

Benchmark 100: Chiseled "□" on top of NE wingwall of S.N. 050-2595, Sta. 149+37.53, 19.87' Lt., Elev. 529.93.  
 Benchmark 101: Railroad spike in power pole, SW Quadrant U.S. Route 6 and E2575 Road, Sta. 151+97.93, 51.98' Rt., Elev. 529.40.

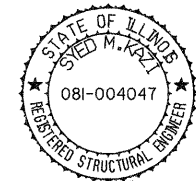
Existing Structure: The existing structure, number 050-2595 was originally built in 1919 as SBI-7, section H in LaSalle County over an unnamed tributary of the Illinois River located 3.6 miles west of Illinois 170. The existing structure is an 8 ft wide x 3 ft high reinforced concrete single cell box culvert with roadway measuring 30' face-to-face of guardrail. The road will be closed to traffic and will be detoured. Precast alternate is not allowed.

Salvage: None

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

APPROVED  
 FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (TSB)  
 ENGINEER OF BRIDGES AND STRUCTURES



Syed M. Kazl  
 Licensed Structural Engineer  
 State of Illinois  
 Lic. No. 081-004047  
 Expires: 11-30-2010  
 Signature and Seal apply to Structural Drawings

INDEX OF SHEETS

1. General Plan and Elevation
2. Structure Dimensions, Details and General Notes
3. Reinforcement Details
4. Soil Boring Logs

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Porous Granular Embankment	Cu Yd	408
Stone Riprap, Class A5	Sq Yd	186
Filter Fabric	Sq Yd	186
Removal of Existing Structures	Each	1
Removal and Disposal of Unsuitable Material for Structures	Cu Yd	163
Reinforcement Bars	Pound	17,420
Concrete Box Culverts	Cu Yd	87.1
Temporary Soil Retention System	Sq Ft	175
Rock Fill	Cu Yd	160

WATERWAY INFORMATION

Drainage Area = 0.23 sq. mi. Low Grade Elev. 531.72 @ Sta. 150+50

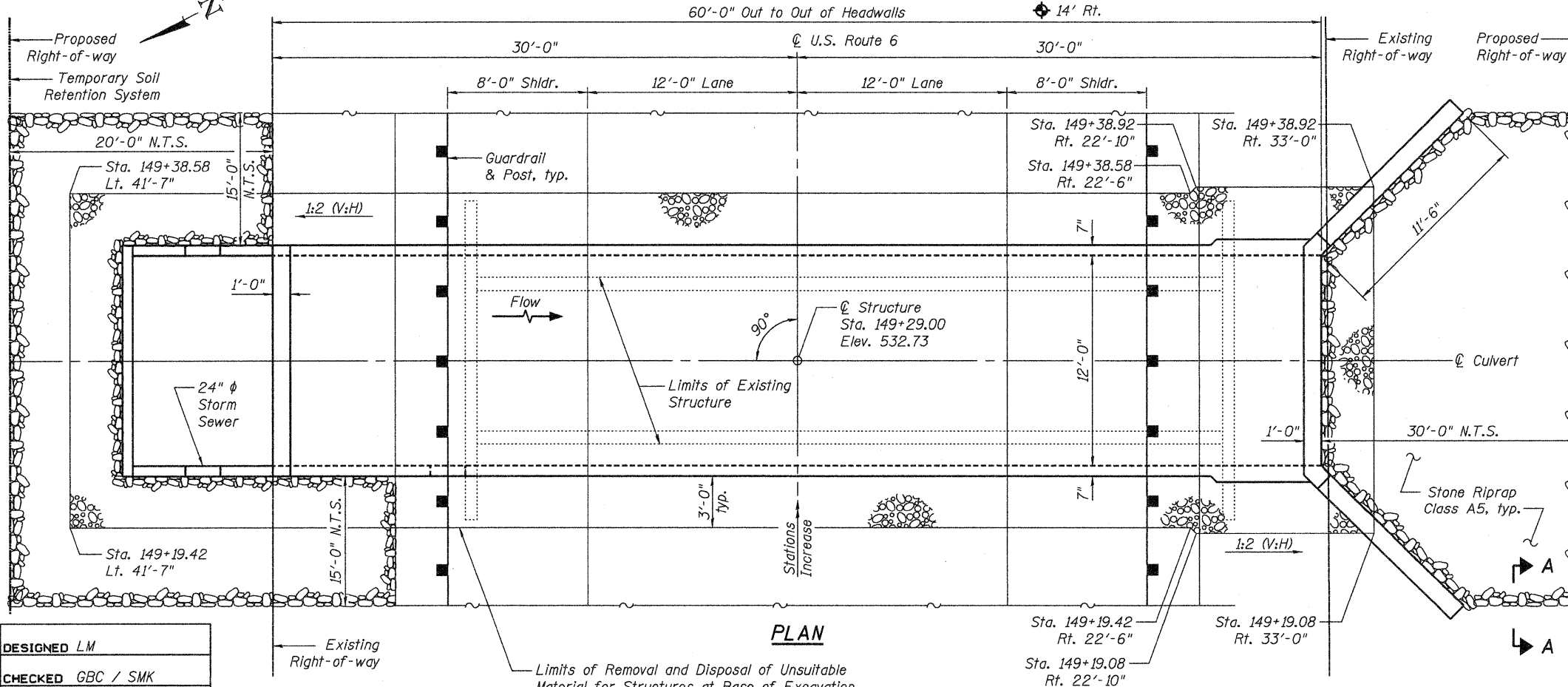
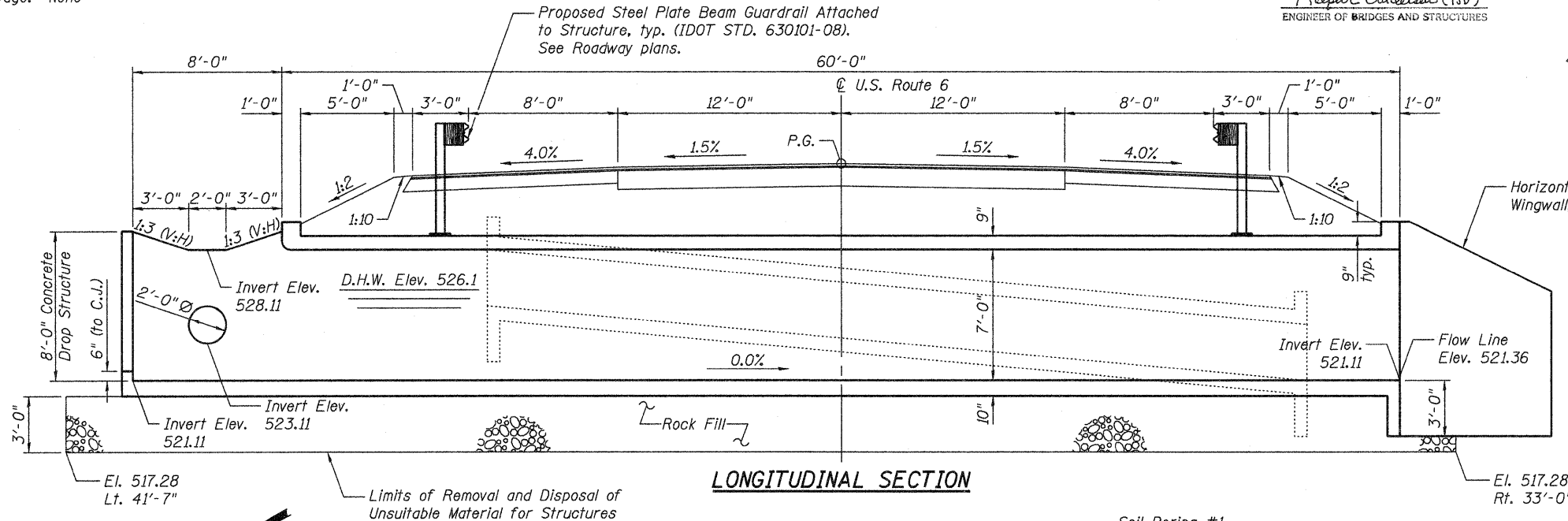
Flood	Freq. Yr.	Q	C.F.S.	Opening	Sq. Ft.	Nat. Exist.	Prop.	H.W.E.	Head - Ft. Exist.	Prop.	Headwater El. Exist.	Prop.
Design	10	130	24	56	525.8	0.5	0.0	526.2	525.8			
Base	50	220	24	59	526.1	1.7	0.0	527.8	526.1			
Overtopping	100	250	24	59	526.1	2.0	0.0	528.2	526.1			
Max. Calc.	500	340	24	62	526.3	3.2	0.0	529.5	526.3			

Velocities for 10-Year Flood Event: Existing - 18.2 f/s, Proposed - 7.0 f/s

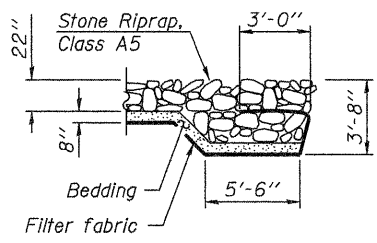
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	South End
	518.1

LONGITUDINAL SECTION

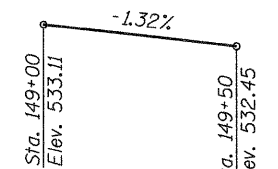


PLAN



SECTION A-A

PROFILE GRADE (along U.S. Route 6)



LOADING HS20-44

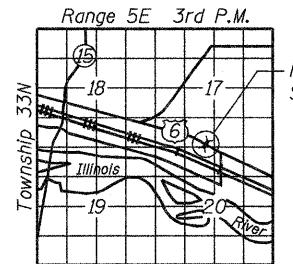
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

DESIGN STRESSES

FIELD UNITS  
 f'c = 3,500 psi  
 fy = 60,000 psi (Reinforcement)



LOCATION SKETCH

GENERAL PLAN AND ELEVATION  
 US ROUTE 6 OVER UNNAMED  
 TRIBUTARY TO THE ILLINOIS RIVER  
 F.A.P. ROUTE 623 - SECTION (H)I-1  
 LASALLE COUNTY  
 STATION 149+29.00  
 STRUCTURE NO. 050-2643

DESIGNED	LM
CHECKED	GBC / SMK
DRAWN	LM
CHECKED	GBC / SMK

N.T.S. = Not to Scale

Soil Boring #2  
 Sta. 149+06  
 13' Lt.



SHEET NO. 1 OF 4 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	623	(H)I-1	LASALLE	25	14
CONTRACT NO. 66914					
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					