

Existing Structure: Existing culvert is a twin cell 10'x6' RC box culvert with vertical cantilever wingwalls built in 1947 under Section 83. The existing culvert is approximately 52'-2" out to out headwalls. The upstream end of the existing culvert will be extended. At the downstream end, the existing concrete wingwalls will be removed and replaced with sheet pile wingwalls. One lane of traffic to be maintained at all times utilizing staged construction.

No salvage.

DESIGN STRESSES

FIELD UNITS

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_u = 38,500$ psi (Permanent Sheet Piling)
 $f_y = 50,000$ psi (AASHTO M270, Grade 50W)

DESIGN SPECIFICATIONS

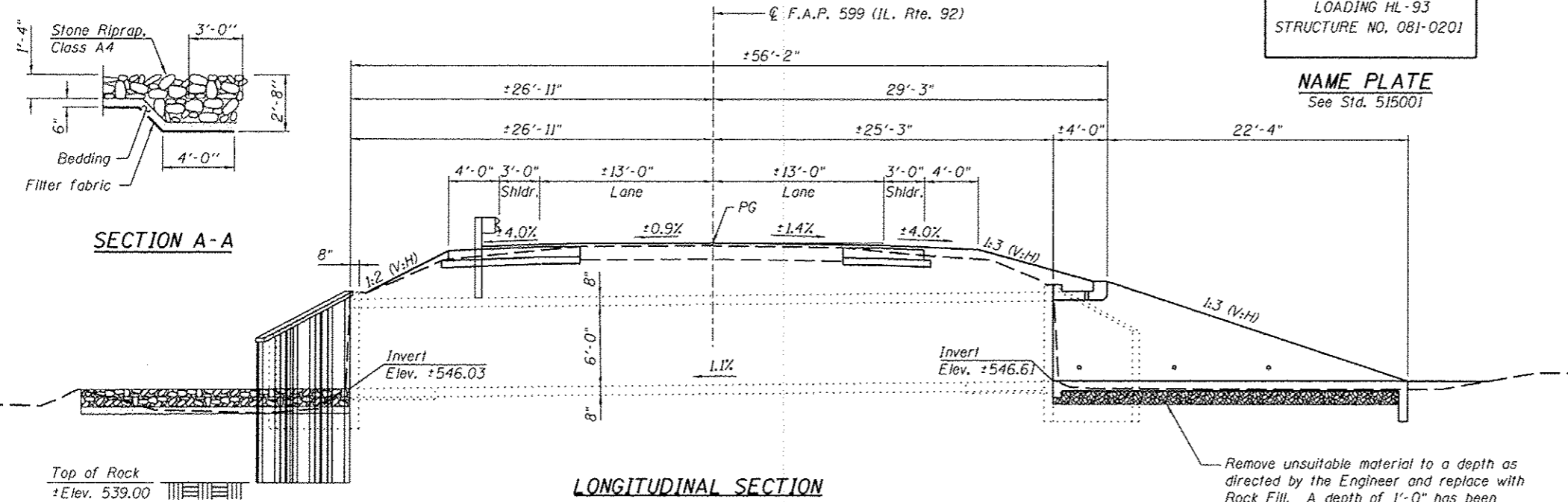
2002 AASHTO Bridge Design Specifications

GENERAL NOTES

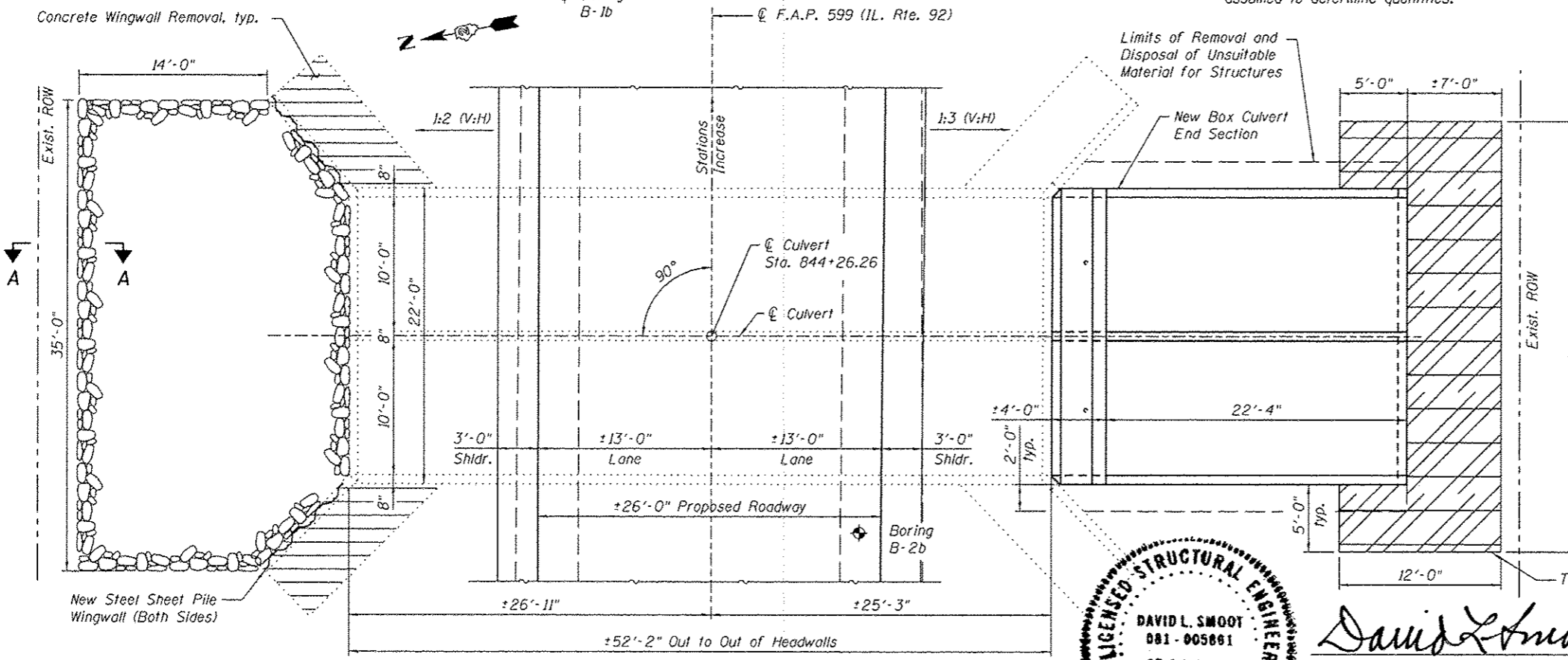
- Plan dimensions and details have been taken from existing plans or survey/field checks. As such, these dimensions and details are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- The sheet piling for the wingwalls shall conform to the special provision Permanent Steel Sheet Piling. The minimum effective section modulus for the Permanent Steel Sheet Piling shall be 3.9 in³/ft.
- The fabricated steel cap shall be AASHTO M270 Grade 50W. The cap, bolts, nuts and washers shall not be paid for separately, but shall be included in the cost for Permanent Steel Sheet Piling.
- Fasteners shall be AASHTO M164 Type 3.
- New coarse aggregate shall be placed behind the existing headwall for the full length of the headwall and shall be 12" wide by 6" high. The coarse aggregate shall be gradation CA 7 or CA 11 material. This item shall not be paid for separately, but shall be included in the cost of Concrete Wingwall Removal.
- All exposed concrete edges shall be chamfered 3/4" unless noted otherwise. All construction joints shall be bonded.
- This work shall conform to the requirements of the applicable portions of Sections 501, 503, 505, 508 and 584 of the Standard Specifications.
- A precast option is not allowed at this location.
- Drainage holes shall conform to the requirements of Article 503.11 of the Standard Specifications.
- Nonwoven geotextile fabric shall conform to the requirements of Art. 1080.01 of the Standard Specifications. The minimum weight of the fabric shall be 6 ounces per square yard.

STATION 844+26.26
 BUILT BY
 STATE OF ILLINOIS
 LOADING HL-93
 STRUCTURE NO. 081-0201

NAME PLATE
 See Std. 515001



LONGITUDINAL SECTION



PLAN

TOTAL BILL OF MATERIAL

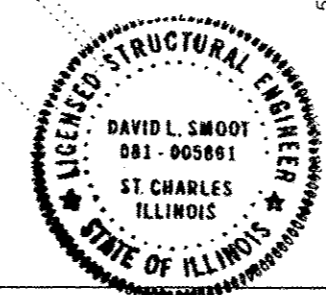
ITEM	UNIT	TOTAL
Turf Reinforcement Mat	Sq. Yd.	31
Stone Riprap, Class A4	Sq. Yd.	77
Filter Fabric	Sq. Yd.	77
Removal and Disposal of Unsuitable Material for Structures	Cu. Yd.	26
Name Plate	Each	1
Box Culvert End Section, Culvert No. 02	Each	1
Concrete Wingwall Removal	Each	2
Permanent Steel Sheet Piling	Sq. Ft.	226
Traversable Pipe Grate	Foot	170.0
Rock Fill	Ton	46

INDEX OF SHEETS

- General Plan & Elevation
- Box Culvert End Section - Section
- Box Culvert End Section - Plan
- Box Culvert End Section Details
- Traversable Steel Pipe System
- Box Culvert End Section Details
- Soil Boring Logs

GENERAL PLAN & ELEVATION

ILLINOIS ROUTE 92
F.A.P. RTE 599 - SEC. (83MFT & 103MFT)W
ROCK ISLAND COUNTY
STATION 844+26.26
STRUCTURE NO. 081-0201



David L. Smoot
 Signature
 Date: March 13, 2013
 License Expires 11/30/2014

FILE NAME: W:\Projects\2013\1128\1128_P1B_157\25\Asado\Structural\081-0201-CFE.dwg
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USER NAME = pparvizi	DESIGNED - AEU	REVISED -
	CHECKED - DLS	REVISED -
PLOT SCALE =	DRAWN - AWH	REVISED -
PLOT DATE = 3/21/2013	CHECKED - AEU	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION - STA. 844+26.26
STRUCTURE NO. 081-0201
 SHEET NO. 1 OF 7 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
599	(83MFT & 103MFT)W	ROCK ISLAND	340	142

CONTRACT NO. 64M11
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT