



DWR WSN: DCF-0098

Project: Long-Scott Creeks Watershed District No. 93
Site 6-9 Dam Rehabilitation

Location: SE 1/4 Sec 9, T-20S; R-16E
Coffey County, Kansas

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Brian W. Severin, P.E. January 2024
 Designed by Date



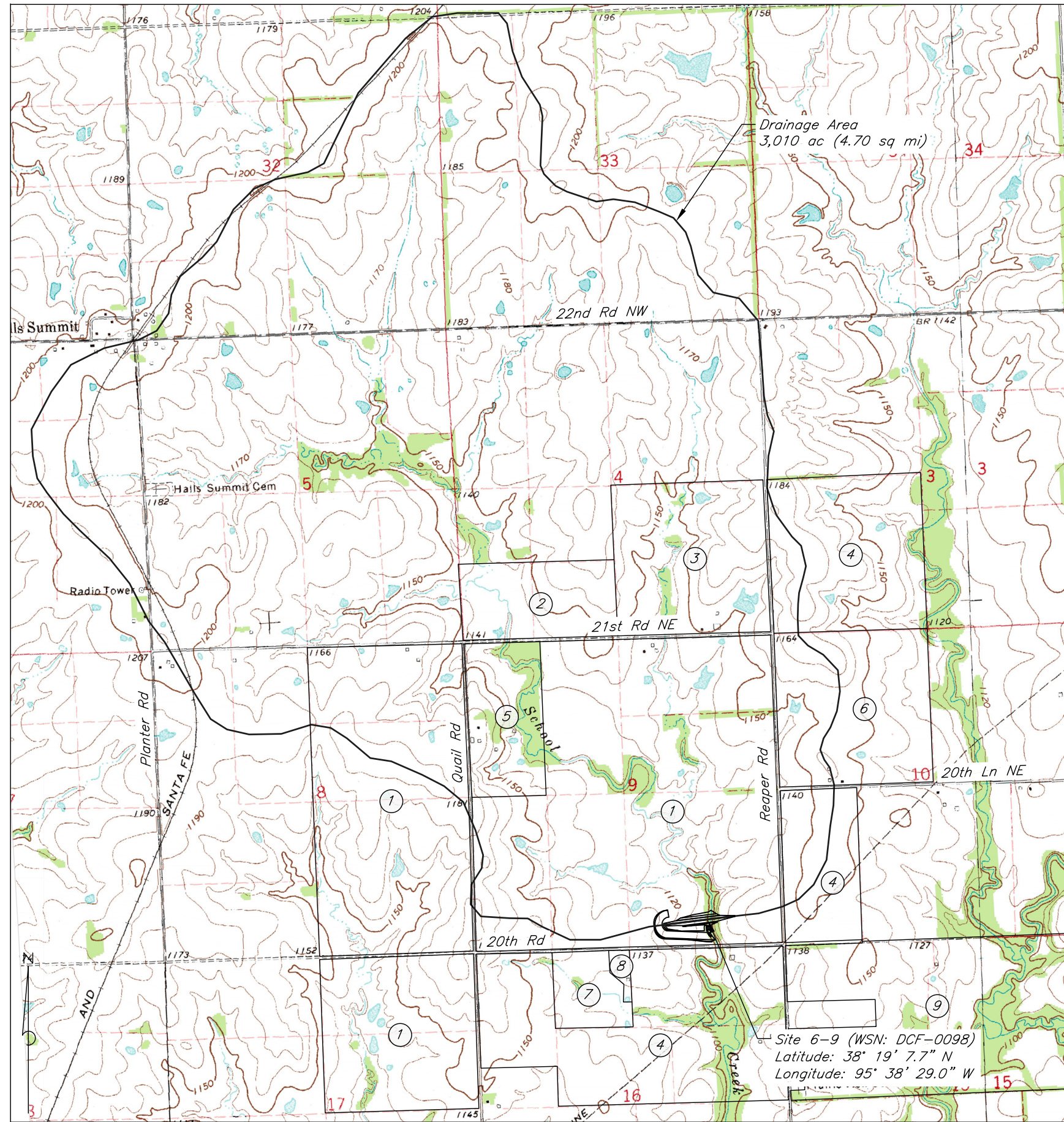
 Approved by Date

Construction Notification to the Chief Engineer [per K.A.R. 5-40-70]
 Each holder of a permit to construct, or an approval to repair or modify a dam, shall notify the KDA-Division of Water Resources Chief Engineer at least 48 hours before any of the following stages of construction and shall obtain the approval of the Chief Engineer before proceeding with each of these stages of construction:

- (a) Starting construction;
- (b) placing backfill in the cutoff trench;
- (c) placing backfill around the primary spillway conduit or any other conduit that extends through the dam embankment and exits the downstream slope; and
- (d) starting any stage of construction not specified in this regulation for which the permit requires that the Chief Engineer shall be notified.

Responsible Engineer [per K.A.R. 5-40-71 (c)]
 Brian Severin, P.E.
 1416 Presby Dr
 Emporia, Kansas 66801
 (c) 785-207-0201

Before any investigation or construction activity, the excavator is responsible for calling Kansas One-Call at 800-344-7233 (800-DIG-SAFE) or 811



The approximate project location is 5 miles south and 2 miles west of Waverly, Kansas.

Table of Quantities			
Item	Unit	Design Quantity	As-Built Quantity
Front Slope Repair			
Excavation	cu yd	660	
Rock Riprap, KDOT Light 24" or Light 18" stone	ton	990	
Outlet Channel Repair			
Excavation	cu yd	120	
Rock Riprap, KDOT Light 24" or Light 18" stone	ton	180	
Existing Fence Removal			
Remove and Dispose Existing Fence Materials	lin ft	1,200	
Fence Barrier Repair			
Rock Riprap, KDOT Light 24" or Light 18" stone	ton	60	
Grass Seeding	ac	1.5	

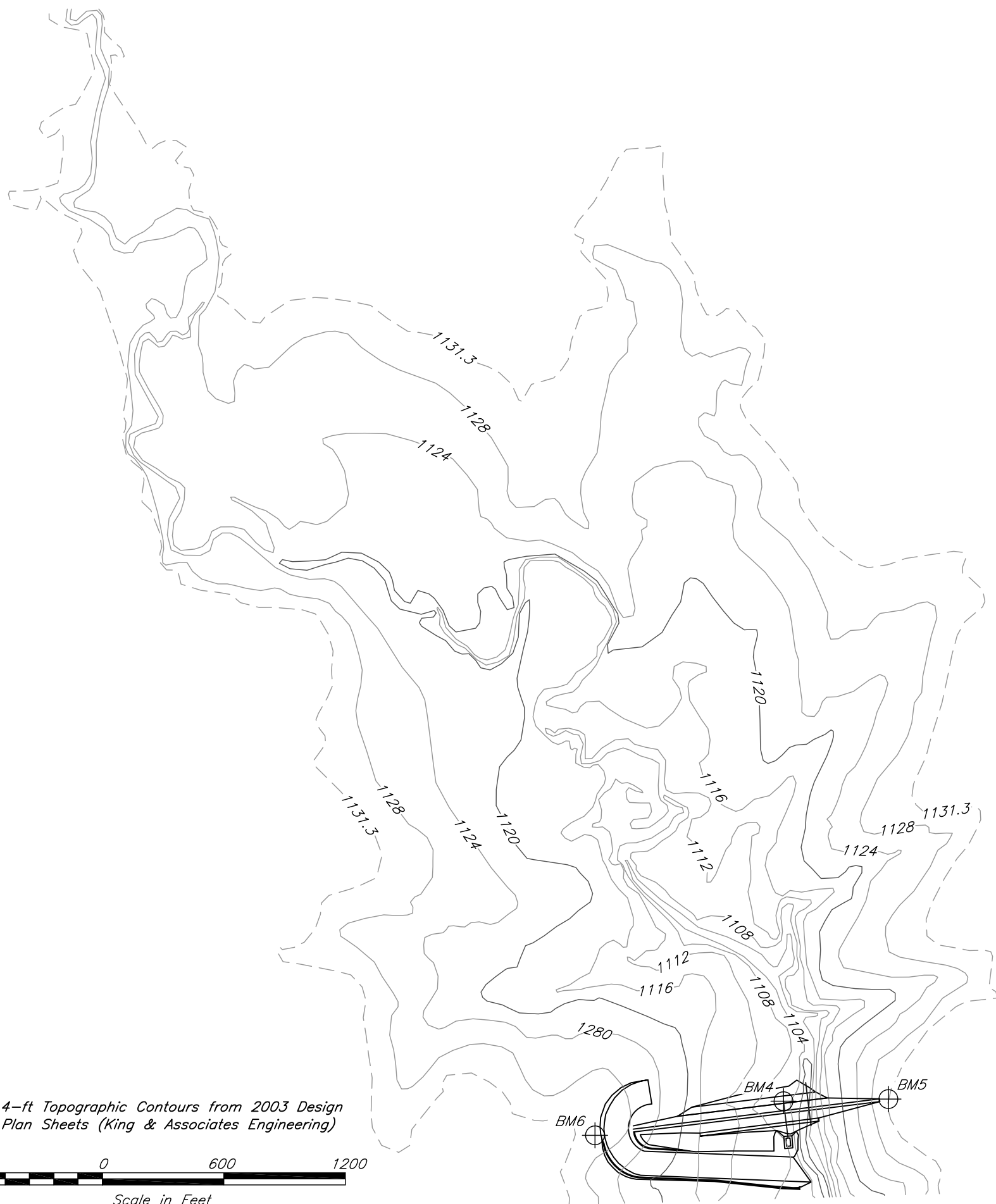
Adjacent Landowners

- 1) Project Location & Adjacent Properties
Williams Family LLC
1275 Udell Hanson Rd
Grayland, Washington 98547
- 2) Tice, Daniel O & Anne M
1744 21st Rd
Waverly, Kansas 66871
- 3) Swartley, Marilyn J
461 E Loula St
Olathe, Kansas 66061
- 4) Williams, Cynthia Ann Trust
1970 Reaper Rd
Waverly, Kansas 66871
- 5) Tyson, Dennis D II & Christina Van Arsdale
714 Pearson Ave
Waverly, Kansas 66871
- 6) Corlis, Sherry L & Jeffrey D
1824 20th Ln
Waverly, Kansas 66871
- 7) Carlson, David J & Sally A Trust
1758 18th Rd
Waverly, Kansas 66871
- 8) Chandler, Cory G; Cochran, Haley D
1745 20th Rd
Waverly, Kansas 66871
- 9) Silovsky, Patricia A Trust
7130 Rockwood Dr
Milford, Kansas 66514

Date 01/24
Designed B Severin
Drawn B Severin
Checked C Janssen
Approved B Severin

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Storage Table			
Elevation (ft)	Area (ac)	Volume (ac-ft)	Total Volume (ac-ft)
1096	0	0	0
1100	0.20	0.40	0.40
1104	0.62	1.64	2.04
1108	3.72	8.68	10.7
1112	17.9	43.2	53.9
1116	36.8	109	163
PS 1118	57.2	94.0	257
1120	77.5	135	392
1124	136	427	819
ASW 1125.5	163	224	1043
1128	208	464	1507
TOD 1131.3	267	784	2290

Storage Table from 2003 Design Plan Sheets (King & Associates Engineering)

Benchmark Table				
Benchmark	Northing	Easting	Survey Elevation	Description
BM4	1926547.27	2132332.17	1118.00	Crest of inlet riser
BM5	1926552.68	2132852.00	1132.95	Top of rebar on dam centerline, Sta 10+85
BM6	1926373.91	2131403.33	1130.29	Top of rebar on dam centerline, Sta 25+45

Survey Area: Kansas State Plane (South)

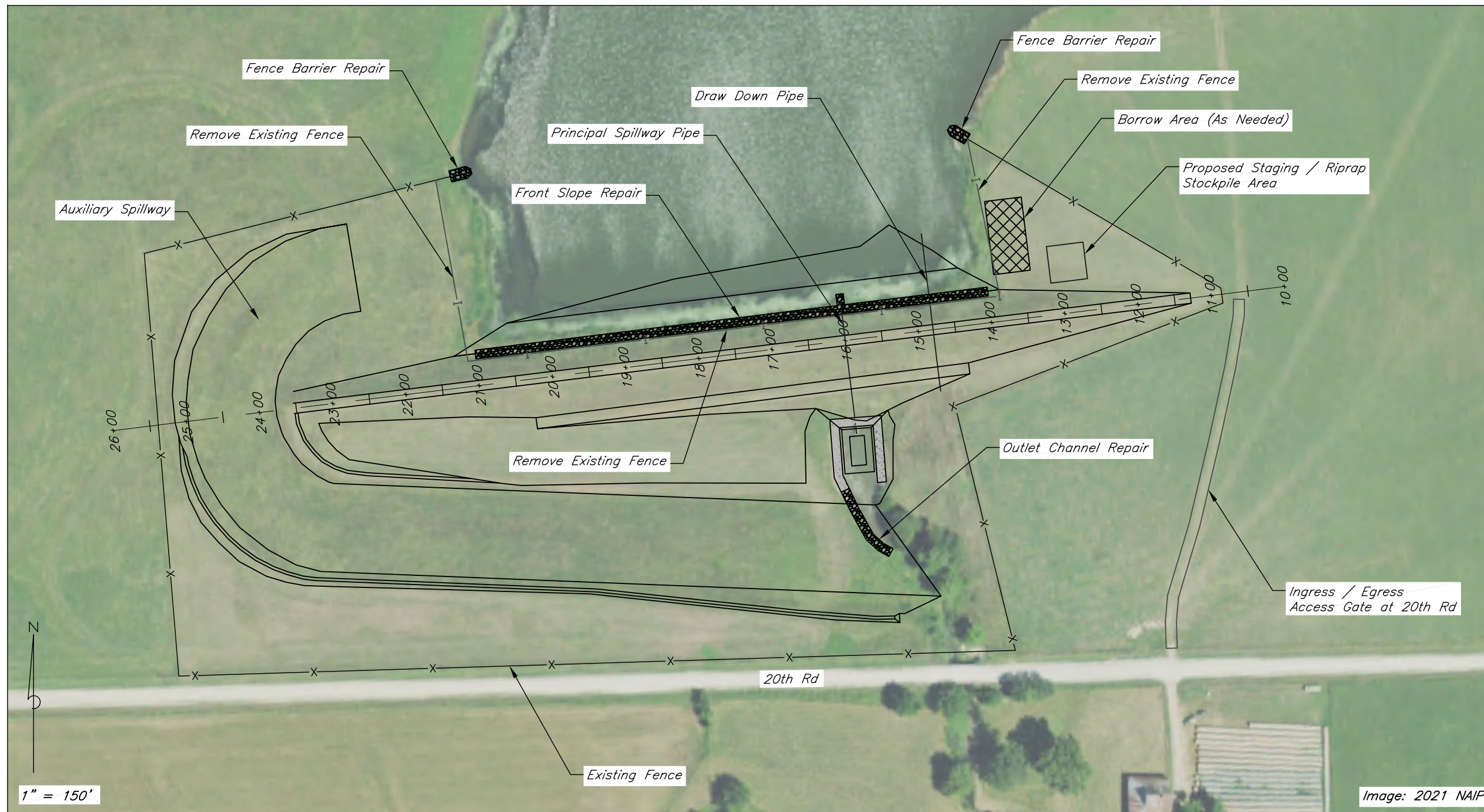
Site 6-9 Information
 NID ID: KS09292
 DWR WSN: DCF-0098
 DWR Class Size: 4
 Hazard Classification: Significant

Topographic Plan Map and Site Information

Designed B Severin Date 01/24
 Drawn B Severin Date 01/24
 Checked C Janssen Date 02/24
 Approved B Severin Date 02/24

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Repair Descriptions

Front Slope Repair (see detail on sheet 5 of 8):

- Front toe excavation
- Rock riprap placement

Outlet Channel Repair (see detail on sheet 6 of 8):

- Bank excavation
- Rock riprap placement

Fence Removal and Barrier Repair (see detail on sheet 7 of 8):

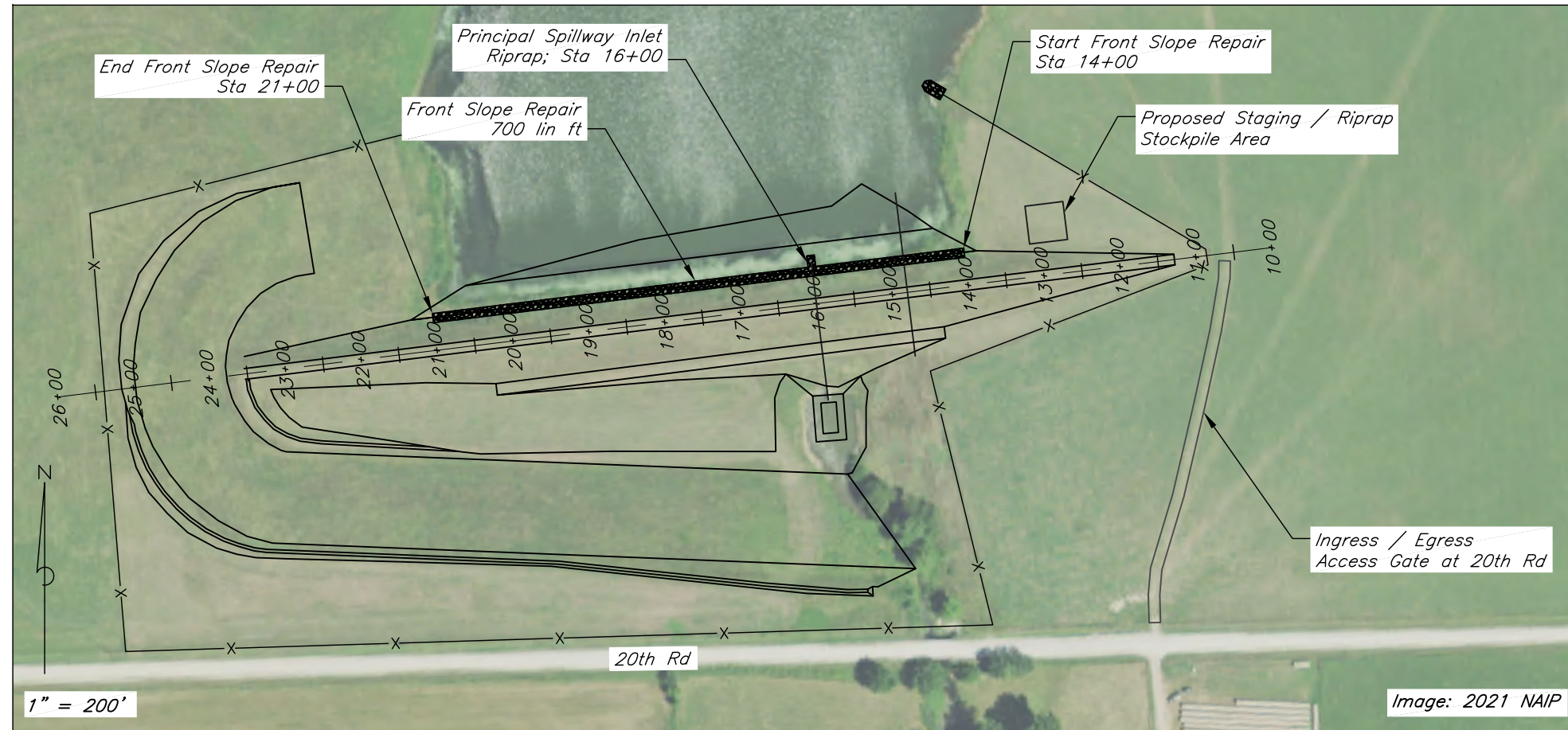
- Remove and dispose of existing fence
- Fence barrier installation (rock riprap)

Orthographic Plan Map

Designed	B Severin	Date	01/24
Drawn	B Severin		
Checked	C Janssen		
Approved	B Severin		

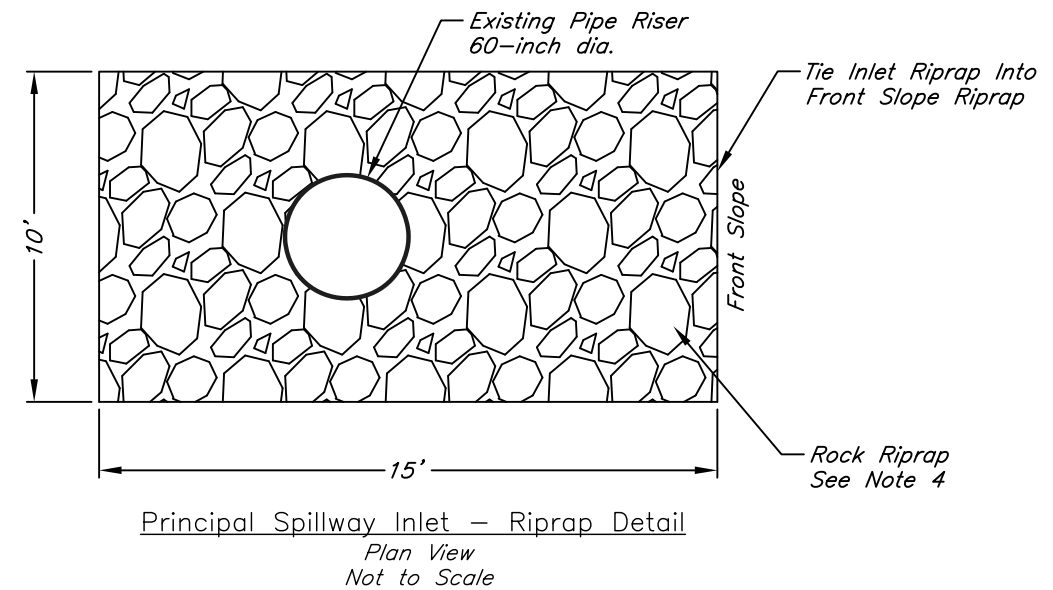
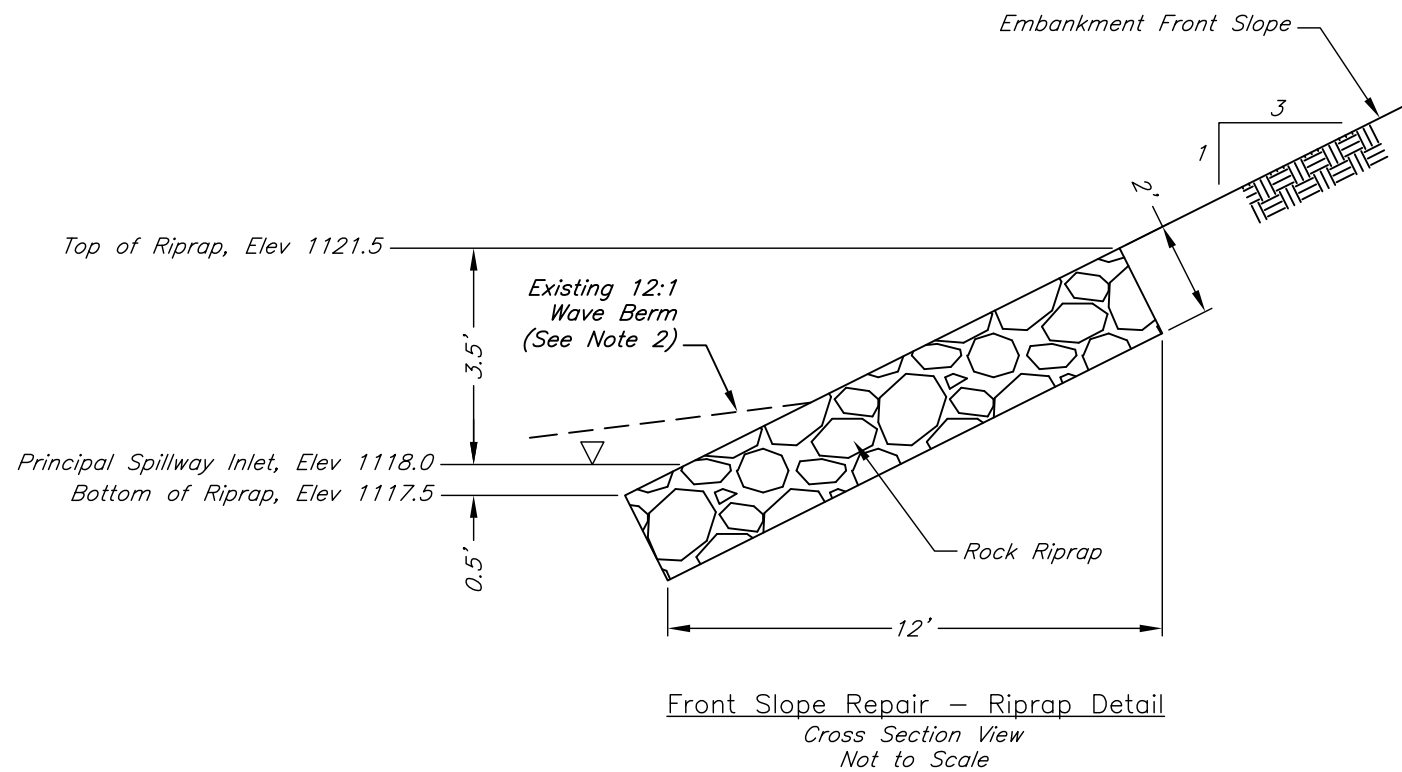
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Notes:

- 1) Rock riprap shall be placed along the embankment front slope from Sta 14+00 – Sta 21+00
- 2) The existing 12:1 wave berm is eroded. As-built, the wave berm started at Elev 1119.0. The wave berm will not be reconstructed to match as-built elevation and dimension. The excavation shall extend into the wave berm as needed to meet the front slope repair detail dimensions and elevations.
- 3) The existing front slope shall be excavated to the dimension and elevation shown in the detail. Excavated material shall be blended into the embankment slope or scattered throughout the riprap after placement is complete.
- 4) The principal spillway inlet riprap shall be 2 feet thick.
- 5) The construction staging area for equipment and rock stockpile shall be mutually determined by the Contractor and Project Engineer.
- 6) Rock riprap gradation shall meet KDOT Stone for Riprap Class – Light Series, Light 24' or Light 18"
- 7) Riprap quality shall meet KDOT Stone for Riprap – soundness and wear requirements.
- 8) Riprap source shall be approved by the Project Engineer.

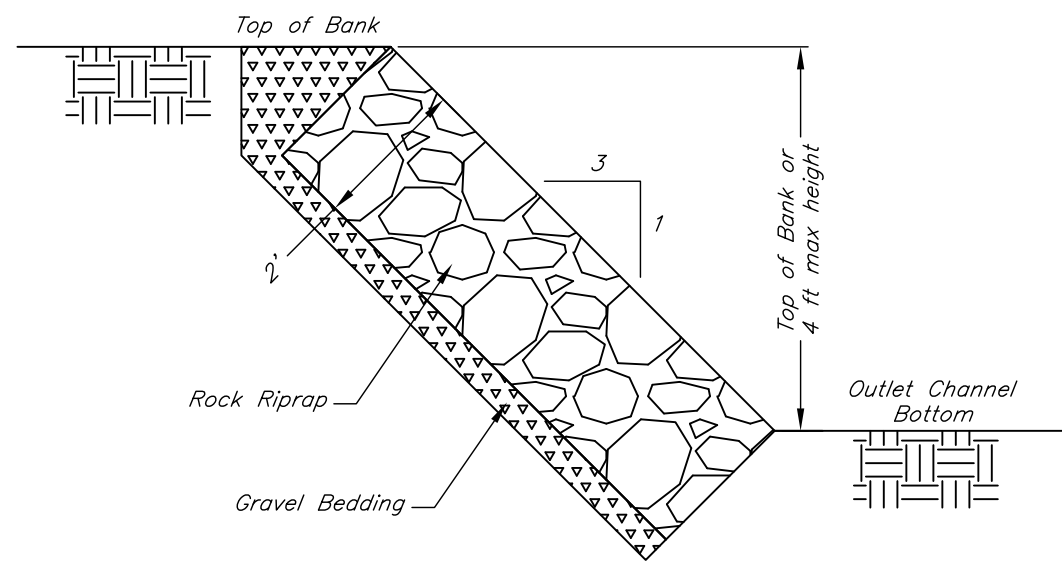
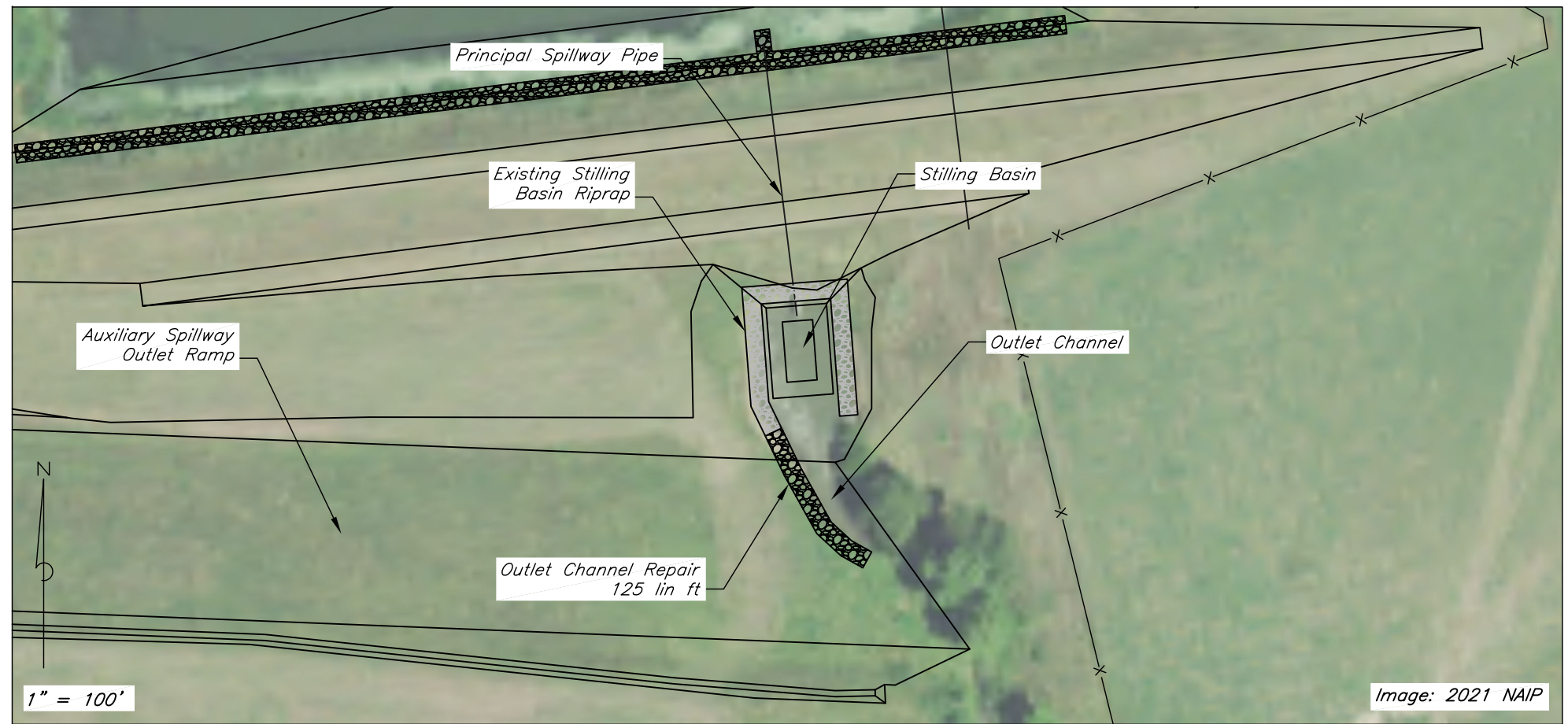


Front Slope Repair Detail

Date	01/24
Designed	B Severin
Drawn	B Severin
Checked	C Janssen
Approved	B Severin

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Outlet Channel Bank Repair Detail

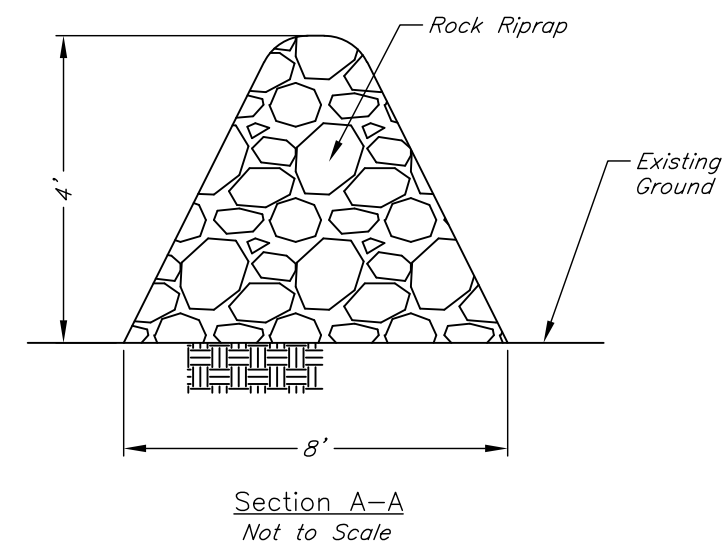
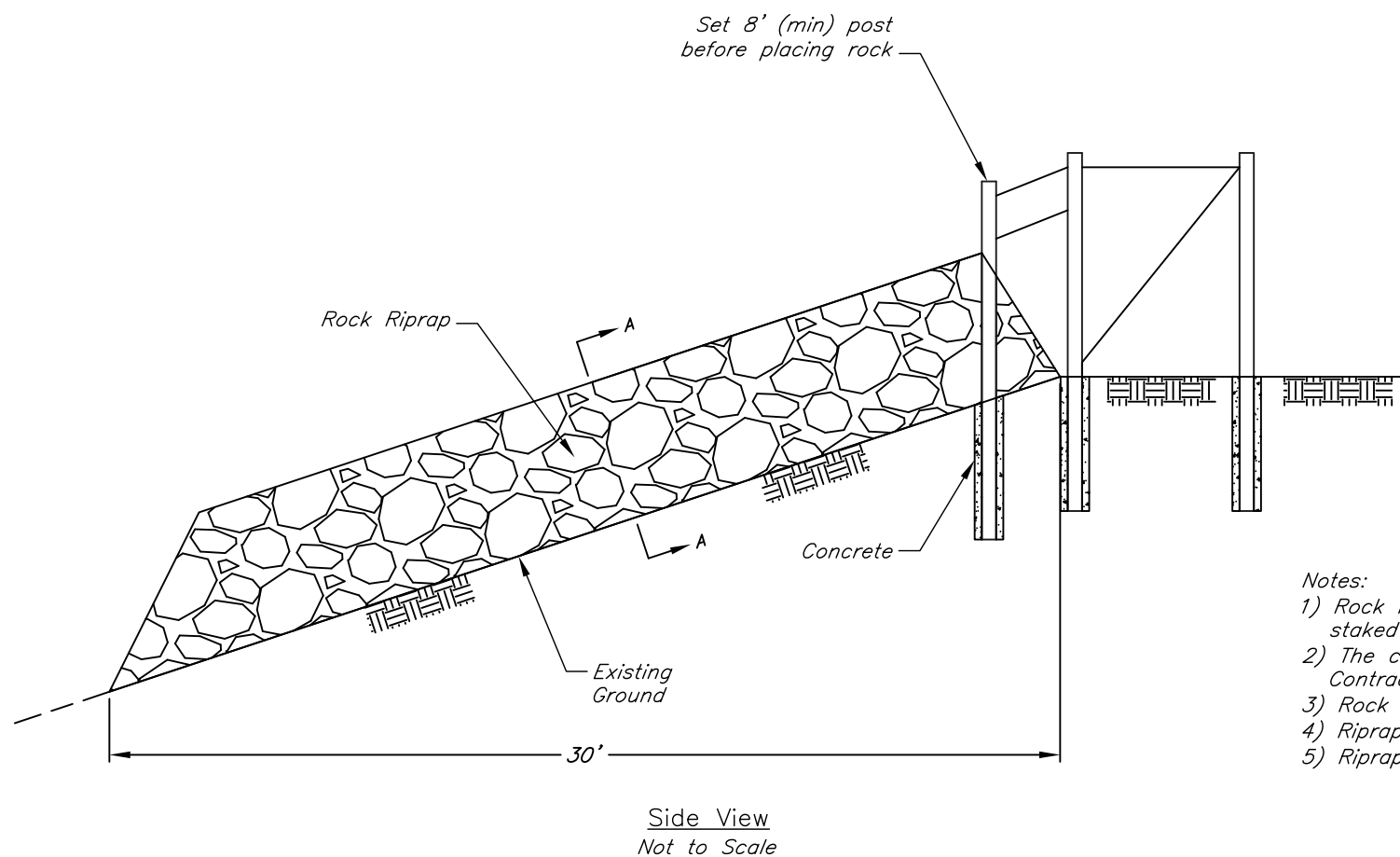
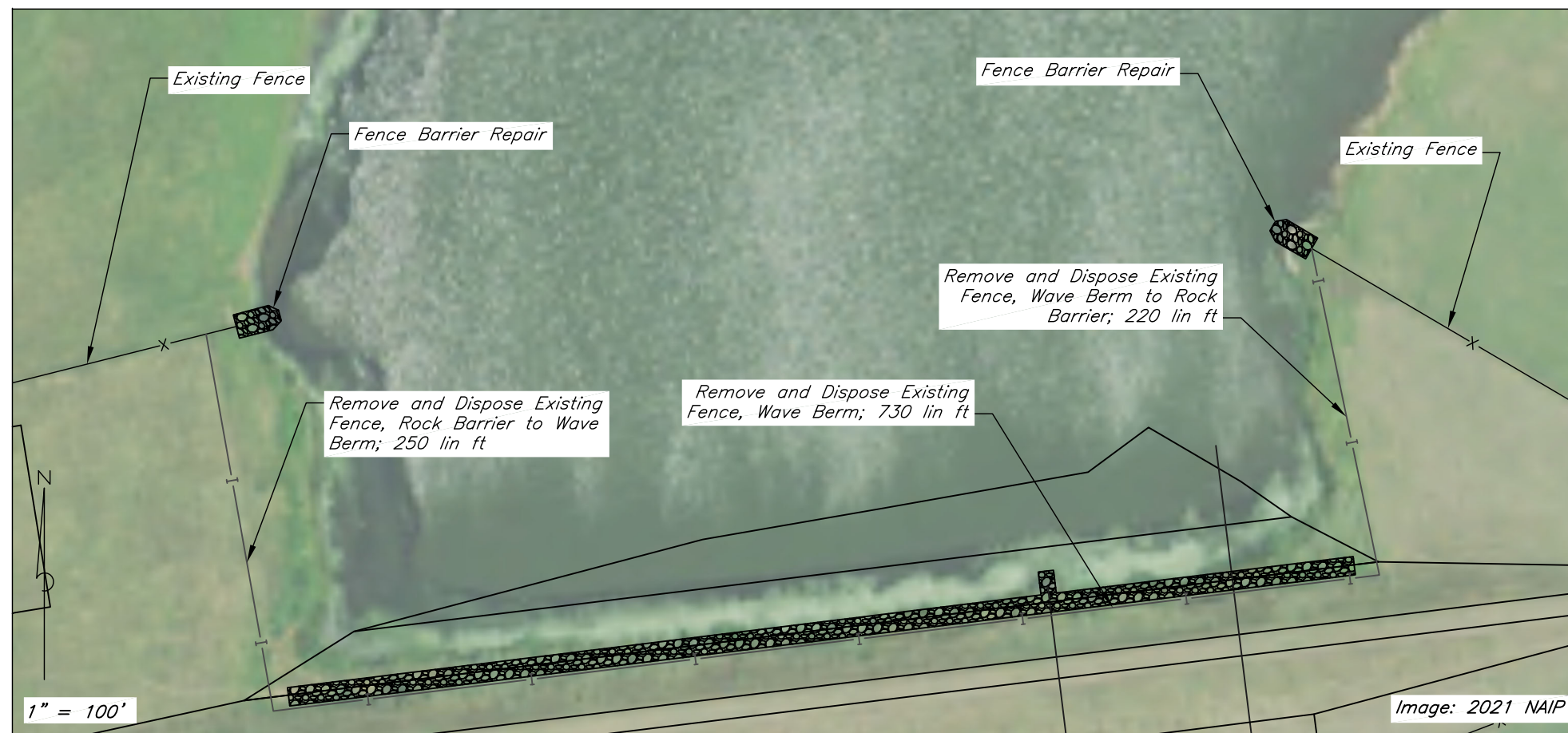
- Stilling Basin Bank Repair Notes:*
- 1) Repair location starts at the downstream end of the existing stilling basin riprap. Repair extends approximately 125 feet along outlet channel bank.
 - 2) Reshape the existing outlet channel bank to create a 3H:1V finished slope.
 - 3) Remove gravel deposition in the stilling basin and line the reshaped slope to create a base for the larger riprap material.
 - 4) Place rock riprap along the reshaped bank slope to the dimensions shown in the drawing detail.
 - 5) Rock will extend into the outlet channel. The toe of the riprap shall be below the existing channel elevation.
 - 6) Earthen excavation shall be placed along the top edge of the rock slope. The finished surface shall be smoothed to allow for grass seeding.

Outlet Channel Repair Detail

Designed	B Severin	Date	01/24
Drawn	B Severin		01/24
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Approved	B Severin		02/24

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Notes:

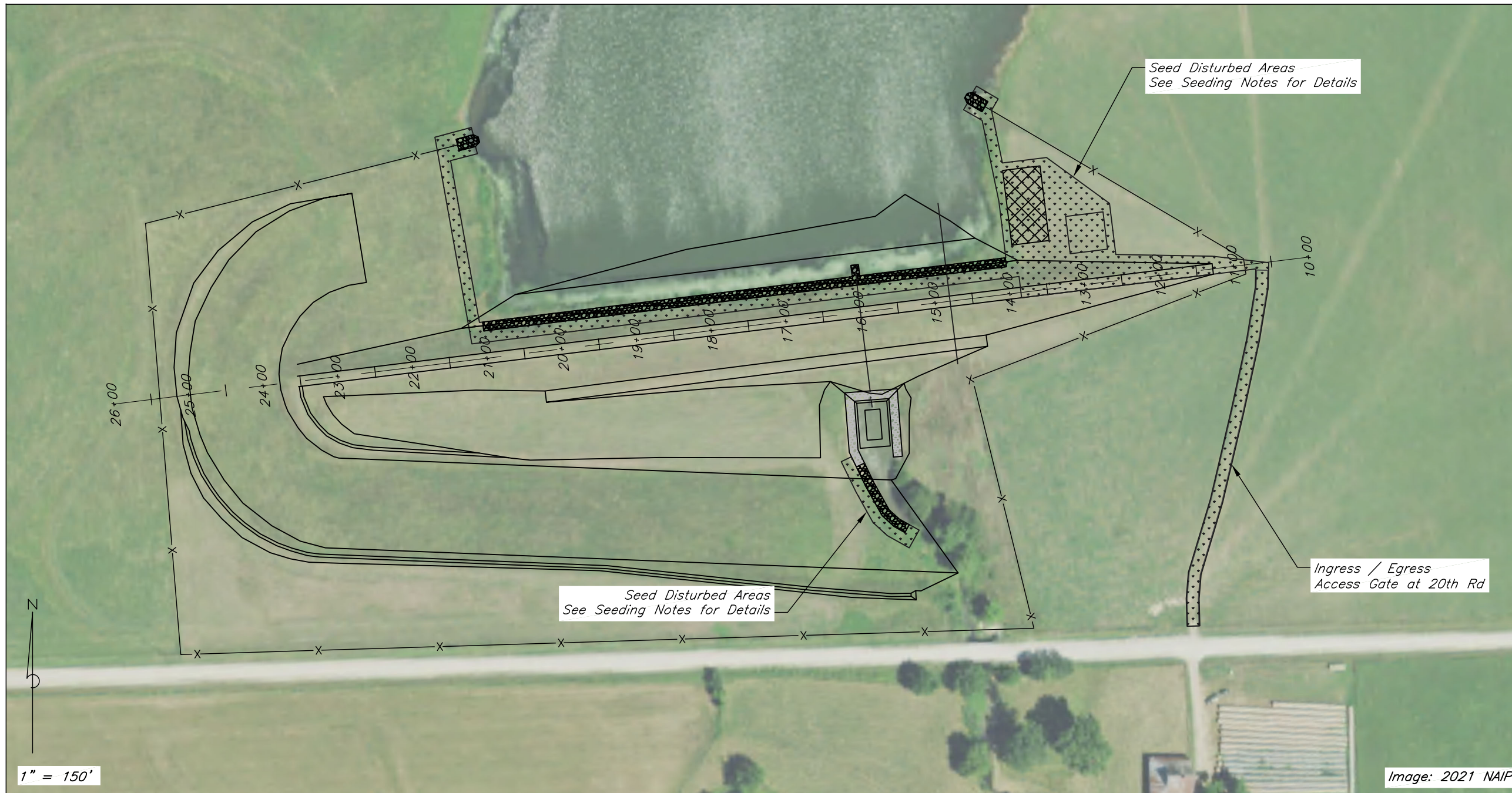
- 1) Rock riprap shall be placed to form a fence barrier in the location specified on the plan sheets or staked in the field.
- 2) The construction staging area for equipment and rock stockpile shall be mutually determined by the Contractor and Project Engineer. A proposed location is shown on the plan sheets.
- 3) Rock riprap gradation shall meet KDOT Stone for Riprap Class - Light Series, Light 24' or Light 18"
- 4) Riprap quality shall meet KDOT Stone for Riprap - soundness and wear requirements.
- 5) Riprap source shall be approved by the Project Engineer.

Fence Barrier Detail

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Pollution Control Notes:

- 1) The estimated total area of disturbance for this project is 1.5 acres. The primary area of disturbance will be in the front slope and outlet channel rehabilitation areas. Other areas of disturbance will occur in the ingress/egress route, equipment/material staging, and haul routes.
- 2) Existing vegetation buffering the construction area will be left undisturbed. No other sediment controls will be required.
- 3) Trash, scraps, and shipping wastes shall be collected and disposed offsite.
- 4) Construction equipment shall be kept in good working condition and monitored for leaks.
- 5) Petroleum products shall be stored in tightly sealed containers that are clearly marked.
- 6) Any discharge or escape of substances which contaminate, or threaten to contaminate or alter any of the properties of the waters of the State or pollute soil in a detrimental, harmful, or injurious manner or will create a nuisance, shall be immediately reported to the Kansas Department of Health and Environment (KDHE)
- 7) KDHE Spill Reporting Number: 785-296-1679

Seeding Notes:

- 1) Reseed all areas disturbed during the dam rehabilitation as necessary (including ingress/egress route, equipment/material staging and haul routes)
- 2) Grass seed mix shall mimic that of the surrounding composition. A recommended mix shall be provided prior to planting.

Grass Seeding and Pollution Control Plan

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