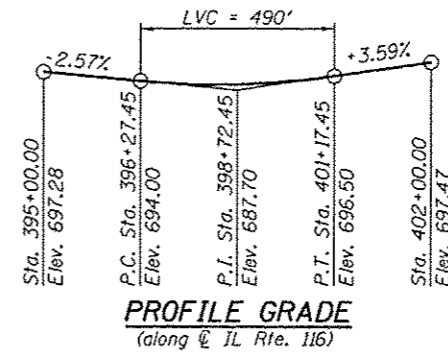
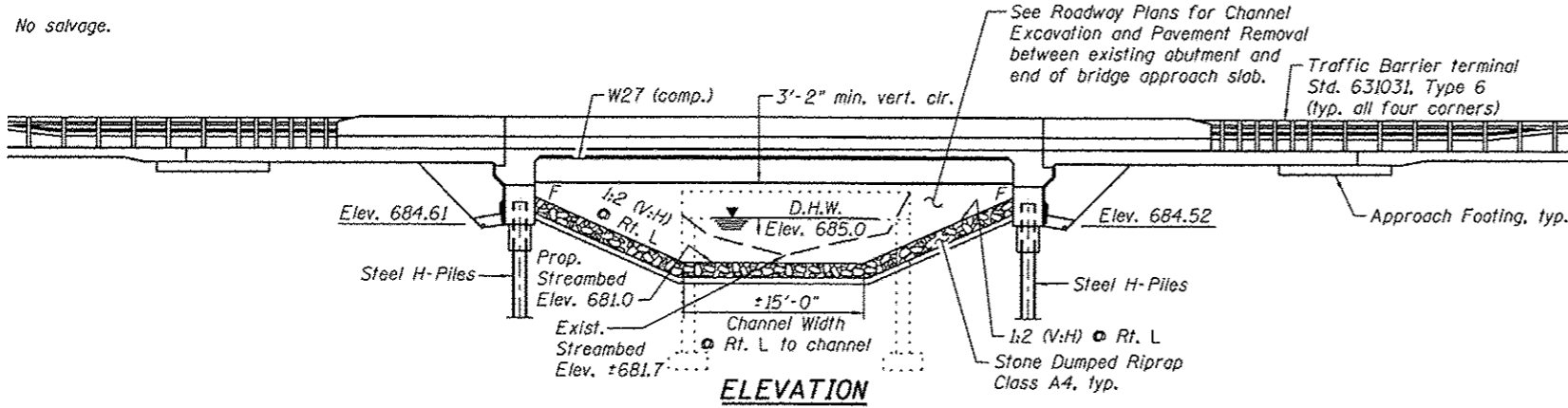


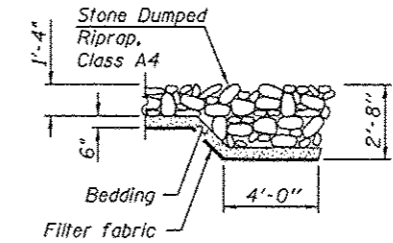
Bench Mark: BM DASI set chiseled "□" on southwest wingwall of existing bridge over unnamed drainage ditch, Sta. 398+20, 27.9' Rt. Elev. 687.42 (assumed).

Existing Structure: S.N. 029-0041 original construction year unknown, reconstructed in 1932 as SBI-97, Section 144-B at Sta. 398+10. Structure consists of 18'-0" (FF-FF Abutments) single span concrete slab bridge with originally 0 deg skew. During reconstruction bridge was widened from 20'-0" to 53'-4" (Out-Out Deck). Widened portion was built on 30 deg ahead right skew to accommodate channel layout. The structure is to be removed and replaced utilizing stage construction while maintaining one lane of traffic.

No salvage.



PROFILE GRADE
(along @ IL Rte. 116)



SECTION A-A

- INDEX OF SHEETS**
1. General Plan and Elevation
 2. General Data
 3. Stage Construction Details
 4. Temporary Concrete Barrier for Stage Construction
 5. Top of Slab Elevations
 6. Top of Approach Slab Elevations
 7. Superstructure
 8. Superstructure Details
 9. Concrete End Diaphragms
 - 10-11. Bridge Approach Slab Details
 12. Framing Plan & Steel Details
 13. West Abutment
 14. East Abutment
 15. Bar Splicer Assembly and Mechanical Splicer Details
 16. HP Pile Details
 17. Drainage Scupper, DS-11
 18. Cantilever Forming Brackets
 19. Boring Logs

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50)
 $f_y = 36,000$ psi (M270 Grade 36)

LOADING HL-93

Allow 50 psf for future wearing surface.

DESIGN SPECIFICATIONS

2010 AASHTO LRFD Bridge Design Specifications with 2010 Interims

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.077g
 Design Spectral Acceleration at 0.2 sec. (S_{D5}) = 0.125g
 Soil Site Class = C

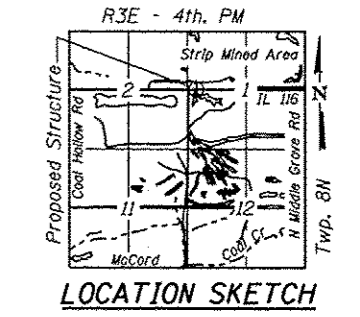
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	E. Abut.
	684.6	684.5

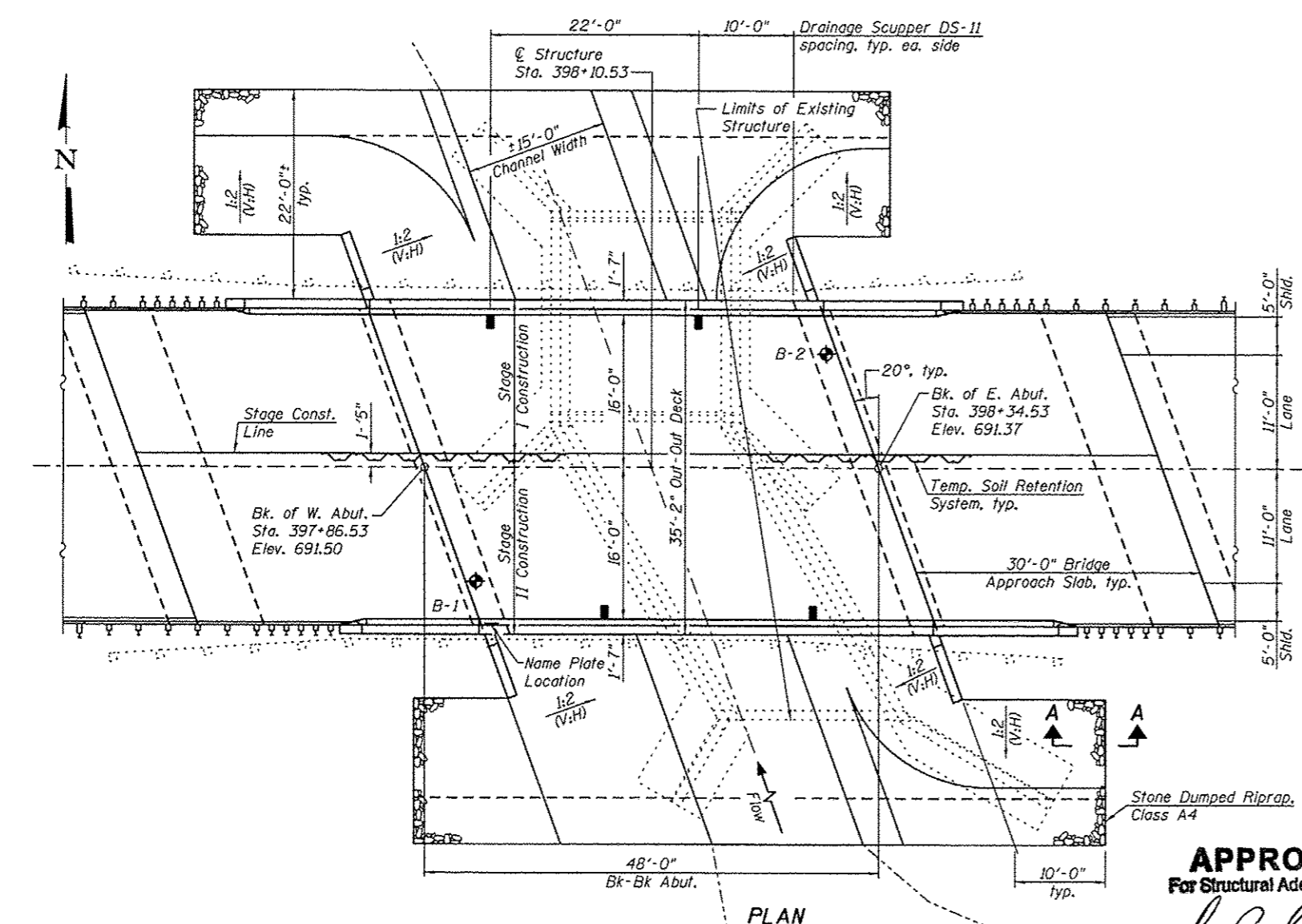
WATERWAY INFORMATION

Drainage Area = 0.58 Sq Mi Low Grade Elev. 691.37 @ Sta. 398+32

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	196	39	52	684.4	0.7	0.0	685.1	684.4
Base	50	312	49	68	685.0	1.0	0.3	686.0	685.3
Overtopping	100	365	49	76	685.3	1.4	0.4	686.7	685.7
Max. Calc	500	491	49	94	685.9	2.3	0.5	688.2	686.4



LOCATION SKETCH



PLAN

APPROVED
 For Structural Adequacy Only
 Michael T. Haley
 Engineer of Bridges & Structures



Michael T. Haley 1-18-13
 Michael T. Haley
 Licensed Structural Engineer
 State of Illinois No. 81-5991
 Expires 11/30/2012

GENERAL PLAN AND ELEVATION
IL ROUTE 116 OVER
UNNAMED DRAINAGE DITCH
F.A.P. RTE. 665 - SEC. 144-B-1 BR
FULTON COUNTY
STATION 398+10.53
STRUCTURE NO. 029-0075

LIN ENGINEERING, LTD. Consulting Engineers Chatham, Illinois	USER NAME *	DESIGNED - TBP	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SHEET NO. 1 OF 19 SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	FILE NAME *	CHECKED - ADB	REVISED -			665	144-B-1 BR	FULTON	48	18
	PLOT SCALE *	DRAWN - A.J.F.	REVISED -			CONTRACT NO. 68778				
	PLOT DATE *	CHECKED - MTH	REVISED -			ILLINOIS FED. AID PROJECT				