

Bench Mark #404: Headwall, chiseled square, existing IL 173 at Sta. 9+46.95, 37.97' Rf., Elev. 731.995

Existing Structure: S.N. 101-2004 Triple 8'-0" x 6'-0" Box Culvert constructed in 1964.

Traffic to be maintained during widening.

No Salvage.

INDEX OF SHEETS

1. General Plan
2. Box Culvert Plan
3. Culvert Sections
4. Culvert Details

GENERAL NOTES

1. Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60. See Special Provisions.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be a change in the scope of work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
4. Exposed edges shall have a 3/4" chamfer.
5. Precast alternate is not allowed.
6. Concrete Removal shall consist of the complete removal of the existing wingwalls at the extension end of the culvert.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Reinforcement Bars	Pound	16,640
Reinforcement Bars (Epoxy Coated)	Pound	110
Expansion Bolts, 3/4"	Each	90
Concrete Box Culverts	Cu. Yd.	67.0
Concrete Removal	Cu. Yd.	12.3

LOADING HS20-44

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

DESIGN SPECIFICATIONS

2002 AASHTO

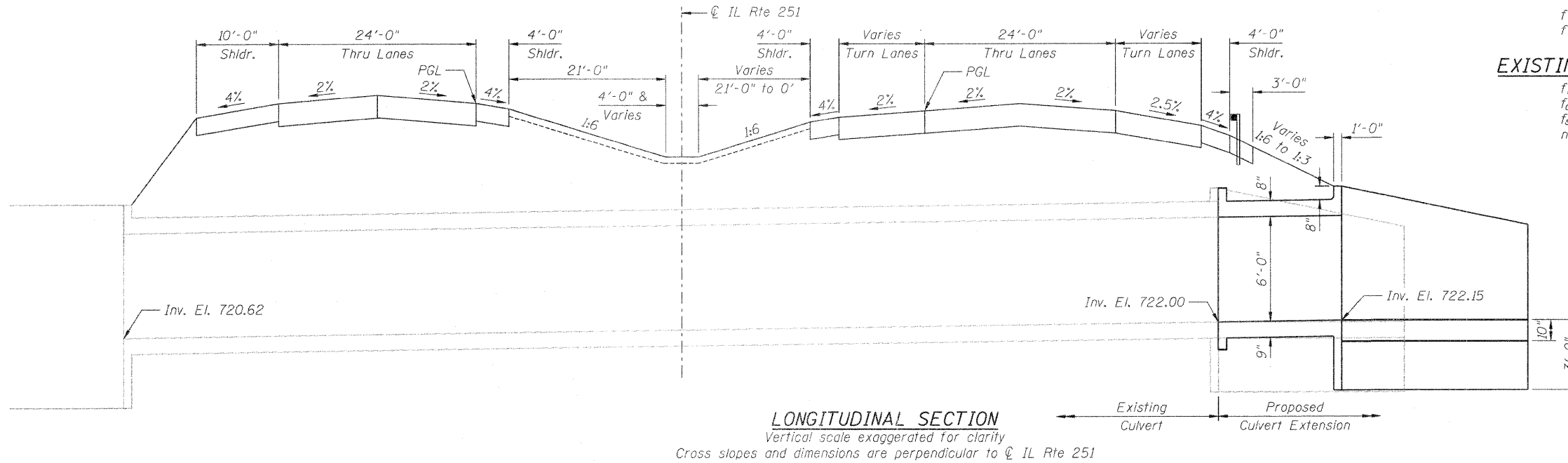
PROPOSED DESIGN STRESSES

FIELD UNITS

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

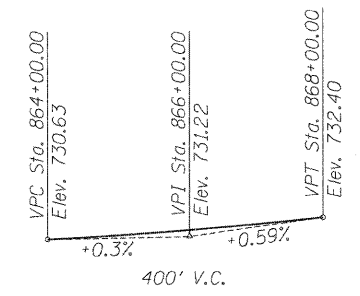
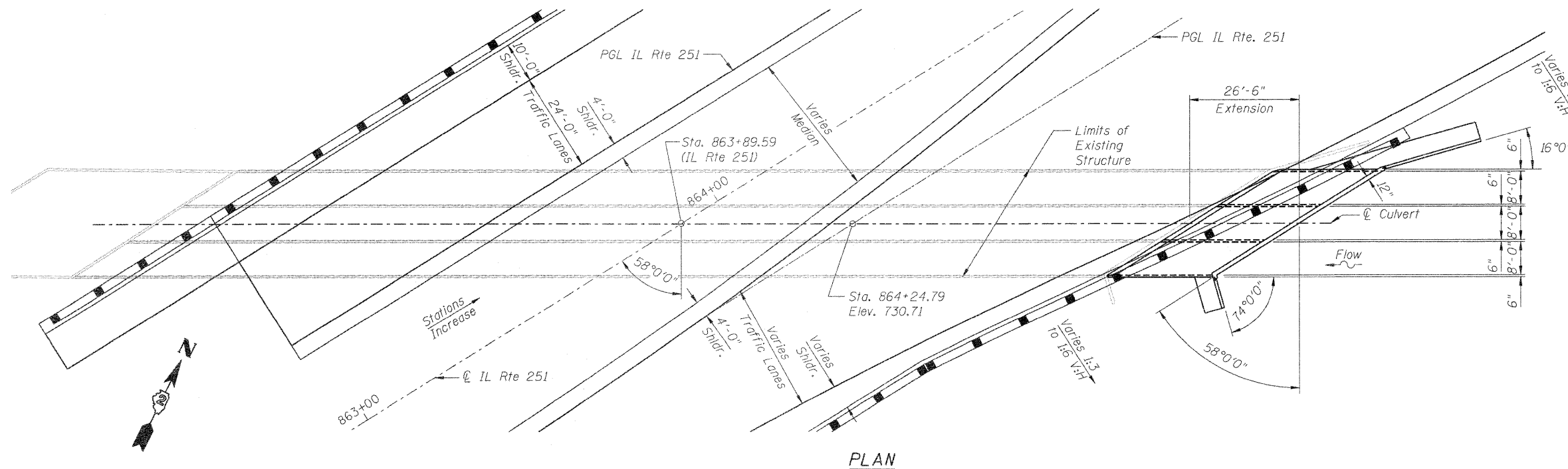
EXISTING DESIGN STRESSES

$f'_c = 1,400$ psi Walls & Top & Bott. Slab
 $f'_c = 1,000$ psi Wingwalls
 $f_s = 20,000$ psi (reinforcement)
 $n = 10$

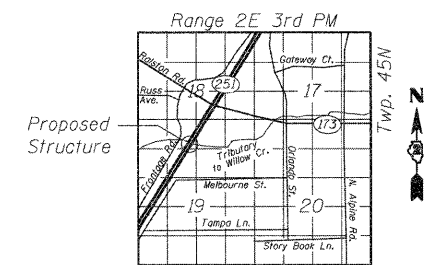


DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream
	719.15



PROFILE GRADE
 (along PGL IL Rte. 251)



LOCATION SKETCH

FILE NAME = ...D264987-2004-001-GPE.dgn	USER NAME = SAW	DESIGNED - LAS	REVISIONS -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN IL RTE 251 OVER WILLOW CREEK NORTH BRANCH	F.A.P. RTE. 303	SECTION 129K-1	COUNTY WINNEBAGO	TOTAL SHEETS 401	SHEET NO. 278
PLOT SCALE = 0:2.0000 ' / IN.	DRAWN - SAW	REVISIONS -	S.N. 101-2004			CONTRACT NO. 64987				
PLOT DATE = 11/28/2010	CHECKED - LAS	REVISIONS -	SHEET NO. 1 OF 4 SHEETS							
ILLINOIS FED. AID PROJECT										