IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DOCUMENTS FOR SILVER LAKE WILDLIFE MANAGEMENT AREA SHORELINE STABILIZATION

DICKINSON COUNTY, IOWA

PROJECT # 24-01-30-01

This project consists of tree clearing and armoring along the north side of Silver Lake

	HEATH B. 21074	HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED UNDER MY SUPERVISION WERE MADE BY ME UNDER THE TECHED TO INTERDISTION WERE MADE BY ME 10:46:21 -05'00' SURVIURE DATE HEATH B. DELZELL PRINTED OR TYPED NAME MY LICENCE RENEWAL DATE IS DECEMBER 31, 20 23 PAGES COVERED BY THIS SEAL: <u>all</u>	
(DIRECTORY	PROJECT DESCRIPTION

COMPANY

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PROJECT MANAGER

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HEATH DELZELI

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	A.02 B.01	QUANTITIES AND GENERAL INFORMATION	-	<u></u>			
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ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	MOBILIZATION/DEMOBILIZATION	LS	1
2	NPDES PERMITTING AND PPP	LS	1
3	CONSTRUCT, MAINTAIN, & RESTORE ACCESS AND STAGING AREAS	LS	1
4	TREE & BRUSH CLEARING	AC	4.80
5	FLOATATION SILT CURTAIN	LF	3,661
6	SEDIMENT CONTROL LOG	LF	3,661
7	CLASS E RIPRAP, ANGULAR	TN	917
8	NATIVE FIELDSTONE, CLASS D RIPRAP	TN	3,580
9	BEDDING FILTER MATERIAL	TN	650
10	GEOTEXTILE FILTER FABRIC - NON-WOVEN	SY	1,961
11	COMMON EXCAVATION (EV) (P) (ON-SITE, DESIGNATED BORROW AREA)	CY	2,637
12	ROLLED EROSION CONTROL PRODUCT RECP TYPE 2B	SY	4,840
13	SEEDING	AC	4.8
14	EROSION CONTROL MULCH	AC	3.7
15	BONDED FIBER MATRIX	AC	0.1

ESTIMATE REFERENCE INFORMATION ITEM DESCRIPTION NO. 1 A. Traffic control is incidental to this line item. At a minimum, contractor shall close the access road using Class 3 barricades or other equipment as approved by the Engineer. 2 A. Contactor is responsible for developing the SWPPP, obtaining the NPDES General Permit #3, conducting required inspections, and maintaining the on-site inspection log. 4 A. Selective clearing - contractor shall remove all shrubs and approximately 75% of all trees. Trees to remain shall be marked with paint by the Engineer. B. All non-marked trees shall be cut flush to the ground and treated with Garlon 3A Herbicide or approved equal C. Woody debris may be burned and buried on-site, at the direction of the Engineer. D. No tree clearing will be allowed between April 1 and September 30. A. Flotation Silt Curtain shall follow Iowa DOT Standard Road Plan EC-202, dated October 21, 2014. 5 B. Removal of curtain is incidental to this line item. 8 A. Material shall consist of fieldstone with sizes in conformance with SUDAS Spec 9040.2.09 10 A. Material shall be non-woven Mirafi 1100n or approved equal. A. Material shall be natural netting only. 12 B. Material shall be staked with 3ft spacing. C. Material shall be tucked under fill material for a minimum length of 6 inches at the toe of the fill, and anchored in a 6 inch by 6 inch trench along the top. A. All disturbed areas that are not in fill shall be treated twice (2-weeks apart, as approved by the Engineer) with Rodeo Herbicide, or approved equal, prior to seeding. B. All disturbed areas shall be seeded with oats (100 pounds per acre) and Native Grass and Forbs (Wildflower) Seeding, pursuant to SUDAS 9010. DNR shall furnish seed for Native 13 Grass and Forbs (Wildflower) Seeding. 14 A. Hydraulic soil stabilizer may be used in lieu of mulch.

GENERAL NOTES

Verify actual locations and elevations with DNR Engineer.

All work shall conform to and be performed in accordance with al ordinances.

The contractor shall visit the site and inspect the project area and themselves with the actual job conditions prior to bidding and the visit the project site shall not relieve the contractor from performing to the plans, specification, special provisions and contract.

The contractor shall verify, at the site, all dimensions and condition shall notify the DNR Engineer of any discrepancies, omissions, and, proceeding with the work.

It shall be the contractor's responsibility to provide waste areas or material (excavated material or broken concrete) which is not desi into the work involved on this project. No payment for overhaul w hauled to these sites. No material shall be placed within the rightstated in the plans or approved by the DNR Engineer.

The contractor shall not disturb desirable grass areas and desirable construction limits. The contractor will not be permitted to park o equipment or use these areas for storage of materials. Storage, pa will be subject to the approval of the DNR Engineer.

Where utilities and fixtures are shown as Existing on the plans or e construction area, it shall be the responsibility of the contractor to of those utilities prior to the beginning of any construction. The co access to these facilities for necessary modification of services. Un structures and utilities have been plotted from available surveys ar their locations must be considered approximate only. It is possible existence of which is presently not known or shown. It is the contracter determine their existence and exact location and to avoid damage additional compensation will be allowed to the contractor for any i caused by such work.

The contractor shall shape graded area to maintain surface drainage finish grade.

The contractor is expected to have materials, equipment, and labo to install and maintain erosion control features on the project. The fence, rock ditch checks, silt basins or silt dikes.

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