

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	S. ABUT.	PIER	N. ABUT.	SUPER.	TOTAL
203.0210.S	ABATEMENT OF ASBESTOS CONTAINING MATERIAL B-10-0051	LS	----	----	----	----	1
203.0600.S	REMOVING OLD STRUCTURE OVER WATERWAY WITH MINIMAL DEBRIS STATION 105+28	LS	----	----	----	----	1
206.1000	EXCAVATION FOR STRUCTURES BRIDGES B-10-0229	LS	----	----	----	----	200
210.0100	BACKFILL STRUCTURE	CY	100	88	100	168	280
502.0100	CONCRETE MASONRY BRIDGES	CT	37	37	37	305	345
502.3200	PROTECTIVE SURFACE TREATMENT	SY	2,360	1,790	2,360	---	6,510
505.0405	BAR STEEL REINFORCEMENT HS BRIDGES	LB	1,850	---	1,850	29,400	33,100
505.0605	BAR STEEL REINFORCEMENT HS COATED BRIDGES	LB	11	---	11	---	22
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	SY	6	8	6	---	20
550.0500	PILE POINTS	EACH	300	440	300	---	1,040
550.1100	PIILING STEEL HP 10-INCH x 42 LB	LF	50	---	50	---	100
606.0300	RIPRAP HEAVY	CT	80	---	80	---	160
612.0406	PIPE UNDERDRAIN WRAPPED 6-INCH	LF	2	---	2	---	4
614.0150	ANCHOR ASSEMBLIES FOR STEEL PLATE BEAM GUARD	EACH	100	---	110	---	210
645.0120	GEOTEXTILE FABRIC TYPE HR	SY	---	---	---	---	14,500
SPV	Stainless Steel	lbs	---	---	---	---	---
	NON-BID ITEMS	SIZE	----	----	----	----	1/2" B. Y.
	FILLER						

width Factor = $\frac{40.9}{39.9} = 1.05$
length Factor = $\frac{25}{60.75} = .36$

Area Factor = $(.36)(1.05) = .38$

(*) = structure approach slabs

Riprap $120 \times 22 \times 2 \div 27 = 195$ we 200
Fabric $124 \times 26 \div 9 = 359$ 360

Note: Structure approach slabs exceed deck area

Not required, this structure under 3500 Design ADJ

336

10/31/15

C-55-39

$\rightarrow (2357)(1.05)(168)(38) + 112 = 254 \text{ c.y.}$
 $\rightarrow (345)(38) + (2)(20)(45) = 310 \text{ c.y.}$
 $\rightarrow 1.05 = 6836$
 $\rightarrow (1850)(2)(1.05) + (29400)(38) + 18,400 = 33,100$
 $\rightarrow 22 \times 1.05 = 23$
 $\rightarrow 72 \times 1.05 = 75.6$
 $\rightarrow 600 \times 1.05 = 630$

Project 7040-03-75 , Category 0020

203.0210.S Abatement Asbestos Material
(structure)01. B-10-0051

203.0210 S Abatement Asbestos Material (structure)01. B-10-0051											
Item No.	Description	Units	Authorized Quantity	Cumulative Quantity Paid To Date	Unit Price	Amount Paid To Date	Cumulative Total Qty Placed	%Complete	Stockpile Material Allowance	Quantity This Estimate	Amount This Estimate
Project 7040-03-75 , Category 0020											
203.0600.S	Rem Old Str Ovr Water-Min-Debris (sta)02. 105+28	LS	1	1.00	15,000 25,000.00	15,000 \$25,000.00	1.00	100.00%	\$0.00	0.00	\$0.00
206.1000	Exc For Structure Bridges (structure)02. B-10-0229	LS	1	1.00	14,000.00	\$14,000.00	1.00	100.00%	\$0.00	0.00	\$0.00
210.0100	Backfill StructureBackfill Structure	CY	200	159.00	18.00	\$2,862.00	159.00	79.50%	\$0.00	0.00	\$0.00
502.0100	Concrete Masonry BridgesConcrete Masonry Bridges	CY	280	254 280.00	6.50 442.00	1,651.00 \$123,760.00	92300	100.00%	\$0.00	0.00	\$0.00
502.3200	Protective Surface TreatmentProtective Surface Treatment	SY	345	340 349.00	3.00	930 \$1,047.00	349.00	101.16%	\$0.00	0.00	\$0.00
505.0405	Bar Steel Reinforcement Hs BridgesBar Steel Reinforcement Hs Bridges	LB	6510	6507.00 6530	1.23	8,003.61 \$8,003.61	6,507.00	99.95%	\$0.00	0.00	\$0.00
505.0605	Bar Steel Reinf Hs Coated BridgeBar Steel Reinf Hs Coated Bridge	LB	33100	33146.00 33354.7	1.23	40,763.45 \$40,763.45	19,520.11	100.05%	\$0.00	0.00	\$0.00
516.0500	Rubberized Membrane WaterproofingRubberized Membrane Waterproofing	SY	22	14.75 23	40.00	590.00 \$590.00	14.75	67.05%	\$0.00	0.00	\$0.00
550.0500	Pile PointsPile Points	EACH	20	20.00 18	100.00	2,000.00 \$2,000.00	20.00	100.00%	\$0.00	0.00	\$0.00
550.1100	Piling Steel Hp 10-inch X 42 LbPiling Steel Hp 10-inch X 42 Lb	LF	1040	938.60 1090	39.00	36,603.40 \$36,603.40	933.60	89.77%	\$0.00	0.00	\$0.00
606.0300	Riprap HeavyRiprap Heavy	CY	100	131.00 200	45.00 50	5,895.00 \$5,895.00	131.00	131.00%	\$0.00	0.00	\$0.00
612.0406	Pipe Underdrain Wrapped 6-inchPipe Underdrain Wrapped 6-inch	LF	160	148.00	6.00	948.00 \$948.00	148.00	92.50%	\$0.00	0.00	\$0.00
614.0150	Anchor Assemblies Stl Plate Beam GuardAnchor Assemblies Stl Plate Beam Guard	EACH	4	4.00	50.00	200.00 \$200.00	4.00	100.00%	\$0.00	0.00	\$0.00

Estimate Detail for 20140610012 ; Estimate 0009 ; Pay Period Date 10/08/15

Item No.	Description	Units	Authorized Quantity	Cumulative Quantity Paid To Date	Unit Price	Amount Paid To Date	Cumulative Total Qty Placed	%Complete	Stockpile Material Allowance	Quantity This Estimate	Amount This Estimate
Project 7040-03-75 , Category 0020											
628.6005	Turbidity-Barrier-Turbidity-Barrier	SY	50	49.00	37.50	\$1,852.20	49.00	98.00%	\$0.00	0.00	\$0.00
645.0120	Geotextile Fabric Type HrGeotextile Fabric Type Hr	SY	210	265.00 <u>360</u>	3.25	1170 <u>-584.25</u>	265.00	126.19%	\$0.00	0.00	\$0.00
650.6500	Construction Staking Structure Layout02. B-10-0229	LS	1	1.00	1,000.00	\$1,000.00	1.00	100.00%	\$0.00	0.00	\$0.00
715.0502	Incentive Strength Conc StructuresIncentive Strength Conc Structures	DOL	1680	0.00	1.00	\$0.00	0.00	00.00%	\$0.00	0.00	\$0.00
805.5500	File SplicesFile Splices	DOL	1	1.00	351.00	\$351.00	1.00	100.00%	\$0.00	0.00	\$0.00

Stainless Steel Rebar = 1430 x 3/8

\$4649

294,580.5

use 295,000

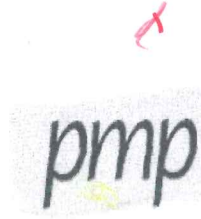
-72,800

-4,640

-22,740

194,850

\$195,000



Project ID : 8949-04-08
Title : BALDWIN -
MENOMONIE
Region : NORTHWEST

Route : USH 012
Sub Title : CULVERTS C-55-9001, 9002 &
0014
County : ST. CROIX

Structure # 3

Existing Structure

- Existing structure ID
- Existing structure type
- Year constructed
- Latest year of rehab
- Current condition
- Bridge sufficiency number
- Rate score
- Vertical clearance
- Clear roadway width
- Last inspection date
- Posted load rating
- Inventory rating
- Feature on
- Feature over/under
- Location
- Existing Skew
- Existing Structure Sq/FT

Existing Utilities

Existing Lighting

Proposed Structure Work

- Proposed structure work **
- Related Construction Project ID
- Proposed structure ID
- Spans or Cells
- Proposed aesthetic value **
- Skew
- Widening
- Curved Superstructure
- Twin Structure
- Structure Survey Report
- Steel Tub Girders

Box Culvert - Multi Cell
8949-04-78
C-55-0039
2
No aesthetics
Not on Skew
No Widening
Not Curved or Tapered

old
C-55-14

- Super Elevation Transition on Structure
- Non-Standard Pier (Straddle bent, integral cap)
- Utility/Lighting Accommodation
- Sign Structure Mounted on Structure
- Raised Sidewalks
- Bridge Painting (with other structure work)
- Tapered Superstructure
- Staged Construction
- Structural approach slab
- BOS Estimated Design Hours150
- Estimated structure cost\$ 200,000

Proposed Utilities

Proposed Lighting

Additional Information

- Additional work required
- Approach slabs
- Approach work
- Canoe/boat landing
- Consultant design structure
- Dam
- Existing foundations
- Fisherman's platform
- Gauging station (USGS)
- High cost bridge
- Pedestrian/bike lanes
- Snowmobiles

Comments

C-55-0039 is replacing C-55-0014 located 0.6 miles ~~east~~ west of 70th Ave.

Last updated by HARRIS, KYLE J on 04/09/2015

0.2 west of 260th st.

ENGINEER'S ESTIMATE / Q2P WORKBOOK

PROJECT MANAGER: RICHARD SHERMO

CONST. I.D.: 8949-04-78

TITLE: BALDWIN - MENOMONIE

LIMITS: CULVERTS C-55-0037, 0038, & 0039

HIGHWAY: USH 12

COUNTY: ST. CROIX

PROGRAM CODE: 303 STATE HIGHWAY REHABILITATION

CONCEPT CODE: RESURF RESURFACING

CONSTRUCTION COST ESTIMATE
6/9/2015
\$133,209.06

PSE Date:

Let Date:

NET C/L MILES: 0.130

SCHEDULE OF BID ITEMS WISDOT STANDARD SPECIFICATIONS 2015 EDITION

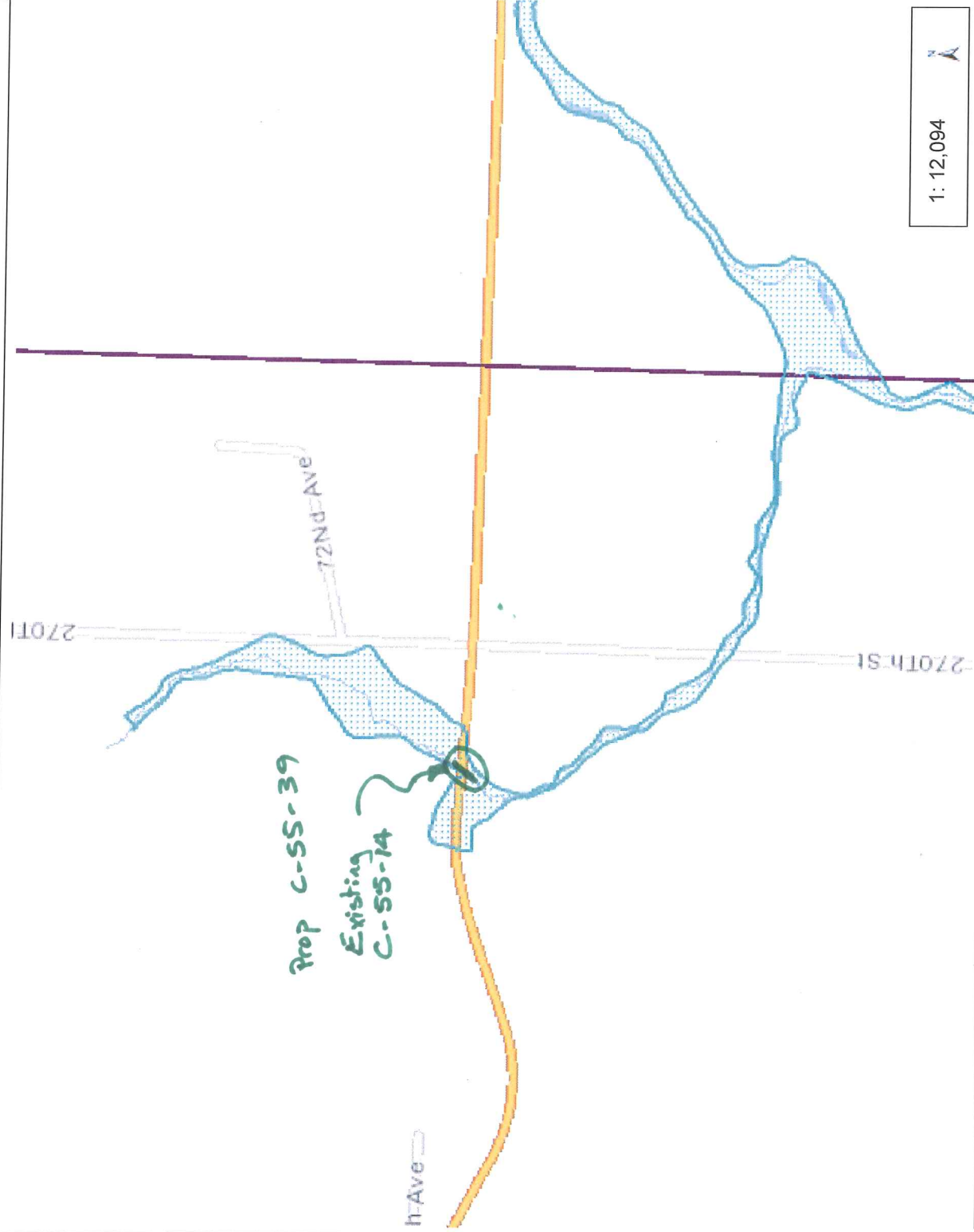
TOTAL BID ITEMS		40							
		ITEM DESCRIPTION		QUANTITY	UNIT	UNIT PRICE	COST		
203.0200	REMOVING OLD STRUCTURE (130+21, C-55-0014)		1	LS	\$2,000.00		\$2,000.00		
204.0100	REMOVING PAVEMENT		222	SY	\$5.00		\$1,111.11		
204.0110	REMOVING ASPHALTIC SURFACE		600	SY	\$4.00		\$2,400.00		
205.0100	EXCAVATION COMMON		3200	CY	\$12.00		\$38,400.00		
211.0100	PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT)		1	LS	\$5,000.00		\$5,000.00		
305.0110	BASE AGGREGATE DENSE 3/4-INCH		60	TON	\$20.00		\$1,200.00		
305.0120	BASE AGGREGATE DENSE 1 1/4-INCH		60	TON	\$30.00		\$1,814.81		
305.0500	SHAPING SHOULDERS		10.8	STA	\$100.00		\$1,080.00		
455.0605	TACK COAT		2.5	GAL	\$15.00		\$37.50		
465.0105	ASPHALTIC SURFACE		36	TON	\$145.00		\$5,252.63		
465.0115	ASPHALTIC SURFACE DETOURS		100	TON	\$120.00		\$12,000.00		
522.0160	CULVERT PIPE REINFORCED CONCRETE CLASS III 60-INCH		70	LF	\$175.00		\$12,250.00		
522.1060	IRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH		2	EACH	\$2,500.00		\$5,000.00		
606.0200	RIPRAP MEDIUM		7.78	CY	\$60.00		\$466.67		
614.2300	MGS GUARDRAIL 3		200	LF	\$18.00		\$3,600.00		
614.2610	MGS GUARDRAIL TERMINAL EAT		4	EACH	\$2,500.00		\$10,000.00		
619.1000	MOBILIZATION		1	EACH	\$6,000.00		\$6,000.00		
625.0500	SALVAGED TOPSOIL		1400	SY	\$1.75		\$2,450.00		
628.1504	SILT FENCE		700	LF	\$2.00		\$1,400.00		
628.1520	SILT FENCE MAINTENANCE		700	LF	\$0.34		\$238.00		
628.1905	MOBILIZATIONS EROSION CONTROL		1	EACH	\$200.00		\$200.00		
628.1910	MOBILIZATIONS EMERGENCY EROSION CONTROL		1	EACH	\$150.00		\$150.00		
628.2004	EROSION MAT CLASS I TYPE B		1400	SY	\$1.50		\$2,100.00		
628.7504	TEMPORARY DITCH CHECKS		100	LF	\$7.25		\$725.00		
628.7555	CULVERT PIPE CHECKS		2	EACH	\$20.00		\$40.00		
629.0210	FERTILIZER TYPE B		1.59	CWT	\$100.00		\$158.76		
630.0120	SEEDING MIXTURE NO. 20		45	LB	\$11.00		\$498.96		
630.0200	SEEDING TEMPORARY		68	LB	\$4.00		\$272.16		
633.5200	MARKERS CULVERT END		2	EACH	\$40.00		\$80.00		
634.0416	POSTS WOOD 4X4-INCH X 16-FT		1	EACH	\$75.00		\$75.00		
634.0805	POSTS TUBULAR STEEL 2X2-INCH X 5-FT		4	EACH	\$100.00		\$400.00		
637.2210	SIGNS TYPE II REFLECTIVE H		18	SF	\$17.00		\$310.25		
638.2602	REMOVING SIGNS TYPE II		5	EACH	\$125.00		\$625.00		
642.5001	FIELD OFFICE TYPE B		1	EACH	\$2,000.00		\$2,000.00		
645.0120	GEOTEXTILE FABRIC TYPE HR		16	SY	\$6.00		\$93.33		

Checked By:

Date:



Surface Water Data Viewer Map



1: 12,094



Legend

- 1% Annual Chance Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Cross Sections
- Floodway
- Base Flood Elevations
- FIRM Panel Index
- Rivers and Streams
- Open Water

Notes

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0.4 Miles

0.19

0

NAD_1983_HARN_Wisconsin_TM
© Latitude Geographics Group Ltd.



route: 012E county: ST. CROIX date: 11/06/2013 plm: 024.040

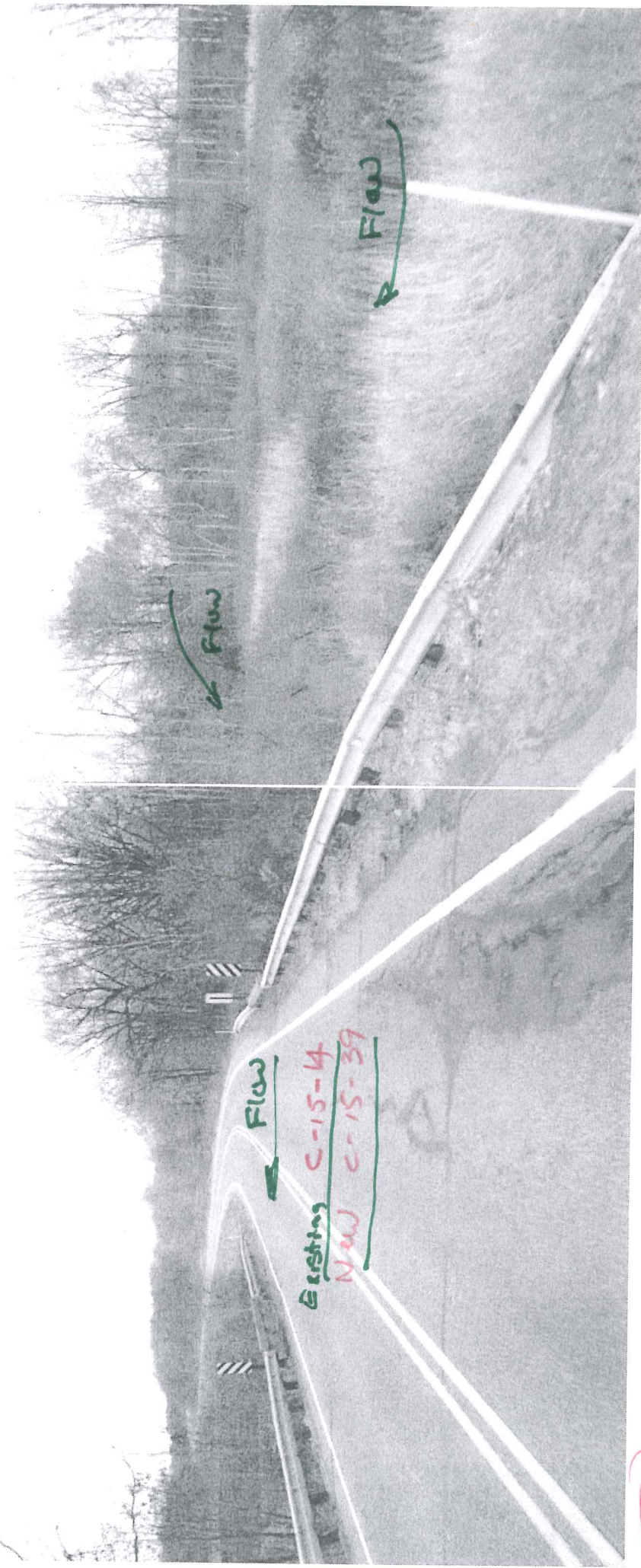
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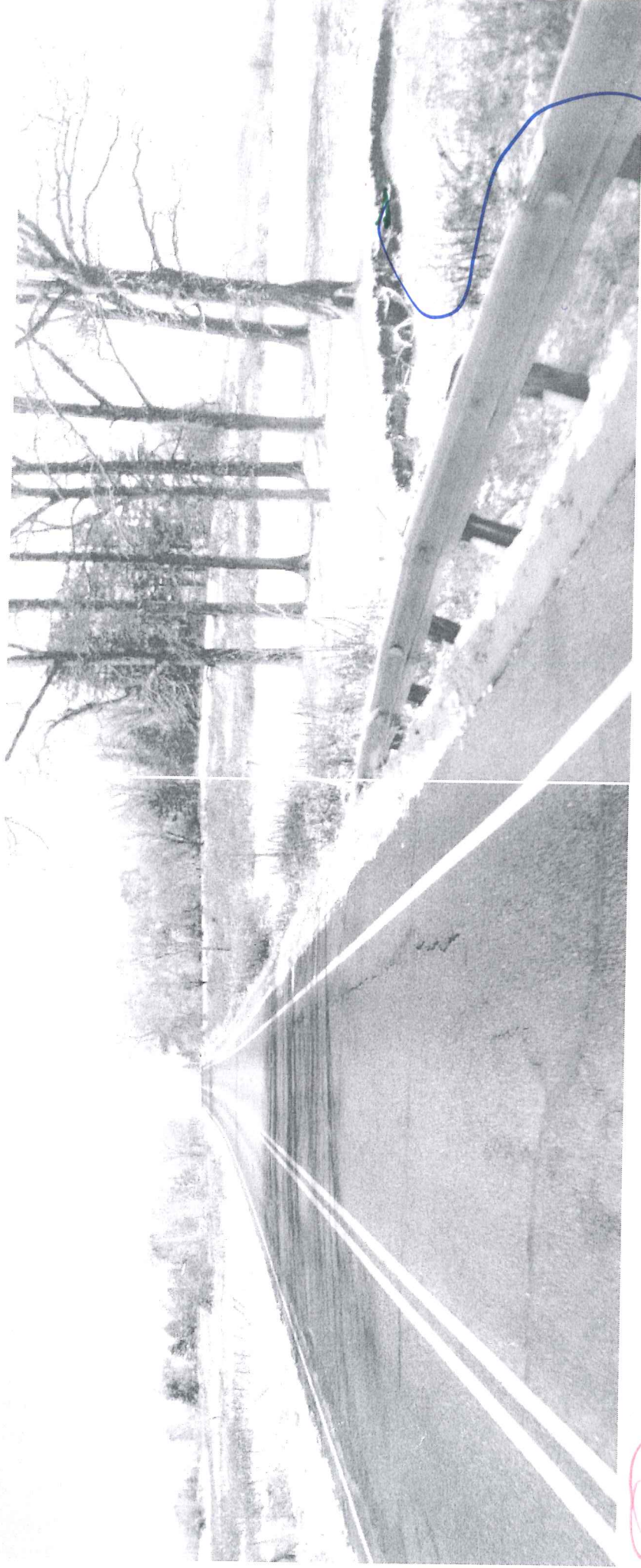
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Existing C-55-M
New C-55-39

C-



route: 012W county: ST. CROIX date: 11/05/2013 plm: 116.129
Lat: 44.95943666 Long: -92.26144753 Elev: 1064.04 ft.
\\dofeauplog1plphotolog\RG5\012W_R5_2013\FrontDir_119\F_11915.jpg
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route: 012E county: ST. CROIX date: 11/06/2013 plm: 024.080

Lat: 44.95941335 Long: -92.26177 Elev: 1065.16 ft.

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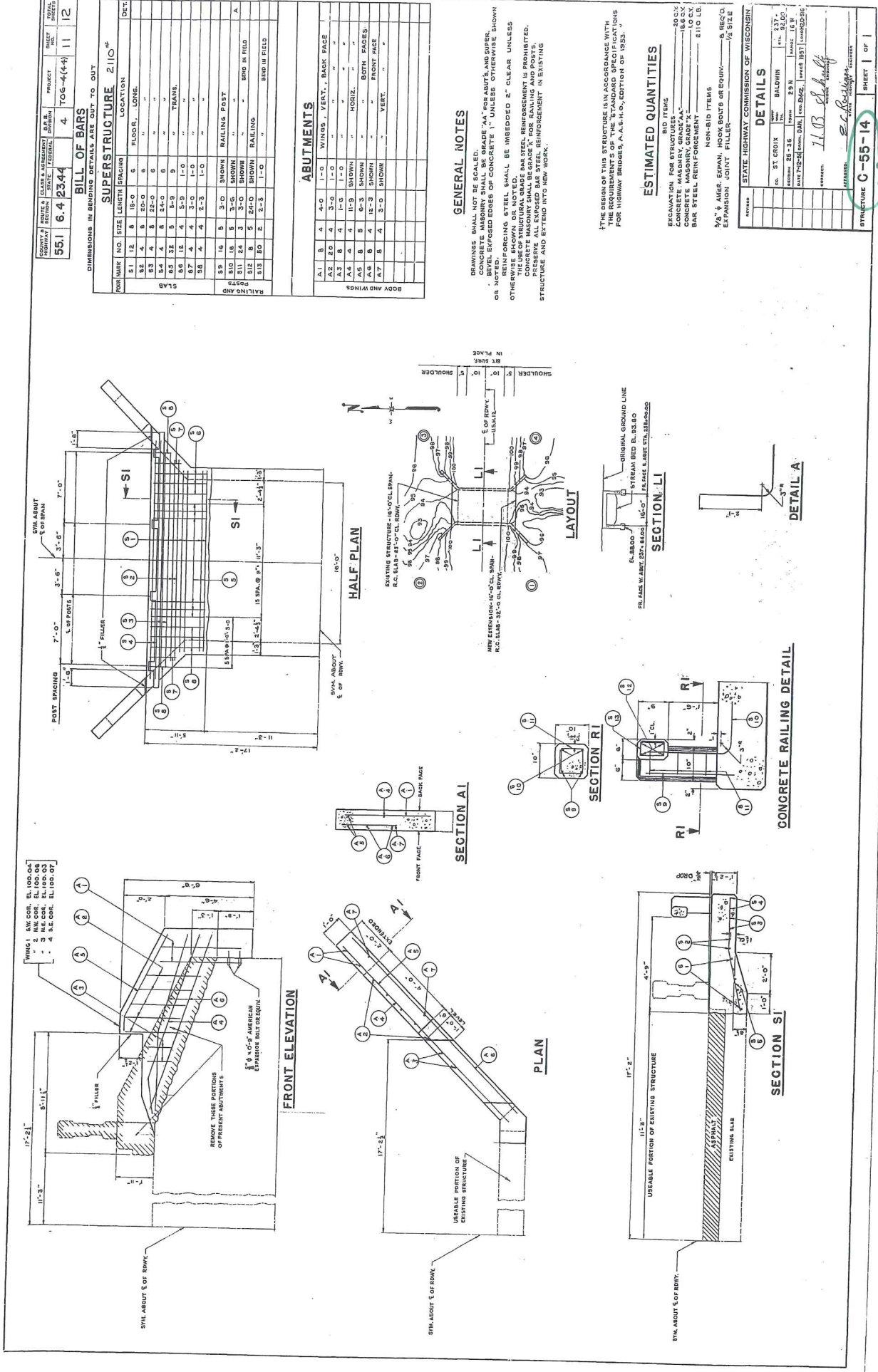
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① Downstream
Eroder

C-55-0014

C-55-39

Prop



widening 1957

C-55-39

$$L = 4,400' + 1 -$$

$$A = 3.5 \text{ Acres} + 1 -$$

As-built

$$H = 126.5 - 116.3 = 10.2' + 1 -$$

$$L_1 = 1500'$$

$$H_1 = 65'$$

$$L_2 = 2900'$$

$$H_2 = 37'$$

$$\text{Avg. Slope} = \frac{65+37}{1500+2900} \times 100 = 2.3\%$$

$$T_c = \frac{4400}{10.2} \Rightarrow 21 \text{ min} \leftarrow \text{Channel}$$

x 2 Grassed Sw

$$T_c \underline{42} \text{ minutes} \rightarrow \text{overland}$$

$$C = 2.1$$

$$100 = 3.6$$

$$150 = 3.3$$

Overland

$$Q_{50} = (3.5 \times 3.3 \times 21) = 248 \text{ cfs}$$

$$Q_{100} = 238 \text{ cfs} \left. \vphantom{Q_{100}} \right\} \text{overland}$$

Channel

$$150 = 4.8$$

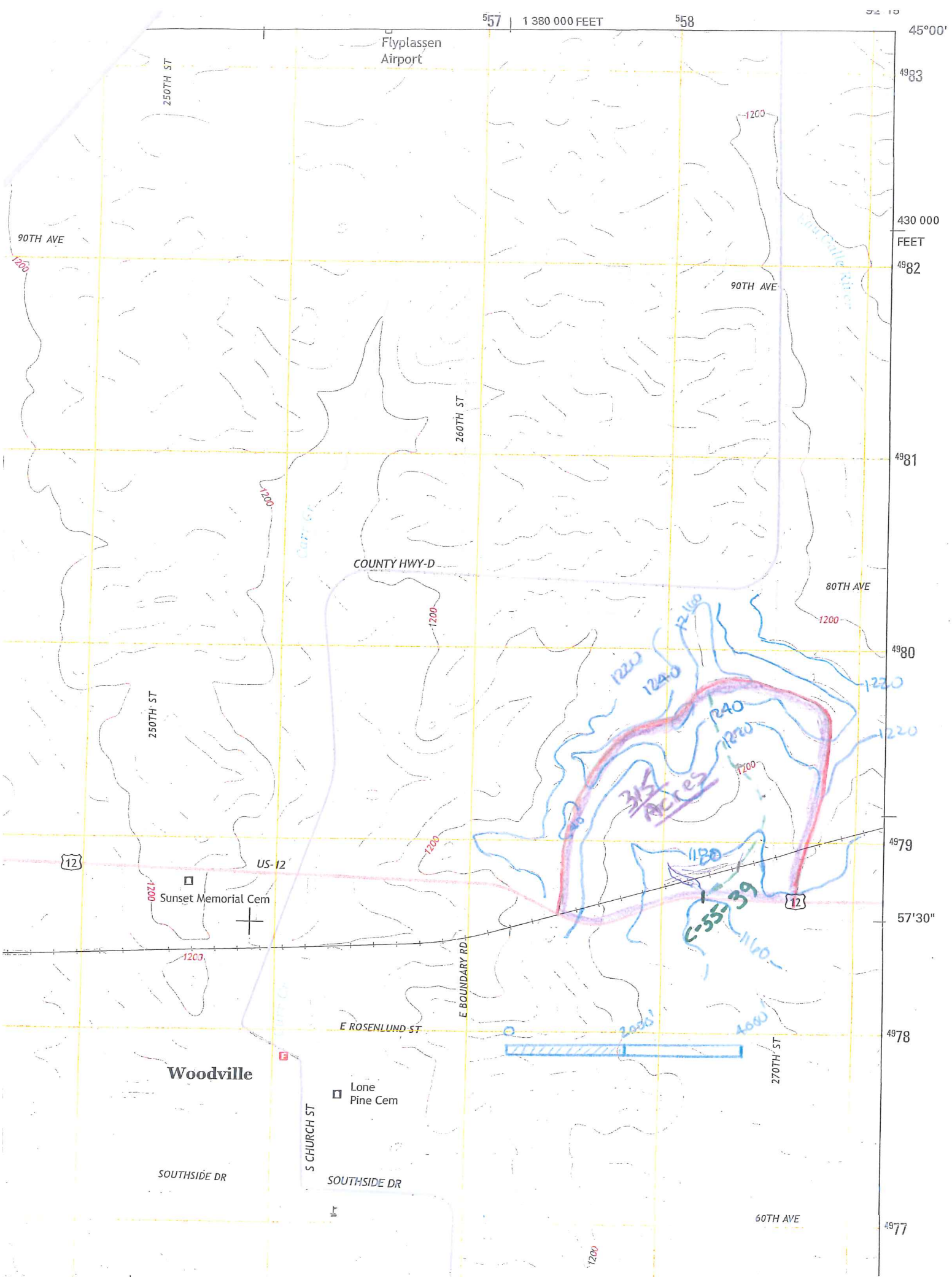
$$100 = 5.0$$

$$Q_{50} = 3.5 (4.7 \times 2.1) = 311 \text{ cfs}$$

$$Q_{100} = 33 \text{ cfs} \left. \vphantom{Q_{100}} \right\} \text{channel}$$

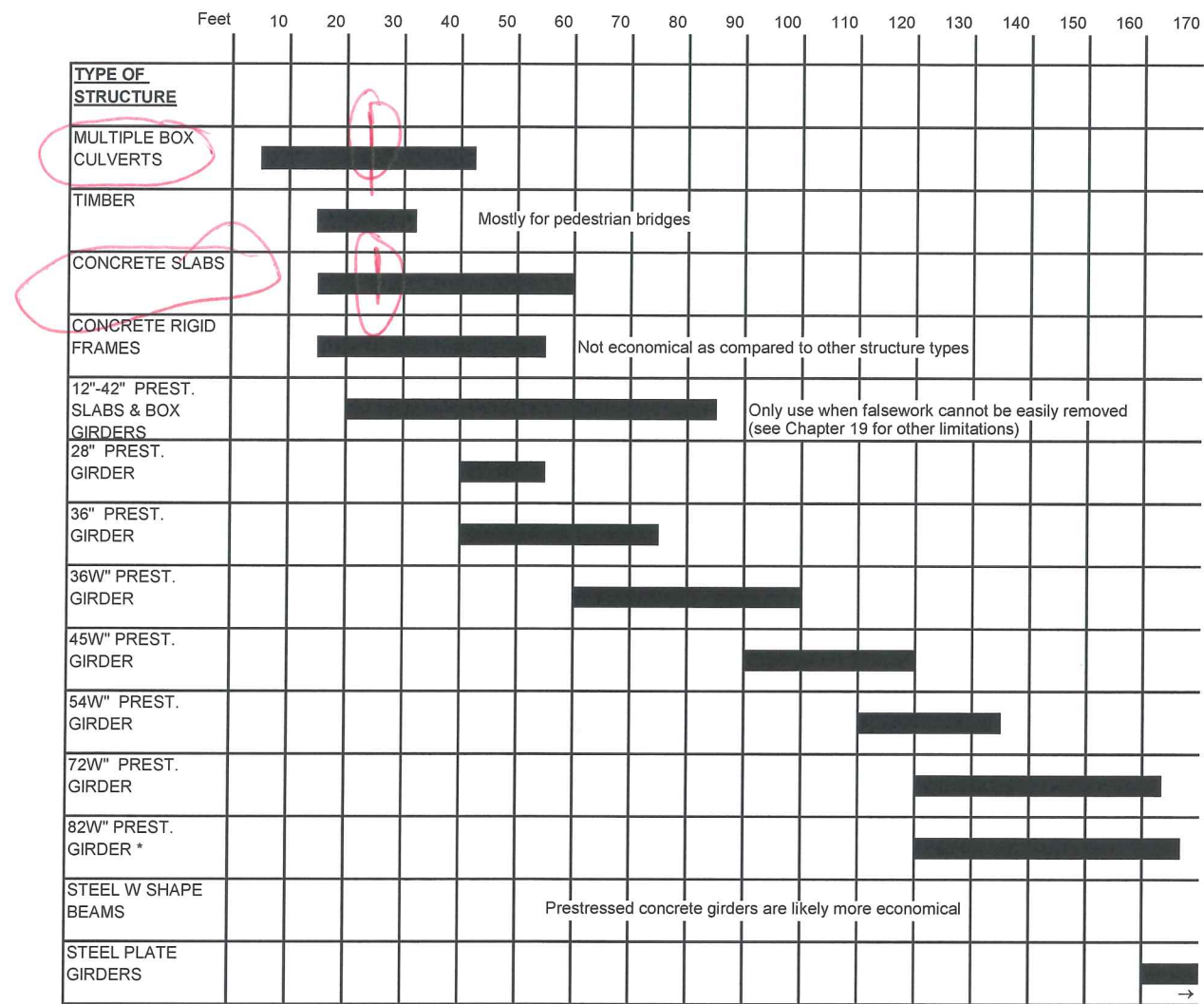
Above for preliminary assessment of flow, based on rational method, for determining ability to replace w/ pipes $\Rightarrow$ do not use for design.

Assume box culvert or bridge $\Rightarrow$ actual flow and size based on flood/hydraulic analysis.





5.2 Economic Span Lengths



*Currently there is a moratorium on the use of 82W" prestressed girders in Wisconsin

Figure 5.2-1
Economic Span Lengths

Move Fences back to Property Line

LARS NYGAARD

JOHN P. MOE

B.M. #28 - Chiseled on North end of West Abut
Elev. 1163.17

16 Span 24 Rdwy Conc Slab Bridge - Old Std.
To remain in place

Curve Data
P.I. 300+332
A = 130°11'
D = 4° CR
Tan = 229.23
L = 454.58
R = 1432.5

Superelevate 1/2" Per ft.

Net length of $\pm$ Sta. 300+00 to Sta. 323+00 = 2300 ft.
Net length of $\pm$ Sta. 323+00 to Sta. 330+00 = 700 ft.

Sta. 298-302+78.5
Cut = 394 C.Y. Fill = 315 C.Y.

Sta. 302+78.5-310 Cut = 486 C.Y.
Fill = 427 C.Y.

Shrinkage Allowance 20%

Sta. 310-312
Cut = 139 C.Y. Fill = 128 C.Y. Haul
= 85 C.Y. back to
Sta. 305-306

Sta. 312-318+4
Fill =

Sta. 303+26 & 16 Span 24 Rdwy Conc. Slab
Bridge in place Standard.

Note: Pavement to be widened
to width of roadway of bridge.

STANDARD GUARD RAIL REQ'D TYPE "C"
Sta. 302+84 to Sta. 303+16 Both Sides 8 Posts
Sta. 316+50 to Sta. 318+58 " " 28 "

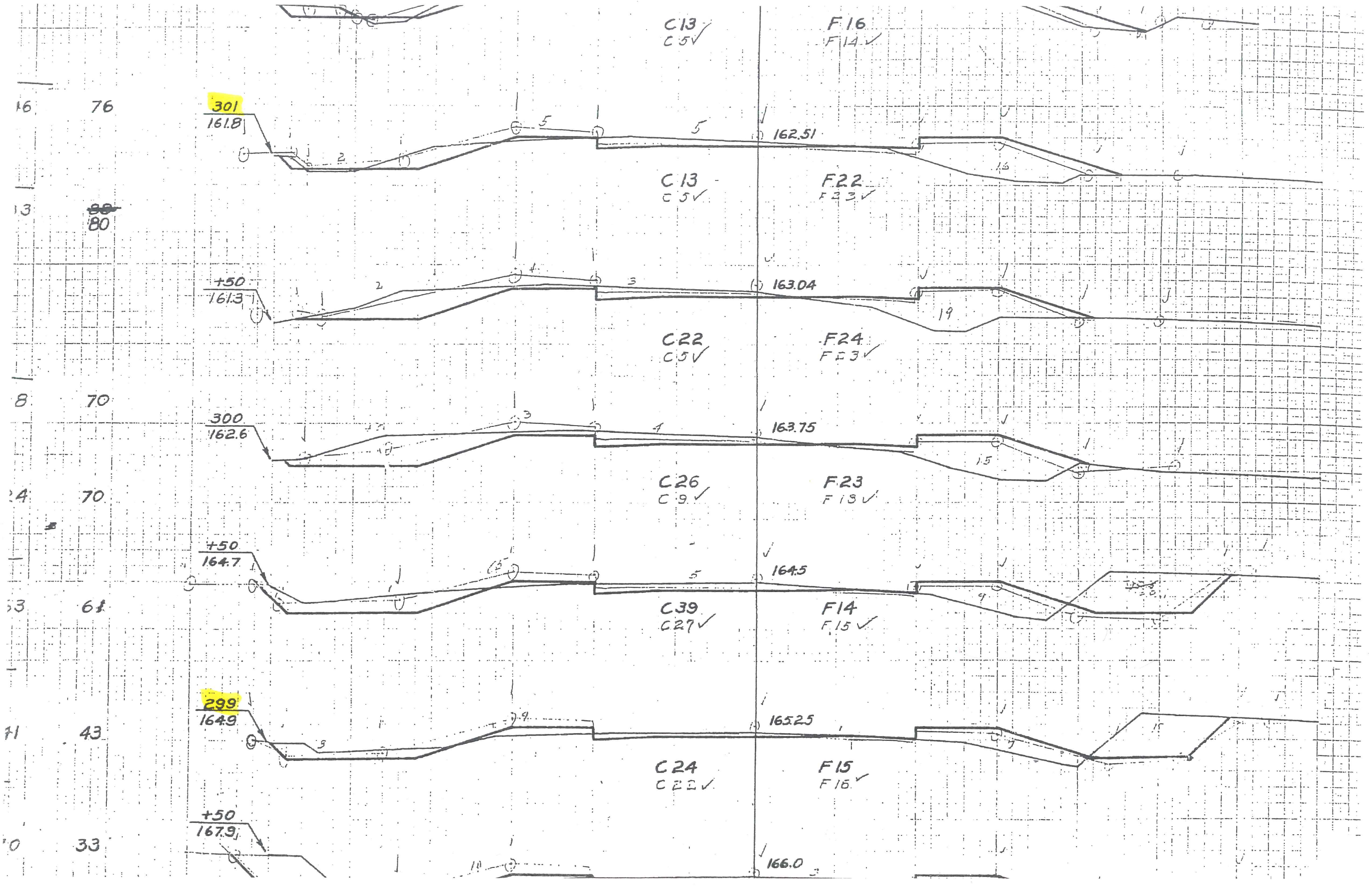
Int.
Sta. 312
Sta. 319

Move Fences back to Property Line

B.M. #31 Spike in Tel. Pole = 1833

36-48-28 Conc. Culv. in place - Old Std.

No. 374.3 RT. OF WAY CHECKED



FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR
4	WISC.	153	

WISCONSIN PROJECT NO. _____
DIVISION JOB NO. _____

YA
C

ROADAGE
T FILL

38
33

46

59

76

88
80

