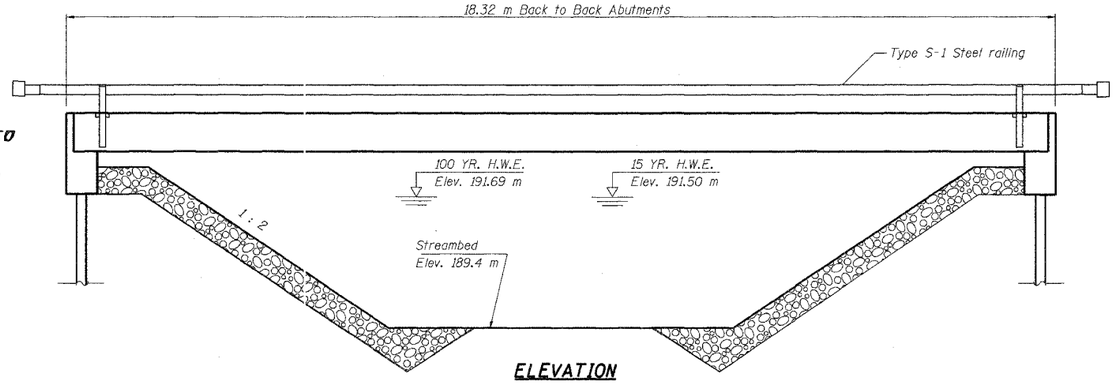
Contract # 91231

RTE. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
408	97-21117-00-BR	SHELBY	12	4

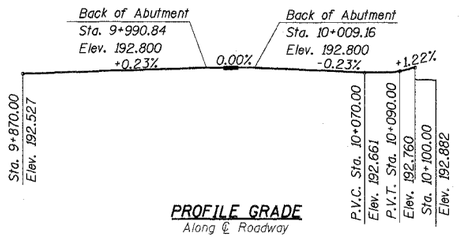
Bench Mark: P.K. Nail on S.W. Wing Pole
Elev. 192.763

Existing Structure: 4.750m Wide x 6.706m Long
Consists of a deck of Timber Planks and Runners on Steel I-Beams with Closed Timber Abutments and Wingwalls.
EXISTING STRUCTURE NO 087-3250

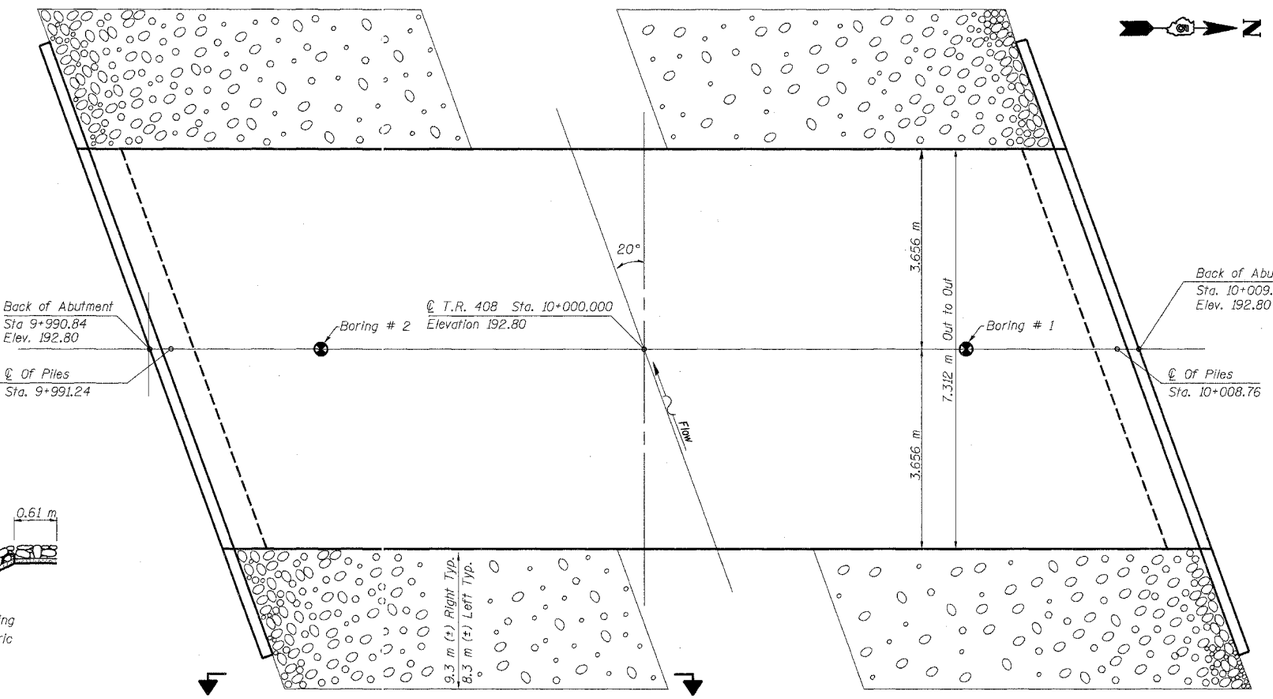
Existing Structure to be removed and replaced with a Single Span Simple Beam Structure 7.312m Wide x 18.32m Long with Precast Prestressed Concrete Deck Beams.



ELEVATION



PROFILE GRADE
Along ℄ Roadway

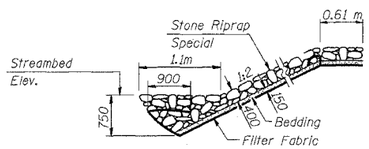


PLAN VIEW

Note: Placement of riprap shall continue out to proposed R.O.W. line within the limits shown on Sheet 3.

HENRY CREEK
BUILT 200_ BY
SHELBY COUNTY
SEC. 97-21117-00-BR
STATION 10+000.000
S.N. 087-3504
LOADING MS-18

NAME PLATE
See Std.-515001



SECTION A-A

GENERAL NOTES

The contractor shall drive one Metal Shell test pile in a permanent location at the South Abutment, as directed by the Engineer before ordering the remainder of the piles.

Layout of the riprap may be varied in the field as directed by the Engineer.

See proposal booklet for boring data.

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Structures	Cu. M.	14.2
Reinforcement Bars	Kg.	1,446
Furnishing Metal Pile Shells 305 MM	M.	35
Driving and Filling Shells	M.	35
Test Pile Metal Shells	Each	1
Concrete Encasement	Cu. M.	2.7
Precast Prestressed Deck Beams (686 Depth)	Sq. M.	130.8
Name Plates	Each	1
Steel Railing, Type S-1	M.	36
Stone Dumped Riprap Class A4	M TON	295
Filter Fabric For Use with Riprap	Sq. M.	443

WATERWAY INFORMATION TABLE

Drainage Area: 6.73 Sq. Km Low Grade Elev.: 191.84 (E) @ Sta.: 9+970

Flood	Freq. (Year)	Q (cms)	Opening (SM) Exist.	Opening (SM) Prop.	NAT. H.W.E.	Head (m) Exist.	Head (m) Prop.	Headwater Elev. Exist.	Headwater Elev. Prop.
Design	15	14.70	9.40	17.80	191.50	0.00	0.00	191.50	191.50
Base	100	23.5	10.30	20.20	191.68	0.12	0.00	191.81	191.69

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 Specifications for Road and Bridge Design."

German Roncancio 4-10-03
ILLINOIS STRUCTURAL NO. 3091 EXPIRES 11-30-04

GERMAN RONCANCIO
3091
STRUCTURAL ENGINEER
OF
SPRINGFIELD
ILLINOIS

DESIGN SPECIFICATIONS

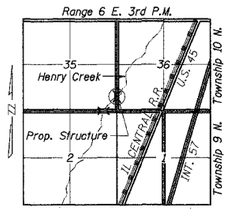
AASHTO 1996 and 1997, Interims.

LOADING MS 18

Allow 1.2 Kn/m² For Future Wearing Surface

DESIGN STRESSES

f'c = 35 MPa (Prestressed Beams)
f'ci = 28 MPa (Prestressed Beams)
fc = 24 MPa (Concrete Structures)
f's = 1862 MPa (Prestressed Strands)
f'si = 1300 MPa (Prestressed Strands)
fs = 160 MPa (Reinf. Bars-Field Units)
fy = 400 MPa (Reinf. Bars-Precast Units)
n = (Concrete Structures)



LOCATION SKETCH

GENERAL PLAN
T.R. 408
SHELBY COUNTY
SECTION 97-21117-00-BR
STRUCTURE NO. 087-3504
STA 10+000.000

RC ENGINEERS, LTD.
CONSULTING ENGINEERS

DESIGNED: G.R. DRAWN: J.T.C.
CHECKED: CHECKED: D.H.F.

April 8, 2003
g:/rabbit/97-70/bridges/gen-plan.dgn

c:\temp\gen-plan.dgn Apr. 08, 2003 13:30:17