



Indiana Department of Environmental Management
Office of Water Quality
Waterways Section

Publication Date:
September 23, 2026

IDEM Permit Number:
WQC001516

PUBLIC NOTICE

Closing Date:
October 14, 2026

Corps of Engineers ID Number:
LRE-2026-00519-143-N26

To all interested parties:

This letter shall serve as a formal notice of the receipt of an application for Section 401 Water Quality Certification by the Indiana Department of Environmental Management (IDEM). The purpose of the notice is to inform the public of active applications submitted for water quality certification under Section 401 of the Clean Water Act (33 U.S.C. § 1341) and to solicit comments and information on any impacts to water quality related to the proposed project. IDEM will evaluate whether the project complies with Indiana's water quality standards as set forth at 327 IAC 2.

- | | | | |
|--------------------------------|--|------------------|---|
| 1. Applicant: | Greg Hall
Chapman Lakes Foundation Inc.
P.O. Box 387, Suite 2
Leesburg, IN 46538 | 2. Agent: | Ross St. Clair
SWCA Environmental Consultants
18853 US-12, Suite 2
New Buffalo, IN 49117 |
| 3. Project Location: | Latitude 41.283779, Longitude -85.766014
3328 N 400 E, Warsaw, Kosciusko County | | |
| 4. Affected Waterbody: | Crooked Creek | | |
| 5. Project Description: | Restoration project to improve water quality, stabilize stream channel, and enhance aquatic and riparian habitat. Approximately 625 linear feet of Crooked Creek will be permanently impacted from the placement of rock-and-wood composite for bank stabilization. Disturbed areas will be stabilized and revegetated with native species upon completion of construction.
For additional information visit the Regulatory ePortal at: https://waterquality.idem.in.gov . | | |

- Comment Period:** Any person or entity who wishes to submit comments or information relevant to the aforementioned project may do so by the closing date noted above. Only comments or information related to water quality or potential impacts of the project on water quality can be considered by IDEM in the water quality certification review process.
- Public Hearing:** Any person may submit a written request that a public hearing be held to consider issues related to water quality in connection with the project detailed in this notice. The request for a hearing should be submitted within the comment period to be considered timely. The request should also state the reason for the public hearing as specifically as possible to assist IDEM in determining whether a public hearing is warranted.
- Questions?** Submit requests for additional information and written comments to WaterwaysComments@idem.IN.gov. In the subject line of the email, please include the IDEM ID Number listed in the top right corner of the first page of this public notice. Indicate if you wish to receive a copy of IDEM's final decision. Comments and inquiries may also be forwarded to -

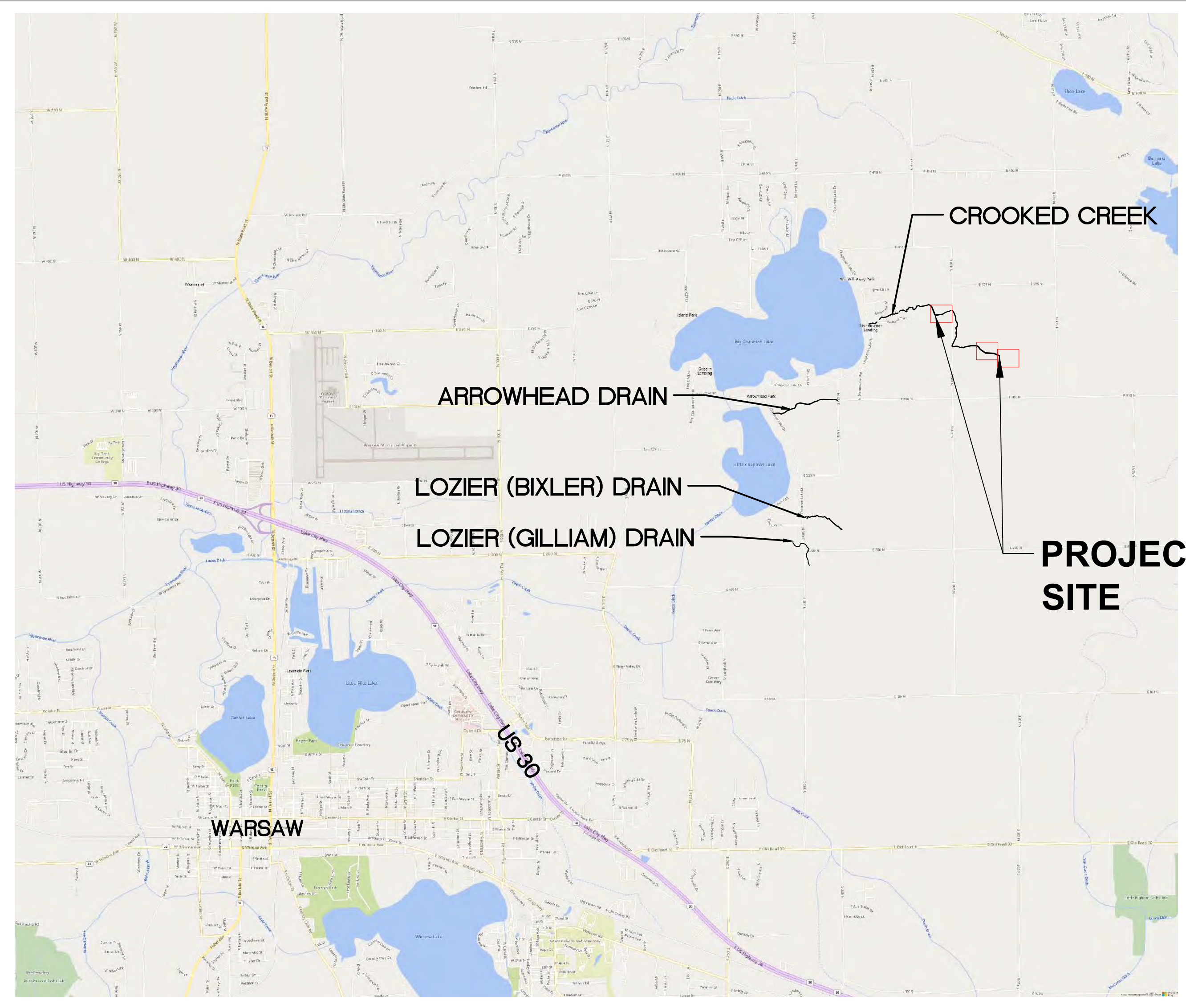
Office of Water Quality
Indiana Department of Environmental Management
100 North Senate Avenue, IGCN 1255
Indianapolis, Indiana 46204-2251

CROOKED CREEK RESTORATION

Chapman Lakes Foundation

Sheet List Table

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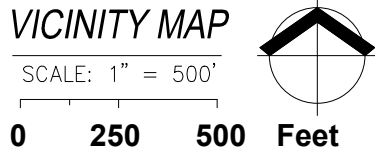
TITLE SHEET AND SHEET INDEX
CROOKED CREEK RESTORATION
CHAPMAN LAKES FOUNDATION
KOSCIUSKO COUNTY, INDIANA

DATE	DESCRIPTION	BY

DATE	JUNE 2026
DRAWN	
DESIGNED	RAS
CHECKED	
PROJECT #	

SHEET TITLE	TITLE SHEET
SHEET NUMBER	

1
LAND USE #



LEGEND
--- SHEET EXTENTS

PREPARED BY:
SWCA
ENVIRONMENTAL CONSULTANTS

PREPARED FOR:
TWF
THE WATERSHED FOUNDATION

EXISTING CONDITIONS OVERVIEW AND SHEET INDEX

Crooked Creek Headwaters Restoration

The Watershed Foundation

KOSCIUSKO COUNTY, INDIANA

#	DATE	DESCRIPTION	BY

DATE | JUNE 2026

DRAWN | JLH

DESIGNED | RAS

CHECKED |

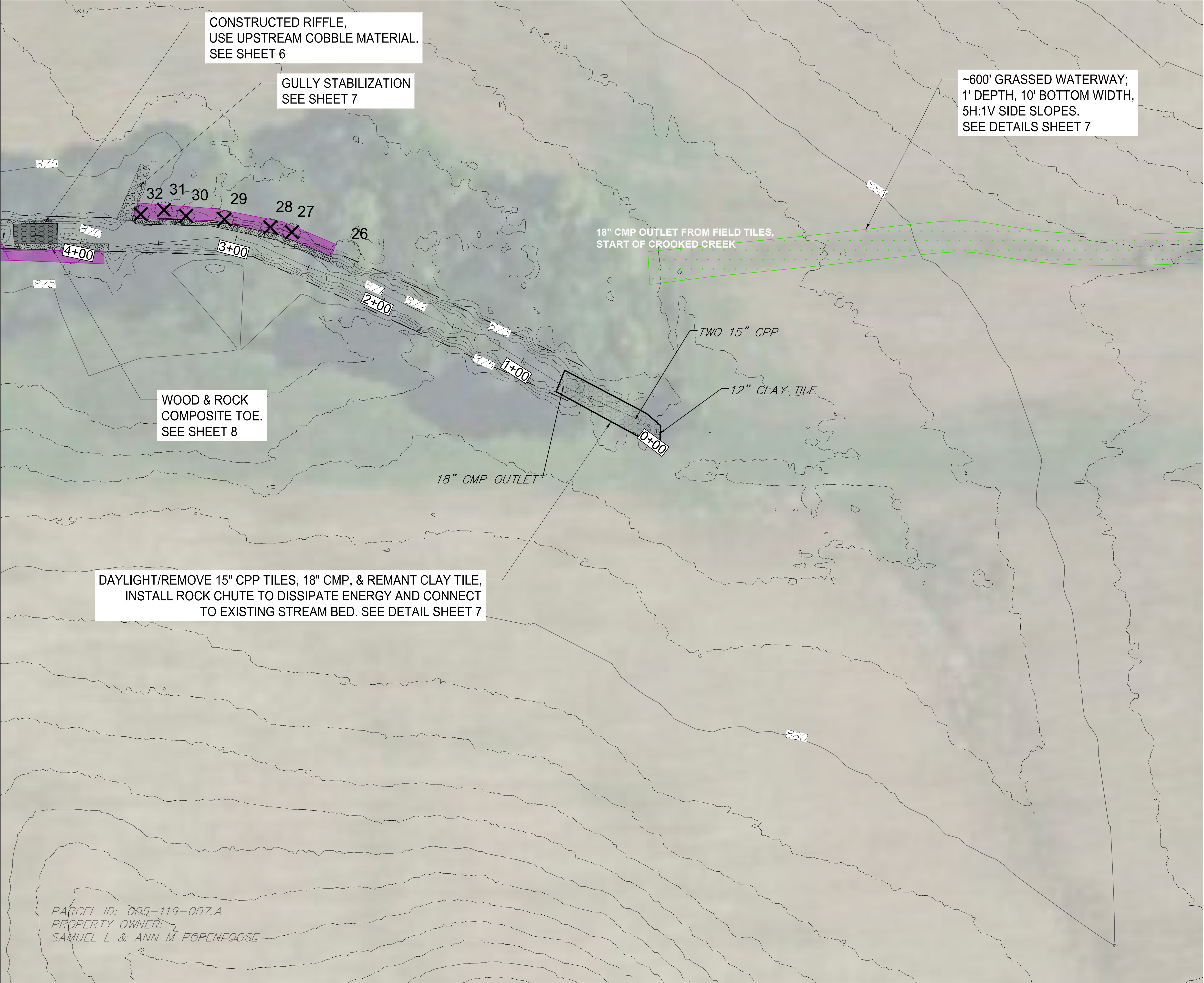
PROJECT # |

SHEET TITLE
EXISTING CONDITIONS

SHEET NUMBER
2

LAND USE #

PERMIT PLANS



CONSTRUCTED RIFFLE,
USE UPSTREAM COBBLE MATERIAL.
SEE SHEET 6

GULLY STABILIZATION
SEE SHEET 7

~600' GRASSED WATERWAY;
1' DEPTH, 10' BOTTOM WIDTH,
5H:1V SIDE SLOPES.
SEE DETAILS SHEET 7

WOOD & ROCK
COMPOSITE TOE.
SEE SHEET 8

DAYLIGHT/REMOVE 15" CPP TILES, 18" CMP, & REMANT CLAY TILE,
INSTALL ROCK CHUTE TO DISSIPATE ENERGY AND CONNECT
TO EXISTING STREAM BED. SEE DETAIL SHEET 7

PARCEL ID: 005-119-007.A
PROPERTY OWNER:
SAMUEL L & ANN M POPENFOOSE

VICINITY MAP
SCALE: 1" = 30'
0 15 30 Feet

LEGEND

- APPOX. TOP OF BANK
- GRASSED WATERWAY
- ROCK LINED GULLY
- BANK GRADING
- STONE/WOOD TOE
- CONSTRUCTED RIFFLE
- POTENTIAL ACCESS ROUTE
- EXISTING TREES
- TREE TO BE REMOVED
- J-HOOK
- BOULDER GLIDE STRUCTURE

TREE ID	DBH (in)	SPECIES	TO BE REMOVED (X)
26	8 STEMMED	HACKBERRY	
27	15	SILVER MAPLE	X
28	12	SILVER MAPLE	X
29	15	SILVER MAPLE	X
30	8	SILVER MAPLE	X
31	14	SILVER MAPLE	X
32	12	SILVER MAPLE	X

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PREPARED FOR:
TWF
THE WATERSHED
FOUNDATION

CROOKED CREEK HEADWATERS PROPOSED CONDITIONS
Crooked Creek Headwaters Restoration
The Watershed Foundation
KOSCIUSKO COUNTY, INDIANA

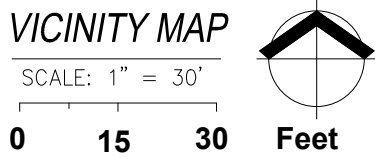
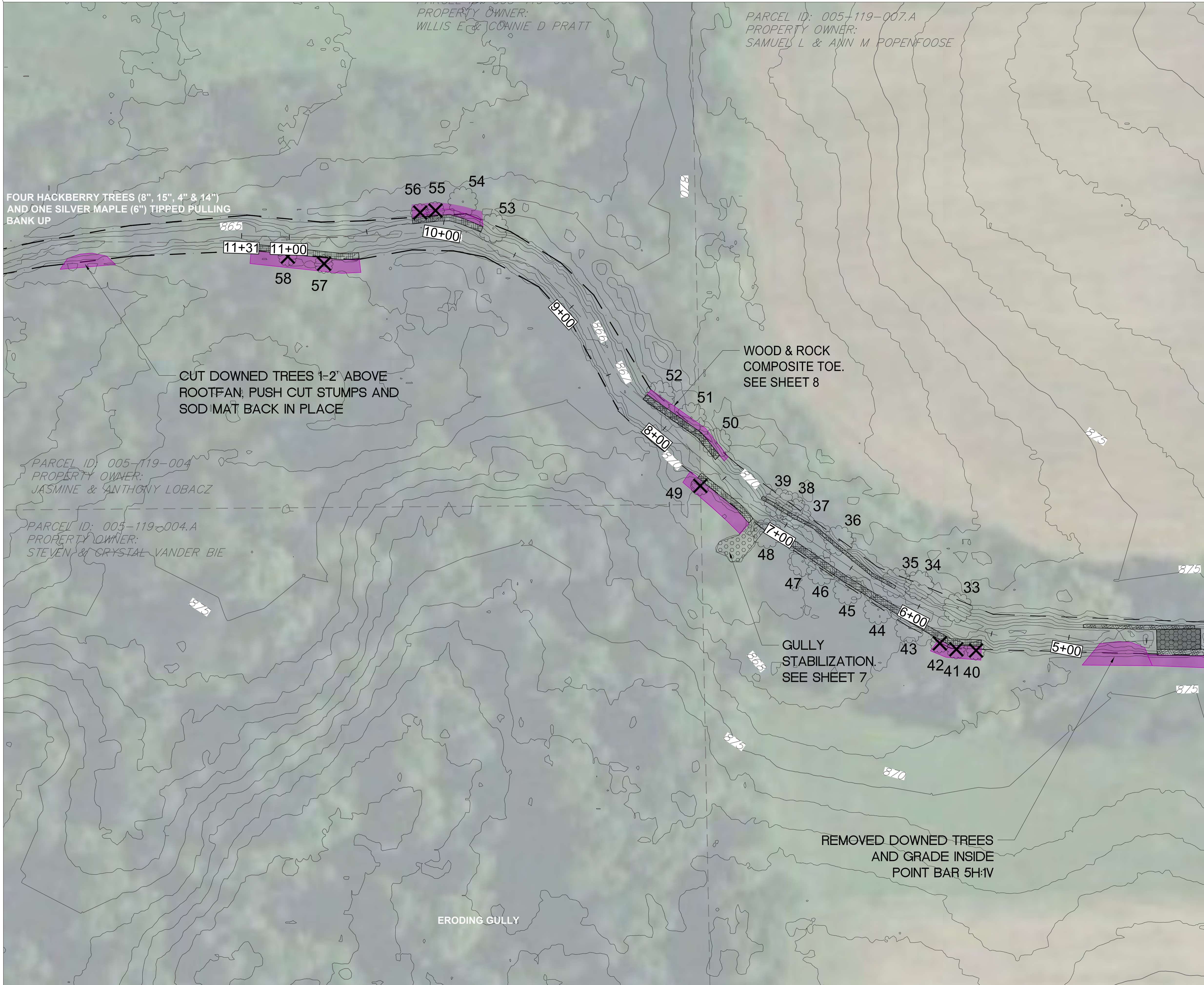
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SHEET TITLE
PROPOSED CONDITIONS
SHEET NUMBER

3
LAND USE #

PERMIT PLANS



- LEGEND
- APPOX. TOP OF BANK (NOT SURVEYED)
 - GRASSSED WATERWAY
 - ROCK LINED GULLY
 - BANK GRADING
 - STONE/WOOD TOE
 - CONSTRUCTED RIFFLE
 - POTENTIAL ACCESS ROUTE
 - PARCEL LINE
 - EXISTING TREES
 - TREE TO BE REMOVED
 - J-HOOK

TRF ID	DBH (in)	SPECIES	TO BE REMOVED (X)
33	24, 30	COTTONWOOD	
34	30	COTTONWOOD	
35	14	HACKBERRY	
36	24	HACKBERRY	
37	17	HACKBERRY	
38	4	HACKBERRY	
39	8	HACKBERRY	
40	12	SILVER MAPLE	X
41	12	SILVER MAPLE	X
42	16	CHERRY	X
43	18, 8	HACKBERRY	
44	7	SILVER MAPLE	
45	8	SILVER MAPLE	
46	5	SILVER MAPLE	
47	8	SILVER MAPLE	
48	12, 4	SILVER MAPLE	
49	14, 6	BASSWOOD	X
50	6	SILVER MAPLE	
51	6	SILVER MAPLE	
52	6	SILVER MAPLE	
53	34	COTTONWOOD	
54	28	CHERRY	
55	8	SILVER MAPLE	X
56	5	SILVER MAPLE	X
57	6	HACKBERRY	X
58	6	SILVER MAPLE	X

CROOKED CREEK HEADWATERS PROPOSED CONDITIONS

Crooked Creek Headwaters Restoration

The Watershed Foundation

KOSCIUSKO COUNTY, INDIANA

#	DATE	DESCRIPTION

PERMIT PLANS

DATE | JUNE 2026

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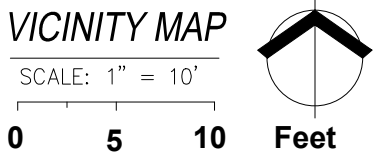
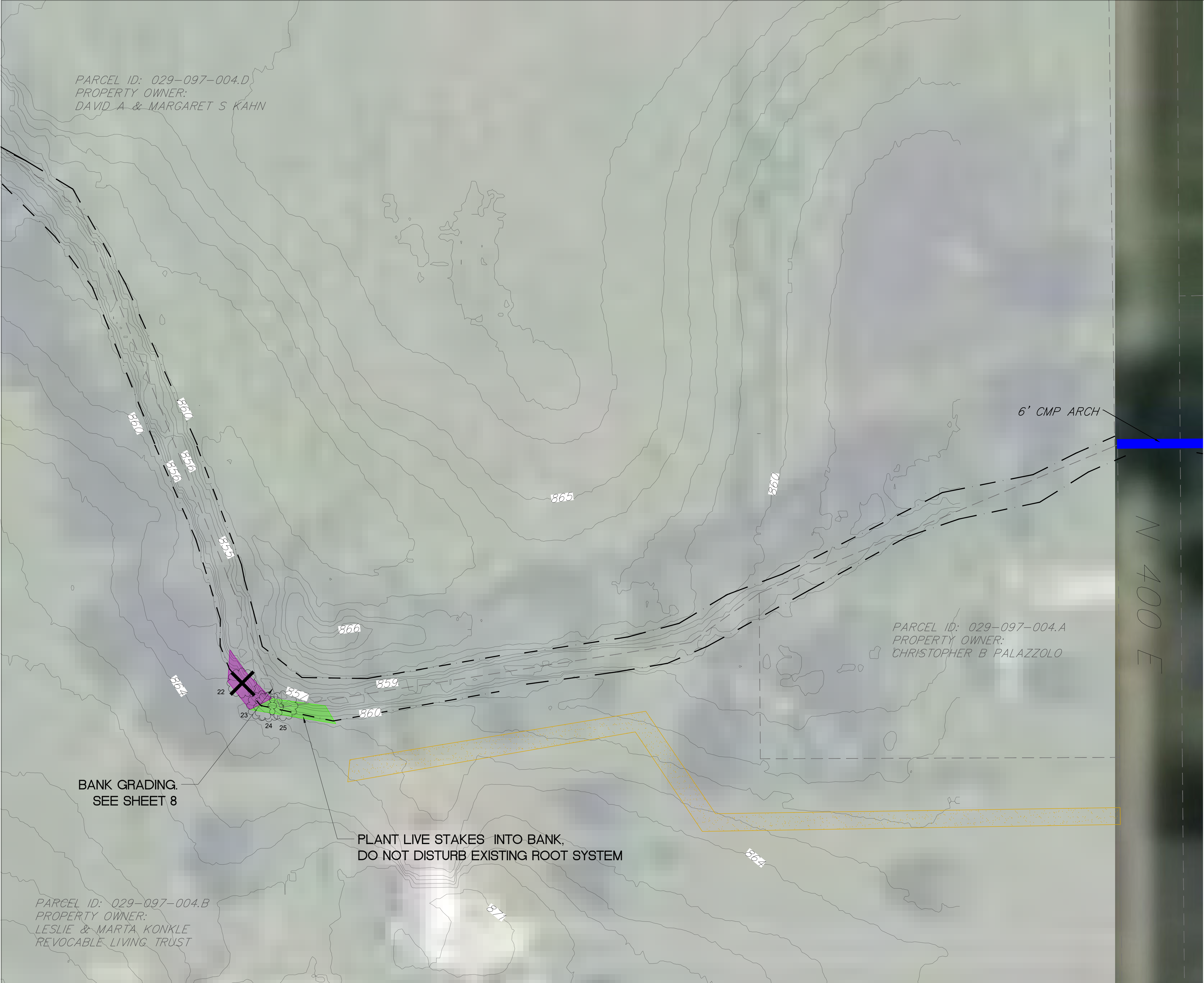
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PROJECT # |

SHEET TITLE
PROPOSED CONDITIONS

SHEET NUMBER
4

LAND USE #



LEGEND

- BANK GRADING
- LIVE STAKE PLANTING
- APPROX. TOP OF BANK
- PARCEL LINE
- ACCESS ROUTE
- EXISTING TREE
- TREE TO BE REMOVED

TREE ID	DBH (in)	SPECIES	TO BE REMOVED (X)
22	12	HACBERRY	X
23	12, 12, 14	THREE STEMMED	
24	8, 14		
25	24, 10		

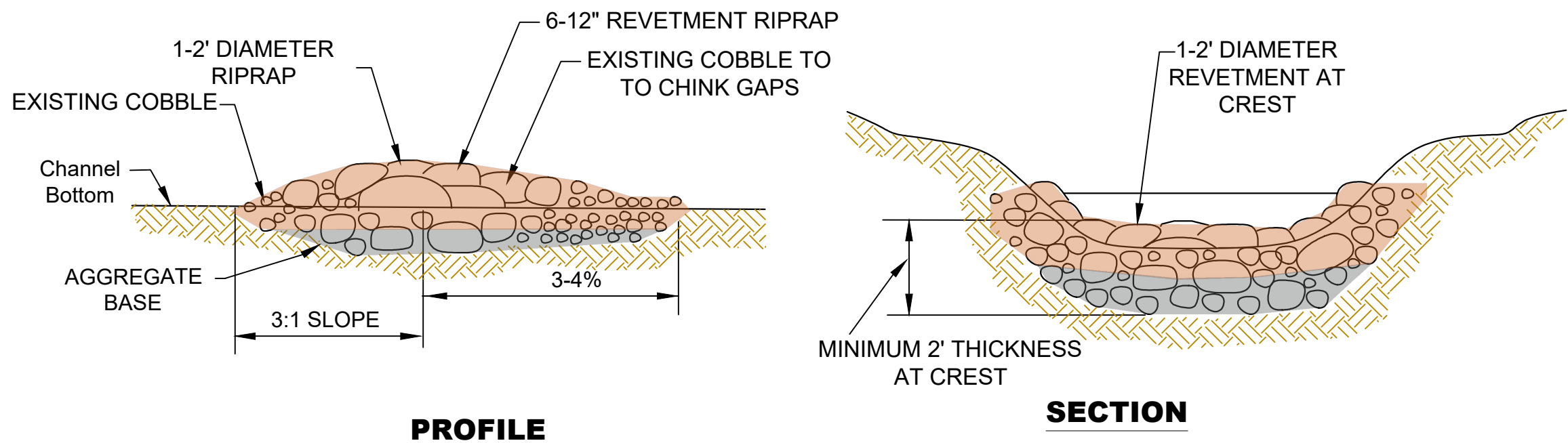
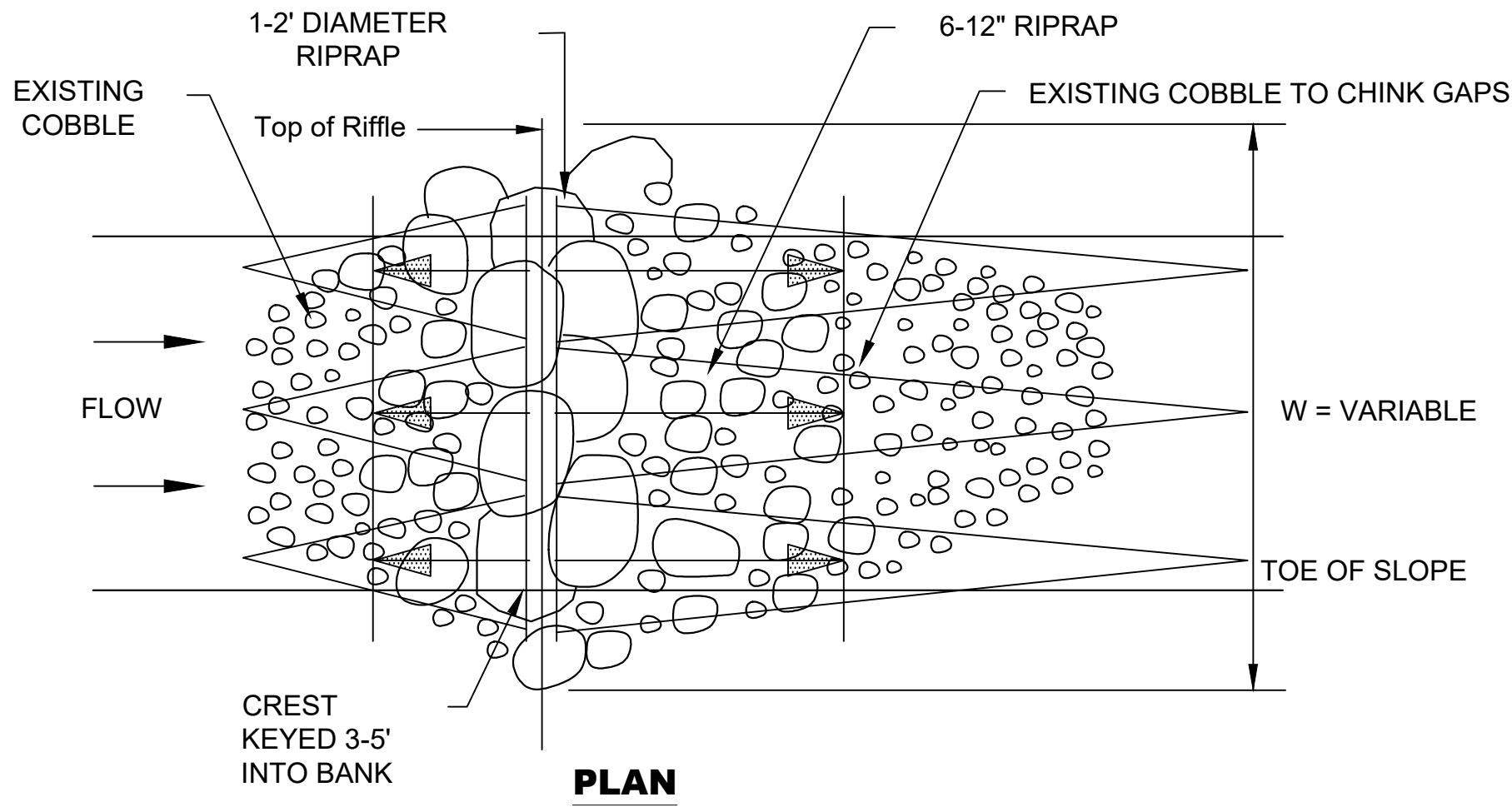
DATE	DESCRIPTION

DATE	JUNE 2026
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PROJECT #	

SHEET TITLE	PROPOSED CONDITIONS
SHEET NUMBER	5

#	DATE	DESCRIPTION

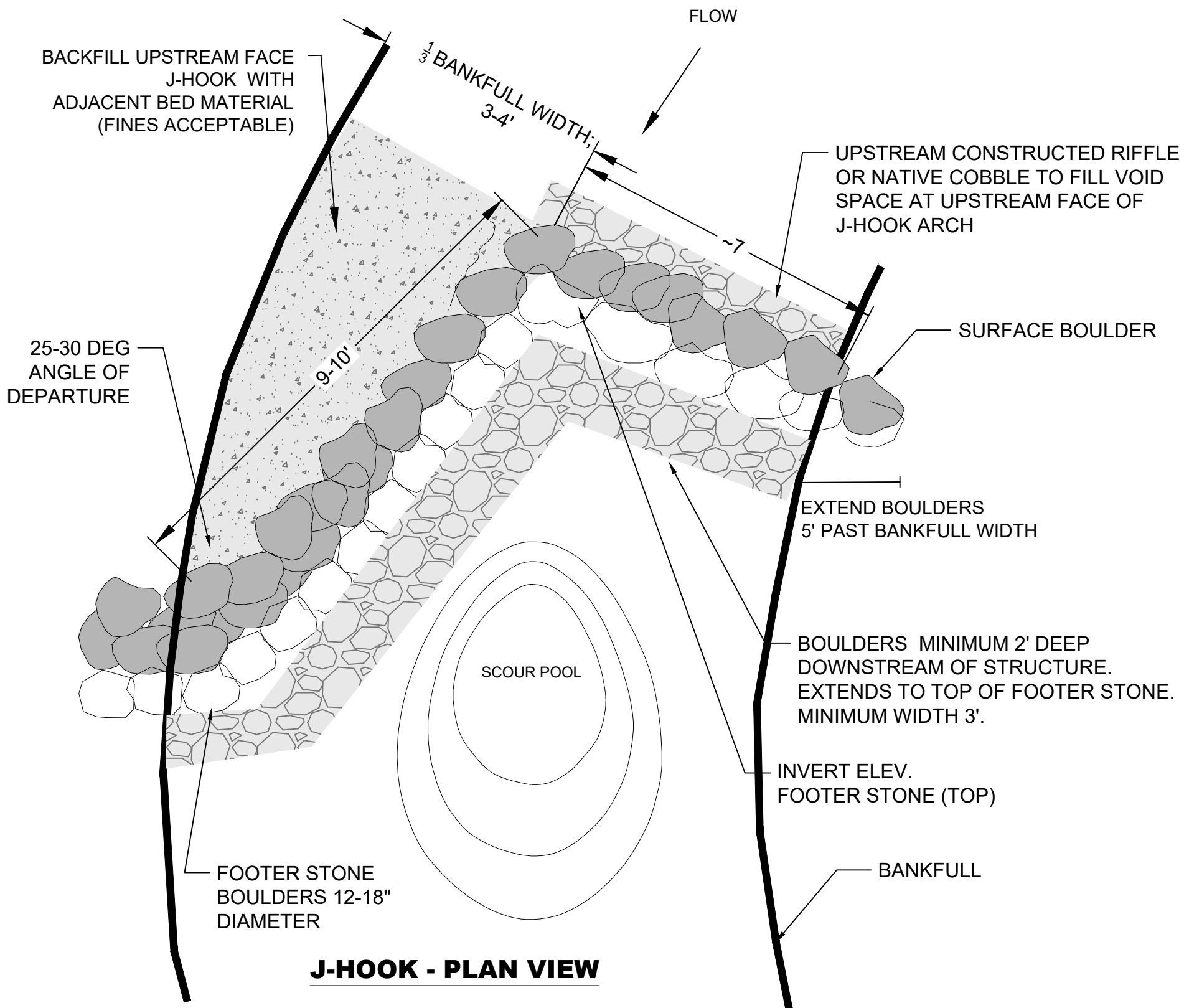
DATE	JUNE 2026
DRAWN	JLH
DESIGNED	RAS
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PROJECT #	
SHEET TITLE	DETAILS
SHEET NUMBER	6
LAND USE #	



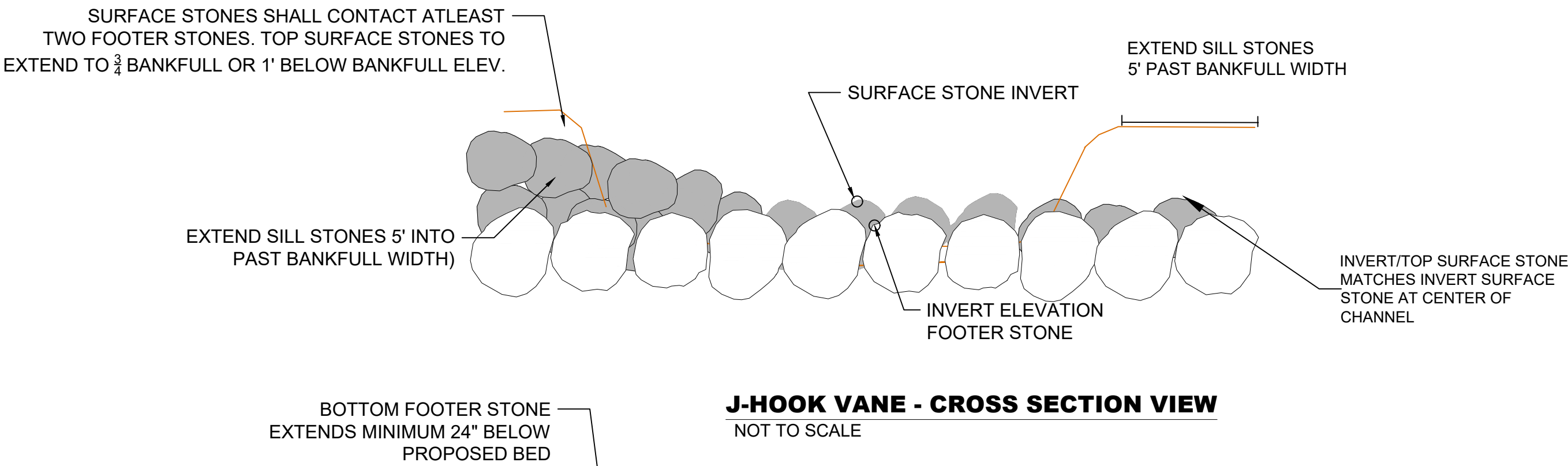
CONSTRUCTED RIFFLE DETAL
NOT TO SCALE



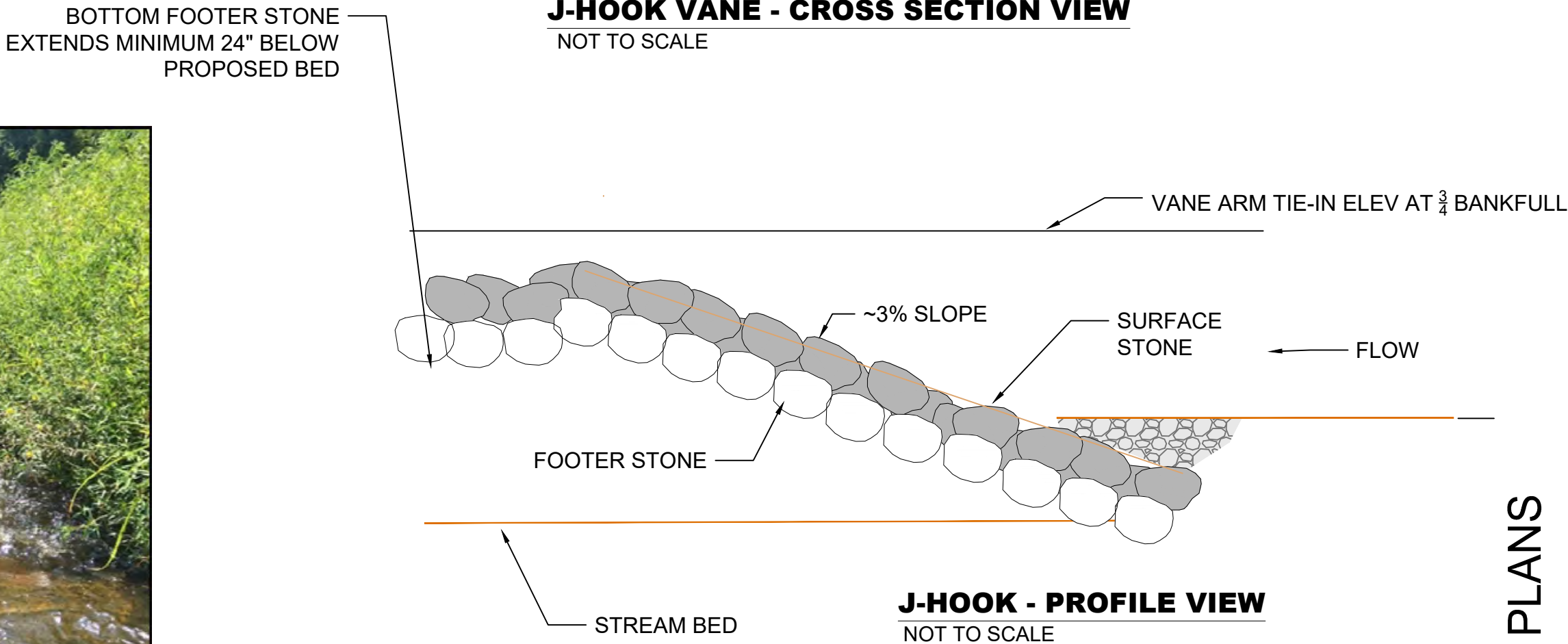
CONSTRUCTED RIFFLE EXAMPLE PHOTO



J-HOOK - PLAN VIEW



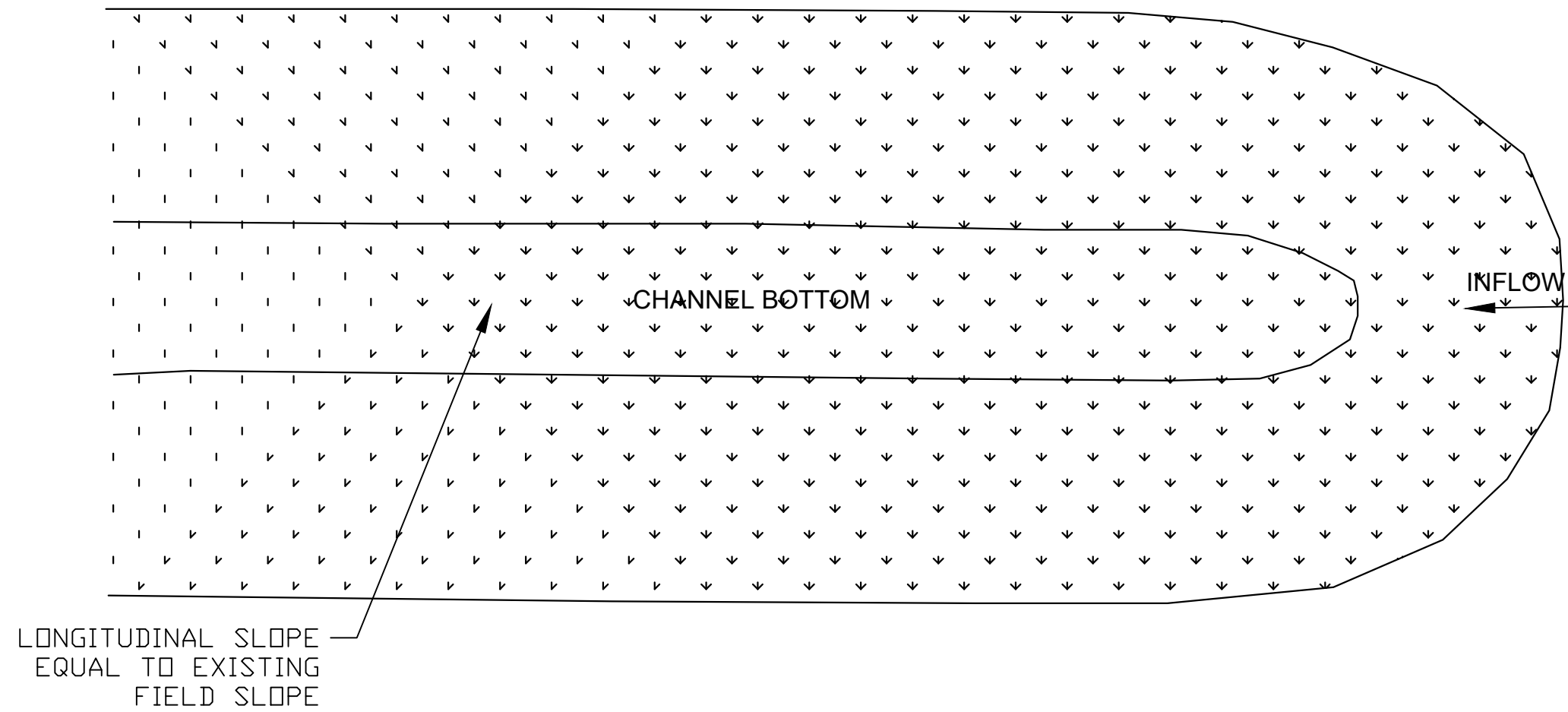
J-HOOK VANE - CROSS SECTION VIEW
NOT TO SCALE



J-HOOK - PROFILE VIEW
NOT TO SCALE



J-HOOK EXAMPLE PHOTO



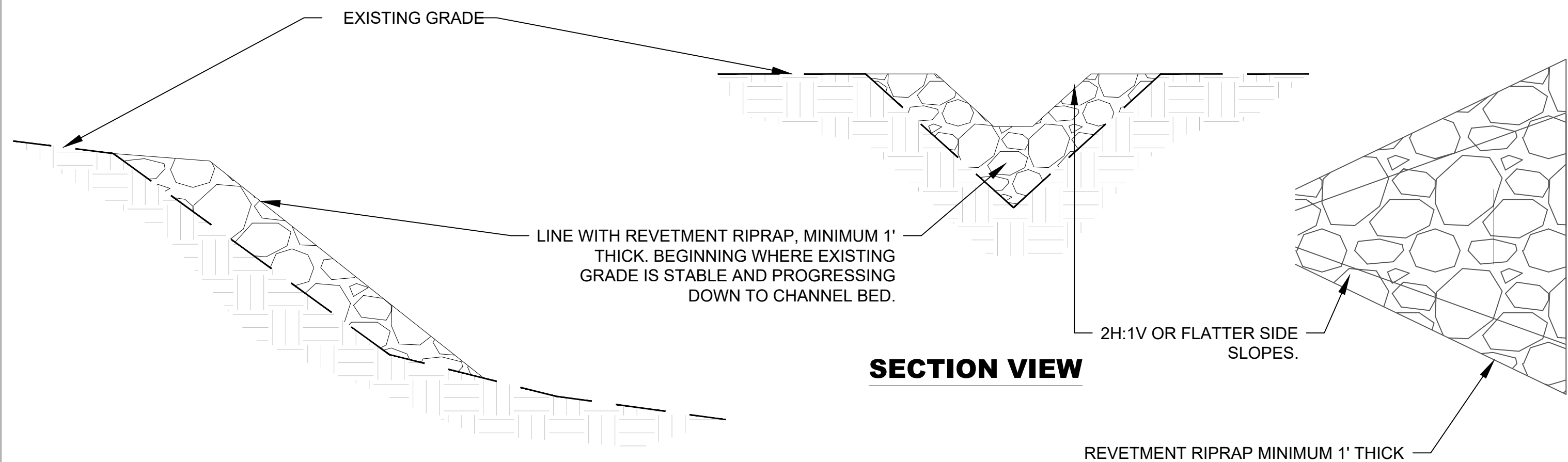
GRASSED WATERWAY - PLAN VIEW
NOT TO SCALE



GRASSED WATERWAY - TYPICAL SECTION
NOT TO SCALE

Grassed Waterway Seed Mix

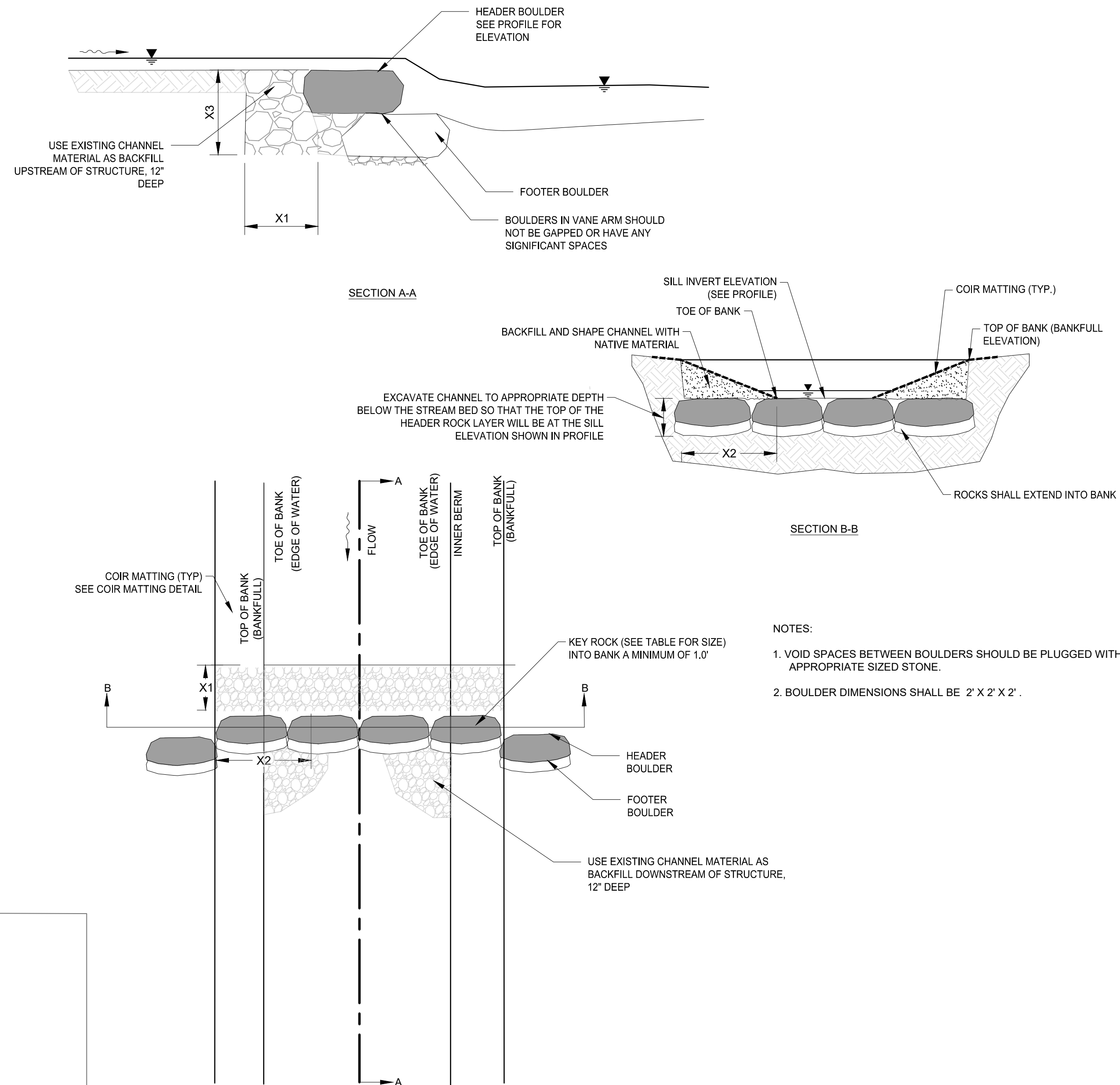
Botanical Name	Common Name	PLS Ounces/Acre
Schedonorus arundinaceus	Tall Fescue	40
Lolium perenne	Perennial Ryegrass	10
Trifolium Repens	Ladino Clover	0.5



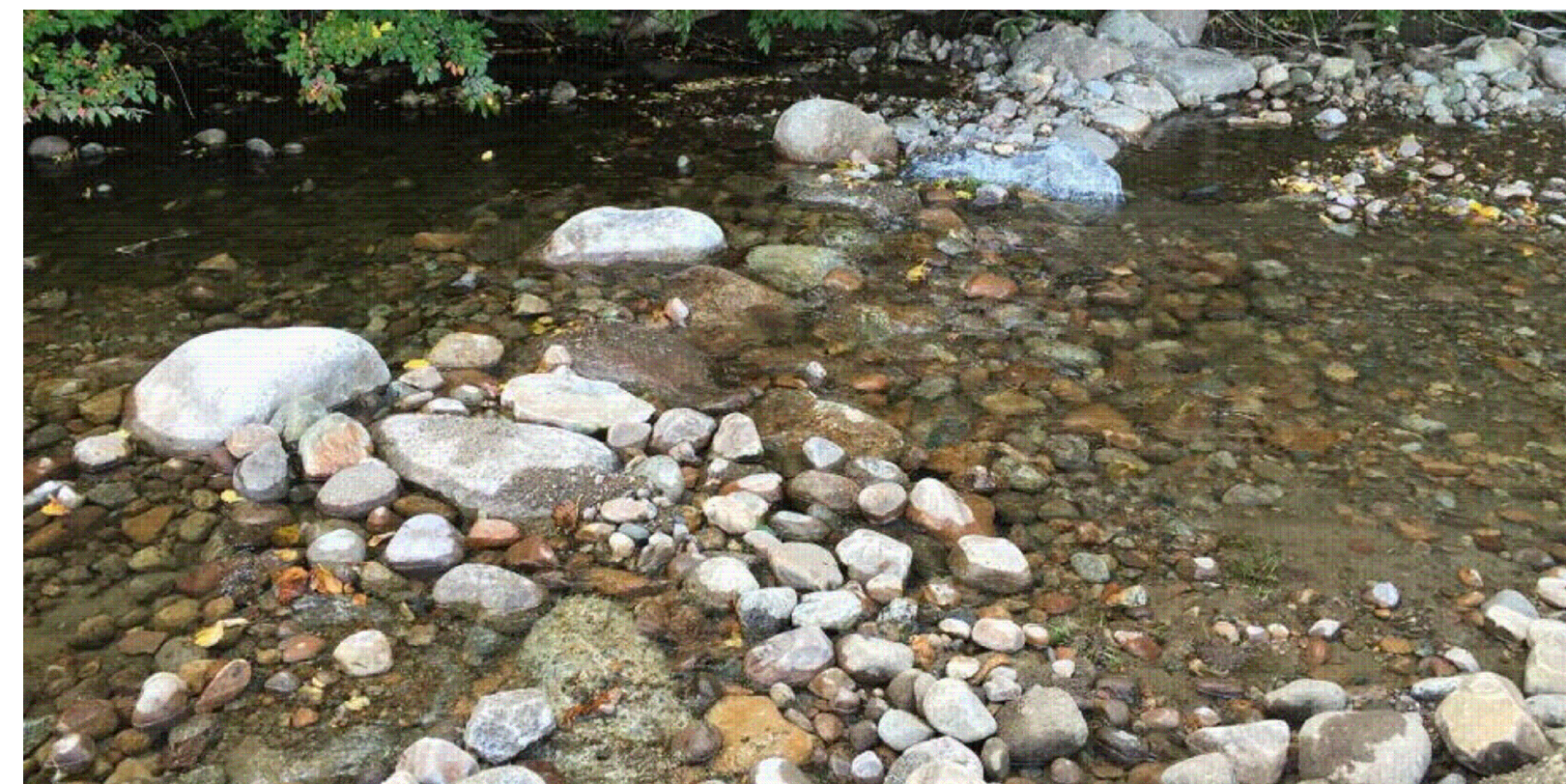
PROFILE VIEW

GULLY STABILIZATION DETAIL
NOT TO SCALE

PLAN VIEW



BOULDER GLIDE
NOT TO SCALE



BOULDER GLIDE EXAMPLE PHOTO

PREPARED BY:

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FOUNDATION

CROOKED CREEK DETAILS

Crooked Creek Headwaters Restoration

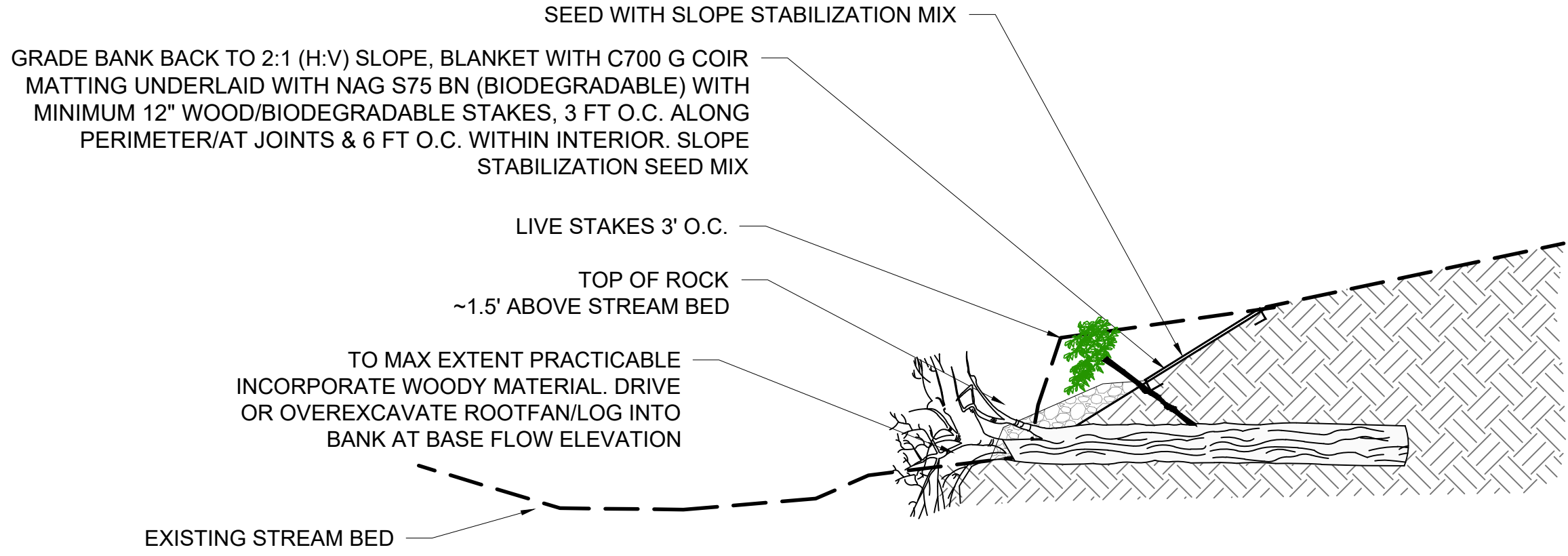
The Watershed Foundation

KOSCIUSKO COUNTY, INDIANA

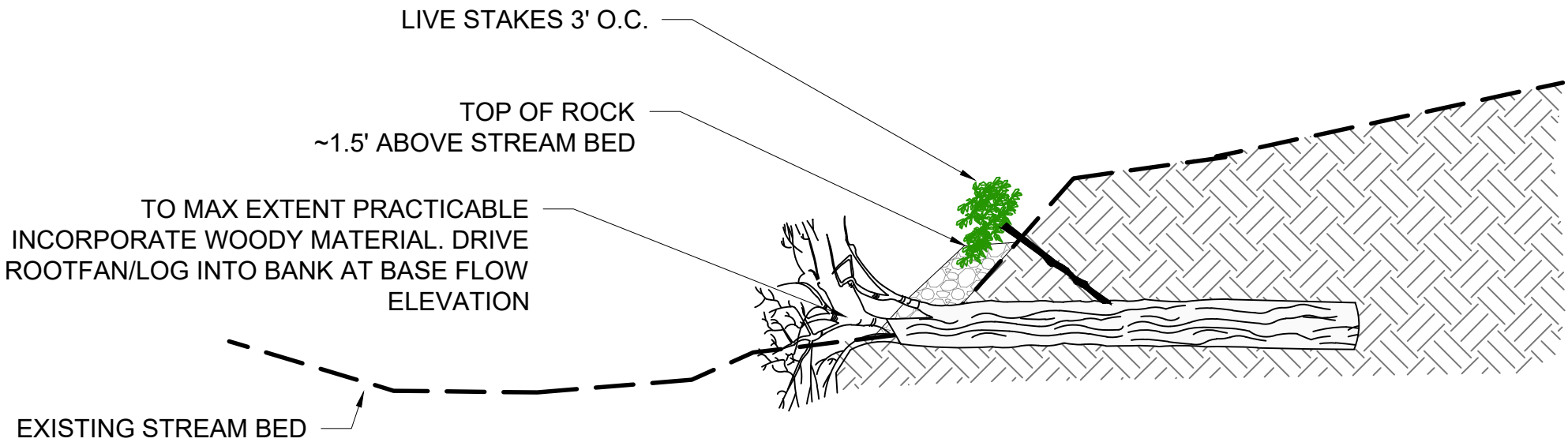
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SHEET TITLE	DETAILS
SHEET NUMBER	7
LAND USE #	

PERMIT PLANS

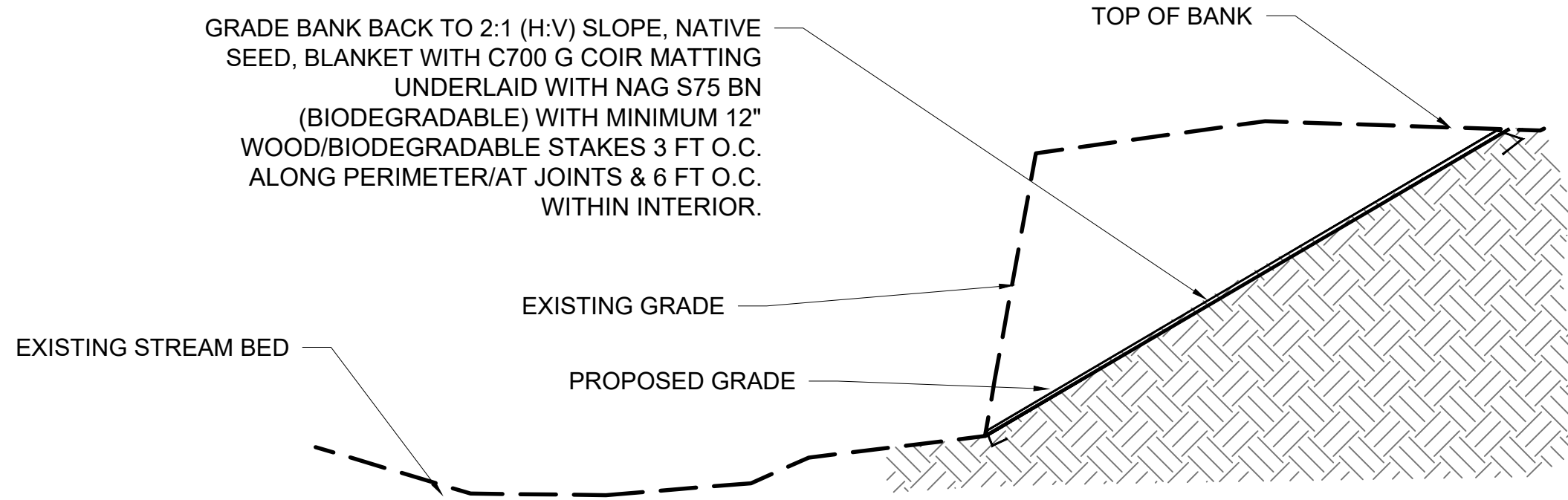


WOOD/ROCK COMPOSITE TOE WITH BANK GRADING
NOT TO SCALE



WOOD/ROCK COMPOSITE WITHOUT GRADING
NOT TO SCALE

- NOTES:
1. RIPRAP BASE STARTING AT STREAM BED TO EXTEND TO TOP OF ROCK ELEVATION. THE OUTER FACE OF THE ROCK SHALL BE STACKED IN A 1.5H:1V SLOPE OR FLATTER
 2. ROOT WADS AND ACCOMPANYING WOODY DEBRIS SHALL BE PLACED TO THE MAXIMUM EXTENT PRACTICABLE. AS SHOWN IN THE PLAN SHEETS.
 3. TREES USED FOR ROOT WADS SHALL, ON AVERAGE, BE A MINIMUM OF 8 INCHES IN DIAMETER AT BREAST HEIGHT. ACCOMPANYING WOODY DEBRIS DOES NOT HAVE A MINIMUM DIAMETER REQUIREMENT. TREES USED FOR ROOT WADS SHALL BE HARDWOOD SPECIES FREE OF ANY DECAY THAT WOULD RESULT IN RISK OF STABILITY.
 4. ROOT WADS SHALL TIE BACK INTO THE BANK A MINIMUM OF 6' AND SHALL BE ANGLED SLIGHTLY UPSTREAM
 5. GRADE TO A 2H:1V SLOPE OR FLATTER, SEED WITH BANK STABILIZATION SEED MIX AND INSTALL COIR MAT (700 g/m2) UNDERLAID WITH STRAW BLANKET FOR AT LEAST 1 ROLL WIDTH (6.5') ON ALL DISTURBED SLOPES ABOVE INSTALLED RIPRAP.
 6. SILKY DOGWOOD, BUTTON BUSH AND ELDERBERRY LIVESTAKES TO BE INSTALLED EVERY 3 ON CENTER ALONG THE TOP OF ROCK.
 7. TREATMENT MAY BE MODIFIED IN FIELD BY ENGINEER.



BANK GRADING
NOT TO SCALE

STABILIZATION SEED MIX

Scientific Name	Common Name	PLS oz/ac
Andropogon gerardii	Big Bluestem Grass	12
Avena sativa	Oats	640
Carex brevior	Plains Oval Sedge	2
Carex cristatella	Crested Oval Sedge	1
Carex grayi	Common Bur Sedge	2
Carex molesta	Field Oval Sedge	1
Carex vulpinoidea	Brown Fox Sedge	2
Chasmanthium latifolium	Northern Sea Oats	2
Cinna arundinacea	Cinnamon Wood Reed	0.5
Elymus canadensis	Canada Wild Rye	64
Elymus virginicus	Virginia Wild Rye	64
Ratibida pinnata	Yellow Coneflower	2
Rudbeckia hirta	Black-eyed Susan	4
Rudbeckia laciniata	Wild Golden Glow	1.5
Schizachyrium scoparium	Little Bluestem	32
Verbena urticifolia	Hairy White Vervain	1
Verbesina alternifolia	Wingstem	2
Zizia aurea	Golden Alexanders	2
TOTAL		833

TREE PLANTINGS

Scientific Name	Common Name	Type	Quantity
Platanus occidentalis	Sycamore	Bare Root	10
Quercus alba	White Oak	Bare Root	10
TOTAL			20

SHRUB PLANTINGS

Scientific Name	Common Name	Type	Quantity
Physocarpus opulifolius	Common Ninebark	Bare Root	10
Prunus virginiana	Common Chokecherry	Bare Root	10
TOTAL			20

LIVE STAKE PLANTINGS

Scientific Name	Common Name	Type	Quantity
Cornus amomum	Silky Dogwood	Live Stake	100
Sambucus canadensis	Elderberry	Live Stake	100
TOTAL			200

PLANTING NOTES & SCHEDULE

THE CROOKED CREEK RESTORATION PROJECT INCLUDES NATIVE SEEDING, LIVE STAKE INSTALLATION, TREE AND SHRUB PLANTING, AND INVASIVE SPECIES MANAGEMENT TO STABILIZE DISTURBED AREAS, REPLACE WOODY VEGETATION REMOVED DURING CONSTRUCTION, AND ENHANCE RIPARIAN HABITAT. PLANTINGS SHALL BE CONCENTRATED WITHIN GRADED STREAMBANKS, ROCK-AND-WOOD COMPOSITE TOE STABILIZATION AREAS, AND LOCATIONS WHERE TREES ARE REMOVED DURING CONSTRUCTION. THE PROPOSED REVEGETATION IS INTENDED TO IMPROVE STREAMBANK STABILITY, INCREASE RIPARIAN VEGETATION, ENHANCE HABITAT QUALITY, AND SUPPORT DEVELOPMENT OF A FORESTED RIPARIAN CORRIDOR.

- GENERAL PLANTING NOTES
1. ALL DISTURBED AREAS SHALL BE STABILIZED USING THE PROJECT STABILIZATION SEED MIX IMMEDIATELY FOLLOWING FINAL GRADING OR COMPLETION OF CONSTRUCTION ACTIVITIES IN EACH WORK AREA.
 2. TREES AND SHRUBS SHALL BE INSTALLED WITHIN AREAS OF TREE REMOVAL AND OTHER SUITABLE RIPARIAN LOCATIONS SHOWN ON THE PLANS.
 3. LIVE STAKES SHALL BE INSTALLED WITHIN ROCK-AND-WOOD COMPOSITE TOE STABILIZATION AREAS AT APPROXIMATELY 3-FOOT SPACING.
 4. EXISTING WOODY INVASIVE SPECIES, INCLUDING BUSH HONEYSUCKLE (LONICERA SPP.) AND AUTUMN OLIVE (ELAEAGNUS UMBELLATA), SHALL BE REMOVED AND/OR TREATED WITHIN THE PROJECT CORRIDOR.
 5. PLANTING LIMITS MAY BE ADJUSTED IN THE FIELD, PROVIDED THE OVERALL PLANTING INTENT IS MAINTAINED.
 6. REVEGETATION MEASURES ARE INTENDED TO SUPPORT ESTABLISHMENT OF A FORESTED RIPARIAN CORRIDOR, ACHIEVE AT LEAST 90 PERCENT VEGETATIVE COVER ON DISTURBED BANKS, AND PROVIDE LONG-TERM BANK STABILITY AND ECOLOGICAL LIFT.

- SEEDING NOTES
7. SEED MIX SHALL BE APPLIED TO ALL CONSTRUCTION DISTURBANCE AREAS, INCLUDING GRADED STREAMBANKS, ACCESS ROUTES (OUTSIDE OF AG FIELDS), STAGING AREAS, , AND OTHER TEMPORARILY DISTURBED SOILS.
 8. SEEDED AREAS SHALL BE STABILIZED WITH APPROPRIATE EROSION CONTROL BLANKET, MULCH, OR OTHER TEMPORARY STABILIZATION MEASURES WHERE NEEDED BASED ON SLOPE, FLOW PATH, AND SOIL EXPOSURE.
 9. CONTRACTOR SHALL REPAIR RILLS, GULLIES, BARE SOIL, OR FAILED STABILIZATION AREAS AND RESEED AS NECESSARY TO ESTABLISH VEGETATIVE COVER.
- TREE, SHRUB, AND LIVE STAKE INSTALLATION NOTES
10. TREES AND SHRUBS SHALL BE PLANTED WITHIN AREAS OF TREE REMOVAL AND WITHIN SUITABLE RIPARIAN BUFFER LOCATIONS TO REPLACE WOODY CANOPY AND UNDERSTORY VEGETATION REMOVED DURING CONSTRUCTION.
 11. LIVE STAKES SHALL BE INSTALLED APPROXIMATELY 3 FEET ON CENTER ALONG , ROCK-AND-WOOD COMPOSITE TOE STABILIZATION TREATMENTS.
 12. LIVE STAKES SHALL BE INSTALLED WITH A MINIMUM OF TWO-THIRDS OF EACH STAKE BELOW THE GROUND SURFACE AND SHALL BE PLACED IN FIRM CONTACT WITH MOIST SOIL. DAMAGED, SPLIT, OR DESICCATED STAKES SHALL NOT BE INSTALLED.
 13. PLANT MATERIAL SHALL BE INSTALLED DURING SUITABLE SEASONAL PLANTING WINDOWS AND PROTECTED FROM UNNECESSARY DISTURBANCE DURING CONSTRUCTION CLOSEOUT.

- PERFORMANCE OBJECTIVES
14. ESTABLISH AND MAINTAIN A NATIVE FORESTED RIPARIAN BUFFER AVERAGING APPROXIMATELY 50 FEET IN WIDTH ON EACH SIDE OF THE STREAM WHERE FEASIBLE AND WITHIN AVAILABLE PROJECT LIMITS.
 15. ACHIEVE A MINIMUM OF 90 PERCENT VEGETATIVE COVER ON DISTURBED STREAMBANKS.
 16. PROMOTE SUCCESSFUL ESTABLISHMENT OF NATIVE TREES, SHRUBS, AND LIVE STAKES TO PROVIDE LONG-TERM RIPARIAN CANOPY, UNDERSTORY STRUCTURE, AND BANK REINFORCEMENT.
 17. ENSURE TREATED STREAMBANKS REMAIN STABLE AND EXHIBIT NO SIGNIFICANT GULLY EROSION FROM OVERLAND FLOW, EXCESSIVE BANK SCOUR FROM STREAM FLOWS, OR OTHER INDICATORS OF ACTIVE INSTABILITY.
 18. IMPROVE HABITAT COMPLEXITY, RIPARIAN FUNCTION, AND OVERALL ECOLOGICAL CONDITION RELATIVE TO EXISTING CONDITIONS.

- MONITORING AND MAINTENANCE NOTES
19. FOLLOWING CONSTRUCTION, PLANTED AND SEEDED AREAS SHALL BE INSPECTED DURING ESTABLISHMENT TO IDENTIFY EROSION, POOR VEGETATIVE ESTABLISHMENT, INVASIVE SPECIES RECOLONIZATION, OR PLANT MORTALITY.
 20. AREAS EXHIBITING POOR ESTABLISHMENT, BARE SOIL, EXCESSIVE EROSION, OR CONCENTRATED FLOW SHALL BE REPAIRED, STABILIZED, AND RESEEDED OR REPLANTED AS NECESSARY.
 21. WOODY INVASIVE SPECIES WITHIN THE PROJECT CORRIDOR SHALL BE RETREATED AS NEEDED TO REDUCE COMPETITION WITH INSTALLED NATIVE VEGETATION.

PREPARED BY:

SWCA[®]
ENVIRONMENTAL CONSULTANTS

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THE WATERSHED
FOUNDATION

CROOKED CREEK DETAILS

Crooked Creek Headwaters Restoration

The Watershed Foundation

KOSCIUSKO COUNTY, INDIANA

#	DATE	DESCRIPTION	BY

DATE

JUNE 2026

DRAWN

JLH

DESIGNED

RAS

CHECKED

PROJECT #

SHEET TITLE

DETAILS

SHEET NUMBER

8

LAND USE #
