

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
FAP 303 IL 173	2010-086-F	LAKE	29	15	23 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Bench Mark: USGS reference mark on S.W. wingwall of structure 049-0055 (Elev. 228.867)

Existing Structure:
S.N. 049-0056, three span 29.58m Back to Back abutments,
15.748m Out to Out, R.C. slab bridge on closed abutments.
Built as IL Route 173, Section 134B-BR at Sta. 860+77 (English)
in 1931. The contractor shall remove the existing structure
and replace it with a two span steel girder composite superstructure
on integral abutments. The road shall be kept open to traffic at all
times utilizing stage construction.

Note: All dimensions in millimeters (mm) except as noted.

No salvage

*** - This work is not in the fabrication contract and sheet is not included in these plans.**

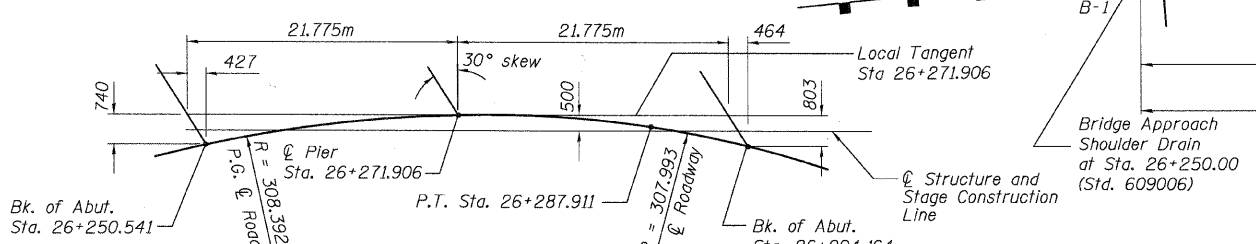
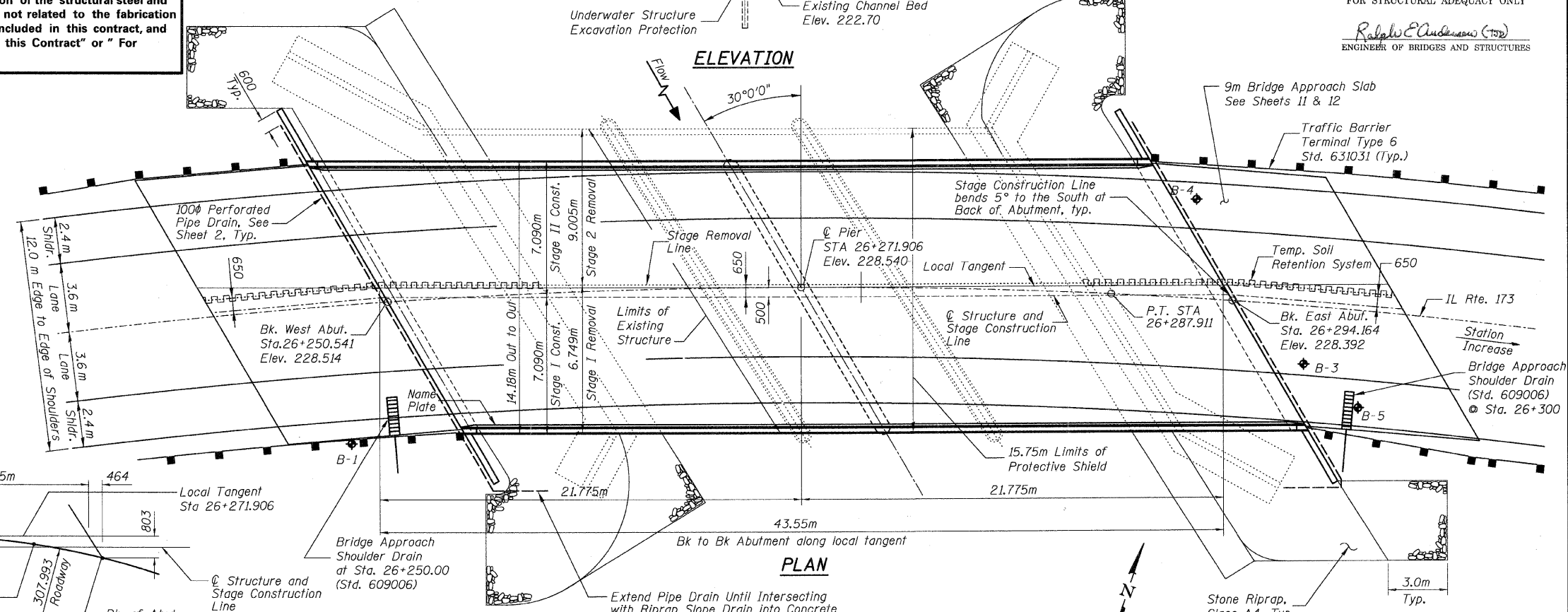
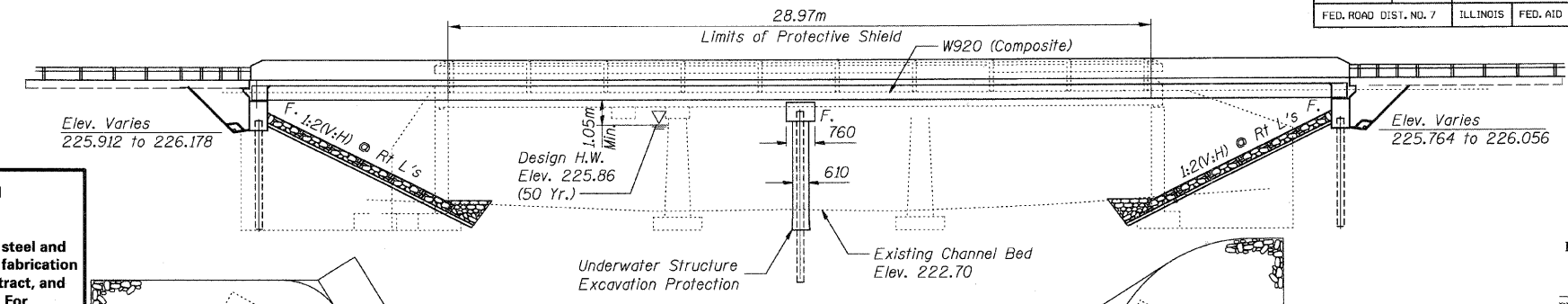
These plans are for the fabrication of the structural steel and bearings. All work shown that is not related to the fabrication is for information only. It is not included in this contract, and is identified as "Not Included in this Contract" or "For Information Only"

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (SE)
ENGINEER OF BRIDGES AND STRUCTURES

INDEX OF SHEETS

SHEET NUMBER	SHEET DESCRIPTION
1.	General Plan and Elevation
2.	Bill of Material, General Data
* 3.	Stage Construction
4.	Top of Slab Elevations - 1
5.	Top of Slab Elevations - 2
* 6.	Top of West Approach Slab Elevations
* 7.	Top of East Approach Slab Elevations
8.	Deck Plan and Cross Section
9.	Superstructure Details - 1
10.	Superstructure Details - 2
11.	Bridge Approach Slab - 1
12.	Bridge Approach Slab - 2
13.	Framing Plan and Design Data Tables
14.	Steel Girder Details
15.	Low-Profile Fixed Bearings
16.	West Abutment
17.	East Abutment
18.	Pier
* 19.	Temporary Concrete Barrier
* 20.	Bar Splicer Details
* 21.	HP Pile Details
* 22.	Soil Boring Logs B-1 & B-3
* 23.	Soil Boring Logs B-4 & B-5



OFFSET SKETCH

HORIZONTAL CURVE DATA-1	HORIZONTAL CURVE DATA-2
$\Delta = 20^\circ 20' 01''$	$\Delta = 18^\circ 59' 40''$
$T = 55.304m$	$T = 51.525m$
$R = 308.392m$	$R = 307.993m$
$L = 109.443m$	$L = 102.100m$
$E = 4.920m$	$E = 4.280$
$S.E. = 0.054$	$S.E. = 0.054$
P.C. STA = 26+178.468	P.C. STA = 26+287.911
P.T. STA = 26+287.911	P.T. STA = 26+390.011
P.I. STA = 26+233.772	P.I. STA = 26+339.436

STATION 26+271.906
BUILT 200_ BY
STATE OF ILLINOIS
FAP 303 SEC 134(B-2) R-1
LOADING MS18
STR. NO. 049-0198
NAME PLATE
See Std. 515001

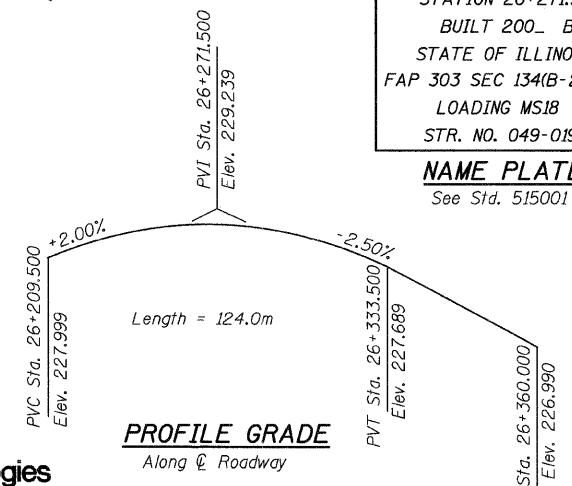
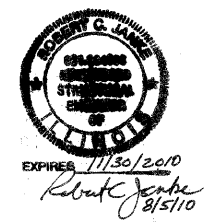
LOADING MS18
Allow 2.4 kN/m² For future wearing surface.

DESIGN SPECIFICATIONS
AASHTO 1996, 1997 Through
2000 and 2002 Interims

DESIGN STRESSES

FIELD UNITS
 $f_c = 24 \text{ MPa}$
 $f_y = 420 \text{ MPa}$ (reinforcement)
 $f_y = 250 \text{ MPa}$ (M270M Grade 250)
 $f_y = 345 \text{ MPa}$ (M270M Grade 345)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.035g
Site Coefficient (S) = 1.2

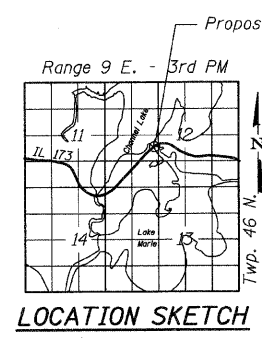


PROFILE GRADE
Along ϕ Roadway

WATERWAY INFORMATION

Drainage Area = 2256 km² Low Grade Elev. 226.7m ϕ Sta. 26+287

Flood Yr.	Freq.	Q C.M.S.	Opening Sq. M		Natural H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
10	0	62.10	61.00	225.46	225.46	0.00	0.00	225.46	225.46	
NPDES	25	0	67.40	70.90	225.69	225.69	0.00	0.00	225.69	225.69
Design	50	0	71.40	73.00	225.86	225.86	0.00	0.00	225.86	225.86
Base	100	0	75.60	78.50	226.04	226.04	0.00	0.00	226.04	226.04
Overtopping		0					0.00	0.00		
Max. Calc.	500	0	84.90	91.20	226.44	226.44	0.00	0.00	226.44	226.44



GENERAL PLAN AND ELEVATION
FAP 303 IL. ROUTE 173
OVER EAST BOAT CHANNEL
SECTION 2010-086-F
LAKE COUNTY
STATION 26+271.906
STRUCTURE NO. 049-0198

