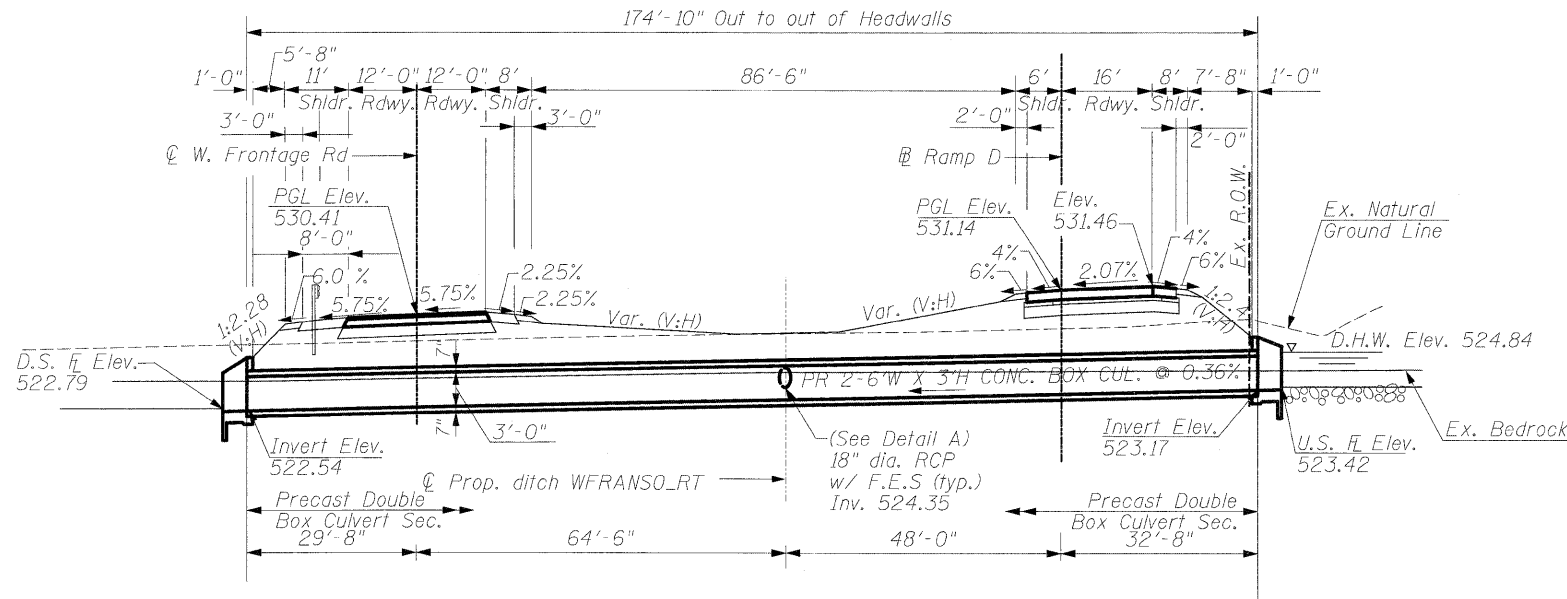
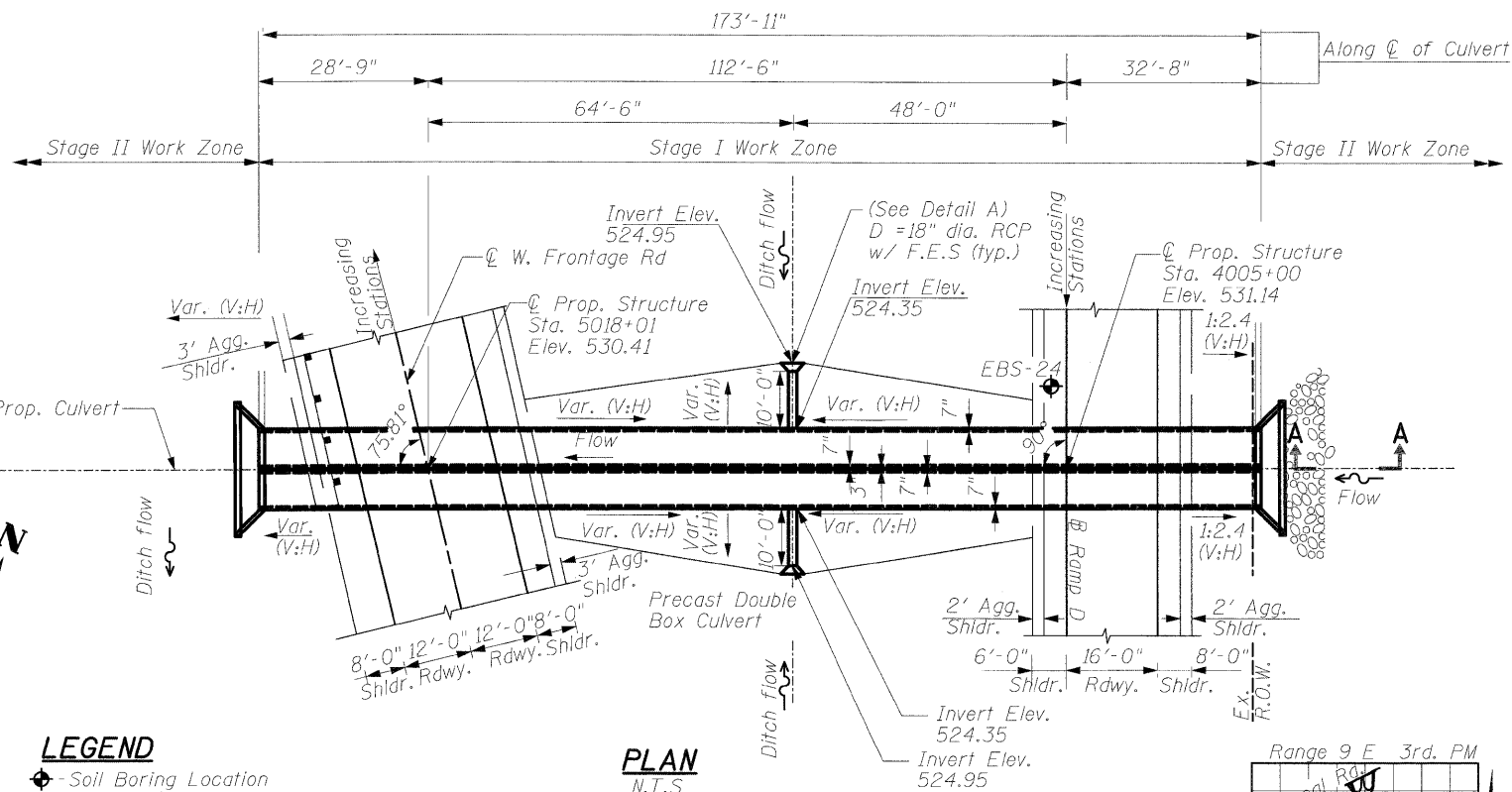


Bench Mark: BM 11
 (RR spike in 2nd power pole West of I-55 Southbound entrance
 ramp at N. side of Arsenal Rd., ±1' N of guardrail. Elev. = 549.615)
 Existing Structures: None

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION



LONGITUDINAL SECTION
 N.T.S.

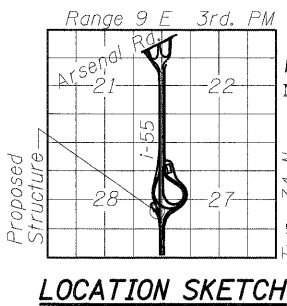


PLAN
 N.T.S.

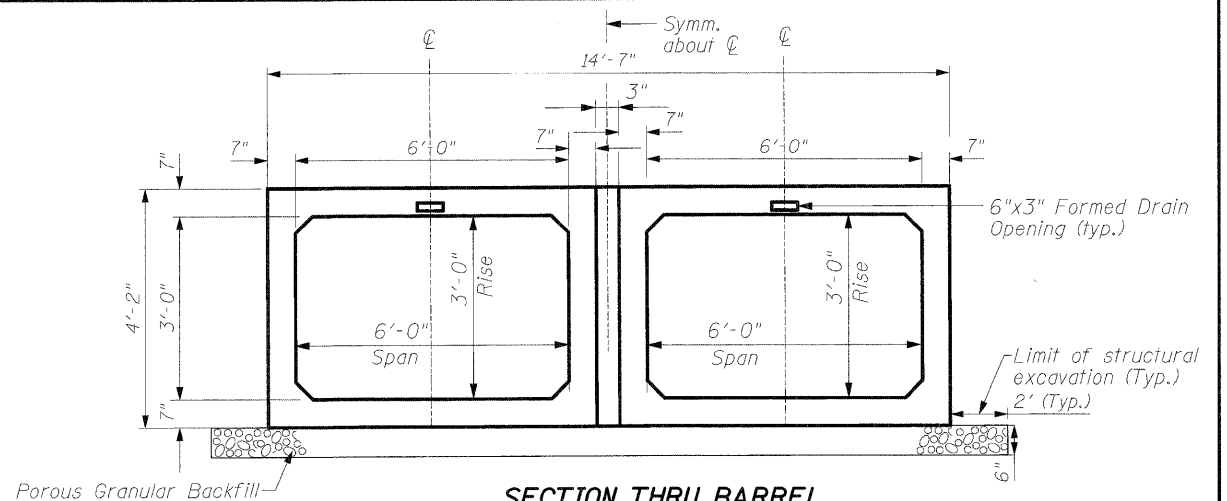
WATERWAY INFORMATION

Drainage Area = 0.052 sq. mi. Low Grade Elev. 529.30 @ Sta. 5018+01 W. Frontage Rd.

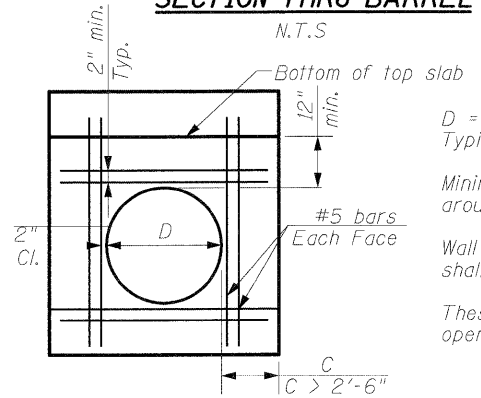
Flood	Freq. Yr.	Q C.F.S.	Opening Sq.Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	42	N/A	8.64	524.65	N/A	0.19	N/A	524.84
Base	100	51	N/A	9.85	524.87	N/A	0.20	N/A	525.07
Overtopping		229.5							



LOCATION SKETCH



SECTION THRU BARREL
 N.T.S.



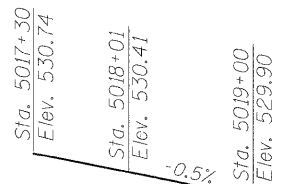
DETAIL A: ADDITIONAL WALL REINFOR. FOR
 PRECAST CONC. BOX CULV. WITH OPENING

CURVE DATA

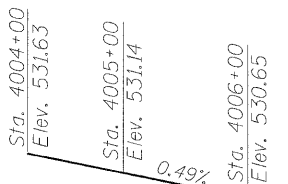
W. Frontage Rd.
 P.I. Station 5015+80.03
 Delta = 42° 50' 05.43" (LT)
 Degree = 5° 12' 31.35"
 Tangent = 431.4712'
 Length = 822.3699'
 Radius = 1,100.00'
 External = 81.5953'
 Long Chord = 803.3517'
 Mid. Ord. = 75.9607'
 P.C. Station 5011+48.56
 P.T. Station 5019+70.93

CURVE DATA

Ramp D
 P.I. Station 4008+27.72
 Delta = 18° 36' 40.15" (RT)
 Degree = 6° 51' 42.37"
 Tangent = 136.8199'
 Length = 271.2296'
 Radius = 835.00'
 External = 11.1352'
 Long Chord = 270.0388'
 Mid. Ord. = 10.9886'
 P.C. Station 4006+90.90
 P.T. Station 4009+62.13



PROFILE GRADE
 (Along W. Frontage Rd.)



PROFILE GRADE
 (Along Ramp D)

GENERAL PLAN & ELEVATION-RAMP D
 OVER UNNAMED DITCH
 F.A.I. ROUTE 55 - SEC. (99-1&2)AC-3
 WILL COUNTY
 STATION 4005+00
 STRUCTURE NO. 099-0524

DESIGN SPECIFICATIONS

AASHTO 2002

LOADING HS-20-44

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

DESIGN STRESSES

FIELD UNITS

Cast-In-Place Units
 $f'_c = 3,500$ psi (Concrete)
 $f_y = 60,000$ psi (Reinforcement)

Precast Units

$f'_c = 5,000$ psi (Concrete)
 $f_y = 65,000$ psi (Welded Wire Fabric)

SEISMIC DATA

Seismic Performance Zone (SPC) = A
 Bedrock Acceleration Coeff.(A) = 0.04g
 Site Coefficient (S) = 1.0

SINGH
 SINGH & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 300 W. ADAMS ST.
 CHICAGO, IL 60606
 TEL: (312) 629-0240
 FAX: (312) 629-8449

SHEET NO.
 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
55	(99-1&2)AC-3	WILL	524	339
Sta. 4005+00 (Ramp D)		CONTRACT NO. 60C31		
FED. RD. DIST. NO. 1	ILLINOIS	FED. AID PROJECT		