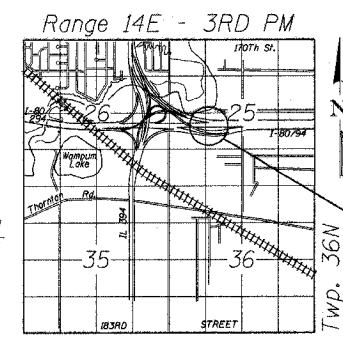
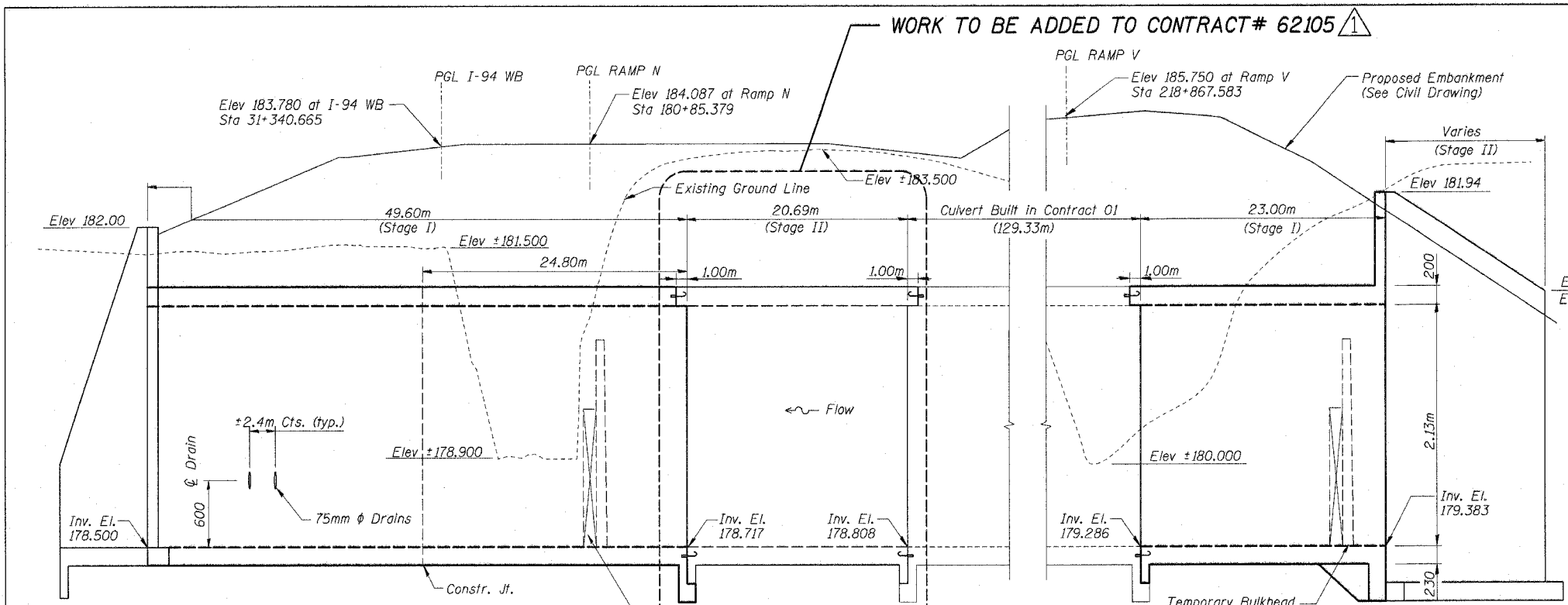


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
80/94 (0203.1 & 0304R-6)		COOK	231	88A
STA.	TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT	
			CONTRACT # 62105	



LOCATION SKETCH

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges
LOADING MS18
 Allow 2.4 kN/m for future wearing surface.
 Lateral Earth Pressure = 6.3 kN/m²
 (Equivalent Fluid Pressure)
 Earth Mass = 18.8 kN/m³
 Live Load Surcharge = 600 mm

DESIGN STRESSES

CAST IN PLACE CONCRETE

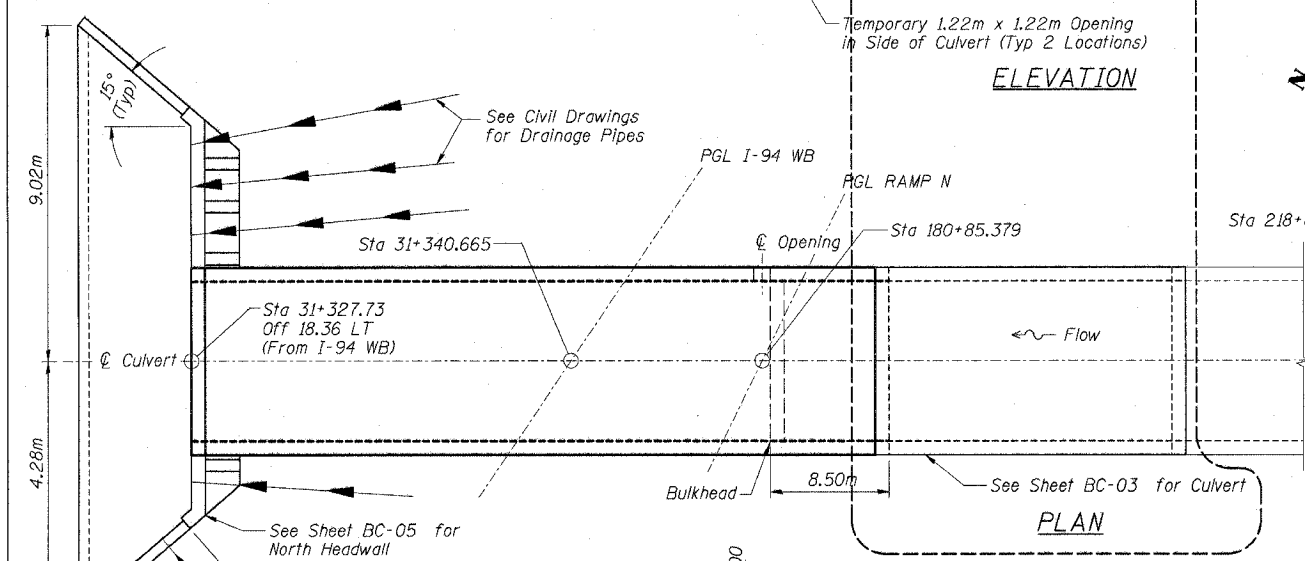
$f'_c = 24$ MPa (Min. Compressive Strength of Cast-In Place Concrete @ 28 Days)
 $f_y = 420$ MPa (Yield Point of Reinforcing Steel)

SEISMIC DATA

Seismic Performance Category (SPC) = A
 Seismic Acceleration Coefficient (A) = 0.04 g
 Site Coefficient (S) = 1.0

GENERAL NOTES:

- Reinforcement bars shall conform to the requirements of AASHTO M-31M, M-42M grade 400.
- Reinforcement bars designated (E) shall be epoxy coated.
- Backfill shall not be placed behind the walls of concrete culvert until the top slab is placed and cured. Backfill behind sidewalls shall be carried up simultaneously behind opposite sidewalls, and at no time shall the fill behind one sidewall be more than 0.61m higher than behind opposite one.
- Sheet Piling to be ASTM A328M.
- If the Contractor chooses to alter the temporary cantilevered sheet piling design requirements shown on the plans, a design submittal including plans, details and calculations will be required for review and acceptance by the Engineer.
- All dimensions are in millimeters (mm) except as noted.

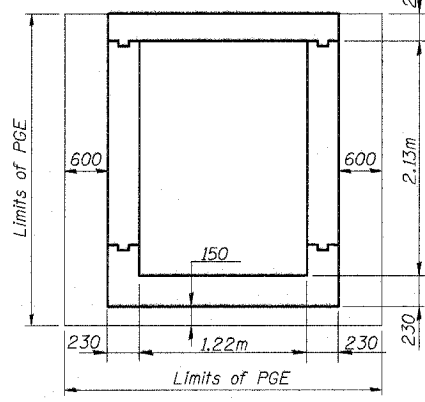


ELEVATION

PLAN

BILL OF MATERIAL

Item	Unit	Total
Porous Granular Embankment	m ³	413
Concrete Removal	m ³	421
Structure Excavation	m ³	1,537
Reinforcement Bars	kg	16,890
Reinforcement Bars, Epoxy Coated	kg	1,340
Concrete Box Culverts	m ³	228.5
Expansion Bolts M20	Each	128
Remove Steel Sheet Piling	m ²	447
Temporary Soil Retention System	m ²	507
Controlled Low Strength Material	m ³	62



SECTION THRU BARREL
 (Showing limits of Porous Granular Material)

NOTE: This culvert is C.I.P. and precast option is not allowed.



REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION F.A.I. ROUTE 80/94 (INTERSTATE 80/294) BOX CULVERT GENERAL PLAN & ELEVATION STA. 31+327.73 (I94 WB) TO STA 218+879.08 (RAMP V) STRUCTURE NO. 016-C009 DESIGNED BY JCE DRAWN BY JCE DATE: JULY 8, 2004 CHECKED BY JCA CHECKED BY JCA
NAME	DATE	
ADDENDUM #1	12/29/05	

