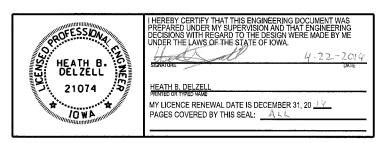
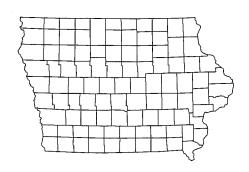
# IOWA DEPARTMENT OF NATURAL RESOURCES

# CONSTRUCTION DOCUMENTS FOR PLEASANT CREEK SRA PHASE 1 -PCC PARKING LOT PAVING LINN COUNTY, IOWA

DOT PROJECT # SP-679-0(5)--7C-57 PROJECT # 19-06-57-04







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	MIKE DUFOE		
TELEPHONE	515-979-0104	TELEPHONE	515-985-9196		
FAX	515-281-8685	FAX			
EMAIL	heath.delzell@dnr.iowa.gov	EMAIL	michael.dufoe@dnr.iowa.gov		

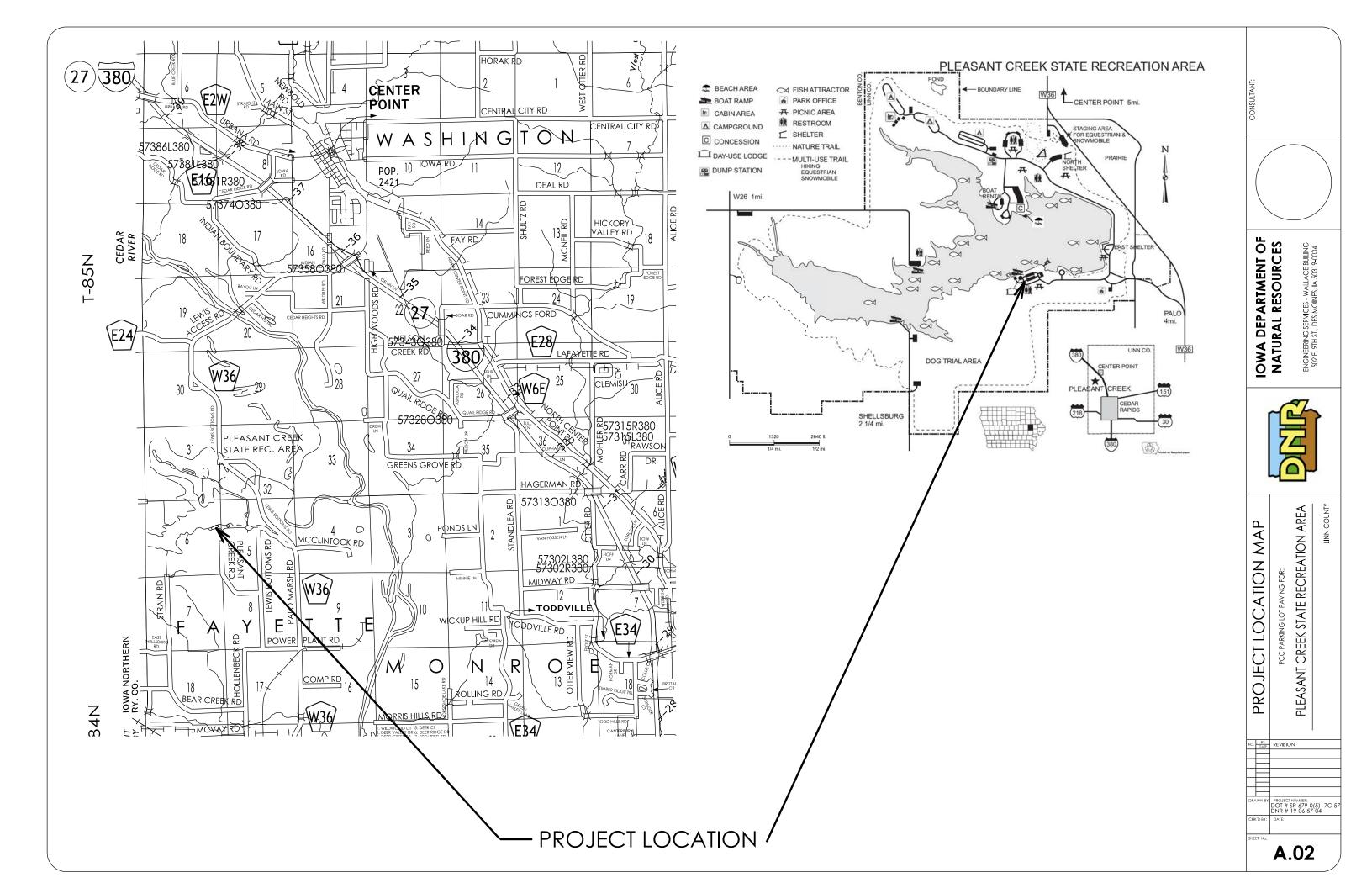


AUTHORIZATION	N TO BID
AUTHORIZATION - PARKS LWILDLIFE   FISHERIES   LAW	1-22-15 ENFORCEMENT   FORESTRY DATE
ENGINEERING BUREAU CHIEF	4/22/19 DATE

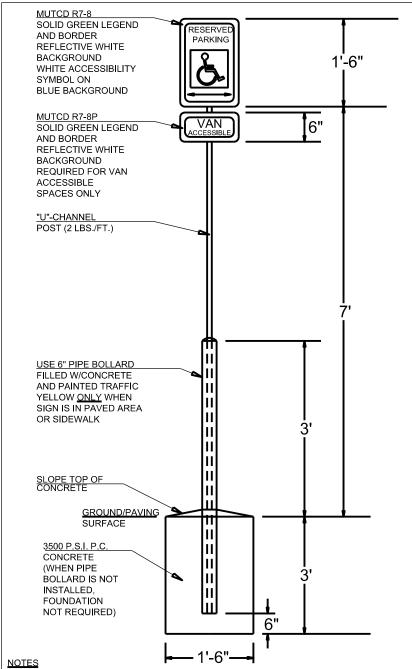
- 46	SHEET INDEX
A.01	COVER SHEET
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B.01	TYPICAL CROSS SECTIONS AND DETAILS
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	TYPICAL CROSS SECTIONS AND DETAILS
	QUANTITIES AND GENERAL INFORMATION
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	STRIPING AND SIGNAGE PLAN STORMWATER PLAN
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N.01	TREE CLEARING PLAN
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	BOAT SLIP REPAIR DETAILS
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**CREEK STATE RECREATION AREA** 

A.01

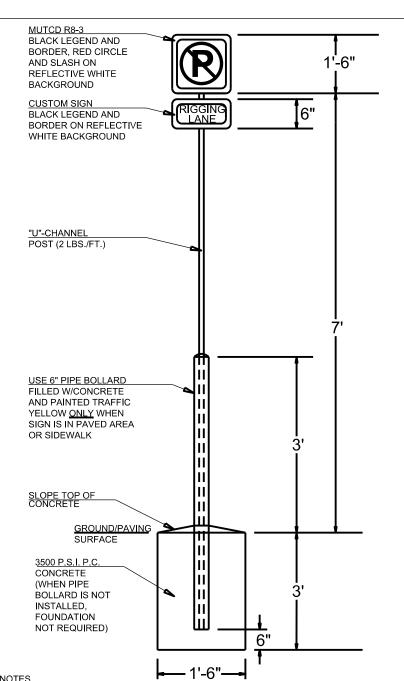


IOWA DOI	STANDARD ROAD PLANS
NUMBER	REVISION
PV-101	4-16-19
SW-211	4-17-18
SW-512	4-17-18
SW-513	4-17-18
SW-604	4-17-18



- 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.
- 2. 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. 3. SIGNAGE SHALL BE INSTALLED IN FRONT OF EACH ACCESSIBLE SPACE, CENTERED ON THE WIDTH OF THE SPACE.
- 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 REQUIREMENTS.
- 5. ALL SIGNAGE SHALL BE ENGINEER GRADE .080 ALUMINUM REFLECTIVE SIGN MEETING THE

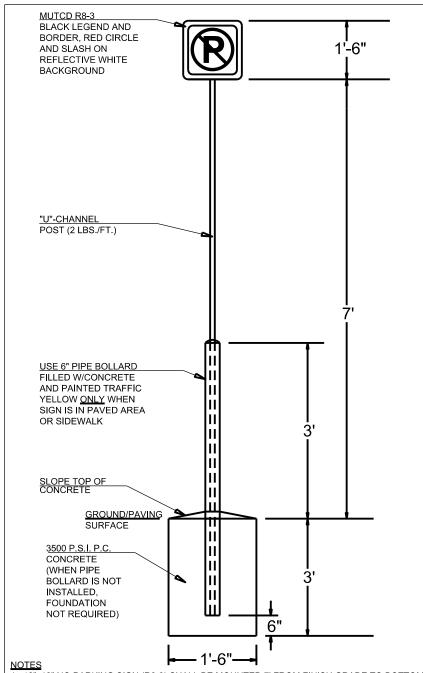
### **HANDICAP SIGN DETAIL** NOT TO SCALE



1. 12"x12" NO PARKING SIGN (R8-3) 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.

2. 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. 3. ALL SIGNAGE SHALL BE ENGINEER GRADE .080 ALUMINUM REFLECTIVE SIGN MEETING THE REQUIREMENTS OF THE MUTCD AND ADAAG.

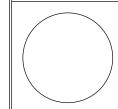
RIGGING LANE SIGN DETAIL NOT TO SCALE



1. 12"x12" NO PARKING SIGN (R8-3) 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.

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NO PARKING SIGN DETAIL NOT TO SCALE



IOWA DEPARTMENT OF NATURAL RESOURCES

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

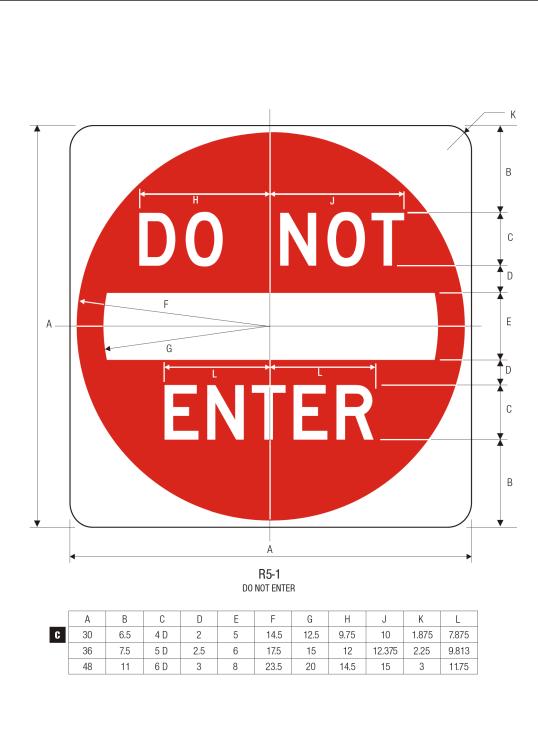


CREEK STATE RECREATION

**CROSS SECTIONS AND DETAILS** 

O. BY REVISION DOT # SP-679-0(5)--7C-5 DNR # 19-06-57-04

**B.01** 



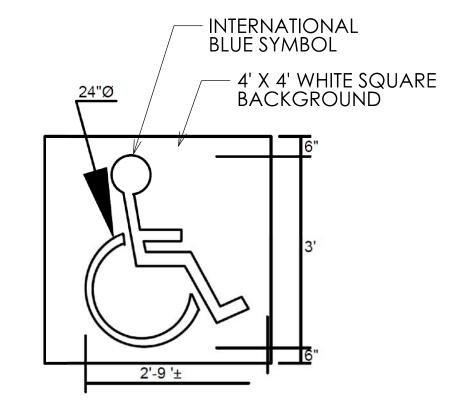
- RED (RETROREFLECTIVE) LEGEND & BACKGROUND - WHITE (RETROREFLECTIVE)

1-73

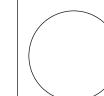
MOUNTING HEIGHT (GROUND TO BOTTOM OF SIGN) SHALL BE 5'. SIGN SHALL BE MOUNDED ON A WOOD SIGN POST THAT MEETS THE REQUIREMENTS OF SECTION 4164.04 OF THE IOWA DOT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION. MINIMUM BURY DEPTH IS 3'.

## DO NOT ENTER SIGN DETAIL NOT TO SCALE

TOP EDGE OF THE PAVEMENT MARKING SHALL BE 13' FROM THE TOP OF THE PARKING SPACE.



# HANDICAP PARKING PAVEMENT MARKING **NOT TO SCALE**



IOWA DEPARTMENT OF NATURAL RESOURCES



YPICAL CROSS SECTIONS AND DETAILS

PCC PARKING LOT PAVING FOR:
PLEASANT CREEK STATE RECREATION AREA

-		I
NO.	BY DATE	REVISION
DRA	WN BY:	PROJECT NUMBER: DOT # SP-679-0(5)7C- DNR # 19-06-57-04
CH	CD BY:	DATE:
0115	T	

**B.02** 

PCC PARKING LOT PAVING FOR:
PLEASANT CREEK STATE RECREATION AREA

1 10-21-14

4030.221

SHEET 1 of 1

SUDAS

SUDAS Standard Specifications

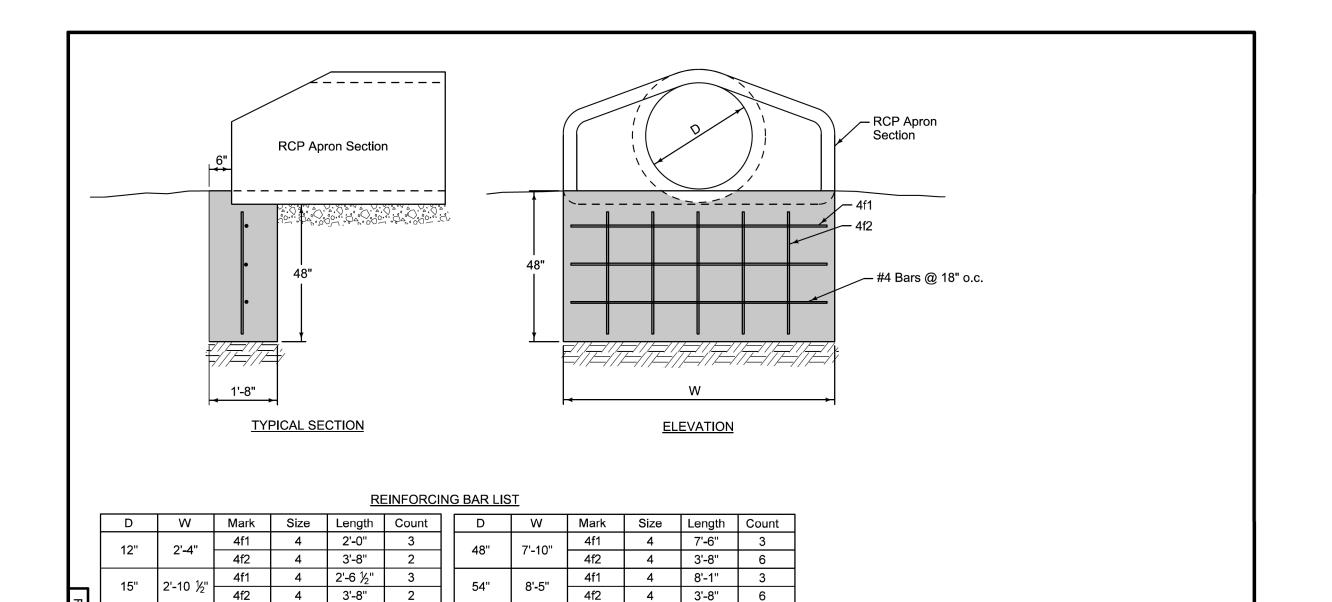
RCP APRON SECTION FOOTING

TYPICAL CROSS SECTIONS AND DETAILS

NO. BY REVISION

PROJECT NUMBER: DOT # SP-679-0(5)--7C-5 DNR # 19-06-57-04

**B.03** 



8'-7"

3'-8"

8'-7"

3'-8"

9'**-**8"

3'-8"

10'-3"

3'-8"

10'-9"

3'-8"

4

4

4

4

4

4

4

4

4

4

3

6

3

6

3

7

3

7

3

8

4f1

4f2

4f1

4f2

4f1

4f2

4f1

4f2

4f1

4f2

4

4

4

4

4

4

4

4

4

4

3'-1"

3'-8"

4'-2"

3'-8"

5'**-**3"

3'-8"

6'-4"

3'-8"

6'-11"

3'-8"

4f1

4f2

4f1

4f2

4f2

4f1

4f2

4f1

4f2

3'-5"

4'-6"

5'-7"

6'-8"

7'-3"

18"

24"

30"

36"

42"

3

3

3

3

3

4

3

5

3

5

60"

66"

72"

78"

84"

8'-11"

8'-11"

10'-0"

10'-7"

11'-1"

	ESTIMATED PRO	DJECT QUAN	ITITIES			
			P&IR	N	NON-P&IR	
ITEM NO.	ITEM	UNIT	TOTAL	UNIT	TOTAL	
1	Mobilization	Lump Sum	1	Lump Sum	0	
2	Construction Staking	Lump Sum	1	Lump Sum	0	
3	Site Restoration	Lump Sum	1	Lump Sum	0	
4	Pavement Removal	SY	7819	SY	5452	
5	Excavation, Class 10 Core Out	CY	2302	CY	1869	
6	5" PCC	SY	0	SY	96	
7	6" PCC	SY	7436	SY	5513	
8	Special Backfill	Tons	2677	Tons	1736	
9	24" Dia RCP	LF	72	LF	77	
10	24" Dia RCP Aprons	Each	4	Each	1	
11	RCP Apron Footing	Each	0	Each	1	
12	Signs - ADA	Each	0	Each	6	
13	Signs - Rigging Lane	Each	0	Each	7	
14	Signs - No Parking	Each	0	Each	3	
15	Signs - Do Not Enter	Each	3	Each	0	
16	Striping	LF	0	LF	4368	
17	Painted Handicap Pavement Markings	Each	0	Each	5	
18	Modified Soil Matrix	CY	0	CY	157	
19	SW-512 Intake	Each	0	Each	1	
20	SW-513 Intake	Each	0	Each	1	
21	Macadam	Tons	0	Tons	254	
22	Engineering Fabric	SY	0	SY	755	
23	8" HDPE Tile	LF	0	LF	308	
24	Native Seeding	Acres	0	Acres	0.4	
25	Silt Fence	LF	0	LF	424	
26	10" CMP	LF	0	LF	10	
27	NPDES General Permit #2 & SWPPP	Lump Sum	1	Lump Sum	1	
	Alternate Bid #1 - Tree Clearing					
28	Clearing and Grubbing	Lump Sum	0	Lump Sum	1	
	Alternate Bid #2 - Boat Slip Repairs					
29	Pavement Removal	SY	0	SY	78	
30	Boat Slip Repair	Lump Sum	0	Lump Sum	1	
31	Special Backfill	Tons	0	Tons	54	
32	PCC Sidewalk, 6" Thick Reinforced	SY	0	SY	82	

	ESTIMATE REFERENCE INFORMATION		
ITEM NO.	DESCRIPTION		
1.	A. The parking lot will be closed to the public during construction. Traffic control is incidental to this bid item.		
2.	A. The DNR will provide a 3-D design file and control points.		
3	A. Except areas designated to be seeded with Native Seeding, all disturbed areas shall be graded, seeded, fertilized, and mulched per section 2601.03.  B. Seed shall be lowa DOT Urban mix.		
4	A. Edges where new construction abuts existing pavement to be saw cut, and shall be incidental to this bid item.     B. Removed pavement is allowed to be used as Special Backfill provided that it meets the requirements of Section 4132.		
5	A. Cored-out material shall be disposed of by the contractor off site.		
6	A. PCC shall be standard or slip form, C-mix. B. Control Joints shall be incidental to this bid item. C. Joint Sealing shall be incidental to this bid item. D. Transverse joints shall be placed at spacing no greater than the pavement width.		
7	<ul> <li>A. PCC shall be standard or slip form, C-mix.</li> <li>B. Control Joints shall be incidental to this bid item.</li> <li>C. Joint Sealing shall be incidental to this bid item.</li> <li>D. Longitudinal control joints shall be placed along the centerline of all pavements.</li> <li>E. Contractor shall submit joint plan to the DNR Engineer for review and approval. Joint plan shall conform to lowa Department of Transportation standards. Joint construction shall follow the lowa Department of Transportation Standard Road Plan PV-101. Joint Spacing shall be approcimately 12' O.C., and not exceeding 15'. The centerline joint along the drive lanes shall be centered in the lane, and shall be an "L" joint. All cold joints shall be a "KT" joint. 2' (min.) blockouts are required at acute angles.</li> </ul>		
9	A. Excavation, CMP removal, disposal, backfill, and compaction are incidental to this bid item.		
12	A. Post material is incidental to this bid item.		
13	A. Post material is incidental to this bid item.		
14	A. Post material is incidental to this bid item.		
15	A. Post material is incidental to this bid item.		
16	A. Pavement striping shall be yellow.		
22	A. Material shall be suitable for use in Subsurface Drainage, and has the properties listed in Table 4196.01-2: Fabric for use in Subsurface Drains.		
23	A. Tile shall be perforated.		
24	A. Only hydraulic seeding and mulching is allowed for this line item.     B. Seeding rates shall meet the requirements of Table 2601.03-5: Native Grass Seed Rates.		
25	A. Silt fence shall be installed around the bioretention cell immediately following the installation of the macadam stone and modified soil matrix.		



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

LINN COUNTY

PCC PARKING LOT PAVING FOR:
PLEASANT CREEK STATE RECREATION AREA

QUANTITIES AND GENERAL INFORMATION

PROJECT NUMBER: DOT # SP-679-0(5)--7C-5 DNR # 19-06-57-04

C.01

### **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.

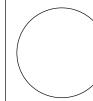
It shall be the contractor's responsibility to provide waste areas or disposal sites for excess material (excavated material or broken concrete) which is not desirable to be incorporated into the work involved on this project. No payment for overhaul will be allowed for material hauled to these sites.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



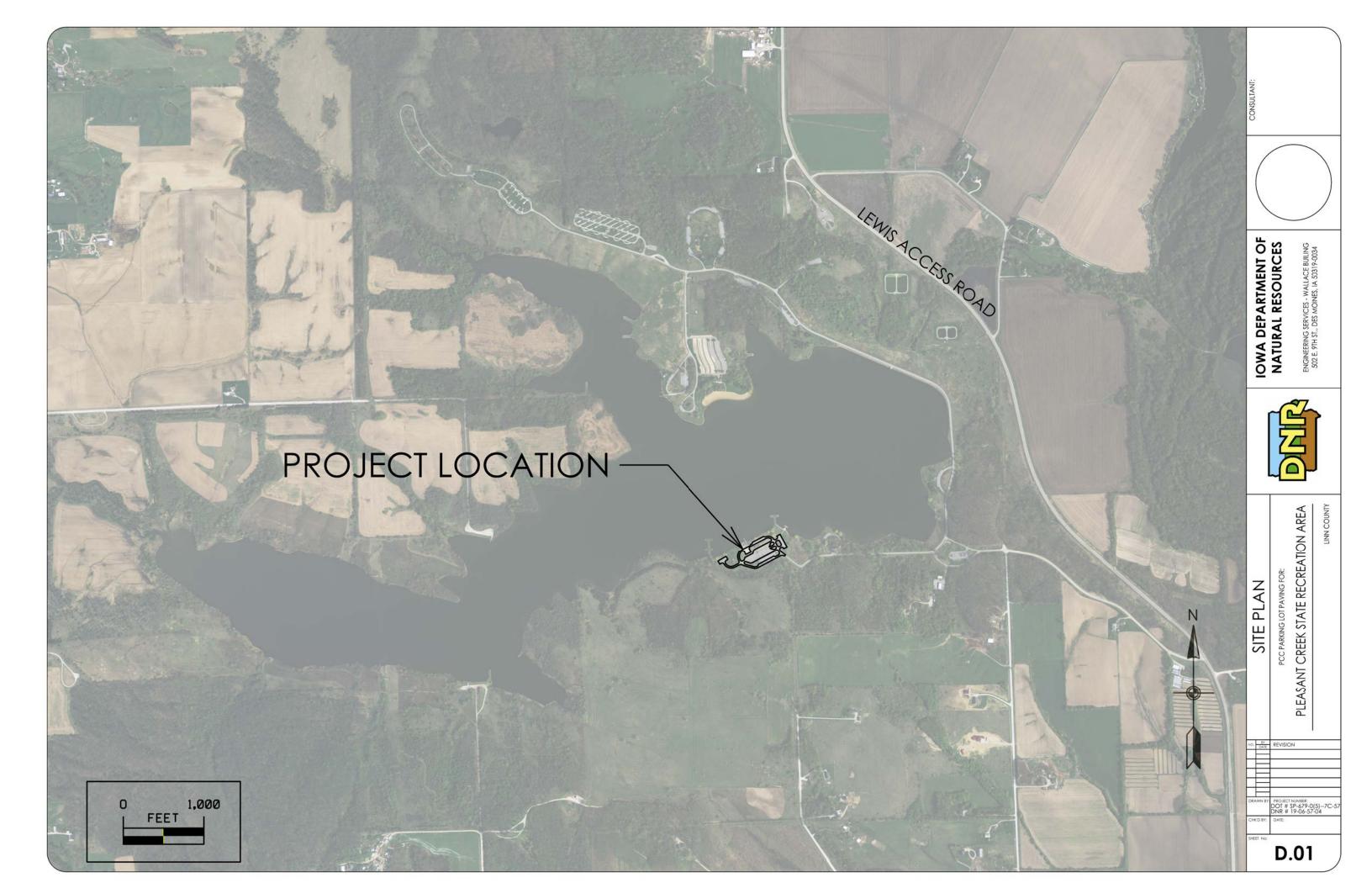
# IOWA DEPARTMENT OF NATURAL RESOURCES

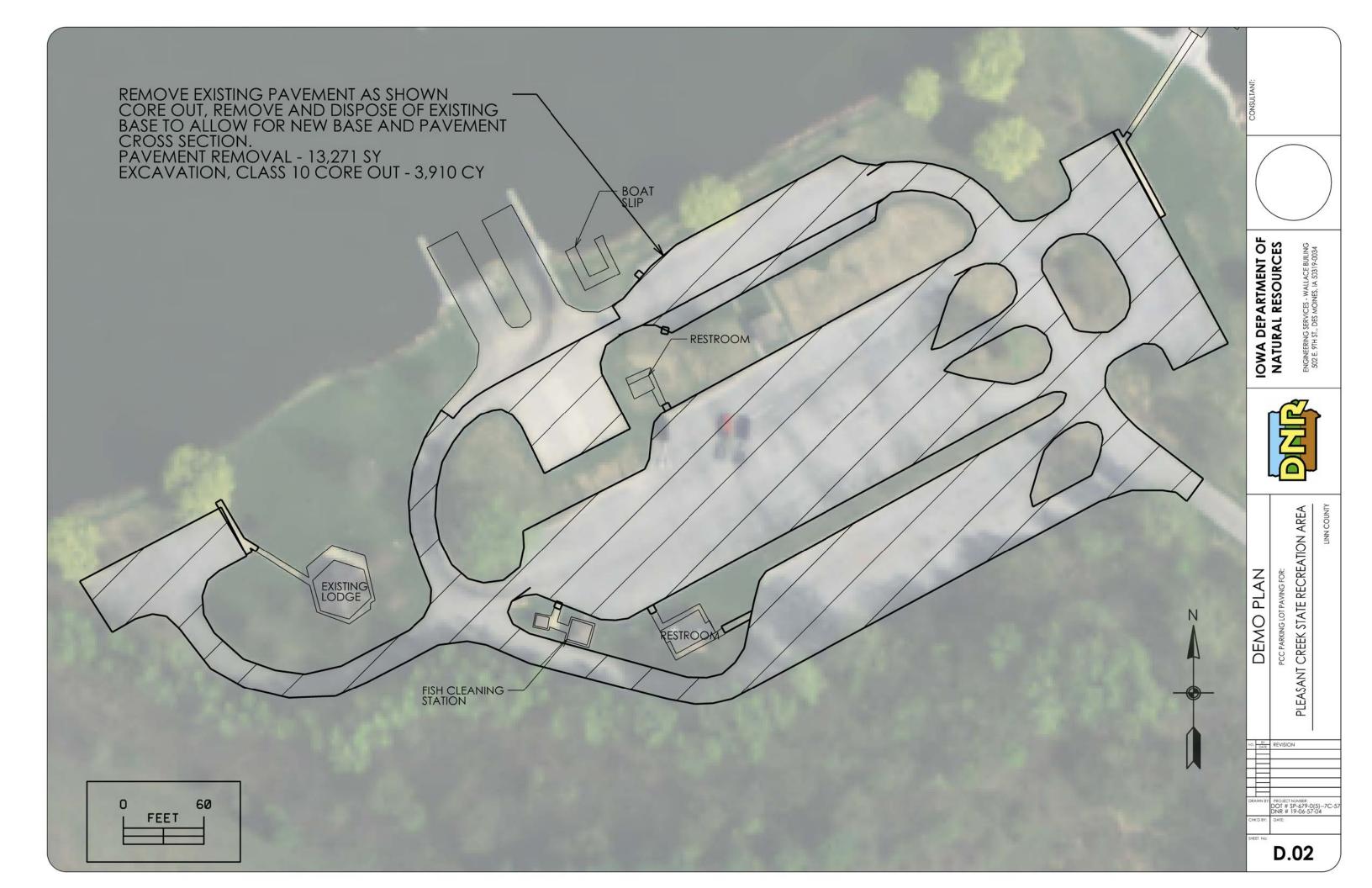


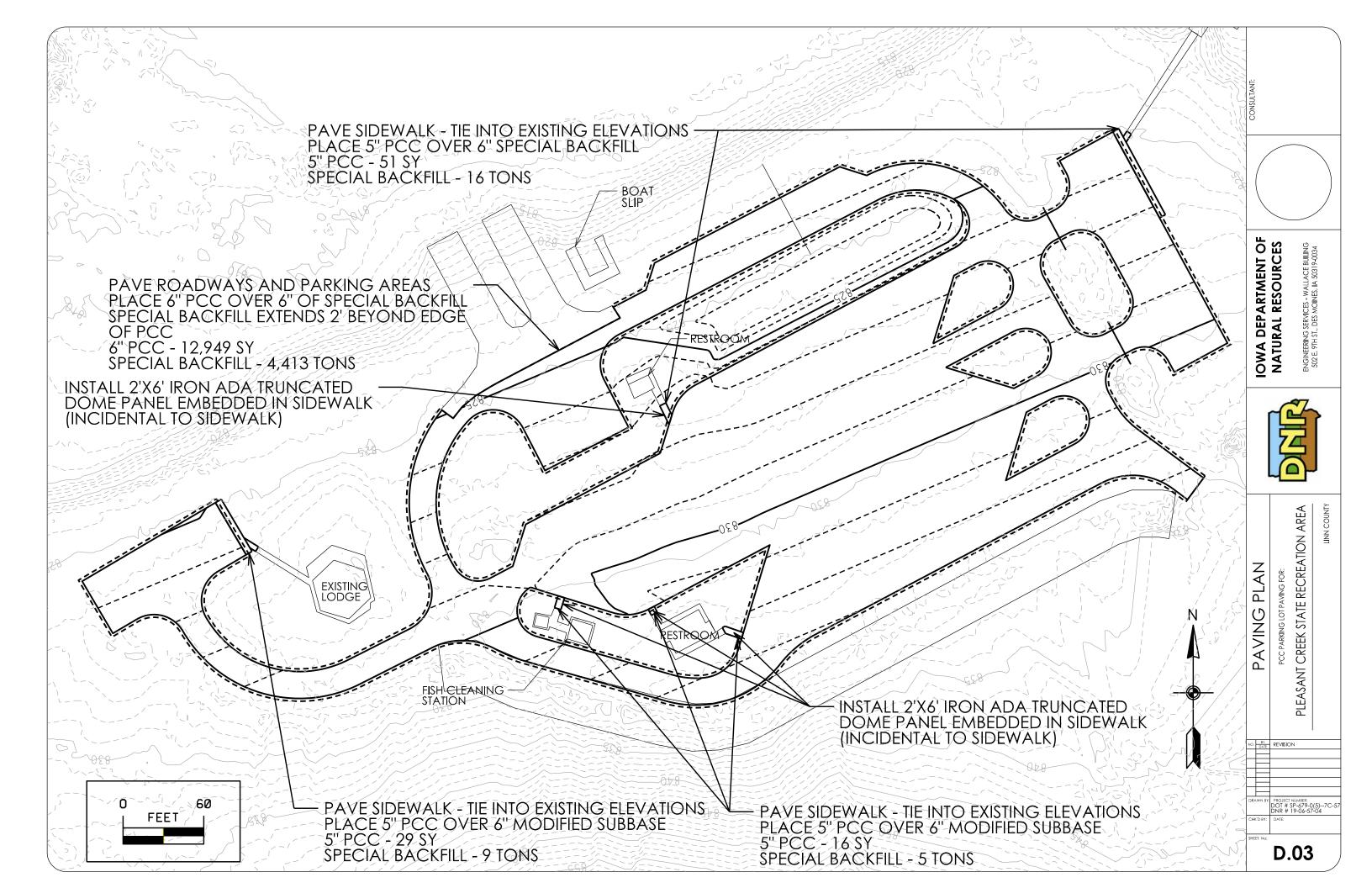
PLEASANT CREEK STATE RECREATION AREA

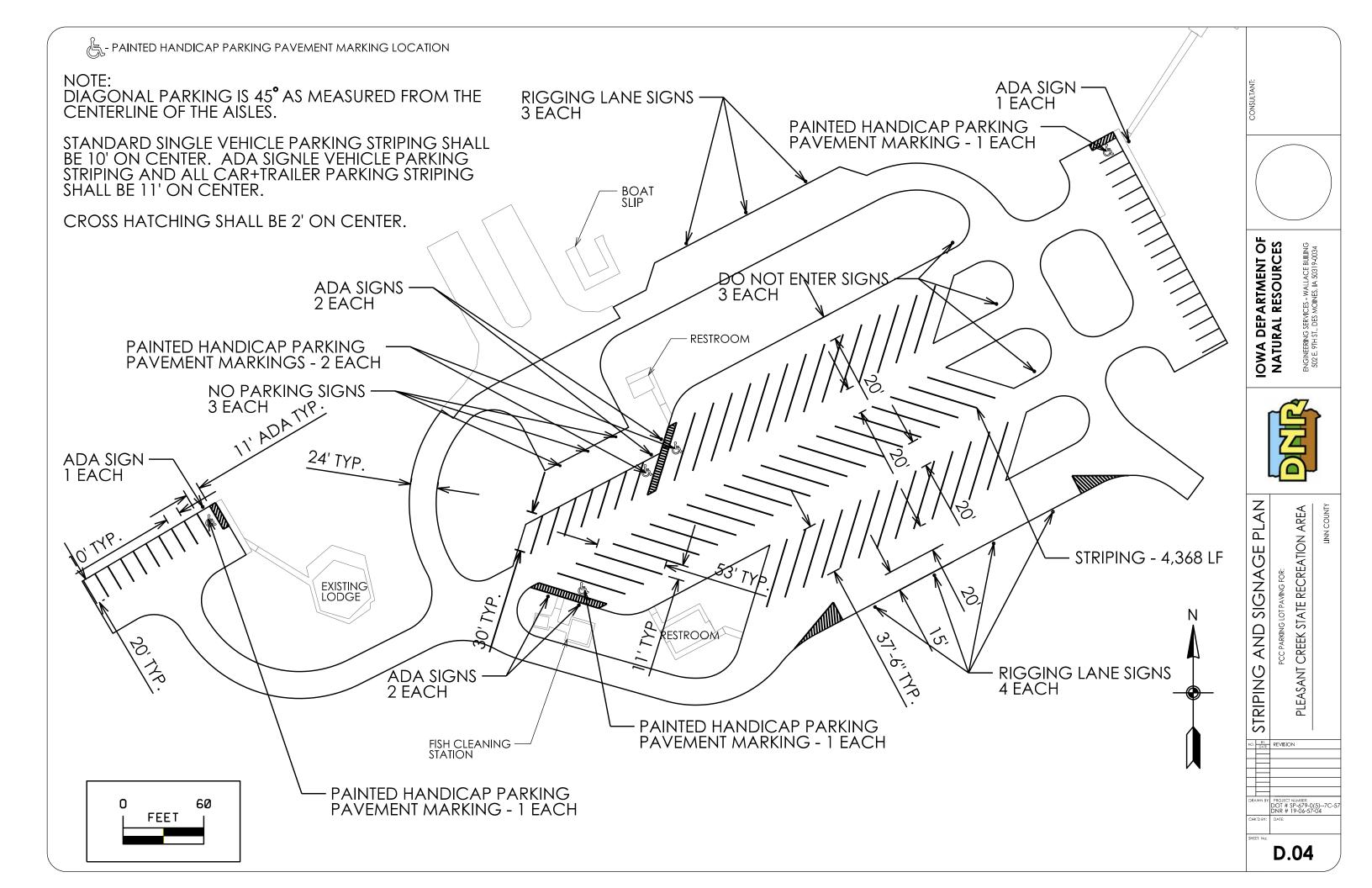
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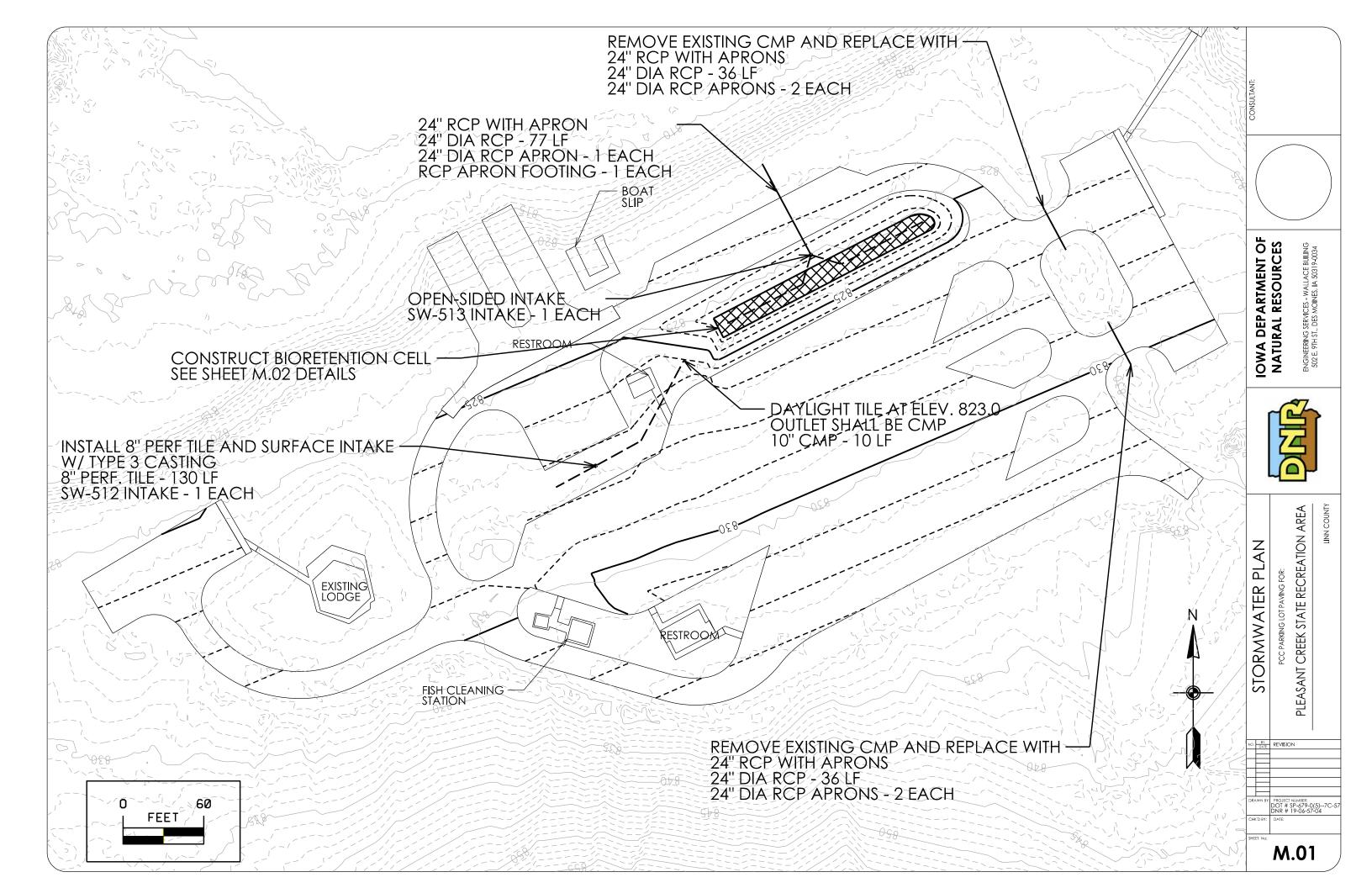
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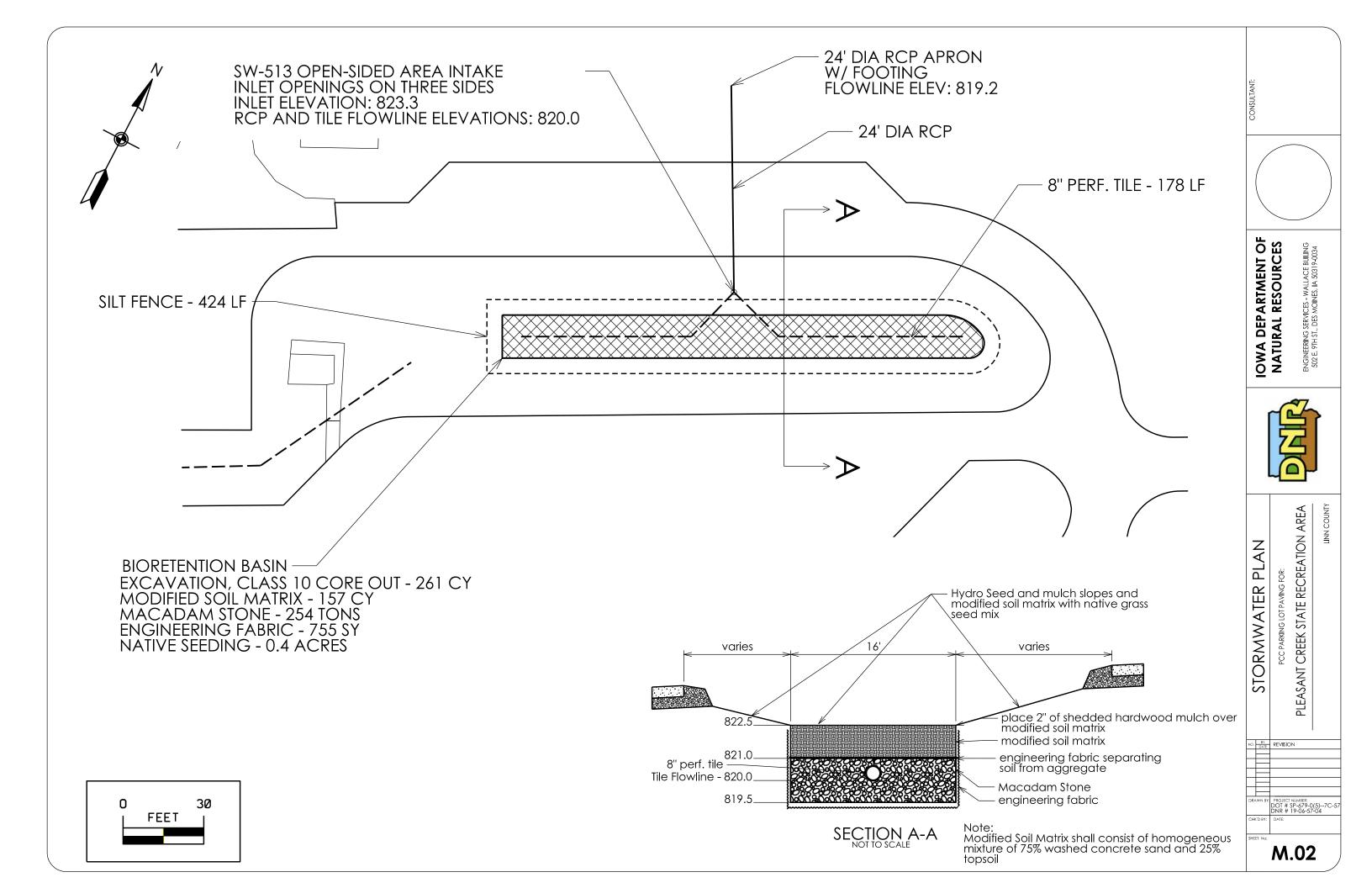




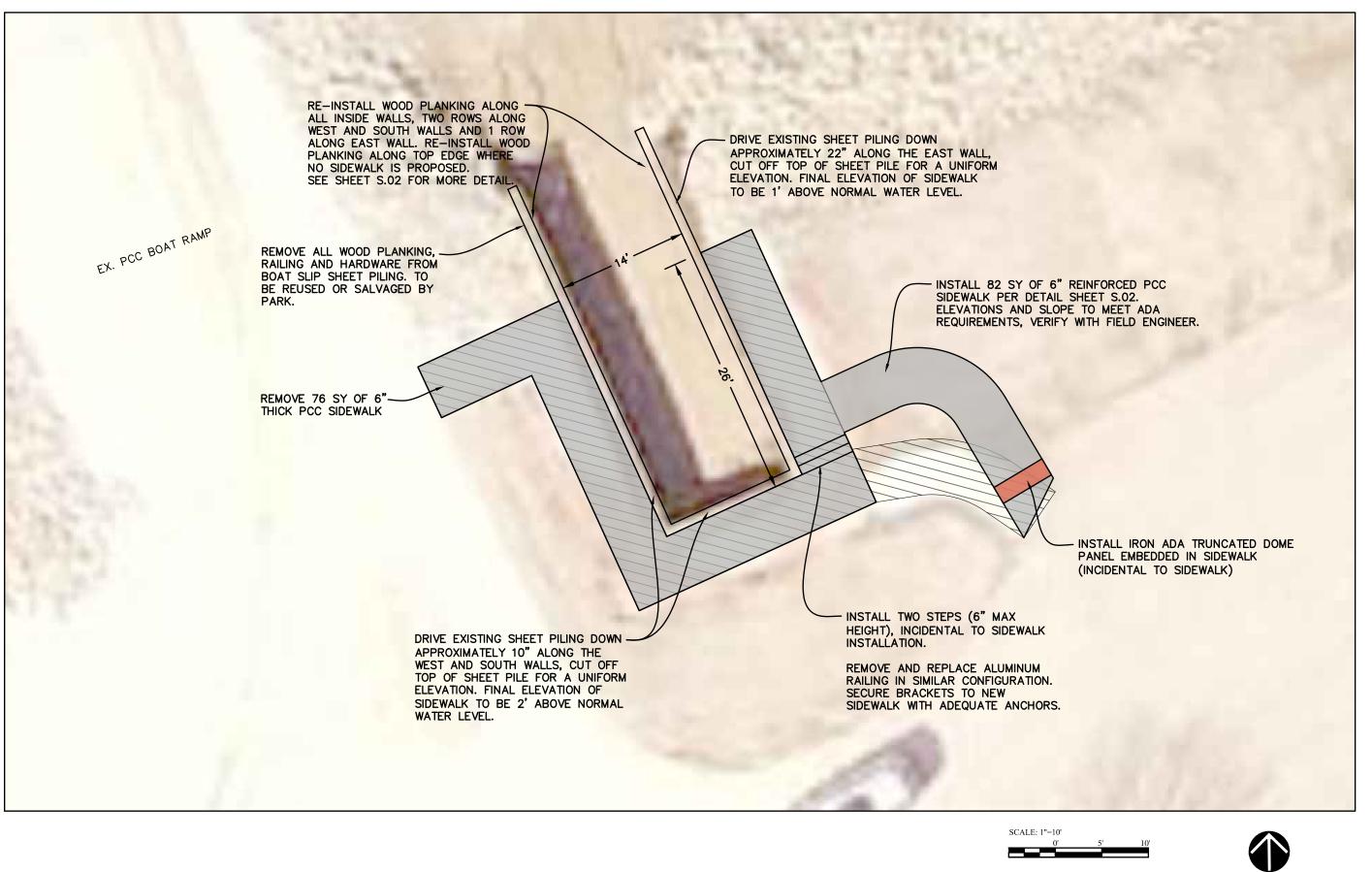












IOWA DEPARTMENT OF NATURAL RESOURCES

PARK STATE

PLEASANT CREEK

BOAT SLIP REPAIR PLAN

NO.	DATE	REVISION
1		-
	MDD	PROJECT NUMBER: DNR # 19-06-57-

NORTH

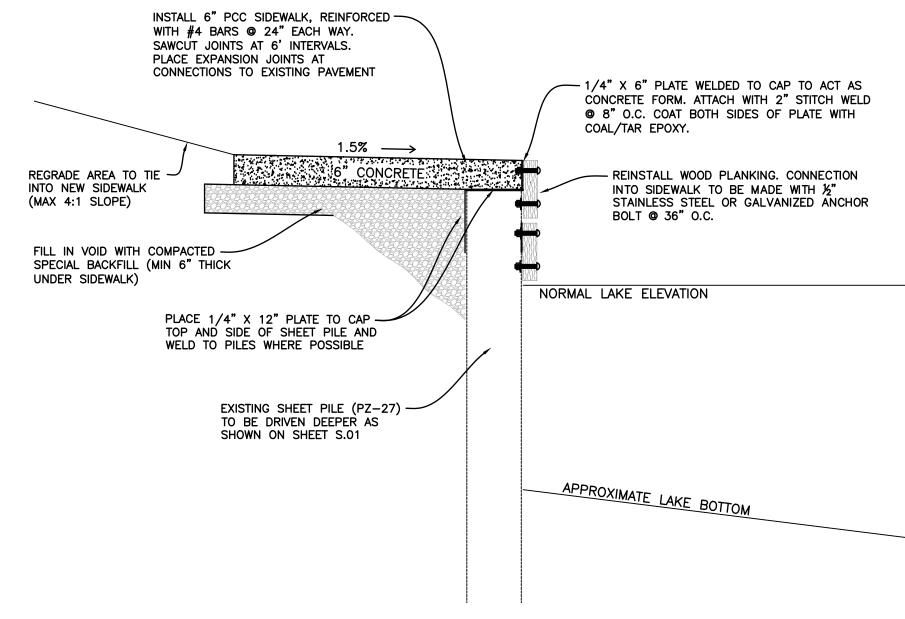
S.01

### ESTIMATED BOAT SLIP REPAIR QUANTITIES

ITEM	DESCRIPTION	UNIT	TOTAL
29	PAVEMENT REMOVAL	S.Y.	78
30	BOAT SLIP REPAIR	L.S.	1
31	SPECIAL BACKFILL	TONS	54
32	PCC SIDEWALK, 6" THICK REINFORCED	S.Y.	82

### ESTIMATED BOAT SLIP REPAIR QUANTITIES NOTES:

- 1. Pavement Removal Includes any necessary removal of rock subbase.
- 2. Boat Slip Repair Includes the following:
- 2.1. Removal of all wood planking, rails and associated hardware. To be reinstalled, extra peices to be salvaged by Park staff.
- 2.2. Driving existing sheet piling down per plan. Construction to be timed such that crane is not used on new parking lot pavement.
- 2.3. Cutting off top of sheet piles as needed for consistent elevation or to remove mushrooming.
- 2.4. Placing plating per plan to cover sheet pile voids and provide form for PCC sidewalk.
- 2.5. Reinstalling wood planking per plan.
- 2.6. Reinstalling aluminum hand rails on new PCC Sidewalk.
- 3. Special Backfill To be placed in voids around boat slip and provide minimum 6" subbase for sidewalk.
- 4. PCC Sidewalk, 6" Thick Reinforced Per SUDAS Specifications, Section 7030. PCC to be Class C, minimum 6" depth per plan. The following is incidental:
- 4.1. Reinforcement per plan.
- 4.2. Two steps to adjust grade from south wall to east wall, maximum 6" height, depth per Building Code requirements. Exposed edges to be smooth.
- 4.3. Truncated dome ADA panel, 2' x 6' (iron).
- 4.4. Control joints and expansion joints as required.



BOAT SLIP REPAIR DETAIL

IOWA DEPARTMENT OF NATURAL RESOURCES

PARK

STATE

PLEASANT CREEK

DNR # 19-06-57-04

S.02

BOAT SLIP REPAIR DETAILS