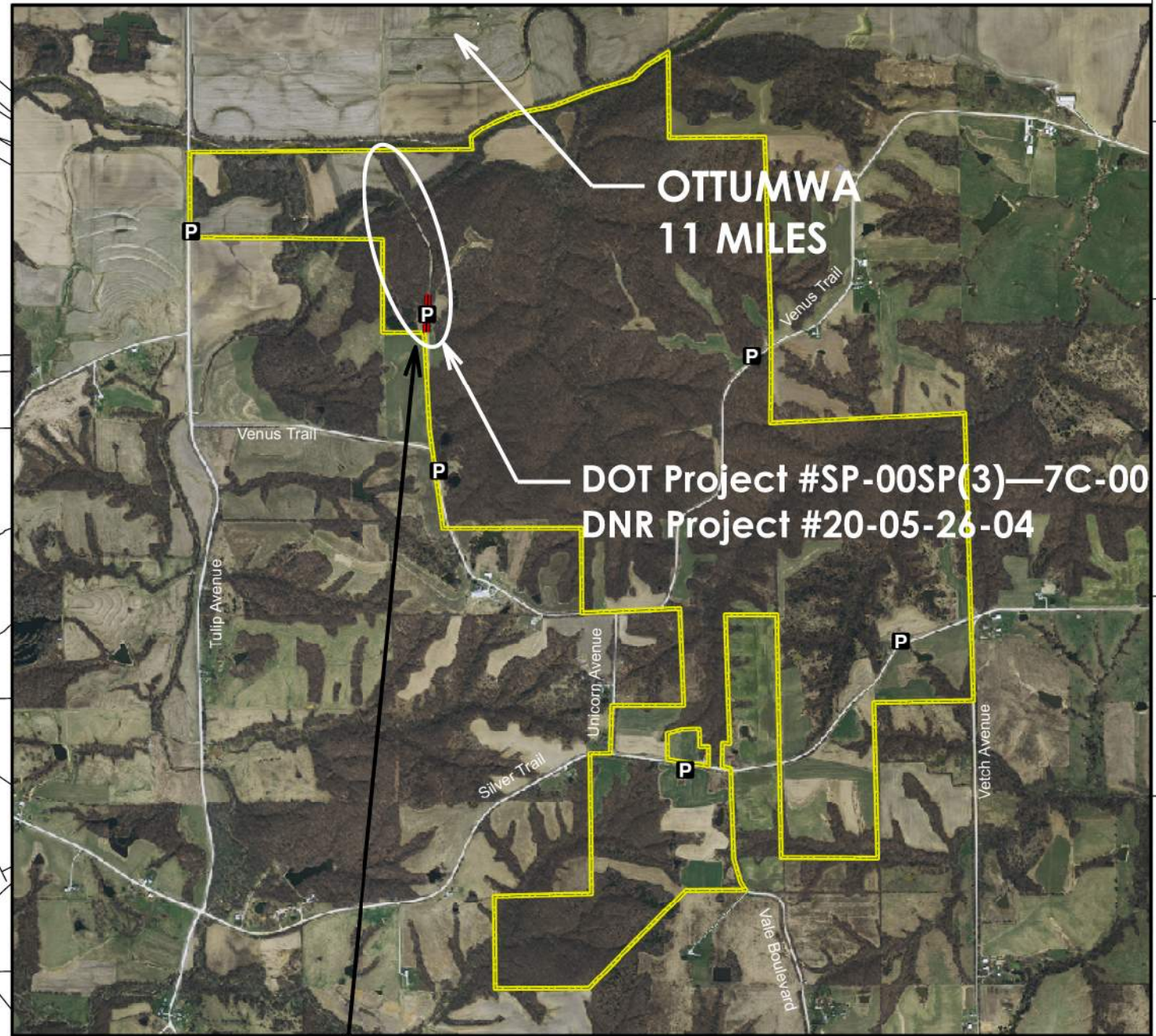




# Eldon Wildlife Management Area

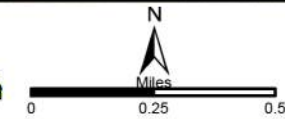


PROJECT LOCATION

## Legend

- State Areas open to hunting
- WMA Boundary
- Parking Lot
- Access Road
- 2010 Aerial Photography

Map Creation Date: 5/2011



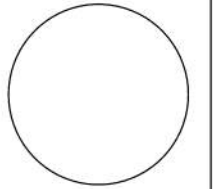
Acres: 1,290  
 Habitat: 1/3 Upland, 3/4 Timber  
 Species: Deer, Turkey, Squirrel  
 Contact: Jeff Glaw  
 Sugema Wildlife Unit  
 319-293-7185

Davis County, Iowa  
 T-70N, R-12W, Sections 4-5,9-10,15-16



Directions: 4 miles E of Floris on J15,  
 1 mile N.

CONSULTANT:



IOWA DEPARTMENT OF  
 NATURAL RESOURCES

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

PROJECT LOCATION MAP

ROAD MAINTENANCE FOR:  
 ELDON WMA

DAVIS COUNTY

NO.	BY	DATE	REVISION

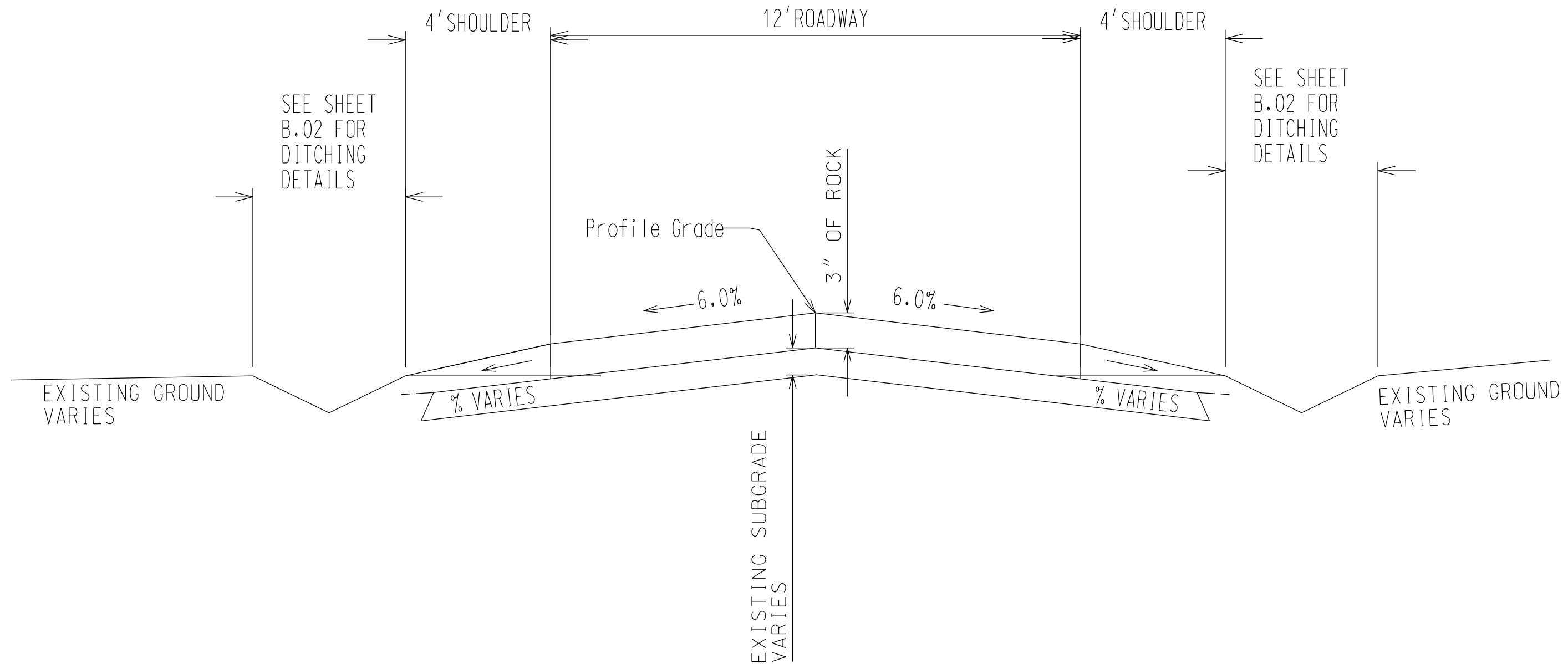
DRAWN BY: BLF

PROJECT NUMBER: 20-05-26-04

CHK'D BY: DATE: MARCH 2022

SHEET NO:

**A.02**



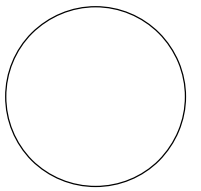
## Typical Roadway Section - Center Crown

Note:

Normal sections shown may be appropriately modified for areas specifically designated by the Engineer.

STATION	TO STATION	LOCATION	WIDTH
0+00	20+33	HEADING NORTH	12'

CONSULTANT:



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

TYPICAL CROSS SECTIONS AND DETAILS

ROAD MAINTENANCE FOR:  
**ELDON WMA**

DAVIS COUNTY

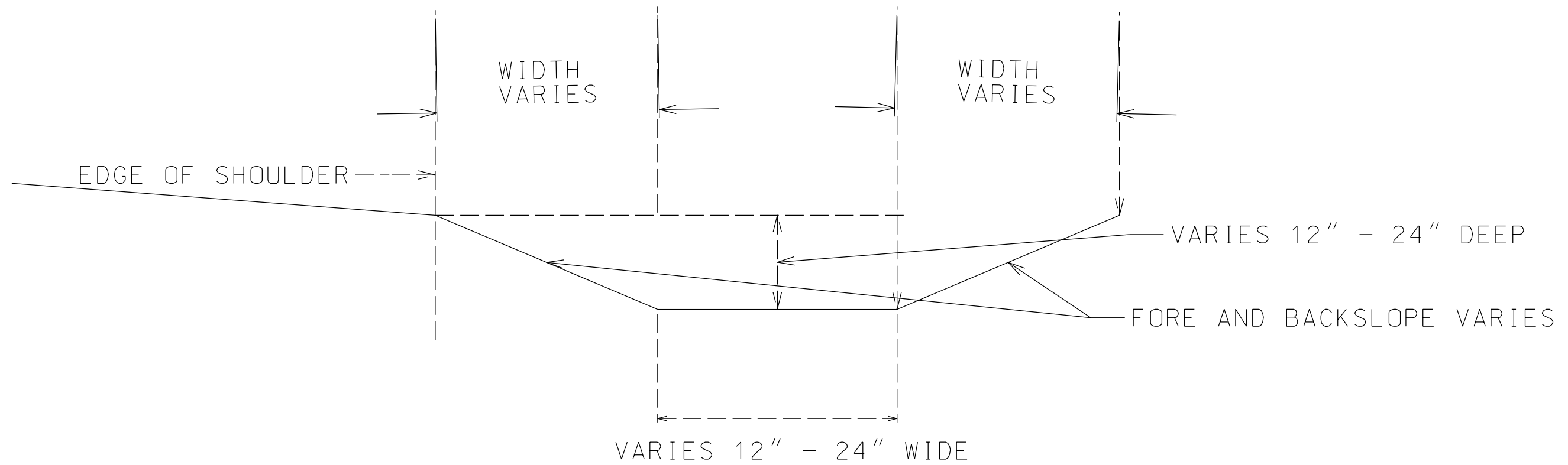
NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:  
BLF 20-05-26-04

CHK'D BY: DATE:  
MARCH 2022

SHEET No:

**B.01**



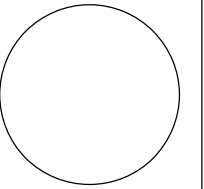
## Typical Ditch Section

### Note:

Normal sections shown may be appropriately modified for areas specifically designated by the Engineer.

STATION	TO	STATION	LOCATION	WIDTH
0+00		20+33	NORTH/SOUTH	12'

CONSULTANT:



**IOWA DEPARTMENT OF  
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502 E. 9TH ST., DES MOINES, IA 50319-0034



TYPICAL CROSS SECTIONS AND DETAILS

ROAD MAINTENANCE FOR:  
ELDON WMA

DAVIS COUNTY

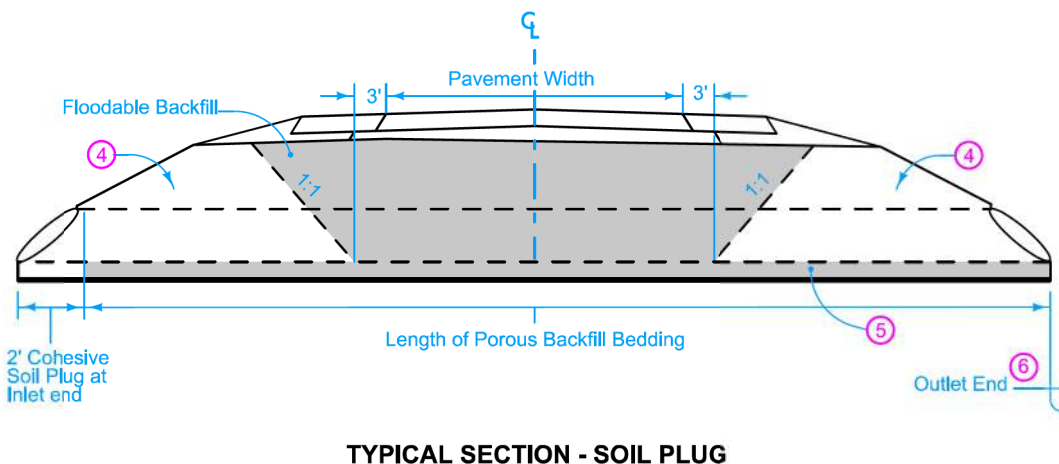
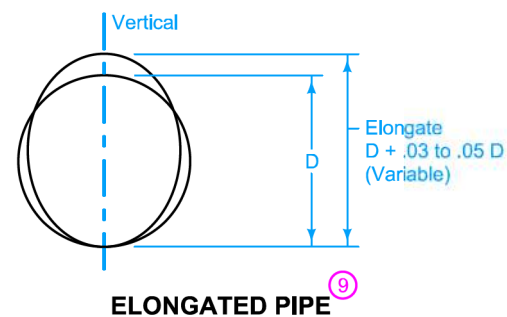
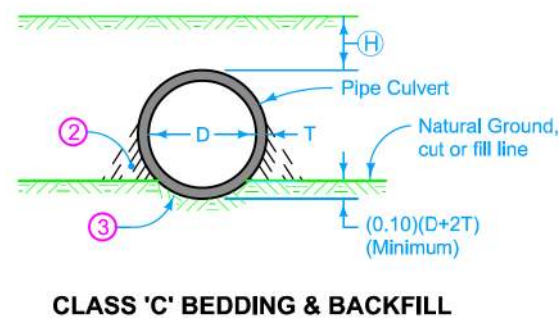
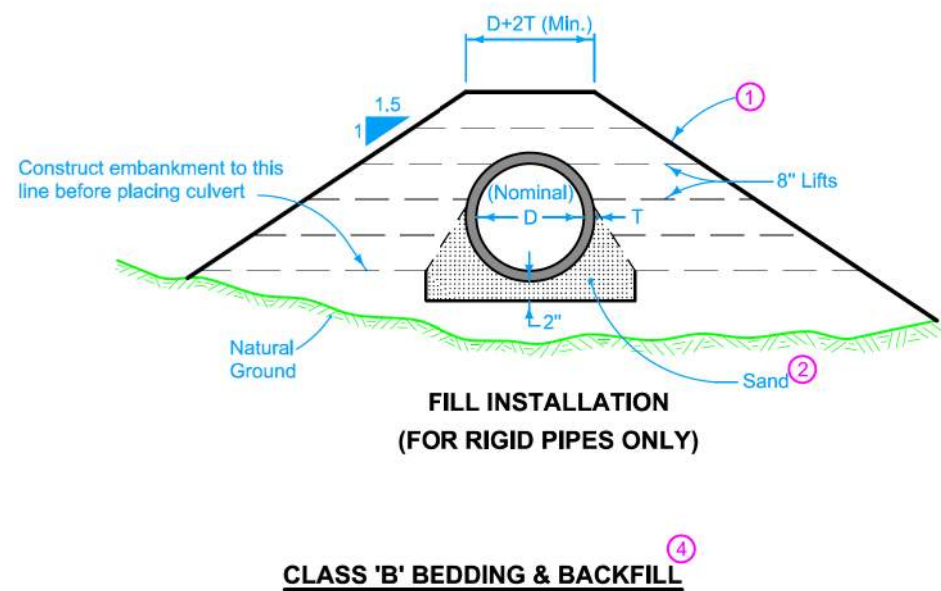
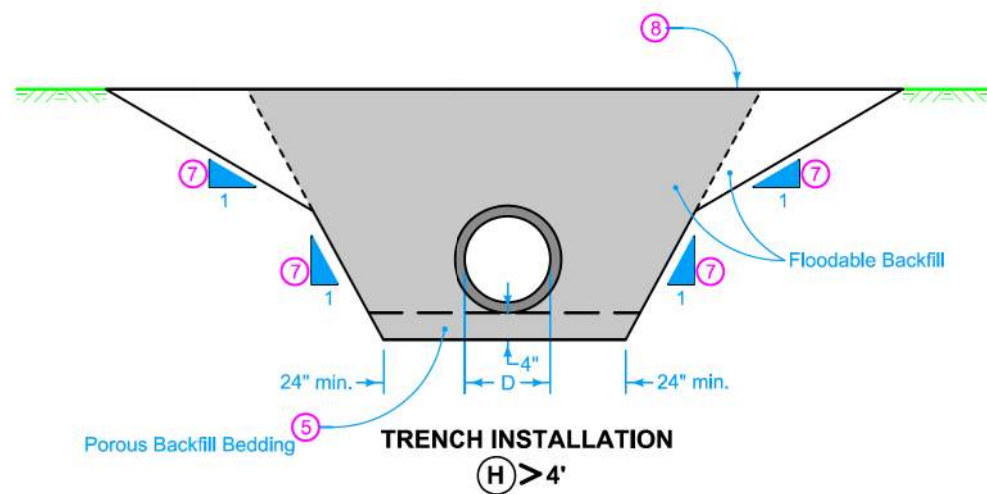
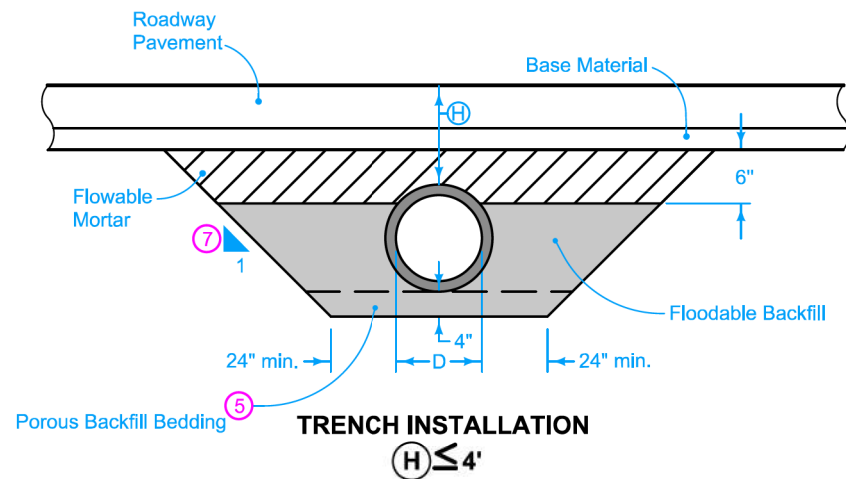
NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:  
BLF 20-05-26-04

CHK'D BY: DATE:  
MARCH 2022

SHEET No:

**B.02**



Refer to DR-104 for minimum and maximum allowable cover  $H$  for the particular kind of pipe culvert.

- 1 The backfill adjacent to and above the pipe culvert may be placed in conjunction with normal embankment construction. Thoroughly tamp the embankment within the limits shown.
- 2 Take extra care to ensure complete and satisfactory tamping of backfill material in the area immediately adjacent to the lower portion of pipe.
- 3 Carefully shape excavation below groundline either using a template conforming to actual dimension and shape of the pipe or using other means. If using other means, check with a template conforming to the actual dimension and shape of the pipe.
- 4 For culverts backfilled by flooding, place a cohesive soil plug at the inlet, outlet, and, when necessary, sides, prior to flooding.
- 5 4-inch Porous Backfill bedding, 2-inch Floodable Backfill bedding may be used under unsealed rigid pipe.
- 6 Extend Porous Backfill through the outlet end soil plug when used for bedding.
- 7 Quantity calculations are based upon a 1:1 slope and minimum trench dimension. Actual slope of trench may vary based upon Contractor's operations.
- 8 Ground Line at time of pipe installation. When existing ground exceeds 5 feet depth over pipe, backfill and compaction by flooding is not required more than 5 feet above the pipe.
- 9 Where a corrugated metal pipe culvert requiring elongation is to be installed (to counteract deformation caused by backfill), complete elongation using a means approved by the Engineer. Elongation may be developed either as part of shop fabrication or field installation. Install with elongated axis vertical.

Possible Contract Items:  
 Flowable Mortar  
 Flooded Backfill  
 Excavation, Class 20

Possible Tabulations:  
 104-3  
 104-4

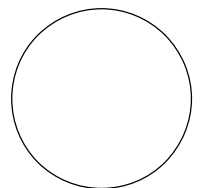
<b>IOWA DOT</b> <b>STANDARD ROAD PLAN</b>	REVISION	
	2	04-18-17
	<b>DR-101</b> SHEET 1 of 1	

REVISIONS: Changed "Porous Backfill" to "Porous Backfill Bedding" for clarity. Modified trench installation detail for H>4' to clarify pay limits.

*Brian Smith*  
 APPROVED BY DESIGN METHODS ENGINEER

**PIPE CULVERT  
 (BEDDING AND BACKFILL)**

CONSULTANT:



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



TYPICAL CROSS SECTIONS AND DETAILS

ROAD MAINTENANCE FOR:  
 ELDON WMA

DAVIS COUNTY

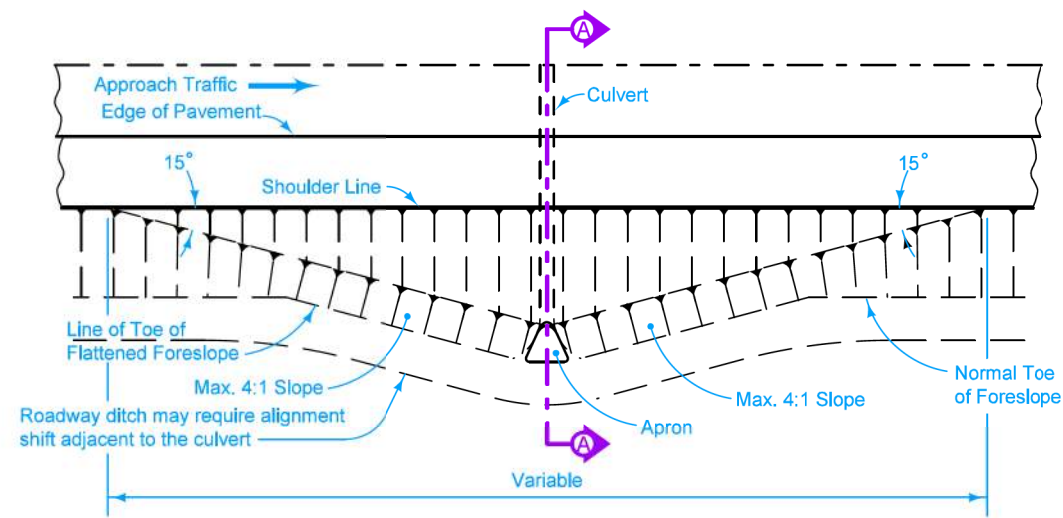
NO. BY DATE REVISION

DRAWN BY: PROJECT NUMBER:  
 BLF 20-05-26-04

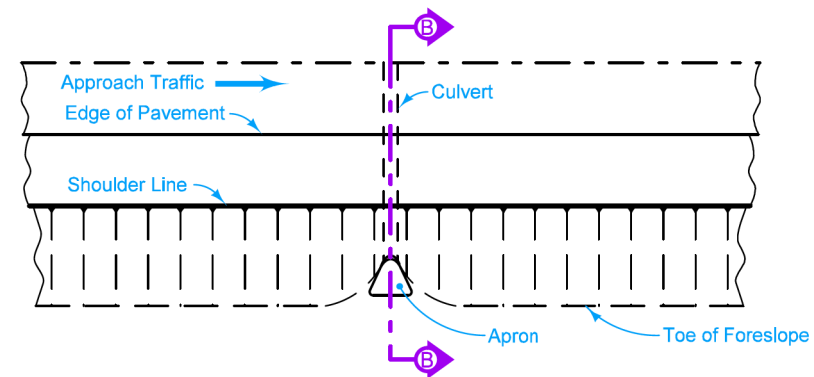
CHK'D BY: DATE:  
 MARCH 2022

SHEET NO.:

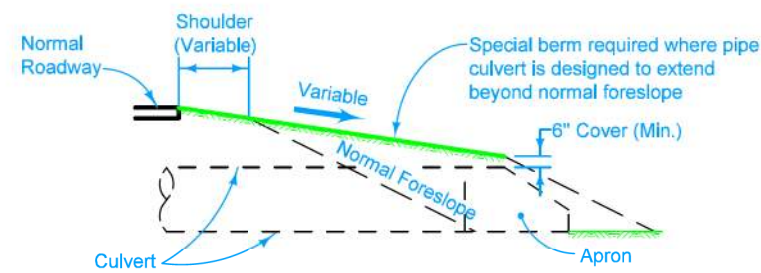
**B.03**



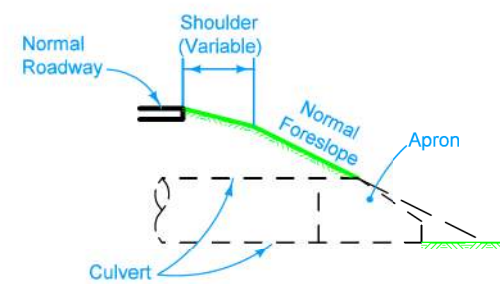
TYPICAL INSTALLATION PLAN  
WHERE SPECIAL BERM IS REQUIRED



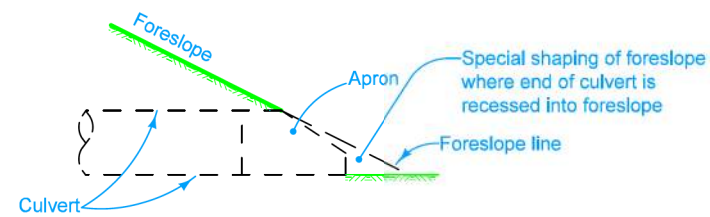
TYPICAL INSTALLATION PLAN  
WHERE CULVERT MATCHES NORMAL FORESLOPE



SECTION A-A



SECTION B-B



DETAIL OF SHAPING EARTH FORESLOPE  
AT CULVERT END

	REVISION
	New 04-21-15
<b>STANDARD ROAD PLAN</b>	<b>DR-103</b>
REVISIONS: New. Replaces RF-30C.	SHEET 1 of 1

APPROVED BY DESIGN METHODS ENGINEER

*Brian Smith*  
APPROVED BY DESIGN METHODS ENGINEER

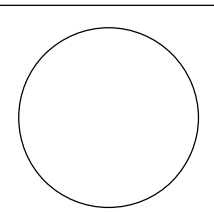
**PIPE CULVERT  
(INSTALLATION DETAILS)**

DRAWN BY: BLF PROJECT NUMBER: 20-05-26-04

CHK'D BY: DATE: MARCH 2022

SHEET No:

CONSULTANT:



**IOWA DEPARTMENT OF  
NATURAL RESOURCES**

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



TYPICAL CROSS SECTIONS AND DETAILS

ROAD MAINTENANCE FOR:

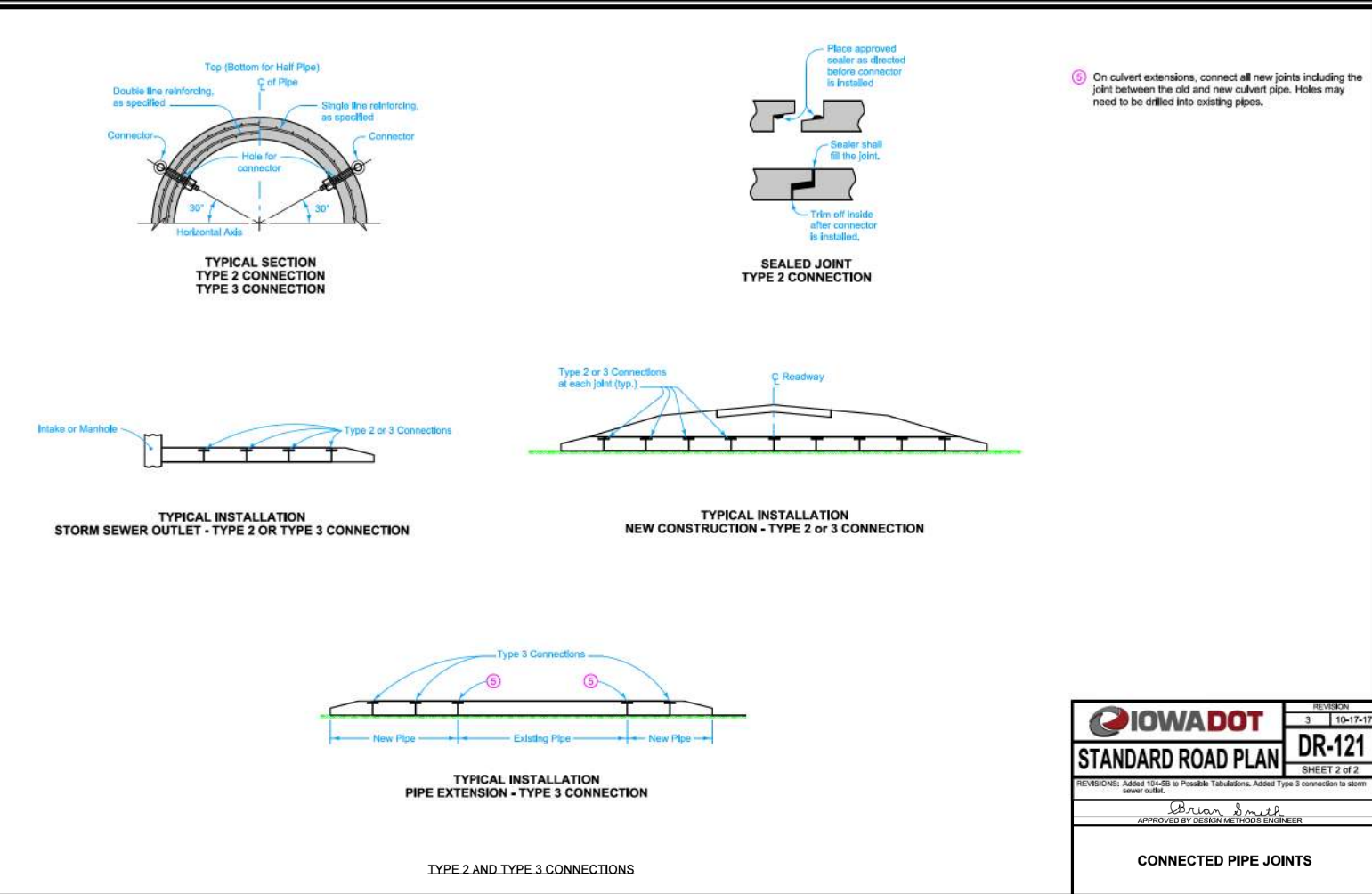
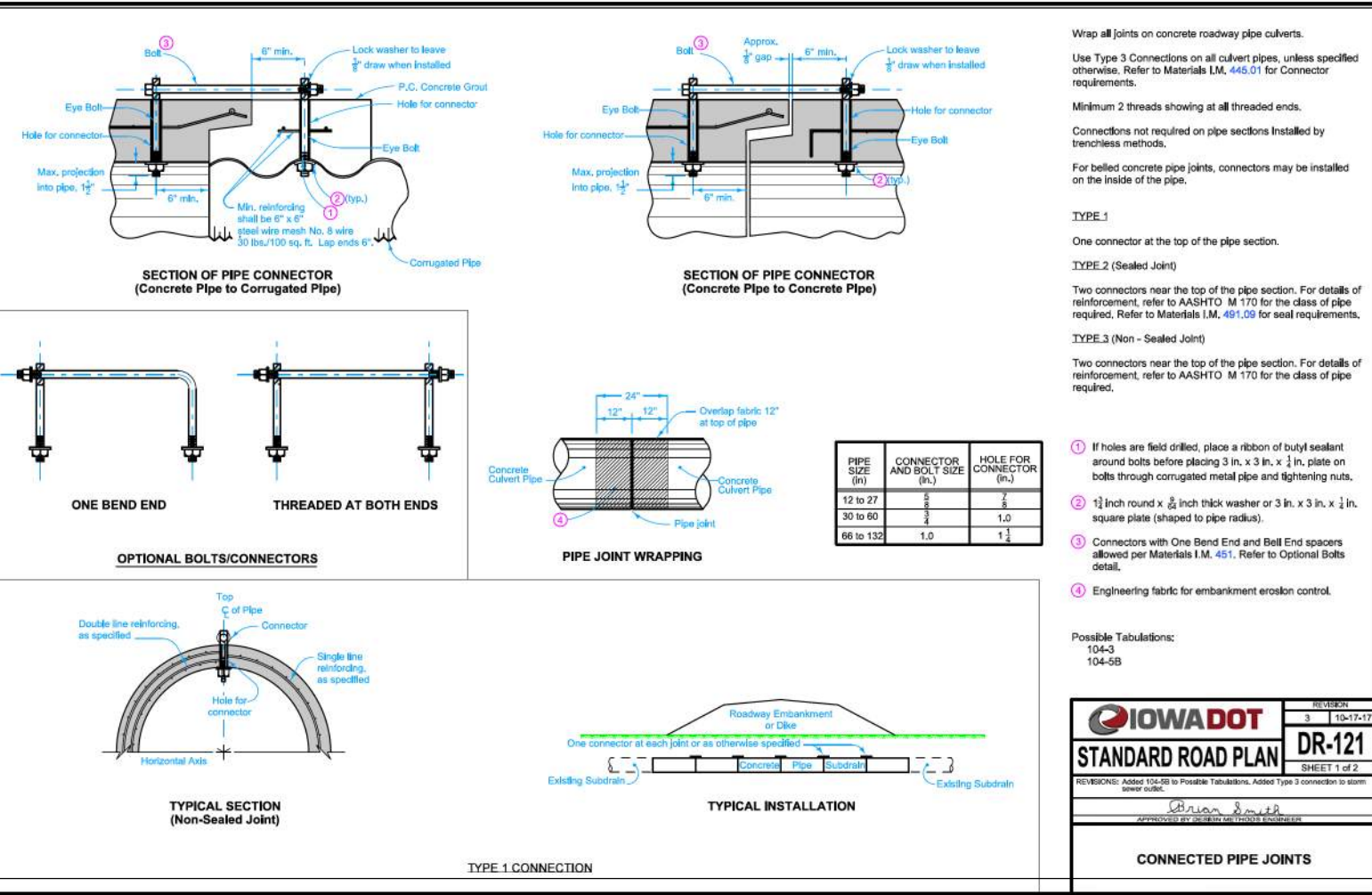
ELDON WMA

DAVIS COUNTY

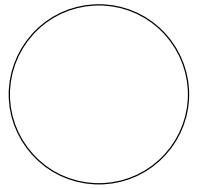
NO.	DATE	REVISION

SHEET No:

**B.04**



CONSULTANT:



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



TYPICAL CROSS SECTIONS AND DETAILS

ROAD MAINTENANCE FOR:  
**ELDON WMA**

DAVIS COUNTY

NO.	BY DATE	REVISION

DRAWN BY: PROJECT NUMBER:  
 BLF 20-05-26-04

CHK'D BY: DATE:  
 MARCH 2022

SHEET NO:

**B.05**

**ESTIMATED PROJECT QUANTITIES**

ITEM NO.	ITEM	UNIT	TOTAL
1	2101 - CLEARING	LS	1
2	2102-EXCAVATION, CL 12, BOULDER/ROCK FRAGMENT	CY	20
3	2125 - RESHAPING DITCHES	STA	20.1
4	2127 - RECONSTRUCTION OF ROADBED - BLADING/SHAPING	STA	20.1
5	2312 - GRANULAR SURFACING ON ROAD, CRUSHED STONE - 3-INCH MINUS	TON	570
6	2416 - CULV, CONC ENT PIPE, 18"	LF	80
7	2417 - APRON, CONC, 18"	EACH	4
8	2507 - REVETMENT, CLASS E	TON	20
9	2507 - EROSION STONE	TON	20
10	2518 - SAFETY CLOSURE	EACH	1
11	2528 - TRAFFIC CONTROL	LS	1
12	2533 - MOBILIZATION	LS	1
13	2601-SEED+FERTILIZE (RURAL)	ACRE	1

**ESTIMATE REFERENCE INFORMATION**

ITEM NO.	DESCRIPTION
1	A. This item for removal of brush for ditch cleaning.
2	A. This item for any encounters with rock during ditch cleaning/shaping.
3	A. See sheet B.02 for typical ditch cross section. B. Remove any excess spoil from project site. C. Includes both sides of road per station.
4	A. Repair all potholes by scarifying surrounding area to depth of pothole and recompacting. B. Re-establish roadway crown - 6% positive drainage each way from centerline; 4% across the width in banked sections. C. Pull in shoulders from ~STA. 17+95 - STA. 20+33 - limits to be marked by DNR Field Engineer.. D. Remove any high shoulder areas, before spreading new rock. E. See sheet B.01 for typical roadway cross section.
5	A. Blade and roll rock after spreading. B. DOT approved source.
6,7	A. DNR Field Engineer will mark inlet locations and set flowline elevations. B. Use Type 3 pinned connections. C. Wrap all joints. D. DOT approved source.
8	A. Place at outlets of new culverts
9	A. Follow DOT Spec Section 2528 for set-up details.
12	A. Use Rural mix. B. DOT approved source.

Contact DNR Field Engineer for any equipment/material staging requests.

**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.

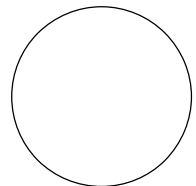
The contractor shall not disturb desirable grass areas and desirable trees outside the construction limits. The contractor will not be permitted to park or service vehicles and equipment or use these areas for storage of materials. Storage, parking and service areas will be subject to the approval of 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.

CONSULTANT:



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



**QUANTITIES AND GENERAL INFORMATION**

ROAD MAINTENANCE FOR:  
**ELDON WMA**  
DAVIS COUNTY

NO.	BY	REVISION

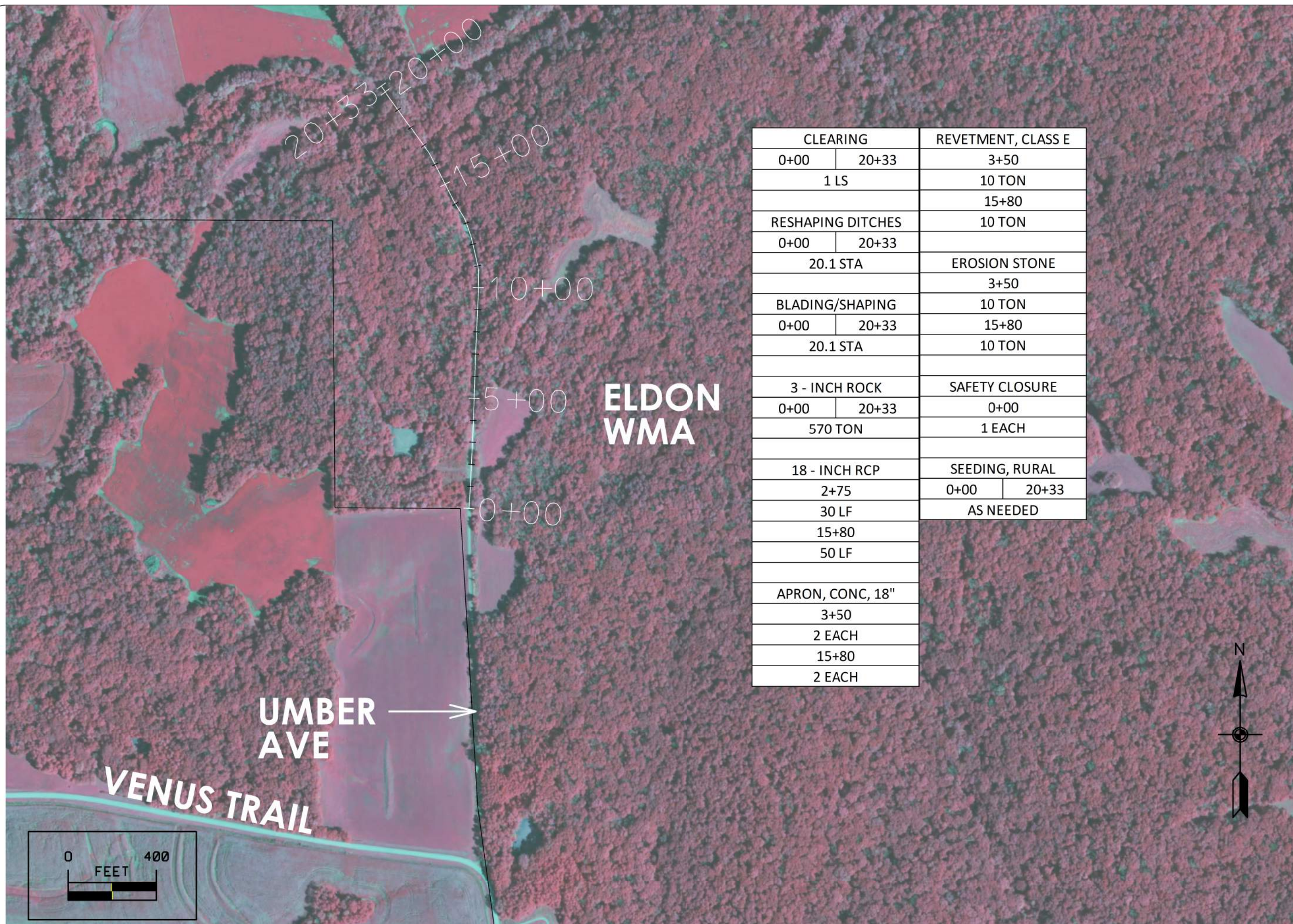
DRAWN BY: BLF PROJECT NUMBER: 20-05-26-04

CHK'D BY: DATE: MARCH 2022

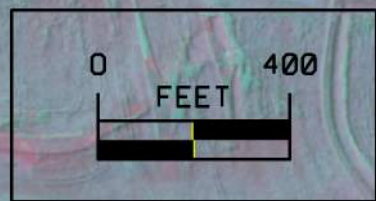
SHEET No:

**C.01**

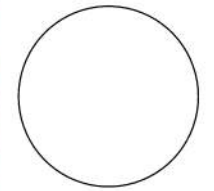




CLEARING		REVETMENT, CLASS E
0+00	20+33	3+50
1 LS		10 TON
		15+80
RESHAPING DITCHES		10 TON
0+00	20+33	
20.1 STA		EROSION STONE
		3+50
BLADING/SHAPING		10 TON
0+00	20+33	15+80
20.1 STA		10 TON
3 - INCH ROCK		SAFETY CLOSURE
0+00	20+33	0+00
570 TON		1 EACH
18 - INCH RCP		SEEDING, RURAL
2+75		0+00
		20+33
30 LF		AS NEEDED
15+80		
50 LF		
APRON, CONC, 18"		
3+50		
2 EACH		
15+80		
2 EACH		



CONSULTANT:



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



**SITE PLAN**  
ROAD MAINTENANCE FOR:  
**ELDON WMA**  
DAVIS COUNTY

NO.	BY	DATE	REVISION

DRAWN BY: BLF	PROJECT NUMBER: 20-05-26-04
CHK'D BY:	DATE: MARCH 2022
SHEET No: <b>D.01</b>	