

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
FAP 301	24BR-1	JO DAVIESS	50	11
SHEET NO. 1				
20 SHEETS				
Contract # 64A48				

B.M. None  
Existing Structure: SN 043-0036 was built in 1971 as SBI Rt 5 at Sta. 477+28. The structure consists of 3 simple span PCC-deck beams on pile bent abutments and pile bent caps. The bk. to bk. of Abutments dimension is 152'-8" and the o. to o. width is 33'-0". The existing superstructure shall be removed and replaced in kind with PCC deck beams. The substructure will be repaired. Stage construction will be used. The existing approach pavements shall remain, but shall be milled 2" to butt into the proposed top of deck. No Salvage.

See Roadway Plans for Approach Pavement and Traffic Barrier Terminal

**SEQUENCE OF CONSTRUCTION**

- PRE-STAGE I**  
Provide Traffic control for Pre-Stage I construction as shown on the Roadway Plans. Remove and replace beam Beam #8 Span 3 as shown on sheet 19 and 20.
- STAGE I**  
Provide Traffic control for Stage I construction as shown on the Roadway Plans. Perform Stage I removal and construction as shown in the plans.
- STAGE II**  
Provide Traffic control for Stage II Construction as shown on the Roadway Plans. Perform Stage II removal and construction as shown in the plans.

**LOADING HS20-44**

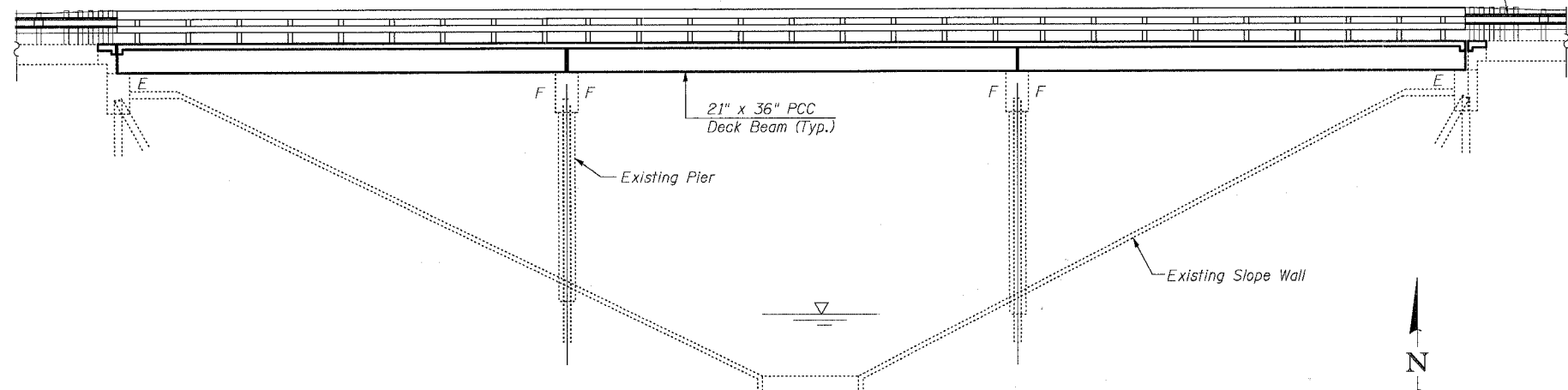
Allow 25#/sq. ft. for future wearing surface.

**DESIGN SPECIFICATIONS**  
2002 AASHTO

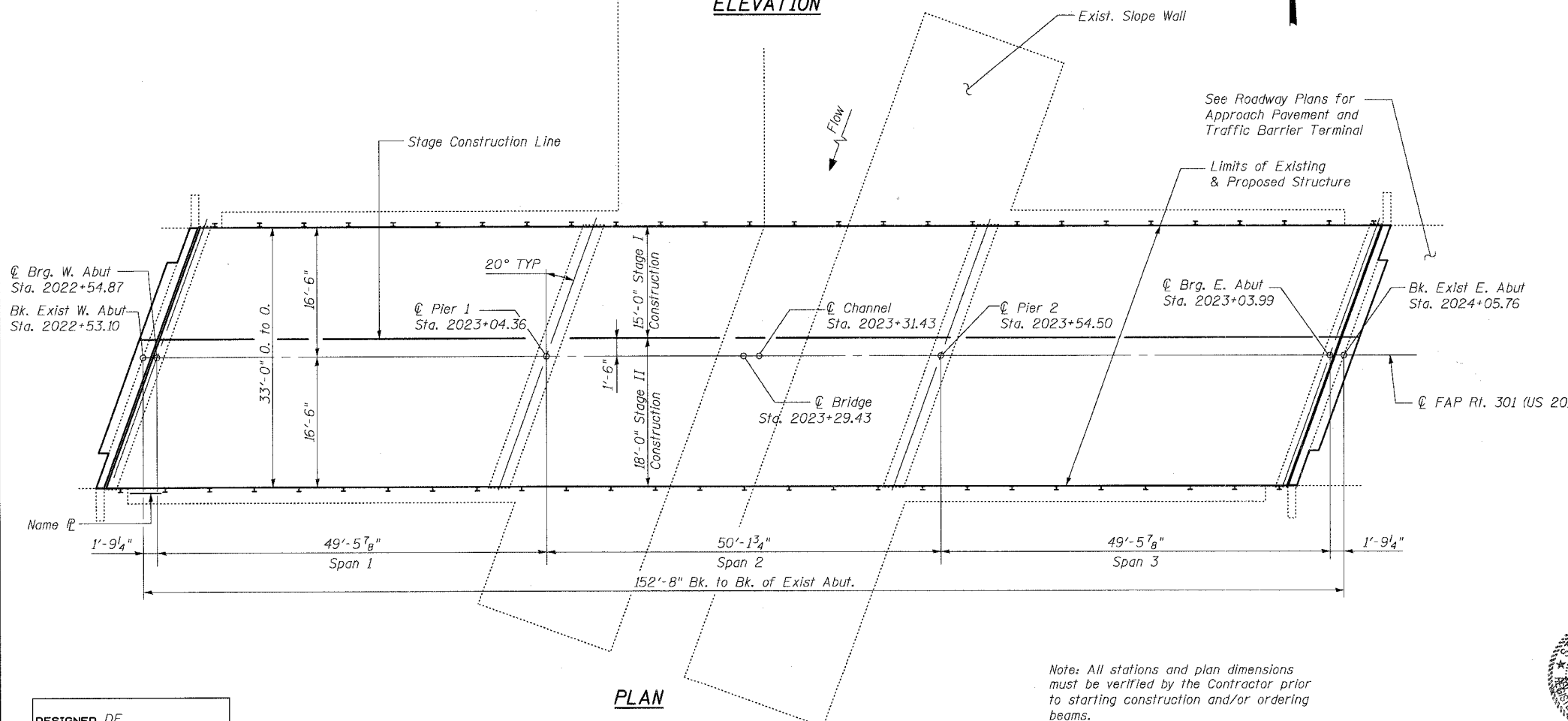
**DESIGN STRESSES**

**NEW & EXISTING CONSTRUCTION**  
FIELD UNITS

- $f'_c = 5,000$  psi (Concrete Wearing Surface)  
 $f'_c = 3,500$  psi (All other)  
 $f_y = 60,000$  psi (reinforcement)
- PRECAST PRESTRESSED UNITS**  
 $f'_c = 5,000$  psi  
 $f'_{ci} = 4,000$  psi  
 $f'_s = 270,000$  psi ( $\frac{1}{2}$ "  $\phi$  low relax strands)  
 $f'_{si} = 201,960$  psi ( $\frac{1}{2}$ "  $\phi$  low relax strands)



**ELEVATION**

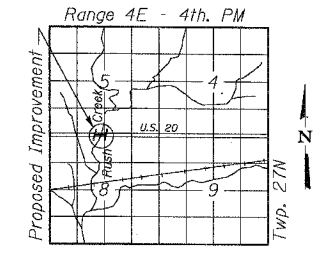


**PLAN**

Note: All stations and plan dimensions must be verified by the Contractor prior to starting construction and/or ordering beams.

DESIGNED	DF
CHECKED	CB
DRAWN	RG
CHECKED	CB

V3 Companies  
7325 Janes Avenue  
Woodridge, IL 60517  
630.724.9200 phone  
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**LOCATION SKETCH**

**GENERAL PLAN AND ELEVATION**

U.S. 20 OVER RUSH CREEK  
F.A.P. ROUTE 301 - SEC. 24BR-1  
JO DAVIESS COUNTY  
STATION 2023+29.43  
S.N. 043-0036