

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5102	09-00557-00-BR	Winnebago	18	1
FED. ROAD DIST. NO. 2	ILLINOIS	CONTRACT NO.	85508	

INDEX OF SHEETS

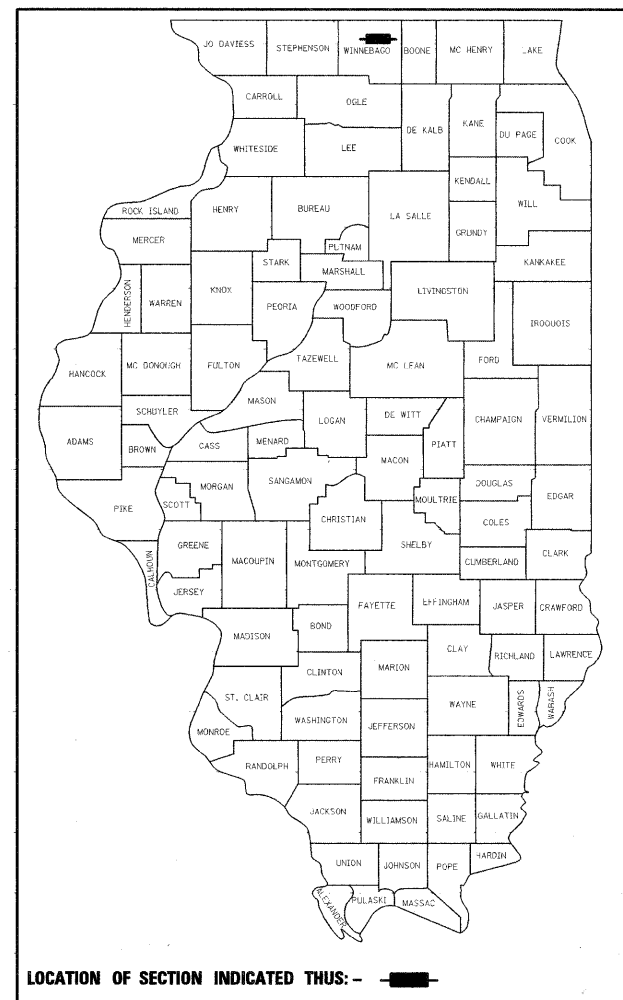
SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES & SPECIFICATIONS
3	SUMMARY OF QUANTITIES
4	TYPICAL SECTIONS
5	PLAN AND PROFILE
6	TEMPORARY DETOUR PLAN
7	STRIPING, EROSION CONTROL & RESTORATION PLAN
8-16	BRIDGE PLANS
17-18	CROSS SECTIONS

STATE STANDARDS

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-05	TEMPORARY EROSION CONTROL SYSTEM
515001-03	NAME PLATE FOR BRIDGES
542301-02	PRECAST REINFORCED CONCRETE FLARED END SECTION
602001-01	CATCH BASIN TYPE A
602401-02	MANHOLE TYPE A
604001-03	FRAME AND LIDS TYPE 1
604006-04	FRAME AND GRATE TYPE 3
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
630001-08	STEEL PLATE BEAM GUARDRAIL
630301-05	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-08	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701006-03	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5M) TO 24" (600mm) FROM PAVEMENT EDGE
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS AND MARKERS)
780001-02	TYPICAL PAVEMENT MARKINGS
BLR 21-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
BLR 22-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

CITY OF ROCKFORD PLANS FOR PROPOSED FEDERAL AID HIGHWAY

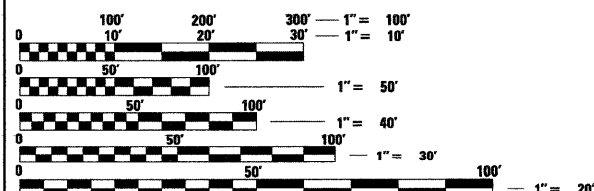
**FAU ROUTE 5102
CENTRAL AVENUE
OVER THE SOUTH BRANCH OF KENT CREEK
SECTION 09-00557-00-BR
BRIDGE SUPERSTRUCTURE REPLACEMENT
PROJECT NO. BHM-5099 (081)
S.N. 101-6124
WINNEBAGO COUNTY
C-92-097-09**



STRUCTURE INFORMATION:

EXISTING SN: 101-6124:
EXISTING THREE SPAN STRUCTURE CONSISTS OF CONTINUOUS REINFORCED CONCRETE SLAB WITH AN OUT-TO-OUT WIDTH OF 39'-0" AND A TOTAL LENGTH OF 76'-3 5/8" BK. TO BK. ABUTMENTS WITH A 9 DEGREE 56 MINUTE SKEW. THE SUBSTRUCTURES CONSIST OF PILE BENT PIERS AND ABUTMENTS. SUPERSTRUCTURE TO BE REMOVED AS SHOWN. SALVAGED EXISTING ALUMINUM RAILINGS TO REMAIN PROPERTY OF THE CITY.

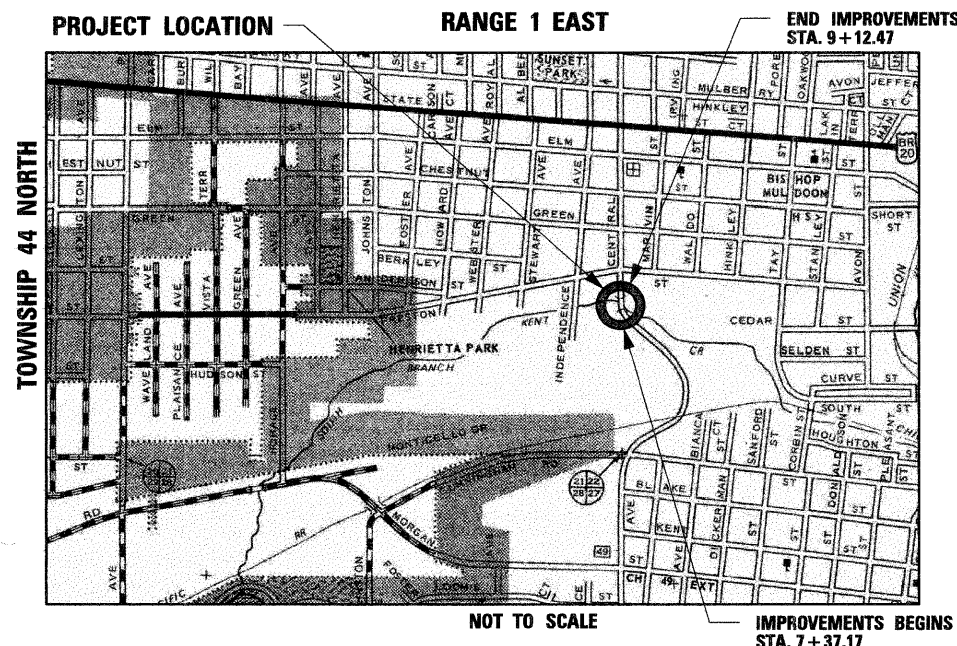
PROPOSED WORK INCLUDES PLACING A REINFORCED CONCRETE SLAB SUPERSTRUCTURE AS SHOWN.



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

**J.U.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123**

CONTRACT NO. 85508



ROCKFORD TOWNSHIP
GROSS LENGTH OF IMPROVEMENT = 176 FT. = 0.03 MILES
NET LENGTH OF IMPROVEMENT = 176 FT. = 0.03 MILES

**FUNCTIONAL CLASSIFICATION
MINOR ARTERIAL (URBAN)**

**DESIGN SPEED
CENTRAL AVE.: 35 MPH**

**SPEED LIMIT
CENTRAL AVE.: 30 MPH**

**TRAFFIC DATA:
CENTRAL AVE: ADT=5,800 (2008)
ADT=7,200 (2030)
4% TRUCKS**

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OF THE STATE OF ILLINOIS**

CITY OF ROCKFORD

APPROVED January 27, 2010 (DATE)
Bob T. Moberg
CITY OF ROCKFORD, CITY ENGINEER

PASSED February 9, 2010 (DATE)
Jim L. Plon
DISTRICT 2 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW February 9, 2010 (DATE)
Kevin M. Arft
DEPUTY DIRECTOR OF HIGHWAYS, REGION 2 ENGINEER

ENGINEER AND SURVEYOR:

SEC GROUP INC.
420 NORTH FRONT STREET
MCHENRY, ILLINOIS 60050-2136
(815) 385-1778
CONTACT:
BOB DAVIES, S.E., P.E. - STRUCTURAL ENGINEER
KEVIN M. ARFT, P.E. - PROJECT ENGINEER

STRUCTURAL ENGINEER'S SIGN & SEAL

Robert G. Davies
ROBERT G. DAVIES, S.E., P.E.
DATE 1-26-2010
EXPIRES 11/30/2010



PROFESSIONAL ENGINEER'S SIGN & SEAL

Kevin M. Arft
KEVIN M. ARFT, P.E.
DATE 01-26-2010
EXPIRES 11-30-2011



FEDERAL AID DESIGN ENGINEER, LAURA CONNOLLY (815) 284-2271

GENERAL NOTES

1. REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL, AND POROUS GRANULAR EMBANKMENT SUBGRADE HAS BEEN ADDED FOR USE IF UNSUITABLE MATERIAL IS ENCOUNTERED IN THE FIELD, AS DETERMINED BY THE ENGINEER. IF UNSUITABLE AND/OR UNSTABLE MATERIALS IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO COMPENSATION WILL BE DUE THE CONTRACTOR.

2. FORTY EIGHT HOURS BEFORE STARTING EXCAVATION THE CONTRACTOR WILL CALL J.U.L.I.E. (1-800-892-0123) TO HAVE THE LOCATION OF EXISTING UTILITIES STAKED.

3. THE CONTRACTOR SHALL CONTACT THE CITY OF ROCKFORD AT LEAST 72 HOURS IN ADVANCE OF BEGINNING ANY WORK ON CENTRAL AVENUE.

4. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON CITY PROPERTY WITHOUT WRITTEN PERMISSION FROM THE CITY OF ROCKFORD.

5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IN ADDITION, THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADE STAKES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT SAME TO THE ENGINEER BEFORE DOING ANY WORK, OTHERWISE THE CONTRACTOR ASSUMES FULL RESPONSIBILITY. IN THE EVENT OF DISAGREEMENT BETWEEN THE CONSTRUCTION PLANS, STANDARD SPECIFICATIONS AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSIONS OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.

6. THE LENGTH OF "GUARDRAIL REMOVAL" INCLUDES THE LENGTH OF THE TRAFFIC BARRIER TERMINALS.

7. THE WORK UNDER THIS CONTRACT SHALL CONFORM TO ALL REGULATIONS GIVEN IN THE ARMY CORPS OF ENGINEERS PERMIT ISSUED FOR THE PROJECT.

8. REMOVAL AND RELOCATION OF EXISTING SIGNS AND EXISTING TRAFFIC CONTROL SIGNS WILL NOT BE PAID SEPARATELY BUT WILL BE INCLUDED IN THE UNIT COST OF THE PAY ITEMS PURSUANT TO ARTICLE 107 OF THE "STANDARD SPECIFICATIONS"

9. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT, EXCEPT FOR PERIODS OF SHORT DURATION AS DETERMINED BY THE ENGINEER.

10. THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

11. EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

12. OFFSET LOCATIONS GIVEN IN THE PLANS FOR STRUCTURES, EDGE OF PAVEMENT, ETC. ARE FROM THE ROADWAY CENTERLINE UNLESS NOTED OTHERWISE.

13. ALL ELEVATIONS REFERRING TO U.S.C.S. MEAN SEA LEVEL DATUM.

14. ADDITIONAL SHOULDER WIDENING INDICATED IN HIGHWAY STANDARD 630301-05 WILL NOT BE REQUIRED

15. THE EXISTING BRIDGE DESIGN PLANS ARE AVAILABLE AT THE CITY OF ROCKFORD.

16. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND AND SURFACE UTILITIES EVEN THOUGH THEY MIGHT NOT BE SHOWN ON THE PLANS. ANY UTILITY PROPERTY DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE.

18. ANY LOOSE MATERIAL DEPOSITED IN THE FLOWLINES OF DRAINAGE STRUCTURES WHICH OBSTRUCT THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF THE IMPROVEMENT, ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

19. WHERE NEW WORK MEETS EXISTING FEATURES TO REMAIN, THE CONTRACTOR SHALL FIELD CHECK ALL DIMENSIONS AND ELEVATIONS PRIOR TO PROCEEDING WITH CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

20. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

21. SAW CUTTING WILL BE REQUIRED FOR ALL REMOVAL ITEMS LISTED IN SECTION 440 OF THE STANDARD SPECIFICATIONS, SHOWN IN THE PLANS, AND AS DIRECTED BY THE ENGINEER. THE COST OF SAW CUTTING WILL BE INCLUDED IN CONTRACT UNIT BID PRICES FOR THE ITEMS BEING REMOVED.

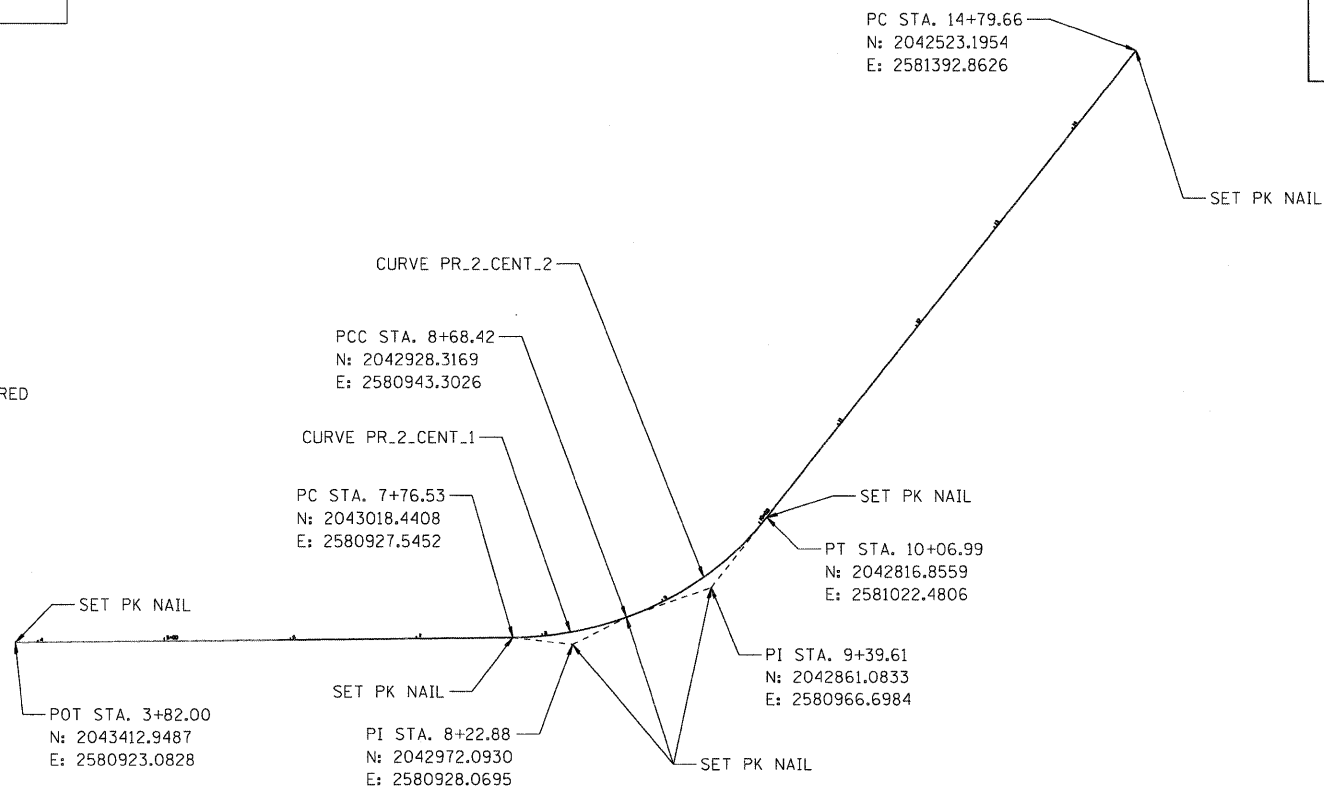
22. THE COST FOR FURNISHING AND INSTALLING REFLECTOR MARKERS IN ACCORDANCE WITH HIGHWAY STANDARDS 635006 AND 635011 IS INCLUDED IN THE COST OF TRAFFIC BARRIER TERMINALS, OF THE TYPE SPECIFIED.

SYMBOL LEGEND

	EXISTING	PROPOSED
SANITARY MANHOLE	⊙	⊙
STORM MANHOLE	⊙	⊙
STORM CATCH BASIN	⊙	⊙
INLET	□	■
FLARED END SECTION	▽	▽
VALVE VAULT	⊙	⊙
FIRE HYDRANT	⋄	⋄
LIGHT POLE	⋆	⋆
STREET SIGN	+	+
REGULATORY SIGN	+	+
UTILITY POLE	⊙	⊙
UTILITY BOX	⊙	⊙
MAILBOX	⊙	⊙
WELL	⊙	⊙
SANITARY SEWER	—>	—>
STORM SEWER	—>	—>
CULVERT	-----	=====
WATER MAIN	—	—
WATER MAIN ENCASEMENT	—	—
STORM UNDERDRAIN	—	—
ELECTRIC LINE	—	—
TELEPHONE LINE	—	—
GAS LINE	—	—
CABLE TV LINE	—	—
TREELINE	⊙	⊙
TREE	⊙	⊙
FENCE	—	—
EROSION CONTROL FENCE	—	—
DITCH CHECK	—	—
DRAINAGE ARROW	→	→
100 YEAR OVERFLOW	→	→

UTILITY CONTACTS

CITY OF ROCKFORD WATER DIVISION	GREG CASSARO	(815) 987-3084
ROCK RIVER WATER RECLAMATION DISTRICT	MIKE OLSON	(815) 387-7663
COMCAST	MICHAEL OWENS	(815) 509-7876
COMED	MIKE LENOX	(815) 490-2869
AT&T	STEVEN JONES	(815) 394-7270
NICOR	CHRIS WINTERS	(815) 455-0271



ALIGNMENT DETAIL
SEE PLAN AND PROFILE FOR
ADDITIONAL CURVE INFORMATION

STANDARD ABBREVIATIONS

B-B - BACK TO BACK OF CURB
B.C. - BACK OF CURB
B.O.C. - BACK OF CURB
B.S.L. - BUILDING SETBACK LINE
C.B. - STORM CATCH BASIN
C.E. - COMMONWEALTH EDISON CO.
D.E. - DRAINAGE EASEMENT
E-E - EDGE TO EDGE OF PAVEMENT
E.O.P. - EDGE OF PAVEMENT
E.O.S. - EDGE OF SHOULDER
E.P. - EDGE OF PAVEMENT
E.S. - EDGE OF SHOULDER
F.E.S. - FLARED END SECTION
I.B.T. - ILLINOIS BELL TELEPHONE CO.
L.E. - LANDSCAPE EASEMENT
M.H. - MANHOLE (TYPE SPECIFIED ON PLANS)
R.O.W. - RIGHT OF WAY
T.B.F. - TRENCH BACKFILL
T.C. - TOP OF CURB
T.C.E. - TEMPORARY CONSTRUCTION EASEMENT
T.O.B. - TOP OF BERM
T.O.C. - TOP OF CURB
U.E. - UTILITY EASEMENT

COMPANY NAME: SEC GROUP, INC.
PROJECT CONTACT: Robert C. Davies
CLIENT: City of Rockford
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CITY OF ROCKFORD

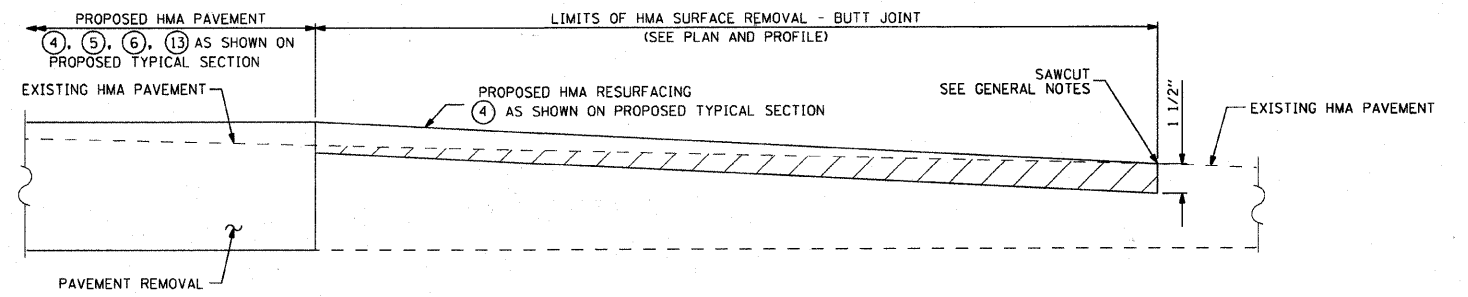
CENTRAL AVENUE OVER THE SOUTH BRANCH OF KENT CREEK
GENERAL NOTES AND SPECIFICATIONS

F.A.U. RTE. 5102	SECTION 09-00557-00-BR	COUNTY Winnebago	TOTAL SHEETS 18	SHEET NO. 2
CONTRACT NO. 85508			FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT	

SCALE: NTS SHEET NO. 1 OF SHEETS STA. TO STA.

SUMMARY OF QUANTITIES			URBAN CONSTRUCTION TYPE CODE		
CODE NUMBER	PAY ITEMS	UNIT	TOTAL QUANTITY	ROADWAY	BRIDGE
Δ 20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU. YD.	44.4	44.4	---
Δ 20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU. YD.	32.6	---	32.6
Δ 20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU. YD.	44.4	44.4	---
21101615	TOPSOIL FURNISH AND PLACE, 4"	SO. YD.	316	316	---
25000210	SEEDING CLASS 2A	ACRE	0.10	0.10	---
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	9	9	---
25000500	PHOSPHOROUS FERTILIZER NUTRIENT	POUND	9	9	---
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	9	9	---
25100630	EROSION CONTROL BLANKET	SO. YD.	316	316	---
28000305	TEMPORARY DITCH CHECKS	FOOT	32	32	---
28000400	PERIMETER EROSION BARRIER	FOOT	532	532	---
28100109	STONE RIPRAP CLASS A5	SO. YD.	523	---	523
28200200	FILTER FABRIC	SO. YD.	523	---	523
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B, 4"	SO. YD.	156	156	---
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL.	64	64	---
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO. YD.	192	192	---
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	71	71	---
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	36	36	---
42400200	PORTLAND CEMENT CONCRETE SIDEWALK, 5"	SO. FT.	245	245	---
44000100	PAVEMENT REMOVAL	SO. YD.	127	127	---
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	90	90	---
44000600	SIDEWALK REMOVAL	SO. FT.	245	245	---
50101500	REMOVAL OF EXISTING SUPERSTRUCTURES	EACH	1	---	1
50200100	STRUCTURE EXCAVATION	CU. YD.	32.6	---	32.6
50300255	CONCRETE SUPERSTRUCTURE	CU. YD.	160.4	---	160.4
50300260	BRIDGE DECK GROOVING	SO. YD.	246	---	246
50300300	PROTECTIVE COAT	SO. YD.	363	---	363
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	42,350	---	42,350
* 50900105	ALUMINUM RAILING, TYPE L	FOOT	72	---	72
51500100	NAME PLATES	EACH	1	---	1
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	1	1	---
550A0430	STORM SEWERS, CLASS A, TYPE 2 30"	FOOT	78	78	---
55101400	STORM SEWER REMOVAL 30"	FOOT	42	42	---
60204005	CATCH BASINS, TYPE A, 5' DIAMETER, TYPE 3 FRAME AND GRATE	EACH	1	1	---
60221100	MANHOLE, TYPE A, 5' DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1	---
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	90	90	---
* 63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	125	125	---
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	1	1	---
* Δ 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	1	1	---
Δ 63200310	GUARDRAIL REMOVAL	FOOT	254	254	---
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4	---
67100100	MOBILIZATION	L SUM	1	0.5	0.5
Δ 70101700	TRAFFIC CONTROL & PROTECTION	L SUM	1	1	---
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	800	800	---
* Δ 78201000	TERMINAL MARKER - DIRECT APPLY	EACH	1	1	---
* Δ X5610010	REMOVE AND REINSTALL EXISTING WATER MAIN	FOOT	74	---	74
Δ Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1	---

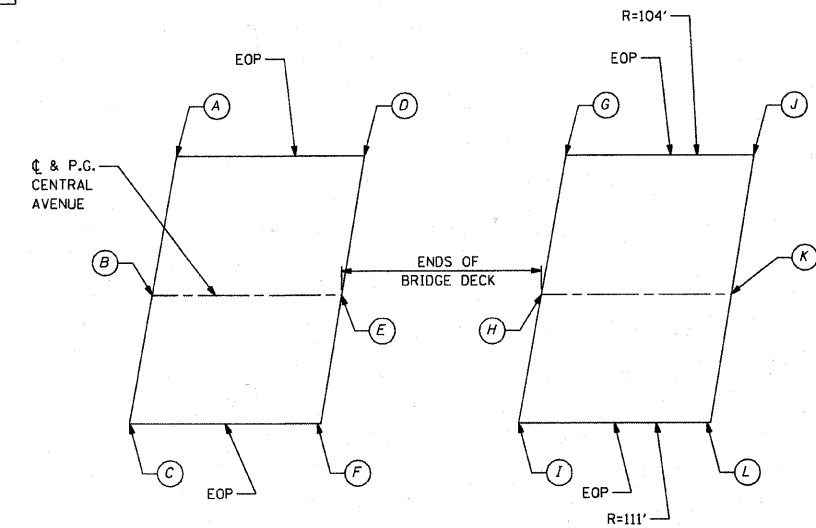
Δ DENOTES SPECIALTY ITEM
 Δ DENOTES SPECIAL PROVISION



HMA SURFACE REMOVAL - BUTT JOINT DETAIL

STORM SEWER TAGS

- 1 EXIST. MH
 STA. = 7+63.53, 24.8' RT
 RIM = 722.96
 INV = 713.96 N (2-EXIST. 18" RCP)
 INV = 713.96 NW (EXIST 15" RCP)
 INV = 713.85 E (PROP. 30" RCP)
 CORE INTO EXIST. MH
 OPENING LEFT FROM REMOVED 30" RCP
 SHALL BE SEALED WITH CLASS SI CONCRETE.
 THE COST FOR CORING PROP. 30" RCP AND
 CLOSING THE OPENING SHALL BE INCLUDED
 IN THE COST OF STORM SEWER 30".
- 2 43 LIN FT SS CL A 2 30" @ 1.50%
- 3 CB TA 5' DIA T3 F&G
 STA. = 7+84.97, 16.8' LT
 RIM = 722.53 (FLOWLINE OF CURB)
 INV. = 713.20 W
 INV. = 713.10 E
- 4 6 LIN FT SS CL A 2 30" @ 1.50%
- 5 MH TA 5' DIA CL
 STA. = 7+85.43, 26.8' LT
 RIM = 722.00
 INV. = 713.01 W
 INV. = 712.91 S
- 6 29 LIN FT SS CL A 2 30" @ 1.41%
- 7 PRC FLAR END SEC 30"
 STA. = 8+15.30, 28.9' LT
 INV. = 712.50



PAVEMENT ELEVATION DETAIL

POINT	STA	EOP OFFSET	PROP. ELEV.
A	7+69.94	14.72' LT	722.37
B	7+67.17	0.00'	722.60
C	7+64.72	13.38' RT	722.65
D	7+90.68	15.44' LT	722.72
E	7+87.17	0.00'	723.09
F	7+84.42	13.50' RT	723.43
G	8+70.99	15.59' LT	724.12
H	8+62.40	0.00'	724.68
I	8+55.79	13.53' RT	725.08
J	8+91.64	13.54' LT	724.50
K	8+82.40	0.00'	725.02
L	8+74.09	13.98' RT	725.30

COMPANY NAME: Seith
 PROJECT CONTACT: Robert G. Davies
 CLIENT: City of Rockford
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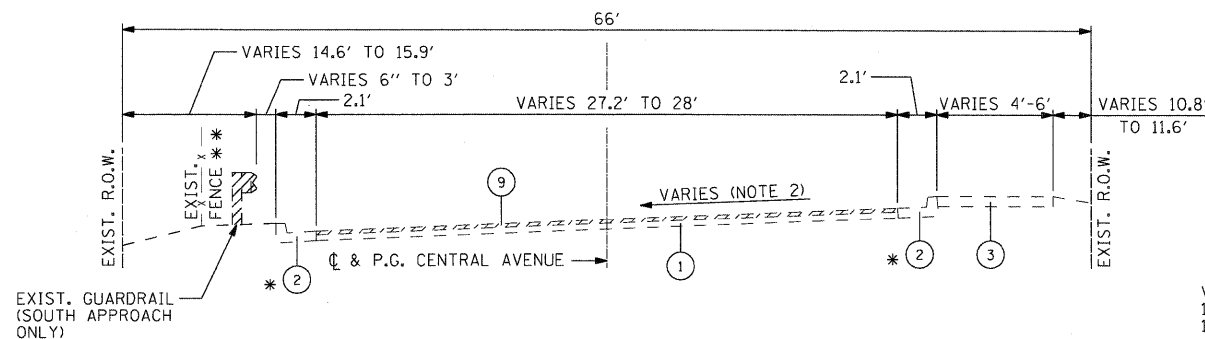
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CITY OF ROCKFORD

**CENTRAL AVENUE OVER THE SOUTH BRANCH OF KENT CREEK
 SUMMARY OF QUANTITIES**

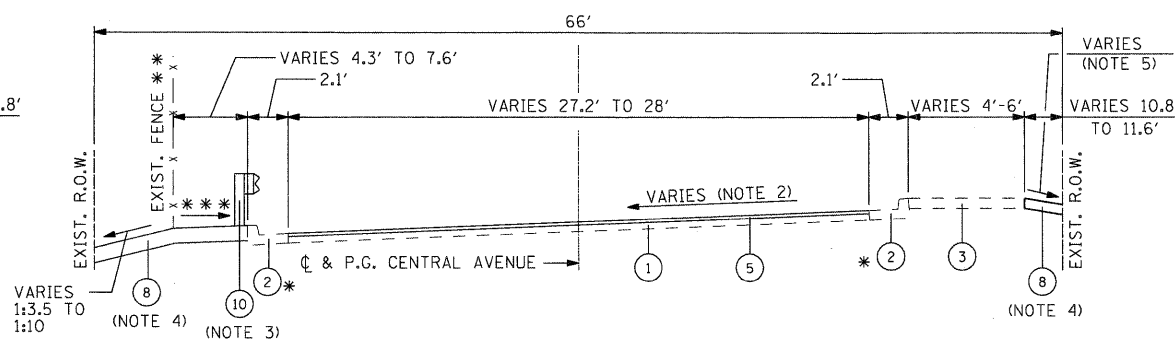
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F.A.U. RTE. 5102	SECTION 09-00557-00-BR	COUNTY Winnebago	TOTAL SHEETS 18	SHEET NO. 3
CONTRACT NO. 85508			FED. ROAD DIST. NO. 2 [ILLINOIS] FED. AID PROJECT	



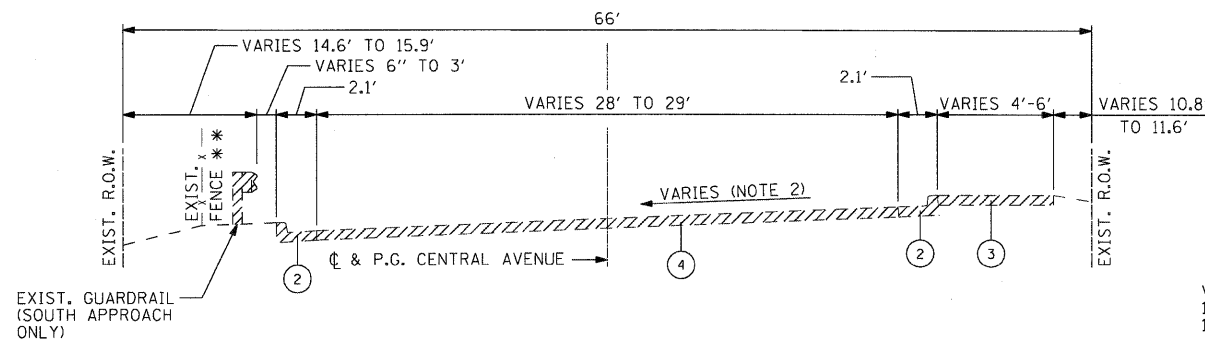
EXISTING APPROACH ROADWAY SECTION

STA. 7+37.17 TO STA. 7+67.17
 STA. 8+82.47 TO STA. 9+12.47
 * HMA SURFACE COVERS EXIST. GUTTER
 ** STA. 8+62.97 TO STA. 9+12.47 SOUTH END ONLY



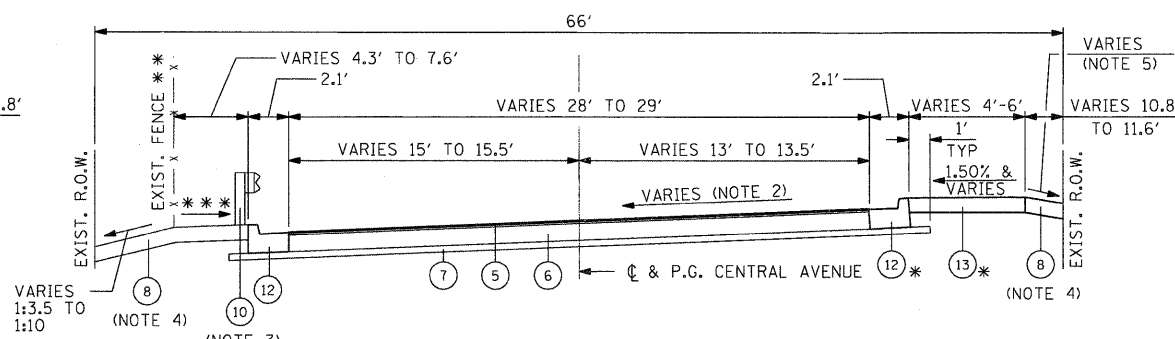
PROPOSED APPROACH ROADWAY SECTION

STA. 7+37.17 TO STA. 7+67.17
 STA. 8+82.47 TO STA. 9+12.47
 * HMA SURFACE COVERS EXIST. GUTTER
 ** STA. 8+62.97 TO STA. 9+12.47 SOUTH END ONLY
 *** VARIES 1.50% TO MATCHING EXIST.



EXISTING APPROACH ROADWAY SECTION

STA. 7+67.17 TO STA. 7+86.67
 STA. 8+62.97 TO STA. 8+82.47
 ** STA. 8+62.97 TO STA. 9+12.47 SOUTH END ONLY



PROPOSED APPROACH ROADWAY SECTION

STA. 7+67.17 TO STA. 7+86.67
 STA. 8+62.97 TO STA. 8+82.47
 * STA. 7+55.00 TO STA. 7+86.67 NORTH END
 ** STA. 8+62.97 TO STA. 9+12.47 SOUTH END ONLY
 *** VARIES 1.50% TO MATCHING EXIST.

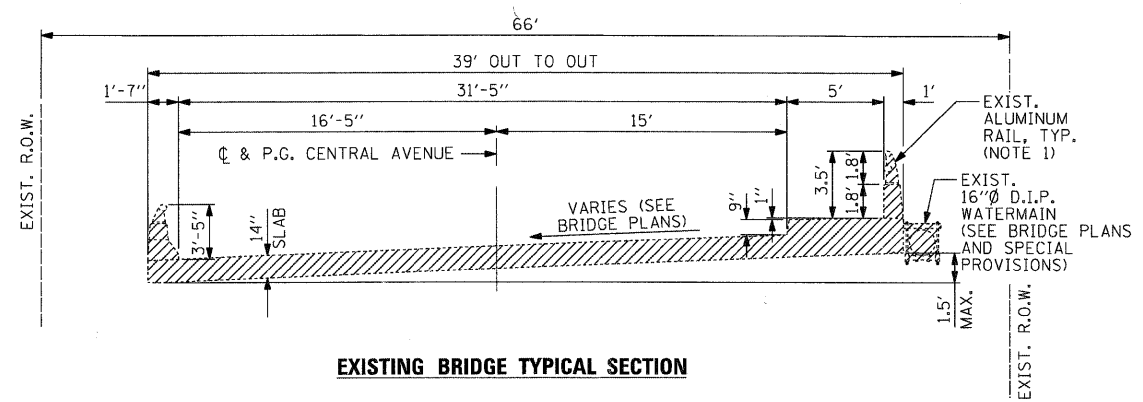
NOTES

1. COST FOR REMOVAL INCLUDED IN THE ITEM REMOVAL OF EXISTING SUPERSTRUCTURE
2. SEE PAVEMENT ELEVATION DETAIL ON SHEET 3 AND THE CROSS SECTIONS.
3. SOUTH APPROACH ONLY
4. SEE STRIPING, EROSION CONTROL & RESTORATION PLAN FOR LIMITS
5. SEE CROSS SECTIONS

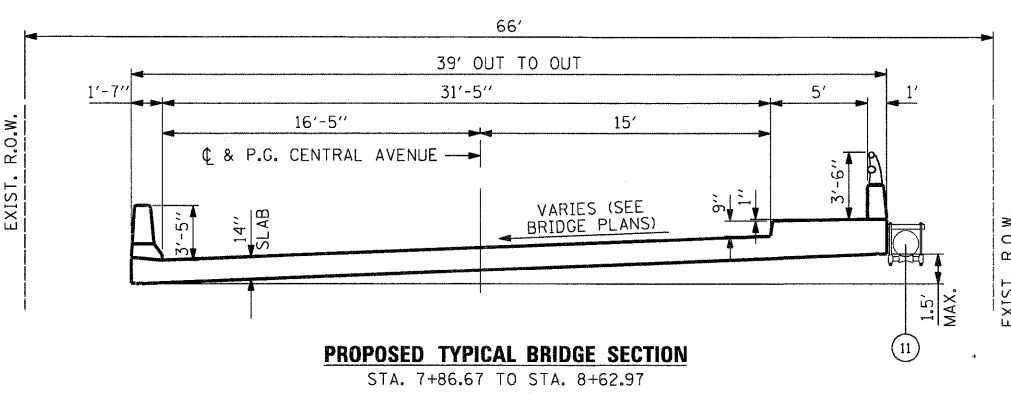
TYPICAL SECTION LEGEND

- 1 EXISTING HMA PAVEMENT (THICKNESS VARIES 5" TO 10")
- 2 EXIST. COMB. CC&G TB6.18
- 3 EXIST. PCC SIDEWALK
- 4 PAVEMENT REMOVAL
- 5 HOT-MIX ASPHALT SURFACE COURSE MIX "D" N50 @ 2"
- 6 HOT-MIX ASPHALT BINDER COURSE IL - 19.0, N50 @ 10"
- 7 SUBBASE GRANULAR MATERIAL, TYPE B 4"
- 8 TOPSOIL FURNISH & PLACE 4" WITH SEEDING CLASS 2A
- 9 HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT
- 10 STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS (SOUTH APPROACH ONLY)
- 11 RE-ATTACH 16" DIA. D.I.P. WATER MAIN WITH NEW HANGERS (SEE BRIDGE PLANS)
- 12 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18
- 13 PORTLAND CEMENT CONCRETE SIDEWALK 5"

INDICATES ITEMS TO BE REMOVED



EXISTING BRIDGE TYPICAL SECTION



PROPOSED TYPICAL BRIDGE SECTION

STA. 7+86.67 TO STA. 8+62.97

HOT-MIX ASPHALT MIXTURE REQUIREMENTS		
MIXTURE USE	SURFACE	BINDER
PG:	PG 64-22	PG 58-22
DESIGN AIR VOIDS	4.0 @ N50	4.0 @ N50
MIXTURE COMPOSITION (GRADATION MIXTURE)	IL 9.5 OR 12.5	IL 19.0
FRICTION AGGREGATE	D	N/A
20 YEAR ESAL	0.0	0.0
MIX UNIT WEIGHT	112 LBS/SY/IN	

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: [Redacted]
 CLIENT: City of Rockford
 DATE PLOTTED: 1/26/2010 10:53 PM
 FILE NAME: 090026-Typ.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: standard-trans.tbl

SEC Group, Inc.
 All HR Green Company
 401 N. Fourth Street
 Moline, IL 61201-2138
 T 815.381.1770 F 815.381.1751
 www.secgroupinc.com
 *Moline, IL *Rockford, IL *New Leno, IL *Chicago, IL

USER NAME = whood	DESIGNED - KMA	REVISED -
FILE NAME = 090026-Typ.dgn	DRAWN - WJH	REVISED -
PLOT SCALE = NTS	CHECKED - TH	REVISED -
PLOT DATE = 1/26/2010	DATE - 1/26/10	REVISED -

CITY OF ROCKFORD

**CENTRAL AVENUE OVER THE SOUTH BRANCH OF KENT CREEK
 TYPICAL SECTIONS**

SCALE: NTS SHEET NO. 1 OF SHEETS STA. TO STA.

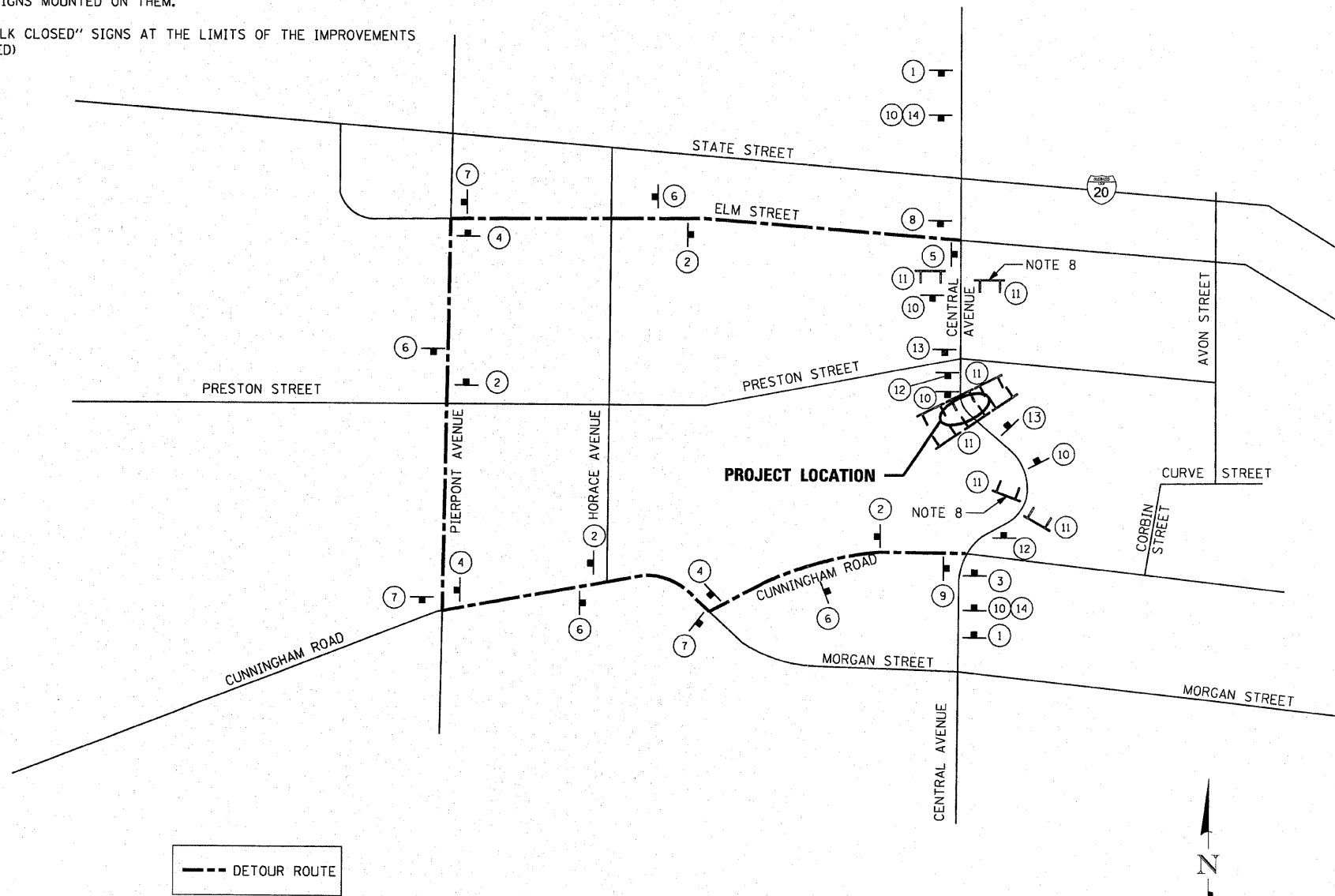
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5102	09-00557-00-BR	Winnebago	18	4
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT			CONTRACT NO. 85508	

ROAD CLOSURE GENERAL NOTES:

1. THE CONTRACTOR WILL BE ALLOWED TO CLOSE CENTRAL AVENUE TO THRU TRAFFIC BETWEEN STATE STREET AND CUNNINGHAM ROAD IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
2. THE DETOUR ROUTE SHALL BE POSTED PRIOR TO CLOSING THE ROAD.
3. ALL TRAFFIC CONTROL WORK ASSOCIATED WITH THE ROAD CLOSURE, SIGNING, TEMPORARY FENCING AND BARRICADING SHALL BE INCLUDED IN THE PAY ITEM FOR 'TRAFFIC CONTROL AND PROTECTION'.
4. THE CONTRATOR SHALL GIVE THE ENGINEER, THE CITY, IDOT, AND THE WINNEBAGO COUNTY HIGHWAY DEPARTMENT A 72 HOUR NOTICE PRIOR TO PLACING THE ADVANCE NOTICE SIGNS.
5. ADVANCE NOTICE SIGNS, (12), SHALL BE PLACED TWO WEEKS PRIOR TO CLOSING THE ROADWAY.
6. ALL SIGNS SHALL CONFORM TO SPACING REQUIREMENTS SET FORTH IN THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS'.
7. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT DRIVEWAYS IN ACCORDANCE WITH THE SPECIAL PROVISIONS.
8. PROVIDE PAIR OF STAGGERED TYPE 3 BARRICADES, (11), IN ACCORDANCE WITH HIGHWAY STANDARD BLR 22. EACH BARRICADE SHALL HAVE "ROAD CLOSED TO THRU TRAFFIC" SIGNS MOUNTED ON THEM.
9. PROVIDE "SIDEWALK CLOSED" SIGNS AT THE LIMITS OF THE IMPROVEMENTS (2 SIGNS REQUIRED)

SIGN LEGEND

- 1. W20-2 (48"x48") WITH STREET SIGN AND FLASHING AMBER LIGHT
- 2. M4-9 (30"x21") WITH STREET SIGN AND DIRECTION OF TRAFFIC
- 3. M4-9L (30"x24") WITH STREET SIGN AND DIRECTION OF TRAFFIC
- 4. M4-9R (30"x24") WITH STREET SIGN AND DIRECTION OF TRAFFIC
- 5. M4-8a (24"x18") WITH STREET SIGN AND INFORMATION SIGN
- 6. M4-9 (30"x24") WITH STREET SIGN AND DIRECTION OF TRAFFIC
- 7. M4-9L (30"x24") WITH STREET SIGN AND DIRECTION OF TRAFFIC
- 8. M4-9R (30"x24") WITH STREET SIGN AND DIRECTION OF TRAFFIC
- 9. M4-8a (24"x18") WITH STREET SIGN AND INFORMATION SIGN
- 10. W20-3 (48"x48") WITH FLASHING AMBER LIGHT
- 11. R11-2 (48"x30") WITH 2 FLASHING AMBER LIGHTS
- 12. INFO (48"x30")
- 13. W20-3 (48"x48") WITH FLASHING AMBER LIGHT
- 14. DISTANCE SIGN



--- DETOUR ROUTE

PROPOSED DETOUR ROUTE
(CENTRAL AVENUE - BRIDGE RE-CONSTRUCTION)

COMPANY NAME: Smith, G. Davis
 PROJECT CONTACT: City of Rockford
 CLIENT: City of Rockford
 DATE PLOTTED: 2/3/2010 12:30:55 PM
 FILE NAME: 090026-Dtr.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: STANDARD-TRANS.TBL

SEC Group, Inc.
 250 N. First Street, Rockford, IL 61102-2100
 815.395.1779 • 815.395.1791
 www.secgroup.com
 Microsoft, Oracle, AutoCAD, Microsoft Office, Windows

USER NAME = whoad	DESIGNED - KMA	REVISED -
FILE NAME = 090026-Dtr.dgn	DRAWN - WJH	REVISED -
PLOT SCALE = 1"=20'	CHECKED - TH	REVISED -
PLOT DATE = 2/3/2010	DATE - 2/3/10	REVISED -

CITY OF ROCKFORD

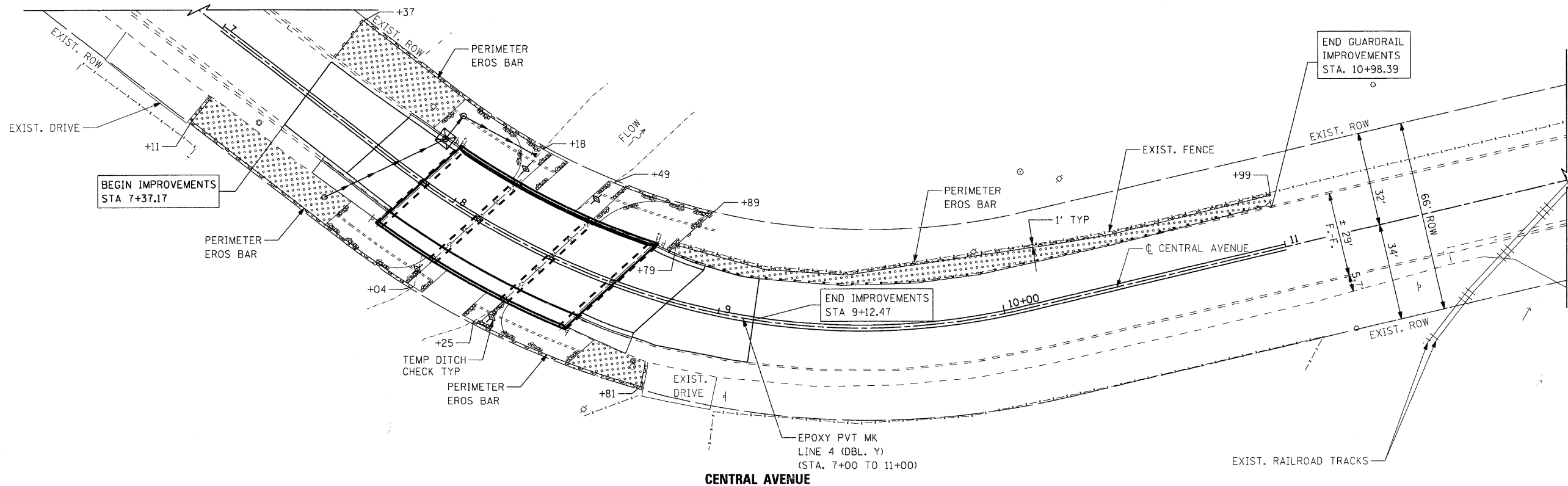
**CENTRAL AVENUE OVER THE SOUTH BRANCH OF KENT CREEK
 TEMPORARY DETOUR PLAN**

F.A.U. RTE. 5102	SECTION 09-00557-00-BR	COUNTY Winnebago	TOTAL SHEETS 18	SHEET NO. 6
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT			CONTRACT NO. 85508	

SCALE: 1"=20' SHEET NO. 1 OF SHEETS STA. TO STA.

EROSION CONTROL NOTES

1. THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT AND MAINTAIN EROSION CONTROL MEASURES IMMEDIATELY AFTER STRIPPING OF EXISTING VEGETATION.
2. TEMPORARY DITCH CHECKS ARE MEASURED PER FOOT, REGARDLESS OF TYPE OR CONFIGURATION USED.
3. STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES TO REMAIN IN PLACE FOR 30 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.
4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT POLLUTION OF STORM WATER AND SHALL FOLLOW IEPA REGULATIONS & IDOT CONSTRUCTION MEMORANDUM NO. 06-60.
5. STABILIZATION MEASURES SHALL BE INITIATED WITHIN 7 DAYS OF CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASING IN AREAS WHERE IT WILL NOT OCCUR FOR A PERIOD OF 14 OR MORE CALENDAR DAYS.
6. THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2 INCH OF RAIN OR MORE BY THE INDIVIDUAL ON SITE IN CHARGE OF SOIL EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT.
7. SILT FENCE SHALL BE INSTALLED FOLLOWING THE COMPLETION AND STABILIZATION OF THE STORMWATER FACILITIES AND WILL REMAIN IN PLACE UNTIL THE CONTRIBUTING AREA IS STABILIZED.
8. ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY AND CLEANED WHEN NECESSARY OR AS DIRECTED BY THE ENGINEER.
9. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL.



TEMPORARY EROSION CONTROL SEQUENCE OF CONSTRUCTION

1. ESTABLISH TEMPORARY EROSION CONTROL MEASURES AND ERECT PERIMETER EROSION BARRIER ALONG SITE BOUNDARIES PRIOR TO EARTHWORK.
2. INSTALL DITCH CHECKS IMMEDIATELY AFTER DITCH GRADING IS COMPLETED.
3. INSTALL TEMPORARY EROSION CONTROL SEEDING.

LEGEND

- PERIMETER EROSION BARRIER
- EXISTING R.O.W.
- DIRECTION OF FLOW
- FINAL RESTORATION OF DISTURBED AREAS - TOPSOIL FURNISH AND PLACE, 4" - SEEDING CLASS 2A - EROSION CONTROL BLANKET
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Robert G. Davies
 CLIENT: City of Rockford
 DATE PLOTTED: 1/26/2010 10:08 AM
 FILE NAME: 090026-Ero.dgn
 PLOT DRIVER: pdf.plt
 STANDARD: Trans.tbl

SEC Group, Inc.
 An HR Green Company
 450 N. First Street
 Moline, IL 62450-3138
 1-815-395-1779 F 815-395-1751
 www.secgroupinc.com
 450 Perry L. - Rockville, IL - New Lenox, IL - Chicago, IL

USER NAME = whoad	DESIGNED - KMA	REVISED -
FILE NAME = 090026-Ero.dgn	DRAWN -	REVISED -
PLOT SCALE =	CHECKED - TH	REVISED -
PLOT DATE = 1/26/2010	DATE - 1/26/10	REVISED -

CITY OF ROCKFORD

CENTRAL AVENUE OVER THE SOUTH BRANCH OF KENT CREEK STRIPING, EROSION CONTROL, AND RESTORATION PLAN

SCALE: SHEET NO. 1 OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5102	09-00557-00-BR	Winnebago	18	7
CONTRACT NO. 85508			FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT	

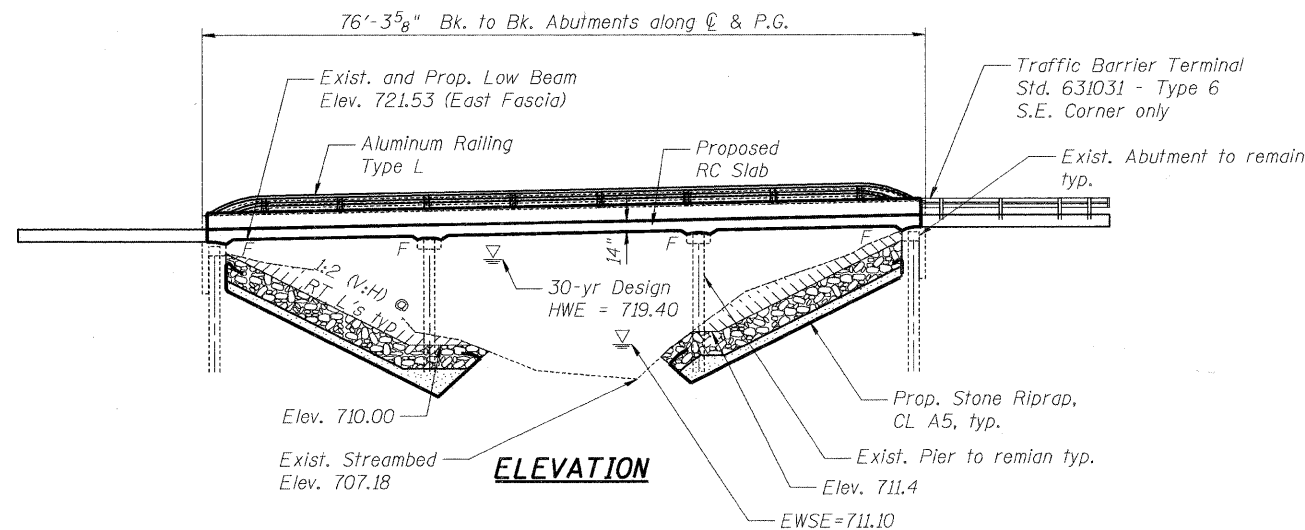
Bench Marks:

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)

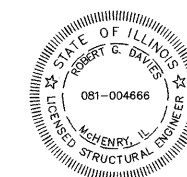
SEISMIC DATA

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



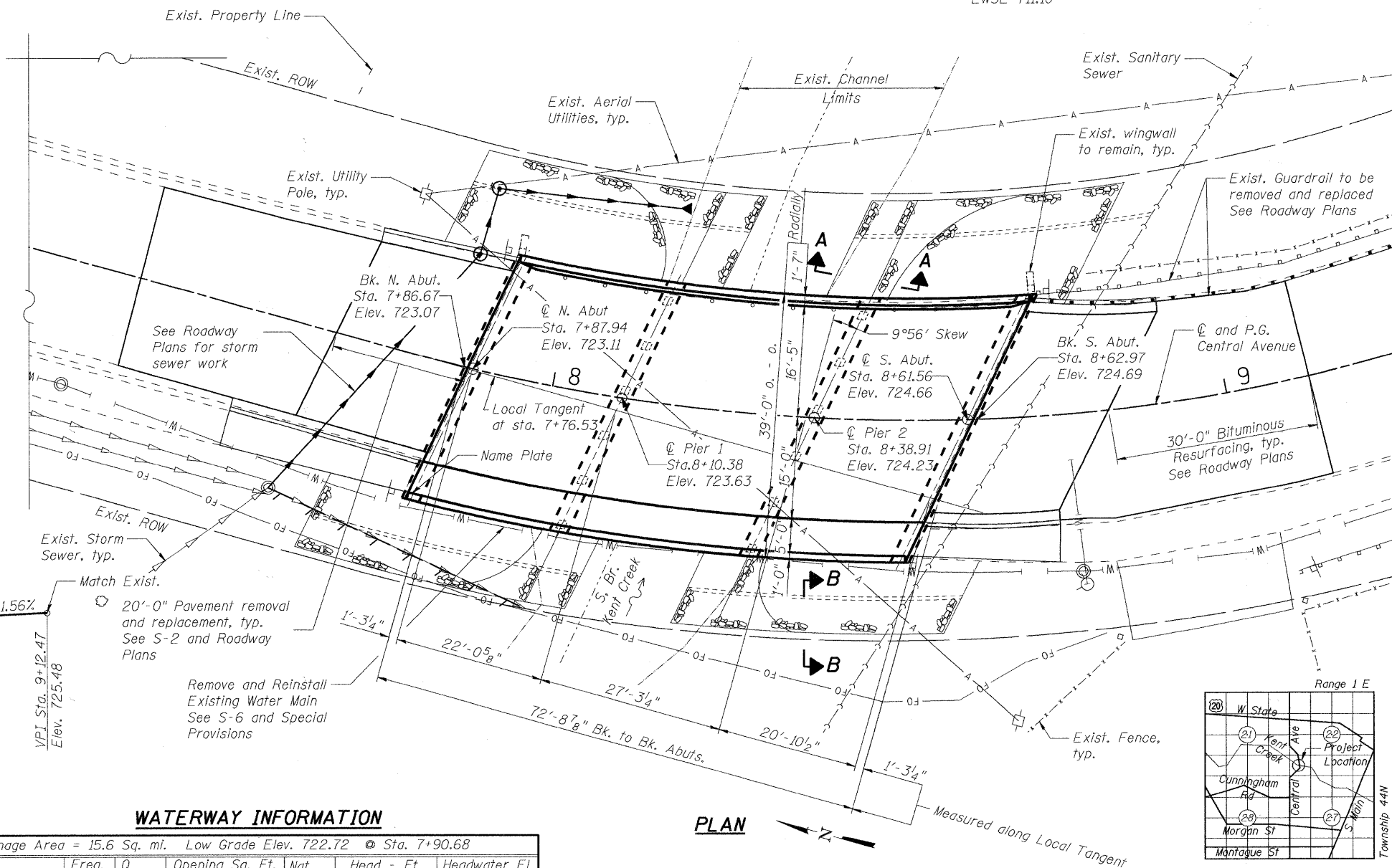
To the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

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

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



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

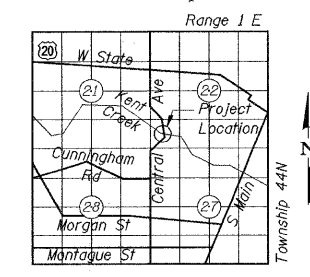
PROFILE GRADE

Central Avenue

WATERWAY INFORMATION

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				



LOCATION SKETCH

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

Illinois Professional Design Firm # 184-000108
SEC GROUP, INC.
An HR Green Company
420 N. Front Street, McHenry, IL 60050
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SHEET NO. 5-1	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	5102	09-00557-00-BR	WINNEAGO	18	8
CONTRACT NO.				85508	
FED. ROAD DIST. NO. 2		ILLINOIS	FED. AID PROJECT		BHM 5099 (081)

GENERAL NOTES:

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Layout of Slope Protection System may be varied to suit ground conditions in field as directed by the Engineer.

The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach pavement.

Excavation behind existing abutment walls shall be performed to balance front and back soil pressure before removing the existing superstructure.

Backfill shall be placed behind the abutment after the superstructure has been poured and falsework removed. See Article 502.10 of the Standard Specifications.

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity not included in Statewide Permit #9. Any permit application by the Contractor shall refer to the IDNR Statewide permit included in the contract documents.

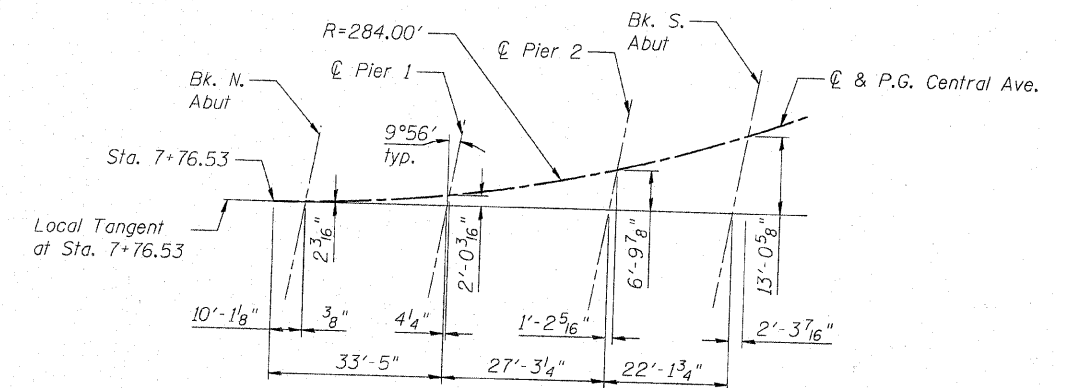
Incidental excavation / shaping required to place Stone Riprap shall be in accordance with the applicable portion of Section 202 of the Standard Specifications. The cost for this work shall be included in Stone Riprap, Class A5.

INDEX OF SHEETS

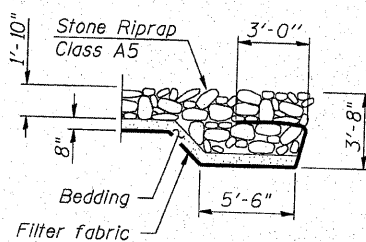
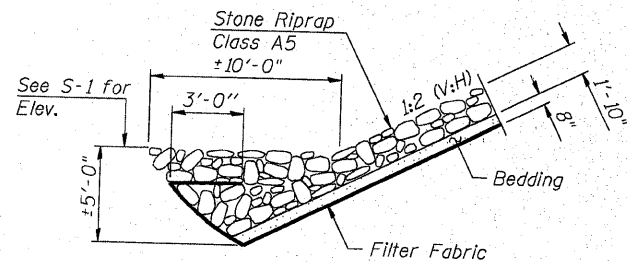
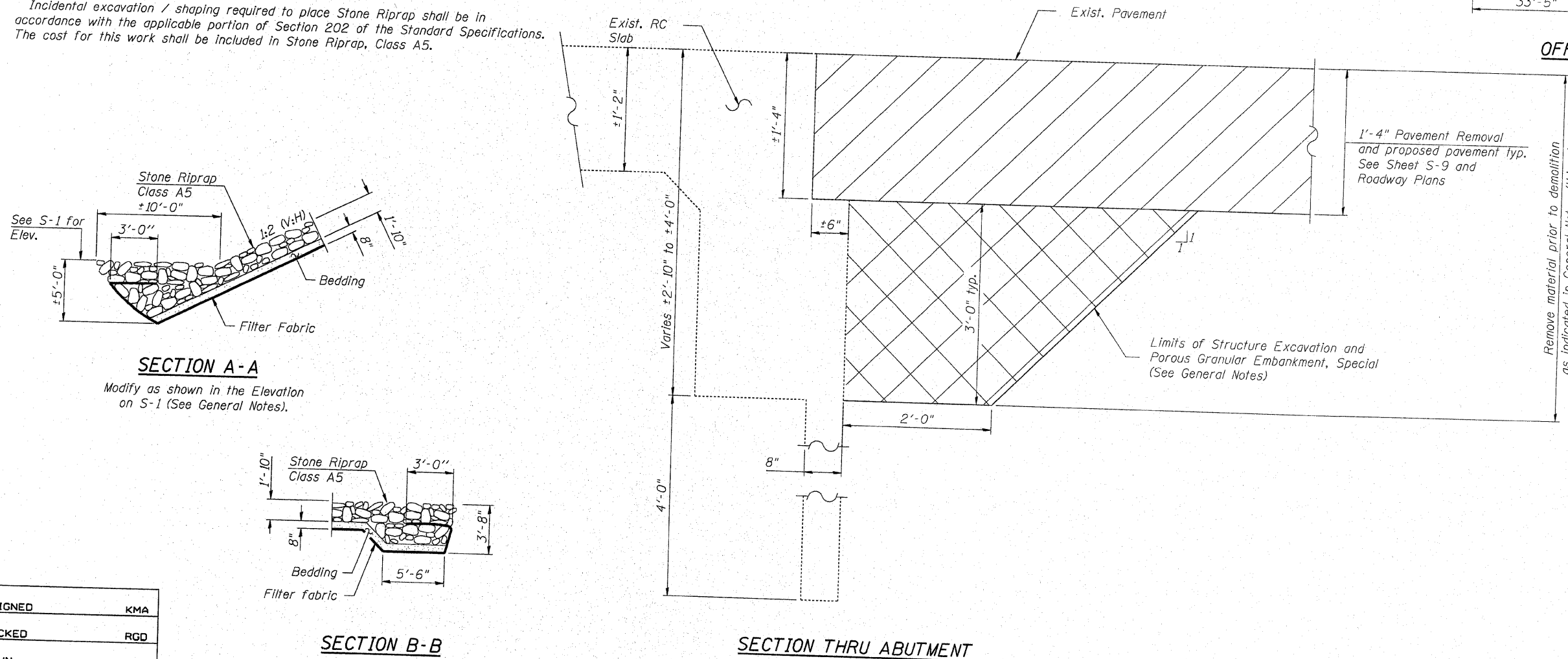
- S-1 General Plan and Elevation
- S-2 General Notes and Total Bill of Materials
- S-3 Top of Slab Elevations
- S-4 Superstructure Plan and Cross Section
- S-5 Superstructure Details
- S-6 Superstructure Details
- S-7 Superstructure Details
- S-8 Aluminum Railing, Type L
- S-9 Substructure Details

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.	---	32.6	32.6
Stone Riprap, Class A5	Sq. Yd.	---	523	523.0
Filter Fabric	Sq. Yd.	---	523	523.0
Removal of Existing Superstructures	Each	1	---	1
Structure Excavation	Cu. Yd.	---	32.6	32.6
Concrete Superstructure	Cu. Yd.	160.4	---	160.4
Bridge Deck Grooving	Sq. Yd.	246	---	246
Protective Coat	Sq. Yd.	363	---	363
Reinforcement Bars, Epoxy Coated	Pound	42,350	---	42,350
Aluminum Railing, Type L	Foot	72	---	72
Name Plates	Each	1	---	1
Remove and Reinstall Existing Water Main	Foot	74	---	74



OFFSET SKETCH



SECTION THRU ABUTMENT

GENERAL NOTES, AND
TOTAL BILL OF MATERIALS
CENTRAL AVENUE (FAU ROUTE 5102)
OVER KENT CREEK
SECTION NO. 09-00557-00-BR
CITY OF ROCKFORD
WINNEBAGO COUNTY
STRUCTURE NO. 101-6124

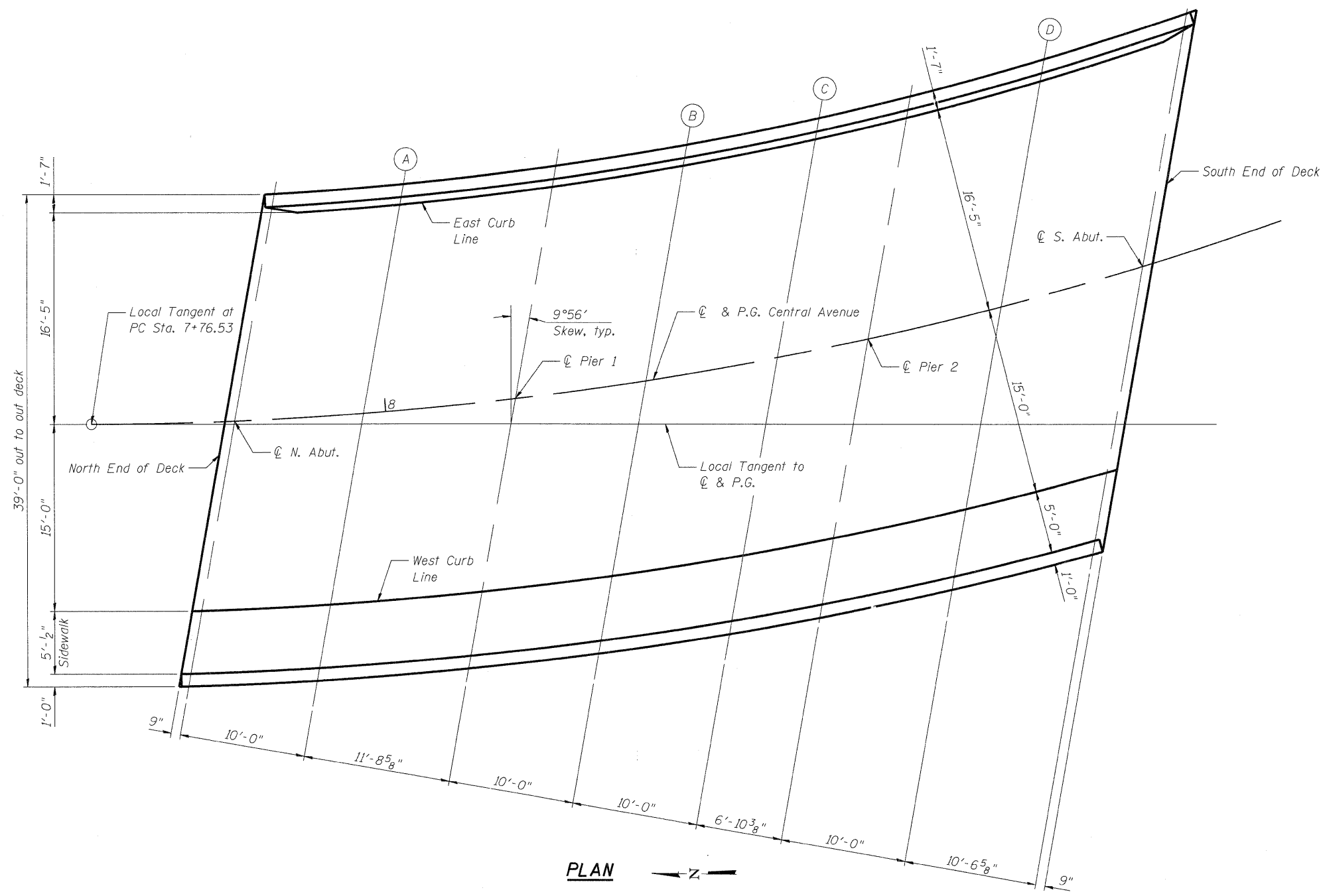
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DRAWN	WJH
CHECKED	RGD

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PLOT DRIVER: pdf.plt
PEN TABLE: STANDARD-TRANS.TBL 2/3/2010

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McHenry, IL • Yorkville, IL • New Lenox, IL • Chicago, IL

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

DATE: 2/3/10



PLAN

EAST CURB LINE

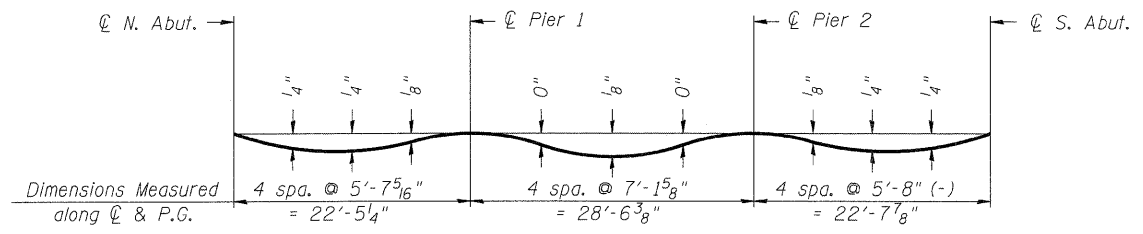
Location	Station	Offset to C & P.G.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
N. End of Deck	7+90.90	-16.417	722.68	722.68
C N. Abut.	7+91.72	-16.417	722.70	722.70
A	8+02.66	-16.417	722.92	722.94
C Pier 1	8+15.64	-16.417	723.14	723.14
B	8+26.86	-16.417	723.33	723.34
C	8+38.25	-16.417	723.52	723.53
C Pier 2	8+46.17	-16.417	723.65	723.65
D	8+57.90	-16.417	723.86	723.88
C S. Abut.	8+70.57	-16.417	724.07	724.07
S. End of Deck	8+71.48	-16.417	724.09	724.09

CENTERLINE AND PROFILE GRADE LINE

Location	Station	Offset to C & P.G.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
N. End of Deck	7+87.17	0.000	723.09	723.09
C N. Abut.	7+87.94	0.000	723.11	723.11
A	7+98.21	0.000	723.35	723.37
C Pier 1	8+10.38	0.000	723.63	723.63
B	8+20.88	0.000	723.86	723.87
C	8+31.52	0.000	724.09	724.10
C Pier 2	8+38.91	0.000	724.23	724.23
D	8+49.83	0.000	724.45	724.47
C S. Abut.	8+61.56	0.000	724.66	724.66
S. End of Deck	8+62.40	0.000	724.68	724.68

WEST CURB LINE

Location	Station	Offset to C & P.G.	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
N. End of Deck	7+84.13	15.000	723.47	723.47
C N. Abut.	7+84.85	15.000	723.49	723.49
A	7+94.59	15.000	723.66	723.68
C Pier 1	8+06.10	15.000	724.03	724.03
B	8+16.03	15.000	724.23	724.24
C	8+26.07	15.000	724.47	724.48
C Pier 2	8+33.03	15.000	724.63	724.63
D	8+43.30	15.000	724.86	724.88
C S. Abut.	8+54.32	15.000	725.09	725.09
S. End of Deck	8+55.11	15.000	725.12	725.12



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown.

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

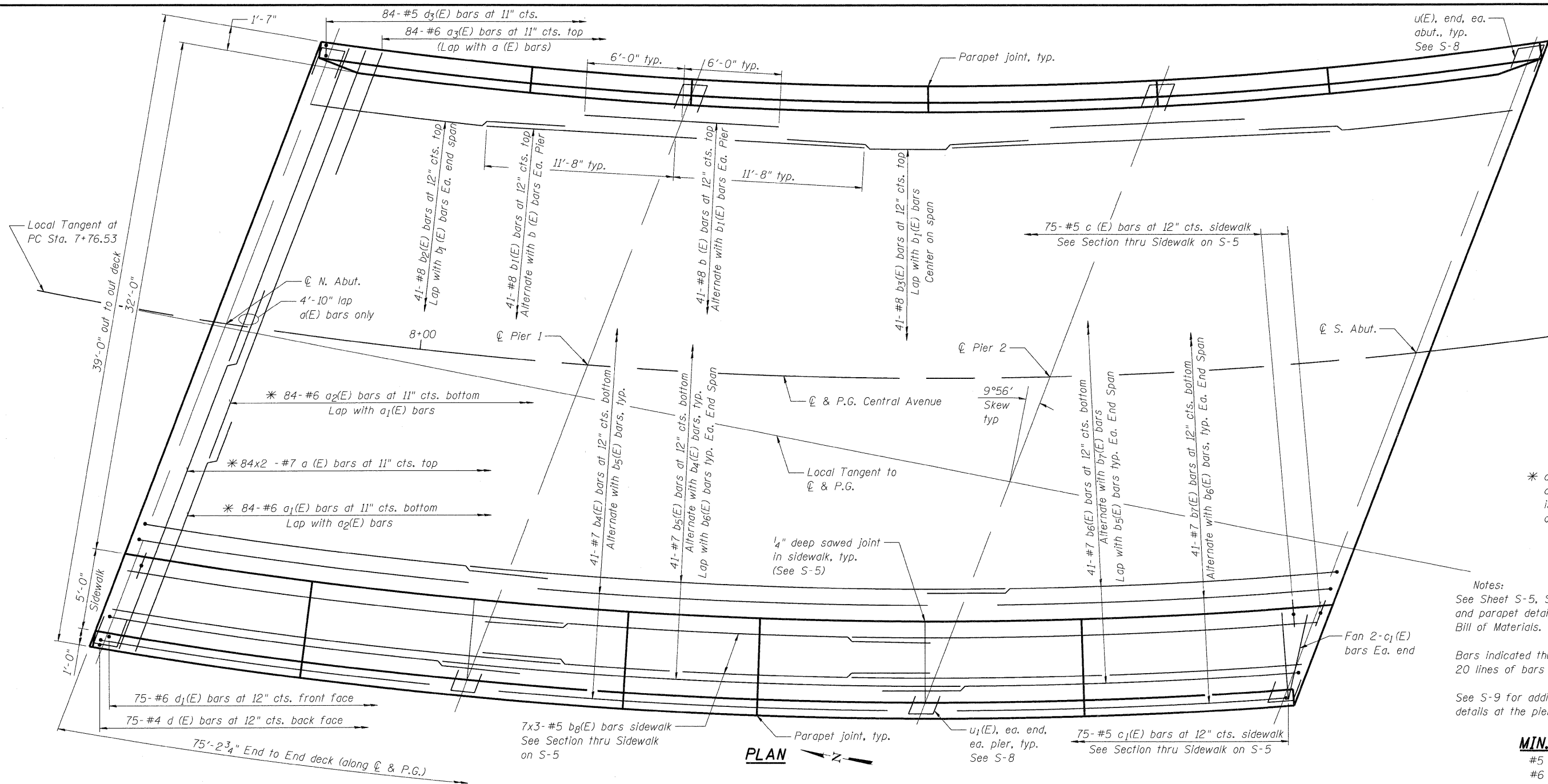
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DRAWN	WJH
CHECKED	RGD

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PEN TABLE: standard-trans.tbl 1/26/2010

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SHEET NO. S-3	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	5102	09-00557-00-BR	WINNEAGO	18	10
S-9 SHEETS		CONTRACT NO. 85508			
FED. ROAD DIST. NO. 2		ILLINOIS	FED. AID PROJECT	BHM 5099 (081)	



* Order a(E) a₁(E) and c₁(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.

* a bars placed parallel to abutments, but spacing is measured along centerline of Central Avenue

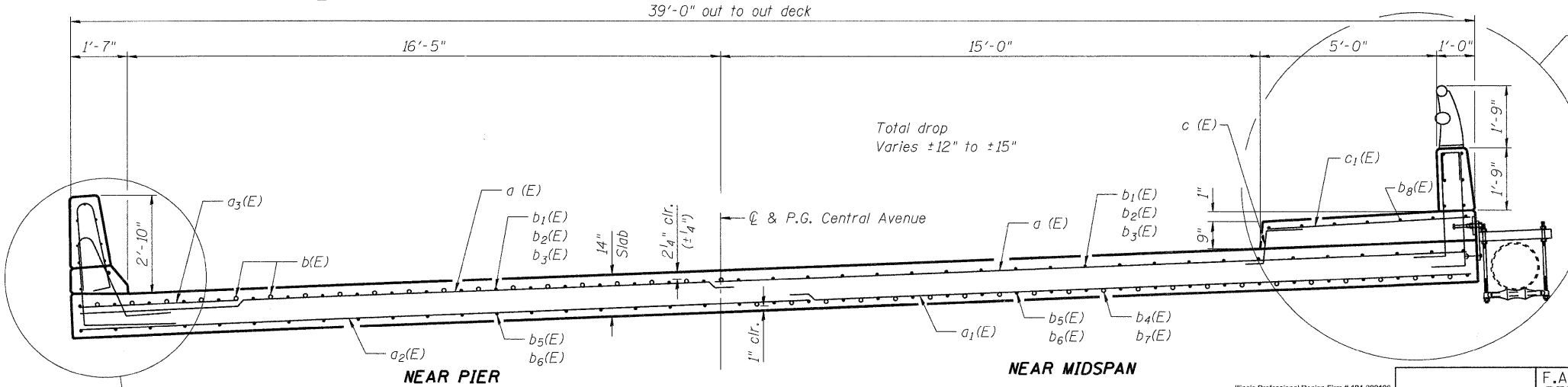
Notes:
See Sheet S-5, S-6 and S-7 for additional superstructure and parapet details. See S-7 for Superstructure Bill of Materials.

Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

See S-9 for additional reinforcement and details at the piers and abutments.

MIN. BAR LAP

#5 bar	= 2'-2"
#6 bar	= 2'-7"
#7 bar	= 2'-8"
#8 bar	= 4'-10"



See sheets S-5 and S-6

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

DESIGNED	KMA
CHECKED	RGD
DRAWN	WJH
CHECKED	RGD

FILE NAME: 090026-sup01.dgn
PLOT DRIVER: pdf.plt
PEN TABLE: standard-trans.tbl 1/26/2010

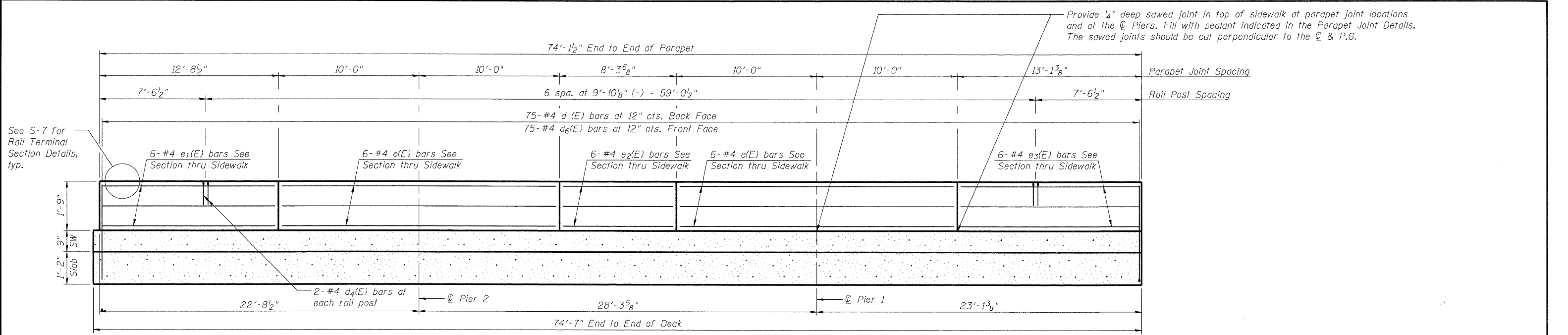
CROSS SECTION
Dimensions Perpendicular to Q & P.G. Central Avenue



Illinois Professional Design Firm # 184-00106
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SHEET NO. S-4 S-9 SHEETS	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	5102	09-00557-00-BR	WINNEAGO	18	11
CONTRACT NO.				85508	
FED. ROAD DIST. NO. 2		ILLINOIS	FED. AID PROJECT		BHM 5099 (081)

DATE: 1/26/10



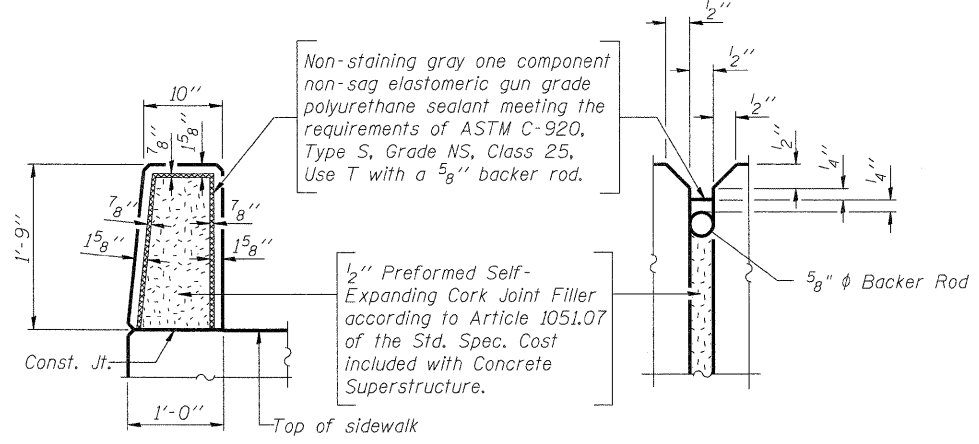
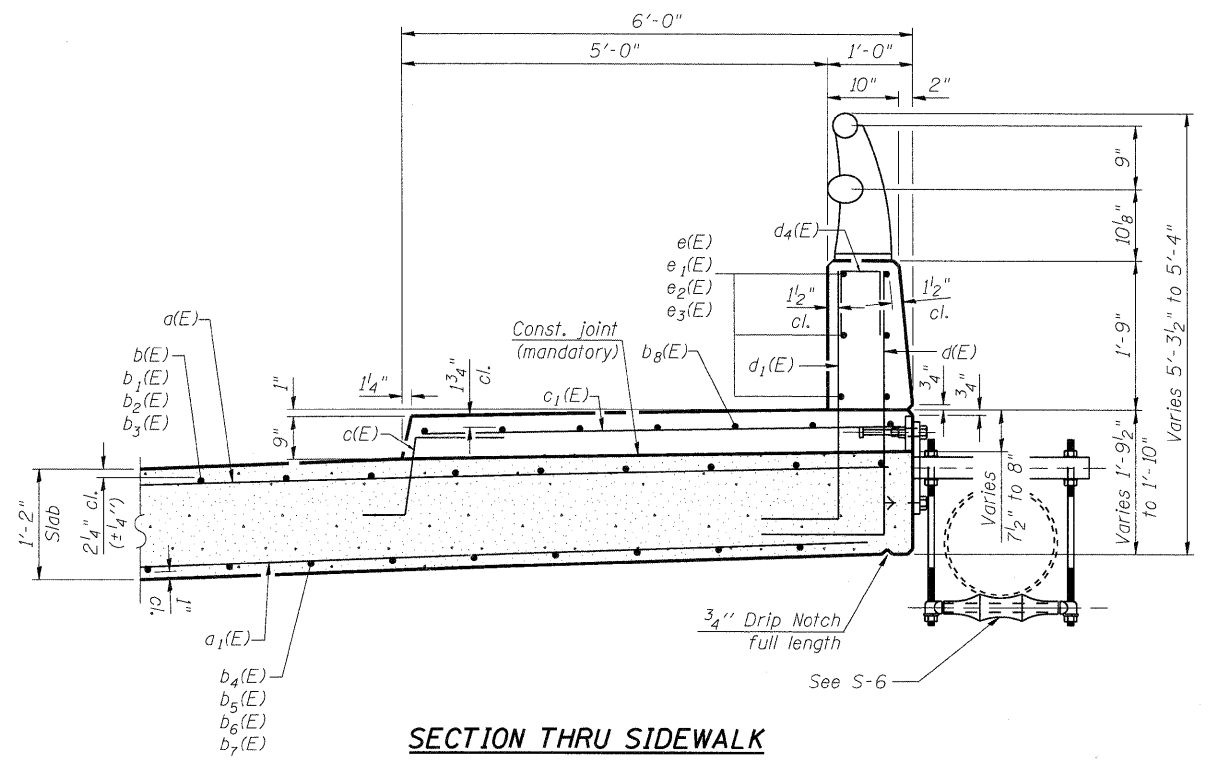
See S-7 for Rail Terminal Section Details, typ.

Provide 1/4" deep sawed joint in top of sidewalk at parapet joint locations and at the Piers. Fill with sealant indicated in the Parapet Joint Details. The sawed joints should be cut perpendicular to the C & P.G.

MINIMUM BAR LAP
(Parapet)
#4 bar = 1'-8"

INSIDE ELEVATION OF WEST PARAPET

All dimensions measured along front face of parapet



PARAPET JOINT DETAILS

SUPERSTRUCTURE DETAILS

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

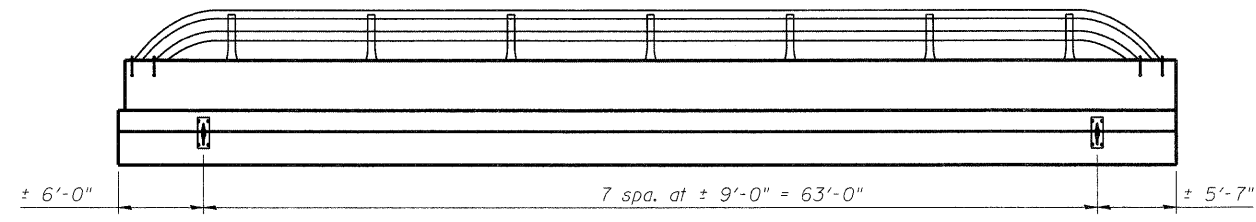
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CHECKED	RGD
DRAWN	WJH
CHECKED	RGD

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PLOT DRIVER: pdf.plt
PEN TABLE: standard-trans.tbl 1/26/2010



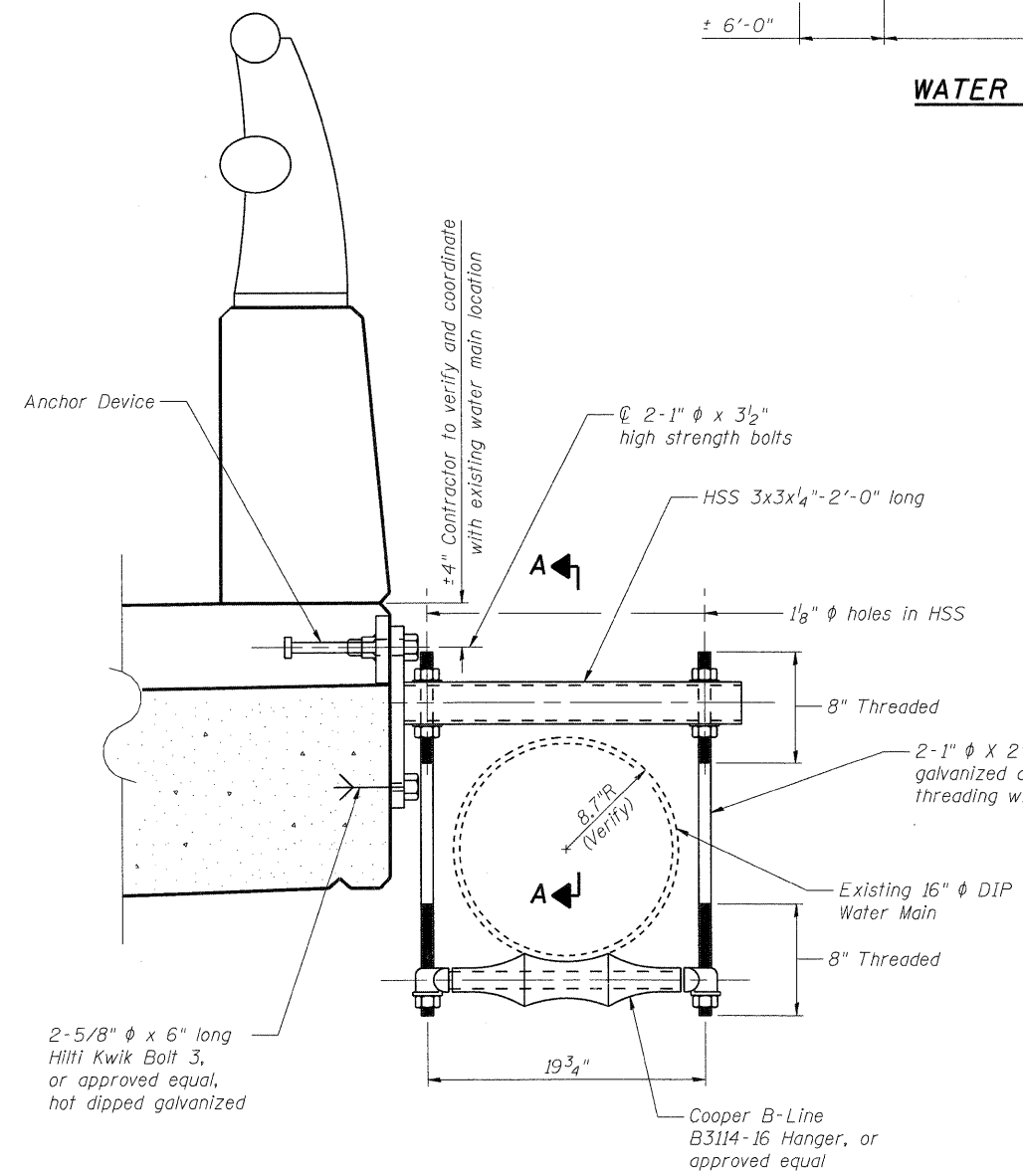
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SHEET NO. S-5	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	5102	09-00557-00-BR	WINNEAGO	18	12
S-9 SHEETS		CONTRACT NO. 85508			
FED. ROAD DIST. NO. 2		ILLINOIS	FED. AID PROJECT	BHM 5099 (081)	



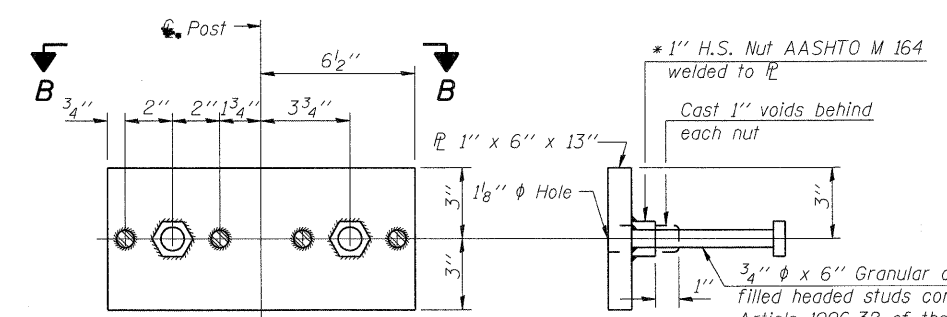
WATER MAIN HANGER LAYOUT - ELEVATION OF WEST FACE

Coordinate layout with existing water main to be re-used.



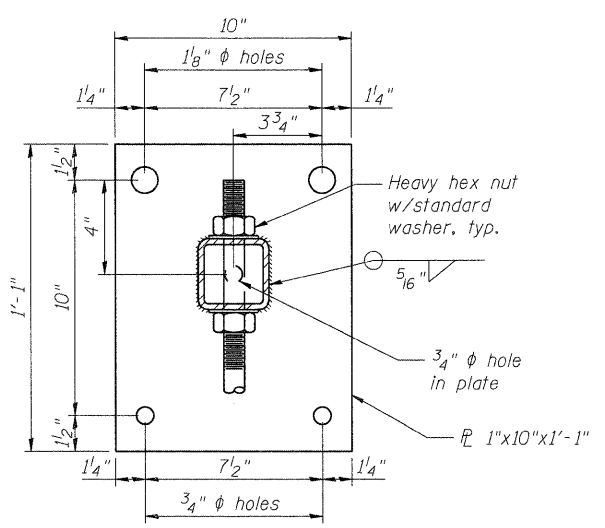
WATER MAIN HANGER DETAIL

(8 Assemblies req'd)



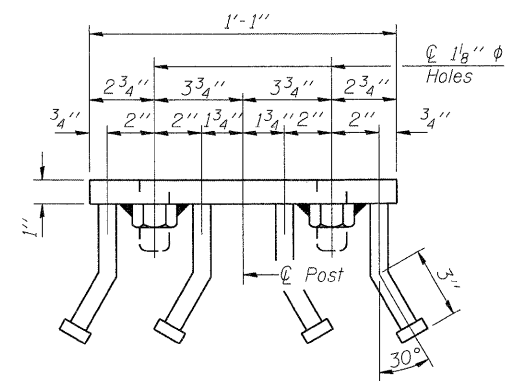
ANCHOR DEVICE

* Threaded areas shall be plugged or blocked off during casting of beam.



VIEW A-A

Water Main not shown for clarity



VIEW B-B

NOTES

1. Hollow structural steel tubing shall conform to the requirements of ASTM designation A500 Grade B Structural Steel Tubing and shall meet the longitudinal CVN requirements of 15 ft.-lbs. at 0° F.
2. All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36.
3. Bolts and nuts shall conform to the requirements of ASTM designation A307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M 164.
4. All bolts, nuts, washers and lock washers shall be galvanized according to AASHTO M 232.
5. All anchor devices plates and HSS shall be galvanized after shop fabrication according to AASHTO M-111 and ASTM A 385.
6. The 1" φ high strength bolts connecting the plate to the concrete shall be tightend to a snug fit and given an additional 1/8 turn.

SUPERSTRUCTURE DETAILS
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

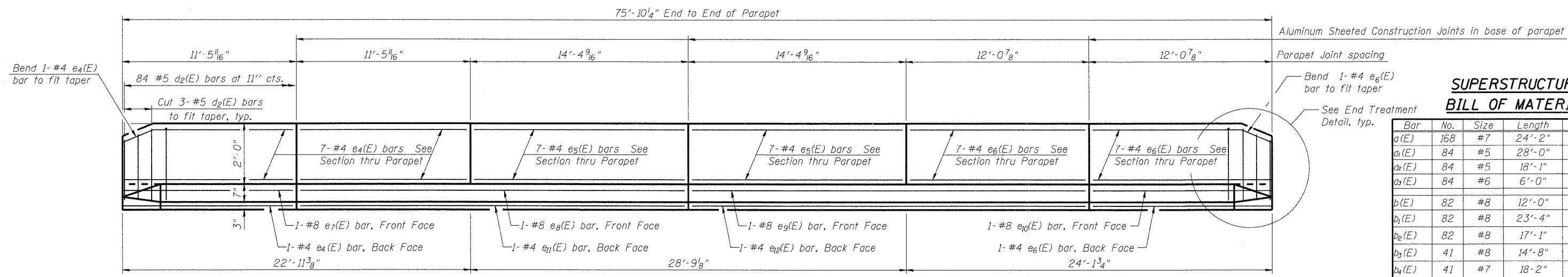
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CHECKED	RGD
DRAWN	WJH
CHECKED	RGD

FILE NAME: 090026-sup03.dgn
 PLOT DRIVER: pdf.plt
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SHEET NO. S-6	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	5102	09-00557-00-BR	WINNEAGO	18	13
S-9 SHEETS		CONTRACT NO. 85508			
FED. ROAD DIST. NO. 2		ILLINOIS	FED. AID PROJECT	BHM 5099 (081)	



**SUPERSTRUCTURE
BILL OF MATERIAL**

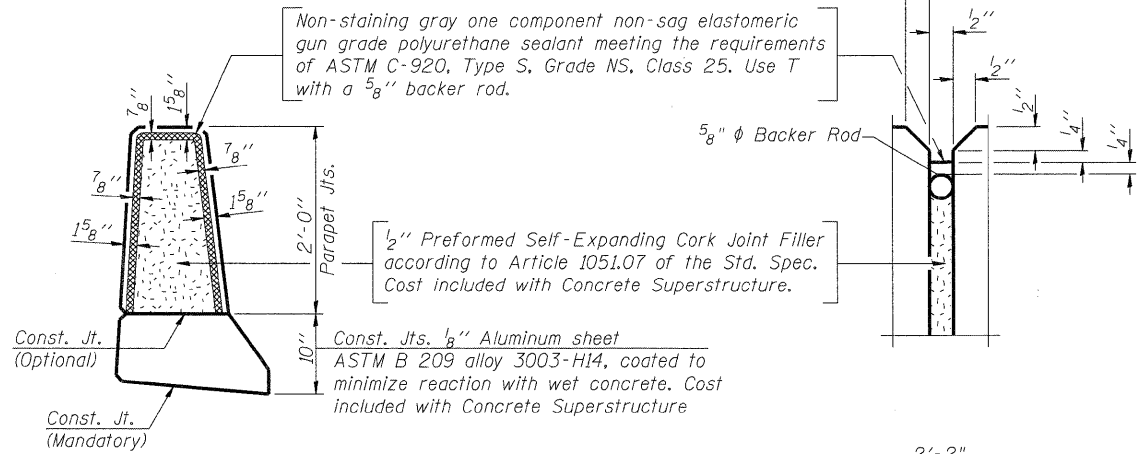
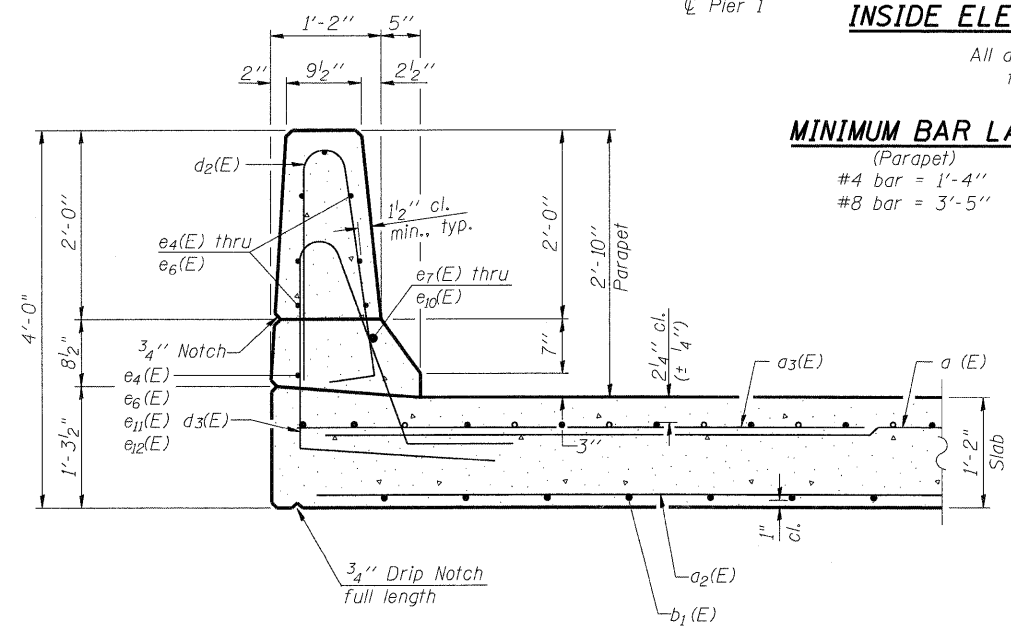
Bar	No.	Size	Length	Shape
a(E)	168	#7	24'-2"	—
a ₁ (E)	84	#5	28'-0"	—
a ₂ (E)	84	#5	18'-1"	—
a ₃ (E)	84	#6	6'-0"	—
b(E)	82	#8	12'-0"	—
b ₁ (E)	82	#8	23'-4"	—
b ₂ (E)	82	#8	17'-1"	—
b ₃ (E)	41	#8	14'-8"	—
b ₄ (E)	41	#7	18'-2"	—
b ₅ (E)	41	#7	31'-0"	—
b ₆ (E)	82	#7	25'-2"	—
b ₇ (E)	82	#7	18'-9"	—
b ₈ (E)	21	#5	26'-0"	—
c(E)	75	#5	2'-5"	└
c ₁ (E)	75	#5	5'-8"	—
d(E)	75	#4	4'-10"	L
d ₁ (E)	75	#6	4'-0"	L
d ₂ (E)	84	#5	5'-7"	└
d ₃ (E)	84	#5	7'-10"	└
d ₄ (E)	14	#4	2'-0"	└
e(E)	12	#4	19'-8"	—
e ₁ (E)	6	#4	12'-1"	—
e ₂ (E)	6	#4	7'-11"	—
e ₃ (E)	6	#4	12'-9"	—
e ₄ (E)	15	#4	11'-1"	—
e ₅ (E)	14	#4	14'-0"	—
e ₆ (E)	15	#4	11'-8"	—
e ₇ (E)	1	#8	11'-1"	—
e ₈ (E)	1	#8	25'-6"	—
e ₉ (E)	1	#8	26'-1"	—
e ₁₀ (E)	1	#8	11'-8"	—
e ₁₁ (E)	1	#4	25'-6"	—
e ₁₂ (E)	1	#4	26'-1"	—
f(E)	12	#7	23'-4"	—
u(E)	8	#5	6'-1"	└
u ₁ (E)	8	#5	6'-7"	└
Reinforcement Bars, Epoxy Coated			Pound	42,350
Concrete Superstructure			Cu. Yds.	160.4

INSIDE ELEVATION OF EAST PARAPET

All dimensions measured along front face of parapet

MINIMUM BAR LAP

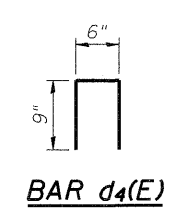
(Parapet)
#4 bar = 1'-4"
#8 bar = 3'-5"



SECTION THRU PARAPET

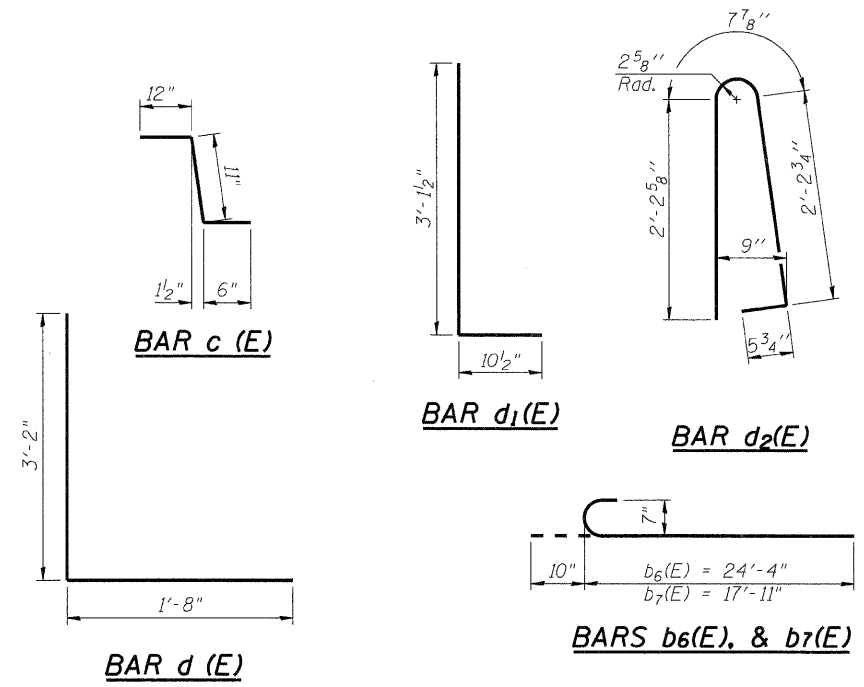
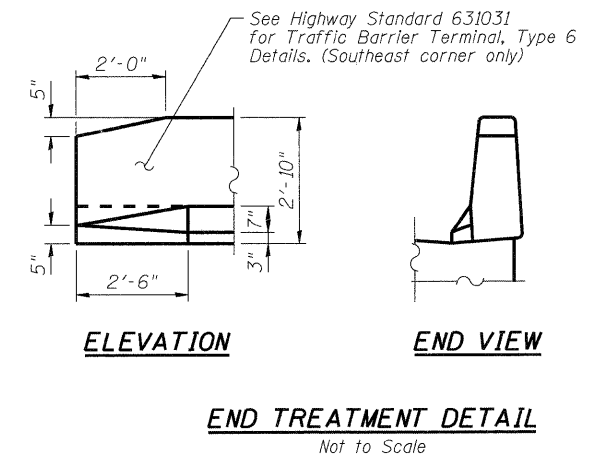
PARAPET JOINT DETAILS

BARS u(E), & u₁(E)



SUPERSTRUCTURE DETAILS

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



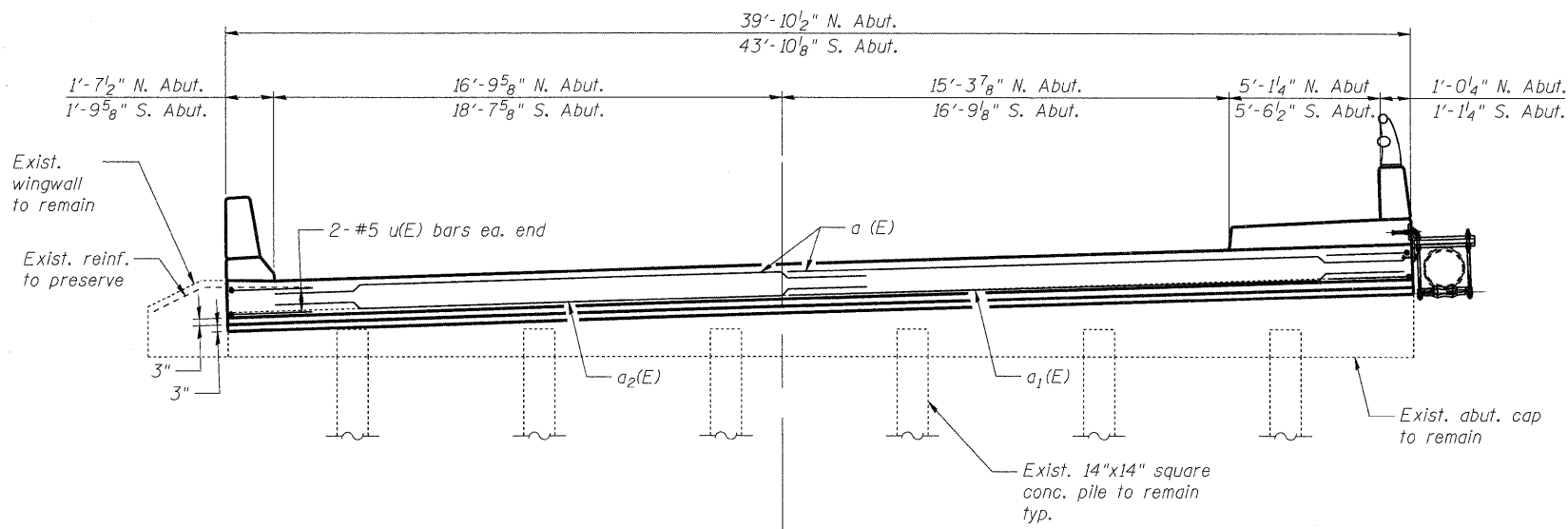
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PLOT DRIVER: pd7.plt
PEN TABLE: standard-trans.tbl 1/26/2010

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SHEET NO. S-7	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	5102	09-00557-00-BR	WINNEAGO	18	14
S-9 SHEETS			CONTRACT NO. 85508		
FED. ROAD DIST. NO. 2		ILLINOIS	FED. AID PROJECT	BHM 5099 (C&I)	

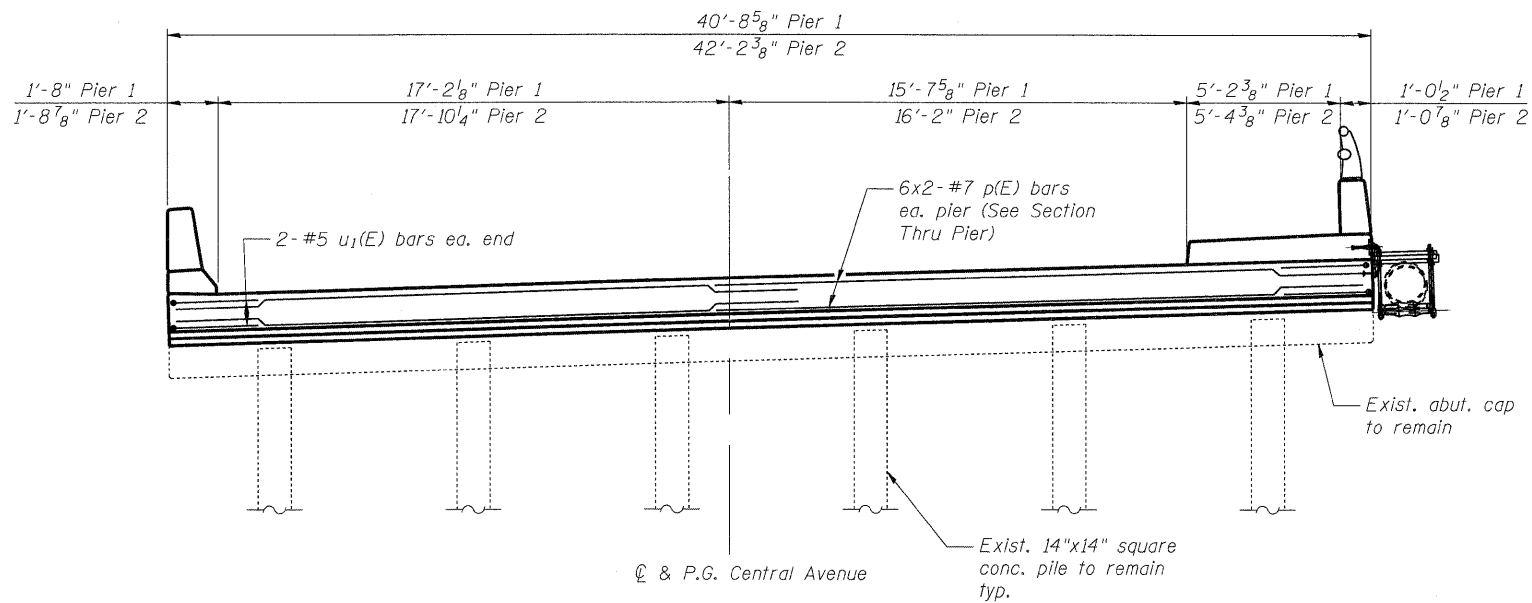
DATE: 1/26/10



℄ & P.G. Central Avenue

ABUTMENT ELEVATION

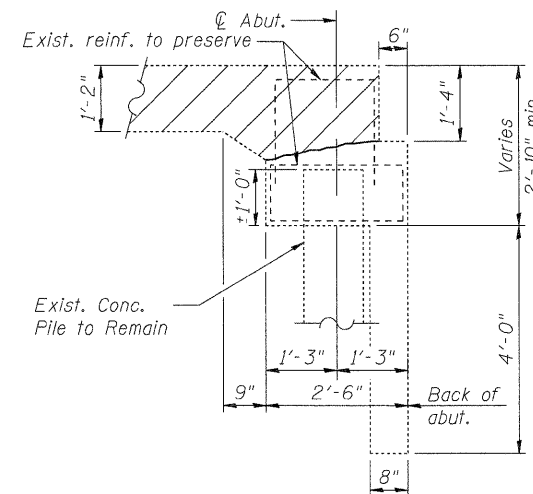
South Abutment looking South
(North Abutment similar, but opposite hand)
Dimensions along skew



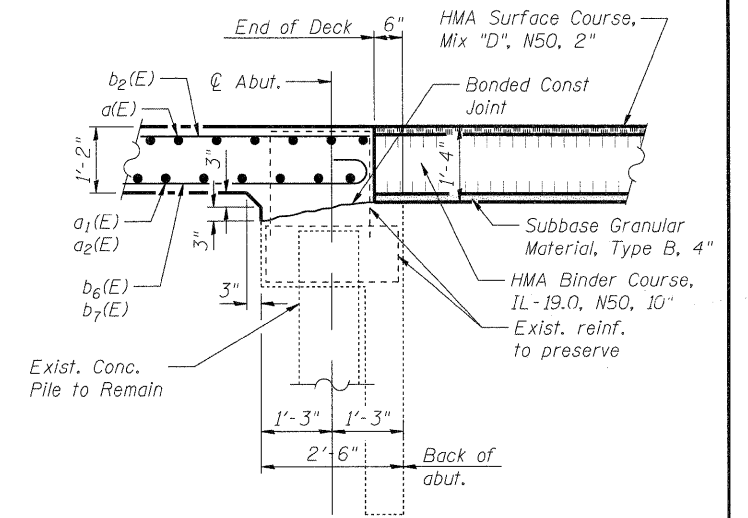
℄ & P.G. Central Avenue

PIER ELEVATION

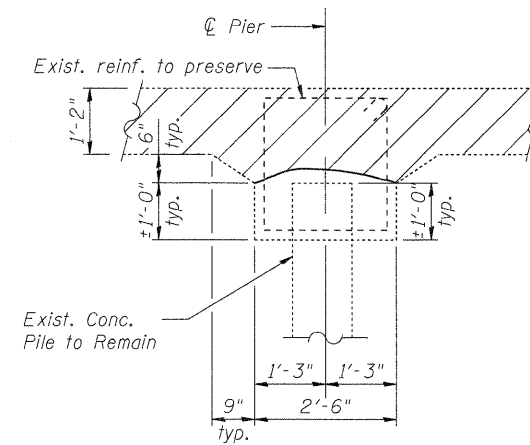
Looking South
Dimensions along skew



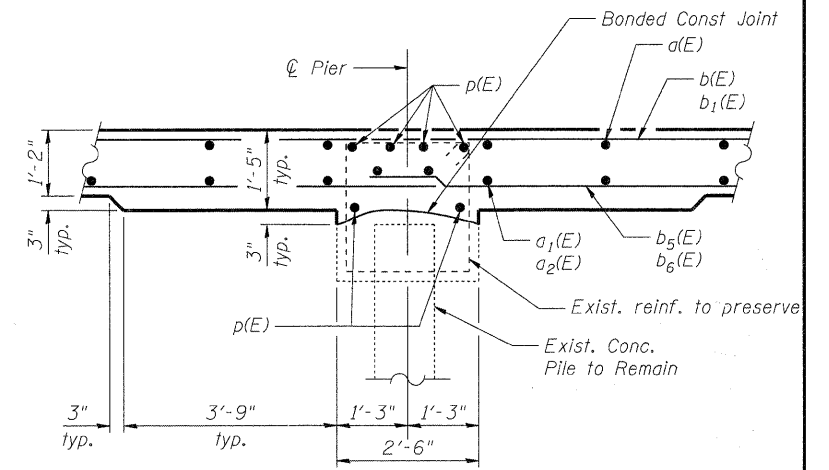
REMOVAL SECTION THRU ABUT.



SECTION THRU ABUT.



REMOVAL SECTION THRU PIER



SECTION THRU PIER

NOTES

1. See Superstructure Bill of Materials for u(E), u1(E), and p(E) bars.
2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included in Removal of Existing Superstructures.

SUBSTRUCTURE DETAILS

**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

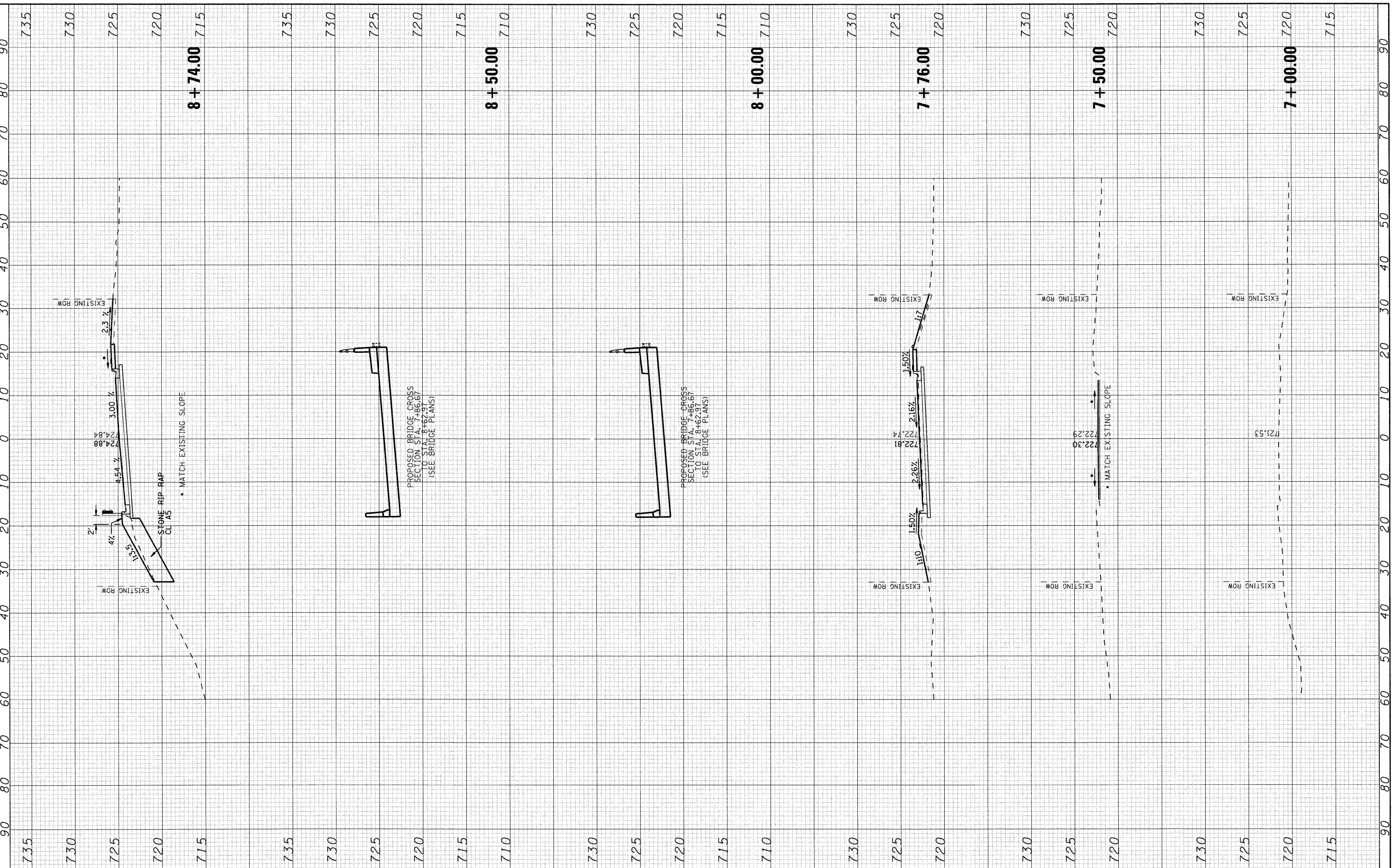
DESIGNED	KMA
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CHECKED	RGD

FILE NAME: 090026-sub01.dgn
PLOT DRIVER: pdf.plt
PEN TABLE: standard-trans.tbl 1/26/2010

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SHEET NO. S-9	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	5102	09-00557-00-BR	WINNEAGO	18	16
S-9 SHEETS			CONTRACT NO. 85508		
FED. ROAD DIST. NO. 2 ILLINOIS			FED. AID PROJECT BHM 5099 (081)		

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Robert G. Davies
 CLIENT: City of Rockford
 DATE PLOTTED: 1/26/2010 10:27 AM
 PLOT NAME: 09-00557-00-BR
 PLOT DRIVER: pdfplot
 PEN TABLE: standard-trans.tbl



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USER NAME = whood	DESIGNED - KMA	REVISED -
FILE NAME = 09-00557-00-BR.dgn	DRAWN - WJH	REVISED -
PLOT SCALE =	CHECKED - TH	REVISED -
PLOT DATE = 1/26/2010	DATE - 1/26/2010	REVISED -

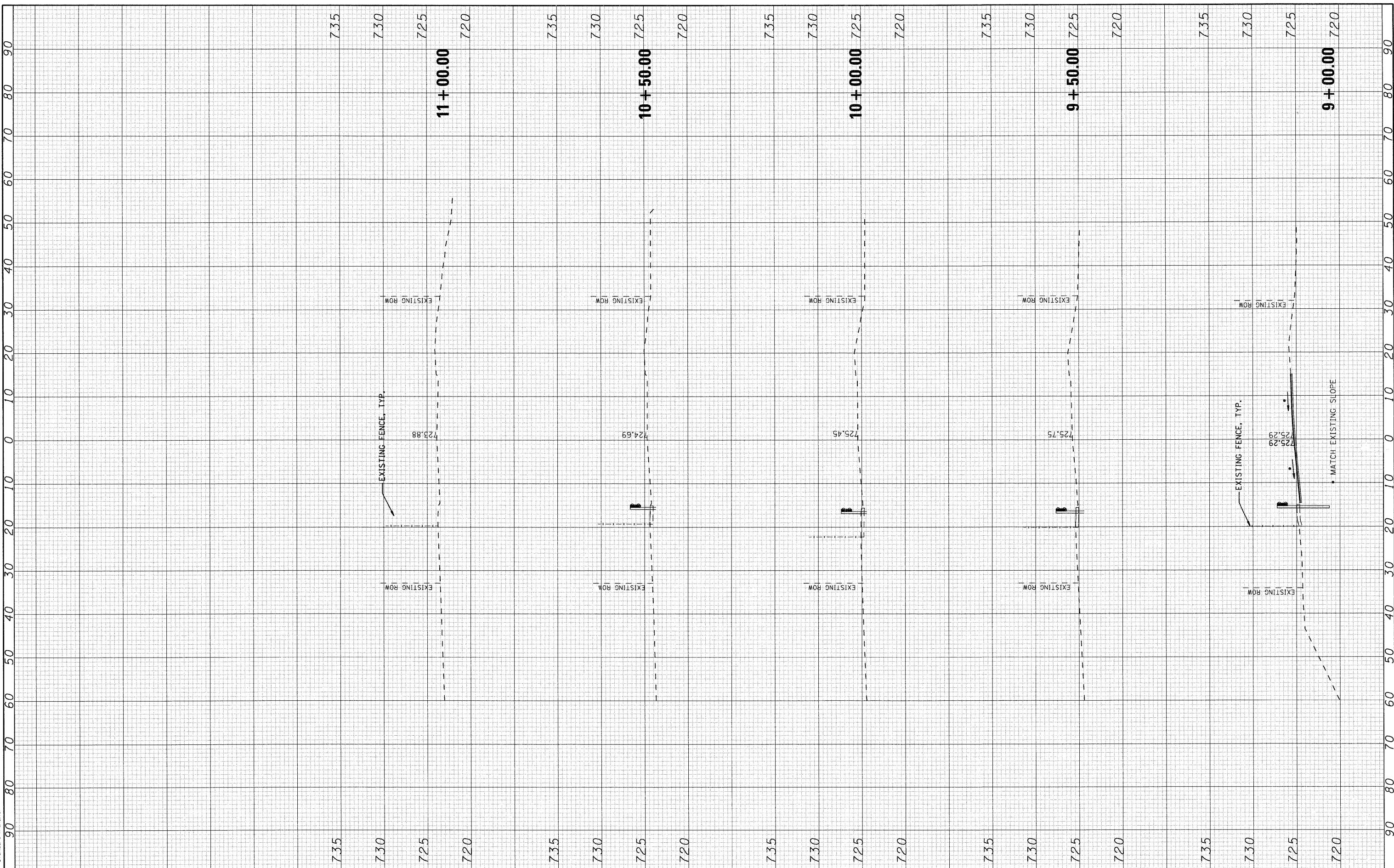
CITY OF ROCKFORD

**CENTRAL AVENUE OVER THE SOUTH BRANCH OF KENT CREEK
 CROSS SECTIONS**

SCALE: 10H:5V SHEET NO. 1 OF 2 SHEETS STA. 7+00.00 TO STA. 8+74.00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5102	09-00557-00-BR	Winnebago	18	17
FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT			CONTRACT NO. 85508	

COMPANY NAME: SEC GROUP, INC.
 PROJECT CONTACT: Ryan P. ...
 CLIENT: City of Rockford
 DATE PLOTTED: 1/26/2010 10:00:00 PM
 FILE NAME: 090026-xsec.dgn
 PLOT DRIVER: pdf.plt
 PEN TABLE: standard-trans.tbl



SEC Group, Inc. <small>An HR Green Company</small> 421 N. First Street McHenry, IL 60050-2138 T 815.365.1778 F 815.365.1781 www.secgroup.com <small>*McHenry, IL *Rockford, IL *New Lenox, IL *Chicago, IL</small>		USER NAME = whood FILE NAME = 090026-xsec.dgn PLOT SCALE = PLOT DATE = 1/26/2010	DESIGNED - KMA DRAWN - WJH CHECKED - TH DATE - 1/26/10	REVISED - REVISED - REVISED - REVISED -	CITY OF ROCKFORD		CENTRAL AVENUE OVER THE SOUTH BRANCH OF KENT CREEK CROSS SECTIONS		F.A.U. RTE. 5102 SECTION 09-00557-00-BR COUNTY Winnebago CONTRACT NO. 85508	TOTAL SHEETS 18 SHEET NO. 18
SCALE: 10H:5V		SHEET NO. 2 OF 2 SHEETS		STA. 9+00.00 TO STA. 11+50.00		FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT				