

B.M. #4690-2 Brass disk on the N.W. wing of S.N. 015-0065, 17.5' Lt. Sta. 900+45, Elev. 677.59 (Stamped Elev. 677.81).

Existing Structure: S.N. 015-0065, originally built in 1980 as F.A.S. Rte. 673, Section 2-BR at Sta. 900+00. The existing structure is a Three Span Precast Concrete Channel Beam bridge on spill thru abutments and pile bent piers. The existing structure has a bituminous overlay and waterproofing membrane. The overall length is 86'-1" back to back of abutments. The out to out bridge width is 33'-9" with a clear roadway width of 31'-9" measured face to face of curbs. The superstructure will be replaced under stage construction.

No Salvage

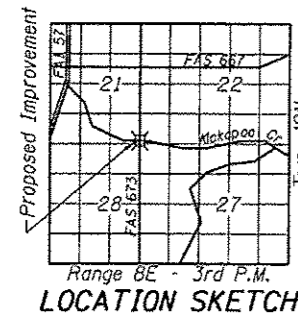
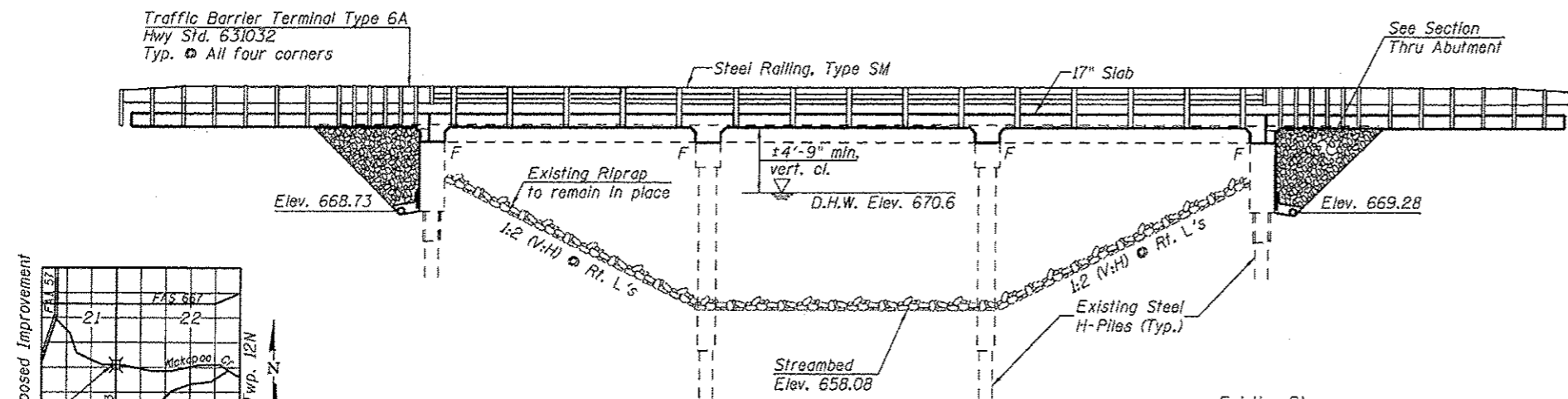
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	S. Abut.	Pier 1	Pier 2	N. Abut.
	668.7	655.1	655.1	669.3

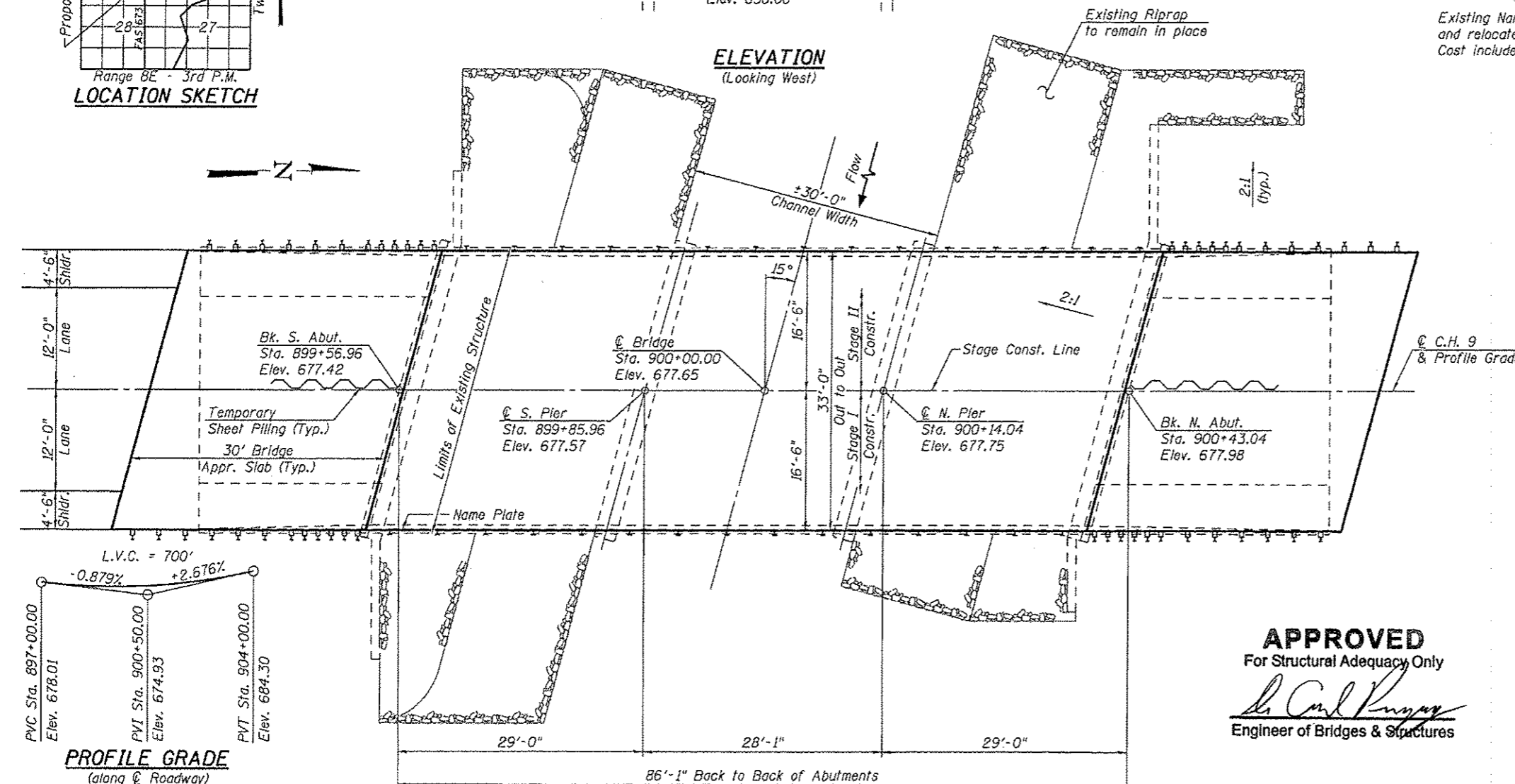
WATERWAY INFORMATION

Drainage Area = 11.5 sq. mi. Low Grade Elev. 677.23 @ Sta. 899+00.00									
Flood	Freq. Yr.	Q C.F.S.	Opening Exist.	Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
10	1700	369	369	369	669.2	0.2	0.2	669.4	669.4
Design	50	2730	463	463	670.6	0.5	0.5	671.1	671.1
Base	100	3190	499	499	671.1	0.6	0.6	671.7	671.7
Overtopping									
Max. Calc.	500	4320	588	588	672.3	1.0	1.0	673.3	673.3

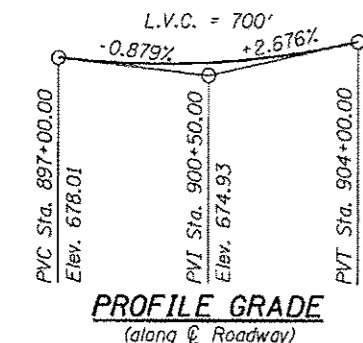
10 Year Velocity Through Exist. Bridge = 4.61 fps
 10 Year Velocity Through Prop. Bridge = 4.61 fps



ELEVATION (Looking West)



PLAN



PROFILE GRADE (along & Roadway)

Note: Plan elevations relative to the existing structure have been taken from existing plans and reduced by 0.22 feet to match benchmark datum.

STATION 900+00.00
 RE-BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.S. RTE 673
 SEC. 2BR
 LOADING HL-93
 STR. NO. 015-0065

NAME PLATE
 See Std. 515001

Existing Name Plate shall be cleaned and relocated next to new Name Plate. Cost included with Name Plates

INDEX OF SHEETS

1. General Plan
2. General Data
3. Stage Construction Details
4. Temporary Concrete Barrier
- 5.-6. Top of Slab Elevations
- 7.-8. Top of Approach Slab Elevations
- 9.-10. Superstructure Plan
11. Superstructure Cross Section and Details
- 12.-13. Bridge Approach Slab Details
14. Type SM Railing
15. Abutment Details
16. Pier Details
17. Bar Splicer Details

DESIGN SPECIFICATIONS

New Construction
 2012 AASHTO LRFD Bridge Design Specifications, 6th Edition, with 2013 AASHTO Interims
Existing Construction
 2002 AASHTO Bridge Design Specifications

LOADING HL-93

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

SEISMIC DATA

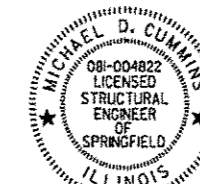
New Construction
 Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (S₁) = 0.125
 Design Spectral Acceleration at 0.2 sec. (S_{0.2}) = 0.274
 Soil Site Class = C
Existing Construction
 Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 0.06g
 Site Coefficient (S) = 1.5

DESIGN STRESSES

FIELD UNITS (New Construction)
 f'c = 5,000 psi (Superstructure)
 fy = 60,000 psi (Reinforcement)
FIELD UNITS (Existing Construction)
 f'c = 3,500 psi (Substructure)
 fy = 60,000 psi (Reinforcement)

APPROVED
 For Structural Adequacy Only

Michael D. Cummins
 Engineer of Bridges & Structures



Michael D. Cummins 7/24/14
 (Expires 11/30/2014)

GENERAL PLAN & ELEVATION
C.H. 9 OVER KICKAPOO CREEK
F.A.S. ROUTE 673 SECTION 2BR
COLES COUNTY
STATION 900+00.00
STRUCTURE NO. 015-0065



JOB # 2223.9
 FILE # 8150065-74167-81-0PE.dgn
 DATE 7/24/2014

DESIGNED - AAN
 CHECKED - MDC
 DRAWN - SJS
 CHECKED - MDC

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION

SHEET NO. 1 OF 17 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
673	2BR	COLES	24	8

CONTRACT NO. 74167

ILLINOIS FED. AID PROJECT