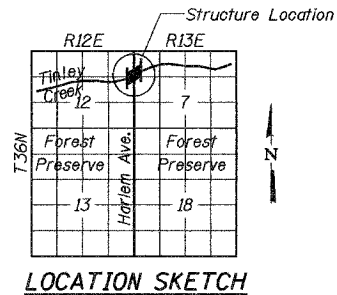


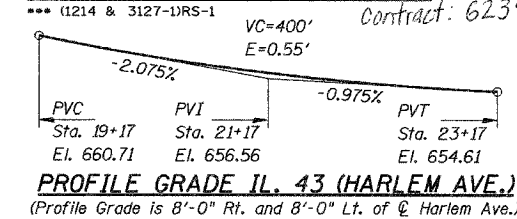
Bench Marks:
 Top of concrete southeast wingwall, Sta. 20+23.68, 61.97' Rt., El. 647.13
 "X" Scribed into concrete median surface (Point B) Sta. 19+99.769, 0.0', El. 659.21

Existing Structure: S.N. 016-2400 Extended in 1970 to a triple
 10' x 8' R.C. box culvert, culvert length = 138'-9".
 Traffic to be maintained during construction.

No Salvage



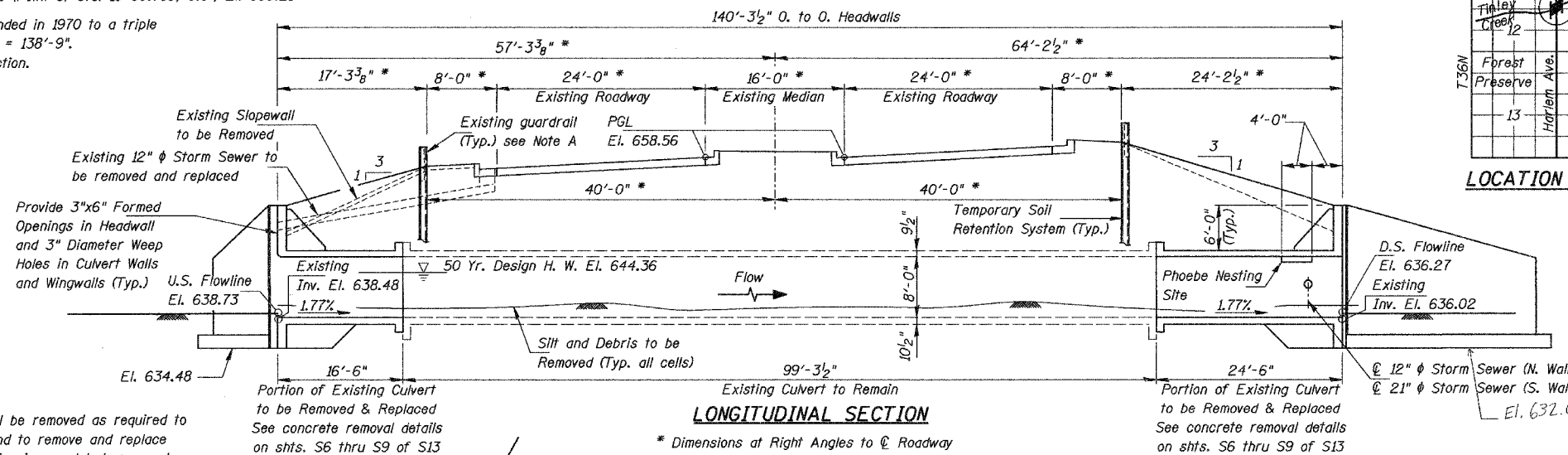
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. S1
FAP 348	***	COOK	86	28	S13 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		
*** (1214 & 3127-1)RS-1		VC=400'		Contract: 62343	
		E=0.55'			



WATERWAY INFORMATION

Drainage Area = 1.49 sq. mi. Low Grade Elev. 648.16 @ Sta. 29+17

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.	Natural H.W.E.	Head - Ft.	Headwater El.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.
Design	50	856.7	240	240	644.0	0.37	644.36	
Base	100	982.8			644.19	0.38	644.58	
Overtopping								
Max. Calc.	500	1335.5			644.57	0.38	645.34	



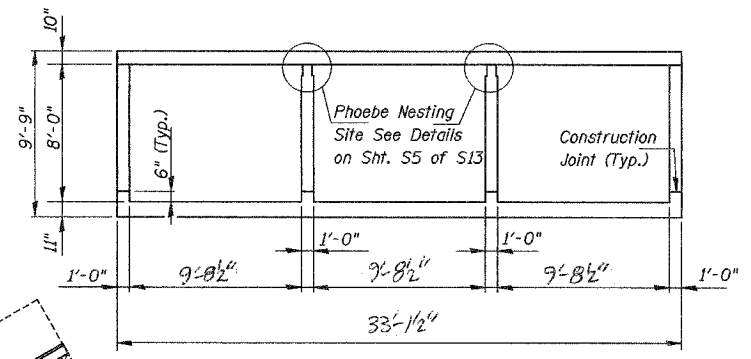
Note A:
 Existing guardrail and storm sewers shall be removed as required to install temporary soil retention system and to remove and replace culvert sections. After culvert construction is completed, removed guardrail shall be replaced in-kind and removed sections of pipe shall be replaced in-kind and reconnected to existing facilities. The removal and replacement-in-kind of the guardrail and pipe sections shall be performed and paid for in accordance with the roadway plans. See sheet S4 of S13 for details at pipe opening in culvert wall.

Portion of Existing Culvert to be Removed & Replaced See concrete removal details on shts. S6 thru S9 of S13

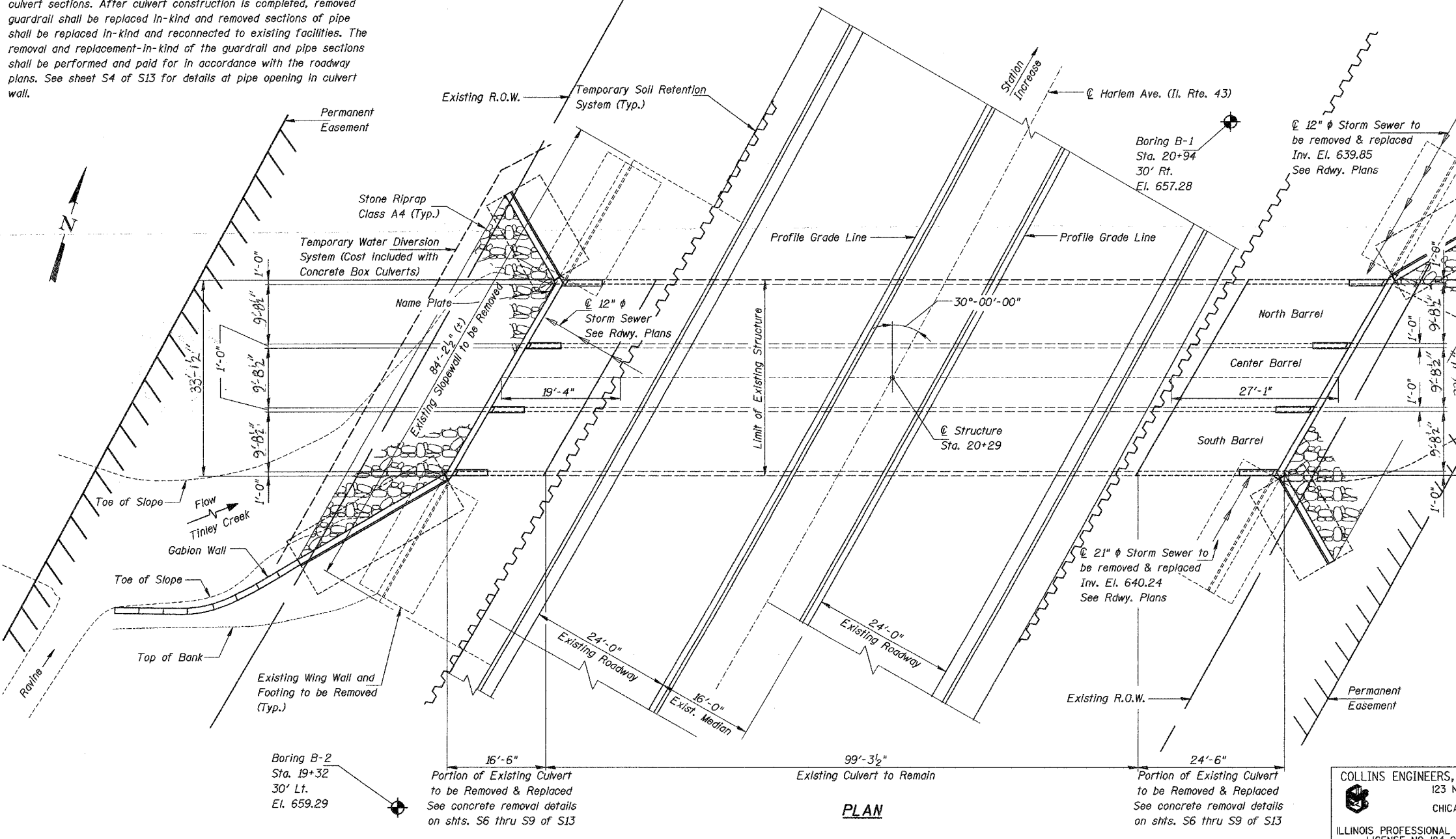
LONGITUDINAL SECTION

* Dimensions at Right Angles to C Roadway

Portion of Existing Culvert to be Removed & Replaced See concrete removal details on shts. S6 thru S9 of S13



TYPICAL SECTION THRU BARREL EXTENSION

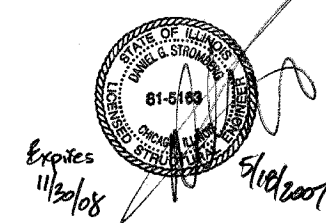


PLAN

Portion of Existing Culvert to be Removed & Replaced See concrete removal details on shts. S6 thru S9 of S13

Portion of Existing Culvert to be Removed & Replaced See concrete removal details on shts. S6 thru S9 of S13

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
Ralph C. Anderson (PE)
 ENGINEER OF BRIDGES AND STRUCTURES



SCOPE OF WORK

1. Install temporary soil retention system.
2. Remove concrete slopewall on west side.
3. Remove end portions of box culvert, including wing walls.
4. Remove silt and debris from culvert.
5. Construct end portions of box culvert, including wing walls.
6. Complete formed high performance enhanced shotcrete repairs and epoxy crack sealing.
7. Place gabion baskets.
8. Regrade side slopes.

REVISIONS	
NAME	DATE

COLLINS ENGINEERS, INC.
 123 N. WACKER DR.
 SUITE 300
 CHICAGO, IL 60606
 (312)704-9300
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LICENSE NO. 184-000993

ILLINOIS DEPARTMENT OF TRANSPORTATION
 HARLEM AVENUE (IL. 43) OVER
 TINLEY CREEK
 FAP ROUTE 348 SECTION 1214 & 3127-1)RS-1
 COOK COUNTY STATION 20+29
 STRUCTURE NO. 016-2400
GENERAL PLAN AND ELEVATION
 DRAWN BY: KAC
 CHECKED BY: PAS/DGS
 DATE: JULY, 2003