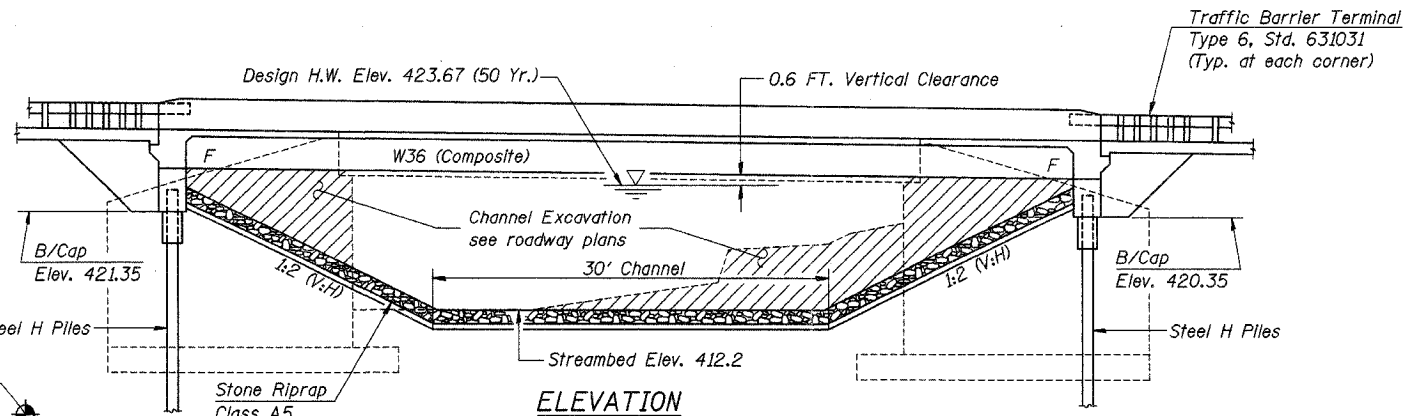


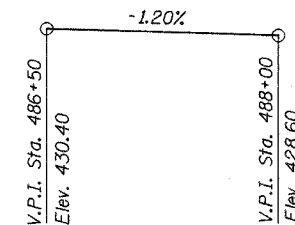
Bench Mark: Disc in SE Headwall of Bridge S.N. 095-0024. Elev. 430.18

Existing Structure: S.N. 095-0024 built in 1936 as S.B.I. Route 127, Sec. 2-B-NRH at Sta. 487+25. Structure is a single span RC T-beam bridge on closed abutments with timber piles. Overall length is 53'-0" back to back abutments. Bridge width is 43'-6" out to out of deck with a 39'-8" clear roadway width. Structure is to be removed and replaced with a single span composite WF bridge on integral abutments. Traffic shall be maintained at all times utilizing Stage Construction.

No Salvage.



Sta. 486+70
60' LT
B1



PROFILE GRADE
(along @ F.A.P. Rte. 42)

INDEX OF SHEETS

1. General Plan and Elevation
2. General Notes & Total Bill of Material
3. Stage Construction Details
4. Top of Slab Elevations
5. Superstructure
6. Superstructure Details
7. Diaphragm Details
8. Structural Steel
9. Bearing Details
10. North Abutment
11. South Abutment
12. Bar Splicer Assembly Details
13. Anchor Bolt Details
14. Temporary Concrete Barrier for Stage Construction
15. Boring Logs

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44

Allow 50#/Sq. Ft. for future wearing surface

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (Structural Steel) (M270 GR. 50)

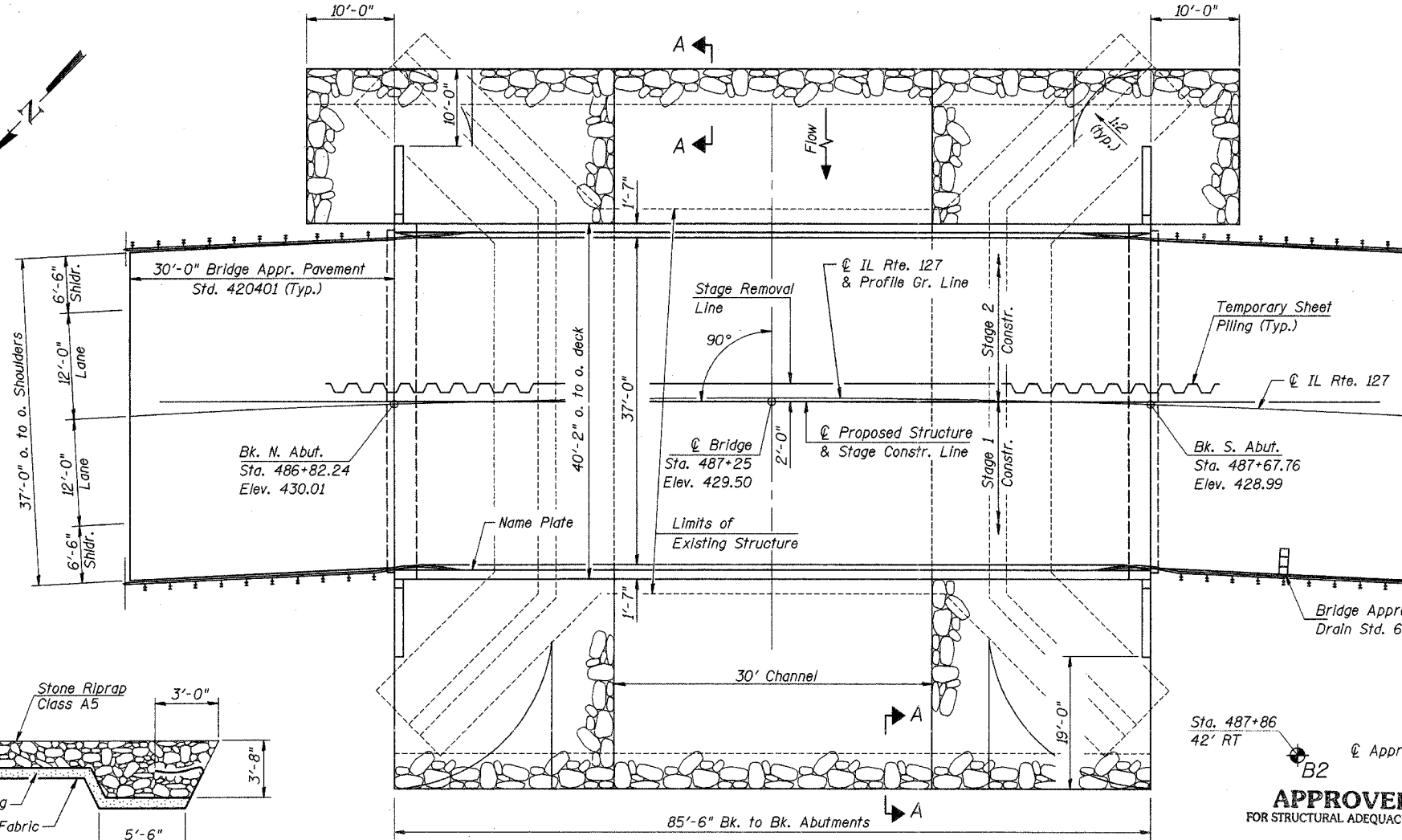
SEISMIC DATA

Seismic Performance Category (SPC) = B
 Bedrock Acceleration Coefficient (A) = 0.10
 Site Coefficient (S) = 1.0

CURVE DATA

(@ F.A.P. Route 42)

$\Delta = 44^\circ 23' 09''$
 $D = 4^\circ 23' 56''$
 $T = 531.35'$
 $R = 1,302.50'$
 $L = 1,009.02'$
 $E = 104.21'$
 $S.E. = 0.063'/Ft.$
 $P.C. Sta. = 478+86.04$
 $P.I. Sta. = 484+17.40$
 $P.T. Sta. = 488+95.06$

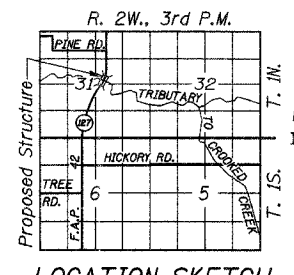


SEC A-A

PLAN

WATERWAY INFORMATION

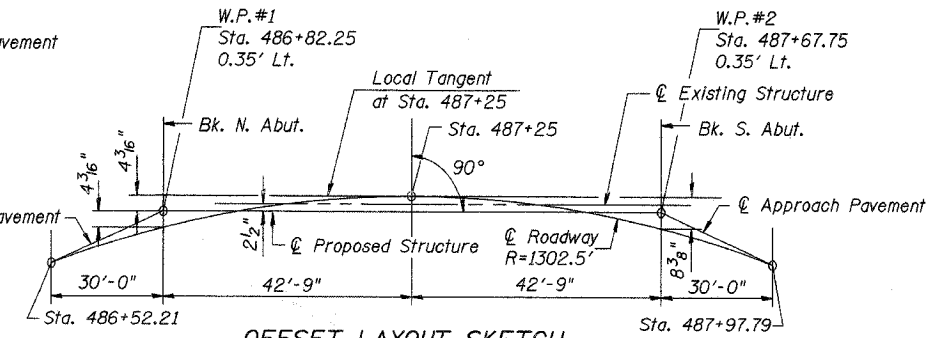
Drainage Area = 12.36 Sq. Mi.		Low Grade Elev. 426.02		Sta. 492+12		
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.	Nat. H.W.E. Exist.	Head - Ft. Exist.	Headwater El. Prop.
Design	50	3231	444 547	423.67	2.09 1.52	425.76 425.19
Base	100	3712	458 567	423.95	2.44 1.75	426.39 425.70
Overtopping	Exist.	71	3425 449	423.78	2.24	426.02
	Prop.	167	4000	579	424.11	1.91
Max. Calc.						



LOCATION SKETCH

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

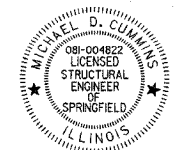
Richard E. Anderson
ENGINEER OF BRIDGES AND STRUCTURES



OFFSET LAYOUT SKETCH

STATION 487+25
BUILT 200_ BY
STATE OF ILLINOIS
F.A.P. RTE. 42 SEC. 2BR
LOADING HS20
STR. NO. 095-0076

LETTERING FOR NAME PLATE
See Std. 515001



Michael D. Cummins
(Expires 11/30/2006)

GENERAL PLAN & ELEVATION

IL ROUTE 127 OVER TRIBUTARY TO CROOKED CREEK
F.A.P. ROUTE 42 SECTION 2BR
WASHINGTON COUNTY
STA. 487+25
S.N. 095-0076

CUMMINS ENGINEERING CORPORATION	JOB #: 2158 FILE: 2158GPE DATE: 2/10/05
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