F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
374	G-B-1-1	COOK	15	3
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO. 60D59

BENCHMARK

Square cut on NW corner of traffic signal handhole on SE corner of Milwaukee Ave. and Euclid Ave. Elevation 663.54

EXISTING STRUCTURE

S.N. 016-0242 was built in 1926 and was improved in 1976 including railing replacement and sidewalk removal. The existing three span structure utilizes simple span concrete T-beams with a 4" P.C.C. wearing surface and a 1½" bituminous surface on a 6" concrete deck. The structure is 53 feet wide out to out and 159 feet long. The structure is founded on untreated timber piles.

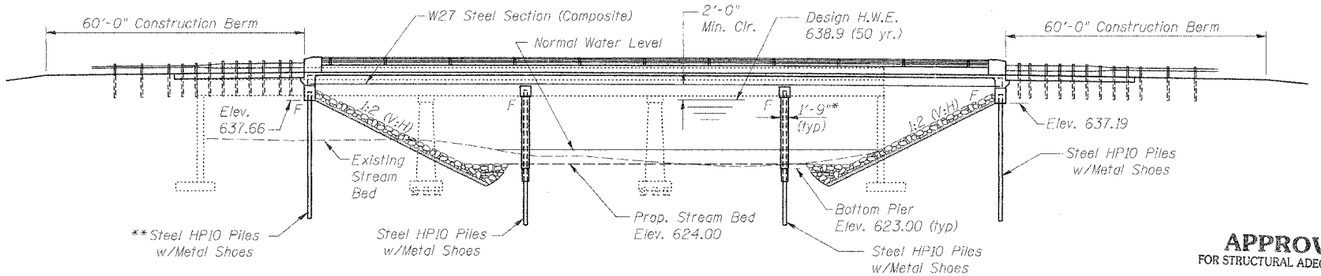
Stage construction will be utilized to maintain one lane of traffic in each direction at all times.

No Salvage.

STATION 130+82.50
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RT. 374 SEC. 3268F-R-1
LOADING HS20
STR. NO. 016-6566

NAME PLATE

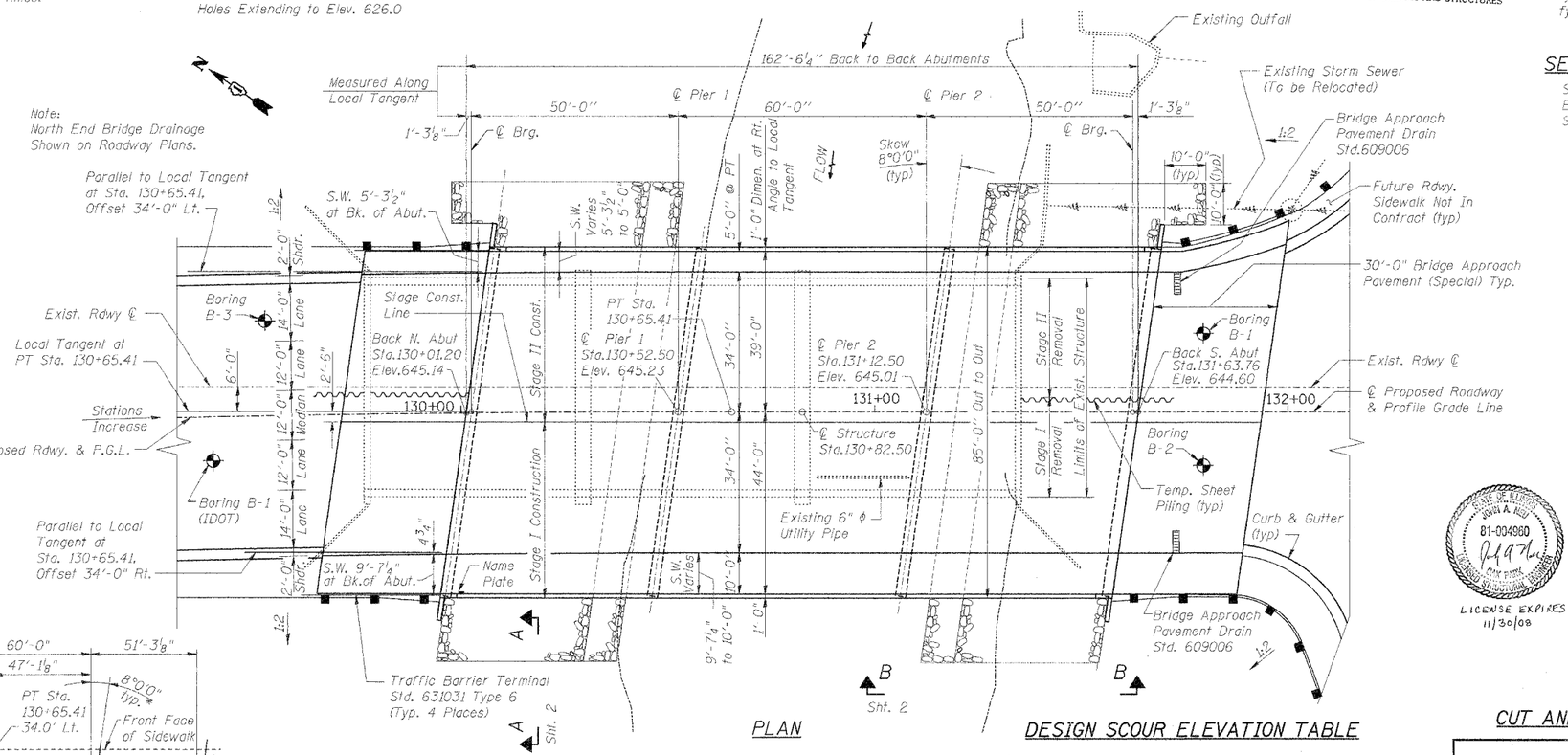
See Std. 515001



**Piles For N. Abut. Shall Be Driven Thru 18" ϕ Pre-Cored Holes Extending to Elev. 626.0

ELEVATION

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



Note:
North End Bridge Drainage Shown on Roadway Plans.

PLAN

DESIGN SPECIFICATIONS

2002 AASHTO Std. Specifications, 17th Edition

LOADING HS20-44

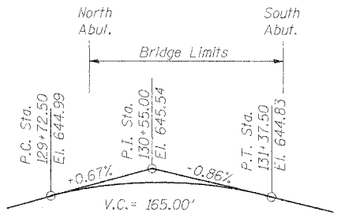
Allow 50 lbs/sq. ft. future wearing surface

DESIGN STRESSES

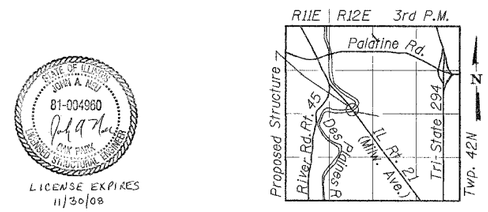
f'c = 3.500 psi
fy = 60,000 psi (reinforcement)
fy = 50,000 psi (M270 Gr.50W Structural Steel)

SEISMIC DATA

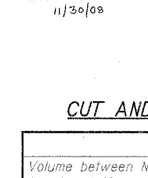
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.2

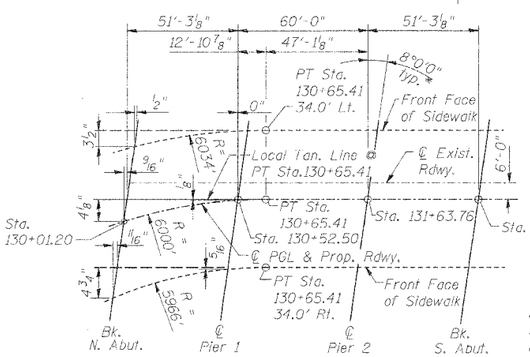


PROFILE GRADE LINE
IL Route 21



LOCATION SKETCH





OFFSET SKETCH

*Measured From Perpendicular to Local Tangent Line

HORIZONTAL CURVE DATA

Curve NX3

PI Sta. = 126+35.78
Δ = 8° 13' 10" (Rt)
D = 0° 57' 18"
R = 6000.00'
T = 431.11'
L = 860.74'
E = 15.47'
e = Normal Crown
T.R. = N.A.
S.E. Run = N.A.
P.C. Sta. = 122+04.67
P.T. Sta. = 130+65.41

DESIGN SCOUR ELEVATION TABLE

	N. Abut.	S. Abut.	Piers
Design Scour Elevation (ft)	637.66	637.19	617.00

CUT AND FILL IN FLOODWAY TABLE

	UNIT	CUT	FILL
Volume between Normal Water Level and 10 year Flood Level	CU YD	790	15845
Volume between 10 Year and 100 Year Flood Level	CU YD	385	12535

WATERWAY INFORMATION

Drainage Area = 363.0 Sq.Mi.
Existing Low Grade Elev. 636.5 @ Sta. 118+00
Prop. Low Grade Elev. 638.0 @ Sta. 114+50

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Overtopping	5	3000	977		636.1	0.4		636.5	
	10	4364	1122	1481	637.4	0.4	0.3	637.8	637.7
Design	50	5750	1290	1694	638.9	0.4	0.4	639.3	639.3
Base	100	6200	1335	1767	639.4	0.4	0.4	639.8	639.8
Max. Calc.	500	7359	1335	1915	640.5	0.4	0.4	640.9	640.9

STV Incorporated
Engineers/Architects/Planners/Construction Managers
200 W. Monroe Street, Suite 1650
Chicago, IL. 60606-5015
312/553-0655, FAX 312/553-0661

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
ILLINOIS ROUTE 21
MILWAUKEE AVE. OVER DES PLAINES RIVER
F.A.P. ROUTE 374 SECTION G-B-1-1
COOK COUNTY, SN 016-6566

GENERAL PLAN & ELEVATION

DESIGN BY: AWH DRAWN BY: BTO
DATE: 8/29/07 CHECKED BY: JAN CHECKED BY: JAN

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