

PALO ALTO COUNTY, IOWA

PROJECT # 21-01-74-01

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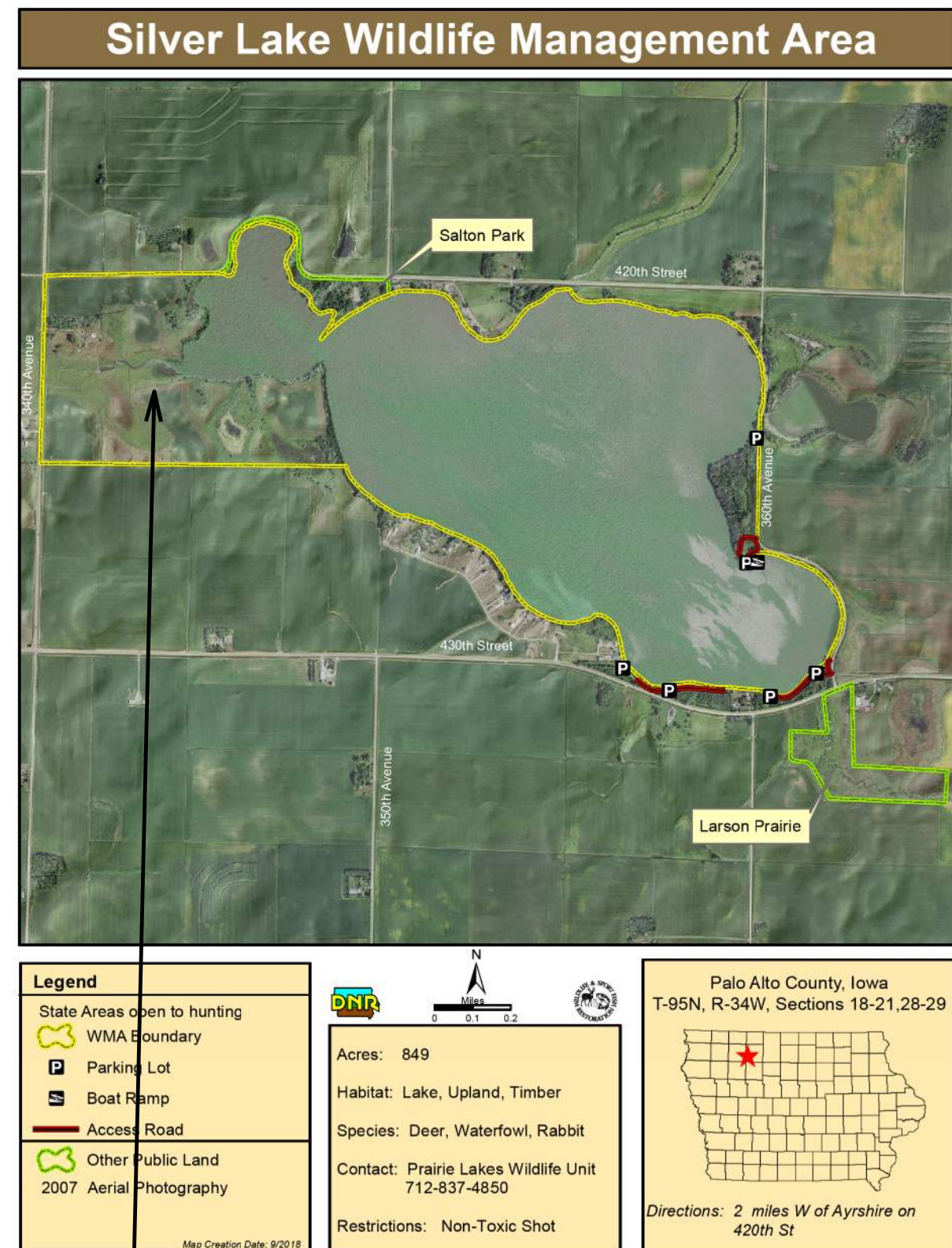
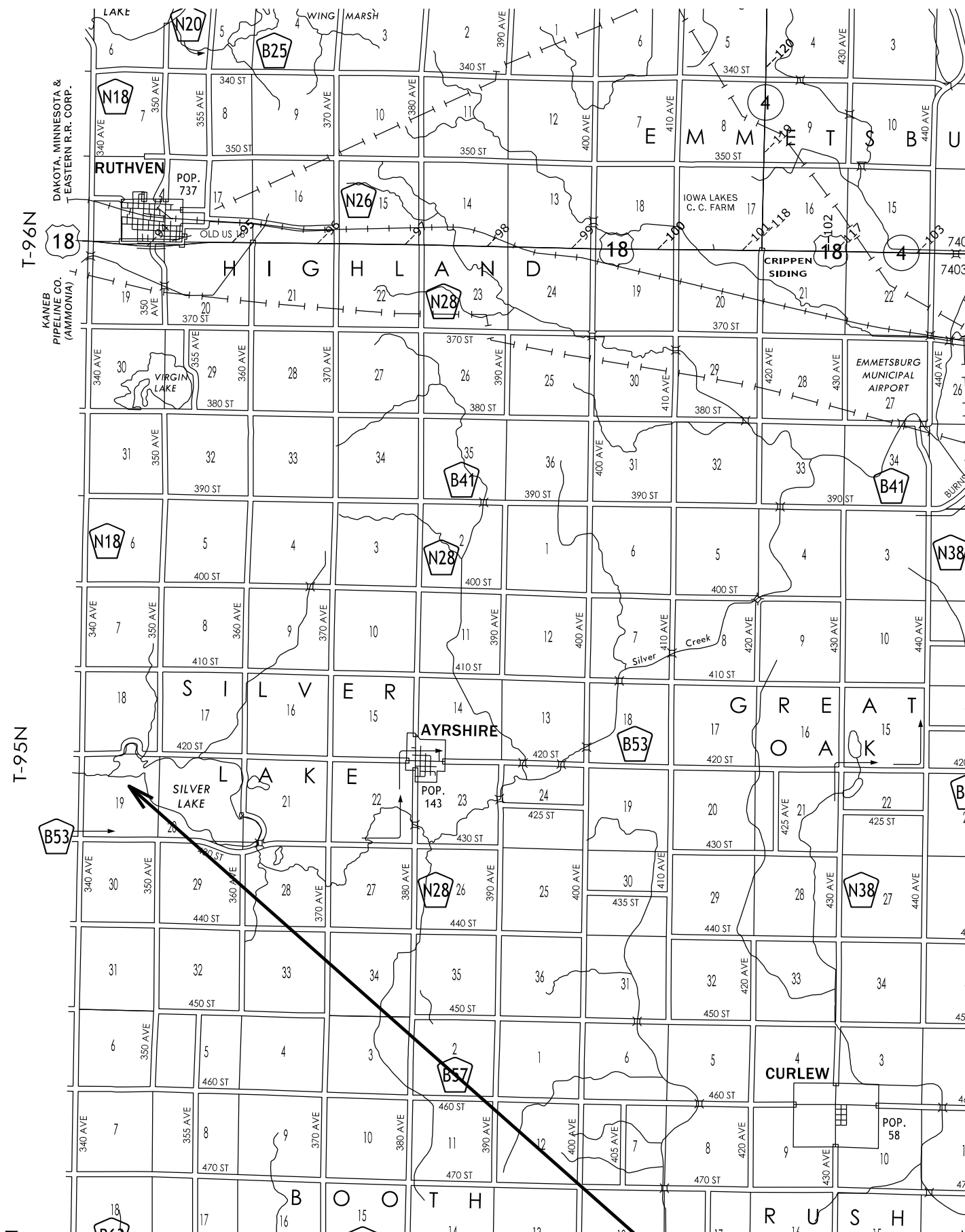
DIRECTORY			
PROJECT MANAGER		CONSTRUCTION INSPECTOR	
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES
ADDRESS	6200 PARK AVENUE	ADDRESS	
CITY,STATE,ZIP	DES MOINES, IA, 50321	CITY,STATE,ZIP	
CONTACT	HEATH DELZELL	CONTACT	JEFF FELTS
TELEPHONE	515-979-0104	TELEPHONE	515-250-3712
FAX		FAX	
EMAIL	heath.delzell@dnr.iowa.gov	EMAIL	jeff.felts@dnr.iowa.gov

PROJECT DESCRIPTION

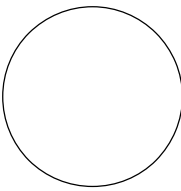
This project consists of restoring wetlands by constructing four dikes; installing, daylighting, and breaking tile and installing water control structures.

AUTHORIZATION TO BID	
AUTHORIZATION - PARKS WILDLIFE FISHERIES LAW ENFORCEMENT FORESTRY	DATE
ENGINEERING BUREAU CHIEF	DATE

NO.	BY DATE	REVISION
DRAWN BY:	PROJECT NUMBER: 21-01-74-01	
CHK'D BY:	DATE:	
SHEET No: A 01		



CONSULTANT:



**IOWA DEPARTMENT OF
NATURAL RESOURCES**



PROJECT LOCATION MAP

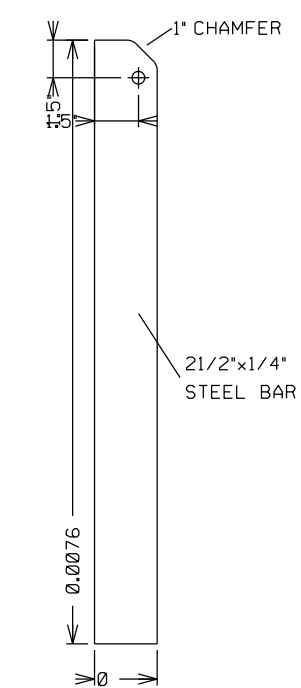
WETLAND RESTORATION FOR:

WETLAND RESTORATION FOR:
SILVER LAKE WMA

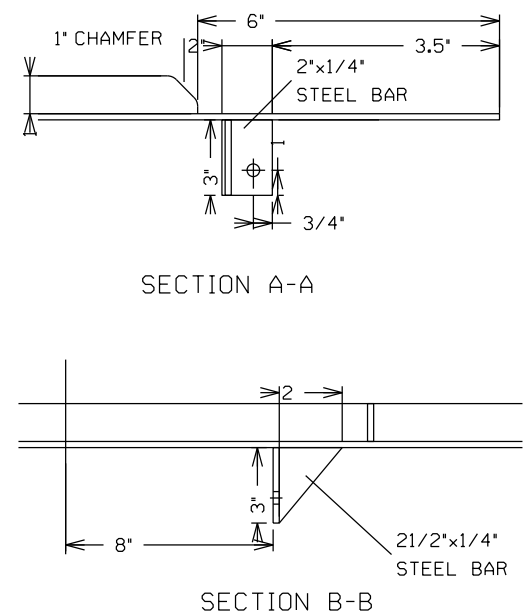
PALO ALTO COUNTY

NO.	BY DATE	REVISION
DRAWN BY:	PROJECT NUMBER: 21-01-74-01	
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- FIRE PROOF COVER SHALL INCLUDE ALL COMPONENTS, ROCK, AND INSTALLATION COSTS
- ALL STEEL COMPONENTS OF THE FIRE PROOF COVER SHALL BE GALVANIZED
- FIRE PROOF COVER TO BE INCIDENTAL TO WATER CONTROL STRUCTURE UNLESS NOTED IN BID ITEMS.



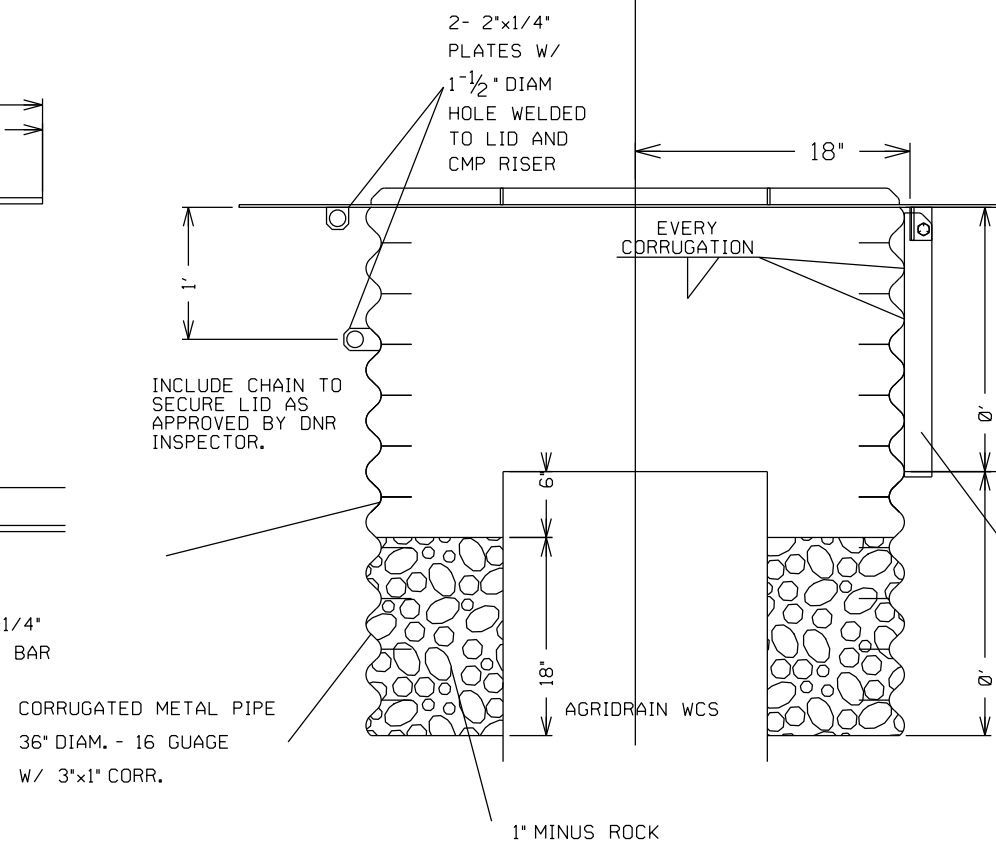
HINGE BRACKET
PIECE
2 TOTAL NO SCALE



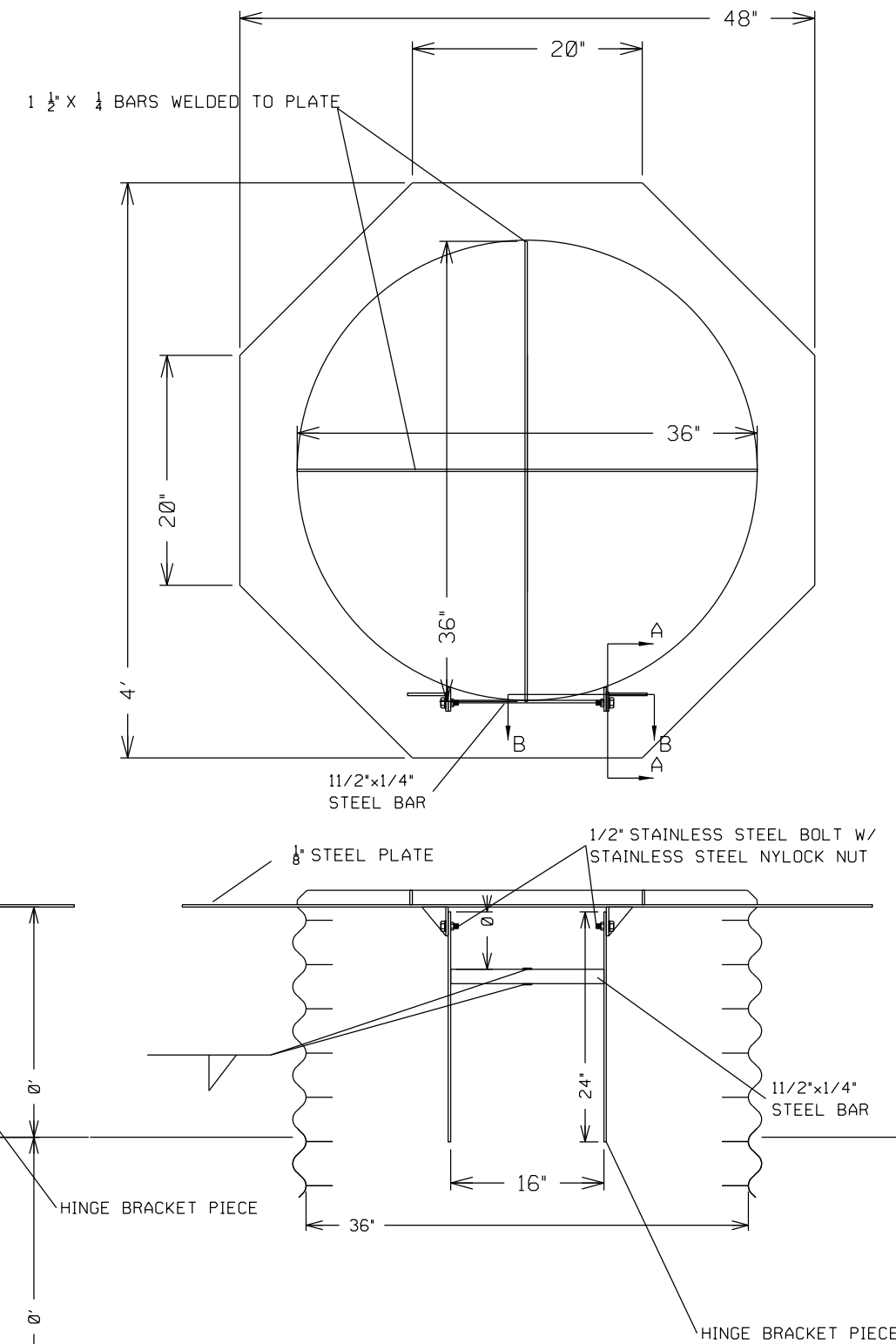
SECTION A-A

SECTION B-B

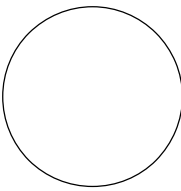
LID HINGE
NO SCALE



WATER CONTROL STRUCTURE COVER DETAILS
SCALE: NOT TO SCALE'



CONSULTANT:



IOWA DEPARTMENT OF
NATURAL RESOURCES
ENGINEERING SERVICES -
6200 PARK AVENUE
DES MOINES, IA 50321



TYPICAL CROSS SECTIONS AND DETAILS

WETLAND RESTORATION FOR:
SILVER LAKE WMA
PALO ALTO COUNTY

NO.	BY	REVISION
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SHEET NO: B.02

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ESTIMATE REFERENCE INFORMATION	
ITEM NO.	DESCRIPTION
2.	A) DNR shall supply the 10" CMP
3.	A) Borrow for the embankments shall come from the identified borrow locations or the associated pool area. No borrow shall come within the first 25' of the upstream dike toe. Vegetation strippings shall be temporarily stockpiled in the basin area and then respreads over the dike as overbuild. Vegetation stripping for the dike and borrow area shall be considered incidental to the contract. 6" of anticipated stripping area under the dike has been included in the dike fill quantity. B) The contractor can choose the type of equipment used to construct the dike, but if the inspector feels that proper compaction is not being reached, a proof roll or density test will be performed at the contractor's expense. Once the dike is constructed to 0.0 or +0.1' of plan grade, vegetation strippings shall be spread over the embankment to provide topsoil fill for seeding and provide overbuild for settlement. C) It is expected that the dike surface, upon final construction, is smooth, uniform, and ready for seeding. Any uneven areas will have to be corrected prior to acceptance of the project. Plan quantity is based on the compacted fill required to construct the dike to grade plus the 6" strippings. Contractors should anticipate a small amount of shrink. This shrink is considered incidental to this line item.
4.	A) The contractor shall ensure that all tile investigations and breaks area completed prior to the installation of embankment over the tile. Open cutting through constructed fill areas after their completion will result in removal and reconstruction of the entire feature to ensure uniform compaction. Investigation shall be to a minimum depth of 6'.
5.	A) Culvert Anchor is incidental to this line item.
6.	A) CMP is to be placed over the dual wall pipe with three feet of overlap. B) Joint to be wrapped with engineering fabric, 4' wide, incidental to this line item.
7.	A) See sheets B.01 and B.02 for details. B) Fireproof cover shall be incidental to this line item.
8.	A) 12" Rat Guard, Item #RG120 as manufactured by Agri Drain Corporation, Adair Iowa, or approved equal B) Rat Guards to be installed on the CMP outlets.
9.	A) 10" HD Yellow Bar Guard, Item #BG10HDY as manufactured by Agri Drain Corporation, Adair Iowa, or approved equal
10.	A) Material meets Iowa DOT Standard Specifications for Highway and Bridge Construction, current edition
11.	A) Contractor shall be responsible for final grading and seed bed preparation only. DNR will seed and site.

GENERAL NOTES

Verify actual locations and elevations with DNR Engineer.

All work shall conform to and be performed in accordance with all applicable codes and ordinances.

The contractor shall visit the site and inspect the project area and thoroughly familiarize themselves with the actual job conditions prior to bidding and the start of work. Failure to visit the project site shall not relieve the contractor from performing the work in accordance to the plans, specification, special provisions and contract.

The contractor shall verify, at the site, all dimensions and conditions shown on the plans and shall notify the DNR Engineer of any discrepancies, omissions, and/or conflicts prior to proceeding with the work.

It shall be the contractor's responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project. No payment for overhaul will be allowed for material hauled to these sites. No material shall be placed within the right-of-way, unless specifically stated in the plans or approved by the DNR Engineer.

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

Where utilities and fixtures are shown as Existing on the plans or encountered within the construction area, it shall be the responsibility of the contractor to notify the DNR Engineer of those utilities prior to the beginning of any construction. The contractor shall be afforded access to these facilities for necessary modification of services. Underground facilities, structures and utilities have been plotted from available surveys and records and therefore their locations must be considered approximate only. It is possible there may be others, the existence of which is presently not known or shown. It is the contractor's responsibility to determine their existence and exact location and to avoid damage thereto. No claims for additional compensation will be allowed to the contractor for any interference or delay caused by such work.

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

The contractor is expected to have materials, equipment, and labor available on a daily basis to install and maintain erosion control features on the project. This may involve seeding, silt fence, rock ditch checks, silt basins or silt dikes.



ENGINEERING SERVICES -
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SHEET No:		

C.01

