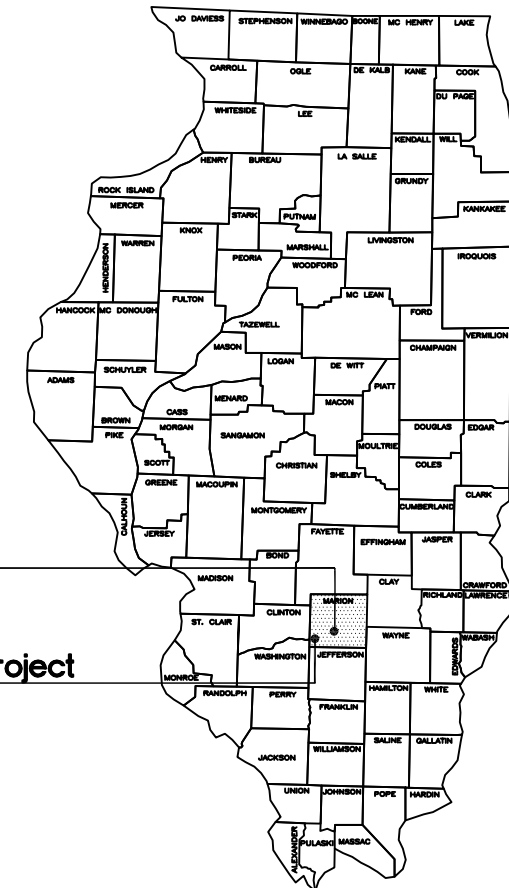


State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Division of Abandoned Mined Lands

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

Glen Ridge Mine and Salem Shaft
 Reclamation Project
 AML-GMaE-1211
 Marion County
 1LR



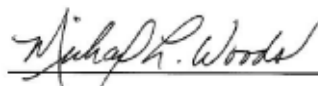
Salem Shaft
 Marion County

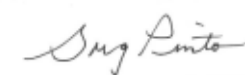
Glen Ridge Mine Reclamation Project
 Marion County

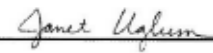
SCHEDULE OF DRAWINGS:


1. Cover Sheet
 2. Location Maps
 3. Summary of Quantities/General Notes/Seeding Schedule
 4. Glen Ridge Mine Existing Conditions
 5. Glen Ridge Mine Proposed Conditions
 6. Salem Shaft Existing/Proposed Conditions
 - 7-9. Glen Ridge Mine Cross-Sections
 10. Details
- DOT Standard: Traffic Control Standard BLR 17-4

Prepared By IDNR Staff

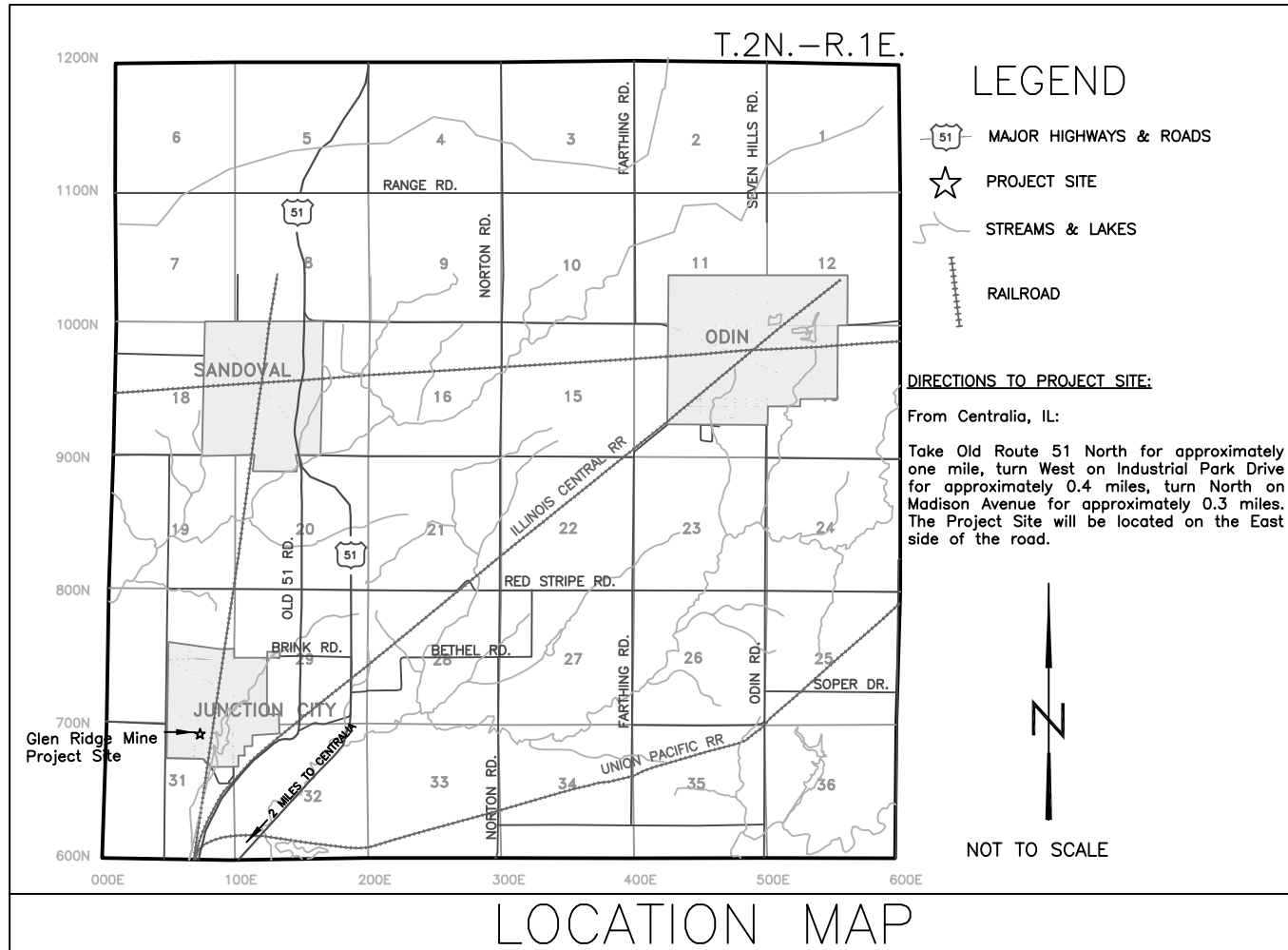
Approved for Bidding:

 Michael L. Woods, Director
 Office of Mines and Minerals

Approved By:

 Greg Pinto, Acting Manager
 AML Division

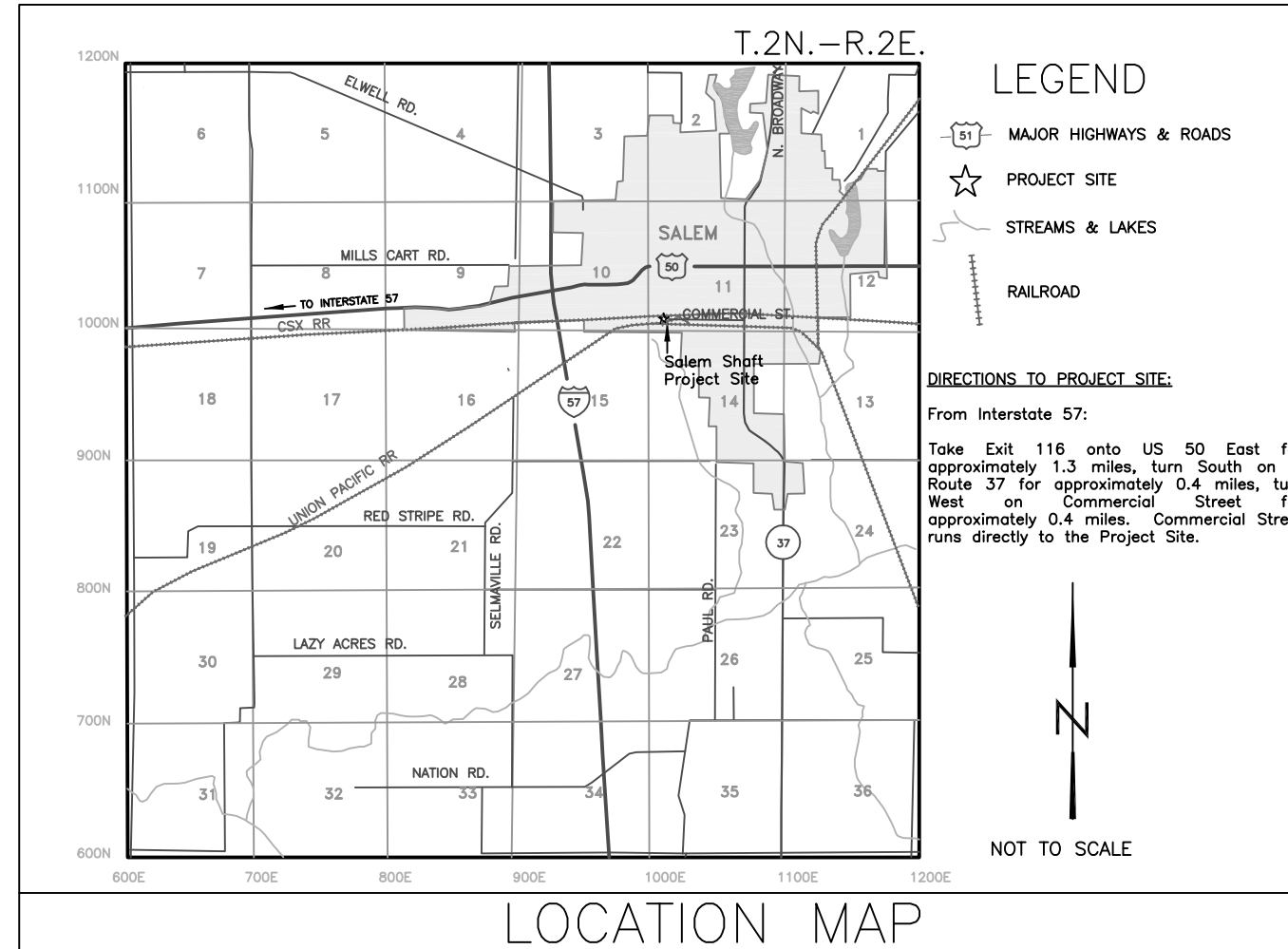
Approved By:

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



GLEN RIDGE MINE RECLAMATION



SALEM SHAFT RECLAMATION



Summary of Quantities							
#	Item	Section	Quantity			Unit	Rates/Remarks
			GLEN RIDGE	SALEM	TOTAL		
1	Special Clearing	201	1	-	1	L.S.	
2	Earth Excavation	202	8,576	-	8,576	C.Y.	COMPACTION SHALL BE IN ACCORDANCE WITH SECTION 205 OF THE SPECIAL PROVISIONS
3	Mine Refuse Excavation	202	3,542	-	3,542	C.Y.	
4	Furnished Excavation	204	-	86	86	C.Y.	
5	Special Excavation	214	188	94	282	C.Y.	
6	CA-1 Fill	216	39.2	19.6	58.8	TON	
7	CA-6 Fill	216	84.2	42.1	126.3	TON	
8	Riprap Fill, C-3	216	-	15.1	15.1	TON	
9	Filter Fabric	216	54	27	81	S.Y.	
10	Seeding	250	8.5	0.1	8.6	ACRE	
11	Agricultural Ground Limestone	250	42.5	0.5	43.0	TON	5 TON/ACRE
12	Nitrogen Fertilizer Nutrient	250	1,700	10	1,710	POUND	100 LB/ACRE-TWICE
13	Phosphorus Fertilizer Nutrient	250	1,275	15	1,290	POUND	150 LB/ACRE
14	Potassium Fertilizer Nutrient	250	2,975	35	3,010	POUND	350 LB/ACRE
15	Mulch, Method 2, Procedure 1	IDOT 251	8.5	0.1	8.6	ACRE	2 TON/ACRE
16	Tree, White Pine, 2" BB	IDOT 253	42	-	42	EACH	
17	Mine Refuse Treatment - Limestone	255	79.0	-	79.0	TON	10 TON/ACRE
18	Mowing	258	8.5	-	8.5	ACRE	
19	Perimeter Erosion Barrier	280	400	-	400	FOOT	
20	Aggregate Base Course, Type B, CA-6	IDOT 351	470.6	-	470.6	TON	
21	Removal of Existing Structures	501	1	-	1	L.S.	
22	Fine Aggregate Fill Material	501	2,450	-	2,450	TON	
23	Mine Opening Marker	666	2	1	3	EACH	
24	Mobilization (Max. 6% of Bid)	671	0.9	0.1	1	L.S.	

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 cleared from the site shall be disposed of onsite per Section 201 of the Special Provisions. Clearing of all trees may only occur from October 1st to March 31st. No trees may be removed from outside this window.

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.

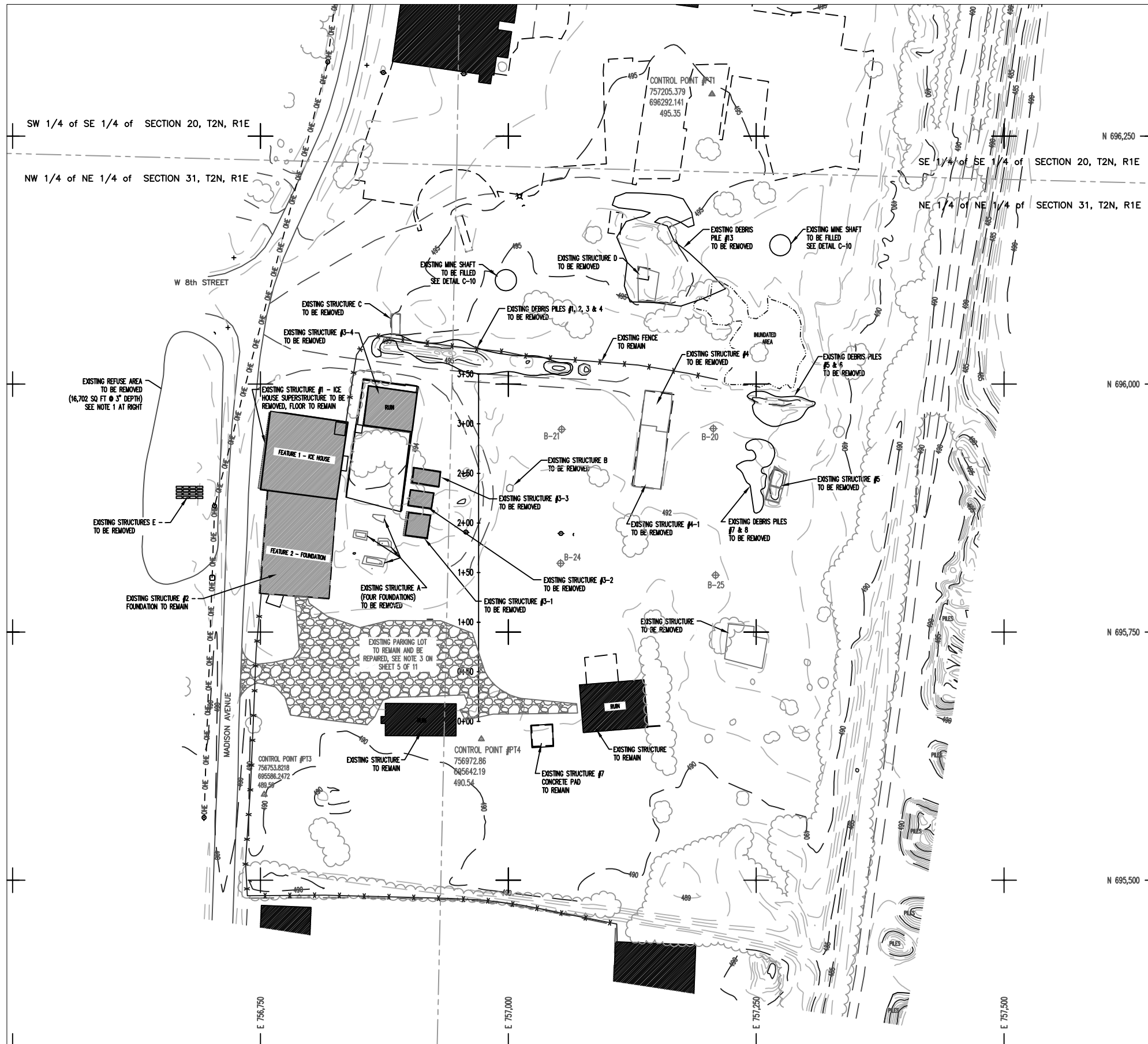
AGRICULTURAL GROUND LIMESTONE-Immediately prior to seed bed preparation, fertilizer nutrients and agricultural ground limestone shall be uniformly spread at the rates specified in the plans.

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.

TRAFFIC CONTROL - During the demolition of Structure #1 (Icehouse), mine refuse excavation West of Madison Avenue, and earth filling activities West of Madison Avenue, the adjacent roadway, Madison Avenue, shall be closed to through traffic in accordance with IDOT Traffic Control Standard B.L.R. 17-4. The Village of Junction City is aware of the future road closure. Please give adequate notice prior to construction activities, as the Village will utilize their police force to assist in traffic detours. Refer to Sheet 11 of these plans for documentation of Traffic Control Standard B.L.R. 17-4. This Traffic Control work shall be incidental to Removal of Existing Structures.

Schedule of Seeding, Fertilizer Nutrients and Mulch						
ITEM (unit)	INITIAL APPLICATION FALL 2013 AUG. 20 - SEPT. 30		SECOND APPLICATION SPRING 2014 JAN. 1 - MAR. 15		MOWING	TOTAL QUANTITY
	GLEN RIDGE	SALEM	GLEN RIDGE	SALEM		
SEEDING (acres)	8.5	0.1			GLEN RIDGE EXACT DATE TO BE SET BY ENGINEER	8.6
NITROGEN FERTILIZER NUTRIENT (pounds)	850	10	850			1,710
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	1,275	15				1,290
POTASSIUM FERTILIZER NUTRIENT (pounds)	2,975	35				3,010
AGRICULTURAL GROUND LIMESTONE (tons)	42.5	0.5				43.0
MULCH, METHOD 2 PROCEDURE 1 (acres)	8.5	0.1				8.6
MOWING (acres)					8.5	8.5

Drawn By: JMB Date: 11/28/2012
Checked By: _____



NOTE:

1. The exposed mine refuse area West of Madison Avenue shall be excavated to 3" depth. The excavated material shall be used for mine refuse fill in the proposed borrow pit (See Sheet 5).
2. All structures to be removed shall be removed to a depth of 24" below grade in accordance with Section 501 of the Special Provisions. See Detail B-10.
3. All structures and debris piles to be removed shall be used for rubble fill in the proposed borrow pit. Fine aggregate fill material shall be placed within the rubble voids. The rubble and sand fill shall meet the requirements of Section 501 of the Special Provisions. The Engineer reserves the right to increase the volume of Fine Aggregate Fill Material to ensure all voids are filled and the rubble and sand fill in the borrow pit is at minimum 486.4 elevation.

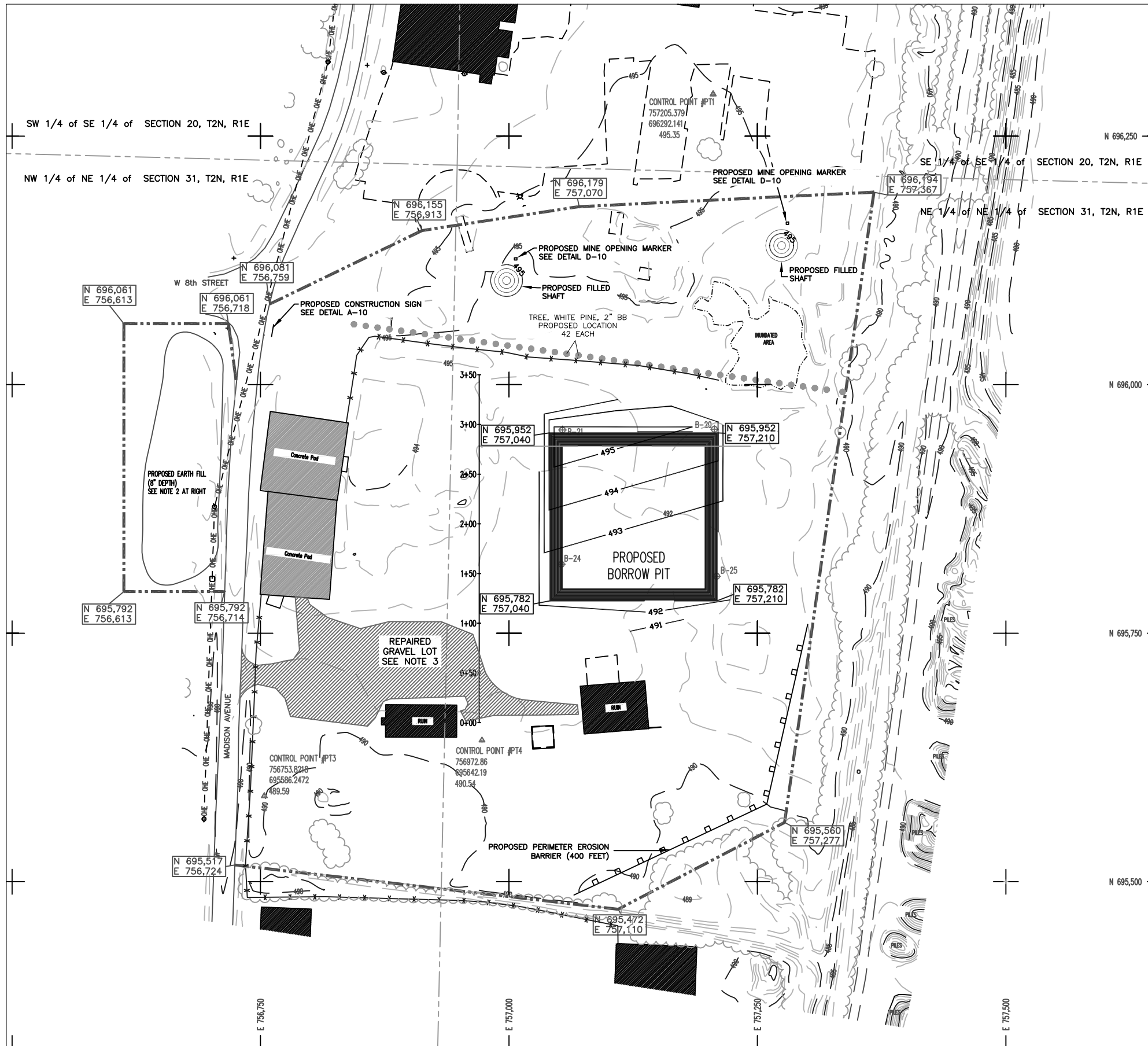
---	SECTION LINE
-465-	EXISTING CONTOUR
---	PROJECT BASELINE
~ ~ ~	TREE LINE
—O—E—	OVERHEAD ELECTRIC LINE
x x x	EXISTING FENCE
△	CONTROL POINT
⊕	SOIL BORING
■	EXISTING STRUCTURE

Legend



POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
PT1	696,292.14	757,205.38	495.35	REBAR WITH CAP
PT3	695,586.25	756,753.82	489.59	REBAR WITH CAP
PT4	695,642.19	756,972.86	490.54	REBAR WITH CAP
0+00	695,660	756,970	---	BL BEGINNING
3+50	696,010	756,970	---	BL ENDING

Drawn By: JMB Date: 11-28-2012
Checked By: _____

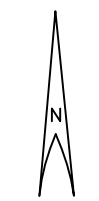
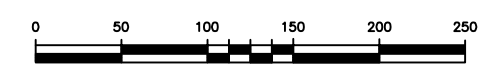


NOTE:

1. All at-grade areas East of Madison Avenue within the construction limits and the top of the mine refuse fill in the proposed borrow pit shall receive mine refuse treatment—limestone at a rate of 10 tons/acre in accordance with Section 255 of the Special Provisions (79.0 tons).
2. All disturbed areas East of Madison Avenue shall receive 3" earth cover (2,908 C.Y.). The earth fill will be incorporated into the underlying mine refuse in accordance with Section 255 of the Special Provisions. Existing grade and drainage shall be preserved.
3. All disturbed areas West of Madison Avenue shall receive 8" earth cover (412 C.Y.). Existing grade and drainage shall be preserved. No mine refuse treatment—limestone required West of Madison Avenue.
4. Once seeding activities are complete, the existing gravel lot shall be repaired with 4" of Aggregate Base Course, Type B, CA-6 (470.6 Tons). The aggregate shall be placed in accordance with Article 351 of the Standard Specifications.

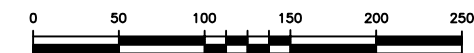
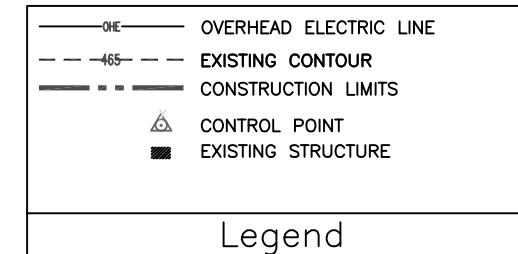
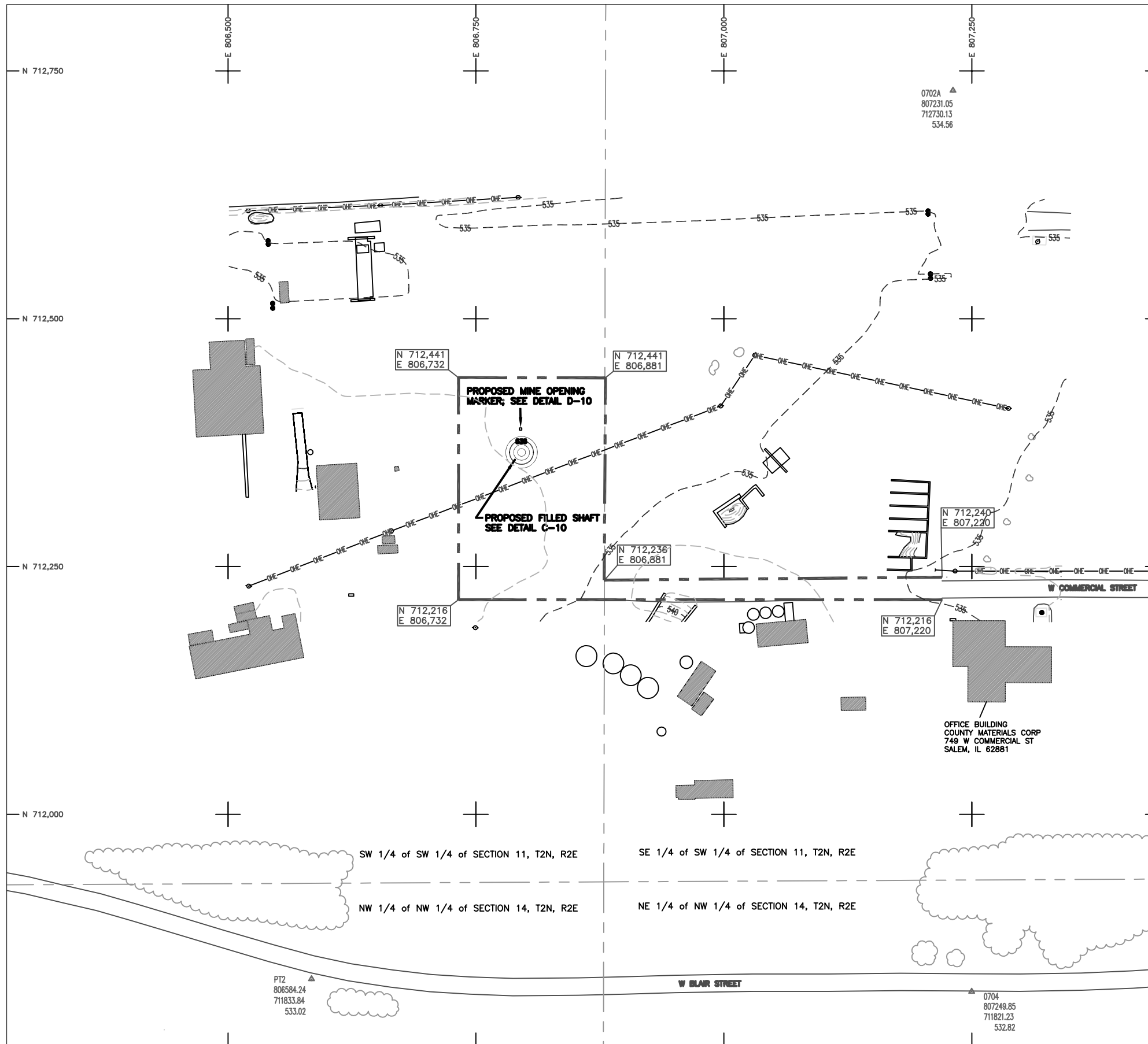
	EXISTING CONTOUR
	CONSTRUCTION LIMITS
	PROJECT BASELINE
	TREE LINE
	OVERHEAD ELECTRIC LINE
	EXISTING FENCE
	CONTROL POINT
	SOIL BORING
	EXISTING STRUCTURE

Legend



POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
PT1	696,292.14	757,205.38	495.35	REBAR WITH CAP
PT3	695,586.25	756,753.82	489.59	REBAR WITH CAP
PT4	695,642.19	756,972.86	490.54	REBAR WITH CAP
0+00	695,660	756,970	---	BL BEGINNING
3+50	696,010	756,970	---	BL ENDING

Drawn By: Date: 11-28-2012
 Checked By:



POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
0702A	712,730.13	807,231.05	534.56	REBAR WITH CAP
0704	711,821.23	807,249.85	532.82	REBAR WITH CAP
PT2	711,833.84	806,584.24	533.02	REBAR WITH CAP

State of Illinois
Department of Natural Resources

Glen Ridge Mine and Salem Shaft
Reclamation Project
AML-GMaE-1211
Marion County

Drawn By: JMB Date: 11-28-2012
Checked By: _____

Salem Shaft
Existing/Proposed Conditions
Sheet 6 of 10

Glen Ridge and Salem Shaft
 Reclamation Project
 AML-GMaE-1211
 Marion County

LEGEND

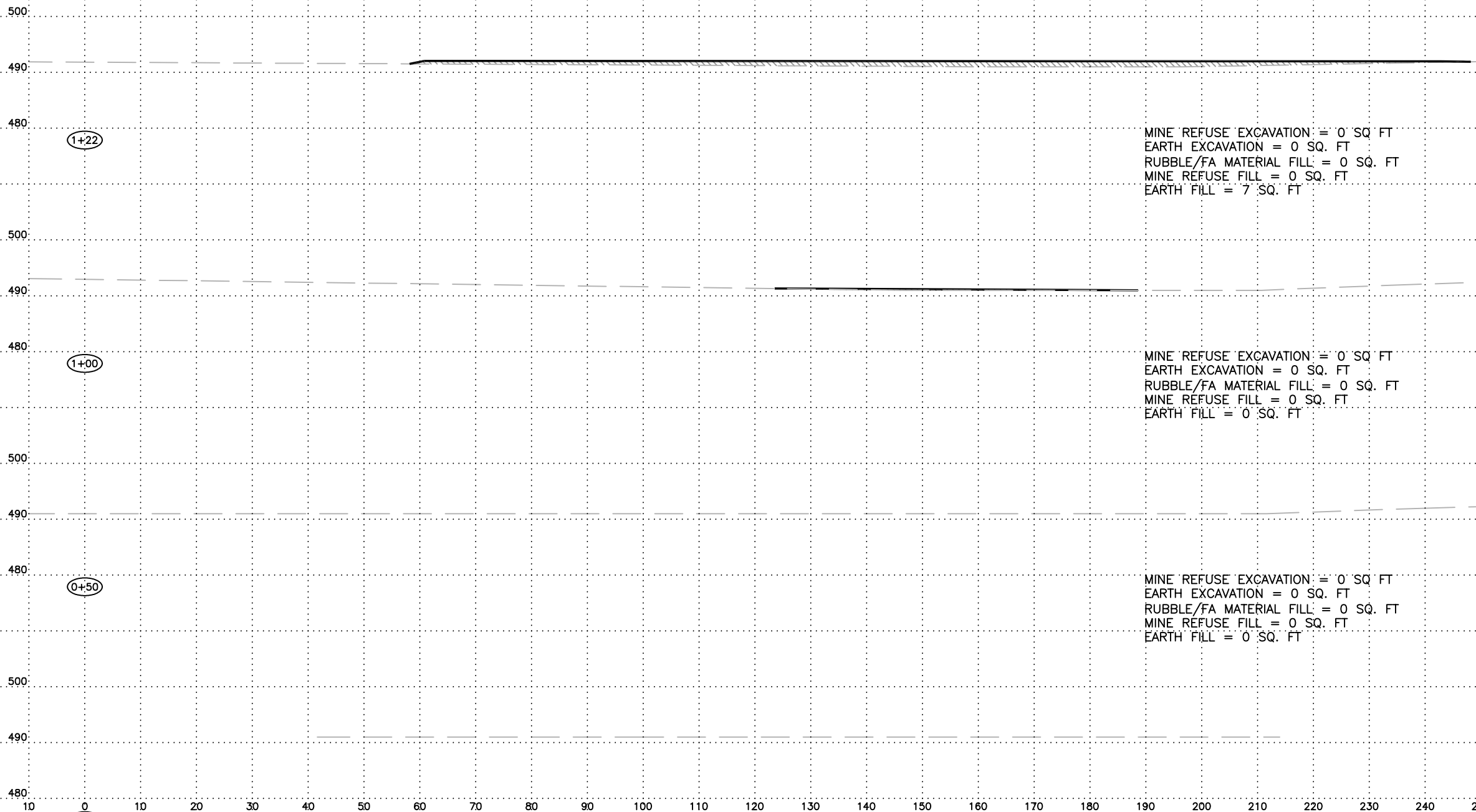
- — — — — EXISTING CONTOUR
- PROPOSED CONTOUR
- - - - - EXISTING EARTH SUBGRADE
- - - - - PROPOSED SUBGRADE WITH MINE REFUSE TREATMENT-LIMESTONE
- [Pattern: Dotted] MINE REFUSE CUT
- [Pattern: Diagonal lines /] MINE REFUSE FILL
- [Pattern: Vertical lines] EARTH CUT
- [Pattern: Diagonal lines \] EARTH FILL
- [Pattern: Cross-hatch] RUBBLE & SAND FILL

MINE REFUSE EXCAVATION = 0 SQ. FT
 EARTH EXCAVATION = 0 SQ. FT
 RUBBLE/FA MATERIAL FILL = 0 SQ. FT
 MINE REFUSE FILL = 0 SQ. FT
 EARTH FILL = 142 SQ. FT

MINE REFUSE EXCAVATION = 0 SQ. FT
 EARTH EXCAVATION = 0 SQ. FT
 RUBBLE/FA MATERIAL FILL = 0 SQ. FT
 MINE REFUSE FILL = 0 SQ. FT
 EARTH FILL = 7 SQ. FT

MINE REFUSE EXCAVATION = 0 SQ. FT
 EARTH EXCAVATION = 0 SQ. FT
 RUBBLE/FA MATERIAL FILL = 0 SQ. FT
 MINE REFUSE FILL = 0 SQ. FT
 EARTH FILL = 0 SQ. FT

MINE REFUSE EXCAVATION = 0 SQ. FT
 EARTH EXCAVATION = 0 SQ. FT
 RUBBLE/FA MATERIAL FILL = 0 SQ. FT
 MINE REFUSE FILL = 0 SQ. FT
 EARTH FILL = 0 SQ. FT



Horizontal Scale 10
 Vertical Scale 10

Glen Ridge and Salem Shaft
 Reclamation Project
 AML-GMaE-1211
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MINE REFUSE EXCAVATION = 574 SQ. FT.
 EARTH EXCAVATION = 1552 SQ. FT.
 RUBBLE/FA MATERIAL FILL = 1123 SQ. FT.
 MINE REFUSE FILL = 550 SQ. FT.
 EARTH FILL = 746 SQ. FT.

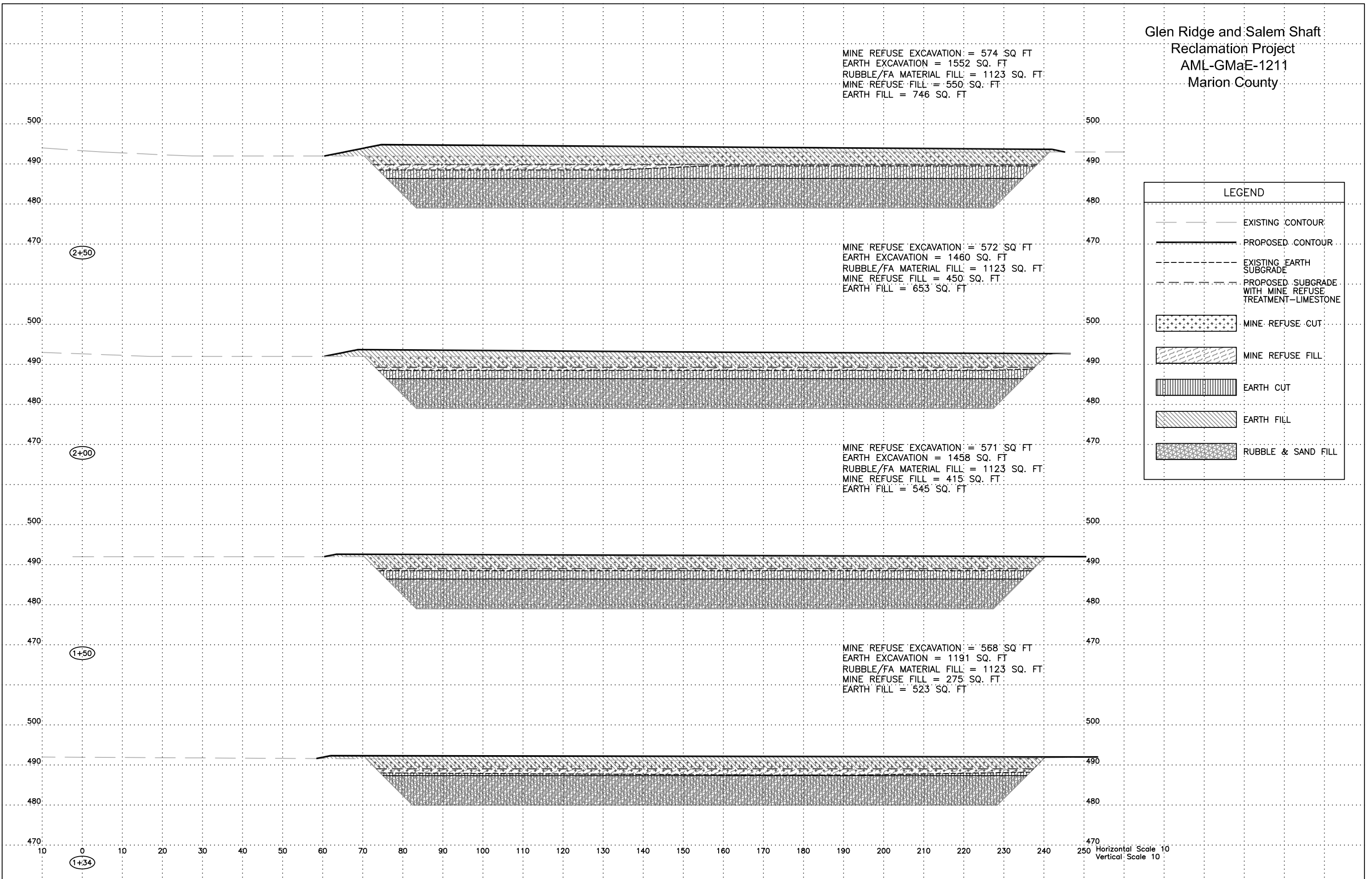
MINE REFUSE EXCAVATION = 572 SQ. FT.
 EARTH EXCAVATION = 1460 SQ. FT.
 RUBBLE/FA MATERIAL FILL = 1123 SQ. FT.
 MINE REFUSE FILL = 450 SQ. FT.
 EARTH FILL = 653 SQ. FT.

MINE REFUSE EXCAVATION = 571 SQ. FT.
 EARTH EXCAVATION = 1458 SQ. FT.
 RUBBLE/FA MATERIAL FILL = 1123 SQ. FT.
 MINE REFUSE FILL = 415 SQ. FT.
 EARTH FILL = 545 SQ. FT.

MINE REFUSE EXCAVATION = 568 SQ. FT.
 EARTH EXCAVATION = 1191 SQ. FT.
 RUBBLE/FA MATERIAL FILL = 1123 SQ. FT.
 MINE REFUSE FILL = 275 SQ. FT.
 EARTH FILL = 523 SQ. FT.

LEGEND

- — — — — EXISTING CONTOUR
- PROPOSED CONTOUR
- - - - - EXISTING EARTH SUBGRADE
- - - - - PROPOSED SUBGRADE WITH MINE REFUSE TREATMENT-LIMESTONE
- [Pattern: Dotted] MINE REFUSE CUT
- [Pattern: Diagonal lines /] MINE REFUSE FILL
- [Pattern: Vertical lines] EARTH CUT
- [Pattern: Diagonal lines \] EARTH FILL
- [Pattern: Cross-hatch] RUBBLE & SAND FILL



Horizontal Scale 10
 Vertical Scale 10

Glen Ridge and Salem Shaft
 Reclamation Project
 AML-GMaE-1211
 Marion County

MINE REFUSE EXCAVATION = 0 SQ. FT
 EARTH EXCAVATION = 0 SQ. FT
 RUBBLE/FA MATERIAL FILL = 0 SQ. FT
 MINE REFUSE FILL = 0 SQ. FT
 EARTH FILL = 0 SQ. FT

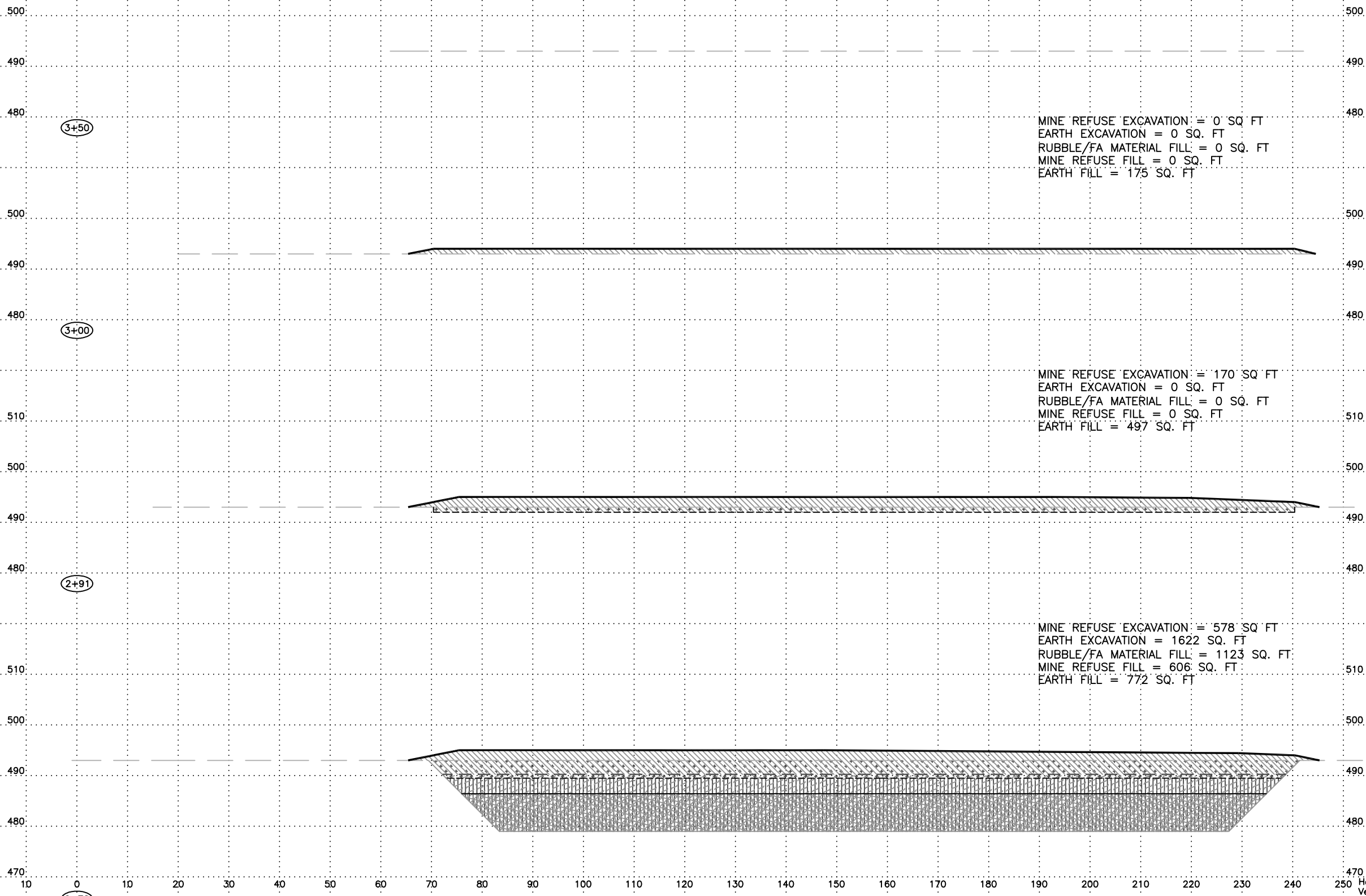
MINE REFUSE EXCAVATION = 0 SQ. FT
 EARTH EXCAVATION = 0 SQ. FT
 RUBBLE/FA MATERIAL FILL = 0 SQ. FT
 MINE REFUSE FILL = 0 SQ. FT
 EARTH FILL = 175 SQ. FT

MINE REFUSE EXCAVATION = 170 SQ. FT
 EARTH EXCAVATION = 0 SQ. FT
 RUBBLE/FA MATERIAL FILL = 0 SQ. FT
 MINE REFUSE FILL = 0 SQ. FT
 EARTH FILL = 497 SQ. FT

MINE REFUSE EXCAVATION = 578 SQ. FT
 EARTH EXCAVATION = 1622 SQ. FT
 RUBBLE/FA MATERIAL FILL = 1123 SQ. FT
 MINE REFUSE FILL = 606 SQ. FT
 EARTH FILL = 772 SQ. FT

LEGEND

- — — — — EXISTING CONTOUR
- PROPOSED CONTOUR
- - - - - EXISTING EARTH SUBGRADE
- - - - - PROPOSED SUBGRADE WITH MINE REFUSE TREATMENT-LIMESTONE
- [Pattern: Dotted] MINE REFUSE CUT
- [Pattern: Diagonal lines /] MINE REFUSE FILL
- [Pattern: Vertical lines] EARTH CUT
- [Pattern: Diagonal lines \] EARTH FILL
- [Pattern: Cross-hatch] RUBBLE & SAND FILL



Horizontal Scale 10
 Vertical Scale 10

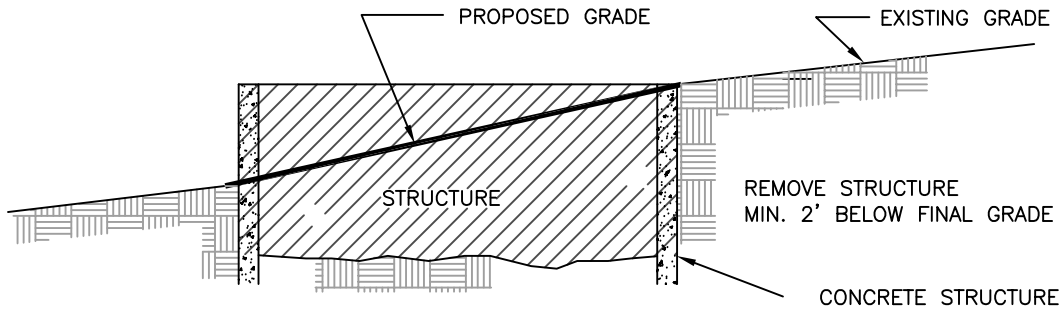
1.5" 3.5"
 1.5" 3.5"
 1.5" 3.5"
 1.5" 3.5"
 3.5" 3.0"
 3.5" 2.5"
 1.5" 2.5"
 3.5" 2.0"
 1.5" 2.0"
 2.0" 2.0"

RECLAMATION PROJECT
 of the
 DEPARTMENT OF NATURAL RESOURCES
 STATE OF ILLINOIS
 PAT QUINN, GOVERNOR
 Marc Miller, Director
 Illinois Dept. of Natural Resources
 In cooperation with the Office of Surface Mining
 United States Department of the Interior

1. Furnishing, erecting and removing the sign shall be incidental to the contract. Sign not required at the Salem Shaft project site.
2. The sign shall be painted on 1/2" or thicker exterior plywood (4' x 8'), color shall be black on white.
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.

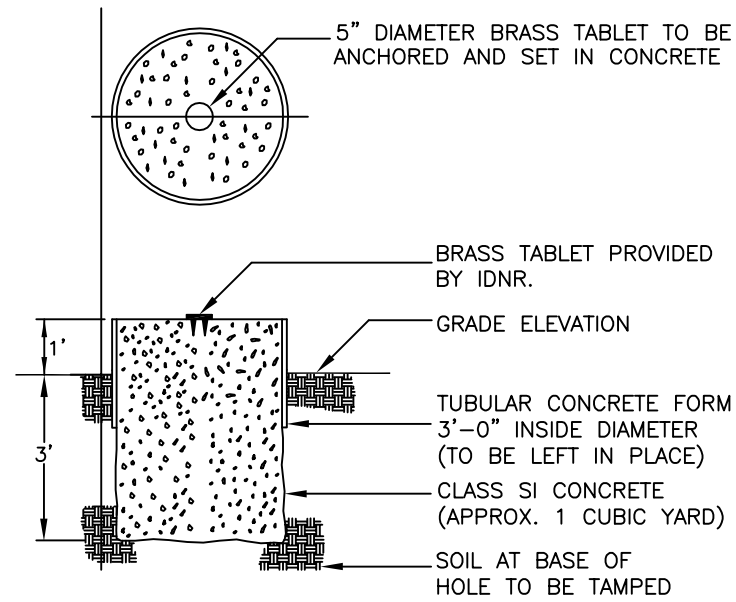
CONSTRUCTION SIGN DETAIL

DETAIL A-10, NOT TO SCALE, EXACT LOCATION TO BE SET BY ENGINEER



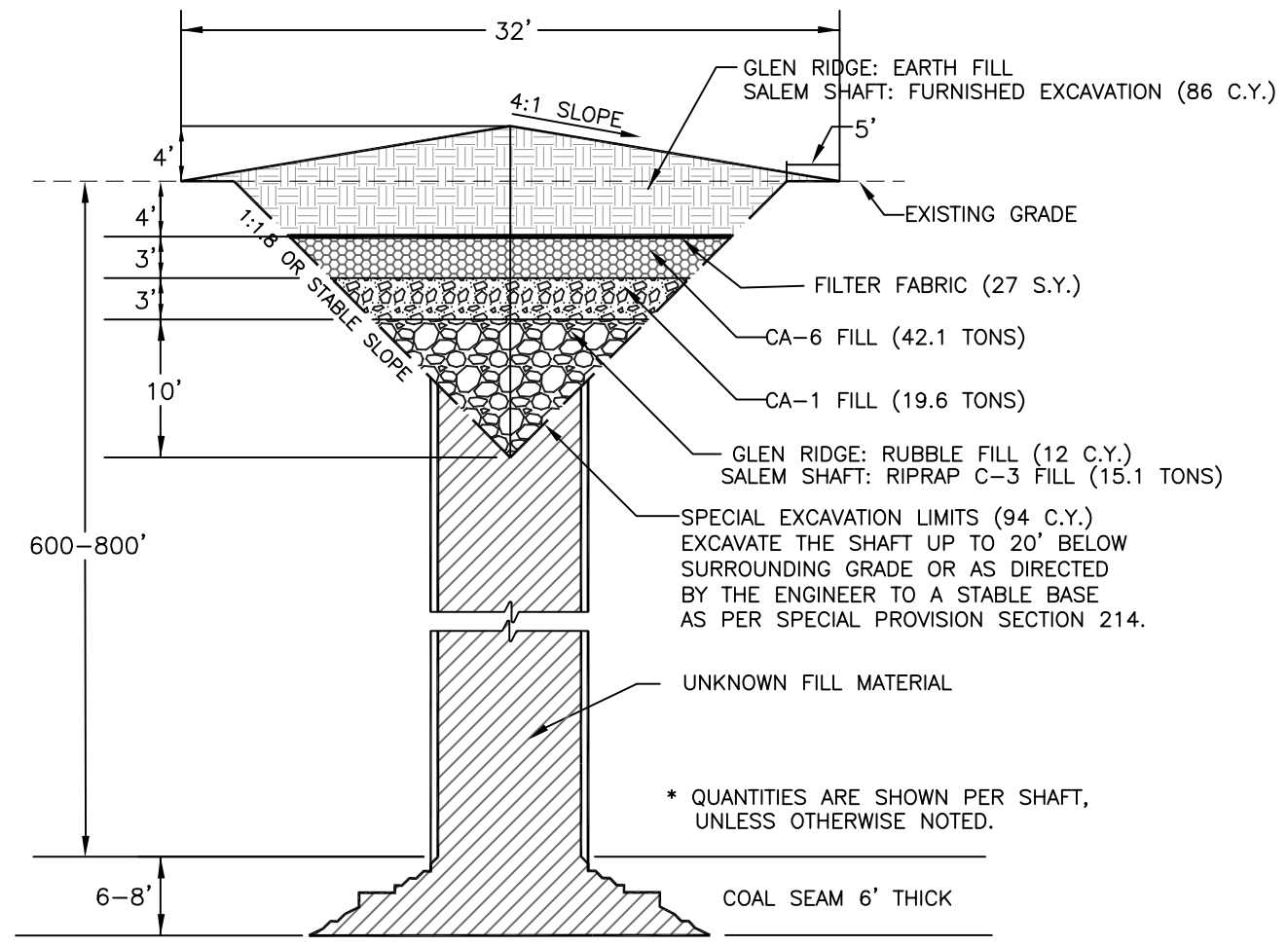
STRUCTURE REMOVAL DETAIL

DETAIL B-10, NOT TO SCALE



MINE OPENING MARKER DETAIL

DETAIL D-10, NOT TO SCALE



TYPICAL SHAFT FILLING DETAIL

DETAIL C-10, NOT TO SCALE

- NOTES:
1. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE SHAFT AREAS DUE TO THE UNKNOWN CONDITION OF THE SHAFTS AND THE UNKNOWN STABILITY OF THE SURROUNDING AREAS.
 2. THE ENGINEER RESERVES THE RIGHT TO INCREASE OR DECREASE THE VOLUME OF SPECIAL EXCAVATION AND BACKFILLING OF MATERIALS REQUIRED. THE ENGINEER WILL MAKE THE DETERMINATION DURING CONSTRUCTION BASED UPON THE CONDITIONS ENCOUNTERED DURING THE SPECIAL EXCAVATION PROCESS.

State of Illinois
 Department of Natural Resources

Glen Ridge Mine and Salem Shaft
 Reclamation Project
 AML-GMaE-1211
 Marion County

Drawn By: JMB
 Checked By:
 Date: 1/28/2012

Details
 Sheet 10 of 10