

Bench Mark: Chiseled square @ N.W. corner of East main guard, Elev. 575.87
 Existing Structure: S.N. 032-0026 was built in 1956 and has 34'-4" Out to Out and 73'-9" Back to Back of abutments. Traffic to be maintained utilizing stage construction.
 No salvage

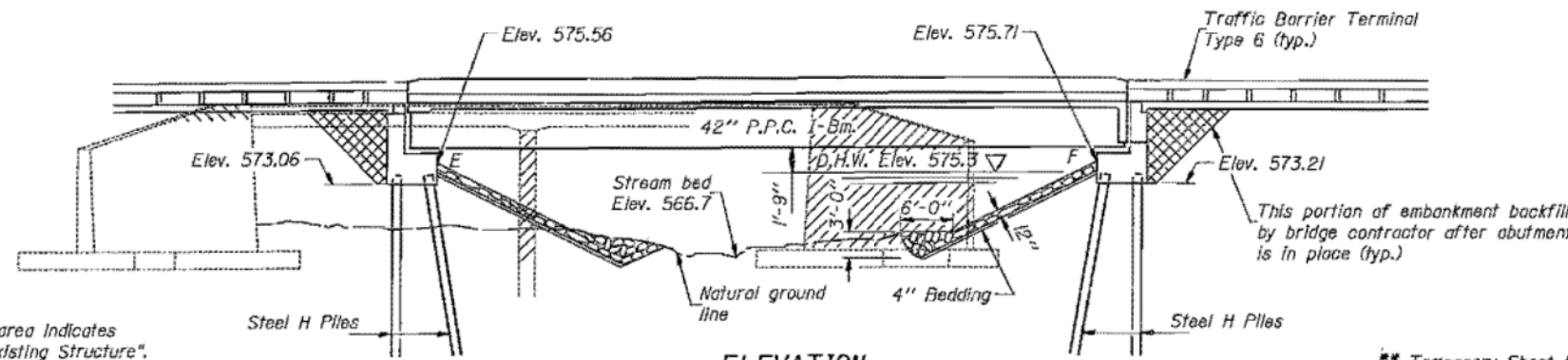
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A. 100	#	#	100	67
SHEET NO. 1 15 SHEETS				

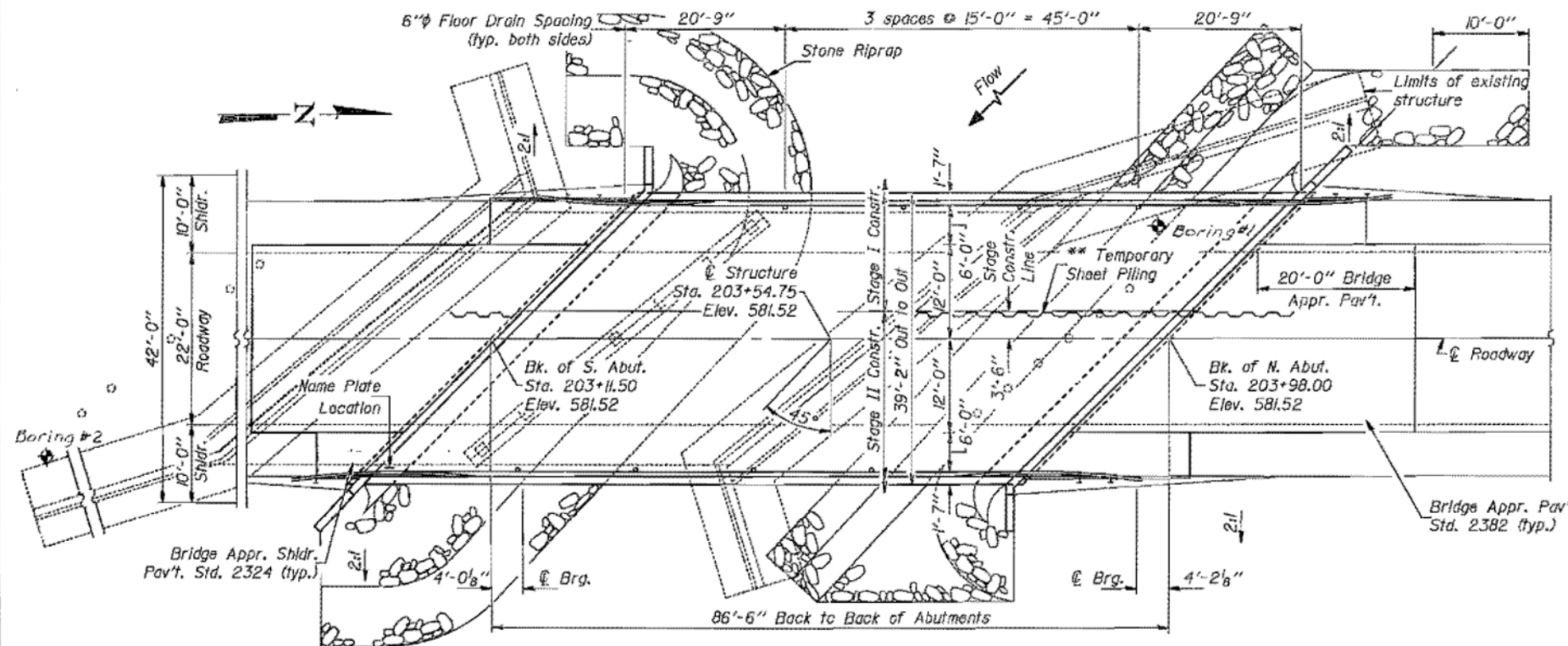
GENERAL NOTES

See Proposal for Boring Data.
 All structural steel shall be shop painted with the zinc-silicate and vinyl paint system.
 Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
 Layout of stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.
 The embankment configuration shown shall be the minimum embankment that must be constructed prior to construction of the abutments.
 The contractor shall drive one (1) Steel (HP10x42) test pile in a permanent location at the South Abutment as directed by the Engineer before ordering the remainder of piles.

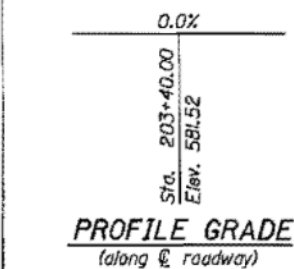


ELEVATION

** Temporary Sheet Piling (See sheet #2 of 15).



PLAN



PROFILE GRADE
 (along roadway)

DESIGNED	Y. H. ...
CHECKED	VECTOR ...
DRAWN	John F. Schneller Jr.
CHECKED	P.M. ...

EXAMINED	...
PASSED	...
APPROVED	...

WATERWAY INFORMATION

Drainage Area = 9.6 sq. mi. Low Grade Elev. 581.50 @ Sta. 204+00.00

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft. Exlst. Prop.*	Nat. H.W.E. Exlst. Prop.	Head - Ft. Exlst. Prop.	Headwater El. Exlst. Prop.		
Design	50	920	284.8	290	575.3	0.3	575.6	575.6
Base	100	1056	300.8	310	575.7	0.4	576.1	576.1
Overtopping	500	1377	332.4	351	576.5	0.5	577.0	576.9

* Single span, open abutment bridge with 45° skew angle

STATION 203+54.75
 BUILT 198 BY
 STATE OF ILLINOIS
 F.A. RT. 100 SEC. 110BR-1
 PROJECT F-100(59)
 LOADING HS20
 STR. NO. 032-0088

NAME PLATE
 See Std. 2113

DESIGN SPECIFICATIONS

AASHTO (1983) and applicable Interims (1984 thru 1985)

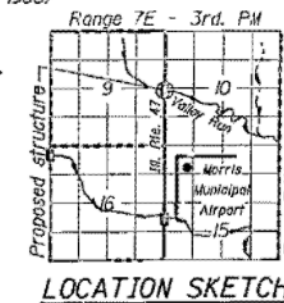
LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinf.)
 $f_y = 36,000$ psi (Str. Steel)

PRECAST PRESTRESSED UNITS
 $f'_c = 6,000$ psi
 $f'_c = 4,800$ psi
 $f'_s = 270,000$ psi ($1/2$ " ϕ strands)
 $f'_s = 189,000$ psi ($1/2$ " ϕ strands)



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Class X Concrete Superstructure	Cu. Yd.	125.5		125.5
Class X Concrete	Cu. Yd.		82.3	82.3
Reinforcement Bars (Epoxy Coated)	Lbs.	21,220		21,220
Reinforcement Bars	Lbs.		8,220	8,220
Furnishing & Erecting Precast Prestressed Concrete I Beams (42")	Lin. Ft.	558		558
Steel Piles (HP10x42)	Lin. Ft.		915	915
Test Piles Steel (HP10x42)	Each		1	1
Name Plates	Each	1		1
Stone Riprap	Sq. Yd.		780	780
Structure Excavation	Cu. Yd.		230	230
Preformed Joint Seal (1 1/4")	Lin. Ft.	55		55
Neoprene Expansion Joint (2")	Lin. Ft.	55		55
Protective Coat	Sq. Yd.	67		67
Structural Steel	Lbs.	1,200	1,510	2,710
Elastomeric Bearing Assembly, Type J	Each		7	7
Removal of Existing Structure	Each		1	1
Temporary Sheet Piling	Sq. Ft.		2,094	2,094
Floor Drains	Each	8		8

GENERAL PLAN
 ILLINOIS ROUTE 47 OVER
 VALLEY RUN
 F.A. ROUTE 100 - SECTION 110BR-1
 GRUNDY COUNTY
 STATION 203+54.75
 STRUCTURE NO. 032-0088