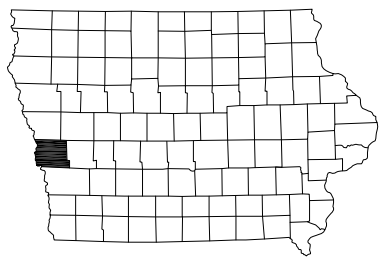


IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION DOCUMENTS
FOR
MISSOURI RIVER WILDLIFE UNIT
LITTLE SIOUX DELTA BOAT RAMP

HARRISON COUNTY, IOWA

PROJECT #14-04-43-01

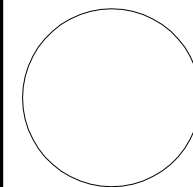


IOWA ONE CALL logo with phone number 1-800-292-8989 and website www.iowaonecall.com. Includes 811 logo and slogan 'Know what's below. Call before you dig.'

SHEET INDEX

Table with 2 columns: No. and Description. Rows include COVER SHEET, PROJECT LOCATION, ESTIMATED QUANTITIES & GENERAL NOTES, SITE PLAN, PROFILE, CROSS SECTION, BOAT RAMP PLAN, BOAT RAMP DETAILS, and PARKING LOT PLAN.

CONSULTANT:



IOWA DEPARTMENT OF NATURAL RESOURCES

ENGINEERING SERVICES - WALLACE BUILDING
502 E. 9TH ST., DES MOINES, IA 50319-5034



COVER SHEET

BOAT RAMP CONSTRUCTION FOR:

MISSOURI RIVER WILDLIFE UNIT

HARRISON COUNTY, IA

DIRECTORY

PROJECT DESCRIPTION

AUTHORIZATION TO BID

Table with 2 main columns: PROJECT MANAGER and CONSTRUCTION INSPECTOR. Each column has sub-headers for COMPANY, ADDRESS, CITY, STATE, ZIP, CONTACT, TELEPHONE, and FAX/EMAIL.

THIS PROJECT INVOLVES CONSTRUCTION OF A NEW BOAT RAMP AND PROTECTING THE ADJACENT SHORELINE WITH RIP RAP AND OTHER INCIDENTAL WORK AS REQUIRED BY D.N.R. CONSTRUCTION INSPECTOR IN HARRISON COUNTY, IOWA.

AUTHORIZATION -- PARKS | WILDLIFE | FISHERIES | LAW ENFORCEMENT | FORESTRY
ENGINEERING BUREAU CHIEF DATE

NO. BY DATE REVISION

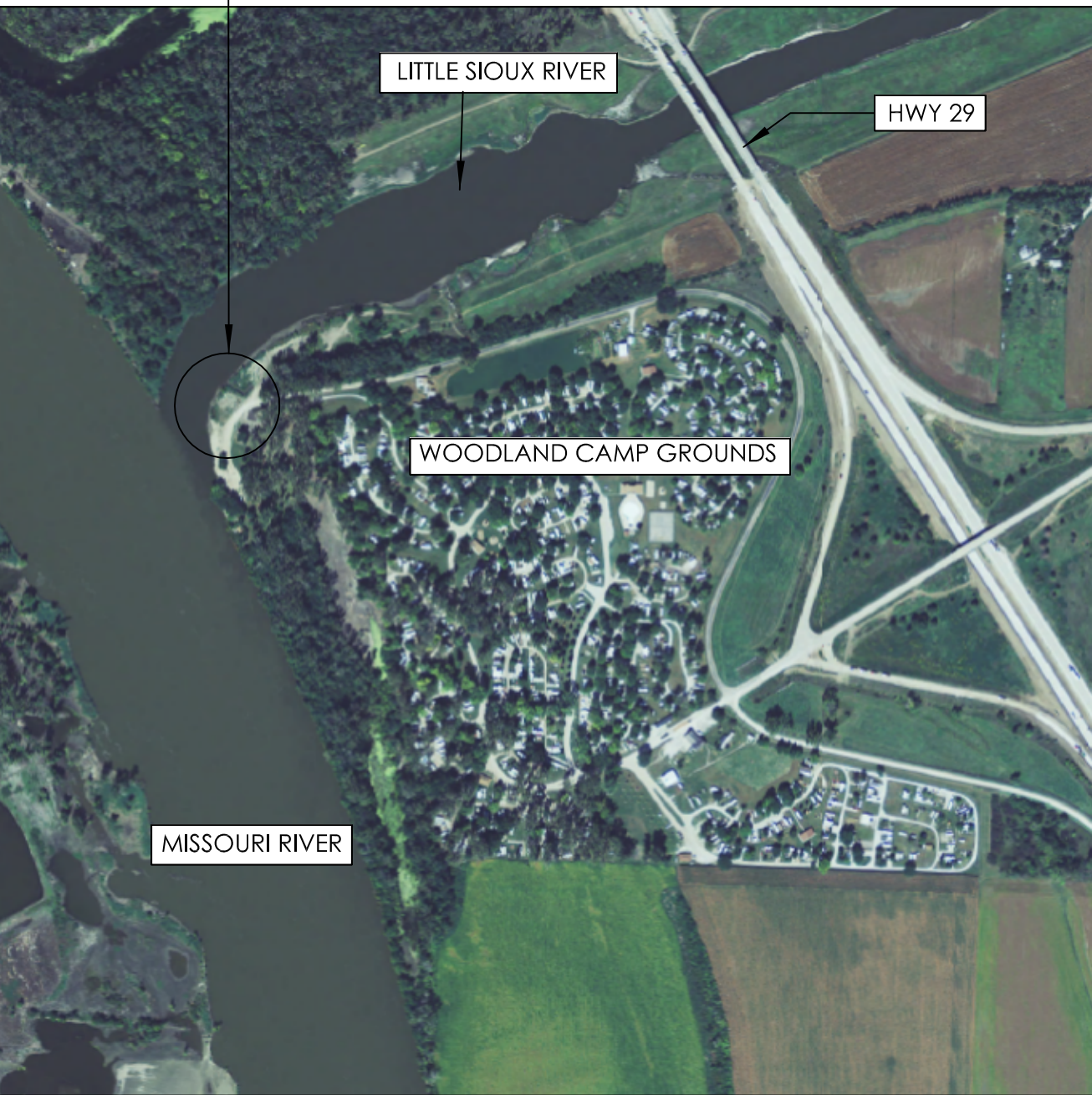
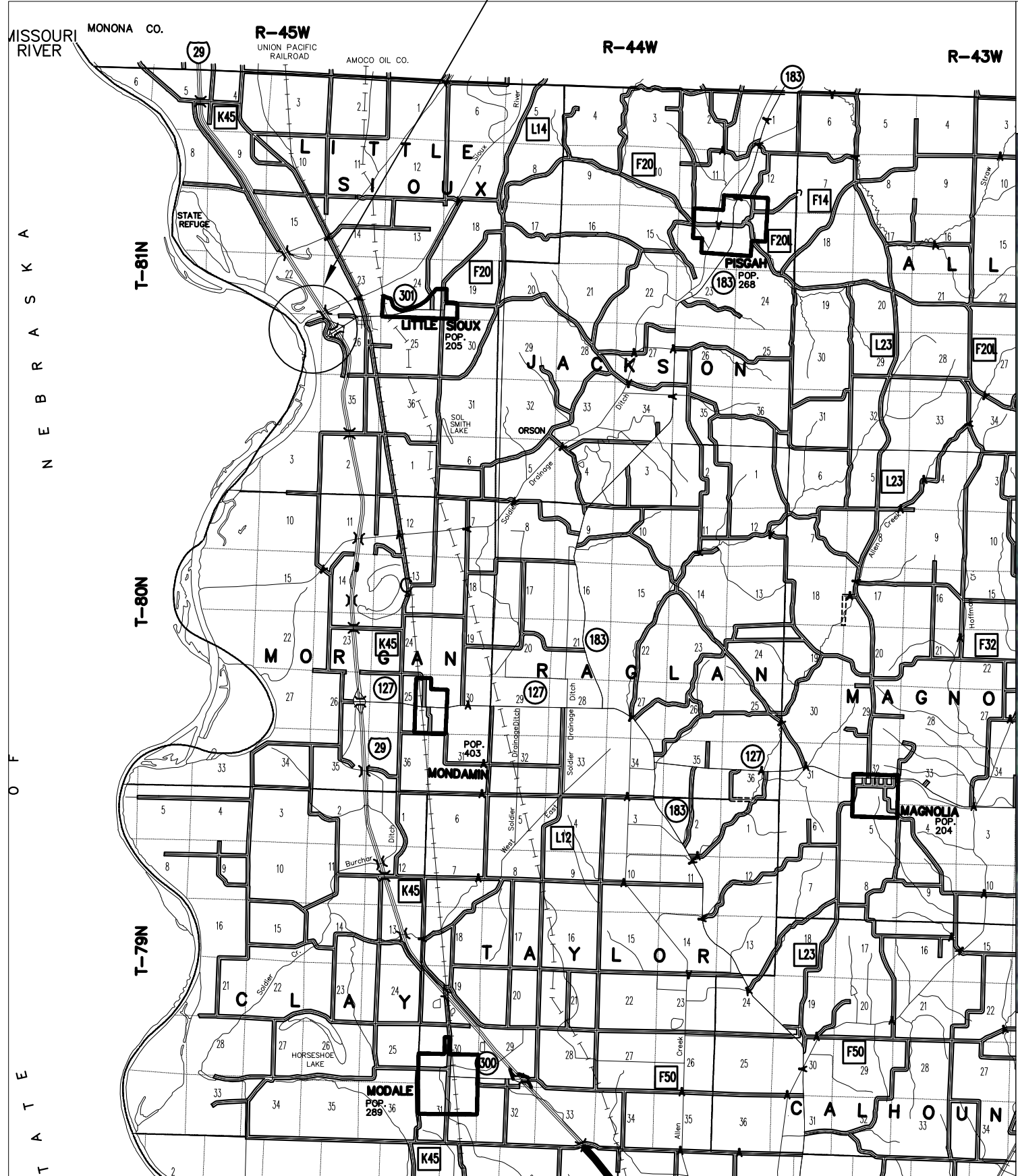
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DRAWN BY: PROJECT NUMBER: 14-04-43-01
CHK'D BY: DATE: AUG/2014
E.S. E.D.

SHEET NO:

1

PROJECT LOCATION



CONSULTANT:

IOWA DEPARTMENT OF NATURAL RESOURCES

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



PROJECT LOCATION

BOAT RAMP CONSTRUCTION FOR:

MISSOURI RIVER WILDLIFE UNIT

HARRISON COUNTY, IA

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| R.D.        | AUG/2014        |

ESTIMATED PROJECT QUANTITIES

| ITEM | DESCRIPTION                                   | UNIT     | TOTAL |
|------|---|----------|-------|
| 1    | MOBILIZATION                                  | LUMP SUM | 1     |
| 2    | CLEARING AND GRUBBING                         | LUMP SUM | 1     |
| 3    | SURFACE CLASS "A" CRUSHED STONE (RAMP BASE)   | TONS     | 62    |
| 4    | CONCRETE STRUCTURAL CLASS "C" 6" DEPTH        | SQ.YD    | 238   |
| 5    | REVTMENT CLASS "E" RIP RAP                    | TONS     | 323   |
| 6    | EXCAVATION                                    | C.Y      | 116   |
| 7    | SITE RESTORATION                              | LUMP SUM | 1     |
| 8    | SURFACE CLASS "A" CRUSHED STONE (PARKING LOT) | TONS     | 278   |
| 9    |   |          |       |
| 10   |   |          |       |

**NOTE:**

AT ELEV: 1015.5, THE RIVER FLOW IS 50,000 CFS AND ITS AT 25% EXCEEDENCE MISSOURI RIVER MILE 669.2

AT ELEV: 1010.0, THE RIVER FLOW IS 27,000 CFS MINIMUM DAILY FLOW JUNE, JULY AT MISSOURI RIVER MILE 669.2

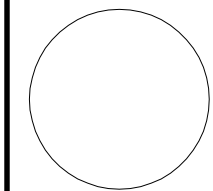
AT ELEV:1008.5, THE RIVER FLOW IS 20,000 CFS AND MINIMUM DAILY FLOW APRIL, MAY, AUG, SEPT, OCT MISSOURI RIVER MILE 669.2

AT ELEV:1005.8, THE RIVER FLOW IS 12,000 CFS AND MINIMUM DAILY FLOW JAN, FEB, NOV, DEC MISSOURI RIVER MILE 669.2

GENERAL NOTES:

| ITEM | DESCRIPTION   |
|------|---|
| A.   | The contractor shall notify the following two weeks prior to construction:<br>1. District Inspector:<br>MARK JOHNSON<br>(515)-250-3713<br><br>2. Project Manager:<br>BUTCH DOORENBOS<br>(515)-281-8123  |
| B.   | The contractor shall verify actual locations and elevations with the D.N.R Inspector.   |
| C.   | All work shall conform to and be performed in accordance with all applicable codes and ordinances.  |
| D.   | The contractor shall visit the site and inspect the project area and thoroughly familiarize themselves with the actual job conditions prior to the start of work. Failure to visit the project site shall not relieve the contractor from performing the work in accordance to the plans, specifications, special provisions and contract.  |
| E.   | The contractor shall verify, at the site, all dimensions and conditions shown on the plans and shall notify the D.N.R Inspector of any discrepancies, omissions and/or conflicts prior to proceeding with the work.   |
| F.   | The contractor is responsible for providing waste area or disposal 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 D.N.R Inspector. |
| G.   | The contractor shall not disturb desirable grass areas and desirable trees outside 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 D.N.R inspector.  |
| H.   | 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.   |
| I.   | The contractor shall be responsible for any damage to existing facilities resulting from their negligence, or that of a subcontractor, and said repairs shall be approved by the owner.   |
| J.   | Existing roadway and parking area shown on sheet 4 is a relatively flat area at elev. 1022.00. Blade this area smooth prior to applying class A crushed stone to parking lot area(dimension shown on sheet 9). Minor bladeing and grading is incidental to clearing and grubbing; it is not a separate bid item.  |

CONSULTANT:



IOWA DEPARTMENT OF  
NATURAL RESOURCES

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



ESTIMATED QUANTITIES

BOAT RAMP CONSTRUCTION FOR:

MISSOURI RIVER WILDLIFE UNIT

MONONA COUNTY, IA

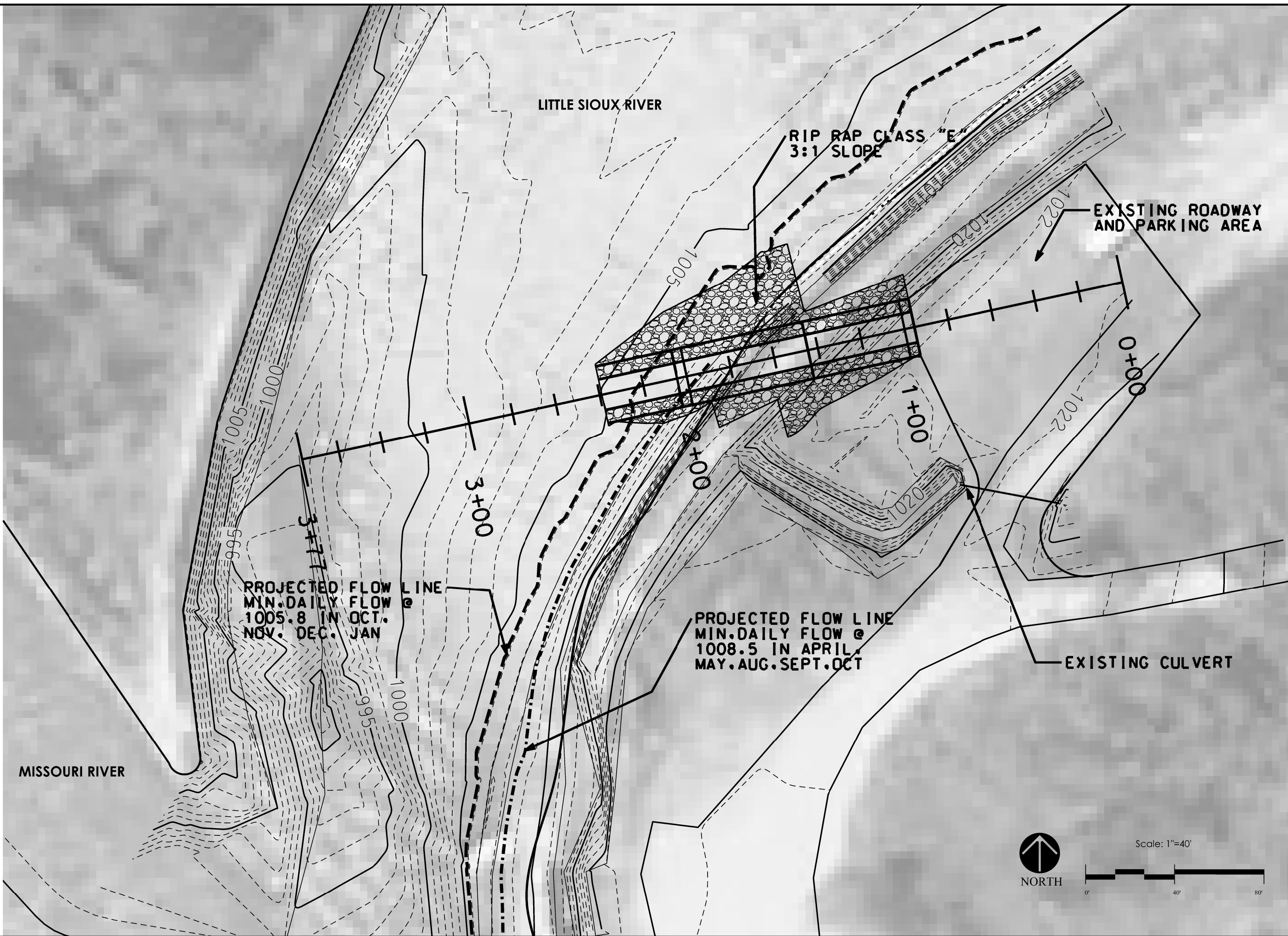
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CHKD BY: B.D DATE: AUG /2014

SHEET No:



LITTLE SIOUX RIVER

RIP RAP CLASS "E"  
3:1 SLOPE

EXISTING ROADWAY  
AND PARKING AREA

PROJECTED FLOW LINE  
MIN. DAILY FLOW @  
1005.8 IN OCT.  
NOV. DEC. JAN

PROJECTED FLOW LINE  
MIN. DAILY FLOW @  
1008.5 IN APRIL  
MAY. AUG. SEPT. OCT

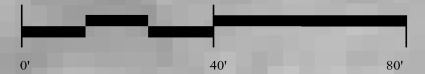
EXISTING CULVERT

MISSOURI RIVER

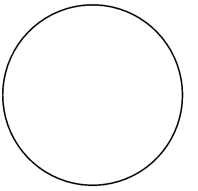


NORTH

Scale: 1"=40'



CONSULTANT:



IOWA DEPARTMENT OF  
NATURAL RESOURCES

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



SITE PLAN

BOAT RAMP CONSTRUCTION FOR:

MISSOURI RIVER WILDLIFE UNIT

HARRISON COUNTY, IOWA

| NO. | BY | REVISION |
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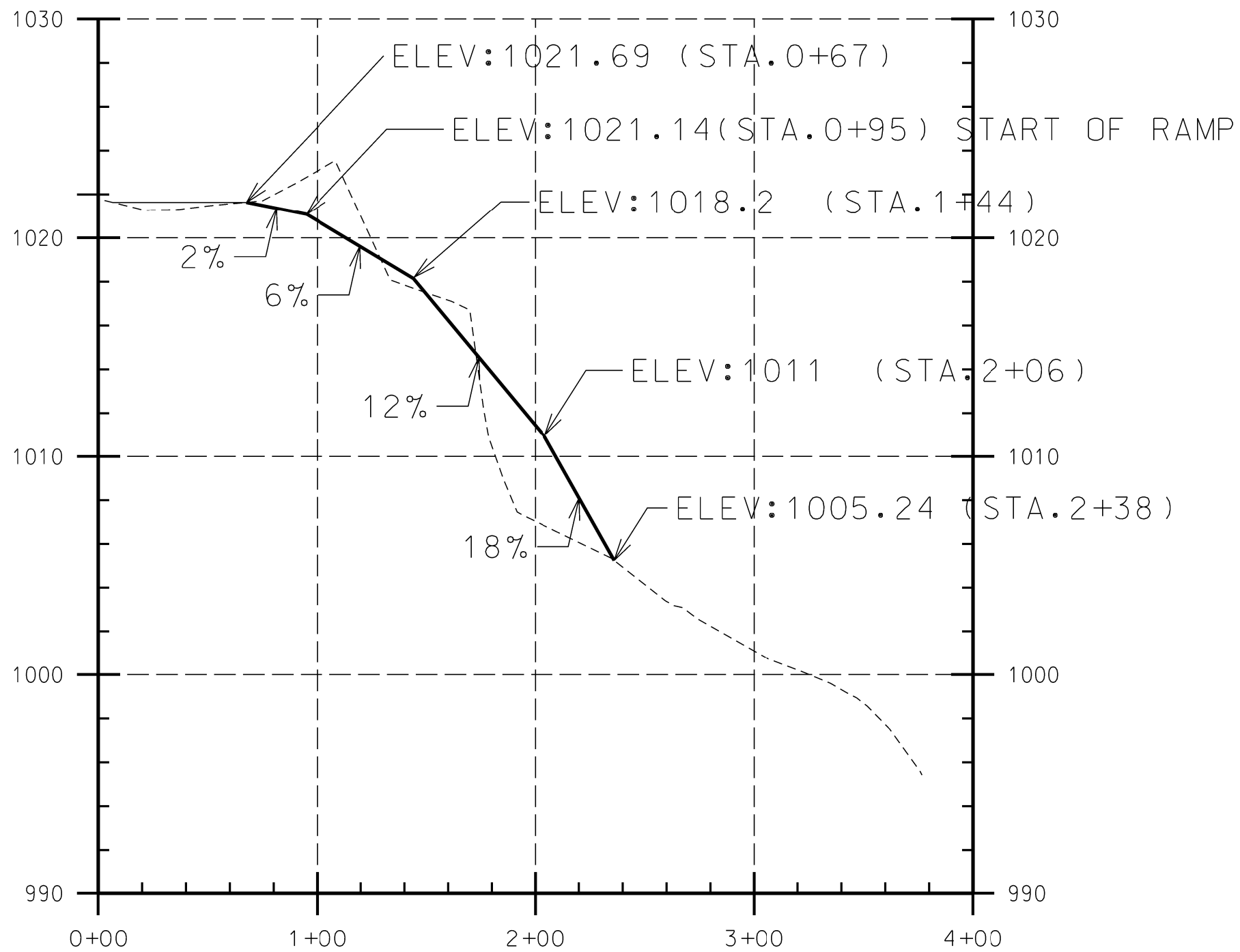
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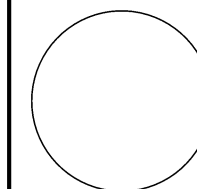
4

Ramp 1



| LINE                      | SURFACE  | OFFSET |
|---------------------------|----------|--------|
| —                         | 4582surv | 0.00   |
| Scaled 10.0000 Times Ver. |          |        |
| Scaled 1.0000 Times Hor.  |          |        |

CONSULTANT:



IOWA DEPARTMENT OF  
NATURAL RESOURCES

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



PROFILE

BOAT RAMP CONSTRUCTION FOR:

MISSOURI RIVER WILDLIFE UNIT

HARRISON COUNTY, IOWA

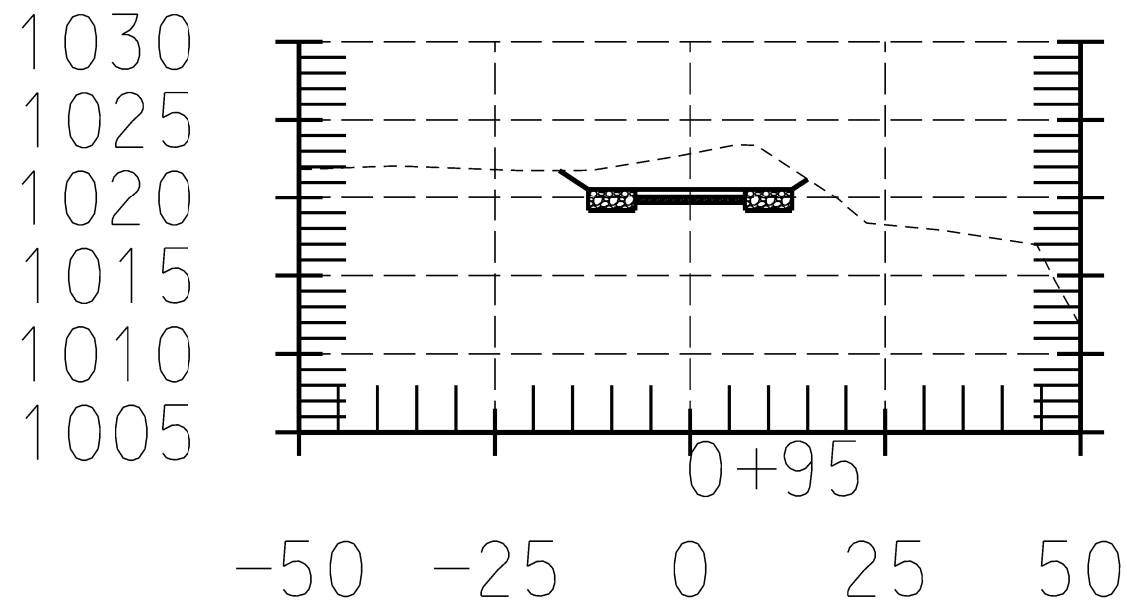
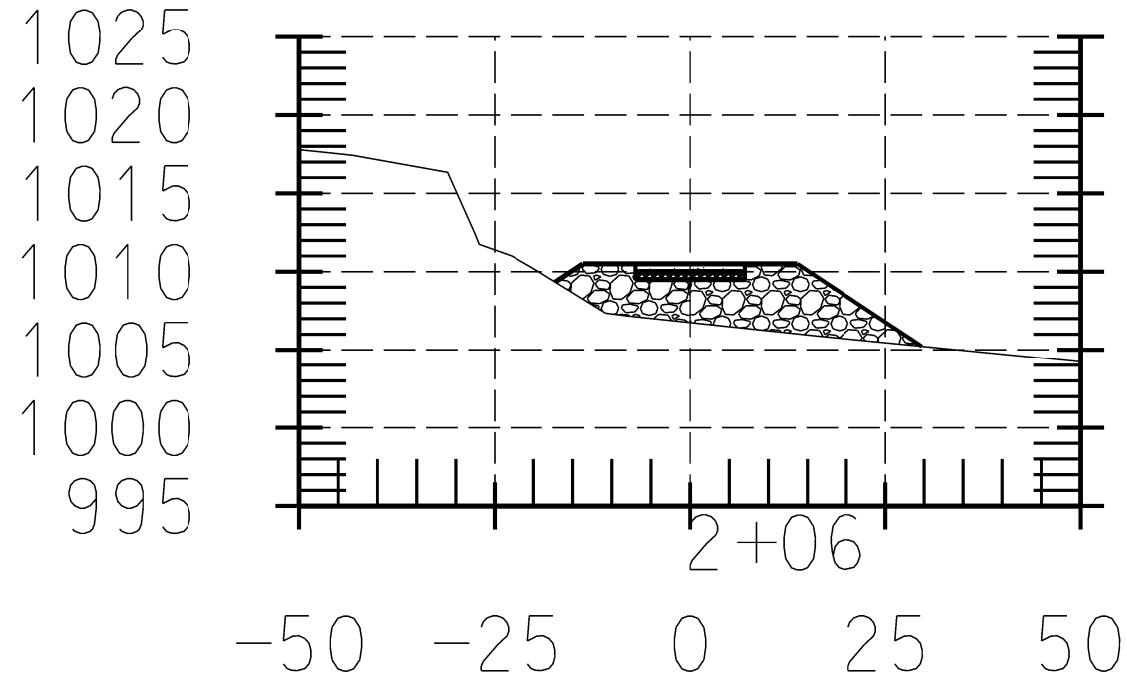
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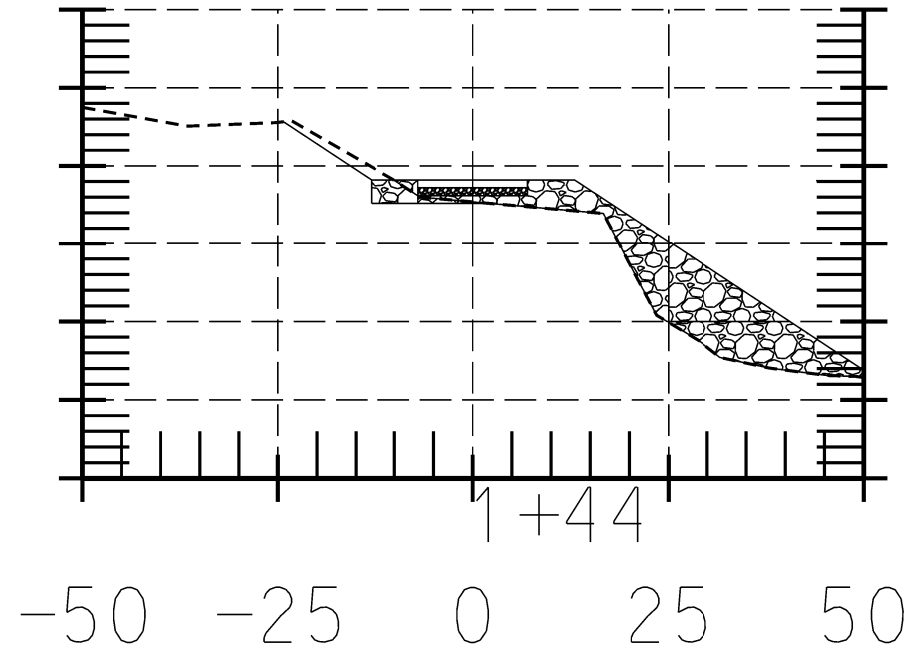
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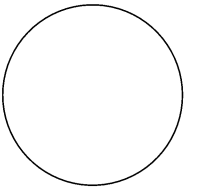


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CONSULTANT:



**IOWA DEPARTMENT OF  
NATURAL RESOURCES**

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



CROSS SECTIONS

BOAT RAMP CONSTRUCTION FOR:

MISSOURI RIVER WILDLIFE UNIT

HARRISON COUNTY, IOWA

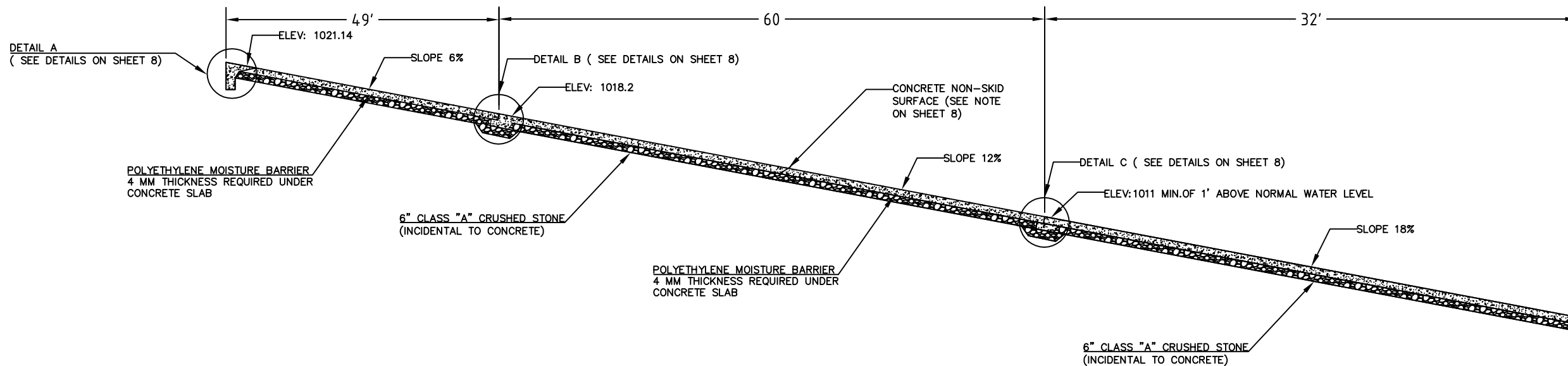
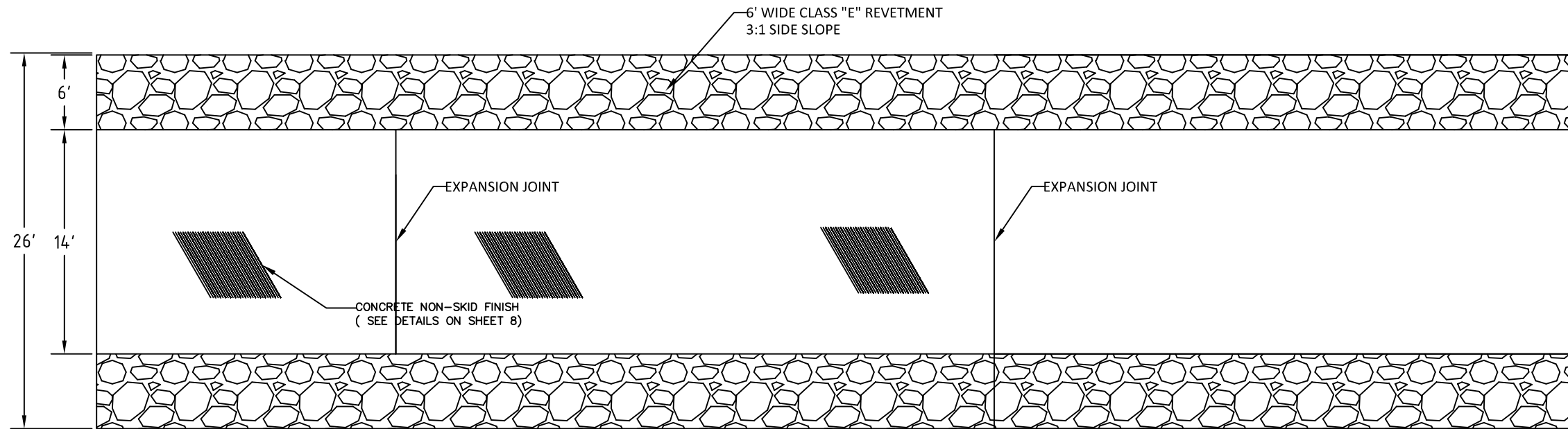
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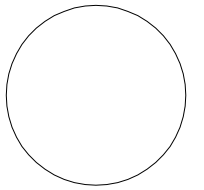
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PLAN



CROSS-SECTION

CONSULTANT:



IOWA DEPARTMENT OF  
NATURAL RESOURCES

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



BOAT RAMP

BOAT RAMP CONSTRUCTION FOR:

MISSOURI RIVER WILDLIFE UNIT

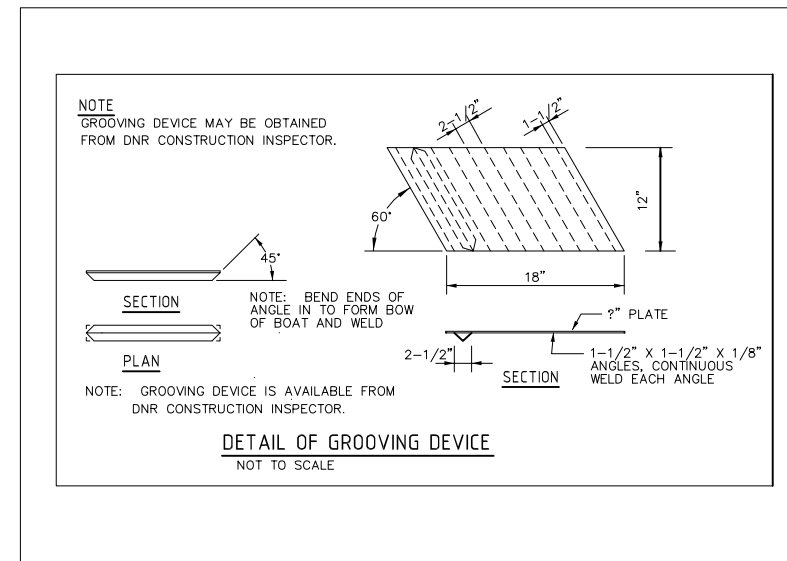
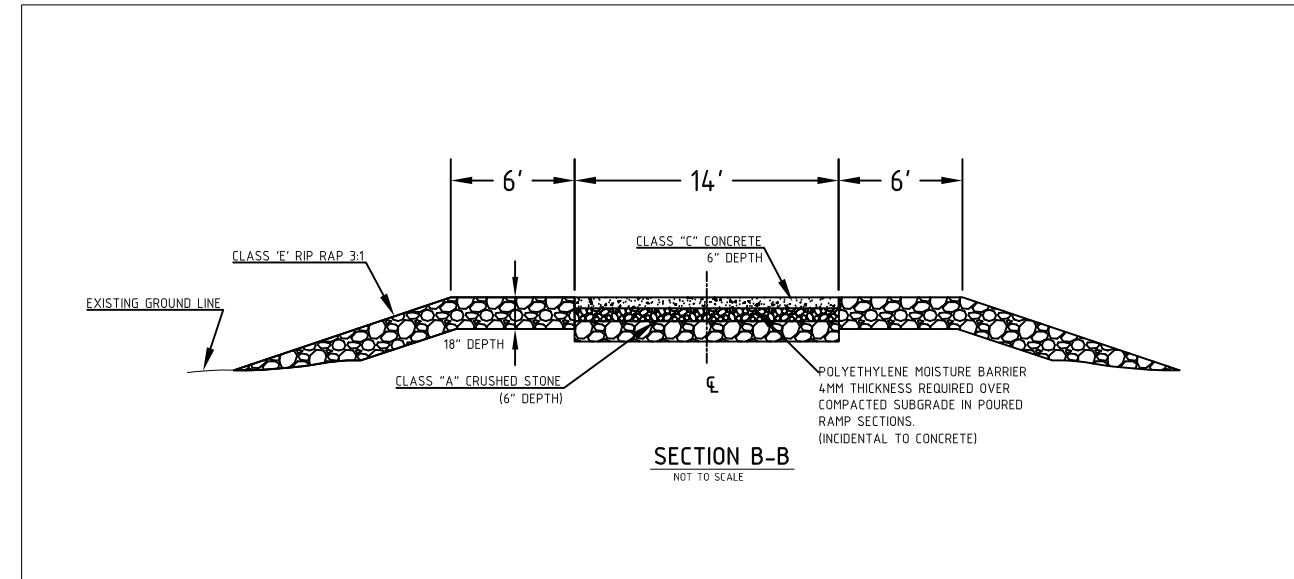
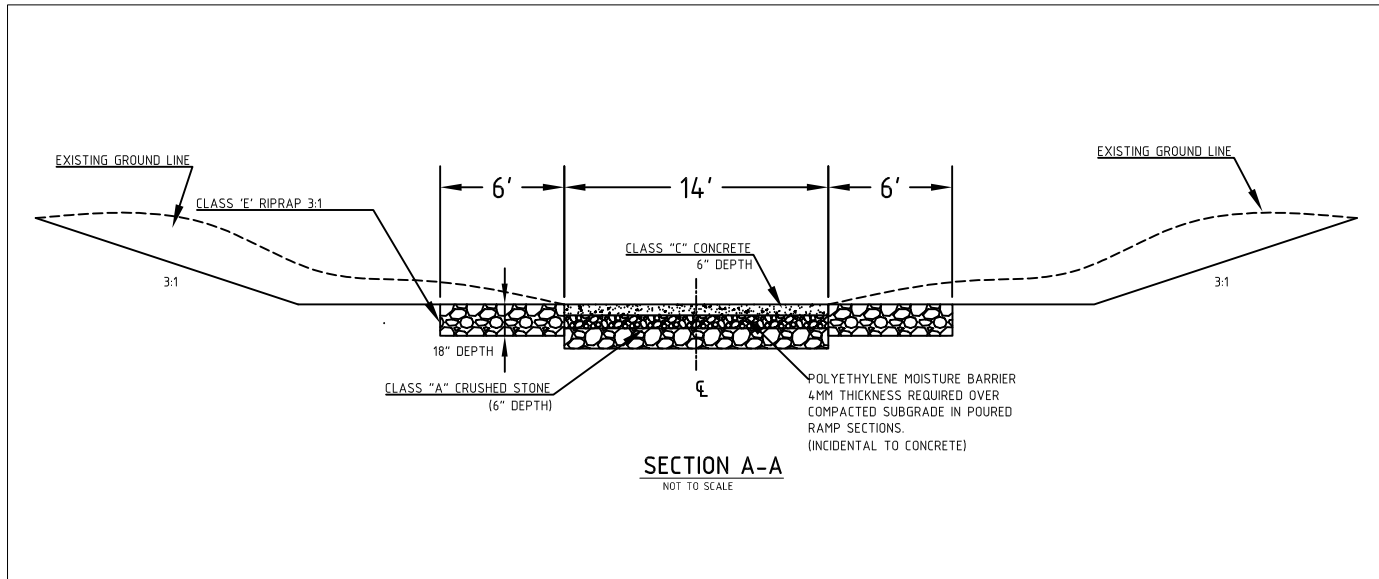
HARRISON COUNTY, IA

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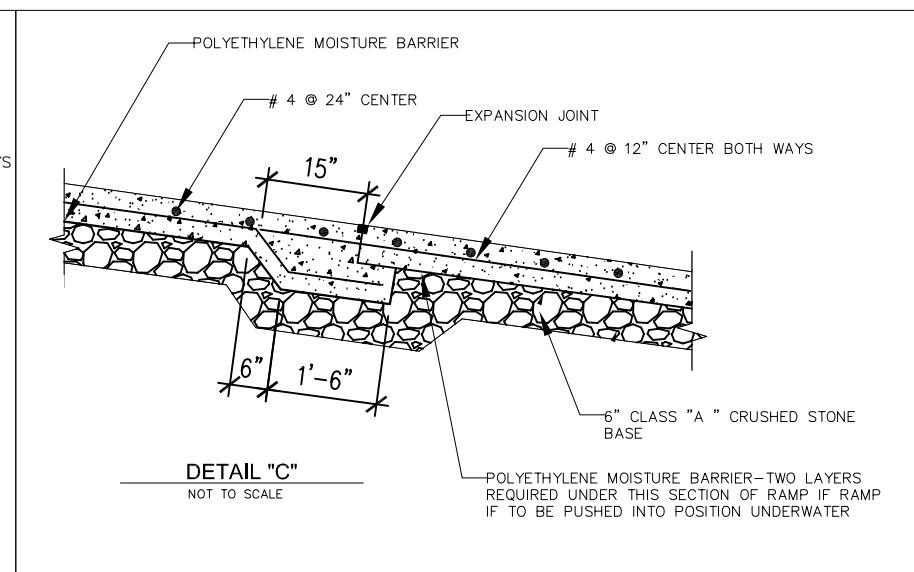
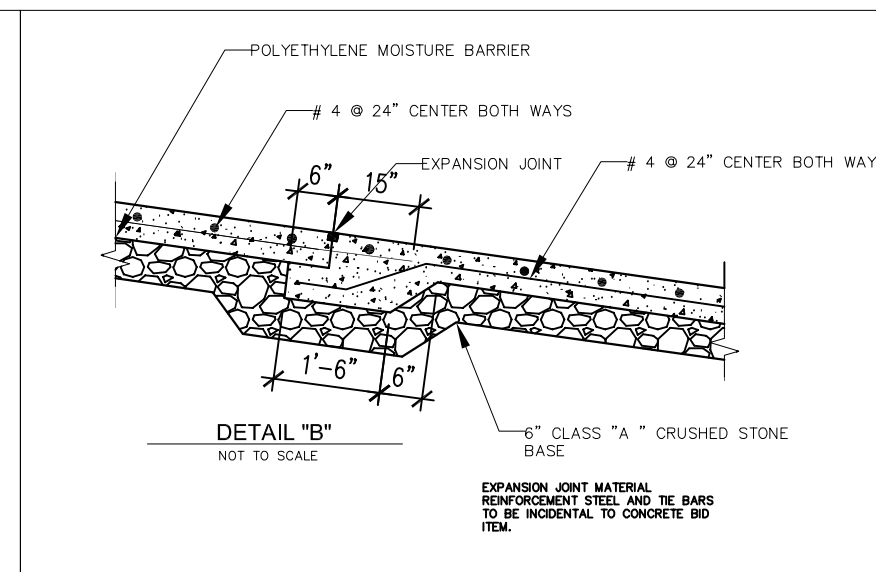
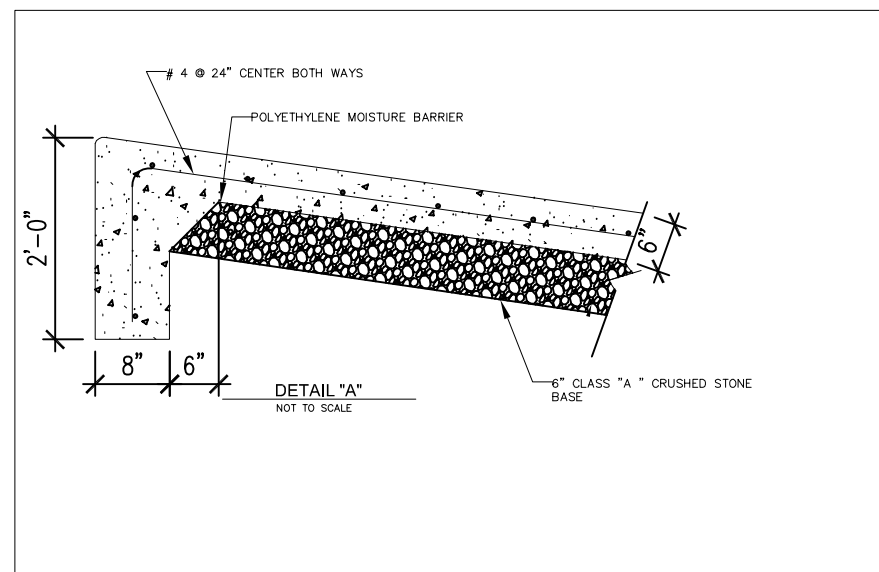
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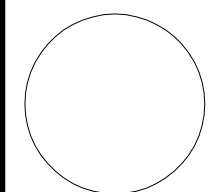


**BOAT RAMP NOTES**

- ALL CONCRETE SHALL CONFORM TO CLASS "C" MIX 4 I. D.O.T. SPECIFICATION SERIES 2009
- ALL EXPOSED EDGES OF CONCRETE TO BE BEVELED WITH CHAMFER STRIPS
- THE TOP 1" OF ALL EXPANSION JOINTS TO RECEIVE A SILICONE BASE POURING TYPE SEALER
- EXPANSION JOINTS - PREFORMED RESILIENT FILLER MATERIAL
- REINFORCING STEEL - GRADE 40 - DEFORMED
- THAT PORTION OF THE RAMP TO BE PLACED BELOW THE WATERLINE MAY BE FORMED ABOVE THE WATERLINE AND CAREFULLY PUSHED INTO POSITION UNDERWATER TO THE LOCATION AND ELEVATION AS SHOWN ON THE PLAN AND AS APPROVED BY THE INSPECTOR. THE REMAINING SECTIONS OF THE RAMP SHALL BE FORMED AND POURED IN PLACE.



CONSULTANT:



**IOWA DEPARTMENT OF NATURAL RESOURCES**

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



**BOAT RAMP DETAILS**

BOAT RAMP CONSTRUCTION FOR  
**MISSOURI RIVER WILDLIFE UNIT**

HARRISON COUNTY IA

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