


POLK COUNTY, 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.

Bruce L. Flippin 10-15-2019
SIGNATURE DATE

BRUCE L. FLIPPIN
PRINTED OR TYPED NAME

MY LICENCE RENEWAL DATE IS DECEMBER 31, 20 20
 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	BRUCE L. FLIPPIN	CONTACT	DON LABATE
TELEPHONE	515-689-8509	TELEPHONE	515-250-3714
FAX	515-281-9685	FAX	
EMAIL	bruce.flippin@dnr.iowa.gov	EMAIL	don.labate@dnr.iowa.gov

This project consists of a 3-inch, High Traffic, HMA overlay, with an 1-inch interlayer. Pavement scarification painted symbols are also included.

AUTHORIZATION TO BID

[Signature] 10/15/19

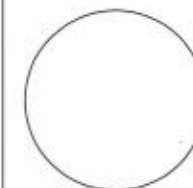
AUTHORIZATION - PARKS | WILDLIFE | FISHERIES | LAW ENFORCEMENT | FORESTRY | DA

[Signature] 10/15/19

ENGINEERING BUREAU CHIEF DATE

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CONCLUSIONS

IOWA DEPARTMENT OF
NATURAL RESOURCES

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

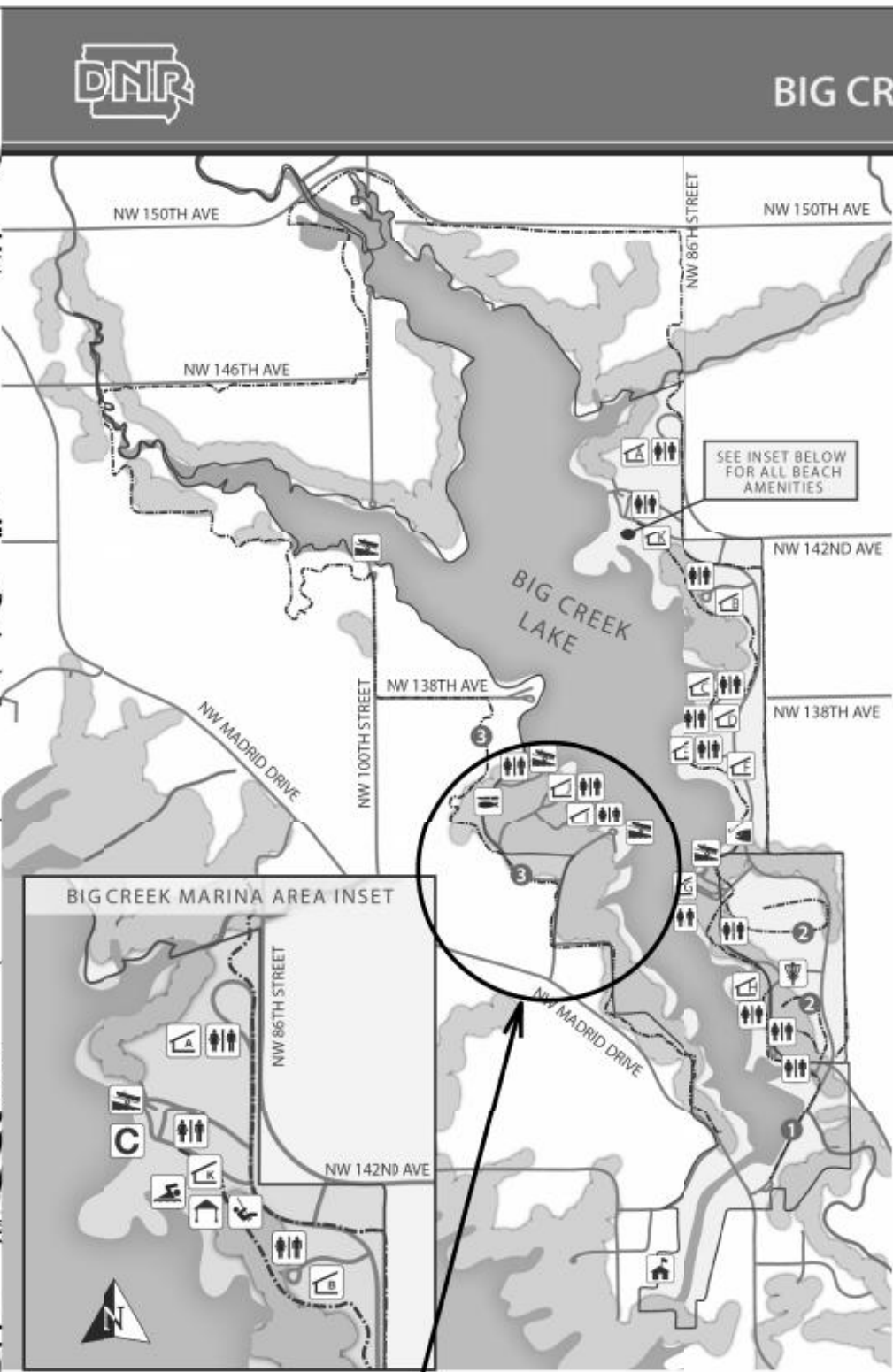
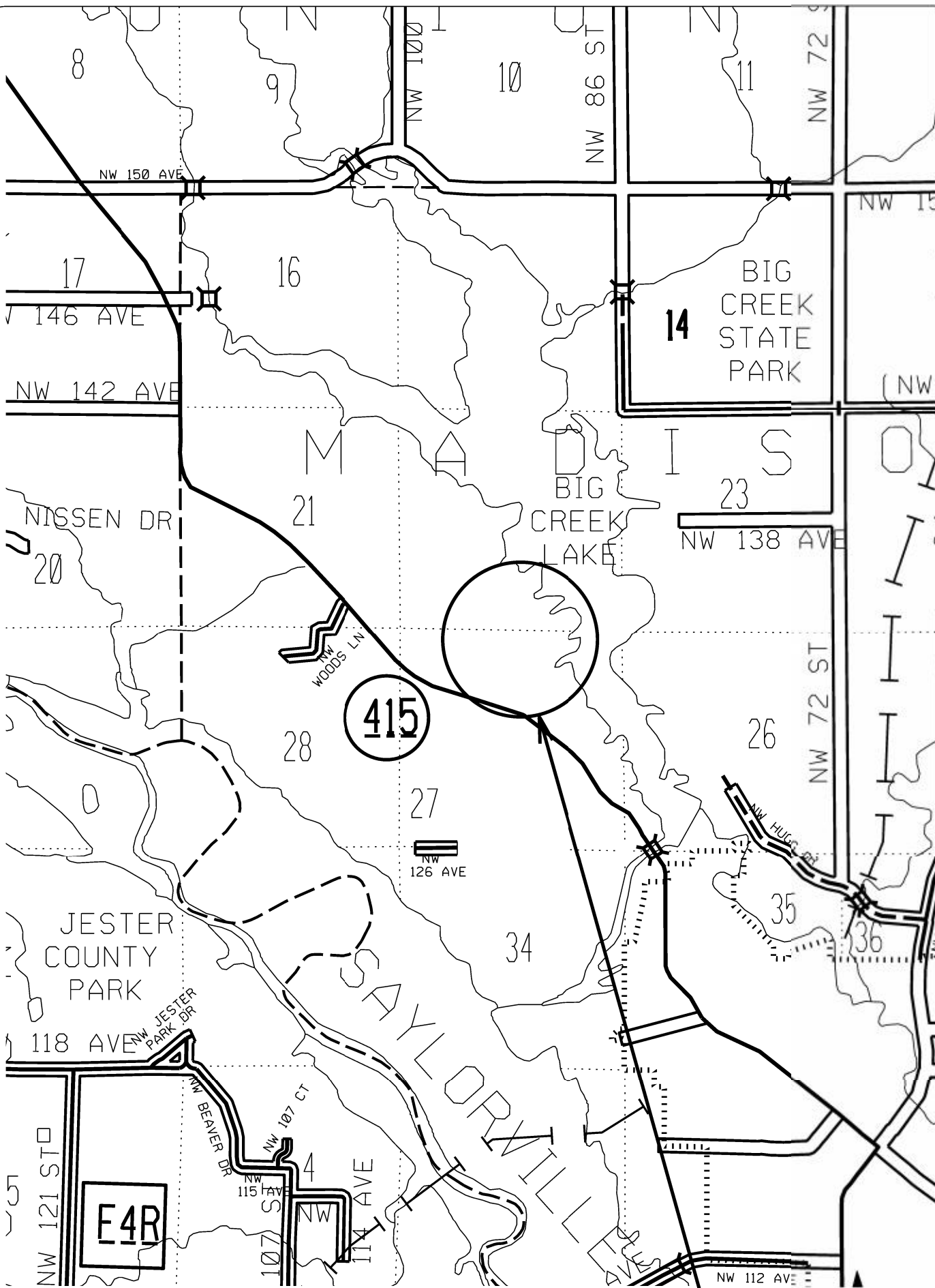


COVER SHEET

WEST ROAD MAINTENANCE FOR:

BIG CREEK STATE PARK

A.01



TRAIL INFORMATION

Trail Name	Trail Activity	Length	Level of Difficulty	Estimated Hike Time
1 Neal Smith - Big Creek Portion	Hiking, Biking, Mountain Biking	3 mi	Easy	1.25-1.5 hr
2 Cross-country Ski	Cross-country Skiing	2.5 mi	Easy	1-1.25 hr
3 Snowmobile (Seasonal)	Snowmobiling	10.8 mi	Moderate	6 hr

Walking times are figured at a rate of 2 mph.
www.iowadnr.gov/Places-to-Go/State-Parks

MAP KEY

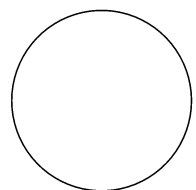
- Beach Area
- Beach Cabanas - 9
- Boat Ramp
- Concession
- Disk Golf
- Fishing Pier / Jetty
- Fish Cleaning Station
- Park Office
- Playground
- Model Airfield
- Restroom - Modern Seasonal
- Shelter

SHELTERS

- A. Atlantic Shelter
- B. Beverly Dinahv Shelter
- C. Cadet Shelter
- D. Duster Shelter
- E. Ensign Shelter
- F. Firefly Shelter
- G. Gannet Shelter
- H. Hampton Shelter
- I. Inland Cat Shelter
- J. Jolly Boat Shelter
- K. Beach Shelters 1,2,3

- Trail
- Road
- Park Boundary
- Multiuse Trails
- Water

CONSULTANT:



IOWA DEPARTMENT OF
NATURAL RESOURCES

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



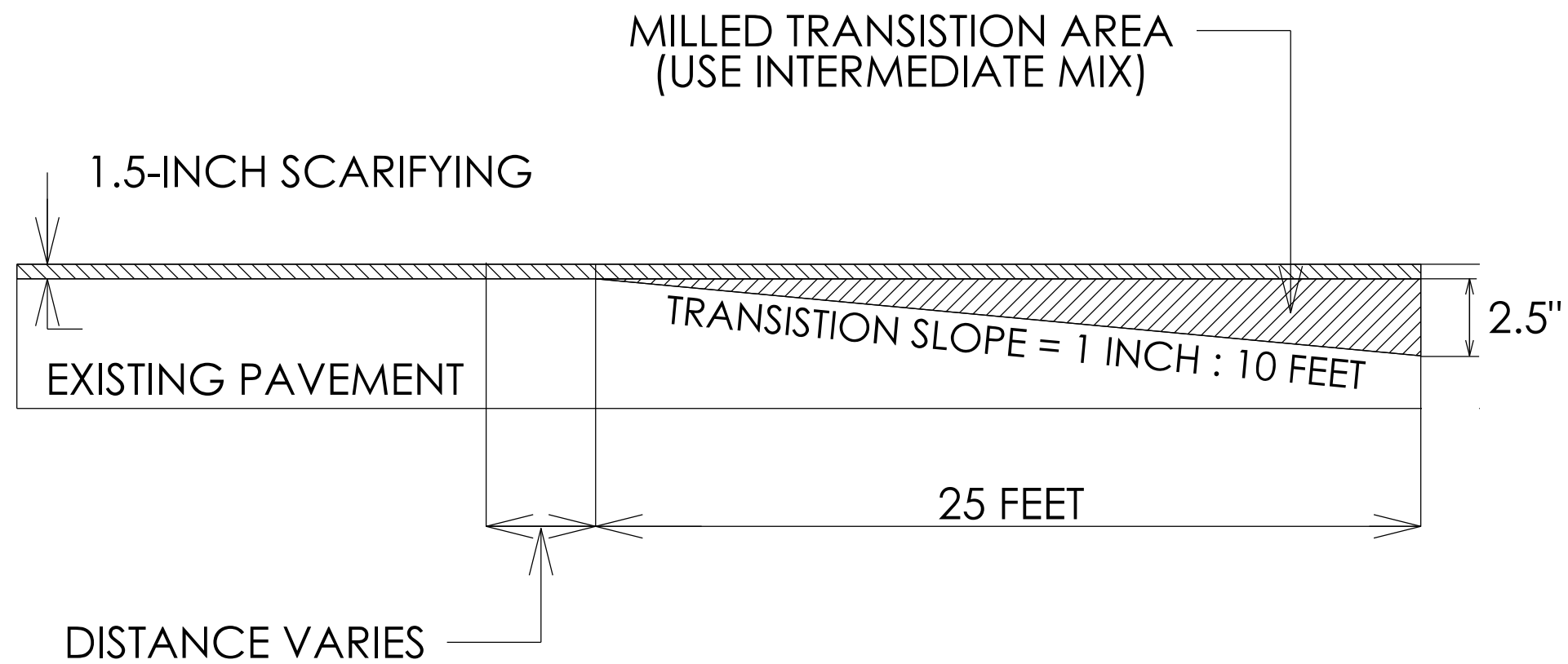
PROJECT LOCATION MAP

WEST ROAD MAINTENANCE FOR:

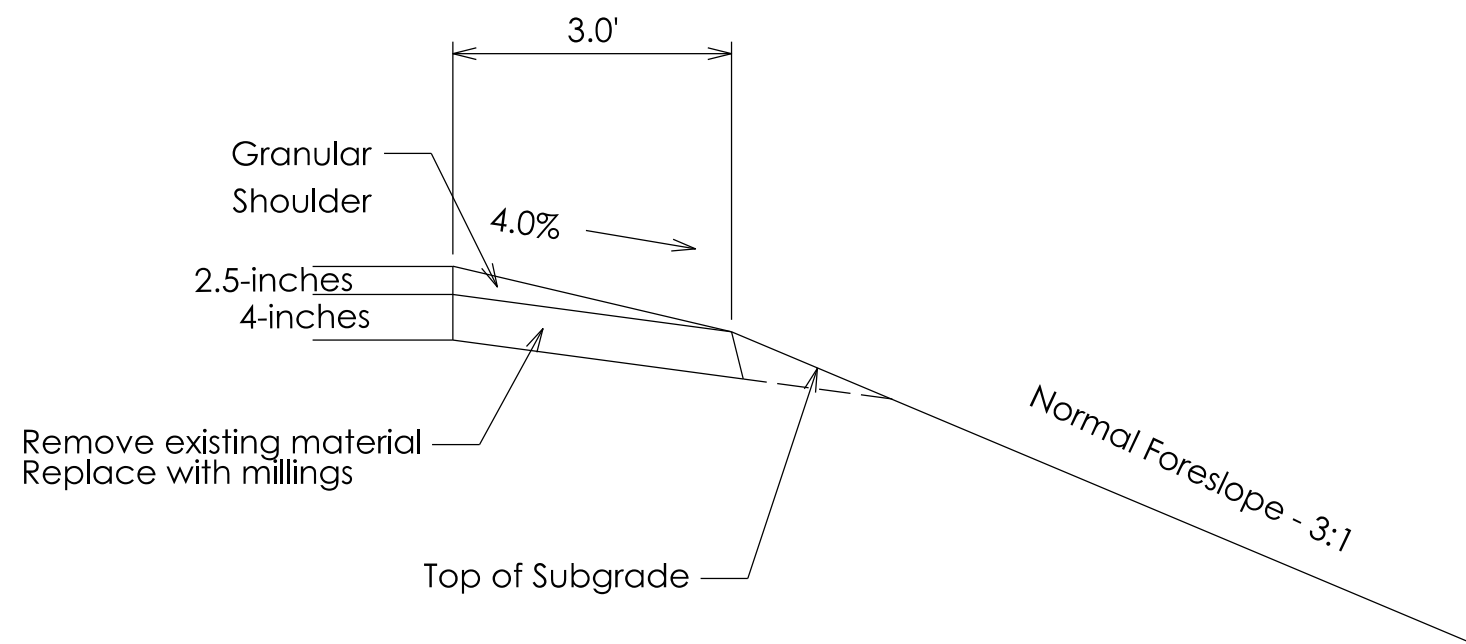
BIG CREEK STATE PARK

POLK COUNTY

NO.	DATE	REVISION
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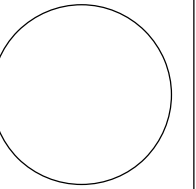


MILLED HEADER DIMENSIONS AND DETAILS



TYPICAL GRANULAR SHOULDER SECTION

CONSULIANI:



**IOWA DEPARTMENT OF
NATURAL RESOURCES**

502 E. 9TH ST., DES MOINES, IA 50319-0034



TYPICAL CROSS SECTIONS AND DETAILS

WEST ROAD MAINTENANCE FUR:

BIG CREEK STATE PARK

OVER COUNT

BY:	REVISION
DATE:	
DRAWN BY:	PROJECT NUMBER:
BLF	20-02-77-02
CHECK'D BY:	DATE:
	OCT 2019
SHEET No:	

B.01

[illegible]

ESTIMATE REFERENCE INFORMATION	
ITEM NO.	DESCRIPTION
1	<p>A. Nominal 1.5 - inch scarification.</p> <p>B. Milled headers to be an additional 2.5 - inches. Taper headers 1 - inch per 10 - feet.</p> <p>C. Includes 591 SY for gore/return areas.</p> <p>D. Screen millings down to a nominal 1.5 - inch size, and use as shoulder material.</p> <p>E. Remove any excess millings from project site.</p>
2	<p>A. Remove existing shoulder vegetation/material - 4.0-inches deep, 3.0-feet wide.</p> <p>B. Remove spoil from project site.</p> <p>C. A shouldering machine must be used to place millings.</p> <p>D. Includes both shoulders.</p>
3	<p>A. 1 - inch lift. All roadways.</p>
4	<p>A. 1.5 - inch lift all roadways.</p> <p>B. Use in transition wedge areas.</p>
5	<p>A. 1.5 - inch lift all roadways.</p>
6	<p>A. For Intermediate and surfaces courses.</p>
7	<p>A. For Interlayer course only.</p>
8	<p>A. Follow current Iowa DOT Standard Specifications section 2518 for safety closure requirements.</p>
9	<p>A. Stop bar. Use MUTCD standards for dimensions and placement.</p>

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.

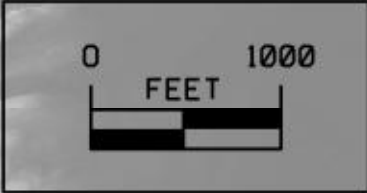
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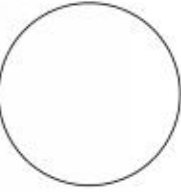
WEST ROAD MAINTENANCE FOR:
BIG CREEK STATE PARK

POLK COUNTY

C.01



CONSULTANT:



IOWA DEPARTMENT OF
NATURAL RESOURCES

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



SITE PLAN

WEST ROAD MAINTENANCE FOR:

BIG CREEK STATE PARK

POLK COUNTY

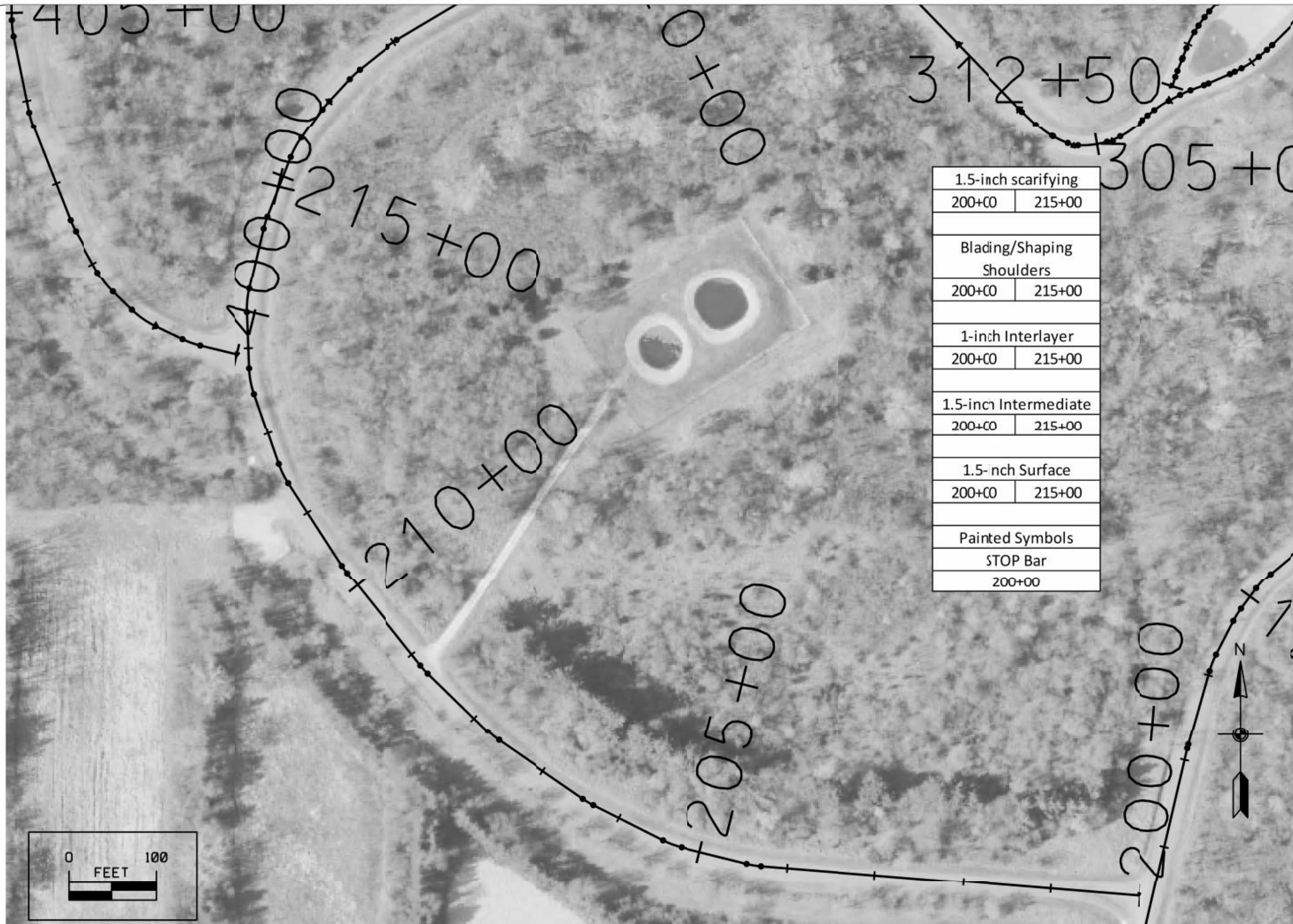
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DRAWN BY: BLF PROJECT NUMBER: 20-02-77-02

CHECKED BY: DATE: 06/12/17

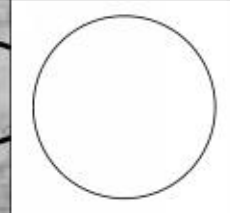
SHEET NO:

D.01



1.5-inch scarifying	
200+00	215+00
Blading/Shaping Shoulders	
200+00	215+00
1-inch Interlayer	
200+00	215+00
1.5-inch Intermediate	
200+00	215+00
1.5-inch Surface	
200+00	215+00
Painted Symbols	
STOP Bar	
200+00	

CONSULTANT:



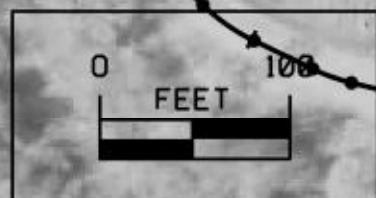
IOWA DEPARTMENT OF
NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-0034



SITE PLAN
WEST ROAD MAINTENANCE FOR:
BIG CREEK STATE PARK
POLK COUNTY

NO.	BY	REVISION
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100	BLF	20-02-77-02

1.5-inch scarifying	
215+00	225+30
228+70	230+77
Milled Header	
225+05	225+30
228+70	228+95
Blading/Shaping Shoulders	
215+00	225+30
228+70	230+77
1-inch Interlayer	
215+00	225+30
228+70	230+77
1.5-inch Intermediate	
215+00	225+30
228+70	230+77
1.5-inch Surface	
215+00	225+30
228+70	230+77



230+00
230+77

300+00

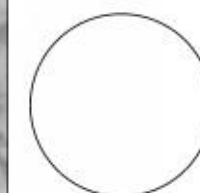
220+00

312+50

305+40



CONSULTANT:



IOWA DEPARTMENT OF
NATURAL RESOURCES

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



SITE PLAN

WEST ROAD MAINTENANCE FOR:

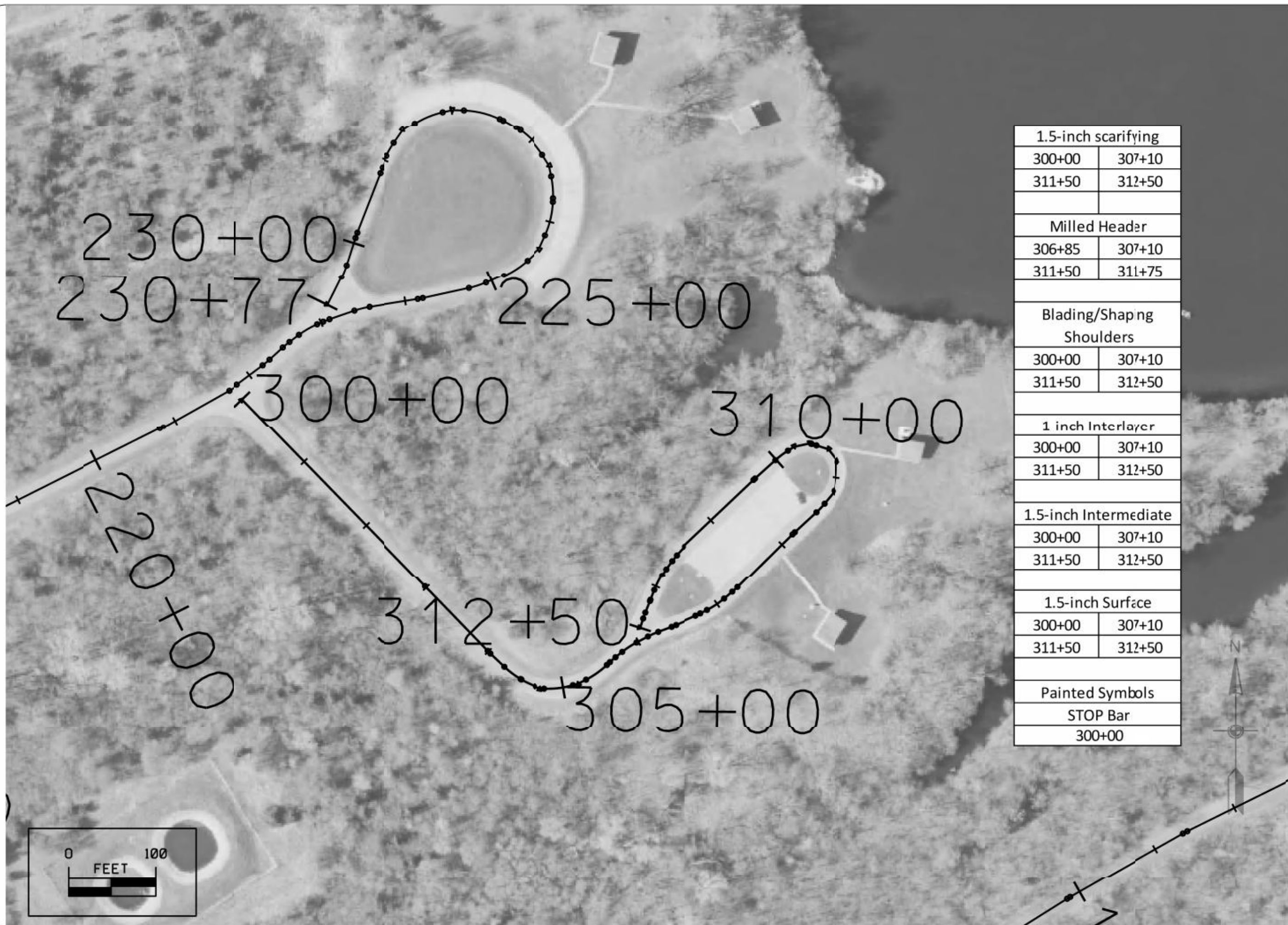
BIG CREEK STATE PARK

POLK COUNTY

NO.	BY	REVISION
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2	CAL	2017

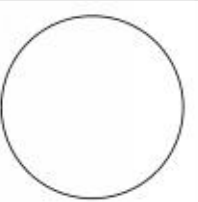
SHEET NO.

D.05



1.5-inch scarifying	
300+00	307+10
311+50	312+50
Milled Header	
306+85	307+10
311+50	311+75
Blading/Shaping Shoulders	
300+00	307+10
311+50	312+50
1 inch Interlayer	
300+00	307+10
311+50	312+50
1.5-inch Intermediate	
300+00	307+10
311+50	312+50
1.5-inch Surface	
300+00	307+10
311+50	312+50
Painted Symbols	
STOP Bar	
300+00	

CONSULTANT:



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ENGINEERING SERVICES - WALLACE BUILDING
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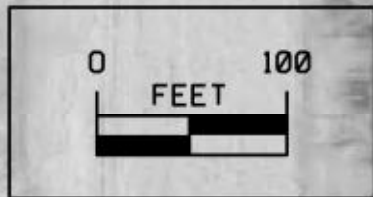
SITE PLAN

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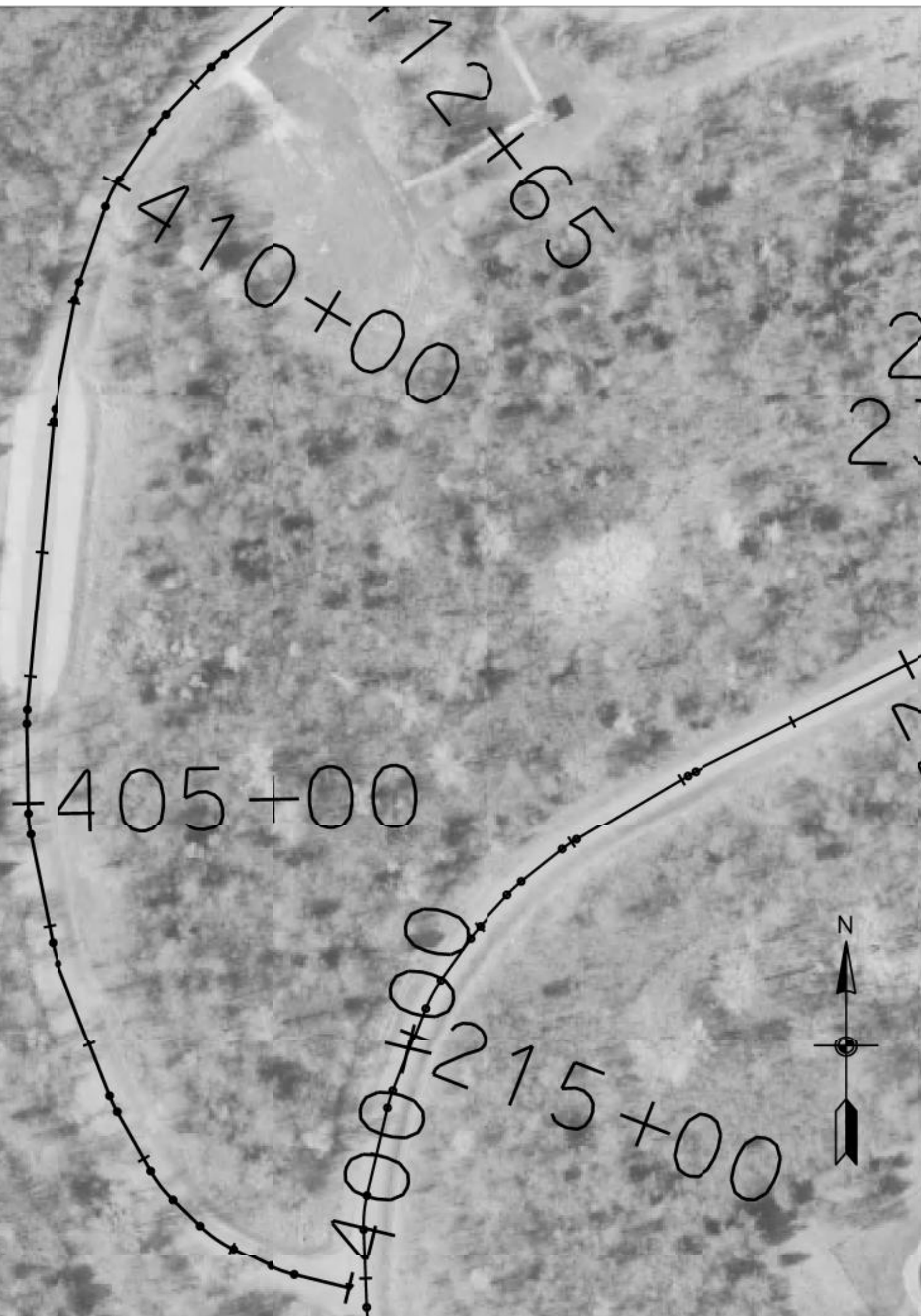
BIG CREEK STATE PARK

POLK COUNTY

NO.	BY	DATE	REVISION
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1.5-inch scarifying	
400+00	410+00
Blading/Shaping Shoulders	
400+00	410+00
1-inch Interlayer	
400+00	410+00
1.5-inch Intermediate	
400+00	410+00
1.5-inch Surface	
400+00	410+00
Painted Symbols	
STOP Bar	
400+00	



CONSULTANT:

IOWA DEPARTMENT OF
NATURAL RESOURCES

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

SITE PLAN

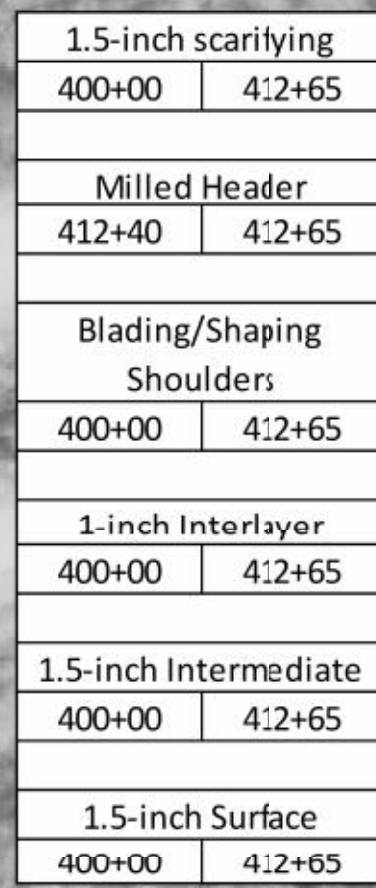
WEST ROAD MAINTENANCE FOR:
BIG CREEK STATE PARK

POLK COUNTY

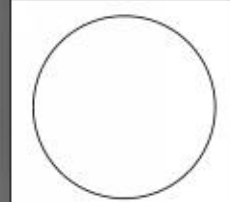
NO.	BY	REVISION
1	BLF	20-02-77-02
2	CCT	2017

SHEET No:

D.07



CONSULTANT:



**IOWA DEPARTMENT OF
NATURAL RESOURCES**

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



SITE PLAN

WEST ROAD MAINTENANCE FOR:

BIG CREEK STATE PARK

POLK COUNTY

NO.	BY	REVISION
	DATE	
DRAWN BY:		PROJECT NUMBER:
BLF		20-02-77-02
CHECKED BY:		DATE:
		06/1/2017
SHEET No:		

D.08

A horizontal scale bar with a black outline. It is divided into two equal segments by a vertical line. The left segment is white, and the right segment is black. Above the left end is the number '0', and above the right end is the number '100'. In the center, above the bar, is the word 'FEET'.

D.09