

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
353	(12&13)WRS-4	Will.	608	477
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	Contract No. 62478

SHEET NO. 2
9 SHEETS

ABBREVIATIONS

CL	centerline
C.I.P.	cast-in-place
CMP	corrugated metal pipe
chs.	centers
dia.	diameter
DS	down stream
EB	Eastbound
E.F.	each face
Elev.	elevation
I.F.	inside face
Inv.	invert
Lt.	left
O.F.	outside face
PGL	profile grade line
R.O.W.	right-of-way
Rt.	right
Sta.	station
typ.	typical
WB	Westbound
US	Upstream

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

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

DESIGN STRESSES

FIELD UNITS

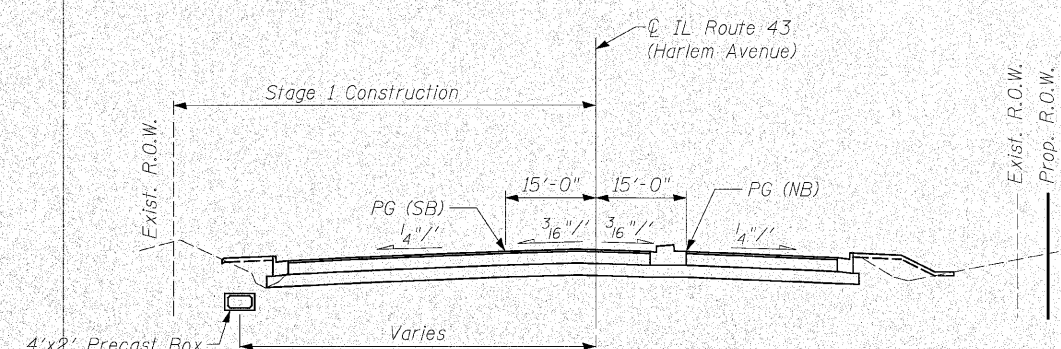
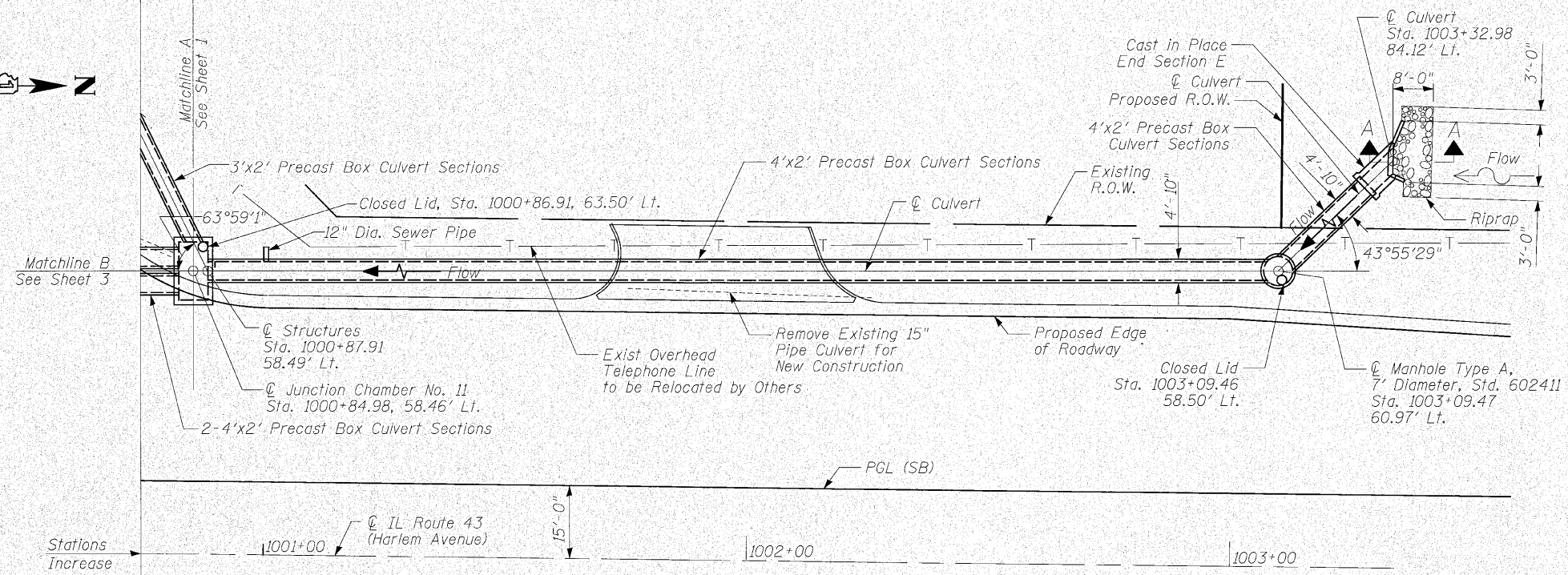
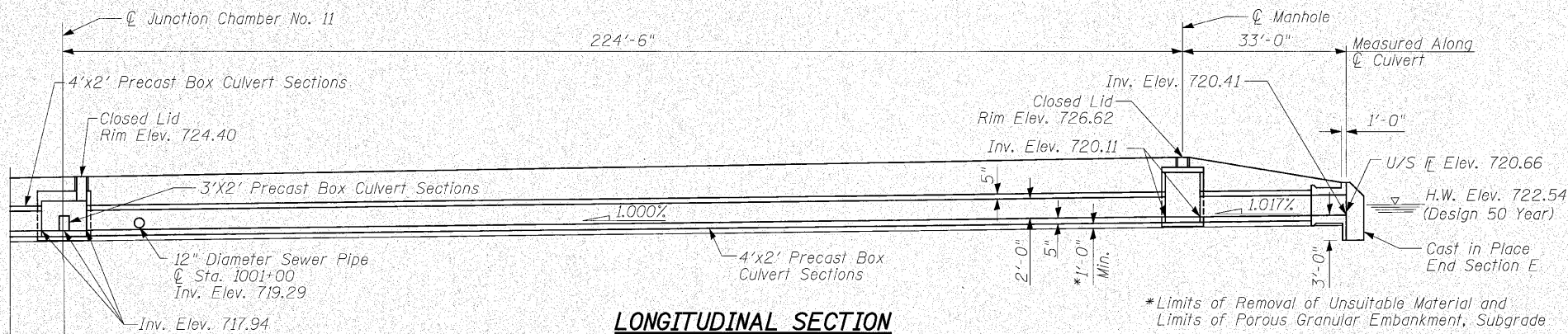
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

PRECAST UNITS

$f'_c = 5,000$ psi
 $f_y = 65,000$ psi (welded wire fabric)

GENERAL NOTES

1. Precast concrete box culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of either AASHTO M259 or M273 as applicable.
2. Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
3. Reinforcement bars shall conform to the requirements of ASTM A706 Grade 60. See Special Provisions.
4. All construction joints of cast-in-place concrete elements shall be bonded.
5. The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
6. All Junction Chambers and Manholes to have Type I Frame and Closed Lids (Standard 604001) unless noted otherwise. Cost of Frame and Lid is included with cost of Junction Chamber and Manhole.



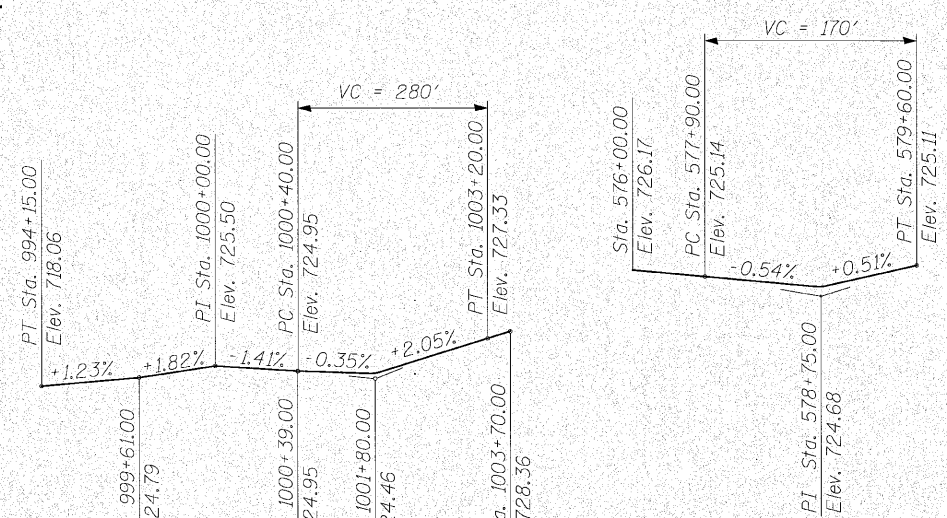
TYPICAL CROSS-SECTION BETWEEN STATIONS 1000+84.98 AND 1003+09.47
(Looking North)

WATERWAY INFORMATION TABLE (2-4'x2' Box Culverts)

Drainage Area = 0.046 sq. miles. Low Grade Elev. 724.90 @ Sta. 578+77.62

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	29	2.20	15.31	720.20	1.01	0.00	719.52	719.16
Base	50	53	3.10	15.31	720.56	1.69	0.00	720.54	719.77
Overtopping	100	64	3.41	15.31	720.69	1.97	0.00	720.95	720.01
Max. Calc.	500	130	4.91	15.31	721.77	1.88	2.14	721.40	723.91

DESIGNED	MT
CHECKED	RB
DRAWN	JHP
CHECKED	SPK

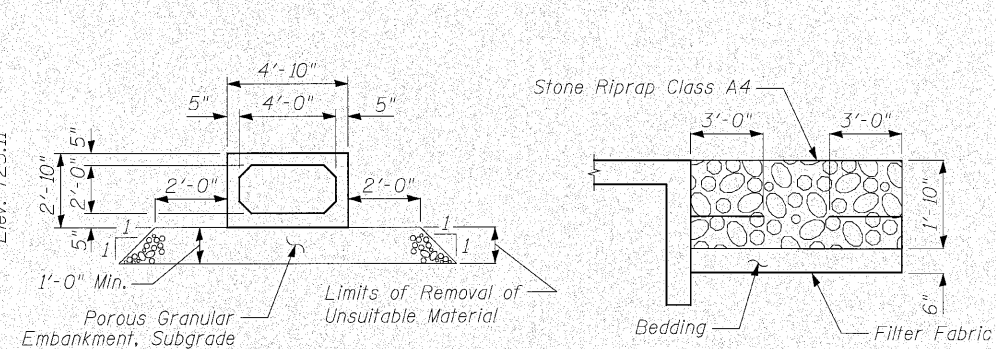


PROFILE GRADE U.S. ROUTE 30

(Along the Edge of a Lane Measured 15'-0" Normal to CL)

PROFILE GRADE IL ROUTE 43

(Along the Edge of a Lane Measured 15'-0" Normal to CL)



SECTION THRU 4'x2' PRECAST CONCRETE BARREL

SECTION A-A

PARTIAL GENERAL PLAN (2 OF 3)
U.S. ROUTE 30 OVER DRAINAGE DITCH
F.A.P. ROUTE 353 SEC. (12&13)WRS-4
WILL COUNTY
STATION 579+38.78
STRUCTURE NO. 099-C028

INFRASTRUCTURE ENGINEERING INCORPORATED
33 West Monroe | Suite 1540 | Chicago, IL 60603
P 312.425.9560 | F 312.425.9564 | www.infrastructure-eng.com

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