

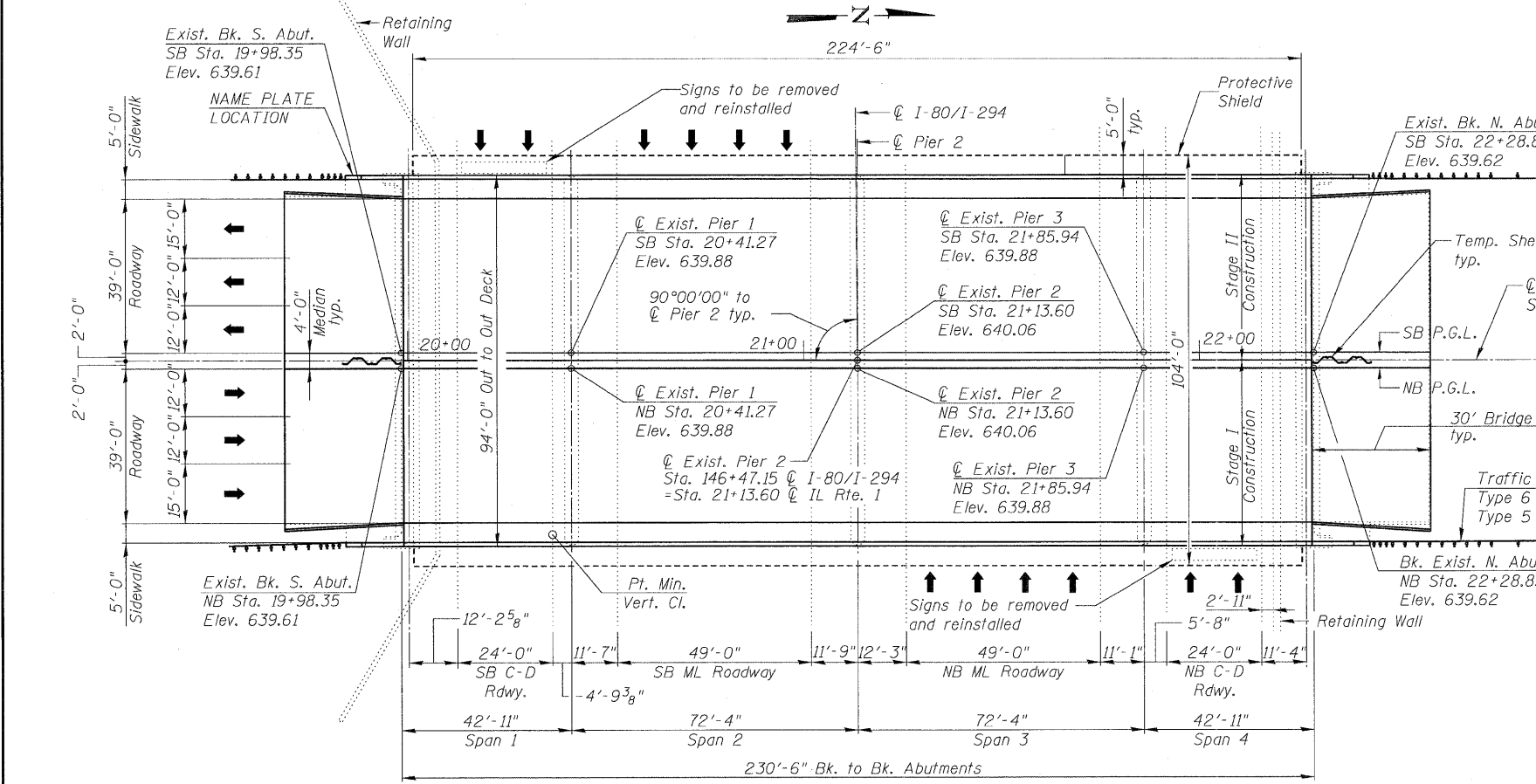
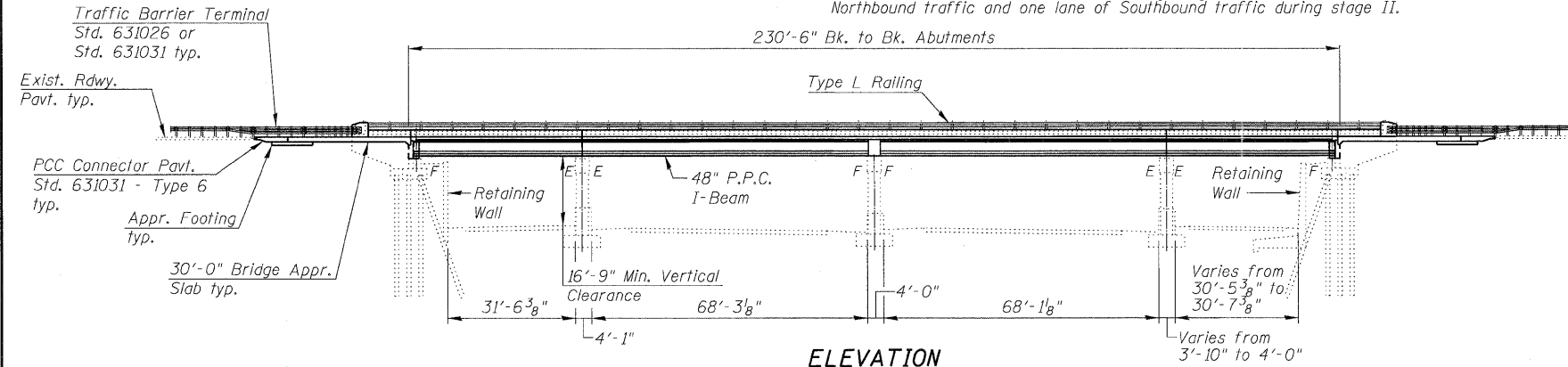
B.M. # 221: Square cut on S. side of concrete base of traffic signal mast arm pole at the SE corner of Halsted St. & 171st St. Elevation = 613.28

Existing Structure: SN 016-0199 built in 1958 as Illinois Route 1, Section T1-7. The superstructure consists of four simple spans with 48" Prestressed Concrete Beams. The substructure consists of three multi-column R.C. piers on spread footings & two R.C. pile bent abutments. Skewed at 0°, 230'-6" back to back of abutments and 94'-0" out to out of deck. Traffic to be maintained using stage construction.

No Salvage

**PROPOSED SCOPE OF WORK**

1. Remove and replace the existing bridge concrete deck, beams, diaphragms and bearings. Repair piers and North and South retaining walls and abutments.
2. Remove existing signs, store and put back on the new superstructure.
3. Remove the existing 30' approach pavements and replace with IDOT 30' Bridge Appr. Slabs.
4. Remove existing sidewalk over existing wingwalls and provide parapet and railing over the existing wingwalls.
5. Construction will be staged to maintain two lanes of Southbound traffic and one lane of Northbound traffic during stage I and two lanes of Northbound traffic and one lane of Southbound traffic during stage II.



**SEISMIC DATA**  
 Seismic Performance Category (SPC) = A  
 Bedrock Acceleration Coefficient (A) = 0.04g  
 Site Coefficient (S) = 1.0

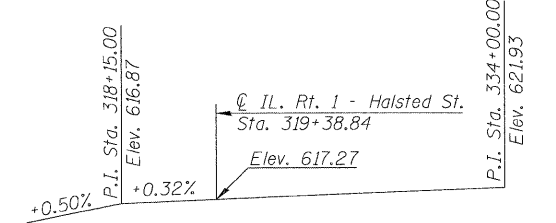
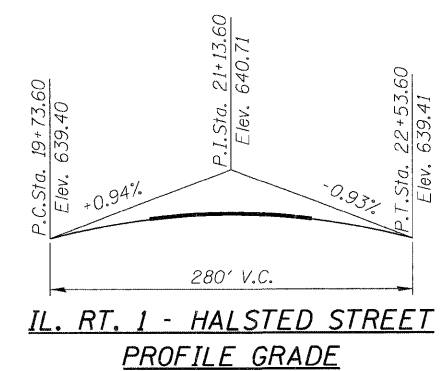
**DESIGN SPECIFICATIONS**  
 2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition

**LOADING HS20-44**  
 Allow 25#/sq. ft. for future wearing surface.

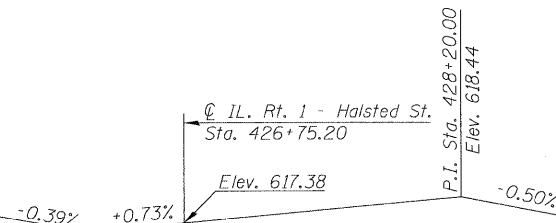
**DESIGN STRESSES**  
 FIELD UNITS (New Construction)  
 $f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (reinforcement)

FIELD UNITS (Existing Substructure)  
 $f'_c = 3,000$  psi  
 $f_y = 40,000$  psi (reinforcement)

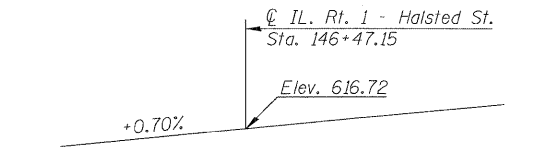
**PRECAST PRESTRESSED CONCRETE UNITS**  
 $f'_c = 6,000$  psi  
 $f'_{ci} = 5,000$  psi  
 $f'_s = 270,000$  psi  
 $f'_{si} = 201,960$  psi



**NB ROADWAY C-D PROFILE GRADE**



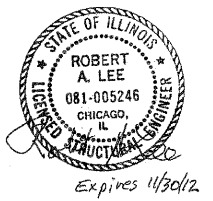
**SB ROADWAY C-D PROFILE GRADE**



**I-80/I-294 (NB & SB) PROFILE GRADE**

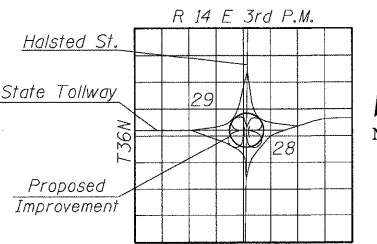
STATION 21+13.60  
 REBUILT 20 BY  
 STATE OF ILLINOIS  
 F.A. 876 SEC. 2001-001BR  
 LOADING HS20  
 STRUCTURE NO. 016-0199

**NAME PLATE**  
 See Std. 515001



FILE NAME = 0160199-62099-01-GPE.dgn	USER NAME =	DESIGNED - JPMILLA	REVISED -
PLOT SCALE =	PLLOT DATE = 07/01/2011	CHECKED - RALEE	REVISED -
		DRAWN - RMKANE	REVISED -
		CHECKED - RALEE	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION



**LOCATION SKETCH**

**GENERAL PLAN**  
 IL. RT 1 - HALSTED ST. OVER I-80/294

**APPROVED**  
 FOR STRUCTURAL ADEQUACY ONLY  
 ENGINEER OF BRIDGES AND STRUCTURES

F.A.P. 876 SECTION T1-7  
 COOK COUNTY  
 STA. 21+13.60  
 STRUCTURE NO. 016-0199

IL. RT 1 - HALSTED ST. OVER I-80/294  
 GENERAL PLAN & ELEVATION  
 SHEET NO. 01 OF 33 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
876	2001-001BR	COOK	62	20
STRUCTURE NO. 016-0199			CONTRACT NO. 62099	
ILLINOIS FED. AID PROJECT				