

B.M. - NGS Monument Sta 1227+20, 98' Lt., Elev. 932.49  
 Existing Structure- 008-1029. Built in 1925 as SBI 27, Section 15 at Station 1239+74 as a single-cell, 8x5 cast-in-place RC box culvert, 30'-0" face-to-face of curb with a culvert length of 31'-4". Existing culvert is to be filled. Traffic to be maintained utilizing stage construction.

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

**STA. 1240 + 74**  
**6'x5' DOUBLE BOX CULVERT**

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 1
F.A.P. 17	15T-2	CARROLL	71	38	6 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT			

Contract # 64C35

No Salvage

STATION 1240+74.00  
 FAP RTE. 17 SEC. 15T-2  
 BUILT 20\_\_ BY  
 STATE OF ILLINOIS  
 LOADING HS20  
 STR. NO. 008-1098

**NAME PLATE**

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	General Plan & Elevation
2	Stage Construction Details
3	Culvert Details
4	Temp. Sheet Piling & Grating Details
5	Bar Splicer Assembly Details
6	Temp. Conc. Barrier Details

**DESIGN SPECIFICATIONS**

2002 AASHTO

**LOADING HS 20-44**

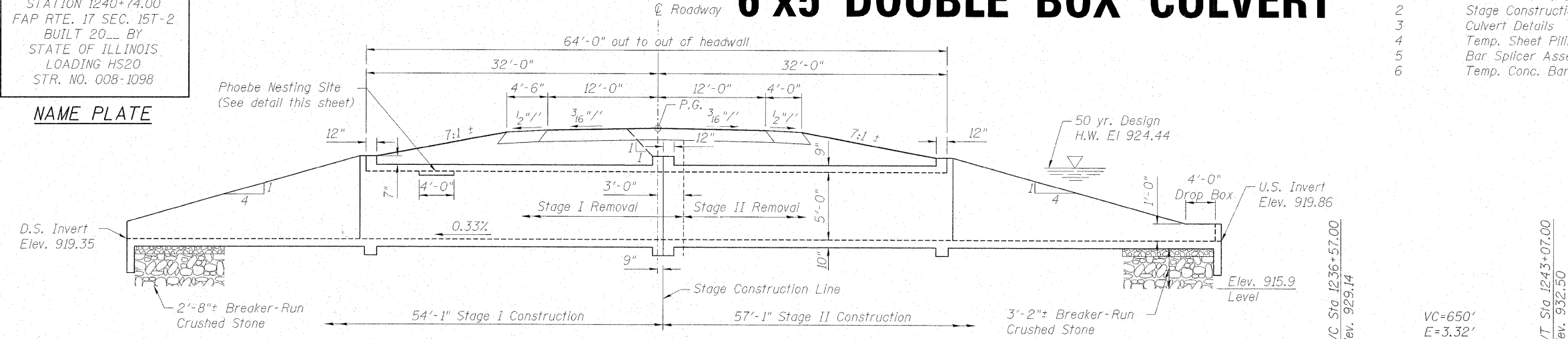
Allow 50#/sq. ft. for future wearing surface

**DESIGN STRESSES**

$f_y = 60,000 \text{ psi}$   
 $f'_c = 3,500 \text{ psi}$

**GENERAL NOTES**

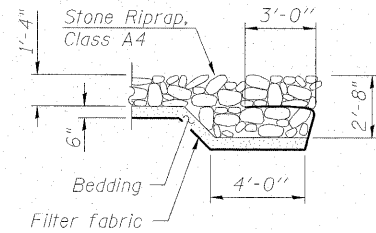
1. Reinforcement bars shall conform to the requirements of ASTM A 706 Grade 60, (IL modified). See Special Provisions.
2. For staging details, see sheet 2 of 6.
3. Precast alternate is not allowed.



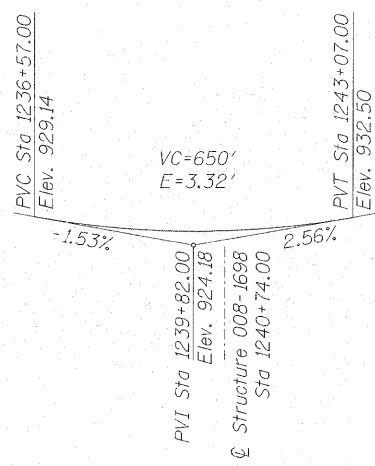
**Notes:**  
 The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.

The Breaker-Run Crushed Stone shall be capped with 6 in. of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for "Breaker-Run Crushed Stone".

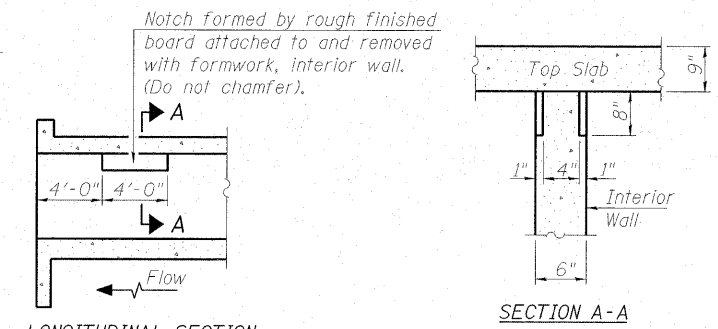
**ELEVATION VIEW**  
 Dimensions are at right angles to  $\perp$  Roadway  
 Looking West



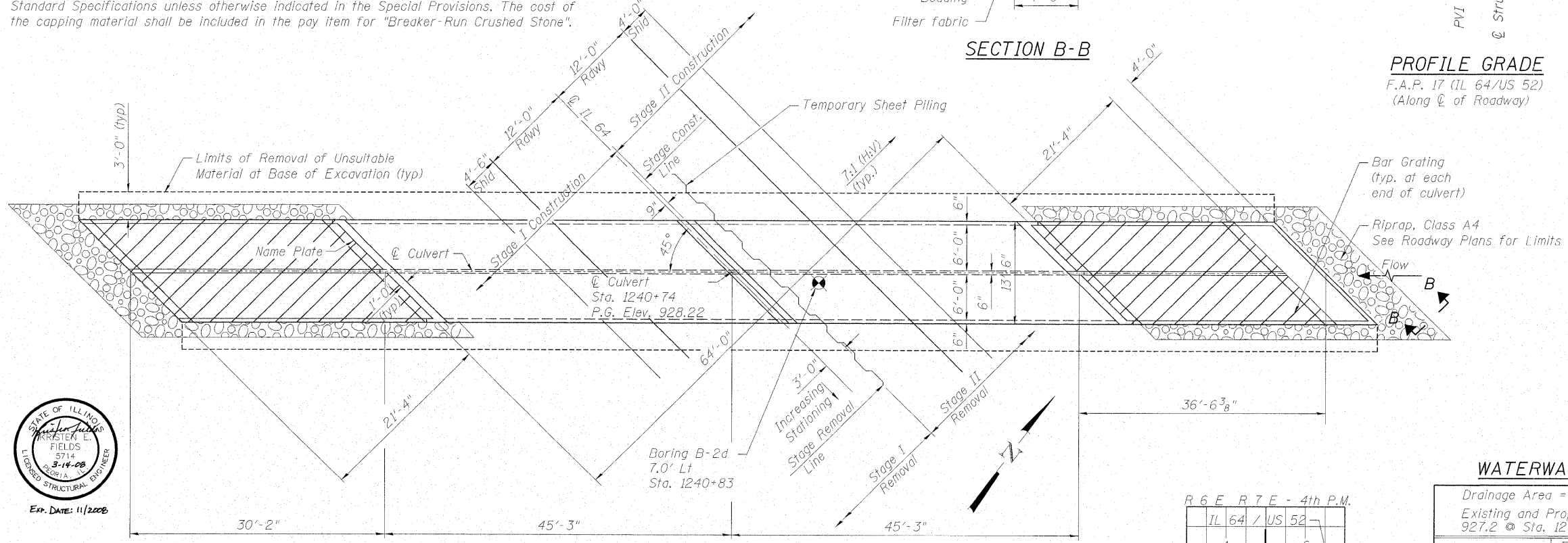
**SECTION B-B**



**PROFILE GRADE**  
 F.A.P. 17 (IL 64/US 52)  
 (Along  $\perp$  of Roadway)



**LONGITUDINAL SECTION**  
**PHOEBE NESTING SITE DETAILS**  
 (Downstream End Only)

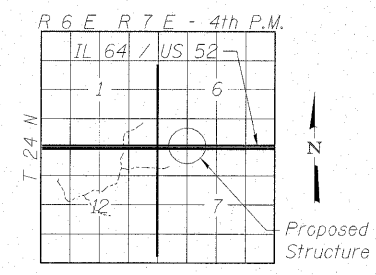


**PLAN VIEW**

**DESIGN SCOUR ELEVATION TABLE**

Design Scour Elevation (ft.)	Upstream	Downstream
	916.86	916.35

**APPROVED**  
 FOR STRUCTURAL ADEQUACY ONLY  
*Ralph E. Anderson*  
 ENGINEER OF BRIDGES AND STRUCTURES



**LOCATION SKETCH**

**WATERWAY INFORMATION**

Drainage Area = 280.4 ac  
 Existing and Proposed Low Grade Elev. 927.2 @ Sta. 1238+94.1

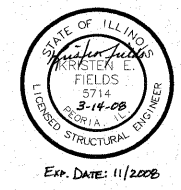
Flood	Freq. Yr.	Q C.F.S.	Headwater El.	
			Exist.	Prop.
Design	10	155	923.55	922.76
Ex Overtopping	50	317	926.04	924.44
Base	85	381	927.21	
Pr Overtopping	100	418		925.35
	263	600		927.21

10-year velocity through existing culvert: 8.5 fps  
 10-year velocity through proposed culvert: 7.4 fps

**TOTAL BILL OF MATERIAL**

PAY CODE	ITEM	UNIT	TOTAL
*20201200	Removal and Disposal of Unsuitable Material	Cu. Yd.	330
28100107	Stone Riprap, Class A4	Sq. Yd.	59
28200200	Filter Fabric	Sq. Yd.	59
50800105	Reinforcement Bars	Pound	23,260
*51205200	Temporary Sheet Piling	Sq. Ft.	1711
51500100	Name Plates	Each	1
54003000	Concrete Box Culverts	Cu. Yd.	142.9
*20005400	Breaker Run Crushed Stone	Ton	494
*20023600	Filling Existing Culvert	Each	1

**GENERAL PLAN & ELEVATION**  
 IL ROUTE 64/US ROUTE 52  
 OVER UNNAMED TRIBUTARY  
 TO STRADDLE CREEK  
 FAP 17 - SECTION 15T-2  
 CARROLL COUNTY  
 STATION 1240+74  
 STRUCTURE NO. 008-1098



DESIGNED - BAS
CHECKED -
DRAWN - LAD
CHECKED - BAS

