

Benchmark: Cut on NW Wingwall of SN 008-2002. Sta. 246+16.118 20.82' LT Elev. 646.36

Existing Structure: SN 008-2002, originally built in 1937. The existing structure is a double 11'x6' box culvert. The existing structure will be removed and replaced with a double 14'x4' CIP culvert. Traffic will be detoured. No Salvage.

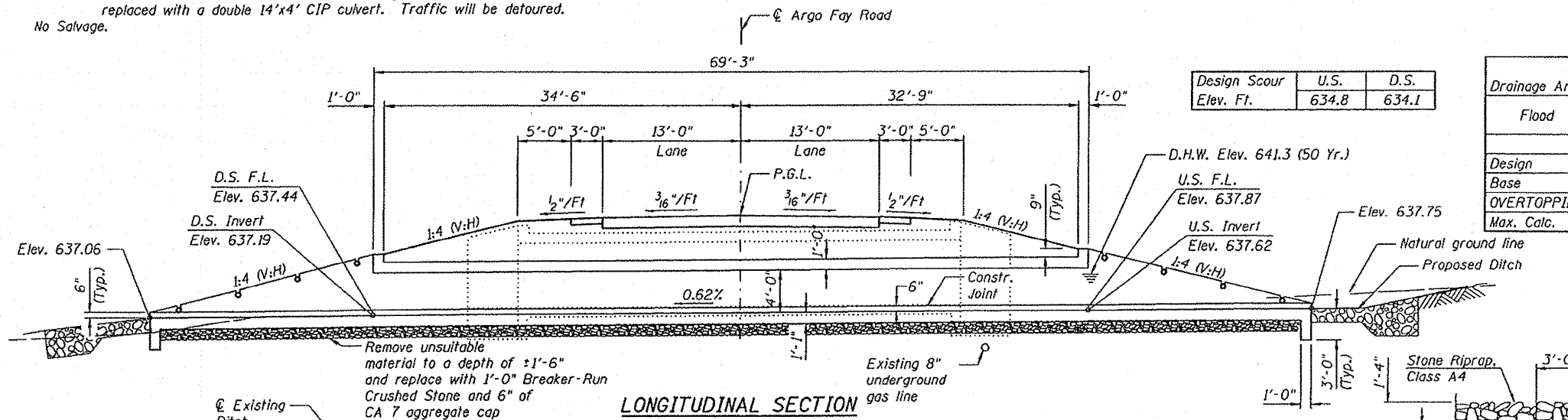
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.	SHEET NO. S-1
Argo Fay Road	101T-1	Carroll	31	15	S-6 SHEETS
Contract # 64979					

WATERWAY INFORMATION

Existing Low Grade Elevation = 646.79 ft. @ Sta. 246+04  
Proposed Low grade Elevation = 646.79 ft. @ Sta. 246+04

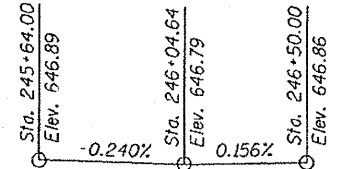
Flood Year	Frequency	Discharge (cfs)	Waterway Opening		Natural Head (ft.)		Headwater El. (ft.)		
			Existing	Proposed	Existing	Proposed	Existing	Proposed	
10	292	56	71	640.4	0.1	0	640.5	640.1	
Design	50	444	75	94	641.2	0.3	0.0	641.6	641.3
Base	100	507	82	104	641.6	0.4	0.1	642.0	641.7
<b>OVERTOPPING</b>									
Max. Calc.	500	656	98	123	642.3	0.6	0.5	642.8	642.7



INDEX OF SHEETS

- S-1 General Plan
- S-2 Culvert Plan & Section
- S-3 Culvert Details
- S-4 Pipe Grating Details
- S-5 Soil Boring Logs No. 1
- S-6 Soil Boring Log No. 2

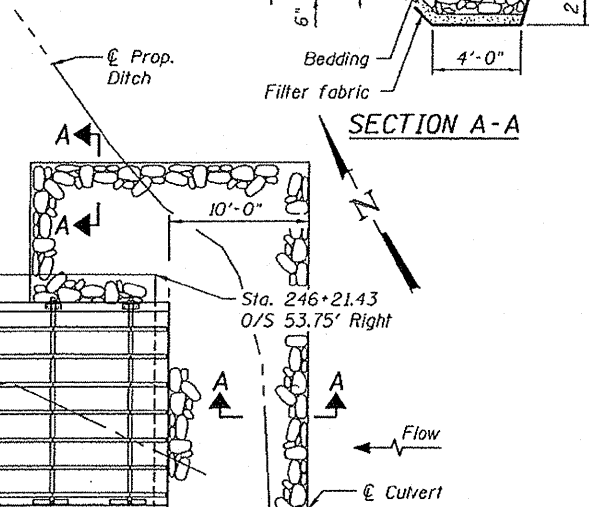
PROFILE GRADE  
(along @ Rdwy. Argo Fay Road)



GENERAL NOTES

- Precast Culvert option will not be allowed at this site.
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60 (IL Modified). See Special Provisions.
- All exposed concrete edges shall be chamfered 3/4" unless otherwise noted.
- No less than 7 ft. of barrel shall be poured monolithically with the middle wall and wingwalls on each side.
- All Construction Joints shall be bonded.
- The cost of stream realignment is included with "Stone Riprap, Class A4".
- The limits and quantities of removal and replacement shown are based on the boring data and may be modified by the District Geotechnical and Field Engineers for variable subsurface conditions encountered in the field.
- The Breaker-Run Crushed Stone shall be capped with 6 in. of CA7 and satisfy the Standard Specifications unless otherwise indicated in the Special Provisions. The cost of the capping material shall be included in the pay item for "Breaker-Run Crushed Stone".
- The cost of Excavation and Backfill is included in the "Concrete Box Culverts".

SECTION A-A

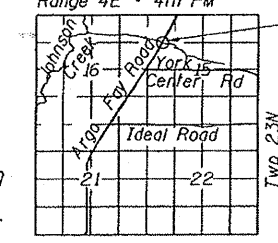


STATION 246+04.08  
BUILT 20\_\_ BY  
STATE OF ILLINOIS  
FAS 2076 SEC 101T-1  
LOADING HS20  
STRUCTURE NO. 008-2020

NAME PLATE  
See Std. 515001

APPROVED  
FOR STRUCTURAL ADEQUACY ONLY

ENGINEER OF BRIDGES AND STRUCTURES  
Range 4E - 4th PM



LOCATION SKETCH

TOTAL BILL OF MATERIAL

Item	Unit	Quantity
Removal and Disposal of Unsuitable Material	Cu. Yd.	203
Stone Riprap, Class A4	Sq. Yd.	154
Filter Fabric	Sq. Yd.	154
Removal of Existing Structures No. 2	Each	1
Reinforcement Bars	Pound	46,560
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	2,39.1
Grating for Box Culvert, LOCATION 1	Each	2
Breaker-Run Crushed Stone	Ton	430

\*See Special Provisions

GENERAL PLAN  
ARGO FAY ROAD OVER  
JOHNSON CREEK TRIBUTARY  
FAS 2076 (ARGO FAY ROAD)  
SECTION 101T-1  
CARROLL COUNTY  
STA. 246+04.68  
S.N. 008-2020

DESIGNED	E. Mroczek
CHECKED	B. Sauter
DRAWN	R. Danley
CHECKED	E. Mroczek

**Ciorba Group, Inc.** PLAN  
CONSULTING ENGINEERS  
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LOADING HS20-44  
Allow 50#/Sq. Ft. for future wearing surface  
DESIGN SPECIFICATIONS  
2002 AASHTO Standard Specifications

DESIGN STRESSES  
f'c = 3,500 psi  
fy = 60,000 psi (Reinforcement)  
fy = 35,000 psi (Steel pipe)

8/1/2008 emroczek N:\PROJ\317\317\_07\Design\Structure\CAD\317-07-01.dgn