

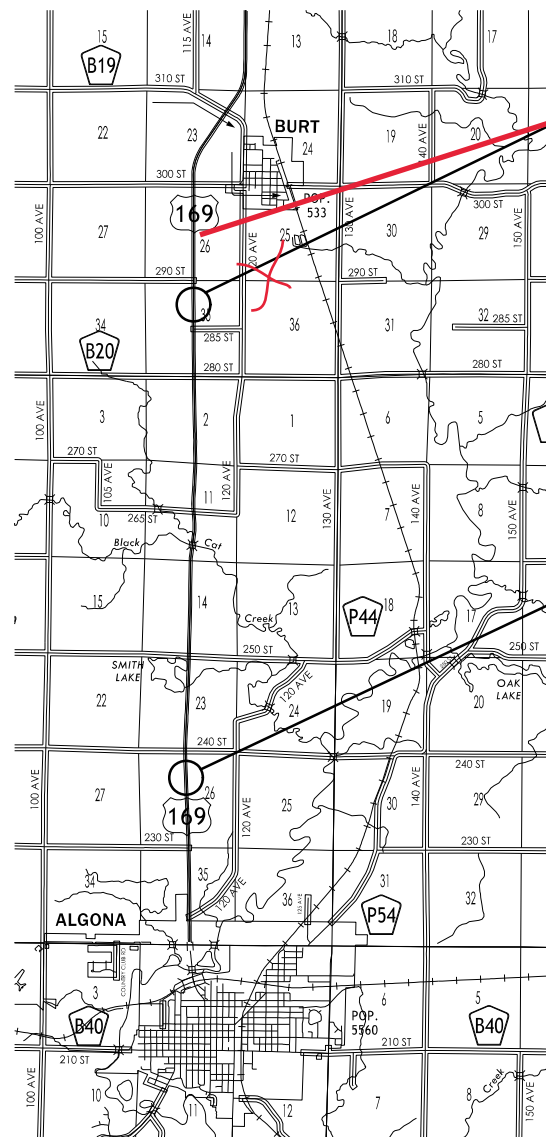
KOSSUTH COUNTY

Pipe Culverts  
NHSN-169-8(65)--2R-55

LETTING DATE  
May 2, 2023

July 18, 2023

Update location.  
Pipe north of 290th  
St not south



RP 206.4

R.P. 205.70  
PROJECT LOCATION #2

R.P. 200.75  
PROJECT LOCATION #1

FE August 13, 2021  
Attendees:  
Mary Kelly  
Duane Nie  
Jason Ruter  
Kevin Rauk  
Dwayne Berte

get traffic data from interactive traffic map.

20 -- AADT -- V.P.D.  
20 -- DHV -- V.P.H.  
TRUCKS -- %  
Total  
Design ESALs --



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM  
KOSSUTH COUNTY  
Pipe Culverts

0.1 mi S. of 240th Street and 0.6 mi N. of 290th Street

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

PROJECT IDENTIFICATION NUMBER

21-55-169-010

PROJECT NUMBER

NHSN-169-8(65)--2R-55

R.O.W. PROJECT NUMBER

INDEX OF SHEETS

105-3  
10-18-05

A.1	Title Sheet and Location Map
C.1-C.3	Estimate of Quantities, General Notes and Tabulations
D.1-D.3	As-Built Plan and Profile Sheet \ Plan Sheets
J.1	Traffic Control Sheet
U.1	Special Detail Sheet

NO PROJECT LENGTH SUMMARY

PRELIMINARY PLANS

Subject to change by final design.

D2 PLAN - August 13, 2021

# ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : Roadway Items

Item no.	Item Code	Item	Unit	Quantities		Estimate Reference Notes
				Estimated		
				Roadway Items		
1	2121-7425020	GRANULAR SHOULDERS, TYPE B	TON	0		Refer to special detail sheets U.1 and U.2 for additional information. Match existing granular shoulder width. XX' was used for quantity. Discretionary amount for granular shoulder repair.
2	2402-2723100	EXCAVATION, CLASS 23, FOR ROADWAY PIPE CULVERT	CY			
3	2416-0100018	APRONS, CONCRETE, 18 IN. DIA.	EACH			
4	2416-1263018	CULVERT, CONCRETE PIPE, 3000D, TRENCHLESS, 18 IN. DIA.	LF			
5	2507-3250005	ENGINEERING FABRIC	SY	0		Refer to Tabulation 100-23.
6	2526-8285000	CONSTRUCTION SURVEY	LS	0		
7	2528-8445110	TRAFFIC CONTROL	LS			Refer to Traffic Control Plan on Sheet _____. Refer to Traffic Control Plan on sheet C.2
8	2533-4980005	MOBILIZATION	LS			--
9	2602-0000320	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 20 IN. DIA.	LF	0		Refer to Tab. 100-19.
10	2602-0000351	REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE	LF			

Add bid item to repair longitudinal subdrain and subdrain outlet.

Add flagger bid item.

<b>100-1D</b> <b>10-18-05</b>	<b>PROJECT DESCRIPTION</b>
One 18" x 84 LF RCP and two aprons will be installed at each location by using trenchless construction. Location 1 is 0.1 miles south of 240th Street and Location 2 is 0.1 miles south of 290th Street. At each location, there are existing tile crossings with intakes which will need to be relocated, one each side of the roadway.	

<b>105-4</b> <b>10-18-11</b>	<b>STANDARD ROAD PLANS</b>	
The following Standard Road Plans apply to construction work on this project.		
Number	Date	Title
DR-101	04-18-17	Pipe Culvert (Bedding and Backfill)
DR-102	04-21-15	Pipe Culvert (Cover and Camber)
DR-103	04-21-15	Pipe Culvert (Installation Details)
DR-104	04-19-16	Depth of Cover Tables for Concrete and Corrugated Pipe
DR-121	10-17-17	Connected Pipe Joints
DR-201	04-21-20	Concrete Aprons
EC-204	10-19-21	Perimeter, Slope and Ditch Check Sediment Control Devices
EC-301	10-18-16	Rock Erosion Control (REC)
PM-110	04-21-20	Line Types
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	10-19-21	Work Within 15 ft of Traveled Way
TC-252	04-21-20	Routes Closed to Traffic

<b>108-11A</b> <b>08-01-08</b>	<b>UTILITIES</b>
<p>Ron Covert Public Works Director ALGONA (Sanitary and Storm Sewer) 112 W Call Street Algona, IA 50511 (515) 295-2411 Cell: (515) 320-1395 rcovert@ci.algona.ia.us</p> <p>Mary Montgomery Real Estate and Right of Way Representative II Alliant Energy (Fiber and Gas Transmission) PO Box 351 Cedar Rapids, IA 52406-9874 (319) 786-4768 MaryMontgomery@alliantenergy.com</p> <p>Mary Montgomery Real Estate and Right of Way Representative II Alliant Energy (Electric and Gas Distribution) PO Box 351 Cedar Rapids, IA 52406-9874 (319) 786-4768 MaryMontgomery@alliantenergy.com</p> <p>Aaron McCartan General Manager Titonka-Burt Communications (Fiber Transmission and Distribution, Cable TV, Communication tower, and Telephone) 247 Main St. N Titonka, IA 50480 (515) 928-2110 Cell: (712) 346-8700 Aaron@TBCtel.com</p> <p>Luke Niles Analyst II-Permitting Windstream Communications (Fiber Transmission, Cable TV) 4001 N. Rodney Parham Rd Little Rock, AR 72212 (501) 748-5893 Cell: (682) 554-6784 luke.t.niles@windstream.com</p> <p>Anthony Rich Manager OSP Engineering Windstream Communications (Telephone and Fiber Distribution) 641 West Street South Grinnell, IA 50112 (402) 706-9950 Cell: (402) 706-9950 anthony.rich@windstream.com</p>	

<b>232-3A</b> <b>10-19-21</b>	<b>EROSION CONTROL (RURAL SEEDING)</b>
Area to be seeded is estimated to be less than 1 acre. If the contractor determines the area exceeds 2 acres, notify the Engineer. Approved quantity in excess of 2 acres will be paid for as extra work according to Article 1109.03,B of the Standard Specifications.	
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.	

<b>232-11</b> <b>10-19-21</b>	<b>EROSION CONTROL (STABILIZING CROP SEEDING)</b>
Area to be seeded is estimated to be less than 1 acre. If the contractor determines the area exceeds 2 acres, notify the Engineer. Approved quantity in excess of 2 acres will be paid for as extra work according to Article 1109.03,B of the Standard Specifications.	
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.	

<b>262-6</b> <b>10-18-05</b>	<b>UTILITIES (NOT A POINT 25 PROJECT)</b>
This is NOT a POINT 25 project and is not subject to the provisions of IAC 761-115.25.	

**EXISTING PAVEMENT**

No.	Location					Year	Type	Project Number	Surface		Base		Subbase		Removal		Coarse Aggregate			Reinforcement	Remarks	
	County	Route	Dir. of Travel	Begin Ref. Loc. Sign	End Ref. Loc. Sign				Type	Depth	Type	Depth	Type	Depth	Type	Depth	Source	Type	Durability Class			Type
	55	169	NB/SB	188.03	188.77	1972		F-169-8(3)--20-55	PCC	9												
	55	169	NB/SB	188.03	188.77	2012	W	NHSX-169-8(27)--3H-55	HMA	2	HMA	2	HMA	2								
	55	169	NB/SB	188.03	188.77	2012		NHSX-169-8(27)--3H-55	HMA	2												

**DRAINAGE STRUCTURE BY ROAD CONTRACTOR**

Length of unclassified pipe calculated is based on using Reinforced Concrete Pipe.

\* Not a bid item

① Diameter or equivalent diameter

② UNCL = Unclassified Pipe CMP = Corrugated Metal Pipe RCP = Reinforced Concrete Pipe LCP = Arch or Elliptical Low Clearance Pipe SARC = Steel Arch Pipe

③ Backfill according to DR-101

Drainage Area ACRE	Location	Type	Size ① IN	Kind Of Pipe ②	Length New Const. LF	Bedding Class	Design Cover (H) FT	Camber* (DR-102) FT	Apron No.		Apron Guard* (DR-213) No.	Elbow* (DR-141) No.	Diaphragm* (DR-501) No.	Tee Section* (DR-142) No.	"D" Section* (DR-141) No.	Reducer* No.	'C' Connections* (DR-122) Type No.	Connected Pipe Joint* (DR-121) Type	4" Perforated Subdrain* FT	Flow Line Elevations				Dimensions Lin. Ft.		Skew Ahead Degrees		Dike			Class 20 CY	Flowable Mortar CY	Floodable* Backfill (A) CY	Porous* Backfill (B) CY	Flooded Backfill (A+B) CY	Remarks				
									IN	OUT										Lt.	Rt.	Other	Other	Lt.	Rt.	Lt.	Rt.	Lt.	Rt.	Lt.							Rt.	Location Station	Top Elevation	Type
									Total	Extensions										Rt.		Location Station		Top Elevation		Type														

**ROCK EROSION CONTROL**

Refer to EC-301 and Detail 570-8

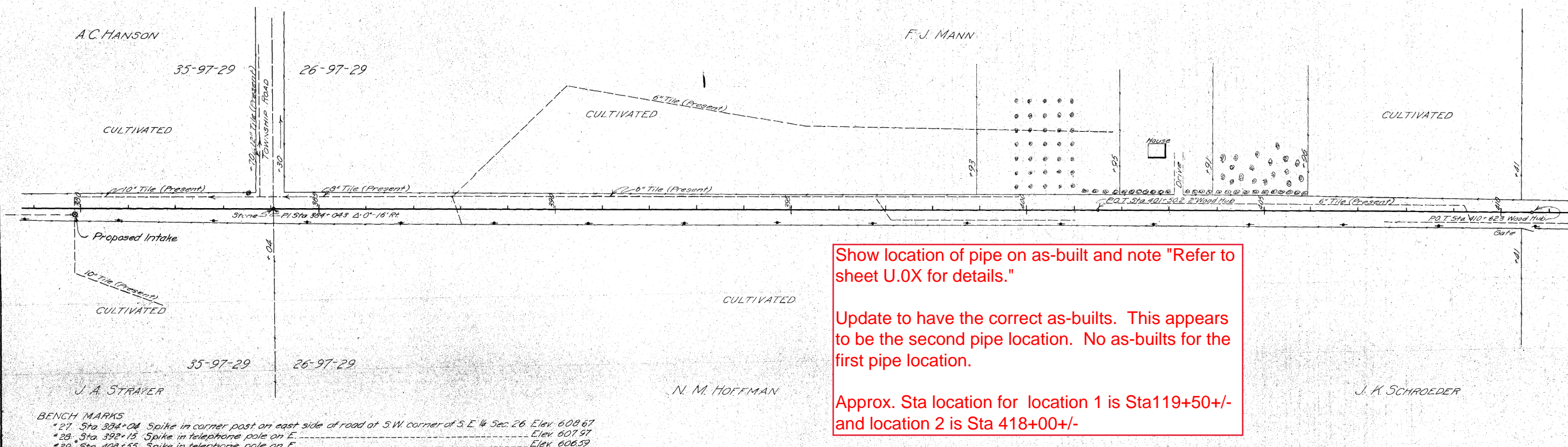
Location				Rock Erosion Control (REC)					Material Bid Quantities			Remarks		
Road Identification	Begin Station	End Station	Side Lt./Rt.	L FT	W FT	Type 1	Type 2	Type 3	Type 4	Type 5	Eng. Fabric		Class E Revetment	Erosion Stone
						Rock Ditch Check	Rock Ditch	Rock Flume	Rock Splash Basin	Rock Slope Protection	SY		TON	TON

**PERIMETER, SLOPE AND DITCH CHECK SEDIMENT CONTROL DEVICES**

Possible Standards: EC-204

Location			Perimeter and Slope			Ditch Check		Remarks
Begin Station	End Station	Side	Length of Installation			Length of Installation		
			9 inch Dia	12 inch Dia	20 inch Dia	12 inch Dia	20 inch Dia	
			LF	LF	LF	LF	LF	





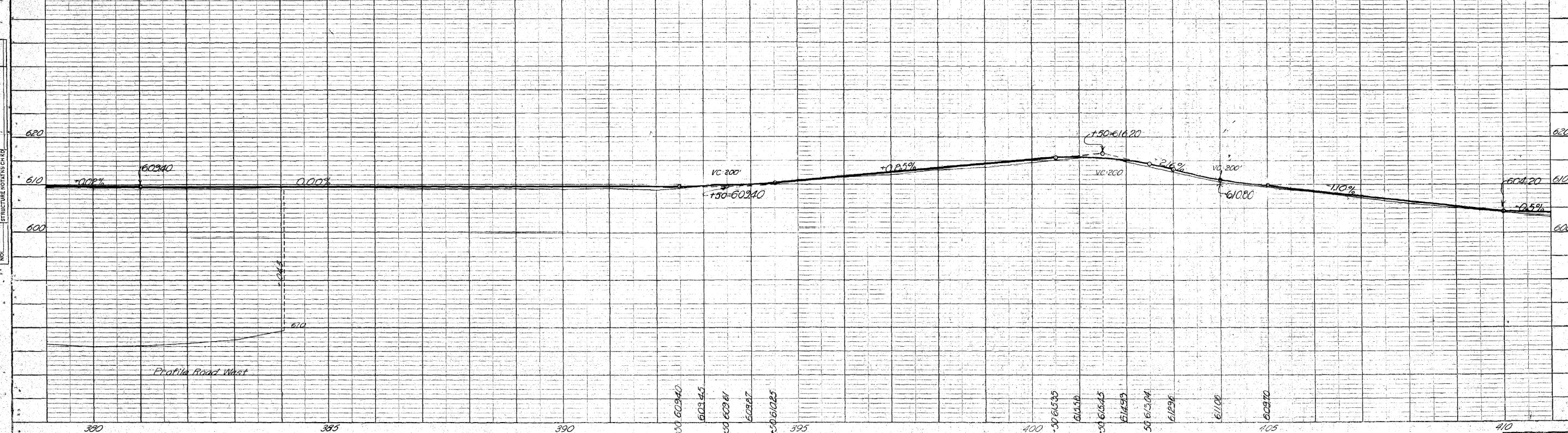
Show location of pipe on as-built and note "Refer to sheet U.0X for details."

Update to have the correct as-builts. This appears to be the second pipe location. No as-builts for the first pipe location.

Approx. Sta location for location 1 is Sta 119+50+/- and location 2 is Sta 418+00+/-

BENCH MARKS  
 \* 27 Sta 384+04 Spike in corner post on east side of road at SW corner of S.E. 1/4 Sec. 26 Elev. 608.67  
 \* 28 Sta 392+15 Spike in telephone pole on E Elev. 607.97  
 \* 29 Sta 408+55 Spike in telephone pole on E Elev. 606.59

Cut	28	31	30	24	26	37	37	30	22	22	15	15	11	20	33	30	31	19	17	19	15	30	35	26	11	18	26	15	07	22	30	22
Fill	20	17	18	22	20	15	15	18	28	33	39	34	43	26	06	09	07	13	18	24	26	18	07	15	28	26	15	22	20	07	04	07
Haul	C=127	F+15%=112		0.24						C=F+15%=215																						
	W=15		22.0								0.15	19.20					18.13	7.0							25.9	7.6						



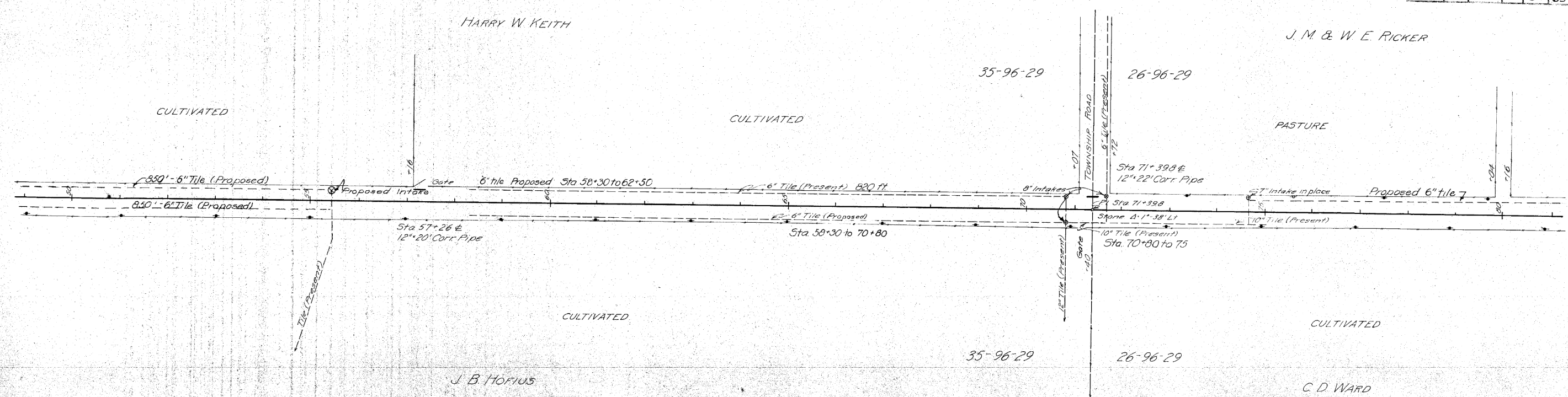
AS-BUILT PLANS, FOR INFORMATION ONLY



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	Iowa	111		5	69

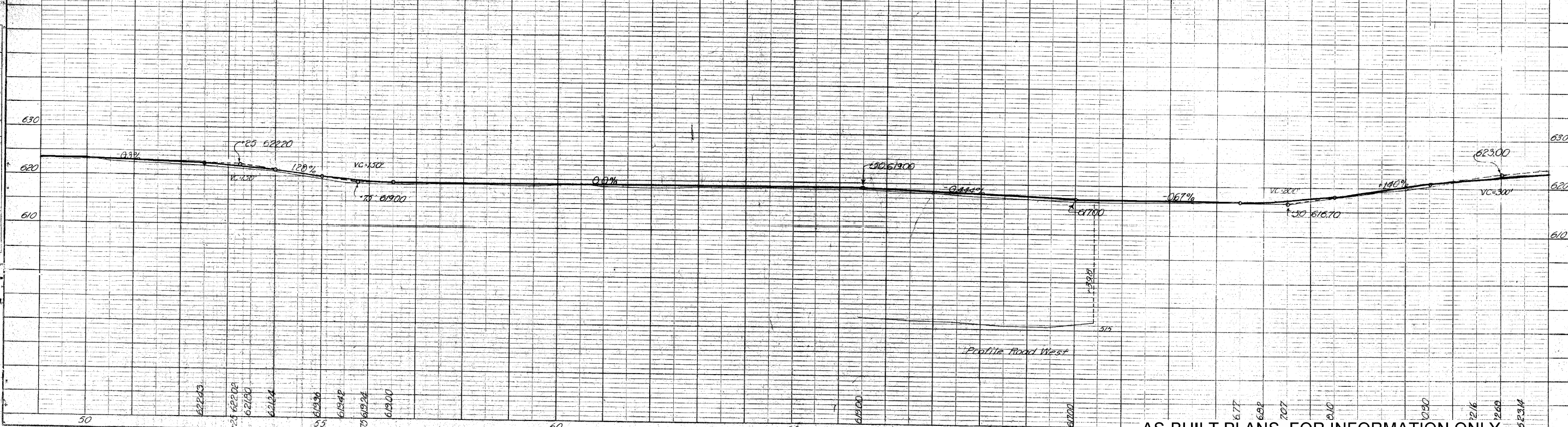
DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY

DATE	BY
DATE	BY
DATE	BY
DATE	BY
DATE	BY



**BENCH MARKS**  
 \*10 Sta 57+00 Spike in telephone pole E of & Elev. 616.61  
 \*11 Sta 71+40 Gas pipe 33' E of stone at S.W. corner S.E. 1/4 Sec. 26 Elev. 614.91  
 \*12 Sta 71+40 Top of corner stone at S.W. corner S.E. 1/4 Sec. 26 Elev. 616.34

Cut CY	40	11	00	13	24	14	15	26	26	27	27	33	19	14	20	19	15	13	17	15	14	13	17	20	20	20	17	09	15	20	11
Fill CY	12	26	20	15	06	20	20	09	09	11	09	07	19	19	07	07	13	15	13	20	20	19	12	19	15	09	18	14	12	09	22
Haul																															



AS-BUILT PLANS, FOR INFORMATION ONLY

**511 TRAVEL RESTRICTIONS**

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
			None									

111-01  
04-17-12

**COORDINATED OPERATIONS**

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
NHSN-018-3(114)--2R-55	Pipe Jacking-- Tied Project
	Pipe Culvert

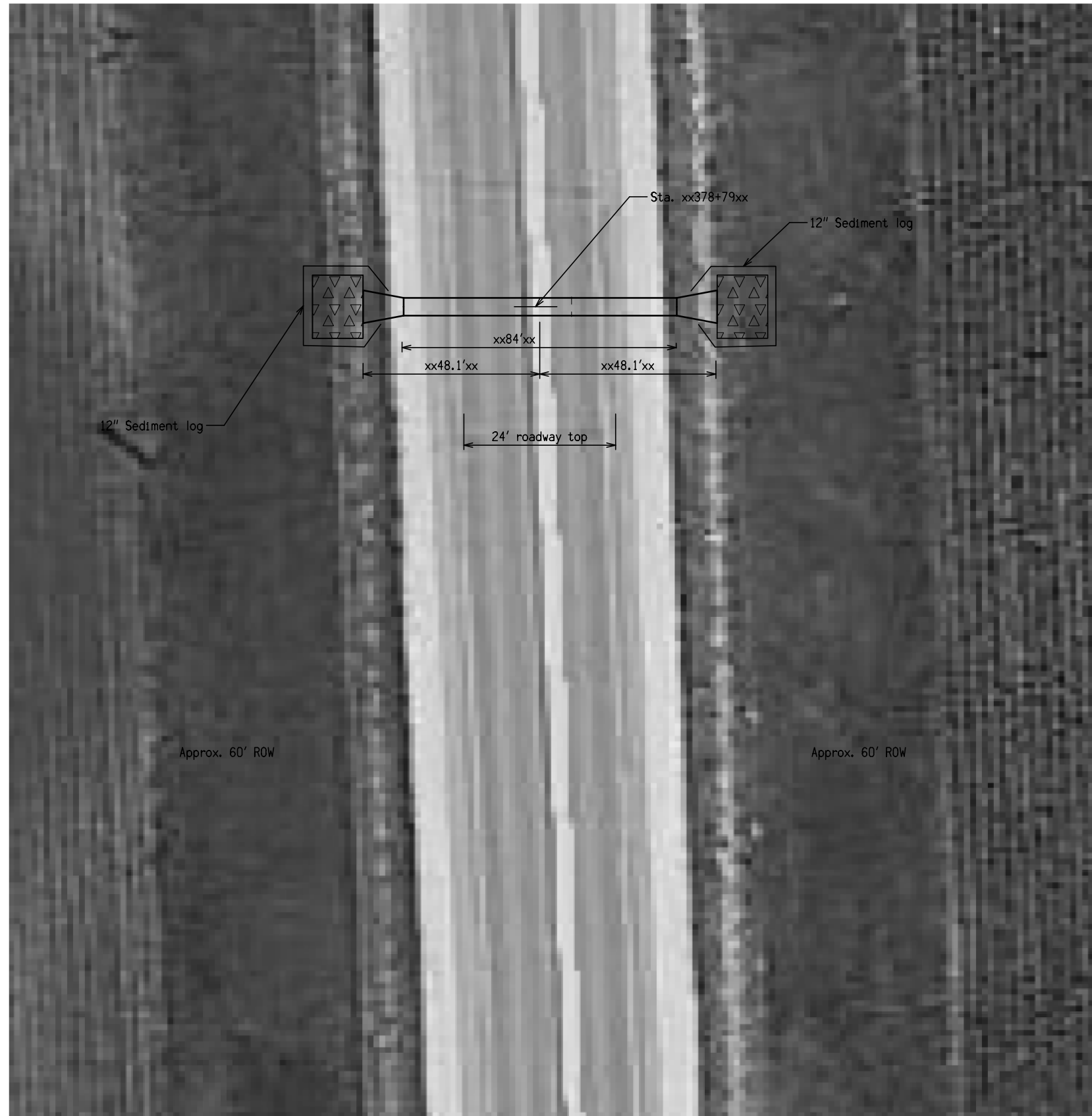
108-23A  
08-01-08

**TRAFFIC CONTROL PLAN**

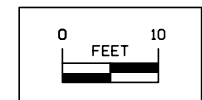
Northbound and Southbound US 169 lanes will be open to traffic during construction.

TC-213 may be used for intermittent lane closures as needed.

Note: All work to be completed within ROW.  
No equipment, materials or personnel shall cross the ROW line.



Sta. xxx+xx  
 D.A. = 100 Acres  
 Install xx" x xx' RCP w/ aprons  
 Flowline Lt. = xxxx.xx'  
 Flowline Rt. = xxxx.xx'



Notes: Contractor shall restore and shape shoulders to existing conditions and grade foreslopes per Std. DR-103.

### TYPICAL - POST CULVERT CONSTRUCTION

### INSTALL NEW CULVERT @ STA 378+79

FILE NO. 98765	ENGLISH	DESIGN TEAM Iowa DOT	KOSSUTH COUNTY	PROJECT NUMBER NHSN-169-8(65)-2R-55	SHEET NUMBER U.1
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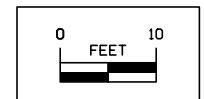


Benchmark: xxdescriptionxx - Elevation = xxxx.xx'

Note: All work to be completed within ROW.  
No equipment, materials or personnel shall cross the ROW line.



Sta. xxx+xx  
D.A. = 100 Acres  
Install xx" x xx' RCP w/ aprons  
Flowline Lt. = xxxx.xx'  
Flowline Rt. = xxxx.xx'



Notes: Contractor shall restore and shape shoulders to existing conditions and grade foreslopes per Std. DR-103.

### TYPICAL - POST CULVERT CONSTRUCTION

**INSTALL NEW CULVERT @ STA XX378+79XX**