

BENCHMARK: Chiseled "□" on East headwall of S.N. 050-0153  
Sta. 1032+42.10, 20.5' Lt., Elev. 626.55

EXISTING STRUCTURE: SN 050-0153 was originally built at an unknown time and was widened in 1932 as Sec. 106. The structure is a single span reinforced concrete structure with 2 closed abutments and wingwalls on spread footings. The deck width is 42'-2" and the length is 14'-0" back to back of abutments. Traffic shall be maintained utilizing stage construction.

No salvage.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STRUCTURE INDEX OF SHEETS

- General Plan
- Stage Construction Details
- Cast-in-Place Box Culvert End Section Details
- Soil Boring
- Temporary Concrete Barrier for Stage Construction

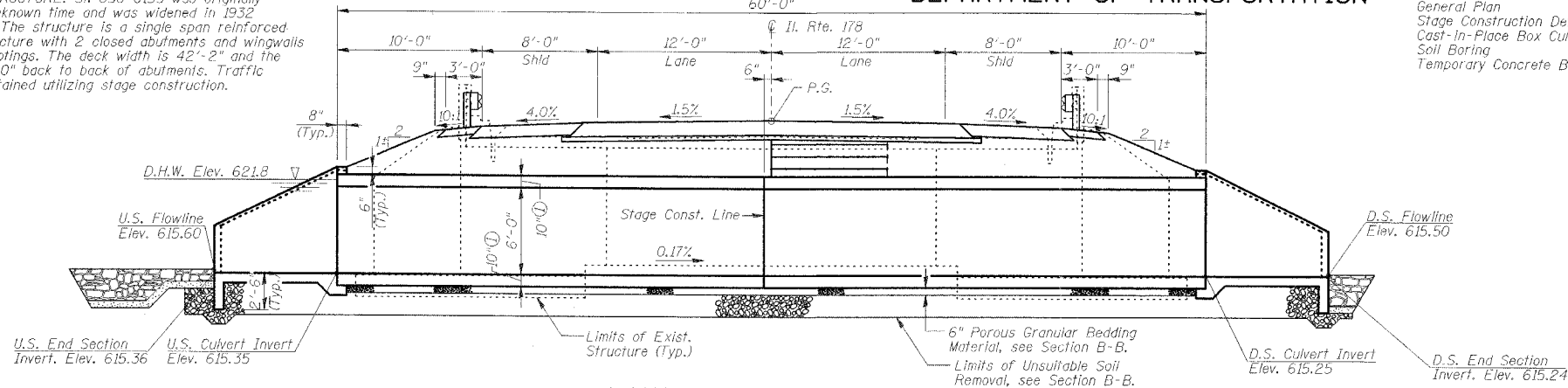
- Sheet No. 1 of 5
- Sheet No. 2 of 5
- Sheet No. 3 of 5
- Sheet No. 4 of 5
- Sheet No. 5 of 5

ROUTE NO.	SECTION	COUNTY	DATE	SHEET	SHEET NO. 1
FAS 1279	1071	LaSALLE	43	19	5 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT			

CTR# 66400

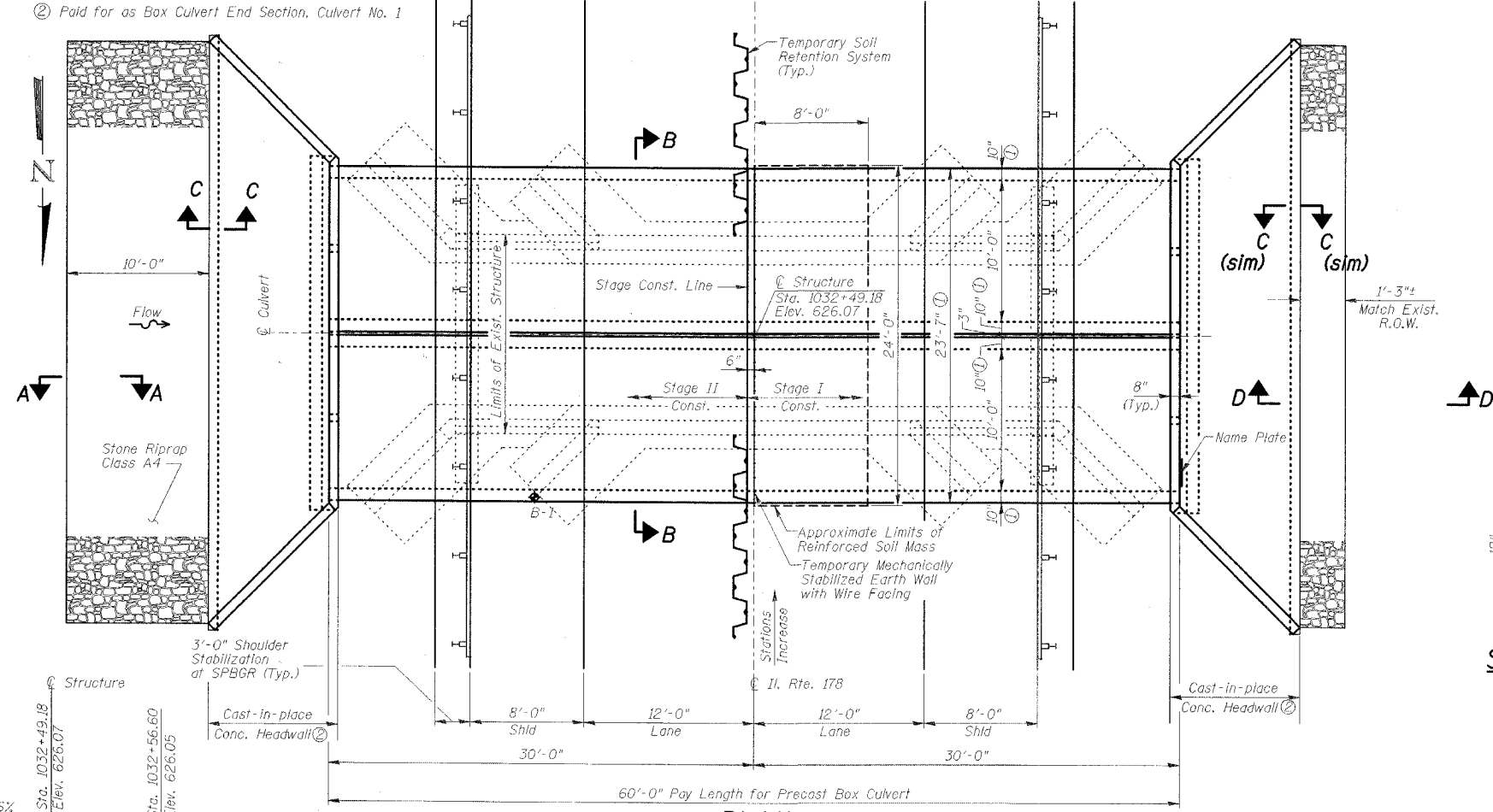
GENERAL NOTES

- Exposed edges shall be beveled 3/4".
- For backfilling & embankment, see Standard Specifications.
- Reinforcement bars shall conform to the requirements of AASHTO M31, M42 or M53 Grade 60.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- All construction joints shall be bonded.
- Class SI Concrete shall be used throughout the cast-in-place concrete headwalls.
- The Precast Concrete Box Culvert sections shall conform to the requirements of AASHTO M259.
- Excavation behind existing abutment walls shall be done before removing the existing superstructure. The Contractor shall sawcut the existing abutments at the stage removal line before Stage I removal.



LONGITUDINAL SECTION

- Thickness of precast culvert walls and slabs shall be verified on shop drawings and coordinated for final dimensions.
- Paid for as Box Culvert End Section, Culvert No. 1



PLAN

STATION 1032+49.18  
BUILT 200\_ BY  
STATE OF ILLINOIS  
FAS ROUTE 1279 SECTION 1071  
F.A. PROJECT \_\_\_\_\_  
LOADING HS20  
STR. NO. 050-2041

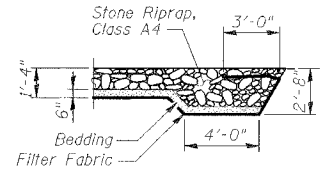
NAME PLATE

See Std. 515001

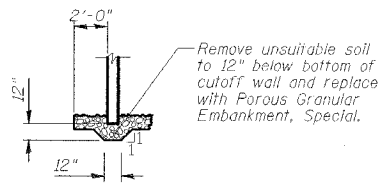
TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Stone Riprap, Class A4	Sq. Yd.	53
Filter Fabric	Sq. Yd.	53
Removal of Existing Structures No. 1	Each	1
Temporary Soil Retention System	Sq. Ft.	430
Name Plates	Each	1
Box Culvert End Section, Culvert No. 1	Each	2
Precast Concrete Box Culvert 10' x 6'	Foot	120
Temporary Mechanically Stabilized Earth Wall	Sq. Ft.	65

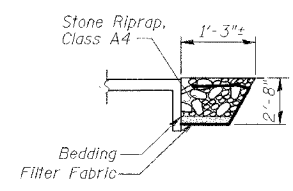
Pay items for Temporary Concrete Barriers, Excavation, Porous Granular Embankment and Porous Granular Embankment, Special are included in Roadway Plans.



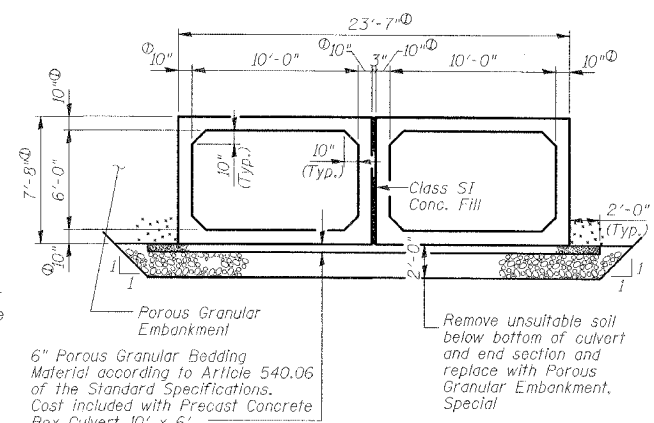
SECTION A-A



SECTION C-C



SECTION D-D



SECTION B-B

PROFILE GRADE  
(Along Roadway)

**ESCA CONSULTANTS, INC.**

DESIGNED BY: MTD 11/04  
DRAWN BY: RJT 11/04  
CHECKED BY: MTD 11/04  
APPROVED BY: RDP 05/06

**WATERWAY INFORMATION**

Drainage Area = 1.12 Sq. Mi. Low Grade Elev. 626.04 Ft. @ Sta. 1032+57

Flood	Freq. Yr.	C.F.S.	Opening	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
Design	50	500	63	120	621.8	0.7	0.0	622.5
Base	100	580	65	120	622.1	1.0	0.1	623.1
Max. Calc.	500	750	60	120	622.5	1.4	0.3	623.9
Overtopping								

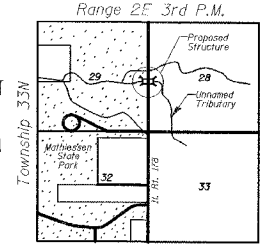
(\*Headwater El. = W.S. El. @ Upstream Face of Proposed Structure)

DESIGN SPECIFICATIONS

2002 AASHTO  
LOADING HS20-44  
Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS PRECAST UNITS  
f'c = 3,500 psi f'c = 5,000 psi  
fy = 60,000 psi (Reinf.) fy = 65,000 psi (WWF)



LOCATION SKETCH

STATE OF ILLINOIS  
RICHARD B. PAVE  
No. 4647  
REGISTERED STRUCTURAL ENGINEER

EXPIRES 11-30-06  
Signature: R. B. Pave  
DATE: 6/15/06

GENERAL PLAN  
IL ROUTE 178 OVER  
UNNAMED TRIBUTARY  
FAS 1279 SECTION 1071  
LaSALLE COUNTY  
STATION 1032+49.18  
STRUCTURE NO. 050-2041