IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DOCUMENTS FOR LAKE MANAWA STATE PARK BOAT RAMP EXTENSIONS

POTTAWATTAMIE COUNTY, IOWA

PROJECT # 24-04-78-01

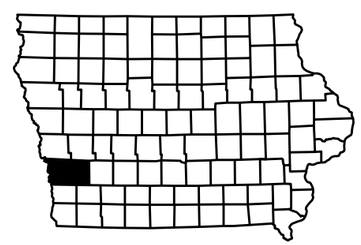
LICENSED PROFESSIONAL ENGINEER
HEATH B. DELZELL
21074
IOWA

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
Date: 2023.12.20 07:40:39 -06'00'
SIGNATURE DATE

HEATH B. DELZELL
PRINTED OR TYPED NAME

MY LICENCE RENEWAL DATE IS DECEMBER 31, 2023
PAGES COVERED BY THIS SEAL: all



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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	TROY DUFF	CONTACT	MARK JOHNSON
TELEPHONE	515-250-3715	TELEPHONE	515-250-3713
FAX		FAX	
EMAIL	troy.duff@dnr.iowa.gov	EMAIL	mark.johnson@dnr.iowa.gov

PROJECT DESCRIPTION

This project consists of repairing prop wash erosion with articulating concrete block mattresses at the north and south boat ramps on Lake Manawa State Park in Pottawattamie County, Iowa.

AUTHORIZATION TO BID

Seth Moore
Digitally signed by Seth Moore
Date: 2023.12.20 11:33:51 -06'00'
AUTHORIZATION - PARKS | WILDLIFE | FISHERIES | LAW ENFORCEMENT | FORESTRY DATE

Travis Baker
Digitally signed by Travis Baker
Date: 2023.12.20 13:29:53 -06'00'
ENGINEERING BUREAU CHIEF DATE

SHEET INDEX

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B.01	TYPICAL CROSS SECTIONS AND DETAILS
C.01	QUANTITIES AND GENERAL INFORMATION
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D.03	SITE PLAN - NORTH RAMP

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034

COVER SHEET

RAMP EXTENSIONS FOR:
LAKE MANAWA STATE PARK
POTTAWATTAMIE COUNTY

NO.	BY / DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 24-04-78-01
CHK'D BY:
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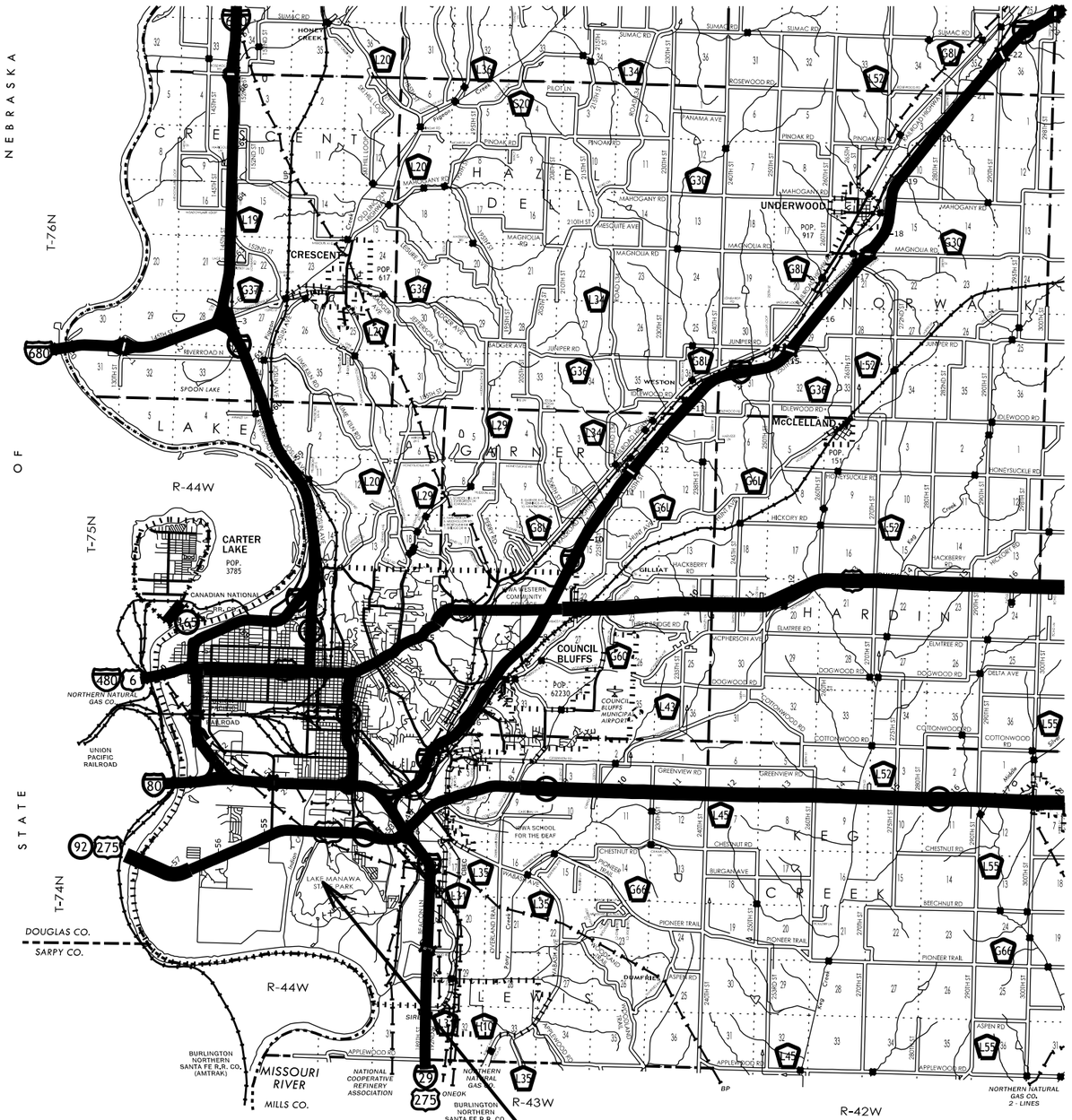

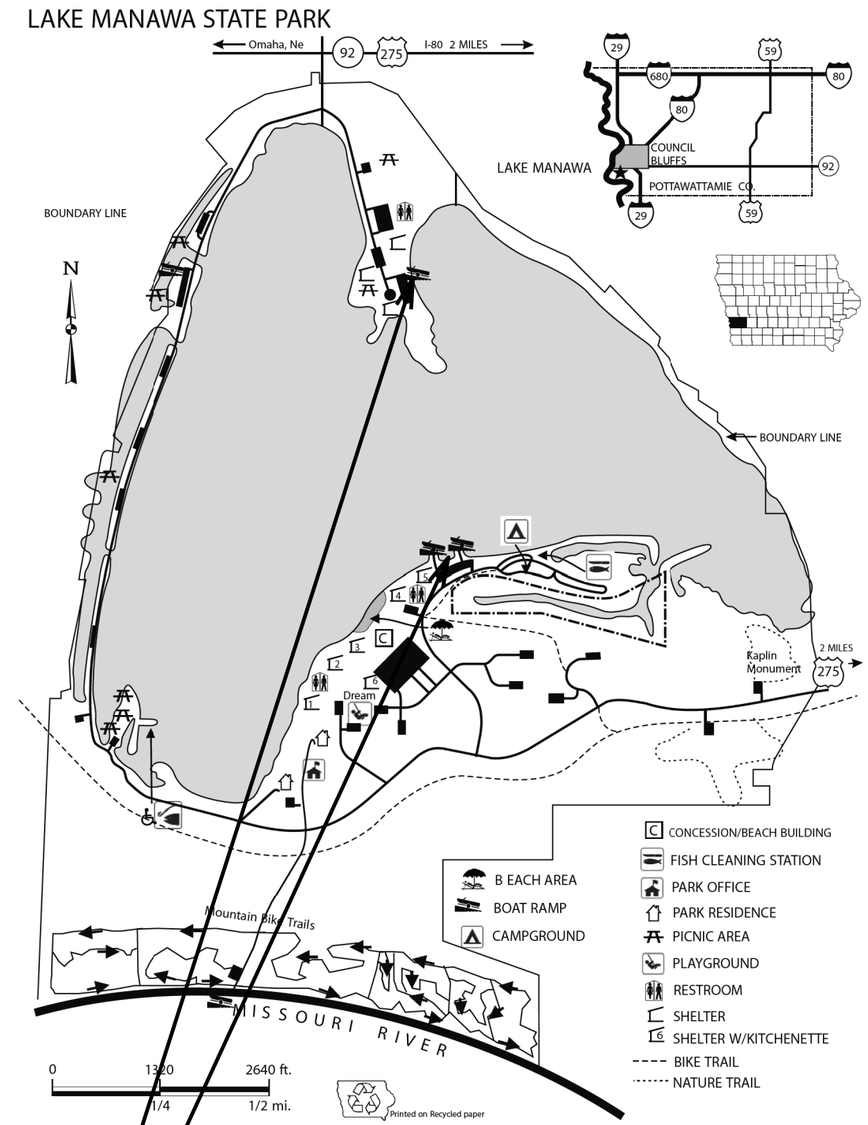

PROJECT LOCATION

CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034

PROJECT LOCATION MAP

RAMP EXTENSIONS FOR:

LAKE MANAWA STATE PARK

POTTAWATTAMIE COUNTY

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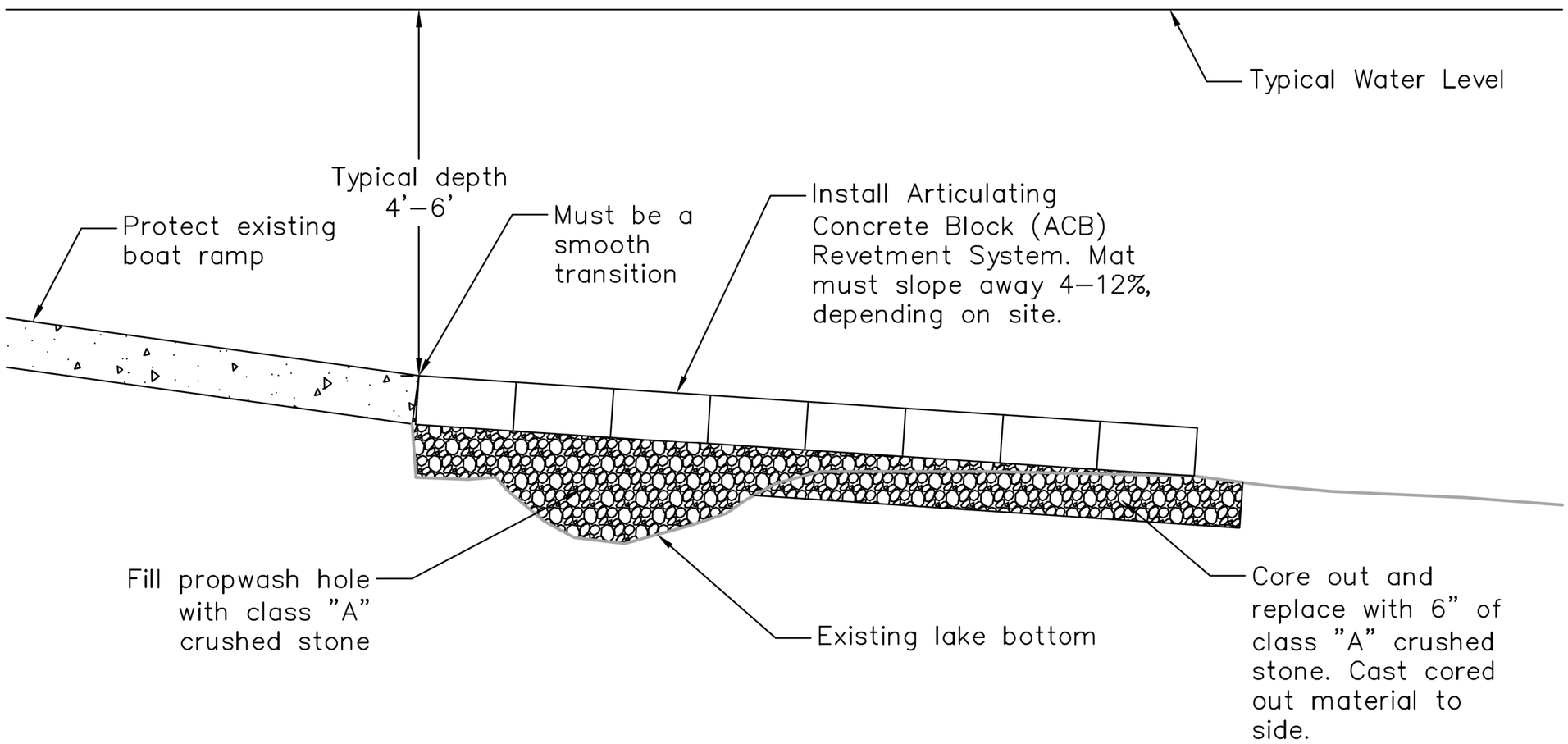
SHEET No: **A.02**

Propwash Protection Plan
Typical Cross Section



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TYPICAL CROSS SECTIONS AND DETAILS

RAMP EXTENSIONS FOR:

LAKE MANAWA STATE PARK

POTTAWATTAMIE COUNTY

NO.	BY / DATE	REVISION

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PROJECT NUMBER: 24-04-78-01

CHK'D BY:

DATE:

SHEET No: B.01

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	Mobilization	Lump Sum	1
2	Class "A" Crushed Stone	Tons	34
3	Site Preparation for Articulating Concrete Block System	Lump Sum	1
4	Articulating Concrete Block System	S.F.	864

ESTIMATE REFERENCE INFORMATION

ITEM NO.	DESCRIPTION
2	A. To be used as base under Articulating Concrete Block System. See detail, page B1.
3	A. Core out and grade lake bottom as necessary to accommodate base material and Articulating Block System.
4	A. Articulating Concrete Block System shall be ArmorFlex 55-S, Closed Cell Articulating Block Mattress, or approved equal.

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.

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QUANTITIES AND GENERAL INFORMATION

RAMP EXTENSIONS FOR:
LAKE MANAWA STATE PARK
POTTAWATTAMIE COUNTY

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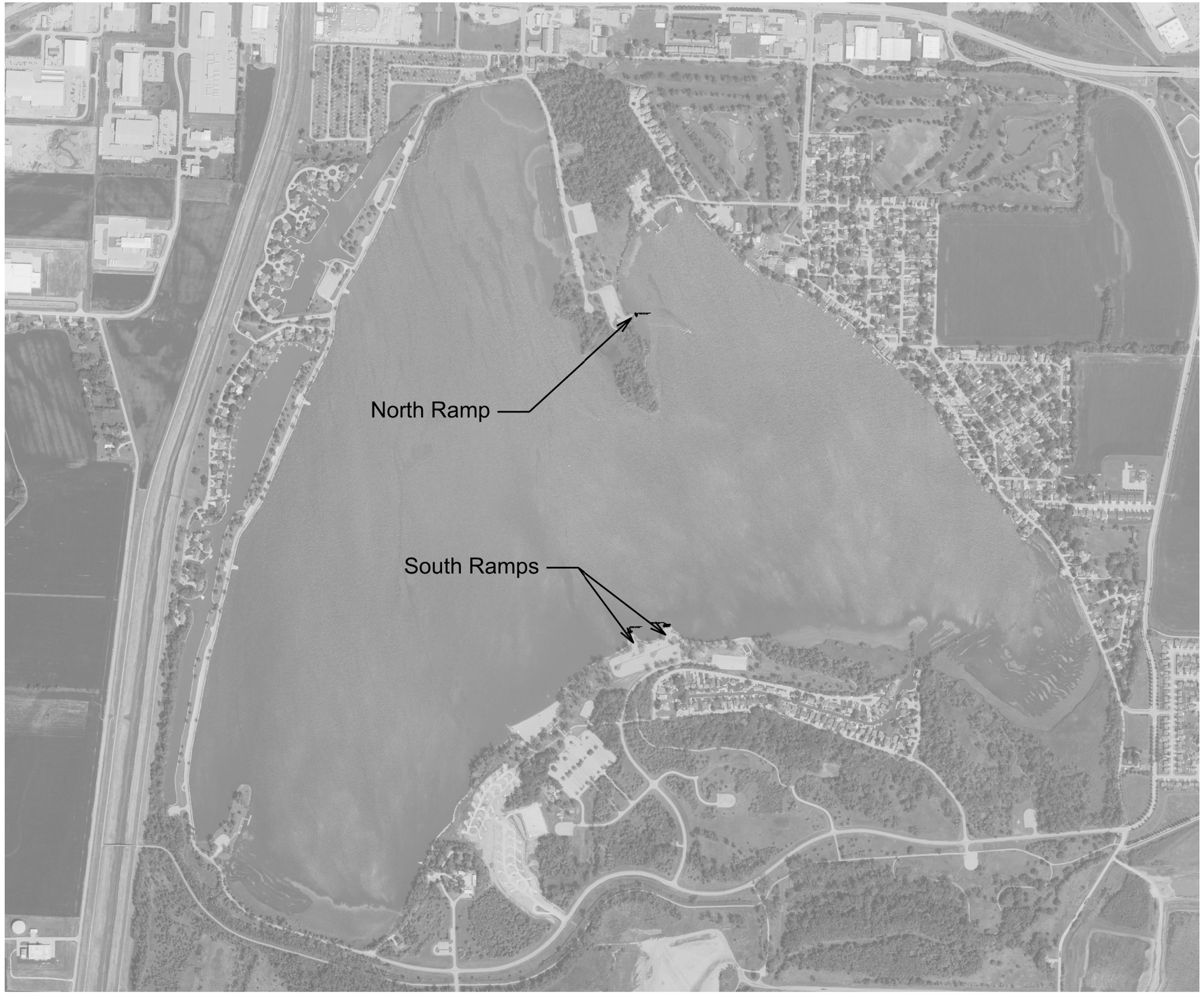

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FEET

CONSULTANT:

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ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034

SITE PLAN

RAMP EXTENSIONS FOR:

LAKE MANAWA STATE PARK

POTTAWATTAMIE COUNTY

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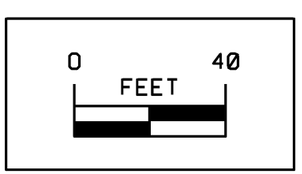
DATE:
SHEET No: **D.01**



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SITE PLAN - SOUTH RAMPS

RAMP EXTENSIONS FOR:

LAKE MANAWA STATE PARK

POTTAWATTAMIE COUNTY

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ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034

SITE PLAN - NORTH RAMP

RAMP EXTENSIONS FOR:

LAKE MANAWA STATE PARK

POTTAWATTAMIE COUNTY

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PROJECT NUMBER: 24-04-78-01

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