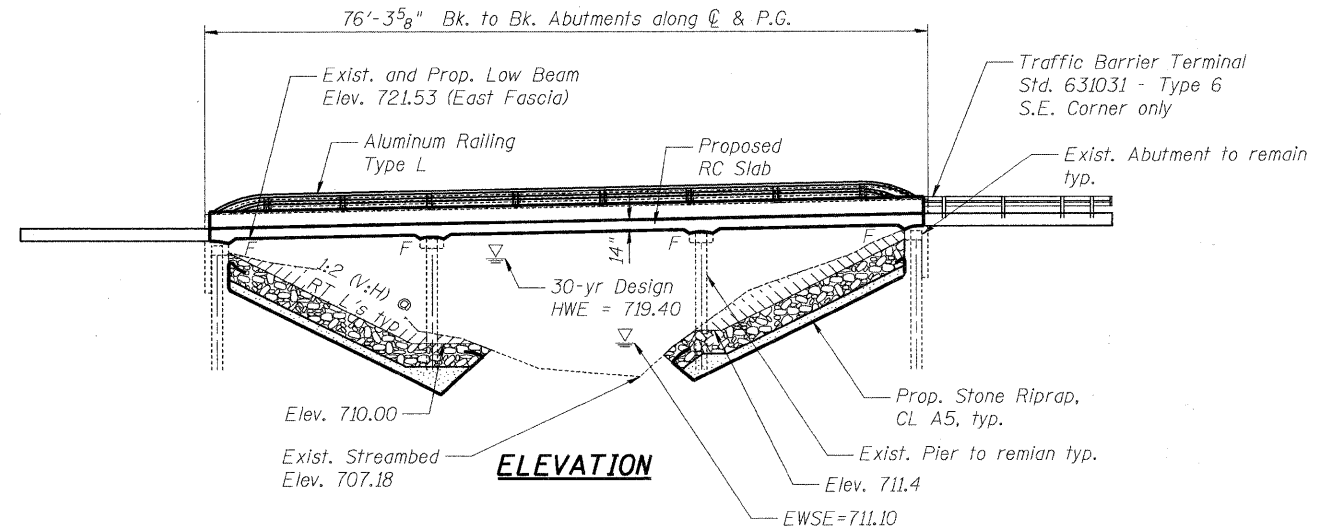


Bench Marks:
 BM 1: Railroad spike in north face of wood light pole located at the southwest corner of the South Central bridge over Kent Creek. Elevation = 726.59 NAVD88
 BM 2: Railroad spike in the south face of wood power pole located at the northeast corner of South Central Avenue and Preston Street. Elevation = 719.84 NAVD88

Existing Structure: S.N. 101-6124, originally built in 1975. The existing structure consists of a 3 span continuous reinforced concrete slab supported on pile bent piers and abutments. The back to back abutments measures 76'-3 5/8" along the C & P.G. and the out to out of deck is 39'-0". The Superstructure is to be removed and replaced. The Substructure is to remain. Traffic is to be detoured during construction.

No Salvage except for undamaged rails from the existing Aluminum Railings. Salvaged rails shall remain the property of the City of Rockford. Cost shall be included in the Removal of Existing Superstructures.



LOADING HS 20-44
 Allow 25#/#sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
 2002 AASHTO Standard Specifications

DESIGN STRESSES
 FIELD UNITS

f'c = 3,500 psi
 fy = 60,000 psi (Reinforcement)

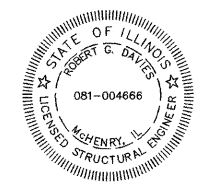
SEISMIC DATA

Seismic Performance Category (SPC) = A
 Bedrock Acceleration Coefficient (A) = 4%g
 Site Coefficient (S) = 1.0

CURVE DATA

Central Avenue Curve 1	Central Avenue Curve 2
D = 20°10'28"	D = 23°23'10"
T = 46.35'	T = 71.19'
L = 91.89'	L = 138.56'
E = 3.76'	E = 10.13'
R = 284.00'	R = 245.00'
S.E. =	S.E. =
P.C. = Sta. 7+76.53	P.C. = Sta. 8+68.42
P.T. = Sta. 8+68.42	P.T. = Sta. 10+06.99
P.I. = Sta. 8+22.88	P.I. = Sta. 9+39.61

See S-2 for offset sketch



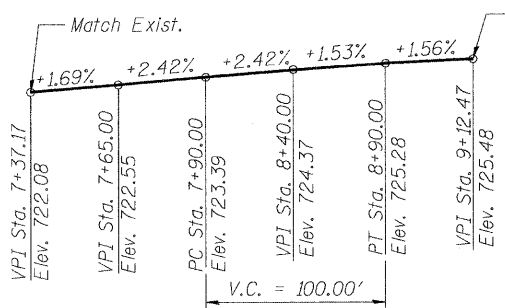
To the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Mark B. Davis 1/26/2010
 Structural Engineer Expires: 11/30/2010
 SEC Group, Inc.

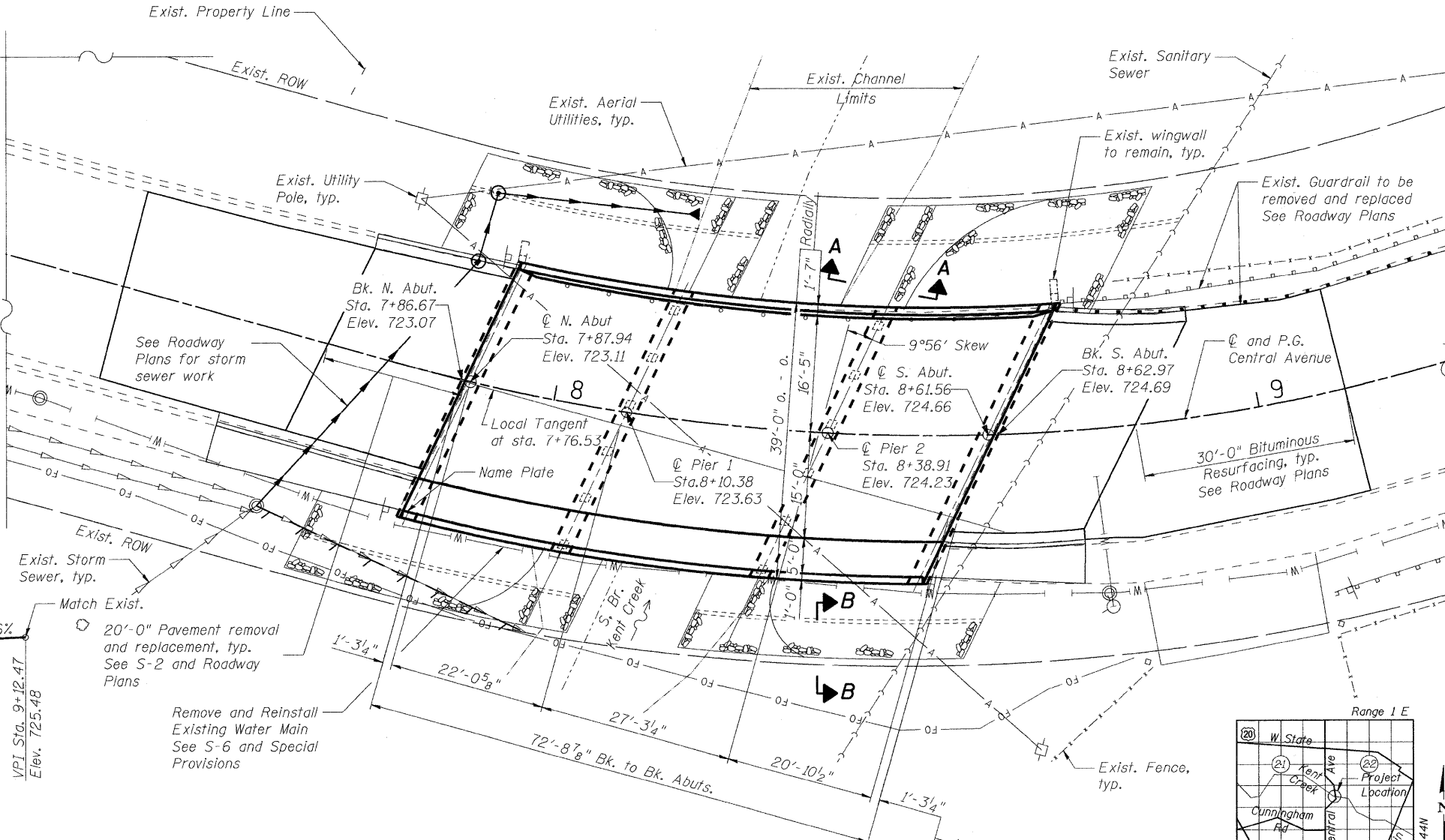
KENT CREEK
 RE-BUILT 2010 BY
 CITY OF ROCKFORD
 SEC. 09-00557-00-BR
 F.A.U. RT. 5102 STA. 8+25.00
 STR. NO. 101-6124 LOADING HS20

NAME PLATE
 See Std. 515001

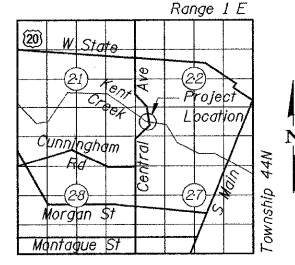
Existing Name Plate shall be cleaned and relocated next to the new Name Plate. Cost included with Name Plates



PROFILE GRADE
 Central Avenue



PLAN



LOCATION SKETCH

GENERAL PLAN AND ELEVATION

CENTRAL AVENUE (FAU ROUTE 5102)
OVER KENT CREEK
SECTION NO. 09-00557-00-BR
CITY OF ROCKFORD
WINNEBAGO COUNTY
STRUCTURE NO. 101-6124

DATE: 1/26/10

Drainage Area = 15.6 Sq. mi. Low Grade Elev. 722.72 @ Sta. 7+90.68									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10				719.40				
Base	30	1600	841	841	720.70				
Overtopping	100								
Max. Calc.	500				721.40				

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	RGD

FILE NAME: 090026-ape.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: standard-trans.tbl 1/26/2010

SEC GROUP, INC.
 An HR Green Company
 420 N. Front Street, McHenry, IL 60050
 815.385.1778 F. 815.385.1781
 www.secgroupinc.com
 • McHenry, IL • Yorkville, IL • New Lenox, IL • Chicago, IL

SHEET NO. S-1	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S-9 SHEETS	5102	09-00557-00-BR	WINNEAGO	18	8
CONTRACT NO.				85508	
FED. ROAD DIST. NO. 2 ILLINOIS				FED. AID PROJECT BHM 5099 (081)	