

JUDGE AML PERMANENT SEEDING PROJECT -- SPRING 2016

GENERAL:

1. FOLLOW ALL STANDARD AND SUPPLEMENTAL SPECIFICATIONS SET FORTH BY THE DIVISION OF SOIL CONSERVATION AND WATER QUALITY (HEREINAFTER "DIVISION"). COPIES OF APPLICABLE STANDARD SPECIFICATIONS WILL BE PROVIDED OR MADE AVAILABLE UPON REQUEST.
2. PROVIDE NOTICE TO THE DIVISION AT LEAST 48 HOURS PRIOR TO THE ANTICIPATED START OF WORK FOR THIS PROJECT.
3. DIVISION OR ENGINEER SHALL BE PRESENT PRIOR TO AND AT THE COMMENCEMENT OF SEEDING TO APPROVE SEED MIX AND PLANTING EQUIPMENT.

APPLICABLE STANDARD SPECIFICATIONS INCORPORATED BY REFERENCE:

1. SECTION 02105 - MOBILIZATION, PERMANENT SEEDING
2. SECTION 02420 - SEED BED PREPARATION, PERMANENT SEEDING
3. SECTION 02720 - PERMANENT SEEDING

PROJECT QUANTITIES:

1. ACTUAL APPLICATION RATES FOR AGRICULTURAL LIME AND SPECIFIED NUTRIENTS HAVE BEEN DETERMINED FROM SOIL TESTING IN ACCORDANCE WITH SECTION 02420.
2. AREAS FOR SEEDING AND SPECIFIED REPAIR AREAS HAVE BEEN DETERMINED BY THE DIVISION USING FIELD MEASUREMENTS AND/OR INFORMATION DEVELOPED AS PART OF THE ORIGINAL RECLAMATION PROJECT.

EXECUTION, MEASUREMENT, AND PAYMENT:

1. UNLESS MODIFIED BY SUPPLEMENTAL SPECIFICATIONS PROVIDED HEREIN, EXECUTION, MEASUREMENT AND PAYMENT FOR WORK ITEMS ON THIS PROJECT SHALL BE IN ACCORDANCE WITH THE APPLICABLE STANDARD SPECIFICATIONS INDICATED.

SEED MIX:

1. THE SEED MIX AND THE SEEDING RATE APPLIED ON THE SITE SHALL BE AS SPECIFIED HEREIN.

SUPPLEMENTAL SPECIFICATIONS:

1. SOIL TESTING FOR THIS PROJECT WAS PERFORMED BY THE DIVISION PRIOR TO COMMENCEMENT OF THIS WORK. AG LIME AND FERTILIZER QUANTITIES HAVE BEEN DETERMINED FROM THE RECOMMENDATIONS DEVELOPED BY THAT TESTING.
2. ONE MOWING, PRIOR TO SEEDING, SHALL BE PERFORMED TO FACILITATE THE BREAKDOWN AND DECAY OF EXISTING VEGETATION. USE OF A FLAIL-TYPE MOWER TO ACCOMPLISH THIS WORK IS PREFERRED.
3. TERRACE FLOWLINE GRADING: SEE SUPPLEMENT TO SECTION 02420 BELOW.
4. REFER TO SPECIFICATION SECTION 02720, PART 3.3, D FOR SEEDING EQUIPMENT REQUIREMENTS.
5. FOR MEASUREMENT OF AREAS TO BE SEEDED, THE CONTRACTOR IS NOT REQUIRED TO PERFORM FIELD MEASUREMENTS AS STIPULATED IN 02720, PART 3.7 C.
6. SEEDING APPLICATION RATES SHALL BE AT THE SPRING SEEDING RATE SPECIFIED ON TABLE 1 AND TABLE 2.
7. ALL WORK OF THIS CONTRACT SHALL BE COMPLETE BY SEPTEMBER 30, 2016.

SUPPLEMENT TO SECTION 02420: TERRACE FLOW LINE GRADING

- A. CONTRACTOR SHALL CHECK THE TERRACE FLOW LINES FOR ANY EVIDENCE OF PONDING THAT IS NOT IN THE IMMEDIATE VICINITY OF THE OUTFALL.
- B. CONTRACTOR SHALL USE A LEVEL TO CHECK THE FLOW LINE OF THE TERRACE FOR ONE-HUNDRED (100) FEET OF EACH SIDE OF THE OUTFALL AND BEYOND IF THE FLOW LINE AT THIS POINT IS NOT AT LEAST ONE (1) FOOT HIGHER THAN THE OUTFALL TO ALLOW FOR A ONE PERCENT GRADE.
- C. CONTRACTOR SHALL NOTIFY DIVISION IF AREAS OF EROSION ARE FOUND WITHIN THE TERRACE FLOWLINE THAT MAY NEED TO BE ADDRESSED PRIOR TO SEEDING.
- D. CONTRACTOR SHALL PROVIDE GRADING AS NEEDED TO ESTABLISH THE PROPER FLOW LINES. IF EXCAVATIONS EXCEEDING FOUR (4) INCHES IN DEPTH ARE NEEDED, CONTRACTOR SHALL NOTIFY DIVISION PRIOR TO GRADING.

TABLE 1.: Upland Seed Mix with Pollinator Species,
(Developed 03-31-2016 by SK, Revised: 04-04-2016 by WJG)

Common Name	Scientific Name	Spring Seeding Rate (Lb. PLS/ac)	Dormant Seeding Rate (Lb. PLS/ac)
Timothy	<i>phleum pretense</i>	5.0	7.0
Indian grass	<i>sorgastrum nutans</i>	4.0	5.0
Orchard grass	<i>dactylic glomerata</i>	4.0	5.0
Canada Wildrye	<i>Elymus canadensis</i>	4.0	6.0
Big bluestem	<i>Andropogon gerardii</i>	5.0	6.0
Purple prairie clover	<i>dalea purpurea</i>	0.2	0.3
Alsike clover	<i>trifolium hybridum</i>	2.0	3.0
Alfalfa	<i>medicago sativa</i>	4.0	5.0
Swamp Milkweed	<i>Asclepias incarnate</i>	0.2	0.3
Common Milkweed	<i>Asclepias syriaca</i>	0.2	0.3
Foxglove Beardtongue	<i>Penstemon digitalis</i>	0.1	0.2
Common Mt. Mint	<i>Pycnanthemum virginianum</i>	0.1	0.2
Showy Goldenrod	<i>Solidago speciose</i>	0.2	0.3
Smooth Blue Aster	<i>Symphotrichum laeve</i>	0.1	0.2
Golden Alexanders	<i>Zizia aurea</i>	0.2	0.3
Culver's Root	<i>Veronicastrum virginicum</i>	0.1	0.2
TOTAL		29.4	39.3

Note: Substitutions are allowed with prior Division approval.

Spring Seeding: April 15 - June 30
Dormant Seeding: November 15 - Ground Freeze

TABLE 2.: Wetland Fringe Seed Mix
(01-27-2014)

Common Name	Scientific Name	Spring Seeding Rate (Lb. PLS/ac)	Dormant Seeding Rate (Lb. PLS/ac)
Virginia wildrye	<i>elymus virginicus</i>	8.00	10.60
Fowl mannagrass	<i>glyceria striata</i>	0.50	0.70
Bluejoint grass	<i>calamagrostis canadensis</i>	0.50	0.70
Prairie cordgrass	<i>spartina pectinata</i>	3.00	4.00
Fox sedge	<i>carex vulpinoden</i>	0.02	0.03
Bebb's sedge	<i>carex bebbii</i>	0.03	0.04
Spike rush	<i>eleocharis palustris</i>	0.04	0.05
Rice cut grass	<i>leersia oryzoides</i>	0.03	0.04
Shortawn foxtail	<i>alopercurus acqualis</i>	8.00	10.60
Cup plant	<i>silphium prefoliatum</i>	0.50	0.70
Total		20.62	27.46

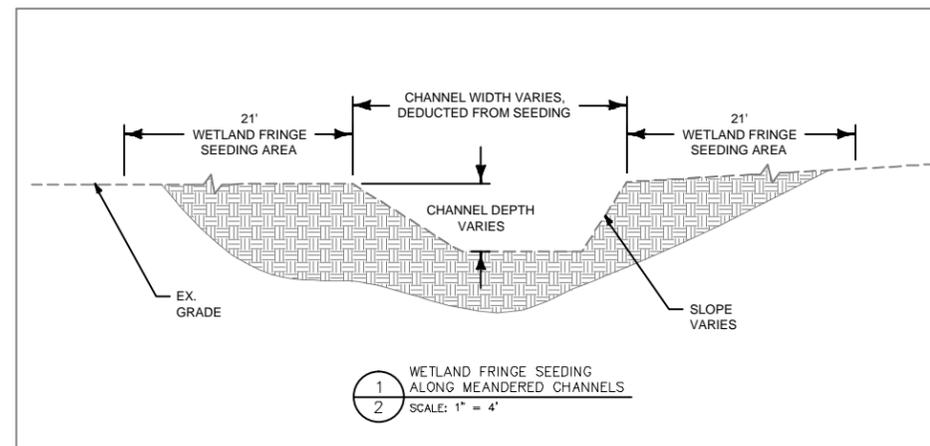
Spring Seeding: April 15 - June 30
Dormant Seeding: November 15 - Ground Freeze

TABLE: BID QUANTITIES

ITEM NO.	ITEM	SPEC. SECTION	QTY.	UNITS
1	MOBILIZATION	2105	1	LUMP SUM
2	TSC REMOVAL	2420	1	LUMP SUM
3	MOWING	2420	34.6	ACRE
4	TERRACE FLOWLINE GRADING	2420	1	LUMP SUM
5	AG LIME, SEEDING	2720	104	TON ECCE
6	NITROGEN, N	2720	1557	LB
7	PHOSPHOROUS, P	2720	3806	LB
8	POTASSIUM, K	2720	9688	LB
9	UPLAND SEEDING	2720	30.9	ACRE
10	WETLAND FRINGE SEEDING	2720	3.7	ACRE

PROJECT SPECIFIC NOTES:

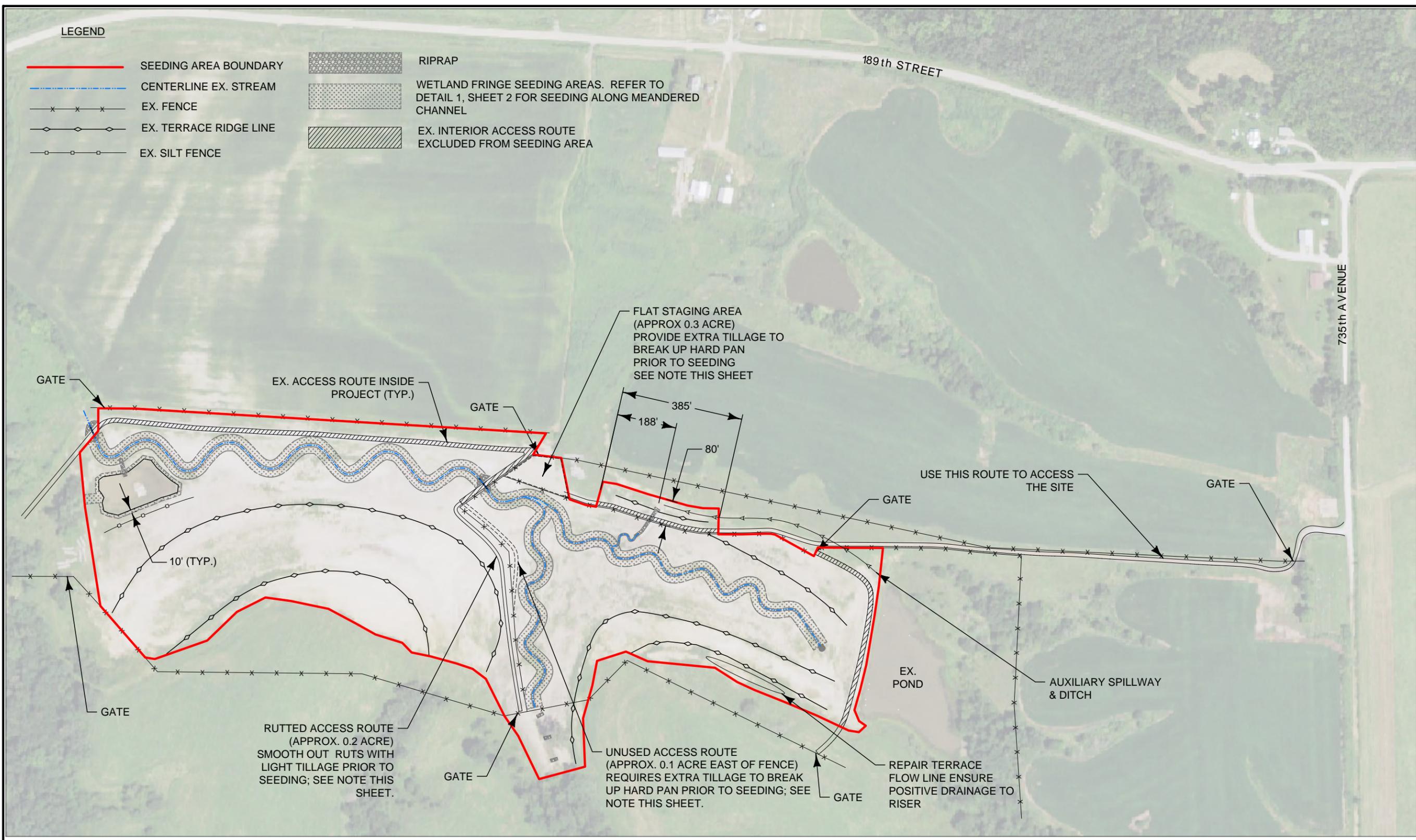
1. FERTILIZER AND AG LIME SHALL BE APPLIED TO 34.6 ACRES.
2. APPLIED FERTILIZER RATES SHALL BE: N-P-K = 45-110-280 LBS. PER ACRE
3. AGRICULTURAL LIME IS TO APPLIED AT A RATE OF 3.0 TON ECCE PER ACRE
4. SEEDING AND MOWING QUANTITIES INDICATE THE NET AREA REMAINING AFTER DEDUCTING THE WETLAND POOL, MEANDERED STREAM CHANNEL, AND INTERIOR ACCESS ROUTES.
5. TSC MEANS "TEMPORARY SEDIMENT CONTROLS"



DESIGN BY: WJG	DRAWN BY: WJG	CHKD. BY: RK	ISSUED: 04-04-2016	REVISED: 04-08-2016	FILE: JUDGE_SEEDING_PLAN.DWG
			DIVISION OF SOIL CONSERVATION AND WATER QUALITY IOWA DEPARTMENT OF AGRICULTURE AND LAND STEWARDSHIP HENRY A. WALLACE BUILDING 502 E. 9th STREET, DES MOINES, IOWA 50319 (515) 281-4246		
JUDGE AML PERMANENT SEEDING PROJECT		PROJECT NOTES			
SHEET 2 OF 3					REVISION: DATE: DESCRIPTION: 1 04-08-2016 ADDED TERRACE FLOWLINE GRADING 2 3 4

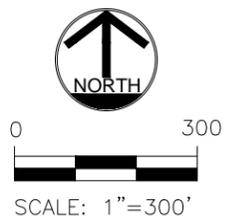
LEGEND

- SEEDING AREA BOUNDARY
- - - CENTERLINE EX. STREAM
- x - x - x - EX. FENCE
- ◇ ◇ ◇ ◇ ◇ EX. TERRACE RIDGE LINE
- □ □ □ □ EX. SILT FENCE
-  RIPRAP
-  WETLAND FRINGE SEEDING AREAS. REFER TO DETAIL 1, SHEET 2 FOR SEEDING ALONG MEANDERED CHANNEL
-  EX. INTERIOR ACCESS ROUTE EXCLUDED FROM SEEDING AREA



NOTES THIS SHEET:

1. CLOSE ALL GATES UPON ENTRANCE AND EXIT.
2. FENCES, SILT FENCES, TERRACES, AND ACCESS ROUTES SHOWN IN APPROXIMATE LOCATIONS.
3. WETLAND FRINGE SEED MAY BE BROADCAST SUBJECT TO DIVISION APPROVAL. REFER TO SPECIFICATION 02720, PART 3.3, D.
4. REMOVE STRAW WATTLES FROM ALL RISERS AND REMOVE ALL EX. SILT FENCE.
5. DIMENSIONS SHOWN ARE APPROXIMATE.
6. WHERE EXTRA TILLAGE IS REQUIRED TO BREAK UP HARD PAN OR SMOOTH OUT RUTS, SAID TILLAGE IS INCIDENTAL TO SEEDING.



FILE: JUDGE_SEEDING_PLAN.DWG

REVISION:	DATE:	DESCRIPTION:
1		
2		
3		
4		

ISSUED: 04-04-2016 REVISED: 04-07-2016

CHKD. BY: RK

DRAWN BY: WJG

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PROJECT**

SEEDING AREA PLAN