

**HAMILTON CO.**  
**REVETMENT**  
**NHSN-020-4(57)--2R-40**  
 LETTING DATE  
 07-21-2020



**Highway Division**  
 PLANS OF PROPOSED IMPROVEMENT ON THE  
**PRIMARY ROAD SYSTEM**  
**HAMILTON COUNTY**  
**REVETMENT**

U.S. 20(EB) S. ditch, on W. side of N. flowing tributary to Brewers Creek,  
 approx. 1.8 mi. W. of the E. Jct. IA 17.

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



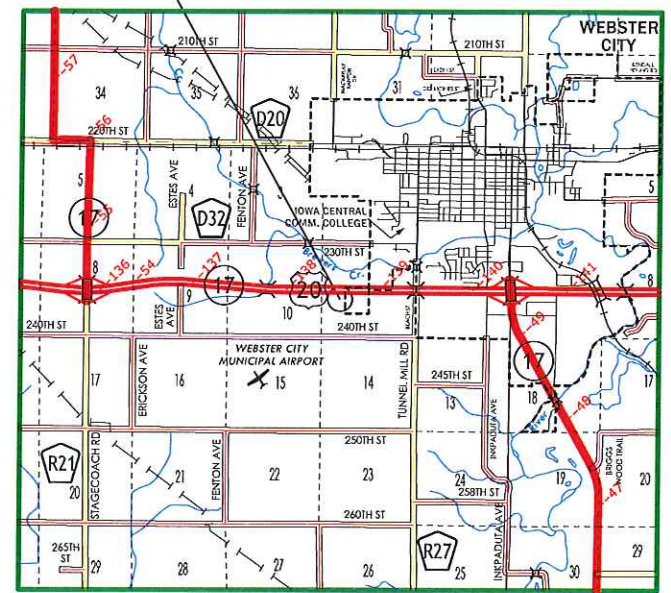
REVISIONS

	TOTAL
	7
PROJECT IDENTIFICATION NUMBER	
20-40-020-010	
PROJECT NUMBER	
NHSN-020-4(57)--2R-40	
R.O.W. PROJECT NUMBER	

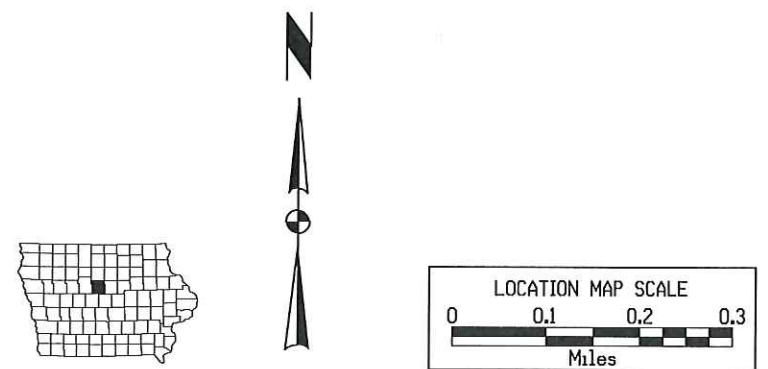
**INDEX OF SHEETS**

No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
* A.1	Title Sheet
* A.1	Location Map Sheet
* A.2	Site Map
<b>C Sheets</b>	<b>Quantities and General Information</b>
C.1	Project Description
C.1	Estimated Project Quantities
C.1	Estimate Reference Information
C.1	Standard Road Plans
C.1	General Notes
C.2	Tabulations (beg. with tab. of incidentals if needed)
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
J.1	Traffic Control Plan
<b>U Sheets</b>	<b>500 Series, Mod.Stds. and Detail Sheets</b>
U.1	As-Built Sheet-FOR INFORMATION ONLY
U.2	Dist.1 Partial ROW Strip Map-FOR INFORMATION ONLY
	* Color Sheets

PROJECT LOCATION  
 ±Sta 216+80 Rt.  
 REF.LOC.SIGN ±138.60 (US 20 EB)



SEE SHEET A.2  
 FOR SITE MAP



DESIGN DATA RURAL			
2017 AADT	10,000	V.P.D.	
20-- AADT	--	V.P.D.	
20-- DHV	--	V.P.H.	
TRUCKS	20.8	%	
Total			
Design ESALs			

INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	Tony J. Gustafson	Primary Signature Block

**ROADWAY DESIGN**

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Date: 5/4/2020

Signature: \_\_\_\_\_  
 Printed or Typed Name: Tony J. Gustafson  
 My license renewal date is December 31, 2021

Pages or sheets covered by this seal: A.1-A.2, C.1-C.2, J.1, and U.1-U.2

# Hamilton Co. (57)

Pipe removals, shaping, revetment, fencing, incidental erosion control

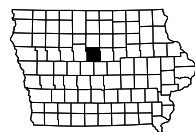
## Legend

Feature 1



Google Earth

© 2020 Google



FILE NO.

ENGLISH

DESIGN TEAM

T.Gustafson \ A.Smyth \ B.North

HAMILTON COUNTY

PROJECT NUMBER

NHSN-020-4(57)--2R-40

SHEET NUMBER

A.2

100-1D  
10-18-05

**PROJECT DESCRIPTION**

Major work for this project includes removing two failed and rusted 36" corrugated metal pipe (CMP) and replacing it with a rock ditch. Work also includes field fence removal and repairs to the remaining segment of existing state owned field fence, required erosion control measures and adequate traffic control to safely complete the project.

100-1A  
07-15-97

**ESTIMATED PROJECT QUANTITIES  
(1 DIVISION PROJECT)**

Item No.	Item Code	Item	Unit	Total	As Built Qty.
1	2507-3250005	ENGINEERING FABRIC	SY	1,223.0	
2	2507-6800061	REVTMENT, CLASS E	TON	1,075.0	
3	2519-4200140	REMOVAL OF FENCE, FIELD	LF	80.0	
4	2528-8445110	TRAFFIC CONTROL	LS	1.00	
5	2533-4980005	MOBILIZATION	LS	1.00	
6	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA.	LF	675.0	
7	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE	LF	675.0	

105-4  
10-18-11

**STANDARD ROAD PLANS**

The following Standard Road Plans apply to construction work on this project.

Number	Date	Title
EC-204	04-21-20	Perimeter and Slope Sediment Control Devices
EC-301	10-18-16	Rock Erosion Control (REC)
EC-502	04-21-15	Seeding in Rural Areas
MI-101	10-20-15	Fencing Layout
MI-104	10-17-17	Fence Construction at Channel Crossings, Flood Plains, and Minor Ground Depressions
SI-881	04-16-19	Special Signs for Workzones
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-402	04-21-15	Work Within 15 ft of Traveled Way
TC-418	04-21-20	Lane Closure on Divided Highway

232-3C  
04-16-19

**EROSION CONTROL  
(NATIVE GRASS SEEDING)**

Following the completion of work in a disturbed area and according to the seeding dates in Section 2601 of the Standard Specifications, place seed and mulch on the disturbed area lying 8 feet or more beyond the shoulder as follows:

SEED MIX:  
 Big bluestem (Andropogon gerardii) 6 lbs. PLS/Acre (7.0 kg/ha)  
 Indiangrass (Sorghastrum nutans) 6 lbs. PLS/Acre (7.0 kg/ha)  
 Little bluestem (Schizachyrium scoparium) 6 lbs. PLS/Acre (7.0 kg/ha)  
 Partridge Pea (Chamaecrista fasciculata) 4 lbs. PLS/Acre (4.5 kg/ha)  
 Sideoats grama (Bouteloua curtipendula) 4 lbs. PLS/Acre (4.5 kg/ha)  
 Canada wildrye (Elymus canadensis) 2 lbs. PLS/Acre (2.2 kg/ha)  
 Switchgrass (Panicum virgatum) 1 lbs. PLS/Acre (1.1 kg/ha)  
 Oats (Avena sativa) 32 lbs./Acre (36.0 kg/ha)

Furnish Big bluestem, Indiangrass, Canada wildrye and Little bluestem that is debarbed or equal to facilitate the application of seed.

Furnish seed certified as Source Identified Class (Yellow Tag) Source G0-Iowa. Oats are excluded from this requirement.

Place seed according to the requirements of Article 4169.02 of the Standard Specifications.

Place mulch according to the requirements of Articles 2601.03,E,2,a and 4169.07,A of the Standard Specifications.

Preparing the seedbed, furnishing and applying seed and mulch are incidental to mobilization and will not be paid for separately.

232-3A  
04-16-19

**EROSION CONTROL  
(RURAL SEEDING)**

Following the completion of work in a disturbed area and according to the seeding dates in Section 2601 of the Standard Specifications, place seed, fertilizer, and mulch on the disturbed area lying 8 feet adjacent to shoulder and median as follows:

Place seed and fertilize according to the requirements of Article 2601.03,C,3 and Section 4169 of the Standard Specifications.

Place mulch according to the requirements of Articles 2601.03,E,2,a and 4169.07,A of the Standard Specifications.

Preparing the seedbed, furnishing and applying seed, fertilizer, and mulch are all incidental to mobilization and will not be paid for separately.

232-11  
04-16-19

**EROSION CONTROL  
(STABILIZING CROP SEEDING)**

If outside of permanent seeding dates in Section 2601 of the Standard Specifications, or if required by a storm water permit, place stabilizing crop, fertilizer, and mulch on the disturbed area as follows:

Place seed and fertilize according to the requirements of Article 2601.03,C,1 and Section 4169 of the Standard Specifications.

Place mulch according to the requirements of Articles 2601.03,E,2,a and 4169.07,A of the Standard Specifications.

Preparing the seedbed, furnishing and applying seed, fertilizer, and mulch are incidental to mobilization and will not be paid for separately.

100-4A  
10-29-02

**ESTIMATE REFERENCE INFORMATION**

Item No.	Item Code	Description
1	2507-3250005	ENGINEERING FABRIC
2	2507-6800061	REVTMENT, CLASS E See tab. 100-23 sheet C.2 and sheet A.2 for more information and location. Includes all required class 10 earthwork for shaping, smoothing, and grading existing ditch and berms from 50' west of the inlet for existing letdown #1 and easterly to the outlet of letdown #2 (length x width of this preparation = 275' L x 40' W). At letdowns #1 & #2 the contractor shall excavate thru and remove a minimum 'V' shaped portion of the berms containing the letdown CMP's then shape the sides of the V cut in the berms to slope at 1:1 before placing fabric and revetment on 100% of these new 1:1 side slopes.
3	2519-4200140	REMOVAL OF FENCE, FIELD See tabulation 100-7 sheet C.2 and sheet A.2. Work includes all required materials, labor, and equipment to: Remove the existing south to north segment of state owned field fence (shown in red on sheet A.2) that's located and beginning just off the south end of the existing RCB's west wing and running southwesterly (away from US 20) +/-55' across the berm (for letdown #2) to an existing wooden post that marks a slight westerly angle break in this fence line. Beginning at this wooden post with the angle break, repair and reconstruct the remaining existing fence and post as needed to leave this segment sound and in good order.
4	2528-8445110	TRAFFIC CONTROL See Traffic Control Plan on sheet J.1.
5	2533-4980005	MOBILIZATION This bid item includes as incidental: seeding, fertilizing, and mulching per standard notes on sheet C.1. This bid item includes as incidental: removal and disposal of both rusted out, failed letdown CMP's #1 & #2.
6	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA. Refer to Tab. 100-19. The tabulation includes estimated locations for placement of "Perimeter and Slope Sediment Control Device, 20 in. dia." to address erosion to be encountered during construction. Verify the specific locations with the Engineer prior to beginning placement. Bid item includes 50% additional quantity for field adjustments and replacements. Use Perimeter and Slope Sediment Control Devices fabricated using wood excelsior.
7	2602-0000350	REMOVAL OF PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

253-1  
10-18-11

**MEDIAN CROSSOVER**

The Contractor is prohibited from using any established or other type median crossover on this project unless specifically designated for the Contractor's use by this plan.

262-6  
10-18-05

**UTILITIES  
(NOT A POINT 25 PROJECT)**

This is NOT a POINT 25 project and is not subject to the provisions of IAC 761-115.25.

281-1  
10-18-16

**SECTION 404 PERMIT AND CONDITIONS**

Construct this project according to the requirements of U.S. Army Corps of Engineers NATIONWIDE, Permit No. 3. A copy of this permit is available from the Iowa DOT website (<http://www.enrpermits.iowadot.gov/>). The U.S. Army Corps of Engineers reserves the right to visit the site without prior notice.

100-08  
04-17-18

**REMOVAL OF FENCE**

Removal of Field Fence is incidental to Clearing and Grubbing.

Location				Type	Length LF	Remarks
From		To				
Station	Offset	Station	Offset			
218+50.00	175	219+40.00	125	Field	80.0	See sheet A.2

100-23  
04-17-18

**ROCK EROSION CONTROL**

Refer to EC-301 and Detail 570-8

Location				L	W	Rock Erosion Control (REC)					Material Bid Quantities			Remarks
Road Identification	Begin Station	End Station	Side Lt./Rt.			Type 1	Type 2	Type 3	Type 4	Type 5	Eng. Fabric	Class E Revetment	Erosion Stone	
				Rock Ditch Check	Rock Ditch	Rock Flume	Rock Splash Basin	Rock Slope Protection	SY	TON	TON			
US 20 EB Rt	216+70.00	219+20.00	south	250	40		X					1223.0	1075.0	

100-19  
04-19-16

**PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE**

Possible Standards: EC-204

Location			Length of Installation			Remarks
Begin Station	End Station	Side	9 inch Dia	12 inch Dia	20 inch Dia	
			LF	LF	LF	
216+80.00	218+80.00	Rt			450.0	for ditch checks spaced 22' apart

**TRAFFIC CONTROL PLAN**

108-23A  
08-01-08

- 1.) Through traffic on U.S. 20, all associated ramps, and intersecting roadways shall be maintained at all times during this project.
- 2.) Traffic control on this project shall be in accordance with Standard Road Plans in tabulation 105-4 on sheet C.1.
- 3.) Work will be prohibited and all traffic shall be returned to normal during weekends; refer to TRAFFIC CONTROL CLOSURE TABLE(S) tab. 108-23B.
- 4.) Pedestrian crossings are not present within this project and pedestrian traffic is not anticipated.

**COORDINATED OPERATIONS**

111-01  
04-17-12

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work

**TRAFFIC CONTROL CLOSURE TABLE(S)**

108-23B  
10-17-17

\* This is to only be used in conjunction with Tabulation 108-23A  
Shaded area indicates times that lane closures are not allowed

	AM											NOON	PM												
	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	
SUN																									
MON																									
TUE																									
WED																									
THU																									
FRI																									
SAT																									

**511 TRAVEL RESTRICTIONS**

108-25  
10-21-14

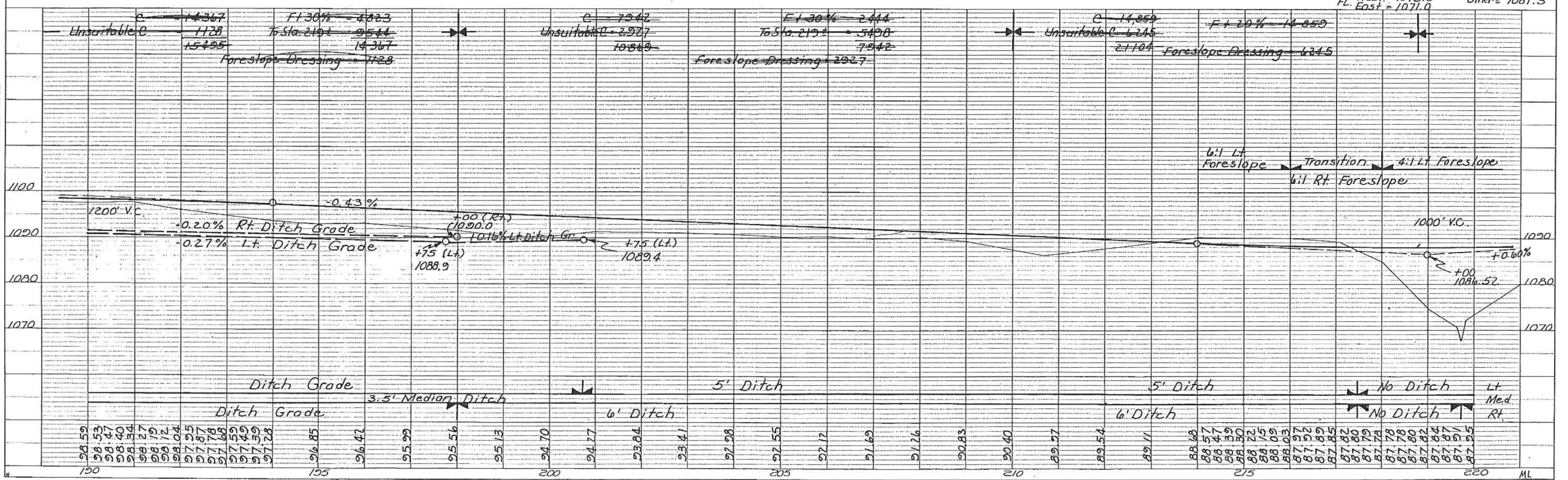
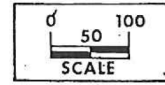
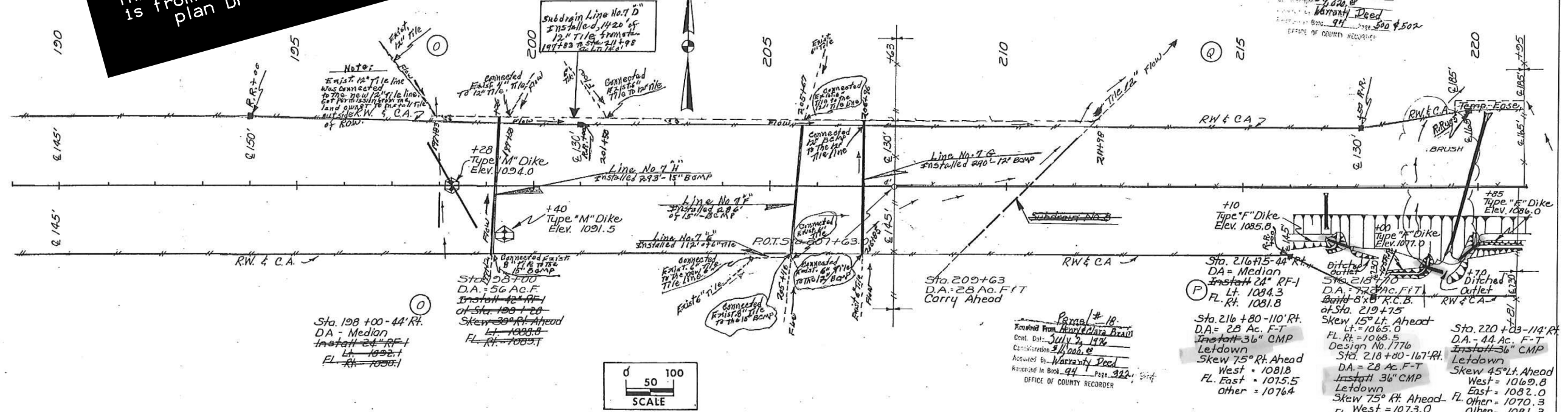
Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
			No Travel Restrictions Expected									

Property Owners  
 O-Harley Shaffer  
 P-Heary & Clara Brain  
 Q-Ruth & Abbie Conklin

**This sheet, FOR INFORMATION ONLY,  
 is from 1978 As-Built PCC Paving  
 plan DP-520-4(16)--36-40**

FREEDOM TWP  
 T88N R26W  
 SEC.10 SEC.11

Parcel #19  
 Released From *Harley Shaffer* & *Abbie Conklin*  
 Oct. 7, 1978  
 \$9,020.00  
 Warranty Deed  
 Record Book 94 Page 500 & 502  
 OFFICE OF COUNTY RECORDER



PLAN

DATE	
BY	
CHECKED	
ALIGNED	
RT. OF WAY	
NOTE BOOK	
NO.	

PROFILE

DATE	
BY	
CHECKED	
GRADES	
STRUCTURE	
NOTATION	
NO.	

HAMILTON CO.	PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS	PROJECT NUMBER	STATE	FED. ROAD DIST. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
		IOWA	1				DP-520-4(16)--36-40	IOWA	1		58	ML

SW 1/4 NW 1/4  
SEC. 11 T88N R26W

SE 1/4 NW 1/4  
SEC. 11 T88N R26W

PARCEL 19  
RUTH CONKLIN & ABBIE CONKLIN  
WARRANTY DEED & QCD  
RECORDED NOV. 1, 1976  
BOOK 94 PAGE 500

PARCEL 20  
RAY L. & MABEL CARD  
WARRANTY DEED  
RECORDED SEP. 21, 1976  
BOOK 94 PAGE 420

210

215

220  
2061

225

230

.090

PARCEL 18  
HENRY A. & CLARA BRIAN  
WARRANTY DEED  
RECORDED AUG. 13, 1976  
BOOK 94 PAGE 322

PARCEL 21

This sheet, FOR INFORMATION ONLY,  
is from District 1 ROW Stripmap

NE 1/4 SW 1/4  
SEC. 11 T88N R26W