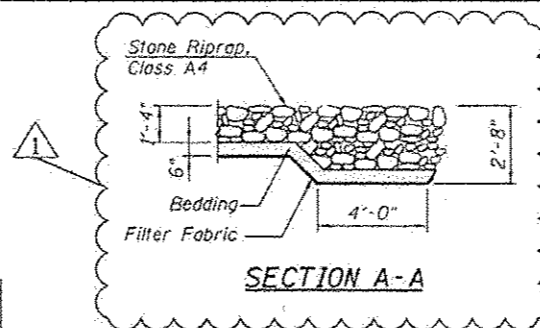


Bench Mark: BM #2 Set at Sta. 71+61.8, Elev. 931.030. Spike in the northwesterly face of 32-inch tree at the northeast corner of U.S. Route 20 and IL Route 47 ±110' foot north of utility pole w/ transformer.

Existing Structure: SN 045-0251 was built as part of US Route 20, Section 106-S-N-2. The structure is a single cast-in-place concrete box culvert approximately 12 feet in length and 55 feet in width. The structure is not skewed to the roadway centerline and carries two 12-foot traffic lanes and two 6-foot shoulders. Structure to be removed and replaced. Traffic to be maintained utilizing stage construction.

No Salvage.



WATERWAY INFORMATION

Drainage Area = 1.06 Sq. Mi.		Existing Low Grade Elev. = 929.3 ft. @ Sta. 75+00		Proposed Low Grade Elev. = 929.3 ft. @ Sta. 75+00		
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Natural H.W.E.	Head - Ft.	Headwater El.
			Exist. Prop.	Exist. Prop.	Exist. Prop.	Exist. Prop.
Design	50	300	35.6 35.9	926.41	0.06 0.08	926.47 926.49
Base	100	434	36.0 36.0	927.29	1.07 0.93	928.36 928.22
Overtopping	N/A			928.39	1.20 1.22	929.59 929.61
Max. Calc.	500	669	36.0 36.0	928.73	1.26 1.25	929.99 929.98

HIGHWAY CLASSIFICATION

F.A.P. Route 345, US Route 20.
 Function Class: Other Principal Arterial
 ADT: 7,550 vpd (2011)
 ADTT: 1025 (2011) 14%
 DHV: 755 (2007)
 Design Speed: 60 mph
 Posted Speed 55 mph

LOADING HL-93

Allow 50#/Sq Ft. for Future Wearing Surface

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

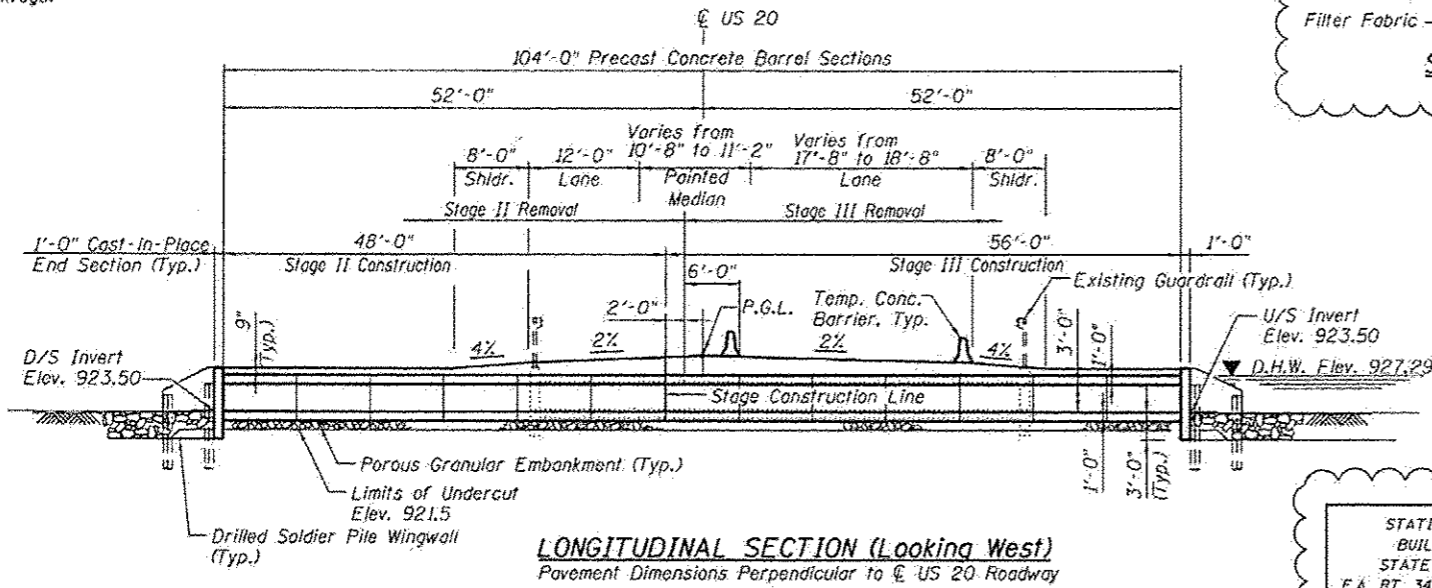
DESIGN STRESSES

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

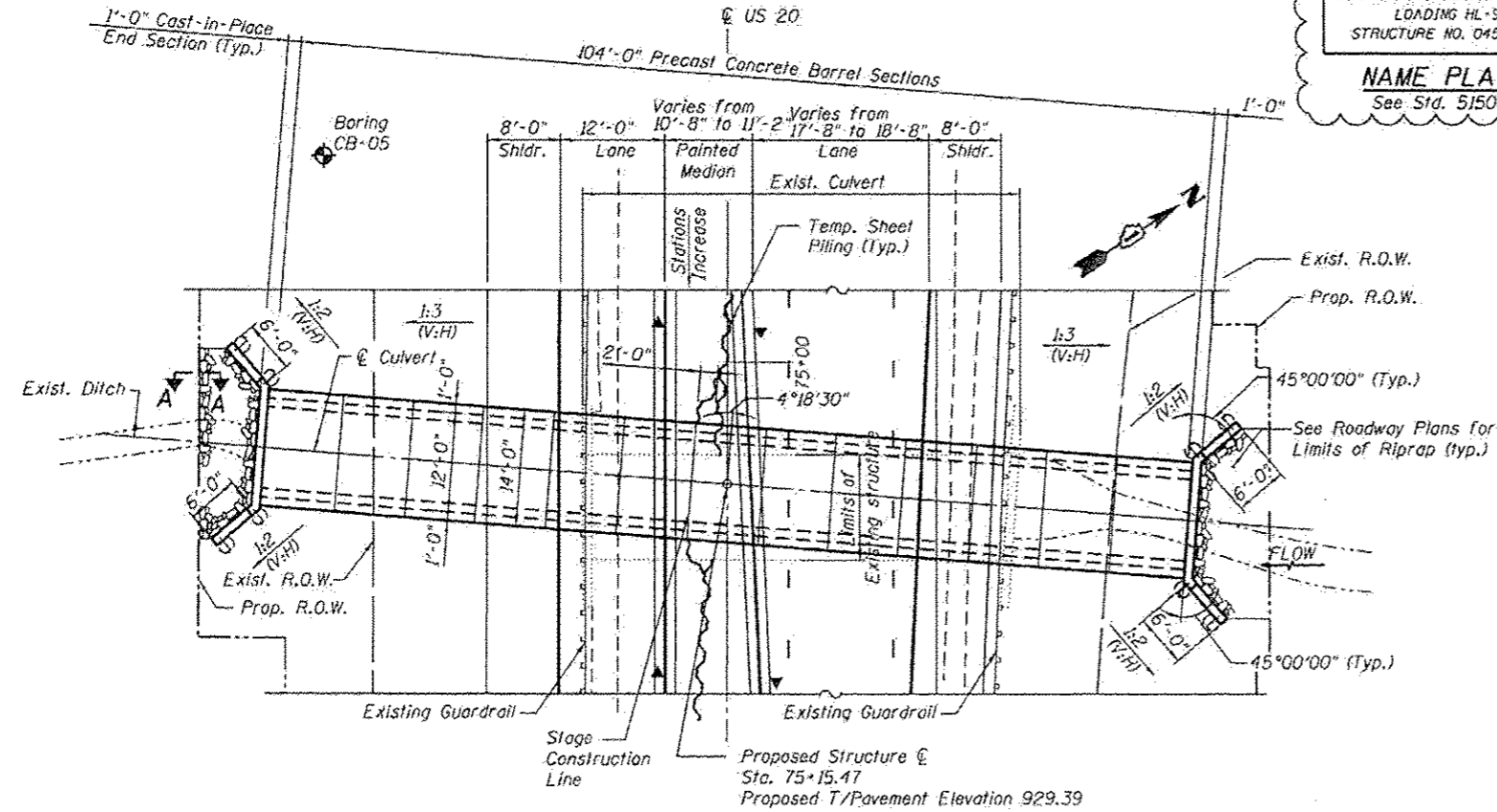
PRECAST UNITS
 f'c = 5,000 psi
 fy = 65,000 psi (Reinforcement)

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu. Yd.	72
Stone Riprap, Class A4	Sq. Yd.	33
Filter Fabric	Sq. Yd.	36
Removal of Existing Structures	Each	1
Structure Excavation	Cu. Yd.	128
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	72
Concrete Structures	Cu. Yd.	9.9
Protective Coat	Sq. Yd.	4
Reinforcement Bars, Epoxy Coated	Pound	1290
Drilling and Setting Soldier Piles (in soil)	Cu. Yd.	19.7
Precast Concrete Box Culverts 12'x3'	Foot	104
Furnishing Soldier Piles (HP Section)	Foot	108
Temporary Sheet Piling	Sq. Ft.	355



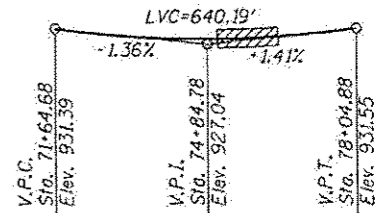
NAME PLATE
 See Sta. 515001



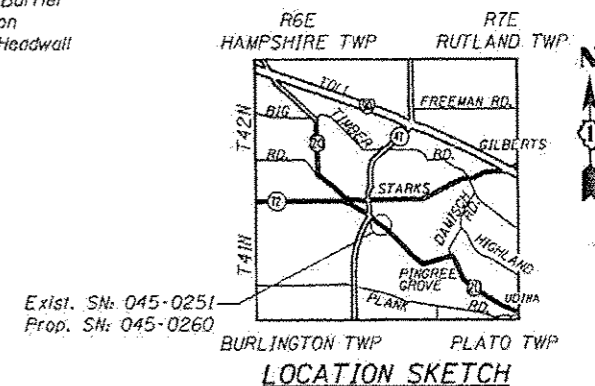
INDEX OF SHEETS

- S1 General Plan and Elevation
- S2 Stage Construction
- S3 Temporary Concrete Barrier for Stage Construction
- S4 Culvert Section and Headwall and Wingwall Details
- S5 Soil Boring Logs I
- S6 Soil Boring Logs II

PROFILE GRADE LINE
 (IL US 20, Along @ Roadway)



LOCATION SKETCH



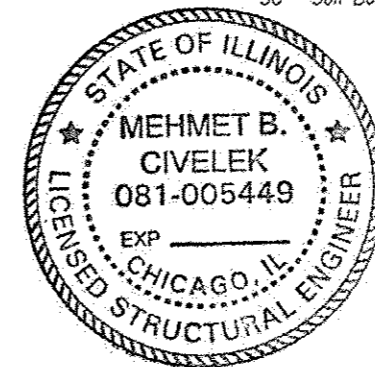
GENERAL PLAN

US ROUTE 20 OVER UN-NAMED DITCH
F.A.P. ROUTE 345 - SECTION 106-S-N-2

KANE COUNTY

STATION 75+15.47

STRUCTURE NO. 045-0260



Signed *M. Basar Civelek*
 Mehmet Basar Civelek, P.E., S.E.
 Il. Lic. No. 081-005449
 Expires 11-30-2014

Date **7-18-2014**

Note:
 The contractor shall grade around the wingwalls in such manner to create a positive drainage away from the culvert.

ADDENDUM 1 7-18-14

LEGEND

- Soil Boring
- Sheet Piling

USER NAME: -	DESIGNED - MBC	REVISED -	DIBS CONSULTANTS, INC. 1234 RIVERVIEW DRIVE, SUITE 100 CHICAGO, IL 60606 TEL: (312) 555-1234 FAX: (312) 555-1234	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION STRUCTURE NO. 045-0260	F.A.P. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
PLOT SCALE: -	DRAWN - BA/DS	REVISED -				345	106-S-N-2	KANE	147	98
PLOT DATE: -	CHECKED - WPK	REVISED -				CONTRACT NO. 60T09				
FILE NAME: -	DATE - 5/19/2014	REVISED -				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
SHEET NO. 51 OF 56 SHEETS										