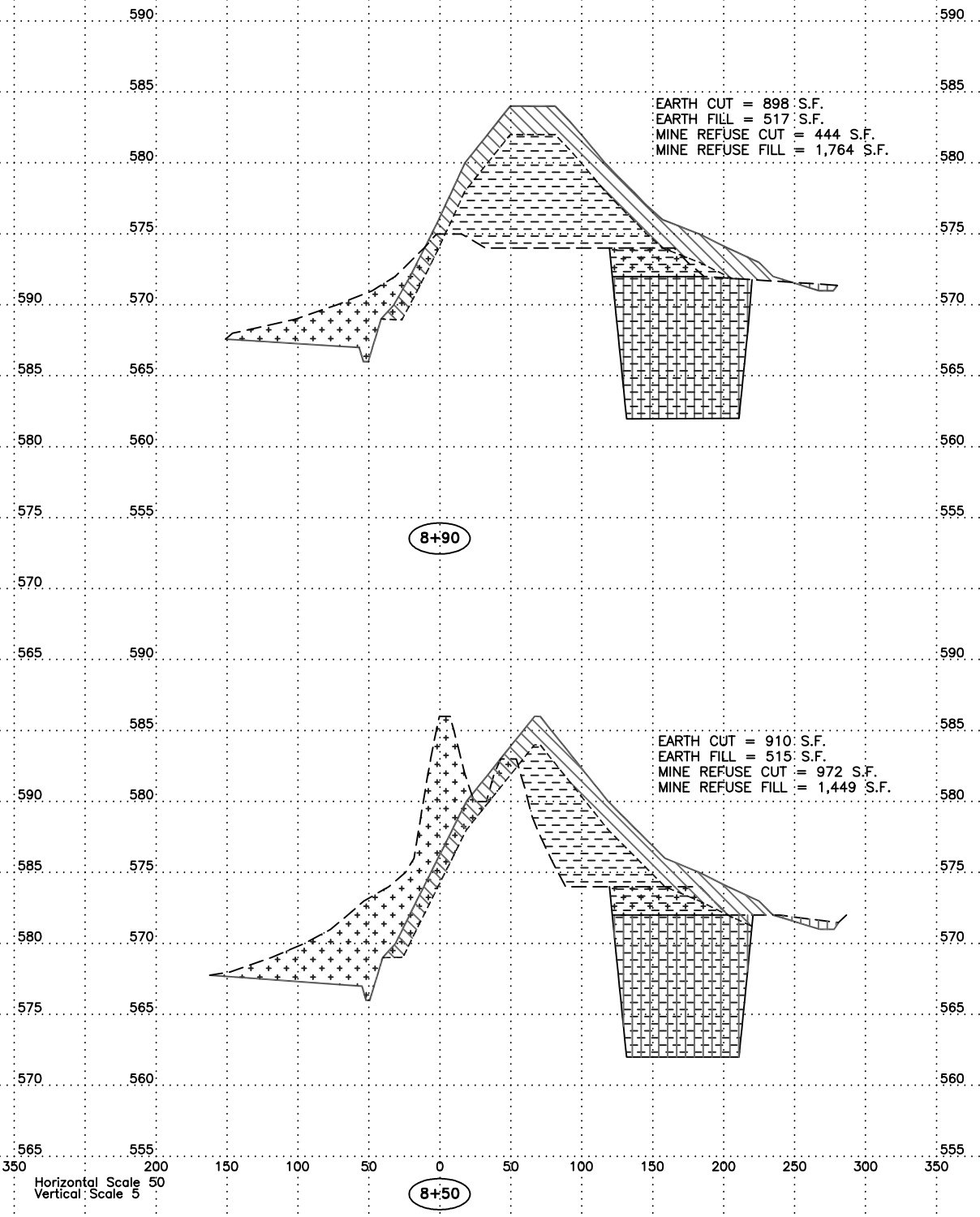
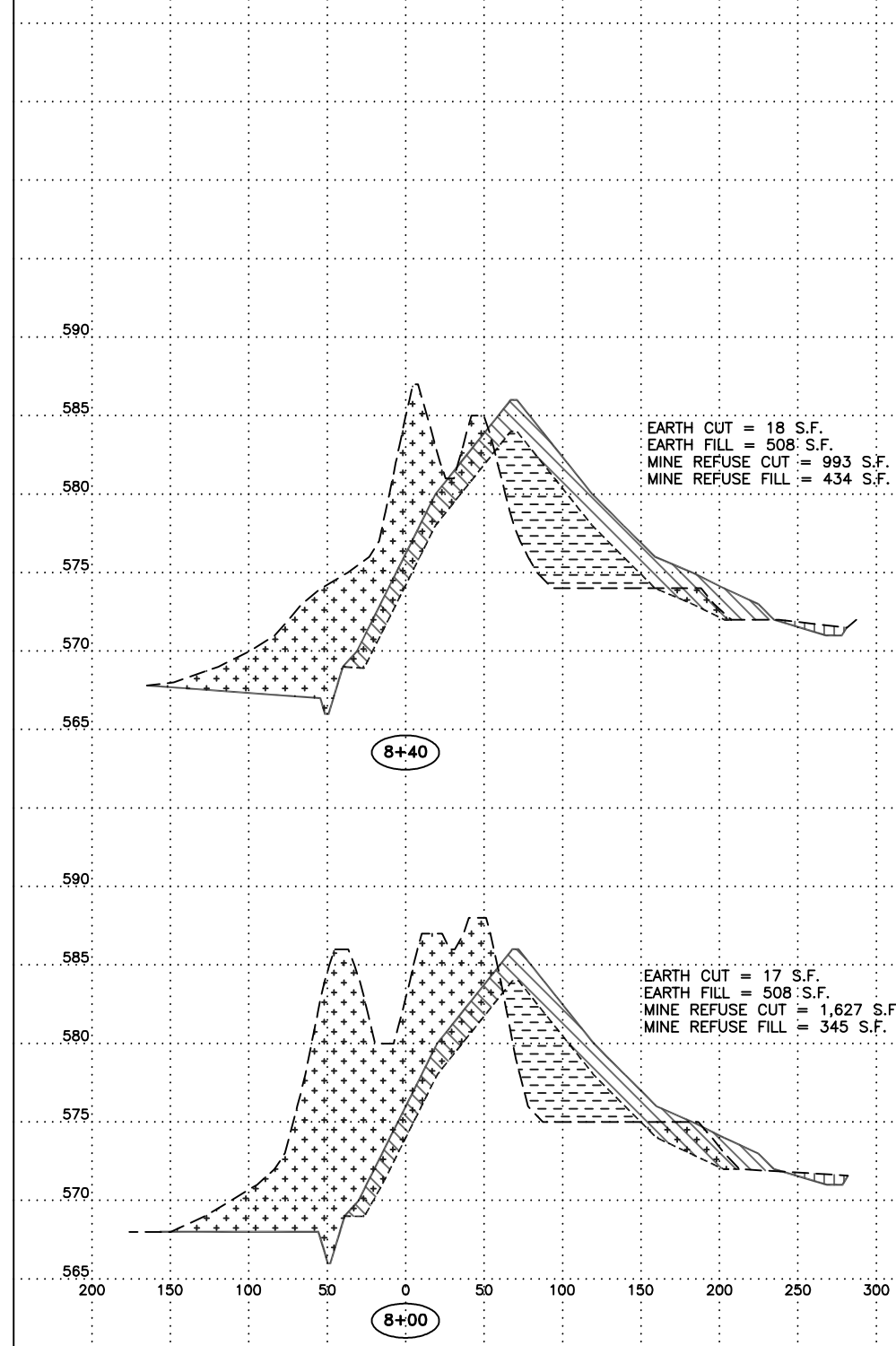


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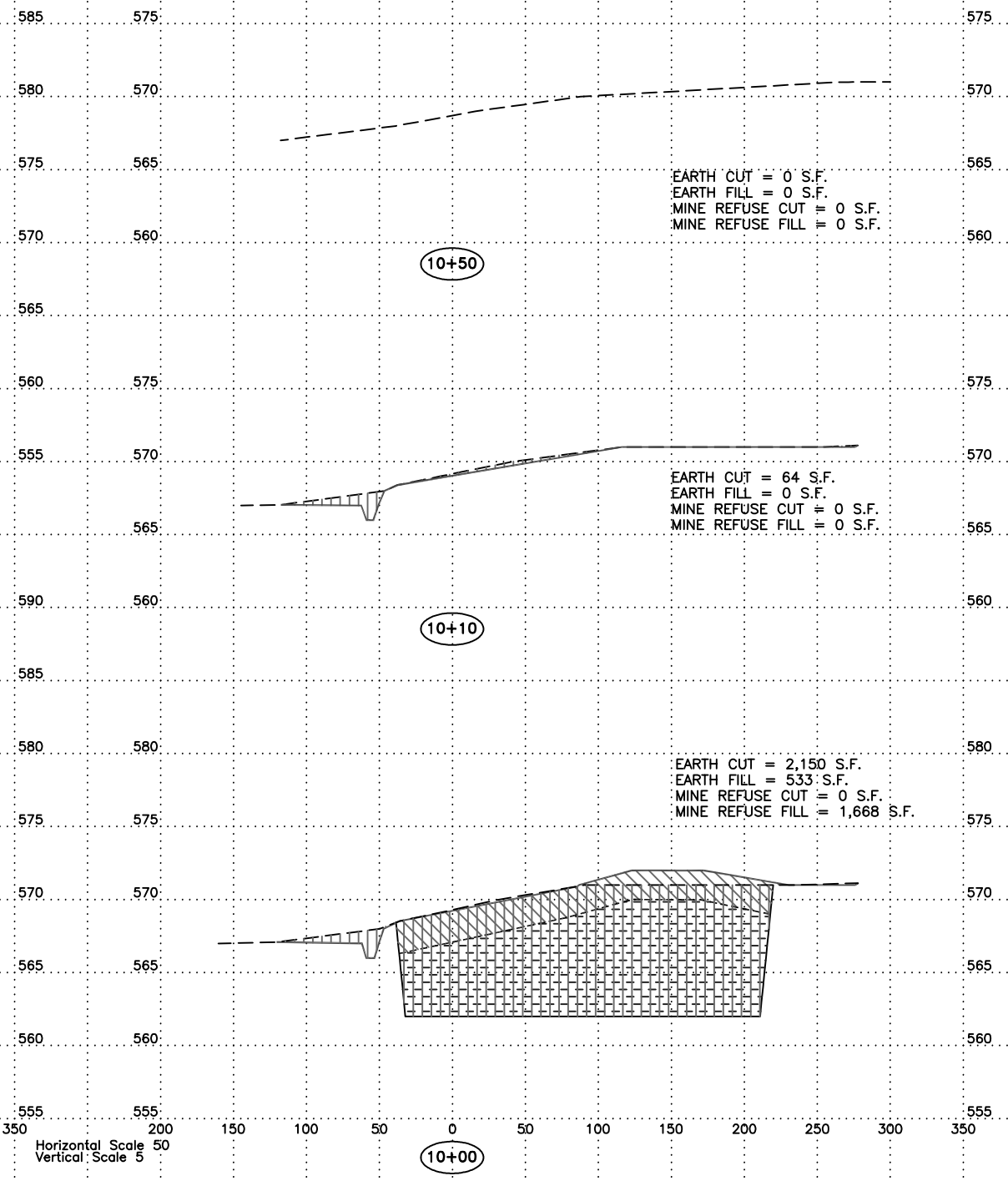
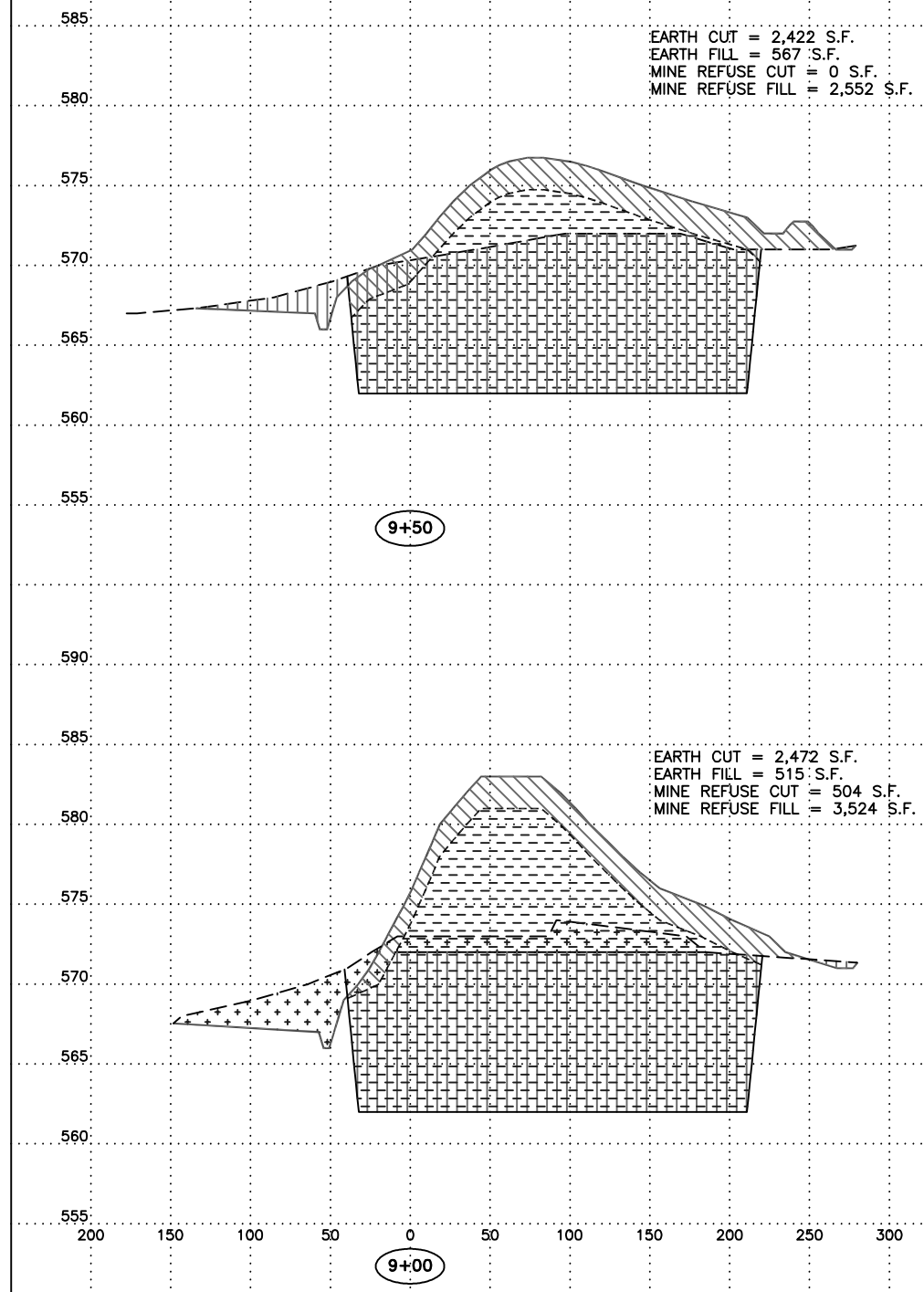
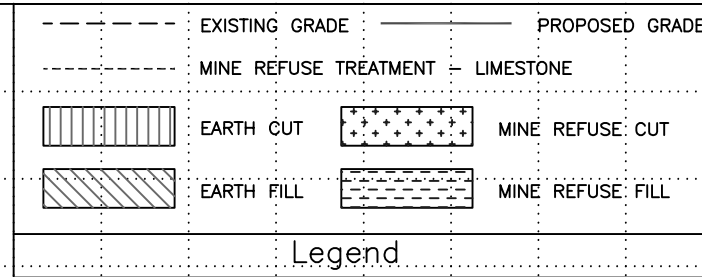
- EXISTING GRADE
- PROPOSED GRADE
- - - MINE REFUSE TREATMENT - LIMESTONE
- [Vertical Lines] EARTH CUT
- [Diagonal Lines] EARTH FILL
- [Stippled] MINE REFUSE CUT
- [Horizontal Lines] MINE REFUSE FILL

	EXISTING GRADE		PROPOSED GRADE
	MINE REFUSE TREATMENT - LIMESTONE		MINE REFUSE CUT
	EARTH CUT		MINE REFUSE FILL
	EARTH FILL		

Legend

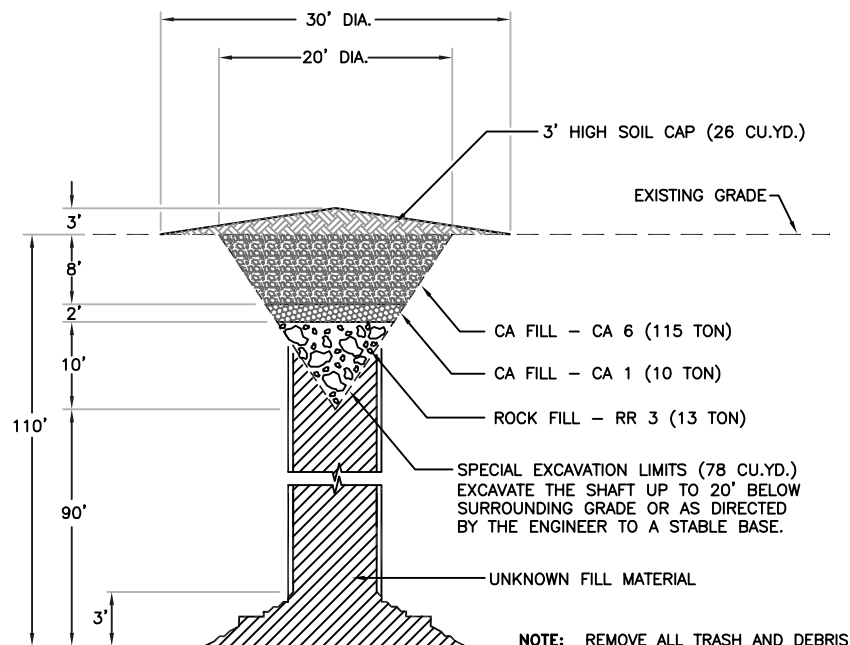


Horizontal Scale 50  
 Vertical Scale 5



Horizontal Scale 50  
Vertical Scale 5

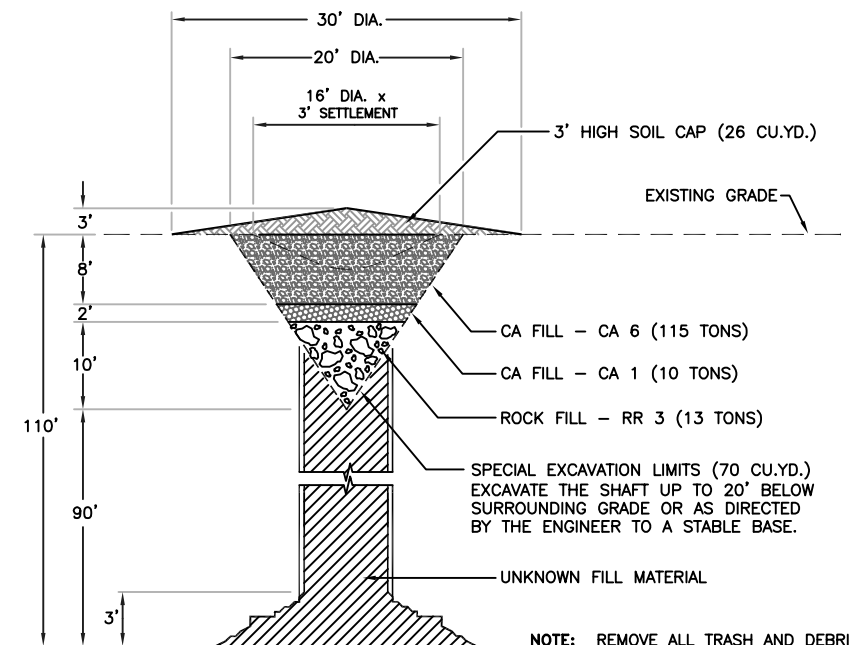




**A** DIAMOND #5 AIR SHAFT  
14 NOT TO SCALE

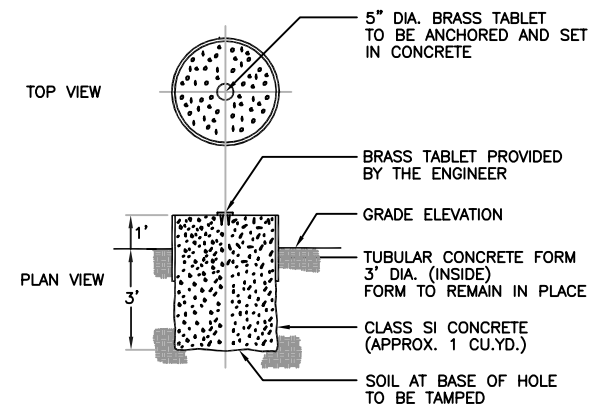
NOTE: REMOVE ALL TRASH AND DEBRIS FROM SHAFT TO A DEPTH OF 20' TO STABLE EXISTING FILL OR AS DIRECTED BY THE ENGINEER. ANY EXCESS EARTH GENERATED DURING SPECIAL EXCAVATION TO BE DISPOSED OF ON SITE AS DIRECTED BY THE ENGINEER.

NOTE: DUE TO THE UNKNOWN CONDITIONS THAT EXIST IN AND AROUND THE SHAFTS, THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN PERFORMING WORK NEAR THEM. 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.



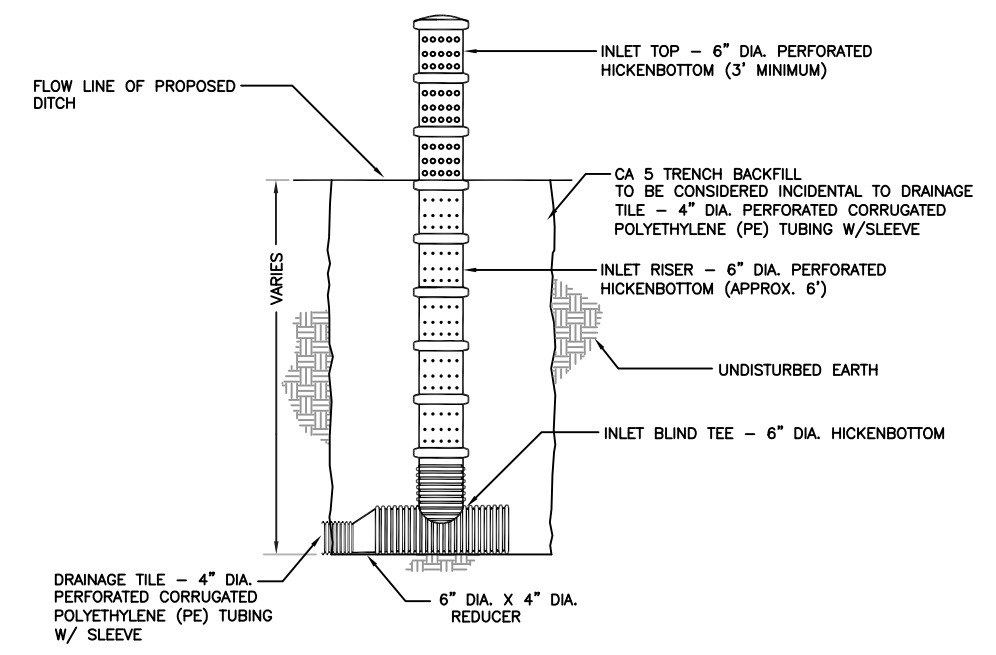
**B** DIAMOND #5 HOIST SHAFT  
14 NOT TO SCALE

NOTE: REMOVE ALL TRASH AND DEBRIS FROM SHAFT TO A DEPTH OF 20' TO STABLE EXISTING FILL OR AS DIRECTED BY THE ENGINEER. ANY EXCESS EARTH GENERATED DURING SPECIAL EXCAVATION TO BE DISPOSED OF ON SITE AS DIRECTED BY THE ENGINEER.



**C** MINE OPENING MARKER DETAIL  
14 NOT TO SCALE

EXACT LOCATION TO BE SET BY THE ENGINEER



**D** DIAMOND #5 TILE INLET  
14 NOT TO SCALE