



DATE	BY	CHKD	APPD
2	CHC		

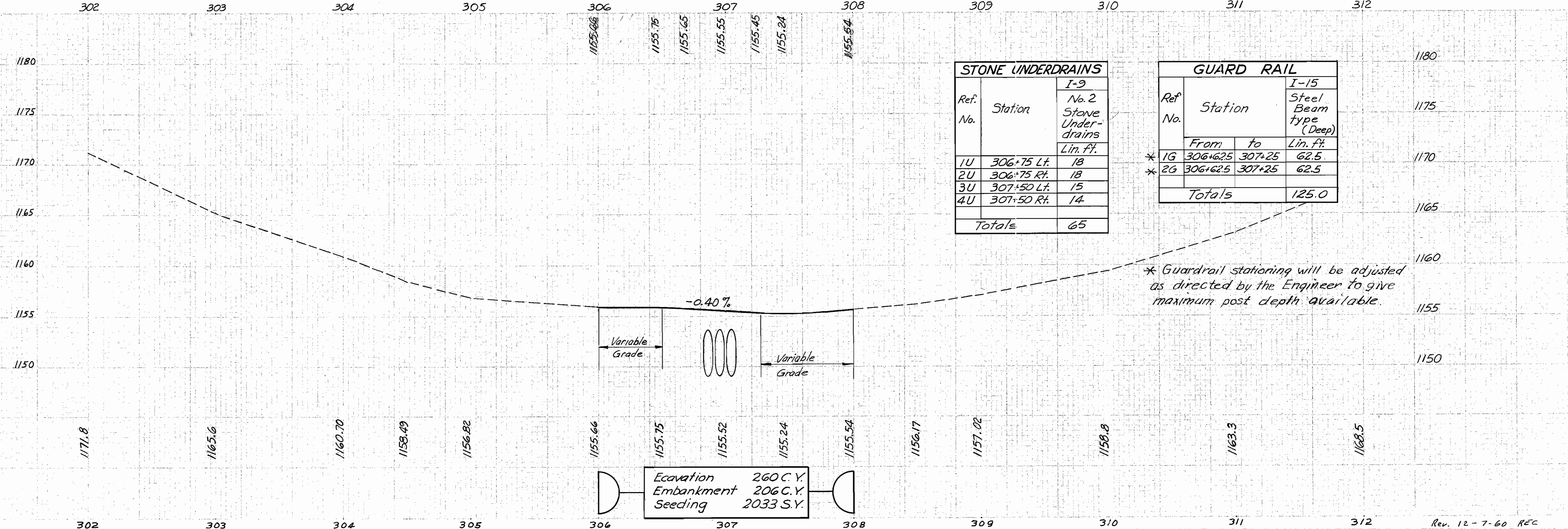
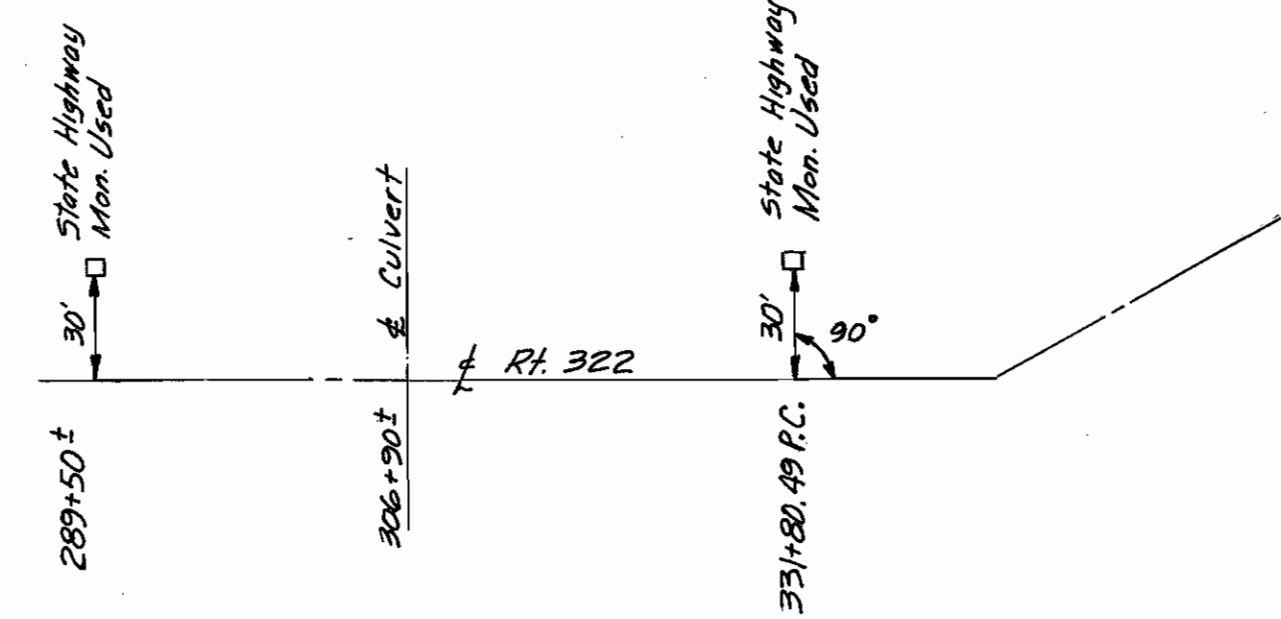
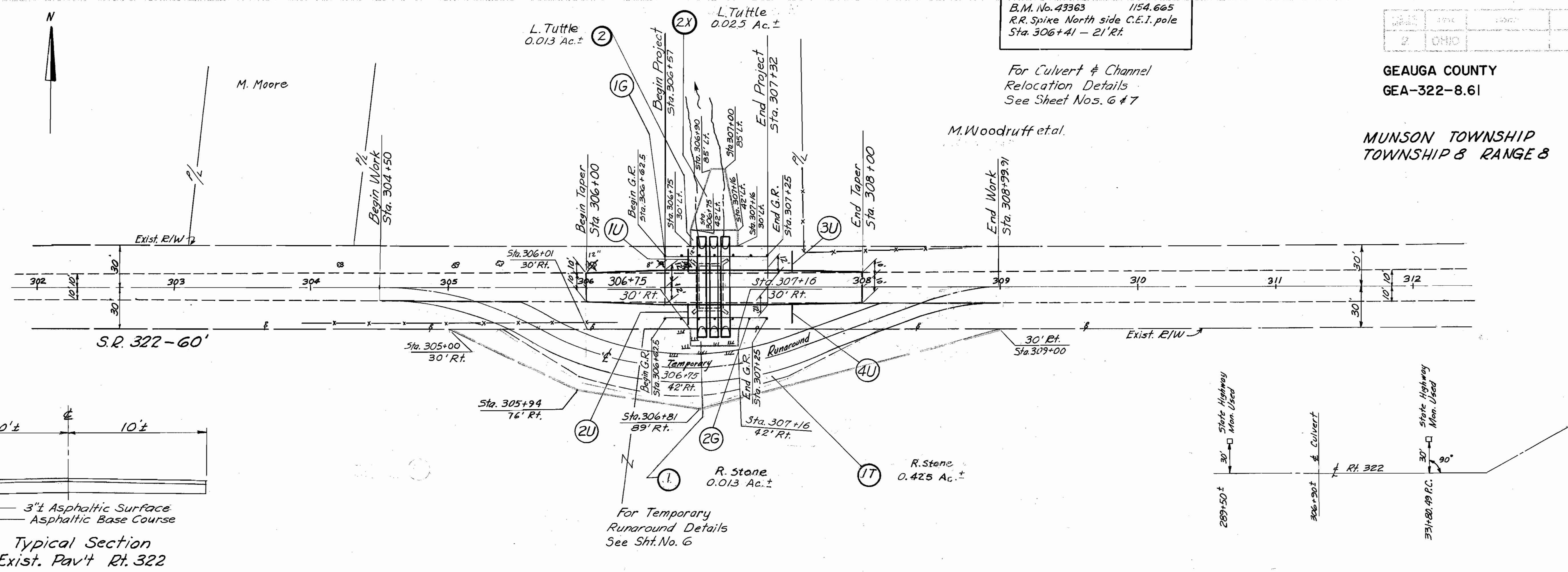
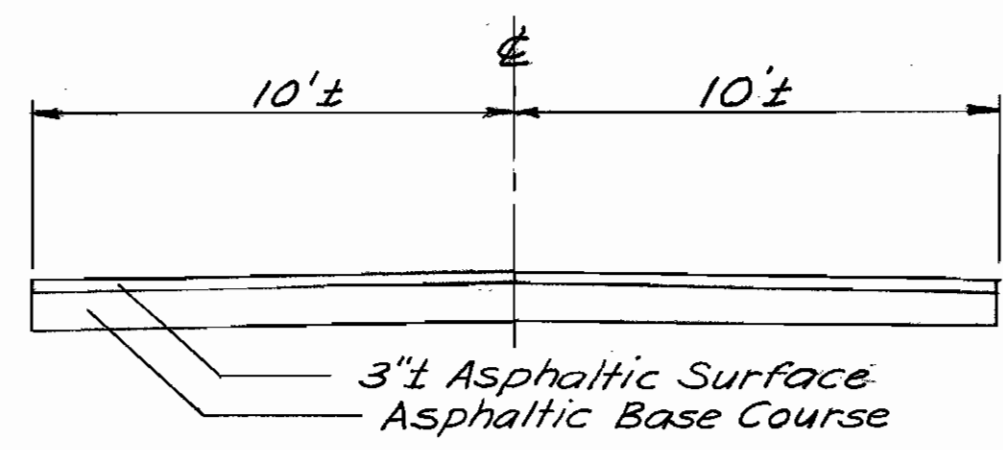
GEAUGA COUNTY  
GEA-322-8.61

MUNSON TOWNSHIP  
TOWNSHIP 8 RANGE 8

B.M. No. 43363 1154.665  
R.R. Spike North side C.E.I. pole  
Sta. 306+41 - 21' Rt.

For Culvert & Channel  
Relocation Details  
See Sheet Nos. 6 & 7

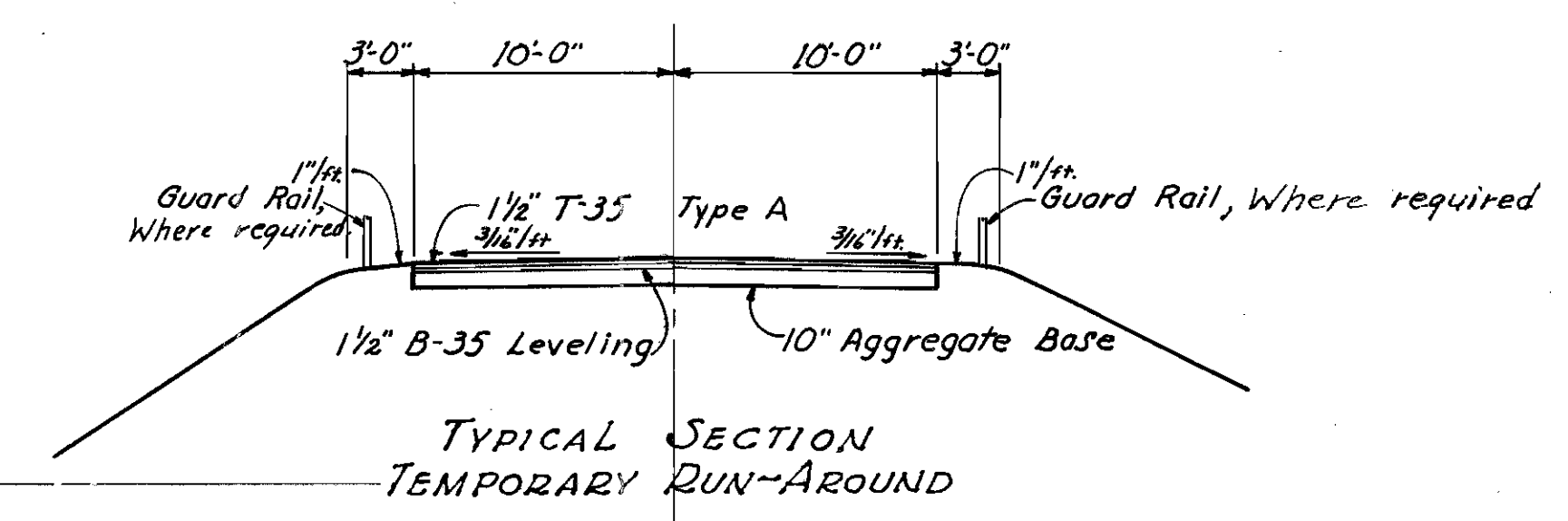
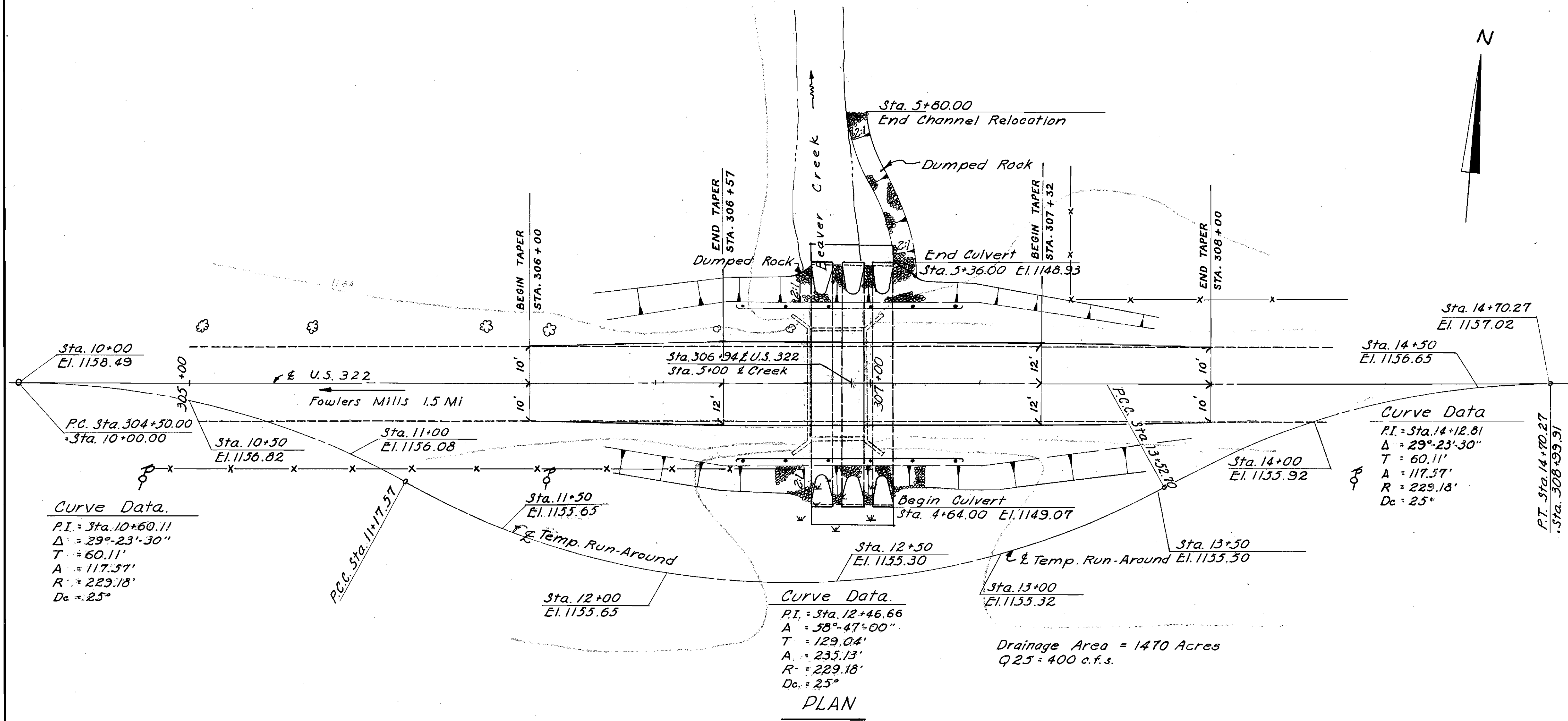
M. Woodruff et al.



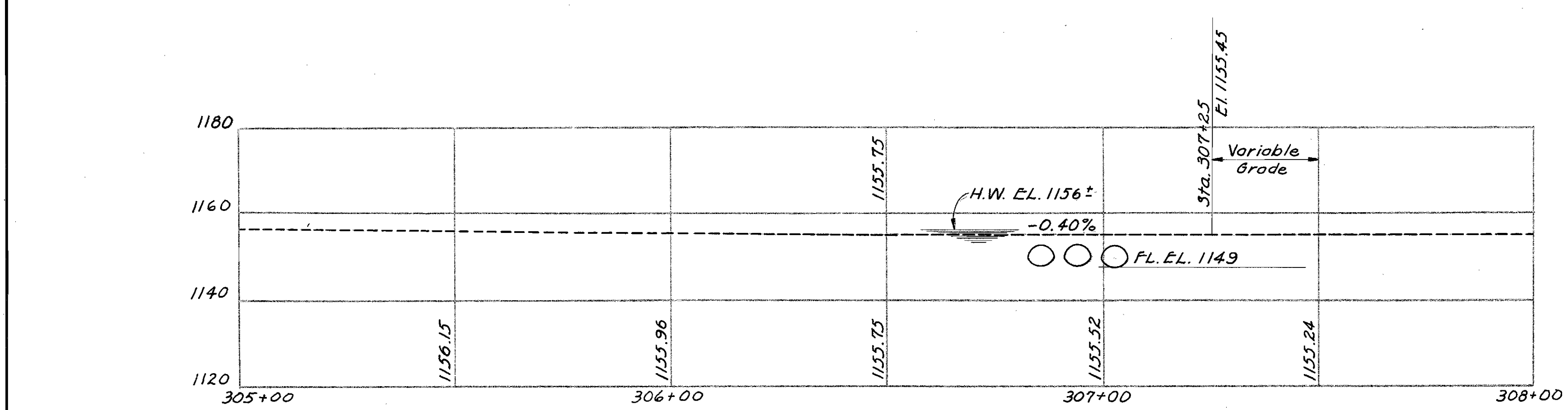
STONE UNDERDRAINS		
Ref. No.	Station	I-9
		No. 2 Stone Under-drains Lin. ft.
1U	306+75 Lt.	18
2U	306+75 Rt.	18
3U	307+50 Lt.	15
4U	307+50 Rt.	14
Totals		65

GUARD RAIL			
Ref. No.	Station	I-15	
		From	to
* 1G	306+62.5	307+25	62.5
* 2G	306+62.5	307+25	62.5
Totals		125.0	

\* Guardrail stationing will be adjusted as directed by the Engineer to give maximum post depth available.



NOTE: The alternate Portland cement concrete provided for in Sec. S-15.06 shall be permitted in lieu of the flexible pavement detailed above.

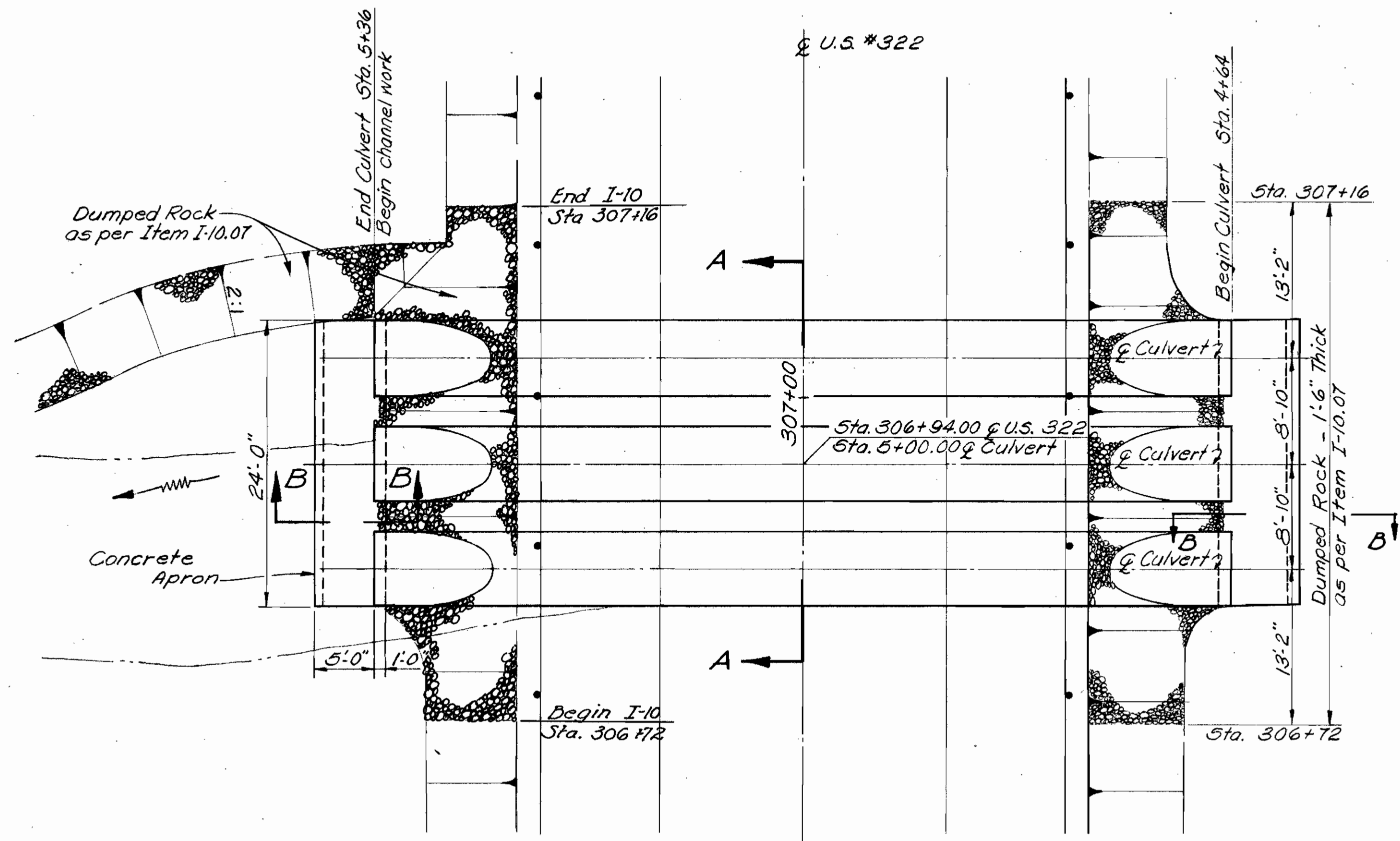


PROFILE ON & U.S. 322

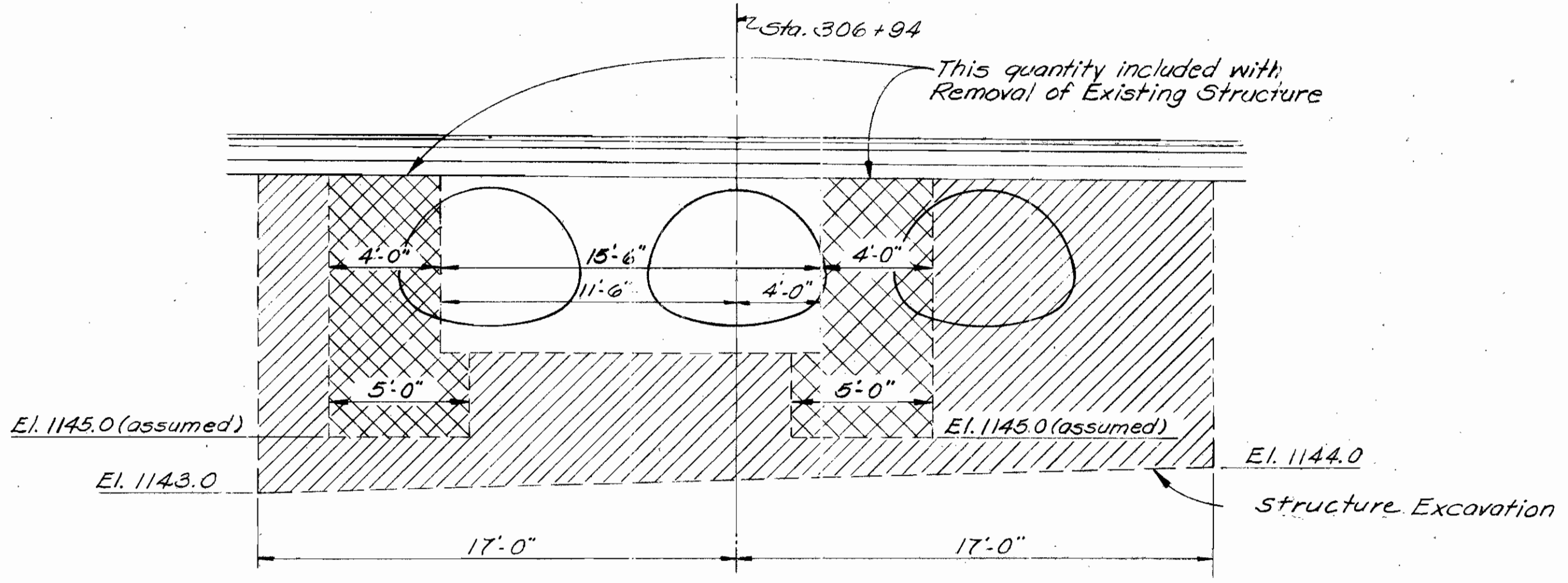
**EXISTING STRUCTURE**  
 TYPE: Concrete slab with stone Abutments  
 SPAN: 15'-6" Clear  
 ROADWAY: 31'-0"  
 LOADING: H-12.1  
 SKEW: None  
 WEARING SURFACE: Asphaltic Concrete  
 ALIGNMENT: Tangent

**PROPOSED STRUCTURE**  
 TYPE: 3 Corrugated Metal Pipe-Arch  
 SPAN: 6'-4"  
 RISE: 4'-9"  
 LENGTH: 72'-0"  
 SLOPE: -0.2%  
 SKEW: None

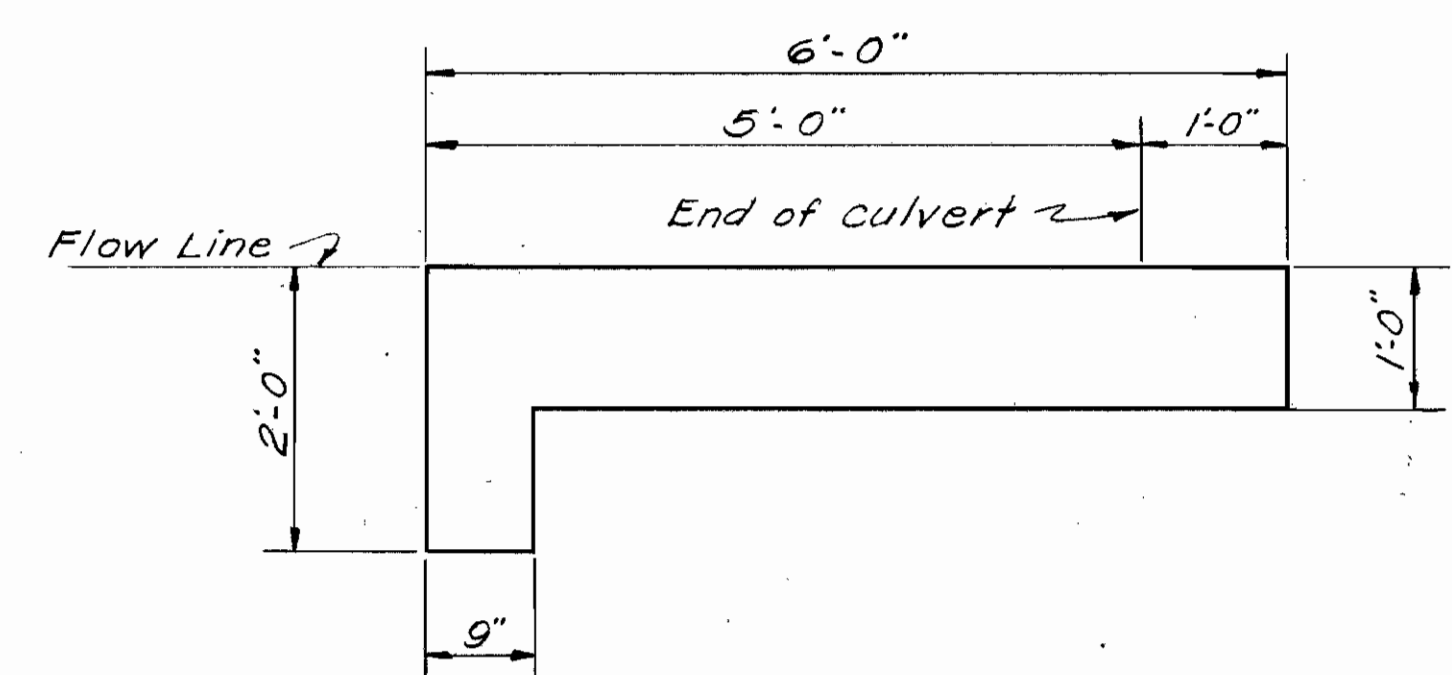
ALDEN E. STILSON & ASSOCIATES, LIMITED CONSULTING ENGINEERS COLUMBUS, OHIO						
SITE PLAN BRIDGE No GEA-322-0863 OVER BEAVER CREEK						
GEAUGA COUNTY						Sta. 306+94
DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
SV.C.			GWM			



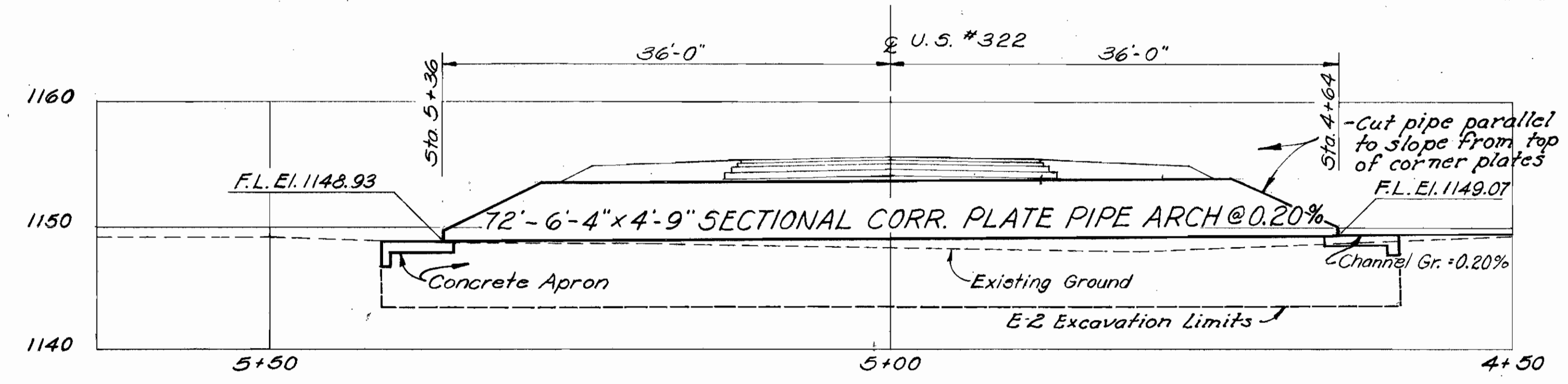
PLAN



SECTION A-A  
Showing limits of excavation for culverts



SECTION B-B



PROFILE ALONG @ CULVERT & CHANNEL

GENERAL SUMMARY (cont)

DRAINAGE (continued)			
ITEM	DESCRIPTION	QUANTITY	UNIT
E-2	Excavation for Structures	600	Cu. Yds.
E-3	Channel Excavation	35	Cu. Yds.
S-1	Class "E" Concrete for Structures	12	Cu. Yds.
S-24	Removal of Existing Structure	Lump	Sum
S-28	6'-4" x 4'-9" Sectional Corrugated metal structure	216	Lin. Ft.
I-10	M 6.4 (g) 10-10 Gage, as per plan		
	Dumped Rock Channel Protection	53	Cu. Yds.

**NOTES**

The plates of the pipe-arch culvert shall be No. 10 gage.

A tolerance of 1" plus or minus will be permitted in the in the span and rise of the pipe-arch culvert.

The corrugations of the plates shall have a pitch of 6" plus or minus 1/4", and a depth of 2" plus or minus 1/8". The radius on the inside of the corrugations shall be at least 1 1/2". Plates shall be assembled with 3/4" high-strength bolts meeting the requirements of ASTM A-325. Longitudinal seams shall be bolted with 4 bolts per foot. All plates and bolts shall be galvanized.

Excavate existing soil in creek bed to elevation shown and for 5 ft. beyond ends of culverts. Replace with granular material meeting the requirements set forth in Sec. 5-28.02.

**SOUNDING DATA**

The proposed design is based on a foundation investigation made at the proposed site of the structure. This information may be inspected in the office of the Bureau of Bridges in Columbus or in the Division Office but the State does not guarantee the accuracy thereof.

ALDEN E. STILSON & ASSOCIATES, LIMITED  
CONSULTING ENGINEERS  
COLUMBUS, OHIO

**SECTIONAL CORRUGATED  
PLATE PIPE-ARCH DETAILS**

BRIDGE No GEA-322-0863

GEAUGA COUNTY STA. 306+94.00

DESIGNED	DRAWN	TRACED	CHECKED	REVIEWED	DATE	REVISED
GWM			SVC			