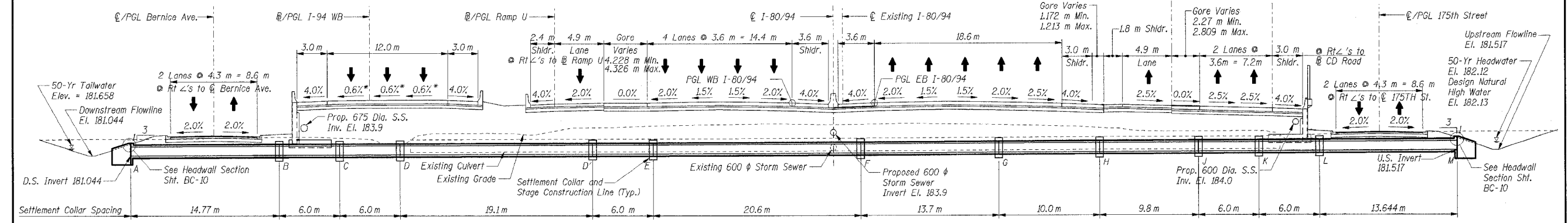


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		COOK	631	3398
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
	• (2425 & 2626) R-2 CONTRACT NO. 62111			



**LONGITUDINAL SECTION**  
(Final Configuration at completion of This Contract)  
(Looking East along @ Proposed Culvert)

**TEMPORARY SOIL RETENTION SYSTEM LOCATIONS**  
(Roadway Reference @ I-80/94)

Location	Station	Offset (m)	Location	Station	Offset (m)	Location	Station	Offset (m)	Location	Station	Offset (m)
W1	5+557.85	17.396 Lt.	X1	5+558.40	2.204 Rt.	Y1	5+558.60	15.904 Rt.	Z1	5+558.85	25.904 Rt.
W2	5+564.35	17.396 Lt.	X2	5+564.35	2.204 Rt.	Y2	5+564.35	15.904 Rt.	Z2	5+564.35	25.904 Rt.
W3	5+564.35	18.396 Lt.	X3	5+564.35	3.204 Rt.	Y3	5+564.35	16.904 Rt.	Z3	5+564.35	26.904 Rt.
W4	5+567.65	18.396 Lt.	X4	5+567.65	3.204 Rt.	Y4	5+567.65	16.904 Rt.	Z4	5+567.65	26.904 Rt.
W5	5+567.65	17.396 Lt.	X5	5+567.65	2.204 Rt.	Y5	5+567.65	15.904 Rt.	Z5	5+567.65	25.904 Rt.
W6	5+574.15	17.396 Lt.	X6	5+573.60	2.204 Rt.	Y6	5+573.40	15.904 Rt.	Z6	5+573.15	25.904 Rt.

**TOTAL BILL OF MATERIALS**

Item	Unit	Total
Concrete Box Culverts	Cu m	32.2
Reinforcement Bars	kg	4,580
Temporary Soil Retention System	Sq m	37
*Removal of Temporary Soil Retention System	Sq m	58

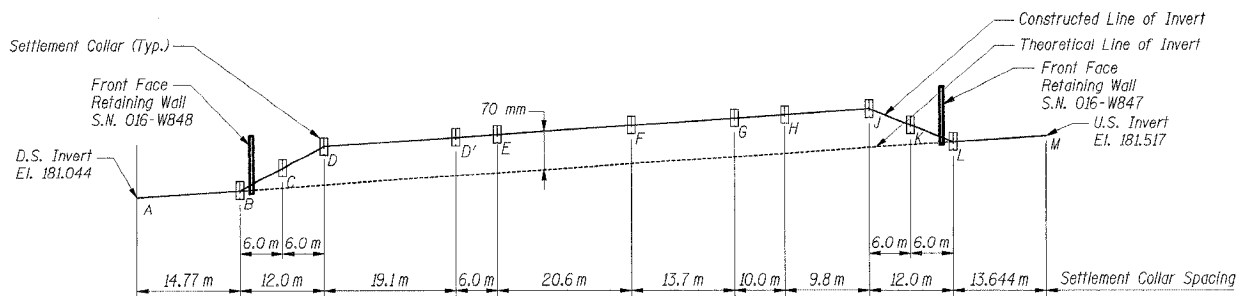
\*Installed by others under Contracts 62350 and 62110

**CULVERT LAYOUT & PROFILE DATA**

Location ID	Description	Roadway Reference	Station	Offset (m)	I-80/94		Invert Elevation
					Station	Offset (m)	
A	Downstream	I-94 WB	32+962.526	23.630 Lt.	5+566.000	69.766 Lt.	181.044
B	Settlement Collar	I-94 WB	32+963.826	8.917 Lt.	5+566.000	54.996 Lt.	181.097
C	Settlement Collar	I-94 WB	32+964.351	2.940 Lt.	5+566.000	48.996 Lt.	181.153
D	Settlement Collar	I-94 WB	32+964.874	3.038 Rt.	5+566.000	42.996 Lt.	181.209
D'	Settlement Collar	I-94 WB	32+966.524	22.066 Rt.	5+566.000	23.896 Lt.	181.277
E	Settlement Collar	I-94 WB	32+967.037	28.043 Rt.	5+566.000	17.896 Lt.	181.298
F	Settlement Collar				5+566.000	2.704 Rt.	181.372
G	Settlement Collar				5+566.000	16.404 Rt.	181.420
H	Settlement Collar	CD Road EB	190+900.516	17.123 Lt.	5+566.000	26.404 Rt.	181.456
J	Settlement Collar	CD Road EB	190+900.043	7.334 Lt.	5+566.000	36.204 Rt.	181.491
K	Settlement Collar	CD Road EB	190+899.754	1.341 Lt.	5+566.000	42.204 Rt.	181.477
L	Settlement Collar	CD Road EB	190+899.464	4.652 Rt.	5+566.000	48.204 Rt.	181.463
M	Upstream	CD Road EB	190+898.806	18.280 Rt.	5+566.000	61.848 Rt.	181.512

**WATERWAY INFORMATION**

Flood	Frequency (yr.)	Discharge (cms)	Waterway Opening (Sq. m)		Natural H.W.E. (m)	Created Head (m)		Headwater Elevation (m)	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
Design	10	1.05	1.110	1.155	182.00	0.01	-0.07	183.16	181.93
Base	50	1.86	1.110	1.477	182.13	0.31	0.02	183.50	182.12
Overtopping	100	2.46	1.110	1.667	182.21	-	0.03	-	182.24
Max. Calc.	>500								
	500	4.18	1.110	2.160	182.38	-	0.20	-	182.58



**CULVERT PROFILE**  
(Looking East)

See Table above for Constructed Invert Elevations

**General Notes:**

- All dimensions are in millimeters (mm) except as noted.
- All construction joints shall be bonded.
- Reinforcement bars shall conform to the requirements of AASHTO M31 or M322 Grade 400.
- Precast culvert alternate is not allowed.
- Exposed edges shall have 20 mm chamfer.
- For backfilling and embankment, see Standard Specifications.
- Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.
- The design or design information shown in the plans relative to the temporary structures is provided for the existing and/or proposed conditions including traffic patterns and locations shown or detailed in the plans. If the actual existing and/or proposed conditions including traffic patterns and locations vary from those shown in the plans, the Contractor shall verify the design parameters for the temporary structures and submit the design (or redesign if any) for Engineer's approval. The design/redesign including calculations shall be sealed and signed by a structural engineer licensed in the State of Illinois.

**INDEX OF SHEETS**

- BC-01 GENERAL PLAN & LONGITUDINAL SECTION
- BC-02 INDEX OF SHEETS, GENERAL NOTES, WATERWAY INFORMATION & TOTAL BILL OF MATERIAL
- BC-03 PROFILE GRADE LINES
- BC-04 CONSTRUCTION STAGING SEQUENCE & SECTIONS
- BC-05 TEMPORARY SOIL RETENTION SYSTEM
- BC-06 TOP & BOTTOM SLAB PLANS & WALL ELEVATIONS I \*\*\*
- BC-07 TOP & BOTTOM SLAB PLANS & WALL ELEVATIONS II
- BC-08 TOP & BOTTOM SLAB PLANS & WALL ELEVATIONS III \*\*\*
- BC-09 SECTION THROUGH BARREL & SETTLEMENT COLLAR DETAILS
- BC-10 HEADWALL DETAILS \*\*\*
- BC-11 BORING LOGS

ILLINOIS DEPARTMENT OF TRANSPORTATION  
F.A.I. ROUTE 80/94 (KINGERY EXPRESSWAY)  
EB & WB INSIDE LANES (MAINLINE) CONSTRUCTION BOX CULVERT  
STRUCTURE NO. 016-C013 STA. 5+566.000  
SECTIONS 2001-167R AND (2425 & 2626) R-1  
COOK COUNTY

**SHT. BC-02 OF 11**

REVISIONS	
NAME	DATE

**INDEX OF SHEETS, GENERAL NOTES, WATERWAY INFORMATION & TOTAL BILL OF MATERIAL**

DATE: 1/4/06

**TENG**  
TENG & ASSOCIATES, INC.  
ENGINEERS/ARCHITECTS/PLANNERS  
CHICAGO, ILLINOIS

DRAWN BY: OD  
CHECKED BY: MJK