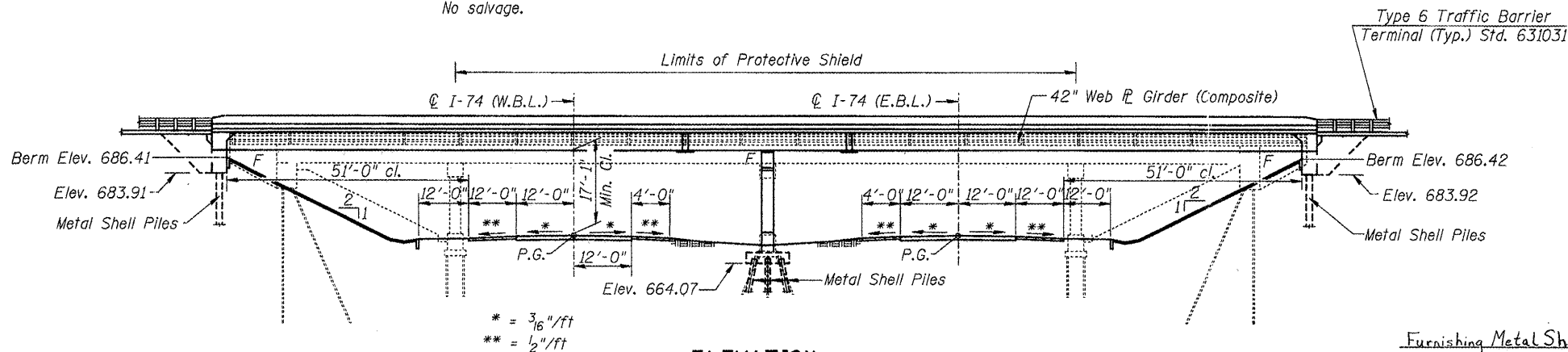


B.M. Chiseled "□" on East Foundation of Sign for Eastbound I-74 on East Side of C.H. 22 (IL Rte 49S) and South of Southeast Ramp. Elev. = 666.96

Existing Structure: S.N. 010-0097 Built in 1959. Four Simple Spans R.C. Deck with P.P.C. I-Beams on R.C. Piers and Abutments. The Structure is 28'-0" wide between curbs and spans 185'-6" Back to Back Abutments. Structure is to be removed and replaced. The proposed structure allows for a third lane in each direction in anticipation of the future widening of I-74. Road will be closed and traffic detoured during construction. No salvage.

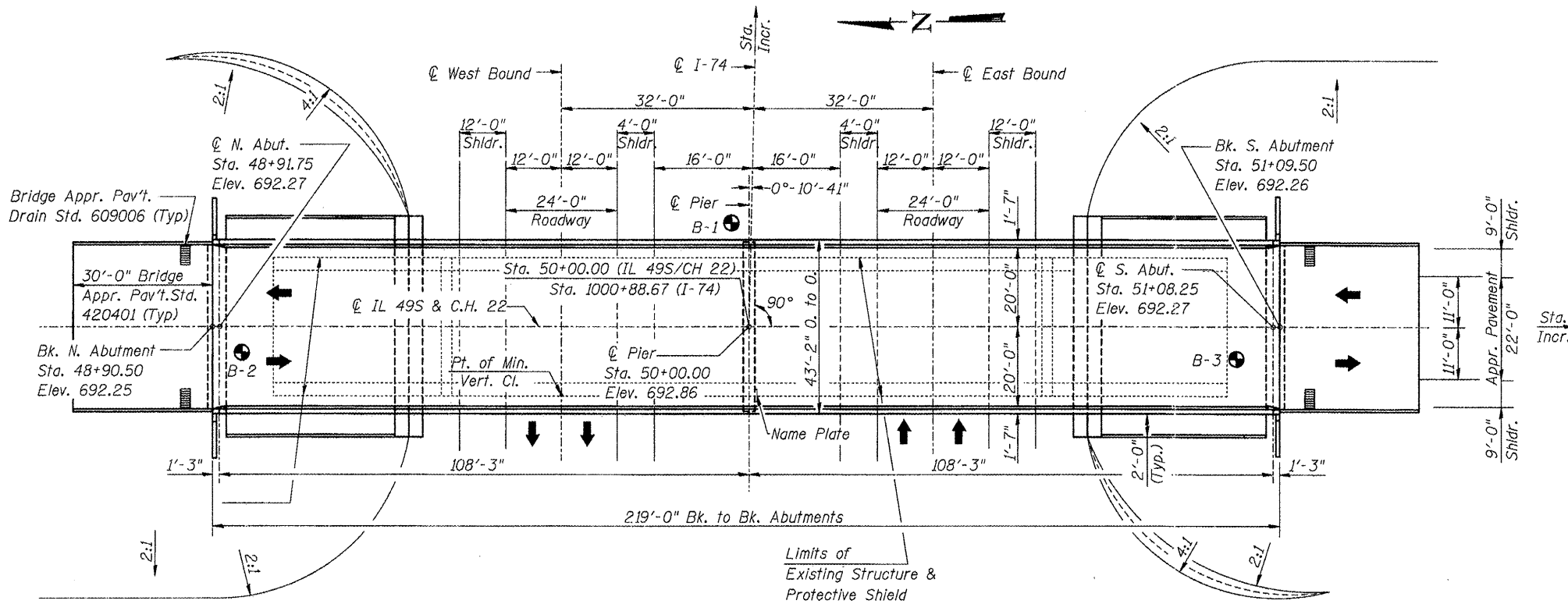
ROUTE NO.	SECTION	COUNTY	DIST.	SHEET NO.	SHEET NO. 1
FAI 74	*	CHAMPAIGN	93	41	17 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-	CONTRACT 70695		



ELEVATION
(Looking East)

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. yd		108	108
Structure Excavation	Cu. yd		148	148
Concrete Structures	Cu. yd		104.5	104.5
Concrete Superstructure	Cu. yd	307.3		307.3
Bridge Deck Grooving	Sq. yd.	925		925
Reinforcement Bars, Epoxy coated	Pound	76830	17210	94040
Furnishing and Erecting Structural Steel	Lump Sum	1		1
Protective Coat	Sq. yd	1152		1152
Stud Shear Connectors	Each	3600		3600
Name Plates	Each		1	1
Furnishing Metal Pile Shells (14" Ø)	Foot		2071	2071
Driving and Filling Shell Piles	Foot		2071	2071
Test Pile Metal Shells	Each		1	1
Slope Wall, 4"	Sq. yd		452	452
Bar Splicers	Each	80		80
Removal of Existing Structures	Each	1		1
Protective Shield	Sq. yd.	429		429



PLAN

LOADING HL93 (STRUCT. STEEL, DECK & BEARINGS)

LOADING HS20-44 (SUBSTRUCTURE)

Allow 50 psf for future wearing surface.

DESIGN SPECIFICATIONS

Superstructure

1998 AASHTO LRFD Bridge Design Specifications with 1999 thru 2002 Interims.

Substructure

1996 AASHTO Standard Specifications with 1997 thru 2002 Interims.

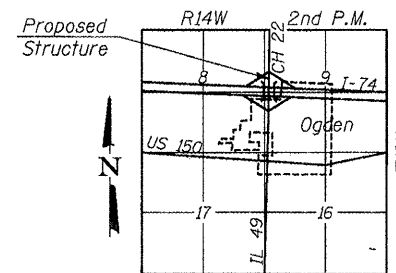
APPROVED

For Structural Adequacy Only

Ralph E. Anderson (T.S.)
Engineer of Bridges & Structures



Paul B. Lin
ILLINOIS STRUCTURAL NO. 4419
DATE 2/23/05



LOCATION SKETCH

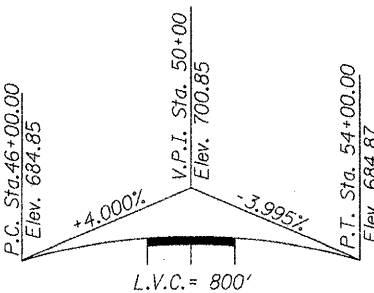
SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.048g
Site Coefficient (S) = 1.2

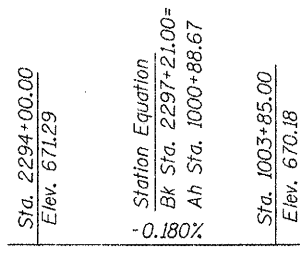
DESIGN STRESSES

FIELD UNITS

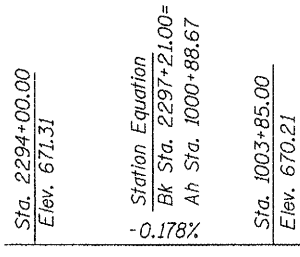
$f'_c = 3.5$ ksi
 $f_y = 60$ ksi (reinf.)
 $f_y = 50$ ksi (Struct. Steel, AASHTO M270 Gr. 36)
 $f_y = 50$ ksi (Struct. Steel, AASHTO M270 Gr. 50)



PROFILE GRADE
(IL 49S along Q Roadway)



PROFILE GRADE
(F.A.I. Rte. 74 E.B.)



PROFILE GRADE
(F.A.I. Rte. 74 W.B.)

LIN ENGINEERING, LTD.
20 W. Chestnut
Champaign, Illinois 62529
(217) 483-6888
FAX (217) 483-4706
Designed By: MTH
Checked By: STD
Drawn By: JMD
Date: 11/02
Files: 000277.DGN

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
GENERAL PLAN
FAS RTE 518 (IL 49S) & FAP RTE 836 (C.H.22)
OVER FAI RTE 74 (I-74)
SECTION (10-92-8HB-1) BR
CHAMPAIGN COUNTY
STA. 1000+88.67 (I-74)
STA. 50+00.00 (IL 49S & C.H. 22)
STRUCTURE NO. 010-0277