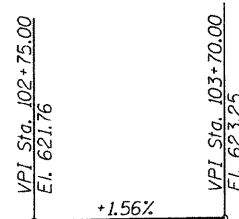


B.M.: RR Spike in PP Sta. 99+84, 20' Rt. Elev. 626.51
 B.M.: RR Spike in PP Sta. 104+50, 16' Rt. Elev. 623.87
 B.M.: Chiseled "X" S.W. bolt of F.H. Sta. 106+94, 23' Rt. Elev. 629.31

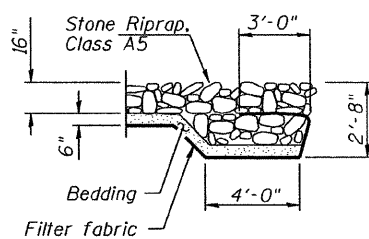
Existing Structure:
 Triple 15.5'x7' (varying) reinforced concrete box culvert.
 The structure is 31'-8" out to out, and is not skewed.
 Str. No. 050-8005

Salvage: None

Road to be closed to traffic during construction.



PROPOSED PROFILE GRADE



SECTION A-A

**PRAIRIE CREEK
 BUILT 201 BY
 LASALLE COUNTY
 SEC. 11-00692-00-DR
 STATION 103+21.54
 STR. NO. 050-8025 LOADING HL-93**

NAME PLATE

Locate Name Plate at South Headwall
 S.W. Corner of Culvert (See Std. 515001)

WATERWAY INFORMATION

Drainage Area = 6.04 Sq. Mi. Low Grade Elev. = 621.07 @ Sta. 102+21.40

Flood	Freq. Yr.	C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	30	1467	307	318	620.62	0.54	0.50	621.16	621.12
Base	100	1940	326	349	621.55	0.79	0.74	622.34	622.29

Construction of this project complies with IDNR,
 Office of Water Resources Statewide Permit No. 12.

OVER THE ROAD FLOW

Freq. Yr.	Existing (Sq. Ft.)	Proposed (Sq. Ft.)
30	0	0
100	103	103

DESIGN SPECIFICATIONS

2010 AASHTO & Interims

DESIGN STRESSES

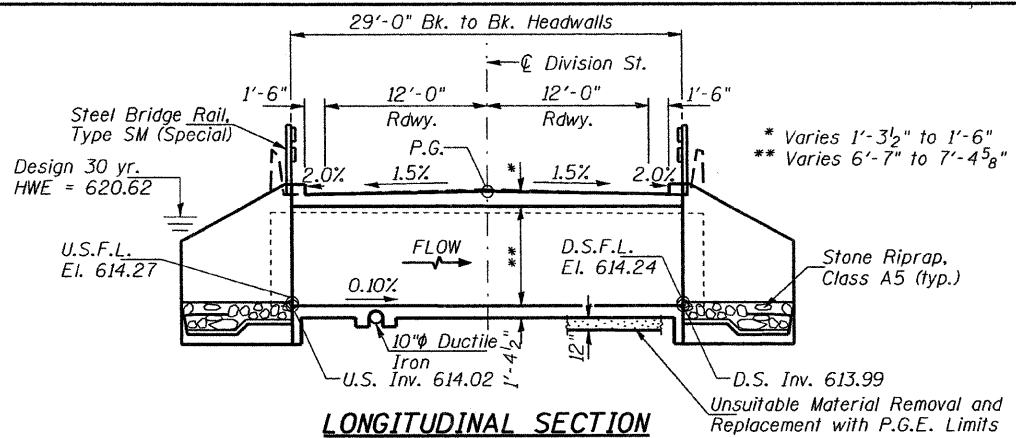
FIELD UNITS

$f'c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)

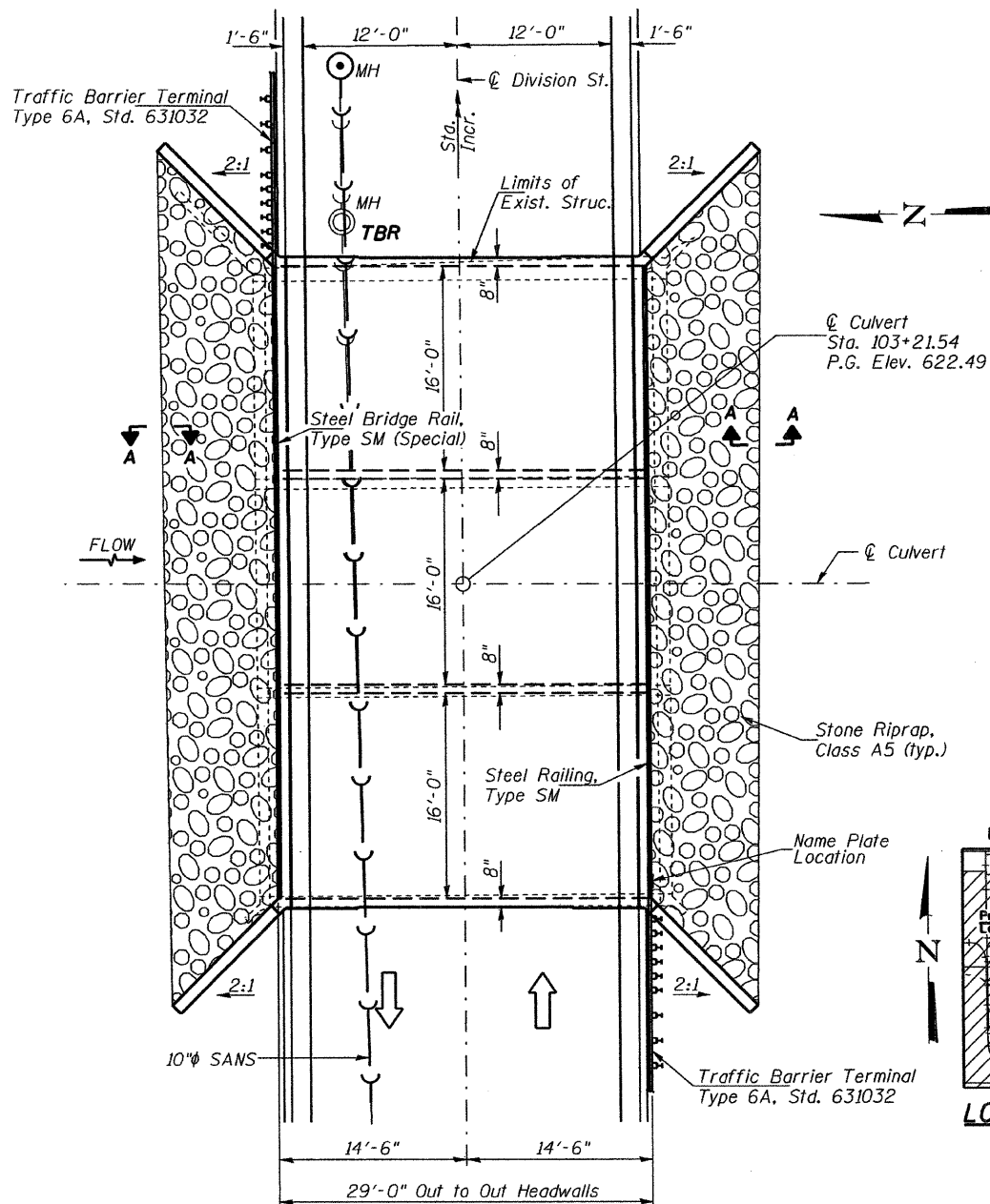
LOADING HL-93

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

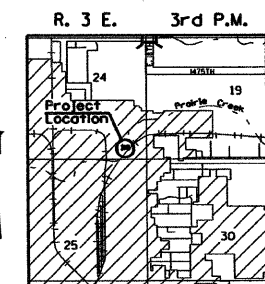
DESIGNED	NPH
CHECKED	BAN
DRAWN	RMD
CHECKED	BAN



LONGITUDINAL SECTION



PLAN



LOCATION SKETCH

GENERAL NOTES

Reinforcement Bars shall conform to the requirements of ASTM A 706 Grade 60.
 For backfilling and embankment see Standard Specifications.
 Exposed concrete edges shall have a 3/4" chamfer unless otherwise noted.
 Precast culvert option will not be allowed.
 Layout of stone riprap may be varied in the field to suit ground conditions as directed by the Engineer.
 A distance of half the length of the wingwall, but not less than 6 feet of the barrel shall be poured monolithically with the wingwall.
 All excavation required for construction of the culvert in accordance with the Standard Specifications shall be included in the cost of Concrete Box Culverts.
 Reinforcement bars designated (E) shall be epoxy coated.
 Areas of excavation required for removal of the existing structure or construction of the new culvert shall be backfilled with P.G.E. See Special Provisions for more detailed information.
 Actual quantity, if any, of Removal & Disposal of Unsuitable Material shall be determined in the field by the Engineer.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Box Culverts	CU YD	193.3
Reinforcement Bars, Epoxy Coated	POUND	32,400
① Removal of Existing Structures	EACH	1
Name Plates	EACH	1
Stone Riprap, Class A5	SQ YD	118
Filter Fabric	SQ YD	118
Steel Bridge Rail, Type SM (Special)	FOOT	102
Porous Granular Embankment	CU YD	140
Protective Coat	SQ YD	172
Removal & Disposal of Unsuitable Material	CU YD	57

① See Special Provisions

DESIGN SCOUR TABLE

Location	Upstream	Downstream
Design Scour Elevation	614.02	613.99

I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specification for Highway Bridges.
 This design complies with all requirements of the current AASHTO Guide Specifications for Seismic Design of Highway Bridges.

Benjamin A. Nebel 3/20/2012
 Illinois Structural No. 6527
 Expires 11/30/2012



Lic. Exp. 11/30/2012

GENERAL PLAN & ELEVATION

SHEET NO. 1	RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5 SHEETS	DIVISION ST.	11-00692-00-DR	LA SALLE	15	9
	S.N.	050-8025	CONTRACT NO. 87521		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT BRM-5066(017)		