

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 389	2424.2 B-1	COOK	23	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

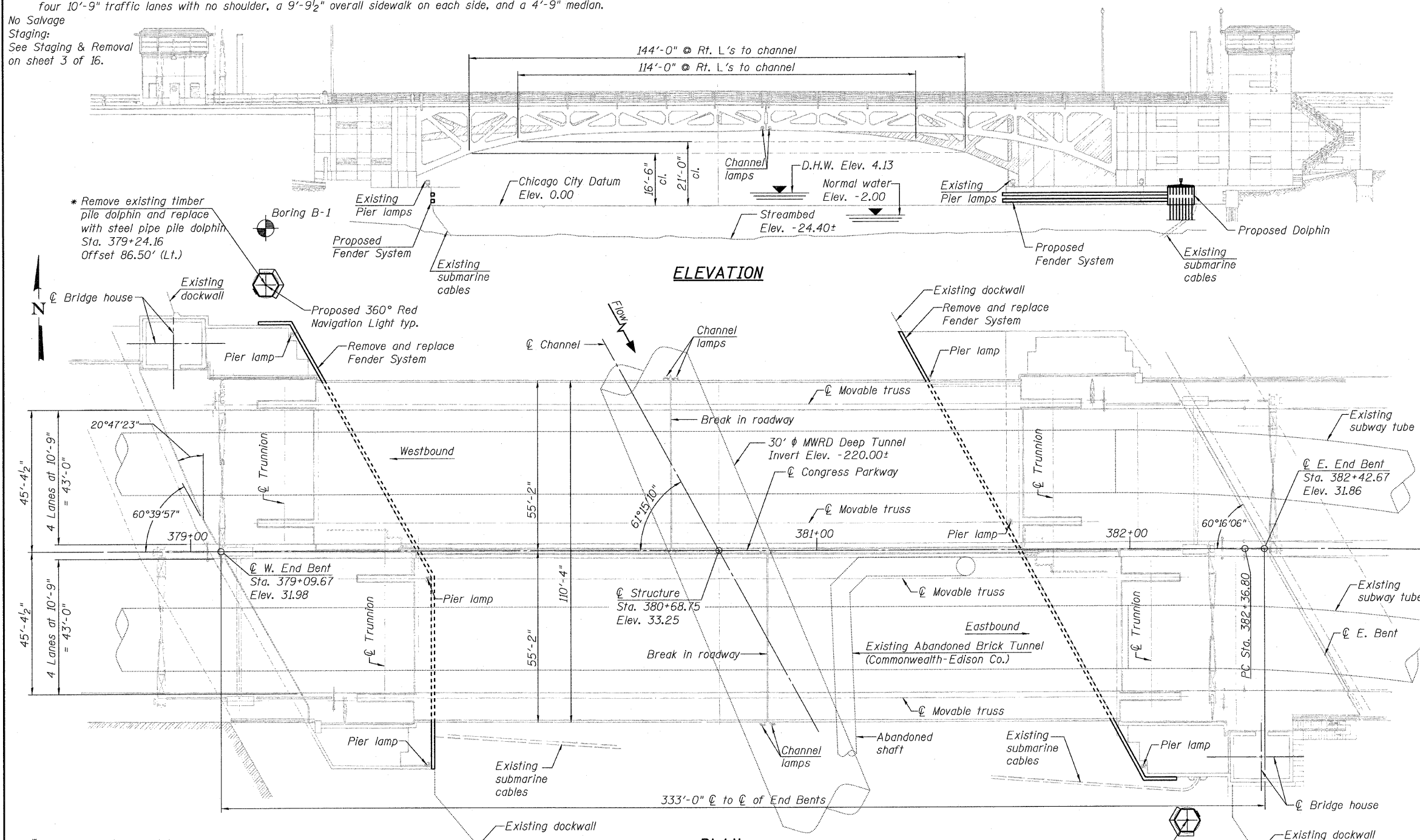
SHEET NO. 1
16 SHEETS

Contract No. 60E11

B.M. (CDOT Wacker Drive Rehabilitation Survey Marker #1), Elev. 17.655'
3" brass disk set in sidewalk on the southerly side of Harrison Street, 3.6' southerly of the northerly back of curb,
3.1' northerly of the southerly back of curb, 15.5' easterly of the westerly traffic signal, 33.4' easterly of a utility manhole
and 29.9' easterly of the easterly edge of pavement of Franklin Street. (Northing = 897601.505, Easting = 174477.842)

Existing Structure:
The existing structure is a dual double-leaf, trunnion type bascule bridge, carrying the eastbound and westbound traffic of Congress Parkway over the South Branch of the Chicago River. The movable structure has an overall length of approximately 333'-0" (C to C of end bents) and has an out-to-out deck width of approximately 110'-4". The deck cross section consists of four 10'-9" traffic lanes with no shoulder, a 9'-9 1/2" overall sidewalk on each side, and a 4'-9" median.

No Salvage
Staging:
See Staging & Removal
on sheet 3 of 16.



SCOPE OF WORK

- Remove the existing timber fender system and replace with a self-restoring rubber type.
- Remove existing timber pile dolphins at the southeast and northwest ends and replace with pipe pile dolphins at the same location.
- Repair outside face of the river piers with epoxy crack injection and structural repair of concrete.
- Repair the eroded section behind the northwest dock wall at the west bridge house.
- Remove and replace pier dock ladders.
- Install one navigation light at each new dolphin.

DESIGN SPECIFICATIONS

2002 AASHTO

DESIGN STRESSES

FIELD UNITS

- f'c = 3,500 psi
- fy = 60,000 psi (reinforcement)
- fy = 35,000 psi ASTM A 252, GR. 2 (Pipe piles)
- fy = 36,000 psi (AASHTO M 270, GR. 36)

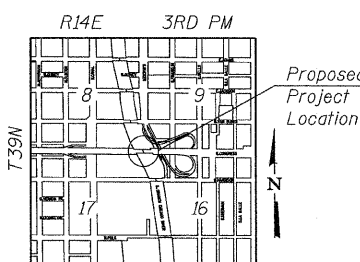
SEISMIC DATA

- Seismic Performance Category (SPC) = A
- Bedrock Acceleration Coefficient (A) = 0.032g
- Site Coefficient (S) = 1.0

EXISTING CURVE DATA

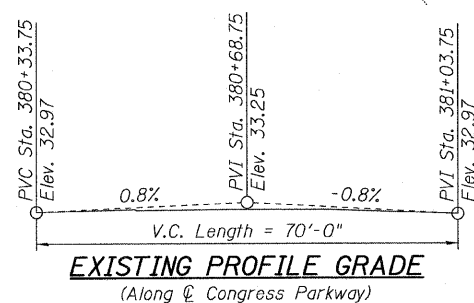
- Δ = 2°17'43" (Rt.)
- D = 1°30'00"
- T = 76.52'
- L = 153.02'
- E = 0.77'
- R = 3,819.72'
- P.C. = Sta. 382+36.80
- P.T. = Sta. 383+89.82
- P.I. = Sta. 383+13.32

Note:
An abbreviated Hydraulic Report was made and no further hydraulic study is needed.
All existing channel and pier lamps remain in place.



LOCATION SKETCH

DESIGNED	S. CHELBIAN
CHECKED	A. HAMMAD
DRAWN	D.C.PATEL
CHECKED	A. HAMMAD



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

Signed *Ahmad M. Hammad*
Ahmad M. Hammad, S.E., IL Lic. No. 081-005467
Expires 11-30-2008
Date 10-15-2008

LEGEND

Soil Boring Location



**GENERAL PLAN & ELEVATION
CONGRESS PARKWAY OVER
SOUTH BRANCH CHICAGO RIVER
F.A.P. RT. 389 - SEC. 2424.2 B-1
COOK COUNTY
STATION 380+68.75
STRUCTURE NO. 016-2445**

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