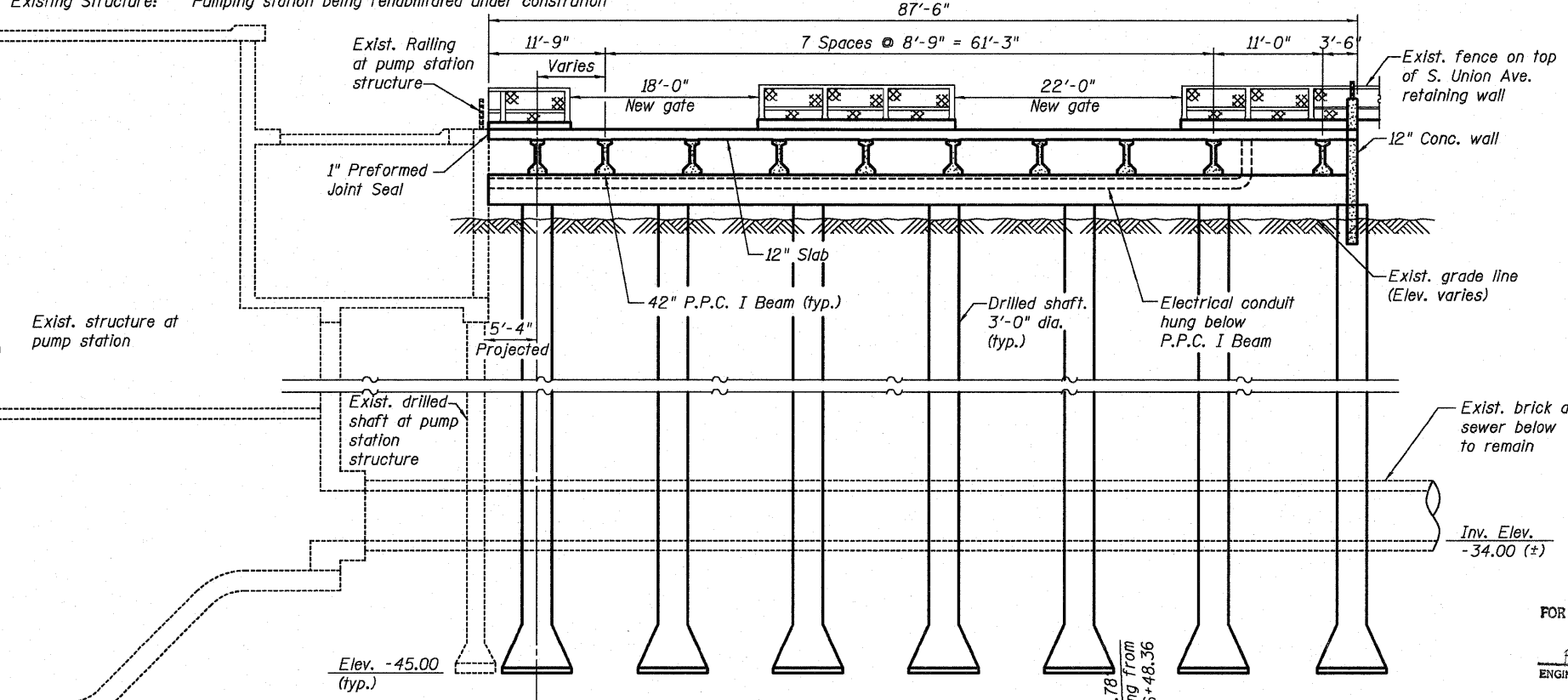
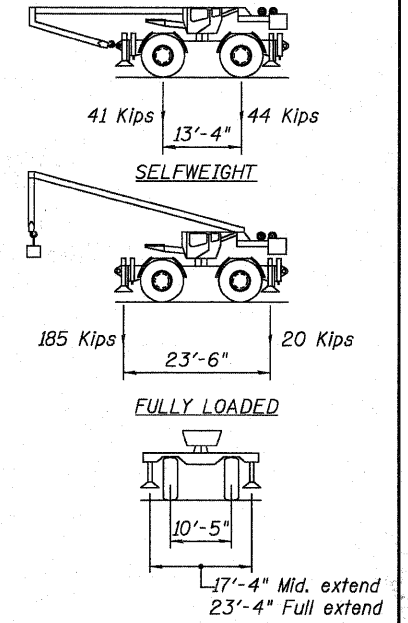
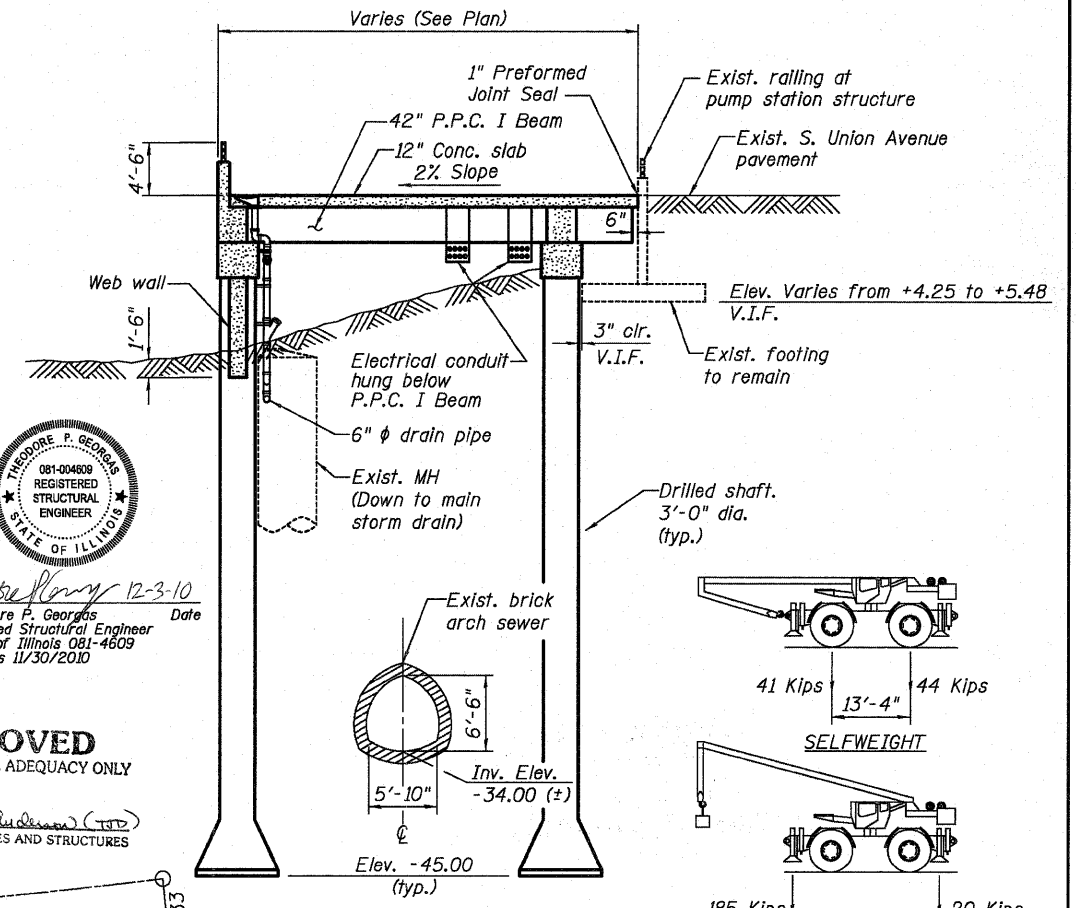


Benchmark: Existing spike in bituminous shoulder of S. Union Avenue.
Sta. 5+94.11, offset 18.07 ft. Elev. +14.69 (Chicago City Datum).
Existing Structure: Pumping station being rehabilitated under construction



THEODORE P. GEORGAS
081-004809
REGISTERED
STRUCTURAL
ENGINEER
STATE OF ILLINOIS
Theodore P. Georgas
Licensed Structural Engineer
State of Illinois 081-4609
Expires 11/30/2010
Date 12-3-10

APPROVED
FOR STRUCTURAL ADEQUACY ONLY
Ralph E. Anderson (SE)
ENGINEER OF BRIDGES AND STRUCTURES



LOADING HL-93
Allow 50#/Sq. Ft. future wearing surface.
SPECIAL LOADING CRANE GROVE RT760E
Crane Capacity = 120 Kips
Crane Selfweight = 85 Kips

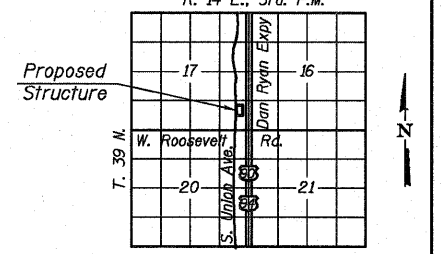
DESIGN SPECIFICATIONS
2010 AASHTO LRFD Bridge Design Specifications.

DESIGN STRESSES
FIELD UNITS

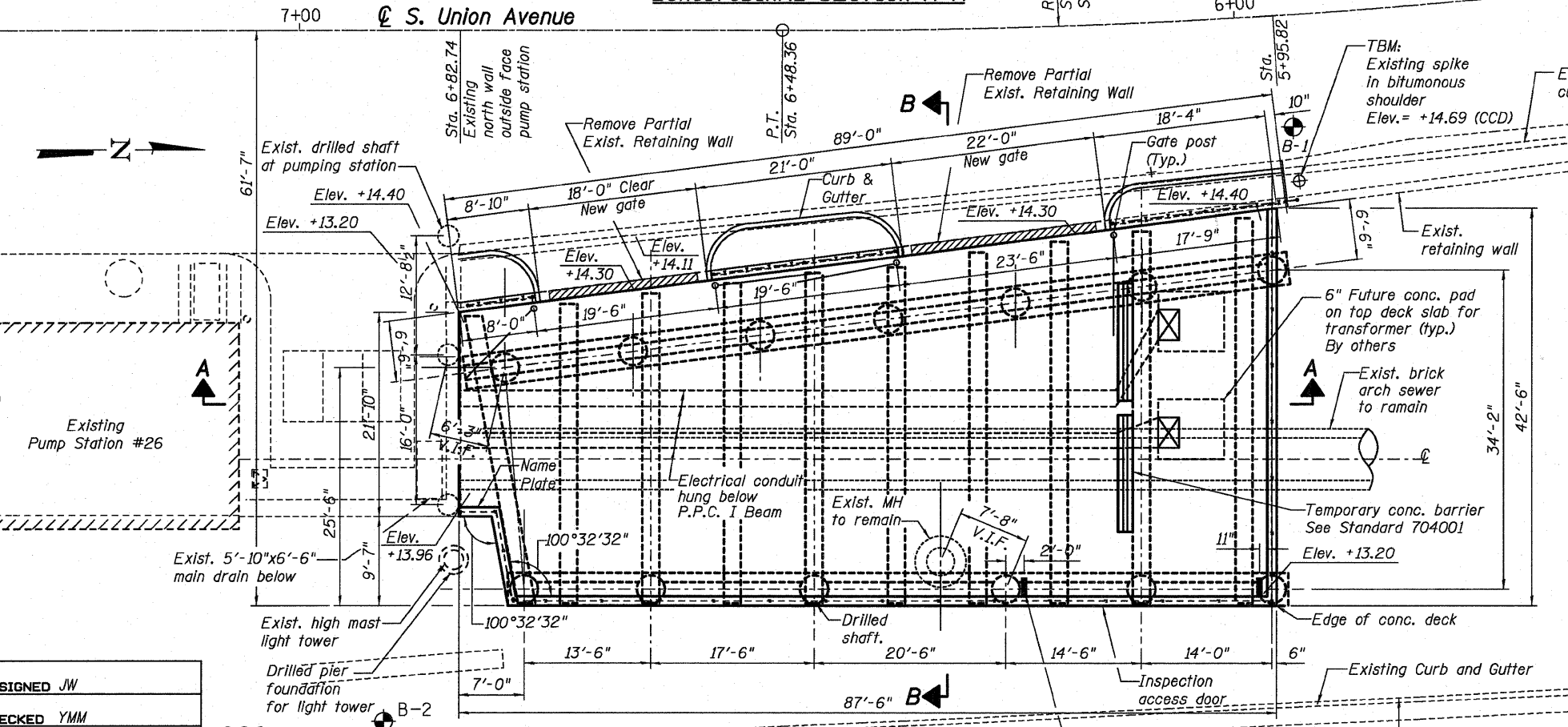
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
PRECAST PRESTRESSED UNITS
 $f'_c = 6,000$ psi
 $f'_{ci} = 5,000$ psi
 $f_{pu} = 270,000$ psi ($\frac{1}{2}$ " ϕ low relax. strands)
 $f_{pbt} = 201,960$ psi ($\frac{1}{2}$ " ϕ low relax. strands)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.085g
Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.143g
Soil Site Class = D

60 TON CRANE LOADING
(GROVE RT760E)
R. 14 E., 3rd. P.M.



GENERAL PLAN
I-90/94 DAN RYAN PUMP STATION #26
ROOSEVELT ROAD AT S. UNION AVENUE
RETAINING WALL TRUCK PARKING AREA
STRUCTURE NUMBER 016-1308



DESIGNED	JW
CHECKED	YMM
DRAWN	JLS & PS
CHECKED	TPG & JXH

Primera
100 S. WICKER DRIVE SUITE 700 CHICAGO IL 60605 P.312.686.8900 F.312.686.8915

SHEET NO. SJ	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	90/94	2010-075-I	COOK	33	10
S19 SHEETS	DATE: 12-03-10		ILLINOIS FED. AID PROJECT		
	CONTRACT NO. 60L61				