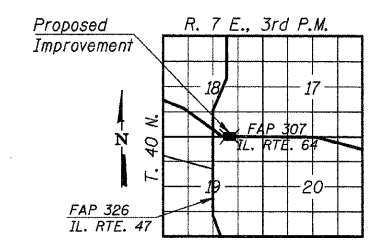


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAP 307	126N-1	KANE		154
ILLINOIS				

Sheet 1 of 3

Existing Structure @ Sta. 52+80.51  
15"  $\phi$  CMP Pipe Culvert to be removed and replaced with a Double 10'x3' R.C. Box Culvert 59'-1" long.

Bench Mark: R.R. Spike in south face of power pole.  
40.21' Lt. Sta. 56+65.83; Elev. 879.74



LOCATION SKETCH

**GENERAL NOTES**

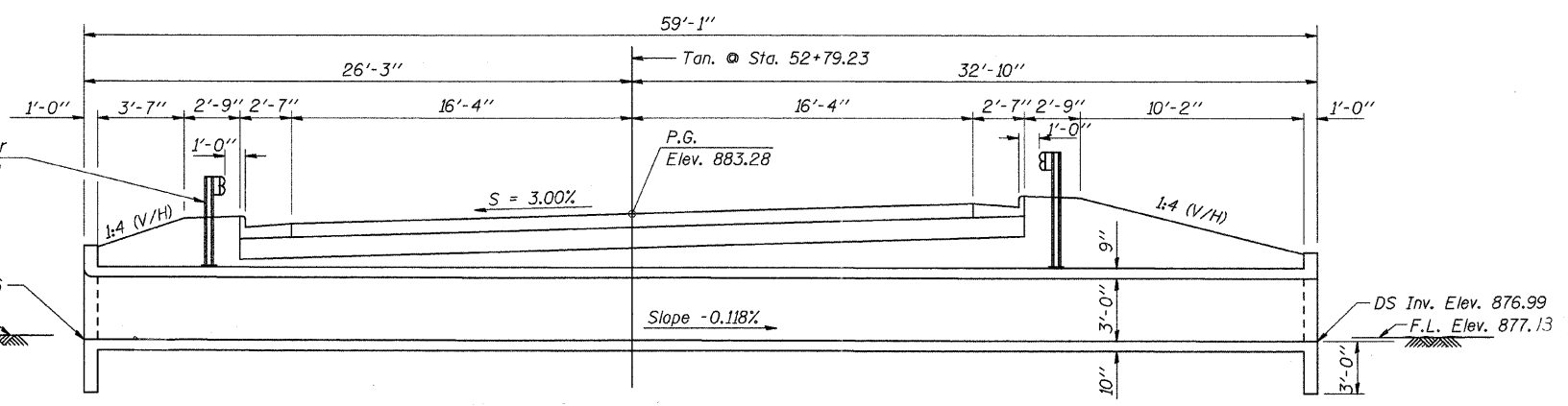
Reinforcement bars shall conform to the requirements of ASTM A706, Grade 60.  
Precast box culvert alternate is not allowed.  
For backfilling and embankment, see Standard Specifications.  
A distance of half the length of the wingwall but not less than 6 feet of the Barrel shall be poured monolithically with the wingwalls.  
Exposed edges shall have a 3/4" chamfer.

The road will be closed to traffic.

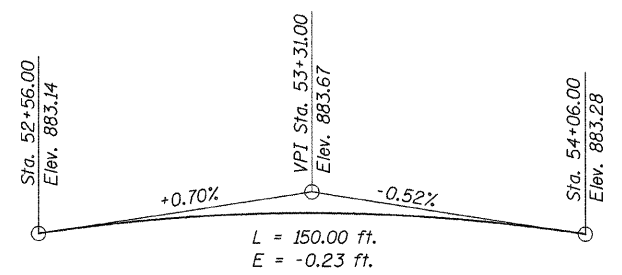
No Salvage.

See Roadway Plans for Guardrail Post spacing (See Std. 630001 & 630101).

US Inv. Elev. 877.06  
F.L. Elev. 877.20



LONGITUDINAL SECTION  
(Looking East)



PROPOSED PROFILE GRADE

**ILLINOIS ROUTE 64  
WATERWAY INFORMATION TABLE**

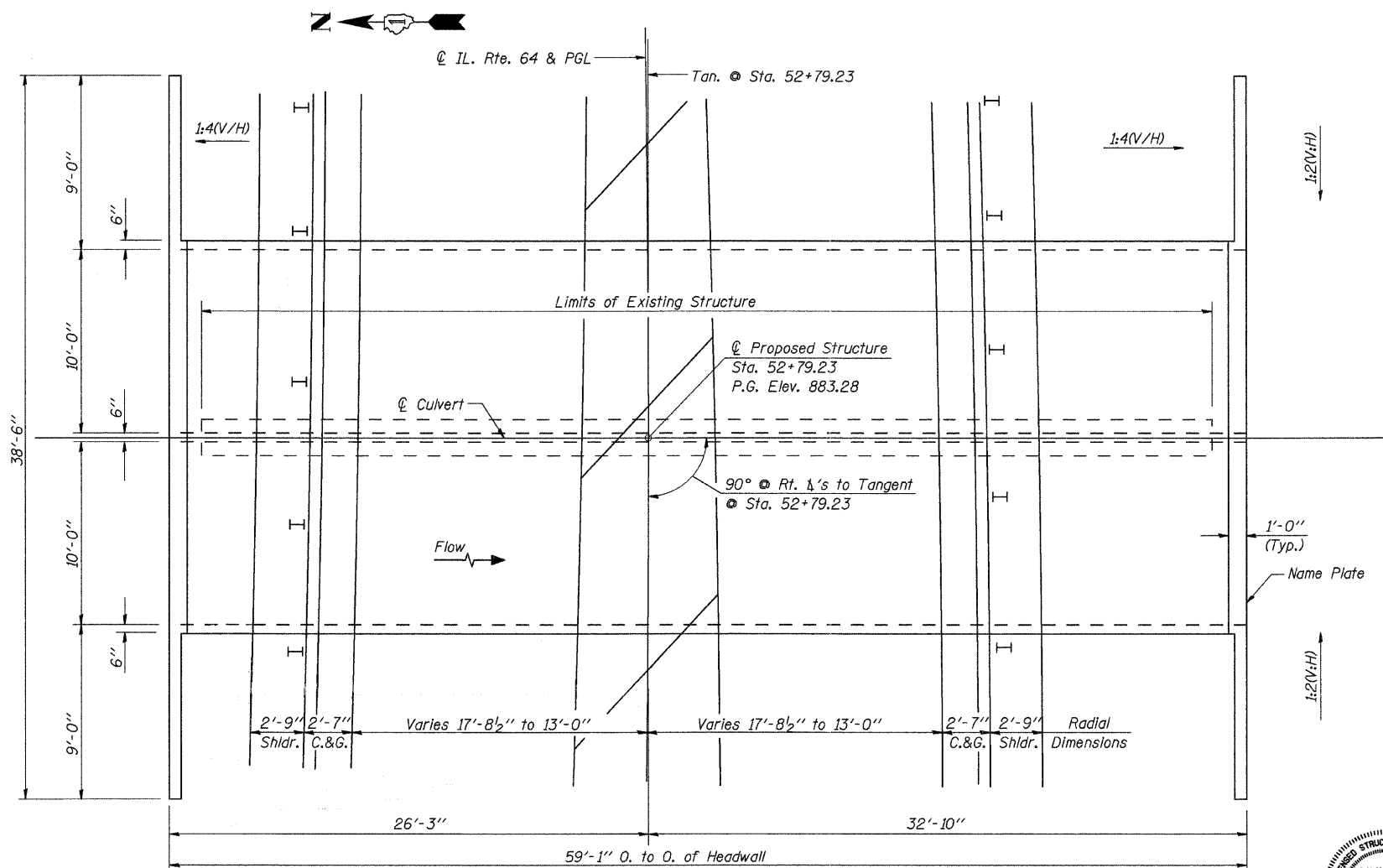
Drainage Area = 0.1638 Sq. Mi. Low Grade Elev. = 878.67 (Exist.) @ Sta. 53+31.35  
882.85 (Prop.) @ Sta. 51+70.80

Flood Yr.	Freq.	Q C.F.S.	Opening Sq. Ft. Exist.	Prop.	Nat. H.W.E.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	10	63	32.4	43.8	879.26	0.00	0.00	879.21	878.23
	50	135	60.5	46.8	879.41	0.00	0.00	879.36	879.00
Base	100	185	60.5	47.0	879.42	0.02	0.03	879.44	879.45
Overlapping	<10 Year Existing Conditions, >500 Year Proposed Conditions								
Max. Calc.	500	315	62.1	48.4	879.49	0.12	0.98	879.61	880.47

Max. Recorded H.W.E. = 881.0 (October, 1954)

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Concrete Box Culverts	Cu. Yd.	94.7
Reinforcement Bars	Pound	23,200
Name Plates	Each	1



PLAN

DESIGNED	F.J.S.
CHECKED	S.F.M.
DRAWN	D.E.G. & K.T.R.
CHECKED	A.R.K. & S.F.M.

**DESIGN STRESSES**

$f'_c = 3,500$  psi (Concrete)  
 $f_y = 60,000$  psi (Reinforcement)

**LOADING HS20**

Allow 50#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS**

2002 AASHTO Specifications



Salvatore F. Madonia 05/02/11  
ILLINOIS STRUCTURAL NO. 3305 (Expires 11/30/2012)

**GENERAL PLAN AND ELEVATION**  
F.A.P. RTE. 307-IL. RTE. 64  
TRIBUTARY TO FERSON CREEK  
SECTION 126N-1  
KANE COUNTY  
STATION 52+79.23  
STRUCTURE NO. 045-2027

4440 ASH GROVE SPRINGFIELD, IL 62711 (317) 793-8600 www.fehr-graham.com	<b>FEHR-GRAHAM &amp; ASSOCIATES, LLC</b> ENGINEERING AND SCIENCE CONSULTANTS WESLEY, IL. ROCKFORD, IL. ROCKFORD, IL. SPRINGFIELD, IL.	JOB NO.: 48520H FILE: 9PE.DGN DATE: 04-25-11
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