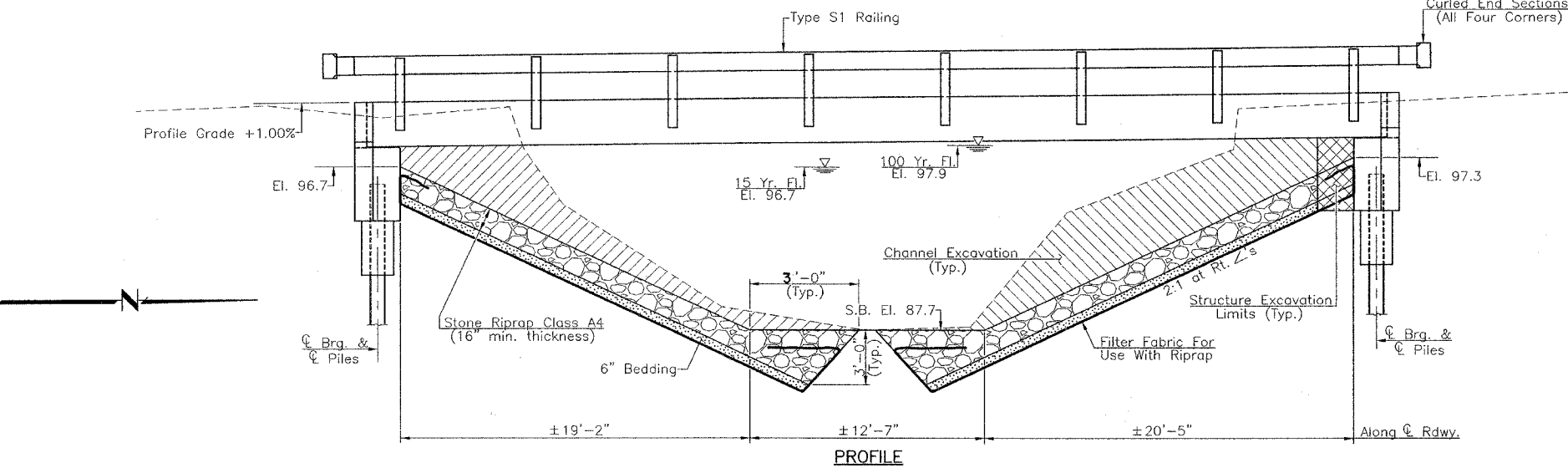


Existing Structure: Single Span Timber Deck on Steel Stringers, Closed Timber Abutments and Wingwalls, ±40'-0" Bk.-Bk. Abutments, ±19'-3" Clear Deck Width. Tubular Steel Railing, ±20' Skew Rt. Fwd.

Benchmarks: BM#1 - 60d Nail & Washer in Power Pole
16' Lt. Sta. 2+87 El. 104.47
BM#2 - PK Nail & Washer in N.E. Wingwall Pile
El. 100.00 (Assumed)

RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
T.R. 112	*	SHELBY	9	4
PROJECT				
* 02-19114-00-BR				



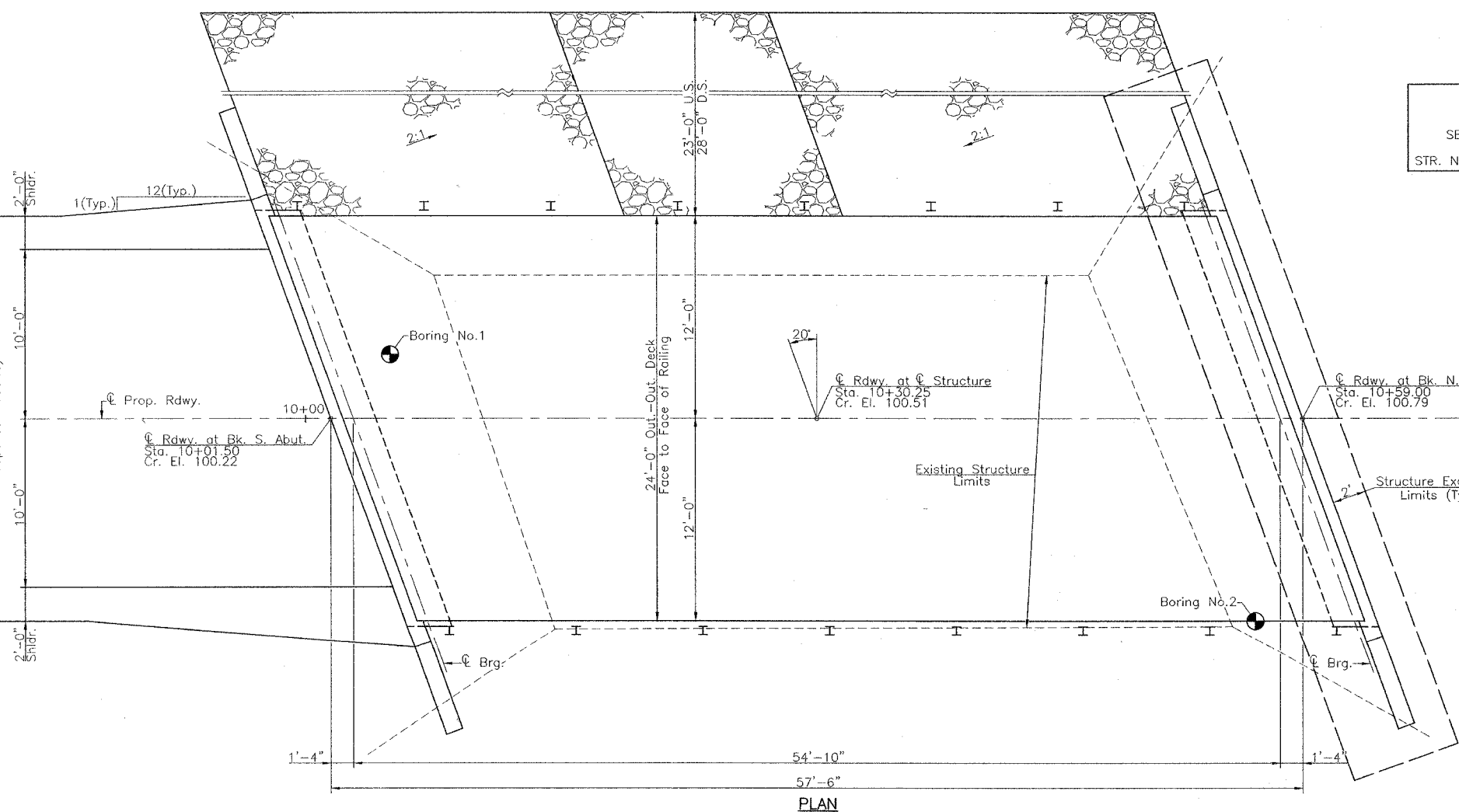
TOTAL BILL OF MATERIAL

Item	Super	Sub	Total
Channel Excavation			219
Stone Riprap, Class A4			303
Filter Fabric For Use With Riprap			488
Removal of Existing Structures			1
Structure Excavation			138
Concrete Structures		28.1	28.1
Precast Prestressed Concrete Deck Beams (27" Depth)	1346		1346
Reinforcement Bars		2665	2665
Steel Railing Type S1		115	115
Furnishing Steel Piles HP 10x42		210	210
Driving Steel Piles		210	210
Test Pile, Steel HP 10x42		1	1
Concrete Encasement		2.2	2.2
Name Plates	1		1

WATERWAY INFORMATION

Flood		Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head-Ft.		Headwater El.	
Design	Base			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
15	100	795	1341	198	264	96.7	0.0	0.0	96.7	96.7
				233	322	97.9	0.6	0.1	98.5	98.0
Exist. Overtop. Greater than 500 years										
Prop. Overtop. Greater than 500 years										
Max. Calc.	500	1812	233	328		98.5	1.4	0.5	99.9	99.0

Drainage Area = 2.91 Sq. Miles Low Grade Elev. = 99.68 @ Sta. 4+00



MUD CREEK
BUILT 200 BY
SHELBY COUNTY
SECTION 02-19114-00-BR
STA. 10+30.25
STR. NO. 087-3536 LOADING HS20
NAME PLATE
(Standard 515001)

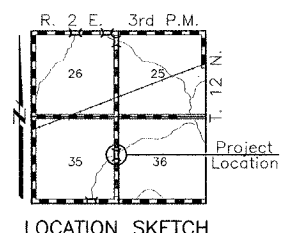
FIELD UNITS
fc = 1400 psi
vc = 56.2 psi
fs = 24000 psi
n = 9

DESIGN STRESSES
PRECAST PRESTRESSED UNITS
f'c = 5000 psi
f'ci = 4000 psi
f's = 270000 psi
f'si = 189000 psi
1/2" Strands

GENERAL NOTES
See Proposal for Boring Data.
Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31, M-42, or M-53, Grade 60.
The layout of the riprap slope may be varied to suit conditions in the field as determined by the engineer.
The contractor shall drive one test pile in a permanent location at the South abutment as directed by the Engineer in the field prior to ordering the remainder of piles.

DESIGN SPECIFICATIONS
2002 A.A.S.H.T.O. Specifications with 2003 Interim Specifications.

LOADING HS 20-44



Mark A. Henderson 9/12/2005
Expiration Date 11/30/2006

GENERAL PLAN & ELEVATION
T.R. 112 OVER MUD CREEK
SECTION 02-19114-00-BR
SHELBY COUNTY