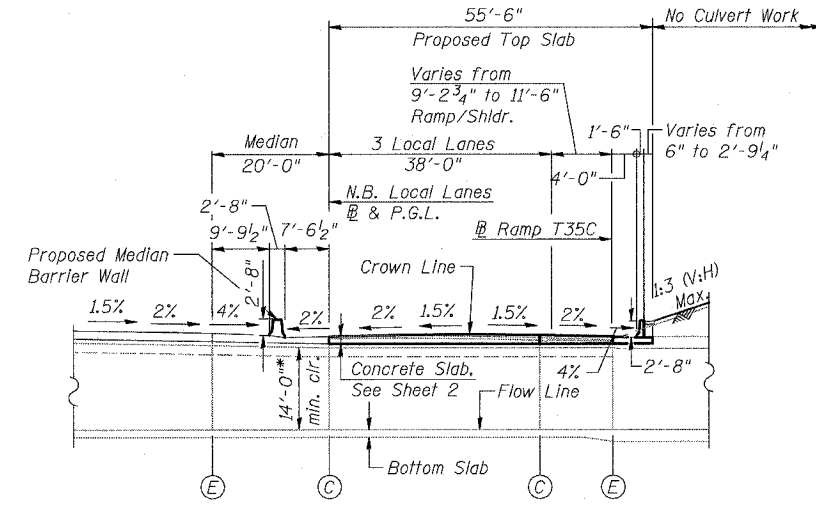


F.A.I.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94/90	*	COOK	565	426
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
62301	(2021-922 PT2 ETC	2324.6-1P)	R-10	



LONGITUDINAL SECTION THRU CULVERT

* No work will encroach inside the culvert or change existing opening
 ** Ramp profile follows Local Lane profile over the culvert and approach pavement

GENERAL NOTES

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

All construction joints shall be bonded.

Benchmark: BM No. 3540

"□" Cut on the Southwest corner of traffic control box at the Northeast corner of 39th and LaSalle Streets. El. 12.33

Existing Structure: The existing structure was built in 1962 under Section S-2323.2-4B and is identified as S.N. 016-2625. The structure is a 12'-0" clear span by 14'-0" clear height double barrel reinforced concrete box culvert. It conveys sanitary and storm water under the Dan Ryan Expressway for the MWRDGC. The length of culvert under the expressway is 325'-0" and the culvert transitions horizontally, vertically and in cross section to connect to an existing circular brick sewer under the centerline of 39th Street. The top slab of the culvert is the expressway pavement and consists of a minimum of 1'-3" of reinforced concrete with an approximately 5" thick overlay (either concrete or bituminous). The centerline of the culvert has no skew relative to the Dan Ryan baselines. There are 20'-6" long approach slabs on each side of the culvert over the width of the traffic lanes. Barrier wall is attached to the top slab and separates the express and local lanes of the expressway and the expressway from the CTA tracks. The barrier is supported by PCC shoulders outside the limits of the culvert. The culvert will be rehabilitated utilizing stage construction. Portions of the top slab and all components of the culvert below grade shall be re-used.

All elevations are based on the Chicago City Datum (C.C.D.)

TOTAL BILL OF MATERIAL

ITEM	UNIT	QTY.
Bridge Approach Pavement	Sq. Yd.	430
Bituminous Surface Removal (Variable Depth)	Sq. Yd.	38
Approach Slab Removal	Sq. Yd.	164
Concrete Superstructure	Cu. Yd.	97.1
Structure Excavation	Cu. Yd.	16
Bridge Deck Grooving	Sq. Yd.	153
Protective Coat	Sq. Yd.	263
Reinforcement Bars, Epoxy Coated	Pound	17,690
Bar Splicers	Each	110
Concrete Slab Hydro-Demolition	Sq. Yd.	165
Video Taping of MWRD Culvert	Foot	245

DESIGN SPECIFICATIONS

2002 AASHTO

LOADING HS20-44 & ALT.

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

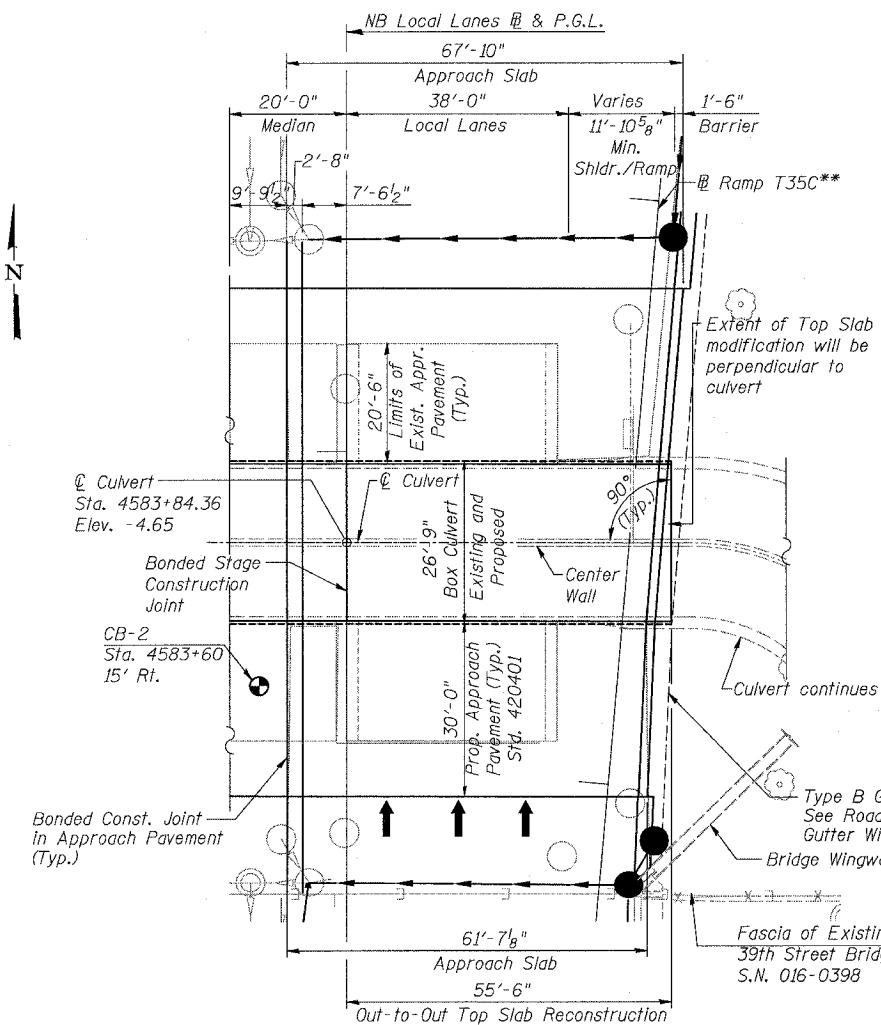
DESIGN STRESSES

FIELD UNITS

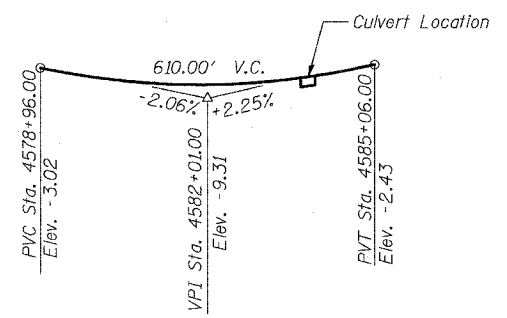
New:
 f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)
 Existing:
 f'c = 3,500 psi
 fy = 40,000 psi (Reinforcement)

LEGEND

- CB-2 = Soil Boring Location
- = Exist. Catch basin
- ⊙ = Exist. Manhole
- = Exist. Inlet
- = Exist. Storm sewer
- = Exist. Underdrain
- = Prop. Catch basin
- ⊙ = Prop. Manhole
- = Prop. Storm sewer
- = Prop. Underdrain

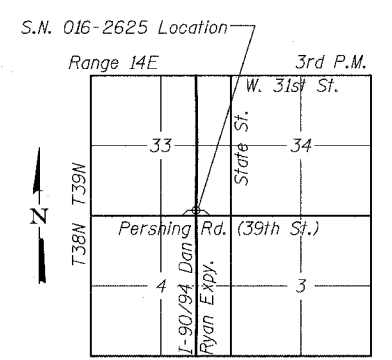


PROFILE GRADE LINE ALONG N.B. LOCAL LANES @



ABBREVIATIONS

- MWRDGC = Metropolitan Water Reclamation or MWRD District of Greater Chicago
- CTA = Chicago Transit Authority
- EJ = Expansion Joint
- CJ = Construction Joint
- P.G.L. = Profile Grade Line
- NB = Northbound
- SB = Southbound
- C.R.P.C.C = Continually Reinforced Portland Cement Concrete



LOCATION SKETCH

APPROVED
 FOR STRUCTURAL ADEQUACY ONLY



Brian L. Umbright
 Date: July 13, 2006
 License
 Expires: November 30, 2006

Richard E. Anderson
 ENGINEER OF BRIDGES AND STRUCTURES

REVISIONS	
NAME	DATE
REVISED	06/23/06
REVISED	07/13/06

SHEET CUL-1 OF CUL-16

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 94/90 (DAN RYAN EXPRESSWAY)
 GARFIELD BLVD TO 31ST STREET (NB LOCAL LANES)
 MWRD CULVERT, N. OF 39TH ST.,
 COOK COUNTY, S.N. 016-2625
 GENERAL PLAN

SCALE: N.T.S. DRAWN BY: DJM
 DATE: JUNE 9, 2006 CHECKED BY: BLU

BOWMAN, BARRETT & ASSOCIATES INC.
 CONSULTING ENGINEERS
 Chicago, Illinois
 312.228.0100
 www.bbandainc.com

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