Bench Mark: Chiseled "square" in S.E. wingwall Sta. 61+15.47, ±28' - RT., Elev. = 653.82

Existing Structure: S.N. 050-0026 was built in 1961 as F.A. Project I-80 (36), Section 50-2HB-2, at station 655+47.95. The four span superstructure consists of a curved cast in place concrete deck composite with straight, simple span, wide flange beams. The stub abutments are supported on piles. The multi-column piers are supported on spread footings.
The structure is ±231'-5" back to back of abutments and 47'-8" out to out of deck.
The existing structure will be replaced. Stage construction will be utilized to maintain one lane of traffic at all times.

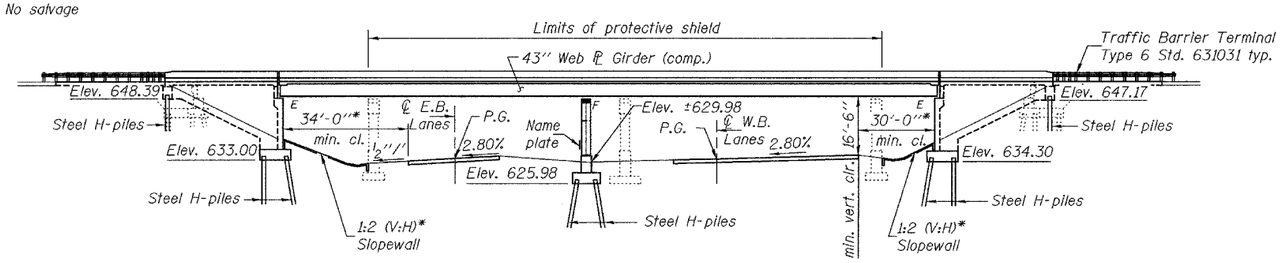
No salvage

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

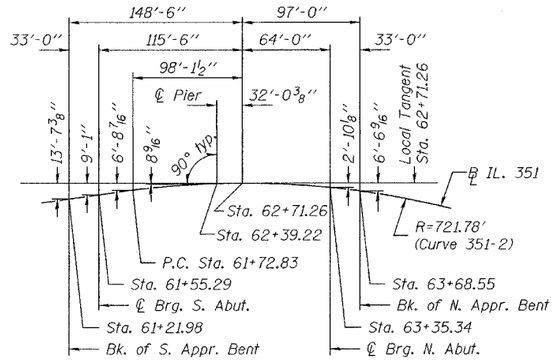
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 80	(50-2) HBR	LaSALLE		143
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SHEET NO. 1
35 SHEETS

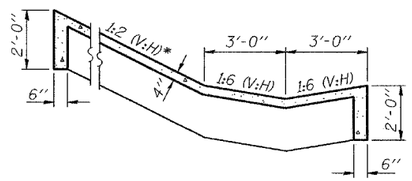
Contract No. 86603



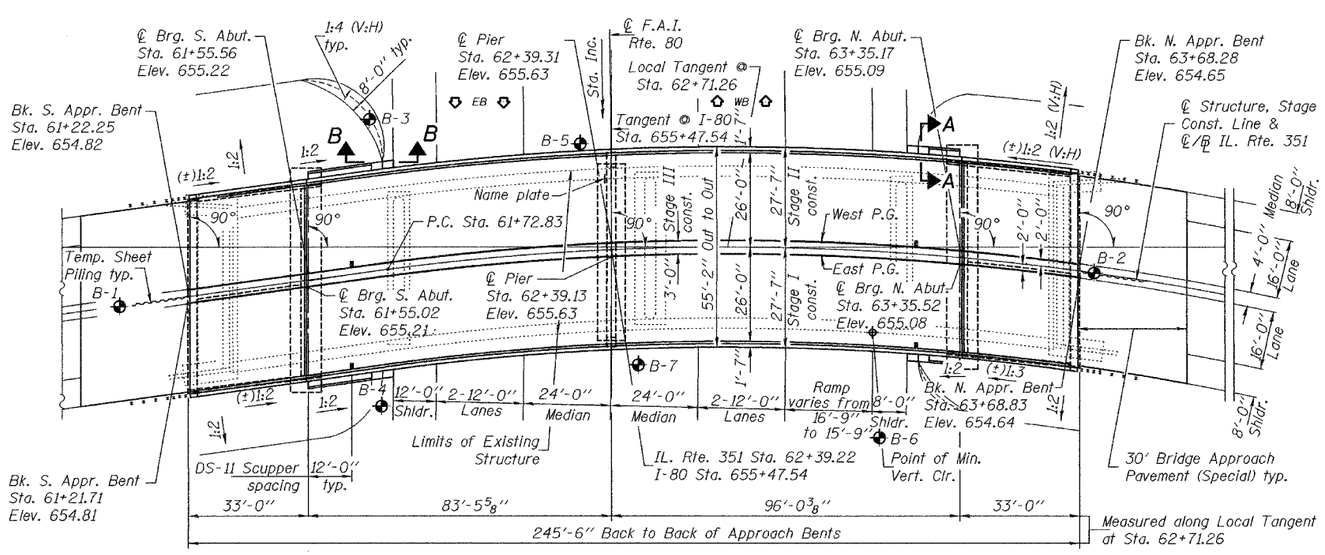
ELEVATION



OFFSET SKETCH



SECTION B-B

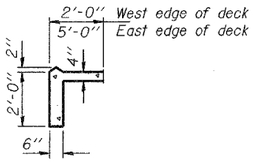


PLAN

STATION 62+39.22
BUILT 20 BY
STATE OF ILLINOIS
F.A.I. RT. 80 SEC. (50-2)HBR
LOADING HS20 & ALT.
STRUCTURE NO. 050-0230

NAME PLATE

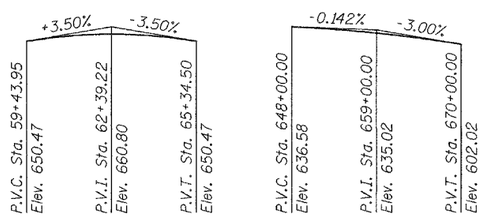
See Std. 515001



SECTION A-A

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal of Existing Structures	Each			1
Structure Excavation	Cu. Yd.		535.8	535.8
Concrete Structures	Cu. Yd.		457.7	457.7
Concrete Superstructure	Cu. Yd.	479.2		479.2
Bridge Deck Grooving	Sq. Yd.	1221.3		1221.3
Protective Coat	Sq. Yd.	1662.7		1662.7
Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	6016		6016
Reinforcement Bars, Epoxy Coated	Pound	121290	61230	182520
Slopewall 4"	Sq. Yd.		272.5	272.5
Furnishing Steel Piles HP 12x53	Foot		3690	3690
Driving Steel Piles	Foot		3690	3690
Test Pile Steel HP 12x53	Each		3	3
Name Plates	Each		1	1
Sand Backfill	Cu. Yd.		625.7	625.7
Bridge Seat Sealer	Sq. Ft.		266.8	266.8
Erecting Floating Bearings, Guided Expansion 125 kip	Each	16		16
Erecting Floating Bearings, Fixed 250 kip	Each	8		8
Bridge Joint System (Expansion), 1⅝"	Foot	110		110
Drainage Scuppers, DS-11	Each	4		4
Protective Shield	Sq. Yd.	668.4		668.4
Temporary Sheet Piling	Sq. Ft.		341.6	341.6
Bar Splicers	Each	757	190	947



PROFILE GRADE

Illinois Route 351

PROFILE GRADE

Interstate Route 80

CURVE DATA
F.A.I. RTE. 80
(CURVE I80-1)

P.I. Sta. = 643+89.68
Δ = 47°-02'-20" (RT)
R = 3819.71'
T = 1662.40'
L = 3135.92'
E = 346.07'
P.C. Sta. 627+27.28
P.T. Sta. 658+63.20
S.E. 2.80%
S.E. attained from Sta. 626+60.64 to Sta. 627+62.34
S.E. removed from Sta. 657+97.11 to Sta. 658+95.54

CURVE DATA
IL. ROUTE 351
(CURVE 351-2)

P.I. Sta. = 62+94.31
Δ = 19°-06'-28" (RT)
R = 721.78'
T = 121.48'
L = 240.71'
E = 10.15'
P.C. Sta. = 61+72.83
P.C.C. Sta. = 64+13.54
S.E. = 8.00%
S.E. attained from Sta. 60+00.64 Sta. 62+57.86

LOADING HS20-44

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

DESIGN SPECIFICATIONS

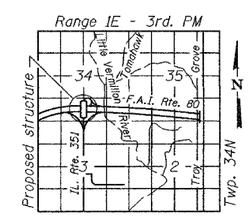
2002 AASHTO
2003 AASHTO Guide Specifications for Horizontally Curved Bridges

DESIGN STRESSES

FIELD UNITS
f'_c = 3,500 psi
f_y = 60,000 psi (reinforcement)
f_y = 50,000 psi (structural steel) (M270, Gr. 50)

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0



LOCATION SKETCH

GENERAL PLAN
ILLINOIS RT. 351 (F.A.U. 6108)
OVER I-80
F.A.I. RT. 80 - SEC. (50-2)HBR
LaSALLE COUNTY
STATION 62+39.22
STRUCTURE NO. 050-0230

DESIGNED	Curtis M. Eary
CHECKED	Rebecca S. Mitchell
DRAWN	h.t. parsons
CHECKED	CME/RSM

November 29 2004

EXAMINED Thomas J. Tomy Jr. ENGINEER OF BRIDGE DESIGN

PASSED Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS RALPH E. ANDERSON 081-004625 SPRINGFIELD LICENSED STRUCTURAL ENGINEER

EXPIRES 11-30-2004

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