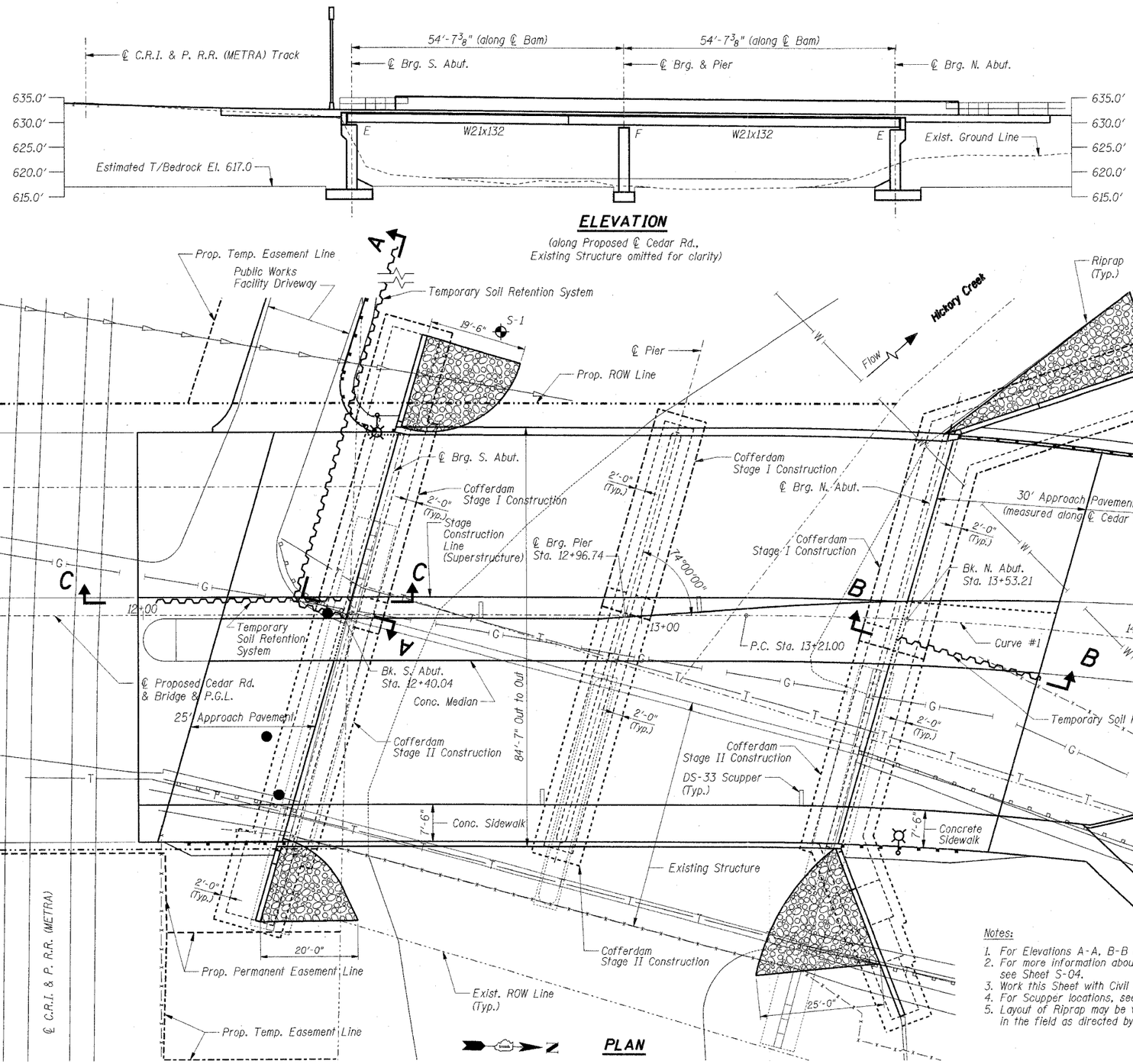
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0369	97-00025-00-BR	WILL	156	110
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

CONTRACT NO: 83757

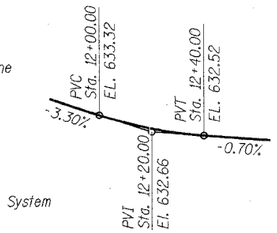


ELEVATION

(along Proposed ℄ Cedar Rd., Existing Structure omitted for clarity)

LEGEND

- T — Existing Phone Line
- W — Existing Water Line
- G — Existing Gas Line
- CTV — Existing CTV Line
- Existing Storm Sewer Line
- Existing Fence
- Existing Guardrail
- Proposed Guardrail
- Cofferdam
- Temporary Soil Retention System
- Soil Boring
- Proposed Lighting Unit
- Proposed Drainage Structure



PROFILE GRADE

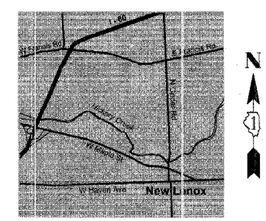
CURVE #1 DATA

PI STA. = 14+23.78
Δ = 18° 31' 58" (RT)
D = 9° 05' 40"
R = 630.00'
T = 102.79'
L = 203.78'
E = 8.33'
P.C. STA. = 13+21.00
P.T. STA. = 15+24.78

WATERWAY INFORMATION

Drainage Area = 75.4 sq. mi. Low Grade Elev. 628.00 @ Sta. 13+94.04

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	4,700	816	850	626.07	0.67	0.51	626.73	626.58
Design	30	6,062	857	944	627.00	1.21	0.73	628.21	627.73
Base/Max. Calc.	100	8,100	867	1,044	627.99	2.36	1.41	630.35	629.40



LOCATION SKETCH

BENCHMARK

Square cut on the northwest corner of the South Abutment. Elevation 629.10.

EXISTING STRUCTURE

Structure No. 099-0196, two simple concrete T-beam spans, 106' back to back of abutments, 46'-9" out to out. Pier and closed abutments supported on spread footings. Existing structure is to be removed and replaced.

SALVAGE

No salvage.

STAGING

Traffic will be maintained utilizing staged construction. For details, see Sht. S-03.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges.

DESIGN LOADING

Roadway Live Load: HS-20-44
Future Wearing Surface = 50 psf

DESIGN STRESSES

Field Units

New Construction

Concrete, f'c = 3,500 psi
Reinforcement, fy = 60,000 psi
Structural Steel, fy = 50,000 psi

SEISMIC DATA

Seismic Performance Category (SPC) = A
Bedrock Acceleration Coeficient (A) = 0.04g
Site Coeficient (S) = 1.0

I certify that to the best of my knowledge, information and belief, 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"

8/7/05
FOR PLAN SHEETS 110-138
EXPIRES 11/30/05

Notes:

1. For Elevations A-A, B-B & C-C, see Sheet S-05.
2. For more information about Temp. Soil Retention System, see Sheet S-04.
3. Work this Sheet with Civil and Lighting Plans.
4. For Scupper locations, see Sheet S-08.
5. Layout of Riprap may be varied to suit ground conditions in the field as directed by the Engineer.

SHT. S-01

REVISIONS	
NAME	DATE

VILLAGE OF NEW LENOX
F.A.U. (0369) CEDAR ROAD OVER HICKORY CREEK
WILL COUNTY

GENERAL PLAN & ELEVATION

SCALE: 3/32" = 1'-0"
DRAWN BY: FZD
DATE: 07/01/05
CHECKED BY: KPS

TENG
TENG & ASSOCIATES, INC.
ENGINEERS/ARCHITECTS/PLANNERS
205 N. MICHIGAN AVE. CHICAGO, IL 60601
TELEPHONE: 312/616-0550

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