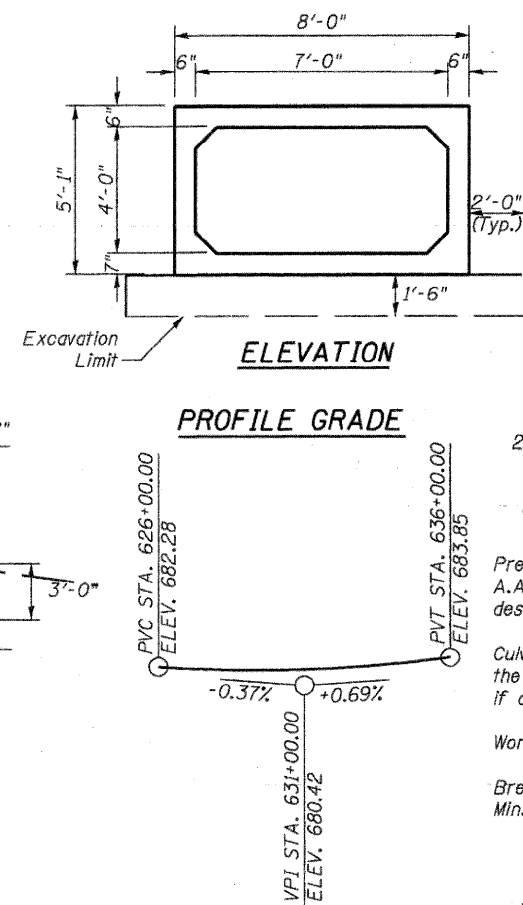
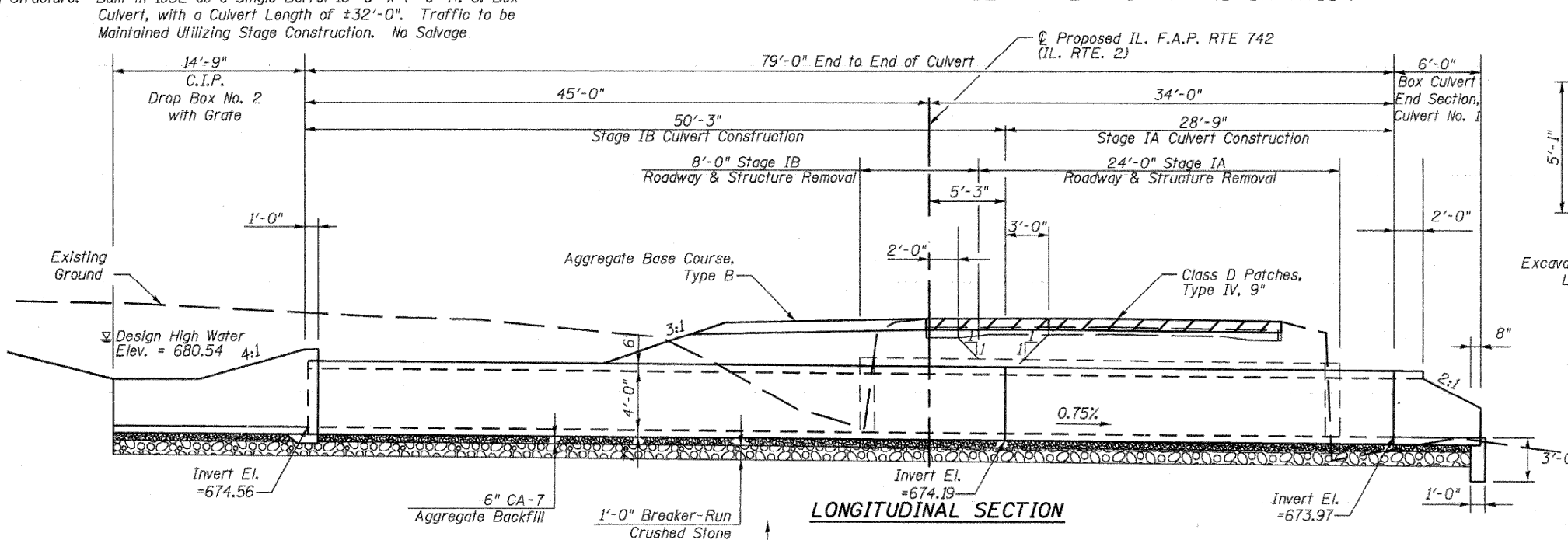


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Benchmark:

Existing Structure: Built in 1952 as a Single Barrel 10'-0" x 7'-0" R. C. Box Culvert, with a Culvert Length of ±32'-0". Traffic to be Maintained Utilizing Stage Construction. No Salvage



DESIGN STRESSES

$f_y = 60,000$ psi
 $f_y = 65,000$ psi (Welded Wire Fabric)
 $f'_c = 3,500$ psi
 $f'_c = 5,000$ psi (Precast)

DESIGN SPECIFICATIONS

2002 A.A.S.H.T.O. Specifications & Supplements

LOADING HS 20-44

Allow 50#/Sq. Ft. for future wearing surface

GENERAL NOTES

Precast Box shall conform to the requirements of A.A.S.H.T.O. M259 (A.S.T.M. C789). The maximum design fill height for this structure is 4'-0".

Culvert Concrete thickness shown shall be considered the minimum acceptable. Other thickness will be allowed if approved by the engineer.

Work this sheet with Staging sheets.

Breaker-Run Crushed Stone to be placed as a Subbase. Min. depth over competent rock is 1'-0".

TOTAL BILL OF MATERIALS

DESCRIPTION	UNIT	QTY.
Removal of Existing Structures No. 2	Each	1
Drop Box, No. 2	Each	1
Box Culvert End Section, Culvert No. 1	Each	1
Precast Concrete Box Culvert 7' X 4'	Foot	79
Breaker-Run Crushed Stone	Ton	84

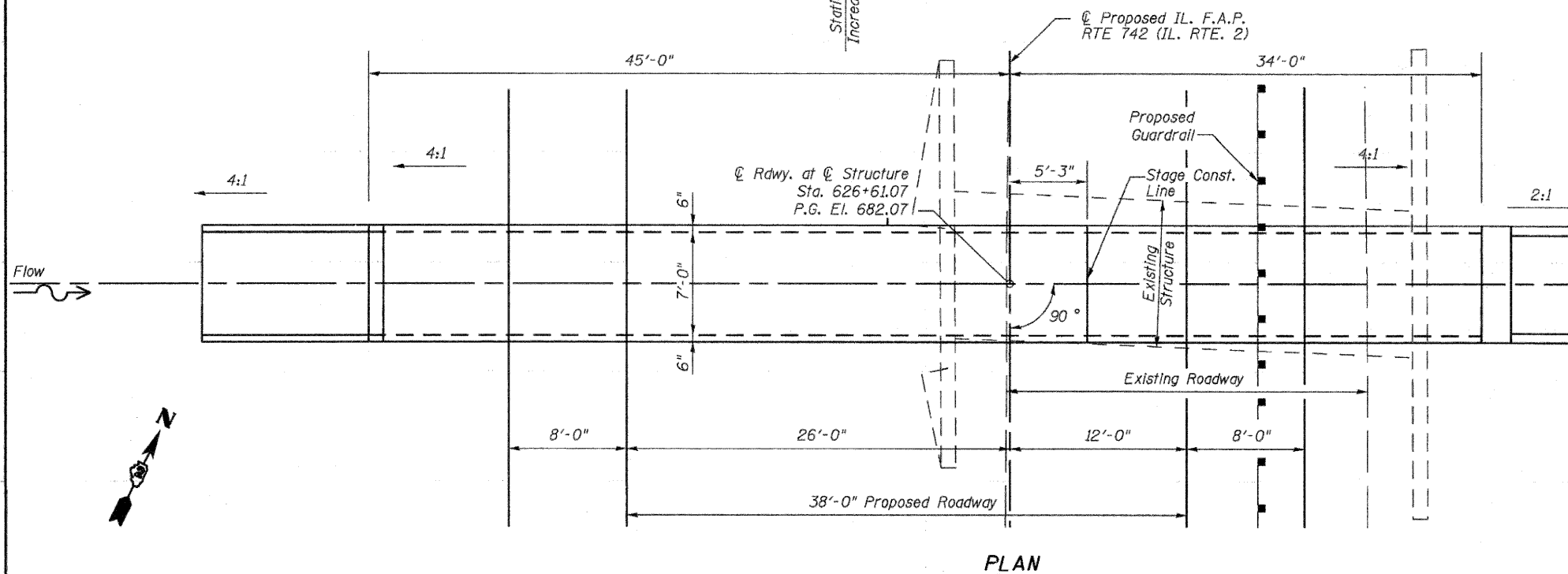
STATION 626+61.07
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RTE. 742 SEC. 37R-3
LOADING HS20-44
STRUCTURE NO. 071-1131

NAME PLATE
See Std. 515001

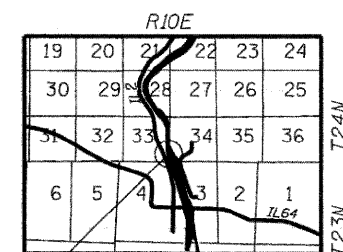
WATERWAY INFORMATION TABLE

	Frequency Year	Discharge (cfs)	Waterway Opening Sq. Ft.		Natural H.W.E.	Head (ft)		Headwater Elev. (ft)	
			Existing	Proposed		Existing	Proposed	Existing	Proposed
Ten-Year	10	77	70.0	28.0		3.41	4.57	676.30	679.14
Design	50	189	70.0	28.0		4.06	5.97	676.95	680.54
Base	100	238	70.0	28.0		4.35	7.46	677.24	682.03
EX OVT									
PR OVT	81	226		28.0			7.06		681.63
Max Calc	500	360		28.0		5.62		678.51	

10-Year Velocity through Existing Structure =
10-Year Velocity through Proposed Structure = 7.1 fps



PLAN



LOCATION SKETCH

**GENERAL PLAN & ELEVATION
IL. RTE. 2 OVER
TRIBUTARY TO ROCK RIVER
STA. 626+61.07**

DESIGNED CTH

CHECKED DSG

DRAWN EBS

CHECKED DFM

David F. Maxwell S.E. Reg. No. 081-005455

Date: 2/19/09

My registration expires November 30, 2010.

Howard R. Green Company

SHEET NO. 1 1 SHEETS	F.A.P. RTE. 742	SECTION 37 R-3	COUNTY OGLE	TOTAL SHEETS 345	SHEET NO. 184
	SN 071-1131		CONTRACT NO. 84788		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					