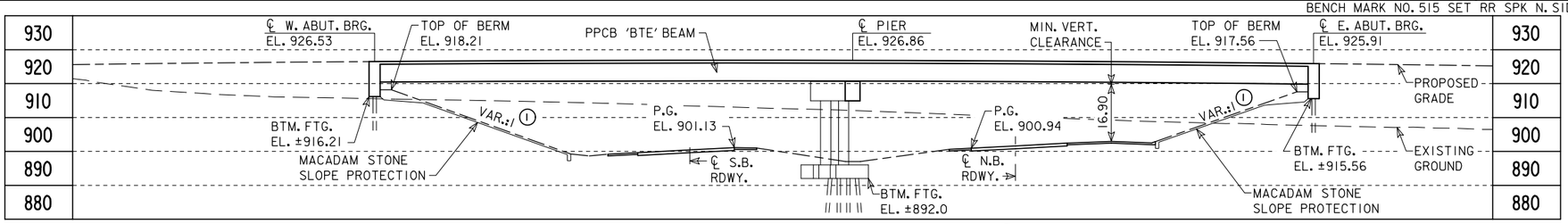
BENCH MARK NO. 515 SET RR SPK N. SIDE POWER POLE S. SIDE CO. RD. C-50 STA. 3156+34.26 46.71' RT. EL. 911.242



LONGITUDINAL SECTION ALONG ℄ ROADWAY

1.3724% -2.6400%

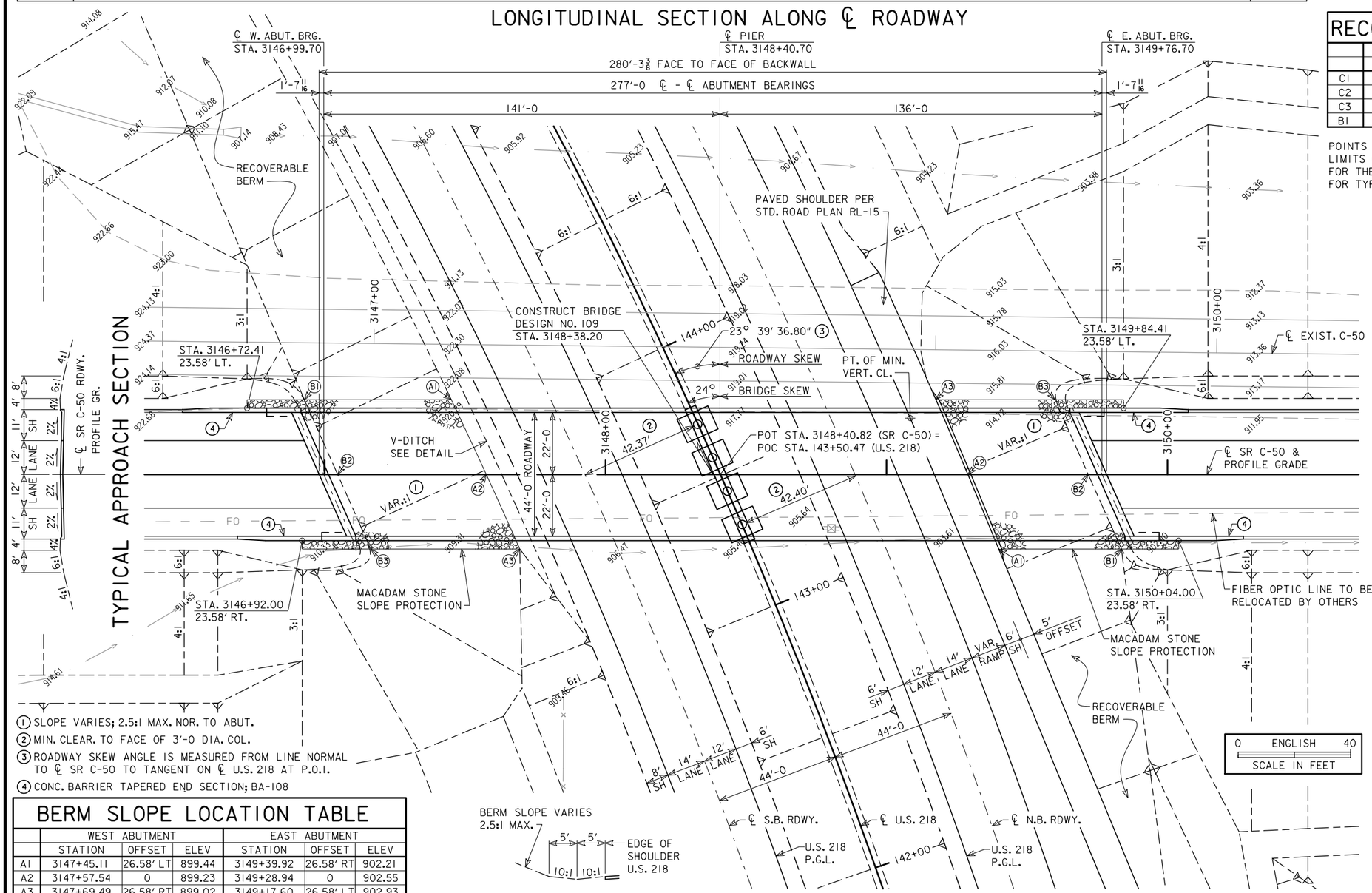
VPI STA = 3149+00.00 VC = 600'
VPI ELEV = 929.61

PROPOSED PROFILE GRADE SR C-50

-0.2400% 1.2600%

VPI STA = 142+00.00 VC = 1600'
VPI ELEV = 897.16

PROPOSED PROFILE GRADE U.S. 218



RECOVERABLE BERM LOCATION TABLE

	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV	STATION	OFFSET	ELEV
C1	3145+60.49	337.12' LT	902.78	3149+93.72	157.21' RT	901.40
C2	3145+52.10	357.00' LT	902.51	3150+03.18	177.53' RT	901.29
C3	3145+43.71	376.50' LT	903.24	3150+06.16	200.52' RT	901.49
B1	3146+92.79	26.58' LT	918.21	3149+83.61	26.58' RT	917.56

POINTS (C1), (C2) AND (C3) FOR THE ABUTMENTS ARE BEYOND THE LIMITS OF THIS SHEET. SEE THE RECOVERABLE BERM LOCATION TABLE FOR THEIR LOCATIONS, OFFSETS AND ELEVATIONS. REFER TO RL-15 FOR TYPICAL LOCATIONS.

MINIMUM VERTICAL CLEARANCE

OVERHEAD STATION = 3149+08.46
OVERHEAD ELEVATION = 926.17
DEPTH OF SUPERSTRUCTURE = 6.08
UNDERPASS STATION = 143+41.93
UNDERPASS ELEVATION = 903.19
MINIMUM VERTICAL CLEARANCE = 16.90

CURVE DATA (U.S. 218)

TS STA. 130+12.58
Δ = 85° 55' 47.49" (LT)
T = 1,909.31'
L = 3,074.51'
E = 751.42'
R = 2,050.00'
e = 6.00%
Ls = 270'
x = 90'

TRAFFIC ESTIMATE

2012 AADT	1,560	V.P.D.
2032 AADT	2,200	V.P.D.
2032 DHV	5,500	V.P.H.
TRUCKS	10	%
TOTAL DESIGN ESALs	--	

LOCATION

COUNTY ROAD C-50 OVER U.S. 218
T-91 N R-14 W
SECTION 36
JACKSON TOWNSHIP
BREMER COUNTY

(1) SLOPE VARIES; 2.5:1 MAX. NOR. TO ABUT.
(2) MIN. CLEAR. TO FACE OF 3'-0 DIA. COL.
(3) ROADWAY SKEW ANGLE IS MEASURED FROM LINE NORMAL TO ℄ SR C-50 TO TANGENT ON ℄ U.S. 218 AT P.O.I.
(4) CONC. BARRIER TAPERED END SECTION; BA-108

BERM SLOPE LOCATION TABLE

	WEST ABUTMENT			EAST ABUTMENT		
	STATION	OFFSET	ELEV	STATION	OFFSET	ELEV
A1	3147+45.11	26.58' LT	899.44	3149+39.92	26.58' RT	902.21
A2	3147+57.54	0	899.23	3149+28.94	0	902.55
A3	3147+69.49	26.58' RT	899.02	3149+17.60	26.58' LT	902.93
B1	3146+92.79	26.58' LT	918.21	3149+83.61	26.58' RT	917.56
B2	3147+04.63	0	918.21	3149+71.77	0	917.56
B3	3147+16.46	26.58' RT	918.21	3149+59.94	26.58' LT	917.56

TYPICAL SECTION V-DITCH AT WEST ABUTMENT

SITUATION PLAN

NOTE TO FINAL DESIGNER:
NON-STANDARD WING EXTENSIONS WILL BE REQUIRED.
10'-6 WING EXTENSIONS ARE SHOWN.

This Sheet
For Information Only

DESIGN FOR 24° SKEW

277'-0 x 44' PRETENSIONED PRESTRESSED CONCRETE BEAM BRIDGE

141'-0, 136'-0 SPANS

SITUATION PLAN

STATION 3148+38.20 BTE-BEAM

BREMER COUNTY

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION

DESIGN SHEET NO. 1 OF 1 FILE NO. 30316 DESIGN NO. 109