

CONSTRUCTION PLAN

PRACTICE(S) GRASSED WATERWAY (412)

LANDOWNER DURLIN KNUTH

ADDRESS S7102 SUNRISE ROAD, LOGANVILLE, WI 53943

LANDOWNER PHONE NO. 608-434-0335 COUNTY SAUK

TOWNSHIP WESTFIELD T 11 N, R 04 E/W, Sec. 34

FIELD OFFICE SAUK CO. LRE DEPT. TELEPHONE NO. 608-355-3245

DIGGERS HOTLINE

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Not to  
 Scale

LOCATION MAP

NOTICE TO LANDOWNERS AND EXCAVATORS

Any representation made by the USDA, Natural Resources Conservation Service, or the SAUK County LCD, as to the approximate location or nonexistence of above or under ground hazards does not relieve the owner of the property or the excavator that is hired to complete construction, from notifying Diggers Hotline of the pending construction. You will be liable for damages resulting from construction activities.  
 Call Diggers Hotline! Ticket Number \_\_\_\_\_

CONSTRUCTION DRAWINGS AND SPECIFICATIONS ACCEPTANCE

I have reviewed and understand the construction plans and specifications and agree to complete the work accordingly. Failure to meet these plans and specifications may jeopardize any continued NRCS technical assistance or program cost sharing applied for. I understand that it is my responsibility to secure all necessary permits and licenses, and to complete the work in accordance with all local, state, and federal laws. Modification of these construction plans or specifications must be approved by the NRCS before installation. I assume all responsibility for negotiations and contract agreements with the construction contractors.

Landowner Signature: Durlin Knuth Date: 3-26-2020  
 Designed by: GUS JOHNSON Date: 3/17/2020  
 Checked by: \_\_\_\_\_ Date: \_\_\_\_\_  
 Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

The installed practices comply with applicable NRCS technical standards and specifications. The "redlined" construction plans (as-built drawings) reflect changes made during construction.

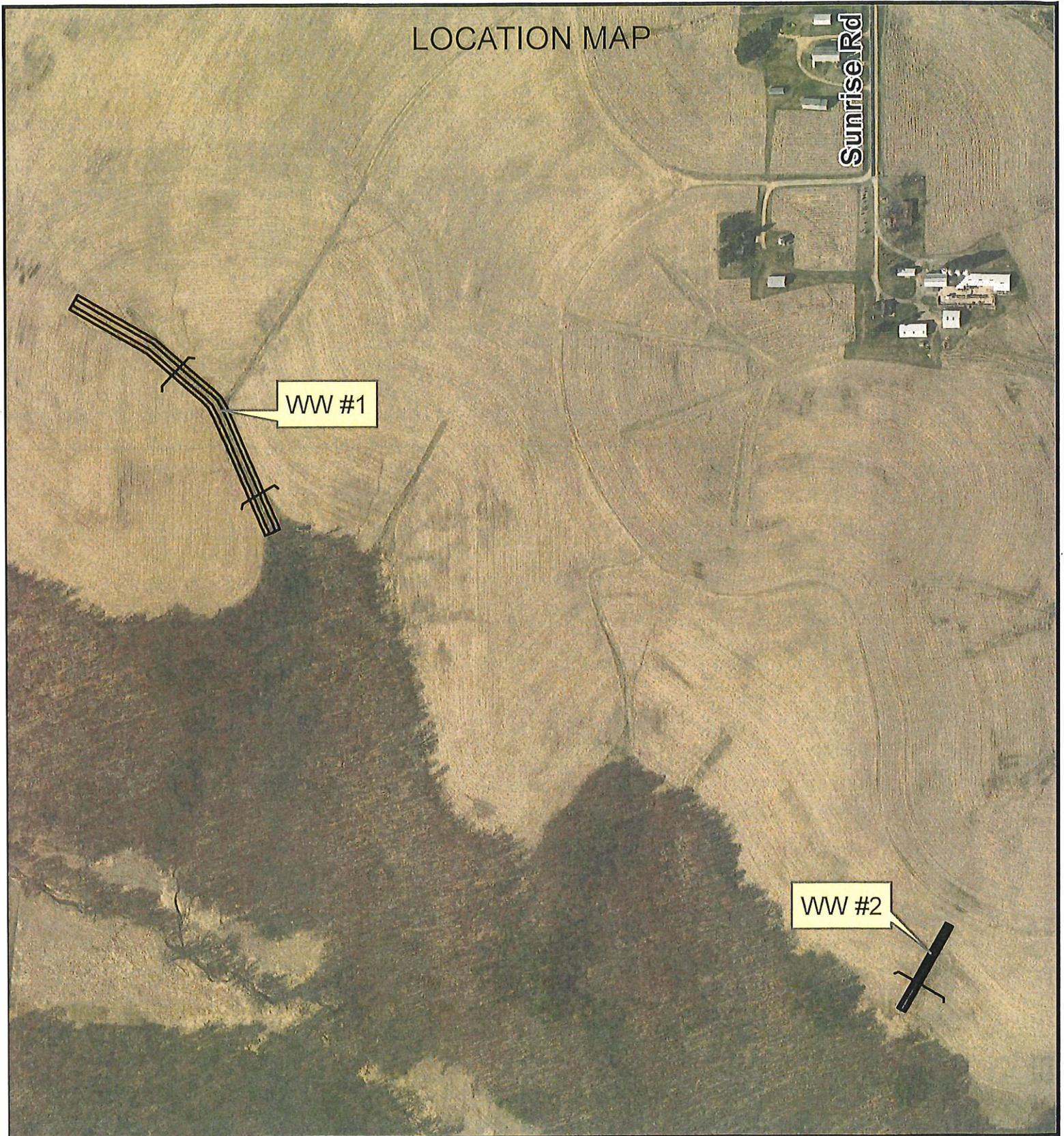
Construction Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Job Approval Class I (D.A. = 35.8 Ac. + 2.5 Ac.) Sheet 1 of \_\_\_\_\_



# DURLIN KNUTH GRASSED WATERWAYS (412)

LOCATION MAP



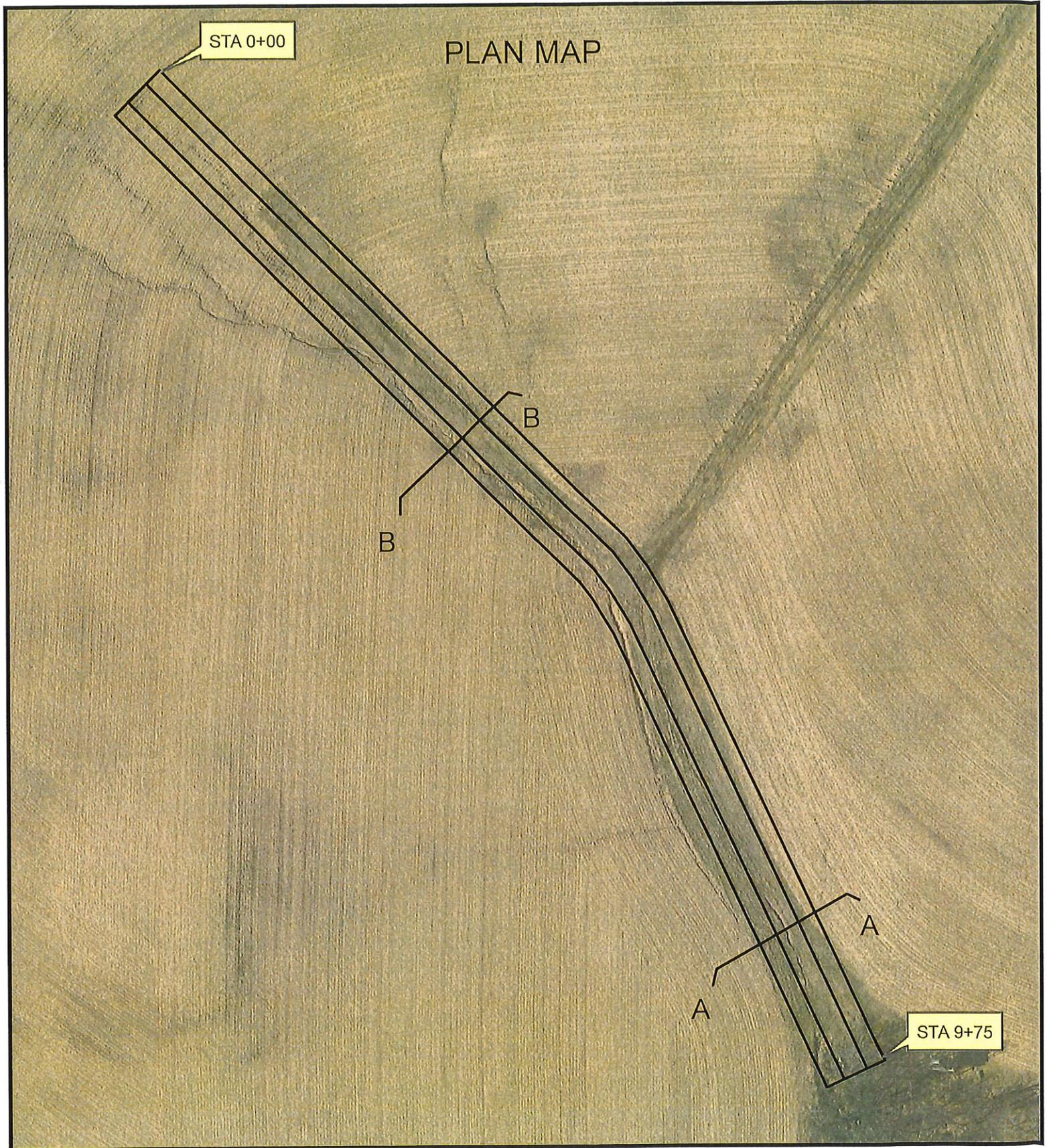
0 200 400 800 Feet  
|-----|-----|-----|-----|



DESIGNED: GJ CHECKED: \_\_\_\_\_

SHEET 3 OF 10

# DURLIN KNUTH WATERWAY #1



0 50 100 200 Feet

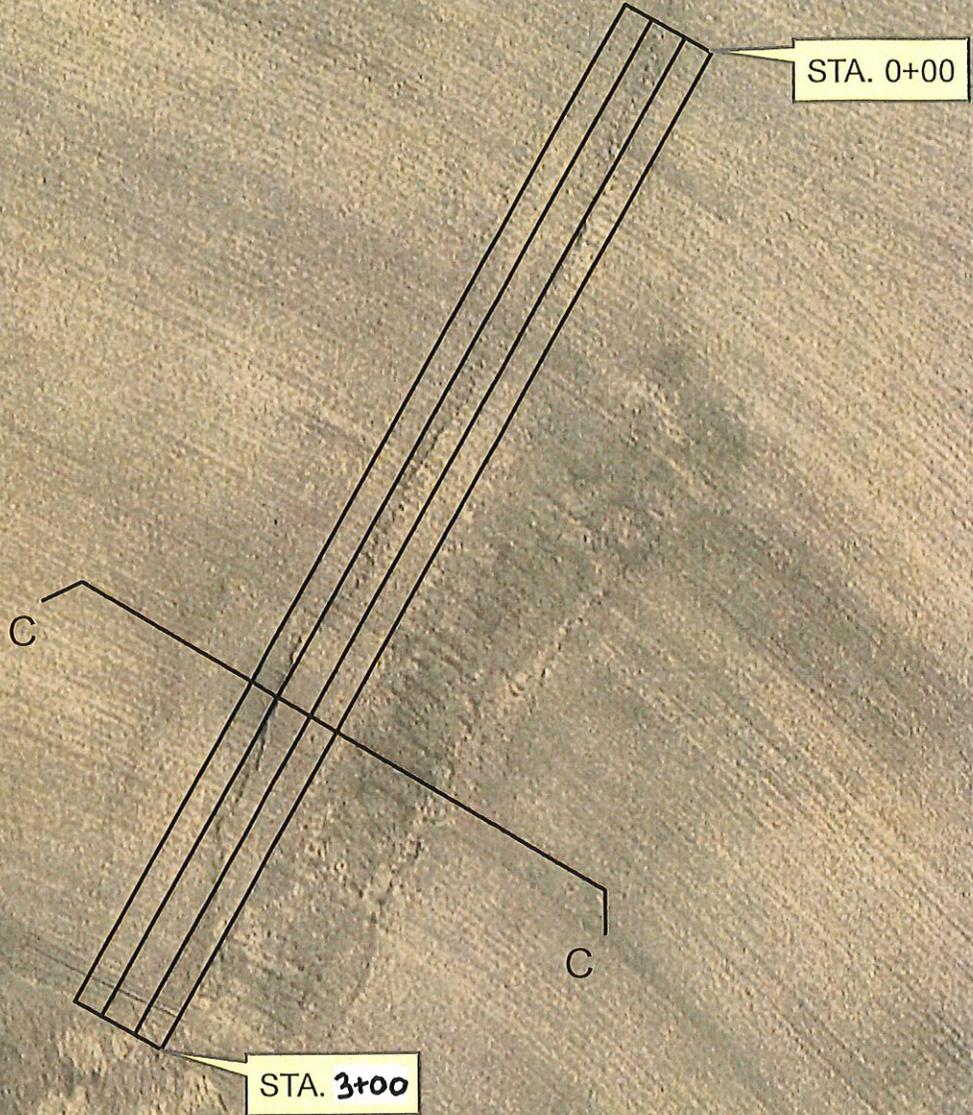


DESIGNED: GJ CHECKED: \_\_\_\_\_

SHEET 4 OF 10

# DURLIN KNUTH WATERWAY #2

PLAN MAP

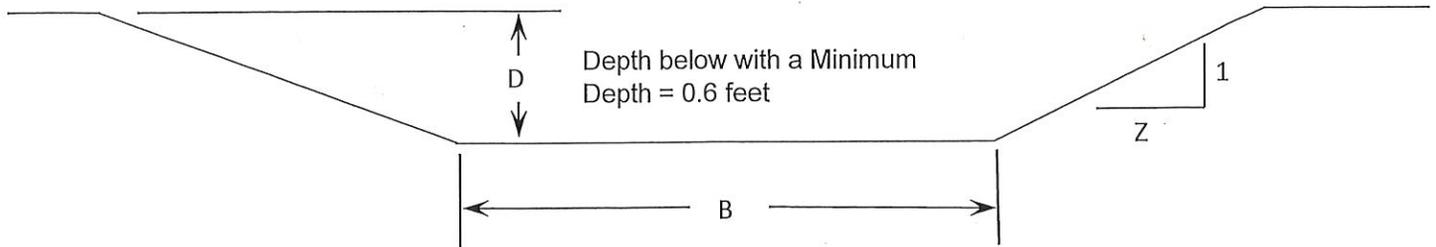


0 25 50 100 Feet  
|-----|-----|-----|-----|



DESIGNED: GJ CHECKED: \_\_\_\_\_

SHEET 5 OF 10



CONSTRUCTION DETAILS

WATERWAY NUMBER	REACH		CHANNEL SLOPE %	Bottom Width (B) FEET	Depth (D) FEET	SIDE SLOPE (Z)	LENGTH FEET
	FROM	TO					
1	0+00	3+85	6.75	20	1.5	10	385
1	3+85	8+55	3.7	20	1.5	10	470
1	8+55	9+75	5.4	20	1.5	10	120
2	0+00	1+25	5.5	10	1.0	8	125
2	1+25	2+15	8.5	10	1.0	8	90
2	2+15	3+00	4.5	10	1.0	8	85

NOTES AND SPECIFICATIONS:

1. TOPSOIL SHALL BE STOCKPILED AND RESPREAD ON THE WATERWAY WHEN NEEDED TO FACILITATE REVEGETATION.
2. PLACE SPOIL WHERE IT WILL NOT INTERFERE WITH SURFACE WATER FLOW INTO THE WATERWAY.
3. FILL AND PROPERLY COMPACT ANY EXISTING GULLIES ADJACENT TO WATERWAYS
4. CHANNEL SLOPES WITHIN 0.5% (+ OR -) OF DESIGN SLOPE (ABOVE) WILL STILL MEET GRASSED WATERWAY STANDARD. THIS RANGE ALLOWS FOR CONSTRUCTOR FLEXIBILITY FOR PROFILE GRADING.
- 5.
- 6.
- 7.



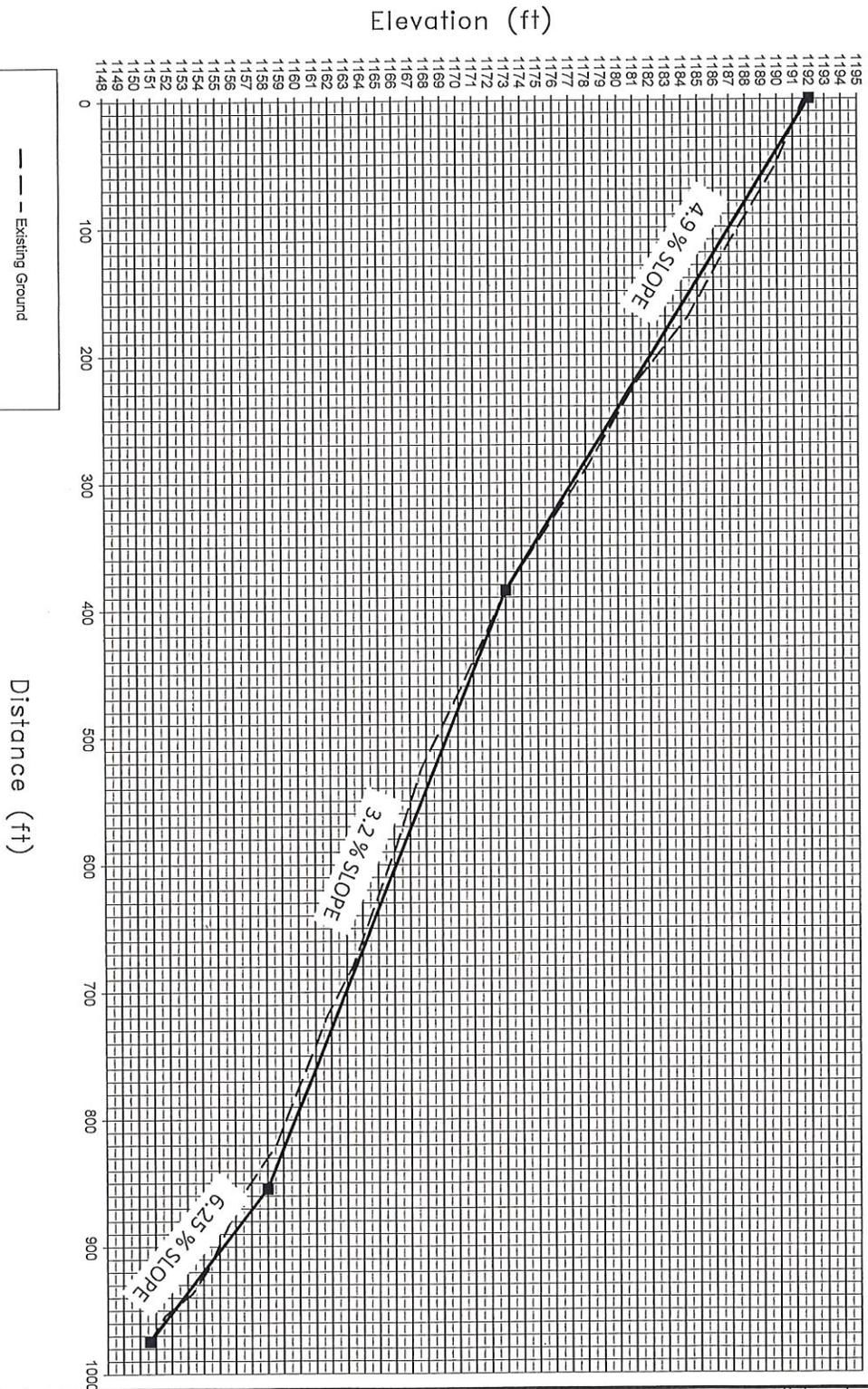
TRAPEZOIDAL GRASSED WATERWAY

CLIENT: Durlin Knuth  
 COUNTY: Sauk MSE4

Designed: GJ	Date	3/17/20
Drawn: GJ	Date	3/17/20
Checked: _____		
Approved: _____		

File Name	Date
WI-402 A ss	
	7-2014

# Profile Waterway 1



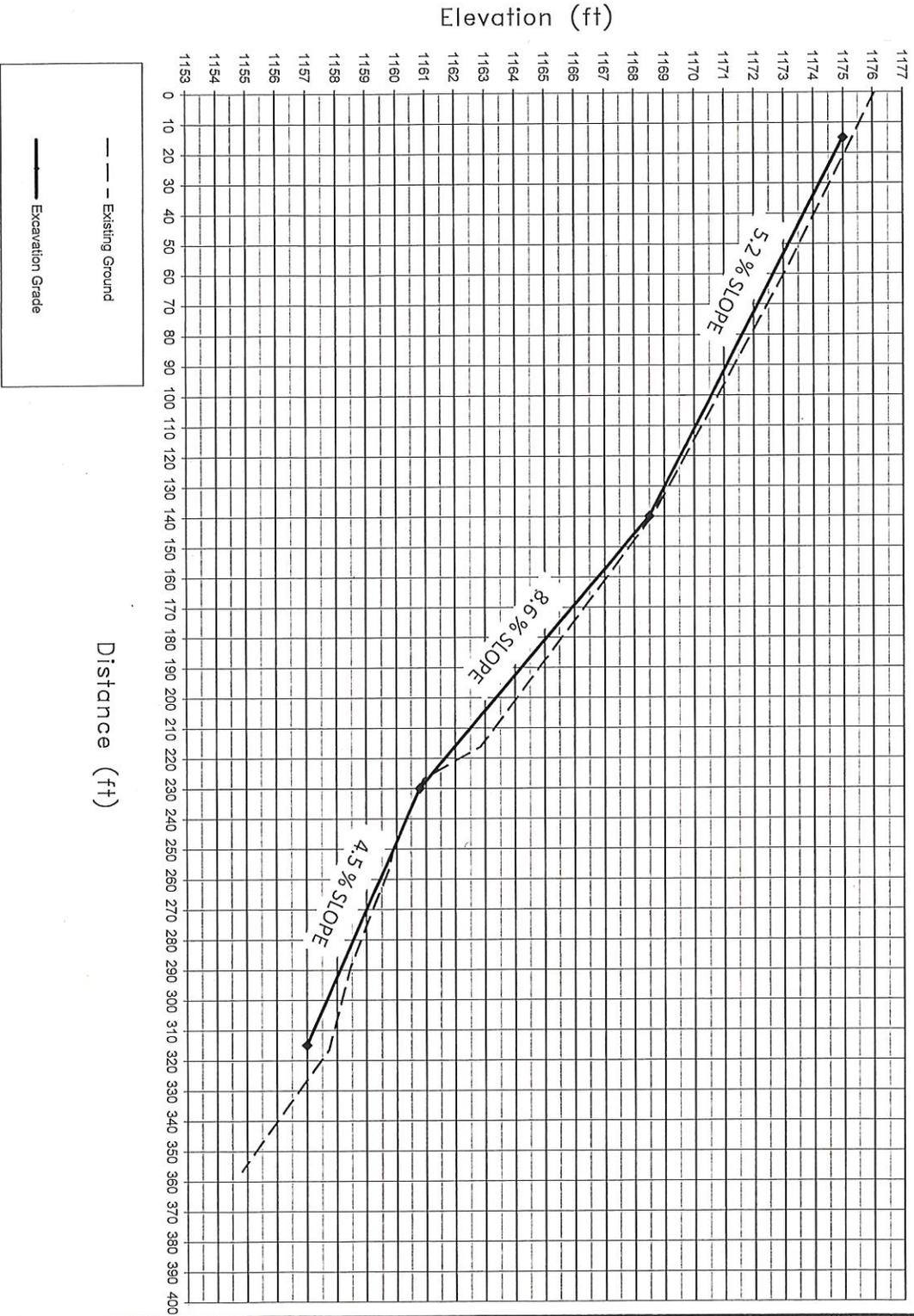
## PROFILES

CLIENT: DURLIN KNUTH  
 COUNTY: SAUK

Date 3/18/20  
 Designed GJ  
 Drawn G. JOHNSON  
 Checked \_\_\_\_\_  
 Approved \_\_\_\_\_

Drawing Name \_\_\_\_\_  
 Date \_\_\_\_\_  
 Sheet of 7 of 10

# Profile Waterway 2



**USDA** United States Department of Agriculture  
**Natural Resources Conservation Service**

## PROFILES

CLIENT: DURLIN KNUTH  
 COUNTY: SAUK

Designed GJ <sup>Date</sup> 3/18/20  
 Drawn G. JOHNSON  
 Checked \_\_\_\_\_  
 Approved \_\_\_\_\_

Drawing Name \_\_\_\_\_  
 Date \_\_\_\_\_  
 Sheet of **8 of 10**



**SEEDING**

Inoculate legumes with the specific inoculum for the species in accordance with the manufacturer's recommendations. When using a hydroseeder, five times the recommended rate of inoculant shall be added to the hydroseeder. Inoculant shall not be mixed with liquid fertilizer.

Seed may be broadcast or drilled as appropriate to the site.  
 Seed, fertilize, and lime as soon as possible after construction.  
 Seeding perpendicular to direction of flow is required to limit erosion.

Seed grasses and legumes no more than 1/4 inch deep.

Consider seeding at a lower rate and making 2 passes to ensure more uniform distribution.

**TEMPORARY SEEDING OPTIONS**

Select one of the following species for temporary cover if:

- 1) The required seeds or plant stock are not available or the normal permanent seeding period for the species has passed
  - Forage Sorghum - 1/2 bushel per acre (May 15-July 15)
  - Sorghum - Sudangrass Hybrid - 1 bushel per acre (May 15-July 15)
  - Sudangrass - 1 bushel per acre (May 15-July 15)
  - Winter Wheat - 2 bushels per acre (Aug 1-Oct 1)
  - Winter Cereal Rye - 2 bushels per acre (Aug 1-Oct 15)
  - Oats - 2 bushels per acre (Apr 1-Sept 1)
  - Annual Ryegrass - 20 Pounds per acre (Apr 1-Sept 1)
  
- 2) Triazine herbicide carryover will not allow establishment of permanent cover immediately.
  - Forage Sorghum - 1/2 Bushel per acre (May 15-July 15)
  - Sorghum - Sudangrass Hybrid - 1 Bushel per acre (May 15-July 15)
  - Sudangrass - 1 Bushel per acre (May 15-July 15)

**DORMANT SEEDING**

Seed is broadcast and incorporated, no-tilled, or drilled into the seedbed .  
 Seedbed preparations and conditions are similar to conventional seeding.

**MULCHING**

Mulching shall be done immediately after seedbed preparation and seeding.  
 Mulch shall be applied immediately after final grading for areas seeded at a later date.  
 Mulch material shall be relatively free of disease, pesticides, chemicals, noxious weed seeds, and other pests and pathogens.

Spread straw and hay mulch uniformly and at the rate of 1.5-2.0 tons per acre (60-70 bales). This application results in a layer of 6 to 7 stems, 1 to 2 inches thick, and provides a minimum 70% ground cover. Some soil surface can be seen after the application. Crimping (disking), wood cellulose fiber, tackifiers, netting, pinning, or other acceptable methods of anchoring will be used if needed to hold the mulch in place.

If other mulch materials are used, the rate of application shall meet the manufacturer's recommendations.

Two (2) tons/ac of 80-89 lime or equivalent from UW-EXT A3671

Lime Quality	Tons / AC.	Lime Quality	Tons / AC.
40-49	3.9	70-79	2.3
50-59	3.2	90-99	1.9
60-69	2.7	100+	1.6

 United States Department of Agriculture  Natural Resources Conservation Service	INTRODUCED SPECIES SEEDING ESTABLISHMENT		Designed	GJ	Date	File Name
	COOPERATOR	DURLIN KNUTH	Drawn			WI-710SS
	COUNTY	SAUK	Checked			Pg 2 of 2
			Approved			1-2019
						Sheet 10 of 10

