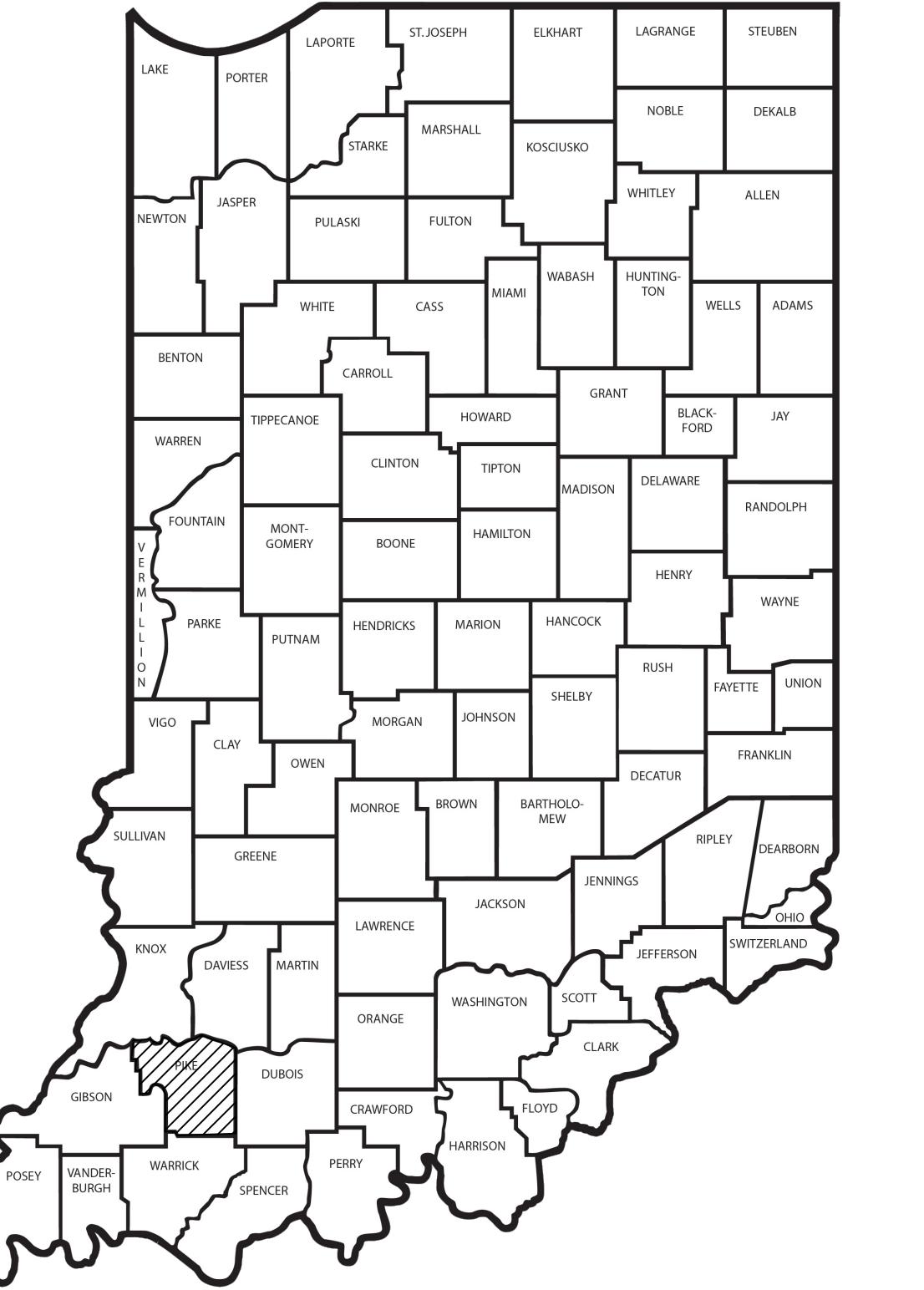


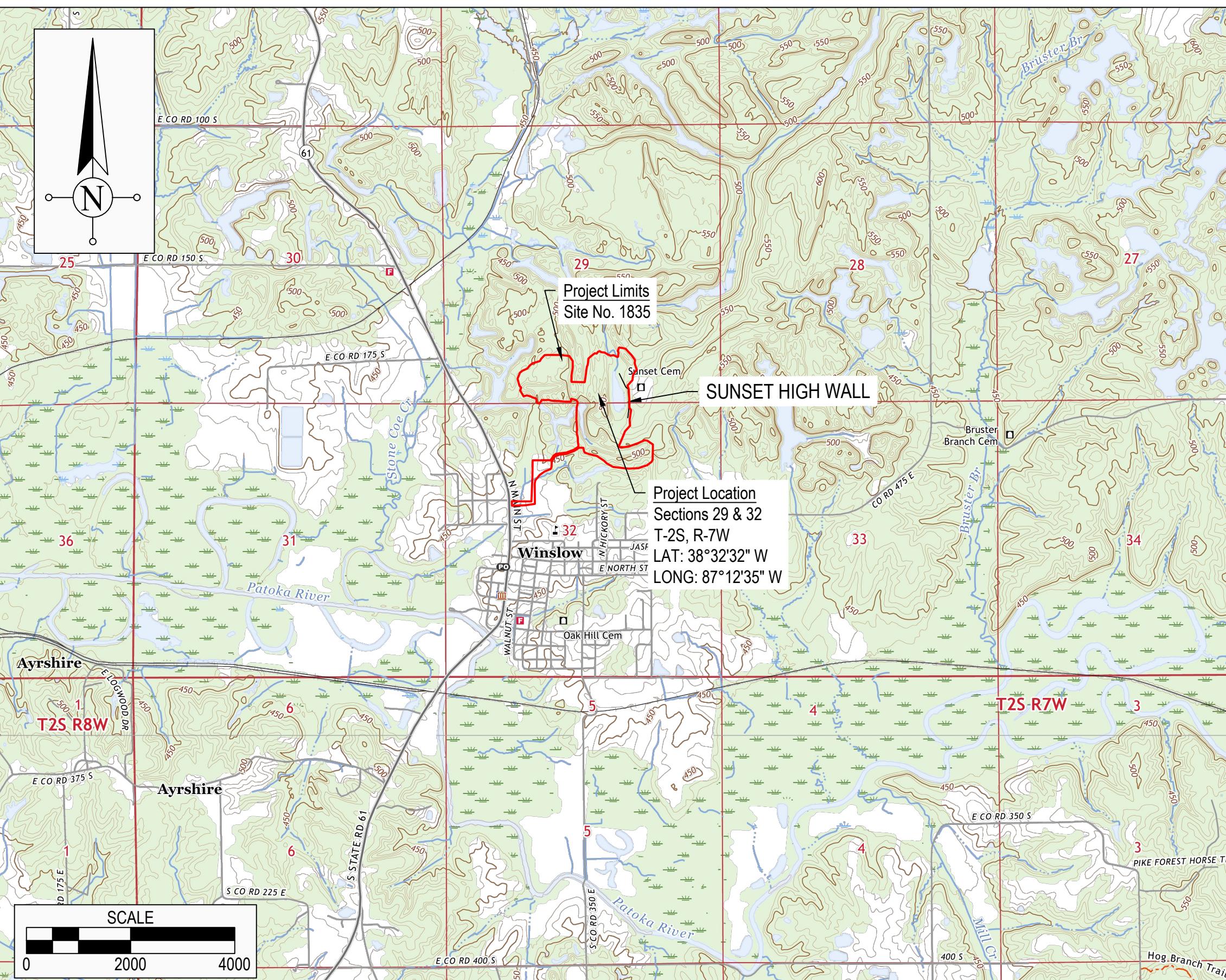
SUNSET HIGHWALL	
SITE NO.	CONTRACT NO.
1835	DEL2415208208/E008-334
	

**STATE OF INDIANA**  
**INDIANA DEPARTMENT OF NATURAL RESOURCES**  
**DIVISION OF RECLAMATION**

**ABANDONED COAL MINE  
RESTORATION**

**SUNSET HIGHWALL  
SITE 1835**  
**CONTRACT DEL2415208208/E008-334**  
**PIKE COUNTY**

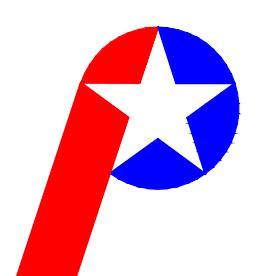
**Clear and grub, backfill highwall, construct ponds, improve drainage, and  
revegetate site to enhance wildlife habitat and recreation opportunities.**

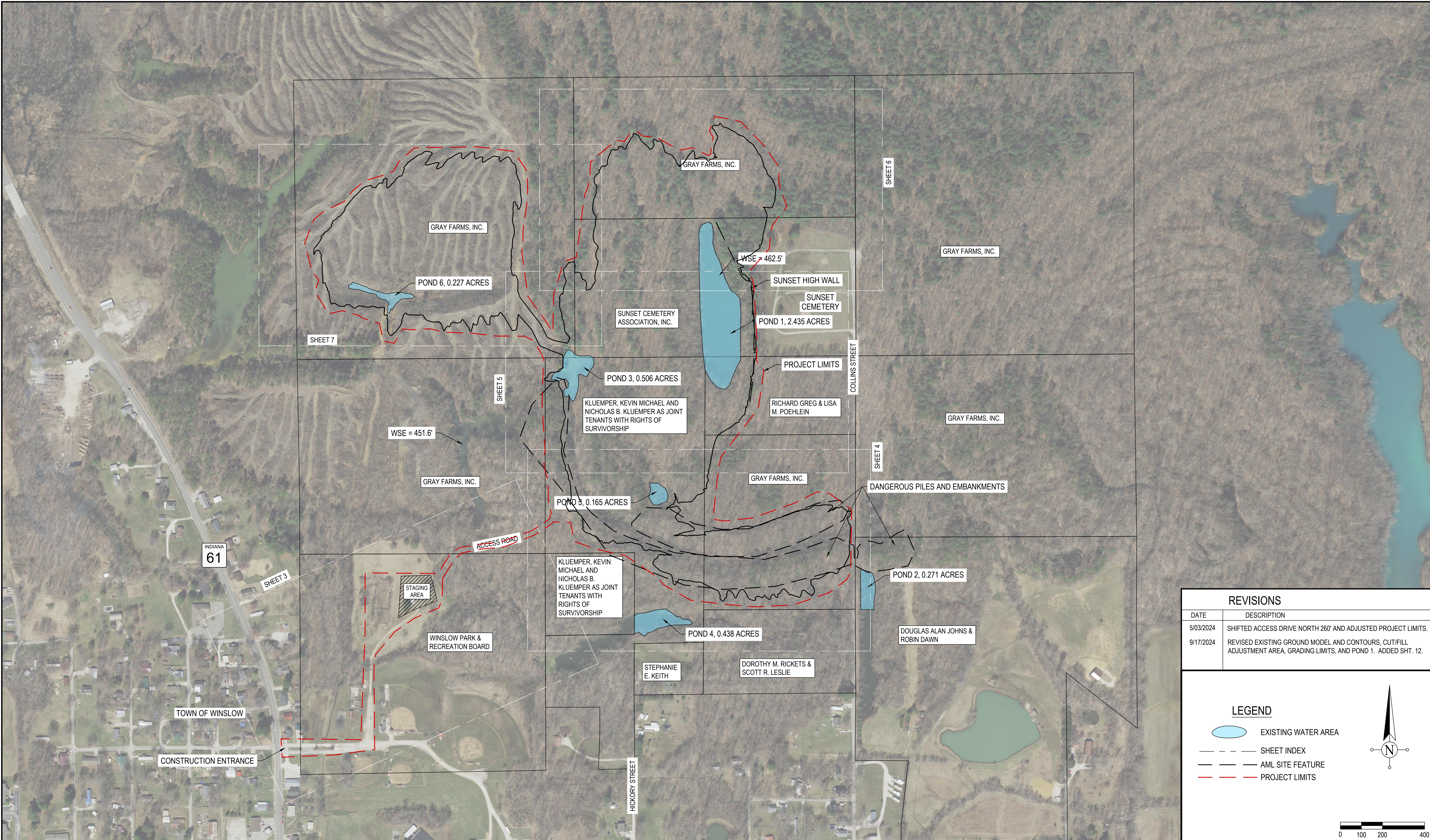


**PROJECT LOCATION MAP**  
**AUGUSTA & WINSLOW USGS TOPOGRAPHIC QUADRANGLES (2022)**

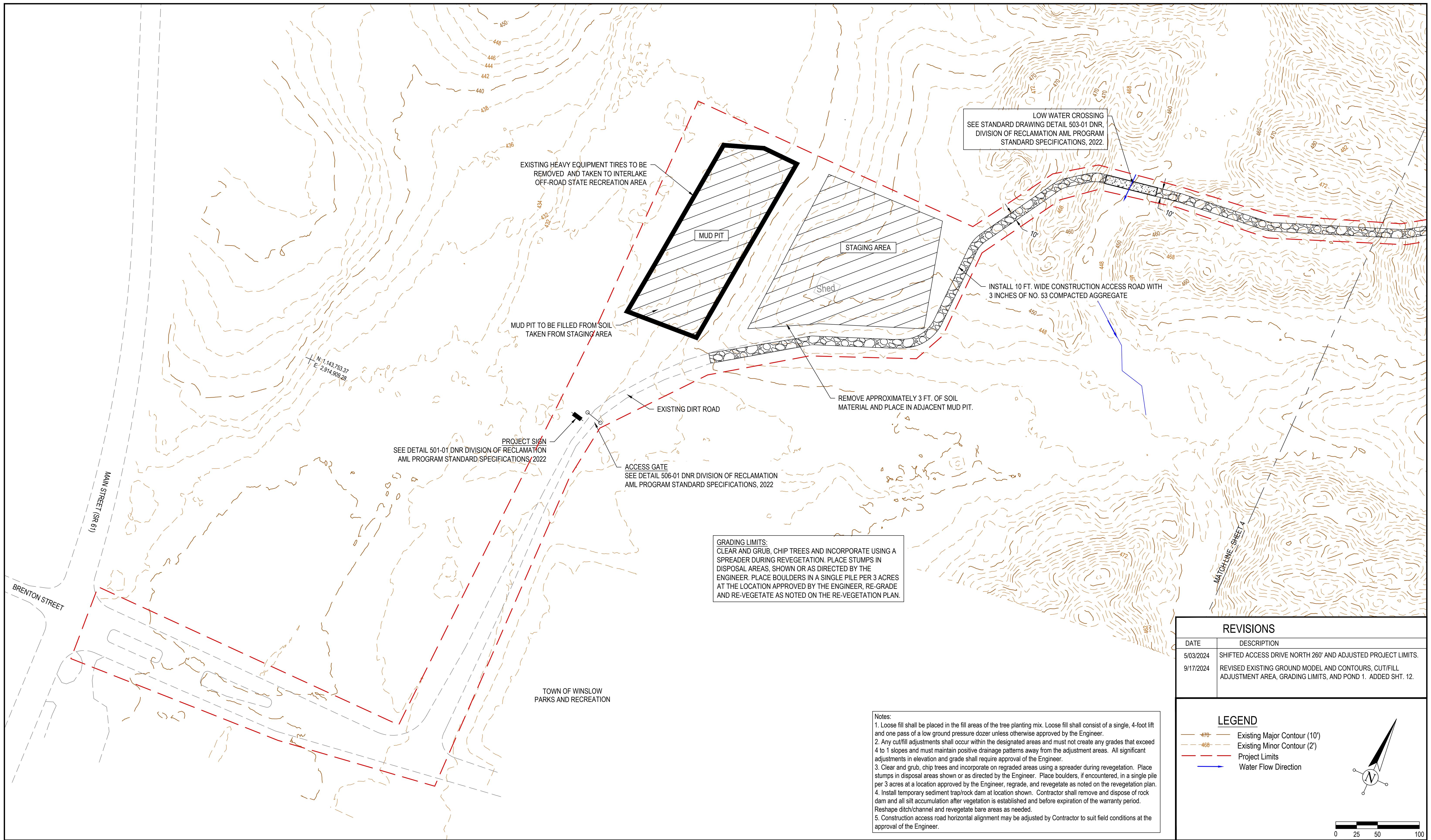
GENERAL NOTES	
2023 AML STANDARD SPECIFICATIONS TO BE USED WITH THESE PLANS	
AN NPDES DISCHARGE PERMIT IS REQUIRED FOR THIS PROJECT	
PLANS DEVELOPED FROM INDIANA 2019 LIDAR TOPO IN NAD 83 INDIANA STATE PLANE WEST, FEET, AND GROUND SURVEY PERFORMED BY TRIMARK SURVEYING.	
INDEX	
<b>SHEET NO.</b>	<b>SHEET TITLE</b>
1	TITLE, INDEX & LOCATION MAP
2	SITE MAP
3-6	GRADING PLAN
7	GRADING PLAN - CUT/FILL ADJUSTMENT AREA
8-9	SECTIONS
10	REVEGETATION PLAN
11	DETAILS
12	REVISED PROJECT & GRADING LIMITS
UTILITIES	
NO UTILITES ARE KNOWN TO EXIST NEAR THE PROJECT SITE AND NONE ARE EXPECTED TO BE AFFECTED BY THE PROPOSED CONSTRUCTION. HOWEVER, CONTRACTOR SHALL CALL IUPPS BEFORE ANY DIGGING.	
CALL BEFORE YOU DIG. INDIANA UNDERGROUND PLANT PROTECTION SERVICE (IUPPS) 1-800-382-5544 OR 811 FROM YOUR MOBILE PHONE.	

REVISIONS	
DATE	DESCRIPTION
5/03/2024	REVISED SHEETS 2, 3, 4 AND 10. SHIFTED ACCESS DRIVE NORTH, OMITTED CROSS PIPE UNDER ACCESS DRIVE AND ADDED WETLAND SEED MIX.
6/04/2024	ADDED RIFFLES TO DITCHES ON SHEETS 3, 4, 5 AND 6 AND RIFFLE DETAIL TO SHEET 11
9/17/2024	REVISED EXISTING GROUND MODEL AND CONTOURS, CUT/FILL ADJUSTMENT AREA, GRADING LIMITS, AND POND 1. ADDED SHT. 12.

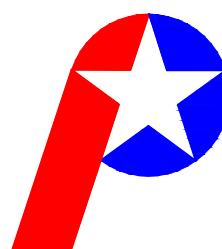
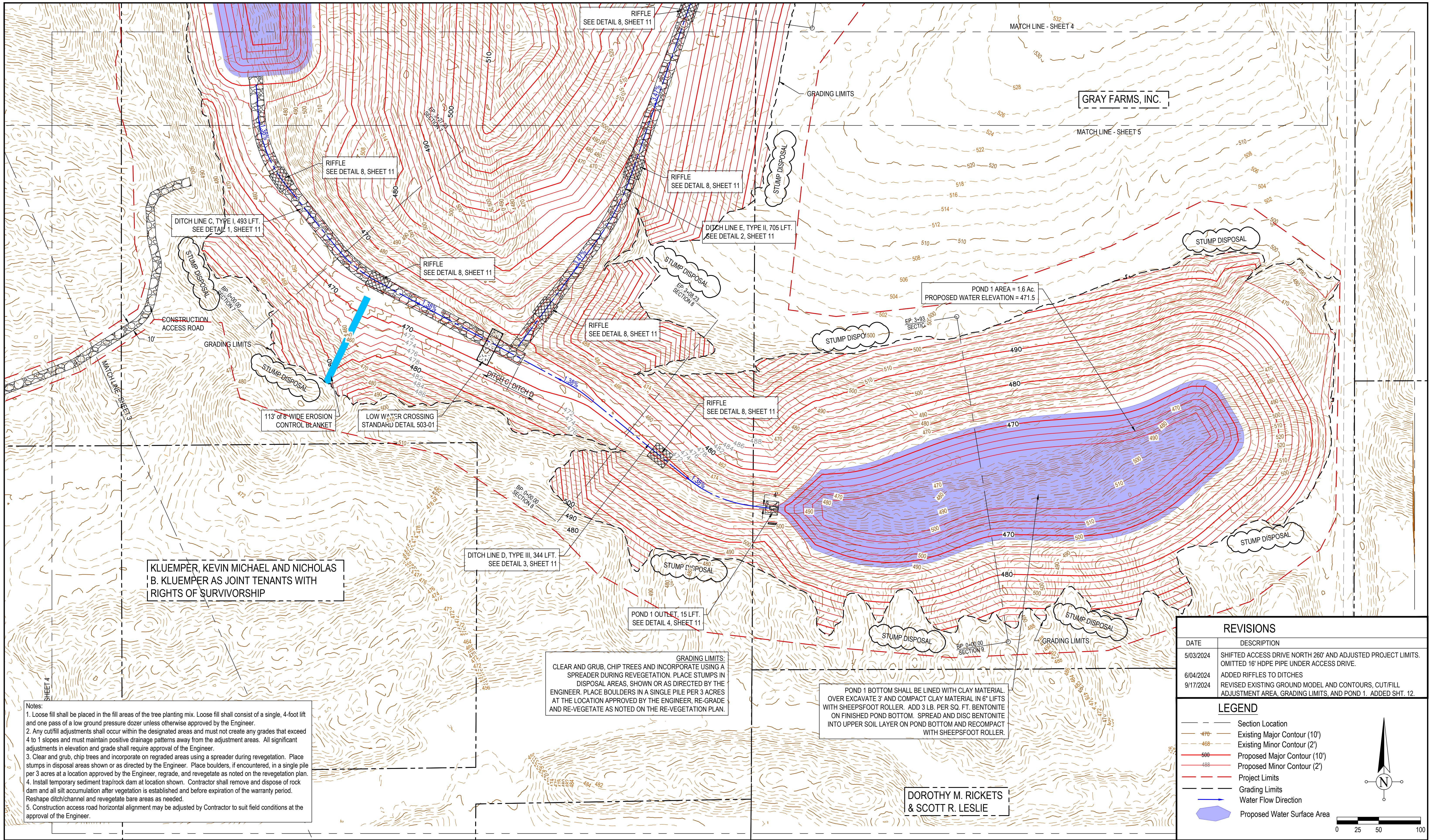
 <p>Patriot Engineering &amp; Environmental, Inc.</p>		PLANS PREPARED BY:	PATRIOT ENGINEERING	317-576-8058
		CERTIFIED BY:		PHONE NUMBER 9/18/2024 DATE
		APPROVED FOR LETTING:	DIVISION OF RECLAMATION	DATE
		SCALE AS NOTED	SHEET 1 of 12	
		PROJECT E008-334	SITE 1835	



<p>Patriot Engineering &amp; Environmental, Inc.</p>		RECOMMENDED FOR APPROVAL:	<p>9/18/2024 DATE</p>	DATE MADE	Site Map		SCALE	SHEET
		DESIGNED BY	K.S.B.	DRAWN BY	J.D.D.	DATE REVISED	1" = 200'	2 of 12
<p>STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION</p>						PROJECT	SITE	1835



 <p>Patriot Engineering &amp; Environmental, Inc.</p>		 <p>RECOMMENDED FOR APPROVAL: <u>Ken Bosar</u> 9/18/2024 DATE</p>	<p>DATE MADE 9/22/2023</p>	<p>SCALE 1' = 50</p>	<p>SHEET 3 of 12</p>
		<p>DESIGNED BY K.S.B.</p>	<p>DRAWN BY J.D.D.</p>	<p>DATE REVISED 9/17/2024</p>	<p>PROJECT E008-334</p>
<p>STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION</p>					



Patriot Engineering &  
Environmental, Inc.



RECOMMENDED  
FOR APPROVAL:

*Kenneth Stephen Bosar*  
9/18/2024  
DATE

DATE MADE

9/22/2023

DESIGNED BY  
K.S.B.

DRAWN BY  
J.D.D.

DATE REVISED  
9/17/2024

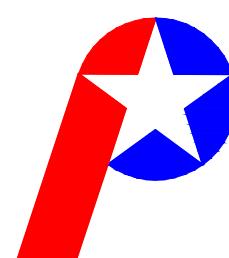
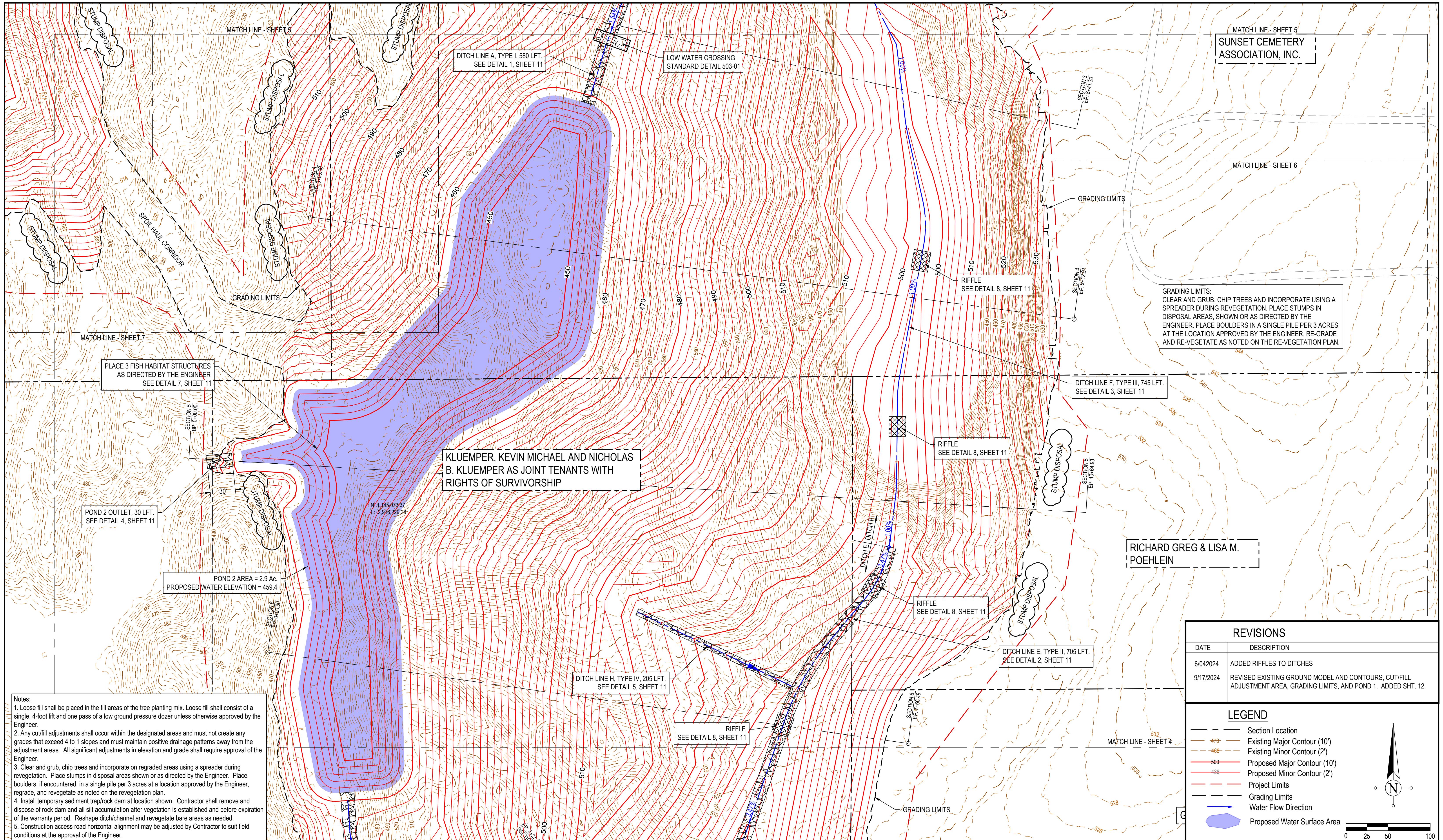
STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF RECLAMATION

SCALE  
1" = 50'

SHEET  
4 of 12

PROJECT  
E008-334

SITE  
1835



Patriot Engineering &  
Environmental, Inc.



RECOMMENDED  
FOR APPROVAL:

*Kenneth S. Bosar*

9/18/2024

DATE MADE  
9/22/2023

DESIGNED BY  
K.S.B.

DRAWN BY  
J.D.D.

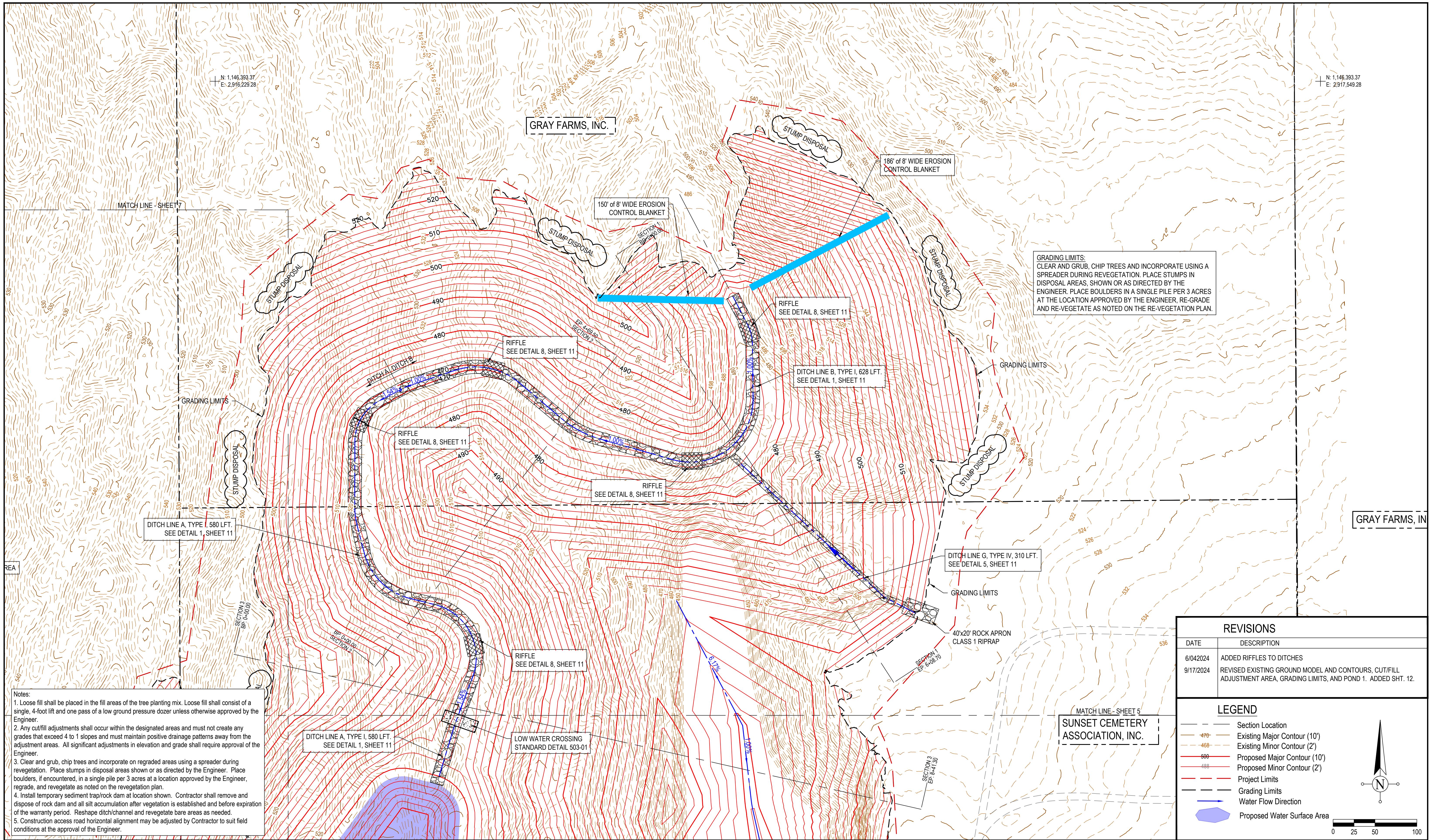
DATE REVISED  
9/17/2024

## Grading Plan

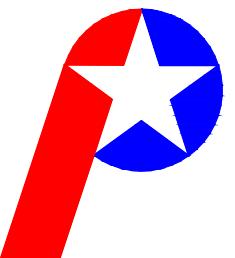
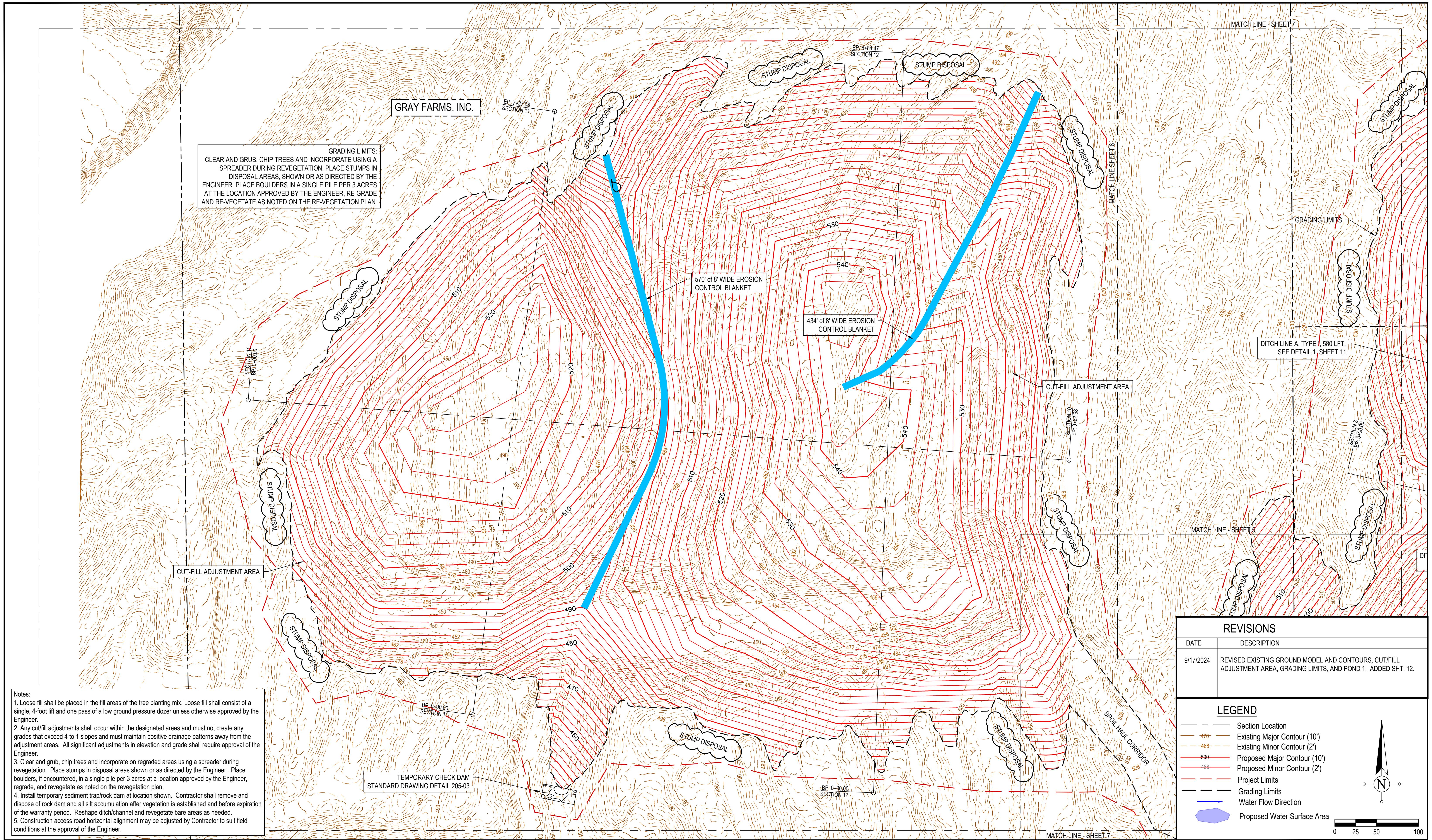
STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF RECLAMATION

SCALE  
1" = 50'  
PROJECT  
E008-334

SHEET  
5 of 12  
SITE  
1835



<p>Patriot Engineering &amp; Environmental, Inc.</p>	<p>RECOMMENDED FOR APPROVAL: <i>Kenneth Stephen Bosar</i> 9/18/2024 DATE</p>	<h3>Grading Plan</h3>		
		DESIGNED BY K.S.B.	DRAWN BY J.D.D.	DATE REVISED 9/17/2024
<p>STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION</p>			PROJECT E008-334	SITE 1835



# Patriot Engineering & Environmental, Inc.



## RECOMMENDATION FOR APPROVAL

RECOMMENDED FOR APPROVAL: Karen Basa 9/18/2024 DATE

DATE MADE  
9/22/2023

# Grading Plan - Cut/Fill Adjustment Area

SCALE  
1" = 50'

SHEET  
7 of 12

# DESIGNED K.S.B.

# DRAWN BY

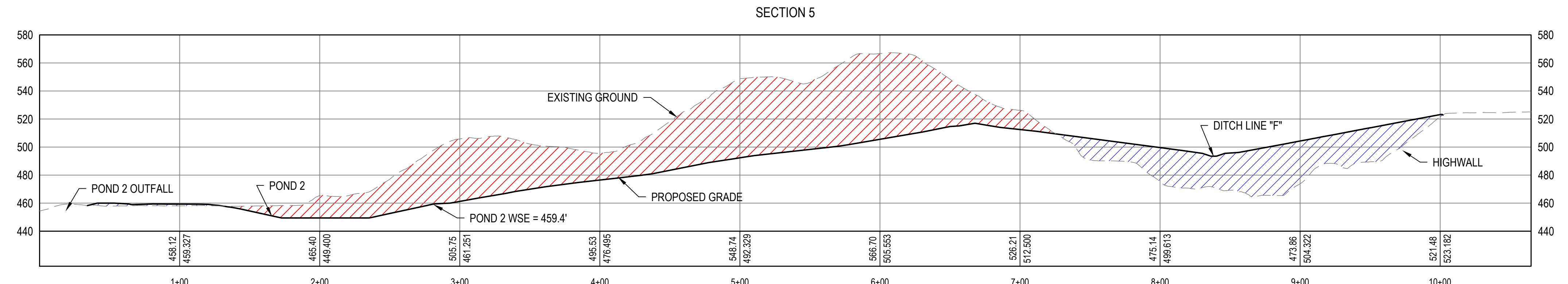
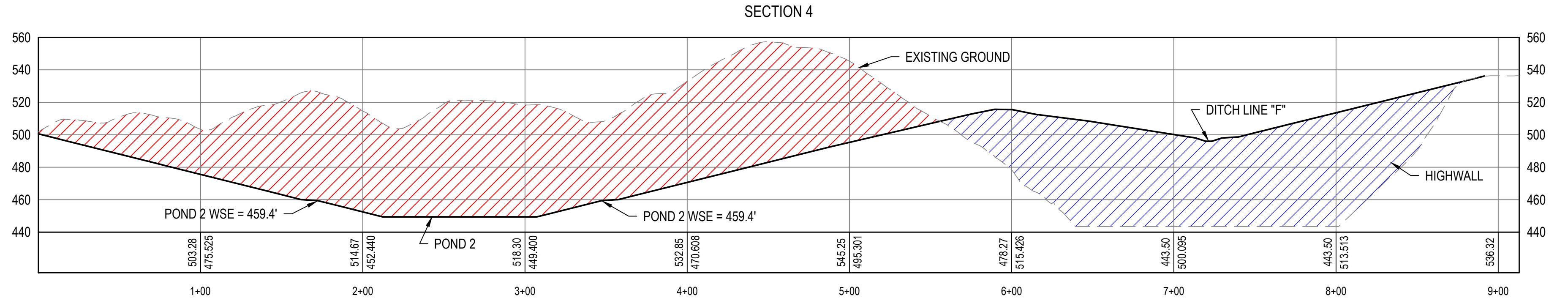
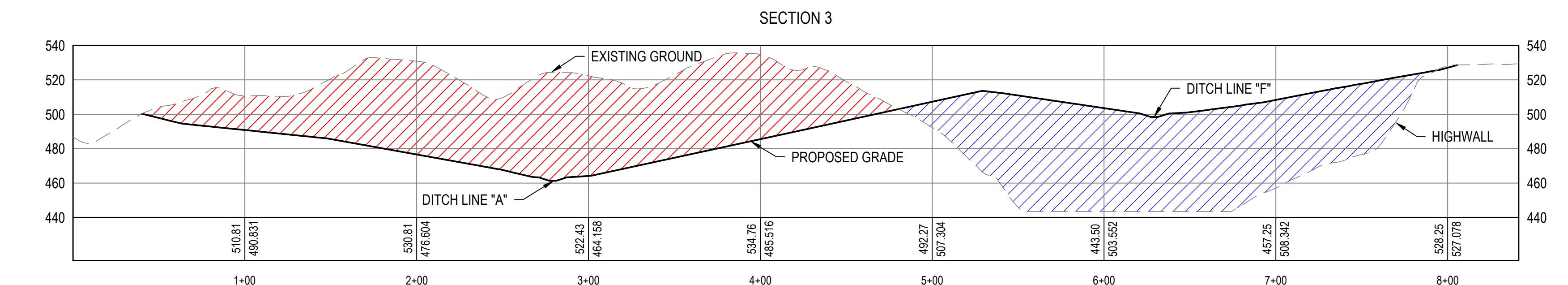
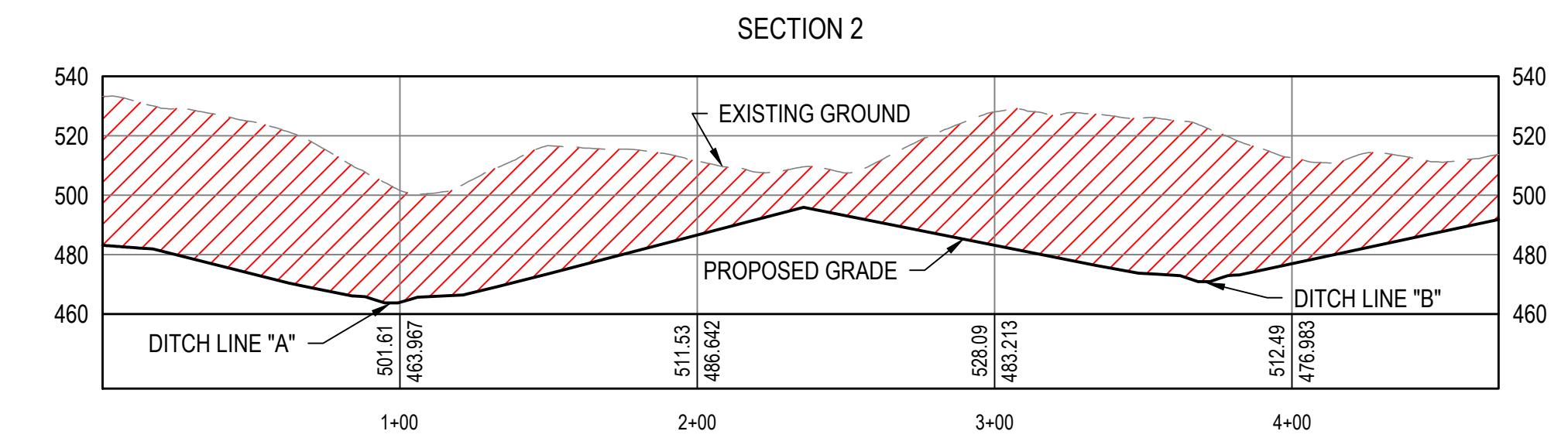
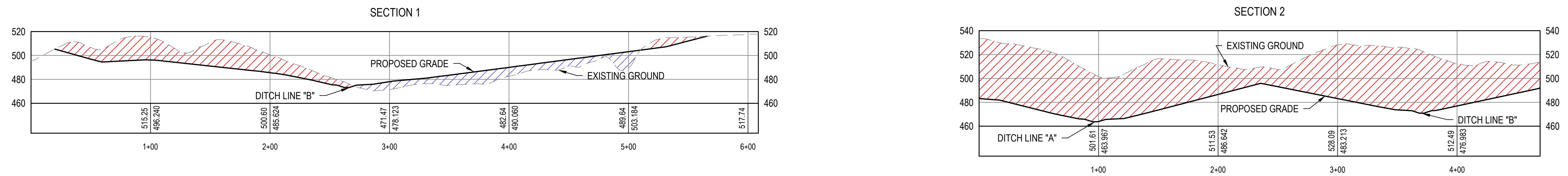
## J.D.D.

DATE REVISED  
9/17/2024

STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF RECLAMATION

# PROJECT E008-334

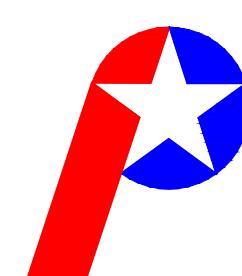
# SITE 1835

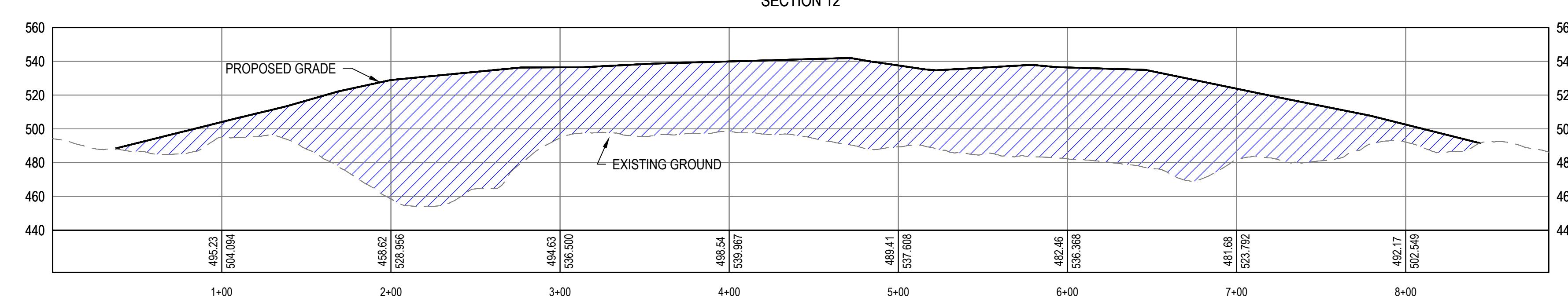
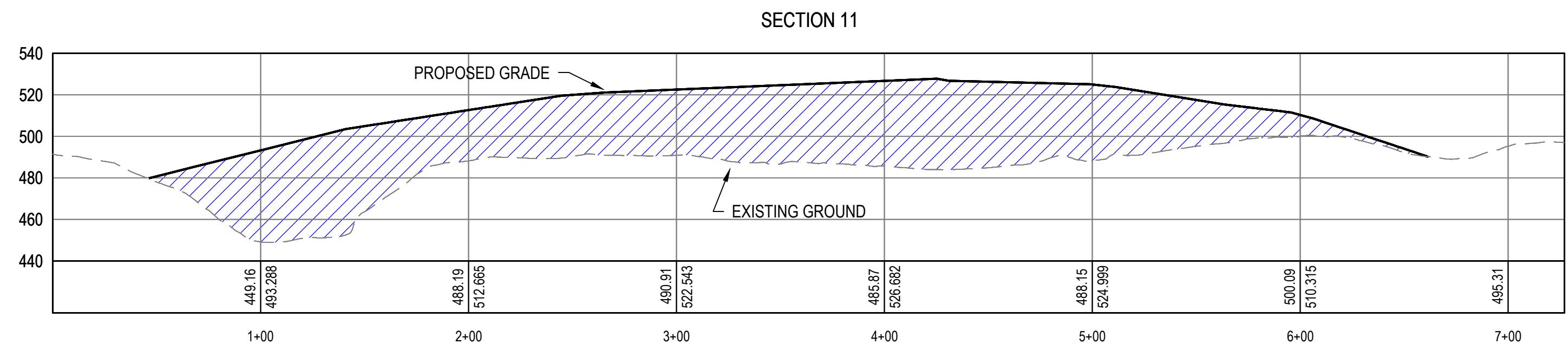
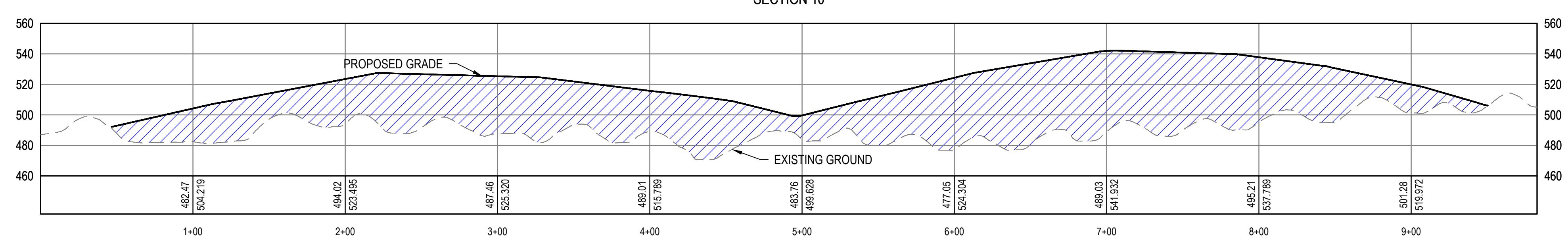
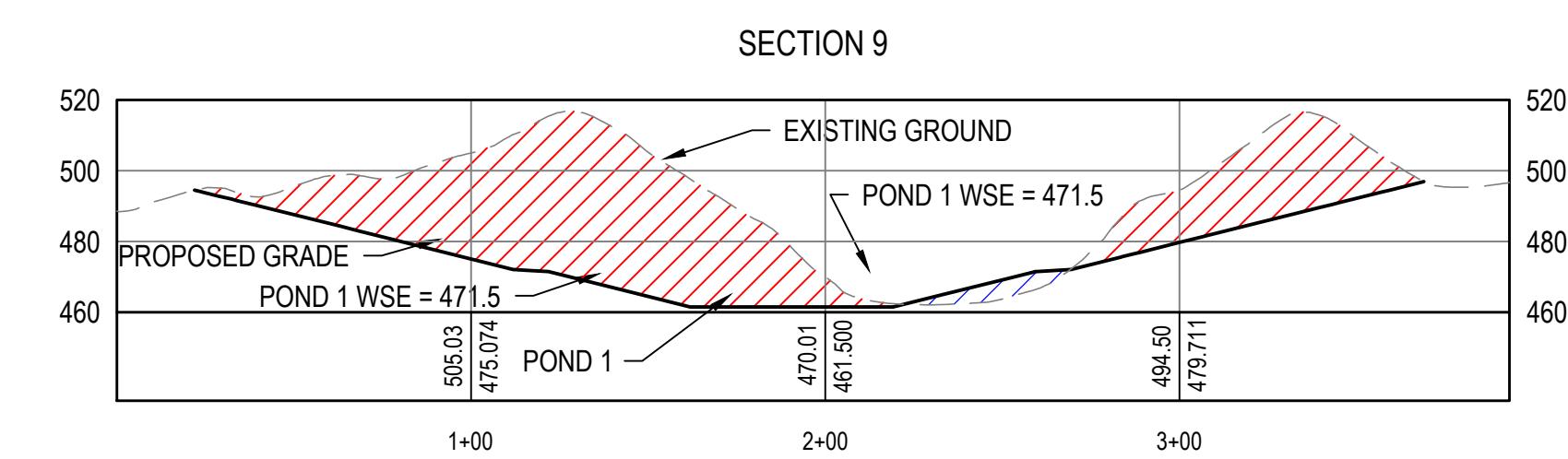
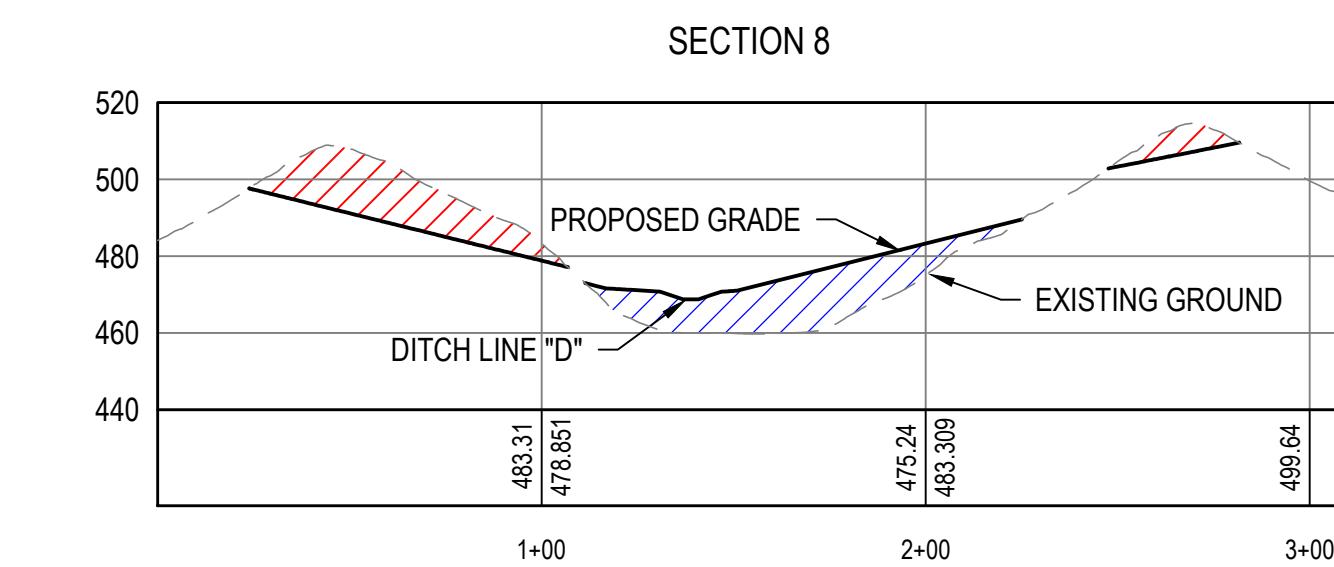
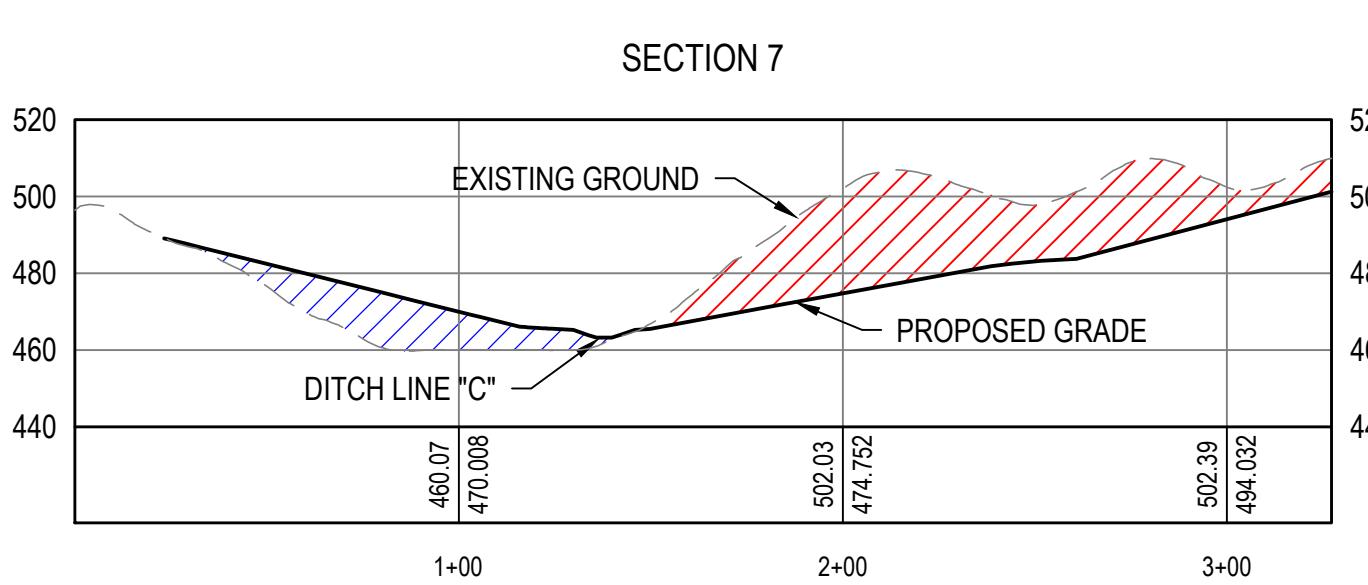
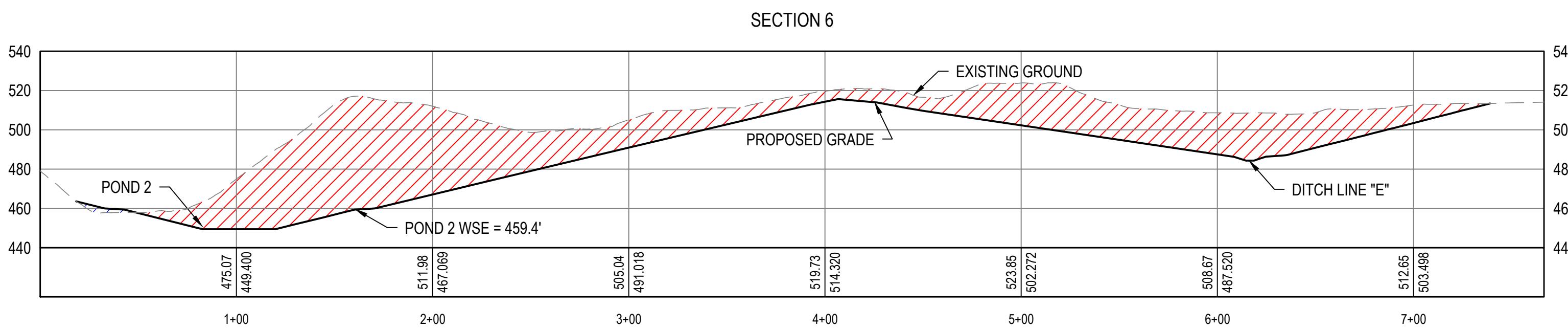


REVISIONS	
DATE	DESCRIPTION
9/17/2024	REVISED EXISTING GROUND MODEL AND CONTOURS, CUT/FILL ADJUSTMENT AREA, GRADING LIMITS, AND POND 1. ADDED SHT. 12.

LEGEND  
 CUT AREA  
 FILL AREA

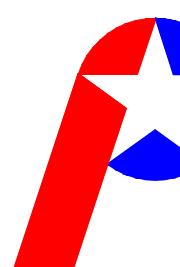
0 25 50 100

 <p>Patriot Engineering &amp; Environmental, Inc.</p>	 <p>RECOMMENDED FOR APPROVAL: <u>Kenneth Stephen Bosar</u> 9/18/2024 DATE</p>	<p>DATE MADE 9/22/2023</p>	<p>Sections</p>			<p>SCALE 1" = 50'</p>	<p>SHEET 8 of 12</p>
			DESIGNED BY K.S.B.	DRAWN BY J.D.D.	DATE REVISED 9/17/2024		
<p>STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION</p>						PROJECT E008-334	SITE 1835



REVISIONS	
DATE	DESCRIPTION
9/17/2024	REVISED EXISTING GROUND MODEL AND CONTOURS, CUT/FILL ADJUSTMENT AREA, GRADING LIMITS, AND POND 1. ADDED SHT. 12.
LEGEND	
	CUT AREA
	FILL AREA

0 25 50 100



Patriot Engineering &  
Environmental, Inc.



RECOMMENDED  
FOR APPROVAL:

*Kenneth S. Bosar*  
9/18/2024  
DATE

DATE MADE  
9/22/2023

DESIGNED BY  
K.S.B.

DRAWN BY  
J.D.D.

DATE REVISED  
9/17/2024

Sections

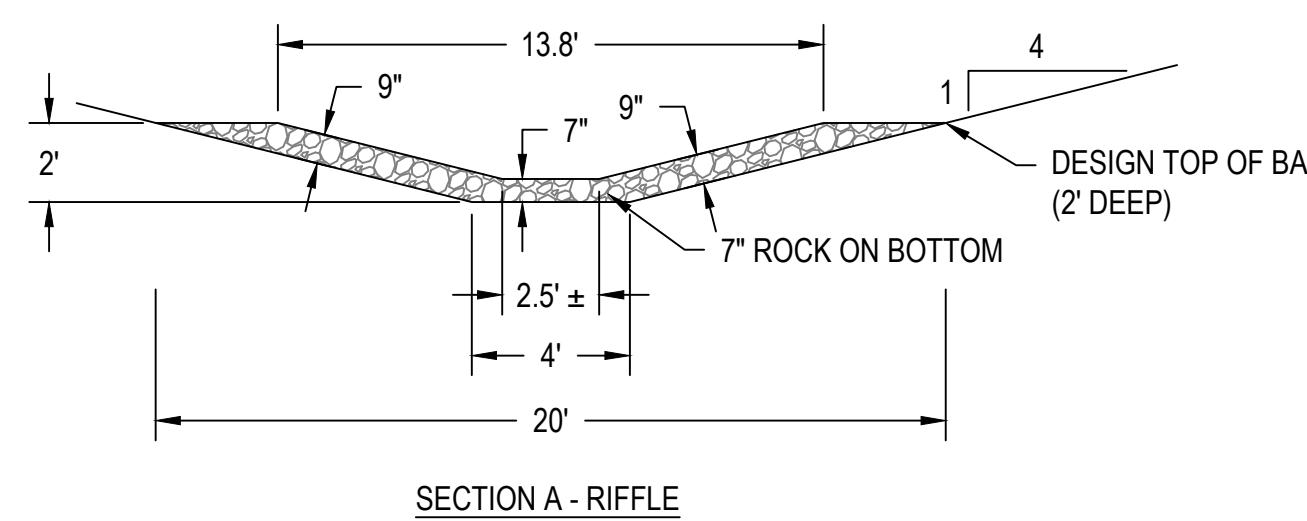
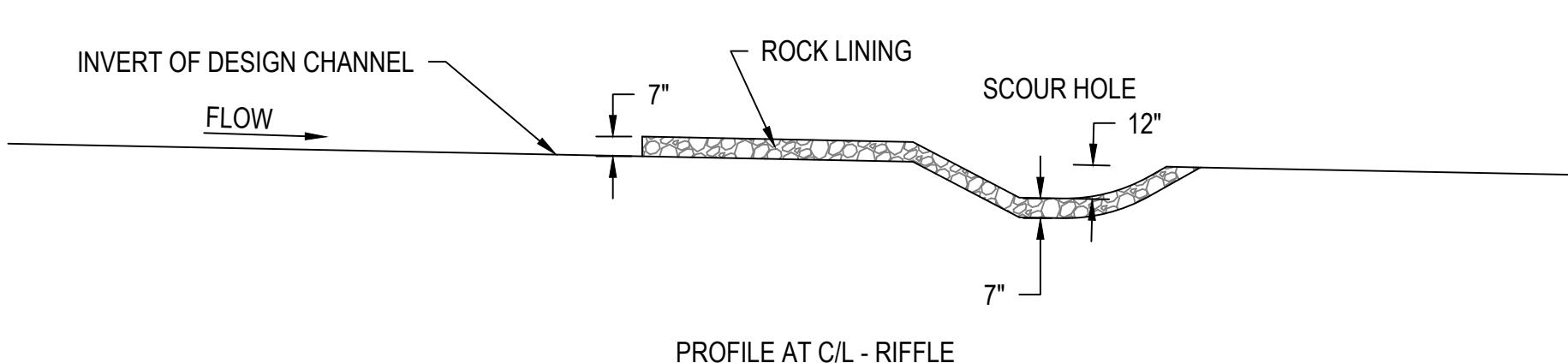
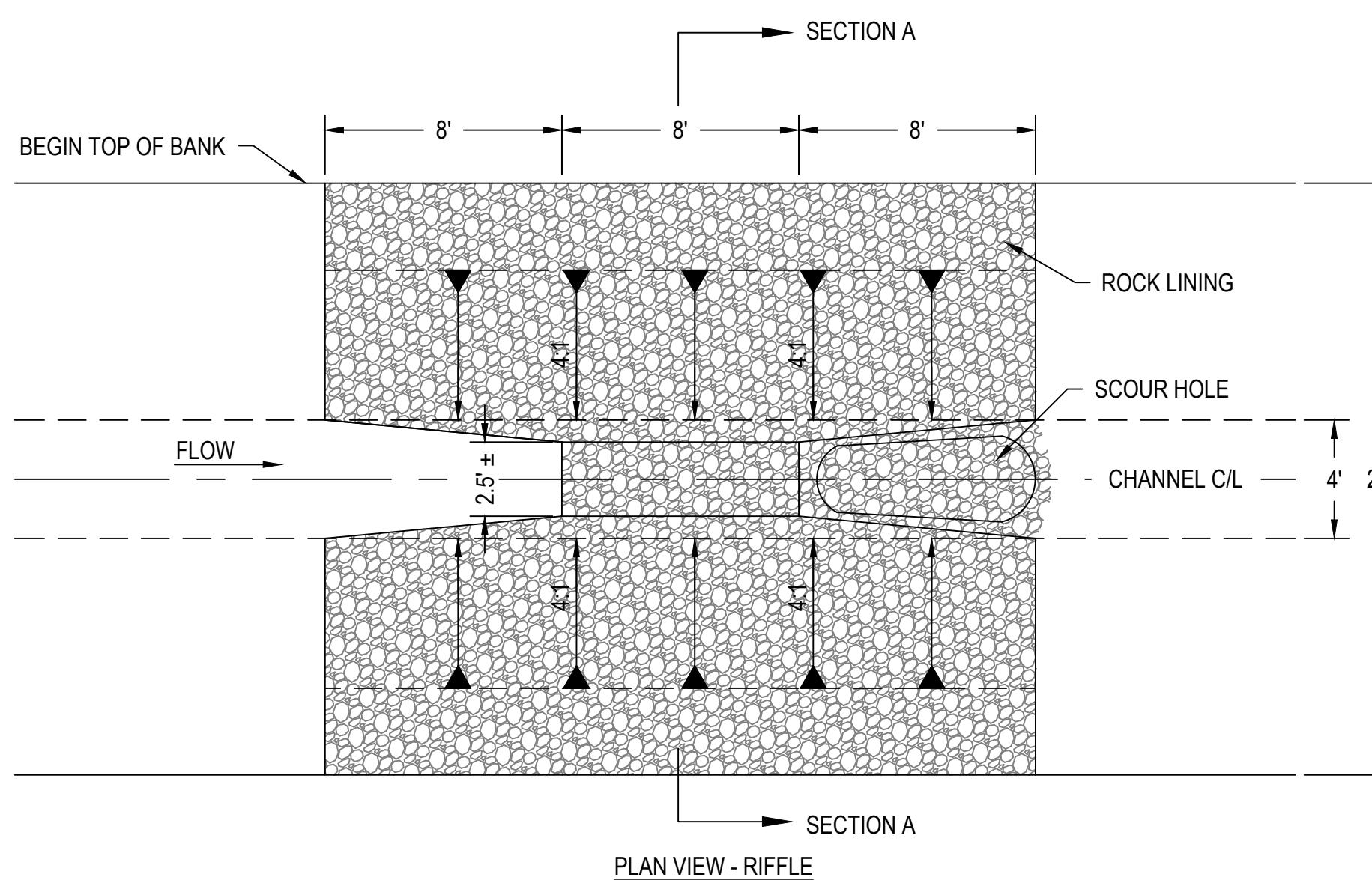
STATE OF INDIANA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF RECLAMATION

SCALE  
1" = 50'  
PROJECT  
E008-334

SHEET  
9 of 12  
SITE  
1835

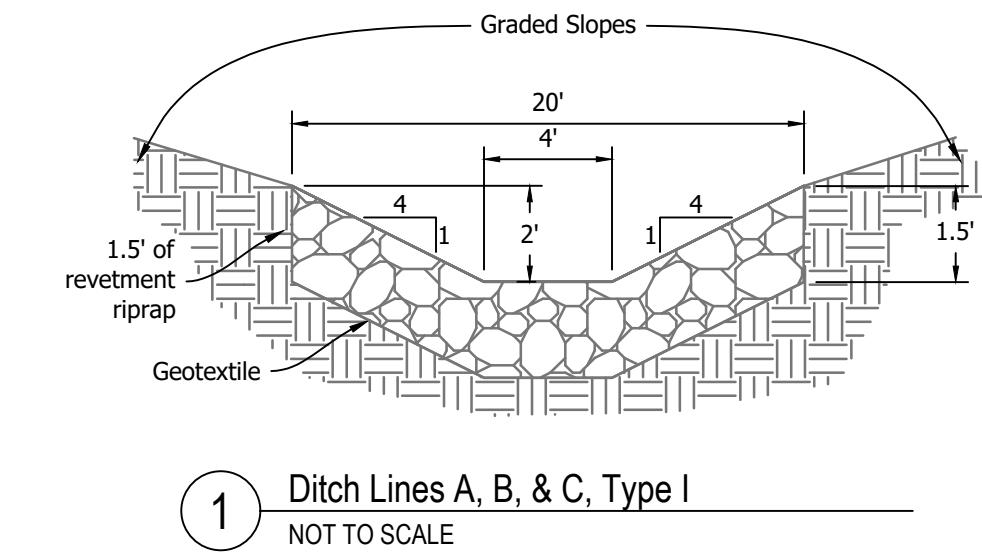


 <b>Patriot Engineering &amp; Environmental, Inc.</b>		RECOMMENDED FOR APPROVAL:	<i>K. Bosa</i> 9/18/2024	DATE MADE	9/22/2023	<b>Revegetation Plan</b> STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION		SCALE	1" = 150'	SHEET	10 of 12
		DESIGNED BY	K.S.B.	DRAWN BY	J.D.D.	DATE REVISED	9/17/2024	PROJECT	E008-334	SITE	1835

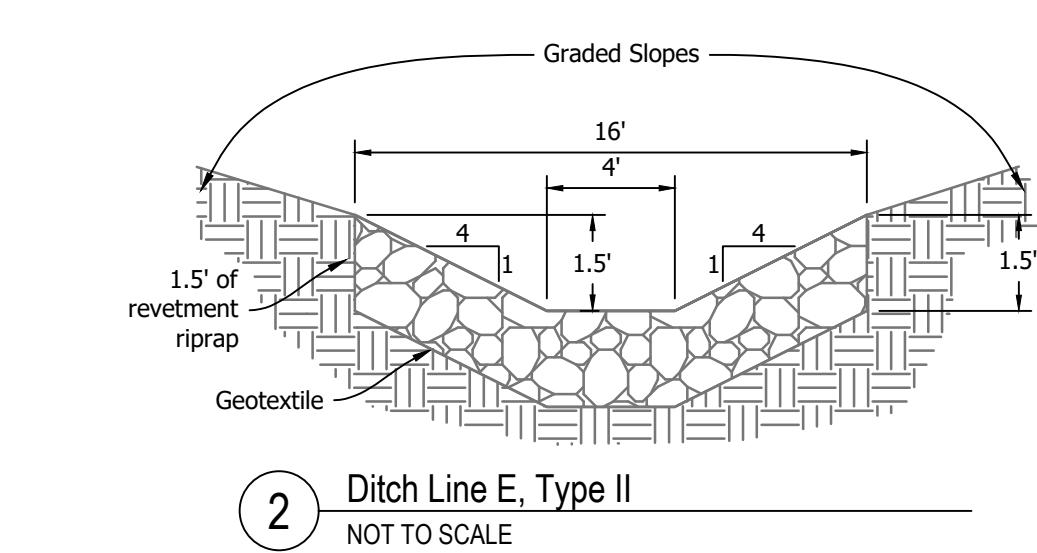


NOTE:  
ROCK LINING SHALL BE UNIFORM A RIPRAP IN ACCORDANCE  
WITH AML PROGRAM - STANDARD SPECIFICATION 601.03

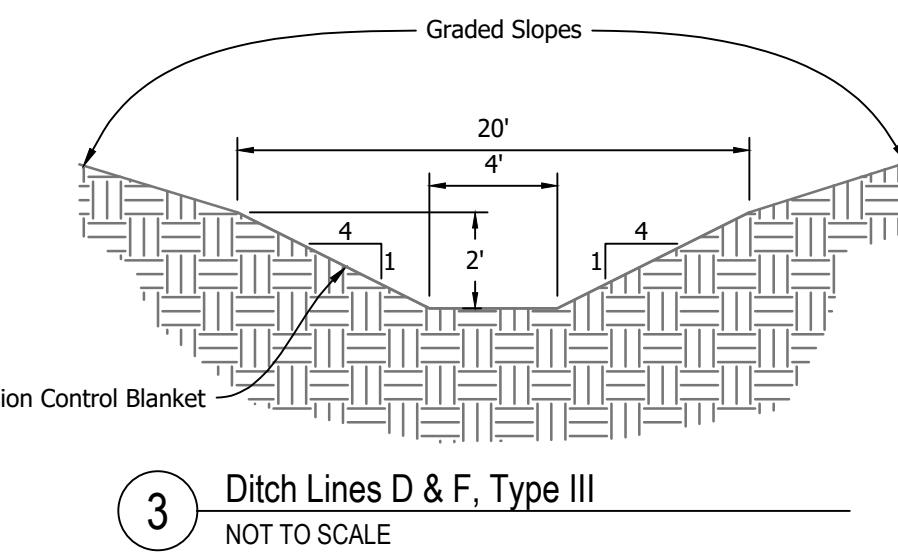
8 RIFF  
1" = 5



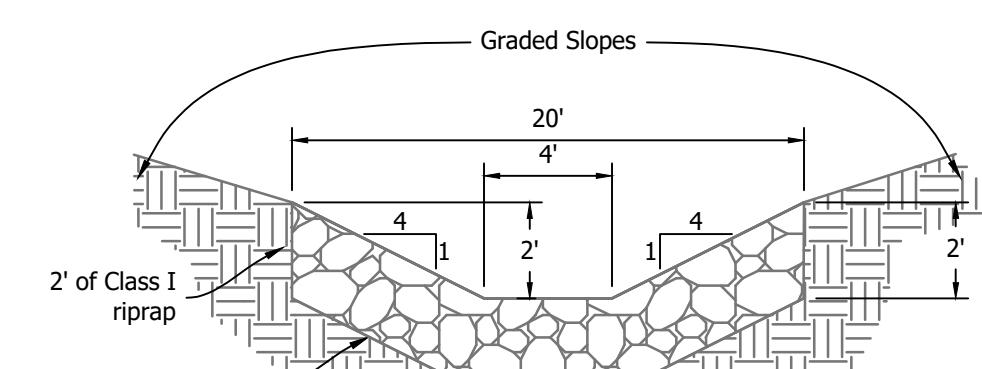
1 Ditch Lines A, B, & C, Type I  
NOT TO SCALE



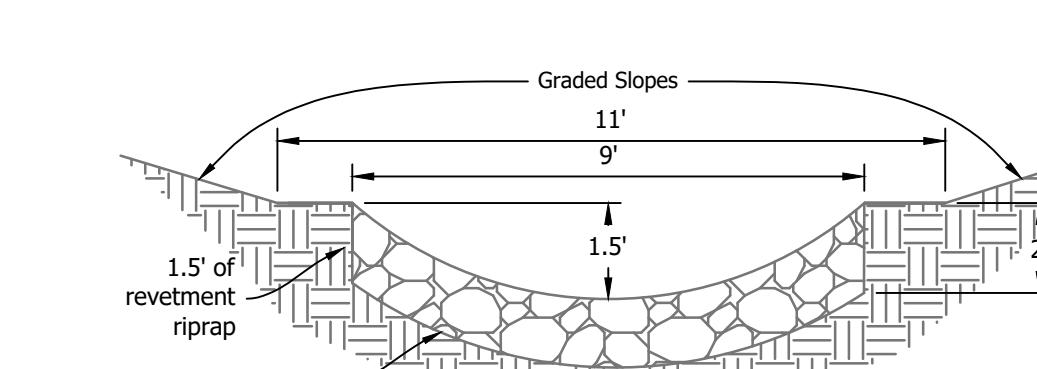
2 Ditch Line E, Type  
NOT TO SCALE



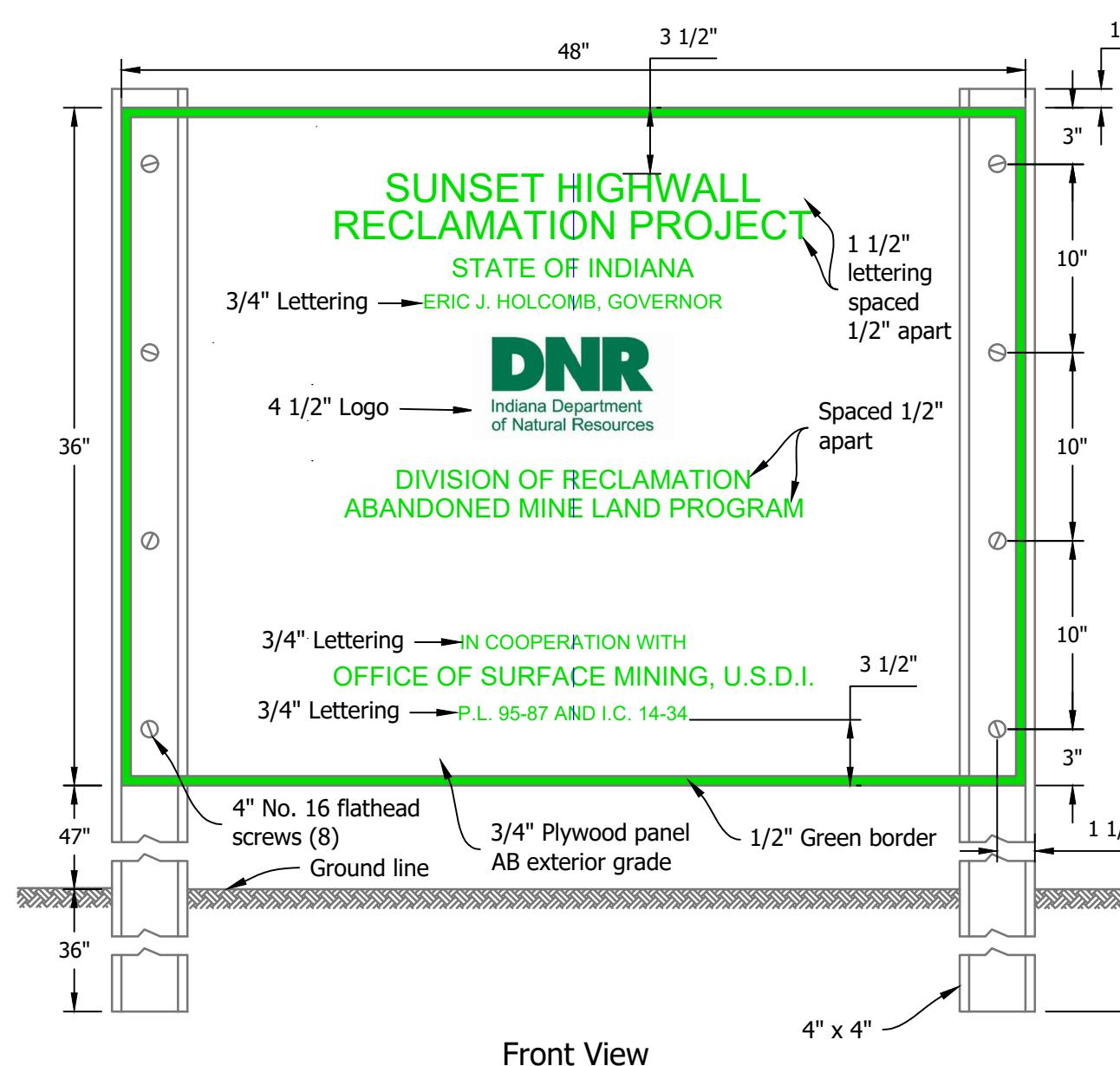
3 Ditch Lines D & F, Type III  
NOT TO SCALE



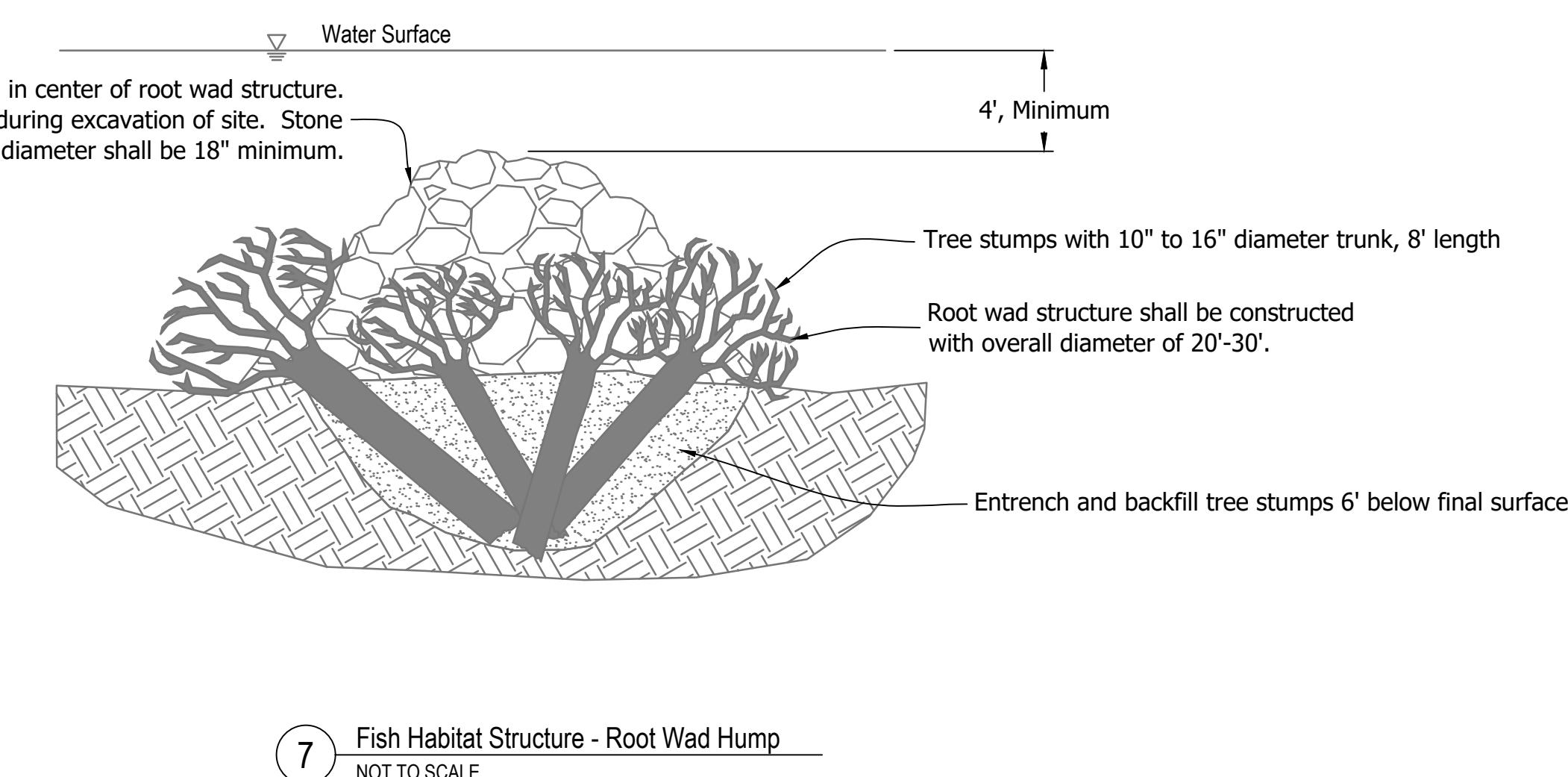
4 Pond Outlet Structures 1 & 2  
NOT TO SCALE



5 Ditch Line G & H, Type I  
NOT TO SCALE

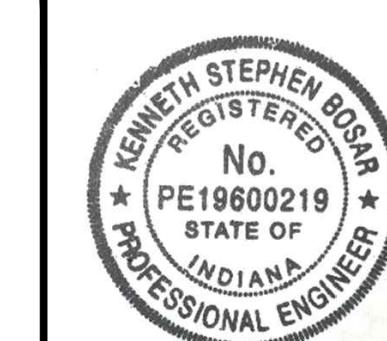


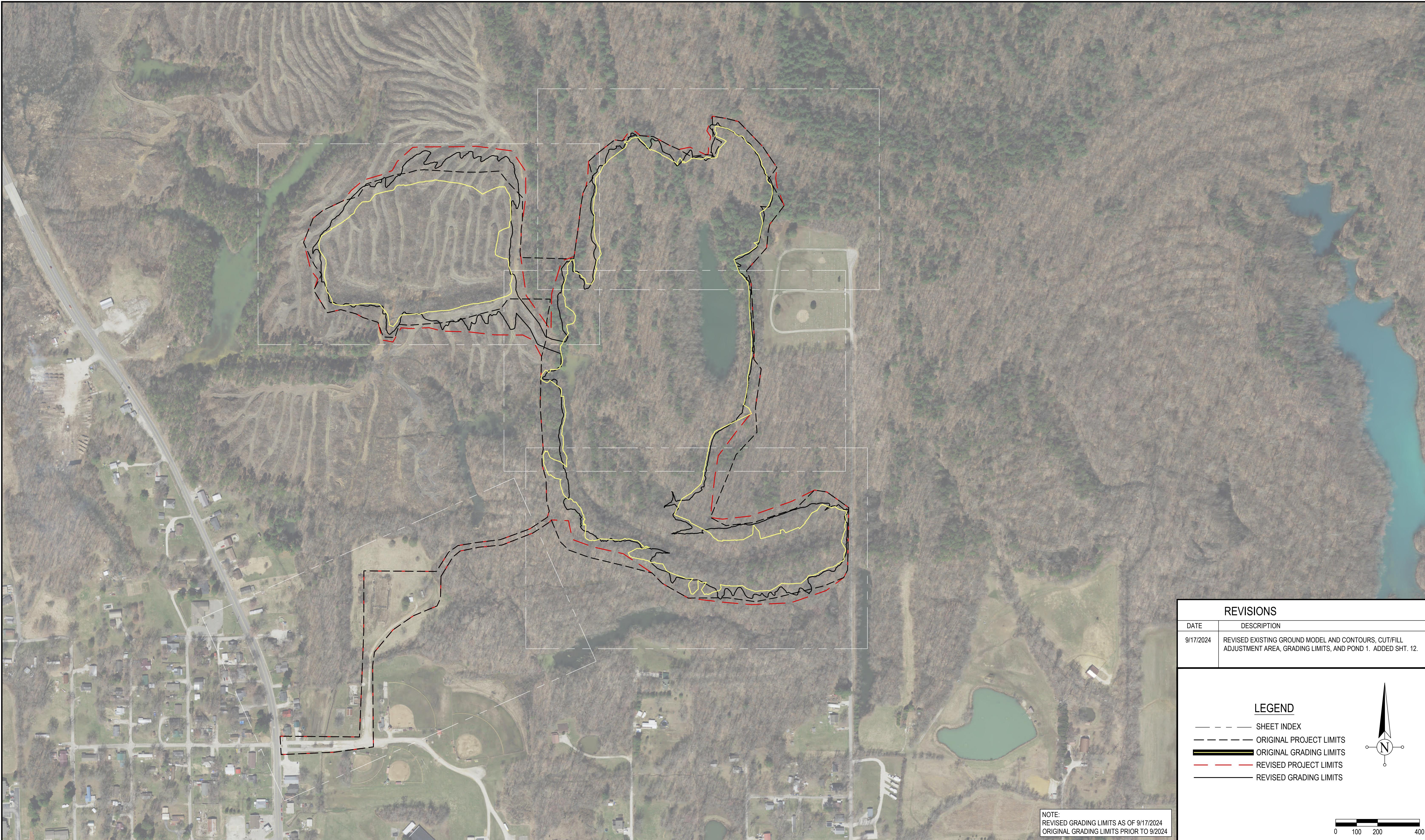
## 6 Project Sign

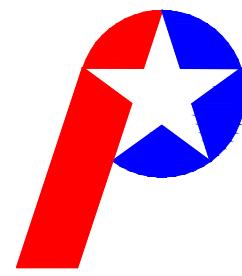


## 7 Fish Habitat Structure - Root Wad Hump NOT TO SCALE

REVISIONS	
DATE	DESCRIPTION
6/04/2024	ADDED RIFFLE DETAIL 8





 <p>Patriot Engineering &amp; Environmental, Inc.</p>		RECOMMENDED FOR APPROVAL:	<i>Ken Bubar</i> 9/18/2024 DATE	DATE MADE	Revised Project & Grading Limits	SCALE	SHEET	
		DESIGNED BY	K.S.B.	DRAWN BY	J.D.D.	1" = 200'	12 of 12	
<p>DATE REVISED</p> <p>9/17/2023</p> <p>STATE OF INDIANA DEPARTMENT OF NATURAL RESOURCES DIVISION OF RECLAMATION</p>						PROJECT	SITE	
<p>E008-334</p>						1835		