IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DOCUMENTS **FOR** GEODE STATE PARK RECONSTRUCT BEACH/BOAT RAMP PARKING LOT

DES MOINES COUNTY, IOWA

PROJECT # 22-06-29-01 **IDOT PROJECT #**



PROJECT MANAGER

ADDRESS

CONTACT

TELEPHONE

CITY,STATE,ZIP

DIRECTORY

COMPANY

ADDRESS

CONTACT

EMAIL

CITY,STATE,ZIF

TELEPHONE

CONSTRUCTION INSPECTOR

502 EAST 9TH STREET

DES MOINES, IA 50319

Michael Dufoe@dnr.iowa.go

MICHAEL DUFOE

515-985-9196

IOWA DEPARTMENT OF NATURAL RESOURCES

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502 EAST 9TH STREET

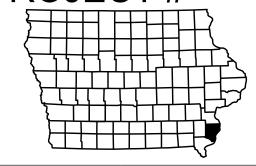
DES MOINES, IA, 50319

515-205-1698

MANDI L. ALDRICH PETERS

Mandi.Aldrich-Peters@dnr.iowa.gov

MY LICENCE RENEWAL DATE IS DECEMBER 31, 20,23



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This project consists of reconstructing parking lots with PCC pavement.	



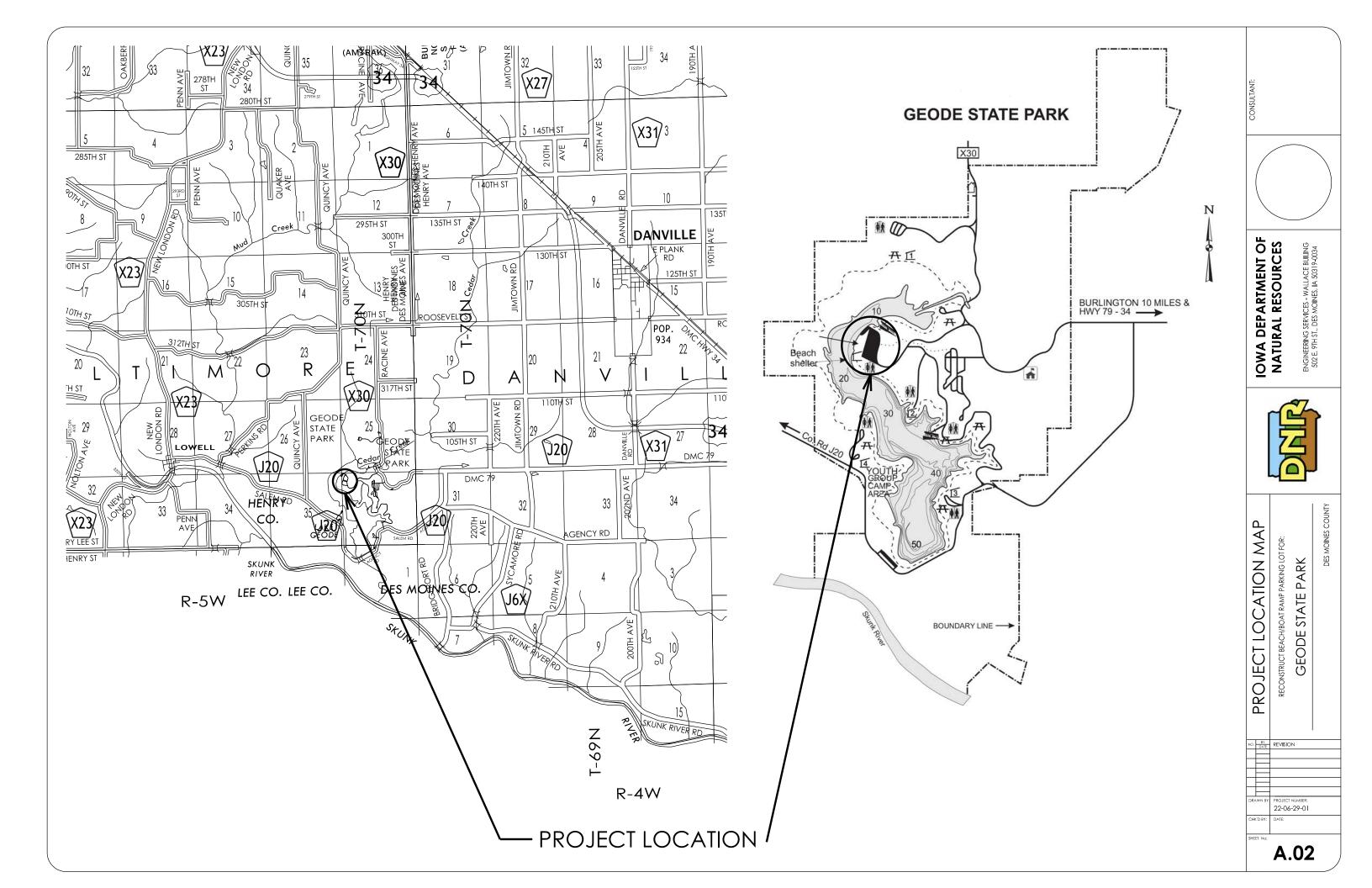
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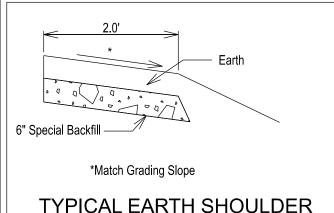
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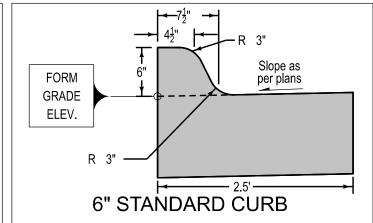
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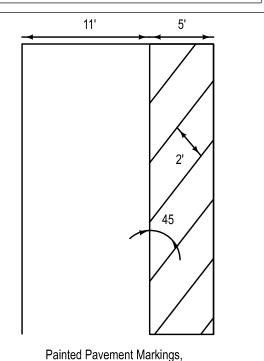
	SHEET INDEX				
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A.02	LOCATION MAP				
B.01	TYPICAL CROSS SECTIONS AND DETAILS	 ÷			
C.01	QUANTITIES AND GENERAL INFORMATION	[₹			
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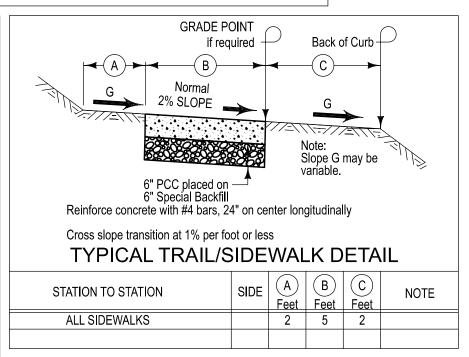


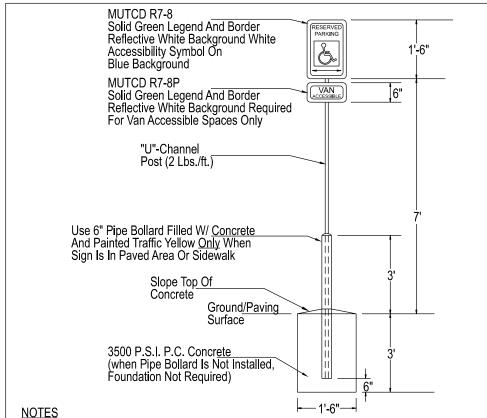




Waterborne/Solvent - White. 4"

ADA STALL AND ACCESS ISLE PAINTING DETAIL





NOTES
1. 12"x18" accessibility sign (R7-8) shall be mounted 7' from finish grade to bottom edge of sign face. Mounting height may be reduced to 5' if placed in a landscape area in which pedestrians are not expected to use.

Bollard may be omitted if installed in landscape areas. When installed in landscape areas, mounting post shall be driven a minimum of 3' below finished grade. Alternate mounting posts must be approved by the field inspector prior to construction.
 Signage shall be installed in front of each accessible space, centered on the width of the

4. Refer to Americans With Disabilities Act and architectural Barriers Act Accessibility Guidelines (ADAAG), latest edition, for required number of accessible space. Per ADAAG, one van accessible space shall be provided, minimum, with additional van accessible spaces per ADAAG

5. All signage shall be engineer grade .080 aluminum reflective sign meeting the requirements of the MUTCD and ADAAG.

ADA SIGN DETAIL NOT TO SCALE

IOWA DEPARTMENT OF NATURAL RESOURCES

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



//BOAT RAMP PARKING LOTF GEODE (

TYPICAL CROSS SECTIONS AND DETAILS

NO. BY REVISION

22-06-29-01

B.01

ESTIMATED PROJECT QUANTITIES

ITEM NO.	ITEM	UNIT	TOTAL
1	Clearing and Grubbing	LS	1
2	Remove Existing Payement and Rase	SY	9,561
3	Storm Sewer Abandonment, Fill+Plug, Less Than 36"	T F	252
4	Storm Sewer Abandonment, Fill+Plug, Less Than 36" Remove Existing Revetment	ĊΥ	1,530
5	Remove Existing Intake	EACH	2
6	Remove Curb and Gutter	STA	4.2
7	Painted Pavement Mark, High-Build Waterborne	STA	73
8	Painted Pavement Mark, High-Build Waterborne Painted Symbol+Legend, High-Build Waterborne Pavement, 7" PCC	EACH	3
9	Pavement, 7" PCC	SY	10,777
10	Earth Shoulder	STA	15.6
11	Special Backfill	CY	1,906
12	Curb and Gutter, PCC, 2.5'	LF	337
13	Intake, SW-501	EACH	2
14	Intake, SW-511	EACH	2
15	Manhole, SW-401 (48")	EACH	1
16	Storm Sewer, PVC, 6"	LF	82.2
17	Storm Sewer, Reinforced Concrete Pipe, 12"	LF	407
18	Storm Sewer, Reinforced Concrete Pipe Apron, 12" Sidewalk, 6" PCC Excavation, Class 10, Roadway and Borrow	EACH	10/
19	Sidewalk, 6" PCC	SY	136
20	Excavation, Class 10, Roadway and Borrow	CY	52
21	Excavation, Class 10, Waste	ĊŸ	3,428
22	Seeding, Fertilizing, and Mulching	AC	0.4
23	Filter Sock, 8"	LF	1,100
24	Signing	EACH	2
25	Bollards NDDES Consort Power! #0.9 SWDDD	EACH	1
26 27	NPDES General Permit #2 & SWPPP	LS LS	1
28	Construction Staking Traffic Control	LS	1
28	Iranic Coniror Mobilization	LS	1
<u></u>	MODIIIZUIION	LS	I
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ESTIMATE REFERENCE INFORMATION

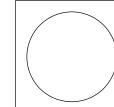
ITEM NO.	DESCRIPTION
1	Clearing and Grubbing A. Includes the removal and disposal of trees and stumps as shown in the plans and as directed by the DNR Inspector. B. Off-site disposal is the responsibility of the contractor. No burning or burying allowed in the park.
2	Removal of Existing Pavement and Base A. The contractor shall remove the existing pavement and base as indicated in the plan sheets. B. All saw cuts shall be incidental. C. Off-site disposal is the responsibility of the contractor. D. No payment for overhaul will be allowed.
3	Storm Sewer Abandonment, Fill+Plug, Less Than 36" A. Fill the existing line with flowable mortar.
4	Remove Existing Revetment A. Off-site disposal is the responsibility of the contractor. B. No payment for overhaul will be allowed.
5	Remove Existing Intake A. The contractor shall remove the existing structure as indicated in the plan sheets. B. Off-site disposal is the responsibility of the contractor. C. No payment for overhaul will be allowed.
6	Remove Curb and Gutter A. The contractor shall remove the existing pavement and base as indicated in the plan sheets. B. All saw cuts shall be incidental. C. Off-site disposal is the responsibility of the contractor. D. No payment for overhaul will be allowed.
7	Painted Pavement Mark, High-Build Waterborne A. Includes all parking lot striping.
8	Painted Symbol+Legend, High-Build Waterborne A. Includes all directional handicap symbols.

	ESTIMATE REFERENCE INFORMATION
ITEM NO.	DESCRIPTION
9	Pavement, 7" PCC A. Non-reinforced concrete pavement with IDOT C4 mix. B. Joints shall be sawcut at 14' maximum spacing. C. PCC testing to be handled by a separate DNR contract. D. Joints shall be cut to a maximum width of 1/8" +/- 1/16" and not sealed. E. Contractor to provide jointing and staging plans. F. All jointing is incidental. G. Earth shoulders shall be incidental.
11	Special Backfill A. Contractor shall install 6" special subbase under all roadways, parking lots, and sidewalks. B. Existing ACC from pavement removal shall be used on the project as a special backfill. C. The contractor may crush ACC from the pavement removal and use it as recycled material provided it meets the gradation requirements. D. Gradation shall be per the Standard Specifications for Bridge and Highway Design, Series 2015, Section 4123. E. Subgrade preparation shall be per the Standard Specifications for Bridge and Highway Design, Series 2015, Section 2115. F. Preparation of subgrade shall be incidental.
12	Curb and Gutter, PCC, 2.5' A. All jointing is incidental.
13	Intake, SW-512 (18") A. Install Type 4A castings.
14	Manhole, SW-401 (48") A. Install Type E castings.
15 16	Storm Sewer, PVC, 6" Storm Sewer, Reinforced Concrete Pipe, 12" A. Pipe will be measured in linear feet along the centerline of the pipe from center of intake or manhole to center of intake or manhole. B. Includes, but is not limited to trench excavation, dewatering, furnishing bedding material, placing bedding, backfill material, and tracer system. C. All water main conflicts shall be addressed perthe1/64Standard Specifications for Bridge and Highway Design, Series 2015, Section 4010.
18	Sidewalk, 6" PCC A. Reinforced concrete pavement with IDOT C4 mix. B. Contraction joints shall be sawcut at 5' maximum spacing. Expansion joints shall be installed around the perimeter of the building and between the sidewalk around the building and the sidewalks leading up to the building. C. Expansion joints shall be installed between the new sidewalk and the existing pavement. D. Excavation for sidewalk construction is considered incidental. E. PCC testing to be handled by a separate DNR contract. F. Earth shoulders shall be incidental.
19	Excavation, Class 10, Roadway and Borrow A. Remove existing topsoil to an average depth of 6 inch. B. Material to be used as fill where needed. C. Sod to be stripped in areas where fill is placed. D. Place topsoil in those areas outside of the new construction. Seed, fertilizer and mulch on all disturbed areas as directed by the DNR Inspector. E. No shrink factor is applied. F. No payment for overhaul will be allowed.
20	Excavation, Class 10, Waste A. A suitable waste site shall be obtained by the contractor. No payment for overhaul will be allowed. B. No shrink factor is applied.

Seeding, Fertilizing, and Mulching A. Contractor shall seed, fertilize, and mulch all disturbed areas. B. All rural seeding shall be completed per Statewide Urban Standard Design Specifications for Public Improvements (SUDAS) Section 9010. C. All rural seeding shall be completed using DOT Urban or Class "C" seed mixture.

A. Filter sock shall be installed as detailed to prevent sediment from exiting the project site and shall remain in place and be maintained during construction. DNR Park staff will remove once the site is stabilized.

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IOWA DEPARTMENT OF NATURAL RESOURCES

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



VSTRUCT BEACH/BOAT RAMP PARKING LOT FOR:

GEODE STATE PARK

QUANTITIES AND GENERAL INFORMATION

C.01

NO. BY REVISION

	ESTIMATE REFERENCE INFORMATION
ITEM NO.	DESCRIPTION
23	Signing A. Signs shall be mounted 7' from finish grade to bottom edge of the sign face. mounting height may be reduced to 5' if placed in a landscape area in which pedestrians are not expected to use. B. Bollard may be omitted if installed in landscape areas, when installed in landscape areas, mounting post shall be driven a minimum of 3' below finished grade, alternate mounting posts must be approved by the DNR inspector prior to construction. C. All signage shall be engineer grade .080 aluminum reflective sign meeting the requirements of the MUTCD.
25	NPDES General Permit #2 & SWPPP A. Contractor is responsible for obtaining the necessary permit, SWPPP, inspecting and maintaining the log.
26	Construction Staking A. Contractor is responsible for the survey staking of the construction of the project.

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.

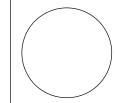
It shall be the contractor's responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project. No payment for overhaul will be allowed for material hauled to these sites. 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

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.



IOWA DEPARTMENT OF NATURAL RESOURCES

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



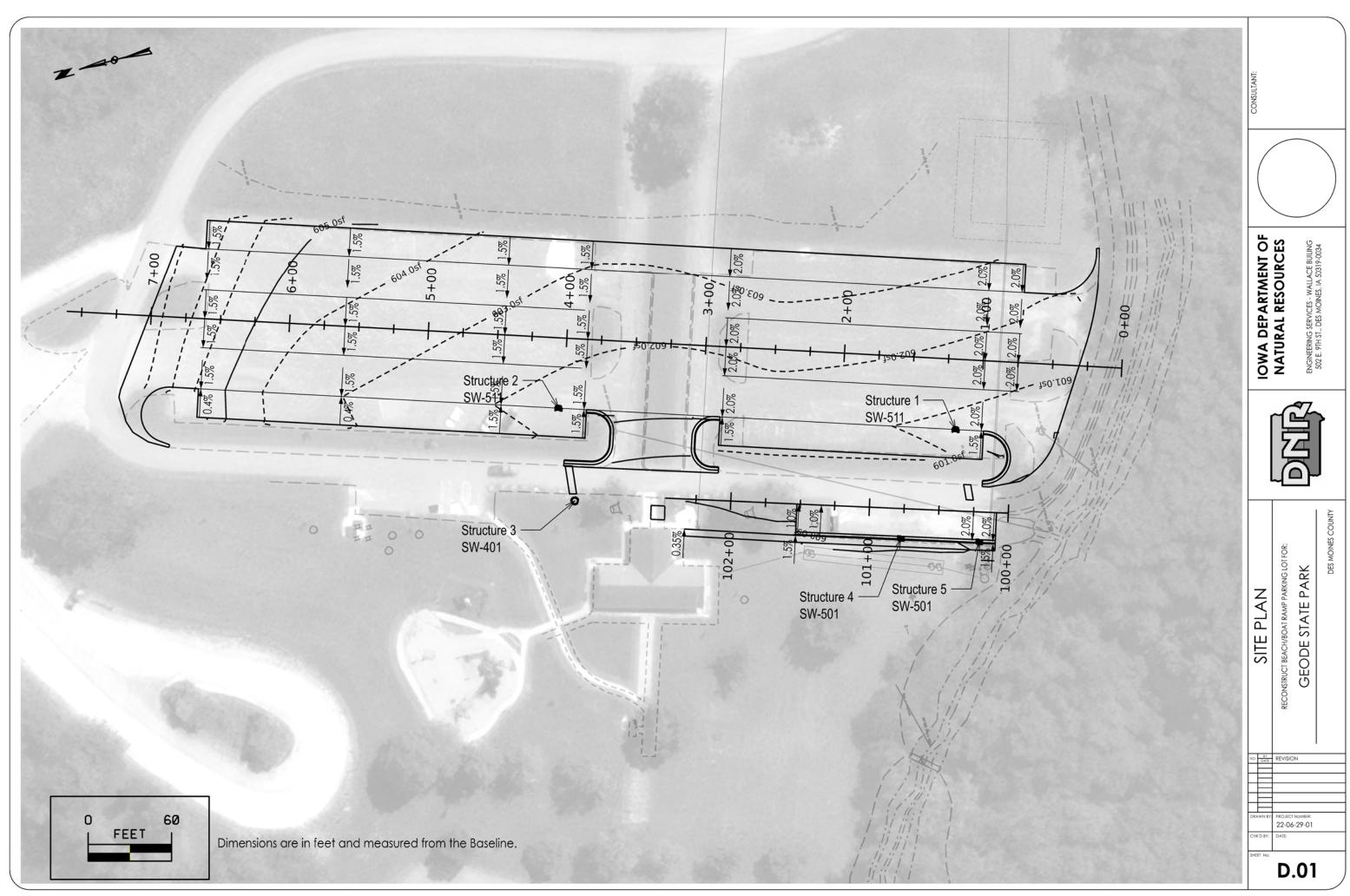
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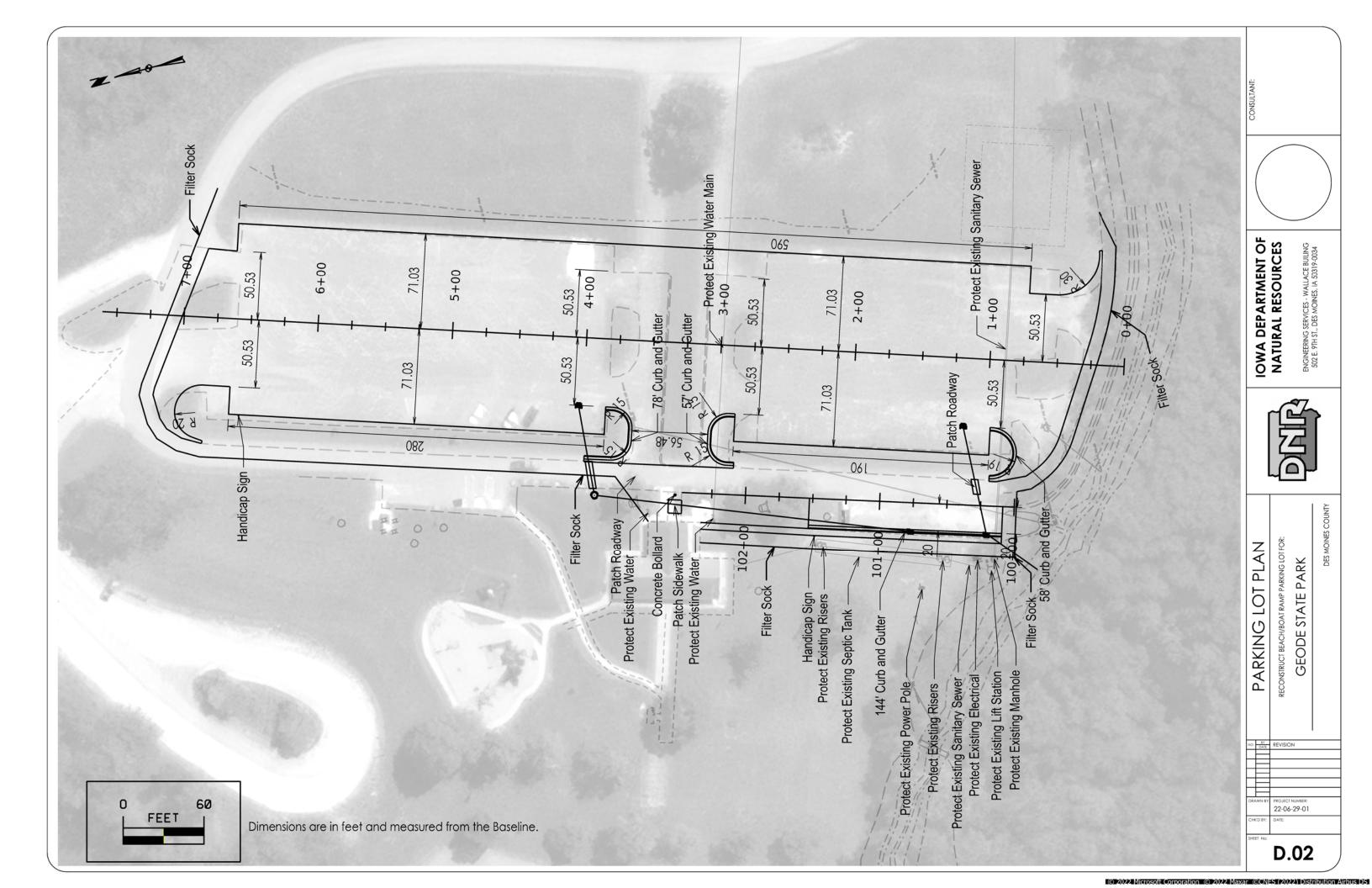
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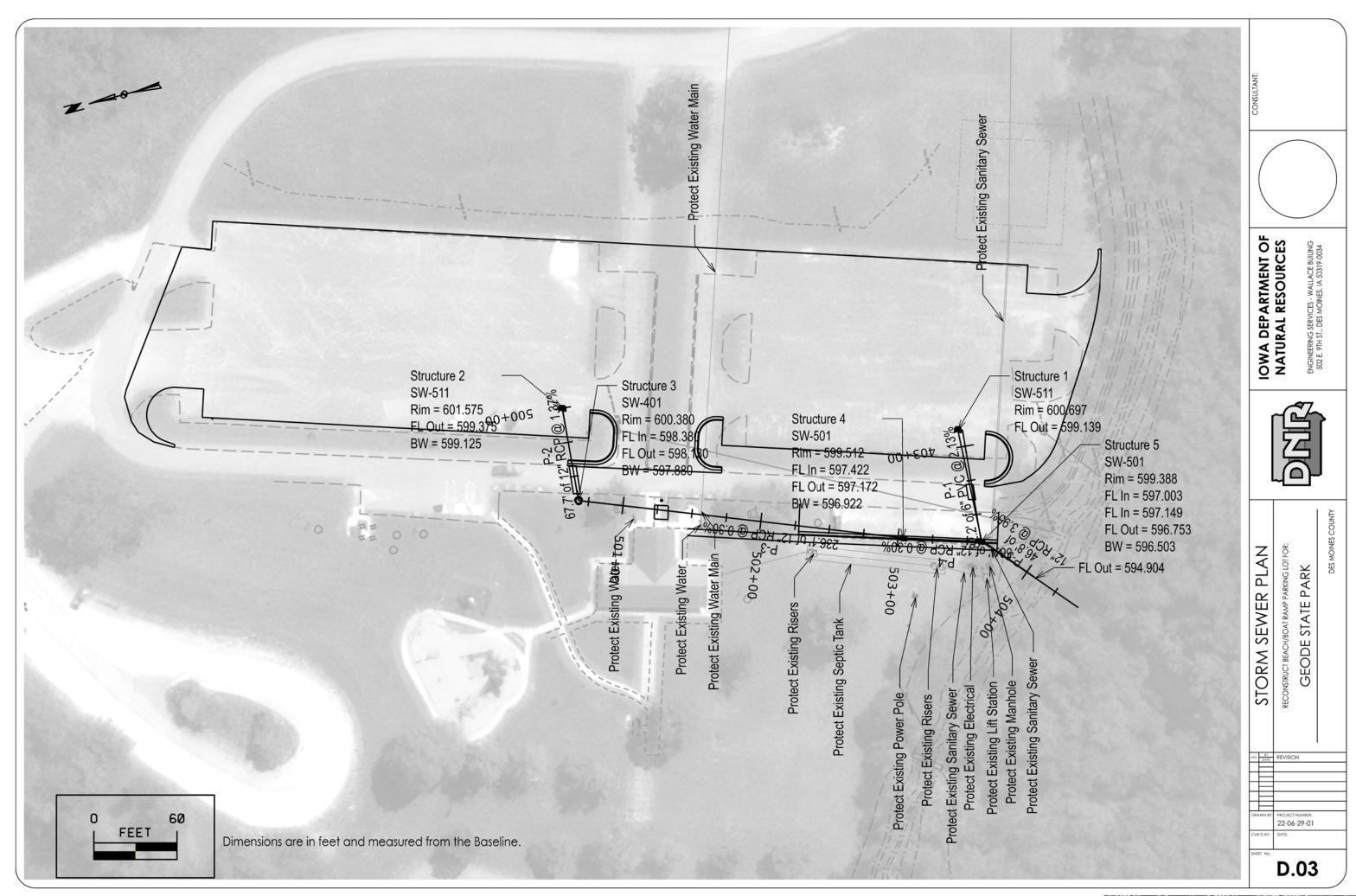
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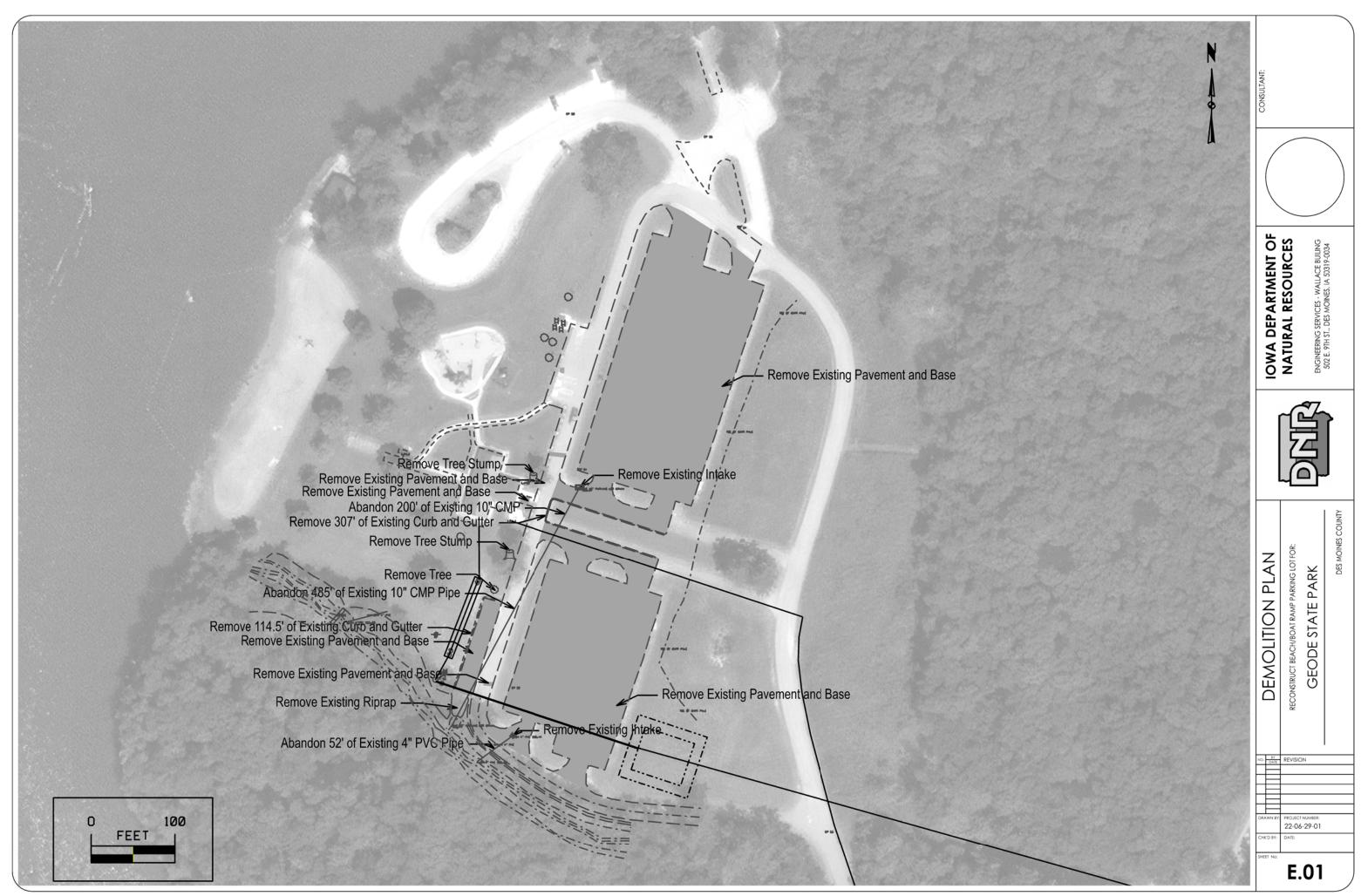
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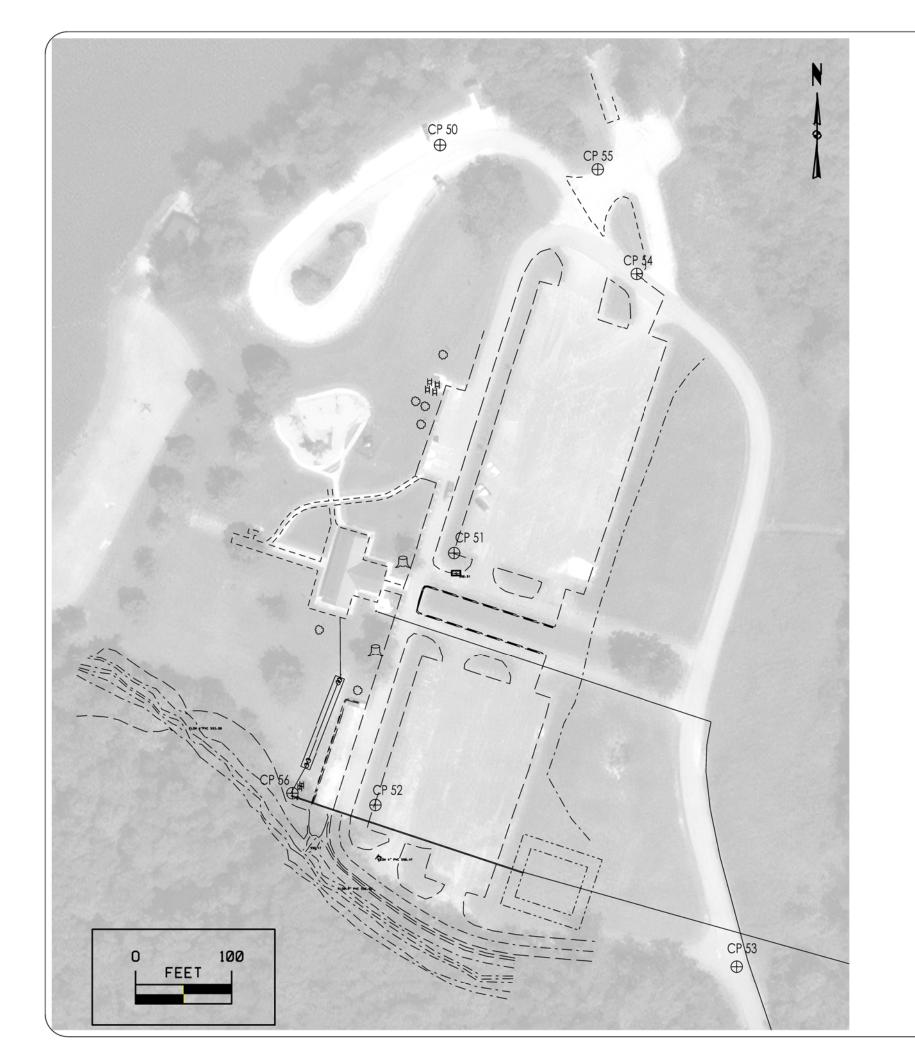
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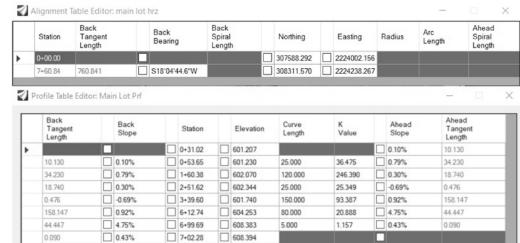








POINT	NORTHING		ELEVATION	DESCRIPTION
CP50	308398.8	2224037	612.917	PK NAIL FLIGHT TARGET NEAR PIT LATRINE
CP51	307974	2224052	601.529	PK NAIL
CP52	307711.5	2223970	600.115	PK NAIL
CP53	307543.5	2224346	611.736	PK NAIL FLIGHT TARGET
CP54	308264.9	2224242	608.234	CUT X IN CONCRETE
CP55	308373.5	2224201	607.588	CUT X IN CONCRETE
CP56	307723.8	2223883	599.641	DIMPLE IN METAL AT LIFT STATION



	Station	Back Tangent Length	Back Bearing	Back Spiral Length	Northing	Easting	Radius	Arc Length	Ahead Spiral Length
•	100+00.00				307694.414	2223922.601			
	101+60.00	160.000	S17'28'31.8"W	0.000	307847.029	2223970.649	0.000	0.000	0.000
	102+47.20	87.195	S17°34'29.0"W		307930.154	2223996.977			

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	Station	Back Tangent Length		Back Bearing	Back Spiral Length	Northing	Easting	Radius	Arc Length	Ahead Spiral Length
-	402+87.93				1000	307712.276	2223989.475			
	403+70.08	82.145		S84"33"14.8"E		307720.072	2223907.701			

Station	Back Tangent Length	Back Bearing	Back Spiral Length	Northing	Easting	Radius	Arc Length	Ahead Spiral Length
500+00.00	100000			307987.301	2224079.256			
500+67.66	67.660	S84'52'42.3"E	0.000	307993.341	2224011.866	0.000	0.000	0.000
503+03.77	236.110	N21"34"28.9"E	0.000	307773.773	2223925.045	0.000	0.000	0.000
503+60.20	56.430	N17'28'33.0"E	0.000	307719.948	2223908.099	0.000	0.000	0.000
504+45.23	85.033	N49"30"01.6"E	200	307664.724	2223843.439	200 B		9 200





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



NSTRUCT BEACH/BOAT RAMP PARKING LOT FOR:

GEODE STATE PARK

SURVEY CONTROL

22-06-29-01

G.01

