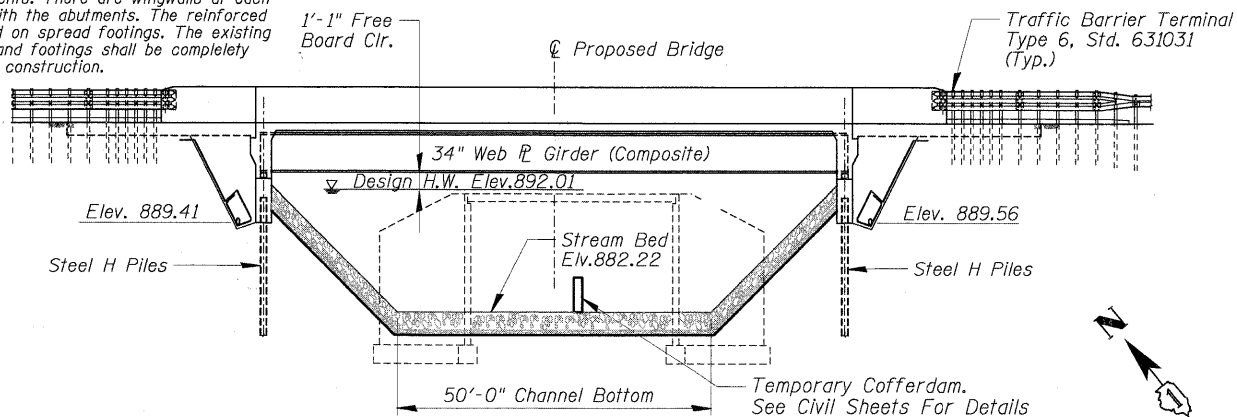


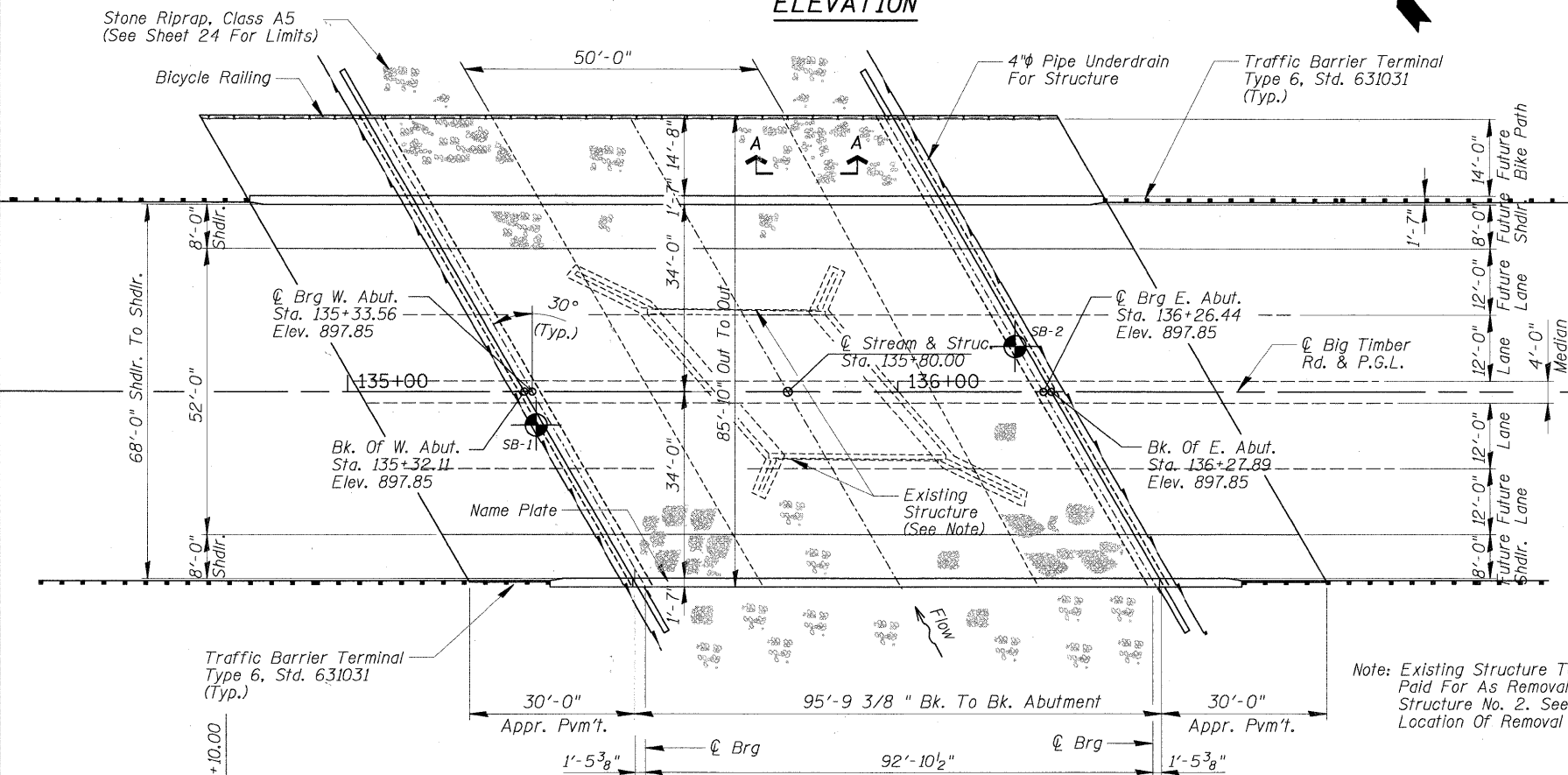
Bench Mark: Yellow "Bench Tie" spike in southerly face of power pole on westerly side of drive to house number 15N563. Elev. 893.84

Existing Structure: The existing structure, S/N 045-3012, is a single span reinforced concrete slab bridge with a bituminous overlay. The clear span length of the bridge is 30'-0" with a back of abutments length of 32'-7". The bridge deck is 27'-0" out to out with 24'-6" clear between the curbs. The reinforced concrete slab is supported on reinforced concrete abutments. There are wingwalls at each corner of the structure, which are monolithic with the abutments. The reinforced concrete abutments and wingwalls are supported on spread footings. The existing reinforced concrete slab, abutments, wingwalls and footings shall be completely removed. Bridge will be closed to traffic during construction. Construction staging is not required.

No salvage.



ELEVATION

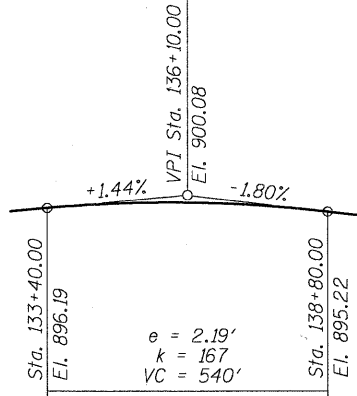


PLAN

WATERWAY INFORMATION

Flood	Freq. Yr.	Q cfs	Opening ft ²		Nat. H.W.E.	Head - ft		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	30	1558	418.0	553.15	892.01	0.67	0.00	892.68	891.92
Base	50	1742	476.9	565.5	892.17	0.80	0.00	892.97	891.99
Max. Calc.	100	2096	505.1	581.6	892.37	1.11	0.06	893.48	892.43
	500	2819	580.4	609.8	892.70	1.29	0.25	893.99	892.95

WATERWAY INFORMATION TABLE ELEVATIONS BASED ON HEC-2 MODEL RESULTS



PROFILE GRADE

INDEX OF SHEETS

- 1 General Plan and Elevation
- 2 General Notes
- 3 Top Of Deck Plan And Details
- 4-5 Top Of Deck Elevations
- 6 Top Of West Approach Slab Elevations
- 7 Top Of East Approach Slab Elevations
- 8 Deck Plan and Cross Section
- 9-10 Parapet Details
- 11 Superstructure Details
- 12 Bicycle Railing
- 13 Framing Plan And Details
- 14 Steel Details
- 15 West Abutment Details
- 16 East Abutment Details
- 17 Bar Splicer Assembly
- 18-19 Bridge Approach Slab Details
- 20 Pile Details
- 21 Boring Logs

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	APPROACH	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		225		225
Stone Riprap, Class A5	Sq. Yd.		2,700		2,700
Filter Fabric	Sq. Yd.		2,700		2,700
Structure Excavation	Cu. Yd.		220		220
Concrete Structures	Cu. Yd.		81.8	45.9	127.7
Concrete Superstructure	Cu. Yd.	299.1		276.3	575.4
Bridge Deck Grooving	Sq. Yd.	703			703
Concrete Encasement	Cu. Yd.		9.0		9.0
Protective Coat	Sq. Yd.	990		40	1,030
Furnishing & Erecting Structural Steel	L. Sum	1			1
Stud Shear Connectors	Each	3,354			3,354
Reinforcement Bars, Epoxy Coated	Lb.	52,220	8,460	70,360	131,040
Furnishing Steel Piles HPI2x53	Foot		1,644		1,644
Driving Piles	Foot		1,644		1,644
Test Pile HPI2x53	Each		2		2
Name Plates	Each	1			1
Pipe Underdrain for Structures, 4"	Foot.		240		240
Bar Splicers	Each	176			176
Anchor Bolts, 1"	Each		52		52
Removal Of Existing Structures No. 2	Each				1
Geocomposite Wall Drain	Sq. Yd.		160		160
Bicycle Railing	Foot	156			156

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges 17th Edition.

LOADING HS20-44

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

DESIGN STRESSES

FIELD UNITS

f_c = 3,500 psi
 f_y = 50,000 psi (structural steel) (M270 Grade 50)
 f_y = 60,000 psi (Reinf.)

SEISMIC DATA

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

TYLER AND PINGREE CREEK
 BUILT BY
 KANE COUNTY
 SEC. 01-00266-00-BR
 F.A.S. 0130 STA. 135+80
 STR. NO. 045-3323
 LOADING HS20-44

NAME PLATE

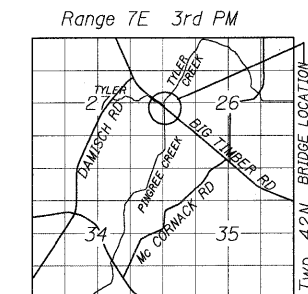
See Std. 515001

Note: Existing Structure To Be Removed.
 Paid For As Removal of Existing
 Structure No. 2. See Civil Plans For
 Location Of Removal of Structure No. 1

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".



Majid Mobasser 2/7/2011
MAJID MOBASSERI
 ILLINOIS REGISTRATION No. 081-005058
 STRUCTURAL ENGINEER
 EXPIRATION DATE: 11/30/12



LOCATION SKETCH

F.A.S. 0130 - BIG TIMBER ROAD
 OVER TYLER AND PINGREE CREEK
 SECTION 01-00266-00-BR
 KANE COUNTY, ILLINOIS
 STA. 135+80.00
 STRUCTURE NO. 045-3323

CHRISTOPHER B. BURKE ENGINEERING, LTD.
 9575 W. Higgins Road, Suite 600
 Rosemont, Illinois 60018
 (847) 823-0500



FILE NAME = N:\kane\county\04198\STRUCT_2\04198-51.SHT	USER NAME = PRAZALAN	DESIGNED - MM	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN AND ELEVATION	F.A.S. RTE. 0130	SECTION 01-00266-00-BR	COUNTY KANE	TOTAL SHEETS 70	SHEET NO. 38
PLOT SCALE = 1/5"	CHECKED - MM	REVISED -	CONTRACT NO. 63196							
PLOT DATE = 2/7/2011	DATE -	REVISED -	SHEET NO. S-1 OF S-21							
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT BRM-80030431										