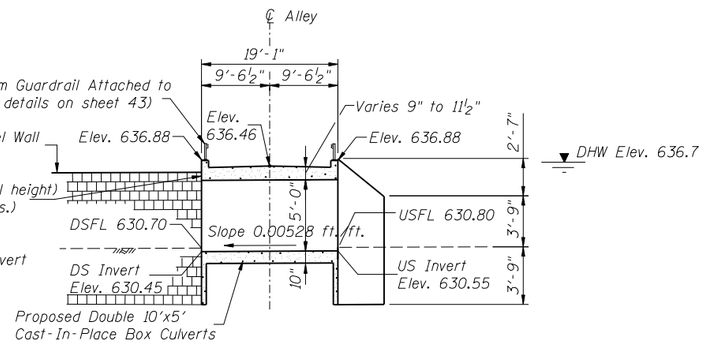
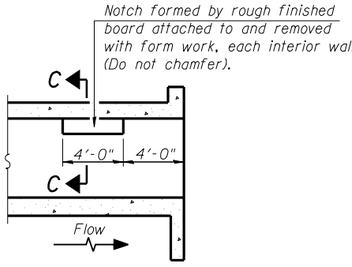
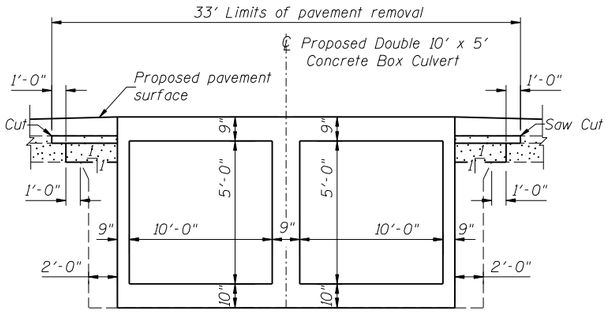


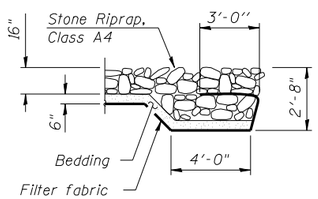
SECTION A-A



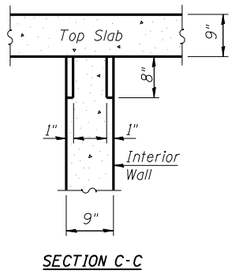
LONGITUDINAL SECTION



SECTION B-B

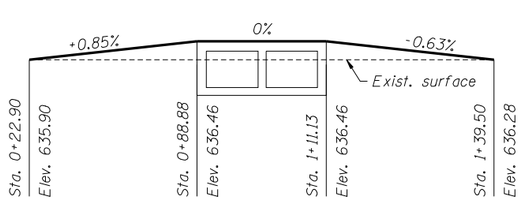


SECTION C-C

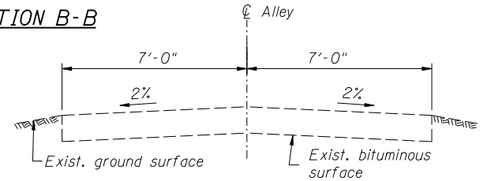


SECTION C-C

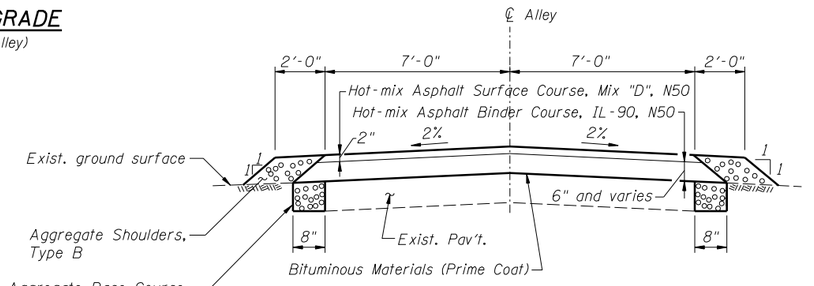
PHOEBE NESTING SITE DETAILS
(Downstream End Only)



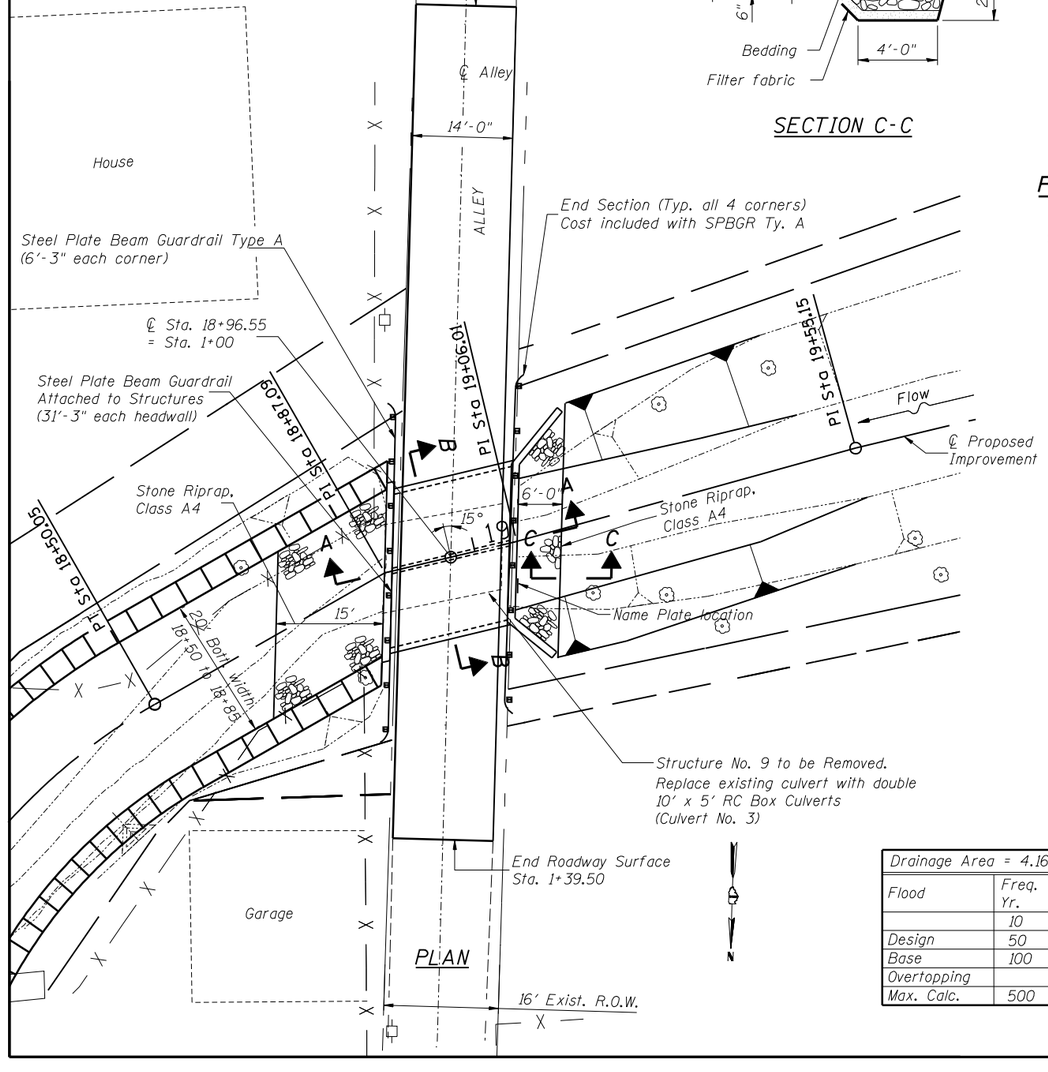
PROFILE GRADE
(along ℄ Alley)



EXISTING ROADWAY SECTION
(at right angles to roadway)



PROPOSED ROADWAY SECTION
(at right angles to roadway)



PLAN

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS
2002 AASHTO Bridge Design Specifications

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)

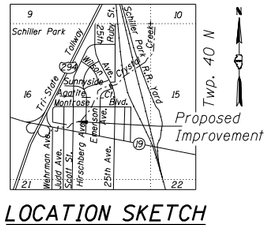
WATERWAY INFORMATION

Drainage Area = 4.16 sq. mi. Low Grade Elev. 635.90 @ Sta. 0+22.90

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	305	45	108	634.84	2.38	0	637.22	634.75
Design	50	484	45	108	636.68	1.75	0.02	638.43	636.7
Base	100	579	45	108	637.27	2.24	0	639.51	637.25
Overtopping									
Max. Calc.	500								

CRYSTAL CREEK
BUILT 2010 BY
IL. DEPT. OF NATURAL RESOURCES
OFFICE OF WATER RESOURCES
LOADING HS20

NAME PLATE
See Std. 515001
Note: Attach name plate to upstream headwall.



LOCATION SKETCH

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.
Reinforcement bars designated (E) shall be epoxy coated.
All exposed edges of concrete shall be beveled ¾".
Precast alternate is not allowed.
For backfilling and embankment, see Standard Specifications.
Place permanent Bench Mark on downstream headwall.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QTY.
Concrete Box Culvert	Cu Yd	45.2
Reinforcement Bars, Epoxy Coated	Pound	8,380
Bituminous Materials (Prime Coat)	Gal	7
Hot-mix Asphalt Surface Course, Mix "D", N50	Ton	16
Hot-mix Asphalt Binder Course, IL-90, N50	Ton	49
Aggregate Base Course, Type A 6"	Sq Yd	14
Aggregate Shoulders, Type B	Ton	10
Pavement Removal	Sq Yd	51
Removal of Existing Structures No. 9	Each	1
Name Plates	Each	1
Stone Riprap, Class A4	Sq Yd	59
Filter Fabric	Sq Yd	59
Steel Plate Beam Guardrail Attached to Structures	Foot	62.5
Steel Plate Beam Guardrail Type A	Foot	25

Designed By TMM Checked By JJF
Drawn By JJF Checked By RLP
1/29/2010 12:13:43 PM C:\OwrProjImpl\Projects\Crystal Creek\JJF\Culvert No 3 Alley.dgn