

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80	132, 47-4K	KENDALL/GRUNDY	243	175
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 66294				

Bench Mark:

BM 1703 Chiseled "X" on light pole foundation bolt. Sta. 192+94.19, 6.41'Rt. El. 608.23

Existing Structure

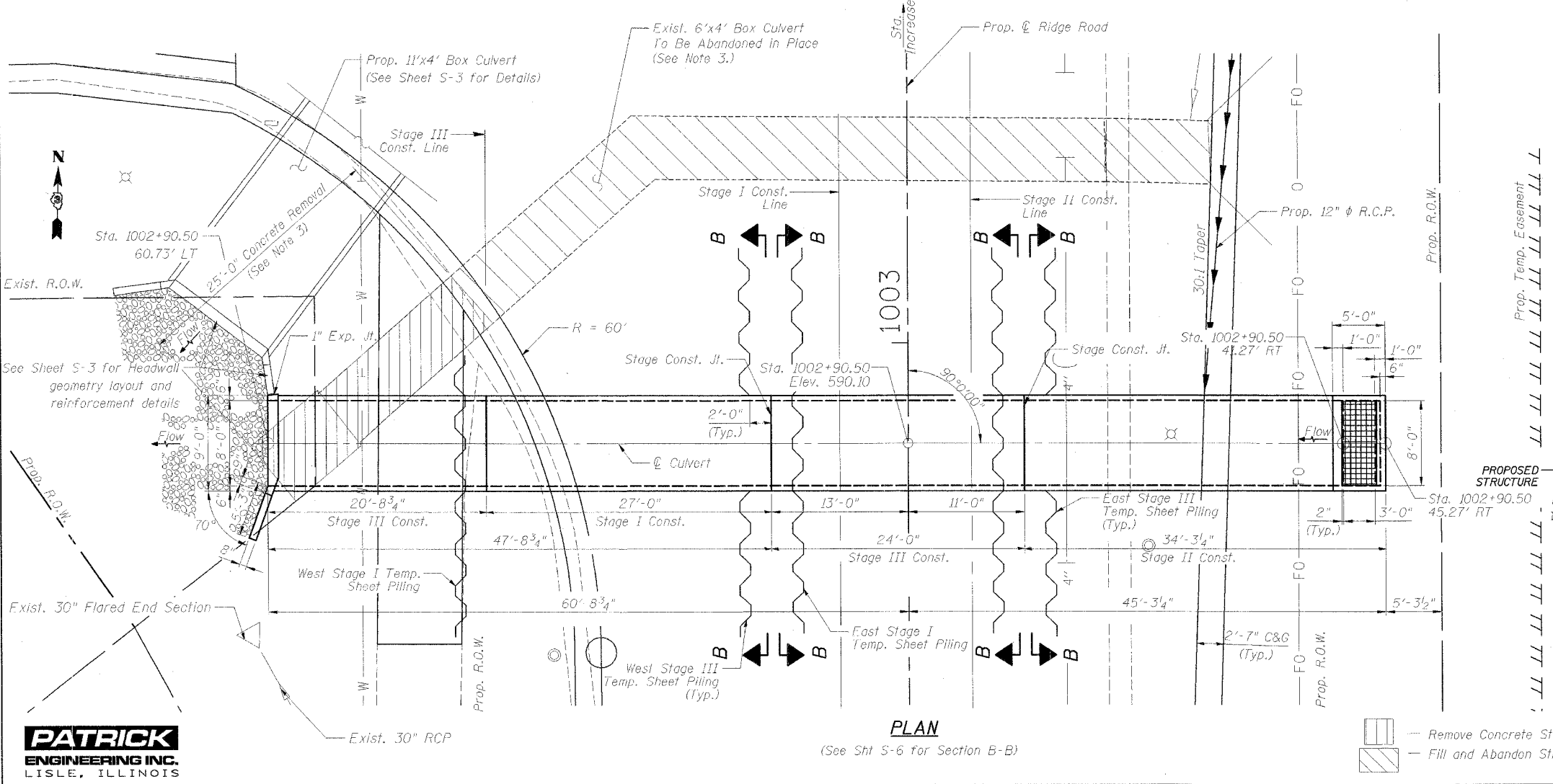
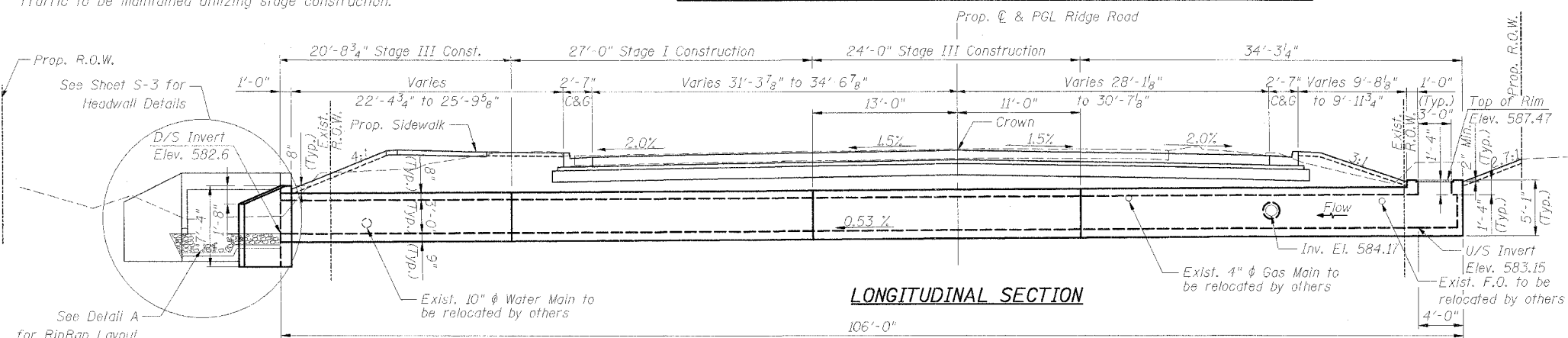
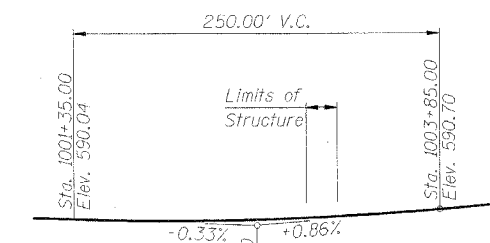
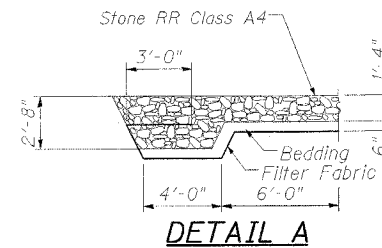
The existing structure is a 6'x4' cast in place reinforced concrete box culvert last modified with an extension to the East built in 2000. The existing structure is to remain in place as temporary drainage during stages of construction. It will then be filled and abandoned with the proposed 8'x3' cast in place culvert being constructed utilizing staged construction replacing it across Ridge Rd. No Salvage.

Traffic to be maintained utilizing stage construction.

WATERWAY INFORMATION

Proposed Low Grade Elev. = 589.81 @ Sta. 1002+04
Existing Low Grade Elev. = 589.81 @ Sta. 1002+04
Drainage Area = 0.34 Sq. Mi.

Flood	Freq. Yr.	Q (C.F.S.)	Opening (Sq. Ft.)		Nat. H.W.E.	Head (Ft.)		Headwater Elev.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	107	8.04	10.72	584.49	2.25	1.65	587.11	586.14
Base	50	232	12.24	16.32	585.19	4.45	4.06	590.01	589.25
Overtop	100	311	14.28	19.12	585.54	4.36	4.75	590.26	590.29
	500	586	19.5	26.0	586.40	3.86	4.16	590.63	590.56



PATRICK ENGINEERING, INC.
GREGORY J. HATLESTAD, S.E.
Professional Engineer Seal for Gregory J. Hatlestad, No. 081-005562, State of Illinois.

PROFILE GRADE - RIDGE ROAD
(Along P.G.L.)

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS20-44

Allowance for Future Wearing Surface=50 lb/ft²

DESIGN STRESSES

f'c=3500 psi
fy=60,000 psi (Reinf.)

SEISMIC DATA

Seismic Performance Category (SPC)=A
Bedrock Acceleration Coefficient (A)=0.035g
Site Coefficient (S)=1.0

TOTAL BILL OF MATERIAL

Item	Unit	Quantity
Porous Granular Backfill	Cu. Yd.	112
Structure Excavation	Cu. Yd.	364
Reinforcement Bars	Pound	13,750
* Temporary Sheet Piling	Sq. Ft.	1,280
Concrete Box Culverts	Cu. Yd.	63.1
Bar Splicers	Each	90

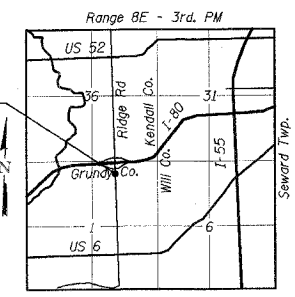
*See Special Provisions

INDEX OF SHEETS

- S-5 - General Plan & Elevation
- S-6 - Plan & Elevation Details I
- S-7 - Plan & Elevation Details II

NOTES:

- For Temporary Sheet Piling Details, see Sheet S-7 of S-11.
- For Section B-B, see Sheet S-7 of S-11.
- See Drainage and Utilities Ridge Road Sta. 1000+00 to Sta. 1013+00 sheet for details and quantities for Abandon Existing Culvert and Concrete Removal.



LOCATION SKETCH

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
FAI ROUTE 80
(I-80 AT MINOOKA INTERCHANGE)
CULVERT NO. 2
GENERAL PLAN AND ELEVATION
8'X3' BOX CULVERT

SCALE: None
DATE: 2/10/06
DRAWN BY: M. Tryon
CHECKED BY: A. Yorgiooglu

