

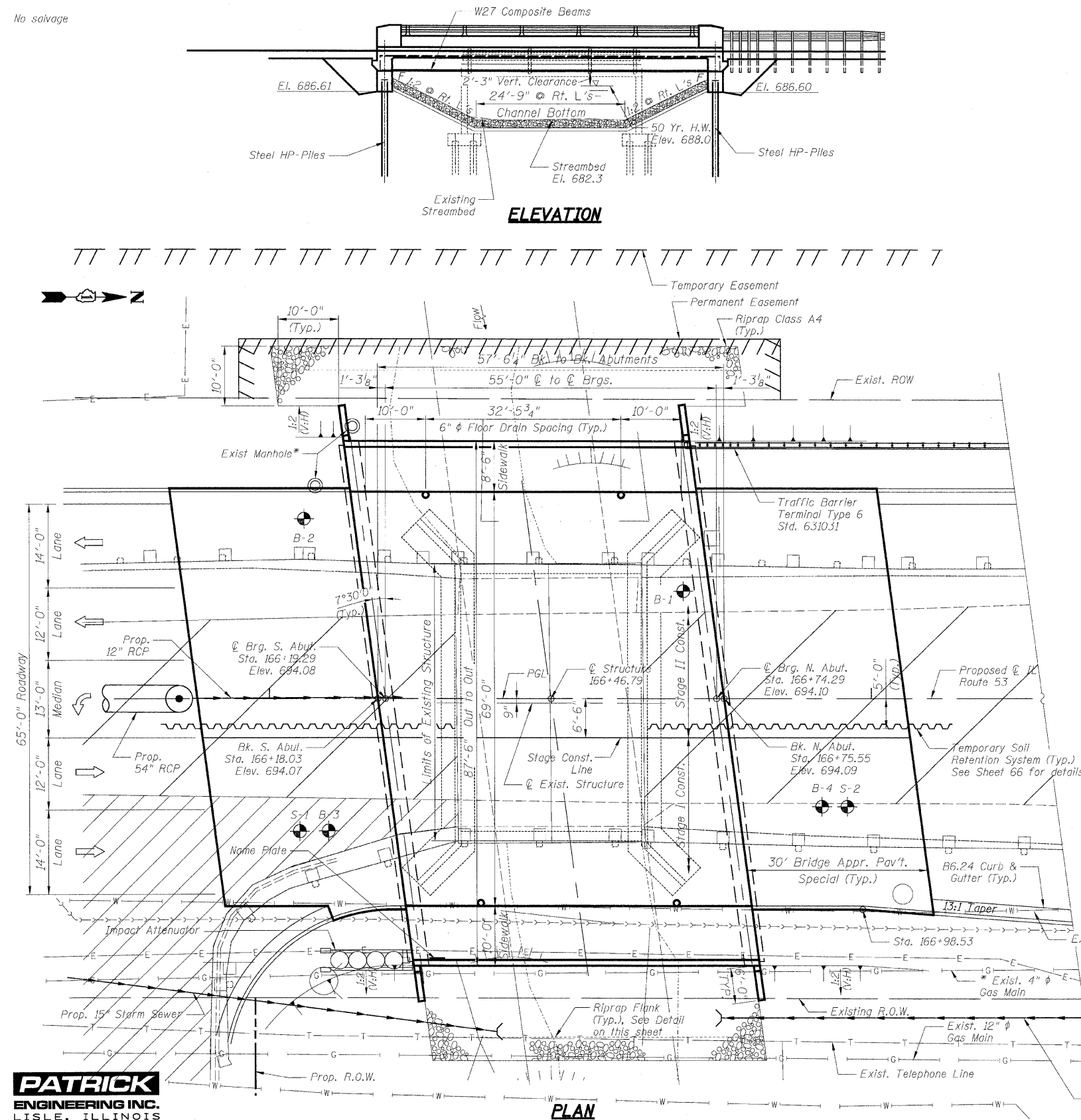
**Bench Mark:**

Cut square in SW corner of parapet on existing bridge. El. 690.92

**Existing Structure**

S.N. 022-0074 was built in 1931 as a single span reinforced concrete slab bridge. The existing structure spans 30 feet, is 46 feet wide and has a 3.5 inch bituminous wearing surface. The existing structure is to be removed and replaced. Traffic is to be maintained utilizing stage construction.

No salvage



4:00pm/11/11/11  
 6/12/2009  
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**WATERWAY INFORMATION**

Proposed Low Grade Elev. 691.06 @ Sta. 159+88.53  
 Existing Low Grade Elev. 688.6 @ Sta. 162+00

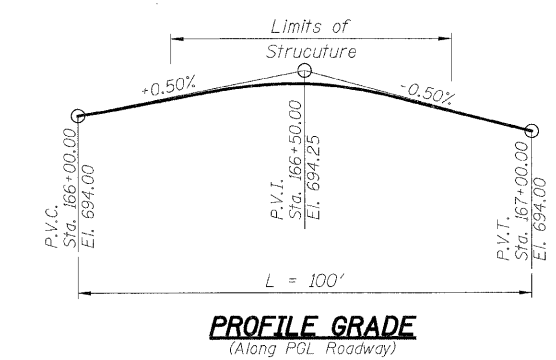
Flood	Freq. Yr.	Q (C.F.S.)	Opening (Sq. Ft.)		Nat. H.W.E.		Head (Ft.)		Headwater Elev.	
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Overtop	40	416	111	166	687.1	1.1	0.0	688.2	687.1	
Design	50	597	136	208	688.0	1.0	0.0	689.0	688.0	
Base	100	679	142	222	688.3	0.8	0.0	689.1	688.3	
Max. Calc.	500	1153	142	309	690.4	0.1	0.6	690.5	691.0	

**DESIGN SCOUR ELEVATION (ft)**

S. Abut	N. Abut
686.61	686.60

**INDEX OF SHEETS**

- S1. GENERAL PLAN & ELEVATION
- S2. GENERAL NOTES, TOTAL BILL OF MATERIAL & STAGING DETAILS
- S3. TOP OF SLAB ELEVATIONS I
- S4. TOP OF SLAB ELEVATIONS II
- S4A. TOP OF APPROACH SLAB ELEVATIONS
- S5. DECK PLAN & CROSS SECTION
- S6. SUPERSTRUCTURE DETAILS
- S7. DIAPHRAGM DETAILS
- S8. BRIDGE RAILING DETAILS
- S9. FRAMING PLAN
- S10. BEAM DETAILS
- S11. BLANK SHEET
- S12. SOUTH ABUTMENT
- S13. NORTH ABUTMENT
- S14. TEMPORARY CONCRETE BARRIER
- S15. BAR SPLICER DETAILS
- S16. CANTILEVER FORMING BRACKETS
- S17. SOIL BORING LOGS I
- S18. SOIL BORING LOGS II
- S19. SOIL BORING LOGS III
- S20. SOIL BORING LOGS IV



STATION 166+46.79  
 BUILT 200\_ BY  
 STATE OF ILLINOIS  
 F.A.U. 2578 SEC. 532B-1  
 LOADING HS20  
 STR. NO. 022-0189

**LOADING HS20-44**

Allowance for Future Wearing Surface=50 lb/ft<sup>2</sup>

**DESIGN STRESSES**

f'<sub>c</sub>=3500 psi  
 f<sub>y</sub>=60,000 psi (Reinf.)  
 f<sub>y</sub>=50,000 psi (M270 Grade 50W)

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges

**SEISMIC DATA**

Seismic Performance Category (SPC)=A  
 Bedrock Acceleration Coefficient (A)=0.035g  
 Site Coefficient (S)=1.0



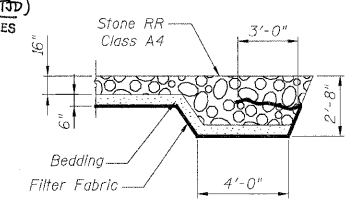
*Paul M Lopez*  
 PAUL M. LOPEZ, P.E., S.E.  
 NO. 081-005231  
 EXP. DATE: 11/30/10

**APPROVED**  
 FOR STRUCTURAL ADEQUACY ONLY

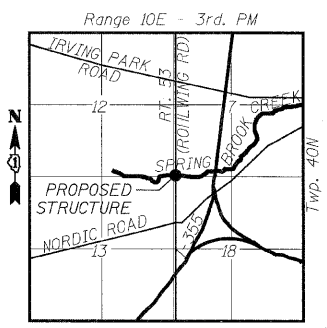
*Ralph E. Anderson (TSP)*  
 ENGINEER OF BRIDGES AND STRUCTURES

**NAME PLATE**

See Standard 515001



**RIPRAP FLANK DETAIL**



**LOCATION SKETCH**

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**GENERAL PLAN & ELEVATION**  
 ILLINOIS ROUTE 53 OVER  
 SPRING BROOK CREEK  
 FAU 2578 SECTION 532B-1  
 STRUCTURE NO. 022-0189  
 DUPAGE COUNTY STATION 166+46.79  
 SCALE: NONE DRAWN BY: E. MROZCEK  
 DATE: 6/12/09 CHECKED BY: G. HATLESTAD

\* - To Be Relocated by Others