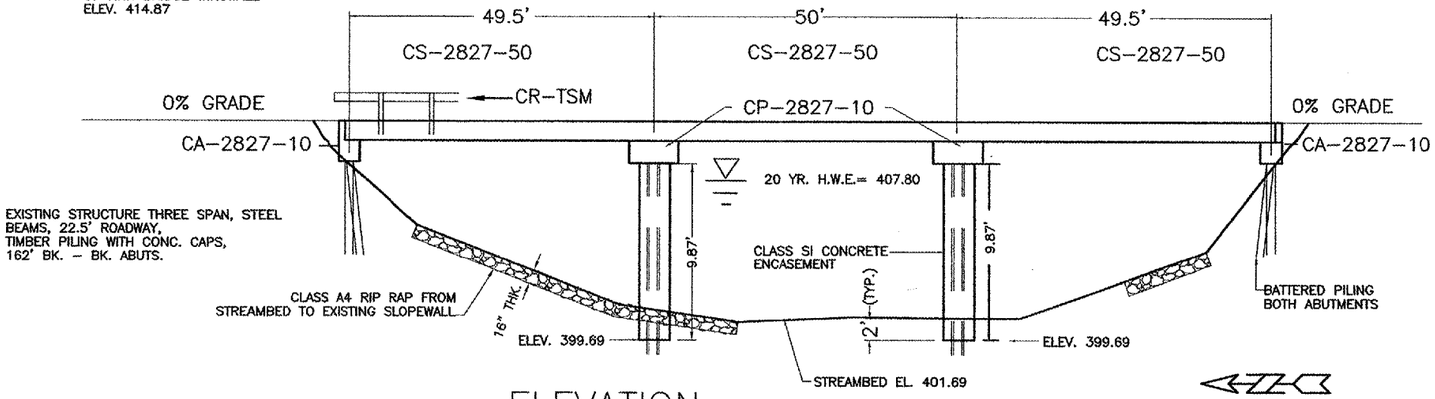
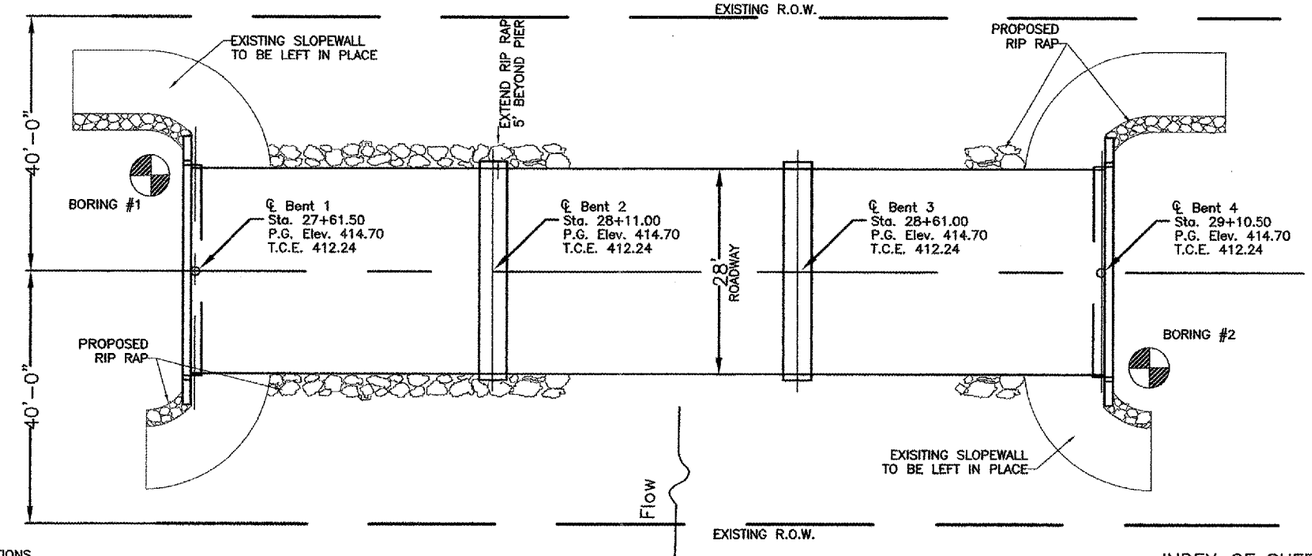
ROUTE	COUNTY	SECTION	SHEET/OF
CH 19	RANDOLPH	05-00039-04-BR	5/6

CONTRACT NO. 97279

B.M.#1 – CHISELED SQUARE ON TOP OF N.W. BRIDGE WINGWALL ELEV. 414.87



ELEVATION



PLAN

GENERAL NOTES

1. Class SI Concrete shall be used throughout except in the deck beams.
2. See the special provisions for boring logs.
3. A Corrosion inhibitor, as covered in the Special Provisions, shall be used in the concrete for the Precast Prestressed Concrete Deck Beams.
4. Reinforcement bars shall conform to the requirements of AASHTO M-31, M-42 or M-53 Grade 60.
5. The top surface of the beams shall be finished in accordance with Article 504.06 of the Standard Specification except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners, and the top edge of keys shall be rounded or chamfered a minimum of 1/4".
6. In addition to all other requirements of section 512 of the Standard Specifications, splices for H-piles shall develop the full capacity of the steel's cross sectional area of the pile for tension, shear and bending forces. One approved method of acheiving this requirement is full penetration butt welding of the entire cross section. Other types of splices meeting the full capacity requirements may be allowed subject to the approval of the Engineer. Any proposal by the contractor to use an alternate splice method must include adequate documentation demonstrating that the full tension, shear and bending capacities will be met. Appropriate welder qualifications will be required for the positions and processed used in splicing all piles. Nondestructive testing of completed welds will be limited to visual inspection.
7. The Article or Section numbers referencing the Standard Specifications for Road and Bridge Construction as shown on the standard bridge plan sheets included with the contract plans should be interpreted as referring to the current edition of the Standard Specification (Adopted January 1, 2002) as shown in the "Article/Section No. Reference Table".

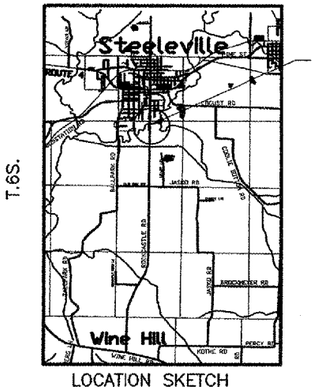
ARTICLE/SECTION NO. REFERENCE TABLE

Previous No.	Current No.
504.06	504.06
505.04	505.04
706.05	1006.05
706.32	1006.32
760.07	1060.07

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub Struct. Piers	Sub Struct. Abuts.	Total
Removal of Existing Structures	L Sum				1
Bit Conc Surf Cse, Super, Mix C, N50	Tons	53			53
Waterproofing Membrane System	Sq Yd	467			467
Concrete Structures	Cu Yd		17.2	20.8	38
P.P.Conc. Deck Beams 27" DP	Sq Ft	4200			4200
Steel Bridge Rail, Type SM	Foot	300			300
Reinforcement Bars	Pound		1760	2580	4340
Test Piles HP 10X42	Each			2	2
Furnishing Steel Piles HP 10X42	Foot		1015	576	1591
Driving Steel Piles	Foot		1015	576	1591
Name Plates	Each	1			1
Class SI Conc Encasement	Cu Yd		11.8	2.6	14.4
Stone Dumped Riprap CI A4	Ton		141	63	204

R.5W. 3rd P.M.



LOCATION SKETCH

INDEX OF SHEETS

DESIGN SPECIFICATIONS
1996 AASHTO
HS 20 LOADING
LOAD FACTOR DESIGN

SEISMIC DATA
Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.135g
Site Coefficient (S) = 1.5

PILE DATA (2 ABUTS, 2 PIERS)
HP 10X42 PILING
CAPACITY: REFUSAL
ESTIMATED LENGTH
74 FT BENT NO. 1
73 FT BENT NO. 2
72 FT BENT NO. 3
70 FT BENT NO. 4

NO. REQ'D: 5 EACH ABUTMENT
7 EACH PIER
TOTAL: 24

(INCLUDES 1 TEST PILE IN EACH ABUTMENT)

COX CREEK
BUILT 2006 BY
RANDOLPH COUNTY
SEC 05-00039-04-BR
STATION 28+36
STR NO 079-3194 LOADING HS20

LETTERING FOR NAME PLATE

LOCATE THE NAME PLATE AT THE NORTHWEST CORNER OF BRIDGE (SEE STANDARD CN)

WATERWAY INFORMATION

DRAINAGE AREA=46.7 SQ MI LOW GRADE ELEVATION 414.70 AT STATION 28+36

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Natural H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater Elev. Exist.	Headwater Elev. Prop.
DESIGN	20	4393	605	605	407.80	0.79	.079	408.59	408.59
BASE	100	5794	675	675	408.37	1.05	1.05	409.42	409.42
Max Calc	500								

These Plans were prepared by me or a member of my staff working under my direct supervision

Michael Riebeling 3/09/06
County Engineer Date

MICHAEL RIEBELING (Seal)
062-044850
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS
11/30/2007
Date of Expiration

GENERAL PLAN & ELEVATION

COUNTY HIGHWAY 19
OVER COX CREEK

SECTION 05-00039-04-BR
RANDOLPH COUNTY
STATION 28+36