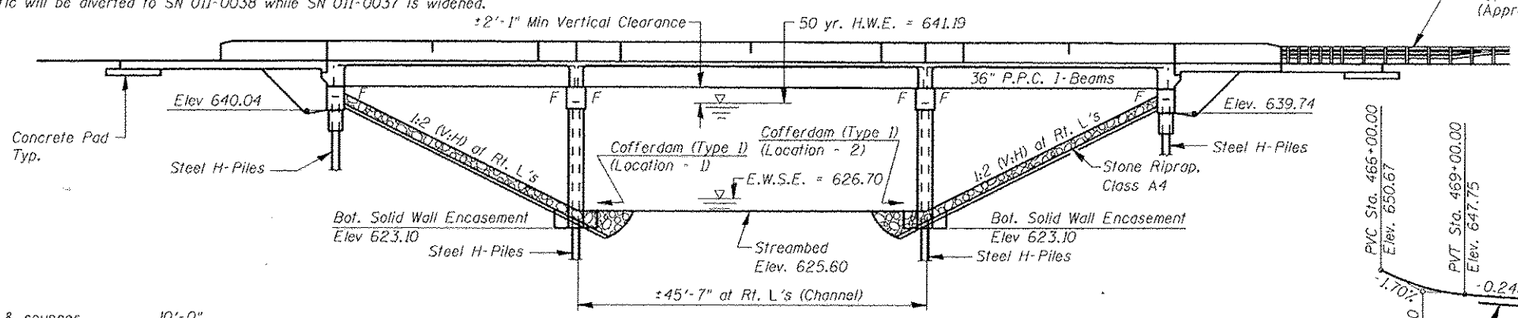
Existing Structure - Structure No. 011-0037, built as Section 44B-1 at Sta. 342+37.59 on F.A.P Rte. 322 (U.S. Rte. 51) in 2002. The structure has a three-span, P.P.C. I-beam superstructure on integral abutments and pile bent piers. 122'-7" back to back abutments, 43'-2" out to out of deck, and 15° skew Rt. Ah.

Two-way traffic will be diverted to SN 011-0038 while SN 011-0037 is widened.

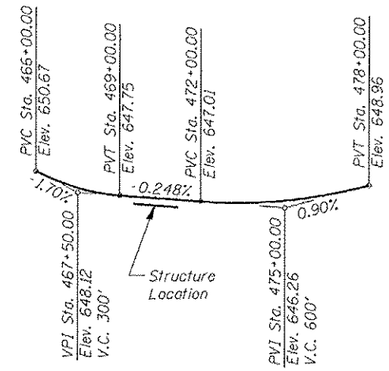
No Salvage

BM - Chisel "□" on Northeast Wingwall of SN 011-0037
Sta. 470+76.01, 17.0' Lt., Elev. 647.33

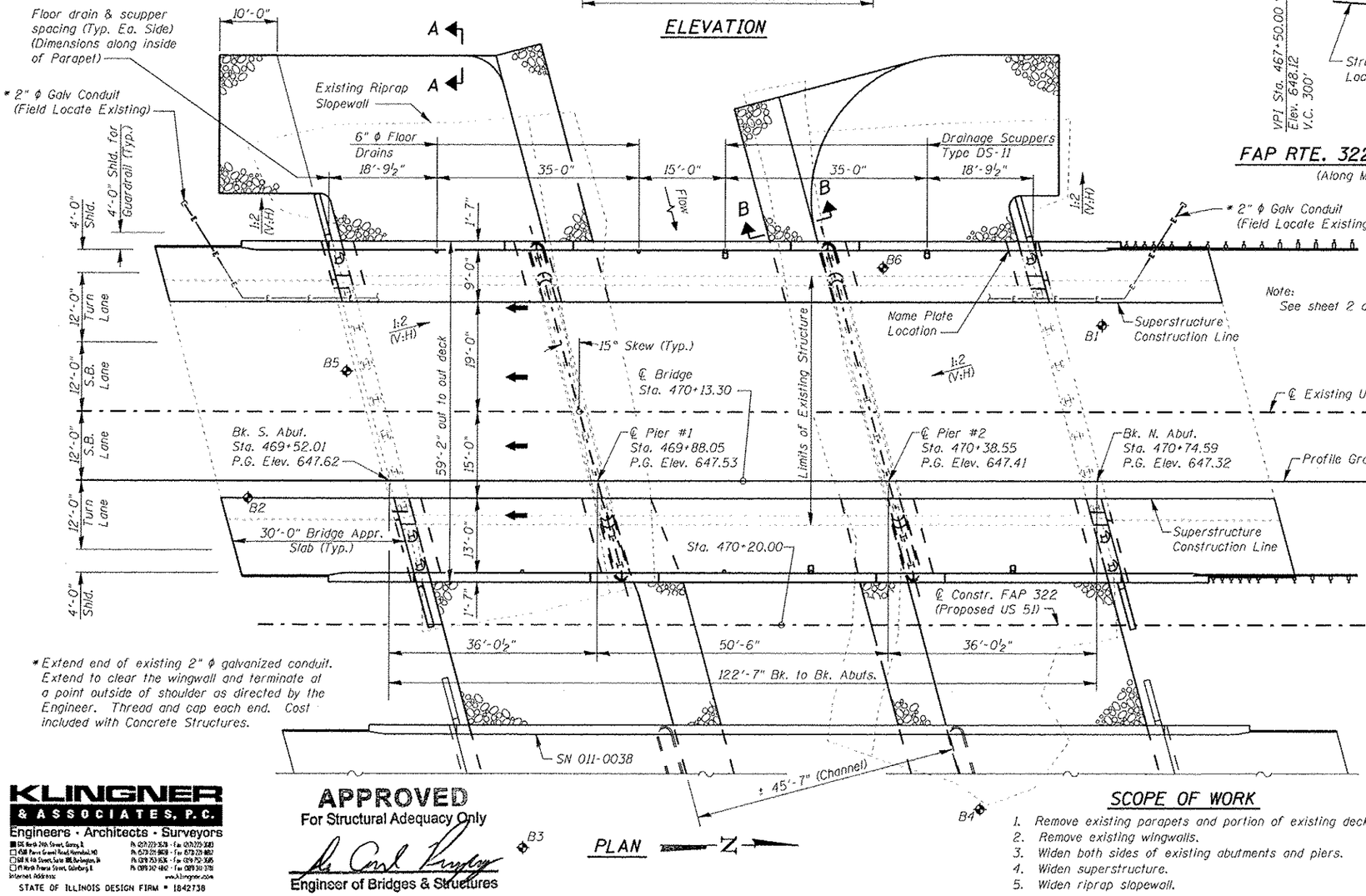
8/9/2012 1:25:43 PM



ELEVATION



FAP RTE. 322 PROFILE GRADE
(Along Median Edge)



Note:
See sheet 2 of 34 for Sections A-A and B-B.

* Extend end of existing 2" ϕ galvanized conduit. Extend to clear the wingwall and terminate at a point outside of shoulder as directed by the Engineer. Thread and cap each end. Cost included with Concrete Structures.

INDEX OF SHEETS

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2	General Data
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6	Top of North Approach Slab Elevations
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13-14	Bridge Approach Slab Details
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19-20	36" P.P.C. I-Beam - Span 2
21	36" P.P.C. I-Beam Details
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23	North Abutment
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25	Pier #2
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27	HP Pile Details
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DESIGN SPECIFICATIONS

AASHTO 17th Edition, 2002

LOADING HS20-44

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

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f_y = 60,000 psi (Reinforcement)

PRECAST PRESTRESSED UNITS

f'_c = 6,000 psi
f'_{ci} = 5,000 psi
f'_s = 270,000 psi (½" ϕ Low Relaxation Strands)
f_{si} = 201,960 psi (½" ϕ Low Relaxation Strands)

SEISMIC DATA

Seismic Performance Category (SPC)= A
Bedrock Acceleration Coefficient (A)= 0.057g
Site Coefficient (S)= 1.0

STATE OF ILLINOIS
ALAN D. LUKENS
081-005167
LICENSED STRUCTURAL ENGINEER
QUINCY, ILLINOIS

8/9/12
Alan D. Lukens Date
Licensed Structural Engineer
State of Illinois No. 081-005167
License Expires 11/30/2012

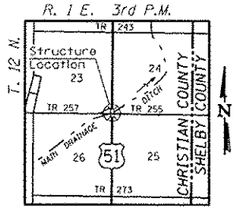
KLINGNER & ASSOCIATES, P.C.
Engineers · Architects · Surveyors
STATE OF ILLINOIS DESIGN FIRM # 184273B

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

PLAN

SCOPE OF WORK

1. Remove existing parapets and portion of existing deck.
2. Remove existing wingwalls.
3. Widen both sides of existing abutments and piers.
4. Widen superstructure.
5. Widen riprap slopewall.



LOCATION SKETCH

GENERAL PLAN & ELEVATION
FAP RTE 322 (US RTE 51) OVER
MAIN DRAINAGE DITCH
SECTION 11-10
CHRISTIAN COUNTY
STATION 470+20.00
STRUCTURE NO. 011-0037

FILE NAME =	USER NAME =	DESIGNED ADL	REVISED -
		CHECKED RJP	REVISED -
	PLOT SCALE =	DRAWN RJP	REVISED -
	PLOT DATE =	CHECKED ADL	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
S.N. 011-0037
SHEET NO. 1 OF 34 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
322	11-10	CHRISTIAN	437	201
		CONTRACT NO. 72961		
		ILLINOIS FED. AID PROJECT		

G:\2\Files\010329\Bridge\B1-011-0037.dgn

Klingner & Associates, P.C.