BENCHMARK:
"X" cut on the southeasterly corner of the R.R. bridge pier in the centerline of 159th Street at the east face of the bridge, approximately 98 feet west of Center Street Elevation 603.25

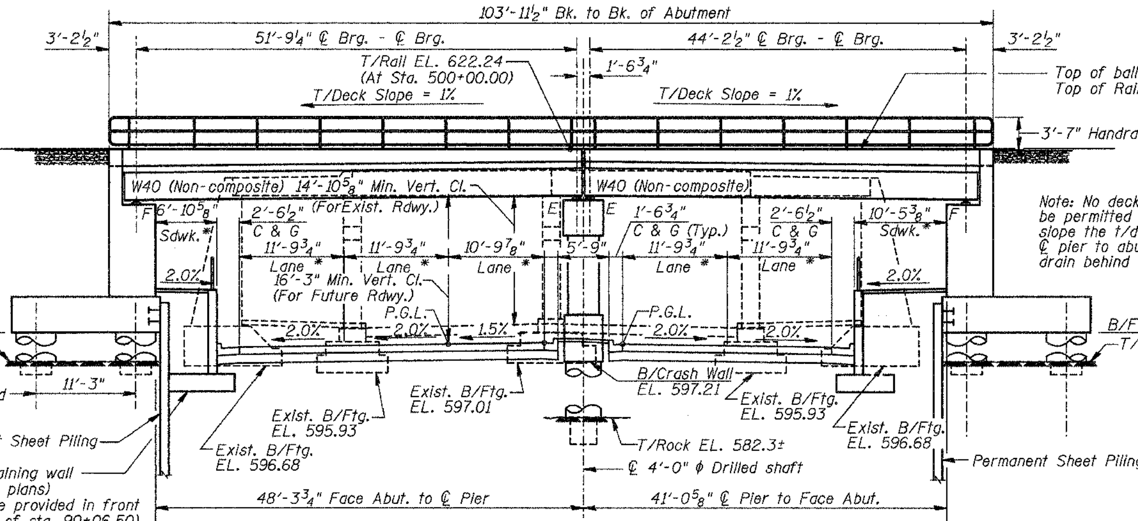
EXISTING STRUCTURE:
None

* Existing 2-lane roadway and sidewalks to remain.

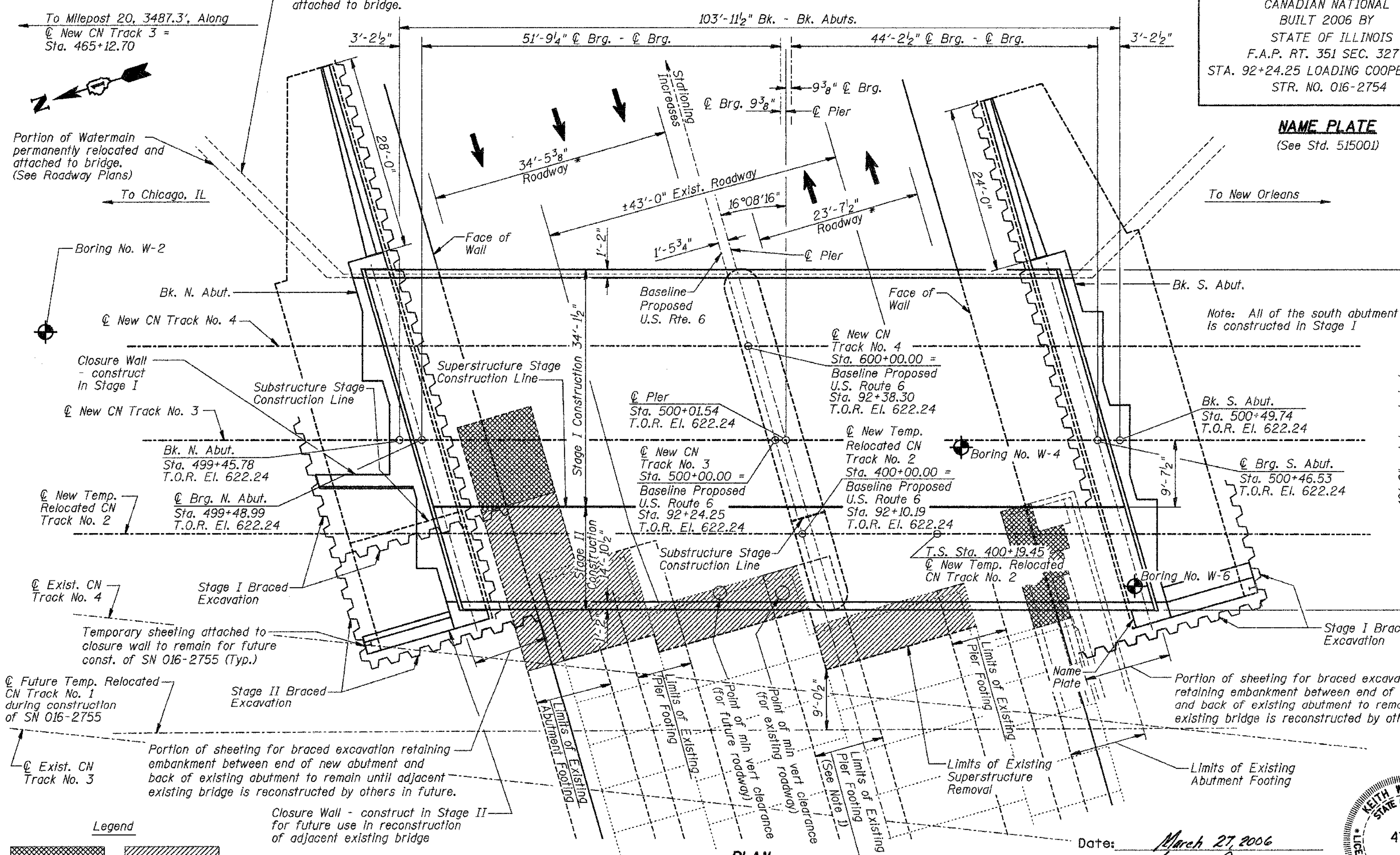
Future 5-lane roadway and elevated sidewalks are shown for reference only and will be constructed by others in a future project.

Wingwalls at west end of abutments to be constructed by others in future as part of reconstruction of existing adjacent RR structure.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(Looking East)
Note: All horizontal dimensions shown at 90° to Route 6 except span lengths.



PLAN

Legend

Stage I Removal | Stage II Removal

Note 1: Pier removal not shown for clarity. See Sheet 13 of 30 for concrete removal details.

Portion of sheeting for braced excavation retaining embankment between end of new abutment and back of existing abutment to remain until adjacent existing bridge is reconstructed by others in future.

CANADIAN NATIONAL
BUILT 2006 BY
STATE OF ILLINOIS
F.A.P. RT. 351 SEC. 3277B
STA. 92+24.25 LOADING COOPER E-80
STR. NO. 016-2754

NAME PLATE
(See Std. 515001)

STAGING:
U.S. Rte. 6 to be closed to traffic during both Stage 1 and Stage 2 of Pier construction only. U.S. Rte 6 to remain open during all other construction of SN 016-2754.

All 4 CN Tracks on existing bridge to remain open during construction.

Track #4 to be permanently relocated onto new structure after completion of Stage I construction.

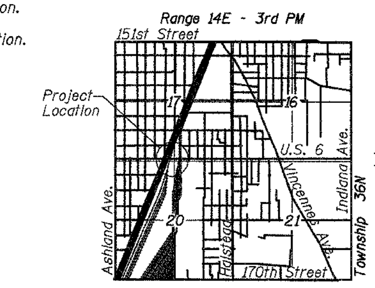
Track #3 to be permanently relocated onto new structure after completion of Stage II construction.

Track to be constructed on new structure after completion of Stage II construction for future temporary relocation of Track #2.

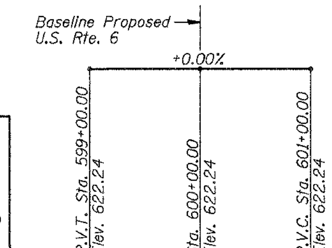
CURVE DATA TEMPORARY
CN TRACK NO. 2
P.I. Sta. 404+25.80
Δ = 9° 51' 27" (RT)
D = 1° 45' 00"
T = 282.35'
R = 3,274.17'
L = 563.29'
E = 12.15'
T.S. Sta. 400+19.45
S.C. Sta. 401+43.45
C.S. Sta. 407+06.74
S.T. Sta. 408+30.74
S.E. = 2"

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 351	3277R	COOK	66	19
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

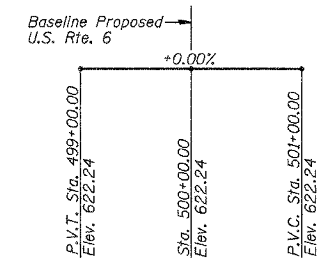
Contract No. 62206



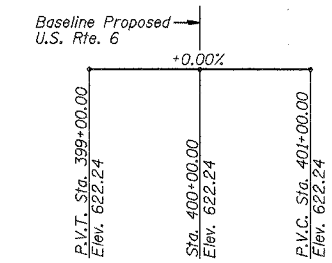
LOCATION SKETCH



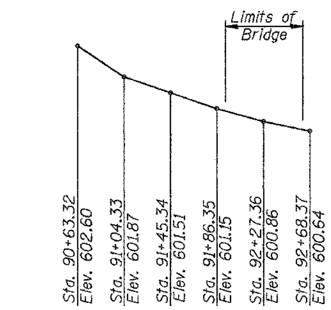
TOP OF RAIL PROFILE GRADE
NEW CN TRACK NO. 4



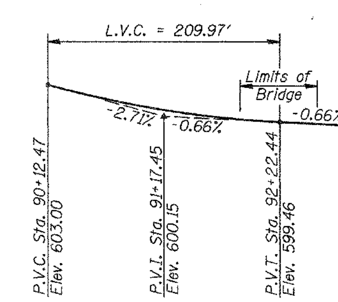
TOP OF RAIL PROFILE GRADE
NEW CN TRACK NO. 3



TOP OF RAIL PROFILE GRADE
NEW TEMP. RELOCATED CN TRACK NO. 2



PROFILE GRADE U.S. RTE. 6
(Existing)



PROFILE GRADE U.S. RTE. 6
(Proposed)

DESIGN SPECIFICATIONS
American Railway Engineering & Maintenance-of-Way Association (AREMA) Manual for Railway Engineering, 2003.
2003 AASHTO Standard Specifications for Highway Bridges.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 p.s.i.
fy = 60,000 p.s.i. (Reinforcement)
fy = 50,000 p.s.i. (Struct.) (M270 Grade 50)
fy = 36,000 p.s.i. (Struct.) (M270 Grade 36)

CN /IC RAILROAD
CLASS: RAILROAD
ADT: CN Tracks 3 & 4 = 18 Freight Trains Per Day (Combined)
CN Track 2 = 8 Freight Trains & 2 Passenger Trains Per Day
Design Speed: 50 mph

LOADING COOPER E-80
Cooper E80 plus Impact for equipment with hammer blow.
Service Load Design (CN R.R. Bridge)
Allow for future addition of 12" ballast.

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = .039g
Site Coefficient (S) = 1.0

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

KEITH W. BENTING
STATE OF ILLINOIS
4777
DECATUR, ILLINOIS
LICENSED STRUCTURAL ENGINEER
Exp. 11/30/2006

Date: March 27, 2006
Keith W. Benting
Keith W. Benting
Ill. Structural No. 4777

GENERAL PLAN AND ELEVATION

Date 3/27/06	Designed TDN	CN RAILROAD BRIDGE	Sheet No.
Revisions	Drawn BKN	OVER U.S. 6 (159TH STREET)	1
	Checked DCS	F.A.P. RTE. 351 SECTION 3277R COOK COUNTY	
	Approved KWB	STATION 92+24.25 STRUCTURE NO. 016-2754	of 30
Prepared By: URS	3040 N. University Ave., Suite 1 Decatur, IL.		URS Job No. 36430825