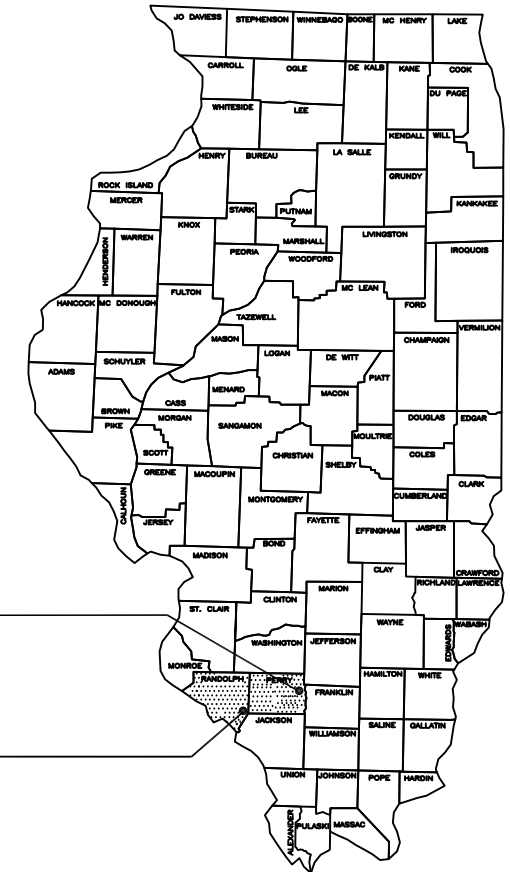


State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Division of Abandoned Mined Lands

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

Willis Coal Mine #1 and Square Deal
 Reclamation Project
 AML-GRaE-1307
 Randolph and Perry Counties
 2 LR



Square Deal
 Perry County

Willis Coal Mine #1
 Randolph County


Certified Copy

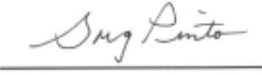
SCHEDULE OF DRAWINGS:

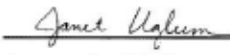
1. Cover Sheet
2. Summary of Quantities/General Notes
3. Willis Coal Mine #1 - Existing Conditions
4. Willis Coal Mine #1 - Proposed Conditions
5. Square Deal - Existing Conditions
6. Square Deal - Proposed Conditions
7. Details


CONTRACT NO. M1307

Prepared By IDNR Staff

Approved for Bidding:

 Michael L. Woods, Director
 Office of Mines and Minerals

Approved By:

 Greg Pinto, Acting Manager
 AML Division

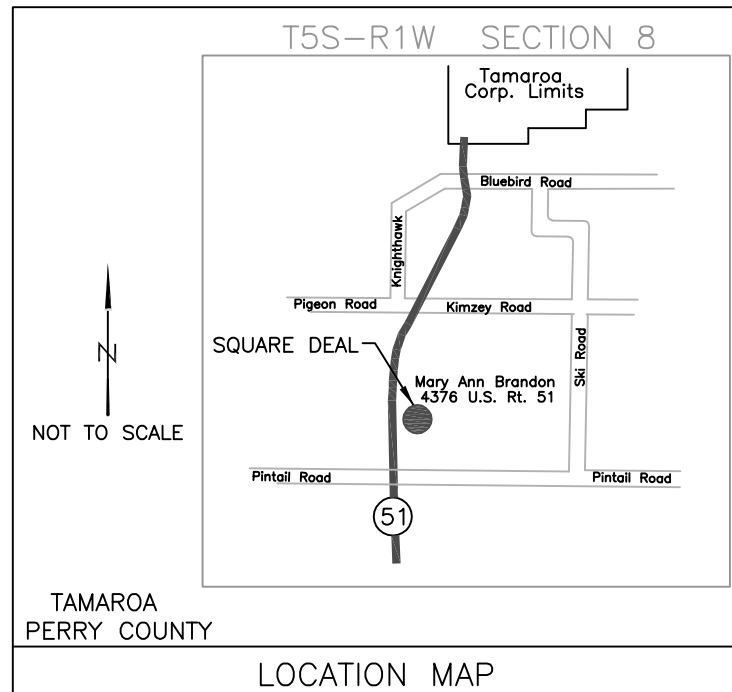
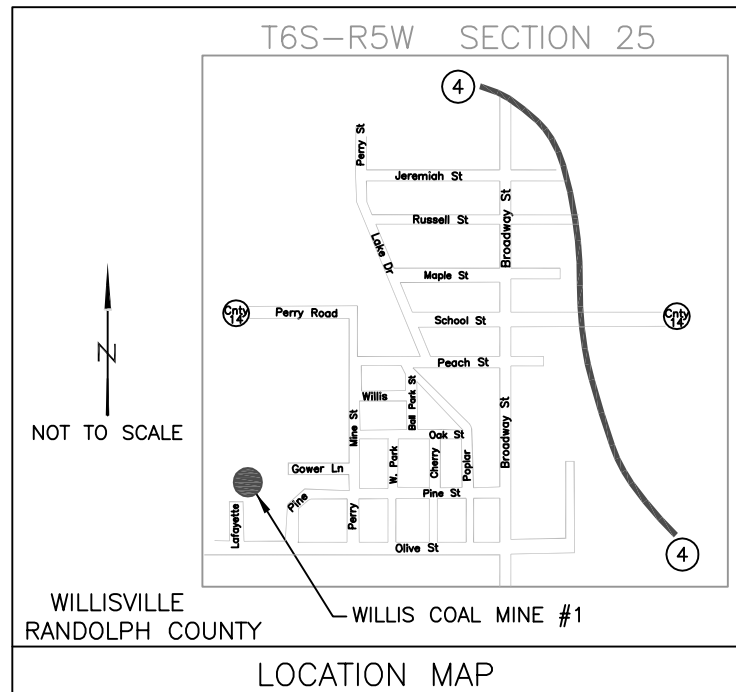
Approved By:

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



Summary of Quantities

Item Number	#	Item	Section	Quantity			Unit	Rates/Remarks
				WILLIS COAL MINE #1	SQUARE DEAL	TOTAL		
NRM20110	1	Special Clearing	201	0.5	0.5	1	L SUM	
NRM20480	2	Furnished Excavation	204	705	0	705	CU YD	Compaction in Accordance with Section 205 of the Special Provisions
NRM21510	3	Special Excavation	215	963	368	1,331	CU YD	
NRM21621	4	CA Fill, CA-1	216	5.5	104.0	109.5	TON	
NRM21644	5	Rock Fill, RR-4	216	20.0	828.4	848.4	TON	
NRM21661	6	Class SI Concrete Plug	216	11	0	11	CU YD	
NRM25040	7	Nitrogen Fertilizer Nutrient	250	30	50	80	POUND	100 LB / ACRE
NRM25050	8	Phosphorus Fertilizer Nutrient	250	45	75	120	POUND	150 LB / ACRE
NRM25060	9	Potassium Fertilizer Nutrient	250	105	175	280	POUND	350 LB / ACRE
NRM25070	10	Agricultural Ground Limestone	250	1.5	2.5	4.0	TON	5 TONS / ACRE
NRM25090	11	Seeding	250	0.3	0.5	0.8	ACRE	
25100115	12	Mulch, Method 2, Procedure 1	IDOT 251	0.3	0.5	0.8	ACRE	
NRM28610	13	Special Excelsior Blanket	286	133	0	133	SQ YD	8 FT. WIDE STRIPS
40200800	14	Aggregate Surface Course, Type B	IDOT 402	30.0	15.0	45.0	TON	CA-6
NRM66610	15	Mine Opening Marker	666	1	1	2	EACH	
NRM67110	16	Mobilization (Max. 6% of Bid)	671	0.5	0.5	1	L SUM	

Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing			
ITEM (unit)	SPRING 2014 MARCH 15 - MAY 15		TOTAL QUANTITY
	WILLIS	SQUARE DEAL	
SEEDING (acres)	0.3	0.5	0.8
AGRICULTURAL GROUND LIMESTONE (tons)	1.5 5 T/A	2.5 5 T/A	4.0
NITROGEN FERTILIZER NUTRIENT (pounds)	30 100 Lb./A	50 100 Lb./A	80
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	45 150 Lb./A	75 150 Lb./A	120
POTASSIUM FERTILIZER NUTRIENT (pounds)	105 350 Lb./A	175 350 Lb./A	280
MULCH, METHOD 2 PROCEDURE 1 (acre)	0.3 2 T/A	0.5 2 T/A	0.8



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 of the Special Provisions.

TREE REMOVAL—Trees removed shall be disposed of per Section 201 of the Special Provisions. Trees shall be removed and disposed off site in both locations.

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.

GENERAL NOTES

Unless otherwise noted on the plans, all disturbed areas within the construction limits will be amended with agricultural ground limestone, fertilizer, seeded and mulched per specifications.

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.

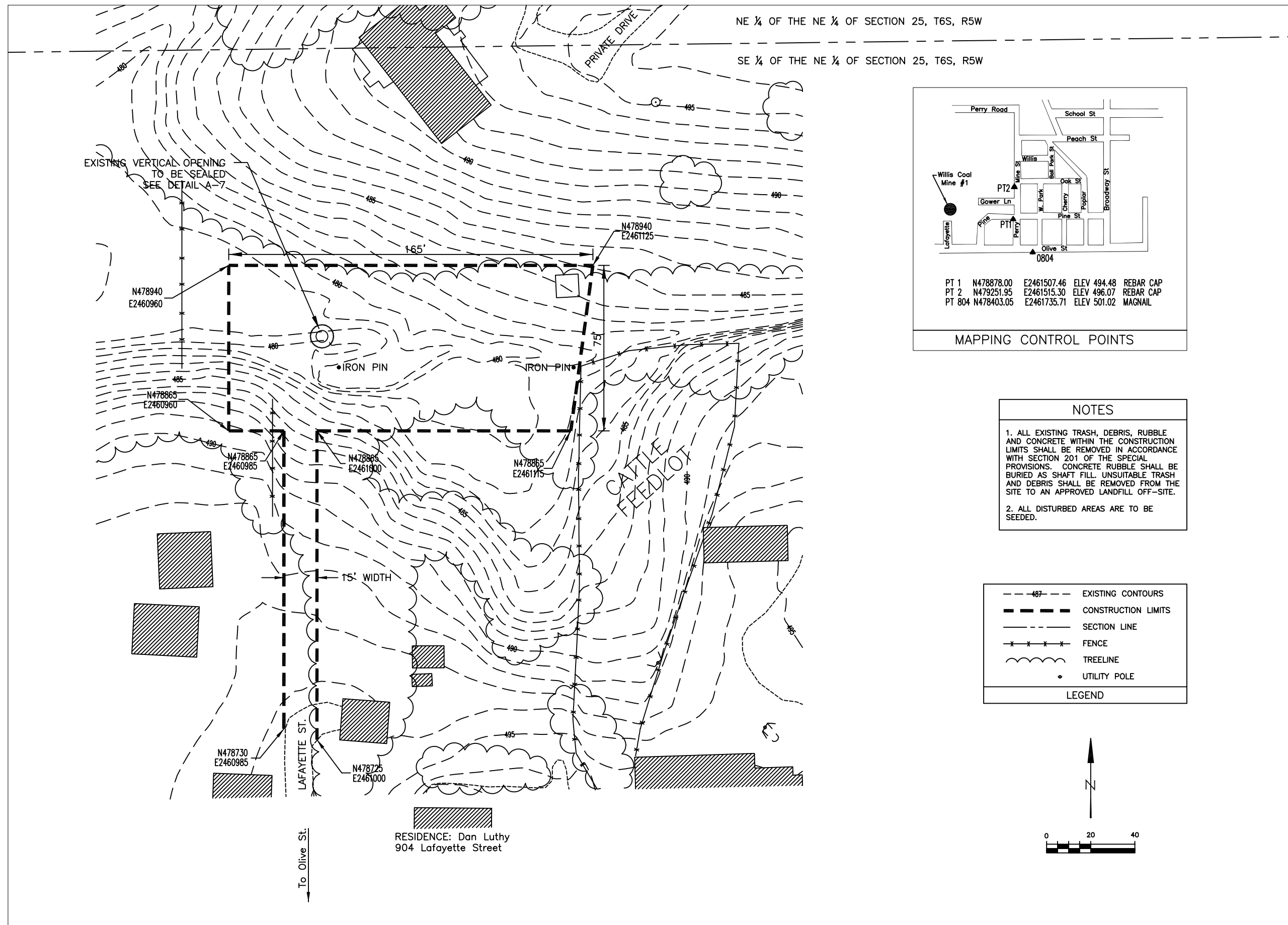
The contractor is responsible for locating and protecting all existing utility lines pertaining to the work.

Unless noted on the plans, all onsite access roads may be used for construction and must be maintained during construction. Access the site as designated on the plans and maintained to the satisfaction of the Engineer.

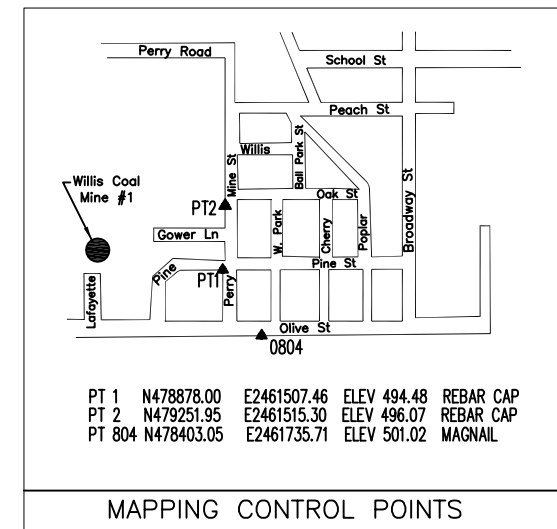
The construction limits will be staked by the contractor prior to construction. The contractor is responsible for the repair and or restitution at his own expense for all damages done to any area outside the construction limits.

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

The locations from which Borrow Excavation comes must meet the review requirements of Article 107.22 and Section 204 of the Special Provisions prior to hauling to the project sites.



NE ¼ OF THE NE ¼ OF SECTION 25, T6S, R5W
 SE ¼ OF THE NE ¼ OF SECTION 25, T6S, R5W

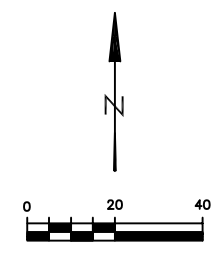


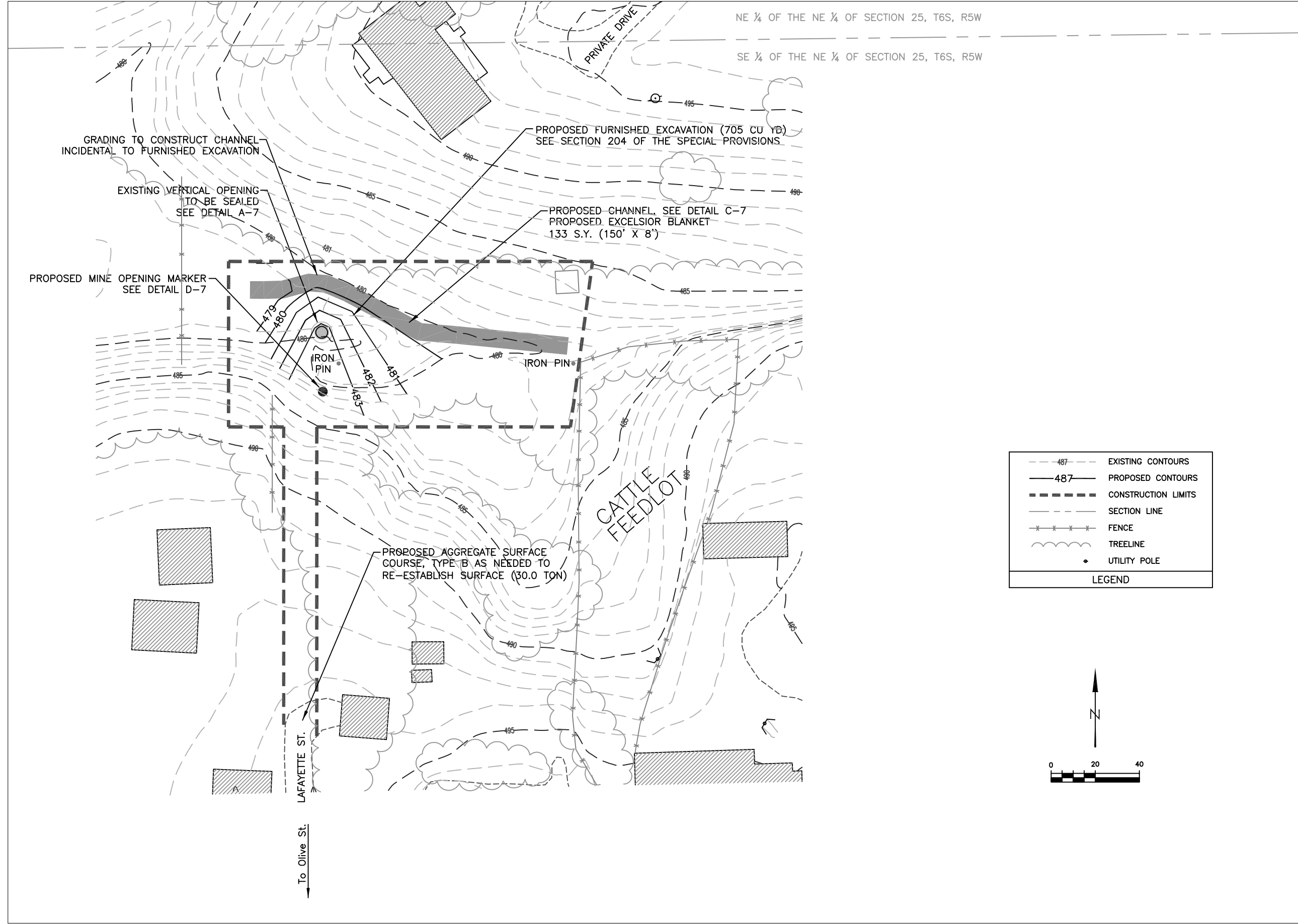
NOTES

1. ALL EXISTING TRASH, DEBRIS, RUBBLE AND CONCRETE WITHIN THE CONSTRUCTION LIMITS SHALL BE REMOVED IN ACCORDANCE WITH SECTION 201 OF THE SPECIAL PROVISIONS. CONCRETE RUBBLE SHALL BE BURIED AS SHAFT FILL. UNSUITABLE TRASH AND DEBRIS SHALL BE REMOVED FROM THE SITE TO AN APPROVED LANDFILL OFF-SITE.
2. ALL DISTURBED AREAS ARE TO BE SEEDED.

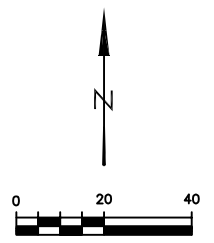
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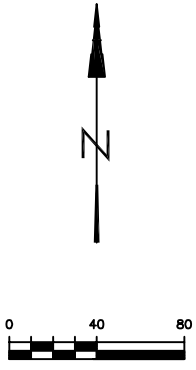
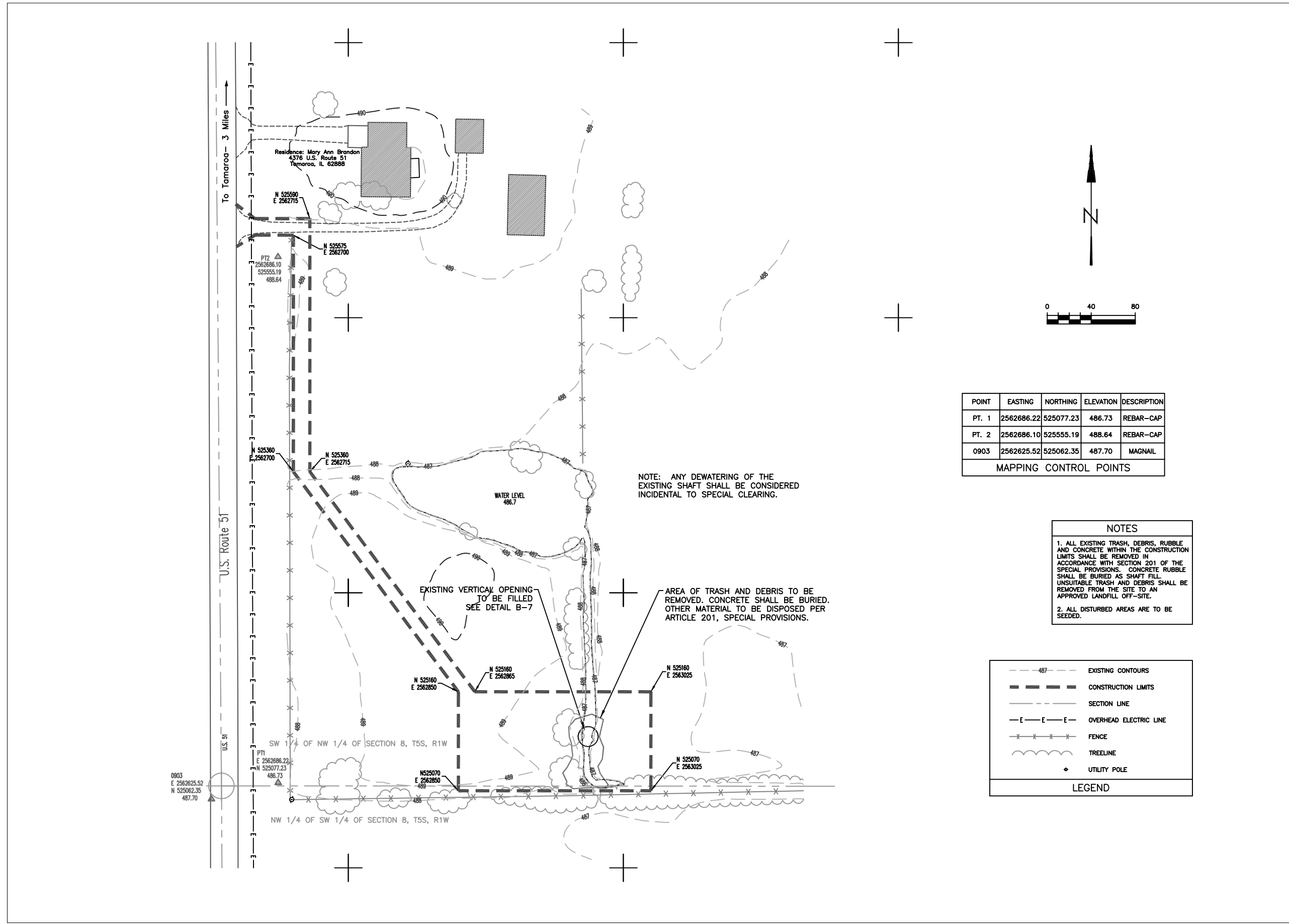
--- 487 ---	EXISTING CONTOURS
---	CONSTRUCTION LIMITS
---	SECTION LINE
x x x x	FENCE
~~~~~	TREELINE
•	UTILITY POLE





--- 487 ---	EXISTING CONTOURS
— 487 —	PROPOSED CONTOURS
--- ---	CONSTRUCTION LIMITS
---	SECTION LINE
* * * * *	FENCE
~~~~~	TREELINE
•	UTILITY POLE
LEGEND	





POINT	EASTING	NORTHING	ELEVATION	DESCRIPTION
PT. 1	2562686.22	525077.23	486.73	REBAR-CAP
PT. 2	2562686.10	525555.19	488.64	REBAR-CAP
0903	2562625.52	525062.35	487.70	MAGNAIL

MAPPING CONTROL POINTS

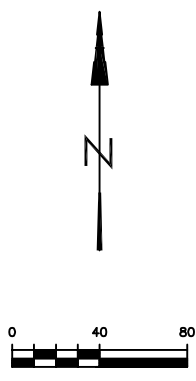
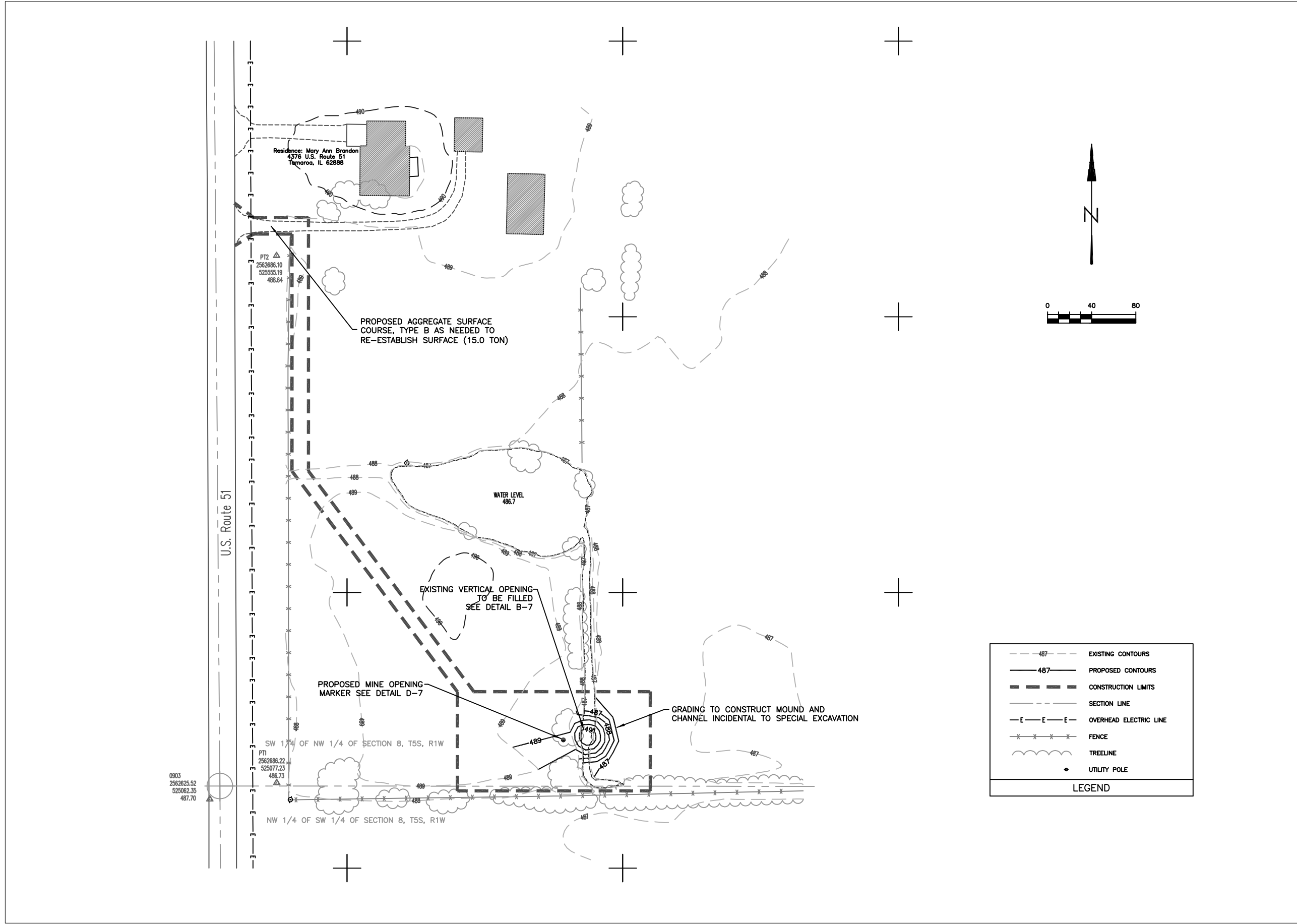
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	EXISTING CONTOURS
	CONSTRUCTION LIMITS
	SECTION LINE
	OVERHEAD ELECTRIC LINE
	FENCE
	TREELINE
	UTILITY POLE

LEGEND

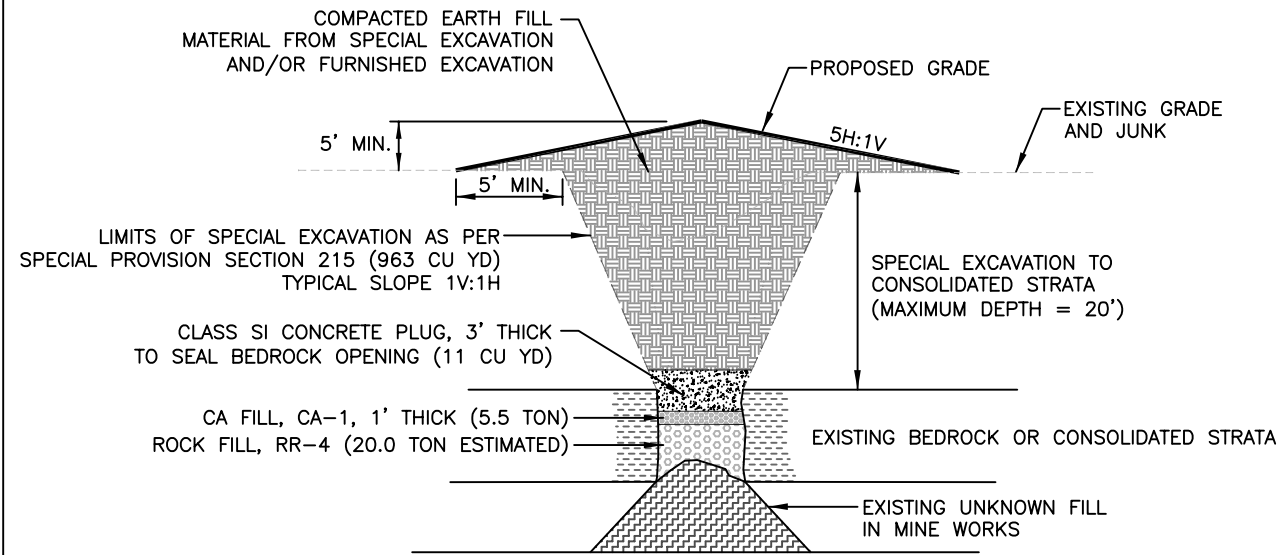
NOTE: ANY DEWATERING OF THE EXISTING SHAFT SHALL BE CONSIDERED INCIDENTAL TO SPECIAL CLEARING.



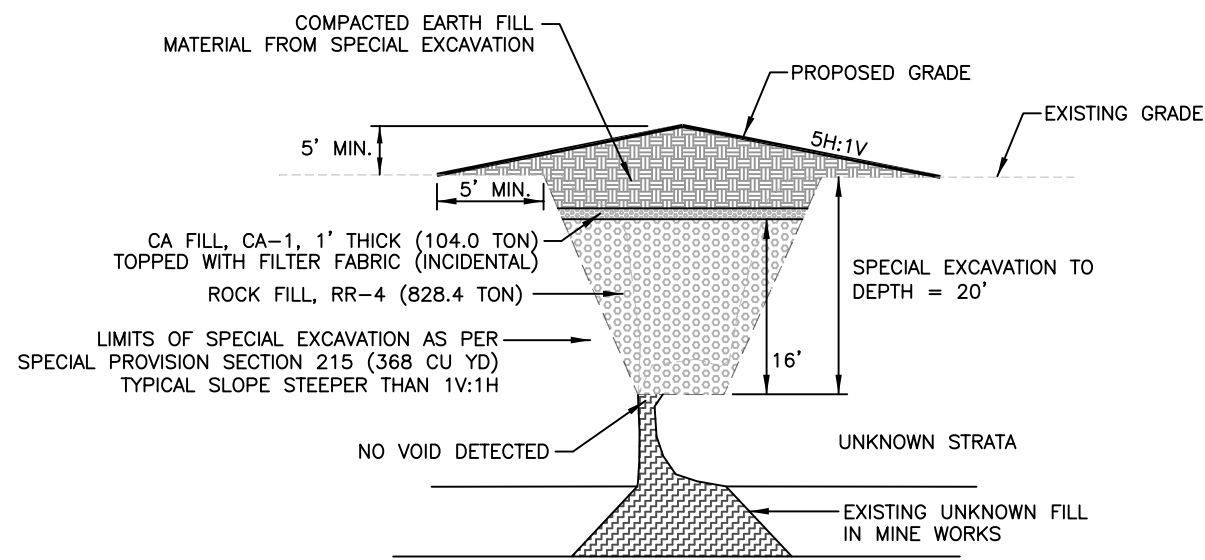
--- 487 ---	EXISTING CONTOURS
— 487 —	PROPOSED CONTOURS
— — — — —	CONSTRUCTION LIMITS
— — — — —	SECTION LINE
— E — E — E —	OVERHEAD ELECTRIC LINE
x x x x x	FENCE
~~~~~	TREELINE
•	UTILITY POLE
LEGEND	

NOTES:

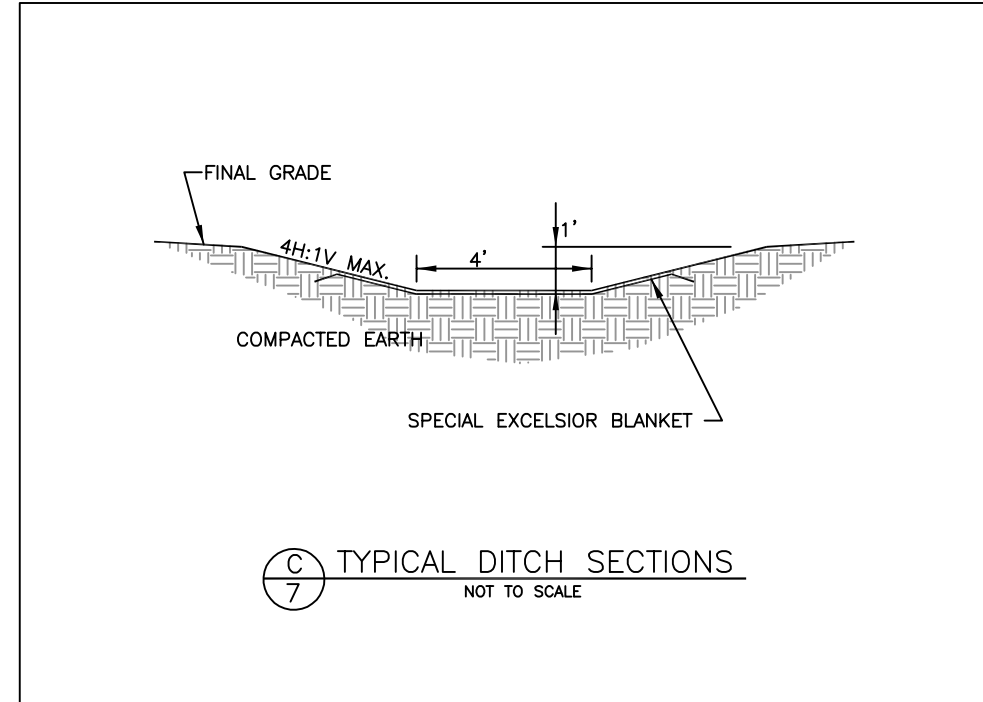
1. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING IN THE SHAFT AREAS DUE TO THE UNKNOWN CONDITION OF THE SHAFTS AND THE UNKNOWN STABILITY OF THE SURROUNDING AREAS.
2. BASED UPON CONDITIONS ENCOUNTERED AS THE SPECIAL EXCAVATION PROCESS IS COMPLETED, THE ENGINEER RESERVES THE RIGHT TO INCREASE OR 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 BOTH THE WILLIS COAL MINE #1 SHAFT AND THE SQUARE DEAL SHAFT ARE ESTIMATED TO BE 10' X 10'.
4. AFTER THE ROCK FILL, RR-4, HAS BEEN PLACED, THE CONTRACTOR SHALL SECURE THE AREA WITH TEMPORARY FENCING FOR A THREE DAY PERIOD TO ALLOW FOR SETTLEMENT BEFORE PROCEEDING WITH THE BACKFILLING. THE TEMPORARY FENCING SHALL BE INCIDENTAL TO THE ROCK FILL, RR-4.



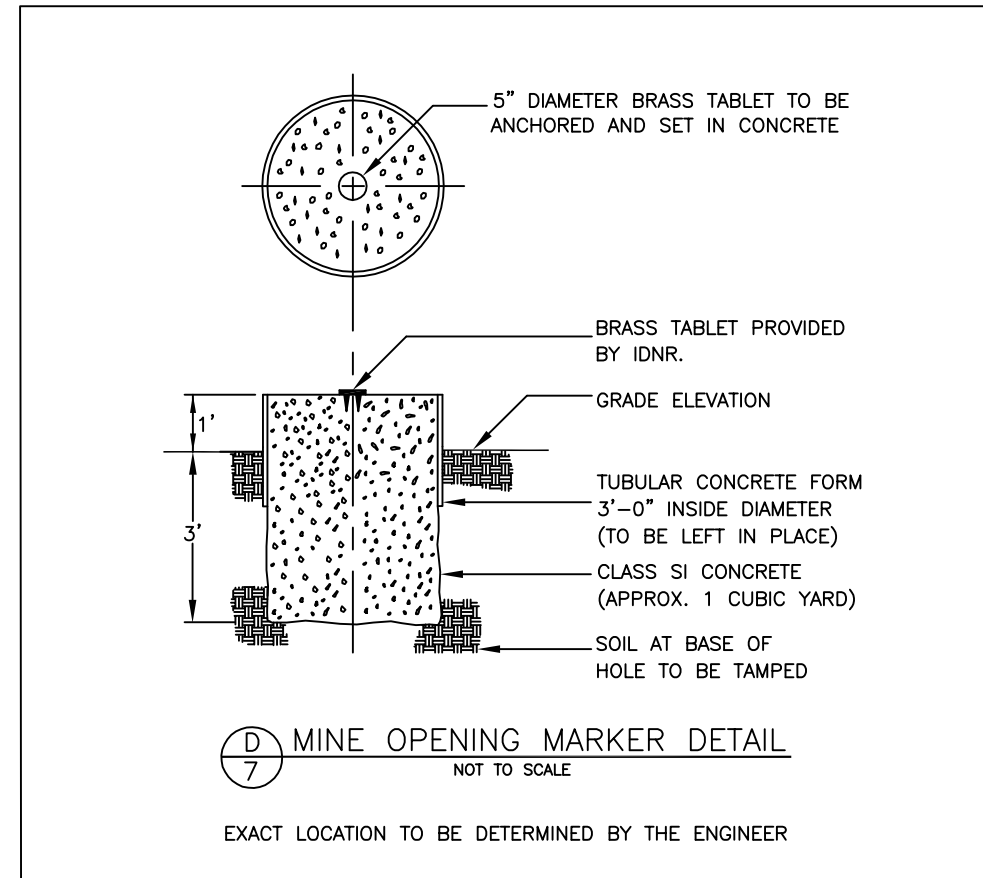
(A) SHAFT SEALING DETAIL IN BEDROCK  
NOT TO SCALE, TYPICAL SECTION



(B) SHAFT FILLING DETAIL IN UNKNOWN STRATA  
NOT TO SCALE, TYPICAL SECTION



(C) TYPICAL DITCH SECTIONS  
NOT TO SCALE



(D) MINE OPENING MARKER DETAIL  
NOT TO SCALE

EXACT LOCATION TO BE DETERMINED BY THE ENGINEER