

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

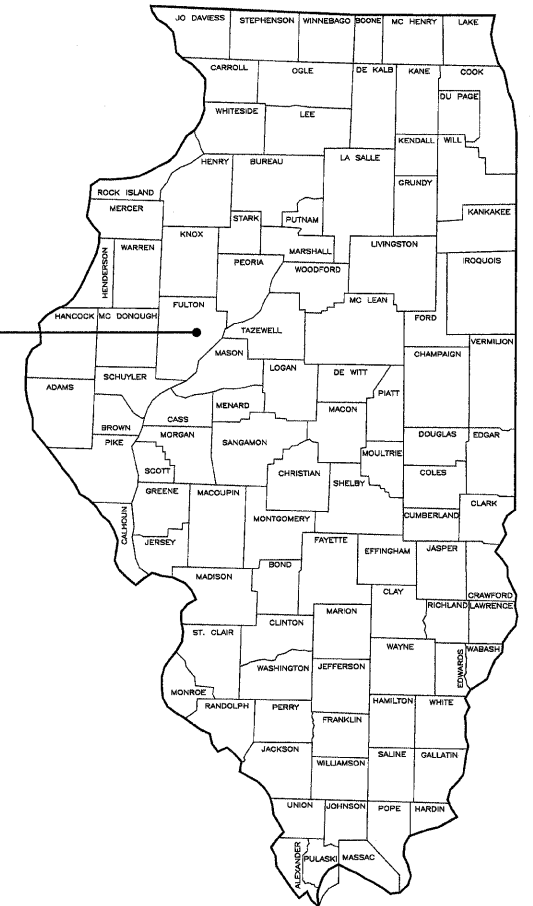
Funded by the
 United States Department of Interior
 Federal Office of Surface Mining

Red Ember -East
 Reclamation Project
 AML-GFuE-0803
 Fulton County
 1LR

SCHEDULE OF DRAWINGS:

1. Cover Sheet
 2. Summary of Quantities/General Notes/Location Map
 3. Sheet Lay-out/Survey Information
 - 4-13. Existing and Proposed Conditions
 - 14-43. Cross Sections
 44. Details
- IDOT Standard 665001-01

Red Ember - East
 Fulton County



Pre-Bid Meeting

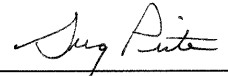
A pre-bid meeting is scheduled for this project at 9:00 A.M., Friday, July 24, 2009
 at the intersection of E. Arrow Road and N. Arrow Road, on the West side of the project.

Prepared By IDNR Staff

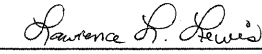
Approved for Bidding:


 Joseph R. Angleton, Director
 Office of Mines and Minerals

Approved By:

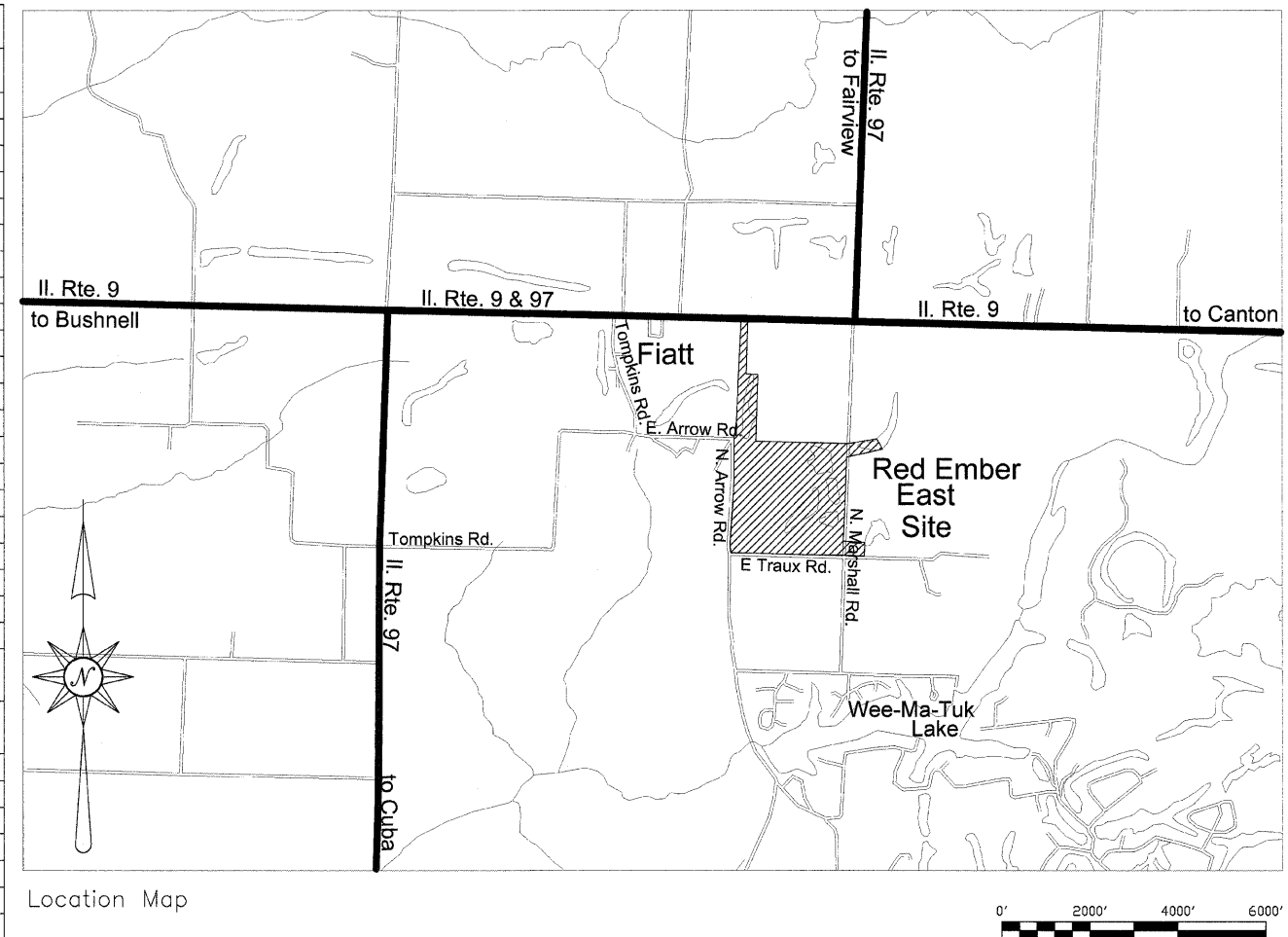

 Greg Pinto, Acting Manager
 AML Division

Approved By:


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



Summary of Quantities				
#	Item	Section	Quantity	Unit Rates/Remarks
1	Special Clearing	201	1	L.S.
2	Earth Excavation	202	935,750	C.Y. Compaction Required per SP 205
3	Mine Refuse Excavation	202	581,492	C.Y. Compaction Required per SP 205
4	Seeding	250	175	Acre See Schedule This Sheet
5	Nitrogen Fertilizer Nutrient	250	42,000	Pound See Schedule This Sheet
6	Phosphorous Fertilizer Nutrient	250	70,000	Pound See Schedule This Sheet
7	Potassium Fertilizer Nutrient	250	105,000	Pound See Schedule This Sheet
8	Agricultural Ground Limestone	250	350	Ton See Schedule This Sheet
9	Mulch, Method 2, Procedure 1	IDOT 251	175	Acre See Schedule This Sheet
10	Erosion Control Blanket	IDOT 251	12,099	S.Y.
11	Mine Refuse Treatment - Limestone	255	1,000	Ton 50 Ton/Acre
12	Mowing	258	175	Acre See Schedule This Sheet
13	Coal Combustion By-Products Placement	259	100,000	Ton See Special Note This Sheet
14	Perimeter Erosion Barrier	280	1,509	Foot
15	Earth Excavation for Erosion Control	280	135	C.Y.
16	Stone Riprap A-4	IDOT 281	1,279	S.Y.
17	Filter Fabric for use w/Riprap	IDOT 282	1,279	S.Y.
18	Aggregate Surface Course Type B, CA-1	IDOT 402	300	Ton
19	Aggregate Surface Course Type B, CA-6	IDOT 402	2,772	Ton
20	Pipe Culvert 15" Corrugated Steel Culvert Pipe, Type 1	IDOT 542	40	Foot
21	Steel End Section 15" Dia.	IDOT 542	2	Each
22	Pipe Culvert 24" Corrugated Polyethylene(PE) with a Smooth Interior, Type 1	IDOT 542	50	Foot
23	Pipe Culvert 42" Corrugated Polyethylene(PE) with a Smooth Interior, Type 1	IDOT 542	130	Foot
24	Pipe Culvert 8" Corrugated Steel Culvert Pipe, Type 1	IDOT 542	66	Foot
25	Dewatering Impoundment 1	614	1	L.S.
26	Dewatering Impoundment 2	614	1	L.S.
27	Dewatering Impoundment 3	614	1	L.S.
28	Dewatering Impoundment 4	614	1	L.S.
29	Woven Wire Fence 4' High	IDOT 665	2,517	Foot IDOT Standard 665001-01
30	Mobilization (Max. 6% of Bid)	671	1	L.S.



Location Map

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.

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 Standard 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 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.

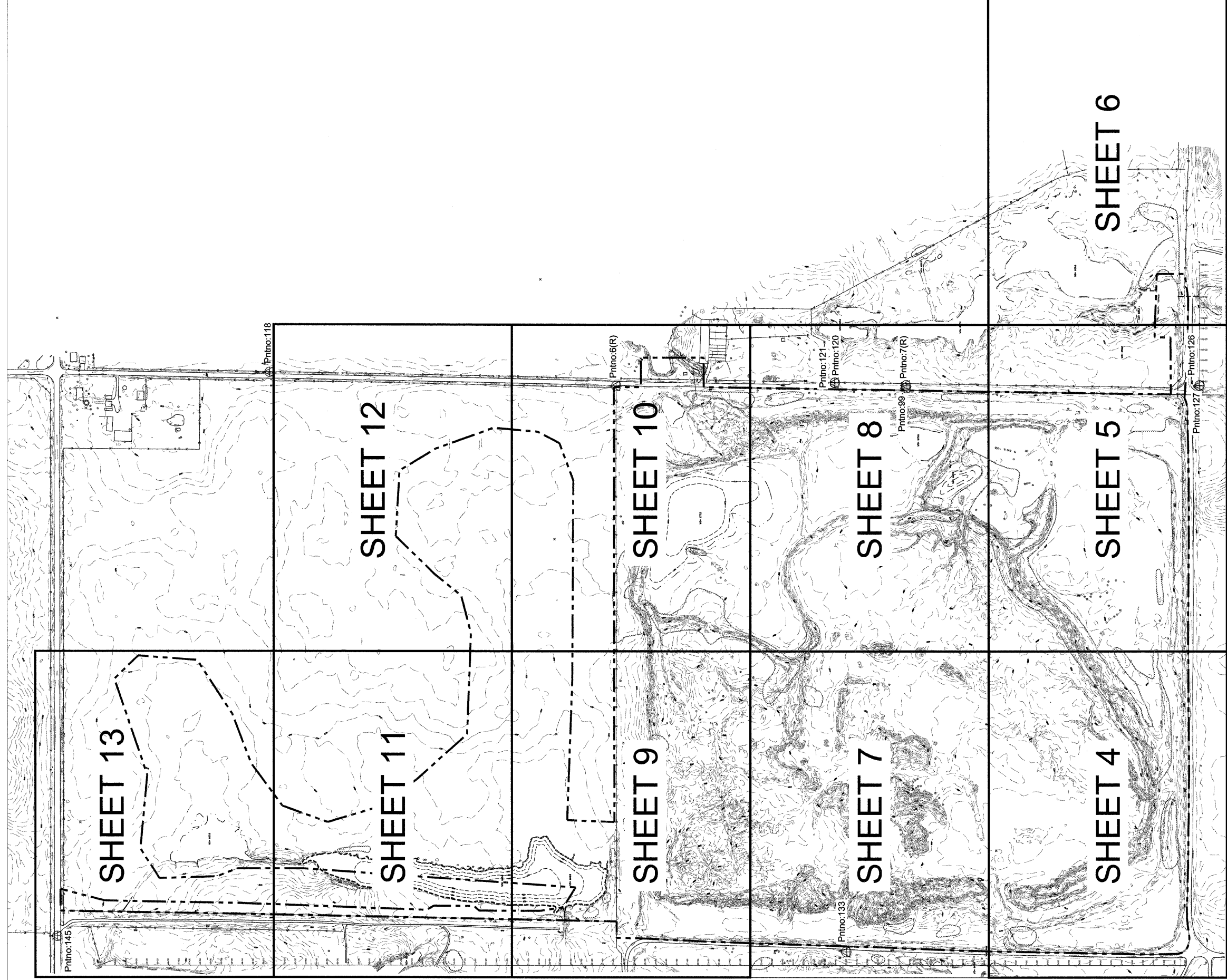
MINE REFUSE TREATMENT -After mine refuse has been graded to the subgrade shown in the plans, agricultural ground limestone shall be uniformly spread at the rate specified in the plans. A 3 inch layer of soil shall then be spread over the mine refuse treatment area and blended to a depth of 6 inches with an industrial offset disk approved by the engineer. Treated areas shall then be covered with 33 inches of soil.

Special Note:

Coal Combustion By-Products - In Accordance with Article 259 of the Special Provisions, approximately 100,000 tons of CCB's shall be spread in lifts in mine refuse fill areas prior to earth cover placement.

Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing

ITEM (unit)	March 1, 2011 - April 20, 2011	September 1, 2012 - September 30, 2012	June 15, 2012 - July 15, 2012	TOTAL QUANTITY
SEEDING (acres)	175			175
AGRICULTURAL GROUND LIMESTONE (tons)	350 Tns 2 Tons/Acre			350 Tons
NITROGEN FERTILIZER NUTRIENT (pounds)	21,000 Pounds 120 Lb./Acre	21,000 Pounds 120 Lb./Acre		42,000 Pounds
PHOSPHOROUS FERTILIZER NUTRIENT (pounds)	35,000 Pounds 200 Lb./Acre	35,000 Pounds 200 Lb./Acre		70,000 Pounds
POTASSIUM FERTILIZER NUTRIENT (pounds)	52,500 Pounds 300 Lb./Acre	52,500 Pounds 300 Lb./Acre		105,000 Pounds
MULCH, METHOD 2 PROCEDURE 1 (tons)	175 Acres 2 Tons/Acre			175 Acres
MOWING (acres)			175 Acres	175 Acres



SURVEY DATA

PT. #	NORTHING	EASTING	ELEV.
6(R)	1415359.26	2298087.81	673.18
7(R)	1413991.06	2298091.67	667.42
99	1413991.22	2298078.72	668.36
118	1416994.92	2298151.62	675.78
120	1414327.60	2298103.72	668.82
121	1414328.40	2298102.46	668.94
126	1412606.42	2298090.84	659.29
127	1412607.33	2298089.75	659.29
133	1414273.82	2295422.04	670.04
145	1417997.15	2295493.42	674.85

N

---600'---

EXISTING CONTOUR

CONSTRUCTION LIMITS

⊕

SURVEY CONTROL POINT

Legend

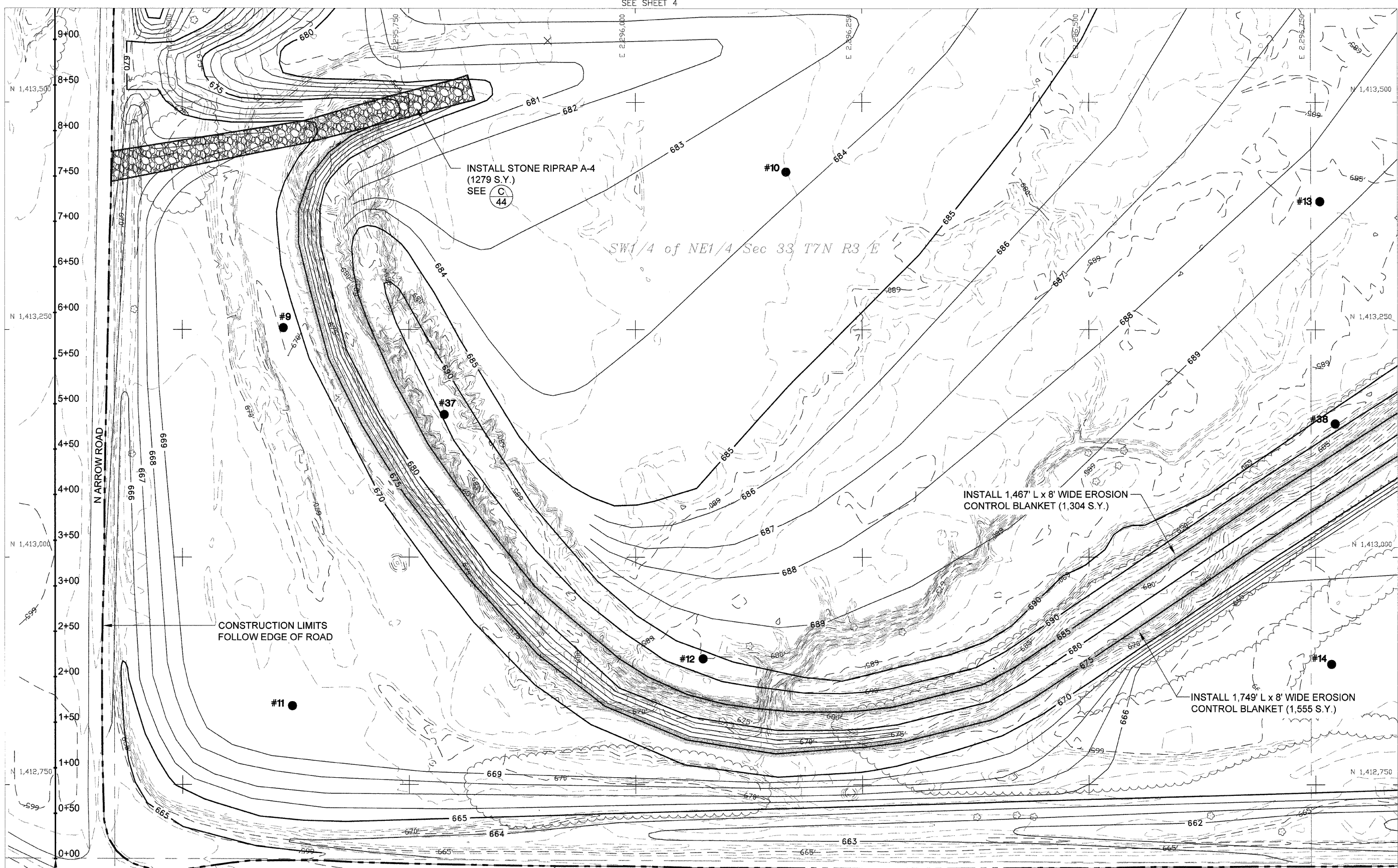


Sheet Layout/ Survey Information
 Sheet 3 of 44

Drawn By: M-LF
 Checked By: _____
 Date: 6/29/2009

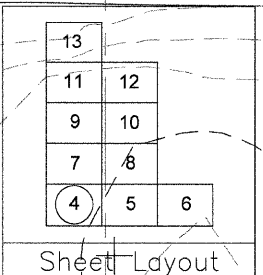
Red Ember - East Reclamation Project
 AML-GFuE-0803
 Fulton County

State of Illinois
 Department of Natural Resources



Legend

- 600' --- EXISTING CONTOUR
- 650' --- PROPOSED CONTOUR
- - - - - CONSTRUCTION LIMITS
- #10 BORING
- EDGE OF ROAD
- ~~~~~ TREELINE
- EDGE OF WATER
- ⊕ SURVEY CONTROL POINT

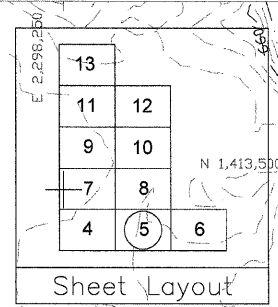
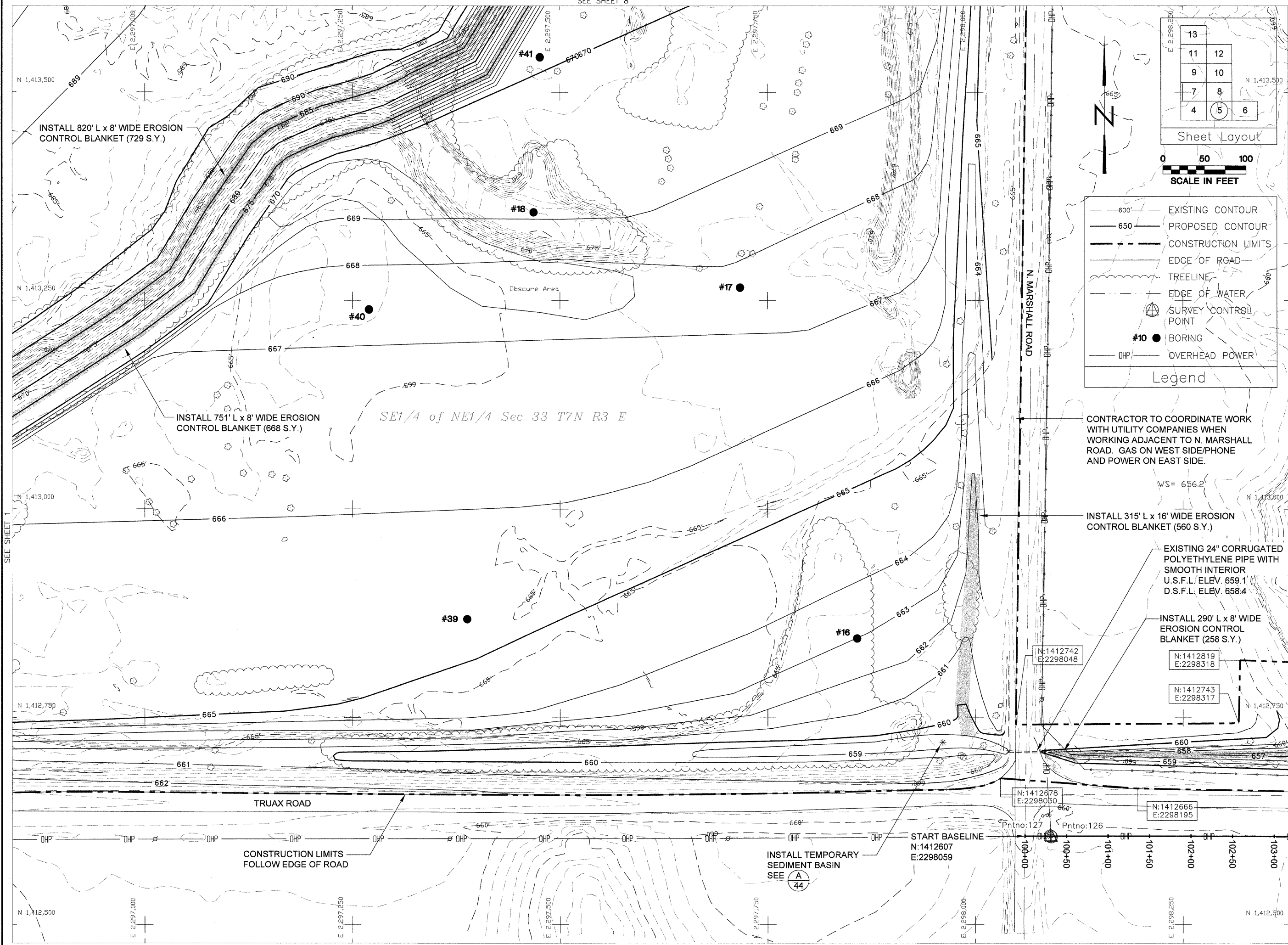


State of Illinois
Department of Natural Resources

Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County

Drawn By: _____ V.P., M-LF
Checked By: _____
Date: 6/29/2009

Existing & Proposed
Conditions
Sheet
4 of 44



- Legend**
- 600' --- EXISTING CONTOUR
 - 650 — PROPOSED CONTOUR
 - - - - - CONSTRUCTION LIMITS
 - — — — — EDGE OF ROAD
 - ~~~~~ TREELINE
 - - - - - EDGE OF WATER
 - ⊕ SURVEY CONTROL POINT
 - #10 BORING
 - OHP — OVERHEAD POWER

CONTRACTOR TO COORDINATE WORK WITH UTILITY COMPANIES WHEN WORKING ADJACENT TO N. MARSHALL ROAD. GAS ON WEST SIDE/PHONE AND POWER ON EAST SIDE.

WS = 656.2

INSTALL 315' L x 16' WIDE EROSION CONTROL BLANKET (560 S.Y.)

EXISTING 24" CORRUGATED POLYETHYLENE PIPE WITH SMOOTH INTERIOR
U.S.F.L. ELEV. 659.1
D.S.F.L. ELEV. 658.4

INSTALL 290' L x 8' WIDE EROSION CONTROL BLANKET (258 S.Y.)

N:1412819
E:2298318

N:1412743
E:2298317

N:1412742
E:2298048

N:1412678
E:2298050

N:1412666
E:2298195

START BASELINE
N:1412607
E:2298059

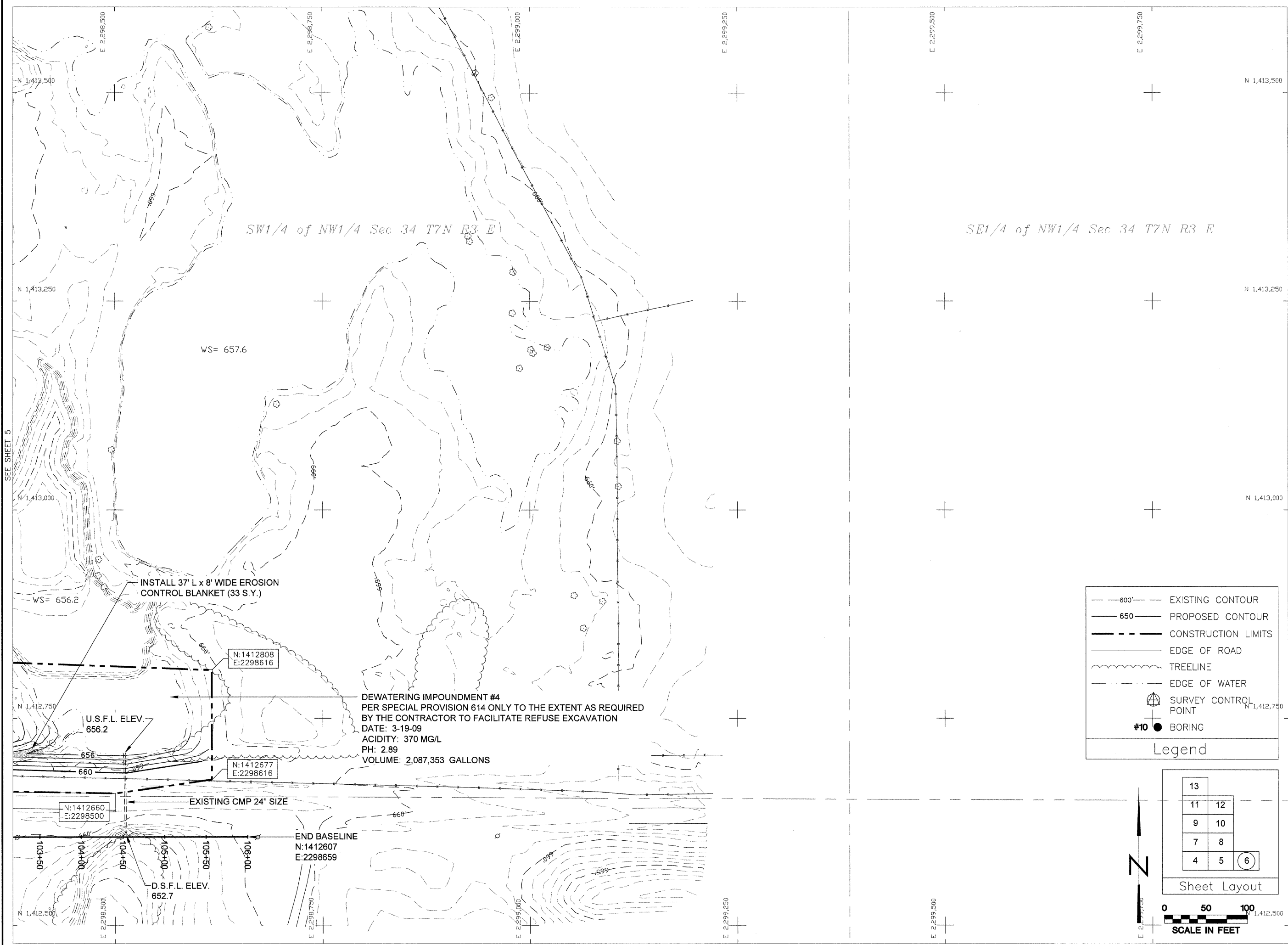
INSTALL TEMPORARY SEDIMENT BASIN
SEE (A) 44

TRUAX ROAD

CONSTRUCTION LIMITS FOLLOW EDGE OF ROAD

SE1/4 of NE1/4 Sec 33 T7N R3 E

Obscure Area



SW1/4 of NW1/4 Sec 34 T7N R3 E

SE1/4 of NW1/4 Sec 34 T7N R3 E

WS= 657.6

WS= 656.2

INSTALL 37' L x 8' WIDE EROSION CONTROL BLANKET (33 S.Y.)

DEWATERING IMPOUNDMENT #4
 PER SPECIAL PROVISION 614 ONLY TO THE EXTENT AS REQUIRED
 BY THE CONTRACTOR TO FACILITATE REFUSE EXCAVATION
 DATE: 3-19-09
 ACIDITY: 370 MG/L
 PH: 2.89
 VOLUME: 2,087,353 GALLONS

U.S.F.L. ELEV.
656.2

D.S.F.L. ELEV.
652.7

EXISTING CMP 24" SIZE

END BASELINE
 N:1412607
 E:2298659

Legend

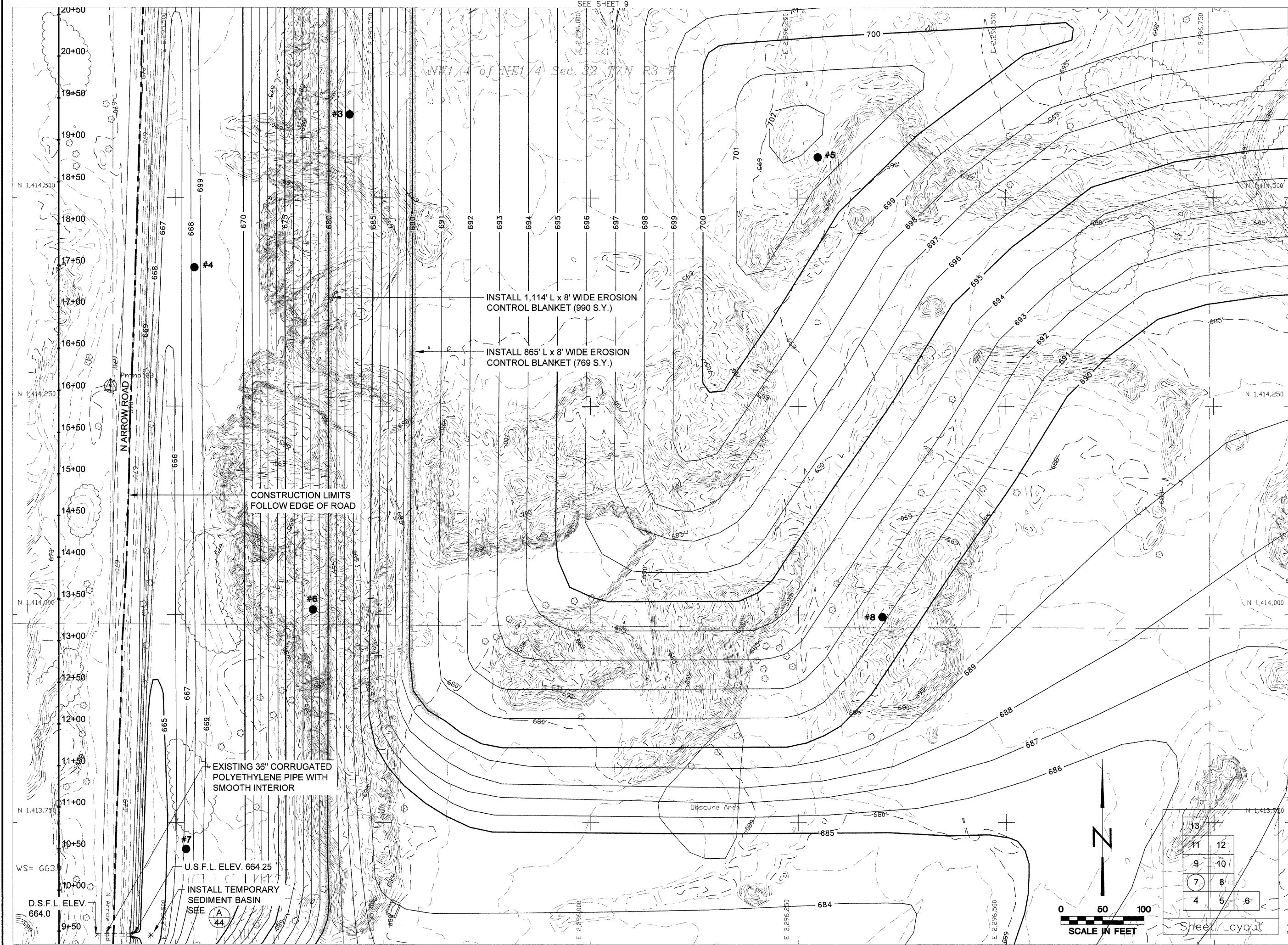
- 600' — EXISTING CONTOUR
- 650 — PROPOSED CONTOUR
- CONSTRUCTION LIMITS
- EDGE OF ROAD
- TREELINE
- EDGE OF WATER
- SURVEY CONTROL POINT
- #10 BORING

Sheet Layout

13		
11	12	
9	10	
7	8	
4	5	6

SCALE IN FEET

0 50 100

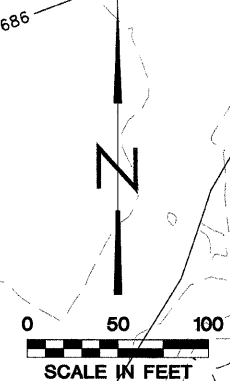


NW1/4 of NE1/4 Sec. 33 T4N R3 W

SEE SHEET 9

SEE SHEET 4

SEE SHEET 8



13		
11	12	
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7	8	
4	5	6

Sheet Layout

EXISTING 36" CORRUGATED
POLYETHYLENE PIPE WITH
SMOOTH INTERIOR

U.S.F.L. ELEV. 664.25

INSTALL TEMPORARY
SEDIMENT BASIN
SEE (A)
44

INSTALL 1,114' L x 8' WIDE EROSION
CONTROL BLANKET (990 S.Y.)

INSTALL 865' L x 8' WIDE EROSION
CONTROL BLANKET (769 S.Y.)

CONSTRUCTION LIMITS
FOLLOW EDGE OF ROAD

20+50
20+00
19+50
19+00
18+50
18+00
17+50
17+00
16+50
16+00
15+50
15+00
14+50
14+00
13+50
13+00
12+50
12+00
11+50
11+00
10+50
10+00
9+50

N 1,414,500

N 1,414,250

N 1,414,000

N 1,413,750

WS = 663.0

D.S.F.L. ELEV. 664.0

N 1,414,250

N 1,414,000

N 1,413,750

E 2,296,000

E 2,296,250

E 2,296,500

E 2,296,750

E 2,296,000

E 2,296,250

E 2,296,500

E 2,296,750

N ARROW ROAD

Discure Area

#4

#3

#5

#8

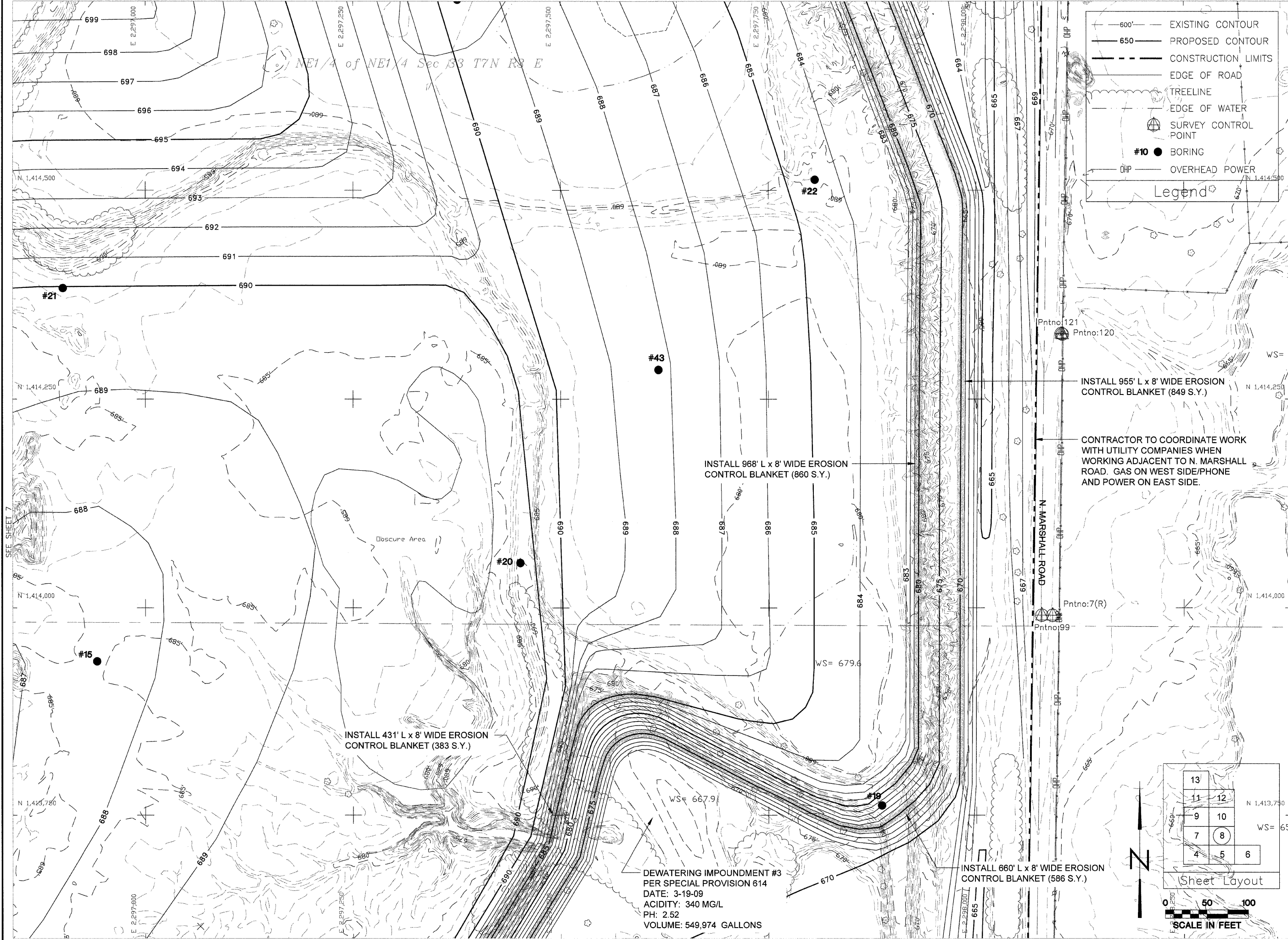
#7

(A)
44

NE1/4 of NE1/4 Sec 33 T7N R3 E

Legend

- 600' — EXISTING CONTOUR
- 650' — PROPOSED CONTOUR
- - - CONSTRUCTION LIMITS
- EDGE OF ROAD
- TREELINE
- EDGE OF WATER
- ⊕ SURVEY CONTROL POINT
- #10 BORING
- OHP OVERHEAD POWER



INSTALL 431' L x 8' WIDE EROSION CONTROL BLANKET (383 S.Y.)

INSTALL 968' L x 8' WIDE EROSION CONTROL BLANKET (860 S.Y.)

INSTALL 955' L x 8' WIDE EROSION CONTROL BLANKET (849 S.Y.)

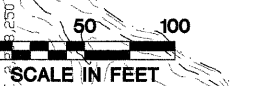
CONTRACTOR TO COORDINATE WORK WITH UTILITY COMPANIES WHEN WORKING ADJACENT TO N. MARSHALL ROAD. GAS ON WEST SIDE/PHONE AND POWER ON EAST SIDE.

INSTALL 660' L x 8' WIDE EROSION CONTROL BLANKET (586 S.Y.)

DEWATERING IMPOUNDMENT #3 PER SPECIAL PROVISION 614
DATE: 3-19-09
ACIDITY: 340 MG/L
PH: 2.52
VOLUME: 549,974 GALLONS

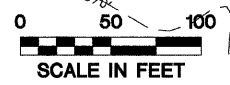
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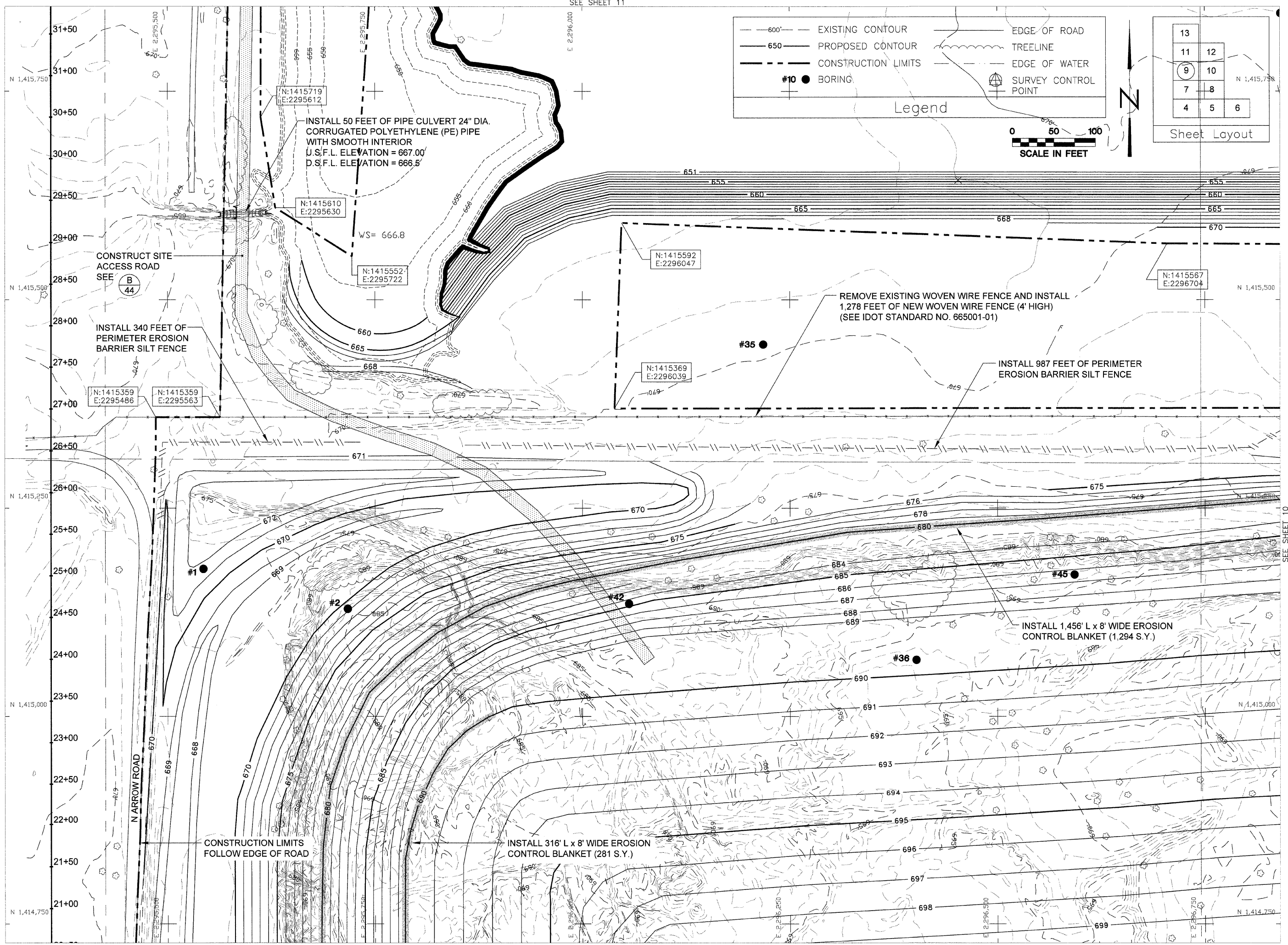
Legend

- 600' --- EXISTING CONTOUR
- 650 --- PROPOSED CONTOUR
- - - - CONSTRUCTION LIMITS
- #10 ● BORING
- EDGE OF ROAD
- TREELINE
- EDGE OF WATER
- SURVEY CONTROL POINT



13		
11	12	
9	10	
7	8	
4	5	6

Sheet Layout



INSTALL 50 FEET OF PIPE CULVERT 24" DIA. CORRUGATED POLYETHYLENE (PE) PIPE WITH SMOOTH INTERIOR U.S.F.L. ELEVATION = 667.00' D.S.F.L. ELEVATION = 666.5'

CONSTRUCT SITE ACCESS ROAD SEE (B) 44

INSTALL 340 FEET OF PERIMETER EROSION BARRIER SILT FENCE

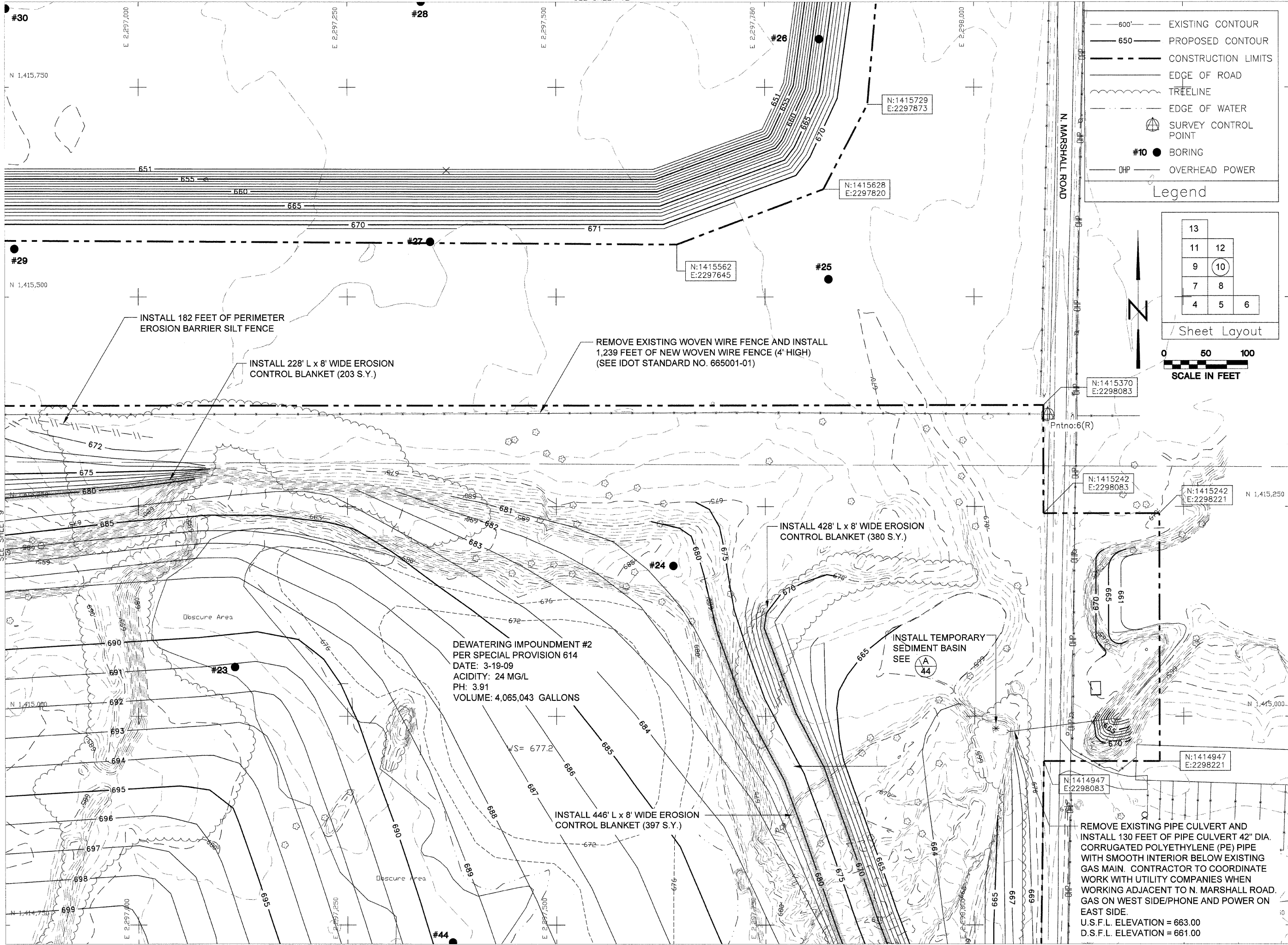
REMOVE EXISTING WOVEN WIRE FENCE AND INSTALL 1,278 FEET OF NEW WOVEN WIRE FENCE (4' HIGH) (SEE IDOT STANDARD NO. 665001-01)

INSTALL 987 FEET OF PERIMETER EROSION BARRIER SILT FENCE

INSTALL 1,456' L x 8' WIDE EROSION CONTROL BLANKET (1,294 S.Y.)

INSTALL 316' L x 8' WIDE EROSION CONTROL BLANKET (281 S.Y.)

CONSTRUCTION LIMITS FOLLOW EDGE OF ROAD



Legend

- 600' — EXISTING CONTOUR
- 650 — PROPOSED CONTOUR
- CONSTRUCTION LIMITS
- EDGE OF ROAD
- ~ TREELINE
- - - EDGE OF WATER
- ⊙ SURVEY CONTROL POINT
- #10 BORING
- OHP OVERHEAD POWER

Sheet Layout

13		
11	12	
9	10	
7	8	
4	5	6

SCALE IN FEET: 0 50 100

State of Illinois
Department of Natural Resources

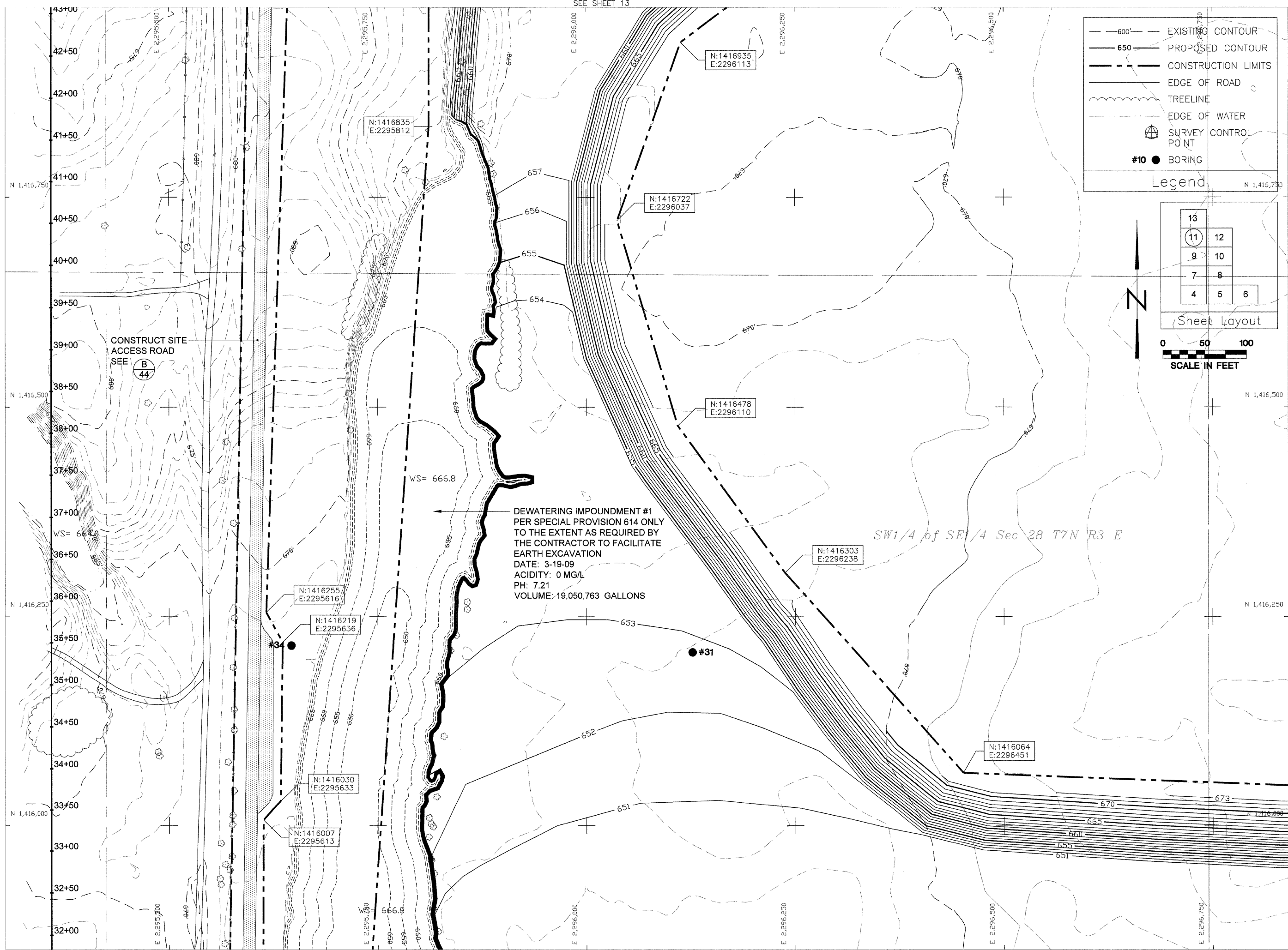
Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County

Drawn By: V.P., M-LF
Checked By: _____
Date: 6/30/2009

Existing & Proposed
Conditions
Sheet
10 of 44

SEE SHEET 9

SEE SHEET 8



DEWATERING IMPOUNDMENT #1
 PER SPECIAL PROVISION 614 ONLY
 TO THE EXTENT AS REQUIRED BY
 THE CONTRACTOR TO FACILITATE
 EARTH EXCAVATION
 DATE: 3-19-09
 ACIDITY: 0 MG/L
 PH: 7.21
 VOLUME: 19,050,763 GALLONS

SW 1/4 of SE 1/4 Sec 28 T7N R3 E

Legend

- 600' --- EXISTING CONTOUR
- 650 — PROPOSED CONTOUR
- - - - - CONSTRUCTION LIMITS
- — — — — EDGE OF ROAD
- ~~~~~ TREELINE
- - - - - EDGE OF WATER
- ⊕ SURVEY CONTROL POINT
- #10 BORING

Sheet layout

13		
11	12	
9	10	
7	8	
4	5	6

0 50 100
SCALE IN FEET

State of Illinois
 Department of Natural Resources

Red Ember - East
 Reclamation Project
 AML-GFuE-0803
 Fulton County

Drawn By: V.P., M-LF
 Checked By: _____
 Date: 6/29/2009

Existing & Proposed
 Conditions
 Sheet
 11 of 44

SEE SHEET 12

	EXISTING CONTOUR		EDGE OF ROAD
	PROPOSED CONTOUR		TREE LINE
	CONSTRUCTION LIMITS		EDGE OF WATER
	#10 BORING		SURVEY CONTROL POINT

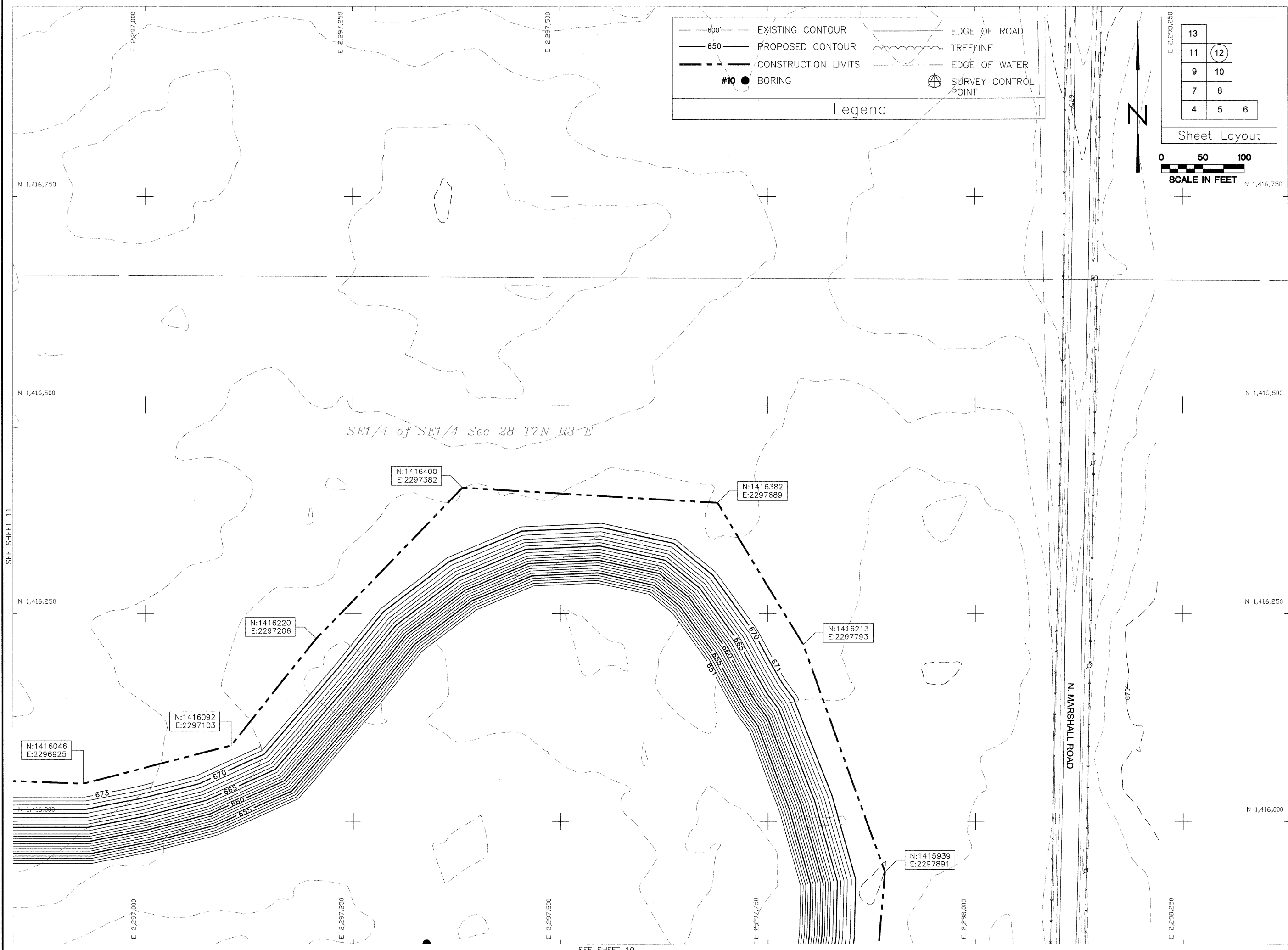
Legend

Sheet Layout

13
11 (12)
9 10
7 8
4 5 6

SCALE IN FEET

0 50 100



State of Illinois
Department of Natural Resources

Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County

Drawn By: _____ V.P., M-LF
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Date: 6/29/2009

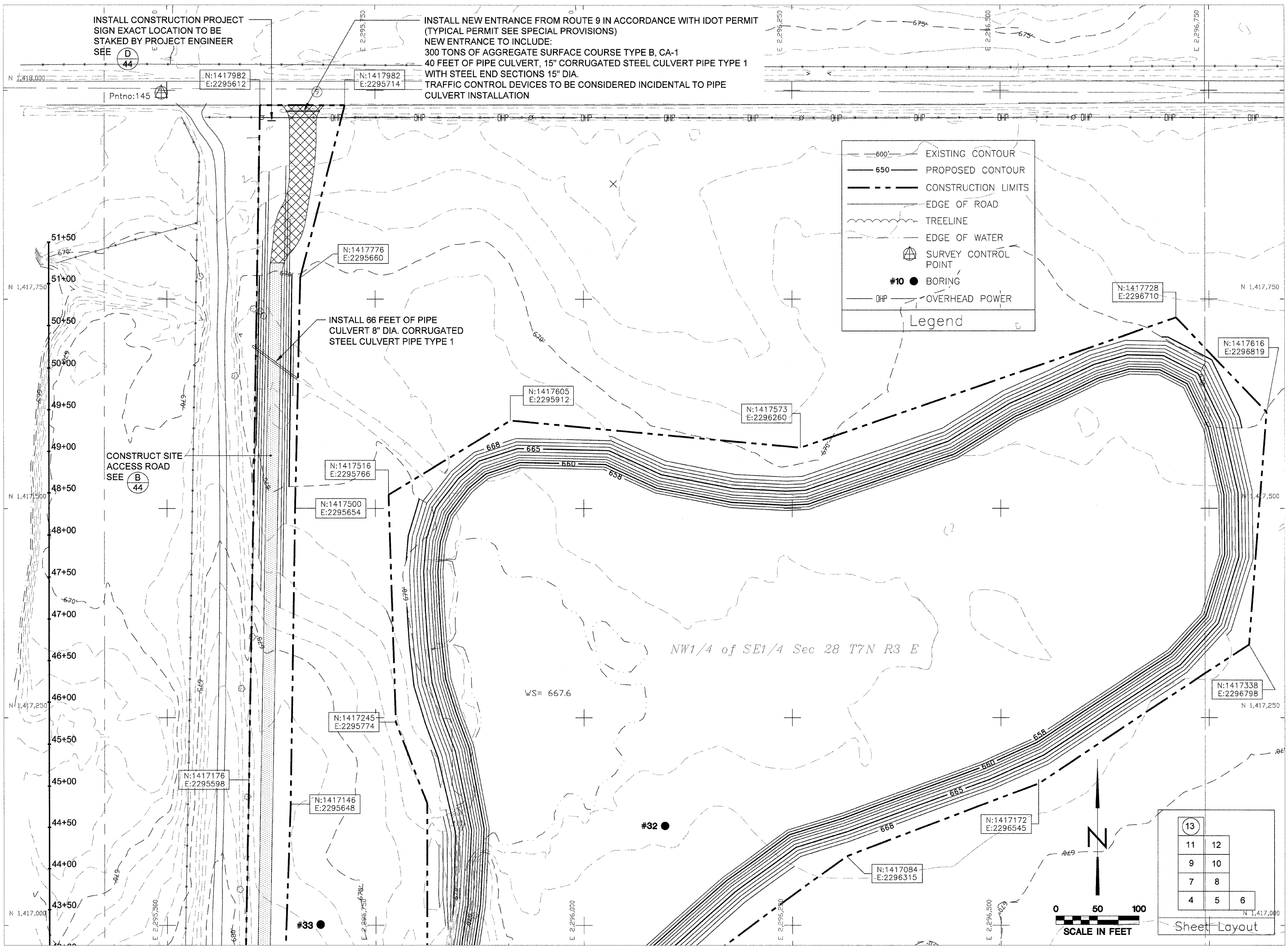
Existing & Proposed
Conditions
Sheet
12 of 44

SEE SHEET 10

SEE SHEET 11

INSTALL CONSTRUCTION PROJECT SIGN EXACT LOCATION TO BE STAKED BY PROJECT ENGINEER SEE (D) 44

INSTALL NEW ENTRANCE FROM ROUTE 9 IN ACCORDANCE WITH IDOT PERMIT (TYPICAL PERMIT SEE SPECIAL PROVISIONS)
 NEW ENTRANCE TO INCLUDE:
 300 TONS OF AGGREGATE SURFACE COURSE TYPE B, CA-1
 40 FEET OF PIPE CULVERT, 15" CORRUGATED STEEL CULVERT PIPE TYPE 1 WITH STEEL END SECTIONS 15" DIA.
 TRAFFIC CONTROL DEVICES TO BE CONSIDERED INCIDENTAL TO PIPE CULVERT INSTALLATION



CONSTRUCT SITE ACCESS ROAD SEE (B) 44

INSTALL 66 FEET OF PIPE CULVERT 8" DIA. CORRUGATED STEEL CULVERT PIPE TYPE 1

Legend

- 600' — EXISTING CONTOUR
- 650' — PROPOSED CONTOUR
- - - CONSTRUCTION LIMITS
- EDGE OF ROAD
- ~ TREELINE
- EDGE OF WATER
- ⊕ SURVEY CONTROL POINT
- #10 BORING
- OHP — OVERHEAD POWER

NW1/4 of SE1/4 Sec 28 T7N R3 E

WS= 667.6

Sheet Layout

13		
11	12	
9	10	
7	8	
4	5	6

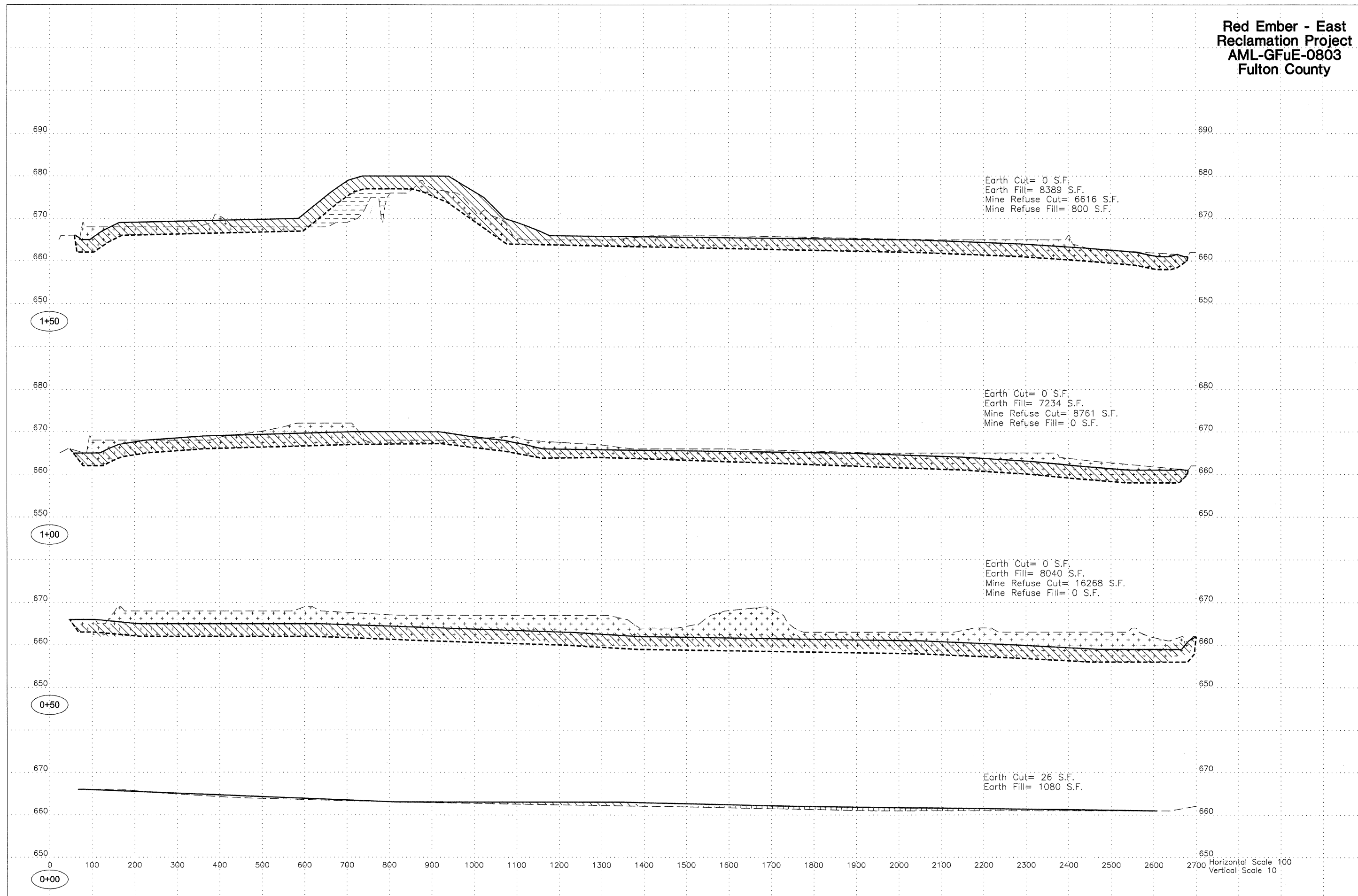
State of Illinois
 Department of Natural Resources

Red Ember - East
 Reclamation Project
 AML-GFuE-0803
 Fulton County

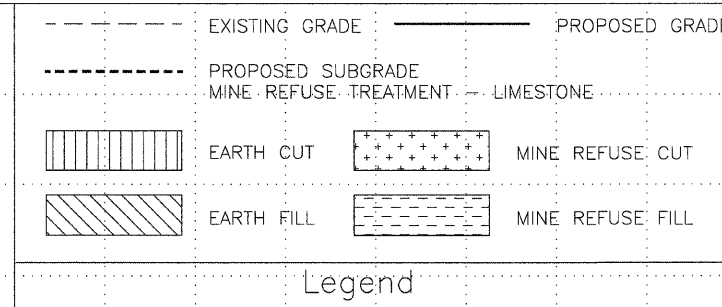
Drawn By: V.P., M-LF Date: 6/30/2009
 Checked By:

Existing & Proposed
 Conditions
 Sheet
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**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Earth Cut= 23 S.F.
Earth Fill= 7670 S.F.
Mine Refuse Cut= 4737 S.F.
Mine Refuse Fill= 1621 S.F.

Earth Cut= 119 S.F.
Earth Fill= 7504 S.F.
Mine Refuse Cut= 4799 S.F.
Mine Refuse Fill= 1981 S.F.

Earth Cut= 209 S.F.
Earth Fill= 7540 S.F.
Mine Refuse Cut= 6348 S.F.
Mine Refuse Fill= 750 S.F.

700
690
680
670
660
650
3+00

700
690
680
670
660
650
2+50

700
690
680
670
660
650
2+00

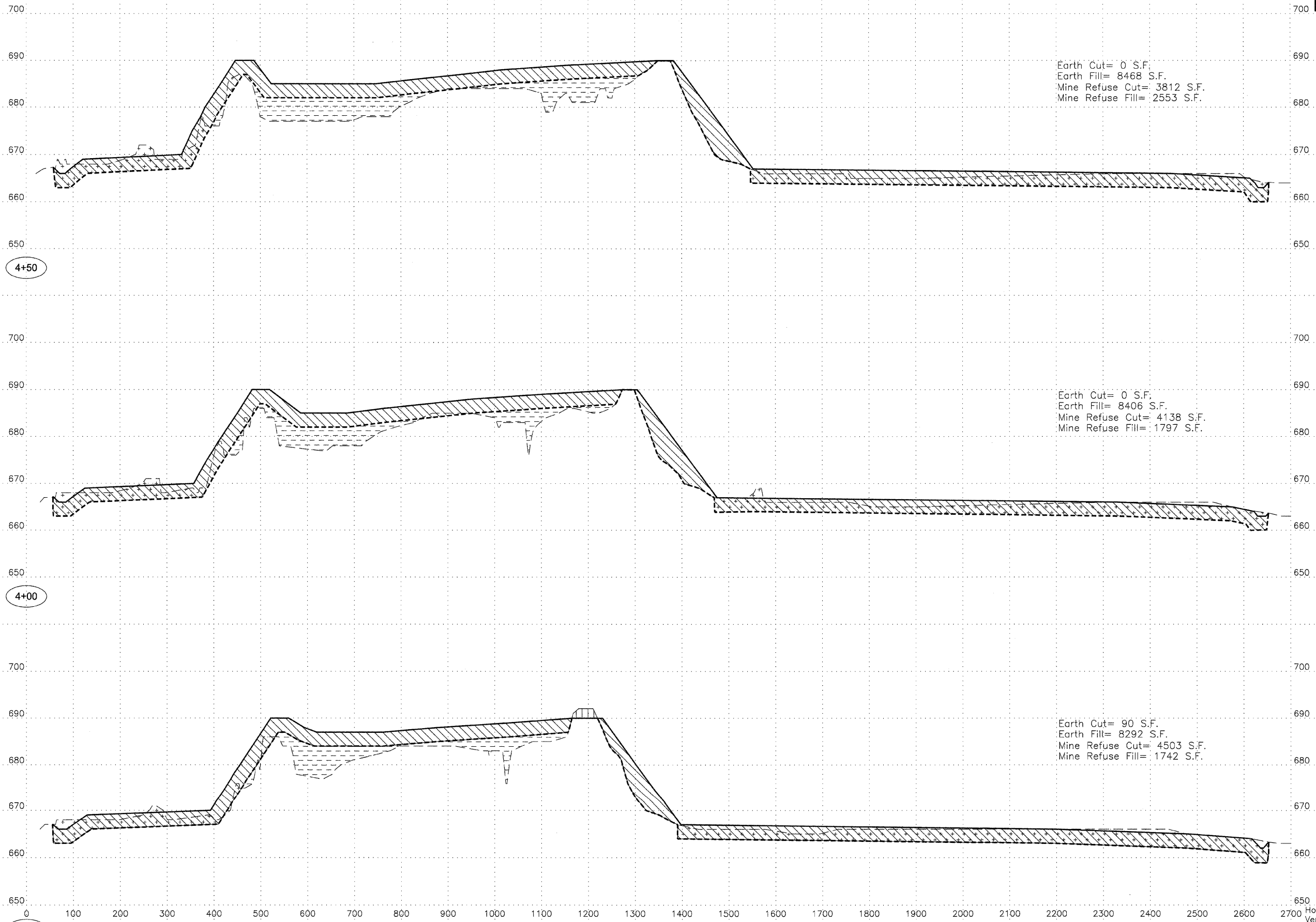
0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700
Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

Earth Cut= 0 S.F.
Earth Fill= 8468 S.F.
Mine Refuse Cut= 3812 S.F.
Mine Refuse Fill= 2553 S.F.

Earth Cut= 0 S.F.
Earth Fill= 8406 S.F.
Mine Refuse Cut= 4138 S.F.
Mine Refuse Fill= 1797 S.F.

Earth Cut= 90 S.F.
Earth Fill= 8292 S.F.
Mine Refuse Cut= 4503 S.F.
Mine Refuse Fill= 1742 S.F.



4+50

4+00

3+50

Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

---	EXISTING GRADE	—	PROPOSED GRADE
---	PROPOSED SUBGRADE	---	MINE REFUSE TREATMENT LIMESTONE
[Vertical Lines]	EARTH CUT	[Cross-hatch]	MINE REFUSE CUT
[Diagonal Lines]	EARTH FILL	[Horizontal Dashed]	MINE REFUSE FILL

Legend

Earth Cut= 0 S.F.
 Earth Fill= 8490 S.F.
 Mine Refuse Cut= 2868 S.F.
 Mine Refuse Fill= 2599 S.F.

700
690
680
670
660
6+00

700
690
680
670
660
5+50

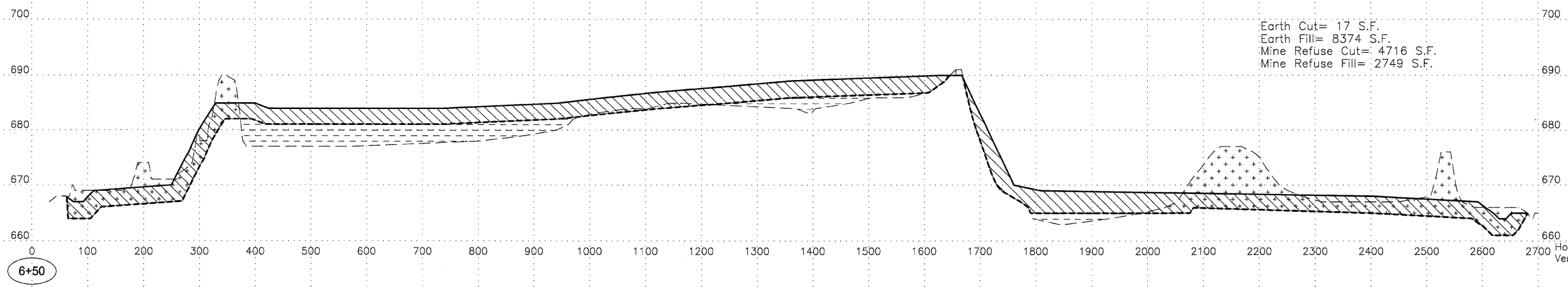
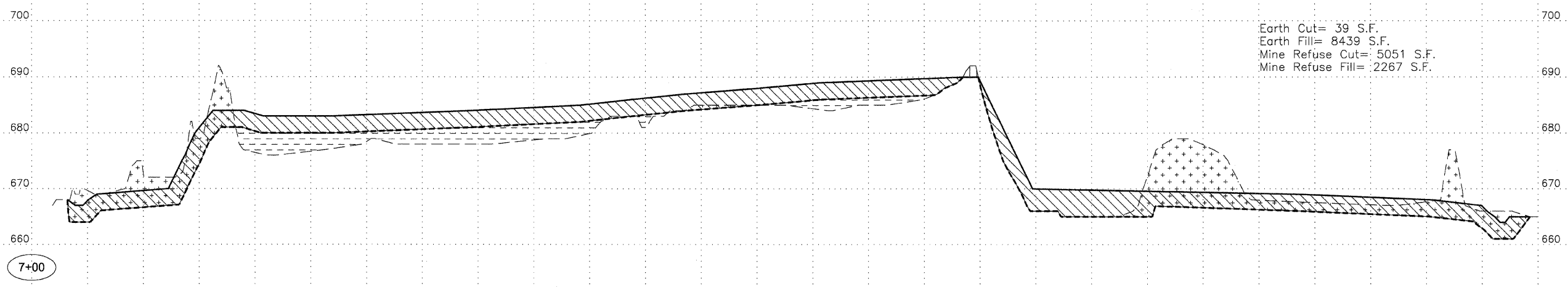
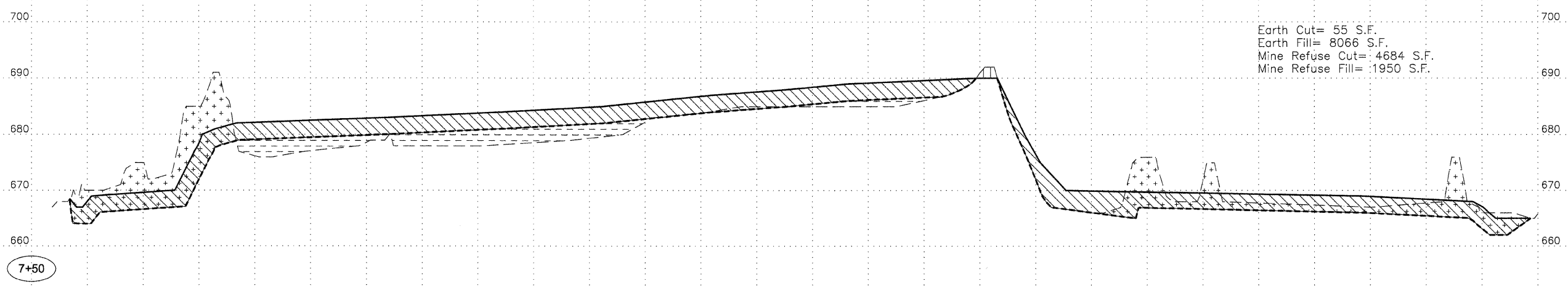
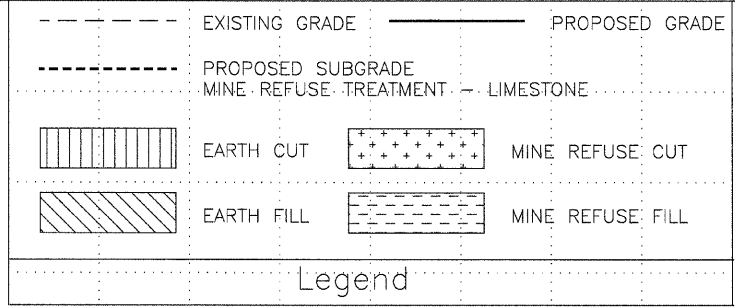
700
690
680
670
660
650
5+00

700
690
680
670
660
700
690
680
670
660
700
690
680
670
660
650

Earth Cut= 0 S.F.
 Earth Fill= 8386 S.F.
 Mine Refuse Cut= 2656 S.F.
 Mine Refuse Fill= 2569 S.F.

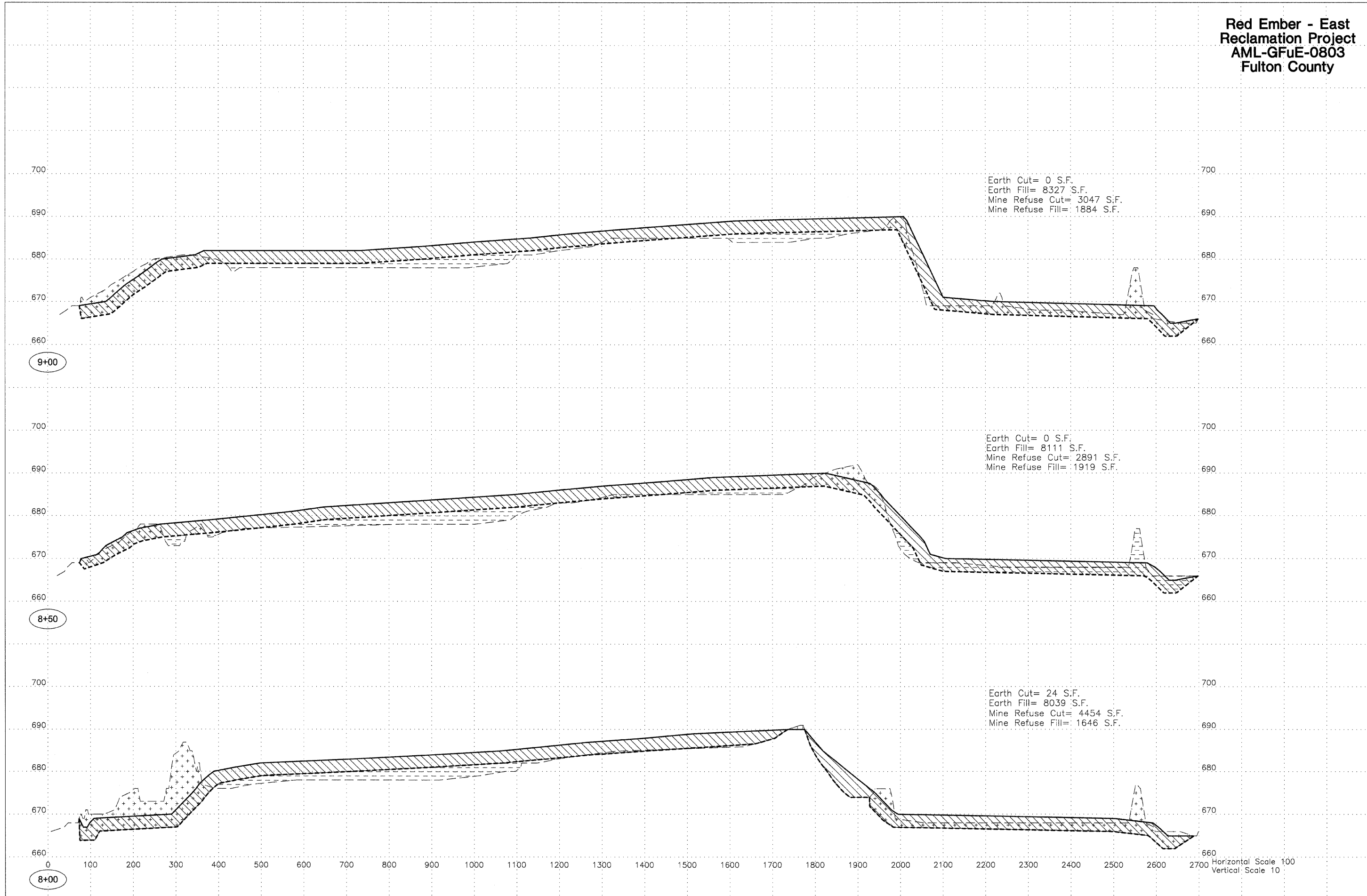
Earth Cut= 0 S.F.
 Earth Fill= 8692 S.F.
 Mine Refuse Cut= 3614 S.F.
 Mine Refuse Fill= 2344 S.F.

Horizontal Scale 100
 Vertical Scale 10



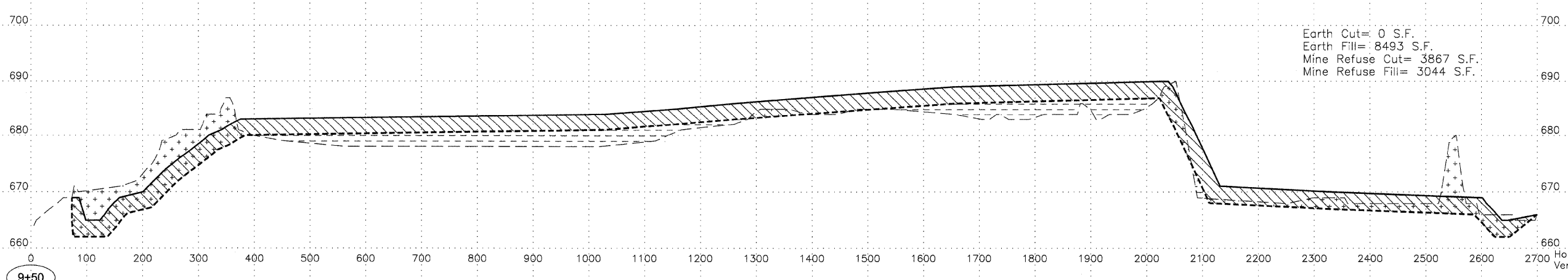
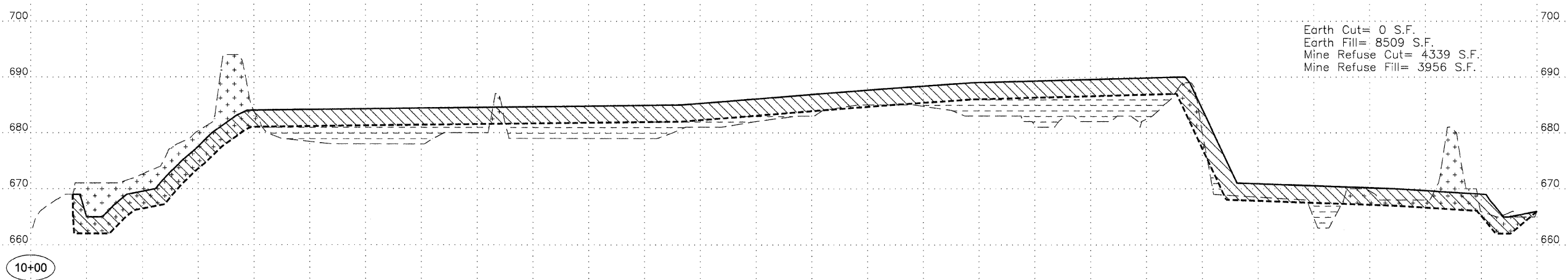
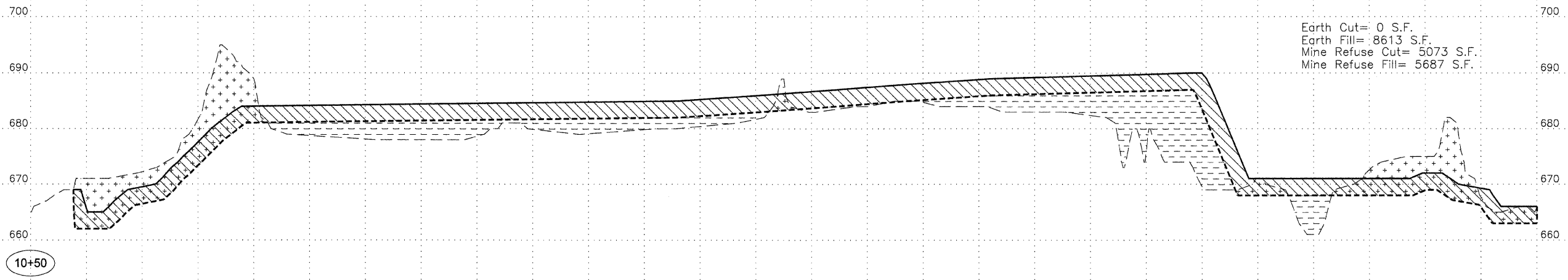
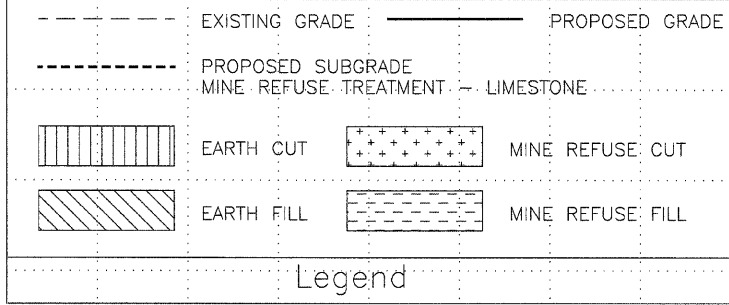
Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Horizontal Scale 100
Vertical Scale 10

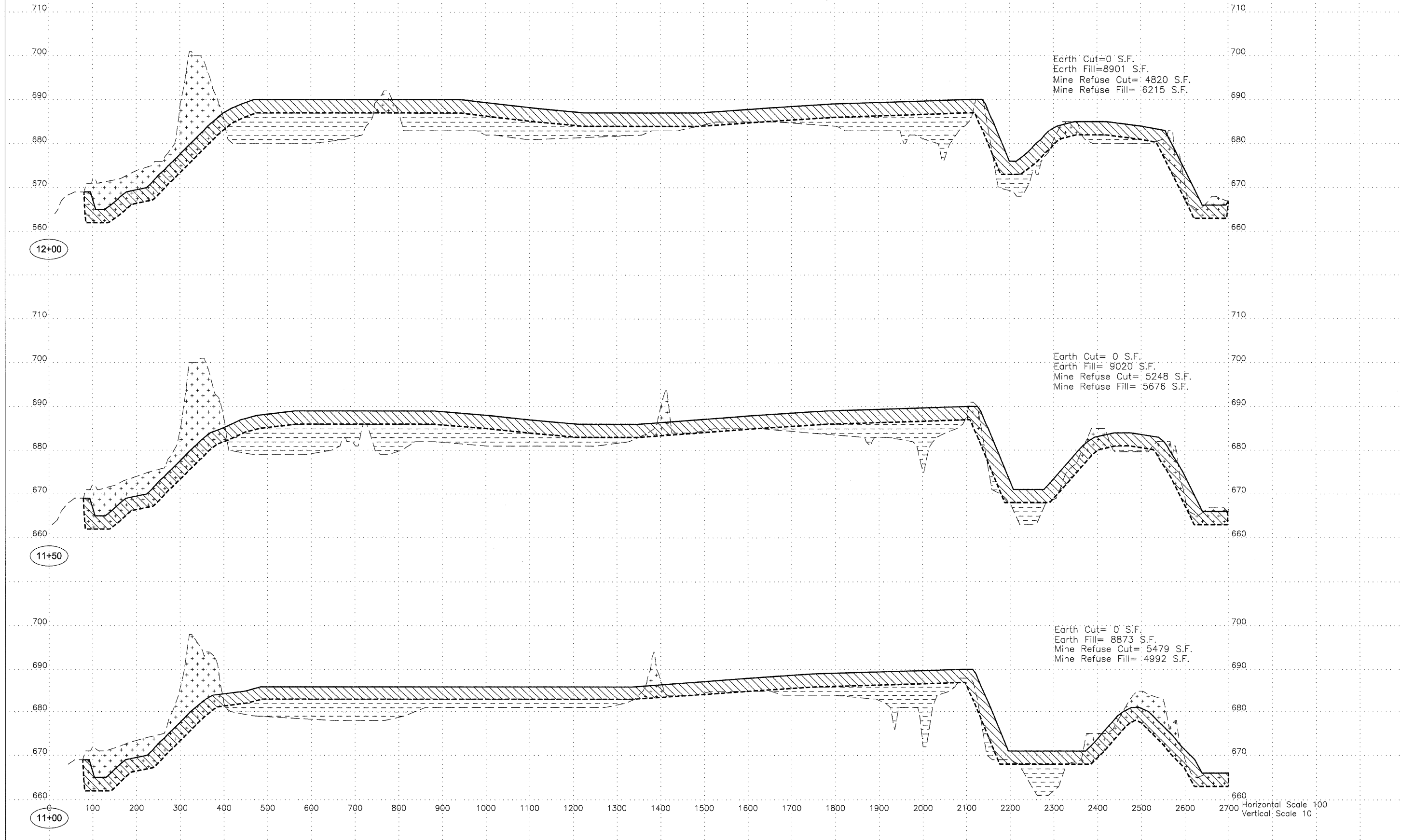
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700

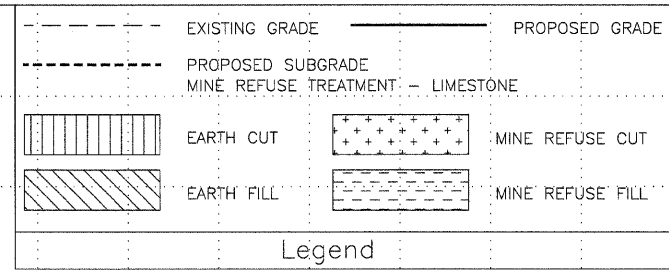
Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Horizontal Scale 100
Vertical Scale 10

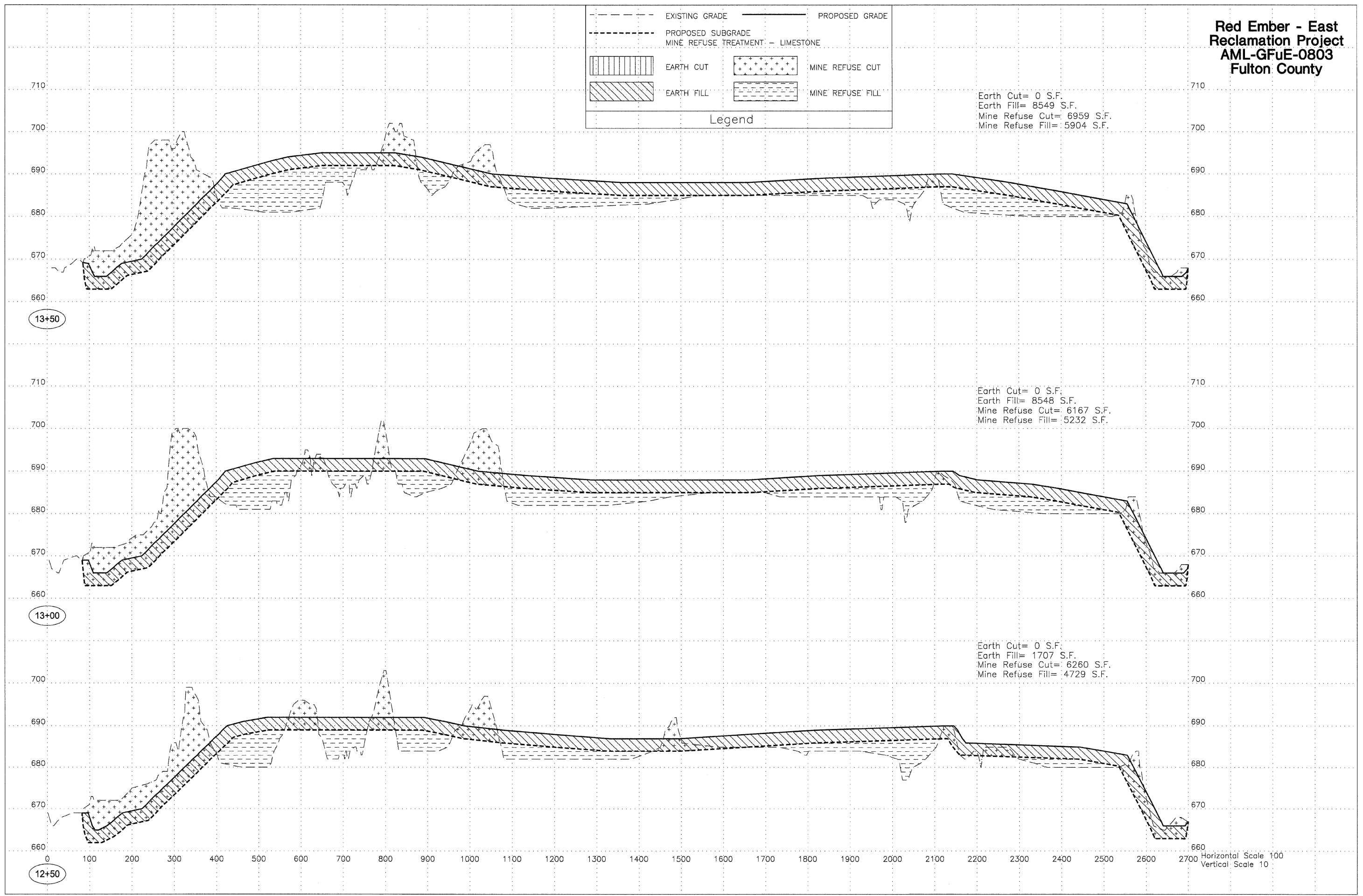
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Earth Cut= 0 S.F.
Earth Fill= 8549 S.F.
Mine Refuse Cut= 6959 S.F.
Mine Refuse Fill= 5904 S.F.

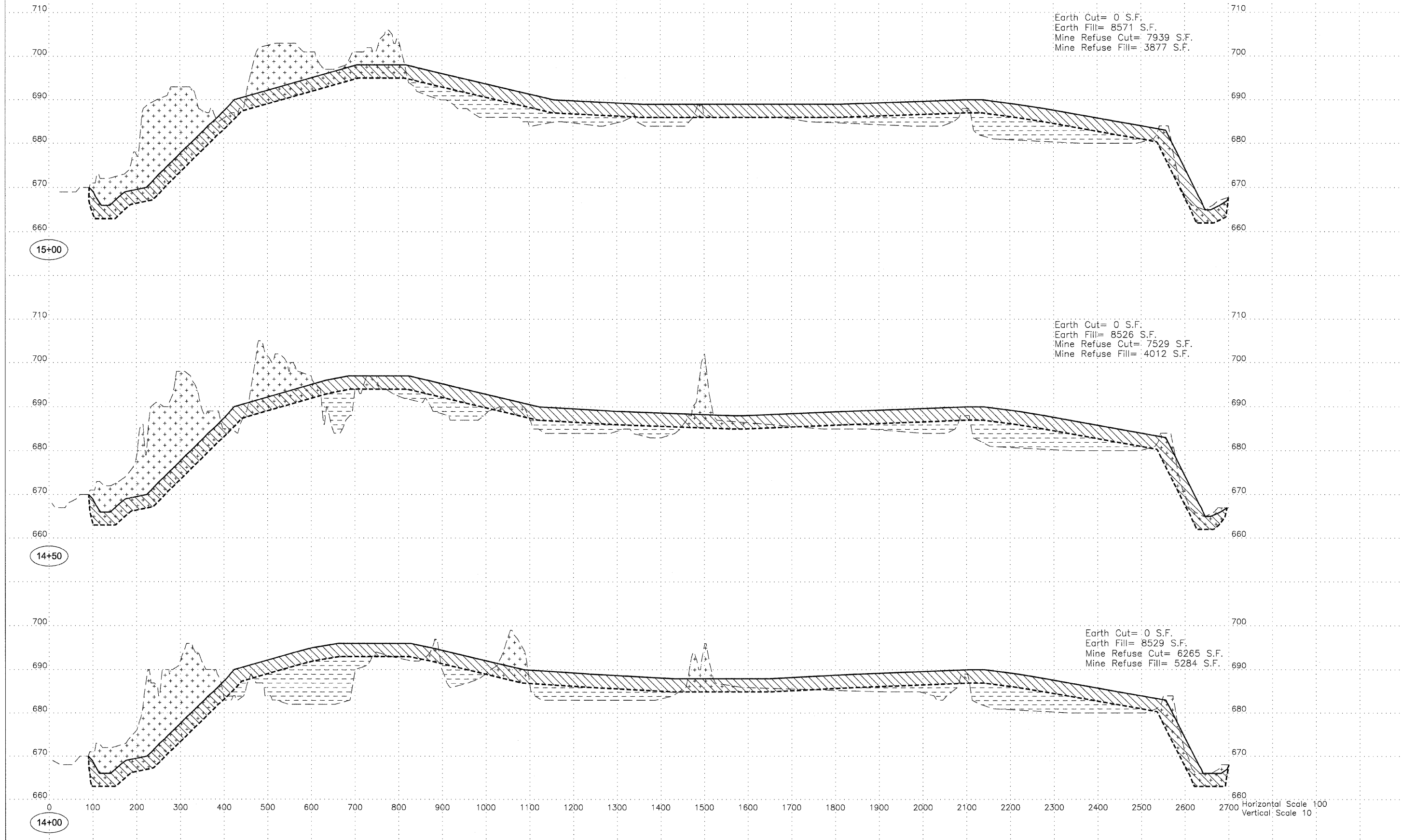
Earth Cut= 0 S.F.
Earth Fill= 8548 S.F.
Mine Refuse Cut= 6167 S.F.
Mine Refuse Fill= 5232 S.F.

Earth Cut= 0 S.F.
Earth Fill= 1707 S.F.
Mine Refuse Cut= 6260 S.F.
Mine Refuse Fill= 4729 S.F.



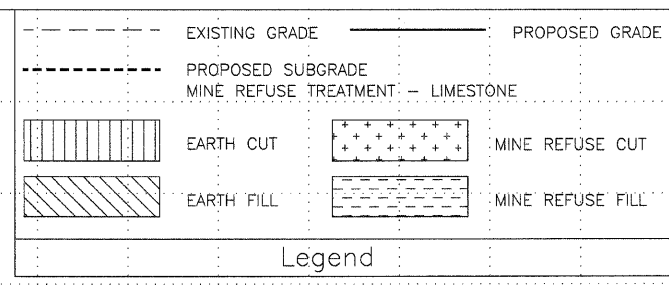
Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
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Fulton County**



Horizontal Scale 100
Vertical Scale 10

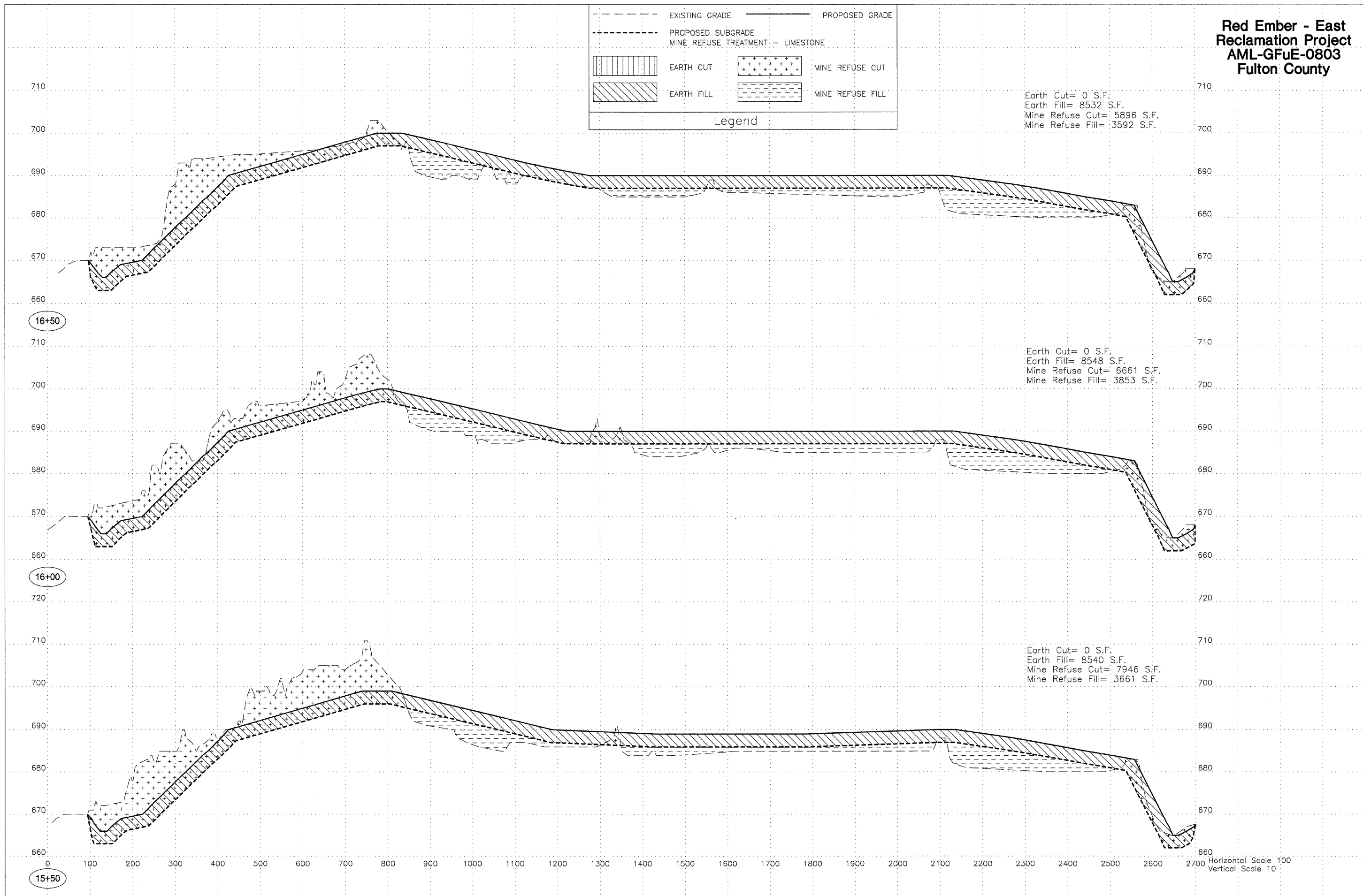
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Earth Cut= 0 S.F.
Earth Fill= 8532 S.F.
Mine Refuse Cut= 5896 S.F.
Mine Refuse Fill= 3592 S.F.

Earth Cut= 0 S.F.
Earth Fill= 8548 S.F.
Mine Refuse Cut= 6661 S.F.
Mine Refuse Fill= 3853 S.F.

Earth Cut= 0 S.F.
Earth Fill= 8540 S.F.
Mine Refuse Cut= 7946 S.F.
Mine Refuse Fill= 3661 S.F.



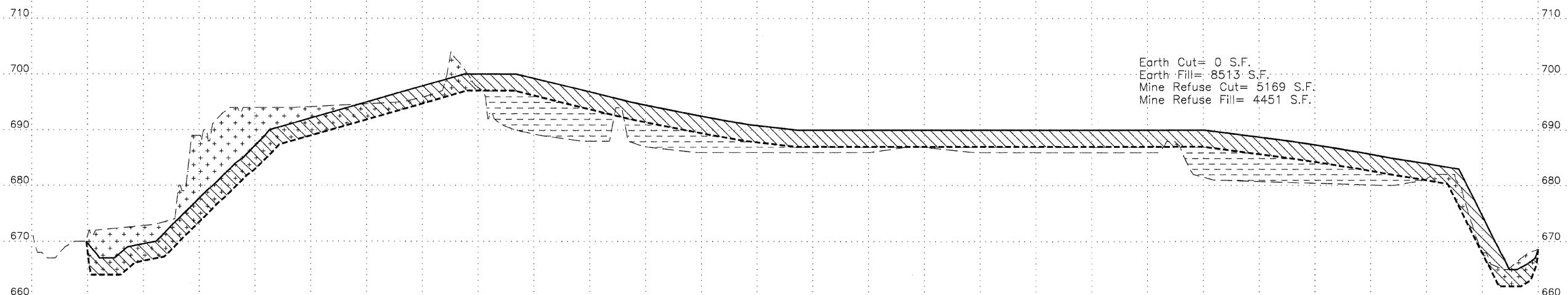
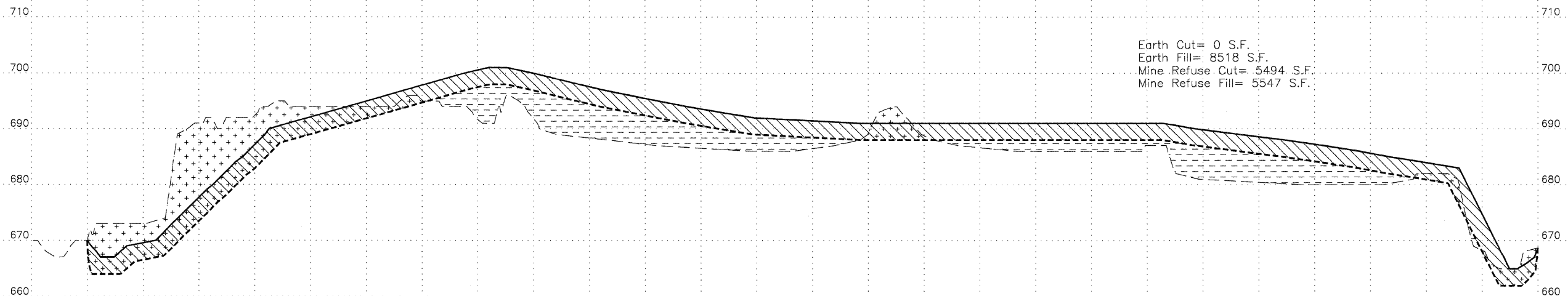
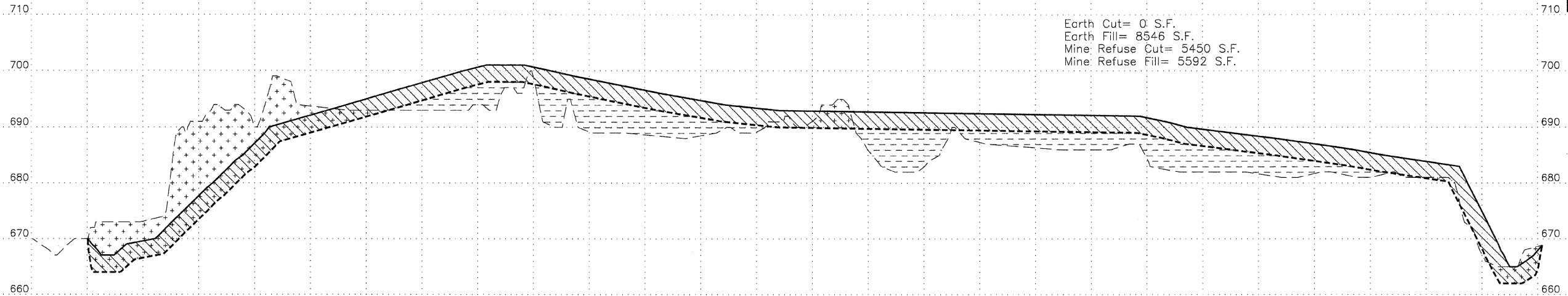
Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

Earth Cut= 0 S.F.
Earth Fill= 8546 S.F.
Mine Refuse Cut= 5450 S.F.
Mine Refuse Fill= 5592 S.F.

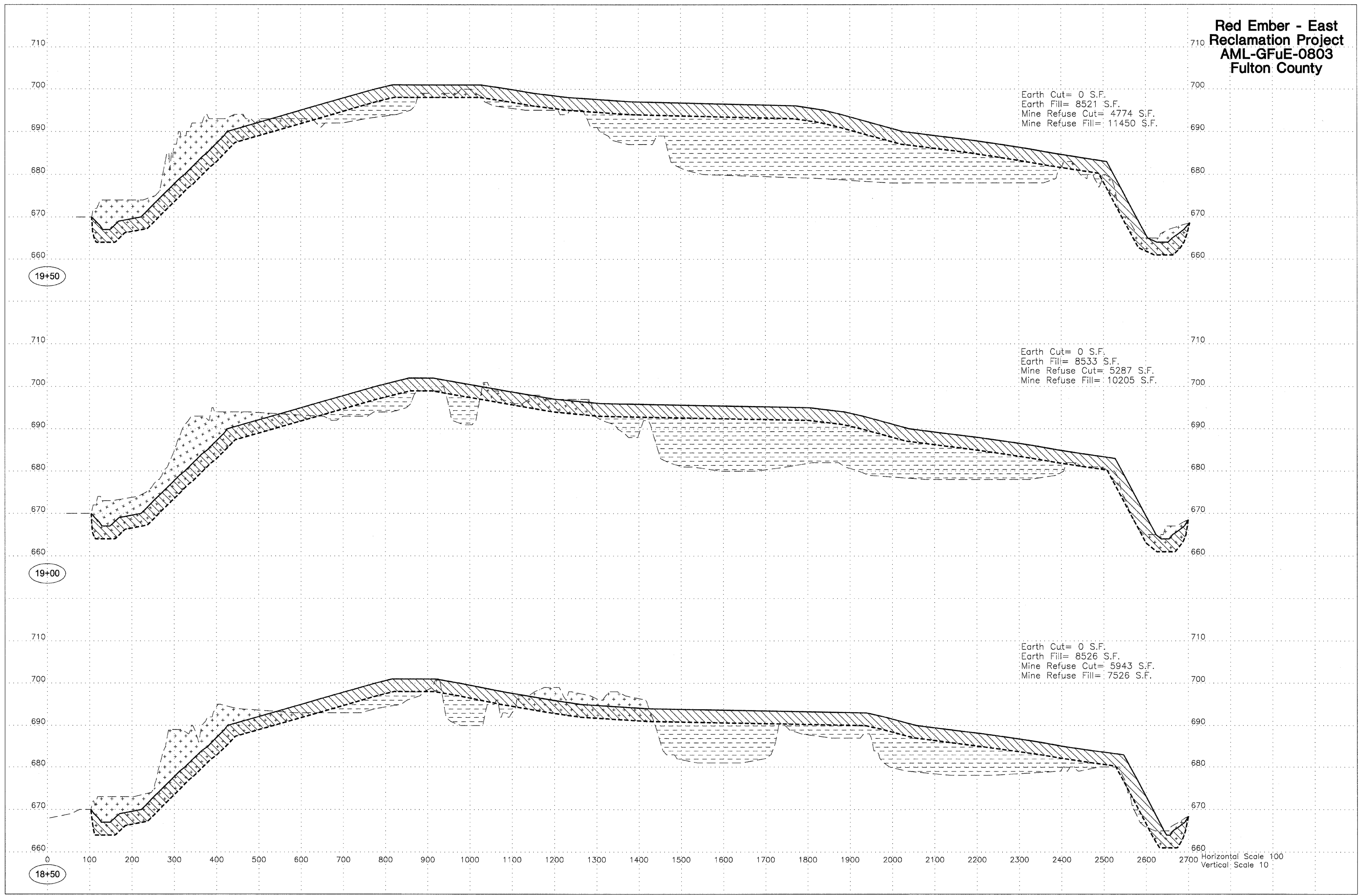
Earth Cut= 0 S.F.
Earth Fill= 8518 S.F.
Mine Refuse Cut= 5494 S.F.
Mine Refuse Fill= 5547 S.F.

Earth Cut= 0 S.F.
Earth Fill= 8513 S.F.
Mine Refuse Cut= 5169 S.F.
Mine Refuse Fill= 4451 S.F.



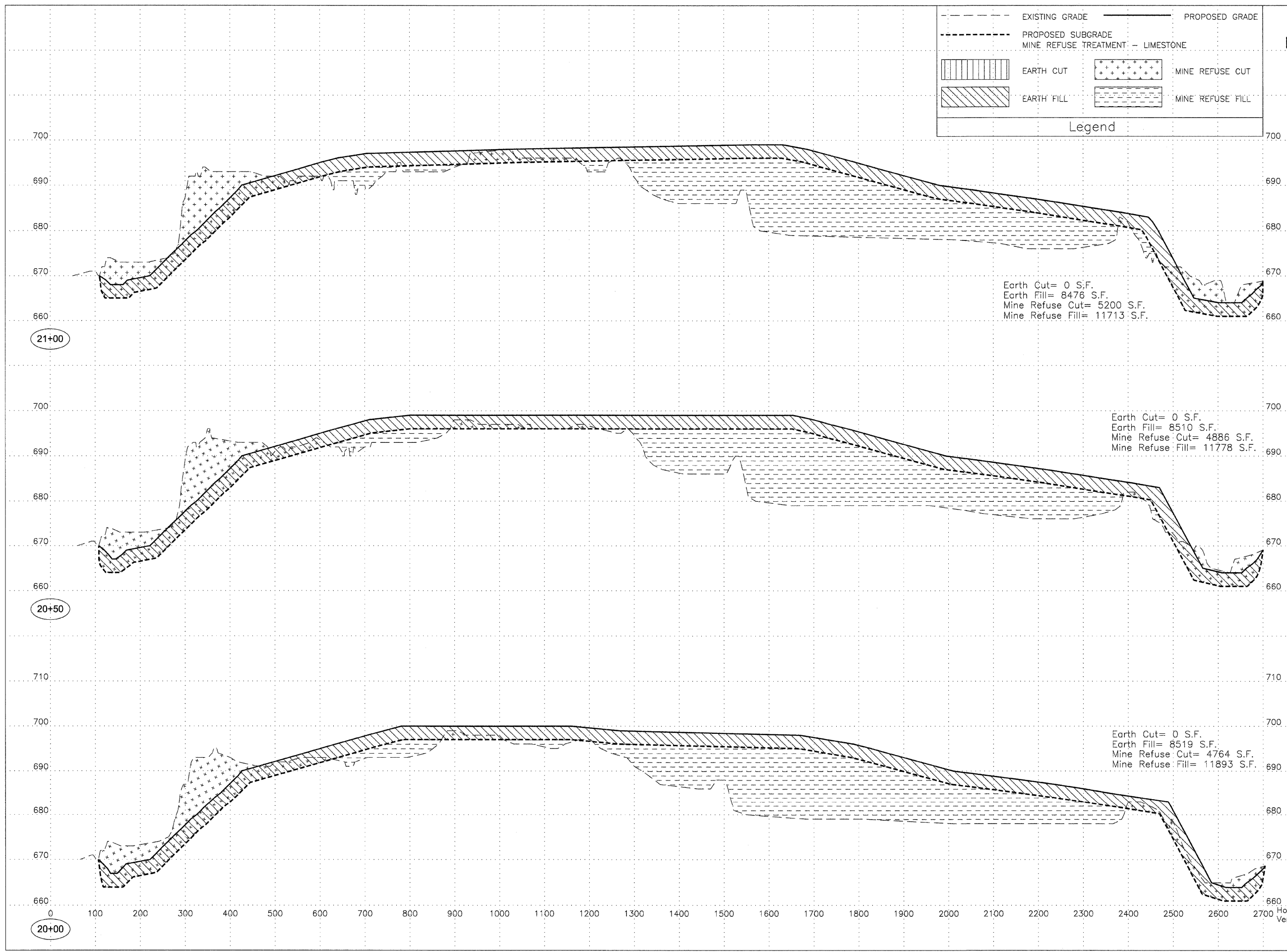
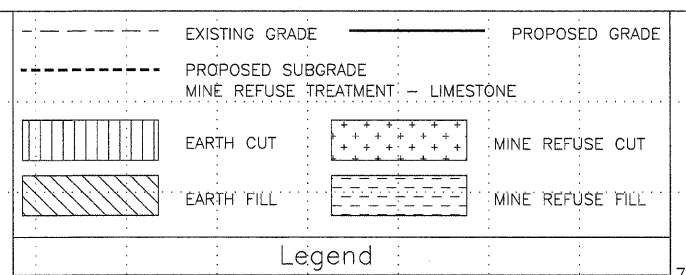
0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700
Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

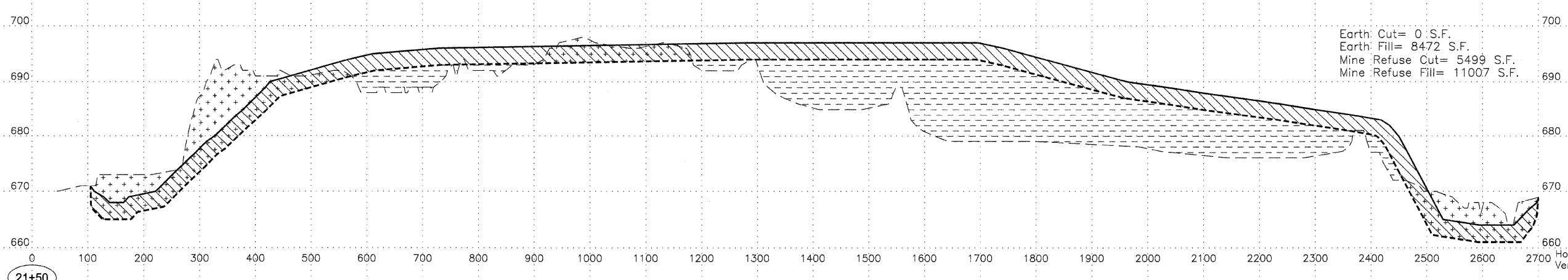
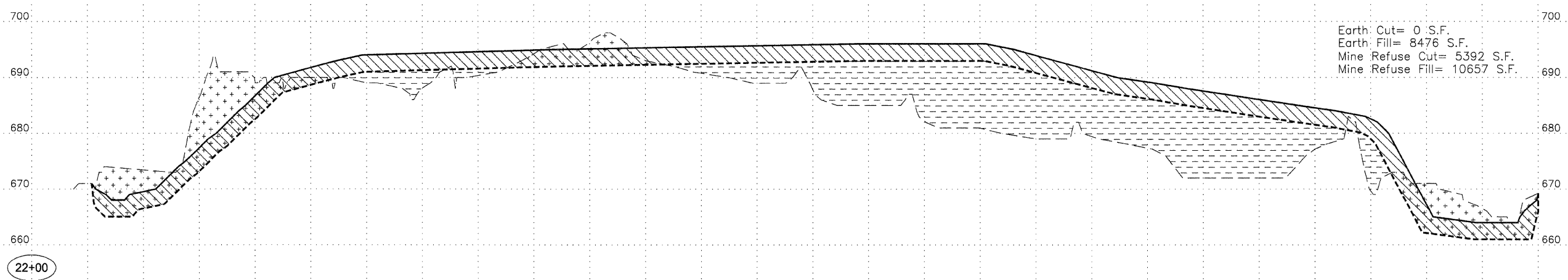
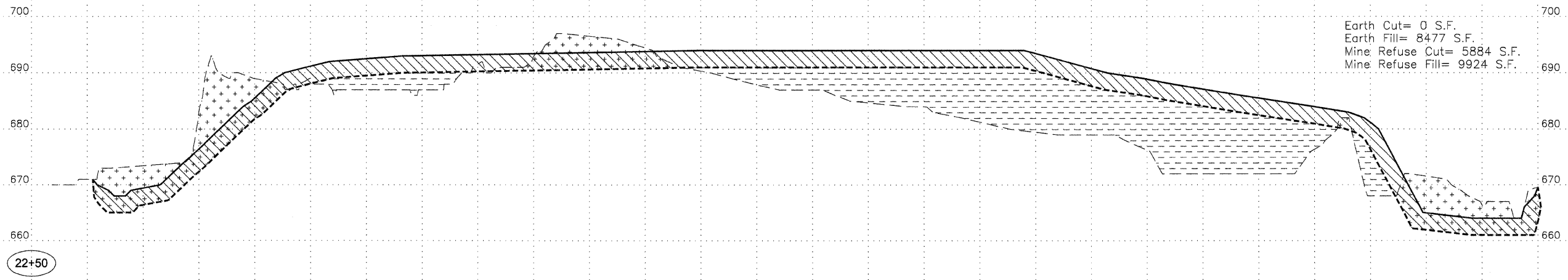
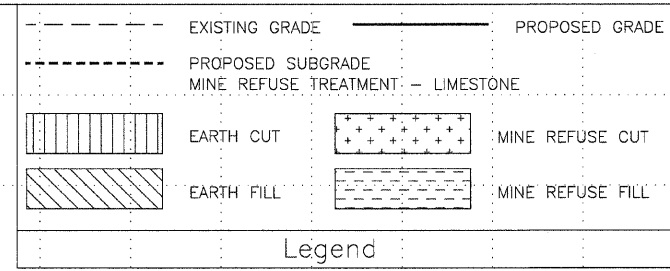


Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



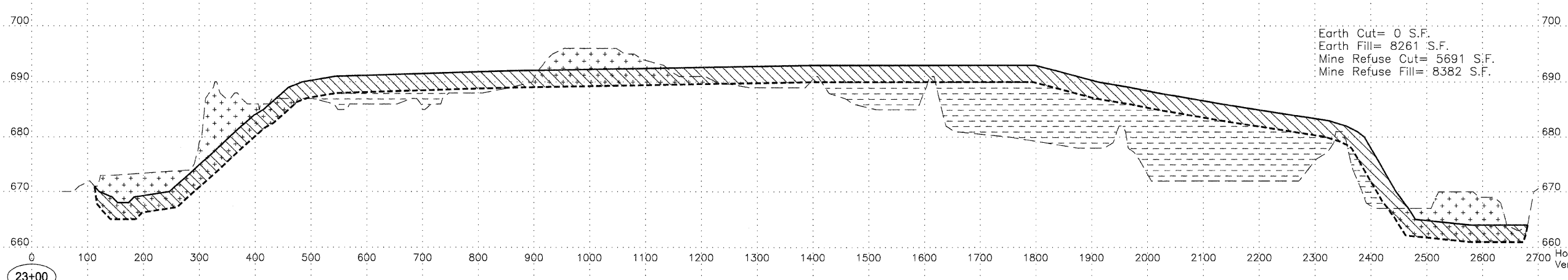
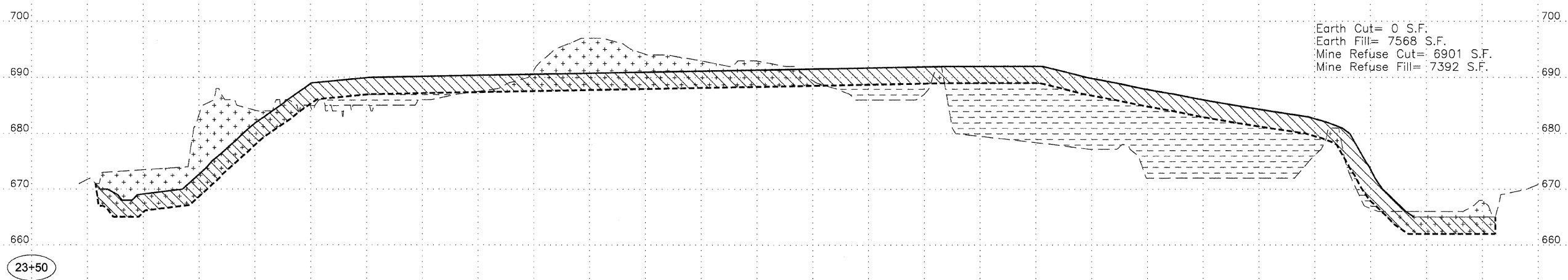
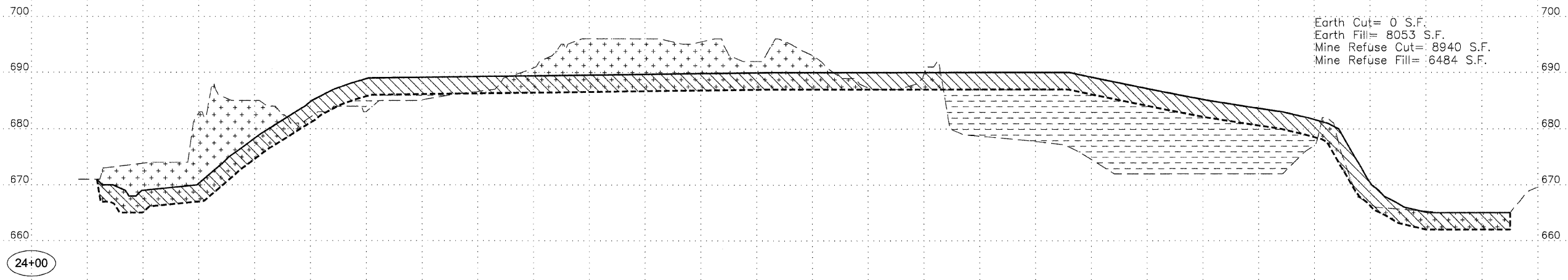
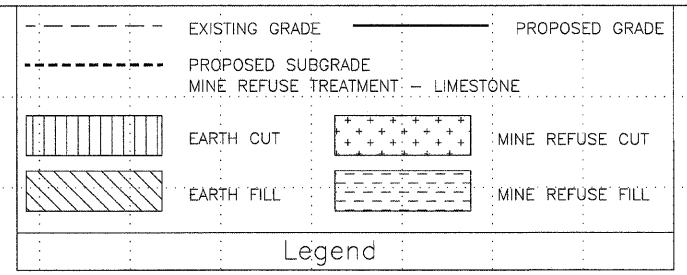
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700

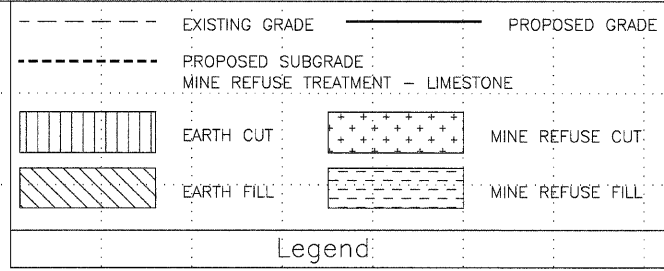
Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Earth Cut= 0 S.F.
Earth Fill= 6765 S.F.
Mine Refuse Cut= 8454 S.F.
Mine Refuse Fill= 1751 S.F.

Earth Cut= 0 S.F.
Earth Fill= 7630 S.F.
Mine Refuse Cut= 15127 S.F.
Mine Refuse Fill= 2743 S.F.

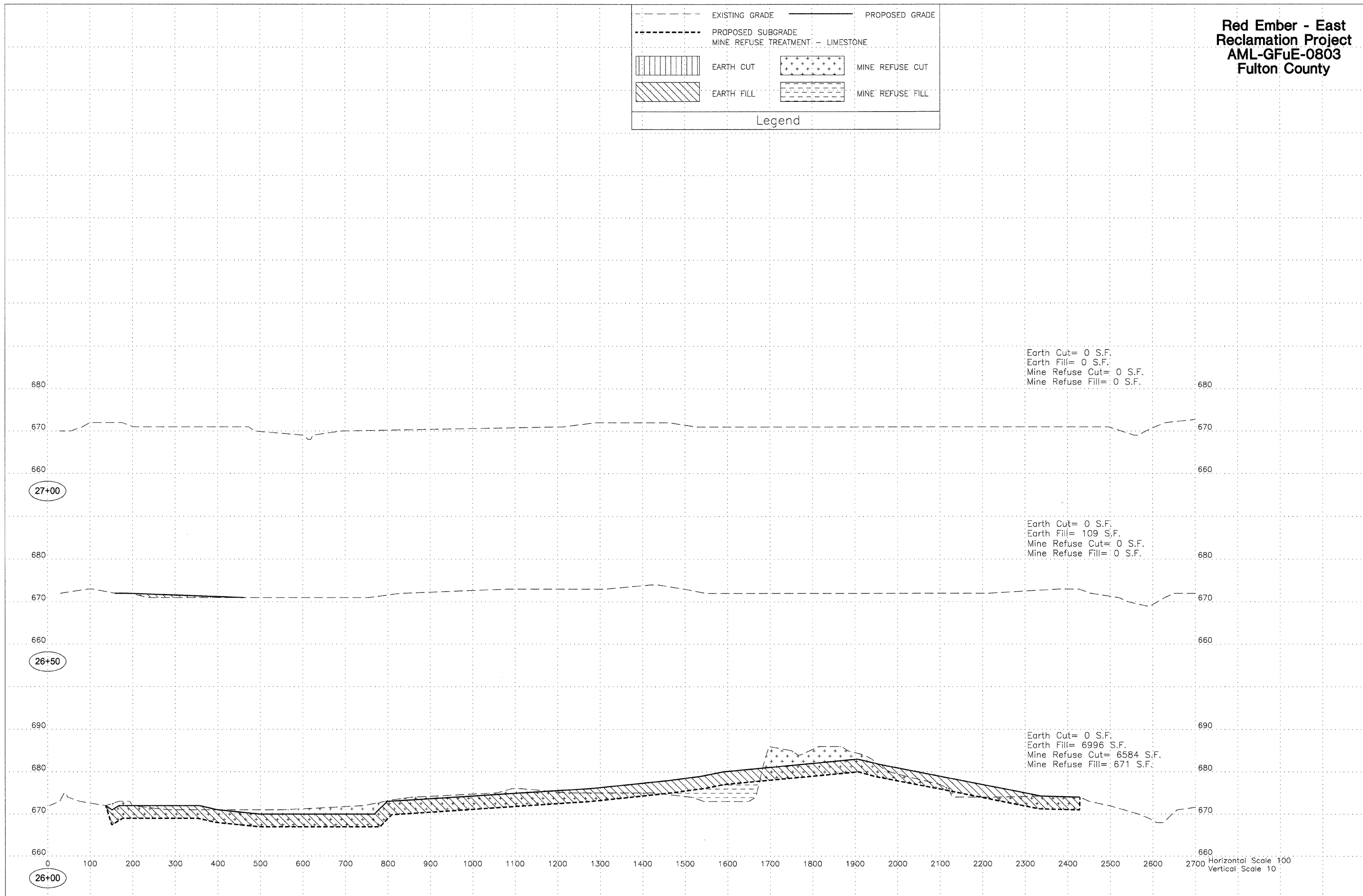
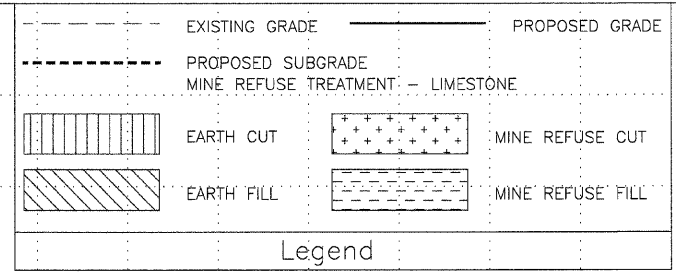
Earth Cut= 0 S.F.
Earth Fill= 8360 S.F.
Mine Refuse Cut= 12370 S.F.
Mine Refuse Fill= 5429 S.F.

WATER ELEV.
660.6

WATER ELEV.
660.6

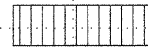
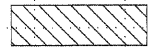
Horizontal Scale 100
Vertical Scale 10

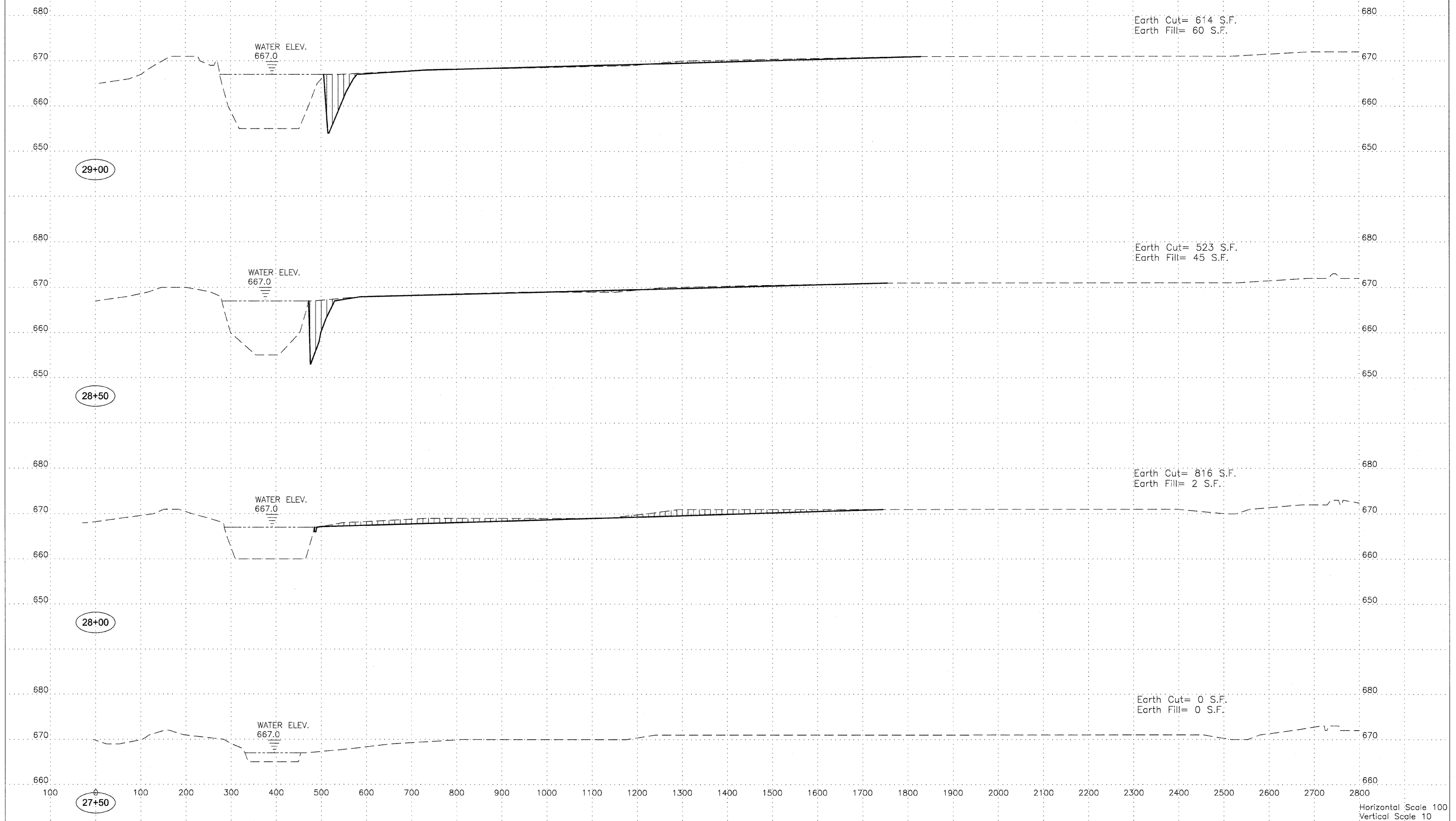
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Horizontal Scale 100
Vertical Scale 10

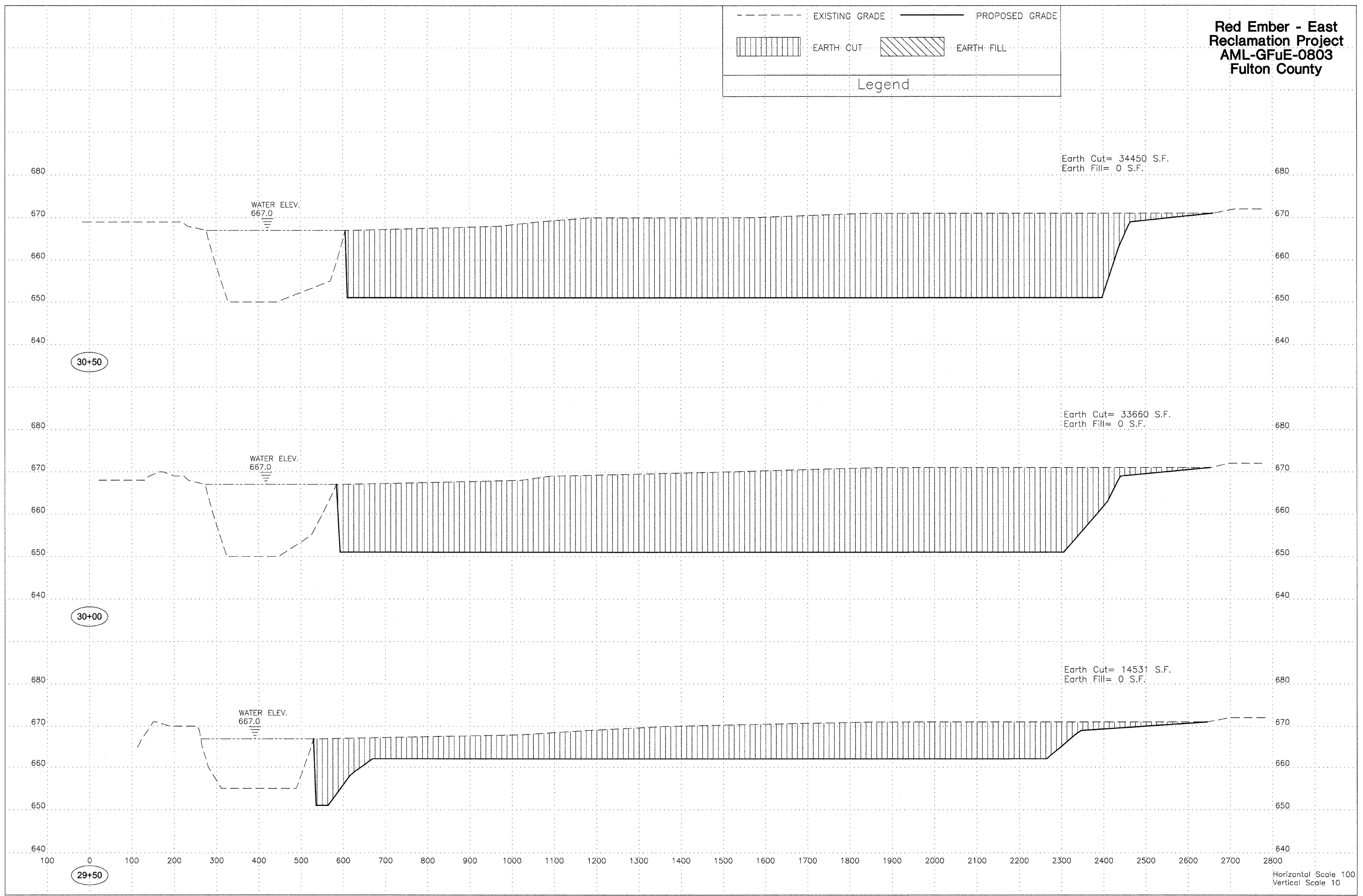
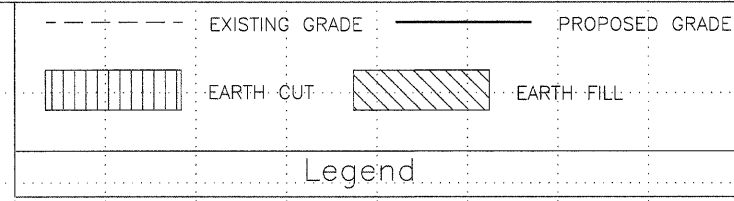
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

---	EXISTING GRADE	—	PROPOSED GRADE
	EARTH CUT		EARTH FILL
Legend			



Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

Earth Cut= 38697 S.F.
Earth Fill= 0 S.F.

Earth Cut= 38282 S.F.
Earth Fill= 0 S.F.

Earth Cut= 38161 S.F.
Earth Fill= 0 S.F.

Earth Cut= 35279 S.F.
Earth Fill= 0 S.F.

WATER ELEV.
667.0

WATER ELEV.
667.0

WATER ELEV.
667.0

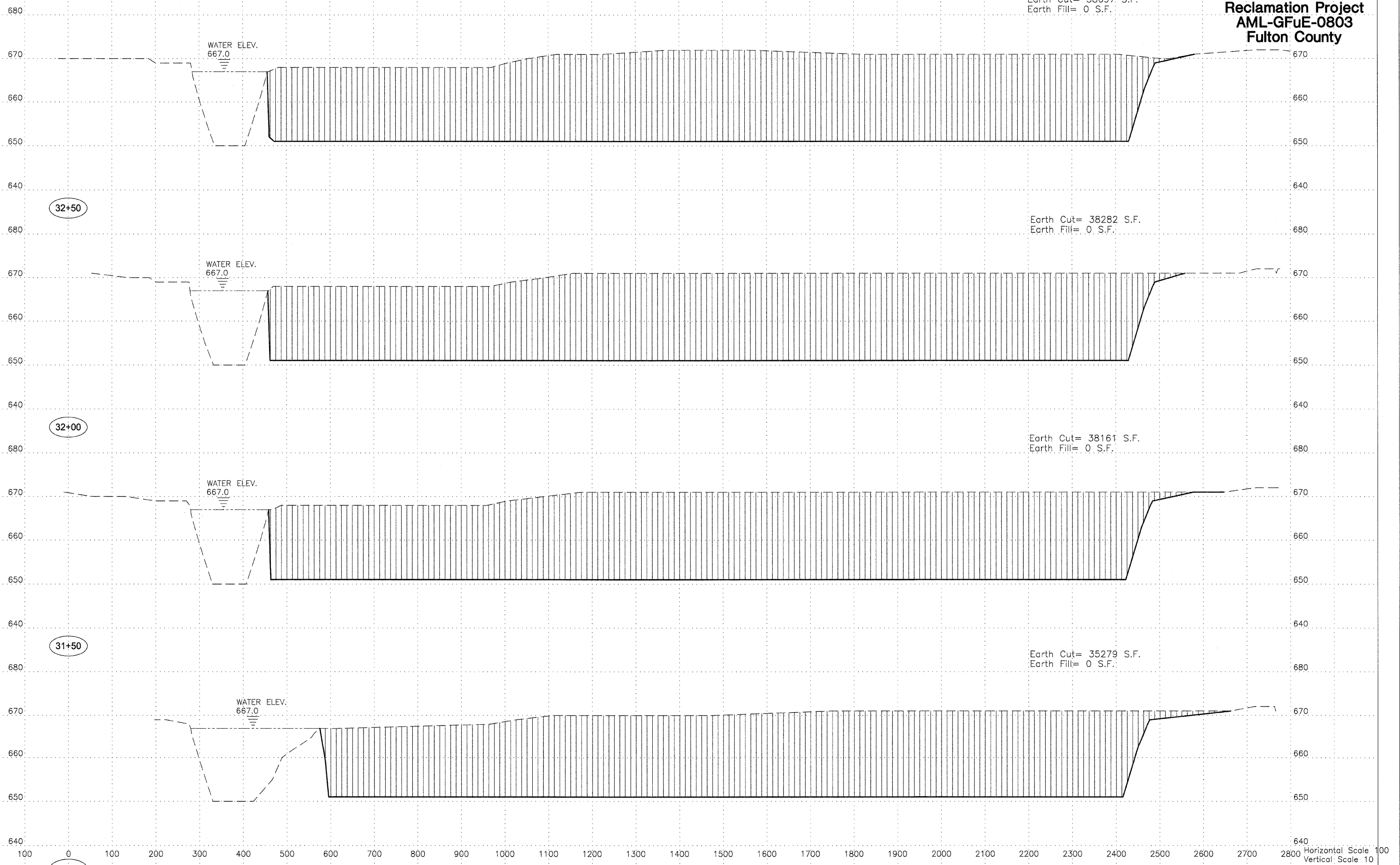
WATER ELEV.
667.0

32+50

32+00

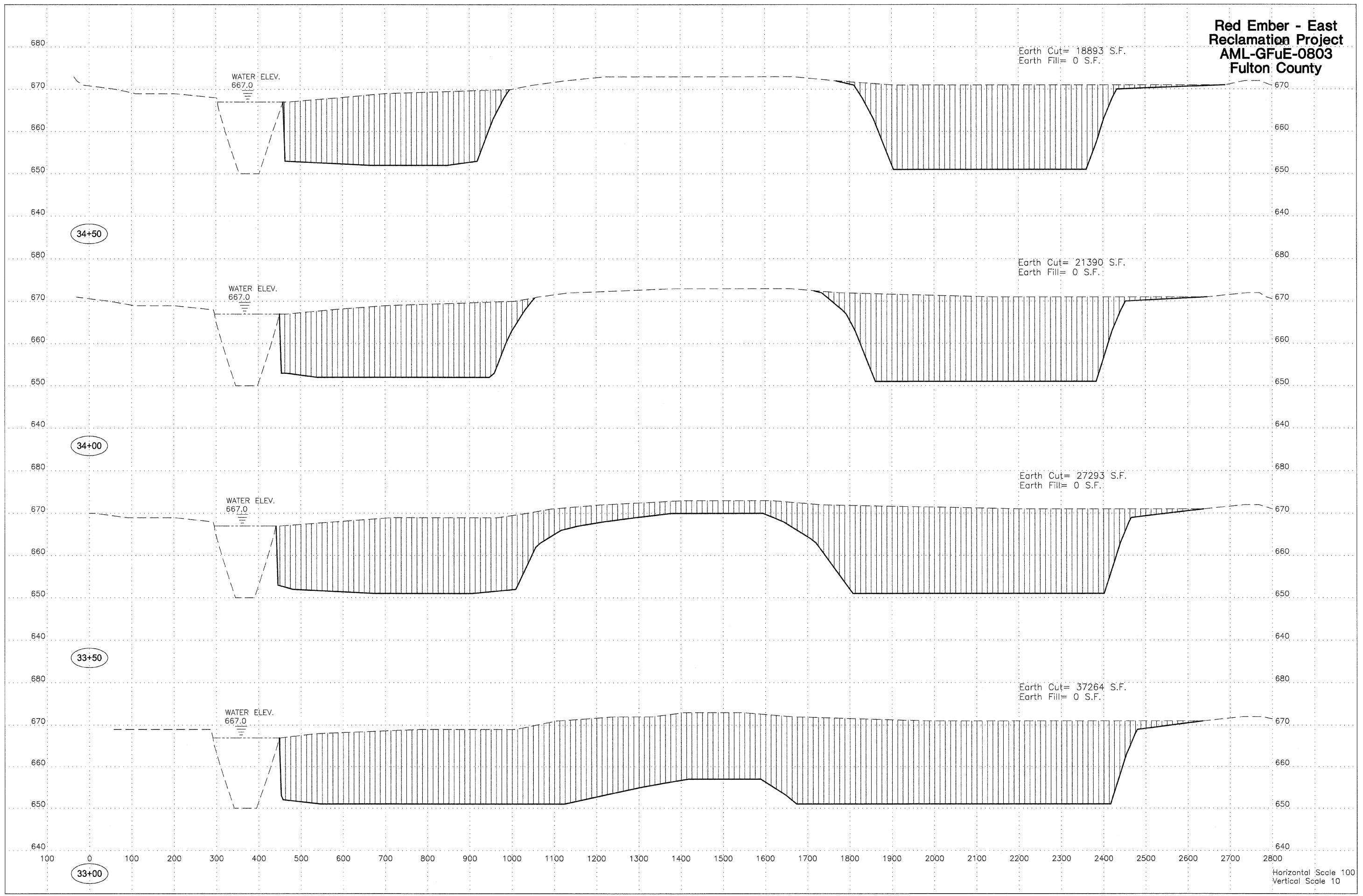
31+50

31+00



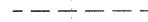
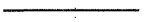

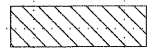
Horizontal Scale 100
Vertical Scale 10

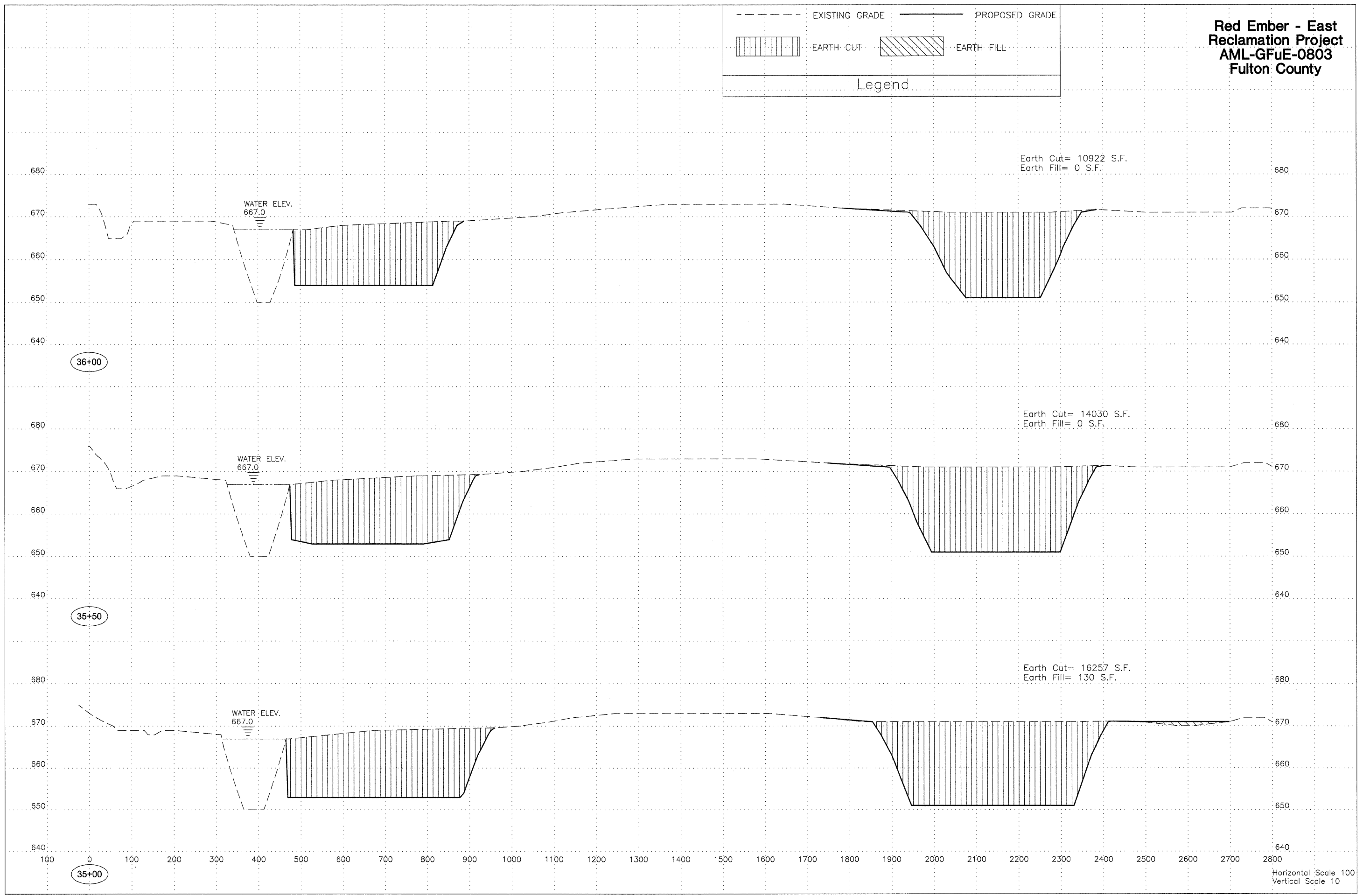
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



Horizontal Scale 100
Vertical Scale 10

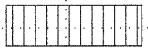
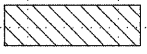
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

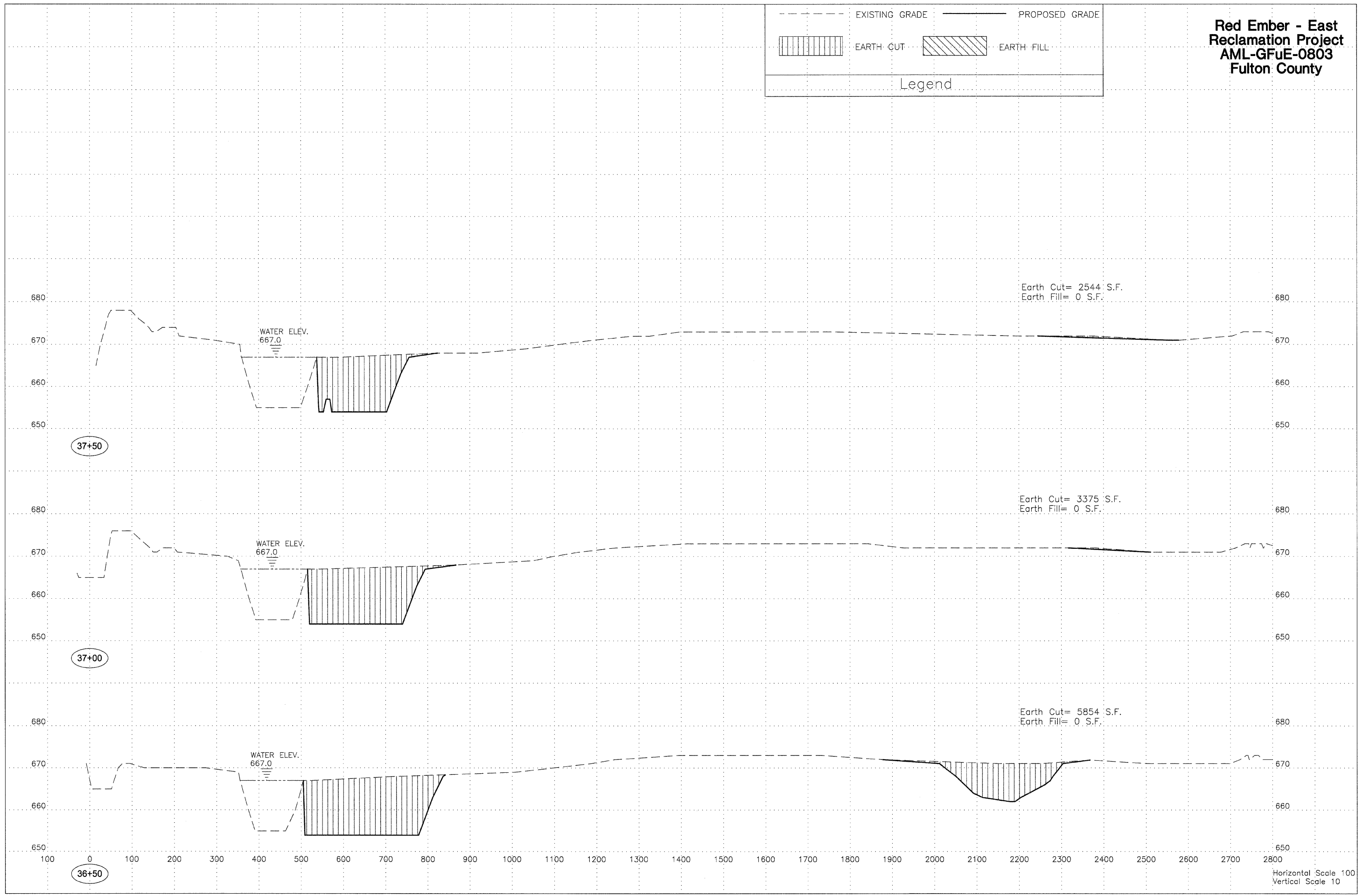
	EXISTING GRADE		PROPOSED GRADE
	EARTH CUT		EARTH FILL
Legend			



Horizontal Scale 100
Vertical Scale 10

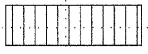
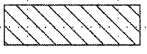
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

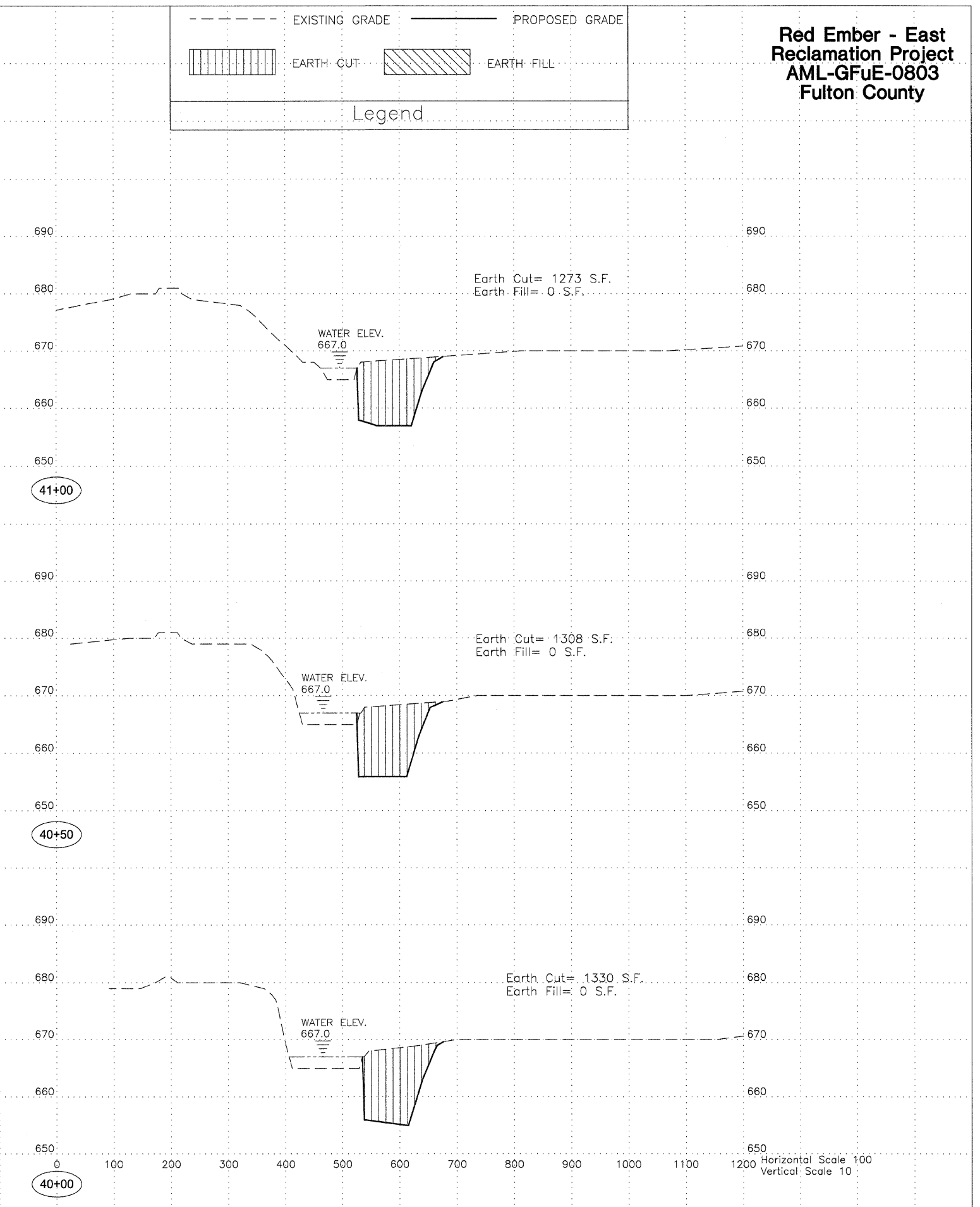
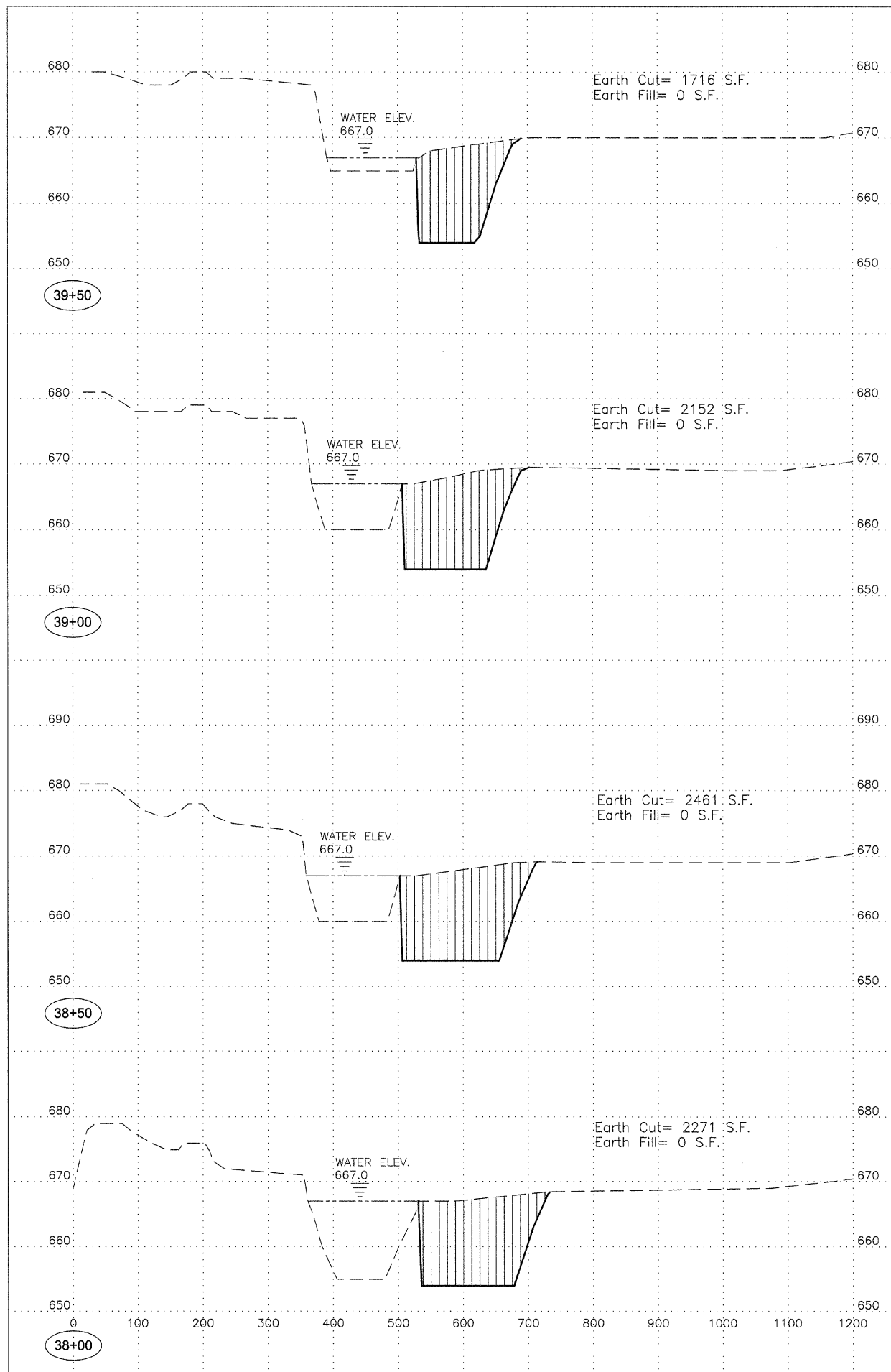
---	EXISTING GRADE	—	PROPOSED GRADE
	EARTH CUT		EARTH FILL
Legend			



Horizontal Scale 100
Vertical Scale 10

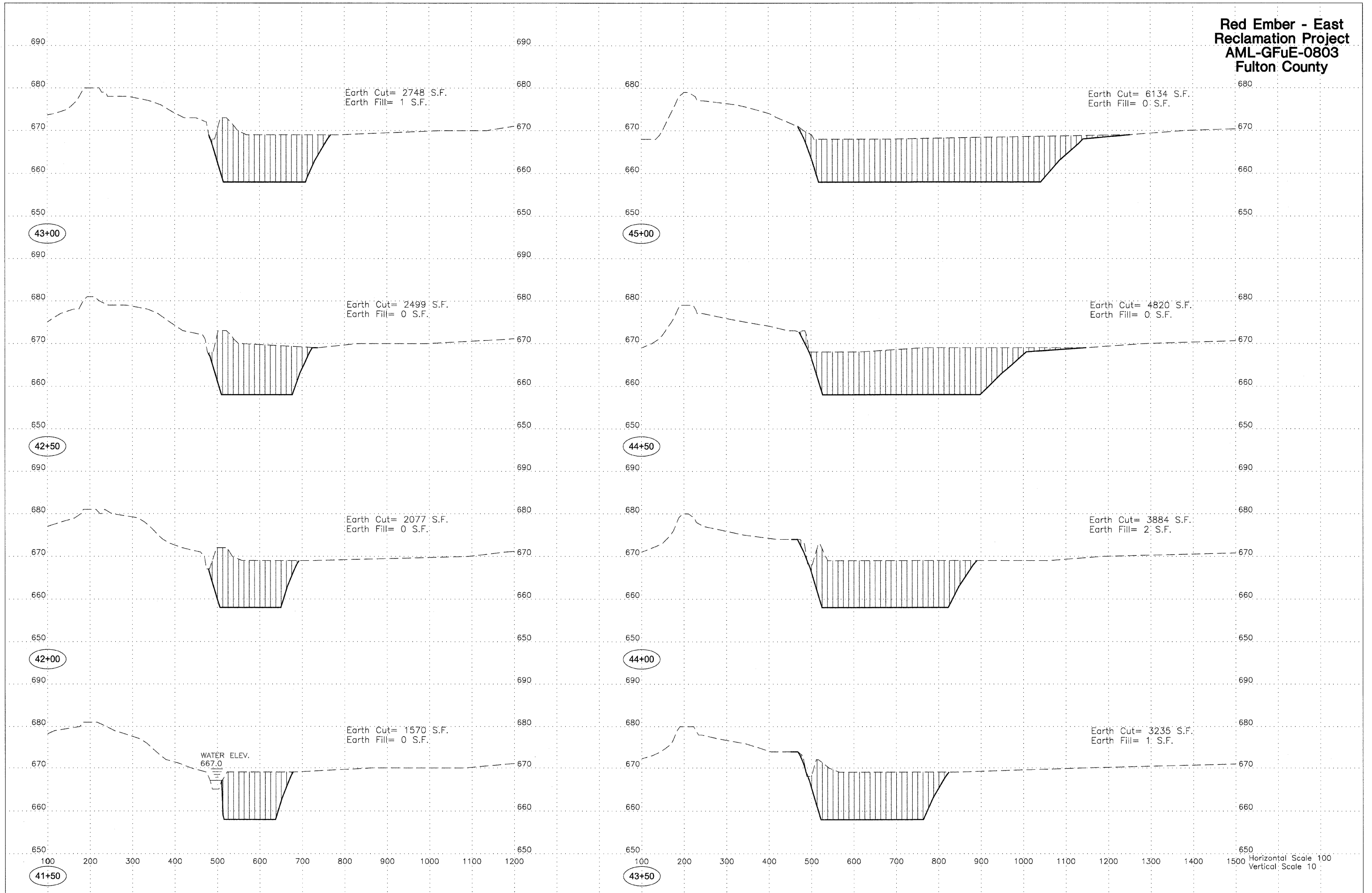
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

---	EXISTING GRADE	—	PROPOSED GRADE
	EARTH CUT		EARTH FILL
Legend			



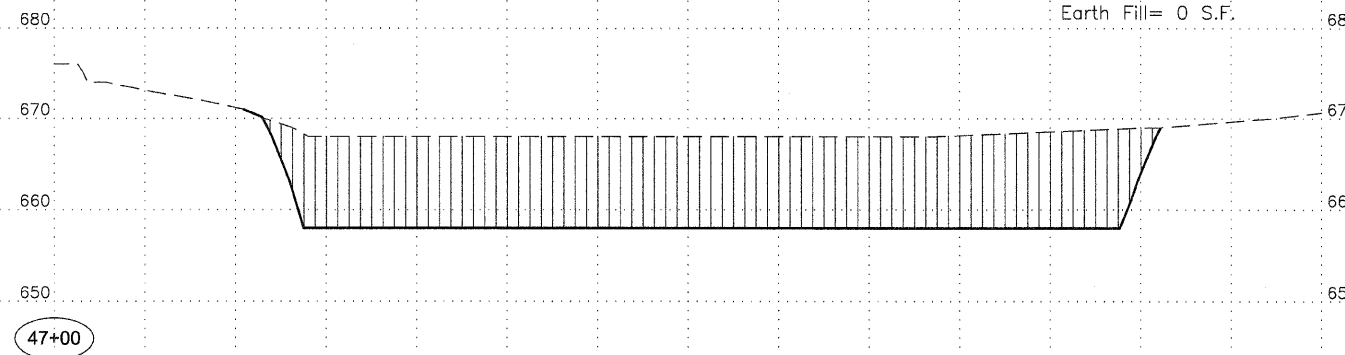
Horizontal Scale 100
Vertical Scale 10

**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



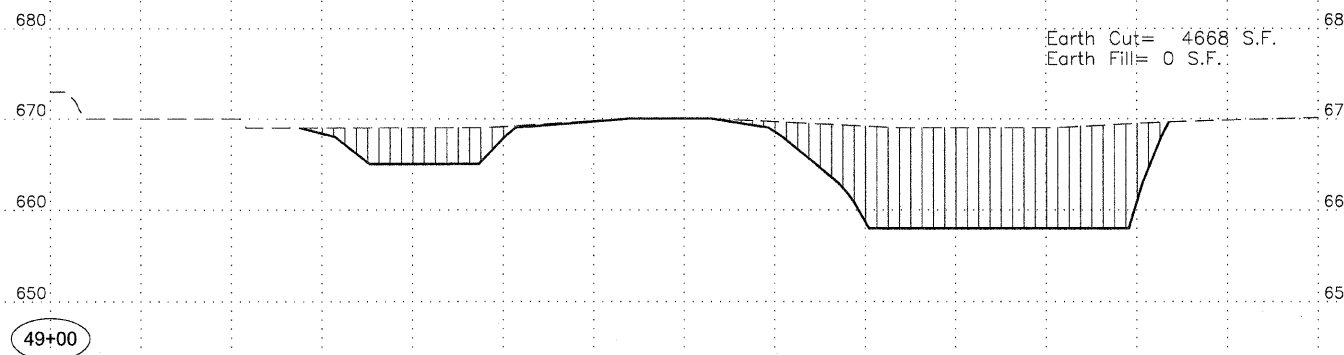
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**

Earth Cut= 9556 S.F.
Earth Fill= 0 S.F.



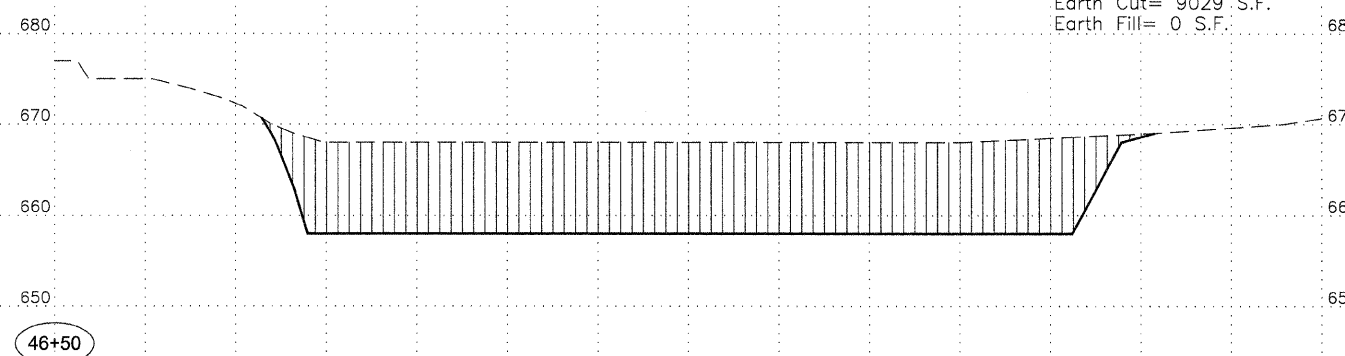
47+00

Earth Cut= 4668 S.F.
Earth Fill= 0 S.F.



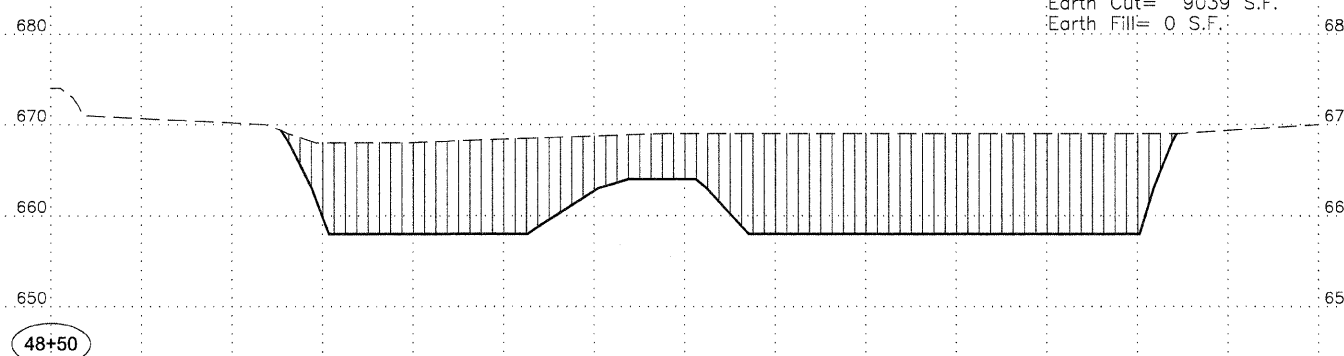
49+00

Earth Cut= 9029 S.F.
Earth Fill= 0 S.F.



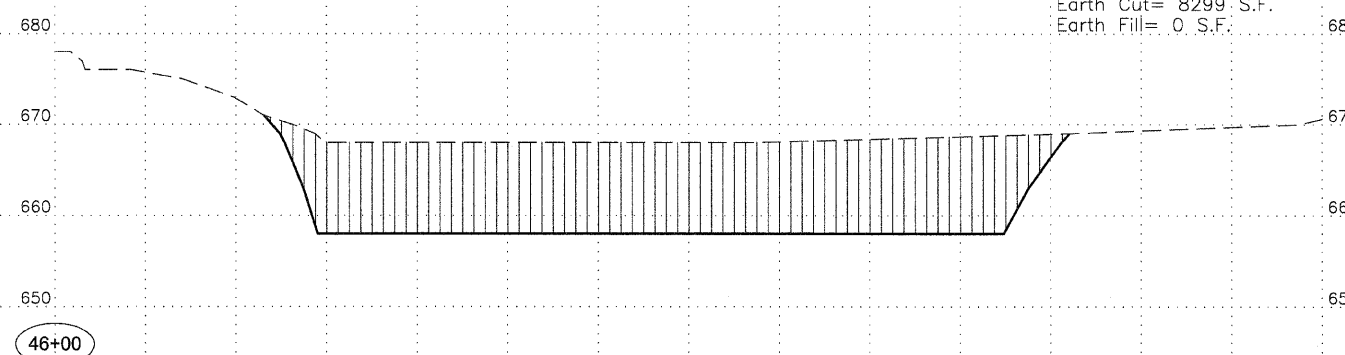
46+50

Earth Cut= 9039 S.F.
Earth Fill= 0 S.F.



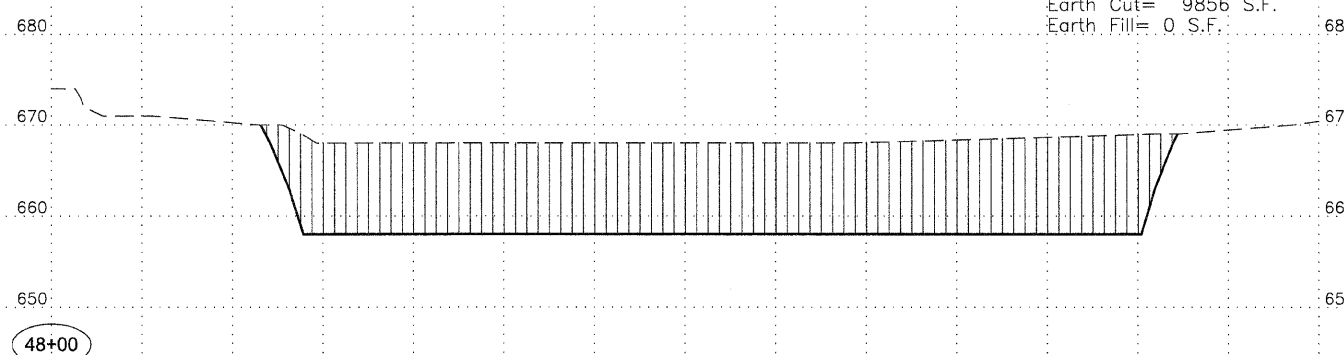
48+50

Earth Cut= 8299 S.F.
Earth Fill= 0 S.F.



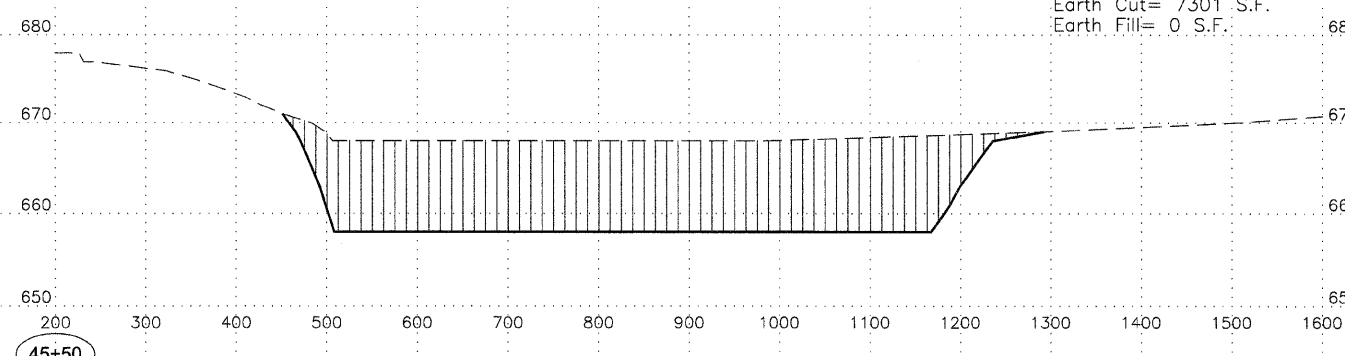
46+00

Earth Cut= 9856 S.F.
Earth Fill= 0 S.F.



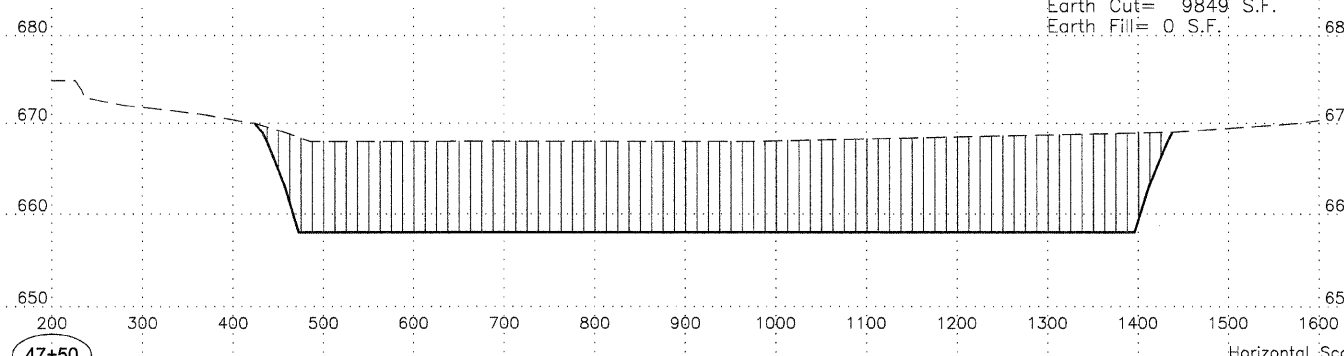
48+00

Earth Cut= 7301 S.F.
Earth Fill= 0 S.F.



45+50

Earth Cut= 9849 S.F.
Earth Fill= 0 S.F.

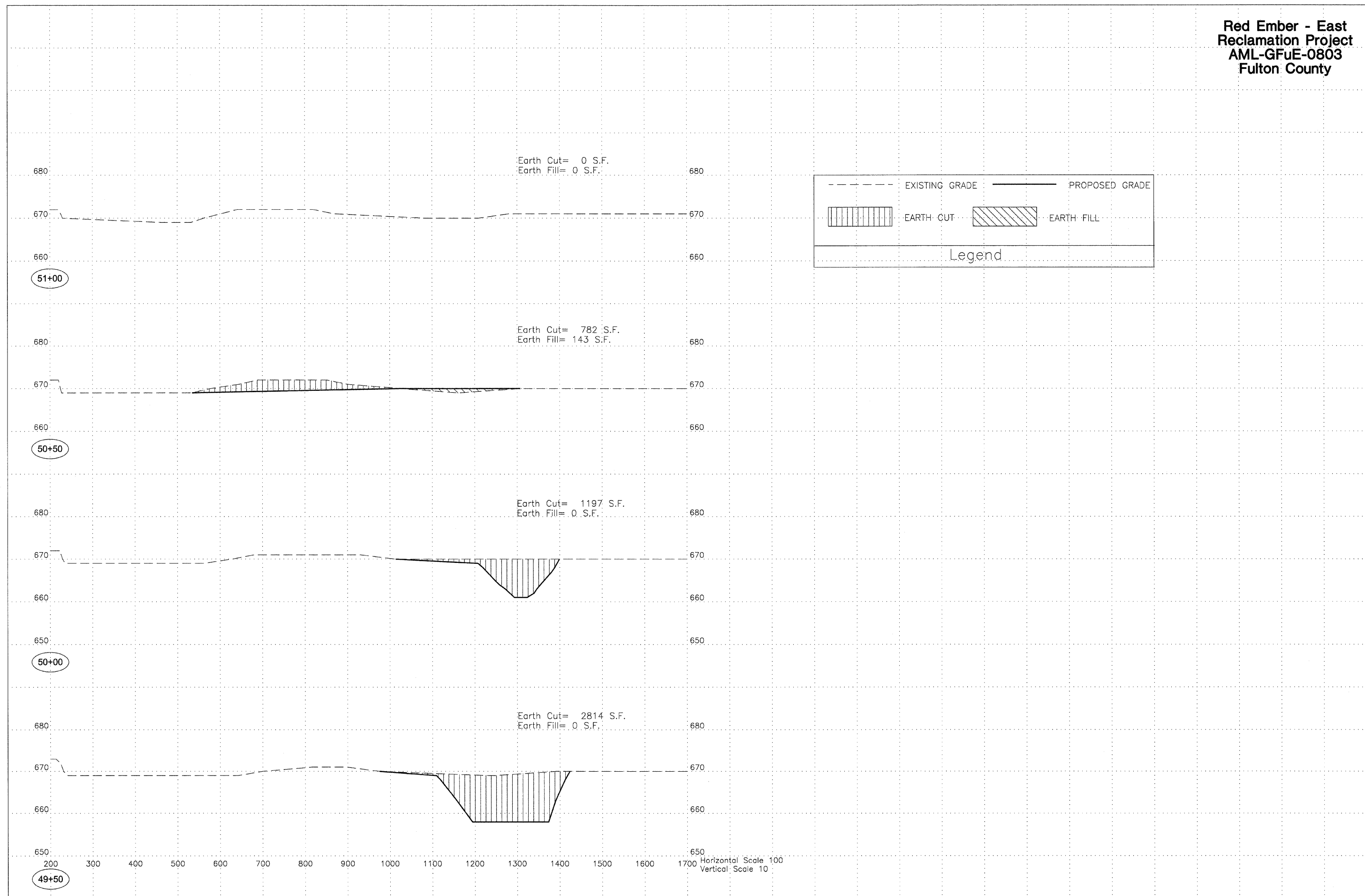


47+50

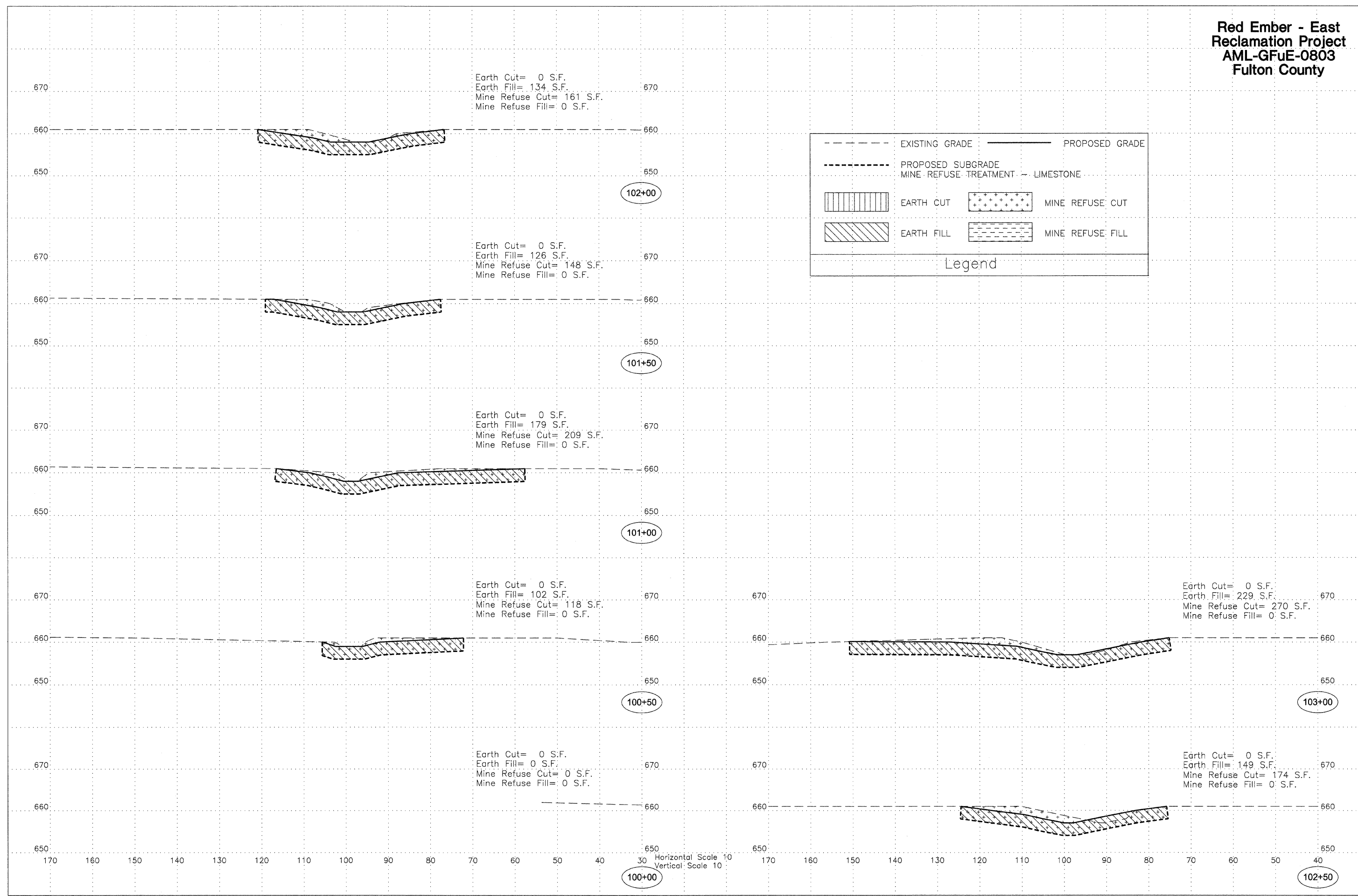
200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600

200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600

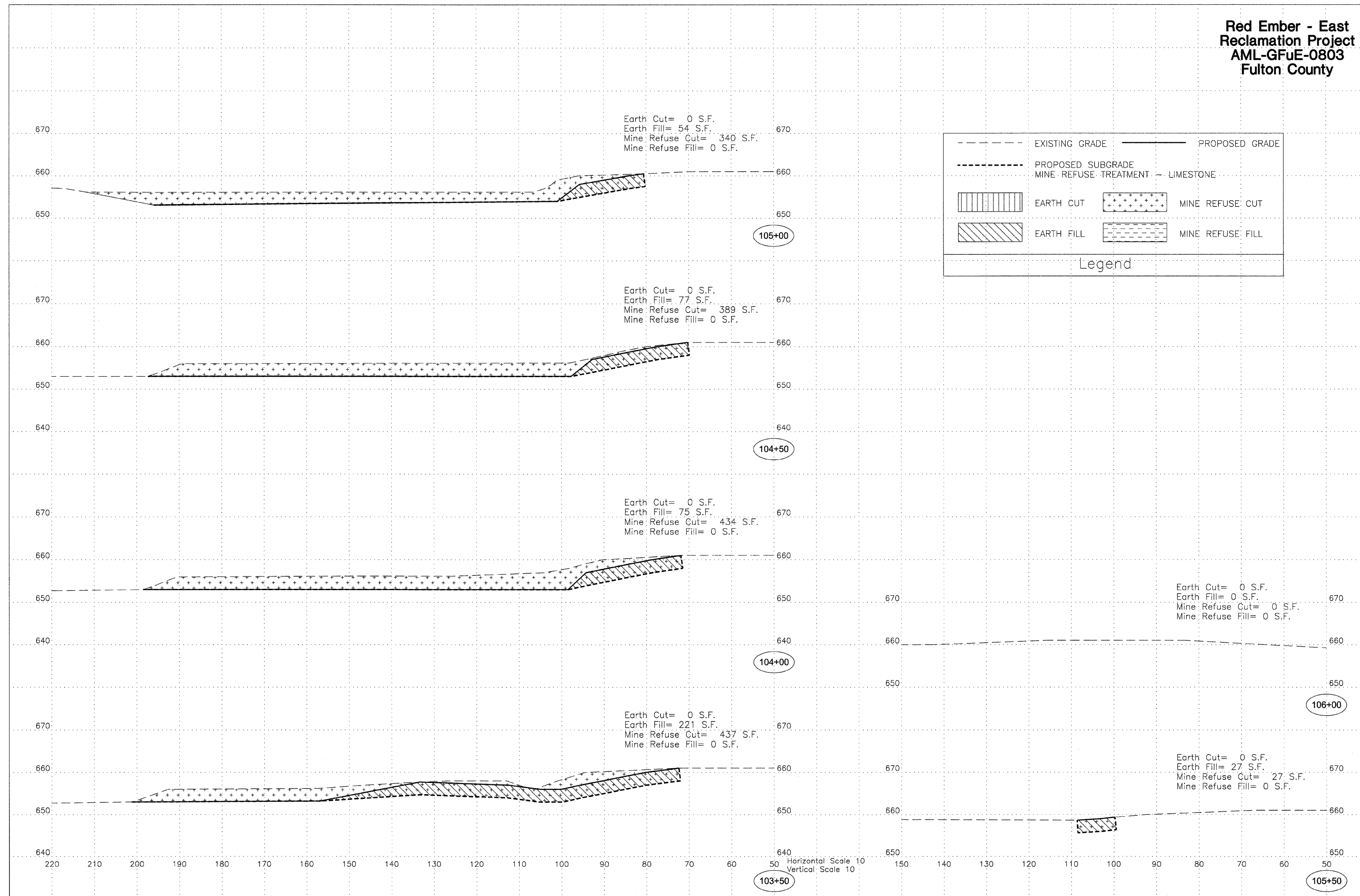
Horizontal Scale 100
Vertical Scale 10

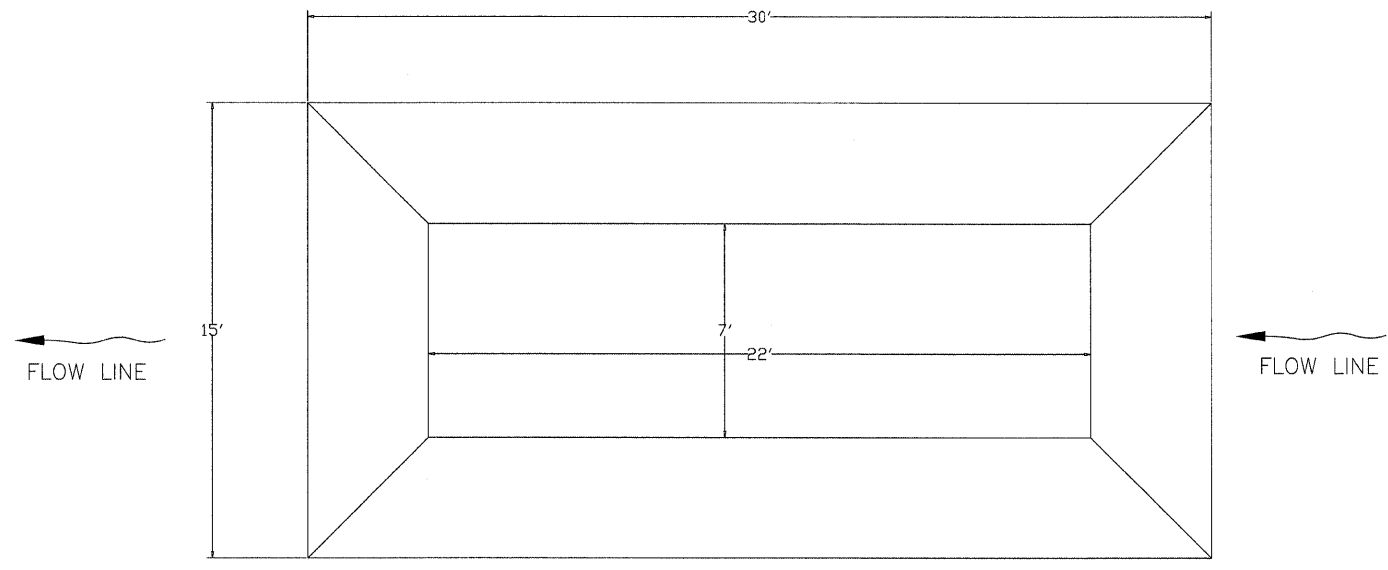


**Red Ember - East
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Fulton County**



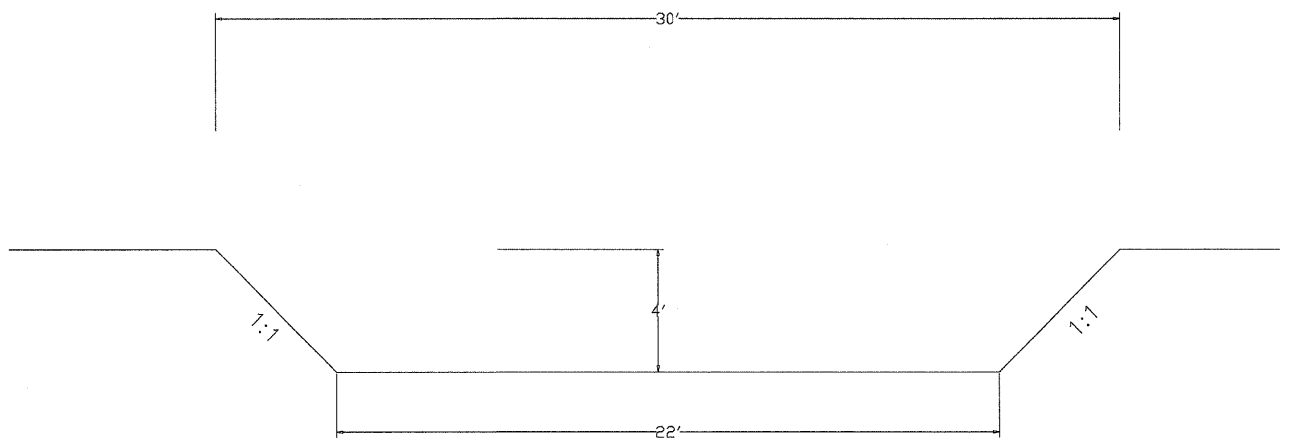
**Red Ember - East
Reclamation Project
AML-GFuE-0803
Fulton County**



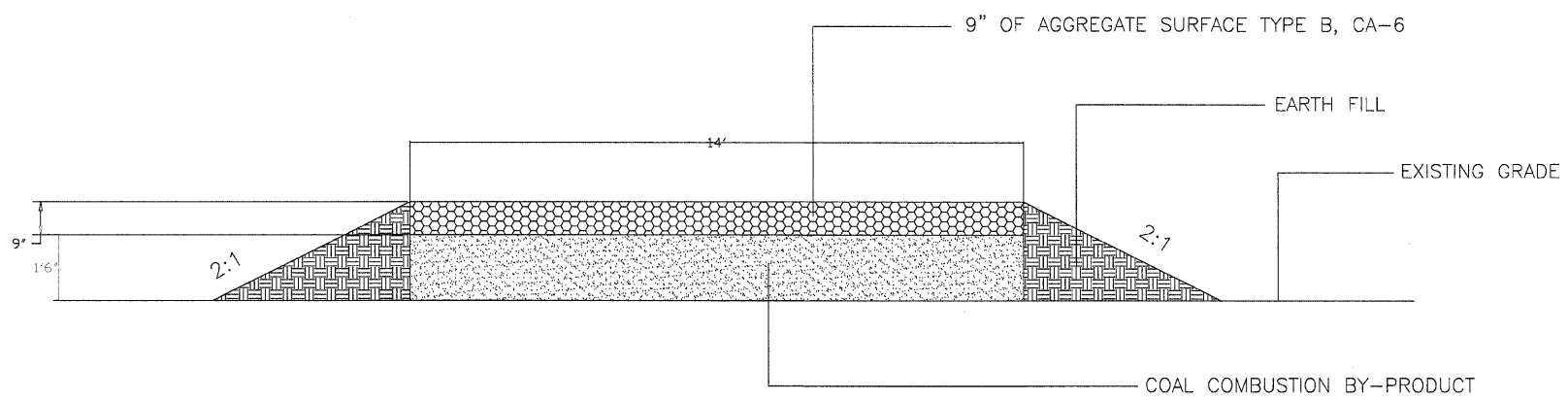


PLAN

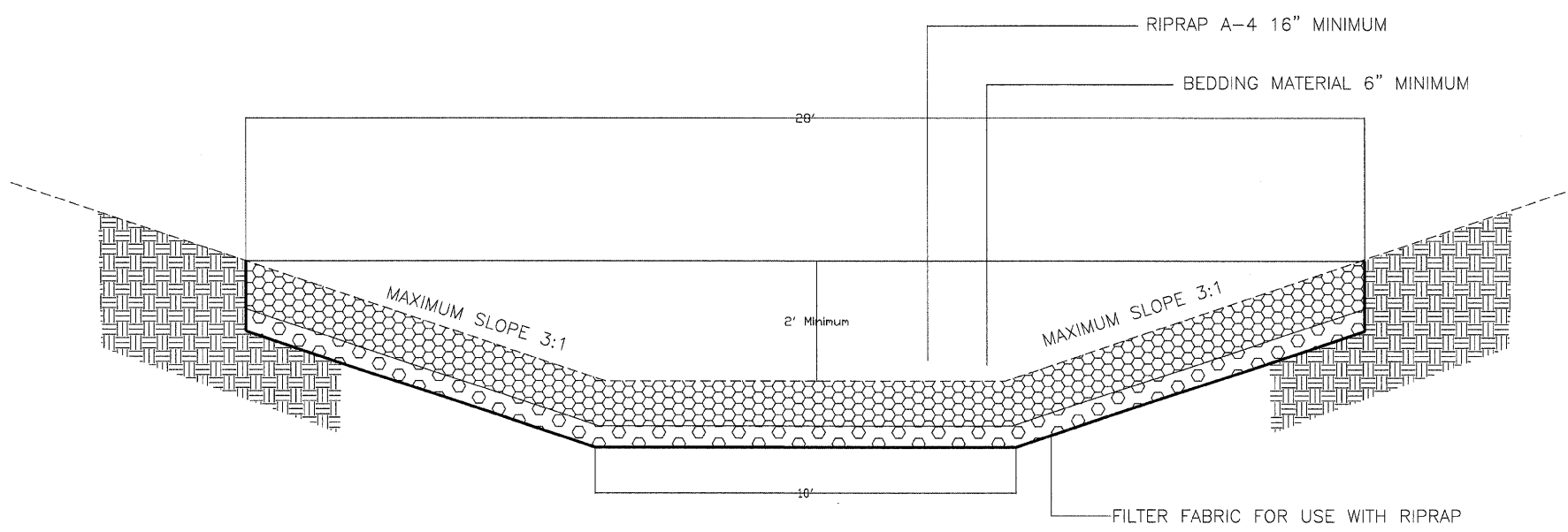
A TEMPORARY SEDIMENT BASIN
44



CROSS SECTION



B NEW ACCESS ROAD CROSS SECTION
44



C RIPRAP DITCH DETAIL
44

SPACING LETTERS	
2.0"	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
Department 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.
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.

D CONSTRUCTION SIGN DETAIL
44