

NOTE: Camber Overall Bridge Profile 1% Of The Bridge Length But At No Point Along The Bridge Shall The Deck Slope Be Greater Than 5%. Taking Into Account The Difference In Bearing Elevations. In Addition, All Truss Verticals Shall Be Plumb.

CONTRACT No. 83728

**BILL OF MATERIAL (BRIDGE 2)**

ITEM	DESCRIPTION	UNIT	QUANTITY
* 20700400	Porous Granular Embankment, Special	Cu. Yd.	135
28100107	Stone Riprap, Class A4	Sq. Yd.	140
28200200	Filter Fabric	Sq. Yd.	140
50200100	Structure Excavation	Cu. Yd.	375
50300225	Concrete Structures	Cu. Yd.	166
50800205	Reinforcement Bars, Epoxy Coated	Pound	13,240
* X5020503	Underwater Structure Excavation Protection-Location 3	Each	1
* X5020504	Underwater Structure Excavation Protection-Location 4	Each	1
50901725	Bicycle Rolling, Special	L.F.	66
* X0322508	Pedestrian Truss Superstructure (Bridge 2)	Sq. Ft.	2,720

\* Special Provision

**BRIDGE REACTION TABLE (90'-0" SPAN)**

ITEM	P (LBS) BRG.	H (LBS) ABUTMENT	L (LBS)
DEAD LOAD (2)	22,950	---	---
UNI. LIVE LOAD	23,460	---	---
VEHICLE LOAD	6,000	---	---
UPLIFT WIND 20 PSF WINDWARD/LEEWARD	-8,970/	---	---
WIND	+2,690	7,765	---
THERMAL (2)	---	---	3,445

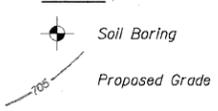
- (1) Bridge Lifting Weight : 32,200
- (2) Total Bridge Weight : 91,800

**BRIDGE REACTION TABLE (132'-5" SPAN)**

ITEM	P (LBS) BRG.	H (LBS) ABUTMENT	L (LBS)
DEAD LOAD (2)	45,430	---	---
UNI. LIVE LOAD	33,915	---	---
VEHICLE LOAD	6,000	---	---
UPLIFT WIND 20 PSF WINDWARD/LEEWARD	-13,635/	---	---
WIND	+7,385	18,810	---
THERMAL (2)	---	---	6,815

- (1) Bridge Lifting Weight : 66,000
- (2) Total Bridge Weight : 181,720

**LEGEND**



All Footings Have Been Designed Based On The Bridge Reactions Shown  
 "P" - Vertical Load Per Base Plate  
 "H" - Horizontal Load Per Footing  
 "L" - Longitudinal Load Per Base Plate

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 "AASHTO Standard Specification For Highway And Bridges".

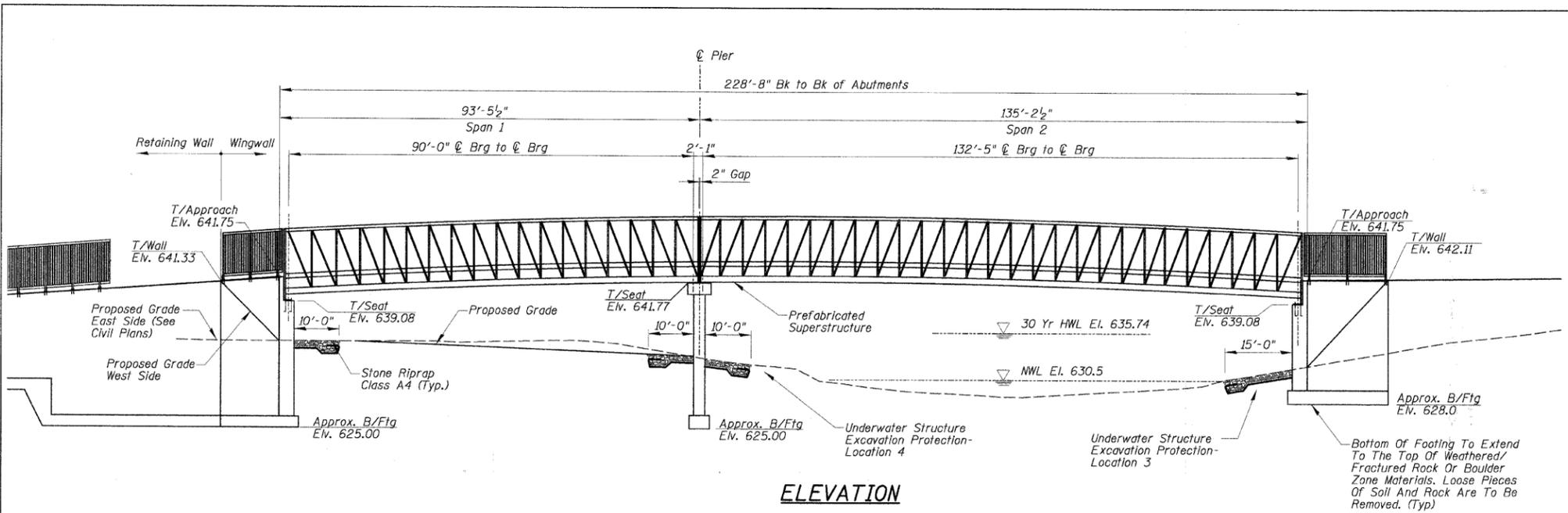


5-22-09  
 MAJID MOBASSERI  
 STRUCTURAL ENGINEER  
 ILLINOIS REGISTRATION No. 081-005058  
 EXPIRATION DATE: 11/30/10

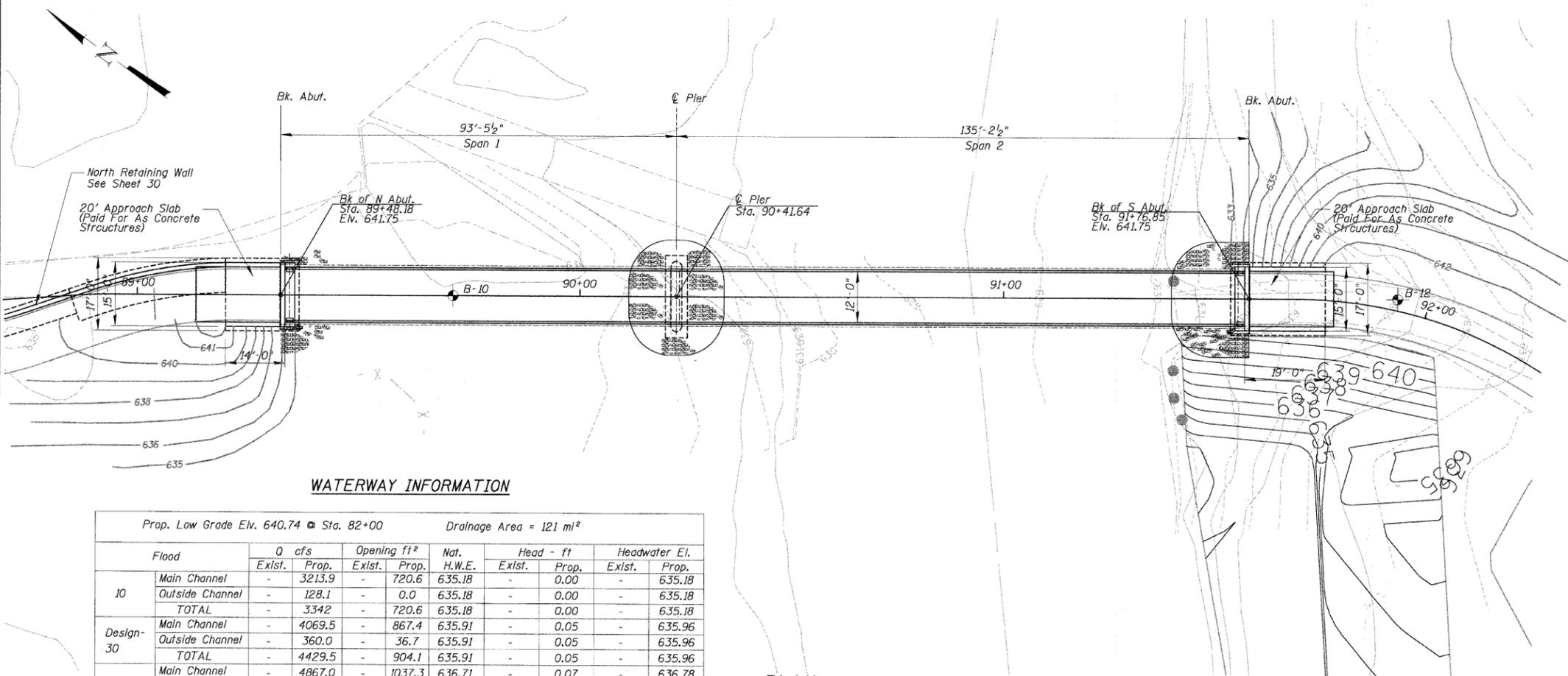
REVISIONS	
NAME	DATE
1. PER IDOT COMMENTS	5/22/09

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**BRIDGE 2**  
**STA. 90+40.00**  
**PLAN AND PROFILE**

SCALE: NOT TO SCALE  
 DATE 5/22/2009  
 DRAWN BY PDR  
 CHECKED BY PLB



**ELEVATION**



**PLAN**

**WATERWAY INFORMATION**

Prop. Low Grade Elev. 640.74 @ Sta. 82+00      Drainage Area = 121 mi<sup>2</sup>

Flood	Channel	Q cfs		Opening ft <sup>2</sup>		Nat. H.W.E.	Head - ft		Headwater El.	
		Exlst.	Prop.	Exlst.	Prop.		Exlst.	Prop.	Exlst.	Prop.
10	Main Channel	-	3213.9	-	720.6	635.18	-	0.00	-	635.18
	Outside Channel	-	128.1	-	0.0	635.18	-	0.00	-	635.18
	TOTAL	-	3342	-	720.6	635.18	-	0.00	-	635.18
Design-30	Main Channel	-	4069.5	-	867.4	635.91	-	0.05	-	635.96
	Outside Channel	-	360.0	-	36.7	635.91	-	0.05	-	635.96
	TOTAL	-	4429.5	-	904.1	635.91	-	0.05	-	635.96
100	Main Channel	-	4867.0	-	1037.3	636.71	-	0.07	-	636.78
	Outside Channel	-	796.0	-	164.0	636.71	-	0.07	-	636.78
	TOTAL	-	5663.0	-	1201.3	636.71	-	0.07	-	636.78
500	Main Channel	-	5947.4	-	1284.7	637.62	-	0.00	-	637.62
	Outside Channel	-	1452.6	-	346.8	637.62	-	0.00	-	637.62
	TOTAL	-	7400.0	-	1631.5	637.62	-	0.00	-	637.62

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 SURVEYED \_\_\_\_\_  
 ALIGNED \_\_\_\_\_  
 CHECKED \_\_\_\_\_  
 CAD FILE NAME: \_\_\_\_\_

DATE: \_\_\_\_\_  
 BY: \_\_\_\_\_  
 PROFILE DRAWN BY \_\_\_\_\_  
 BRIDGE CHECKED \_\_\_\_\_  
 STRUCTURE NOTATIONS CHD \_\_\_\_\_

5/22/2009