

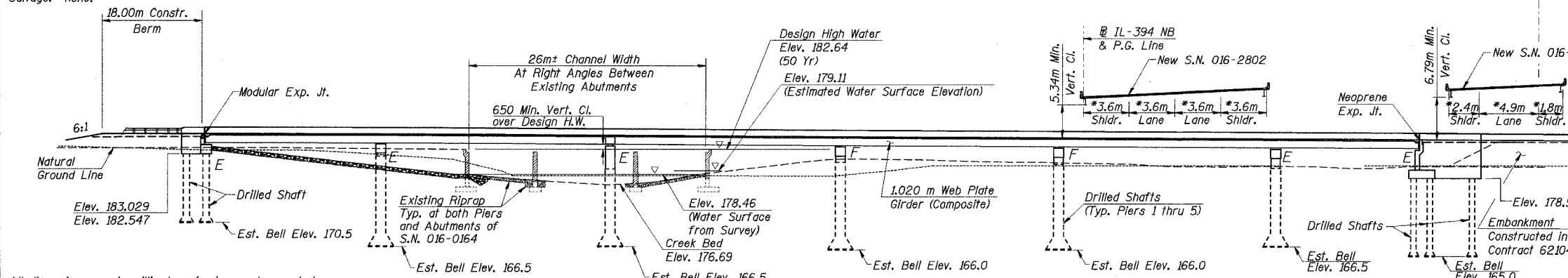
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F. A. I. 80/94		COOK	870	611	56 SHEETS
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT-			
0203.1 & 0312-708W-R-3		CONTRACT NO. 62104			

Benchmark: TBM #316 Set cut box on foundation of overhead sign truss (C3) NE corner of exit ramp to I-80 westbound; approximately mile marker 74.30 Elev. = 183.274

Existing Structure: S.N. 016-0164, three-span continuous 39.49 m Bk. to Bk. abutments, variable width from 21.60 m to 23.4 m out-to-out. Haunched R.C. slab on multicolumn piers and closed abutments founded on timber piles. Built as S.A. Route 66, Sec. 066-0303.1-MFT at Station 4+61.67 (English) in 1945. Bridge was widened in 1969 and deck was rehabilitated in 1995. The Contractor shall remove in stages the existing superstructure and substructure and replace with new structures (SN 016-2807, 2800/2845) while maintaining traffic on the existing structure using staged construction.

Salvage: None.



All dimensions are in millimeters (mm) except as noted.

Staging: Prior to the beginning of construction of the new bridge, the two existing lanes of EB I-94 traffic will be shifted to the southern half of the existing bridge. The SB IL394 traffic will be shifted to the new NB IL394 lanes. The northern half of the existing bridge will then be removed and construction of the new bridge will begin.

LOADING MS18 & ALT.
Allow 2.4 kN/m² for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO
2003 AASHTO Guide Specifications for Horizontally Curved Steel Girder Highway Bridges

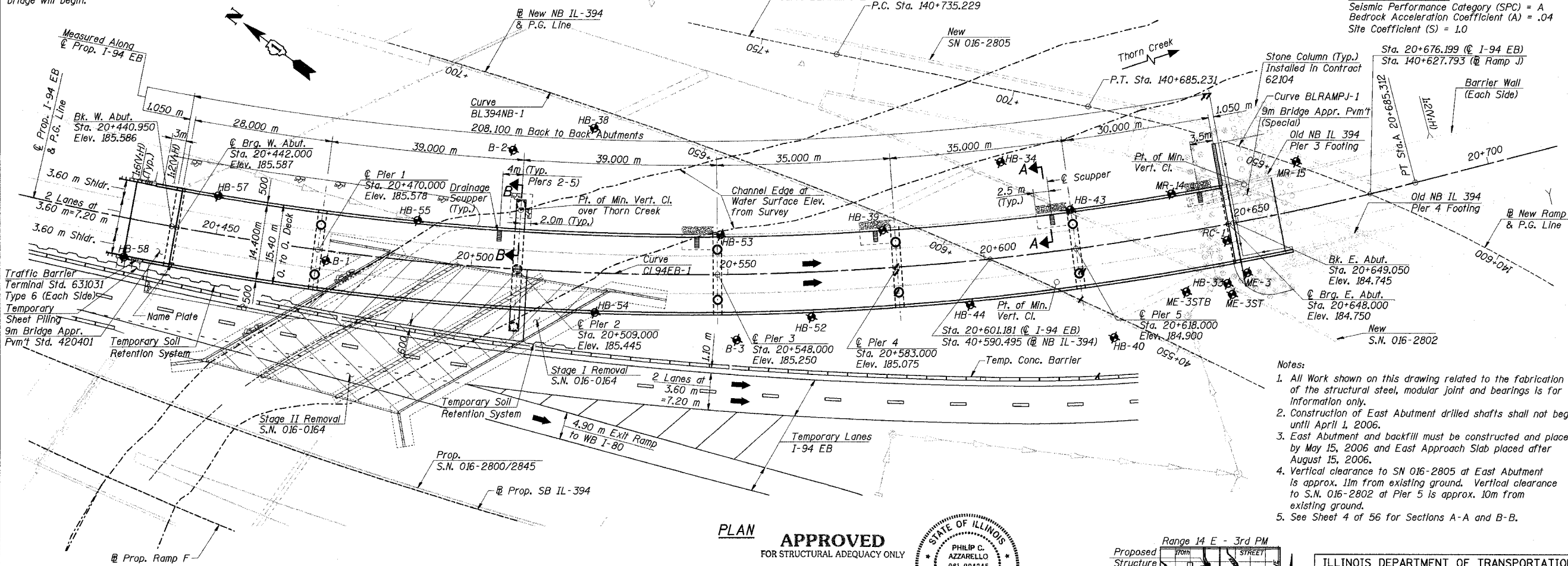
DESIGN STRESSES

FIELD UNITS
f_c = 24 MPa
f_y = 400 MPa (reinforcement)
f_y = 345 MPa (structural steel) (M270M Grade 345)
f_y = 250 MPa (structural steel) (M270M Grade 250)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = .04
Site Coefficient (S) = 1.0

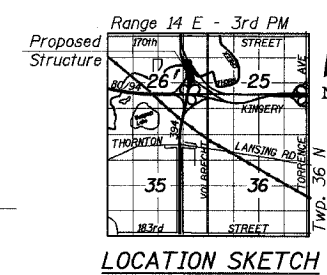
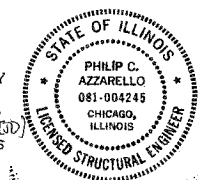
ELEVATION



PLAN APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Philip C. Azzarelli (S.E.)
ENGINEER OF BRIDGES AND STRUCTURES

Philip C. Azzarelli (S.E.)
8.18.05
Philip C. Azzarelli, S.E.
Ill. Reg. No. 081-004245
Expires 11-30-06



ILLINOIS DEPARTMENT OF TRANSPORTATION
I-94 EAST BOUND / IL 394 SOUTH BOUND

GENERAL PLAN & ELEVATION

EB I-94 OVER THORN CREEK
F.A.I. 94 SECTION (0203.1 & 0312-708W) R-3
COOK COUNTY
STA. 20+509.000 STRUCTURE NO. 016-2807

DATE JUL 18, 2005
SCALE ---

HNTB

WATERWAY INFORMATION

Drainage Area = 274.4 km² Prop. Low Grade Elev. 183.89 @ Sta. 20+100

DESIGNED	CHKD	Yr.	Freq.	Q	Opening m ²		Nat. H.W.E.		Head-m.		Headwater El.	
					Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
JJK	PCA	10	10	124.6	201.3	181.94	0.01	181.95				
		50	50	188.3	264.3	182.64	0.02	182.66				
		100	100	213.5	294.8	182.94	0.02	182.96				
		500	500	280.3	328.6	183.74	0.02	183.76				

- LEGEND**
- Existing Fence
 - Existing Drainage Pipe
 - ⊙ Existing Manhole
 - Existing Inlet
 - Existing Catch Basin
 - ◆ Boring
 - ▨ Structure Removal

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