

Benchmark: Set at sta. 75+17.70, 39.62 Rt., Elev. 645.47 "x" located on existing sidewalk southwest corner of existing entrance west of the 6'x4' culvert.

Existing Structure: The existing structure (S.N. 016-1292) was built in 1942 with a length of 79'-4 1/4" and was extended at both ends in two rehabilitation projects to be 127'-8" long (sta. 76+44.12). It is a single cast-in-place reinforced concrete box culvert with 6 spans by 4' rise and 34.5° skew angle. Structure to be removed and replaced. One lane shall be maintained in each bound utilizing stage construction.

Salvage: Existing steel plate beam guardrail and chain link fence.

**NOTES:**

1. For General Notes, Index of Sheets and Total Bill of Material, see Sheet S1-02.
2. For Section A-A, see Sheet S1-02.
3. Precast culvert will not be allowed.
4. For westbound and eastbound profile grade lines, see Sheet S1-02.

**DESIGN SPECIFICATIONS**

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition, with 2012 Interims.

**LOADING HL-93**

Allow 50 #/sq. ft. for future wearing surface.

**DESIGN STRESSES**

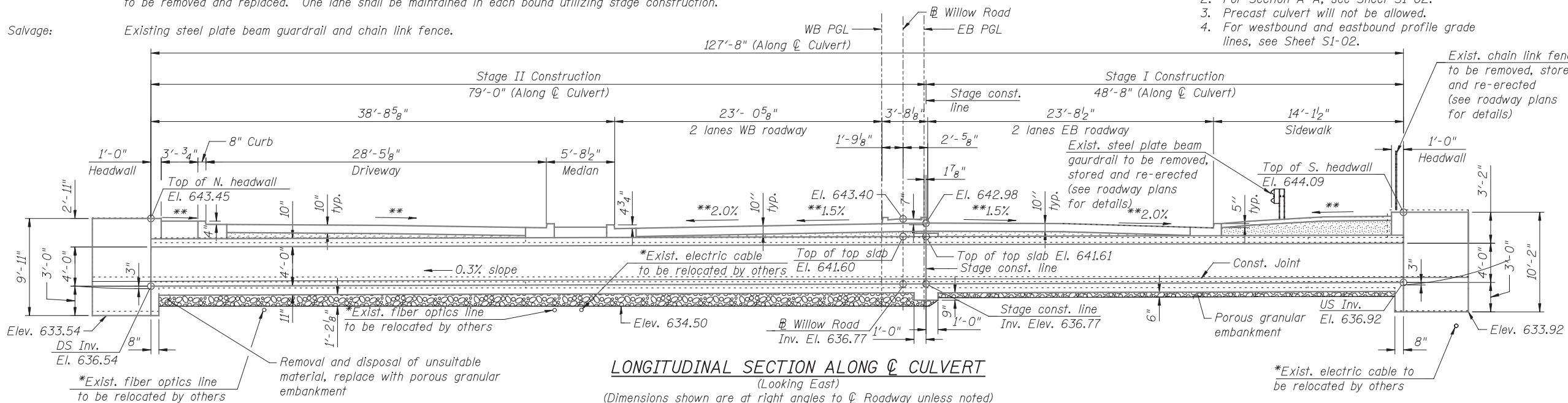
**FIELD UNITS**

f'c = 3,500 psi (Concrete)  
f\_y = 60,000 psi (Reinforcement)

STA. 76+44.64  
BUILT 2013 BY  
STATE OF ILLINOIS  
FAP RT. 305 SEC. 1920.01-B-R  
LOADING HL-93  
STRUCTURE NO. 016-1392

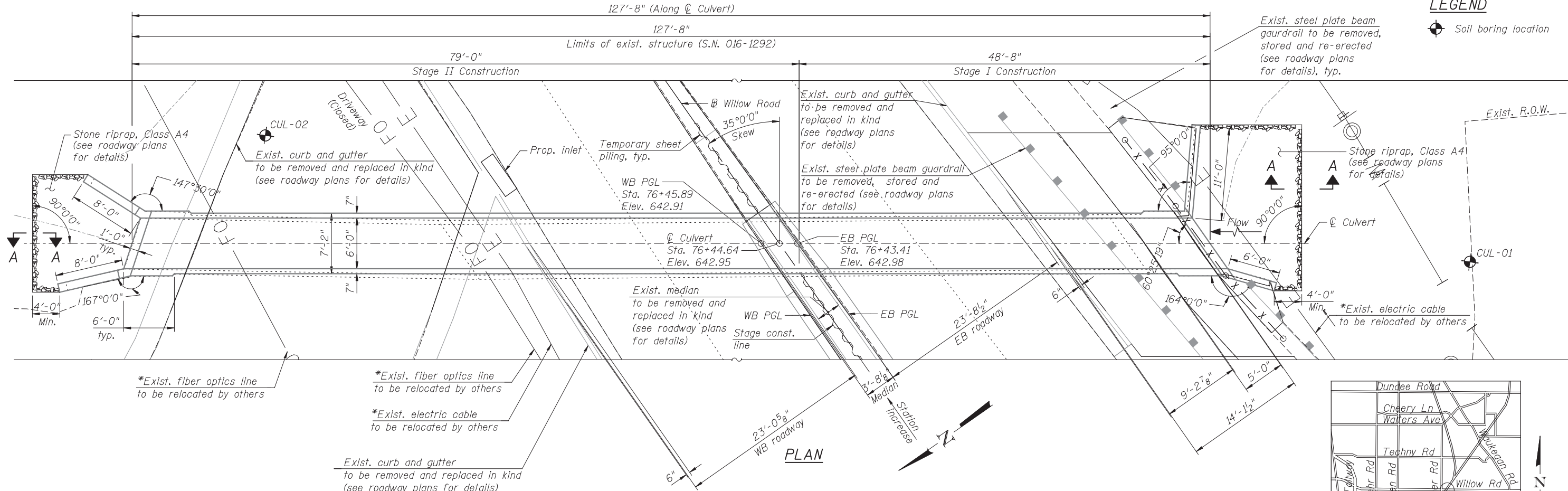
**NAME PLATE**

Locate Name Plate at South Headwall SW Corner of Culvert (See Std. 515001). Existing Name Plate shall be cleaned and relocated next to new Name plate. Cost included with Name Plates.



**LONGITUDINAL SECTION ALONG Q̄ CULVERT**

(Looking East)  
(Dimensions shown are at right angles to Q̄ Roadway unless noted)



**LEGEND**

Soil boring location

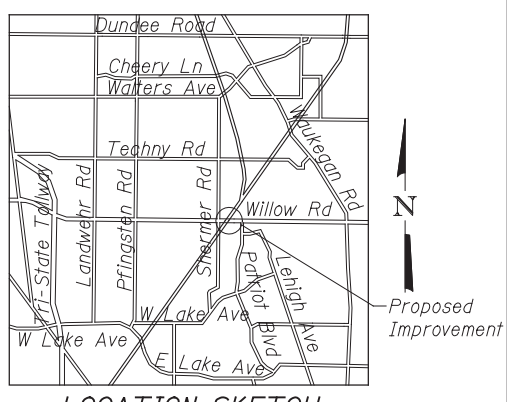
\* Existing utilities within the project limits are located based on the field survey. The exact elevations/locations of these utilities in the vertical direction are unknown (i.e., above or below the culverts). These utilities shall be protected or relocated by others. It shall be the Contractor's responsibility to field verify all locations and elevations of utilities prior to starting work. Any damage to the utilities caused by the Contractor in the performance of his/her work shall be repaired at no cost to the Owner.

\*\* All slopes shall match existing conditions.



Signed Moussa A. Issa  
Dr. Moussa A. Issa, S.E. Il. Lic. No. 081-005738  
Expires 11-30-2014

Date 12/24/2012 For Sheets S1-01 Thru S1-10



**HBM**  
ENGINEERING GROUP, LLC  
4415 WEST HARRISON ST.  
SUITE 231  
HILLSIDE, IL 60162  
PHONE: (708) 236-0900  
FAX: (708) 236-0901

DESIGNED - MI, LAB	REVISD -
CHECKED - MI	REVISD -
DRAWN - LAB, AI	REVISD -
CHECKED - MAI, MI	REVISD -

DATE - 12/24/2012

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION**  
**6'x4' BOX CULVERT (S.N. 016-1392) - STA. 76 + 44.64**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
305	1920.01-B-R	COOK	60	27
CONTRACT NO. 60W04				

ILLINOIS FED. AID PROJECT