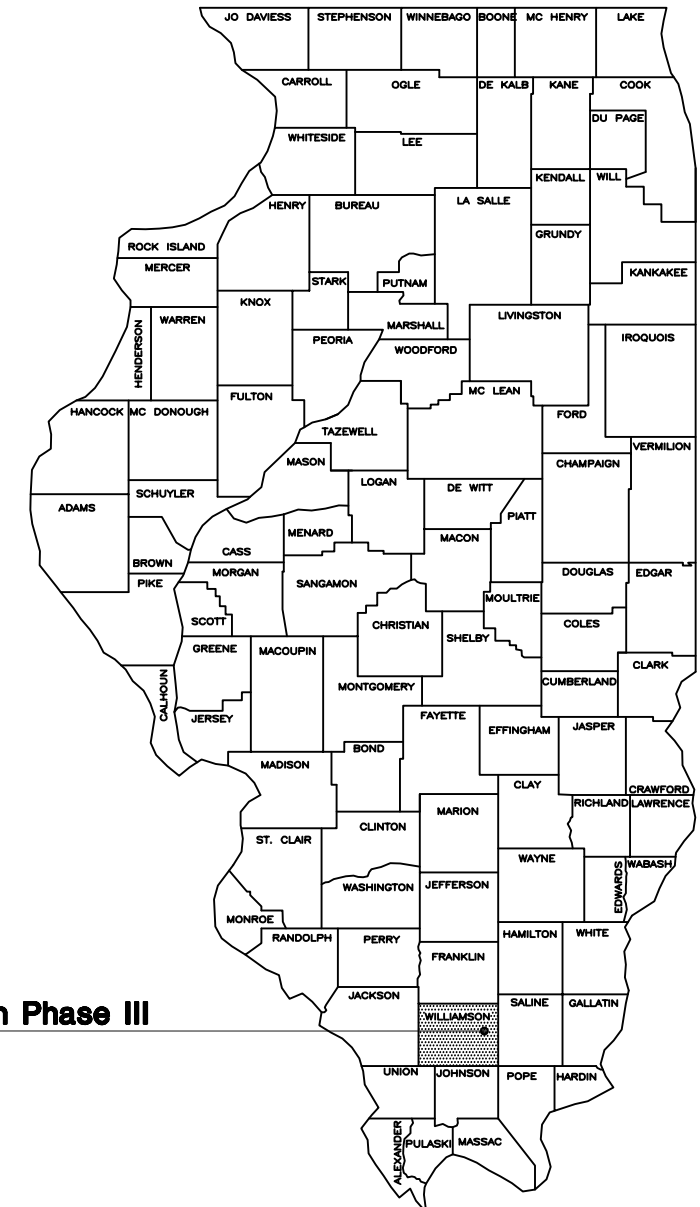


State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Division of Abandoned Mined Lands Reclamation

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

Delta Collieries North Phase III
Reclamation Project
AML-GWmE-1709
Williamson County
3LR



Delta Collieries North Phase III
Williamson County

Certified Copy

SCHEDULE OF DRAWINGS:

1. Cover Sheet
2. Summary of Quantities / General Notes / Location Map
3. Site Information
- 4-13. Existing and Proposed Conditions
- 14-24. Cross Sections
25. Details

CONTRACT NO. M1709

PRE-BID MEETING

A PRE-BID MEETING IS SCHEDULED FOR THIS PROJECT ON TUESDAY, NOVEMBER 7, 2017 AT 10:00 A.M. AT THE INTERSECTION OF DYKERSBURG ROAD AND SHADY REST ROAD (SEE SHEET 2). ALL PRIME AND SUBCONTRACTORS ARE ENCOURAGED TO ATTEND.

Prepared By IDNR Staff

Approved for Bidding:

Thomas A. Benner, Director
Office of Mines and Minerals

Approved By:

J. Greg Pinto, Acting Manager
AMLR Division

Approved By:

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



Summary of Quantities

Item No.	#	Bid Item Description	Section	Quantity	Unit	Rates/Remarks
NRM20110	1	Special Clearing	201	1	L SUM	
NRM20210	2	Earth Excavation	202	530,986	CU YD	COMPACTION IN ACCORDANCE WITH SECTION 205 OF SPECIAL PROVISIONS
20300100	3	Channel Excavation	IDOT 203	2,935	CU YD	
NRM25040	4	Nitrogen Fertilizer Nutrient	250	6,980	POUND	100 LB / ACRE TWICE
NRM25050	5	Phosphorous Fertilizer Nutrient	250	5,040	POUND	140 LB / ACRE
NRM25060	6	Potassium Fertilizer Nutrient	250	10,800	POUND	300 LB / ACRE
NRM25070	7	Agricultural Ground Limestone	250	720.0	TON	20 TON / ACRE
NRM25090	8	Seeding	250	33.8	ACRE	
25000314	9	Seeding Class 4B	IDOT 250	2.2	ACRE	
25100115	10	Mulch, Method 2, Procedure 1	IDOT 251	36.0	ACRE	2 TON / ACRE
NRM25810	11	Mowing	258	33.8	ACRE	
NRM28040	12	Perimeter Erosion Barrier	280	110	FOOT	
NRM28050	13	Inlet and Pipe Protection	280	1	EACH	
28100205	14	Stone Riprap, Class A3	IDOT 281	32.4	TON	
28100207	15	Stone Riprap, Class A4	IDOT 281	224.7	TON	
NRM28610	16	Special Excelsior Blanket	286	9,513	SQ YD	8 FOOT WIDE
NRM28710	17	Geosynthetic Concrete Composite Mat	287	933	SQ YD	
542D0223	18	Pipe Culvert, Class D, Type 1 18"	IDOT 542	40	FOOT	CORRUGATED PE WITH SMOOTH INTERIOR, METHOD 1
542D0229	19	Pipe Culvert, Class D, Type 1 24"	IDOT 542	40	FOOT	
542D1069	20	Pipe Culvert, Class D, Type 2 24"	IDOT 542	50	FOOT	
NRM61410	21	Dewatering Impoundments	614	1	L SUM	
NRM66540	22	Temporary Safety Fence	665	2,320	FOOT	
NRM67110	23	Mobilization	671	1	L SUM	MAX. 6% OF BID

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.

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

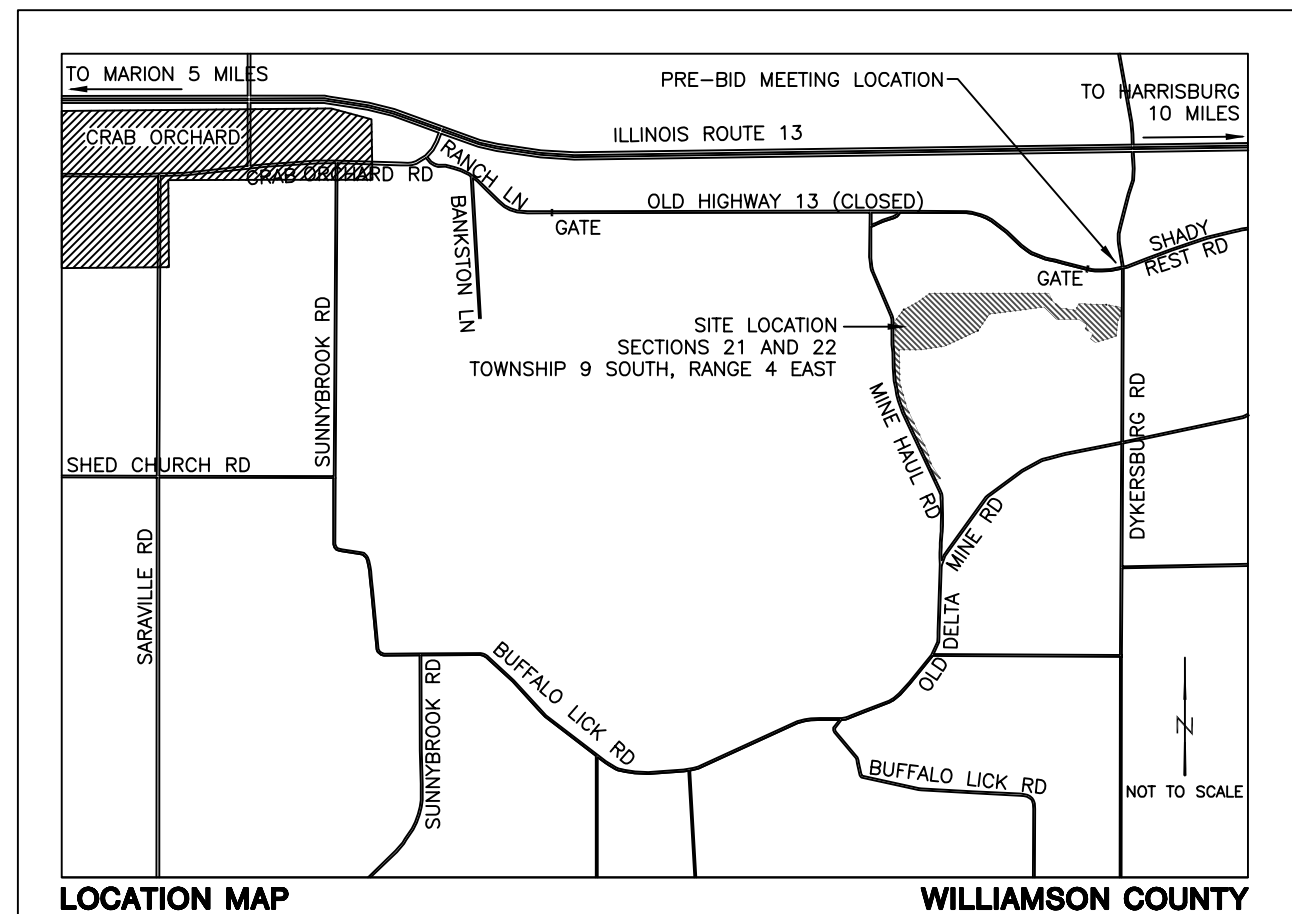
BURIAL/REMOVAL OF MATERIAL—Concrete and masonry debris designated for burial by the engineer shall be buried at least three feet below proposed final grade. Onsite organic debris and trash shall be disposed of in an engineer approved offsite landfill in accordance with Sections 201 and 501 of the Special Provisions.

TREE REMOVAL—Trees cleared from the site shall be disposed of onsite per Section 201 of the Special Provisions. No clearing of trees outside the construction limits may occur. Tree clearing must be completed by March 14, 2018.

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 including the Seeding Class 4B areas.

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.



Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing

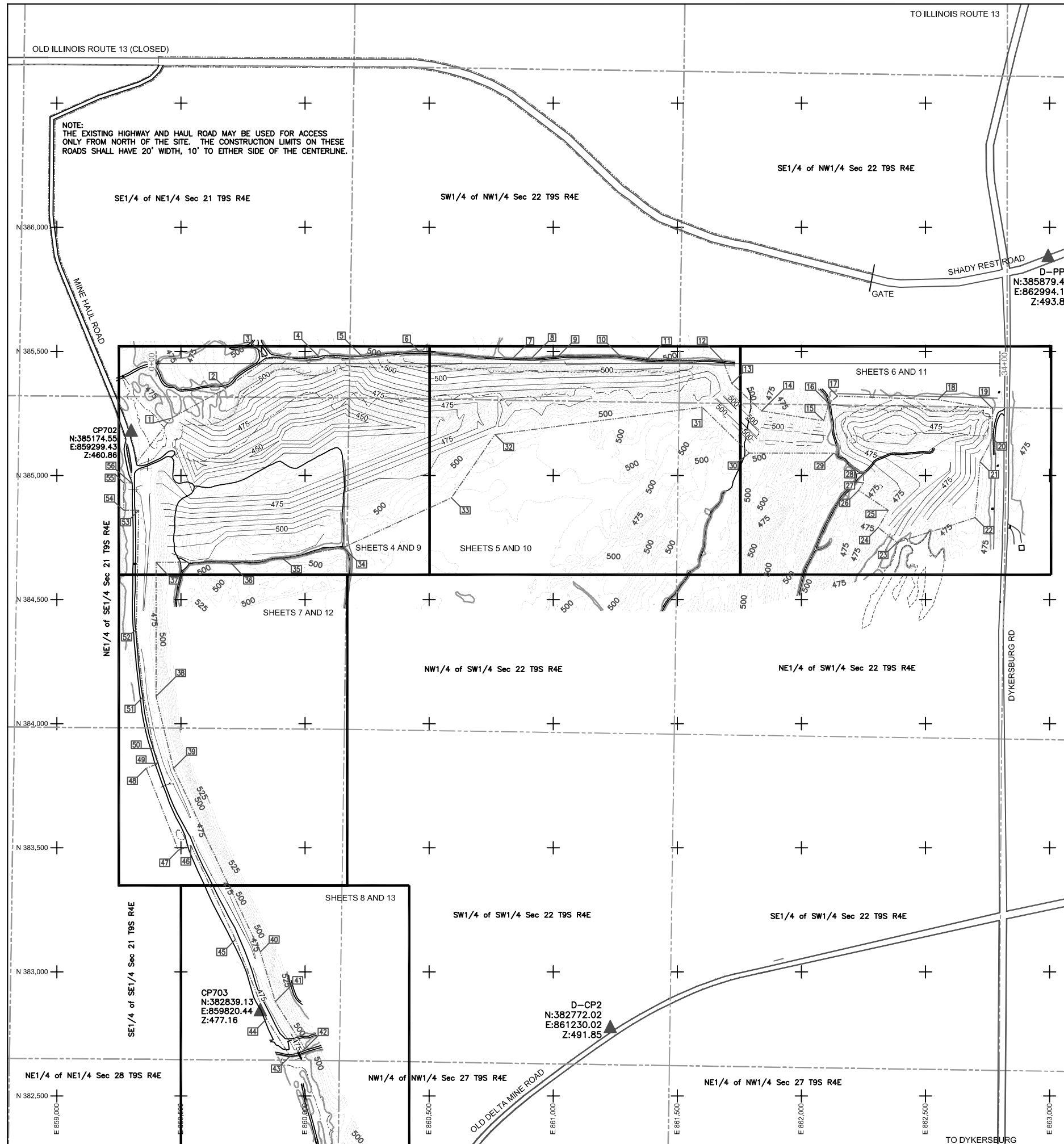
ITEM (unit)	INITIAL APPLICATION FALL 2018 AUG. 20– SEPT. 30	INITIAL APPLICATION FALL 2018 OCT. 15–DEC. 1	SECOND APPLICATION SPRING 2019 JAN. 1 – MAR. 15 PER THE ENGINEER	MOWING TO BE COMPLETED BY JUNE 30, 2019 OR AS DIRECTED BY THE ENGINEER	TOTAL QUANTITY
SEEDING (acres)	33.8				33.8
SEEDING CLASS 4B (acres)		2.2	NOT REQUIRED	NO MOWING REQUIRED	2.2
AGRICULTURAL GROUND LIMESTONE (tons)	676	44			720
NITROGEN FERTILIZER NUTRIENT (pounds)	3,380	220	3,380		6,980
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	4,732	308			5,040
POTASSIUM FERTILIZER NUTRIENT (pounds)	10,140	660			10,800
MULCH, METHOD 2 PROCEDURE 1 (acres)	33.8	2.2			36.0
MOWING (acres)				33.8	33.8

State of Illinois
Department of Natural Resources

Delta Collieries North Phase III
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Williamson County

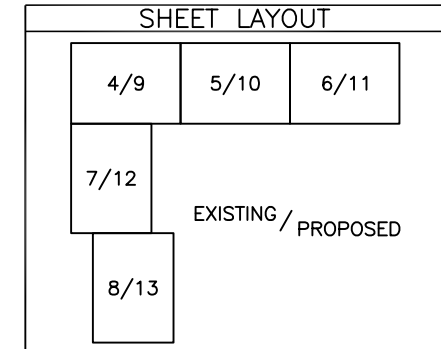
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Drawn By: _____
Checked By: _____

Summary of Quantities/
General Notes/Location Map
Sheet 2 of 25



CONSTRUCTION LIMITS COORDINATES

POINT	NORTHING	EASTING	POINT	NORTHING	EASTING	POINT	NORTHING	EASTING
1	385,230	859,460	21	385,055	862,720	41	382,880	859,880
2	385,350	859,680	22	384,830	862,700	42	382,690	860,000
3	385,470	859,850	23	384,730	862,385	43	382,660	859,940
4	385,480	860,055	24	384,790	862,310	44	382,810	859,845
5	385,480	860,230	25	384,860	862,350	45	383,130	859,720
6	385,500	860,460	26	384,940	862,230	46	383,510	859,540
7	385,470	860,835	27	384,970	862,250	47	383,490	859,490
8	385,470	860,910	28	385,010	862,250	48	383,820	859,360
9	385,480	861,020	29	385,090	862,130	49	383,840	859,410
10	385,480	861,270	30	385,090	861,790	50	383,900	859,390
11	385,470	861,380	31	385,275	861,600	51	384,110	859,350
12	385,460	861,685	32	385,165	860,765	52	384,380	859,320
13	385,370	861,720	33	384,910	860,590	53	384,860	859,330
14	385,260	861,840	34	384,710	860,155	54	384,860	859,270
15	385,220	862,090	35	384,665	859,910	55	384,970	859,270
16	385,290	862,110	36	384,650	859,700	56	384,970	859,300
17	385,320	862,145	37	384,650	859,400			
18	385,305	862,550	38	384,110	859,400			
19	385,270	862,770	39	383,820	859,470			
20	385,150	862,770	40	383,080	859,820			

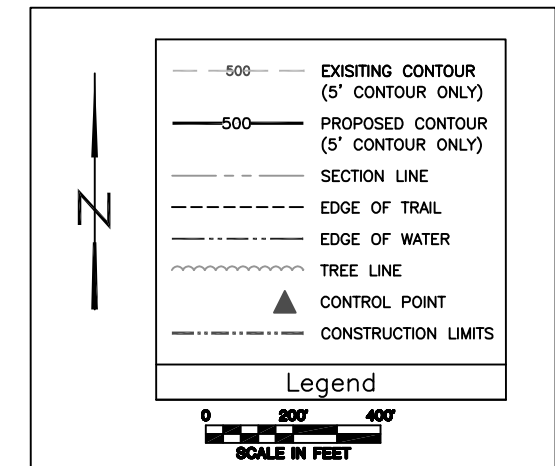


CONTROL POINT INFORMATION

POINT	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP702	385,174.55	859,299.43	460.86	IRON PIN
CP703	382,839.13	859,820.44	477.16	IRON PIN
D-PP3	385,879.47	862,994.12	493.80	PK-NAIL IN PAVEMENT
D-CP2	382,772.02	861,230.02	491.85	IRON PIN

BASELINE COORDINATES

STA	NORTHING	EASTING	STA	NORTHING	EASTING
0+00	385,450	859,400	34+00	385,450	862,800



State of Illinois
Department of Natural Resources

Delta Collieries North Phase III
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AML-GWmE-1709
Williamson County

Date: _____
Drawn By: _____
Checked By: _____

Site Information
Sheet 3 of 25



State of Illinois
Department of Natural Resources

Delta Collieries North Phase III
Reclamation Project
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Williamson County

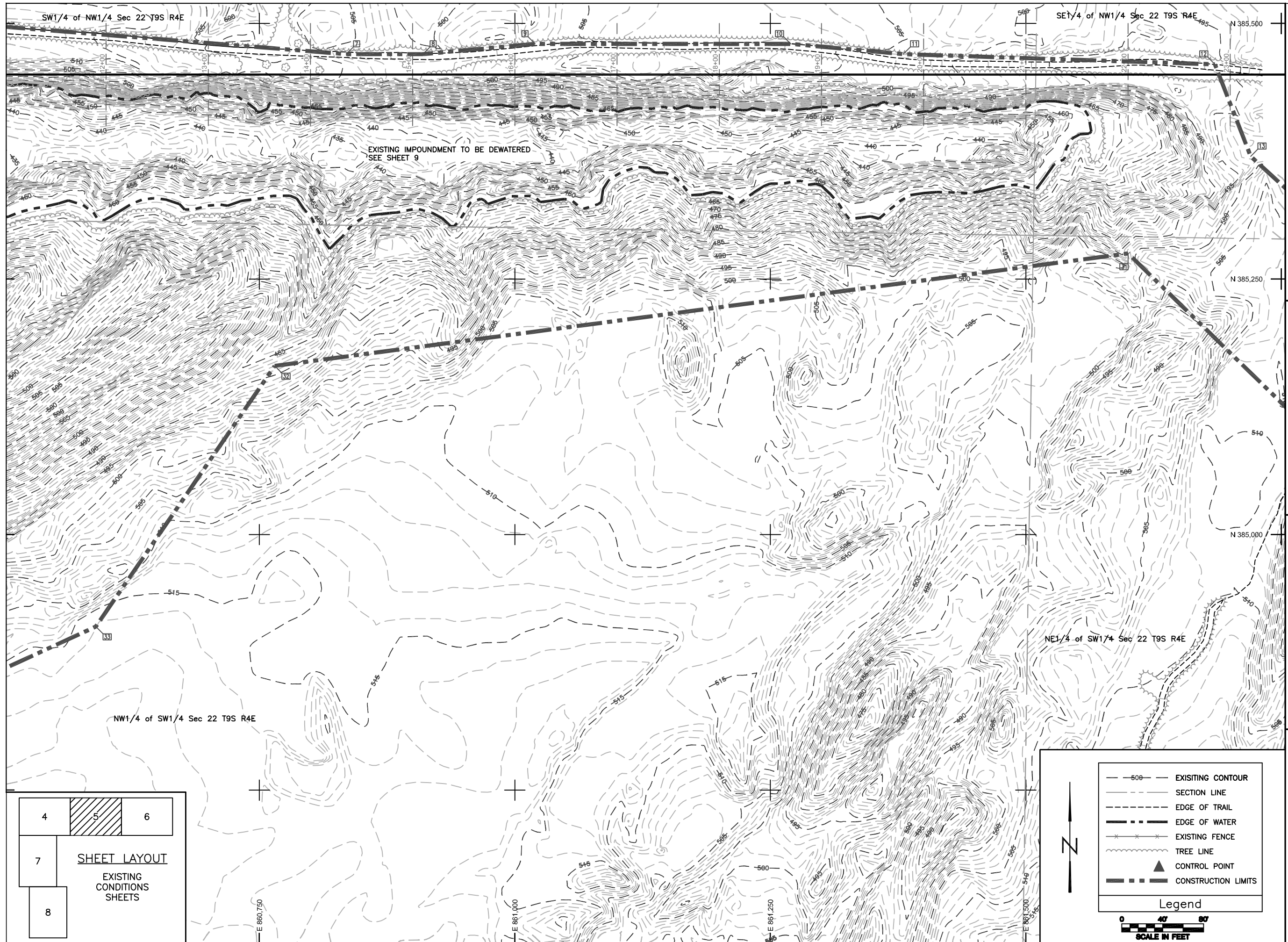
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Date: _____

Existing
Conditions
Sheet 4 of 25

Legend

- 508 — EXISTING CONTOUR
- — SECTION LINE
- - - - EDGE OF TRAIL
- — — — EDGE OF WATER
- * * * * * EXISTING FENCE
- ~ ~ ~ ~ TREE LINE
- ▲ CONTROL POINT
- - - - CONSTRUCTION LIMITS

0 40 80
SCALE IN FEET

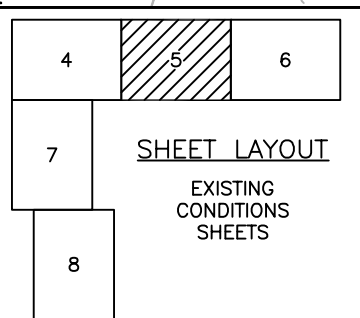


State of Illinois
Department of Natural Resources

Delta Collieries North Phase III
Reclamation Project
AML-GWmE-1709
Williamson County

Drawn By: _____
Checked By: _____
Date: _____

Existing
Conditions
Sheet 5 of 25



Legend

- EXISTING CONTOUR
- SECTION LINE
- EDGE OF TRAIL
- EDGE OF WATER
- EXISTING FENCE
- TREE LINE
- CONTROL POINT
- CONSTRUCTION LIMITS

0 40 80
SCALE IN FEET

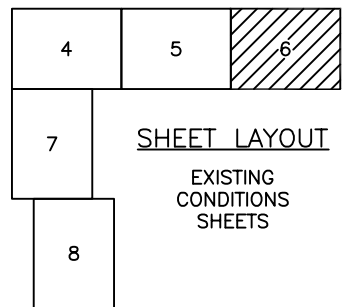


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Delta Collieries North Phase III
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Williamson County

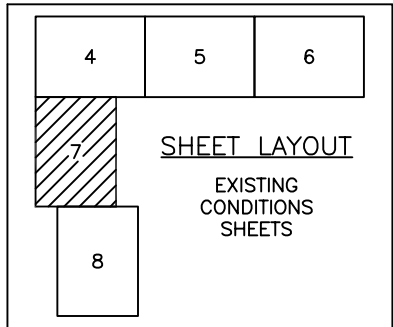
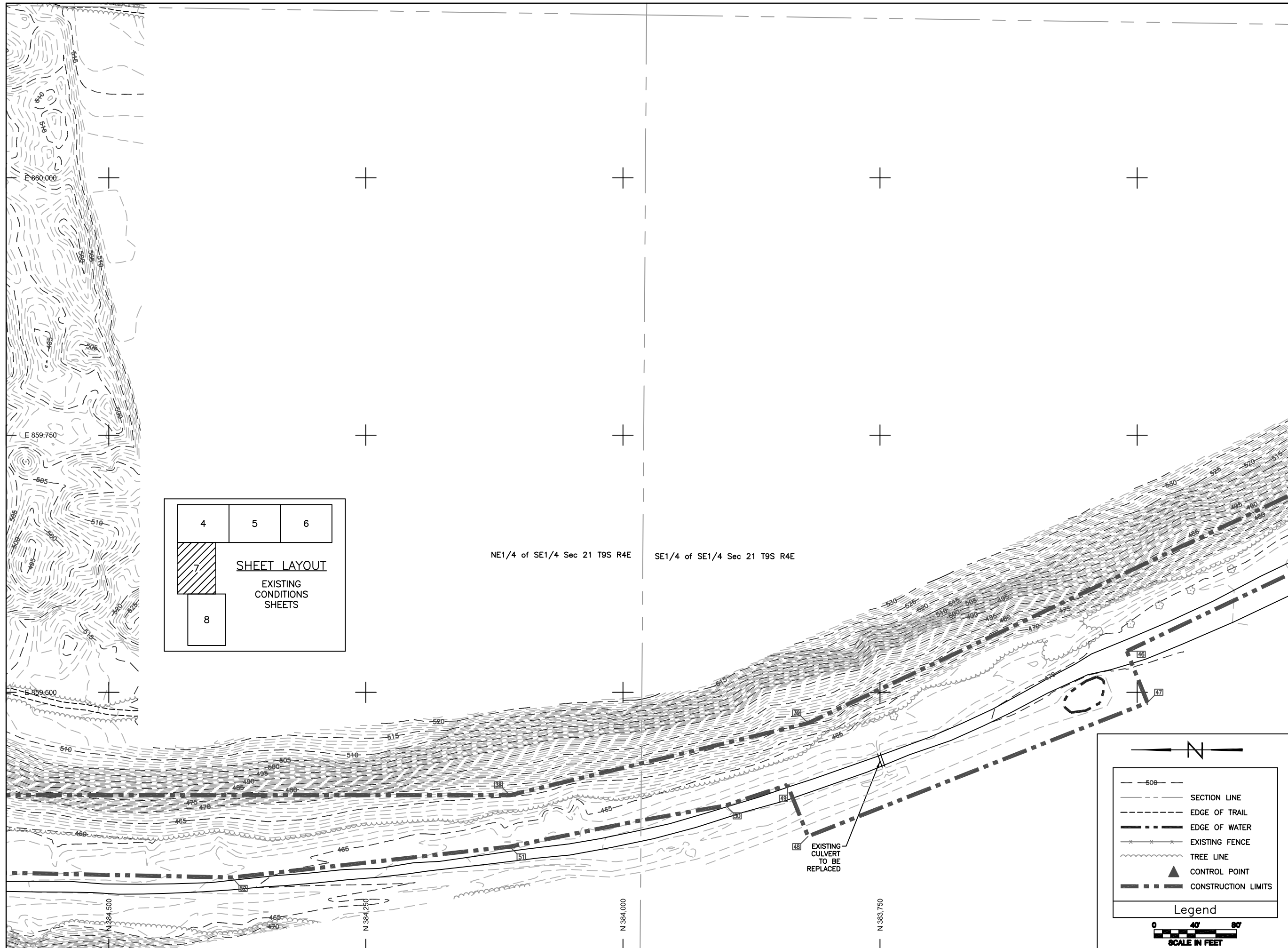
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Existing
Conditions
Sheet 6 of 25



- Legend
- 508 — EXISTING CONTOUR
 - — SECTION LINE
 - - - - EDGE OF TRAIL
 - — — — EDGE OF WATER
 - * * * * EXISTING FENCE
 - ~ ~ ~ ~ TREE LINE
 - ▲ CONTROL POINT
 - - - - CONSTRUCTION LIMITS





NE1/4 of SE1/4 Sec 21 T9S R4E SE1/4 of SE1/4 Sec 21 T9S R4E

Legend

	SECTION LINE
	EDGE OF TRAIL
	EDGE OF WATER
	EXISTING FENCE
	TREE LINE
	CONTROL POINT
	CONSTRUCTION LIMITS

SCALE IN FEET

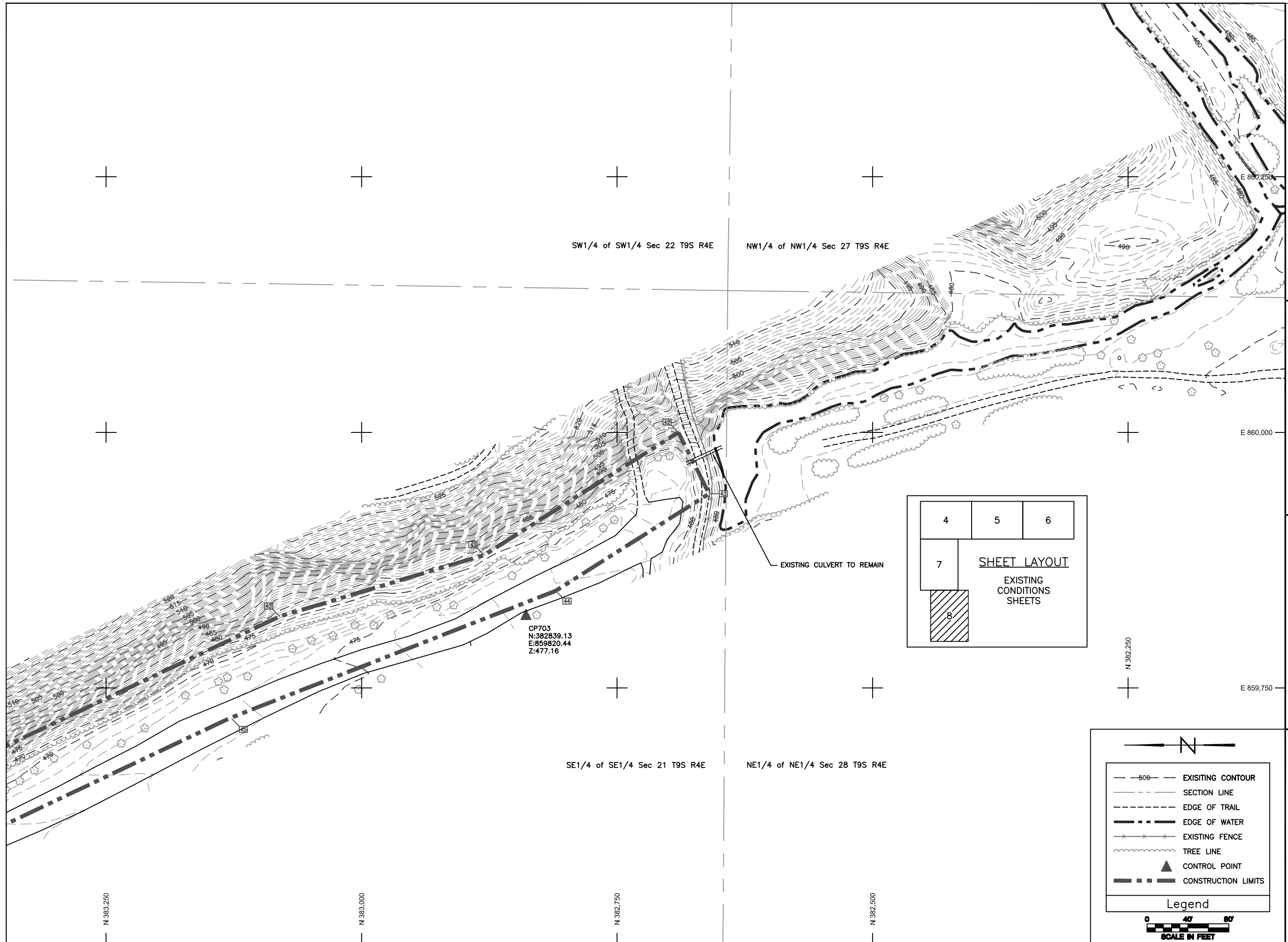
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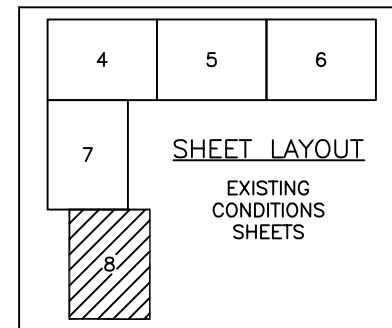
Delta Collieries North Phase III
Reclamation Project
AML-GWmE-1709
Williamson County

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Existing Conditions
Sheet 7 of 25



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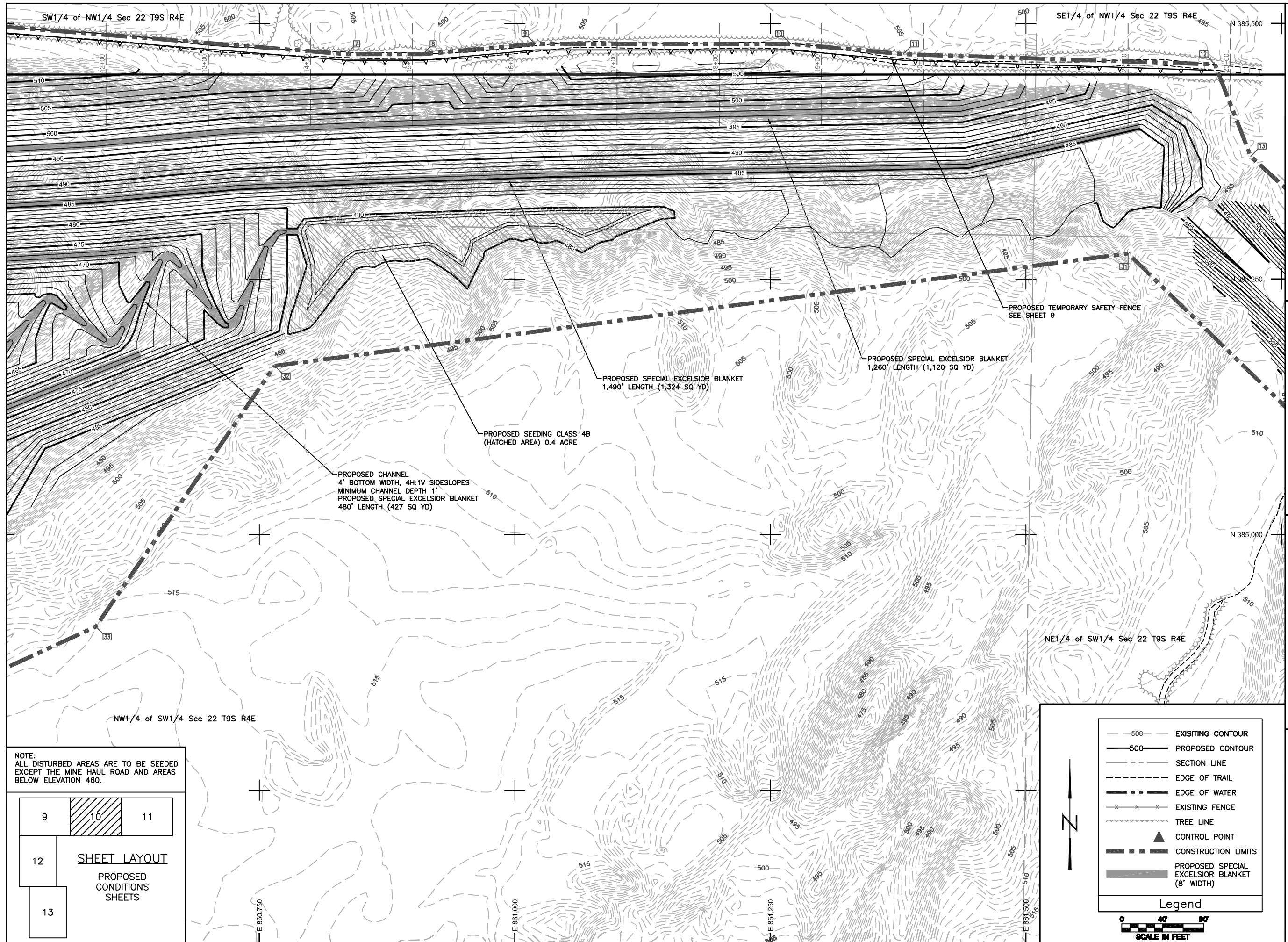
Legend

	EXISTING CONTOUR
	SECTION LINE
	EDGE OF TRAIL
	EDGE OF WATER
x x x	EXISTING FENCE
	TREE LINE
▲	CONTROL POINT
	CONSTRUCTION LIMITS

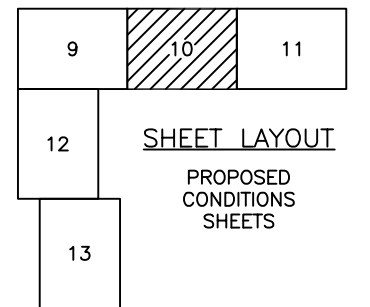
0 40' 80'
SCALE IN FEET



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Checked By: _____
Date: _____



NOTE:
ALL DISTURBED AREAS ARE TO BE SEEDED
EXCEPT THE MINE HAUL ROAD AND AREAS
BELOW ELEVATION 460.



PROPOSED CHANNEL
4' BOTTOM WIDTH, 4H:1V SIDESLOPES
MINIMUM CHANNEL DEPTH 1'
PROPOSED SPECIAL EXCELSIOR BLANKET
480' LENGTH (427 SQ YD)

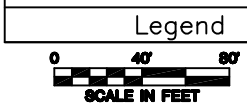
PROPOSED SEEDING CLASS 4B
(HATCHED AREA) 0.4 ACRE

PROPOSED SPECIAL EXCELSIOR BLANKET
1,490' LENGTH (1,324 SQ YD)

PROPOSED SPECIAL EXCELSIOR BLANKET
1,260' LENGTH (1,120 SQ YD)

PROPOSED TEMPORARY SAFETY FENCE
SEE SHEET 9

- | | |
|--|---|
| | EXISTING CONTOUR |
| | PROPOSED CONTOUR |
| | SECTION LINE |
| | EDGE OF TRAIL |
| | EDGE OF WATER |
| | EXISTING FENCE |
| | TREE LINE |
| | CONTROL POINT |
| | CONSTRUCTION LIMITS |
| | PROPOSED SPECIAL EXCELSIOR BLANKET (8' WIDTH) |



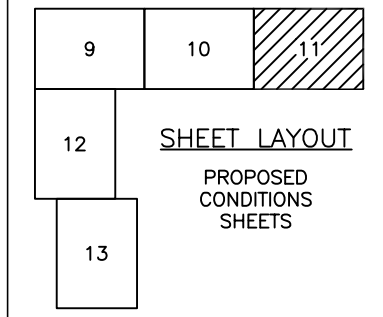
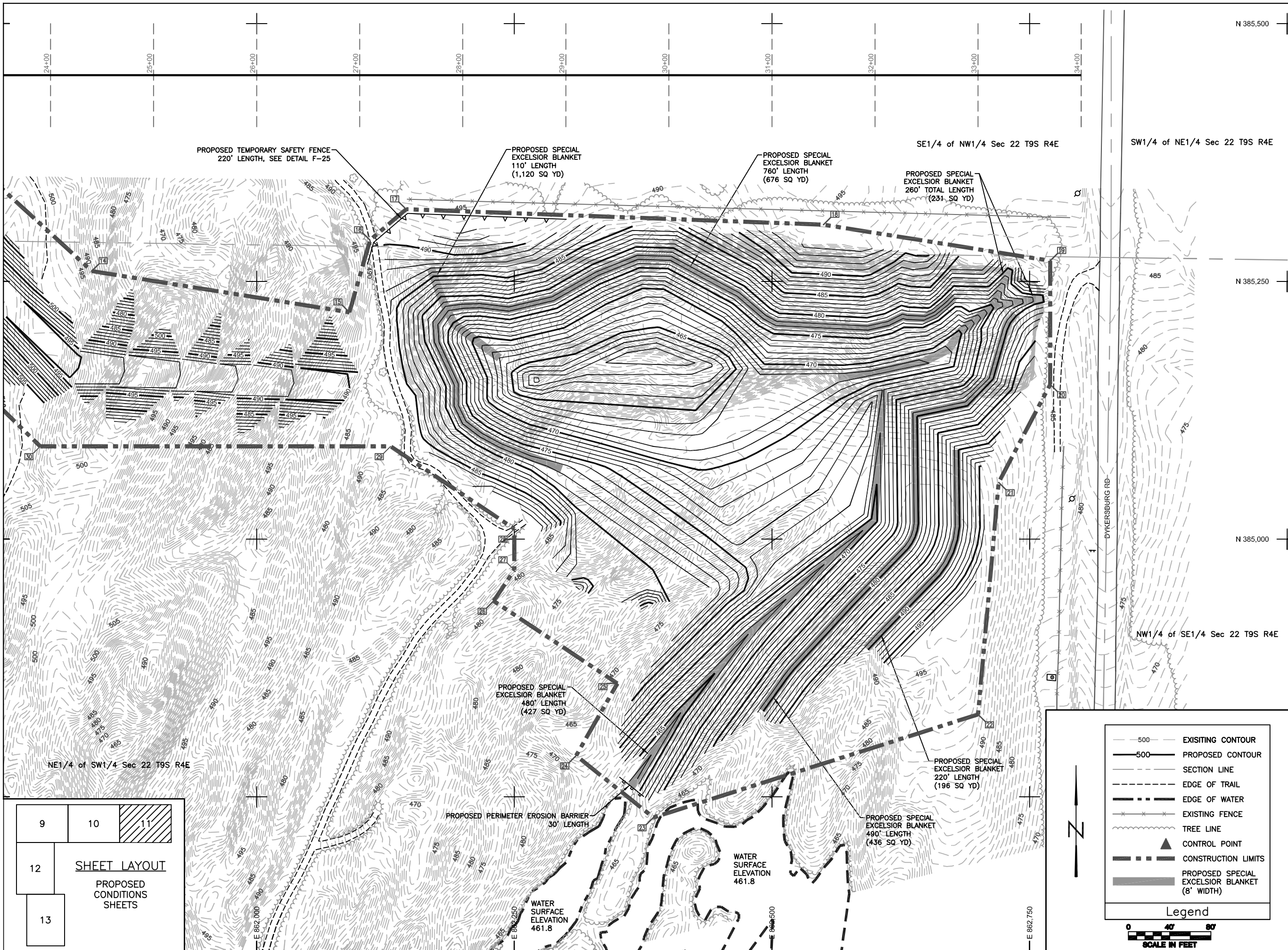
State of Illinois
Department of Natural Resources

Delta Collieries North Phase III
Reclamation Project
AML-GWmE-1709
Williamson County

Drawn By: _____
Checked By: _____
Date: _____

Proposed
Conditions

Sheet 10 of 25



Legend

- 500 — EXISTING CONTOUR
- 500 — PROPOSED CONTOUR
- - - SECTION LINE
- - - EDGE OF TRAIL
- - - EDGE OF WATER
- - - EXISTING FENCE
- - - TREE LINE
- ▲ CONTROL POINT
- - - CONSTRUCTION LIMITS
- █ PROPOSED SPECIAL EXCELSIOR BLANKET (8' WIDTH)

Scale: 0 40 80
SCALE IN FEET

State of Illinois
Department of Natural Resources

Delta Collieries North Phase III
Reclamation Project
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Williamson County

Drawn By: _____
Checked By: _____
Date: _____

Proposed
Conditions
Sheet 11 of 25

N 385,500
N 385,250
N 385,000
SW1/4 of NE1/4 Sec 22 T9S R4E
NW1/4 of SE1/4 Sec 22 T9S R4E

SE1/4 of NW1/4 Sec 22 T9S R4E

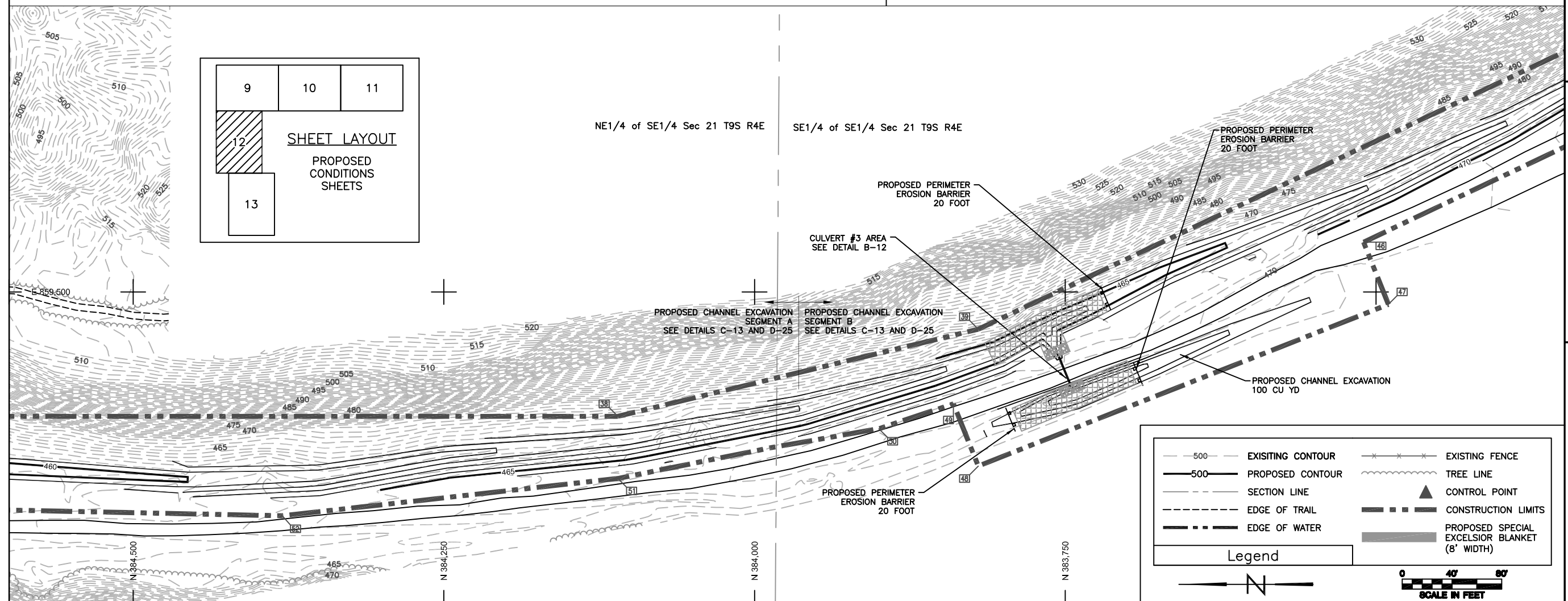
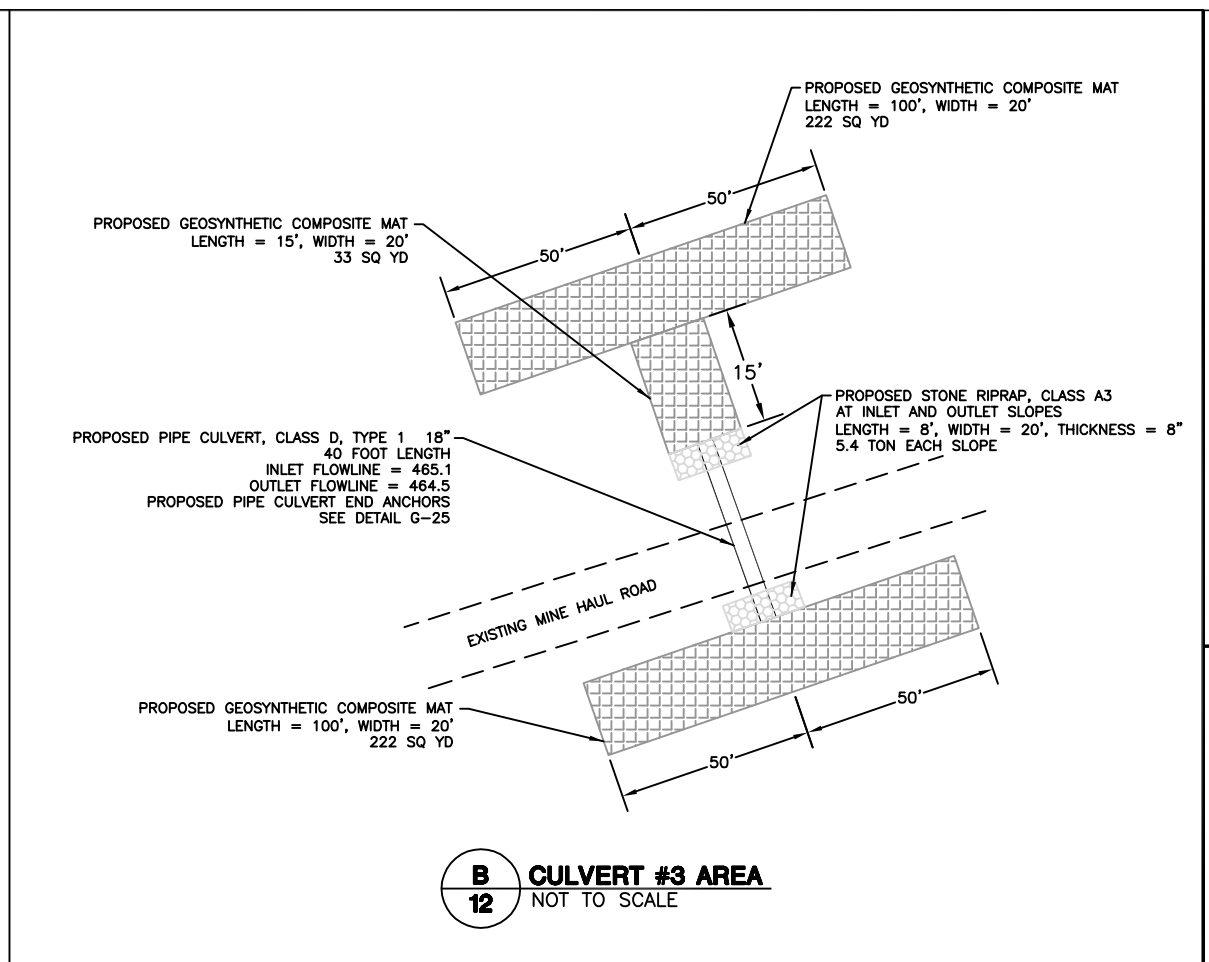
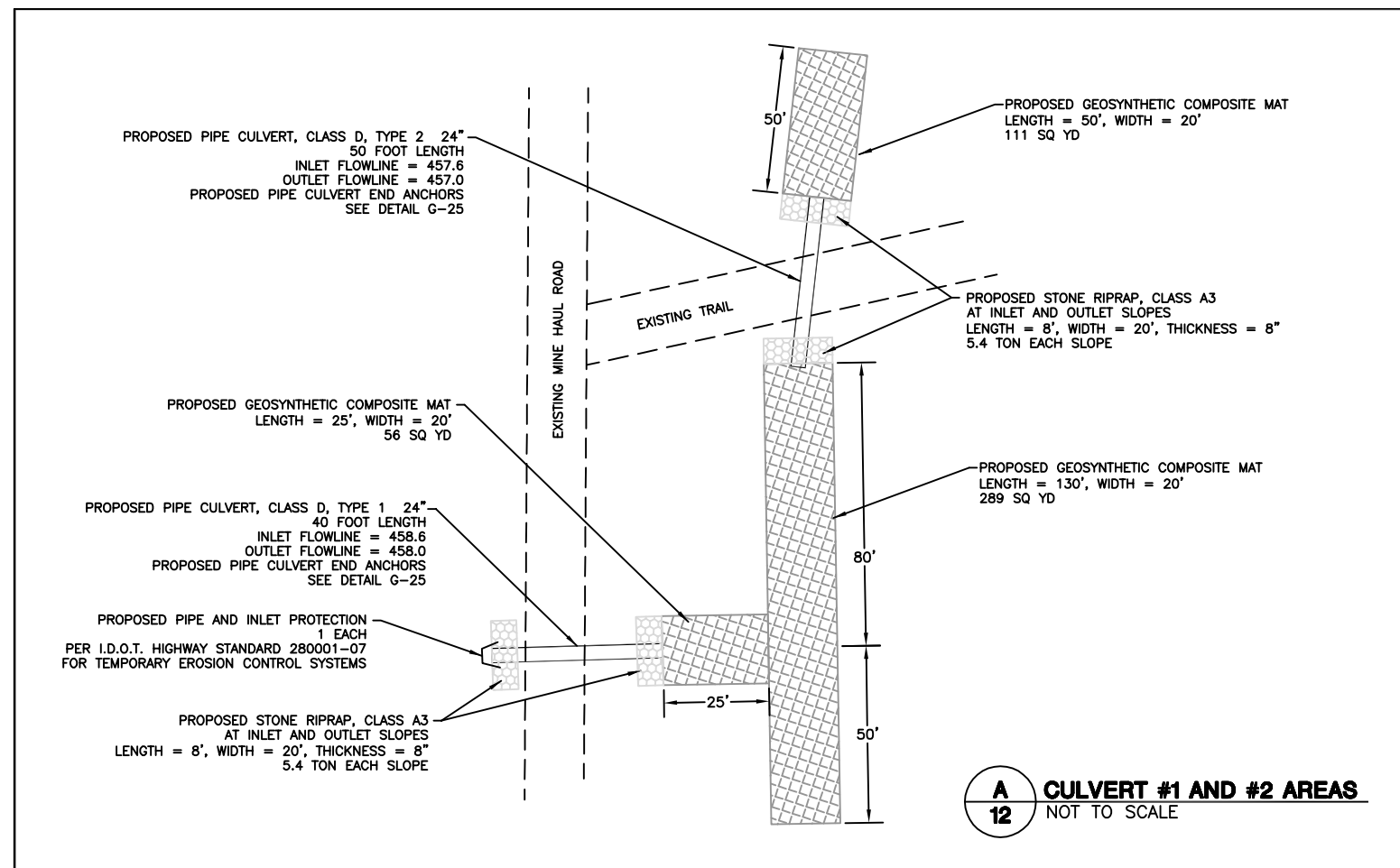
NE1/4 of SW1/4 Sec 22 T9S R4E

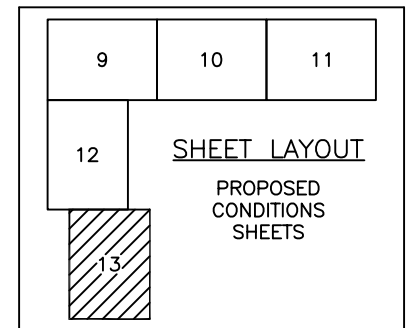
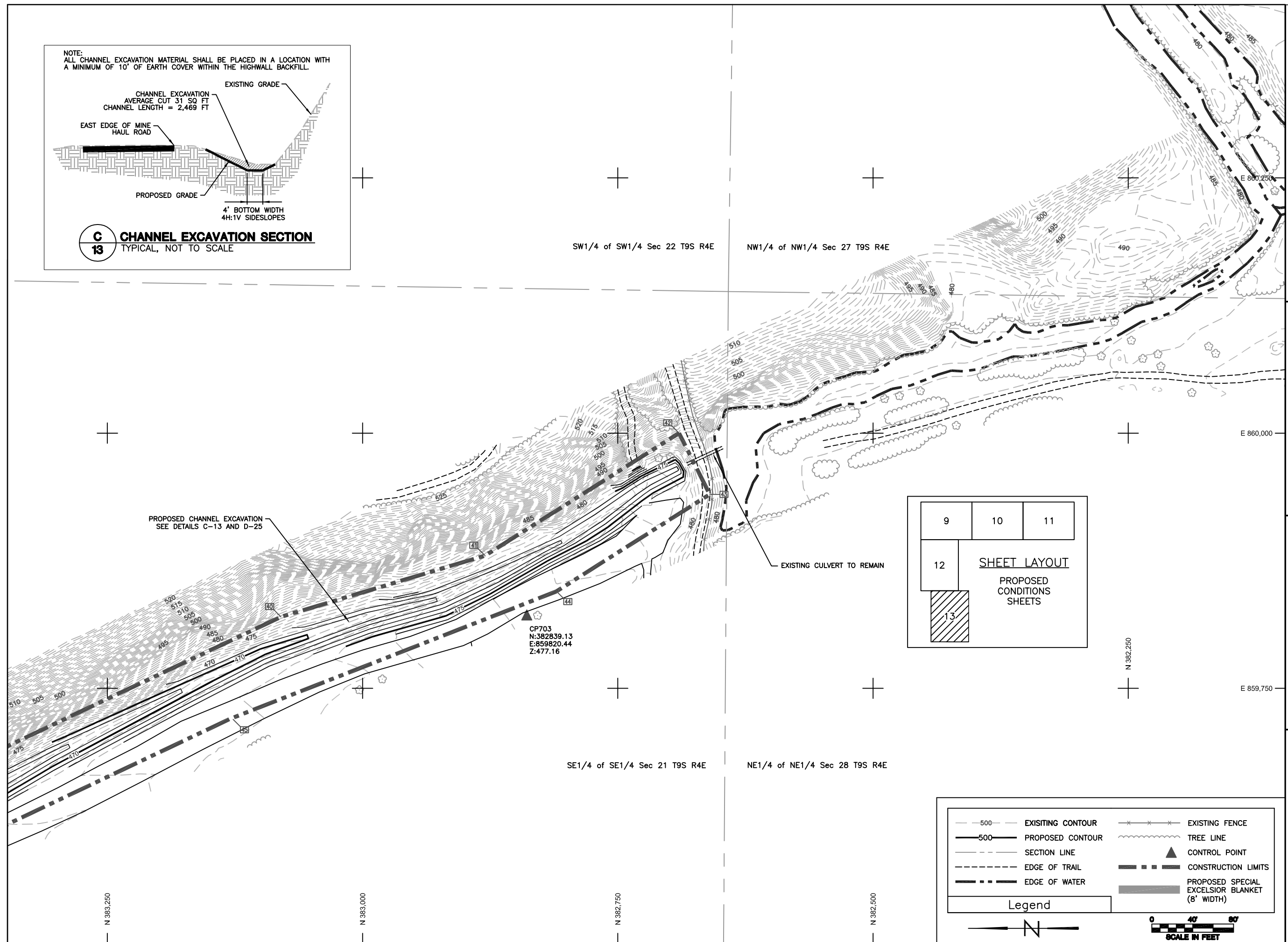
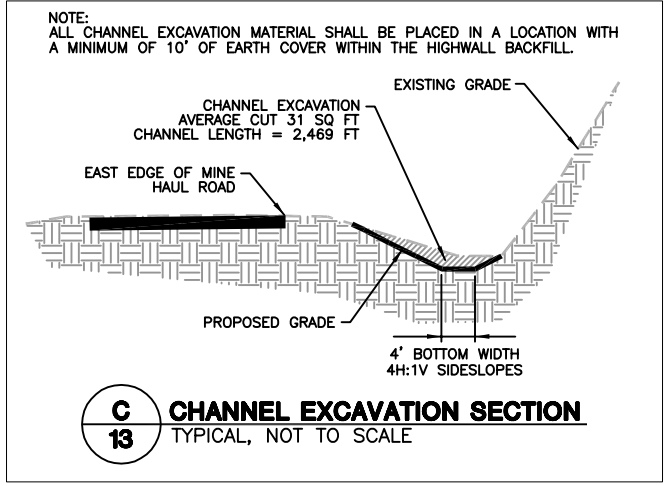
WATER SURFACE ELEVATION 461.8

WATER SURFACE ELEVATION 461.8

DYKERSBURG RD

24+00 25+00 26+00 27+00 28+00 29+00 30+00 31+00 32+00 33+00 34+00





Legend

— 500 —	EXISTING CONTOUR	— * * * —	EXISTING FENCE
— 500 —	PROPOSED CONTOUR	~~~~~	TREE LINE
---	SECTION LINE	▲	CONTROL POINT
- - - - -	EDGE OF TRAIL	- - - - -	CONSTRUCTION LIMITS
- . - . -	EDGE OF WATER	██████████	PROPOSED SPECIAL EXCELSIOR BLANKET (8' WIDTH)

Legend

0 40 80
SCALE IN FEET

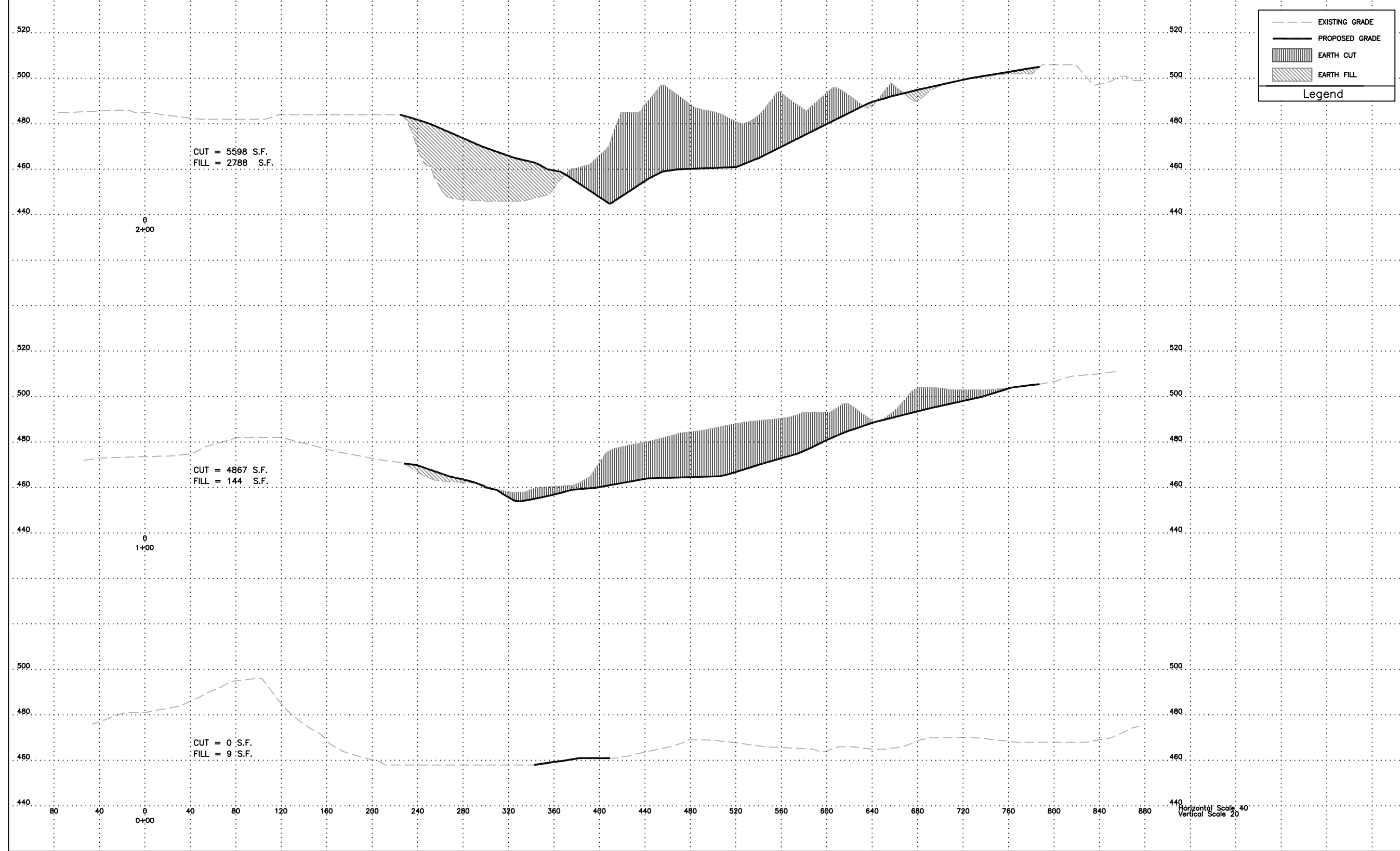
State of Illinois
Department of Natural Resources

Delta Collieries North Phase III
Reclamation Project
AML-GW/mE-1709
Williamson County

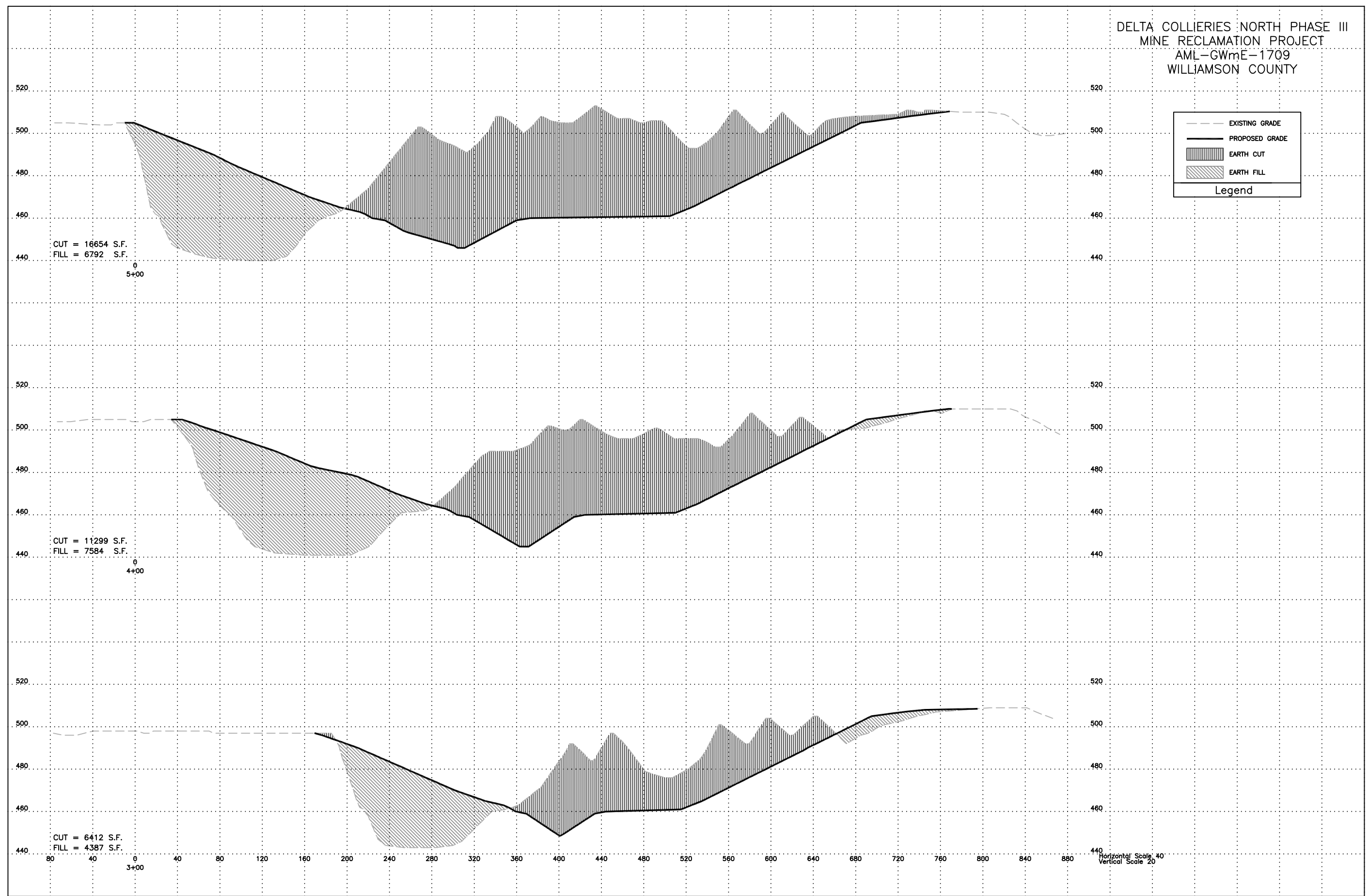
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Date: _____

Proposed
Conditions
Sheet 13 of 25

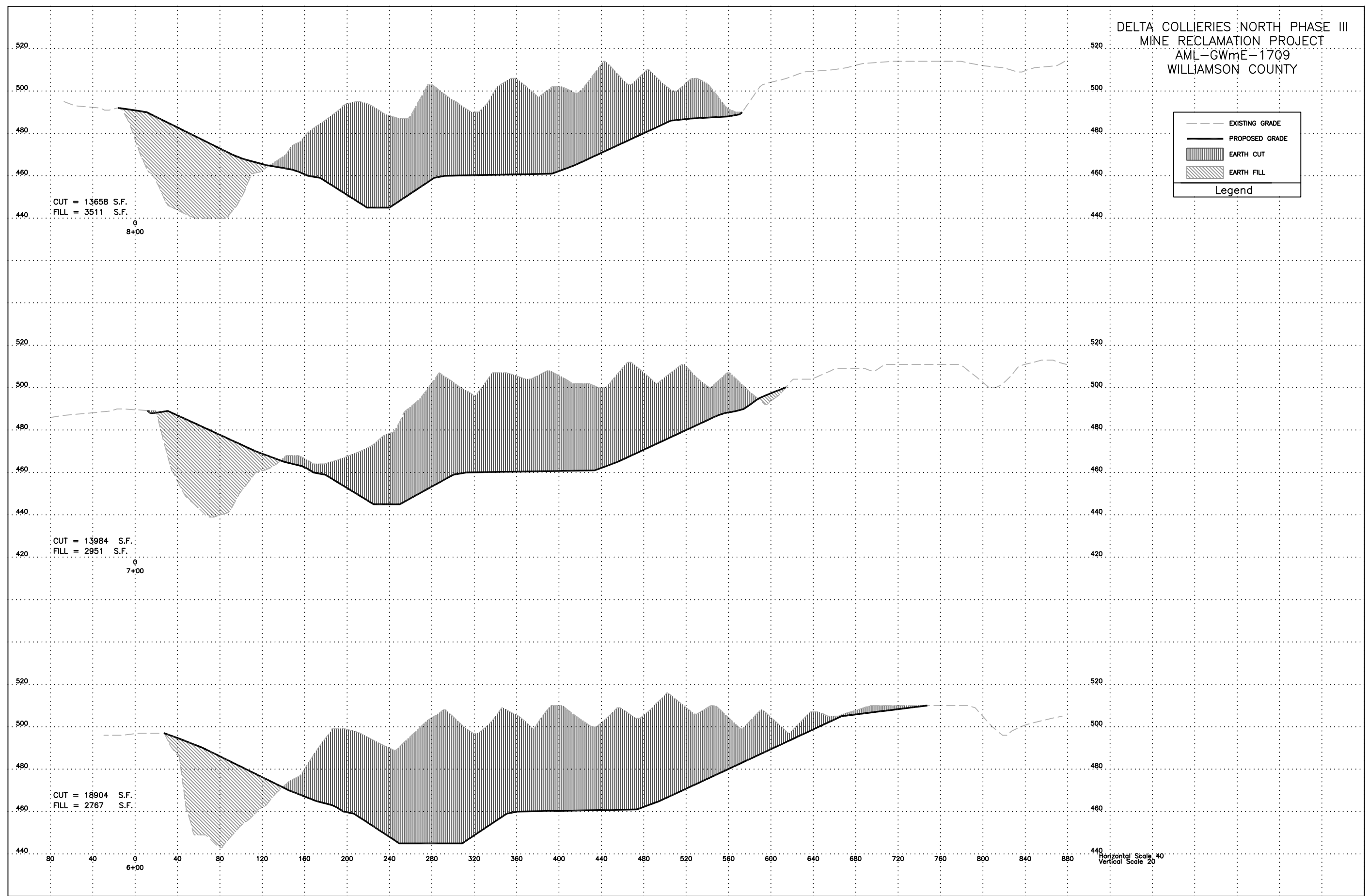
DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY



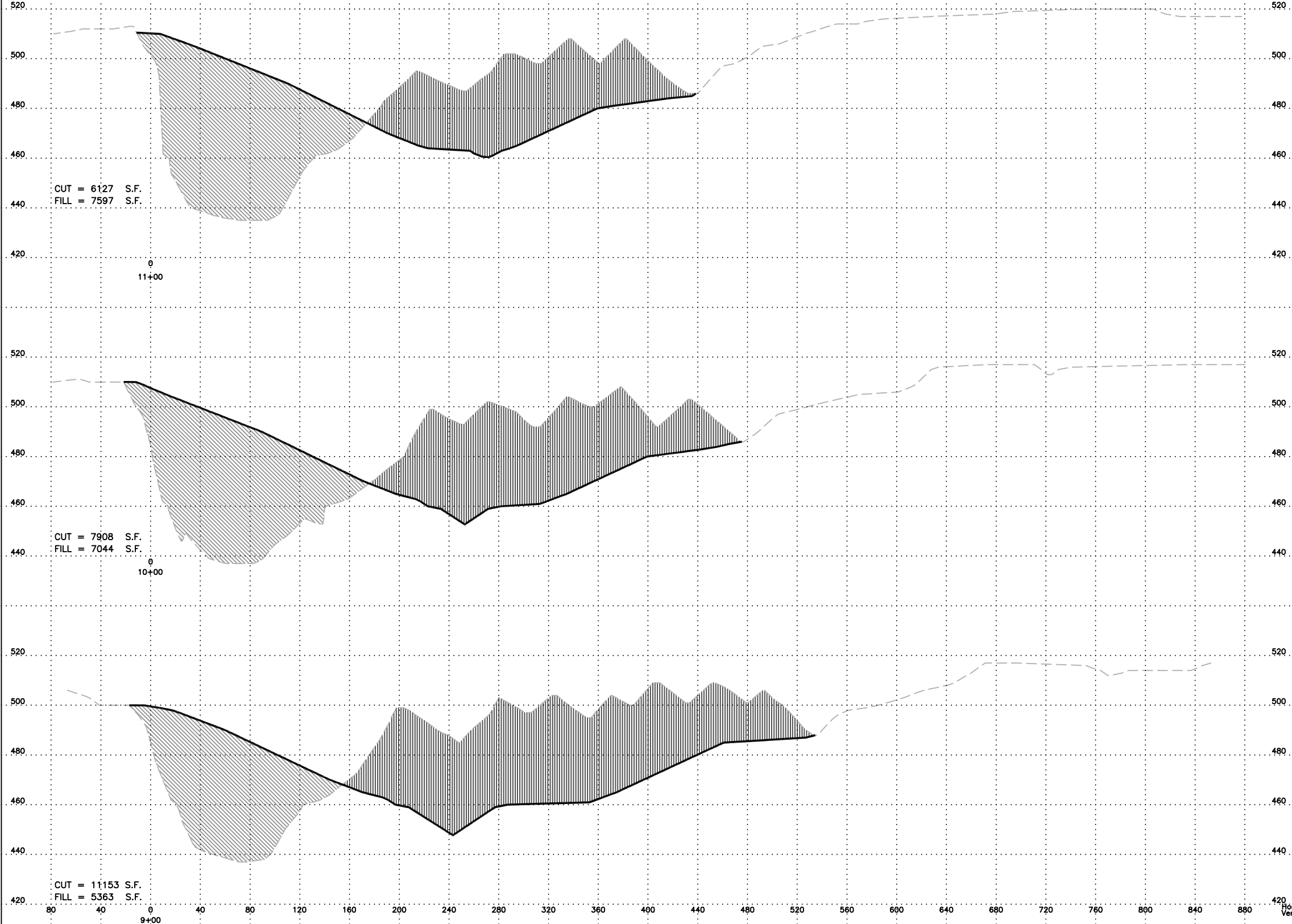
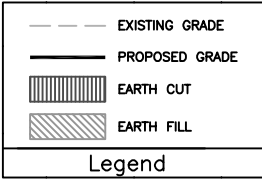
DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY



DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY



DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
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 WILLIAMSON COUNTY



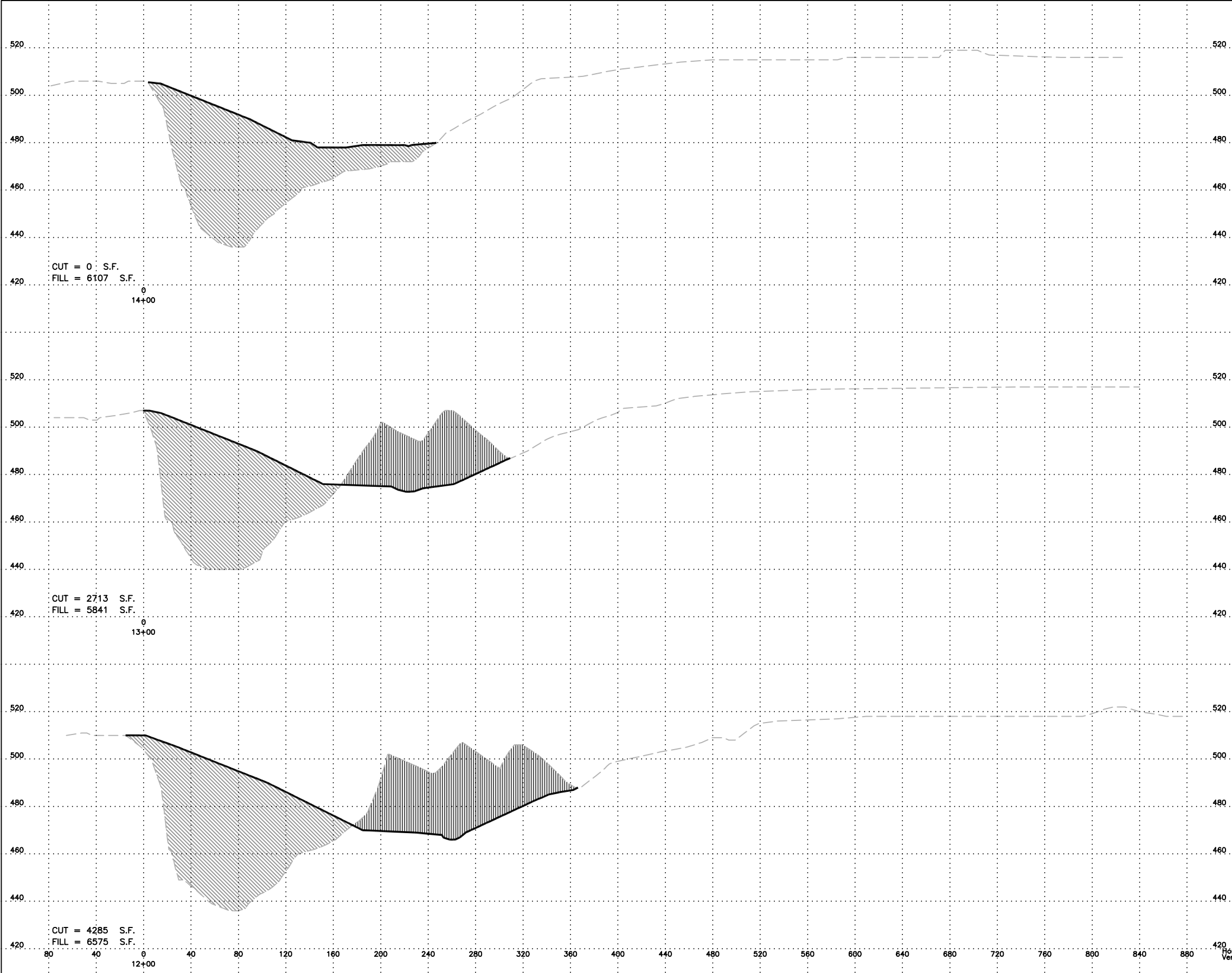
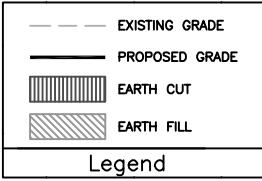
0
11+00

0
10+00

0
9+00

Horizontal Scale 40
 Vertical Scale 20

DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY



CUT = 0 S.F.
 FILL = 6107 S.F.

0
 14+00

CUT = 2713 S.F.
 FILL = 5841 S.F.

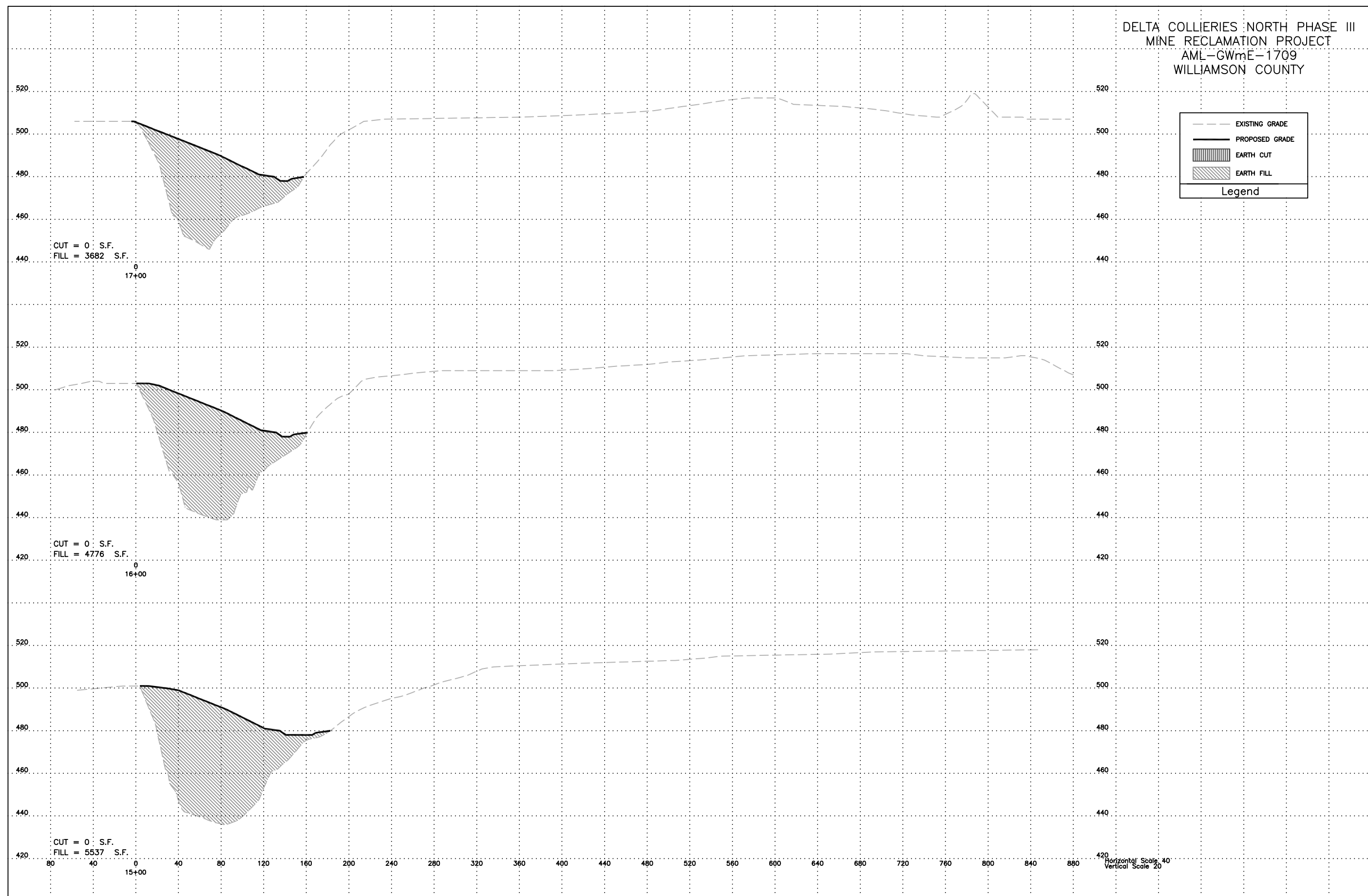
0
 13+00

CUT = 4285 S.F.
 FILL = 6575 S.F.

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 12+00

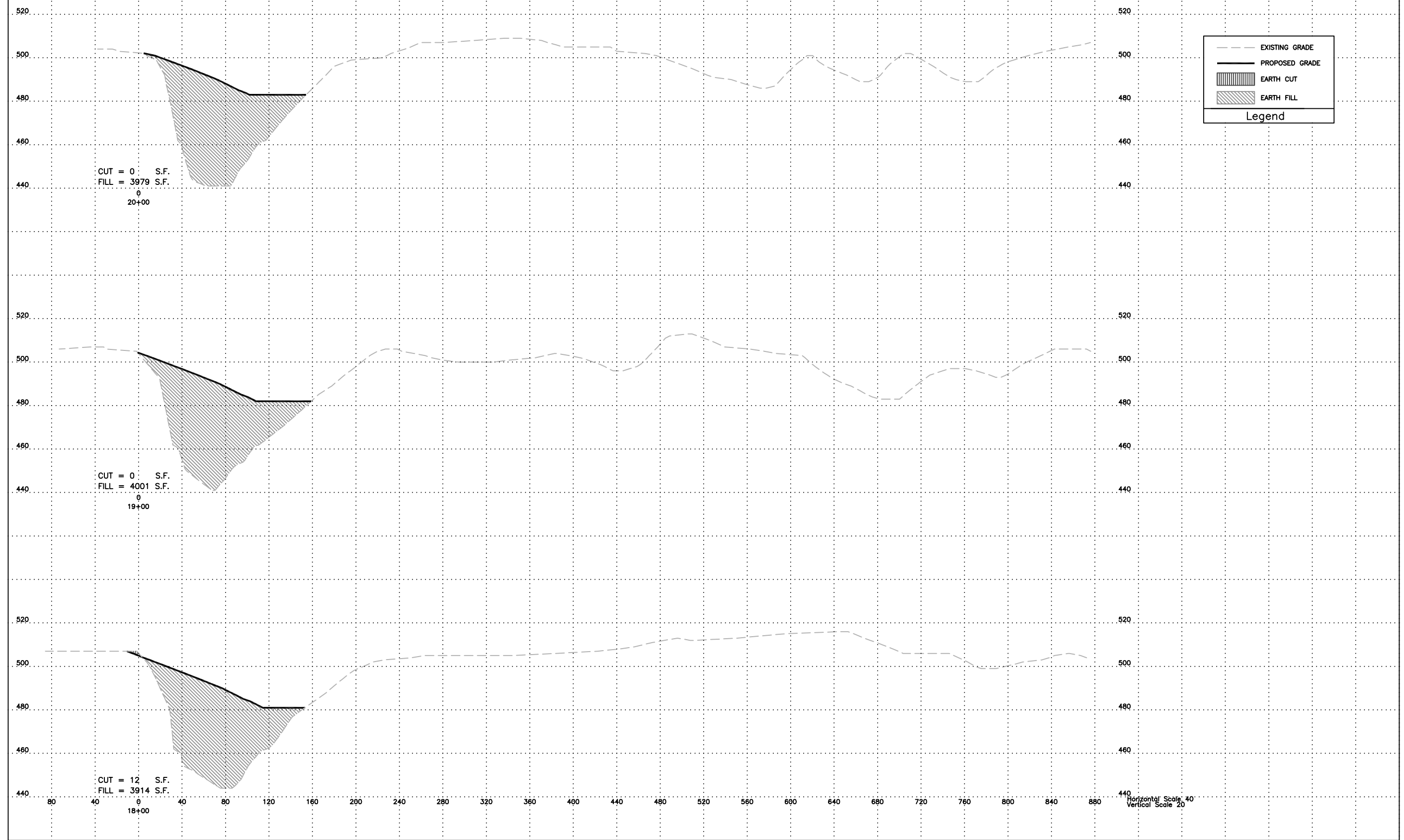
Horizontal Scale 40
 Vertical Scale 20

DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY







Horizontal Scale 40'
 Vertical Scale 20'

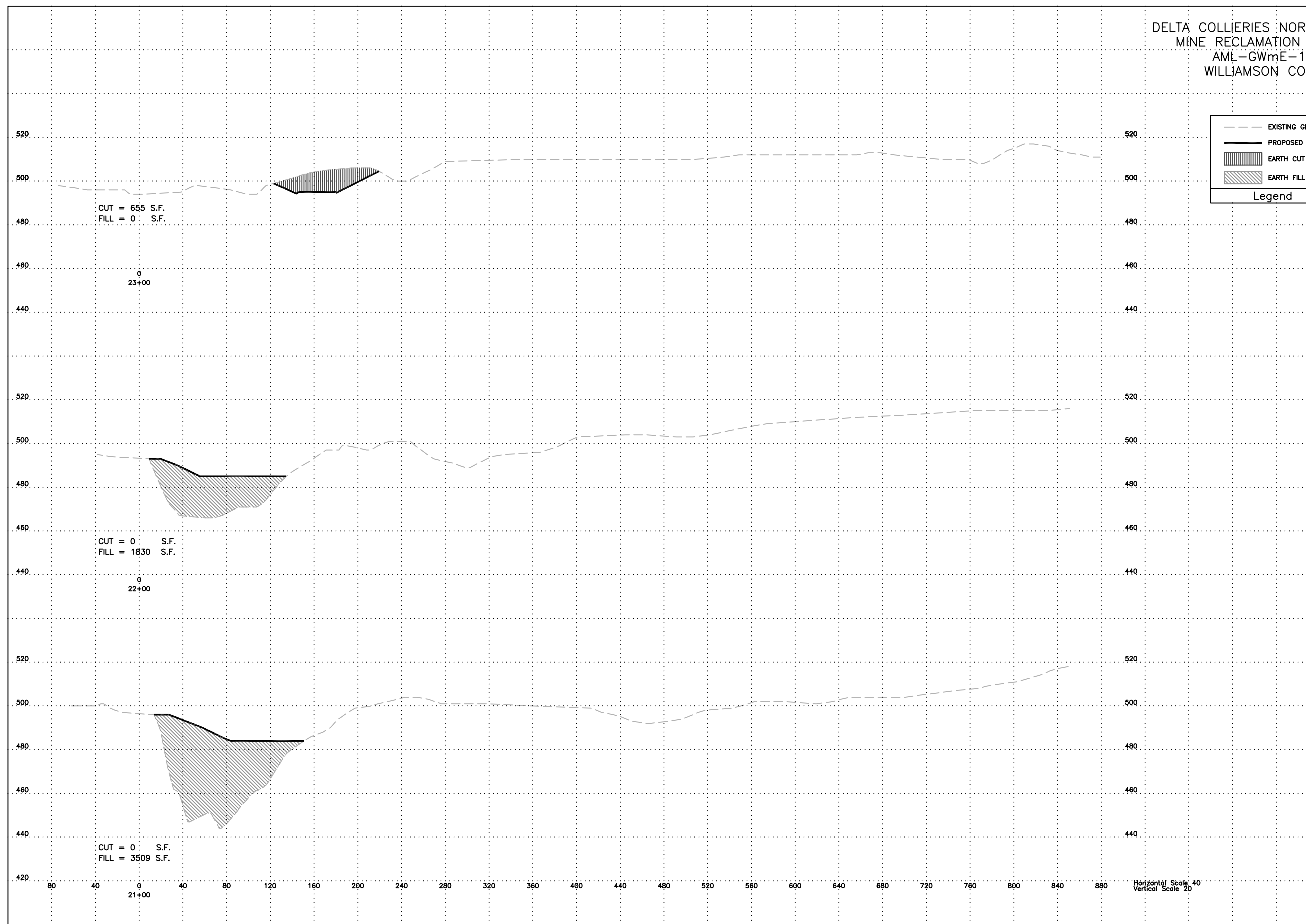
DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY



Horizontal Scale: 40'
 Vertical Scale: 20'

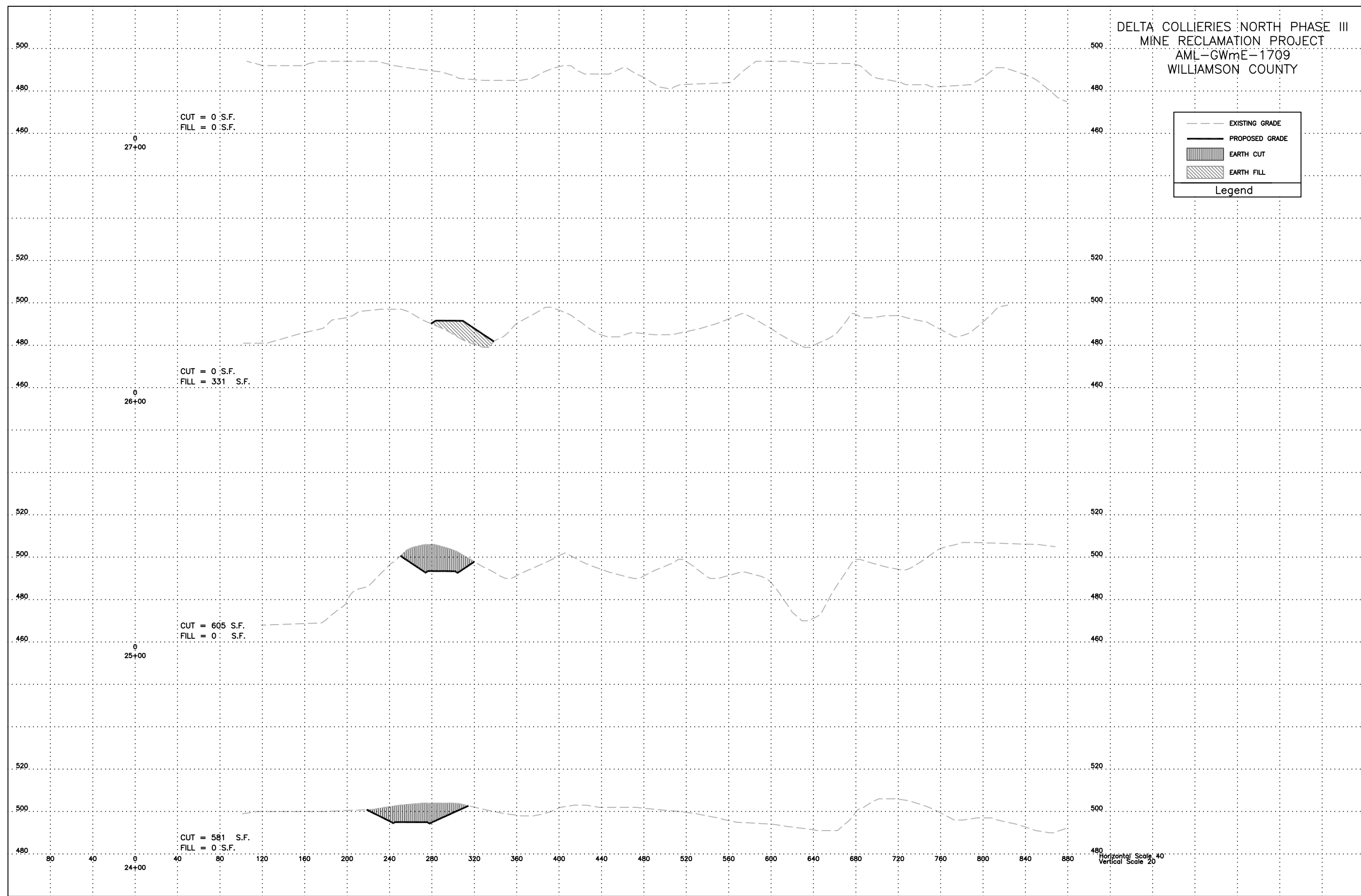
DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY

	EXISTING GRADE
	PROPOSED GRADE
	EARTH CUT
	EARTH FILL
Legend	

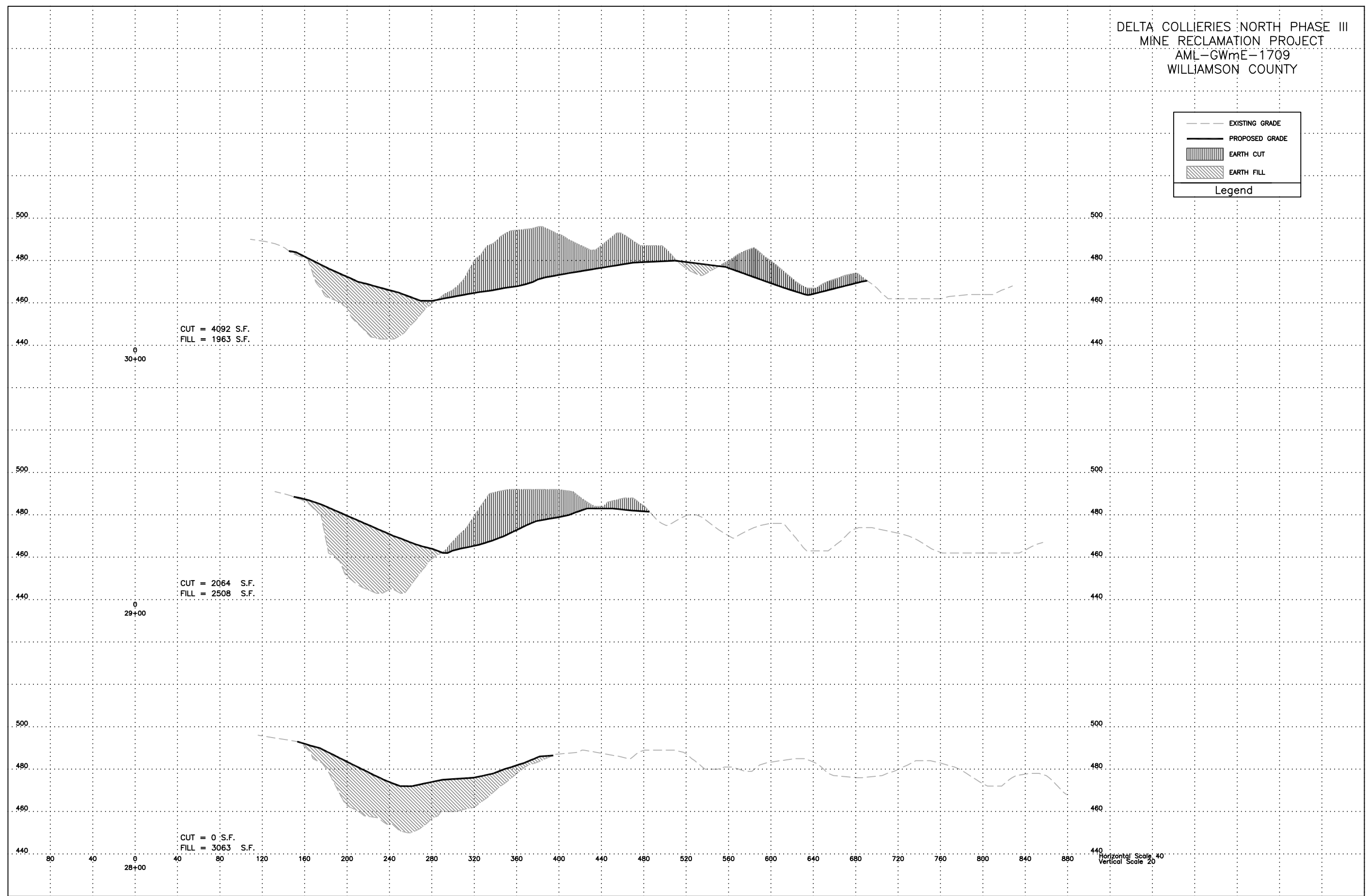
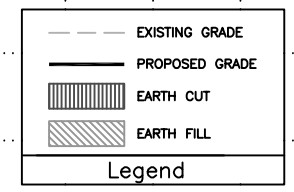


Horizontal Scale 40'
 Vertical Scale 20'

DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY

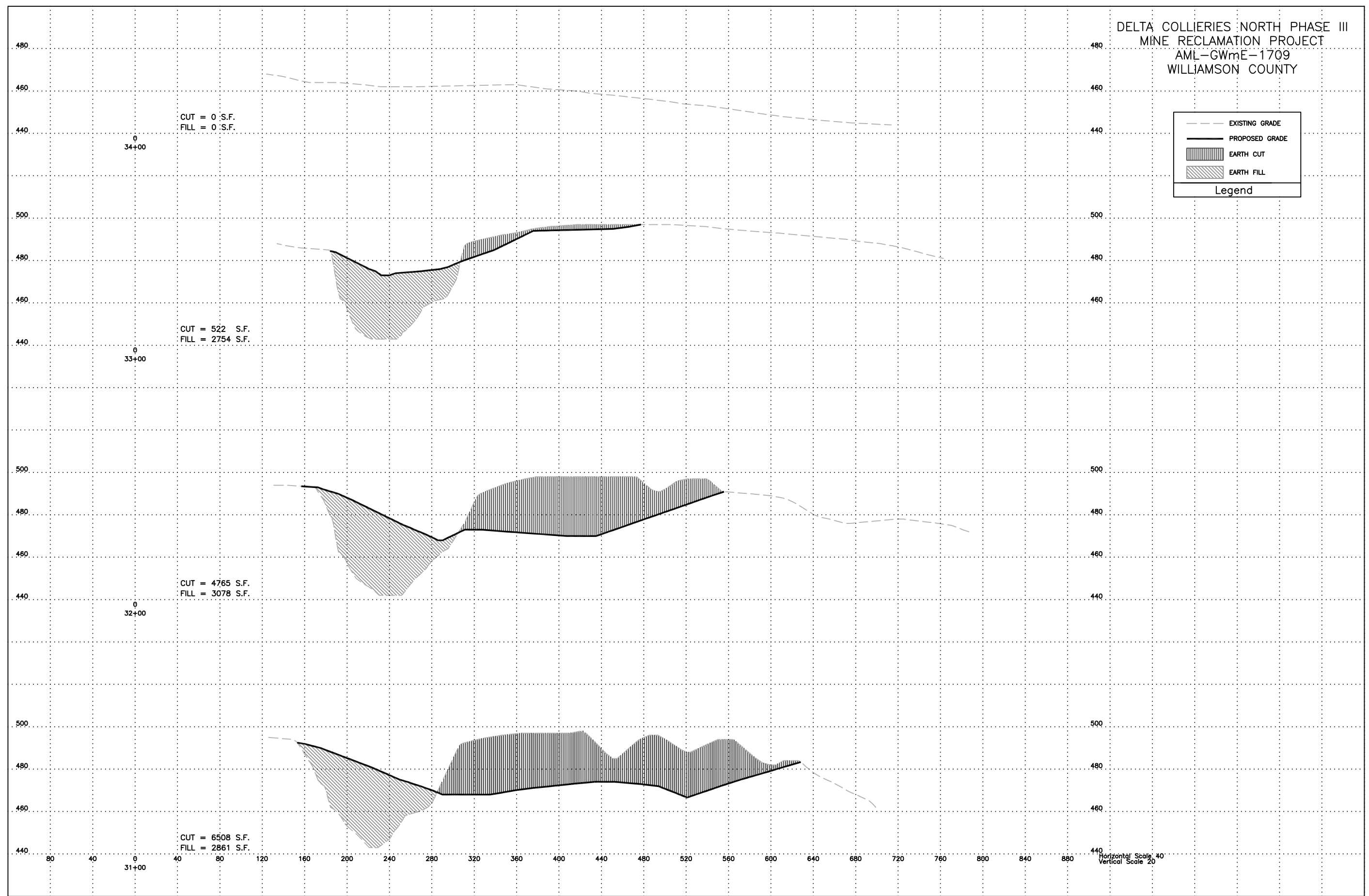


DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY



Horizontal Scale 40'
 Vertical Scale 20'

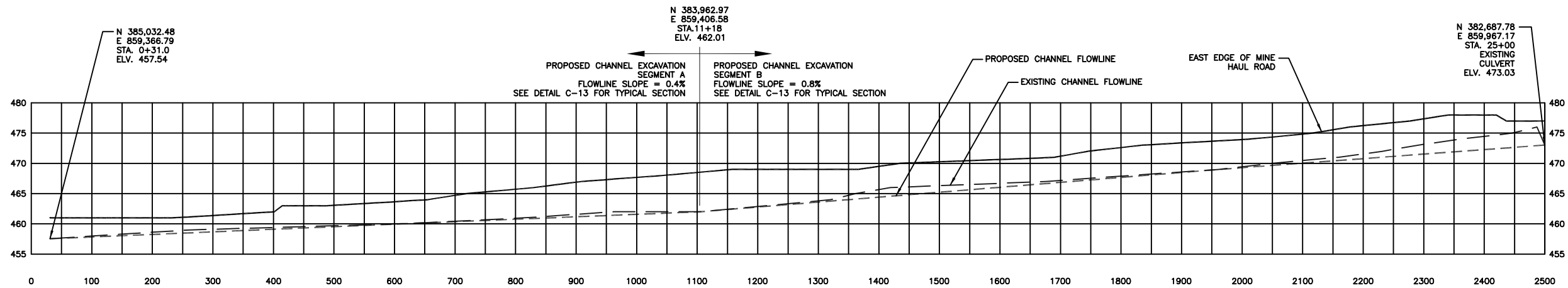
DELTA COLLIERIES NORTH PHASE III
 MINE RECLAMATION PROJECT
 AML-GWmE-1709
 WILLIAMSON COUNTY



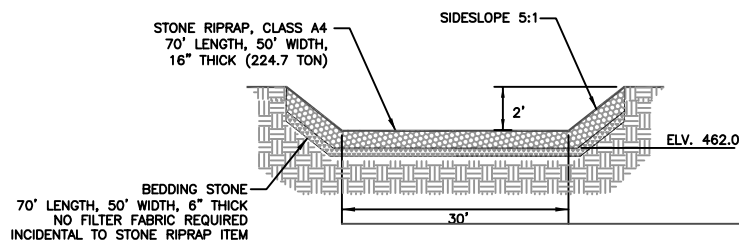
Legend

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

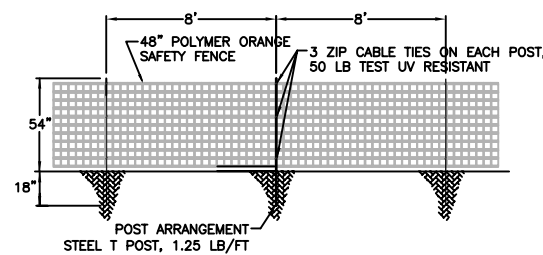
Horizontal Scale 40'
 Vertical Scale 20'



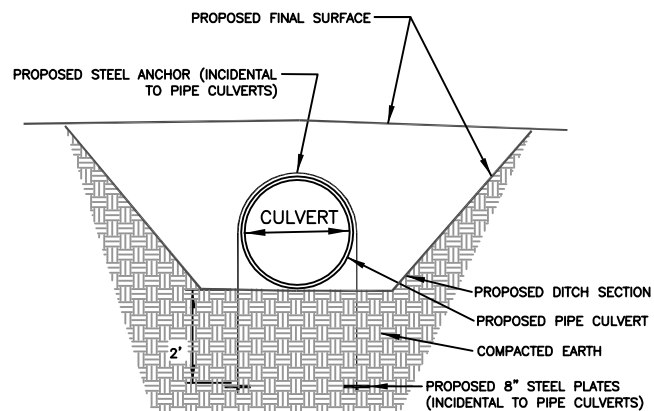
D
25 CHANNEL EXCAVATION PROFILE
NOT TO SCALE



E
25 WEST POND SPILLWAY SECTION
TYPICAL SECTION, NOT TO SCALE



F
25 SAFETY FENCE DETAIL
NOT TO SCALE



G
25 PIPE CULVERT END ANCHOR DETAIL
FOR EACH END OF PROPOSED PIPE CULVERTS, NOT TO SCALE

SPACING LETTERS

4.5"
3.5"
1.5"
3.5"
2.5"
3.5"
3.5"
2.5"
3.5"
1.5"
2.5"
3.0"
1.5"
2.0"
4.5"

**ABANDONED MINED LANDS
RECLAMATION PROJECT
STATE OF ILLINOIS**

BRUCE RAUNER, GOVERNOR
Department of Natural Resources
Wayne A. Rosenthal, Director

Funding provided by the US Department of the Interior
Office of Surface Mining, with fees paid by the Coal Industry

10" dia. state seal

1. Furnishing, erecting and removing the sign shall be incidental to the contract.
2. The sign shall be painted on 1/2" or thicker exterior plywood (4' x 8'), color shall be black on white, and a 10" diameter Illinois state seal shall be provided by the D.N.R.
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.

H
25 CONSTRUCTION SIGN DETAIL
EXACT LOCATION TO BE SET BY ENGINEER