

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

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

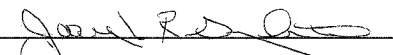
**Crystal Mine Group**  
**Reclamation Project**  
**AML-GRaE-0607**  
**Randolph, St. Clair and Clinton Counties**  
**2LR**

SCHEDULE OF DRAWINGS:

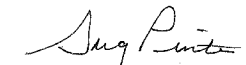
1. Cover Sheet
2. Summary of Quantities/General Notes/Location Map
3. Existing & Proposed Conditions - Crystal Mine
4. Existing & Proposed Conditions - Excelsior Mine
5. Existing & Proposed Conditions - Union Mine Shaft No. 1
6. Existing & Proposed Conditions - Trenton No. 1
- 7-8. Cross Sections - Trenton No. 1
9. Details

Prepared By IDNR Staff

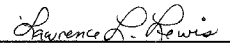
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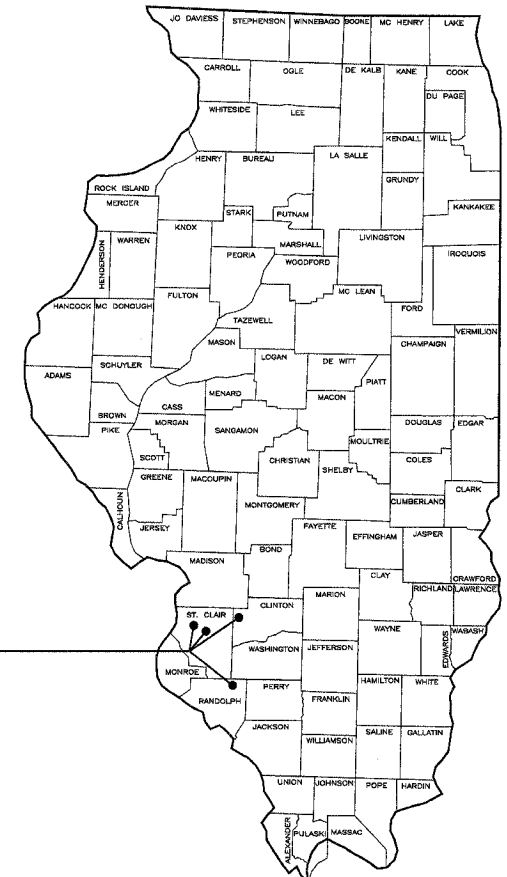
  
 Joseph R. Angleton, Director  
 Office of Mines and Minerals

Approved By:

  
 J. Greg Pinto, Interim Manager  
 AML Division

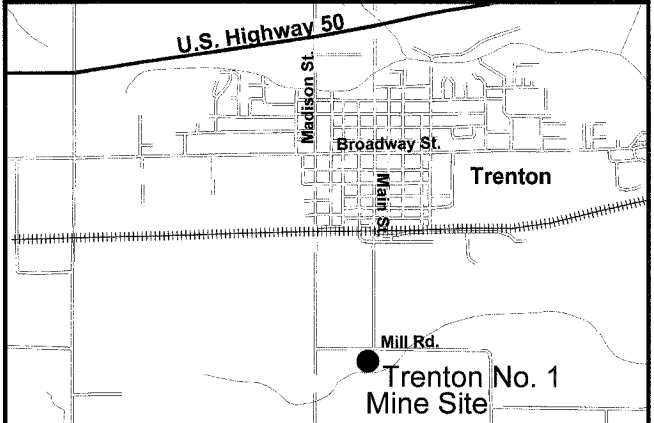
Approved By:

  
 Lawrence L. Lewis, P.E.  
 IL Licensed Professional Engineer  
 No. 0062-038880

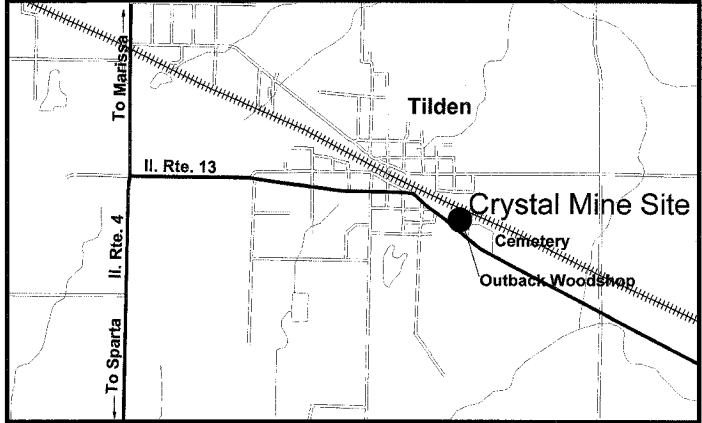


Crystal Mine Group  
 Randolph, St. Clair and Clinton Counties

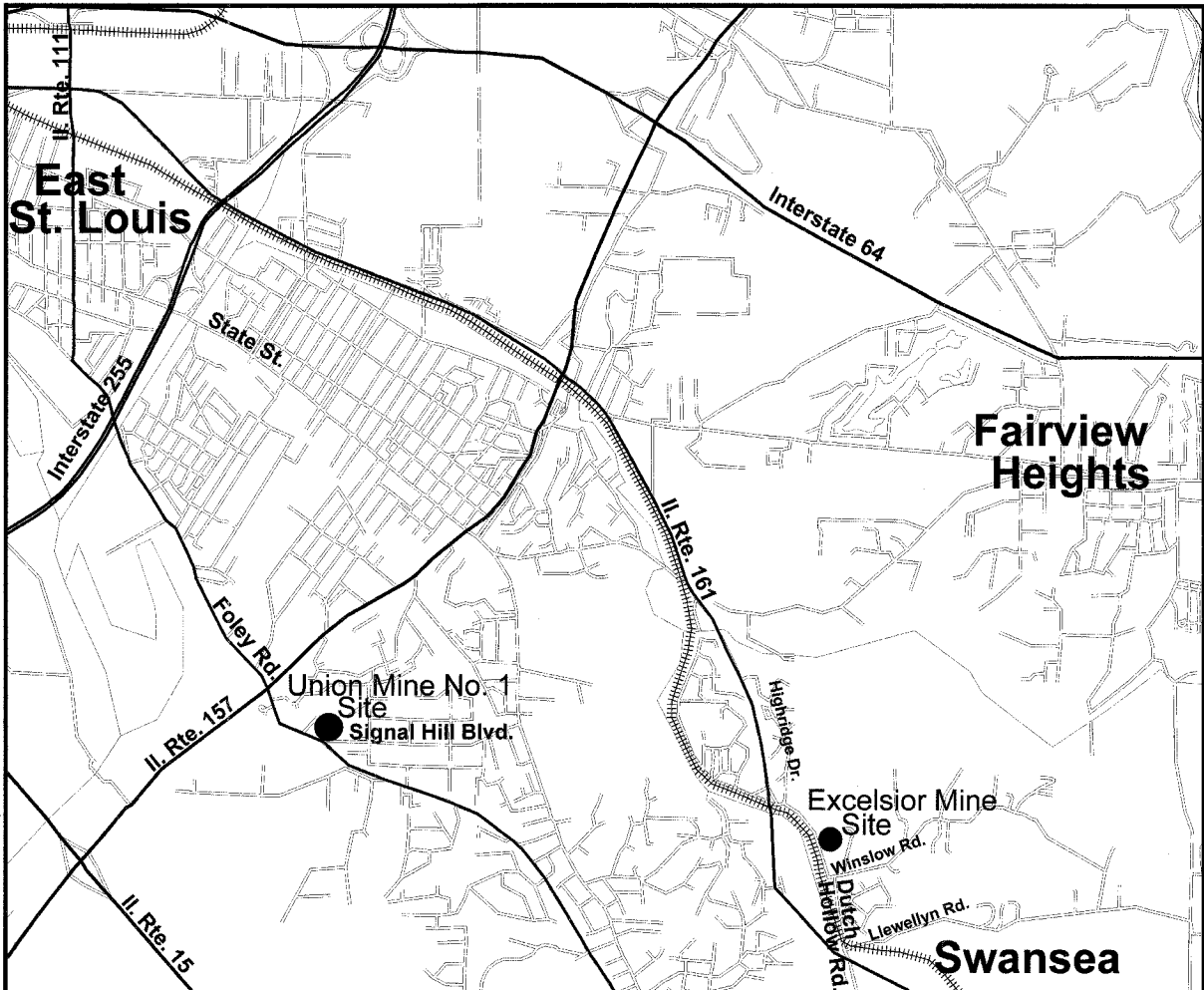
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			Crystal Mine	Excelsior Mine	Union #1 Mine	Trenton #1 Mine			
1	Special Clearing	201	0.3	0.1	0.1	0.5	1	L.S.	
2	Mine Refuse Excavation	202	0			734	734	C.Y.	
3	Earth Excavation	202	204	164	0	4500	4868	C.Y.	
4	Special Excavation	214	620	310	310	620	1860	C.Y.	
5	FA-2 Fill	216	140				140	Ton	
6	CA-6 Fill	216		247.0	247.0	494.0	988.0	Ton	
7	Seeding, Class 1, Lawn Mixture	IDOT 250	2.0		0.3		2.3	Acre	Seeding to be Completed by 6/30/08
8	Seeding, Class 6, Conservation Mixture	IDOT 250		0.6		3.0	3.6	Acre	Seeding to be Completed by 6/30/08
9	Nitrogen Fertilizer Nutrient	IDOT 250	240	72	36	360	708	Pound	120 pounds / acre
10	Phosphorus Fertilizer Nutrient	IDOT 250	200	60	30	300	590	Pound	100 pounds / acre
11	Potassium Fertilizer Nutrient	IDOT 250	700	210	105	1050	2065	Pound	350 pounds / acre
12	Agricultural Ground Limestone	IDOT 250	20	6	3	30	59	Ton	10 Tons / acre
13	Mulch Method 2, Procedure 1	IDOT 251	2	0.6	0.3	3	5.9	Acre	2 Tons / acre
14	Removal of Existing Structures	501	0.9			0.1	1	L.S.	
15	Temporary Site Safety Fence	643		500			500	Foot	
16	Mine Opening Marker	666	2	1	1	1	5	Each	
17	Mobilization	671	0.25	0.25	0.25	0.25	1	L.S.	Maximum 6% of Bid



Location Map - Trenton No. 1 Mine



Location Map - Crystal Mine



Location Map - Union No. 1 and Excelsior Mines

**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.

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 Special Provisions.

**TREE REMOVAL**-Trees removed shall be disposed of onsite per Section 201 of the Special Provisions.

**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.

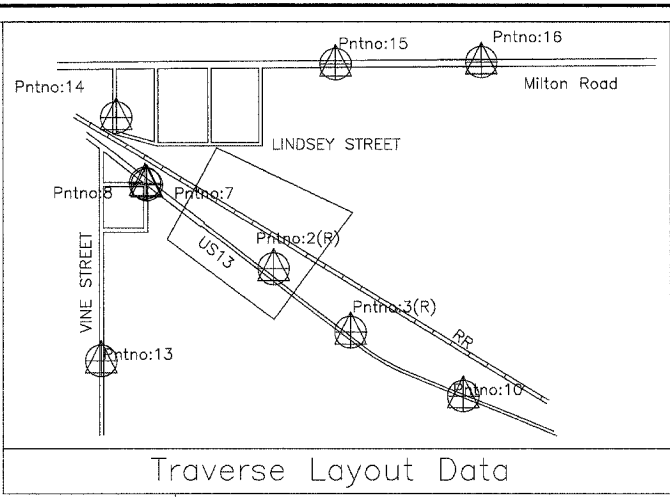
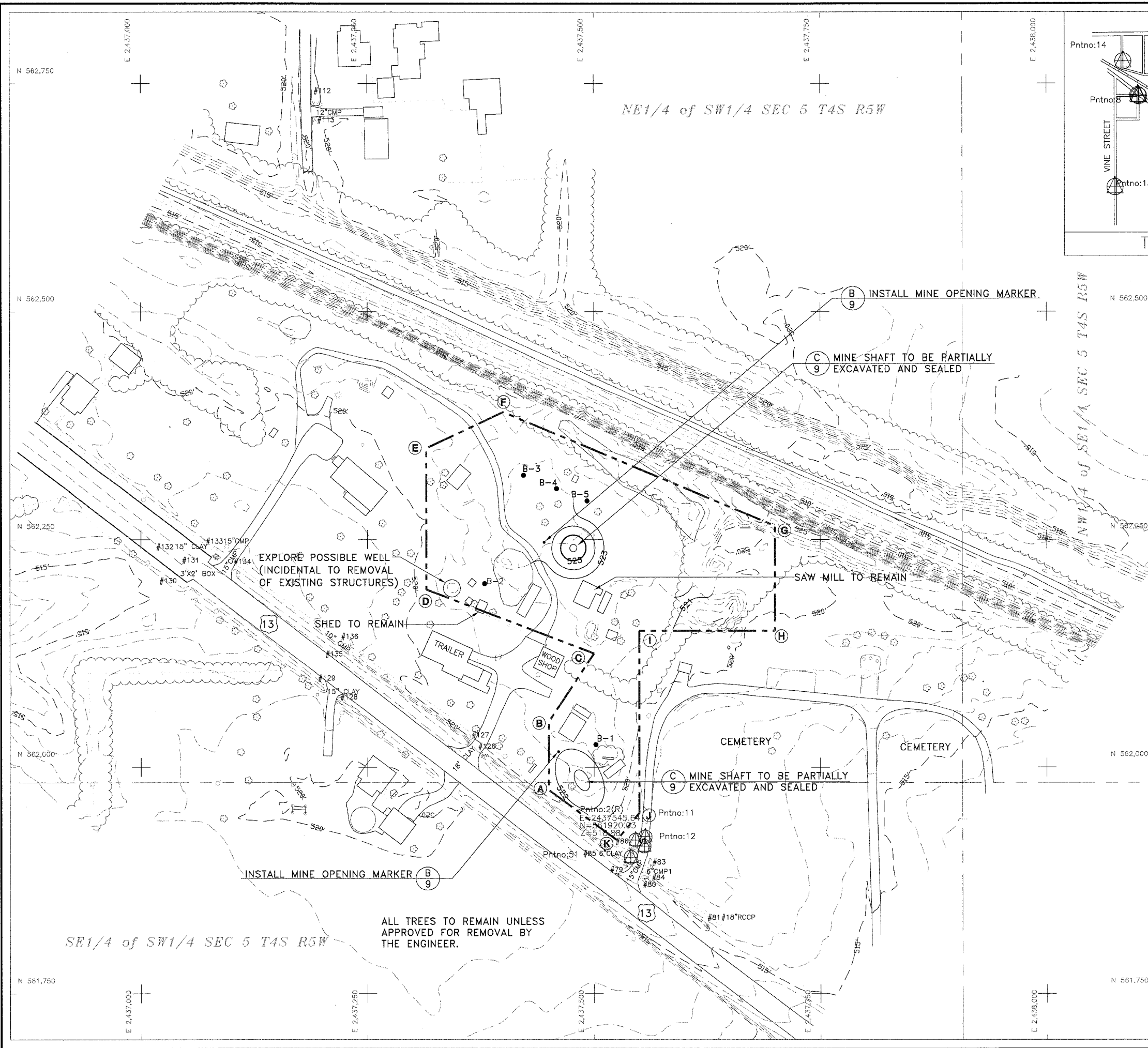
**MULCHING**-Within 24 hours from the time seeding has been performed, the seeded area shall be given a covering of mulch at the rates specified in the plans. The mulch is to be anchored into the soil in accordance with the requirements for method 2, procedure 1 of Article 251.03 of the Standard Specifications.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

State of Illinois  
Department of Natural Resources

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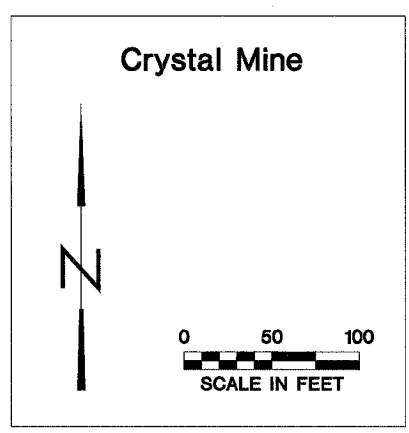
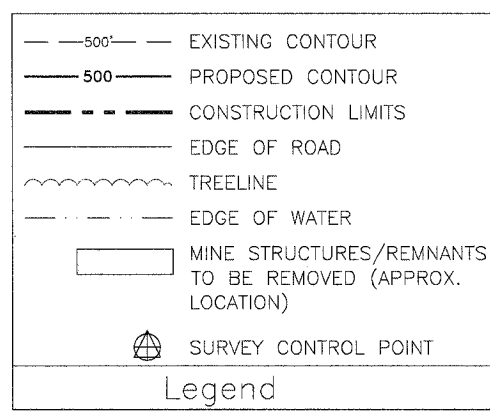
Drawn By: \_\_\_\_\_ T.M.  
Checked By: \_\_\_\_\_  
Date: 10/16/07

Summary of Quantities/  
General Notes/Location Map  
Sheet  
2 of 9



Construction Limits

	Northing	Easting
A	561,975	2,437,450
B	562,050	2,437,450
C	562,125	2,437,500
D	562,195	2,437,315
E	562,350	2,437,315
F	562,390	2,437,400
G	562,265	2,437,700
H	562,150	2,437,700
I	562,150	2,437,550
J	561,950	2,437,550
K	561,920	2,437,525



NE1/4 of SW1/4 SEC 5 T4S R5W

NW1/4 of SE1/4 SEC 5 T4S R5W

SE1/4 of SW1/4 SEC 5 T4S R5W

ALL TREES TO REMAIN UNLESS  
APPROVED FOR REMOVAL BY  
THE ENGINEER.

B INSTALL MINE OPENING MARKER  
9

C MINE SHAFT TO BE PARTIALLY  
EXCAVATED AND SEALED  
9

SAW MILL TO REMAIN

C MINE SHAFT TO BE PARTIALLY  
EXCAVATED AND SEALED  
9

INSTALL MINE OPENING MARKER  
B  
9

EXPLORE POSSIBLE WELL  
(INCIDENTAL TO REMOVAL  
OF EXISTING STRUCTURES)

SHED TO REMAIN

TRAILER

WOOD SHOP

CEMETERY

CEMETERY

13

13

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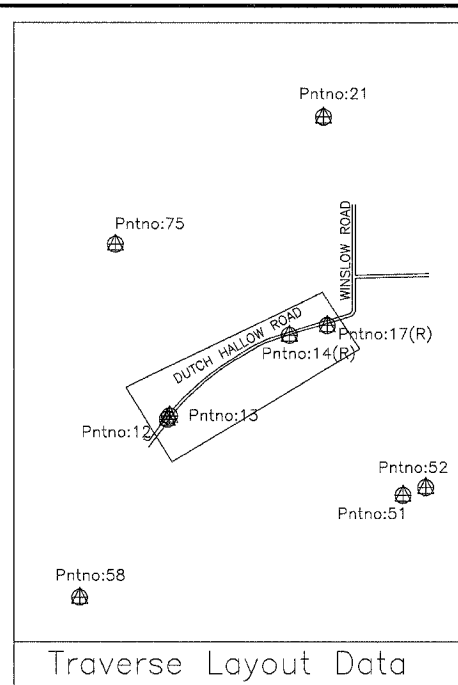
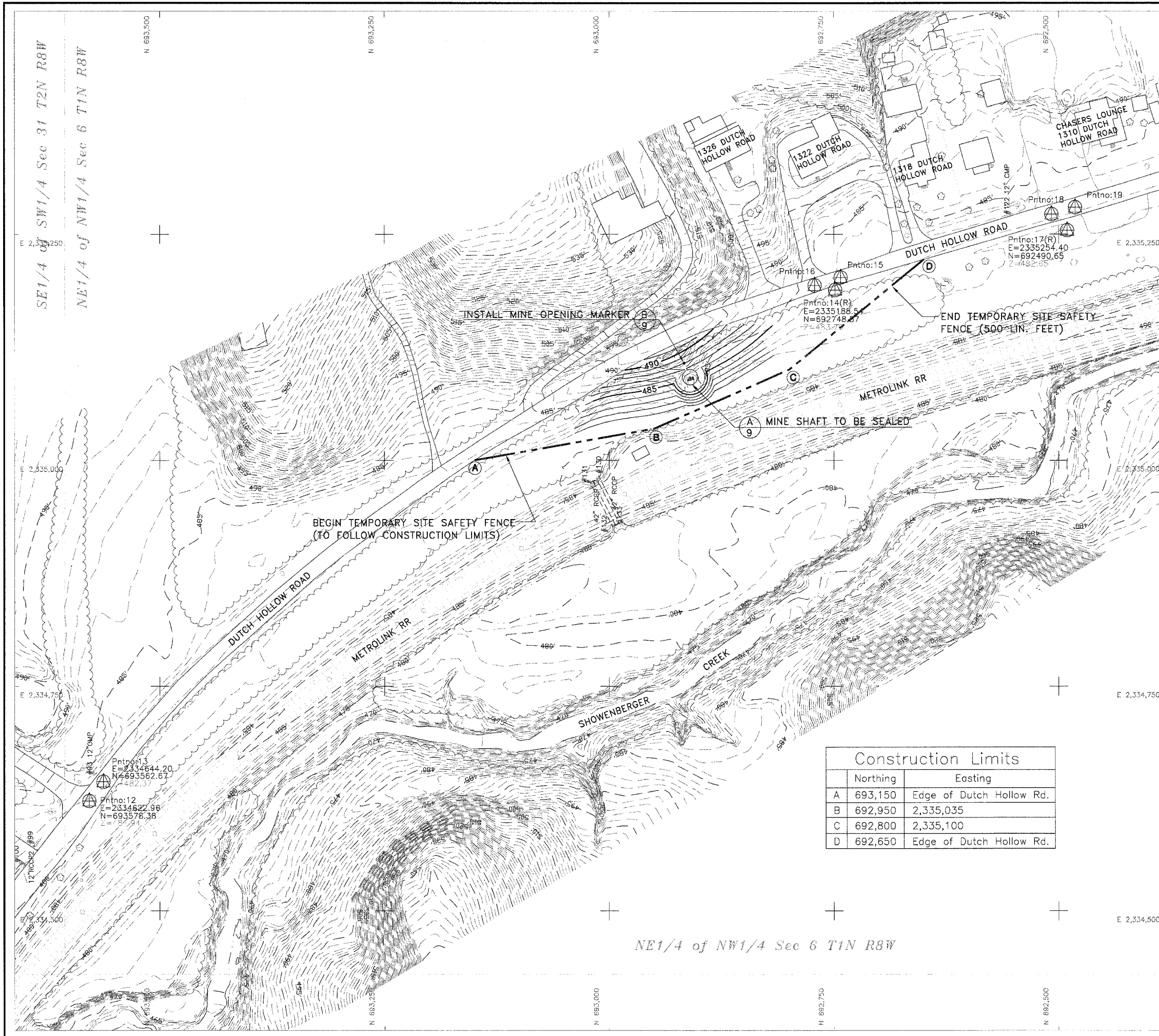
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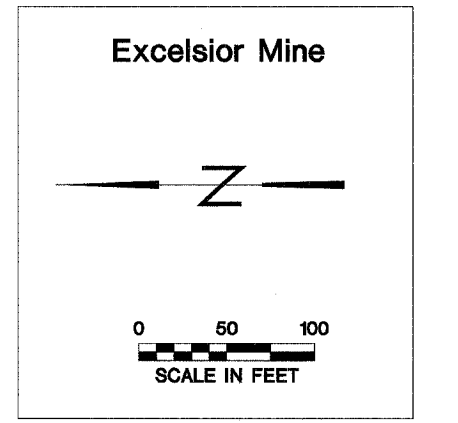
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**SPECIAL NOTE:**  
CONSTRUCTION LIMITS ARE WITHIN THE METROLINK R.R. RIGHT-OF-WAY SO CONTRACTOR IS RESPONSIBLE TO COMPLY WITH INSURANCE REQUIREMENTS SPECIFIED IN ARTICLE 107.11 OF THE SPECIAL PROVISIONS.

Construction Limits	
Northing	Easting
A 693,150	Edge of Dutch Hollow Rd.
B 692,950	2,335,035
C 692,800	2,335,100
D 692,650	Edge of Dutch Hollow Rd.

- 400' --- EXISTING CONTOUR
- 450 --- PROPOSED CONTOUR
- --- CONSTRUCTION LIMITS
- --- EDGE OF ROAD
- --- TREELINE
- --- EDGE OF WATER
- ⊕ SURVEY CONTROL POINT

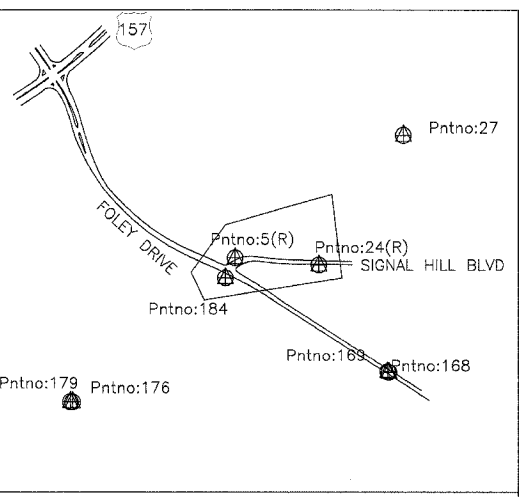
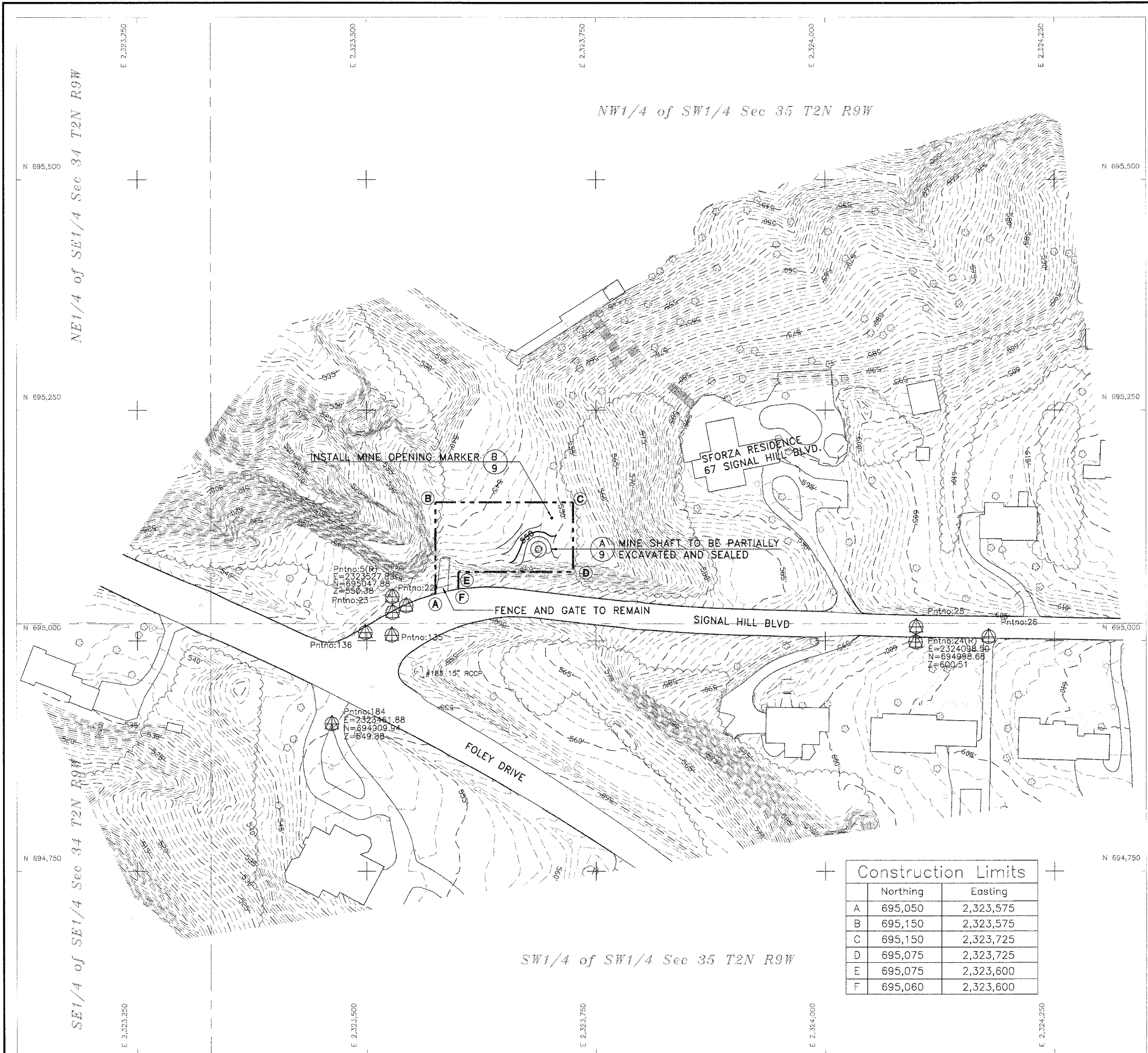


**State of Illinois**  
**Department of Natural Resources**

**Crystal Mine Group**  
**Reclamation Project**  
**AML-GRaE-0607**  
**Randolph, St. Clair and**  
**Clinton Counties**

Drawn By: M-LF  
Checked By: \_\_\_\_\_  
Date: 10/17/2007

**Existing & Proposed**  
**Conditions**  
**Sheet**  
**4 of 9**

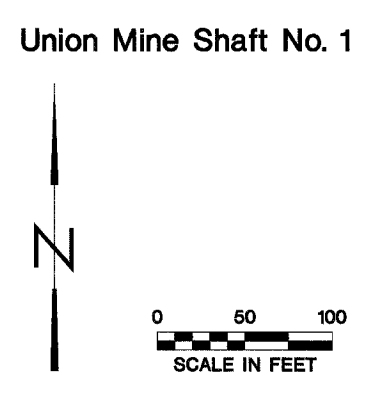


Traverse Layout Data

- 400' EXISTING CONTOUR
- 450' PROPOSED CONTOUR
- CONSTRUCTION LIMITS
- EDGE OF ROAD
- TREELINE
- EDGE OF WATER
- SURVEY CONTROL POINT

Legend

Construction Limits		
	Northing	Easting
A	695,050	2,323,575
B	695,150	2,323,575
C	695,150	2,323,725
D	695,075	2,323,725
E	695,075	2,323,600
F	695,060	2,323,600

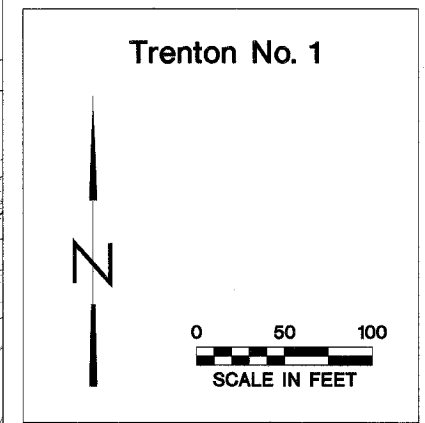
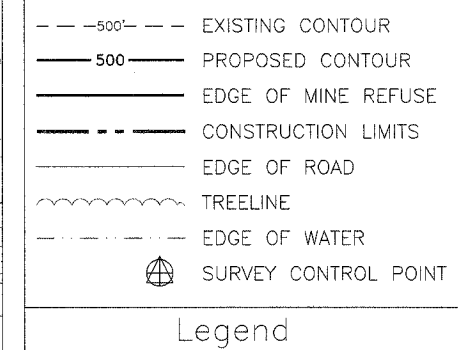


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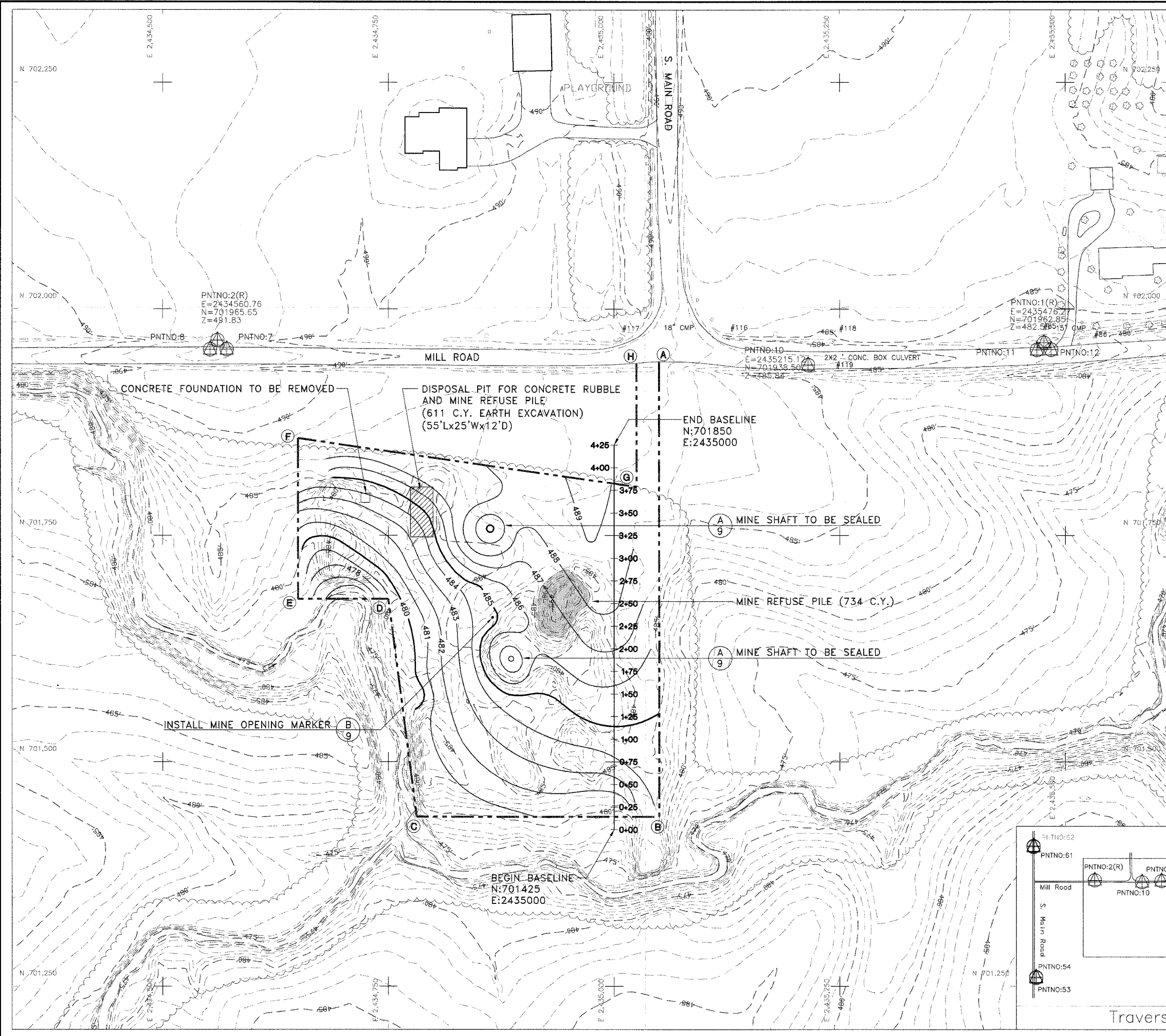
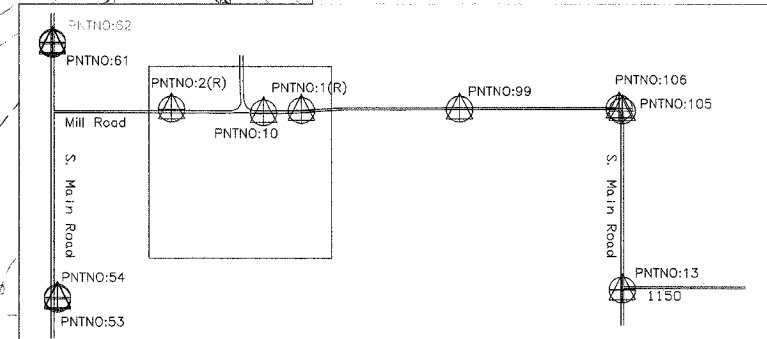
Drawn By: M-LF  
Checked By: \_\_\_\_\_  
Date: 10/11/2007

Existing & Proposed  
Conditions  
Sheet  
5 of 9

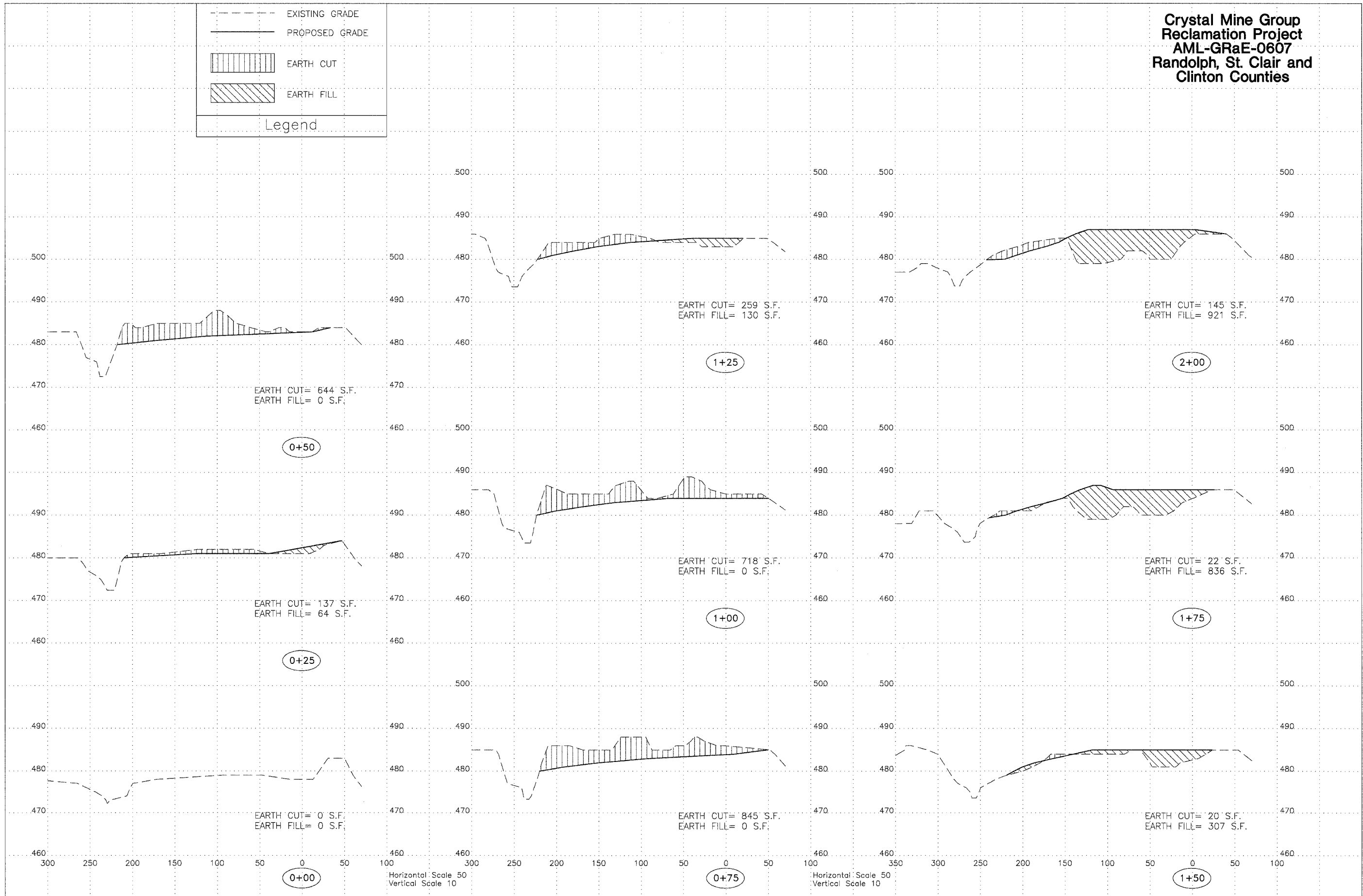
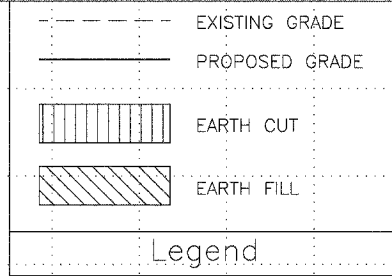


Construction Limits

	Northing	Easting
A	701,940	2,435,050
B	701,440	2,435,050
C	701,440	2,434,780
D	701,680	2,434,750
E	701,680	2,434,650
F	701,860	2,434,650
G	701,805	2,435,025
H	701,940	2,435,025



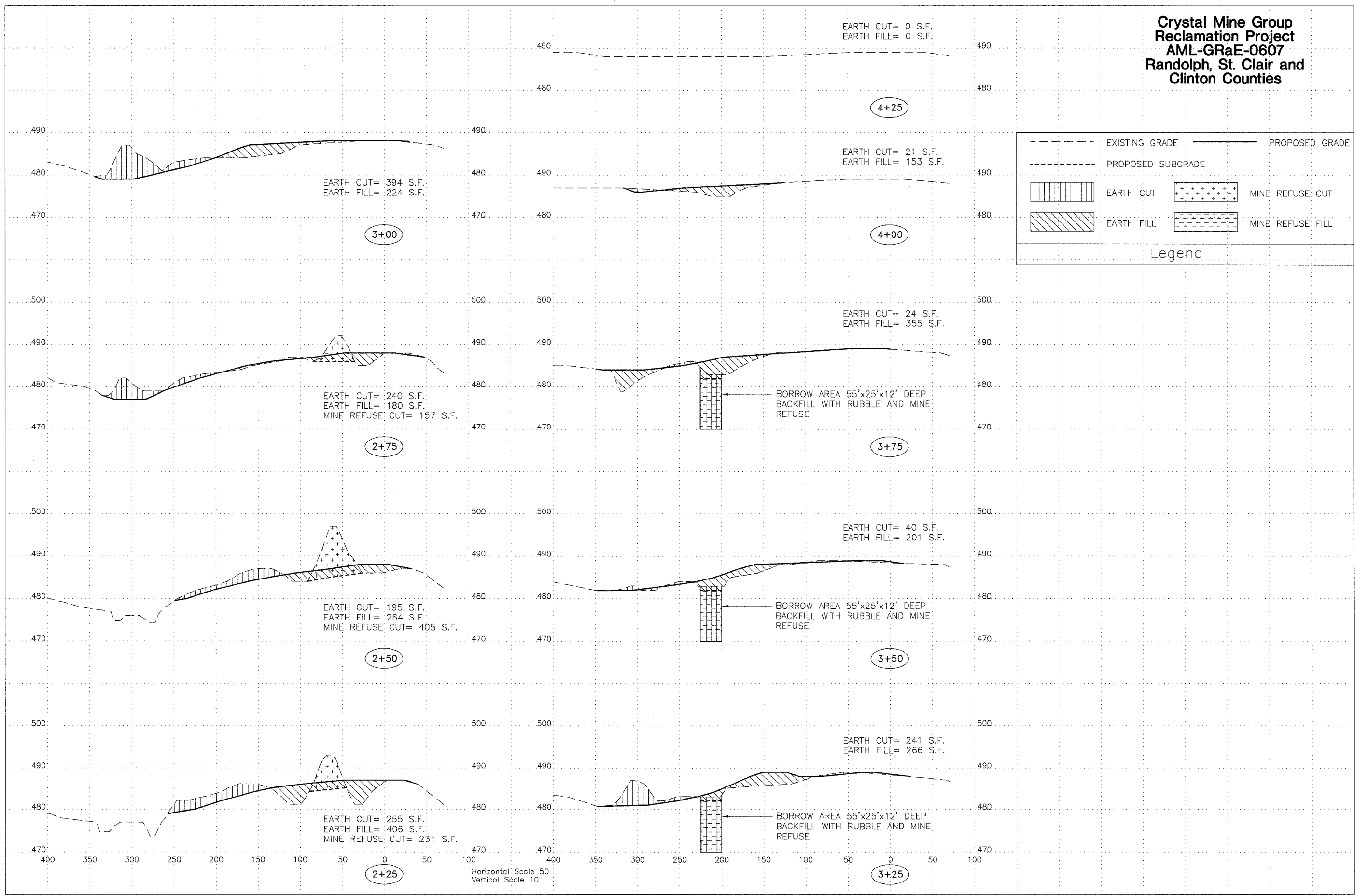
Crystal Mine Group  
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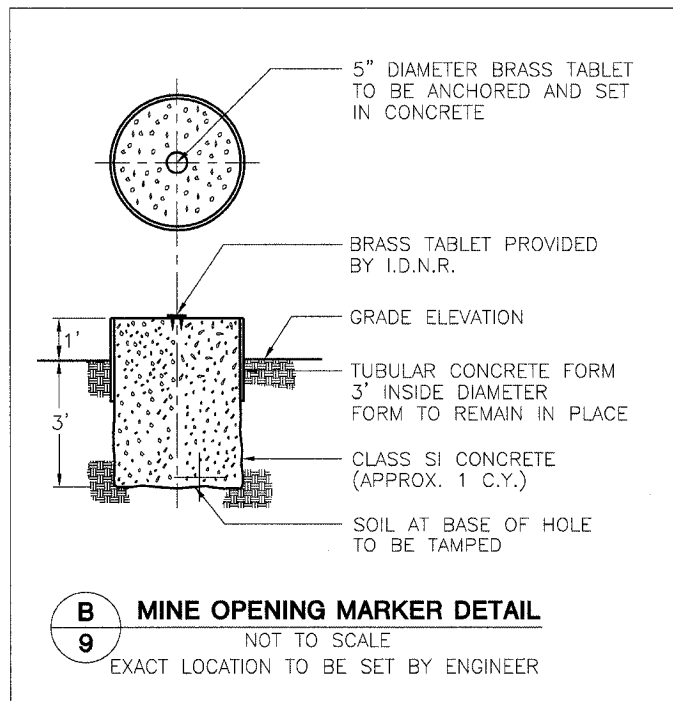
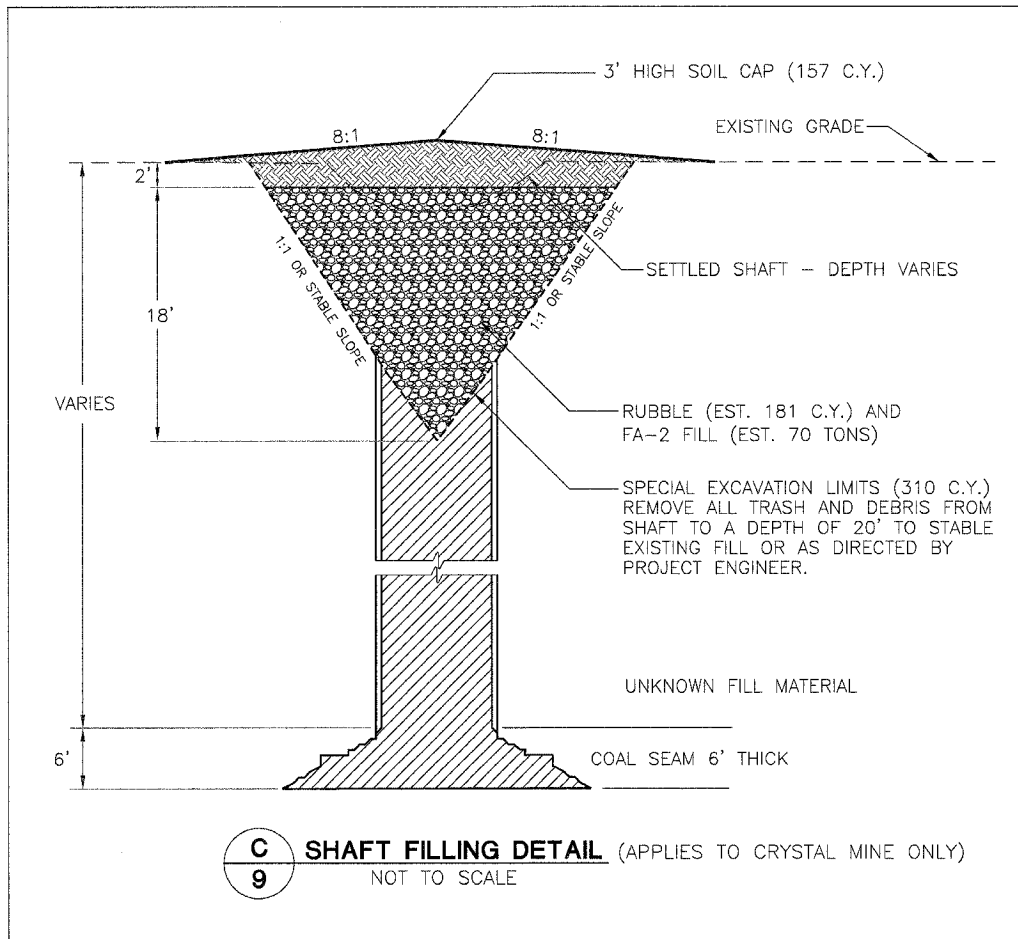
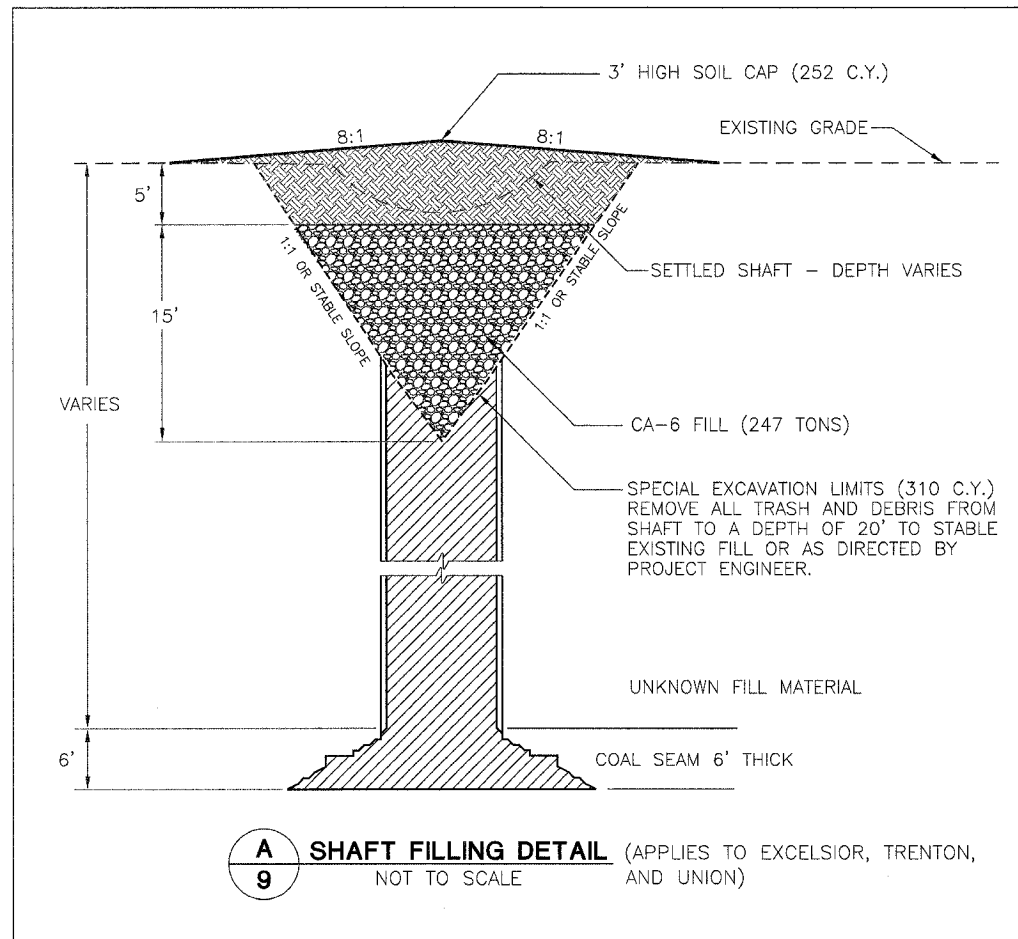
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	EXISTING GRADE		PROPOSED GRADE
	PROPOSED SUBGRADE		
	EARTH CUT		MINE REFUSE CUT
	EARTH FILL		MINE REFUSE FILL

Legend







**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.

Drawn By: M-LF  
 Checked By:  
 Date: 10/16/2007