

- Benchmarks: 1.) USGS Y248 1961 Old Rte. 66 (Lincoln Ave.) & Ditch Bridge @ N.E. corner of bridge Elevation = 642.18.
 2.) Set PK Nail in power pole East side of Division St. ±60' North of existing structure Station 28+75/21' Rt. Elevation = 642.33.
 3.) Top of fire hydrant on the West side of Division St. @ the S.E. corner of C & C Auto Wrecking & Towing Sta. 31+35/30' Lt. Elevation = 644.23.

Existing Structure: Structure Number 053-0073, built in 1926 and carries F.A.U. 6325 (Division Street) over North Creek. Consist of a 30'-0" single span reinforced concrete T-Beam deck (6-Beams) and a Bituminous Concrete Wearing Surface on two reinforced concrete closed abutments supported by spread footings. The slab thickness is 6". The structure is not skewed to the roadway and is approximately 34'-6" out to out and 33'-0" back to back of abutments. The existing end posts shall be salvaged and reincorporated into the proposed bridge, otherwise the existing structure has no salvage value.

DESIGN SPECIFICATIONS

AASHTO 2002

LOADING HS20-44

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

DESIGN STRESSES

CAST IN PLACE CONCRETE (FIELD UNITS)

$f'_c = 4,000$ psi
 $f_y = 60,000$ psi (Reinforcement)

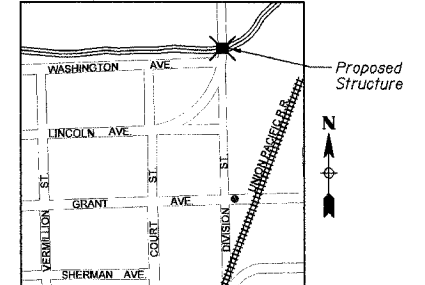
SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.043
 Site Coefficient (S) = 1.0

HORIZONTAL CURVE DATA

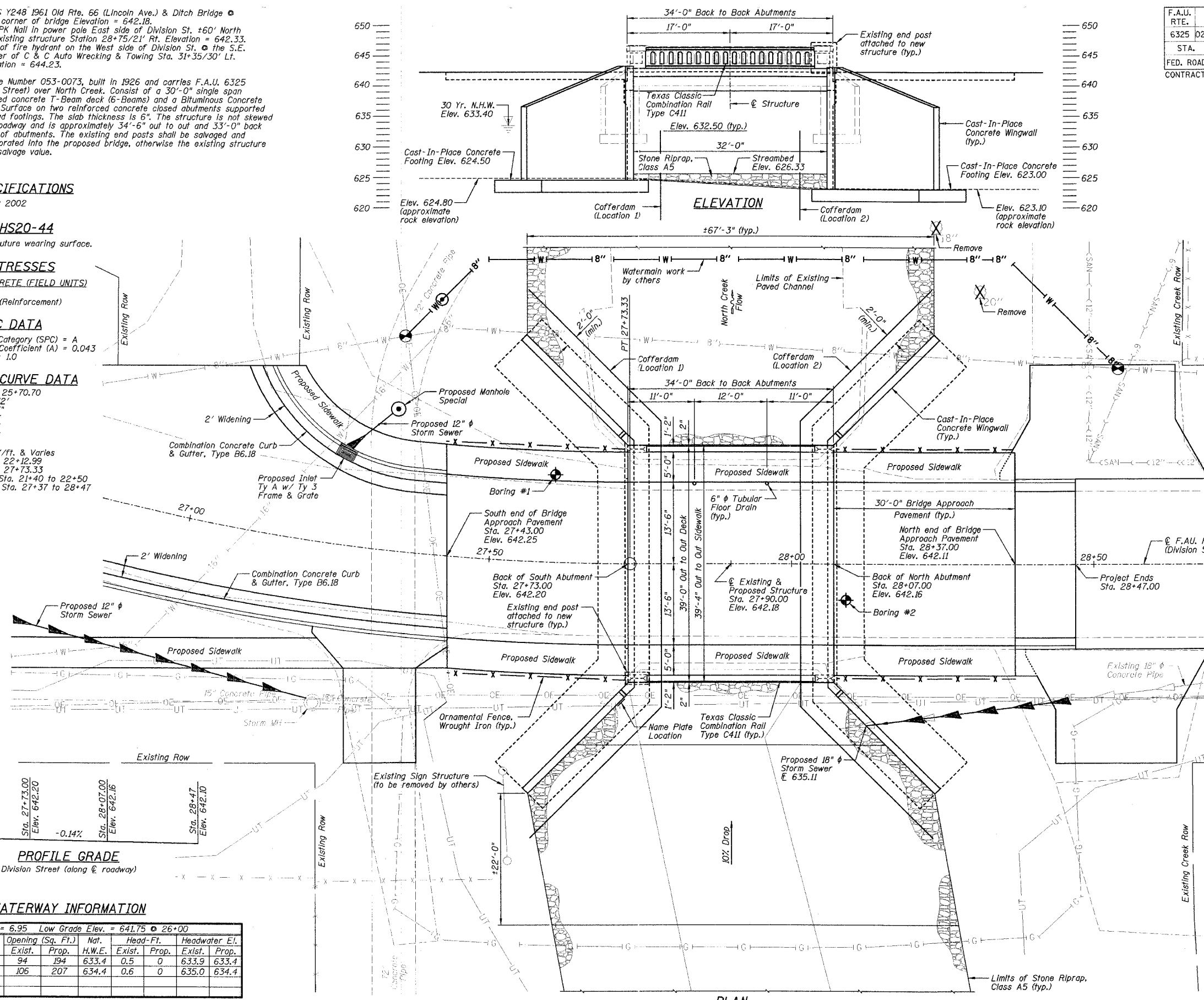
P.I. STA. = 25+70.70
 $\Delta = 90^\circ 26' 12''$
 $D = 16' 11' 37''$
 $R = 355.00'$
 $T = 357.72'$
 $L = 560.34'$
 $E = 148.97'$
 S.E. = 0.04'/ft. & Varies
 P.C. STA. = 22+12.99
 P.T. STA. = 27+73.33
 Attain S.E. Sta. 21+40 to 22+50
 Depart S.E. Sta. 27+37 to 28+47

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. B1 OF 18 SHEETS
6325	02-00090-00-BR	LIVINGSTON	31	8	
STA.	TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT		
CONTRACT NO. 87238					

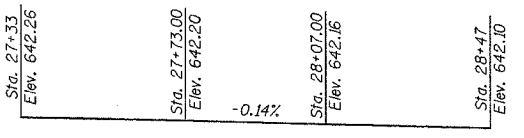


INDEX TO SHEETS

SHEET NO.	TITLE
B1	GENERAL PLAN AND ELEVATION
B2	CHANNEL EXCAVATION PLAN, GENERAL NOTES AND TOTAL BILL OF MATERIALS
B3	STONE RIPRAP LAYOUT PLAN
B4	BAR SPLICER ASSEMBLY DETAILS
B5	ELEVATION LOCATIONS AND DEAD LOAD DEFLECTION DIAGRAM
B6	TOP OF SLAB ELEVATIONS
B7	SUPERSTRUCTURE DECK
B8	SUPERSTRUCTURE CROSS SECTION, GIRDER ELEVATION & TYPICAL DETAIL AND FLOOR DRAIN DETAILS
B9	END DIAPHRAGM ELEVATION AND SECTIONS
B10	RAILING ELEVATION, SECTIONS AND DETAILS
B11	SOUTH ABUTMENT
B12	SOUTH ABUTMENT WINGWALL DETAILS AND BILL OF MATERIALS
B13	NORTH ABUTMENT
B14	NORTH ABUTMENT WINGWALL DETAILS AND BILL OF MATERIALS
B15-B16	BORING LOGS
B17-B18	EXISTING PLANS



PROFILE GRADE
 Division Street (along & roadway)

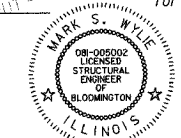


WATERWAY INFORMATION

Drainage Area (Sq. Mi.) = 6.95 Low Grade Elev. = 641.75 @ 26+00

Flood Year	Q C.F.S.	Opening (Sq. Ft.)	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.		
Design	30	970	94	194	633.4	0.5	0	633.9	633.4
Base	100	1153	106	207	634.4	0.6	0	635.0	634.4
Overtopping Max. Freq.									

I certify that to the best of my knowledge, 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'.



Mark S. Wylie Date 1/21/05
 MARK S. WYLIE
 ILLINOIS STRUCTURAL ENGINEER
 NO. 081-005002
 Exp. Date 11/30/06

SECTION 02-00090-00-BR
 LIVINGSTON COUNTY
 PONTIAC, ILLINOIS

GENERAL PLAN AND ELEVATION

DESIGNED BY J.M.L.	Farnsworth GROUP 2700 Midway Drive Bloomington, Illinois 61704 309/530-9426 309/530-1871 fax	FILE NO. 24-6884
DRAWN BY D.J.M.		DATE 01-14-05
CHECKED BY M.S.W.		SHEET NO. 8 OF 31