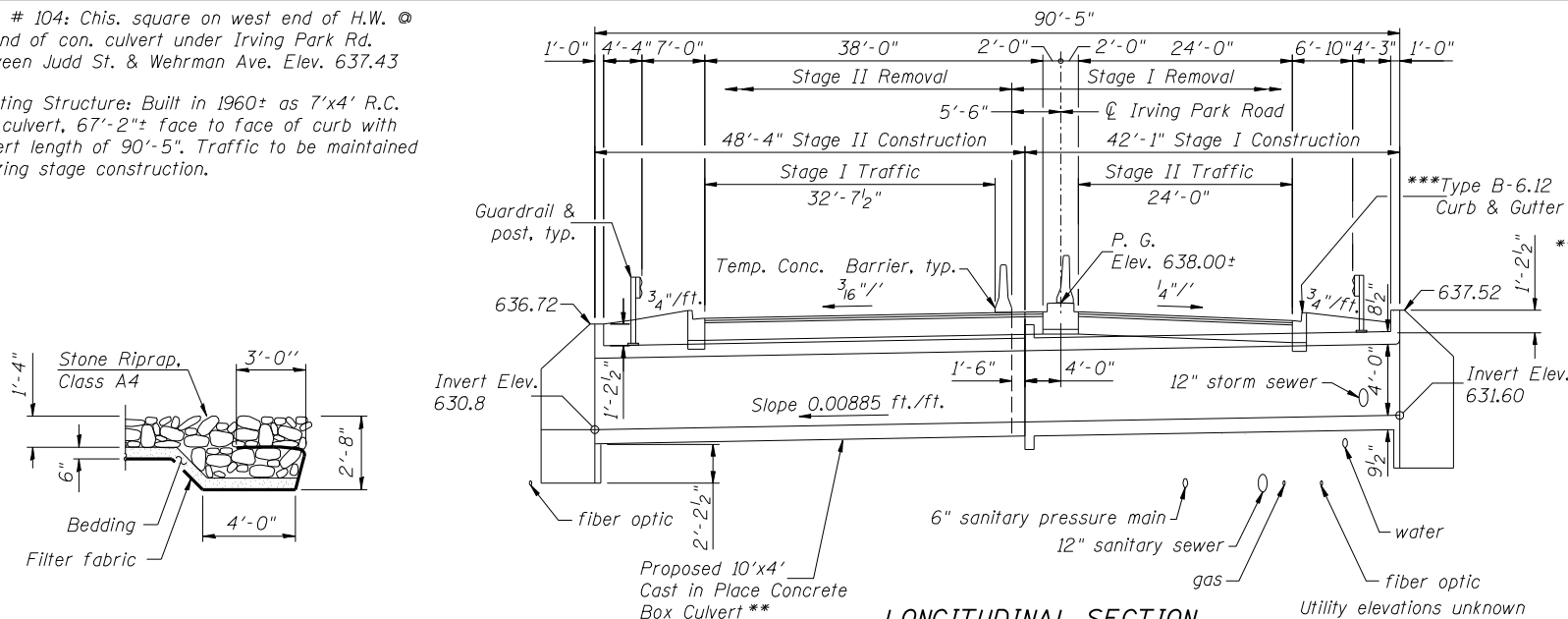


TBM # 104: Chis. square on west end of H.W. @  
S. end of con. culvert under Irving Park Rd.  
between Judd St. & Wehrman Ave. Elev. 637.43

Existing Structure: Built in 1960± as 7'x4' R.C.  
box culvert, 67'-2"± face to face of curb with  
culvert length of 90'-5". Traffic to be maintained  
utilizing stage construction.



SECTION A-A

LONGITUDINAL SECTION

\*\* Precast culvert alternate not allowed

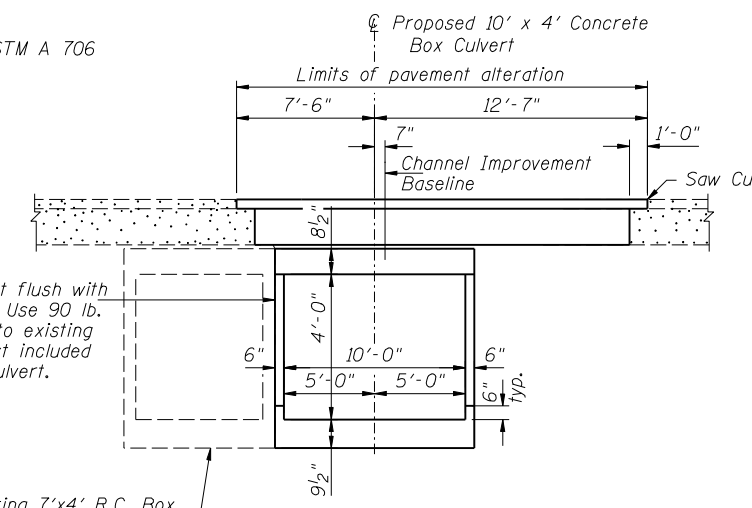
GENERAL NOTES

- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
- All exposed edges of concrete shall be beveled 3/4".
- Precast alternate is not allowed.
- For backfilling and embankment, see Standard Specifications.
- Place permanent Bench Mark on downstream headwall.
- \*\*\* Cost included with Comb. Conc. Curb & Gutter Rem. & Replacement
- D.H.W. Elev. 637.22
- Exist. Water Surface Elev. 632.3

CRYSTAL CREEK  
BUILT 2010 BY  
IL. DEPT. OF NATURAL RESOURCES  
OFFICE OF WATER RESOURCES  
LOADING HS20  
STRUCTURE NUMBER 016-1198

NAME PLATE

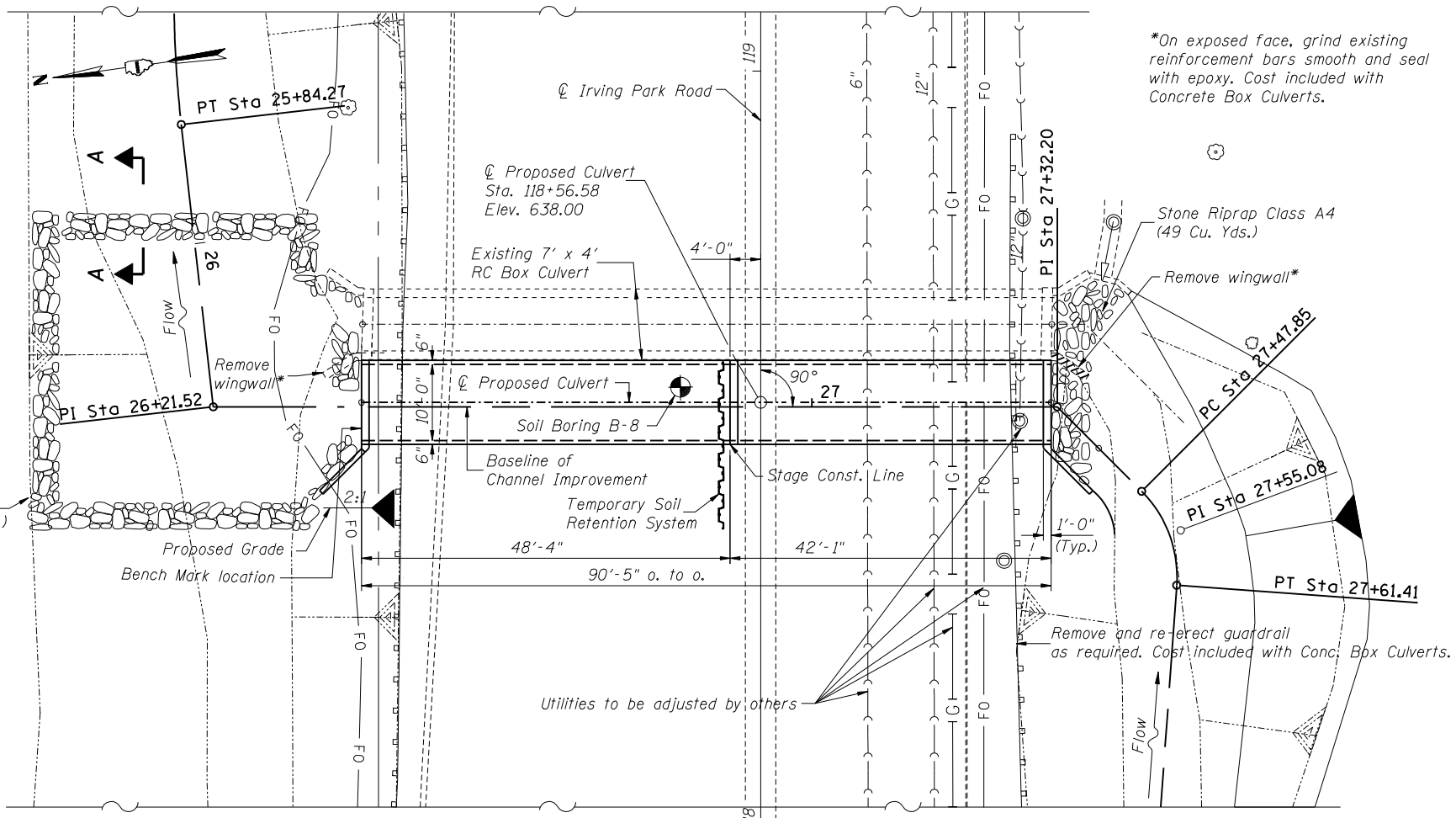
See Std. 515001  
(Attach to downstream headwall)



SECTION THRU BARREL

TOTAL BILL OF MATERIAL

ITEM	UNIT	QTY.
Concrete Box Culverts	Cu Yd	98.6
Reinforcement Bars	Pound	18,270
Pavement Removal	Sq Yd	152
Combination Conc. Curb & Gutter Removal and Repl.	Foot	40
Steel Plate Beam Guardrail Attached to Structures	Foot	38
Stone Riprap, Class A4	Sq Yd	241
Filter Fabric	Sq Yd	241
Temporary Soil Retention System	Sq Ft	118
Bar Splicers	Each	38
Name Plates	Each	1



PLAN

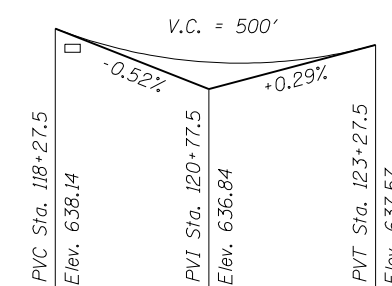
WATERWAY INFORMATION

Drainage Area = 0.94 sq. mi. Low Grade Elev. 637.35 @ Sta. 120+77.5

Flood	Freq. Yr.	Q	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	227	28	68	635.62	1.31	0.17	636.93	635.79
Design	50	343	28	68	637.15	1.35	0.07	638.5	637.22
Design	100	402	28	68	637.57	1.98	0	639.55	637.55
Overtopping	50	343	28	68	637.15	1.35	0.07	638.5	637.22

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	Upstream	Downstream
		628.60



PROFILE GRADE

Along Center Roadway

LOADING HS 20-44  
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO

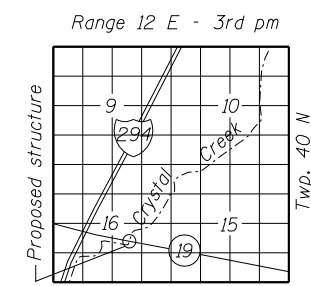
DESIGN STRESSES

FIELD UNITS

f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)

HIGHWAY CLASSIFICATION

F.A.P. Route 876 - IL Rte. 19  
ADT: 38,900 (2007)  
Functional Class: other principal arterial  
Design Speed: 45 mph ±  
ADTT 3150 Posted Speed: 35 mph



LOCATION SKETCH

GENERAL PLAN  
IL ROUTE 19 (IRVING PARK ROAD)  
OVER CRYSTAL CREEK  
STA. 118+56.58  
COOK COUNTY  
S.N. 016-1198

O:\Dwt\Proj\Imp\Projects\Crystal Creek\JF\Culvert No 4 Irving Park Road.dgn  
 12:16:49 PM  
 1/29/2010  
 Designed By TMM Checked By JJF  
 Drawn By JJF Checked By RLP