

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

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

Corn Crib Lake and
 Little John TR1950N
 Reclamation Projects
 AML-GKnE-2002
 Knox County
 1LR

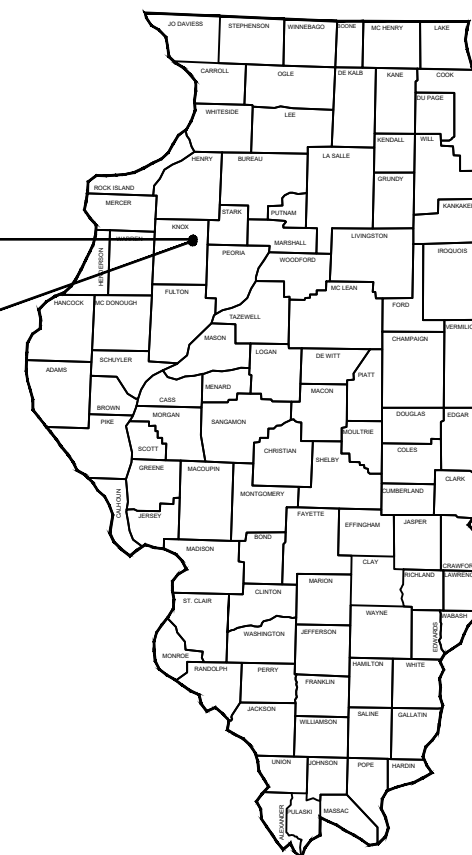
SCHEDULE OF DRAWINGS:

1. Cover Sheet
 2. Summary of Quantities/General Notes/Location Map
 3. Site Access Route- Corn Crib
 4. Existing Conditions- Corn Crib Lake
 5. Existing and Proposed Conditions - Corn Crib Lake
 6. Site Access Route - Little John
 7. Existing Conditions - Little John TR1950N
 8. Existing and Proposed Conditions - Little John TR1950N
 9. Borrow Area - Little John TR1950N and Corn Crib
 - 10-11. Cross Sections- Corn Crib Lake
 - 12-13. Cross Sections - Little John TR1950N
 14. IDOT Slope Step Detail
- IDOT Standard 701006-05 Off Rd Moving Operation 2L2W

Contract No. M2002

Corn Crib Lake
 Knox County

Little John TR1950N
 Knox County



PRE-BID MEETING

A voluntary Pre-bid meeting is scheduled for this project near the Little John TR1950N project site at 11am on Tuesday, March 30, 2021

Certified Copy

Prepared By IDNR Staff

Approved for Bidding:

Ronnie Huff, Director
 Office of Mines & Minerals
 Illinois Dept. of Natural Resources

Approved By:

Rita M. Lee, Manager
 AMLR Division
 Illinois Dept. of Natural Resources

Approved By:

Thaddeus J. Faught
 IL Licensed Professional Engineer
 No. 062.069058

Summary of Quantities

Item No	#	Item	Section	Quantity			Unit	Rates/Remarks
				Corn Crib Lake	Little John TR1950N	Total		
NRM20110	1	Special Clearing	201	.5	.5	1	L SUM	
NRM20210	2	Earth Excavation	202	808	5644	6452	CU YD	Compaction in accordance w/Sec. 205
NRM25040	3	Nitrogen Fertilizer Nutrient	250	216	192	408	POUND	120 pounds/acre-application *
NRM25050	4	Phosphorus Fertilizer Nutrient	250	180	160	340	POUND	100 pounds/acre-application *
NRM25060	5	Potassium Fertilizer Nutrient	250	630	560	1,190	POUND	350 pounds/acre-application *
NRM25070	6	Agricultural Ground Limestone	250	9	8	17	TON	10 tons/acre *
NRM25090	7	Seeding	250	.9	.8	1.7	ACRE	*
25100115	8	Mulch Method 2, Procedure 1	IDOT 251	.9	.8	1.7	ACRE	2 tons/acre, Procedure 1 *
25100900	9	Turf Reinforcement Mat	IDOT 251	0	219	219	SQ YD	
NRM25810	10	Mowing	258	.4	.8	1.2	ACRE	
NRM28031	11	Temporary Ditch Check	280	0	40	40	FOOT	Rolled Excelsior, 12" DIA
NRM28040	12	Perimeter Erosion Barrier (Rolled Excelsior)	280	425	400	825	FOOT	Rolled Excelsior, 12" DIA
28100801	13	Stone Dumped Riprap, Class A1	IDOT 281	388	465	853	TON	Conversion factor 1.291 tons/cu yd
28100805	14	Stone Dumped Riprap, Class A3	IDOT 281	1309	5552	6861	TON	Conversion factor 1.291 tons/cu yd
28200200	15	Filter Fabric	IDOT 282	1072	1114	2186	SQ YD	Includes 278 sq yd for construction entrance
40200800	16	Aggregate Surface Course, Type B	IDOT 402	120	0	120	TON	
NRM67110	17	Mobilization (Max. 6% of Bid)	671	.5	.5	1	L SUM	

* Note: 0.5 acre added to Corn Crib quantities for borrow area haul road for seeding, fertilizer and mulch quantities. No mowing on this 0.5 acre.

Schedule of Seeding, Fertilizer Nutrients, Mulch and Mowing

ITEM (Unit)	August 1st, 2021 – September 1st, 2021	Mowing Date to be set by Engineer	March 1st, 2022 – April 20th, 2022	TOTAL QUANTITY
SEEDING (Acres)	1.7 Acres			1.7 Acres
AGRICULTURAL GROUND LIMESTONE (Tons)	17 Tons (10 Tons/Acre)			17 Tons
NITROGEN FERTILIZER NUTRIENT (Pounds)	204 Pounds (120 Pounds/Acre)		204 Pounds (120 Pounds/Acre)	408 Pounds
PHOSPHORUS FERTILIZER NUTRIENT (Pounds)	170 Pounds (100 Pounds/Acre)		170 Pounds (100 Pounds/Acre)	340 Pounds
POTASSIUM FERTILIZER NUTRIENT (Pounds)	595 Pounds (350 Pounds/Acre)		595 Pounds (350 Pounds/Acre)	1,190 Pounds
MULCH, METHOD 2 PROCEDURE 1 (Acres)	1.7 Acres (2 Tons/Acre)			1.7 Acres
MOWING (Acres)		1.2 Acres		1.2 Acres

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 getting familiar 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 shall be staked by the Contractor prior to construction. The Contractor is responsible for the repair and/or restitution at his/her 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 the proposed final grade. Onsite organic debris and trash shall be disposed of in an Engineer approved offsite landfill in accordance with Sections 201 and 501 of the Special Provisions.

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

EROSION CONTROL – The Contractor shall schedule his operations and take such precautions that may be necessary to prevent or minimize erosion. Failure to comply with this requirement shall cause the Contractor to be fully responsible for repairing any eroded areas and cleaning up areas or drainage structures that have become silted in or damaged.

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

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

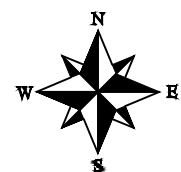
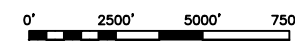
SPECIAL NOTE

Rock quantities to be placed as fill below the water level are based on average end areas of cross sections plus 30% to account for estimated losses.

Mowing date is to be set by the Engineer



Location Map

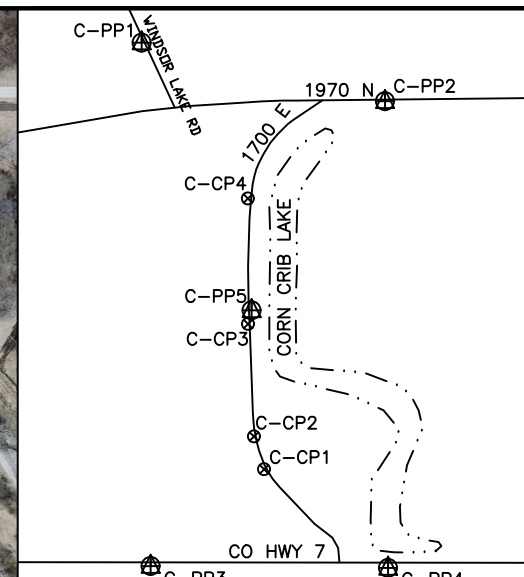


State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Abandoned Mined Lands Reclamation Division

Corn Crib Lake and
Little John TR1950N
Reclamation Project
Knox County
AML-GKne-2002

Drawn By: N. Lowrey Date: 1/27/21
Checked By: T. Faught Date: 3/05/21

Summary of Quantities/
General Notes/Location Map
Sheet
2 of 11

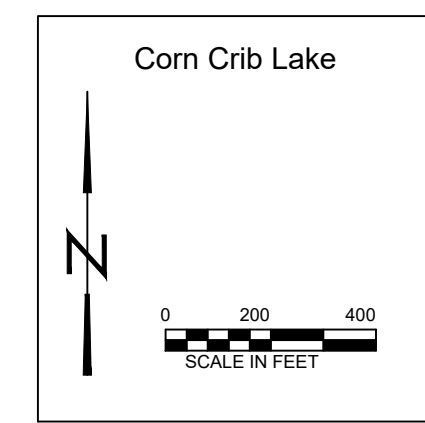
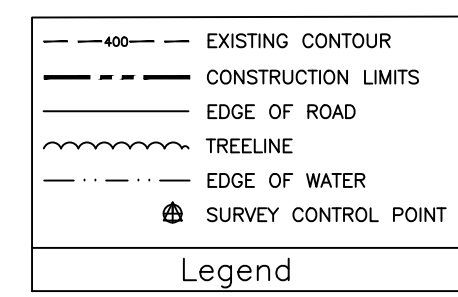


Traverse Layout Data

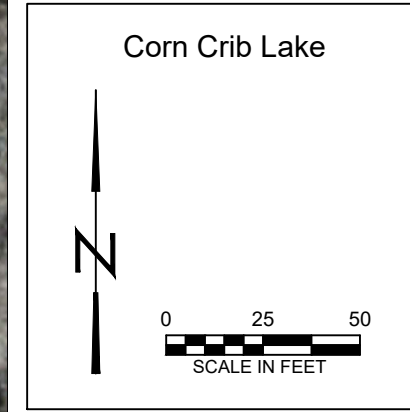
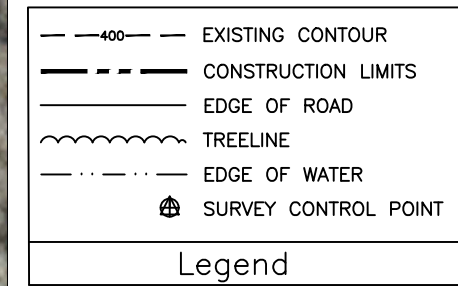
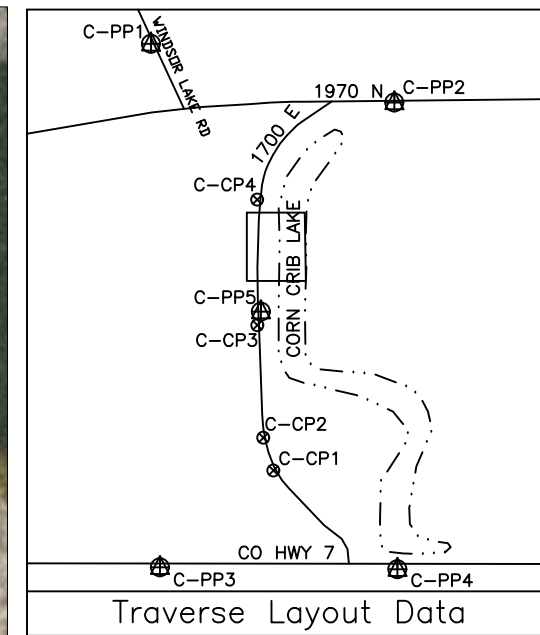
State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Abandoned Mined Lands Reclamation Division

Corn Crib Lake and
Little John TR1950N
Reclamation Project
Knox County
AML-GKnE-2002

Drawn By: **N. Lowrey** Date: **2/22/2021**
Checked By: **T. Faught** Date: **3/05/21**



Access Route
Sheet
3 of 13

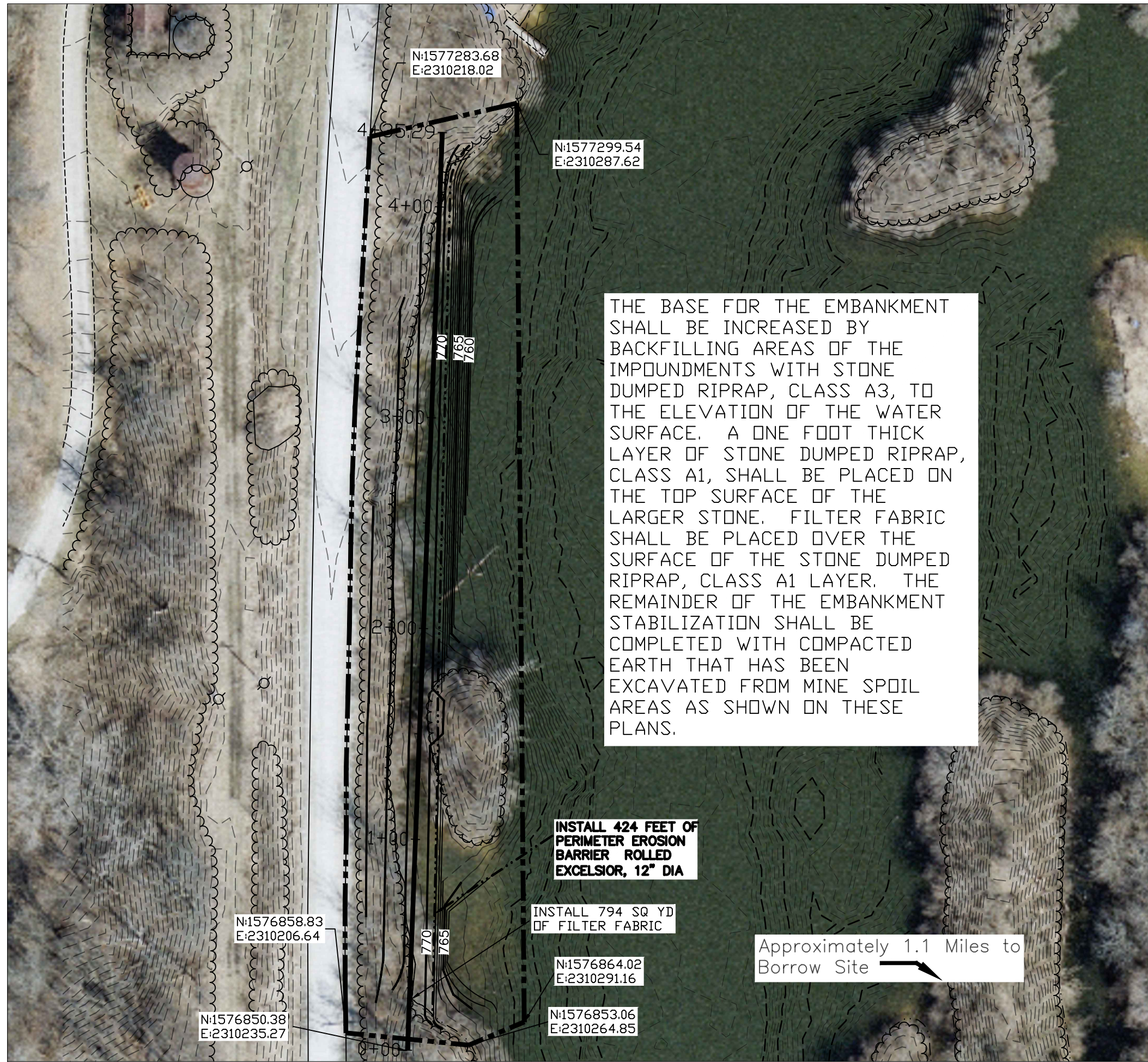


State of Illinois
 Department of Natural Resources
 Office of Mines and Minerals
 Abandoned Mined Lands Reclamation Division

Corn Crib Lake and
 Little John TR1950N
 Reclamation Project
 Knox County
 AML-GKnE-2002

Drawn By: **N. Lowrey**
 Checked By: **T. Faught**
 Date: **1/27/21**
 Date: **3/05/21**

Existing
 Conditions
 Sheet
 4 of 13

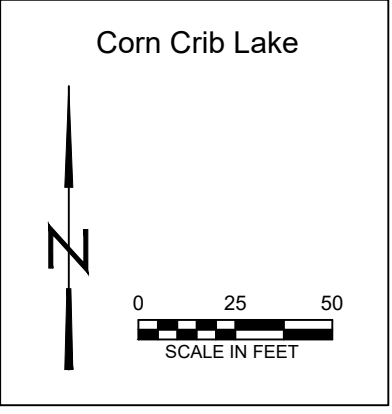
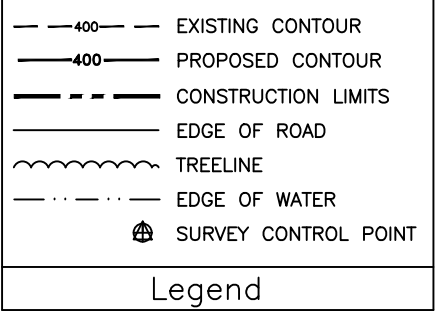
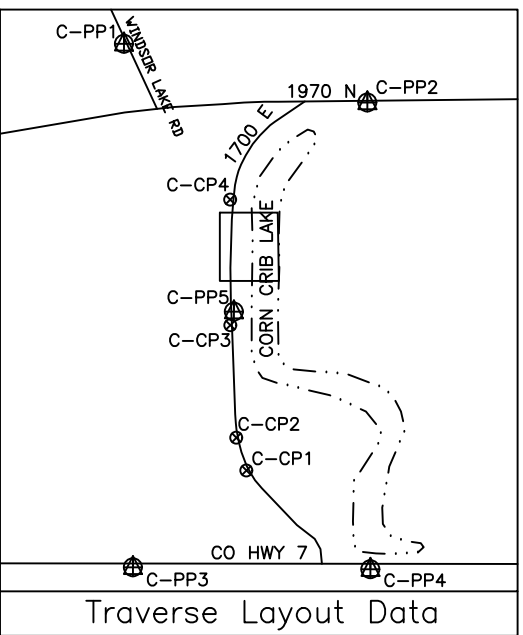


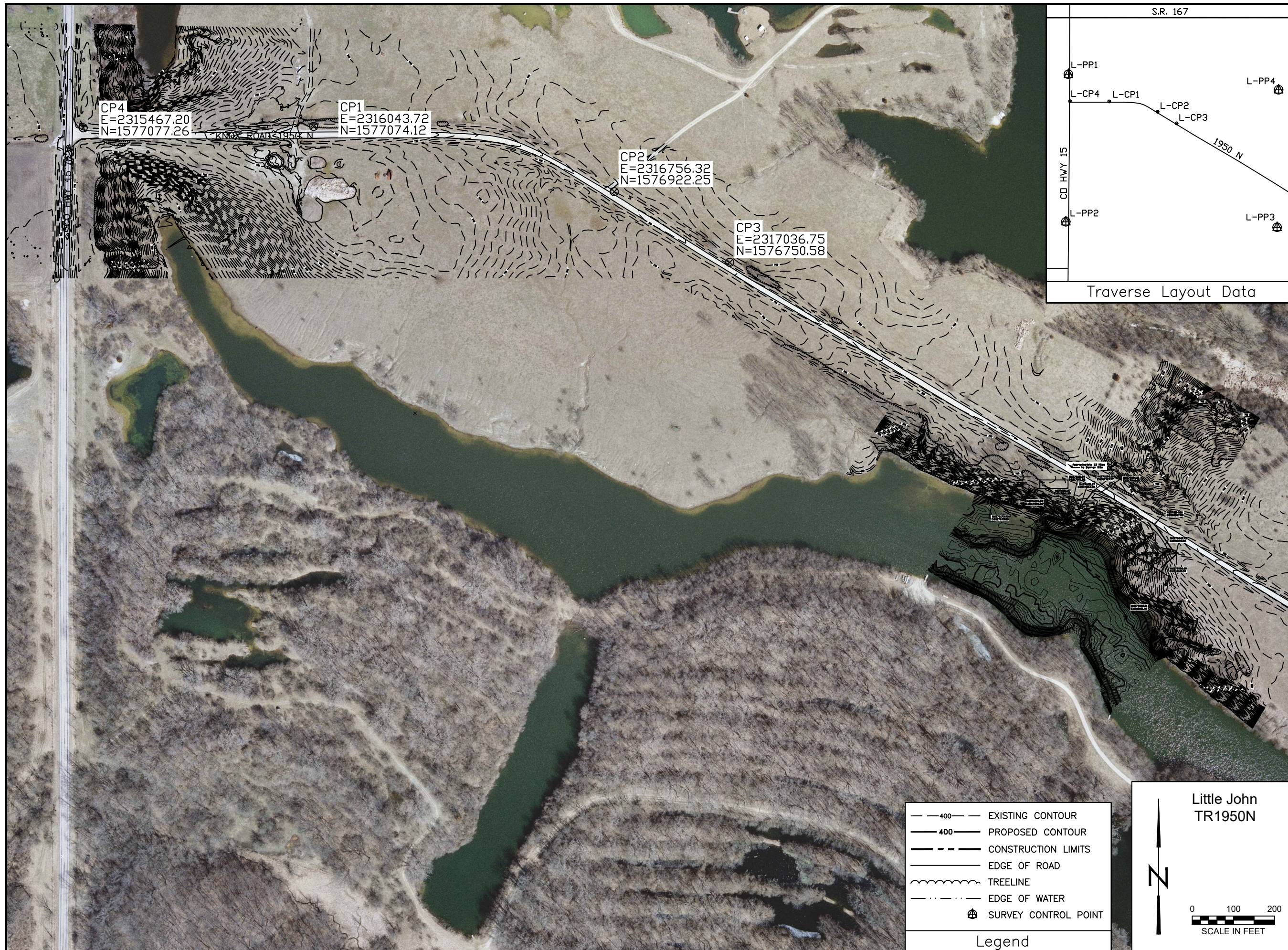
THE BASE FOR THE EMBANKMENT SHALL BE INCREASED BY BACKFILLING AREAS OF THE IMPOUNDMENTS WITH STONE DUMPED RIPRAP, CLASS A3, TO THE ELEVATION OF THE WATER SURFACE. A ONE FOOT THICK LAYER OF STONE DUMPED RIPRAP, CLASS A1, SHALL BE PLACED ON THE TOP SURFACE OF THE LARGER STONE. FILTER FABRIC SHALL BE PLACED OVER THE SURFACE OF THE STONE DUMPED RIPRAP, CLASS A1 LAYER. THE REMAINDER OF THE EMBANKMENT STABILIZATION SHALL BE COMPLETED WITH COMPACTED EARTH THAT HAS BEEN EXCAVATED FROM MINE SPOIL AREAS AS SHOWN ON THESE PLANS.

INSTALL 424 FEET OF PERIMETER EROSION BARRIER ROLLED EXCELSIOR, 12" DIA

INSTALL 794 SQ YD OF FILTER FABRIC

Approximately 1.1 Miles to Borrow Site



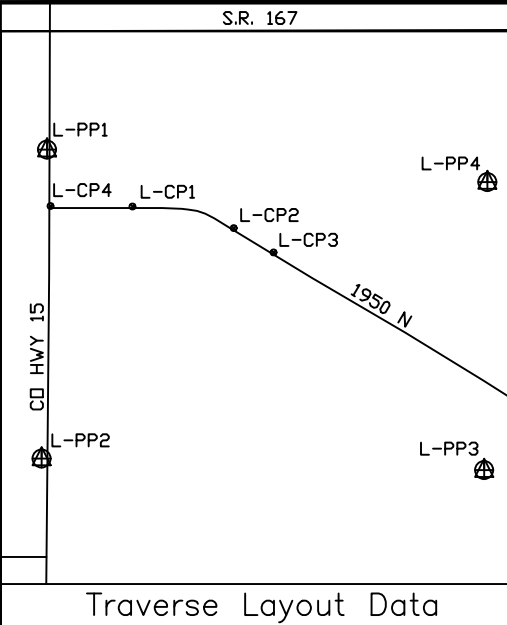


CP4
E=2315467.20
N=1577077.26

CP1
E=2316043.72
N=1577074.12

CP2
E=2316756.32
N=1576922.25

CP3
E=2317036.75
N=1576750.58



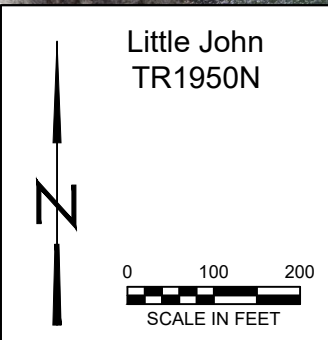
State of Illinois
Department of Natural Resources
Office of Mines and Minerals
Abandoned Mined Lands Reclamation Division

Corn Crib Lake and
Little John TR1950N
Reclamation Project
Knox County
AML-GKnE-2002

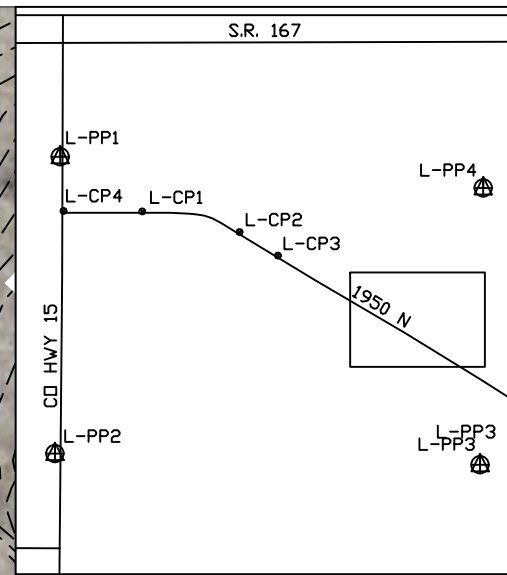
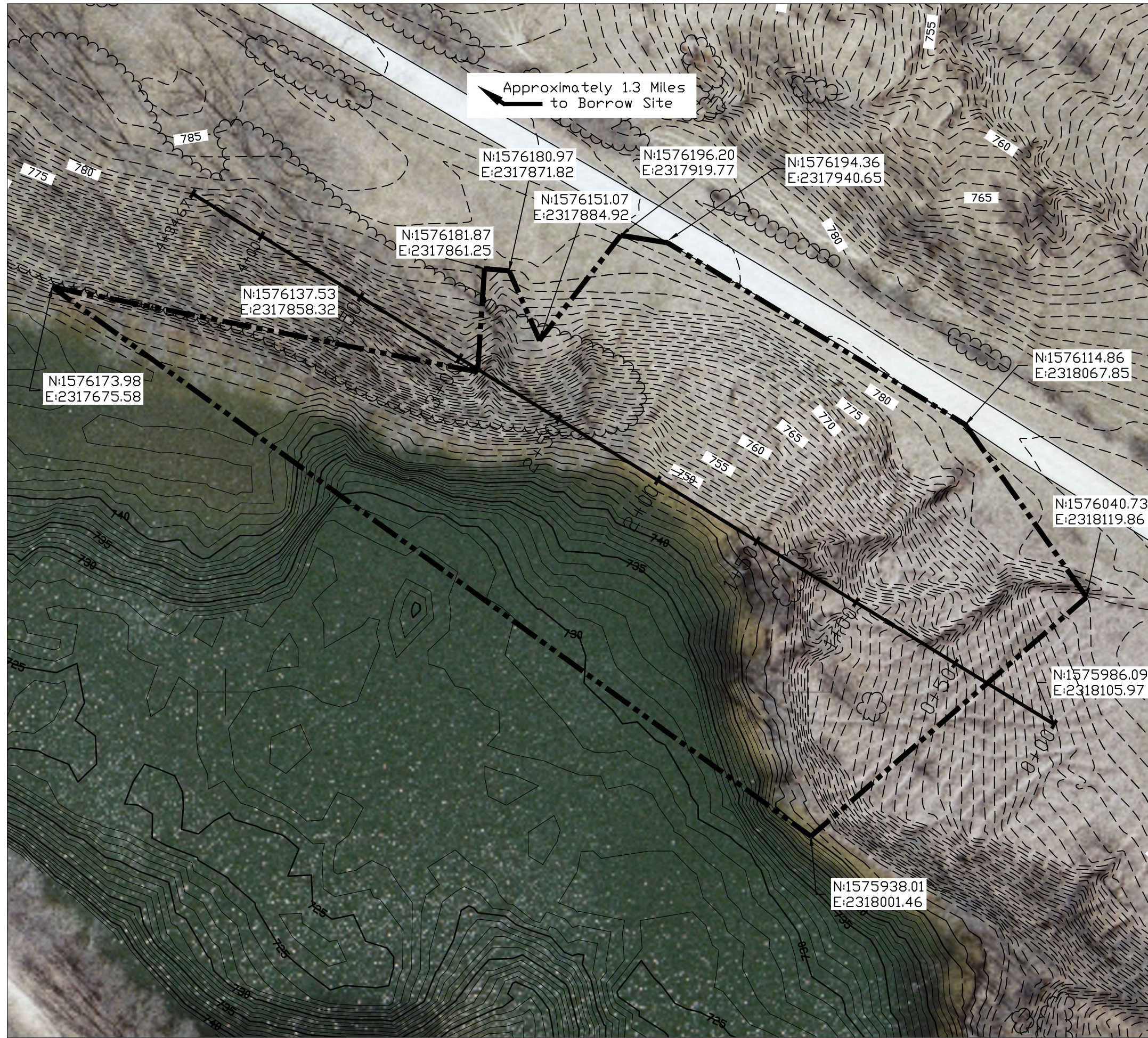
Drawn By: **N. Lowrey**
Checked By: **T. Faught**
Date: **2/22/21**
Date: **3/05/21**

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

Legend



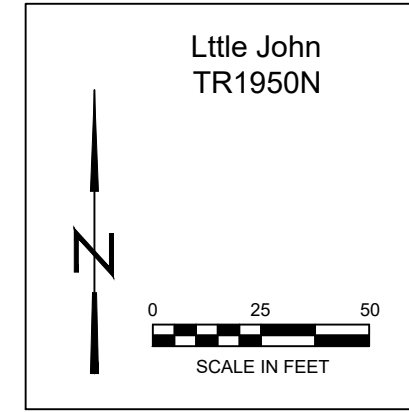
Access Route
Sheet
6 of 13



Traverse Layout Data

	EXISTING CONTOUR
	CONSTRUCTION LIMITS
	EDGE OF ROAD
	TREELINE
	EDGE OF WATER
	SURVEY CONTROL POINT

Legend

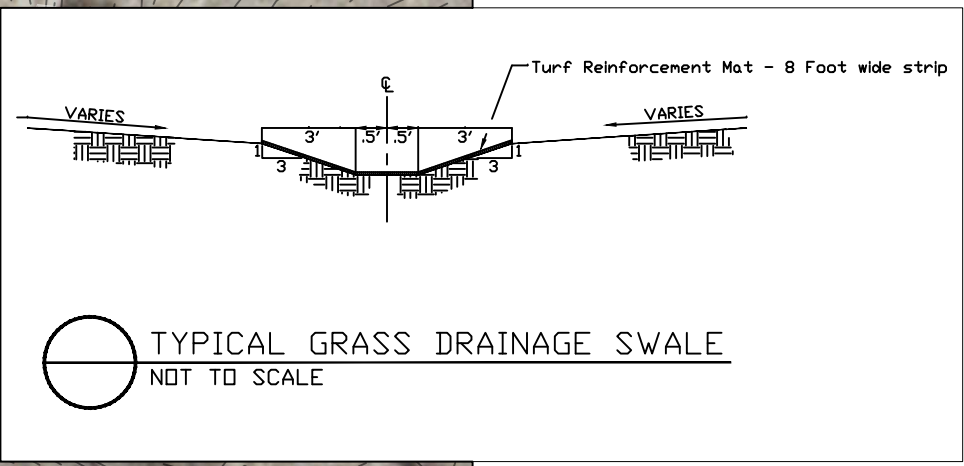
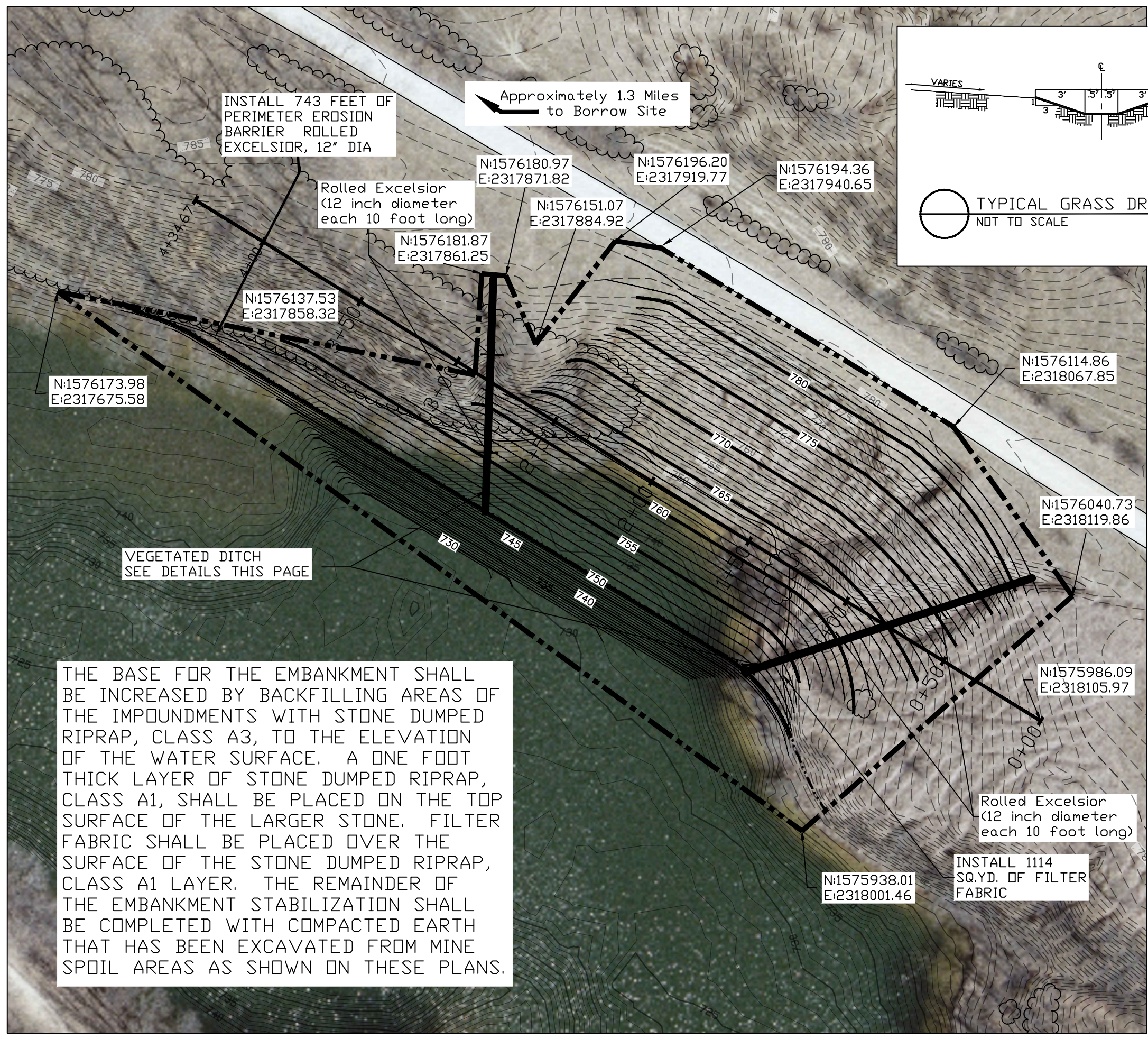


State of Illinois
 Department of Natural Resources
 Office of Mines and Minerals
 Abandoned Mined Lands Reclamation Division

Corn Crib Lake and
 Little John TR1950N
 Reclamation Project
 Knox County
 AML-GKnE-2002

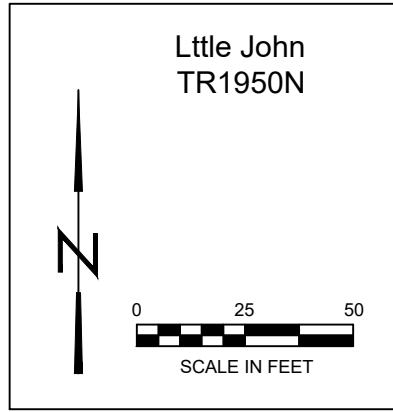
Drawn By: **N. Lowrey**
 Checked By: **T. Faught**
 Date: **1/27/21**
3/05/21

Existing Conditions
 Sheet
 7 of 13



	EXISTING CONTOUR
	PROPOSED CONTOUR
	CONSTRUCTION LIMITS
	EDGE OF ROAD
	TREELINE
	EDGE OF WATER
	SURVEY CONTROL POINT

Legend

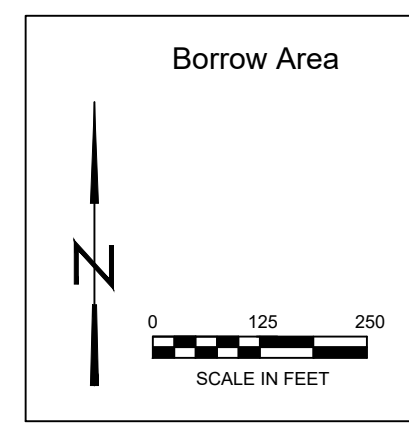
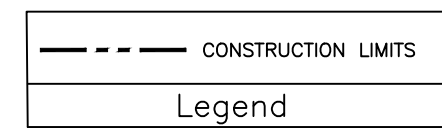


State of Illinois
 Department of Natural Resources
 Office of Mines and Minerals
 Abandoned Mined Lands Reclamation Division

Corn Crib Lake and
 Little John TR1950N
 Reclamation Project
 Knox County
 AML-GKnE-2002

Drawn By: **N. Lowrey** Date: **1/27/21**
 Checked By: **T. Faught** Date: **3/05/21**

Existing & Proposed
 Conditions
 Sheet
 8 of 13



Approximately 1.1 Miles to
Corn Crib Lake Site

Approximately 1.3 Miles to
Little John Site

INSTALL 50' X 50' SITE ENTRANCE
BY PLACING 278 SQ YD OF FILTER
FABRIC AND 120 TON OF AGGREGATE
SURFACE COURSE TYPE B CA-1

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

Corn Crib Lake and
Little John TR1950N
Reclamation Project
Knox County
AML-GKnE-2002

Drawn By: **N. Lowrey** Date: **1/27/21**
Checked By: **T. Faught** Date: **3/05/21**

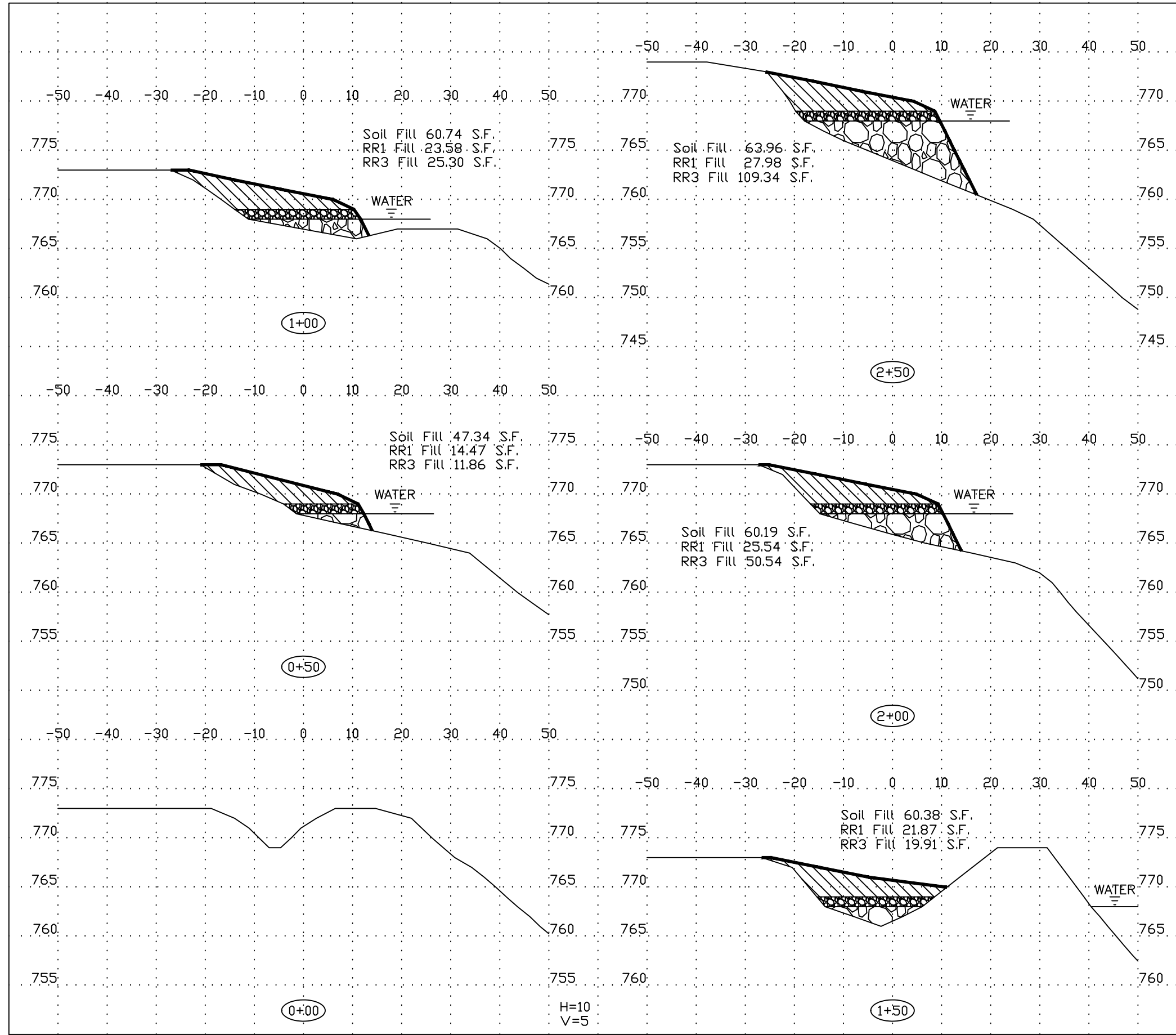
Borrow Area
Sheet
9 of 13

Corn Crib Lake
Reclamation Project
AML-GKnE-2002
Knox County

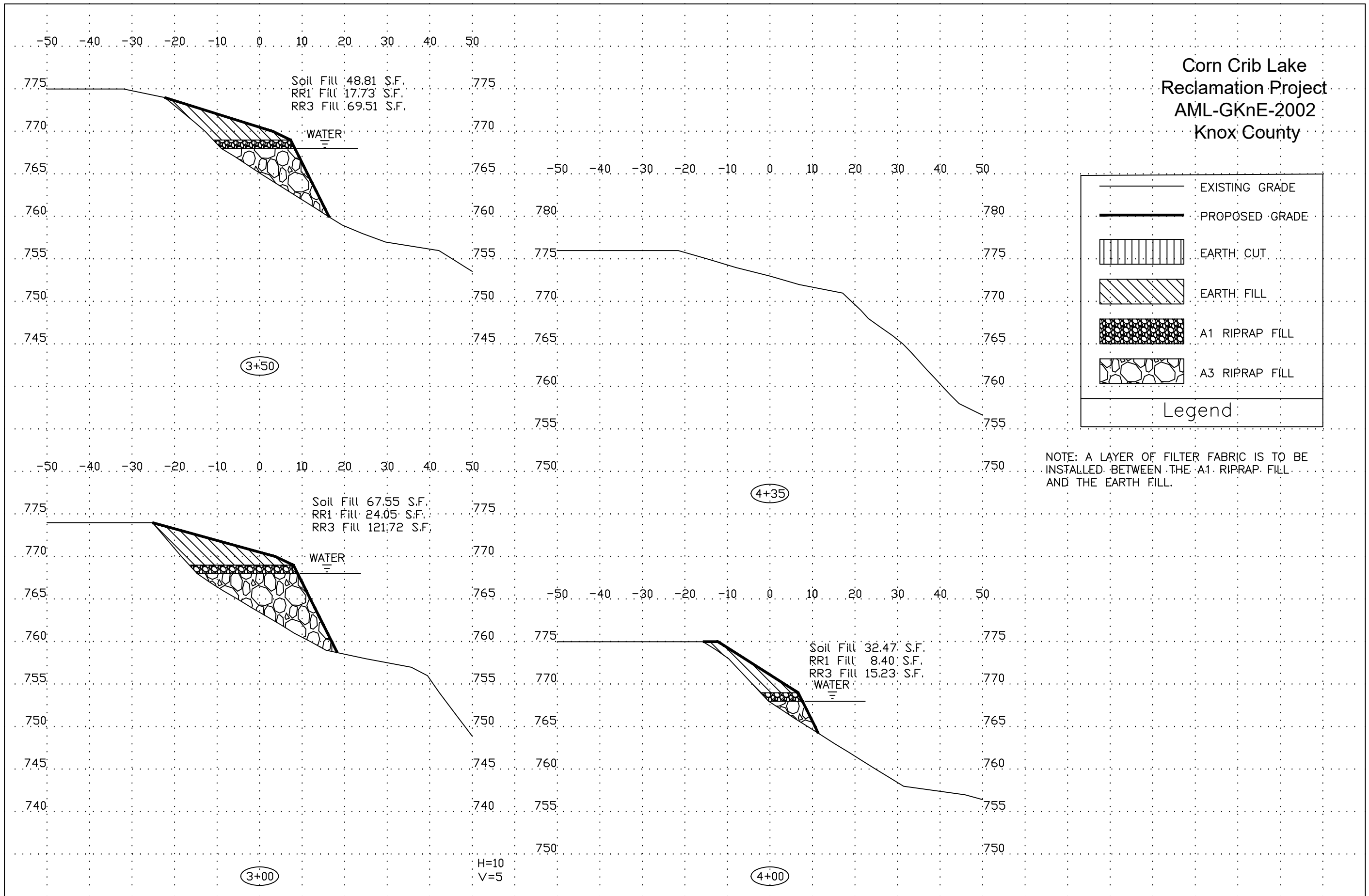
Legend:

- EXISTING GRADE
- PROPOSED GRADE
- [Vertical Lines] EARTH CUT
- [Diagonal Lines] EARTH FILL
- [Stippled Pattern] A1 RIPRAP FILL
- [Large Stone Pattern] A3 RIPRAP FILL

NOTE: A LAYER OF FILTER FABRIC IS TO BE INSTALLED BETWEEN THE A1 RIPRAP FILL AND THE EARTH FILL.



Corn Crib Lake
Reclamation Project
AML-GKnE-2002
Knox County



Little John TR1950N
 Reclamation Project
 AML-GKnE-2002
 Knox County

	EXISTING GRADE
	PROPOSED GRADE
	EARTH CUT
	EARTH FILL
	A1 RIPRAP FILL
	A3 RIPRAP FILL

Legend

NOTE: A LAYER OF FILTER FABRIC IS TO BE INSTALLED BETWEEN THE A1 RIPRAP FILL AND THE EARTH FILL.

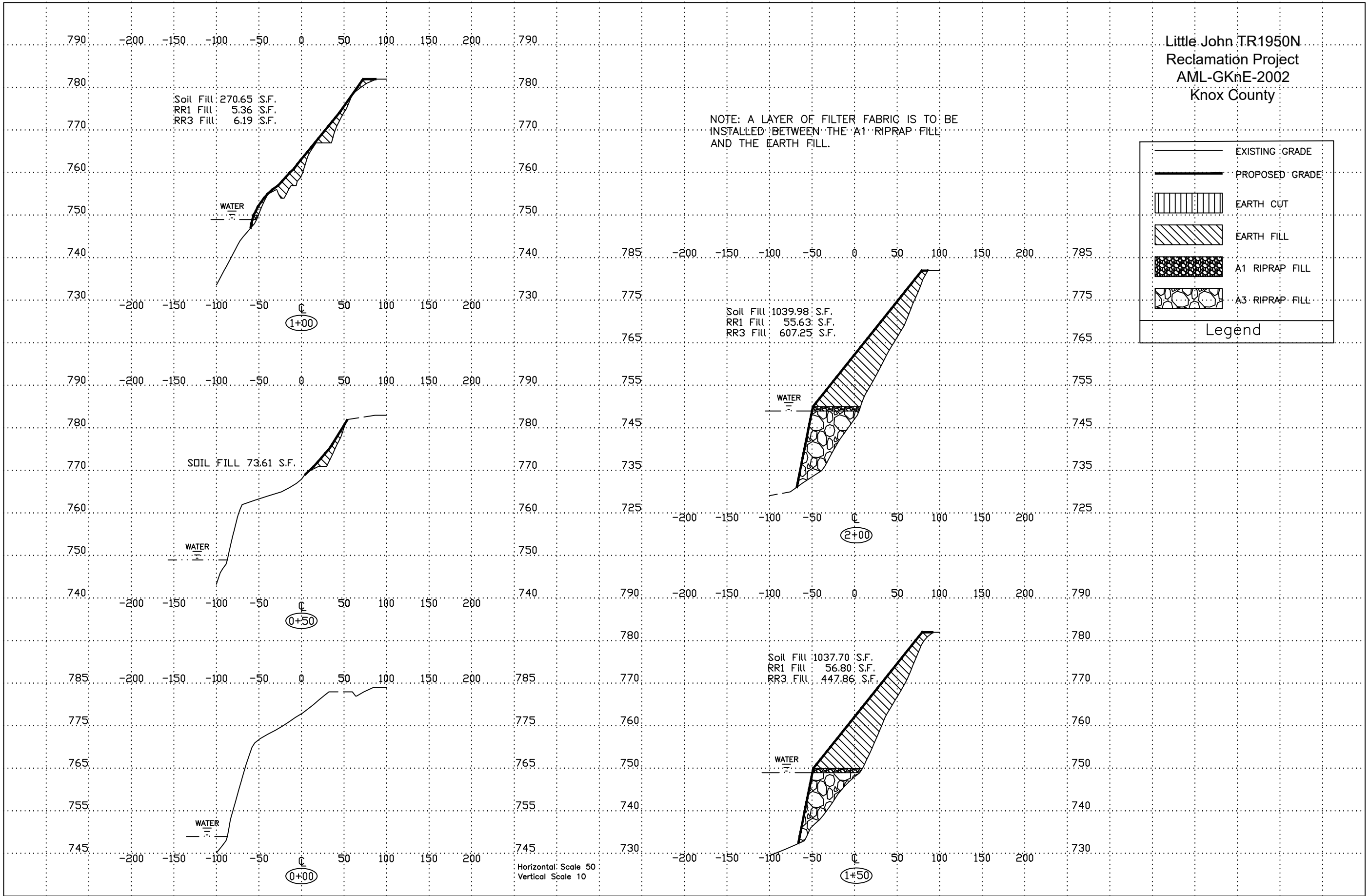
Soil Fill: 270.65 S.F.
 RR1 Fill: 5.36 S.F.
 RR3 Fill: 6.19 S.F.

Soil Fill: 1039.98 S.F.
 RR1 Fill: 55.63 S.F.
 RR3 Fill: 607.25 S.F.

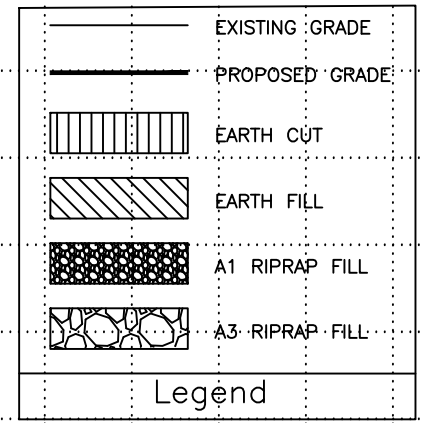
SOIL FILL 73.61 S.F.

Soil Fill: 1037.70 S.F.
 RR1 Fill: 56.80 S.F.
 RR3 Fill: 447.86 S.F.

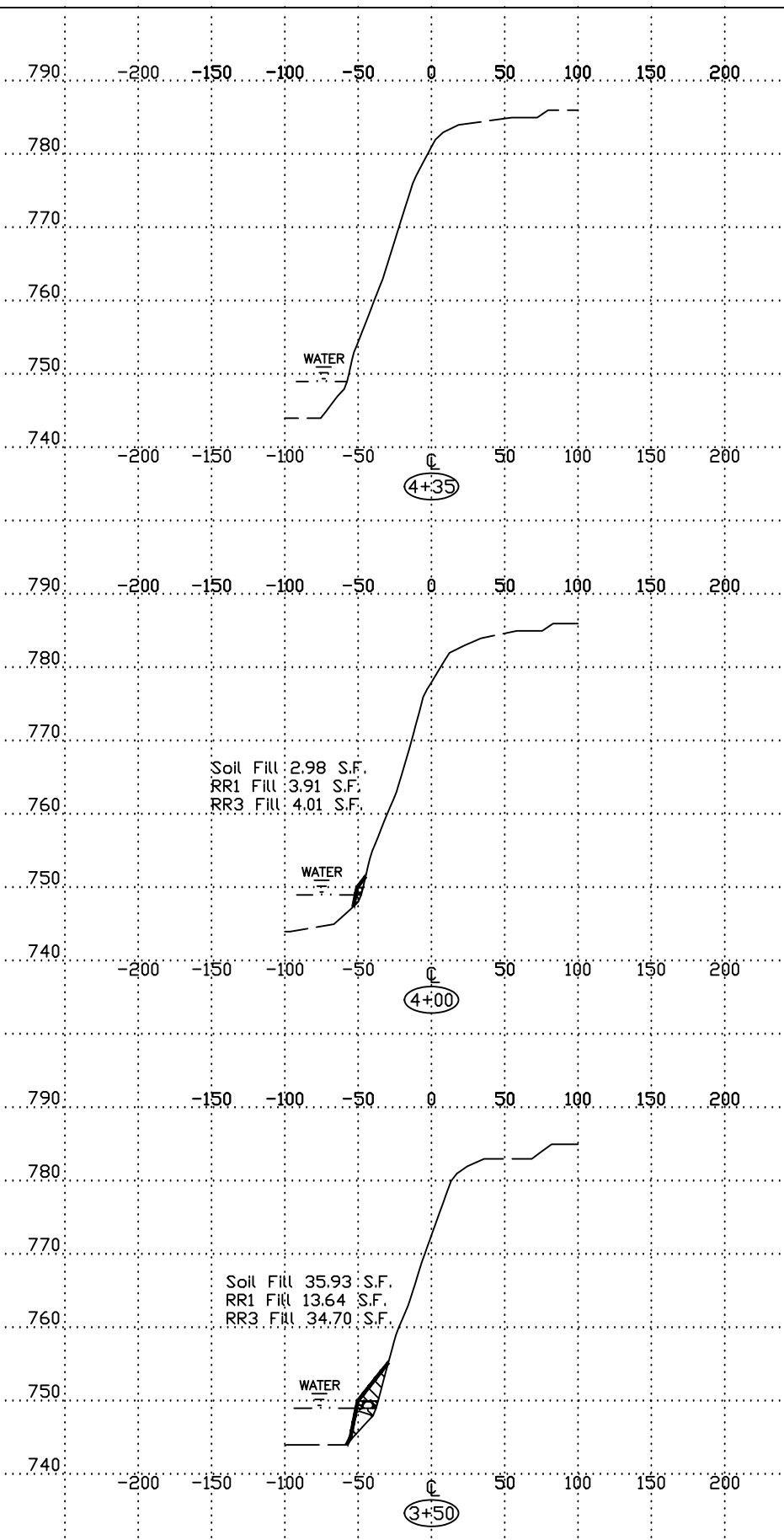
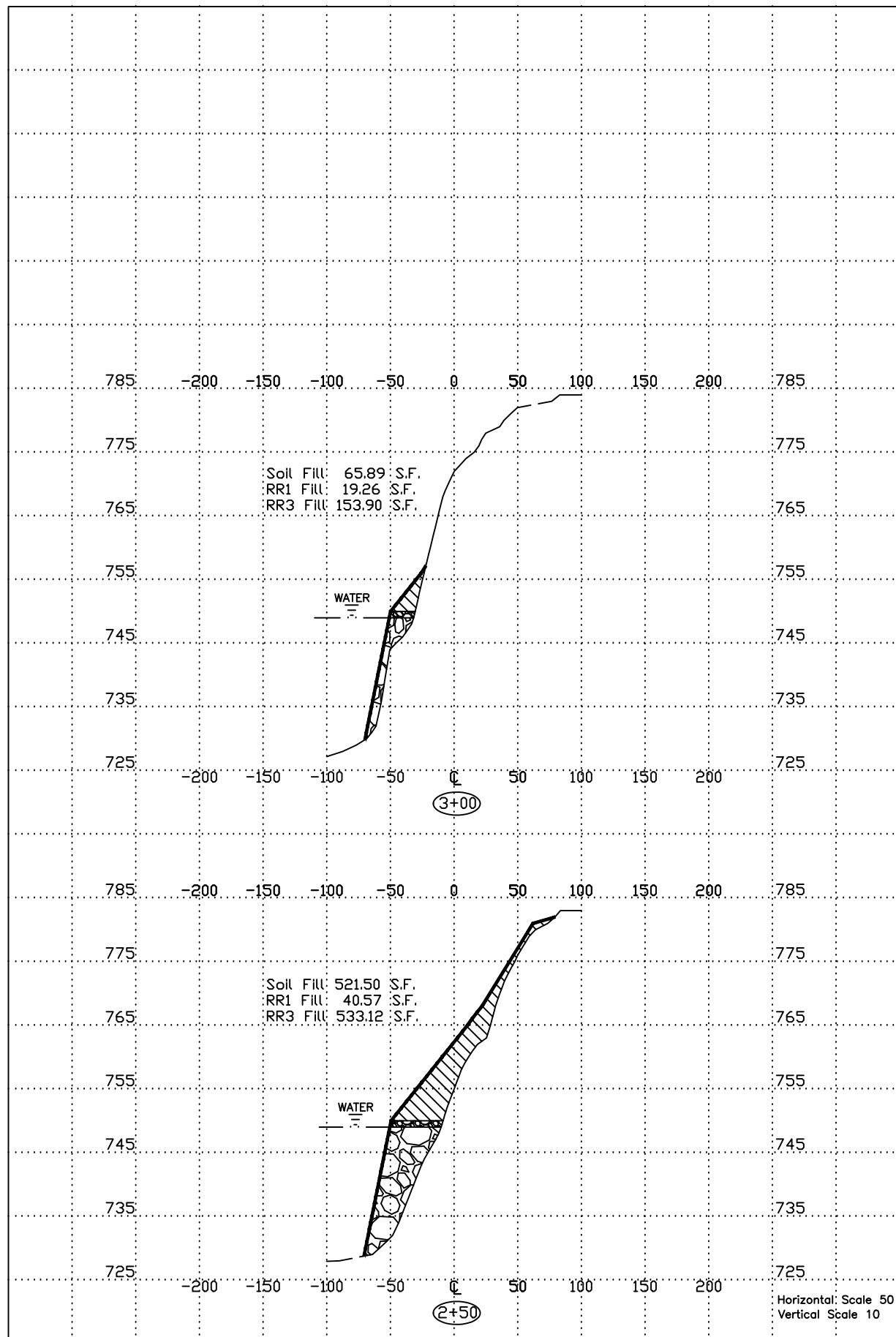
Horizontal Scale 50
 Vertical Scale 10



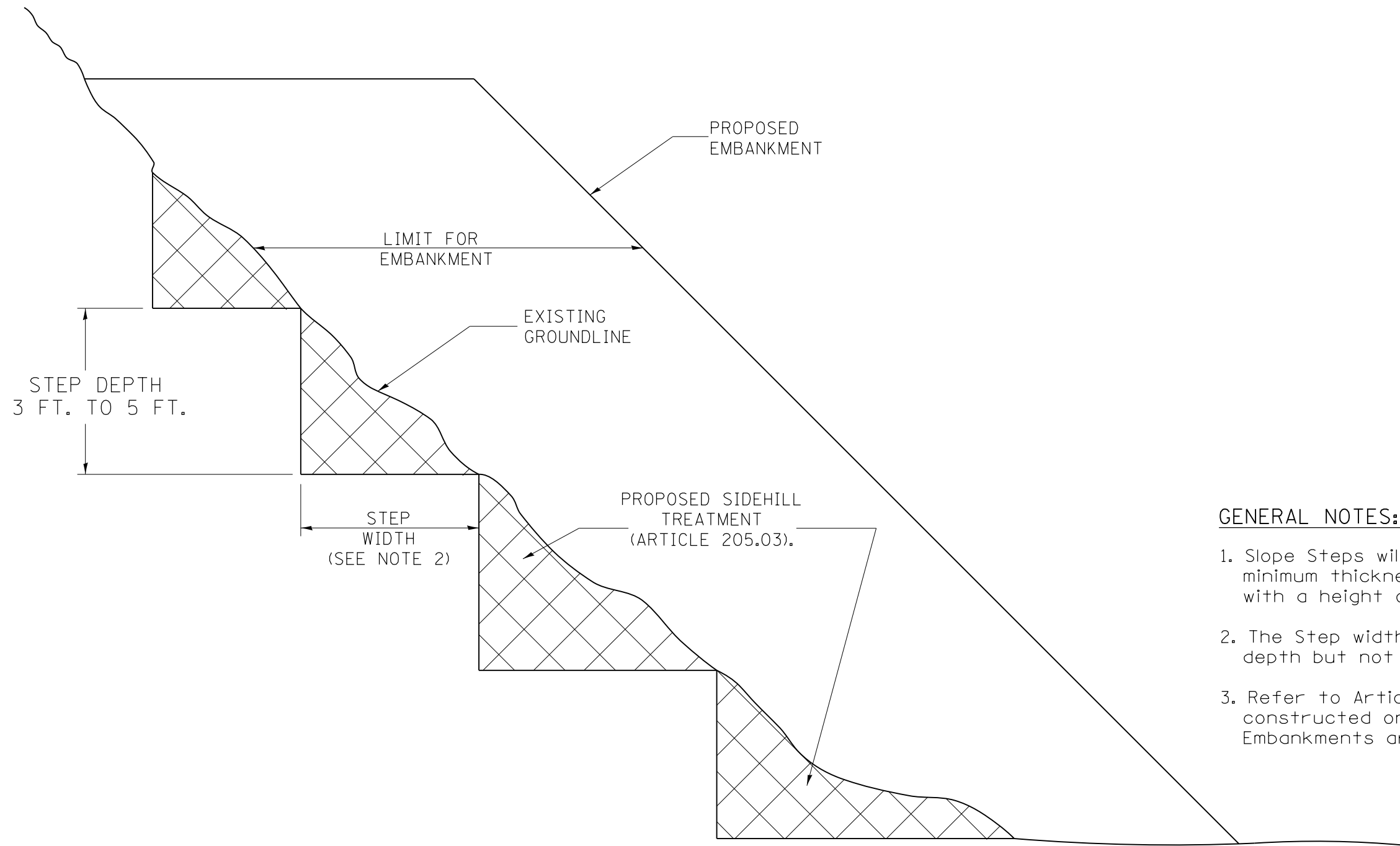
Little John TR1950N
Reclamation Project
AML-GKnE-2002
Knox County



NOTE: A LAYER OF FILTER FABRIC IS TO BE INSTALLED BETWEEN THE A1 RIPRAP FILL AND THE EARTH FILL.



SLOPE STEPS DETAIL
 TYPICAL CROSS-SECTION EMBANKMENT
 CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12 (300) minimum thickness "silver fills" and on a fills with a height of 10' (3.0 m).
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

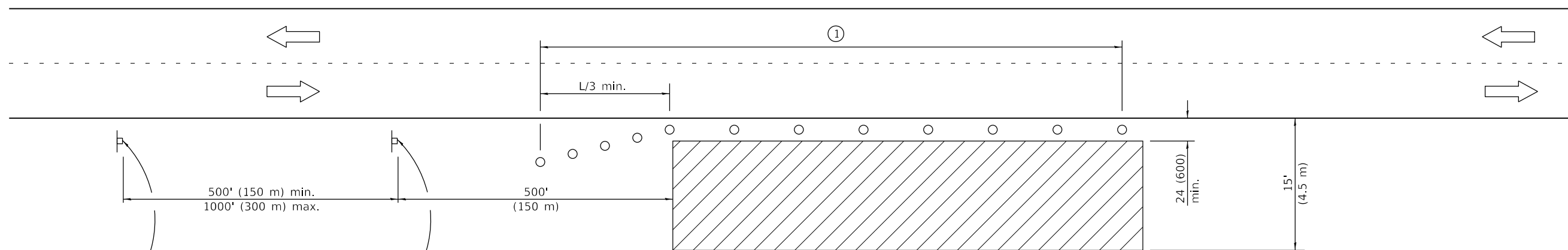
REPLACEMENT MATERIAL:



STANDARD EMBANKMENT
 (IN ACCORDANCE WITH
 205 OF THE STANDARD SPECIFACATION).

All dimensions are in inches
 (millimeters) unless otherwise noted.

FILE NAME =	USER NAME = Verenskifa	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SLOPE STEPS DETAIL				F.A. RTÉ.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SLOPESTEP.DGN						SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	
PLOT SCALE = 40.0000' / in.					CHECKED -	REVISED -	CONTRACT NO.						
PLOT DATE = 5/10/2016					DATE -	REVISED -	ILLINOIS FED. AID PROJECT						



For contract construction projects

ROAD CONSTRUCTION AHEAD

W20-1103(0)-48

ROAD WORK AHEAD

W21-1(0)-48

For maintenance and utility projects

ROAD WORK AHEAD

W20-1(0)-48

500' (150 m) min.
1000' (300 m) max.

500'
(150 m)

L/3 min.




24 (600)
min.

15'
(4.5 m)

TYPICAL APPLICATIONS

- Utility operations
- Culvert extensions
- Side slope changes
- Guardrail installation and maintenance
- Delineator installation
- Landscaping operations
- Shoulder repair
- Sign installation and maintenance

SYMBOLS

-  Work area
-  Sign
-  Cone, drum or barricade

① When the work operation exceeds one hour, cones, drums or barricades shall be placed at 25' (8 m) centers for L/3 distance, and at 50' (15 m) centers through the remainder of the work area.

GENERAL NOTES

This Standard is used where any vehicles, equipment, workers or their activities will encroach in the area 15' (4.5 m) to 24' (600) from the edge of pavement.

Calculate L as follows:

SPEED LIMIT	FORMULAS	
	English	(Metric)
40 mph (70 km/h) or less:	$L = \frac{WS^2}{60}$	$L = \frac{WS^2}{150}$
45 mph (80 km/h) or greater:	$L = (W)(S)$	$L = 0.65(W)(S)$

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-14	Revised workers sign number to agree with current MUTCD.
1-1-13	Omitted text 'WORKERS' sign.

OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE

STANDARD 701006-05

Illinois Department of Transportation

PASSED January 1, 2014

ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2014

ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97