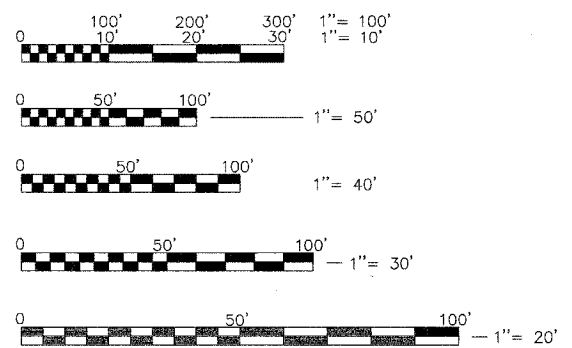


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 # MCHSNEY # YORKVILLE # YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	1
PROJECT NO. BHM-8003 (278)				
FED. ROAD DIST. NO. 1 ILLINOIS HIGHWAY PROJECT 1				

FOR INDEX OF SHEETS, SEE SHEET NO. 2

SCALES
 PLAN: 1" = 20'
 PROFILE HORIZ.: 1" = 20'
 PROFILE VERT.: 1" = 5'
 CROSS SECTIONS HORIZ.: 1" = 2'
 CROSS SECTIONS VERT.: 1" = 5'



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.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

F.A.U. 1517 : ILLINOIS AVENUE OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
ROADWAY WIDENING AND BRIDGE
SUPERSTRUCTURE REPLACEMENT
PROJECT NO. ACBHM-8003 (278)
S.N. 045-6008, 045-6009
KANE COUNTY
C-91-076-03



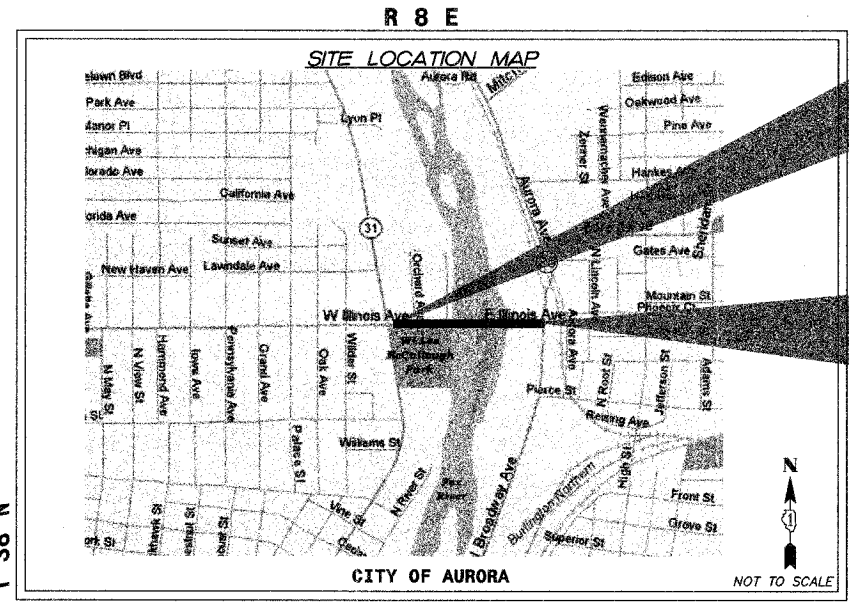
LOCATION OF SECTION INDICATED THIS: - [black rectangle]

STRUCTURE INFORMATION

SN 045-6008:
 EXISTING AND PROPOSED STRUCTURE IS TWO SPANS (146'-3") REMOVE EXISTING CONCRETE DECK ON CONCRETE BEAM SUPERSTRUCTURE AND REPLACE WITH A 74'-1" WIDE SUPERSTRUCTURE CONSISTING OF A CONCRETE DECK ON STEEL BEAMS. EXISTING SUBSTRUCTURE UNITS TO BE MODIFIED AND RE-USED.

SN 045-6009:
 EXISTING AND PROPOSED STRUCTURE IS FOUR SPANS (296'-8") REMOVE EXISTING CONCRETE DECK ON CONCRETE BEAM SUPERSTRUCTURE AND REPLACE WITH A 74'-1" WIDE SUPERSTRUCTURE CONSISTING OF A CONCRETE DECK ON STEEL BEAMS. EXISTING SUBSTRUCTURE UNITS TO BE MODIFIED AND RE-USED.

PROJECT LOCATED IN THE CITY OF AURORA



ILLINOIS AVENUE PROJECT BEGINS STA. 105+75

ILLINOIS AVENUE PROJECT ENDS STA. 124+95

AURORA TOWNSHIP

GROSS LENGTH OF PROJECT = 1920 FEET = 0.36 MILES
 NET LENGTH OF PROJECT = 1920 FEET = 0.36 MILES

DESIGN DESIGNATION
 MINOR ARTERIAL (URBAN)

SPEED LIMIT
 ILLINOIS AVENUE: 30 MPH

TRAFFIC DATA
 ILLINOIS AVENUE: 11,000 (2002)

CITY OF AURORA

APPROVED August 3, 2006
Steph K. Anderson
 LOCAL AGENCY OFFICIAL

PASSED September 5, 2006
Christopher Holt
 DISTRICT 4 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW Sept 11, 2006
Diane O'Keefe
 DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

PROFESSIONAL ENGINEER'S SIGN & SEAL

Jeff L. Pisha
 JEFF L. PISHA P.E.
 DATE: July 28, 2006
 LICENSE EXPIRES: Nov 30, 2007

STRUCTURAL ENGINEER'S SIGN & SEAL

Robert G. Davies
 ROBERT G. DAVIES, S.E., P.E.
 DATE: July 28, 2006
 LICENSE EXPIRES: Nov 30, 2006

FEDERAL AID DESIGN ENGINEER: JESSICA MILLER (847) 705-4487



CALL JULIE 1-800-892-0123
 WITH THE FOLLOWING:
 COUNTY KANE
 CITY-TOWNSHIP AURORA - AURORA
 SEC. & 1/4 SEC. NO. # 15
 48 hours before you dig
 (Excluding Sat., Sun. & Holidays)

CONTRACT NO. 83867

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	2
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT #: 83867				

INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS, LIST OF STATE STANDARDS, GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5-7	TYPICAL SECTIONS
8-10	ALIGNMENT AND TIES
11-12	REMOVAL PLAN
13-16	ROADWAY PLAN AND PROFILE
17-21	SUGGESTED MAINTENANCE OF TRAFFIC PLANS AND DETAILS
22	TEMPORARY DETOUR PLAN
23-24	EROSION CONTROL PLAN
25-28	DRAINAGE PLAN AND PROFILE
29-30	PAVEMENT MARKING, SIGNING, AND LANDSCAPING PLAN
31-32	FUTURE TRAFFIC SIGNAL INTERCONNECT PLAN AND DETECTOR LOOP REPLACEMENT PLAN
33-41	LIGHTING PLANS AND DETAILS
42-71	WEST STRUCTURE PLANS
72-83	PEDESTRIAN TUNNEL PLANS
84-110	EAST STRUCTURE PLANS
111	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
112	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS AND BENCHING DETAIL FOR EMBANKMENT WIDENING
113	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
114	BUTT JOINT AND BITUMINOUS TAPER DETAILS
115	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
116	PCC SIDEWALK 5" (SPECIAL) AND CONCRETE BARRIER (SPECIAL) DETAIL
117-118	STANDARD CONSTRUCTION DETAILS
119-121	CROSS SECTIONS

GENERAL NOTES

- 1 THE CONTRACTOR WILL PROVIDE AND INSTALL TWO (2) WEIGHTED SAND BAGS ON EACH TYPE II BARRICADE USED. (ONE (1) WEIGHTED SAND BAG ACROSS EACH BOTTOM RAIL.) ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR (4) SANDBAGS PER BARRICADE.
- 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 AURORA AND I.D.O.T. AT LEAST 72 HOURS IN ADVANCE OF BEGINNING ANY WORK ON ILLINOIS 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 AURORA.
- 5 THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.40 GAL/SQ-YD WITH TWO (2) APPLICATIONS INCLUDED.
- 6 UNLESS OTHERWISE NOTED ALL OFFSETS FOR THE DRAINAGE STRUCTURES LOCATED IN THE CURB AND GUTTER ARE TO THE BACK OF CURB. OFFSETS FOR ALL OTHER STRUCTURES ARE TO THE CENTER OF THE GRATE.
- 7 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.
- 8 THE CONTRACTOR SHALL ENSURE THAT ALL WATER SYSTEM VALVES, VALVE VAULTS, AND SANITARY SEWER MANHOLES REMAIN READILY ACCESSIBLE TO THE CITY FOR EMERGENCY OPERATIONS. THE LOCATIONS OF ALL WATER AND SANITARY FACILITIES SHALL BE MARKED AND READILY VISIBLE AT ALL TIMES.
- 9 THE CONTRACTOR SHALL NOT OPERATE ANY OF THE EXISTING WATER SYSTEM. CITY OF AURORA FORCES MUST BE PRESENT TO OBSERVE AND OPERATE ALL VALVES, HYDRANTS, ETC. THE CONTRACTOR SHALL PROVIDE THE CITY WITH 24 HOUR NOTICE PRIOR TO STARTING ANY WORK ON CITY FACILITIES.
- 10 SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS BEFORE REMOVAL OF ANY UNSTABLE MATERIAL.
- 11 A SOILS REPORT HAS BEEN COMPLETED FOR THIS PROJECT AND IS AVAILABLE FOR CONTRACTOR REVIEW AT THE CITY OF AURORA OFFICES.
- 12 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 THE COST OF ITEMS BEING REMOVED.
- 13 THIS PROJECT MAY REQUIRE UP TO 6 CHANGEABLE MESSAGE SIGNS.
- 14 THE PAY ITEM FOR STORM SEWER REMOVAL SHALL INCLUDE ANY TRENCH BACKFILL REQUIRED TO FILL AREA OF SEWER REMOVAL WHERE THERE IS NO REPLACEMENT. IF PROPOSED STORM SEWER IS REPLACED IN THE SAME TRENCH, THEN TRENCH BACKFILL SHALL BE PAID FOR SEPARATELY WITH THE QUANTITY SHOWN ON THE PLANS.
- 15 WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III SHALL BE PLACED ON THE FINAL SURFACE PRIOR TO PLACING FINAL STRIPING. COST SHALL BE INCLUDED WITH TRAFFIC CONTROL AND PROTECTION.
- 16 5' LONG TRANSITIONS FOR PROPOSED CURB AND GUTTER TO EXISTING CURB AND GUTTER ARE INCLUDED AND SHALL BE INCIDENTAL TO COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12.
- 17 THE WORK UNDER THIS CONTRACT SHALL CONFORM TO ALL REGULATIONS GIVEN IN THE REGIONAL PERMIT ISSUED FOR THE PROJECT AND THE IDNR/OWR PERMIT ISSUED FOR THE PROJECT. THE WORK SHALL ALSO CONFORM TO KANE-DUPAGE COUNTY SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) REQUIREMENTS. ANY FEES REQUIRED BY THE KDSWCD THROUGHOUT THE DURATION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 18 BUTT JOINTS WILL BE INSTALLED AT THE END OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE "BUTT JOINT AND BITUMINOUS TAPER" DETAILS UNLESS OTHERWISE SPECIFIED.
- 19 PLACING EMBANKMENT SHALL BE IN ACCORDANCE WITH THE "BENCHING DETAIL FOR EMBANKMENT WIDENING" AND THE STANDARD SPECIFICATIONS. EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM "FURNISHED EXCAVATION."
- 20 THE BIKE TRAILS THAT CROSS THROUGH THE SITE SHALL BE MAINTAINED BY THE CONTRACTOR WITHIN THE LIMITS OF THE R.O.W. AND SHALL REMAIN OPEN TO BIKE AND PEDESTRIAN TRAFFIC AT ALL TIMES DURING CONSTRUCTION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN "TRAFFIC CONTROL AND PROTECTION."

LIST OF STATE STANDARDS

STANDARD NO.	LIST OF DESCRIPTION
000001-04	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001-02	TEMPORARY EROSION CONTROL SYSTEMS
420001-06	PAVEMENT JOINTS
420401-05	BRIDGE APPROACH PAVEMENT
424001-04	CURB RAMPS FOR SIDEWALKS
515001-02	NAME PLATE FOR BRIDGES
601001	SUB-SURFACE DRAINS
602011	CATCH BASIN, TYPE C
602301-01	INLET, TYPE A
602401-01	MANHOLE, TYPE A
604001-02	FRAME AND LIDS, TYPE 1
604051-02	FRAME AND GRATE, TYPE 11
606001-02	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-02	PC CONCRETE ISLAND AND MEDIANS
609006-02	BRIDGE APPROACH PAVEMENT (DRAIN DETAIL)
701606-04	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701801-03	LANE CLOSURE, MULTILANE 1W OR 2W, CROSSWALK OR SIDEWALK CLOSURE FOR SPEEDS < 45 MPH
702001-06	TRAFFIC CONTROL DEVICES
704001-02	TEMPORARY CONCRETE BARRIER
720001	SIGN PANEL MOUNTING DETAILS
720006	SIGN PANEL ERECTION DETAILS
720011	METAL POSTS FOR SIGNS, MARKERS, AND DELINEATORS
729001	APPLICATION OF TYPE A & B METAL POSTS
780001-01	TYPICAL PAVEMENT MARKINGS
805001	ELECTRIC SERVICE INSTALLATION DETAILS
878001-01	CONCRETE FOUNDATION DETAILS
886001	DETECTOR LOOP INSTALLATIONS
886006	TYPICAL LAYOUT FOR DETECTOR LOOPS

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	—	—

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

REVISIONS	
NO.	DATE
7.	
6.	
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 * McHENRY * HUNTLEY * YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 INDEX OF SHEETS,
 LIST OF STATE STANDARDS,
 AND GENERAL NOTES

SCALE: "N15"
 DATE: 07-28-2006
 DRAWN BY: MPL
 CHECKED BY: JLP

PLOT FILE STANDARD
 VIEW: 05-02
 COMP. FILE: 050701-011.DWG

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	3
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83867				

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
			URBAN TOTAL QUANTITIES	ROADWAY 80% FEDERAL 20% LOCAL 1000-2A	BRIDGE 80% FEDERAL 20% LOCAL X071-2A	LIGHTING 80% FEDERAL 20% LOCAL Y030-1E	ROADWAY 100% LOCAL X060-2A
CODE NO.	ITEM	UNIT					
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	215	215	-	-	-
20400800	FURNISHED EXCAVATION	CU YD	83	83	-	-	-
20700400	POROUS GRANULAR EMBANKMENT (SPECIAL)	CU YD	212	-	212	-	-
20700420	POROUS GRANULAR EMBANKMENT, SUBGRADE	CU YD	604	604	-	-	-
20800150	TRENCH BACKFILL	CU YD	100	100	-	-	-
* 21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	2,055	2,055	-	-	-
* 25000350	SEEDING, CLASS 7	ACRE	0.4	0.4	-	-	-
* 25000400	NITROGEN FERTILIZER NUTRIENT	POUND	45	45	-	-	-
* 25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	45	45	-	-	-
* 25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	45	45	-	-	-
* 25200110	SODDING, SALT TOLERANT	SQ YD	2,055	2,055	-	-	-
* 28000400	PERIMETER EROSION BARRIER	FOOT	1,419	1,419	-	-	-
* 28000500	INLET AND PIPE PROTECTION	EACH	9	9	-	-	-
28000510	INLET FILTERS	EACH	9	9	-	-	-
28100107	STONE RIP RAP, CLASS A4	SQ YD	9	9	-	-	-
28200200	FILTER FABRIC	SQ YD	9	9	-	-	-
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	1,231	1,231	-	-	-
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	5,742	3,083	-	-	2,659
40600980	BITUMINOUS SURFACE REMOVAL - BUTT JOINT	SQ YD	458	-	-	-	458
42000501	PORTLAND CEMENT CONCRETE PAVEMENT 10" (JOINTED)	SQ YD	811	811	-	-	-
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	732	732	-	-	-
42001400	BRIDGE APPROACH PAVEMENT (SPECIAL)	SQ YD	168	168	-	-	-
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	67	67	-	-	-
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	10,613	10,613	-	-	-
42400430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	2,567	2,567	-	-	-
42400800	DETECTABLE WARNINGS	SQ FT	325	325	-	-	-
44000006	BITUMINOUS SURFACE REMOVAL, 1 1/2"	SQ YD	5,982	3,156	-	-	2,826
44000100	PAVEMENT REMOVAL	SQ YD	1,909	1,909	-	-	-
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	223	223	-	-	-
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1,989	1,989	-	-	-
44000600	SIDEWALK REMOVAL	SQ FT	10,901	10,901	-	-	-
44000910	BITUMINOUS CONCRETE REMOVAL (DECK)	SQ YD	2,551	2,551	-	-	-
44002010	CONCRETE MEDIAN REMOVAL	FOOT	86	86	-	-	-
44201785	CLASS D PATCHES, TYPE I, 12"	SQ YD	20	20	-	-	-
44201794	CLASS D PATCHES, TYPE III, 12"	SQ YD	40	40	-	-	-
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	790	790	-	-	-
50101700	REMOVAL OF EXISTING SUPERSTRUCTURES NO. 1	EACH	1	-	1	-	-
50101800	REMOVAL OF EXISTING SUPERSTRUCTURES NO. 2	EACH	1	-	1	-	-
50102400	CONCRETE REMOVAL	CU YD	242	-	242	-	-
50104000	BRIDGE RAIL REMOVAL	FOOT	36	-	36	-	-
50200100	STRUCTURE EXCAVATION	CU YD	218	-	218	-	-
50300150	NEOPRENE EXPANSION JOINT 2"	FOOT	153	-	153	-	-
50300225	CONCRETE STRUCTURES	CU YD	594	-	594	-	-
50300255	CONCRETE SUPERSTRUCTURE	CU YD	1,143	-	1,143	-	-
50300260	BRIDGE DECK GROOVING	SQ YD	2,387	-	2,387	-	-
50300300	PROTECTIVE COAT	SQ YD	4,260	-	4,260	-	-
50300310	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	40	-	40	-	-
50300320	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	20	-	20	-	-
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	-	1	-	-
50500505	STUD SHEAR CONNECTORS	EACH	13,980	-	13,980	-	-
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	313,040	-	313,040	-	-
50900605	HANDRAIL REMOVAL	FOOT	116	-	116	-	-

SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE				
			URBAN TOTAL QUANTITIES	ROADWAY 80% FEDERAL 20% LOCAL 1000-2A	BRIDGE 80% FEDERAL 20% LOCAL X071-2A	LIGHTING 80% FEDERAL 20% LOCAL Y030-1E	ROADWAY 100% LOCAL X060-2A
CODE NO.	ITEM	UNIT					
51500100	NAME PLATES	EACH	2	-	2	-	-
54002020	EXPANSION BOLTS 3/4"	EACH	56	-	56	-	-
54213447	END SECTIONS 12"	EACH	4	4	-	-	-
550A0340	STORM SEWER, CLASS A, TYPE 2, 12"	FOOT	142	142	-	-	-
55100500	STORM SEWER REMOVAL 12"	FOOT	24	24	-	-	-
56103000	DUCTILE IRON WATER MAIN 6"	FOOT	4	-	-	-	4
56400500	FIRE HYDRANTS TO BE REMOVED	EACH	1	-	-	-	1
56400820	FIRE HYDRANTS WITH AUXILIARY VALVE AND VALVE BOX	EACH	1	-	-	-	1
58700200	BRIDGE SEAT SEALER	SQ FT	964	-	964	-	-
59000100	EPOXY CRACK SEALING	FOOT	97	-	97	-	-
60100945	PIPE DRAINS, 12"	FOOT	56	56	-	-	-
60201105	CATCH BASINS, TYPE A, 4'-DIA, TYPE 11 FRAME AND GRATE	EACH	5	5	-	-	-
60221100	MANHOLES, TYPE A, 5'-DIA, TYPE 1 FRAME, CLOSED LID	EACH	2	2	-	-	-
60224020	MANHOLES, TYPE A, 6'-DIA, TYPE 11 FRAME AND GRATE	EACH	3	3	-	-	-
60223100	MANHOLES, TYPE A, SPECIAL, 5'-DIA, TYPE 1 FRAME, CLOSED LID	EACH	1	1	-	-	-
60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	5	5	-	-	-
60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	18	15	-	-	3
60265900	VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	3	2	-	-	1
60500040	REMOVING MANHOLES	EACH	3	3	-	-	-
60500060	REMOVING INLETS	EACH	7	7	-	-	-
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1,578	1,578	-	-	-
60620800	CONCRETE MEDIAN, TYPE SB-9.12	SQ FT	1,574	1,574	-	-	-
60900140	TYPE B INLET BOX, STANDARD 609006	EACH	4	4	-	-	-
60900515	CONCRETE THRUST BLOCKS	EACH	4	4	-	-	-
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	15	15	-	-	-
67100100	MOBILIZATION	L. SUM	1	0.5	0.5	-	-
70101700	TRAFFIC CONTROL AND PROTECTION	L. SUM	1	0.5	0.5	-	-
70400100	TEMPORARY CONCRETE BARRIER	FOOT	578	578	-	-	-
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	578	578	-	-	-
72400710	RELOCATE SIGN PANEL - TYPE 1	SQ FT	37	37	-	-	-

PLOT FILE STANDARD
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REVISIONS	
NO.	DATE
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* MCKENRY * HUNTLEY * YORKVILLE
ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
SUMMARY OF QUANTITIES

SCALE: "NTS"
DATE 07-28-2006

DRAWN BY MPL
CHECKED BY JLP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	4
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83867				

SUMMARY OF QUANTITIES			URBAN	CONSTRUCTION TYPE CODE				
				TOTAL QUANTITIES	ROADWAY	BRIDGE	LIGHTING	ROADWAY
					80% FEDERAL 20% LOCAL 1000-2A	80% FEDERAL 20% LOCAL X071-2A	80% FEDERAL 20% LOCAL Y030-1E	100% LOCAL Z000-2A
CODE NO.	ITEM	UNIT						
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQ FT	104	104	-	-	-	
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4,569	4,569	-	-	-	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	593	593	-	-	-	
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	388	388	-	-	-	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	36	36	-	-	-	
* 78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	3,602	3,602	-	-	-	
* 78005150	EPOXY PAVEMENT MARKING - LINE 12"	FOOT	6	6	-	-	-	
78300105	PAVEMENT MARKING REMOVAL	FOOT	200	200	-	-	-	
* 80400100	ELECTRIC SERVICE INSTALLATION	EACH	2	-	-	2	-	
* 80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1	-	-	1	-	
* 80700140	GROUND ROD, 3/4" DIA. x 10 FT	EACH	15	-	-	15	-	
* 81000600	CONDUIT IN TRENCH, 2" DIA. GALVANIZED STEEL	FOOT	830	40	-	790	-	
* 81018500	CONDUIT PUSHED, 2" DIA. GALVANIZED STEEL	FOOT	137	-	-	137	-	
* 81100200	CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA. GALVANIZED STEEL	FOOT	152	-	-	152	-	
* 81400100	HANDHOLES	EACH	24	-	-	24	-	
* 81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1,544	-	-	1,544	-	
* 81702440	ELECTRIC CABLE IN CONDUIT 600V (XLP TYPE USE) 3-1/C NO. 1/0	FOOT	200	-	-	200	-	
* 82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	23	-	-	23	-	
* 82500530	LIGHTING CONTROLLER TYPE CB-RCS 100 AMP-240 VOLT	EACH	2	-	-	2	-	
* 83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	121	-	-	121	-	
* 84200500	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	16	-	-	16	-	
* 84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	2	-	-	2	-	
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1	-	-	-	
88600100	DETECTOR LOOP, TYPE I	FOOT	443	-	-	-	443	
X0322256	TEMPORARY INFORMATION SIGNING	SQ FT	200	200	-	-	-	
X0323557	BRIDGE JOINT SYSTEM EXPANSION, 1"	FOOT	153	-	153	-	-	
X0323830	DRAINAGE SCUPPERS, DS-11	EACH	24	-	24	-	-	
X0712400	TEMPORARY PAVEMENT	SQ YD	84	84	-	-	-	
X0925900	BICYCLE RAILING (SPECIAL)	FOOT	624	-	624	-	-	
* X2800100	TEMPORARY DITCH CHECKS, ROLLED EXCELSIOR	EACH	10	10	-	-	-	
X3550500	BITUMINOUS BASE COURSE SUPERPAVE 8"	SQ YD	420	420	-	-	-	
X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	3	3	-	-	-	
X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	6	6	-	-	-	
X4066426	BITUMINOUS CONC. SURF. COURSE, SUPERPAVE, MIX "D", N70	TON	603	324	-	-	279	
X4066616	BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL 19.0, N70	TON	63	63	-	-	-	
X4066770	LEVELING BINDER (MACHINE METHOD), SUPERPAVE N70	TON	499	359	-	-	140	
* X7011005	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	L SUM	1	0.5	0.5	-	-	
* X7015000	PORTABLE CHANGEABLE MESSAGE SIGN	CAL NO	12	12	-	-	-	
* X7030100	WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III	FOOT	14,644	14,644	-	-	-	
* XX0016697	LUMINAIRE (SPECIAL)	EACH	8	-	-	8	-	
Z0002600	BAR SPLICERS	EACH	2,029	-	2,029	-	-	
Z0004500	BITUMINOUS DRIVEWAY PAVEMENT 8"	SQ YD	128	128	-	-	-	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0.5	0.5	-	-	
* Z0030255	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2	EACH	4	4	-	-	-	
Z0036600	PARAPET RAILING	FOOT	446	-	446	-	-	
Z0076600	TRAINEES	HOURL	1500	750	750	-	-	

SUMMARY OF QUANTITIES			TOTAL QUANTITIES	CONSTRUCTION TYPE CODE			
				ROADWAY	BRIDGE	LIGHTING	ROADWAY
				80% FEDERAL 20% LOCAL 1000-2A	80% FEDERAL 20% LOCAL X071-2A	80% FEDERAL 20% LOCAL Y030-1E	100% LOCAL Z000-2A
CODE NO.	ITEM	UNIT					
* X0000088	UNIT DUCT WITH 2-1/C NO. 8 AND 1/C NO. 8 GROUND 600 V (XHHW-2), 1" DIA. POLYETHYLENE	FOOT	2,470	-	-	2,470	-
* X0000089	UNIT DUCT WITH 4-1/C NO. 8 AND 2-1/C NO. 8 GROUND 600 V (XHHW-2), 1" DIA. POLYETHYLENE	FOOT	20	-	-	20	-
* X0000090	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 6 1/C NO. 8	FOOT	162	-	-	162	-
* X0000091	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 3 1/C NO. 8	FOOT	77	-	-	77	-
* X0000092	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 2 1/C NO. 12	FOOT	168	-	-	168	-
* X0000093	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 1/C NO. 12	FOOT	168	-	-	168	-
X0324876	CONCRETE BARRIER (SPECIAL)	FOOT	198	198	-	-	-
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN)	SQ FT	171	-	171	-	-
X0000094	CLEARING (SPECIAL)	SQ YD	48	48	-	-	-
* X0000095	LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM	EACH	15	-	-	15	-
* X0000096	LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM, TWIN	EACH	4	-	-	4	-

PLOT FILE STANDARD
 MEMO OF-04
 COMP. FILE: 050181-81.DWG

+ Y080
 * SPECIALTY ITEM

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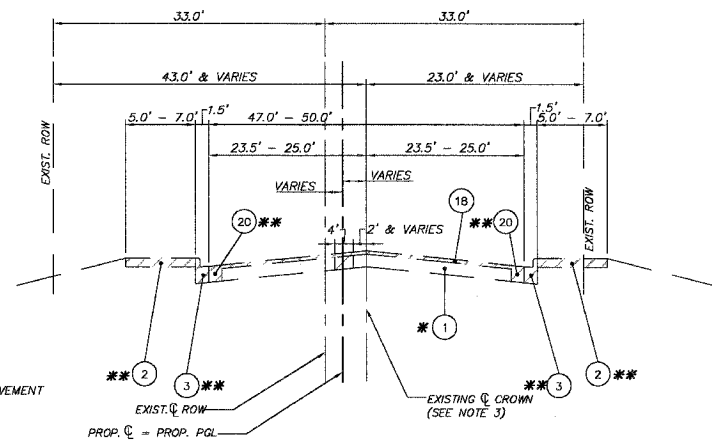
ILLINOIS DEPARTMENT OF TRANSPORTATION

 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 SUMMARY OF QUANTITIES

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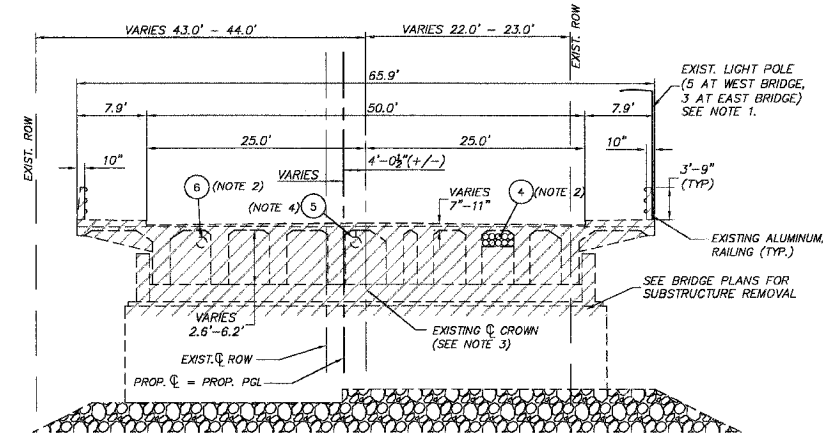
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	5
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83867				



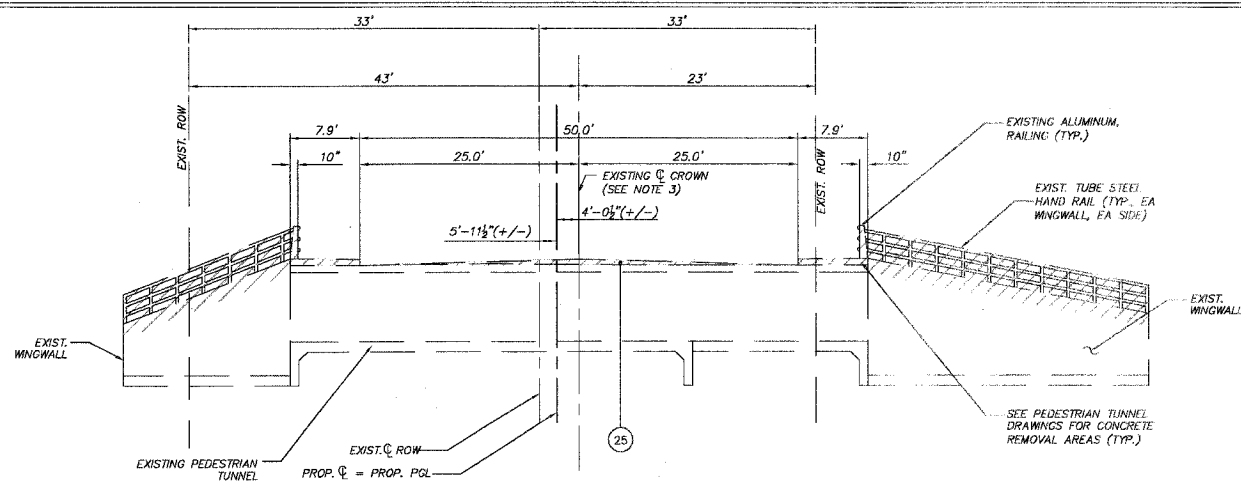
EXISTING CONCRETE BRIDGE APPROACH PAVEMENT
 STA. 113+08 TO STA. 113+38
 STA. 116+38 TO STA. 116+81
 STA. 116+96 TO STA. 117+11
 STA. 118+52 TO STA. 118+82
 STA. 120+32 TO STA. 120+62

NOT REQUIRED STA. 105+75 TO STA. 109+02
 AND STA. 123+68 TO STA. 124+95 (SEE
 REMOVAL PLAN AND PLAN AND PROFILES)

STA. 105+75 TO STA. 113+08
 STA. 117+11 TO STA. 118+52
 STA. 120+62 TO STA. 124+95



ILLINOIS AVENUE BRIDGE - EXISTING TYPICAL SECTION
 STA. 113+98 TO STA. 116+98 (SN 045-6009)
 STA. 118+82 TO STA. 120+32 (SN 045-6008)



ILLINOIS AVENUE PEDESTRIAN TUNNEL - EXISTING TYPICAL SECTION
 STA. 116+81 TO STA. 116+96

LEGEND

- 1 EXISTING PAVEMENT (2 1/2" - 6" BITUMINOUS SURFACE WITH 8"-11" CONCRETE BASE COURSE)
- 2 EXISTING PCC SIDEWALK
- 3 EXISTING CONCRETE CURB AND GUTTER
- 4 EXISTING ABANDONED 10-DUCT ELECTRICAL PACKAGE (5" DIA. PVC)
- 5 EXISTING 8" GAS MAIN (TO BE RELOCATED BY OTHERS)
- 6 EXISTING ABANDONED 12" WATER MAIN
- 7 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1.5"
- 8 PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2.5"
- 9 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5" (SPECIAL) (SEE PCC SIDEWALK 5" (SPECIAL) AND CONCRETE BARRIER (SPECIAL) DETAIL SHEET)
- 10 PROPOSED AGGREGATE BASE 4" (CA-6 CRUSHED) (INCLUDED IN COST OF PCC SIDEWALK)
- 11 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5"
- 12 PROPOSED BITUMINOUS BASE COURSE, SUPERPAVE, 8"
- 13 PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
- 14 PROPOSED TOPSOIL FURNISH AND PLACE, 6" & SODDING, SALT TOLERANT
- 15 PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE (12" DEPTH, SEE NOTE BELOW)
- 16 PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MINIMUM THICKNESS OF GUTTER FLAG SHALL BE 9". ADDITIONAL AGGREGATE UNDER GUTTER FLAG SHALL BE INCLUDED IN THE COST OF COMBINATION CONCRETE CURB & GUTTER TYPE B-6.12)
- 17 PROPOSED CONCRETE SUPERSTRUCTURE (CLASS BD CONCRETE) SEE BRIDGE PLANS
- 18 BITUMINOUS SURFACE REMOVAL, 1 1/2"
- 19 PROPOSED CONCRETE MEDIAN, TYPE SB-9.12
- 20 PAVEMENT REMOVAL
- 21 PROPOSED CONCRETE BARRIER (SPECIAL) (SEE PCC SIDEWALK 5" (SPECIAL) AND CONCRETE BARRIER (SPECIAL) DETAIL SHEET)
- 22 PROPOSED PORTLAND CEMENT CONCRETE PAVEMENT, 10" (JOINTED)
- 23 PROPOSED BRIDGE APPROACH PAVEMENT
- 24 PROPOSED BRIDGE APPROACH PAVEMENT (SPECIAL)
- 25 BITUMINOUS CONCRETE REMOVAL (DECK)
- 26 PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
- 27 PROPOSED LEVELING BINDER (MACHINE METHOD) SUPERPAVE N70 (THICKNESS VARIES 3/4" TO 2 1/4")

NOTES

1. WORK TO REMOVE EXISTING LIGHT POLES ON THE BRIDGES SHALL BE PAID FOR UNDER "REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE." REMOVAL OF EXISTING CONDUIT, HANDHOLES, ETC. ON THE BRIDGES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM "REMOVAL OF EXISTING SUPERSTRUCTURES."
2. WORK TO REMOVE EXISTING ABANDONED 10-DUCT PACKAGE AND ABANDONED 12" WATER MAIN SHALL BE INCLUDED UNDER THE LUMP SUM UNIT PRICE FOR "REMOVAL OF EXISTING SUPERSTRUCTURES"
3. EXIST. CROWN SHOWN ON EXISTING TYPICAL SECTIONS FOR CLARITY ONLY.
4. THE CONTRACTOR SHALL VERIFY THE STATUS OF THE EXISTING 8" GAS MAIN WITH THE GAS COMPANY BEFORE BEGINNING SUPERSTRUCTURE REMOVAL



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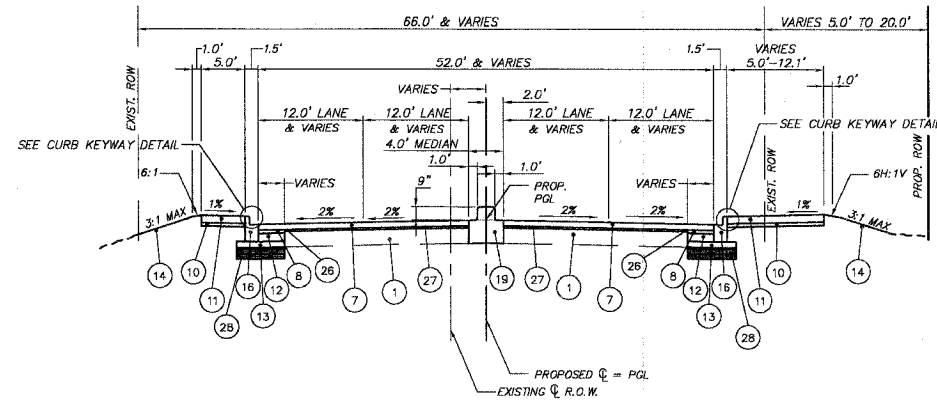
ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 EXISTING TYPICAL SECTIONS

SCALE: "NTS"
 DATE 07-28-2006

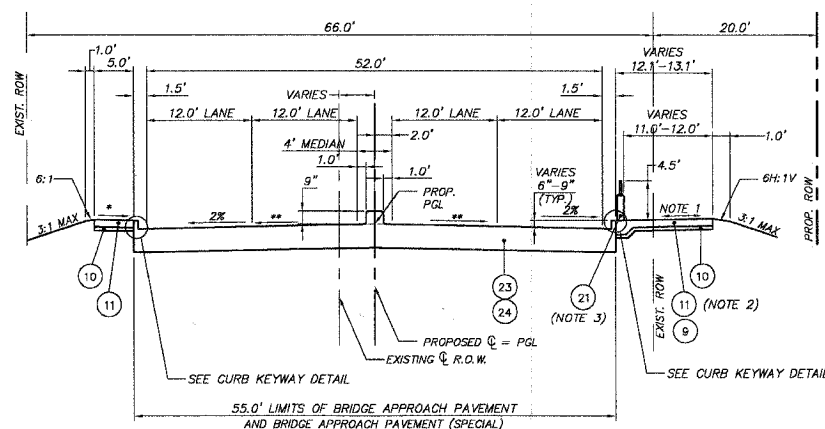
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	6
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83867				



ILLINOIS AVENUE - PROPOSED TYPICAL SECTION

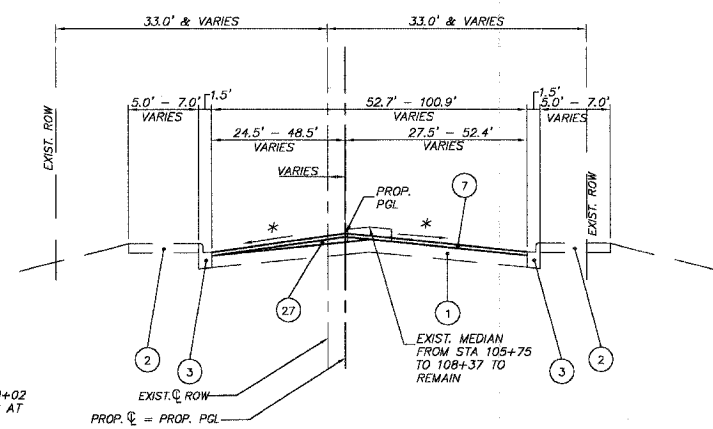
STA. 109+02 TO STA. 113+06.72
STA. 120+61.83 TO STA. 123+05



ILLINOIS AVENUE - PROPOSED TYPICAL SECTION

STA. 113+06.72 TO STA. 113+36.72
STA. 116+39.19 TO STA. 116+81.54
STA. 116+94.54 TO STA. 117+09.54
STA. 118+50.12 TO STA. 118+80.12
STA. 120+31.83 TO STA. 120+61.83

* VARIES 1.0% AT ROADWAY TO 1.6% AT END OF PROP. BRIDGES
** VARIES 1.5% AT END OF PROP. BRIDGES TO 2.0% AT ROADWAY



ILLINOIS AVENUE - PROPOSED TYPICAL SECTION

STA. 105+75 TO STA. 109+02
STA. 123+05 TO STA. 124+95

* VARIES FROM 2.0% AT STATIONS 109+02 AND 123+05 TO MATCHING EXISTING AT STATIONS 105+75 AND 124+95

BITUMINOUS MIXTURE REQUIREMENT

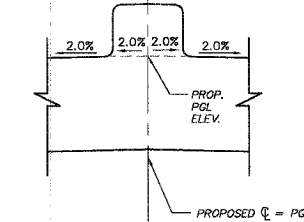
ITEM DESCRIPTION	AC TYPE	VOIDS	RAP %	THICKNESS
*BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	PG 64-22	4% @ 70 Gyr.	10%	1 1/2"
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70	PG 64-22	4% @ 70 Gyr.	15%	2 1/2"
BITUMINOUS BASE COURSE, SUPERPAVE 8"	PG 58-22	2% @ 50 Gyr.	50%	8"
LEVELING BINDER (MACHINE METHOD) SUPERPAVE N70	PG 64-22	4% @ 70 Gyr.	10%	VARIES (3/4" TO 2 1/4")
BITUMINOUS DRIVEWAY PAVEMENT: BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70	PG 64-22	4% @ 70 Gyr.	10%	2"
CLASS D PATCHES, TYPE I	PG 64-22	4% @ 70 Gyr.	15%	12"
CLASS D PATCHES, TYPE II	PG 64-22	4% @ 70 Gyr.	15%	12"

THE UNIT WEIGHT USED TO CALCULATE BITUMINOUS SURFACE MIXTURE IS 112 LB/SY PER INCH THICKNESS.

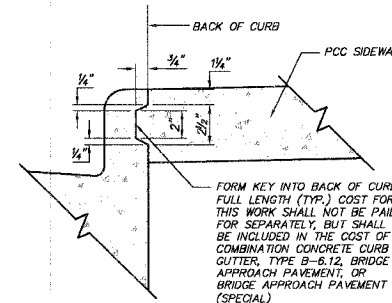
* TO BE UTILIZED FOR "TEMPORARY PAVEMENT" (2" THICK) AND "BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)"

"POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSUITABLE AND/OR UNSTABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO COMPENSATION WILL BE DUE THE CONTRACTOR."

ALL RECOMMENDED UNDERCUTS ARE FROM 6" OUTSIDE THE EDGES OF CURB AND GUTTER. DEPTHS WILL BE DETERMINED BY A LICENSED SOILS ENGINEER. LIMITS ARE FROM STA 109+02 TO 113+36.72, 116+39.19 TO 118+80.12, AND 120+31.83 TO 123+05.



PROPOSED PGL DETAIL (TYP.)



CURB KEYWAY DETAIL

LEGEND

- 1 EXISTING PAVEMENT (2 1/2" - 6" BITUMINOUS SURFACE WITH 8"-11" CONCRETE BASE COURSE)
- 2 EXISTING PCC SIDEWALK
- 3 EXISTING CONCRETE CURB AND GUTTER
- 4 EXISTING ABANDONED 10-DUCT ELECTRICAL PACKAGE (5" DIA. PVC)
- 5 EXISTING 8" GAS MAIN (TO BE RELOCATED BY OTHERS)
- 6 EXISTING ABANDONED 12" WATER MAIN
- 7 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1.5"
- 8 PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2.5"
- 9 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5" (SPECIAL) AND CONCRETE BARRIER (SPECIAL) DETAIL SHEET
- 10 PROPOSED AGGREGATE BASE 4" (CA-6 CRUSHED) (INCLUDED IN COST OF PCC SIDEWALK)
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- 21 PROPOSED CONCRETE BARRIER (SPECIAL) (SEE PCC SIDEWALK 5" (SPECIAL) AND CONCRETE BARRIER (SPECIAL) DETAIL SHEET)
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- 24 PROPOSED BRIDGE APPROACH PAVEMENT (SPECIAL)
- 25 BITUMINOUS CONCRETE REMOVAL (DECK)
- 26 PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
- 27 PROPOSED LEVELING BINDER (MACHINE METHOD) SUPERPAVE N70 (THICKNESS VARIES 3/4" TO 2 1/4")
- 28 PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE (12" DEPTH-SEE NOTE BELOW)

FLEXIBLE PAVEMENT STRUCTURAL DESIGN - ILLINOIS AVENUE
DESIGN SPEED = 35 MPH

STRUCTURAL DESIGN TRAFFIC		DESIGN YEAR = 2017	
CLASSIFICATION:	CLASS I	ADT:	11,833
DESIGN PERIOD:	20 YEARS	PV:	11,241
TRAFFIC FACTOR:	1.5	SU:	355
ILLINOIS BEARING RATIO:	3	MU:	237
STRUCTURAL DESIGN #(Dt):	4.5		
BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1.5"	x .40	=	0.60
BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2.5"	x .33	=	0.99
BITUMINOUS BASE COURSE, SUPERPAVE, 8"	x .33	=	2.64
SUB-BASE GRANULAR MATERIAL, TYPE B-4"	x .11	=	0.44
			4.5

NOTES

1. CROSS SLOPE OF SHARED USE PATH VARIES FROM 1.6% AT PROP. BRIDGES AND PEDESTRIAN TUNNEL (SLOPING AWAY FROM ROADWAY) TO 1% AT ROADWAY (SLOPING TOWARD ROADWAY)
2. STA. 118+50.12 TO 118+80.12 ONLY
3. STA. 113+06.72 TO STA. 113+36.72, STA. 116+39.19 TO 116+81.54, STA. 116+94.54 TO STA. 117+09.54, AND STA. 120+31.83 TO STA. 120+61.83 ONLY

REVISIONS	
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ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

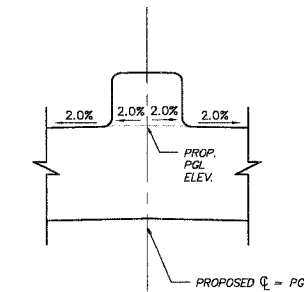
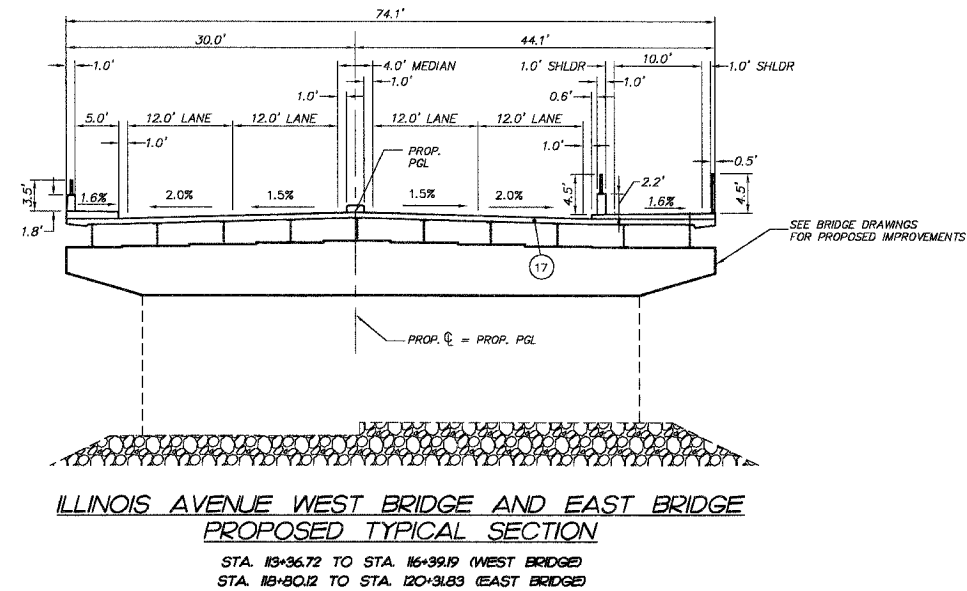
ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
PROPOSED TYPICAL SECTIONS

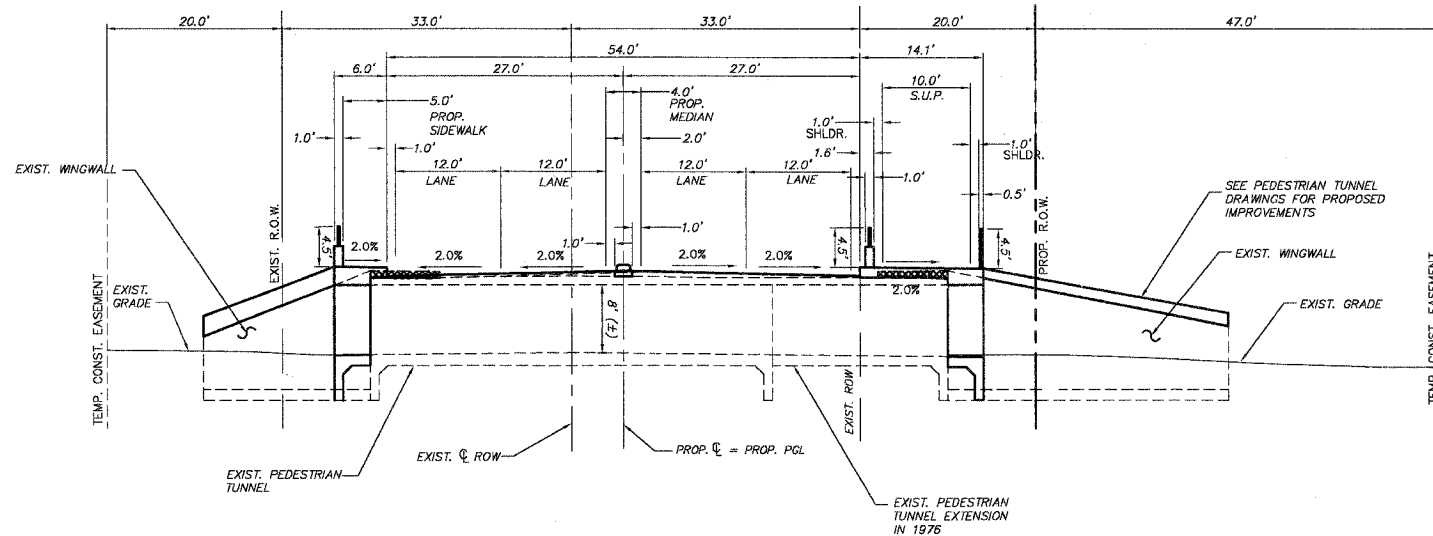
SCALE: "NTS"
DATE 07-28-2006

DRAWN BY MPL
CHECKED BY JLP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	7
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83867				

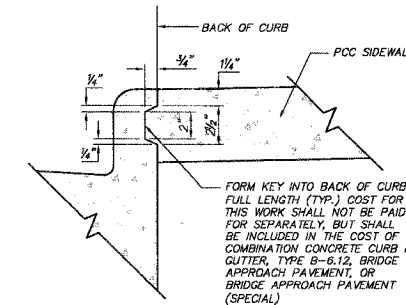
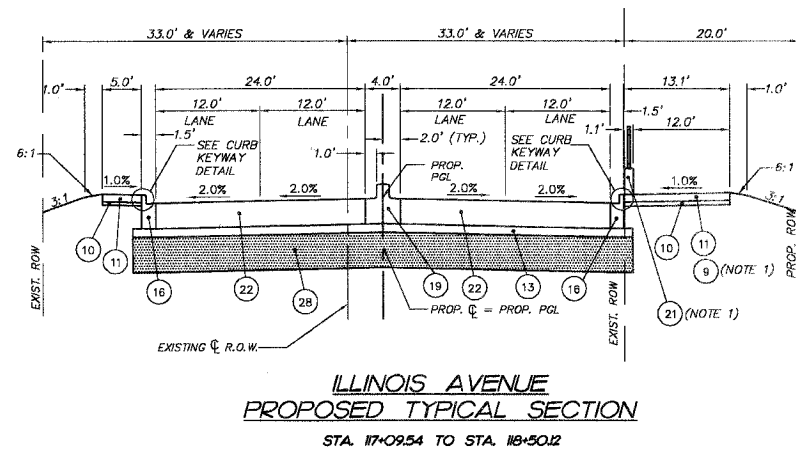


- LEGEND**
- 1 EXISTING PAVEMENT (2 1/2" - 6" BITUMINOUS SURFACE WITH 8"-11" CONCRETE BASE COURSE)
 - 2 EXISTING PCC SIDEWALK
 - 3 EXISTING CONCRETE CURB AND GUTTER
 - 4 EXISTING ABANDONED 10-DUCT ELECTRICAL PACKAGE (5" DIA. PVC)
 - 5 EXISTING 8" GAS MAIN (TO BE RELOCATED BY OTHERS)
 - 6 EXISTING ABANDONED 12" WATER MAIN
 - 7 PROPOSED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX D, N70, 1.5"
 - 8 PROPOSED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19, N70, 2.5"
 - 9 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5" (SPECIAL) (SEE PCC SIDEWALK 5" (SPECIAL) AND CONCRETE BARRIER (SPECIAL) DETAIL SHEET)
 - 10 PROPOSED AGGREGATE BASE 4" (CA-6 CRUSHED) (INCLUDED IN COST OF PCC SIDEWALK)
 - 11 PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK 5"
 - 12 PROPOSED BITUMINOUS BASE COURSE, SUPERPAVE, 8"
 - 13 PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE B, 4"
 - 14 PROPOSED TOPSOIL FURNISH AND PLACE, 6" & SODDING, SALT TOLERANT
 - 15 PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE (12" DEPTH, SEE NOTE BELOW)
 - 16 PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (MINIMUM THICKNESS OF GUTTER FLAG SHALL BE 9". ADDITIONAL AGGREGATE UNDER GUTTER FLAG SHALL BE INCLUDED IN THE COST OF COMBINATION CONCRETE CURB & GUTTER TYPE B-6.12)
 - 17 PROPOSED CONCRETE SUPERSTRUCTURE (CLASS BD CONCRETE) SEE BRIDGE PLANS
 - 18 BITUMINOUS SURFACE REMOVAL, 1 1/2"
 - 19 PROPOSED CONCRETE MEDIAN, TYPE SB-9.12
 - 20 PAVEMENT REMOVAL
 - 21 PROPOSED CONCRETE BARRIER (SPECIAL) (SEE PCC SIDEWALK 5" (SPECIAL) AND CONCRETE BARRIER (SPECIAL) DETAIL SHEET)
 - 22 PROPOSED PORTLAND CEMENT CONCRETE PAVEMENT, 10" (JOINTED)
 - 23 PROPOSED BRIDGE APPROACH PAVEMENT
 - 24 PROPOSED BRIDGE APPROACH PAVEMENT (SPECIAL)
 - 25 BITUMINOUS CONCRETE REMOVAL (DECK)
 - 26 PROPOSED STRIP REFLECTIVE CRACK CONTROL TREATMENT
 - 27 PROPOSED LEVELING BINDER (MACHINE METHOD) SUPERPAVE N70 (THICKNESS VARIES 3/4" TO 2 1/4")
 - 28 PROPOSED POROUS GRANULAR EMBANKMENT, SUBGRADE (12" DEPTH-SEE NOTE BELOW)



"POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) AND GEOTECHNICAL FABRIC FOR GROUND STABILIZATION HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES OVER GEOTECHNICAL FABRIC FOR GROUND STABILIZATION WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH STATIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.03 AND THE UNDERCUT GUIDELINES IN THE IDOT SUBGRADE STABILITY MANUAL. IF UNSUITABLE AND/OR UNSTABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO COMPENSATION WILL BE DUE THE CONTRACTOR."

ALL RECOMMENDED UNDERCUTS ARE FROM 6" OUTSIDE THE EDGES OF CURB AND GUTTER. DEPTHS WILL BE DETERMINED BY A LICENSED SOILS ENGINEER. LIMITS ARE FROM STA 109+02 TO 113+36.72, 116+39.19 TO 118+80.12, AND 120+31.83 TO 123+05.



- NOTES**
1. STA. 117+09.54 TO STA. 117+92 ONLY

REVISIONS	
NAME	DATE
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SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
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#MCHENRY #MONTGOMERY #YORKVILLE
ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
PROPOSED BRIDGE
TYPICAL SECTIONS
SCALE: "NTS"
DATE 07-28-2006
DRAWN BY WJH
CHECKED BY TEH

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	8
STA.	102+50	TO STA.	112+50	
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		
CONTRACT #: 83867				



PROPOSED CONCRETE PAVEMENT
(QUANTITY ON PLANS)

LINE	LENGTH	BEARING	BEGIN STA.	END STA.
L1	500.00'	S89°04'04" W	100+00	105+00
L2	401.59'	S89°04'04" W	105+00	109+01.59
L3	406.52'	N89°33'59" E	109+01.59	113+08.10
L4	722.16'	N88°52'54" E	113+08.10	120+30.26
L5	454.41'	S89°34'41" E	120+30.26	124+84.68
L6	53.89'	N89°37'36" E	124+84.68	125+38.57
L7	283.23'	N63°42'21" E	125+38.57	128+22.30
L8	271.84'	N89°24'05" E	128+22.30	130+94.14

TIE POINT	NORTHING	EASTING
501	1859009.30	989661.46
502	1859078.63	989658.81
503	1859046.53	989551.21
504	1859109.58	990031.13
505	1858989.42	990063.94
506	1859019.06	989558.68

SITE BENCHMARKS

BM 1:
CUT SQUARE ON NORTHWEST WINGWALL OF
WEST BRIDGE: SN 045-6009
ELEVATION = 639.93

BM 2:
CUT SQUARE ON SOUTHEAST WINGWALL OF
EAST BRIDGE: SN 045-6008
ELEVATION = 639.88

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www.smithengineering.com E-MAIL: see@smithengineering.com
MARTHENSVILLE HUNTLEY YORKVILLE
ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

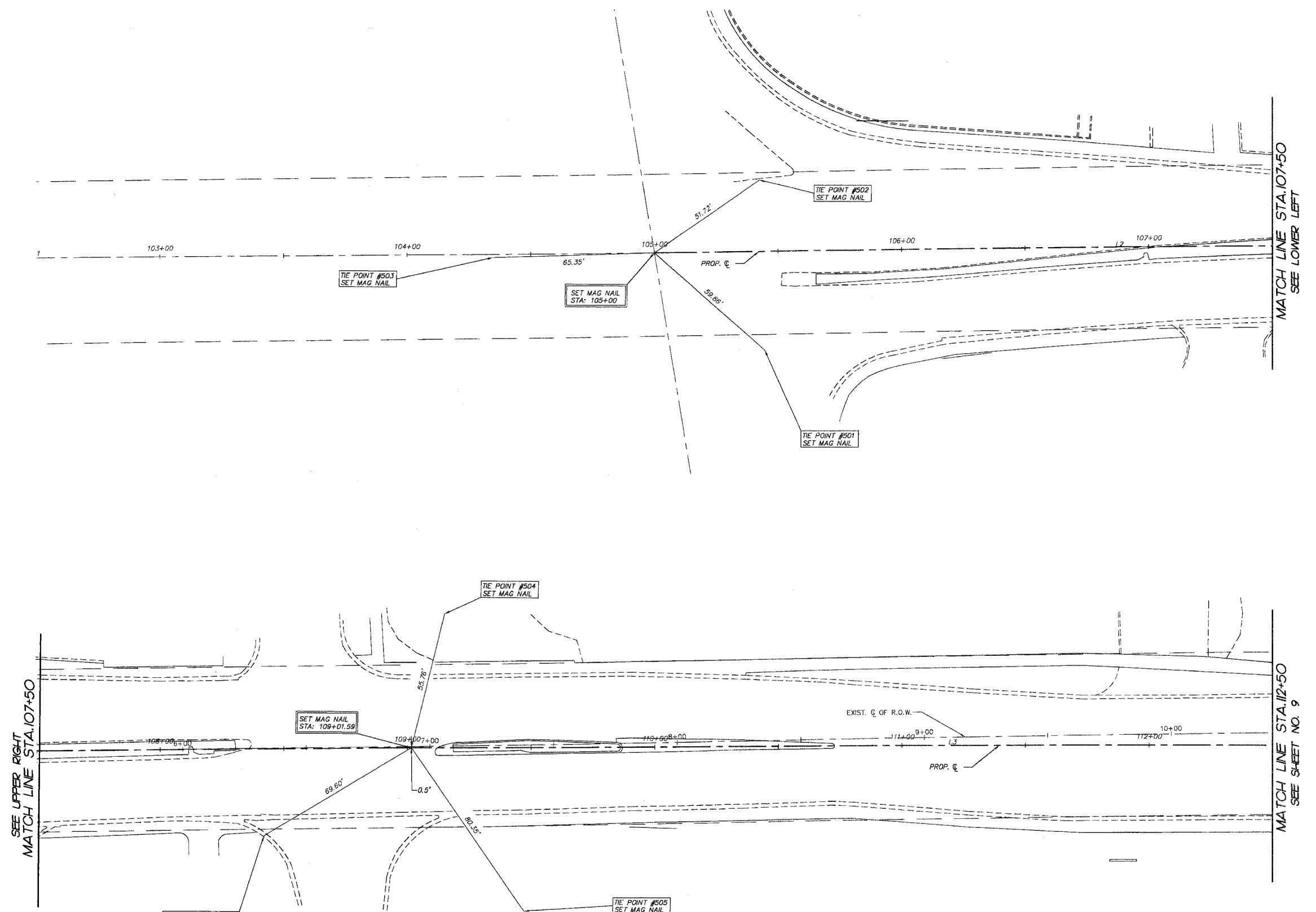
CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
ALIGNMENT AND TIES
STA 102+50 TO STA 112+50

SCALE: 1" = 20'
DATE 07-28-2006

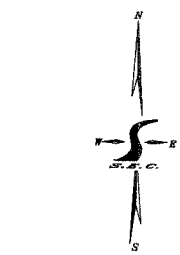
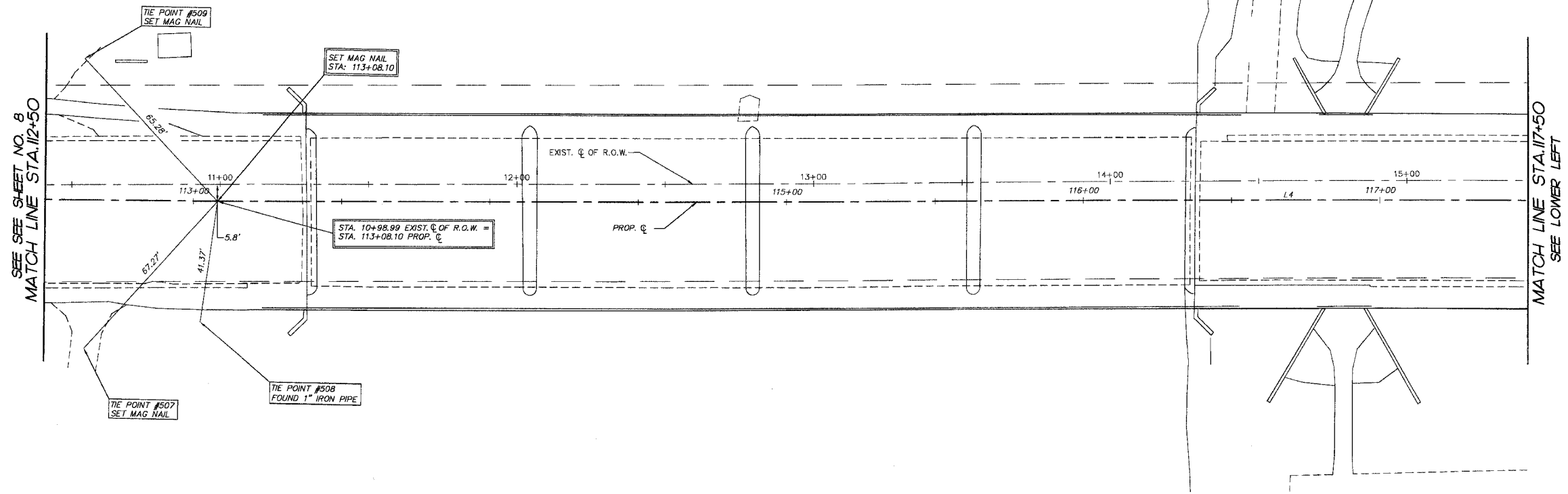
DRAWN BY MPL
CHECKED BY JLP

REVISIONS		
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NAME: C:\P
COMP. FILE: C:\00181-528.dwg

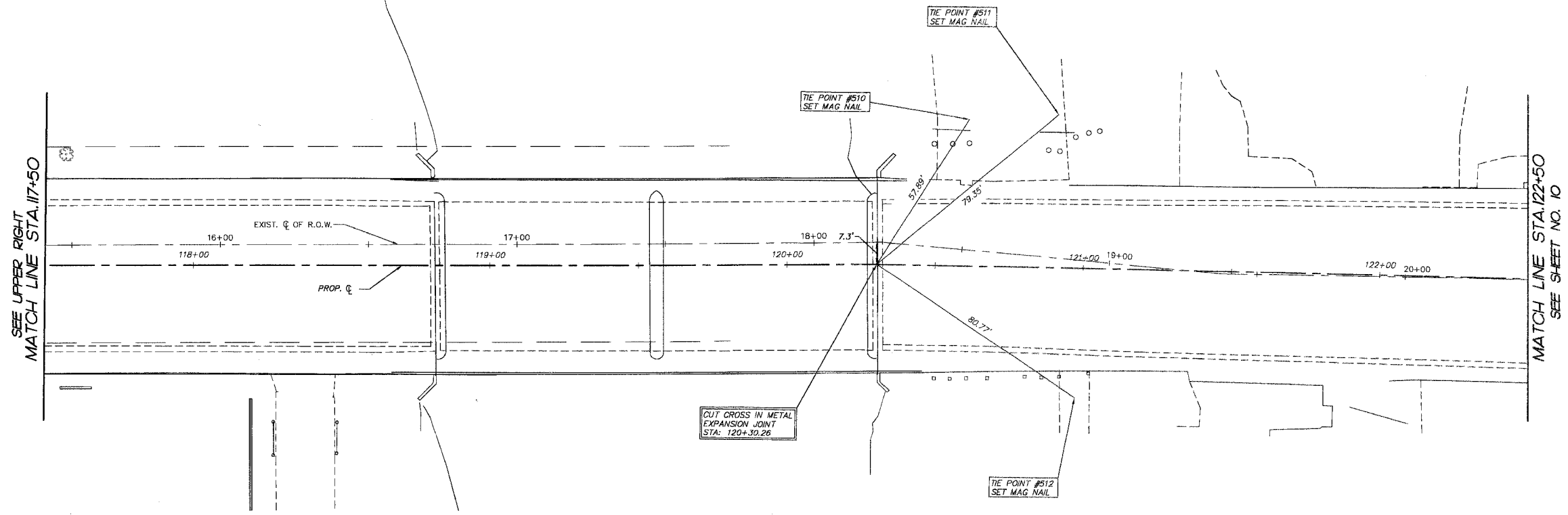


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	9
STA. 112+50		TO STA. 122+50		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT #: 83867				



LINE	LENGTH	BEARING	BEGIN STA.	END STA.
L1	500.00'	S89°04'04"W	105+00	105+00
L2	401.59'	S89°04'04"W	105+00	109+01.59
L3	406.52'	N89°35'59"E	109+01.59	113+08.10
L4	722.16'	N88°59'04"E	113+08.10	120+30.26
L5	454.41'	S89°34'41"E	120+30.26	124+84.68
L6	53.89'	N89°37'36"E	124+84.68	125+38.57
L7	283.73'	N83°42'21"E	125+38.57	128+22.30
L8	271.84'	N89°24'05"E	128+22.30	130+94.14

TIE POINT	NORTHING	EASTING
507	1859007.47	990380.41
508	1859017.16	990419.46
509	1859105.04	990379.06
510	1859120.26	991177.06
511	1859122.67	991207.19
512	1859026.57	991214.05



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 McHENRY HUNTLEY YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 ALIGNMENT AND TIES
 STA 112+50 TO STA 122+50
 SCALE: 1" = 20'
 DATE 07-28-2006
 DRAWN BY MPL
 CHECKED BY JLP

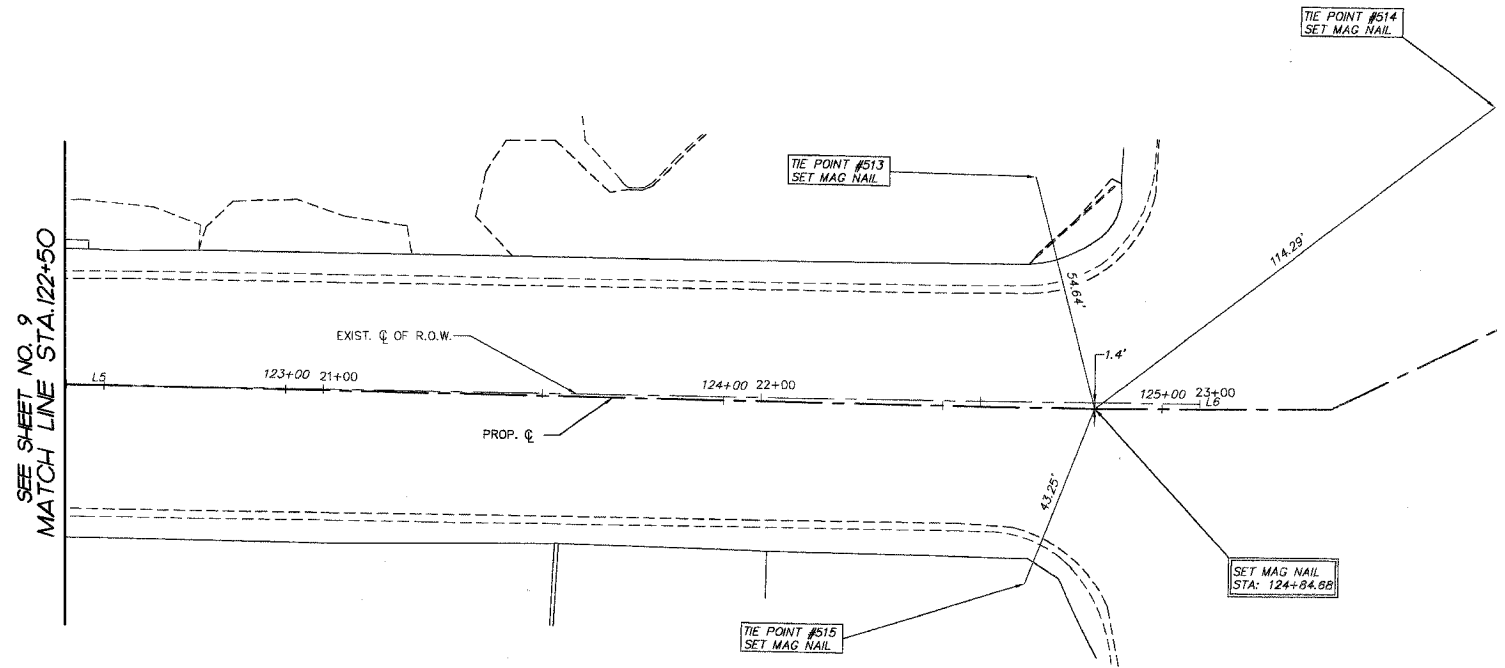
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	10
STA.	122+50	TO STA.	125+00	
FED. ROAD DIST. NO. 1	ILLINOIS HIGHWAY PROJECT		CONTRACT #: 83867	



LINE	LENGTH	BEARING	BEGIN STA.	END STA.
L1	500.00'	S89°04'04"W	100+00	105+00
L2	401.59'	S89°04'04"W	105+00	109+01.59
L3	406.52'	N89°35'59"E	109+01.59	113+08.10
L4	722.16'	N89°39'04"E	113+08.10	120+30.26
L5	454.41'	S89°34'41"E	120+30.26	124+84.68
L6	53.89'	N89°37'36"E	124+84.68	125+38.57
L7	283.73'	N63°42'21"E	125+38.57	128+22.30
L8	271.84'	N89°24'05"E	128+22.30	130+94.14

TIE POINT	NORTHING	EASTING
513	1859120.46	991586.89
514	1859137.68	991691.34
515	1859027.26	991585.61



SEE SHEET NO. 9
MATCH LINE STA. 122+50

PLOT FILE STANDARD
VIEW: CE-10
COMP. FILE: 050181-628.dwg

REVISIONS		
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SMITH ENGINEERING CONSULTANTS, INC.
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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 ALIGNMENT AND TIES
 STA 122+50 TO STA 125+00

SCALE: 1" = 20'
 DATE 07-28-2006
 DRAWN BY MPL
 CHECKED BY JLP

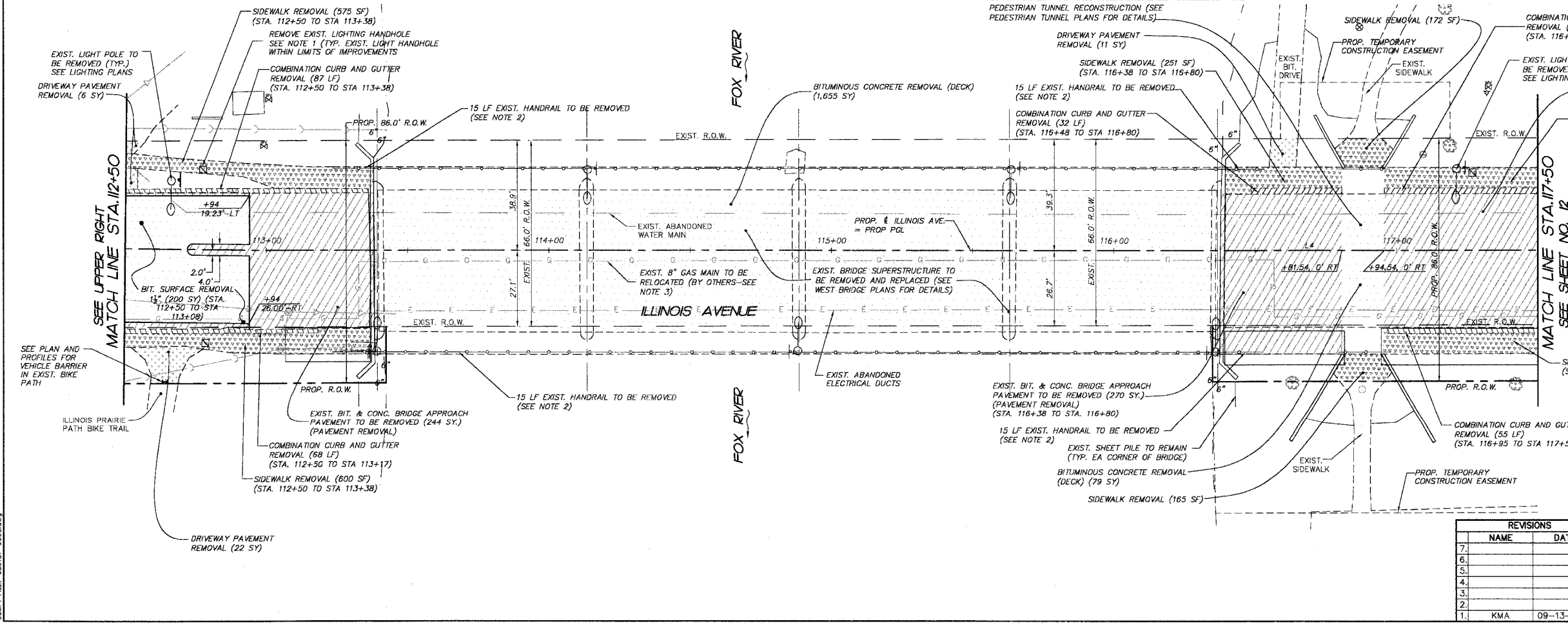
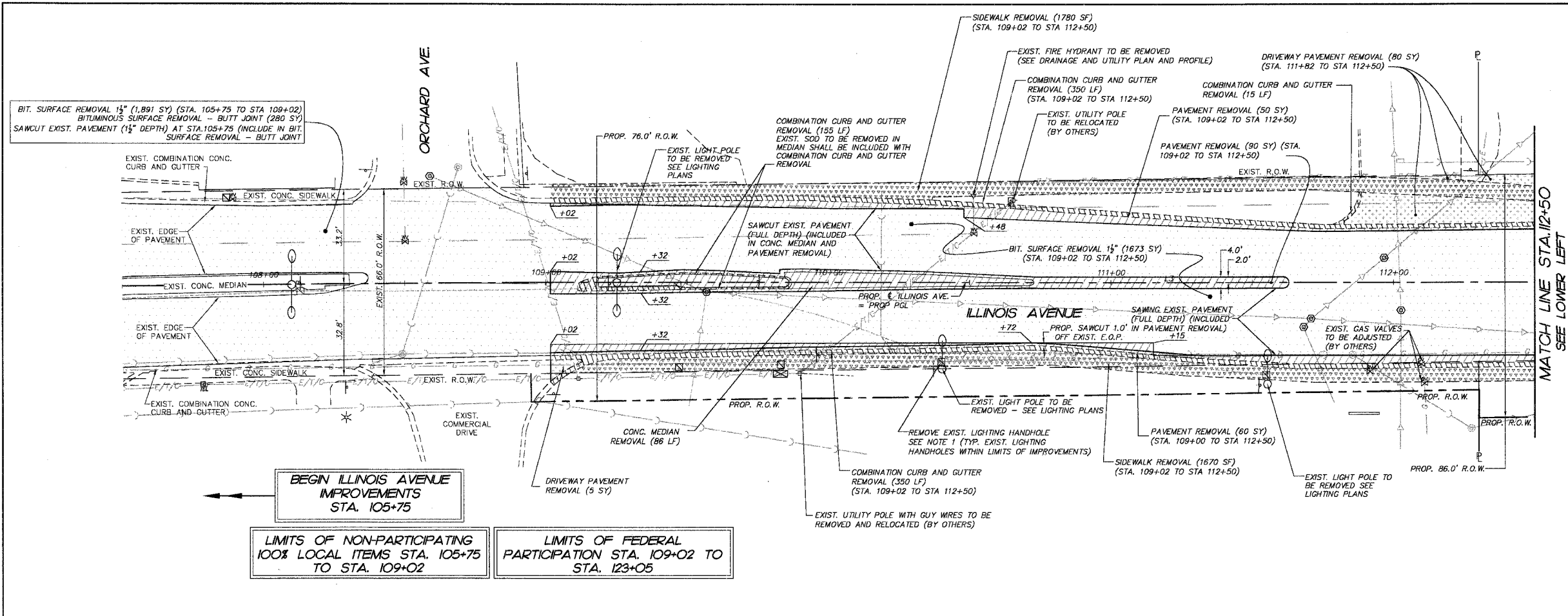
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	11
STA. 107+50		TO STA. 117+50		
FED. ROAD DIST. NO. 1 ILLINOIS HIGHWAY PROJECT				
CONTRACT: 83867				

LINE	LENGTH	BEARING	BEGIN STA.	END STA.
L1	500.00'	S89°04'04"W	100+00	105+00
L2	401.59'	S89°04'04"W	105+00	109+01.59
L3	406.52'	N89°35'59"E	109+01.59	113+08.10
L4	722.16'	N88°59'04"E	113+08.10	120+30.26
L5	454.41'	S89°34'41"E	120+30.26	124+84.68
L6	53.89'	N89°37'36"E	124+84.68	125+38.57
L7	283.73'	N63°42'21"E	125+38.57	128+22.30
L8	271.84'	N89°24'05"E	128+22.30	130+94.14

- NOTES:**
- EXISTING LIGHTING HANDHOLE REMOVAL SHALL BE INCLUDED UNDER REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE.
 - EXISTING HANDRAIL REMOVAL OFF OF BRIDGES SHALL BE INCLUDED UNDER "SIDEWALK REMOVAL"
 - CONTRACTOR SHALL VERIFY STATUS OF 8" GAS MAIN WITH GAS COMPANY BEFORE BRIDGE SUPERSTRUCTURE REMOVAL.

PROJECT LEGEND:

- DENOTES BITUMINOUS SURFACE REMOVAL, 1 1/2" OR BITUMINOUS CONCRETE REMOVAL (DECK)
- DENOTES BITUMINOUS SURFACE REMOVAL, - BUTT JOINT
- DENOTES PAVEMENT REMOVAL OR CONCRETE MEDIAN REMOVAL
- DENOTES SIDEWALK REMOVAL
- DENOTES COMBINATION CURB AND GUTTER REMOVAL
- DENOTES DRIVEWAY PAVEMENT REMOVAL
- DENOTES TREE REMOVAL (6 TO 15 UNITS DIAMETER)



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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
REMOVAL PLAN
STA 107+50 TO STA 117+50

SCALE: 1" = 20'
 DATE 07-28-2006
 DRAWN BY MPL
 CHECKED BY JLP

PLT FILE: STANDARD
 VIEW: CE-11
 COMP. FILE: 050181-9006.dwg

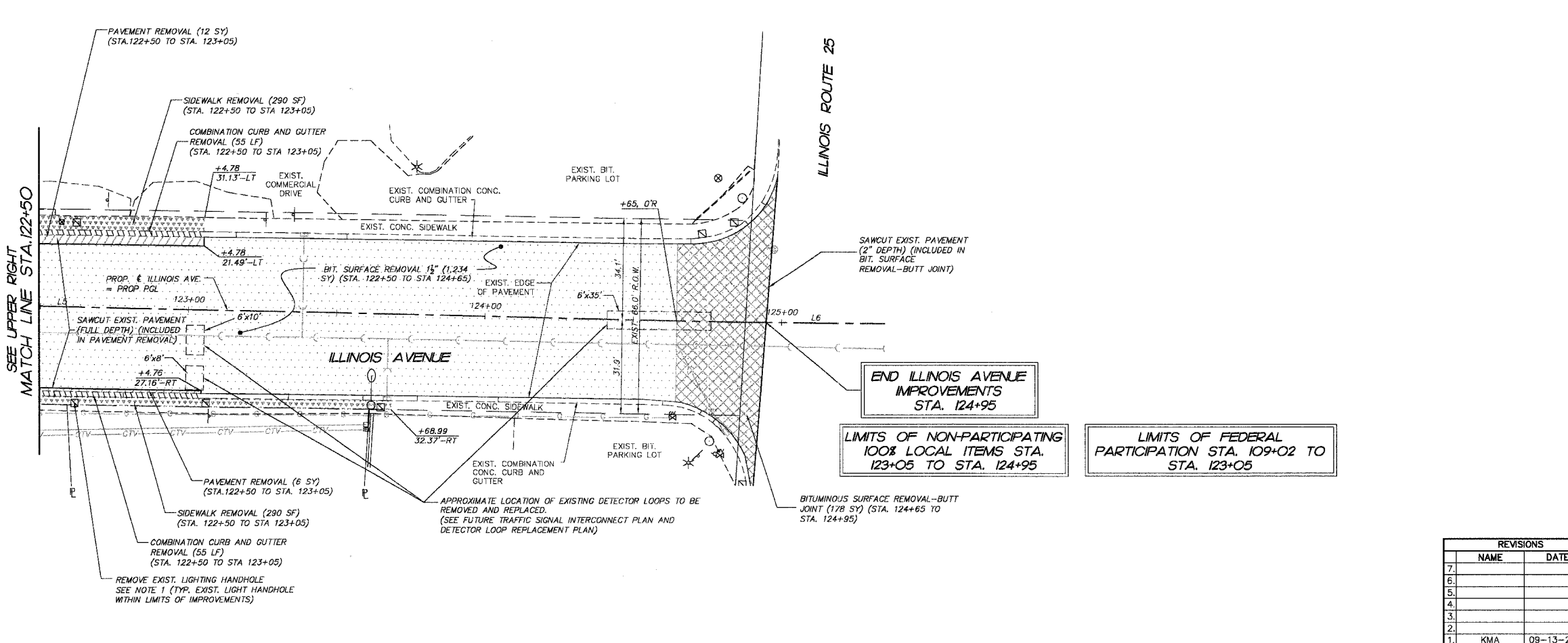
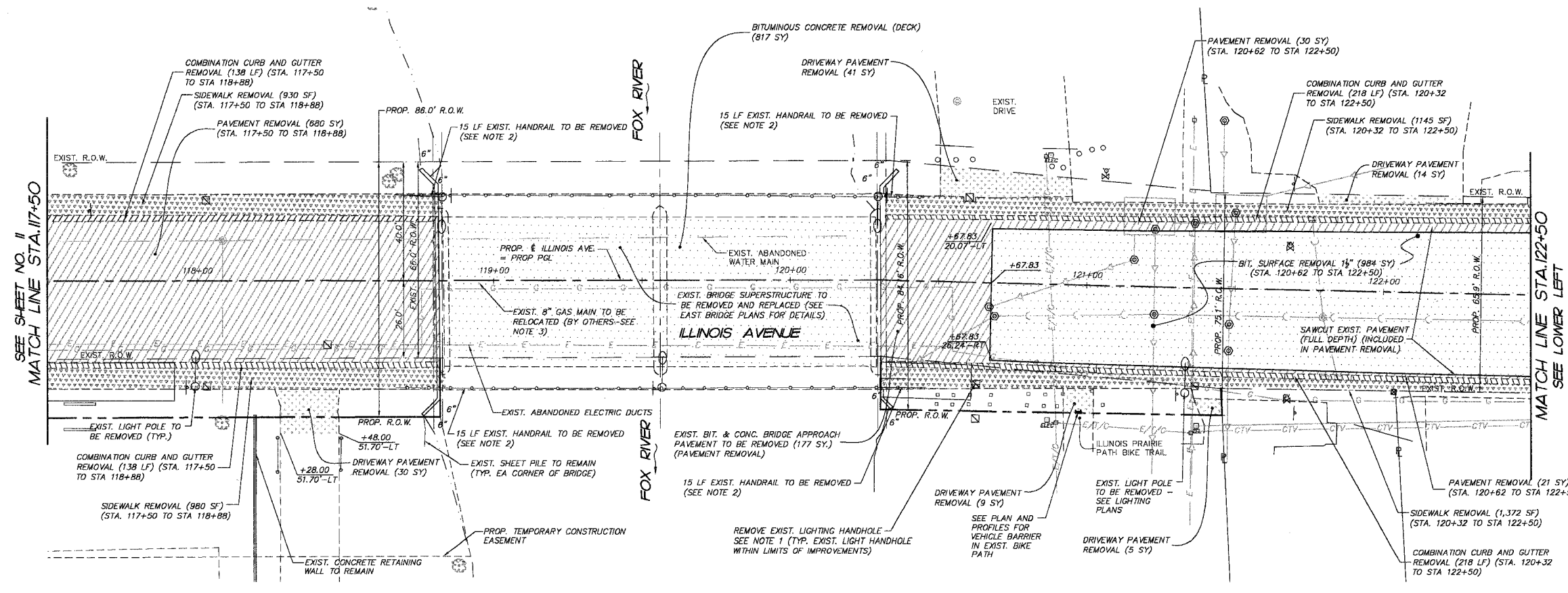
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	12
STA.	117+50	TO STA.	125+00	
FED. ROAD DIST. NO. 1 ILLINOIS HIGHWAY PROJECT				
CONTRACT: 83B67				

LINE	LENGTH	BEARING	BEGIN STA.	END STA.
L1	500.00'	S89°04'04"W	100+00	105+00
L2	401.59'	S89°04'04"W	105+00	109+07.59
L3	406.52'	N89°35'59"E	109+07.59	113+08.10
L4	722.16'	N88°59'04"E	113+08.10	120+30.26
L5	454.41'	S89°34'41"E	120+30.26	124+84.68
L6	53.89'	N89°37'36"E	124+84.68	125+38.57
L7	283.23'	N63°42'21"E	125+38.57	128+22.30
L8	271.84'	N89°24'05"E	128+22.30	130+94.14

- NOTES:**
- EXISTING LIGHTING HANDHOLE REMOVAL SHALL BE INCLUDED UNDER "REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE".
 - EXISTING HANDRAIL REMOVAL OFF OF BRIDGES SHALL BE INCLUDED UNDER "SIDEWALK REMOVAL".
 - CONTRACTOR SHALL VERIFY STATUS OF 8" GAS MAIN WITH GAS COMPANY BEFORE BRIDGE SUPERSTRUCTURE REMOVAL.

PROJECT LEGEND:

- [Pattern] DENOTES BITUMINOUS SURFACE REMOVAL 1 1/2" OR BITUMINOUS CONCRETE REMOVAL (DECK)
- [Pattern] DENOTES BITUMINOUS SURFACE REMOVAL - BUTT JOINT
- [Pattern] DENOTES PAVEMENT REMOVAL OR CONCRETE MEDIAN REMOVAL
- [Pattern] DENOTES SIDEWALK REMOVAL
- [Pattern] DENOTES COMBINATION CURB AND GUTTER REMOVAL
- [Pattern] DENOTES DRIVEWAY PAVEMENT REMOVAL
- [Symbol] DENOTES TREE REMOVAL (6 TO 15 UNITS DIAMETER)



END ILLINOIS AVENUE IMPROVEMENTS
STA. 124+95

LIMITS OF NON-PARTICIPATING
100% LOCAL ITEMS STA.
123+05 TO STA. 124+95

REVISIONS	
NO.	DATE
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1.	KMA 09-13-2006

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
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McHENRY HUNTLEY YORKVILLE
ILLINOIS PROFESSIONAL DESIGN FIRM # 154-000108

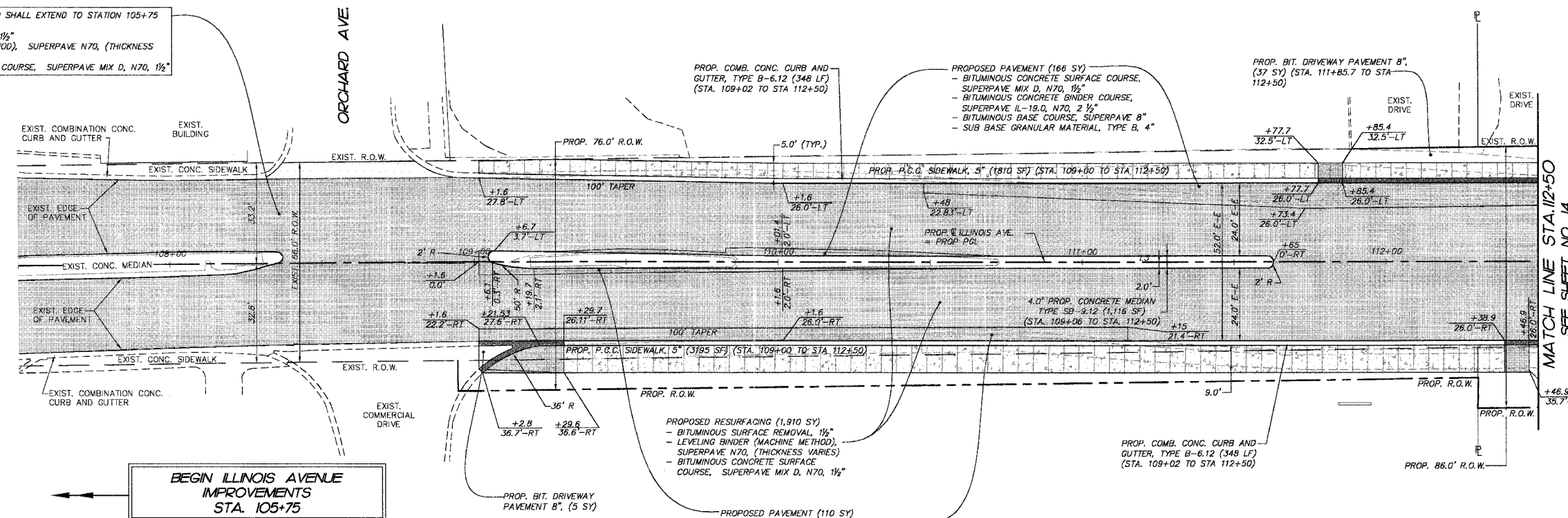
ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
REMOVAL PLAN
STA 117+50 TO STA 125+00

SCALE: 1" = 20'
DRAWN BY MPL
DATE 07-28-2006
CHECKED BY JLP

PLOT FILE: STANDARD
COMP. FILE: 090181-6000.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	13
STA. 107+50 TO STA. 112+50				
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
CONTRACT #: 83867				

PROPOSED RESURFACING (2,171 SY) SHALL EXTEND TO STATION 105+75 (STA. 105+75 TO STA. 109+02)
 - BITUMINOUS SURFACE REMOVAL, 1 1/2"
 - LEVELING BINDER (MACHINE METHOD), SUPERPAVE N70, (THICKNESS VARIES)
 - BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX D, N70, 1 1/2"



LEGEND

- PROPOSED RESURFACING (QUANTITY ON PLANS)
- PROPOSED PAVEMENT (QUANTITY ON PLANS)
- PROPOSED PCC SIDEWALK, 5" (QUANTITY ON PLANS)
- PROPOSED PCC SIDEWALK, 5" (SPECIAL) (QUANTITY ON PLANS)
- PROPOSED DEPRESSED CURB & GUTTER
- PROPOSED CONCRETE PAVEMENT (QUANTITY ON PLANS)

LINE TABLE

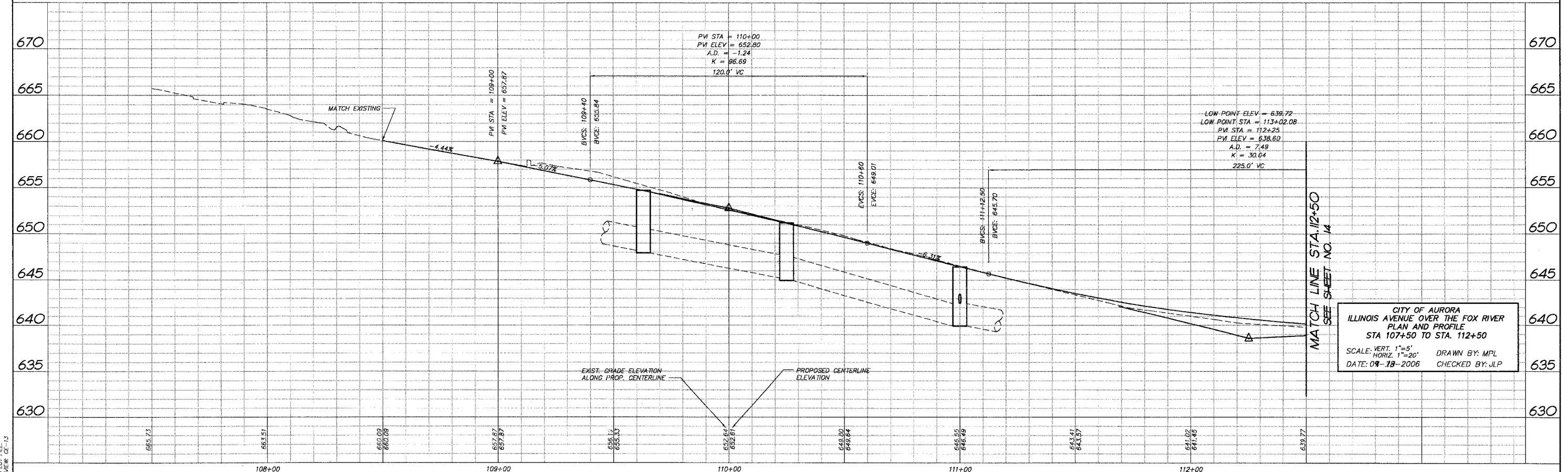
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L1	500.00'	S89°04'04"W	100+00	105+00
L2	401.59'	S89°04'04"W	105+00	109+01.59
L3	406.52'	N89°35'59"E	109+01.59	113+08.10
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L5	454.41'	S89°34'41"E	120+30.26	124+04.68
L6	53.89'	N89°37'36"E	124+04.68	125+38.57
L7	283.73'	N63°42'21"E	125+38.57	128+22.30
L8	271.84'	N89°24'05"E	128+22.30	130+94.14

BEGIN ILLINOIS AVENUE IMPROVEMENTS STA. 105+75

LIMITS OF NON-PARTICIPATING 100% LOCAL ITEMS STA. 105+75 TO STA. 109+02

LIMITS OF FEDERAL PARTICIPATION STA. 109+02 TO STA. 123+05

ILLINOIS AVENUE



CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 PLAN AND PROFILE
 STA 107+50 TO STA. 112+50
 SCALE: VERT. 1"=5'
 HORIZ. 1"=20'
 DATE: 04-18-2006
 DRAWN BY: MPL
 CHECKED BY: JLP

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
NO. BOOK	
AREAS CHECKED	
NO.	

COMP. FILE: 050181-602c.dwg
 PLOT FILE: VIEW CF-13

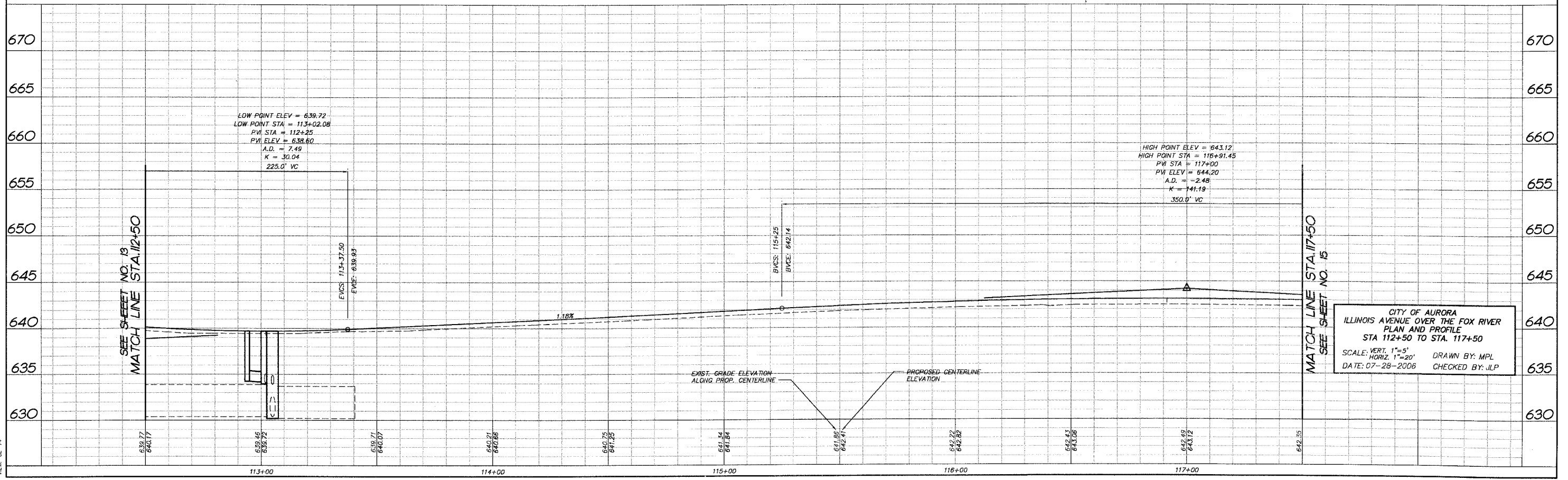
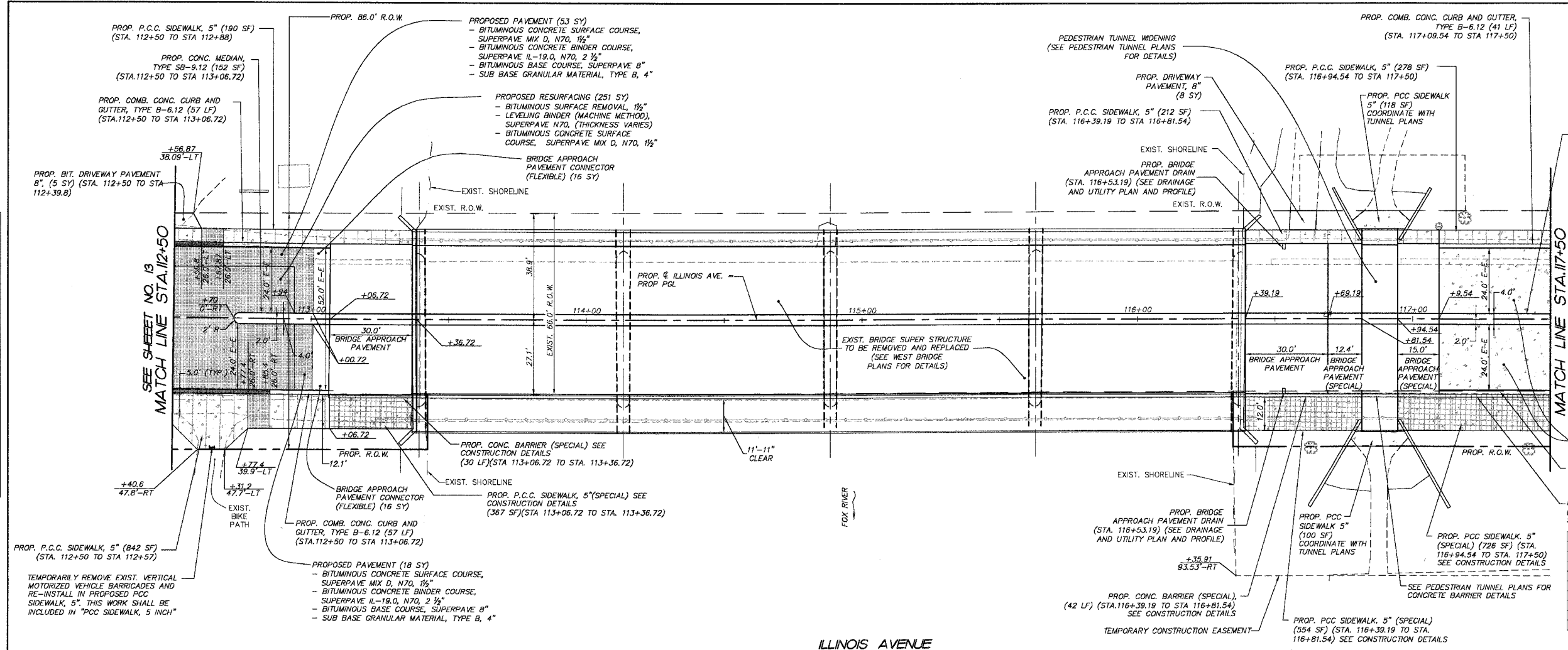
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	14
STA. 112+50 TO STA. 117+50				
FED. ROAD DIST. NO. 1 ILLINOIS			HIGHWAY PROJECT	
CONTRACT #: 83867				

LEGEND

	PROPOSED RESURFACING (QUANTITY ON PLANS)
	PROPOSED PAVEMENT (QUANTITY ON PLANS)
	PROPOSED PCC SIDEWALK, 5" (QUANTITY ON PLANS)
	PROPOSED PCC SIDEWALK, 5" (SPECIAL) (QUANTITY ON PLANS)
	PROPOSED DEPRESSED CURB & GUTTER
	PROPOSED CONCRETE PAVEMENT (QUANTITY ON PLANS)

LINE TABLE

LINE	LENGTH	BEARING	BEGIN STA.	END STA.
L1	500.00'	S89°04'04"W	100+00	105+00
L2	401.59'	S89°04'04"W	105+00	109+01.59
L3	406.52'	N89°35'59"E	109+01.59	113+08.10
L4	722.16'	N88°59'04"E	113+08.10	120+30.26
L5	454.41'	S89°34'41"E	120+30.26	124+84.68
L6	53.89'	N89°37'36"E	124+84.68	125+38.57
L7	283.73'	N63°42'21"E	125+38.57	128+22.30
L8	271.84'	N89°24'05"E	128+22.30	130+94.14



CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 PLAN AND PROFILE
 STA 112+50 TO STA. 117+50
 SCALE: VERT. 1"=5'
 HORIZ. 1"=20'
 DATE: 07-28-2006
 DRAWN BY: MPL
 CHECKED BY: JLP

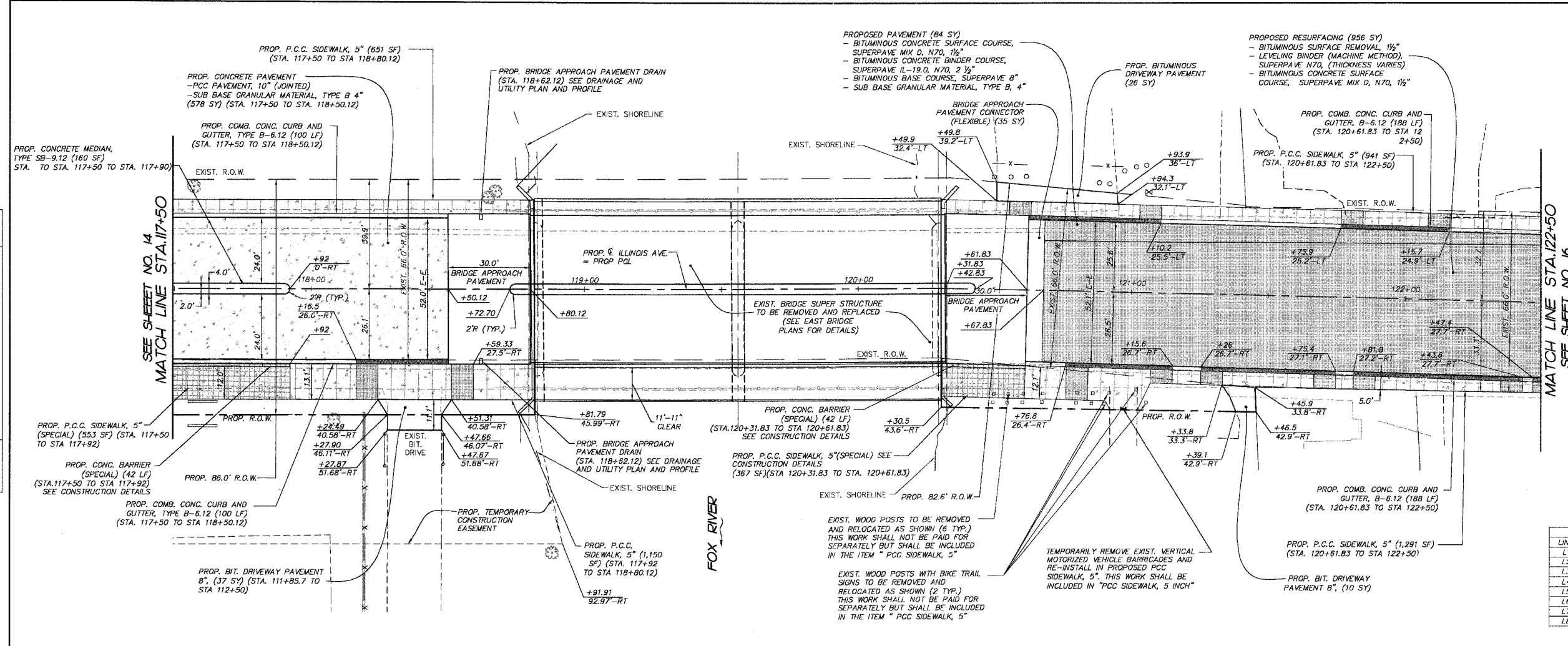
NO.	DATE	BY	REVISION

FINAL SURVEY PLOTTED TEMPLATE
 NOTE BOOK AREAS CHECKED

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	15
STA. 117+50 TO STA. 122+50				
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
CONTRACT # 83967				



DATE	BY
FINAL SURVEY PLOTTED	
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	
NO.	

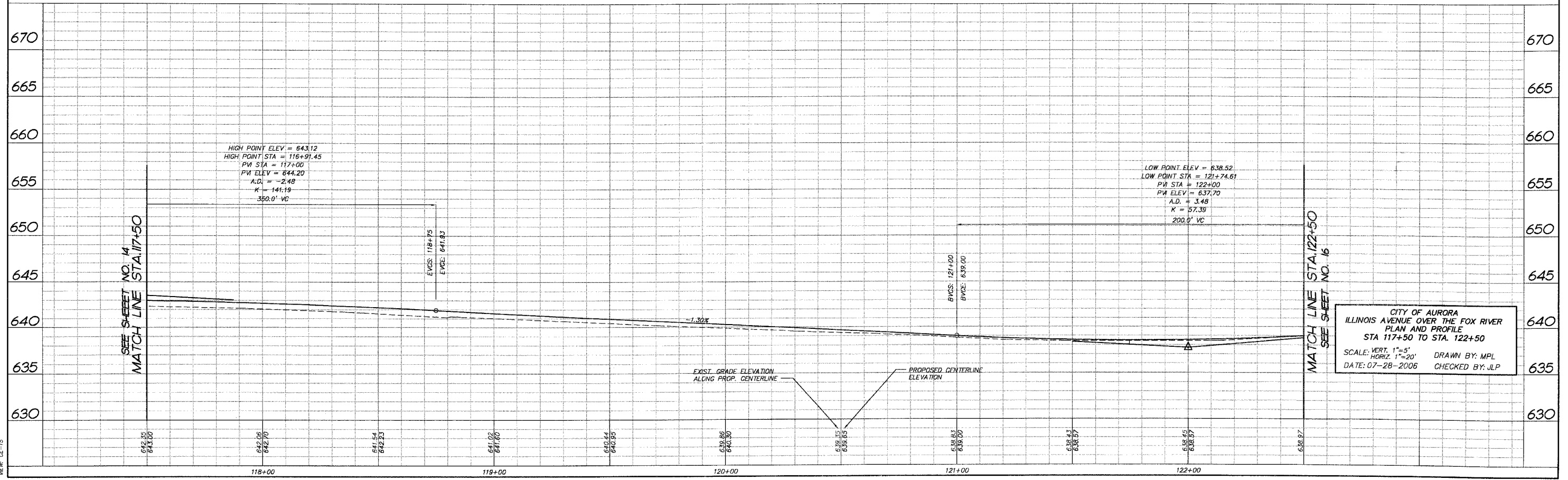


LEGEND

- PROPOSED RESURFACING (QUANTITY ON PLANS)
- PROPOSED PAVEMENT (QUANTITY ON PLANS)
- PROPOSED P.C.C. SIDEWALK, 5" (QUANTITY ON PLANS)
- PROPOSED P.C.C. SIDEWALK, 5" (SPECIAL) (QUANTITY ON PLANS)
- PROPOSED DEPRESSED CURB & GUTTER
- PROPOSED CONCRETE PAVEMENT (QUANTITY ON PLANS)

LINE TABLE

LINE	LENGTH	BEARING	BEGIN STA.	END STA.
L1	500.00'	S89°04'04"W	100+00	105+00
L2	401.59'	S89°04'04"W	105+00	109+01.59
L3	406.52'	N89°35'59"E	109+01.59	113+08.10
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L6	53.89'	N89°37'36"E	124+84.68	125+38.57
L7	283.73'	N63°42'21"E	125+38.57	128+22.30
L8	271.84'	N89°24'05"E	128+22.30	130+94.14

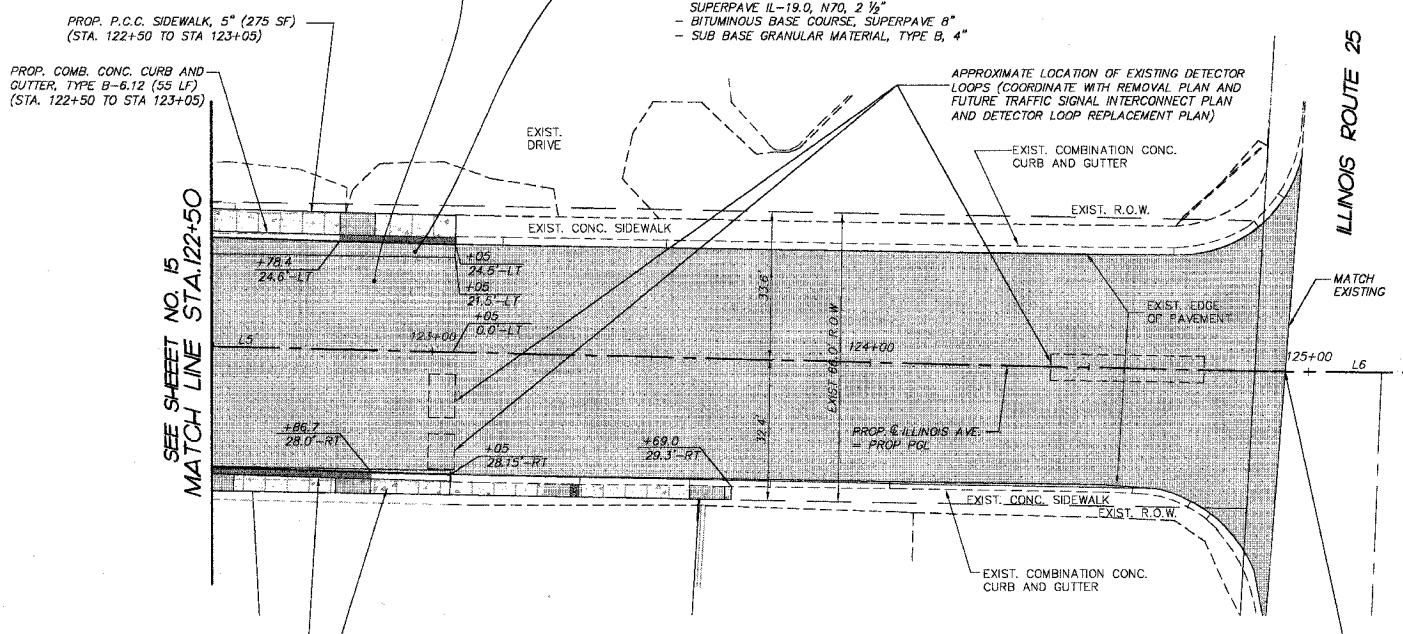


CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
PLAN AND PROFILE
STA 117+50 TO STA. 122+50
SCALE: VERT. 1"=5'
HORIZ. 1"=20'
DATE: 07-28-2006
DRAWN BY: MPL
CHECKED BY: JLP

COMP. FILE: 000191-6026.dwg
DATE: 08-15
USER: JLP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	16
STA. 122+50 TO STA. 125+00				
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
CONTRACT #: 83867				

- PROPOSED RESURFACING (1,458 SY)
 - BITUMINOUS SURFACE REMOVAL, 1 1/2"
 - LEVELING BINDER (MACHINE METHOD)
 - SUPERPAVE N70, (THICKNESS VARIES)
 - BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX D, N70, 2"
- PROPOSED PAVEMENT (18 SY)
 - BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE MIX D, N70, 1 1/2"
 - BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE IL-19.0, N70, 2 1/2"
 - BITUMINOUS BASE COURSE, SUPERPAVE B"
 - SUB BASE GRANULAR MATERIAL, TYPE B, 4"



LEGEND

[Pattern]	PROPOSED RESURFACING (QUANTITY ON PLANS)
[Pattern]	PROPOSED PAVEMENT (QUANTITY ON PLANS)
[Pattern]	PROPOSED P.C.C. SIDEWALK, 5" (QUANTITY ON PLANS)
[Pattern]	PROPOSED P.C.C. SIDEWALK, 5" (SPECIAL) (QUANTITY ON PLANS)
[Pattern]	PROPOSED DEPRESSED CURB & GUTTER
[Pattern]	PROPOSED CONCRETE PAVEMENT (QUANTITY ON PLANS)

DATE	BY
FINAL SURVEY PLOTTED	
NOTE BOOK TEMPLATE AREAS CHECKED	
NO.	

PROP. P.C.C. SIDEWALK, 5" (275 SF) (STA. 122+50 TO STA 123+05)

PROP. COMB. CONC. CURB AND GUTTER, TYPE B-6.12 (55 LF) (STA. 122+50 TO STA 123+05)

PROP. P.C.C. SIDEWALK, 5" (591 SF) (STA. 122+50 TO STA 123+69)
 P.C.C. SIDEWALK 5" FROM STA. 123+05 TO 123+69 INCLUDED AS A PARTICIPATING ITEM TO FACILITATE LIGHT POLE INSTALLATION. SEE LIGHTING PLANS.

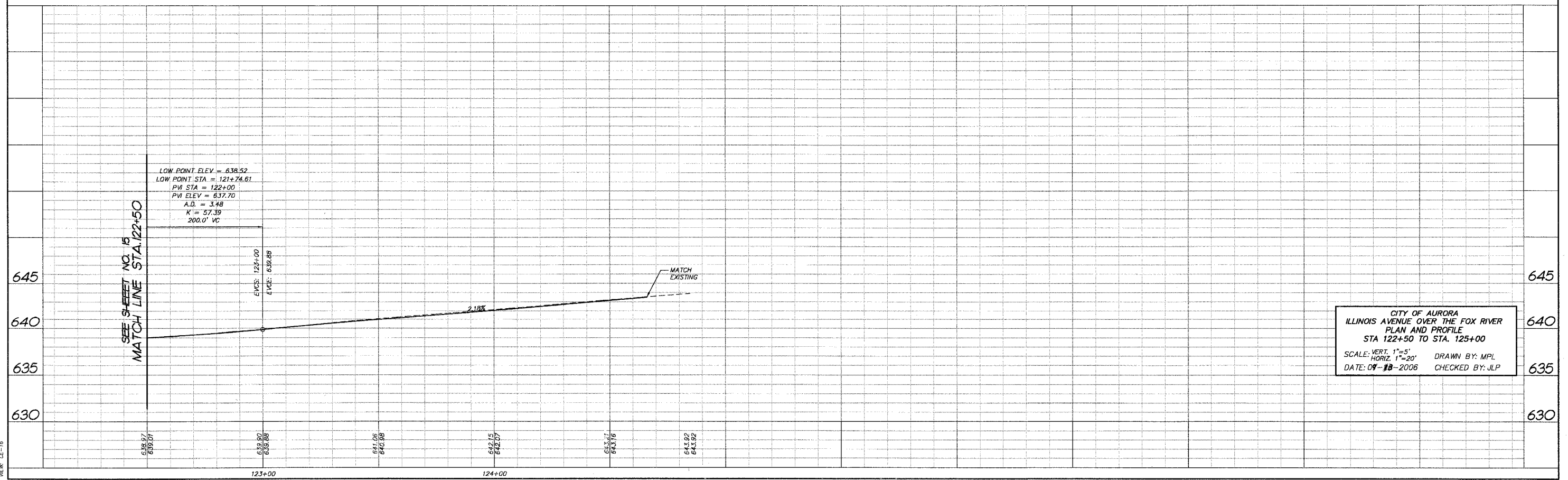
END ILLINOIS AVENUE IMPROVEMENTS STA. 124+95

LIMITS OF NON-PARTICIPATING 100% LOCAL ITEMS STA. 123+05 TO STA. 124+95

LIMITS OF FEDERAL PARTICIPATION STA. 109+02 TO STA. 123+05

LINE TABLE

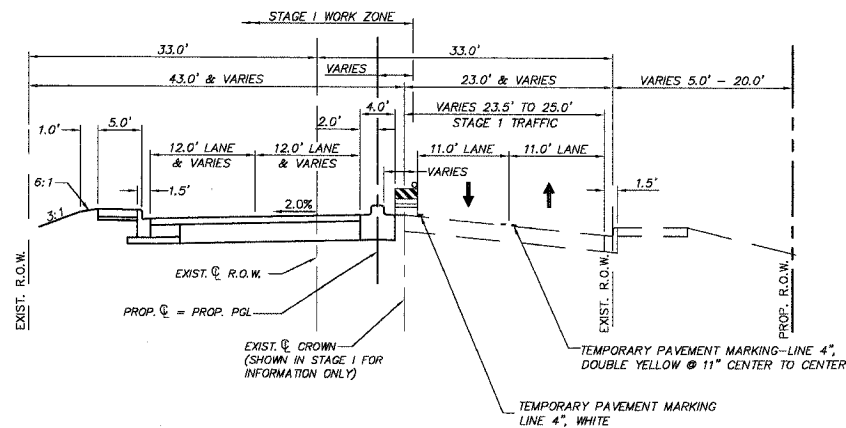
LINE	LENGTH	BEARING	BEGIN STA.	END STA.
L1	500.00'	S89°04'04"W	100+00	105+00
L2	401.59'	S89°04'04"W	105+00	109+01.59
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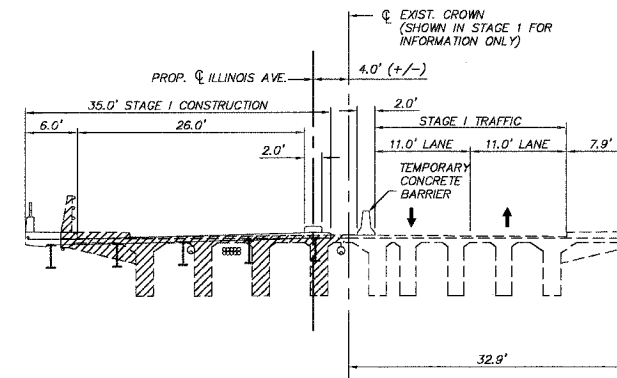
CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 PLAN AND PROFILE
 STA 122+50 TO STA. 125+00
 SCALE: VERT. 1"=5'
 HORIZ. 1"=20'
 DATE: 07-18-2006
 DRAWN BY: MPL
 CHECKED BY: JLP

COMP. FILE: 050181-602a.dwg
 VIEW: 05-16

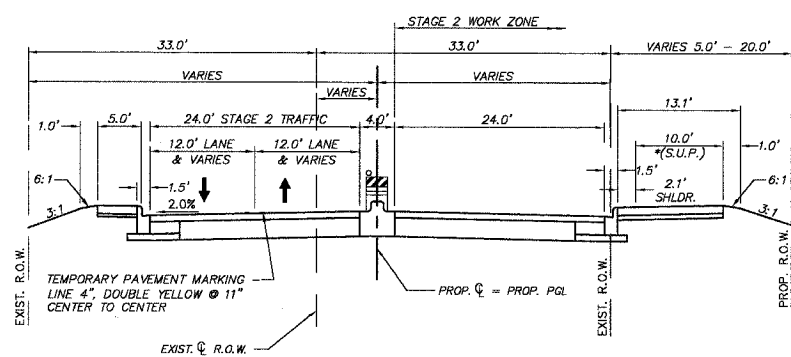
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	17
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT #: 83867				



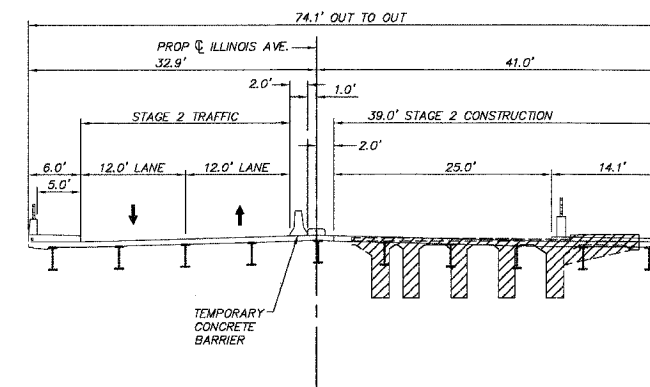
**ILLINOIS AVENUE
TYPICAL ROADWAY SECTION
STAGE 1 CONSTRUCTION**



**ILLINOIS AVENUE
TYPICAL BRIDGE SECTION
STAGE 1 CONSTRUCTION**



**ILLINOIS AVENUE
TYPICAL ROADWAY SECTION
STAGE 2 CONSTRUCTION**
* S.U.P. = SHARED USE PATH



**ILLINOIS AVENUE
TYPICAL BRIDGE SECTION
STAGE 2 CONSTRUCTION**

SUGGESTED MAINTENANCE OF TRAFFIC

GENERAL

- A MINIMUM OF ONE (1) SIDEWALK SHALL BE MAINTAINED FOR THE ENTIRE LENGTH OF THE PROJECT LIMITS AT ALL TIMES DURING CONSTRUCTION

ADVANCE WORK

- COORDINATE WITH REQUIRED UTILITY RELOCATIONS.
- REMOVE EXISTING CONCRETE MEDIAN FROM STA 109+11 TO STA. 110+72 AND PLACE TEMPORARY PAVEMENT. MAINTAIN EXISTING TRAFFIC USING HIGHWAY STANDARD 701806.

STAGE I

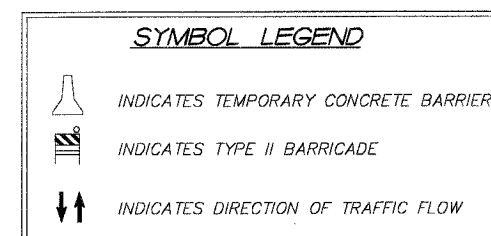
TRAFFIC:
- MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION UTILIZING THE EXISTING TWO EASTBOUND LANES.

CONSTRUCTION:
- CONSTRUCT NORTH HALVES OF BRIDGES, PEDESTRIAN TUNNEL AND AVAILABLE PORTIONS OF ROADWAY. CONSTRUCT REMAINDER OF NORTH HALF OF ROADWAY UTILIZING HIGHWAY STANDARD 701806.

STAGE II

TRAFFIC:
- MAINTAIN ONE LANE OF TRAFFIC IN EACH DIRECTION UTILIZING THE NEWLY CONSTRUCTED WEST BOUND LANES.

CONSTRUCTION:
- CONSTRUCT SOUTH HALVES OF BRIDGES, PEDESTRIAN TUNNEL, AND AVAILABLE PORTIONS OF ROADWAY. CONSTRUCT REMAINDER OF SOUTH HALF OF ROADWAY UTILIZING HIGHWAY STANDARD 701806.



REVISIONS	
NAME	DATE
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SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
4500 PRIME PARKWAY, SUITE 201
McHENRY, ILLINOIS 60050
PH: 815-385-1778 FAX: 815-385-1781
www.smithengineering.com E-MAIL: seo@smithengineering.com
McHENRY HUNTLEY YORKVILLE
ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

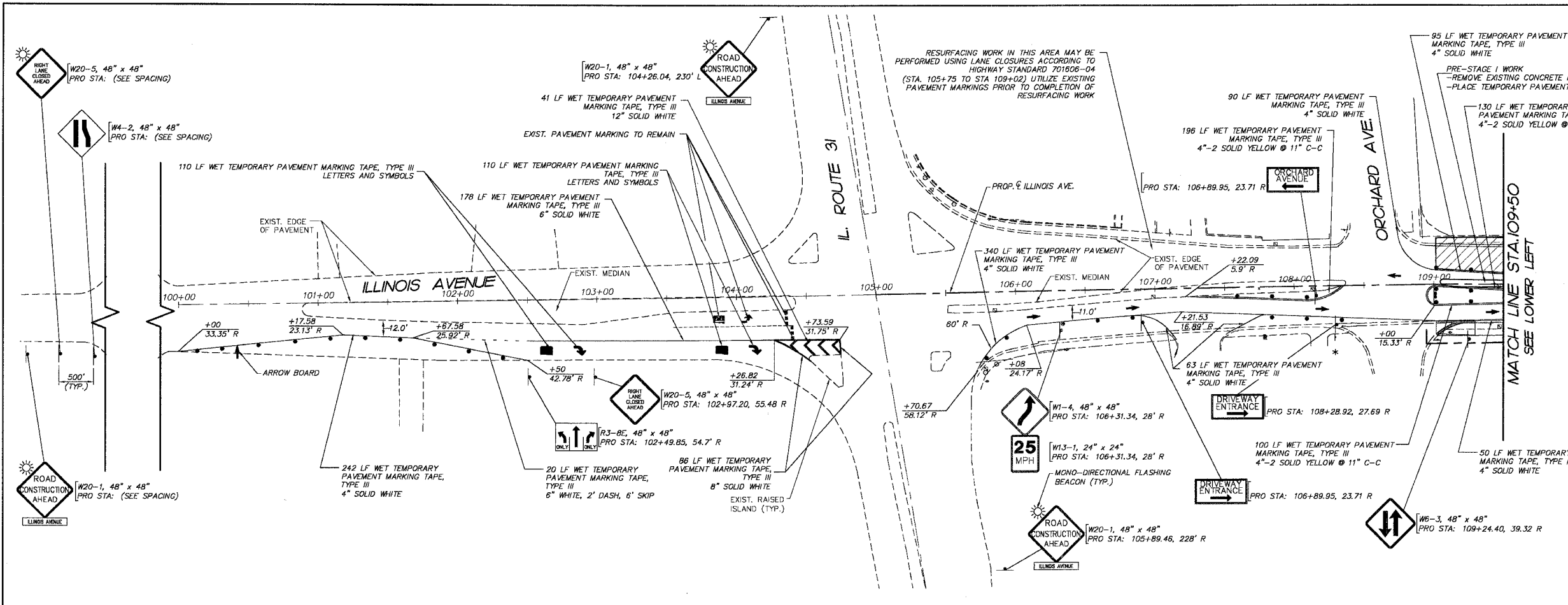
CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
SUGGESTED MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS

SCALE: "N"TS
DATE 07-28-2006

DRAWN BY WJH
CHECKED BY JLP

PLOT FILE STANDARD
VIEW: 05-17
COMP. FILE: 08/01/06 08:00:00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	18
STA.	100+00	TO STA.	119+50	
FED. ROAD DIST. NO. 1 ILLINOIS HIGHWAY PROJECT				
CONTRACT # 83867				

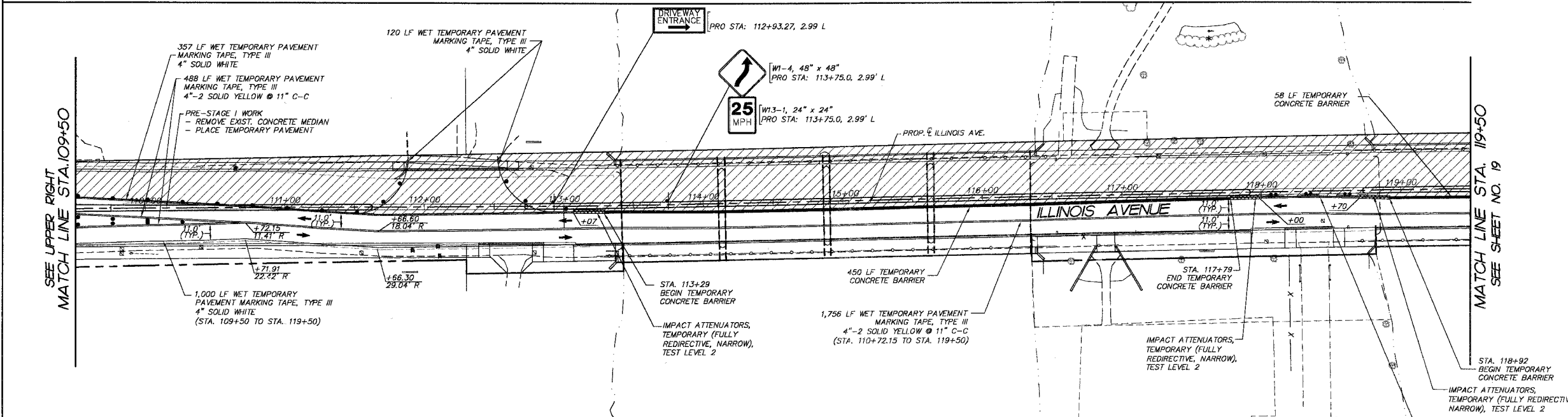


GENERAL NOTES & SYMBOL LEGEND

- ALL SIGNING & STRIPING TO BE IN ACCORDANCE WITH THE FOLLOWING STATE STANDARDS:
720006 701606
702001 701801
- TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
- CONTRACTOR TO MAINTAIN TEMPORARY ACCESS AT ALL TIMES DURING CONSTRUCTION TO ALL DRIVEWAYS ALONG THE LIMITS OF CONSTRUCTION.
- TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL BEACON
- TYPE III BARRICADE
- INDICATES DIRECTION OF TRAFFIC FLOW

HATCH LEGEND

- DENOTES CONSTRUCTION AREA FOR IMPROVEMENTS.
- DENOTES IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW) TEST LEVEL 2



GENERAL NOTES

- The contractor shall maintain a minimum of 2 - 11' wide lanes for two-way traffic flow.
- The contractor shall maintain traffic in accordance with the special provisions, details, state standards, standard specifications and as directed by the Engineer.
- The Engineer shall be informed 48 hours in advance of any change in construction staging.
- Type II barricades and vertical panels shall be equipped with mono-directional steady burn lights and shall be placed at 50' intervals along the proposed work zone, 25' intervals within taper sections and 12' intervals around radii as indicated on the plans or as directed by the Engineer.
- The Contractor shall be required to remove all existing pavement markings which conflict with the designated traffic control plan. This work shall be paid for as pavement marking removal. The Contractor shall mark a double 4" wide solid centerline 11" C/C during Stage I and Stage II traffic operations as shown on the plans. This work shall be paid for at the contract unit price for WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III.
- The furnishing, installing, and relocation of all traffic signs shall be in accordance with the Manual on Uniform Traffic Control Devices and the Standard Specifications. This work shall be included in the cost for traffic control and protection. All conflicting traffic signs shall be covered as directed by the Engineer. This shall be incidental to the cost of traffic control and protection.
- Ingress and egress to driveways and side streets shall be maintained as shown on the plans and/or as directed by the Engineer. Quantities for Temporary Access (Private Entrance) and Temporary Access (Commercial Entrance) have been included in the contract for driveway and side street access. A minimum of one (1) sidewalk and side street access. A minimum of one (1) sidewalk shall be maintained throughout the duration of the project for pedestrian traffic.
- The Contractor shall provide and install two (2) weighted sand bags on each Type II barricade used - one (1) weighted sand bag across each bottom rail. All Type III barricades shall require a minimum of four (4) sandbags per barricade.
- The Contractor shall be responsible for ensuring drainage of the roadway during all stages of construction.
- Temporary pavement shall adhere to Section 703 of the Standard Specifications and the project special provisions.
- The existing light poles on the south side of Illinois Avenue shall be maintained and remain functional for the duration of Stage I Construction. This work shall not be paid for separately, but shall be included in the cost of TRAFFIC CONTROL AND PROTECTION. Coordinate with Lighting Plans and Details.
- The cost to relocate impact attenuators shall be included in the cost of IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2.

REVISIONS	
NO.	DATE
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SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
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www.smithengineering.com E-MAIL: seo@smithengineering.com
#KOBENY #HUNTER #YORKER

ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
SUGGESTED MAINTENANCE OF TRAFFIC PLAN
STAGE 1
STA 100+00 TO STA 119+50
SCALE: 1" = 40'
DATE 07-28-2006
DRAWN BY MPL
CHECKED BY JLP

PLOT FILE: STANDARD
VIEW: CE-18
COMP. FILE: 050191-827.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	19
STA. 119+50	TO STA. 129+82			
FED. ROAD DIST. NO. 1 ILLINOIS		HIGHWAY PROJECT		
CONTRACT #: 83867				

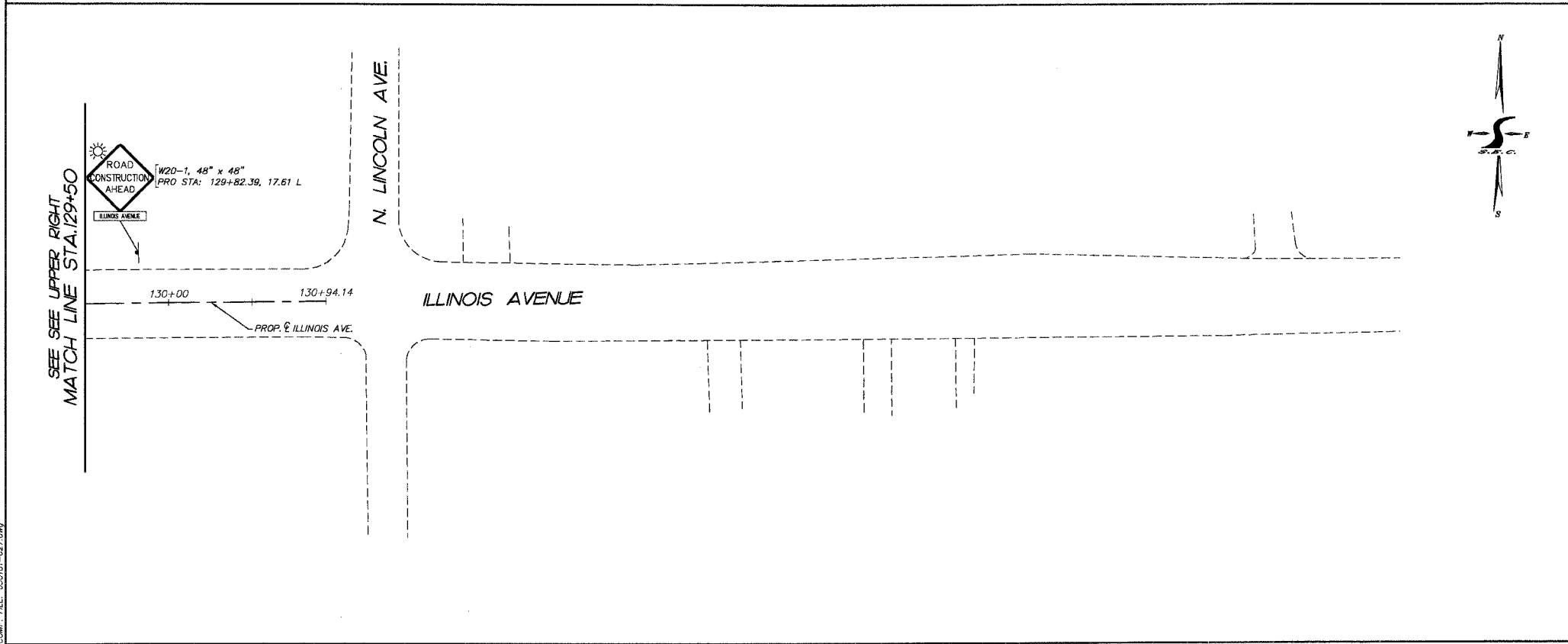
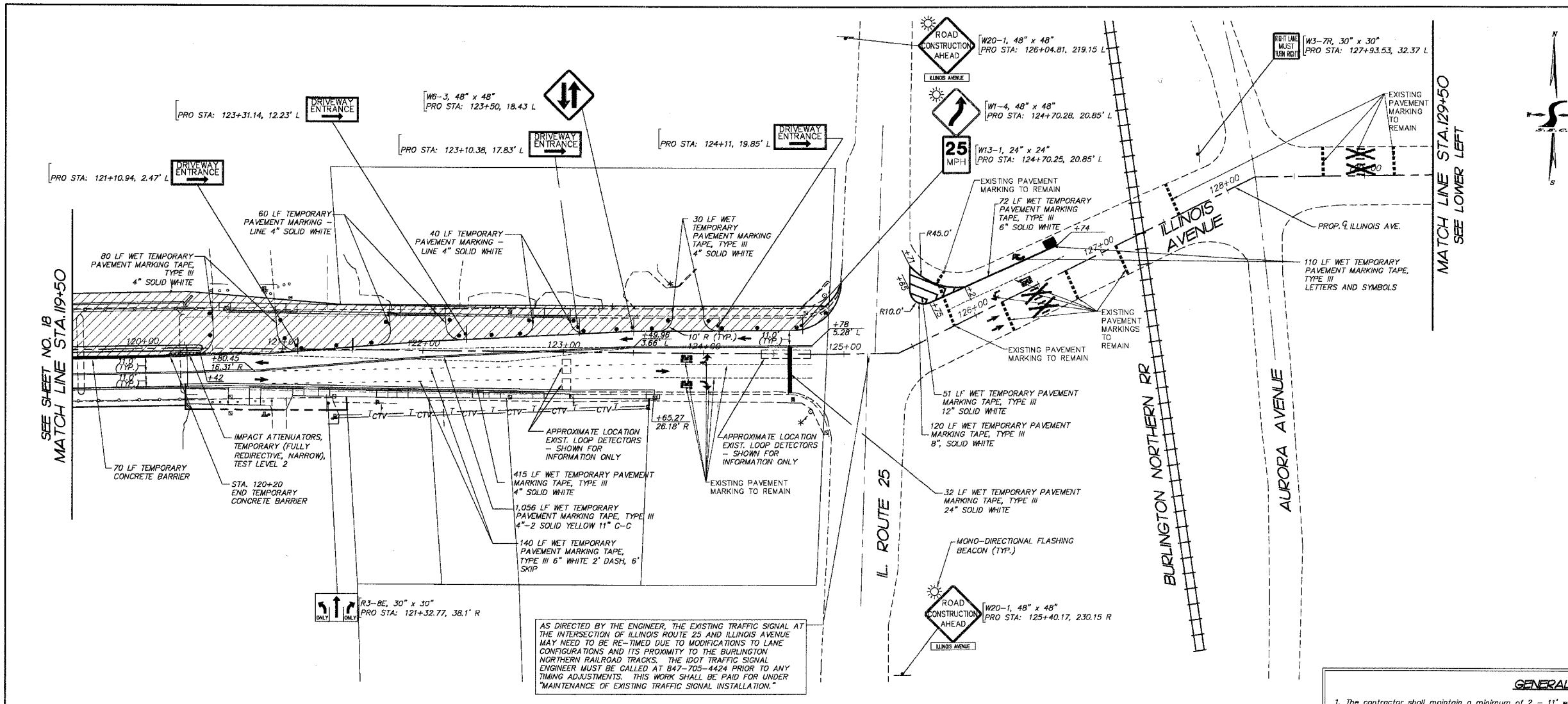
- ### GENERAL NOTES & SYMBOL LEGEND
- ALL SIGNING & STRIPING TO BE IN ACCORDANCE WITH THE FOLLOWING STATE STANDARDS:

720006	701606
702001	701801

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
 PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
 - CONTRACTOR TO MAINTAIN TEMPORARY ACCESS AT ALL TIMES DURING CONSTRUCTION TO ALL DRIVEWAYS ALONG THE LIMITS OF CONSTRUCTION.
 - | | |
|--|---|
| | TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL BEACON |
|--|---|
 - | | |
|--|--------------------|
| | TYPE III BARRICADE |
|--|--------------------|
 - | | |
|--|-------------------------------------|
| | INDICATES DIRECTION OF TRAFFIC FLOW |
|--|-------------------------------------|

- ### HATCH LEGEND
- | | |
|--|--|
| | DENOTES CONSTRUCTION AREA FOR IMPROVEMENTS. |
| | DENOTES IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW) TEST LEVEL 2 |

- ### GENERAL NOTES
- The contractor shall maintain a minimum of 2 - 11' wide lanes for two-way traffic flow.
 - The contractor shall maintain traffic in accordance with the special provisions, state standards, standard specifications and as directed by the Engineer.
 - The Engineer shall be informed 48 hours in advance of any change in construction staging.
 - Type II barricades and vertical panels shall be equipped with mono-directional steady burn lights and shall be placed at 50' intervals along the proposed work zone, 25' intervals within taper sections, and 12' intervals around radii as indicated on the plans or as directed by the Engineer.
 - The Contractor shall be required to remove all existing pavement markings which conflict with the designated traffic control plan. This work shall be paid for as pavement marking removal. The Contractor shall mark a double 4" wide solid centerline 11" C/C during Stage I and Stage II traffic operations as shown on the plans. This work shall be paid for at the contract unit price for WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III.
 - The furnishing, installing, and relocation of all traffic signs shall be in accordance with the Manual on Uniform Traffic Control Devices and the Standard Specifications. This work shall be included in the cost for traffic control and protection. All conflicting traffic signs shall be covered as directed by the Engineer. This shall be incidental to the cost of traffic control and protection.
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 - The Contractor shall be responsible for ensuring drainage of the roadway during all stages of construction.
 - Temporary protection shall adhere to Section 703 of the Standard Specifications and the project special provisions.
 - The existing light poles on the south side of Illinois Avenue shall be maintained and remain functional for the duration of Stage I Construction. This work shall not be paid for separately, but shall be included in the cost of TRAFFIC CONTROL PROTECTION. Coordinate with Lighting Plans and Details.
 - The cost to relocate impact attenuators shall be included in the cost of IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW) TEST LEVEL 2.



AS DIRECTED BY THE ENGINEER, THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF ILLINOIS ROUTE 25 AND ILLINOIS AVENUE MAY NEED TO BE RE-TIMED DUE TO MODIFICATIONS TO LANE CONFIGURATIONS AND ITS PROXIMITY TO THE BURLINGTON NORTHERN RAILROAD TRACKS. THE IDOT TRAFFIC SIGNAL ENGINEER MUST BE CALLED AT 847-705-4424 PRIOR TO ANY TIMING ADJUSTMENTS. THIS WORK SHALL BE PAID FOR UNDER "MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION."

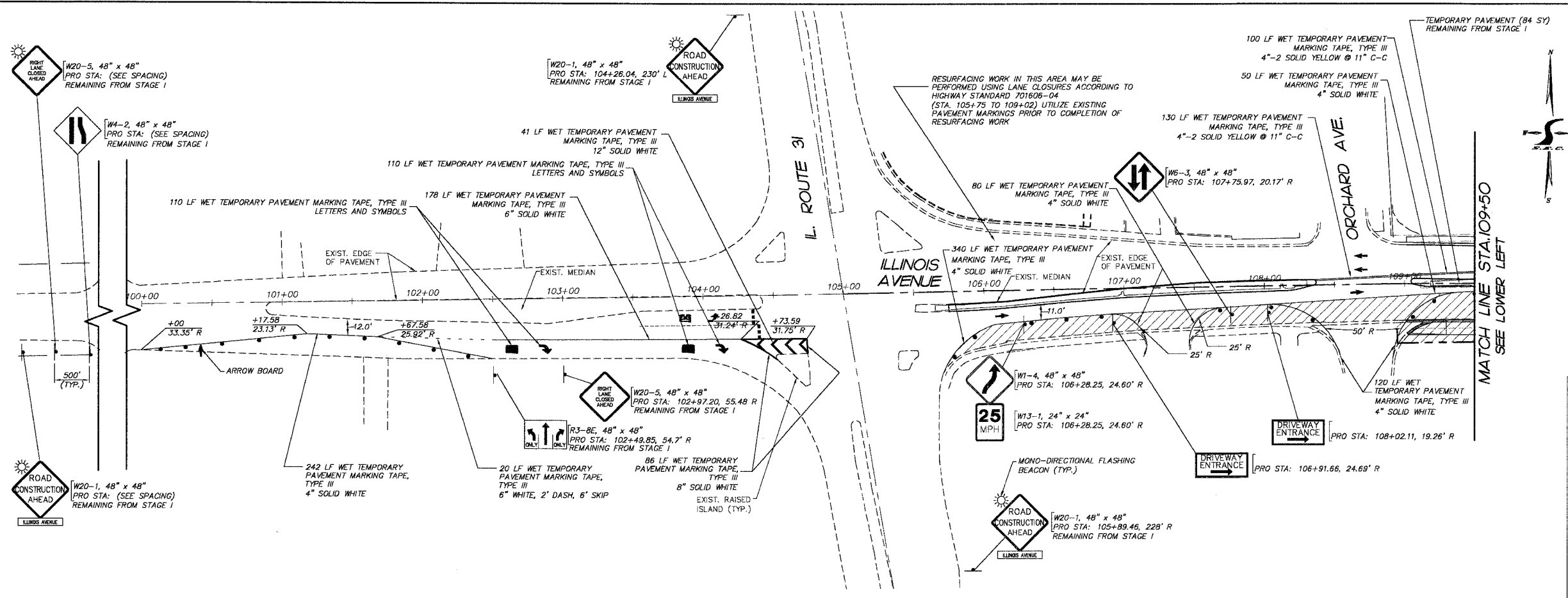
REVISIONS		
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SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
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 #McHENRY #LUNTVILLE #YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

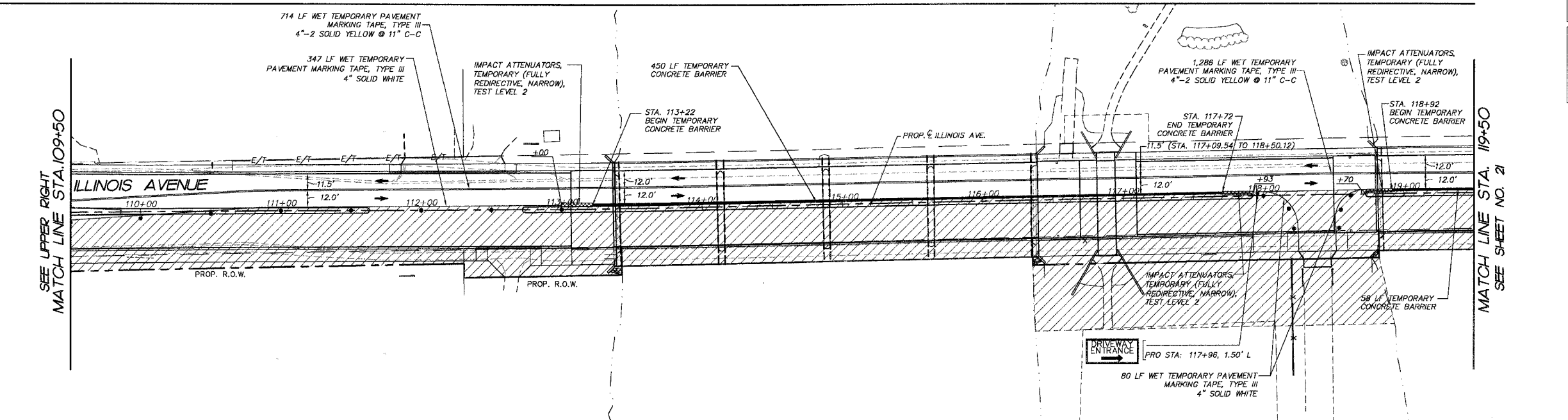
ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 SUGGESTED MAINTENANCE OF TRAFFIC PLAN
 STAGE 1
 STA 119+50 TO STA 129+82
 SCALE: 1" = 40'
 DATE 07-28-2006
 DRAWN BY MPL
 CHECKED BY JLP

PLC FILE: STANDARD
 PLOT FILE: 19
 COMP. FILE: 000181-827.DWG

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	20
STA.	100+00	TO STA.	119+50	
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT	CONTRACT # 83867	



- GENERAL NOTES & SYMBOL LEGEND**
- ALL SIGNING & STRIPING TO BE IN ACCORDANCE WITH THE FOLLOWING STATE STANDARDS:
720006 701606
702001 701801
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
 - CONTRACTOR TO MAINTAIN TEMPORARY ACCESS AT ALL TIMES DURING CONSTRUCTION TO ALL DRIVEWAYS ALONG THE LIMITS OF CONSTRUCTION.
 -  TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL BEACON
 TYPE III BARRICADE
 INDICATES DIRECTION OF TRAFFIC FLOW



- GENERAL NOTES**
- The contractor shall maintain a minimum of 2 - 11' wide lanes for two-way traffic flow.
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 - The Contractor shall be required to remove all existing pavement markings which conflict with the designated traffic control plan. This work shall be paid for as pavement marking removal. The Contractor shall mark a double 4" wide solid centerline 11" C/C during Stage I and Stage II traffic operations as shown on the plans. This work shall be paid for at the contract unit price for WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III.
 - The furnishing, installing, and relocation of all traffic signs shall be in accordance with the Manual on Uniform Traffic Control Devices and the Standard Specifications. This work shall be included in the cost for traffic control and protection. All conflicting traffic signs shall be covered as directed by the Engineer. This shall be incidental to the cost of traffic control and protection.
 - Ingress and egress to driveways and side streets shall be maintained as shown on the plans and/or as directed by the Engineer. Quantities for Temporary Access (Private Entrance) and Temporary Access (Commercial Entrance) have been included in the contract for driveway and side street access. A minimum of one (1) sidewalk shall be maintained throughout the duration of the project for pedestrian traffic.
 - The Contractor shall provide and install two (2) weighted sand bags on each Type II barricade used - one (1) weighted sand bag across each bottom rail. All Type III barricades shall require a minimum of four (4) sandbags per barricade.
 - The Contractor shall be responsible for ensuring drainage of the roadway during all stages of construction.
 - Temporary pavement shall adhere to Section 703 of the Standard Specifications and the special provisions.
 - The proposed light poles to be installed on the north side of Illinois Avenue during Stage I construction shall be functional prior to Stage II construction. Coordinate with Lighting Plans and Details.
 - The cost to relocate impact attenuators shall be included in the cost of IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW) TEST LEVEL 2.

REVISIONS

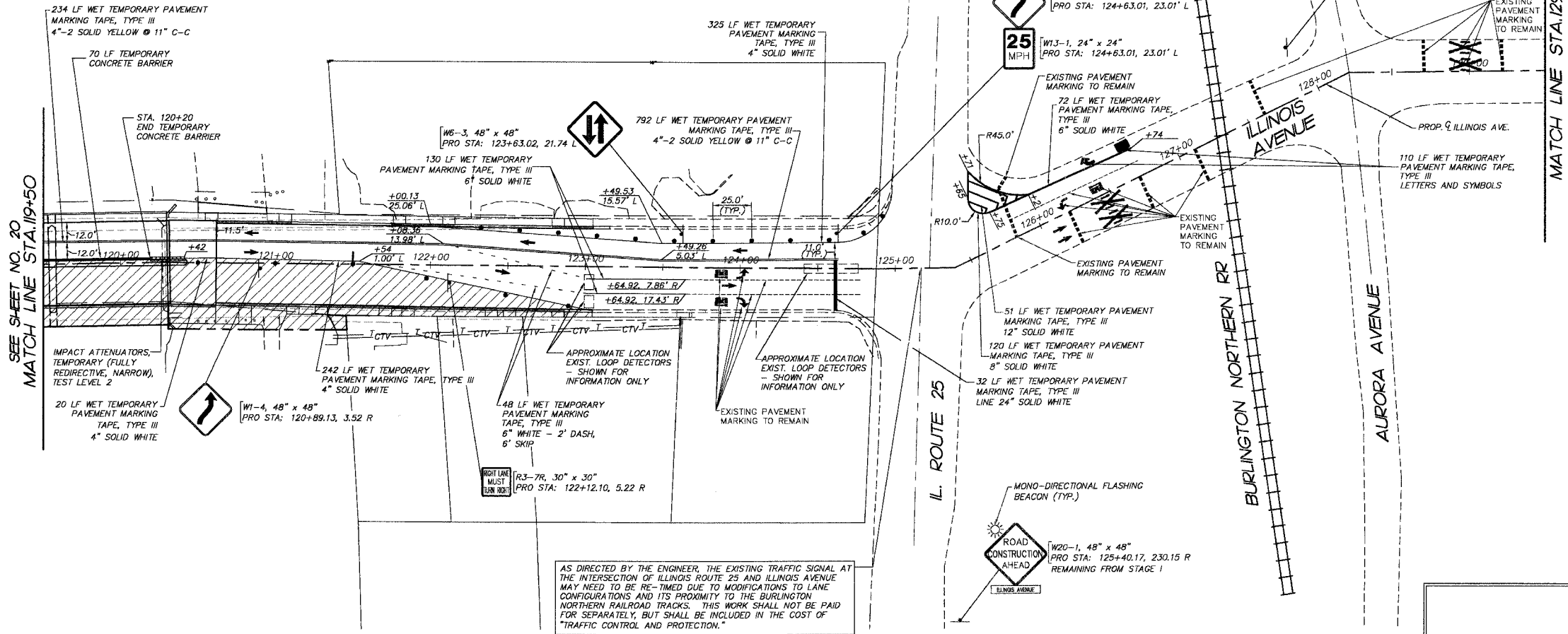
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ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
SUGGESTED MAINTENANCE OF TRAFFIC PLAN
STAGE II
STA 100+00 TO STA 119+50
SCALE: 1" = 40'
DATE 07-28-2006
DRAWN BY MPL
CHECKED BY JLP

PLOT FILE: STANDARD
COMP. FILE: 050181--6278.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	21
STA.	119+50	TO STA.	129+82	
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83867				



SEE SHEET NO. 20
MATCH LINE STA. 119+50

MATCH LINE STA. 129+50
SEE LOWER LEFT

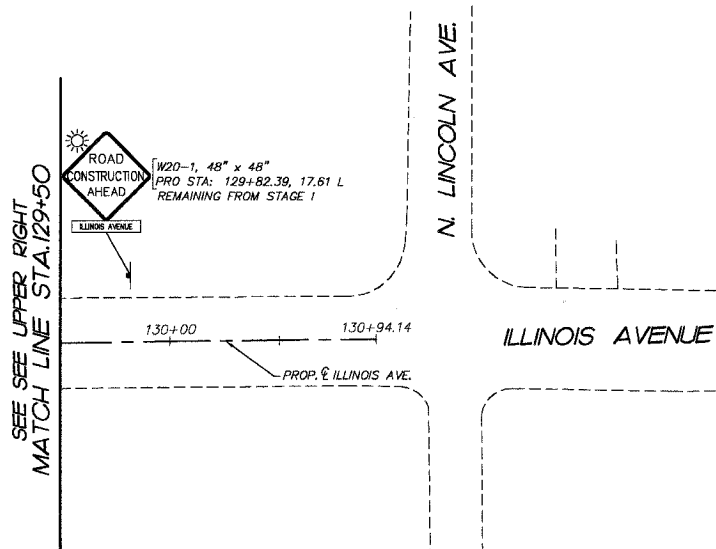
- ### GENERAL NOTES & SYMBOL LEGEND
- ALL SIGNING & STRIPING TO BE IN ACCORDANCE WITH THE FOLLOWING STATE STANDARDS:
720006 701606
702001 701801
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
 - CONTRACTOR TO MAINTAIN TEMPORARY ACCESS AT ALL TIMES DURING CONSTRUCTION TO ALL DRIVEWAYS ALONG THE LIMITS OF CONSTRUCTION.
 - TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL BEACON
 - TYPE III BARRICADE
 - INDICATES DIRECTION OF TRAFFIC FLOW

- ### HATCH LEGEND
- DENOTES CONSTRUCTION AREA FOR IMPROVEMENTS.
 - DENOTES IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2

AS DIRECTED BY THE ENGINEER, THE EXISTING TRAFFIC SIGNAL AT THE INTERSECTION OF ILLINOIS ROUTE 25 AND ILLINOIS AVENUE MAY NEED TO BE RE-TIMED DUE TO MODIFICATIONS TO LANE CONFIGURATIONS AND ITS PROXIMITY TO THE BURLINGTON NORTHERN RAILROAD TRACKS. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION."

GENERAL NOTES

- The contractor shall maintain a minimum of 2 - 11' wide lanes for two-way traffic flow.
- The contractor shall maintain traffic in accordance with the special provisions, state standards, standard specifications and as directed by the Engineer.
- The Engineer shall be informed 48 hours in advance of any change in construction staging.
- Type II barricades and vertical panels shall be equipped with mono-directional steady burn lights and shall be placed at 50' intervals along the proposed work zone, 25' intervals within taper sections, and 12' intervals around radii as indicated on the plans or as directed by the Engineer.
- The Contractor shall be required to remove all existing pavement markings which conflict with the designated traffic control plan. This work shall be paid for as pavement marking removal. The Contractor shall mark a double 4" wide solid centerline 11" C/C during Stage I and Stage II traffic operations as shown on the plans. This work shall be paid for at the contract unit price for WET TEMPORARY PAVEMENT MARKING TAPE, TYPE III.
- The furnishing, installing, and relocation of all traffic signs shall be in accordance with the Manual on Uniform Traffic Control Devices and the Standard Specifications. This work shall be included in the cost for traffic control and protection. All conflicting traffic signs shall be covered as directed by the Engineer. This shall be incidental to the cost of traffic control and protection.
- Ingress and egress to driveways and side streets shall be maintained as shown on the plans and/or as directed by the Engineer. Quantities for Temporary Access (Private Entrance) and Temporary Access (Commercial Entrance) have been included in the contract for driveway and side street access. A minimum of one (1) sidewalk shall be maintained throughout the duration of the project for pedestrian traffic.
- The Contractor shall provide and install two (2) weighted sand bags on each Type II barricade used - one (1) weighted sand bag across each bottom rail. All Type III barricades shall require a minimum of four (4) sandbags per barricade.
- The Contractor shall be responsible for ensuring drainage of the roadway during all stages of construction.
- Temporary pavement shall adhere to Section 703 of the Standard Specifications and the special provisions.
- The proposed light poles to be installed on the north side of Illinois Avenue during Stage I construction shall be functional prior to Stage II construction. Coordinate with Lighting Plans and Details.
- The cost of relocating impact attenuators shall be included in the cost of IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 2.



SEE UPPER RIGHT
MATCH LINE STA. 129+50

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ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

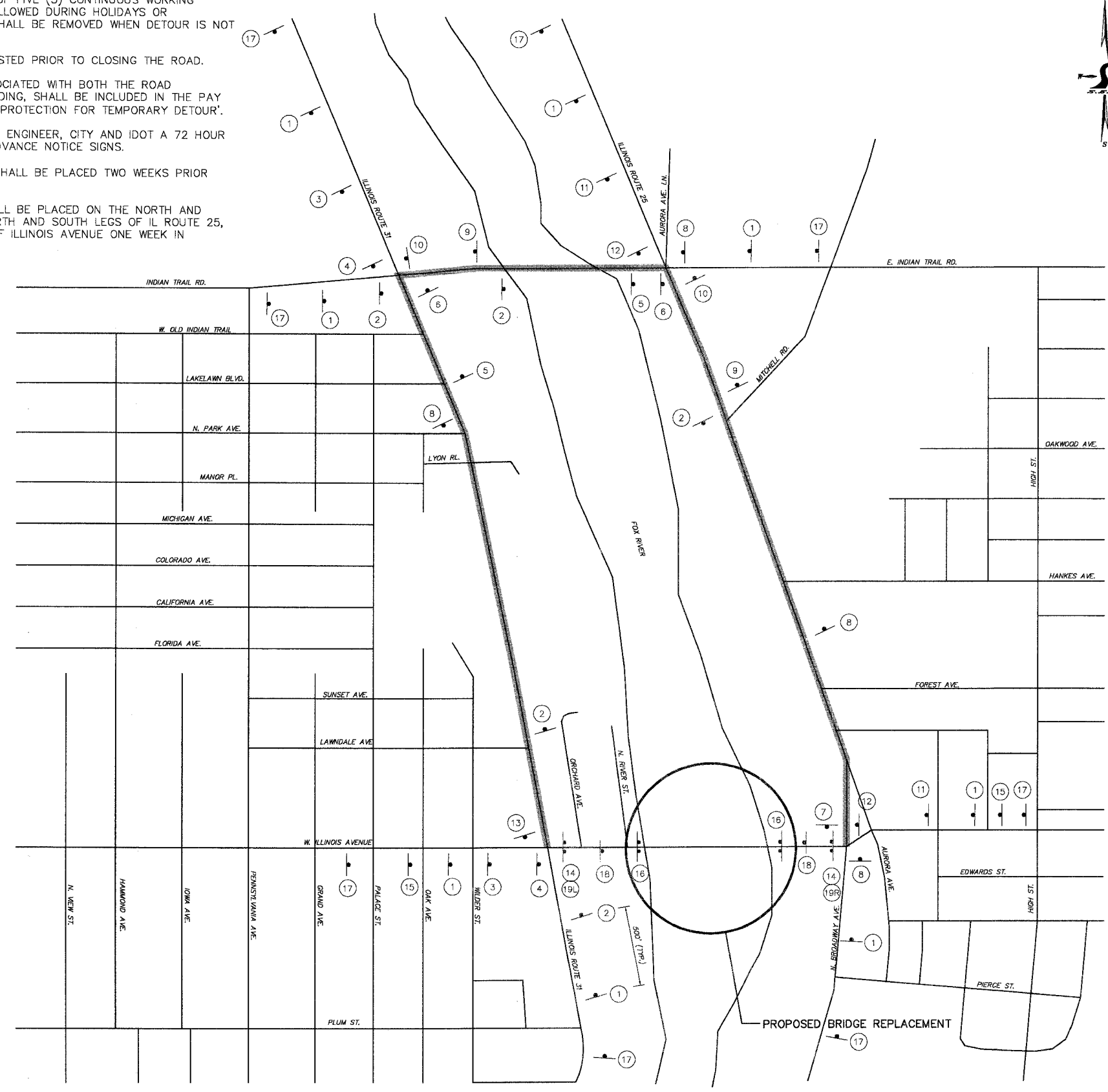
ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
SUGGESTED MAINTENANCE OF TRAFFIC PLAN
STAGE II
STA 119+50 TO STA 129+82
SCALE: 1" = 40'
DATE 07-28-2006
DRAWN BY MPL
CHECKED BY JLP

PLANT FILE STANDARD
COMP. FILE: 050181-6278.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	22
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS		HIGHWAY PROJECT	
CONTRACT # 83867				

ROAD CLOSURE GENERAL NOTES

1. THE CONTRACTOR WILL BE ALLOWED TO CLOSE ILLINOIS AVENUE FOR TWO (2) SEPARATE DURATIONS AS DETAILED IN THE SPECIFICATIONS. EACH DURATION SHALL BE A MAXIMUM OF FIVE (5) CONTINUOUS WORKING DAYS. CLOSURES WILL NOT BE ALLOWED DURING HOLIDAYS OR WEEKENDS. ALL DETOUR SIGNS SHALL BE REMOVED WHEN DETOUR IS NOT IN PLACE.
2. THE DETOUR ROUTE SHALL BE POSTED PRIOR TO CLOSING THE ROAD.
3. ALL TRAFFIC CONTROL WORK ASSOCIATED WITH BOTH THE ROAD CLOSURES, SIGNING, AND BARRICADING, SHALL BE INCLUDED IN THE PAY ITEM FOR 'TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR'.
4. THE CONTRACTOR SHALL GIVE THE ENGINEER, CITY AND IDOT A 72 HOUR NOTICE PRIOR TO PLACING THE ADVANCE NOTICE SIGNS.
5. ADVANCE NOTICE SIGNS "17" SHALL BE PLACED TWO WEEKS PRIOR TO CLOSING THE ROADWAY.
6. CHANGEABLE MESSAGE SIGNS SHALL BE PLACED ON THE NORTH AND SOUTH LEGS OF IL ROUTE 31, NORTH AND SOUTH LEGS OF IL ROUTE 25, AND THE EAST AND WEST LEGS OF ILLINOIS AVENUE ONE WEEK IN ADVANCE OF ROAD CLOSURES.



SIGN LEGEND

1		10	
2		11	
3		12	
4		13	
5		14	
6		15	
7		16	
8		17	
9		18	
		19L	
		19R	

LEGEND

PROPOSED DETOUR ROUTE

NOTE: SIGN SPACING SHALL BE 500' TYPICAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

REVISIONS	
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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 DETOUR PLAN

SCALE: "NTS" DRAWN BY CFR
 DATE 07-28-2006 CHECKED BY JLP

PLOT FILE STANDARD
 VIEW: CE-22
 COMP. FILE: 050701-627.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	23
STA.	107+50	TO STA.	117+50	
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83867				

LEGEND:

- DEMOTES PROPOSED TOPSOIL FURNISH AND PLACE 6" AND SOODING, SALT TOLERANT
- DEMOTES PERIMETER EROSION BARRIER
- DEMOTES STONE RIP RAP
- DEMOTES ROLLED EXCELSIOR
- DEMOTES FLOW DIRECTION

EROSION CONTROL NOTES:

THE KANE DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWD) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

WORK SHALL BE DONE IN ACCORDANCE WITH HIGHWAY STANDARD 280001 AND DETAILS IN THE PLANS.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KDSWD.

PERIMETER EROSION BARRIER MUST REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY OR AFTER A ONE-HALF INCH OR GREATER RAINFALL EVENT AND ANY REQUIRED REPAIRS WILL BE MADE.

WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION SHALL BE FILTERED AND A MEANS PROVIDED TO REDUCE EROSION.

ROLLED EXCELSIOR SHALL BE PLACED ALONG THE RIVER EDGE AS SHOWN. THE REMOVAL AND REINSTALLATION REQUIRED DUE TO CONSTRUCTION OPERATIONS SHALL BE INCLUDED IN COST OF THE ROLLED EXCELSIOR.

MECHANIZED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED FROM OR MOVED ALONG THE RIVER BOTTOM.

ANY DISTURBED GROUND SHALL BE PROTECTED WITHIN 7 DAYS WITH EITHER PERMANENT OR TEMPORARY EROSION CONTROL MEASURES.

ROLLED EXCELSIOR'S SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SHALL BE A MINIMUM OF 12' IN LENGTH.

CONTRACTOR SHALL NOT DISTURB GROUND OUTSIDE THE PERIMETER EROSION BARRIER. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREA OTHER THAN INDICATED ON THESE PLANS, A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE CITY OF AURORA FOR REVIEW BY THE KDSWD.

WORK THIS SHEET WITH THE BRIDGE PLANS AND THE 'EARTH EXCAVATION TABLE.

AT ALL TIMES, PERIMETER EROSION BARRIER SHALL BE INSTALLED BETWEEN ALL DISTURBED AREAS AND THE RIVER. PERIMETER BARRIERS SHALL BE INSPECTED AT THE END OF EACH WORK DAY AND PRIOR TO ANY RAIN EVENTS.

ALL INLETS ON AND ADJACENT TO THE SITE MUST HAVE A SEDIMENT TRAPPING OR CONTAINMENT DEVICE INSTALLED DURING CONSTRUCTION ACTIVITIES. STRAW BALES ARE NOT ALLOWED.

BUILDING MATERIAL STOCKPILES SHALL BE LOCATED IN AREAS THAT DO NOT HAVE HIGH POTENTIAL FOR CONTRIBUTING SEDIMENTS TO THE RIVER OR STORMWATER STRUCTURES.

THE CONTRACTOR IS NOT PERMITTED TO ALLOW THE EXISTING DECK MATERIAL, OR OTHER CONSTRUCTION DEBRIS TO FALL INTO THE RIVER DURING DEMOLITION OR CONSTRUCTION.

IN THE EVENT THE CONTRACTOR REQUESTS TEMPORARY WORK ACCESS TO THE FOX RIVER TO PLACE TEMPORARY SHORING PLATFORMS OR OTHER STRUCTURES, THE CONTRACTOR MUST CONTACT THE KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT AT 630-584-7891 EXT. 3, AND THE US ARMY CORP OF ENGINEERS TO COORDINATE EROSION AND SEDIMENT CONTROL MEASURES. AT NO TIME WILL ACTIVE EXCAVATION BE ALLOWED IN THE RIVER FLOWS.

IF ANY EXCAVATION OF THE BANKS SHALL TAKE PLACE FOR THE PLACEMENT OF RIPRAP, TIMING OF THE WORK TO COINCIDE WITH LOW FLOW CONDITIONS SHALL TAKE PLACE. IF ANY FLOWING WATER IS PRESENT ON THE BANKS DURING THE EXCAVATION AND PLACEMENT OF THE RIP RAP, A TURBIDITY CURTAIN, SILT FENCE, OR OTHER SEDIMENT BARRIER SHALL BE PLACED BETWEEN THE ACTIVE EXCAVATION AREA AND THE RIVER FLOWS. IF WORK SHALL NOT BE DONE DURING ACTIVE FLOWS ON THE BANKS, NO ADDITIONAL SEDIMENT CONTROL BARRIER IS NECESSARY, HOWEVER STABILIZATION AND PLACEMENT OF THE RIP RAP SHALL TAKE PLACE IMMEDIATELY UPON COMPLETION OF THE GRADING ON THE BANK AREA.

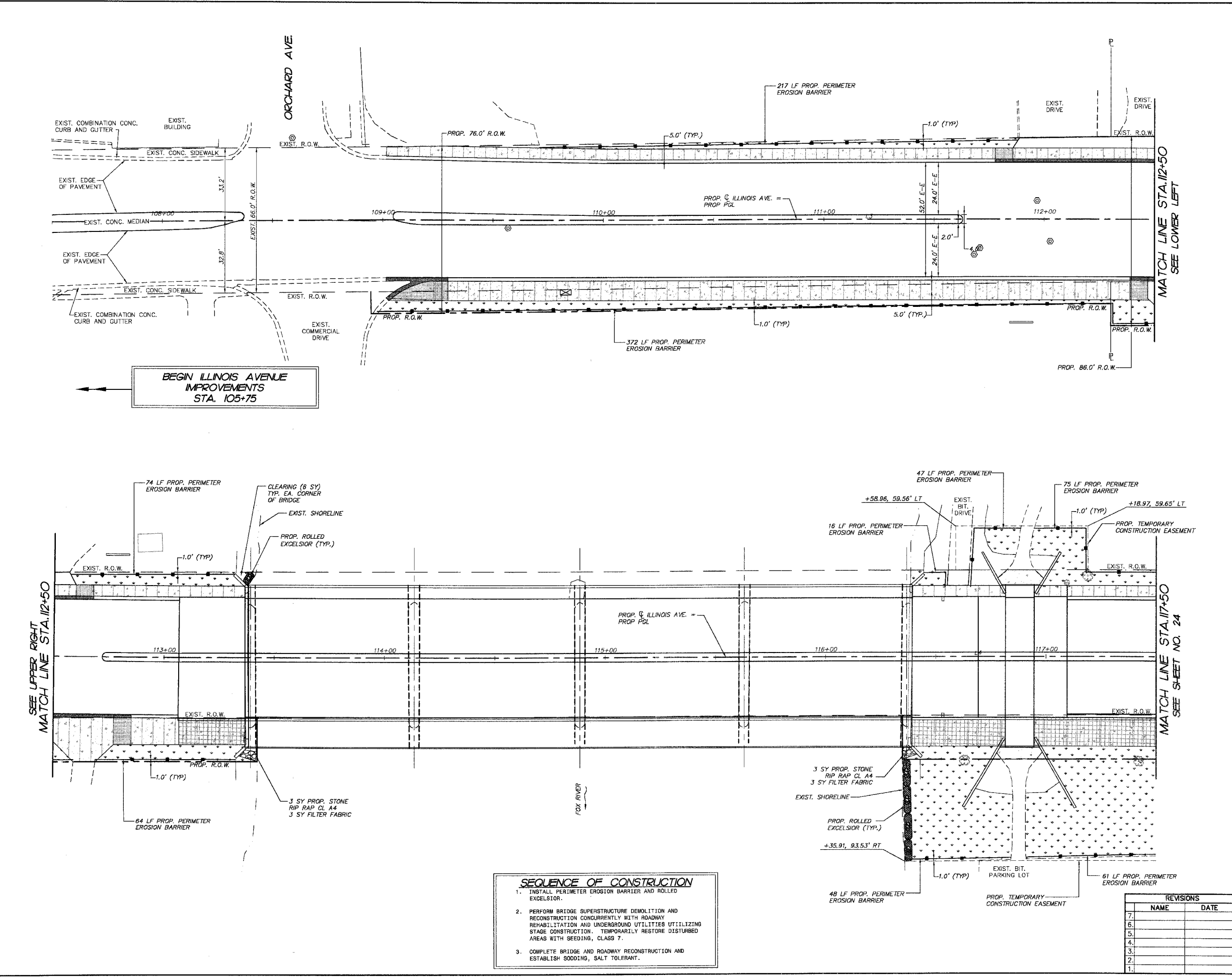
SMITH ENGINEERING CONSULTANTS, INC.
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ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 EROSION CONTROL PLAN
 STA 107+50 TO STA 117+50

SCALE: 1" = 20'
 DATE 07-28-2006

DRAWN BY MPL
 CHECKED BY JLP



BEGIN ILLINOIS AVENUE IMPROVEMENTS STA. 105+75

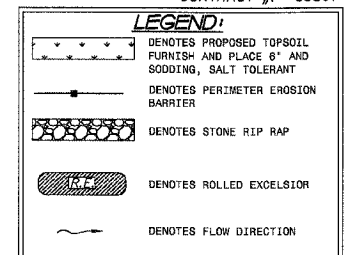
- SEQUENCE OF CONSTRUCTION**
1. INSTALL PERIMETER EROSION BARRIER AND ROLLED EXCELSIOR.
 2. PERFORM BRIDGE SUPERSTRUCTURE DEMOLITION AND RECONSTRUCTION CONCURRENTLY WITH ROADWAY REHABILITATION AND UNDERGROUND UTILITIES UTILIZING STAGE CONSTRUCTION. TEMPORARILY RESTORE DISTURBED AREAS WITH SEEDING, CLASS 7.
 3. COMPLETE BRIDGE AND ROADWAY RECONSTRUCTION AND ESTABLISH SOODING, SALT TOLERANT.

REVISIONS

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PLOT FILE STANDARD
 VIEW: CE-23
 COMP. FILE: C20181-526.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	24
STA.	117+50	TO STA.	125+00	
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83867				



EROSION CONTROL NOTES:

THE KANE DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KOSWCD) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

WORK SHALL BE DONE IN ACCORDANCE WITH HIGHWAY STANDARD 280001 AND DETAILS IN THE PLANS.

A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KOSWCD.

PERIMETER EROSION BARRIER MUST REMAIN IN PLACE UNTIL FINAL STABILIZATION HAS BEEN ESTABLISHED.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED WEEKLY OR AFTER A ONE-HALF INCH OR GREATER RAINFALL EVENT AND ANY REQUIRED REPAIRS WILL BE MADE.

WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION SHALL BE FILTERED AND A MEANS PROVIDED TO REDUCE EROSION.

ROLLED EXCELSIOR SHALL BE PLACED ALONG THE RIVER EDGE AS SHOWN. THE REMOVAL AND REINSTALLATION REQUIRED DUE TO CONSTRUCTION OPERATIONS SHALL BE INCLUDED IN COST OF THE ROLLED EXCELSIOR.

MECHANIZED CONSTRUCTION EQUIPMENT SHALL NOT BE OPERATED FROM OR MOVED ALONG THE RIVER BOTTOM.

ANY DISTURBED GROUND SHALL BE PROTECTED WITHIN 7 DAYS WITH EITHER PERMANENT OR TEMPORARY EROSION CONTROL MEASURES.

ROLLED EXCELSIOR'S SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND SHALL BE A MINIMUM OF 12' IN LENGTH.

CONTRACTOR SHALL NOT DISTURB GROUND OUTSIDE THE PERIMETER EROSION BARRIER. PRIOR TO COMMENCING LAND-DISTURBING ACTIVITIES IN AREA OTHER THAN INDICATED ON THESE PLANS, A SUPPLEMENTARY EROSION CONTROL PLAN SHALL BE SUBMITTED TO THE CITY OF AURORA FOR REVIEW BY THE KOSWCD.

WORK THIS SHEET WITH THE BRIDGE PLANS AND THE 'EARTH EXCAVATION TABLE.

AT ALL TIMES, PERIMETER EROSION BARRIER SHALL BE INSTALLED BETWEEN ALL DISTURBED AREAS AND THE RIVER. PERIMETER BARRIERS SHALL BE INSPECTED AT THE END OF EACH WORK DAY AND PRIOR TO ANY RAIN EVENTS.

ALL INLETS ON AND ADJACENT TO THE SITE MUST HAVE A SEDIMENT TRAPPING OR CONTAINMENT DEVICE INSTALLED DURING CONSTRUCTION ACTIVITIES. STRAW BALES ARE NOT ALLOWED.

BUILDING MATERIAL STOCKPILES SHALL BE LOCATED IN AREAS THAT DO NOT HAVE HIGH POTENTIAL FOR CONTRIBUTING SEDIMENTS TO THE RIVER OR STORMWATER STRUCTURES.

THE CONTRACTOR IS NOT PERMITTED TO ALLOW THE EXISTING DECK MATERIAL, OR OTHER CONSTRUCTION DEBRIS TO FALL INTO THE RIVER DURING DEMOLITION OR CONSTRUCTION.

IN THE EVENT THE CONTRACTOR REQUESTS TEMPORARY WORK ACCESS TO THE FOX RIVER TO PLACE TEMPORARY SHORING PLATFORMS OR OTHER STRUCTURES, THE CONTRACTOR MUST CONTACT THE KANE DUPAGE SOIL & WATER CONSERVATION DISTRICT AT 630-584-7961 EXT 3, AND THE US ARMY CORP OF ENGINEERS TO COORDINATE EROSION AND SEDIMENT CONTROL MEASURES. AT NO TIME WILL ACTIVE EXCAVATION BE ALLOWED IN THE RIVER FLOWS.

IF ANY EXCAVATION OF THE BANKS SHALL TAKE PLACE FOR THE PLACEMENT OF RIPRAP, TIMING OF THE WORK TO COINCIDE WITH LOW FLOW CONDITIONS SHALL TAKE PLACE. IF ANY FLOWING WATER IS PRESENT ON THE BANKS DURING THE EXCAVATION AND PLACEMENT OF THE RIP RAP, A TURBIDITY CURTAIN, SILT FENCE, OR OTHER SEDIMENT BARRIER SHALL BE PLACED BETWEEN THE ACTIVE EXCAVATION AREA AND THE RIVER FLOWS. IF WORK SHALL NOT BE DONE DURING ACTIVE FLOWS ON THE BANKS, NO ADDITIONAL SEDIMENT CONTROL BARRIER IS NECESSARY, HOWEVER STABILIZATION AND PLACEMENT OF THE RIP RAP SHALL TAKE PLACE IMMEDIATELY UPON COMPLETION OF THE GRADING ON THE BANK AREA.

- SEQUENCE OF CONSTRUCTION**
1. INSTALL PERIMETER EROSION BARRIER AND ROLLED EXCELSIOR.
 2. PERFORM BRIDGE SUPERSTRUCTURE DEMOLITION AND RECONSTRUCTION CONCURRENTLY WITH ROADWAY REHABILITATION AND UNDERGROUND UTILITIES UTILIZING STAGE CONSTRUCTION. TEMPORARILY RESTORE DISTURBED AREAS WITH SEEDING, CLASS 7.
 3. COMPLETE BRIDGE AND ROADWAY RECONSTRUCTION AND ESTABLISH SODDING, SALT TOLERANT.

SMITH ENGINEERING CONSULTANTS, INC.
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ILLINOIS DEPARTMENT OF TRANSPORTATION

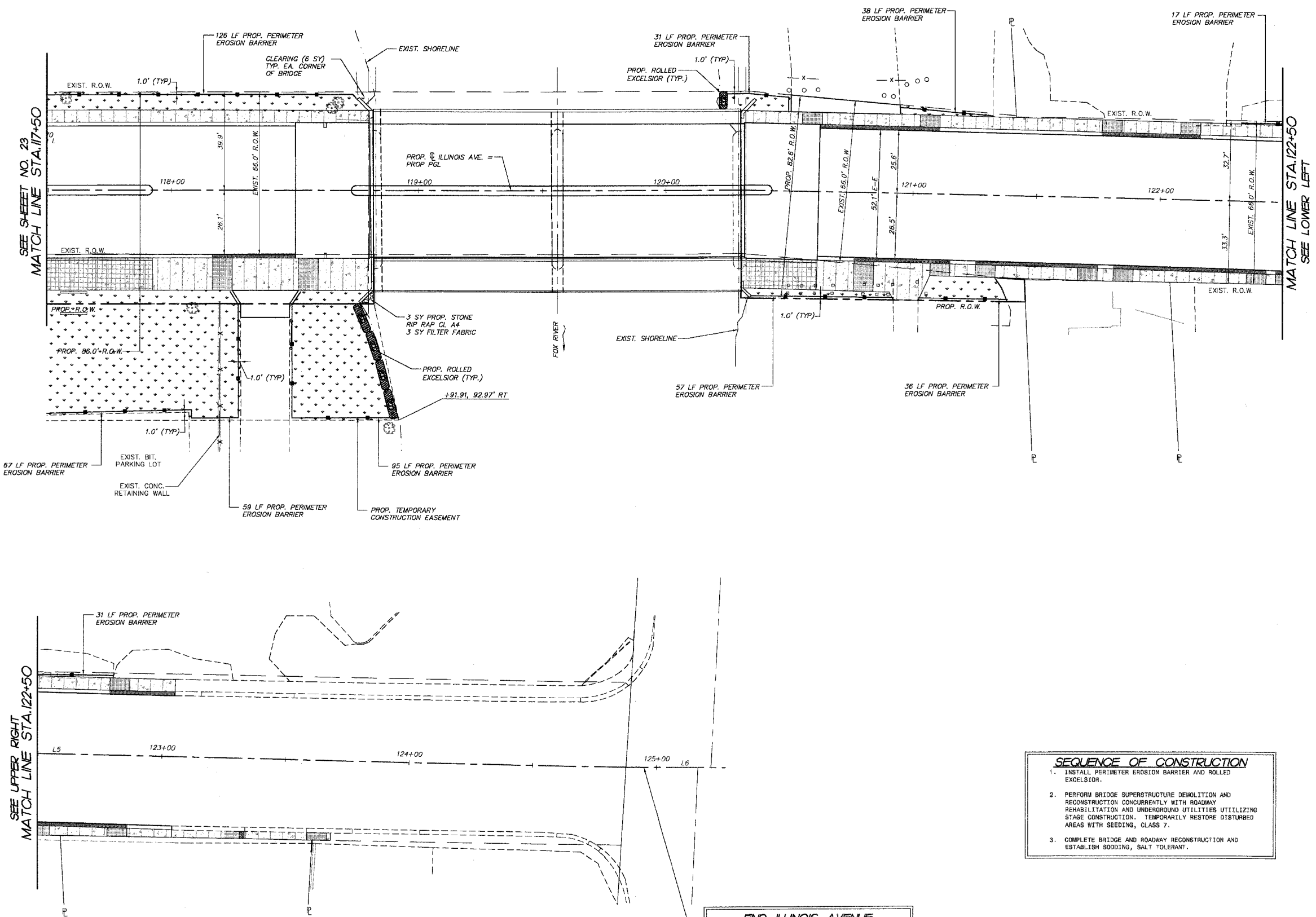
CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 EROSION CONTROL PLAN
 STA 117+50 TO STA 125+00

SCALE: 1" = 20'
 DATE 07-28-2006

DRAWN BY MPL
 CHECKED BY JLP

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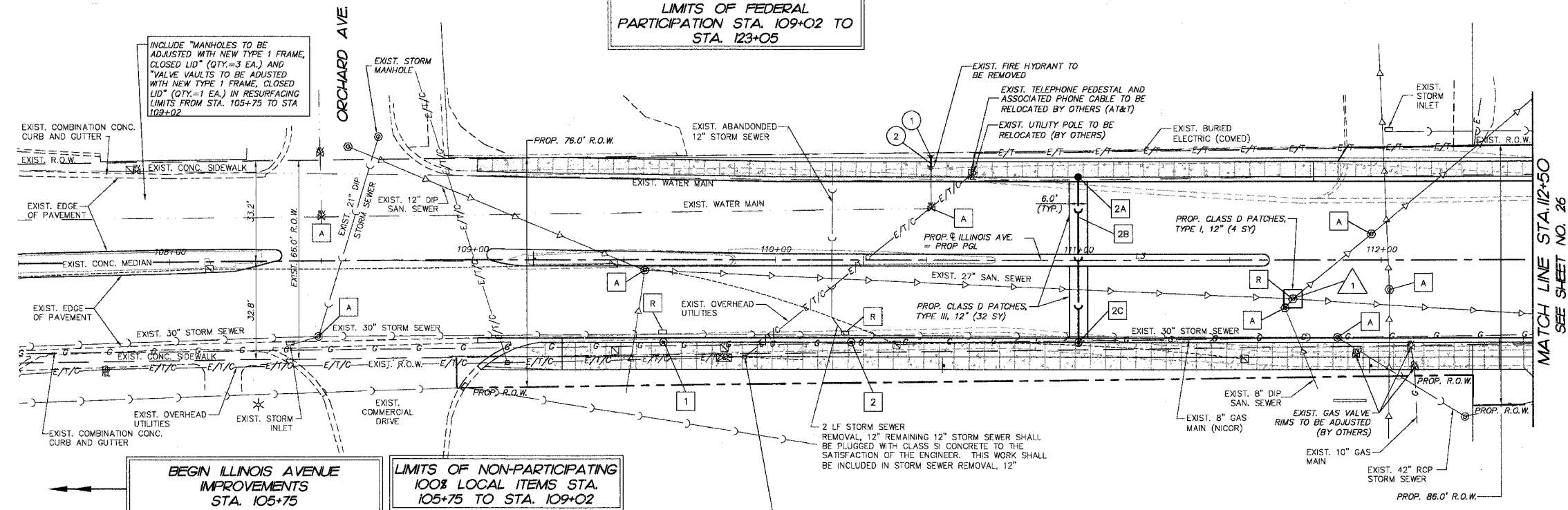
END ILLINOIS AVENUE
 IMPROVEMENTS
 STA. 124+95



PLOT FILE STANDARD
 LVS
 COMP. FILE: 050181-626.rtg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	25
STA. 107+50		TO STA. 112+50		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		CONTRACT #: 83867

LIMITS OF FEDERAL PARTICIPATION STA. 109+02 TO STA. 123+05



BEGIN ILLINOIS AVENUE IMPROVEMENTS STA. 105+75

LIMITS OF NON-PARTICIPATING 100% LOCAL ITEMS STA. 105+75 TO STA. 109+02

- STORM SEWER TAGS**
- MH TA 6' DIA. T11 F&G STA. 109+63, 27.5' R T/C = 654.67 INV = MATCH EXIST. (W) TIE EXIST. 30" RCP STORM SEWER INTO PROP. MH INV = 648.22 (E) TIE EXIST. 30" RCP STORM SEWER INTO PROP. MH (SEE NOTE 1)
 - MH TA 6' DIA. T11 F&G STA. 110+25, 27.5' R T/C = 651.18 INV = 645.52 (E) TIE EXIST. 30" RCP STORM SEWER INTO PROP. MH INV = 645.52 (W) TIE EXIST. 30" RCP STORM SEWER INTO PROP. MH (SEE NOTE 1)
 - CB TA 4' DIA. T11 F&G STA. 111+00, 27.5' L T/C = 646.41 INV = 643.02 (S) 12" 2B. 52 LF STORM SEWER CLASS A, TYPE 2, 12 @ 1.00% (TBF = 37 CY)
 - MH TA 6' DIA. T11 F&G STA. 111+00, 27.5' R T/C = 646.41 INV = 642.50 (N) 12" INV = 639.92 (E) TIE EXIST. 30" RCP STORM SEWER INTO PROP. MH INV = 639.92 (W) TIE EXIST. 30" RCP STORM SEWER INTO PROP. MH (SEE NOTE 1)

- WATER MAIN TAGS**
- FIRE HYDRANT STA. 110+51, 34' L BURY = 649.55
 - 4 LF WATER MAIN 6

- SANITARY SEWER TAGS**
- MH TA SPECIAL 5' DIA. TIF CL (SEE STANDARD CONSTRUCTION DETAILS) STA. 111+71, 13' R RIM = 642.33 INV = 636.29 (W) TIE EXIST. 27" SAN. SEWER INTO PROP. MH INV = 636.29 (E) TIE EXIST. 27" SAN. SEWER INTO PROP. MH (SEE NOTE 1)

NOTES

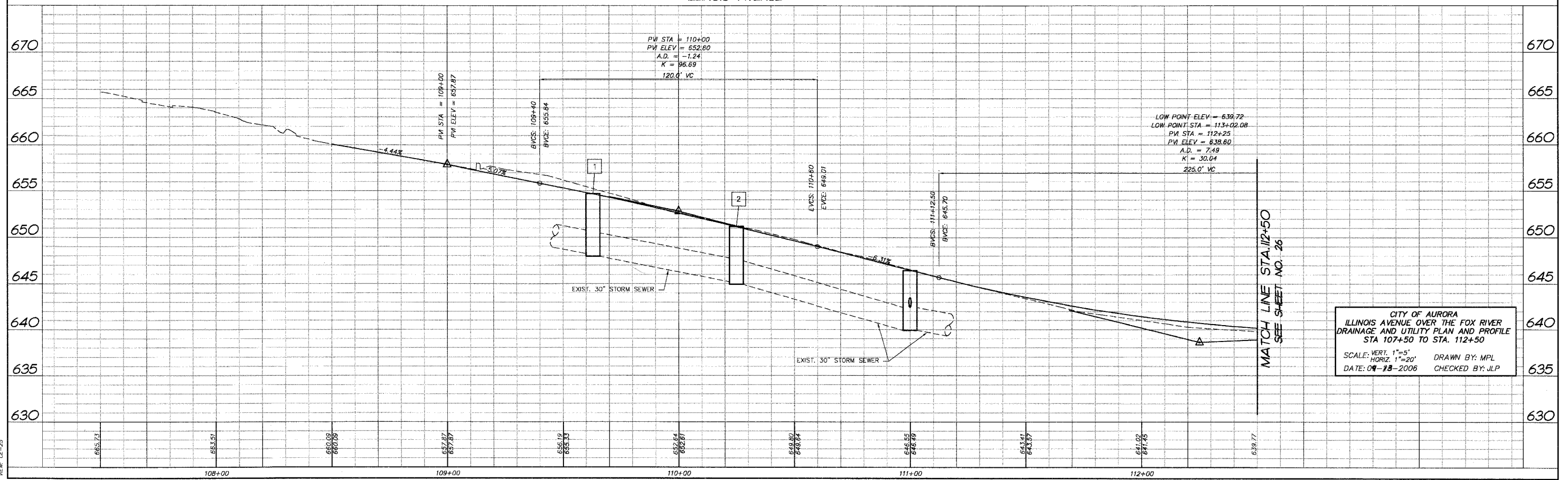
- WORK TO CONNECT EXIST. PTIPES TO PROPOSED STRUCTURES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST FOR THE PROPOSED STRUCTURE PAY ITEM.

- LEGEND**
- DENOTES EXISTING STORM SEWER TO BE REMOVED, SIZE AS INDICATED.
 - R DENOTES STRUCTURE TO BE REMOVED (MANHOLE, VALVE VAULT, CATCH BASIN OR INLET)
 - # DENOTES PROPOSED DRAINAGE STRUCTURE OR STORM SEWER
 - DENOTES PROPOSED WATERMAIN, OR FIRE HYDRANT
 - A DENOTES EXISTING STRUCTURE TO BE ADJUSTED WITH NEW TYPE 1 FRAME AND GRATE, CLOSED LID
 - △ DENOTES PROPOSED SANITARY STRUCTURE

DATE	BY

FINAL SURVEY PLOTTED TEMPLATE AREAS CHECKED

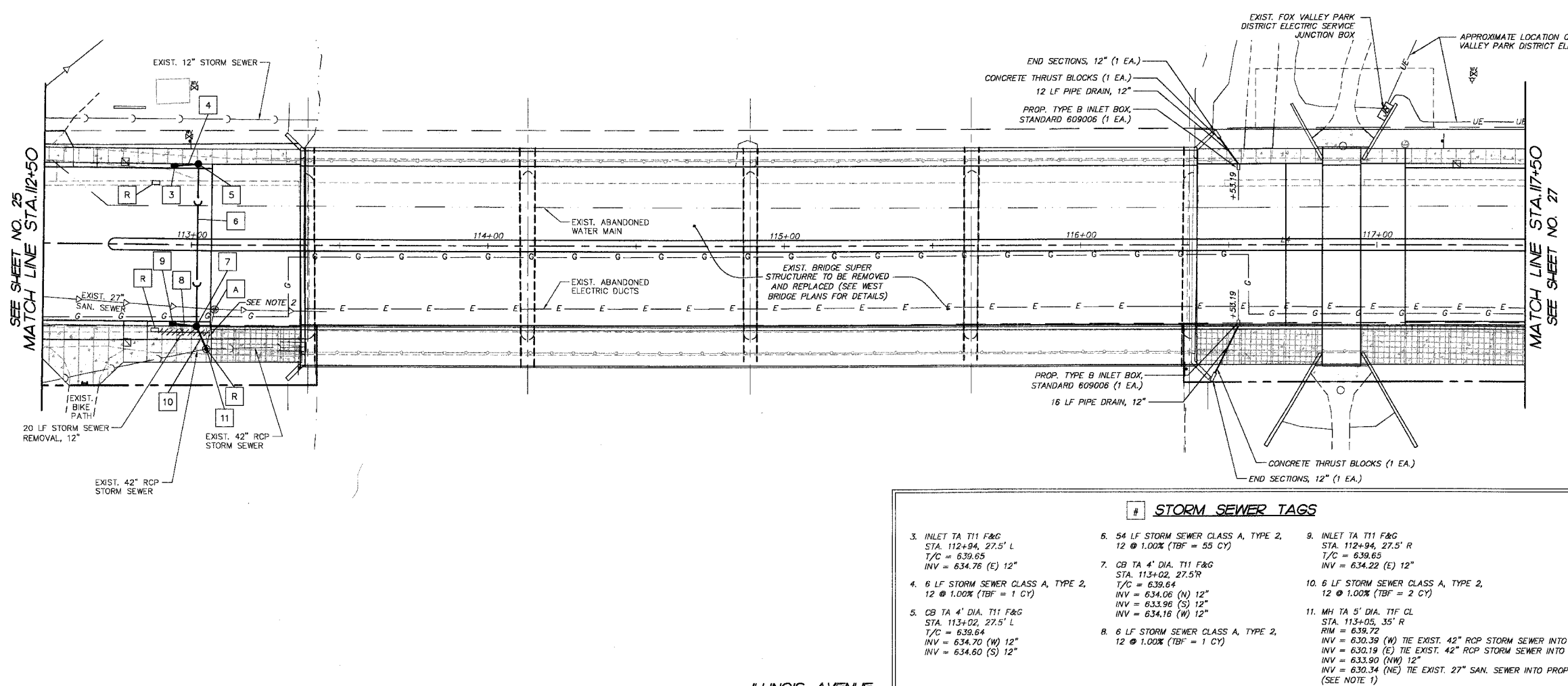
NO.



CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
DRAINAGE AND UTILITY PLAN AND PROFILE
STA 107+50 TO STA. 112+50
SCALE: VERT. 1"=5'
HORIZ. 1"=20'
DATE: 04-18-2006 DRAWN BY: MPL
CHECKED BY: JLP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	26
STA. 112+50 TO STA. 117+50				
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
CONTRACT #: 83867				

FINAL SURVEY NOTE BOOK NO.	BY	DATE
SURVEYED PLOTTED TEMPLATE AREAS CHECKED		



NOTES

- WORK TO CONNECT EXIST. PIPES TO PROPOSED STRUCTURES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST FOR THE PROPOSED STRUCTURE PAY ITEM.
- EXIST. TEE IN PIPE SHALL BE PLUGGED WITH CLASS SI CONCRETE TO THE SATISFACTION OF THE ENGINEER. EXISTING 27\"/>

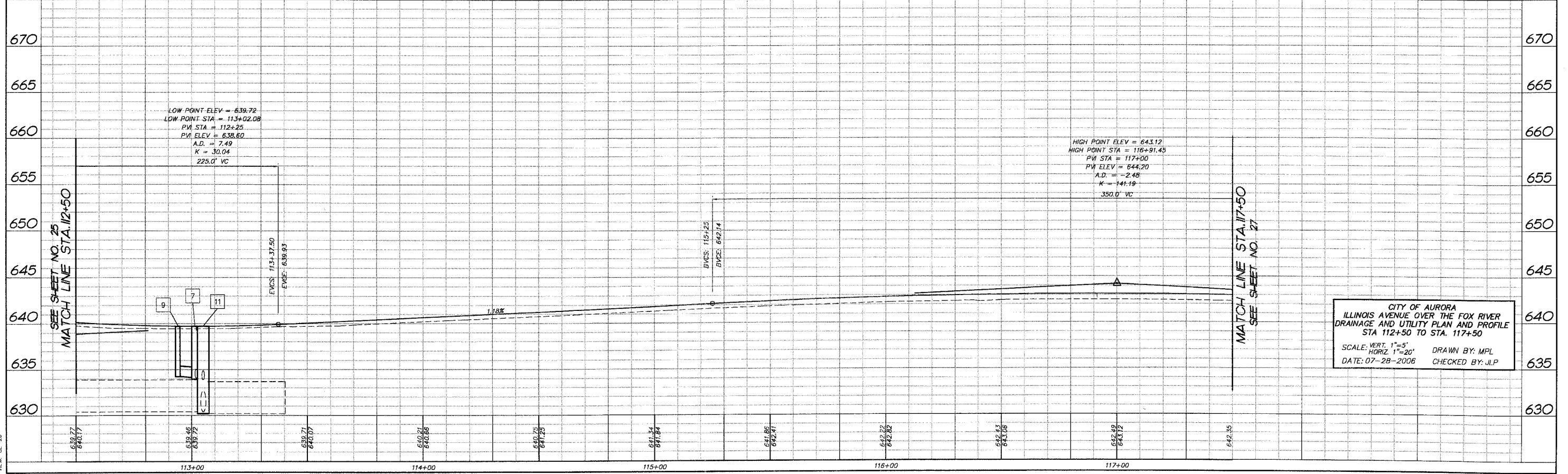
LEGEND

- DENOTES EXISTING STORM SEWER TO BE REMOVED, SIZE AS INDICATED.
- DENOTES STRUCTURE TO BE REMOVED (MANHOLE, VALVE VAULT, CATCH BASIN OR INLET)
- DENOTES PROPOSED DRAINAGE STRUCTURE OR STORM SEWER
- DENOTES PROPOSED WATERMAIN, OR FIRE HYDRANT
- DENOTES EXISTING STRUCTURE TO BE ADJUSTED WITH NEW TYPE 1 FRAME AND GRATE, CLOSED LID
- DENOTES PROPOSED SANITARY STRUCTURE

STORM SEWER TAGS

<p>3. INLET TA T11 F&G STA. 112+94, 27.5' L T/C = 639.65 INV = 634.76 (E) 12"</p> <p>4. 6 LF STORM SEWER CLASS A, TYPE 2, 12 @ 1.00% (TBF = 1 CY)</p> <p>5. OB TA 4' DIA. T11 F&G STA. 113+02, 27.5' L T/C = 639.64 INV = 634.70 (W) 12" INV = 634.60 (S) 12"</p>	<p>6. 54 LF STORM SEWER CLASS A, TYPE 2, 12 @ 1.00% (TBF = 55 CY)</p> <p>7. OB TA 4' DIA. T11 F&G STA. 113+02, 27.5' R T/C = 639.64 INV = 634.06 (N) 12" INV = 633.96 (S) 12" INV = 634.16 (W) 12"</p> <p>8. 6 LF STORM SEWER CLASS A, TYPE 2, 12 @ 1.00% (TBF = 1 CY)</p>	<p>9. INLET TA T11 F&G STA. 112+94, 27.5' R T/C = 639.65 INV = 634.22 (E) 12"</p> <p>10. 6 LF STORM SEWER CLASS A, TYPE 2, 12 @ 1.00% (TBF = 2 CY)</p> <p>11. MH TA 5' DIA. T1F CL STA. 113+05, 35' R RIM = 639.72 INV = 630.39 (W) TIE EXIST. 42\"/> </p>
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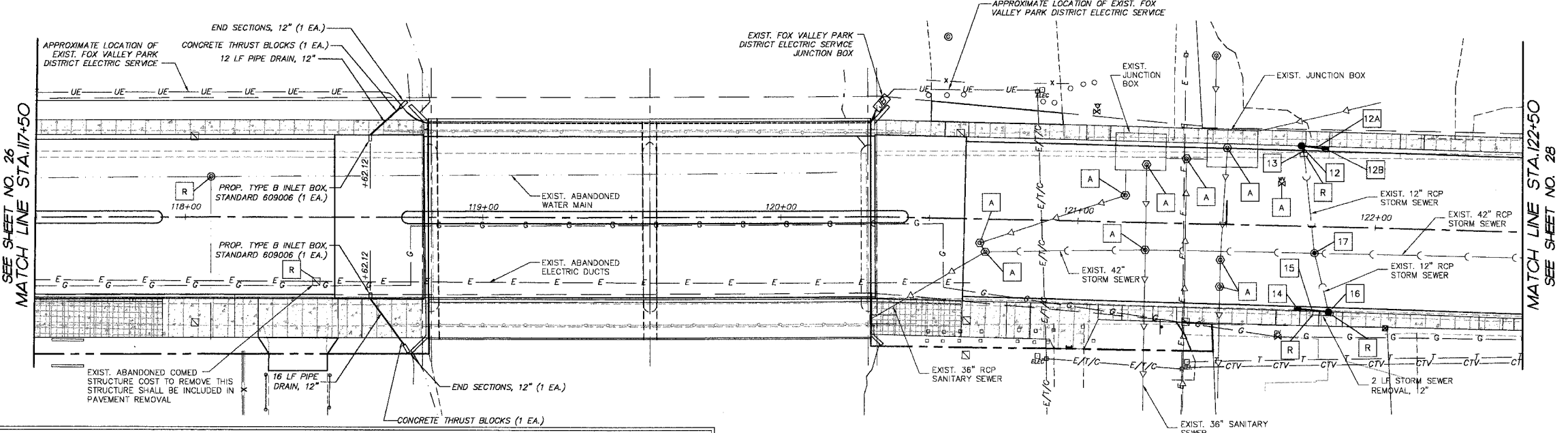
ILLINOIS AVENUE



CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
DRAINAGE AND UTILITY PLAN AND PROFILE
STA 112+50 TO STA. 117+50
SCALE: VERT. 1"=5'
HORIZ. 1"=20'
DATE: 07-28-2006
DRAWN BY: MPL
CHECKED BY: JLP

COMP. FILE: 050181-6026.dwg
PLOT FILE:
VIEW: CE-26

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	27
STA. 117+50		TO STA. 122+50		
FED. ROAD DIST. NO. 1		ILLINOIS		HIGHWAY PROJECT
CONTRACT #: 83867				



SEE SHEET NO. 26
MATCH LINE STA. 117+50

MATCH LINE STA. 122+50
SEE SHEET NO. 28

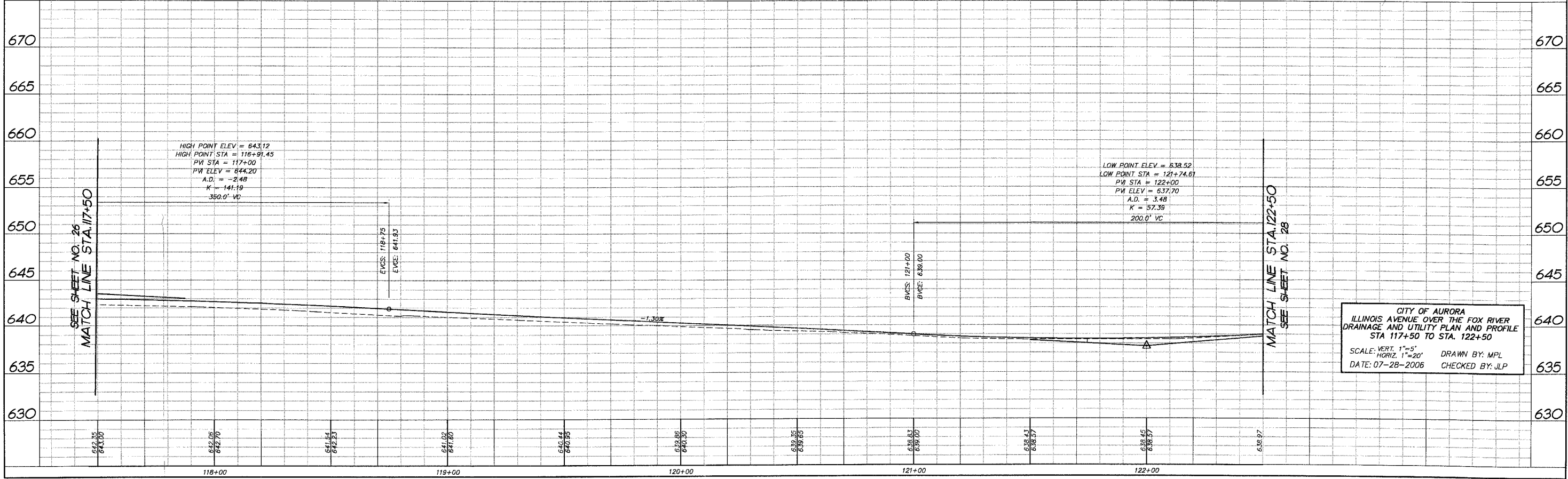
- NOTES**
- WORK TO CONNECT EXIST. PIPES TO PROPOSED STRUCTURES SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST FOR THE PROPOSED STRUCTURE PAY ITEM.
 - WORK TO CONNECT PROP. STORM SEWER TO EXIST. STORM SEWER WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE OF THE ITEM "STORM SEWER" OF THE TYPE AND SIZE SPECIFIED.

- LEGEND**
- DENOTES EXISTING STORM SEWER TO BE REMOVED, SIZE AS INDICATED.
 - DENOTES STRUCTURE TO BE REMOVED (MANHOLE, VALVE VAULT, CATCH BASIN, INLET OR HANDHOLE)
 - DENOTES PROPOSED DRAINAGE STRUCTURE OR STORM SEWER
 - DENOTES PROPOSED WATERMAIN, OR FIRE HYDRANT
 - DENOTES EXISTING STRUCTURE TO BE ADJUSTED WITH NEW TYPE 1 FRAME AND GRATE, CLOSED LID
 - DENOTES PROPOSED SANITARY STRUCTURE

STORM SEWER TAGS

12. CB TA 4' DIA. T11 F&G STA. 121+74.61, 26.7' L T/C = 638.48 INV = 633.70 (S) 12"	15. 8 LF STORM SEWER, CLASS A, TYPE 2 12 @ 1.00% (TBF = 1 CY)	12A. 6 LF STORM SEWER, CLASS A, TYPE 2 12 @ 1.00% (TBF = 1 CY)
13. 4 LF STORM SEWER, CLASS A, TYPE 2 12 @ 1.00% (TBF = 1 CY) CONNECT TO EXIST. 12" RCP STORM SEWER (SEE NOTE 2)	16. CB TA 4' DIA. T11 F&G STA. 121+65, 28.7' R T/C = 638.42 INV = 633.82 (W) 12" INV = 633.47 (N) TIE EXIST. 12" RCP STORM SEWER INTO PROP. CB (SEE NOTE 1)	12B. INLET TA T11 F&G STA. 121+82.61, 26.7' L T/C = 638.45 INV = 633.76 (W) 12"
14. INLET TA 2' DIA. T11 F&G STA. 121+74.61, 28.6' R T/C = 638.42 INV = 633.90 (E) 12"	17. MH TA 5' DIA T1F CL STA. = 121+81.5, 9' R RIM = 638.34 INV = 630.80 (W) TIE EXIST. 42" RCP STORM SEWER INTO PROP. MH INV = 631.00 (E) TIE EXIST. 42" RCP STORM SEWER INTO PROP. MH EXIST. STORM SEWER NORTH & SOUTH MAKES BLIND CONNECTION TO EXIST. 42" RCP STORM SEWER—MATCH INVERTS AT PROP. MANHOLE (SEE NOTE 1.)	

ILLINOIS AVENUE



CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
DRAINAGE AND UTILITY PLAN AND PROFILE
STA 117+50 TO STA. 122+50

SCALE: VERT. 1"=5'
HORIZ. 1"=20'

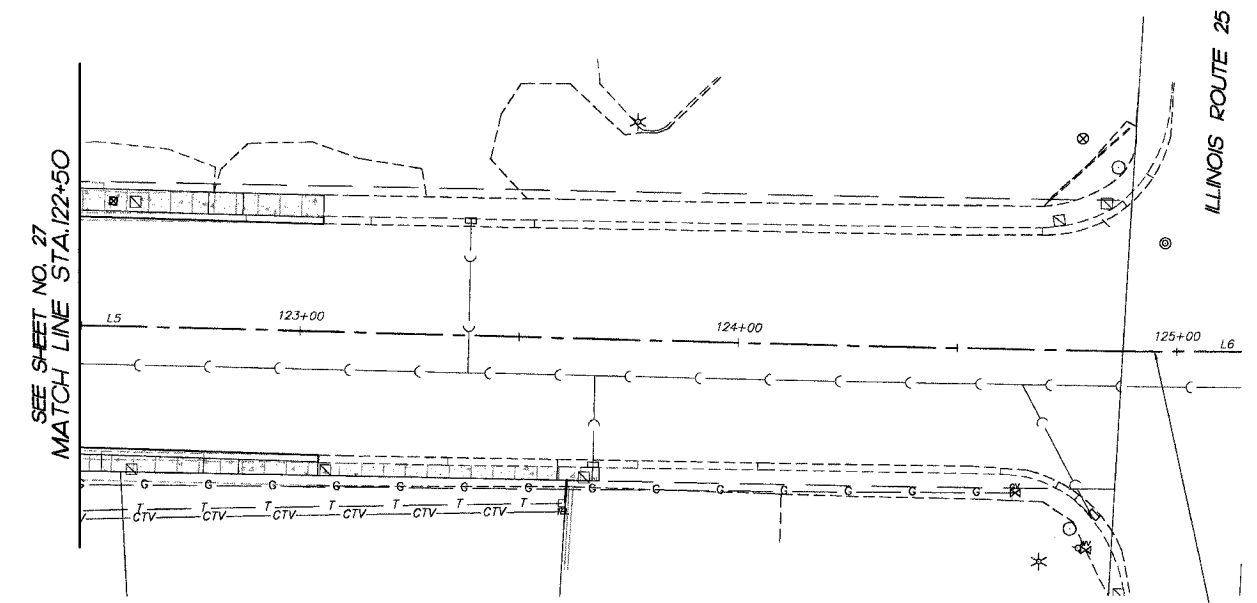
DATE: 07-28-2006 DRAWN BY: MPL
CHECKED BY: JLP

DATE	BY
FINAL SURVEY PLOTTED	
NOTE BOOK TEMPLATE	
AREAS CHECKED	
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COMP. FILE: 090781-602b.dwg
PLOT FILE:
VER: CE-27

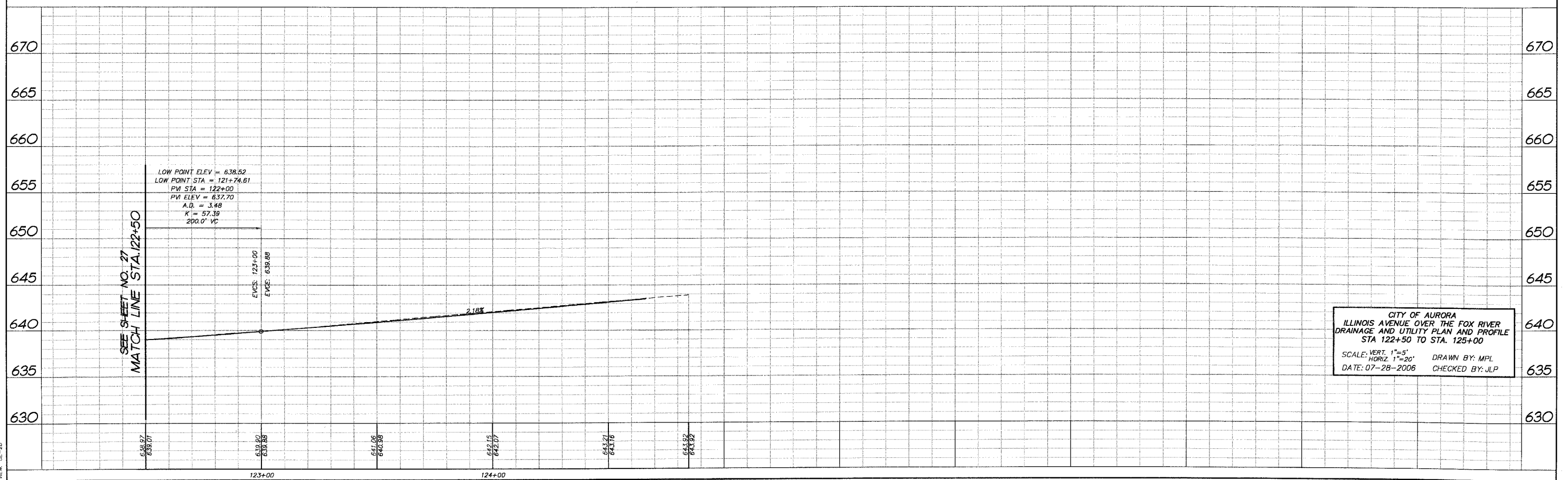
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	28
STA. 122+50		TO STA.	125+00	
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
CONTRACT #: 83867				

FINAL SURVEY NO.	BY	DATE
SURVEY PLOTTED		
NOTE BOOK TEMPLATE		
AREAS CHECKED		
AREAS CHECKED		



LEGEND

- DENOTES EXISTING STORM SEWER TO BE REMOVED, SIZE AS INDICATED.
- DENOTES STRUCTURE TO BE REMOVED (MANHOLE, VALVE VAULT, CATCH BASIN OR INLET)
- DENOTES PROPOSED DRAINAGE STRUCTURE OR STORM SEWER
- DENOTES PROPOSED WATERMAIN, OR FIRE HYDRANT
- DENOTES EXISTING STRUCTURE TO BE ADJUSTED WITH NEW TYPE 1 FRAME AND GRATE, CLOSED LID
- DENOTES PROPOSED SANITARY STRUCTURE

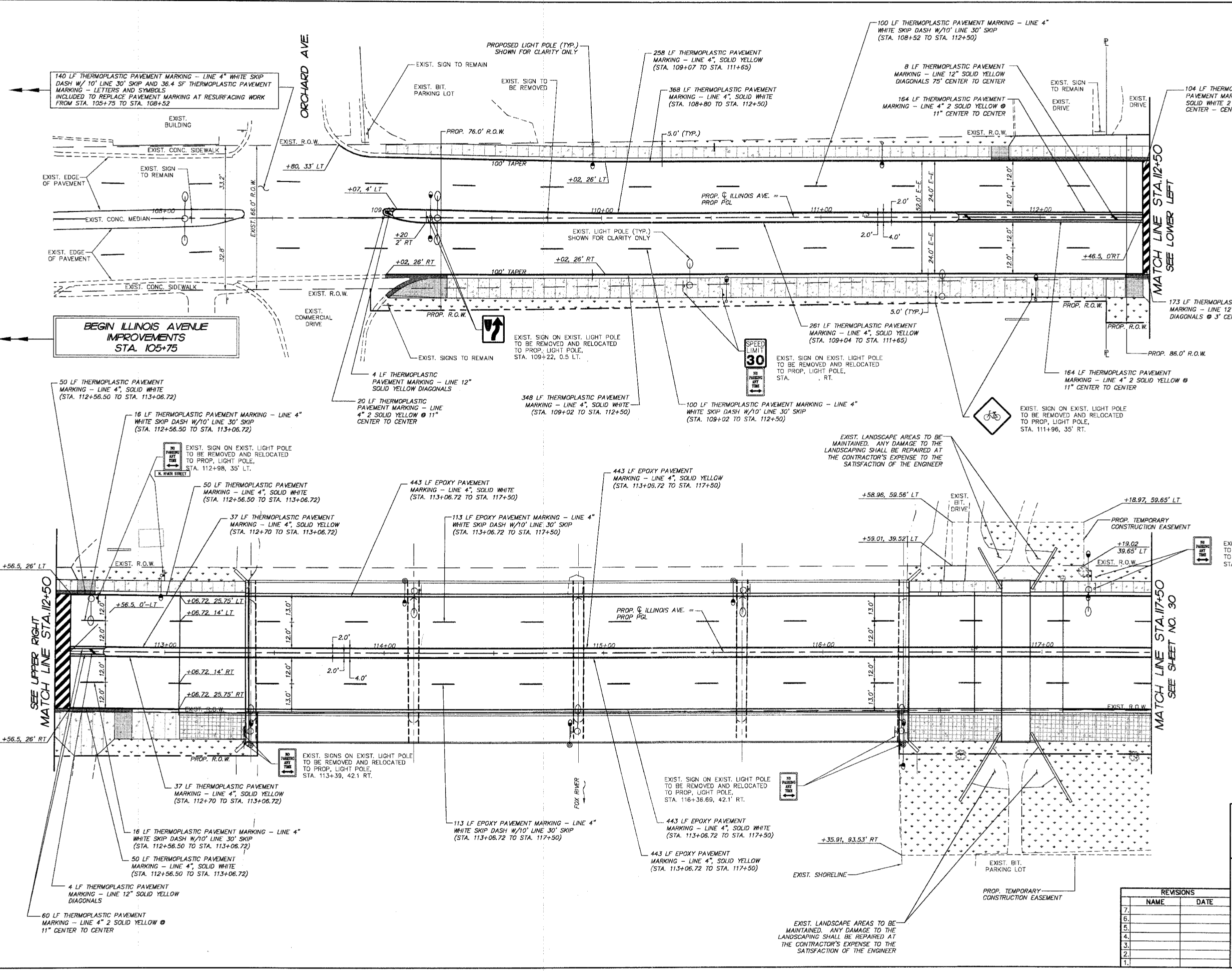


CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
DRAINAGE AND UTILITY PLAN AND PROFILE
STA 122+50 TO STA. 125+00

SCALE: VERT. 1"=5'
HORIZ. 1"=20' DRAWN BY: MPL
DATE: 07-28-2006 CHECKED BY: JLP

DWG. FILE: 0507181-60226.dwg
 DATE: 07-28-06
 VFW:

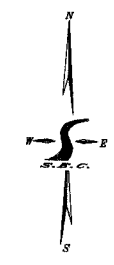
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	29
STA.	107+50	TO STA.	117+50	
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
CONTRACT # 83867				



LEGEND:
 DENOTES PROPOSED TOPSOIL FURNISH AND PLACE 6" AND SODDING, SALT TOLERANT

QUANTITIES:
 STA. 107+50 TO STA. 117+50
 TOPSOIL FURNISH AND PLACE 6": 1,199 CY
 SODDING, SALT TOLERANT: 1,199 SY

- NOTES:**
- PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE "DISTRICTONE TYPICAL PAVEMENT MARKINGS" DETAIL SHEET.
 - EXISTING SIGNS TO REMAIN SHALL BE PRESERVED.
 - ALL PAVEMENT MARKINGS PLACED ON CONCRETE SHALL BE EPOXY AND ALL PAVEMENT MARKINGS PLACED ON BITUMINOUS SHALL BE THERMOPLASTIC.



PLOT FILE: STANDARD
 VIEW: CE-29
 COMP. FILE: 050181-005.dwg

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4500 PRIME PARKWAY, SUITE 201
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 PH: 616-386-1779 FAX: 616-386-1781
 www.smithengineering.com E-MAIL: see@smithengineering.com
 #MOBILE #HUNTSVILLE #NORVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 164-000100

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 PAVEMENT MARKING, SIGNING,
 AND LANDSCAPING PLAN
 STA 107+50 TO STA 117+50

SCALE: 1" = 20'
 DATE 07-28-2006

DRAWN BY MJP
 CHECKED BY JLP

REVISIONS	
NO.	DATE
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	30
STA.	117+50	TO STA.	125+00	
FED. ROAD DIST. NO. 1	ILLINOIS HIGHWAY PROJECT			
CONTRACT # 83867				

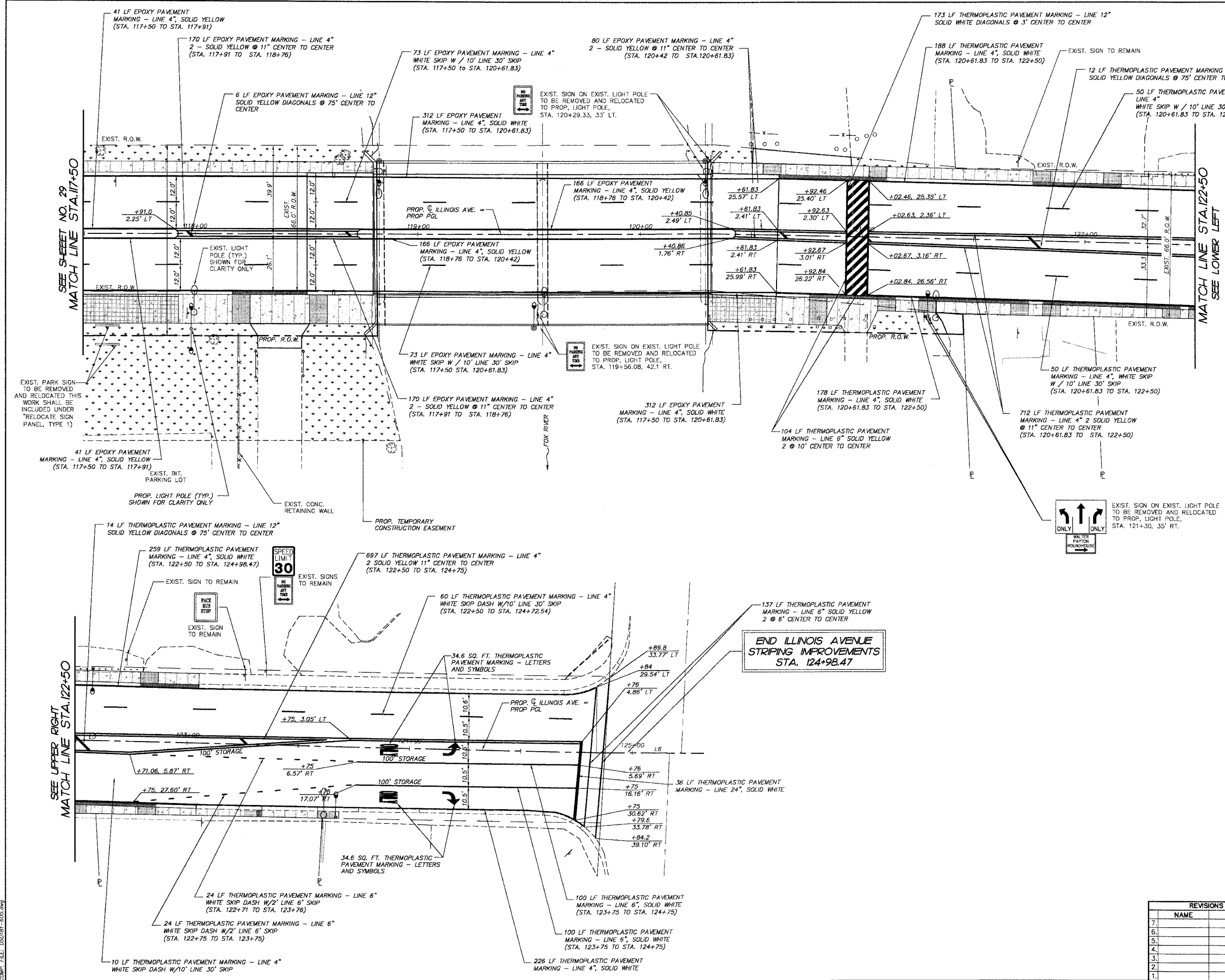


LEGEND:
 DENOTES PROPOSED TOPSOIL FURNISH AND PLACE 6" AND SODDING, SALT TOLERANT

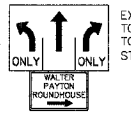
QUANTITIES:
 STA. 117+50 TO STA. 125+00
 TOPSOIL FURNISH AND PLACE 6": 856 SY
 SODDING, SALT TOLERANT: 856 AC

NOTES:

- PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE "DISTRICTONE TYPICAL PAVEMENT MARKINGS" DETAIL SHEET.
- EXISTING SIGNS TO REMAIN SHALL BE PRESERVED
- ALL PAVEMENT MARKINGS PLACED ON CONCRETE SHALL BE EPOXY AND ALL PAVEMENT MARKINGS PLACED ON BITUMINOUS SHALL BE THERMOPLASTIC.



**END ILLINOIS AVENUE
 STRIPING IMPROVEMENTS
 STA. 124+98.47**



REVISIONS	
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 www.smithengineering.com E-MAIL: sec@smithengineering.com
 *McHENRY *HENRY *YOGA *YOGA
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

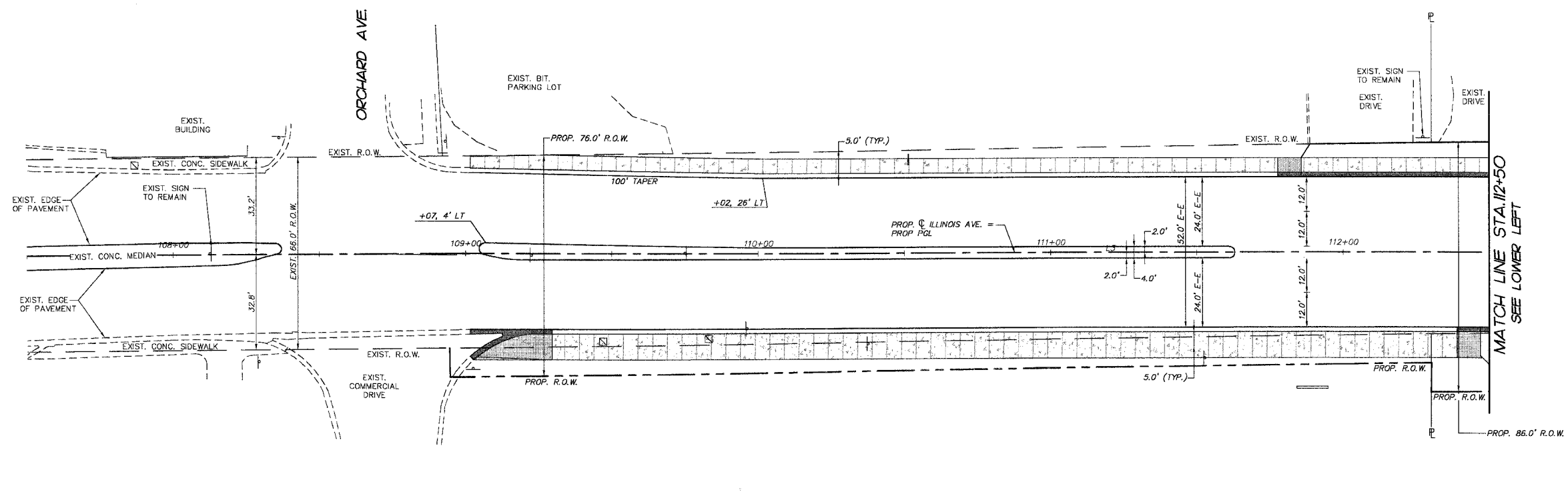
CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 PAVEMENT MARKING, SIGNING,
 AND LANDSCAPE PLAN
 STA 117+50 TO STA 125+00

SCALE: 1" = 20'
 DATE 07-28-2006

DRAWN BY MPL
 CHECKED BY JLP

PLOT FILE STANDARD
 COMP. FILE: 050181-605.dwg

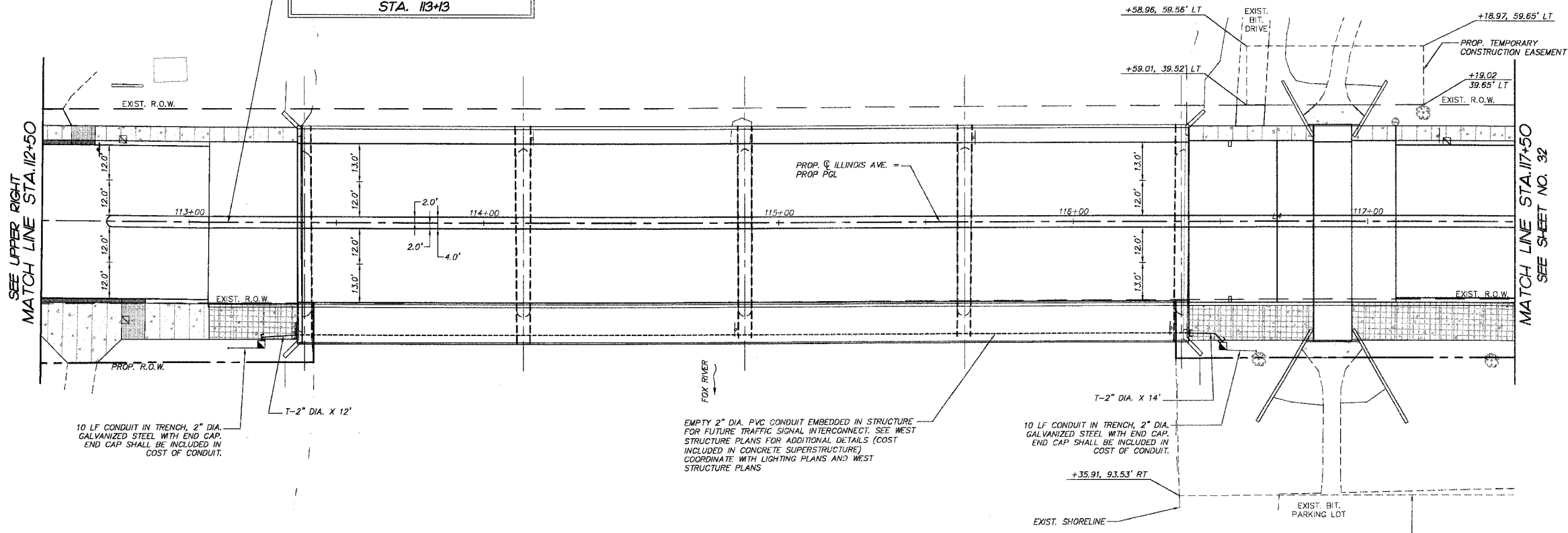
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	31
STA.	107+50	TO STA.	117+50	
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		CONTRACT # 83867



LEGEND:

- EXISTING HANDHOLE
- PROPOSED HANDHOLE
- PVC CONDUIT EMBEDDED IN STRUCTURE
- CONDUIT IN TRENCH (T) CONDUIT PUSHED (P)
- RIGID GALVANIZED STEEL (RGS) CONDUIT
- DIA. X LENGTH

BEGIN ILLINOIS AVENUE FUTURE SIGNAL INTERCONNECT IMPROVEMENTS STA. 113+13



10 LF CONDUIT IN TRENCH, 2" DIA. GALVANIZED STEEL WITH END CAP. END CAP SHALL BE INCLUDED IN COST OF CONDUIT.

EMPTY 2" DIA. PVC CONDUIT EMBEDDED IN STRUCTURE FOR FUTURE TRAFFIC SIGNAL INTERCONNECT. SEE WEST STRUCTURE PLANS FOR ADDITIONAL DETAILS (COST INCLUDED IN CONCRETE SUPERSTRUCTURE) COORDINATE WITH LIGHTING PLANS AND WEST STRUCTURE PLANS

10 LF CONDUIT IN TRENCH, 2" DIA. GALVANIZED STEEL WITH END CAP. END CAP SHALL BE INCLUDED IN COST OF CONDUIT.

REVISIONS

NO.	NAME	DATE
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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 FUTURE TRAFFIC SIGNAL INTERCONNECT PLAN
 AND DETECTOR LOOP REPLACEMENT PLAN
 STA 107+50 TO STA 117+50

SCALE: 1" = 20'
 DATE 07-28-2006
 DRAWN BY KMA
 CHECKED BY J.P.

PLOT FILE: STANDARD
 NEW: CL-31
 COMP: FILE: 050181-002.dwg

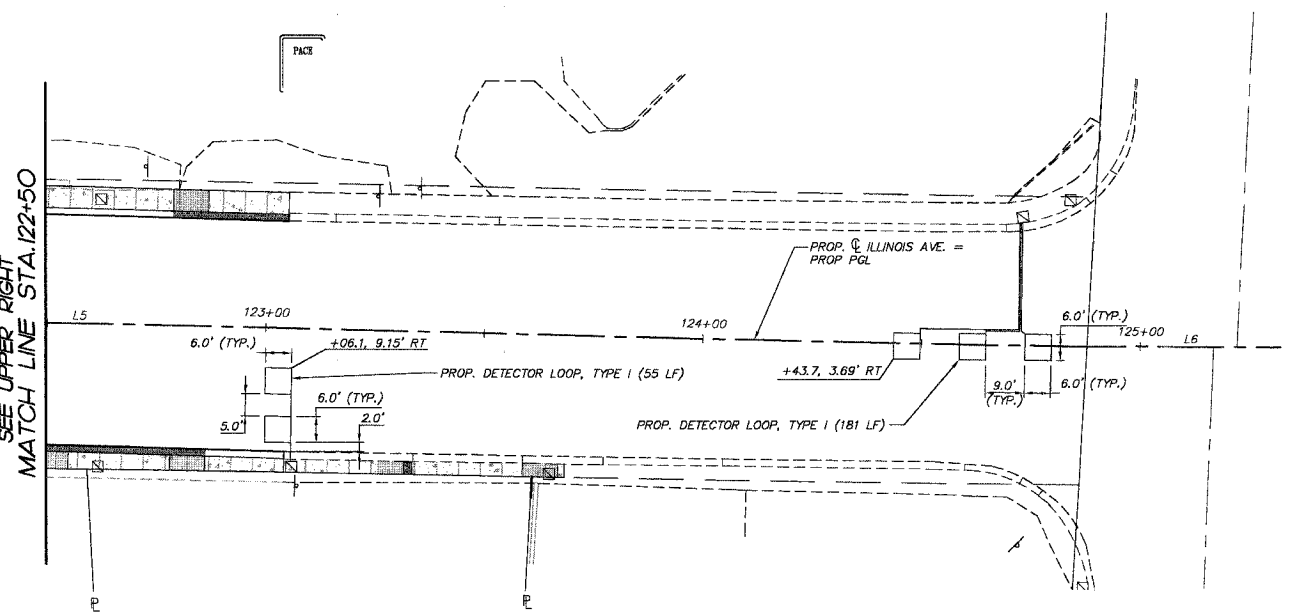
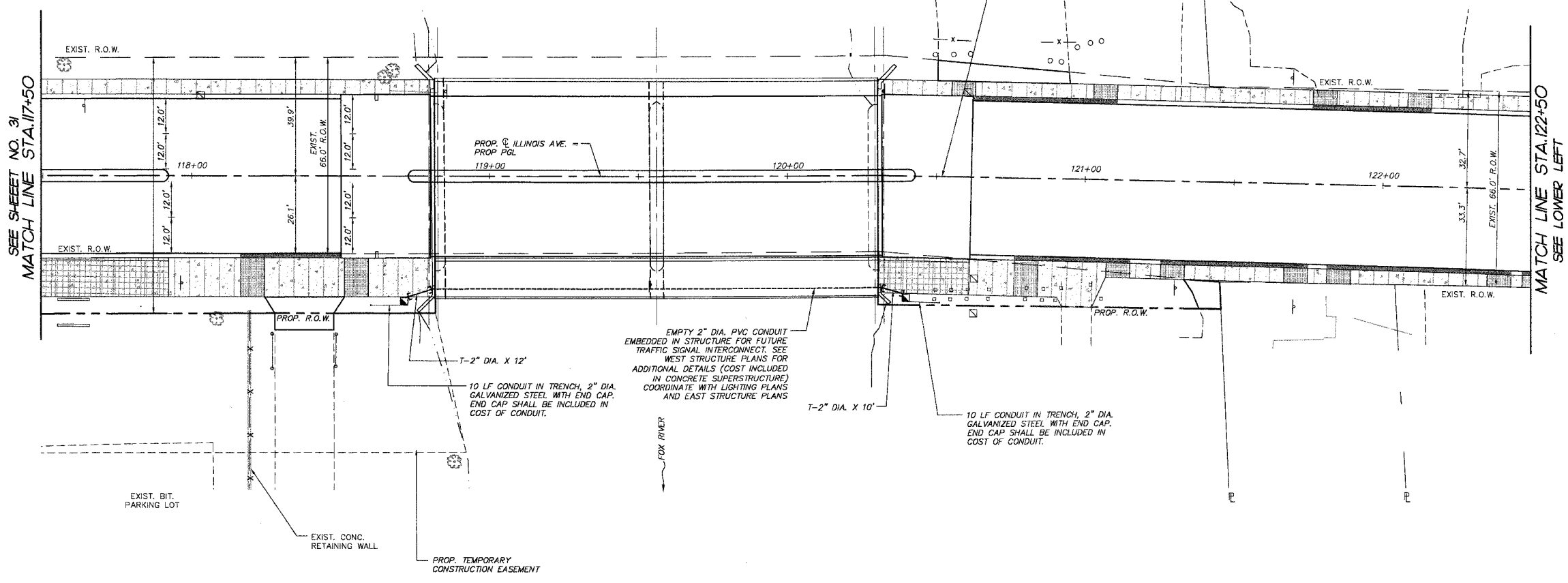
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	32
STA. 117+50	TO STA. 125+00			
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	
CONTRACT #: 83867				

**END ILLINOIS AVENUE FUTURE
SIGNAL INTERCONNECT
IMPROVEMENTS
STA. 120+51.89**



LEGEND:

	EXISTING HANDHOLE
	PROPOSED HANDHOLE
	PVC CONDUIT EMBEDDED IN STRUCTURE
	CONDUIT IN TRENCH (T) CONDUIT PUSHED (P) RIGID GALVANIZED STEEL (RGGC) CONDUIT DIA. X LENGTH



PLOT FILE STANDARD
 NEW 12-13-20
 COMP. FILE: 050181-007.dwg

REVISIONS	
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 *MCHENRY *HUNTLEY *YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

 CITY OF AURORA
**ILLINOIS AVENUE OVER THE FOX RIVER
 FUTURE TRAFFIC SIGNAL INTERCONNECT PLAN
 AND DETECTOR LOOP REPLACEMENT PLAN
 STA 117+50 TO STA 125+00**
 SCALE: 1" = 20'
 DATE 07-28-2006
 DRAWN BY KMA
 CHECKED BY J.P.

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	33
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		
E-01 OF E-09				
CONTRACT #: 83867				

GENERAL NOTES

- 1 WHERE SEPARATE CIRCUIT RUNS ARE TO BE INSTALLED PARALLEL WITH EACH OTHER, ONE COMMON TRENCH SHALL BE USED AND SHALL BE MEASURED ONLY ONCE FOR PAYMENT, AS TRANCH AND BACKFILL FOR ELECTRICAL WORK.
- 2 IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES FOR EXAMINATION AND CONFIRMATION WITH THE ENGINEER AT THE PRECONSTRUCTION INSPECTION. THE EXACT LOCATIONS OF ALL OTHER ROADWAY LIGHTING ITEMS, INCLUDING THE LIGHTING CONTROLLER SHALL BE CONFIRMED WITH THE ENGINEER PRIOR TO STARTING WORK.
- 3 THE RESPONSIBILITY FOR COORDINATING FINISHED GRADE ELEVATION WITH THE TOP OF THE FOUNDATION HEIGHTS SHALL REMAIN WITH THE CONTRACTOR.
- 4 THE CONTRACTOR SHALL SUBMIT EIGHT (8) COPIES OF APPROVABLE MANUFACTURER'S PRODUCT DATA AND DETAIL SHOP DRAWINGS FOR ENGINEER APPROVAL WITHIN 30 DAYS AFTER CONTRACT EXECUTION TO THE MCHENRY OFFICE OF SMITH ENGINEERING CONSULTANTS, 4500 PRIME PARKWAY MCHENRY, IL 60050 PH. (815) 385-1778. THE FOLLOWING SHALL BE INCLUDED:
 - A. TRENCH: ELECTRICAL WARNING TAPE
 - B. FOUNDATION: CLASS "SI" CONCRETE, REINFORCEMENT, RACEWAYS, ANCHOR BOLTS WITH NUTS AND WASHERS.
 - C. CONDUIT: CONDUIT AND CONDUIT FITTINGS.
 - D. GROUND ROD: GROUND ROD, COPPER WIRE, EXOTHERMIC WELD.
 - E. UNIT DUCT/CABLES
 - F. ELECTRICAL CABLES
 - G. LIGHT POLE/ARM: POLE DETAILS, SHOP DRAWINGS, AND WIND LOAD CALCULATIONS, POLE WIRE.
 - H. LUMINAIRE: ROADWAY LUMINAIRE WITH BALLAST ASSEMBLY.
 - I. ELECTRICAL ITEMS: ELECTRIC TAPES, QUICK DISCONNECT WITH FUSE, LAMPS.
 - J. LIGHTING CONTROLLER: CIRCUITRY DETAIL, CATALOG ON MATERIALS, PAINT.
- 5 THE CONTRACTOR SHALL SUBMIT FOUR (4) SETS OF FULL SIZE COMPLETE, ACCURATE "RECORD DRAWING" PLAN SETS TO THE ENGINEER FOR REVIEW AND COMMENT, AND DEPICT ALL ROADWAY LIGHTING MATERIAL INSTALLATIONS WITH ANY CHANGES INDICATED IN RED. "RECORD DRAWINGS" SHALL BE SUBMITTED AT LEAST 7 DAYS BEFORE SCHEDULING A FINAL INSPECTION.
- 6 THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. AT (1-800-892-0123) TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.
- 7 THE CONTRACTOR SHALL GIVE CONSTRUCTION STAGING FOR THE PROPOSED LIGHTING WORK IN WRITING TO THE ENGINEER FOR REVIEW. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FROM THE ENGINEER.
- 8 THE LIGHT POLE SETBACK SHALL BE 6' FROM THE BACK OF CURB TO THE FACE OF THE FOUNDATION UNLESS SHOWN OTHERWISE.
- 9 THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL CODES AND ORDINANCES.
- 10 THE PROPOSED TRENCH SHALL BE 36 INCHES BELOW FINISHED GRADE.
- 11 BALLAST LOSSES SHALL NOT EXCEED 17.5% FOR A 250 WATT HPS, 55 V LAMP LUMINAIRE.
- 12 THE EXISTING LIGHT POLES ON THE SOUTH SIDE OF ILLINOIS AVENUE SHALL BE MAINTAINED AND REMAIN FUNCTIONAL FOR THE DURATION OF STAGE I CONSTRUCTION. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL PROTECTION."
- 13 THE PROPOSED LIGHT POLES TO BE INSTALLED ON THE NORTH SIDE OF THE ILLINOIS AVENUE, THE PROPOSED LIGHTING CONTROLLERS, AND PROPOSED WIRING AND CONDUIT REQUIRED TO SERVICE THESE LIGHT POLES SHALL BE INSTALLED DURING STAGE I CONSTRUCTION AND SHALL BE FUNCTIONAL PRIOR TO BEGINNING STAGE II CONSTRUCTION. THE CONTRACTOR HAS THE OPTION TO TEMPORARILY RE-INSTALL EXISTING SALVAGED LIGHT POLES AT PROPOSED LIGHT POLE LOCATIONS TO PROVIDE TEMPORARY ROADWAY LIGHTING DURING STAGE II UNTIL THE PROPOSED LIGHT POLES CAN BE INSTALLED. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION."

BILL OF MATERIALS			TOTAL QUANTITIES
CODE NO.	ITEM	UNIT	
80400100	ELECTRIC SERVICE INSTALLATION	EACH	2
80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1
80700140	GROUND ROD, 3/4" DIA. x 10 FT	EACH	15
81000600	CONDUIT IN TRENCH, 2" DIA. GALVANIZED STEEL	FOOT	790
81018500	CONDUIT PUSHED, 2" DIA. GALVANIZED STEEL	FOOT	137
81100200	CONDUIT ATTACHED TO STRUCTURE, 3/4" DIA. GALVANIZED STEEL	FOOT	152
81400100	HANDHOLES	EACH	24
81500200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	1,544
81702440	ELECTRIC CABLE IN CONDUIT 600V (XLP TYPE USE) 3-1/C NO. 1/0	FOOT	200
82102250	LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT	EACH	23
82500530	LIGHTING CONTROLLER TYPE CB-RCS 100 AMP - 240 VOLT	EACH	2
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	121
84200500	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE	EACH	16
84500120	REMOVAL OF ELECTRIC SERVICE INSTALLATION	EACH	2
XX003070	LUMINAIRE (SPECIAL)	EACH	8
	UNIT DUCT WITH 2-1/C NO. 8 AND 1/C NO. 8 GROUND 600 V (XHHW-2), 1" DIA. POLYETHYLENE	FOOT	2,470
	UNIT DUCT WITH 4-1/C NO. 8 AND 2-1/C NO. 8 GROUND 600 V (XHHW-2), 1" DIA. POLYETHYLENE	FOOT	20
	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 6 1/C NO. 8	FOOT	162
	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 3 1/C NO. 8	FOOT	77
	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 2-1/C NO. 12	FOOT	168
	ELECTRIC CABLE IN CONDUIT 600 V (XHHW-2), 1/C NO. 12 GROUND	FOOT	168
	LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM	EACH	15
	LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM, TWIN	EACH	4

THE FOLLOWING ITEMS ARE EMBEDDED IN THE BRIDGE SUPERSTRUCTURES

1. ANCHOR BOLTS FOR LIGHTING UNIT FOUNDATION
2. 2" DIA. PVC CONDUIT (SCHEDULE 40)
3. EXPANSION FITTINGS SHALL BE INSTALLED AT BRIDGE EXPANSION JOINTS FOR ALL ELECTRICAL RACEWAY RUNS

THE COST OF FURNISHING THESE MATERIALS SHALL BE INCLUDED WITH "CONCRETE SUPERSTRUCTURE" AND SHALL NOT BE PAID FOR SEPARATELY. SEE BRIDGE PLANS FOR ADDITIONAL DETAILS.

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SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
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 * MCHENRY * BURLY * YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 LIGHTING GENERAL NOTES AND BILL OF MATERIALS

SCALE: "NTS"
 DATE 07-28-2006

DRAWN BY MPL
 CHECKED BY GB

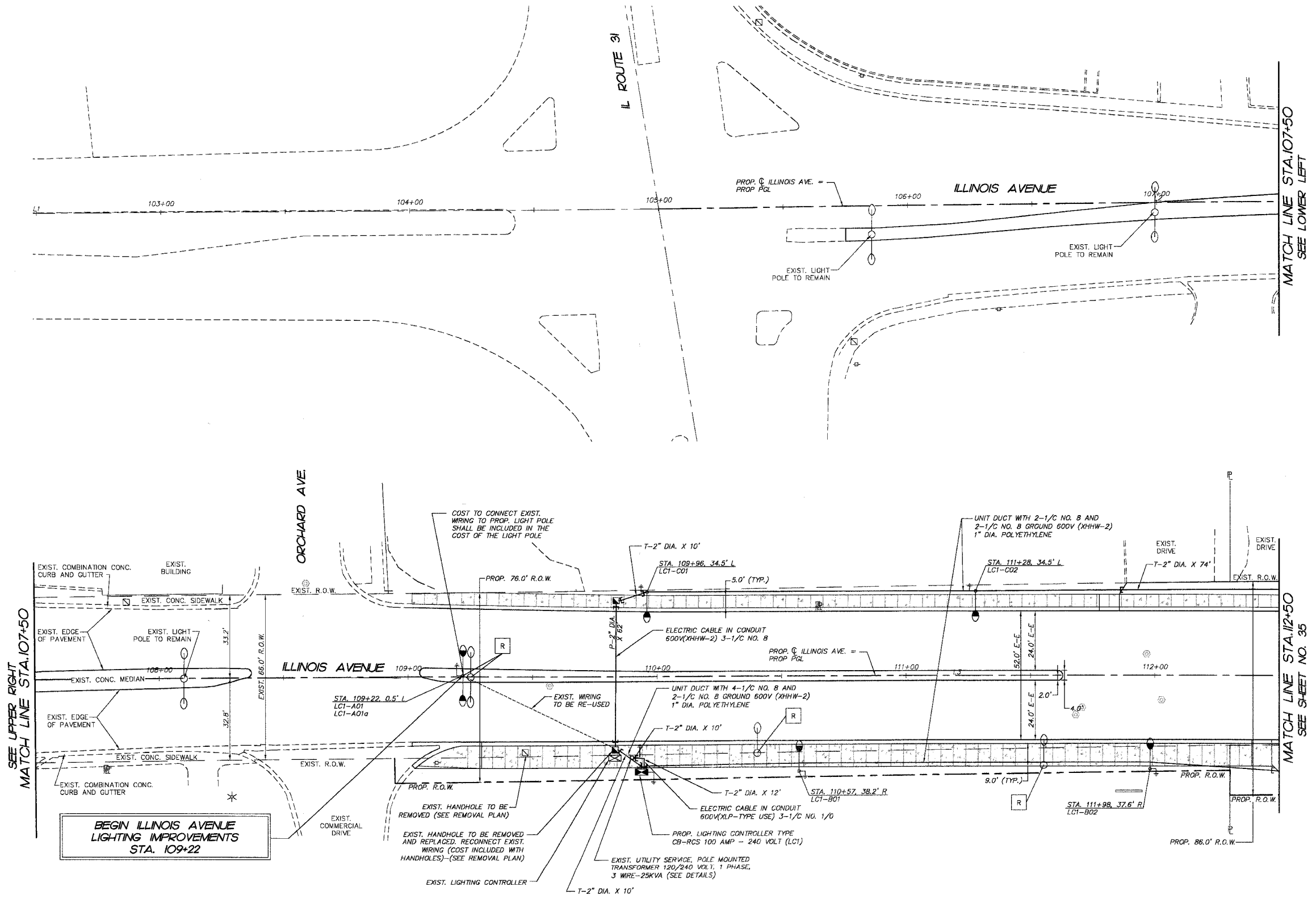
PLOT FILE: STANDARD
 V.P.W. C.T. 23
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	34
STA.	102+50	TO STA.	107+50	
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
E-02 OF E-09				
CONTRACT # 83867				



LEGEND:

	REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE
	EXISTING LIGHT POLE
	EXISTING LIGHT POLE WITH DOUBLE MAST ARM AND LUMINAIRE
	EXISTING LIGHTING CONTROLLER
	EXISTING HANDHOLE
	LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM
	LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM, TWIN (BRIDGE MOUNTED)
	LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM, TWIN
	LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM, TWIN (BRIDGE MOUNTED)
	PROPOSED LUMINAIRE (SPECIAL)
	GROUND ROD, 3/8" DIA. X 10 FT.
	PROPOSED HANDHOLE
	PROPOSED LIGHTING CONTROLLER TYPE CB-RCS 100 AMP - 240 VOLT
	POLE LOCATION
	POLE NUMBER
	LIGHTING CIRCUIT BREAKER DESIGNATION
	LIGHTING CONTROLLER DESIGNATION
	PVC CONDUIT EMBEDDED IN STRUCTURE
	ELECTRIC CABLE IN UNIT DUCT, NUMBER OF CONDUCTORS AND DIAMETER OF CONDUIT AS SHOWN
	CONDUIT IN TRENCH (T) CONDUIT PUSHED (P) RIGID GALVANIZED STEEL (RGSC) CONDUIT DIA. X LENGTH



BEGIN ILLINOIS AVENUE LIGHTING IMPROVEMENTS STA. 109+22

NOTES:

1. THE CONTRACTOR SHALL VERIFY THAT THERE ARE NO CONFLICTS BETWEEN THE PROPOSED LIGHT POLE FOUNDATION LOCATIONS AND EXISTING UTILITIES, PROPOSED UTILITIES, EXISTING DRIVEWAYS, AND PROPOSED DRIVEWAYS. IF A CONFLICT IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL OBTAIN WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED. BY FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE.

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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

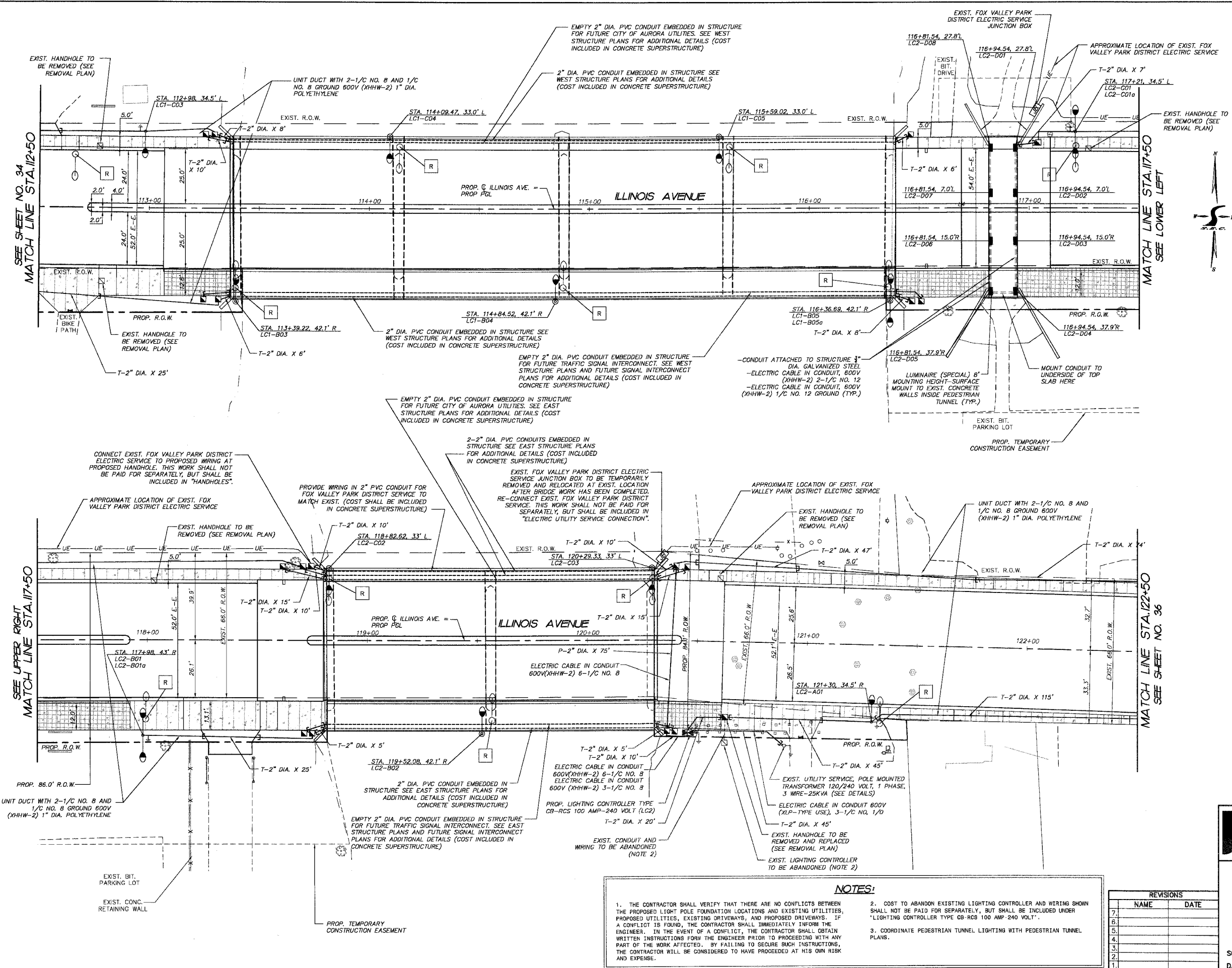
CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
LIGHTING PLANS AND DETAILS
STA. 102+50 TO STA. 107+50

SCALE: 1" = 20'
 DATE 07-28-2006

DRAWN BY MPL
 CHECKED BY GB

PLAT FILE STANDARD
 WWW.CE-34
 COMP. FILE: 050181-652.dwg

F.A.P. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	35
STA.	112+50	TO STA.	122+50	
FED. ROAD DIST. NO. 1	ILLINOIS HIGHWAY PROJECT		E-03 OF E-09	
			CONTRACT #: 83867	



LEGEND:

- [R] REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE
- EXISTING LIGHT POLE
- EXISTING LIGHT POLE WITH DOUBLE MAST ARM AND LUMINAIRE
- ⊗ EXISTING LIGHTING CONTROLLER
- ⊠ EXISTING HANDHOLE
- LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM
- LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM (BRIDGE MOUNTED)
- LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM, TWIN
- LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM, TWIN (BRIDGE MOUNTED)
- PROPOSED LUMINAIRE (SPECIAL)
- ⊕ GROUND ROD, 5/8" DIA. X 10 FT.
- ⊠ PROPOSED HANDHOLE
- ⊠ PROPOSED LIGHTING CONTROLLER TYPE CB-RCS 100 AMP - 240 VOLT
- POLE LOCATION
- POLE NUMBER
- LIGHTING CIRCUIT BREAKER DESIGNATION
- LIGHTING CONTROLLER DESIGNATION
- PVC CONDUIT EMBEDDED IN STRUCTURE
- ELECTRIC CABLE IN UNIT DUCT, NUMBER OF CONDUCTORS AND DIAMETER OF CONDUIT AS SHOWN
- CONDUIT IN TRENCH (T) CONDUIT PUSHED (P) RIGID GALVANIZED STEEL (RGS) CONDUIT DIA. X LENGTH

SMITH ENGINEERING CONSULTANTS, INC.
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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 LIGHTING PLANS AND DETAILS
 STA. 107+50 TO STA. 117+50

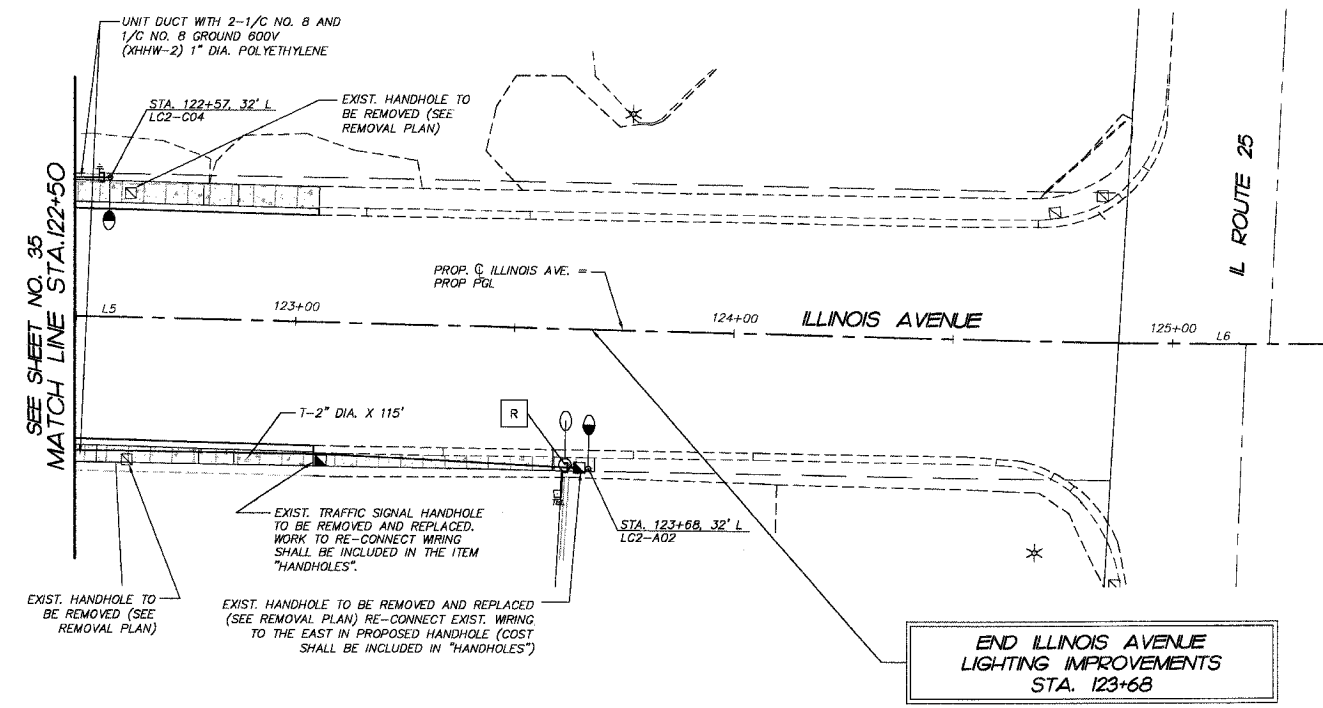
SCALE: 1" = 20'
 DATE 07-28-2006
 DRAWN BY MPL
 CHECKED BY GB

- NOTES:**
1. THE CONTRACTOR SHALL VERIFY THAT THERE ARE NO CONFLICTS BETWEEN THE PROPOSED LIGHT POLE FOUNDATION LOCATIONS AND EXISTING UTILITIES, PROPOSED UTILITIES, EXISTING DRIVEWAYS, AND PROPOSED DRIVEWAYS. IF A CONFLICT IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL OBTAIN WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED. BY FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE.
 2. COST TO ABANDON EXISTING LIGHTING CONTROLLER AND WIRING SHOWN SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED UNDER 'LIGHTING CONTROLLER TYPE CB-RCS 100 AMP - 240 VOLT'.
 3. COORDINATE PEDESTRIAN TUNNEL LIGHTING WITH PEDESTRIAN TUNNEL PLANS.

REVISIONS	
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PLOT FILE: STANDARD
 VIEW: LC2-35
 COMP. FILE: 050181-622.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	36
STA.	122+50	TO STA.	125+00	
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
E-04 OF E-09				
CONTRACT #: 83867				



LEGEND:

- REMOVAL OF EXISTING LIGHTING UNIT, SALVAGE
- EXISTING LIGHT POLE
- EXISTING LIGHT POLE WITH DOUBLE MAST ARM AND LUMINAIRE
- EXISTING LIGHTING CONTROLLER
- EXISTING HANDHOLE
- LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM
- LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM (BRIDGE MOUNTED)
- LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM, TWIN
- LIGHT POLE, STEEL, 31 FT M.H., 12 FT MAST ARM, TWIN (BRIDGE MOUNTED)
- PROPOSED LUMINAIRE (SPECIAL)
- GROUND ROD, 1/2" DIA. X 10 FT.
- PROPOSED HANDHOLE
- PROPOSED LIGHTING CONTROLLER TYPE CB-RCS 100 AMP - 240 VOLT
- STA. XXX+XX, XX' R' --- POLE LOCATION
- POLE NUMBER
- LIGHTING CIRCUIT BREAKER DESIGNATION
- LIGHTING CONTROLLER DESIGNATION
- PVC CONDUIT EMBEDDED IN STRUCTURE
- ELECTRIC CABLE IN UNIT DUCT, NUMBER OF CONDUCTORS AND DIAMETER OF CONDUIT AS SHOWN
- CONDUIT IN TRENCH (T) CONDUIT PUSHED (P) RIGID GALVANIZED STEEL (RGS) CONDUIT DIA. X LENGTH

**END ILLINOIS AVENUE
LIGHTING IMPROVEMENTS
STA. 123+68**

NOTES:

1. THE CONTRACTOR SHALL VERIFY THAT THERE ARE NO CONFLICTS BETWEEN THE PROPOSED LIGHT POLE FOUNDATION LOCATIONS AND EXISTING UTILITIES, PROPOSED UTILITIES, EXISTING DRIVEWAYS, AND PROPOSED DRIVEWAYS. IF A CONFLICT IS FOUND, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER. IN THE EVENT OF A CONFLICT, THE CONTRACTOR SHALL OBTAIN WRITTEN INSTRUCTIONS FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED. BY FAILING TO SECURE SUCH INSTRUCTIONS, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE.

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SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
LIGHTING PLAN AND DETAILS
STA 122+50 TO STA 125+00

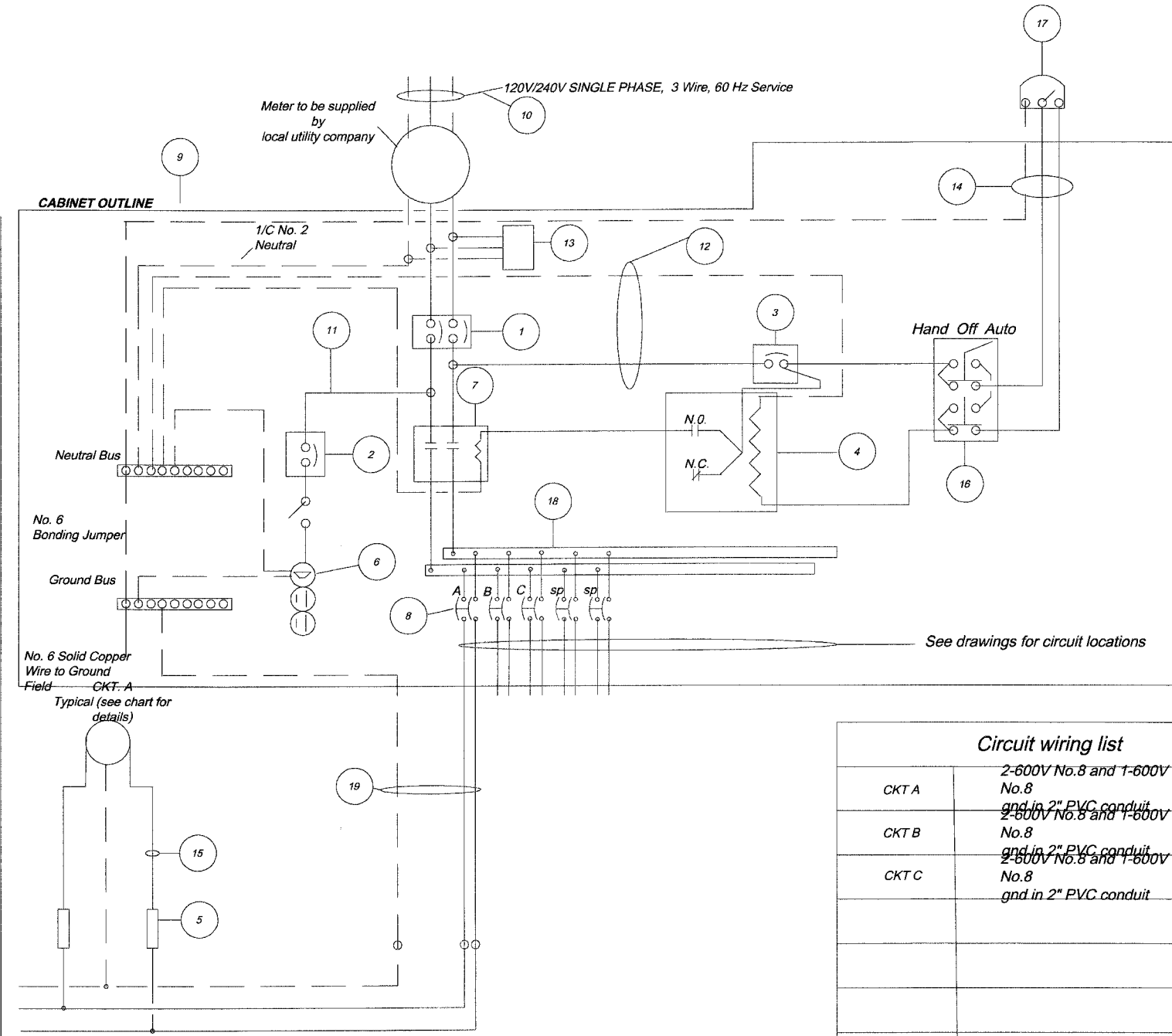
SCALE: 1" = 20'
 DATE 07-28-2006

DRAWN BY MPL
 CHECKED BY GB

PLOT FILE: STANDARD
 VIEW: CE-36
 COMP. FILE: 050101-022.dwg

LIGHTING CONTROLLER LC1 COMPONENT SCHEDULE

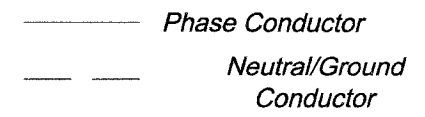
ITEM	DESCRIPTION	SPECIFICATION OR EQUAL
1	Main Circuit Breaker	100A, 2P, 240V Rating, 10K AIC
2	Lampholder Circuit Breaker	15A, 1P, 120V Rating, 10K AIC
3	Photoelectric Control Circuit Breaker	15A, 1P, 120V Rating, 10K AIC
4	Auxiliary Relay	120V Operated SPST 60Hz Coil 600V Normally Open Contacts
5	Fuse	Single Pole In-Line Fuseholder 600V, 5A
6	Lampholder With Outlet	120V Weatherproof Lampholder with SPST Switch & GFCI Outlet
7	Contactor	100A, 2P, 240V Rating, 10K AIC
8	Branch Line Circuit Breakers	14 - 20A, 2P, 240V Rating, 10K AIC Note: circuit F2 to be 30A
9	Control Cabinet	H41"x W25"x D16" NEMA 3R
10	Service Cables	Existing Service
11	Lampholder Wire	2 - 600V No. 12
12	Control Wire	2 - 600V No. 12
13	Surge Arrestor	10K Ampere Rating
14	Photoelectric Control Wire	3 - 600V No. 10
15	Lighting Pole Wire	2 - 600V 10awg cables with Pole Ground and Fusing
16	HAND/OFF/AUTO Control Switch	20A, 3 Position, 600V
17	Photocell	
18	Terminal Block	600V
19	Lighting circuit Control Wire	2-600V No.8 and 1-600V No.8 gnd in 2" unit duct



Circuit wiring list	
CKT A	2-600V No.8 and 1-600V No.8 gnd in 2" PVC conduit
CKT B	2-600V No.8 and 1-600V No.8 gnd in 2" PVC conduit
CKT C	2-600V No.8 and 1-600V No.8 gnd in 2" PVC conduit

Circuit I.D.	QTY	AMPERE	WATTS
A	8	9.6	2304W
B	6	7.2	1728W
C	5	6	1440W
Total			5472W

LIGHTING CONTROLLER WIRING DETAIL



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SMITH ENGINEERING CONSULTANTS, INC.
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 McHENRY McHENRY McHENRY McHENRY
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000106

ILLINOIS DEPARTMENT OF TRANSPORTATION

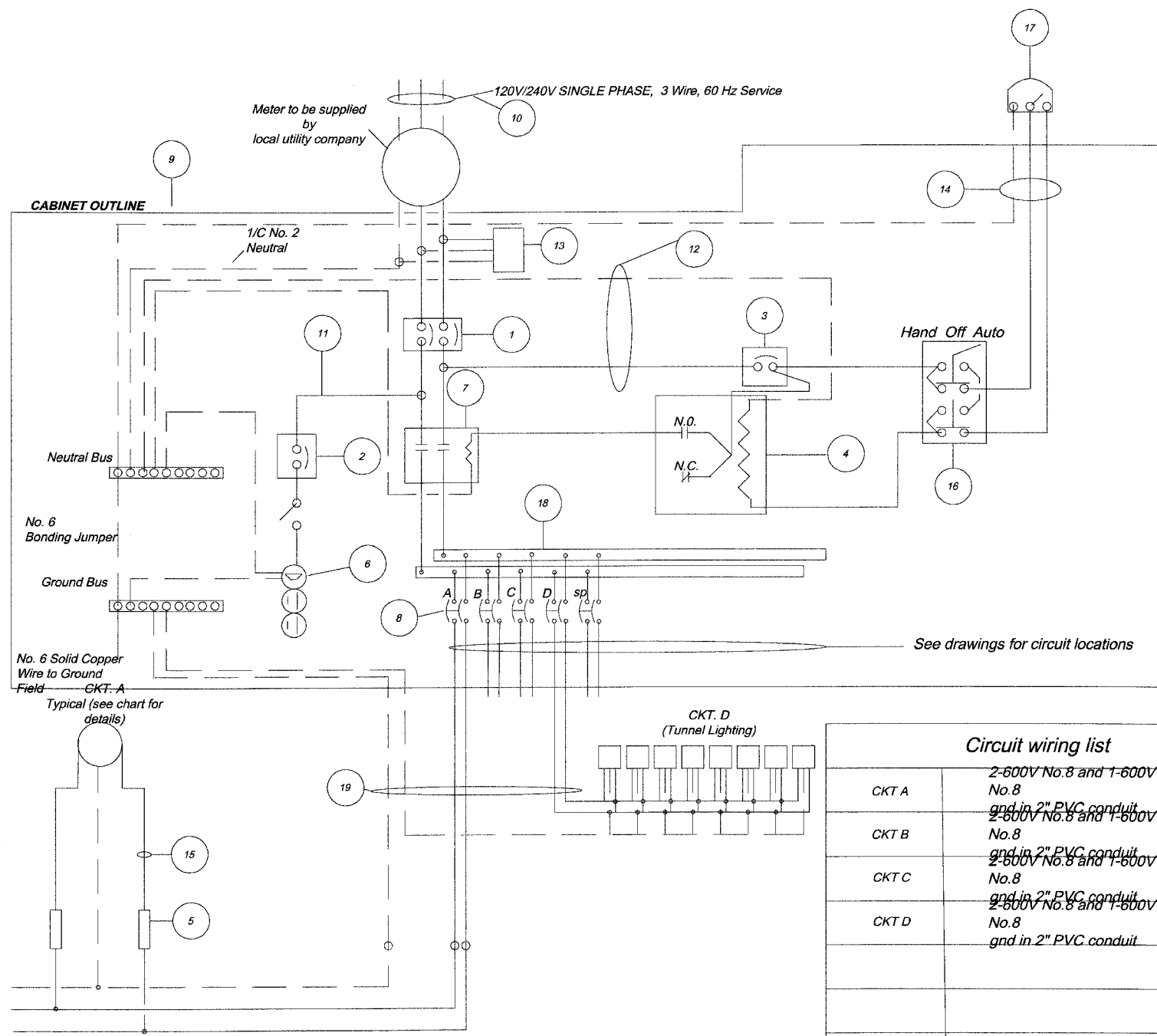
CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 LIGHTING PLANS AND DETAILS
 LIGHTING CONTROL PANEL DETAILS

SCALE: N.T.S. DRAWN BY
 DATE 07-28-06 CHECKED BY GB

PLOT FILE STANDARD
 VEW: 02-17
 COMP. FILE: 000181-009-lighting.dwg

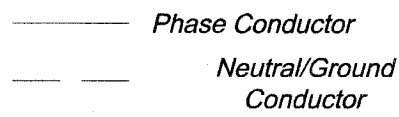
LIGHTING CONTROLLER LC2 COMPONENT SCHEDULE

ITEM	DESCRIPTION	SPECIFICATION OR EQUAL
1	Main Circuit Breaker	100A, 2P, 240V Rating, 10K AIC
2	Lampholder Circuit Breaker	15A, 1P, 120V Rating, 10K AIC
3	Photoelectric Control Circuit Breaker	15A, 1P, 120V Rating, 10K AIC
4	Auxiliary Relay	120V Operated SPST 60Hz Coil 600V Normally Open Contacts
5	Fuse	Single Pole In-Line Fuseholder 600V, 5A
6	Lampholder With Outlet	120V Weatherproof Lampholder with SPST Switch & GFCI Outlet
7	Contactor	100A, 2P, 240V Rating, 10K AIC
8	Branch Line Circuit Breakers	14 - 20A, 2P, 240V Rating, 10K AIC Note: circuit F2 to be 30A
9	Control Cabinet	H41"x W25"x D16" NEMA 3R
10	Service Cables	Existing Service
11	Lampholder Wire	2 - 600V No. 12
12	Control Wire	2 - 600V No. 12
13	Surge Arrestor	10K Ampere Rating
14	Photoelectric Control Wire	3 - 600V No. 10
15	Lighting Pole Wire	2 - 600V 10awg cables with Pole Ground and Fusing
16	HAND/OFF/AUTO Control Switch	20A, 3 Position, 600V
17	Photocell	
18	Terminal Block	600V
19	Lighting circuit Control Wire	2-600V No.8 and 1-600V No.8 gnd in 2" unit duct



Circuit wiring list	
CKT A	2-600V No.8 and 1-600V No.8 gnd in 2" PVC conduit
CKT B	2-600V No.8 and 1-600V No.8 gnd in 2" PVC conduit
CKT C	2-600V No.8 and 1-600V No.8 gnd in 2" PVC conduit
CKT D	2-600V No.8 and 1-600V No.8 gnd in 2" PVC conduit

LIGHTING CONTROLLER WIRING DETAIL



Circuit I.D.	QTY	AMPERE	WATTS
A	7	8.4	2016W
B	2	2.4	576W
C	5	6	1440W
D	8	8.8	2112W
Total			6144W

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SMITH ENGINEERING CONSULTANTS, INC.
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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000100

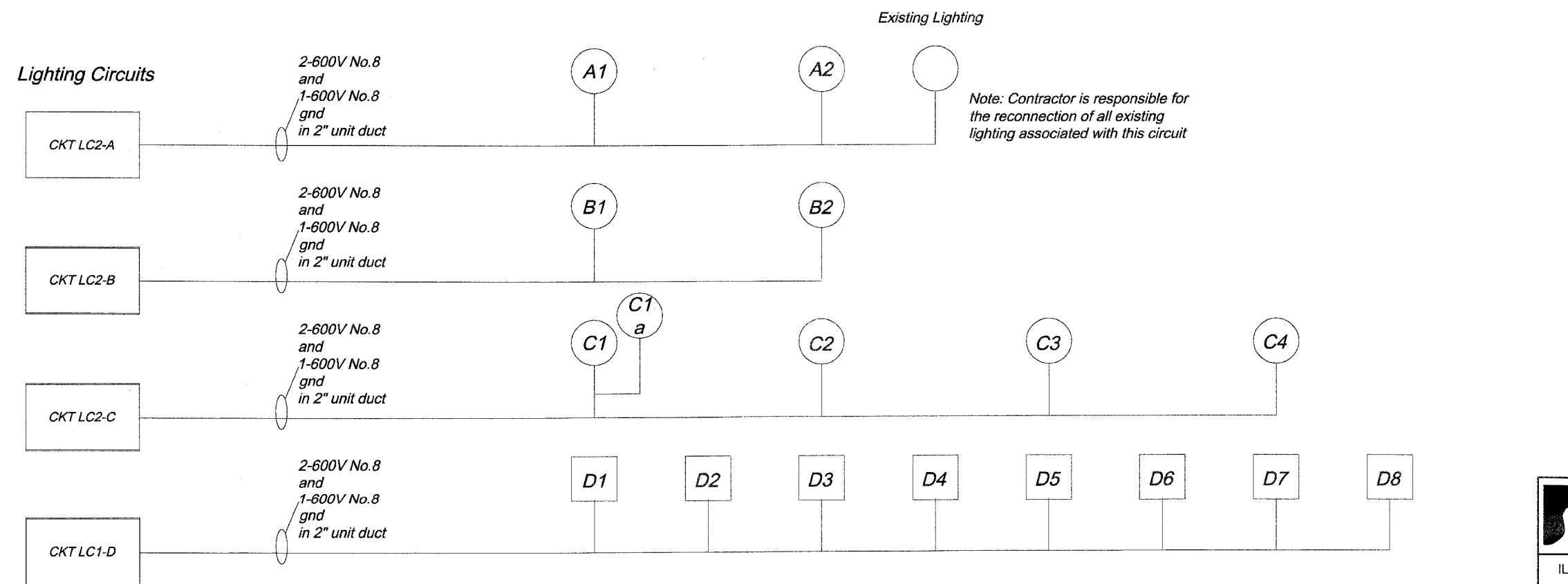
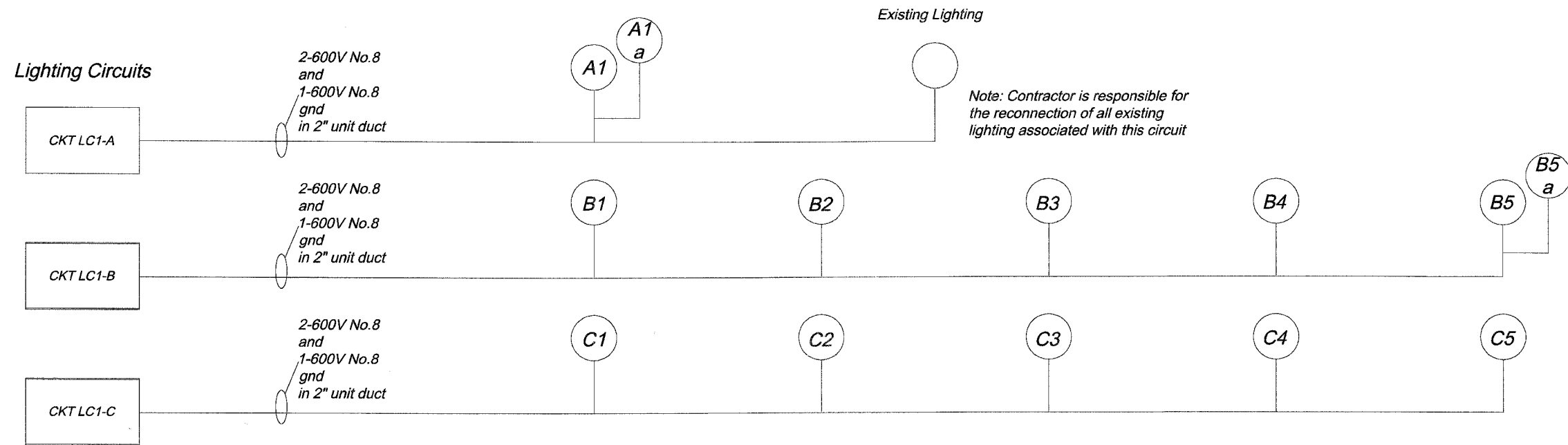
ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 LIGHTING PLANS AND DETAILS
 LIGHTING CONTROLLER PANEL DETAILS
 SCALE: N.T.S. DRAWN BY
 DATE 07-28-08 CHECKED BY GB

PLOT FILE: STANDARD
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 COMMENT: FILE: 030191-009-lighting.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	39
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	HIGHWAY PROJECT	

E-07 OF E-09

CONTRACT #: 83867



PLOT FILE: STANDARD
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COMP. FILE: 030101-00-100-100.dwg

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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

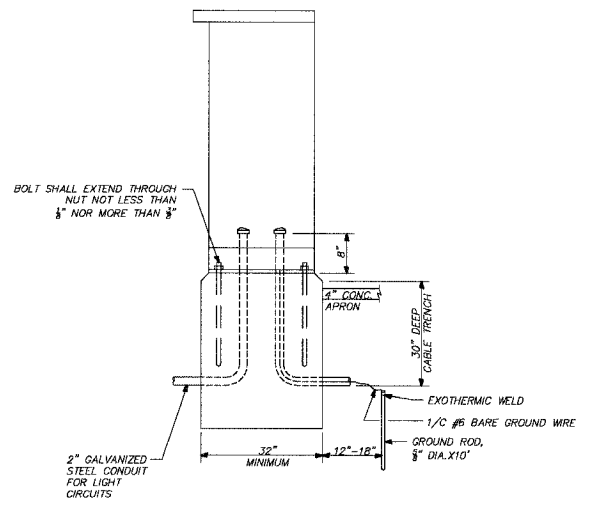
ILLINOIS DEPARTMENT OF TRANSPORTATION

CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 LIGHTING PLANS AND DETAILS
 ONE LINE DIAGRAM

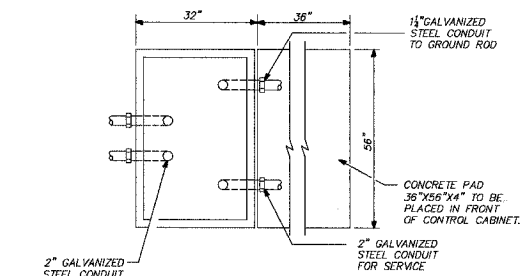
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 DATE 07-28-05 CHECKED BY GB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	40
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		
E-08 OF E-09				

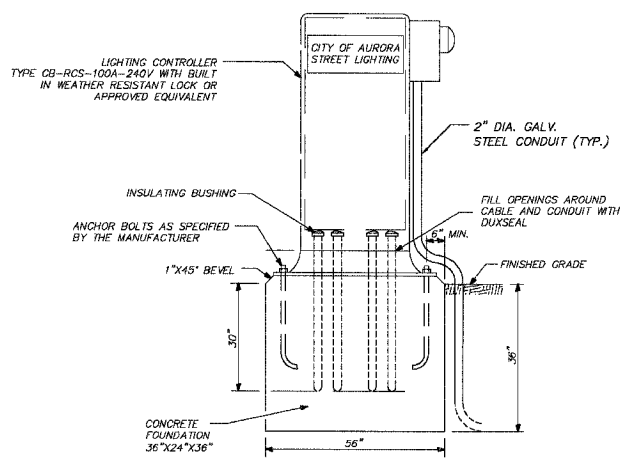
CONTRACT #: 83867



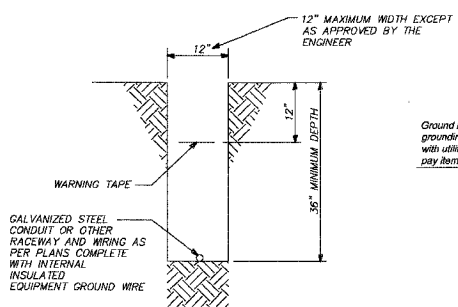
CABINET AND FOUNDATION (SIDE VIEW)



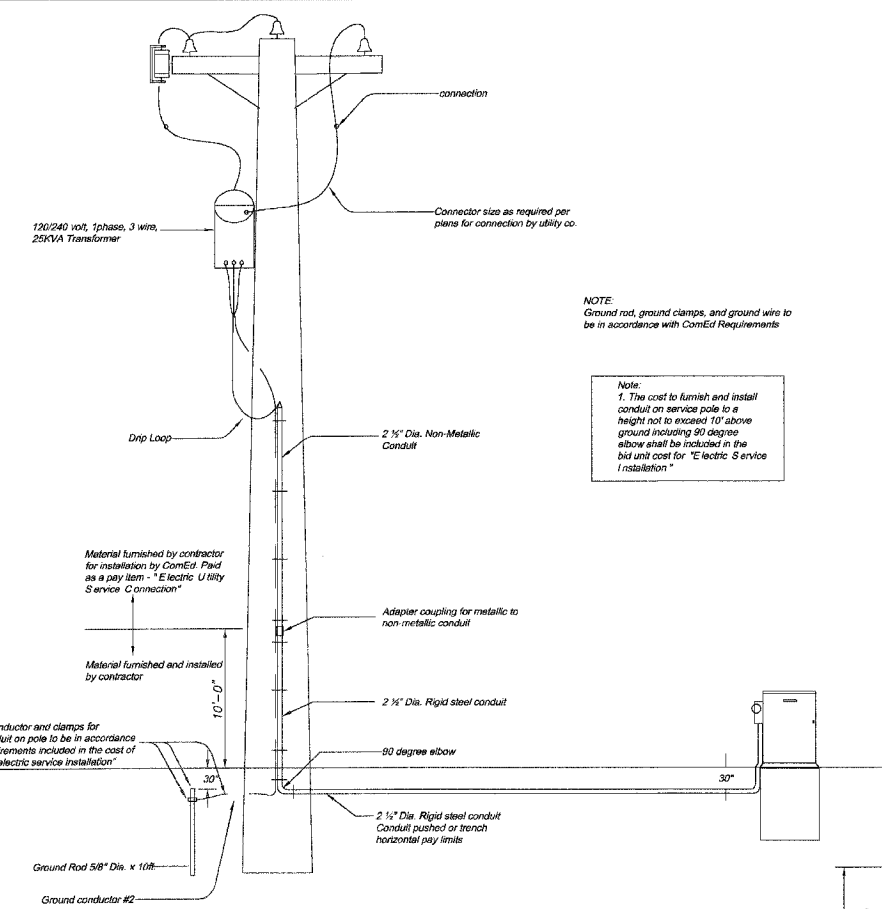
FOUNDATION (TOP VIEW)



CABINET AND FOUNDATION (FRONT VIEW)

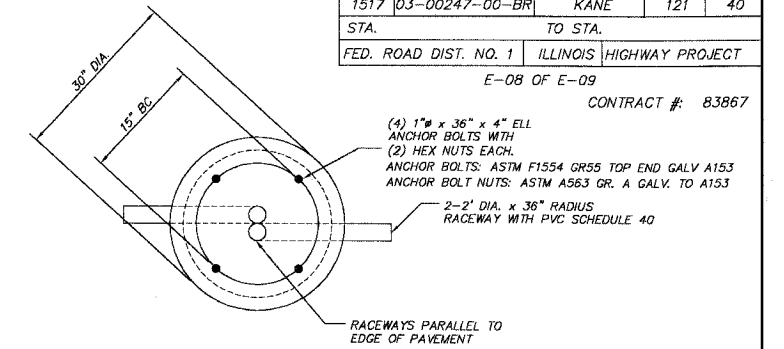


TYPICAL CONDUIT IN TRENCH DETAIL

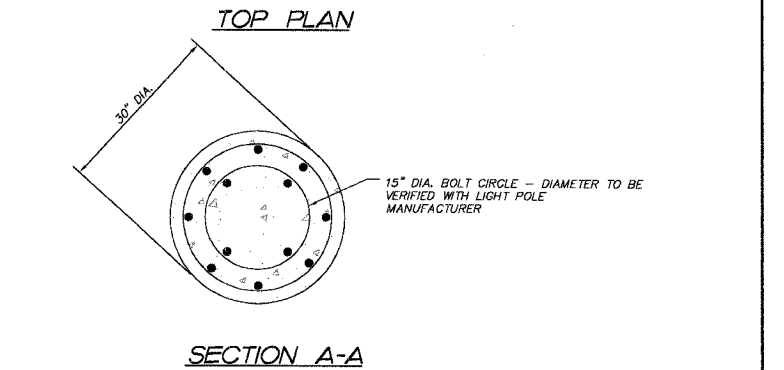


PROPOSED SERVICE INSTALLATION POLE TOP MOUNTED TRANSFORMER

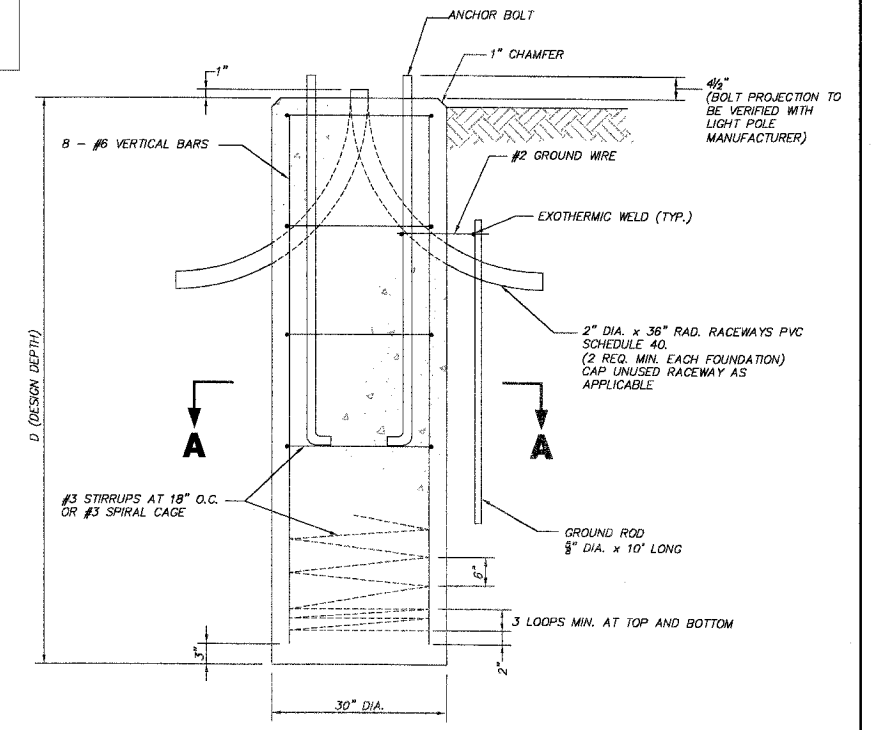
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	11'-0"	12'-8"
MEDIUM CLAY Qu = 0.75 TON/SQ. FT.	9'-0"	14'-10"
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-6"	8'-7"
LOOSE SAND Phi = 34°	9'-6"	10'-7"
MEDIUM SAND Phi = 37.5°	9'-0"	9'-10"
DENSE SAND Phi = 40°	8'-3"	9'-7"



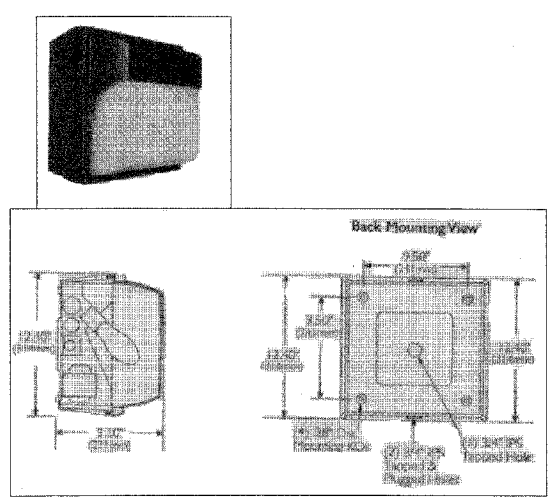
TOP PLAN



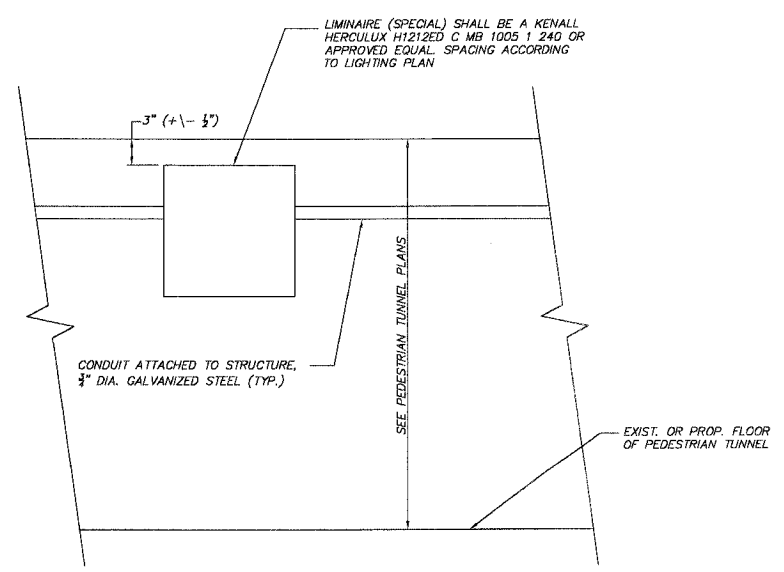
SECTION A-A



FOUNDATION DETAIL



LUMINAIRE (SPECIAL) DETAIL



PEDESTRIAN TUNNEL

NOTES

1. THE ANCHOR BOLTS TIED WITH REINFORCEMENT AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IS PLACED IN THE FORM.
2. RACEWAYS SHALL PROJECT 1" ABOVE THE TOP OF THE FOUNDATION.
3. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE LIGHT POLE IS ERECTED.
4. CONCRETE FOR LIGHT POLE FOUNDATION, 30" SHALL BE CLASS SI. CONCRETE FOUNDATION MUST BE CURED FOR TEN (10) DAYS BEFORE THE LIGHT STANDARD IS ERECTED.

REVISIONS	
NAME	DATE
7.	
6.	
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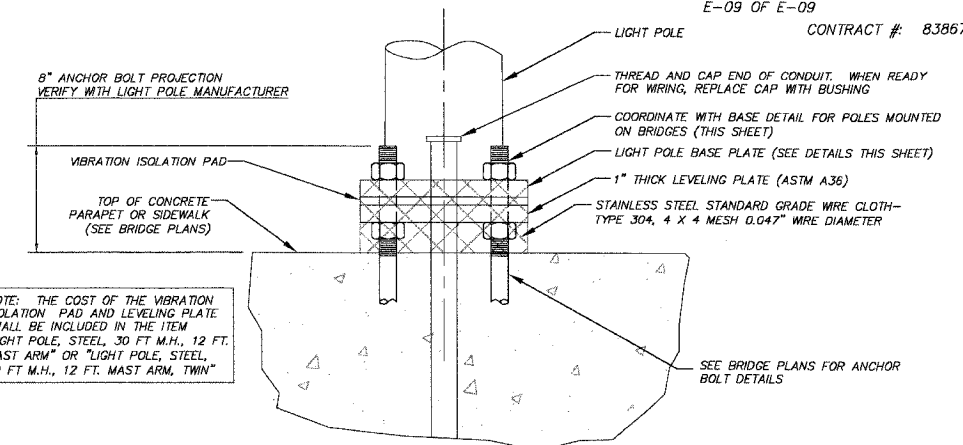
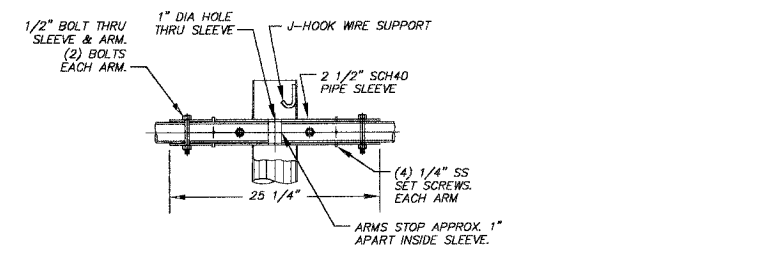
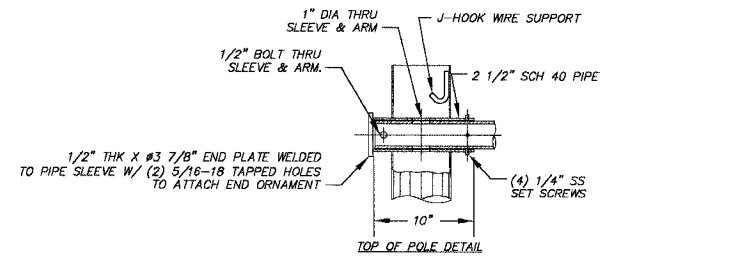
SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4500 VIEWS PARKWAY, SUITE 201
 McHENRY, ILLINOIS 60050
 PH: 815-385-1776 FAX: 815-385-1761
 www.smithengineering.com E-MAIL: see@smithengineering.com
 McHENRY HUNTLEY YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 LIGHTING PLANS AND DETAILS
 SCALE: N.T.S. DRAWN BY
 DATE 07-28-08 CHECKED BY GB

PLOT FILE STANDARD
 VIEW: CE-40
 COMP. FILE: 050101-609-lighting.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	41
STA.	TO STA.			
FED. ROAD DIST. NO. 1 ILLINOIS HIGHWAY PROJECT				

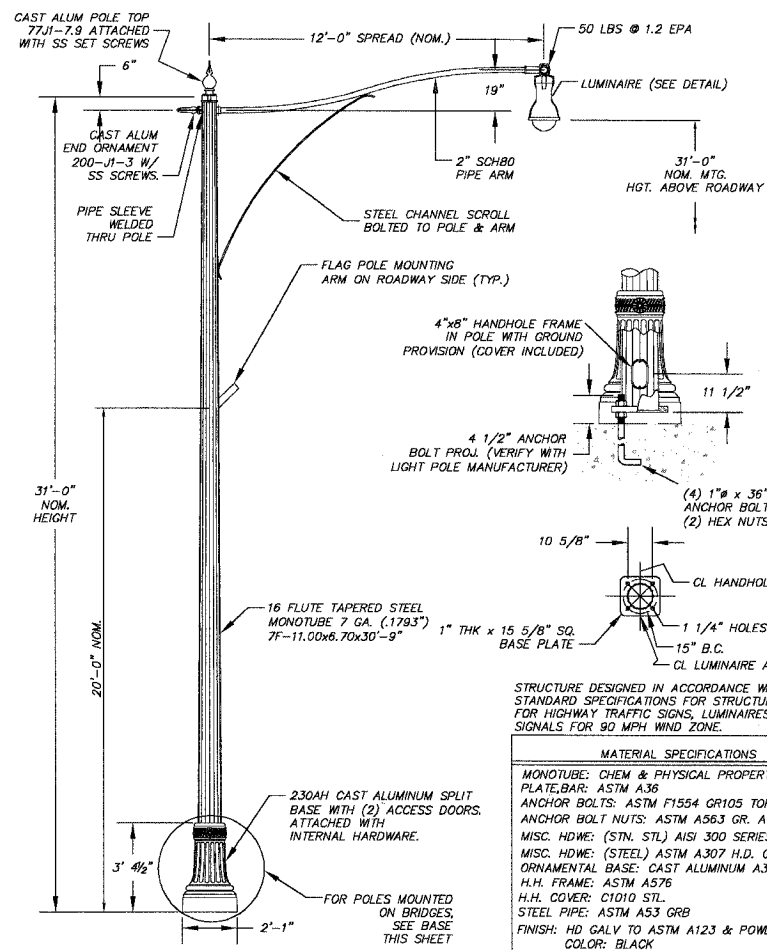
E-09 OF E-09
CONTRACT # 83867



NOTE: THE COST OF THE VIBRATION ISOLATION PAD AND LEVELING PLATE SHALL BE INCLUDED IN THE ITEM "LIGHT POLE, STEEL, 30 FT. M.H., 12 FT. MAST ARM" OR "LIGHT POLE, STEEL, 30 FT. M.H., 12 FT. MAST ARM, TWIN"

INSTALLATION DETAIL FOR POLES MOUNTED ON BRIDGES

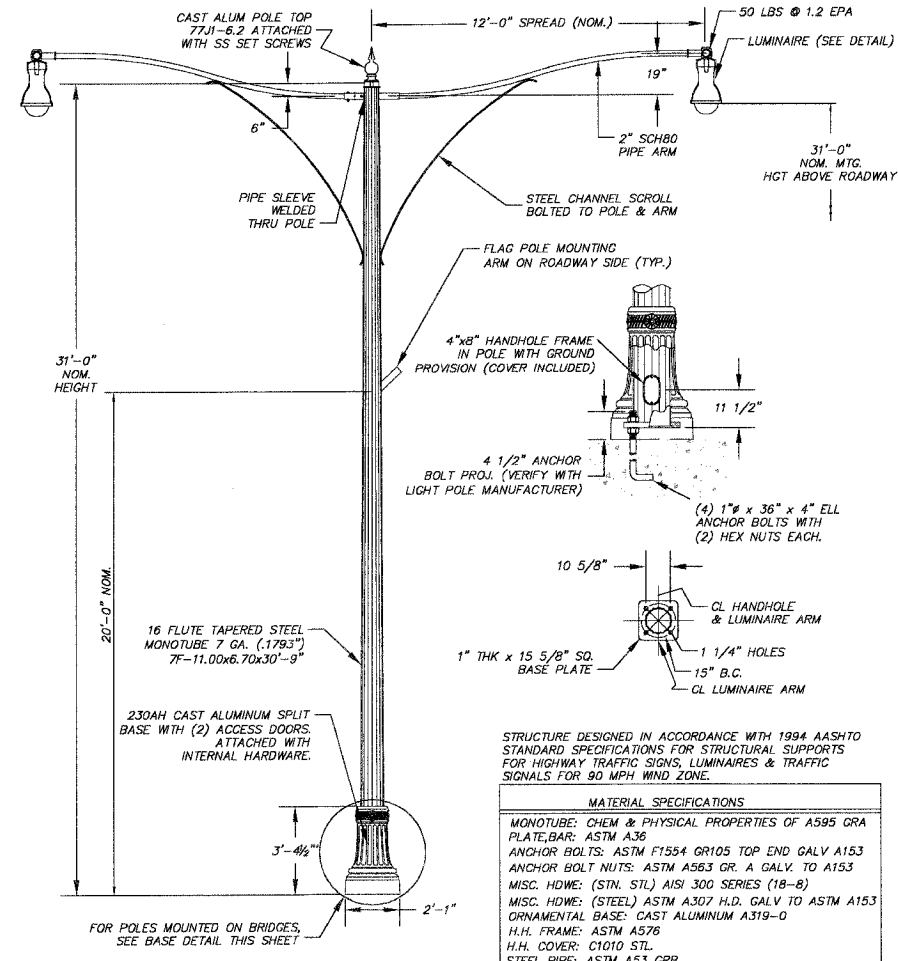
WORK THIS DETAIL WITH BRIDGE PLANS



STRUCTURE DESIGNED IN ACCORDANCE WITH 1994 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY TRAFFIC SIGNS, LUMINAIRES & TRAFFIC SIGNALS FOR 90 MPH WIND ZONE.

MATERIAL SPECIFICATIONS
 MONOTUBE: CHEM & PHYSICAL PROPERTIES OF A595 GRA PLATE, BAR: ASTM A36
 ANCHOR BOLTS: ASTM F1554 GR105 TOP END GALV A153
 ANCHOR BOLT NUTS: ASTM A563 GR. A GALV. TO A153
 MISC. HDWE: (STN. STL) AISI 300 SERIES (18-8)
 MISC. HDWE: (STEEL) ASTM A307 H.D. GALV TO ASTM A153
 ORNAMENTAL BASE: CAST ALUMINUM A319-D
 H.H. FRAME: ASTM A576
 H.H. COVER: C1010 STL.
 STEEL PIPE: ASTM A53 GRB
 FINISH: HD GALV TO ASTM A123 & POWDER COATED.
 COLOR: BLACK

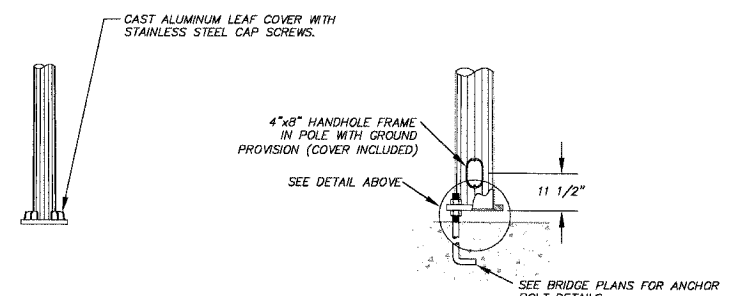
LIGHT POLE, STEEL, 30 FT. M.H., 12 FT. MAST ARM DETAIL
UNION METAL CORPORATION MODEL B70028-230-B41-Y1 OR APPROVED EQUAL



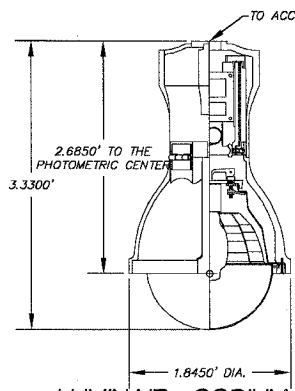
STRUCTURE DESIGNED IN ACCORDANCE WITH 1994 AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY TRAFFIC SIGNS, LUMINAIRES & TRAFFIC SIGNALS FOR 90 MPH WIND ZONE.

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 H.H. COVER: C1010 STL.
 STEEL PIPE: ASTM A53 GRB
 FINISH: HD GALV TO ASTM A123 & POWDER COATED.
 COLOR: BLACK

LIGHT POLE, STEEL, 30 FT. M.H., 12 FT. MAST ARM, TWIN DETAIL
UNION METAL CORPORATION MODEL B70028-230-B43-Y1 OR APPROVED EQUAL



BASE DETAIL FOR POLES MOUNTED ON BRIDGES



LUMINAIRE SPECIFICATIONS
 STYLE: COLUMBIA VERTICAL LAMP, TYPE III, CUTOFF WITH 12" HALF ROUND GLOBE
 HEIGHT: 27 3/4"
 WIDTH: 15 3/8" DIAMETER
 MATERIAL: CAST ALUMINUM ALLOY ANS1 356 PER A.S.T.M. B26-95
 GLOBE: CLEAR POLYCARBONATE
 DISTRIBUTION: TYPE III - ASYMMETRIC
 FINISH: PRIME PAINT THEN FINISH SHERWIN WILLIAMS ACROLON - BLACK
 LAMPING: 250 WATT HPS
 VOLTAGE: QUAD
 SOCKET: MODUL BASE
 PHOTO CONTROL: NONE

LUMINAIRE, SODIUM VAPOR, VERTICAL MOUNT, 250 WATT DETAIL
SPRING CITY MFG. CO. MODEL ALMCLB-PHR2-VC3 OR APPROVED EQUAL

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 4500 FIRME PARKWAY, SUITE 201
 MCKENRY, ILLINOIS 60050
 PH: 815-395-1778 FAX: 815-395-1781
 www.smithengineering.com E-MAIL: seo@smithengineering.com
 McHENRY HUNTLEY YORKVILLE
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 LIGHTING PLANS AND DETAILS

SCALE: N.T.S. DRAWN BY CFR
 DATE 07-28-06 CHECKED BY GB

REVISIONS	
NAME	DATE

PLT FILE: STANDARD
 VIEW: CE-41
 COMP. FILE: 030181-009-lighting.dwg

Benchmark:
Cut square on Northwest Wingwall (West Bridge)
Elev. = 639.93

Existing Structure:
No. 045-6009 built in 1949 under Sec. 14B-CS, S.A.R. 24 Ext. (Kane County Sec. 118-B M.F.T.) and widened in 1976. The Superstructure consists of 4-continuous reinforced concrete T-Beam spans measuring 302'-8 7/8" back to back of abutments and 65'-11" out to out deck supported by three reinforced concrete piers and two reinforced concrete closed abutments founded on rock.

Salvage:
Reuse existing substructures.

Staging:
One lane of traffic in each direction to be maintained during construction utilizing staged construction.

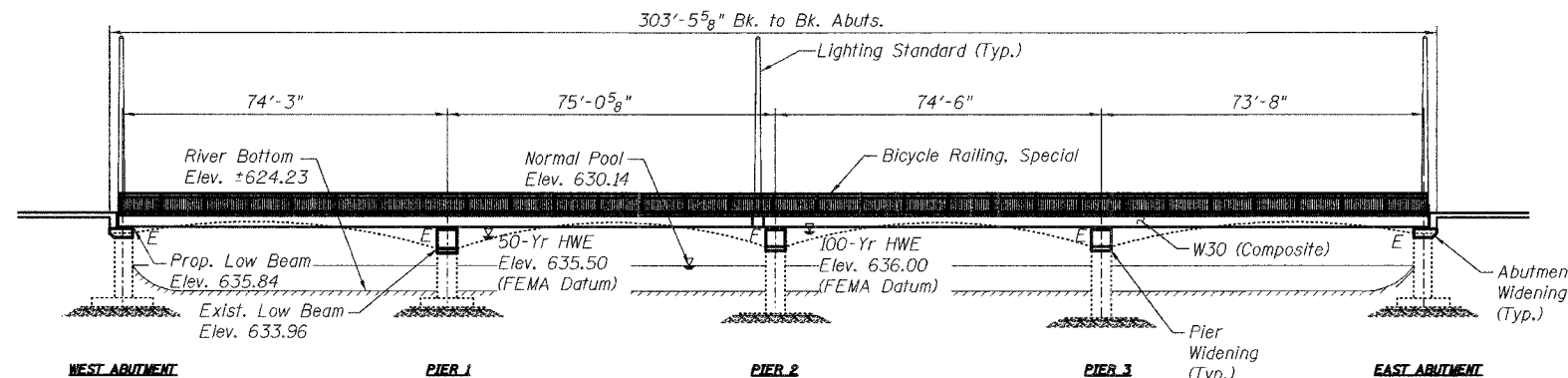
LEGEND:

 12" Cast Iron Watermain (Abandoned)
 8" Gas Main (To be Abandoned by NICOR Prior to Construction)
 (10)-5" PVC Electrical Conduits (Abandoned)

ROUTE NO.	SECTION	COUNTY	DISTRICT	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	42
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
1				

SHEET NO. SW-1
SW-30 SHEETS

CONTRACT #83867



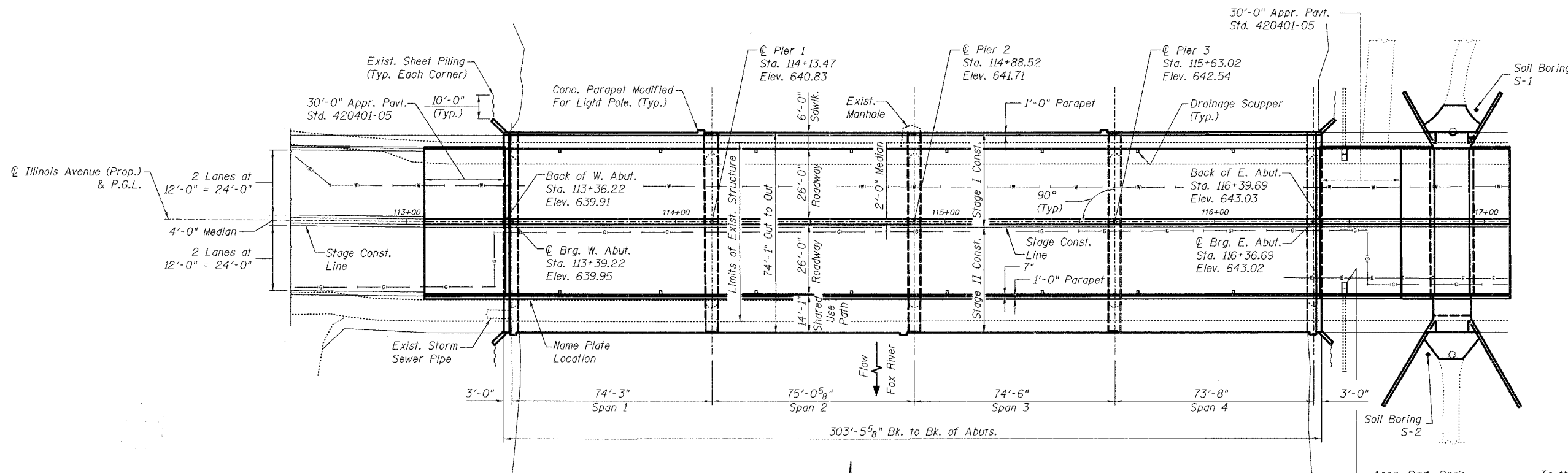
ELEVATION

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications - 17th Ed.

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Gr. 50 Structural Steel)

SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4Zg
Site Coefficient (S) = 1.0



PLAN

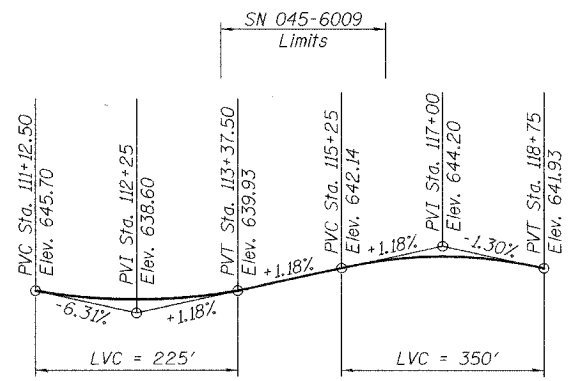


To the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Andrew E. Underwager 8-3-06
Andrew E. Underwager Date
Licensed Structural Engineer
License Expires November 30, 2006

FOX RIVER
BUILT 2007 BY
CITY OF AURORA
SEC 03-00247-00-BR
STATION 114+87.96
STR. NO. 045-6009
LOADING HS20

NAME PLATE
See Std. 515001-02

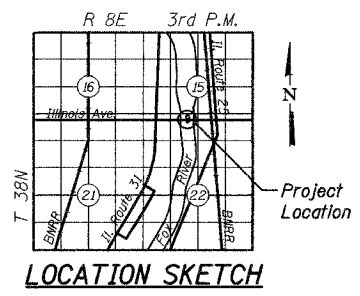


PROFILE GRADE
(Along Illinois Av.)

WATERWAY INFORMATION

Drainage Area = 1,705 Sq. Mi. Low Grade Elev. 639.52 @ Sta. - 121+74.61

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	50	8,400	3,159.16	3,178.16	635.50	0	0	635.50	635.50
Base	100	9,180	3,285.84	3,318.92	636.00	0	0	636.00	636.00
Overtopping									
Max. Calc.	500								



DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, MECHANICAL AND SURVEYORS
1001 N. LAKE STREET, CHICAGO, ILL. 60611

REVISIONS	
NAME	DATE

CITY OF AURORA

GENERAL PLAN AND ELEVATION
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE 1-28-2006

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET
FAU 1517	03-00247-00-BR	KANE	121	43
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	CONTRACT #83867	

SHEET NO. SW-2
SW-30 SHEETS

GENERAL NOTES

Fasteners shall be high strength bolts.
Bolts 7/8" φ, open holes 15/16" φ, unless otherwise noted.
Calculated weight of Structural Steel = 560,446 lbs.
Field welding of construction accessories will not be permitted to beams.
Anchor bolts shall be set before bolting diaphragms over supports.
The structural steel bearing plates of the Elastomeric Bearing Assembly shall conform to the requirements of AASHTO M270 Grade 50

The main load carrying member components subject to tensile stress shall conform to the Supplemental Requirements for Notch Toughness Zone 2. These components are the wide flange beams and all splice plate material except fill plates.

Reinforcement bars shall conform to the requirements of AASHTO M 31 or M 322, Grade 60.

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

The back face of Closed Abutments and their wingwalls shall be waterproofed according to Article 503.18 of the Standard Specifications.

Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field 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 the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 inch. Adjustment shall be made either by grinding the surface or by shimming the bearing. Two 1/8" adjusting shims, of the dimensions of the bottom bearing plate, shall be provided for each bearing in addition to all other plates or shims. For Type I Elastomeric Bearings, two 1/8" adjusting shims shall be provided for each bearing and placed as detailed.

Bridge Seat Sealer shall be applied to the seat area of the abutments.

When the deck pour is stopped for the day at one or more of the transverse Bonded Construction Joints in the Deck Pouring Sequence as shown, the next pour shall not be made until both of the following requirements are met:

1. At least 72 hours shall have elapsed from the end of the previous pour.
2. The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3,500 psi.

All construction joints shall be bonded.

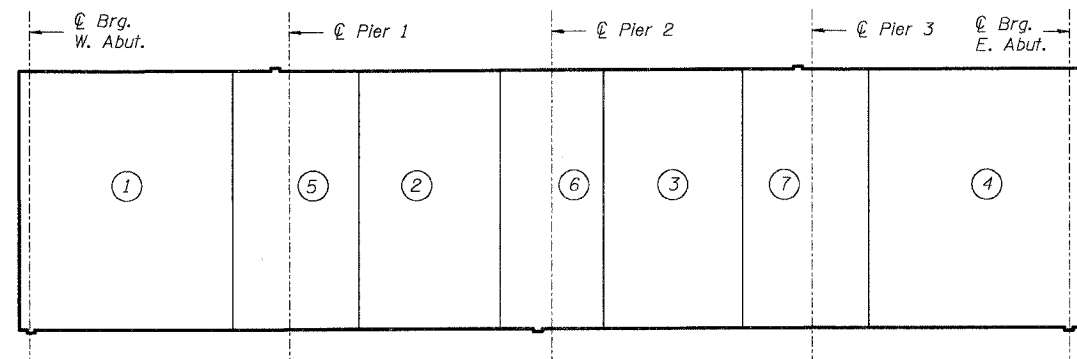
Excavation behind existing abutment walls shall be done before removing the existing superstructure. The Contractor shall sawcut the existing abutments at the stage removal line before Stage I Removal.

The Contractor shall obtain a construction permit from the Illinois Department of Natural Resources (IDNR), Office of Water Resources for any temporary construction activity placed in the water except cofferdams. This shall include the placement of material for run-arounds, causeways, etc. Any permit application by the Contractor shall refer to the IDNR permit number NE2006043 which was issued for the permanent construction.

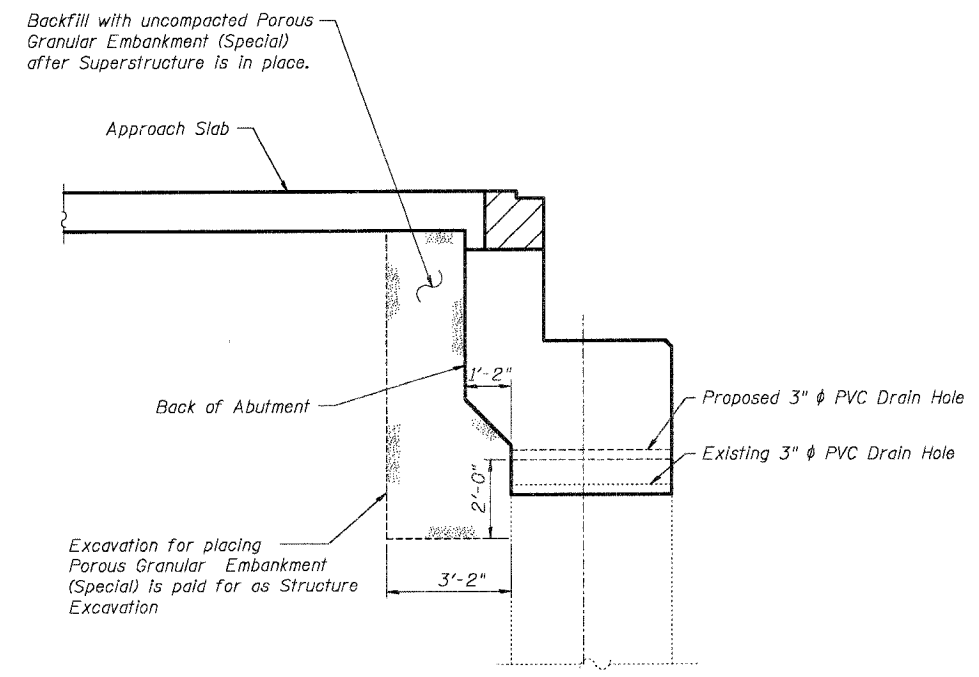
The organic zinc rich primer / epoxy / urethane paint system shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with exception that the masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat shall be gray, Munsell No. 5B 7/1. See special provision for "Cleaning and Painting New Metal Structures".

The information shown in these plans concerning the type and location of utilities is not guaranteed to be accurate or all-inclusive. The Contractor is responsible for making his own determination as to the existence of type, size and location of all underground and overhead utilities as may be necessary to avoid conflict with construction operations and/or damage to the utility.

During Phase I, the Contractor shall maintain sidewalk access and lighting on the south side. During Phase II, the new lighting on the north side shall be operational and new sidewalk accessible.



POURING SEQUENCE



ABUTMENT DRAINAGE DETAIL

TOTAL BILL OF MATERIAL - 045-6009

ITEM	UNIT	TOTAL
* Porous Granular Embankment (Special)	Cu. Yd.	106
* Removal of Existing Superstructures, No. 1	Each	1
Concrete Removal	Cu. Yd.	126.7
Structure Excavation	Cu. Yd.	106
Neoprene Expansion Joint 2"	Foot	152.7
Concrete Structures	Cu. Yd.	347.8
Concrete Superstructure	Cu. Yd.	738.2
Bridge Deck Grooving	Sq. Yd.	1,595
* Protective Coat	Sq. Yd.	2,762
Elastomeric Bearing Assembly, Type I	Each	20
Elastomeric Bearing Assembly, Type II	Each	20
* Structural Repair of Concrete (Depth Equal To Or Less Than 5 In.)	Sq. Ft.	18.5
Furnishing and Erecting Structural Steel	L. Sum	0.66
Stud Shear Connectors	Each	9,300
Reinforced Bars, Epoxy Coated	Pound	195,430
Name Plates	Each	1
Bridge Seat Sealer	Sq. Ft.	482
Epoxy Crack Sealing	Foot	79
Drainage Scuppers, DS-11	Each	16
* Bicycle Railing, Special	Foot	320
Parapet Railing	Foot	298
Bar Splicers	Each	1,286

*Indicates Item Requires a Special Provision.

INDEX OF STRUCTURE SHEETS - 045-6009

SW-1	GENERAL PLAN & ELEVATION
SW-2	GENERAL NOTES, INDEX & QUANTITIES
SW-3	STAGE CONSTRUCTION DETAILS
SW-4	TEMPORARY CONCRETE BARRIER
SW-5	TOP OF DECK ELEVATIONS (1 of 5)
SW-6	TOP OF DECK ELEVATIONS (2 of 5)
SW-7	TOP OF DECK ELEVATIONS (3 of 5)
SW-8	TOP OF DECK ELEVATIONS (4 of 5)
SW-9	TOP OF DECK ELEVATIONS (5 of 5)
SW-10	DECK PLAN & CROSS SECTION
SW-11	SUPERSTRUCTURE DETAILS I
SW-12	SUPERSTRUCTURE DETAILS II
SW-13	SUPERSTRUCTURE DETAILS III
SW-14	SUPERSTRUCTURE DETAILS IV
SW-15	NEOPRENE EXPANSION JOINTS
SW-16	DRAINAGE SCUPPER, DS-11
SW-17	BRIDGE RAILING DETAILS
SW-18	STEEL FRAMING PLAN
SW-19	STEEL FRAMING DETAILS
SW-20	BEARING DETAILS I
SW-21	BEARING DETAILS II
SW-22	ANCHOR BOLT DETAILS
SW-23	BAR SPLICER DETAILS
SW-24	WEST ABUTMENT PLAN & ELEVATION
SW-25	WEST ABUTMENT DETAILS
SW-26	EAST ABUTMENT PLAN & ELEVATION
SW-27	EAST ABUTMENT DETAILS
SW-28	PIER 1 DETAILS
SW-29	PIER 2 DETAILS
SW-30	PIER 3 DETAILS

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.	
CIVIL, STRUCTURAL, ELECTRICAL AND SURVEYORS	
2111 W. Belmont Street, Chicago, IL 60612	
REVISONS	
NAME	DATE

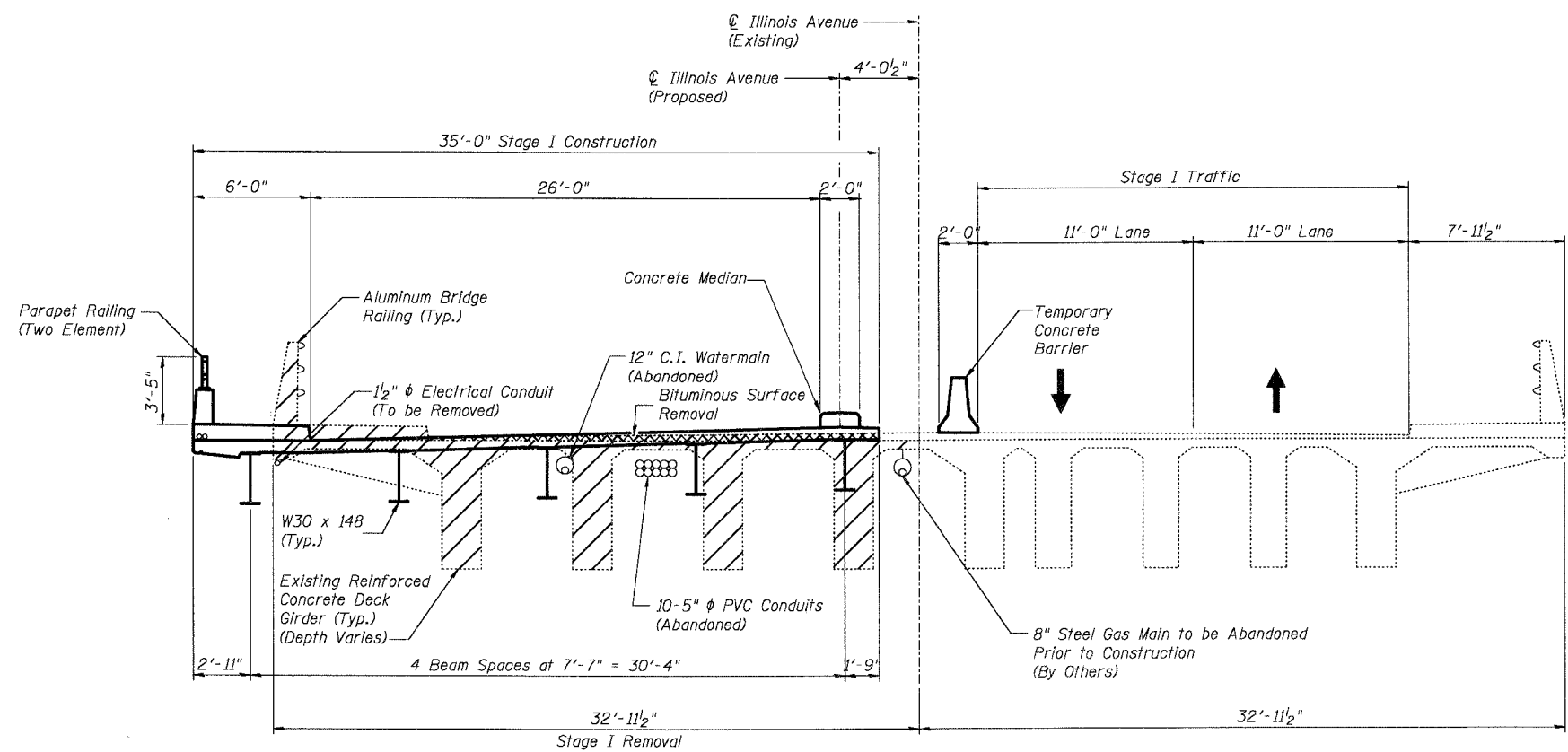
CITY OF AURORA
GENERAL NOTES, INDEX & QUANTITIES
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE 7-28-2006

COMPANY NAME, SEC. NO., PROJECT, DATE, DRAWN BY, CHECKED BY, SCALE, SHEET NO. OF TOTAL SHEETS, PROJECT LOCATION, DRAWING NO.

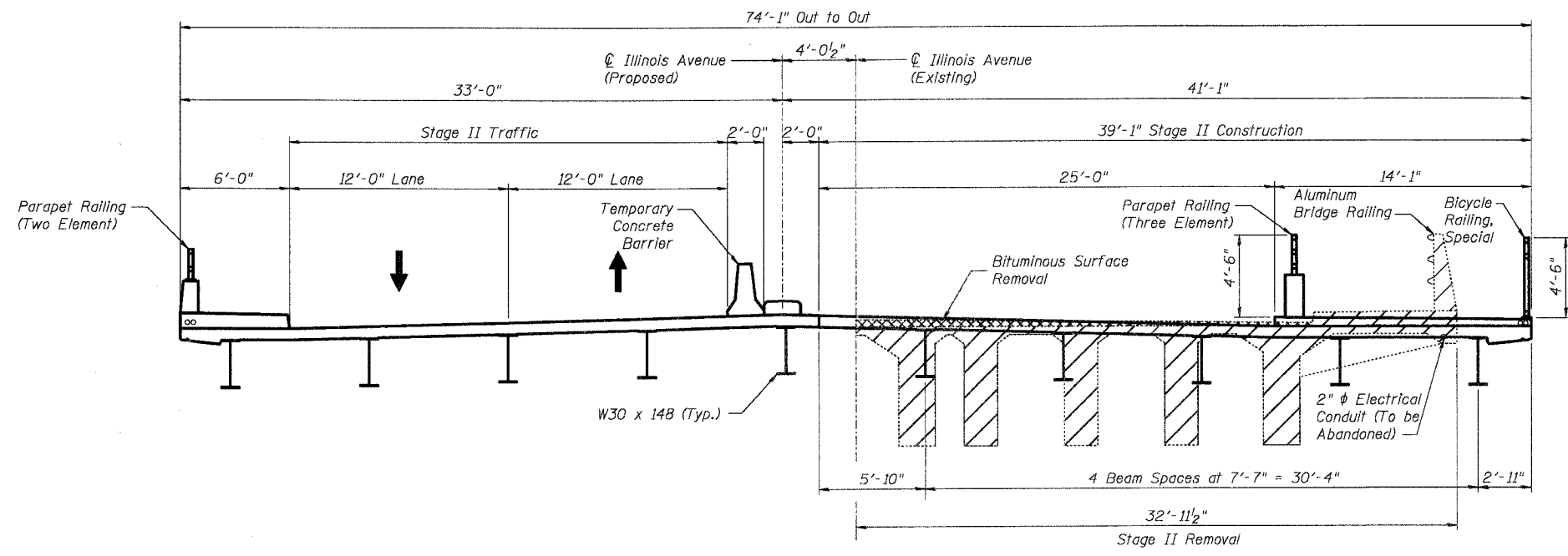
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	44
FED. ROAD DIST. NO.	1	ILLINOIS	FED. AID PROJECT-	

SHEET NO. SW-3
SW-30 SHEETS

CONTRACT #B3867



STAGE I
(Looking East)



STAGE II
(Looking East)

NOTES:

Contractor may remove existing superstructure as required utilizing permanent lane closures for a period of not longer than 5 continuous days.

Prior to any permanent lane closures, the Contractor shall notify the City 72 hours in advance and obtain all necessary permits. See Roadway Plans for detour route requirements.

See Sheet SW-4 for Temporary Concrete Barrier Details.

See Roadway Plans for Temporary Concrete Barrier Quantity.

The removal and disposal of abandoned utilities shall be the Contractor's responsibility. The cost of this work shall be included in the cost of "Removal of Existing Superstructures, No. 1".

The removal and disposal of the existing aluminum railing shall be included in the cost of "Removal of Existing Superstructures, No. 1".

Indicates limits of "Removal of Existing Superstructures, No. 1".

Indicates limits of Bituminous Surface Removal. See Roadway Plans for quantity.

BILL OF MATERIAL

Item	Unit	Total
Removal of Existing Superstructures, No. 1	Each	1

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, ELECTRICAL, MECHANICAL AND SURVEYING
440 N. HANCOCK STREET, SUITE 200
AURORA, ILLINOIS 60009
TEL: 630-997-1100 FAX: 630-997-1101

CITY OF AURORA

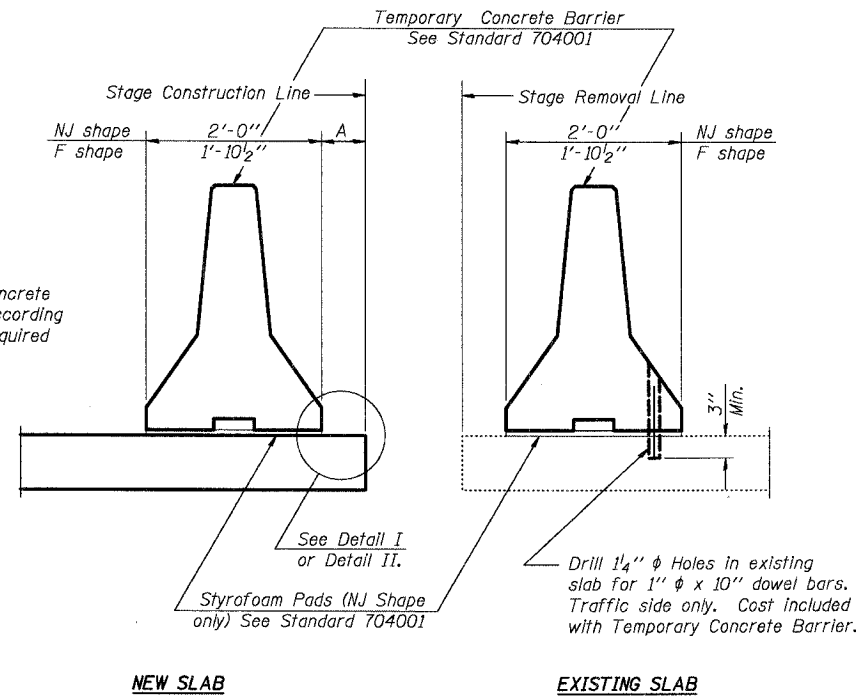
**STAGE CONSTRUCTION DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009**

DATE 7-28-2006

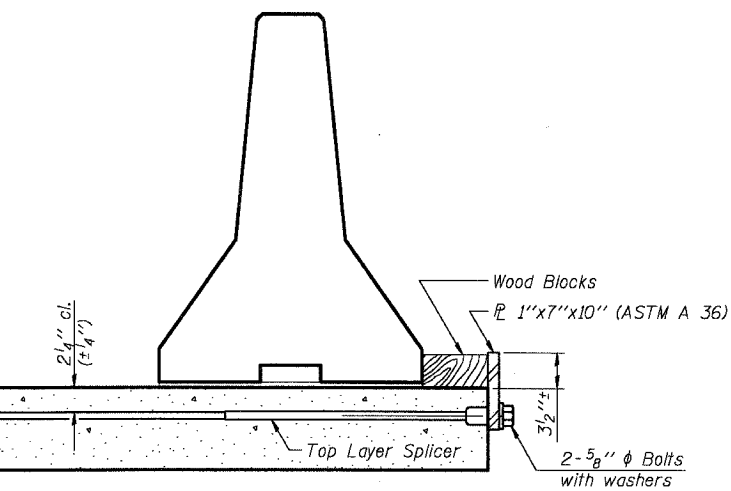
COMPANY NAME, SEC. No. PROJECT CONTRACT
 CLIENT, PROJECT
 ADDRESS, CITY, STATE, ZIP
 PROJECT NO.

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FAU 1517	03-00247-00-BR	KANE	121	45
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		
CONTRACT #83867				

SHEET NO. SW-4
SW-30 SHEETS

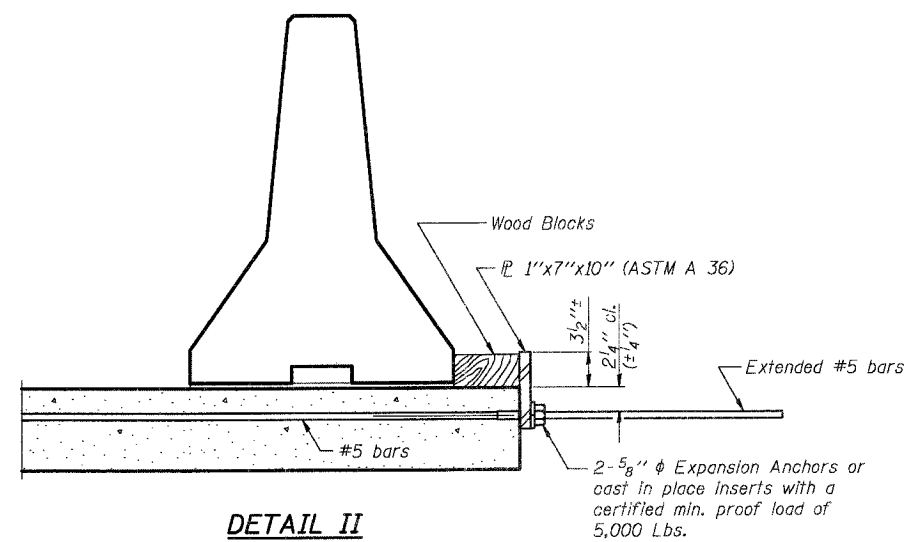


SECTIONS THRU SLAB



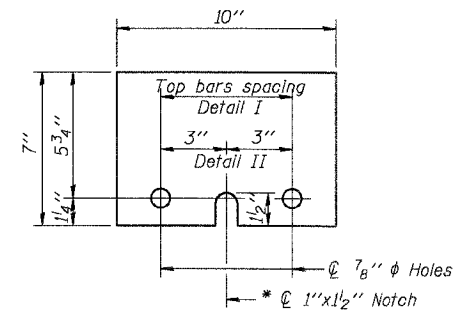
DETAIL I

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1"x7"x10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



1" x 7" x 10"

* Required only with Detail II

NOTES

- Detail I - With Bar Splicer or Couplers:**
Connect one (1) 1"x7"x10" steel plate to the top layer of couplers with 2-5/8" phi bolts screwed to coupler at approximate center of each barrier panel.
- Detail II - With Extended Reinforcement Bars:**
Connect one (1) 1"x7"x10" steel plate to the concrete slab with 2-5/8" phi Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate center of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier. See Roadway plans for quantity Temporary Concrete Barrier.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS

REVISIONS	
NAME	DATE

CITY OF AURORA
TEMPORARY CONCRETE BARRIER
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE 7-28-2006

CONTRACT NO. 03-00247-00-BR
 PROJECT NO. 03-00247-00-BR
 SHEET NO. SW-45
 DATE 7-28-2006
 DRAWN BY WJH
 CHECKED BY NRF
 DESIGNED BY AEU
 PROJECT NO. 03-00247-00-BR
 SHEET NO. SW-45
 DATE 7-28-2006

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	47
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

SHEET NO. SW-6
SW-30 SHEETS

CONTRACT #83867

BEAM 1W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	113+36.22	-30.083	639.36	639.36
⊙ Brg. W. Abut.	113+39.22	-30.083	639.40	639.40
A	113+49.22	-30.083	639.51	639.58
B	113+59.22	-30.083	639.63	639.74
C	113+69.22	-30.083	639.75	639.88
D	113+79.22	-30.083	639.87	639.99
E	113+89.22	-30.083	639.99	640.08
F	113+99.22	-30.083	640.10	640.16
⊙ Brg. Pier 1	114+13.47	-30.083	640.27	640.27
G	114+23.47	-30.083	640.39	640.39
H	114+33.47	-30.083	640.51	640.53
I	114+43.47	-30.083	640.63	640.66
J	114+53.47	-30.083	640.74	640.79
K	114+63.47	-30.083	640.86	640.90
L	114+73.47	-30.083	640.98	641.00
⊙ Brg. Pier 2	114+88.52	-30.083	641.16	641.16
M	114+98.52	-30.083	641.28	641.29
N	115+08.52	-30.083	641.39	641.42
O	115+18.52	-30.083	641.51	641.55
P	115+28.52	-30.083	641.63	641.67
Q	115+38.52	-30.083	641.74	641.77
R	115+48.52	-30.083	641.84	641.85
⊙ Brg. Pier 3	115+63.02	-30.083	641.98	641.98
S	115+73.02	-30.083	642.07	642.10
T	115+83.02	-30.083	642.15	642.23
U	115+93.02	-30.083	642.22	642.34
V	116+03.02	-30.083	642.29	642.42
W	116+13.02	-30.083	642.35	642.47
X	116+23.02	-30.083	642.40	642.48
⊙ Brg. E. Abut.	116+36.69	-30.083	642.46	642.46
Bk. E. Abut.	116+39.69	-30.083	642.47	642.47

BEAM 2W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	113+36.22	-22.500	639.52	639.52
⊙ Brg. W. Abut.	113+39.22	-22.500	639.55	639.55
A	113+49.22	-22.500	639.67	639.73
B	113+59.22	-22.500	639.79	639.90
C	113+69.22	-22.500	639.91	640.04
D	113+79.22	-22.500	640.03	640.15
E	113+89.22	-22.500	640.14	640.24
F	113+99.22	-22.500	640.26	640.31
⊙ Brg. Pier 1	114+13.47	-22.500	640.43	640.43
G	114+23.47	-22.500	640.55	640.55
H	114+33.47	-22.500	640.67	640.69
I	114+43.47	-22.500	640.78	640.82
J	114+53.47	-22.500	640.90	640.95
K	114+63.47	-22.500	641.02	641.06
L	114+73.47	-22.500	641.14	641.16
⊙ Brg. Pier 2	114+88.52	-22.500	641.32	641.32
M	114+98.52	-22.500	641.43	641.44
N	115+08.52	-22.500	641.55	641.57
O	115+18.52	-22.500	641.67	641.71
P	115+28.52	-22.500	641.79	641.83
Q	115+38.52	-22.500	641.90	641.93
R	115+48.52	-22.500	642.00	642.01
⊙ Brg. Pier 3	115+63.02	-22.500	642.14	642.14
S	115+73.02	-22.500	642.23	642.26
T	115+83.02	-22.500	642.31	642.38
U	115+93.02	-22.500	642.38	642.49
V	116+03.02	-22.500	642.45	642.58
W	116+13.02	-22.500	642.51	642.63
X	116+23.02	-22.500	642.56	642.64
⊙ Brg. E. Abut.	116+36.69	-22.500	642.62	642.62
Bk. E. Abut.	116+39.69	-22.500	642.63	642.63

BEAM 3W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	113+36.22	-14.917	639.68	639.68
⊙ Brg. W. Abut.	113+39.22	-14.917	639.71	639.71
A	113+49.22	-14.917	639.83	639.89
B	113+59.22	-14.917	639.95	640.06
C	113+69.22	-14.917	640.07	640.20
D	113+79.22	-14.917	640.18	640.31
E	113+89.22	-14.917	640.30	640.40
F	113+99.22	-14.917	640.42	640.47
⊙ Brg. Pier 1	114+13.47	-14.917	640.59	640.59
G	114+23.47	-14.917	640.71	640.71
H	114+33.47	-14.917	640.82	640.85
I	114+43.47	-14.917	640.94	640.98
J	114+53.47	-14.917	641.06	641.11
K	114+63.47	-14.917	641.18	641.22
L	114+73.47	-14.917	641.30	641.32
⊙ Brg. Pier 2	114+88.52	-14.917	641.47	641.47
M	114+98.52	-14.917	641.59	641.60
N	115+08.52	-14.917	641.71	641.73
O	115+18.52	-14.917	641.83	641.87
P	115+28.52	-14.917	641.94	641.98
Q	115+38.52	-14.917	642.06	642.08
R	115+48.52	-14.917	642.16	642.17
⊙ Brg. Pier 3	115+63.02	-14.917	642.30	642.30
S	115+73.02	-14.917	642.39	642.42
T	115+83.02	-14.917	642.47	642.54
U	115+93.02	-14.917	642.54	642.65
V	116+03.02	-14.917	642.61	642.74
W	116+13.02	-14.917	642.67	642.78
X	116+23.02	-14.917	642.72	642.80
⊙ Brg. E. Abut.	116+36.69	-14.917	642.78	642.78
Bk. E. Abut.	116+39.69	-14.917	642.79	642.79

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



REVISIONS	
NAME	DATE

CITY OF AURORA

TOP OF DECK ELEVATIONS (2 of 5)
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE 7-28-2006

DESIGN: AEU, RGD, WJH, NRF
 PROJECT CONTACT: PROJECT CONTACT
 DATE: 7/28/06
 PROJECT NO: 03-00247-00-BR
 SHEET NO: SW-30

BEAM 4W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	113+36.22	-7.330	639.80	639.80
⊙ Brg. W. Abut.	113+39.22	-7.330	639.84	639.84
A	113+49.22	-7.330	639.95	640.02
B	113+59.22	-7.330	640.07	640.18
C	113+69.22	-7.330	640.19	640.32
D	113+79.22	-7.330	640.31	640.43
E	113+89.22	-7.330	640.43	640.52
F	113+99.22	-7.330	640.54	640.59
⊙ Brg. Pier 1	114+13.47	-7.330	640.71	640.71
G	114+23.47	-7.330	640.83	640.83
H	114+33.47	-7.330	640.95	640.97
I	114+43.47	-7.330	641.07	641.10
J	114+53.47	-7.330	641.18	641.23
K	114+63.47	-7.330	641.30	641.34
L	114+73.47	-7.330	641.42	641.44
⊙ Brg. Pier 2	114+88.52	-7.330	641.60	641.60
M	114+98.52	-7.330	641.72	641.73
N	115+08.52	-7.330	641.83	641.85
O	115+18.52	-7.330	641.95	641.99
P	115+28.52	-7.330	642.07	642.11
Q	115+38.52	-7.330	642.18	642.21
R	115+48.52	-7.330	642.28	642.29
⊙ Brg. Pier 3	115+63.02	-7.330	642.42	642.42
S	115+73.02	-7.330	642.51	642.54
T	115+83.02	-7.330	642.59	642.67
U	115+93.02	-7.330	642.66	642.78
V	116+03.02	-7.330	642.73	642.86
W	116+13.02	-7.330	642.79	642.91
X	116+23.02	-7.330	642.84	642.92
⊙ Brg. E. Abut.	116+36.69	-7.330	642.90	642.90
Bk. E. Abut.	116+39.69	-7.330	642.91	642.91

PROFILE GRADE LINE, CENTERLINE & CROWN

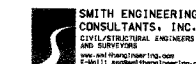
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	113+36.22	0.000	639.91	639.91
⊙ Brg. W. Abut.	113+39.22	0.000	639.95	639.95
A	113+49.22	0.000	640.07	640.13
B	113+59.22	0.000	640.19	640.30
C	113+69.22	0.000	640.30	640.44
D	113+79.22	0.000	640.42	640.55
E	113+89.22	0.000	640.54	640.64
F	113+99.22	0.000	640.66	640.71
⊙ Brg. Pier 1	114+13.47	0.000	640.83	640.83
G	114+23.47	0.000	640.94	640.95
H	114+33.47	0.000	641.06	641.08
I	114+43.47	0.000	641.18	641.22
J	114+53.47	0.000	641.30	641.34
K	114+63.47	0.000	641.42	641.46
L	114+73.47	0.000	641.53	641.56
⊙ Brg. Pier 2	114+88.52	0.000	641.71	641.71
M	114+98.52	0.000	641.83	641.84
N	115+08.52	0.000	641.95	641.97
O	115+18.52	0.000	642.07	642.11
P	115+28.52	0.000	642.18	642.22
Q	115+38.52	0.000	642.29	642.32
R	115+48.52	0.000	642.40	642.41
⊙ Brg. Pier 3	115+63.02	0.000	642.54	642.54
S	115+73.02	0.000	642.62	642.66
T	115+83.02	0.000	642.71	642.78
U	115+93.02	0.000	642.78	642.89
V	116+03.02	0.000	642.84	642.97
W	116+13.02	0.000	642.90	643.02
X	116+23.02	0.000	642.96	643.04
⊙ Brg. E. Abut.	116+36.69	0.000	643.02	643.02
Bk. E. Abut.	116+39.69	0.000	643.03	643.03

BEAM 5W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	113+36.22	0.250	639.91	639.91
⊙ Brg. W. Abut.	113+39.22	0.250	639.95	639.95
A	113+49.22	0.250	640.06	640.13
B	113+59.22	0.250	640.18	640.29
C	113+69.22	0.250	640.30	640.43
D	113+79.22	0.250	640.42	640.54
E	113+89.22	0.250	640.54	640.63
F	113+99.22	0.250	640.65	640.71
⊙ Brg. Pier 1	114+13.47	0.250	640.82	640.82
G	114+23.47	0.250	640.94	640.94
H	114+33.47	0.250	641.06	641.08
I	114+43.47	0.250	641.18	641.21
J	114+53.47	0.250	641.29	641.34
K	114+63.47	0.250	641.41	641.45
L	114+73.47	0.250	641.53	641.55
⊙ Brg. Pier 2	114+88.52	0.250	641.71	641.71
M	114+98.52	0.250	641.83	641.84
N	115+08.52	0.250	641.94	641.96
O	115+18.52	0.250	642.06	642.10
P	115+28.52	0.250	642.18	642.22
Q	115+38.52	0.250	642.29	642.32
R	115+48.52	0.250	642.39	642.40
⊙ Brg. Pier 3	115+63.02	0.250	642.53	642.53
S	115+73.02	0.250	642.62	642.65
T	115+83.02	0.250	642.70	642.78
U	115+93.02	0.250	642.77	642.89
V	116+03.02	0.250	642.84	642.97
W	116+13.02	0.250	642.90	643.02
X	116+23.02	0.250	642.95	643.03
⊙ Brg. E. Abut.	116+36.69	0.250	643.01	643.01
Bk. E. Abut.	116+39.69	0.250	643.02	643.02

CONTRACT NO. 03-00247-00-BR
 PROJECT NO. 03-00247-00-BR
 SHEET NO. SW-30
 DATE: 7-28-2006

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



REVISIONS	
NAME	DATE

CITY OF AURORA

TOP OF DECK ELEVATIONS (3 of 5)
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE: 7-28-2006

**STAGE CONSTRUCTION LINE &
LONGITUDINAL BONDED CONSTRUCTION JOINT**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	113+36.22	2.000	639.88	639.88
⊙ Brg. W. Abut.	113+39.22	2.000	639.92	639.92
A	113+49.22	2.000	640.04	640.10
B	113+59.22	2.000	640.16	640.26
C	113+69.22	2.000	640.27	640.40
D	113+79.22	2.000	640.39	640.52
E	113+89.22	2.000	640.51	640.60
F	113+99.22	2.000	640.63	640.68
⊙ Brg. Pier 1	114+13.47	2.000	640.80	640.80
G	114+23.47	2.000	640.91	640.91
H	114+33.47	2.000	641.03	641.05
I	114+43.47	2.000	641.15	641.19
J	114+53.47	2.000	641.27	641.31
K	114+63.47	2.000	641.39	641.42
L	114+73.47	2.000	641.50	641.52
⊙ Brg. Pier 2	114+88.52	2.000	641.68	641.68
M	114+98.52	2.000	641.80	641.81
N	115+08.52	2.000	641.92	641.94
O	115+18.52	2.000	642.03	642.08
P	115+28.52	2.000	642.15	642.19
Q	115+38.52	2.000	642.26	642.29
R	115+48.52	2.000	642.37	642.38
⊙ Brg. Pier 3	115+63.02	2.000	642.51	642.51
S	115+73.02	2.000	642.59	642.63
T	115+83.02	2.000	642.67	642.75
U	115+93.02	2.000	642.75	642.86
V	116+03.02	2.000	642.81	642.94
W	116+13.02	2.000	642.87	642.99
X	116+23.02	2.000	642.92	643.00
⊙ Brg. E. Abut.	116+36.69	2.000	642.98	642.98
Bk. E. Abut.	116+39.69	2.000	643.00	643.00

BEAM 6W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	113+36.22	7.833	639.79	639.79
⊙ Brg. W. Abut.	113+39.22	7.833	639.83	639.83
A	113+49.22	7.833	639.95	640.01
B	113+59.22	7.833	640.06	640.17
C	113+69.22	7.833	640.18	640.31
D	113+79.22	7.833	640.30	640.42
E	113+89.22	7.833	640.42	640.51
F	113+99.22	7.833	640.54	640.59
⊙ Brg. Pier 1	114+13.47	7.833	640.70	640.70
G	114+23.47	7.833	640.82	640.82
H	114+33.47	7.833	640.94	640.96
I	114+43.47	7.833	641.06	641.10
J	114+53.47	7.833	641.18	641.22
K	114+63.47	7.833	641.29	641.33
L	114+73.47	7.833	641.41	641.43
⊙ Brg. Pier 2	114+88.52	7.833	641.59	641.59
M	114+98.52	7.833	641.71	641.72
N	115+08.52	7.833	641.83	641.85
O	115+18.52	7.833	641.94	641.99
P	115+28.52	7.833	642.06	642.10
Q	115+38.52	7.833	642.17	642.20
R	115+48.52	7.833	642.28	642.28
⊙ Brg. Pier 3	115+63.02	7.833	642.42	642.42
S	115+73.02	7.833	642.50	642.53
T	115+83.02	7.833	642.58	642.66
U	115+93.02	7.833	642.66	642.77
V	116+03.02	7.833	642.72	642.85
W	116+13.02	7.833	642.78	642.90
X	116+23.02	7.833	642.83	642.91
⊙ Brg. E. Abut.	116+36.69	7.833	642.89	642.89
Bk. E. Abut.	116+39.69	7.833	642.90	642.90

BEAM 7W

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	113+36.22	15.417	639.67	639.67
⊙ Brg. W. Abut.	113+39.22	15.417	639.70	639.70
A	113+49.22	15.417	639.82	639.88
B	113+59.22	15.417	639.94	640.05
C	113+69.22	15.417	640.06	640.19
D	113+79.22	15.417	640.17	640.30
E	113+89.22	15.417	640.29	640.39
F	113+99.22	15.417	640.41	640.46
⊙ Brg. Pier 1	114+13.47	15.417	640.58	640.58
G	114+23.47	15.417	640.70	640.70
H	114+33.47	15.417	640.81	640.84
I	114+43.47	15.417	640.93	640.97
J	114+53.47	15.417	641.05	641.10
K	114+63.47	15.417	641.17	641.21
L	114+73.47	15.417	641.29	641.31
⊙ Brg. Pier 2	114+88.52	15.417	641.46	641.46
M	114+98.52	15.417	641.58	641.59
N	115+08.52	15.417	641.70	641.72
O	115+18.52	15.417	641.82	641.86
P	115+28.52	15.417	641.93	641.97
Q	115+38.52	15.417	642.04	642.07
R	115+48.52	15.417	642.15	642.16
⊙ Brg. Pier 3	115+63.02	15.417	642.29	642.29
S	115+73.02	15.417	642.38	642.41
T	115+83.02	15.417	642.46	642.53
U	115+93.02	15.417	642.53	642.64
V	116+03.02	15.417	642.60	642.73
W	116+13.02	15.417	642.66	642.77
X	116+23.02	15.417	642.71	642.79
⊙ Brg. E. Abut.	116+36.69	15.417	642.77	642.77
Bk. E. Abut.	116+39.69	15.417	642.78	642.78

DESIGNER: AEU
 CHECKER: RGD
 DRAWN: WJH
 CHECKED: NRF

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

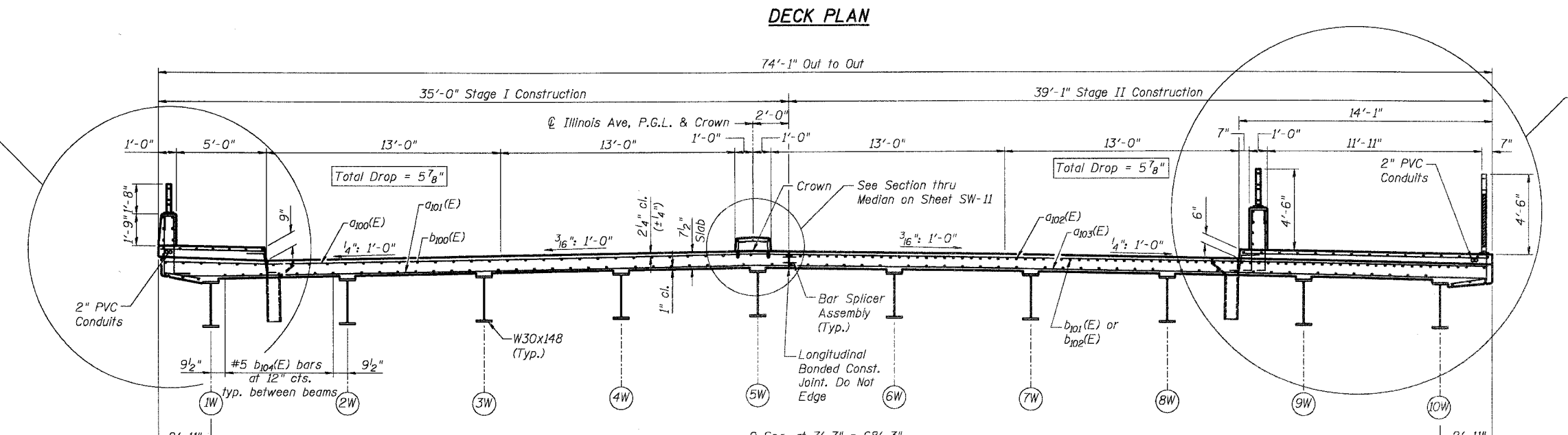
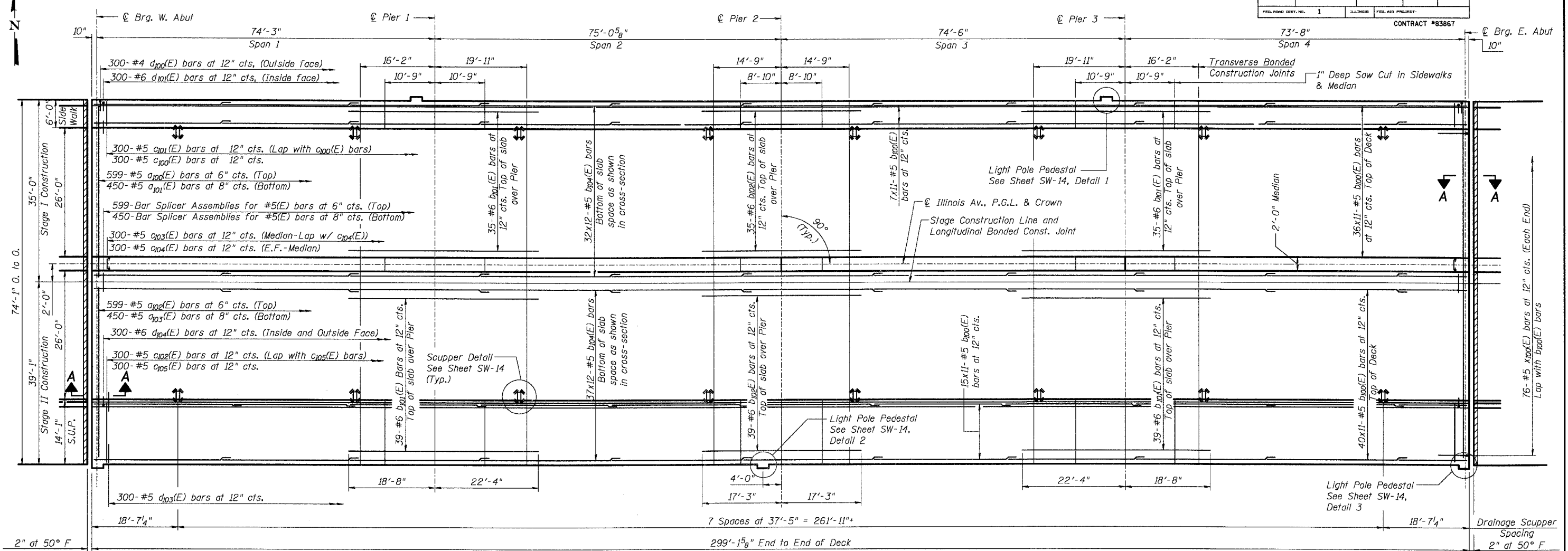


REVISIONS	
NAME	DATE

CITY OF AURORA

TOP OF DECK ELEVATIONS (4 of 5)
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE 7-28-2006



NOTES:

Work this sheet with sheets SW-11 thru SW-14.

Bars indicated thus 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.

See Sheet SW-11 for Section A-A.

Min. Lap length for #5 Bars = 2'-2"

Min. Lap length for #6 Bars = 2'-7"

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

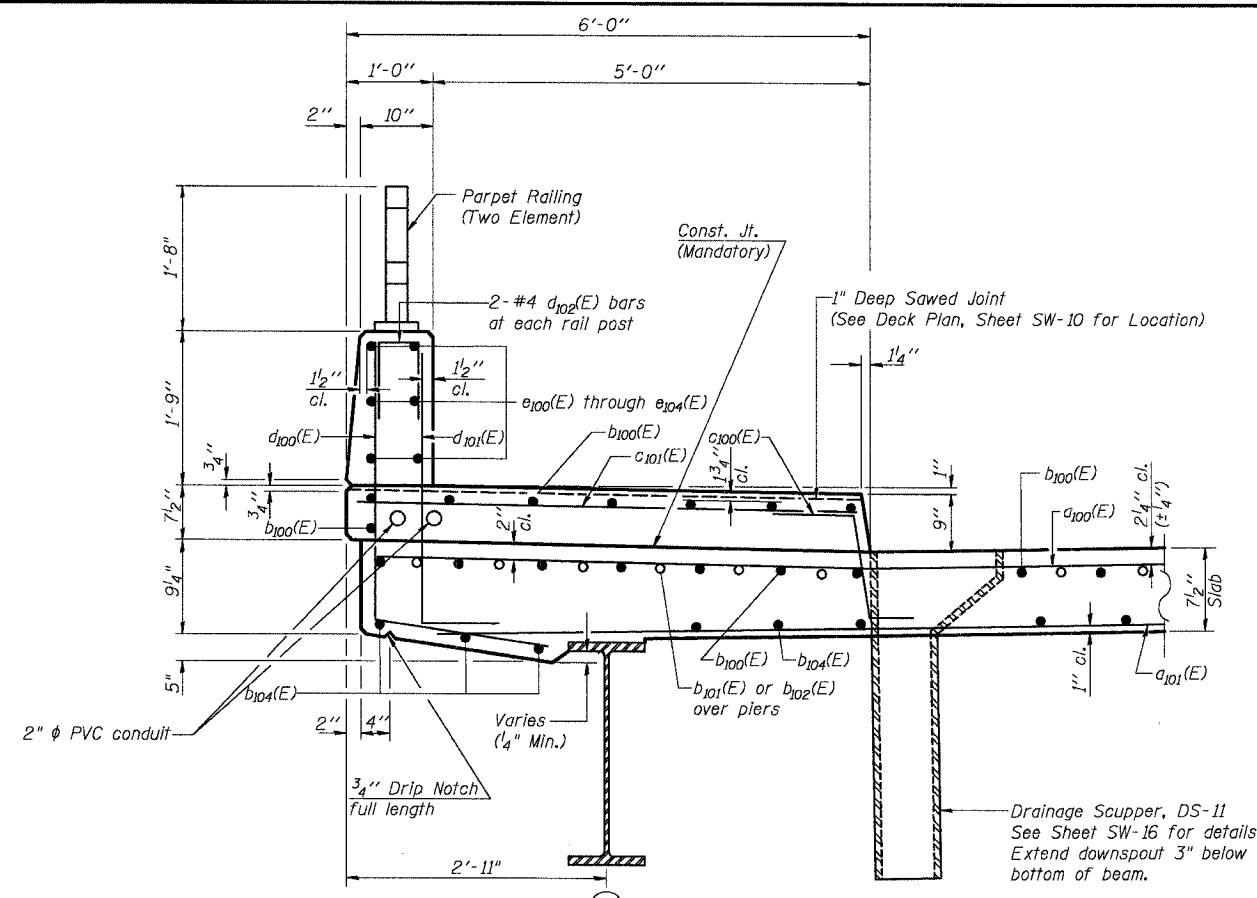
REVISIONS	
NAME	DATE

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL ENGINEERS
 1001 W. WASHINGTON ST., SUITE 200
 AURORA, ILLINOIS 60007
 (708) 421-1100
 www.smitheng.com

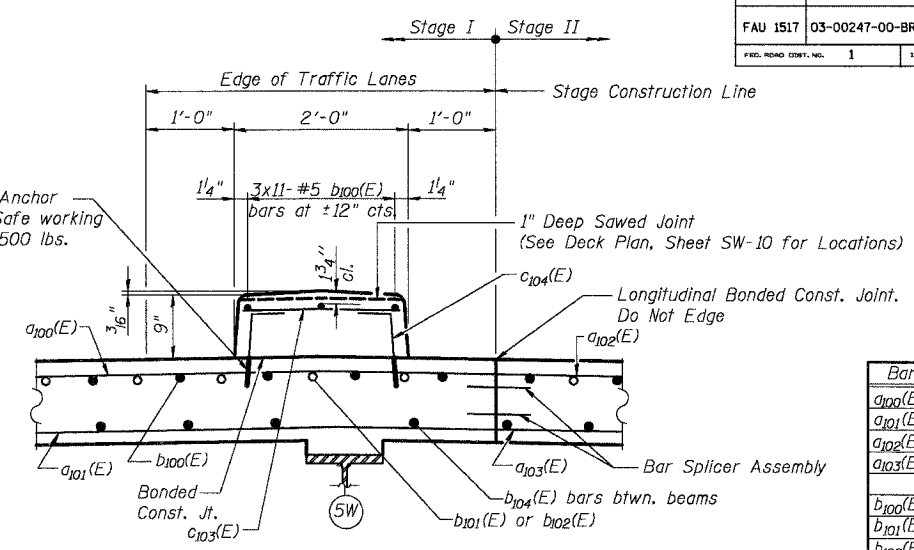
CITY OF AURORA

DECK PLAN & CROSS SECTION
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 STRUCTURE NO. 045-6009

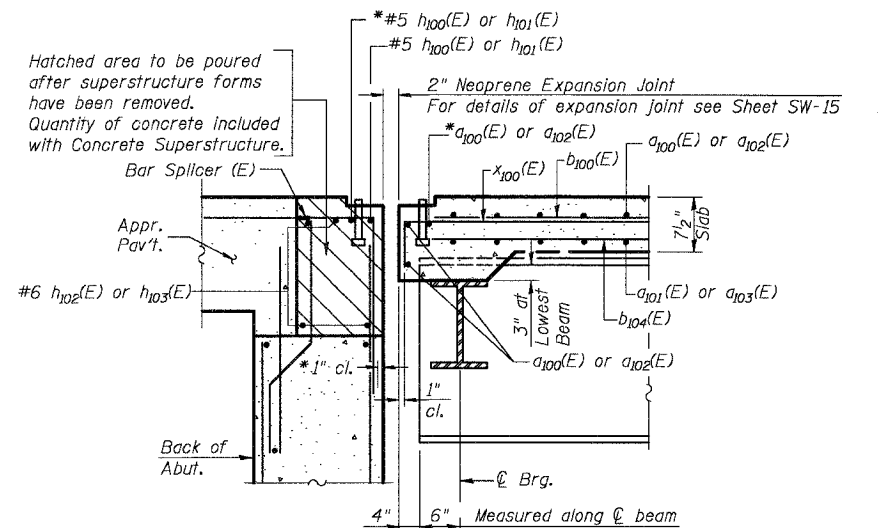
DATE 7-28-2006



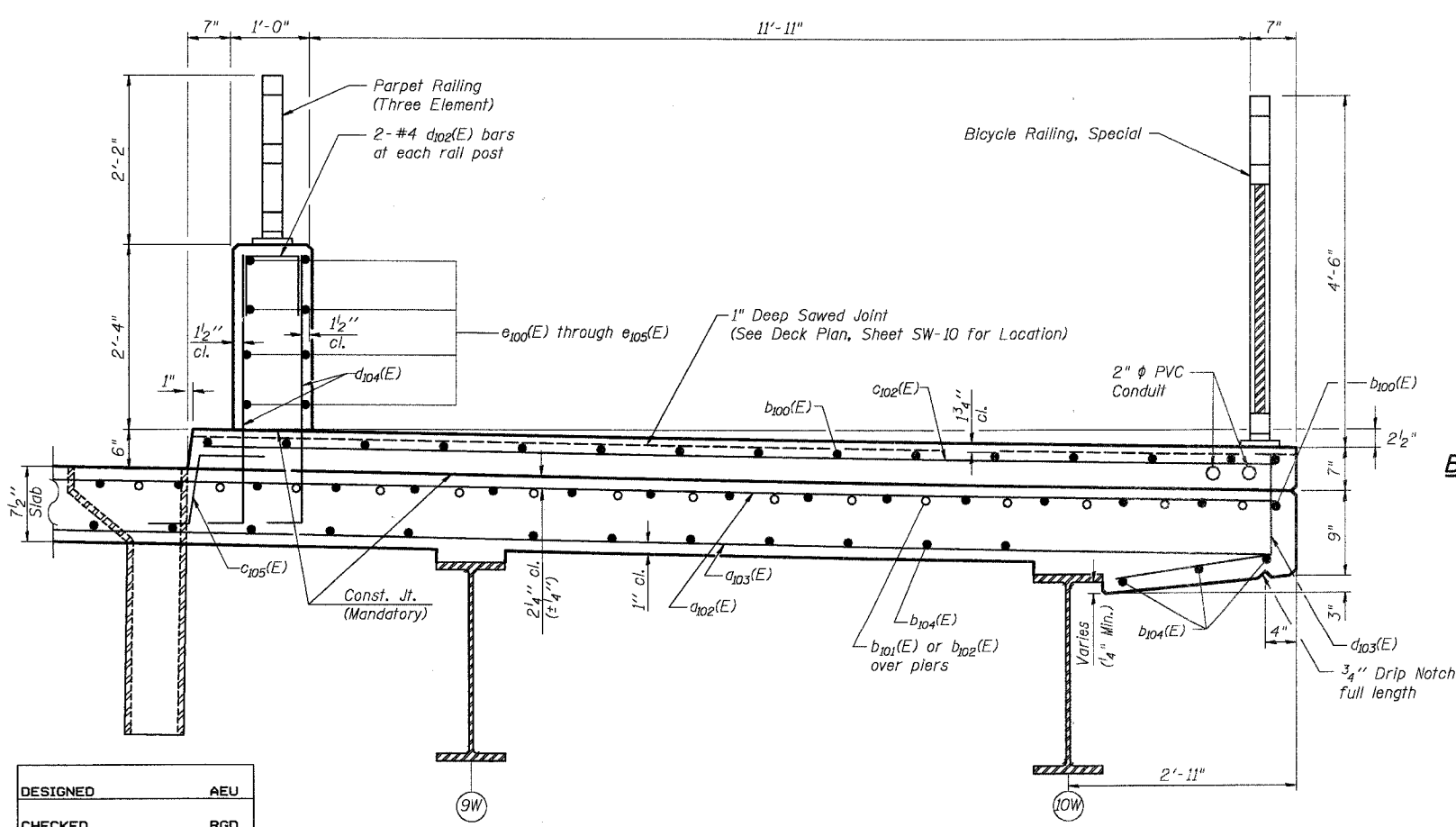
SECTION THRU SIDEWALK



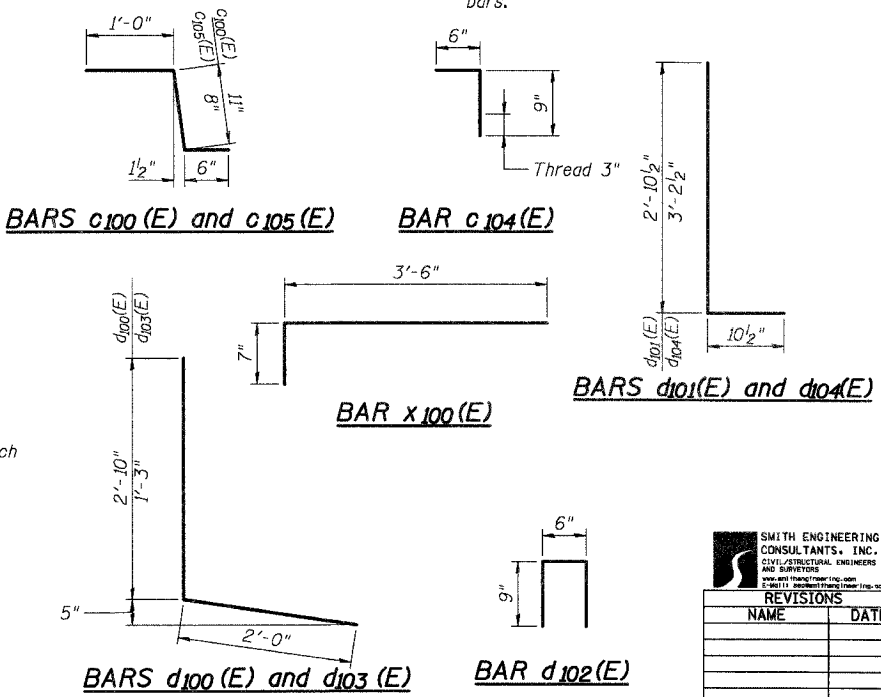
SECTION THRU MEDIAN



SECTION A-A



SECTION THRU SHARED USE PATH



NOTE:
The Cost of Epoxy Coated Expansion Anchors is included in the cost of "Reinforcement Bars, Epoxy Coated".

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a100(E)	599	#5	34'-6"	—
a101(E)	450	#5	34'-6"	—
a102(E)	599	#5	38'-9"	—
a103(E)	450	#5	38'-9"	—
b100(E)	1133	#5	28'-11"	—
b101(E)	148	#6	41'-0"	—
b102(E)	74	#6	34'-6"	—
b104(E)	828	#5	26'-8"	—
b105(E)	128	#5	1'-6"	—
c100(E)	300	#5	2'-5"	—
c101(E)	300	#5	5'-8"	—
c102(E)	300	#5	13'-9"	—
c103(E)	300	#5	1'-8"	—
c104(E)	600	#5	1'-3"	—
c105(E)	300	#5	2'-2"	—
d100(E)	300	#4	4'-10"	—
d101(E)	300	#6	3'-9"	—
d102(E)	124	#4	2'-0"	—
d103(E)	300	#5	3'-3"	—
d104(E)	600	#6	4'-1"	—
d105(E)	8	#4	1'-8"	—
d106(E)	18	#6	8'-11"	—
d107(E)	6	#6	3'-10"	—
d108(E)	9	#6	2'-5"	—
d109(E)	6	#6	1'-8"	—
e100(E)	84	#4	15'-8"	—
e101(E)	48	#4	10'-6"	—
e102(E)	36	#4	18'-1"	—
e103(E)	24	#4	8'-6"	—
e104(E)	36	#4	17'-11"	—
e105(E)	12	#4	17'-2"	—
x100(E)	152	#5	4'-1"	—
Reinforcement Bars, Epoxy Coated			Pound	170,170
Concrete Superstructure			Cu. Yd.	738.2
Bridge Deck Grooving			Sq. Yd.	1,595
Protective Coat			Sq. Yd.	2,762

NOTES:
Work this sheet with sheets SW-10 and SW-12 through SW-14. See sheet SW-10 for Section A-A. For Parapet Railing and Bicycle Railing, Special details see Sheet SW-17. For Bar Splicer Assembly details see Sheet SW-23.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

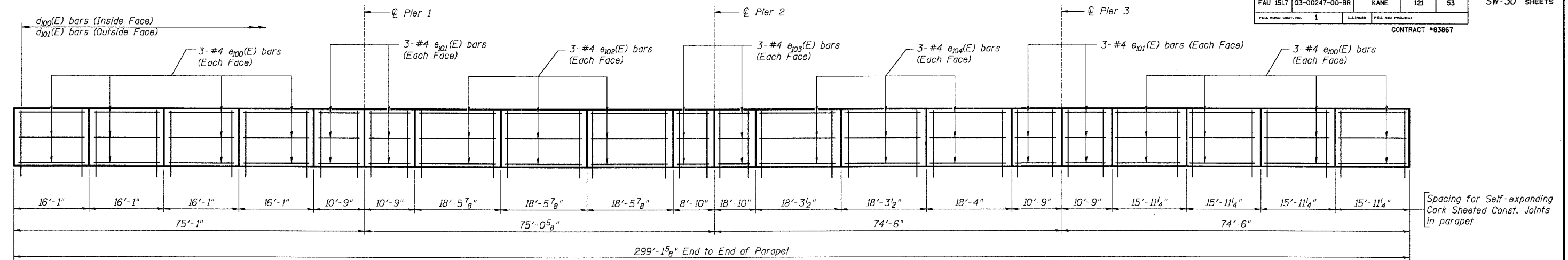
SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, ELECTRICAL AND MECHANICAL ENGINEERS AND SURVEYORS
1000 N. WASHINGTON ST., SUITE 1000, CHICAGO, ILL. 60610
TEL: (312) 467-1000 FAX: (312) 467-1001

CITY OF AURORA	
SUPERSTRUCTURE DETAILS I	
ILLINOIS AVENUE	
OVER THE FOX RIVER	
SECTION NO. 03-00247-00-BR	
KANE COUNTY	
STRUCTURE NO. 045-6009	
DATE 7-28-2006	

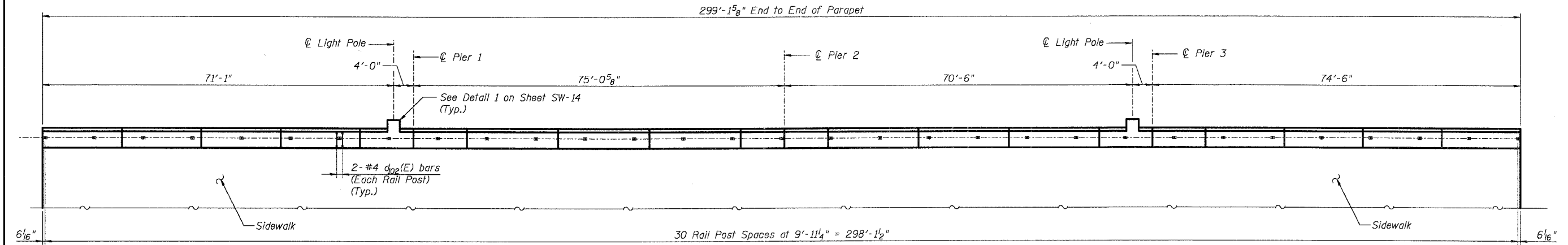
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	53
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

SHEET NO. SW-12
SW-30 SHEETS

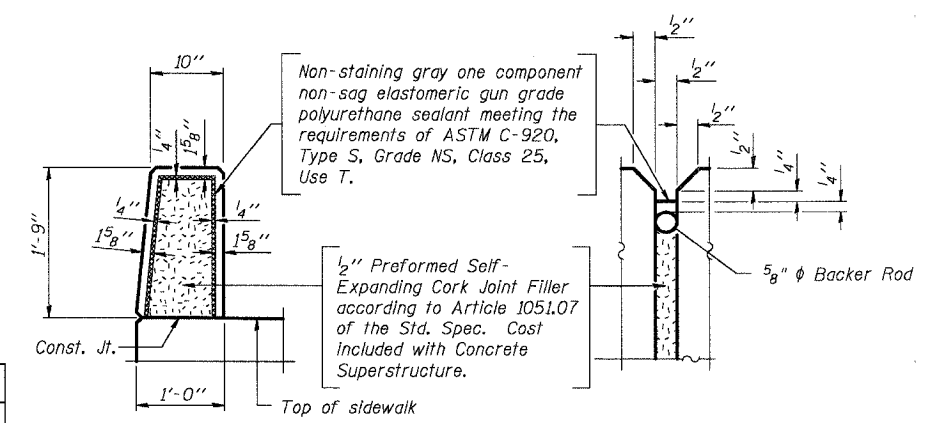
CONTRACT #83867



INSIDE ELEVATION OF NORTH PARAPET



TOP PLAN OF NORTH PARAPET



PARAPET JOINT DETAILS

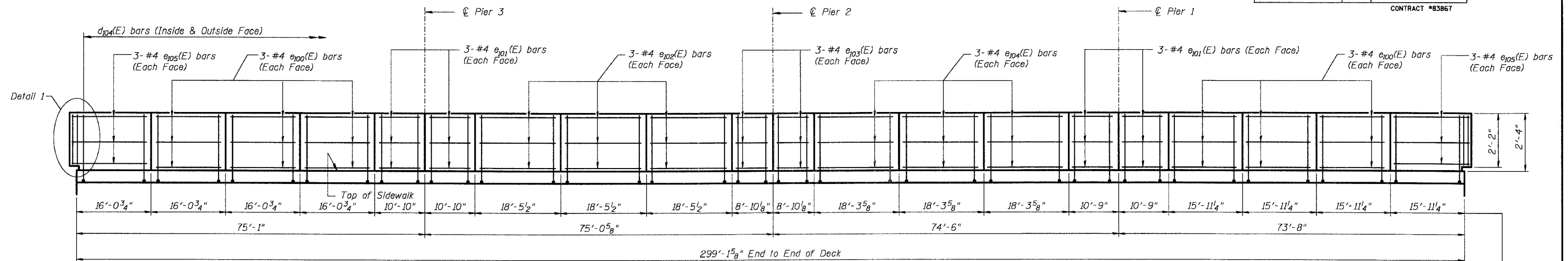
Notes:
Work this Sheet with Sheets SW-10, SW-11 & SW-14.
For parapet railing details see Sheet SW-17.
For light pole support details see Sheet SW-14.
For Bill of Material see Sheet SW-11

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, ELECTRICAL AND SURVEYORS
www.smitheng.com
11011 Woodland Drive, Suite 100, Aurora, IL 60011

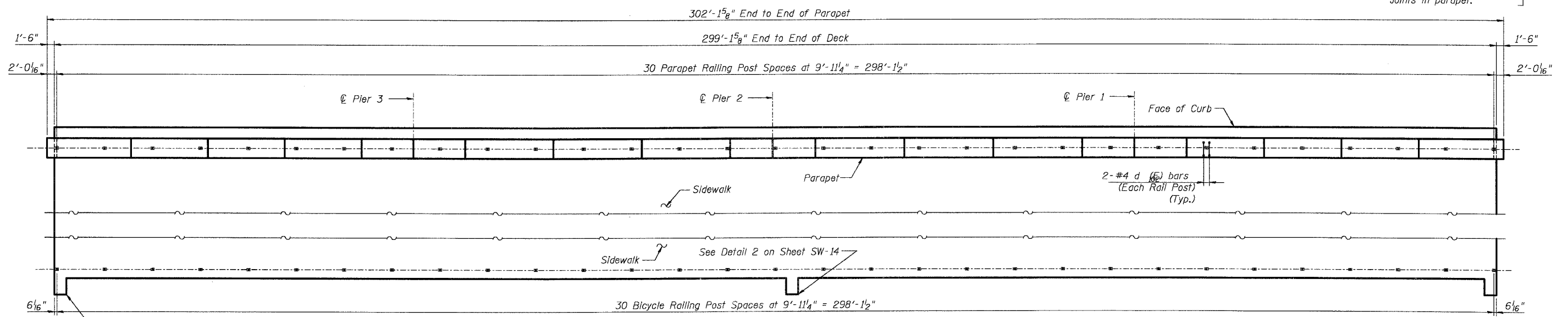
CITY OF AURORA	
SUPERSTRUCTURE DETAILS II OVER THE FOX RIVER SECTION NO. 03-00247-00-BR KANE COUNTY STRUCTURE NO. 045-6009	
DATE	7-28-2006

COMPANY NAME, SIZE, AND ADDRESS
 CLIENT NAME AND ADDRESS
 PROJECT NAME AND ADDRESS
 DRAWING NUMBER AND DATE
 SCALE
 DRAWN BY
 CHECKED BY
 DESIGNED BY
 DATE

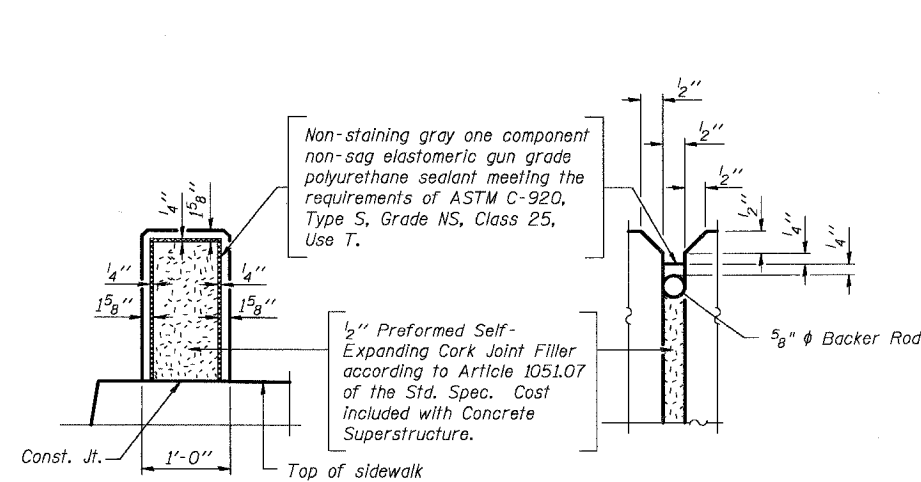


INSIDE ELEVATION OF SOUTH PARAPET

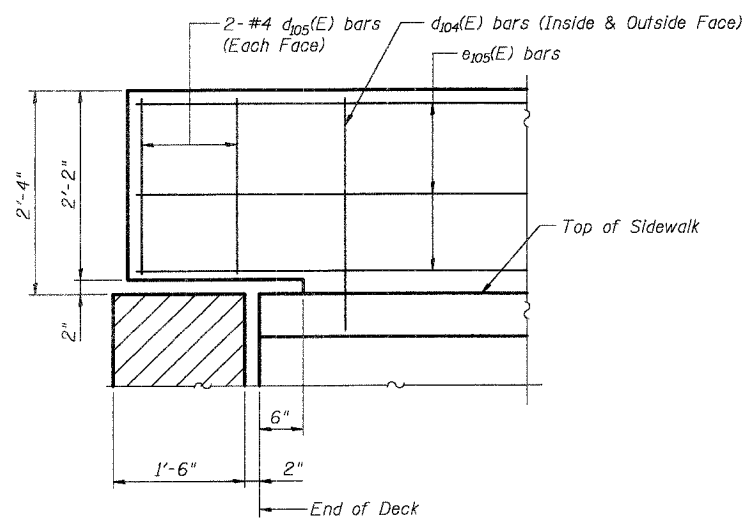
Spacing for Self-expanding
Cork Sheeted Construction
Joints in parapet.



TOP PLAN OF SHARED USE PATH



SOUTH PARAPET JOINT DETAILS



DETAIL 1

Typical at both ends of Parapet

Notes:
Work this Sheet with Sheets SW-10, SW-11 & SW-14.
For parapet railing details see Sheet SW-11.
For light pole support details see Sheet SW-14.
For Bill of Material see Sheet SW-11.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

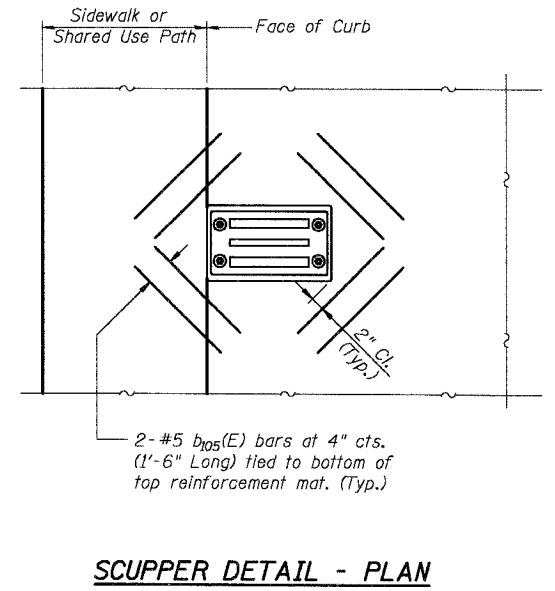
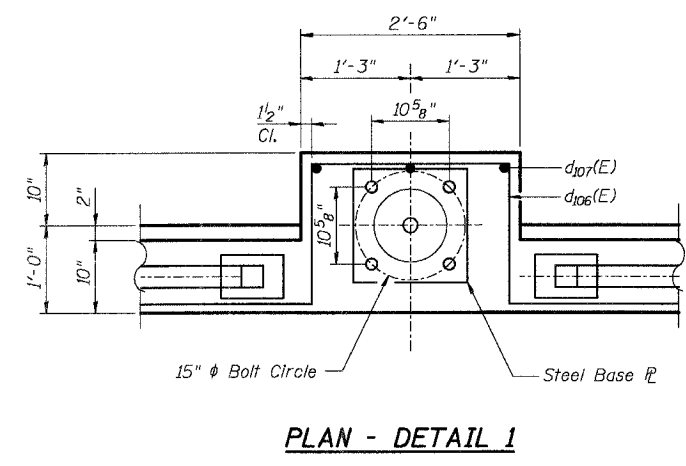
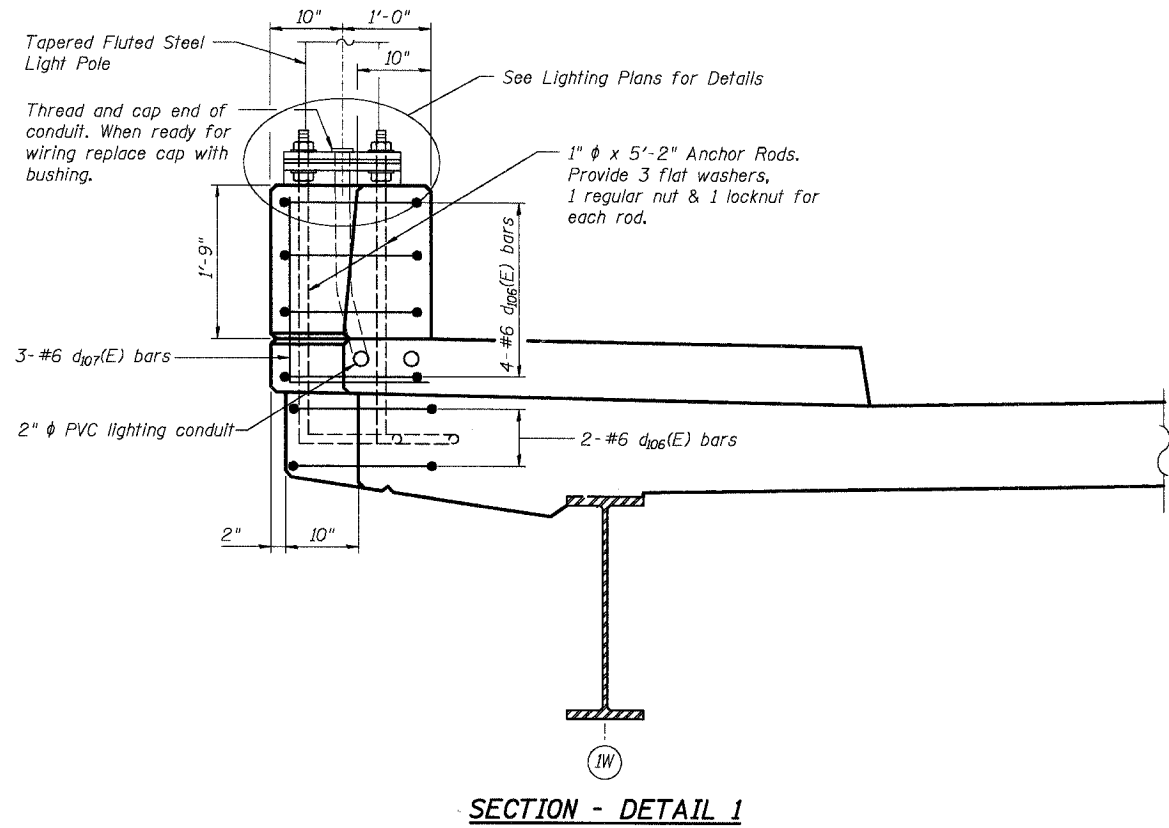


REVISIONS	
NAME	DATE

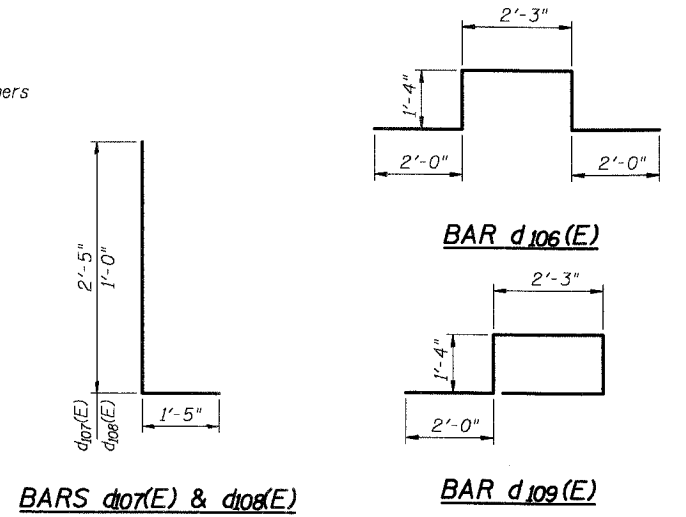
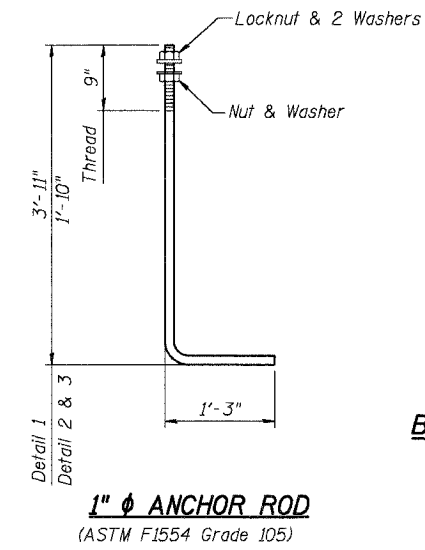
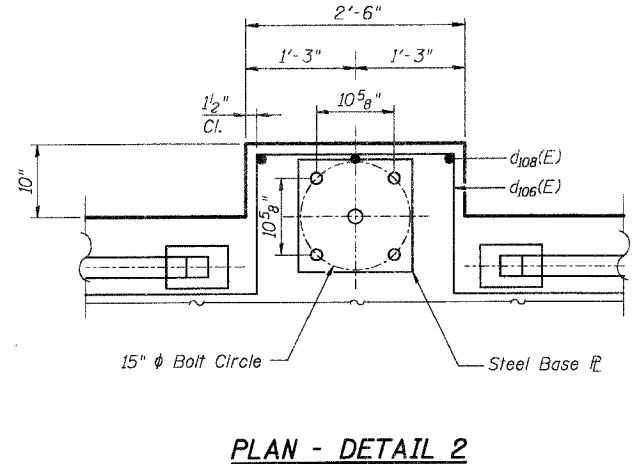
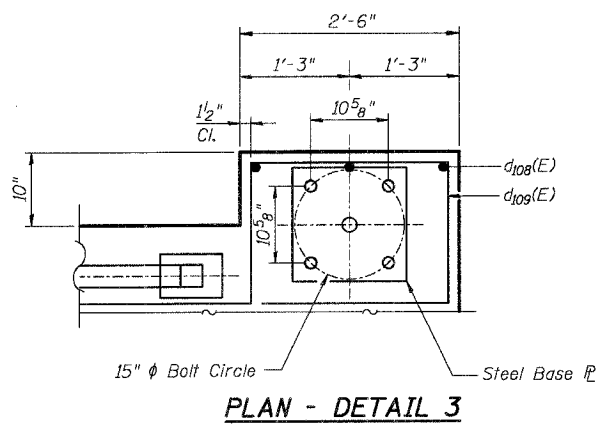
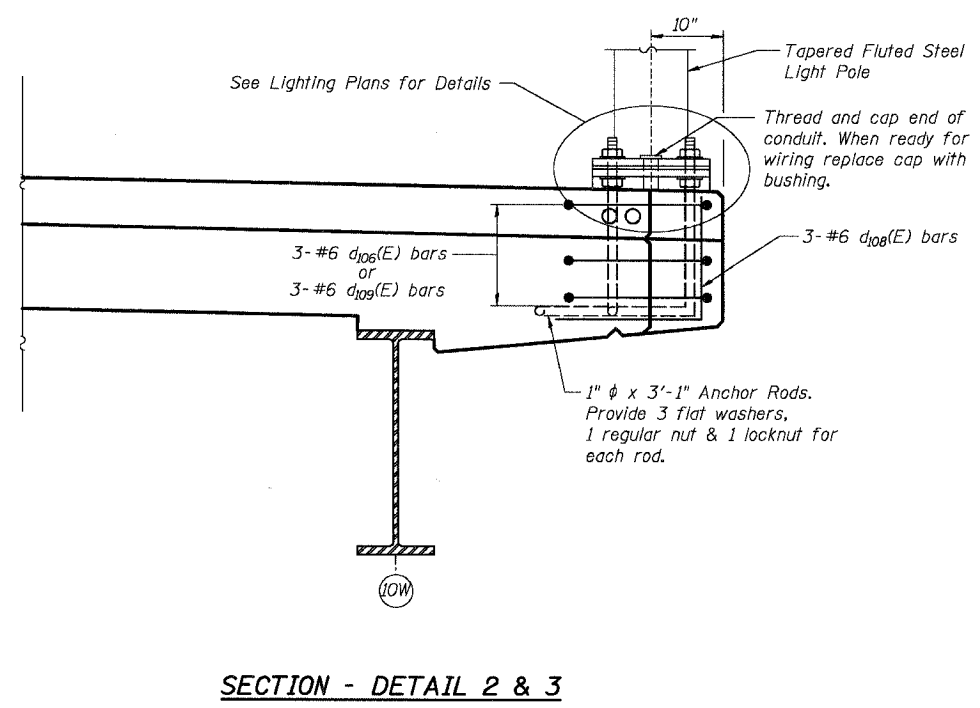
CITY OF AURORA
SUPERSTRUCTURE DETAILS III
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE 7-28-2006

CONTRACT NO. 03-00247-00-BR, SHEET SW-13 OF 30 SHEETS
 PROJECT: ILLINOIS AVENUE OVER THE FOX RIVER
 DRAWN BY: WJH
 CHECKED BY: NRF
 DATE: 7-28-2006



LIGHT POLE MOUNTED ON CONCRETE PARAPET DETAILS



NOTES:
Work this sheet with sheets SW-10 through SW-13.
For Bill of Material see Sheet SW-11.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

CITY OF AURORA

SUPERSTRUCTURE DETAILS IV
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE 7-28-2006

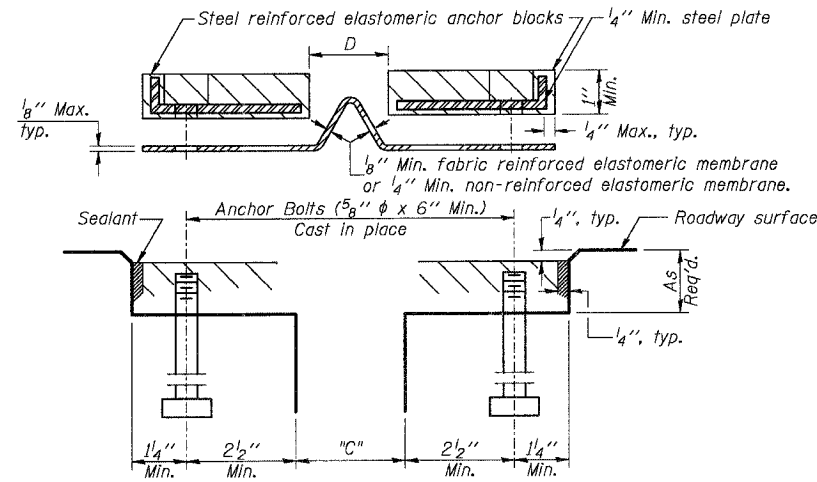
DESIGN: AEU, INC. PROJECT: FAU 1517, SHEET: SW-30, DATE: 7-28-2006, PROJECT: SUPERSTRUCTURE DETAILS IV, OVER THE FOX RIVER, KANE COUNTY, ILLINOIS.

Joint Size	"C" at 50°F	"D" at 50°F
2"	2"	1 1/2" Min.

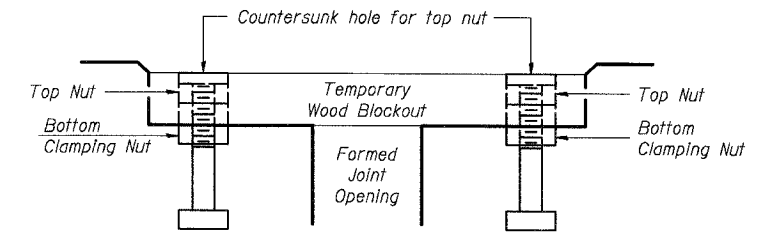
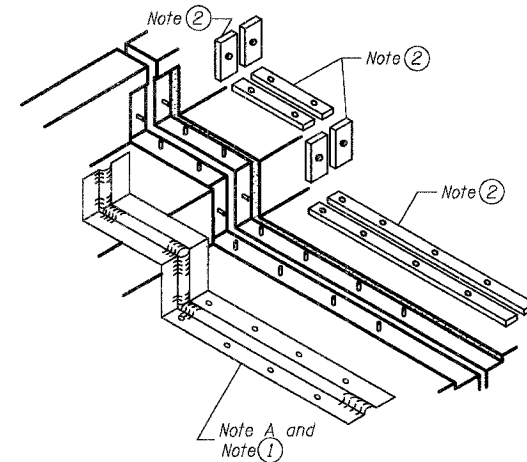
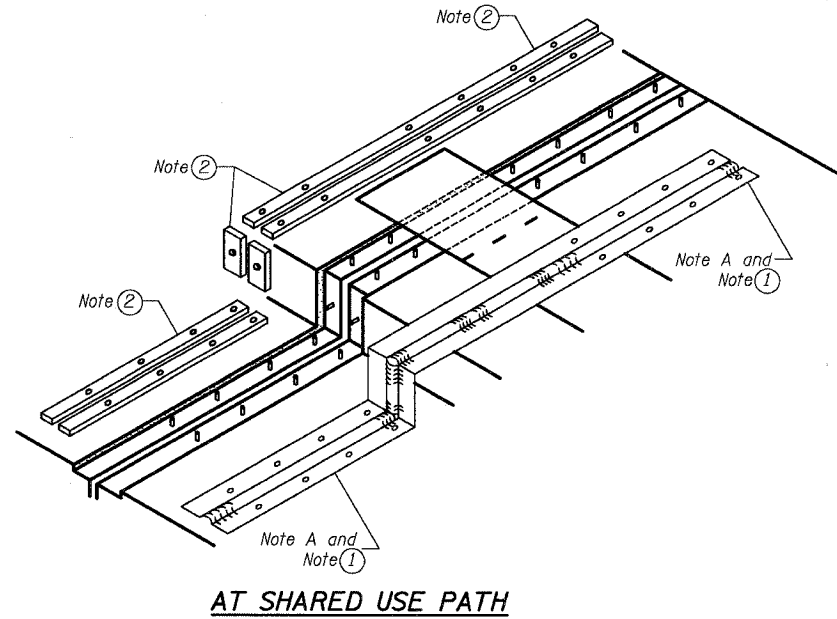
INSTALLATION NOTES

- ① Install continuous seal in roadway, parapet, curb, and sidewalk.
- ② Install anchor blocks as indicated.

Note A:
Maximum spacing of anchor bolts shall be 12" centers.

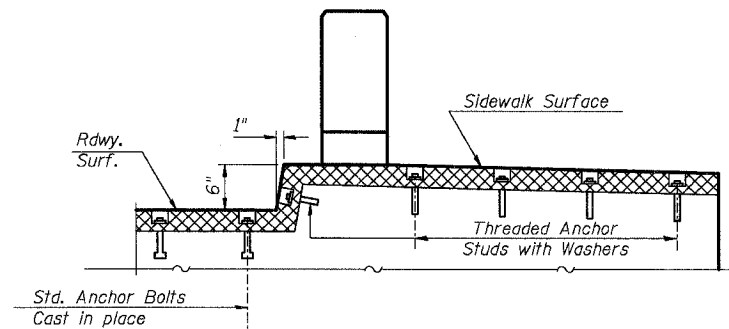


CROSS SECTION

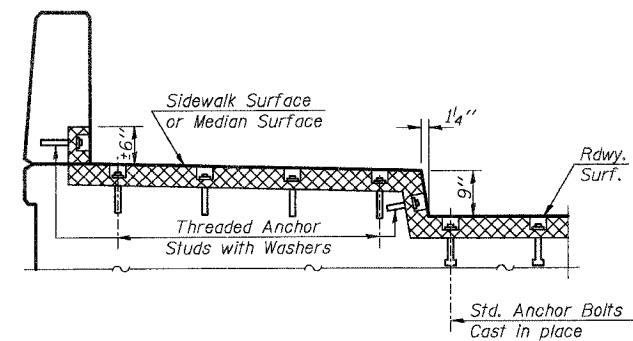


Note:
Stud needs to be threaded lower to allow for use of clamping nut.

RECOMMENDED BLOCKOUT DETAIL



AT SHARED USE PATH TYPICAL END TREATMENTS



AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS

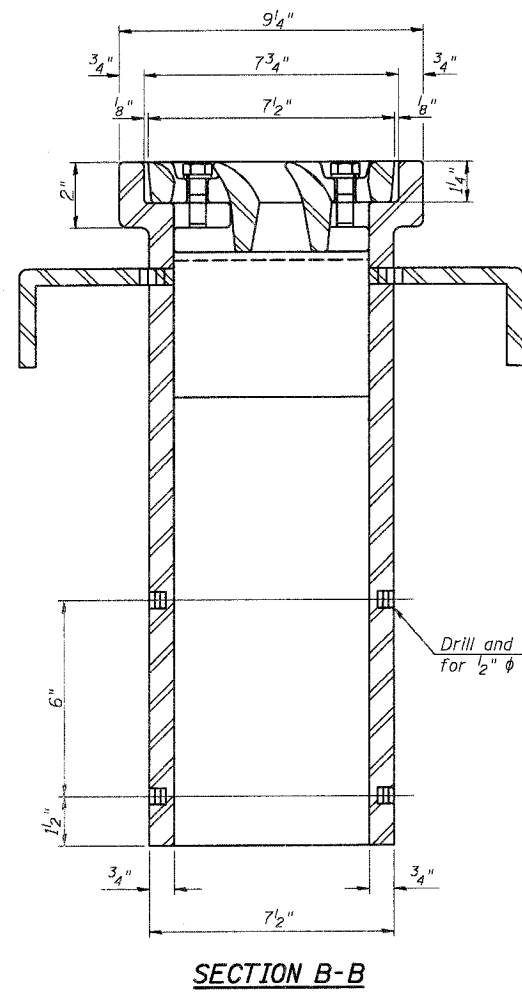
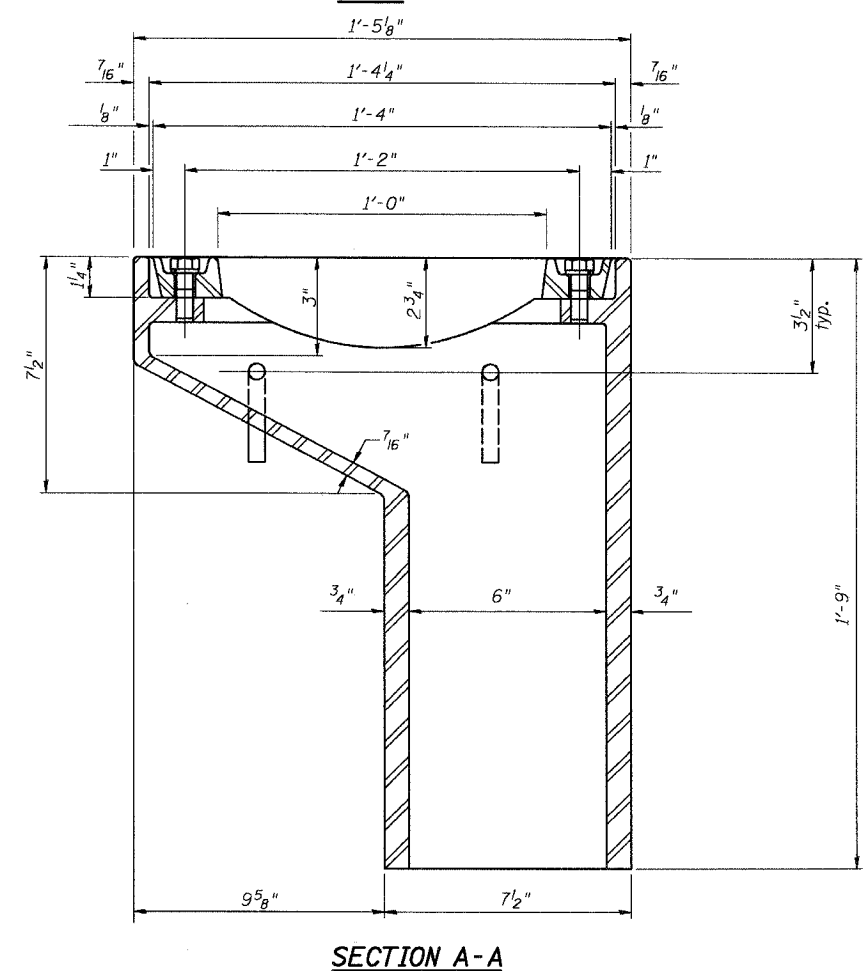
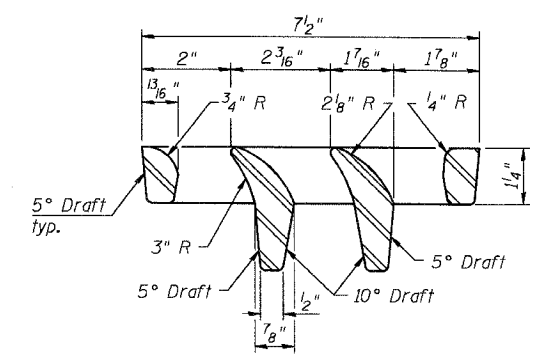
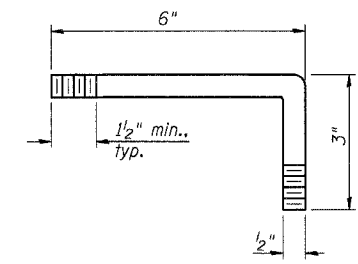
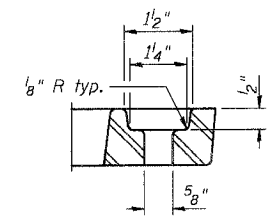
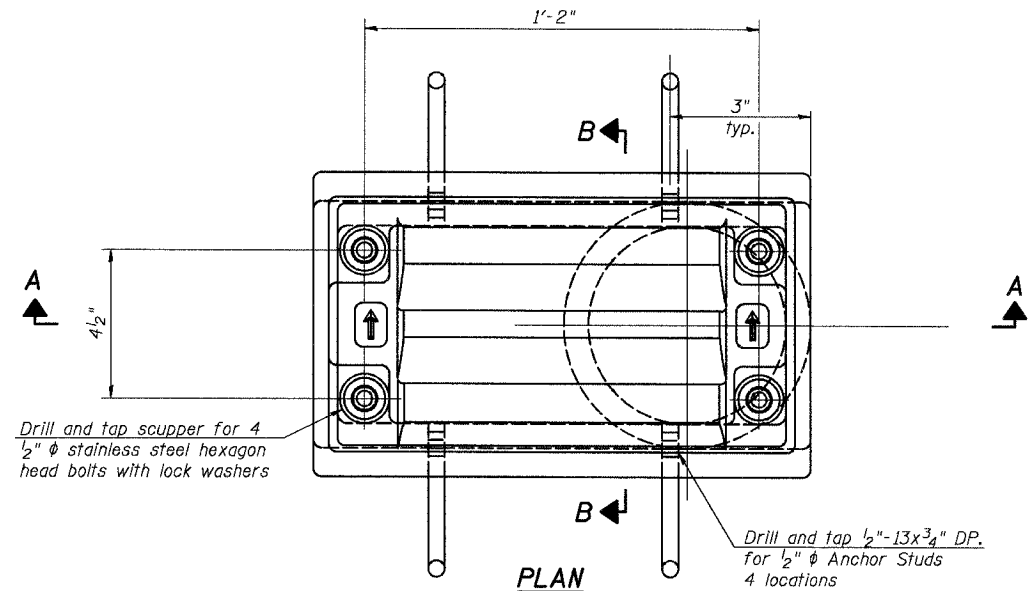
BILL OF MATERIAL

Item	Unit	Quantity
Neoprene Expansion Joint 2"	Foot	152.7

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC. CIVIL, STRUCTURAL, ELECTRICAL AND SURVEYORS 1111 S. WASHINGTON ST., SUITE 200 AURORA, ILLINOIS 60007	
REVISIONS	
NAME	DATE

CITY OF AURORA
NEOPRENE EXPANSION JOINTS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE 7-28-2006



Notes:

All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.

Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.

The grate, frame and downspout shall be galvanized according to AASHTO M 111 and ASTM A 385. Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.

As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.

Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

BILL OF MATERIAL

Item	Unit	Quantity
Drainage Scuppers, DS-11	Each	16

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC. CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS	
www.smith-engineering.com 214111 and 214112 Smith-Eng.com	
REVISIONS	
NAME	DATE

CITY OF AURORA

DRAINAGE SCUPPER, DS-11

ILLINOIS AVENUE

OVER THE FOX RIVER

SECTION NO. 03-00247-00-BR

KANE COUNTY

STRUCTURE NO. 045-6009

DATE 7-28-2006

DRAWING NAME: SEE PLAN
 PROJECT CONTACT: PROJECT CONTACT
 DATE: 7/28/06
 PROJECT NO: 03-00247-00-BR
 SHEET NO: SW-30 SHEETS

CONTRACT #83867

NOTES

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the Contract Unit Price per foot for Bicycle Railing, Special or Parapet Railing.

Hollow structural sections shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36.

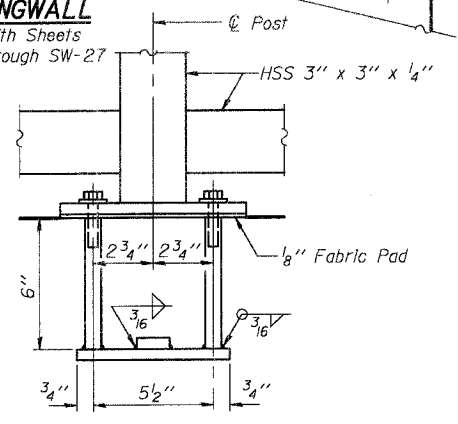
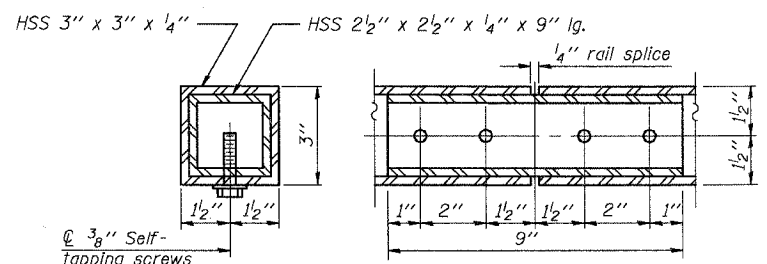
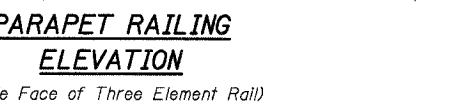
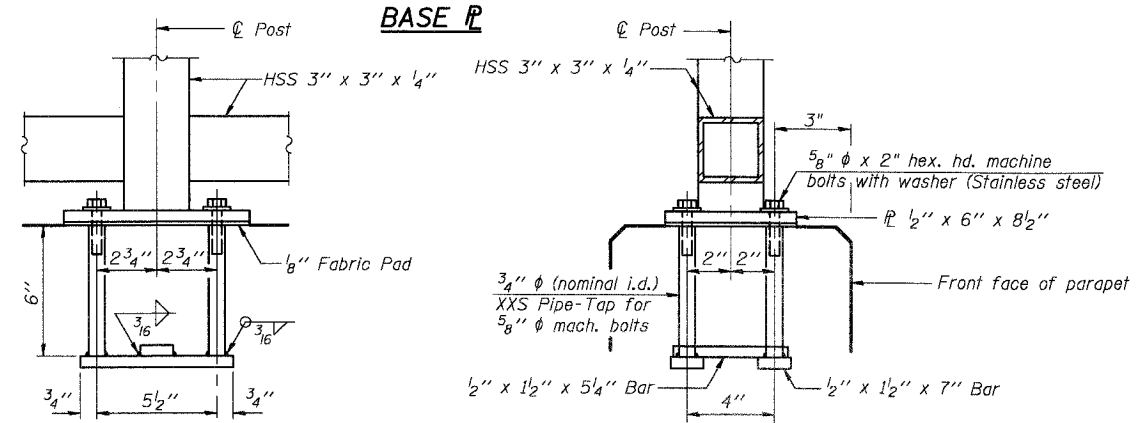
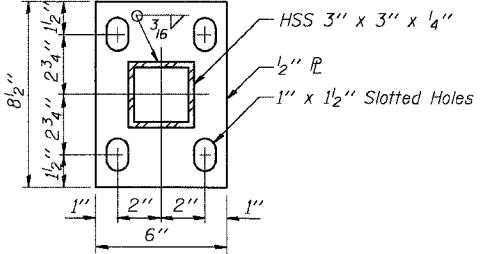
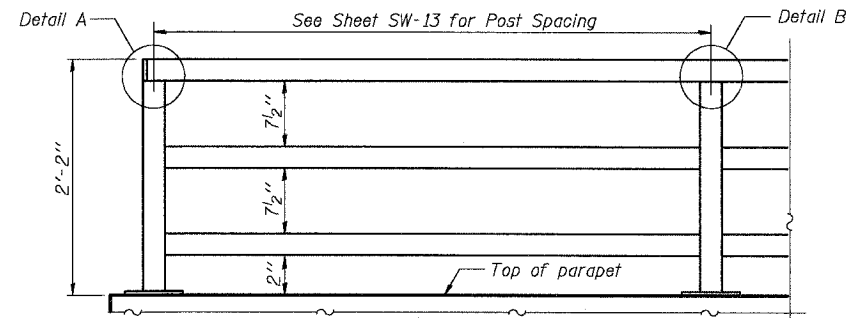
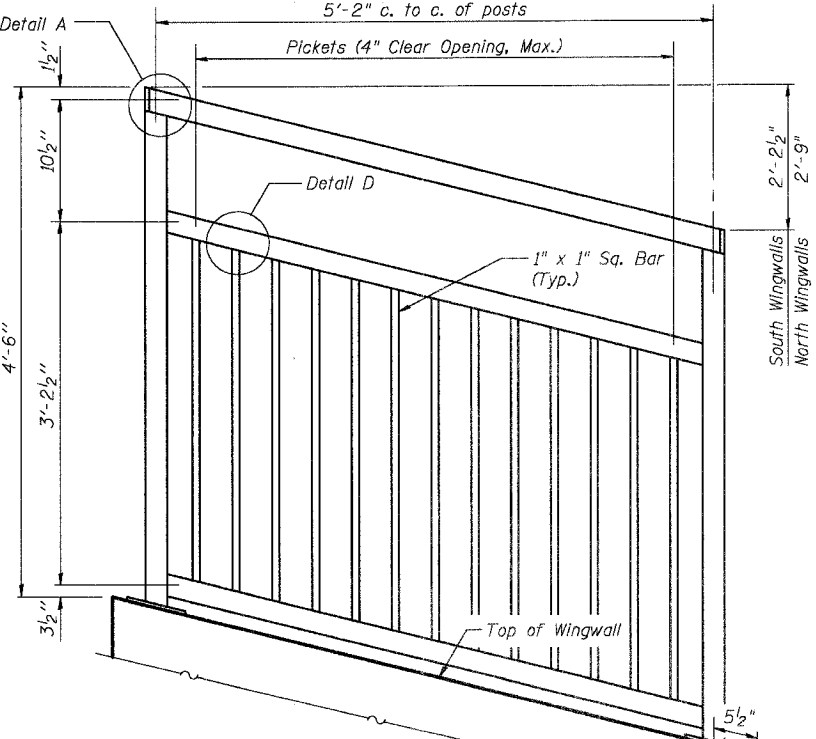
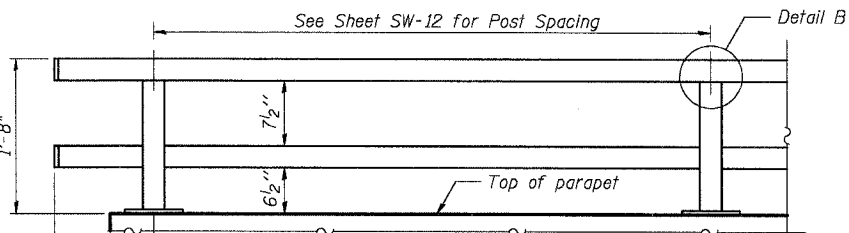
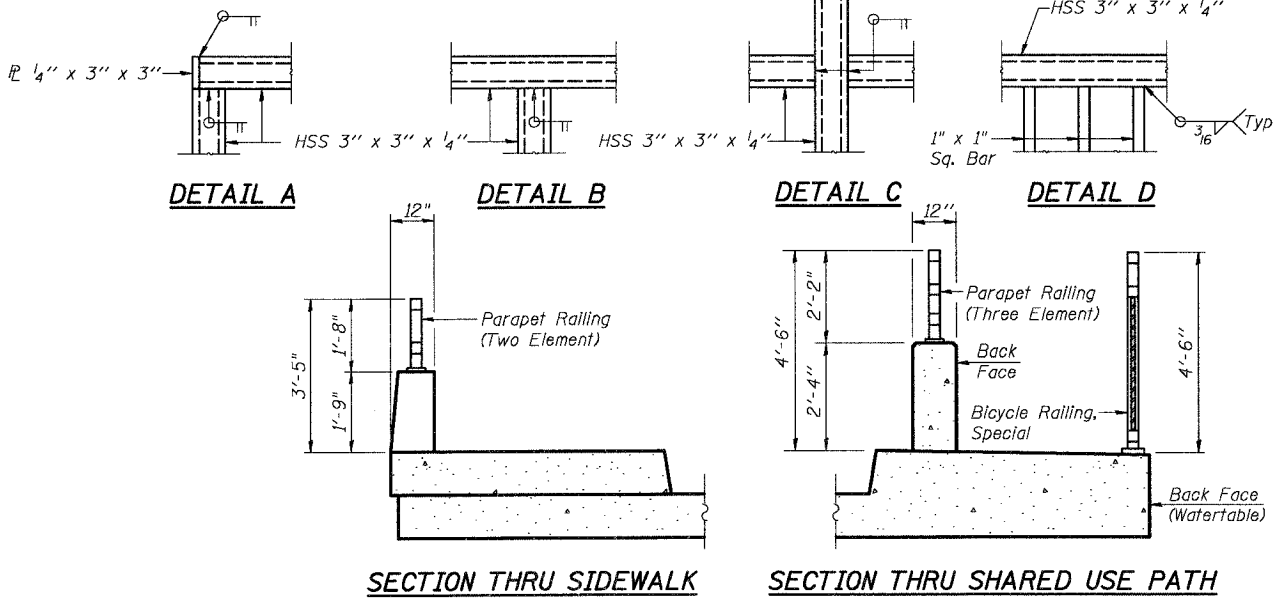
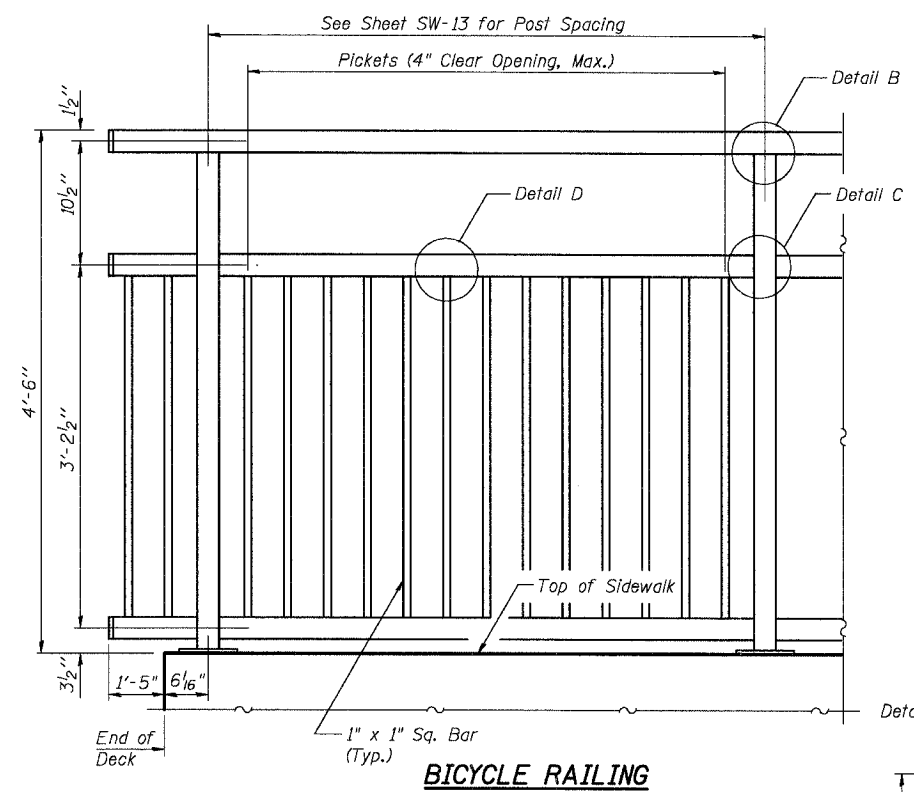
The Three Element Parapet Railing, furnished and installed shall not be paid for separately but shall be included in the unit bid price for Bicycle Railing, Special.

If the option of drilling and epoxy grouting the anchor rods is chosen, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with pre-measured amounts of the adhesive chemical.

Space reinforcement to miss anchor rods.

All post, railing, pickets, splices, and anchor devices shall be powder coated black. The powder coating system to be used shall be approved by the engineer prior to the coating process.

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting $\frac{5}{8}$ " ϕ anchor rods. Embedment shall be according to the manufacturer's specifications.



DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

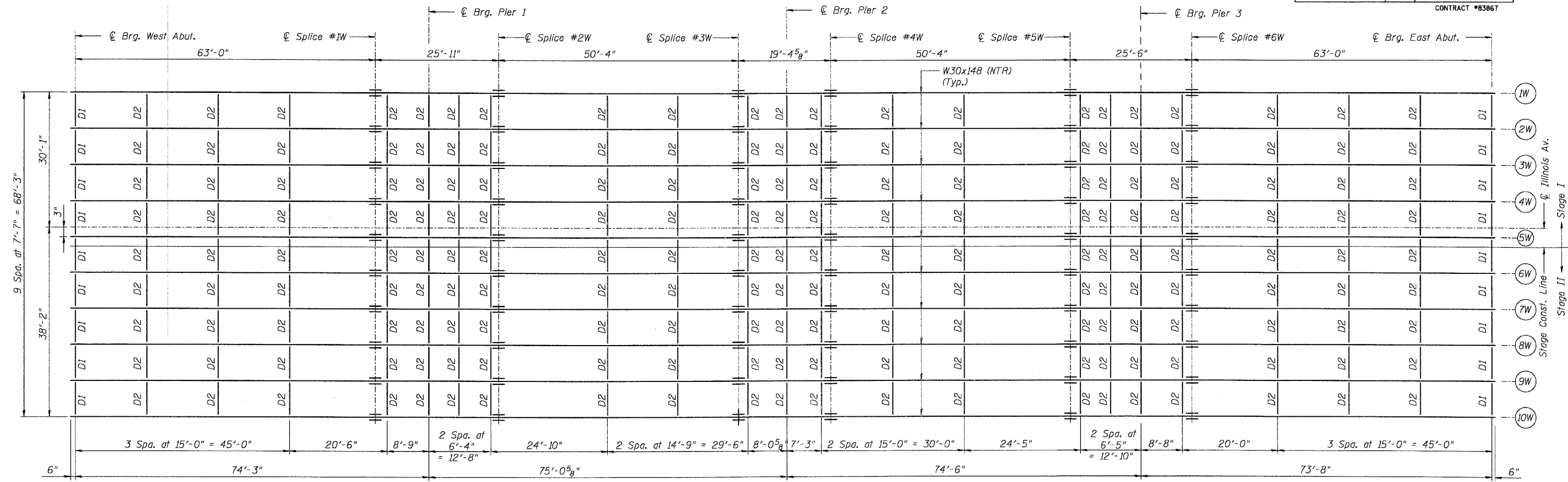
BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing, Special	Foot	298
Parapet Railing	Foot	298

REVISIONS	
NAME	DATE

CITY OF AURORA
BRIDGE RAILING DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE 7-28-2006

COMPANY NAME: SES, INC.
 CLIENT: ILLINOIS
 PROJECT: CONTRACT
 ADDRESS: 1111 S. WASHINGTON ST., SUITE 200, AURORA, IL 60180
 PHONE: 630.584.1111
 FAX: 630.584.1112
 WWW: www.sesinc.com



FRAMING PLAN

INTERIOR GIRDER MOMENT TABLE

	0.4 Sp. 1	Pier 1	0.5 Sp. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4
I_s	6,680	6,680	6,680	6,680	6,680	6,680	6,680
$I_c (n)$	17,020	-	17,020	-	17,020	-	17,020
$I_c (3n)$	12,596	-	12,596	-	12,596	-	12,596
S_s	436	436	436	436	436	436	436
$S_c (n)$	622	-	622	-	622	-	622
$S_c (3n)$	566	-	566	-	566	-	566
Z	-	500	-	500	-	500	-
ϕ	1.00	1.55	1.00	1.55	1.00	1.55	1.00
$M\phi$	449	776	254	549	248	765	444
$s\phi$	0.55	-	0.55	-	0.55	-	0.55
$M_s\phi$	269	-	173	-	170	-	265
M_t	642	309	567	289	563	306	637
M (Imp)	161	77	142	72	141	77	160
$5_3[M_t + M(\text{Imp})]$	1,339	644	1,182	602	1,173	638	1,329
M_a	2,674	1,846	2,092	1,496	2,069	1,824	2,649
M_u	3,015	2,083	3,015	2,083	3,015	2,083	3,015
$f_s\phi$ (non-comp)	12.4	21.4	7.0	15.1	6.8	21.1	12.2
$f_s\phi$ (comp)	5.7	-	3.7	-	3.6	-	5.6
$f_s 5_3 (t + \text{Imp})$	25.8	17.7	22.8	16.6	22.6	17.6	25.6
f_s (Overload)	43.9	39.1	33.5	31.7	33.1	38.6	43.5
f_s (Total)	-	-	-	-	-	-	-
VR	56.9	-	46.0	-	45.9	-	56.9

INTERIOR GIRDER REACTION TABLE

	W. Abut.	Pier 1	Pier 2	Pier 3	E. Abut.
$R\phi$	45.7	130.8	109.4	129.9	45.5
R_t	42.4	56.0	54.2	55.8	42.3
Imp.	10.6	14.0	13.6	14.0	10.6
R (Total)	98.7	200.8	177.2	199.7	98.4

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s (Total & Overload).
 $I_c (n)$ and $S_c (n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 $I_c (3n)$ and $S_c (3n)$ are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (See AASHTO 10.3B)
 VR is the maximum Live Load + Impact shear range in span.
 Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
 M_a (Applied Moment) = $1.3[M\phi + M_s\phi + 5_3(M_t + M(\text{Imp}))]$.
The Plastic Moment capacity (M_u) is computed according to AASHTO 10.48.1 and 10.50.1.1.
 f_s (Overload) is the sum of the stresses due to $M\phi + M_s\phi + 5_3(M_t + M(\text{Imp}))$.
 f_s (Total) (Non-compaction section) is the sum of the stresses due to $1.3[M\phi + M_s\phi + 5_3(M_t + M(\text{Imp}))]$.

TOP OF BEAM ELEVATIONS (For Fabrication Use Only)

LOCATION	WEST ABUT.	EAST ABUT.	PIER 1	PIER 2	PIER 3	SPLICE 1W	SPLICE 2W	SPLICE 3W	SPLICE 4W	SPLICE 5W	SPLICE 6W
Beam 1W	638.71	641.77	639.48	640.37	641.19	639.35	639.66	640.25	640.48	641.05	641.29
Beam 2W	638.86	641.93	639.64	640.53	641.35	639.51	639.81	640.41	640.64	641.21	641.44
Beam 3W	639.02	642.09	639.80	640.68	641.51	639.67	639.97	640.57	640.79	641.37	641.60
Beam 4W	639.15	642.21	639.92	640.81	641.63	639.79	640.09	640.69	640.92	641.49	641.73
Beam 5W	639.26	642.32	640.03	640.92	641.74	639.90	640.21	640.80	641.03	641.60	641.84
Beam 6W	639.14	642.20	639.91	640.80	641.63	639.78	640.09	640.68	640.91	641.48	641.72
Beam 7W	639.01	642.08	639.79	640.67	641.50	639.66	639.96	640.56	640.78	641.36	641.59
Beam 8W	638.85	641.92	639.63	640.52	641.34	639.50	639.80	640.40	640.63	641.20	641.43
Beam 9W	638.70	641.76	639.47	640.36	641.18	639.34	639.65	640.24	640.47	641.04	641.28
Beam 10W	638.54	641.60	639.31	640.20	641.03	639.18	639.49	640.08	640.31	640.88	641.12

NOTES:
All material shall be AASHTO M270 Grade 50.
NTR indicates notch toughness requirements.
See Sheet SW-19 for typical beam elevation and framing details.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.	
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS	
REVISIONS	
NAME	DATE

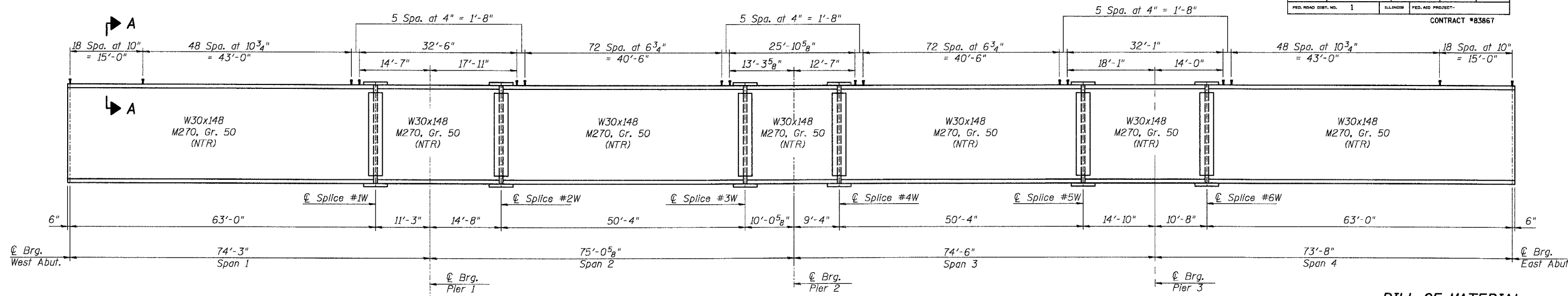
CITY OF AURORA

STEEL FRAMING PLAN
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE 7-28-2006

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	60
FED. ROAD DIST. NO. 1	BILLINGS	FED. AID PROJECT-	CONTRACT #83867	

SHEET NO. SW-19
SW-30 SHEETS



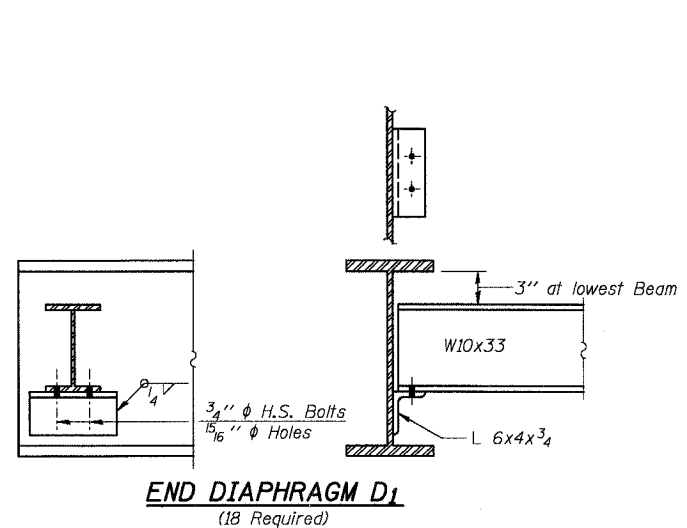
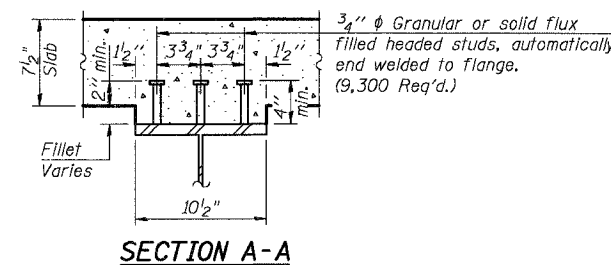
TYPICAL BEAM ELEVATION

"NTR" denotes beams to which Notch Toughness requirements are applicable

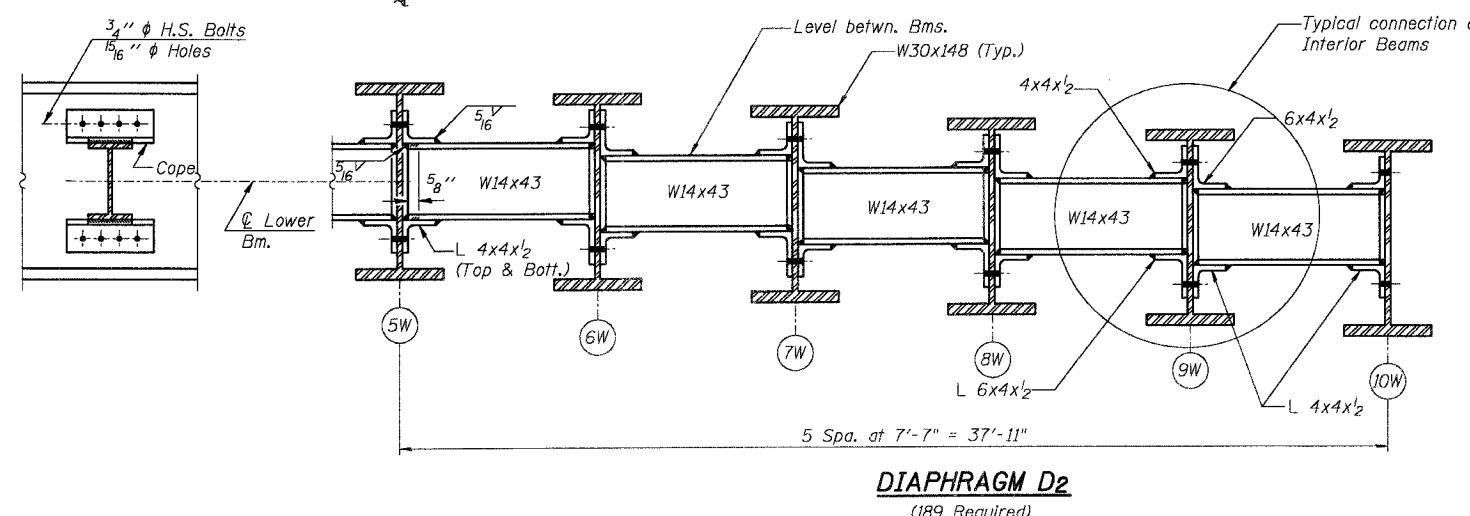
BILL OF MATERIAL

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	L. Sum	0.66
Stud Shear Connectors	Each	9,300

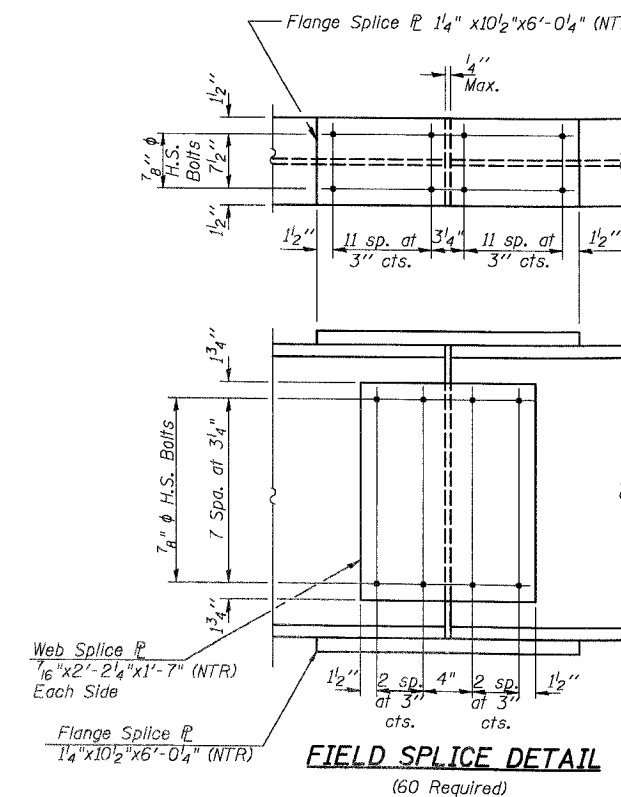
Notes:
Work this Sheet with Sheets SW-18, SW-20 & SW-21.
All splice material shall be M270 Grade 50.



END DIAPHRAGM D1
(18 Required)



DIAPHRAGM D2
(189 Required)



FIELD SPLICE DETAIL
(60 Required)

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

Note:
Two hardened washers shall be required over all oversize holes for diaphragms.



REVISIONS	
NAME	DATE

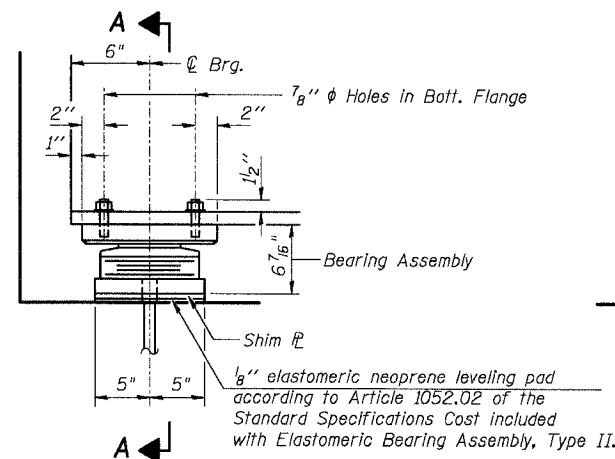
CITY OF AURORA
STEEL FRAMING DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE 7-28-2006

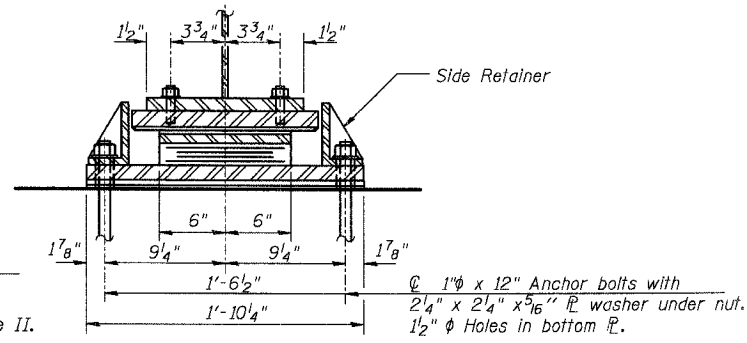
ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	61
FED. ROAD DIST. NO.	1	ILLINOIS	FED. AID PROJECT-	

SHEET NO. SW-20
SW-30 SHEETS

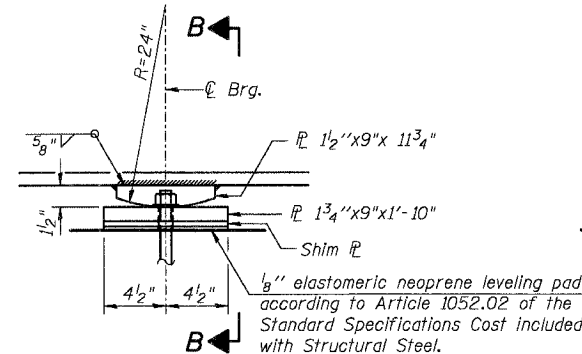
CONTRACT #83867



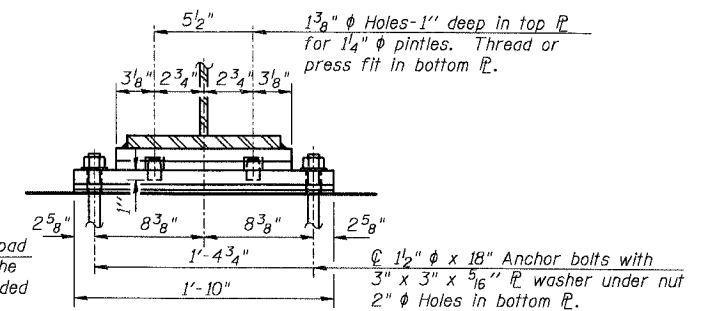
ELEVATION AT ABUTS.



SECTION A-A



ELEVATION AT PIER 2



SECTION B-B

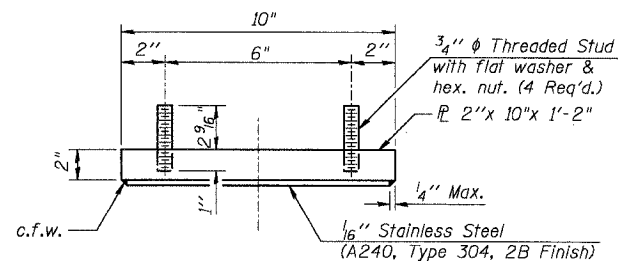
TYPE II ELASTOMERIC EXP. BRG.

(20 Required)

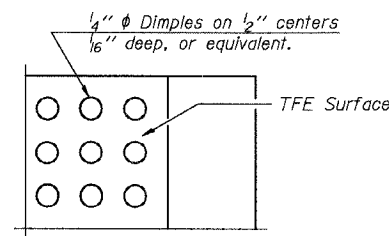
Notes:
See sheet SW-22 for Anchor Bolt installation.

FIXED BEARING

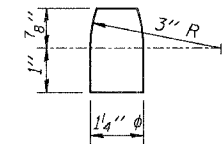
(10 Required)



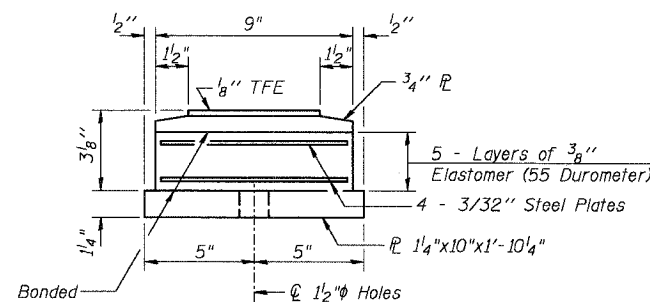
TOP BEARING ASSEMBLY



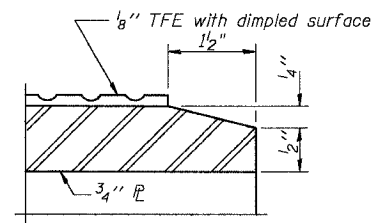
PLAN-TFE SURFACE



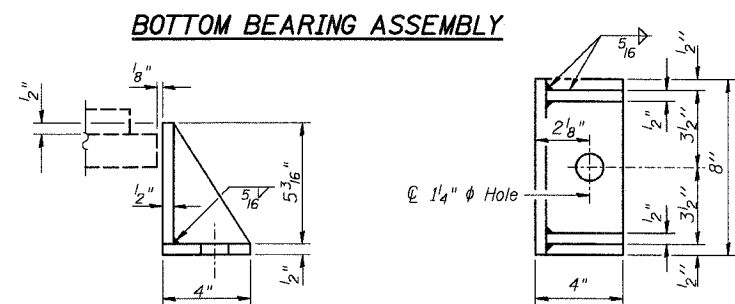
PINTLE
(Fy=50 ksi)



BOTTOM BEARING ASSEMBLY



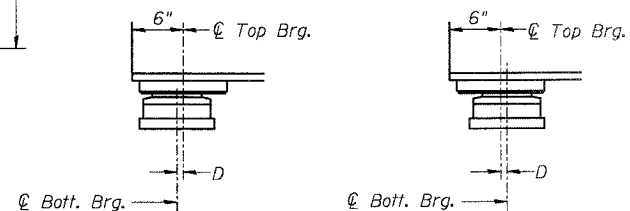
SECTION THRU TFE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.

Notes:
The 1/8" TFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces. Bonding of 1/8" TFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



BELOW 50°F.

ABOVE 50°F.

(Move bott. brg. away from fixed brg.) (Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D=1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL

Item	Unit	Quantity
Elastomeric Bearing Assembly, Type II	Each	20

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
2001 N. Paulina Street, Chicago, IL 60610
Tel: (312) 329-1100 Fax: (312) 329-1101

REVISIONS

NAME	DATE

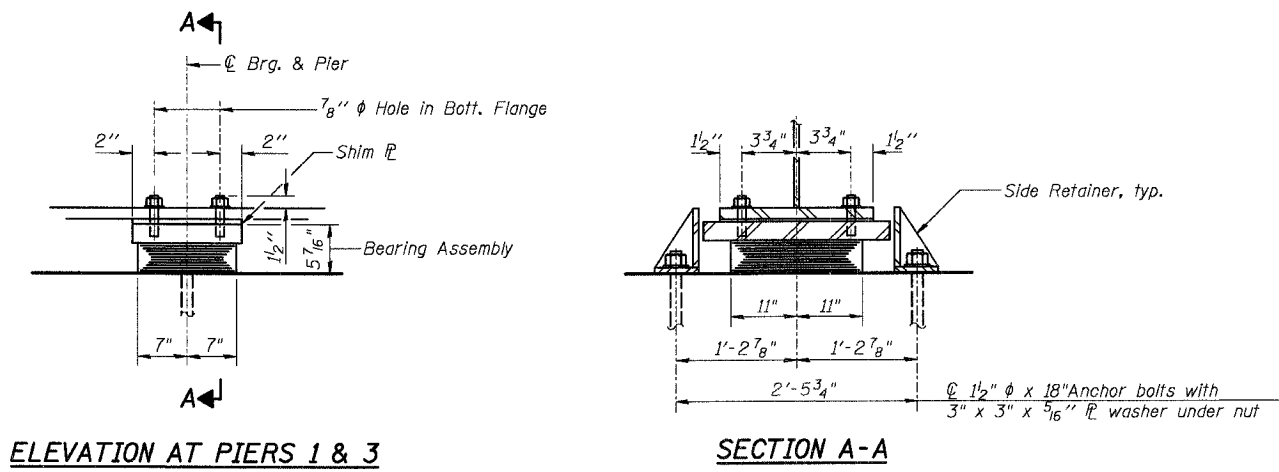
CITY OF AURORA
BEARING DETAILS I
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE 7-28-2006

PROJECT NO. 03-00247-00-BR SHEET NO. SW-30
 PROJECT CONTRACT NO. 03-00247-00-BR
 DRAWN BY WJH
 CHECKED BY NRF
 DATE 7-28-2006

ROUTE NO.	DISTRICT	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	62
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-	CONTRACT #83867	

SHEET NO. SW-21
SW-30 SHEETS

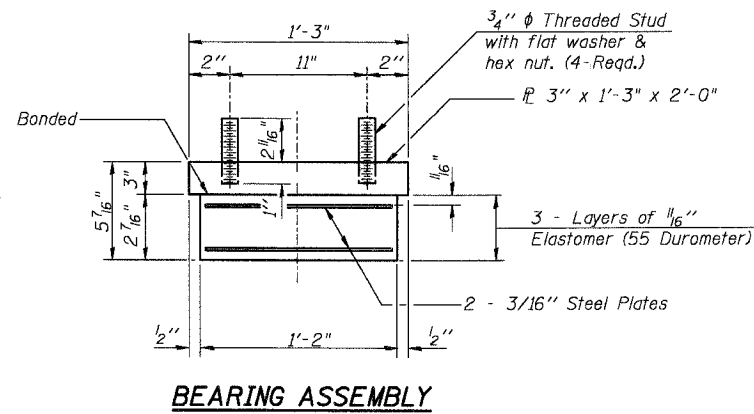


ELEVATION AT PIERS 1 & 3

SECTION A-A

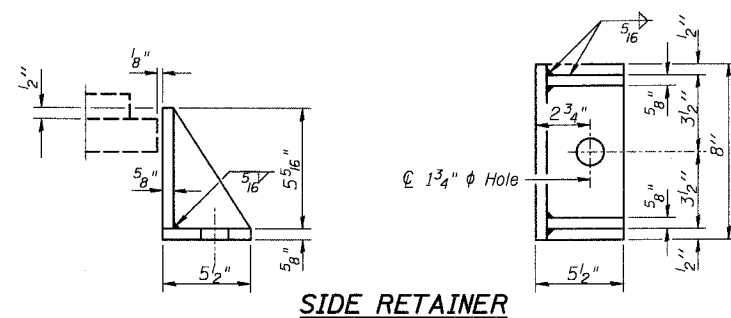
TYPE I ELASTOMERIC EXP. BRG.
(20 Required)

Notes:
See sheet SW-22 for Anchor Bolt Installation.



BEARING ASSEMBLY

Note:
Shim plates shall not be placed under Bearing Assembly.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.

BILL OF MATERIAL

Item	Unit	Quantity
Elastomeric Bearing Assembly, Type I	Each	20

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

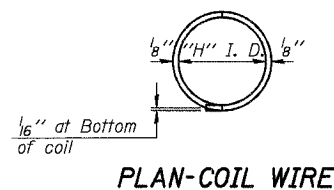
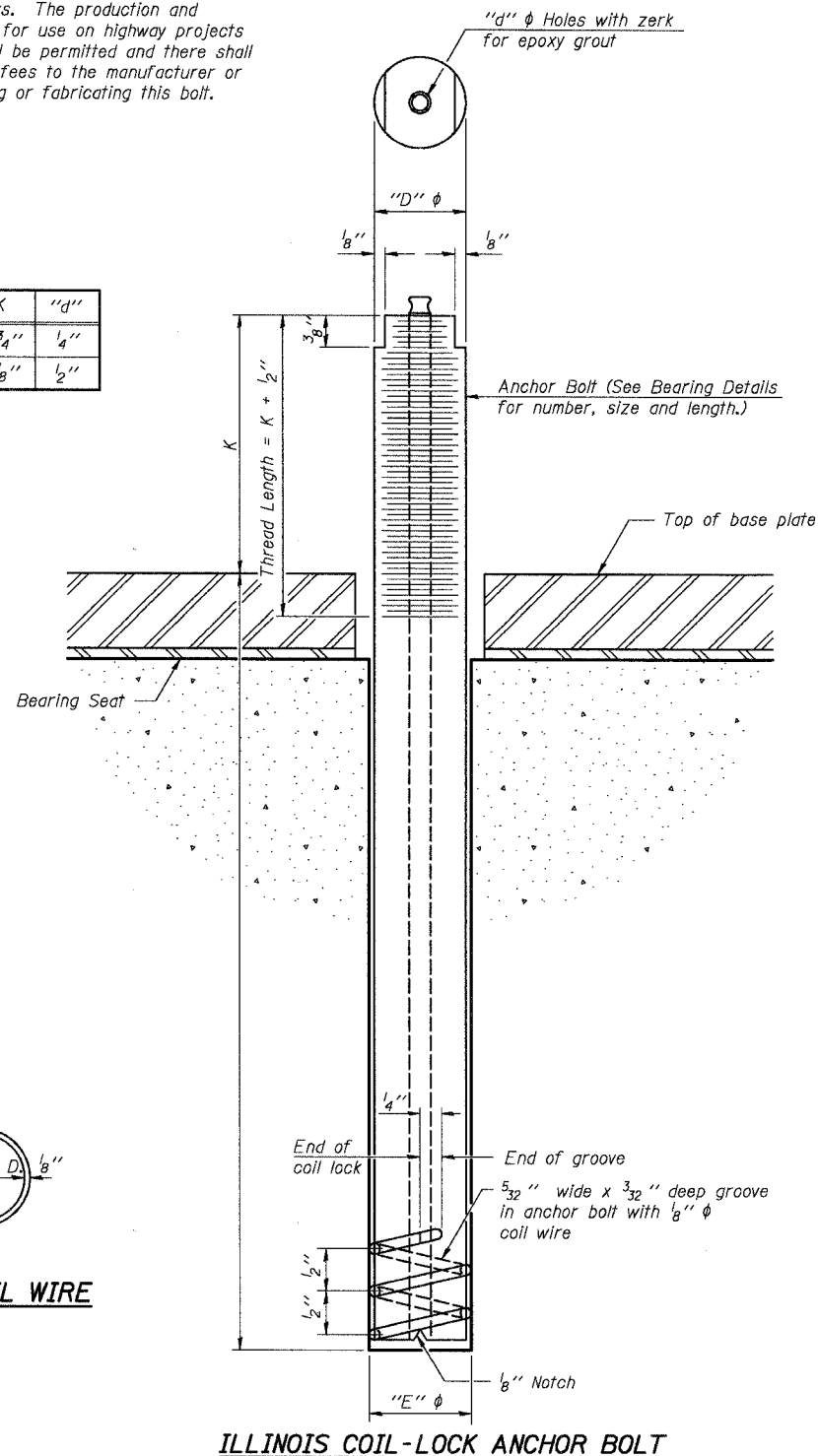
SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
17251 E. Mississippi Avenue
Denver, Colorado 80241-3805
Tel: 303-755-1111 Fax: 303-755-1122

REVISIONS	
NAME	DATE

CITY OF AURORA
BEARING DETAILS II
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE: 7-28-2006

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1"	1 1/8"	1 3/16"	1 3/4"	1/4"
1 1/2"	1 5/8"	1 5/16"	2 1/8"	1/2"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type 1, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.
The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer of the type specified.
2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Size	Type
Abutments	1" ϕ	A 307
Piers 1 & 3	1 1/2" ϕ	M 164
Pier 2	1 1/2" ϕ	A 307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
The anchor bolts, furnished and installed and including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC. CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS	
REVISIONS	
NAME	DATE

CITY OF AURORA	
ANCHOR BOLT DETAILS ILLINOIS AVENUE OVER THE FOX RIVER SECTION NO. 03-00247-00-BR KANE COUNTY STRUCTURE NO. 045-6009	
DATE 7-28-2006	

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$
 - ② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_{s_{allow}} \times A_t$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

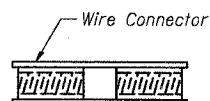
Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



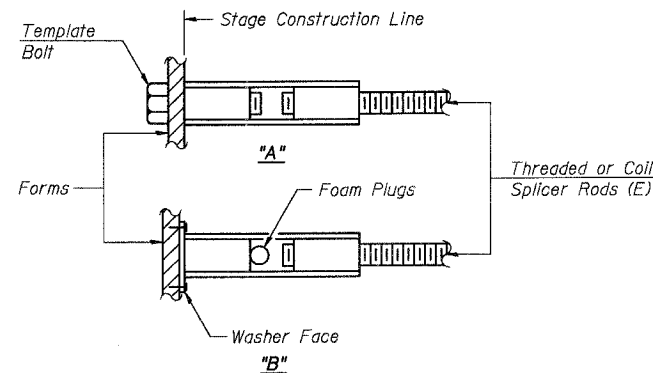
** ONE PIECE



WELDED SECTIONS

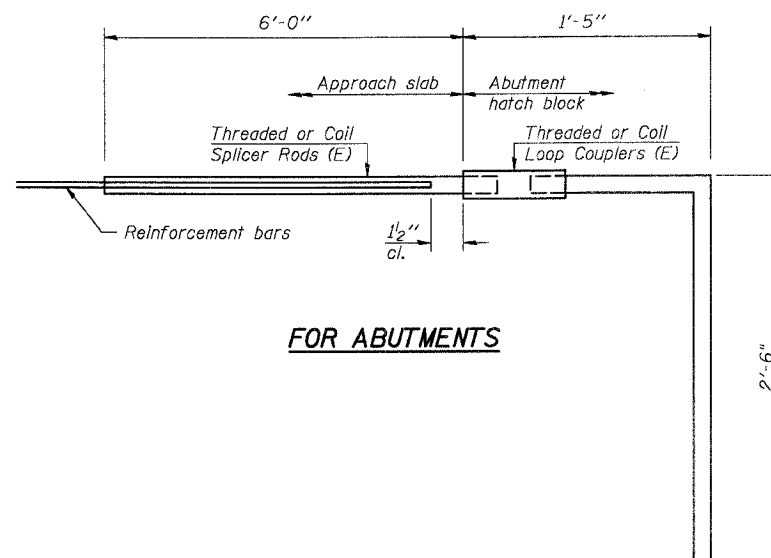
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



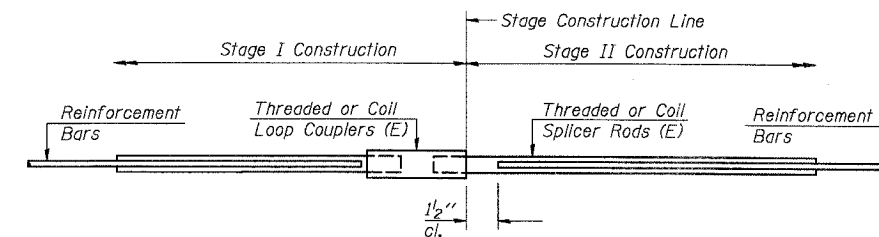
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



FOR ABUTMENTS

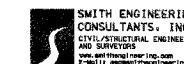
Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 9.2 kips - tension	
No. Required = 112	



STANDARD

Bar Size	No. Assemblies Required	Location
#5	599	Deck
#5	450	Deck
#5	20	W. Abut.
#6	4	W. Abut.
#7	7	W. Abut.
#5	11	Pier 1
#8	10	Pier 1
#5	11	Pier 2
#8	10	Pier 2
#5	11	Pier 3
#8	10	Pier 3
#5	20	E. Abut.
#6	4	E. Abut.
#7	7	E. Abut.

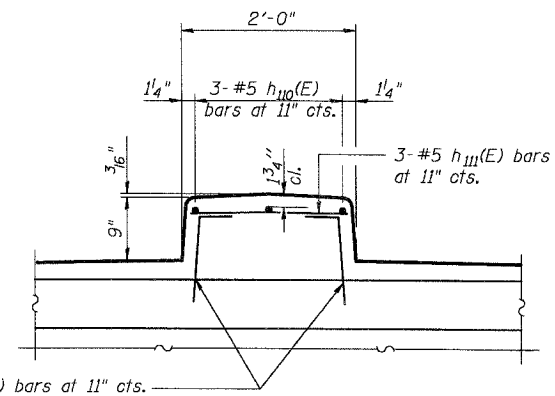
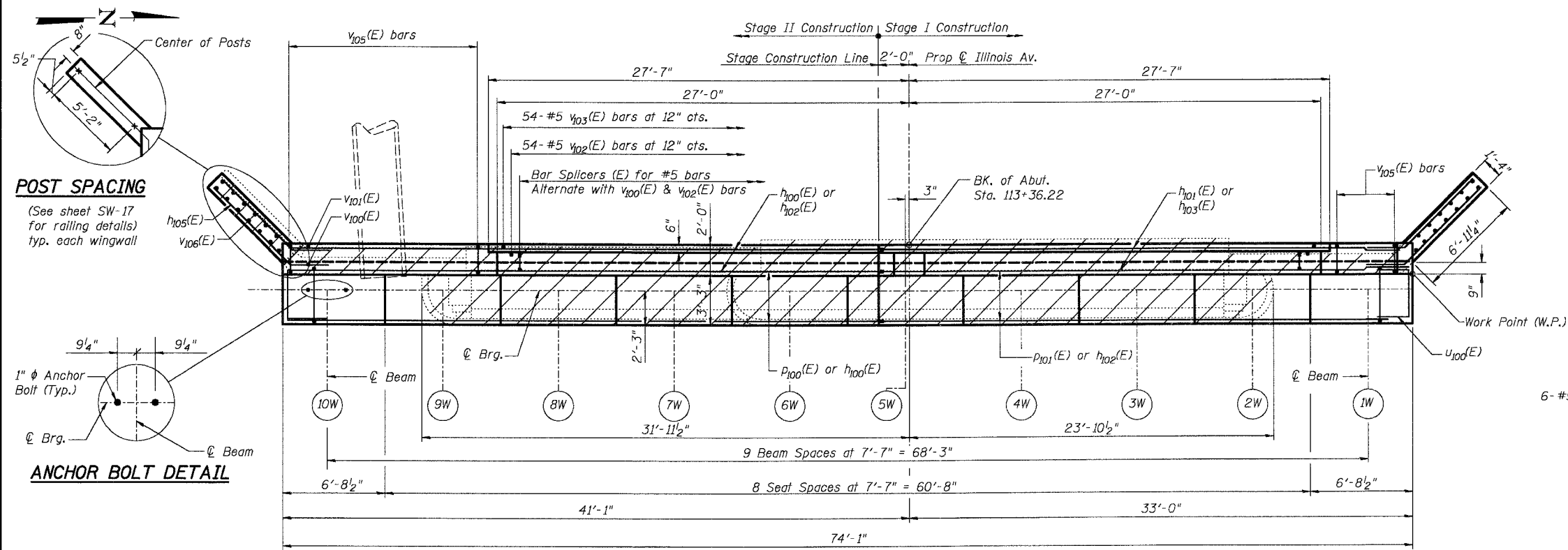
DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



REVISIONS	
NAME	DATE

CITY OF AURORA
BAR SPLICER DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

DATE 7-28-2006



NOTES:

Work this sheet with sheets SW-17, and SW-25.

Space reinforcement in abutment seat to miss anchor bolts.

Contractor to field verify dimensions of existing abutment and wingwalls and locations of existing storm pipe in wingwall.

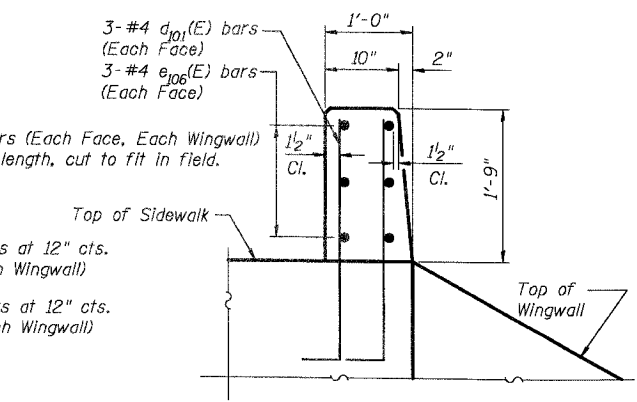
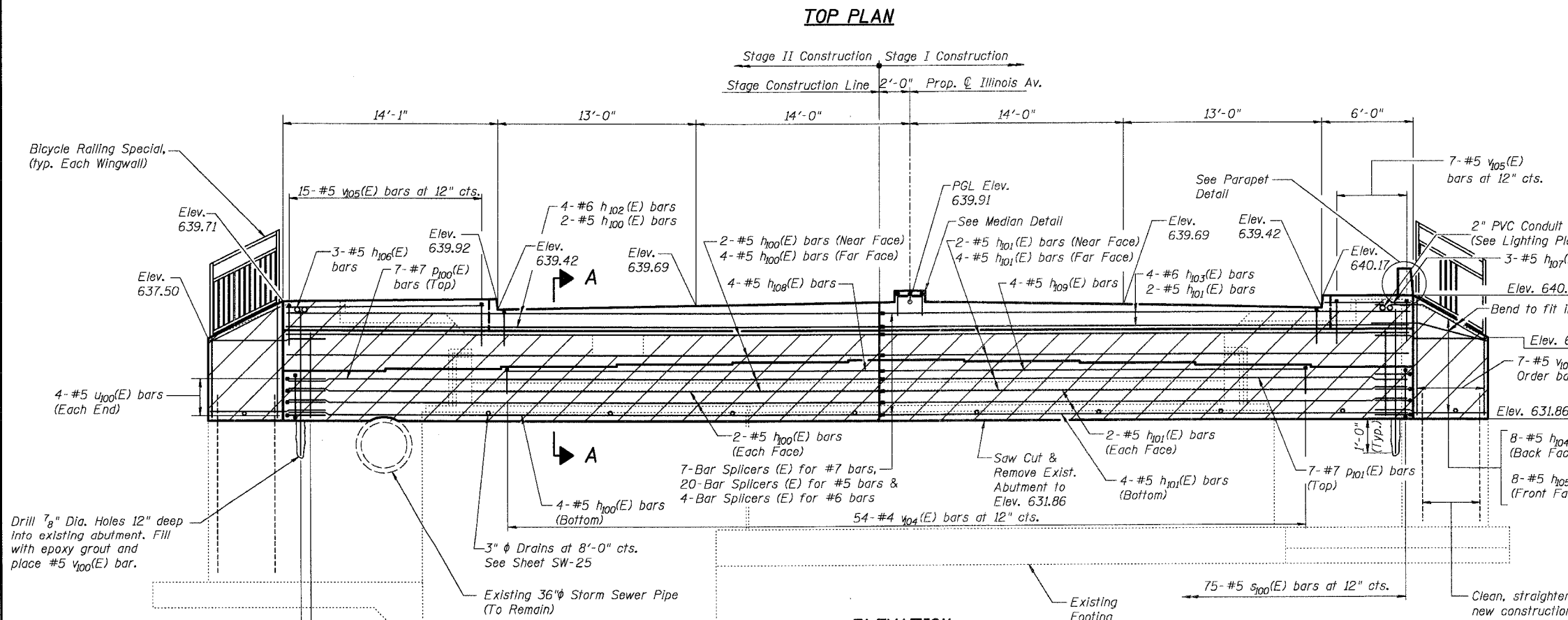
Existing reinforcement extending into removal area shall be cleaned, straightened and incorporated into the new construction. Cost included in pay item "Concrete Removal".

Drill and epoxy grout #5 $v_{100}(E)$ bars in drilled holes with a minimum depth of 12" according to to Article 584 of the Standard Specs.

Pour steps monolithically with abutment cap. All edges shall have standard 3/4" chamfers except as noted.

All elevations given at back of abutment unless noted otherwise.

See Sheet SW-25 for Section A-A.



BEAM SEAT ELEVATION TABLE

Beam #	1W	2W	3W	4W	5W	6W	7W	8W	9W	10W
Seat Elevation	635.61	635.77	635.93	636.05	636.16	636.04	635.92	635.76	635.60	635.44

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

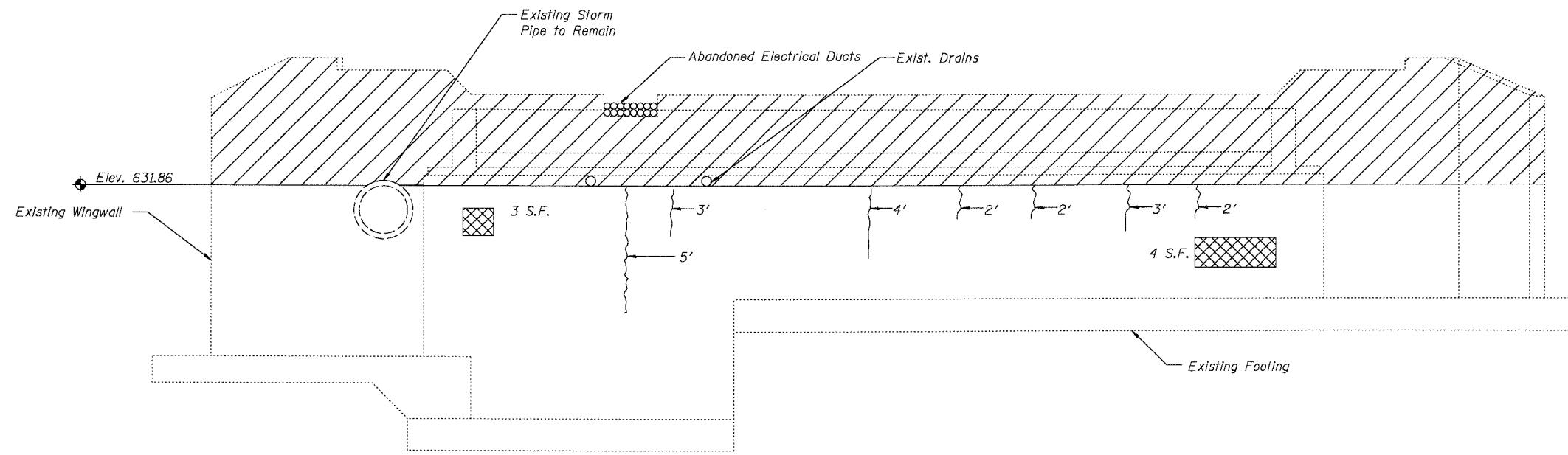
CITY OF AURORA

WEST ABUTMENT PLAN AND ELEVATION
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009

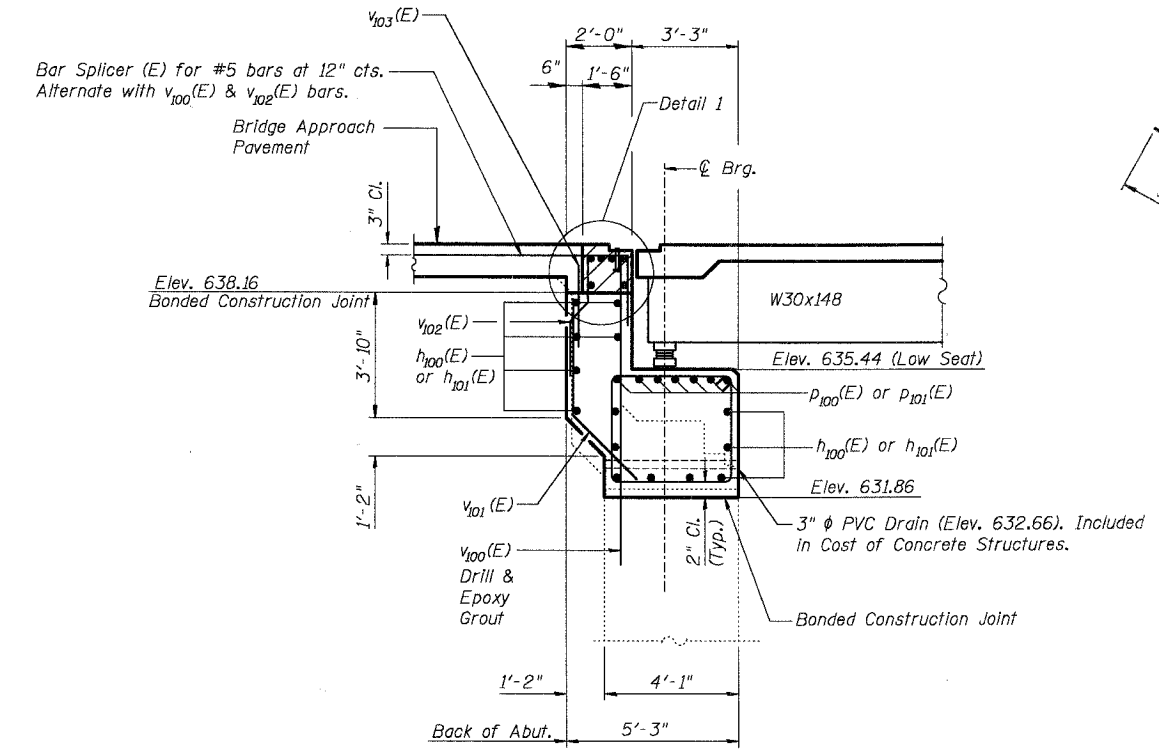
DATE 7-28-2006

COMPANY NAME, SET NO., PROJECT CONTRACT, CLIENT, ADDRESS, PHONE, FAX, E-MAIL, WEBSITE, PROJECT NO., SHEET NO., DATE

CONTRACT #83867

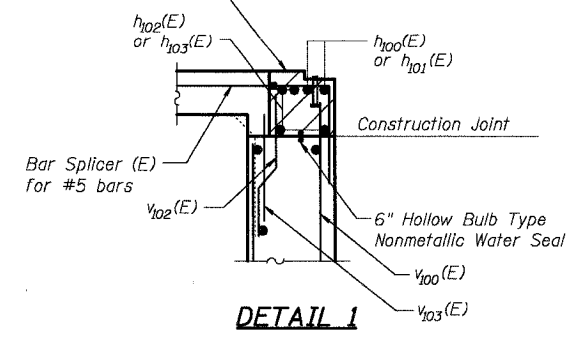


ELEVATION
Looking West



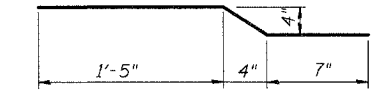
SECTION A-A

Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.

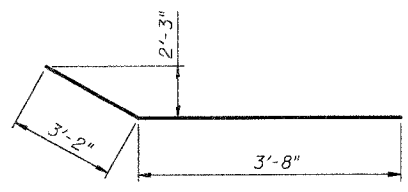


DETAIL 1

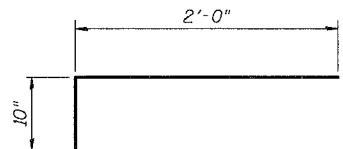
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CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



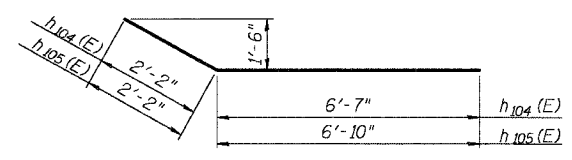
BAR v102(E)



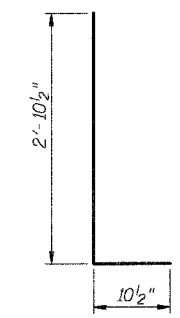
BAR v101(E)



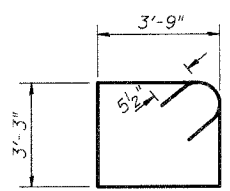
BAR v107(E)



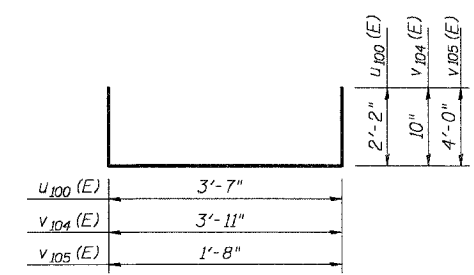
BARS h104(E) & h105(E)



BAR d101(E)



BAR s100(E)



BARS u100(E), v104(E) & v105(E)

LEGEND

- Indicates Concrete Removal Areas
- Indicates Epoxy Crack Sealing
- Indicates Structural Repair of Concrete

**BILL OF MATERIAL
WEST ABUTMENT**

Bar	No.	Size	Length	Shape	
d ₁₀₁ (E)	6	#6	3'-9"		
e ₁₀₆ (E)	6	#4	1'-8"		
h ₁₀₀ (E)	16	#5	38'-10"		
h ₁₀₁ (E)	16	#5	34'-8"		
h ₁₀₂ (E)	4	#6	38'-10"		
h ₁₀₃ (E)	4	#6	34'-8"		
h ₁₀₄ (E)	16	#5	8'-9"		
h ₁₀₅ (E)	16	#5	9'-0"		
h ₁₀₆ (E)	3	#5	13'-9"		
h ₁₀₇ (E)	3	#5	5'-8"		
h ₁₀₈ (E)	4	#5	16'-10"		
h ₁₀₉ (E)	4	#5	20'-3"		
h ₁₁₀ (E)	3	#5	1'-2"		
h ₁₁₁ (E)	3	#5	1'-8"		
p ₁₀₀ (E)	7	#7	38'-10"		
p ₁₀₁ (E)	7	#7	34'-8"		
s ₁₀₀ (E)	75	#5	14'-11"		
u ₁₀₀ (E)	8	#5	7'-11"		
v ₁₀₀ (E)	75	#5	8'-4"		
v ₁₀₁ (E)	75	#5	6'-10"		
v ₁₀₂ (E)	54	#5	2'-6"		
v ₁₀₃ (E)	54	#5	2'-4"		
v ₁₀₄ (E)	54	#4	5'-7"		
v ₁₀₅ (E)	22	#5	9'-8"		
v ₁₀₆ (E)	28	#5	8'-0"		
v ₁₀₇ (E)	6	#5	2'-10"		
Reinforcement Bars, Epoxy Coated				Pound	6,650
Concrete Removal				Cu. Yd.	41.2
Concrete Structures				Cu. Yd.	74.0
Structure Excavation				Cu. Yd.	53
Bridge Seat Sealer				Sq. Ft.	241
Epoxy Crack Sealing				Foot	21
Structural Repair of Concrete (Less than or equal to 5')				Sq. Ft.	7
Bicycle Railing, Special				Foot	11

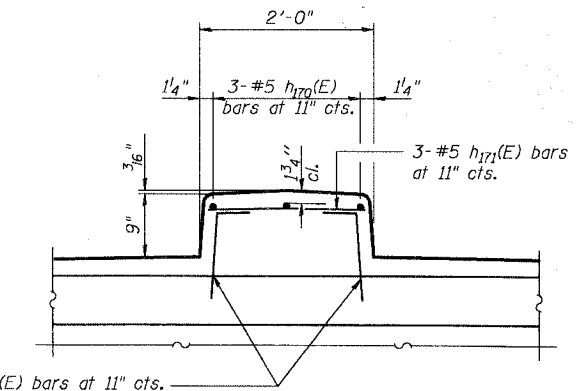
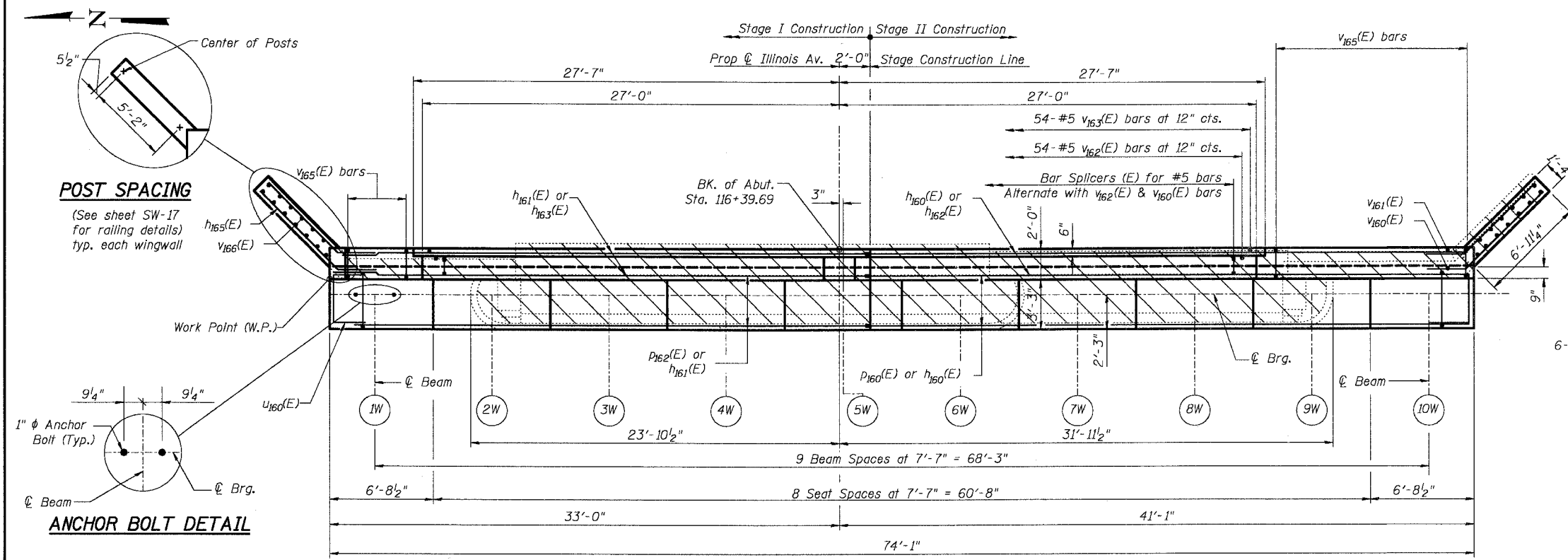
NOTES:

- Reinforcement bars designated (E) shall be epoxy coated.
- Work this sheet with sheet SW-24.
- See Sheet SW-2 for abutment drainage detail.

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140 S. WASHINGTON ST., SUITE 200
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REVISIONS	
NAME	DATE

CITY OF AURORA
WEST ABUTMENT DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE 7-28-2006



NOTES:

Work this sheet with sheet SW-27 and SW-17.

Space reinforcement in abutment seat to miss anchor bolts.

Contractor to field verify dimensions of existing abutment and wingwalls and locations of existing storm pipe in wingwall.

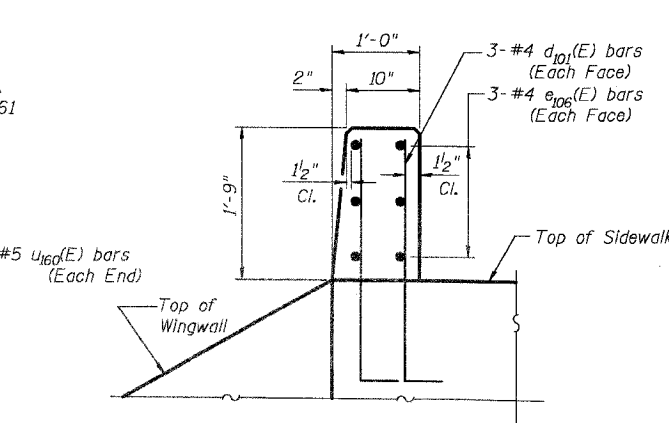
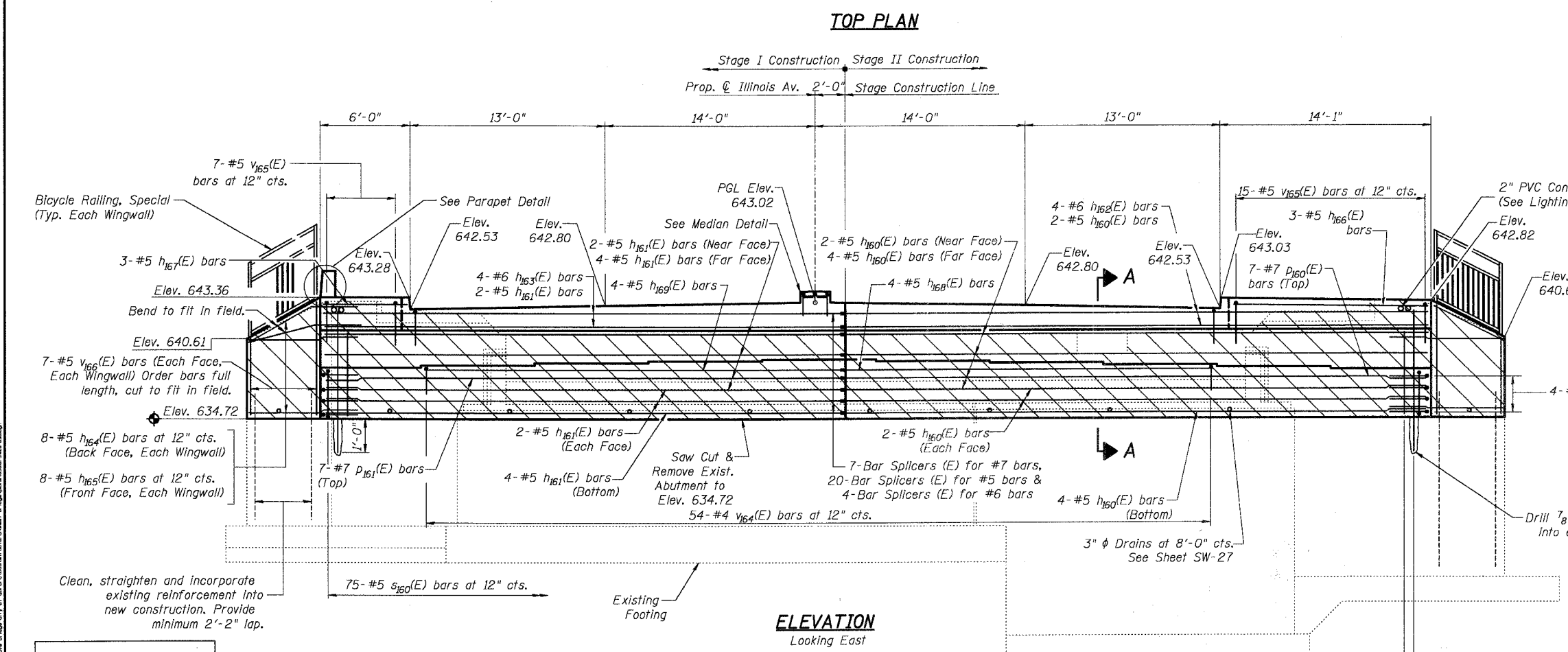
Existing reinforcement extending into removal area shall be cleaned, straightened and incorporated into the new construction. Cost included in pay item "Concrete Removal".

Drill and epoxy grout #5 $v_{160}(E)$ bars in drilled holes with a minimum depth of 12" according to Article 584 of the Standard Specs.

Pour steps monolithically with abutment cap. All edges shall have standard 3/4" chamfers except as noted.

All elevations given at back of abutment unless noted otherwise.

See Sheet SW-27 for Section A-A.



BEAM SEAT ELEVATION TABLE

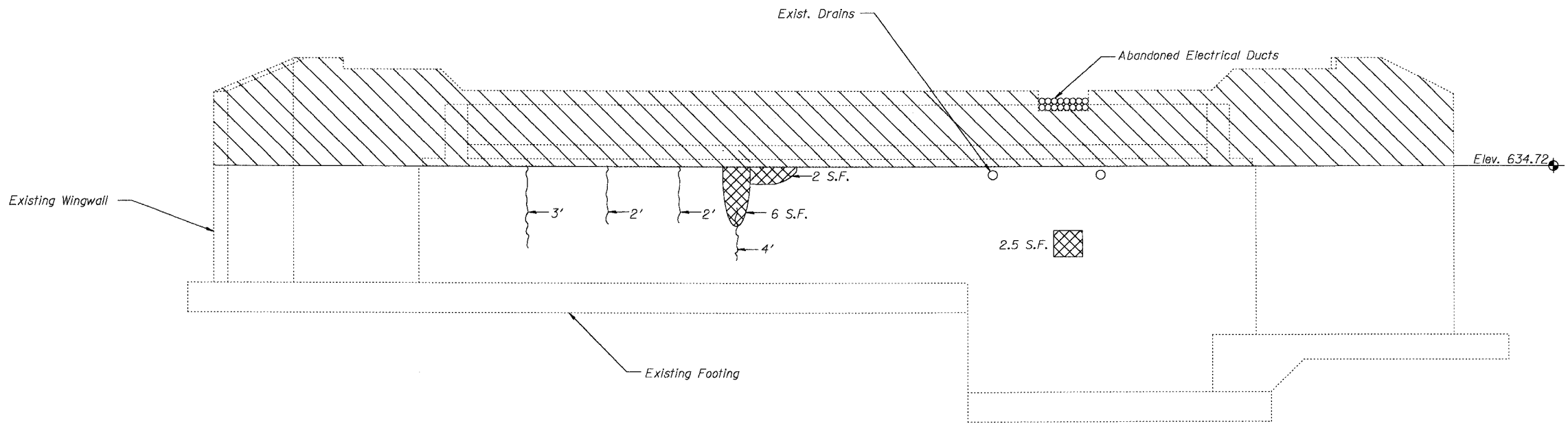
Beam #	1W	2W	3W	4W	5W	6W	7W	8W	9W	10W
Seat Elevation	638.67	638.83	638.99	639.11	639.22	639.10	638.98	638.82	638.66	638.50

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

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Aurora, IL 60202-4000

REVISIONS	
NAME	DATE

CITY OF AURORA
EAST ABUTMENT PLAN AND ELEVATION
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE 7-28-2006



ELEVATION
Looking East

LEGEND

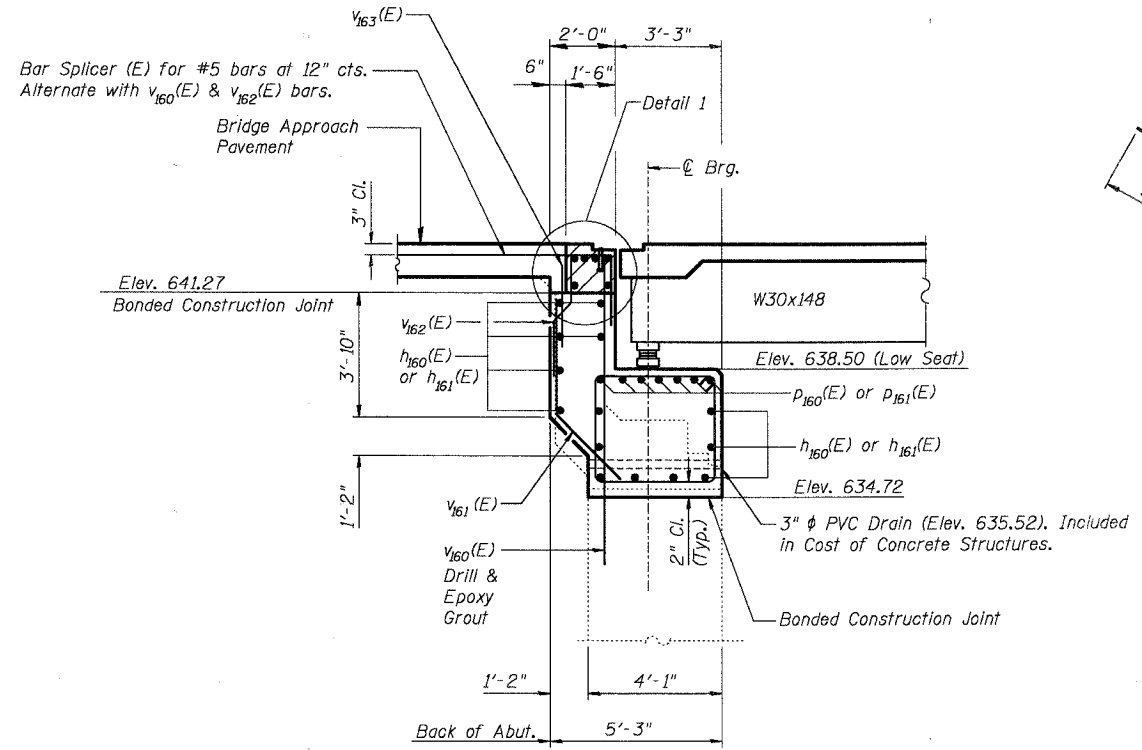
Indicates Concrete Removal Areas

Indicates Epoxy Crack Sealing

Indicates Structural Repair of Concrete

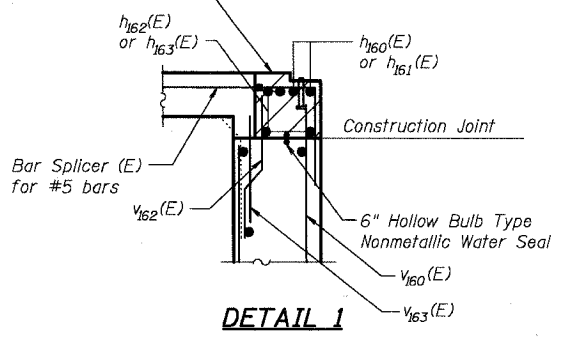
BILL OF MATERIAL
EAST ABUTMENT

Bar	No.	Size	Length	Shape
d ₁₀₁ (E)	6	#6	3'-9"	
ϕ ₁₀₆ (E)	6	#4	1'-8"	
h ₁₆₀ (E)	16	#5	38'-10"	
h ₁₆₁ (E)	16	#5	34'-8"	
h ₁₆₂ (E)	4	#6	38'-10"	
h ₁₆₃ (E)	4	#6	34'-8"	
h ₁₆₄ (E)	16	#5	8'-9"	
h ₁₆₅ (E)	16	#5	9'-0"	
h ₁₆₆ (E)	3	#5	13'-9"	
h ₁₆₇ (E)	3	#5	5'-8"	
h ₁₆₈ (E)	4	#5	16'-10"	
h ₁₆₉ (E)	4	#5	20'-3"	
h ₁₇₀ (E)	3	#5	1'-2"	
h ₁₇₁ (E)	3	#5	1'-8"	
p ₁₆₀ (E)	7	#7	38'-10"	
p ₁₆₁ (E)	7	#7	34'-8"	
s ₁₆₀ (E)	75	#5	15'-3"	
u ₁₆₀ (E)	8	#5	7'-11"	
v ₁₆₀ (E)	75	#5	8'-4"	
v ₁₆₁ (E)	75	#5	6'-8"	
v ₁₆₂ (E)	54	#5	2'-6"	
v ₁₆₃ (E)	54	#5	2'-4"	
v ₁₆₄ (E)	54	#4	5'-7"	
v ₁₆₅ (E)	22	#5	9'-8"	
v ₁₆₆ (E)	28	#5	8'-3"	
v ₁₆₇ (E)	6	#5	2'-10"	
Reinforcement Bars, Epoxy Coated	Pound		6,670	
Concrete Removal	Cu. Yd.		41.2	
Concrete Structures	Cu. Yd.		74.0	
Structure Excavation	Cu. Yd.		53	
Bridge Seat Sealer	Sq. Ft.		241	
Epoxy Crack Sealing	Foot		11	
Structural Repair of Concrete (Less than or equal to 5")	Sq. Ft.		11	
Bicycle Railing, Special	Foot		11	

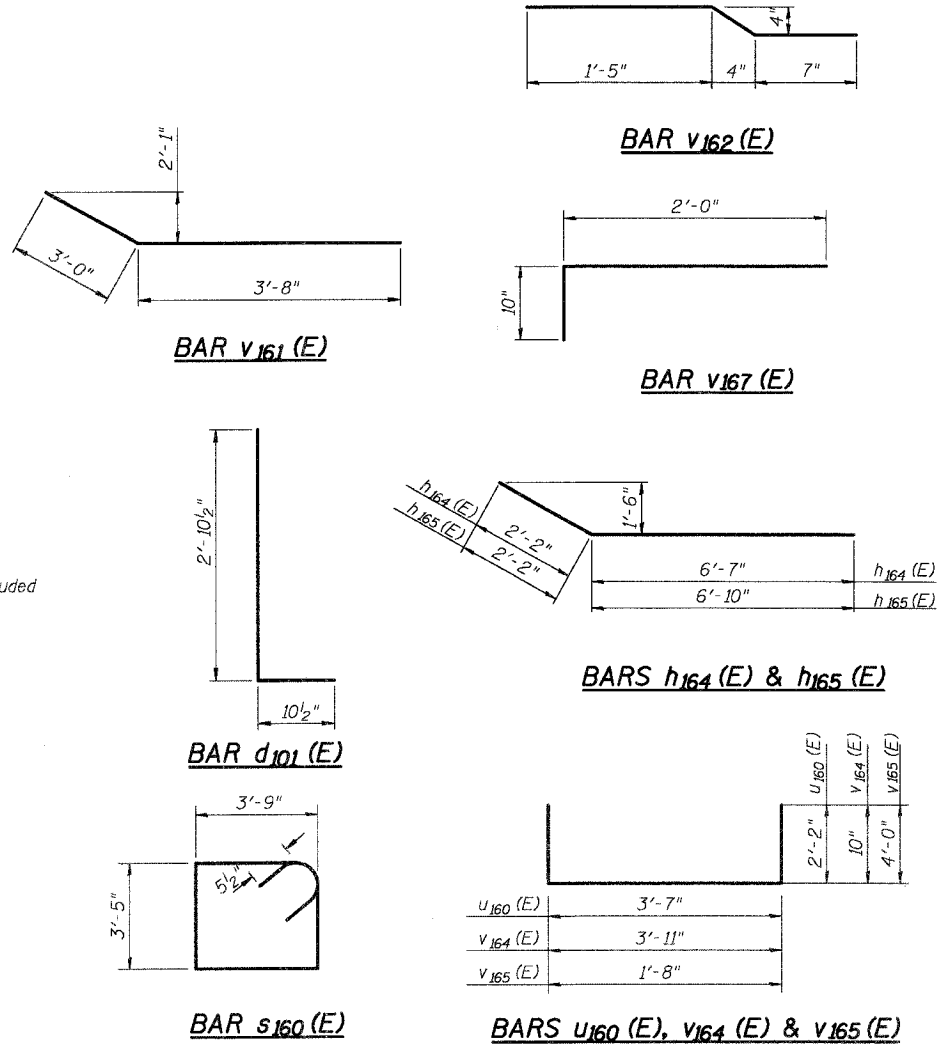


SECTION A-A

Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.



DETAIL 1

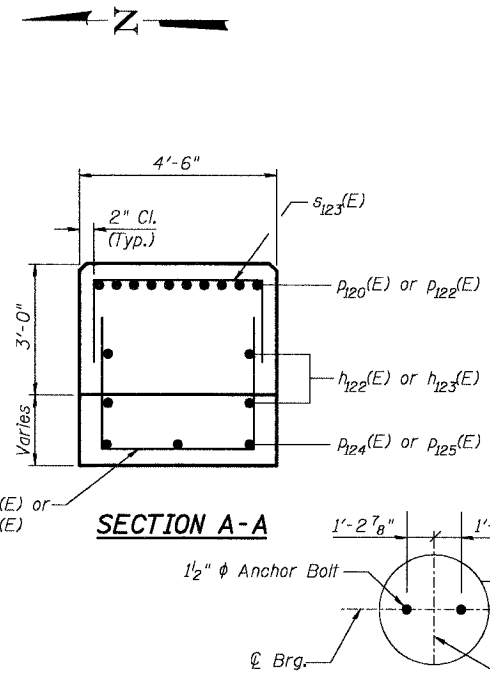


DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

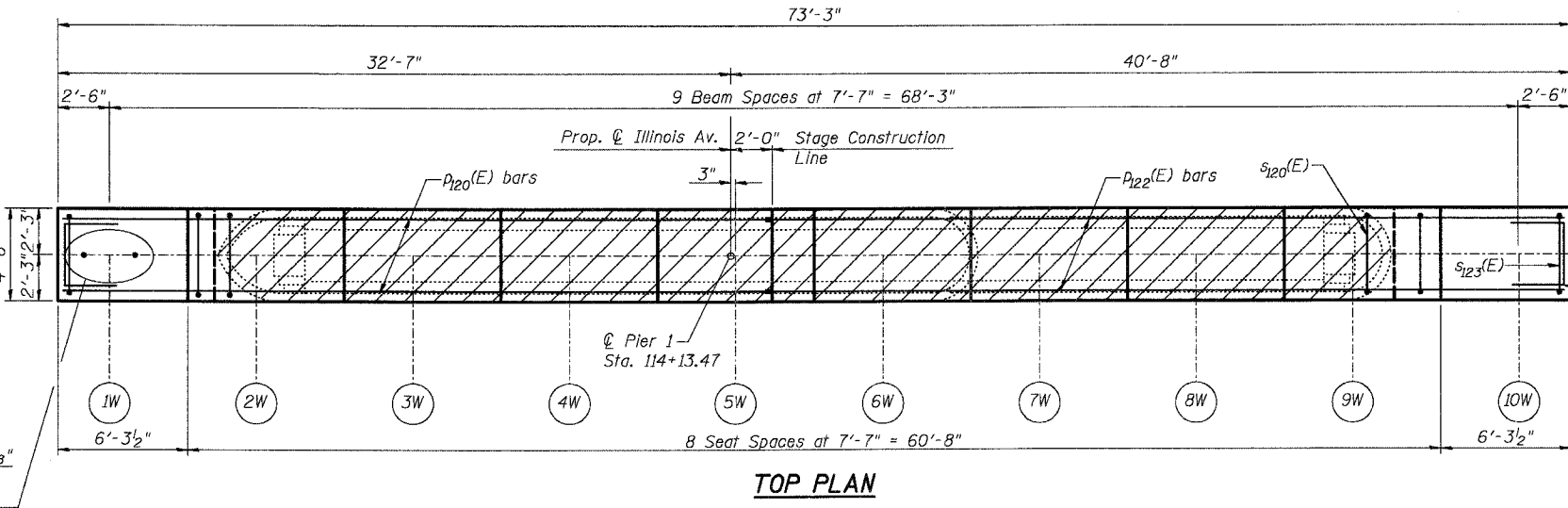
NOTES:
Reinforcement bars designated (E) shall be epoxy coated.
Work this sheet with sheet SW-26.
See Sheet SW-2 for abutment drainage detail.

REVISIONS	
NAME	DATE

SMITH ENGINEERING CONSULTANTS, INC.
CITY OF AURORA
EAST ABUTMENT DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE 7-28-2006

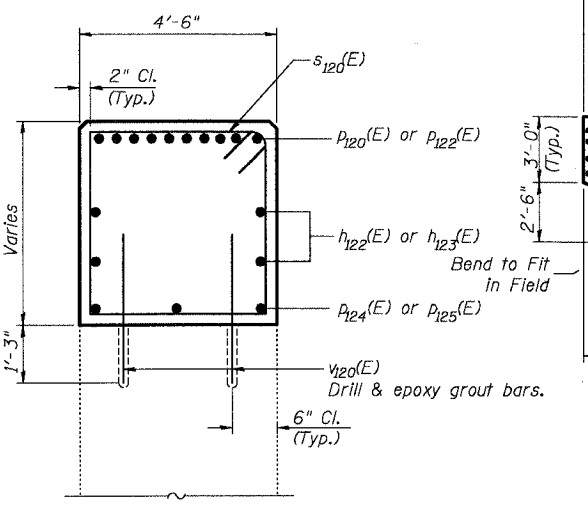
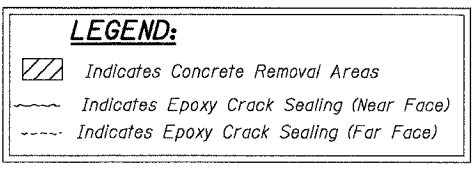


ANCHOR BOLT DETAIL



BEAM SEAT ELEVATION TABLE

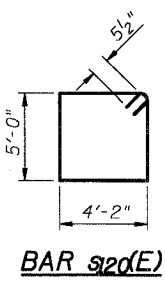
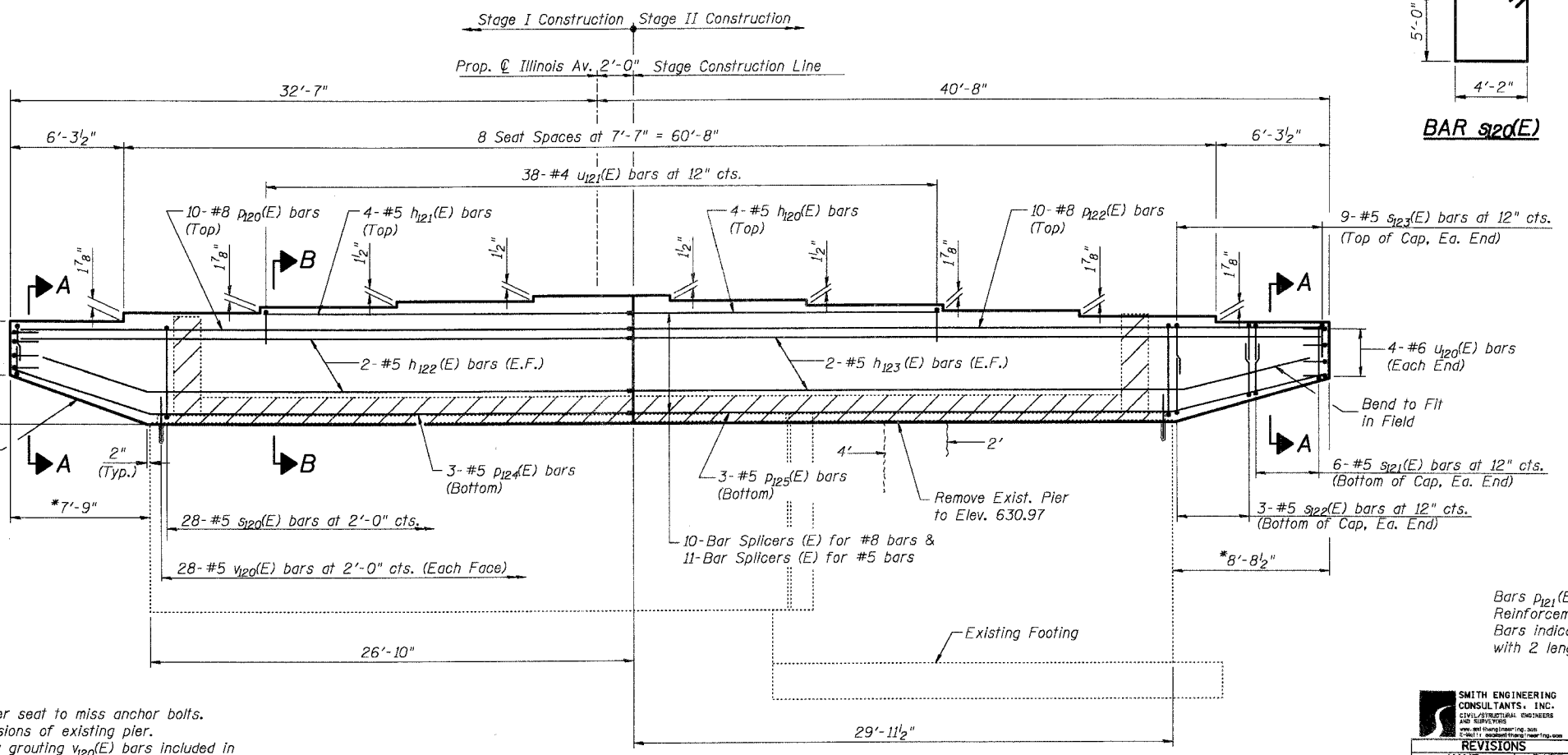
Beam #	1W	2W	3W	4W	5W	6W	7W	8W	9W	10W
Seat Elevation	636.47	636.63	636.79	636.91	637.02	636.90	636.78	636.62	636.46	636.30



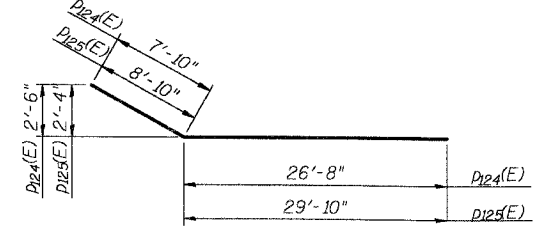
NOTES:

- Space reinforcement in pier seat to miss anchor bolts.
- Contractor to verify dimensions of existing pier.
- Cost for drilling and epoxy grouting v120(E) bars included in cost of Reinforcement Bars, Epoxy Coated.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



BARS s123(E), s121(E), s122(E), u120(E) & u121(E)



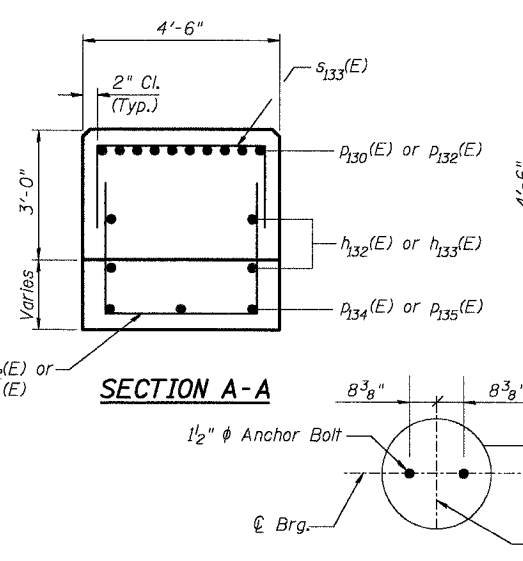
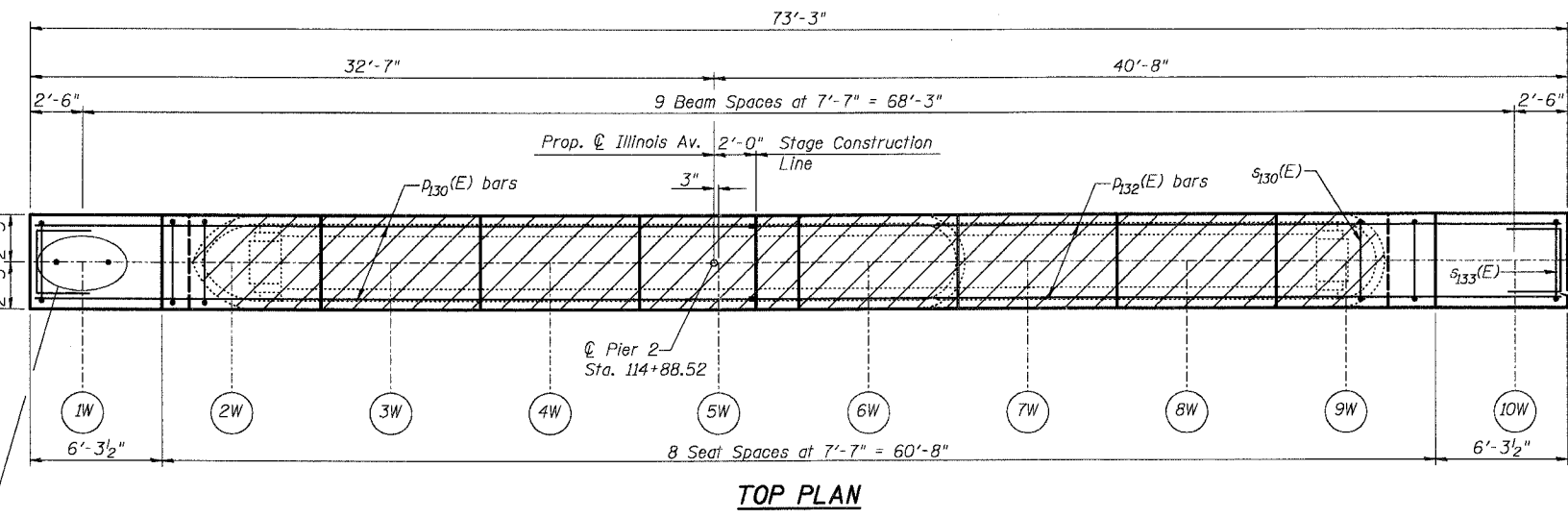
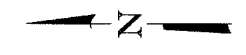
BILL OF MATERIAL PIER 1

Bar No.	Size	Length	Shape
h120(E)	4 #5	16'-10"	—
h121(E)	4 #5	20'-3"	—
h122(E)	4 #5	34'-3"	—
h123(E)	4 #5	38'-4"	—
p120(E)	10 #8	34'-3"	—
p122(E)	10 #8	38'-4"	—
p124(E)	3 #5	34'-6"	┌
p125(E)	3 #5	38'-8"	┌
s120(E)	28 #5	19'-3"	□
s121(E)	12 #5	9'-8"	┌
s122(E)	6 #5	10'-8"	┌
s123(E)	18 #5	9'-8"	┌
u120(E)	8 #6	9'-4"	┌
u121(E)	38 #4	5'-10"	┌
v120(E)	56 #5	2'-10"	—
Reinforcement Bars, Epoxy Coated	Pound	3,980	
Concrete Removal	Cu. Yd.	14.1	
Concrete Structures	Cu. Yd.	66.6	
Epoxy Crack Sealing	Foot	6	

Bars p121(E) & p123(E) are not used. Reinforcement bars designated (E) shall be epoxy coated. Bars indicated thus 1 x 2 - #5 etc. indicates 1 line of bars with 2 lengths per line.

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NAME	DATE

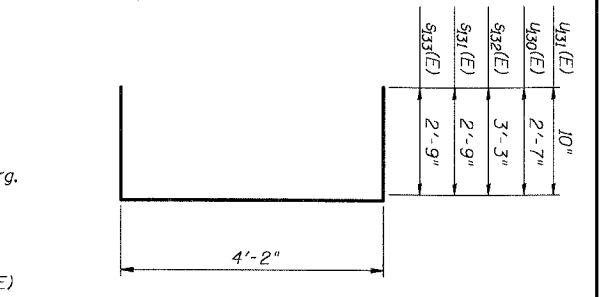
CITY OF AURORA
PIER 1 DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE T-28-2006



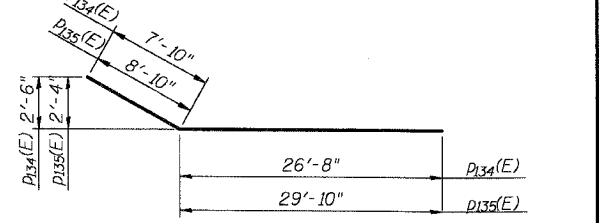
ANCHOR BOLT DETAIL

BEAM SEAT ELEVATION TABLE

Beam #	1W	2W	3W	4W	5W	6W	7W	8W	9W	10W
Seat Elevation	637.54	637.70	637.85	637.98	638.09	637.97	637.84	637.69	637.53	637.37



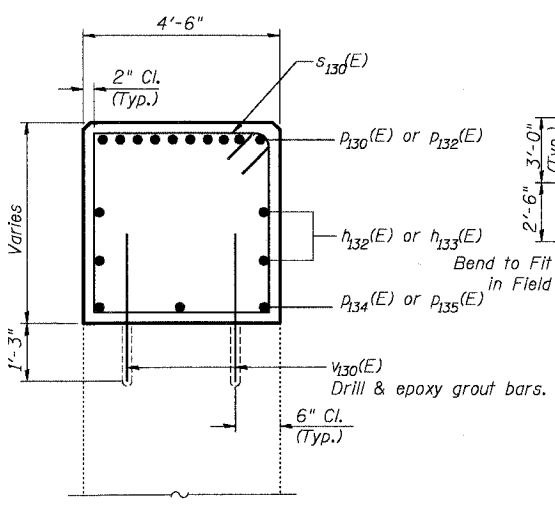
**BARS s133 (E), s131 (E), s132 (E)
u130 (E) & u131 (E)**



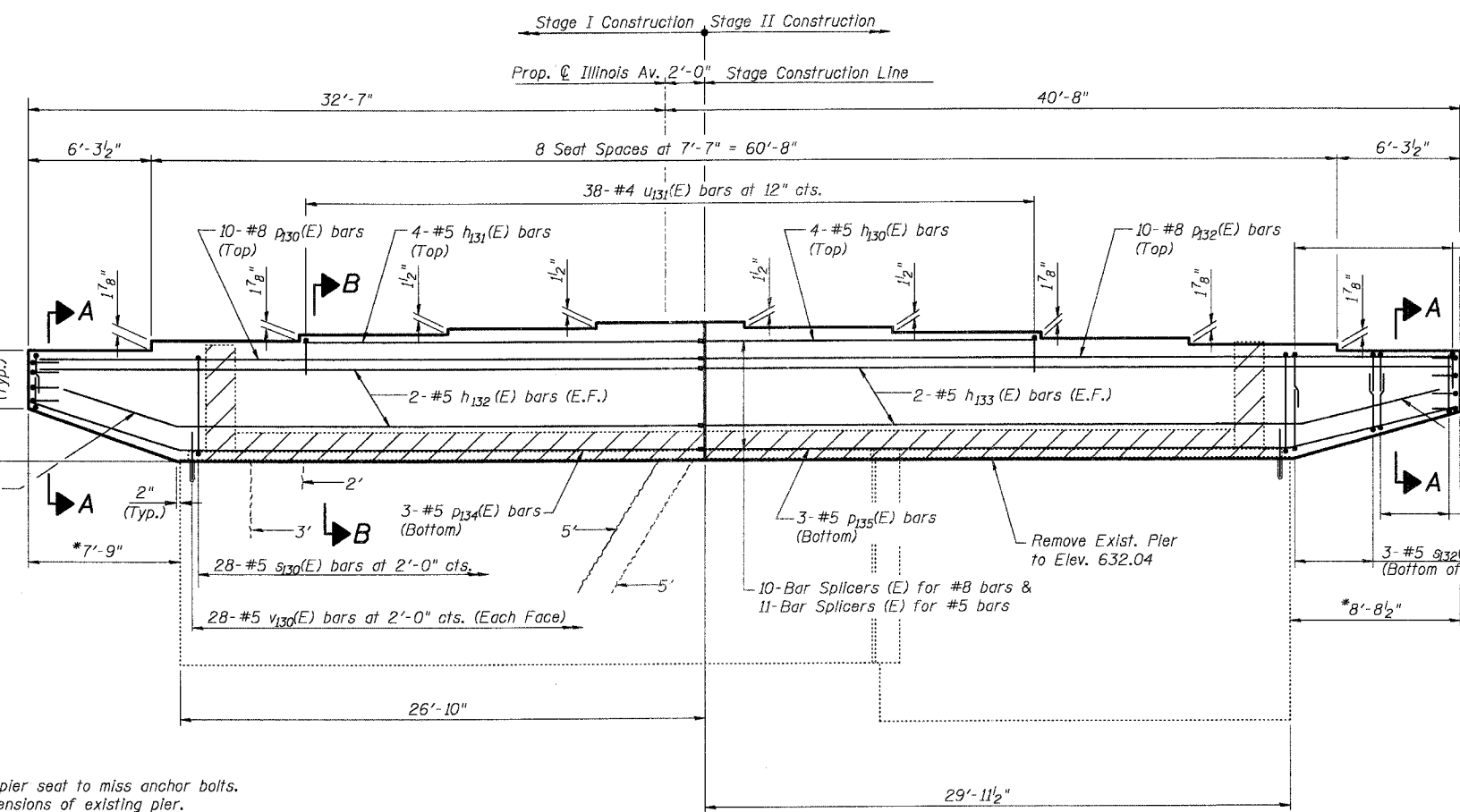
BARS p134 (E) & p135 (E)

LEGEND:

- Indicates Concrete Removal Areas
- Indicates Epoxy Crack Sealing (Near Face)
- Indicates Epoxy Crack Sealing (Far Face)



SECTION B-B



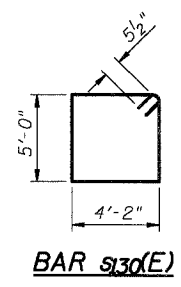
ELEVATION

Looking East
*Measured Along C of Pier

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

NOTES:

- Space reinforcement in pier seat to miss anchor bolts.
- Contractor to verify dimensions of existing pier.
- Cost for drilling and epoxy grouting v130(E) bars included in cost of Reinforcement Bars, Epoxy Coated.



BAR s130(E)

**BILL OF MATERIAL
PIER 2**

Bar No.	Size	Length	Shape
h130 (E)	4 #5	16'-10"	—
h131 (E)	4 #5	20'-3"	—
h132 (E)	4 #5	34'-3"	—
h133 (E)	4 #5	38'-4"	—
p130 (E)	10 #8	34'-3"	—
p132 (E)	10 #8	38'-4"	—
p134 (E)	3 #5	34'-6"	┘
p135 (E)	3 #5	38'-8"	┘
s130 (E)	28 #5	19'-3"	□
s131 (E)	12 #5	9'-8"	┘
s132 (E)	6 #5	10'-8"	┘
s133 (E)	18 #5	9'-8"	┘
u130 (E)	8 #6	9'-4"	┘
u131 (E)	38 #4	5'-10"	┘
v130 (E)	56 #5	2'-10"	—
Reinforcement Bars, Epoxy Coated	Pound	3,980	
Concrete Removal	Cu. Yd.	16.5	
Concrete Structures	Cu. Yd.	66.6	
Epoxy Crack Sealing	Foot	15	

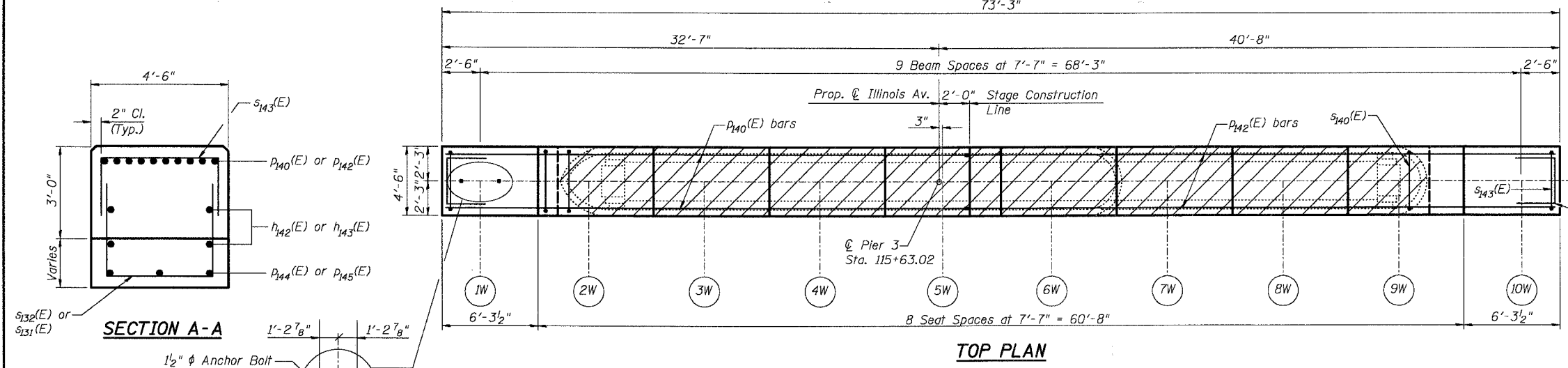
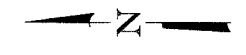
Bars p131 (E) & p133 (E) are not used.
Reinforcement bars designated (E) shall be epoxy coated.
Bars indicated thus 1 x 2 - #5 etc. indicates 1 line of bars with 2 lengths per line.

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TEL: 630-584-8800 FAX: 630-584-8801

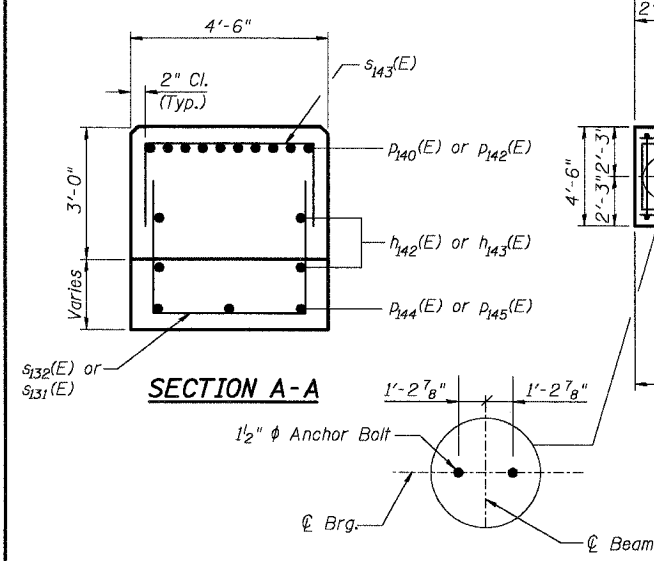
REVISIONS	
NAME	DATE

CITY OF AURORA
PIER 2 DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6009
DATE 7-28-2006

CONTRACT #83867



TOP PLAN



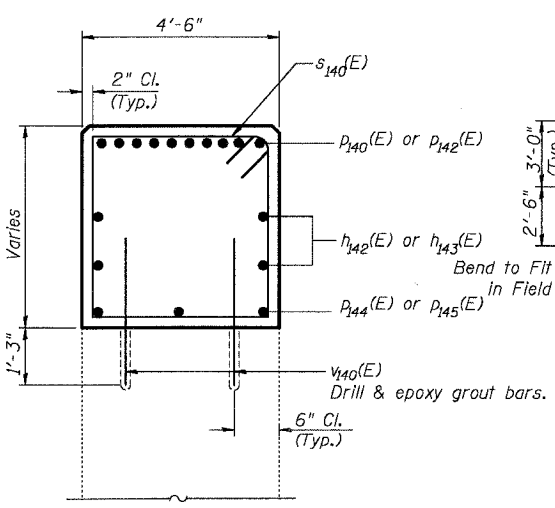
SECTION A-A

ANCHOR BOLT DETAIL

BEAM SEAT ELEVATION TABLE

Beam #	1W	2W	3W	4W	5W	6W	7W	8W	9W	10W
Seat Elevation	638.18	638.34	638.50	638.62	638.73	638.62	638.49	638.33	638.17	638.02

LEGEND:
 Indicates Concrete Removal Areas
 Indicates Epoxy Crack Sealing (Near Face)
 Indicates Epoxy Crack Sealing (Far Face)

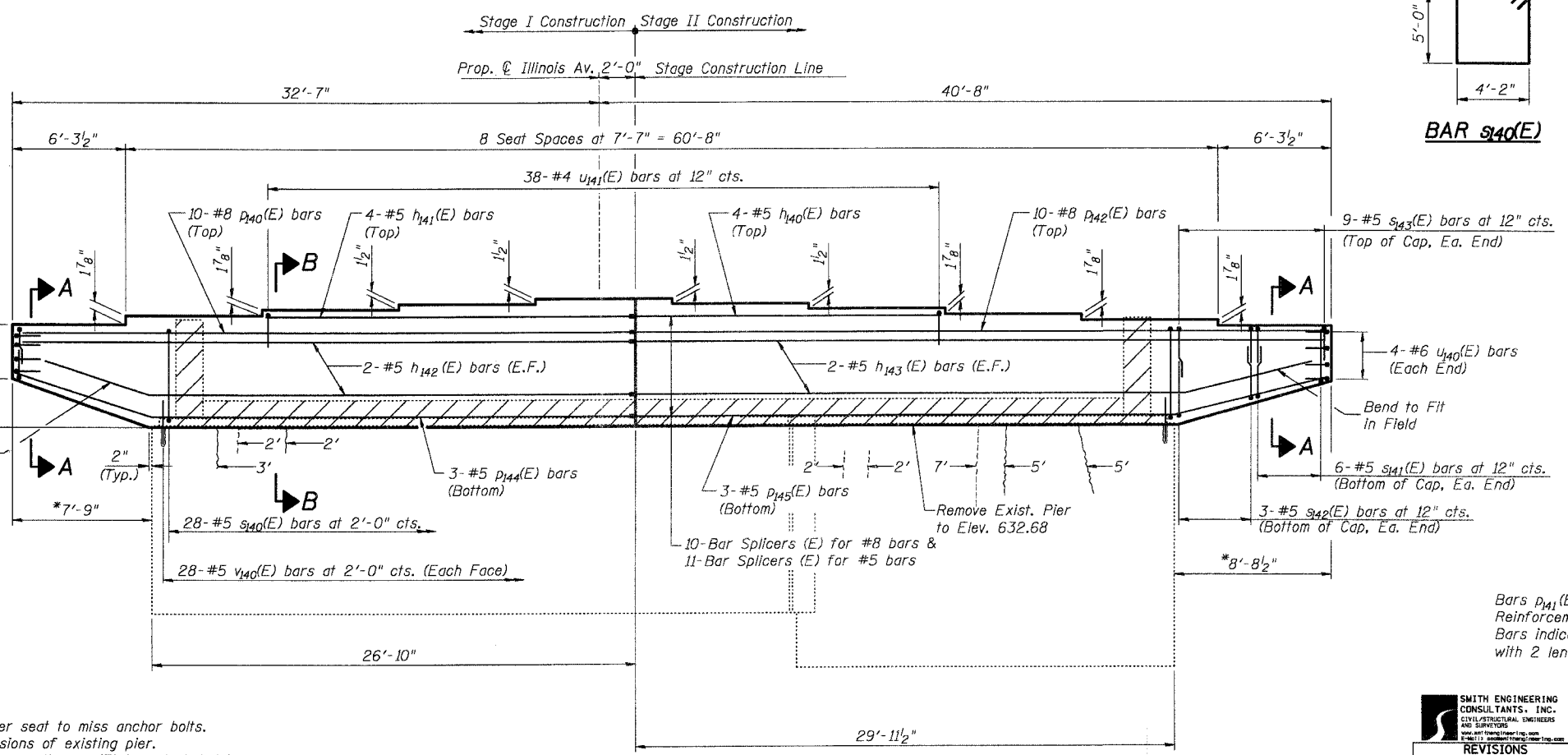


SECTION B-B

NOTES:

- Space reinforcement in pier seat to miss anchor bolts.
- Contractor to verify dimensions of existing pier.
- Cost for drilling and epoxy grouting U40(E) bars included in cost of Reinforcement Bars, Epoxy Coated.

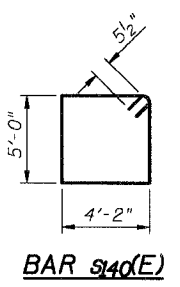
DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



ELEVATION

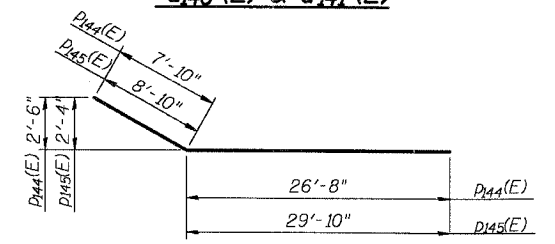
Looking East

*Measured Along C of Pier



BAR S140(E)

**BARS S143 (E), S141 (E), S142 (E)
U140 (E) & U141 (E)**



BARS P144 (E) & P145 (E)

**BILL OF MATERIAL
PIER 3**

Bar	No.	Size	Length	Shape
h140 (E)	4	#5	16'-10"	—
h141 (E)	4	#5	20'-3"	—
h142 (E)	4	#5	34'-3"	—
h143 (E)	4	#5	38'-4"	—
P140 (E)	10	#8	34'-3"	—
P142 (E)	10	#8	38'-4"	—
P144 (E)	3	#5	34'-6"	—
P145 (E)	3	#5	38'-8"	—
S140 (E)	28	#5	19'-3"	□
S141 (E)	12	#5	9'-8"	□
S142 (E)	6	#5	10'-8"	□
S143 (E)	18	#5	9'-8"	□
U140 (E)	8	#6	9'-4"	□
U141 (E)	38	#4	5'-10"	□
U40 (E)	56	#5	2'-10"	—
Reinforcement Bars, Epoxy Coated		Pound	3,980	
Concrete Removal		Cu. Yd.	13.7	
Concrete Structures		Cu. Yd.	66.6	
Epoxy Crack Sealing		Foot	28	

Bars P141 (E) & P143 (E) are not used.
 Reinforcement bars designated (E) shall be epoxy coated.
 Bars indicated thus 1 x 2 - #5 etc. indicates 1 line of bars with 2 lengths per line.

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REVISIONS	
NAME	DATE

CITY OF AURORA
 PIER 3 DETAILS
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 STRUCTURE NO. 045-6009
 DATE 7-28-2006

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	72
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		
CONTRACT #83867				

SHEET NO. ST-1

ST-12 SHEETS

Benchmark:
Cut square on Northwest Wingwall (West Bridge)
Elev. = 639.93

Existing Structure:
12'-0" wide by 8'-0" high by 65'-11" long cast-in-place reinforced concrete tunnel with reinforced concrete wingwalls supported on spread footings. Tunnel built in 1949 under Sec. 14B-CS, S.A.R. 24 Ext. (Kane County Sec. 118-B M.F.T.) and widened in 1976.

Salvage:
Existing tunnel to be lengthened. Wingwalls and footings to remain as shown.
Existing Steel Pipe Railing to be removed and disposed.

Staging:
One lane of traffic in each direction to be maintained during construction utilizing staged construction.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications - 17th Ed.

DESIGN STRESSES

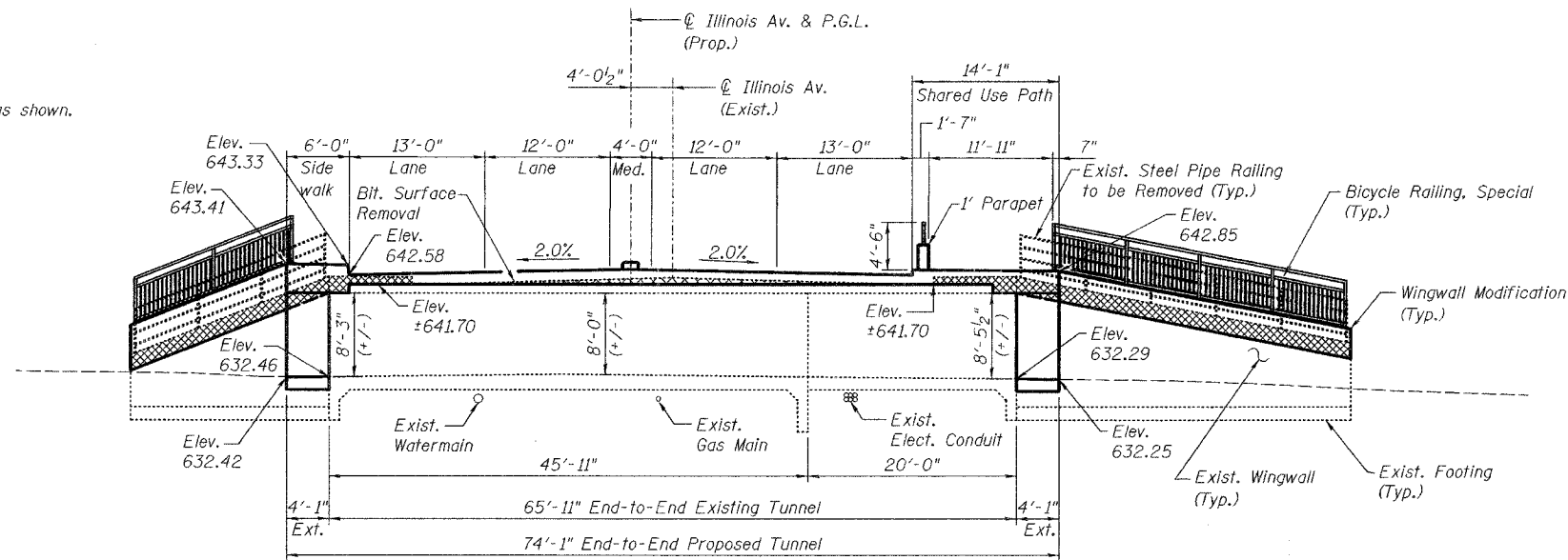
FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

- LEGEND:**
- 12" ϕ Watermain (Abandoned)
 - 8" ϕ Gas Main (Abandoned)
 - (10)-5" ϕ PVC Electrical Conduits (Abandoned)

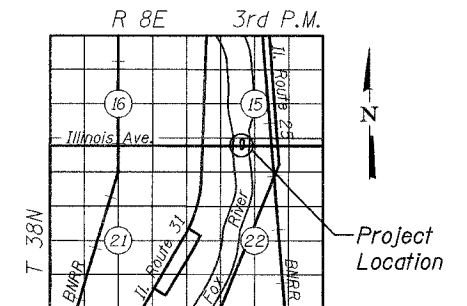
INDEX OF SHEETS

- ST-1 General Plan & Elevation
- ST-2 General Notes & Bill of Materials
- ST-3 Stage Construction Details
- ST-4 Temporary Concrete Barrier
- ST-5 Tunnel Details
- ST-6 Tunnel Extension Details-North End
- ST-7 Tunnel Extension Details-South End
- ST-8 Railing Details
- ST-9 Approach Pavement Details I
- ST-10 Approach Pavement Details II
- ST-11 Bar Splicer Details
- ST-12 Soil Boring Logs



LONGITUDINAL SECTION

(Elevations shown are at the centerline of the Tunnel)



LOCATION SKETCH

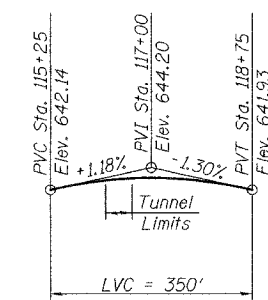
NOTES:

- * Remove, clean, and relocate existing bronze name plate. Cost included in Concrete Structures.
- ** Wall mounted luminaires. See Lighting Plans for locations.



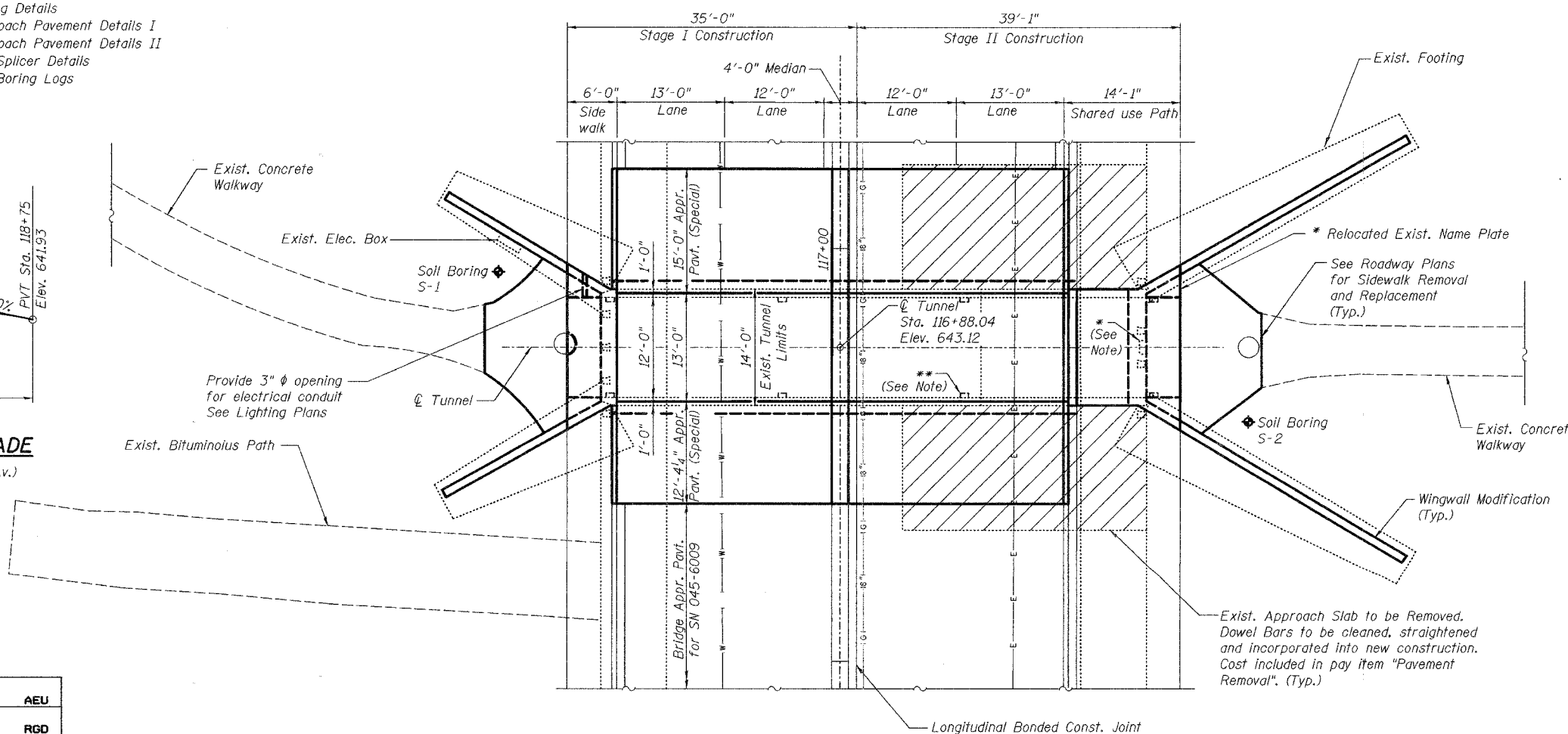
To the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Robert G. Davies 9/13/06
Robert G. Davies Date
Licensed Structural Engineer
License Expires November 30, 2006



PROFILE GRADE

(Along centerline of Illinois Av.)



PLAN

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

CITY OF AURORA

**GENERAL PLAN AND ELEVATION
PEDESTRIAN TUNNEL
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY**

DATE 7-28-2006

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	16.1
Bridge Rail Removal	Foot	36
Structure Excavation	Cu. Yd.	6.0
Concrete Structures	Cu. Yd.	31.4
Concrete Superstructure	Cu. Yd.	44.7
* Protective Coat	Sq. Yd.	127
* Structural Repair of Concrete (Depth Equal to or less than 5 in.)	Sq. Ft.	130
Reinforcement Bars, Epoxy Coated	Pound	17,370
Expansion Bolts 3/4 Inch	Each	56
* Bicycle Railing, Special	Foot	134
Bar Splicers	Each	28
* Handrail Removal	Foot	116
* Bridge Approach Pavement (Special)	Sq. Yd.	168

*Indicates Item Requires a Special Provision.

GENERAL NOTES

Reinforcement bars shall conform to the requirements of AASHTO M31 or M322, Grade 60.

All new concrete exposed to earth shall be waterproofed according to Article 503.18 of the Standard Specifications.

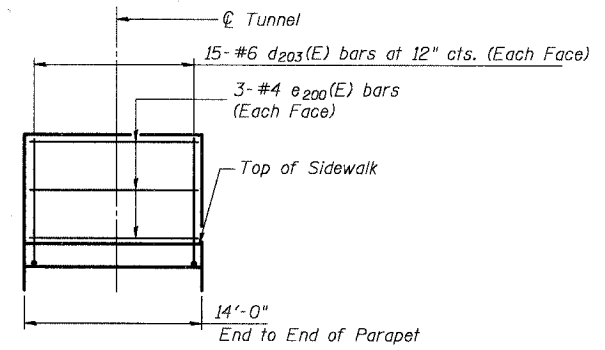
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

All Construction Joints shall be bonded.

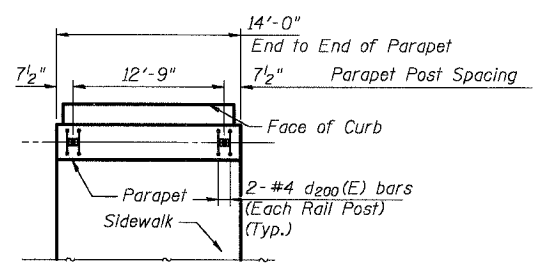
For Lighting Details, see Lighting Plans.

The information shown in these plans concerning the type and location of utilities is not guaranteed to be accurate or all-inclusive. The Contractor is responsible for making his own determination as to the existence of type, size and location of all underground and overhead utilities as may be necessary to avoid conflict with construction operations and/or damage to the utility.

Cost for Rubbed Finish is included in the cost for Concrete Structures.

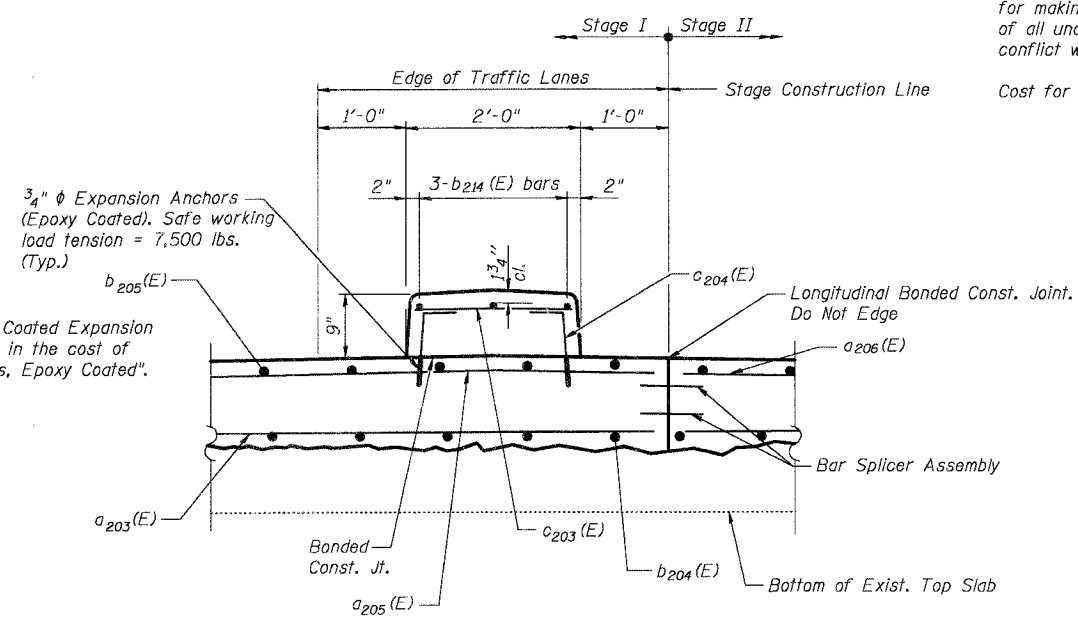


INSIDE ELEVATION OF SOUTH PARAPET



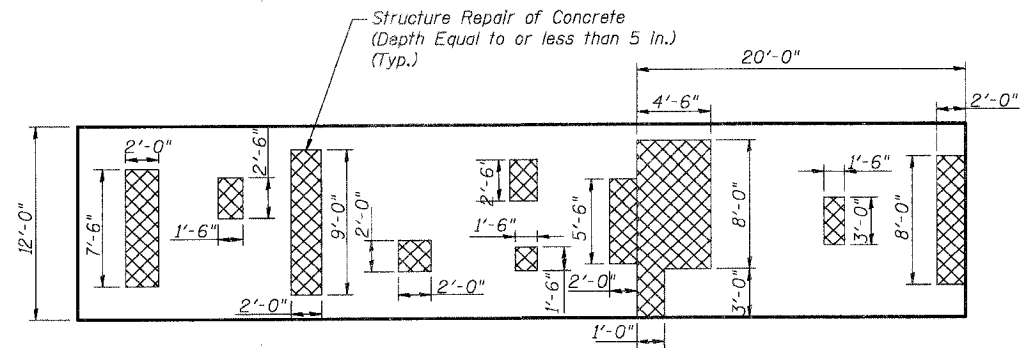
TOP PLAN OF SOUTH PARAPET

See Roadway Drawing for adjacent parapets not located on the tunnel.
See Sheet ST-7 for Bill of Material.



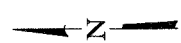
SECTION THRU MEDIAN

(Looking East)
See Sheet ST-5 for Bill of Material.



BOTTOM OF EXISTING TOP SLAB

N.T.S.



DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC. LEVEL SURVEYORS AND SURVEYORS www.smitheng.com 11111 Pennsylvania Ave., Suite 1000, Springfield, IL 62761	
REVISTIONS	
NAME	DATE

CITY OF AURORA

GENERAL NOTES AND BILL OF MATERIAL
PEDESTRIAN TUNNEL
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY

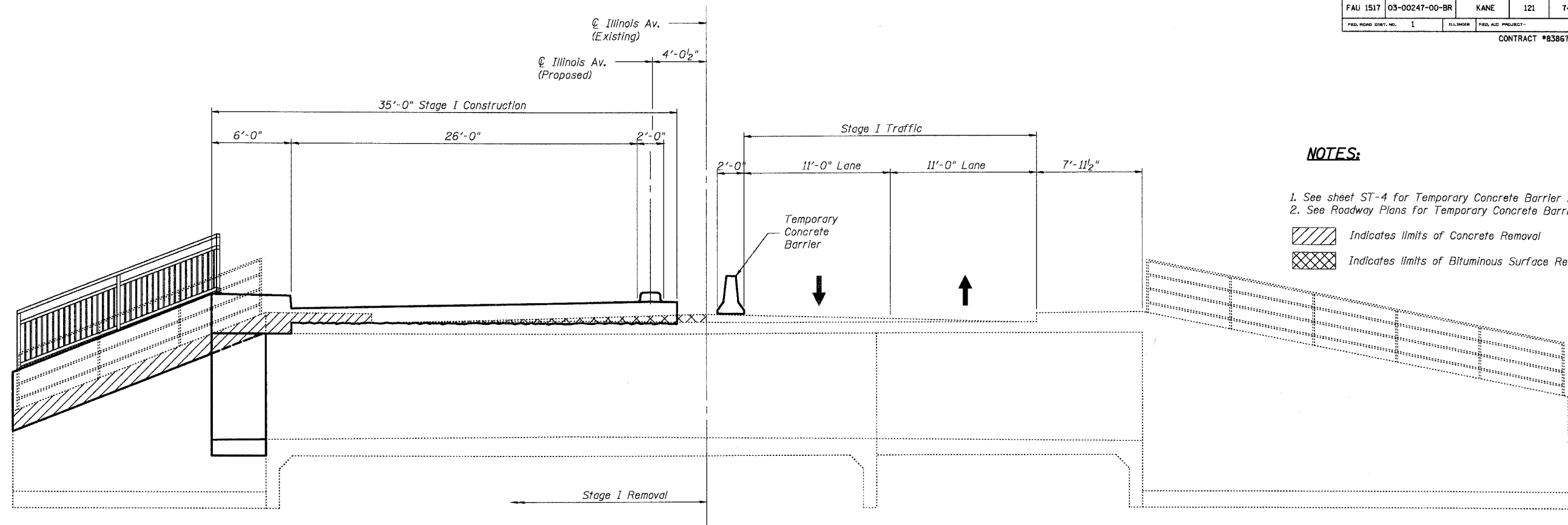
DATE 7-28-2006

PROJECT NAME: PEDESTRIAN TUNNEL
 PROJECT NO.: 03-00247-00-BR
 SHEET NO.: ST-12
 DATE: 7-28-2006
 DRAWN BY: WJH
 CHECKED BY: NRF
 DESIGNED BY: AEU

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FAU 1517	03-00247-00-BR	KANE	121	74
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

SHEET NO. ST-3
ST-12 SHEETS

CONTRACT #83867

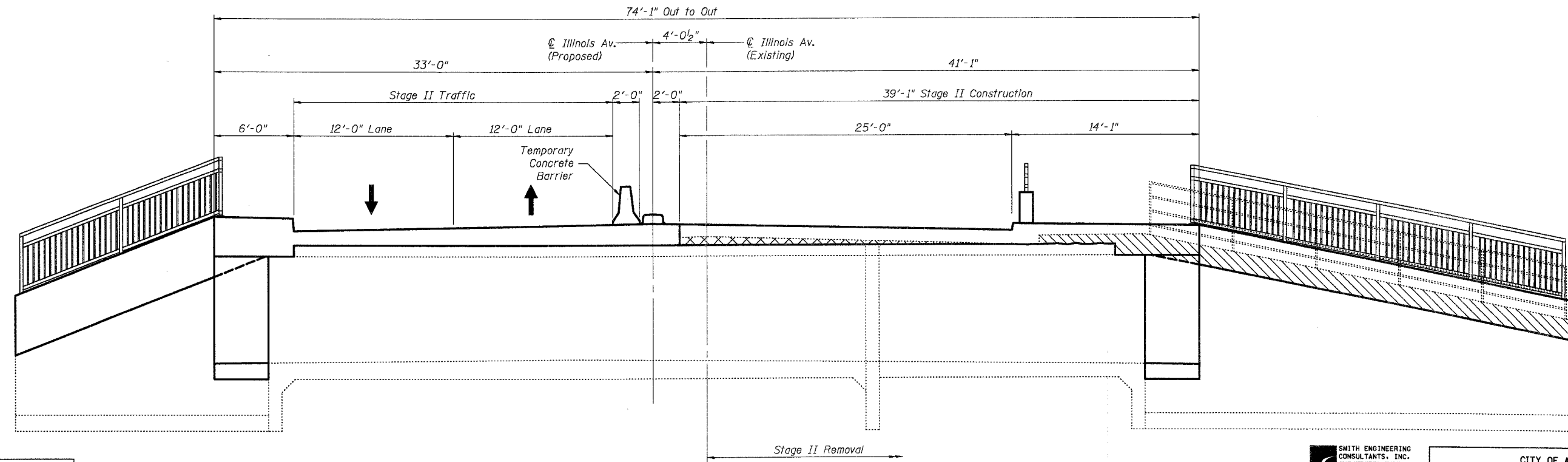


NOTES:

1. See sheet ST-4 for Temporary Concrete Barrier Details
2. See Roadway Plans for Temporary Concrete Barrier quantity.

Indicates limits of Concrete Removal
 Indicates limits of Bituminous Surface Removal

STAGE I
(Looking East)



STAGE II
(Looking East)

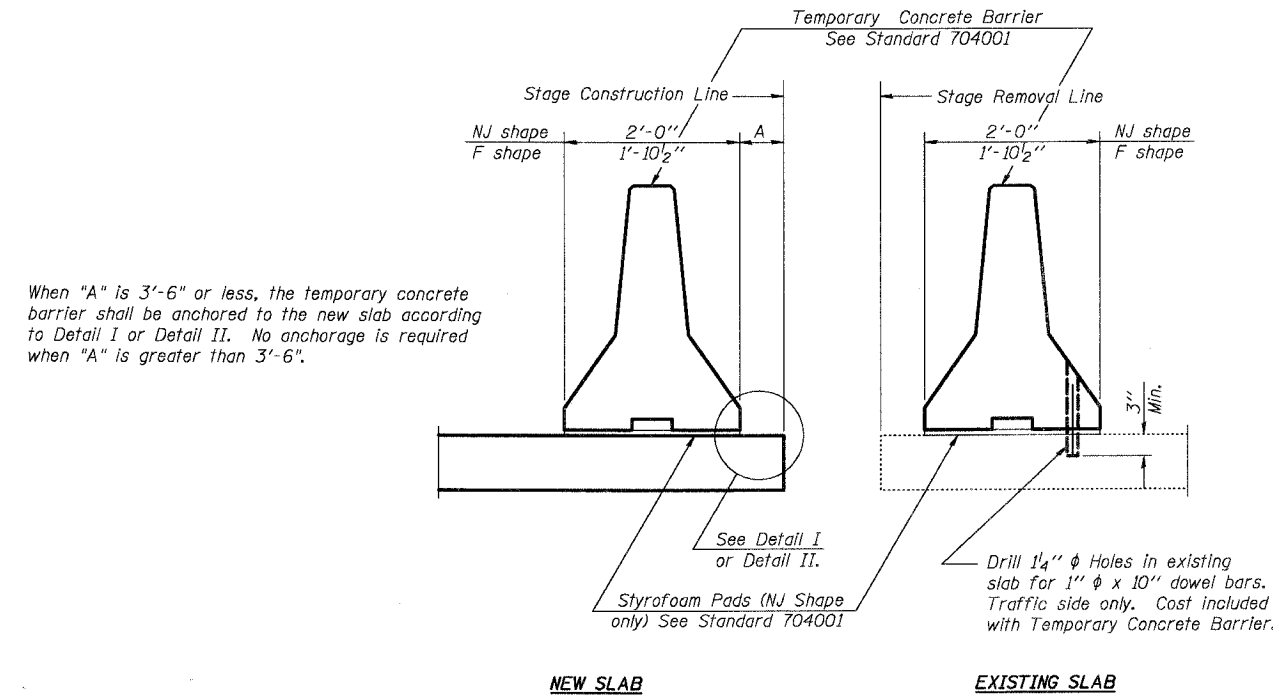
DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, ELECTRICAL AND SURVEYORS
www.smitheng.com
E-Mail: info@smitheng.com

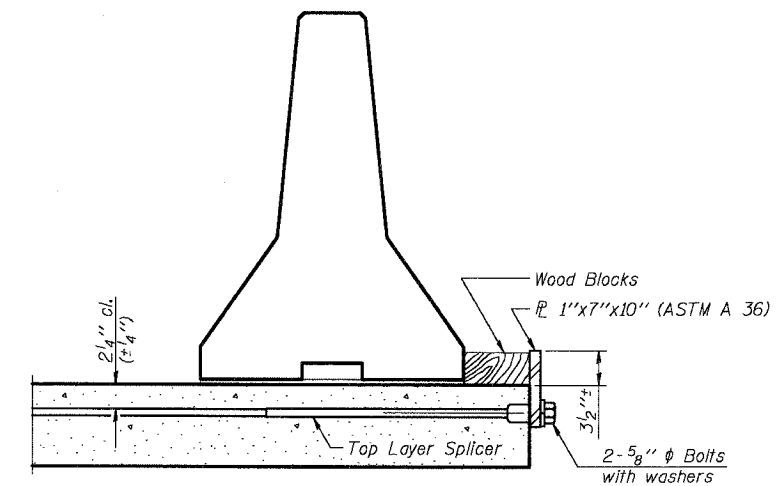
REVISIONS	
NAME	DATE

CITY OF AURORA
STAGE CONSTRUCTION DETAILS
PEDESTRIAN TUNNEL
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
DATE 7-28-2006

DRAWN: WJH, DESIGNED: AEU, PROJECT: FAU 1517, CONTRACT: 03-00247-00-BR, SHEET: ST-12, DATE: 7-28-2006, PROJECT LOCATION: ILLINOIS AVENUE OVER THE FOX RIVER, AURORA, ILLINOIS

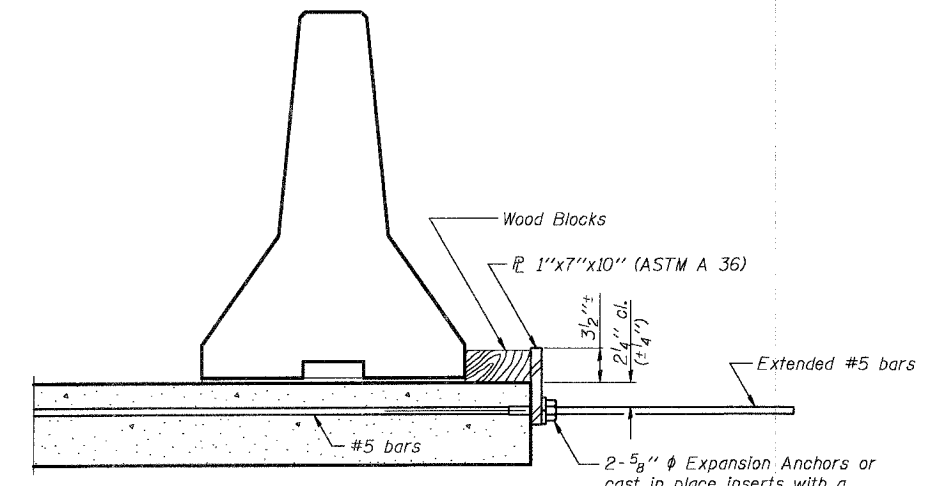


SECTIONS THRU SLAB



DETAIL I

The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

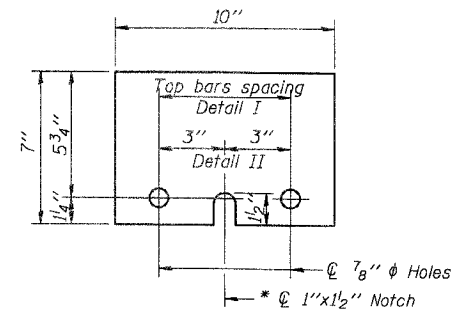
The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x 10" steel \bar{L} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x 10" steel \bar{L} to the concrete slab with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.

Cost of anchorage is included with Temporary Concrete Barrier.



1" x 7" x 10"

* Required only with Detail II

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC. CIVIL, STRUCTURAL, ELECTRICAL AND SURVEYING 1101 W. 11th Street, Aurora, IL 60111 Tel: (708) 485-1100 Fax: (708) 485-1101	
REVISONS	
NAME	DATE

CITY OF AURORA

TEMPORARY CONCRETE BARRIER
PEDESTRIAN TUNNEL
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY

DATE T-28-2006

PROJECT NO. 03-00247-00-BR
 SHEET NO. ST-12
 CONTRACT #83867
 DATE T-28-2006

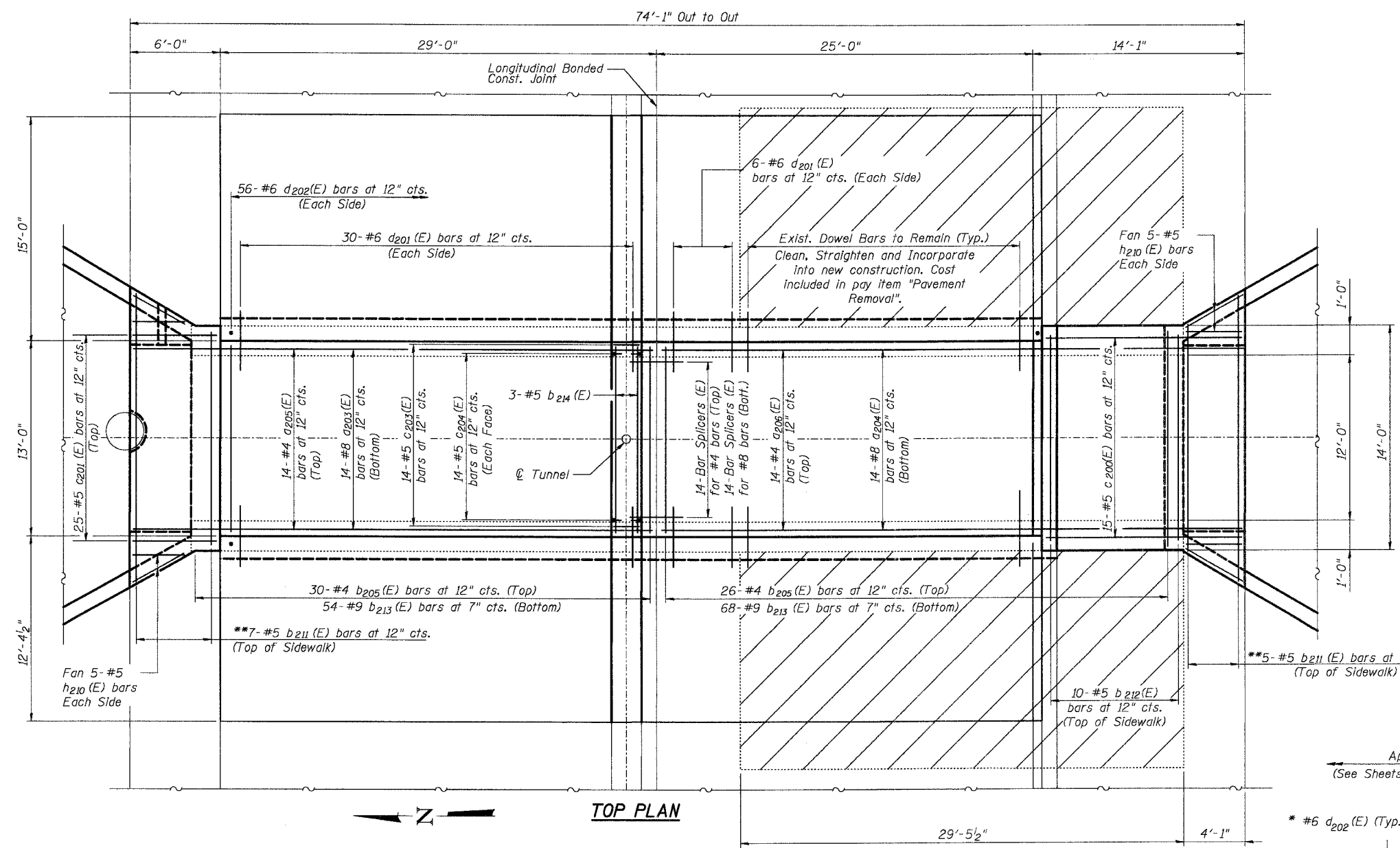
LEGEND:
 Existing Approach Pavement to be removed

BILL OF MATERIALS

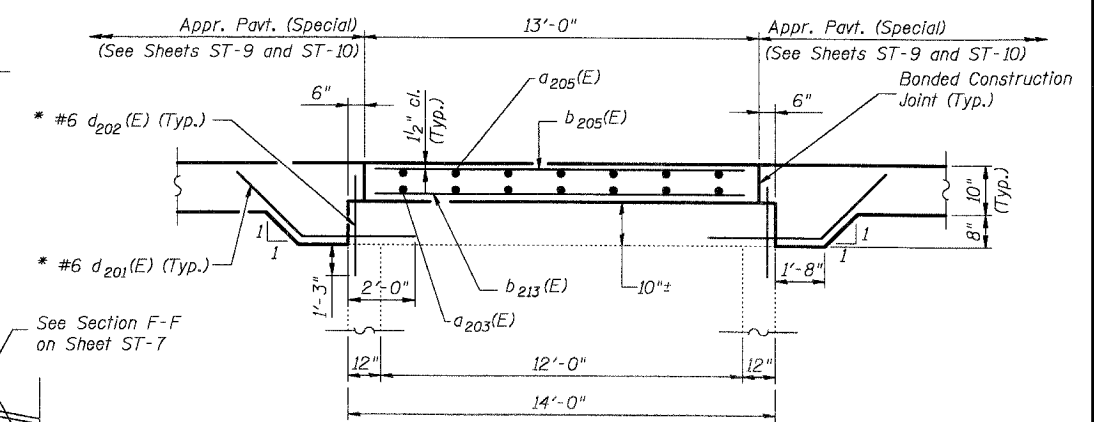
Bar No.	Size	Length	Shape
a203(E)	14 # 8	34'-8"	—
a204(E)	14 # 8	38'-9"	—
a205(E)	14 # 4	28'-10"	—
a206(E)	14 # 4	24'-10"	—
b204(E)	122 # 9	12'-8"	—
b205(E)	56 # 4	12'-8"	—
b206(E)	3 # 5	12'-8"	—
b211(E)	12 # 5	18'-5"	—
b212(E)	10 # 5	13'-8"	—
c200(E)	15 # 5	13'-8"	—
c201(E)	15 # 5	5'-8"	—
c203(E)	14 # 5	1'-8"	—
c204(E)	28 # 5	1'-3"	—
d201(E)	72 # 6	5'-1"	—
d206(E)	112 # 6	3'-0"	—
h206(E)	30 # 5	6'-8"	—
h210(E)	20 # 5	3'-9"	—
Reinforcement Bars, Epoxy Coated	Pound	10,980	
Concrete Superstructure	Cu. Yd.	44.7	
Protective Coat	Sq. Yd.	127	

NOTES:

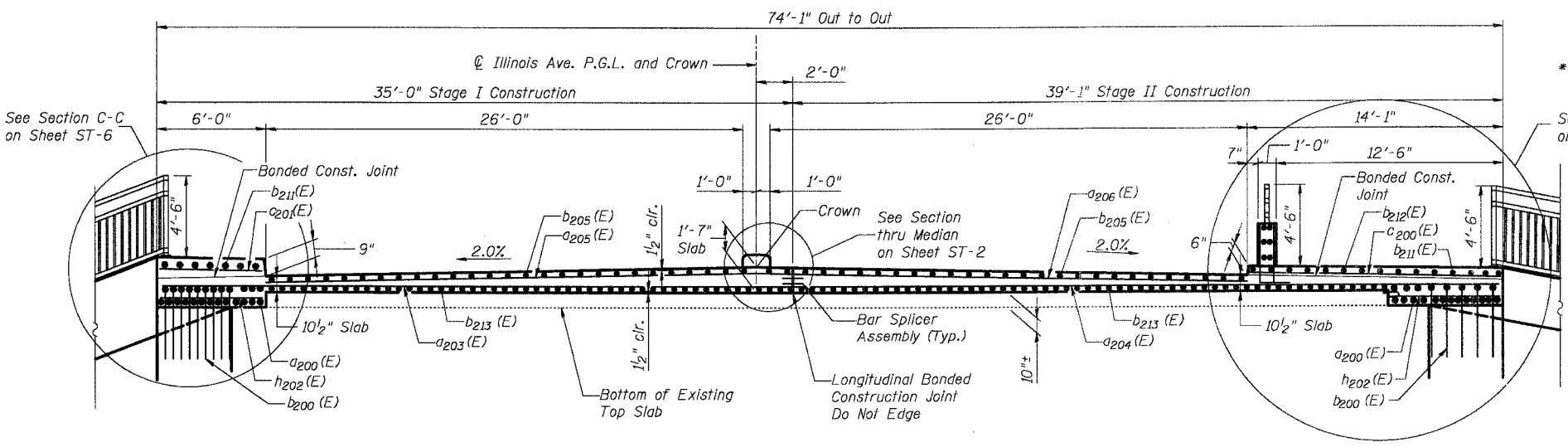
Reinforcement bars designated (E) shall be epoxy coated. Work this sheet with sheets ST-6 and ST-7. See sheet ST-2 for Section Thru Median. See sheets ST-9 and ST-10 for Approach Pavement (Special) Details.



TOP PLAN



SECTION THRU TOP OF DECK



TYPICAL DECK CROSS SECTION
(Looking East)

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

* Drill and Epoxy Grout bars in drilled holes according to Article 584 of the Standard Specifications.
 ** Order bars full length and cut to fit in the field.

BAR d201(E)

BAR c204(E)

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 1111 North Dearborn Street, Suite 200
 Chicago, Illinois 60610
 (312) 467-1111

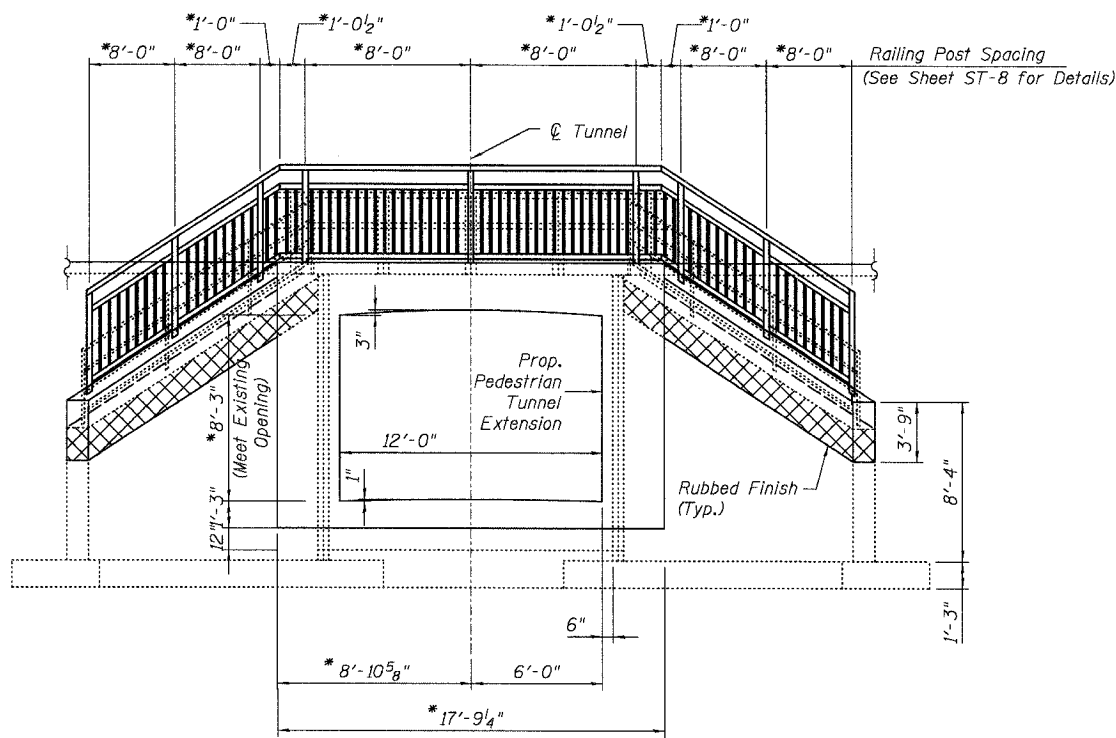
REVISIONS	
NAME	DATE

CITY OF AURORA
 TUNNEL DETAILS
 PEDESTRIAN TUNNEL
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 DATE 7-28-2006

DRAWING NO. ST-5
 PROJECT NO. 03-00247-00-BR
 SHEET NO. ST-5
 DATE 7-28-2006

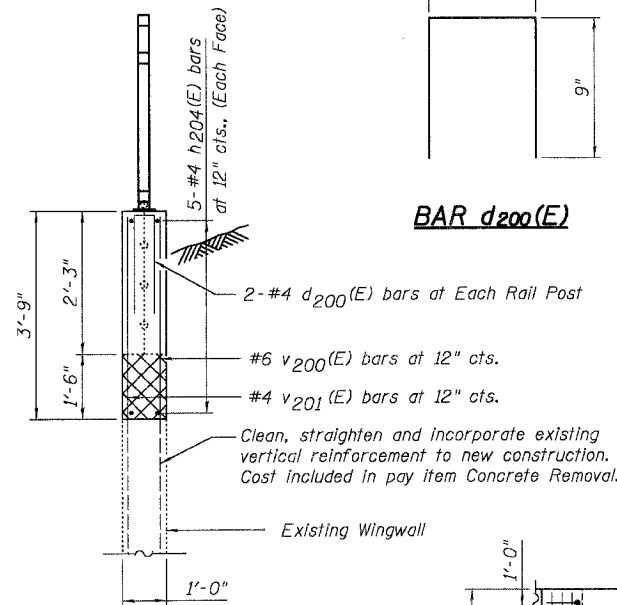
**NORTH EXTENSION
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
d200(E)	13	# 7	18'-5"	—
d201(E)	5	# 7	17'-3"	—
d202(E)	18	# 7	13'-9"	—
d203(E)	10	# 7	8'-11"	—
d204(E)	18	# 7	8'-4"	—
d205(E)	14	# 5	9'-5"	—
d206(E)	20	# 5	6'-3"	—
d207(E)	14	# 4	2'-2"	—
d208(E)	6	# 5	3'-6"	—
h201(E)	62	# 5	3'-9"	—
h202(E)	13	# 5	5'-8"	—
h203(E)	20	# 4	22'-6"	—
v200(E)	46	# 6	3'-7"	—
v201(E)	46	# 4	3'-7"	—
Reinforcement Bars, Epoxy Coated				Pound 2,950
Concrete Structures				Cu. Yd. 14.1
Expansion Bolts 3/4 Inch				Each 28
Concrete Removal				Cu. Yd. 7.2

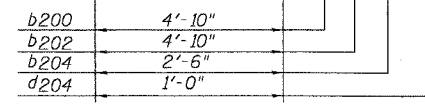


NORTH END ELEVATION

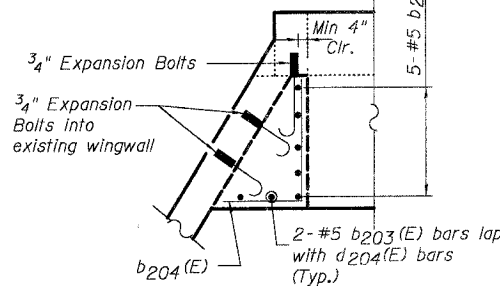
* Verify dimension in the field



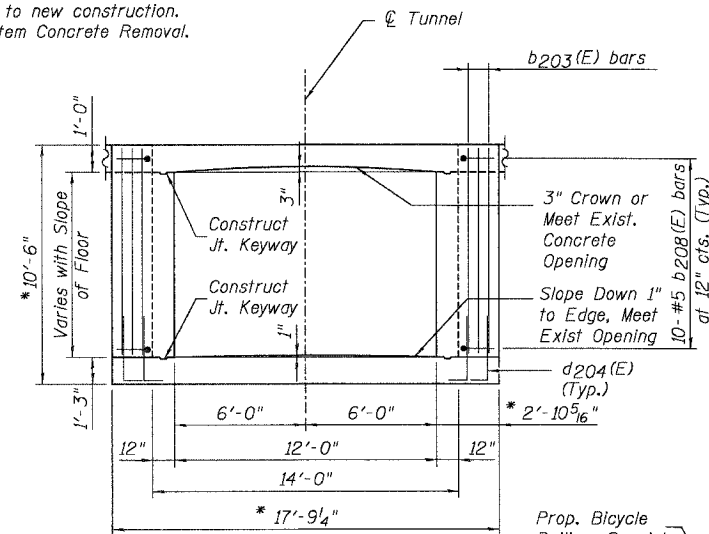
SECTION B-B



**BARS b200(E), b202(E),
 b204(E) and d204(E)**

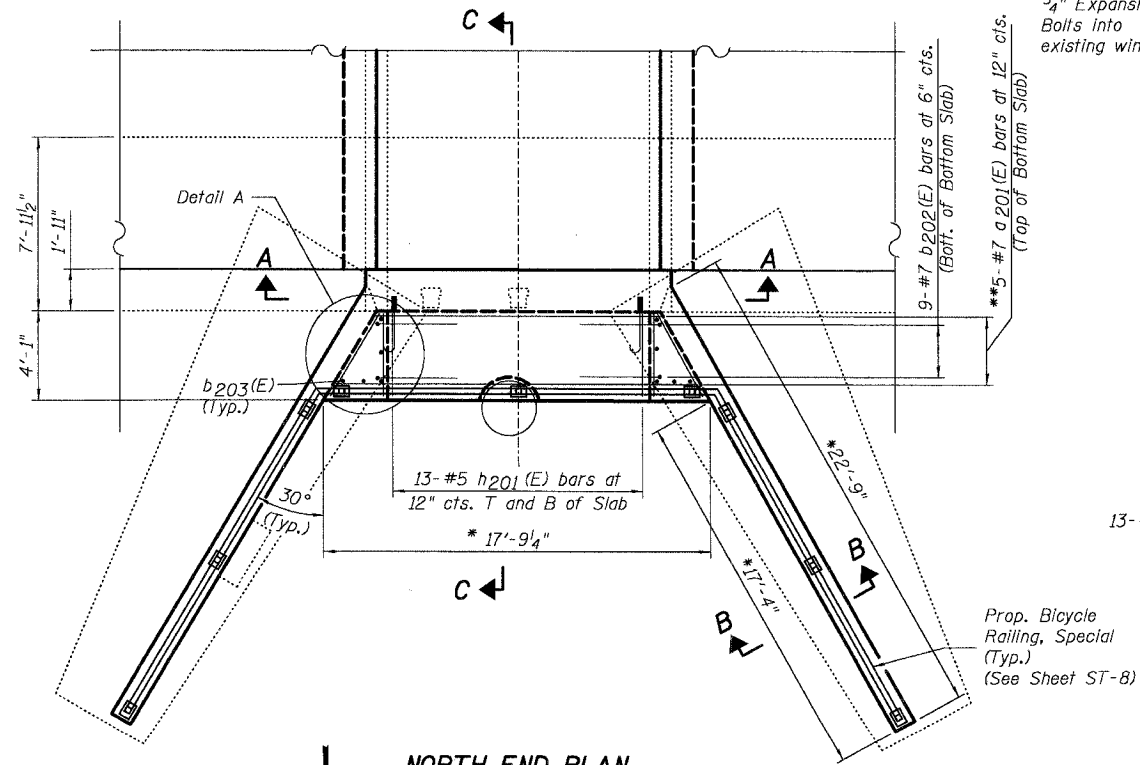


DETAIL A



SECTION A-A

* Verify dimensions in the field



NORTH END PLAN

Showing bottom slab reinforcement

* Verify dimension in the field

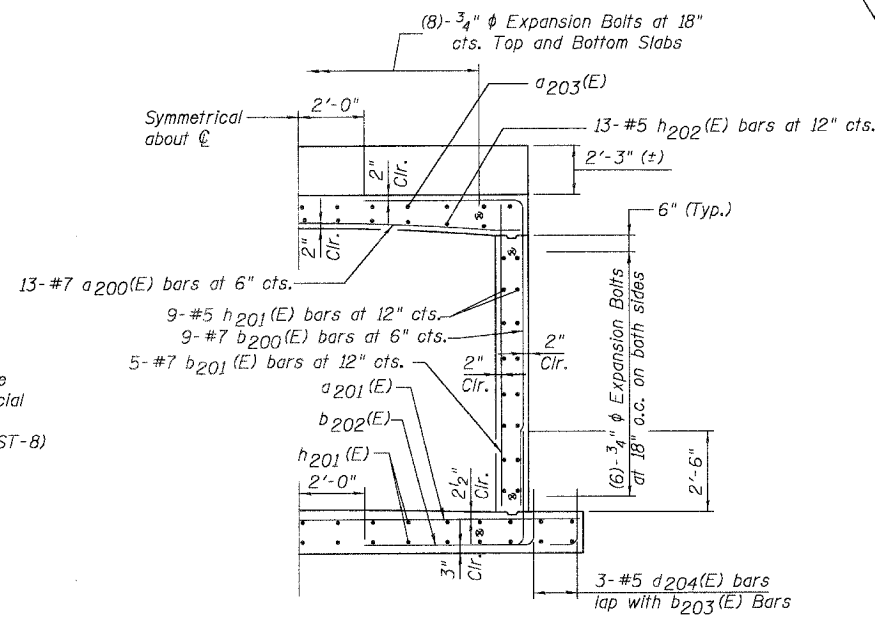
** Order Bars full length and cut to fit in the field.

NOTES

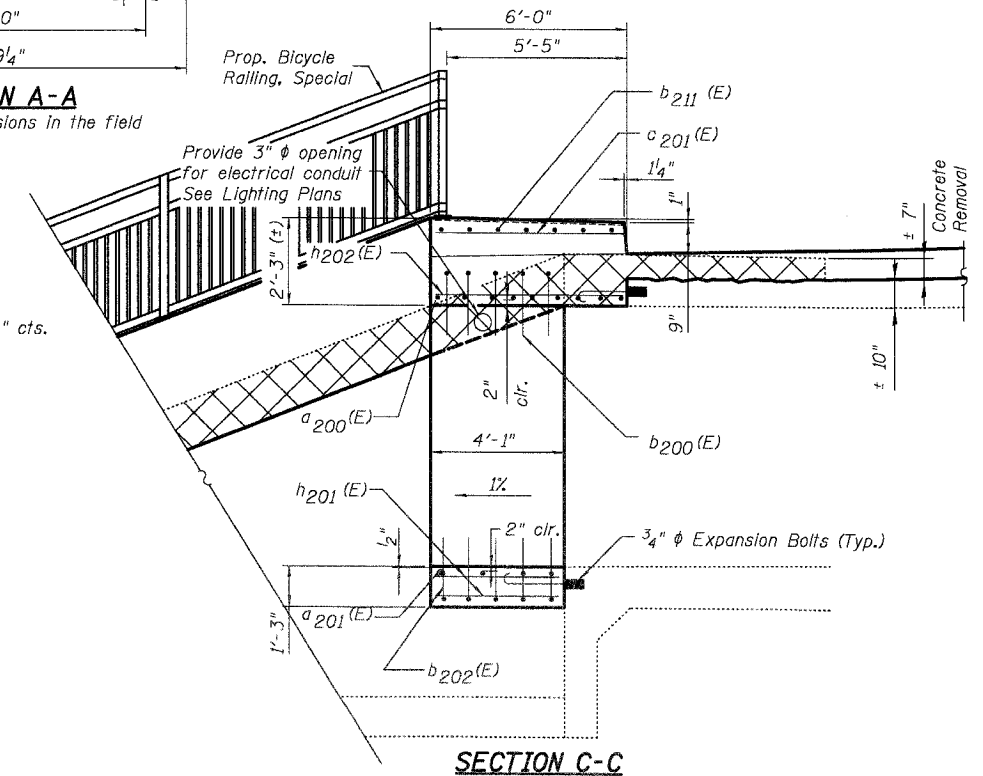
Reinforcement Bars designated (E) shall be Epoxy Coated. Cost of Rubbed Finish included in the pay item Concrete Structures.

LEGEND

Indicates limits Concrete Removal.



**HALF SECTION A-A
 SHOWING REINFORCEMENT**



SECTION C-C

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS

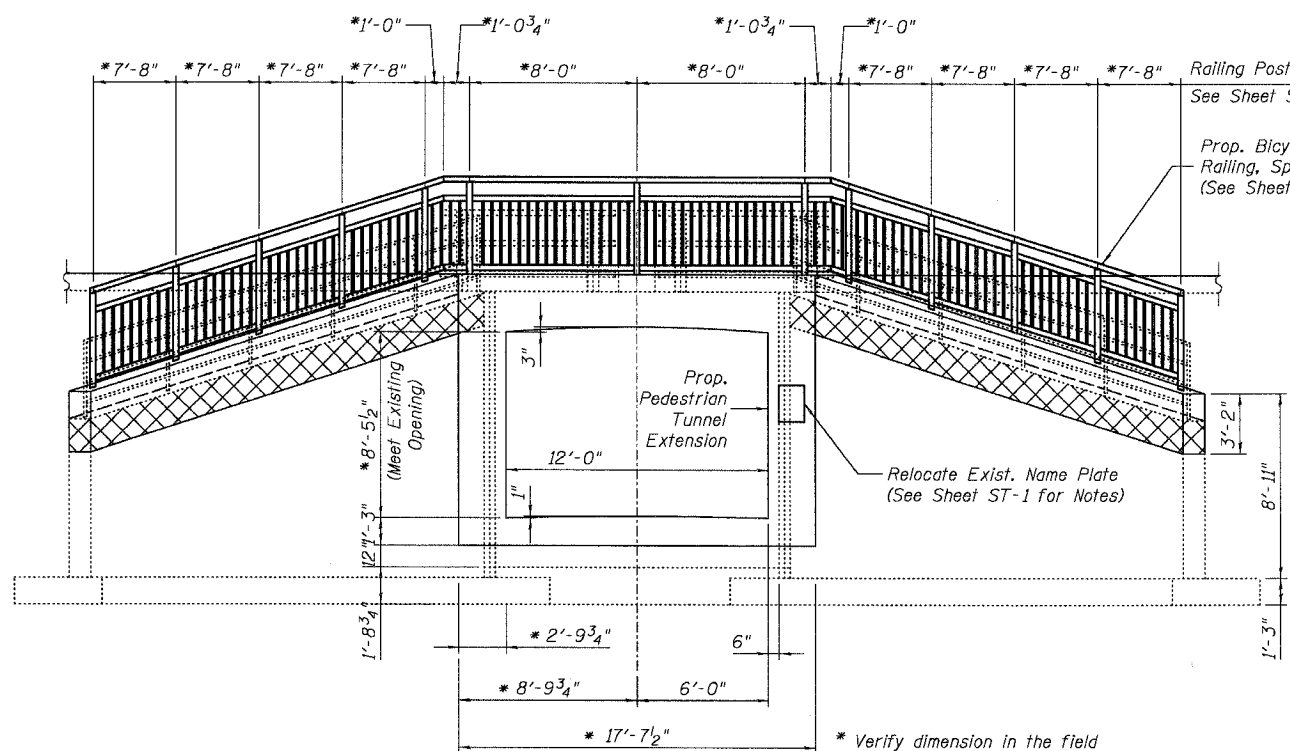
REVISIONS	
NAME	DATE

CITY OF AURORA
 TUNNEL EXTENSION DETAILS - NORTH END
 PEDESTRIAN TUNNEL
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 DATE 7-28-2006

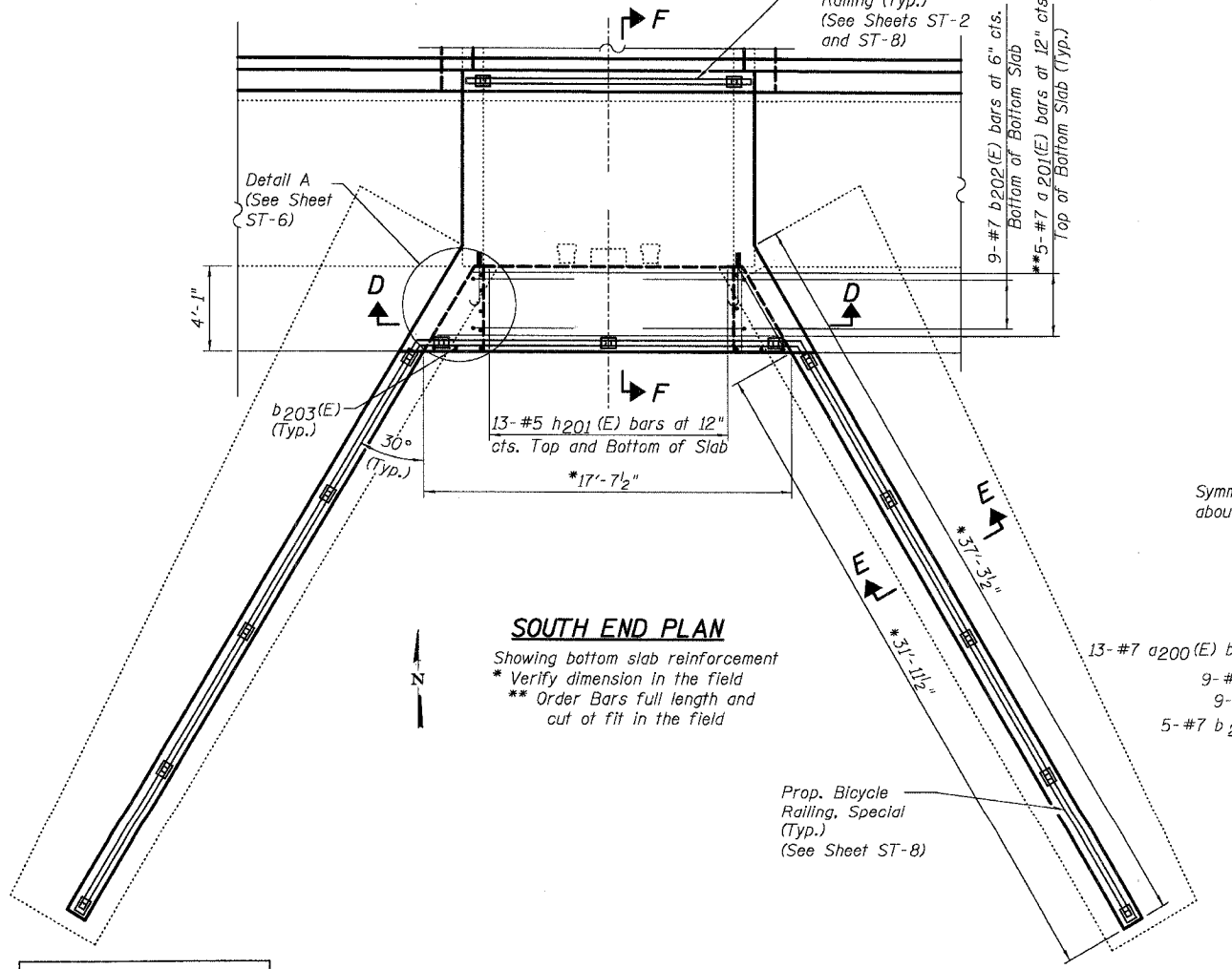
CONTRACT #83867
SOUTH EXTENSION
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
Clea0(E)	13	# 7	18'-5"	—
Clea1(E)	5	# 7	17'-3"	—
Dea0(E)	18	# 7	13'-9"	—
Dea1(E)	10	# 7	8'-11"	—
Dea2(E)	18	# 7	8'-4"	—
Dea3(E)	14	# 5	9'-5"	—
Dea4(E)	20	# 5	6'-3"	—
Dea5(E)	62	# 5	3'-9"	—
Dea6(E)	13	# 5	6'-0"	—
Dea7(E)	16	# 4	37'-0"	—
Clea0(E)	26	# 4	2'-2"	—
Clea3(E)	30	# 6	4'-0"	—
Clea4(E)	6	# 5	3'-6"	—
Clea5(E)	6	# 4	13'-8"	—
Vea0(E)	76	# 6	3'-0"	—
Vea3(E)	76	# 4	3'-0"	—
Reinforcement Bars, Epoxy Coated			Pound	3,440
Concrete Structures			Cu. Yd.	17.3
Expansion Bolts 3/4 Inch			Each	28
Concrete Removal			Cu. Yd.	8.9

Notes:
 Reinforcement Bars designated (E) shall be Epoxy Coated.
 Cost of Rubbed Finish Included in the pay item Concrete Structures

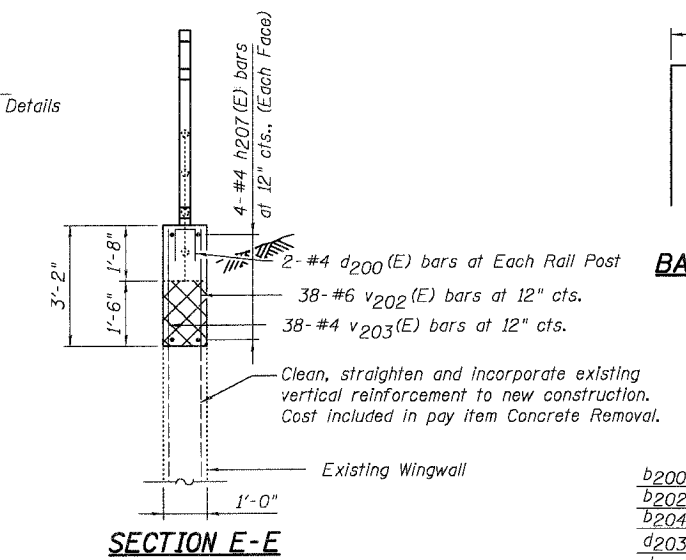


SOUTH END ELEVATION



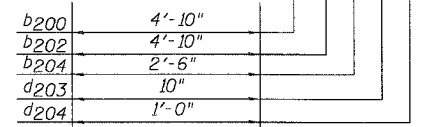
SOUTH END PLAN

Showing bottom slab reinforcement
 * Verify dimension in the field
 ** Order Bars full length and cut of fit in the field

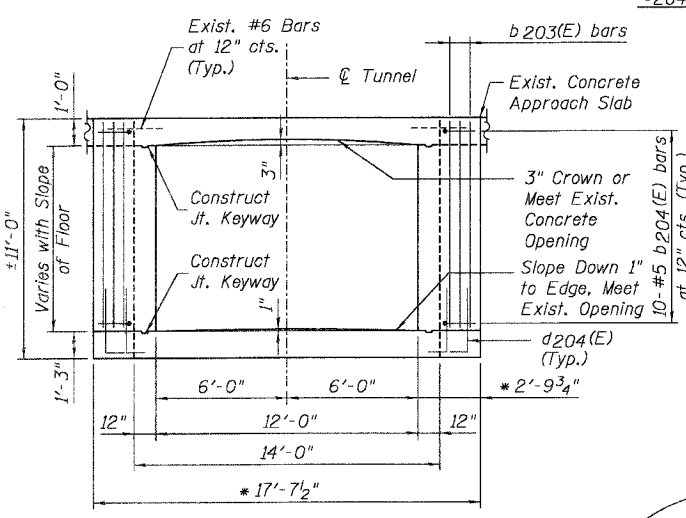


SECTION E-E

BAR d200(E)

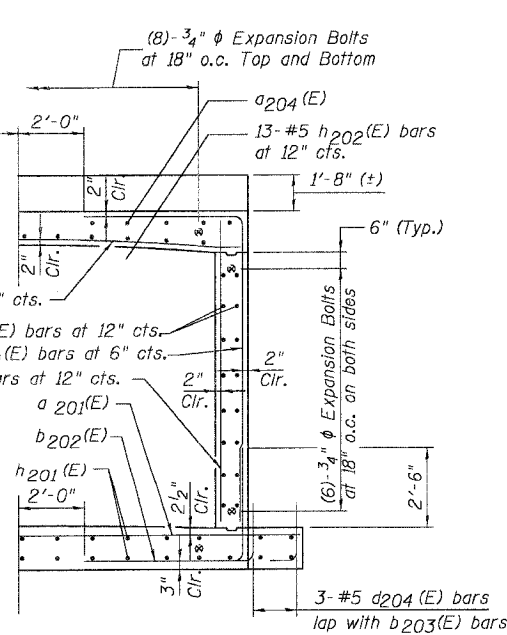


BAR b200(E), b202(E), b204(E), d203(E) and d204(E)

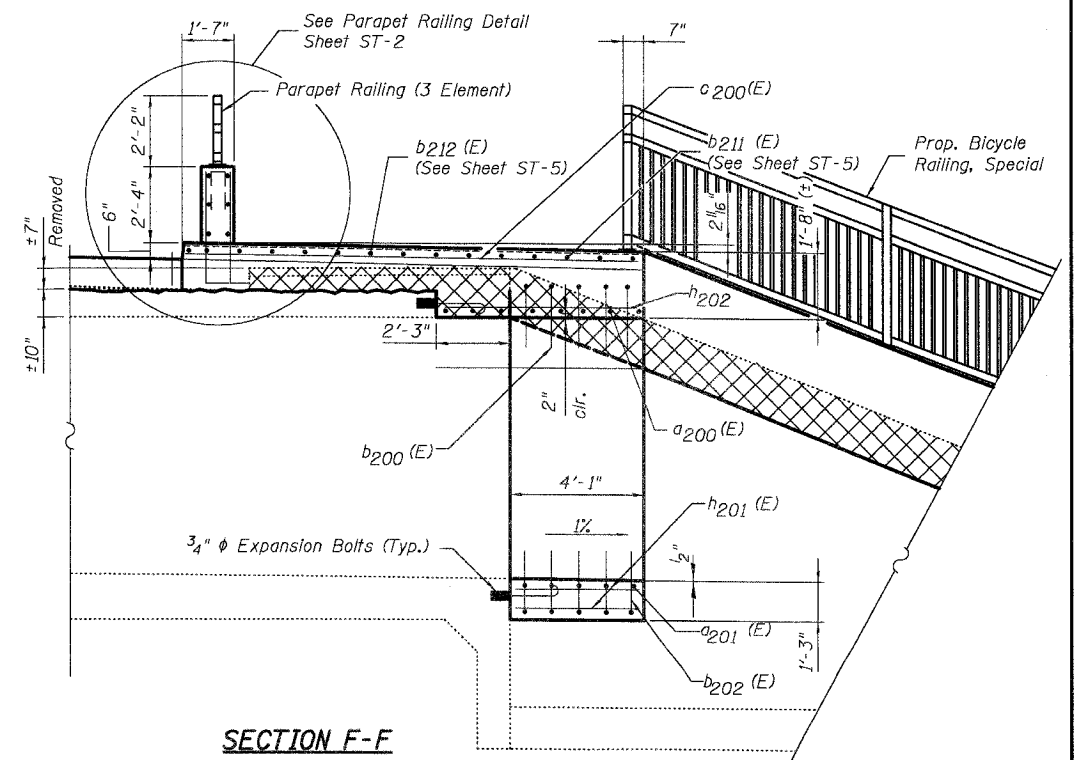


SECTION D-D

* Verify dimension in the field



HALF SECTION D-D SHOWING REINFORCEMENT



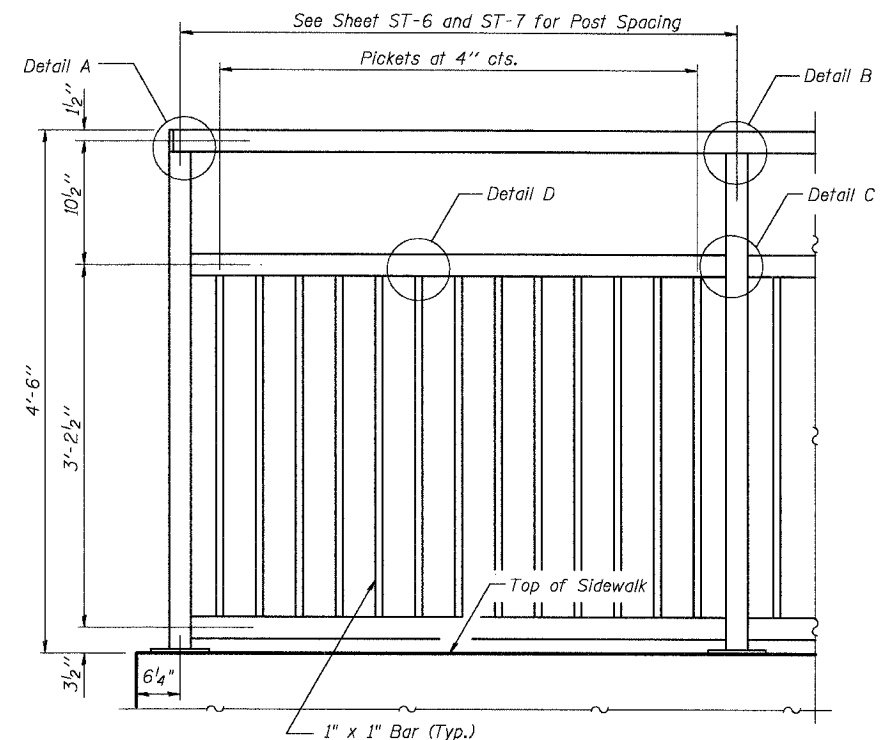
SECTION F-F

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

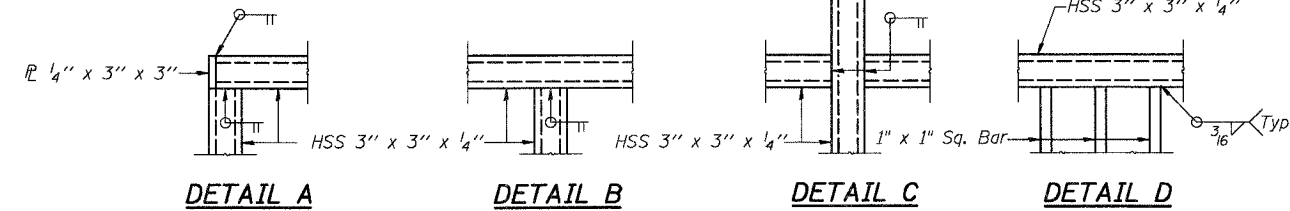
REVISIONS	
NAME	DATE

CITY OF AURORA
 TUNNEL EXTENSION DETAILS - SOUTH END
 PEDESTRIAN TUNNEL
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 DATE 7-28-2006

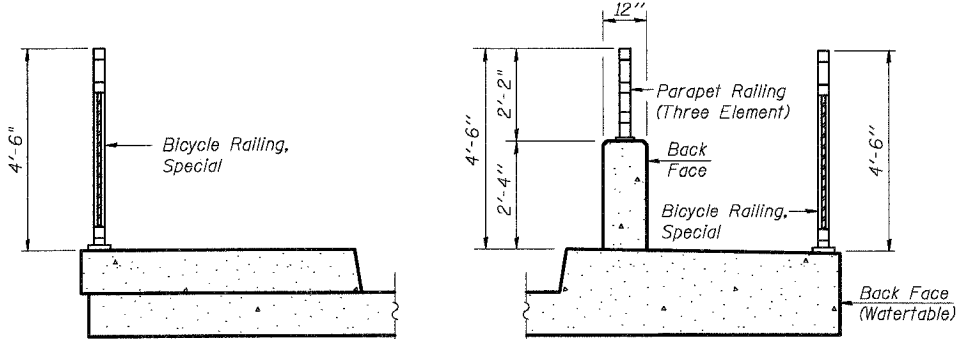
COMPANY NAME, ADDRESS, PHONE NO., FAX NO., E-MAIL ADDRESS, WEBSITE
 CLIENT NAME, ADDRESS, PHONE NO., FAX NO., E-MAIL ADDRESS, WEBSITE



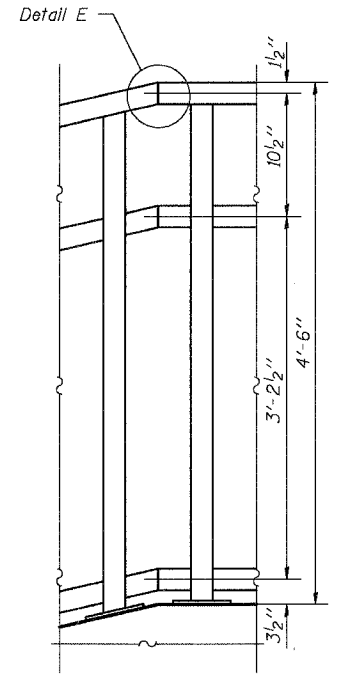
BICYCLE RAILING



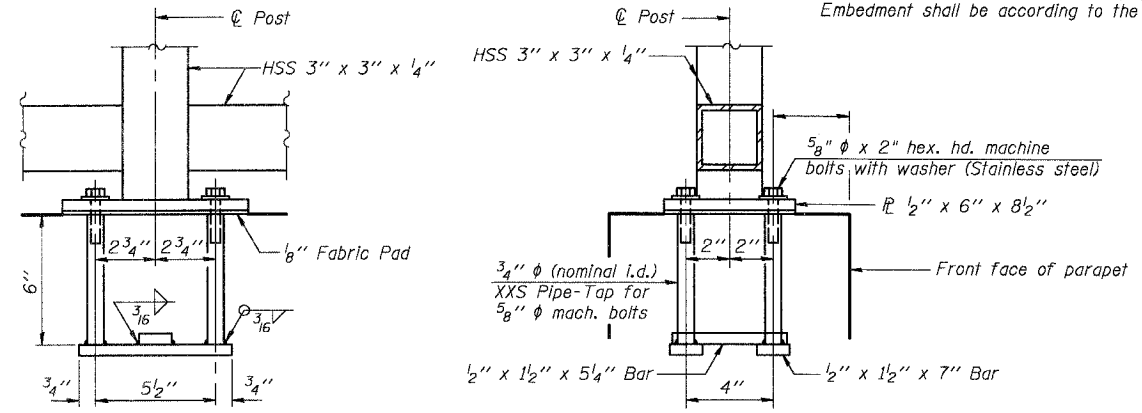
DETAIL A DETAIL B DETAIL C DETAIL D



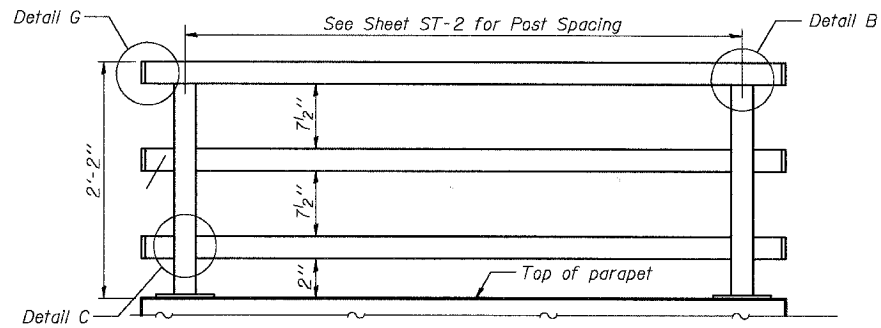
SECTION THRU SIDEWALK SECTION THRU SHARED USE PATH



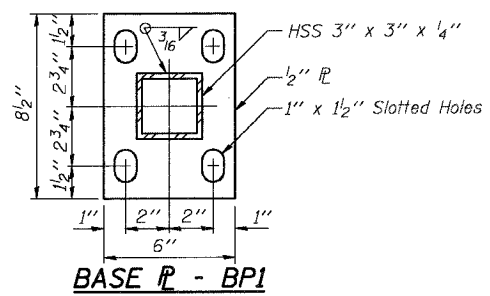
BICYCLE RAILING ON WINGWALL CORNERS



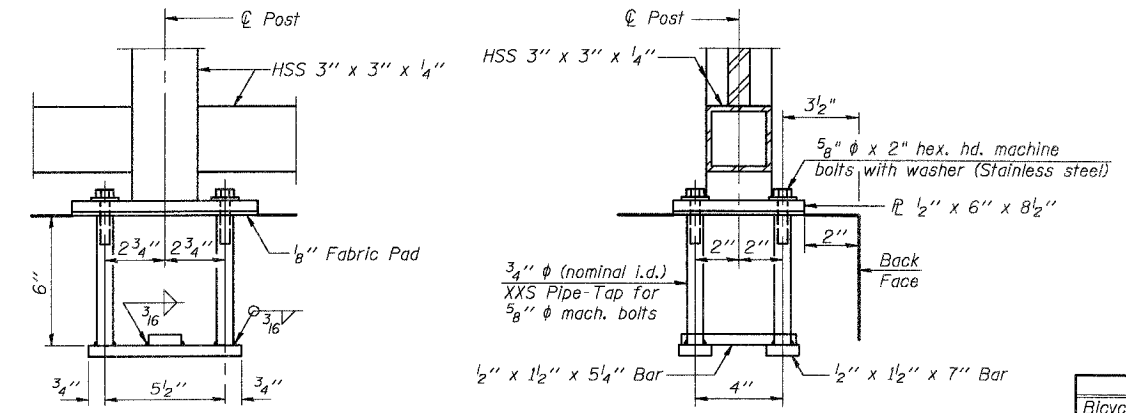
ANCHOR BOLT DETAILS
Parapet Railings



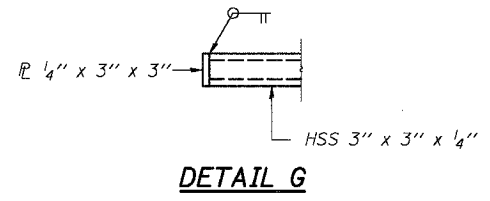
PARAPET RAILING ELEVATION
(Inside Face of Three Element Rail)



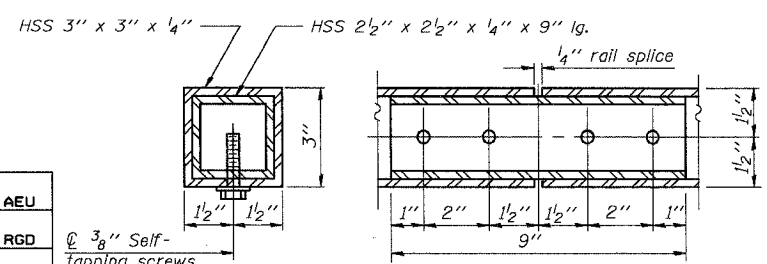
BASE PL - BP1



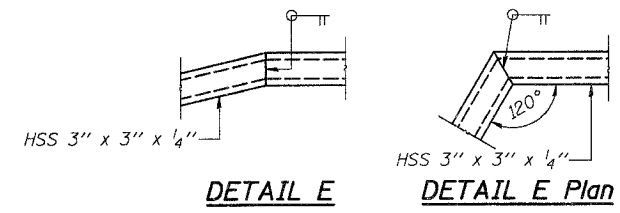
ANCHOR BOLT DETAILS
Bicycle Railing



DETAIL G



RAIL SPLICE



DETAIL E DETAIL E Plan

NOTES

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the Contract Unit Price per foot for Bicycle Railing, Special or Parapet Railing.

Hollow structural sections shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36.

The Three Element Parapet Railing, furnished and installed shall not be paid for separately but shall be included in the unit bid price for Bicycle Railing, Special.

If the option of drilling and epoxy grouting the anchor rods is chosen, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with pre-measured amounts of the adhesive chemical.

Space reinforcement to miss anchor rods.

All post, railing, pickets, splices, and anchor devices shall be powder coated black. The powder coating system to be used shall be approved by the engineer prior to the coating process.

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting 5/8" diameter anchor rods. Embedment shall be according to the manufacturer's specifications.

BILL OF MATERIAL

Item	Unit	Quantity
Bicycle Railing, Special	Foot	134

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

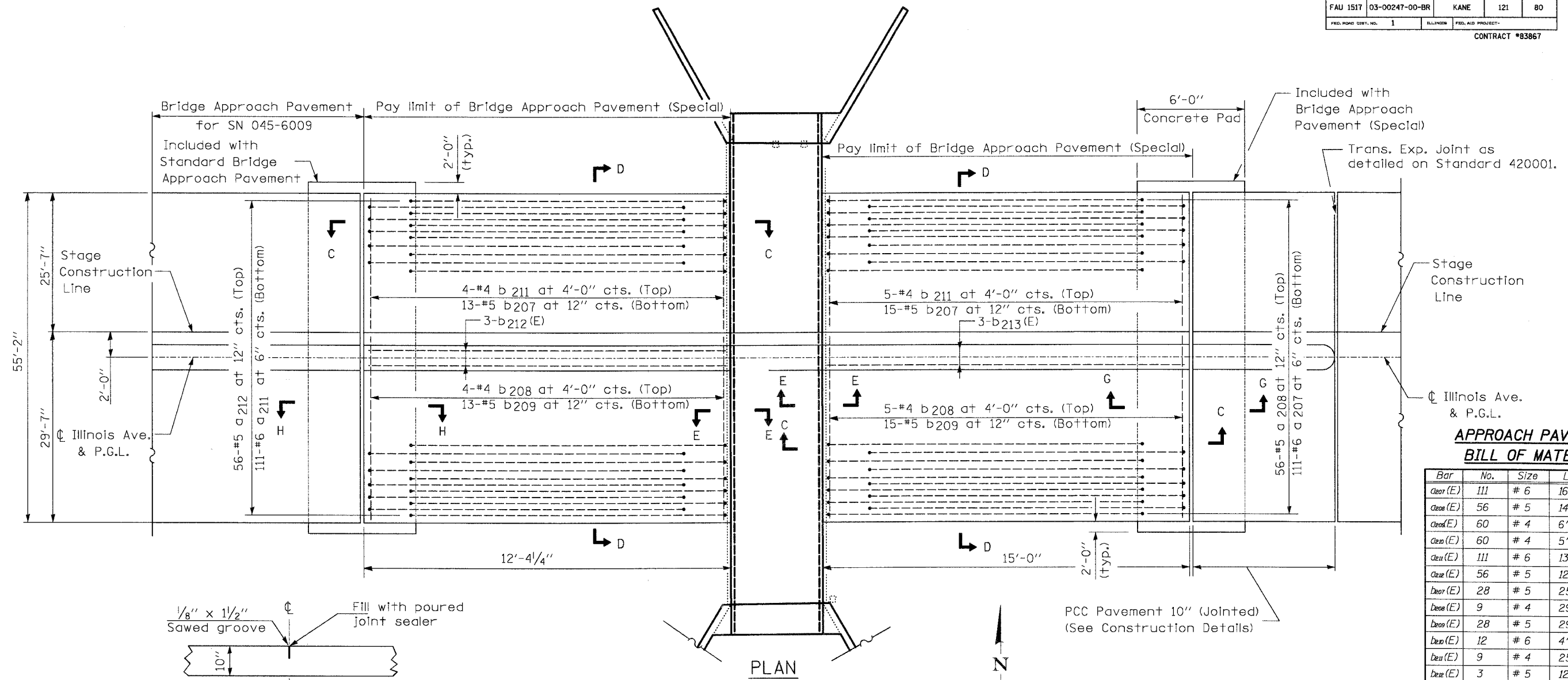
REVISIONS	
NAME	DATE

CITY OF AURORA

RAILING DETAILS
PEDESTRIAN TUNNEL
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY

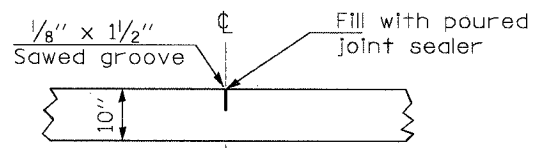
DATE 7-28-2006

COMPANY NAME, DATE, PROJECT, SHEET NO., DRAWN BY, CHECKED BY, DESIGNED BY, SCALE, TYPED BY, PLOTTED BY, PLOT DATE, PLOT SCALE, PLOT SIZE, PLOT ORIENTATION, PLOT RESOLUTION, PLOT DENSITY, PLOT FONT SIZE, PLOT LINE WEIGHT, PLOT COLOR, PLOT BACKGROUND, PLOT OVERLAY, PLOT PRINTING, PLOT CANCEL, PLOT ERROR, PLOT WARNING, PLOT MESSAGE, PLOT STATUS, PLOT INFO, PLOT HELP, PLOT ABOUT, PLOT EXIT.



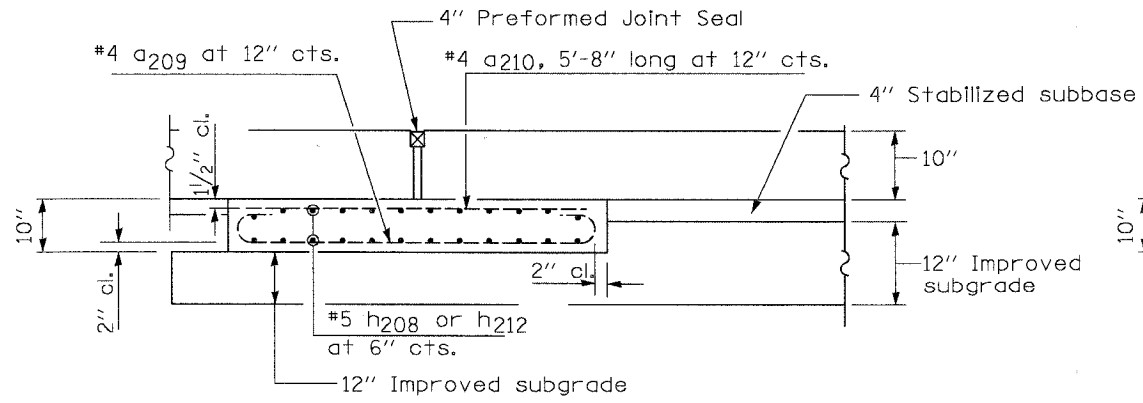
**APPROACH PAVEMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
Clear (E)	111	# 6	16'-6"	U
Clear (E)	56	# 5	14'-8"	U
Clear (E)	60	# 4	6'-8"	U
Clear (E)	60	# 4	5'-8"	U
Clear (E)	111	# 6	13'-10"	U
Clear (E)	56	# 5	12'-0"	U
Clear (E)	28	# 5	25'-3"	U
Clear (E)	9	# 4	29'-3"	U
Clear (E)	28	# 5	29'-3"	U
Clear (E)	12	# 6	4'-0"	U
Clear (E)	9	# 4	25'-3"	U
Clear (E)	3	# 5	12'-0"	U
Clear (E)	3	# 5	14'-8"	U
Clear (E)	29	# 5	1'-8"	U
Clear (E)	29	# 5	1'-3"	U
Clear (E)	24	# 5	27'-3"	U
Clear (E)	24	# 5	31'-3"	U
Bridge Approach Pavement (Special)		Sq. Yd.	168	

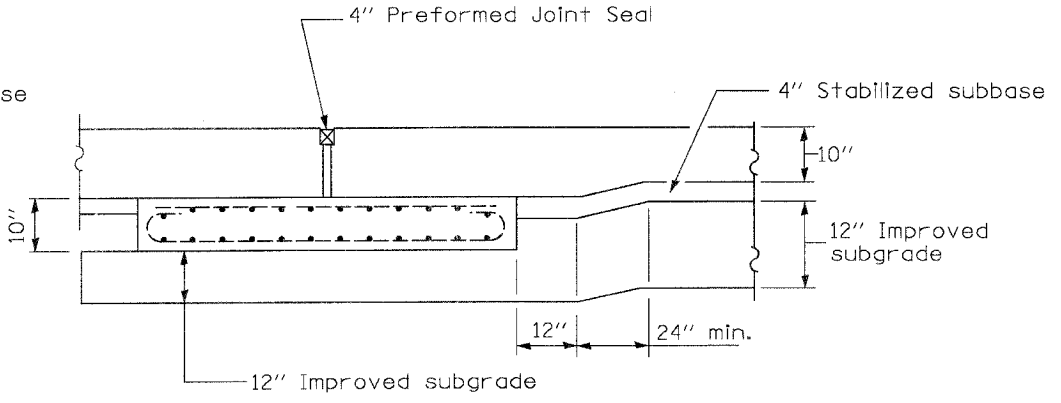


SAWED JOINT DETAIL*
(Reinforcement Not Shown)

* Saw ϕ or lane edge if poured two or more lane widths at a time.



SECTION G-G - RIGID PAVEMENT
(Showing reinforcement)



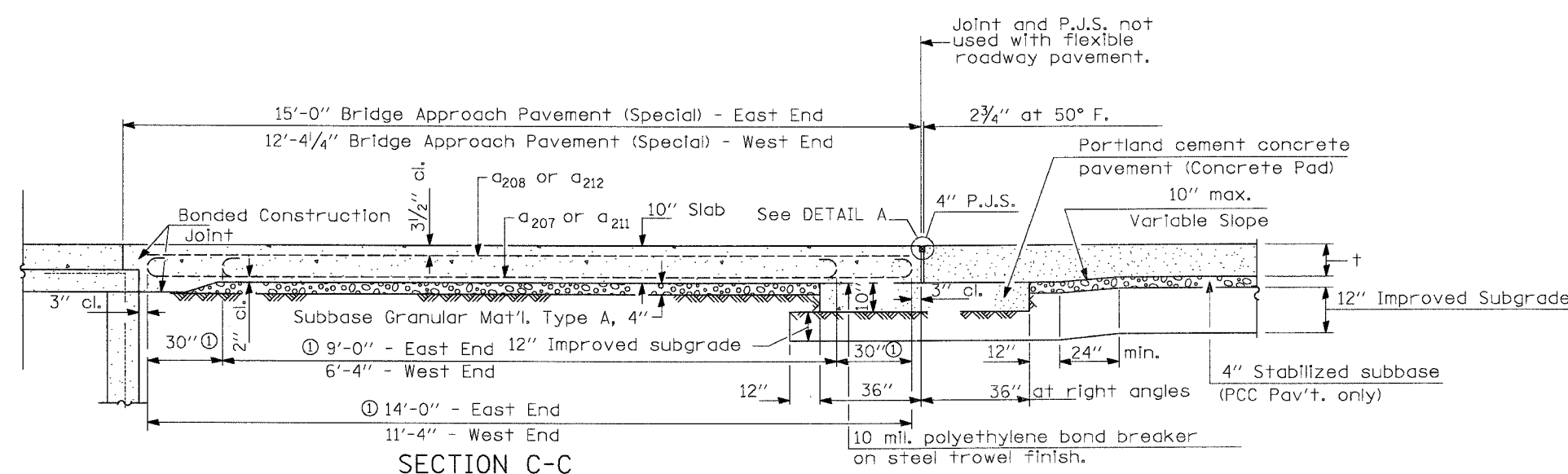
SECTION H-H - RIGID PAVEMENT
Work with Bridge Approach Pavement Standard.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

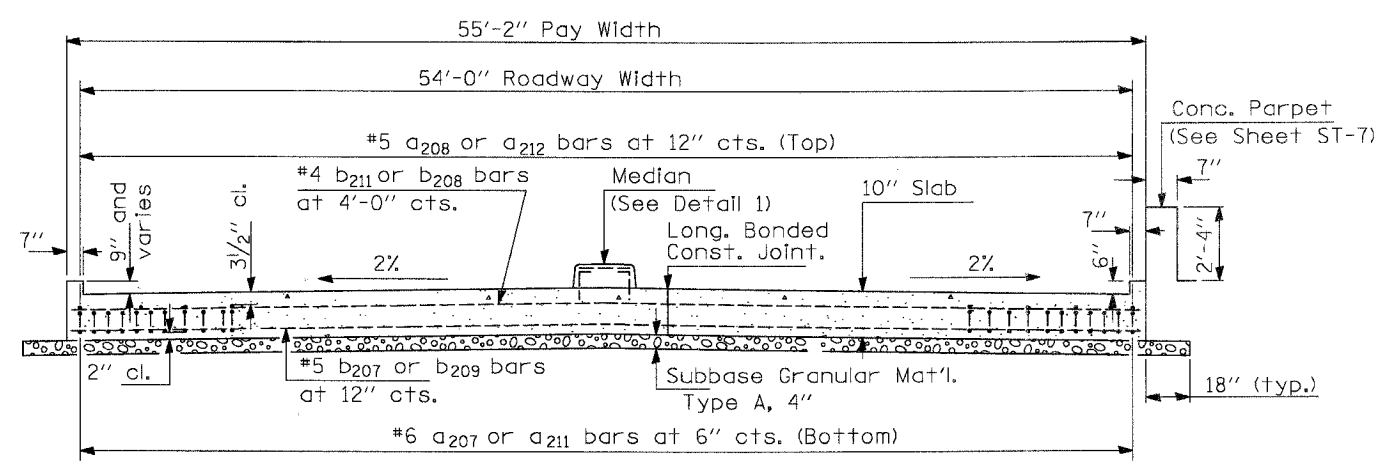
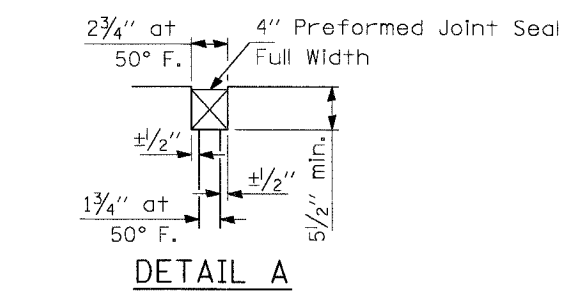
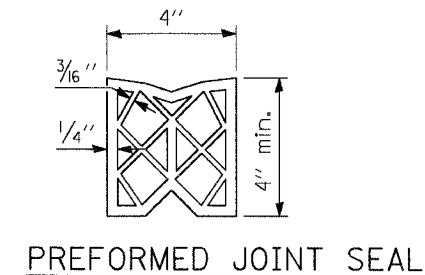
REVISIONS	
NAME	DATE

CITY OF AURORA
APPROACH PAVEMENT DETAILS I
 PEDESTRIAN TUNNEL
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 DATE 7-28-2006

DESIGN: AEU, RGD, WJH, NRF
 PROJECT: CONTRACT #83867, PROJECT #03-00247-00-BR
 DRAWN: WJH
 CHECKED: NRF

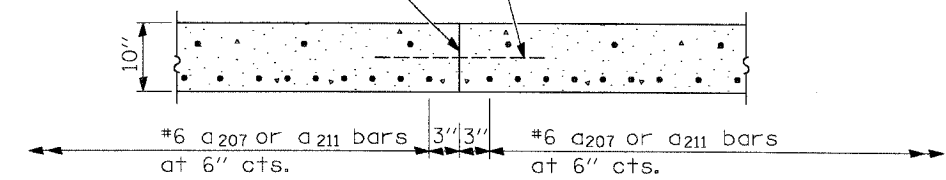


SECTION C-C
 ① Stagger #9 a₂₀₇ and a₂₁₁ bars as shown on plan - full width
 Tilt a₂₀₇ and a₂₁₁ bars in field to meet minimum clearance.

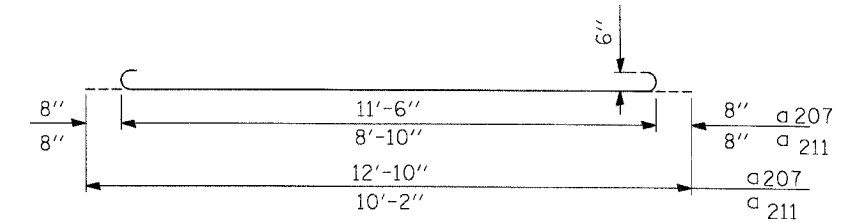


SECTION D-D
 (See Plan for Dimensions not shown)
 All reinforcement bars shall be epoxy coated.

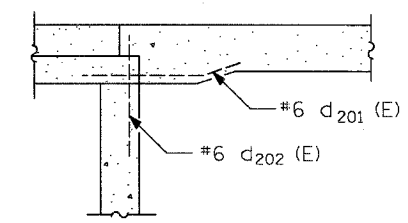
Longitudinal Construction Joint in accordance with details shown on Standard 420001.



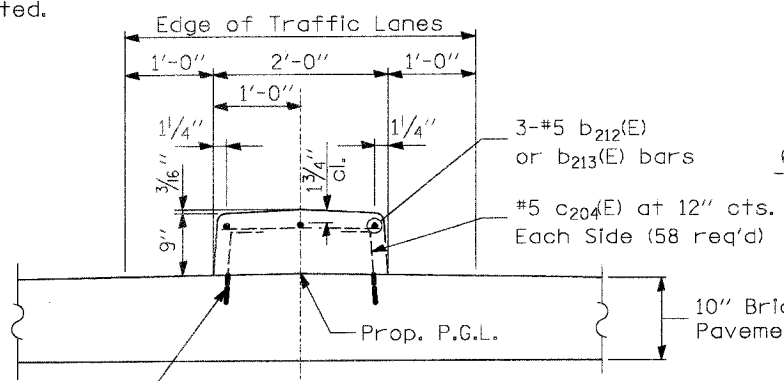
LONGITUDINAL CONSTRUCTION JOINT



BAR a₂₀₇ OR a₂₁₁

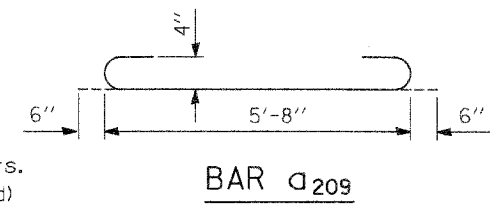


SECTION E-E
 (See Section Thru Top of Deck on Sheet ST-5)

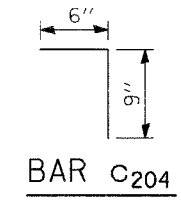


3/4" Ø Expansion Anchors (Epoxy Coated). Safe working load tension = 7,500 lbs. (Typ.)

DETAIL 1



BAR a₂₀₉



BAR c₂₀₄

DESIGN STRESSES
 f_y = 60,000 p.s.i.
 f'c = 3,500 p.s.i.
 n = 8.5

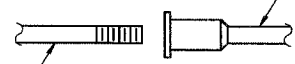
DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.	
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS	
REVISIONS	
NAME	DATE

CITY OF AURORA
 APPROACH PAVEMENT DETAILS II
 PEDESTRIAN TUNNEL
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 DATE 7-28-2006

CONTRACT NO. 03-00247-00-BR SHEET 81 OF 121
 PROJECT NO. 03-00247-00-BR
 DRAWN BY WJH
 CHECKED BY NRF
 DATE 7-28-2006

The diameter of this part is the same as the diameter of the bar spliced.



The diameter of this part is equal or larger than the diameter of bar spliced.

ROLLED THREAD DOWEL BAR



**** ONE PIECE**

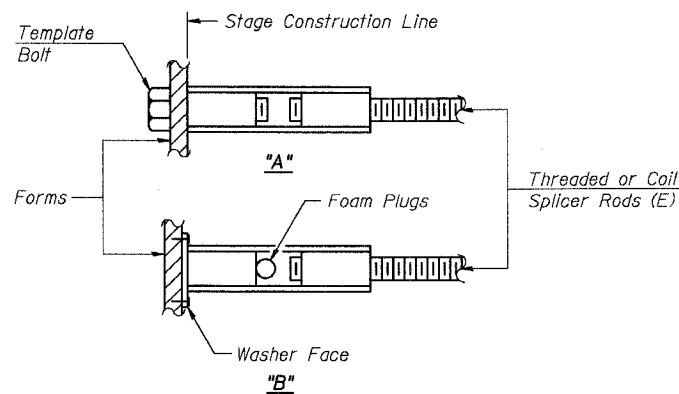
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.

NOTES

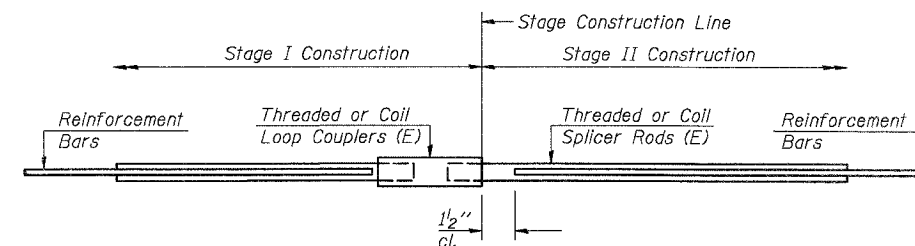
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
 Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
 All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
 Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- ① Minimum Capacity = $1.25 \times f_y \times A_t$
 (Tension in kips)
- ② Minimum *Pull-out Strength = $1.25 \times f_{s_{allow}} \times A_t$
 (Tension in kips)

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_t = Tensile stress area of lapped reinforcement bars.
 * = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."



STANDARD

Bar Size	No. Assemblies Required	Location
#4	14	Top Slab
#8	14	Top Slab

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

SMITH ENGINEERING CONSULTANTS, INC.
 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 21011 Pennsylvania Ave., Suite 200
 Aurora, IL 60011

CITY OF AURORA

BAR SPLICER DETAILS
 PEDESTRIAN TUNNEL
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY

DATE 7-28-2006

DRAWING MADE BY: AEU
 PROJECT CONTACT: PROJECT CONTACT
 DATE: 7/28/06
 FILE: I:\Projects\03-00247-00-BR\Drawings\03-00247-00-BR-ST-12.dwg

CHICAGO TESTING LABORATORY, INC.

FOUNDATION BORING LOG (REVISED)

SHEET 1 OF 1

PROJECT Illinois Avenue over the Fox River CTL FILE # 06MC205 DATE 1/31/06
 ROUTE F.A.P. 1517 LOCATION SE 1/4, Sec. 15, T 38 N, R 8 E BORED BY VI
 SECTION 03-00247-00-BR DRILLING METHOD Continuous Flight Auger LOGGED BY DS
 COUNTY Kane HAMMER TYPE Rope/Cathead CHECKED BY CC

STRUCTURE NUMBER	BORING	STATION	OFFSET	Depth	N/6"	Qu	W	WATER SURFACE EL.	GROUND WATER AT COMPLETION	Depth	N/6"	Qu	W
	S-1	116+95	43' L of CL					689.1	4.7'				
GROUND SURFACE EL. 692.8				M (Ft)						M (Ft)			
Black and Dark Brown Clay LOAM, stiff, A-6: FILL					10	1.0	30						
Dark Brown PEAT, A-8				(S)	4	0.25	48						
Grey Organic SILT to Organic Silty CLAY, trace Shells, A-8				2	2	<0.25	39						
Grey SAND (f-c), trace to little Gravel, A-1-b				3	12	0.25	42						
weathered dolomite				(15)	13	11	7						
Spoon Refusal @ 14.2'					50/2"								

N-Standard Penetration Test- Blows per foot to drive 2 inch
 O.D. Split Spoon Sampler 12 inches with 140 lbs. hammer falling 30 inches
 Qu- Unconfined Compressive Strength (tsf)
 W- Water Content-percentage of oven dry weight (%)
 Type failure: B- Bulge Failure, S- Shear Failure, E- Estimated Value, P-Penetrometer

CHICAGO TESTING LABORATORY, INC.

FOUNDATION BORING LOG (REVISED)

SHEET 1 OF 1

PROJECT Illinois Avenue over the Fox River CTL FILE # 06MC205 DATE 1/31/06
 ROUTE F.A.P. 1517 LOCATION SE 1/4, Sec. 15, T 38 N, R 8 E BORED BY VI
 SECTION 03-00247-00-BR DRILLING METHOD Continuous Flight Auger LOGGED BY DS
 COUNTY Kane HAMMER TYPE Rope/Cathead CHECKED BY CC

STRUCTURE NUMBER	BORING	STATION	OFFSET	Depth	N/6"	Qu	W	WATER SURFACE EL.	GROUND WATER AT COMPLETION	Depth	N/6"	Qu	W
	S-2	116+81	58' R of CL					689.1	4.1'				
GROUND SURFACE EL. 692.7				M (Ft)						M (Ft)			
±13" Dark Brown Silty Clay LOAM/ TOPSOIL, A-7-6: FILL					10	2.0	15						
Brown Sandy LOAM, A-2: FILL				(S)	5		36						
Dark Grey Organic SILT with Shells, A-8				2	1	<0.25	87						
Light Grey Organic SILT and SAND with Shells, A-8					1	P	50						
Light Grey SAND with Shells, trace Gravel, A-1-b				3	8		35						
Grey SAND (f-c) and GRAVEL A-1-b				4	13		13						
weathered dolomite bedrock end of Boring @ 13.6' spoon refusal/ auber refusal)				(15)	50/0"		10						

N-Standard Penetration Test- Blows per foot to drive 2 inch
 O.D. Split Spoon Sampler 12 inches with 140 lbs. hammer falling 30 inches
 Qu- Unconfined Compressive Strength (tsf)
 W- Water Content-percentage of oven dry weight (%)
 Type failure: B- Bulge Failure, S- Shear Failure, E- Estimated Value, P-Penetrometer

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
 1111 N. LAUREL STREET, CHICAGO, IL 60610
 TEL: (773) 399-1111 FAX: (773) 399-1112
 WWW.SMITHENGINEERINGCONSULTANTS.COM

REVISIONS	
NAME	DATE

CITY OF AURORA

SOIL BORING LOGS
 PEDESTRIAN TUNNEL
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY

DATE 1-28-2006

PROJECT: ILLINOIS AVENUE PEDESTRIAN TUNNEL OVER THE FOX RIVER
 CONTRACT: 03-00247-00-BR
 SHEET: ST-12 OF 12
 DATE: 1/31/06
 DRAWN BY: WJH
 CHECKED BY: NRF
 PROJECT ENGINEER: AEU
 CHICAGO TESTING LABORATORY, INC.
 1111 N. LAUREL STREET, CHICAGO, IL 60610
 TEL: (773) 399-1111 FAX: (773) 399-1112
 WWW.SMITHENGINEERINGCONSULTANTS.COM

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	84
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		
1				

SHEET NO. SE-1
SE-27 SHEETS

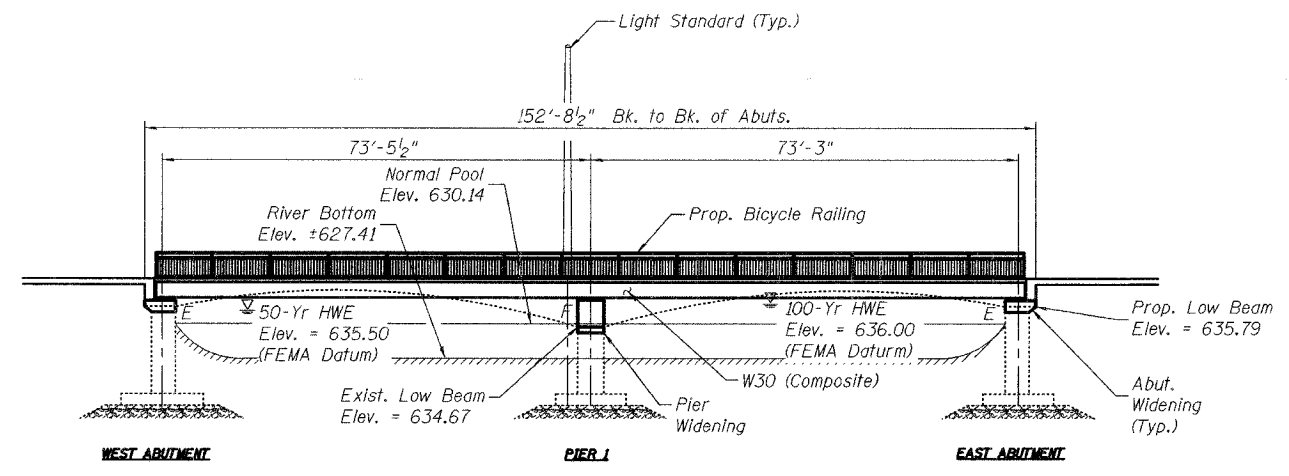
CONTRACT #83867

Benchmark:
Cut square on Southeast Wingwall (East Bridge)
Elev. = 639.88

Existing Structure:
No. 045-6008 Built in 1949 under Sec. 14B-CS, S.A.R. 24 Ext. (Kane County Sec. 118-B M.F.T.), and widened in 1976. The Superstructure consists of 2-continuous reinforced concrete T-Beam spans measuring 150'-2 5/8" back to back of abutments and 65'-11" out to out deck supported by one reinforced concrete pier and two reinforced concrete closed abutments founded on rock.

Salvage:
Reuse existing substructures.

Staging:
One lane of traffic in each direction shall be maintained during construction utilizing staged construction.



ELEVATION

- LEGEND**
- W— 12" Watermain (Abandoned)
 - G— 8" Gas Main (To be Abandoned by NICOR Prior to Construction)
 - E— (10)-5" PVC Electrical Conduits (Abandoned)

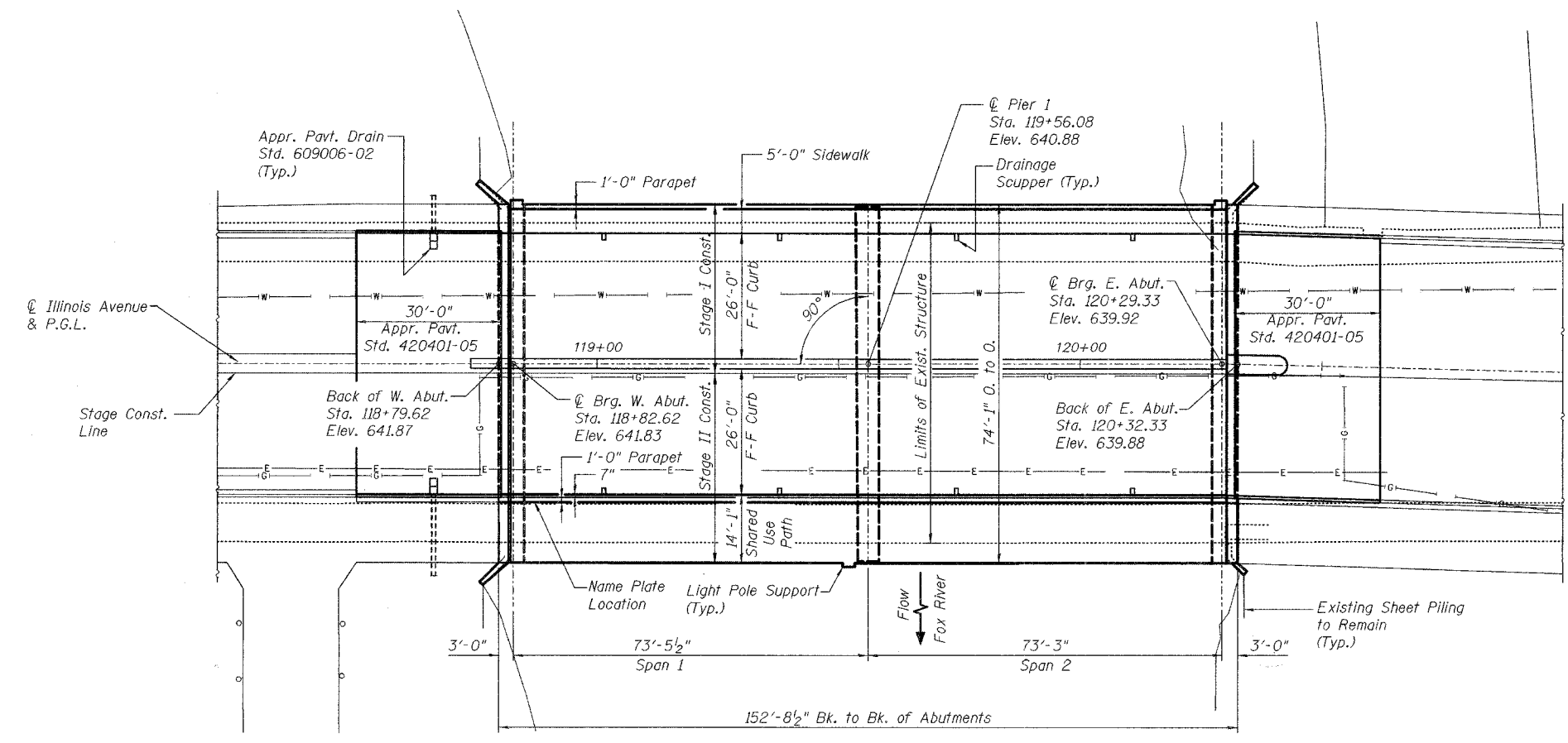
DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications - 17th Ed.

LOADING HS20-44
Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (reinforcement)
fy = 50,000 psi (M270 Gr. 50 Structural Steel)

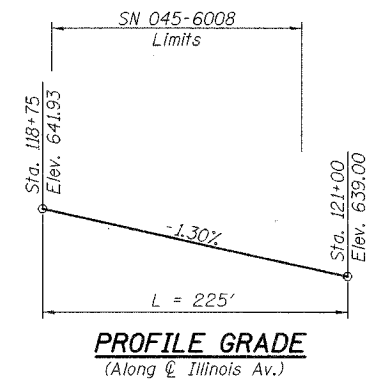
SEISMIC DATA
Seismic Performance Category (SPC) = A
Bedrock Acceleration Coefficient (A) = 4%g
Site Coefficient (S) = 1.0



PLAN

FOX RIVER
BUILT 2007 BY
CITY OF AURORA
SEC 03-00247-00-BR
STATION 119+55.97
STR. NO. 045-6008
LOADING HS20

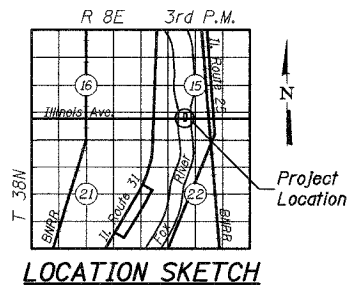
NAME PLATE
See Std. 515001-02



WATERWAY INFORMATION

Drainage Area = 1,705 Sq. Mi. Low Grade Elev. 639.52 @ Sta. - 121+74.61

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	50	8,600	3,159.16	3,178.16	635.50	0	0	635.50	635.50
Base	100	9,420	3,285.84	3,318.92	636.00	0	0	636.00	636.00
Overtopping									
Max. Calc.	500								



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".

Andrew E. Underwager 8-3-06
Date
Andrew E. Underwager
Licensed Structural Engineer
License Expires November 30, 2006

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

CITY OF AURORA

GENERAL PLAN & ELEVATION
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

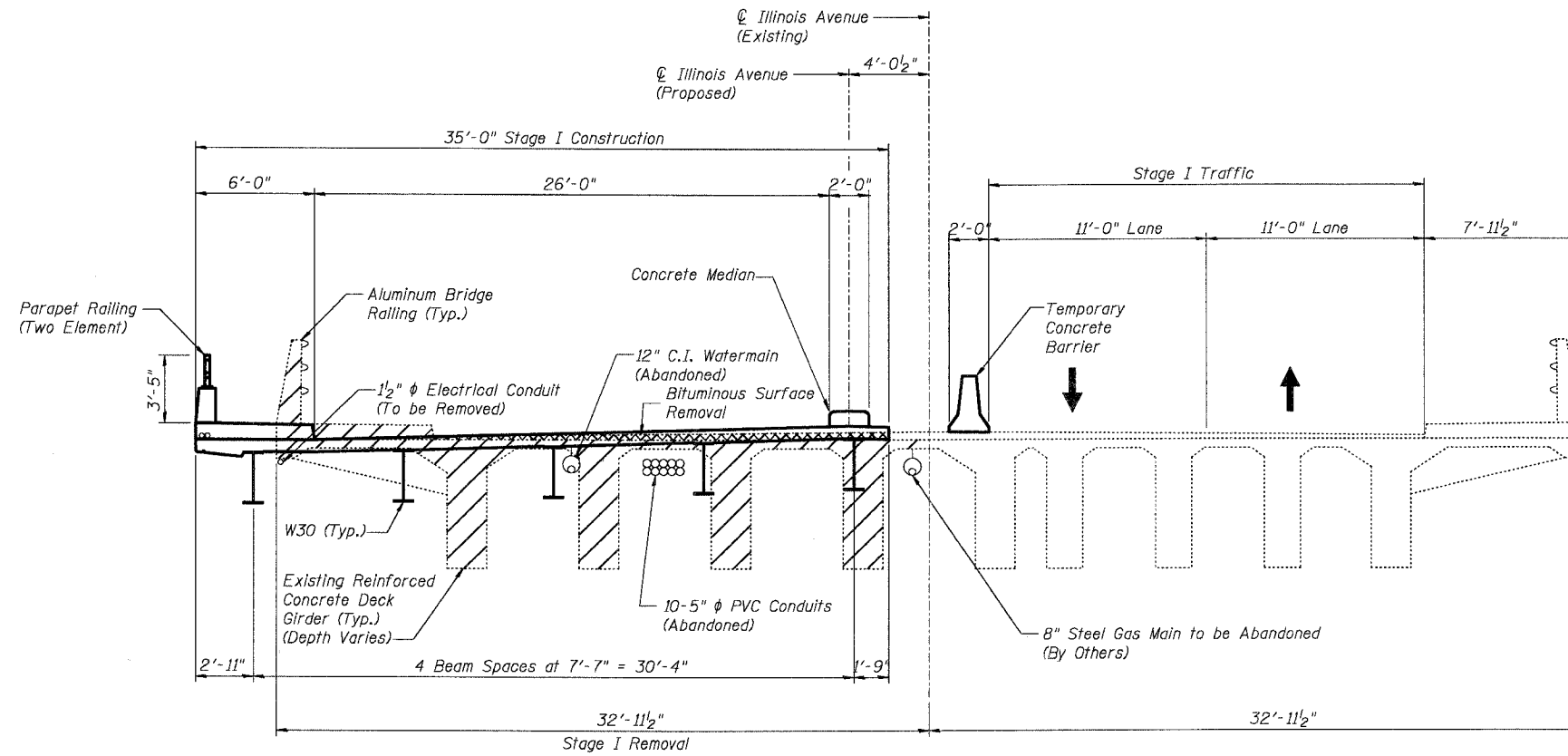
DATE 7-28-2006

CONTRACT NO. 03-00247-00-BR
 PROJECT NO. 045-6008
 SHEET NO. SE-1
 DATE 7-28-2006

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	86
FED. ROAD DIST. NO.	1	S.L. NUMBER	FED. AID PROJECT	

SHEET NO. SE-3
SE-27 SHEETS

CONTRACT #83867



STAGE I
(Looking East)

NOTES:

Contractor may remove existing superstructure as required utilizing permanent lane closures for a period of not longer than 5 continuous days.

Prior to any permanent lane closures, the Contractor shall notify the City 72 hours in advance and obtain all necessary permits. See Roadway Plans for detour route requirements.

See Sheet SE-4 for Temporary Concrete Barrier Details.

See Roadway Plans for Temporary Concrete Barrier Quantity.

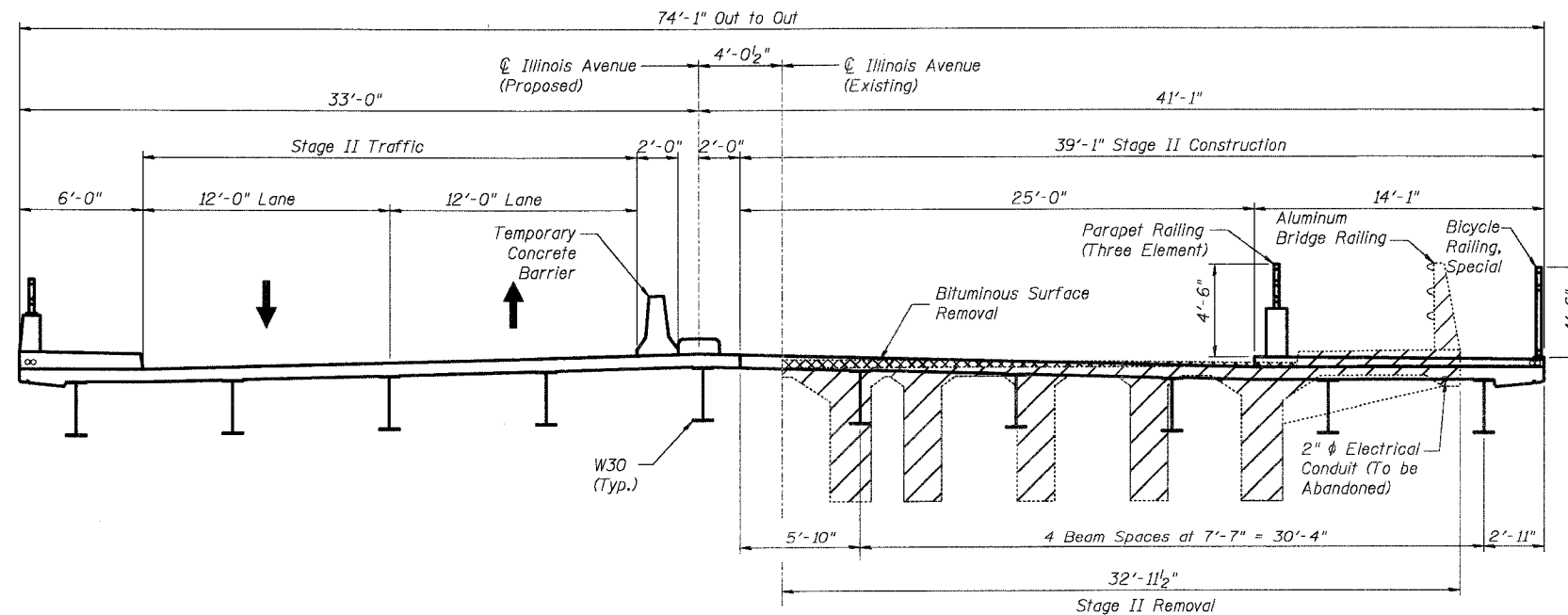
The removal and disposal of abandoned utilities shall be the Contractor's responsibility. The cost of this work shall be included in the cost of "Removal of Existing Superstructures, No. 2".

The removal and disposal of the existing aluminum railing shall be included in the cost of "Removal of Existing Superstructures, No. 2".

- Indicates limits of "Removal of Existing Superstructures, No. 2".
- Indicates limits of Bituminous Surface Removal. See Roadway Plans for quantity.

BILL OF MATERIAL

Item	Unit	Quantity
Removal of Existing Superstructures, No. 2	Each	1



STAGE II
(Looking East)

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

CITY OF AURORA

STAGE CONSTRUCTION DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

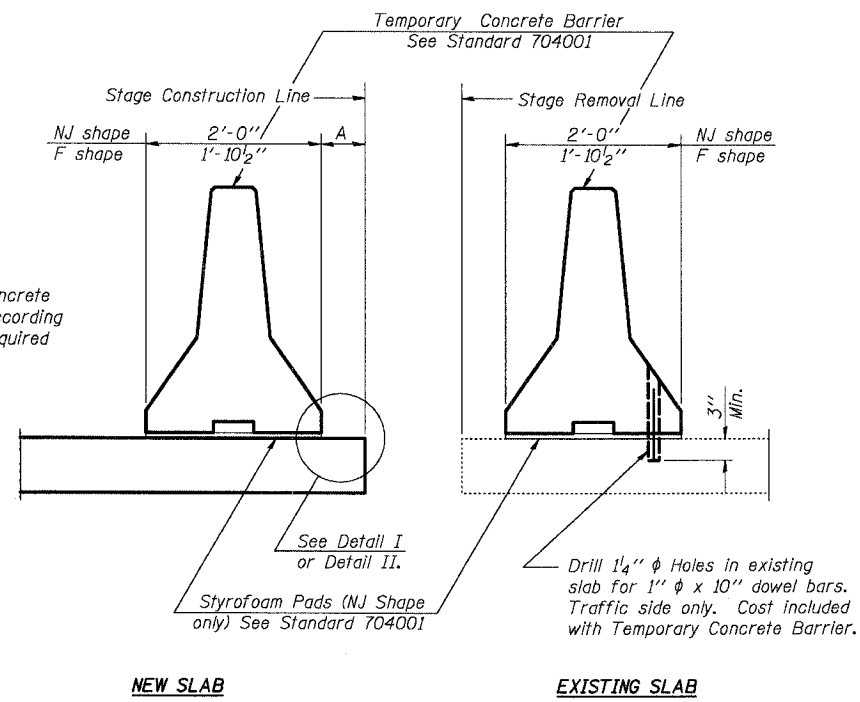
DATE 7-28-2006

COMPANY NAME, SIZE, TYPE, ADDRESS, CITY, STATE, ZIP, PHONE, FAX, E-MAIL, WEBSITE, URL, PROJECT NUMBER, SHEET NUMBER, DATE, SCALE, DRAWN BY, CHECKED BY, DESIGNED BY, APPROVED BY, PROJECT TITLE, CLIENT NAME, PROJECT LOCATION, PROJECT DESCRIPTION, PROJECT STATUS, PROJECT BUDGET, PROJECT COST, PROJECT REVENUE, PROJECT PROFIT, PROJECT RISK, PROJECT CHALLENGES, PROJECT OPPORTUNITIES, PROJECT LESSONS LEARNED, PROJECT CONTACT INFORMATION.

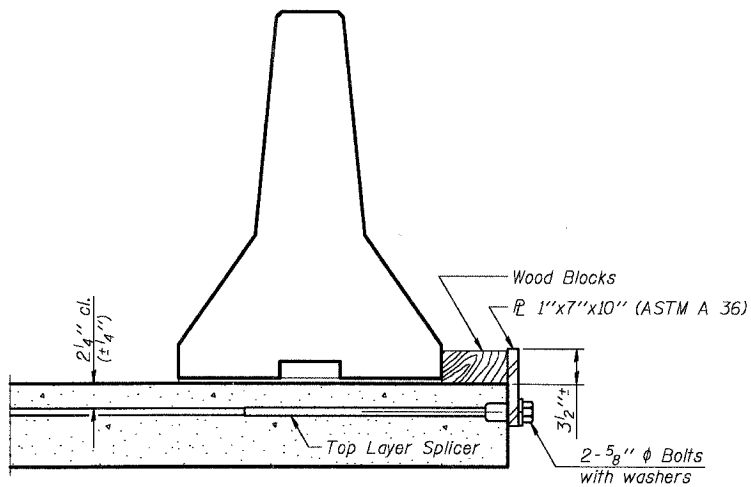
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	87
FED. ROAD DIST. NO.	1	ILLINOIS	FED. AID PROJECT-	

SHEET NO. SE-4
SE-27 SHEETS

CONTRACT #83667

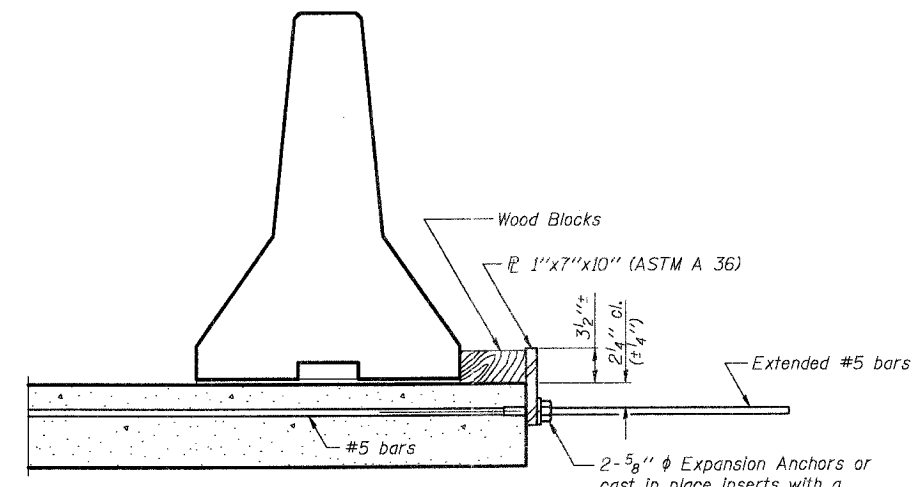


SECTIONS THRU SLAB



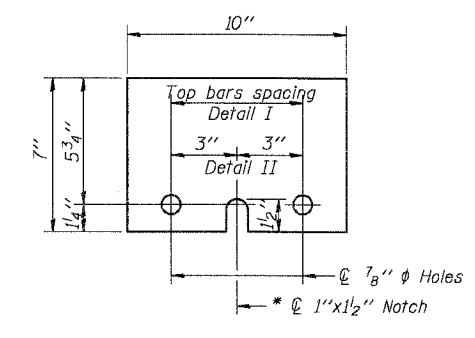
DETAIL I

The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and reinforcement bars are in place.



DETAIL II

The 1" x 7" x 10" Plate shall not be removed until Stage II Construction forms and all reinforcement bars are in place and the concrete is ready to be placed.



1" x 7" x 10"

* Required only with Detail II

NOTES

- Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x 10" steel \bar{P} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \bar{C} of each barrier panel.
- Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x 10" steel \bar{P} to the concrete slab with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \bar{C} of each barrier panel.
- Cost of anchorage is included with Temporary Concrete Barrier.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, ELECTRICAL AND SURVEYORS
2001 W. Parkland Ave., Aurora, IL 60004
Tel: 630-584-1100 Fax: 630-584-1101

REVISIONS	
NAME	DATE

CITY OF AURORA

TEMPORARY CONCRETE BARRIER
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

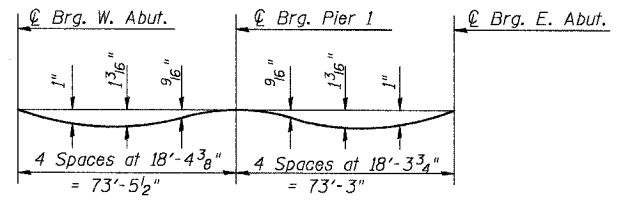
DATE 7-28-2006

PROJECT NAME: SEE PLAN
 PROJECT CONTACT: PROJECT CONTACT
 DRAWING NO.: SEE PLAN
 DATE: 7-28-2006

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	88
FED. ROAD DIST. NO.	BILLINGS	FED. AID PROJECT		
1				

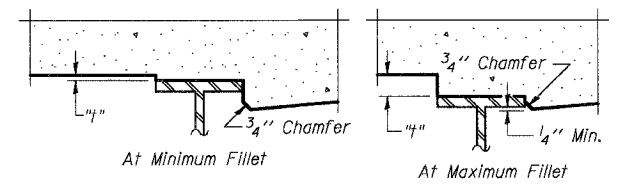
SHEET NO. SE-5
SE-27 SHEETS

CONTRACT #83867



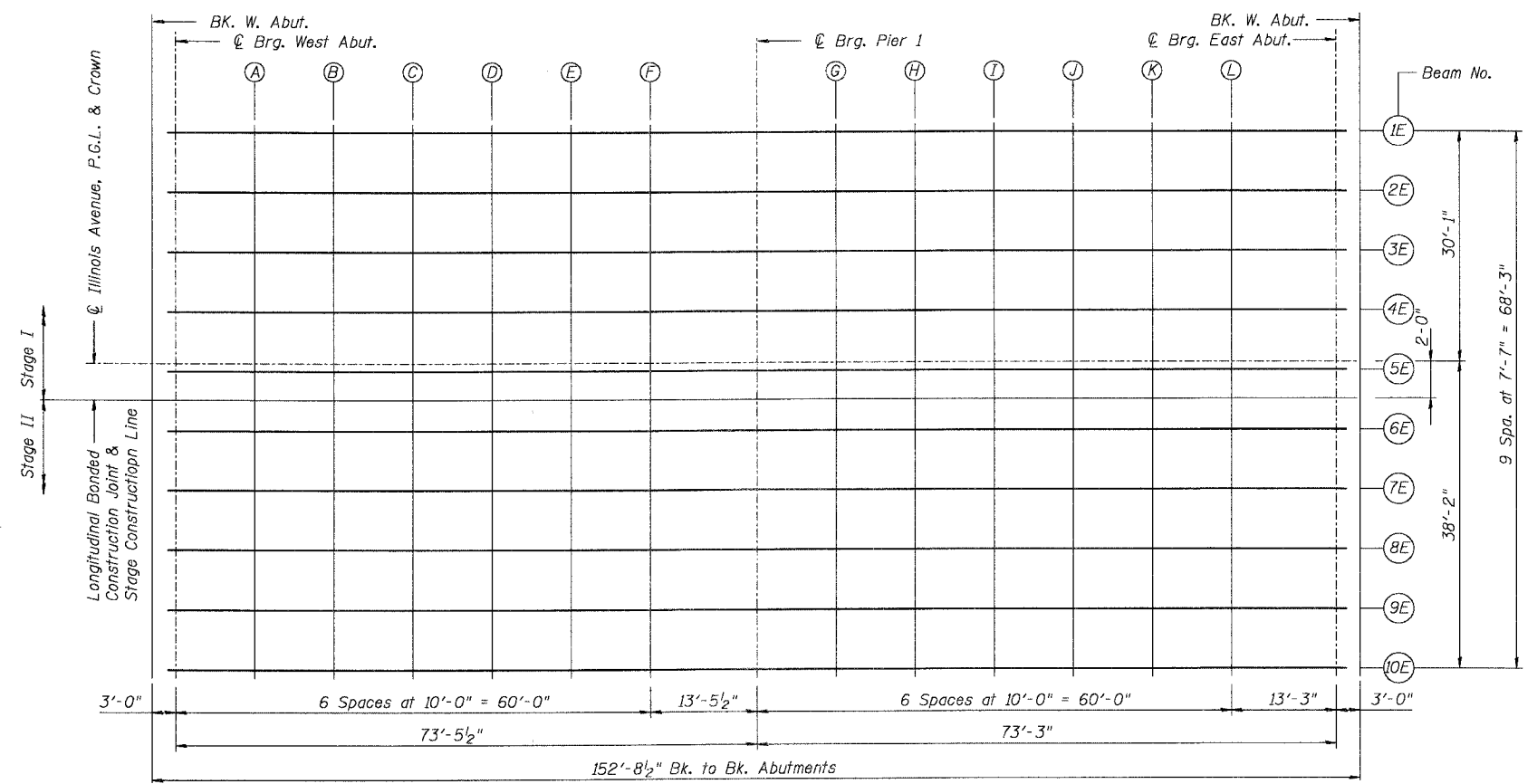
DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

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 below.

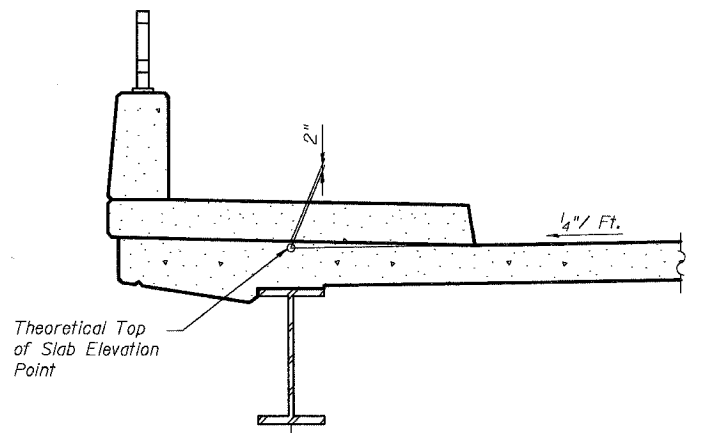


To determine "h": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "h" above top flange of beams.

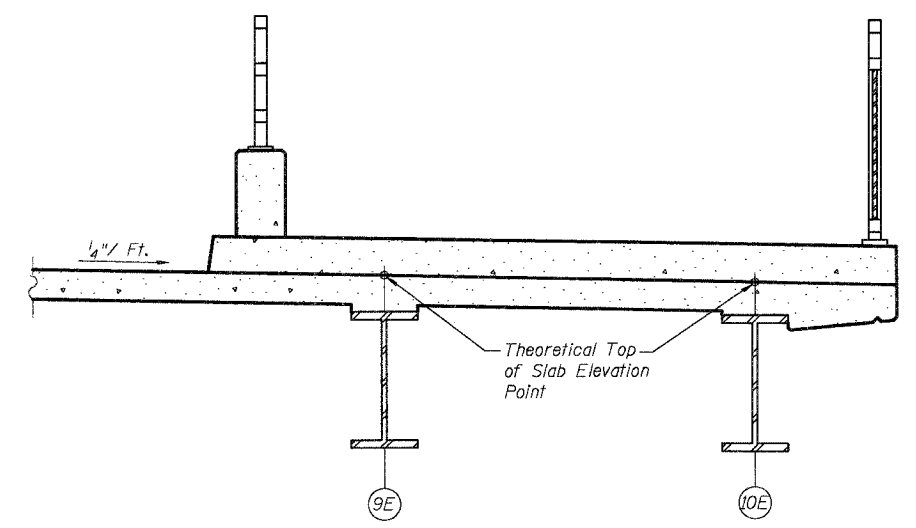
FILLET HEIGHTS



PLAN



SECTION THRU SIDEWALK



SECTION THRU SHARED USE PATH

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS
AND SURVEYORS
1000 WEST PINE STREET, SUITE 100
AURORA, ILLINOIS 60005-4450

CITY OF AURORA

TOP OF DECK ELEVATIONS (1 of 5)
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

DATE 7-28-2006

COMPANY NAME, INC. NO. PROJECT CONTRACT
 CLIENT, INC/NO. PROJECT CONTRACT
 PROJECT NO. 03-00247-00-BR SHEET NO. SE-5 OF 27

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	89
FED. ROAD DIST. NO.	1	ILLINOIS	FED. AID PROJECT	

SHEET NO. SE-6
SE-27 SHEETS

CONTRACT #83867

BEAM 1E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	118+79.62	-30.083	641.32	641.32
Ⓢ Brg.W. Abut.	118+82.62	-30.083	641.28	641.28
A	118+92.62	-30.083	641.15	641.20
B	119+02.62	-30.083	641.02	641.10
C	119+12.62	-30.083	640.89	640.99
D	119+22.62	-30.083	640.76	640.85
E	119+32.62	-30.083	640.63	640.69
F	119+42.62	-30.083	640.50	640.52
Ⓢ Brg. Pier 1	119+56.08	-30.083	640.32	640.32
G	119+66.08	-30.083	640.19	640.21
H	119+76.08	-30.083	640.06	640.11
I	119+86.08	-30.083	639.93	640.01
J	119+96.08	-30.083	639.80	639.90
K	120+06.08	-30.083	639.67	639.76
L	120+16.08	-30.083	639.54	639.61
Ⓢ Brg. E. Abut.	120+29.3	-30.083	639.37	639.37
Bk. E. Abut.	120+32.3	-30.083	639.33	639.33

BEAM 2E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	118+79.62	-22.500	641.47	641.47
Ⓢ Brg.W. Abut.	118+82.62	-22.500	641.44	641.44
A	118+92.62	-22.500	641.31	641.36
B	119+02.62	-22.500	641.18	641.26
C	119+12.62	-22.500	641.05	641.15
D	119+22.62	-22.500	640.92	641.01
E	119+32.62	-22.500	640.79	640.85
F	119+42.62	-22.500	640.66	640.68
Ⓢ Brg. Pier 1	119+56.08	-22.500	640.48	640.48
G	119+66.08	-22.500	640.35	640.37
H	119+76.08	-22.500	640.22	640.27
I	119+86.08	-22.500	640.09	640.17
J	119+96.08	-22.500	639.96	640.06
K	120+06.08	-22.500	639.83	639.92
L	120+16.08	-22.500	639.70	639.76
Ⓢ Brg. E. Abut.	120+29.3	-22.500	639.53	639.53
Bk. E. Abut.	120+32.3	-22.500	639.49	639.49

BEAM 3E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	118+79.62	-14.917	641.63	641.63
Ⓢ Brg.W. Abut.	118+82.62	-14.917	641.59	641.59
A	118+92.62	-14.917	641.46	641.51
B	119+02.62	-14.917	641.33	641.42
C	119+12.62	-14.917	641.20	641.30
D	119+22.62	-14.917	641.07	641.16
E	119+32.62	-14.917	640.94	641.01
F	119+42.62	-14.917	640.81	640.84
Ⓢ Brg. Pier 1	119+56.08	-14.917	640.64	640.64
G	119+66.08	-14.917	640.51	640.52
H	119+76.08	-14.917	640.38	640.43
I	119+86.08	-14.917	640.25	640.33
J	119+96.08	-14.917	640.12	640.22
K	120+06.08	-14.917	639.99	640.08
L	120+16.08	-14.917	639.86	639.92
Ⓢ Brg. E. Abut.	120+29.3	-14.917	639.69	639.69
Bk. E. Abut.	120+32.3	-14.917	639.65	639.65

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC. LEVEL, STRUCTURAL, ENGINEERS AND SURVEYORS 300 WEST HUNTER STREET CHICAGO, ILLINOIS 60610 (312) 487-1200 www.smitheng.com	
REVISIONS	
NAME	DATE

CITY OF AURORA
TOP OF DECK ELEVATIONS (2 of 5)
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008
DATE 7-28-2006

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ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	91
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-	CONTRACT #83867	

SHEET NO. SE-8
SE-27 SHEETS

**STAGE CONSTRUCTION LINE &
LONGITUDINAL BONDED CONSTRUCTION JOINT**

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	118+79.62	2.000	641.84	641.84
⊕ Brg. W. Abut.	118+82.62	2.000	641.80	641.80
A	118+92.62	2.000	641.67	641.72
B	119+02.62	2.000	641.54	641.63
C	119+12.62	2.000	641.41	641.51
D	119+22.62	2.000	641.28	641.37
E	119+32.62	2.000	641.15	641.21
F	119+42.62	2.000	641.02	641.05
⊕ Brg. Pier 1	119+56.08	2.000	640.84	640.84
G	119+66.08	2.000	640.71	640.73
H	119+76.08	2.000	640.58	640.63
I	119+86.08	2.000	640.45	640.54
J	119+96.08	2.000	640.32	640.42
K	120+06.08	2.000	640.19	640.29
L	120+16.08	2.000	640.06	640.13
⊕ Brg. E. Abut.	120+29.3	2.000	639.89	639.89
Bk. E. Abut.	120+32.3	2.000	639.85	639.85


BEAM 6E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	118+79.62	7.833	641.75	641.75
⊕ Brg. W. Abut.	118+82.62	7.833	641.71	641.71
A	118+92.62	7.833	641.58	641.63
B	119+02.62	7.833	641.45	641.54
C	119+12.62	7.833	641.32	641.42
D	119+22.62	7.833	641.19	641.28
E	119+32.62	7.833	641.06	641.12
F	119+42.62	7.833	640.93	640.96
⊕ Brg. Pier 1	119+56.08	7.833	640.75	640.75
G	119+66.08	7.833	640.62	640.64
H	119+76.08	7.833	640.49	640.54
I	119+86.08	7.833	640.36	640.45
J	119+96.08	7.833	640.23	640.33
K	120+06.08	7.833	640.10	640.20
L	120+16.08	7.833	639.97	640.04
⊕ Brg. E. Abut.	120+29.3	7.833	639.80	639.80
Bk. E. Abut.	120+32.3	7.833	639.76	639.76

BEAM 7E

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. W. Abut.	118+79.62	15.417	641.62	641.62
⊕ Brg. W. Abut.	118+82.62	15.417	641.58	641.58
A	118+92.62	15.417	641.45	641.50
B	119+02.62	15.417	641.32	641.41
C	119+12.62	15.417	641.19	641.29
D	119+22.62	15.417	641.06	641.15
E	119+32.62	15.417	640.93	641.00
F	119+42.62	15.417	640.80	640.83
⊕ Brg. Pier 1	119+56.08	15.417	640.63	640.63
G	119+66.08	15.417	640.50	640.51
H	119+76.08	15.417	640.37	640.42
I	119+86.08	15.417	640.24	640.32
J	119+96.08	15.417	640.11	640.21
K	120+06.08	15.417	639.98	640.07
L	120+16.08	15.417	639.85	639.91
⊕ Brg. E. Abut.	120+29.3	15.417	639.68	639.68
Bk. E. Abut.	120+32.3	15.417	639.64	639.64

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

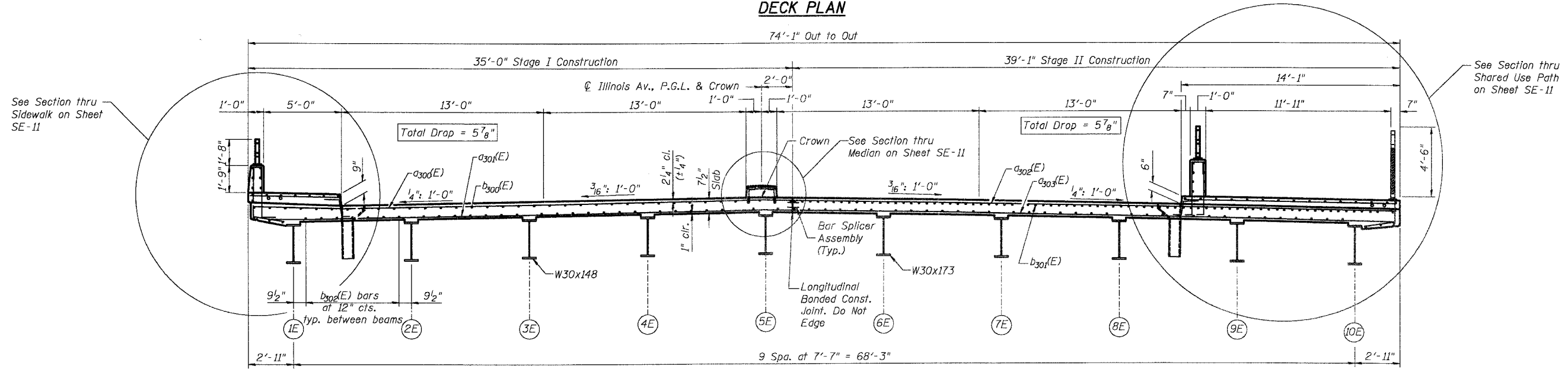
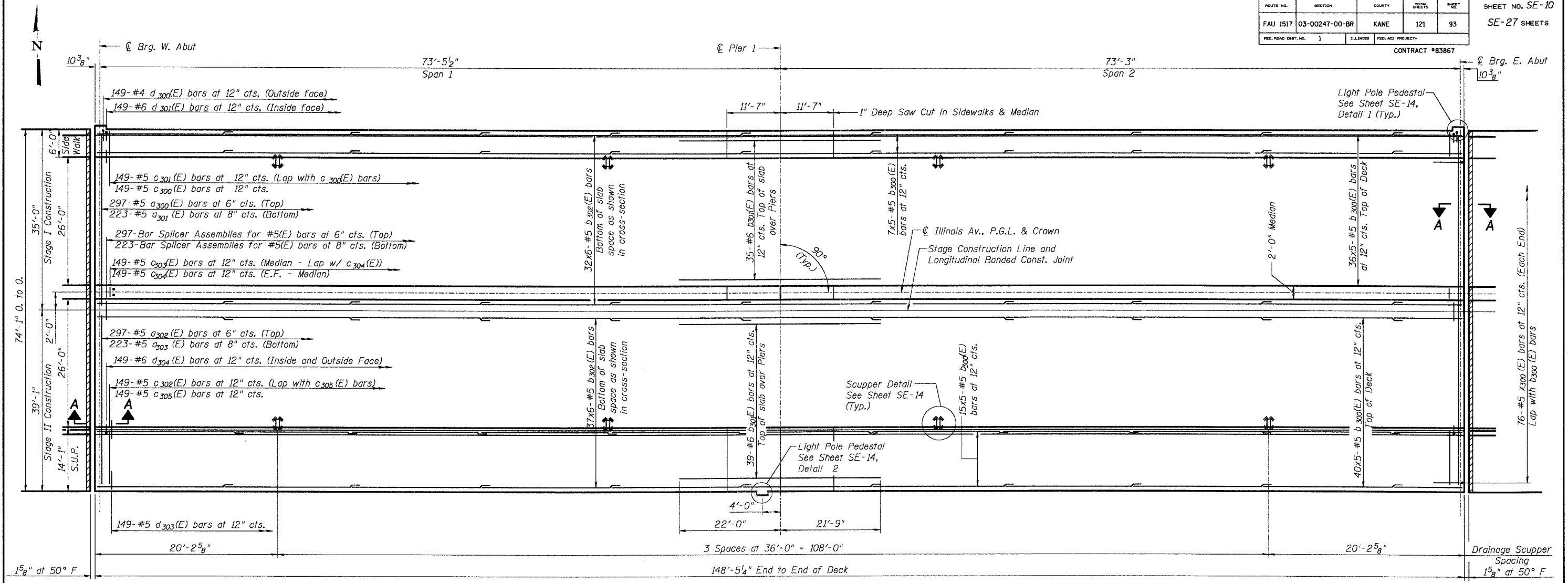
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REVISIONS	
NAME	DATE

CITY OF AURORA

TOP OF DECK ELEVATIONS (4 of 5)
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

DATE 7-28-2006

COMPANY NAME, SIZE, INC. PROJECT NO. 03-00247-00-BR
 CLIENT: ILLINOIS STATE DEPARTMENT OF TRANSPORTATION
 PROJECT: ILLINOIS AVENUE OVER THE FOX RIVER
 SHEET: SE-27 OF 27 SHEETS

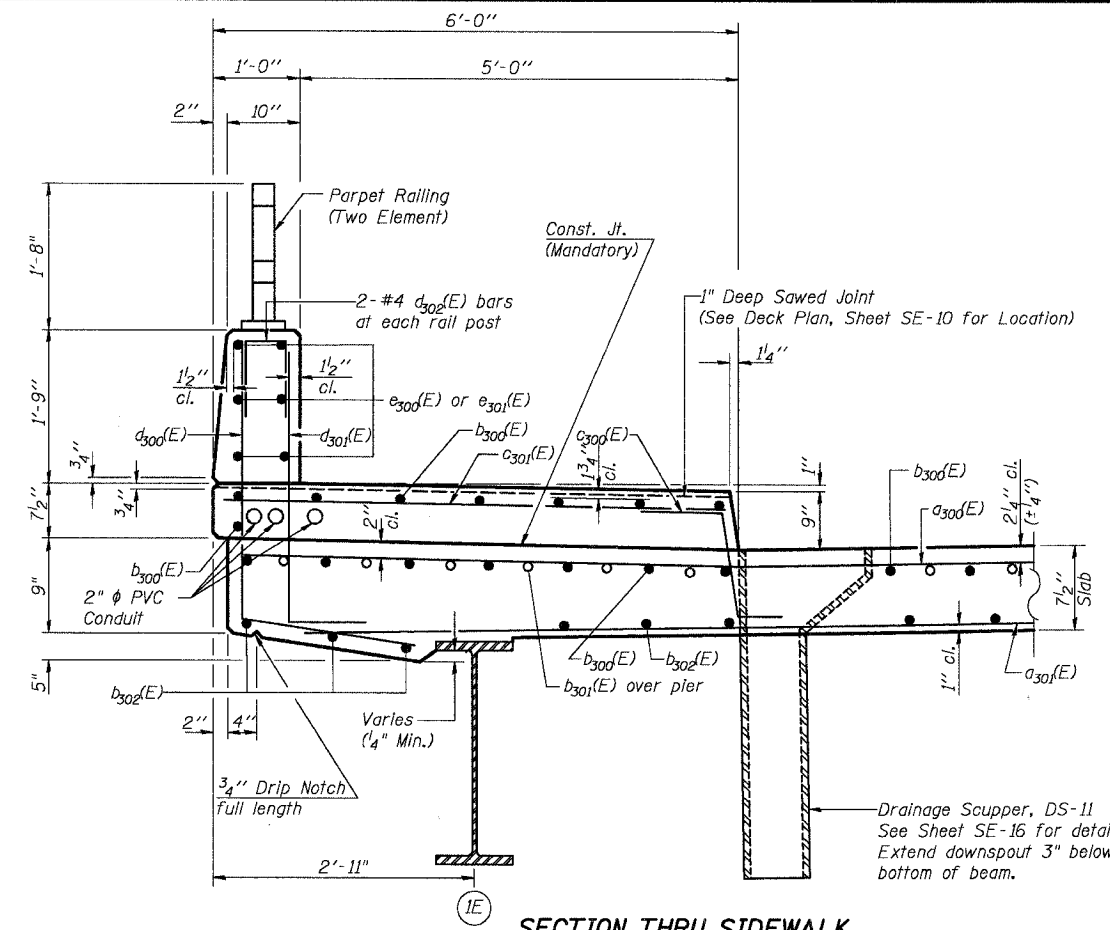


NOTES:
 Min. Lap length for #5 Bars = 2'-2"
 Min. Lap length for #6 Bars = 2'-7"
 Reinforcement Bars designated (E) shall be epoxy coated.
 Work this sheet with sheets SE-11 thru SE-14.
 Bars indicated thus 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.
 See Sheet SE-11 for Section A-A.

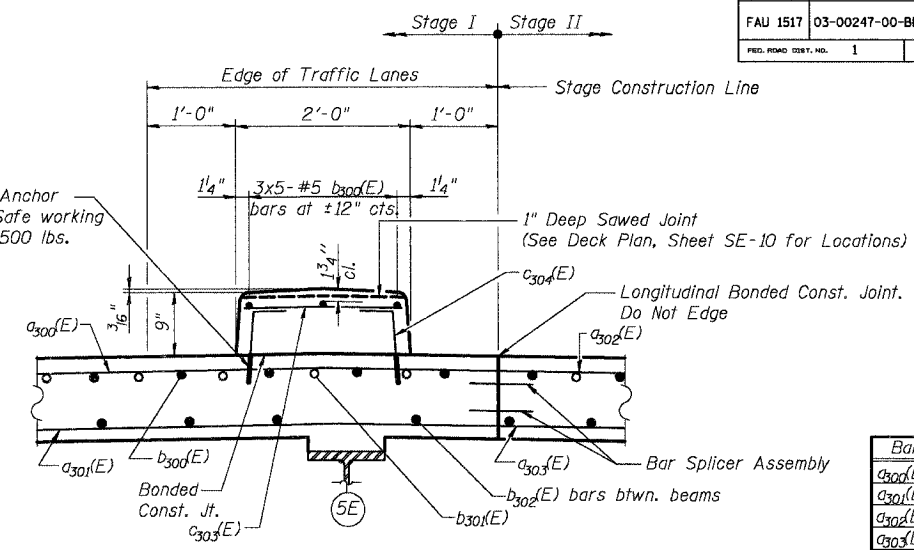
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CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

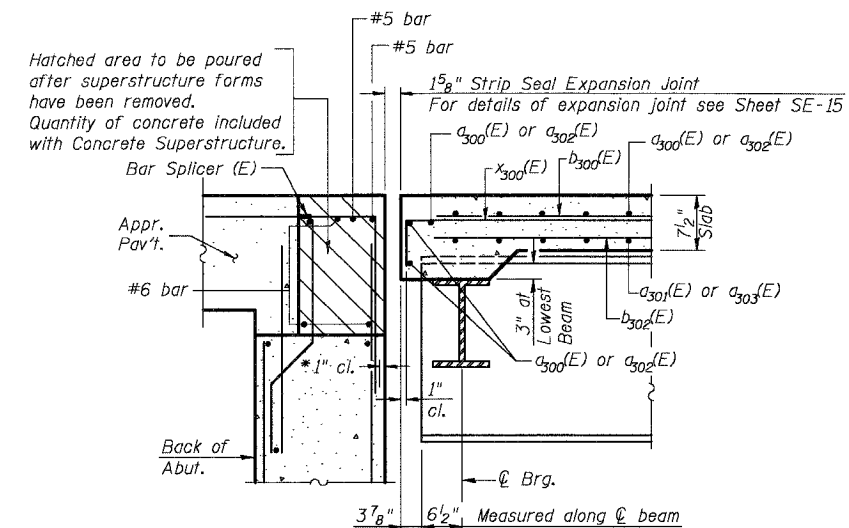
CITY OF AURORA
 DECK PLAN & CROSS SECTION
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 STRUCTURE NO. 045-6008
 DATE 7-28-2006



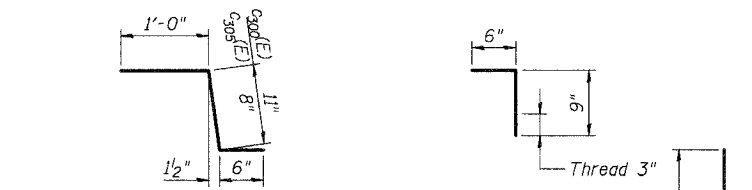
SECTION THRU SIDEWALK



SECTION THRU MEDIAN

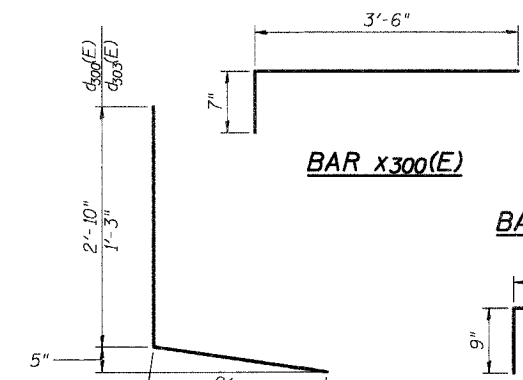


SECTION A-A



BARS c300(E) and c305(E)

BAR c304(E)



BAR x300(E)

BARS d301(E) and d304(E)

BARS d300(E) and d303(E)

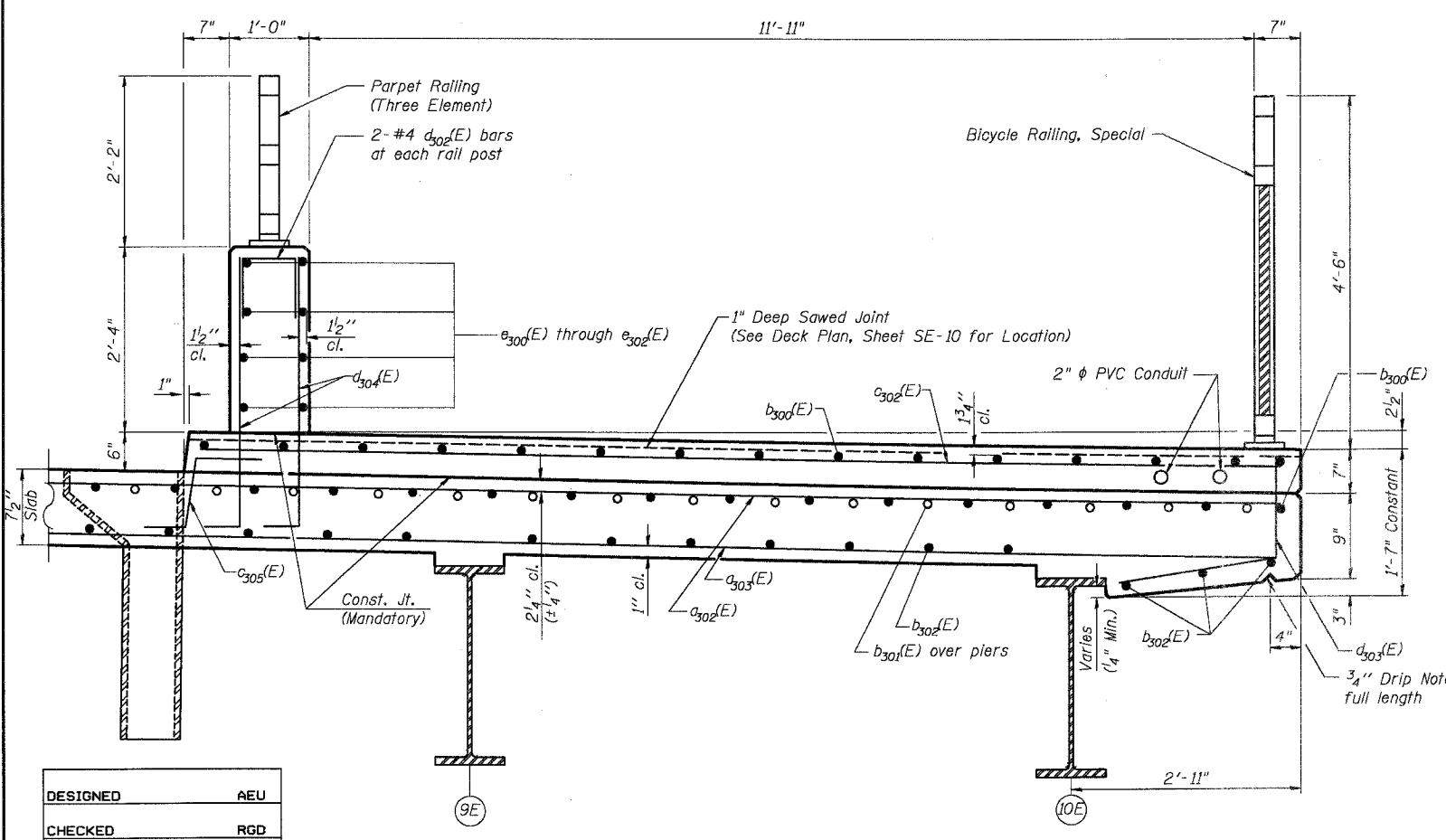
BAR d302(E)

**SUPERSTRUCTURE
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a300(E)	297	#5	34'-6"	—
a301(E)	223	#5	34'-4"	—
a302(E)	297	#5	38'-9"	—
a303(E)	223	#5	38'-7"	—
b300(E)	515	#5	30'-11"	—
b301(E)	74	#6	43'-9"	—
b302(E)	414	#5	26'-2"	—
b303(E)	64	#5	1'-6"	—
c300(E)	149	#5	2'-5"	U
c301(E)	149	#5	5'-8"	—
c302(E)	149	#5	13'-9"	—
c303(E)	149	#5	1'-8"	—
c304(E)	298	#5	1'-3"	U
c305(E)	149	#5	2'-2"	U
d300(E)	149	#4	4'-10"	U
d301(E)	149	#6	3'-9"	—
d302(E)	64	#4	2'-0"	—
d303(E)	149	#5	3'-3"	—
d304(E)	298	#6	4'-1"	—
d305(E)	8	#4	1'-8"	—
d306(E)	3	#6	8'-11"	—
d307(E)	6	#6	3'-10"	—
d308(E)	3	#6	2'-5"	—
d309(E)	12	#6	1'-8"	—
e300(E)	84	#4	15'-4"	—
e301(E)	24	#4	11'-4"	—
e302(E)	12	#4	15'-7"	—
x300(E)	152	#5	4'-1"	—
Reinforcement Bars, Epoxy Coated		Pound	82,710	
Concrete Superstructure		Cu. Yd.	359.7	
Bridge Deck Grooving		Sq. Yd.	792	
Protective Coat		Sq. Yd.	1,371	

Reinforcement bars designated (E) shall be epoxy coated.

Notes:
Work this sheet with sheets SE-10 and SE-12 through SE-14.
See sheet SE-10 for Section A-A.
For Parapet Railing and Bicycle Railing, Special details see Sheet SE-17.
For Bar Splicer Assembly details see Sheet SE-22.
The cost of furnishing and installing 2" φ conduit is included in the unit cost of Concrete Superstructures.



SECTION THRU SHARED USE PATH

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL STRUCTURAL ENGINEERS AND SURVEYORS
2000 N. WISCONSIN ST., SUITE 100
AURORA, ILLINOIS 60007
TEL: (708) 485-1100 FAX: (708) 485-1101

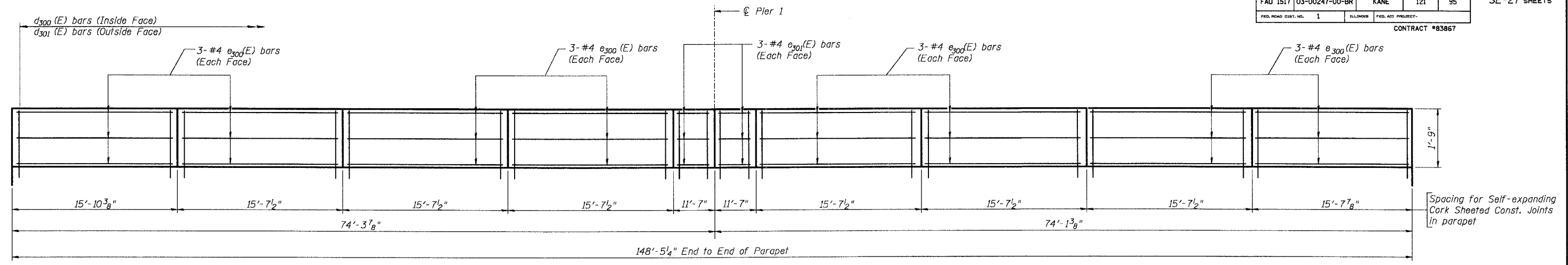
REVISIONS	
NAME	DATE

CITY OF AURORA
SUPERSTRUCTURE DETAILS I
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008
DATE 7-28-2006

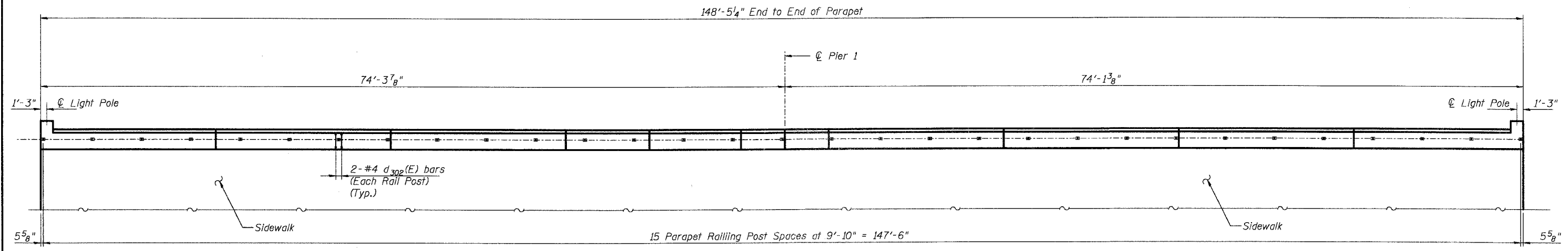
ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
FAU 1517	03-00247-00-BR	KANE	121	95
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

SHEET NO. SE-12
SE-27 SHEETS

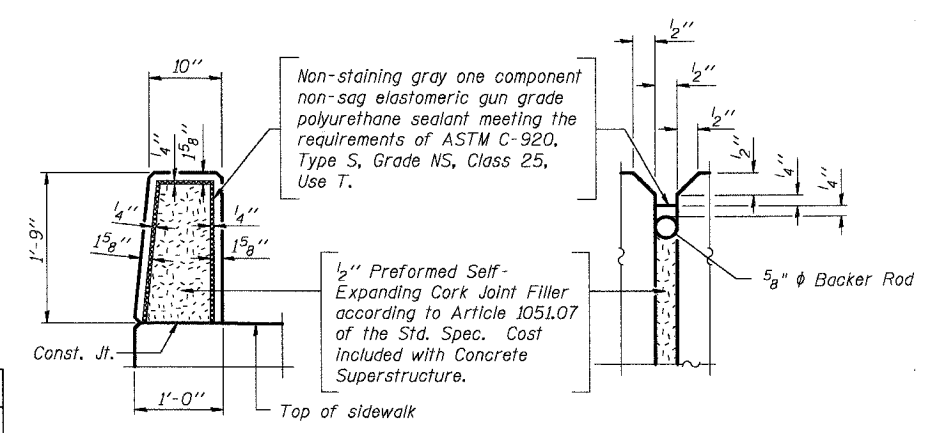
CONTRACT #83867



INSIDE ELEVATION OF NORTH PARAPET



TOP PLAN OF NORTH PARAPET



PARAPET JOINT DETAILS

Notes:
Work this Sheet with Sheets SE-10, SE-11 & SE-14.
For parapet railing details see Sheet SE-11.
For light pole support details see Sheet SE-14.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

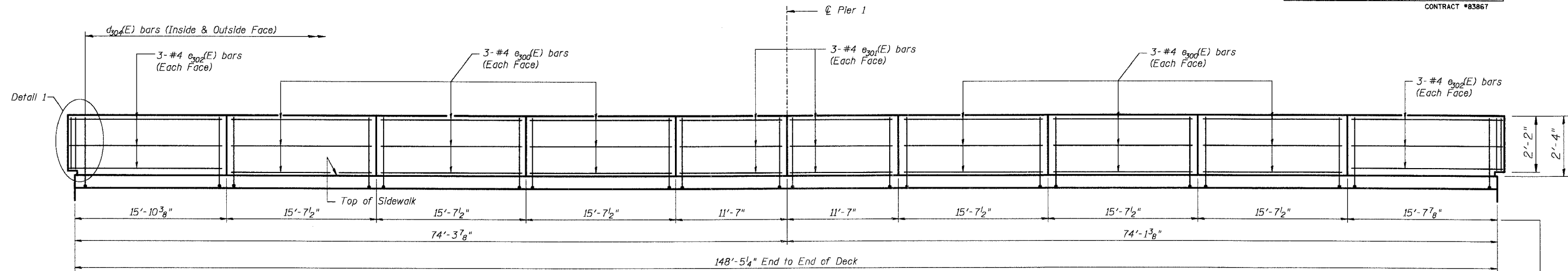
SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, ELECTRICAL AND SURVEYING ENGINEERS
www.smitheng.com
25011 Pennsylvania Avenue, Suite 200, Aurora, IL 60018

CITY OF AURORA
SUPERSTRUCTURE DETAILS II
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008
DATE 7-28-2006

CONTRACT NO. 03-00247-00-BR
 PROJECT NO. 03-00247-00-BR
 SHEET NO. SE-12
 DATE 7-28-2006
 DESIGNED BY AEU
 CHECKED BY RGD
 DRAWN BY WJH
 CHECKED BY NRF

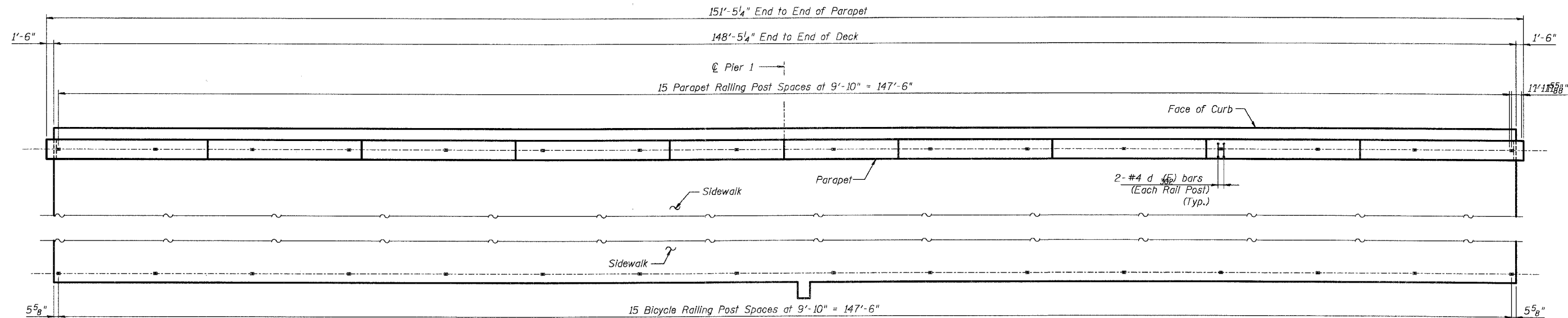
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	96
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT-		
1			CONTRACT #83867	

SHEET NO. SE-13
SE-27 SHEETS

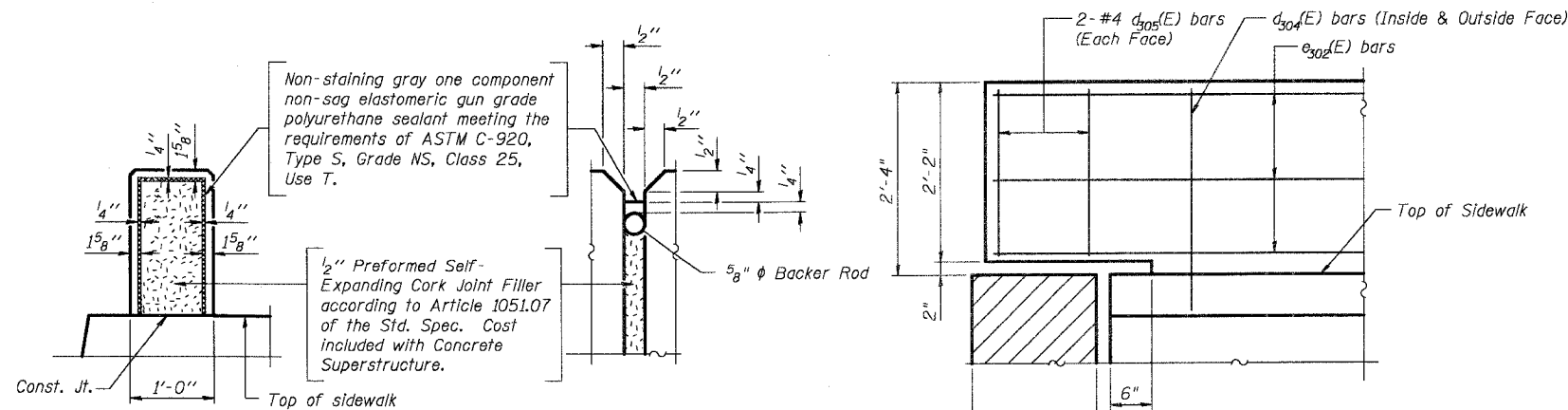


INSIDE ELEVATION OF SOUTH PARAPET

Spacing For Self-expanding
Cork Sheeted Construction
Joints in Parapet.



TOP PLAN OF SHARED USE PATH



SOUTH PARAPET JOINT DETAILS

DETAIL 1

Typical at both ends of Parapet

Notes:
Work this Sheet with Sheets SE-10, SE-11 & SE-14.
For parapet railing details see Sheet SE-11.
For light pole support details see Sheet SE-14.

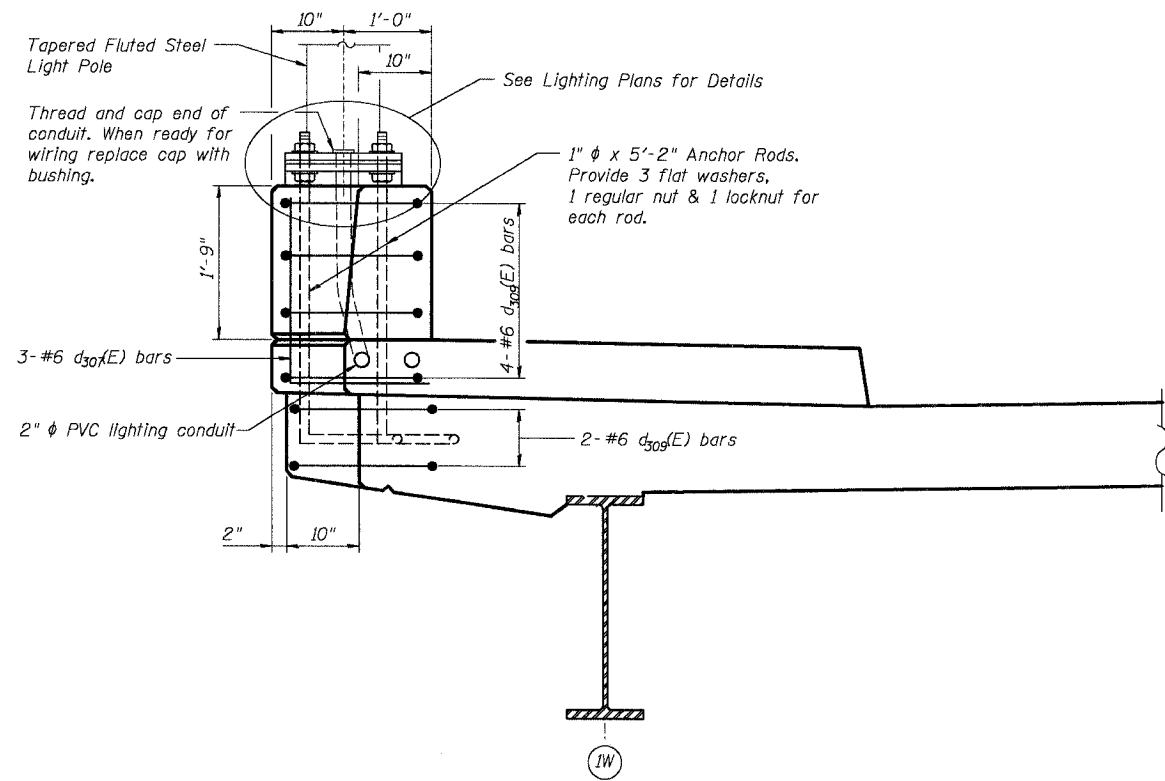
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CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



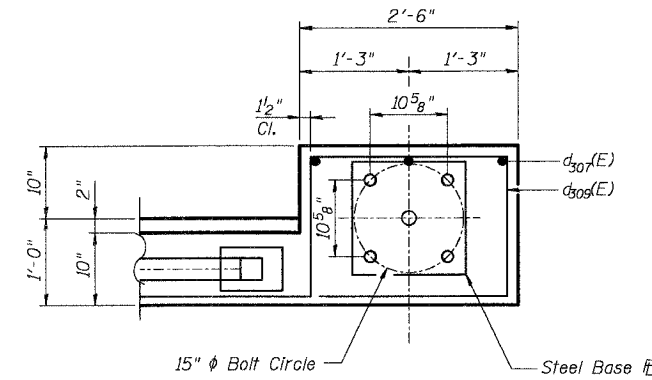
REVISIONS	
NAME	DATE

CITY OF AURORA
SUPERSTRUCTURE DETAILS III
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008
DATE 7-28-2006

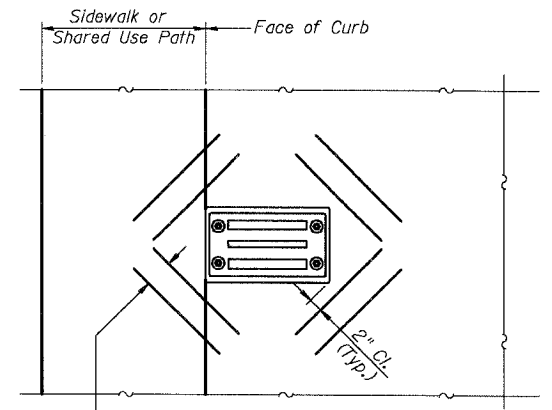
PROJECT NO. 03-00247-00-BR
 PROJECT CONTRACT #03-00247-00-BR
 DATE 7-28-2006
 PROJECT LOCATION
 PROJECT DESCRIPTION
 PROJECT DRAWN BY WJH
 PROJECT CHECKED BY NRF
 PROJECT DESIGNED BY AEU
 PROJECT NO. 03-00247-00-BR



SECTION - DETAIL 1

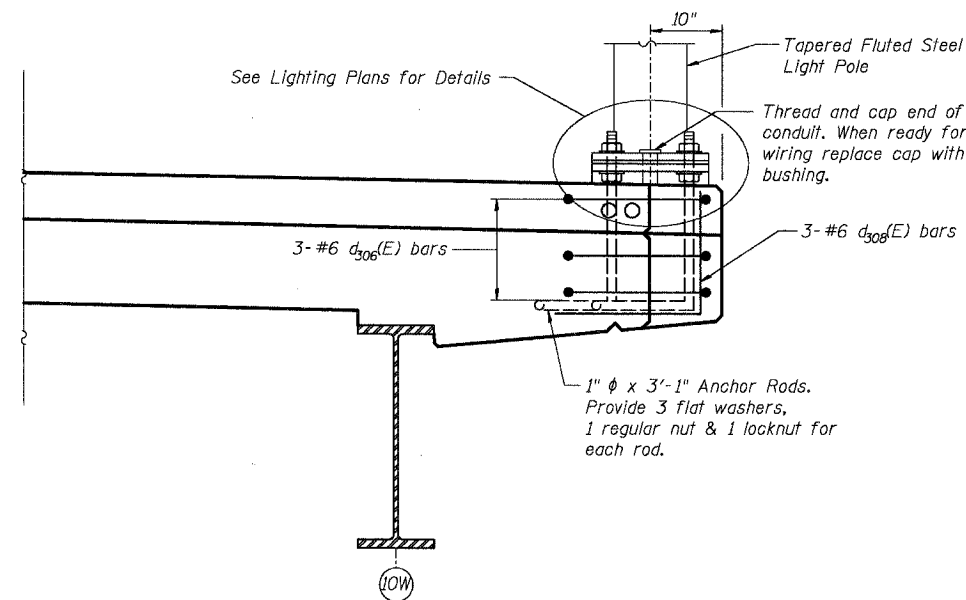


PLAN - DETAIL 1

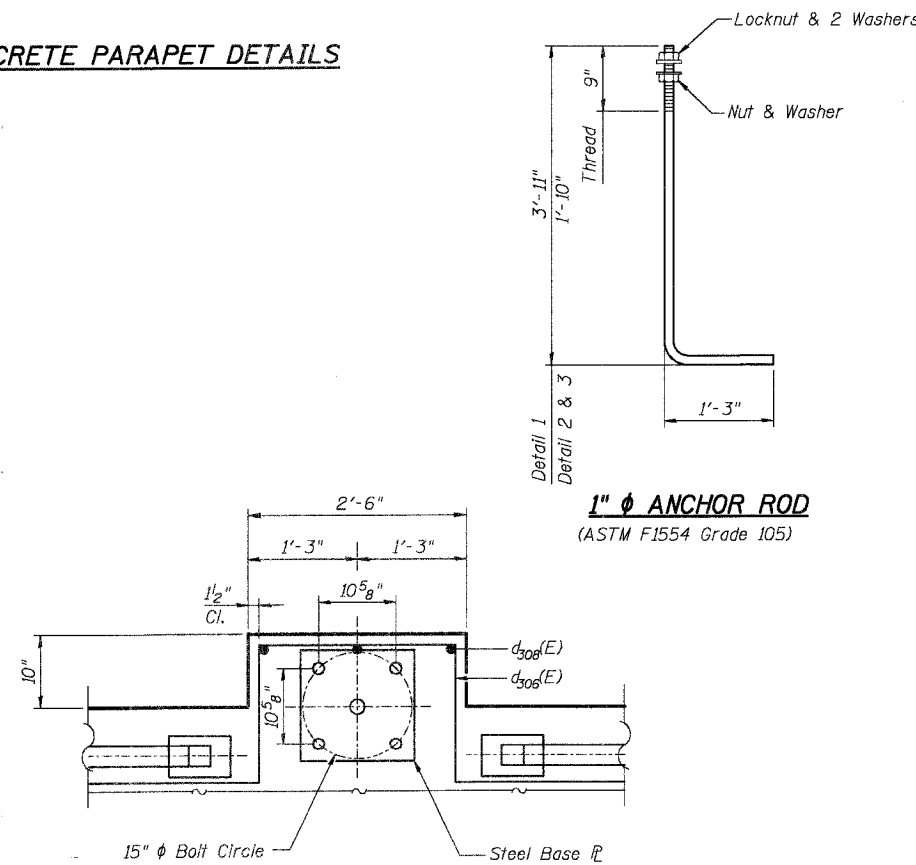


SCUPPER DETAIL - PLAN

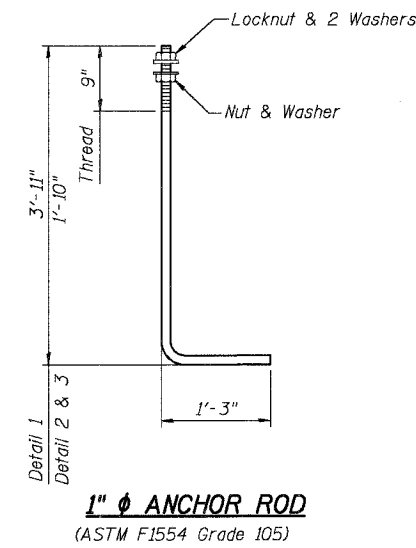
LIGHT POLE MOUNTED ON CONCRETE PARAPET DETAILS



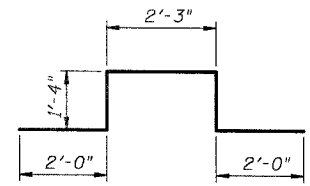
SECTION - DETAIL 2 & 3



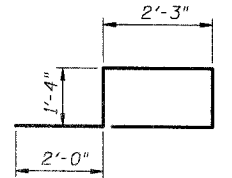
PLAN - DETAIL 2



BARS d307(E) & d308(E)



BAR d306(E)



BAR d308(E)

Notes:

Work this sheet with sheets SE-10 through SE-13.
For Bill of Material see Sheet SE-11.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

CITY OF AURORA
 SUPERSTRUCTURE DETAILS IV
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 STRUCTURE NO. 045-6008
 DATE 7-28-2006

COMPANY NAME, ADDRESS, CITY, STATE, ZIP, PHONE, FAX, E-MAIL
 SMITH ENGINEERING CONSULTANTS, INC., CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
 1111 W. 19TH AVENUE, SUITE 200, GLENDALE, ILLINOIS 60138-4453
 PHONE: (708) 944-4453 FAX: (708) 944-4454 E-MAIL: SMITHENR@AURORA.ILLINOIS.CITY.GOV

GENERAL NOTES

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

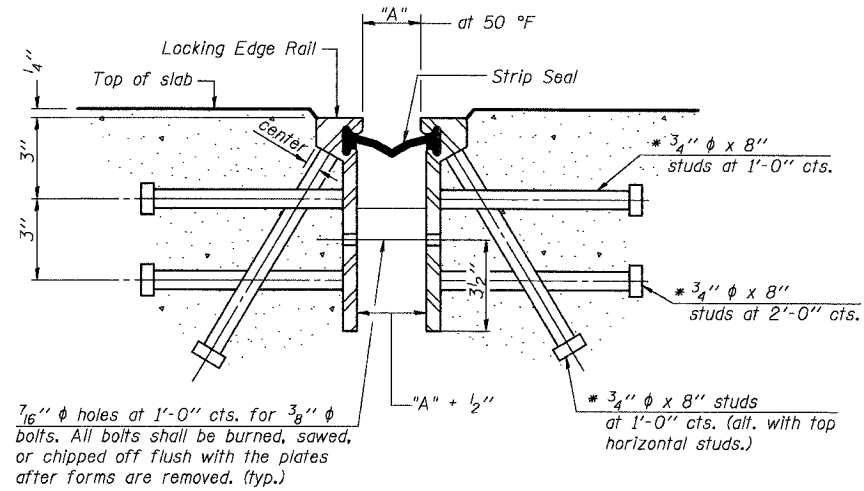
The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.

Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

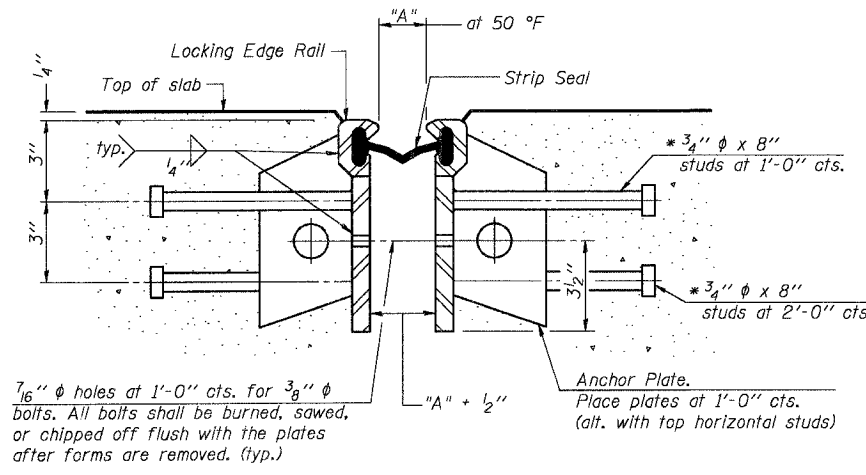
The manufacturer's recommended installation methods shall be followed.

BILL OF MATERIAL

Item	Unit	Total
Bridge Joint System Expansion, 1"	Foot	152.7



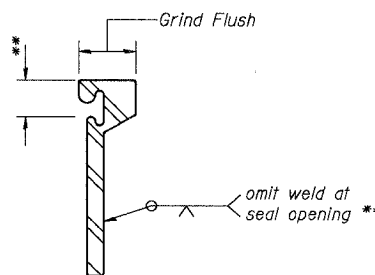
Required Strip Seal rated movement	"A"
1"	1/8"



SECTION THRU ROLLED RAIL EXP. JOINT
(209 Studs Required)

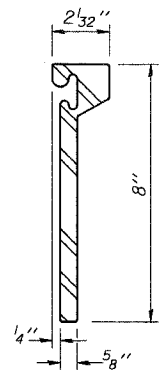
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

SECTION THRU WELDED RAIL EXP. JOINT
(169 Studs Required)
(40 Anchor Plates Required)

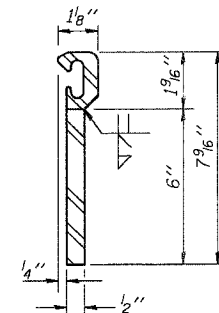


LOCKING EDGE RAIL SPLICE

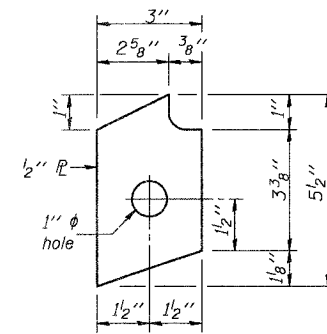
The inside of the locking edge rail groove shall be free of weld residue.



ROLLED (EXTRUDED) RAIL

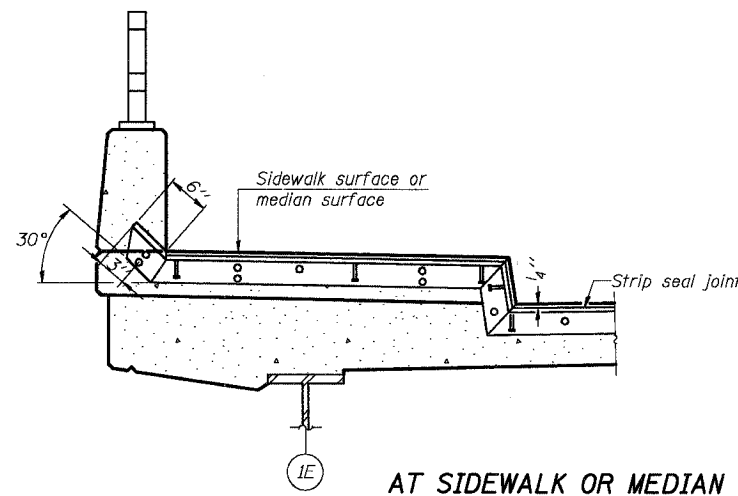


WELDED RAIL

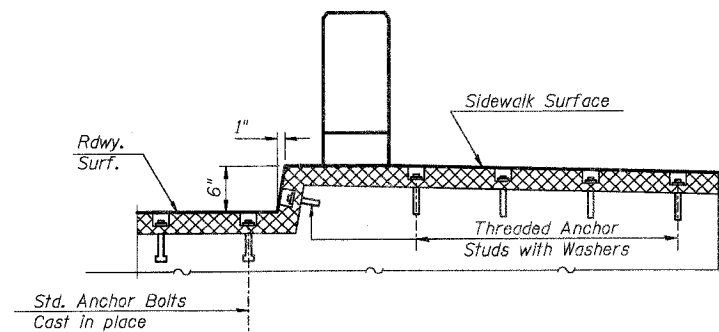


ANCHOR PL
(for welded rail)

LOCKING EDGE RAILS



AT SIDEWALK OR MEDIAN



**AT SHARED USE PATH
TYPICAL END TREATMENTS**

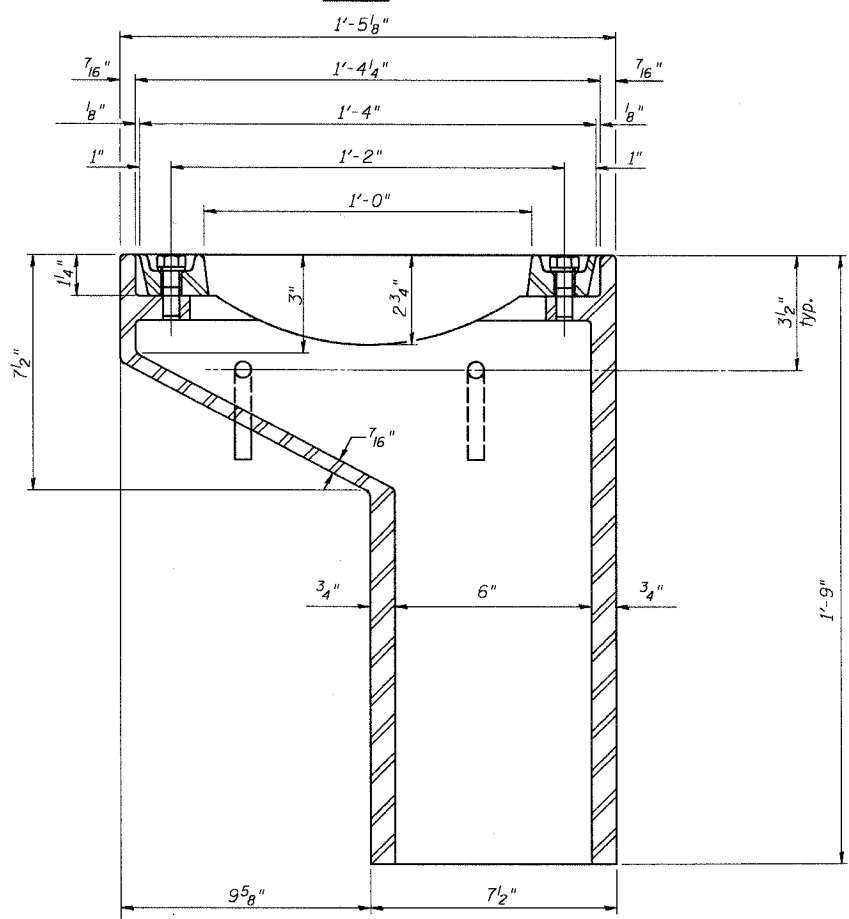
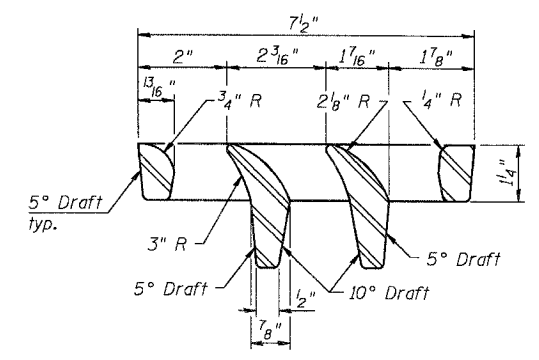
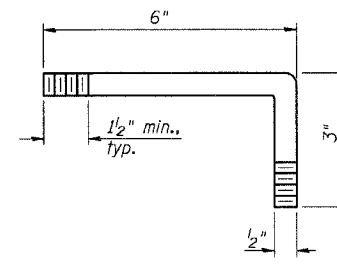
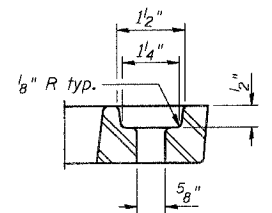
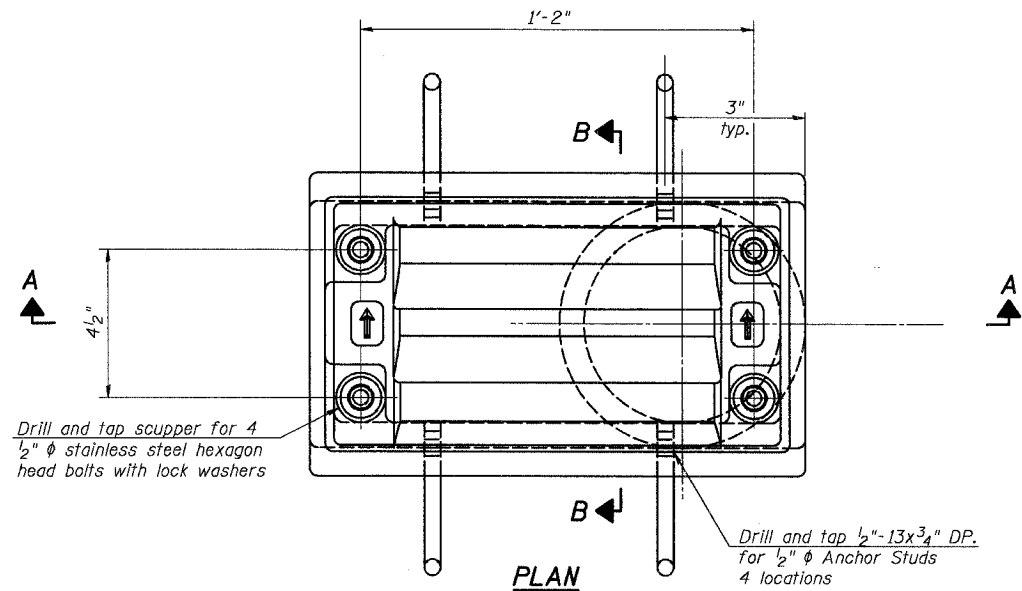
DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

TYPICAL END TREATMENTS

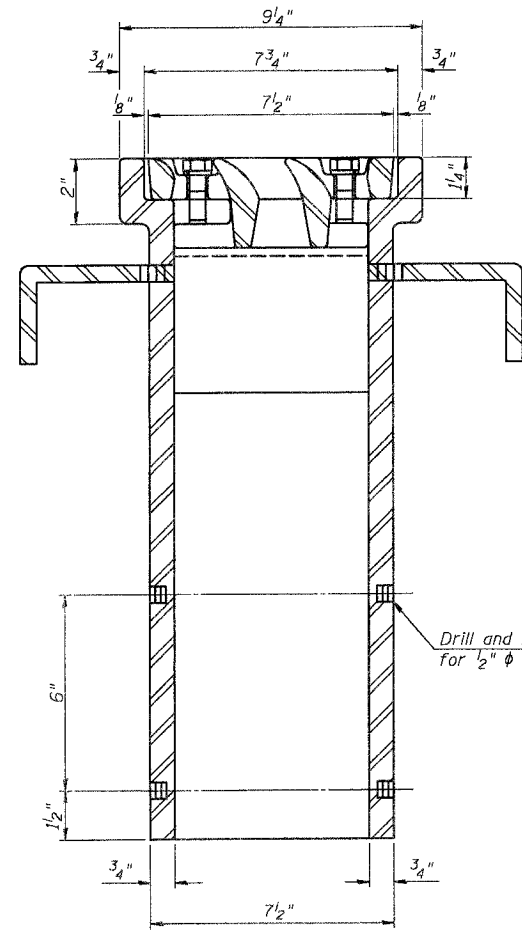
* Shorter plates with a single row of studs at 12" centers may be necessary on sidewalks which are shallower than 9". See manufacturer's recommendation.

SMITH ENGINEERING CONSULTANTS, INC.	
CIVIL ENGINEERS AND SURVEYORS	
1111 N. WASHINGTON ST. AURORA, ILL. 60009	
REVISIONS	
NAME	DATE

CITY OF AURORA	
STRIP SEAL EXPANSION JOINTS OVER THE FOX RIVER SECTION NO. 03-00247-00-BR KANE COUNTY STRUCTURE NO. 045-6008	
DATE	7-28-2006



See sheet of for scupper location relative to parapet.



Notes:
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M 105, Class 35B.
 Bolts, anchor studs, washers and nuts shall conform to the requirements of ASTM A 307 and shall be galvanized according to AASHTO M 232.
 The grate, frame and downspout shall be galvanized according to AASHTO M 111 and ASTM A 385. Downspouts located on the exterior side of a painted steel fascia beam shall be painted with the finish coat specified for the exterior side of the fascia beam.
 As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.
 Structural steel weldments of equal sections and of the same configuration may be substituted for cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
 Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-11.

BILL OF MATERIAL

Item	Unit	Quantity
Drainage Scuppers, DS-11	Each	8

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

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 CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
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REVISIONS

NAME	DATE

CITY OF AURORA

DRAINAGE SCUPPER, DS-11
 ILLINOIS AVENUE
 OVER THE FOX RIVER
 SECTION NO. 03-00247-00-BR
 KANE COUNTY
 STRUCTURE NO. 045-6008

DATE 7-28-2006

COMPANY NAME, SEC. NO., PROJECT, CONTRACT, CLIENT, ADDRESS, PHONE, FAX, E-MAIL, URL, DATE, DRAWN BY, CHECKED BY, DESIGNED BY, SCALE, SHEET NO., SHEETS, CONTRACT NO., PROJECT NO., DRAWING NO., REVISIONS, COMMENTS, APPROVED BY, DATE

ROUTE NO.	SECTION	COUNTY	JOB NO.	SHEET NO.
FAU 1517	03-00247-00-BR	KANE	121	100
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT-		

SHEET NO. SE-17
SE-27 SHEETS

CONTRACT #83867

NOTES

Railing shall be according to Section 509 of the Standard Specifications, except as noted, and will be paid for at the Contract Unit Price per foot for Bicycle Railing, Special or Parapet Railing.

Hollow structural sections shall conform to the requirements of ASTM designation A 500, Grade B, structural steel tubing.

All other steel shapes and plates shall conform to the requirements of AASHTO M 270 Grade 36.

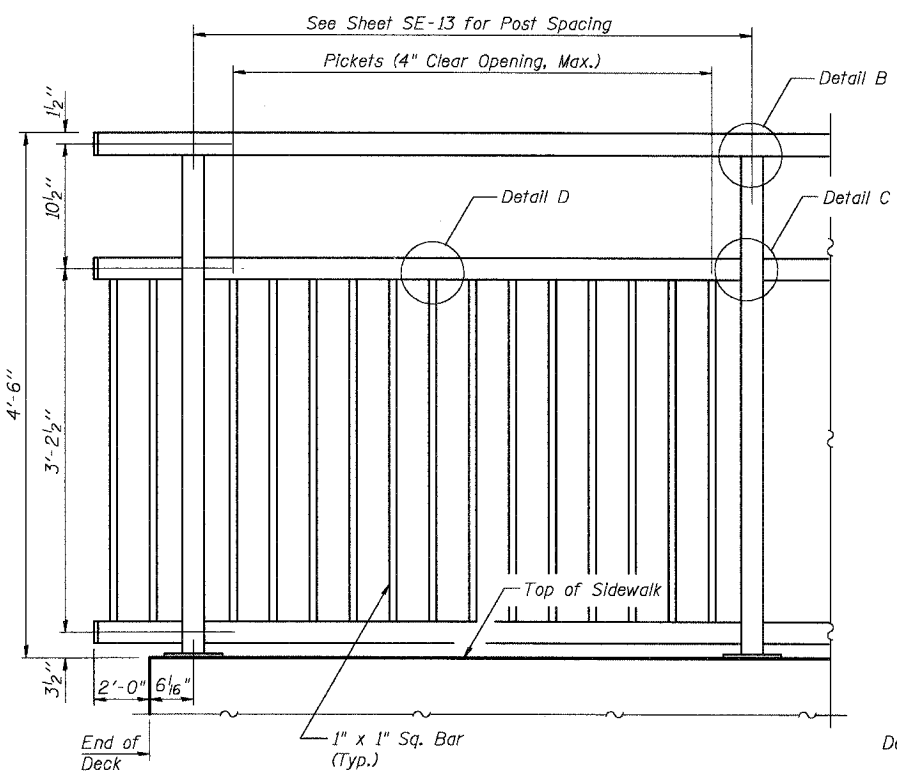
The Three Element Parapet Railing, furnished and installed shall not be paid for separately but shall be included in the unit bid price for Bicycle Railing, Special.

If the option of drilling and epoxy grouting the anchor rods is chosen, the Contractor shall use the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures. The capsule or the adhesive cartridge shall be sealed with pre-measured amounts of the adhesive chemical.

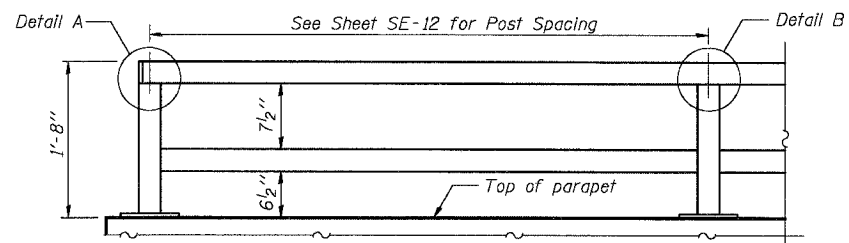
Space reinforcement to miss anchor rods.

All post, railing, pickets, splices, and anchor devices shall be powder coated black. The powder coating system to be used shall be approved by the engineer prior to the coating process.

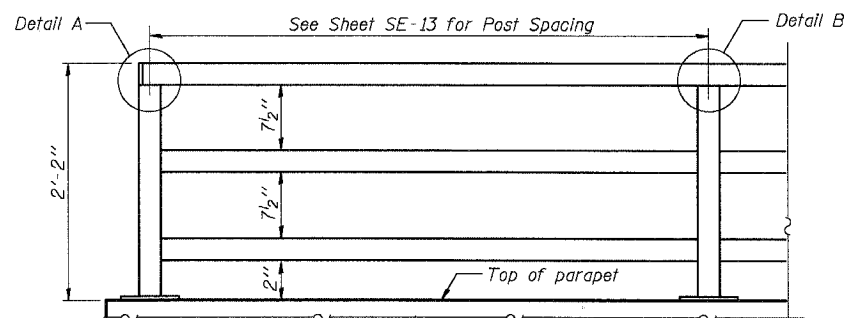
In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and epoxy grouting $\frac{5}{8}$ " ϕ anchor rods. Embedment shall be according to the manufacturer's specifications.



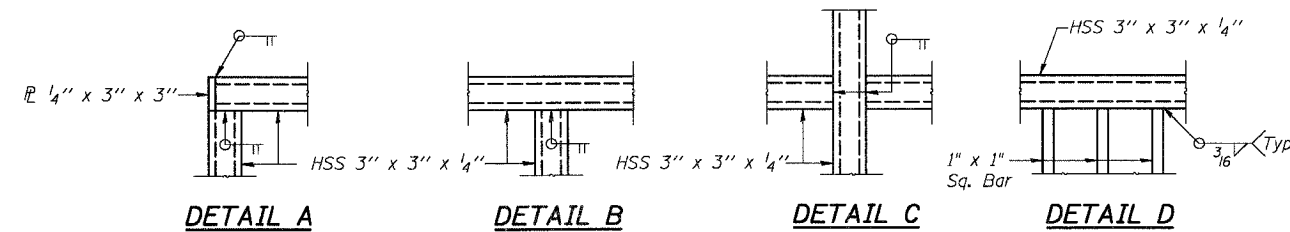
BICYCLE RAILING



PARAPET RAILING ELEVATION
(Inside Face of Two Element Rail)



PARAPET RAILING ELEVATION
(Inside Face of Three Element Rail)

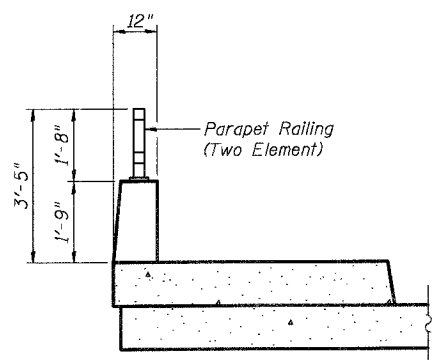


DETAIL A

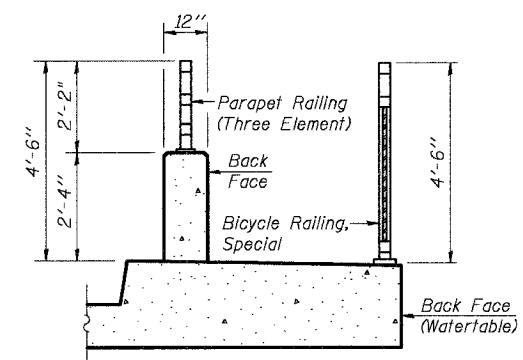
DETAIL B

DETAIL C

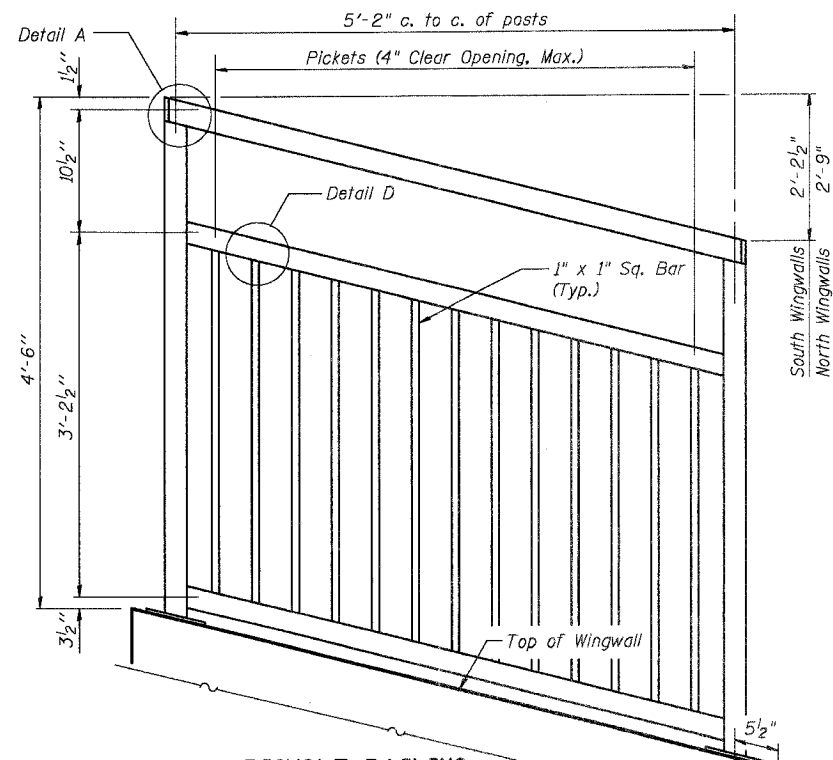
DETAIL D



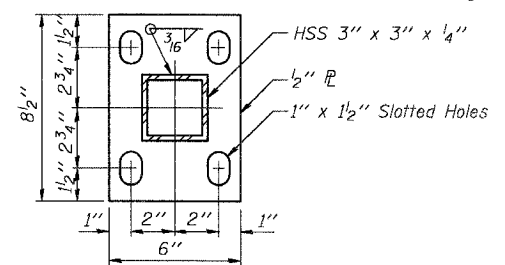
SECTION THRU SIDEWALK



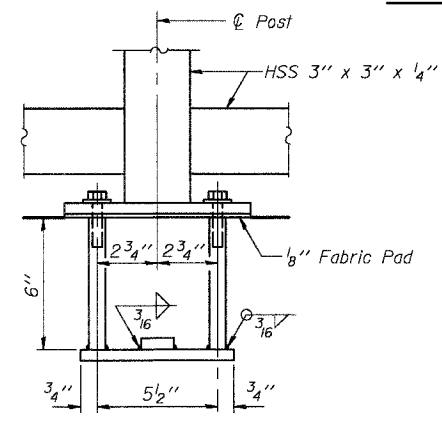
SECTION THRU SHARED USE PATH



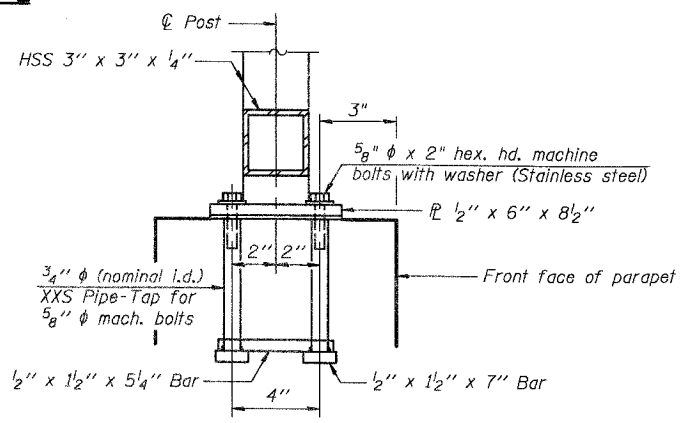
BICYCLE RAILING ON WINGWALL
Work with Sheets SE-24 to SE-27



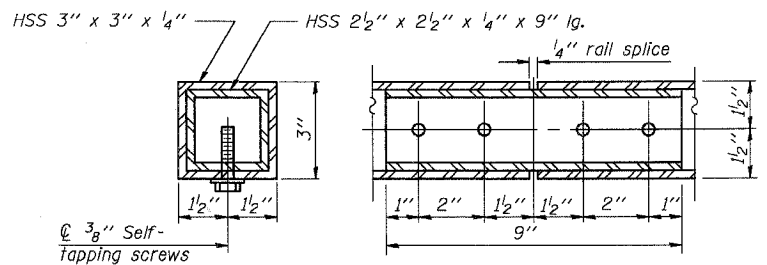
BASE PL



ANCHOR BOLT DETAILS
Parapet Railings



ANCHOR BOLT DETAILS
Bicycle Railing



RAIL SPLICE

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

BILL OF MATERIAL

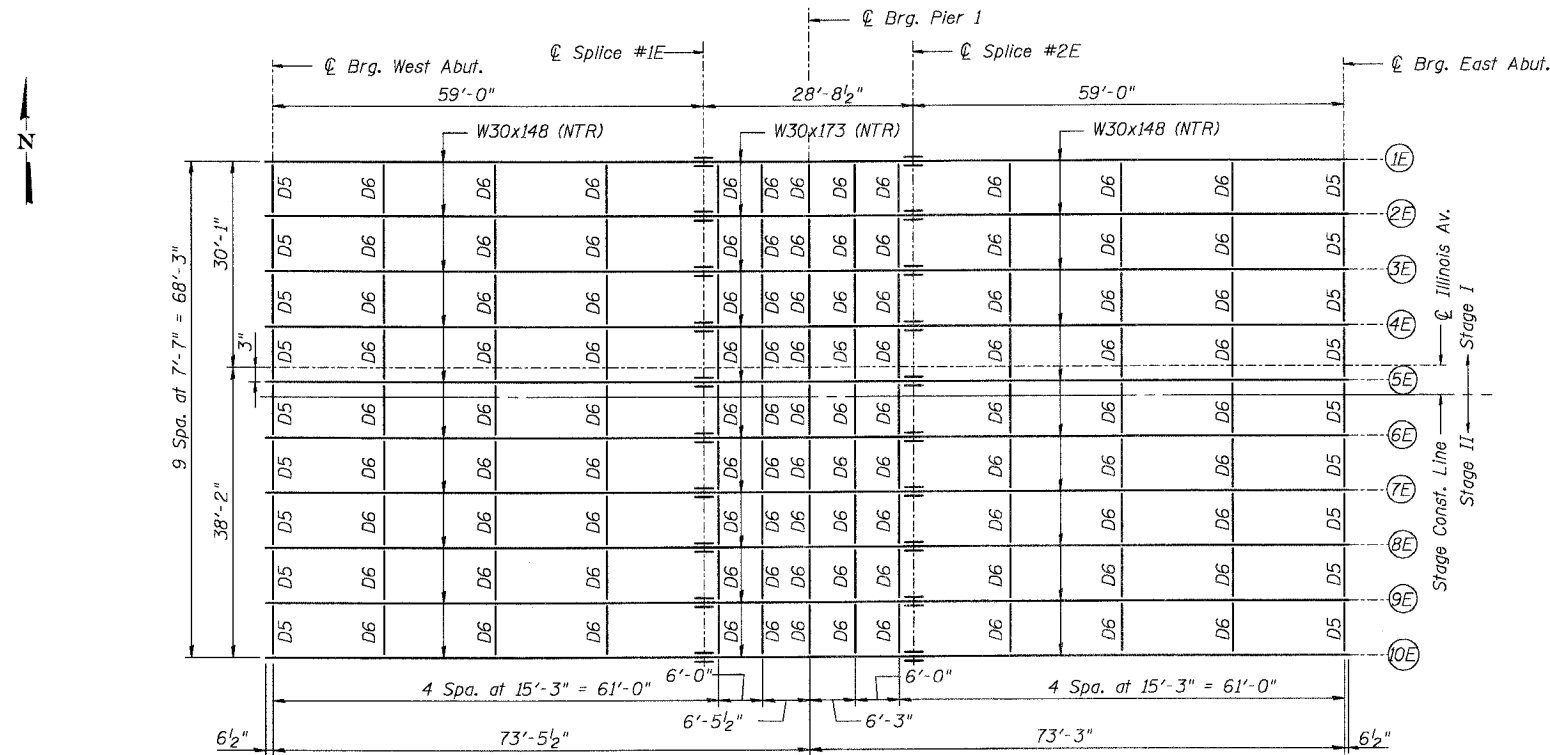
Item	Unit	Quantity
Bicycle Railing, Special	Foot	148
Parapet Railing	Foot	148

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
1100 N. WASHINGTON ST., SUITE 200
AURORA, ILLINOIS 60009-3000
TEL: 630-584-1000 FAX: 630-584-1001

REVISIONS	
NAME	DATE

CITY OF AURORA
BRIDGE RAILING DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008
DATE T-28-2006

DRAWING MADE BY: AEU
 PROJECT NO.: 03-00247-00-BR
 SHEET NO.: SE-17
 DATE: 7-28-2006
 PROJECT CONTACT: WJH
 CLIENT: CITY OF AURORA
 CONTRACT NO.: 03-00247-00-BR
 CONTRACT VALUE: \$1,000,000.00
 DRAWING NO.: 03-00247-00-BR-SE-17-001



FRAMING PLAN

NOTES:
All material shall be AASHTO M270 Grade 50.
NTR indicates notch toughness requirements.
See Sheet SE-19 for typical beam elevation and framing details.

INTERIOR GIRDER MOMENT TABLE

	0.4 Sp. 1	Pier 1	0.5 Sp. 2
I_s (in ⁴)	6,680	8,230	6,680
I_c (n) (in ⁴)	17,020	-	17,020
I_c (3n) (in ⁴)	12,596	-	12,596
S_s (in ³)	436	540	436
S_c (n) (in ³)	622	-	622
S_c (3n) (in ³)	566	-	566
Z (in ³)	-	607	-
ρ (k/ft.)	1.00	1.56	-
$M\ell$ (k)	391	943	406
$s\ell$ (k/ft.)	0.56	-	0.56
$M_s\ell$ (k)	242	-	250
$M\ell$ (k)	627	330	625
M (Imp) (k)	157	82	157
$5_3[M\ell + M(\text{Imp})]$ (k)	1307	687	1,303
M_a (k)	2,522	2,119	2,547
M_u (k)	3,015	2,529	3,015
$f_s\ell$ non-comp (k.s.i.)	10.8	21.0	11.2
$f_s\ell$ comp (k.s.i.)	5.1	-	5.3
$f_s 5_3(\ell + \text{Imp})$ (k.s.i.)	25.2	15.3	25.1
f_s (Overload) (k.s.i.)	41.1	36.3	41.6
f_s (Total) (k.s.i.)	-	-	-
VR (k)	57.1	-	57.1

INTERIOR GIRDER REACTION TABLE

	W. Abut.	Pier 1	E. Abut.
$R\ell$ (k)	42.6	142.9	43.4
$R\ell$ (k)	42.3	56.5	42.2
Imp. (k)	10.6	14.2	10.6
R (Total) (k)	95.5	213.6	96.2

I_s and S_s are the moment of inertia and section modulus of the steel section used in computing f_s (Total & Overload).
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing stresses due to Live Load.
 I_c and S_c are the moment of inertia and section modulus of the composite section used in computing stresses due to superimposed dead loads. (see AASHTO 10.38)
VR is the maximum Live Load + Impact shear range in span.
 Z is the plastic section modulus used to determine the fully plastic moments in the non-composite areas.
 M_a (Applied Moment) = $1.3M\ell + M_s\ell + 5_3(M\ell + M(\text{Imp}))$.
The Plastic Moment capacity (M_u) is computed according to AASHTO 10.48.1 and 10.50.1.1.
 f_s (Overload) is the sum of the stresses due to $M\ell + M_s\ell + 5_3(M\ell + M(\text{Imp}))$.
 f_s (Total) (Non-compact section) is the sum of the stresses due to $1.3M\ell + M_s\ell + 5_3(M\ell + M(\text{Imp}))$.

TOP OF BEAM ELEVATIONS (For Fabrication Use Only)

LOCATION	WEST ABUT.	EAST ABUT.	PIER 1	SPLICE 1E	SPLICE 2E
Beam 1E	640.59	638.68	639.53	639.72	639.35
Beam 2E	640.75	638.84	639.69	639.88	639.50
Beam 3E	640.91	639.00	639.85	640.03	639.66
Beam 4E	641.03	639.12	639.97	640.16	639.78
Beam 5E	641.14	639.23	640.08	640.27	639.90
Beam 6E	641.02	639.11	639.96	640.15	639.78
Beam 7E	640.90	638.99	639.84	640.02	639.65
Beam 8E	640.74	638.83	639.68	639.87	639.49
Beam 9E	640.58	638.67	639.52	639.71	639.33
Beam 10E	640.42	638.51	639.36	639.55	639.18

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

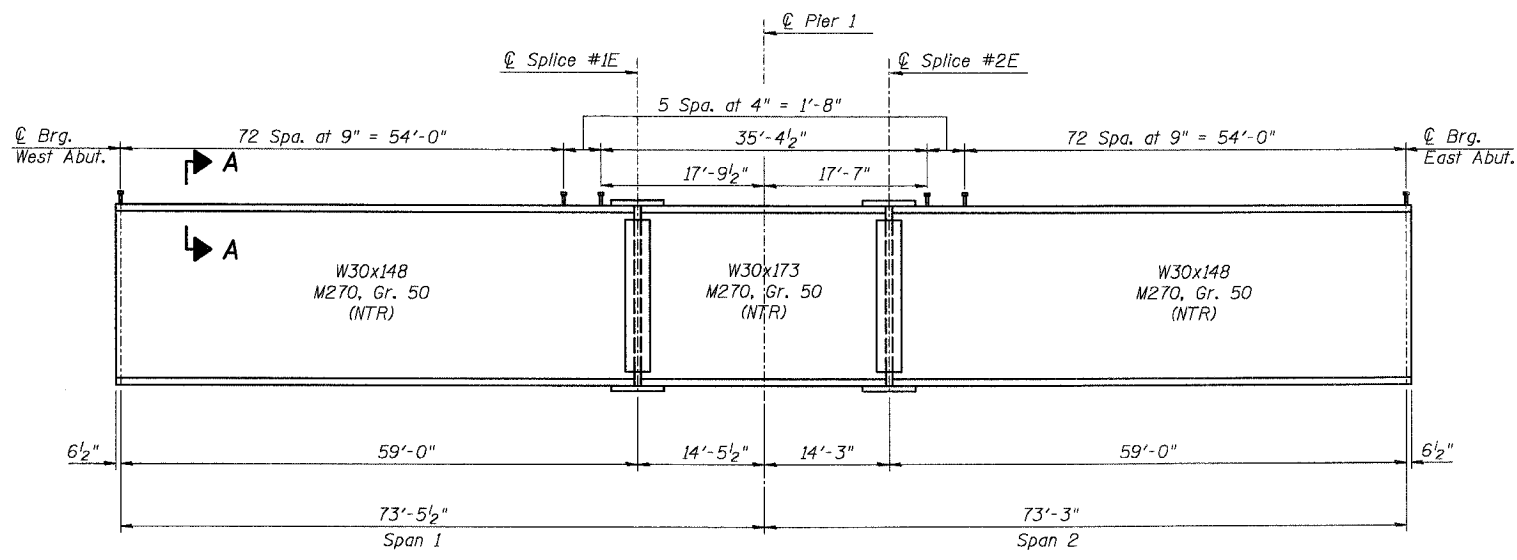
REVISIONS	
NAME	DATE

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS
1000 W. WASHINGTON ST., SUITE 200
AURORA, ILLINOIS 60007
TEL: 630-584-7000 FAX: 630-584-7001
WWW.SMITHENGINEERING.COM

CITY OF AURORA

STEEL FRAMING PLAN
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

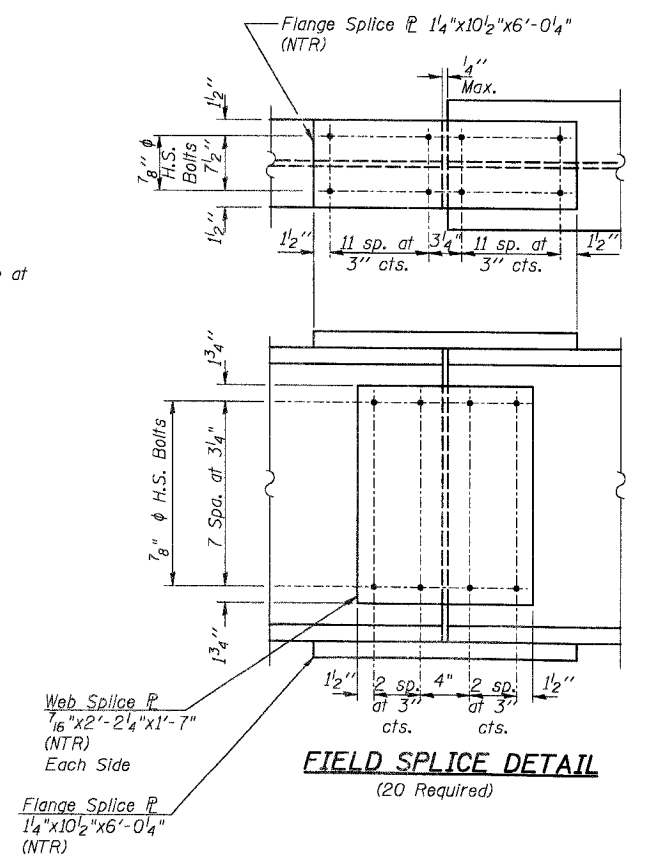
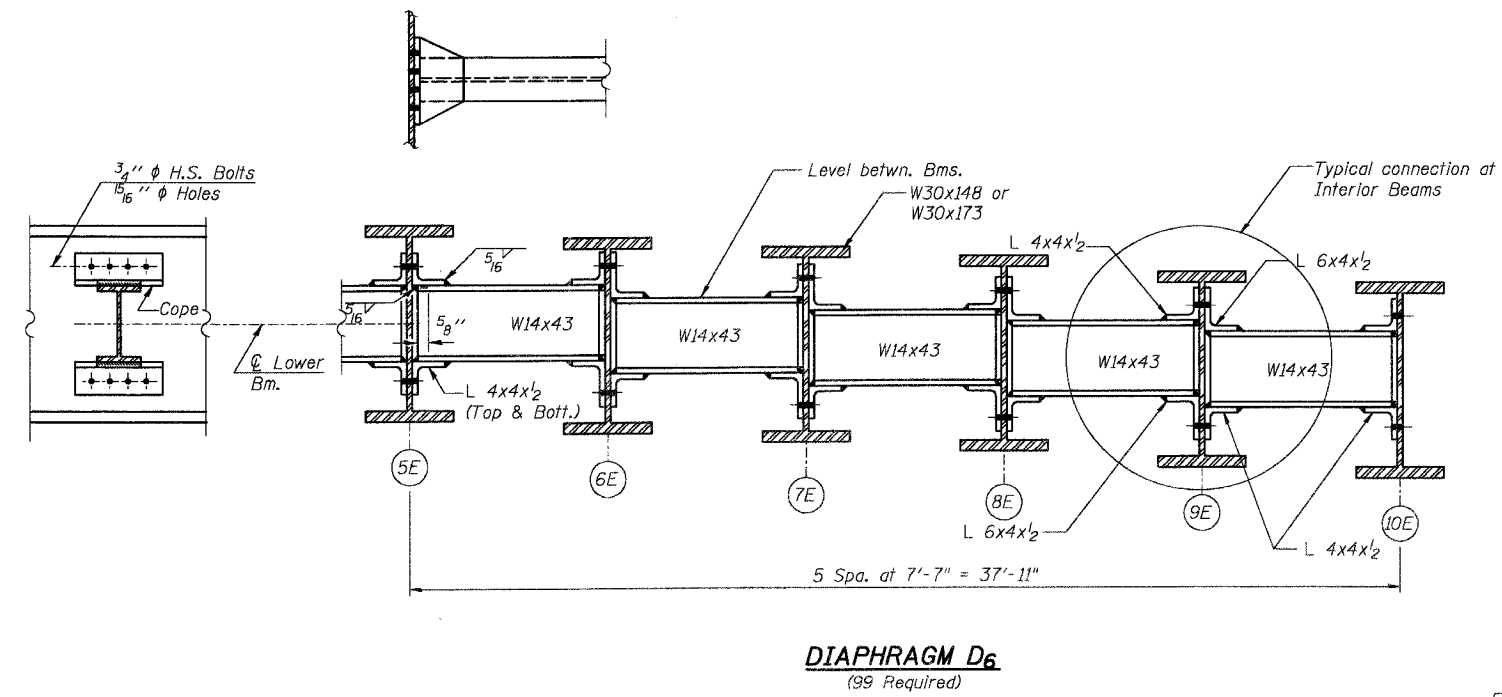
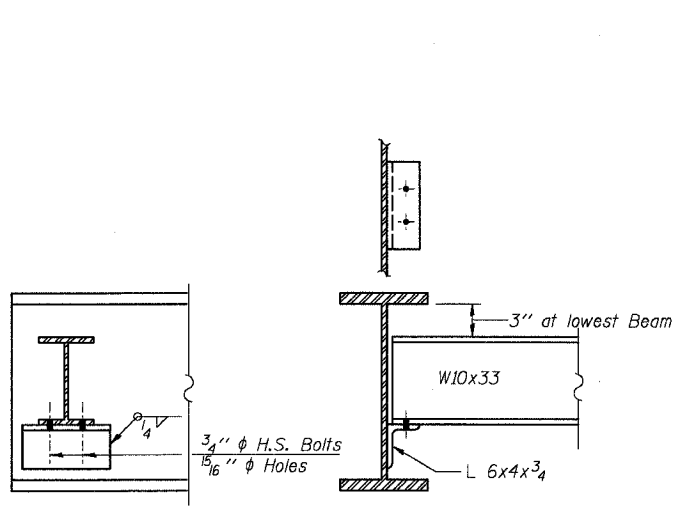
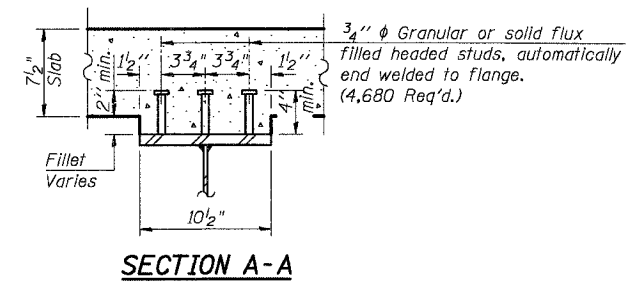
DATE 7-28-2006



BILL OF MATERIAL

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	L. Sum	0.34
Stud Shear Connectors	Each	4,680

Notes:
Work this Sheet with Sheet SE-18.
For bearing details see Sheet SE-20.
All splice material shall be M270 Grade 50.



DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

Note:
Two hardened washers shall be required over all oversize holes for diaphragms.

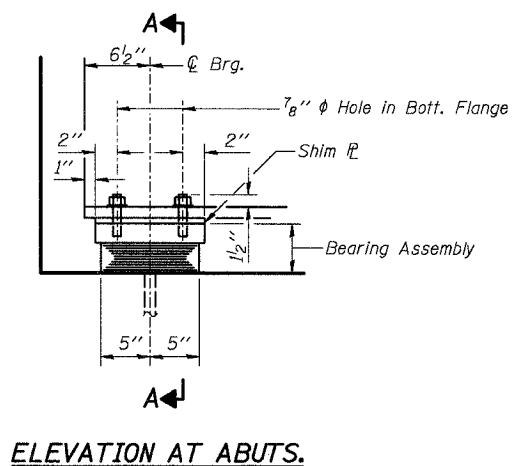
SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, MECHANICAL, ELECTRICAL, AND SURVEYING ENGINEERS
1000 WEST WASHINGTON STREET, SUITE 200, AURORA, ILLINOIS 60009
TEL: (708) 485-1100 FAX: (708) 485-1101

REVISIONS	
NAME	DATE

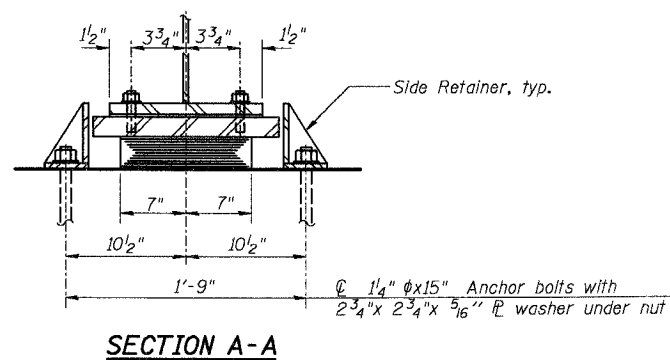
CITY OF AURORA

STEEL FRAMING DETAILS
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

DATE 7-28-2006

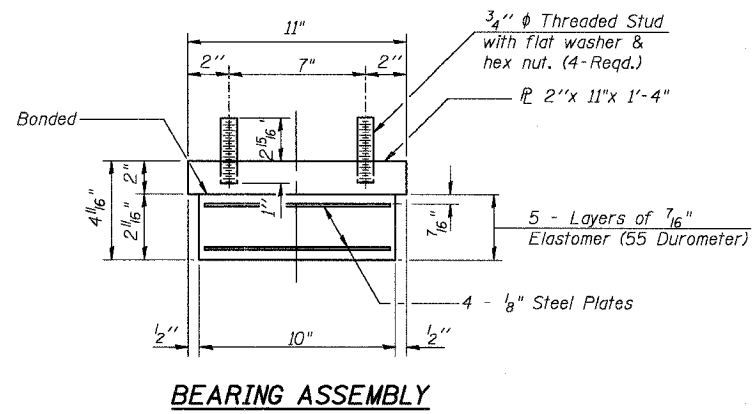


ELEVATION AT ABUTS.



SECTION A-A

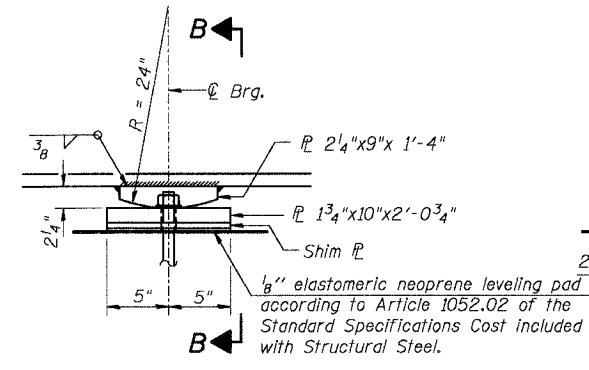
TYPE I ELASTOMERIC EXP. BRG.



BEARING ASSEMBLY

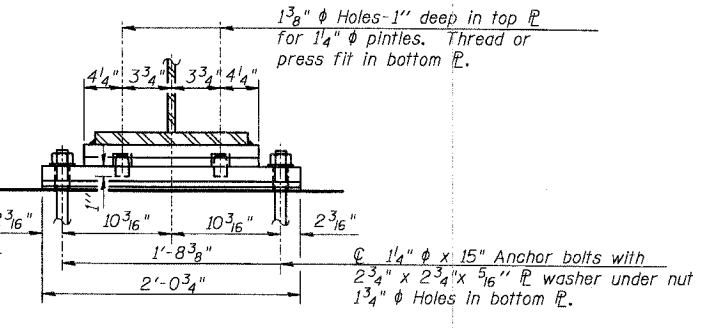
Note:
Shim plates shall not be placed under Bearing Assembly.

Notes:
See sheet SE-21 for Anchor Bolt installation.

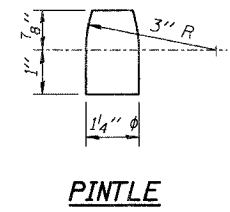


ELEVATION AT PIER 1

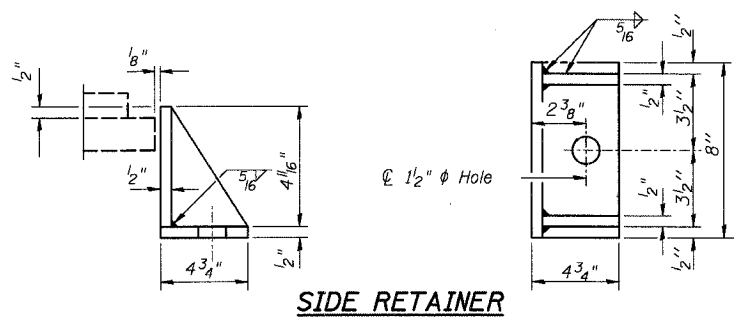
FIXED BEARING



SECTION B-B



PINTLE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates. Weight included with Structural Steel.

BILL OF MATERIAL

Item	Unit	Quantity
Elastomeric Bearing Assembly, Type I	Each	20

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

REVISIONS	
NAME	DATE

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
1100 N. WASHINGTON ST., SUITE 100
AURORA, ILLINOIS 60007

CITY OF AURORA

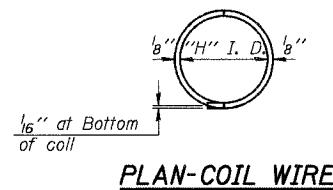
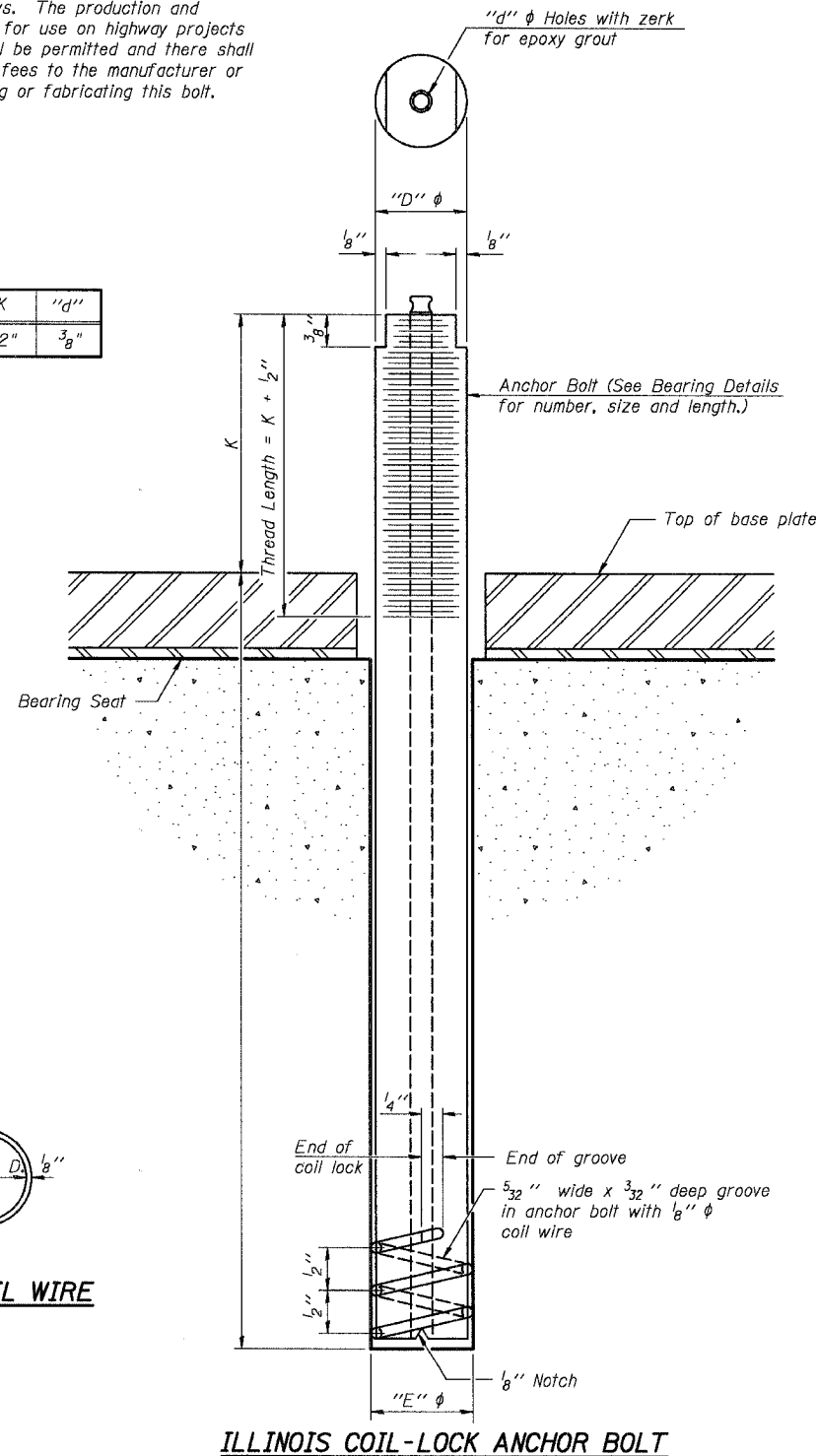
BEARING DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

DATE 7-28-2006

COMPANY NAME, SIZE AND ADDRESS
 PROJECT CONTRACT NO.
 DRAWN BY
 CHECKED BY
 DATE

The Illinois Coil-Lock Anchor Bolt is a proprietary item which is the property of the Illinois Department of Transportation. Use, reproduction or disclosure without express written permission is prohibited and protected under Federal copyright laws. The production and the fabrication of this bolt for use on highway projects in the State of Illinois shall be permitted and there shall be no incurred charges or fees to the manufacturer or the fabricator for producing or fabricating this bolt.

D	E	H	K	"d"
1 1/4"	1 3/8"	1 1/8"	2"	3/8"



MATERIALS FOR ILLINOIS COIL-LOCK ANCHOR BOLT

The anchor bolt shall be fabricated from cold drawn or hot finished seamless carbon steel mechanical tubing conforming to ASTM A 519, Grade 1026, CW and supplied with hexagonal nuts and cut washers.
The coil wire shall be made of any suitable soft steel wire.
The finished anchor bolt shall be cleaned of rust and other foreign materials and wrapped or packaged to prevent contamination until they are installed.
The epoxy grout shall be a two-component, epoxy resin bonding system conforming to ASTM C 881, Type I, Grade 1 and of a Class suitable for the temperature at installation.

INSTALLATION PROCEDURE for the ILLINOIS COIL-LOCK ANCHOR BOLT

1. With the coil wire in place, the bolt shall be inserted into the hole and turned clockwise to a snug fit in the hole. Nut and washer shall be placed on the bolt. The nut shall be tensioned until the steel base plates are held securely to the concrete bearing seat.
2. Epoxy grout shall be pumped through the zerk fitting with a pressure gun. Pumping shall continue until the epoxy overflows the hole around the bolt shank. After pumping is discontinued, excess epoxy shall be immediately wiped off.

ALTERNATE ANCHOR BOLTS

The Contractor may use, at his option, the capsule or the adhesive cartridge type anchor rods that have been previously tested and given a prior approval by the Department. The Contractor shall install these anchor rods in pre-drilled holes according to the manufacturer's recommendations and procedures.

- The capsule or the adhesive cartridge type anchor rods shall be a two part system composed of:
1. A threaded rod stud with nut and washer of the type specified.
 2. A sealed glass capsule or a sealed glass adhesive cartridge containing premeasured amounts of the adhesive chemical.

Location	Size	Type
Abutments	1 1/4" ϕ	A 307
Pier 1	1 1/4" ϕ	A 307

ASTM F 1554 Grade 105, ASTM A 449 and AASHTO M 314 Grade 105 anchor bolts may be substituted for the anchor bolts shown above.

GENERAL NOTES

Holes in the masonry for anchor bolts shall be drilled through the base plates to the diameter and depth shown or according to the manufacturer's recommendation after beams or girders have been erected and adjusted.
Prior to setting the bolts, the holes shall be dry and all dust and loose particles shall be removed by the use of compressed air or vacuuming.
The anchor bolts, furnished and installed including the epoxy grout or capsules shall not be paid for separately but shall be included in the unit bid price for Furnishing and Erecting Structural Steel.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC. CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS www.smitheng.com 708.111.8888	
REVISIONS	
NAME	DATE

CITY OF AURORA
ANCHOR BOLT DETAILS ILLINOIS AVENUE OVER THE FOX RIVER SECTION NO. 03-00247-00-BR KANE COUNTY STRUCTURE NO. 045-6008
DATE 7-28-2006

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.

Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

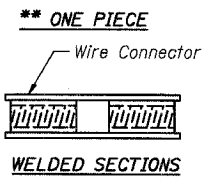
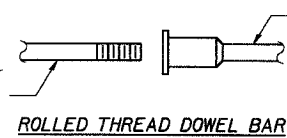
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_f$
- ② Minimum *Pull-out Strength (Tension in kips) = $1.25 \times f_{s,allow} \times A_f$

Where f_y = Yield strength of lapped reinforcement bars in ksi.
 $f_{s,allow}$ = Allowable tensile stress in lapped reinforcement bars in ksi (Service Load)
 A_f = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	5.9
#5	2'-0"	23.0	9.2
#6	2'-7"	33.1	13.3
#7	3'-5"	45.1	18.0
#8	4'-6"	58.9	23.6
#9	5'-9"	75.0	30.0
#10	7'-3"	95.0	38.0
#11	9'-0"	117.4	46.8

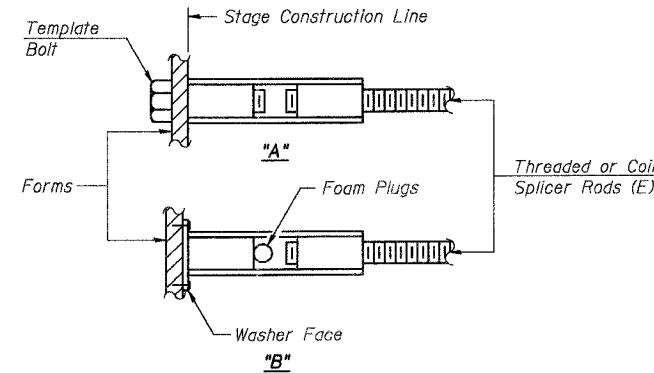
Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS."

The diameter of this part is the same as the diameter of the bar spliced.



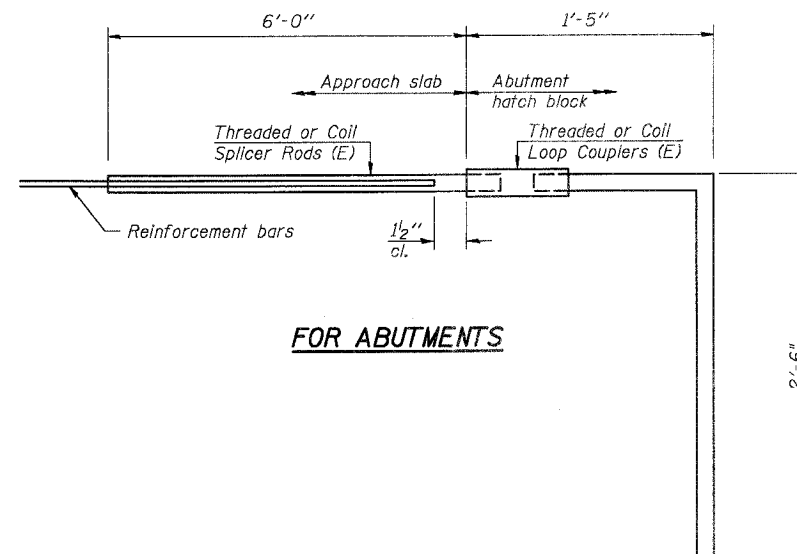
BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



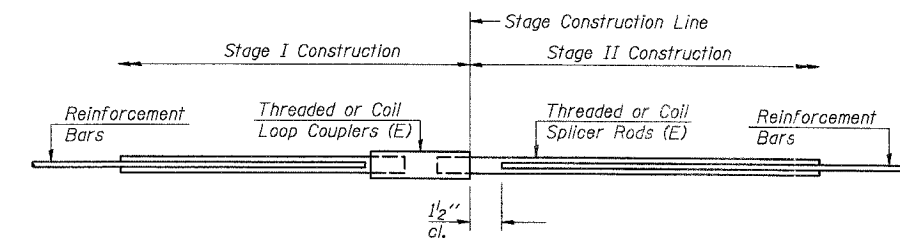
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



FOR ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity = 23.0 kips - tension	
Min. Pull-out Strength = 9.2 kips - tension	
No. Required = 112	



STANDARD

Bar Size	No. Assemblies Required	Location
#5	297	Deck
#5	223	Deck
#5	20	W. Abut.
#6	4	W. Abut.
#7	7	W. Abut.
#5	11	Pier 1
#8	10	Pier 1
#5	20	E. Abut.
#6	4	E. Abut.
#7	7	E. Abut.

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

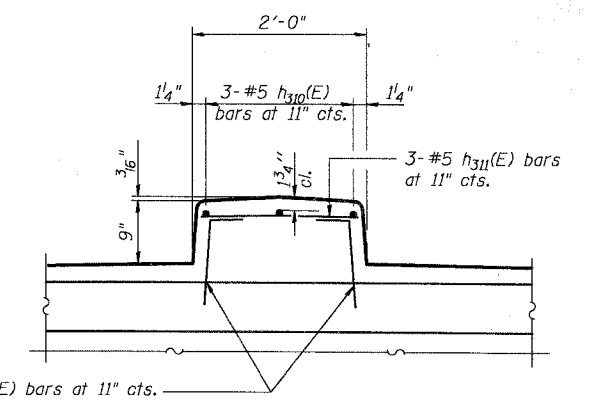
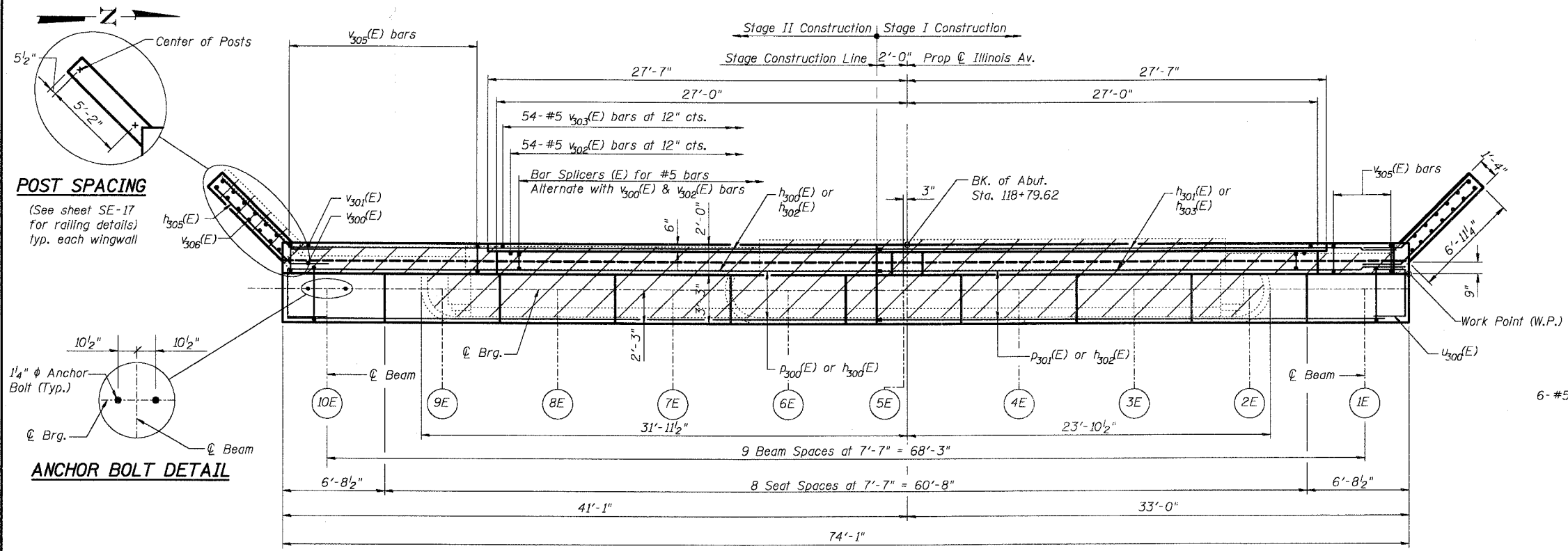
SMITH ENGINEERING CONSULTANTS, INC. CONSULTING ENGINEERS AND SURVEYORS www.smitheng.com 746111 smitheng.com	
REVISIONS	
NAME	DATE

CITY OF AURORA

BAR SPLICER DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

DATE 7-28-2006

CONTRACT NAME: SE-22
 PROJECT NO.: 03-00247-00-BR
 SHEET NO.: SE-22
 DATE: 7/28/06



NOTES:
Work this sheet with sheet SE-24.

Space reinforcement in abutment seat to miss anchor bolts.

Contractor to field verify dimensions of existing abutment and wingwalls.

Existing reinforcement extending into removal area shall be cleaned, straightened and incorporated into the new construction. Cost included in pay item "Concrete Removal".

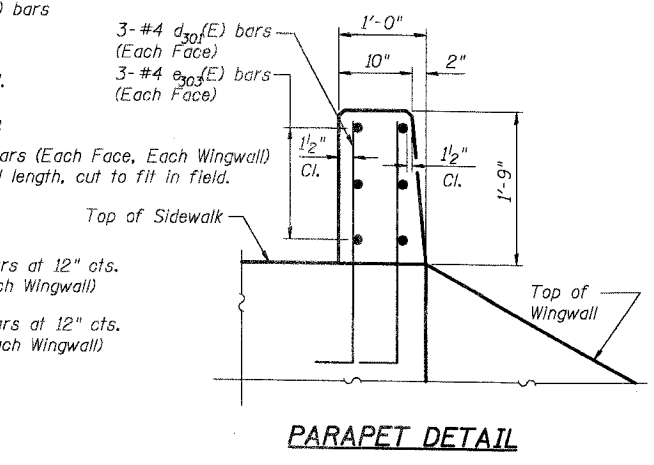
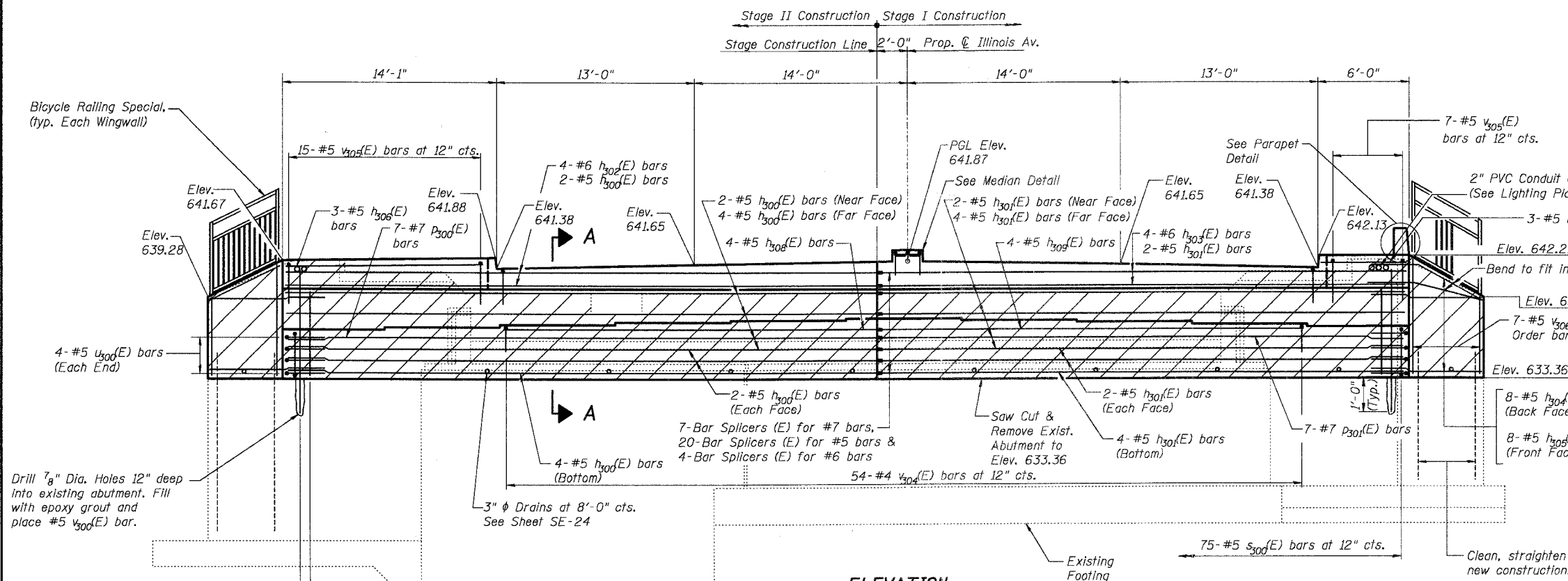
Drill and epoxy grout #5 $v_{300}(E)$ bars in drilled holes with a minimum depth of 12" according to Article 584 of the Standard Specs.

Pour steps monolithically with abutment cap. All edges shall have standard $\frac{3}{4}$ " chamfers except as noted.

All elevations given at back of abutment unless noted otherwise.

See Sheet SE-24 for Section A-A.

See Sheet SE-17 for Bicycle Railing, Special details.



DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

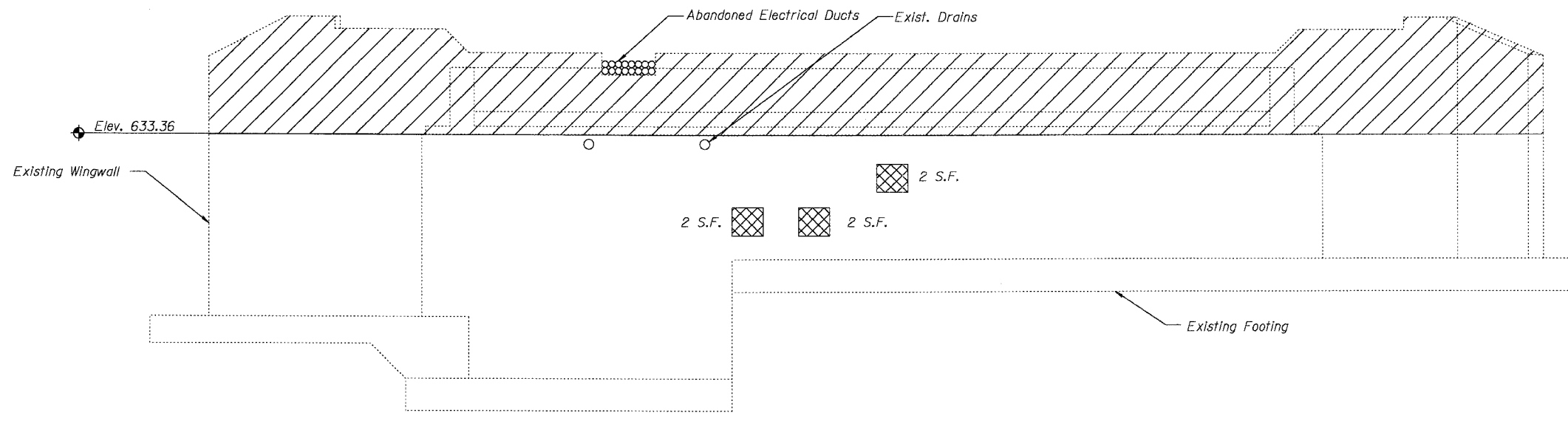
BEAM SEAT ELEVATION TABLE

Beam #	1E	2E	3E	4E	5E	6E	7E	8E	9E	10E
Seat Elevation	637.65	637.80	637.96	638.09	638.20	638.08	637.95	637.79	637.64	637.48

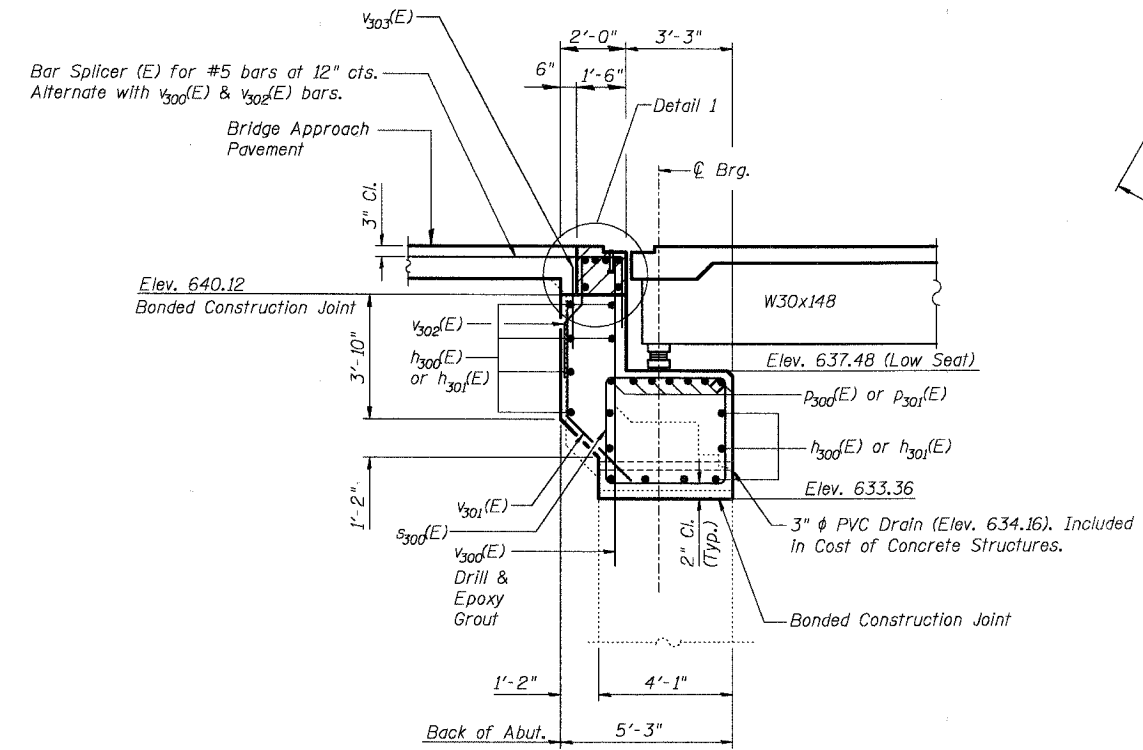
SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS
11111 Frederick Road, Suite 100, Springfield, MA 01104
Tel: 417-833-1111 Fax: 417-833-1112
www.smith-engineering.com

REVISIONS	
NAME	DATE

CITY OF AURORA
WEST ABUTMENT PLAN AND ELEVATION
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008
DATE 7-28-2006

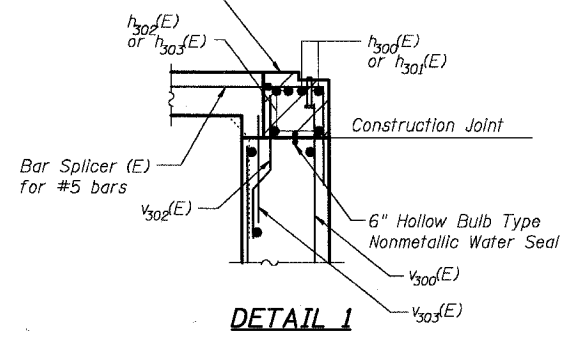


ELEVATION
Looking West



SECTION A-A

Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.



DETAIL 1

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

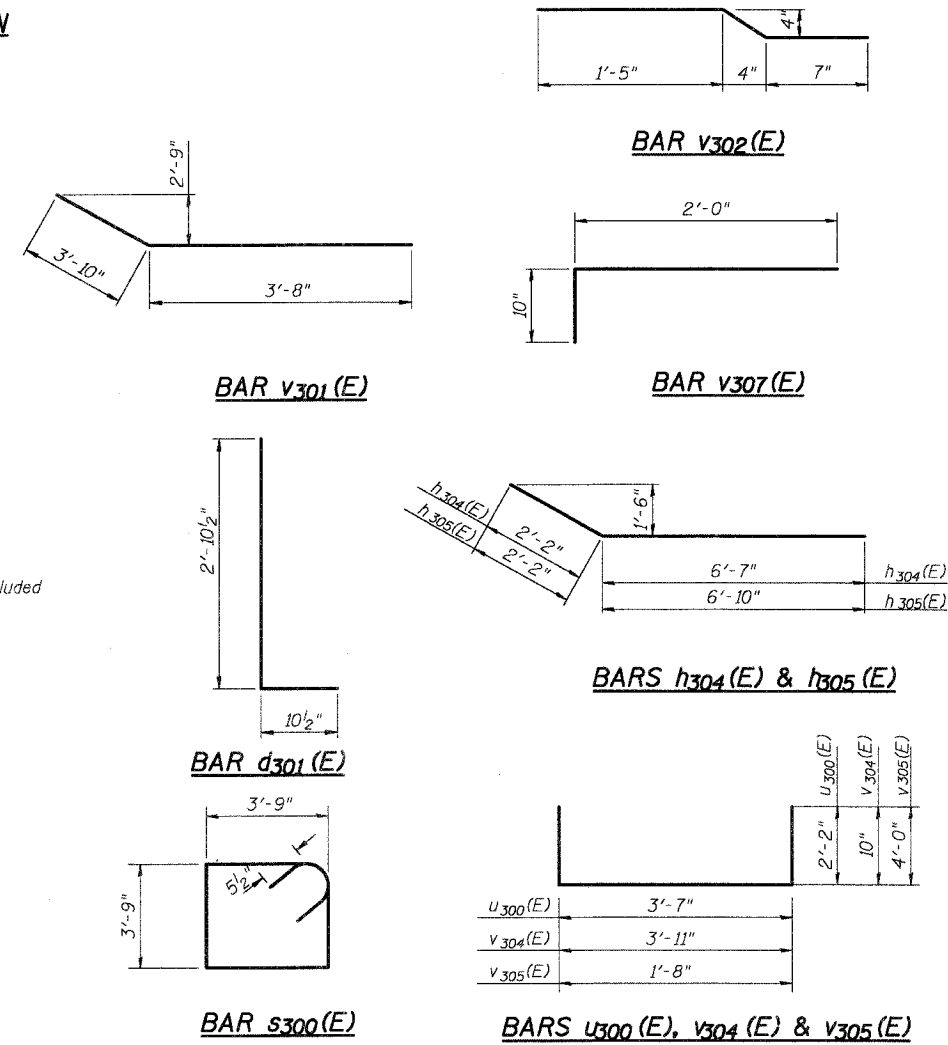
LEGEND

Indicates Concrete Removal Areas

Indicates Structural Repair of Concrete

BILL OF MATERIAL
WEST ABUTMENT

Bar	No.	Size	Length	Shape
d301(E)	6	#6	3'-9"	┌
e303(E)	6	#4	1'-8"	—
h300(E)	16	#5	38'-10"	—
h301(E)	16	#5	34'-8"	—
h302(E)	4	#6	38'-10"	—
h303(E)	4	#6	34'-8"	—
h304(E)	16	#5	8'-9"	└
h305(E)	16	#5	9'-0"	└
h306(E)	3	#5	13'-9"	—
h307(E)	3	#5	5'-8"	—
h308(E)	4	#5	16'-10"	—
h309(E)	4	#5	20'-3"	—
h310(E)	3	#5	1'-2"	—
h311(E)	3	#5	1'-8"	—
P300(E)	7	#7	38'-10"	—
P301(E)	7	#7	34'-8"	—
s300(E)	75	#5	15'-11"	└
U300(E)	8	#5	7'-11"	—
V300(E)	75	#5	8'-10"	—
V301(E)	75	#5	7'-6"	└
V302(E)	54	#5	2'-6"	└
V303(E)	54	#5	2'-4"	—
V304(E)	54	#4	5'-7"	—
V305(E)	22	#5	9'-8"	—
V306(E)	28	#5	8'-4"	—
V307(E)	6	#5	2'-10"	└
Reinforcement Bars, Epoxy Coated	Pound		6,830	
Concrete Removal	Cu. Yd.		41.2	
Concrete Structures	Cu. Yd.		74.0	
Structure Excavation	Cu. Yd.		53	
Bridge Seat Sealer	Sq. Ft.		241	
Structural Repair of Concrete (Less than or equal to 5")	Sq. Ft.		6	
Bicycle Railing, Special	Foot		11	



NOTES:
Reinforcement bars designated (E) shall be epoxy coated.
Work this sheet with sheet SE-23.
See Sheet SE-2 for abutment drainage detail.

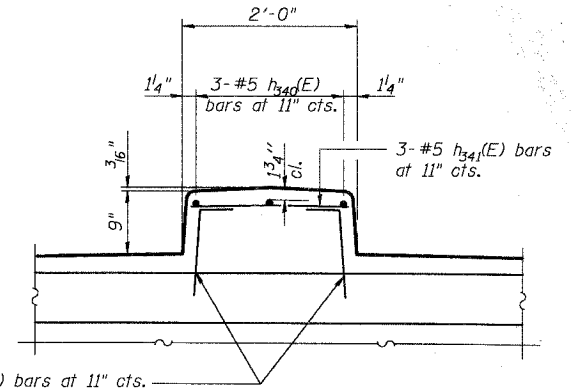
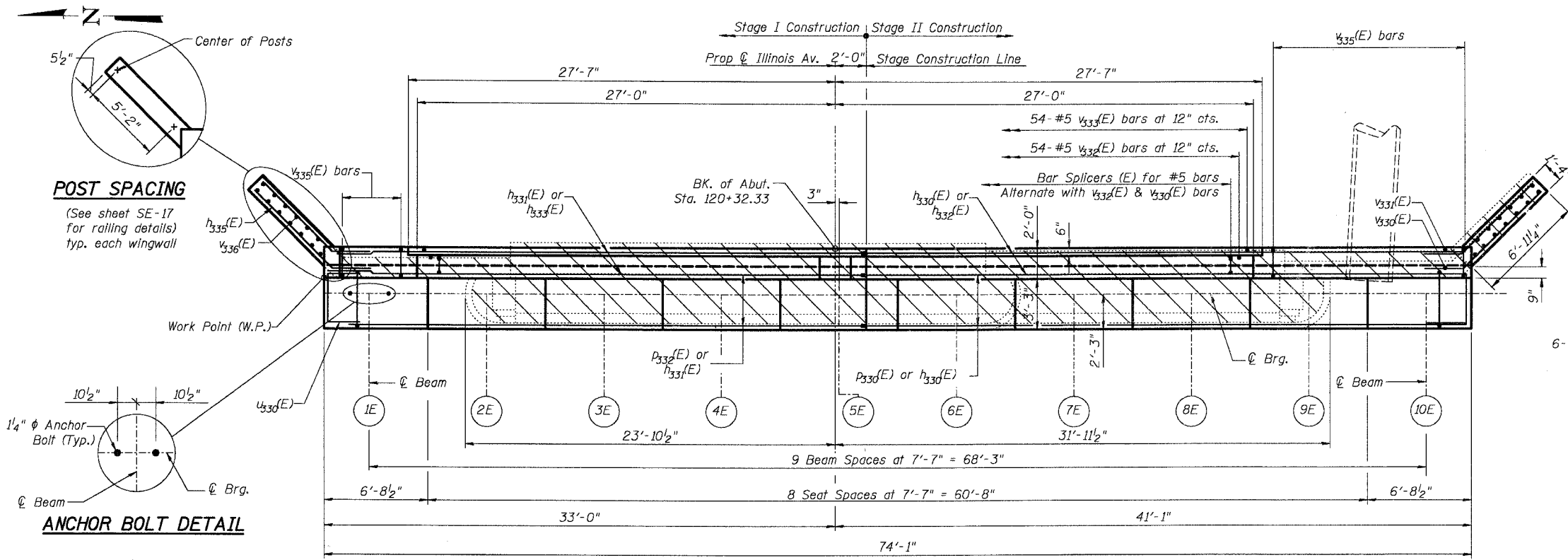
SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, MECHANICAL AND ELECTRICAL ENGINEERS AND SURVEYORS
1101 W. MONROE STREET, AURORA, ILL. 60004
TEL: (708) 885-8800 FAX: (708) 885-8801

REVISIONS	
NAME	DATE

CITY OF AURORA

WEST ABUTMENT DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

DATE 7-28-2006



NOTES:

Work this sheet with sheet SE-26.

Space reinforcement in abutment seat to miss anchor bolts.

Contractor to field verify dimensions of existing abutment and wingwalls and locations of existing storm pipe in wingwall.

Existing reinforcement extending into removal area shall be cleaned, straightened and incorporated into the new construction. Cost included in pay item "Concrete Removal".

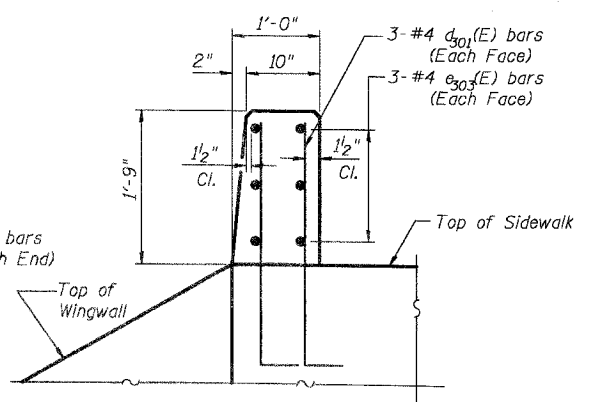
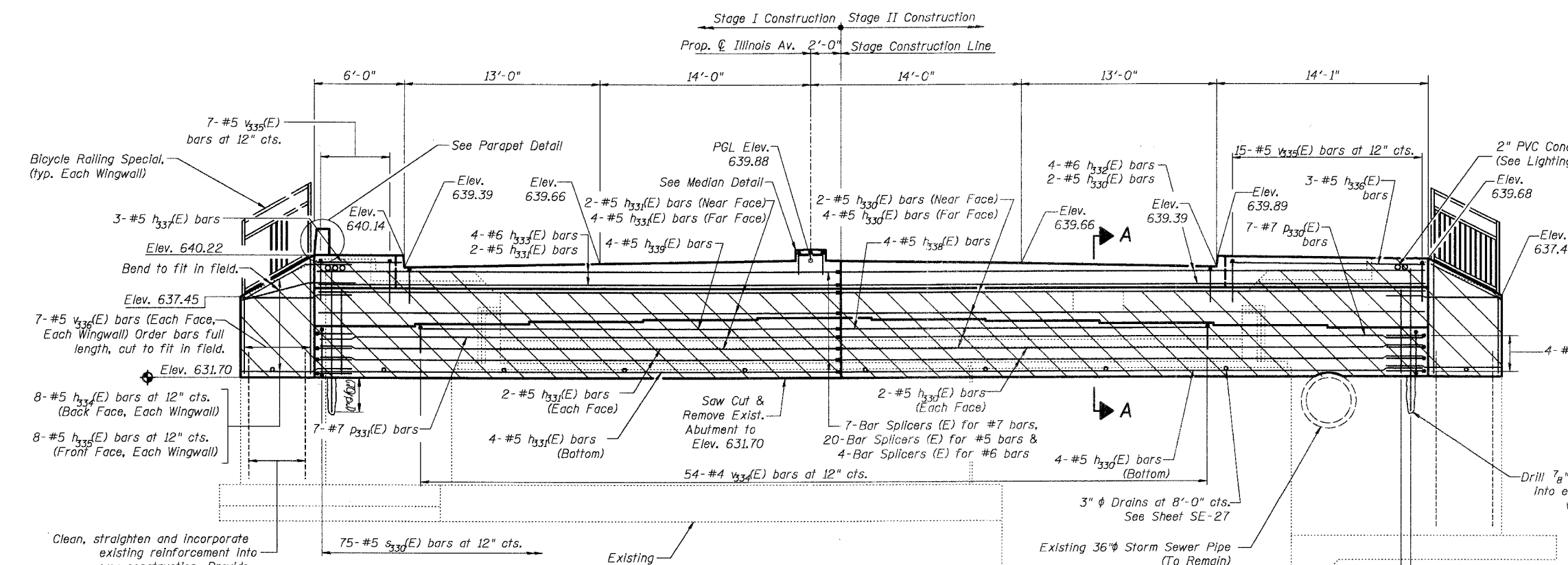
Drill and epoxy grout #5 $v_{330}(E)$ bars in drilled holes with a minimum depth of 12" according to Article 584 of the Standard Specs.

Pour steps monolithically with abutment cap. All edges shall have standard 3/4" chamfers except as noted.

All elevations given at back of abutment unless noted otherwise.

See Sheet SE-26 for Section A-A.

See Sheet SE-17 for Bicycle Railing, Special Detail.



BEAM SEAT ELEVATION TABLE

Beam #	1E	2E	3E	4E	5E	6E	7E	8E	9E	10E
Seat Elevation	635.74	635.89	636.05	636.18	636.29	636.17	636.04	635.88	635.73	635.57

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, ELECTRICAL AND SURVEYING

REVISIONS

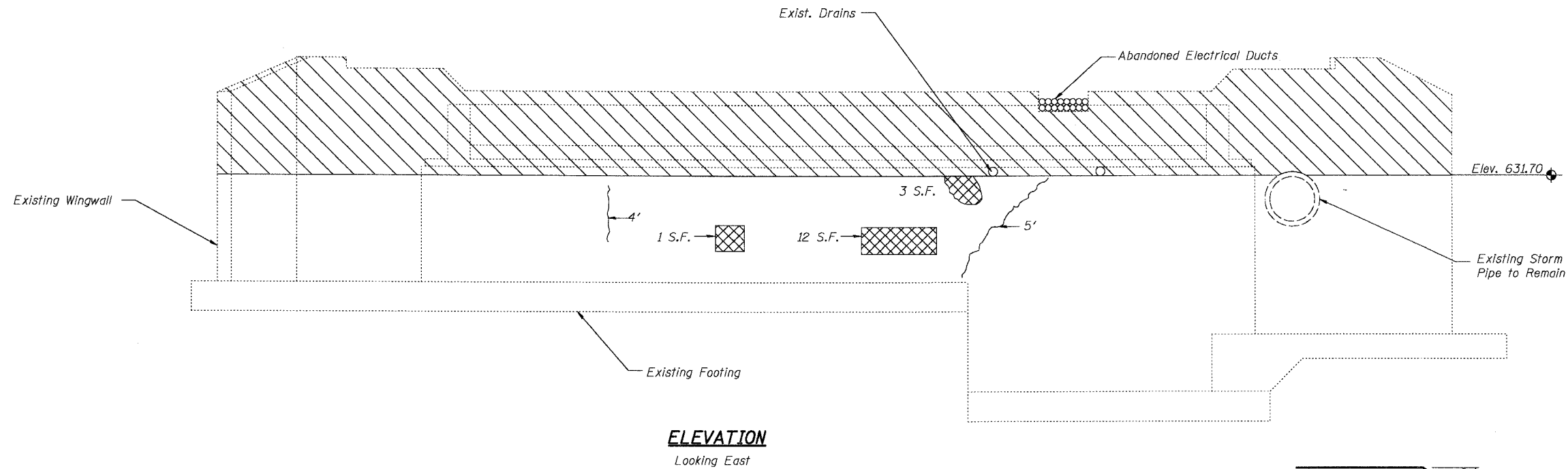
NAME	DATE

CITY OF AURORA

**EAST ABUTMENT PLAN AND ELEVATION
OVER THE FOX RIVER**
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

DATE 7-28-2006

COMPANY NAME, SEC. INC.
 PROJECT CONTACT: PROJECT CONTACT
 ADDRESS: ADDRESS IN ADDRESS
 PHONE: PHONE IN PHONE
 FAX: FAX IN FAX
 E-MAIL: E-MAIL IN E-MAIL
 WWW: WWW IN WWW



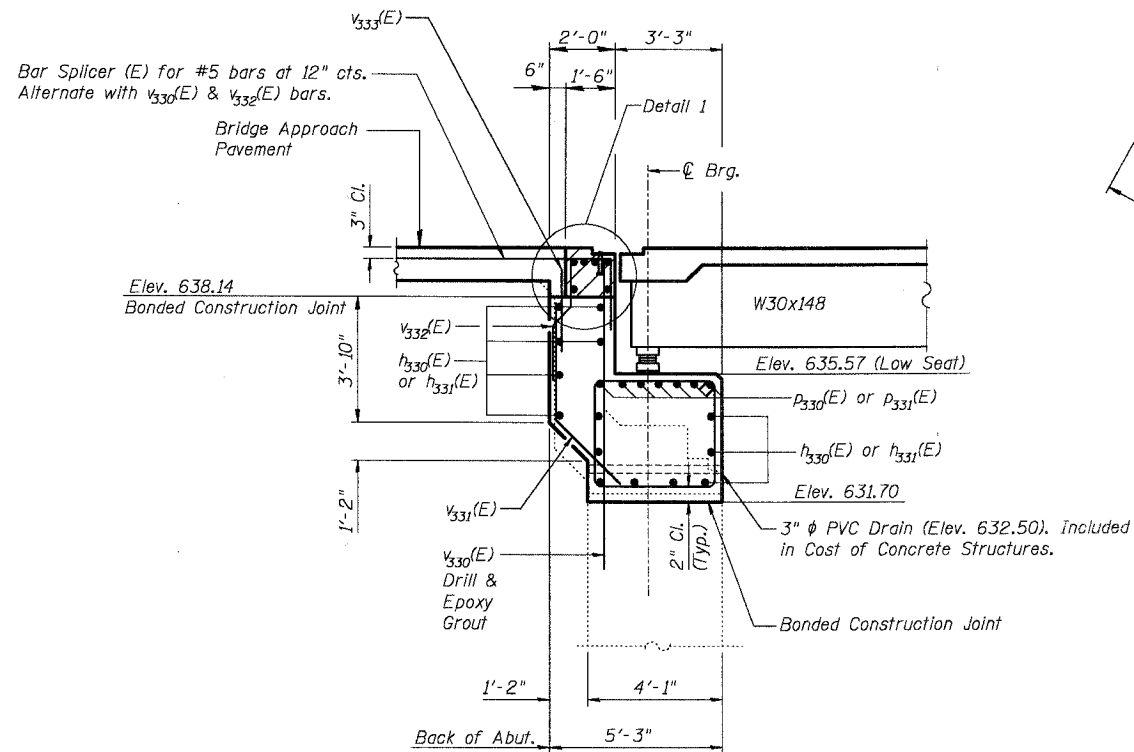
ELEVATION
Looking East

LEGEND

	Indicates Concrete Removal Areas
	Indicates Epoxy Crack Sealing
	Indicates Structural Repair of Concrete

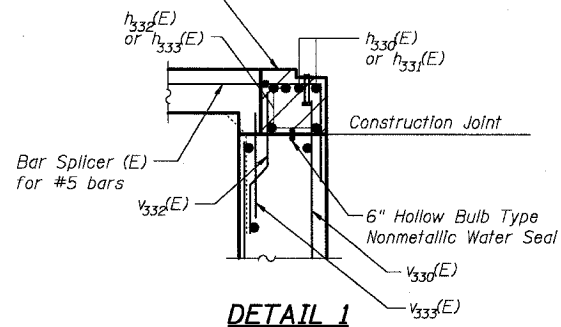
**BILL OF MATERIAL
EAST ABUTMENT**

Bar	No.	Size	Length	Shape	
d ₃₀₁ (E)	6	#6	3'-9"	┌	
e ₃₀₃ (E)	6	#4	1'-8"	—	
h ₃₃₀ (E)	16	#5	38'-10"	—	
h ₃₃₁ (E)	16	#5	34'-8"	—	
h ₃₃₂ (E)	4	#6	38'-10"	—	
h ₃₃₃ (E)	4	#6	34'-8"	—	
h ₃₃₄ (E)	16	#5	8'-9"	└	
h ₃₃₅ (E)	16	#5	9'-0"	└	
h ₃₃₆ (E)	3	#5	13'-9"	—	
h ₃₃₇ (E)	3	#5	5'-8"	—	
h ₃₃₈ (E)	4	#5	16'-10"	—	
h ₃₃₉ (E)	4	#5	20'-3"	—	
h ₃₄₀ (E)	3	#5	1'-2"	—	
h ₃₄₁ (E)	3	#5	1'-8"	—	
p ₃₃₀ (E)	7	#7	38'-10"	—	
p ₃₃₁ (E)	7	#7	34'-8"	—	
s ₃₃₀ (E)	75	#5	15'-5"	└	
u ₃₃₀ (E)	8	#5	7'-11"	┌	
v ₃₃₀ (E)	75	#5	8'-6"	—	
v ₃₃₁ (E)	75	#5	7'-1"	└	
v ₃₃₂ (E)	54	#5	2'-6"	└	
v ₃₃₃ (E)	54	#5	2'-4"	—	
v ₃₃₄ (E)	54	#4	5'-7"	—	
v ₃₃₅ (E)	22	#5	9'-8"	—	
v ₃₃₆ (E)	28	#5	8'-0"	—	
v ₃₃₇ (E)	6	#5	2'-10"	└	
Reinforcement Bars, Epoxy Coated				Pound	6,720
Concrete Removal				Cu. Yd.	41.2
Concrete Structures				Cu. Yd.	74.0
Structure Excavation				Cu. Yd.	53
Bridge Seat Sealer				Sq. Ft.	241
Epoxy Crack Sealing				Foot	9
Structural Repair of Concrete (Less than or equal to 5")				Sq. Ft.	16
Bicycle Railing Special				Foot	11



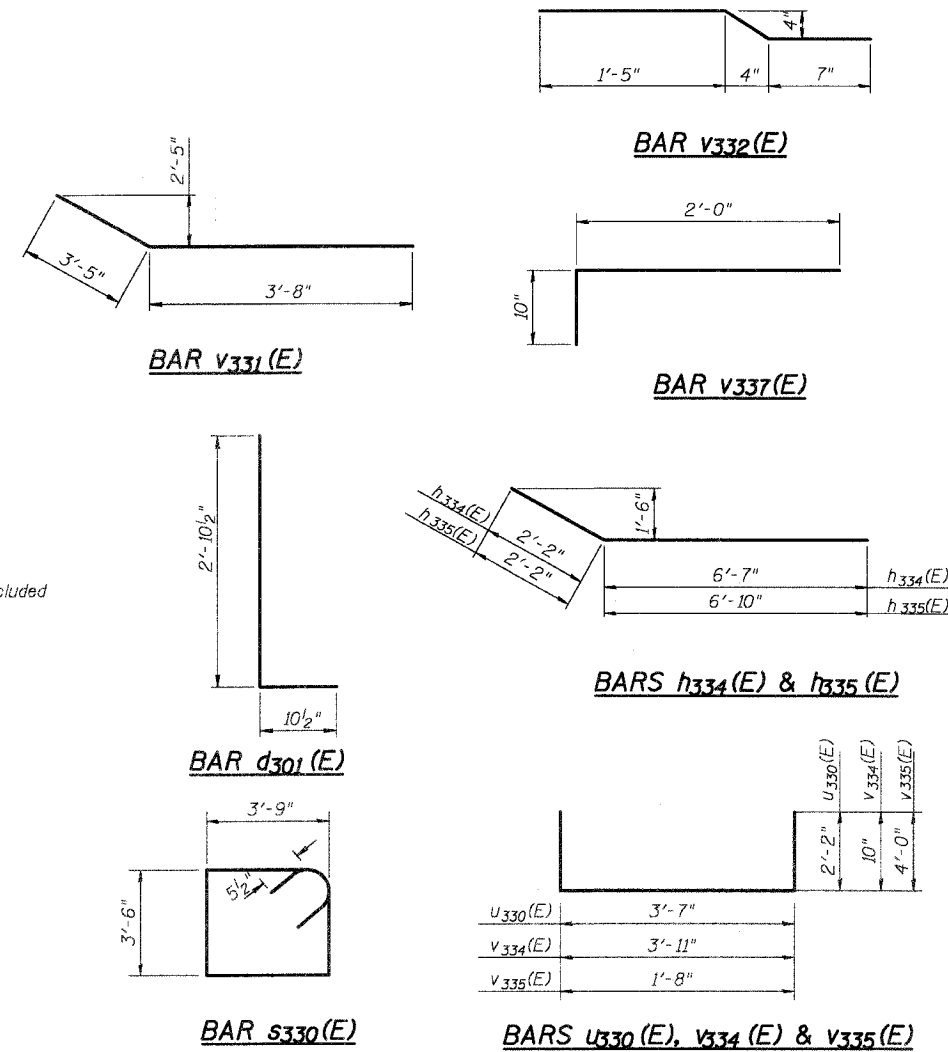
SECTION A-A

Hatched area to be poured after superstructure falsework has been removed. Quantity of concrete included with Concrete Superstructure.



DETAIL 1

DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF



NOTES:

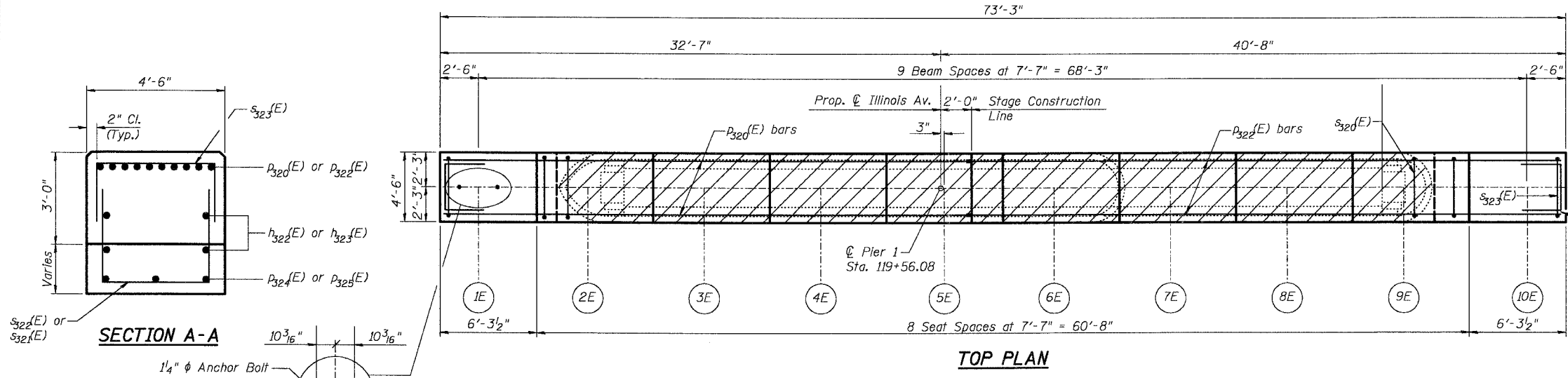
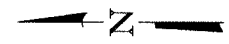
- Reinforcement bars designated (E) shall be epoxy coated.
- Work this sheet with sheet SE-25.
- See Sheet SE-2 for abutment drainage detail.

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL/STRUCTURAL ENGINEERS AND SURVEYORS

REVISIONS	
NAME	DATE

CITY OF AURORA	
EAST ABUTMENT DETAILS ILLINOIS AVENUE OVER THE FOX RIVER SECTION NO. 03-00247-00-BR KANE COUNTY STRUCTURE NO. 045-6008	
DATE	7-28-2006

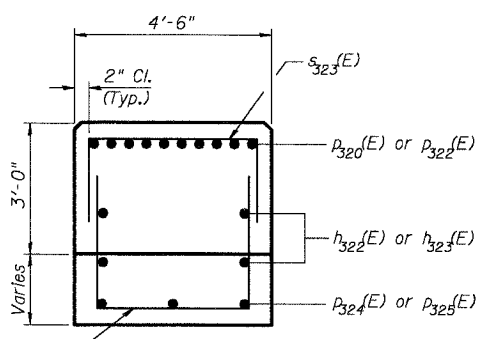
CONTRACT #83867



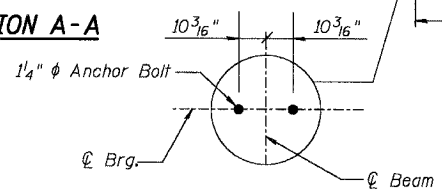
TOP PLAN

BEAM SEAT ELEVATION TABLE

Beam #	1E	2E	3E	4E	5E	6E	7E	8E	9E	10E
Seat Elevation	636.64	636.80	636.96	637.08	637.19	637.07	636.95	636.79	636.63	636.47



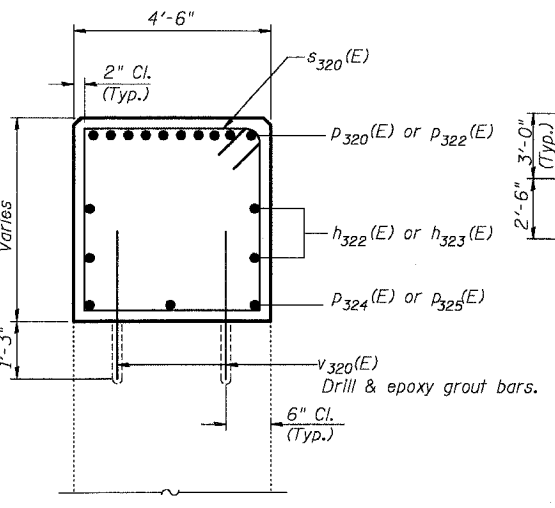
SECTION A-A



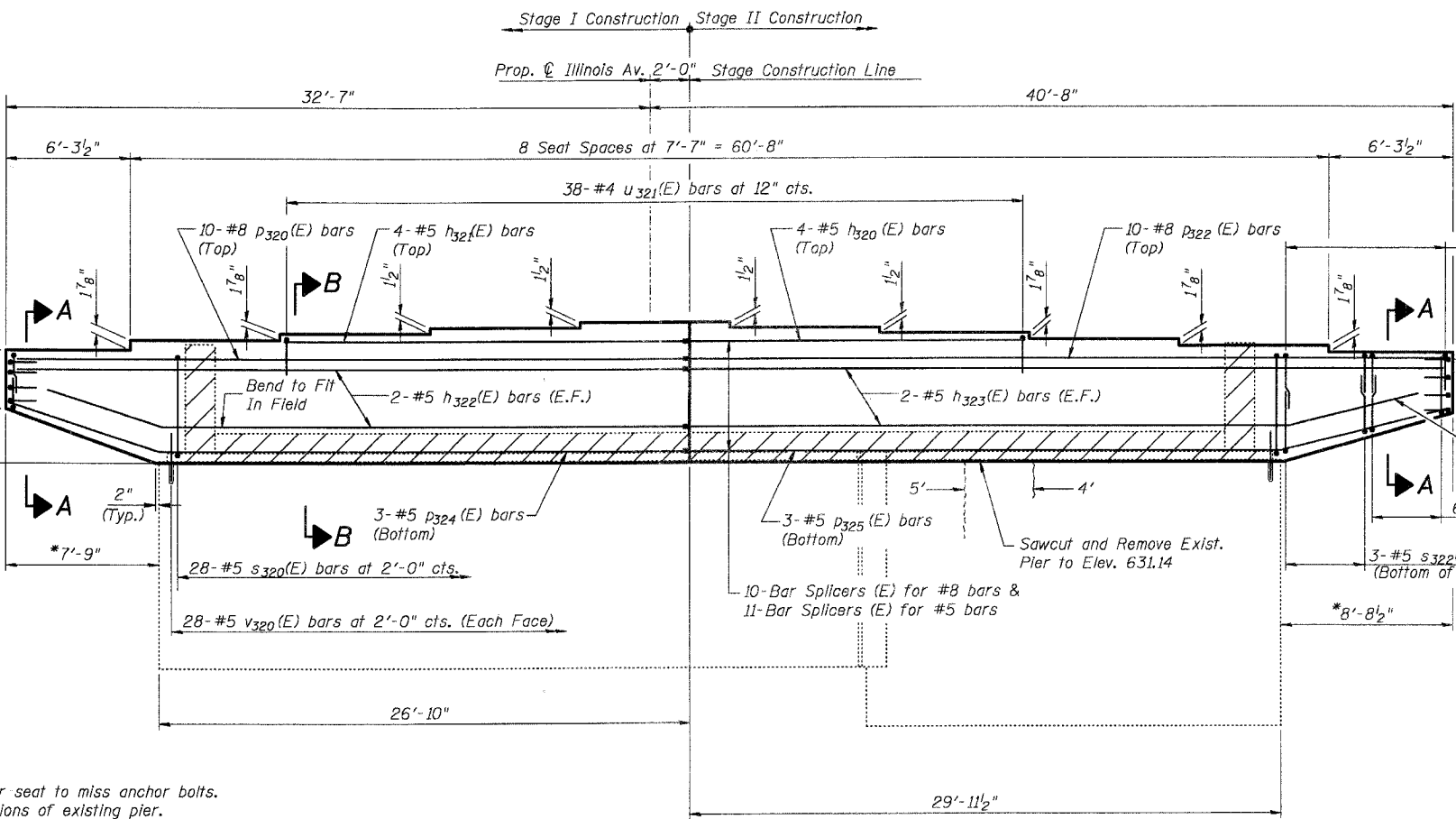
ANCHOR BOLT DETAIL

LEGEND:

- Indicates Concrete Removal Areas
- Indicates Epoxy Crack Sealing (Near Face)
- Indicates Epoxy Crack Sealing (Far Face)



SECTION B-B



ELEVATION

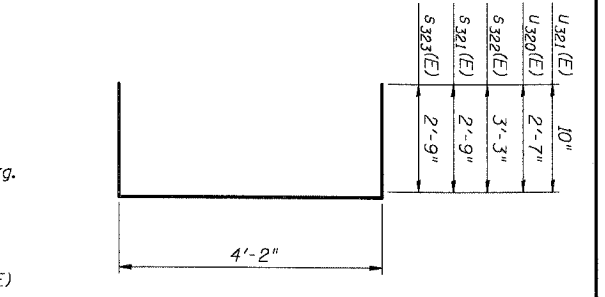
Looking East

*Measured Along ϕ of Pier

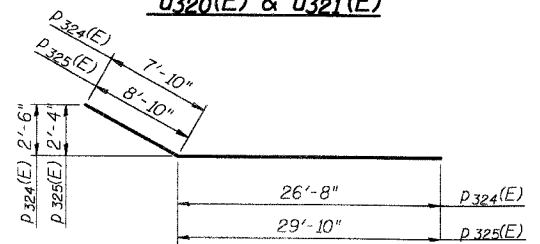
DESIGNED	AEU
CHECKED	RGD
DRAWN	WJH
CHECKED	NRF

NOTES:

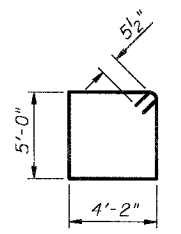
Space reinforcement in pier seat to miss anchor bolts. Contractor to verify dimensions of existing pier. Cost for drilling and epoxy grouting v320(E) bars included in cost of Reinforcement Bars, Epoxy Coated.



BARS U320(E) & U321(E)



BARS P324(E) & P325(E)



BAR S320(E)

**BILL OF MATERIAL
PIER 1**

Bar	No.	Size	Length	Shape
h320(E)	4	#5	16'-10"	—
h321(E)	4	#5	20'-3"	—
h322(E)	4	#5	34'-3"	—
h323(E)	4	#5	38'-4"	—
P320(E)	10	#8	34'-3"	—
P322(E)	10	#8	38'-4"	—
P324(E)	3	#5	34'-6"	┘
P325(E)	3	#5	38'-8"	┘
S320(E)	28	#5	19'-3"	□
S321(E)	12	#5	9'-8"	┘
S322(E)	6	#5	10'-8"	┘
S323(E)	18	#5	9'-8"	┘
U320(E)	8	#6	9'-4"	┘
U321(E)	38	#4	5'-10"	┘
V320(E)	56	#5	2'-10"	—
Reinforcement Bars, Epoxy Coated		Pound	3,980	
Concrete Removal		Cu. Yd.	16.5	
Concrete Structures		Cu. Yd.	66.6	
Epoxy Crack Sealing		Foot	9	

Bars P321(E) & P323(E) are not used. Reinforcement bars designated (E) shall be epoxy coated. Bars indicated thus 1 x 2 - #5 etc. indicates 1 line of bars with 2 lengths per line.

SMITH ENGINEERING CONSULTANTS, INC.
CIVIL, STRUCTURAL, ELECTRICAL AND MECHANICAL ENGINEERS AND SURVEYORS

REVISIONS

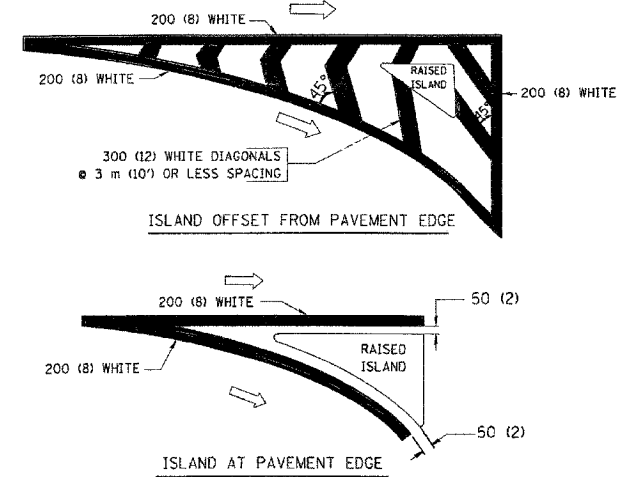
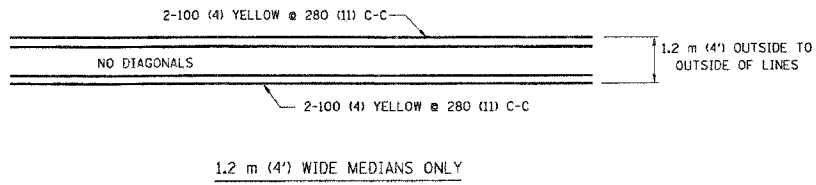
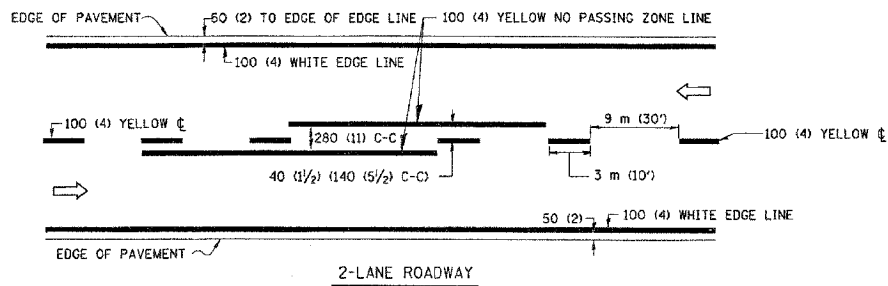
NAME	DATE

CITY OF AURORA

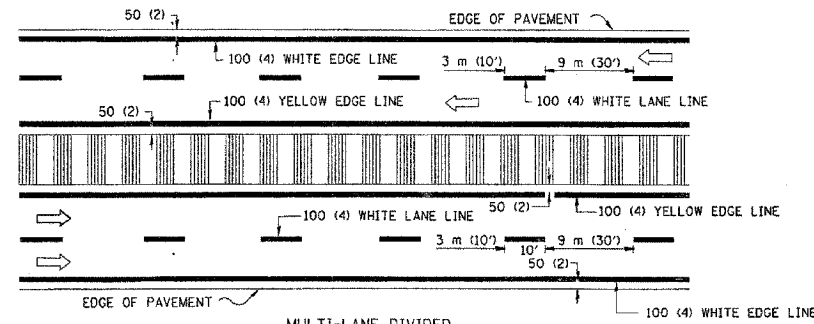
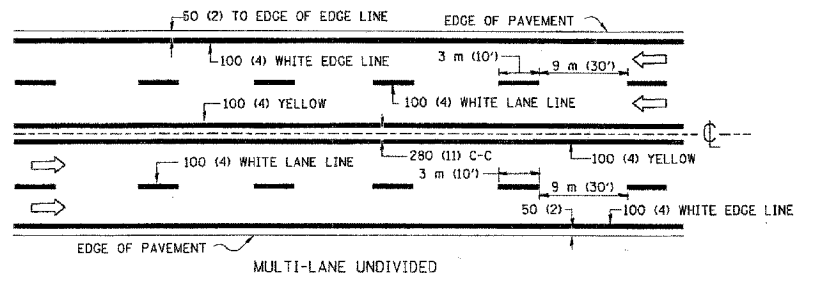
PIER 1 DETAILS
ILLINOIS AVENUE
OVER THE FOX RIVER
SECTION NO. 03-00247-00-BR
KANE COUNTY
STRUCTURE NO. 045-6008

DATE 7-28-2006

COMPANY NAME, SEC. NO., PROJECT NO., CONTRACT NO., SHEET NO., DATE, DRAWN BY, CHECKED BY, DESIGNED BY, PROJECT LOCATION, CONTRACT VALUE, SHEET TOTAL, SHEET NO.

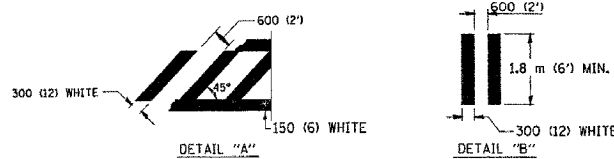
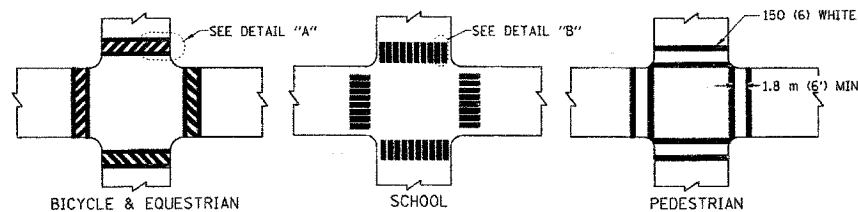


TYPICAL ISLAND MARKING

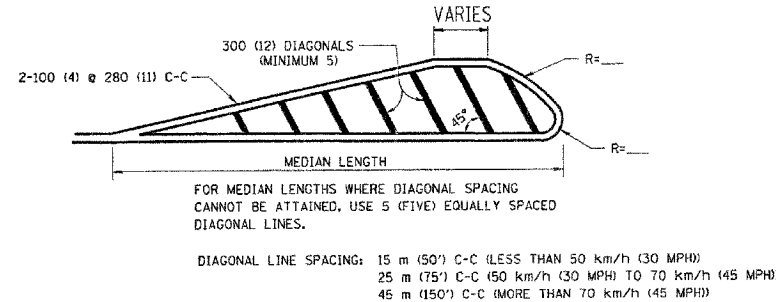


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

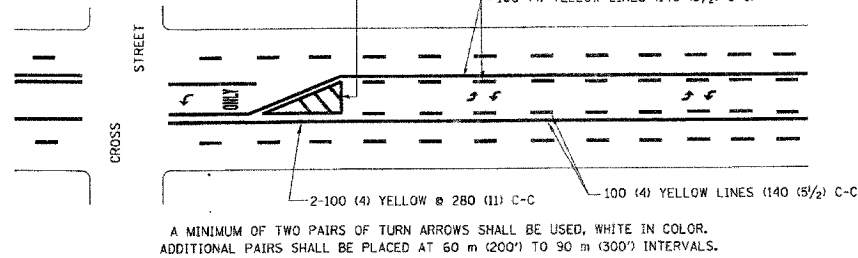
TYPICAL LANE AND EDGE LINE MARKING



TYPICAL CROSSWALK MARKING

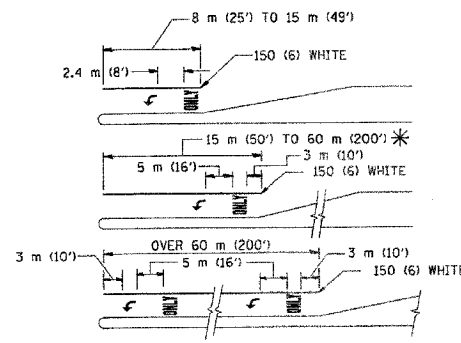


MEDIANS OVER 1.2 m (4') WIDE



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 2.4 m (8') AND ARROWS SHALL BE USED.
AREA = 1.5 m² (15.6 SQ. FT.) ONLY AREA = 1.9 m² (20.8 SQ. FT.)

* TURN LANES IN EXCESS OF 120 m (400') IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	100 (4)	SKIP-DASH	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION	100 (4)	SOLID	YELLOW	140 (5 1/2) C-C FROM SKIP-DASH CENTERLINE
NO PASSING ZONE LINES: FOR BOTH DIRECTIONS	2 @ 100 (4)	SOLID	YELLOW	280 (11) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	100 (4)	SKIP-DASH	WHITE	3 m (10') LINE WITH 9 m (30') SPACE
LANE LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	125 (5) ON FREEWAYS	SKIP-DASH	WHITE	
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	600 (2') LINE WITH 1.8 m (6') SPACE
EDGE LINES	100 (4)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	150 (6) LINE; FULL SIZE LETTERS & SYMBOLS (2.4 m (8'))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 100 (4) EACH DIRECTION	SKIP-DASH AND SOLID	YELLOW	3 m (10') LINE WITH 9 m (30') SPACE FOR SKIP-DASH; 140 (5 1/2) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE
TWO WAY LEFT TURN MARKING	2.4 m (8') LEFT ARROW	IN PAIRS	WHITE	SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN)	2 @ 150 (6)	SOLID	WHITE	NOT LESS THAN 1.8 m (6') APART
CROSSWALK LINES (BIKE & EQUESTRIAN)	300 (12) @ 45°	SOLID	WHITE	600 (2') APART
CROSSWALK LINES (LONGITUDINAL BARS (SCHOOL))	300 (12) @ 90°	SOLID	WHITE	600 (2') APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	600 (24)	SOLID	WHITE	PLACE 1.2 m (4') IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 100 (4) WITH 300 (12) DIAGONALS @ 45°	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	280 (11) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	200 (8) WITH 300 (12) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 4.5 m (15') C-C (LESS THAN 50 km/h (30 MPH)) 6 m (20') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 9 m (30') C-C (OVER 70 km/h (45 MPH))
RAILROAD CROSSING	600 (24) TRANSVERSE LINES; "RR" IS 1.8 m (6') LETTERS; 400 (16) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=0.33m ² (3.6 SQ. FT.) EACH "X"=5.0 m ² (54.0 SQ. FT.)
SHOULDER DIAGONALS	300 (12) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	15 m (50') C-C (LESS THAN 50 km/h (30 MPH)) 25 m (75') C-C (50 km/h (30 MPH) TO 70 km/h (45 MPH)) 45 m (150') C-C (OVER 70 km/h (45 MPH))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

All dimensions are in millimeters (Inches) unless otherwise shown.

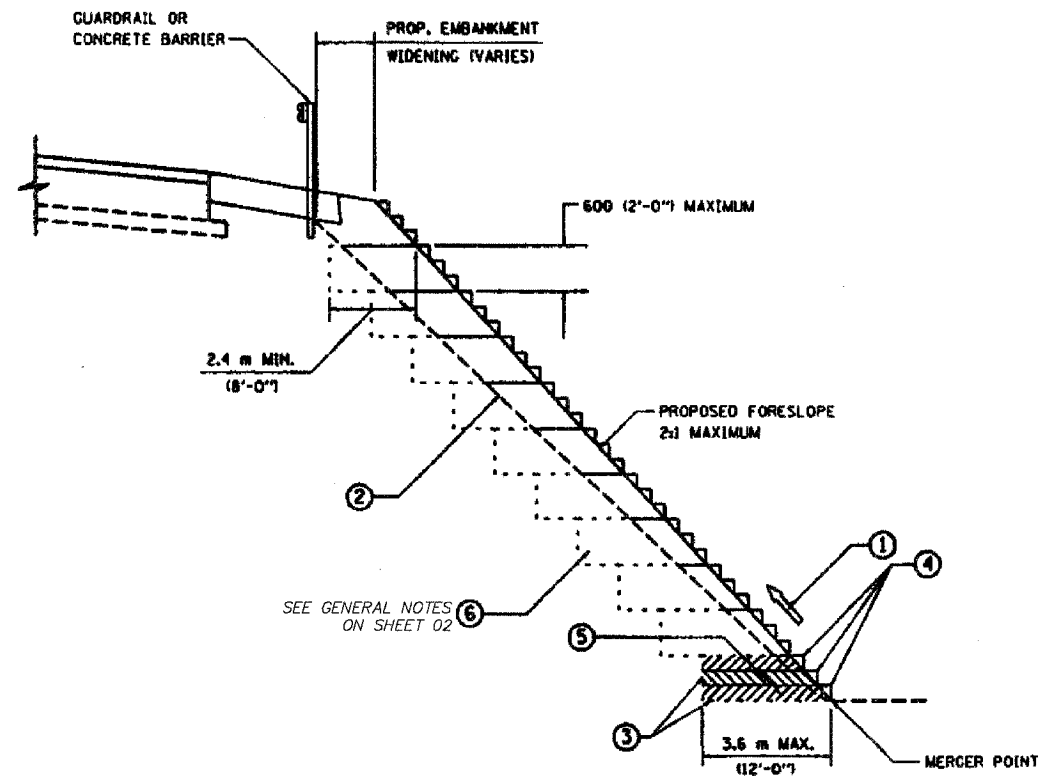
ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

REVISIONS	
NAME	DATE
EVERS	03-19-90
T. RAMMACHER	10-27-94
ALEX HOUSEH	10-09-96
ALEX HOUSEH	10-17-96
T. RAMMACHER	01-06-00

SCALE: NONE
DATE 11/20/01

DRAWN BY CADD
CHECKED BY



**TYPICAL BENCHING DETAIL
FOR EMBANKMENT**

NOTES:

- ① CONSTRUCT SUCCEEDING BENCH CUTS AND EMBANKMENT PLACEMENT AND COMPACTION FROM BOTTOM TO TOP IN STAIRSTEP FASHION.
- ② EXISTING FORESLOPE PREPARED IN ACCORDANCE WITH ARTICLE 205.04 OF THE STANDARD SPECIFICATIONS.
- ③ BENCH CUT EXISTING SLOPE TYPICAL FOR EACH STEP.
- ④ TRIM TO FINAL SLOPE.
- ⑤ EQUAL 200 (8-INCH) LIFTS OF EMBANKMENT COMPACTED IN ACCORDANCE WITH ARTICLE 205.06 OF THE STANDARD SPECIFICATIONS.
- ⑥ EXCAVATION OF BENCH CUTS WITHIN EXISTING EMBANKMENT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC METER OR CUBIC YARD FOR "EARTH EXCAVATION (SPECIAL)". THIS PRICE WILL INCLUDE ALL LABOR AND MATERIAL. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

REVISIONS	
NAME	DATE
KMA	09-2006

ILLINOIS DEPARTMENT OF TRANSPORTATION

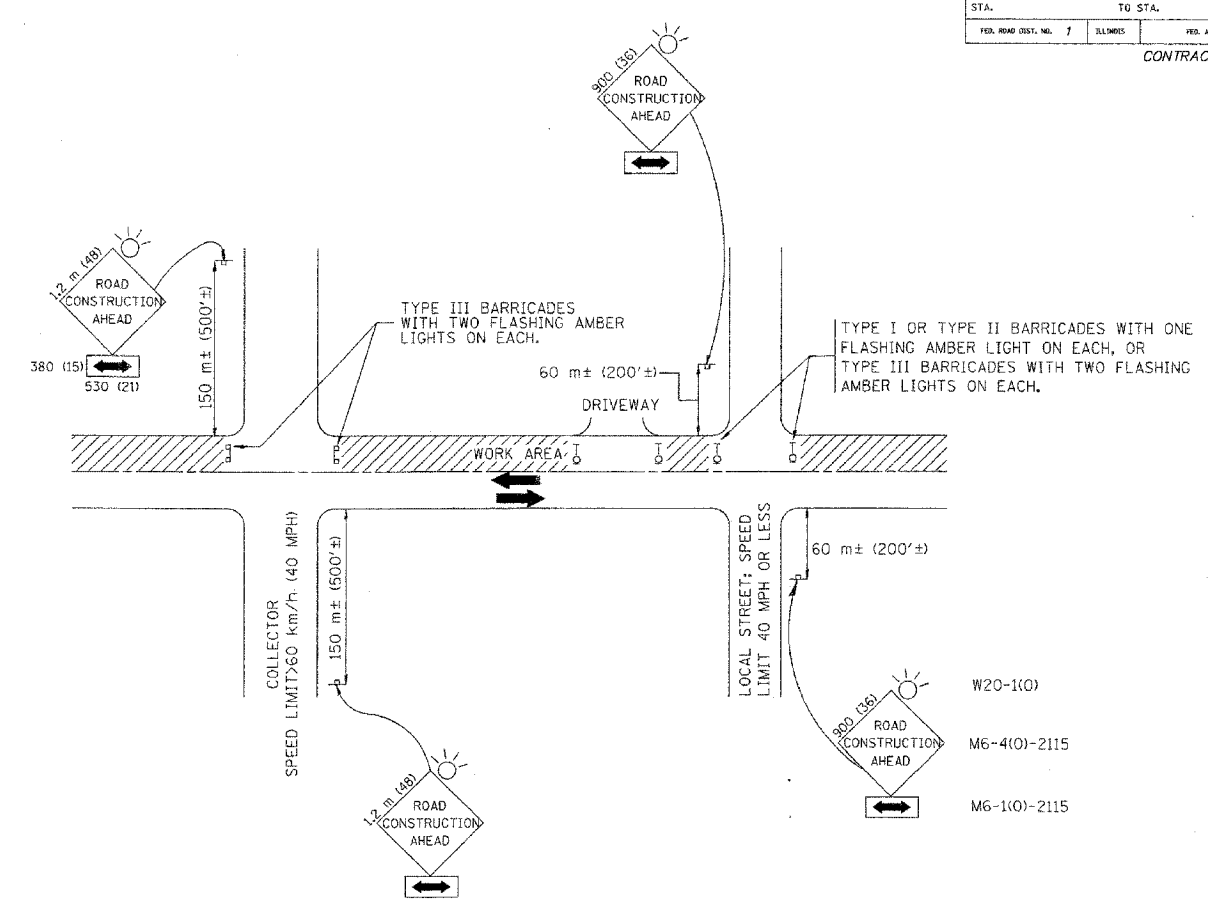
**BENCHING DETAIL
FOR EMBANKMENT
WIDENING**

SCALE: NONE DRAWN BY: CAD

DATE: 10/18/2002 CHECKED BY: S.E.S.

80-51

F. & A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	112
STA.		TO STA.		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		
CONTRACT #: 83867				



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 1. SIDE ROAD WITH A SPEED LIMIT OF 60 km/h (40 MPH) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 900x300 (36x36) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 60 m (200') IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 60 km/h (40 MPH) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 1.2 m x 1.2 m (48x48) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 150 m (500') IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:
 - USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
 - C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
 - D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (Inches) unless otherwise shown.

REVISIONS	
NAME	DATE
LHA	6/89
T. RAMMACHER	09/08/94
J. OBERLE	10/18/95
A. HOUSEH	03/06/96
A. HOUSEH	10/15/96
T. RAMMACHER	01/06/00

ILLINOIS DEPARTMENT OF TRANSPORTATION

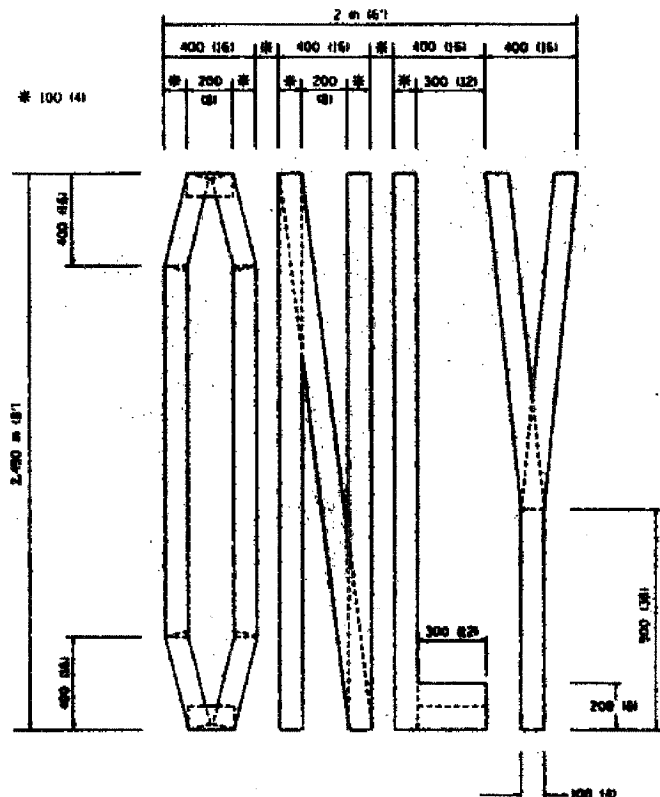
**TRAFFIC CONTROL AND PROTECTION
FOR
SIDE ROADS, INTERSECTIONS, AND
DRIVEWAYS**

SCALE: NONE DRAWN BY:

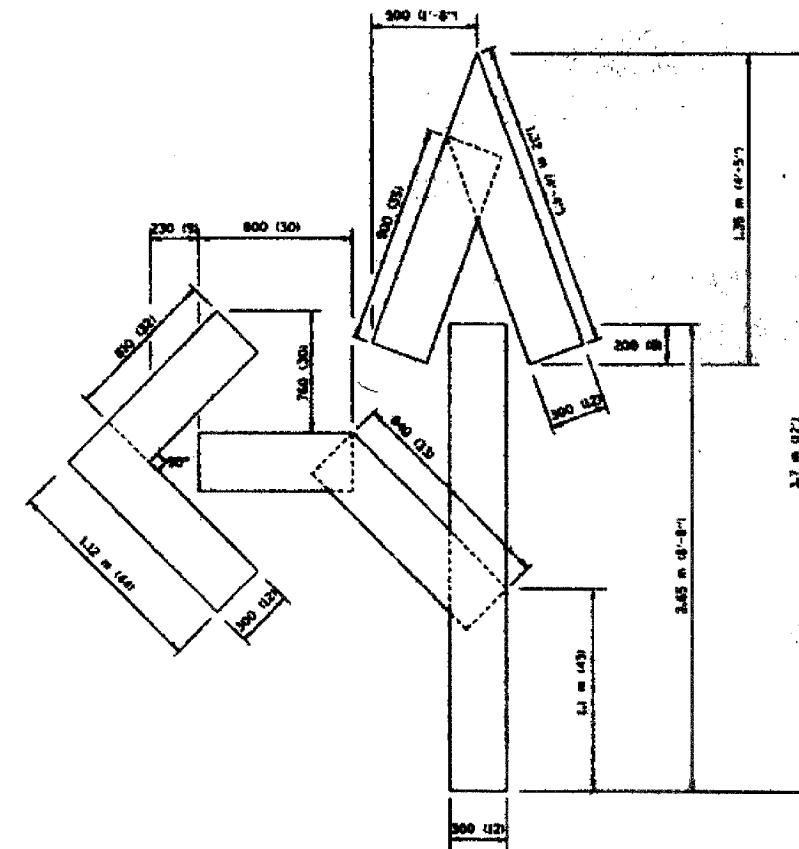
DATE: 11/20/01 CHECKED BY:

S.A. NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
1517-03-00247-00-B1		KANE	121	113
S.A. NO.		SHEET NO.		
1517-03-00247-00-B1		121		

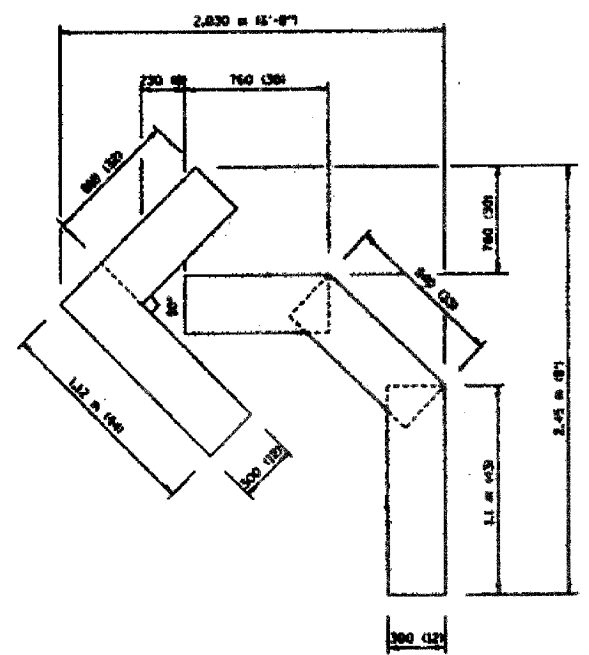
CONTRACT # 83867



QUANTITY
100 (4) LINE = 19.7 m (64.1 ft.)
1.97 sq. m (21.1 sq. ft.)



QUANTITY
100 (4) LINE = 25.3 m (82.5 ft.)
2.53 sq. m (27.5 sq. ft.)



QUANTITY
100 (4) LINE = 13.9 m (45.5 ft.)
1.39 sq. m (15.2 sq. ft.)

All dimensions are in millimeters (inches) unless otherwise shown.

ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING
LETTERS AND SYMBOLS
FOR TRAFFIC STAGING

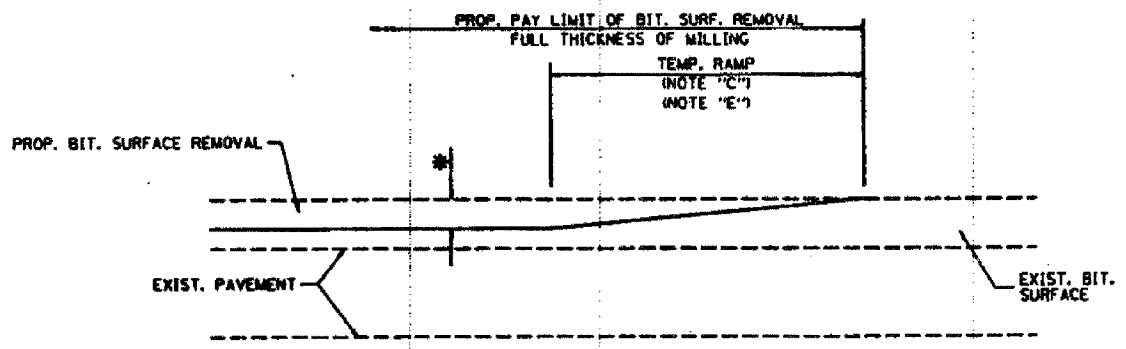
REVISIONS	
NAME	DATE
T. RAMMACHER	09/18/94
M. OBERLE	06/20/95
T. RAMMACHER	06/05/99
T. RAMMACHER	11/04/97
T. RAMMACHER	03/02/98
E. GONZ	08/28/00

SCALE: NONE
DATE 10/18/2002

DRAWN BY CADD
CHECKED BY TC-16

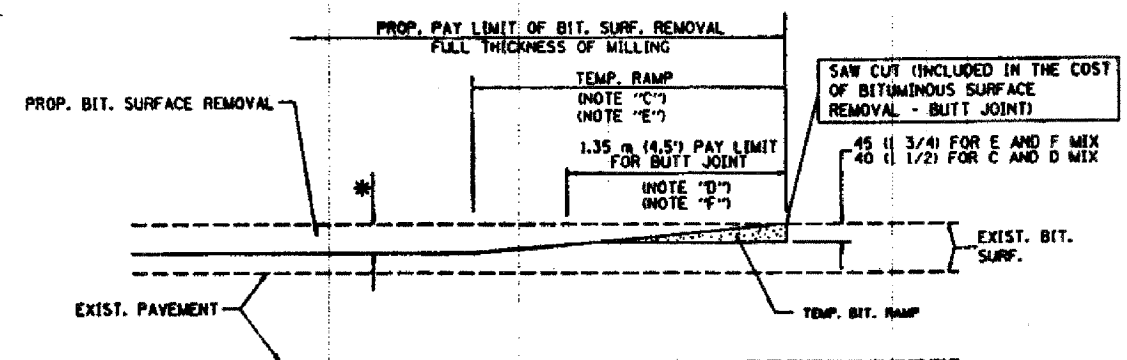
STATE	DISTRICT	COUNTY	SECTION	SHEET NO.	TOTAL SHEETS
1517	03-00247-00-B1	KANE	121	114	

CONTRACT #: B3867



MILLED TEMPORARY RAMP
(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

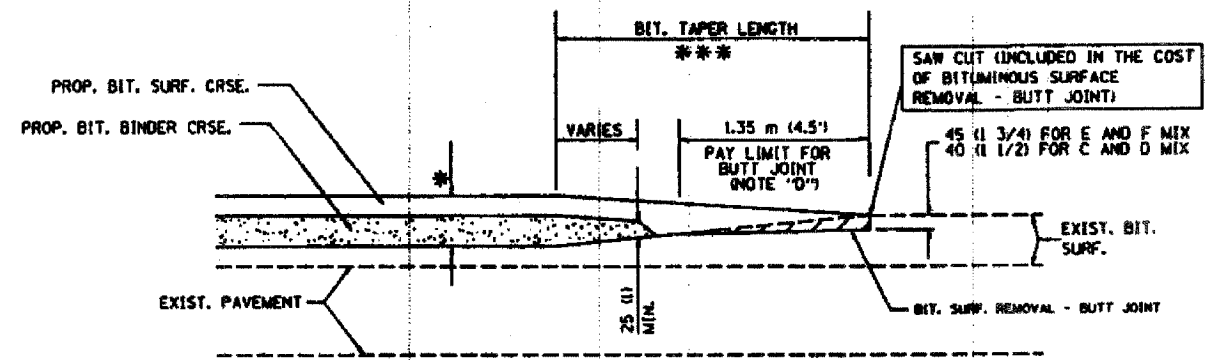
OPTION 1



BITUMINOUS CONSTRUCTED TEMPORARY RAMP
(FOR BUTT JOINT AND BIT. TAPER SEE DETAIL BELOW)

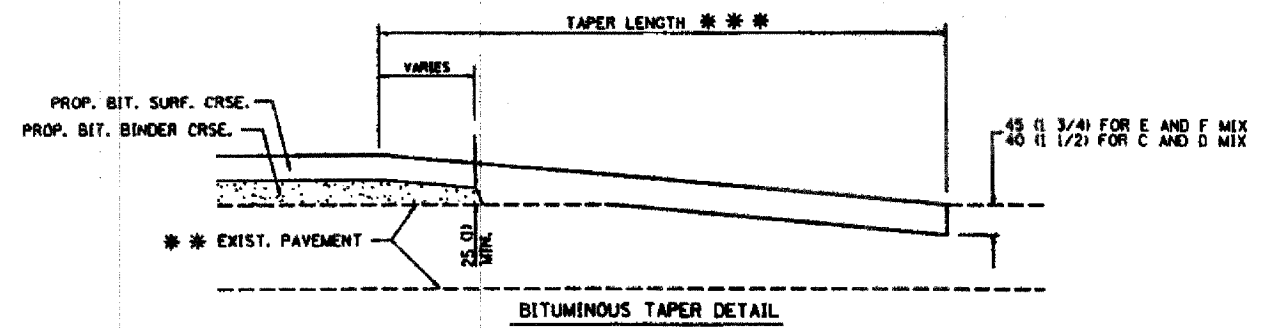
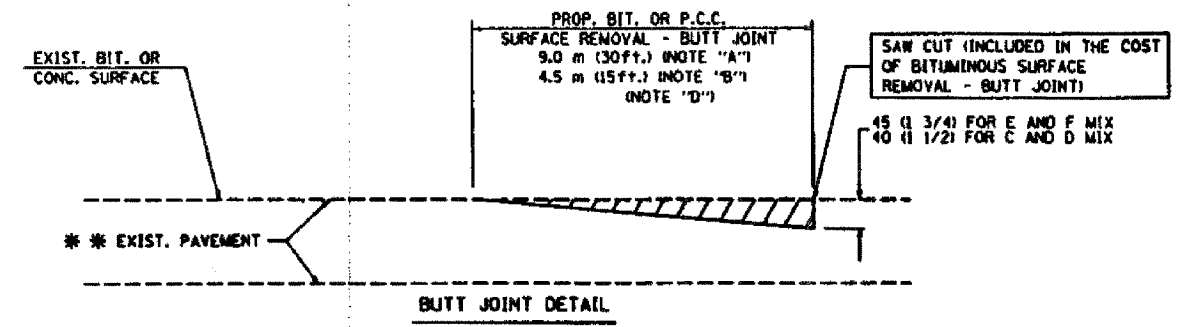
OPTION 2

TYPICAL TEMPORARY RAMP



BUTT JOINT AND BITUMINOUS TAPER

TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR MILLING AND RESURFACING



TYPICAL BUTT JOINT AND BITUMINOUS TAPER FOR RESURFACING ONLY

*** PC CONCRETE, BITUMINOUS OR BITUMINOUS RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING BITUMINOUS SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED BITUMINOUS COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 900 (3 ft.) PER INCH OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 1.35 m (4.5') TEMP. BIT. RAMP WILL BE PAID AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT".
 - G: SEE ARTICLE 406.18 AND 406.24 OF THE STANDARD SPECIFICATIONS FOR "BITUMINOUS AND PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 6.1 m (20') PER 25 (1) RESURFACING (NOTE "A")
3.0 m (10') PER 25 (1) RESURFACING (NOTE "B")

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE SHOWN.

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR PER SQUARE METER (SQUARE YARD.) AS "BITUMINOUS SURFACE REMOVAL - BUTT JOINT" OR AS "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

REVISIONS	
NAME	DATE
M. DE YONG	6-13-90
M. DE YONG	7-3-90
M. DE YONG	3-27-92
R. SHAH	09/08/94
R. SHAH	10/25/94
A. ABBAS	03/21/97
M. GOMEZ	04/06/01

ILLINOIS DEPARTMENT OF TRANSPORTATION

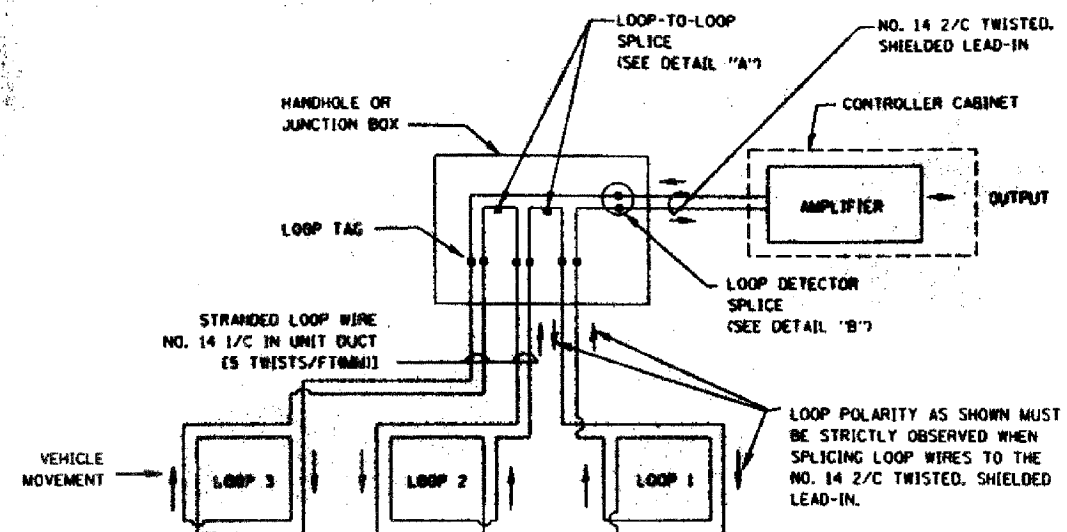
BUTT JOINT AND BITUMINOUS TAPER DETAILS

SCALE: NONE
DATE PLOTTED: 10/18/2002

DRAWN BY
CHECKED BY
0400-05 (VI-8032)
REVISION DATE: 04/06/01

LOOP DETECTOR NOTES

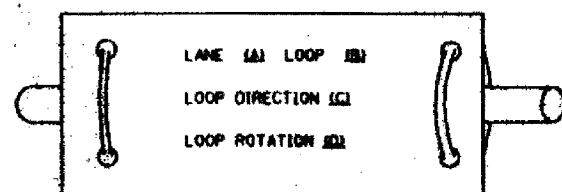
- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
- EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
- LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
- PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.



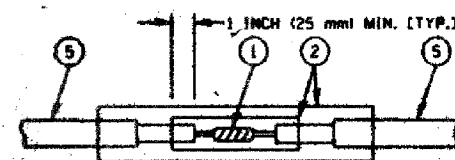
DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

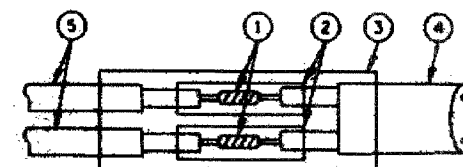
LOOP LEAD-IN CABLE TAG



- LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



**DETAIL "A"
LOOP-TO-LOOP SPLICE**



**DETAIL "B"
LOOP-TO-CONTROLLER SPLICE**

LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSM 30/100 HEAT SHRINK TUBE. MINIMUM LENGTH 3" (75 mm). UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE. MINIMUM LENGTH 6" (150 mm). UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

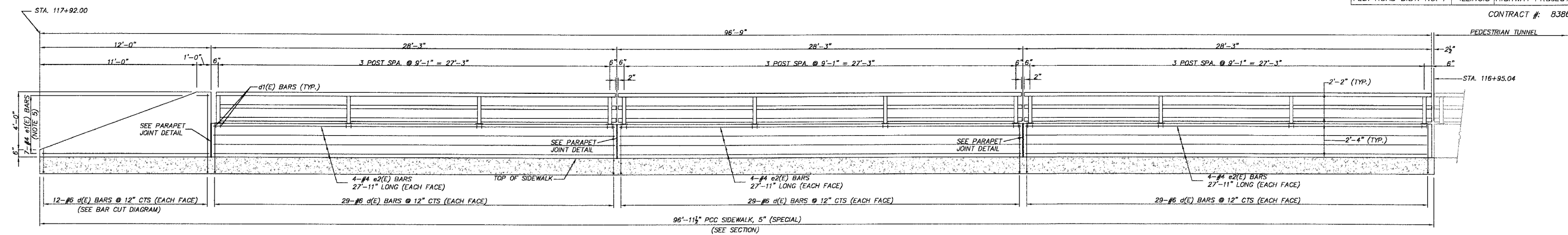
REVISIONS	
NAME	DATE
CAD	5/30/00
ADD NOTE NO. 2	11/12/01
BUREAU OF TRAFFIC	1-01-02

ILLINOIS DEPARTMENT OF TRANSPORTATION
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS**

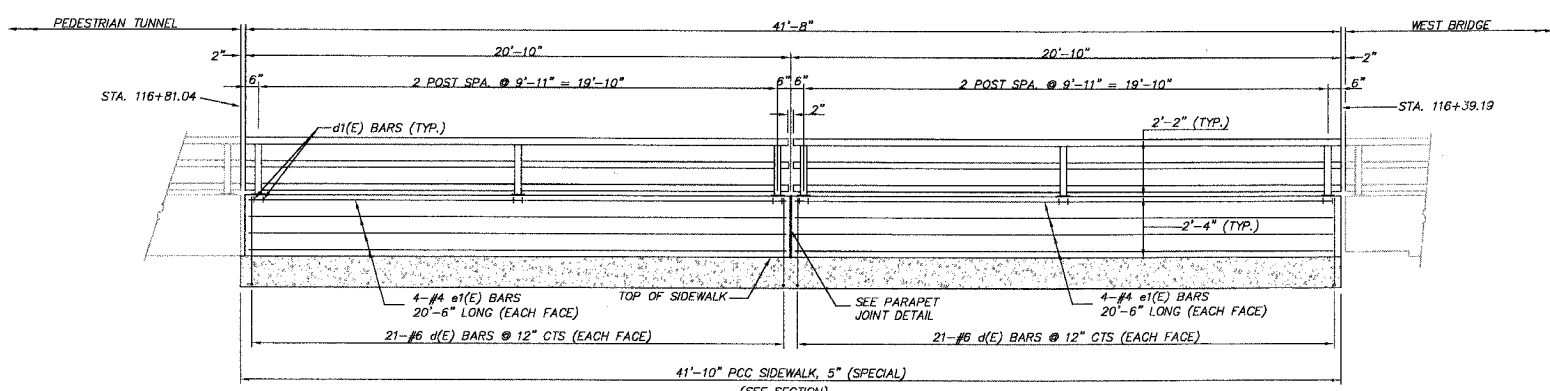
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HORIZ. NONE
DATE 10/10/02

DRAWN BY: RHP
DESIGNED BY: DAD
CHECKED BY: OAZ
SHEET 1 OF 4

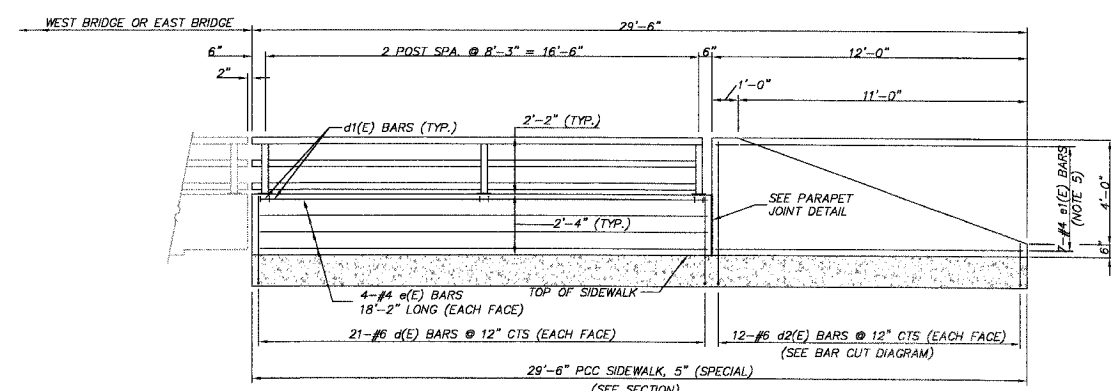
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	116
STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	HIGHWAY PROJECT		
CONTRACT #: 83867				



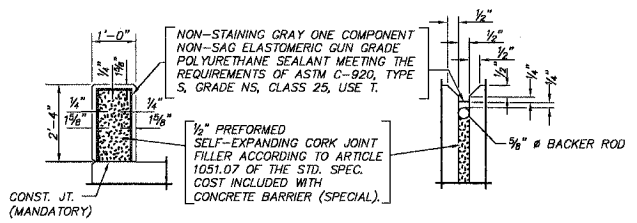
ELEVATION
LOOKING AT ROADWAY FACE
STA. 116+95.04 TO STA. 117+92



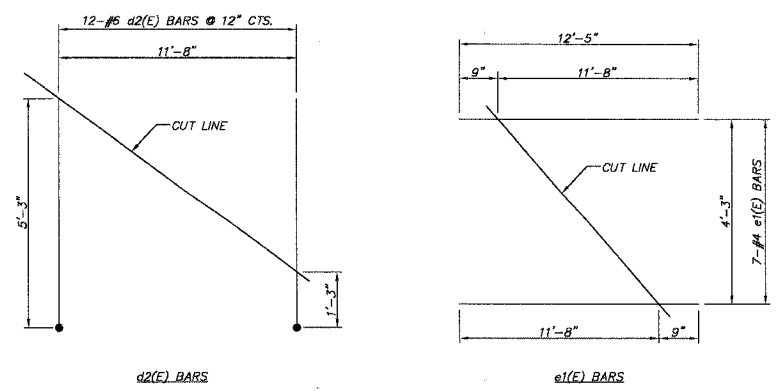
ELEVATION
LOOKING AT ROADWAY FACE
STA. 116+39.19 TO STA. 116+81.04



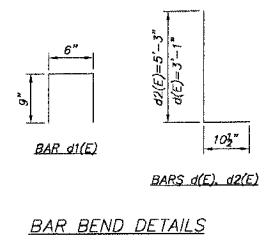
ELEVATION
LOOKING AT ROADWAY FACE
STA. 113+06.72 TO STA. 113+36.72
STA. 120+31.83 TO STA. 120+61.83 (OPPOSITE HAND)



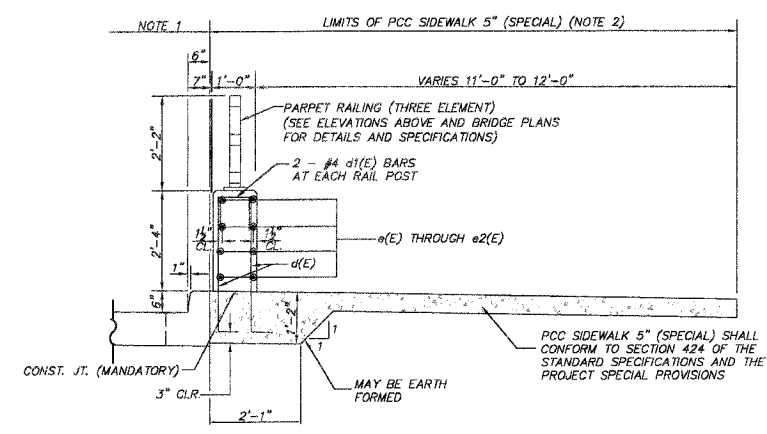
PARAPET JOINT DETAILS



BAR CUT DIAGRAMS



BAR BEND DETAILS



SECTION

- NOTES
- BRIDGE APPROACH PAVEMENT STA. 113+06.72 TO STA. 113+36.72, STA. 116+39.19 TO STA. 116+89.19, AND STA. 120+31.38 TO STA. 120+61.83. BRIDGE APPROACH PAVEMENT (SPECIAL) STA. 116+89.19 TO 116+81.54 AND STA. 116+84.54 TO STA. 117+09.54. PCC PAVEMENT 10" (JOINTED) AND COMB. CONC. CURB AND GUTTER, TYPE B-6.12 STA. 117+09.54 TO STA. 117+92
 - 12'-1" STA. 113+06.72 TO STA. 113+36.72 AND STA. 120+31.83 TO STA. 120+61.83 13'-1" STA. 116+39.19 TO STA. 116+81.54 AND STA. 116+84.54 TO STA. 117+92
 - d(E) AND d2(E) BARS SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM "PCC SIDEWALK, 5" (SPECIAL)."
 - d1(E) BARS, e(E) BARS, AND THE 3 ELEMENT PARAPET RAILING SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM "CONCRETE BARRIER (SPECIAL)."
 - PROVIDE e1(E) BARS FULL LENGTH AND TRIM IN ACCORDANCE WITH BAR CUT DIAGRAM MAINTAINING 1 1/2" CLEAR COVER. USE REMAINDER IN OPPOSITE FACE.

REVISIONS	
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MCHENRY YORKVILLE
ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

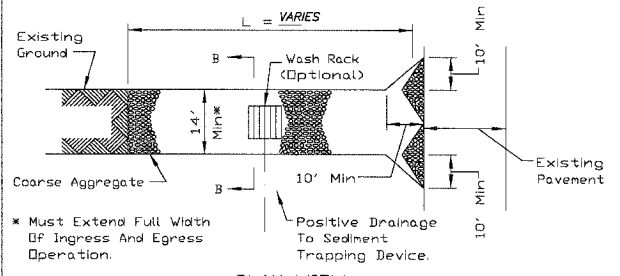
ILLINOIS DEPARTMENT OF TRANSPORTATION
CITY OF AURORA
ILLINOIS AVENUE OVER THE FOX RIVER
PCC SIDEWALK 5" (SPECIAL) AND CONCRETE BARRIER (SPECIAL) DETAIL

SCALE: "NTS"
DATE 07-28-2006
DRAWN BY CFR
CHECKED BY JLP

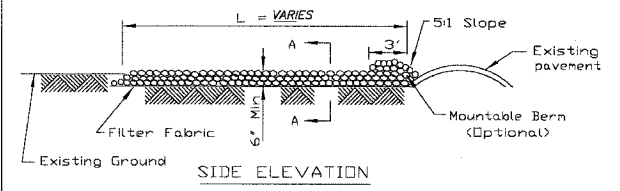
PLOT FILE: STANDARD
CONV. FILE: 050181-6096.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	117
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT # 83867				

STABILIZED CONSTRUCTION ENTRANCE PLAN



PLAN VIEW



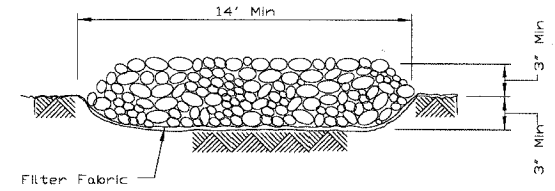
SIDE ELEVATION

- NOTES:
- Filter fabric shall meet the requirements of material specification 592 GEDTEXTILE, Table 1 or 2, Class I, II or IV and shall be placed over the cleared area prior to the placing of rock.
 - Rock or reclaimed concrete shall meet one of the following IDOT coarse aggregate gradation, CA-1, CA-2, CA-3 or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
 - Any drainage facilities required because of washing shall be constructed according to manufacturers specifications.
 - If wash racks are used they shall be installed according to the manufacturer's specifications.

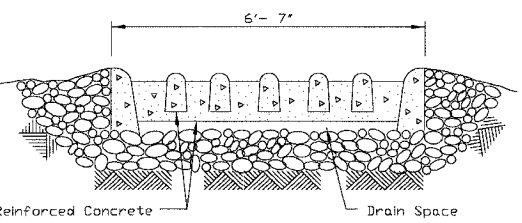
REFERENCE Project	DESIGNED	DATE	STANDARD DWG. NO. IL-630
CHECKED	DATE	DATE	SHEET 1 OF 2
APPROVED	DATE	DATE	DATE 8-18-94



STABILIZED CONSTRUCTION ENTRANCE PLAN

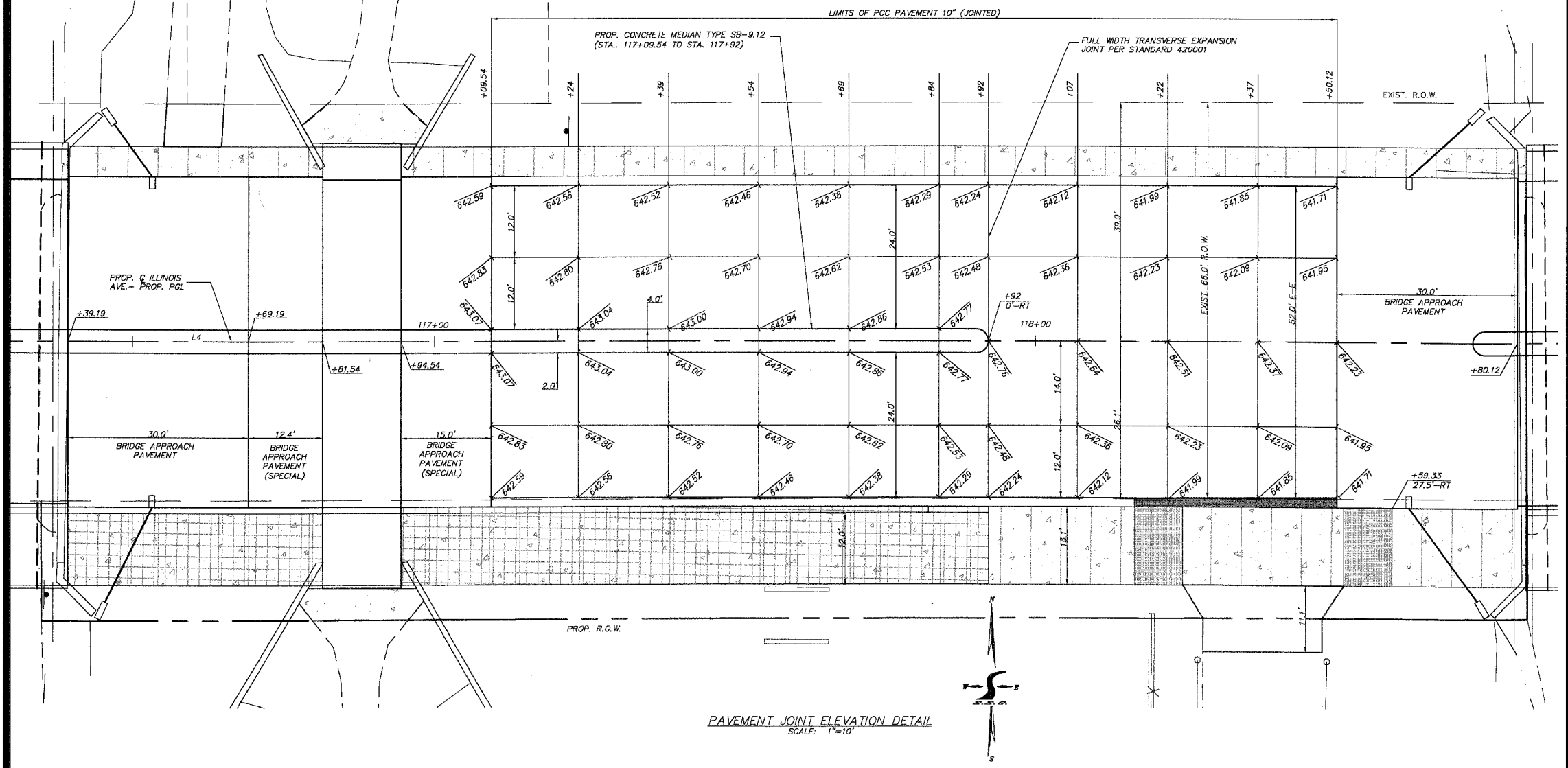


SECTION A-A

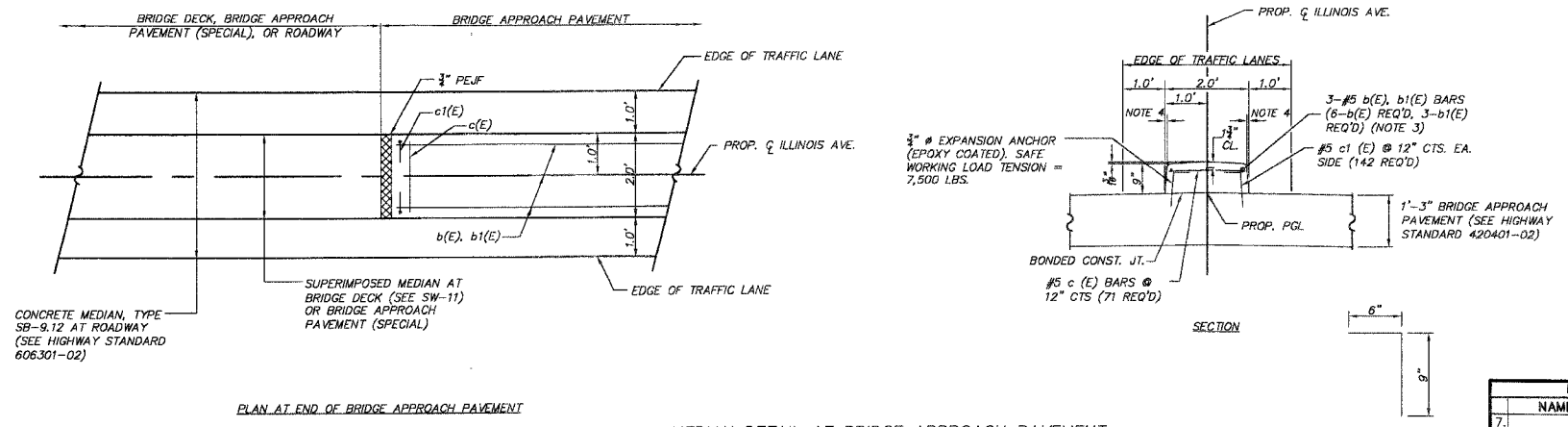


SECTION B-B

REFERENCE Project	DESIGNED	DATE	STANDARD DWG. NO. IL-630
CHECKED	DATE	DATE	SHEET 2 OF 2
APPROVED	DATE	DATE	DATE 8-18-94



PAVEMENT JOINT ELEVATION DETAIL
SCALE: 1"=10'



PLAN AT END OF BRIDGE APPROACH PAVEMENT

MEDIAN DETAIL AT BRIDGE APPROACH PAVEMENT

- NOTES
- WORK THIS DETAIL WITH HIGHWAY STANDARDS 420401-05 AND 606301-02.
 - THE COST OF THE EPOXY COATED EXPANSION ANCHORS, c(E) BARS, b(E) BARS, AND b1(E) BARS SHOWN ON THIS DETAIL SHALL BE INCLUDED IN THE COST OF "BRIDGE APPROACH PAVEMENT."
 - 3 - 28'-8" LONG #5 b(E) BARS REQUIRED IN MEDIAN AT BRIDGE APPROACH PAVEMENTS FROM STA. 113+06.72 TO STA. 113+36.72 AND STA. 116+39.19 TO STA. 116+69.19. 3 - 10'-8" LONG #5 b1(E) BARS REQUIRED IN MEDIAN AT BRIDGE APPROACH PAVEMENT FROM STA. 120+31.83 TO STA. 120+42.83. FIELD BEND b(E) AND b1(E) BARS AT NOSES OF MEDIANS TO MAINTAIN 1 1/2" CLEAR COVER. (SEE SECTIONS F-F AND G-G IN HIGHWAY STANDARD 606301-02)
 - VARIES FROM 1 1/2" AT THE ENDS OF BRIDGES AND ADJACENT TO BRIDGE APPROACH PAVEMENT (SPECIAL) (STATIONS 113+36.72, 116+36.72, 116+69.19, AND 120+31.83) TO 2" AT ROADWAY (STA. 113+06.72).

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 ■ HUNTER ■ HUNTER ■ HUNTER ■ HUNTER ■ HUNTER ■ HUNTER
 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

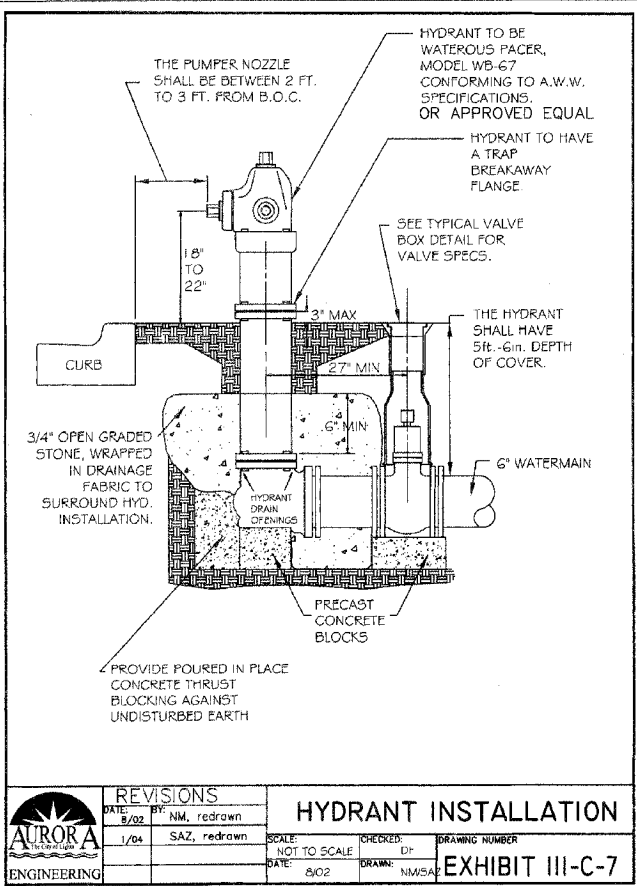
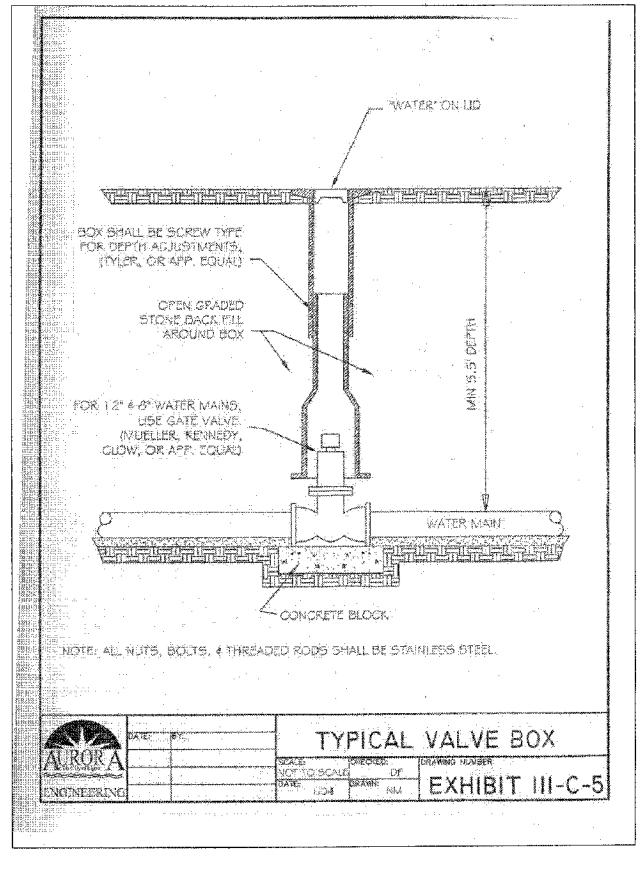
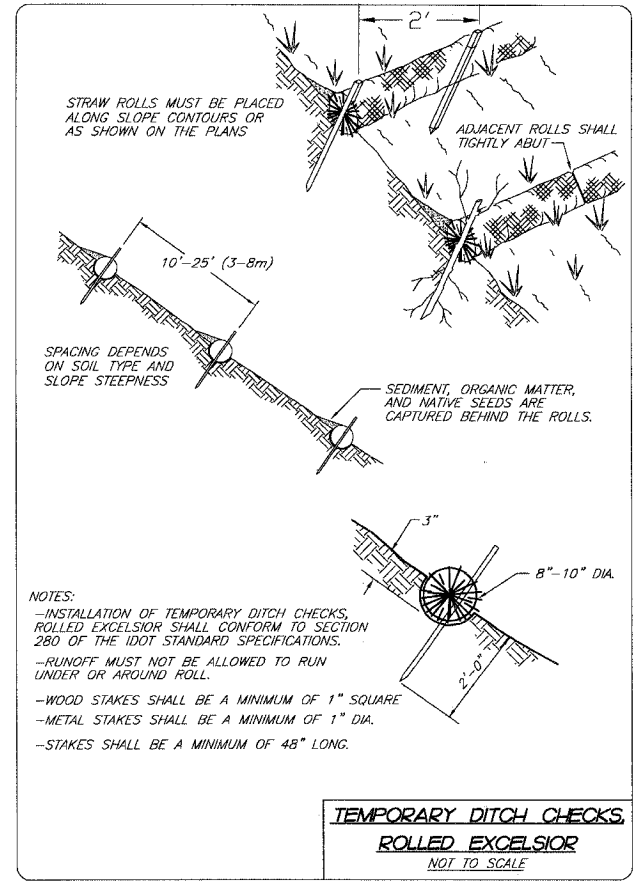
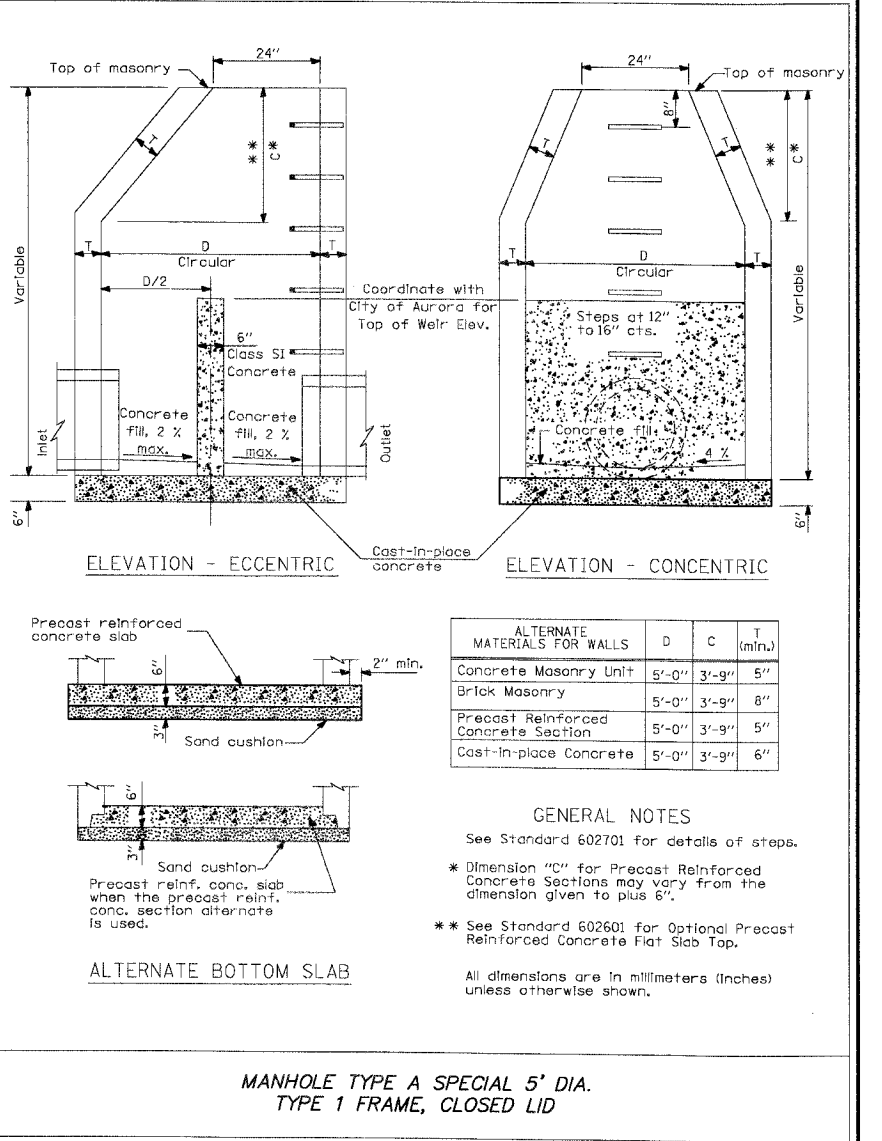
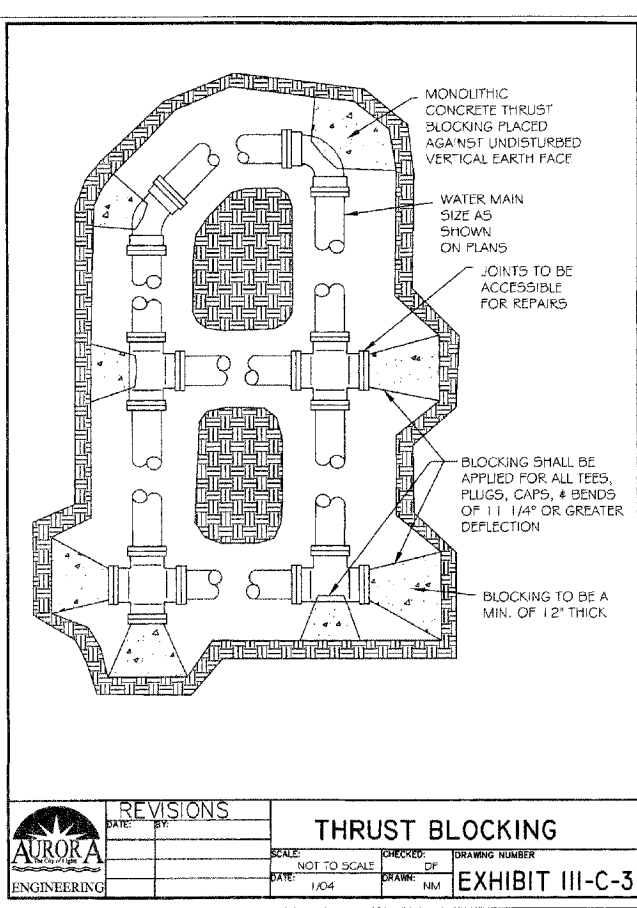
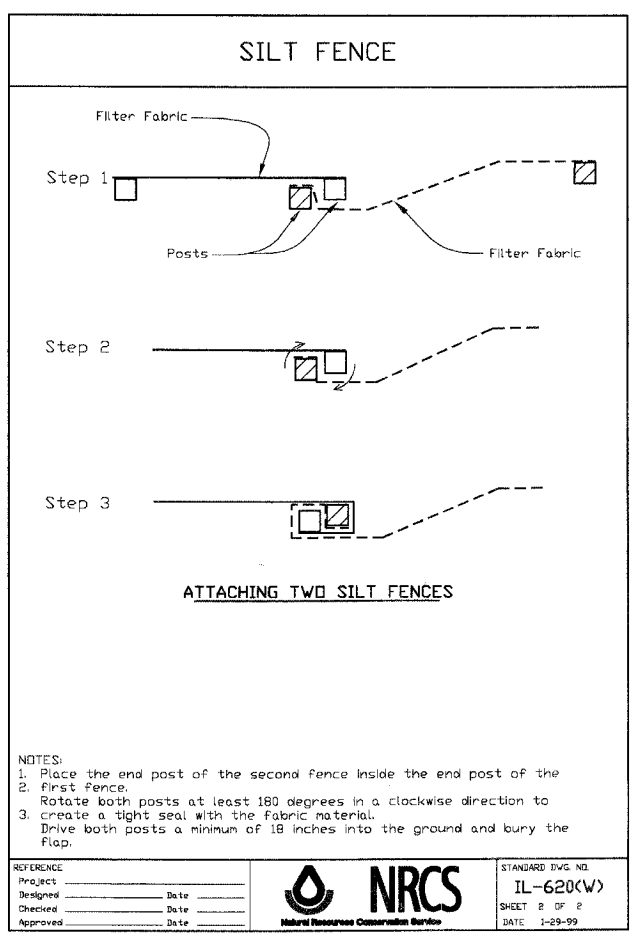
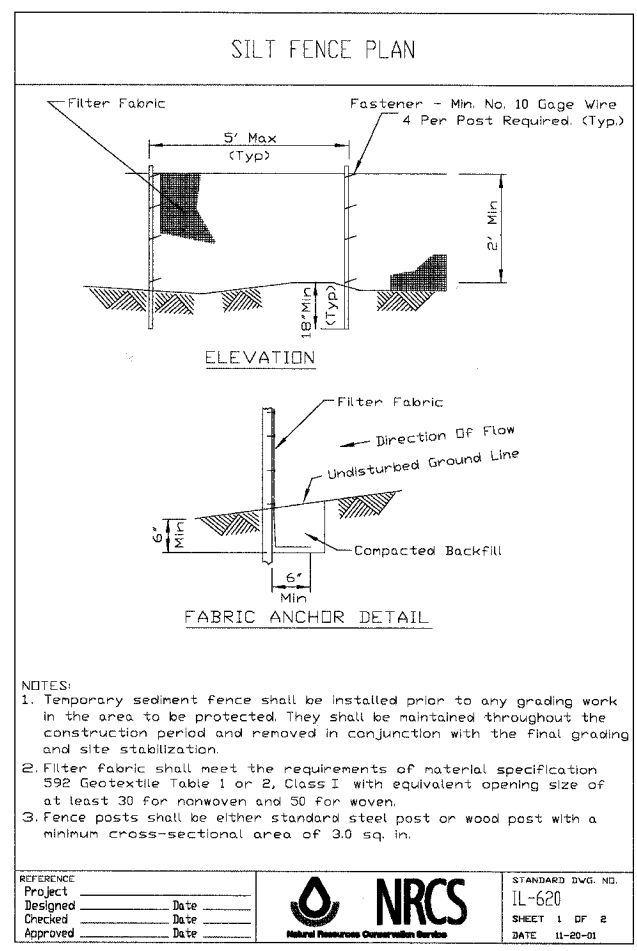
ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 STANDARD CONSTRUCTION DETAILS

REVISIONS	
NAME	DATE
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SCALE: "NTS"
 DATE 07-28-2006
 DRAWN BY CFR
 CHECKED BY JLP

PLOT FILE STANDARD VIEW, CE-117, 05/01/01-008, 008

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	118
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		
CONTRACT #: 83867				



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 ILLINOIS PROFESSIONAL DESIGN FIRM # 184-000108

ILLINOIS DEPARTMENT OF TRANSPORTATION

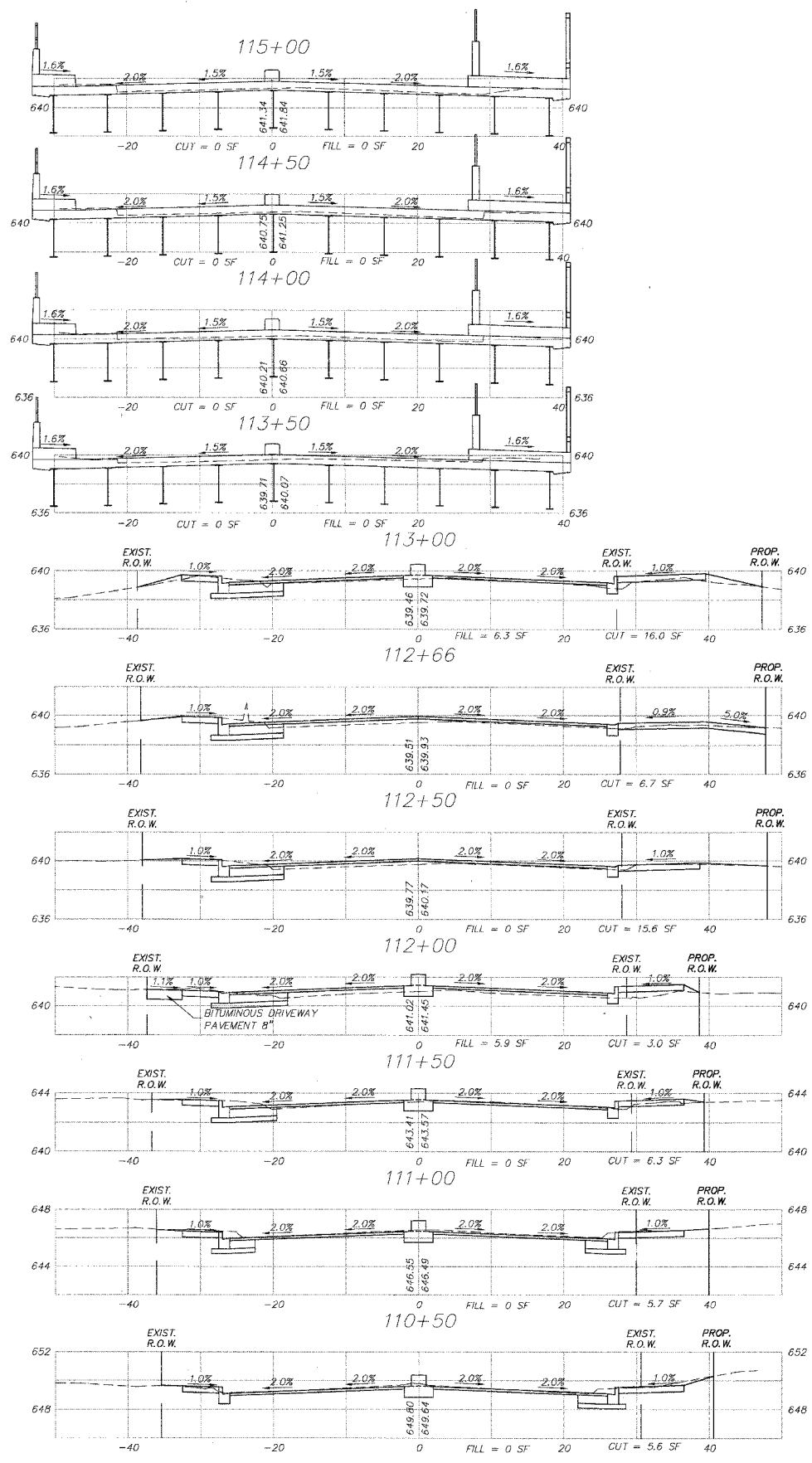
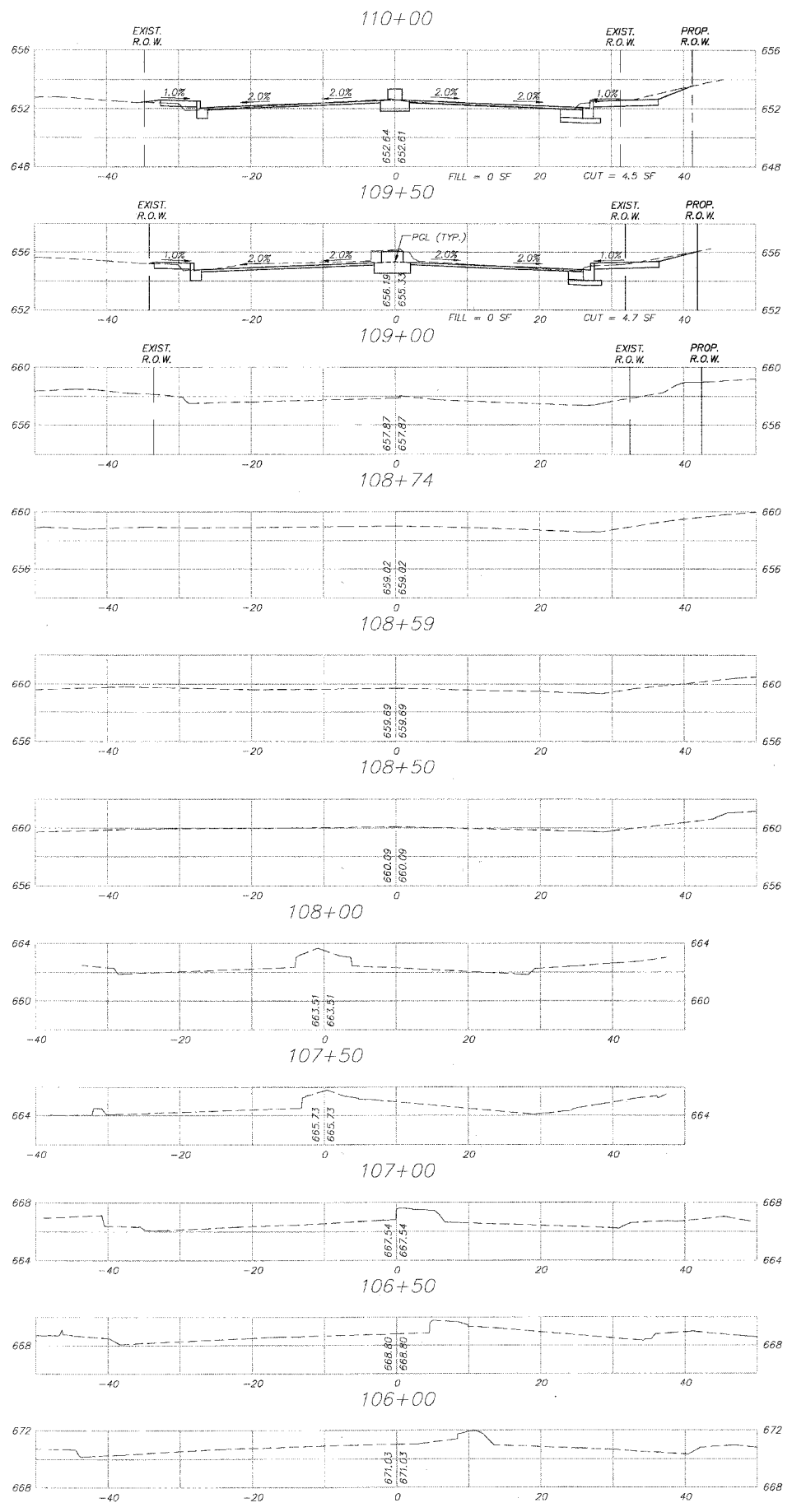
CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 STANDARD CONSTRUCTION DETAILS

SCALE: "NTS"
 DATE: 07-28-2006

DRAWN BY: W.J.H.
 CHECKED BY: J.L.P.

PLOT FILE: STANDARD
 COMP. FILE: 050181-6006.dwg

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	119
STA.	106+00	TO STA.	115+00	
FED. ROAD DIST. NO. 1	ILLINOIS HIGHWAY PROJECT			
CONTRACT #: 83867				



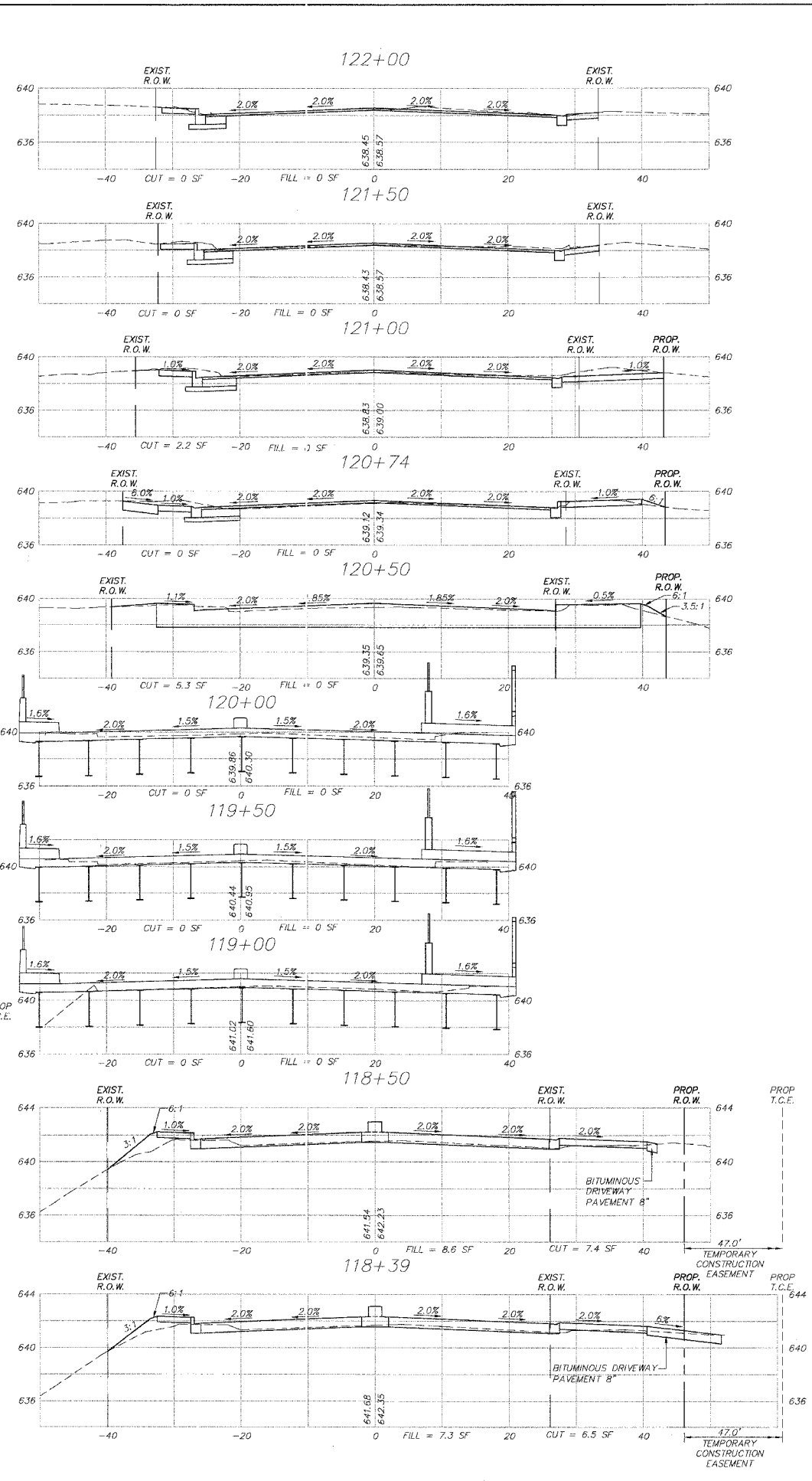
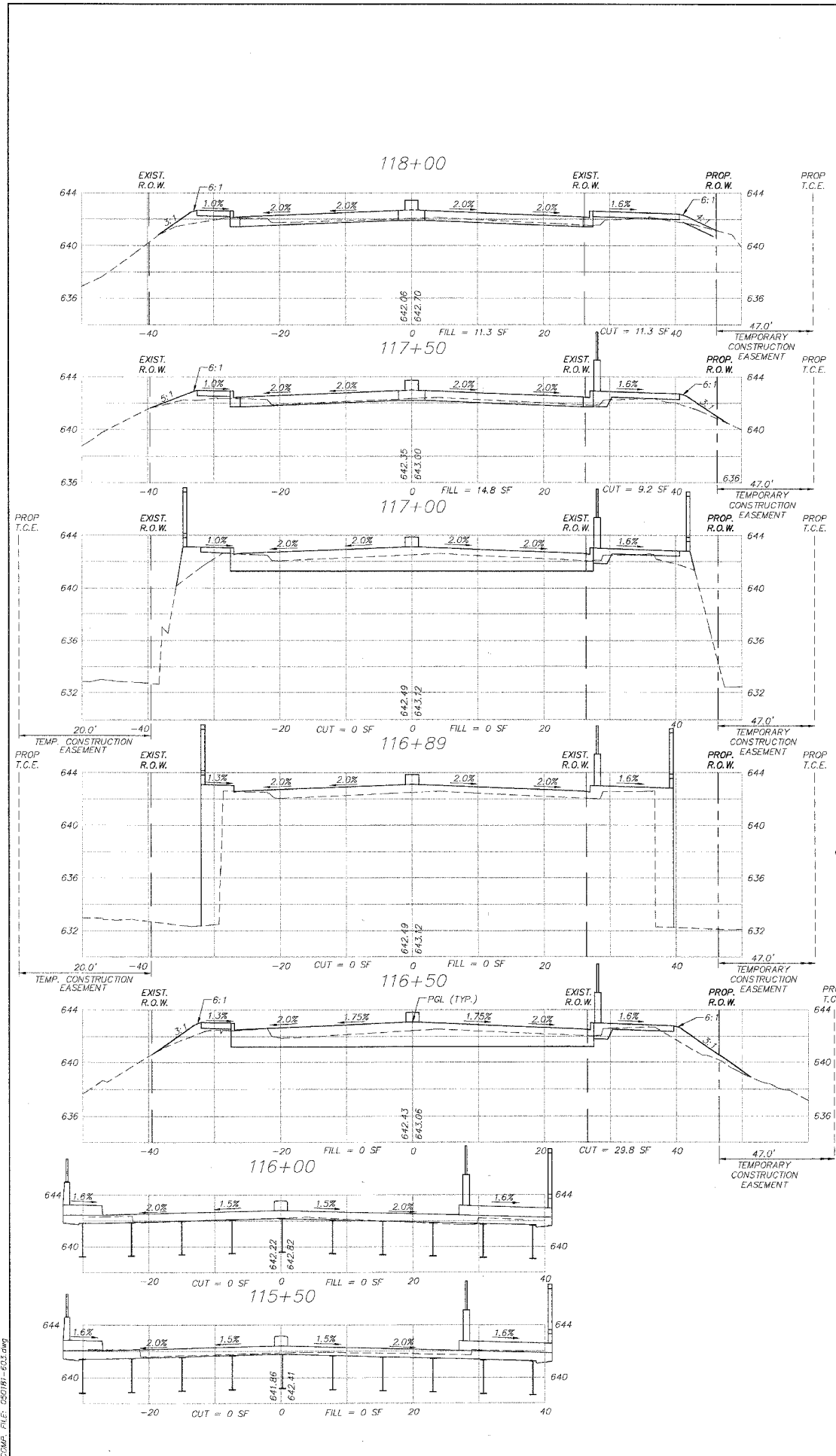
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COMP. FILE: 060101-503.dwg

REVISIONS	
NAME	DATE
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ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 CROSS SECTIONS
 STA. 106+00 TO STA. 115+00
 SCALE: H. 1" = 10' - V. 1" = 5'
 DRAWN BY MPL
 DATE 07-28-2006 CHECKED BY JLP

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	120
STA.	115+50	TO STA.	122+00	
FED. ROAD DIST. NO. 1	ILLINOIS HIGHWAY PROJECT			CONTRACT # 83867



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DATE: 07-28-2006
DRAWN BY: JPL

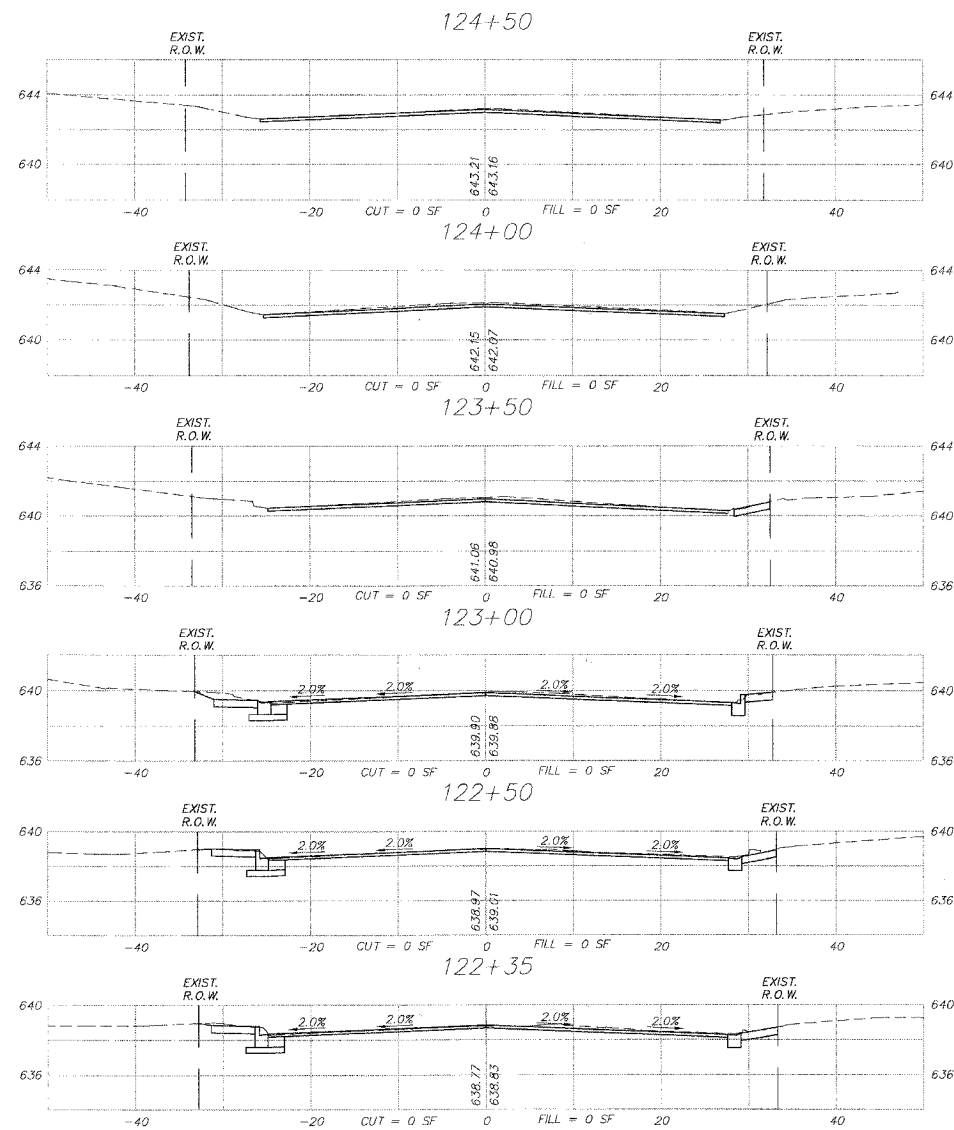
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ILLINOIS DEPARTMENT OF TRANSPORTATION
 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 CROSS SECTIONS
 STA. 115+50 TO STA. 122+00
 SCALE: H. 1" = 10' - V. 1" = 5'
 DATE 07-28-2006 DRAWN BY MPL
 CHECKED BY JPL

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1517	03-00247-00-BR	KANE	121	121
STA.	122+35	TO STA.	124+50	
FED. ROAD DIST. NO. 1		ILLINOIS HIGHWAY PROJECT		CONTRACT # 83867

Station	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL					FURNISHED EXCAVATION					
	Area (sf)	Avg. Area (sf)	Length (ft)	Volume (cf)	Volume (cy)	Area (sf)	Avg. Area (sf)	Length (ft)	Volume (cf)	Volume (cy)	
10600	0					0					
10650	0	0	50	0	0.0	0	0	50	0	0.0	
10700	0	0	50	0	0.0	0	0	50	0	0.0	
10750	0	0	50	0	0.0	0	0	50	0	0.0	
10800	0	0	50	0	0.0	0	0	50	0	0.0	
10850	0	0	50	0	0.0	0	0	50	0	0.0	
10900	0	2.35	50	117.5	4.4	0	0	50	0	0.0	
10950	4.7	4.6	50	230	8.5	0	0	50	0	0.0	
11000	4.5	5.05	50	252.5	9.4	0	0	50	0	0.0	
11050	5.6	5.65	50	282.5	10.5	0	0	50	0	0.0	
11100	5.7	6	50	300	11.1	0	0	50	0	0.0	
11150	6.3	4.65	50	232.5	8.6	0	2.95	50	147.5	5.5	
11200	3	9.3	50	465	17.2	5.9	2.95	50	147.5	5.5	
11250	15.8	11.15	16	178.4	6.6	0	0	16	0	0.0	
11266	6.7	11.35	34	385.9	14.3	0	3.15	34	107.1	4.0	
11300	16	8	50	400	14.8	6.3	3.15	50	157.5	5.8	
11350	0	0	250	0	0.0	0	0	250	0	0.0	
11600	0	14.9	50	745	27.6	0	0	50	0	0.0	
11650	29.8	14.9	39	581.1	21.5	0	0	39	0	0.0	
11689	0	0	11	0	0.0	0	0	11	0	0.0	
11700	0	4.6	50	230	8.5	0	7.4	50	370	13.7	
11750	9.2	10.25	50	512.5	19.0	14.8	13.05	50	652.5	24.2	
11800	11.3	8.9	39	347.1	12.9	11.3	9.3	39	362.7	13.4	
11839	6.5	6.95	11	76.45	2.8	7.3	7.95	11	87.45	3.2	
11850	7.4	3.7	50	185	6.9	8.6	4.3	50	215	8.0	
11900	0	0	100	0	0.0	0	0	100	0	0.0	
12000	0	2.65	50	132.5	4.9	0	0	50	0	0.0	
12050	5.3	2.65	24	63.6	2.4	0	0	24	0	0.0	
12074	0	1.1	26	28.6	1.1	0	0	26	0	0.0	
12100	2.2	1.1	50	55	2.0	0	0	50	0	0.0	
12150	0	0	50	0	0.0	0	0	50	0	0.0	
12200	0	0	50	0	0.0	0	0	50	0	0.0	
12250	0	0	50	0	0.0	0	0	50	0	0.0	
12300	0	0	50	0	0.0	0	0	50	0	0.0	
12350	0	0	50	0	0.0	0	0	50	0	0.0	
12400	0	0	50	0	0.0	0	0	50	0	0.0	
12450	0	0	50	0	0.0	0	0	50	0	0.0	
Total					216	Total					83



PLOT FILE STANDARD
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 DATE: 07-28-2006 10:31:00

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ILLINOIS DEPARTMENT OF TRANSPORTATION

 CITY OF AURORA
 ILLINOIS AVENUE OVER THE FOX RIVER
 CROSS SECTIONS
 STA. 115+50 TO STA. 122+00

 SCALE: H. 1" = 10' - V. 1" = 5'
 DRAWN BY MPL
 DATE 07-28-2006 CHECKED BY JLP