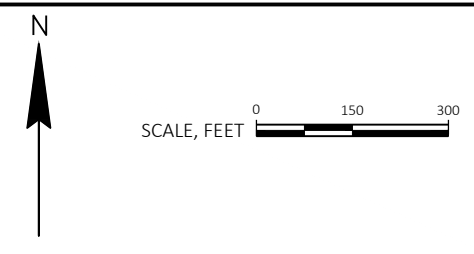
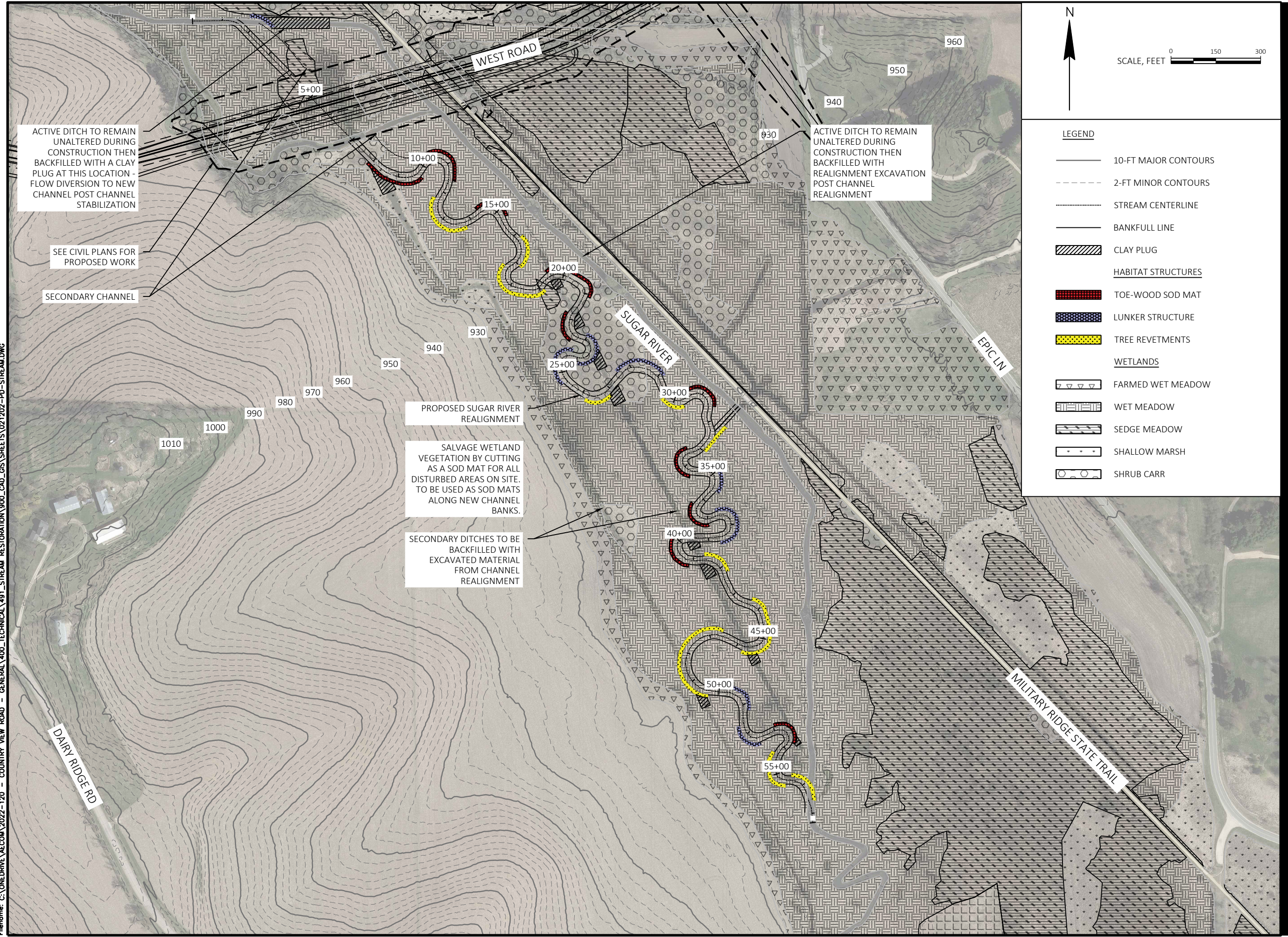


I/R	DATE	DESCRIPTION
1		ORIGINAL



- LEGEND**
- 10-FT MAJOR CONTOURS
  - 2-FT MINOR CONTOURS
  - ..... STREAM CENTERLINE
  - BANKFULL LINE
  - ▨ CLAY PLUG
  - HABITAT STRUCTURES
  - ▨ TOE-WOOD SOD MAT
  - ▨ LUNKER STRUCTURE
  - ▨ TREE REVETMENTS
  - WETLANDS
  - ▨ FARMED WET MEADOW
  - ▨ WET MEADOW
  - ▨ SEDGE MEADOW
  - ▨ SHALLOW MARSH
  - ▨ SHRUB CARR



ACTIVE DITCH TO REMAIN UNALTERED DURING CONSTRUCTION THEN BACKFILLED WITH A CLAY PLUG AT THIS LOCATION - FLOW DIVERSION TO NEW CHANNEL POST CHANNEL STABILIZATION

ACTIVE DITCH TO REMAIN UNALTERED DURING CONSTRUCTION THEN BACKFILLED WITH REALIGNMENT EXCAVATION POST CHANNEL REALIGNMENT

SEE CIVIL PLANS FOR PROPOSED WORK

SECONDARY CHANNEL

PROPOSED SUGAR RIVER REALIGNMENT

SALVAGE WETLAND VEGETATION BY CUTTING AS A SOD MAT FOR ALL DISTURBED AREAS ON SITE. TO BE USED AS SOD MATS ALONG NEW CHANNEL BANKS.

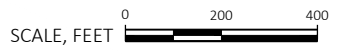
SECONDARY DITCHES TO BE BACKFILLED WITH EXCAVATED MATERIAL FROM CHANNEL REALIGNMENT

Plotted By: vince.christensen  
 Plot File Date Created: Feb/26/2024 9:42 AM  
 Layout - Sheet Name: 01  
 Filename: C:\ONEDRIVE\AECOM\2022-120 - COUNTRY VIEW ROAD - GENERAL\400\_TECHNICAL\491\_STREAM RESTORATION\900\_CAD\_GIS\SHEETS\021202-PD-STREAM.DWG  
 Project Management Initials:  
 Designer: K/W  
 Checked: ZRL  
 Approved: ZRL  
 ANS I D 22" x 34"

**ISSUE/REVISION**

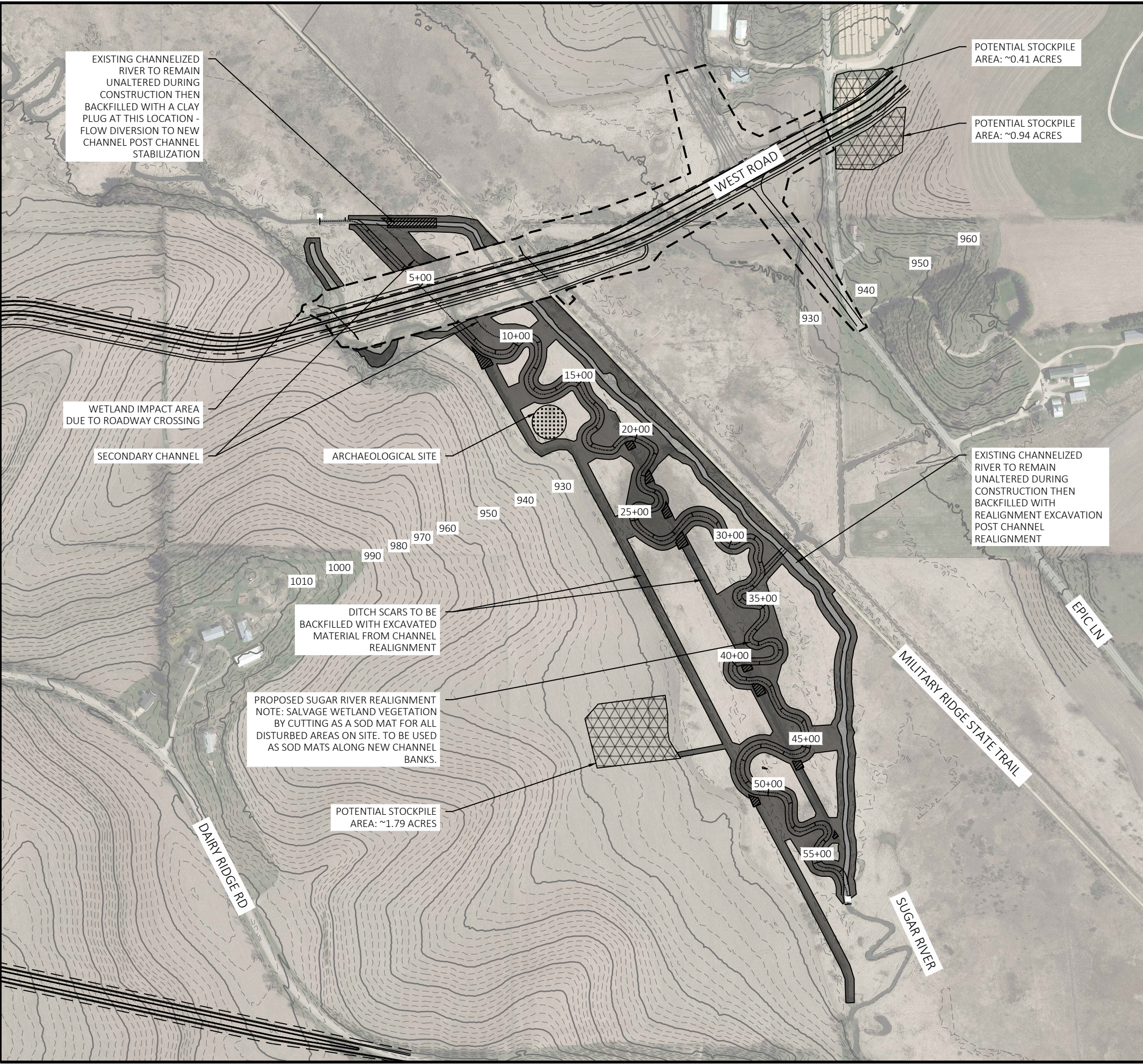
NO.	DATE	DESCRIPTION

**KEY PLAN**



**LEGEND**

- 10-FT MAJOR CONTOURS
- 2-FT MINOR CONTOURS
- STREAM CENTERLINE
- BANKFULL LINE
- CLAY PLUG
- DISTURBED WETLANDS
- POTENTIAL STOCKPILE AREAS



**NOTES:**

1. TOTAL TEMPORARILY DISTURBED WETLANDS (ALL GREYED OUT AREAS WITH THE EXCEPTION OF THE PROPOSED STREAM QUANTIFIED IN #2): 14.44 AC
2. TOTAL DISTURBED WETLANDS FOR STREAM RESTORATION: 4.39 AC
3. TOTAL LENGTH OF RESTORED CHANNEL: 5,400 FT
4. TOTAL LENGTH OF RESTORED BANKS: 10,800 FT
5. TOTAL AREA OF BACKFILLED DITCH SCARS AS RESTORED WETLANDS: 1.58 AC
6. TOTAL AREA OF BACKFILLED CHANNELIZED RIVER AS RESTORED WETLANDS: 1.73 AC
7. TOTAL ESTIMATED CUT MATERIAL: 26,800 CY
  - 7.1. DITCH SCAR BACKFILL: 9,900 CY
  - 7.2. CHANNELIZED RIVER BACKFILL: 8,000 CY
  - 7.3. SURPLUS CUT MATERIAL: 8,900 CY
8. ALL DISTURBED AREAS OUTSIDE OF THE NEWLY-EXCAVATED CHANNEL REALIGNMENT SHALL BE DECOMPACTED, SEEDED WITH NATIVE, LOCAL GENOTYPE SEED SPECIFIC TO THE WETLAND TYPES DISTURBED (TO BE SPECIFIED WITHIN THE PLANTING PLAN OF THE CONSTRUCTION DRAWINGS) AND TREATED WITH CERTIFIED CLEAN STRAW TO BE DISKED INTO TOPSOIL.
9. SOIL STOCKPILES WILL HAVE SILT FENCE OR EROSION CONTROL LOGS PLACED ALONG ALL DOWNSTREAM SIDES OF STOCKPILES. STOCKPILES IN PLACE FOR LONGER THAN 14 DAYS WILL BE EITHER TEMPORARILY SEEDED OR A POLYMER SOIL STABILIZER WILL BE APPLIED TO THE STOCKPILED SOIL.

ANS I D 22" x 34" Approved: ZRL Checked: ZRL Designer: K/W Project Management Initials: EC-SR-01  
 Plotted By: vince.christensen Plot File Date Created: Feb/26/2024 9:40 AM  
 Layout-Sheet Name: 01 Filename: C:\ONEDRIVE\AECOM\2022-120 - COUNTRY VIEW ROAD - GENERAL\400\_TECHNICAL\491\_STREAM RESTORATION\900\_CAD\_GIS\SHEETS\021202-EC-SR-01-STREAM.DWG

EXISTING CHANNELIZED RIVER TO REMAIN UNALTERED DURING CONSTRUCTION THEN BACKFILLED WITH A CLAY PLUG AT THIS LOCATION - FLOW DIVERSION TO NEW CHANNEL POST CHANNEL STABILIZATION

POTENTIAL STOCKPILE AREA: ~0.41 ACRES

POTENTIAL STOCKPILE AREA: ~0.94 ACRES

WETLAND IMPACT AREA DUE TO ROADWAY CROSSING

EXISTING CHANNELIZED RIVER TO REMAIN UNALTERED DURING CONSTRUCTION THEN BACKFILLED WITH REALIGNMENT EXCAVATION POST CHANNEL REALIGNMENT

DITCH SCARS TO BE BACKFILLED WITH EXCAVATED MATERIAL FROM CHANNEL REALIGNMENT

PROPOSED SUGAR RIVER REALIGNMENT NOTE: SALVAGE WETLAND VEGETATION BY CUTTING AS A SOD MAT FOR ALL DISTURBED AREAS ON SITE. TO BE USED AS SOD MATS ALONG NEW CHANNEL BANKS.

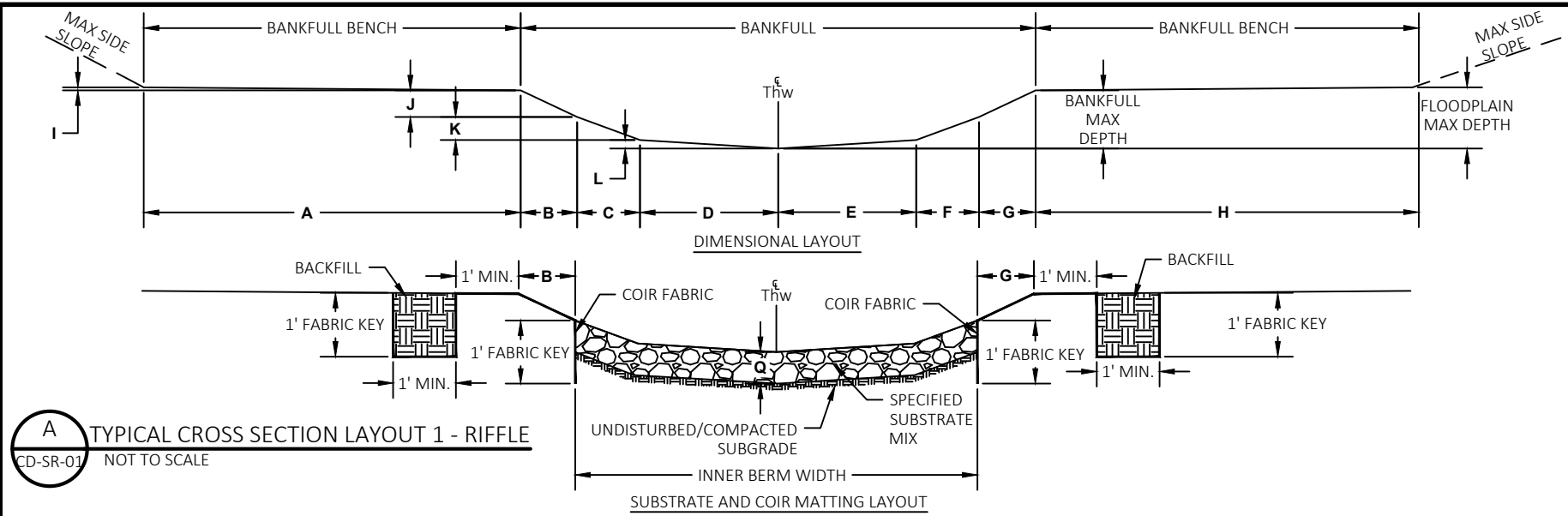
POTENTIAL STOCKPILE AREA: ~1.79 ACRES

**ISSUE/REVISION**

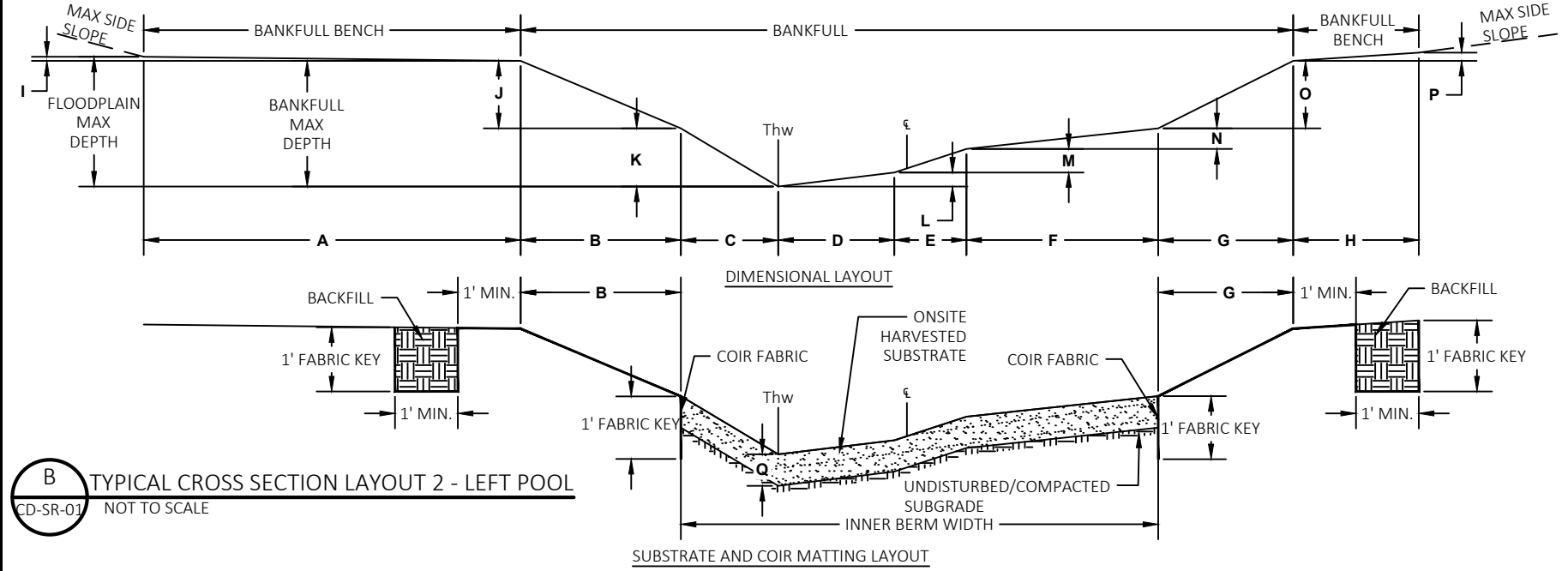
NO.	DATE	DESCRIPTION
1		ORIGINAL

SUGAR RIVER			
PARAMETER	RIFLE XX	LEFT POOL XX	RIGHT POOL XX
A	TBD	TBD	TBD
B	TBD	TBD	TBD
C	TBD	TBD	TBD
D	TBD	TBD	TBD
E	TBD	TBD	TBD
F	TBD	TBD	TBD
G	TBD	TBD	TBD
H	TBD	TBD	TBD
I	TBD	TBD	TBD
J	TBD	TBD	TBD
K	TBD	TBD	TBD
L	TBD	TBD	TBD
M	TBD	TBD	TBD
N	TBD	TBD	TBD
O	TBD	TBD	TBD
P	TBD	TBD	TBD
Q	TBD	TBD	TBD
MAX SIDE SLOPE	TBD	TBD	TBD
BANKFULL MAX DEPTH	TBD	TBD	TBD
FLOODPLAIN MAX DEPTH	TBD	TBD	TBD
INNER BERM WIDTH	TBD	TBD	TBD

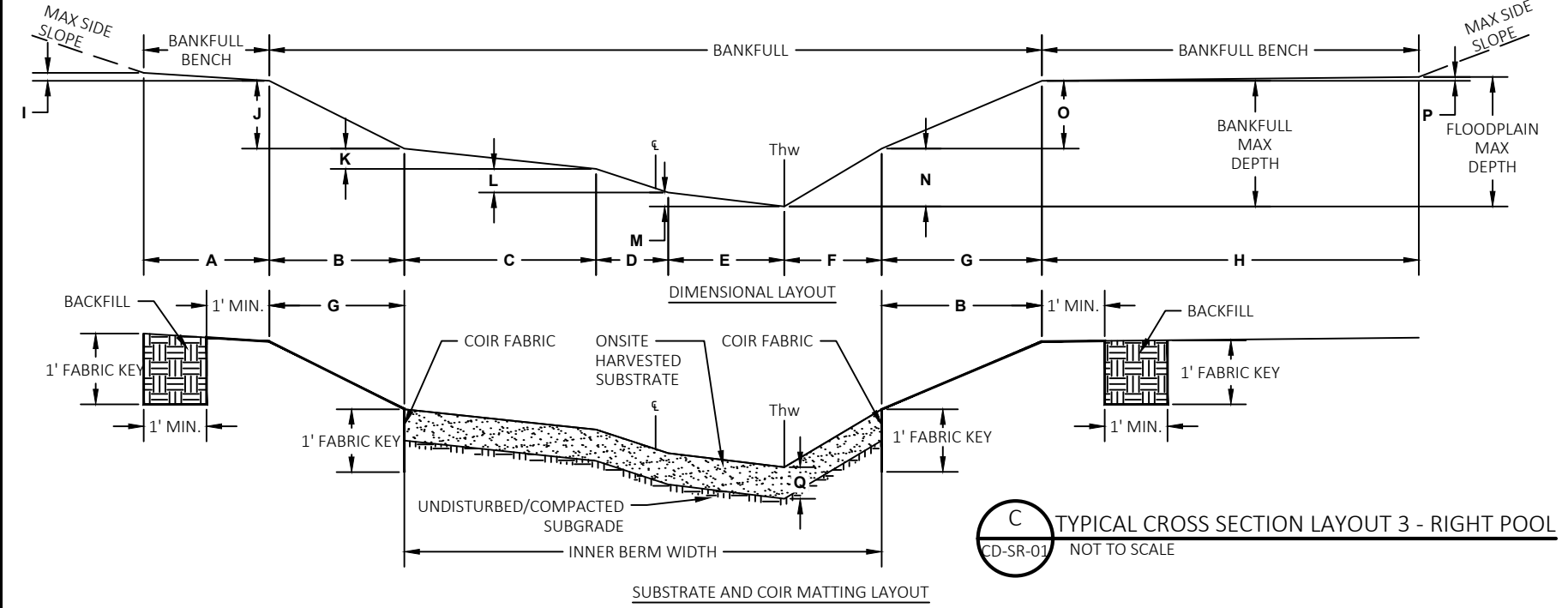
NOTE: THE SUBSTRATE HARVESTED ON SITE MAY BE USED IN THE POOL AREAS IF IT MEETS SUBSTRATE STANDARDS WITH APPROVAL FROM PROJECT ENGINEER. SEE SUBSTRATE DETAIL XX SHEET XX FOR STONE SIZING IN RIFFLES AND POOLS



**A** TYPICAL CROSS SECTION LAYOUT 1 - RIFLE  
 CD-SR-01 NOT TO SCALE



**B** TYPICAL CROSS SECTION LAYOUT 2 - LEFT POOL  
 CD-SR-01 NOT TO SCALE

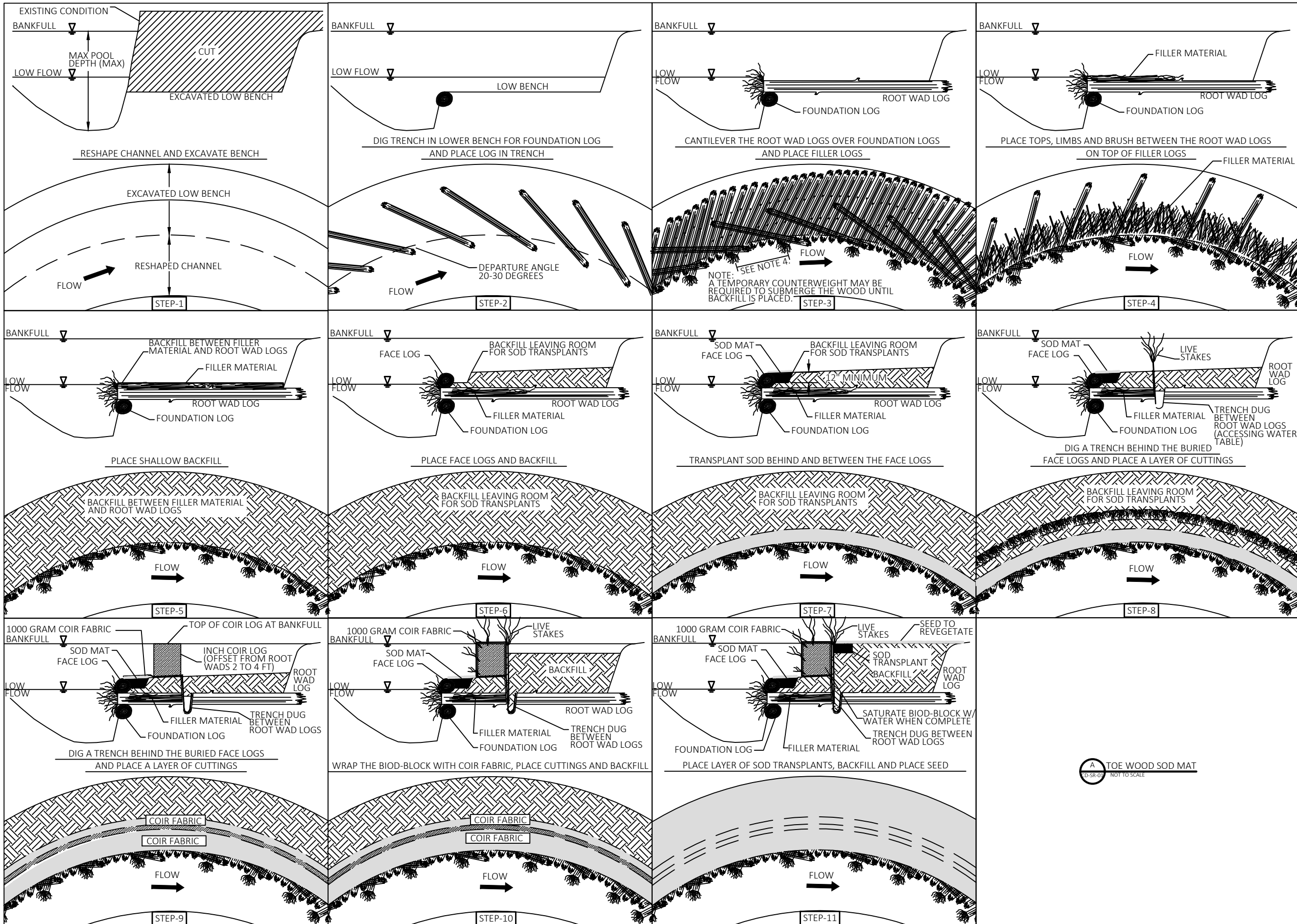


**C** TYPICAL CROSS SECTION LAYOUT 3 - RIGHT POOL  
 CD-SR-01 NOT TO SCALE

ANS I D 22" x 34"  
 Approved: ZRL  
 Checked: ZRL  
 Designer: K/W  
 Project Management Initials:  
 G:\ONEEDRIVE\AECOM\2022-120 - COUNTRY VIEW ROAD - GENERAL\400\_TECHNICAL\491\_STREAM RESTORATION\900\_CAD\_GIS\SHEETS\020303-TS-STREAM.DWG  
 Plotted By: vince.christensen  
 Plot File Date Created: Feb/12/2024 10:50 AM  
 Layout-Sheet Name: LAYOUT1  
 Filename: G:\ONEEDRIVE\AECOM\2022-120 - COUNTRY VIEW ROAD - GENERAL\400\_TECHNICAL\491\_STREAM RESTORATION\900\_CAD\_GIS\SHEETS\020303-TS-STREAM.DWG

**ISSUE/REVISION**

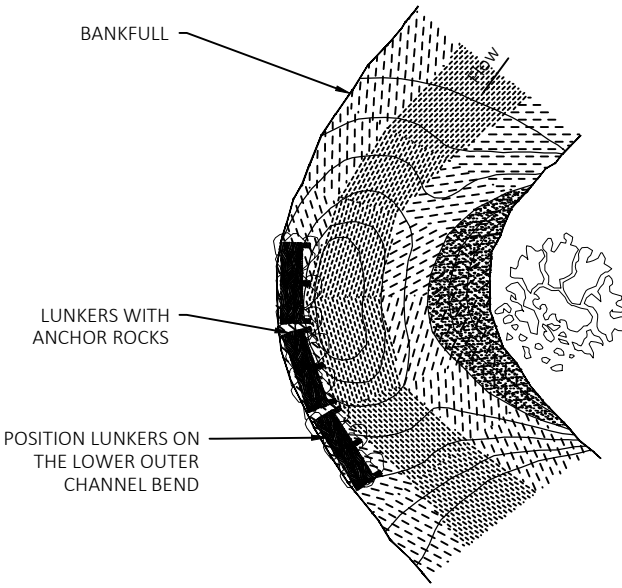
I	DATE	DESCRIPTION
1		ORIGINAL
J/R		



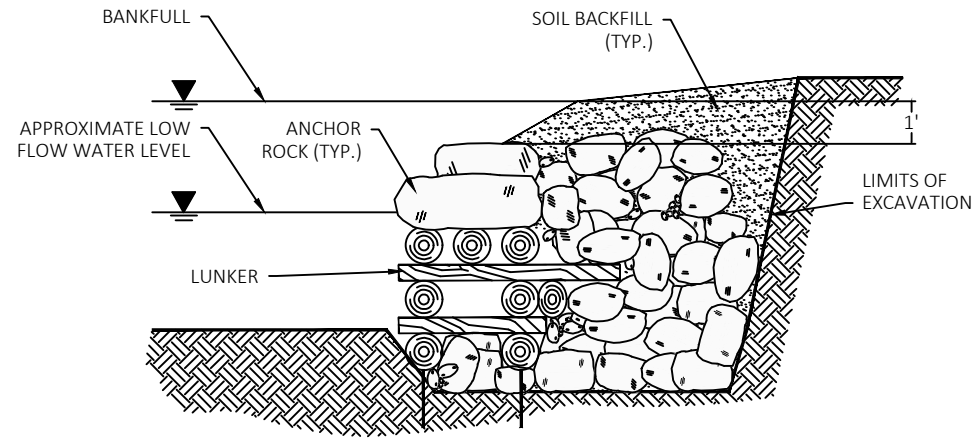
ANS I D 22' x 34' Approved: ZRL Checked: ZRL Designer: K/W Project Management Initials: Project Management Initials: G:\ONEDRIVE\AECOM\2022-120 - COUNTRY VIEW ROAD - GENERAL\400\_TECHNICAL\491\_STREAM RESTORATION\900\_CAD\_GIS\SHEETS\021001-CD-STREAM.DWG Plotted By: vincos.christensen Plot File Date Created: Feb/12/2024 10:50 AM Layout-Sheet Name: DETAILS Filename: G:\ONEDRIVE\AECOM\2022-120 - COUNTRY VIEW ROAD - GENERAL\400\_TECHNICAL\491\_STREAM RESTORATION\900\_CAD\_GIS\SHEETS\021001-CD-STREAM.DWG

**ISSUE/REVISION**

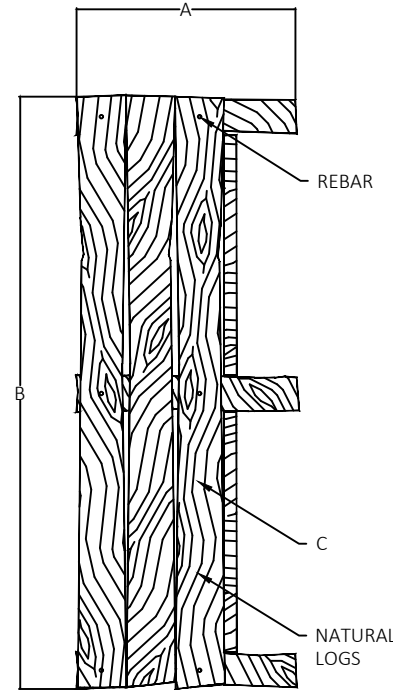
I/R	DATE	DESCRIPTION



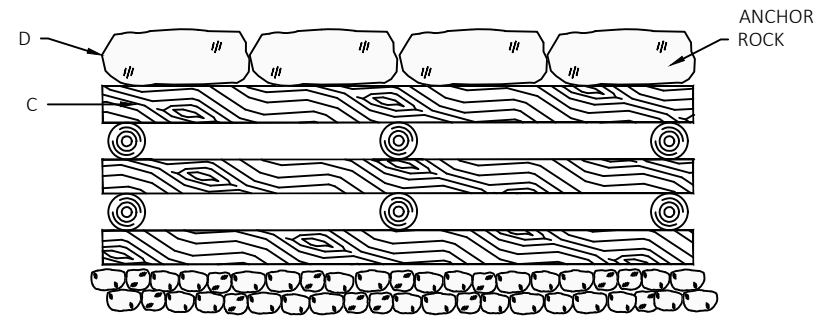
PLAN VIEW DETAIL



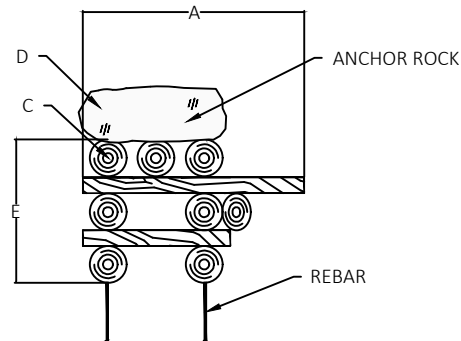
CROSS SECTION



LUNKER TOP DETAIL



LUNKER FRONT DETAIL



LUNKER SIDE DETAIL

LUNKER STRUCTURE DIMENSION KEY			
Dimension	Name	Typical Unit	Value
A	STRUCTURE WIDTH	Feet	TBD
B	STRUCTURE LENGTH	Feet	TBD
C	LOG	Feet	TBD
D	ANCHOR ROCK	Feet	TBD
E	STRUCTURE HEIGHT	Feet	TBD
Notes:			
1. Data are for LUNKER STRUCTURES			
2. Dimension labels are referenced in the detail drawings.			
3. Common guidance, values, or ranges are given unless they require computation using site-specific input.			

**A** LUNKER STRUCTURE  
 CD-SR-02 NOT TO SCALE

Plotted By: vince.christensen  
 Plot File Date Created: Feb/12/2024 11:04 AM  
 Layout - Sheet Name: DETAILS (2)  
 Filename: C:\ONEDRIVE\AECOM\2022-120 - COUNTRY VIEW ROAD - GENERAL\400\_TECHNICAL\491\_STREAM RESTORATION\900\_CAD\_GIS\SHEETS\02.1001-CD-STREAM.DWG  
 Project Management Initials: Designer: KJW  
 Checked: ZRL  
 Approved: ZRL  
 ANSI D 22' x 34'

**PROJECT**  
**WEST ROAD**  
 DAIRY RIDGE RD TO COUNTRY VIEW RD  
 2023-XXX  
 VERONA, WISCONSIN

**CLIENT**  
**CITY OF VERONA**  
 111 LINCOLN STREET  
 VERONA, WISCONSIN 53593  
 608-845-6495 tel  
 www.ci.verona.wi.us

**CONSULTANT**  
 AECOM  
 1350 DEMING WAY SUITE 100  
 MIDDLETON, WI 53562  
 608-836-9800 tel  
 608-836-9767 fax  
 www.aecom.com

**SUB-CONSULTANTS**

**REGISTRATION**

**ISSUE/REVISION**

I/R	DATE	DESCRIPTION
1		ORIGINAL

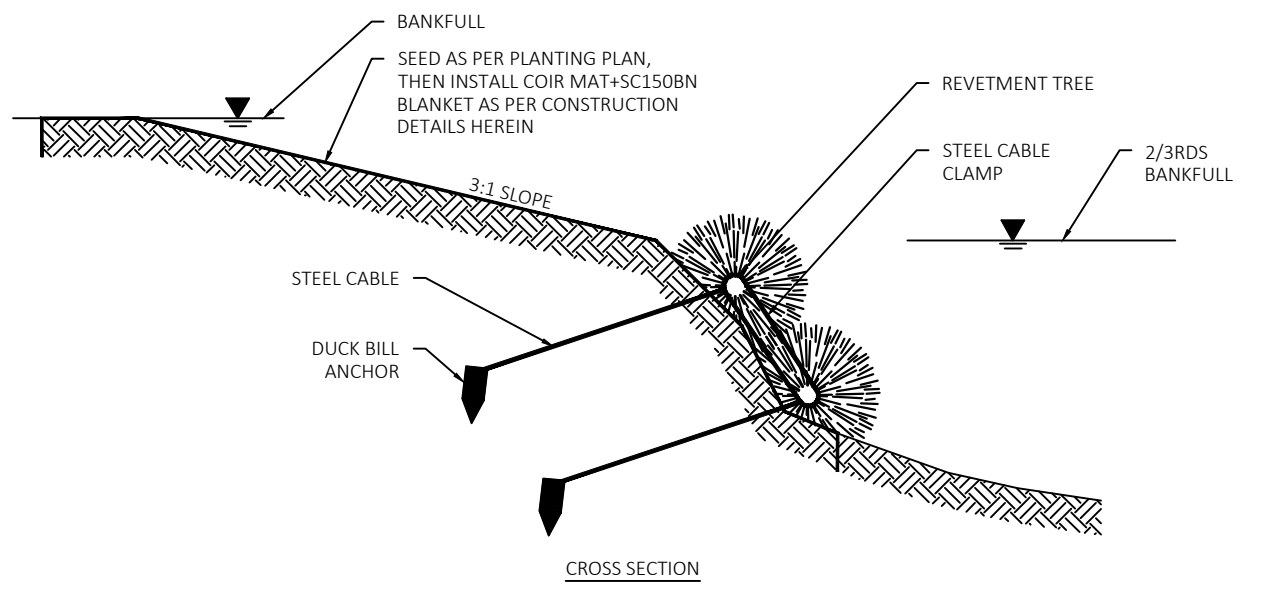
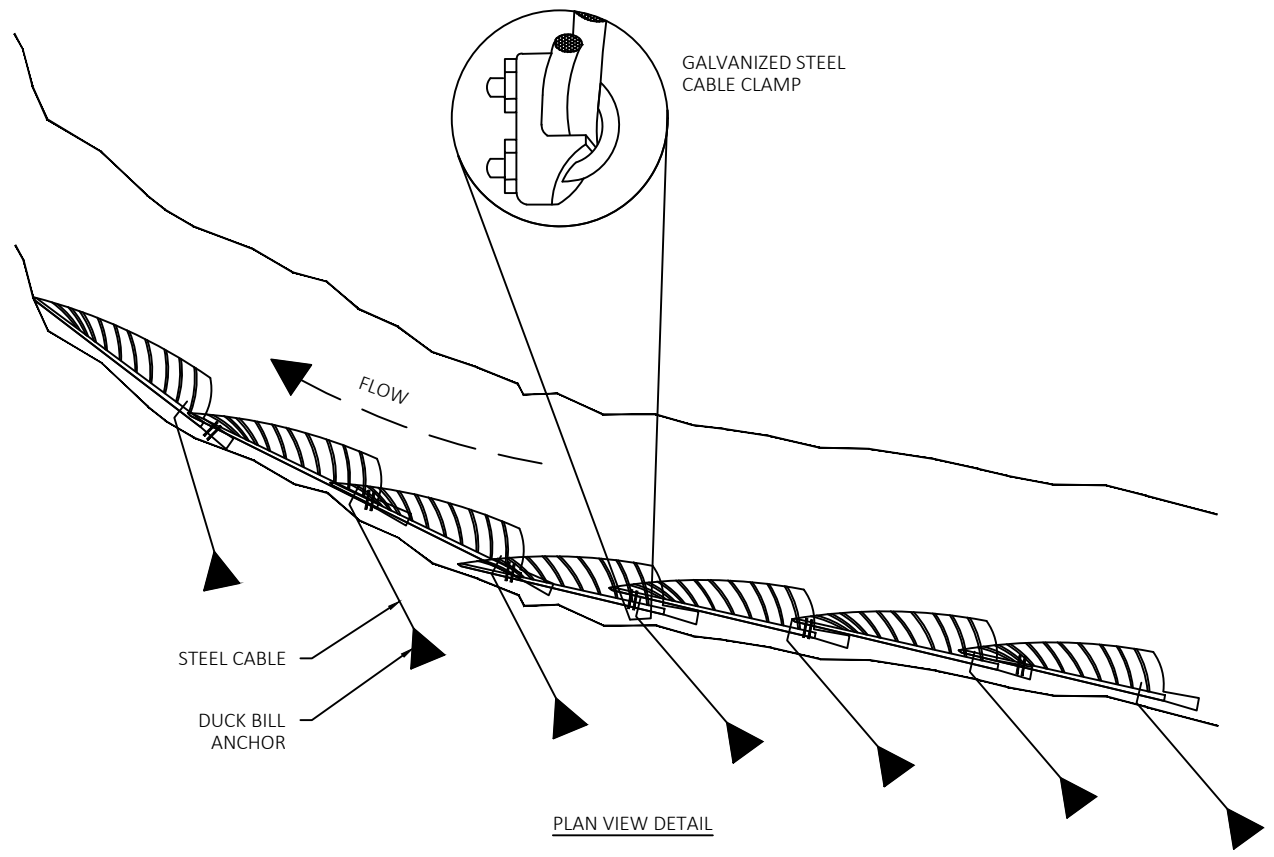
**KEY PLAN**

**PROJECT NUMBER**  
 2023-XXX

**SHEET TITLE**  
 CONSTRUCTION DETAILS -  
 TREE REVETMENT

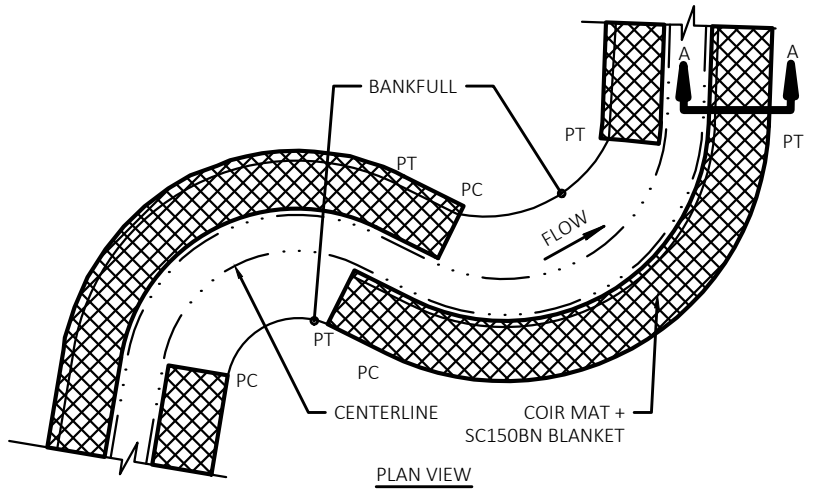
**SHEET NUMBER**  
 CD-SR-03

Plotted By: vince.christensen  
 Plot File Date Created: Feb/12/2024 11:03 AM  
 Layout - Sheet Name: DETAILS (3)  
 Filename: C:\ONEDRIVE\AECOM\2022-120 - COUNTRY VIEW ROAD - GENERAL\400\_TECHNICAL\491\_STREAM RESTORATION\900\_CAD\_GIS\SHEETS\021001-CD-STREAM.DWG  
 Project Management Initials: Designer: KJW Checked: ZRL Approved: ZRL  
 ANSI D 22' x 34'



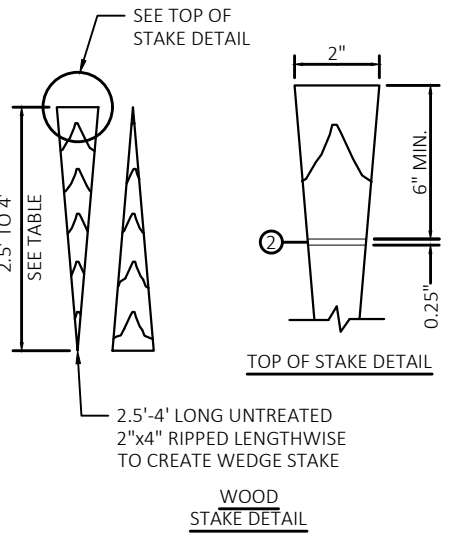
**A TREE REVETMENT**  
 CD-SR-03 NOT TO SCALE

ANSI D 22" x 34" Approved: ZRL  
 Designer: K/W  
 Project Management Initials:  
 GENERAL VIEW ROAD - COUNTRY VIEW ROAD - STREAM RESTORATION 900\_CAD\_GIS SHEETS 02.1001-CD-STREAM.DWG  
 Plotted By: vince.christensen  
 Plot File Date Created: Feb/12/2024 11:02 AM  
 Layout - Sheet Name: DETAILS (4)  
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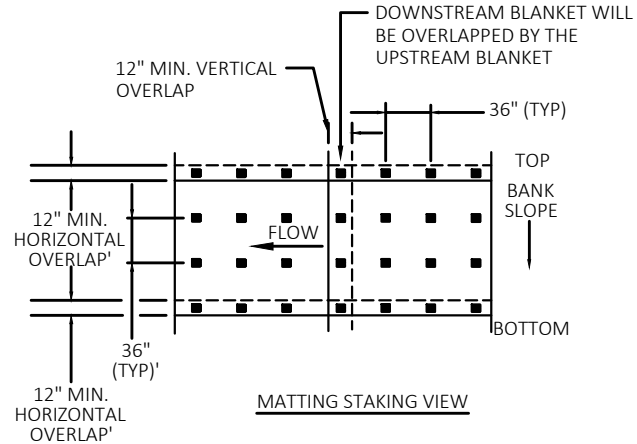


- NOTES:**
- ALL AREAS THAT USE COIR FIBER EROSION CONTROL BLANKET WILL USE 1000G COIR MAT. USE STRAW-COCONUT BLANKET WITH BIODEGRADABLE NETTING (SC150BN) UNDER COIR FABRIC

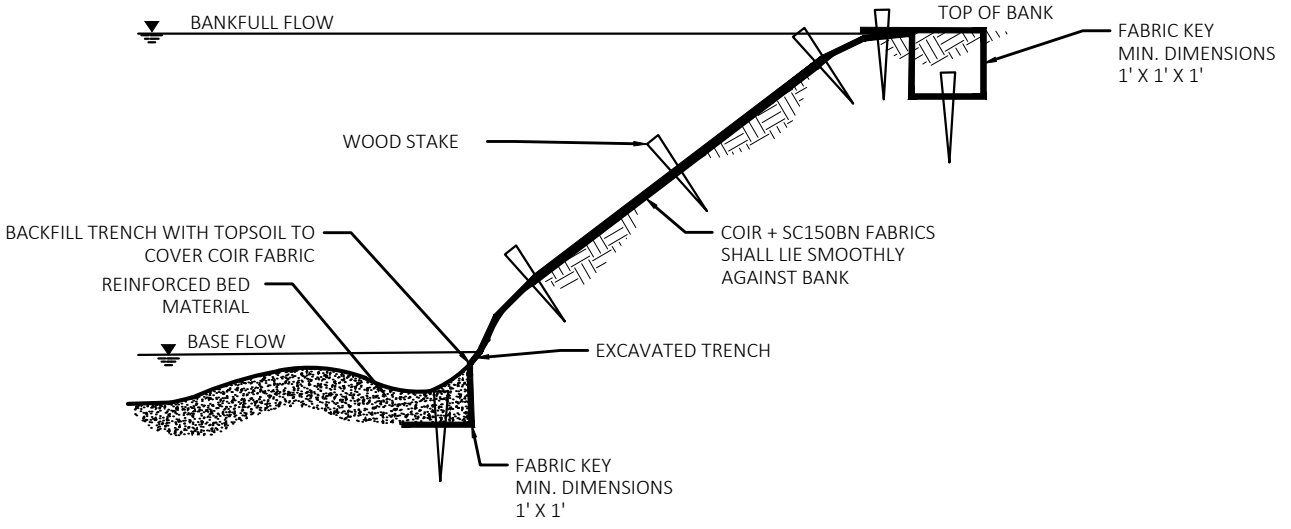
STAKE LENGTH	
SOIL TYPE	LENGTH (FEET)
CLAY	2.5
SILT	3.0
SAND	4.0
LOAM	2.0



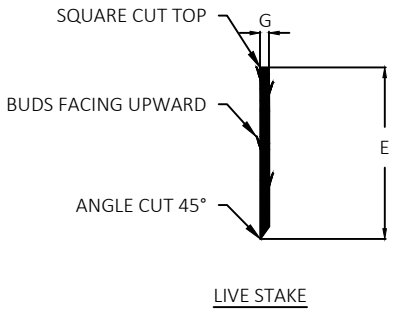
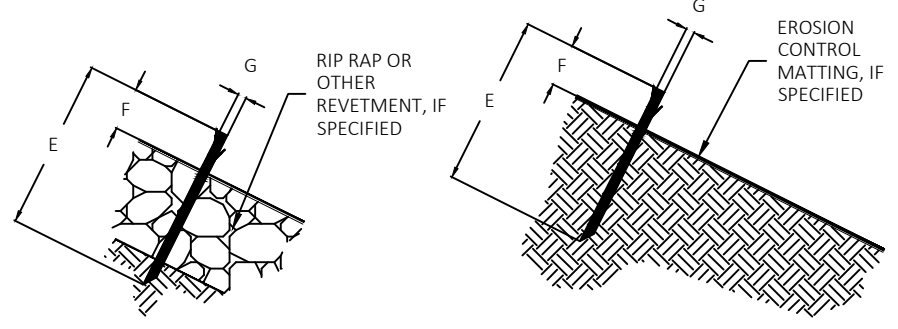
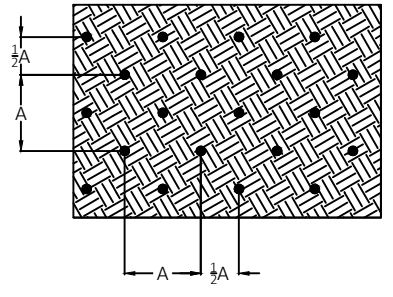
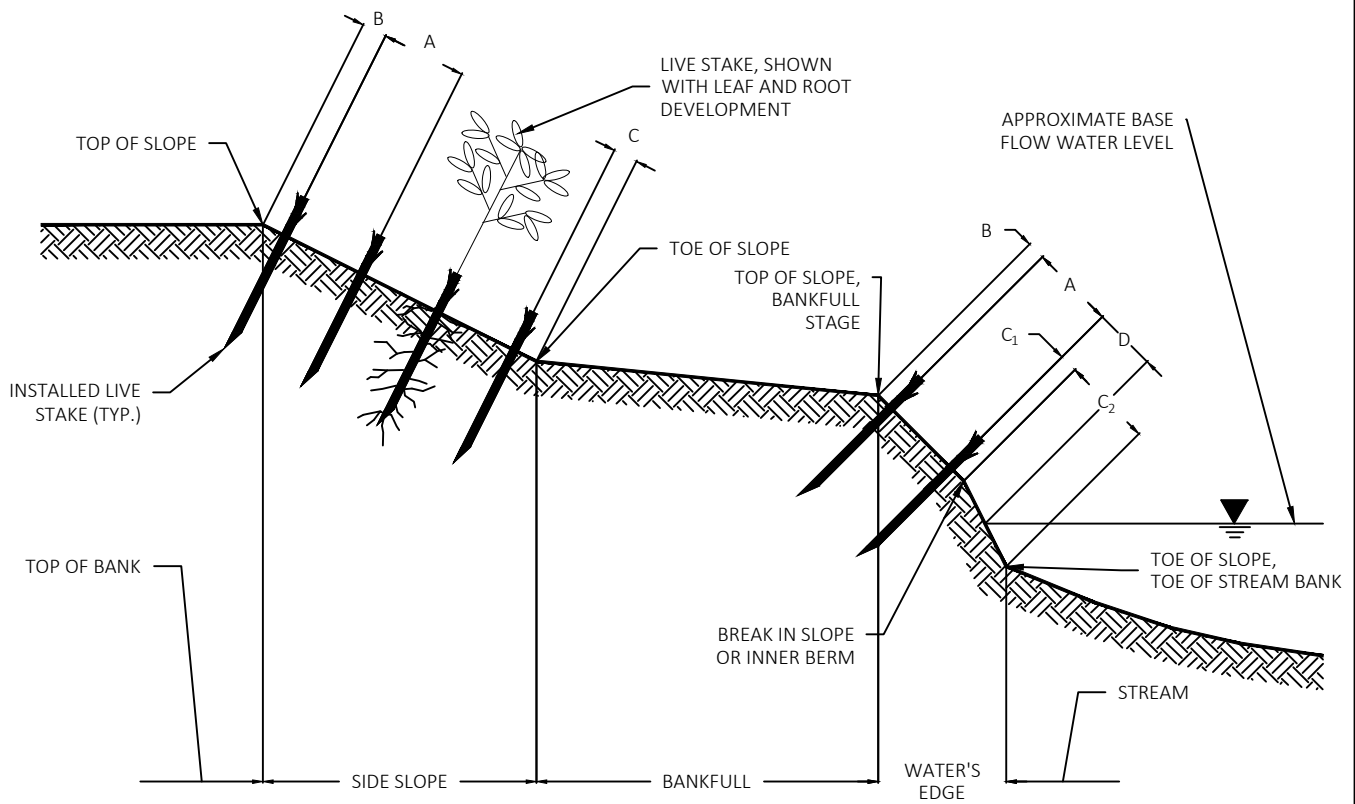
- NOTES:**
- PRE-MANUFACTURED WOOD OR BIODEGRADABLE STAKES OF SUFFICIENT LENGTH MAY BE USED IN PLACE OF 2"x4" RIPPED WEDGE STAKES. NO METAL OR NON BIODEGRADABLE FASTENERS MAY BE USED IN PLACE OF WOOD STAKES.
  - NOTCH STAKES TO 3/8" DEPTH (BOTH SIDES). TWINE, STRING, OR WIRE SHALL BE WRAPPED 1 TURN MIN. AROUND EACH STAKE AND PLACED WITHIN NOTCH.



**SECTION A-A**



**A EROSION CONTROL MAT/BLANKET**  
 CD-SR-04 NOT TO SCALE



**B LIVE STAKE**  
 CD-SR-04 NOT TO SCALE

LIVE STAKING DIMENSION KEY			
DIMENSION	NAME	TYPICAL UNIT	VALUE
A	LIVE STAKE SPACING	FEET	2 TO 4
B	LIVE STAKE - TOP OF SLOPE PLACEMENT	FEET	TBD
C	LIVE STAKE - TOE OF SLOPE PLACEMENT	FEET	TBD
D	LIVE STAKE - BASE FLOW RELATIONSHIP	FEET	TBD
E	LIVE STAKE LENGTH	FEET	3
F	LIVE STAKE PROTRUSION	FEET	1/5 X LIVE STAKE LENGTH; TALLER THAN SURROUNDING VEGETATION (NRCS 2007A)
G	LIVE STAKE DIAMETER	INCHES	1/2 TO 2

- NOTES:**
- DATA ARE FOR LIVE STAKING IN BARE SOIL, IN SOIL COVERED WITH EROSION CONTROL MATTING, AND/OR IN SOIL COVERED WITH RIP RAP OR OTHER REVETMENT (JOINT PLANTING).
  - DIMENSION LABELS ARE REFERENCED IN THE DETAIL DRAWINGS.
  - COMMON GUIDANCE, VALUES, OR RANGES ARE GIVEN UNLESS THEY REQUIRE COMPUTATION USING SITE-SPECIFIC INPUT.