

Benchmark: Set Square on NE abutment/wingwall El. 665.04

Existing Structure: S.N. 049-6801. Built in 1964 as Moffett Road Bridge Section 44-12-1B-CA (Part 1B) (County) and Section 8B-CS (Part 1B) (Village). 3-Span P.P.C. deck on open abutments. 114'-9" Back to Back of Abutments, 31'-0" Out of Out Deck. Structure is to be removed. Traffic will be detoured during construction.

Salvage: None.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
2758	02-00025-00-BR	LAKE	40	11	30 SHEETS
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

CONTRACT 83790

**LOADING HS20-44**

Allow 50#/sq. ft. for future wearing surface

**DESIGN SPECIFICATIONS**

AASHTO 2002 Standard Specifications for Highway Bridges, 17th Edition

**DESIGN STRESSES**

**FIELD UNITS**

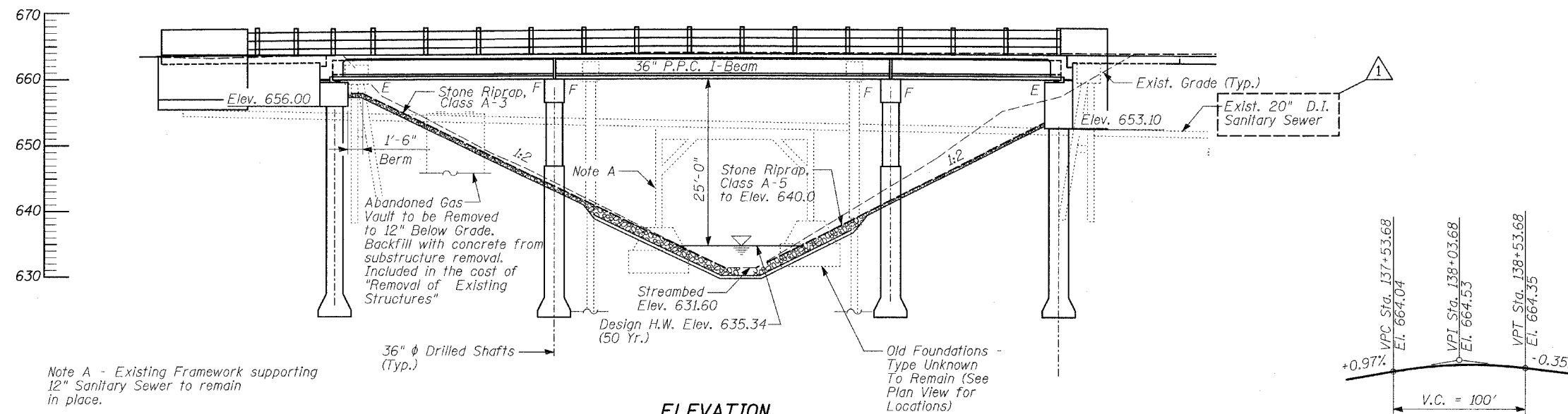
$f'_c = 3,500$  psi  
 $f_y = 60,000$  psi (Reinforcement)

**PRECAST PRESTRESSED UNITS**

$f'_c = 6,000$  psi  
 $f'_{ci} = 5,000$  psi  
 $f'_s = 270,000$  psi ( $\frac{1}{2}$ "  $\phi$  low lax. strands)  
 $f_{si} = 201,960$  psi ( $\frac{1}{2}$ "  $\phi$  low lax. strands)

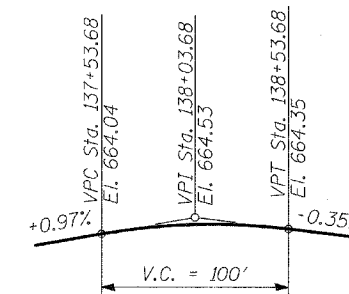
**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 3.5%  
Site Coefficient (S) = 1.0

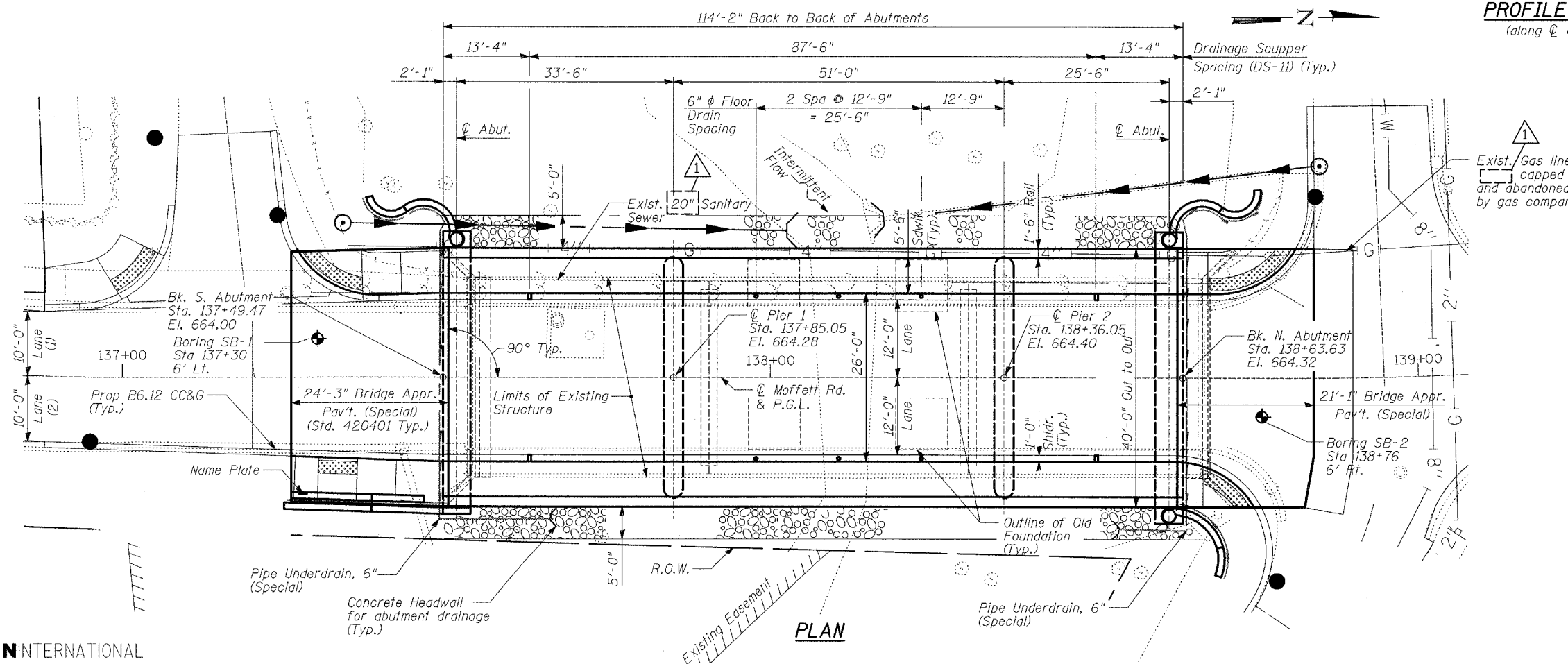


Note A - Existing Framework supporting 12" Sanitary Sewer to remain in place.

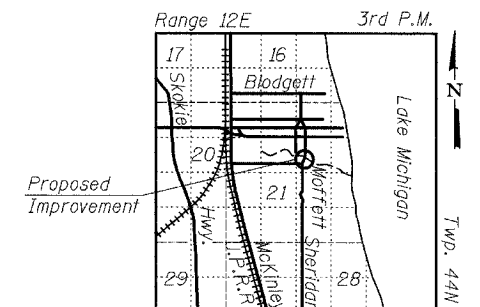
**ELEVATION**



**PROFILE GRADE**  
(along  $\phi$  roadway)



**PLAN**



**LOCATION SKETCH**

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of the structure and complies with requirements of the current "AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES."



Signed Phillip D. Frey  
Phillip D. Frey, S.E. II, Lic. No. 081-004826  
Expires 11-30-2005.

Date 2/23/05

TYLIN INTERNATIONAL

DESIGNED	SP, DR
CHECKED	SP
DRAWN	SP, DR
CHECKED	PF
DATE	12-22-2004

(1) Lane width varies from 10'-0" at Sta. 137+88.00 to 12'-0" at Sta. 137+48.14.

(2) Lane width varies from 10'-0" at Sta. 137+88.00 to 12'-0" at Sta. 137+48.21.

ADDENDUM #1 9-01-05

**GENERAL PLAN AND ELEVATION**

MOFFETT ROAD OVER  
DRAINAGE RAVINE  
FAU 2758  
LAKE COUNTY  
S.N. 049-6803