

**DECATUR CO.**  
**PIPE CULVERTS**  
**STPN-069-1(54)--2J-27**

LETTING DATE  
 07-21-2020



**Highway Division**

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM  
**DECATUR COUNTY**  
 PIPE CULVERTS

1.6 mi S of Co Rd J66

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

12

PROJECT IDENTIFICATION NUMBER

19-27-069-010

PROJECT NUMBER

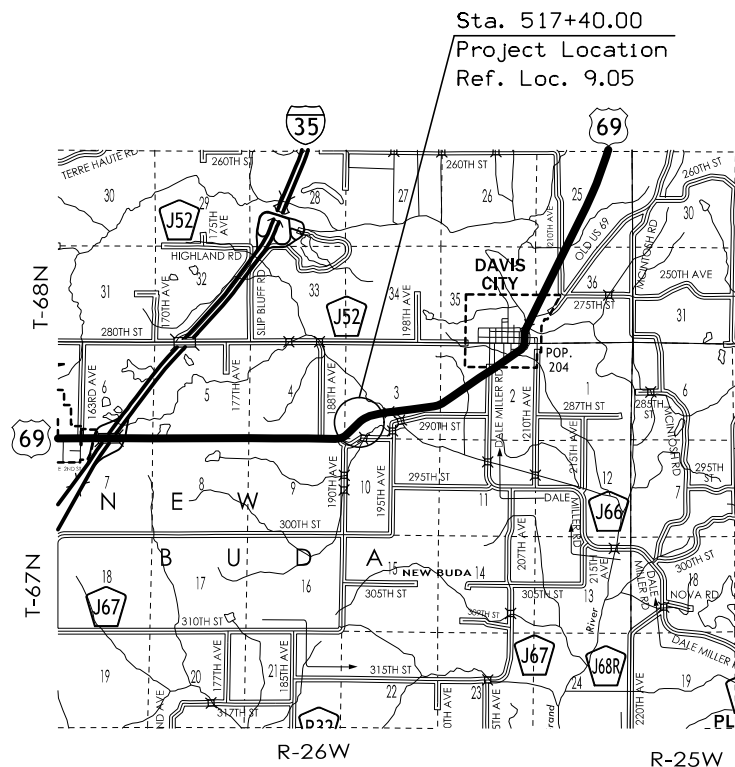
STPN-069-1(54)--2J-27

R.O.W. PROJECT NUMBER

STPN-069-1(55)--2J-27

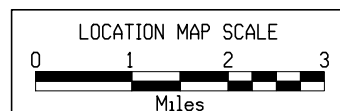
**INDEX OF SHEETS**

No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
A.1	Title Sheet
A.1	Location Map Sheet
<b>B Sheets</b>	<b>Typical Cross Sections and Details</b>
B.1 - 2	Typical Cross Sections and Details
<b>D Sheets</b>	<b>Mainline Plan and Profile Sheets</b>
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	US 69
<b>G Sheets</b>	<b>Survey Sheets</b>
G.1	Reference Ties and Bench Marks
G.2	Point Control Vicinity Map
G.3	Horizontal Control Tab. & Super for all Alignments
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
J.1	Traffic Control Plan
J.1	511 Travel Restrictions
J.1	Coordinated Operations
<b>V Sheets</b>	<b>Bridge and Culvert Situation Plans</b>
* V.1	Bridge and Culvert Situation Plans
<b>W Sheets</b>	<b>Mainline Cross Sections</b>
W.1 - 2	Mainline Cross Sections
	* Color Plan Sheets



**DESIGN DATA RURAL**

2017 AADT	1140	V.P.D.
20-- AADT	--	V.P.D.
20-- DHV	--	V.P.H.
TRUCKS	8 %	
Total Design ESALs	--	



**INDEX OF SEALS**

SHEET NO.	NAME	TYPE
A.1	X	Primary Signature Block
X	X	X

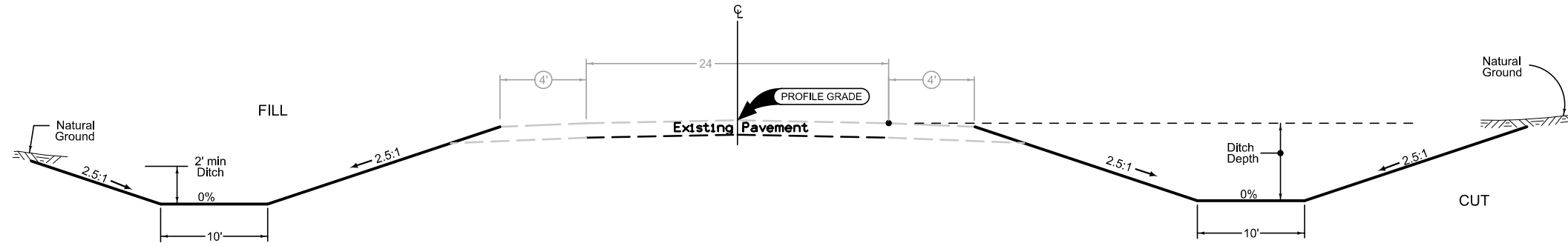
**PRELIMINARY PLANS**

Subject to change by final design.

**D5 PLAN - Date: 8-20-19**

**Foreslope/Ditching**

2_G_	
10-21-14	
STATION TO STATION	
516+67.00	518+02.00

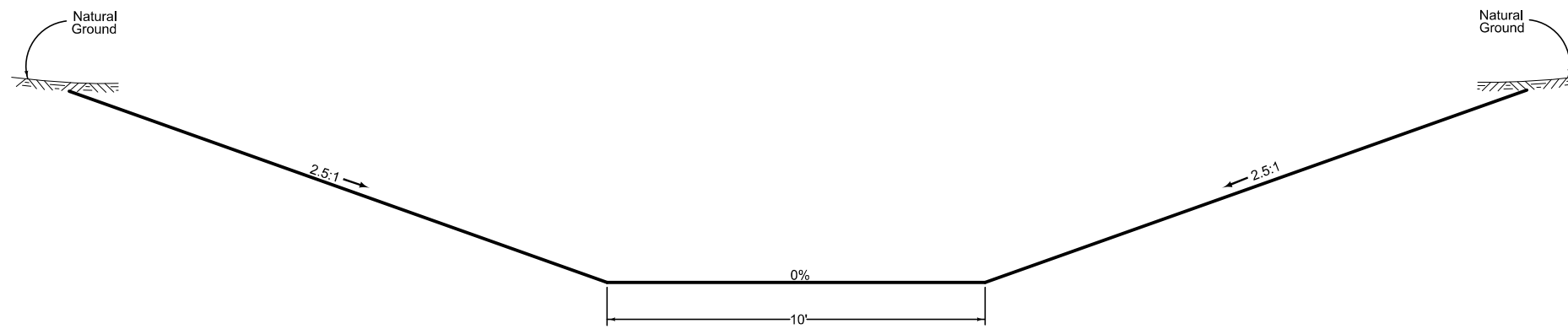


**Foreslope/Ditching**

2_G_	
10-21-14	
STATION TO STATION	
516+67.00	518+02.00

**2 LANE GRADING**

**US 69**



OPEN CHANNEL GRADING

US 69

### SURVEY SYMBOLS

- BNK Stream Bank
- D Centerline Draw or Stream (Down)
- BL Topo Breakline
- EW Edge of Water
- DU Centerline Draw or Stream (Up)
- CON Concrete or A/C Slab
- CP Control Point
- PRO Profile Shot
- PIP Pipe Culvert
- PLG Location of General Photo
- SOP Size of Pipe or Culvert
- ENU Edge Unpaved Entrance & Parking
- ENT Centerline BL of Entrance
- UE Utility Elevation
- SIGN SI Sign
- TA Tower Anchor
- OUT Tile Outlet
- TILE TIL Tile Line
- FW Wire Fence
- MIS Miscellaneous
- PPA Power Pole Co. 1
- GU Gutter In Front of Curb
- CU Back of Curb
- TLNL Tree Line Left
- WL1D Water Line Co. 1 - Quality D
- FENO FENO Monument
- BM Bench Mark
- TLNR Tree Line Right
- FO1D Fiber Optic Co. 1 - Quality D
- TPD Telephone Pedestal

### UTILITY LEGEND

- Southern Iowa Rural Water Associates  
Dan McIntosh  
1391 190th Street  
Creston, Iowa 50801  
(641) 782-9265
- Grand River Mutual Telephone  
Dirk Schwartzkopf  
1001 Kentucky  
Princeton, MO 64673  
(660) 748-2200
- Alliant Energy  
Heather Dee  
200 1st St. SE  
Cedar Rapids, IA 52401  
(319) 786-8196

### PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)	Existing Utilities
SHADING	Design Color No.	
Yellow	(4)	Highlight for Critical Notes or Features
Red	(3)	Delineates Restricted Areas
Lavender	(9)	Temporary Pavement Shading
Gray, Light	(48)	Proposed Pavement Shading
Gray, Med	(80)	Proposed Granular Shading
Gray, Dark	(112)	Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)	Grading Shading
Tan	(8)	Proposed Sidewalk Shading
Blue, Light	(230)	Proposed Sidewalk Landing Shading
Pink	(11)	Proposed Sidewalk Ramp Shading

### PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design Color No.	
Green	(2)	Existing Ground Line Profile
Blue	(1)	Proposed Profile and Annotation
Magenta	(5)	Existing Utilities
Blue, Light	(230)	Proposed Ditch Grades, Left
Black	(0)	Proposed Ditch Grades, Median
Rust	(14)	Proposed Ditch Grades, Right

- Reference Point
- Station
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

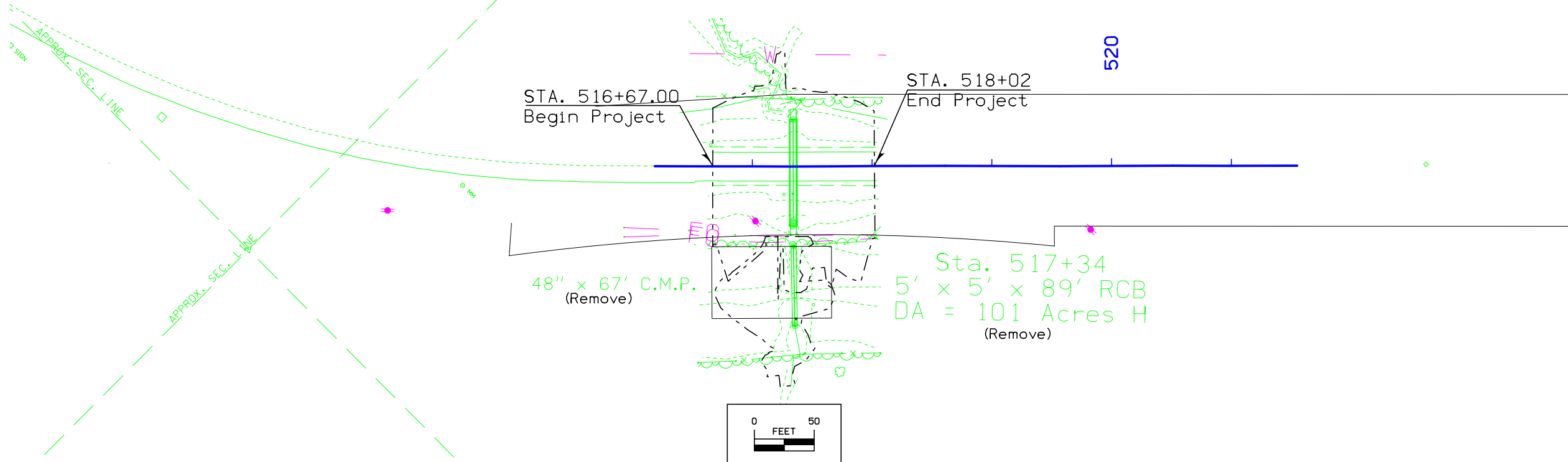
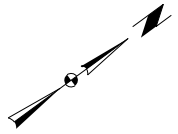
### RIGHT-OF-WAY LEGEND

- Proposed Right-of-Way
- Existing Right of Way
- Existing and Proposed Right-of-Way
- Easement and Existing Right-of-Way
- Easement (Temporary)
- Easement
- Access Control
- Property Line

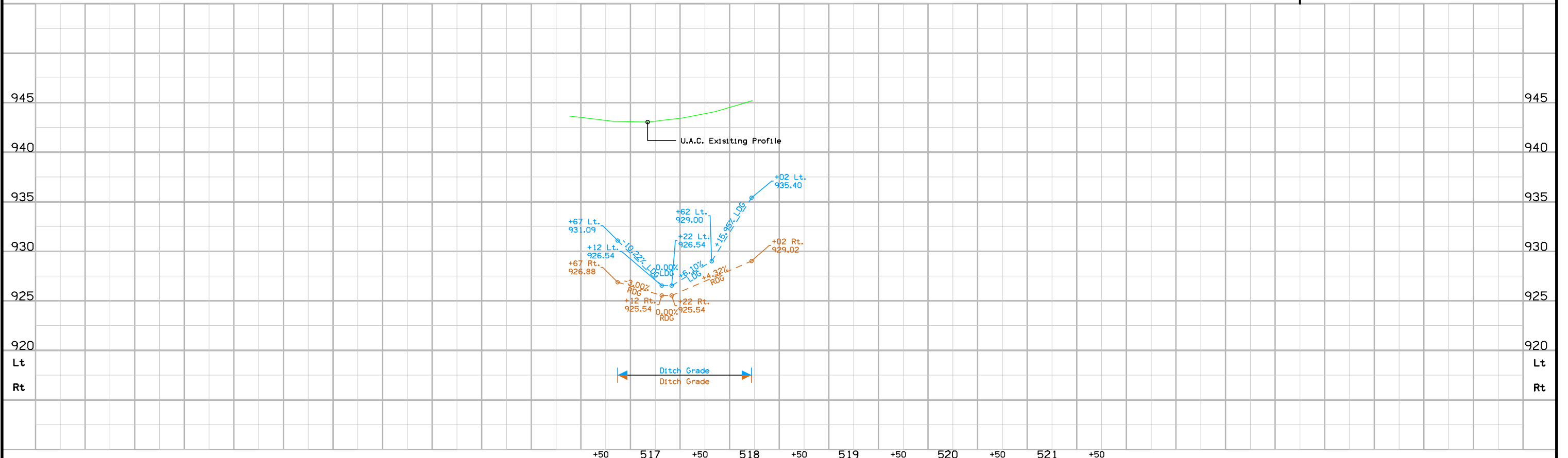
## PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET

(COVERS SHEET SERIES D, E, F, & K)

New Buda Twp.  
T67N R26W  
Sec. 3



US 69



## Survey Information

Decatur County  
STPN-069-1(52)--2J-27  
1.8 mi S of Co Rd J66  
Ditch Improvement  
PIN 18-27-069-020  
Sap-0816

### General Information

Measurement units for this survey are US survey feet. This survey is for ditch improvement, 1.8 mi S of Co Rd J66 on US Hwy. 69 in Decatur County. Project datum and control information is provided by Design Survey Office. This project is a full field survey.

### Vertical Control

Vertical Control was established on 2 feno monuments on this project by six hour static sessions. Vertical datum for this survey is NAVD88 (Computed using Geoid12b). GRS80 Ellipsoidal Height was computed at project Pts. Feno 5 & Feno 6. Vertical control was verified with Pt. # Feno 3 from Project No. IMX-035-1(158)6- -02-27. Vertical control was checked with IARTN checks.

This survey observed 1 As-Built plan bench marks to compare to local ground control:

BM 42 Project P 588 Elev. 1017.30  
Survey Elev. = 1019.89

### Horizontal Control

The project coordinate system for this survey is Iowa RCS Zone 12 (U.S. Survey Feet). This survey control is relative to IARTN reference stations. IARTN Reference Station coordinates are relative to the National Reference Station network datum: NAD83 (2011). Coordinates were determined by conducting a six hour static observations. Horizontal control was verified with Pt. # Feno 3 from Project No. IMX-035-1(158)6- -02-27. Horizontal control was checked with IARTN checks.

Point Name	Northing	Easting	Elevation	Description
Feno 3	6104352.63	22470865.35	970.50	FENO
Feno 5	6093271.30	22472642.87	964.92	FENO
Feno 6	6093328.87	22473834.01	962.23	FENO

### Alignment Information

The horizontal alignment for this survey is a retrace of As-built Plans No. P 588. Survey stationing was equated to the plan PI at Sta. 53+73.8 and run back and ahead with an equation throughout the survey.

Survey stationing relates to as built plan stationing as follows:

PI Sta. 488+77.5 As-built Plans Project No. P 588 =  
Survey PI Sta. 488+76.06

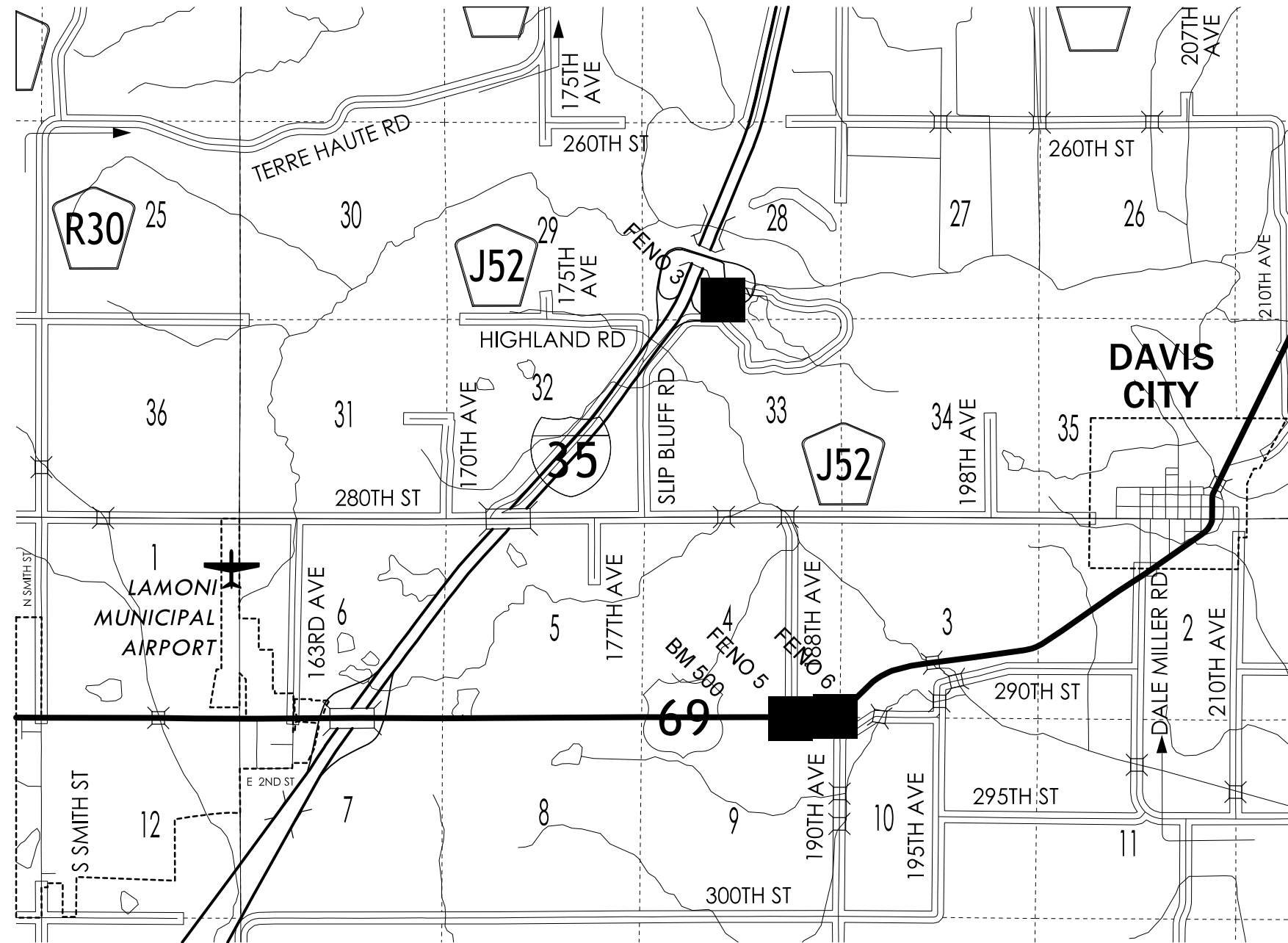
PI Sta. 501+90.5 Project No. P 588 =  
Survey PI Sta. 501+91.50

PI Sta. 513+73.8 Project No. P 588 =  
Survey PI Sta. 513+73.8

PT Sta. 517+034.11 Back =  
Sta. 515+66.70 Ahead

### CONTROL POINT VICINITY MAP

This map is a guide to the vicinity of the primary project control points  
 Primary control is for use with RTK base stations and for RTN validation.  
 Future surveys will use primary project control to establish temporary control as needed for construction or other surveying applications.



HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

1a. Regional Coordinate System Zone 12

Coordinate listing from next sheet will be used with 1aRTN for monument recovery. No other reference ties are given.

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

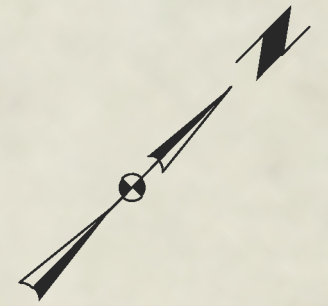
Ia. Regional Coordinate System Zone 12

Point Name	Y	X	Z	Feature Definition-Description
FENO 3	6104352.627	22470865.35	970.5	FENO SET FENO MONU_AT REST AREA_85.5' WEST INLET APRON_123' SOUTHWEST TOP OUTLET PIPE_89' SOUTHEAST I-BEAM SIGN POST_69' SOUTH OF CENTER RAMP C
FENO 5	6093271.299	22472642.87	964.924	FENO SET FENO MONUMENT_2.18 MILES E OF INTERS. NB I-35 & US HWY 69_71? ENTRANCE COUNTY ACCESS TO HUNTING_67' SE OF CENTER FACE HDWL 5' X 4' RCB_29' S OF US HWY 69
FENO 6	6093328.869	22473834.01	962.226	FENO SET FENO MONUMENT_2.41 MILES E OF INTERS. NB I-35 & US HWY 69_95' E OF INTERS. US HWY 69 & 190TH AVE_57' NW OF POWER POLE_29' S OF US HWY 69
500	6093284.886	22471348.94	1019.89	BM FD X HDWL 18" CAST IRON PIPE_BM 42 AB PLANS PROJECT # P 588

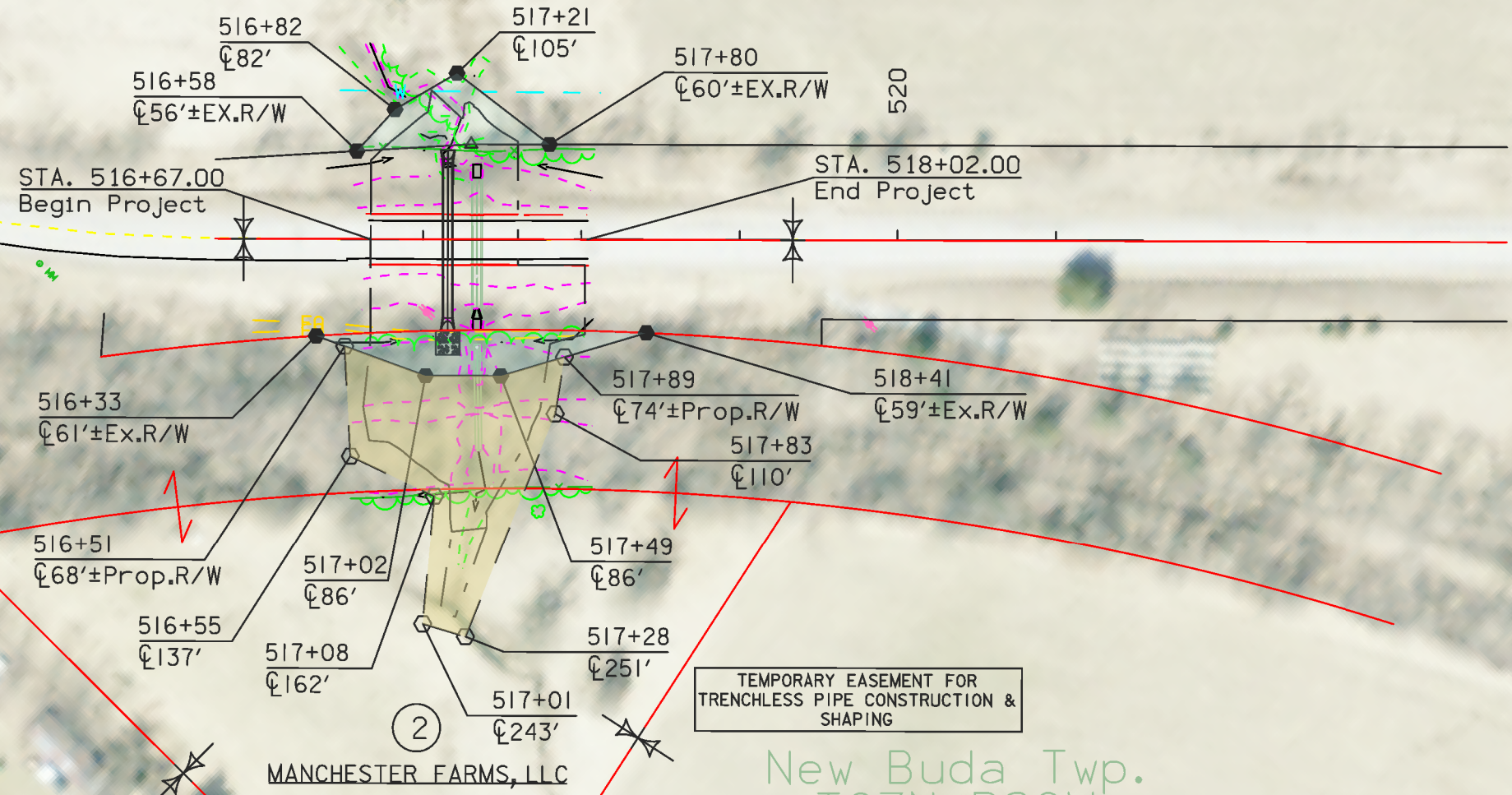




NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.

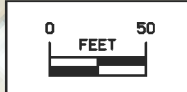


DOUGLAS J. FOSTER &  
TERI J. NIXON-FOSTER



TEMPORARY EASEMENT FOR  
TRENCHLESS PIPE CONSTRUCTION &  
SHAPING

New Buda Twp.  
T67N R26W  
Sec. 3



<b>Right of Way Design Information</b>	
<b>THIS SHEET INCLUDED FOR INFORMATION ONLY</b>	
ROW Team: LARSON/CUVA	
ROW #: STPN-069-1(55)--2J-27	
Plan Date: 10-15-2019	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

108-23A  
08-01-08

### TRAFFIC CONTROL PLAN

US 69 traffic shall be maintained at all times.

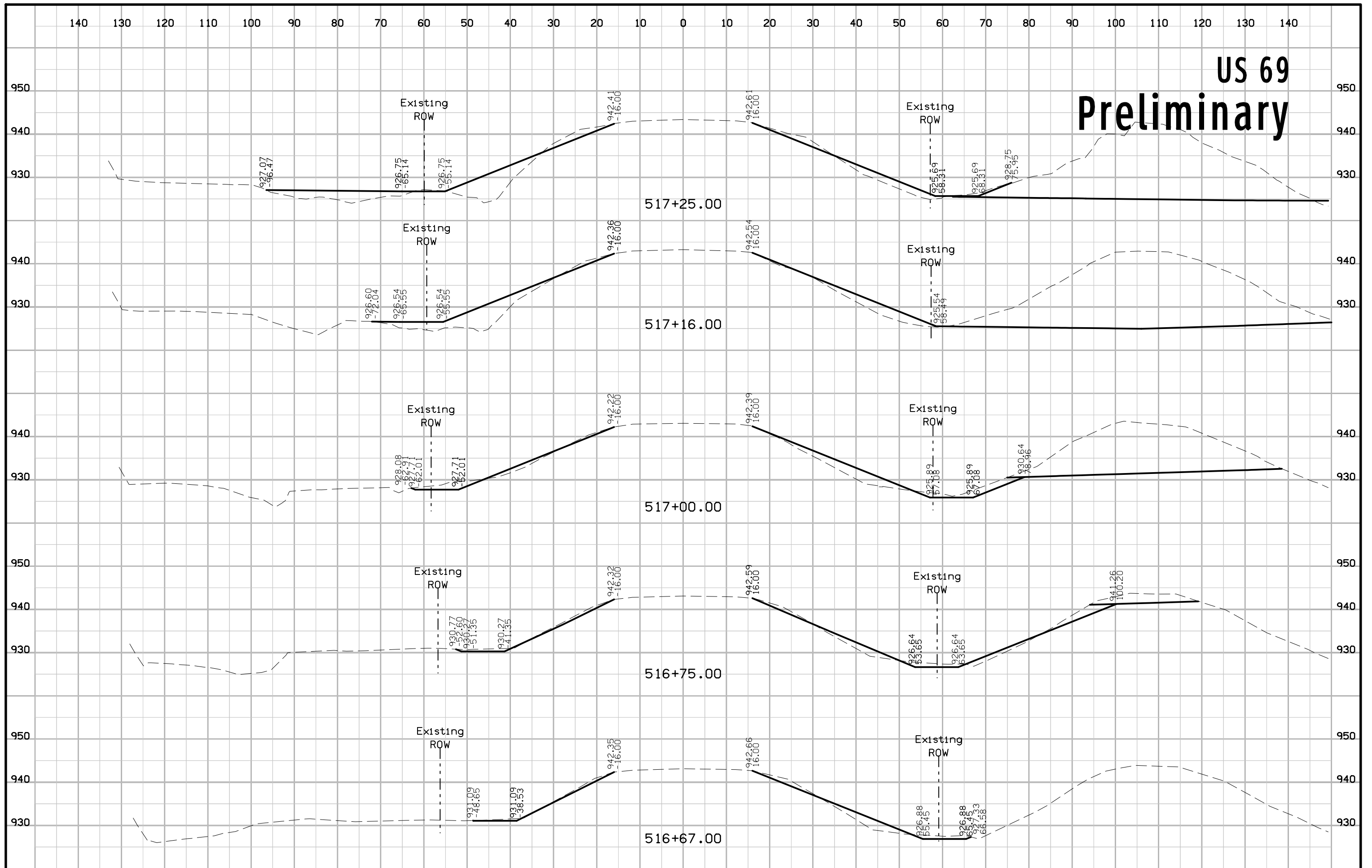
111-01  
04-17-12

### 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
STPN-069-1(50)--2J-27	Revetment
STPN-069-1(52)--2J-27	Ditch Improvement

# US 69 Preliminary



# US 69 Preliminary

