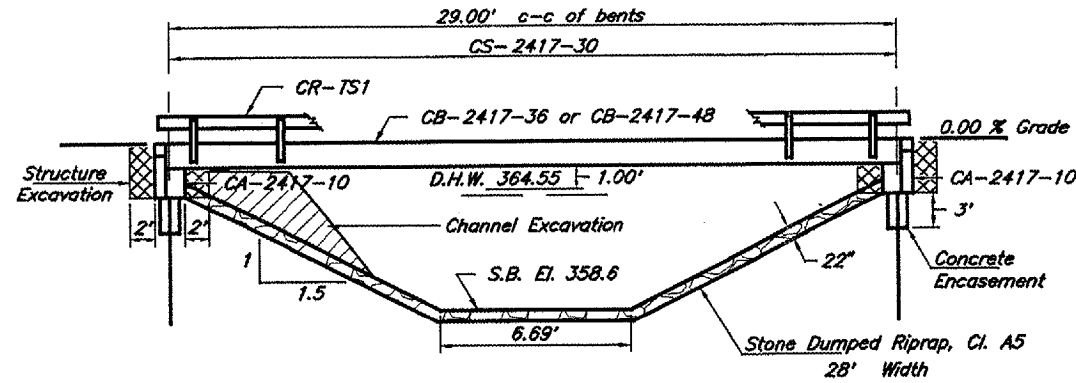


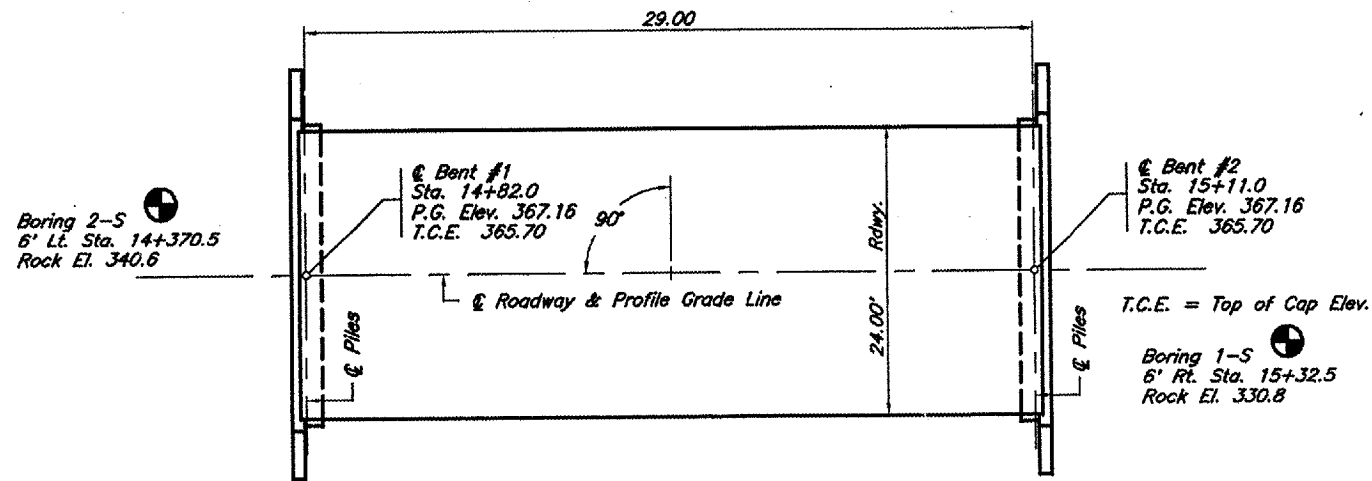
B.M. - RR spike in Power Pole
15' Lt. Station 14+48
Assumed Elev. 365.00

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
TR 22	05-01214-00-BR	JOHNSON	11	3
PROJECT NO. BROS-087(128)			CONTRACT NO. 99244	



ELEVATION

Existing Structure - Timber deck on steel stringers with one closed concrete and one spill-through pile bent abutment 14.3' W x 23.0' L



PLAN

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Removal of Existing Structures	Each				1
Concrete Structures	Cu. Yds.			16.6	16.6
P.P. Conc. Dk. Bm. 17" Dp.	Sq. Ft.	720			720
Steel Railing, Type S1	Foot	60			60
Reinforcement Bars	Pound			2220	2220
Furnishing Steel Piles HP10X42	Foot			208	208
Driving Piles	Foot			208	208
Test Pile Steel HP10X42	Each			1	1
Concrete Encasement	Cu. Yds.			2.1	2.1
Name Plates	Each			1	1
Structure Excavation	Cu. Yds.			29	29
Channel Excavation	Cu. Yds.			11	11
Stone Dumped Riprap, Class A5	Tons			130	130

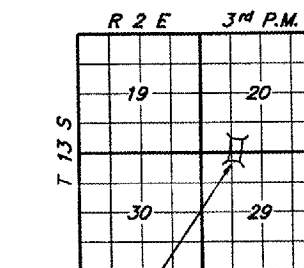
PILE DATA (2-ABUTS.)

Type & Size : HP10X42
Nominal Required Bearing : 333 kips
Allowable Resistance Available : Refusal
Estimated Length : 28 Feet Bent #1, 32 Feet Bent #2
Number Required : 8 (Includes 1 Test Pile located in Bent #2)

TRIBUTARY TO LITTLE BLACK SLOUGH
SEC. 05-01214-00-BR BUILT 20
COUNTY UNIT ROAD DISTRICT
JOHNSON COUNTY
LOADING HS20
STR. NO. 044-3128

LETTERING FOR NAME PLATE

Locate Name Plate at southeast Corner of Bridge (See Std. CN)



LOCATION SKETCH

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications - 17th ed.

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 15.0%
Site Coefficient (S) = 1.0

WATERWAY INFORMATION

Flood		Q		Opening Sq. Ft.		Natural Head-Ft.		Headwater El.	
Yr.	C.F.S.	Exist.	Prop.	H.W.E.	Exist.	Prop.	Exist.	Prop.	
Design	15	629	83.0	92.9	364.55	0.00	0.00	364.55	364.55
Base	100	1025	83.0*	116.1	365.45	0.01	0.00	365.46	365.45
Overtopping	±227	1224		118.8	365.61		1.54		364.15
Max. Calc.	500								

* Over road flow Exist. Q(100) 216.2 Sq. Ft.

Note: No over road flow was used in proposed calculations to allow for future raising of the approaches.

GENERAL PLAN & ELEVATION
TOWNSHIP ROUTE 22
TRIBUTARY TO LITTLE BLACK SLOUGH
SECTION 05-01214-00-BR
JOHNSON COUNTY
STATION 14+96.50