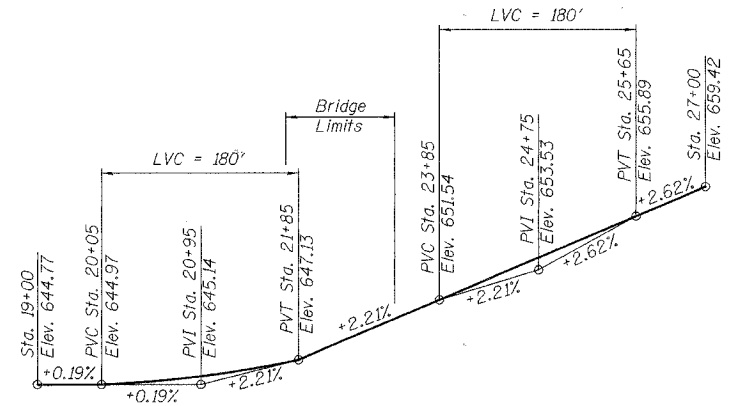


Benchmark: Chiseled square located on northeast wing wall of existing bridge (SN 050-3057).  
Elev. = 649.88 (NAVD 88 Datum)

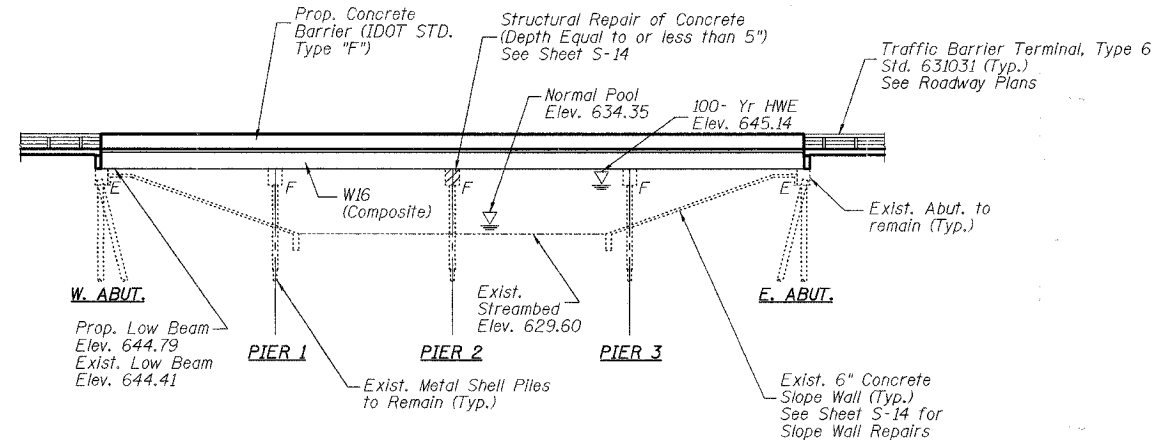
Existing Structure: S.N. 050-3057 was built in 1966 under Sec. 119A by LaSalle County.  
The 4-span structure consists of 21" deep precast, concrete channel beams with an out-to-out width of 29'-9" and a total measured length of 128'-8" bk. to bk. abutments with no skew. The substructure consists of concrete filled metal shell pile bent piers and abutments. The piers have cast in place concrete pile extensions from the pile cap to the metal shells. The existing superstructure is to be removed and replaced under stage construction.

Salvage: Reuse existing substructures

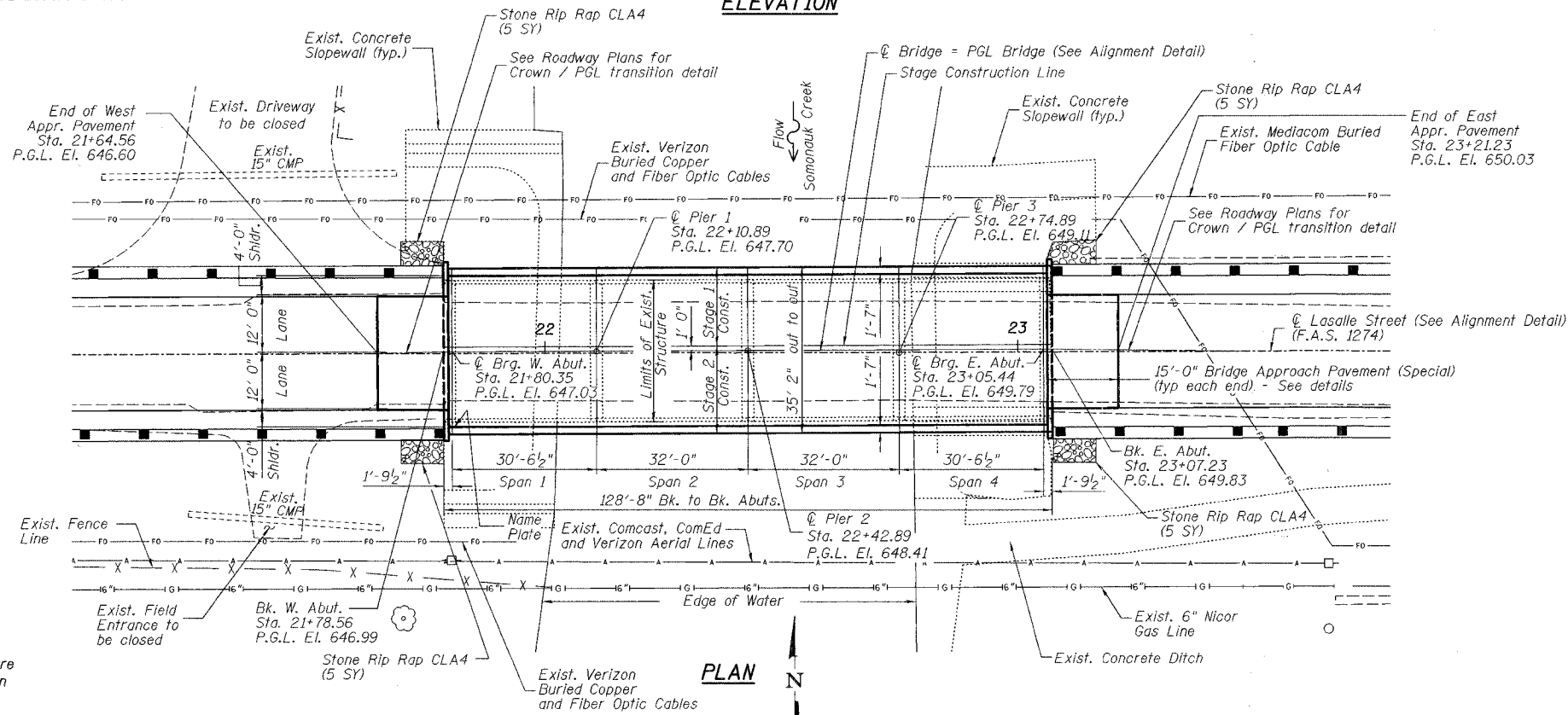
Staging: One reversible lane of traffic to be maintained during construction utilizing staged construction.



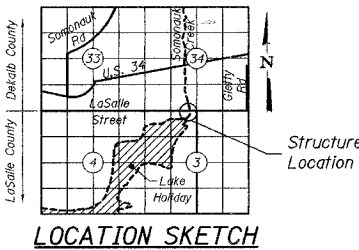
**PROFILE GRADE**  
(Along PGL LaSalle Street)



**ELEVATION**



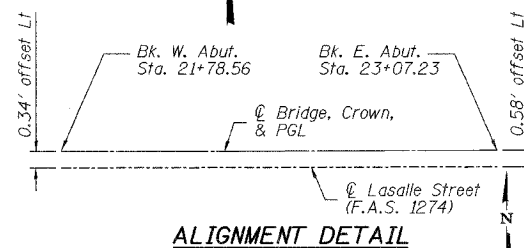
**PLAN**



**WATERWAY INFORMATION**

Drainage Area = 61 Sq. Mi. Low Grade Elev. 646.88 @ Sta. - 21+78.56

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
10									
30									
50	6,605	1,096	1,096	643.36	0	0	643.36	643.36	
Base	100	8,731	1,249	645.14	0	0	645.14	645.14	



SOMONAUK CREEK  
BUILT 200- BY  
LASALLE COUNTY  
SEC 05-00627-00-BR  
F.A.S. RT. 1274 STA. 22+42.89  
STR. NO. 050-3057 LOADING HS20

**NAME PLATE**  
See Std. 515001

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET TOTAL
FAS 1274	05-00627-00-BR	LASALLE	45	14
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
			87351	

SHEET NO. S-1  
S-16 SHEETS

**LOADING HS20-44**

No future wearing surface allowed.

**DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications - 17th Ed.

**DESIGN STRESSES**

**FIELD UNITS**

f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
ty = 50,000 psi (M270 Grade 50)

**SEISMIC DATA**

Seismic Performance Category (SPC) = A  
Bedrock Acceleration Coefficient (A) = 4%g  
Site Coefficient (S) = 1.0

**INDEX OF SHEETS**

- S-1 GENERAL PLAN & ELEVATION
- S-2 GENERAL NOTES, INDEX & QUANTITIES
- S-3 STAGING DETAILS
- S-4 TEMPORARY CONCRETE BARRIER DETAIL
- S-5 TOP OF SLAB ELEVATIONS I
- S-6 TOP OF SLAB ELEVATIONS II
- S-7 DECK PLAN & CROSS SECTION
- S-8 SUPERSTRUCTURE DETAILS
- S-9 EXPANSION JOINT DETAILS
- S-10 STEEL FRAMING PLAN
- S-11 BEAM ELEVATION & DETAILS
- S-12 BEARING DETAILS
- S-13 SUBSTRUCTURE DETAILS
- S-14 SUBSTRUCTURE & SLOPEWALL REPAIR DETAILS
- S-15 BAR SPLICER ASSEMBLY DETAILS
- S-16 BRIDGE APPROACH PAVEMENT (SPECIAL) DETAILS



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 Specifications for Highway Bridges".

*Robert G. Davies* 11-12-07  
Robert G. Davies  
Licensed Structural Engineer  
License Expires November 30, 2008

**LASALLE COUNTY HIGHWAY DEPARTMENT**

**GENERAL PLAN AND ELEVATION**

LASALLE STREET  
OVER SOMONAUK CREEK  
VILLAGE OF SOMONAUK  
SECTION NO. 05-00627-00-BR  
STRUCTURE NO. 050-3057

DATE 11-16-2007

