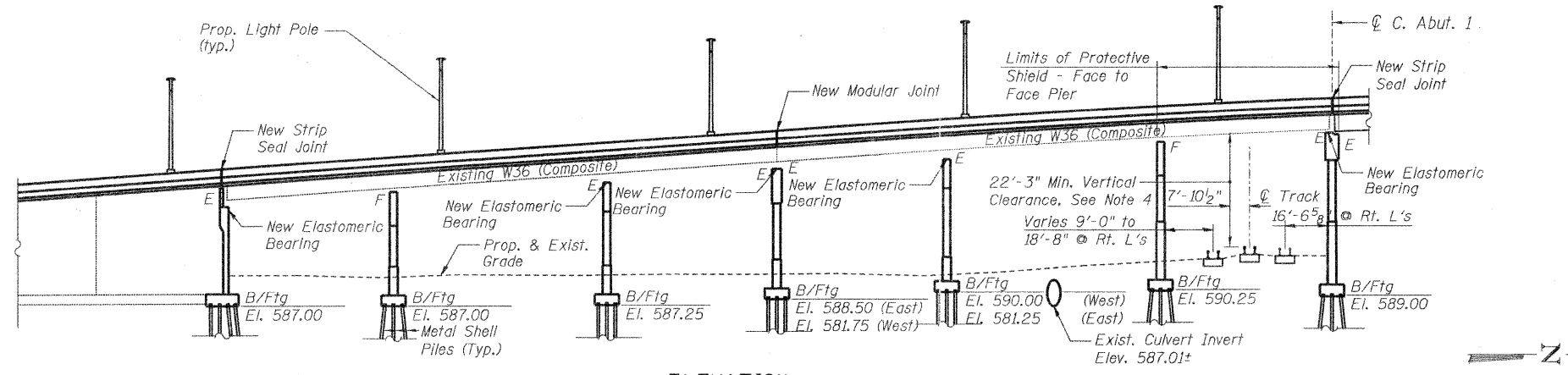


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



**DESIGN SPECIFICATION**  
2002 AASHTO Standard Specifications for Highway Bridges

**DESIGN STRESSES**  
**FIELD UNITS**  
Concrete:  $f'_c = 3,500$  psi  
Struct. Steel:  $f_y = 50,000$  psi (M 270, GR 50)  
Reinforcement:  $f_y = 60,000$  psi

**SEISMIC DATA**  
Seismic performance category (SPC) = A  
Bedrock Acceleration Coefficient = 0.04  
Site Coefficient = 1.50

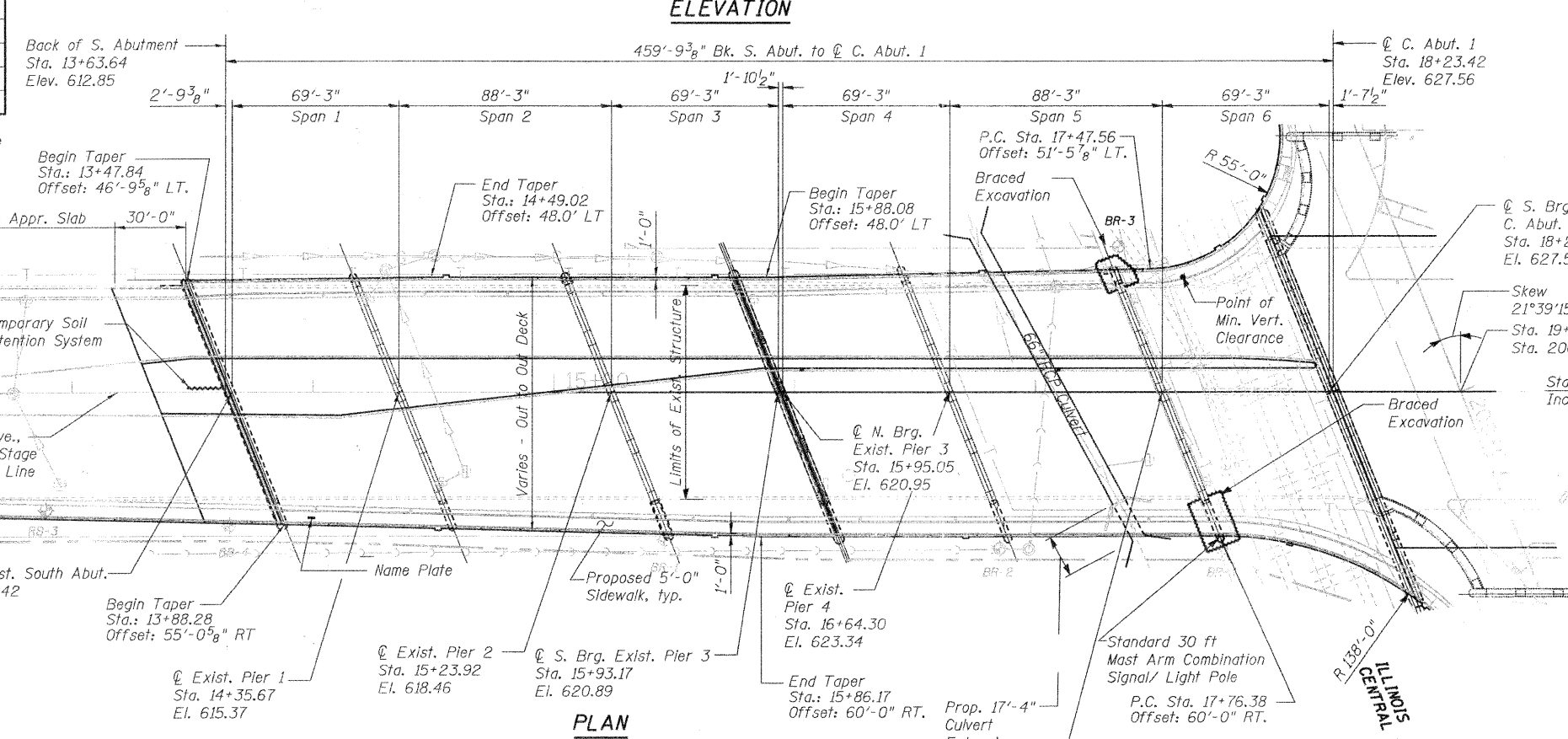
**LOADING HS20-44**  
Allow 50 psf for future wearing surface

**ALLOWABLE STRESSES FOR EXISTING STEEL AND CONCRETE**  
Concrete:  $f'_c = 3,500$  psi  
Struct. Steel:  $f_y = 36,000$  psi  
Reinforcement:  $f_y = 40,000$  psi

**BORING LOCATIONS**

No.	Station	**Offset
RB-4	13+65.3	55.6' RT
BR-1	15+46.1	61.5' RT
BR-2	16+85.2	65.2' RT
BR-3	17+34.4	60.8' LT
BR-4	17+77.4	65.6' RT

\*\* Offset from C Central Avenue



**NOTES:**

- For C. Abutment 1 details, see plans for S.N. 016-0724
- For culvert extension details, see drainage plans.
- Controlling Vertical Clearance governed by existing beams.

STATION 15+94.11  
REBUILT 20... BY  
STATE OF ILLINOIS  
FAP 366  
FAI ROUTE 55  
SEC. 0711.2R & 1011.1BR  
LOADING HS20-44  
STR. NO. 016-3241

**NAME PLATE**

(See Std. 515001)\*

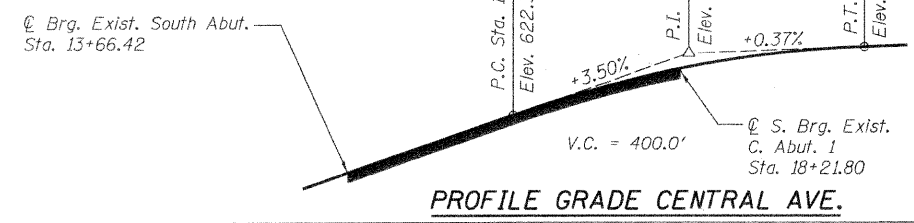
\* The existing Name Plate shall be cleaned and relocated next to the new Name Plate. Cost is included with Name Plates.

**LEGEND**

Boring Location

**SCOPE OF WORK**

- Widen the existing Superstructure and Substructure.
- Remove and replace the Existing Deck with a 7 1/2" Deck.
- Clean and Paint the Existing Structural Steel.
- Make existing structural steel composite.
- Remove and replace End Diaphragms located below deck expansion joints.
- Remove and replace South Abutment stem and backwall.
- Rebuild Pier 3 and C. Abutment 1.
- Construct new Pier & Abutment Extensions.
- Perform Formed Concrete Repairs on Piers.
- Replace Existing Rocker Expansion Bearings with Elastomeric Bearings.
- Install new deck Expansion Joints.
- Remove and replace the Drainage System.
- Extend the existing culvert.



**PROFILE GRADE CENTRAL AVE.**

**APPROVED**  
FOR STRUCTURAL ADEQUACY ONLY

*Anna M. Dukes*  
ENGINEER OF BRIDGES AND STRUCTURES



Signed *Anna M. Dukes*  
Anna M. Dukes, S.E. Il. Lic. No. 081-005598  
Expires 11-30-2012.

Date March 25, 2011

**GENERAL PLAN AND ELEVATION**  
**STRUCTURE NO. 016-3241**

**TYLIN INTERNATIONAL**

DESIGNED	SP	REVISIONS	
CHECKED	AMD,	NAME	DATE
DRAWN	SP		
CHECKED	AMD,		
DATE	03/25/2011		

SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	71 SHEETS	55	0711.2R & 1011.1BR	COOK	741 254
FED. ROAD DIST. NO. 1 ILLINOIS			FED. AID PROJECT		

I:\1345\structure\CI\_South Approach 016-3241\55c1ape.dwg 11:37:40 AM 3/24/2011