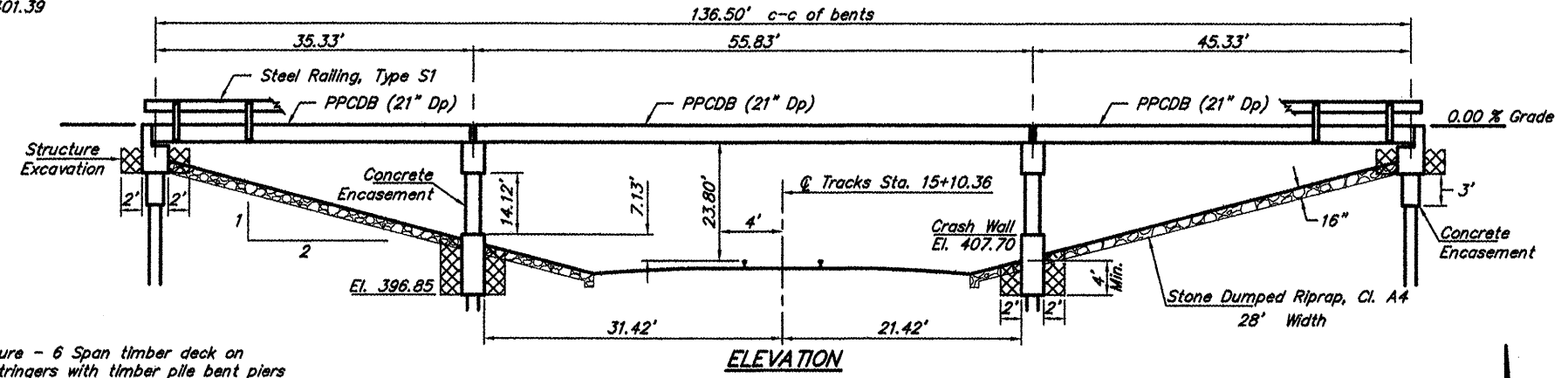


ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 93	00-01199-00-BR	MASSAC	18	4
PROJECT NO. BROS-127(18)			CONTRACT NO. 99438	

B.M.#3- Top of NE bolt in signal base
35.5' Lt. Sta. 15+21
Elev. 401.39



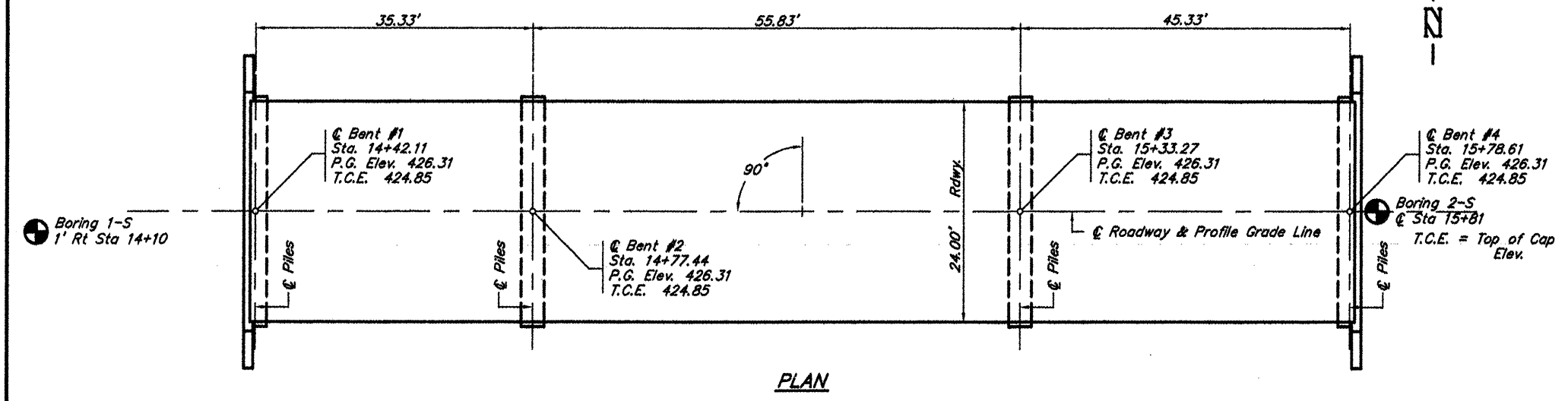
Existing Structure - 6 Span timber deck on timber stringers with timber pile bent piers and abutments. 16' Wide x 123' Long

GENERAL NOTES

1. Metal Shell piles shall meet ASTM A 252 Grade 3 specifications.
2. Test Piles shall be driven to 110% of the Nominal Required Bearing indicated in the pile data.
3. The Contractor shall drive one test pile, as specified, in a permanent location as directed by the Engineer.
4. See Special Provisions for boring logs.
5. A corrosion inhibitor, as covered in the Standard Specifications, shall be used in the precast prestressed concrete deck beams.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Stone Dumped Riprap, Class A4	Tons			327	327
Removal of Existing Structures	Each				1
Structure Excavation	Cu. Yds.		88.5	10.5	99
Concrete Structures	Cu. Yds.		76.4	16.8	93.2
Concrete Encasement	Cu. Yds.		14.8	2.1	16.9
P.P. Conc. Dk. Bm. 21" Dp.	Sq. Ft.	3,294			3,294
Reinforcement Bars	Pound		4,880	2,254	7,134
Steel Railing, Type S1	Foot	278			278
Furnishing Metal Pile Shells 12"	Foot		581	384	965
Driving Piles	Foot		581	384	965
Test Pile Metal Shells	Each		1		1
Name Plates	Each			1	1



PILE DATA (2-PIERS)

Type & Size: Metal Shell 12" dia. x 0.25" walls
Nominal Required Bearing: 302 kips Bent #2, 318 kips Bent #3
Factored Resistance Available: 151 kips Bent #2, 159 kips Bent #3
Estimated Length: 55 Feet Bent #2, 51 Feet Bent #3
Number Required: 12 (Includes 1 Test Pile located in Bent #2)

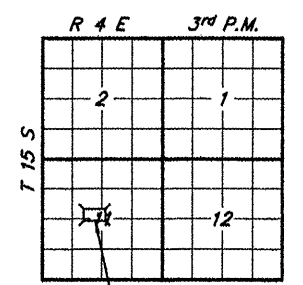
PILE DATA (2-ABUTS.)

Type & Size: Metal Shell 12" dia. x 0.25" walls
Nominal Required Bearing: 206 kips Bent #1, 234 kips Bent #4
Factored Resistance Available: 103 kips Bent #1, 117 kips Bent #4
Estimated Length: 54 Feet Bent #1, 42 Feet Bent #4
Number Required: 8

STATION 15+10.36
IC RAILROAD
SEC.00-01199-00-BR BUILT 20
COUNTY UNIT ROAD DISTRICT
MASSAC COUNTY
LOADING HL-93
STR. NO. 064-3141

LETTERING FOR NAME PLATE

Locate Name Plate at Southwest Corner of Bridge (See Sheet 10)



LOCATION SKETCH

DESIGN SPECIFICATIONS

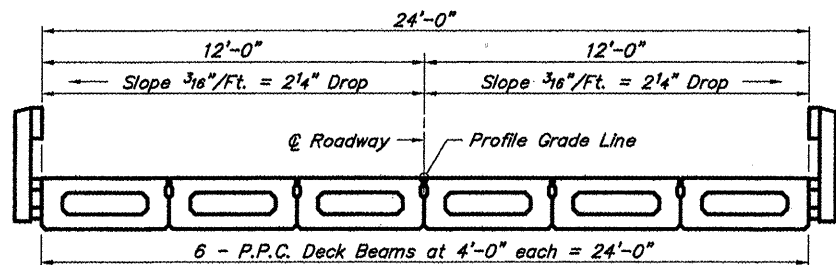
2007 AASHTO LRFD Bridge Design Specifications and all applicable interims.

LOADING HL-93

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

SEISMIC DATA

Soil Site Class = C
Design Spectral Acceleration at 0.2 sec. (S_{ps}) = 1.117
Design Spectral Acceleration at 1.0 sec. (S_{p1}) = 0.427
Seismic Performance Zone (SPZ) = 3



CROSS SECTION

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current Standard Specifications for Highway Bridges."

Zeyn B. Uzman
S.E. #81-4745
Expires Nov. 30, 2012

LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS
ZEYN UZMAN
4745

GENERAL PLAN & ELEVATION
TOWNSHIP ROUTE 93 (SEILBECK ROAD)
IC RAILROAD
SECTION 00-01199-00-BR
MASSAC COUNTY
STRUCTURE NO. 064-3141