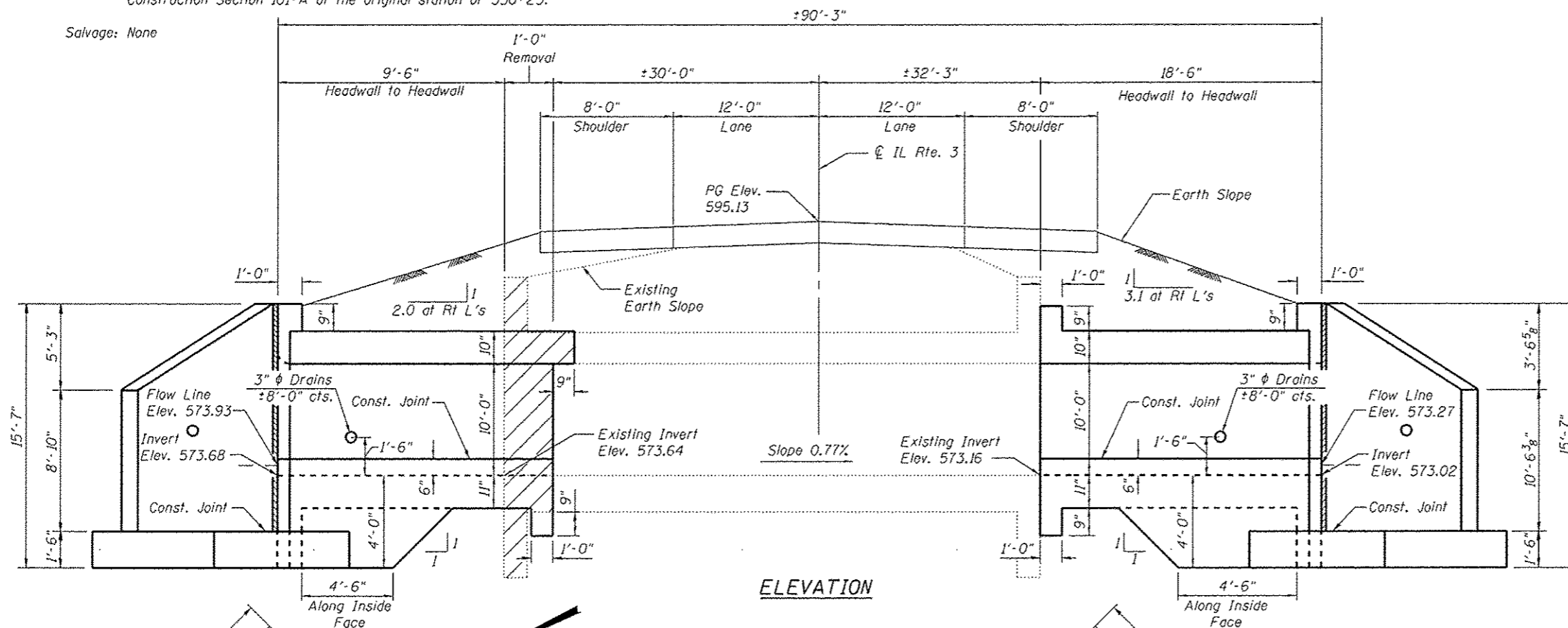
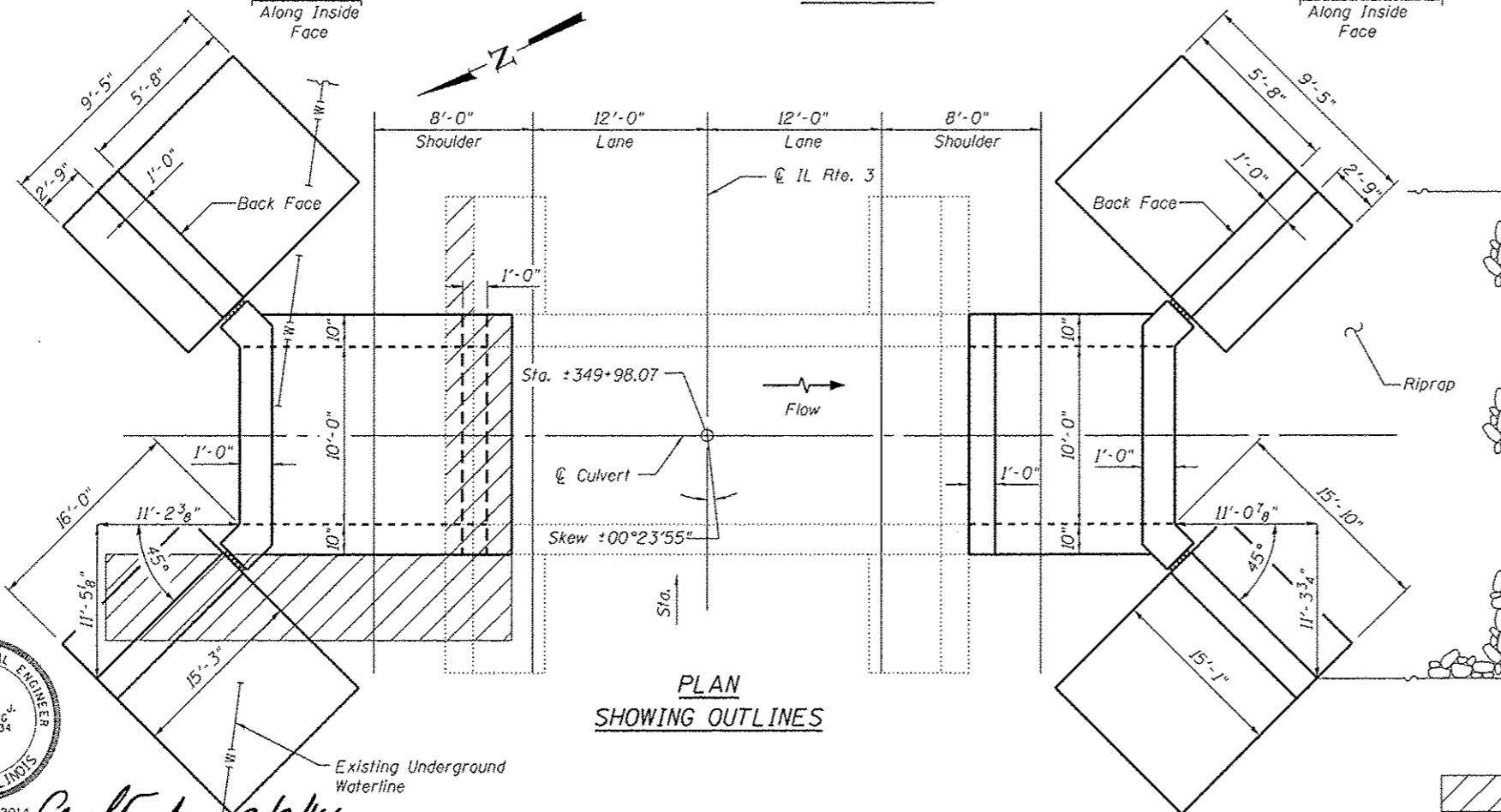


Existing Structure: The existing structure, SN 042-2474, is a $\pm 62'-3"$ long reinforced cast-in-place concrete box culvert with a $10'-0" \times 10'-0"$ opening. The original structure was constructed as S.B.I. Route 109 Construction Section 101-A at the original station of 350+25.

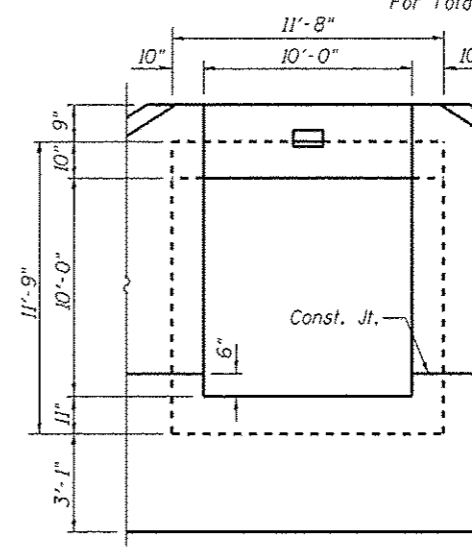
Salvage: None



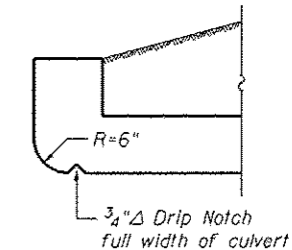
ELEVATION



PLAN SHOWING OUTLINES



BOX CULVERT END ELEVATION
(Dimensions Shown at Rt L's)



HEADWALL DETAILS AT UPSTREAM END

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.
 Plan dimensions and details relative to the 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 work, however, the Contractor will be paid for the quantity furnished at the unit price for the work.
 The verification of allowable soil bearing pressure underlying the proposed box culvert shall be verified by a dynamic cone penetration (DCP) test or other acceptable measures as provided by the District Geotechnical and Field Engineers. The results of the test must exceed the calculated bearing pressures shown on the plans prior to placement of the Concrete Box Culvert. Tests failing to exceed the calculated bearing pressures as shown on the plans will require subsurface modification that must be coordinated with the District Geotechnical and Field Engineers.
 Expansion bolts shall be according to Standard Specification Article 1006.09.
 Precast alternative not allowed at this site.
 A distance half the length of the wingwall but not less than 6'-0" of the barrel shall be poured monolithically with the wingwalls.
 Calculated max. soil pressure under barrel = 2,618 psf.
 For Riprap details and quantities see Roadway Plans.
 For Limits of Existing Concrete Removal see sheet 3 of 4.
 For Total Bill of Material see sheet 4 of 4.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS 20-44

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

DESIGN STRESSES

EXISTING CONSTRUCTION	NEW CONSTRUCTION
$f_y = 40,000 \text{ psi}$	$f_y = 60,000 \text{ psi}$
$f'_c = 3,000 \text{ psi}$	$f'_c = 3,500 \text{ psi}$

GENERAL PLAN & ELEVATION

ILLINOIS ROUTE 3
 F.A.S. RTE. 752 - SEC. 101-2RS-1
 JERSEY COUNTY
 STATION 349+98.07
 STRUCTURE NO. 042-2474



Consent Fuesting 8/8/14

FILE NAME = 349+98.07-76789-001.dgn



USER NAME: jrdinkelmann	DESIGNED - JD	REVISOR -
Illinois Design Firm Number 184.001670	CHECKED - BB	REVISION -
PLOT SCALE:	DRAWN - EW	REVISION -
PLOT DATE: 8/8/2014	CHECKED - CJF	REVISION -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 4 SHEETS

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
752	101-2RS-1	JERSEY	438	246
				CONTRACT NO. 76789

ILLINOIS FED. AID PROJECT