IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DOCUMENTS FOR BLACK HAWK WMA DIKE RECONSTRUCTION

SAC COUNTY, IOWA

PROJECT # 25-01-81-01

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I HEREBY CERTIFY THAT THIS ENGINEERING DOCUMENT WAS PREPARED UNDER MY SUPERVISION AND THAT ENGINEERING DECISIONS WITH REGARD TO THE DESIGN WERE MADE BY ME UNDER THE LAWS OF THE STATE OF IOWA. Heath Delzell Digitally signed by Heath Delzell Digitally signed by Heath Delzell Date: 2024.03.19 10:46:21 - 05'00' STORATURE HEATH B. DELZELL PRINTED OR TYPED NAME MY LICENCE RENEWAL DATE IS DECEMBER 31, 20 25 PAGES COVERED BY THIS SEAL: all

DIRECTORY				
PROJECT MANAGER CONSTRUCTION INSPECTOR				
COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	COMPANY	IOWA DEPARTMENT OF NATURAL RESOURCES	
ADDRESS	502 EAST 9TH STREET	ADDRESS		
CITY,STATE,ZIP	DES MOINES, IA, 50319	CITY,STATE,ZIP		
CONTACT	HEATH DELZELL	CONTACT	JEFF FELTS	
TELEPHONE	515-979-0104	TELEPHONE	515-250-3712	
FAX	515-281-8685	FAX		
EMAIL	heath.delzel@dnr.iowa.gov	EMAIL	jeff.felts@dnr.iowa.gov	



PROJECT DESCRIPTION

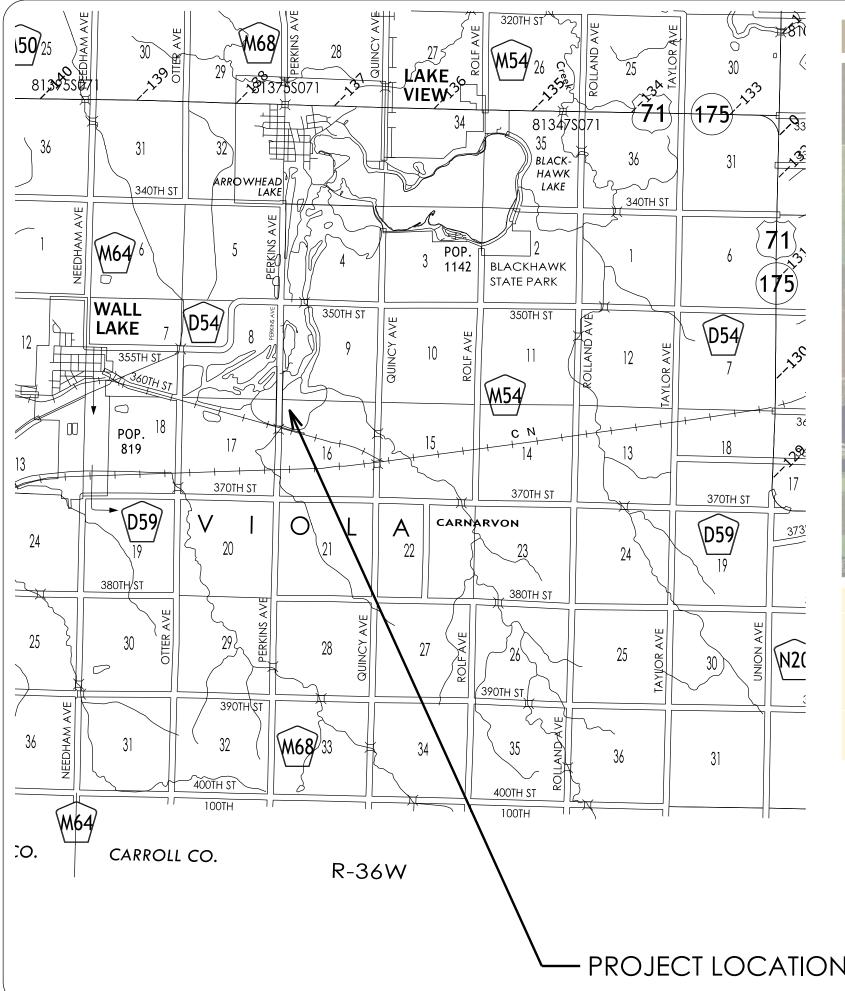
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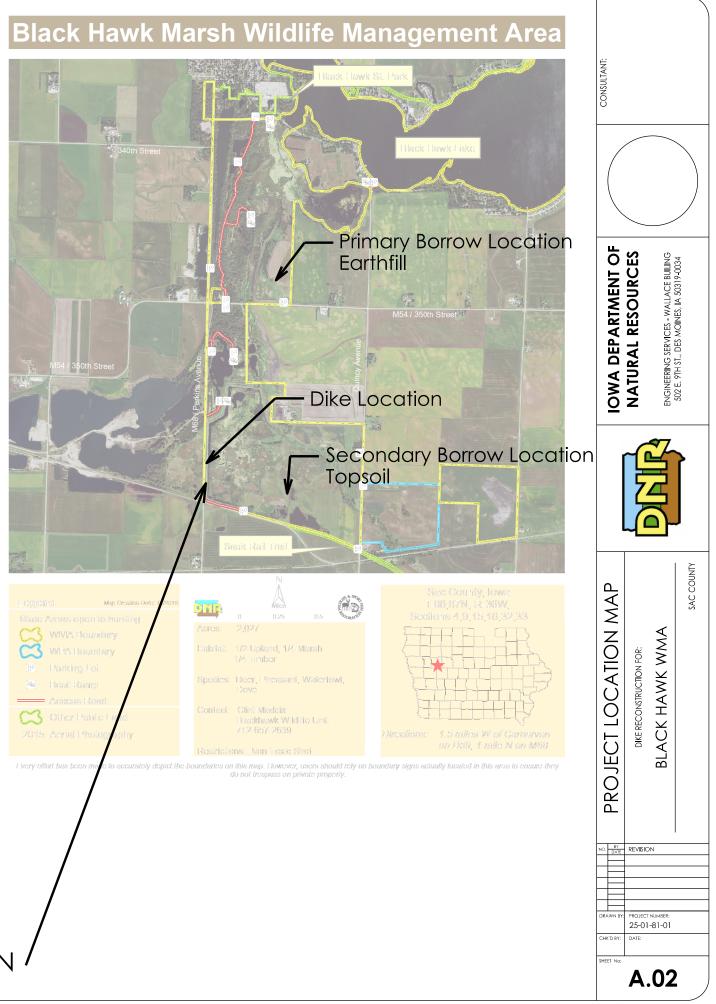


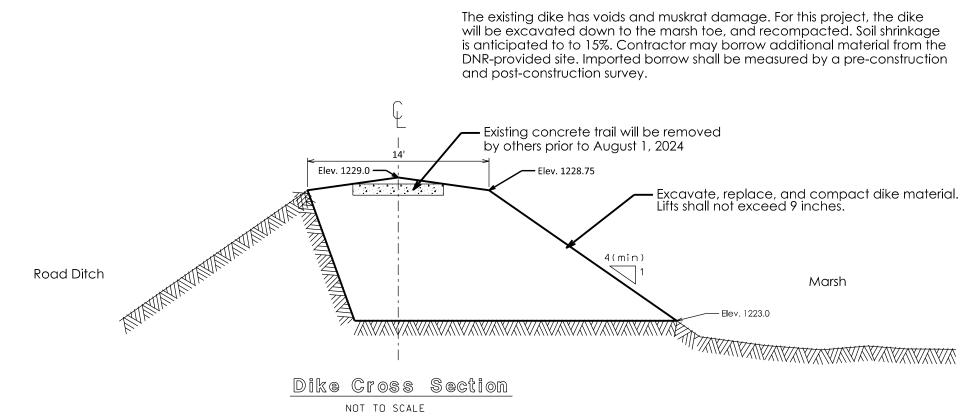
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ENGINEERING BUREAU CHIEF for Travis Baker	

AUTHORIZATION TO BID

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A.02	LOCATION MAP				
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TYPICAL CROSS SECTIONS AND DETAILS	DIKE RECONSTRUCTION FOR:	BLACK HAWK WMA	SAC COUNTY
NO. BY DATE DATE DATE DATE DATE DATE DATE DATE	25-01 Date:	NUMBER: -81-01	

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	Mobilization	Lump Sum	1
2	Construction Staking	Lump Sum	1
3	NPDES Permitting and PPP	Lump Sum	1
4	Class 10 Excavation, Embankment	CY	16,992
5	Topsoil - Strip, Stockpile, and Spread	CY	1,793
6	Class 10 Excavation, Imported Material	CY	4,632
7	Seeding, Fertilizing, and Mulching	Acres	3.4
8	9" Straw Wattle	LF	7,816
	ESTIMATE REFERENCE INFORMATION		
ITEM NO.	DESCRIPTION		

1. A. Construction cannot begin prior to August 1, 2024, unless authorization is granted by the DNR Engineer.

- 2. A. DNR shall provide control points, vertical alignment data, horizontal alignment data, and an electronic design file.
- 3. A. Contractor is responsible for developing the SWPP, obtaining the NPDES General Permit #3, conducting required inspections, and maintaining the on-site inspection log.
- A. This line item includes excavation, placement, compaction, and final grading for embankment soil, excluding topsoil.
 B. Payment for this line item shall be per plan quantity. If insufficient embankment soil exists, embankment material may be borrowed from the primary borrow site, and the cost of the hauling shall be measured and paid as item #6.
 C. Stockpiling material in standing water is prohibited.
- 5. A. Contractor shall strip 4"from the proposed excavation area, stockpile this material, then respreads the material on the finish grade at a depth of 4". Payment for this line item shall be per plan quantity. If insufficient topsoil exists, topsoil material may be borrowed from the secondary borrow site, and the cost of hauling topsoil shall be measured and paid as item #6.
- 6. A. This line item includes excavation and hauling of additional embankment material from the primary borrow location and topsoil material from the secondary borrow location.

B. The design assumes 15% shrinkage. Actual volumes shall be measured via a pre-construction and post-construction survey. C. If disturbed, the borrow sites shall be shaped to drain with slopes no greater than 5H:1V, incidental to this line item.

- 7. A. The contractor shall be responsible for seedbed prep., furnishing 25 pounds per arce of oats, seed application, and hydraulic mulching of all disturbed areas. The DNR will provide the prairie grass seed for all areas. Contractor shall seed all disturbed areas, including disturbed borrow sites.
- 8. A. This line item includes installation and removal of a 9"straw wattle.

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 constructures and utilities for necessary modification of services. Un structures and utilities have been plotted from available surveys are 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 labor to install and maintain erosion control features on the project. Th fence, rock ditch checks, silt basins or silt dikes.

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The existing dike has voids and muskrat damage. For this project, the dike will be excavated down to the marsh toe, and recompacted. Soil shrinkage is anticipated to to 15%. Contractor may borrow additional material from the DNR-provided site. Imported borrow shall be measured by a pre-construction and post-construction survey.

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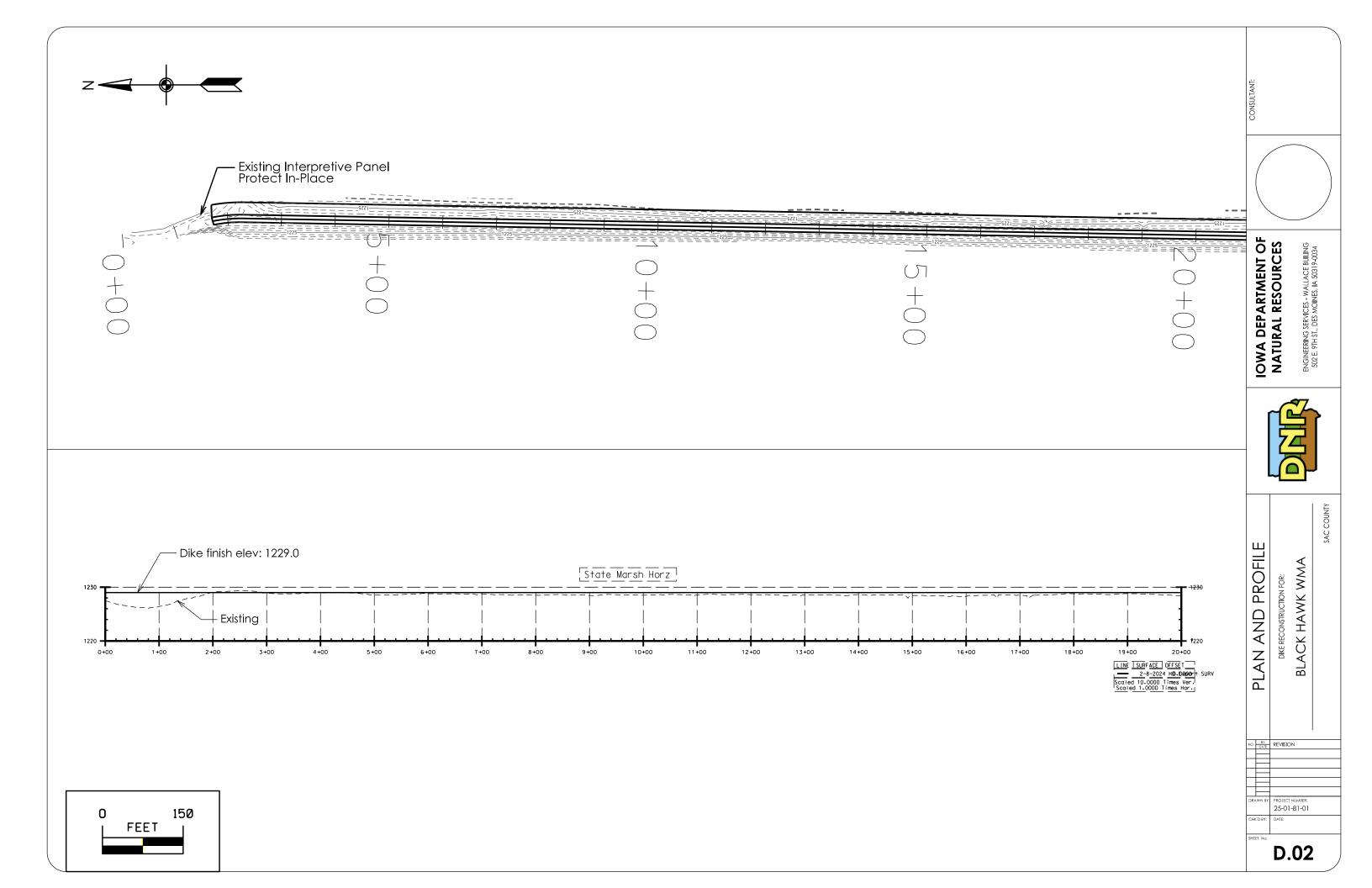
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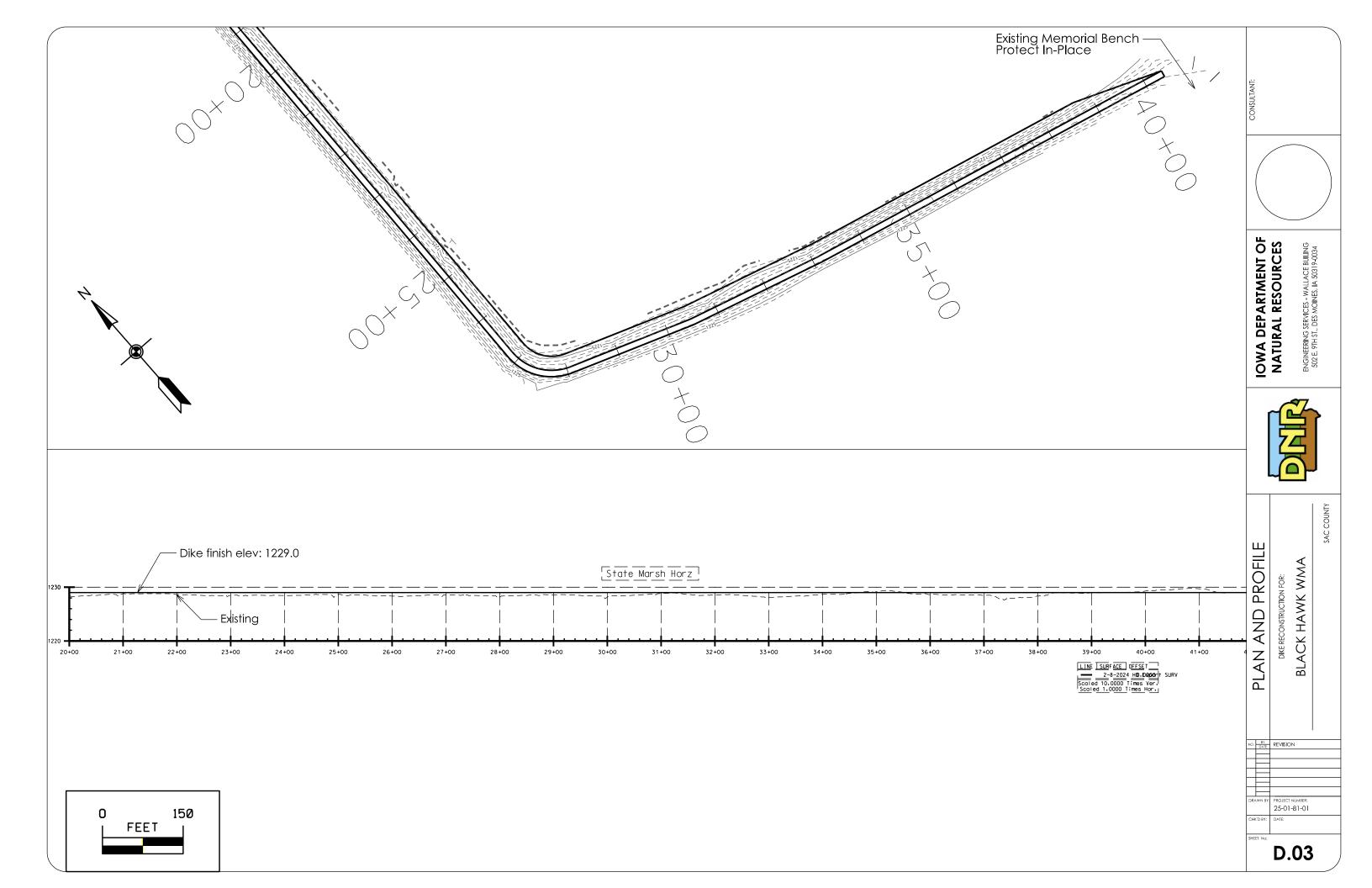
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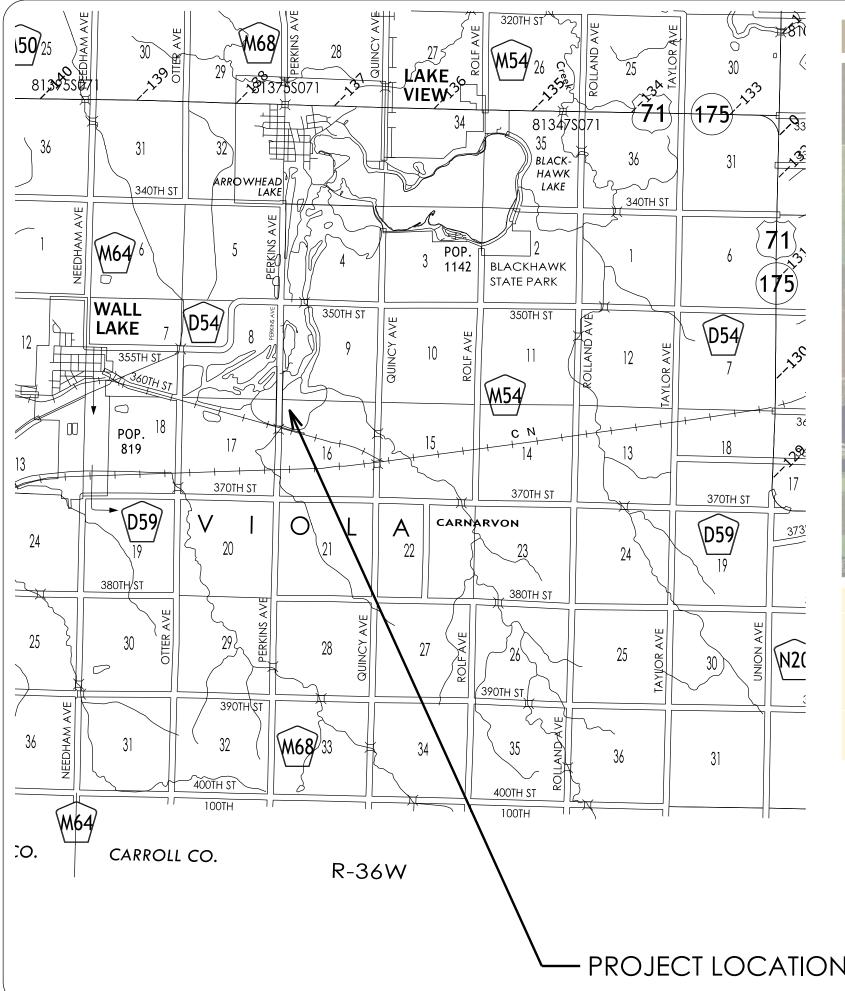


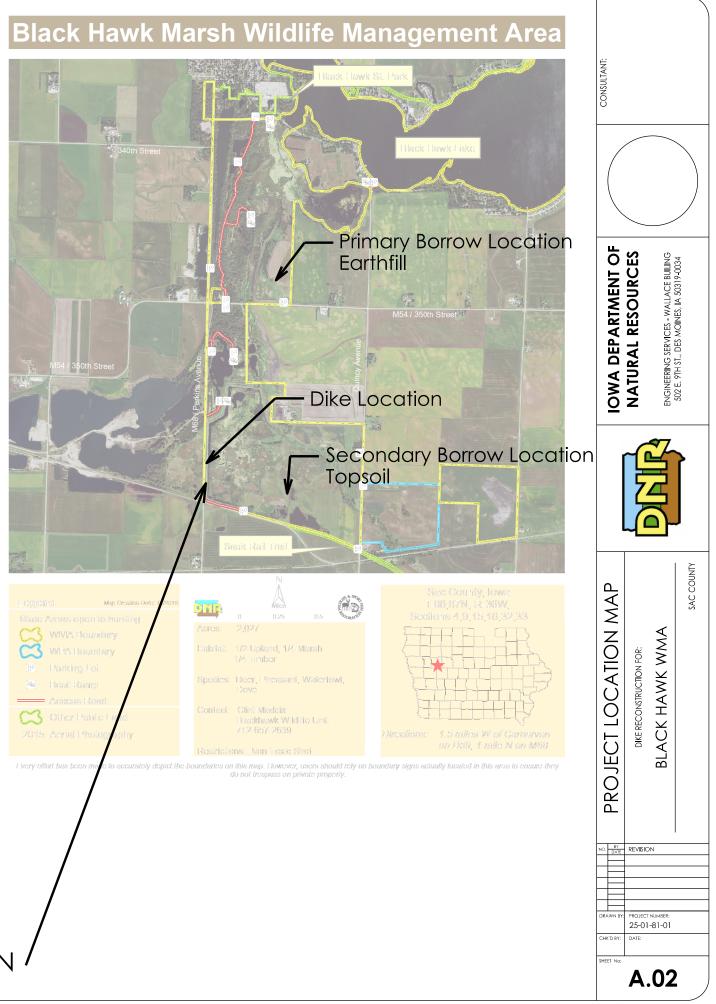
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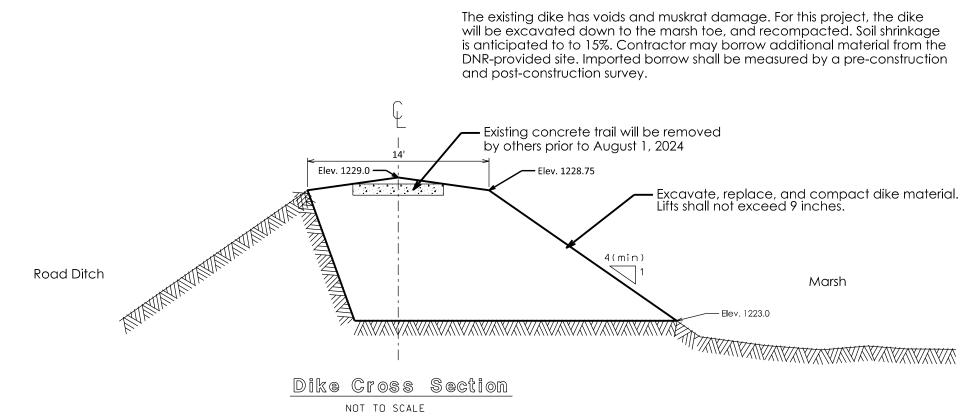
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