11-08-13 LETTING ITEM 014

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 63863		

D-91-130-10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

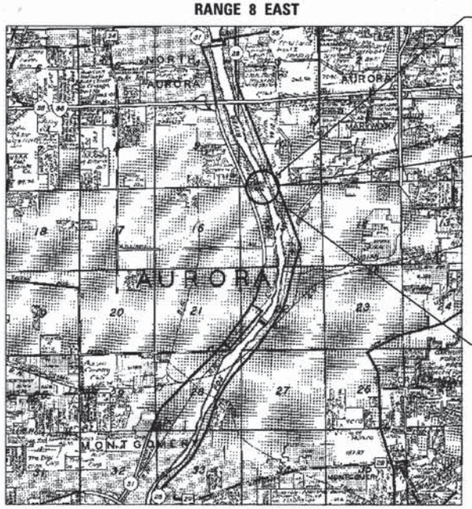
(F.A.U. 1503) INDIAN TRAIL OVER THE FOX RIVER
BRIDGE WIDENING & DECK REPLACEMENT
SN: 045–3088, 045–3089
SECTION: 09–00286–00–BR
PROJECT: BRM–9003(5[illegible]0)
CITY OF AURORA
KANE COUNTY
C–91–130–10

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR LIST OF STATE STANDARDS, SEE SHEET NO. 2

PROJECT IS LOCATED IN THE CITY OF AURORA

PROJECT LOCATION MAP

RANGE 8 EAST



LOCATION OF SECTION INDICATED THUS: –■–

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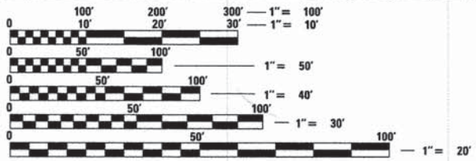
STRUCTURE INFORMATION:

EXISTING SN 045-3088 (WEST BRIDGE)
CONSTRUCTED IN 1963 AS A SEVEN SPAN CAST-IN-PLACE, STA. 93+28.06 TO 99+13.03 CONCRETE DECK ON STEEL BEAMS SUPPORTED ON CONCRETE PIERS AND ABUTMENTS. THE OUT-TO-OUT WIDTH OF 60'-0" AND A TOTAL LENGTH OF 586'-1 1/2". THE STRUCTURE IS TO BE REHABILITATED AS SHOWN WITH NO SALVAGE.

EXISTING SN 045-3089 (EAST BRIDGE)
CONSTRUCTED IN 1963 AS A THREE SPAN CAST-IN-PLACE, STA. 100+67.37 TO 103+07.85 CONCRETE DECK ON STEEL BEAMS SUPPORTED ON CONCRETE PIERS AND ABUTMENTS. THE OUT-TO-OUT WIDTH OF 60'-0" AND A TOTAL LENGTH OF 240'-5 7/8". THE STRUCTURE IS TO BE REHABILITATED AS SHOWN WITH NO SALVAGE.



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.

HRGreen
420 NORTH FRONT STREET, SUITE 100 | McHENRY, ILLINOIS 60050
Phone: 815.385.1778 | Toll Free: 800.728.7805 | Fax: 815.385.1781 | HRGreen.com
ILLINOIS PROFESSIONAL DESIGN FIRM #184-001322

PROJECT ENGINEER: KEVIN M. ARFT, P.E.
PROJECT MANAGER: ROBERT G. DAVIES, S.E., P.E.
CONTRACT NO. 63863

Call Before You Dig
JULIE ILLINOIS ONE-CALL SYSTEM
Simply Call 811

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847) 705-4406, SCHAUMBURG, IL

COMPANY NAME: #COMPANY_NAME#
PROJECT CONTACT: #PROJECT_CONTACT#
CLIENT: #CLIENT#
DATE PLOTTED: 8/22/2013 6:38:08 AM
FILE NAME: C:\projects\...\PLAN.dgn
PLOT DRIVER: #PLOT_DRIVER#
PEN TABLE: #PEN_TABLE#

TOTAL LENGTH OF PROJECT

NET LENGTH OF PROJECT (INDIAN TRAIL ROAD) = 1582.82 FT (0.299 MI)
STRUCTURE LENGTH (045–3088) = 586.125 FT
(045–3089) = 240.490 FT

GROSS LENGTH OF PROJECT = 1582.82 FT (0.299 MI)

TRAFFIC DATA

ADT:
INDIAN TRAIL ROAD 20,600 ADT (2009) 29,000 ADT (2040)

POSTED SPEED
35 MPH (EXISTING)
35 MPH (PROPOSED)

DESIGN SPEED
35 MPH (PROPOSED)

DESIGN DESIGNATION
FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL (URBAN)

PROFESSIONAL ENGINEER'S SIGN & SEAL

Clyde J. Hale
CLYDE J. HALE, P.E.
EXPIRES: 11-30-2013
PERTAINS TO SHEETS: 34-41

CLYDE JOHN HALE 062.049831 LICENSED PROFESSIONAL ENGINEER STATE OF ILLINOIS

STRUCTURAL ENGINEER'S SIGN & SEAL

Robert G Davies
ROBERT G. DAVIES, S.E., P.E.
EXPIRES: 11-30-2014
PERTAINS TO SHEETS: 42-146

STATE OF ILLINOIS ROBERT G. DAVIES 081-004666 LICENSED STRUCTURAL ENGINEER McHENRY, IL

PROFESSIONAL ENGINEER'S SIGN & SEAL

Kevin M Arft
KEVIN M. ARFT, P.E.
EXPIRES: 11-30-2013
PERTAINS TO SHEETS: 1-33 & 147-181

KEVIN M. ARFT 062-059077 REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED Aug. 13 20 13
Chris E. Lunt
CITY OF AURORA

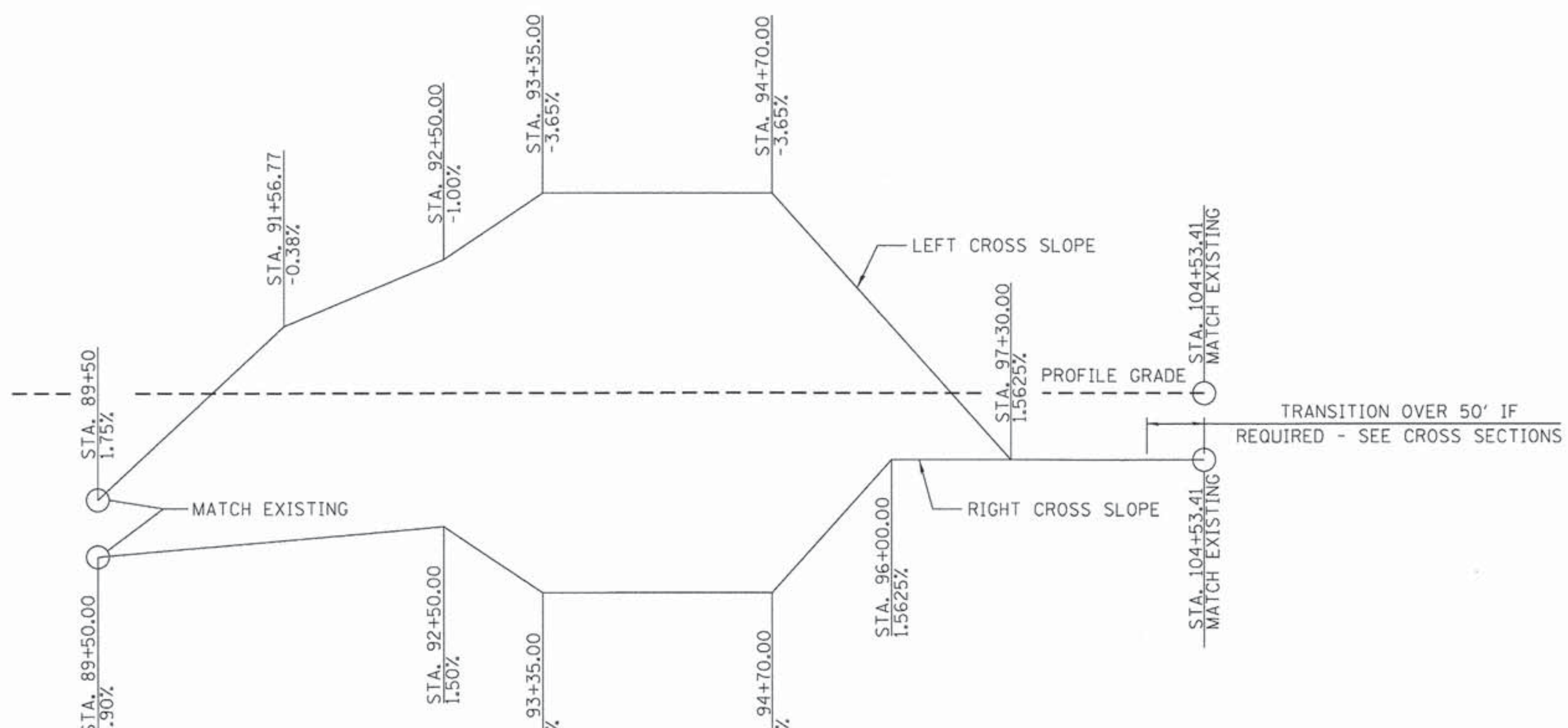
PASSED August 26 20 13
C. J. Holt
DISTRICT ONE ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW August 26 20 13
John Fortmann for
DEPUTY DIRECTOR OF HIGHWAYS, REGION ONE ENGINEER

INDEX OF SHEETS

STATE STANDARDS

000001-06	STANDARD SYMBOLS, ABREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEM
420001-07	PAVEMENT JOINTS
420111-03	PCC PAVEMENT ROUNDOUTS
420401-09	BRIDGE APPROACH PAVEMENT CONNECTOR
424001-07	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
515001-03	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
602001-02	CATCH BASIN TYPE A
602301-03	INLET - TYPE A
602401-03	MANHOLE TYPE A
602406-05	MANHOLE TYPE A 6' DIAMETER
604001-03	FRAME AND LIDS TYPE 1
604036-02	GRATE TYPE 8
604051-03	FRAME AND GRATE TYPE 11
606001-05	CONCRETE CURB TYPE B AND COMBINATION CURB AND GUTTER
630001-10	STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631026-05	TRAFFIC BARRIER TERMINAL, TYPE 5
631031-11	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701101-03	OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701427-01	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH
701602-06	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701606-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-02	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
720001-01	SIGN PANEL MOUNTING DETAILS
720006-03	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS & DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
729001-01	APPLICATIONS OF TYPES A & B METAL POSTS (FOR SIGNS & MARKERS)
780001-03	TYPICAL PAVEMENT MARKINGS
BLR 23-4	TRAFFIC BARRIER TERMINAL TYPE 1



SUPERELEVATION DIAGRAM

CONTACTS

COMED	JOE STACHO	(630) 424-5704
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AT&T	HECTOR GARCIA	(630) 573-5465
COMCAST	PETE ROSA	(630) 461-7679
CITY OF AURORA	CHRIS LIROT	(630) 256-3242
CITY OF AURORA WATER AND SEWER		(630) 256-3710
CITY OF AURORA ELECTRIC		(630) 892-1415
CITY OF AURORA POLICE DEPT. NON-EMERGENCY		(630) 256-5000
ARMY CORP OF ENGINEERS	KIMBERLY KUBIAK	(312) 846-5541
IDNR-OWR	GARY JEREB	(847) 608-3100
IDNR (FOR MUSSEL RELOCATION)	ROBERT RUNG	(630) 553-0164
KANE-DUPAGE SWCD	KELSEY MUSICH	(630) 584-7961
FOX METRO WATER RECLAMATION DISTRICT	MICHAEL FRANKINO	(630) 301-6805
FOX VALLEY PARK DISTRICT	JEFF PALMQUIST	(630) 897-0516
ILLINOIS DEPARTMENT OF TRANSPORTATION	CHARLES RIDDLE	(847) 705-4406
BNSF RAILROAD	DAVID HORNER	(630) 692-6257

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
U.O.N - UNLESS OTHERWISE NOTED

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 5:21:32 PM
FILE NAME: 86110318-gen-01.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
PEN TABLE: standard-trans.tbl

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PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
HIGHWAY STANDARDS AND ABREVIATIONS

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

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	2
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

GENERAL NOTES

ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, JANUARY 1, 2012

ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE RESIDENT ENGINEER.

PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOB SITE. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, HE MUST IMMEDIATELY REPORT THEM TO THE ENGINEER BEFORE DOING ANY WORK. 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.

IT IS THE CONTRACTOR' S RESPONSIBILITY TO ASCERTAIN EXISTING FIELD CONDITIONS PRIOR TO BIDDING ON THE PROJECT.

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

THE CONTRACTOR SHALL CONTACT THE CITY OF AURORA, THE FOX VALLEY PARK DISTRICT AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION AT LEAST 72 HOURS IN ADVANCE OF BEGINNING ANY WORK. SEE SHEET 2 FOR CONTACT INFORMATION.

THE GENERAL CONTRACTOR SHALL CONTACT THE ARMY CORPS OF ENGINEERS AND THE KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT TWO (2) WEEKS PRIOR TO CONSTRUCTION. SEE EROSION CONTROL PLANS AND BRIDGE PLANS.

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, HIS AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

ALL RADII FOR PROPOSED CURB AND GUTTER ARE TO THE EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. CURB AND GUTTER ELEVATIONS SHOWN ALONG RETURNS AND AT POINTS OF CURVATURE, ETC. ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.

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

THE BITUMINOUS MATERIAL PRIME COAT QUANTITIES HAVE BEEN DETERMINED USING A RATE OF 0.1 GALLONS / SQ YD.

SAW CUTTING OF PAVEMENTS, SIDEWALK, ETC. SHALL BE TO FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE ITEM REMOVED.

REMOVAL OF EXISTING COMBINATION CURB AND GUTTER, REGARDLESS OF CURB AND GUTTER TYPE, SHALL BE PAID FOR AS "COMBINATION CURB AND GUTTER REMOVAL".

THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT, UNLESS OTHERWISE NOTED.

THE RESIDENT ENGINEER SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT 847-705-4470 A MINIMUM OF 72 HOURS PRIOR TO THE PLACEMENT OF ANY TEMPORARY TRAFFIC CONTROL DEVICES.

THE RESIDENT ENGINEER SHALL CONTACT THE QA MATERIALS TESTING CONSULTANT 48 HOURS IN ADVANCE OF PLACING MATERIALS.

THE CONTRACTOR SHALL DISPOSE OF ALL EXCESS EXCAVATION, UNSUITABLE AND UNUSABLE MATERIALS OFFSITE AND AT AN APPROVED LOCATION IN A MANNER THAT PUBLIC OR PRIVATE PROPERTY WILL NOT BE DAMAGED OR ENDANGERED. THIS WORK IS CONSIDERED INCLUDED IN THE COST OF THE REMOVAL ITEMS.

SPECIAL ATTENTION IS DRAWN TO THE FACT THAT ARTICLE 105.06 OF THE STANDARD SPECIFICATIONS REQUIRES THE CONTRACTOR TO HAVE A COMPETENT SUPERINTENDENT ON THE PROJECT SITE AT ALL TIMES, IRRESPECTIVE OF THE AMOUNT OF WORK SUBLET. THE SUPERINTENDENT SHALL BE CAPABLE OF READING AND UNDERSTANDING THE PLANS AND SPECIFICATIONS, SHALL HAVE FULL AUTHORITY TO EXECUTE ORDERS TO EXPEDITE THE PROJECT, SHALL BE RESPONSIBLE FOR SCHEDULING AND HAVE CONTROL OF ALL WORK AS THE AGENT OF THE CONTRACTOR. FAILURE TO COMPLY WITH THIS PROVISION WILL RESULT IN A SUSPENSION OF WORK AS PROVIDED IN ARTICLE 107.07.

THE ENGINEER AND CITY ARE NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, TIME OF PERFORMANCE, PROGRAMS OR FOR ANY SAFETY PRECAUTIONS USED BY THE CONTRACTOR. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS.

THE INDISCRIMINATE USE OF FIRE HYDRANTS, EXISTING STREAMS, CREEKS, WETLANDS, OR PONDS IS STRICTLY PROHIBITED. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK AND DRIVER AS REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER FROM AN APPROVED SOURCE. IF THIS WATER IS FROM A SOURCE OTHER THAN HIS YARD, WRITTEN APPROVAL FROM THE AGENCY HAVING JURISDICTION FOR THE SOURCE OF THE WATER MUST BE RECEIVED BY THE CONTRACTOR PRIOR TO THE USE OF THE WATER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SWEEPING AND CLEANING STREETS OF ANY DEBRIS AND MATERIAL THAT HAS ACCUMULATED AS A RESULT OF THE CONSTRUCTION ACTIVITY. A MECHANICAL SWEEPER, MECHANICALLY DRIVEN AIR AND HANDWORK WITH SHOVEL AND BROOM SHALL BE UTILIZED TO PROVIDE A CLEAN STREET FOR THE MOTORING PUBLIC. WITHIN 24 HOURS OF PLACING PRIME COAT AND THE LAYING OF HMA, THE CONTRACTOR SHALL SWEEP THE PAVEMENT AND REMOVE STANDING WATER, EARTH, WEEDS, LEAVES, DIRT, CONSTRUCTION DEBRIS, AND ALL LOOSE MATERIAL. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

ALL FRAMES WITH CLOSED LIDS TO BE FURNISHED AS PART OF THE CONTRACT FOR CONSTRUCTION, ADJUSTMENT OR RECONSTRUCTION OF ANY MANHOLE, CATCH BASIN, INLET, VALVE VAULT OR METER VAULT SHALL HAVE CAST INTO THE LID ONE OF THE FOLLOWING WORDS: "WATER", "STORM", OR "SANITARY".

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.

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

ALL UTILITY COMPANIES SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

THE CONTRACTOR SHALL USE ALL NECESSARY PRECAUTIONS AND PROTECTION MEASURES REQUIRED TO MAINTAIN EXISTING UTILITIES, SEWERS, AND APPURTENANCES THAT MUST BE KEPT IN OPERATION.

NORMAL WORKING HOURS ARE MON.-FRI. 7 A.M. TO 7 P.M. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER PRIOR TO PERFORMING ANY WORK OUTSIDE THESE TIMES. NO COMPENSATION WILL BE PAID FOR ANY INCONVENIENCE, DELAY, OR LOSS EXPERIENCE BY THE CONTRACTOR BECAUSE OF ADJUSTMENTS TO THEIR NORMAL SCHEDULE.

THE CONTRACTOR SHALL CONTACT THE CITY OF AURORA TO COORDINATE DELIVERY OF SALVAGED LIGHT POLES TO THE CITY'S MAINTENANCE FACILITY. SEE SHEET 2 FOR CONTACT INFORMATION.

OFFSETS FOR DRAINAGE STRUCTURES IN THE CURB ARE TO EDGE OF PAVEMENT. ALL OTHER OFFSETS FOR DRAINAGE STRUCTURES ARE TO THE CENTER OF THE STRUCTURE UNLESS OTHERWISE NOTED.

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

WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN, IN AN OPERATING CONDITION, TEMPORARY OUTLETS AND CONNECTIONS FOR ALL DRAINS, SEWERS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES WHICH HAVE THE CAPACITY TO RECEIVE AND DISCHARGE THE STORM WATER FLOW RATES NORMALLY ACCEPTED AND RELEASED BY THE EXISTING DRAINAGE FACILITIES. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

ANY ITEMS DAMAGED DURING REMOVAL OPERATIONS SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE. THE COST OF SALVAGING EXISTING FRAMES, GRATES, LIDS, OR BOXES AND/OR STOCKPILING THEM ON THE JOB SITE FOR DELIVERY TO THE CITY OF AURORA, AS APPLICABLE SHALL BE CONSIDERED AS INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT, AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

THE LOCATION OF THE EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECIEVED FROM VARIOUS SOURCES. IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATLY REPAIRED AT NO ADDITIONAL COST TO THE CITY.

THE CONTRACTOR SHALL OBTAIN A WATER METER FROM THE CITY OF AURORA MAINTENANCE PUMPING STATION TO USE WATER FOR DUST CONTROL, MIXING MORTAR, ETC. THE CONTRACTOR WILL PAY FOR THE QUANTITY OF WATER USED AND WILL NOT BE REIMBURSED FOR THE USE OF CITY WATER.

ONLY PRECAST CONCRETE ADJUSTMENT RINGS, MAXIMUM OF 8" IN HEIGHT, WILL BE ALLOWED IN THE ADJUSTMENT OR RECONSTRUCTION OF CATCH BASIN, MANHOLE, INLET AND VALVE VAULT STRUCTURES. COMMON BRICK WILL NOT BE ALLOWED. THE RINGS SHALL BE INCLUDED IN THE COST OF WORK BEING PERFORMED.

THE THICKNESSES OF HOT MIX ASPHALT MIXTURES SHOWN IN THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASES ON WHICH THE HOT MIX ASPHALT MIXTURES ARE TO BE PLACED.

WHERE PROPOSED WORK MEETS EXISTING FEATURES TO REMAIN, FIELD CHECK ALL DIMENSIONS AND ELEVATIONS BEFORE PROCEEDING WITH CONSTRUCTION, NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

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. THE CONTRACTOR SHALL RESTORE THE FIELD OFFICE SITE TO LIKE ORIGINAL CONDITION.

THE CONTRACTOR SHALL ENSURE THAT ALL STORM SEWER MANHOLES, SANITARY SEWER MANHOLES, WATERMAIN VALVES, AND FIRE HYDRANTS REMAIN READILY ACCESSIBLE TO THE CITY AT ALL TIMES.

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

THE CONTRACTOR SHALL NOT ALLOW CONCRETE OR OTHER CONSTUCTION DEBRIS TO FALL INTO THE RIVER DURING DEMOLITION OR CONSTRUCTION.

EXISTING SIGNS IN CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE REMOVED, STORED, AND RE-INSTALLED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE A LOG OF EXISTING SIGNS TO THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE ITEM "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)."

AGGREGATE SUBGRADE IMPROVEMENT AND ADDITIONAL REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL NOT INCLUDED IN THE EARTHWORK SCHEDULE HAVE BEEN ADDED FOR USE IF UNSUITABLE MATERIAL IS ENCOUNTERED IN THE FIELD, AS DETERMINED BY THE ENGINEER. IF UNSUITABLE AND/OR UNSTABLE MATERIALS IS NOT ENCOUNTERED, THEN THE QUANTITIES SHALL BE DEDUCTED AND NO COMPENSATION WILL BE DUE TO THE CONTRACTOR.

SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH ARTICLE 301.03 OF THE STANDARD SPECIFICATIONS BEFORE REMOVAL OF ANY UNSUITABLE MATERIAL.

BACKFILL

PROVIDE TRENCH BACKFILL FOR ALL UTILITY LINES WITHIN 2' OF PAVED AREAS. ALL TRENCH BACKFILL QUANTITIES FOR STORM SEWER HAVE BEEN COMPUTED AND SHALL BE PAID FOR IN ACCORDANCE WITH THE STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS BUREAU OF CONSTRUCTION TRENCH BACKFILL TABLE, BASED ON PIPE SIZE. DEPTH SHALL BE CALCULATED AS INVERT DEPTH TO BOTTOM OF IMPROVED SUBGRADE ELEVATION.

SIGNING AND STRIPING

SEE DISTRICT ONE DETAIL AND PLAN SHEETS FOR PAVEMENT MARKING DETAILS.

SIGNS SHALL NOT BE MOVED OR COVERED UNTIL PROGRESS OF WORK NECESSITATES IT.

THE CONTRACTOR WILL BE REQUIRED TO TEMPORARILY RESET ALL SUCH SIGNS THAT INTERFERE WITH HIS CONSTRUCTION OPERATIONS. ALL SUCH SIGNS MUST BE MAINTAINED STRAIGHT AND CLEAN FOR THE DURATION OF THE TEMPORARY SETTING AND MUST BE RE-ERECTED AT A TEMPORARY LOCATION IN A WORKMANLIKE MANNER AND BE VISIBLE TO THE TRAFFIC FOR WHICH IT IS INTENDED. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

ALL SIGNS SHALL BE INSTALLED OR RELOCATED IN PERMANENT LOCATIONS AS THE ROADWAY IS COMPLETED. COST FOR THIS WORK SHALL BE INCLUDED IN THE ITEM "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

ALL REMOVED SIGNS SHALL BE RETURNED TO THE CITY OF AURORA. COST FOR THIS WORK SHALL BE INCLUDED IN THE ITEM "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)."

LONGER POSTS MAY BE REQUIRED AT SOME TEMPORARY OR PERMANENT SIGN LOCATIONS TO MAINTAIN PROPER SIGN ELEVATIONS. THIS WORK SHALL BE PAID FOR IN ACCORDANCE WITH SECTION 729 OF THE STANDARD SPECIFICATIONS.

TRAFFIC CONTROL

SEE TRAFFIC CONTROL PLANS FOR GENERAL NOTES CONCERNING TRAFFIC CONTROL AND PROTECTION.

EROSION CONTROL

SEE EROSION CONTROL PLANS FOR GENERAL NOTES CONCERNING EROSION CONTROL.

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 9/25/2013 8:08:08 AM
FILE NAME: 86110318-gen-01.dgn
PLOT DRIVER: pdf.DET-11ff.plt
PEN TABLE: standard-trans.tbl

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USER NAME = whood	DESIGNED - KMA	REVISED -	
FILE NAME = 86110318-gen-01.dgn	DRAWN - WJH	REVISED -	
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PLOT DATE = 9/25/2013	DATE - 9/25/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
GENERAL NOTES

SCALE: | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	3
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

	PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	ROADWAY 80% FEDERAL 20% LOCAL 0004	BRIDGE 80% FEDERAL 20% LOCAL 0014	LIGHTING 80% FEDERAL 20% LOCAL 0021
	20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	478	478		
	20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	166	166		
	20101000	TEMPORARY FENCE	FOOT	220	220		
	20200100	EARTH EXCAVATION	CU YD	1,473.6	1,473.6		
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	140.0	140.0		
	20400800	FURNISHED EXCAVATION	CU YD	1,320.7	1,320.7		
	20800150	TRENCH BACKFILL	CU YD	184.0	184.0		
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	190	190		
•	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	18,500	18,500		
•	25000210	SEEDING, CLASS 2A	ACRE	1.8	1.8		
•	25000310	SEEDING, CLASS 4	ACRE	2.5	2.5		
•	25000400	NITROGEN FERTILIZER NUTRIENT	POUND	344	344		
•	25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	344	344		
	28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	383	383		
	28000305	TEMPORARY DITCH CHECKS	FOOT	150	150		
	28000400	PERIMETER EROSION BARRIER	FOOT	3,050	3,050		
	28000500	INLET AND PIPE PROTECTION	EACH	4	4		
	28000510	INLET FILTERS	EACH	11	11		
	28100107	STONE RIPRAP, CLASS A4	SQ YD	1,027		1,027	
	28100111	STONE RIPRAP, CLASS A6	SQ YD	50	50		
	28200200	FILTER FABRIC	SQ YD	1,025	50	975	
	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	64	64.0		
	30300112	AGGREGATE SUBGRADE IMPROVEMENT, 12"	SQ YD	4,130	4,130		
	31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	1,185	1,185		
	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	200	200		
	40600300	AGGREGATE (PRIME COAT)	TON	4	4		
	40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	275	275		
	42000540	PORTLAND CEMENT CONCRETE PAVEMENT 12"	SQ YD	3,790	3,790		
	42001300	PROTECTIVE COAT	SQ YD	5,388	5,388		
	42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	430	430		
	42400300	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH	SQ FT	6,515	6,515		
	42400800	DETECTABLE WARNINGS	SQ FT	220	220		
	44000100	PAVEMENT REMOVAL	SQ YD	4,135	4,135		
	44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	2,420	2,420		
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	455	455		
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1,995	1,995		
	44000600	SIDEWALK REMOVAL	SQ FT	6,110	6,110		
	44003100	MEDIAN REMOVAL	SQ FT	1,110	1,110		
	44004000	PAVED DITCH REMOVAL	FOOT	300	300		
	50102400	CONCRETE REMOVAL	CU YD	153.5		153.5	
	50104400	CONCRETE HEADWALL REMOVAL	EACH	5	5		
	50104701	REMOVAL OF EXISTING CONCRETE DECK NO. 1	EACH	1		1	
	50104702	REMOVAL OF EXISTING CONCRETE DECK NO. 2	EACH	1		1	
	50157300	PROTECTIVE SHIELD	SQ YD	134		134	
	50200100	STRUCTURE EXCAVATION	CU YD	767.2		767.2	
	50200300	COFFERDAM EXCAVATION	CU YD	179.7		179.7	

PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	ROADWAY 80% FEDERAL 20% LOCAL 0004	BRIDGE 80% FEDERAL 20% LOCAL 0014	LIGHTING 80% FEDERAL 20% LOCAL 0021
50200400	ROCK EXCAVATION FOR STRUCTURES	CU YD	370.1		370.1	
50201101	COFFERDAM (TYPE 1) (LOCATION -1)	EACH	1		1	
50201121	COFFERDAM (TYPE 2) (LOCATION -1)	EACH	1		1	
50201122	COFFERDAM (TYPE 2) (LOCATION -2)	EACH	1		1	
50201123	COFFERDAM (TYPE 2) (LOCATION -3)	EACH	1		1	
50201124	COFFERDAM (TYPE 2) (LOCATION -4)	EACH	1		1	
50300225	CONCRETE STRUCTURES	CU YD	1,137.4		1,137.4	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	2,183.1		2,183.1	
50300260	BRIDGE DECK GROOVING	SQ YD	5,179		5,179	
50300265	SEAL COAT CONCRETE	CU YD	151.0		151.0	
50300300	PROTECTIVE COAT	SQ YD	7,433		7,433	
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		1	
50500505	SHEER STUD CONNECTORS	EACH	24,572		24,572	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	684,130		684,130	
50800515	BAR SPLICERS	EACH	238		238	
51201610	FURNISHING STEEL PILES HP12X63	FOOT	974		974	
51202305	DRIVING PILES	FOOT	974		974	
51203610	TEST PILE STEEL HP 12X63	EACH	5		5	
51204650	PILE SHOES	EACH	54		54	
51500100	NAME PLATES	EACH	2		2	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	383		383	
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	90		90	
52100520	ANCHOR BOLTS, 1"	EACH	234		234	
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	1	1		
54213687	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 42"	EACH	1	1		
550A0330	STORM SEWERS, CLASS A, TYPE 2 10"	FOOT	10	10		
550A0340	STORM SEWERS, CLASS A, TYPE 2 12"	FOOT	275	275		
550A0380	STORM SEWERS, CLASS A, TYPE 2 18"	FOOT	137	137		
550A0470	STORM SEWERS, CLASS A, TYPE 2 42"	FOOT	385	385		
550A0770	STORM SEWERS, CLASS A, TYPE 3 42"	FOOT	41	41		
55100200	STORM SEWER REMOVAL 6"	FOOT	32	32		
55100500	STORM SEWER REMOVAL 12"	FOOT	119	119		
55101800	STORM SEWER REMOVAL 42"	FOOT	177	177		
58700300	CONCRETE SEALER	SQ FT	2,447		2,447	
59000200	EPOXY CRACK INJECTION	FOOT	650		650	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	169		169	
59300100	CONTROLLED LOW STRENGTH MATERIAL	CU YD	43.2		43.2	
60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	5	5		
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	2		
60223800	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
60224005	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 8 GRATE	EACH	3	3		
60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	6	6		
60250200	CATCH BASINS TO BE ADJUSTED	EACH	2	2		
60251500	CATCH BASINS TO BE ADJUSTED WITH NEW TYPE 11 FRAME AND GRATE	EACH	1	1		
60260100	INLETS TO BE ADJUSTED	EACH	1	1		
60500040	REMOVING MANHOLES	EACH	1	1		

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 9/4/2013 7:56:26 AM
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FILE NAME = 8611@318-SOQ-01.dgn	DRAWN - WJH	REVISED -			
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
SUMMARY OF QUANTITIES

SCALE: | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	4
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

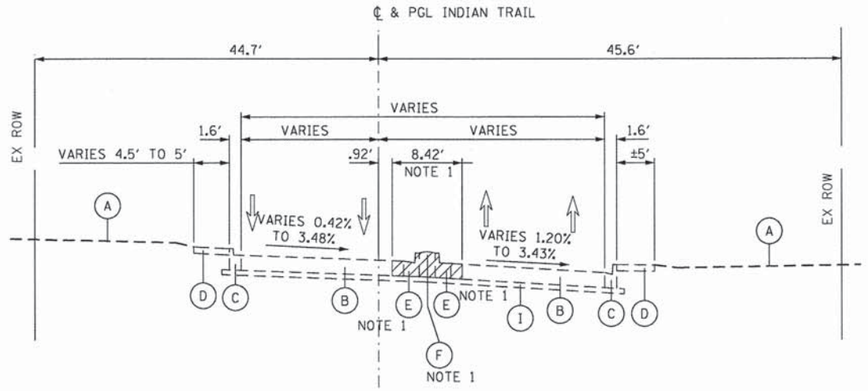
	PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	ROADWAY 80% FEDERAL 20% LOCAL 0004	BRIDGE 80% FEDERAL 20% LOCAL 0014	LIGHTING 80% FEDERAL 20% LOCAL 0021
	60500050	REMOVING CATCH BASINS	EACH	2	2		
	60500060	REMOVING INLETS	EACH	3	3		
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	2,090	2,090		
•	63000003	STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT POSTS	FOOT	320	320		
•	63100070	TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1	1		
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
	63200310	GUARDRAIL REMOVAL	FOOT	435	435		
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	24	24		
	67100100	MOBILIZATION	L SUM	1	1		
••	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	500	500		
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	150	150		
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	72	72		
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	1,000	1,000		
	70300510	PAVEMENT MARKING TAPE, TYPE III - LETTERS AND SYMBOLS	SQ FT	75	75		
	70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	4,075	4,075		
	70300540	PAVEMENT MARKING TAPE, TYPE III 6"	FOOT	165	165		
	70300570	PAVEMENT MARKING TAPE, TYPE III 24"	FOOT	60	60		
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1,970	1,970		
•	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	450	450		
•	78005100	EPOXY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	235	235		
•	78005110	EPOXY PAVEMENT MARKING - LINE 4"	FOOT	5,720	5,720		
•	78005130	EPOXY PAVEMENT MARKING - LINE 6"	FOOT	270	270		
•	78005180	EPOXY PAVEMENT MARKING - LINE 24"	FOOT	130	130		
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	28	28		
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	2	2		
*	80400100	ELECTRIC SERVICE INSTALLATION	EACH	1			1
•	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	1			1
•	81028190	UNDERGROUND CONDUIT, GALVANIZED STEEL, 1 1/2" DIA.	FOOT	450			450
•	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	404	404		
•	81028340	UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	1,122			1,122
*	81101000	CONDUIT ATTACHED TO STRUCTURE, 4" DIA. GALVANIZED STEEL	FOOT	4,530			4,530
*	81200220	CONDUIT EMBEDDED IN STRUCTURE, 1 1/2" DIA., PVC	FOOT	1,781			1,781
•	81400100	HANDHOLE	EACH	17	6		11
•	81400200	HEAVY-DUTY HANDHOLE	EACH	1	1		
•	81702140	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	13,412			13,412
•	82500335	LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 100AMP	EACH	1			1
•	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	162			162
•	84200500	REMOVAL OF LIGHTING UNIT, SALVAGE	EACH	6			6
*	84200804	REMOVAL POLE FOUNDATION	EACH	6			6
*	85000200	MAINTENANCE OF EXISISTING TRAFFIC SIGNAL INSTALLATION	EACH	2	2		
•	88600600	DETECTOR LOOP REPLACEMENT	FOOT	275	275		
•	89502380	REMOVE EXISTING HANDHOLE	EACH	9	9		
•	A2000112	TREE, ACER X FREEMANIIAUTUMN BLAZE (AUTUMN BLAZE FREEMAN MAPLE), 1-1/2" CALIPER, BALLED AND BURLAPPED	EACH	6	6		
•	A2001012	TREE, ACER RUBRUM (RED MAPLE), 1-1/2" CALIPER, BALLED AND BURLAPPED	EACH	8	8		
•	A2002280	TREE, ALNUS RUGOSA (SPECKLED ALDER), 5' HEIGHT, CLUMP FORM, BALLED AND BURLAPPED	EACH	5	5		
•	A2002912	TREE, CELTIS OCCIDENTALIS (COMMON HACKBERRY), 1-1/2" CALIPER, BALLED AND BURLAPPED	EACH	2	2		

	PAYCODE	ITEM DESCRIPTION	UNIT	TOTAL	ROADWAY 80% FEDERAL 20% LOCAL 0004	BRIDGE 80% FEDERAL 20% LOCAL 0014	LIGHTING 80% FEDERAL 20% LOCAL 0021
•	A2004610	TREE, GLEDITSIA TRIACANTHOS INERMIS PERFECTION (PERFECTION THORNLESS HONEYLOCUST), 2" CALIPER, BALLED AND BURLAPPED	EACH	3	3		
•	A2005814	TREE, PLATANUS OCCIDENTALIS (SYCAMORE), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	3	3		
•	A2006512	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 1-1/2" CALIPER, BALLED AND BURLAPPED	EACH	10	10		
•	A2006912	TREE, QUERCUS PALUSTRIS (PIN OAK), 1-1/2" CALIPER, BALLED AND BURLAPPED	EACH	4	4		
•	A2007112	TREE, QUERCUS RUBRA (RED OAK), 1-1/2" CALIPER, BALLED AND BURLAPPED	EACH	6	6		
•	A2007814	TREE, TILIAAMERICANA (AMERICAN LINDEN/BASSWOOD), 1-3/4" CALIPER, BALLED AND BURLAPPED	EACH	2	2		
•	K0029634	WEED CONTROL, PRE-EMERGENT GRANULAR HERBICIDE	POUND	5	5		
•	X0324198	REMOVAL OF ASBESTOS CEMENT CONDUIT	FOOT	3,556		3,556	
•	X0325862	CONCRETE BRIDGE RAILING	FOOT	1,757		1,757	
	X0540000	BRICK PAVERS	SQ FT	640	640		
	X2510635	HEAVY DUTY EROSION CONTROL BLANKET, SPECIAL	SQ YD	18,500	18,500		
	X4240440	PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH, SPECIAL	SQ FT	780	780		
*	X5091755	PARAPET RAILING, SPECIAL	FOOT	1,441		1,441	
	X5150110	NAME PLATES (SPECIAL)	EACH	4		4	
	X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	708.8		708.8	
	X6020084	MANHOLE, SPECIAL	EACH	2	2		
*	X6310190	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (FLARED) MODIFIED	EACH	2	2		
	X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1		
•	XX008424	LIGHT FIXTURE ASSEMBLY - TYPE A	EACH	10			10
•	XX008425	LIGHT FIXTURE ASSEMBLY - TYPE B	EACH	8			8
	Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	91		91	
	Z0004556	HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ YD	4,352		4,352	
*	Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1		1	
*	Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1		1	
	Z0007430	TEMPORARY SIDEWALK	SQ FT	895	895		
*	Z0010501	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1		1	
*	Z0010502	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1		1	
	Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	668		668	
	Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		
	Z0018010	DRAINAGE SCUPPERS, DS-33	EACH	32		32	
	Z0022800	FENCE REMOVAL	FOOT	370	370		
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	204	204		
•	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	24			24
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	1		
	Z0062456	TEMPORARY PAVEMENT	SQ YD	103	103		
	Z0068426	STEEL CASING 66"	FOOT	24	24		
x	Z0076600	TRAINEES	HOUR	1,500	1,500		
x	Z0076604	TRAINEE TRAINING PROGRAM GRADUATE	HOUR	1,500	1,500		

• SPECIALTY ITEM

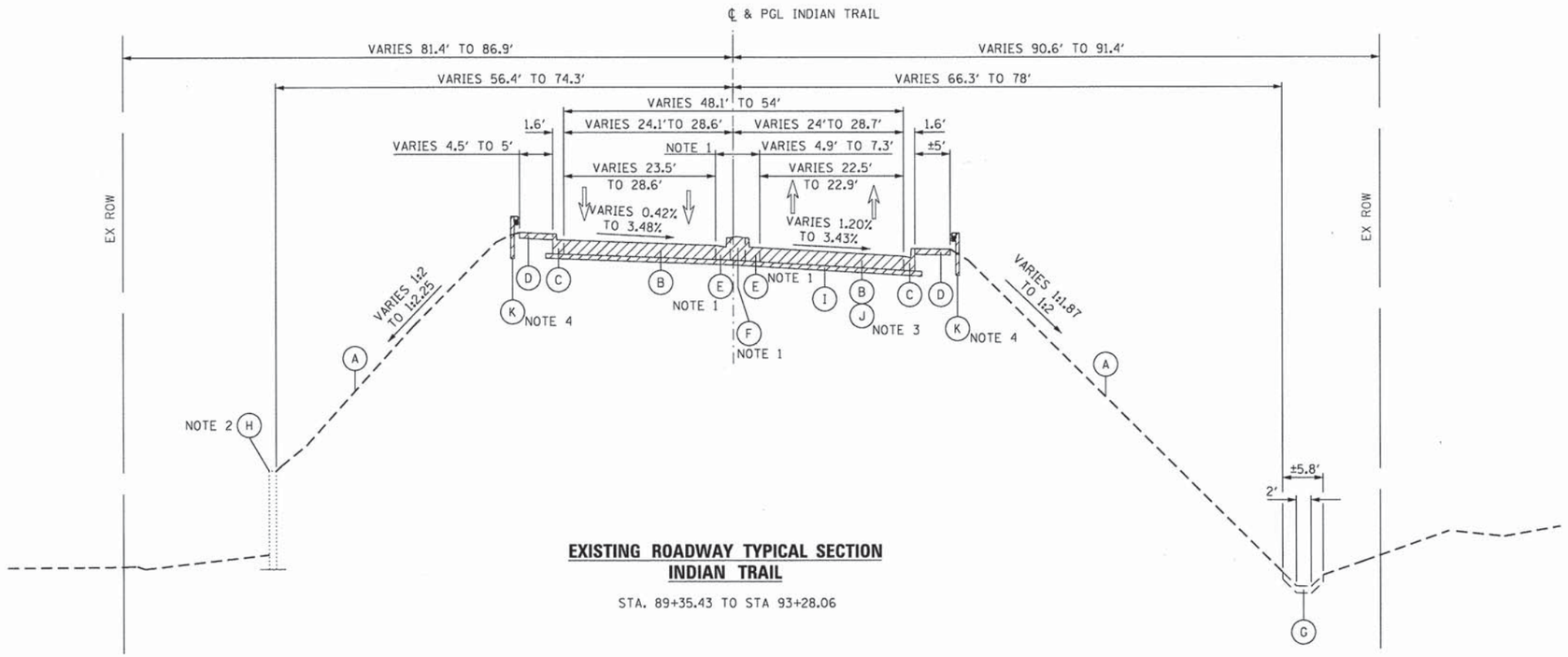
X CONSTRUCTION TYPE CODE 0042

•• SOIL ANALYSIS TO BE PERFORMED BY OTHERS PRIOR TO CONSTRUCTION. ITEM INCLUDED IN CASE CONTAMINATED SOILS ARE ENCOUNTERED. IF CONTAMINATED SOILS ARE NOT ENCOUNTERED, THIS QUANTITIY AND ITEM SHALL BE DEDUCTED AND NO COMPENSATION WILL BE DUE THE CONTRACTOR.



EXISTING ROADWAY TYPICAL SECTION
INDIAN TRAIL

STA. 88+70.59 TO STA 89+35.43



EXISTING ROADWAY TYPICAL SECTION
INDIAN TRAIL

STA. 89+35.43 TO STA 93+28.06

NOTES

1. STA. 88+71.66 TO STA. 90+77.98
   STA. 91+58.56 TO STA. 92+33.37
2. STA. 91+15.16 TO STA. 92+16.90
3. STA. 93+03.56 TO STA. 93+28.06
4. STA. 90+95.43 TO STA. 93+10.60 LT
   STA. 91+56.00 TO STA. 93+13.78 RT

EXISTING LEGEND

- (A) EXISTING GROUND
- (B) EXISTING CONCRETE PAVEMENT (APPROXIMATE DEPTH 12")
- (C) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (D) EXISTING PCC SIDEWALK
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (MEDIAN)
- (F) EXISTING HMA MEDIAN
- (G) EXISTING CONCRETE DITCH
- (H) EXISTING RETAINING WALL
- (I) EXISTING SUBBASE
- (J) EXISTING CONCRETE APPROACH SLAB (12" THICKNESS)
- (K) EXISTING GUARDRAIL (REMOVE AS SHOWN ON REMOVAL PLAN)
- (L) EXISTING CONCRETE DECK•••
- (M) EXISTING W36 OR 44" WEB PLATE GIRDER
- (N) EXISTING PARAPET/ ALUMINUM RAILING•••
- (O) HOT-MIX ASPHALT WEARING SURFACE, ±1 1/2" (REMOVAL PAID AS HOT-MIX ASPHALT SURFACE REMOVAL (DECK))
- (P) EXISTING BRIDGE MOUNTED LIGHTING UNIT•••

PROPOSED LEGEND

- (1) PORTLAND CEMENT CONCRETE PAVEMENT 12"
- (2) AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (3) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (4) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' FOOT POST
- (5) PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH SIDEWALK
- (6) TOPSOIL AND SEEDING
- (7) CONCRETE APPROACH SLAB (12" THICKNESS)
- (8) CONCRETE SUPERSTRUCTURE
- (9) W36 OR 44" WEB PLATE GIRDER
- (10) CONCRETE BRIDGE RAILING
- (11) PARAPET RAILING, SPECIAL
- (12) BRICK PAVERS
- (13) AGGGREGATE SUBGRADE IMPROVEMENT (CU YD)
- (14) GEOTECHNICAL FABRIC FOR GROUND STABALIZATION

INDICATES ITEMS TO BE REMOVED

••• REMOVAL INCLUDED IN THE UNIT PRICE FOR REMOVAL OF CONCRETE DECK NO. 1 AND 2

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Jurff
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 5:54:48 PM
FILE NAME: 86110318-typ01.dgn
PLOT DRIVER: pdf_DET-11ff.plt
PEN TABLE: standard-trans.tbl

HRGreen.com
Illinois Professional Design Firm # 184-001322

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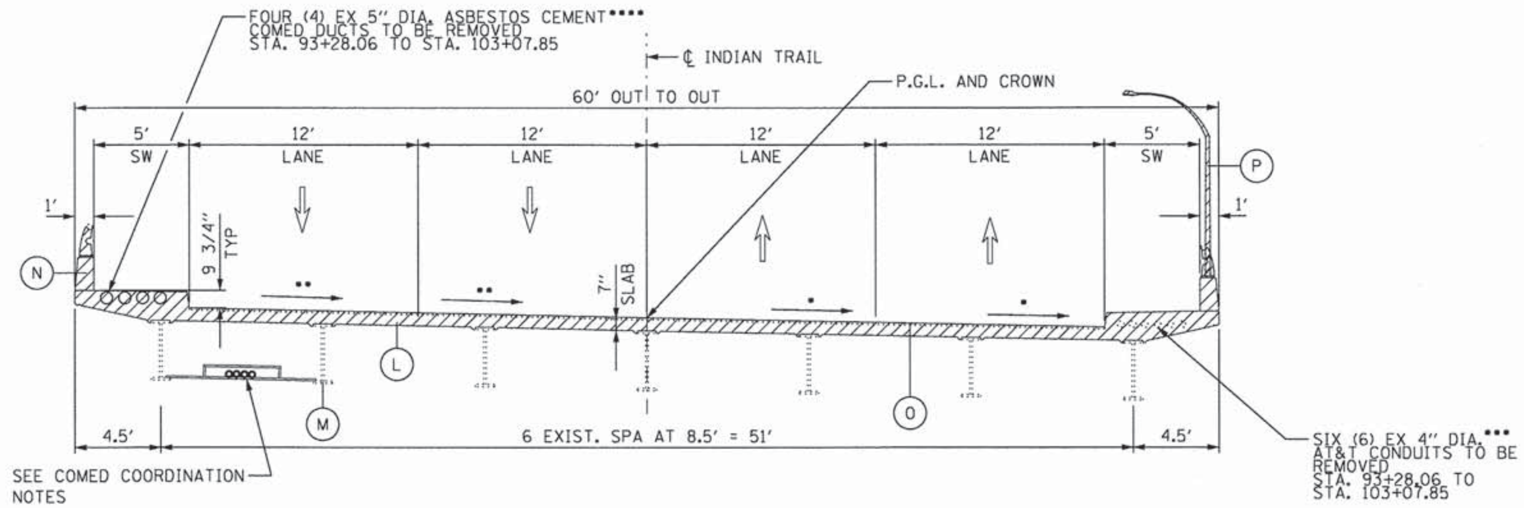
PLOT SCALE = N.T.S.	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. 1 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	6
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

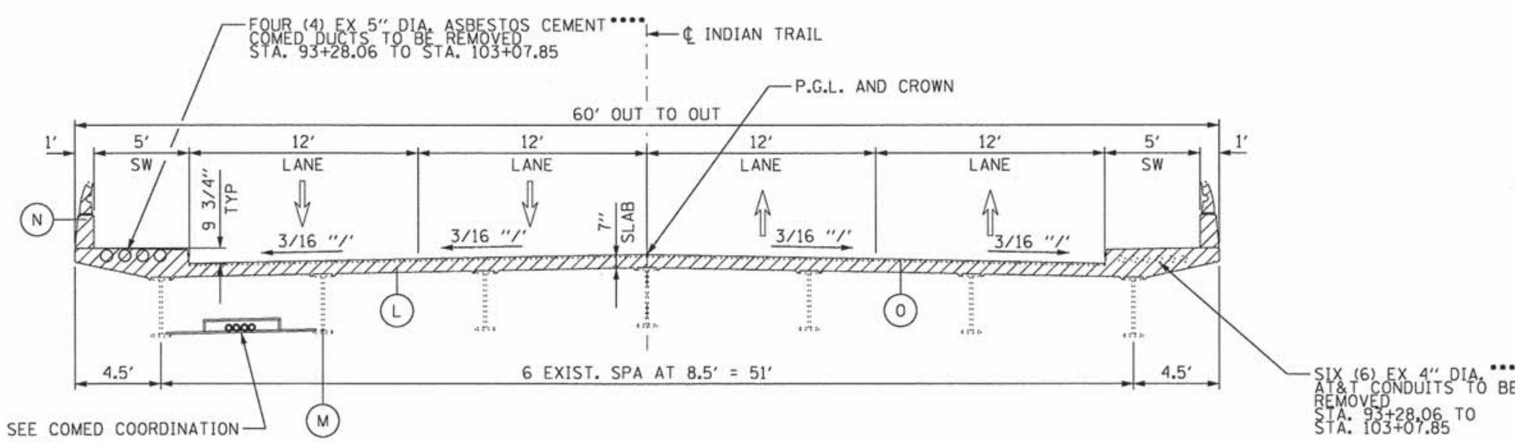


EXISTING BRIDGE SECTION

LOOKING EAST

STA. 93+28.06 TO STA. 97+30.00 WEST BRIDGE S.N. 045-3088

- • VARIES 3/16 "/' TO 3.6% STA. 93+28.56 TO STA. 97+30.00 WEST BRIDGE S.N. 045-3088
- •• VARIES 3.7% SLOPING TOWARD ℄ TO 3/16 "/' SLOPING AWAY FROM ℄ STA. 93+28.56 TO STA. 97+30.00 WEST BRIDGE S.N. 045-3088



EXISTING BRIDGE SECTION

LOOKING EAST

STA. 97+30.00 TO STA. 99+13.03 WEST BRIDGE S.N. 045-3088
STA. 100+67.37 TO STA. 103+07.85 EAST BRIDGE S.N. 045-3089

COMED COORDINATION NOTES

1. CONTRACTOR NOTE THAT TEMPORARY SUPPORT ASSEMBLIES AND FOUR PERMANENT 5" DIA. DUCTS, FURNISHED AND INSTALLED BY COMED, WILL BE IN PLACE PRIOR TO THE FIRST SEASON TEMPORARY DETOUR, AND WILL REMAIN IN PLACE UNTIL THE NEW UTILITY HANGERS (SEE BRIDGE PLANS) ARE INSTALLED WITH NEW DECKS.
   COMED INTENDS TO INSTALL AN ADDITIONAL ROW OF 4-5" DIA. DUCTS ON THE NEW HANGER ASSEMBLIES.
2. UPON AWARD, THE CONTRACTOR SHALL CONTACT COMED TO COORDINATE THEIR SCHEDULES FOR THE TEMPORARY AND PERMANENT FACILITY RELOCATIONS.
3. THE COST FOR THIS WORK AND COORDINATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE CONTRACT.

**** REMOVAL PAID FOR AS REMOVAL OF ASBESTOS CEMENT CONDUIT (SEE SPECIAL PROVISIONS)

EXISTING LEGEND

- (A) EXISTING GROUND
- (B) EXISTING CONCRETE PAVEMENT (APPROXIMATE DEPTH 12")
- (C) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (D) EXISTING PCC SIDEWALK
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (MEDIAN)
- (F) EXISTING HMA MEDIAN
- (G) EXISTING CONCRETE DITCH
- (H) EXISTING RETAINING WALL
- (I) EXISTING SUBBASE
- (J) EXISTING CONCRETE APPROACH SLAB (12" THICKNESS)
- (K) EXISTING GUARDRAIL (REMOVE AS SHOWN ON REMOVAL PLAN)
- (L) EXISTING CONCRETE DECK***
- (M) EXISTING W36 OR 44" WEB PLATE GIRDER
- (N) EXISTING PARAPET/ ALUMINUM RAILING***
- (O) HOT-MIX ASPHALT WEARING SURFACE, ±1 1/2" (REMOVAL PAID AS HOT-MIX ASPHALT SURFACE REMOVAL (DECK))
- (P) EXISTING BRIDGE MOUNTED LIGHTING UNIT***

PROPOSED LEGEND

- (1) PORTLAND CEMENT CONCRETE PAVEMENT 12"
- (2) AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (3) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (4) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' FOOT POST
- (5) PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH SIDEWALK
- (6) TOPSOIL AND SEEDING
- (7) CONCRETE APPROACH SLAB (12" THICKNESS)
- (8) CONCRETE SUPERSTRUCTURE
- (9) W36 OR 44" WEB PLATE GIRDER
- (10) CONCRETE BRIDGE RAILING
- (11) PARAPET RAILING, SPECIAL
- (12) BRICK PAVERS
- (13) AGGGREGATE SUBGRADE IMPROVEMENT (CU YD)
- (14) GEOTECHNICAL FABRIC FOR GROUND STABALIZATION

(hatched) INDICATES ITEMS TO BE REMOVED

*** REMOVAL INCLUDED IN THE UNIT PRICE FOR REMOVAL OF CONCRETE DECK NO. 1 AND 2

COMPANY NAME:
PROJECT CONTACT: Kevin M. Artt
CLIENT: City of Aurora
DATE PLOTTED: 9/4/2013 7:56:43 AM
FILE NAME: 86110318-typ02.dgn
PLOT DRIVER: pdf_DET-11f.plt
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HRGreen.com
Illinois Professional Design Firm # 184-001322
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PLOT SCALE = N.T.S.	CHECKED - RGD	REVISED -	
PLOT DATE = 9/4/2013	DATE - 9/4/13	REVISED -	

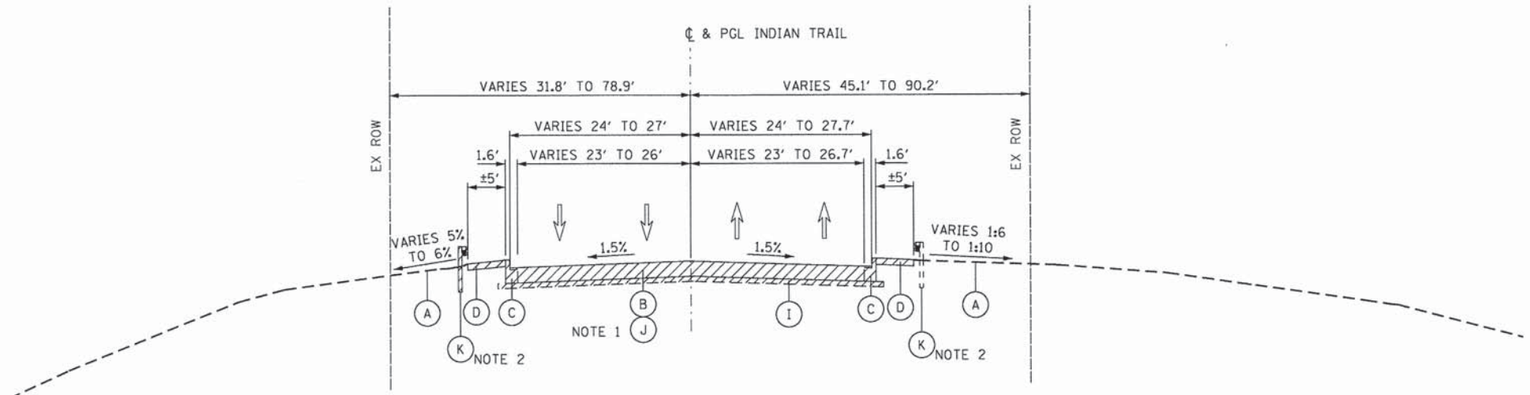
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. 2 OF 6 SHEETS | STA. TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	7
		CONTRACT NO. 63863		

FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT



EXISTING ROADWAY TYPICAL SECTION
INDIAN TRAIL

STA. 99+13.03 TO STA. 100+67.37
STA. 103+07.85 TO STA. 104+53.31

NOTES

1. STA. 99+13.03 TO STA. 99+37.47
   STA. 100+42.90 TO STA. 100+67.37
   STA. 103+07.85 TO STA. 103+32.32
2. STA. 100+48.17 TO STA. 100+61.79 RT
   STA. 103+34.21 TO STA. 103+61.79 RT
   STA. 103+34.21 TO STA. 103+61.30 RT
   STA. 91+84.89 TO STA. 93+10.60 LT
   STA. 99+19.31 TO STA. 99+45.99 LT
   STA. 103+10.92 TO STA. 103+60.81 LT

EXISTING LEGEND

- (A) EXISTING GROUND
- (B) EXISTING CONCRETE PAVEMENT (APPROXIMATE DEPTH 12")
- (C) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (D) EXISTING PCC SIDEWALK
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (MEDIAN)
- (F) EXISTING HMA MEDIAN
- (G) EXISTING CONCRETE DITCH
- (H) EXISTING RETAINING WALL
- (I) EXISTING SUBBASE
- (J) EXISTING CONCRETE APPROACH SLAB (12" THICKNESS)
- (K) EXISTING GUARDRAIL (REMOVE AS SHOWN ON REMOVAL PLAN)
- (L) EXISTING CONCRETE DECK•••
- (M) EXISTING W36 OR 44" WEB PLATE GIRDER
- (N) EXISTING PARAPET/ ALUMINUM RAILING•••
- (O) HOT-MIX ASPHALT WEARING SURFACE, ±1 1/2" (REMOVAL PAID AS HOT-MIX ASPHALT SURFACE REMOVAL (DECK))
- (P) EXISTING BRIDGE MOUNTED LIGHTING UNIT•••

PROPOSED LEGEND

- (1) PORTLAND CEMENT CONCRETE PAVEMENT 12"
- (2) AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (3) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (4) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' FOOT POST
- (5) PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH SIDEWALK
- (6) TOPSOIL AND SEEDING
- (7) CONCRETE APPROACH SLAB (12" THICKNESS)
- (8) CONCRETE SUPERSTRUCTURE
- (9) W36 OR 44" WEB PLATE GIRDER
- (10) CONCRETE BRIDGE RAILING
- (11) PARAPET RAILING, SPECIAL
- (12) BRICK PAVERS
- (13) AGGGREGATE SUBGRADE IMPROVEMENT (CU YD)
- (14) GEOTECHNICAL FABRIC FOR GROUND STABALIZATION

▨ INDICATES ITEMS TO BE REMOVED

••• REMOVAL INCLUDED IN THE UNIT PRICE FOR REMOVAL OF CONCRETE DECK NO. 1 AND 2

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 5:56:04 PM
FILE NAME: 86110318-typ03.dgn
PLOT DRIVER: pdf_DET-11f1.plt
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Illinois Professional Design Firm
184-001322

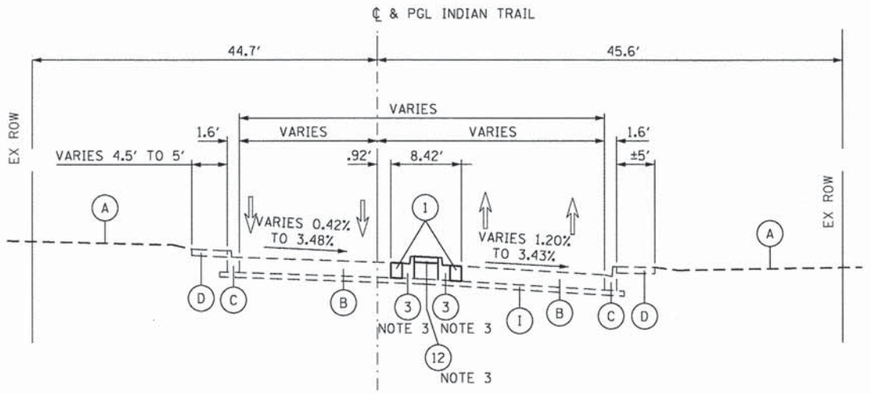
USER NAME = whood	DESIGNED - KMA	REVISED -	
FILE NAME = 86110318-typ03.dgn	DRAWN - WJH	REVISED -	
PLOT SCALE = N.T.S.	CHECKED - RGD	REVISED -	
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. 3 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	8
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		



PROPOSED ROADWAY TYPICAL SECTION
INDIAN TRAIL

STA. 88+70.59 TO STA 89+35.43

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

	AIR VOIDS @ Ndes
FOX RIVER TRAIL (RECONSTRUCTION)	
HMA SURFACE COURSE, MIX "D", N 50 (IL 9.5 mm); 2"	4% @ 50 GYR.
FOX RIVER TRAIL (RESURFACING)	
HMA SURFACE COURSE, MIX "D", N 50 (IL 9.5 mm); 2"	4% @ 50 GYR.
FOX VALLEY PARK DISTRICT DRIVE (RESURFACING)	
HMA SURFACE COURSE, MIX "D", N 50 (IL 9.5 mm); 2"	4% @ 50 GYR.
INDIAN TRAIL - ON ISLAND (TEMP PVMT)	
HMA SURFACE COURSE, MIX "D", N 50 (IL 9.5 mm); 2"	4% @ 50 GYR.
HMA BINDER COURSE, IL-19.0 N 50; 4"	4% @ 50 GYR.

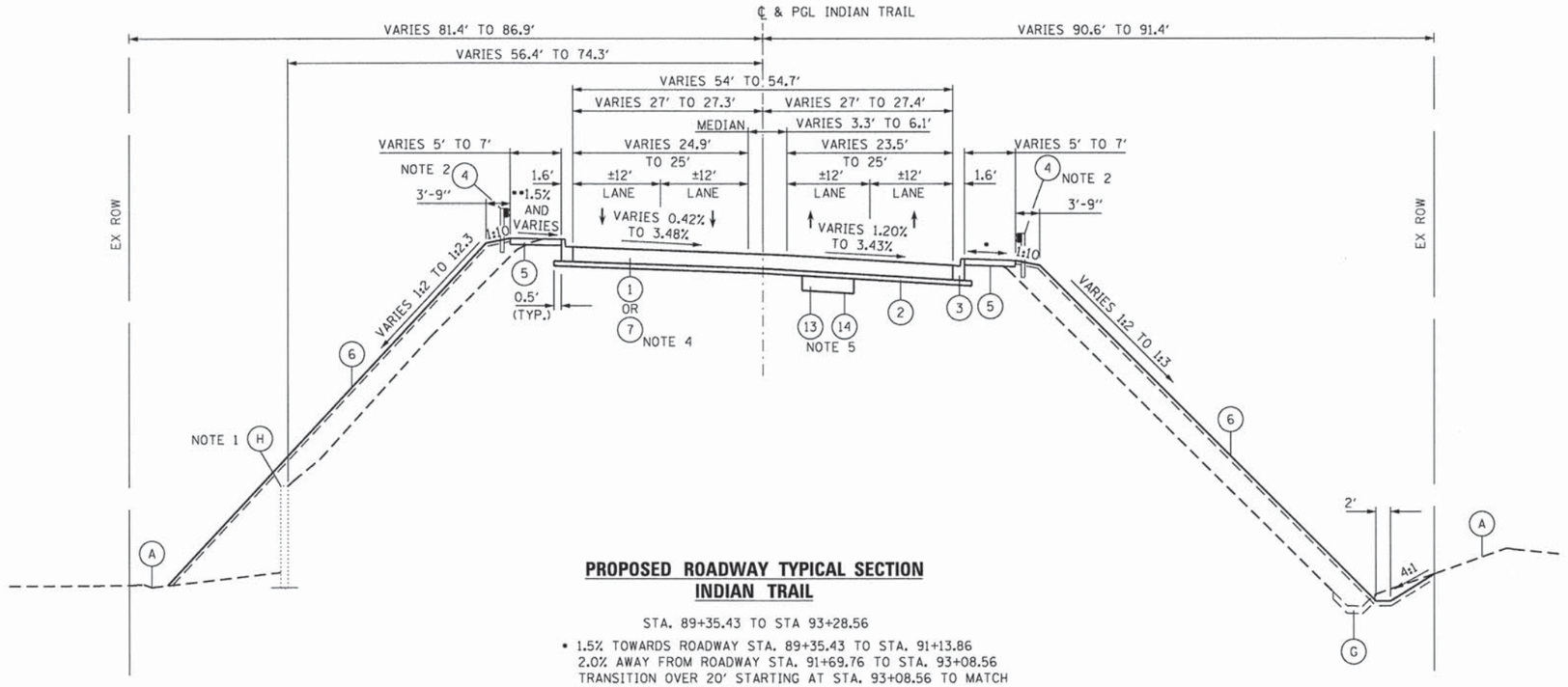
THE UNIT WEIGHT TO CALCULATE ALL HMA SURFACE MIXTURE QUATITIES IS 112 LBS/SQ YD/IN

THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.

FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

EXISTING LEGEND

- (A) EXISTING GROUND
- (B) EXISTING CONCRETE PAVEMENT (APPROXIMATE DEPTH 12")
- (C) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (D) EXISTING PCC SIDEWALK
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (MEDIAN)
- (F) EXISTING HMA MEDIAN
- (G) EXISTING CONCRETE DITCH
- (H) EXISTING RETAINING WALL
- (I) EXISTING SUBBASE
- (J) EXISTING CONCRETE APPROACH SLAB (12" THICKNESS)
- (K) EXISTING GUARDRAIL (REMOVE AS SHOWN ON REMOVAL PLAN)
- (L) EXISTING CONCRETE DECK***
- (M) EXISTING W36 OR 44" WEB PLATE GIRDER
- (N) EXISTING PARAPET/ ALUMINUM RAILING***
- (O) HOT-MIX ASPHALT WEARING SURFACE, ±1 1/2" (REMOVAL PAID AS HOT-MIX ASPHALT SURFACE REMOVAL (DECK))
- (P) EXISTING BRIDGE MOUNTED LIGHTING UNIT***



PROPOSED ROADWAY TYPICAL SECTION
INDIAN TRAIL

STA. 89+35.43 TO STA 93+28.56

- 1.5% TOWARDS ROADWAY STA. 89+35.43 TO STA. 91+13.86
  2.0% AWAY FROM ROADWAY STA. 91+69.76 TO STA. 93+08.56
  TRANSITION OVER 20' STARTING AT STA. 93+08.56 TO MATCH AT BRIDGE AT STA. 93+28.56

•• 2.0% MAX. SLOPE

NOTES

1. STA. 91+15.16 TO STA. 92+16.90
2. STA. 91+84.89 TO STA. 92+97.46 LT
   STA. 91+66.22 TO STA. 93+00.42 RT
3. STA. 88+73.20 TO STA. 90+75.58
4. STA. 93+08.56 TO STA. 93+28.56
5. LOCATIONS TO BE DETERMINED BY ENGINEER IN THE FIELD.

PROPOSED LEGEND

- (1) PORTLAND CEMENT CONCRETE PAVEMENT 12"
- (2) AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (3) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (4) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' FOOT POST
- (5) PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH SIDEWALK
- (6) TOPSOIL AND SEEDING
- (7) CONCRETE APPROACH SLAB (12" THICKNESS)
- (8) CONCRETE SUPERSTRUCTURE
- (9) W36 OR 44" WEB PLATE GIRDER
- (10) CONCRETE BRIDGE RAILING
- (11) PARAPET RAILING, SPECIAL
- (12) BRICK PAVERS
- (13) AGGGREGATE SUBGRADE IMPROVEMENT (CU YD)
- (14) GEOTECHNICAL FABRIC FOR GROUND STABALIZATION

INDICATES ITEMS TO BE REMOVED

••• REMOVAL INCLUDED IN THE UNIT PRICE FOR REMOVAL OF CONCRETE DECK NO. 1 AND 2

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 5:56:47 PM
FILE NAME: 86110318-typ04.dgn
PLOT SCALE: 1 Inch = 10 Feet
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HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	
FILE NAME = 86110318-typ04.dgn	DRAWN - WJH	REVISED -	
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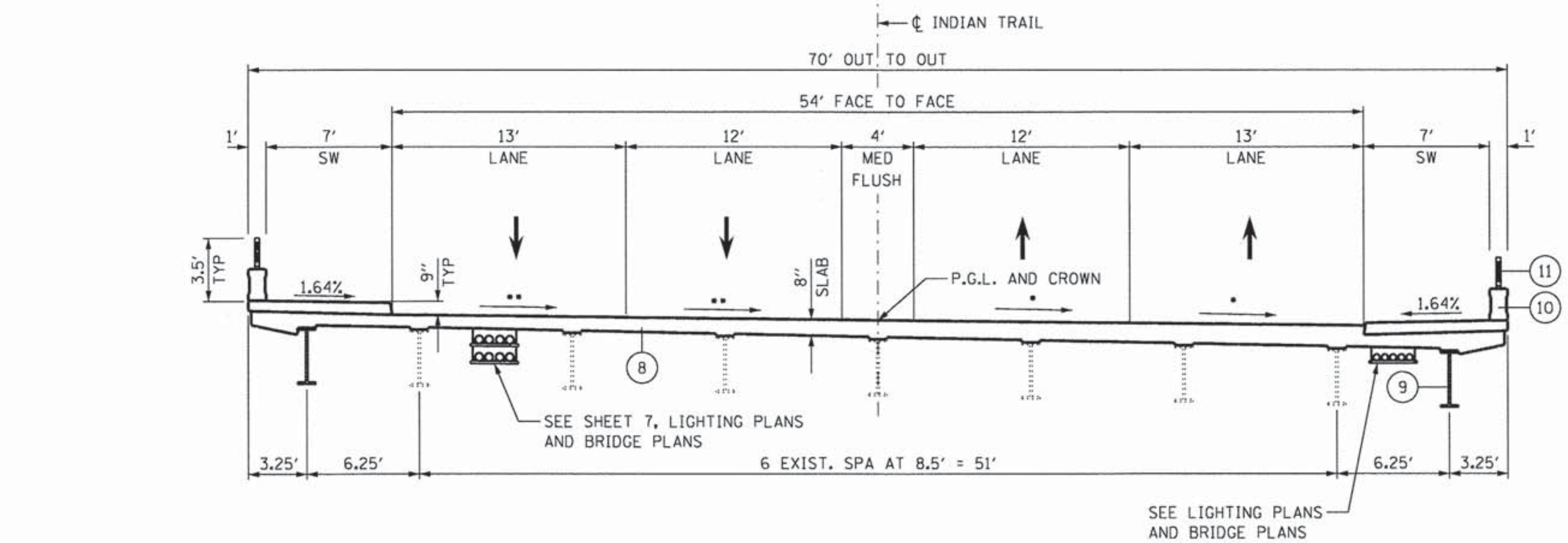
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. 4 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	9
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

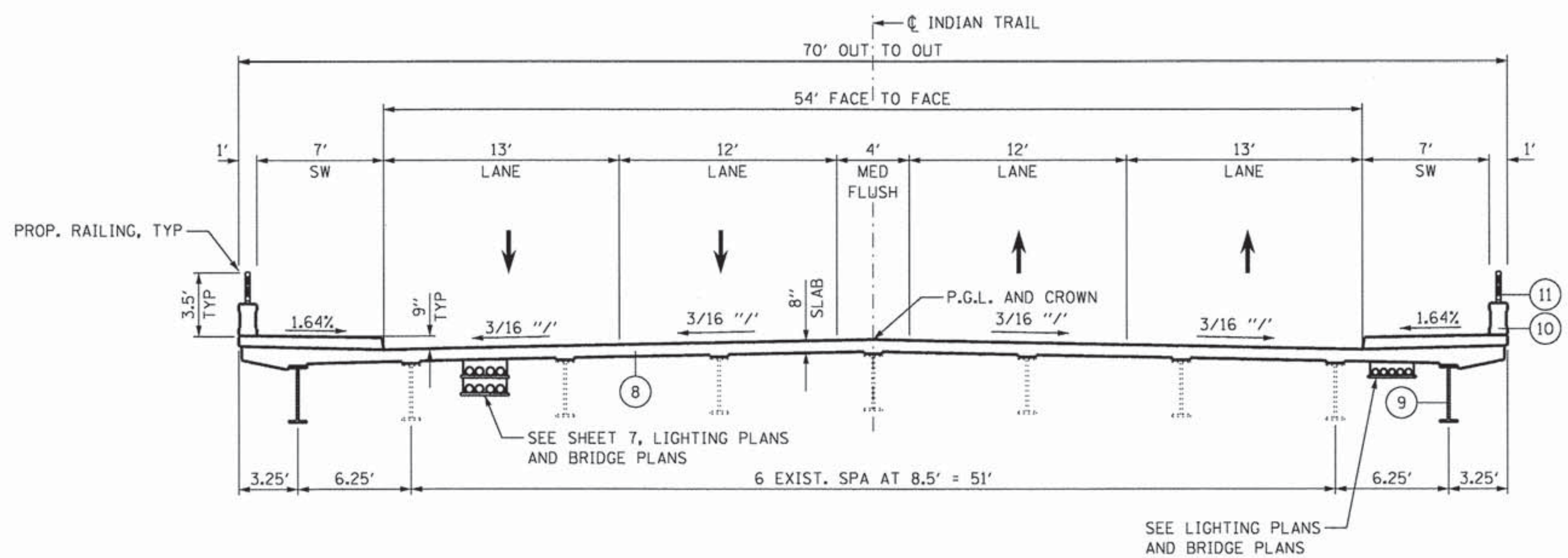


PROPOSED BRIDGE SECTION

LOOKING EAST

STA. 93+28.56 TO STA. 97+30.00 WEST BRIDGE S.N. 045-3088

- • VARIES 1.5625% TO 3.65% STA. 93+28.56 TO STA. 97+30.00 WEST BRIDGE S.N. 045-3088
- •• VARIES 3.65% SLOPING TOWARD ℄ TO 1.5625% SLOPING AWAY FROM ℄ STA. 93+28.56 TO STA. 97+30.00 WEST BRIDGE S.N. 045-3088



PROPOSED BRIDGE SECTION

LOOKING EAST

STA. 97+30.00 TO STA. 99+12.47 WEST BRIDGE S.N. 045-3088

STA. 100+67.90 TO STA. 103+07.37 EAST BRIDGE S.N. 045-3089

EXISTING LEGEND

- (A) EXISTING GROUND
- (B) EXISTING CONCRETE PAVEMENT (APPROXIMATE DEPTH 12")
- (C) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (D) EXISTING PCC SIDEWALK
- (E) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (MEDIAN)
- (F) EXISTING HMA MEDIAN
- (G) EXISTING CONCRETE DITCH
- (H) EXISTING RETAINING WALL
- (I) EXISTING SUBBASE
- (J) EXISTING CONCRETE APPROACH SLAB (12" THICKNESS)
- (K) EXISTING GUARDRAIL (REMOVE AS SHOWN ON REMOVAL PLAN)
- (L) EXISTING CONCRETE DECK•••
- (M) EXISTING W36 OR 44" WEB PLATE GIRDER
- (N) EXISTING PARAPET/ ALUMINUM RAILING•••
- (O) HOT-MIX ASPHALT WEARING SURFACE, ±1 1/2" (REMOVAL PAID AS HOT-MIX ASPHALT SURFACE REMOVAL (DECK))
- (P) EXISTING BRIDGE MOUNTED LIGHTING UNIT•••

PROPOSED LEGEND

- (1) PORTLAND CEMENT CONCRETE PAVEMENT 12"
- (2) AGGREGATE SUBGRADE IMPROVEMENT, 12"
- (3) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
- (4) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' FOOT POST
- (5) PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH SIDEWALK
- (6) TOPSOIL AND SEEDING
- (7) CONCRETE APPROACH SLAB (12" THICKNESS)
- (8) CONCRETE SUPERSTRUCTURE
- (9) W36 OR 44" WEB PLATE GIRDER
- (10) CONCRETE BRIDGE RAILING
- (11) PARAPET RAILING, SPECIAL
- (12) BRICK PAVERS
- (13) AGGREGATE SUBGRADE IMPROVEMENT (CU YD)
- (14) GEOTECHNICAL FABRIC FOR GROUND STABALIZATION

(hatched box) INDICATES ITEMS TO BE REMOVED

••• REMOVAL INCLUDED IN THE UNIT PRICE FOR REMOVAL OF CONCRETE DECK NO. 1 AND 2

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 5:57:23 PM
FILE NAME: 86110318-typ05.dgn
PLOT DRIVER: pdf_DET-11ff.plt
PEN TABLE: standard-trans.tbl

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Illinois Professional Design Firm # 184-001322
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PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

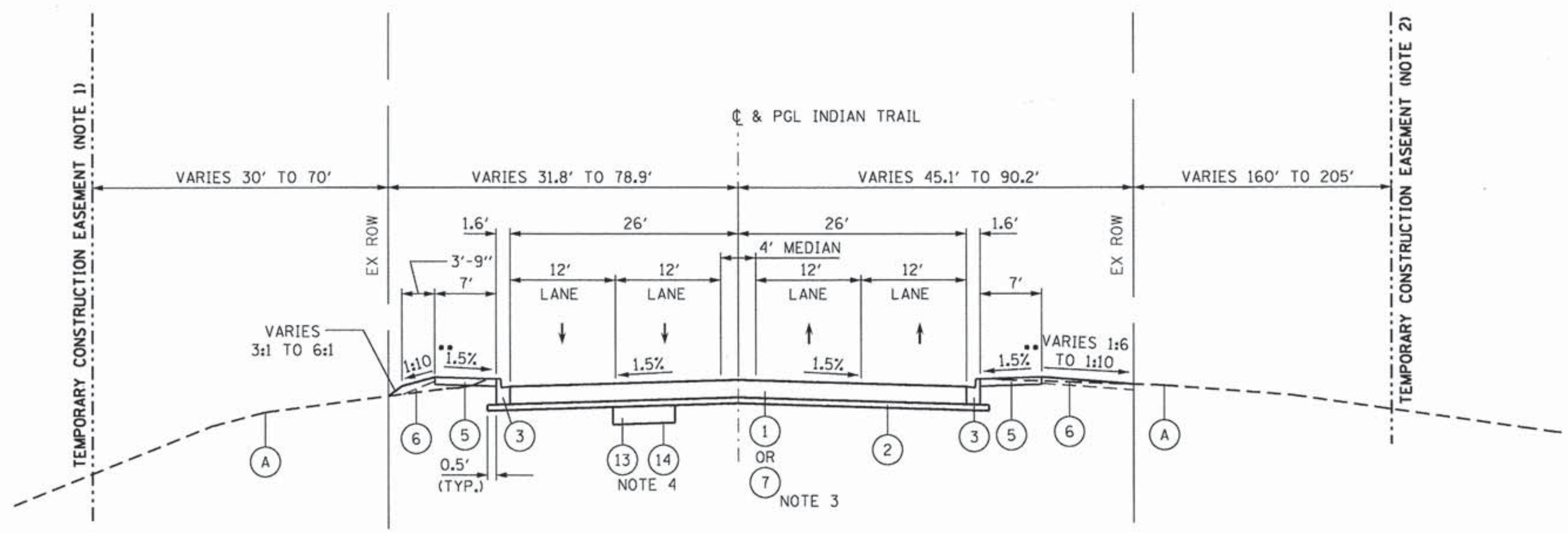
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. 5 OF 6 SHEETS | STA. TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	10

CONTRACT NO. 63863

FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT



PROPOSED ROADWAY TYPICAL SECTION
INDIAN TRAIL

STA. 99+12.47 TO STA 100+67.90
STA. 103+07.32 TO STA. 104+53.31
•• 2.0% MAX SLOPE

NOTES

1. STA. 97+88.90 TO STA. 100+46.94
2. STA. 99+45.83 TO STA. 102+17.26
3. STA. 99+12.47 TO STA. 99+32.47
   STA. 100+47.90 TO STA. 100+67.90
   STA. 103+07.32 TO STA. 103+27.32
4. LOCATIONS TO BE DETERMINED BY ENGINEER IN THE FIELD.

EARTH WORK SCHEDULE

INDIAN TRAIL			
STATION	EARTH EXCAVATION	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE
89+35.43			
89+00.00	0.0	0.0	0.0
89+50.00	59.8	0.3	47.6
90+00.00	120.9	0.6	96.1
90+50.00	123.1	1.5	97.0
91+00.00	125.0	1.1	98.9
91+50.00	119.5	44.2	51.5
92+00.00	115.0	290.9	-198.9
92+50.00	116.9	446.2	-352.7
93+00.00	111.5	441.0	-351.8
93+50.00	53.3	282.9	-240.2
94+00.00	3.1	364.7	-362.3
94+50.00	2.8	323.4	-321.2
95+00.00	0.0	0.0	0.0
95+50.00	0.2	56.9	-56.8
96+00.00	0.3	120.1	-119.9
96+50.00	0.1	63.1	-63.1
99+00.00	0.0	0.0	0.0
99+50.00	57.2	9.0	36.8
100+00.00	112.7	18.3	71.8
100+30.00	69.1	14.2	41.1
100+50.00	23.9	5.7	13.4
103+00.00	0.0	0.0	0.0
103+50.00	54.0	4.5	38.6
104+00.00	104.0	5.9	77.3
104+50.00	98.1	4.6	73.9
104+53.31	3.2	0.2	2.3
TOTALS	1473.6	2499.5	-1320.7

EXISTING LEGEND

(A) EXISTING GROUND
(B) EXISTING CONCRETE PAVEMENT (APPROXIMATE DEPTH 12")
(C) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
(D) EXISTING PCC SIDEWALK
(E) EXISTING COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (MEDIAN)
(F) EXISTING HMA MEDIAN
(G) EXISTING CONCRETE DITCH
(H) EXISTING RETAINING WALL
(I) EXISTING SUBBASE
(J) EXISTING CONCRETE APPROACH SLAB (12" THICKNESS)
(K) EXISTING GUARDRAIL (REMOVE AS SHOWN ON REMOVAL PLAN)
(L) EXISTING CONCRETE DECK***
(M) EXISTING W36 OR 44" WEB PLATE GIRDER
(N) EXISTING PARAPET/ ALUMINUM RAILING***
(O) HOT-MIX ASPHALT WEARING SURFACE, ±1 1/2" (REMOVAL PAID AS HOT-MIX ASPHALT SURFACE REMOVAL (DECK))
(P) EXISTING BRIDGE MOUNTED LIGHTING UNIT***

PROPOSED LEGEND

(1) PORTLAND CEMENT CONCRETE PAVEMENT 12"
(2) AGGREGATE SUBGRADE IMPROVEMENT, 12"
(3) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12
(4) STEEL PLATE BEAM GUARDRAIL, TYPE A, 9' FOOT POST
(5) PORTLAND CEMENT CONCRETE SIDEWALK 6 INCH SIDEWALK
(6) TOPSOIL AND SEEDING
(7) CONCRETE APPROACH SLAB (12" THICKNESS)
(8) CONCRETE SUPERSTRUCTURE
(9) W36 OR 44" WEB PLATE GIRDER
(10) CONCRETE BRIDGE RAILING
(11) PARAPET RAILING, SPECIAL
(12) BRICK PAVERS
(13) AGGREGATE SUBGRADE IMPROVEMENT, (CU YD)
(14) GEOTECHNICAL FABRIC FOR GROUND STABALIZATION

[hatched box] INDICATES ITEMS TO BE REMOVED

*** REMOVAL INCLUDED IN THE UNIT PRICE FOR REMOVAL OF CONCRETE DECK NO. 1 AND 2

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 5:57:55 PM
DATE PLOTTED: 86110318-typ06.dgn
FILE NAME: pdf_DET-Tiff.plt
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PEN TABLE:

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PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

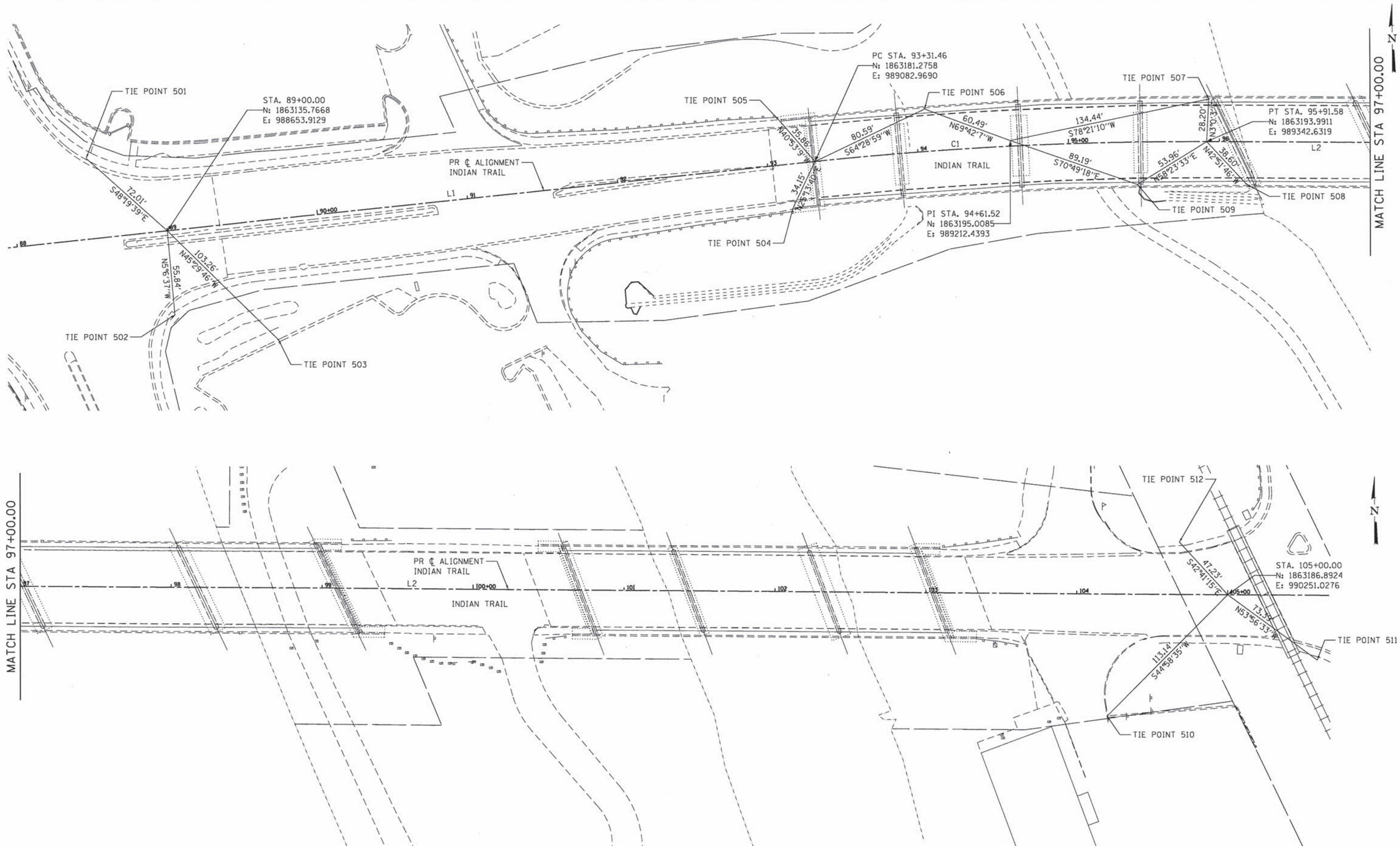
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET NO. 6 OF 6 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	11

CONTRACT NO. 63863
FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT



NOTES:
1. SEE TIE POINT TABLE ON NEXT SHEET FOR TIE POINT LOCATION
2. FOR LINE AND CURVE INFORMATION SEE TABLES ON NEXT SHEET

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 5:58:40 PM
FILE NAME: 86110318-Align.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
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PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
ALIGNMENT AND TIES

SCALE: 1"=30' | SHEET NO. 1 OF 2 SHEETS | STA. TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	12
		CONTRACT NO. 63863		

FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT

TIE POINT TABLE

TIE POINT	DESCRIPTION	NORTHING	EASTING	STATION	OFFSET
501	CUT CROSS IN SW CORNER OF CONCRETE TRAFFIC SIGNAL HAND HOLE BASE 0.5' TO B/C STOP BAR EXTENDED. NE CORNER OF INDIAN TRAIL AND LAKE STR.	1863183.642	988600.127	88+51.56	53.3' LT
502	FOUND CUT CROSS IN SE CORNER OF CONCRETE TRAFFIC SIGNAL CONTROL BOX AT SE CORNER OF INDIAN TRAIL AND LAKE ST.	1863080.144	988658.887	88+99.08	55.8' RT
503	CUT CROSS IN CURB IN WHITE CASTLE PARKING LOT NEAR LIGHT POLE AT SE CORNER OF INDIAN TRAIL AND LAKE ST.	1863063.388	988727.556	89+65.60	79.7' RT
504	CUT "X" IN SIDEWALK AT WEST END OF BRIDGE HANDRAIL AND EAST END OF GUARDRAIL SOUTH SIDE OF INDIAN TRAIL.	1863150.386	989068.415	93+13.73	29.2' RT
505	CUT "X" IN SIDEWALK AT WEST END OF BRIDGE HANDRAIL AND EAST END OF GUARDRAIL NORTH SIDE OF INDIAN TRAIL.	1863208.385	989059.498	93+10.98	29.4' LT
506	CUT "X" IN SIDEWALK NORTH SIDE OF INDIAN TRAIL.	1863215.994	989155.702	94+06.55	28.1' LT
507	CUT "X" IN SIDEWALK NORTH SIDE OF INDIAN TRAIL, 3' WEST OF EXPANSION JOINT	1863222.149	989344.108	95+92.83	28.2' LT
508	CUT "x" IN SIDEWALK SOUTH SIDE OF INDIAN TRAIL, 5'+/- WEST OF WEST EXPANSION JOINT	1863165.697	989368.89	96+18.05	28.1' RT
509	CUT "X" IN SIDEWALK SOUTH SIDE OF INDIAN TRAIL, 5'+/- WEST OF WEST EXPANSION JOINT	1863165.71	989296.675	95+45.27	28.2' RT
510	CUT "X" IN CURB AT INTERSECTION OF PARKING LOT AND ENTRANCE TO "EL RODEO" BAR/RESTAURANT AT SOUTH WEST CORNER OF INDIAN TRAIL AND RTE 25.	1863106.859	990171.06	104+20.66	80.7' RT
511	CUT "X" IN SIDEWALK AT SW CORNER OF INDIAN TRAIL AND RTE 25. EAST OF RR TRACKS WEST OF TRAFFIC SIGNAL POLE	1863143.698	990310.354	105+59.66	42.7' RT
512	CUT "X" IN SIDEWALK AT NORTH SIDE OF INDIAN TRAIL WEST OF RR TRACKS WEST OF TRAFFIC SIGNAL HAND HOLE	1863221.61	990219.005	104+67.71	34.5' LT

LINE TABLE

LINE	LENGTH	BEARING	BEGIN STA.	END STA.
L1	1331.46'	N83°56'43"E	80+00.00	93+31.46
L2	1116.25'	S89°33'8"E	95+91.58	107+07.83

CURVE TABLE

CURVE	C1
PI STA.	94+61.66
Δ	6°30'08"
D	2°29'59"
R	2,292.01'
T	130.20'
L2	260.11'
E	3.69'
P.C. STA.	93+31.46
P.T. STA.	95+91.58

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:00:13 PM
FILE NAME: 86110318-Align.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
PEN TABLE: standard-trans.tbl

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FILE NAME = 86110318-Align.dgn	DRAWN - WJH	REVISED -
PLOT SCALE = N.T.S.	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
ALIGNMENT AND TIES

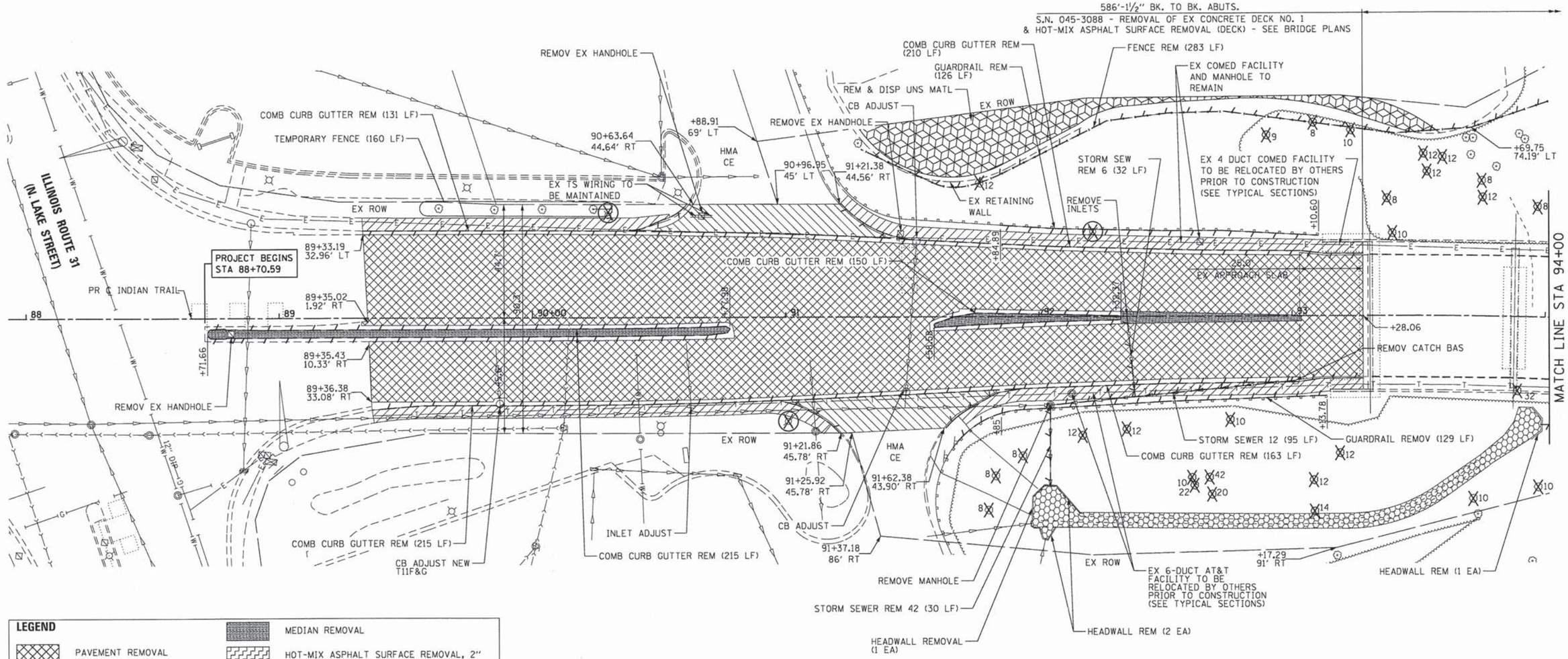
SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	13

CONTRACT NO. 63863

FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT

NOTE:
CONTRACTOR SHALL COORDINATE THE SALVAGE
OF LIGHTING UNITS WITH THE CITY OF AURORA.



LEGEND

- PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- PAVED DITCH REMOVAL
- MEDIAN REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- LINEAR REMOVAL ITEMS (COMB CURB GUTTER REM, STORM SEWER REM, & GUARDRAIL REMOV)
- TREE REMOVAL (WITH UNITS) (12)
- REMOVAL OF LIGHTING UNIT, SALVAGE
- REMOVAL OF LIGHTING UNIT, SALVAGE & REMOVAL OF POLE FOUNDATION

20 0 20 40
SCALE IN FEET

N

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Kraft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:00:56 PM
FILE NAME: 86110318-rem-01.dgn
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PEN TABLE: standard-trans.tbl

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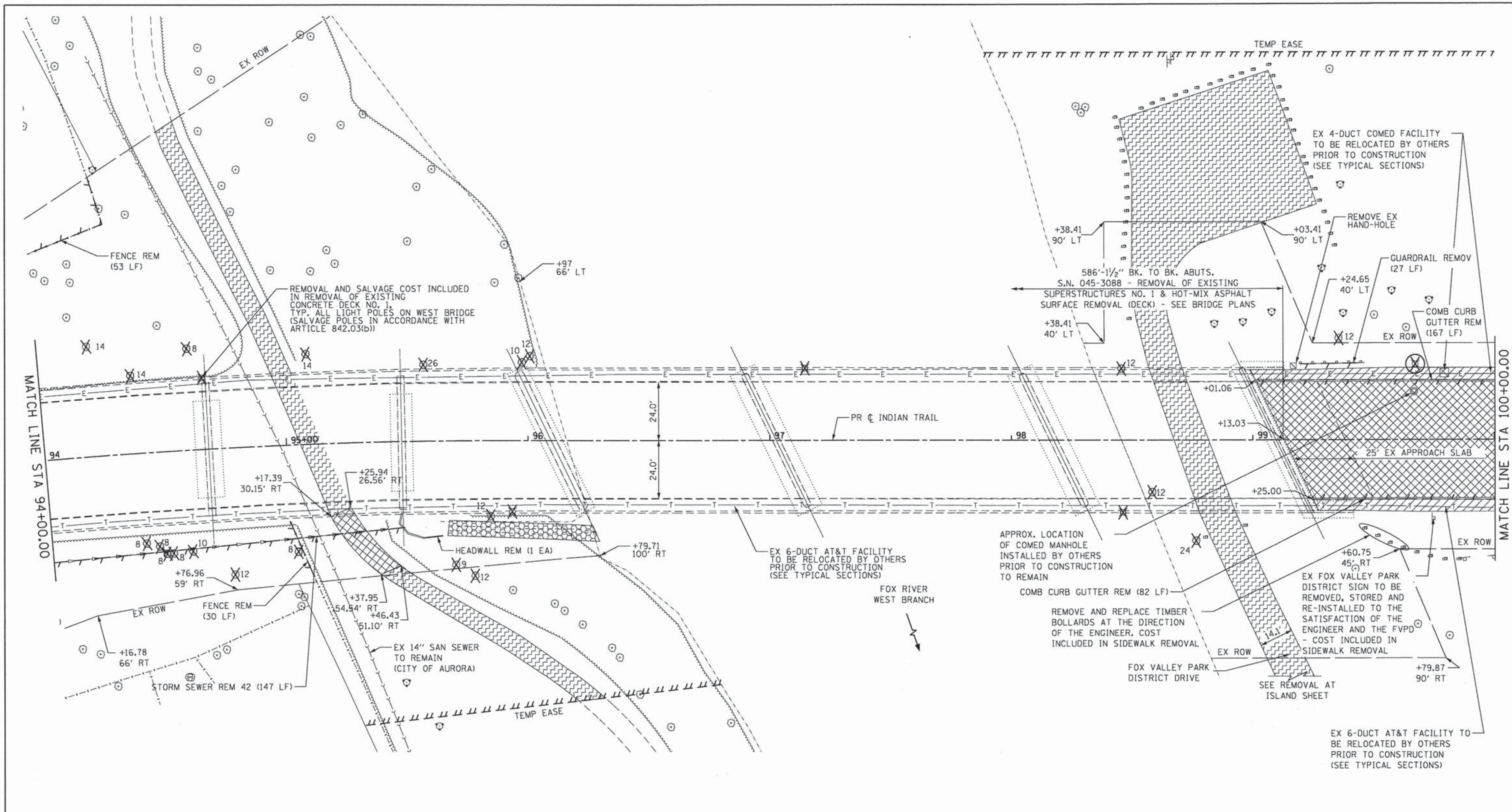
PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
REMOVAL PLAN

SCALE: | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	14
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		



LEGEND

Symbol	Description	Symbol	Description
	PAVEMENT REMOVAL		MEDIAN REMOVAL
			HOT-MIX ASPHALT SURFACE REMOVAL, 2"
	SIDEWALK REMOVAL		LINEAR REMOVAL ITEMS (COMB CURB GUTTER REM, STORM SEWER REM, & GUARDRAIL REMOV)
	DRIVEWAY PAVEMENT REMOVAL		TREE REMOVAL (WITH UNITS) / REMOVAL OF LIGHTING UNIT, SALVAGE
	PAVED DITCH REMOVAL		REMOVAL OF LIGHTING UNIT, SALVAGE & REMOVAL OF POLE FOUNDATION

COMPANY NAME:
PROJECT CONTACT: Kevin M. Artt
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:01:40 PM
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PLOT DRIVER: pdf.DET-11ff.plt
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PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

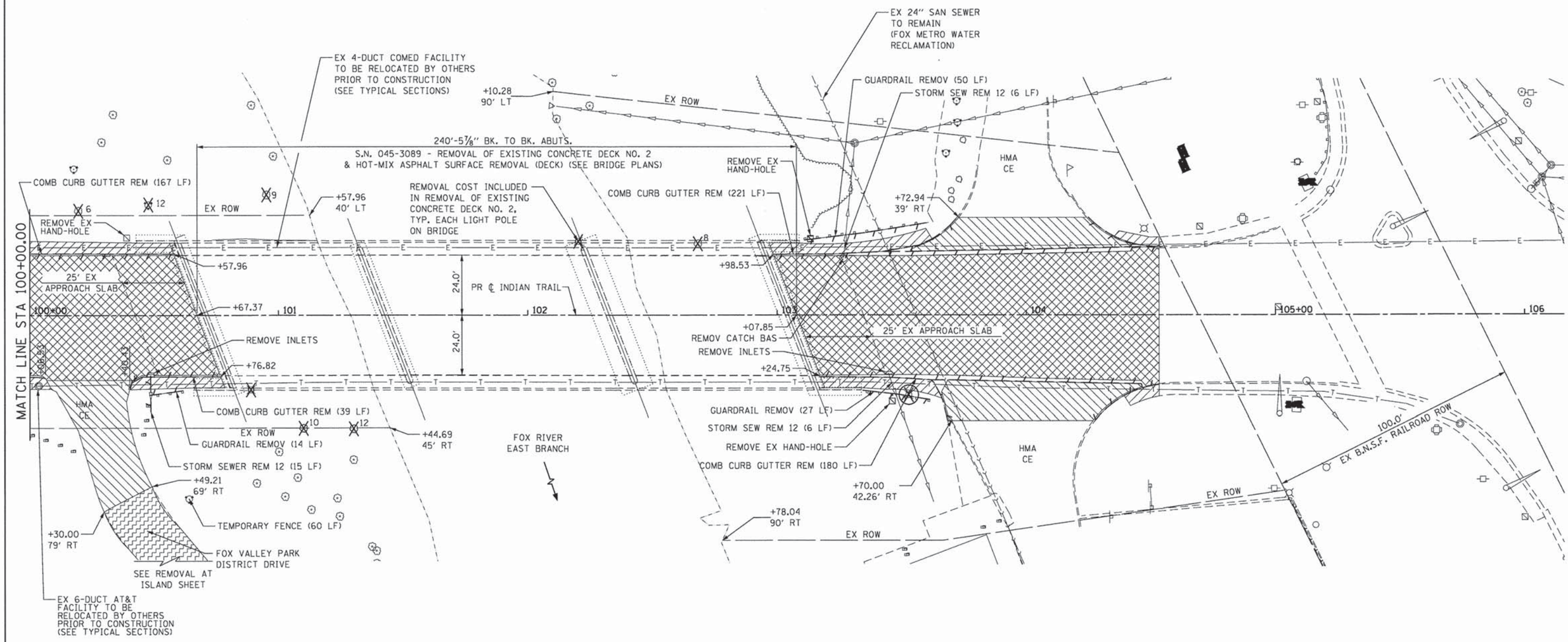
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
REMOVAL PLAN

SCALE: | SHEET NO. 2 OF 4 SHEETS | STA. TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	15

CONTRACT NO. 63863

FED. ROAD DIST. NO. 2 ILLINOIS FED. AID PROJECT



LEGEND

- PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- PAVED DITCH REMOVAL
- MEDIAN REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- LINEAR REMOVAL ITEMS (COMB CURB GUTTER REM, STORM SEWER REM, & GUARDRAIL REMOV)
- TREE REMOVAL (WITH UNITS) (12)
- REMOVAL OF LIGHTING UNIT, SALVAGE
- REMOVAL OF LIGHTING UNIT, SALVAGE & REMOVAL OF POLE FOUNDATION

N

20 0 20 40
SCALE IN FEET

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 10:30:07 PM
FILE NAME: 86110318-rem-03.dgn
PLOT DRIVER: pdf_DET-11FT.plt
PEN TABLE: standard-trans.tbl

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PLOT SCALE =	CHECKED - RGD	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
REMOVAL PLAN

SCALE: | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	16
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

SEE LEFT

+88.90
160' LT

+06.60
152.31' LT

TEMP EASE

+46.94
160' LT

65.0'

58.7'

+44.79
132.26' LT

EX CONC STOP BUMPERS SHALL BE REMOVED, STORED AND RE-INSTALLED AT THE DIRECTION OF THE ENGINEER. COST INCLUDED IN HOT-MIX ASPHALT SURFACE REMOVAL, 2". STOP BUMPERS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

+26.48
97.11' LT

+38.41
90' LT

+03.41
90' LT

+24.65
40' LT

+38.41
40' LT

EXIST. ROW

EXIST. ROW

+57.96
40' LT

+01.06

+57.96

PR ℄ INDIAN TRAIL

+13.03

98 | 99 | 100+00 | 101

+67.37

+25.00

+06.53

+40.43

+76.82

HMA
CB

+60.75
45' RT

EXIST. ROW

+44.69
45' RT

FOX VALLEY PARK
DISTRICT DRIVE

FOX RIVER
WEST BRANCH

+49.21
69' RT

+30.00
79' RT

+79.87
90' RT

EXIST. ROW

FOX VALLEY PARK
DISTRICT DRIVE

141'

219.8'

FOX RIVER
EAST BRANCH

SEE RIGHT

+45.83
250' RT

TEMP EASE

+17.17
250' RT

N

20 0 20 40
SCALE IN FEET

NOTES:
SEE PREVIOUS SHEET FOR ADDITIONAL INFORMATION.

LEGEND

- PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- PAVED DITCH REMOVAL
- MEDIAN REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 2"
- LINEAR REMOVAL ITEMS (COMB CURB GUTTER REM, STORM SEWER REM, & GUARDRAIL REMOV)
- TREE REMOVAL (WITH UNITS) 12
- REMOVAL OF LIGHTING UNIT, NO SALVAGE
- REMOVAL OF LIGHTING UNIT, NO SALVAGE & REMOVAL OF POLE FOUNDATION

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 9/4/2013 11:56:40 AM
FILE NAME: 86110318-rem-04.dgn
PLOT DRIVER: pdf.DET-11ff.plt
PEN TABLE: standard-trans.tbl

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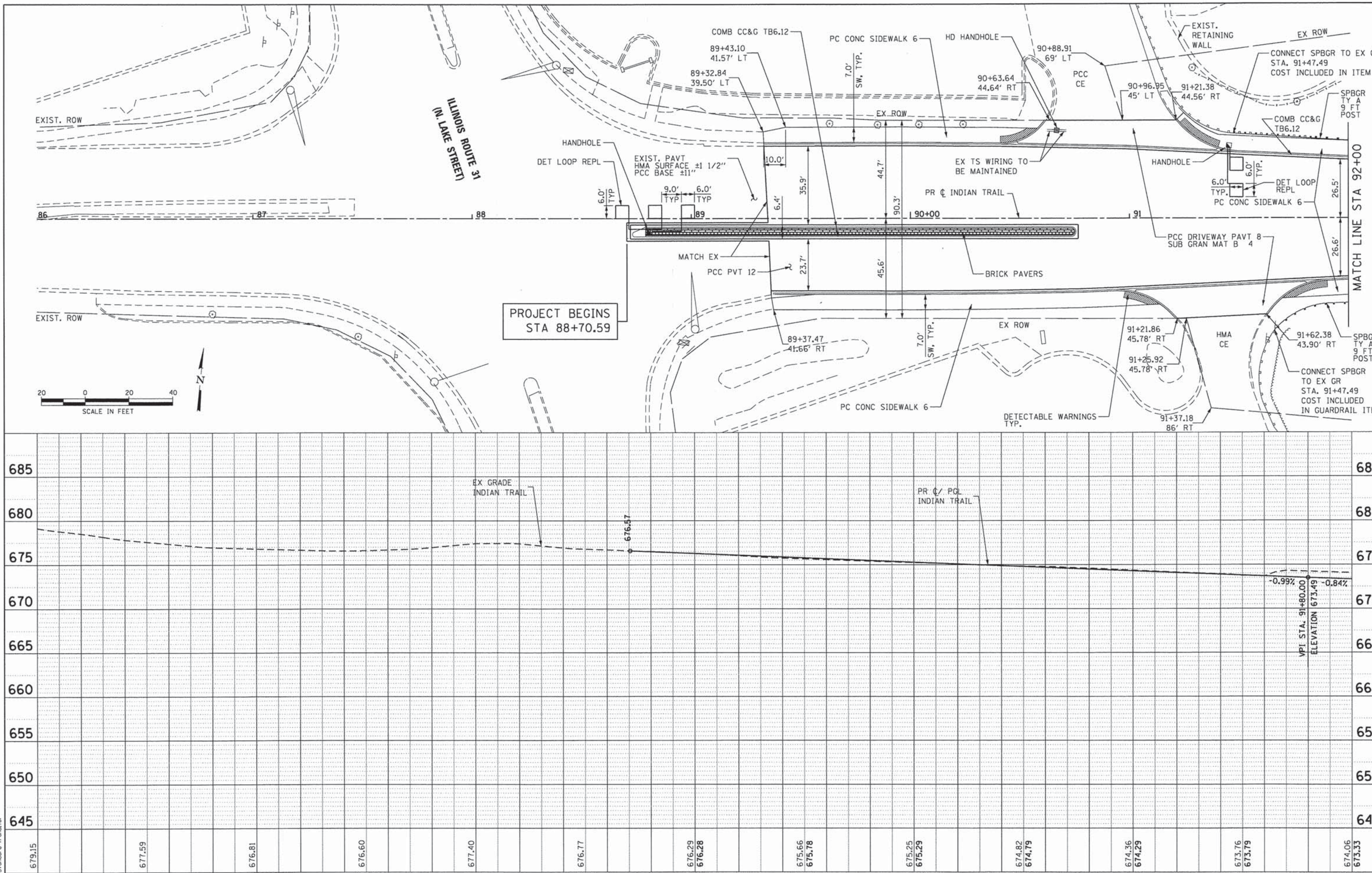
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
REMOVAL AT ISLAND

SCALE: | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	17
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		



COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 6:04:28 PM
DATE PLOTTED: 86110318-pnp-01.dgn
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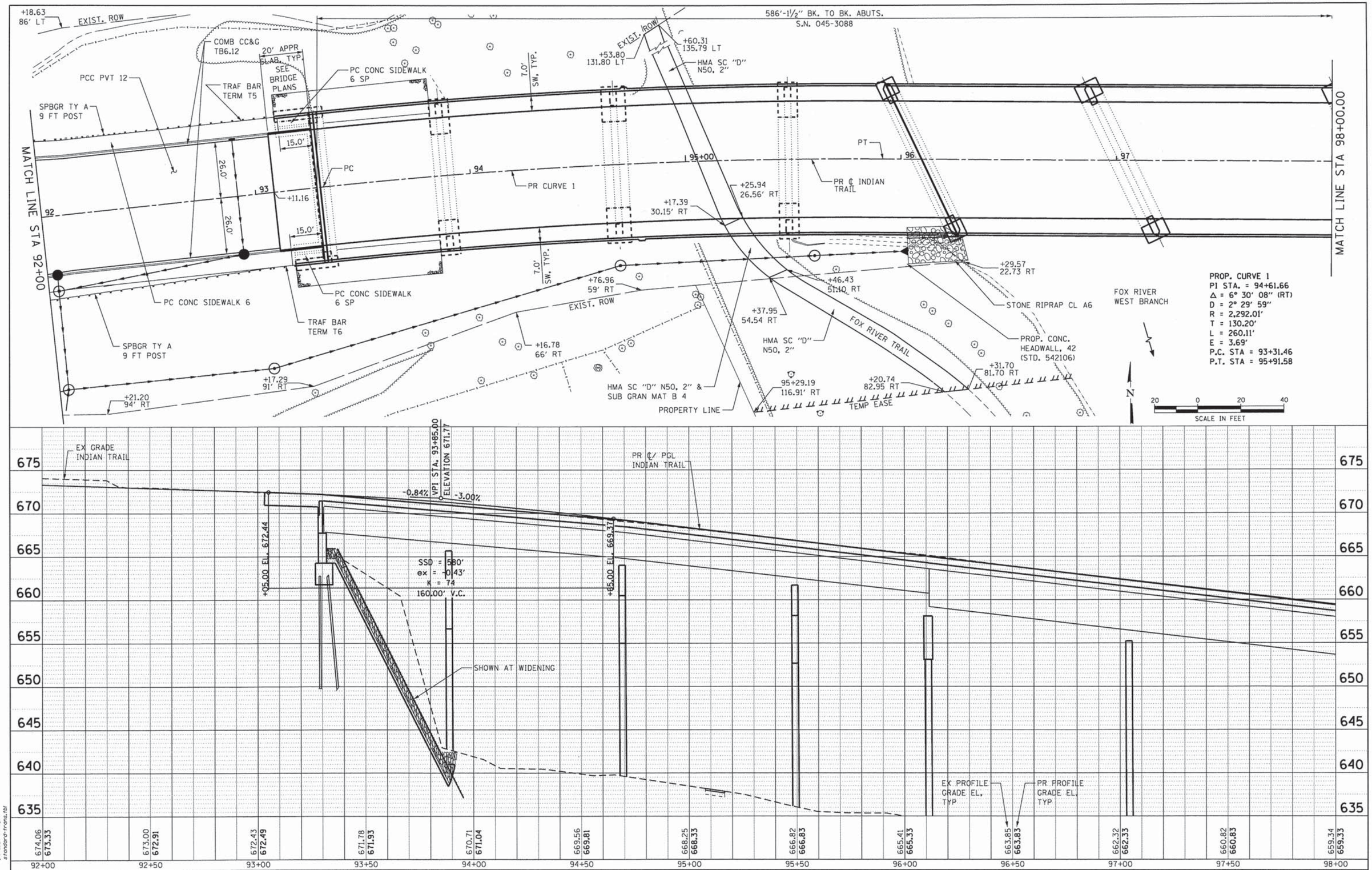
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
PLAN AND PROFILE

SCALE: 1"=20' | SHEET NO. 1 OF 5 SHEETS | STA. 86+00 TO STA. 92+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	18
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT	$FEDPROJNO$	



COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:05:31 PM
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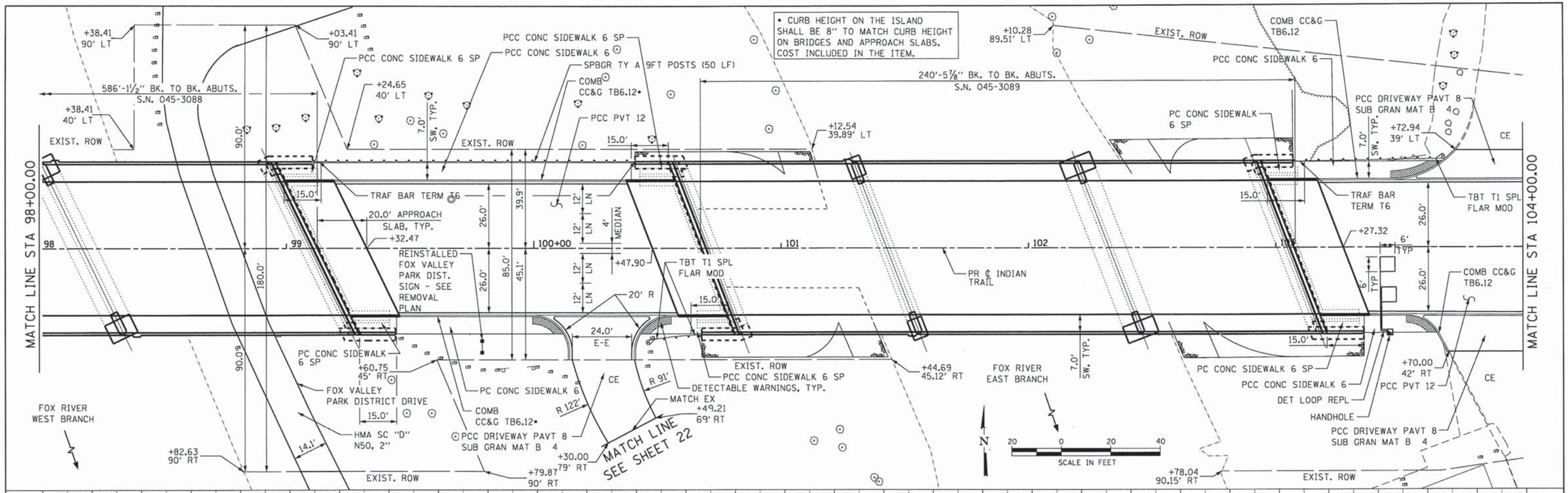
PLOT SCALE = 1'=20'	CHECKED - RDG	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
PLAN AND PROFILE

SCALE: 1"=20' | SHEET NO. 2 OF 5 SHEETS | STA. 92+00 TO STA. 98+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	19
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT	⊕FEDPROJNO⊕	



COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:06:06 PM
FILE NAME: 86110318-pnp-03.dgn
PLOT DRIVER: pdf_DET-11ff.plt
PEN TABLE: standard-trans.tbl

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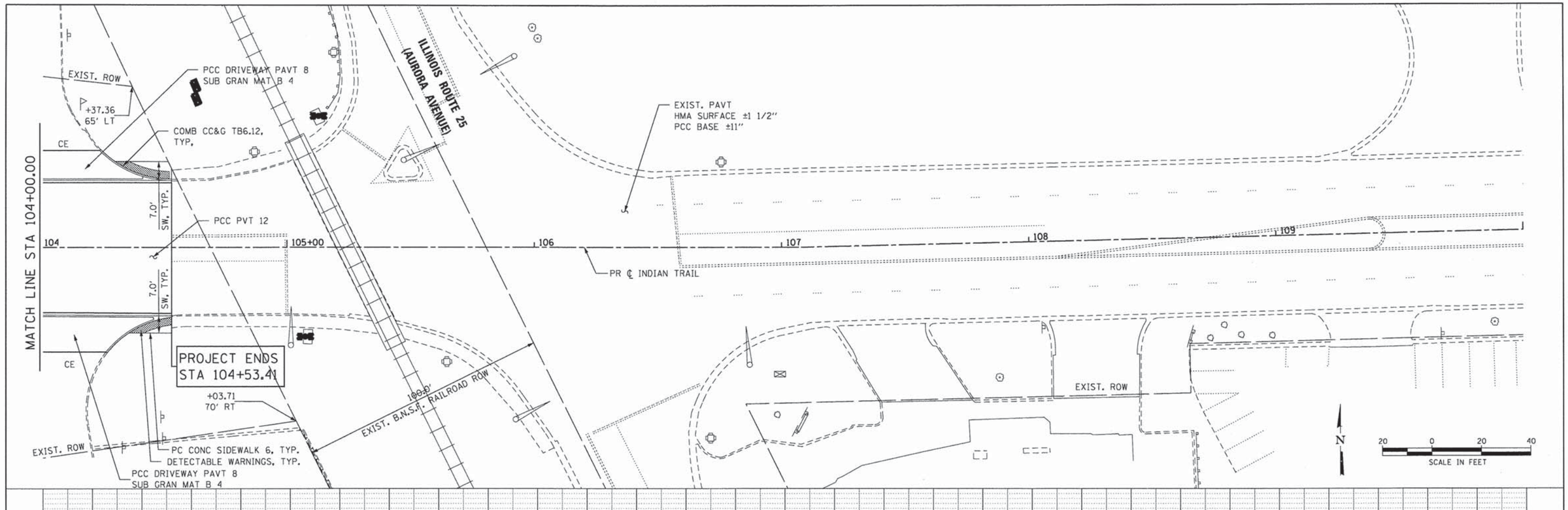
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

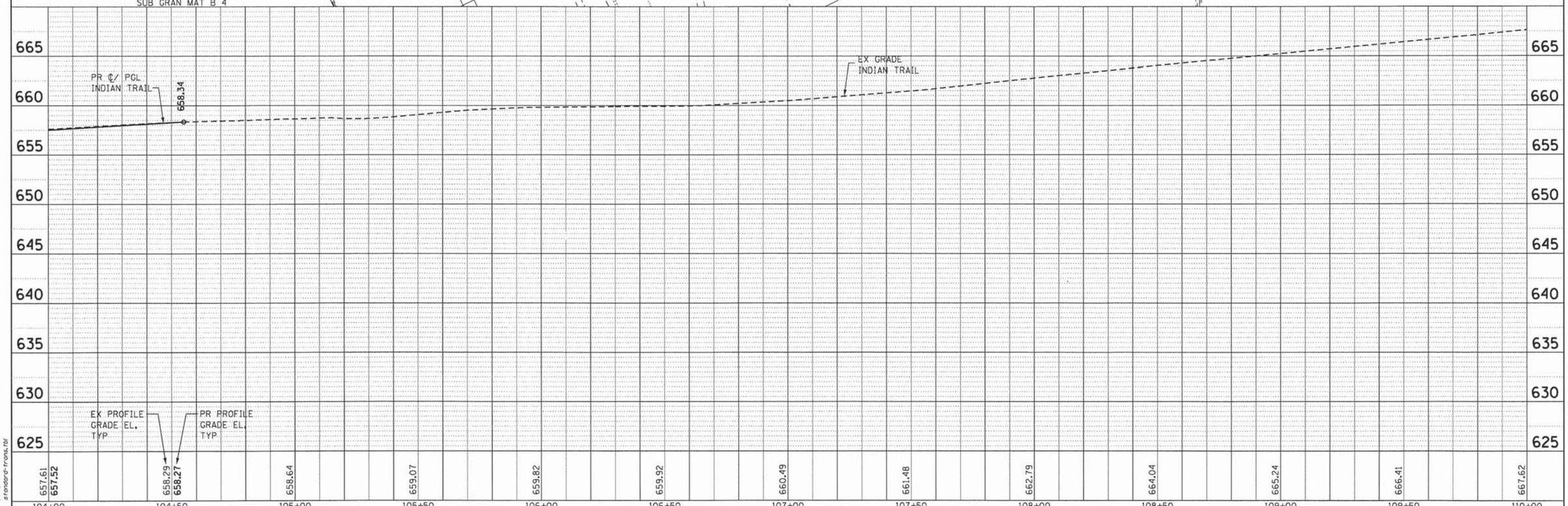
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
PLAN AND PROFILE

SCALE: 1"=20' | SHEET NO. 3 OF 5 SHEETS | STA. 98+00 TO STA. 104+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	20
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT	$FEDPROJNO$	





COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 8:32:40 PM
FILE NAME: 86110318-pnp-04.dgn
PLOT SCALE: 1"=20'
PEN TABLE: standard-trans.tbl

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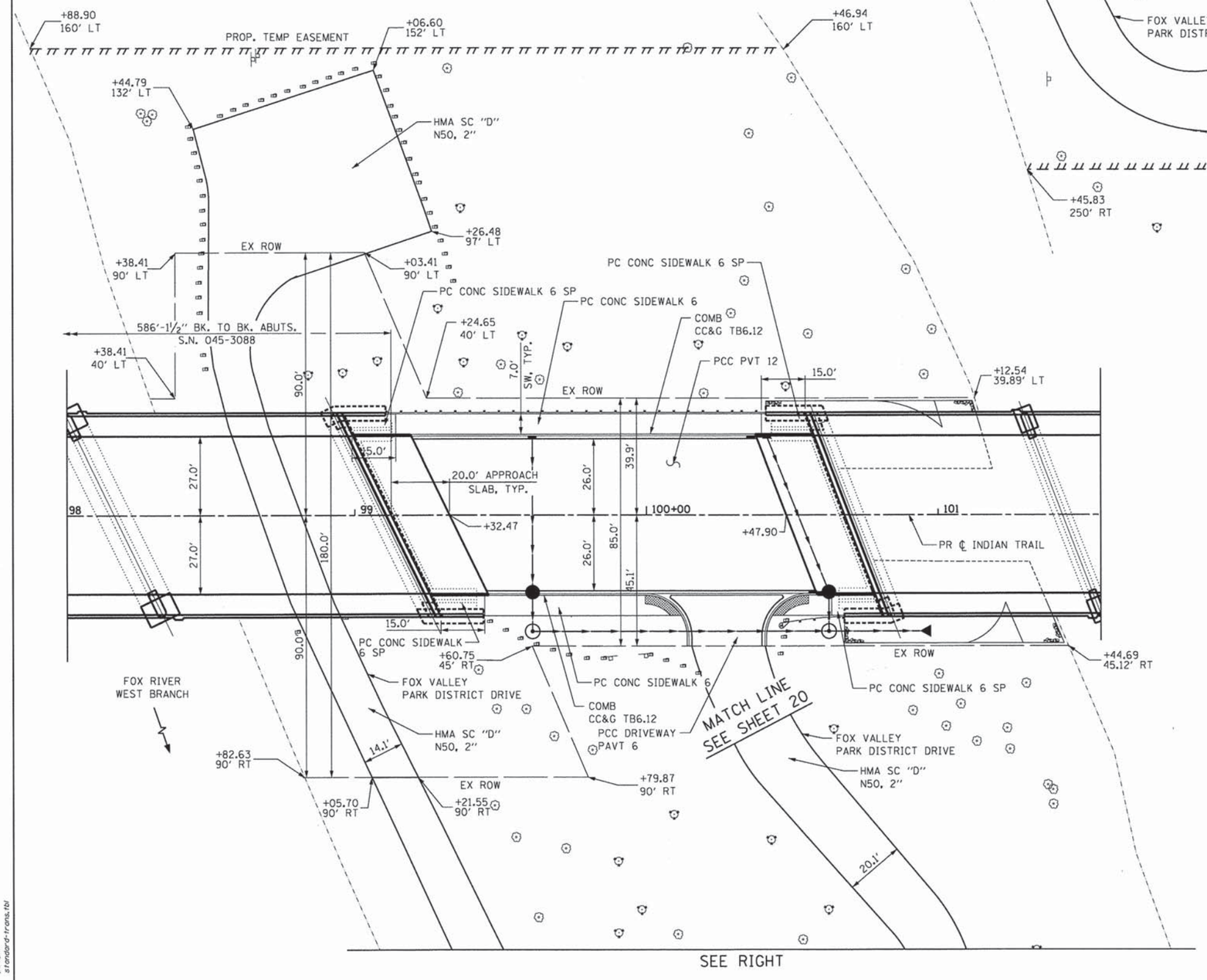
FILE NAME = 86110318-pnp-04.dgn	DRAWN - WJH	REVISED -
PLOT SCALE = 1"=20'	CHECKED - RDG	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

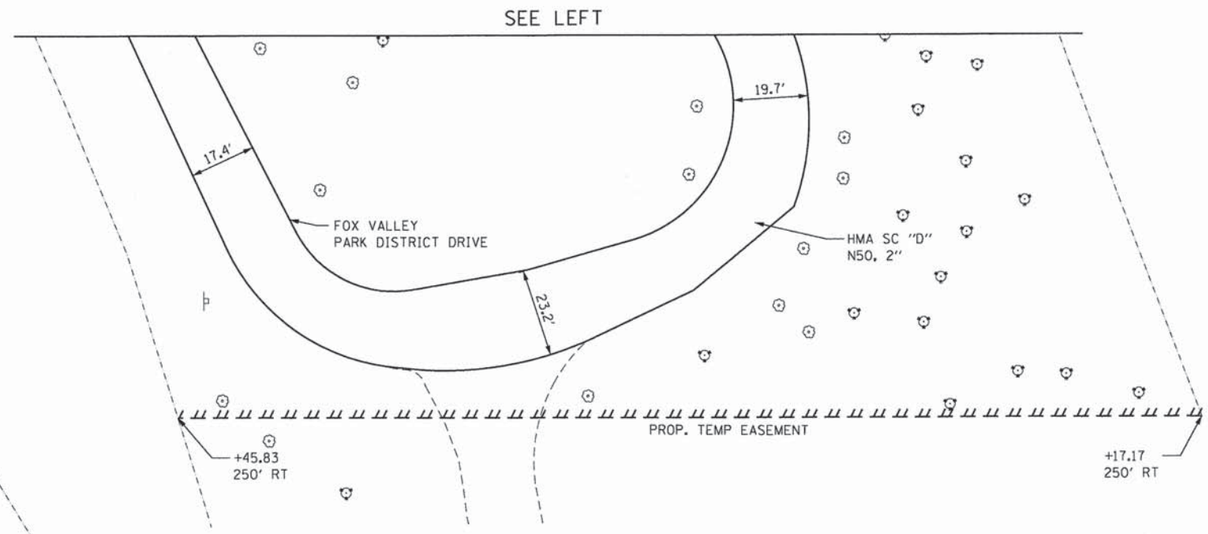
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

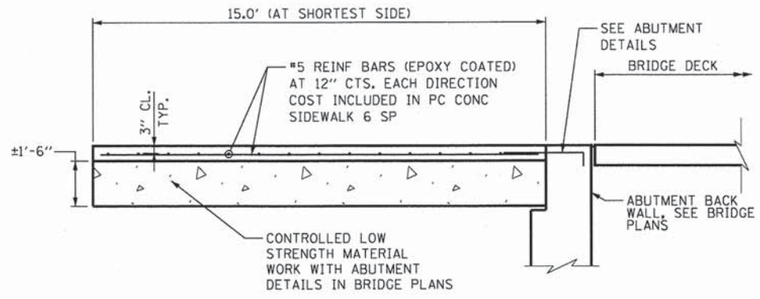
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
PLAN AND PROFILE

SCALE: 1"=20' | SHEET NO. 4 OF 5 SHEETS | STA. 104+00 TO STA. 110+00

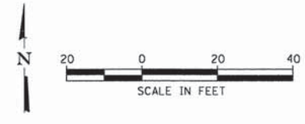
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	21
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT	$FEDPROJNO$	







SECTION THRU
PC CONC SIDEWALK 6 SP



COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arff
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 8:13:26 PM
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USER NAME = whood	DESIGNED - KMA	REVISED -	
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PLOT SCALE = 1'=20'	CHECKED - RDG	REVISED -	
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
ISLAND PLAN

SCALE: 1"=20' | SHEET NO. 5 OF 5 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	22
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

TEMPORARY DETOUR GENERAL NOTES

1. THE CONTRACTOR SHALL CONTACT THE DISTRICT ONE ARTERIAL TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.

2. THE ROAD SHALL NOT BE CLOSED UNTIL ALL SIGNING HAS BEEN ERECTED IN ACCORDANCE WITH THE DETOUR PLAN.

3. THE ENGINEER, CITY OF AURORA POLICE DEPARTMENT AND ILLINOIS DEPARTMENT OF TRANSPORTATION SHALL BE NOTIFIED IN WRITING AT LEAST TWO WEEKS PRIOR TO THE DAY THE DETOUR IS TO BE IN EFFECT. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.

4. ALL SIGNING SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE STATE OF ILLINOIS "STANDARD SPECIFICATIONS FOR ROAD AND AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2012. THE DETAILS IN THESE PLANS, THE LATEST EDITION OF THE STATE OF ILLINOIS "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES," AND AS DIRECTED BY THE ENGINEER.

5. THE SIZES OF ALL SIGNS NOT SPECIFIED IN THESE PLANS SHALL BE AS REQUIRED BY THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICE.

6. ADDITIONAL SIGNING AND/OR BARRICADES DEEMED NECESSARY BY THE ENGINEER SHALL BE PROVIDED AND INSTALLED AT NO ADDITIONAL COST.

7. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH THE NAMES AND PHONE NUMBERS OF HIS REPRESENTATIVES ON THE CONSTRUCTION SITE, (INCLUDING A 24-HR EMERGENCY NUMBER) AND HIS REPRESENTATIVES SHALL BE RESPONSIBLE FOR THE DETOUR SIGNING, PRIOR TO THE START OF WORK AT THE PRECONSTRUCTION CONFERENCE.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD LOCATION OF ALL DETOUR AND CONSTRUCTION SIGNING. THE CONTRACTOR MAY REQUEST THE ENGINEER TO FIELD VERIFY THE POSITIONS OF ANY SIGNS.

9. ALL EXISTING SIGNING THAT IS NOT APPLICABLE WITH THE DETOUR IN EFFECT SHALL BE COMPLETELY COVERED BY THE CONTRACTOR IN A MANNER MEETING THE APPROVAL OF THE ENGINEER.

10. ALL DETOUR SIGNING SHALL BE POST MOUNTED.

11. ALL DETOUR SIGNING EXCEPT REGULATORY SIGNS SHALL HAVE BLACK LEGENDS ON FLUORESCENT ORANGE SHEETING AND STANDARD BLACK BORDERS. THE FLUORESCENT ORANGE REFLECTIVE SHEETING SHALL MEET THE REQUIREMENTS OF ARTICLE 1084.02 OF THE STANDARD SPECIFICATIONS. ALL DETOUR SIGNING SHALL BE NEW OR IN LIKE-NEW CONDITION. THE ENGINEER SHALL BE THE SOLE JUDGE OF THE CONDITION OF THE SIGNS.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL BARRICADES, SIGNS, LIGHTS, AND OTHER DEVICES INSTALLED BY HIM ARE IN PLACE AND OPERATING 24 HOURS EACH DAY, INCLUDING SUNDAYS AND HOLIDAYS.

13. THE "ROAD CLOSED" (R11-2 SIGN SHALL BE MOUNTED ABOVE THE TOPS OF THE TYPE III BARRICADES. ALL TYPE III BARRICADES SHALL HAVE TWO AMBER TYPE A-LOW INTENSITY FLASHING LIGHTS SPACED NEAR THE CENTERLINES OF THE SUPPORTS.

14. THE TYPE III BARRICADES USED AT POINTS OF CLOSURE TO THRU TRAFFIC ONLY SHALL NOT EXCEED 8 FEET IN WIDTH EACH FOR A SINGLE APPROACH LANE. ALL BARRICADES AT THESE LOCATIONS SHALL HAVE REFLECTORIZED STRIPING ON THE BACK SIDES OF THE BARRICADES.

15. CONSTRUCTION EQUIPMENT SHALL NOT BE PARKED IMMEDIATELY BEHIND THE TYPE III BARRICADES DURING NON-WORKING HOURS. IN ANY EVENT ARTICLE 701.04 OF THE STANDARDS SPECIFICATIONS SHALL APPLY.

16. DURING NON-WORKING HOURS THE CONTRACTOR SHALL PROVIDE A MEANS TO RESTRAIN THE TYPE III BARRICADES FROM EASY MOVEMENT BY VANDALS. THE CHOSEN METHOD SHALL BE APPROVED BY THE ENGINEER.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE VISIBILITY OF ALL DETOUR AND CONSTRUCTION SIGNS, INCLUDING CUTTING BACK VEGETATION IF DEEMED NECESSARY BY THE ENGINEER. COST INCLUDED IN "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)."

18. THE ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS BEFORE THE ROAD IS TO BE REOPENED TO TRAFFIC. THE ENGINEER WILL CONTACT THE APPROPRIATE LOCAL AGENCIES AND INTERESTED PARTIES.

19. ALL WORK REQUIRED FOR DETOUR SIGNING SHALL BE PAID FOR AS "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)."

20. SIDEWALK CLOSED SIGNS SHALL BE PLACED AT ALL FOUR QUADRANTS OF EXISTING BRIDGES. COST INCLUDED IN "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)."

21. INFO SIGNS

22. ALL "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE EQUIPPED WITH MONO-DIRECTIONAL AMBER FLASHING LIGHTS.

23. EXISTING TRAFFIC CONTROL DEVICES WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGED SIGNS CAUSED BY HIS WORK SHALL BE REPLACED BY THE CONTRACTOR.

24. THE CONTRACTOR SHALL FURNISH, PLACE, AND MAINTAIN SIX (6) CHANGEABLE MESSAGE SIGNS. EXACT SIGN LOCATIONS SHALL BE DETERMINED BY THE ENGINEER (SEE DETOUR MAP FOR APPROXIMATE LOCATIONS). TWO WEEKS PRIOR TO THE CONTRACTOR BEGINNING ANY WORK THE SIGNS SHALL BE ACTIVATED AND NOTE THE DATE CONSTRUCTION BEGINS AND THAT DELAYS CAN BE EXPECTED. THE SIGN MESSAGES SHALL BE MODIFIED THROUGHOUT THE PROJECT TO ALERT THE TRAVELING PUBLIC WHEN SIGNIFICANT CHANGES OCCUR (LANE CLOSURES, NEW LANE CONFIGURATION, ETC.).

25. EXISTING OR PROPOSED TRAFFIC SIGNS CONFLICTING WITH THE TEMPORARY TRAFFIC CONTROL SHALL BE TEMPORARILY REMOVED OR COVERED AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)."

COMPANY NAME: Kevin M. Arff
PROJECT CONTACT: City of Aurora
CLIENT:
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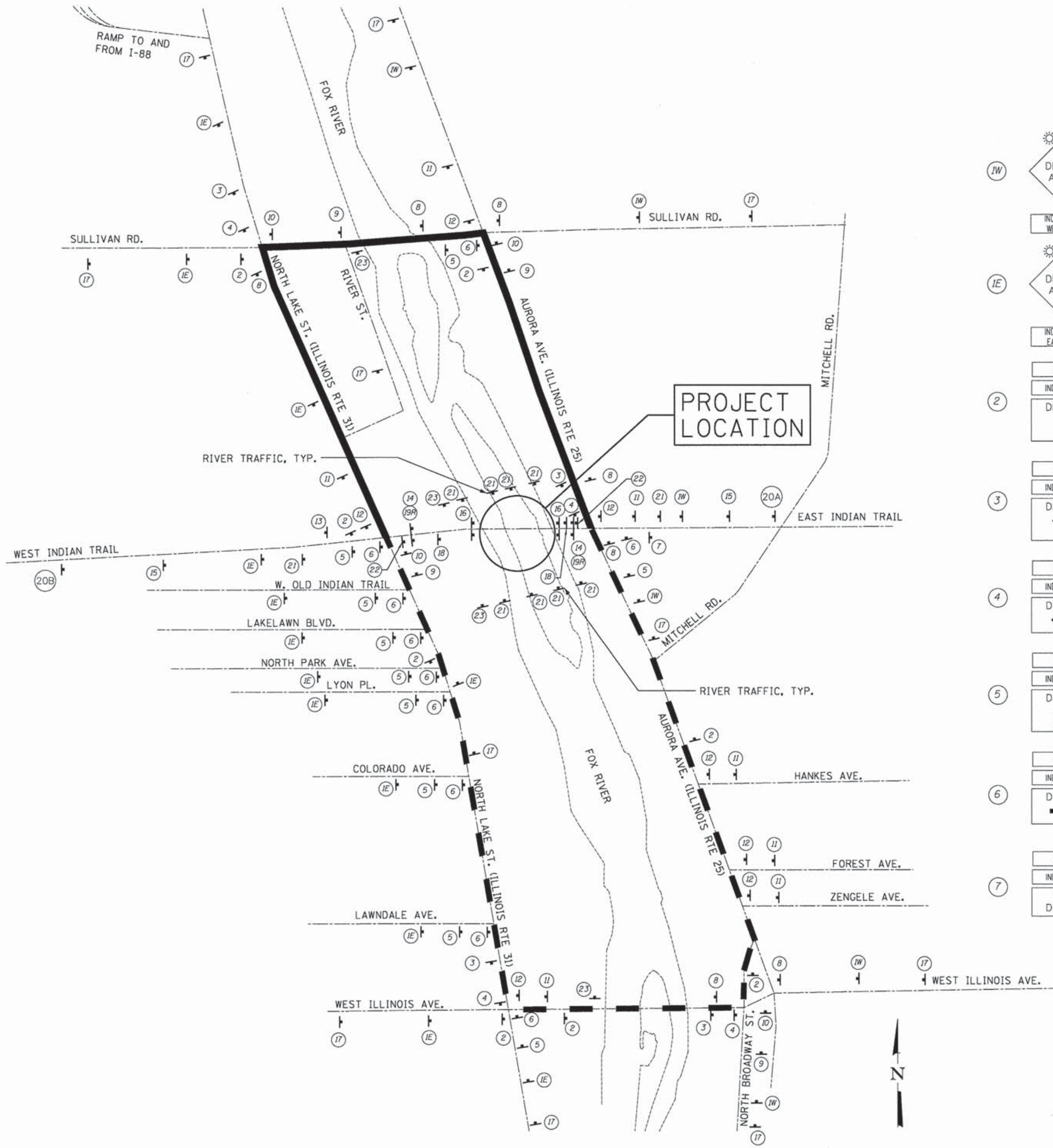
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
TEMPORARY DETOUR NOTES

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	23
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		



SIGN LEGEND

Sign	Legend	Code
(IW)	DETOUR AHEAD / INDIAN TRAIL WESTBOUND	W20-2-4848 / SPECIAL
(IE)	DETOUR AHEAD / INDIAN TRAIL EASTBOUND	W20-2-4848 / SPECIAL
(2)	EAST / INDIAN TRAIL / DETOUR ↑	M3-1-219 / SPECIAL / M4-9-3030
(3)	EAST / INDIAN TRAIL / DETOUR ↰	M3-1-219 / SPECIAL / M4-9L-3030
(4)	EAST / INDIAN TRAIL / DETOUR ←	M3-1-219 / SPECIAL / M4-9L-3030
(5)	EAST / INDIAN TRAIL / DETOUR ↱	M3-1-219 / SPECIAL / M4-9R-3030
(6)	EAST / INDIAN TRAIL / DETOUR →	M3-1-219 / SPECIAL / M4-9R-3024
(7)	EAST / INDIAN TRAIL / END DETOUR	M3-1-219 / SPECIAL / M4-8A-2418
(8)	WEST / INDIAN TRAIL / DETOUR ↑	M3-3-219 / SPECIAL / M4-9-3030
(9)	WEST / INDIAN TRAIL / DETOUR ↰	M3-3-219 / SPECIAL / M4-9L-3030
(10)	WEST / INDIAN TRAIL / DETOUR ←	M3-3-219 / SPECIAL / M4-9L-3030
(11)	WEST / INDIAN TRAIL / DETOUR ↱	M3-3-219 / SPECIAL / M4-9R-3030
(12)	WEST / INDIAN TRAIL / DETOUR →	M3-3-219 / SPECIAL / M4-9R-3024
(13)	WEST / INDIAN TRAIL / END DETOUR	M3-3-219 / SPECIAL / M4-8A-2418
(14)	ROAD CLOSED TO THRU TRAFFIC	R11-4-6030
(15)	ROAD CLOSED AHEAD	W20-3-4848
(16)	ROAD CLOSED	R-11-2-4830 (TYPE III BARRICADE)
(17)	INDIAN TRAIL BRIDGES CLOSED / FOLLOW DETOUR ROUTE / * EFFECTIVE [DATE]	INFO 60X30
(18)	ROAD CLOSED 500 FT	W20-3-4848
(19L)	← DETOUR	M4-10L-4818
(19R)	DETOUR →	M4-10R-4818
(20A)	EFFECTIVE [DATE] / INDIAN TRAIL CLOSED / ILLINOIS 25 TO ILLINOIS 31 / USE SULLIVAN ROAD OR ILLINOIS AVENUE	INFO 60X30
(20B)	EFFECTIVE [DATE] / INDIAN TRAIL CLOSED / ILLINOIS 31 TO ILLINOIS 25 / USE SULLIVAN ROAD OR ILLINOIS AVENUE	INFO 60X30
** (21)	BRIDGE CONSTRUCTION AHEAD	SPECIAL 4848
(22)	INDIAN TRAIL BRIDGES REHABILITATION PROJECT / AURORA / DECK REPLACEMENT AND BRIDGE WIDENING / PARDON THE INCONVENIENCE	INFO 60X48
** (23)	FOX RIVER TRAIL CLOSED AT INDIAN TRAIL [DATE] TO [DATE]	INFO 60X30

* USE "EFFECTIVE DATE" PANEL PRIOR TO CONSTRUCTION. REMOVE "EFFECTIVE DATE" PANEL AT START OF CONSTRUCTION TO REVEAL "FOLLOW DETOUR ROUTE"

** SIGNS FOR RIVER TRAFFIC AND TRAIL TRAFFIC MUST BE LOCATED ON PUBLICLY OWNED GROUND, CITY OF AURORA RIGHT OF WAY OR WITHIN THE TEMPORARY CONSTRUCTION EASEMENTS

SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL AND PROTECTION (SPECIAL)

LEGEND

- WESTBOUND DETOUR ROUTE (solid line)
- EASTBOUND DETOUR ROUTE (dashed line)

COMPANY NAME:
PROJECT CONTACT: Kevin M. Artt
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:10:41 PM
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PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

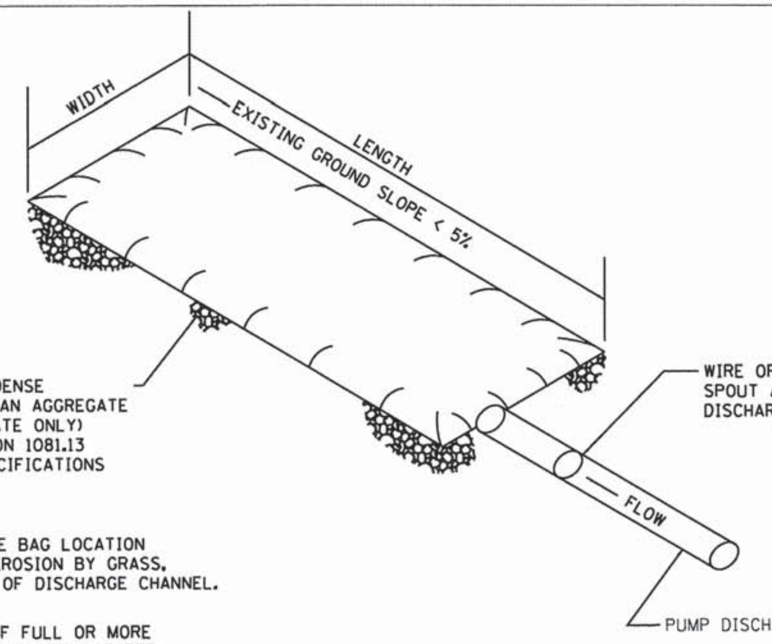
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
TEMPORARY DETOUR PLAN

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	24
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL ERECT A TEMPORARY FENCE AROUND ALL TREES WITHIN THE CONSTRUCTION AREA TO ESTABLISH A "TREE PROTECTION ZONE" BEFORE ANY WORK BEGINS OR ANY MATERIAL IS DELIVERED TO THE JOB SITE. NO WORK IS TO BE PREFORMED (OTHER THAN TREE ROOT PRUNNING). MATERIALS STORED OR VEHICLES DRIVEN OR PARKED WITHIN THE "TREE PROTECTION ZONE". REMOVE PROTECTIVE TEMPORARY FENCE ONLY AFTER ALL CONSTRUCTION WORK HAS BEEN COMPLETED.
2. THE CONTRACTOR WILL BE REQUIRED TO IMPLEMENT AND MAINTAIN EROSION CONTROL MEASURES PRIOR TO START OF ANY EXCAVATIONS.
3. STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.
4. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO PREVENT POLLUTION OF STORM WATER AND SHALL FOLLOW IEPA & IDOT CONSTRUCTION MEMORANDUM NO. 95-60.
5. STABILIZATION MEASURES SHALL BE INITIATED WITHIN 7 DAYS OF CONSTRUCTION ACTIVITY TEMPORARILY OR PERMANENTLY CEASING IN AREAS WHERE IT WILL NOT OCCUR FOR A PERIOD OF 14 OR MORE CALENDAR DAYS.
6. THE SOIL AND WATER CONSERVATION DISTRICT MAY CONDUCT SITE VISITS AND VERIFY THAT THE PRACTICES ARE WORKING PROPERLY AND DETERMINE IF ADDITIONAL PRACTICES ARE NEEDED FOR BETTER SOIL EROSION AND SEDIMENT CONTROL. IF ADDITIONAL PRACTICES ARE DEEMED NECESSARY BY THE ENGINEER OR THE SWCD THE CONTRACTOR WILL IMPLEMENT THE PRACTICES IN A TIMELY MANNER.
7. THE KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND TWO WEEKS PRIOR TO FINAL INSPECTION.
8. THERE WILL BE NO IN-WATER WORK ALLOWED DURING THE TIME PERIOD INDICATED IN THE PERMITS IN THE SPECIAL PROVISIONS. WORKING IN THE DRY BEHIND COFFERDAMS OR ON DRY WORK PADS (IF REQUIRED) IS ACCEPTABLE DURING THIS TIME PERIOD.
9. IN THE EVENT THE CONTRACTOR REQUIRES TEMPORARY WORK ACCESS TO THE FOX RIVER TO PLACE TEMPORARY SHORING PLATFORMS, THE CONTRACTOR MUST CONTACT THE KANE - DUPAGE SOIL AND WATER CONSERVATION DISTRICT AND THE US ARMY CORP OF ENGINEERS TO CORDINATE EROSION AND SEDIMENT MEASURES. AT NO TIME WILL ACTIVE EXCAVATION BE ALLOWED IN THE RIVER, UNLESS AREA IS ISOLATED FROM FLOW AND DEWATERED.
10. THE PROJECT SITE SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
11. THE SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2 INCH OF RAIN OR MORE BY THE INDIVIDUAL ON SITE IN CHARGE OF SOIL EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT. THE ENGINEER WILL BE RESPONSIBLE FOR THE EROSION AND SEDIMENT CONTROL INSPECTIONS.
12. ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS. INSPECTED DAILY AND CLEANED WHEN NECESSARY OR DIRECTED BY THE ENGINEER.
13. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM IDOT STANDARD SPECIFICATIONS AND THE LATEST EDITION OF THE ILLINOIS URBAN MANUAL.
14. ALL MATERIALS USED FOR TEMPORARY CONSTRUCTION ACTIVITIES WILL BE REMOVED TO UPLAND AREAS IMMEDIATELY FOLLOWING COMPLETION OF THE CONSTRUCTION ACTIVITY.
15. A STAMPED AND SIGNED COPY OF THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES AND BE PRESENTED WHEN REQUESTED BY KANE-DUPAGE SWCD, U.S. ARMY CORP OF ENGINEERS OR ANY OTHER AUTHORIZED AGENCY.
16. THE CONTRACTOR WILL BE REQUIRED TO HAVE A DESIGNATED CONCRETE WASH OUT AREA DURING ALL CONCRETE POURS.
17. THE CONTRACTOR MUST CONTACT ROBERT RUNG. IDNR, AT (630) 553-0164 PRIOR TO ANY DE-WATERING ACTIVITIES TO COORDINATE A BIOLOGIST TO BE ON SITE FOR THE RELOCATION OF ANY EXPOSED MUSSELS.
18. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY KANE - DUPAGE SOIL AND WATER CONSERVATION DISTRICT.
19. WORK WITHIN THE RIVER MUST BE TIMED TO TAKE PLACE DURING LOW OR NO-FLOW CONDITIONS. LOW FLOW CONDITIONS ARE FLOWS AT OR BELOW THE NORMAL WATER ELEVATION (EWSE) AS VERIFIED BY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE WATER ELEVATION INFORMATION TO THE ENGINEER.
20. THE COST FOR DE-WATERING SHALL BE INCLUDED IN THE COST OF "COFFERDAM (TYPE SPECIFIED) (LOCATION - SPECIFIED)" AS SHOWN IN THE COFFERDAM PLAN.
21. OTHER THAN TO INSTALL AND REMOVE THE COFFERDAMS, NO WORK SHALL BE PERFORMED IN FLOWING WATER. WORK IN AND NEAR FOX RIVER SHALL BE ISOLATED FROM RIVER FLOWS AND DE-WATERED PRIOR TO THE COMMENCEMENT OF WORK. THE DIVERSION/ISOLATION OF THE RIVER FLOWS MUST BE CONSTRUCTED FROM NON-ERODIBLE MATERIALS (STEEL SHEETS, AQUA BARRIERS, ETC.)
22. THE KANE - DUPAGE COUNTY SOIL AND WATER CONSERVATION DISTRICT AND THE ARMY CORPS OF ENGINEERS MUST BE IN AGREEMENT WITH METHOD OF DIVERSION/ISOLATION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ONCE WORK IN THIS AREA BEGINS, PRIORITY SHALL BE GIVEN TO THE COMPLETION OF THE WORK AND FINAL STABILIZATION OF ALL DISTURBED AREAS.
23. IF BYPASS PUMPING IS NECESSARY, THE OUTLET SHALL BE PLACED ON A NON-ERODIBLE, ENERGY DISSIPATING SURFACE PRIOR TO REJOINING THE RIVER FLOW.
24. WHEN DEWATERING THE CONSTRUCTION AREA, ALL WATER MUST BE FILTERED PRIOR TO REJOINING THE RIVER FLOW. DE-WATERING METHODS SHALL BE CHOSEN BASED ON SITE CONDITIONS, CONSTRAINTS AND SEDIMENT LOADS.
25. NO EQUIPMENT IS ALLOWED TO OPERATE IN THE WATER OR ON THE STREAM BED. IF EQUIPMENT IS NEEDED TO OPERATE IN THE WATER OR ON THE STREAM BED TO CONSTRUCT A DIVERSION OR PERMANENT IMPROVEMENTS, A TEMPORARY IN-STREAM WORK PAD (IN-STREAM ACCESS) MAY BE USED, AND SHALL CONFORM TO CHECK SHEET #8 OF THE RECURRING SPECIAL PROVISIONS AND REQUIREMENTS OF THE ACOE AND IDNR. IF THE CONTRACTOR DETERMINES A TEMPORARY IN-STREAM WORK PAD IS NEEDED, THE CONTRACTOR SHALL PROVIDE A PLAN AND DETAILS OF THE WORK PAD TO ACOE AND FOR IDNR APPROVAL PRIOR TO CONSTRUCTION. PAYMENT FOR THIS WORK SHALL BE ACCORDING TO CHECK SHEET #8 OF THE RECURRING SPECIAL PROVISIONS. SEE BRIDGE PLANS FOR ADDITIONAL INFORMATION.
26. THE CONTRACTOR IS NOT PERMITTED TO ALLOW THE EXISTING STRUCTURE, OR OTHER CONSTRUCTION DEBRIS TO FALL INTO THE RIVER DURING DEMOLITION OR CONSTRUCTION.
27. THE CONDITION OF THE SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING. THE COST OF STABILIZATION SHALL BE INCLUDED IN THE CONTRACT.
28. WORK THE EROSION CONTROL NOTES AND DETAILS WITH THE COFFERDAM PLANS IN THE BRIDGE DRAWINGS AND THE CONSTRUCTION DETAILS.
29. SOIL AND MATERIAL STOCKPILES MAY NOT BE LOCATED WITHIN THE FLOODPLAIN.
30. IN-STREAM ACCESS AREAS, IF UTILIZED, SHALL BE INSPECTED AT THE END OF EACH WORK DAY AND ALL DEBRIS, STOCKPILES OR FUEL CANS REMOVED.



PLACE FILTERBAG ON DENSE MATURE GRASS OR ON AN AGGREGATE BASE (COARSE AGGREGATE ONLY) CONFORMING TO SECTION 1081.13 OF THE STANDARD SPECIFICATIONS

ENSURE THAT RUNOFF FROM THE BAG LOCATION IS PREVENTED FROM CAUSING EROSION BY GRASS, STONE, OR GEOTEXTILE LINING OF DISCHARGE CHANNEL.

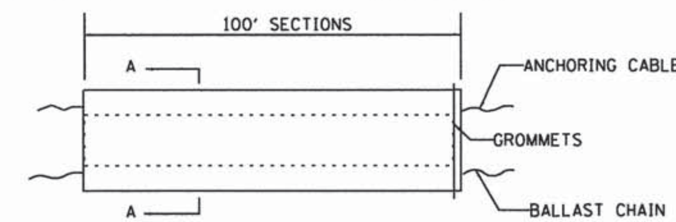
REMOVE SILT WHEN BAG IS HALF FULL OR MORE OFTEN IF RECOMMENDED BY THE MAUNFACUTURER. DISPOSE OF SILT BY TRANSPORTING THE FILLED BAG TO DISPOSAL AREA. SLIT THE BAG, BLEND SILT INTO EXISTING TOPOGRAPHY, SEED AND MULCH

MAINTAIN EXTRA FILTER BAGS ON SITE. REPLACE DAMAGED BAGS PROMPTLY.

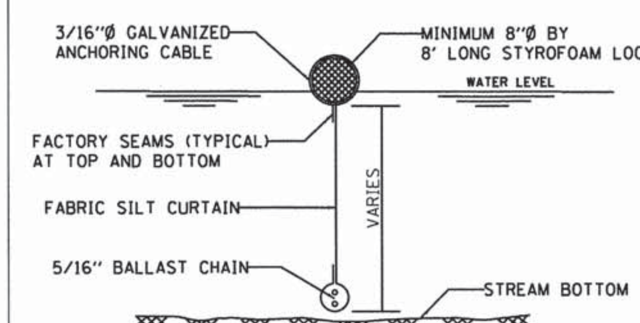
TYPICAL FLOW RATE: 10 GPM x W x L

NOTE:
DEWATERING SYSTEM DETAILS SHALL BE USED IN CONJUCTION WITH THE PROJECT SPECIAL PROVISIONS AND BRIDGE PLANS.

SEDIMENT FILTER BAG



ELEVATION



SECTION A-A

SILT CURTAIN

NOTES:

1. SILT CURTAIN SHALL BE ANCHORED TO PREVENT DRIFT SHOREWARD OR DOWNSTREAM. ANCHORAGES SHALL BE INSTALLED ON BOTH SHORE AND STREAM SIDE.
2. SHORE ANCHORS SHALL CONSIST OF A POST WITH DEADMAN OR APPROVED EQUAL. STREAM ANCHORS SHALL BE SUFFICIENT SIZE TO STABILIZE THE BARRIER WITH NUMBER AND SPACING DEPENDENT ON WATERWAY VELOCITIES.
3. FABRIC SECTIONS SHALL BE CONNECTED END TO END WITH MINIMUM 5/8" DIAMETER POLYPROPYLENE ROPE
4. DESIGN OF BOOM AND ANCHORAGE SHALL BE IN ACCORANDANCE WITH MANUFACTURER'S RECOMENDATIONS. BOTTOM OF BOOM SHALL REACH BOTTOM OF WATERWAY USING ONE OR TWO VERTICAL SECTIONS AS REQUIRED.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED. CONTRACTOR SHALL REMOVE THE BOOM AT COMPLETION OF WORK IN A MANNER THAT WILL PREVENT SILTATION OF THE WATERWAY.
6. COST OF SILT CURTAIN INCLUDED IN THE ITEM "COFFERDAMS (TYPE SPECIFIED) (LOCATION-SPECIFIED)".

APPLICATION: SILT CURTAIN TO BE USED TO CONTROL EROSION, TURBIDITY AND DEBRIS WHEN WORKING IN WATERWAYS.

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	PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

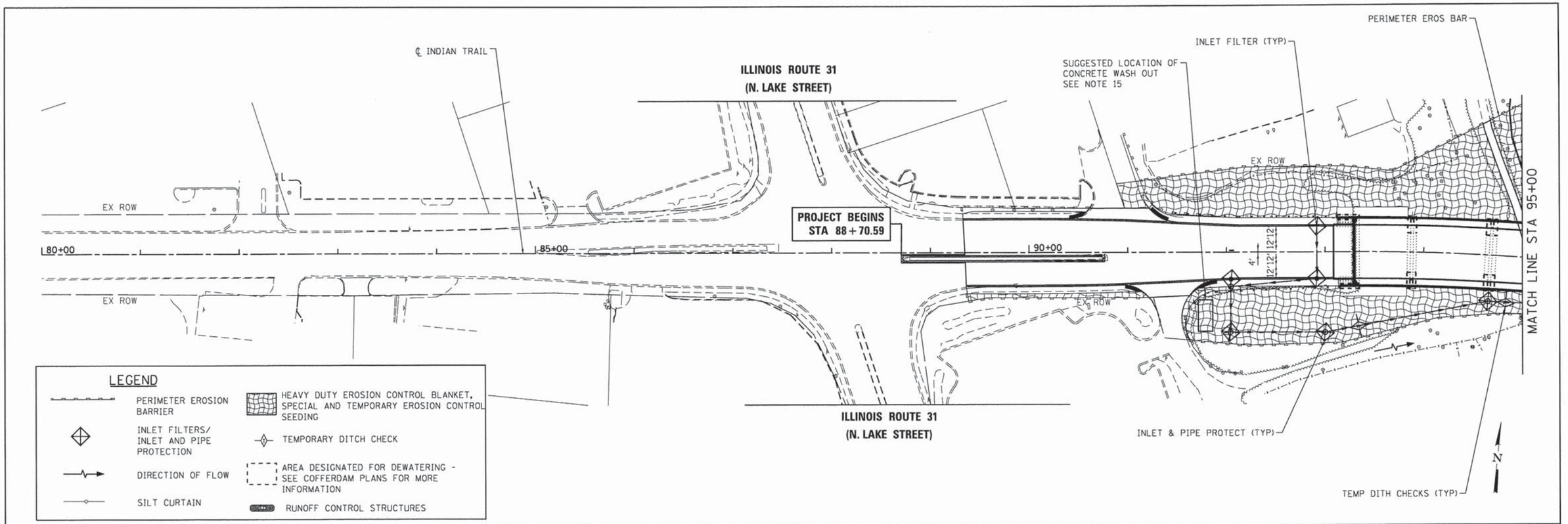
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

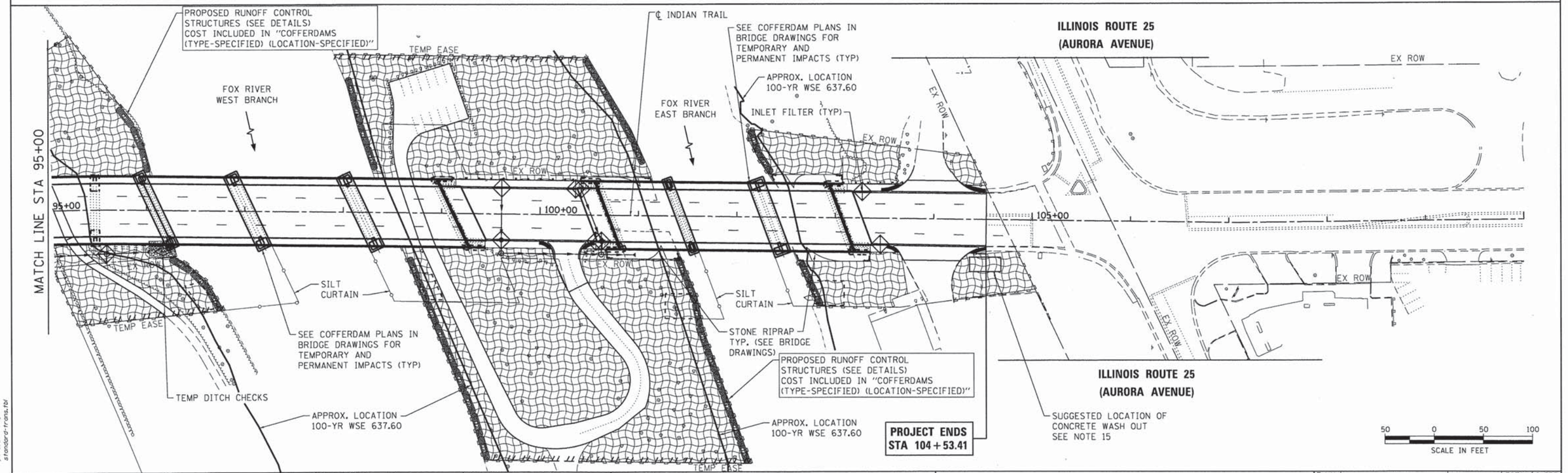
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
EROSION CONTROL NOTES

SCALE: N.T.S. | SHEET NO. 1 OF 4 SHEETS | STA. TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	25
		CONTRACT NO. 63863		

FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT





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PROJECT CONTACT: City of Aurora
CLIENT: 9/4/2013 7:56:36 AM
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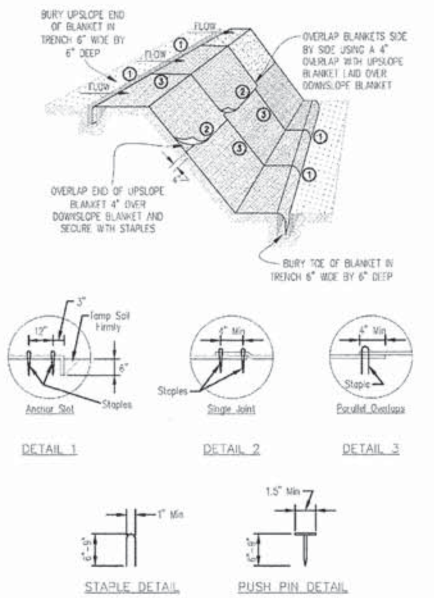
PLOT DATE = 9/4/2013	DATE - 9/4/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
EROSION CONTROL PLAN

SCALE: N.T.S. | SHEET NO. 2 OF 4 SHEETS | STA. 80+00 TO STA. 110+00

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	26
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

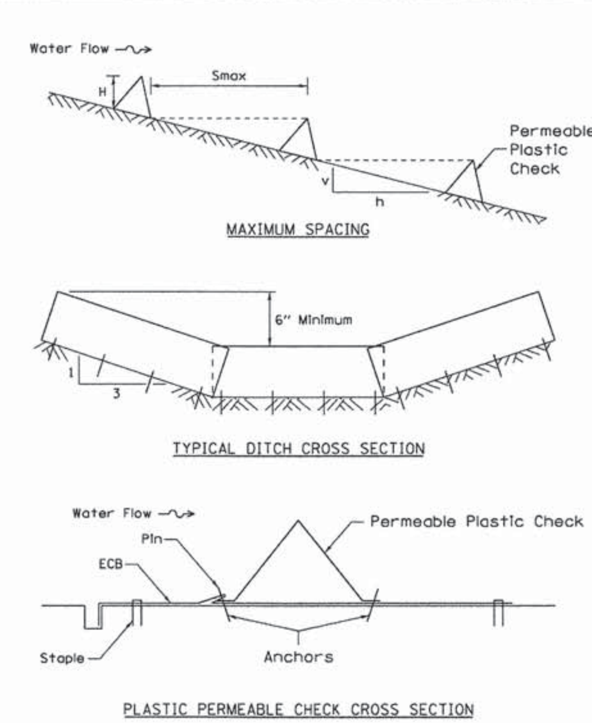


NOTES:

1. Staples shall be placed in a diamond pattern at 2 per s.y. for stiched blankets. Non-stiched shall use 4 staples per s.y. of material. This equates to 200 staples with stiched blanket and 400 stapels with non-stiched blanket per 100 s.y. of material.
2. Staple or push pin lengths shall be selected based on soil type and conditions. (minimum staple length is 6")
3. Erosion control material shall be placed in contact with the soil over a prepared seedbed.
4. All anchor slots shall be stapled at approximately 12" intervals.

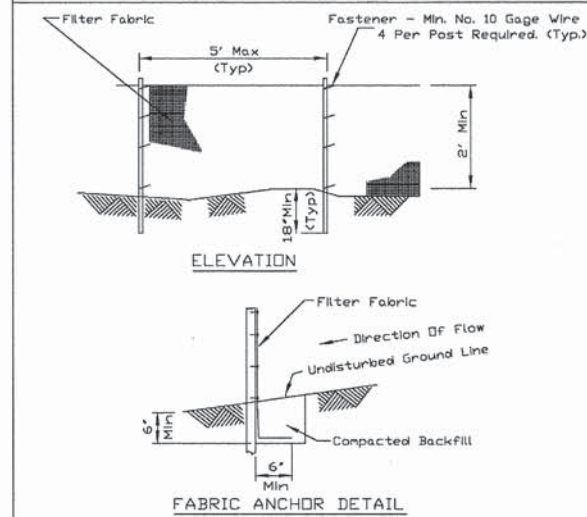
EROSION CONTROL
BLANKET INSTALLATION DETAILS

PLASTIC PERMEABLE CHECKS



REFERENCE		STANDARD DWG. NO.
Project		IUM-514
Designed / Date		SHEET 1 OF 1
Checked / Date		DATE 8-19-11
Approved / Date		

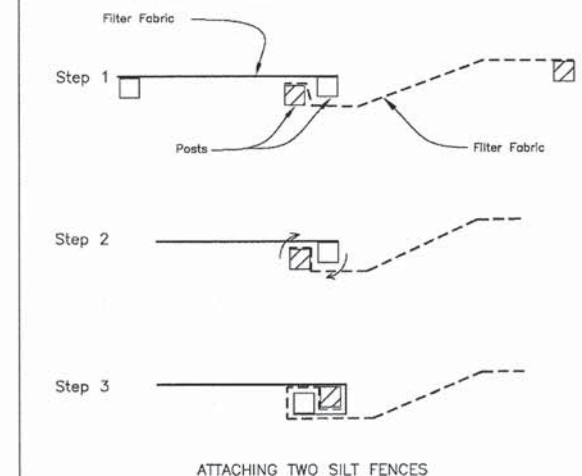
SILT FENCE PLAN



NOTES:
1. Temporary sediment fence shall be installed prior to any grading work in the area to be protected. They shall be maintained throughout the construction period and removed in conjunction with the final grading and site stabilization.
2. Filter fabric shall meet the requirements of material specification 592 Geotextile Table 1 or 2, Class I with equivalent opening size of at least 30 for nonwoven and 50 for woven.
3. Fence posts shall be either standard steel post or wood post with a minimum cross-sectional area of 3.0 sq. in.

REFERENCE	NRCS Natural Resources Conservation Service	STANDARD DWG. NO.
Project		IL-620
Designed / Date		SHEET 1 OF 2
Checked / Date		DATE 11-20-01
Approved / Date		

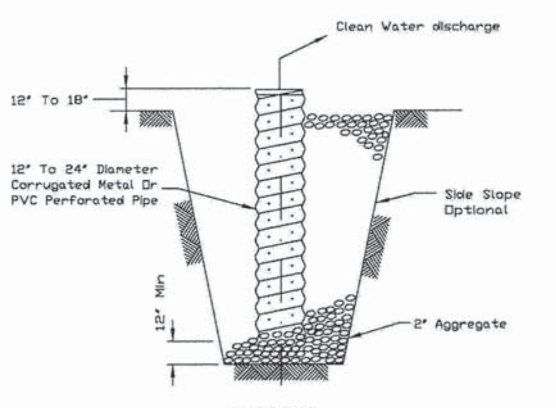
SILT FENCE



NOTES:
1. Place the end post of the second fence inside the end post of the first fence.
2. Rotate both posts at least 180 degrees in a clockwise direction to create a tight seal with the fabric material.
3. Drive both posts a minimum of 18 inches into the ground and bury the flap.

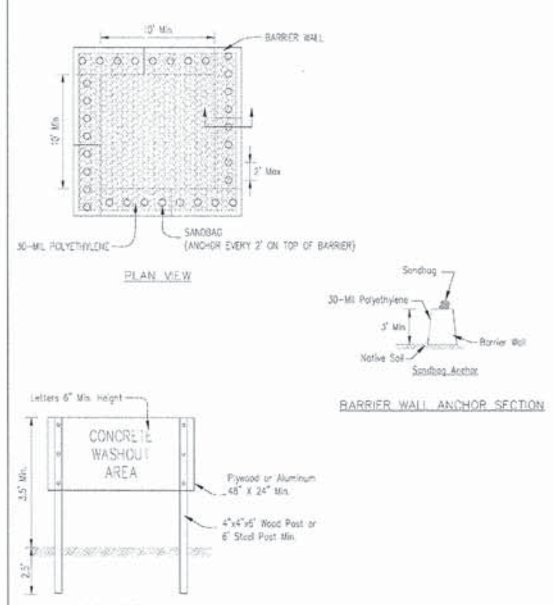
REFERENCE	NRCS Natural Resources Conservation Service	STANDARD DWG. NO.
Project		IL-620(W)
Designed / Date		SHEET 2 OF 2
Checked / Date		DATE 1-29-99
Approved / Date		

SUMP PIT PLAN



NOTES:
1. Pit dimensions are optional.
2. The standpipe will be constructed by perforating a 12"-24" diameter corrugated metal or PVC pipe.
3. A base of 2" aggregate will be placed in the pit to a minimum depth of 12". After installing the standpipe, the pit surrounding the standpipe will then be backfilled with 2" aggregate.
4. The standpipe will extend 12" to 18" above the lip of the pit.
5. If discharge will be pumped directly to a storm drainage system, the standpipe will be wrapped with filter fabric before installation.
6. If desired, 1/4"-1/2" hardware cloth may be placed around the standpipe prior to attaching the filter fabric. This will increase the rate of water seepage into the pipe.

REFERENCE	NRCS Natural Resources Conservation Service	STANDARD DWG. NO.
Project		IL-650
Designed / Date		SHEET 1 OF 1
Checked / Date		DATE 8-11-94
Approved / Date		

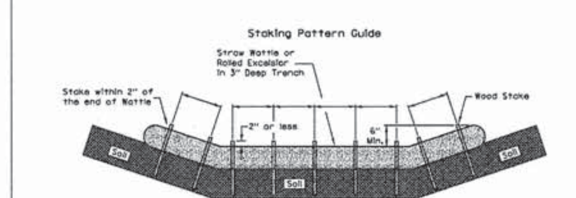


NOTES:

1. Maintaining temporary concrete washout facilities shall include removing and disposing of hardend concrete and/or slurry and returning the facilities to a functional condition.
2. Facility shall be cleaned or reconstructed in a new area once washout becomes two-thirds full.

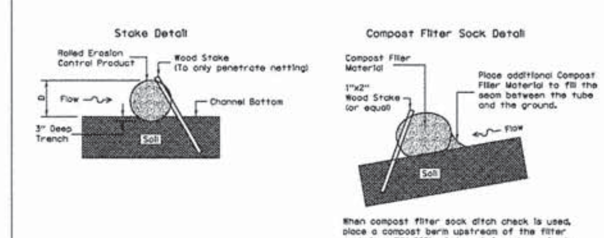
TEMPORARY CONCRETE
WASHOUT FACILITY – BARRIER WALL

ROLLED EROSION CONTROL PRODUCTS



Notes:

1. Overlap minimum is the diameter of the roll.
2. 4' spacing for wattles.
3. 2' spacing for rolled excelsior.
4. Or space according to manufacturer's specifications.



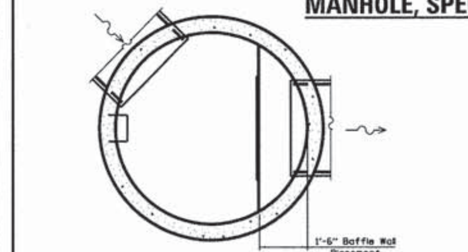
When compost filter sock ditch check is used, place a compost berm upstream of the filter sock (see IUM 805). A trench is not required.

Notes:

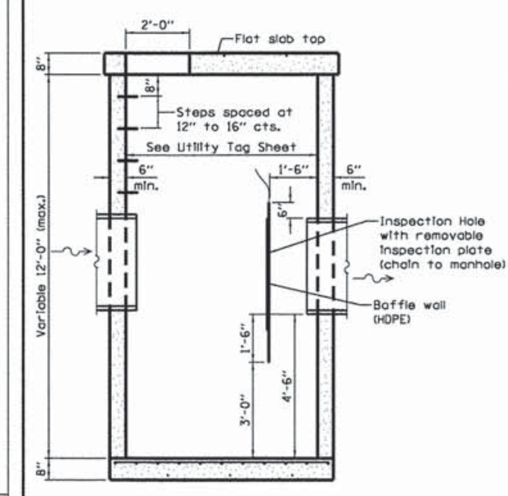
1. Drawings are not to scale.
2. Ends of wattles or rolled excelsior shall be turned at least 6" upslope.
3. Recommended stakes are 1 1/8" wide x 1 1/8" thick x 30" long
4. Stakes shall not extend above the straw wattle more than 2".
5. Spacing: The toe of the upstream ditch check shall create a horizontal line with the top of the downstream ditch check.
6. When compost filter sock ditch check is used, place a compost berm upstream of the filter sock (see IUM 805). A trench is not required.

REFERENCE		STANDARD DWG. NO.
Project		IUM-514
Designed / Date		SHEET 1 OF 1
Checked / Date		DATE 8-19-11
Approved / Date		

MANHOLE, SPECIAL



ELEVATION



ELEVATION

GENERAL NOTES

Joint configuration and dimensions of flat slab top shall match and fit the riser joint detail.

Lifting devices shall be approved by the Engineer.

Bottom slabs shall be reinforced with a minimum of 0.37 sq. in./ft. (780 sq. mm /m) in both directions with a maximum spacing of 10 (250)

Bottom slabs may be connected to the riser as determined by the fabricator; however, only a single row of reinforcement around the perimeter may be utilized.

See Standard 602701 for details of manhole steps.

Baffle wall and the removable inspection plate material shall be ½ inch thick high density polyethylene (HDPE) flat stock. Secure baffle wall to manhole wall with six stainless steel brackets (min.)

Provide a 12 inch dia. inspection hole centered in the baffle wall. Chain removable plate to manhole wall.

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:13:02 PM
FILE NAME: 86110318-DET.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
PEN TABLE: standard-trans.tbl

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Illinois Professional Design Firm # 184-001322
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USER NAME = whood	DESIGNED - KMA	REVISED -
FILE NAME = 86110318-DET.dgn	DRAWN - WJH	REVISED -
PLOT SCALE = N.T.S.	CHECKED - RDG	REVISED -
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

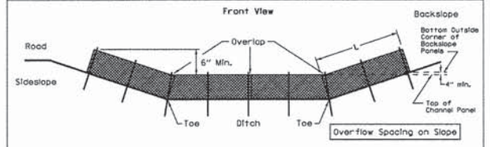
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
EROSION CONTROL DETAILS

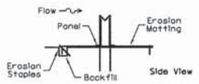
SCALE: N.T.S. | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	27
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

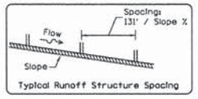
det-02

SYNTHETIC POROUS RUNOFF CONTROL STRUCTURES





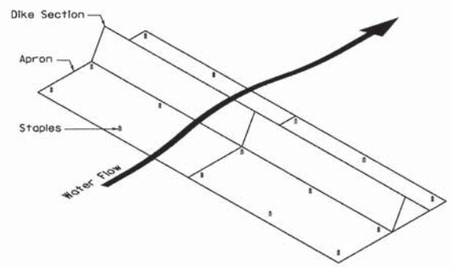
Minimum Installation Length up Slopes	
Slope	Panels
2:1	1
2.5:1	1.5
3:1	2
3.5:1	2
4:1	2
5:1	2.5
6:1	2.5

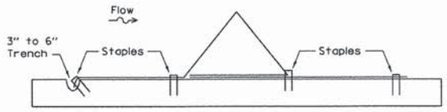


REFERENCE: Project, Designed, Checked, Approved (Date)

STANDARD DWG. NO. IUM-514 SHEET 1 OF 1 DATE 8-19-11

URETHANE FOAM GEOTEXTILES

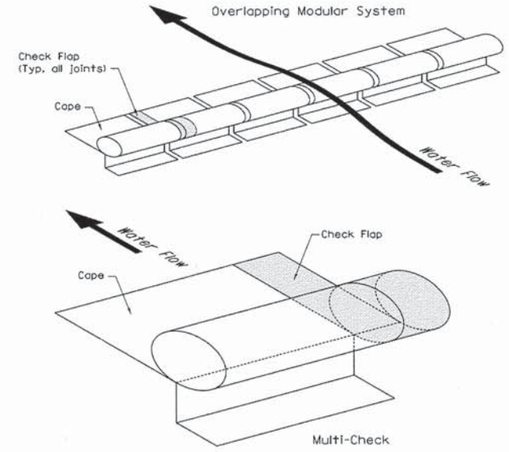




REFERENCE: Project, Designed, Checked, Approved (Date)

STANDARD DWG. NO. IUM-514 SHEET 1 OF 1 DATE 8-30-11

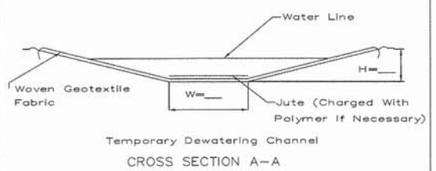
VEGETATED DITCH CHECK



REFERENCE: Project, Designed, Checked, Approved (Date)

STANDARD DWG. NO. IUM-514 SHEET 1 OF 1 DATE 6-30-11

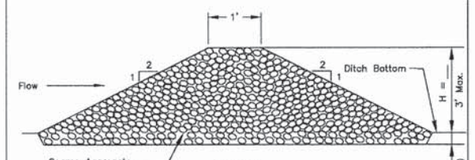
TEMPORARY MIXING SWALE WITH OPTIONAL BAFFLE PIT

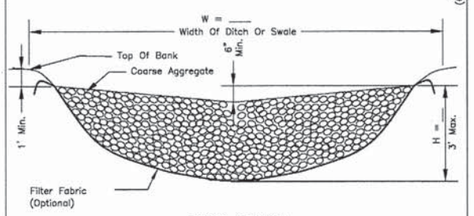


REFERENCE: Project, Designed, Checked, Approved (Date)

STANDARD DWG. NO. IUM-594A SHEET 1 OF 1 DATE 2-24-11

ROCK CHECK DAM - COARSE AGGREGATE





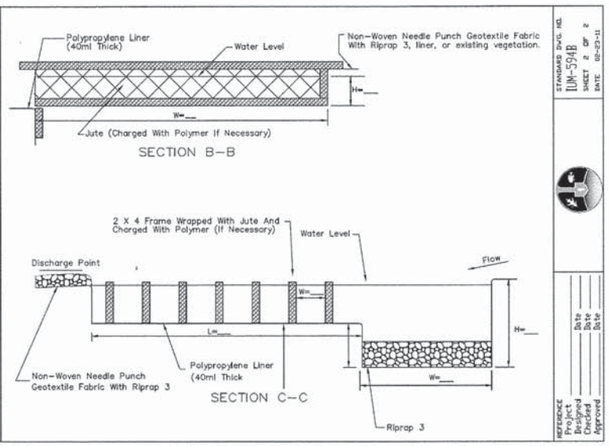
NOTES:
1. Filter fabric shall meet the requirements of material specification 592 GEOTEXTILE, Table 1 or 2, Class I, II, or IV and shall be placed over the cleared area prior to the placing of rock.
2. Coarse aggregate shall meet one of the following IDOT gradations, CA-1, CA-2, CA-3, or CA-4 and be placed according to construction specification 25 ROCKFILL using placement Method 1 and Class III compaction.
3. For added stability, the base of the dam may be keyed 6 inches into the soil.
4. See plans for spacing of dams and H dimensions.
5. Drainage area to each dam shall be less than 2 acres.
6. Use ROCK CHECK DAM-RIPRAP IL-605R for drainage areas of 2 to 10 acres.

REFERENCE: Project, Designed, Checked, Approved (Date)

NRCS Natural Resources Conservation Service

STANDARD DWG. NO. IL-605CA SHEET 1 OF 1 DATE 1-29-99

TEMPORARY MIXING SWALE WITH OPTIONAL BAFFLE PIT



STANDARD DWG. NO. IUM-594B SHEET 2 OF 2 DATE 02-23-11

REFERENCE: Project, Designed, Checked, Approved (Date)

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 6:18:02 PM
FILE NAME: 86110318-DET.dgn
PLOT DRIVER: pat.DET-TYP.pltr
PEN TABLE: standard-trans.tbl

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USER NAME = whood		DESIGNED -	KMA	REVISED -	
FILE NAME = 86110318-DET.dgn		DRAWN -	WJH	REVISED -	
PLOT SCALE = N.T.S.		CHECKED -	RDG	REVISED -	
PLOT DATE = 8/22/2013		DATE -	8/22/13	REVISED -	

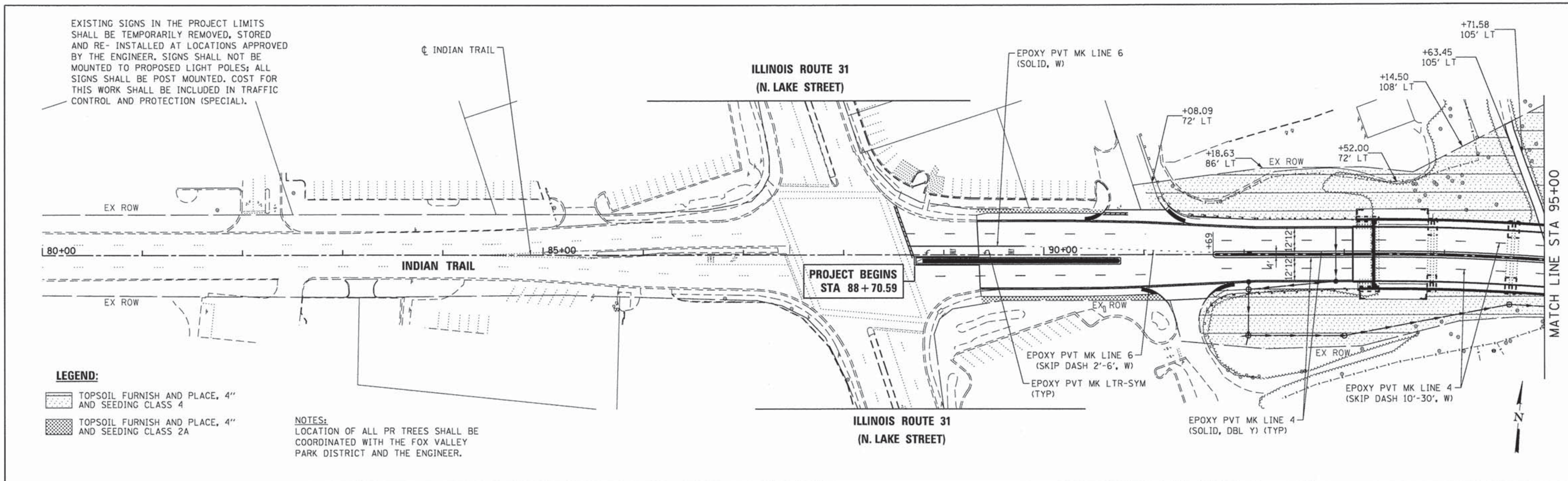
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

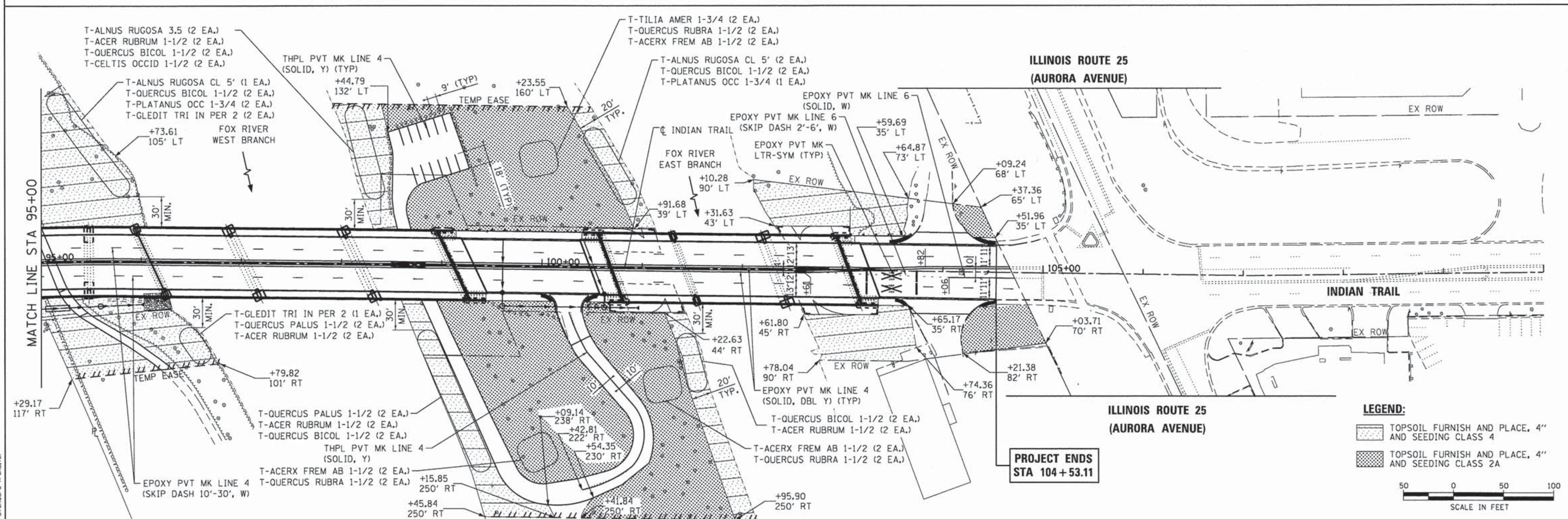
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
EROSION CONTROL DETAILS

SCALE: N.T.S. | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	28
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

det-02A


EXISTING SIGNS IN THE PROJECT LIMITS SHALL BE TEMPORARILY REMOVED, STORED AND RE- INSTALLED AT LOCATIONS APPROVED BY THE ENGINEER. SIGNS SHALL NOT BE MOUNTED TO PROPOSED LIGHT POLES; ALL SIGNS SHALL BE POST MOUNTED. COST FOR THIS WORK SHALL BE INCLUDED IN TRAFFIC CONTROL AND PROTECTION (SPECIAL).
℄ INDIAN TRAIL
ILLINOIS ROUTE 31
(N. LAKE STREET)
EPOXY PVT MK LINE 6
(SOLID, W)
+71.58
105' LT
+63.45
105' LT
+14.50
108' LT
+08.09
72' LT
+18.63
86' LT
EX ROW
+52.00
72' LT
EX ROW
80+00
85+00
INDIAN TRAIL
PROJECT BEGINS
STA 88+70.59
90+00
EX ROW
EPOXY PVT MK LINE 6
(SKIP DASH 2'-6', W)
EPOXY PVT MK LTR-SYM
(TYP)
EPOXY PVT MK LINE 4
(SKIP DASH 10'-30', W)
EPOXY PVT MK LINE 4
(SOLID, DBL Y) (TYP)
ILLINOIS ROUTE 31
(N. LAKE STREET)
MATCH LINE STA 95+00
N
LEGEND:
TOPSOIL FURNISH AND PLACE, 4" AND SEEDING CLASS 4
TOPSOIL FURNISH AND PLACE, 4" AND SEEDING CLASS 2A
NOTES:
LOCATION OF ALL PR TREES SHALL BE COORDINATED WITH THE FOX VALLEY PARK DISTRICT AND THE ENGINEER.


T-ALNUS RUGOSA 3.5 (2 EA.)
T-ACER RUBRUM 1-1/2 (2 EA.)
T-QUERCUS BICOL 1-1/2 (2 EA.)
T-CELTIS OCCID 1-1/2 (2 EA.)
T-ALNUS RUGOSA CL 5' (1 EA.)
T-QUERCUS BICOL 1-1/2 (2 EA.)
T-PLATANUS OCC 1-3/4 (2 EA.)
T-GLEDIT TRI IN PER 2 (2 EA.)
THPL PVT MK LINE 4
(SOLID, Y) (TYP)
+44.79
132' LT
9' (TYP)
TEMP EASE
+23.55
160' LT
20' TYP.
T-TILIA AMER 1-3/4 (2 EA.)
T-QUERCUS RUBRA 1-1/2 (2 EA.)
T-ACERX FREM AB 1-1/2 (2 EA.)
T-ALNUS RUGOSA CL 5' (2 EA.)
T-QUERCUS BICOL 1-1/2 (2 EA.)
T-PLATANUS OCC 1-3/4 (1 EA.)
ILLINOIS ROUTE 25
(AURORA AVENUE)
EPOXY PVT MK LINE 6
(SOLID, W)
EPOXY PVT MK LINE 6
(SKIP DASH 2'-6', W)
+59.69
35' LT
EPOXY PVT MK
LTR-SYM (TYP)
+64.87
73' LT
℄ INDIAN TRAIL
FOX RIVER
EAST BRANCH
+73.61
105' LT
FOX RIVER
WEST BRANCH
18' (TYP)
EX ROW
+10.28
90' LT
+91.68
39' LT
+31.63
43' LT
+09.24
68' LT
+37.36
65' LT
+51.96
35' LT
EX ROW
MATCH LINE STA 95+00
95+00
100+00
105+00
INDIAN TRAIL
30' MIN.
T-GLEDIT TRI IN PER 2 (1 EA.)
T-QUERCUS PALUS 1-1/2 (2 EA.)
T-ACER RUBRUM 1-1/2 (2 EA.)
+22.63
44' RT
+61.80
45' RT
+65.17
35' RT
+03.71
70' RT
+79.82
101' RT
TEMP EASE
+78.04
90' RT
+21.38
82' RT
+74.36
76' RT
+29.17
117' RT
EPOXY PVT MK LINE 4
(SOLID, DBL Y) (TYP)
T-QUERCUS PALUS 1-1/2 (2 EA.)
T-ACER RUBRUM 1-1/2 (2 EA.)
T-QUERCUS BICOL 1-1/2 (2 EA.)
+09.14
238' RT
+42.81
222' RT
+54.35
230' RT
THPL PVT MK LINE 4
(SOLID, Y)
T-QUERCUS BICOL 1-1/2 (2 EA.)
T-ACER RUBRUM 1-1/2 (2 EA.)
T-ACERX FREM AB 1-1/2 (2 EA.)
T-QUERCUS RUBRA 1-1/2 (2 EA.)
ILLINOIS ROUTE 25
(AURORA AVENUE)
PROJECT ENDS
STA 104+53.11
T-ACERX FREM AB 1-1/2 (2 EA.)
T-QUERCUS RUBRA 1-1/2 (2 EA.)
+15.85
250' RT
EPOXY PVT MK LINE 4
(SKIP DASH 10'-30', W)
+45.84
250' RT
+41.84
250' RT
+95.90
250' RT
TEMP EASE
LEGEND:
TOPSOIL FURNISH AND PLACE, 4" AND SEEDING CLASS 4
TOPSOIL FURNISH AND PLACE, 4" AND SEEDING CLASS 2A
50 0 50 100
SCALE IN FEET

HRGreen.com Illinois Professional Design Firm # 184-001322	USER NAME = whood	DESIGNED - JPG	REVISED -
	FILE NAME = 86110318-Striping.dgn	DRAWN - WJH	REVISED -
	PLOT SCALE = N.T.S.	CHECKED - RDG	REVISED -
	PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
STRIPING, SIGNAGE AND RESTORATION PLAN

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	29

CONTRACT NO. 63863

FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 6:20:08 PM
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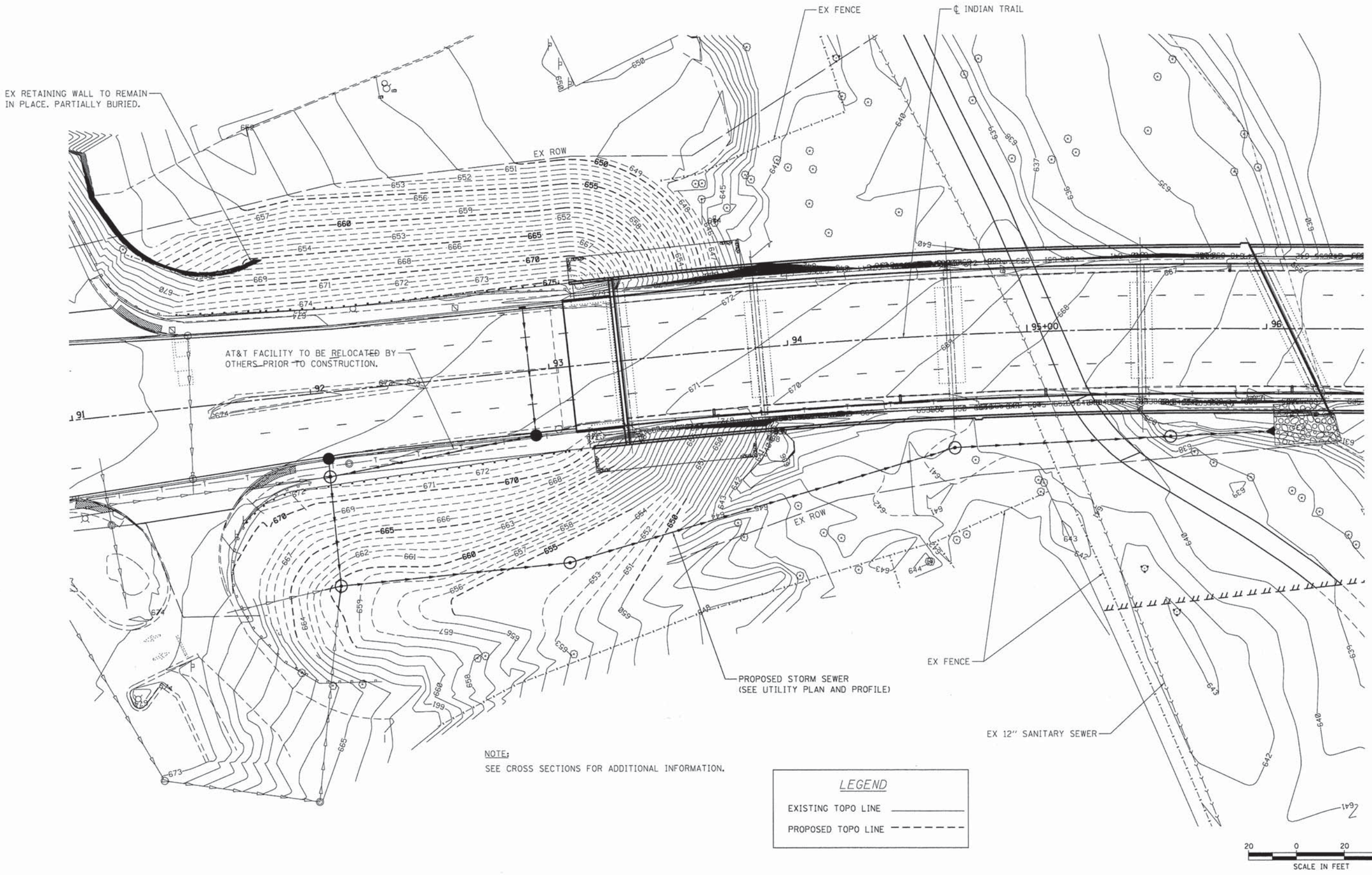

NOTE:
SEE CROSS SECTIONS FOR ADDITIONAL INFORMATION.

LEGEND

EXISTING TOPO LINE ————————

PROPOSED TOPO LINE - - - - - - -

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 6:31:28 PM
FILE NAME: 86110318-grade.dgn
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PLOT SCALE =	CHECKED - RGD	REVISED -	
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
GRADING PLAN

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

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	30
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

+18.63
86' LT
EX ROW
EX STORM SEWER 42"
AT&T FACILITY TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION
92
93
94
95+00
96
97
PR ℄ INDIAN TRAIL
MATCH LINE STA 98+00.00
EX STORM SEWER 10"
+21.20
94' RT
EX STORM SEWER 18"
+17.29
91' RT
+76.96
59' RT
EX ROW
+16.78
66' RT
STEEL CASINGS 66
EX 14" SANITARY SEWER
FOX RIVER TRAIL
TEMP EASE
STONE RIPRAP CL A6
FOX RIVER WEST BRANCH
N
20 0 20 40
SCALE IN FEET

PR PROFILE GRADE INDIAN TRAIL
EX. GRADE AT ℄ INDIAN TRAIL
EX SANITARY SEWER (CONTRACTOR TO VERIFY LOCATION)
670
665
660
655
650
645
640
635
630

674.06	673.00	672.43	671.78	670.71	669.56	668.25	666.82	665.41	663.85	662.32	660.82	659.34
673.33	**672.91**	**672.49**	**671.93**	**671.04**	**669.81**	**668.33**	**666.83**	**665.33**	**663.83**	**662.33**	**660.83**	**659.33**

92+00 92+50 93+00 93+50 94+00 94+50 95+00 95+50 96+00 96+50 97+00 97+50 98+00

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:22:08 PM
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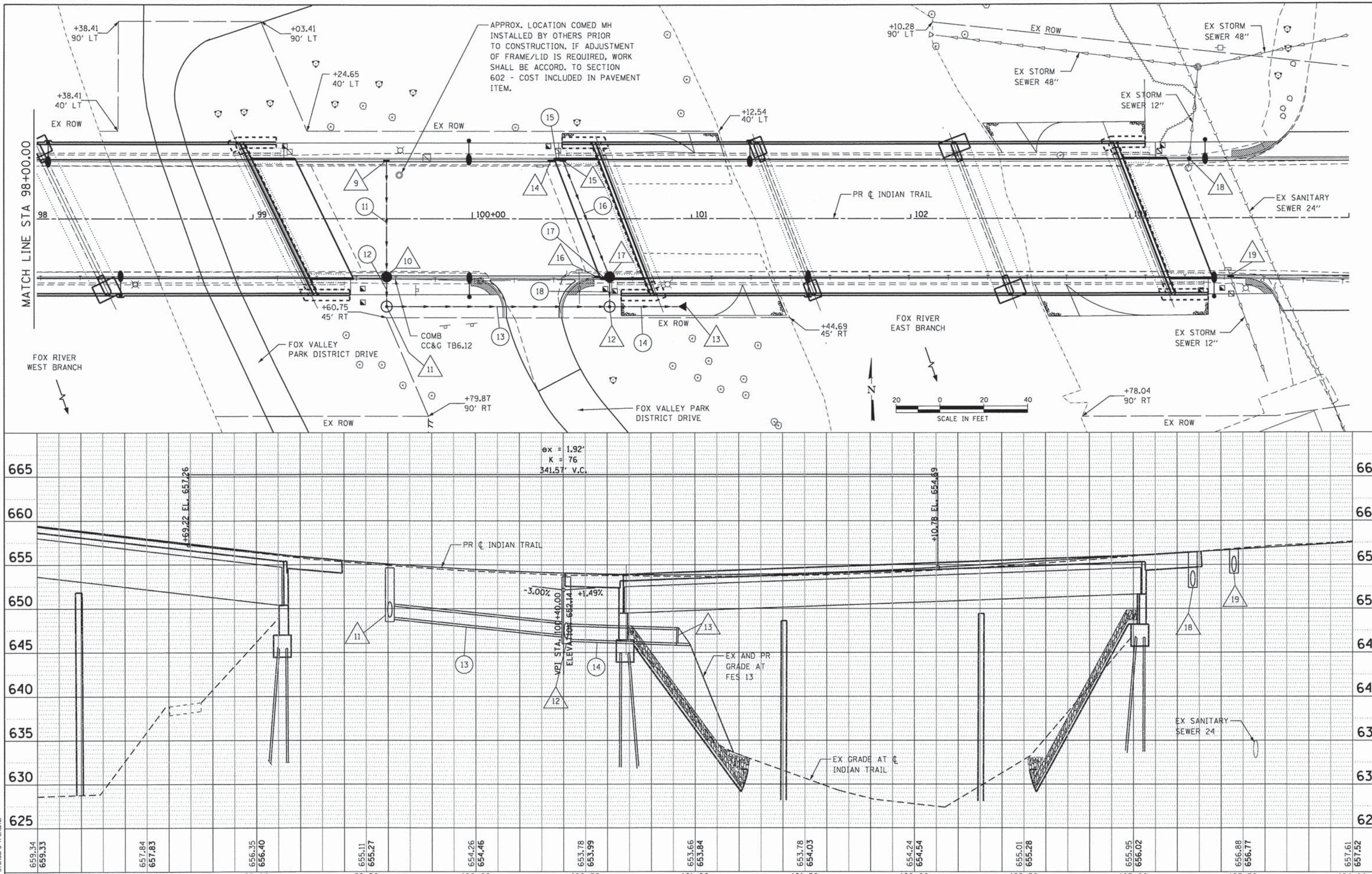
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
UTILITY PLAN AND PROFILE

SCALE: 1"=20' | SHEET NO. 1 OF 2 SHEETS | STA. 92+00 TO STA. 98+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	31
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT	$FEDPROJNO$	



COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013
FILE NAME: 86110318-Util-pnp-03.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
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PLOT SCALE = 1"=20'	CHECKED - RDG	REVISED -	
PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
UTILITY PLAN AND PROFILE

SCALE: 1"=20' | SHEET NO. 2 OF 2 SHEETS | STA. 98+00 TO STA. 104+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	32
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT	$FEDPROJNO$	

STRUCTURE NUMBER	STATION	OFFSET (FT)	STRUCTURE TYPE					DIA. (FT.)	FRAME & GRATE	INVERTS				RIM ELEVATION
			MH TYPE A	CB TYPE A	INL TYPE A	FES	MH, SPECIAL			NORTH	WEST	SOUTH	EAST	
INDIAN TRAIL ROAD														
1	92+04.59	26.4		1				4	T11			668.00		672.89
2	92+04.44	34.9	1					6	T1CL	667.90	663.60	651.39	666.15	673.50
3	92+04.07	80.8	1					6	T8	649.75	652.52	652.74	646.54	656.67
4	93+00.00	81.2	1					6	T8		642.94		636.56	649.80
5	94+67.62	46.8	1					6	T8		633.54		633.18	641.00
6	96+00.10	42.6				1△		3.5					632.00	
7	92+91.62	26.0		1				4	T11	667.00		667.00		671.89
8	95+59.94	44.7					1	6	T1CL		632.35		632.35	637.35
9	99+60.91	-26.0			1			2	T11			650.00		654.64
10	99+60.91	26.0		1				4	T11	649.20		649.19		654.64
11	99+60.91	40.0	1					4	T1CL	649.00			648.99	655.25
12	100+62.54	40.0					1	4	T1CL	647.95	647.00		646.50	654.10
13	100+97.53	40.0				1△		1.5					646.00	
14	100+35.81	-26.0			1			2	T11				649.05	653.67
15	100+41.31	-27.0			1			2	T11		649.00	648.99		653.63
16	100+57.00	26.0			1			2	T11				648.25	653.53
17	100+62.50	27.0		1				4	T11	648.15	648.15	648.14		653.50
• 18	103+27.13	26.0		1				4	T11	653.52				656.00
• 19	103+45.93	26.0			1			2	T11			654.03		656.28
20	92+91.62	-26.0			1			2	T11			667.50		673.16

• CONNECT TO EXISTING RCP STORM SEWER. COST INCLUDED IN COST OF ITEM.

PIPE NO.	FROM STRUCT.	TO STRUCT.	STORM SEWER, CLASS A					SLOPE (%)	TBF (CU YD)
			10"	12"	18"	42"	TYPE		
INDIAN TRAIL ROAD									
1	1	2		5			2	2.00%	3.2
2	EX. PIPE	2				10	2	MATCH EX.	15.8
3	2	3				41	3	4.00%	4.5
4	EX. PIPE	3	10				2	MATCH EX.	0.0
5	EX. PIPE	3			10		2	MATCH EX.	0.0
6	3	4				90	2	4.00%	0.0
7	4	5				162	2	1.84%	0.0
8	5	8				86	2	0.97%	10.7
9	8	6				29	2	0.92%	0.0
10	7	2		85			2	1.07%	64.6
11	9	10		50			2	1.60%	15.0
12	10	11		12			2	1.67%	6.6
13	11	12			99		2	2.01%	23.4
14	12	13			28		2	1.47%	0.0
15	14	15		4			2	1.25%	1.1
16	15	17		55			2	1.53%	15.3
17	16	17		4			2	2.50%	1.3
18	17	12		10			2	1.90%	3.1
19	20	7		50			2	1.00%	16.0

•• CONNECT PROPOSED SECTIONS OF PIPE TO EXISTING STORM SEWER

• CONNECT TO EXISTING RCP STORM SEWER, COST INCLUDED IN COST OF ITEM

△ PROVIDE STEEL GRATE AT FES. GRATING SHALL CONFORM TO THE APPLICABLE PORTIONS OF ARTICLE 542.07 OF THE STANDARD SPECIFICATIONS AND THE CONSTRUCTION DETAILS. COST INCLUDED IN THE COST OF THE FES.

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
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PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
UTILITY TAG SHEET

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	33
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

LIGHTING GENERAL NOTES

1. WHERE SEPARATE CIRCUIT RUNS ARE TO BE INSTALLED PARALLEL WITH EACH OTHER, ONE COMMON TRENCH SHALL BE USED.

2. THE CONTRACTOR SHALL CONSULT WITH RESIDENT ENGINEER IN THE FIELD, AND FINALIZE ALL EXISTING ROADWAY LIGHTING ITEMS.

3 THE RESPONSIBILITY FOR COORDINATING FINISHED SIDEWALK ELEVATIONS WITH THE TOP OF THE FOUNDATIONS HEIGHTS SHALL REMAIN WITH THE CONTRACTOR.

4. THE CONTRACTOR SHALL SUBMIT FOR THE RESIDENT ENGINEER REVIEW WITHIN 30 DAYS DATA AND DETAIL SHOP DRAWINGS TO THE ATTENTION OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION - DISTRICT 1:
   a. TRENCH, ELECTRICAL WARNING TAPE
   b. FOUNDATION: CONCRETE MIX, RACEWAYS, ANCHOR BOLTS WITH NUTS & WASHERS.
   c. CONDUIT: CONDUIT AND CONDUIT FITTINGS, BONDING COMPOUND
   d. GROUND ROD: GROUND ROD, COPPER WIRE, EXOTHERMIC WELD.
   e. UNIT DUCT/CABLES
   f. ELECTRIC CABLES
   g. ELECTRIC TAPES, QUICK DISCONNECT, FUSE & LAMP.
   h. LIGHT POLES/ARM: DETAILS SHOP DRAWING, WIND LOAD CALCULATIONS (SHALL BE REVIEWED BY CONSULTANT CIVIL ENGINEER)
   i. LUMINAIRE: LUMINAIRE WITH BALLAST ASSEMBLY OR DRIVER
   j. LIGHTING CONTROLLER: CIRCUITRY DETAIL, CATALOG ON MATERIALS.

5. ELECTRIC CABLE INSULATION SHALL BE FULLY PIGMENTED COLOR CODED AS SPECIFIED.

6. FINISH PAINT:
THE PAINT COLOR AND FINISH SHALL BE POWDER COATED IN ACCORDANCE WITH THE LIGHT POLE MANUFACTURER'S PROCESS. FOR THE LIGHT POLE AND LUMINAIRE THE CITY OF AURORA SHALL APPROVE THE POWDER COAT COLOR AND FINISH. FINISH TOP COAT COLOR SHALL BE BLACK.

7. LIGHT POLE FOUNDATION HOLE,
EACH HOLE FOR THE FOUNDATIONS SHALL BE INSPECTED BY THE RESIDENT ENGINEER PRIOR TO POURING CONCRETE FOUNDATIONS.

8. THE CONTRACTOR SHALL NOTIFY J.U.L.I.E. AT (1-800-892-0123) TO LOCATE AND MARK/STAKE ALL UNDERGROUND UTILITIES.

9. THE CONTRACTOR SHALL NOTIFY THE CITY OF AURORA TO LOCATE AND MARK/STAKE ALL CITY OWNED UNDERGROUND UTILITIES.

10. THE CONTRACTOR SHALL GIVE IN WRITING TO THE ENGINEER FOR REVIEW, CONSTRUCTION STAGING FOR THE PROPOSED ROADWAY LIGHTING WORK, AND THE CONTRACTOR SHALL OBTAIN PRIOR WRITTEN APPROVAL FROM THE RESIDENT ENGINEER.

11. RESTORATION OF PROJECT SITE SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND CONTRACT DOCUMENTS.

12. THE CONTRACTOR SHALL CHISEL ARROWS LOCATING ALL CONDUIT CROSSINGS ACROSS ROADWAYS. THE CHISEL MARKS SHALL BE ON THE CURB.

13. THE CONTRACTOR SHALL COMPLY WITH ALL LATEST IDOT, IES, NEC AND LOCAL CODES AND ORDINANCES.

14. ALL STREET CROSSINGS SHALL BE IN GALVANIZED STEEL CONDUIT OF THE SIZE INDICATED.

15. THE CONTRACTOR SHALL MAINTAIN THE LIGHTING SYSTEM IN OPERATION WHILE THE ROAD IS OPEN TO TRAFFIC. THIS INCLUDES MAINTAINING PROPOSED AND REQUIRED PORTIONS OF THE EXISTING ROADWAY LIGHTING DURING THE TIME PERIOD BETWEEN TEMPORARY DETOURS. COST INCLUDED IN "MAINTENANCE OF LIGHTING SYSTEM."

16. ALL ELECTRICAL EQUIPMENT AND PRODUCTS SHALL BE U/L LISTED AND LABELED.

17. EXISTING UNUSED CONDUIT SHALL BE ABANDONED IN PLACE. EXISTING LIGHTING UNITS SHALL BE TURNED OVER TO THE OWNER. EXISTING CONCRETE BASES SHALL BE REMOVED AND DISPOSED.

18. SEE REMOVAL PLANS FOR REMOVAL OF EXISTING LIGHTING UNITS AND FOUNDATIONS.

19. ALL POLE HANDHOLES SHALL FACE AWAY FROM TRAFFIC.

20. LUMINAIRES SHALL BE LEVEL & HAVE A TIGHT FIT ON MAST ARMS TO THE ENGINEER'S SATISFACTION. THIS WORK SHALL INCLUDE FIELD ADJUSTING OF THE LUMINAIRE WHICH WILL BE INCLUDED IN THE COST OF THE "LIGHT FIXTURE ASSEMBLY" PAY ITEM.

21. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING SPECIFICATIONS, WHICH ARE HEREBY MADE A PART HEREOF:
   A. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION IN ILLINOIS," AS PREPARED BY IDOT.
   B. "THE NATIONAL ELECTRICAL CODE"
   C. MUNICIPAL CODES & STANDARDS

22. TO MAINTAIN THE STRUCTURAL INTEGRITY OF LIGHT POLES WITH MAST ARMS, THEY SHALL NOT BE ERECTED AND LEFT TO STAND WITHOUT LUMINAIRES. NOTE THAT THE CONTRACTOR SHALL NOT BE PAID FOR POLES UNTIL LUMINAIRES ARE INSTALLED.

23. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MARK THE PROPOSED LOCATIONS OF ALL LIGHT POLES AND LIGHTING CONTROLLERS FOR EXAMINATION AND CONFIRMATION WITH THE RESDIENT ENGINEER. THE CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO AUGERING FOR LIGHT POLE FOUNDATIONS. THE EXACT LOCATIONS OF ALL PROPOSED ITEMS SHALL BE CONFIRMED WITH THE RESIDENT ENGINEER PRIOR TO STARTING WORK.

SUMMARY OF LIGHTING QUANTITIES

ITEM DESCRIPTION	UNIT	QUANTITY
ELECTRIC SERVICE INSTALLATION		
ELECTRIC UTILITY SERVICE CONNECTION	L. SUM	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 1 1/2" DIA.	FOOT	450
UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	1122
CONDUIT EMBEDDED IN STRUCTURE, 1 1/2" DIA., PVC	FOOT	1,781
HANDHOLE	EACH	10
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 4	FOOT	13,412
LIGHTING CONTROLLER, PEDESTAL MOUNTED, 240VOLT, 100AMP	EACH	1
LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	162
LIGHT FIXTURE ASSEMBLY -TYPE A	EACH	10
LIGHT FIXTURE ASSEMBLY -TYPE B	EACH	8

THE FOLLOWING ITEMS ARE EMBEDDED IN THE BRIDGE SUPERSTRUCTURES

1. ANCHOR BOLTS FOR STREET LIGHTING UNIT-TYPE B COST INCLUDED IN CONCRETE SUPERSTRUCTURE

2. PVC CONDUIT (SCHEDULE 40)
PAID FOR AS CONDUIT EMBEDDED IN STRUCTURE

3. EXPANSION FITTINGS SHALL BE INSTALLED AT BRIDGE EXPANSION JOINTS FOR ALL ELECTRICAL RACEWAY RUNS AND CONDUITS. COST INCLUDED WITH APPROPRIATE CONDUIT PAY ITEM

4. HANGERS / STRUTS FOR CONDUIT ATTACHED TO STRUCTURE. COST INCLUDED WITH CONDUIT ATTACHED TO STRUCTURE.

SEE BRIDGE PLANS FOR ADDITIONAL DETAILS.

SYMBOLS

EXISTING UTILITY SERVICE POLE, COMED 120 VOLT/240 VOLT, 1 PHASE

LIGHTING CIRCUIT
MATERIAL TYPE AND SIZE AS NOTED

LIGHTING CONTROLLER
100 AMPERE - 120/240 VOLT, 1 PHASE

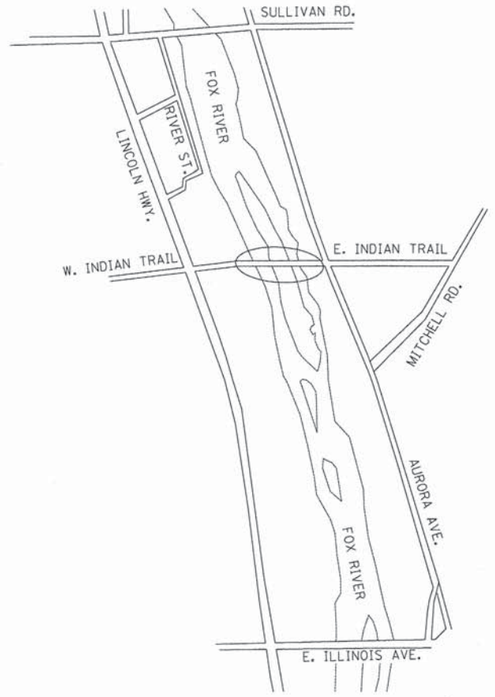
HANDHOLE

STA. 156+67 STREET LIGHTING UNIT
Z W 2 A
- LIGHT FIXTURE ASSEMBLY - TYPE
- POLE SEQUENCE NUMBER
- CIRCUIT IDENTIFIER
- CONTROLLER IDENTIFIER

EMPTY GALVANIZED STEEL CONDUIT FOR FUTURE CITY USE

T — EMPTY GALVANIZED STEEL CONDUIT FOR FUTURE AT&T USE

E — EMPTY CONDUIT BY COMED
(SEE TYPICAL SECTIONS FOR COMED RELOCATION COORDINATION)



KEY PLAN N

COMPANY NAME: Kevin M. Arff
PROJECT: City of Aurora
CONTACT:
CLIENT:
DATE PLOTTED: 9/4/2013 7:56:46 AM
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
LIGHTING PLAN

SCALE: | SHEET NO. 1 OF 8 SHEETS | STA. 88+00 TO STA. 97+00

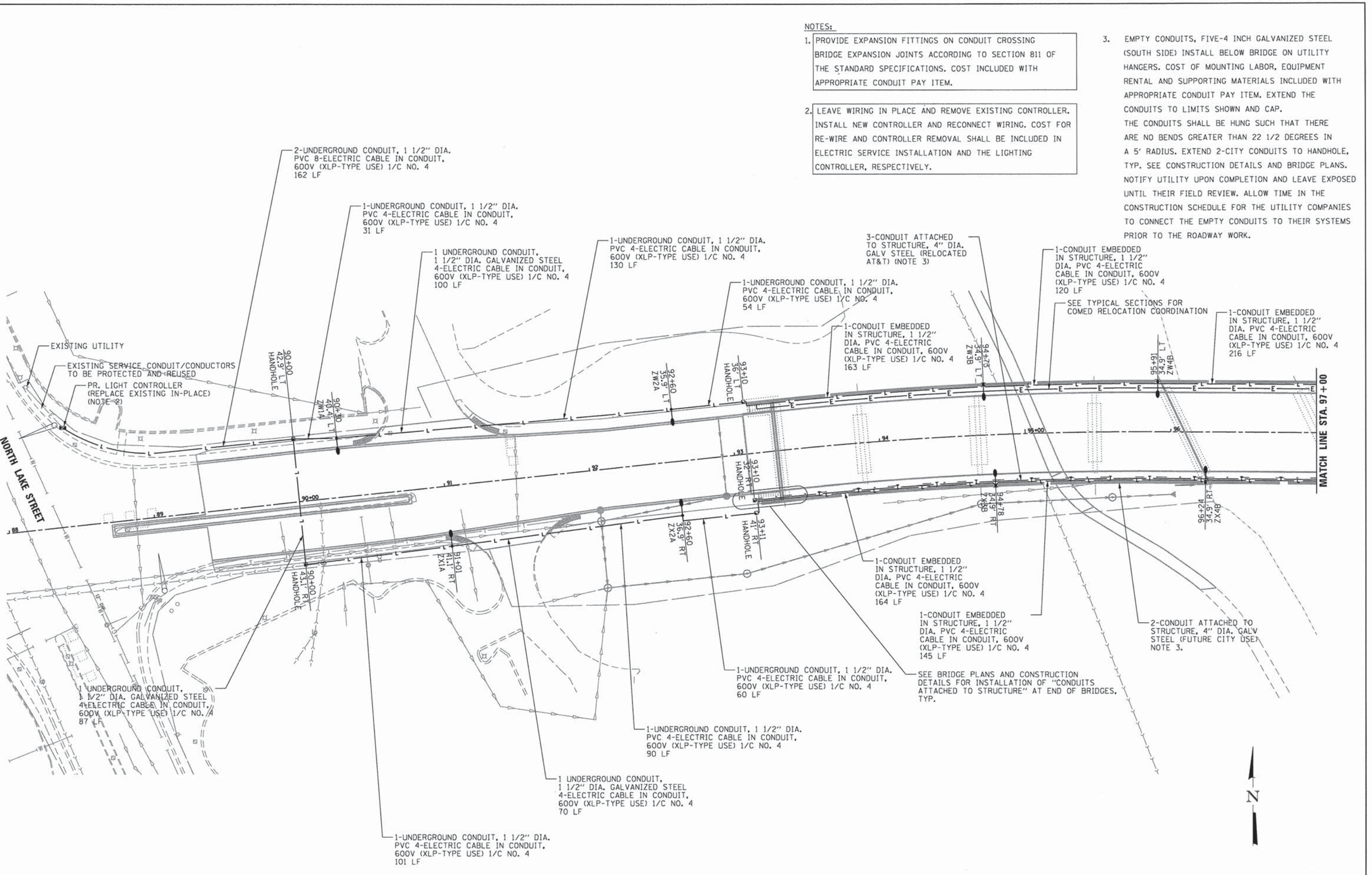
F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	34
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

NOTES:

1. PROVIDE EXPANSION FITTINGS ON CONDUIT CROSSING BRIDGE EXPANSION JOINTS ACCORDING TO SECTION 811 OF THE STANDARD SPECIFICATIONS. COST INCLUDED WITH APPROPRIATE CONDUIT PAY ITEM.

2. LEAVE WIRING IN PLACE AND REMOVE EXISTING CONTROLLER. INSTALL NEW CONTROLLER AND RECONNECT WIRING. COST FOR RE-WIRE AND CONTROLLER REMOVAL SHALL BE INCLUDED IN ELECTRIC SERVICE INSTALLATION AND THE LIGHTING CONTROLLER, RESPECTIVELY.

3. EMPTY CONDUITS, FIVE-4 INCH GALVANIZED STEEL (SOUTH SIDE) INSTALL BELOW BRIDGE ON UTILITY HANGERS. COST OF MOUNTING LABOR, EQUIPMENT RENTAL AND SUPPORTING MATERIALS INCLUDED WITH APPROPRIATE CONDUIT PAY ITEM. EXTEND THE CONDUITS TO LIMITS SHOWN AND CAP. THE CONDUITS SHALL BE HUNG SUCH THAT THERE ARE NO BENDS GREATER THAN 22 1/2 DEGREES IN A 5' RADIUS. EXTEND 2-CITY CONDUITS TO HANDHOLE, TYP. SEE CONSTRUCTION DETAILS AND BRIDGE PLANS. NOTIFY UTILITY UPON COMPLETION AND LEAVE EXPOSED UNTIL THEIR FIELD REVIEW. ALLOW TIME IN THE CONSTRUCTION SCHEDULE FOR THE UTILITY COMPANIES TO CONNECT THE EMPTY CONDUITS TO THEIR SYSTEMS PRIOR TO THE ROADWAY WORK.



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PROJECT CONTACT: City of Aurora
CLIENT:
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PLOT DATE = 9/4/2013	DATE - 9/4/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
LIGHTING PLAN

SCALE: | SHEET NO. 2 OF 8 SHEETS | STA. 97+00 TO STA. 106+00

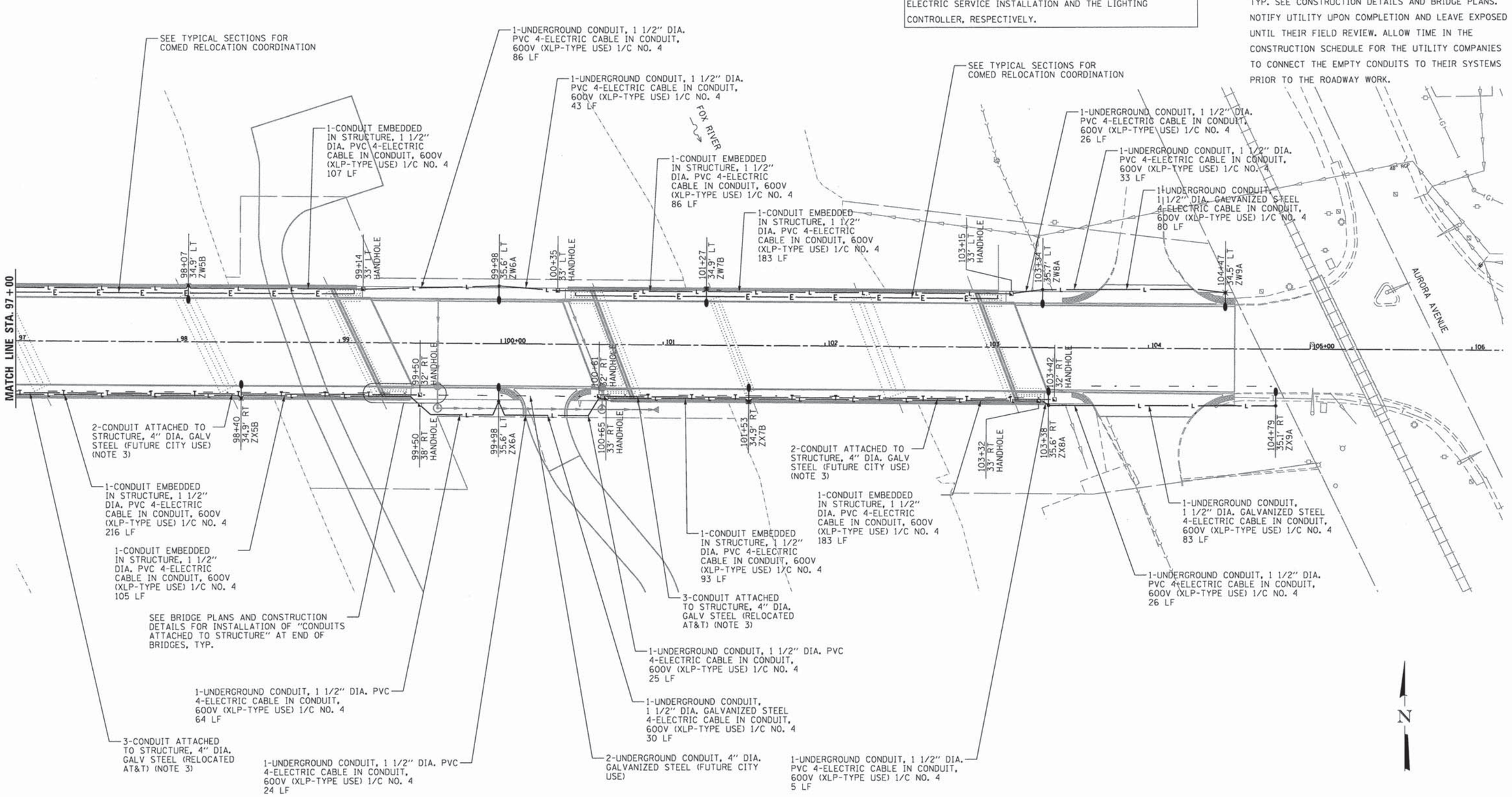
F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	35
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

NOTES:

1. PROVIDE EXPANSION FITTINGS ON CONDUIT CROSSING BRIDGE EXPANSION JOINTS ACCORDING TO SECTION 811 OF THE STANDARD SPECIFICATIONS. COST INCLUDED WITH APPROPRIATE CONDUIT PAY ITEM.

2. LEAVE WIRING IN PLACE AND REMOVE EXISTING CONTROLLER. INSTALL NEW CONTROLLER AND RECONNECT WIRING. COST FOR RE-WIRE AND CONTROLLER REMOVAL SHALL BE INCLUDED IN ELECTRIC SERVICE INSTALLATION AND THE LIGHTING CONTROLLER, RESPECTIVELY.

3. EMPTY CONDUITS, FIVE-4 INCH GALVANIZED STEEL (SOUTH SIDE) INSTALL BELOW BRIDGE ON UTILITY HANGERS. COST OF MOUNTING LABOR, EQUIPMENT RENTAL AND SUPPORTING MATERIALS INCLUDED WITH APPROPRIATE CONDUIT PAY ITEM. EXTEND THE CONDUITS TO LIMITS SHOWN AND CAP.
THE CONDUITS SHALL BE HUNG SUCH THAT THERE ARE NO BENDS GREATER THAN 22 1/2 DEGREES IN A 5' RADIUS. EXTEND 2-CITY CONDUITS TO HANDHOLE, TYP. SEE CONSTRUCTION DETAILS AND BRIDGE PLANS. NOTIFY UTILITY UPON COMPLETION AND LEAVE EXPOSED UNTIL THEIR FIELD REVIEW. ALLOW TIME IN THE CONSTRUCTION SCHEDULE FOR THE UTILITY COMPANIES TO CONNECT THE EMPTY CONDUITS TO THEIR SYSTEMS PRIOR TO THE ROADWAY WORK.



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PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
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PLOT DATE = 9/4/2013	DATE - 9/4/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
LIGHTING PLAN

SCALE: | SHEET NO. 3 OF 8 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	36
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

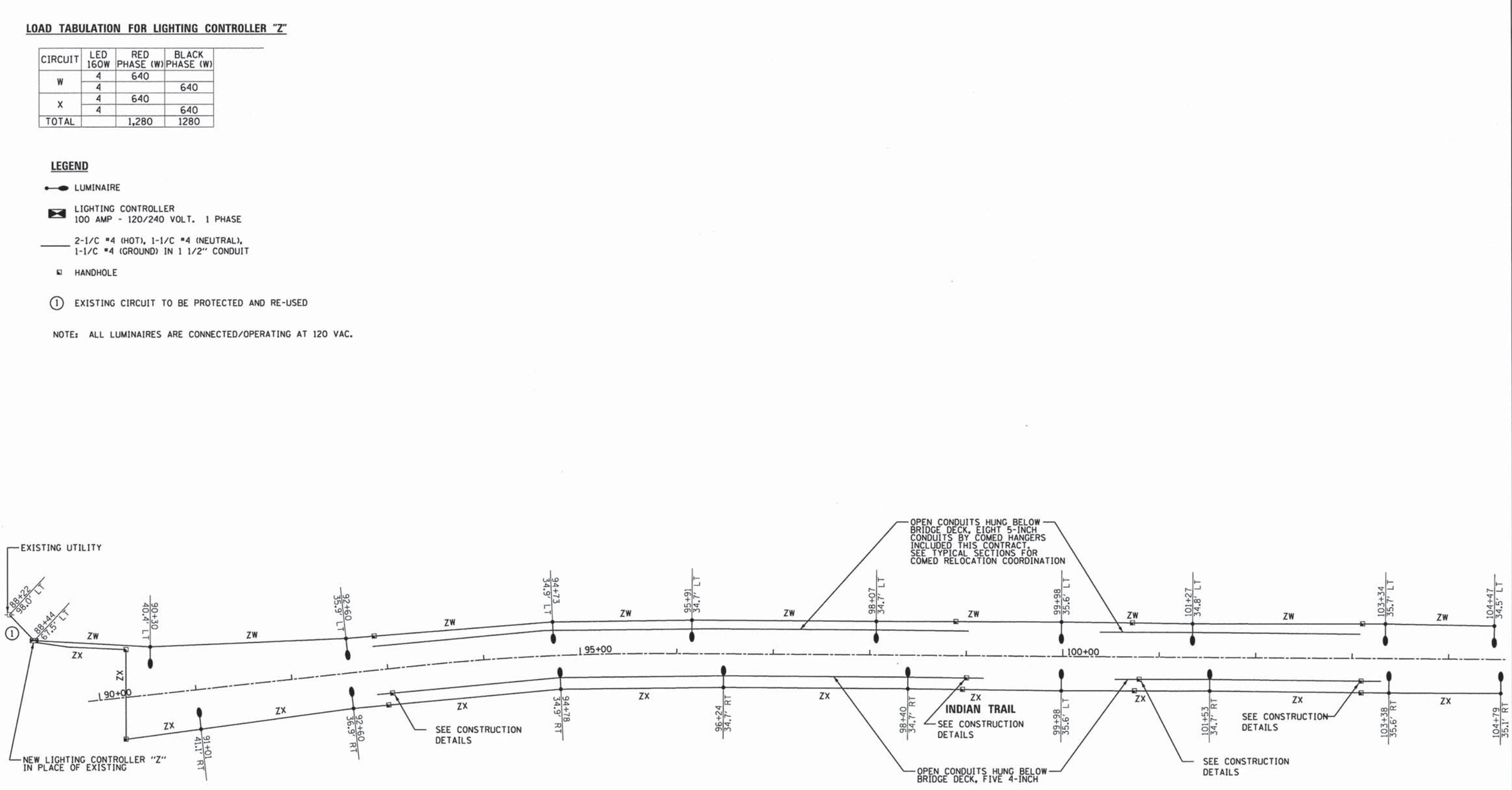
LOAD TABULATION FOR LIGHTING CONTROLLER "Z"

CIRCUIT	LED 160W	RED PHASE (W)	BLACK PHASE (W)
W	4	640	
	4		640
X	4	640	
	4		640
TOTAL		1,280	1280

LEGEND

- LUMINAIRE
- LIGHTING CONTROLLER 100 AMP - 120/240 VOLT. 1 PHASE
- 2-1/C #4 (HOT), 1-1/C #4 (NEUTRAL), 1-1/C #4 (GROUND) IN 1 1/2" CONDUIT
- HANDHOLE
- (1) EXISTING CIRCUIT TO BE PROTECTED AND RE-USED

NOTE: ALL LUMINAIRES ARE CONNECTED/OPERATING AT 120 VAC.



COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 9/4/2013 1:56:55 AM
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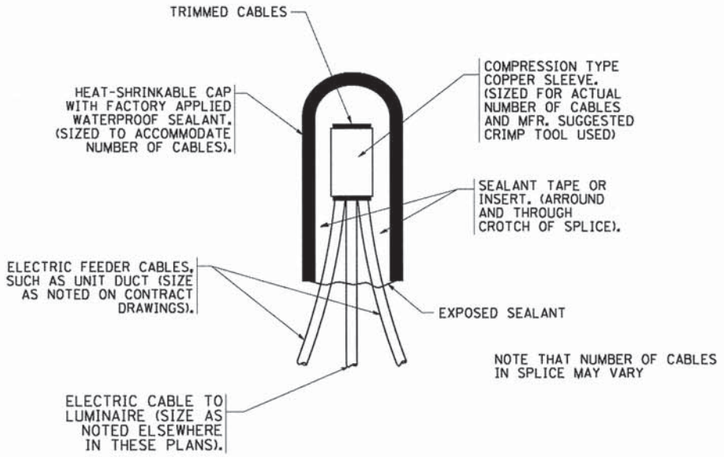
PLOT SCALE =	CHECKED - RGD	REVISED -	
PLOT DATE = 9/4/2013	DATE - 9/4/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
WIRING PLAN

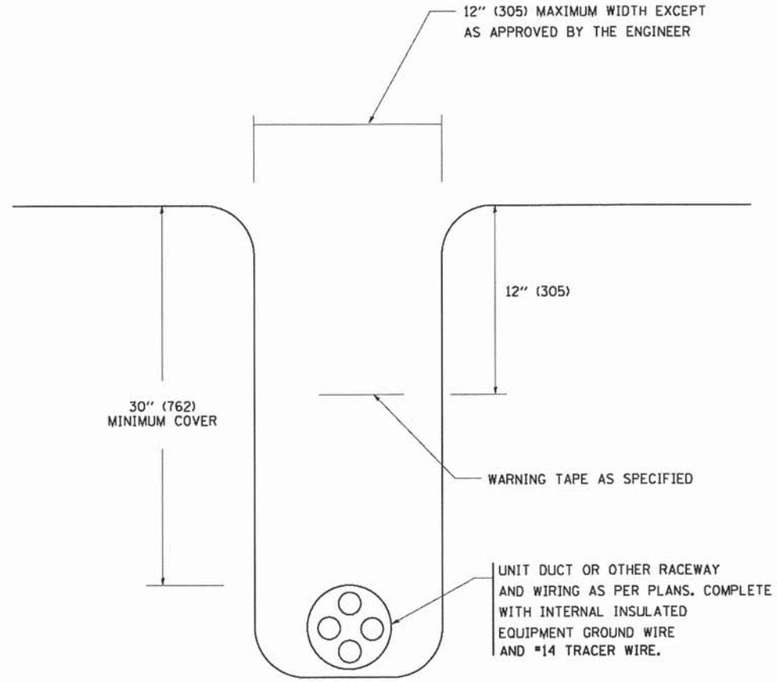
SCALE: | SHEET NO. 4 OF 8 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	37
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		



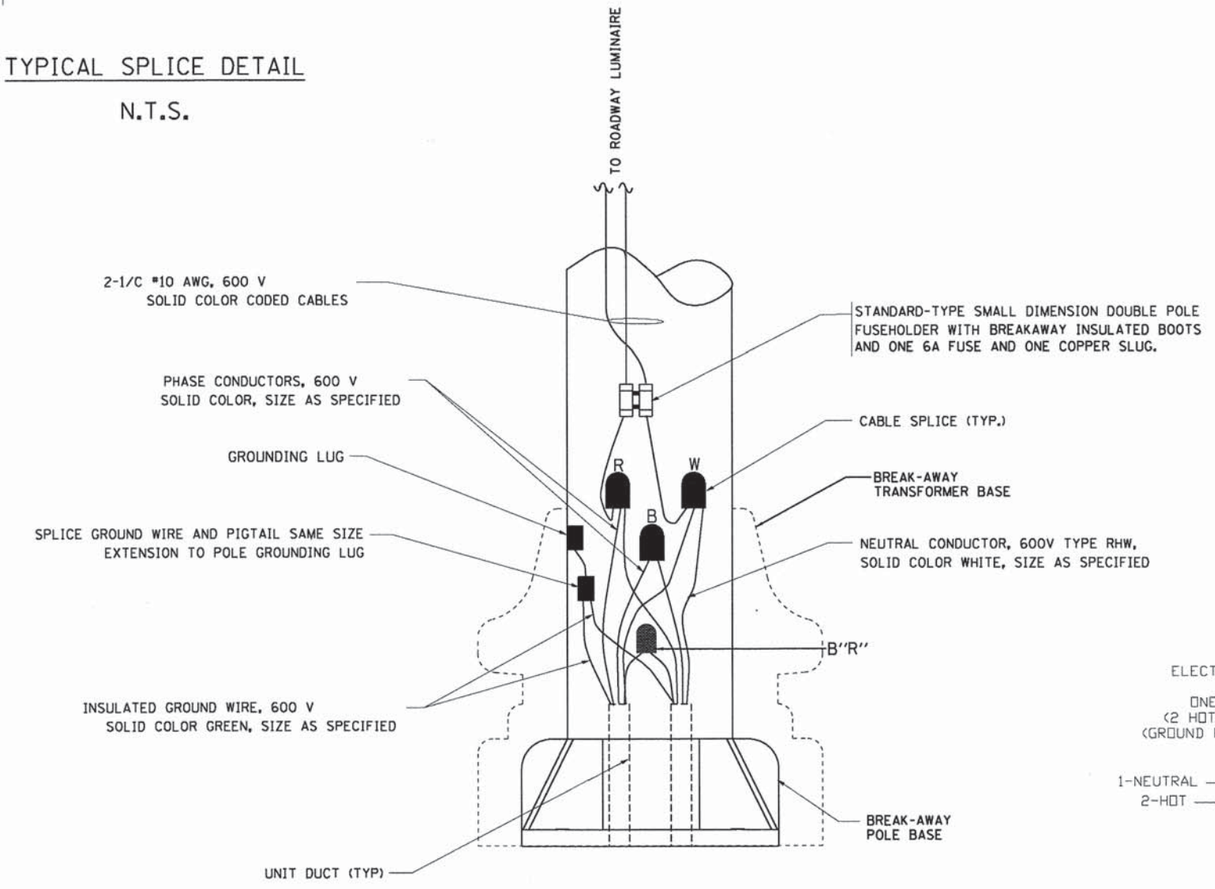
TYPICAL SPLICE DETAIL

N.T.S.



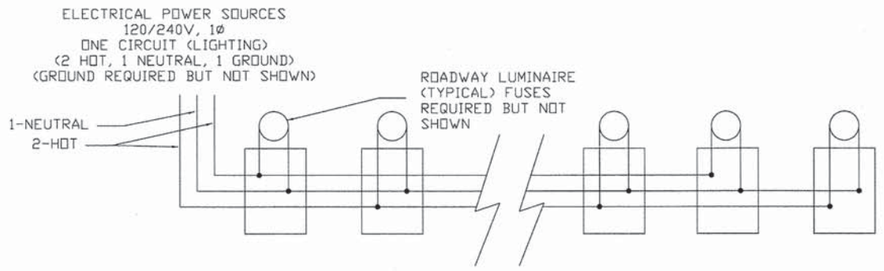
TYPICAL WIRING IN TRENCH DETAIL

N.T.S.



POLE WIRING DETAIL

N.T.S.



WIRING DIAGRAM

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PROJECT CONTACT: City of Aurora
CLIENT:
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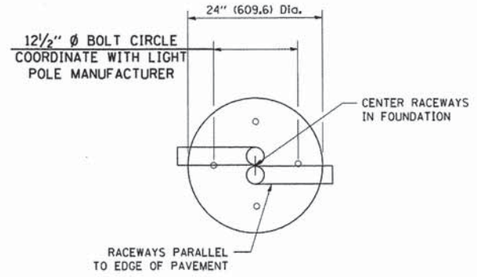
		DRAWN -	REVISED -	
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -	
	PLOT DATE = 1/4/2008	DATE -	REVISED -	

MISC. ELECTRICAL DETAILS
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
SCALE: | SHEET NO. 5 OF 8 SHEETS | STA. | TO STA.

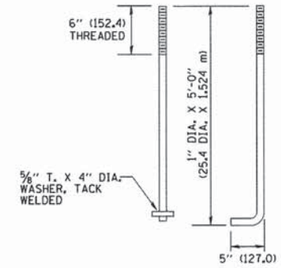
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	38
	BE-702	CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

LIGHT POLE FOUNDATION DEPTH TABLE
30 FT. (9.144 m) TO 35 FT. (10.668 m) MOUNTING HEIGHT

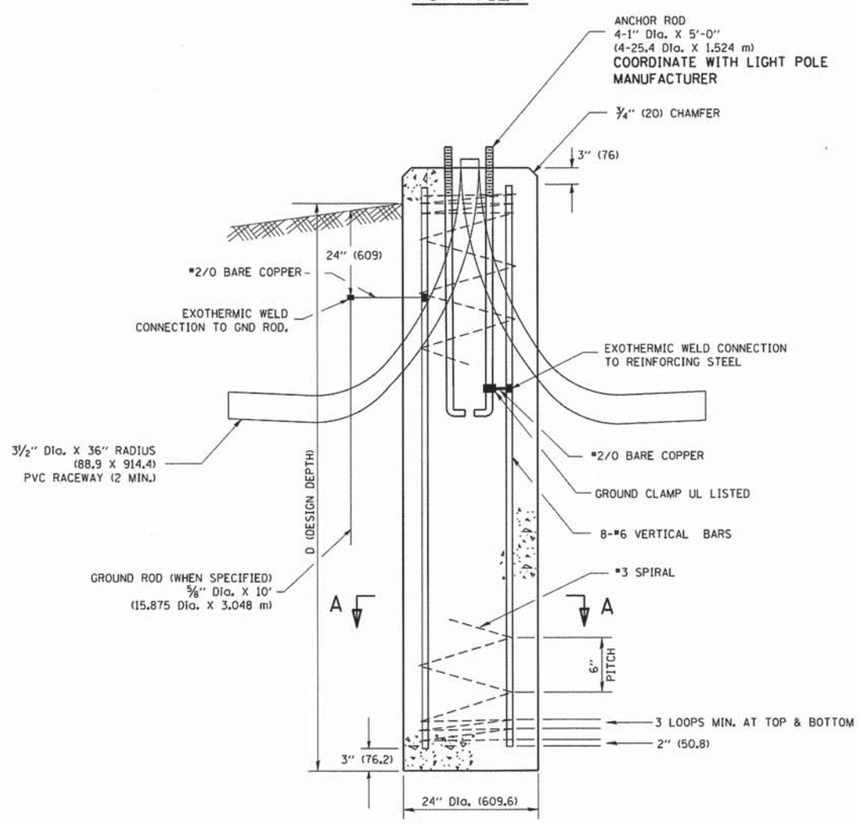
SOIL CONDITIONS	DESIGN DEPTH "D" OF FOUNDATION	
	SINGLE ARM POLE	TWIN ARM POLE
SOFT CLAY Qu = 0.375 TON/SQ. FT.	11'-0" (3.35 m)	12'-8" (3.85 m)
MEDIUM CLAY Qu = 0.75 TON/SQ.FT	9'-0" (2.74 m)	14'-10" (4.52 m)
STIFF CLAY Qu = 1.50 TON/SQ. FT.	7'-6" (2.29 m)	8'-7" (2.61 m)
LOOSE SAND Ø = 34°	9'-6" (2.90 m)	10'-7" (3.22 m)
MEDIUM SAND Ø = 37.5°	9'-0" (2.74 m)	9'-10" (2.99 m)
DENSE SAND Ø = 40°	8'-3" (2.51 m)	9'-7" (2.91 m)



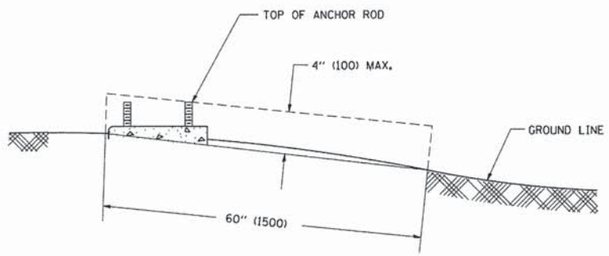
TOP VIEW



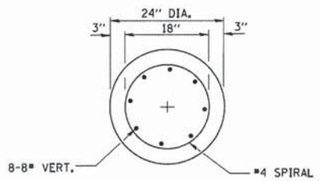
ANCHOR BOLT DETAIL



FOUNDATION DETAIL
GROUND MOUNTED



FOUNDATION EXTENSION DETAIL



SECTION A-A

NOTES

1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
3. THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 4 IN. (100 mm) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES. IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
5. THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP SHALL BE CHAMFERED ¾-IN. (20 mm).
6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
7. THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE ACCORDING TO ASTM F 436.
9. ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
11. ANCHOR RODS SHALL PROJECT 2¾" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
12. THE CONTRACTOR SHALL USE A #3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE #3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
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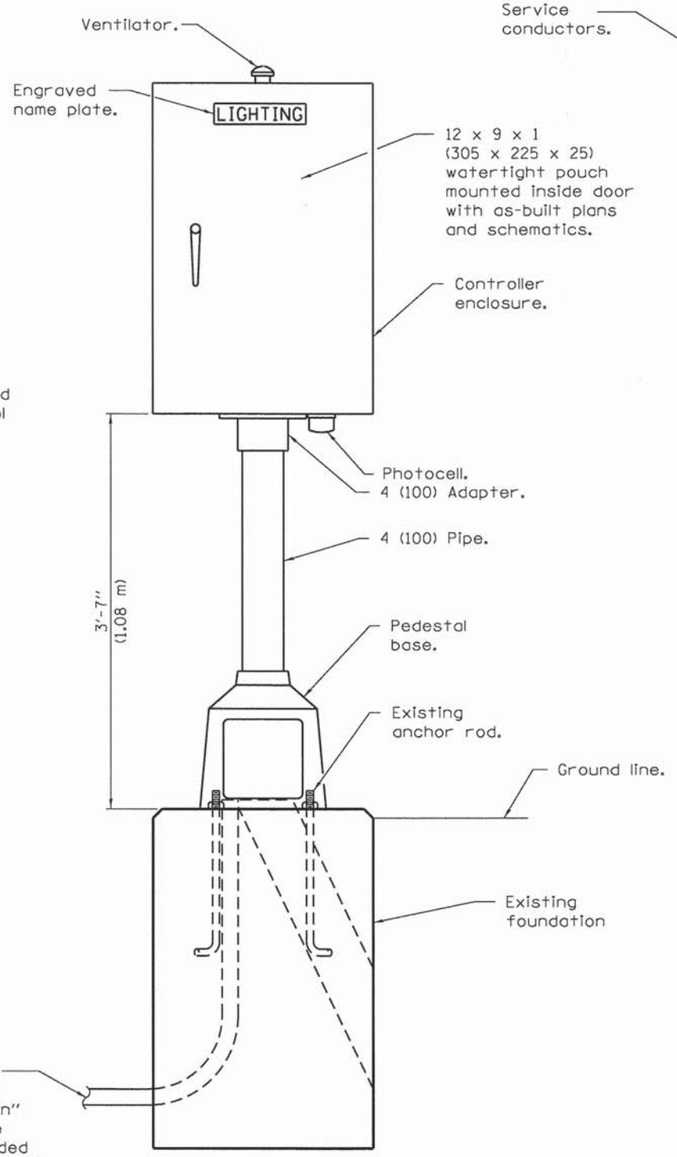
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

LIGHT POLE FOUNDATION
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER
SCALE: NONE | SHEET NO. 6 OF 8 SHEETS | STA. | TO STA.

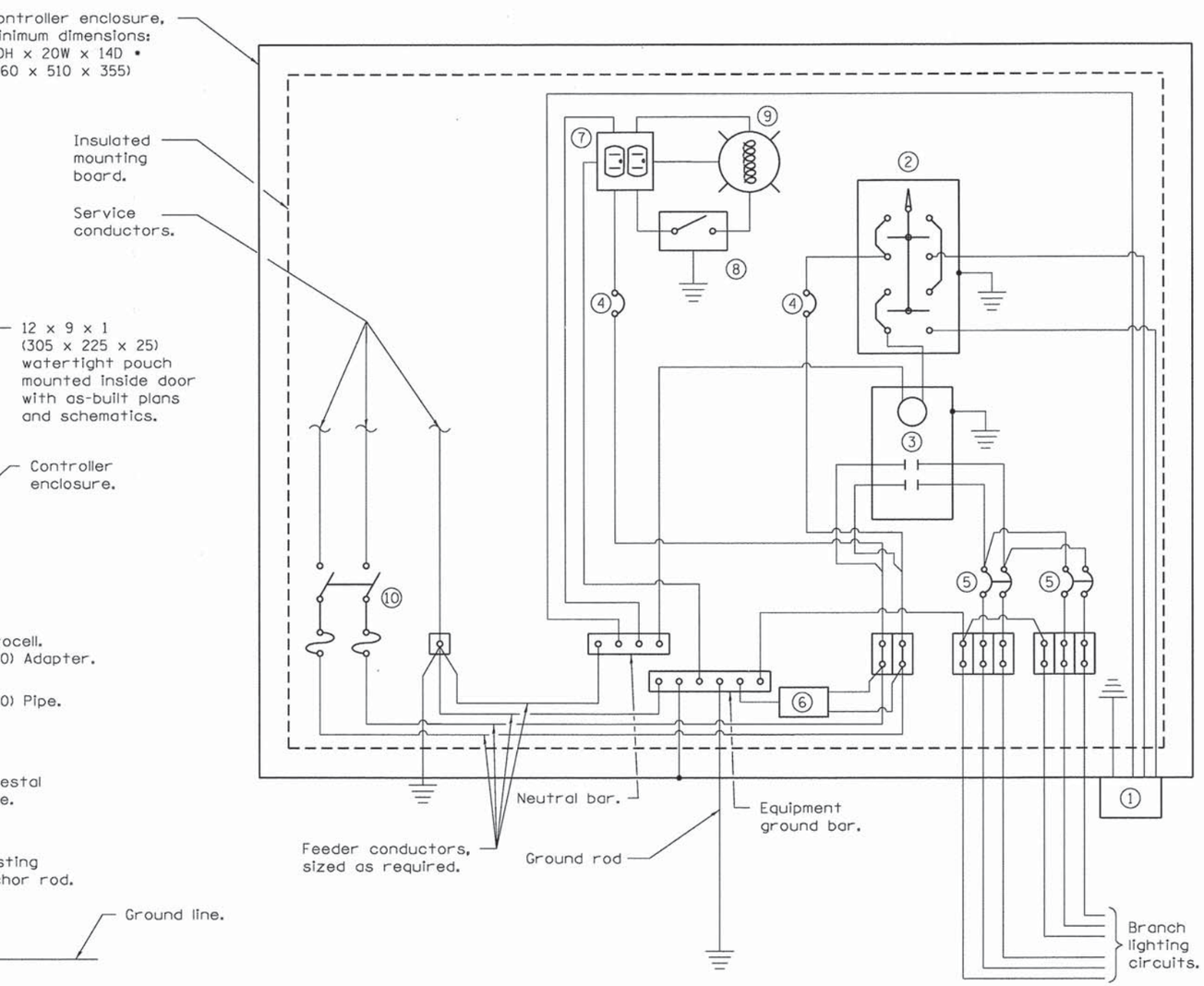
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	39
	BE-300	CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

NOTES:

1. All dimensions are in inches (millimeters) unless otherwise shown.
2. Coordinate cabinet base size with existing foundation.
3. Door shall be constructed from same type of material and thickness as cabinet.
4. Door shall be equipped with latching mechanism and padlock hasp.
5. All external hardware shall be stainless steel.
6. Control wiring to be #12 AWG, 600V, Type "SIS" Gray Switch Board Wire, stranded copper.
7. Cabinet shall be primed and painted as specified.
8. The heads of connector screws shall be painted white for neutral bar connection and green for ground bar connectors.
9. All wiring within the cabinet shall be colored coded as indicated.
   R = Red BL = Blue W = White
   B = Black Y = Yellow G = Green
10. Provide sealing grommets for all open wiring extended from devices in boxes or cabinets within the control cabinet.
11. All wiring shall be neatly dressed and supported.
12. The Controller shall be constructed to U.L. STD. 508 and bear the U.L. Label "Enclosed Industrial Control Panel".



LIGHTING CONTROLLER



CONTROL SCHEMATIC

1. Photocell with integral surge arrester.
2. HAND-OFF-AUTO selector switch.
3. 100 amp•, electrically held contactor.
4. 15 amp, 1-pole circuit breaker.
5. 20 amp•, 2-pole circuit breaker (two spares required but not shown).
6. Surge arrester.
7. GFCI duplex receptacle.
8. Single-pole, single-throw switch.
9. Incandescent luminaire, enclosed and gasketted with 100 watt lamp.
10. Service disconnect switch - 2-pole, 3-wire, 60 amp•, fused at 60 amp•, solid neutral in NEMA 4X enclosure having lockable external handle.

• Size larger as needed.

All dimensions are in inches (millimeters) unless otherwise shown.

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
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Illinois Professional Design Firm # 184-001322

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PLOT DATE = 8/22/2013	DATE - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

LIGHTING CONTROLLER PEDESTAL MOUNTED, 240 V
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER

SCALE: NONE | SHEET NO. 7 OF 8 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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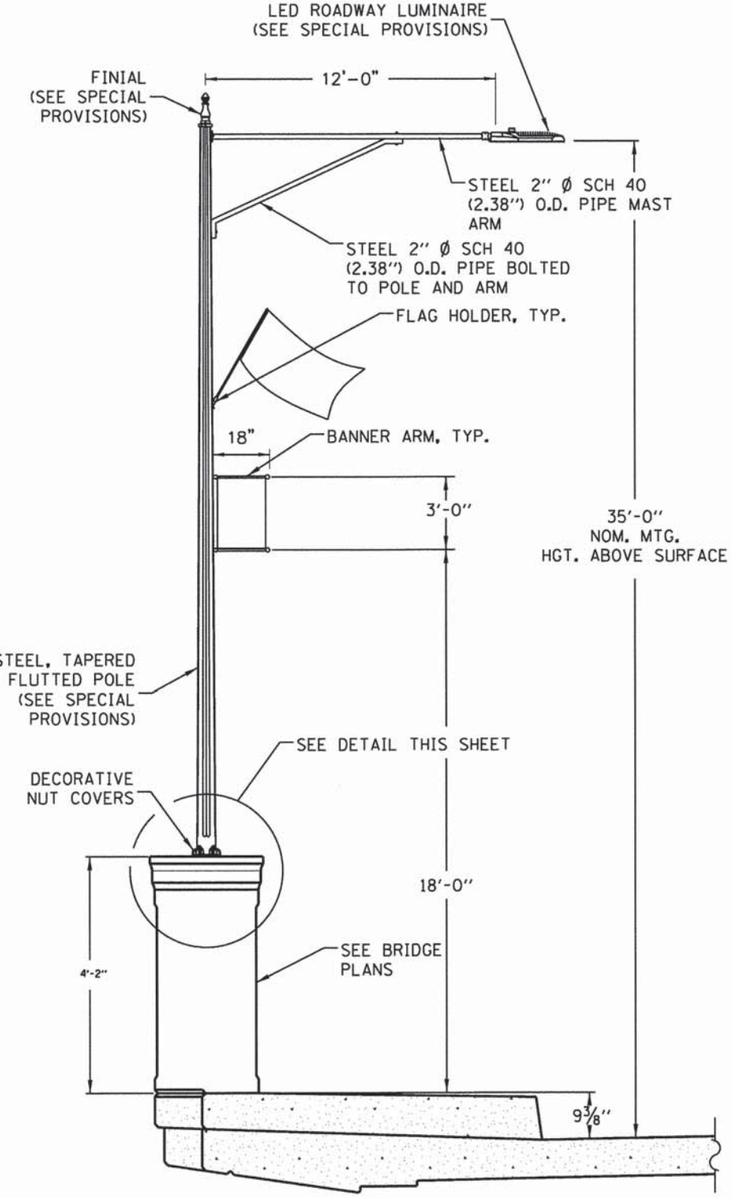
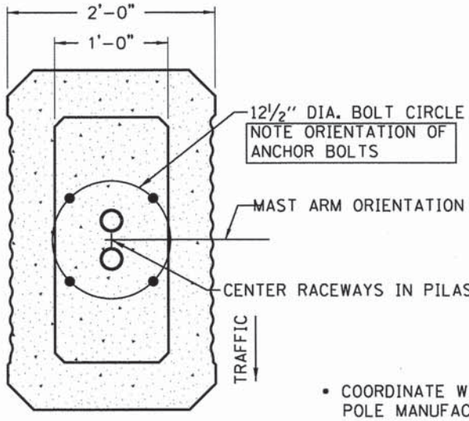
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		



LIGHT FIXTURE ASSEMBLY - TYPE B

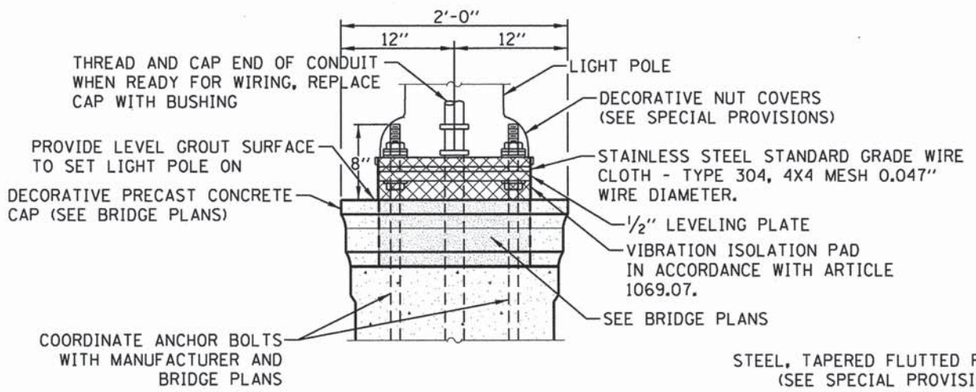
FOR SPECIFIC FEATURES OF EACH TYPE
SEE SPECIAL PROVISIONS



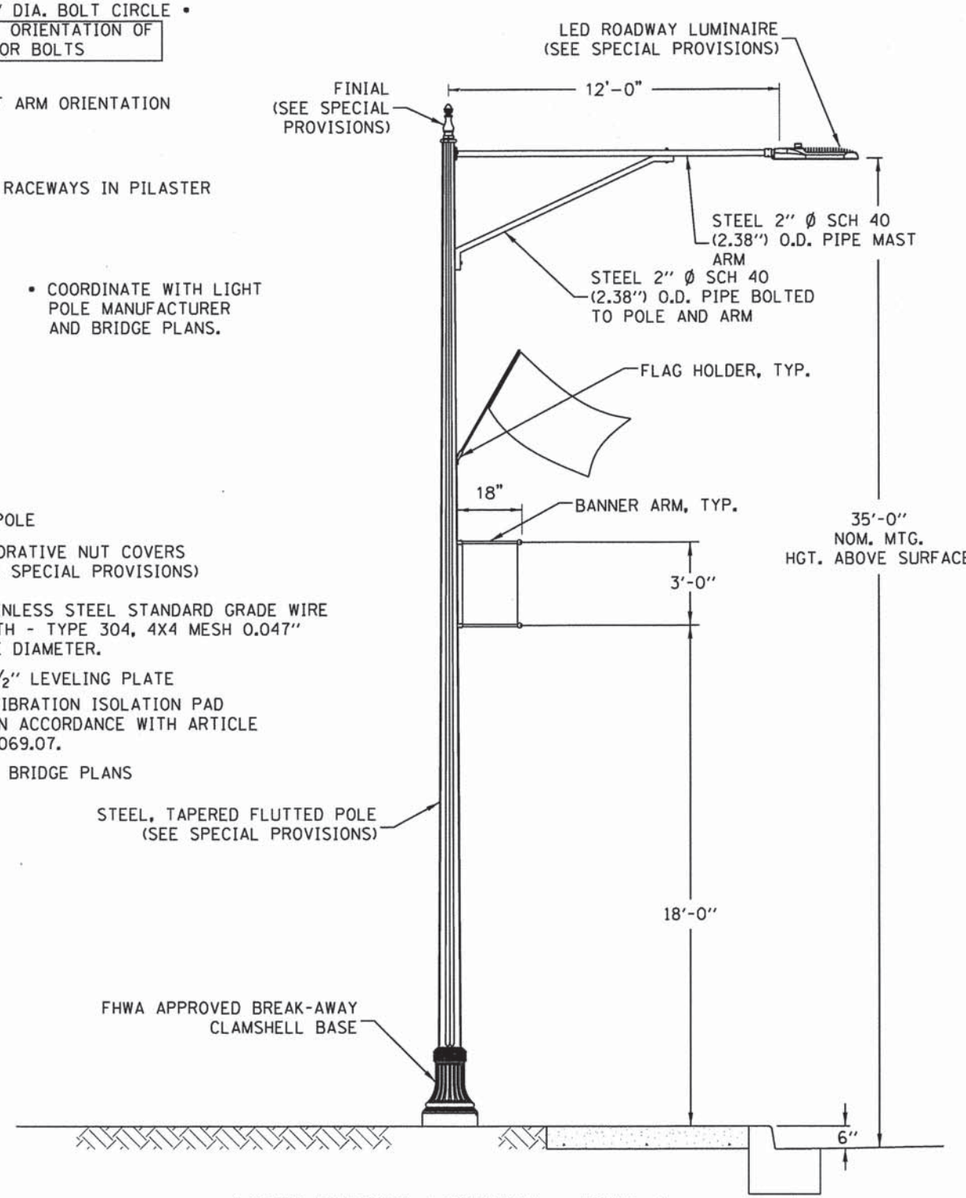
• COORDINATE WITH LIGHT POLE MANUFACTURER AND BRIDGE PLANS.

TOP PLAN

SEE BRIDGE PLANS
FOR ADDITIONAL
DETAILS



BRIDGE MOUNTED POLE
INSTALLATION DETAIL



LIGHT FIXTURE ASSEMBLY - TYPE A

FOR SPECIFIC FEATURES OF EACH TYPE
SEE SPECIAL PROVISIONS

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PROJECT CONTACT: City of Aurora
CLIENT:
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORATION

LIGHT POLE DETAILS
INDIAN TRAIL OVER THE WEST AND EAST BRANCH OF THE FOX RIVER

SCALE: NONE | SHEET NO. 8 OF 8 SHEETS | STA. | TO STA.

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	41
		CONTRACT NO. 63863		
FED. ROAD DIST. NO. 2	ILLINOIS	FED. AID PROJECT		

Benchmark:
Northwest bolt on fire hydrant north of Indian Trail, west of office building for pallet company, west side of Fox River.
Elev: 652.33

Exist. Structure:
Built in 1963 consists of seven span cast-in-place concrete deck on steel beams supported on concrete piers and abutments. Spans 1-4 utilitze steel wide beam flange sections and spans 5-7 utilize steel plate girders. The existing concrete deck is 7 inches thick. The out-to-out deck width is 60'-0" with a total structure length of 586'-1½" back to back of abutments.

Salvage: No salvage

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4	Pier 5	Pier 6	E. Abut.
	660.51	630.52	628.56	627.53	626.51	623.43	622.56	643.56

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges - 17th Ed.

DESIGN STRESSES

FIELD UNITS

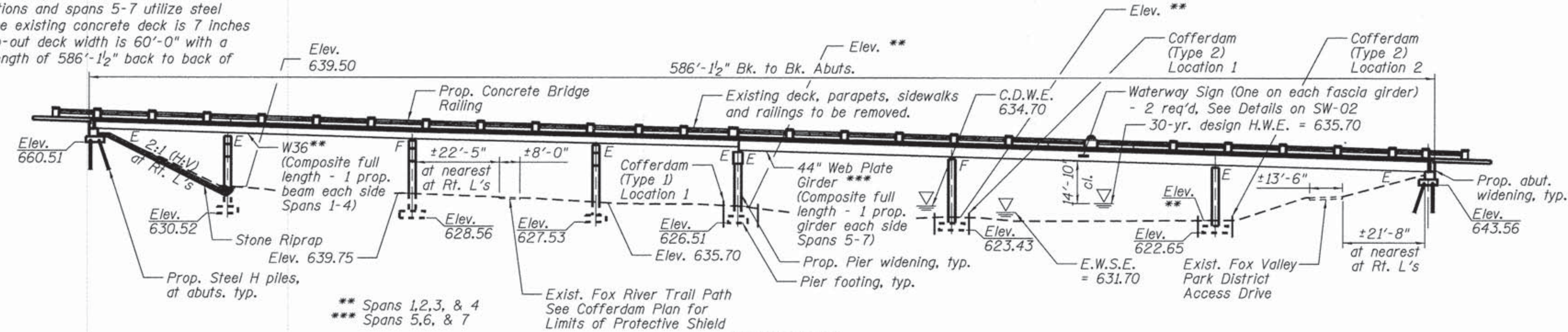
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

LOADING HS20-44

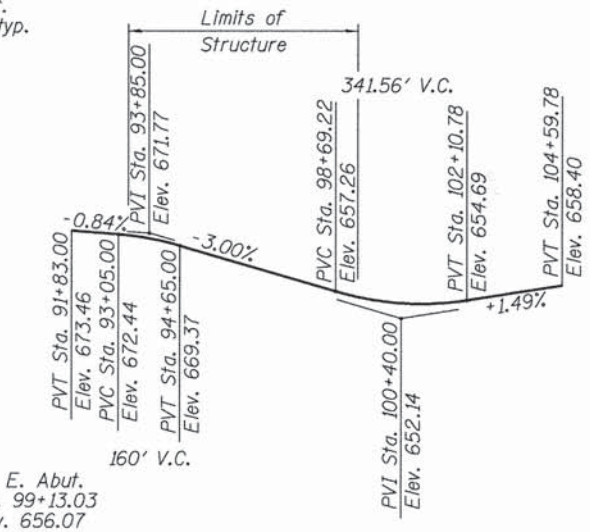
Allow 25#/sq. ft. for future wearing surface.

SEISMIC DATA

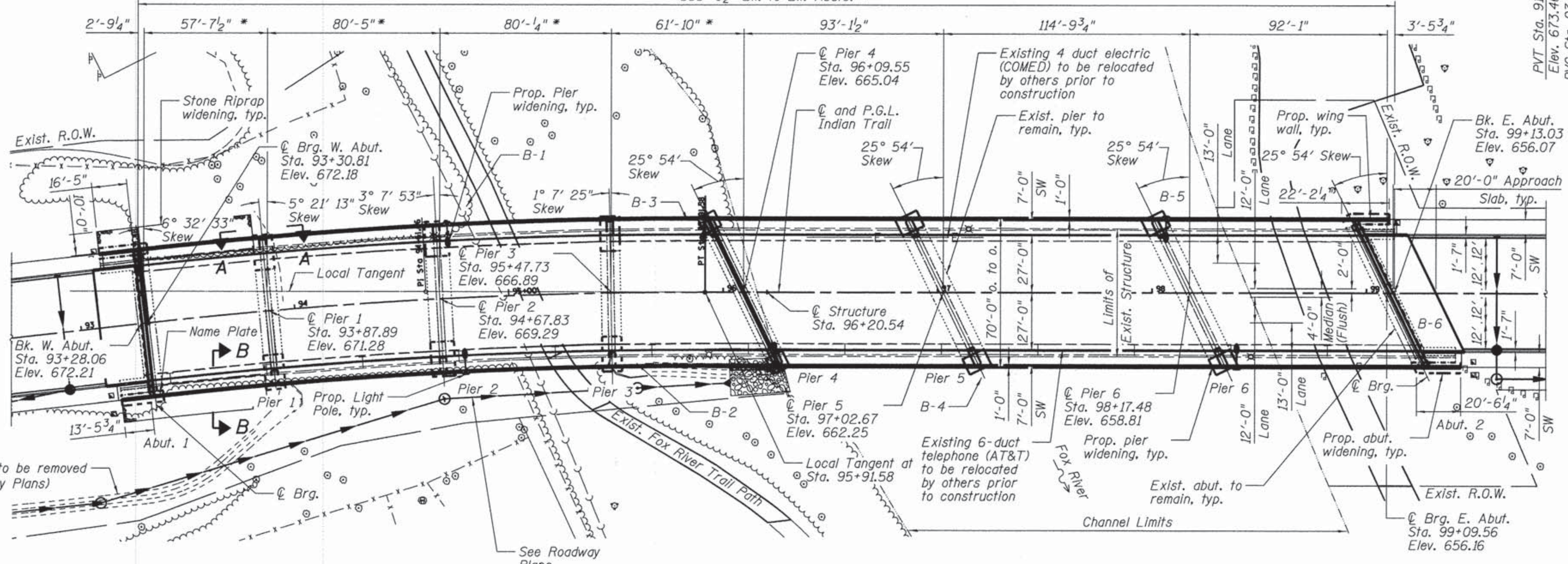
Seismic Performance Category = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient = 1.0

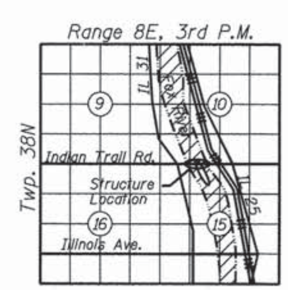


ELEVATION



PROFILE GRADE





LOCATION SKETCH

WATERWAY INFORMATION

Drainage Area = 1,680 SQ. MI. Low Grade Elev. 653.26 @ Sta. 101+04									
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
	10	8,565	1,950	1,950	635.7	0.2	0.2	635.9	635.9
Design	30	11,357	2,208	2,208	636.6	0.2	0.2	636.8	636.8
	50	12,770	2,332	2,332	637.0	0.2	0.2	637.2	637.2
Base	100	14,350	2,458	2,458	637.4	0.2	0.2	637.6	637.6
Max. Calc.	500	18,760	2,820	2,820	638.5	0.2	0.2	638.7	638.7

* Dimensions along Local Tangent at Sta. 95+91.58

** See Cofferdam Plans for streambed elevations at Piers 4, 5 and 6.

See Deck Plan for Scupper locations.

PLAN

N

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 the requirements of the current "AASHTO Standard Specifications for Highway Bridges".

Structural Engineer Expires: 11/30/2014
HRGreen

STATE OF ILLINOIS · ROBERT G. DAVIES · 081-004666 · McHENRY, IL · LICENSED STRUCTURAL ENGINEER

GENERAL PLAN & ELEVATION
INDIAN TRAIL
OVER THE FOX RIVER
PUBLIC WATERS
SECTION NO. 09-00286-00-BR
KANE COUNTY
STATION 96+20.54
STRUCTURE NO. 045-3088

COMPANY NAME:
PROJECT CONTACT: Kevin M. Artt
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 1:07:08 PM
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PLOT DRIVER: pdf_DET-Tiff.plt
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PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. SW-01 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	42
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	

GENERAL NOTES

1. Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts. Bolts $\frac{7}{8}$" ϕ, holes $\frac{15}{16}$" ϕ, unless otherwise noted.

2. Calculated weight of new Structural Steel = 330,990 pounds

3. No field welding is permitted except as specified in the contract documents.

4. The Contractor shall test the existing welds by non-destructive methods within 2 ft. of the end of the existing cover plates for cracks after removal of the existing concrete deck. Dye penetrant (PT), magnetic particle (MT), or other approved testing method shall be performed by qualified personnel approved by the Engineer. If cracks are found, report them to the Bureau of Bridges and Structures for disposition. The cost of testing is included in Removal of Existing Concrete Deck. The cost of crack repair, if necessary, will be paid for according to Article 109.04 of the Standard Specifications. See Steel Framing Plan.

5. Reinforcement bars designated (E) shall be epoxy coated.

6. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

   As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding $\frac{1}{4}$ inch deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

7. If the Contractor elects to use cantilever forming brackets on the exterior beams or girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.

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

9. Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

10. Concrete Sealer shall be applied to the designated areas of the abutments and Pier 4.

11. The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

12. 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 the exception of the exterior surface and the bottom of the bottom flange of fascia beams, masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces and new bearings shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams and exterior bearings shall be Reddish Brown, Munsell No. 2.5 YR 3/4. See Steel Framing Plan for painting existing structural steel.

13. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.

14. The embankment for widening each abutment shall be the minimum that must be placed and compacted prior to construction of the abutment widening.

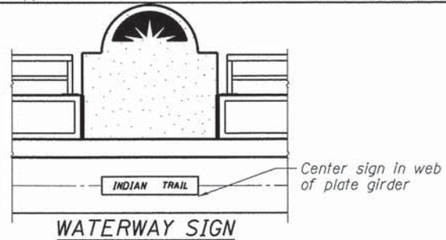
15. See Cofferdam Plans for notes and details concerning in-water work.

16. 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 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 3500 psi.

17. Contractor shall maintain emergency vehicular access to the island from either east or west for utilities and City emergency service providers. Emergency access shall mean 18'-0" of clear deck width without barriers.

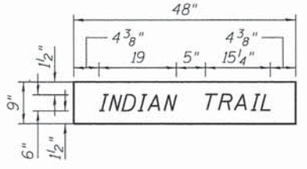
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.	-	346	346
Filter Fabric	Sq. Yd.	-	314	314
Concrete Removal	Cu. Yd.	-	97.5	97.5
Removal of Existing Concrete Deck No. 1	Each	1	-	1
Protective Shield	Sq. Yd.	134	-	134
Structure Excavation	Cu. Yd.	-	649.2	649.2
Cofferdam Excavation	Cu. Yd.	-	55.3	55.3
Rock Excavation for Structures	Cu. Yd.		298.6	298.6
Cofferdam (Type 1) (Location - 1)	Each	-	1	1
Cofferdam (Type 2) (Location - 1)	Each	-	1	1
Cofferdam (Type 2) (Location - 2)	Each	-	1	1
Concrete Structures	Cu. Yd.	-	878.5	878.5
Concrete Superstructure	Cu. Yd.	1,471.3	-	1,471.3
Bridge Deck Grooving	Sq. Yd.	3,584	-	3,584
Seal Coat Concrete	Cu. Yd.	-	94.2	94.2
Protective Coat	Sq. Yd.	5,170	-	5,170
Furnishing and Erecting Structural Steel	L. Sum	0.7	-	0.7
Stud Shear Connectors	Each	15,449	-	15,449
Reinforcement Bars, Epoxy Coated	Pound	366,450	119,630	486,080
Bar Splicers	Each	-	118	118
Furnishing Steel Piles HP12X63	Foot	-	416	416
Driving Piles	Foot	-	416	416
Test Pile Steel HP12X63	Each	-	2	2
Pile Shoes	Each	-	18	18
Name Plates	Each	1	-	1
Preformed Joint Strip Seal	Foot	230	-	230
Elastomeric Bearing Assembly, Type II	Each	63	-	63
Anchor Bolts, 1"	Each	162	-	162
Concrete Sealer	Sq. Ft.	-	1,425	1,425
Epoxy Crack Injection	Foot	-	465	465
Geocomposite Wall Drain	Sq. Yd.	-	95	95
Controlled Low Strength Material	Cu. Yd.	-	21.6	21.6
Conduit Attached to Structure, 4" Dia. Galvanized Steel	Foot	3,335	-	3,335
Conduit Embedded in Structure	Foot	1,295		1,295
Concrete Bridge Railing	Foot	1,226	-	1,226
Parapet Railing (Special)	Foot	1,006	-	1,006
Name Plates (Special)	Each	2	-	2
Granular Backfill for Structures	Cu. Yd.	-	574.6	574.6
Jack and Remove Existing Bearings	Each	63	-	63
Hot-Mix Asphalt Surface Removal (Deck)	Sq. Yd.	3,094	-	3,094
Containment and Disposal of Lead Paint Cleaning Residues No. 1	L. Sum	1	-	1
Cleaning and Painting Steel Bridge No. 1	L. Sum	1	-	1
Structural Repair of Concrete (Depth Less than or Equal to 5")	Sq. Ft.	-	634	634
Drainage Scuppers, DS-33	Each	15	-	15



WATERWAY SIGN

Sign shall be provided according to applicable portions of Section 720 of the Standard Specifications. Connection to be approved by the Engineer. Cost included in Furnishing and Erecting Structural Steel.



WATERWAY SIGN DETAIL

Sign color shall be brown with white lettering.

INDEX OF SHEETS

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 9/4/2013 7:56:57 AM
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PLOT DRIVER: pdf_DET-111f.plt
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HRGreen

USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 9/4/2013	CHECKED - 9/4/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND TOTAL BILL OF MATERIALS
STRUCTURE NO. 045-3088
SHEET NO. SW-02 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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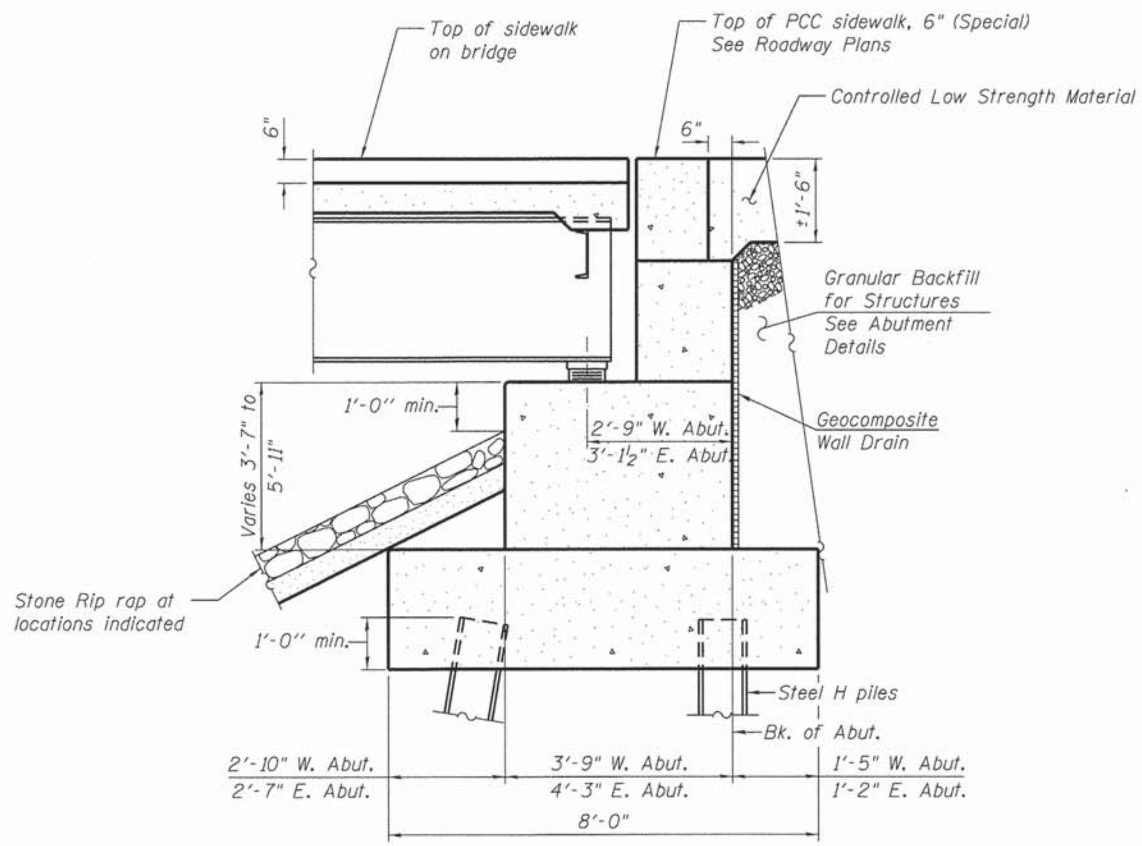
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	



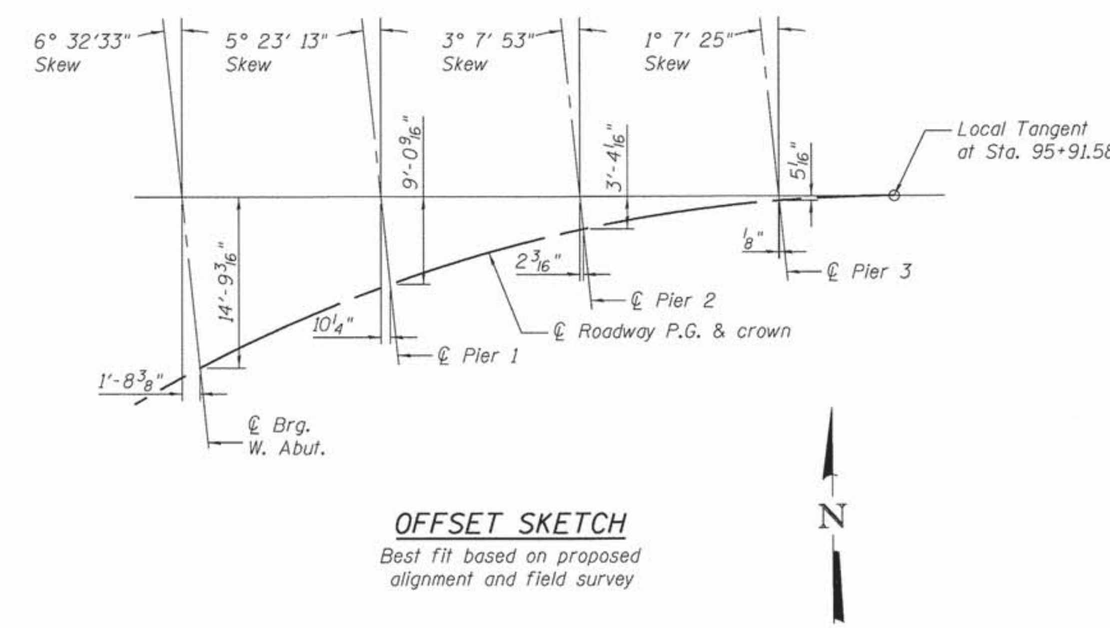
SECTION THRU PILE SUPPORTED ABUTMENT

At Widening
(Horiz. dim. @ Rt. L's)

FOX RIVER
RE-BUILT 20__ BY CITY OF AURORA
KANE COUNTY
SEC. 09-00286-00-BR
F.A. RT. 1503 STA. 96+20.54
STR. NO. 045-3088 LOADING HS20

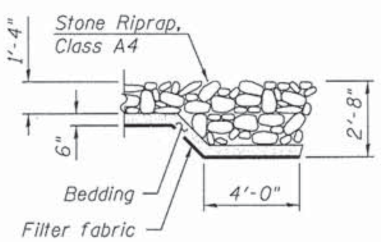
NAME PLATE

See Std. 515001
See Bridge Railing Details

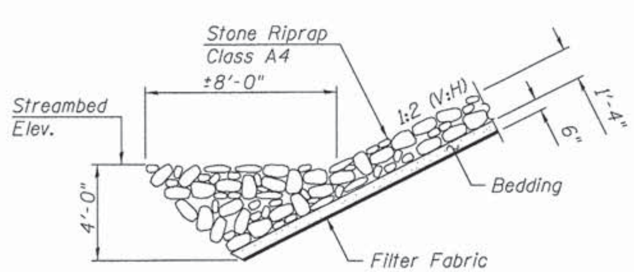


OFFSET SKETCH

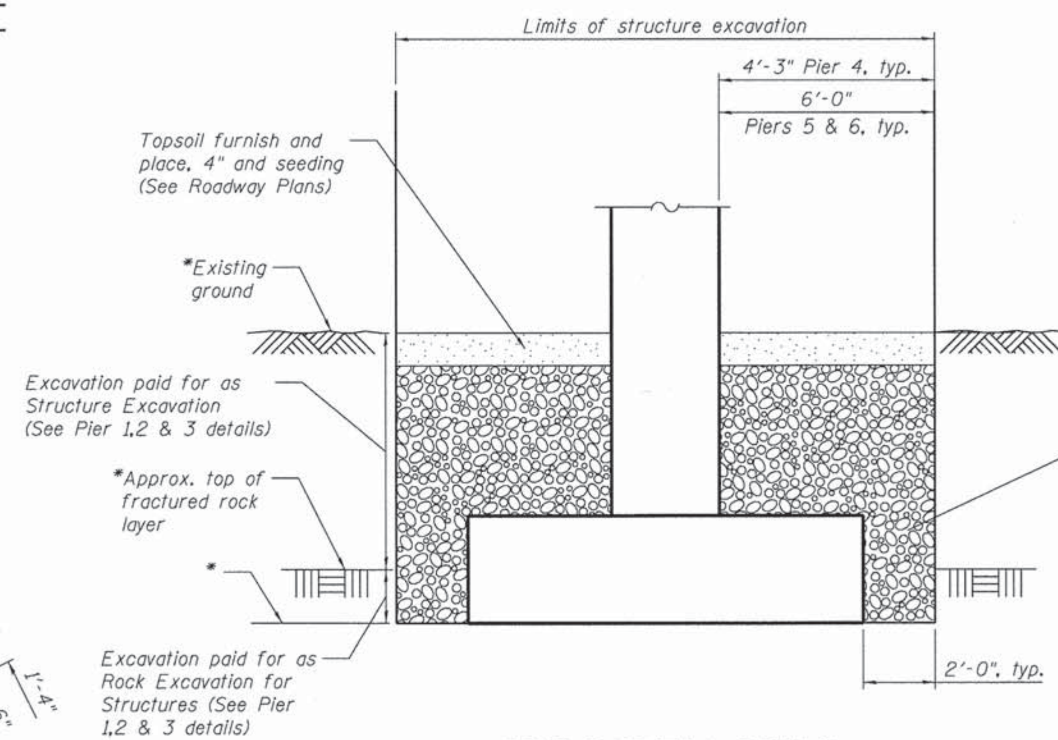
Best fit based on proposed alignment and field survey



SECTION B-B



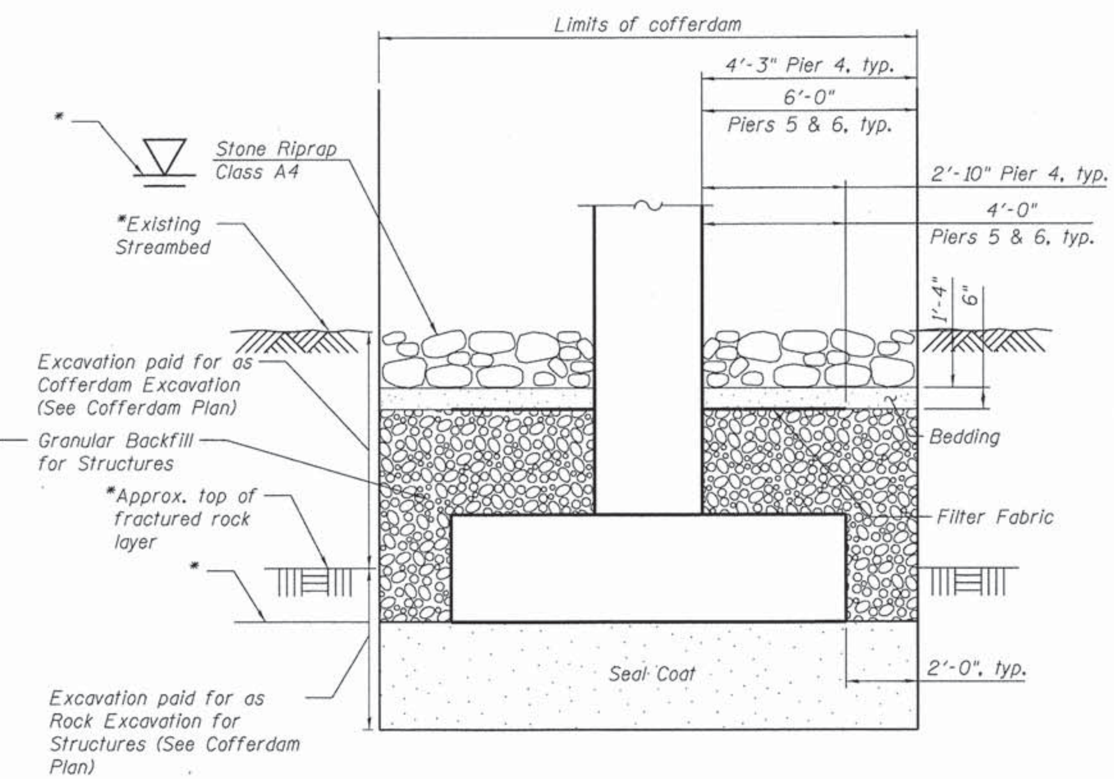
SECTION A-A



PIER BACKFILL DETAIL

Applies to Piers 1, 2 and 3 (at widening)

* See General Plan and Elevation and soils report in special provisions for additional dimensions and elevations



PIER BACKFILL DETAIL

Applies to Piers 4, 5 and 6 (at widening)

* See General Plan and Elevation and Cofferdam Plan for additional dimensions and elevations

COMPANY NAME:
PROJECT CONTACT: Kevin M. Artt
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:38:44 PM
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PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-03 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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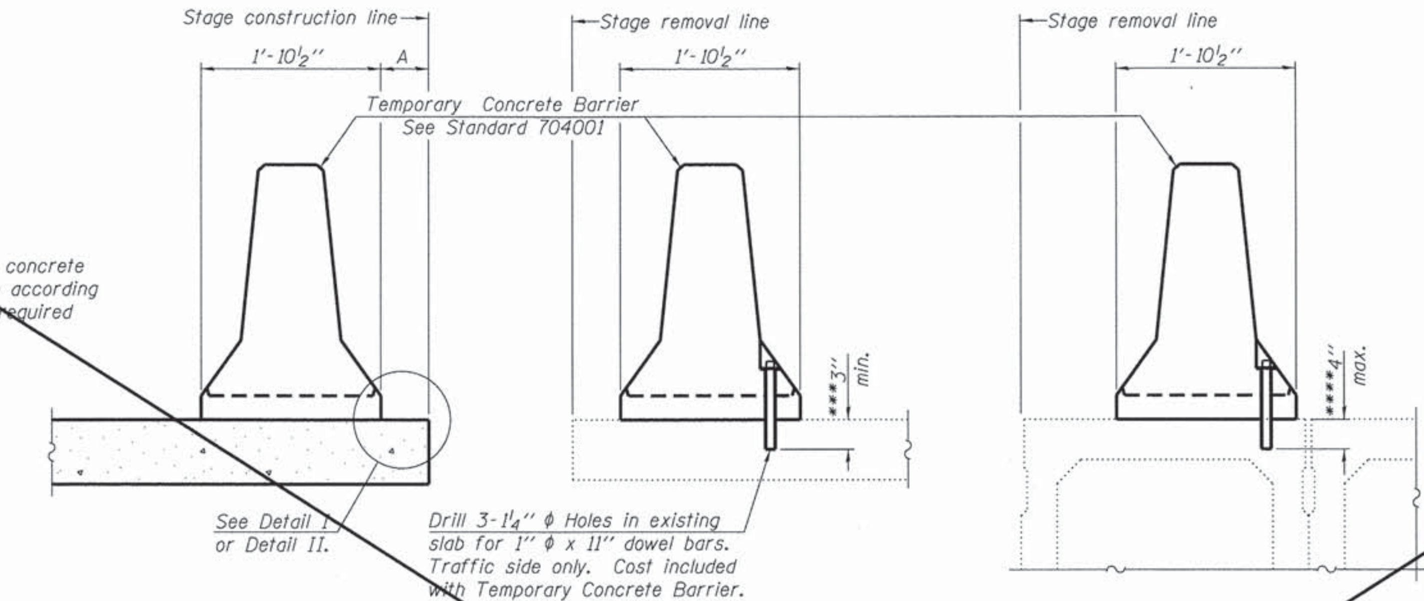


When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".

SECTIONS THRU SLAB OR DECK BEAM

NOTES

Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7' x "W" steel ℙ to the top layer of couplers with 2-⅝" ϕ bolts screwed to coupler at approximate ℄ of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel ℙ to the concrete slab or concrete wearing surface with 2-⅝" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate ℄ of each barrier panel.

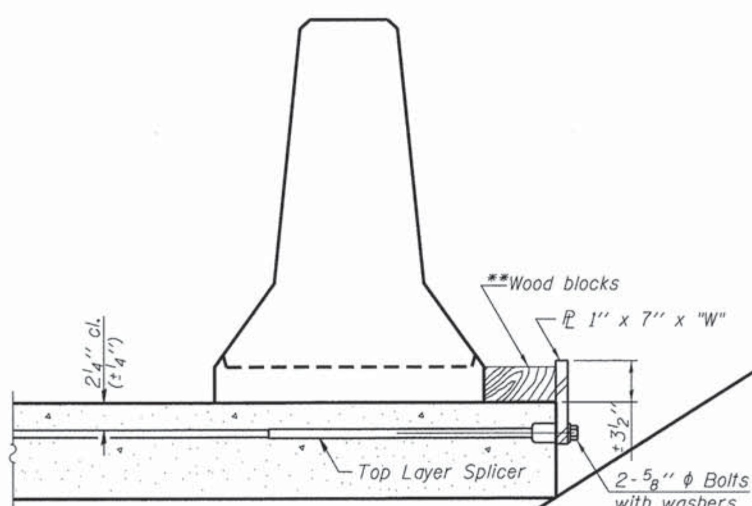
Cost of anchorage is included with Temporary Concrete Barrier.

The 1" x 7" x "W" 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.

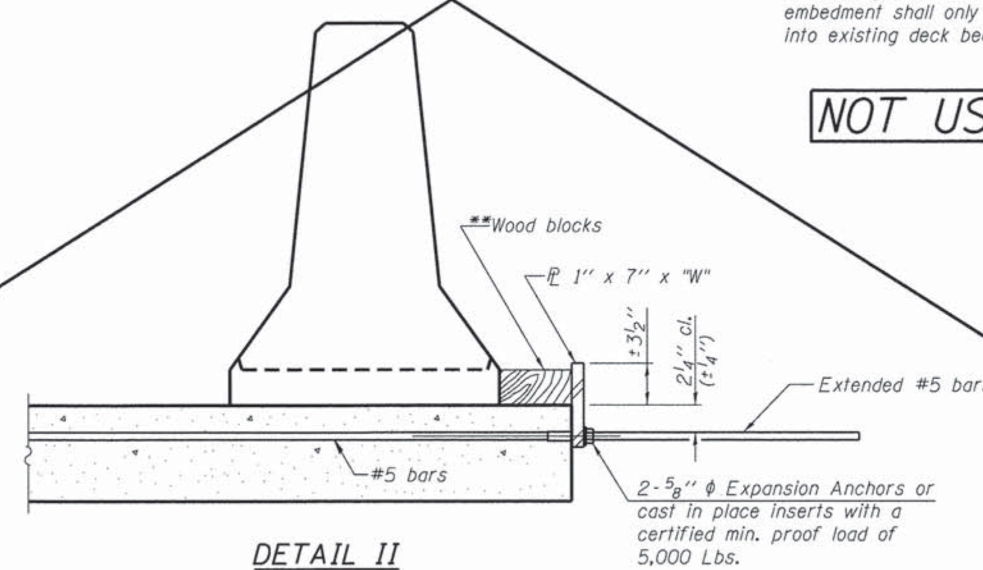
*** Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.

**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.

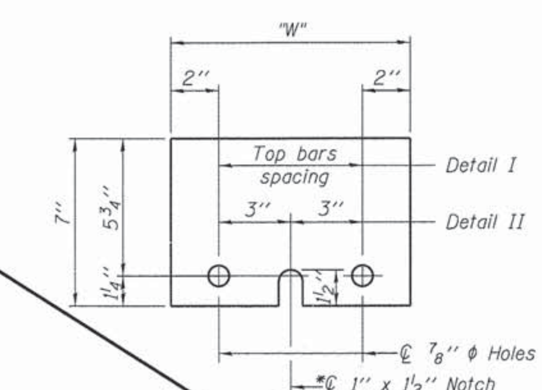
NOT USED



DETAIL I



DETAIL II



STEEL RETAINER ℙ 1" x 7" x "W"

* Required only with Detail II

** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.

"W" = Top bars spacing + 4"

R-27 7-1-10

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:39:22 PM
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PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 045-3088
SHEET NO. SW-04 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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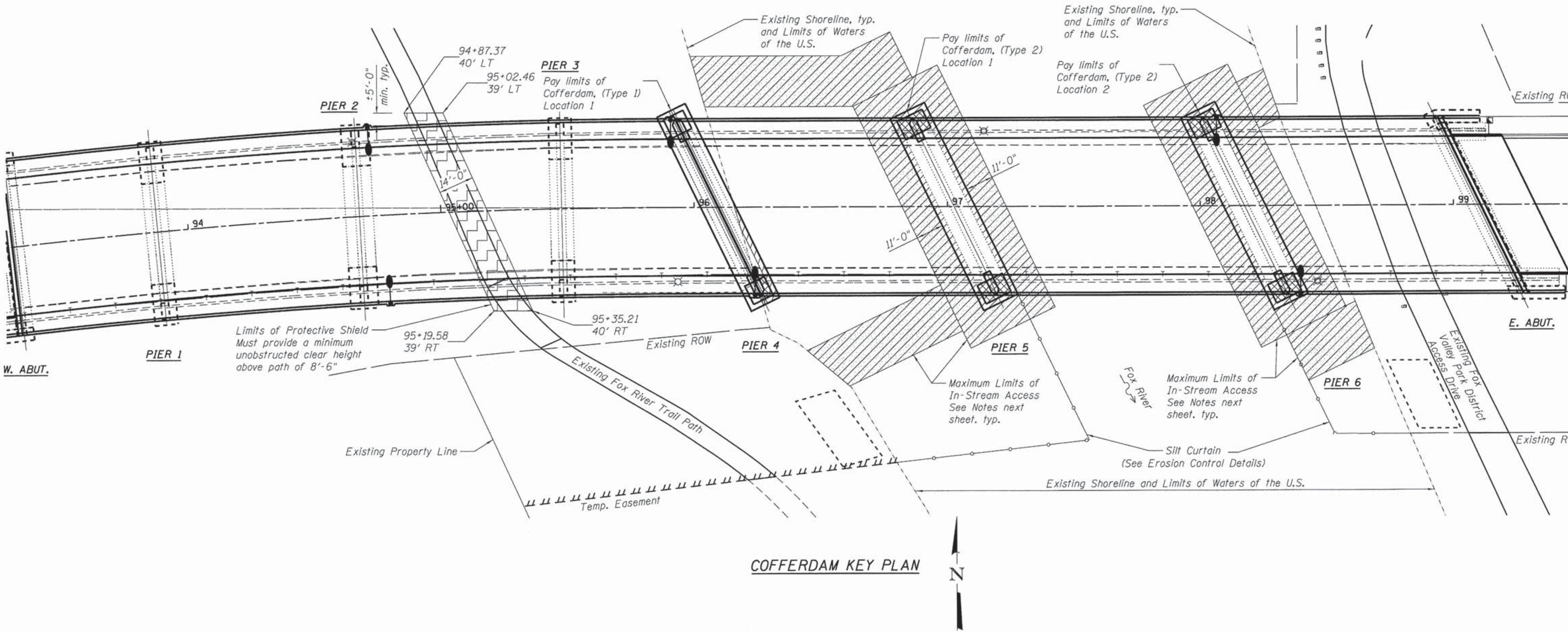
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	



COFFERDAM KEY PLAN

LEGEND

Limits of Protective Shield	Limits of Temporary Impacts to Waters of the U.S.
Limits of Permanent Impacts to Waters of the U.S.	Areas designated for dewatering
Maximum allowable limits of in-stream access, if required See Notes next sheet.	Silt Curtain

Note:
1. In-stream access, if utilized, must be constructed completely of non-erodible materials; under no circumstances may earthen materials or fill be used.
2. See notes next sheet.

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:40:18 PM
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

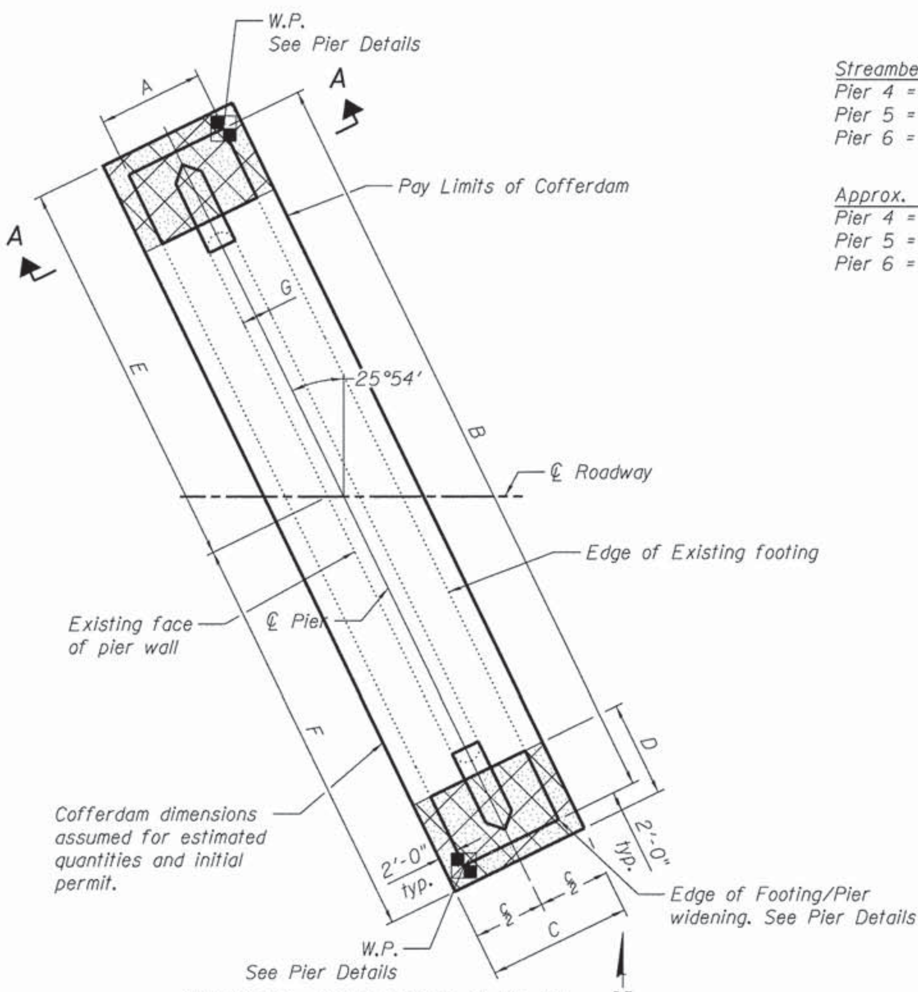
COFFERDAM PLAN
STRUCTURE NO. 045-3088
SHEET NO. SW-05 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	46
		CONTRACT NO. 63863		
	ILLINOIS	FED. AID PROJECT	$FEDPROJNO$	

LEGEND

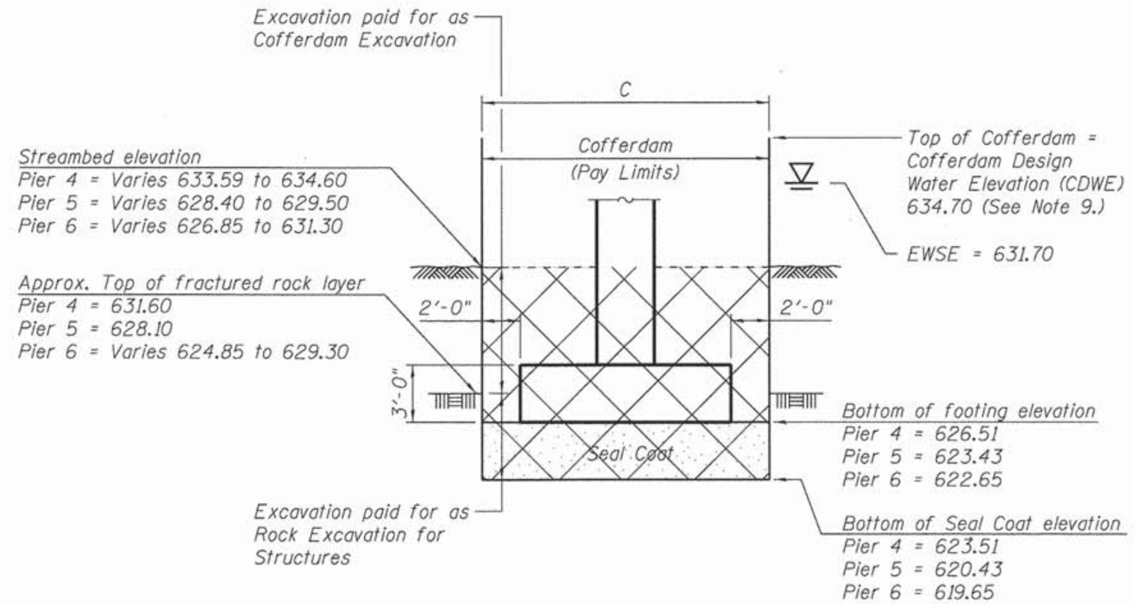
Pay Limits of Cofferdam Excavation / Rock Excavation for Structures

Pay Limits of seal coat



TYPICAL COFFERDAM PLAN

See Pier Details for W.P. locations



SECTION A-A

Notes:

1. All In-Stream work, including placement and removal of In-Stream Access to piers, Cofferdam construction and removal, and stream restoration, must be completed outside of spawning season (April 1 through June 15). No work in flowing water will be permitted during this time.

3. The Contractor shall be responsible for a survey of the work zone upon project completion to demonstrate that the river has been restored to the condition prior to commencement of construction. Cost to survey and restore included in cofferdam items.

4. 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 3704 Floodway Construction permit number allowing permanent construction as shown in the contract plans. The maximum limits of in-stream access (shown on previous sheet) are not included in the IDNR permit nor do they imply that an IDNR permit can be obtained for a causeway or other in-stream work.

5. Work shall conform to all provisions of the Erosion Control Plan.

6. Methods of in-stream access (i.e. Haul Roads, In-Stream Work Pads and Causeways), if needed, shall be constructed in accordance with the Recurring Special Provision Check Sheet #8 and requirements of the ACOE and IDNR Office of Water Resources. The permit for this work shall be obtained by the Contractor (See Note 5 above).

7. Contractor shall review and adhere to the ACOE permit stipulations (copy in Special Provision). Note especially restrictions on the disposal of water pumped from the coffer dams.

8. If the Contractor elects to use a seal coat, the seal coat thickness design shown on these plans is based on the Cofferdam Design Water Elevation (CDWE). Cofferdam design details and proposed changes in seal coat thickness shall be submitted to the Engineer for approval with the cofferdam design. The quantity of Cofferdam Excavation and Rock Excavation for Structures is based on the seal coat thickness and the allowable limits of the Cofferdam.

9. The Contractor should anticipate difficult driving conditions (See Boring Logs). The Typical Cofferdam Plan and Details at left are intended to show the Contractor how cofferdam and associated work will be measured for payment. They do not imply that a conventional steel sheetpile cofferdam is a cost effective or feasible method to isolate the work from water and enable construction under dry conditions as outlined in Guide Bridge Special Provision 73.

10. The maximum area of temporary impacts to Waters of the U.S. at any time for both bridges combined is limited to 0.25 acres in conformance with the ACOE permit issued for the project (See Special Provisions). The Contractor should be aware this will limit his in-stream work to one branch of the river at a time. See note 1. ACOE permit and Special Provisions for additional restrictions.

DIMENSIONS	Pier 4	Piers 5 & 6
A	8′-6"	11′-0"
B	81′-0"	80′-0"
C	12′-6"	15′-0"
D	9′-11"	10′-0"
E	42′-0"	42′-0"
F	43′-0"	43′-0"
G	4′-0"	3′-0"

TEMPORARY IMPACTS TO WATERS OF THE U.S.

Pier 4: 118 sf = 0.003 AC
Pier 5: 3,042 sf = 0.07 AC
Pier 6: 3,042 sf = 0.07 AC
In-Stream Access (if required):
3,539 sf = 0.08 AC
Total: 9,741 sf = 0.223 AC

PERMANENT IMPACTS TO WATERS OF THE U.S.

Pier 4: 36 sf = 0.001 AC
Pier 5: 188 sf = 0.004 AC
Pier 6: 188 sf = 0.004 AC
Total: 412 sf = 0.009 AC

BILL OF MATERIALS

ITEM	UNIT	TOTAL	
Cofferdam Excavation	Cu. Yd.	55.3	*
Rock Excavation for Structures	Cu. Yd.	241.3	*
Cofferdam (Type 1) (Location 1)	Each	1	
Cofferdam (Type 2) (Location 1)	Each	1	
Cofferdam (Type 2) (Location 2)	Each	1	
Protective Shield	Sq. Yd.	134	
Seal Coat Concrete	Cu. Yd.	94.2	

* For Piers 4,5 & 6 only

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:40:53 PM
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PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

COFFERDAM PLAN
STRUCTURE NO. 045-3088
SHEET NO. SW-06 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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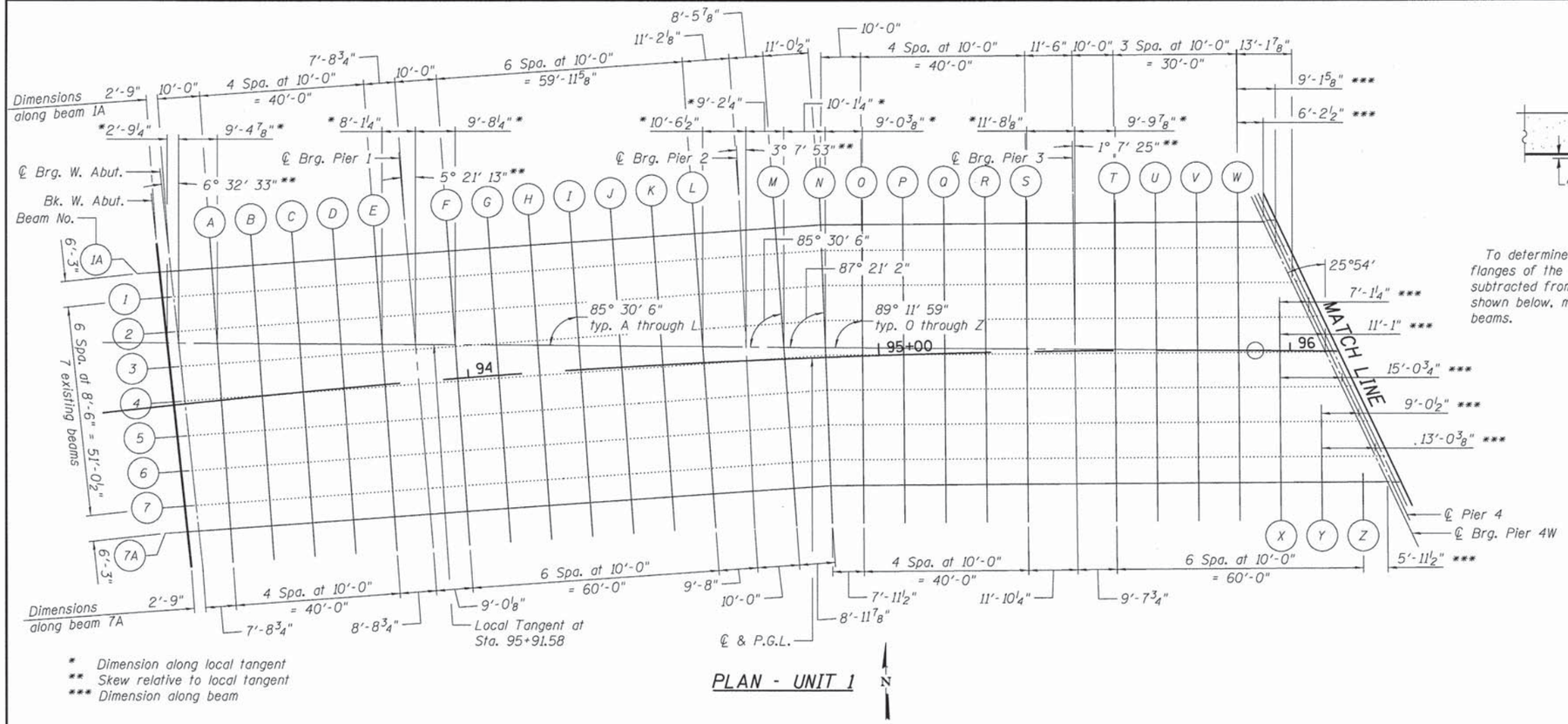
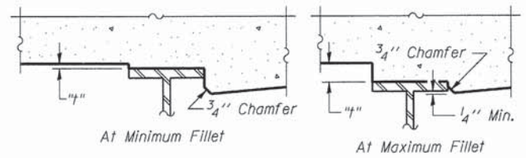


* Dimension along local tangent
** Skew relative to local tangent
*** Dimension along beam

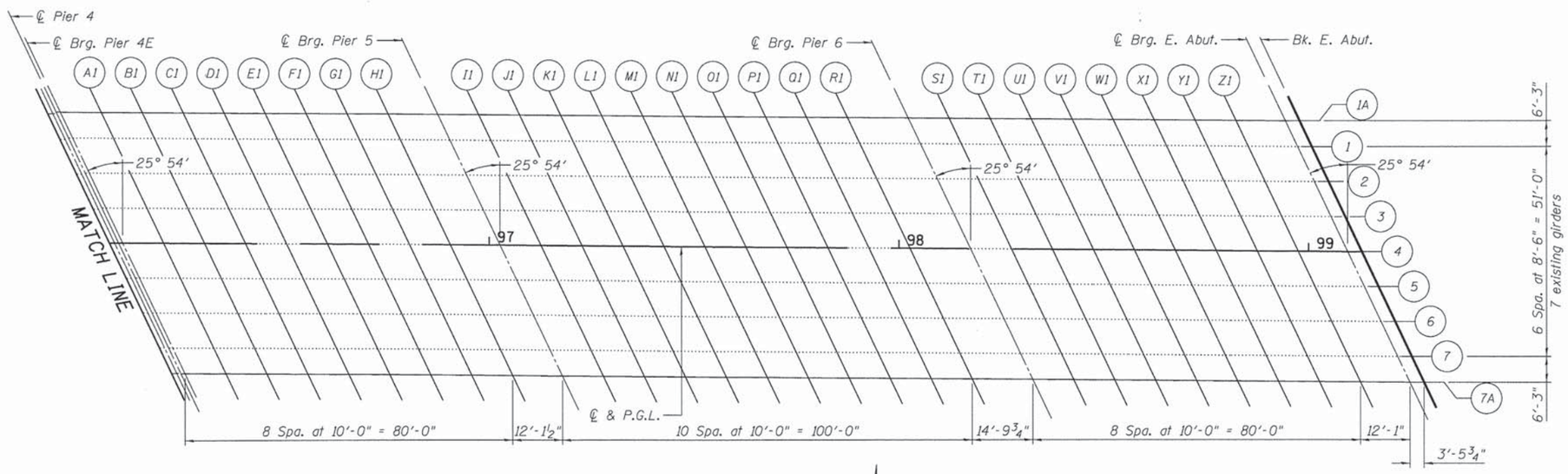
PLAN - UNIT 1



To determine "t": 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 "t" above top flange of beams.

FILLET HEIGHTS

Note:
Coordinate top of slab elevations with the Superelevation Diagram on Sheet 2 of the Roadway Plans.



PLAN - UNIT 2

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 045-3088
SHEET NO. SW-07 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	48
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		

PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.06	0.00	672.21	672.21
CL Brg. W. Abut.	93+30.81	0.00	672.18	672.18
A	93+39.65	0.00	672.07	672.08
B	93+49.66	0.00	671.93	671.95
C	93+59.66	0.00	671.78	671.80
D	93+69.66	0.00	671.62	671.62
E	93+79.66	0.00	671.44	671.44
CL Brg. Pier 1	93+87.89	0.00	671.28	671.28
F	93+97.40	0.00	671.09	671.10
G	94+07.40	0.00	670.87	670.90
H	94+17.40	0.00	670.64	670.68
I	94+27.40	0.00	670.40	670.44
J	94+37.40	0.00	670.15	670.18
K	94+47.41	0.00	669.88	669.90
L	94+57.42	0.00	669.59	669.60
CL Brg. Pier 2	94+67.83	0.00	669.29	669.29
M	94+77.08	0.00	669.01	669.01
N	94+87.08	0.00	668.71	668.73
O	94+96.04	0.00	668.44	668.47
P	95+06.05	0.00	668.14	668.18
Q	95+16.05	0.00	667.84	667.87
R	95+26.05	0.00	667.54	667.56
S	95+36.05	0.00	667.24	667.25
CL Brg. Pier 3	95+47.73	0.00	666.89	666.89
T	95+57.55	0.00	666.60	666.60
U	95+67.55	0.00	666.30	666.31
V	95+77.55	0.00	666.00	666.02
W	95+87.55	0.00	665.70	665.72
X	95+97.55	0.00	665.40	665.41
Y	-	-	-	-
Z	-	-	-	-
CL Brg. Pier 4W	96+08.56	0.00	665.07	665.07

PROFILE GRADE (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4E	96+10.55	0.00	665.01	665.01
A1	96+20.55	0.00	664.71	664.73
B1	96+30.55	0.00	664.41	664.45
C1	96+40.55	0.00	664.11	664.16
D1	96+50.55	0.00	663.81	663.86
E1	96+60.55	0.00	663.51	663.56
F1	96+70.55	0.00	663.21	663.25
G1	96+80.55	0.00	662.91	662.93
H1	96+90.55	0.00	662.61	662.62
CL Brg. Pier 5	97+02.67	0.00	662.25	662.25
I1	97+12.67	0.00	661.95	661.95
J1	97+22.67	0.00	661.65	661.67
K1	97+32.67	0.00	661.35	661.38
L1	97+42.67	0.00	661.05	661.10
M1	97+52.67	0.00	660.75	660.81
N1	97+62.67	0.00	660.45	660.51
O1	97+72.67	0.00	660.15	660.21
P1	97+82.67	0.00	659.85	659.89
Q1	97+92.67	0.00	659.55	659.58
R1	98+02.67	0.00	659.25	659.26
CL Brg. Pier 6	98+17.47	0.00	658.81	658.81
S1	98+27.47	0.00	658.51	658.52
T1	98+37.47	0.00	658.21	658.23
U1	98+47.47	0.00	657.91	657.94
V1	98+57.47	0.00	657.61	657.66
W1	98+67.47	0.00	657.31	657.37
X1	98+77.47	0.00	657.02	657.07
Y1	98+87.47	0.00	656.73	656.78
Z1	98+97.47	0.00	656.47	656.49
CL Brg. E. Abut.	99+09.56	0.00	656.16	656.16
Back of E. Abut.	99+13.03	0.00	656.07	656.07

BEAM 1A

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.03	-32.57	673.33	673.33
CL Brg. W. Abut.	93+30.78	-32.48	673.32	673.32
A	93+40.65	-32.14	673.23	673.24
B	93+50.51	-31.86	673.08	673.10
C	93+60.37	-31.61	672.92	672.94
D	93+70.23	-31.41	672.75	672.76
E	93+80.09	-31.25	672.57	672.57
CL Brg. Pier 1	93+87.73	-31.16	672.42	672.42
F	93+97.59	-31.07	672.22	672.23
G	94+07.46	-31.03	672.01	672.03
H	94+17.33	-31.04	671.78	671.81
I	94+27.19	-31.08	671.54	671.58
J	94+37.06	-31.17	671.29	671.32
K	94+46.92	-31.31	671.03	671.05
L	94+56.79	-31.48	670.76	670.77
CL Brg. Pier 2	94+67.81	-31.73	670.44	670.44
M	94+76.18	-31.95	670.16	670.17
N	94+87.06	-32.29	669.78	669.80
O	94+96.92	-31.99	669.41	669.44
P	95+06.78	-31.74	669.04	669.08
Q	95+16.64	-31.53	668.68	668.72
R	95+26.50	-31.37	668.32	668.35
S	95+36.37	-31.24	667.96	667.97
CL Brg. Pier 3	95+47.71	-31.16	667.54	667.54
T	95+57.58	-31.13	667.19	667.19
U	95+67.44	-31.14	666.83	666.83
V	95+77.31	-31.20	666.47	666.47
W	95+87.18	-31.29	666.12	666.12
X	-	-	-	-
Y	-	-	-	-
Z	-	-	-	-
CL Brg. Pier 4W	95+93.32	-31.38	665.90	665.90

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 6:42:02 PM
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184-001322
HRGreen

USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 045-3088
SHEET NO. SW-08 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	49
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		

BEAM 1A (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4E	95+95.13	-31.75	665.83	665.83
A1	96+05.13	-31.75	665.47	665.49
B1	96+15.13	-31.75	665.11	665.14
C1	96+25.13	-31.75	664.74	664.78
D1	96+35.13	-31.75	664.38	664.42
E1	96+45.13	-31.75	664.02	664.06
F1	96+55.13	-31.75	663.65	663.68
G1	96+65.13	-31.75	663.29	663.31
H1	96+75.13	-31.75	662.93	662.93
CL Brg. Pier 5	96+87.25	-31.75	662.49	662.49
I1	96+97.25	-31.75	662.12	662.13
J1	97+07.25	-31.75	661.76	661.77
K1	97+17.25	-31.75	661.40	661.42
L1	97+27.25	-31.75	661.03	661.07
M1	97+37.25	-31.75	660.72	660.76
N1	97+47.25	-31.75	660.42	660.46
O1	97+57.25	-31.75	660.12	660.15
P1	97+67.25	-31.75	659.82	659.85
Q1	97+77.25	-31.75	659.52	659.54
R1	97+87.25	-31.75	659.22	659.23
CL Brg. Pier 6	98+02.06	-31.75	658.78	658.78
S1	98+12.06	-31.75	658.48	658.48
T1	98+22.06	-31.75	658.18	658.19
U1	98+32.06	-31.75	657.88	657.90
V1	98+42.06	-31.75	657.58	657.61
W1	98+52.06	-31.75	657.28	657.32
X1	98+62.06	-31.75	656.98	657.02
Y1	98+72.06	-31.75	656.68	656.71

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.04	-26.32	673.11	673.11
CL Brg. W. Abut.	93+30.79	-26.22	673.10	673.10
A	93+40.46	-25.90	673.00	673.01
B	93+50.34	-25.61	672.86	672.87
C	93+60.23	-25.36	672.70	672.71
D	93+70.12	-25.16	672.53	672.53
E	93+80.01	-25.00	672.34	672.34
CL Brg. Pier 1	93+87.76	-24.91	672.19	672.19
F	93+97.56	-24.82	671.99	672.00
G	94+07.45	-24.78	671.78	671.79
H	94+14.34	-24.79	671.62	671.64
I	94+27.23	-24.83	671.31	671.34
J	94+37.13	-24.92	671.06	671.08
K	94+47.02	-25.06	670.80	670.81
L	94+56.91	-25.23	670.53	670.53
CL Brg. Pier 2	94+67.82	-25.48	670.22	670.22
M	94+76.35	-25.70	669.94	669.94
N	94+87.06	-26.04	669.57	669.58
O	94+96.75	-25.75	669.22	669.24
P	95+06.64	-25.49	668.87	668.89
Q	95+16.52	-25.28	668.51	668.54
R	95+26.41	-25.12	668.16	668.18
S	95+36.30	-24.99	667.81	667.82
CL Brg. Pier 3	95+47.72	-24.91	667.41	667.41
T	95+57.57	-24.88	667.07	667.07
U	95+67.47	-24.89	666.72	666.72
V	95+77.36	-24.95	666.38	666.38
W	95+87.25	-25.04	666.03	666.03
X	-	-	-	-
Y	-	-	-	-
Z	-	-	-	-
CL Brg. Pier 4W	95+96.34	-25.17	665.72	665.72

BEAM 1 (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4E	95+98.17	-25.50	665.66	665.66
A1	96+08.17	-25.50	665.31	665.32
B1	96+18.17	-25.50	664.95	664.98
C1	96+28.17	-25.50	664.60	664.63
D1	96+38.17	-25.50	664.25	664.28
E1	96+48.17	-25.50	663.90	663.93
F1	96+58.17	-25.50	663.55	663.57
G1	96+68.17	-25.50	663.20	663.21
H1	96+78.17	-25.50	662.85	662.85
CL Brg. Pier 5	96+90.29	-25.50	662.43	662.43
I1	97+00.29	-25.50	662.07	662.08
J1	97+10.29	-25.50	661.72	661.73
K1	97+20.29	-25.50	661.37	661.39
L1	97+30.29	-25.50	661.02	661.05
M1	97+40.29	-25.50	660.72	660.75
N1	97+50.29	-25.50	660.42	660.45
O1	97+60.29	-25.50	660.12	660.15
P1	97+70.29	-25.50	659.83	659.84
Q1	97+80.29	-25.50	659.53	659.54
R1	97+90.29	-25.50	659.23	659.23
CL Brg. Pier 6	98+05.10	-25.50	658.78	658.78
S1	98+15.10	-25.50	658.48	658.49
T1	98+25.10	-25.50	658.18	658.19
U1	98+35.10	-25.50	657.88	657.90
V1	98+45.10	-25.50	657.58	657.61
W1	98+55.10	-25.50	657.28	657.32
X1	98+65.10	-25.50	656.98	657.02
Y1	98+75.10	-25.50	656.69	656.71
Z1	98+85.10	-25.50	656.40	656.42
CL Brg. E. Abut.	98+97.17	-25.50	656.07	656.07
Back of E. Abut.	99+00.65	-25.50	655.98	655.98

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.04	-17.81	672.82	672.82
CL Brg. W. Abut.	93+30.79	-17.52	672.80	672.80
A	93+40.20	-17.40	672.70	672.71
B	93+50.12	-17.11	672.55	672.57
C	93+60.04	-16.86	672.39	672.41
D	93+69.97	-16.66	672.22	672.23
E	93+79.89	-16.50	672.04	672.04
CL Brg. Pier 1	93+87.80	-16.40	671.88	671.88
F	93+97.50	-16.32	671.68	671.69
G	94+07.43	-16.28	671.47	671.49
H	94+17.36	-16.29	671.24	671.28
I	94+27.29	-16.33	671.00	671.04
J	94+37.22	-16.42	670.75	670.78
K	94+47.15	-16.56	670.49	670.51
L	94+57.08	-16.73	670.21	670.22
CL Brg. Pier 2	94+67.82	-16.97	669.90	669.90
M	94+76.59	-17.21	669.63	669.63
N	94+87.07	-17.53	669.29	669.31
O	94+96.52	-17.25	668.96	669.00
P	95+06.44	-17.00	668.62	668.67
Q	95+16.37	-16.79	668.29	668.33
R	95+26.29	-16.62	667.95	667.98
S	95+36.22	-16.50	667.62	667.63
CL Brg. Pier 3	95+47.72	-16.41	667.24	667.24
T	95+57.57	-16.38	666.91	666.91
U	95+67.49	-16.39	666.58	666.58
V	95+77.42	-16.45	666.25	666.26
W	95+87.35	-16.55	665.92	665.92
X	-	-	-	-
Y	-	-	-	-
Z	-	-	-	-
CL Brg. Pier 4W	96+00.44	-16.72	665.49	665.49

BEAM 2 (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4E	96+02.30	-17.00	665.43	665.43
A1	96+12.30	-17.00	665.09	665.12
B1	96+22.30	-17.00	664.76	664.80
C1	96+32.30	-17.00	664.43	664.48
D1	96+42.30	-17.00	664.09	664.15
E1	96+52.30	-17.00	663.76	663.81
F1	96+62.30	-17.00	663.42	663.46
G1	96+72.30	-17.00	663.09	663.11
H1	96+82.30	-17.00	662.76	662.76
CL Brg. Pier 5	96+94.42	-17.00	662.35	662.35
I1	97+04.42	-17.00	662.02	662.02
J1	97+14.42	-17.00	661.69	661.70
K1	97+24.42	-17.00	661.35	661.38
L1	97+34.42	-17.00	661.03	661.08
M1	97+44.42	-17.00	660.73	660.79
N1	97+54.42	-17.00	660.43	660.49
O1	97+64.42	-17.00	660.13	660.19
P1	97+74.42	-17.00	659.83	659.88
Q1	97+84.42	-17.00	659.53	659.56
R1	97+94.42	-17.00	659.24	659.25
CL Brg. Pier 6	98+09.23	-17.00	658.79	658.79
S1	98+19.23	-17.00	658.49	658.50
T1	98+29.23	-17.00	658.19	658.21
U1	98+39.23	-17.00	657.89	657.93
V1	98+49.23	-17.00	657.59	657.64
W1	98+59.23	-17.00	657.29	657.35
X1	98+69.23	-17.00	656.99	657.05
Y1	98+79.23	-17.00	656.70	656.74
Z1	98+89.23	-17.00	656.42	656.45
CL Brg. E. Abut.	99+01.30	-17.00	656.10	656.10
Back of E. Abut.	99+04.78	-17.00	656.01	656.01

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.05	-9.31	672.53	672.53
CL Brg. W. Abut.	93+30.80	-9.21	672.50	672.50
A	93+39.93	-8.91	672.39	672.40
B	93+49.89	-8.61	672.24	672.26
C	93+59.85	-8.37	672.08	672.10
D	93+69.81	-8.16	671.91	671.92
E	93+79.77	-8.00	671.73	671.73
CL Brg. Pier 1	93+87.85	-7.90	671.57	671.57
F	93+97.45	-7.82	671.37	671.38
G	94+07.42	-7.78	671.16	671.18
H	94+17.38	-7.79	670.93	670.97
I	94+27.35	-7.83	670.69	670.73
J	94+37.32	-7.92	670.44	670.47
K	94+47.28	-8.06	670.17	670.20
L	94+57.24	-8.24	669.90	669.91
CL Brg. Pier 2	94+67.83	-8.47	669.59	669.59
M	94+76.83	-8.71	669.32	669.33
N	94+87.08	-9.03	669.01	669.02
O	94+96.29	-8.75	668.71	668.73
P	95+06.24	-8.50	668.38	668.42
Q	95+16.21	-8.29	668.06	668.10
R	95+26.17	-8.12	667.74	667.77
S	95+36.13	-8.00	667.42	667.43
CL Brg. Pier 3	95+47.72	-7.91	667.06	667.06
T	95+57.56	-7.88	666.75	666.75
U	95+67.52	-7.89	666.43	666.45
V	95+77.49	-7.95	666.12	666.14
W	95+87.45	-8.05	665.81	665.82
X	95+97.44	-8.18	665.49	665.50
Y	-	-	-	-
Z	-	-	-	-
CL Brg. Pier 4W	96+04.54	-8.28	665.27	665.27

COMPANY NAME:
PROJECT CONTACT: Kevin M. Artt
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:43:11 PM
FILE NAME: 86110318-SW-T054.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
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184-001322

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	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 045-3088
SHEET NO. SW-10 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	51
		CONTRACT NO. 63863		
	ILLINOIS	FED. AID PROJECT	$FEDPROJNO$	

BEAM 3 (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4W	96+04.54	-8.28	665.27	665.27
CL Brg. Pier 4E	96+06.42	-8.50	665.21	665.21
A1	96+16.42	-8.50	664.89	664.92
B1	96+26.42	-8.50	664.58	664.62
C1	96+36.42	-8.50	664.26	664.31
D1	96+46.42	-8.50	663.94	664.00
E1	96+56.42	-8.50	663.63	663.68
F1	96+66.42	-8.50	663.31	663.35
G1	96+76.42	-8.50	662.99	663.01
H1	96+86.42	-8.50	662.68	662.68
CL Brg. Pier 5	96+98.54	-8.50	662.29	662.29
I1	97+08.54	-8.50	661.98	661.98
J1	97+18.54	-8.50	661.66	661.68
K1	97+28.54	-8.50	661.34	661.38
L1	97+38.54	-8.50	661.04	661.09
M1	97+48.54	-8.50	660.74	660.80
N1	97+58.54	-8.50	660.44	660.50
O1	97+68.54	-8.50	660.14	660.20
P1	97+78.54	-8.50	659.84	659.88
Q1	97+88.54	-8.50	659.54	659.57
R1	97+98.54	-8.50	659.24	659.25
CL Brg. Pier 6	98+13.35	-8.50	658.80	658.80
S1	98+23.35	-8.50	658.50	658.51
T1	98+33.35	-8.50	658.20	658.22
U1	98+43.35	-8.50	657.90	657.93
V1	98+53.35	-8.50	657.60	657.65
W1	98+63.35	-8.50	657.30	657.36
X1	98+73.35	-8.50	657.00	657.06
Y1	98+83.35	-8.50	656.72	656.76
Z1	98+93.35	-8.50	656.44	656.47
CL Brg. E. Abut.	99+05.43	-8.50	656.13	656.13
Back of E. Abut.	99+08.90	-8.50	656.04	656.04

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.06	-0.80	672.24	672.24
CL Brg. W. Abut.	93+30.81	-0.70	672.20	672.20
A	93+39.67	-0.41	672.08	672.09
B	93+49.66	-0.12	671.94	671.95
C	93+59.66	0.13	671.78	671.79
D	93+69.66	0.34	671.60	671.61
E	93+79.66	0.50	671.42	671.42
CL Brg. Pier 1	93+87.89	0.60	671.26	671.26
F	93+97.40	0.68	671.06	671.07
G	94+07.40	0.72	670.85	670.87
H	94+17.41	0.71	670.62	670.66
I	94+27.41	0.67	670.38	670.42
J	94+37.41	0.58	670.13	670.16
K	94+47.41	0.44	669.86	669.88
L	94+57.41	0.26	669.58	669.59
CL Brg. Pier 2	94+67.83	0.03	669.28	669.28
M	94+77.07	-0.21	669.02	669.02
N	94+87.08	-0.52	668.73	668.74
O	94+96.05	-0.26	668.45	668.48
P	95+06.05	0.00	668.14	668.18
Q	95+16.05	0.21	667.83	667.87
R	95+26.05	0.38	667.53	667.55
S	95+36.05	0.50	667.23	667.24
CL Brg. Pier 3	95+47.73	0.59	666.88	666.88
T	95+57.55	0.62	666.58	666.59
U	95+67.55	0.61	666.29	666.30
V	95+77.56	0.55	665.99	666.01
W	95+87.56	0.45	665.69	665.71
X	95+97.56	0.32	665.39	665.40
Y	-	-	-	-
Z	-	-	-	-
CL Brg. Pier 4W	96+08.64	0.16	665.06	665.06

BEAM 4 (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4E	96+10.55	0.00	665.01	665.01
A1	96+20.55	0.00	664.71	664.73
B1	96+30.55	0.00	664.41	664.45
C1	96+40.55	0.00	664.11	664.16
D1	96+50.55	0.00	663.81	663.86
E1	96+60.55	0.00	663.51	663.56
F1	96+70.55	0.00	663.21	663.25
G1	96+80.55	0.00	662.91	662.93
H1	96+90.55	0.00	662.61	662.62
CL Brg. Pier 5	97+02.67	0.00	662.25	662.25
I1	97+12.67	0.00	661.95	661.95
J1	97+22.67	0.00	661.65	661.67
K1	97+32.67	0.00	661.35	661.38
L1	97+42.67	0.00	661.05	661.10
M1	97+52.67	0.00	660.75	660.81
N1	97+62.67	0.00	660.45	660.51
O1	97+72.67	0.00	660.15	660.21
P1	97+82.67	0.00	659.85	659.89
Q1	97+92.67	0.00	659.55	659.58
R1	98+02.67	0.00	659.25	659.26
CL Brg. Pier 6	98+17.47	0.00	658.81	658.81
S1	98+27.47	0.00	658.51	658.52
T1	98+37.47	0.00	658.21	658.23
U1	98+47.47	0.00	657.91	657.94
V1	98+57.47	0.00	657.61	657.66
W1	98+67.47	0.00	657.31	657.37
X1	98+77.47	0.00	657.02	657.07
Y1	98+87.47	0.00	656.73	656.78
Z1	98+97.47	0.00	656.47	656.49
CL Brg. E. Abut.	99+09.56	0.00	656.16	656.16
Back of E. Abut.	99+13.03	0.00	656.07	656.07

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.06	7.70	671.94	671.94
CL Brg. W. Abut.	93+30.81	7.80	671.90	671.90
A	93+39.40	8.09	671.78	671.79
B	93+49.43	8.38	671.63	671.65
C	93+59.46	8.63	671.47	671.48
D	93+69.50	8.83	671.30	671.31
E	93+79.54	9.00	671.11	671.11
CL Brg. Pier 1	93+87.93	9.10	670.95	670.95
F	93+97.35	9.18	670.76	670.76
G	94+07.39	9.22	670.54	670.56
H	94+17.43	9.21	670.31	670.34
I	94+27.47	9.17	670.07	670.11
J	94+37.51	9.07	669.81	669.85
K	94+47.55	8.94	669.55	669.57
L	94+57.58	8.76	669.27	669.28
CL Brg. Pier 2	94+67.84	8.53	668.97	668.97
M	94+77.32	8.28	668.71	668.71
N	94+87.09	7.98	668.44	668.46
O	94+95.81	8.24	668.18	668.21
P	95+05.85	8.50	667.88	667.92
Q	95+15.88	8.71	667.59	667.63
R	95+25.92	8.88	667.30	667.32
S	95+35.96	9.00	667.01	667.02
CL Brg. Pier 3	95+47.73	9.09	666.67	666.67
T	95+57.54	9.12	666.39	666.40
U	95+67.58	9.11	666.11	666.12
V	95+77.62	9.05	665.82	665.85
W	95+87.66	8.95	665.54	665.55
X	95+97.68	8.82	665.25	665.26
Y	-	-	-	-
Z	-	-	-	-
CL Brg. Pier 4W	96+12.74	8.61	664.81	664.81

BEAM 5 (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4E	96+14.68	8.50	664.75	664.75
A1	96+24.68	8.50	664.45	664.48
B1	96+34.68	8.50	664.15	664.19
C1	96+44.68	8.50	663.85	663.91
D1	96+54.68	8.50	663.55	663.61
E1	96+64.68	8.50	663.25	663.30
F1	96+74.68	8.50	662.96	662.99
G1	96+84.68	8.50	662.66	662.68
H1	96+94.68	8.50	662.36	662.36
CL Brg. Pier 5	97+06.80	8.50	661.99	661.99
I1	97+16.80	8.50	661.69	661.70
J1	97+26.80	8.50	661.39	661.41
K1	97+36.80	8.50	661.09	661.13
L1	97+46.80	8.50	660.79	660.84
M1	97+56.80	8.50	660.50	660.55
N1	97+66.80	8.50	660.20	660.25
O1	97+76.80	8.50	659.90	659.95
P1	97+86.80	8.50	659.60	659.64
Q1	97+96.80	8.50	659.30	659.32
R1	98+06.80	8.50	659.00	659.01
CL Brg. Pier 6	98+21.61	8.50	658.55	658.55
S1	98+31.61	8.50	658.25	658.26
T1	98+41.61	8.50	657.95	657.97
U1	98+51.61	8.50	657.65	657.69
V1	98+61.61	8.50	657.36	657.40
W1	98+71.61	8.50	657.06	657.11
X1	98+81.61	8.50	656.77	656.82
Y1	98+91.61	8.50	656.49	656.53
Z1	99+01.61	8.50	656.23	656.25
CL Brg. E. Abut.	99+13.68	8.50	655.92	655.92
Back of E. Abut.	99+17.16	8.50	655.84	655.84

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.07	16.21	671.65	671.65
CL Brg. W. Abut.	93+30.82	16.31	671.60	671.60
A	93+39.13	16.58	671.47	671.48
B	93+49.20	16.88	671.32	671.34
C	93+59.27	17.13	671.16	671.18
D	93+69.34	17.33	670.99	671.00
E	93+79.42	17.50	670.80	670.80
CL Brg. Pier 1	93+87.98	17.60	670.64	670.64
F	93+97.29	17.68	670.45	670.45
G	94+07.37	17.72	670.23	670.25
H	94+17.45	17.71	670.00	670.03
I	94+27.53	17.68	669.75	669.80
J	94+37.60	17.57	669.50	669.54
K	94+47.68	17.44	669.23	669.26
L	94+57.75	17.26	668.95	668.96
CL Brg. Pier 2	94+67.85	17.04	668.66	668.66
M	94+77.56	16.78	668.40	668.40
N	94+87.09	16.49	668.15	668.16
O	94+95.58	16.74	667.91	667.93
P	95+05.65	17.00	667.63	667.66
Q	95+15.72	17.21	667.35	667.37
R	95+25.79	17.38	667.07	667.09
S	95+35.87	17.50	666.79	666.80
CL Brg. Pier 3	95+47.74	17.59	666.47	666.47
T	95+57.54	17.62	666.20	666.21
U	95+67.61	17.61	665.93	665.96
V	95+77.69	17.55	665.66	665.70
W	95+87.77	17.45	665.39	665.43
X	95+97.79	17.32	665.11	665.14
Y	96+07.79	17.18	664.82	664.83
Z	-	-	-	-
CL Brg. Pier 4W	96+16.84	17.05	664.55	664.55

BEAM 6 (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4E	96+18.81	17.00	664.50	664.50
A1	96+28.81	17.00	664.20	664.22
B1	96+38.81	17.00	663.90	663.94
C1	96+48.81	17.00	663.60	663.65
D1	96+58.81	17.00	663.30	663.35
E1	96+68.81	17.00	663.00	663.05
F1	96+78.81	17.00	662.70	662.73
G1	96+88.81	17.00	662.40	662.42
H1	96+98.81	17.00	662.10	662.11
CL Brg. Pier 5	97+10.93	17.00	661.74	661.74
I1	97+20.93	17.00	661.44	661.44
J1	97+30.93	17.00	661.14	661.15
K1	97+40.93	17.00	660.84	660.87
L1	97+50.93	17.00	660.54	660.59
M1	97+60.93	17.00	660.24	660.29
N1	97+70.93	17.00	659.94	660.00
O1	97+80.93	17.00	659.64	659.69
P1	97+90.93	17.00	659.34	659.38
Q1	98+00.93	17.00	659.04	659.07
R1	98+10.93	17.00	658.74	658.75
CL Brg. Pier 6	98+25.73	17.00	658.30	658.30
S1	98+35.73	17.00	658.00	658.00
T1	98+45.73	17.00	657.70	657.71
U1	98+55.73	17.00	657.40	657.43
V1	98+65.73	17.00	657.10	657.14
W1	98+75.73	17.00	656.80	656.85
X1	98+85.73	17.00	656.52	656.57
Y1	98+95.73	17.00	656.25	656.29
Z1	99+05.73	17.00	655.99	656.01
CL Brg. E. Abut.	99+17.81	17.00	655.69	655.69
Back of E. Abut.	99+21.28	17.00	655.61	655.61

BEAM 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.07	24.72	671.35	671.35
CL Brg. W. Abut.	93+30.82	24.81	671.30	671.30
A	93+38.86	25.08	671.16	671.17
B	93+48.96	25.37	671.02	671.02
C	93+59.07	25.62	670.85	670.86
D	93+69.18	25.83	670.68	670.69
E	93+79.30	26.00	670.50	670.50
CL Brg. Pier 1	93+88.02	26.10	670.33	670.33
F	93+97.24	26.18	670.14	670.14
G	94+07.36	26.22	669.92	669.93
H	94+17.47	26.21	669.69	669.71
I	94+27.59	26.17	669.44	669.47
J	94+37.70	26.07	669.19	669.21
K	94+47.81	25.94	668.92	668.93
L	94+57.93	25.76	668.64	668.64
CL Brg. Pier 2	94+67.85	25.54	668.35	668.35
M	94+77.81	25.28	668.10	668.10
N	94+87.10	24.99	667.86	667.87
O	94+95.34	25.23	667.64	667.65
P	95+05.44	25.49	667.37	667.39
Q	95+15.56	25.71	667.10	667.12
R	95+25.67	25.88	666.84	666.85
S	95+35.78	26.00	666.58	666.58
CL Brg. Pier 3	95+47.74	26.09	666.26	666.26
T	95+57.53	26.12	666.01	666.02
U	95+67.64	26.11	665.75	665.77
V	95+77.76	26.05	665.49	665.52
W	95+87.87	25.95	665.23	665.26
X	95+97.91	25.82	664.98	665.00
Y	96+07.91	25.68	664.69	664.70
Z	-	-	-	-
CL Brg. Pier 4W	96+20.94	25.49	664.30	664.30

BEAM 7 (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4E	96+22.93	25.50	664.24	664.24
A1	96+32.93	25.50	663.94	663.95
B1	96+42.93	25.50	663.64	663.67
C1	96+52.93	25.50	663.34	663.37
D1	96+62.93	25.50	663.04	663.07
E1	96+72.93	25.50	662.74	662.77
F1	96+82.93	25.50	662.44	662.46
G1	96+92.93	25.50	662.14	662.15
H1	97+02.93	25.50	661.84	661.85
CL Brg. Pier 5	97+15.05	25.50	661.48	661.48
I1	97+25.05	25.50	661.18	661.18
J1	97+35.05	25.50	660.88	660.89
K1	97+45.05	25.50	660.58	660.60
L1	97+55.05	25.50	660.28	660.31
M1	97+65.05	25.50	659.98	660.01
N1	97+75.05	25.50	659.68	659.71
O1	97+85.05	25.50	659.38	659.41
P1	97+95.05	25.50	659.08	659.10
Q1	98+05.05	25.50	658.78	658.80
R1	98+15.05	25.50	658.48	658.49
CL Brg. Pier 6	98+29.86	25.50	658.04	658.04
S1	98+39.86	25.50	657.74	657.74
T1	98+49.86	25.50	657.44	657.45
U1	98+59.86	25.50	657.14	657.16
V1	98+69.86	25.50	656.84	656.87
W1	98+79.86	25.50	656.55	656.58
X1	98+89.86	25.50	656.27	656.30
Y1	98+99.86	25.50	656.00	656.03
Z1	99+09.86	25.50	655.75	655.77
CL Brg. E. Abut.	99+21.94	25.50	655.46	655.46
Back of E. Abut.	99+25.41	25.50	655.38	655.38

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
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	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 045-3088
SHEET NO. SW-13 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	54
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		

BEAM 7A

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Back of W. Abut.	93+28.08	30.97	671.13	671.13
CL Brg. W. Abut.	93+30.83	31.07	671.08	671.08
A	93+38.66	31.32	670.94	670.95
B	93+48.79	31.62	670.79	670.80
C	93+58.93	31.87	670.63	670.64
D	93+69.07	32.08	670.46	670.46
E	93+79.21	32.24	670.27	670.27
CL Brg. Pier 1	93+88.06	32.35	670.10	670.10
F	93+97.20	32.43	669.91	669.92
G	94+07.34	32.47	669.69	669.71
H	94+17.49	32.46	669.46	669.49
I	94+27.63	32.42	669.21	669.25
J	94+37.77	32.32	668.96	668.99
K	94+47.91	32.19	668.69	668.71
L	94+58.06	32.01	668.41	668.41
CL Brg. Pier 2	94+67.86	31.79	668.12	668.12
M	94+77.99	31.52	667.87	667.87
N	94+87.10	31.24	667.65	667.66
O	94+95.16	31.48	667.44	667.46
P	95+05.30	31.74	667.18	667.21
Q	95+15.43	31.96	666.93	666.94
R	95+25.57	32.13	666.67	666.68
S	95+35.72	32.25	666.41	666.42
CL Brg. Pier 3	95+47.74	32.34	666.11	666.11
T	95+57.52	32.37	665.87	665.88
U	95+67.67	32.36	665.62	665.65
V	95+77.81	32.30	665.37	665.41
W	95+87.95	32.20	665.12	665.17
X	95+98.00	32.06	664.87	664.92
Y	96+08.00	31.92	664.59	664.62
Z	96+18.00	31.79	664.29	664.30
CL Brg. Pier 4W	96+23.95	31.70	664.11	664.11

BEAM 7A (CONTINUED)

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
CL Brg. Pier 4E	96+25.97	31.75	664.05	664.05
A1	96+35.97	31.75	663.75	663.77
B1	96+45.97	31.75	663.45	663.48
C1	96+55.97	31.75	663.15	663.19
D1	96+65.97	31.75	662.85	662.90
E1	96+75.97	31.75	662.55	662.59
F1	96+85.97	31.75	662.25	662.28
G1	96+95.97	31.75	661.95	661.97
H1	97+05.97	31.75	661.65	661.66
CL Brg. Pier 5	97+18.09	31.75	661.29	661.29
I1	97+28.09	31.75	660.99	661.00
J1	97+38.09	31.75	660.69	660.70
K1	97+48.09	31.75	660.39	660.41
L1	97+58.09	31.75	660.09	660.12
M1	97+68.09	31.75	659.79	659.83
N1	97+78.09	31.75	659.49	659.53
O1	97+88.09	31.75	659.19	659.23
P1	97+98.09	31.75	658.89	658.92
Q1	98+08.09	31.75	658.60	658.61
R1	98+18.09	31.75	658.30	658.30
CL Brg. Pier 6	98+32.90	31.75	657.85	657.85
S1	98+42.90	31.75	657.55	657.56
T1	98+52.90	31.75	657.25	657.27
U1	98+62.90	31.75	656.95	656.98
V1	98+72.90	31.75	656.65	656.69
W1	98+82.90	31.75	656.37	656.41
X1	98+92.90	31.75	656.09	656.13
Y1	99+02.90	31.75	655.83	655.86
Z1	99+12.90	31.75	655.58	655.60

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
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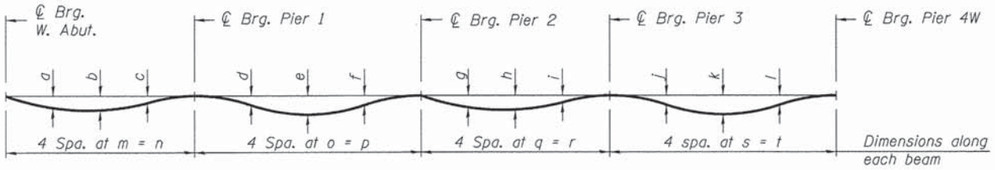
	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 045-3088
SHEET NO. SW-14 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	55
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		



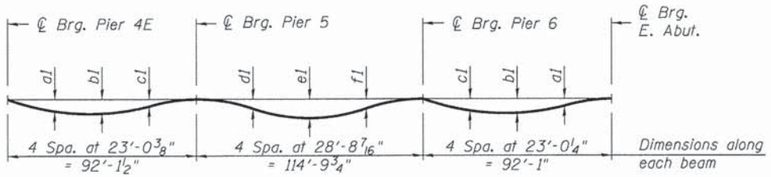
DEAD LOAD DEFLECTION DIAGRAM - UNIT 1

(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 on the Top of Slab Elevations tables on the previous sheets.

Beam	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o	p	q	r	s	t
1A	1/8"	1/8"	0"	1/4"	1/2"	1/4"	1/4"	1/2"	3/8"	0"	0"	0"	14'-5 1/4" (-)	57'-8 7/8"	20'-6 9/16"	81'-2 1/4"	20'-3 1/16"	81'-0 1/4"	11'-6 5/8" (-)	46'-2 1/2"
1	1/8"	1/8"	0"	1/8"	1/4"	1/8"	1/8"	3/8"	1/4"	0"	0"	0"	14'-4 7/8" (-)	57'-7 3/8"	20'-2 7/16" (-)	80'-11 1/4"	20'-2 7/16" (-)	80'-9 5/8"	12'-3 5/16"	49'-1 1/4"
2	1/8"	1/4"	1/8"	1/4"	1/2"	1/4"	1/4"	1/2"	3/8"	0"	1/8"	0"	14'-4 3/8" (-)	57'-5 3/8"	20'-1 13/16"	80'-7 1/4"	20'-1 1/2"	80'-6"	13'-3 1/16" (+)	53'-0 3/8"
3	1/8"	1/4"	1/8"	1/4"	1/2"	1/4"	1/4"	1/2"	1/4"	1/8"	3/8"	1/8"	14'-3 7/8" (-)	57'-3 1/4"	20'-0 9/16"	80'-2 1/4"	20'-0 5/8"	80'-2 1/2"	14'-2 15/16" (-)	56'-11 5/8"
4	1/8"	1/4"	1/8"	1/4"	1/2"	1/4"	1/4"	1/2"	1/4"	1/8"	3/8"	1/8"	14'-3 3/8" (-)	57'-1 1/4"	19'-11 13/16" (-)	79'-11 1/8"	19'-11 11/16" (+)	79'-10 7/8"	16'-2 11/16" (+)	64'-10 7/8"
5	1/8"	1/4"	1/8"	1/4"	1/2"	1/4"	1/4"	1/2"	1/4"	1/8"	3/8"	1/8"	14'-2 3/4" (+)	56'-11 1/8"	19'-10 3/4" (+)	79' 7 1/8"	19'-10 13/16" (+)	79'-7 3/8"	16'-2 1/2"	64'-10"
6	1/8"	1/4"	1/8"	1/4"	1/2"	1/4"	1/8"	3/8"	1/4"	1/4"	1/2"	1/4"	14'-2 1/4" (+)	56'-9 1/8"	19'-9 13/16" (-)	79'-3 1/8"	19'-9 15/16"	79'-3 3/4"	17'-0 1/16"	68'-0 1/4"
7	1/8"	1/8"	0"	1/8"	1/4"	1/8"	1/8"	1/8"	1/8"	1/8"	3/8"	1/4"	14'-1 3/4"	56'-7"	19'-8 13/16" (-)	78'-11 1/8"	19'-9" (+)	79'-0 1/8"	18'-2 1/16" (+)	72'-8 3/8"
7A	1/8"	1/8"	0"	1/4"	1/2"	1/4"	1/8"	1/4"	1/8"	1/4"	1/2"	1/2"	14'-1 3/8"	56'-5 1/2"	19'-8" (+)	78'-8 1/8"	19'-8 7/16" (-)	78'-9 5/8"	18'-10 3/4" (+)	75'-7 1/8"

DEAD LOAD DEFLECTION DIMENSION TABLE - UNIT 1



DEAD LOAD DEFLECTION DIAGRAM - UNIT 2

(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.

Girder	a1	b1	c1	d1	e1	f1
1A & 7A	3/8"	1/2"	1/4"	1/4"	1/2"	1/4"
1 & 7	1/4"	3/8"	1/8"	1/4"	3/8"	1/4"
2-6	1/2"	5/8"	1/4"	3/8"	3/4"	3/8"

DEAD LOAD DEFLECTION DIMENSION TABLE - UNIT 2

COMPANY NAME: HRGreen.com
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 5:46:07 PM
FILE NAME: 8610318-SW-1053.dgn
PLOT DRIVER: pdf_DET-11ft.plt
PEN TABLE: standard-trans.tbl

HRGreen
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Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	
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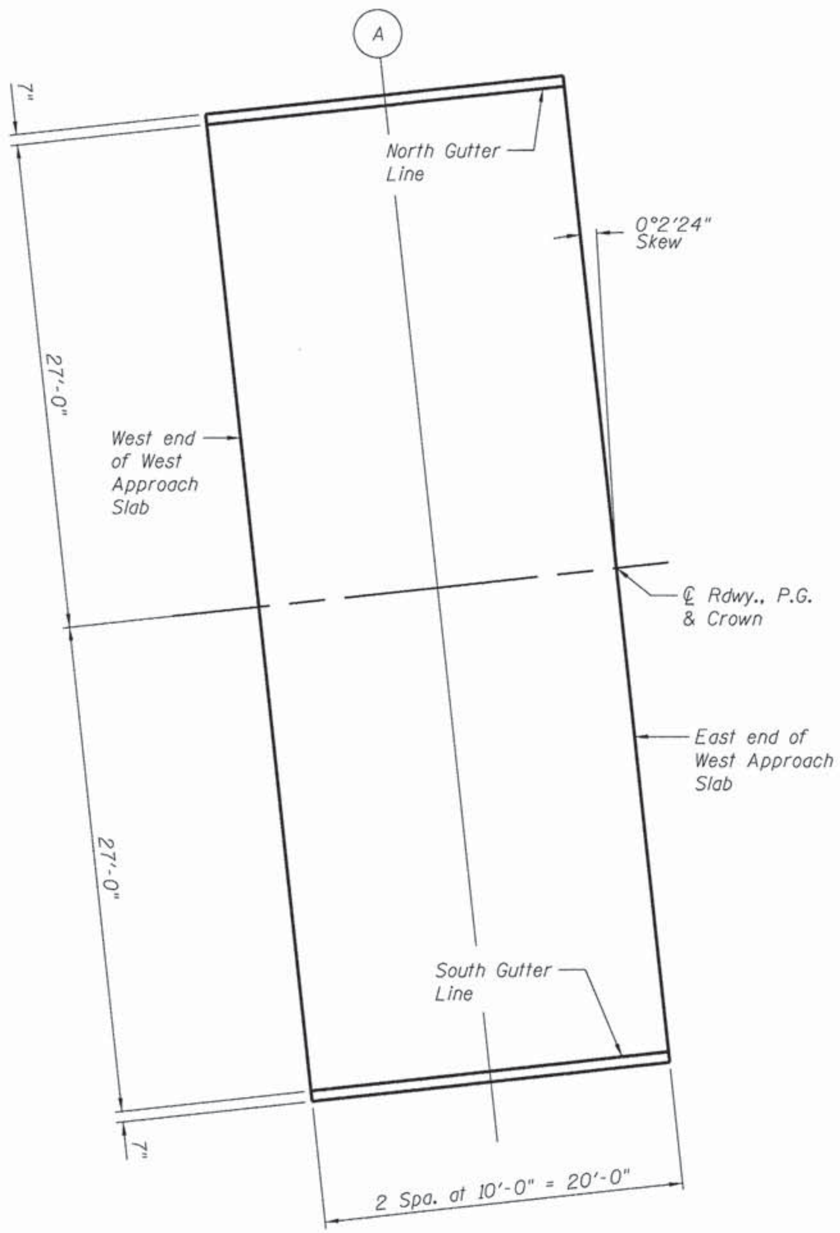
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

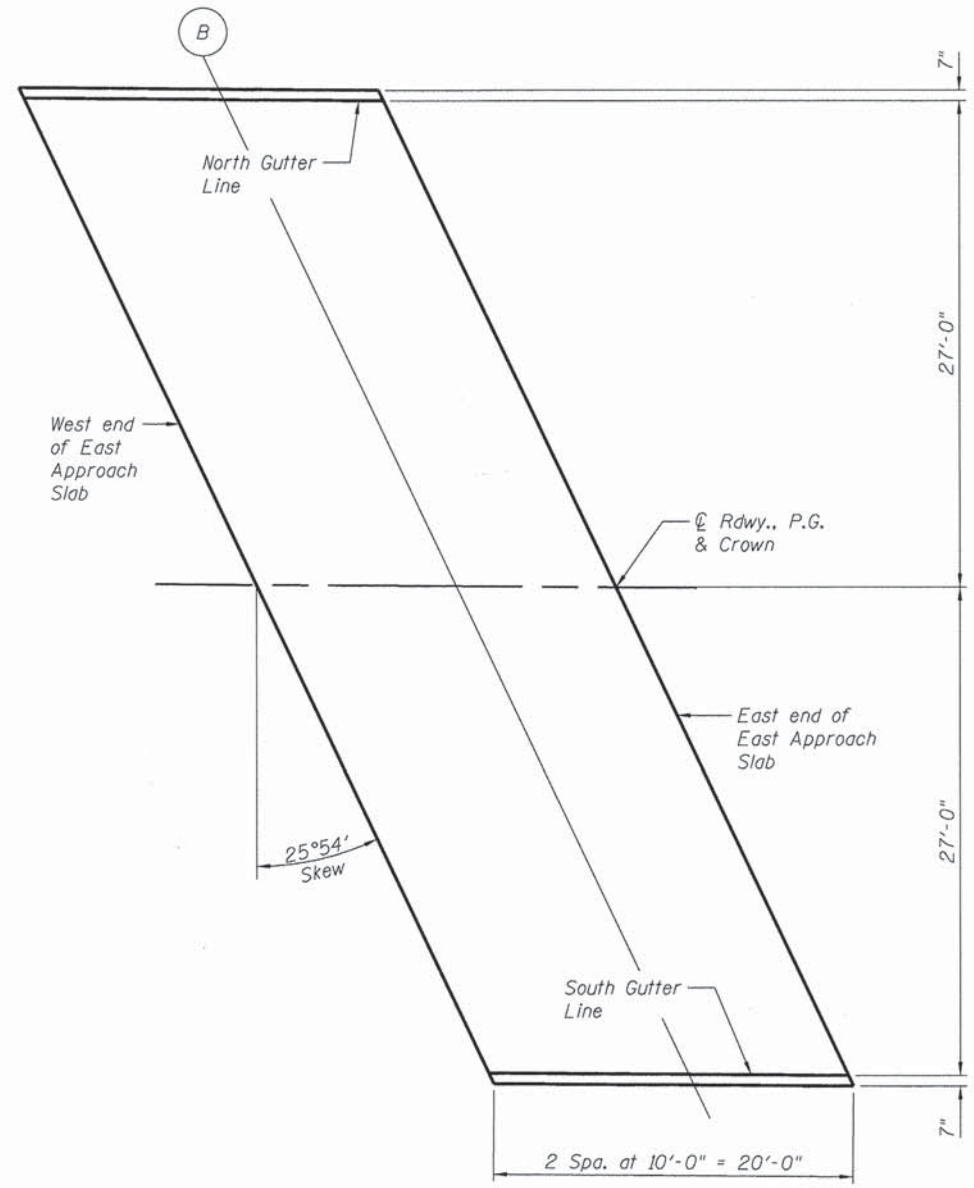
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 045-3088
SHEET NO. SW-15 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	56
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT		$FEDPROJNO$	



WEST APPROACH



EAST APPROACH

℄ ROADWAY, PROFILE GRADE & CROWN

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr.	93+08.56	0.00	672.41
A	93+18.56	0.00	672.31
E. End of W. Appr.	93+28.56	0.00	672.21
W. End of E. Appr.	99+12.47	0.00	656.09
B	99+22.47	0.00	655.85
E. End of E. Appr.	99+32.47	0.00	655.63

NORTH GUTTER LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr.	93+08.54	-27.00	673.18
A	93+18.54	-27.00	673.17
E. End of W. Appr.	93+28.54	-27.00	673.15
W. End of E. Appr.	98+99.36	-27.00	655.99
B	99+09.36	-27.00	655.74
E. End of E. Appr.	99+19.36	-27.00	655.50

SOUTH GUTTER LINE

Location	Station	Offset	Theoretical Grade Elevations
W. End of W. Appr.	93+08.58	27.00	671.61
A	93+18.58	27.00	671.45
E. End of W. Appr.	93+28.58	27.00	671.28
W. End of E. Appr.	99+25.58	27.00	655.36
B	99+35.58	27.00	655.14
E. End of E. Appr.	99+45.58	27.00	654.93

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:46:55 PM
FILE NAME: 86110318-SW-Ase.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
PEN TABLE: standard-trans.tbl

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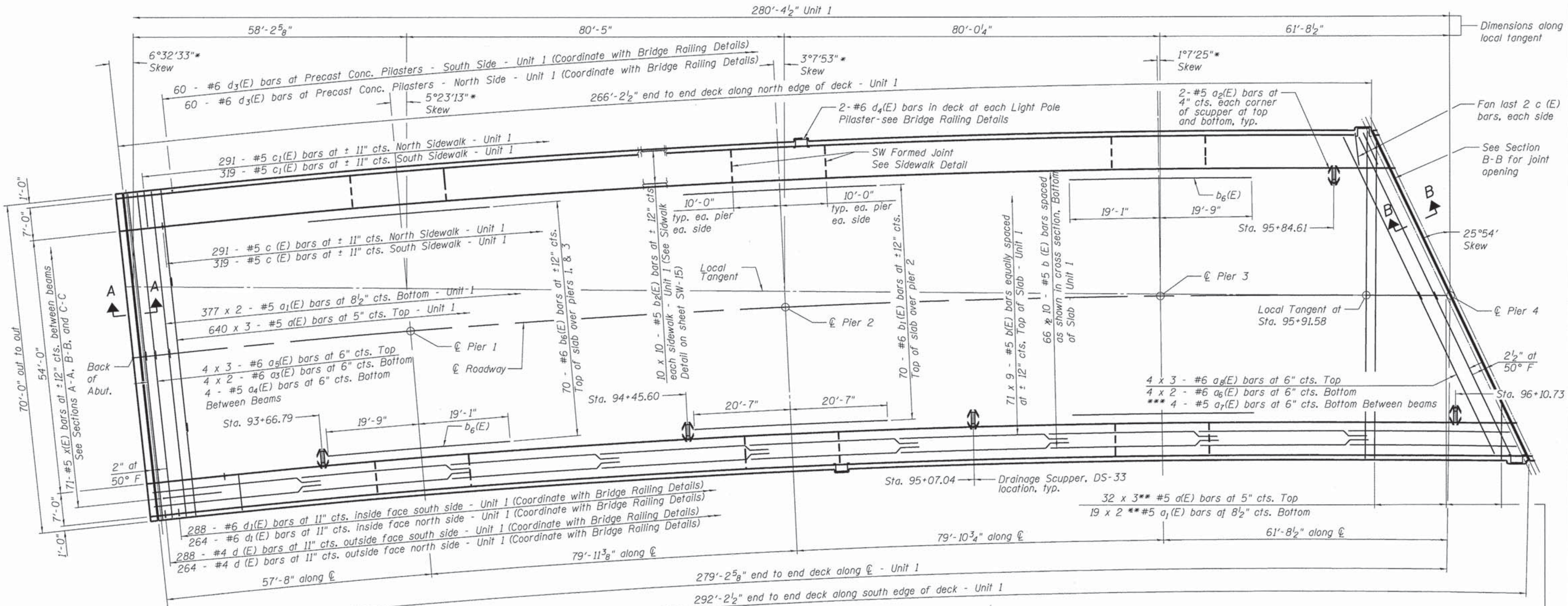
	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 045-3088
SHEET NO. SW-16 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	57

CONTRACT NO. 63863
ILLINOIS FED. AID PROJECT $FEDPROJNO$



280'-4½" Unit 1
58'-2⅝"
80'-5"
80'-0¼"
61'-8½"
Dimensions along local tangent
6°32'33"* Skew
3°7'53"* Skew
1°7'25"* Skew
5°23'13"* Skew
60 - #6 d3(E) bars at Precast Conc. Pilasters - South Side - Unit 1 (Coordinate with Bridge Railing Details)
60 - #6 d3(E) bars at Precast Conc. Pilasters - North Side - Unit 1 (Coordinate with Bridge Railing Details)
266'-2½" end to end deck along north edge of deck - Unit 1
2-#6 d4(E) bars in deck at each Light Pole Pilaster-see Bridge Railing Details
2-#5 a2(E) bars at 4" cts. each corner of scupper at top and bottom, typ.
Fan last 2 c (E) bars, each side
See Section B-B for joint opening
291 - #5 c1(E) bars at ± 11" cts. North Sidewalk - Unit 1
319 - #5 c1(E) bars at ± 11" cts. South Sidewalk - Unit 1
SW Formed Joint See Sidewalk Detail
10'-0" typ. ea. pier ea. side
10'-0" typ. ea. pier ea. side
b6(E)
19'-1"
19'-9"
Sta. 95+84.61
25°54' Skew
291 - #5 c (E) bars at ± 11" cts. North Sidewalk - Unit 1
319 - #5 c (E) bars at ± 11" cts. South Sidewalk - Unit 1
Local Tangent
℄ Pier 3
377 x 2 - #5 a1(E) bars at 8½" cts. Bottom - Unit 1
640 x 3 - #5 a(E) bars at 5" cts. Top - Unit 1
℄ Pier 1
℄ Pier 2
Local Tangent at Sta. 95+91.58
℄ Pier 4
4 x 3 - #6 a5(E) bars at 6" cts. Top
4 x 2 - #6 a3(E) bars at 6" cts. Bottom
4 - #5 a4(E) bars at 6" cts. Bottom Between Beams
℄ Roadway
Back of Abut.
70 - #6 b6(E) bars at ±12" cts. Top of slab over piers 1, & 3
10 x 10 - #5 b2(E) bars at ± 12" cts each sidewalk - Unit 1 (See Sidewalk Detail on sheet SW-15)
70 - #6 b1(E) bars at ±12" cts. Top of slab over pier 2
71 x 9 - #5 b(E) bars equally spaced at ± 12" cts. Top of Slab - Unit 1
66 x 10 - #5 b (E) bars spaced as shown in cross section, Bottom of Slab - Unit 1
2½" at 50° F
4 x 3 - #6 a8(E) bars at 6" cts. Top
4 x 2 - #6 a6(E) bars at 6" cts. Bottom
*** 4 - #5 a7(E) bars at 6" cts. Bottom Between beams
Sta. 96+10.73
Sta. 94+45.60
20'-7"
20'-7"
Sta. 93+66.79
19'-9"
19'-1"
b6(E)
70'-0" out to out
54'-0" between beams
71- #5 x(E) bars at ±12" cts. See Sections A-A, B-B, and C-C
1'-0"
7'-0"
2" at 50° F
A
B
Sta. 95+07.04
Drainage Scupper, DS-33 location, typ.
32 x 3** #5 a(E) bars at 5" cts. Top
19 x 2 **#5 a1(E) bars at 8½" cts. Bottom
288 - #6 d1(E) bars at 11" cts. inside face south side - Unit 1 (Coordinate with Bridge Railing Details)
264 - #6 d1(E) bars at 11" cts. inside face north side - Unit 1 (Coordinate with Bridge Railing Details)
288 - #4 d (E) bars at 11" cts. outside face south side - Unit 1 (Coordinate with Bridge Railing Details)
264 - #4 d (E) bars at 11" cts. outside face north side - Unit 1 (Coordinate with Bridge Railing Details)
79'-10¾" along ℄
61'-8½" along ℄
79'-11⅜" along ℄
57'-8" along ℄
279'-2⅝" end to end deck along ℄ - Unit 1
292'-2½" end to end deck along south edge of deck - Unit 1
N

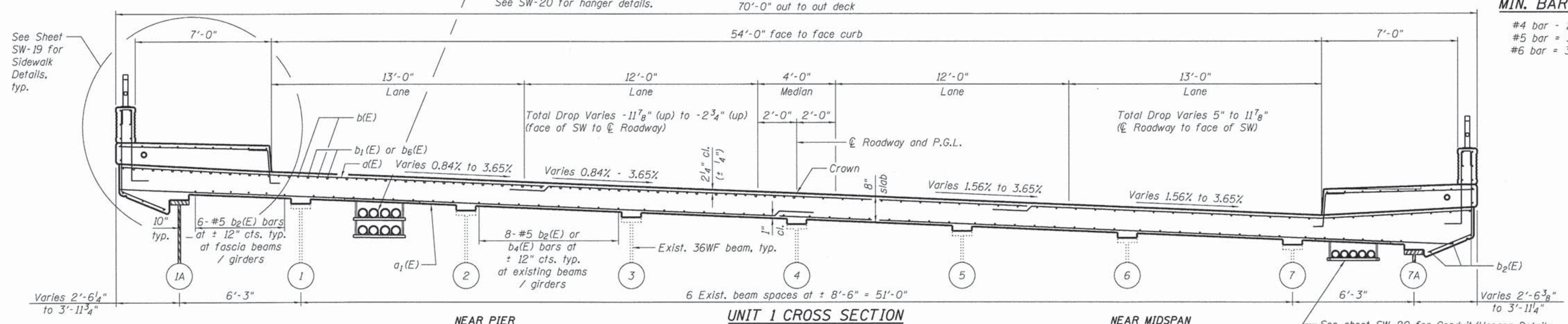
* Skew is measured relative to Local Tangent
** Cut to fit skew and use remainder as shown
*** Trim to fit at spaces between new beams and existing beams

Remainder of 32 x 3 - #5 a(E) bars at 5" cts. Top
Remainder of 19 x 2 - #5 a1(E) bars at 8½" cts. Bottom

UNIT 1 DECK PLAN

MIN. BAR LAP

#4 bar - 2'-7"
#5 bar = 3'-3"
#6 bar = 3'-10"



See Roadway Typical Sections for ComEd relocation coordination. See SW-20 for hanger details.
70'-0" out to out deck
54'-0" face to face curb
7'-0"
7'-0"
See Sheet SW-19 for Sidewalk Details, typ.
13'-0" Lane
12'-0" Lane
4'-0" Median
12'-0" Lane
13'-0" Lane
Total Drop Varies -11⅞" (up) to -2¾" (up) (face of SW to ℄ Roadway)
2'-0" 2'-0"
Total Drop Varies 5" to 11⅞" (℄ Roadway to face of SW)
℄ Roadway and P.G.L.
b(E)
b1(E) or b6(E)
a(E) Varies 0.84% to 3.65%
Varies 0.84% - 3.65%
2¼" cl. (± ¼")
Crown
8" slab
Varies 1.56% to 3.65%
Varies 1.56% to 3.65%
10" typ.
6-#5 b2(E) bars at ± 12" cts. typ. at fascia beams / girders
a1(E)
8-#5 b2(E) or b4(E) bars at ± 12" cts. typ. at existing beams / girders
Exist. 36WF beam, typ.
1" cl.
b2(E)
1A 1 2 3 4 5 6 7 7A
Varies 2'-6¼" to 3'-11¾"
6'-3"
6 Exist. beam spaces at ± 8'-6" = 51'-0"
6'-3"
Varies 2'-6⅜" to 3'-11¼"
NEAR PIER
NEAR MIDSPAN
See sheet SW-20 for Conduit/Hanger Details

UNIT 1 CROSS SECTION
Looking East

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 6:48:06 PM
DATE PLOTTED: 86110318-SW-Deck Details01.dgn
FILE NAME: pdf_DET-11"F.plt
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PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

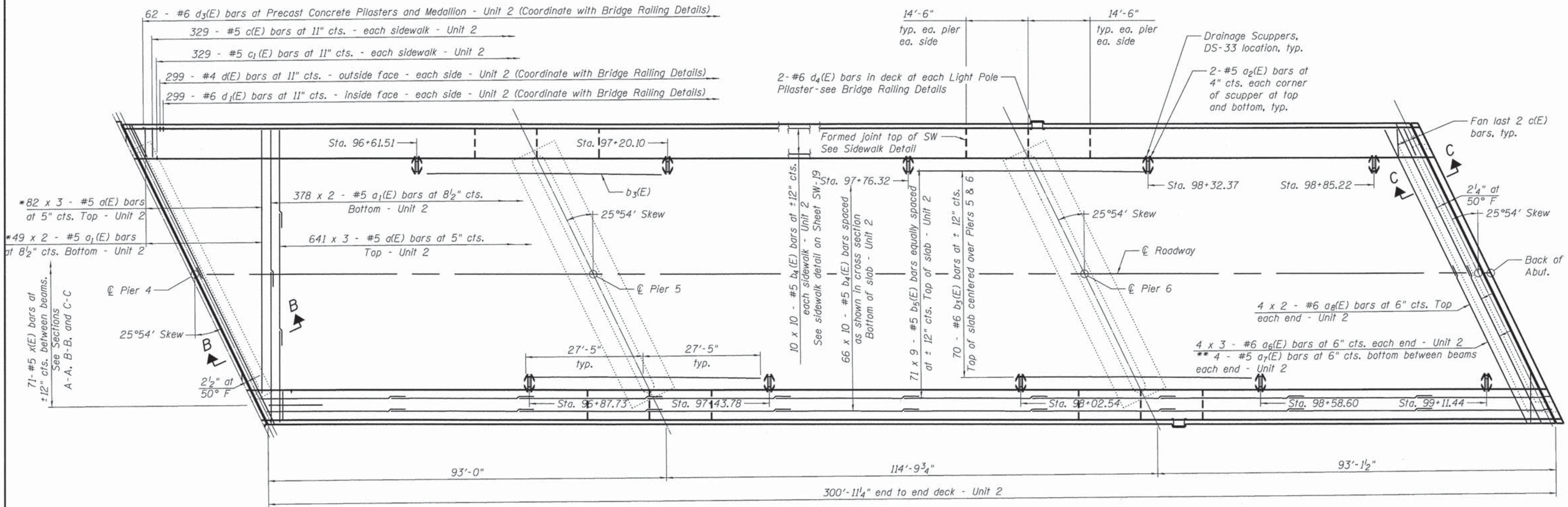
DECK DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-17 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	58
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	#FEDPROJNO#	

* Order a(E) and a_1(E) bars full length.
Cut to fit skew and use remainder of
bars in opposite end.

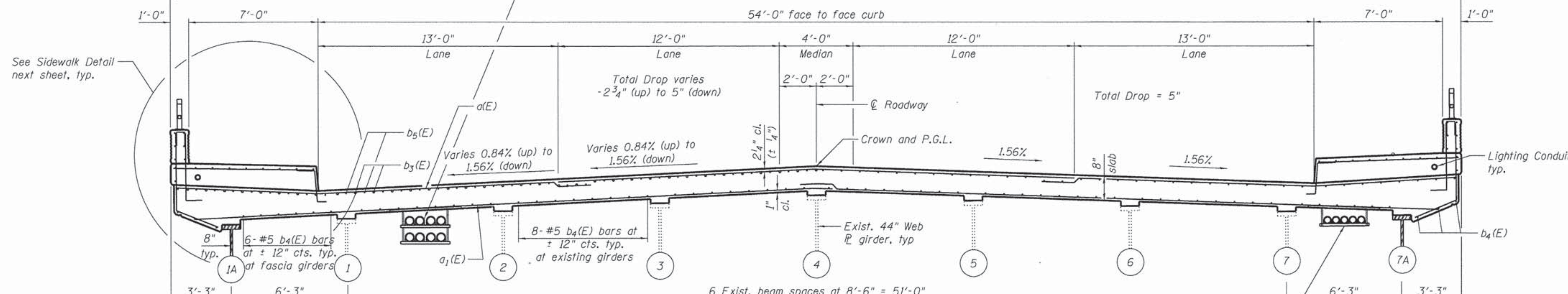
MIN. BAR LAP

#5 bar = 3'-3"
#6 bar = 3'-10"



UNIT 2 DECK PLAN

** Trim to fit at spaces between new girders and existing girders

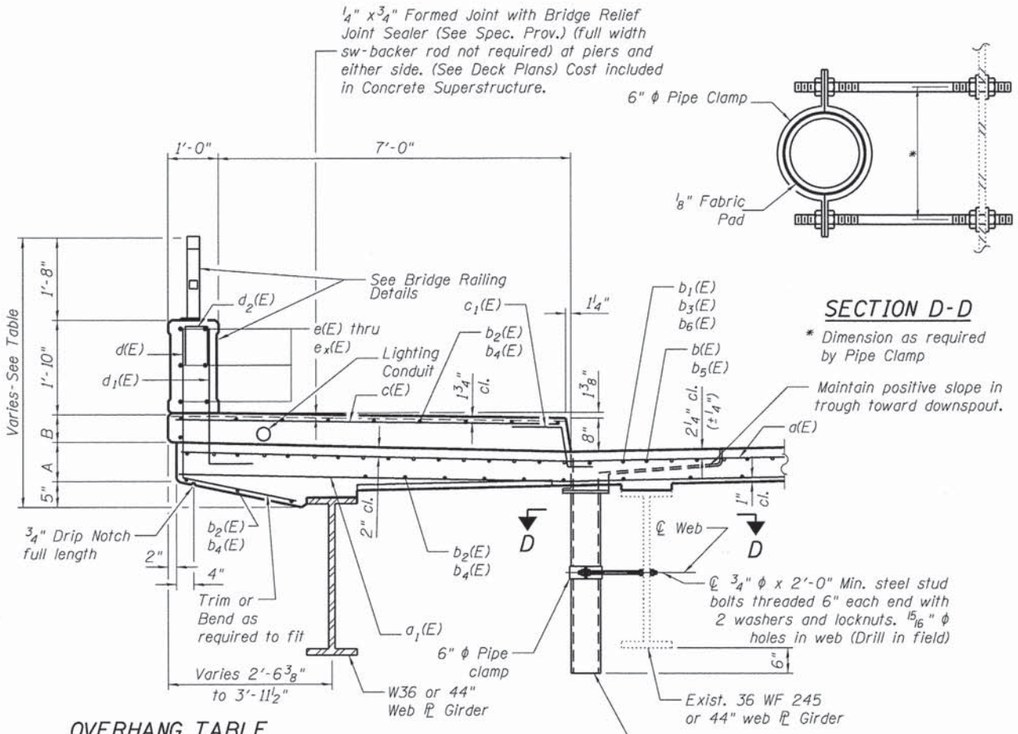


UNIT 2 CROSS SECTION

Looking East

COMPANY NAME:
PROJECT CONTACT: Kevin M. Artt
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:48:42 PM
FILE NAME: 86110318-SW-Deck Details02.dgn
PLOT DRIVER: pdf.DET-TIFF.plt
PEN TABLE: standard-trans.tbl

HRGreen.com Illinois Professional Design Firm # 184-001322 HRGreen	USER NAME = whood	DESIGNED - KMA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DECK DETAILS	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		CHECKED - RDG	REVISED -		STRUCTURE NO. 045-3088	1503	09-00286-00-BR	KANE	181 / 59
	PLOT SCALE =	DRAWN - WJH	REVISED -					CONTRACT NO. 63863	
	PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -		SHEET NO. SW-18 OF SW-62 SHEETS			ILLINOIS FED. AID PROJECT	$FEDPROJNO$



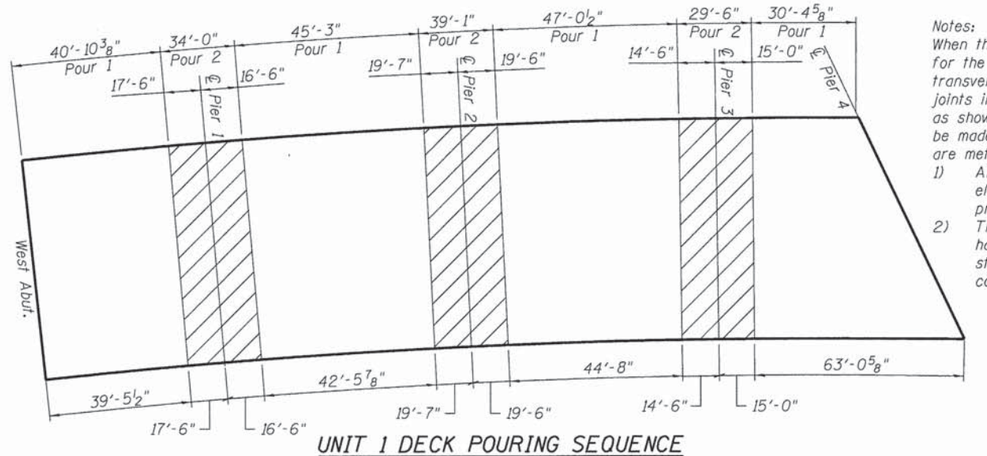
SECTION D-D

* Dimension as required by Pipe Clamp

SIDEWALK DETAIL

OVERHANG TABLE

		A	B
Unit 1	Beam 1A	11 1/2"	5 7/8"
	Beam 7A	1'-1"	6 1/2"
Unit 2	Girder 1A	1'-0 3/4"	6 1/2"
	Girder 7A	1'-0 1/8"	6 1/2"

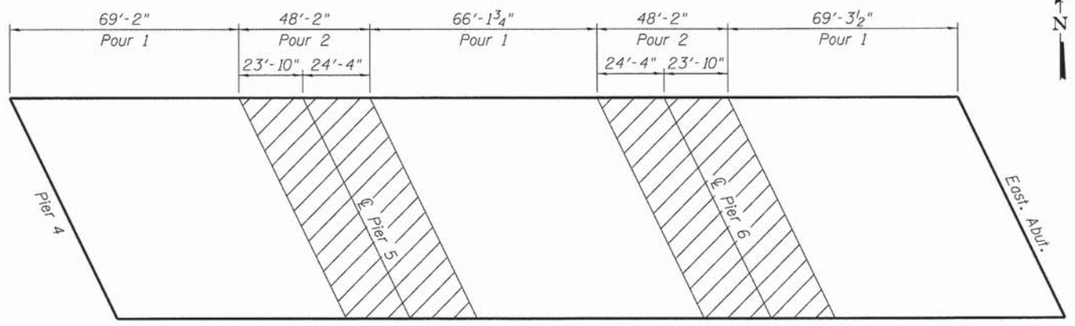


UNIT 1 DECK POURING SEQUENCE

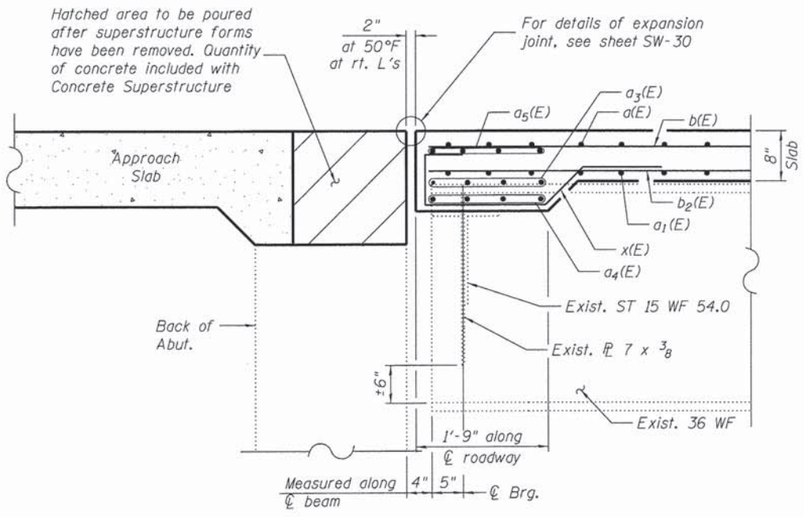
Dimensions along edge of deck

Notes:
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 are met:

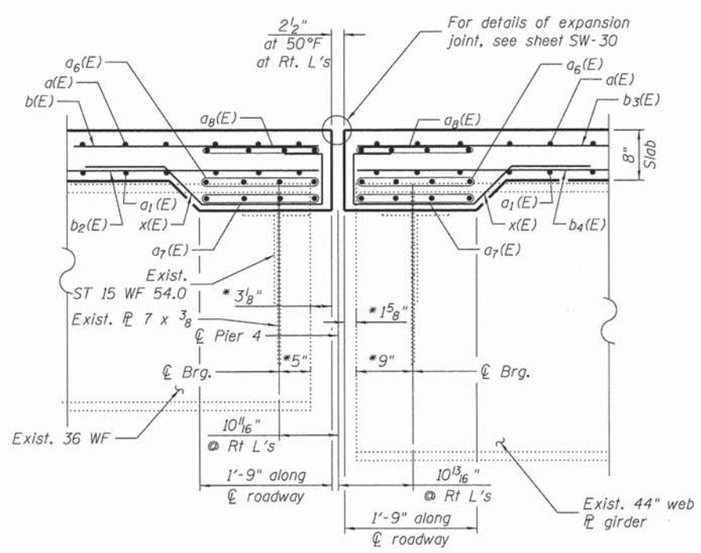
1) At least 72 hours shall have elapsed from the end of the previous pour.
2) The concrete strength shall have attained a minimum flexural strength of 650 psi or a minimum compressive strength of 3500 psi.



UNIT 2 DECK POURING SEQUENCE

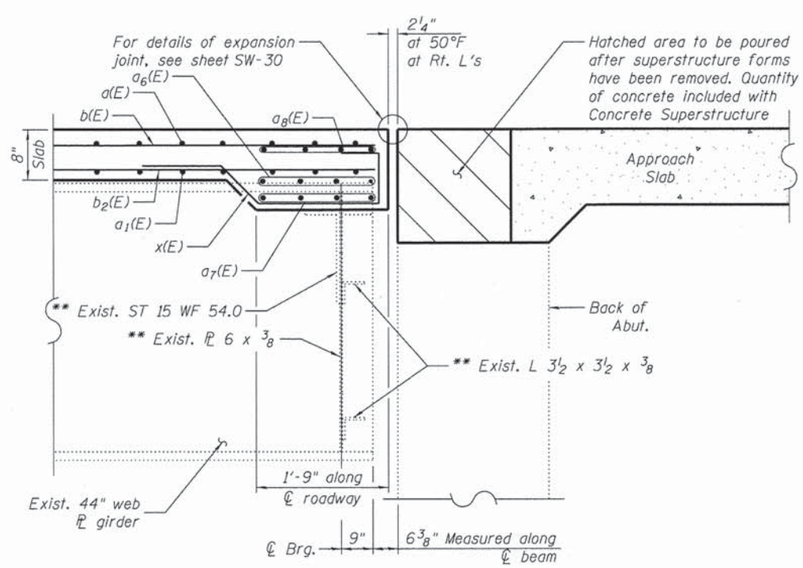


SECTION A-A



SECTION B-B

* Measured along ℄ beam/girder



SECTION C-C

** Part of K-frame diaphragm - See Existing Plans

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 6:49:17 PM
FILE NAME: 8611038-SW-Deck Details03.dgn
PLOT DRIVER: pdf_DET-111f.pltt
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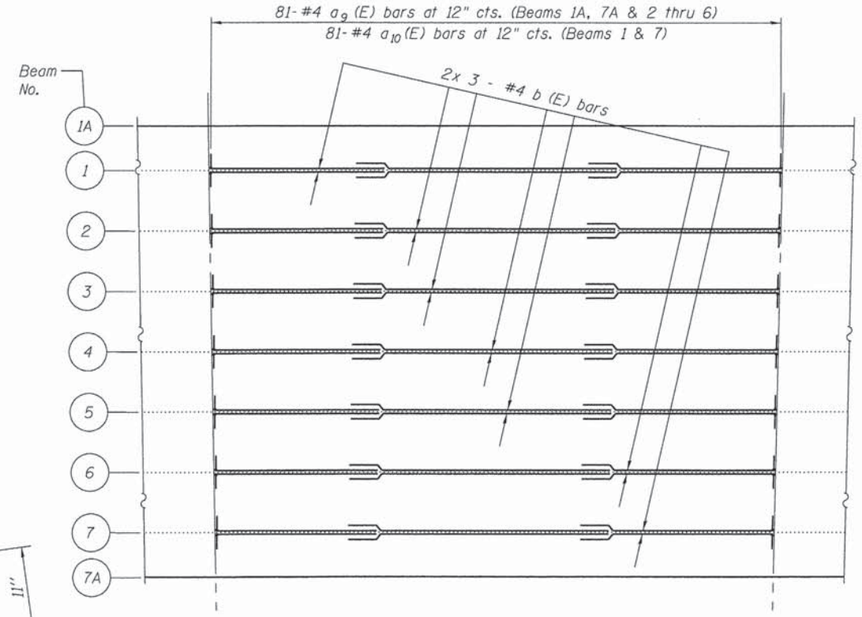
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

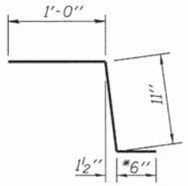
DECK DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-19 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	60
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT $FEDPROJNO$			



PIER 1

PIER 2



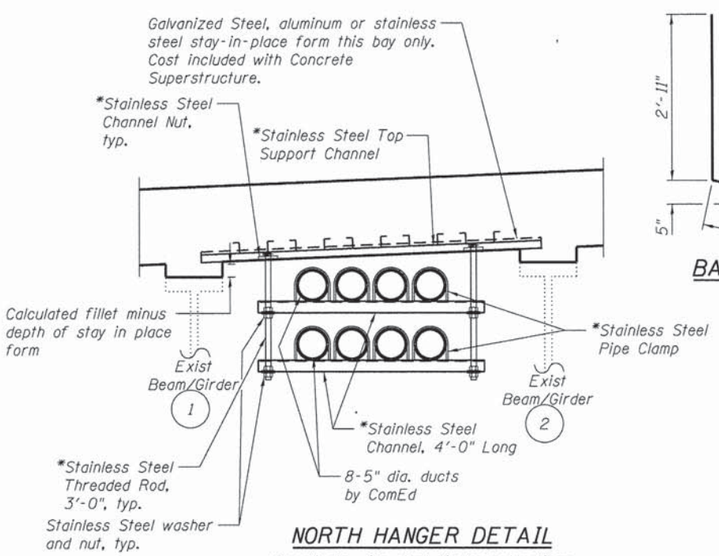
BAR c(E)

* In lieu of bottom leg, c(E) bars may be cored and set according to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of cored hole shall not exceed 6".

DECK FILLET REINFORCEMENT

(Based on theoretical fillet heights)

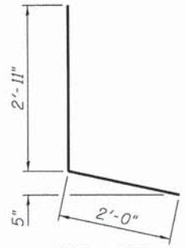
The actual quantities of the deck fillet reinforcement will be determined based on the field measurements of the fillet heights. Proposed fillets measured 6" taller for a length greater than 10'-0" shall be reinforced according to these details.



NORTH HANGER DETAIL

Coordinate with steel diaphram locations
120 assemblies required, North side
See Roadway Typical Sections for ComEd Relocation Coordination.

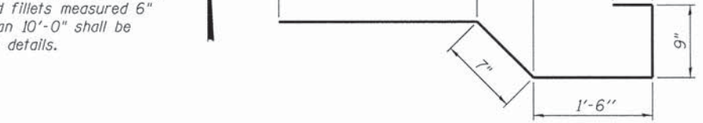
* Utility hangers and hardware at north side for 8-5" dia. ComEd ducts (ducts by others) included in the cost of Concrete Superstructure. See Special Provisions, Lighting Plans and Typical Sections.



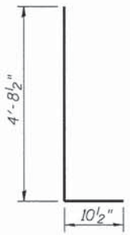
BAR d(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a (E)	4,185	#5	25'- 4"	—
a_1(E)	1,646	#5	36'- 4"	—
a_2(E)	240	#5	2'- 0"	—
a_3(E)	8	#6	36'- 7"	—
a_4(E)	32	#5	8'- 2"	—
a_5(E)	12	#6	25'- 8"	—
a_6(E)	36	#6	40'- 3"	—
a_7(E)	96	#5	9'- 1"	—
a_8(E)	36	#6	28'- 2"	—
a_9(E)	567	#4	6'- 2"	⊓
a_{10}(E)	162	#4	6'- 6"	⊓
b (E)	639	#5	35'- 10"	—
b_1(E)	70	#6	41'- 2"	—
b_2(E)	860	#5	32'- 8"	—
b_3(E)	140	#6	54'- 10"	—
b_4(E)	860	#5	33'- 6"	—
b_5(E)	639	#5	36'- 10"	—
b_6(E)	140	#6	38'- 10"	—
b_7(E)	54	#4	28'- 10"	—
c (E)	1,268	#5	2'- 4"	⌐
c_1(E)	1,268	#5	7'- 8"	—
d (E)	1,150	#4	4'- 11"	L
d_1(E)	1,150	#6	3'- 10"	L
d_3(E)	244	#6	5'- 7"	L
d_4(E)	12	#6	9'- 9"	⊓
x(E)	284	#5	5'- 10"	⌐¬
Concrete Superstructure			Cu. Yd.	1,335.0
Reinforcement Bars, Epoxy Coated			Pound	342,670
Bridge Deck Grooving			Sq. Yd.	3,352
Protective Coat			Sq. Yd.	4,919



BAR x(E)



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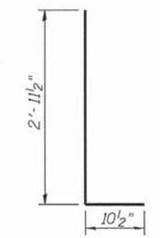
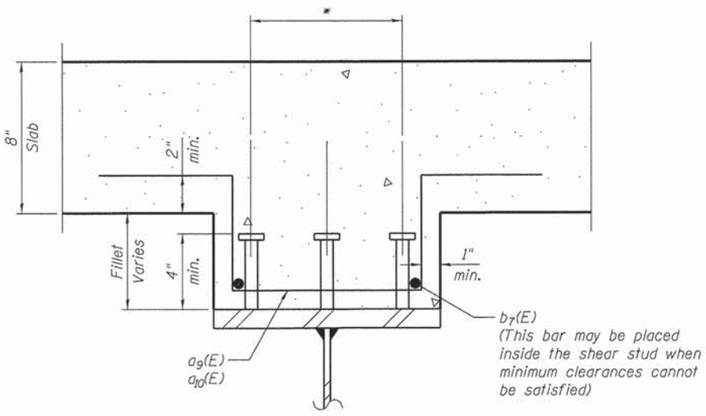
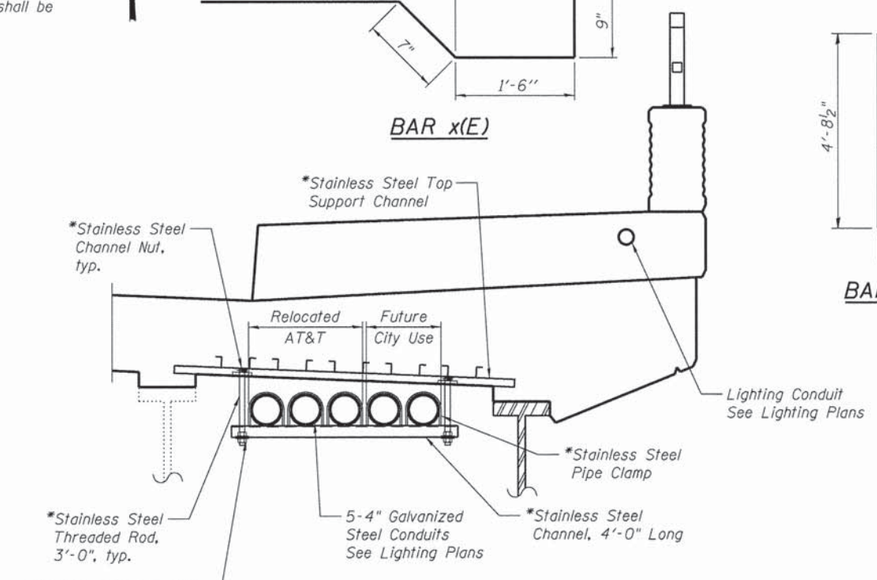


BAR d_1(E)



DEEP FILLET SECTION

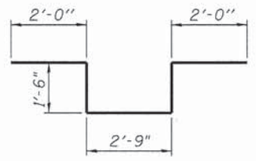
* See Structural Steel Details



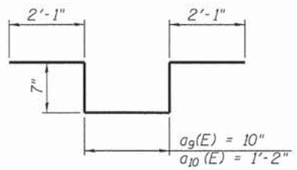
CONDUIT & DETAIL

Coordinate with steel diaphram locations
120 assemblies required, South side

* Utility hangers and hardware at south side for 5-4" dia. gal. steel conduits included in the cost of "Conduit attached to Superstructure". See Special Provisions, Lighting Plans.



BAR d_4(E)



BARS a_9(E) & a_{10}(E)

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 6:49:46 PM
FILE NAME: 8611018-SW-Deck Details04.dgn
PLOT DRIVER: pdf_267-111.pdf
PEN TABLE: standard-trans.tbl

HRGreen.com
Illinois Professional Design Firm # 184-001322
HRGreen

USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RDG	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-20 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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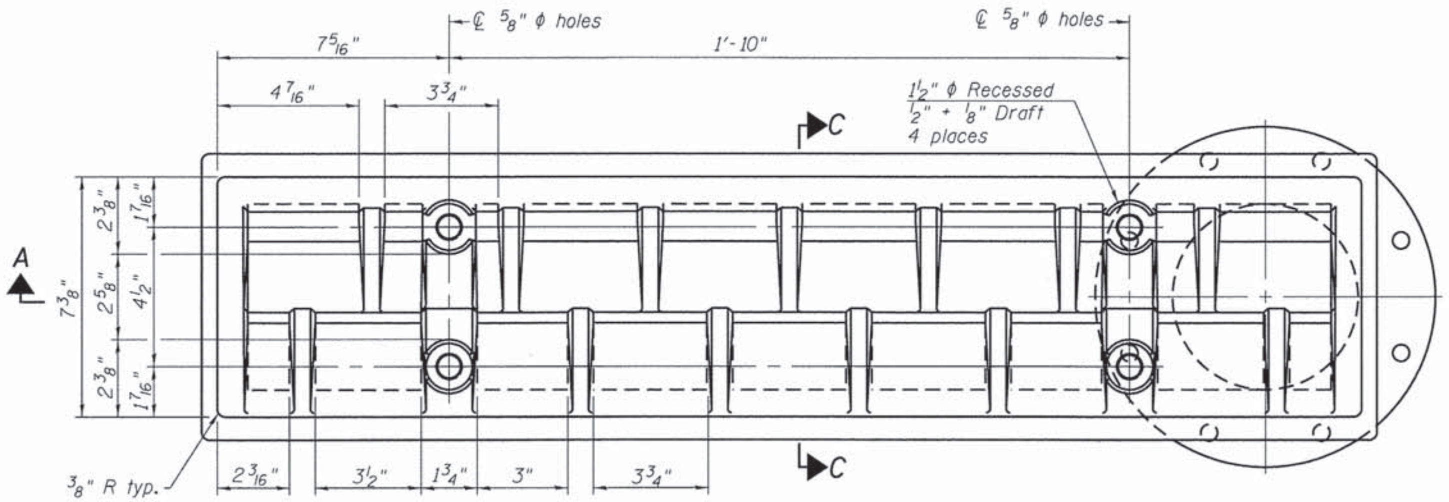
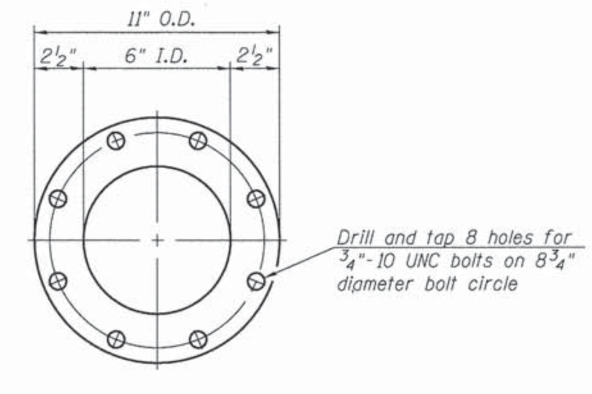
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT $FEDPROJNO$			



PLAN



VIEW B-B

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.

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.

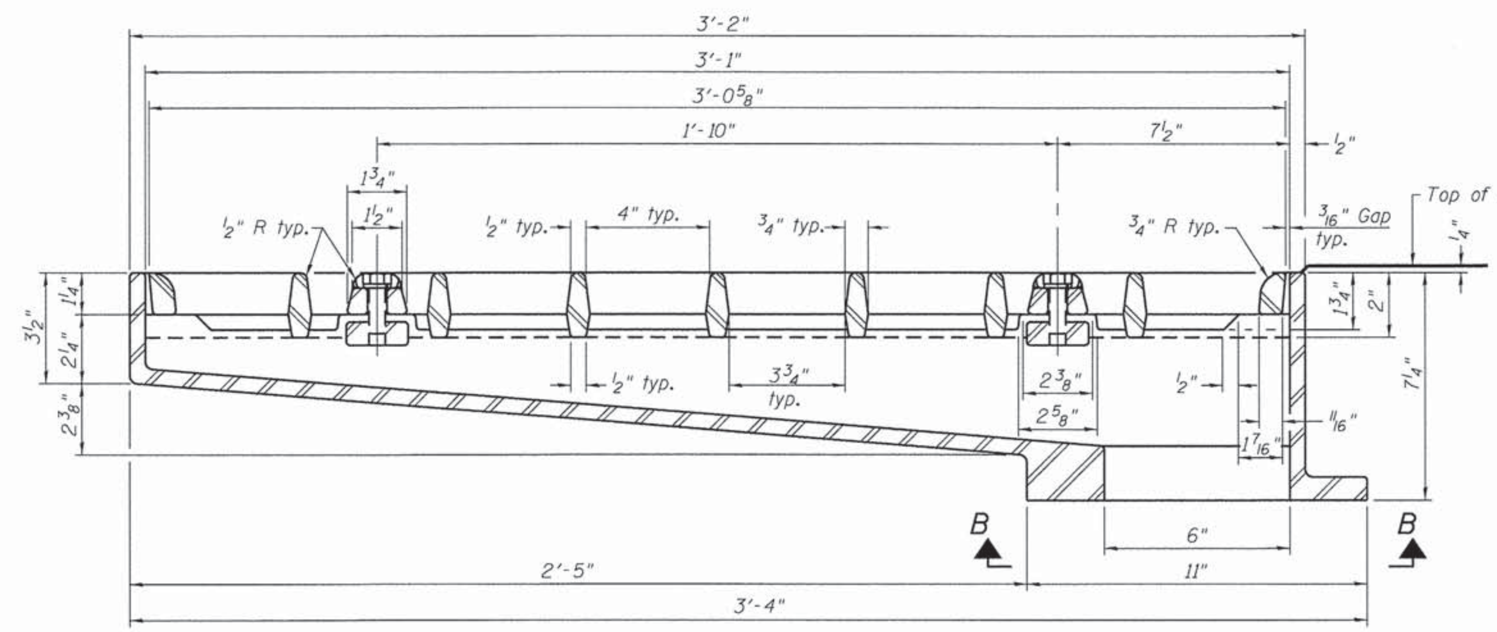
As an alternate, bolts, anchor studs, washers and nuts may be stainless steel according to Article 1006.29(d) of the Standard Specifications.

Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frame. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval. Structural steel weldments shall not be substituted for the cast iron scupper grate. Structural steel frames and downspouts shall be galvanized according to AASHTO M111.

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

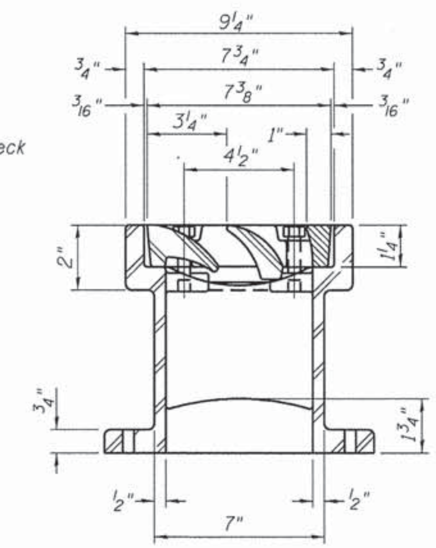
Cost of the Grate, Frame, Downspout, Anchor Studs, Bolts, Washers and Nuts including complete installation of the scupper shall be paid for at the contract unit price each for Drainage Scupper, DS-33.

Alternate fiberglass downspout conforming to ASTM D 2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. may be used in lieu of the cast iron or steel equivalent.

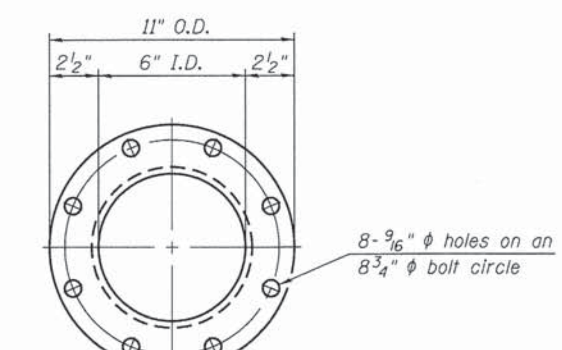


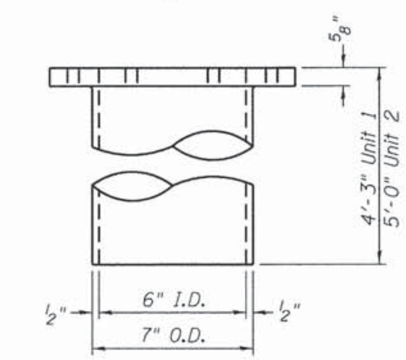
SECTION A-A

See sheet of for scupper location relative to parapet.

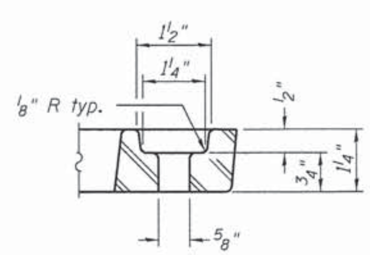


SECTION C-C

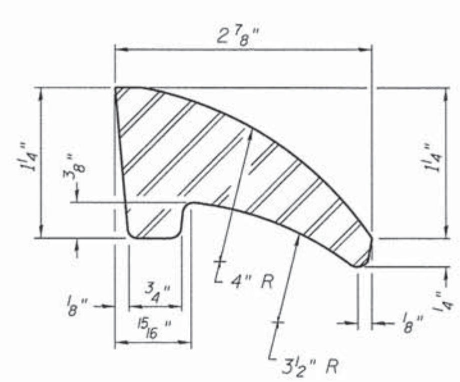




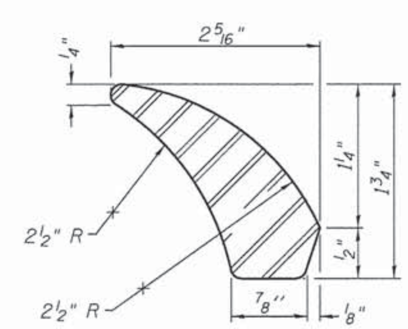
DOWNSPOUT



BOLT HOLE DETAIL



FIRST VANE DETAIL



SECOND VANE DETAIL

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-33	Each	15

DS-33 7-1-10

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:51:14 PM
FILE NAME: 86110318-SW-Scupper.dgn
PLOT DRIVER: pdf_DET-TIFF.plt
PEN TABLE: standard-trans.tbl

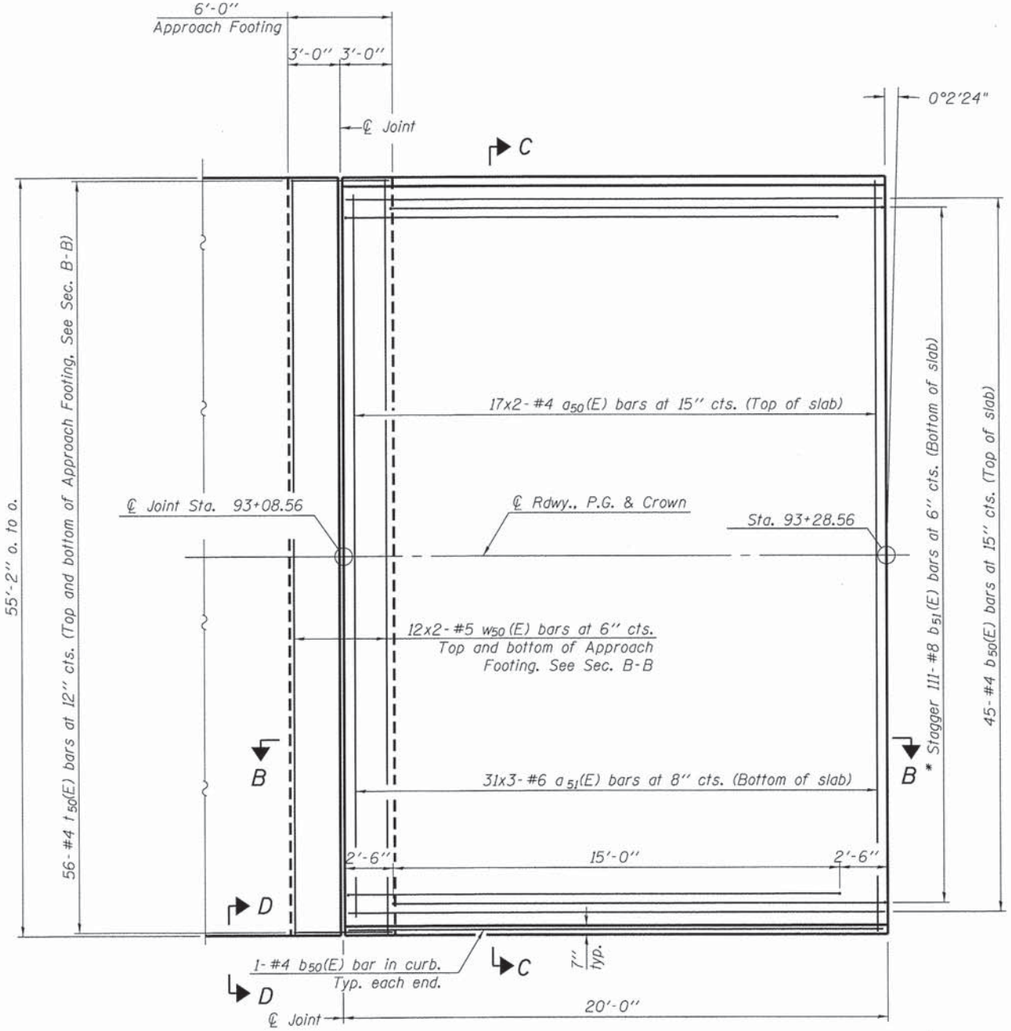
HRG HRGreen HRGreen.com Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

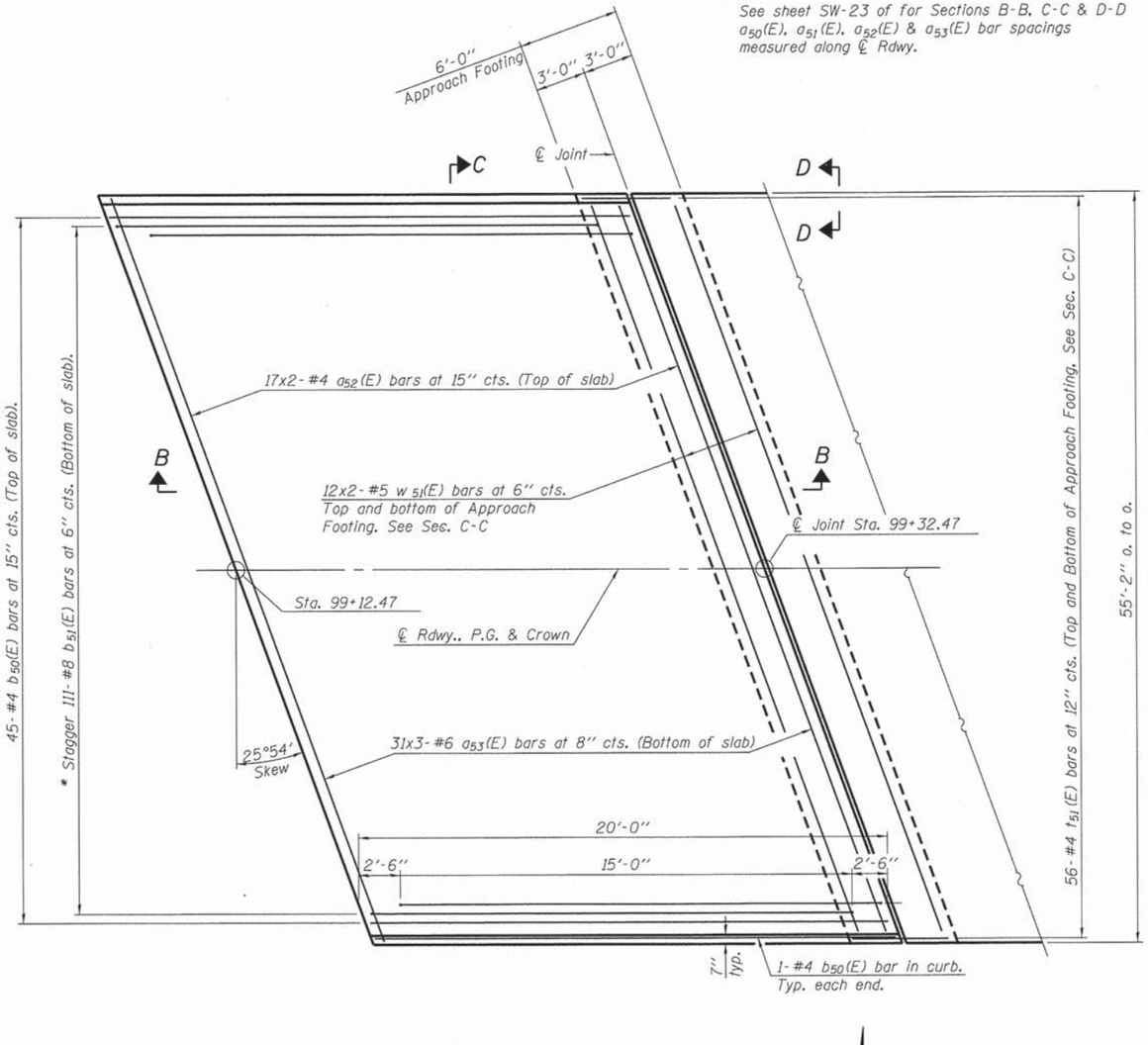
DS-33 SCUPPER
STRUCTURE NO. 045-3088
SHEET NO. SW-21 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	62
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	

Notes:
See sheet SW-23 of for Sections B-B, C-C & D-D
$a_{50}(E)$, $a_{51}(E)$, $a_{52}(E)$ & $a_{53}(E)$ bar spacings measured along ℄ Rdwy.



WEST APPROACH SLAB



EAST APPROACH SLAB

PLAN

* Tilt #8 $b_{51}(E)$ bars as required to maintain clearance.

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 6:51:52 PM
FILE NAME: 8611018-SW-45a01.dgn
PLOT DRIVER: pdf_DET-TIFF.plt
PEN TABLE: standard-trans.tbl

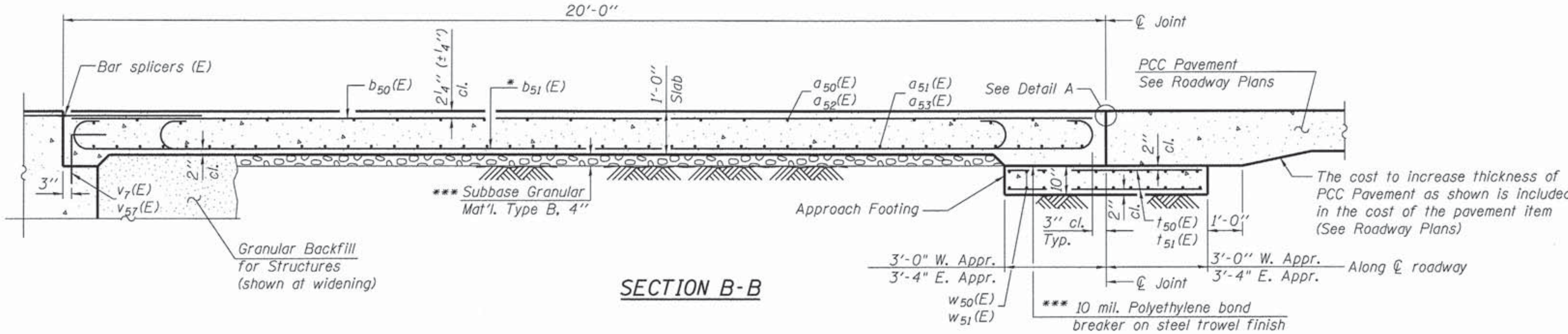
HRGreen
HRGreen.com
Illinois Professional Design Firm #184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-22 OF SW-62 SHEETS

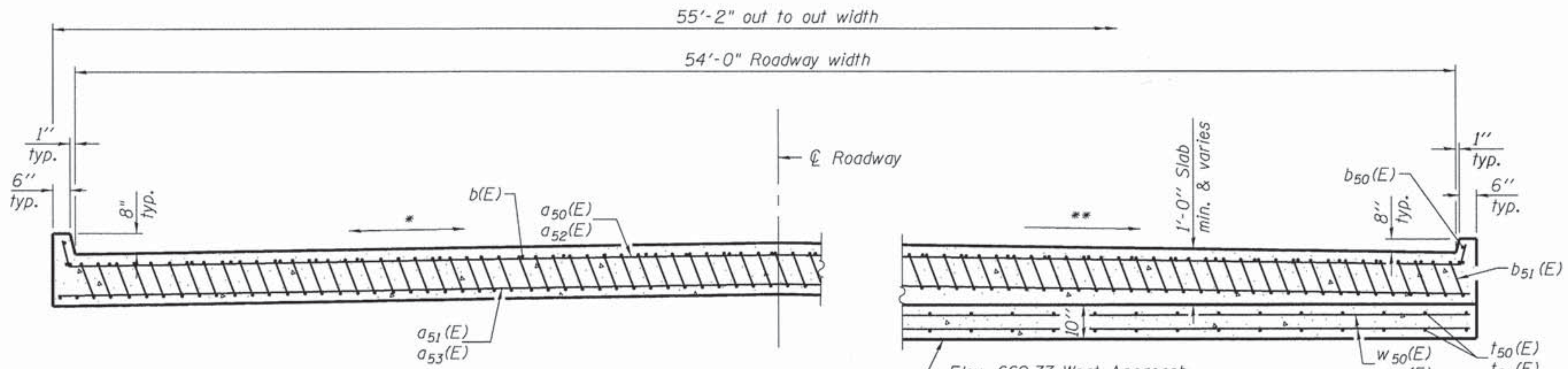
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	63
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		



SECTION B-B

Notes:

Approach slab concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v_7(E) and v_{57}(E) bar details, see Abutment Details.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
For bar splicer details, see sheet SW-57.
Cost of excavation for approach footing included with Concrete Structures.
For Granular Backfill for Structures and drainage treatment details, see Abutment Details.



SECTION C-C

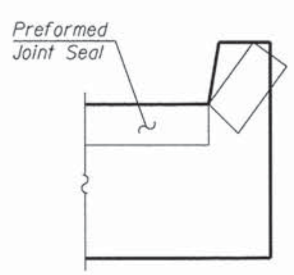
(See Plan for dimensions not shown)

* Slope Varies 2.89% to 3.40% West Approach (sloping down to south) see Approach Slab Elevations
Slope ³⁄₁₆"/' East Approach (sloping down to north)

** Slope Varies 2.95% to 3.44% West Approach (sloping down to south) see Approach Slab Elevations
Slope ³⁄₁₆"/' East Approach (sloping down to south)

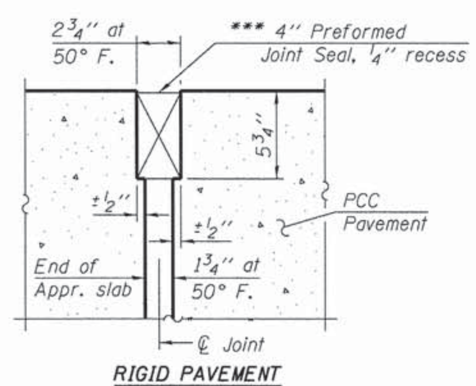
* Tilt #8 b_{51} (E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.



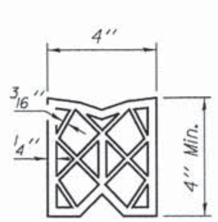
VIEW D-D

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.

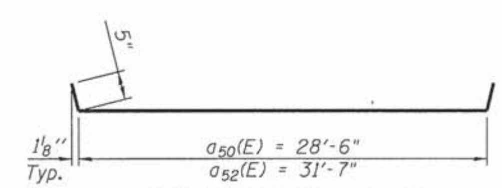


*** Cost included with Concrete Superstructure.

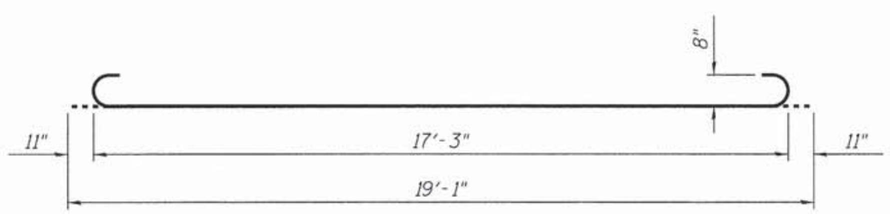
DETAIL A



PREFORMED JOINT SEAL



BARS a_{50}(E), a_{52}(E)



BAR b_{51}(E)

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a50 (E)	34	#4	28'- 11"	
a_{51}(E)	93	#6	20'- 4"	
a_{52}(E)	34	#4	32'- 0"	
a_{53}(E)	93	#6	22'- 5"	
b_{50}(E)	90	#4	19'- 8"	
b_{51}(E)	222	#8	19'- 1"	
t_{50} (E)	112	#4	5'- 8"	
t_{51} (E)	112	#4	6'- 4"	
w_{50} (E)	48	#5	28'- 9"	
w_{51} (E)	48	#5	31'- 10"	
Concrete Superstructure			Cu. Yd.	114.1
Concrete Structures			Cu. Yd.	21.5
Reinforcement Bars, Epoxy Coated			Pound	23,780
Protective Coat			Sq. Yd.	251
Bridge Deck Grooving			Sq. Yd.	232

COMPANY NAME:
PROJECT CONTACT: Kevin M. Artt
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:52:21 PM
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PLOT DRIVER: pdf_DET-11ff.plt
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	PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 045-3088

SHEET NO. SW-23 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 63863		
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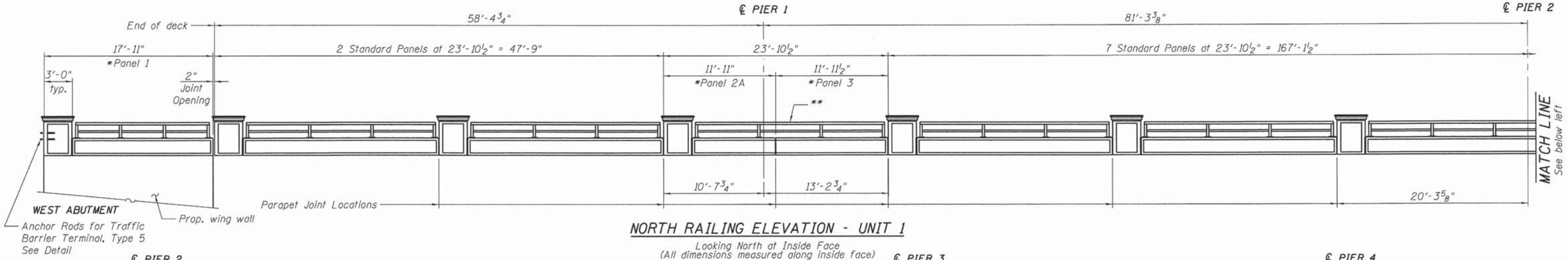
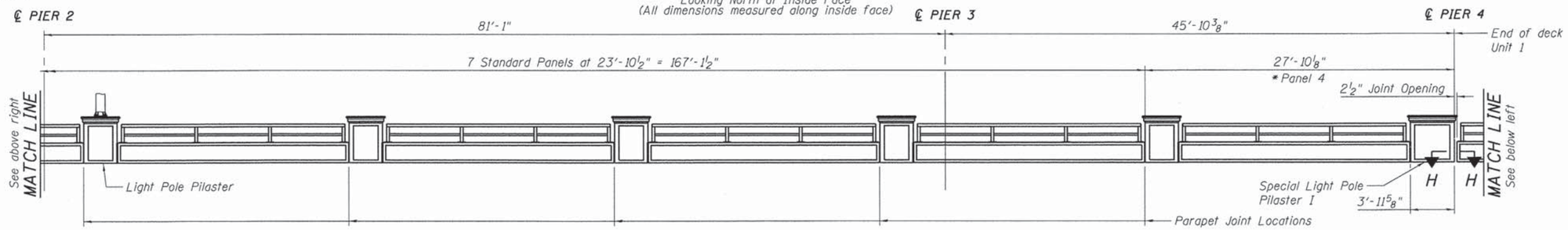


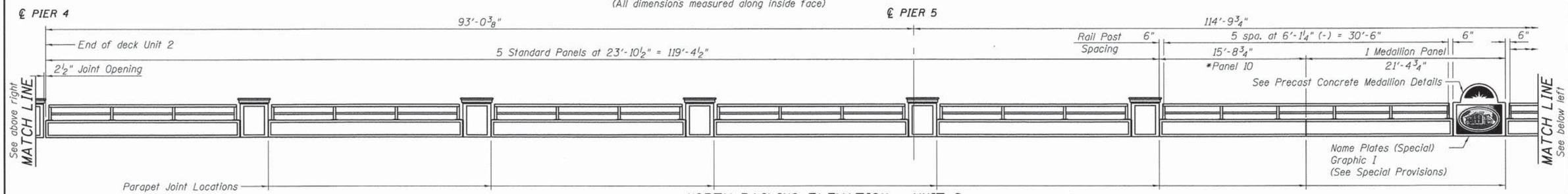
NORTH RAILING ELEVATION - UNIT 1

Looking North at Inside Face
(All dimensions measured along inside face)



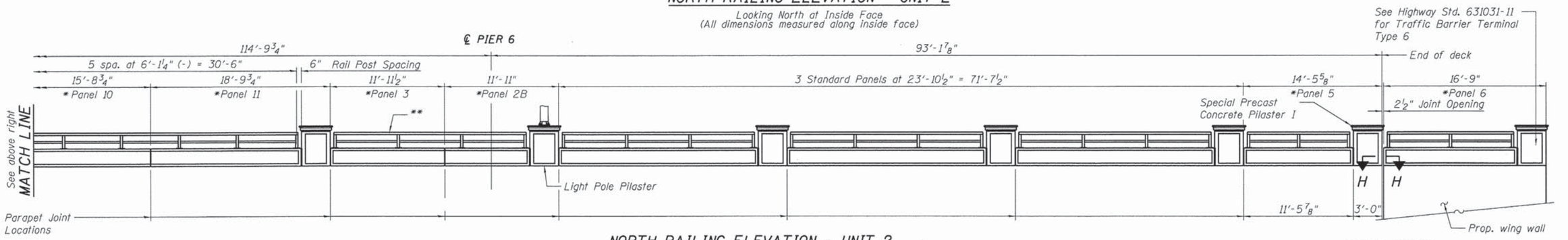
NORTH RAILING ELEVATION - UNIT 1

Looking North at Inside Face
(All dimensions measured along inside face)



NORTH RAILING ELEVATION - UNIT 2

Looking North at Inside Face
(All dimensions measured along inside face)



NORTH RAILING ELEVATION - UNIT 2

Looking North at Inside Face
(All dimensions measured along inside face)

* See Special Panel Details
** Provide Standard Metal Railing Panel
See Sheet SW-28 for Section H-H

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 6:53:00 PM
FILE NAME: 8611018-SW-North Railing Elevation.dgn
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HRGreen.com
Illinois Professional Design Firm # 184-001322
HRGreen

USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NORTH RAILING ELEVATION
STRUCTURE NO. 045-3088
SHEET NO. SW-24 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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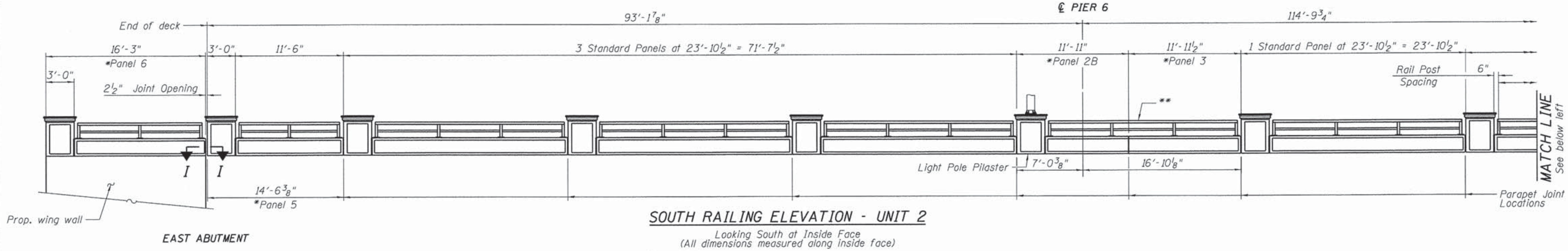
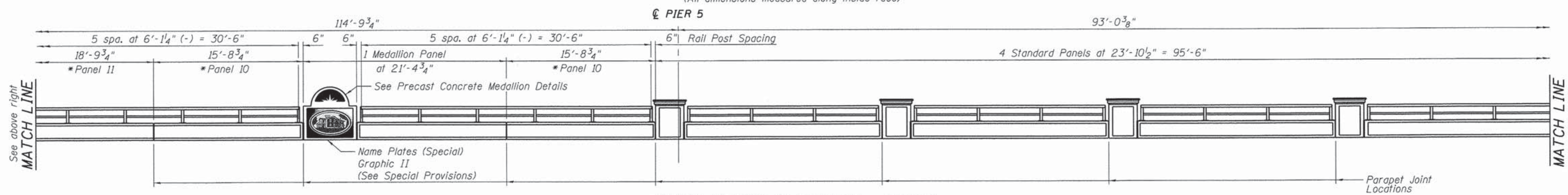
	ILLINOIS FED. AID PROJECT	#FEDPROJNO#		



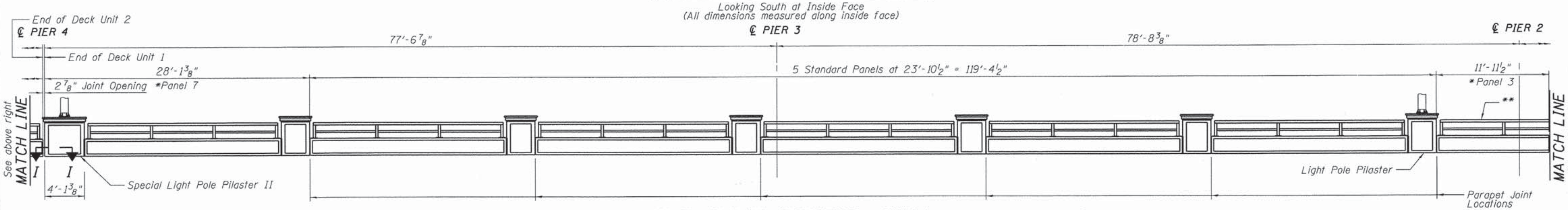
SOUTH RAILING ELEVATION - UNIT 2

Looking South at Inside Face
(All dimensions measured along inside face)



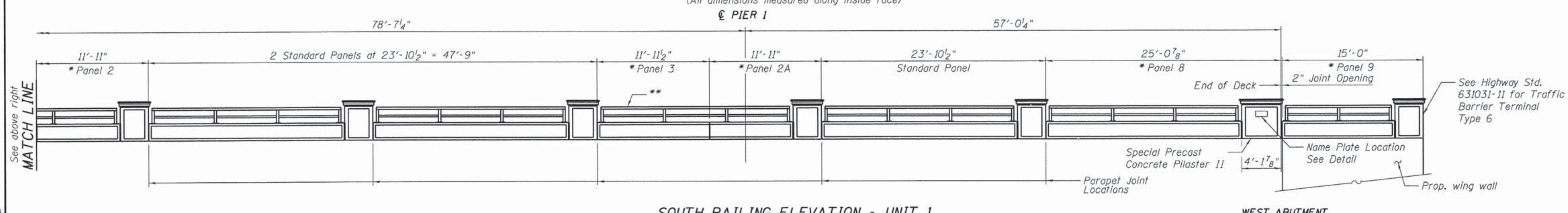
SOUTH RAILING ELEVATION - UNIT 2

Looking South at Inside Face
(All dimensions measured along inside face)



SOUTH RAILING ELEVATION - UNIT 1

Looking South at Inside Face
(All dimensions measured along inside face)



SOUTH RAILING ELEVATION - UNIT 1

Looking South at Inside Face
(All dimensions measured along inside face)

* See Special Panel Details
** Provide Parapet Railing (Special) as shown in Standard Panel Elevation (Sheet SW-26)
See Sheet SW-28 for Section I-I

HRGreen.com Illinois Professional Design Firm # 184-001322 HRGreen	USER NAME = whood PLOT SCALE = PLOT DATE = 8/22/2013	DESIGNED - KMA CHECKED - RDG DRAWN - WJH CHECKED - 8/22/13	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOUTH RAILING ELEVATION STRUCTURE NO. 045-3088 SHEET NO. SW-25 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 63863		
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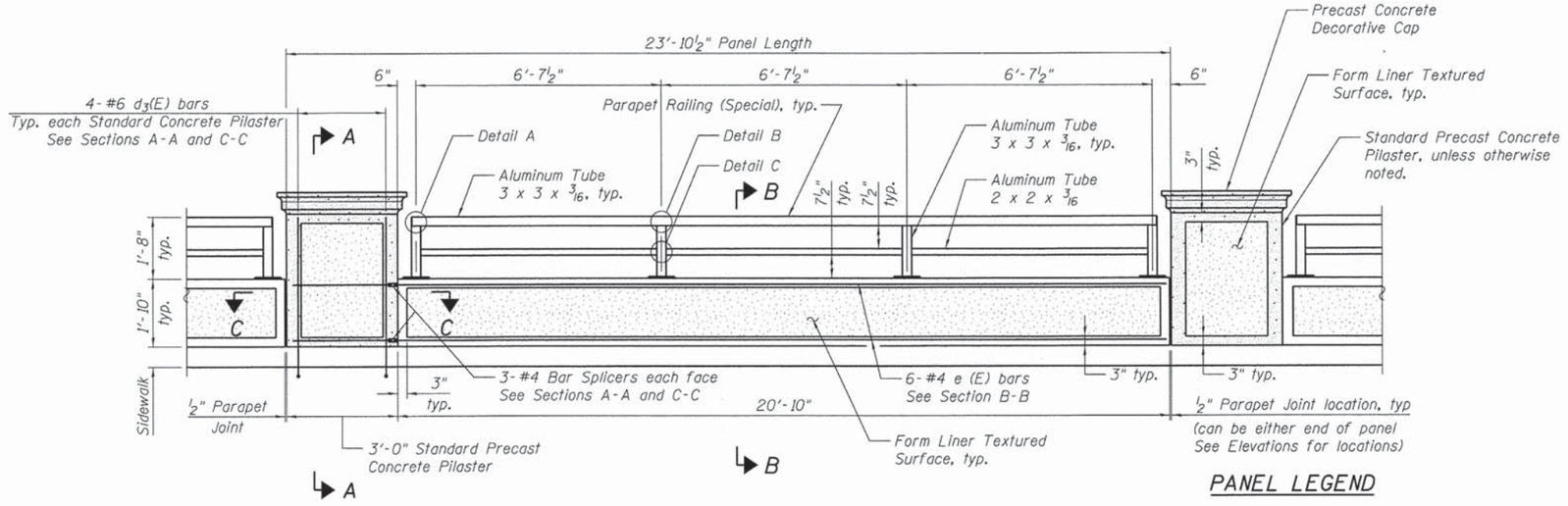


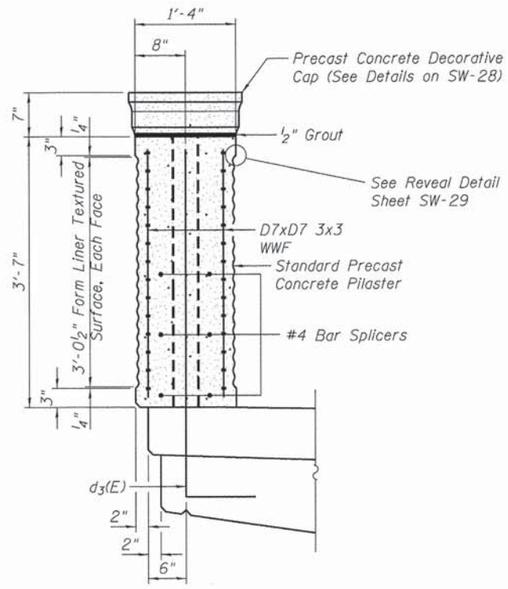
STANDARD PANEL ELEVATION

Can be Opposite Hand
See Elevations

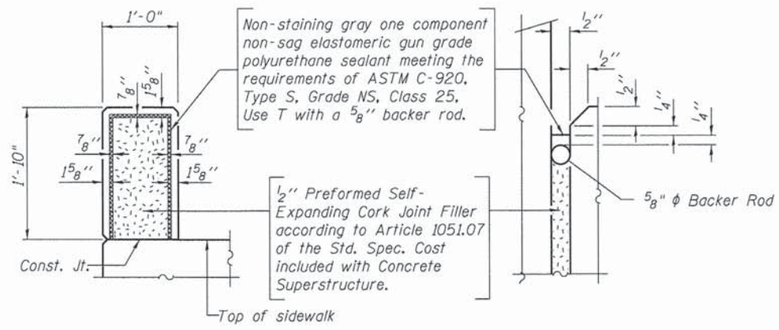
PANEL LEGEND

- Precast Concrete (Install first)
- Cast-in-place Concrete (Install after Precast)
- Indicates Form Liner Textured Surface

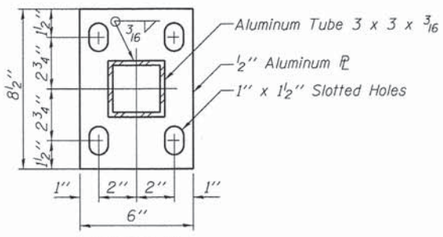
All paid for under "Concrete Bridge Railing"



SECTION A-A



PARAPET JOINT DETAILS



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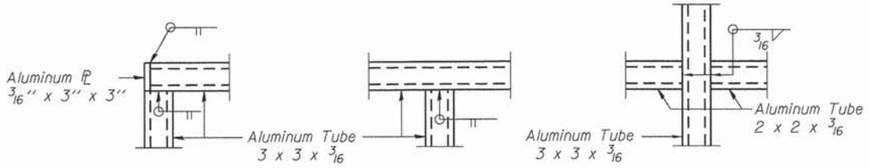
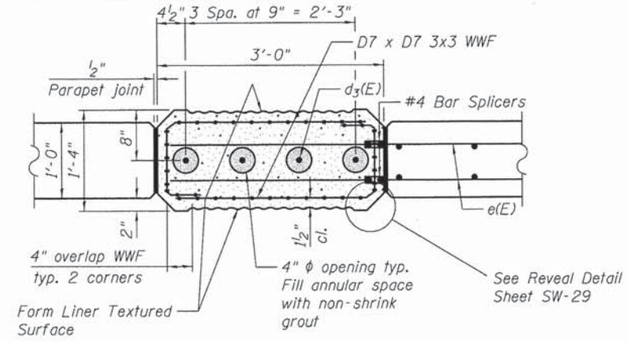


DETAIL A

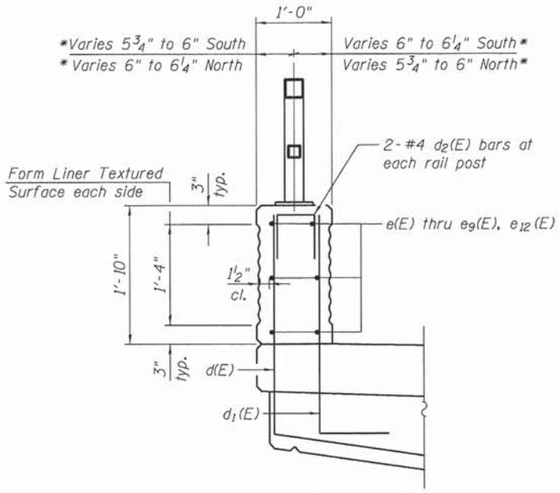
DETAIL B

DETAIL C

See Special Provisions for
finish and color of Parapet
Railings, Special.

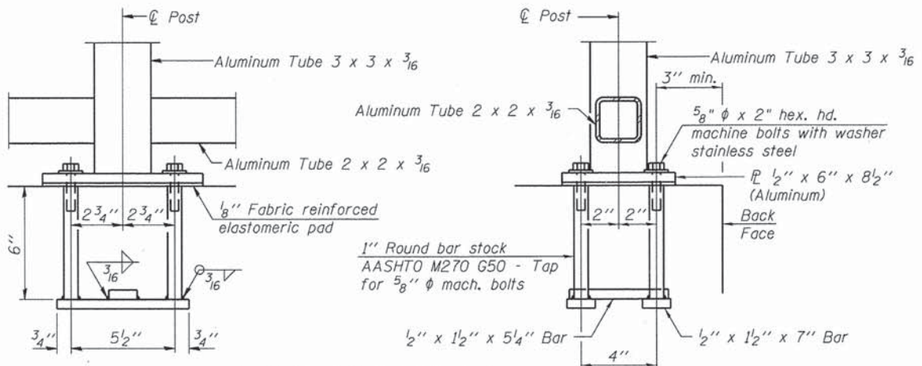


SECTION C-C



SECTION B-B

* Applies to Unit 1
Dimension is 6" at Unit 2



ANCHOR BOLT DETAILS

Drilling and setting anchor rods is not allowed.

BILL OF MATERIAL

Item	Unit	Quantity
Parapet Railing (Special)	Foot	1006
Concrete Bridge Railing	Foot	1226

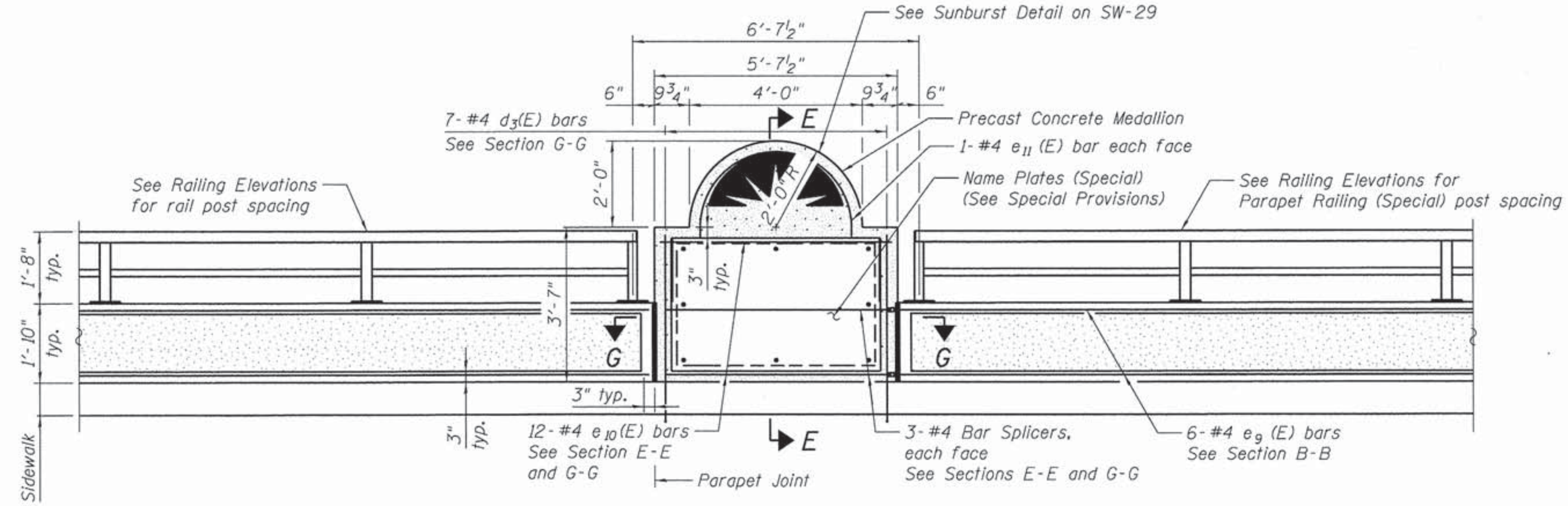
COMPANY NAME: HRGreen.com
PROJECT CONTACT: Illinois Professional Design Firm # 184-001322
CLIENT:
DATE PLOTTED:
FILE NAME:
PLOT DRIVER:
PEN TABLE:

USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RDG	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

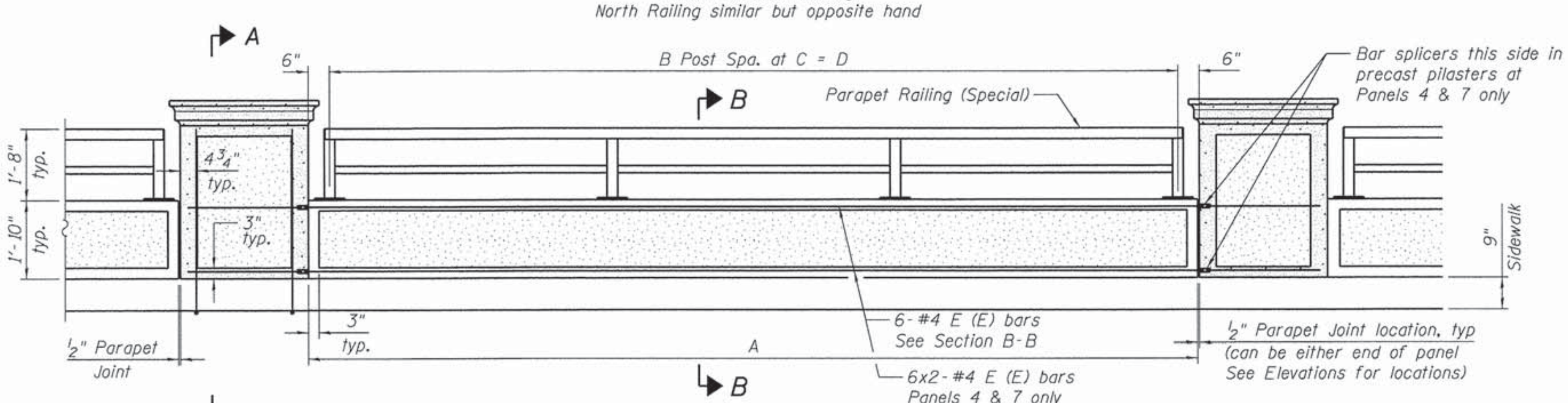
BRIDGE RAILING DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-26 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	67
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT		#FEDPROJNO#



MEDALLION PANEL ELEVATION

Shown at South Railing
North Railing similar but opposite hand



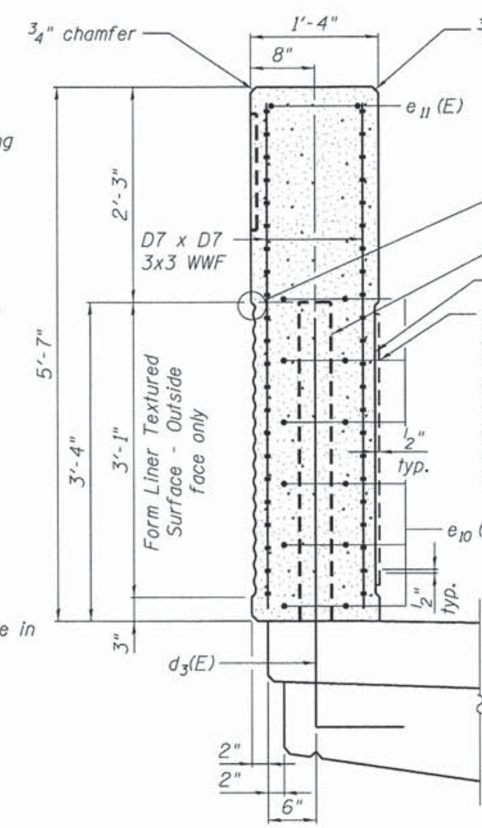
SPECIAL PANEL ELEVATION

Can be Opposite Hand if only one pilaster is included
See Elevations

SPECIAL PARAPET / RAILING PANEL DIMENSION TABLE

Special Panel	A	B	C	D	E	No. of Panels
1	14'-11"	3	4'-7 5/8" (+)	13'-11"	e_1 (E)	1
2A	8'-11"	**	**	**	e_2 (E)	3
2B	8'-11"	**	**	**	e_2(E)	2
3	11'-11"	**	**	**	e_3 (E)	5
4	20'-10 1/2"	**	**	**	e_4 (E)	1
5	11'-5 7/8"	2	5'-2 7/8" (+)	10'-5 7/8"	e_5 (E)	2
6	13'-3"	2	6'-1 1/2"	12'-3"	e_6 (E)	2
7	20'-10 1/2"	**	**	**	e_4 (E)	1
8	20'-10 1/2"	**	**	**	e_7 (E)	1
9	12'-0"	2	5'-6"	11'-0"	e_8 (E)	1
10	15'-8 1/4"	***	***	***	e_9 (E)	4
11	15'-9 3/4"	***	***	***	e_9 (E)	2

* See Standard Precast Concrete Pilaster Details
** See Standard Panel Details for Metal Railing Layout
*** See Railing Elevations for Metal Railing Layout



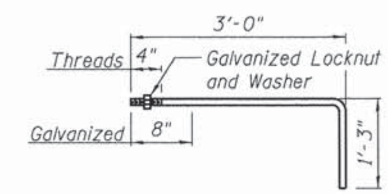
SECTION E-E

Name Plates (Special) - 4'-7" wide x 2'-10" tall. Materials and installation shall conform to Section 515 of the Standard Specifications except that eight brass or bronze bolts with countersunk heads, or eight lugs cast integral with the plate shall be used. Provide one in each corner and one at the mid-span of each side. 2 signs required.

PANEL LEGEND

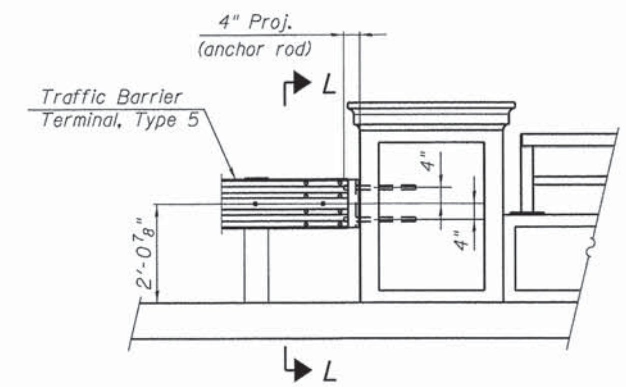
- Precast Concrete (Install first)
- Cast-in-place Concrete (Install after precast)
- Indicates Form Liner Textured Surface

All paid for under "Concrete Bridge Railing"

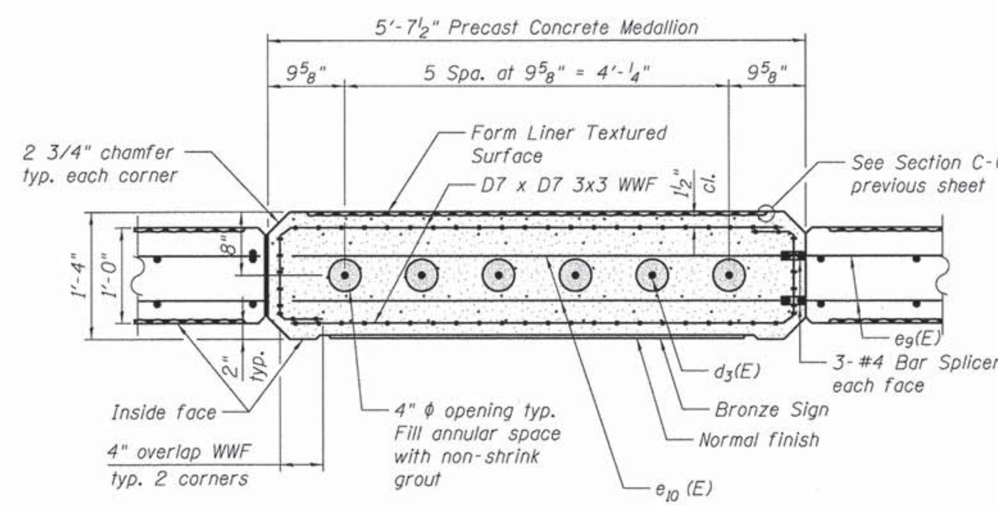


1" ϕ ANCHOR ROD

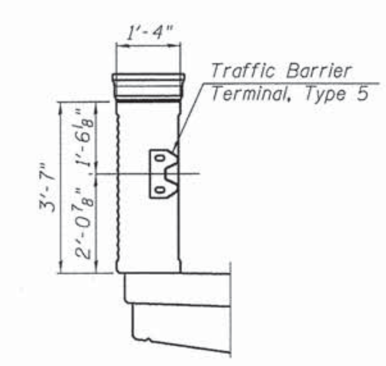
For TBT Type 5
Cost included in Concrete Bridge Railing



TRAFFIC BARRIER TERMINAL DETAIL



SECTION G-G



SECTION L-L

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PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 6:54:49 PM
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FILE NAME: pdf_DET-11f1.plt
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PEN TABLE:

HRGreen.com
Illinois Professional Design Firm
184-001322
HRGreen

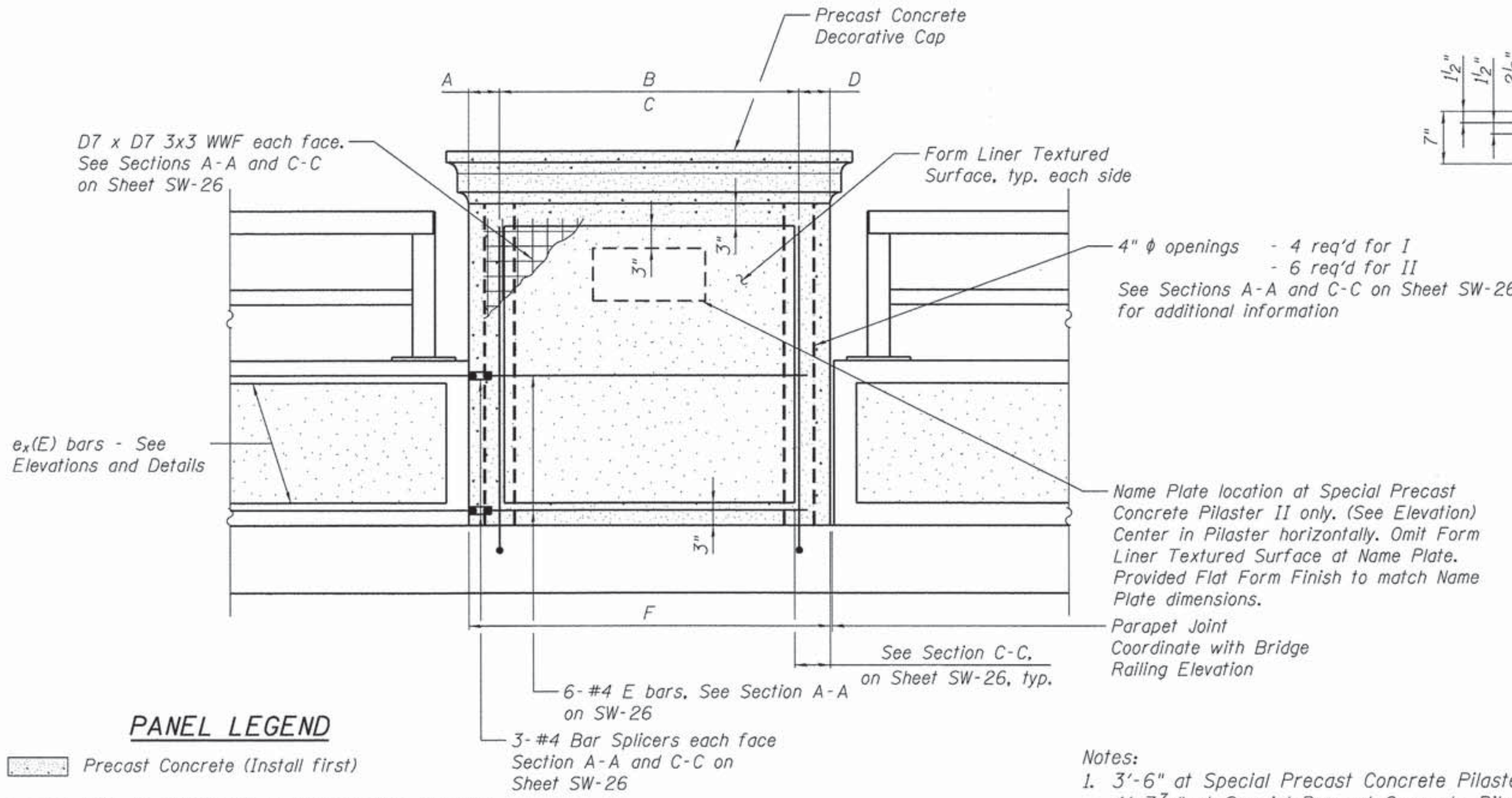
USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE RAILING DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-27 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	68

CONTRACT NO. 63863
ILLINOIS FED. AID PROJECT #FEDPROJNO#



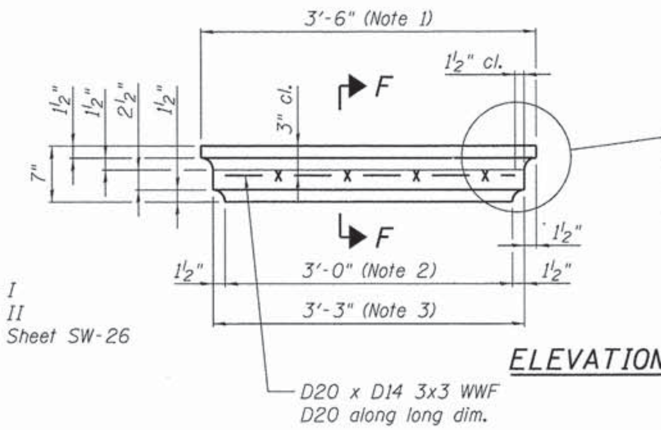
PANEL LEGEND

- Precast Concrete (Install first)
- Cast-in-place Concrete (Install after precast)
- Indicates Form Liner Textured Surface

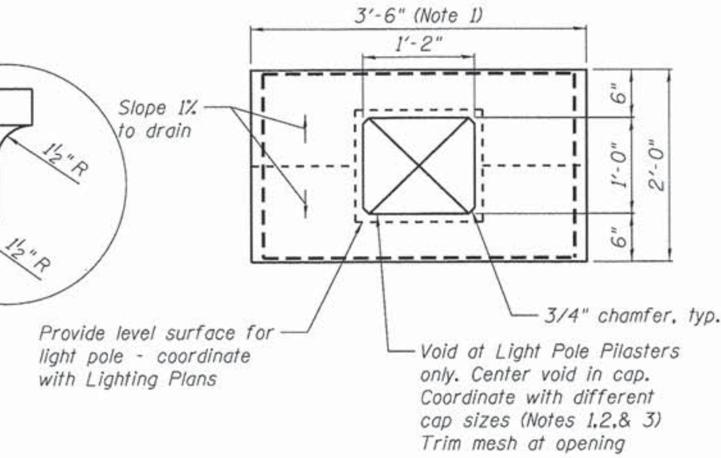
All paid for under "Concrete Bridge Railing"

SPECIAL PRECAST CONCRETE PILASTER DETAIL

May be opposite hand

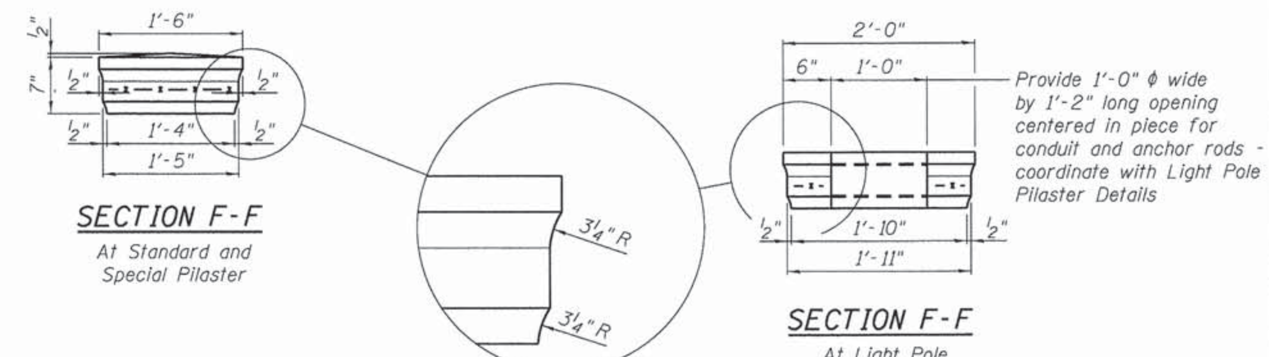


ELEVATION



PLAN

Shown at Light Pole Pilaster



SECTION F-F

At Standard and Special Pilaster

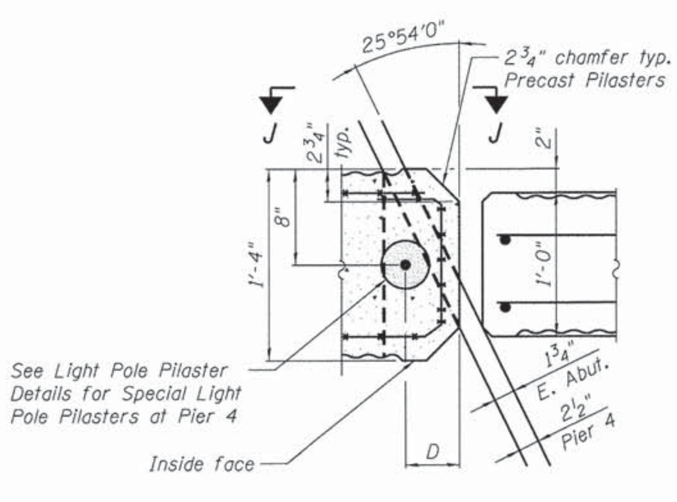
SECTION F-F

At Light Pole Pilaster

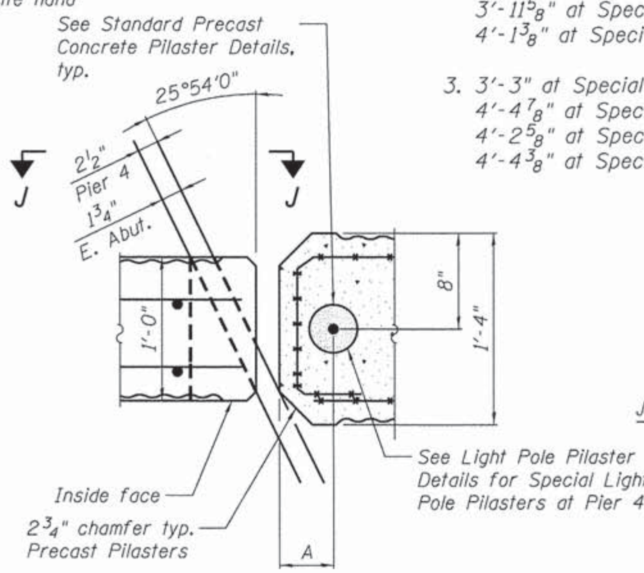
PRECAST CONCRETE DECORATIVE CAP DETAILS

Notes:

1. 3'-6" at Special Precast Concrete Pilaster I
   4'-7⅞" at Special Precast Concrete Pilaster II
   4'-5⅝" at Special Light Pole Pilaster I
   4'-7⅜" at Special Light Pole Pilaster II
2. 3'-0" at Special Precast Concrete Pilaster I
   4'-1⅞" at Special Precast Concrete Pilaster II
   3'-11⅝" at Special Light Pole Pilaster I
   4'-1⅜" at Special Light Pole Pilaster II
3. 3'-3" at Special Precast Concrete Pilaster I
   4'-4⅞" at Special Precast Concrete Pilaster II
   4'-2⅝" at Special Light Pole Pilaster I
   4'-4⅜" at Special Light Pole Pilaster II



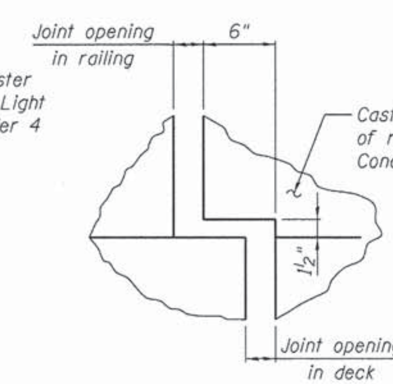
SECTION H-H



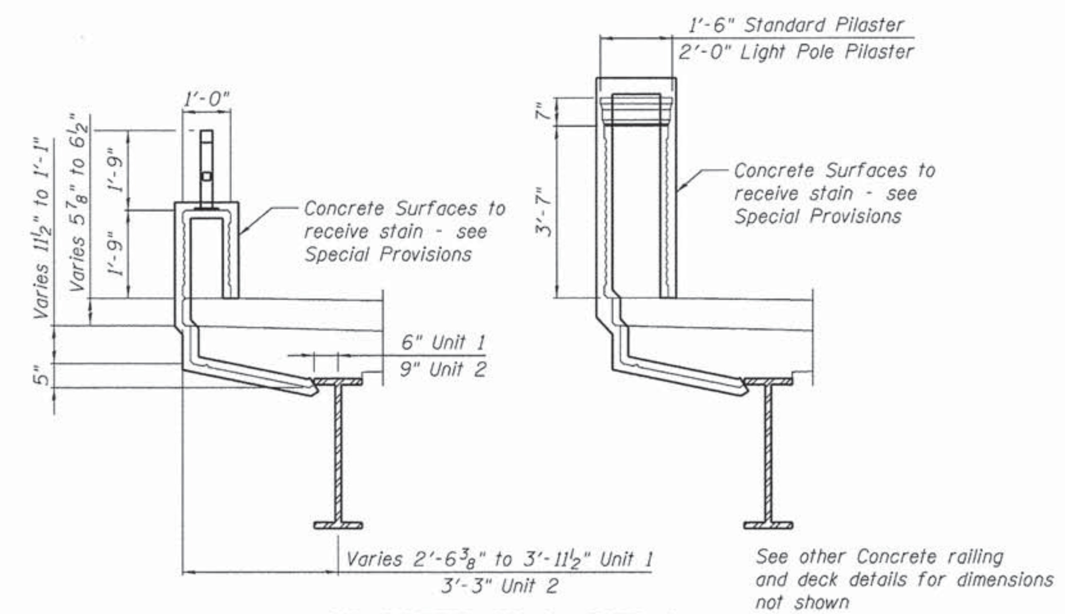
SECTION I-I

MIN. BAR LAP

#4 bar = 2'-4"
#5 bar = 3'-3"
#6 bar = 3'-10"



VIEW J-J



See other Concrete railing and deck details for dimensions not shown

CONCRETE STAIN DETAIL

Special Precast Conc. Pilaster	A	B	C (4" ϕ Opening Spacing)	D	E	F
I	4½"	*	3 Spa. at 8¼" cts.	6½"	*	*
II	4⅞"	6-#6 d_3(E) bars	5 Spa. at 8" cts.	4⅞"	e_{12} (E)	4'-1⅞"

* See Standard Precast Concrete Pilaster Details

HRGreen.com Illinois Professional Design Firm # 184-001322	USER NAME = whood	DESIGNED - KMA	REVISED -
		CHECKED - RDG	REVISED -
	PLOT SCALE =	DRAWN - WJH	REVISED -
	PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE RAILING DETAILS
STRUCTURE NO. 045-3088

SHEET NO. SW-28 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	69
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 6:55:45 PM
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FILE NAME: pdf_DET-1111.plt
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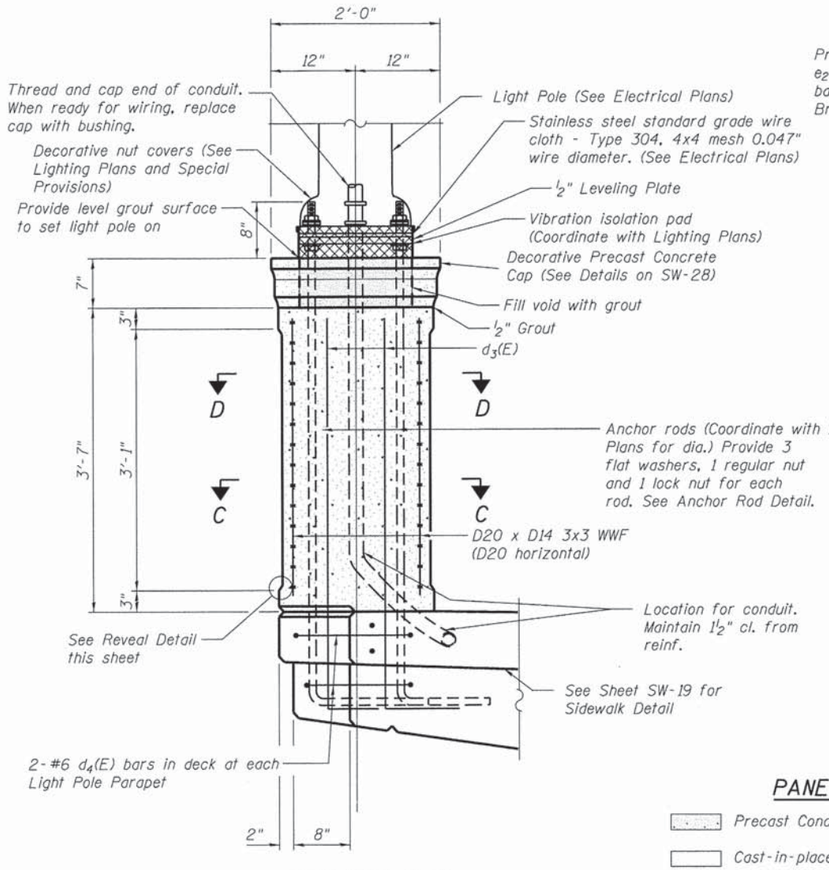
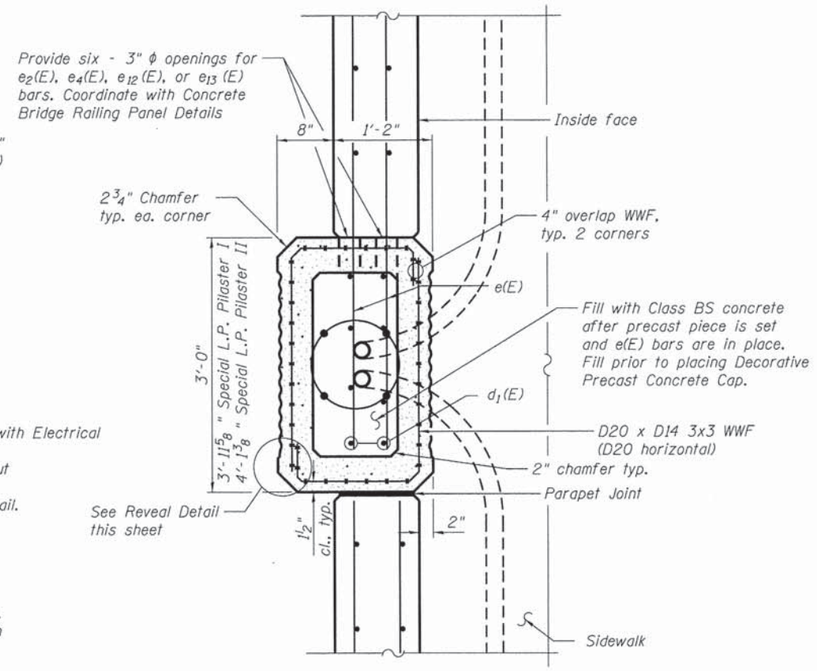


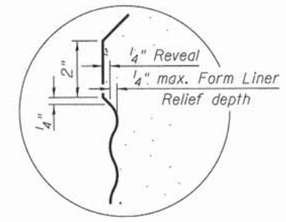
SECTION THRU LIGHT POLE PILASTER

Cost of Anchor Rods in bridge is included with "Concrete Superstructure"



SECTION C-C

Could be opposite hand



REVEAL DETAIL

CONCRETE BRIDGE RAILING REINFORCEMENT

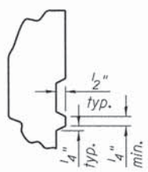
Bar	No.	Size	Length	Shape
$d_2(E)$	414	#4	2'- 2"	⊓
e (E)	198	#4	20'- 8"	——
$e_1(E)$	6	#4	14'- 9"	——
$e_2(E)$	30	#4	8'- 9"	——
$e_3(E)$	30	#4	11'- 9"	——
$e_4(E)$	24	#4	14'- 3"	——
$e_5(E)$	12	#4	11'- 4"	——
$e_6(E)$	12	#4	13'- 1"	——
$e_7(E)$	6	#4	20'- 9"	——
$e_8(E)$	6	#4	11'- 10"	——
$e_9(E)$	48	#4	15'- 7"	——
$e_{10}(E)$	24	#4	5'- 4"	——
$e_{11}(E)$	4	#4	10'- 11"	∩
$e_{12}(E)$	12	#4	23'- 2"	——
$e_{13}(E)$	12	#4	11'- 3"	——
Reinforcement Bars, Epoxy Coated		Pound	5,250	
Bar Splicers		Each	306	

Quantities above provided for bidder's information only. Cost of reinforcement bars, epoxy coated and bar splicers are included in the price of Concrete Bridge Railing.

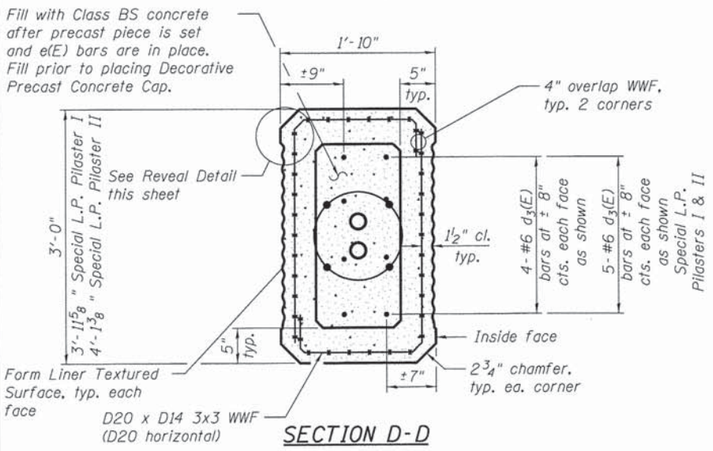
PANEL LEGEND

- Precast Concrete (Install first)
- Cast-in-place Concrete (Install after precast)
- Indicates Form Liner Textured Surface

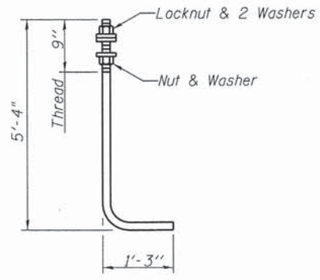
All paid for under "Concrete Bridge Railing"



SECTION K-K

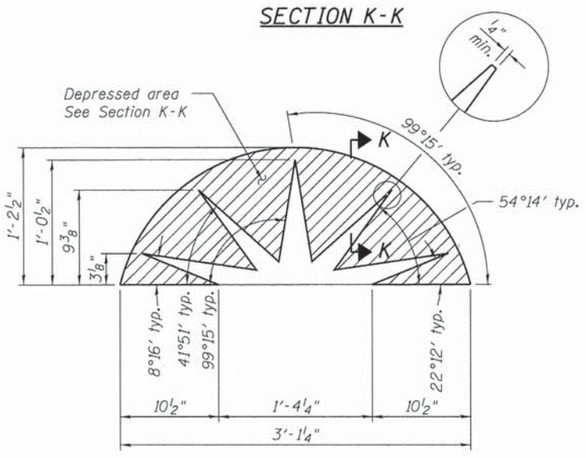


SECTION D-D

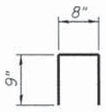


ANCHOR ROD

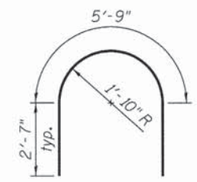
Diameter as specified for light poles. (ASTM F 1554 Grade 105) Full length hot dipped galvanized



SUNBURST DETAIL



BAR $d_2(E)$



BAR $e_{11}(E)$

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 9/4/2013 7:57:00 AM
FILE NAME: 8611031B-SW-Bridge Railing Details04.dgn
PLOT DRIVER: pdf_DET-111.stt
PEN TABLE: standard-trans.tbl

HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RDG	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 9/4/2013	CHECKED - 9/4/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE RAILING DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-29 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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		CONTRACT NO. 63863		
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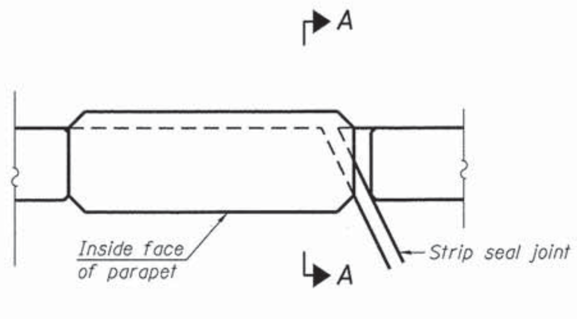
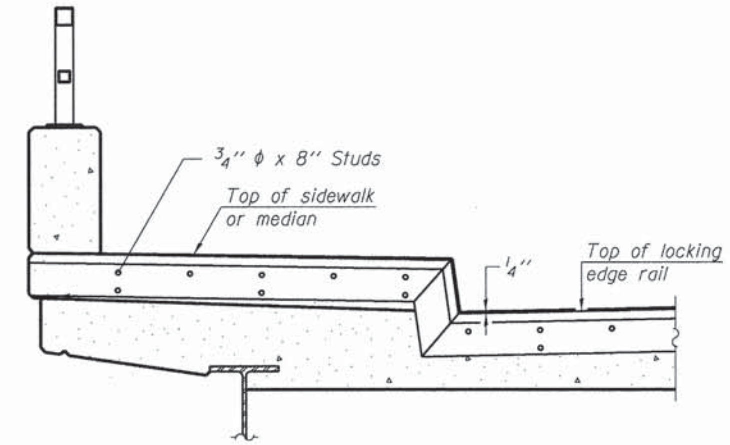
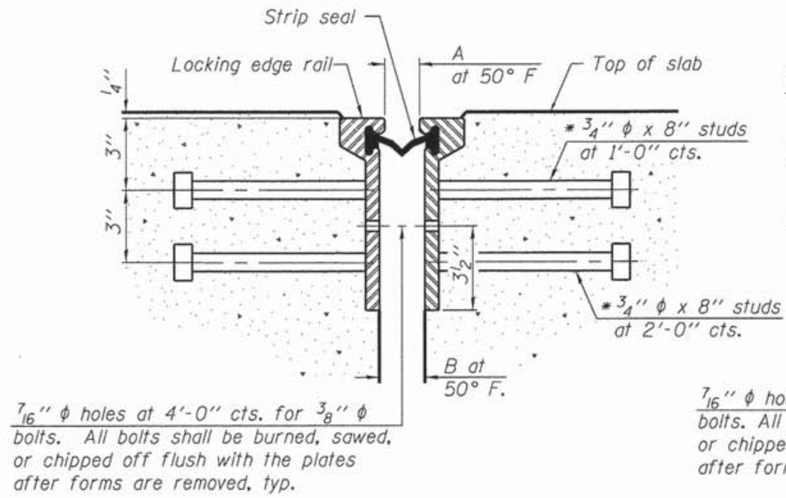


PLAN

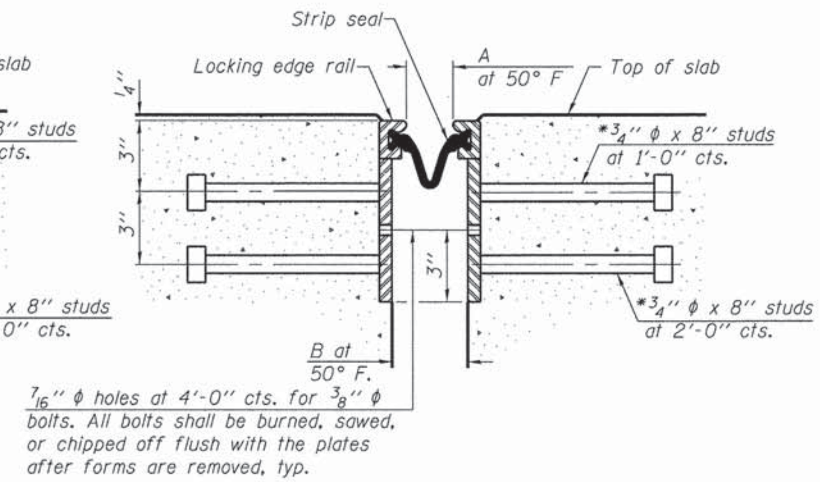


SECTION A-A
TYPICAL END TREATMENT
AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12″ cts. may be necessary on medians which are shallower than 9″. See manufacturer's recommendation.



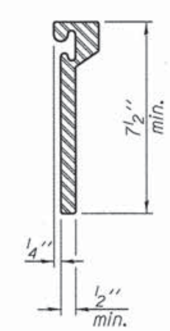
SECTION THRU
ROLLED RAIL JOINT



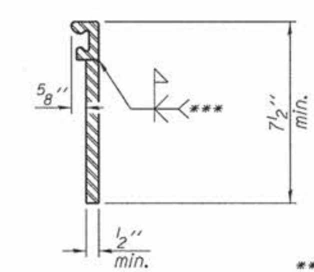
SECTION THRU
WELDED RAIL JOINT

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

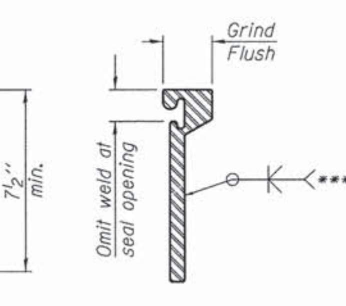
Location	A	B
West Abutment	$1\frac{1}{2}''$	2″
Pier 4	2″	$2\frac{1}{2}''$
East Abutment	$1\frac{3}{4}''$	$2\frac{1}{4}''$



ROLLED
EXTRUDED RAIL



WELDED RAIL



*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE
RAIL SPLICE

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

Rolled rail shown, welded rail similar.

LOCKING EDGE RAILS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of $\frac{1}{4}''$. The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. 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.

The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the Contract.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments shall be $\frac{3}{16}''$, sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	230

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 6:56:53 PM
FILE NAME: 86110318-SW-Expansion Joint Details.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
PEN TABLE: standard-trans.tbl

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HRGreen.com
Illinois Professional Design Firm
184-001322

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PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 045-3088

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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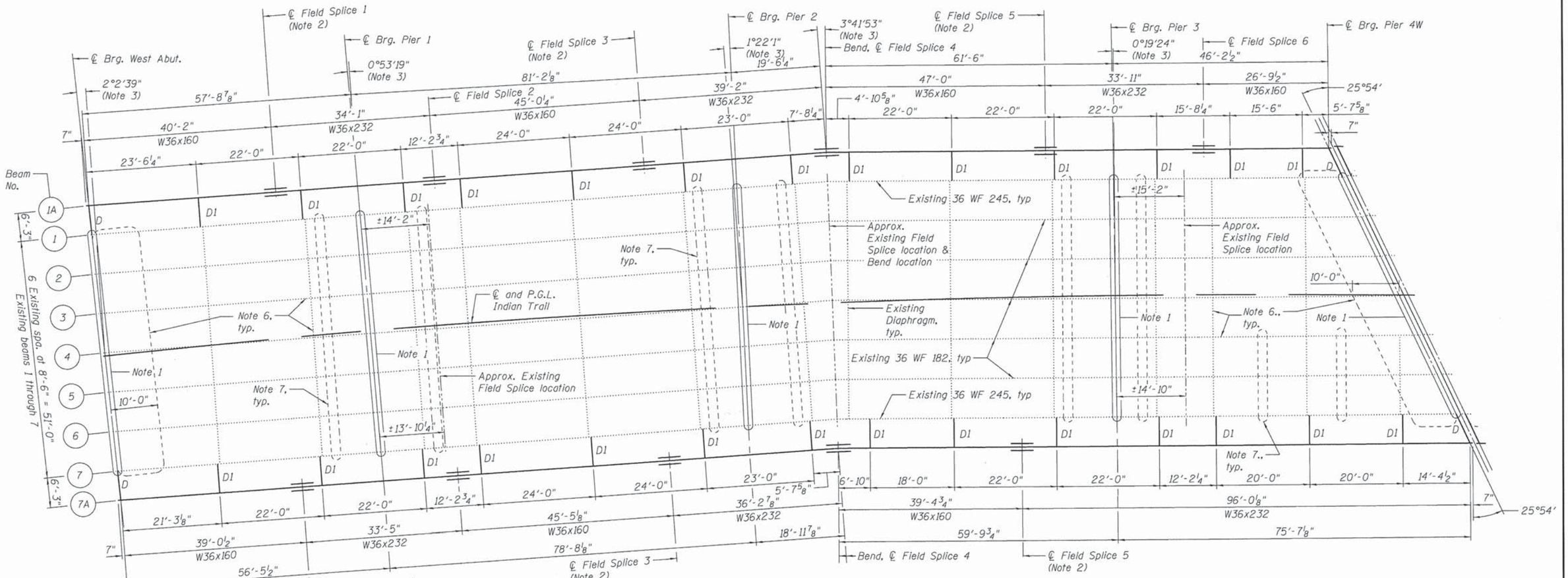
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	



FRAMING PLAN - UNIT 1

All proposed beams are AASHTO M270 Grade 50 (NTR)
All dimensions are along the beams

N

TOP OF BEAM ELEVATIONS (FOR FABRICATION USE ONLY)											
Beam #	West Abut.	*** Field Splice #1	Pier 1	*** Field Splice #2	*** Field Splice #3	Pier 2	*** Field Splice #4	*** Field Splice #5	Pier 3	*** Field Splice #6	Pier 4W
Beam 1A	672.45	671.68	671.34	671.00	669.91	669.46	668.99	667.25	666.67	665.91	665.10
Beam 7A	670.20	669.41	669.01	668.67	667.60	667.14	666.67	665.76	665.24	--	663.32

*** Top of Beam provided at larger section

Notes:

1. Jack and Remove Existing Bearings (See Special Provisions)
2. Field splices 1, 3, and 5, may be substituted with a complet joint penetration weld shop splice. If a shop splice is used, the Contractor shall submit details of the shop splice to the Engineer for approval.
3. Skew angle provided is relative to a line perpendicular to the proposed beams.
4. All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
5. Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
6. The existing portions of the steel superstructure within 10 feet of each deck joint shall receive near white metal blast cleaning SSPC-SP10 and repainted with System 1 according to the IDOT Guide Bridge Special Provision for "Cleaning and Painting Existing Steel Structures." The remainder of the existing steel superstructure shall receive Power Tool Cleaning Modified SSPC-SP3 and repainted with System 2 according to the IDOT Guide Bridge Special Provision for "Cleaning and Painting Existing Steel Structures." Color of the final finish coat for all existing structural steel to be painted shall be gray, Munsell No. 5B 7/1.
7. Approximate existing cover plate termination locations - 108 total locations Unit 1 (54 Top and Bottom). See General Notes on SW-02.

COMPANY NAME: HRGreen.com
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
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HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL BEAM FRAMING PLAN
STRUCTURE NO. 045-3088
SHEET NO. SW-31 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	72
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		

PROPOSED BEAM MOMENT TABLE - UNIT 1

			Beam 1A							Beam 7A						
			0.4 SP. 1	Pier 1	0.5 SP. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4	0.4 SP. 1	Pier 1	0.5 SP. 2	Pier 2	0.5 Sp. 3	Pier 3	0.6 Sp. 4
	I_s	(in^4)	9,750	15,000	9,750	15,000	9,750	15,000	9,750	9,750	15,000	9,750	15,000	9,750	15,000	15,000
	$I_c(n)$	(in^4)	24,337	17,988	24,337	17,988	24,337	17,988	24,337	24,337	17,988	24,337	17,988	24,337	17,988	33,604
	$I_c(3n)$	(in^4)	17,644	17,988	17,644	17,988	17,644	17,988	17,644	17,644	17,988	17,644	17,988	17,644	17,988	24,179
	S_s	(in^3)	541.5	808.0	541.5	808.0	541.5	808.0	541.5	541.5	808.0	541.5	808.0	541.5	808.0	808.0
	$S_c(n)$	(in^3)	777.2	879.4	777.2	879.4	777.2	879.4	777.2	777.2	879.4	777.2	879.4	777.2	879.4	1,117.9
	$S_c(3n)$	(in^3)	698.0	879.4	698.0	879.4	698.0	879.4	698.0	698.0	879.4	698.0	879.4	698.0	879.4	996.2
	Z	(in^3)	624.0	936.0	624.0	936.0	624.0	936.0	624.0	624.0	936.0	624.0	936.0	624.0	936.0	936.0
	DL	(k/')	0.86	0.94	0.86	0.94	0.86	0.94	0.86	0.86	0.94	0.86	0.94	0.86	0.94	0.94
	M_{DL}	('k)	154.5	466.9	205.0	568.1	224.4	418.2	52.5	141.1	458.5	209.3	479.4	148.4	579.7	403.1
	S_{DL}	(k/')	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	158.00
	$M_{s\ DL}$	('k)	113.7	280.2	163.1	346.1	175.5	250.7	43.3	105.6	272.5	162.3	298.9	127.0	336.7	255.9
	M_{LL+PED}	('k)	482.6	460.5	622.3	475.7	613.1	465.1	348.4	460.7	444.6	604.3	461.4	601.2	464.6	725.1
	M_{IM}	('k)	130.3	124.3	168.0	128.4	165.5	125.6	94.1	124.4	120.1	163.2	124.6	162.3	125.4	195.8
***	$5/4\ [M_{LL+PED} + I]$	('k)	766.2	731.1	987.9	755.2	973.3	738.4	553.1	731.4	705.9	959.4	732.5	954.4	737.5	1,151.1
	M_a	('k)	1,344.6	1,921.6	1,762.8	2,170.2	1,785.1	1,829.5	843.6	1,271.5	1,867.9	1,730.3	1,964.0	1,598.7	2,150.1	2,353.2
*	M_u	('k)	3,744.3	4,406.3	3,744.3	4,406.3	3,744.3	4,406.3	3,744.3	3,744.3	4,406.3	3,744.3	4,406.3	3,744.3	4,406.3	5,196.2
	f_s DL non-comp	(ksi)	3.42	6.93	4.54	8.44	4.97	6.21	1.16	3.13	6.81	4.64	7.12	3.29	8.61	5.99
	f_s DL (comp)	(ksi)	1.95	3.82	2.80	4.72	3.02	3.42	0.74	1.82	3.72	2.79	4.08	2.18	4.60	3.08
***	$f_s\ 5/4[M_{LL} + M_I]$	(ksi)	11.83	9.98	15.25	10.31	15.03	10.10	8.54	11.30	9.63	14.81	10.00	14.74	10.06	12.36
	f_s (Overload)	(ksi)	17.20	20.73	22.59	23.47	23.02	19.71	10.44	16.24	20.16	22.24	21.19	20.21	23.27	21.43
**	f_s (Total)	(ksi)	22.36	26.95	29.37	30.50	29.92	25.62	13.58	21.11	26.21	28.91	27.60	26.27	30.25	27.90
	VR	(k)	44.50	68.50	50.60	69.20	50.27	68.70	52.67	44.00	68.10	50.50	69.70	51.20	71.20	48.90

Note:
Information regarding existing beams 1 thru 7 can be found in the original design drawings prepared by Vogt, Ivers & Associates, dated December 1, 1961.

PROPOSED BEAM REACTION TABLE - UNIT 1

		BEAM 1A					BEAM 7A				
		W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4W	W. Abut.	Pier 1	Pier 2	Pier 3	Pier 4W
R_{DL}	(k)	29.0	113.7	125.2	105.7	19.2	28.0	112.4	115.4	129.9	45.5
R_{LL}	(k)	43.1	70.5	73.3	69.1	39.7	42.7	69.9	72.6	73.7	47.9
R_I	(k)	11.6	19.03	19.8	18.7	10.7	11.5	18.9	19.6	19.9	12.9
R_{Total}	(k)	83.7	203.2	218.3	193.5	69.6	82.2	201.2	207.6	223.5	106.3

* Compact section
** Braced non-compact and partially braced section
*** 1.25 x 1.3(Truck + Pedestrian) governs

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s(Total and Overload) due to non-composite dead loads ($in.^4$ and $in.^3$).

$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s(Total and Overload) due to short-term composite live loads ($in.^4$ and $in.^3$).

$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s(Total and Overload) due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

Z: Plastic Section Modulus of the steel section in non-composite areas ($in.^3$).

DL: Un-factored non-composite dead load (kips/ft.).

M_{DL}: Un-factored moment due to non-composite dead load (kip-ft.).

s_{DL}: Un-factored long-term composite (superimposed) dead load (kips/ft.)

$M_{s DL}$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_{LL}: Un-factored live load moment (kip-ft.).

M_I: Un-factored moment due to impact (kip-ft.).

M_a: Factored design moment (kip-ft.).
$1.3\ [M_{DL} + M_{s DL} + \frac{5}{4}(M_{LL} + M_I)]$

M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

f_s (Overload): Sum of stresses as computed from the moments below (ksi).
$M_{DL} + M_{s DL} + \frac{5}{4}(M_{LL} + M_I)$

f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi).
$1.3\ [M_{DL} + M_{s DL} + \frac{5}{4}(M_{LL} + M_I)]$

VR: Maximum LL + impact shear range within the composite portion of the span for stud shear connector design (kips).

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
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184-001322
HRGreen

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PLOT DATE = 8/22/2013

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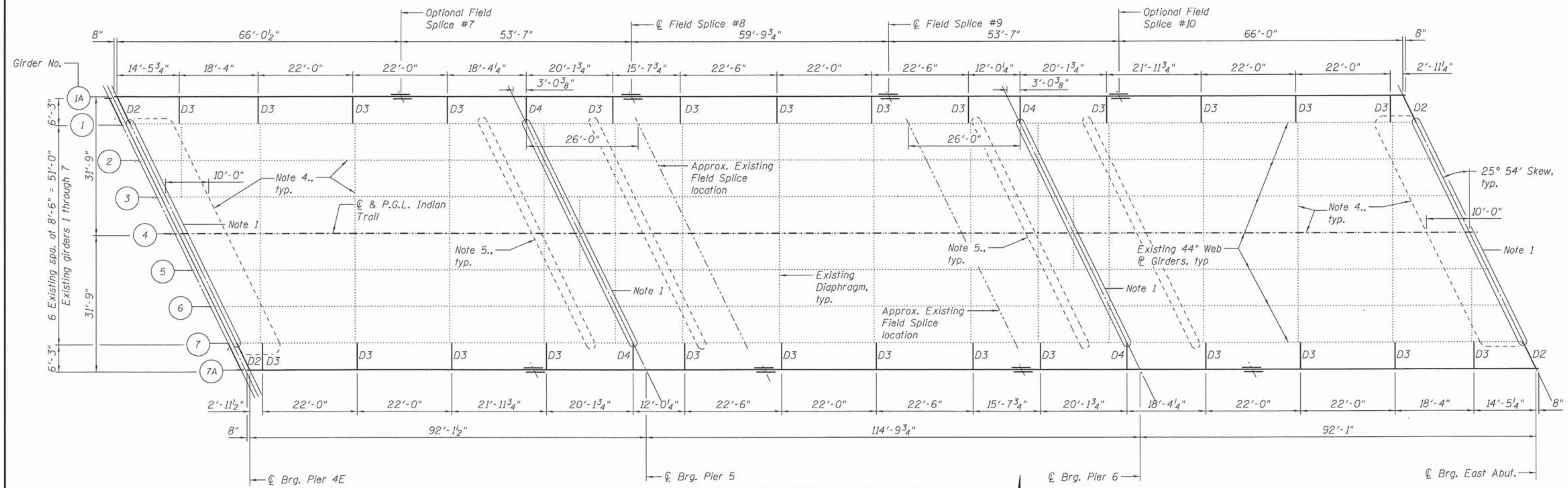
CHECKED - RGD | REVISED -
DRAWN - WJH | REVISED -
CHECKED - 8/22/13 | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL BEAM FRAMING PLAN
STRUCTURE NO. 045-3088
SHEET NO. SW-32 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	73

CONTRACT NO. 63863
ILLINOIS FED. AID PROJECT $FEDPROJNO$



FRAMING PLAN - UNIT 2

All structural steel for plate girders and splice plates is AASHTO M270 Grade 50 (NTR)

		PROPOSED GIRDERS 1A AND 7A MOMENT TABLE - UNIT 2			
			0.4 SP. 5 or 0.6 S	Pier	0.5 SP. 6
	I_s	(in⁴)	26,146	46,456	26,146
	$I_c(n)$	(in⁴)	52,239	50,160	52,239
	$I_c(3n)$	(in⁴)	39,275	50,160	39,275
	S_s	(in³)	1,124.6	1,915.7	1,124.6
	$S_c(n)$	(in³)	1,391.0	2,185.6	1,391.0
	$S_c(3n)$	(in³)	1,288.5	2,185.6	1,288.5
	Z	(in³)	1,260.1	2,115.1	1,260.1
	DL	(k/')	0.92	1.05	0.98
	M_{DL}	('k)	471.7	1,170.1	387.1
	S_{DL}	(k/')	0.58	0.58	0.58
	$M_{s\,DL}$	('k)	316.3	666.3	287.0
	M_{LL+PED}	('k)	949.8	851.1	995.1
	M_{IM}	('k)	256.5	229.8	268.7
***	5/4 [M_{LL+PED}+ I]	('k)	1,507.9	1,351.1	1,579.8
	M_o	('k)	2,984.6	4,143.8	2,930.0
*	M_u	('k)	7,131.7	7,118.8	7,131.7
	f_s DL non-com	(ksi)	5.03	7.33	4.13
	f_s DL (comp)	(ksi)	2.95	3.66	2.67
***	f_s 5/4[M_{LL}+ M_I]	(ksi)	13.01	7.42	13.63
	f_s (Overload)	(ksi)	21.00	18.41	20.43
**	f_s (Total)	(ksi)	27.30	23.90	26.60
	VR	(k)	54.80	79.20	59.70

PROPOSED GIRDER 1A & 7A REACTION TABLE			
		Pier 4E/E. Abut.	Pier
R_{DL}	(k)	49.4	181.4
R_{LL}	(k)	51.4	86.3
R_I	(k)	13.9	23.3
R_{Total}	(k)	114.7	291.0

Girder #

* Compact section
** Braced non-compact and partially braced section
*** 1.25 x 1.3(Truck + Pedestrian) governs

TOP OF BEAM ELEVATIONS (FOR FABRICATION USE ONLY)								
Girder #	Pier 4E	Opt. Field Splice #7	Pier 5	Field Splice #8	Field Splice #9	Pier 6	Opt. Field Splice #10	East Abut.
Girder 1A	664.94	662.39	661.38	660.32	658.58	657.80	657.05	655.16
Girder 7A	663.16	661.03	660.19	659.30	657.61	656.87	656.17	654.40

Notes:

1. Jack and Remove Existing Bearings (See special Provisions)
2. All cross frames or diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
3. Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.
4. The existing portions of the steel superstructure within 10 feet of each deck joint shall receive near white metal blast cleaning SSPC-SP10 and repainted with System 1 according to the IDOT Guide Bridge Special Provision for "Cleaning and Painting Existing Steel Structures." The remainder of the existing steel superstructure shall receive Power Tool Cleaning Modified SSPC-SP3 and repainted with System 2 according to the IDOT Guide Bridge Special Provision for "Cleaning and Painting Existing Steel Structures." Color of the final finish coat for all existing structural steel shall be gray, Munsell No. 5B 7/1.
5. Approximate existing cover plate termination locations - 56 total locations Unit 2 (28 Top and Bottom). See General Notes on SW-02.

I_s, S_s: Non-composite moment of inertia and section modulus of the steel section used for computing f_s(Total and Overload) due to non-composite dead loads (in.⁴ and in.³).
$I_c(n)$, $S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s(Total and Overload) due to short-term composite live loads (in.⁴ and in.³).
$I_c(3n)$, $S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s(Total and Overload) due to long-term composite (superimposed) dead loads (in.⁴ and in.³).
Z: Plastic Section Modulus of the steel section in non-composite areas (in.³).
DL: Un-factored non-composite dead load (kips/ft.).
M_{DL}: Un-factored moment due to non-composite dead load (kip-ft.).
s_{DL}: Un-factored long-term composite (superimposed) dead load (kips/ft.)
$M_{s\,DL}$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).
M_{LL}: Un-factored live load moment (kip-ft.).
M_I: Un-factored moment due to impact (kip-ft.).
M_o: Factored design moment (kip-ft.). $1.3\,[M_{DL} + M_{s\,DL} + \frac{5}{4}(M_{LL} + M_I)]$
M_u: Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).
f_s (Overload): Sum of stresses as computed from the moments below (ksi). $M_{DL} + M_{s\,DL} + \frac{5}{4}(M_{LL} + M_I)$
f_s (Total): Sum of stresses as computed from the moments below on non-compact section (ksi). $1.3\,[M_{DL} + M_{s\,DL} + \frac{5}{4}(M_{LL} + M_I)]$
VR: Maximum LL + impact shear range within the composite portion of the span for stud shear connector design (kips).

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PROJECT CONTACT: City of Aurora
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL GIRDER FRAMING PLAN
STRUCTURE NO. 045-3088

SHEET NO. SW-33 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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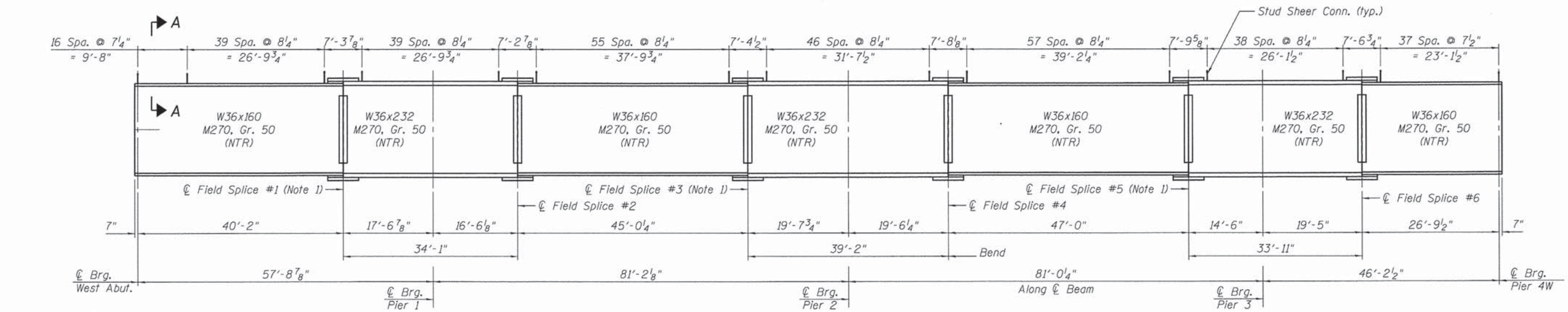
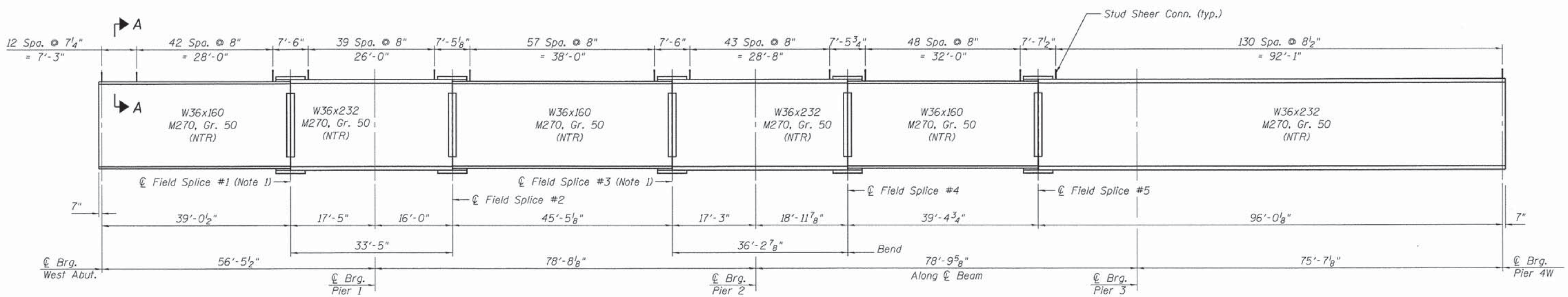
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	



BEAM 1A ELEVATION - UNIT 1

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



BEAM 7A ELEVATION - UNIT 1

"NTR" denotes beams to which
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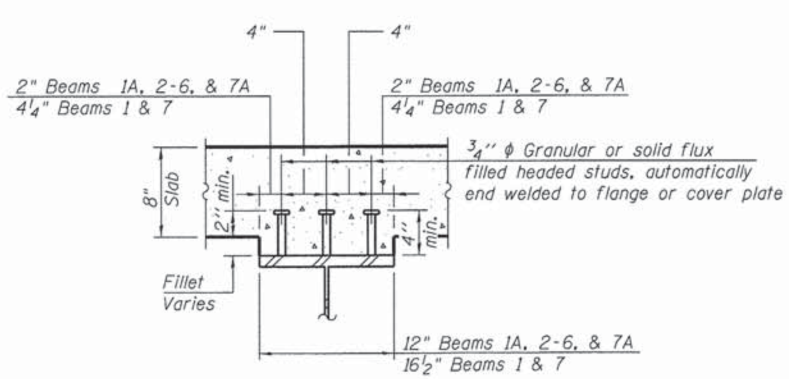

SECTION A-A

Coordinate with Deck Details
for fillets taller than 6"

Notes:

1. Field splices 1, 3 & 5 on Beam 1A, and Field splices 1 & 3 on beam 7A may be substituted with a complete joint penetration weld shop splice. If a shop splice is used, the Contractor shall submit details of the shop splice to the Engineer for approval.

BILL OF MATERIAL - UNIT 1

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	L. Sum	0.4
Stud Shear Connectors	Each	9,806
Jack and Remove Existing Bearings	Each	35

Notes:

Work this Sheet with Sheets SW-31, SW-32, SW-35 & SW-36.
All splice material shall be M270 Grade 50.

COMPANY NAME: Kevin M. Artt
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 6:59:36 PM
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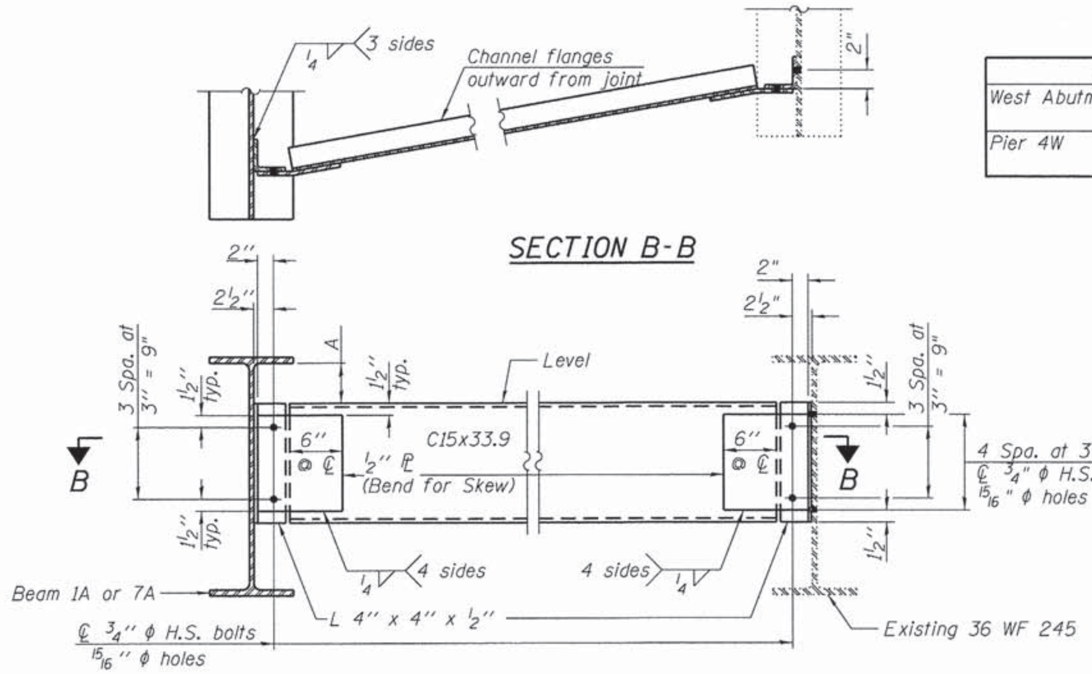
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL BEAM ELEVATION & DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-34 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	75
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	

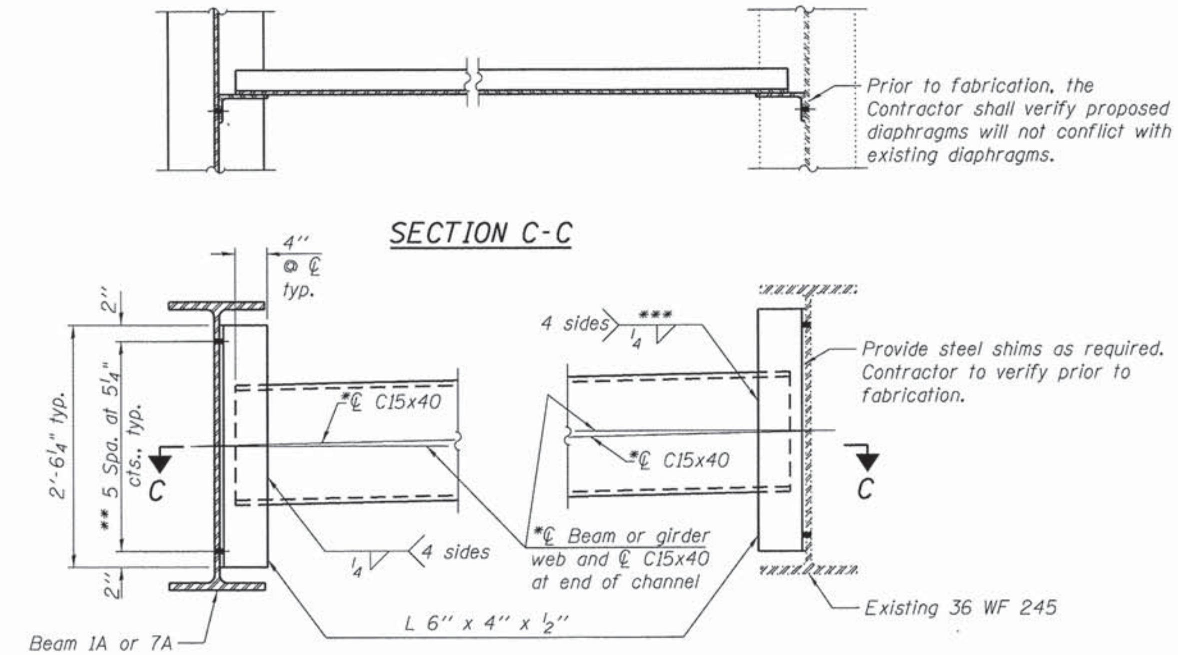
Location		A
West Abutment	Beam 1A	5 3/4"
	Beam 7A	3 1/4"
Pier 4W	Beam 1A	6 3/8"
	Beam 7A	3"



END DIAPHRAGM D

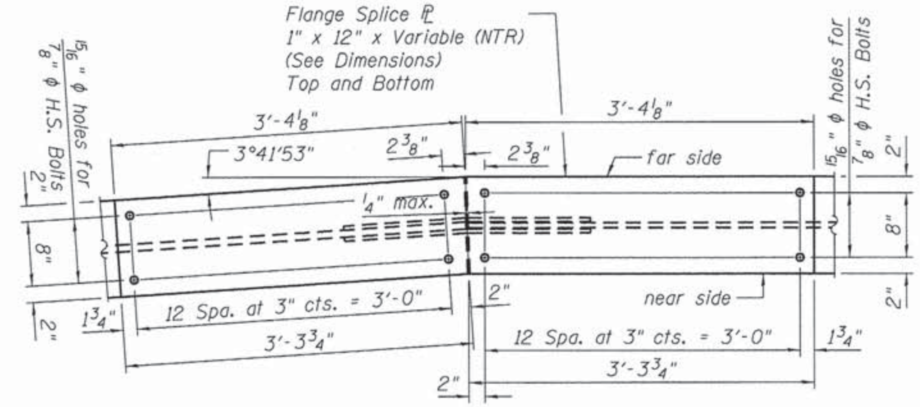
Note:
Two hardened washers required for each set of oversized holes.

**** As an alternative to bolts, L4"x4"x1/2" may be field welded to existing 36WF245 web with a 1/4" fillet weld at 3 accessible sides, similar to connection at proposed beam. No additional cost to the Contract will be allowed.

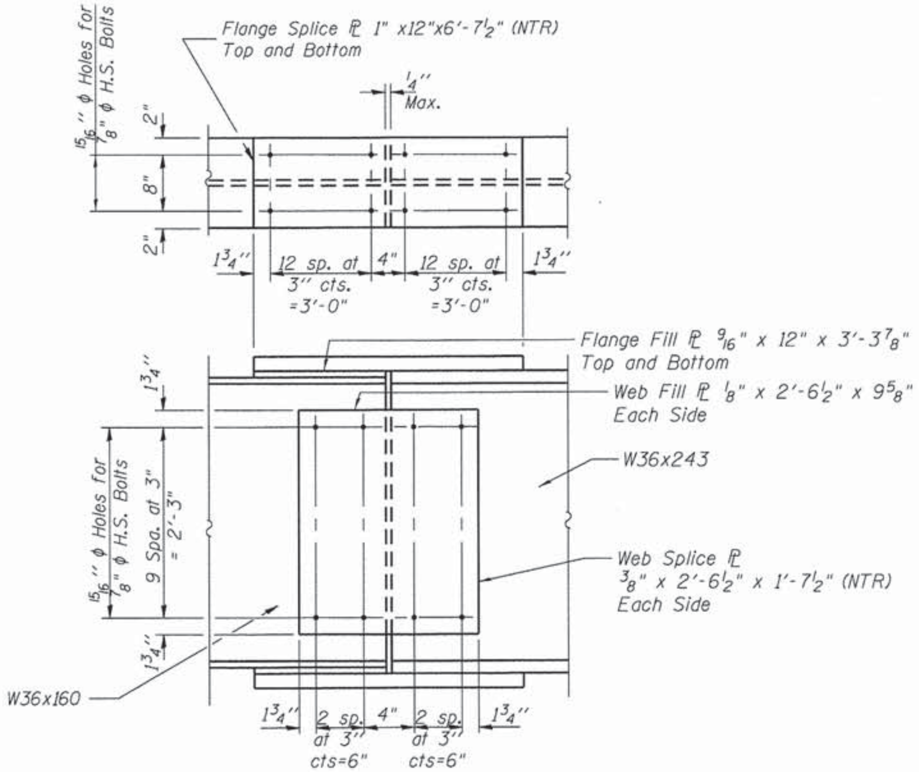


INTERIOR DIAPHRAGM D1

Note:
Two hardened washers required for each set of oversized holes.
*Alternate C15x50 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, if utilized, shall be provided at no additional cost to the Contract.
**3/4" φ HS bolts, 15/16" φ holes
Field drill at existing 36 WF 245
*** The Contractor may field weld channel to L6 at no additional cost to the Contract. If field welding, the fillet weld will only be required at the 3 accessible sides.

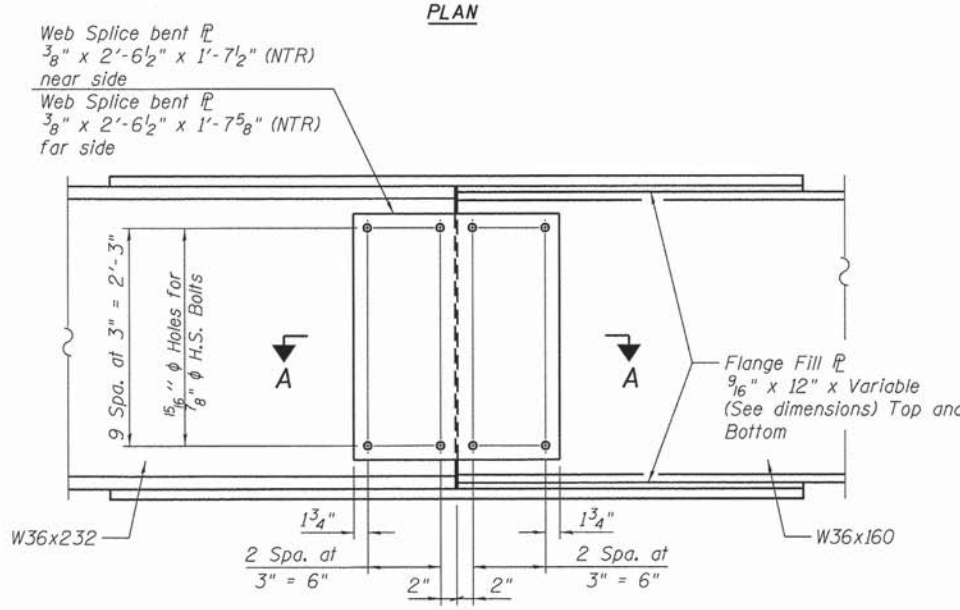


PLAN



FIELD SPLICE DETAIL

Applies to Field Splices #1, #2, #3, #5, and #6
All splice material shall be M270 Grade 50 (NTR)
(9 Required)

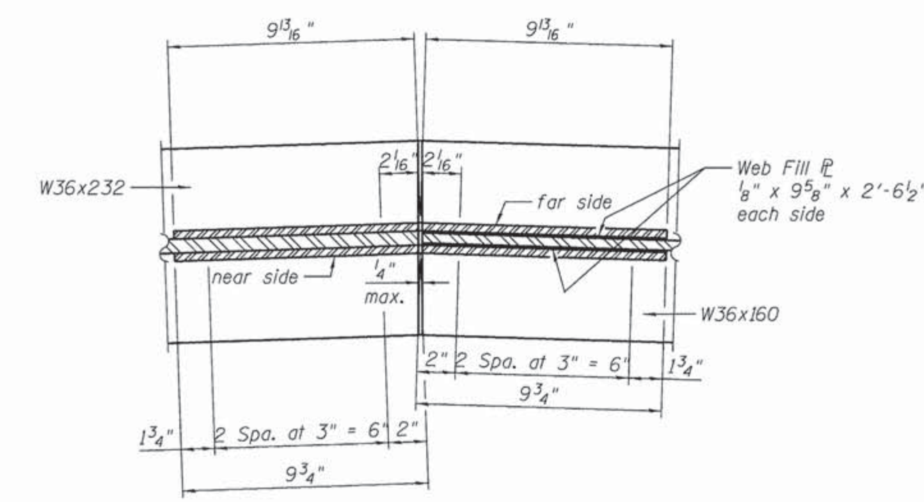


ELEVATION

Horizontal Dimensions shown at near side
See Section A-A for additional dimensions

FIELD SPLICE #4 DETAIL

(2 Required)



SECTION A-A

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	PLOT DATE = 8/22/2013	DRAWN - WJH	REVISED -	
		CHECKED - 8/22/13	REVISED -	

STEEL DIAPHRAGM DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-35 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	76

CONTRACT NO. 63863
ILLINOIS FED. AID PROJECT $FEDPROJNO$

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 7:00:16 PM
DATE PLOTTED: 8610318-SW-Stl02.dgn
FILE NAME: pdf_DET-11ff.plt
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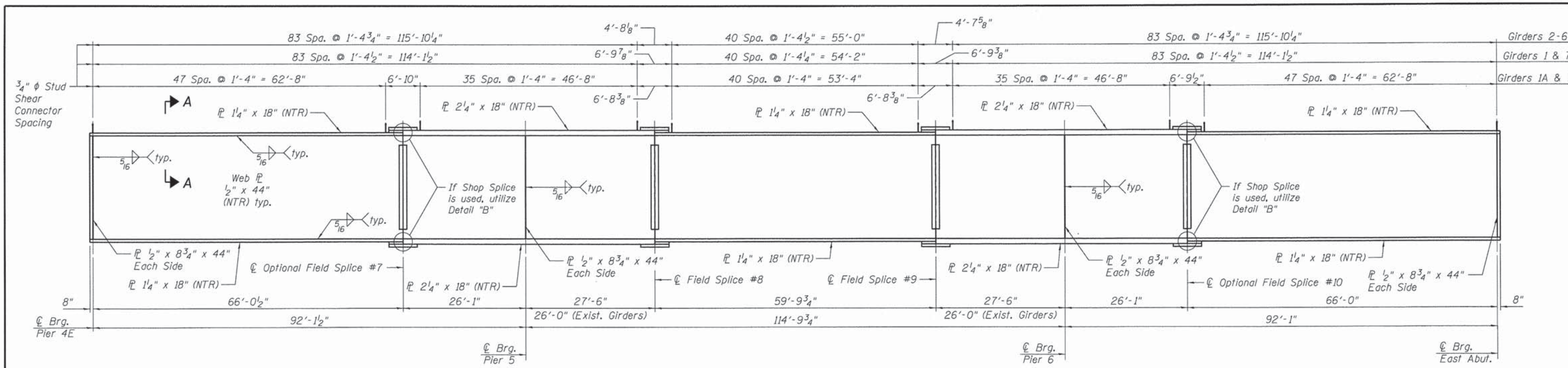
PEN TABLE:

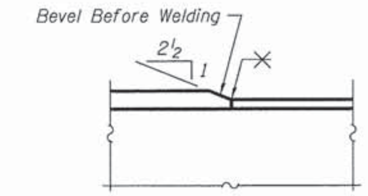


GIRDER 1A AND 7A ELEVATION - UNIT 2

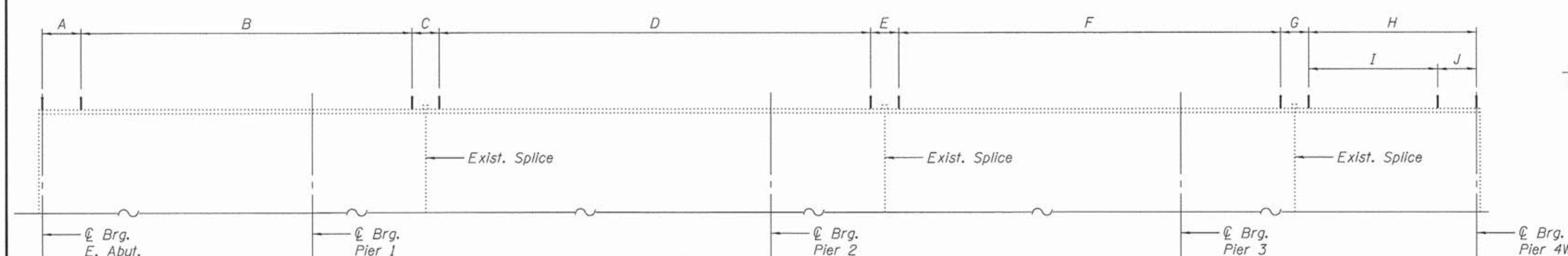
"NTR" denotes plates to which
Notch Toughness requirements are applicable

SHEAR STUD CONNECTOR LAYOUT - UNIT 2

For proposed and existing beams

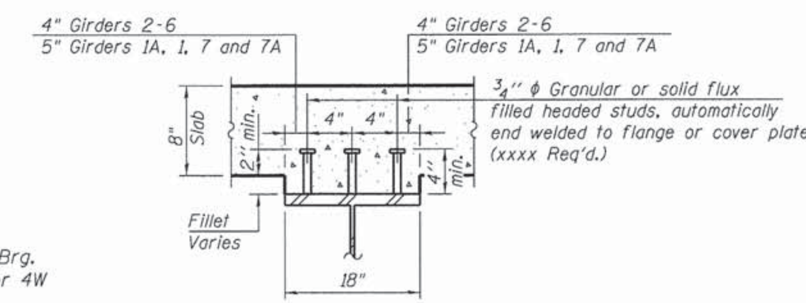


DETAIL "B"



EXISTING BEAM ELEVATION - UNIT 1

Existing Beams 1-7
Existing Cover Plates not shown for clarity



SECTION A-A

SHEAR STUD LAYOUT TABLE - UNIT 1 EXISTING BEAMS

Beam	A	B	C	D	E	F	G	H	I	J
1	12 Spa. @ 7¼" = 7'-3"	85 Spa. @ 8¾" = 61'-11¾"	5'-1"	114 Spa. @ 8½" = 80'-9"	5'-3⅛"	98 Spa. @ 8¾" = 71'-5½"	5'-3⅛"	52 Spa. @ 7¼" = 31'-5"	-	-
2	12 Spa. @ 7¼" = 7'-3"	83 Spa. @ 8¾" = 60'-6¼"	7'-4¼"	108 Spa. @ 8¾" = 78'-9"	7'-5"	94 Spa. @ 8¾" = 68'-6½"	7'-5"	55 Spa. @ 7½" = 34'-4½"	-	-
3	12 Spa. @ 7¼" = 7'-3"	84 Spa. @ 8½" = 59'-6"	7'-5¾"	108 Spa. @ 8¾" = 78'-9"	7'-7⅛"	94 Spa. @ 8¾" = 68'-6½"	7'-7⅛"	-	43 Spa. @ 8½" = 30'-5½"	13 Spa. @ 7¼" = 7'-10¼"
4	13 Spa. @ 7¼" = 7'-10¾"	80 Spa. @ 8¾" = 58'-4"	7'-8½"	111 Spa. @ 8½" = 78'-7½"	7'-7⅜"	96 Spa. @ 8½" = 68'-0"	7'-7⅜"	-	49 Spa. @ 8½" = 34'-8½"	12 Spa. @ 7¼" = 7'-3"
5	12 Spa. @ 7¼" = 7'-3"	82 Spa. @ 8¾" = 59'-9½"	7'-7¼"	106 Spa. @ 8¾" = 77'-3½"	7'-6⅝"	93 Spa. @ 8¾" = 67'-9¾"	7'-6⅝"	-	55 Spa. @ 8½" = 38'-11½"	12 Spa. @ 7¼" = 7'-3"
6	12 Spa. @ 7¼" = 7'-3"	82 Spa. @ 8¾" = 59'-9½"	7'-2½"	106 Spa. @ 8¾" = 77'-3½"	7'-2¾"	93 Spa. @ 8¾" =67'-9¾"	7'-2¾"	-	59 Spa. @ 8¾" = 43'-0¼"	12 Spa. @ 7¼" = 7'-3"
7	12 Spa. @ 7¼" = 7'-3"	83 Spa. @ 8¾" = 60'-6¼"	5'-4⅛"	108 Spa. @ 8¾" = 78'-9"	5'-5⅜"	95 Spa. @ 8¾" = 69'-3¼"	5'-5⅜"	-	65 Spa. @ 8¾" = 47'-4¾"	13 Spa. @ 7¼" = 7'-10¼"

BILL OF MATERIAL - UNIT 2

Item	Unit	Quantity
Furnishing & Erecting Structural Steel	L. Sum	0.3
Stud Shear Connectors	Each	5,643
Jack and Remove Existing Bearings	Each	28

Notes:
Work this Sheet with Sheets SW-31, SW-33 & SW-37.
All splice material shall be M270 Grade 50 (NTR).

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 7:00:49 PM
FILE NAME: 86110318-SW-St603.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
PEN TABLE: standard-trans.tbl

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184-001322
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USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL GIRDER ELEVATION & DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-36 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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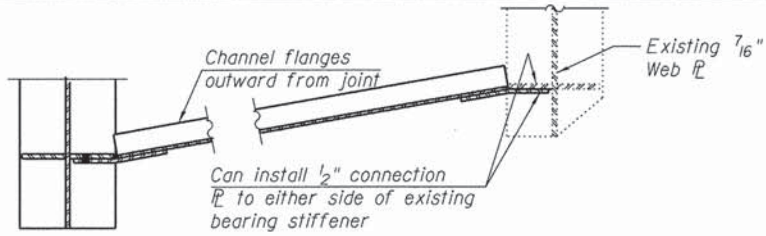
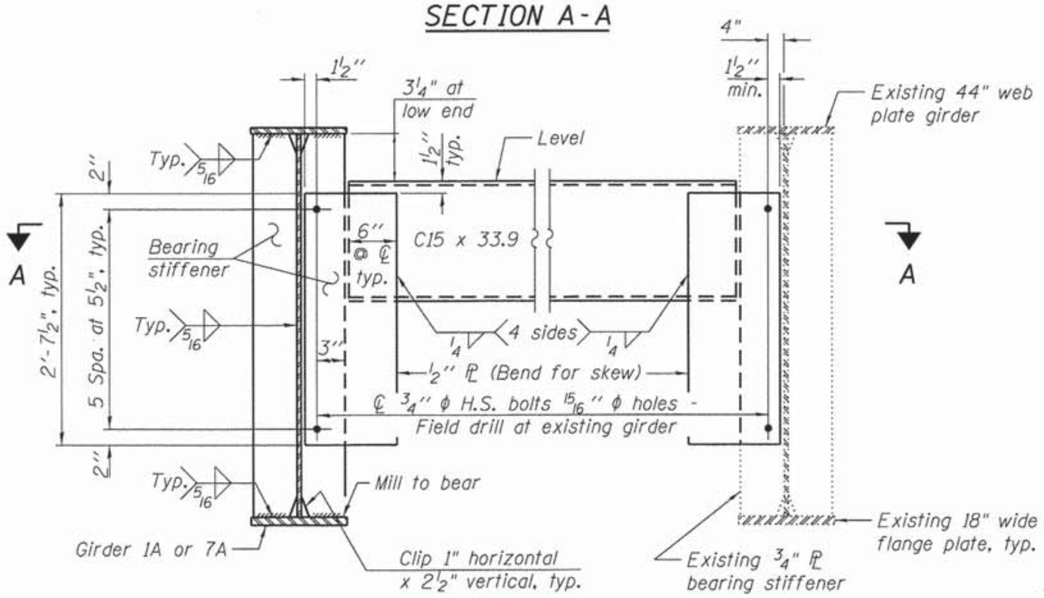
		CONTRACT NO. 63863		
	ILLINOIS	FED. AID PROJECT	$FEDPROJNO$	

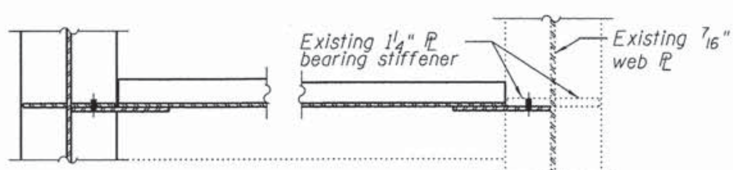


SECTION A-A

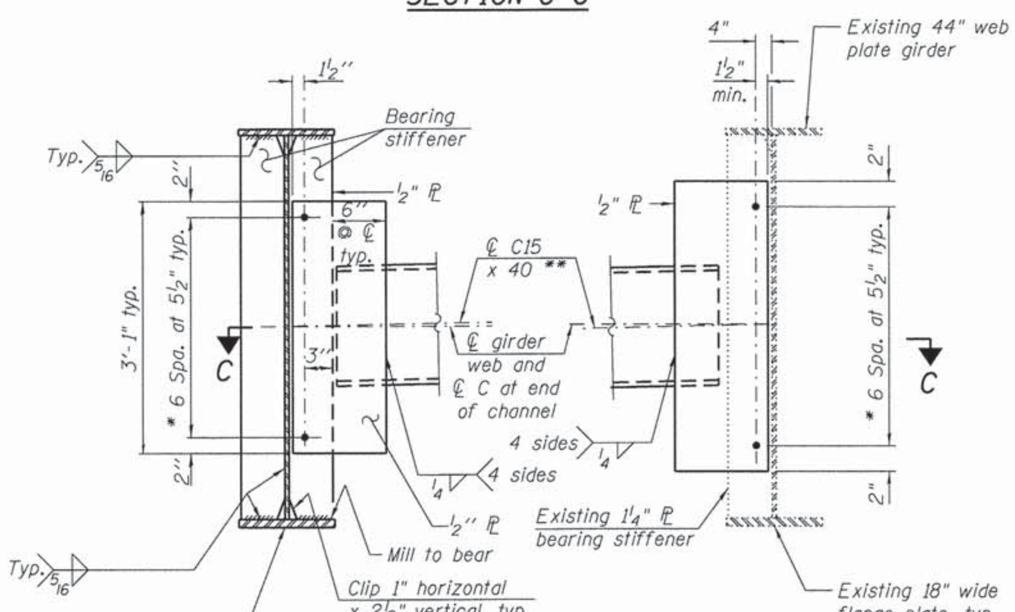


END DIAPHRAGM D2

Note: Two hardened washers required for each set of oversized holes.

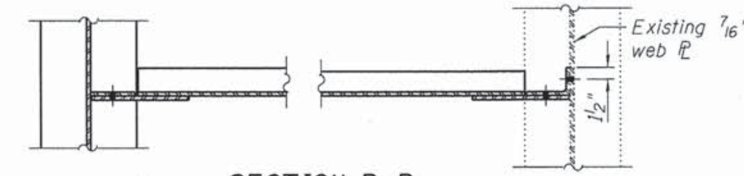


SECTION C-C

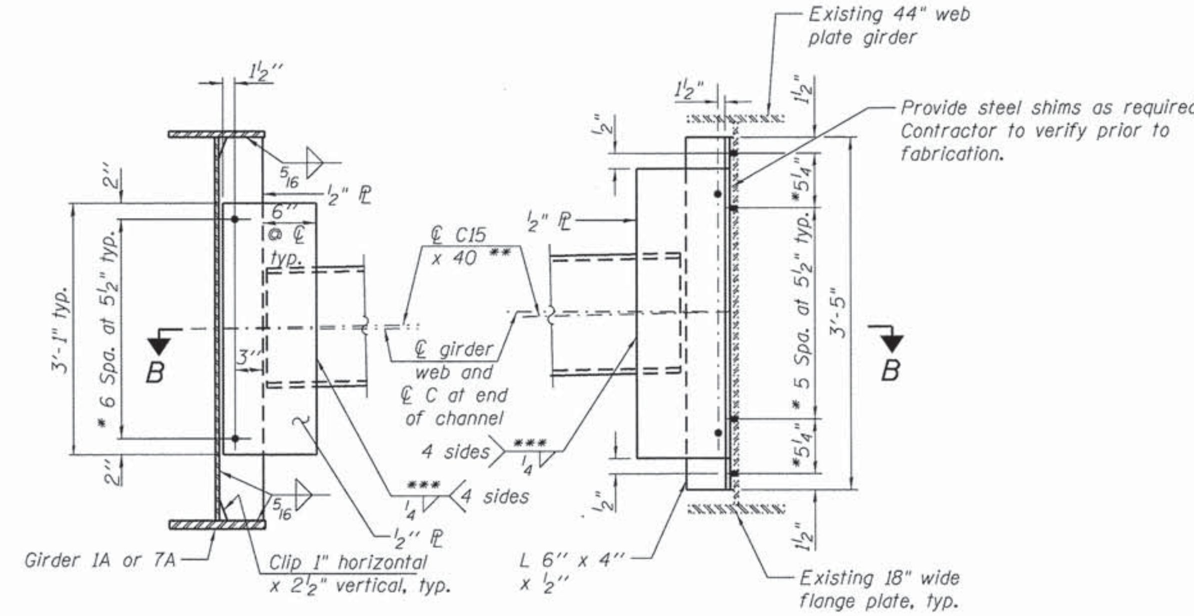


INTERIOR DIAPHRAGM D4

Note:
Two hardened washers required for each set of oversized holes.
* 3/4" ϕ HS bolts, 15/16" ϕ holes. Field drill at existing 1 1/4" ℙ bearing stiffener.
** Alternate C15x50 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Contract.

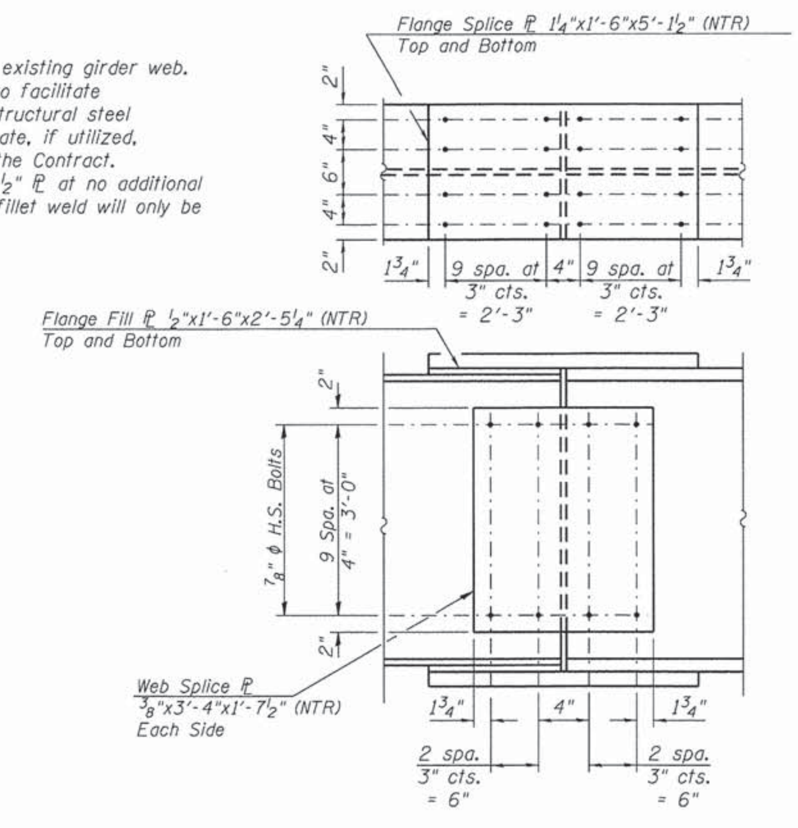


SECTION B-B



INTERIOR DIAPHRAGM D3

Note:
Two hardened washers required for each set of oversized holes.
* 3/4" ϕ HS bolts, 15/16" ϕ holes. Field drill at existing girder web.
** Alternate C15x50 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Contract.
*** The Contractor may field weld channel to 1/2" ℙ at no additional cost to the contract. If field welded, the fillet weld will only be required at the 3 accessible sides.



FIELD SPLICE DETAIL

(2 Required, 2 Optional)

HRGreen.com Illinois Professional Design Firm # 184-001322	USER NAME = whood	DESIGNED - KMA	REVISED -
		CHECKED - RGD	REVISED -
	PLOT SCALE =	DRAWN - WJH	REVISED -
	PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STEEL DIAPHRAGM & DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-37 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	78
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	#FEDPROJNO#		

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 7:01:24 PM
DATE PLOTTED: 86110318-SW-Stl04.dgn
FILE NAME: pdf_DET-11ff.plt
PLOT DRIVER: standard-trans.tbl
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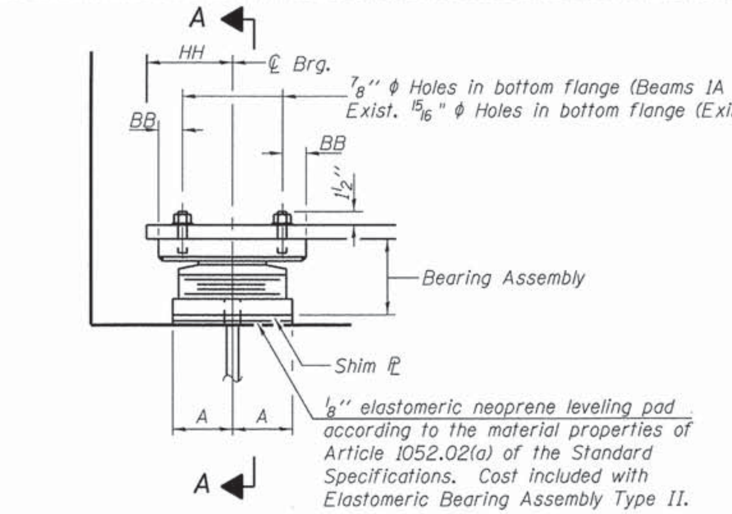
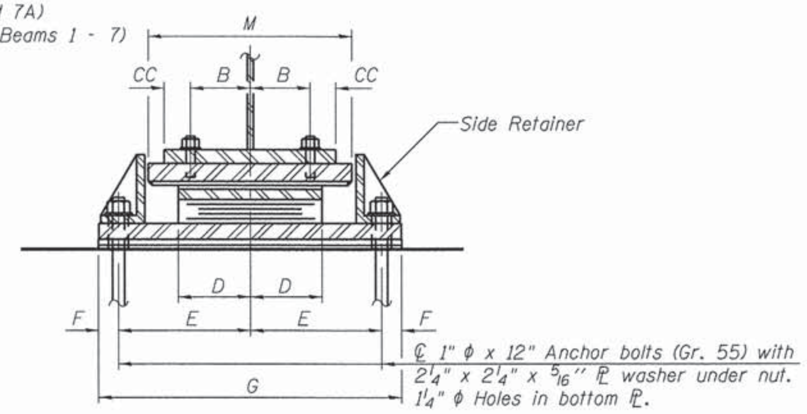
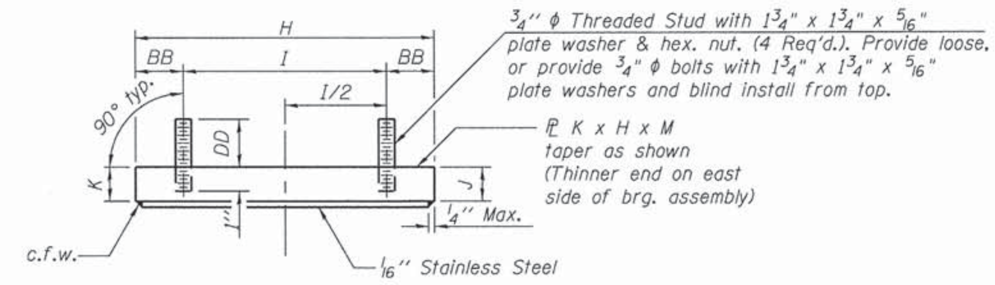


ELEVATION AT ABUT.

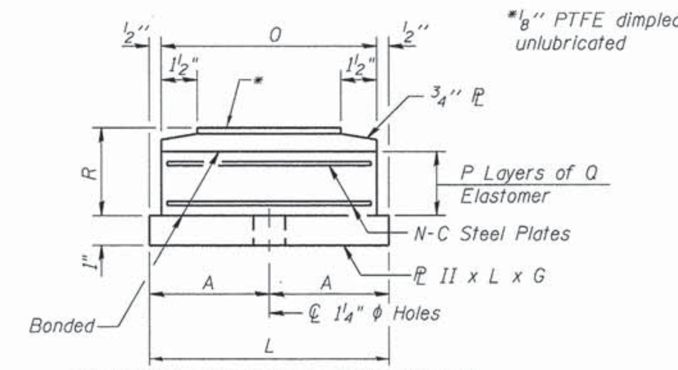


SECTION A-A

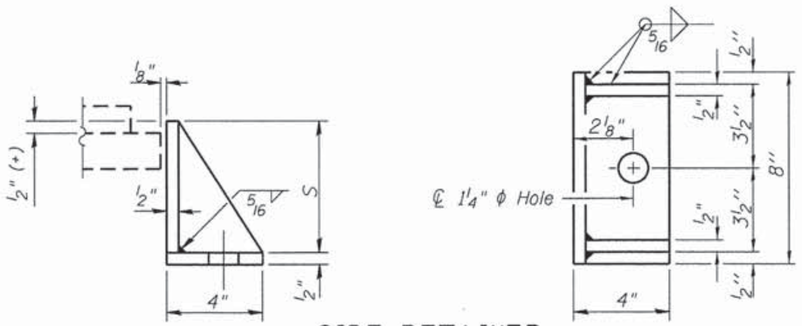
TYPE II ELASTOMERIC EXP. BRG.



TOP BEARING ASSEMBLY

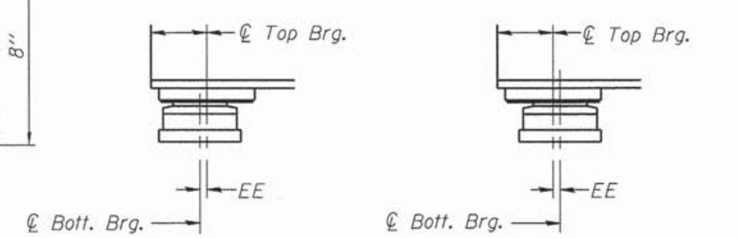


BOTTOM BEARING ASSEMBLY



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

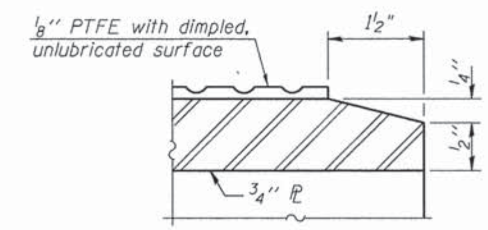


BELOW 50°F.
(Move bott. brg. away from fixed brg.)

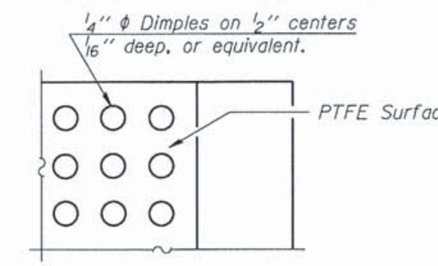
ABOVE 50°F.
(Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

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



SECTION THRU PTFE



PLAN-PTFE SURFACE

Notes:

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts for Type II bearings shall be placed in holes drilled in the concrete through holes in the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The 1/8" PTFE 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" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	63
Anchor Bolts, 1"	Each	126

ELASTOMERIC BEARING DIMENSIONS

Location	Size	Beam	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	BB	CC	DD	HH	II
W. Abut. & Pier 4W	10" x 14"	Beams 1 & 7	5 1/2"	3 1/4"	1/8"	7"	10 1/2"	1 7/8"	2'-0 3/4"	1'-0"	4 1/2"	1 7/8"	2 1/4"	11"	1'-4 1/2"	4	10"	5	7/16"	3 9/16"	5 5/8"	3 3/4"	5"	3"	5"	1"
		Beams 1A & 7A	5 1/2"	4"	1/8"	7"	10 1/2"	1 7/8"	2'-0 3/4"	1'-0"	8"	1 7/8"	2 1/4"	11"	1'-4 1/2"	4	10"	5	7/16"	3 9/16"	5 5/8"	2"	2"	2 1/2"	7"	1"
		Beams 2-6	5 1/2"	3 1/4"	1/8"	7"	10 1/2"	1 7/8"	2'-0 3/4"	1'-0"	4 1/2"	1 7/8"	2 1/4"	11"	1'-4 1/2"	4	10"	5	7/16"	3 9/16"	5 5/8"	3 3/4"	2 3/4"	2 3/4"	5"	1"
Pier 1 & Pier 3	14" x 22"	Beams 1 & 7	7"	3 1/4"	3/16"	11"	1'-2 1/4"	1 7/8"	2'-8 1/4"	1'-4"	4 1/2"	3	3 1/2"	1'-3"	2'-0"	2	1'-2"	3	11/16"	3 5/16"	6 5/8"	5 3/4"	5"	4"	-	1 1/4"
		Beams 1A & 7A	7"	4"	3/16"	11"	1'-2 1/4"	1 7/8"	2'-8 1/4"	1'-4"	1'-0"	3	3 1/2"	1'-3"	2'-0"	2	1'-2"	3	11/16"	3 5/16"	6 5/8"	2"	2"	2 1/2"	-	1 1/4"
		Beams 2-6	7"	3 1/4"	3/16"	11"	1'-2 1/4"	1 7/8"	2'-8 1/4"	1'-4"	4 1/2"	3	3 1/2"	1'-3"	2'-0"	2	1'-2"	3	11/16"	3 5/16"	6 5/8"	5 3/4"	2 3/4"	3 1/2"	-	1 1/4"
Pier 4E & E. Abut.	11" x 16"	Beams 1 & 7	6"	4 1/2"	1/8"	8"	11 1/4"	1 7/8"	2'-2 1/4"	1'-1 1/2"	4 1/2"	2 1/8"	2 1/2"	1'-0"	1'-6"	5	11"	6	1/2"	4 1/2"	6 7/8"	4 1/2"	4 1/2"	3"	9"	1"
		Beams 1A & 7A	6"	7"	1/8"	8"	11 1/4"	1 7/8"	2'-2 1/4"	1'-1 1/2"	9 1/2"	2 1/8"	2 1/2"	1'-0"	1'-6"	5	11"	6	1/2"	4 1/2"	6 7/8"	2"	2"	2 3/4"	8"	1"
		Beams 2-6	6"	4 1/2"	1/8"	8"	11 1/4"	1 7/8"	2'-2 1/4"	1'-1 1/2"	4 1/2"	2 1/8"	2 1/2"	1'-0"	1'-6"	5	11"	6	1/2"	4 1/2"	6 7/8"	4 1/2"	3 1/2"	2 1/2"	9"	1"
Pier 6	15" x 24"	Beams 1 & 7	8"	4 1/2"	3/16"	1'-0"	1'-3 1/4"	1 7/8"	2'-10 1/4"	1'-5 1/2"	4 1/2"	3 1/2"	4	1'-4"	2'-2"	3	1'-3"	4	3/4"	4 7/16"	8"	6 1/2"	4 1/2"	5 3/4"	-	1 1/4"
		Beams 1A & 7A	8"	7"	3/16"	1'-0"	1'-3 1/4"	1 7/8"	2'-10 1/4"	1'-5 1/2"	1'-1 1/2"	3 1/2"	4	1'-4"	2'-2"	3	1'-3"	4	3/4"	4 7/16"	8"	2"	2"	3 3/4"	-	1 1/4"
		Beams 2-6	8"	4 1/2"	3/16"	1'-0"	1'-3 1/4"	1 7/8"	2'-10 1/4"	1'-5 1/2"	4 1/2"	3 1/2"	4	1'-4"	2'-2"	3	1'-3"	4	3/4"	4 7/16"	8"	6 1/2"	3 1/2"	4 1/4"	-	1 1/4"

(Columns A through II are grouped under DIMENSIONS.)

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 7:02:30 PM
FILE NAME: 86110318-SW-Bearing Details01.dgn
PLOT DRIVER: pdf_DET-11ff.plt
PEN TABLE: standard-trans.tbl

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Illinois Professional Design Firm # 184-001322
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USER NAME = whood	DESIGNED - KMA	REVISED -
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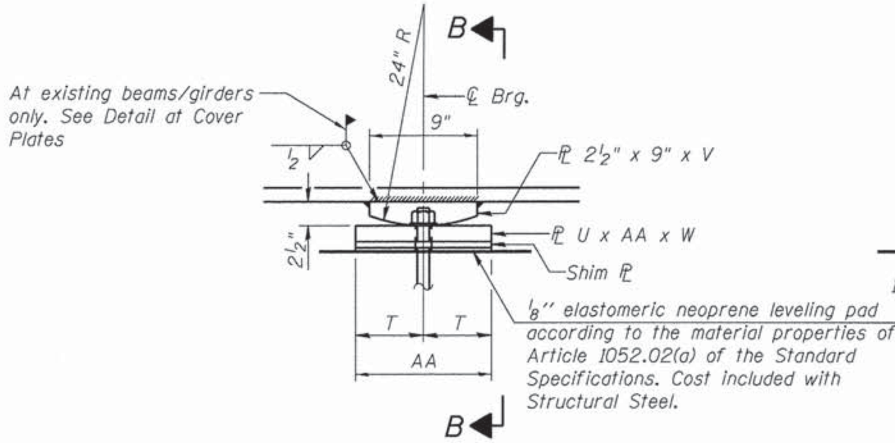
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

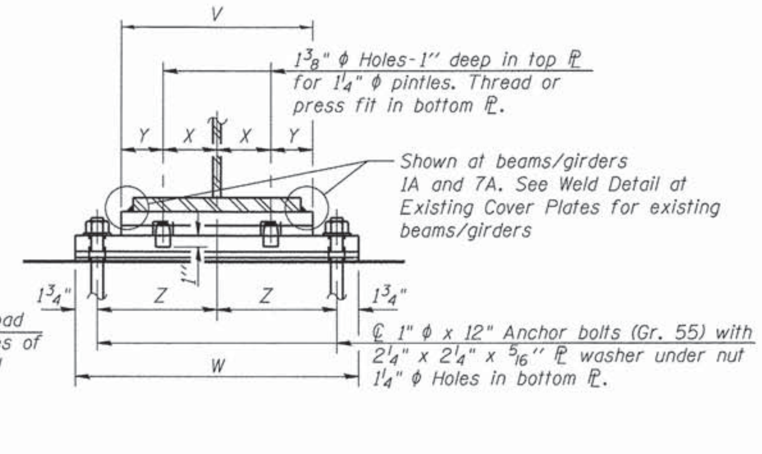
ELASTOMERIC BEARING DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-38 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	79

CONTRACT NO. 63863
ILLINOIS | FED. AID PROJECT | $FEDPROJNO$

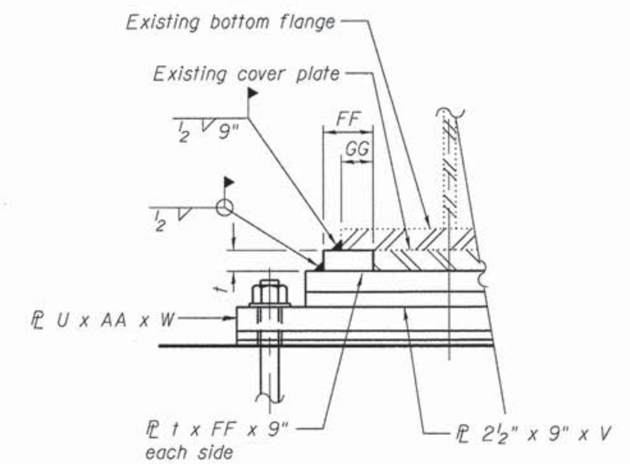


ELEVATION AT PIERS 2 & 5

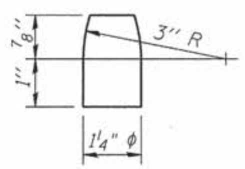


SECTION B-B

FIXED BEARING AT PIERS 2 & 5



WELD DETAIL AT EXISTING COVER PLATES



PINTLE

FIXED BEARING AT COVER PLATE DIMENSIONS

Location	Beam	Dimensions		
		*t	FF	*GG
Pier 2	Beams 1 & 7	1 3/8"	1 3/8"	3/4"
	Beam 2	3/4"	1 5/8"	1"
	Beams 3 & 4	1"	1 5/8"	1"
	Beam 5	1"	1 5/8"	1"
	Beam 6	5/8"	1 5/8"	1"
Pier 5	Girders 1 & 7	2"	1 5/8"	1"
	Girders 2-6	1"	1 5/8"	1"

* Verify in field prior to ordering material

Notes:

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings for Beams/Girders 1A & 7A may be either cast in place or installed in holes drilled after the supported member is in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

FIXED BEARING DIMENSIONS

Location	Beam	Dimensions							
		T	U	V	W	X	Y	Z	AA
Pier 2	Beams 1 & 7	7 1/2"	2 1/2"	1'-7"	2'-2"	4 1/8"	5 3/8"	11 1/4"	1'-3"
	Beams 1A, 2-6 & 7	7 1/2"	2 1/2"	1'-2 1/2"	1'-9 1/2"	3"	4 1/4"	9"	1'-3"
Pier 5	Beams 1, 1A, 7A & 7	8 1/2"	2 1/2"	1'-8 1/2"	2'-3 1/2"	4 1/2"	5 3/4"	12"	1'-5"
	Beams 2-6	8 1/2"	2 1/2"	1'-6 1/2"	2'-1 1/2"	4"	5 1/4"	11"	1'-5"

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	36

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 7:03:02 PM
FILE NAME: 86110318-SW-Bearing Details02.dgn
PLOT DRIVER: pdf_BET-TIFF.plt
PEN TABLE: standard-trans.tbl

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Illinois Professional Design Firm # 184-001322

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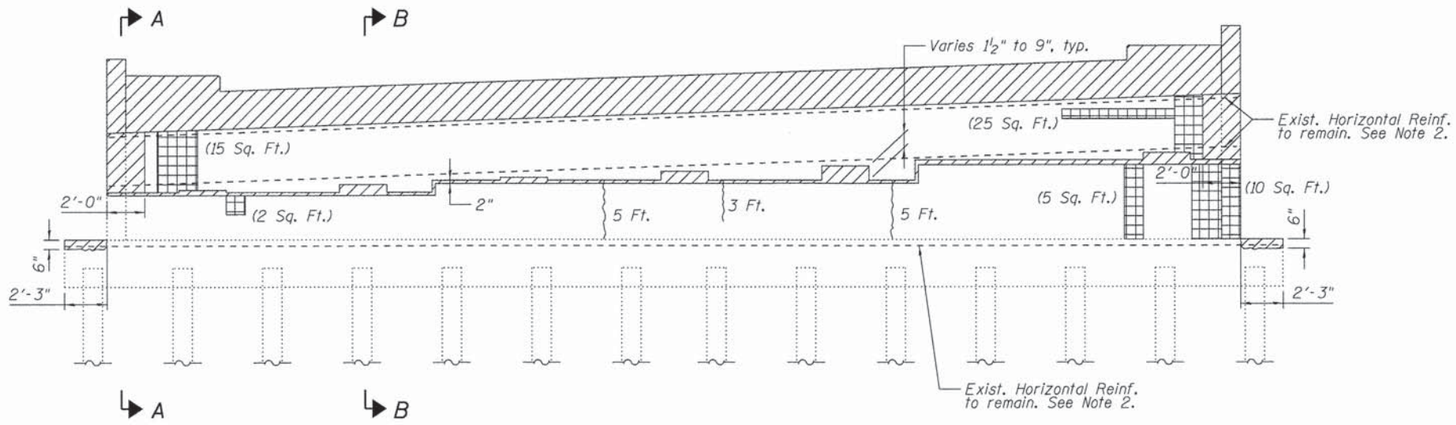
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

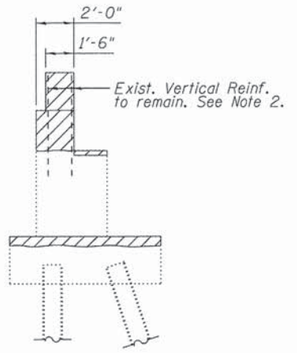
FIXED BEARING DETAILS
STRUCTURE NO. 045-3088

SHEET NO. SW-39 OF SW-62 SHEETS

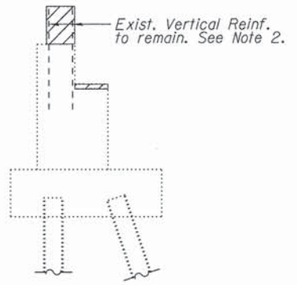
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	80
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	



WEST ABUTMENT



SECTION A-A



SECTION B-B

Notes:

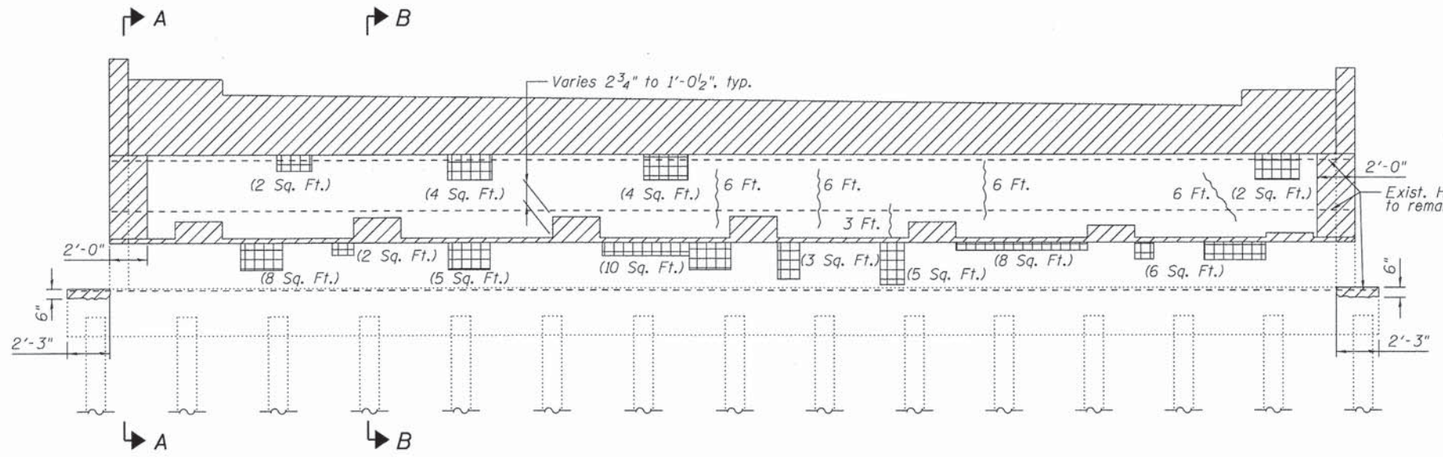
1. Removal of concrete deck, 6-4" AT&T ducts in south sidewalk, railings, and light poles shall be included in the unit price for "Removal of Existing Concrete Deck." Removal of HMA Wearing Surface paid for as "Hot-Mix Ashalt Surface Removal (Deck)." Removal of 4-5" COMED ducts in north sidewalk paid for as "Removal of Asbestos Cement Conduit." See Roadway Typical Sections.
2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
3. The cost for all saw cuts shown shall be included in the cost of "Concrete Removal."
4. See existing bridge plans in the Special Provisions for additional information.

LEGEND

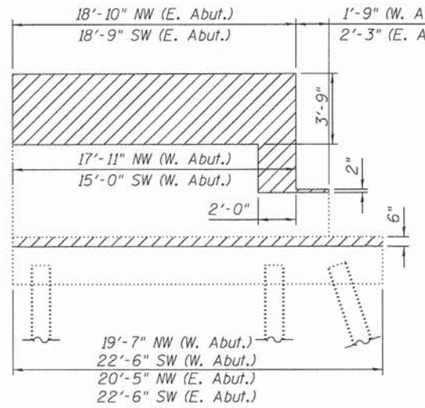
- Concrete Removal
- Structural Repair of Concrete (Depth Equal to or Less than 5 in.)
- Epoxy Crack Injection

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	34.9
Epoxy Crack Injection	Foot	40
Structural Repair of Concrete (Depth Equal to or Less than 5 in.)	Sq. Ft.	116



EAST ABUTMENT



WING WALL ELEVATION

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 7:04:12 PM
FILE NAME: 8611038-SH-Rem01.dgn
PLOT DRIVER: pdf_DET-111f.pltt
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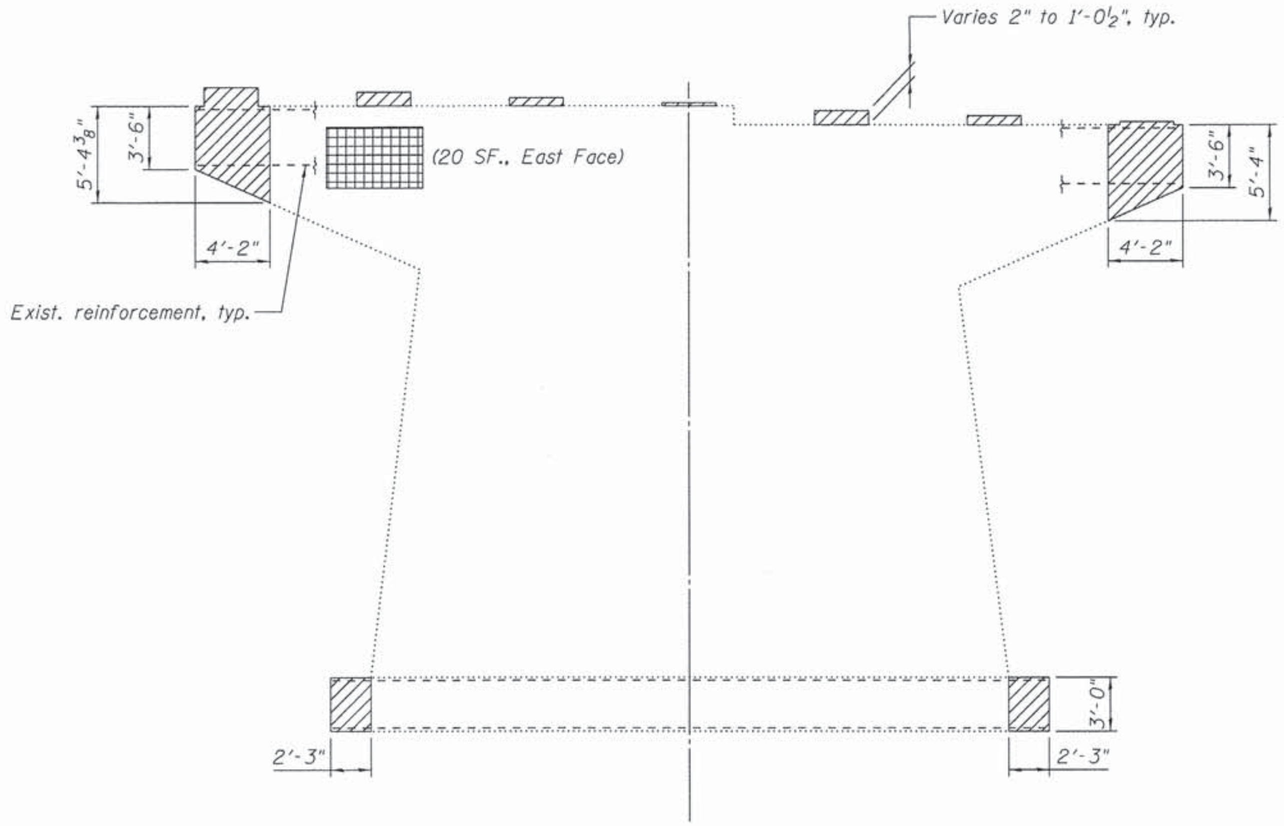
USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RDG	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

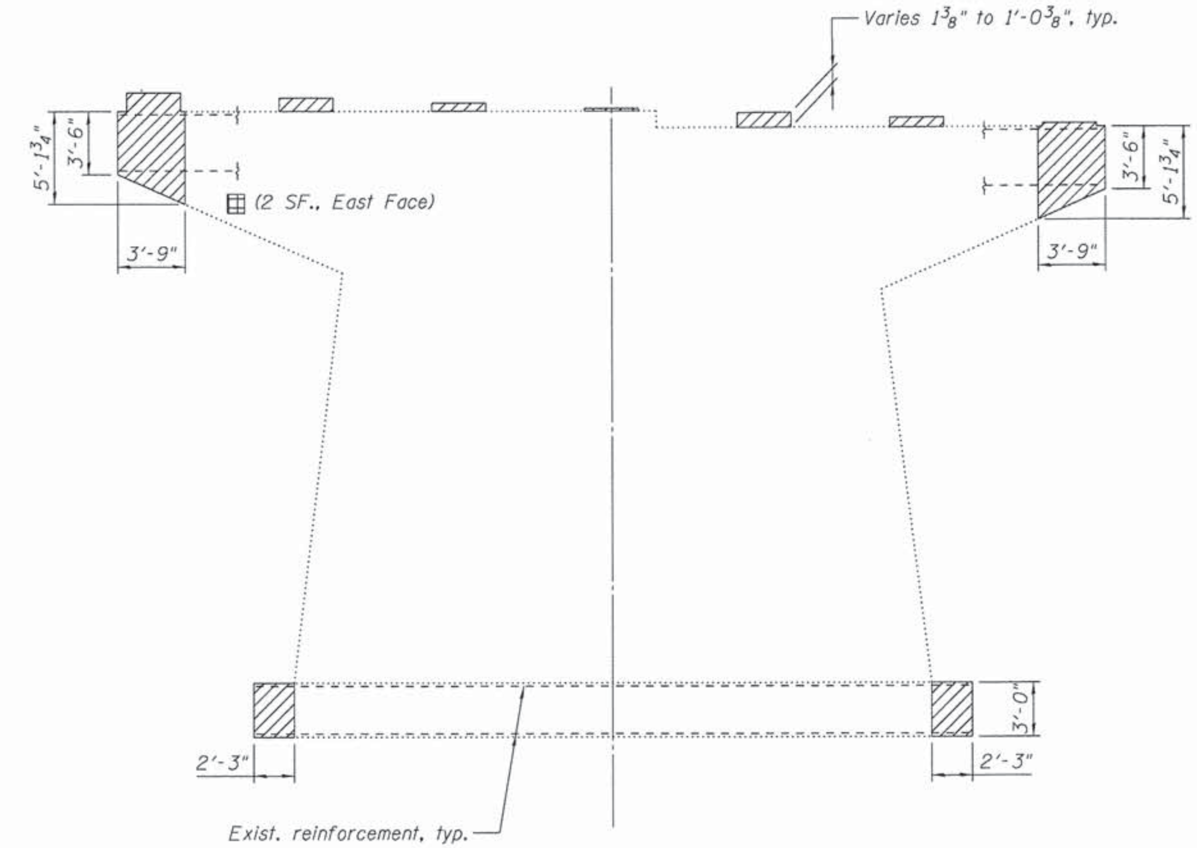
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-40 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	81
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT		#FEDPROJNO#	



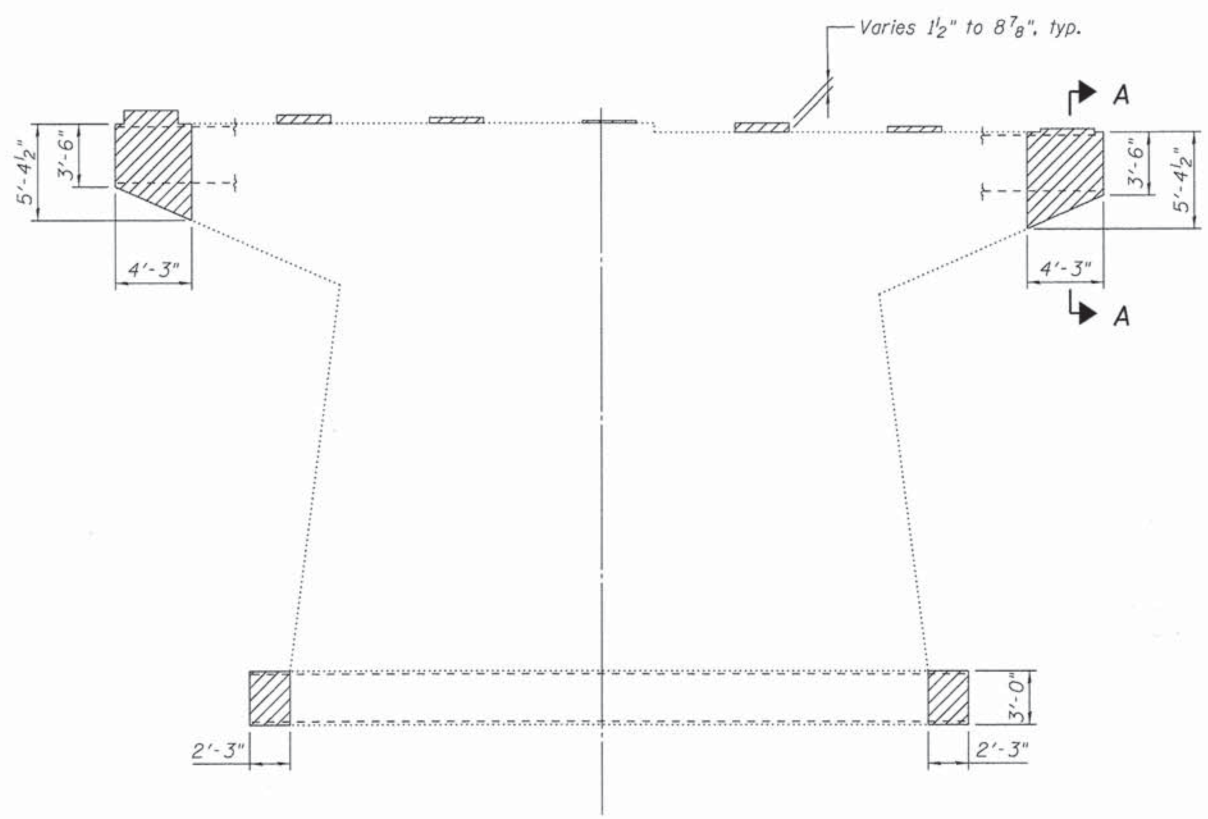
PIER 1
West Face



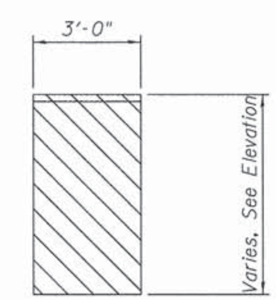
PIER 2
West Face

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	30.3
Structural Repair of Concrete (Depth Equal to or Less than 5 in.)	Sq. Ft.	22



PIER 3
West Face



SECTION A-A

Notes:
1. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
2. The cost for all saw cuts shown shall be included in the cost of "Concrete Removal."
3. See existing bridge plans in the Special Provisions for additional information.

LEGEND

(diagonal hatch)	Concrete Removal
(cross hatch)	Structural Repair of Concrete (Depth Equal to or Less than 5 in.)
(grid hatch)	Structural Repair of Concrete (Depth Equal to or Less than 5 in.) East Face
(wavy line)	Epoxy Crack Injection

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 7:04:42 PM
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PLOT DRIVER: pdf_DET-Tiff.plt
PEN TABLE: standard-trans.tbl

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PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-41 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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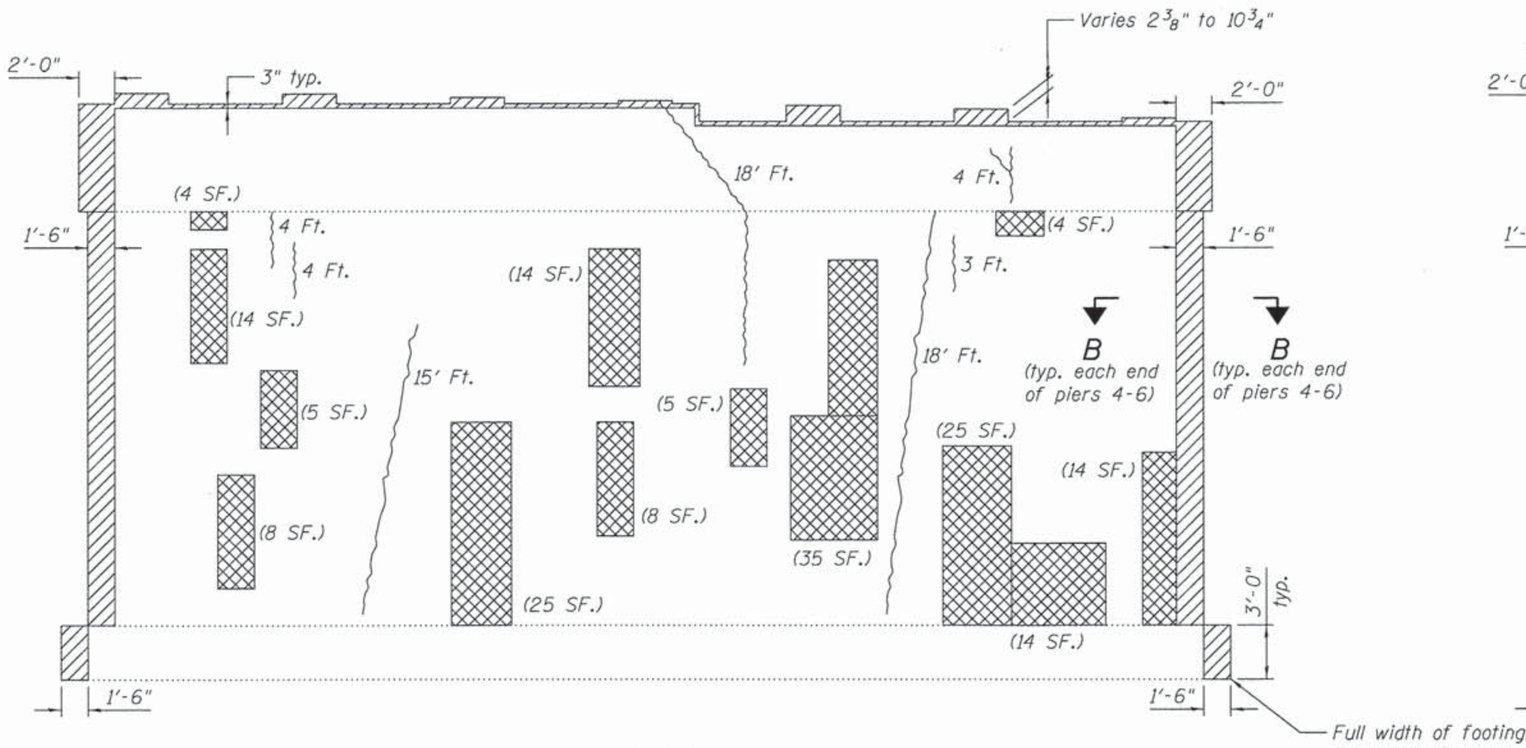
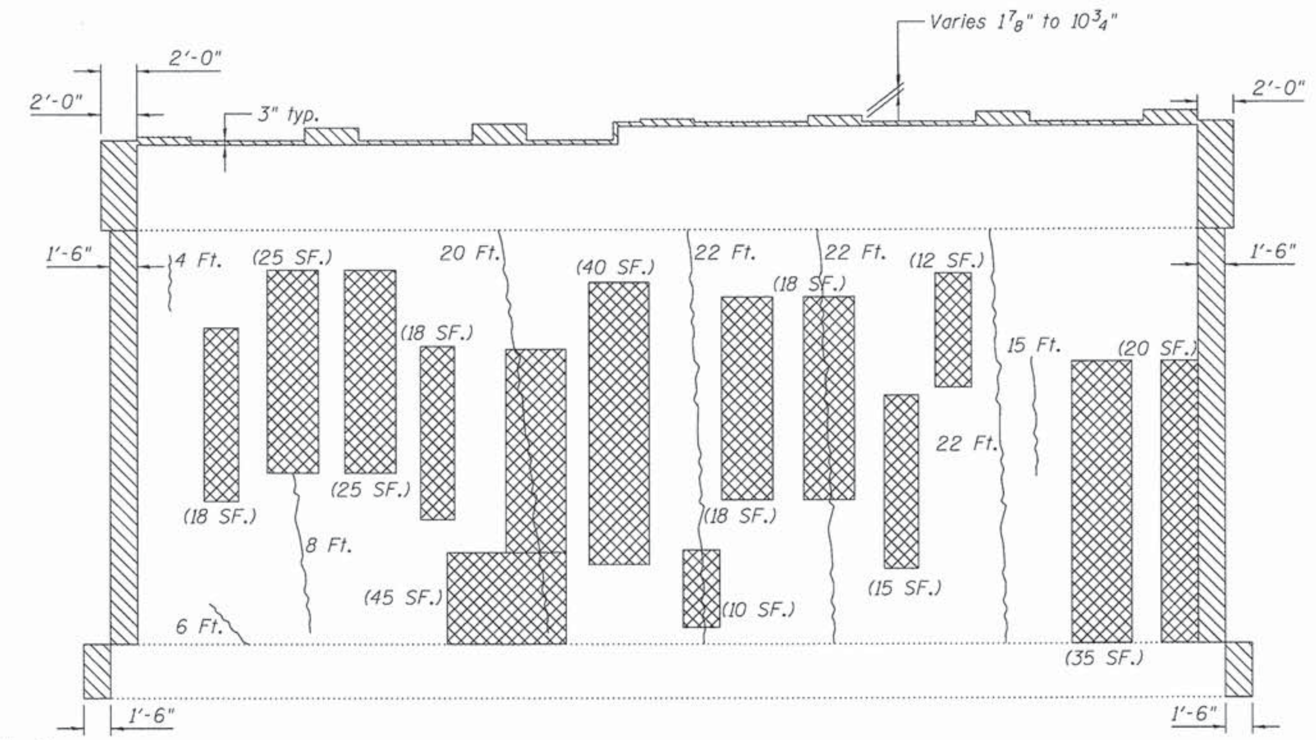
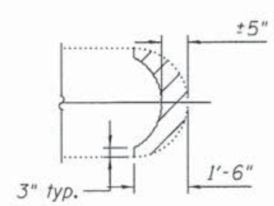
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	



PIER 4
West Face



PIER 4
East Face



SECTION B-B

Notes:

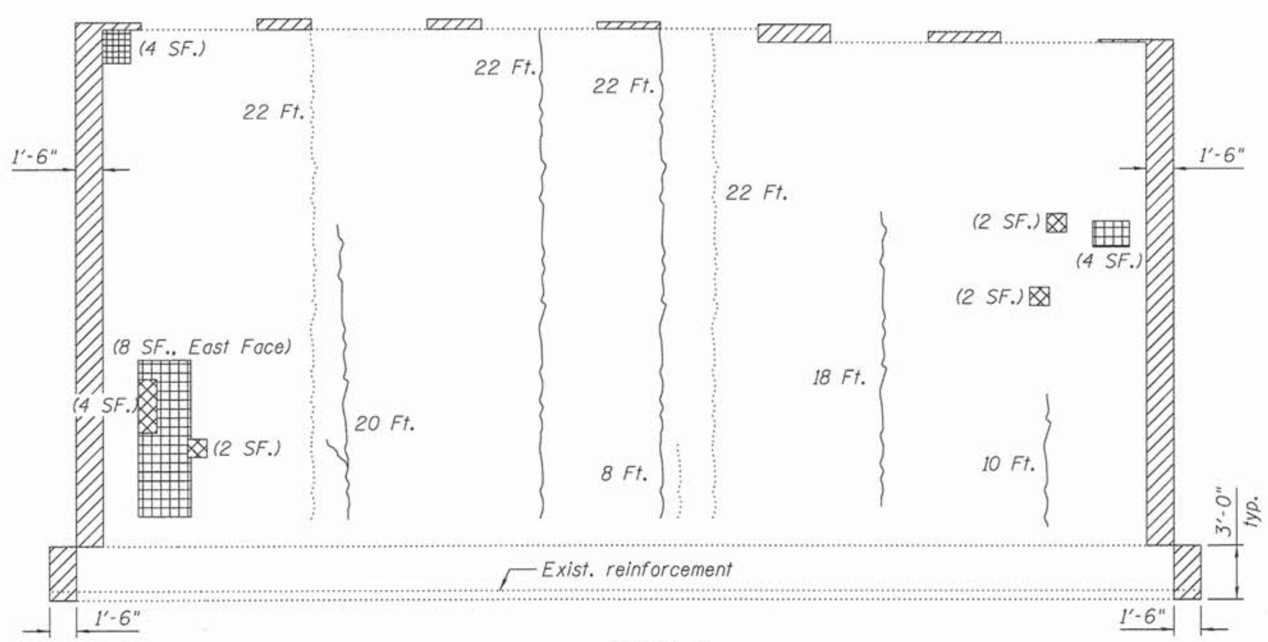
1. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.
2. The cost for all saw cuts shown shall be included in the cost of "Concrete Removal."
3. See existing bridge design plans in the Special Provisions for additional information.

BILL OF MATERIAL

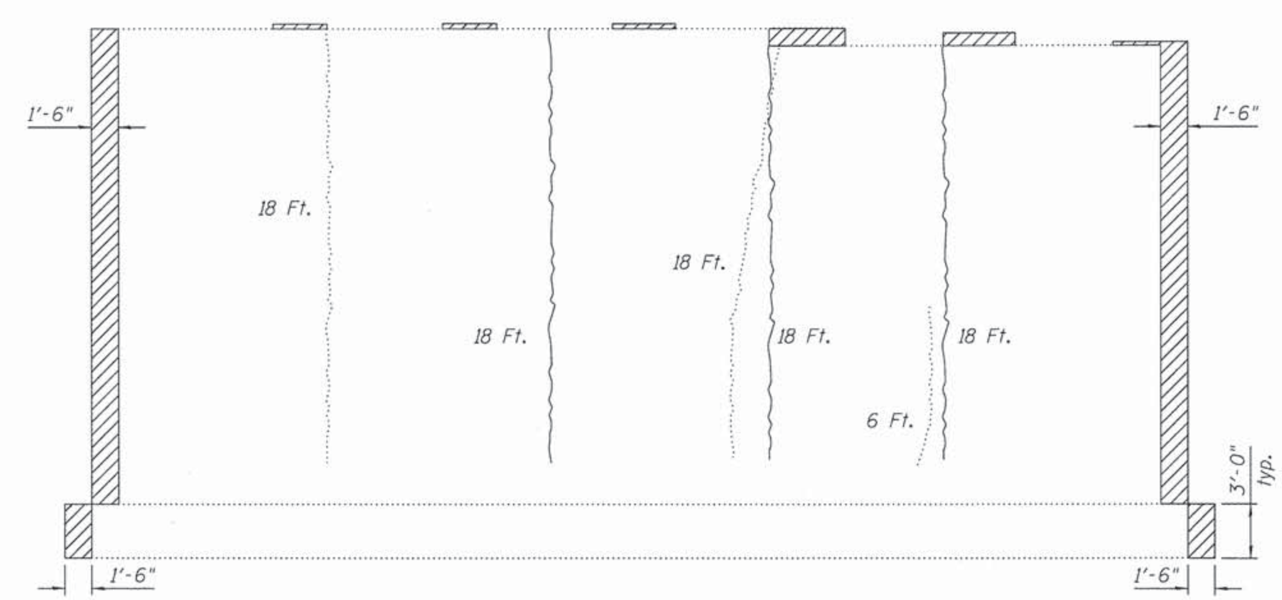
ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	32.3
Epoxy Crack Injection	Foot	425
Structural Repair of Concrete (Depth Equal to or Less than 5 in.)	Sq. Ft.	496

LEGEND

- Concrete Removal
- Structural Repair of Concrete (Depth Equal to or Less than 5 in.)
- Structural Repair of Concrete (Depth Equal to or Less than 5 in.) East Face
- Epoxy Crack Injection
- Epoxy Crack Injection East Face



PIER 5
West Face



PIER 6
West Face

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 7:05:16 PM
FILE NAME: 86110318-SW-Rem03.dgn
PLOT DRIVER: pdf_DET-Tiff.plt
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USER NAME = whood	DESIGNED - KMA	REVISED -
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PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REMOVAL DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-42 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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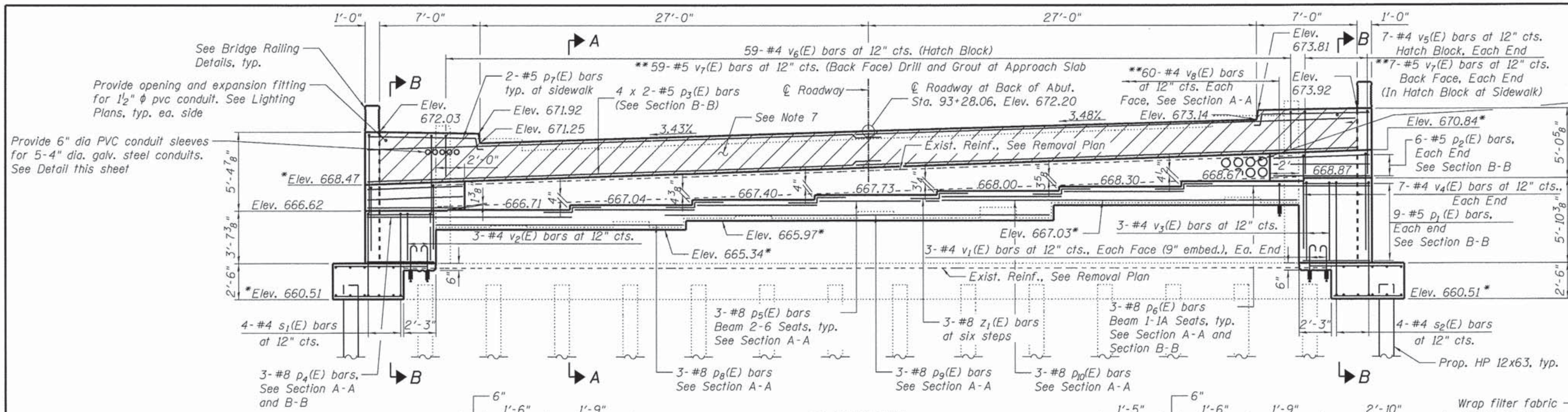
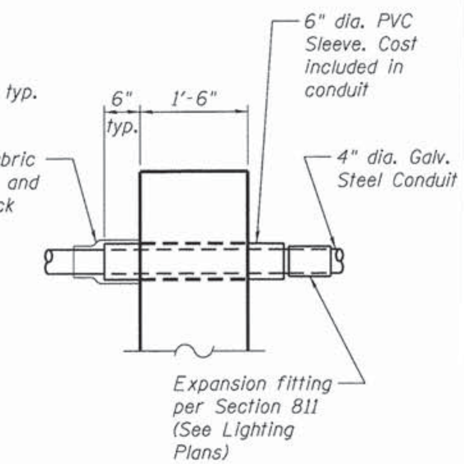
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	



ELEVATION

(Looking West)



CONDUIT DETAIL

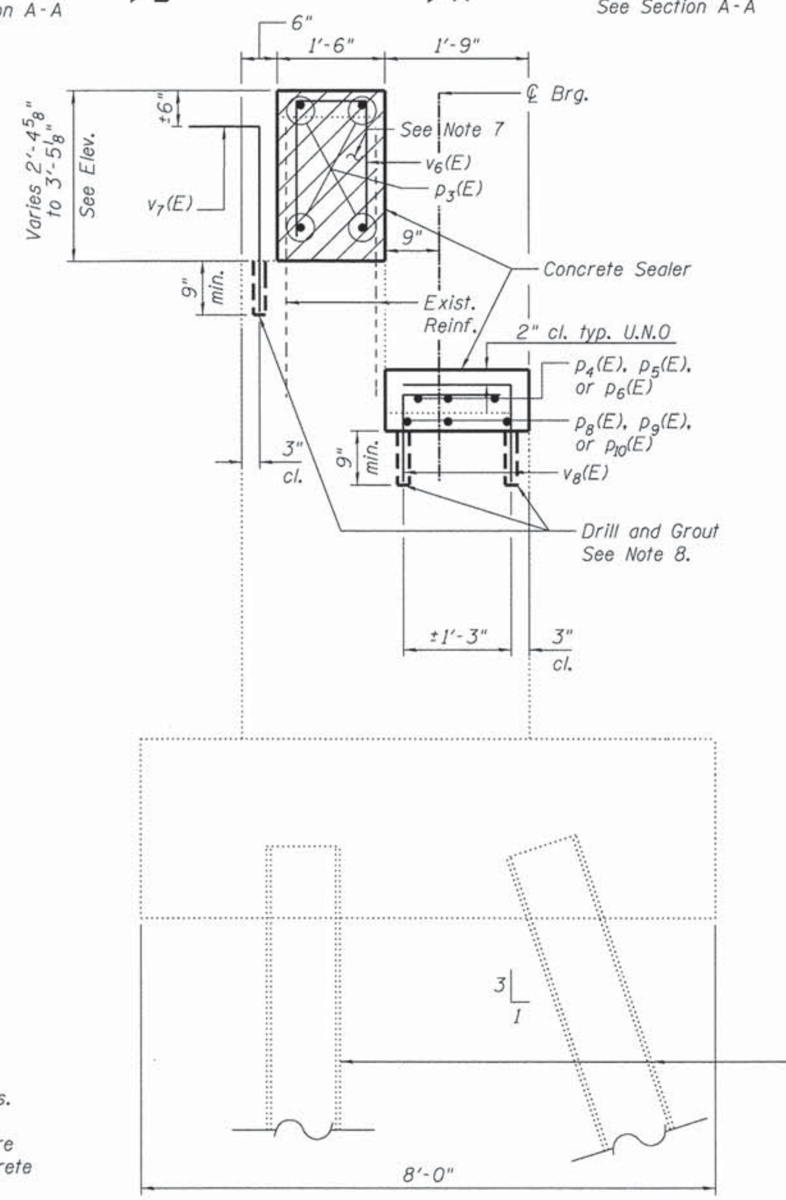
Cost included in conduit items

LEGEND

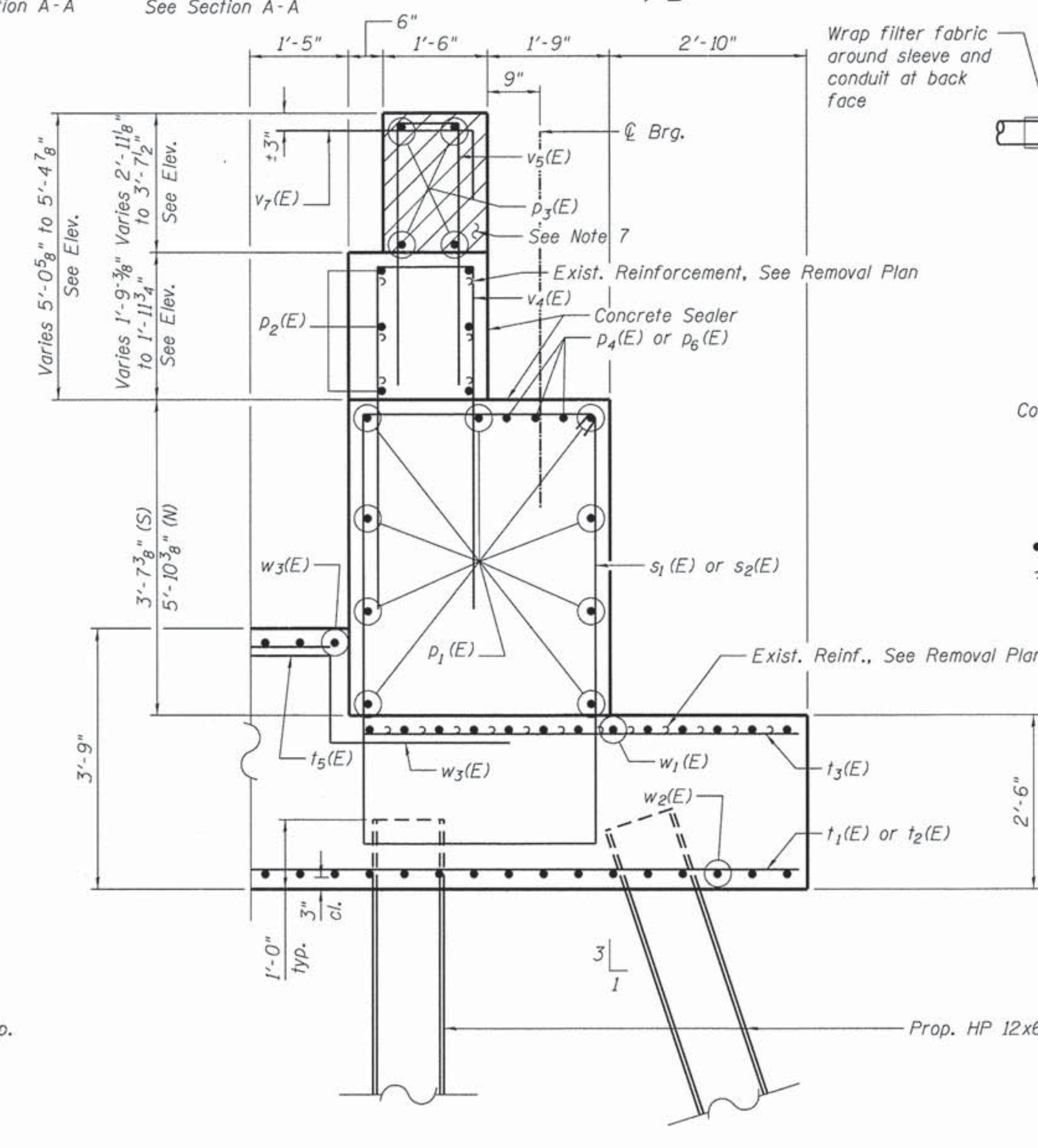
- ● = Proposed Reinforcement
- ◌ = Existing Reinforcement (See Note 2)

* Elevation/dimension based on existing design plans and field survey. Contractor to verify in field.

** Trim or increase embedment to fit.



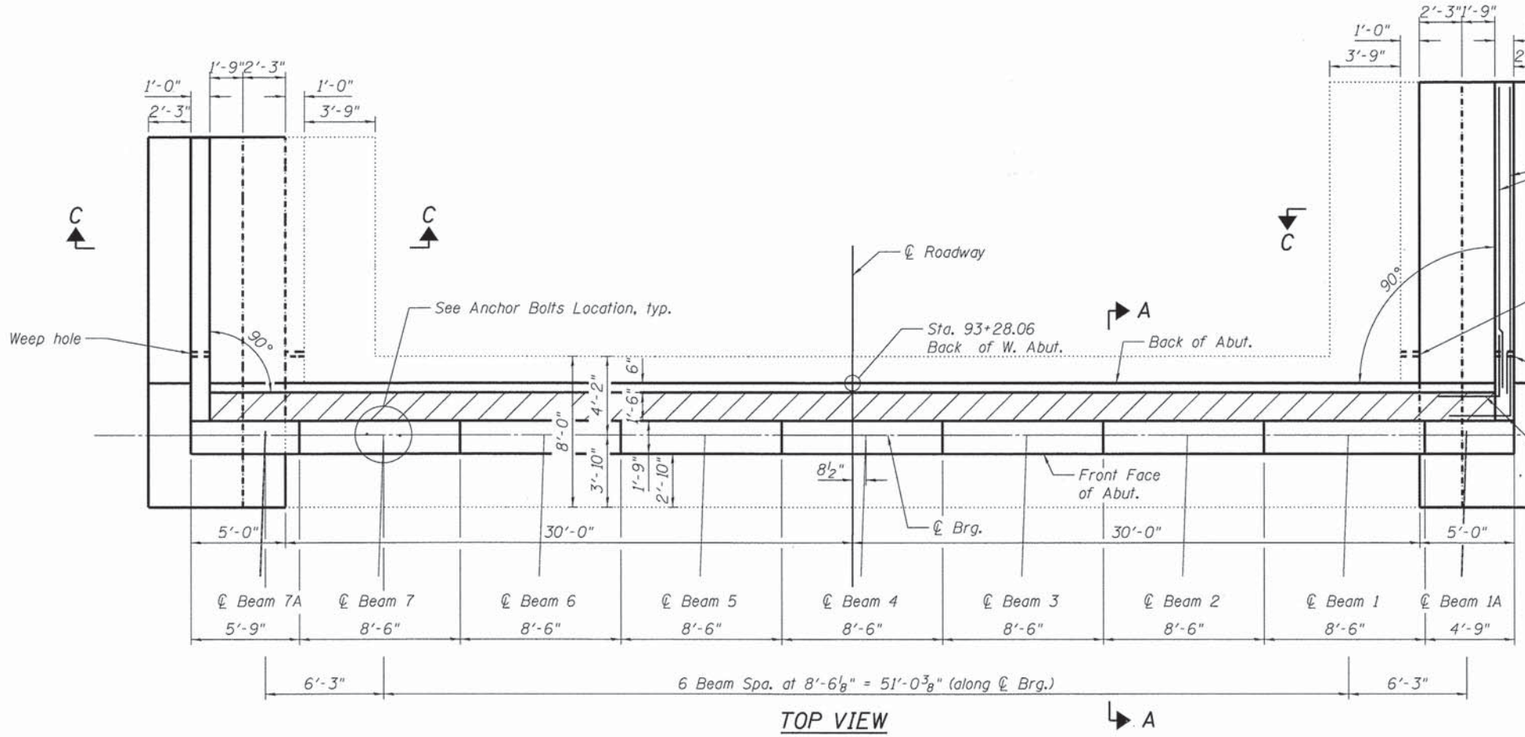
SECTION A-A



SECTION B-B

Notes:

1. Pour steps Monolithically with cap.
2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal. See Removal Plan.
3. All concrete edges shall have standard ¾" chamfer.
4. Space reinforcement in cap to miss Anchor Bolts.
5. Drilling and Epoxy Grouting of bars as shown in plans shall be included in the cost of Reinforcement Bars, Epoxy Coated.
6. See Sheet SW-40 for Concrete Removal Details.
7. Hatched area to be poured after Superstructure Falsework has been removed. Quantity of concrete included with Concrete Superstructure.
8. Trim or drill and grout deeper to mantain clear cover.



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PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 7:06:22 PM
DATE PLOTTED: 8810338-SM-Abut1-02.dgn
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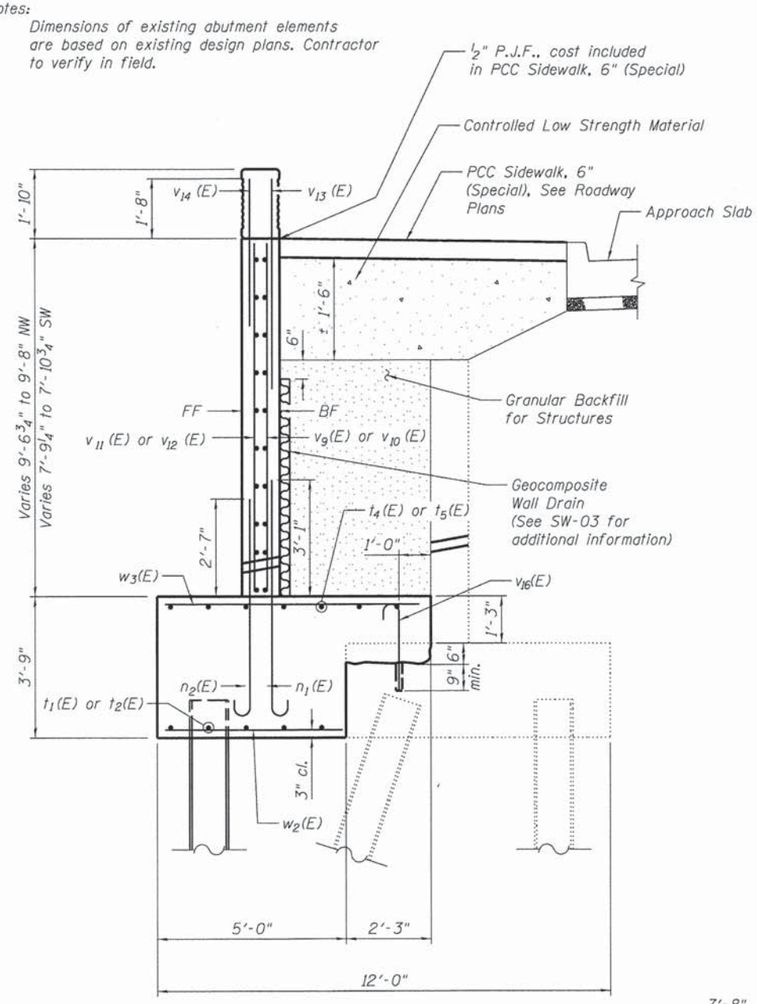
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

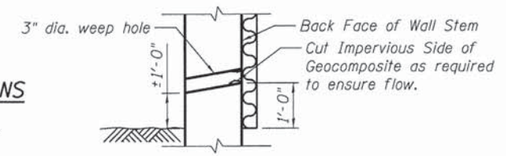
WEST ABUTMENT
STRUCTURE NO. 045-3088
SHEET NO. SW-44 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	85
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT		#FEDPROJNO#	

Notes:
1. Dimensions of existing abutment elements are based on existing design plans. Contractor to verify in field.



SECTION C-C



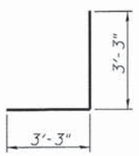
WEEP HOLE DRAIN DETAIL

ABBREVIATIONS

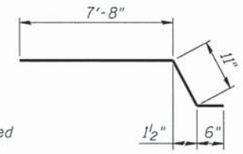
FF = Front Face
BF = Back Face
EF = Each Face
NW = North Wall
SW = South Wall

MIN BAR LAP

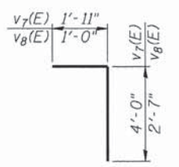
#4	2'-1"
#5	2'-7"
#6	3'-1"
#7	4'-2"
#8	5'-5"



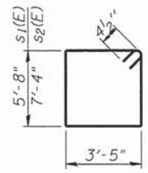
BARS h3(E)



BAR p7(E)



BARS v7(E) & v8(E)



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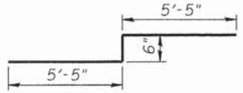
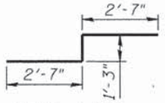
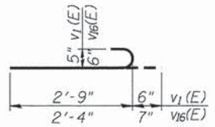


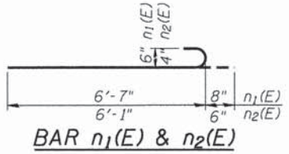
BAR z1(E)



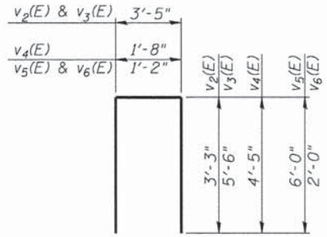
BAR t6(E)



BAR v1(E) & v16(E)

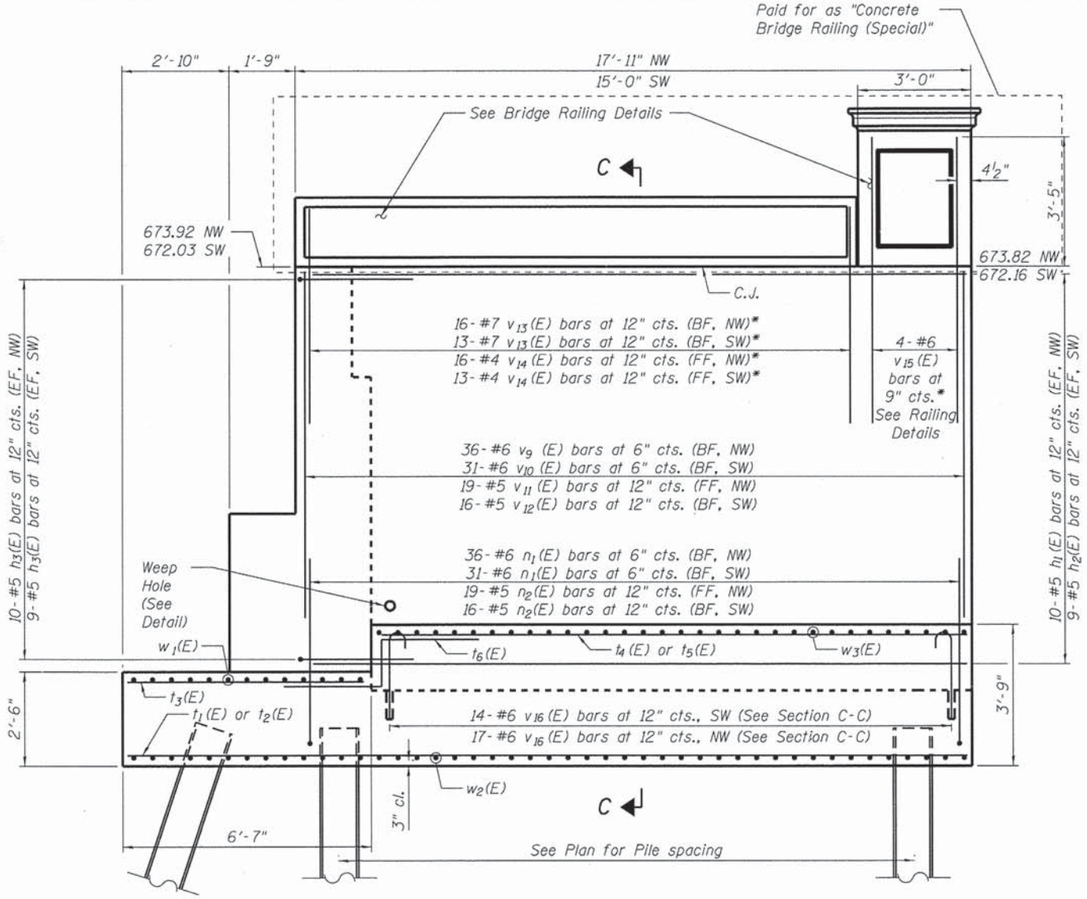


BAR n1(E) & n2(E)



BARS v2(E), v3(E), v4(E), v5(E), & v6(E)

Paid for as "Concrete Bridge Railing (Special)"



WING WALL ELEVATION

*Coordinate v13(E), v14(E), & v15(E) with railing details.

PILE DATA

Type: HP12x63
Nominal Required Bearing: 497 Kips
Factored Resistance Available: 273 Kips
Est. Length: 29'-0"
No. Production Piles: 8
No. Test Piles: 1

ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h1(E)	20	#5	17'- 7"	
h2(E)	18	#5	14'- 8"	
h3(E)	38	#5	6'- 6"	
n1(E)	67	#6	7'- 3"	
n2(E)	35	#5	6'- 8"	
p1 (E)	18	#5	4'- 10"	
p2 (E)	12	#5	6'- 10"	
p3 (E)	8	#5	35'- 2"	
p4 (E)	3	#8	13'- 10"	
p5 (E)	15	#8	8'- 2"	
p6 (E)	3	#8	12'- 10"	
p7 (E)	4	#5	9'- 1"	
p8 (E)	3	#8	16'- 8"	
p9 (E)	3	#8	26'- 0"	
p10 (E)	3	#8	25'- 4"	
s1 (E)	4	#4	18'- 11"	
s2 (E)	4	#4	23'- 5"	
t1 (E)	6	#5	19'- 3"	
t2 (E)	6	#5	22'- 2"	
t3 (E)	12	#5	6'- 3"	
t4 (E)	9	#5	12'- 8"	
t5 (E)	9	#5	15'- 7"	
t6 (E)	12	#5	6'- 5"	
v1 (E)	12	#4	3'- 3"	
v2 (E)	3	#4	9'- 11"	
v3 (E)	3	#4	14'- 5"	
v4 (E)	14	#4	10'- 6"	
v5 (E)	14	#4	13'- 2"	
v6 (E)	59	#4	5'- 2"	
v7 (E)	73	#5	5'- 11"	
v8 (E)	120	#4	3'- 7"	
v9 (E)	36	#6	9'- 3"	
v10 (E)	31	#6	7'- 8"	
v11 (E)	19	#5	9'- 3"	
v12 (E)	16	#5	7'- 8"	
v13 (E)	29	#7	5'- 11"	
v14 (E)	29	#4	3'- 10"	
v15 (E)	8	#6	6'- 6"	
v16 (E)	31	#6	3'- 0"	
w1 (E)	26	#6	4'- 8"	
w2 (E)	43	#5	4'- 8"	
w3 (E)	60	#6	6'- 11"	
z1 (E)	18	#8	11'- 4"	
Structure Excavation			Cu. Yd.	63.6
Concrete Structures			Cu. Yd.	58.4
Concrete Superstructure			Cu. Yd.	10.4
Reinforcement Bars, Epoxy Coated			Pound	8,870
Pile Shoes			Each	9
Furnishing Steel Piles HP12x63			Foot	232
Test Pile Steel HP12x63			Each	1
Driving Piles			Foot	232
Concrete Sealer			Sq. Ft.	447

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 7:06:49 PM
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Illinois Professional Design Firm # 184-001322

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-45 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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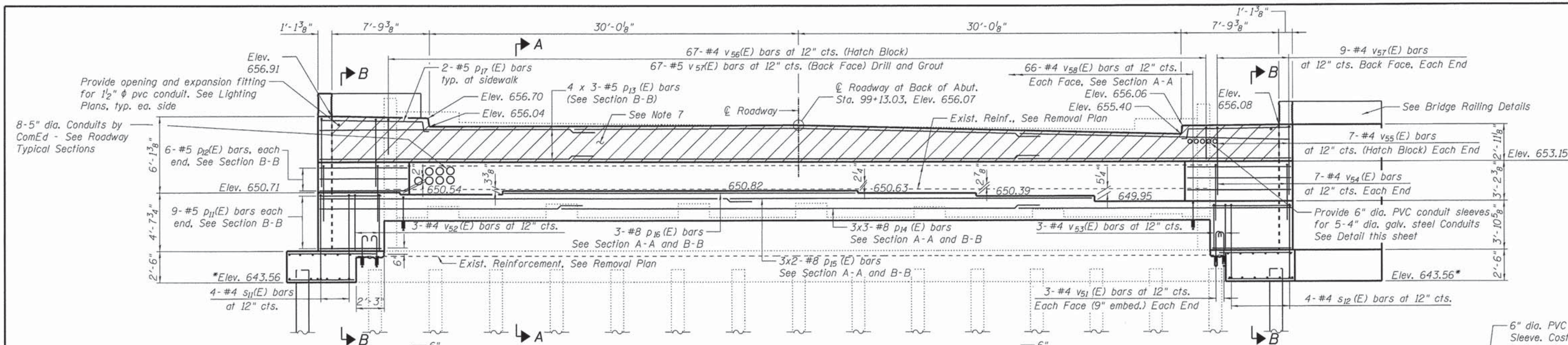
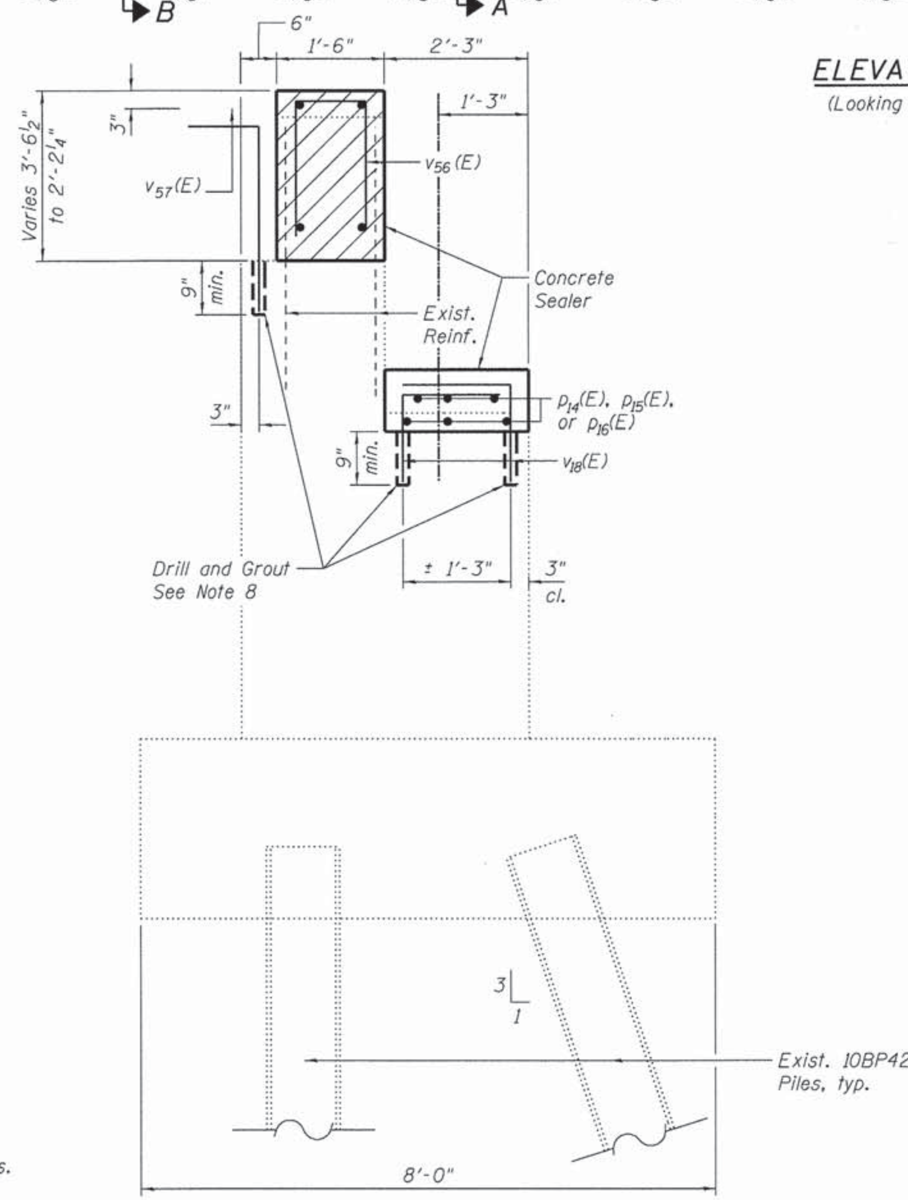
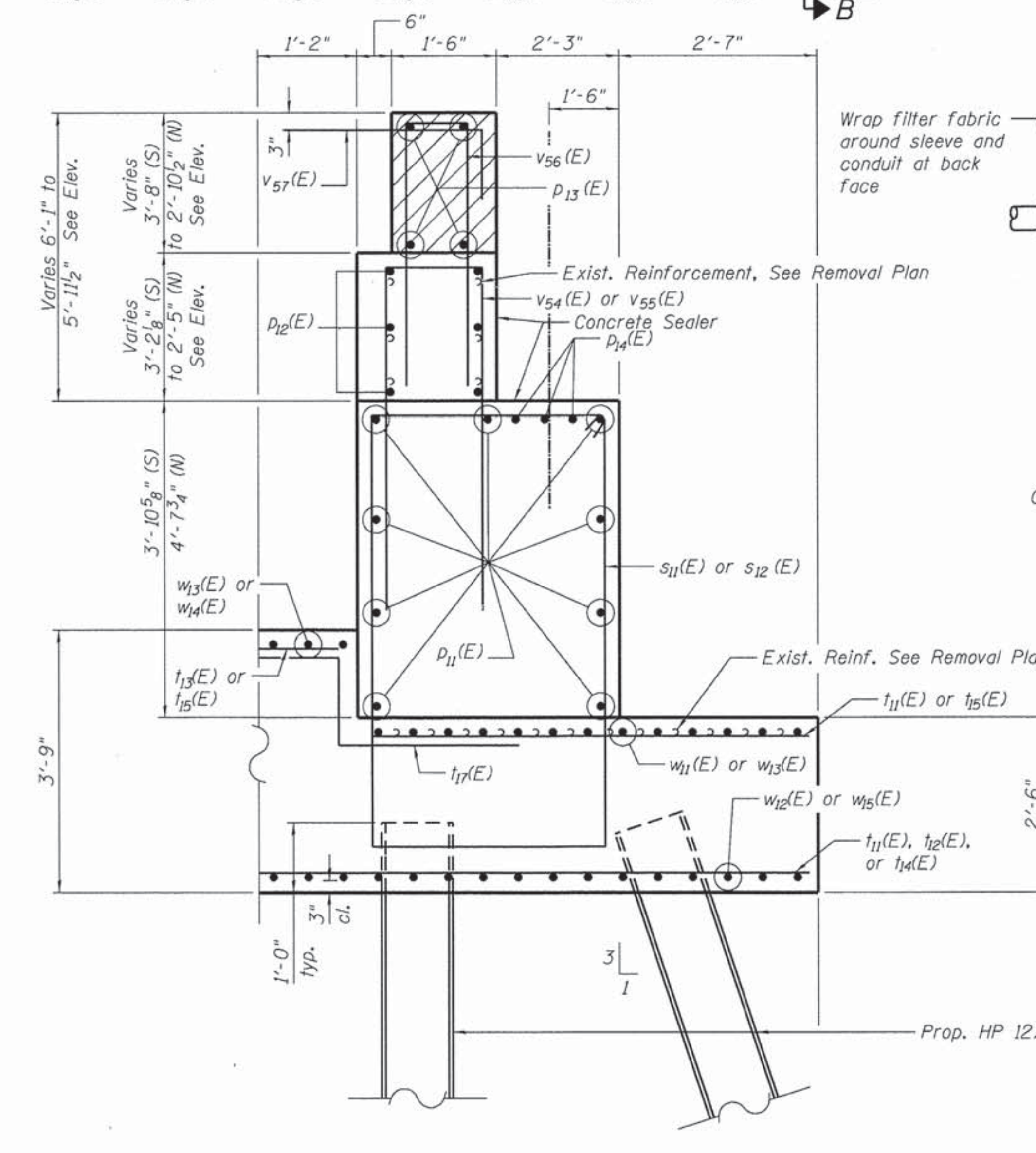
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT		$FEDPROJNO$	



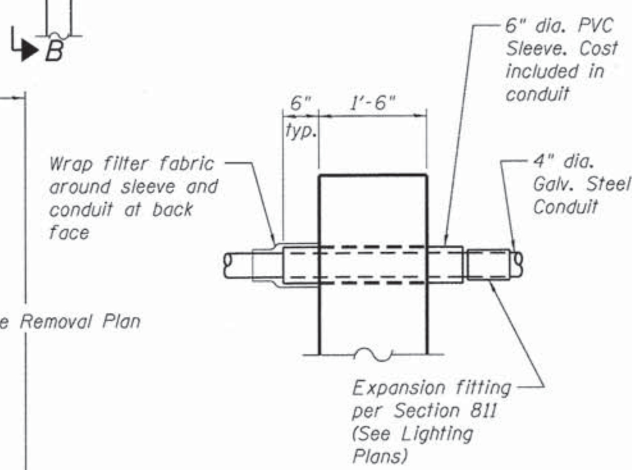
ELEVATION
(Looking East)



SECTION A-A



SECTION B-B



CONDUIT DETAIL

Cost included in conduit items

LEGEND

- ● = Proposed Reinforcement
- ⊃ = Existing Reinforcement (See Note 2)

* Elevation/dimension based on existing design plans and field survey. Conctractor to verify in field.

Notes:

1. Pour steps Monolithically with cap.
2. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal. See Removal Plan.
3. All concrete edges shall have standard 3/4" chamfer.
4. Space reinforcement in cap to miss Anchor Bolts.
5. Drilling and Epoxy Grouting of bars as shown in plans shall be included in the cost of Reinforcement Bars, Epoxy Coated.
6. See Sheet SW-40 for Concrete Removal Details.
7. Hatched area to be poured after Superstructure Falsework has been removed. Quantity of concrete included with Concrete Superstructure.

COMPANY NAME: Kevin M. Artt
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 7:07:37 PM
DATE PLOTTED: 86110318-SW-Abut2-01.dgn
FILE NAME: pdf_DET-Tiff.plt
PLOT DRIVER: standard-trans.tbl
PEN TABLE:

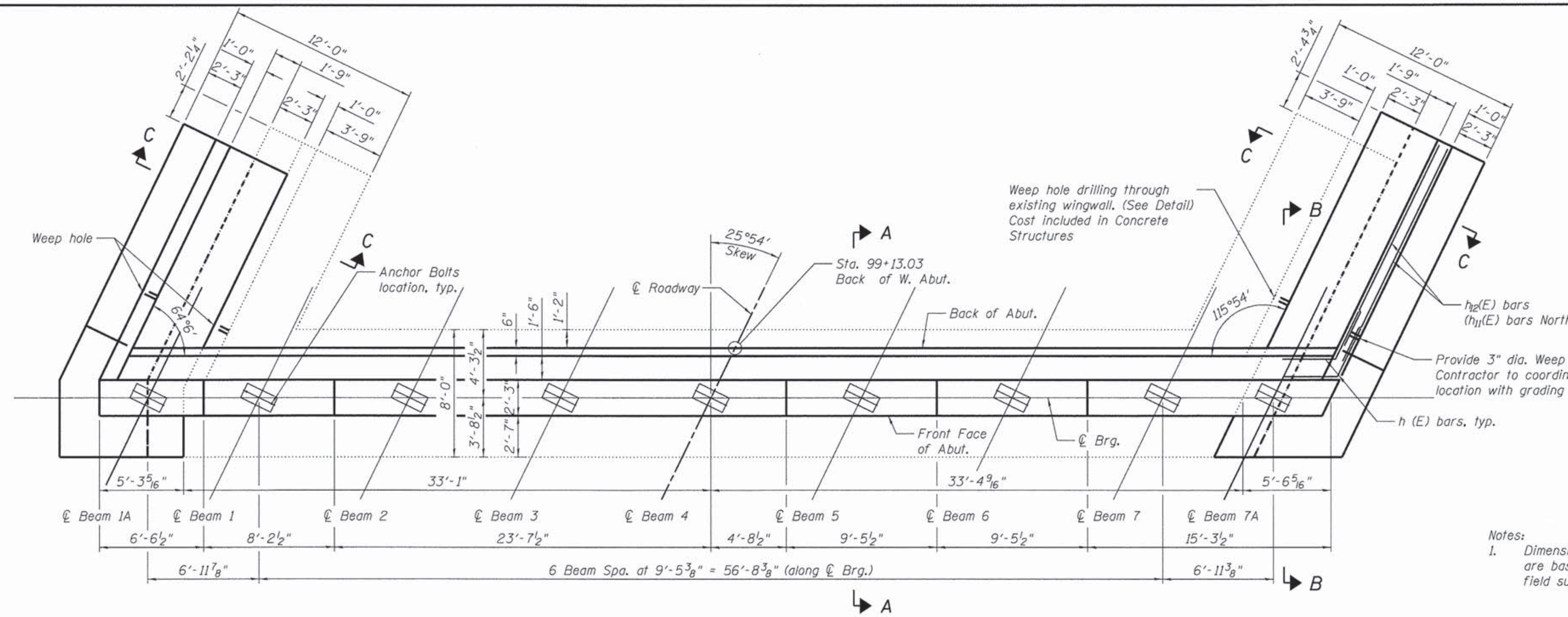
HRGreen — HRGreen.com — Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

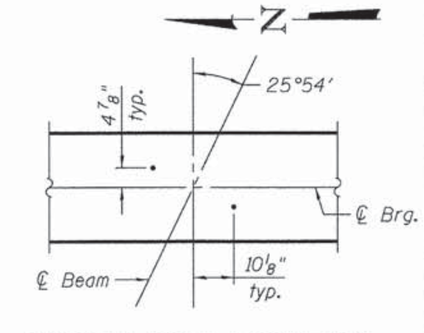
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
STRUCTURE NO. 045-3088
SHEET NO. SW-46 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	87
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	

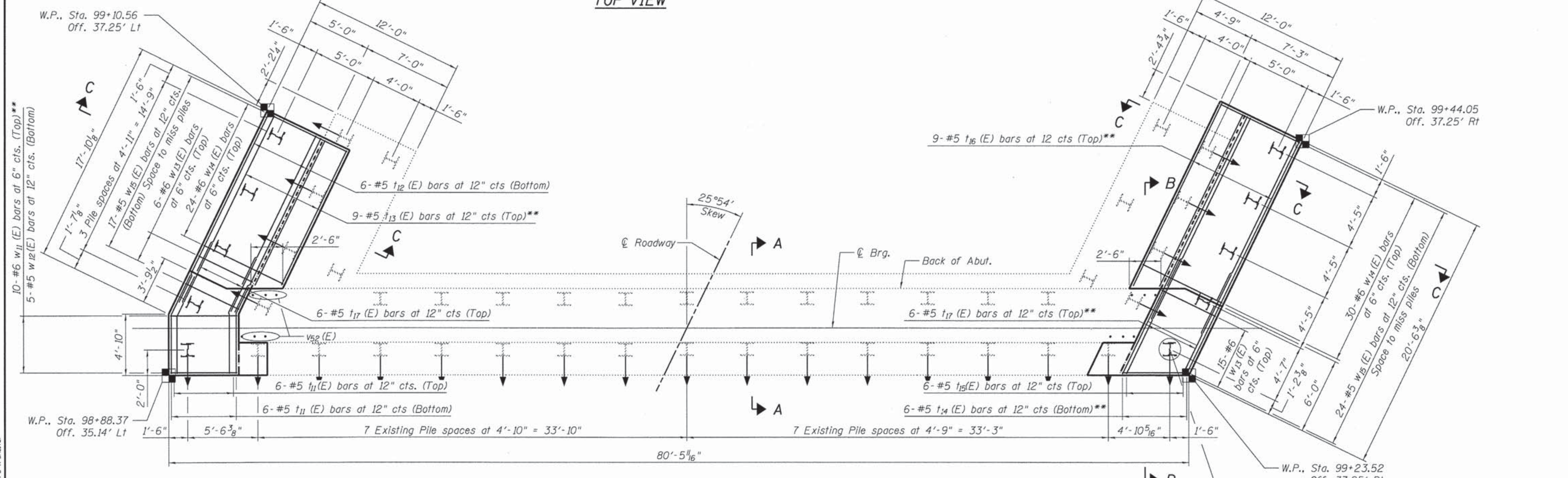


TOP VIEW



ANCHOR BOLT LOCATION

Notes:
1. Dimensions of existing abutment elements are based on existing design plans and field survey. Contractor to verify in field.



PLAN-PILE CAP

COMPANY NAME:
PROJECT CONTACT: Kevin M. Artt
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 7:08:04 PM
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HRGreen

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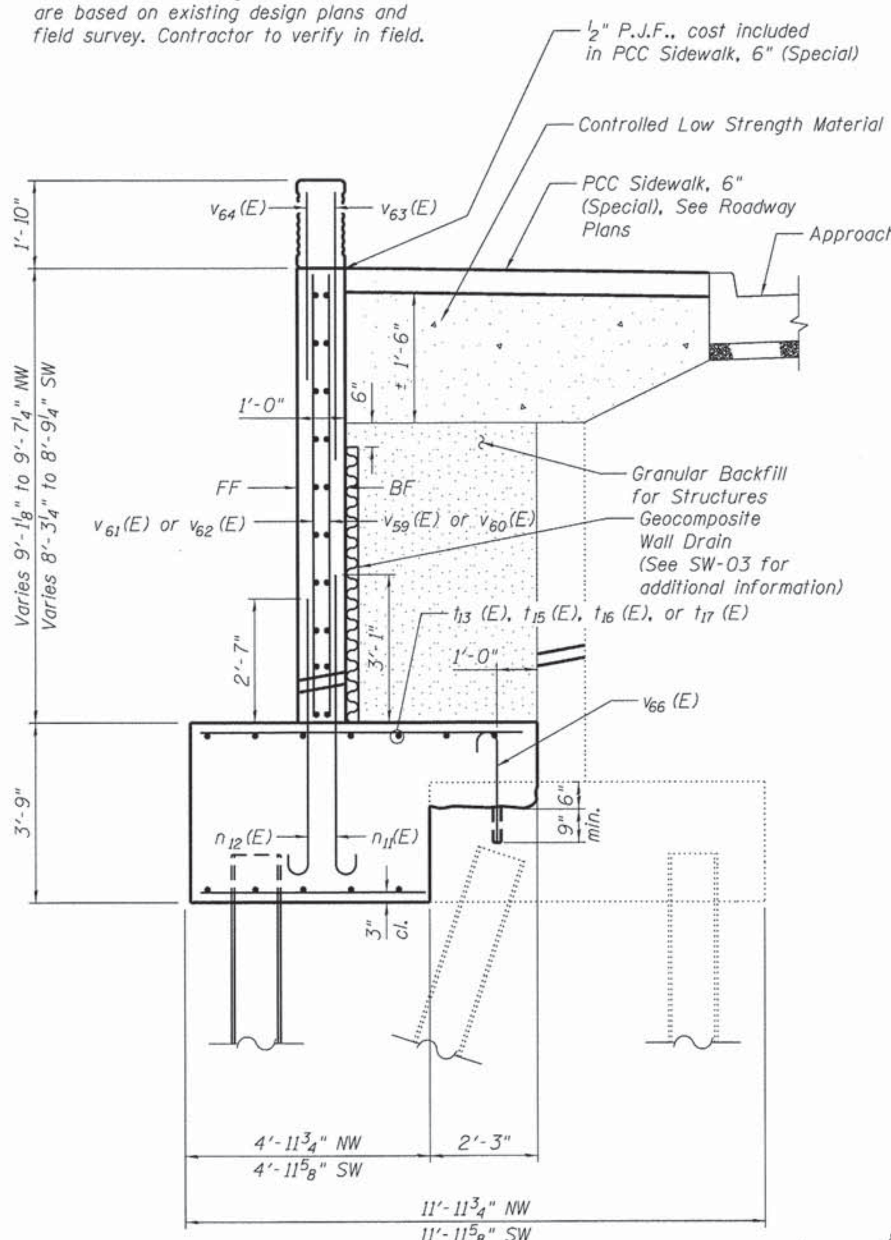
	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

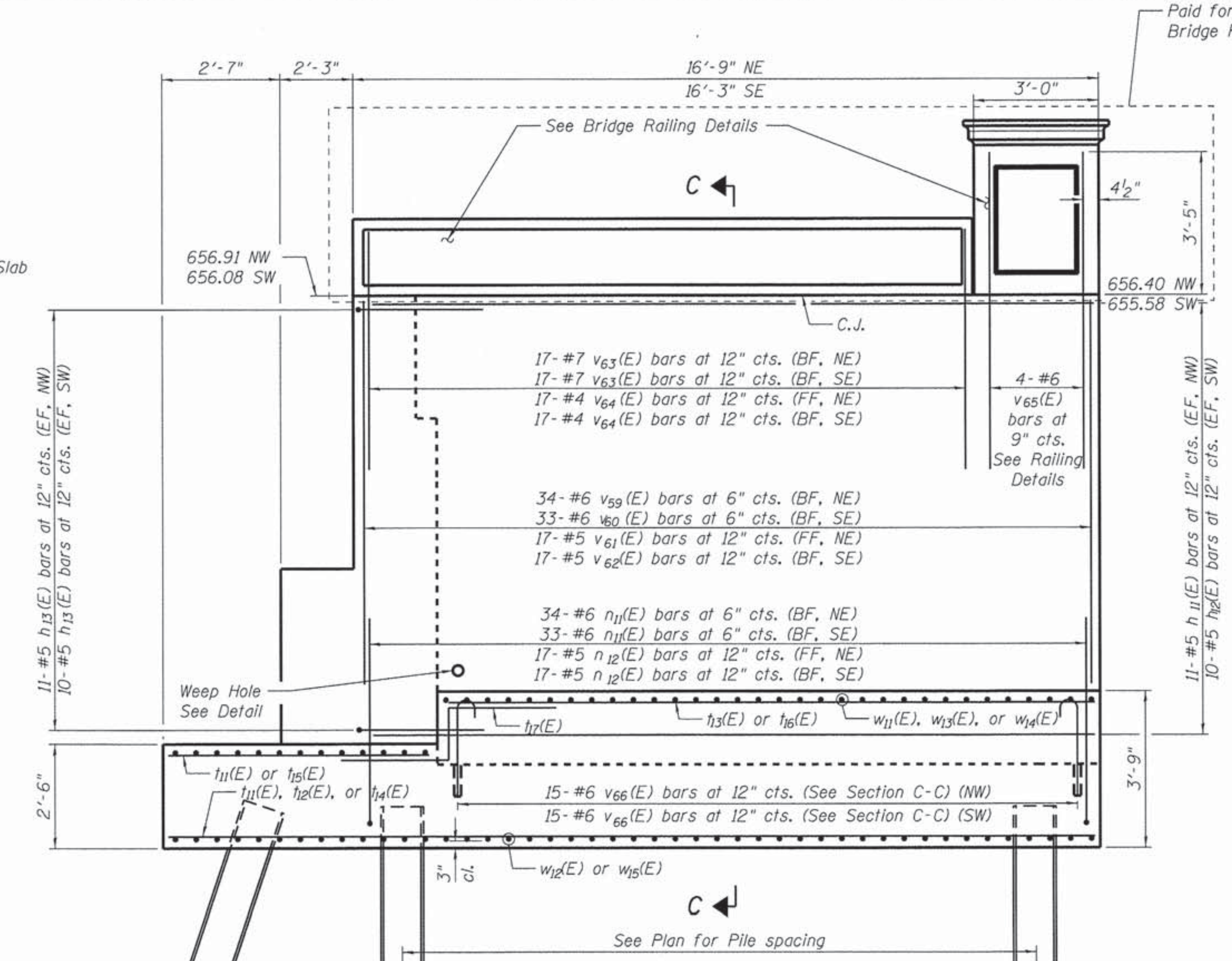
EAST ABUTMENT
STRUCTURE NO. 045-3088
SHEET NO. SW-47 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	88
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	@FEDPROJNO@	

Notes:
1. Dimensions of existing abutment elements are based on existing design plans and field survey. Contractor to verify in field.



SECTION C-C



WING WALL ELEVATION

* Coordinate $v_{23}(E)$, $v_{24}(E)$, and $v_{25}(E)$ bars with railing details

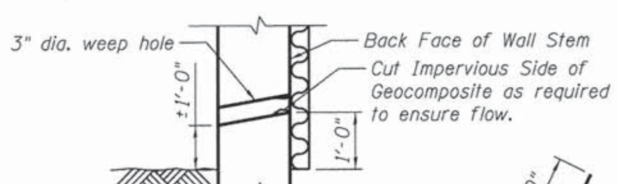
ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_{11}(E)$	22	#5	16'-5"	straight
$h_{12}(E)$	20	#5	15'-11"	straight
$h_{13}(E)$	42	#5	6'-6"	L
$n_{11}(E)$	67	#6	7'-3"	hook
$n_{12}(E)$	34	#5	6'-8"	hook
$p_{11}(E)$	18	#5	5'-2"	straight
$p_{12}(E)$	12	#5	7'-0"	straight
$p_{13}(E)$	12	#5	27'-5"	straight
$p_{14}(E)$	9	#8	29'-6"	straight
$p_{15}(E)$	6	#8	33'-6"	straight
$p_{16}(E)$	3	#8	28'-0"	straight
$p_{17}(E)$	4	#5	9'-10"	bent
$s_{11}(E)$	4	#4	21'-1"	square
$s_{12}(E)$	4	#4	19'-7"	square
$t_{11}(E)$	12	#5	9'-8"	bent
$t_{12}(E)$	6	#5	15'-3"	straight
$t_{13}(E)$	9	#5	13'-10"	straight
$t_{14}(E)$	6	#5	23'-8"	straight
$t_{15}(E)$	6	#5	6'-8"	straight
$t_{16}(E)$	9	#5	16'-3"	straight
$t_{17}(E)$	12	#5	6'-5"	offset
$v_{51}(E)$	12	#4	3'-3"	hook
$v_{52}(E)$	3	#4	11'-7"	U
$v_{53}(E)$	3	#4	10'-1"	U
$v_{54}(E)$	14	#4	10'-4"	U
$v_{55}(E)$	14	#4	13'-0"	U
$v_{56}(E)$	67	#4	5'-2"	U
$v_{57}(E)$	85	#5	5'-11"	L
$v_{58}(E)$	132	#4	3'-11"	L
$v_{59}(E)$	34	#6	8'-9"	straight
$v_{60}(E)$	33	#6	7'-11"	straight
$v_{61}(E)$	17	#5	8'-9"	straight
$v_{62}(E)$	17	#5	7'-11"	straight
$v_{63}(E)$	34	#7	5'-11"	straight
$v_{64}(E)$	34	#4	3'-10"	straight
$v_{65}(E)$	8	#6	6'-6"	straight
$v_{66}(E)$	30	#6	3'-0"	hook
$w_{11}(E)$	10	#6	7'-5"	straight
$w_{12}(E)$	5	#5	5'-2"	straight
$w_{13}(E)$	21	#6	4'-8"	straight
$w_{14}(E)$	54	#6	6'-11"	straight
$w_{15}(E)$	41	#5	4'-8"	straight

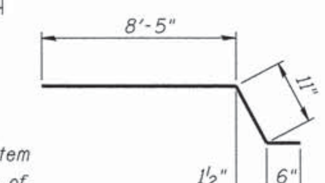
Item	Unit	Quantity
Structure Excavation	Cu. Yd.	63.9
Concrete Structures	Cu. Yd.	64.0
Concrete Superstructure	Cu. Yd.	11.8
Reinforcement Bars, Epoxy	Pound	9,160
Furnishing Steel Piles HP12x63	Foot	184
Test Pile Steel HP12x63	Each	1
Driving Piles	Foot	184
Pile Shoes	Each	9
Concrete Sealer	Sq. Ft.	597

PILE DATA

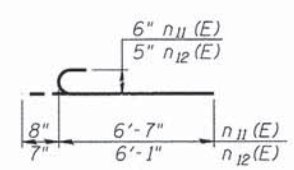
Type: HP12x63
Nominal Required Bearing: 497 Kips
Factored Resistance Available: 273 Kips
Est. Length: 23'-0"
No. Production Piles: 8
No. Test Piles: 1



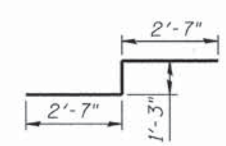
WEEP HOLE DRAIN DETAIL



BAR $p_{17}(E)$



BARS $n_{11}(E)$ & $n_{12}(E)$



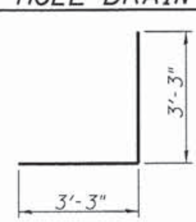
BAR $t_{17}(E)$

ABBREVIATIONS

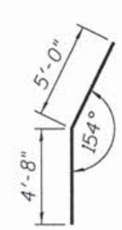
FF = Front Face
BF = Back Face
EF = Each Face
NW = North Wall
SW = South Wall

MIN BAR LAP

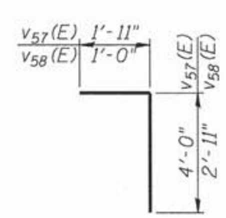
#4	2'-1"
#5	2'-7"
#6	3'-1"
#7	4'-2"
#8	5'-5"



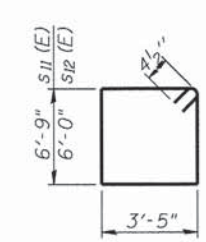
BAR $h_{13}(E)$



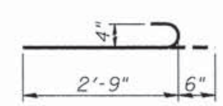
BAR $t_{11}(E)$



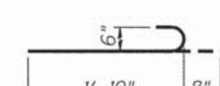
BARS $v_{57}(E)$ & $v_{58}(E)$



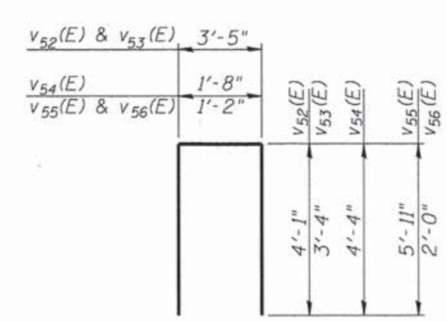
BARS $s_{11}(E)$ & $s_{12}(E)$



BAR $v_{51}(E)$



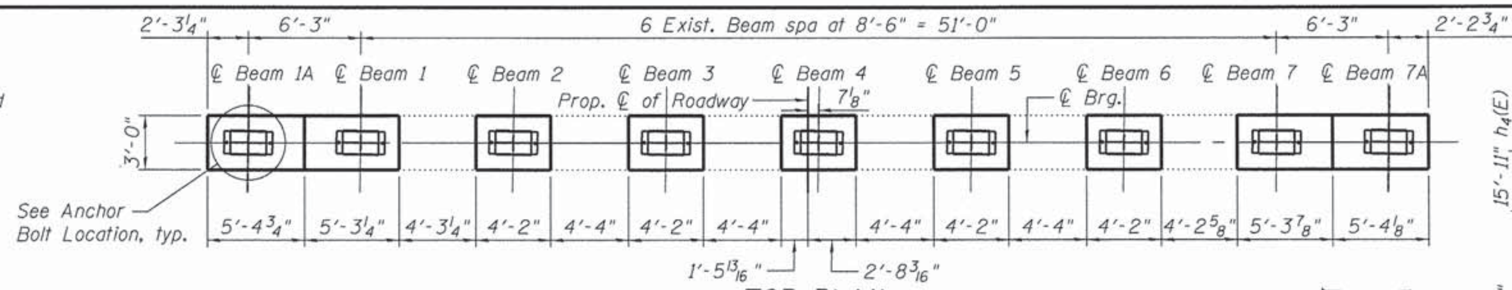
BAR $v_{66}(E)$



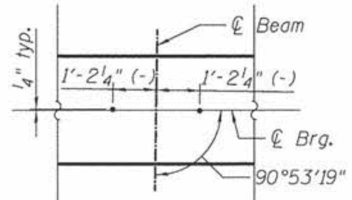
BARS $v_{52}(E)$, $v_{53}(E)$, $v_{54}(E)$, $v_{55}(E)$, & $v_{56}(E)$

Notes:
Space reinforcement in cap to miss anchor bolts.
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

See sheet SW-41 for Concrete Removal details.

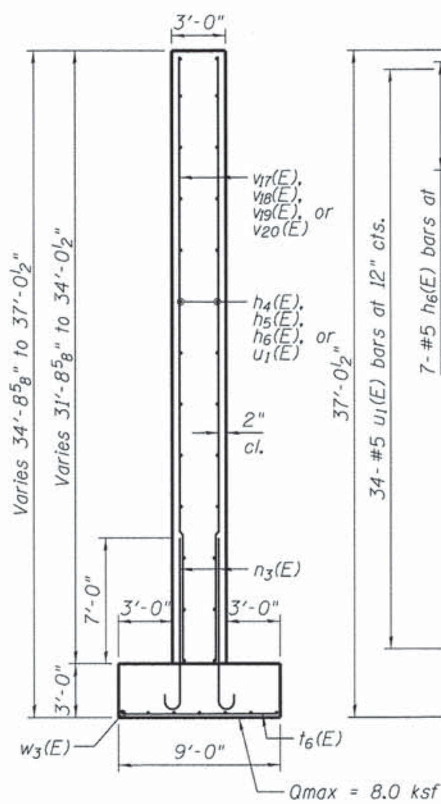


TOP PLAN

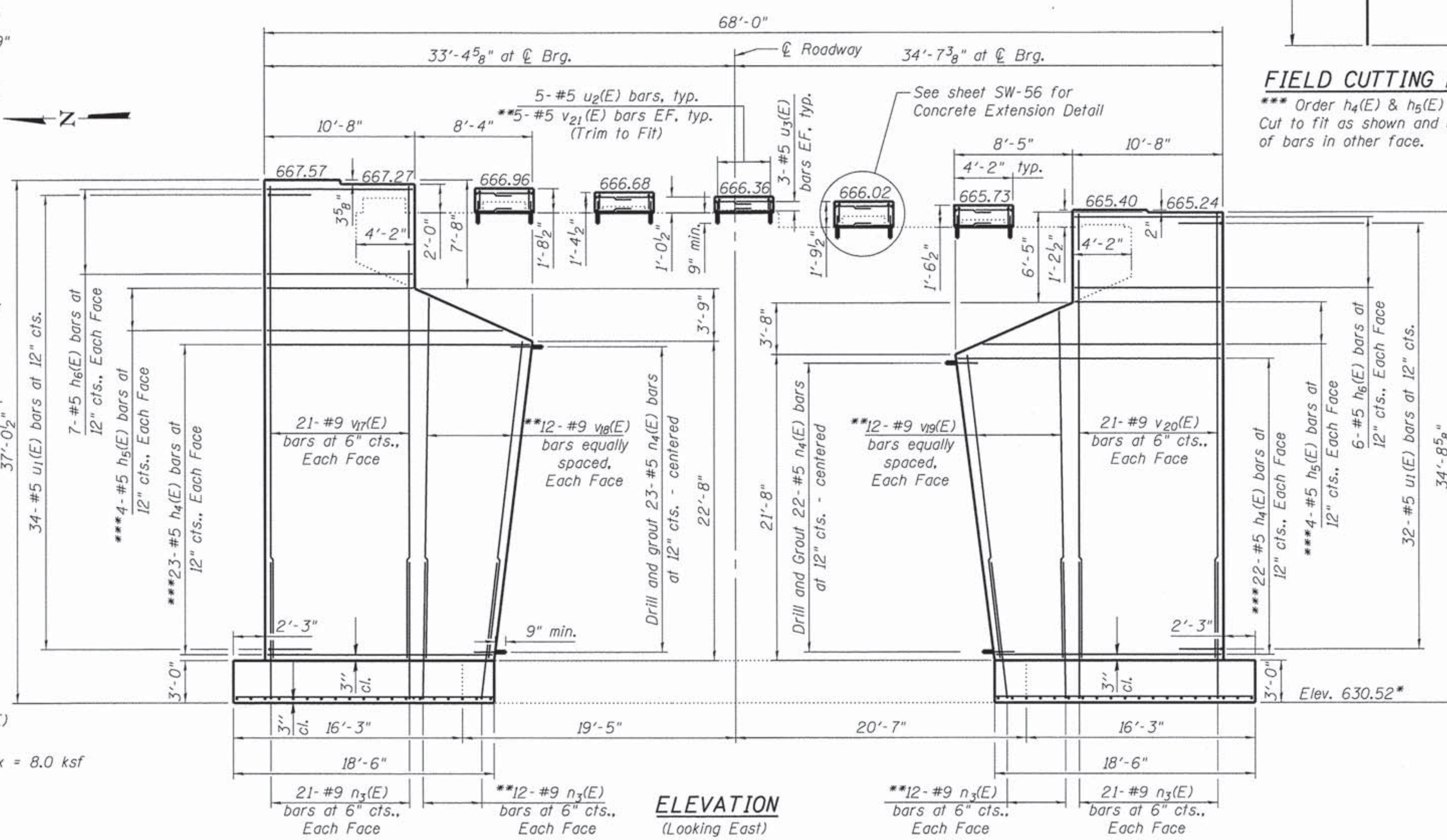


ANCHOR BOLT LOCATION

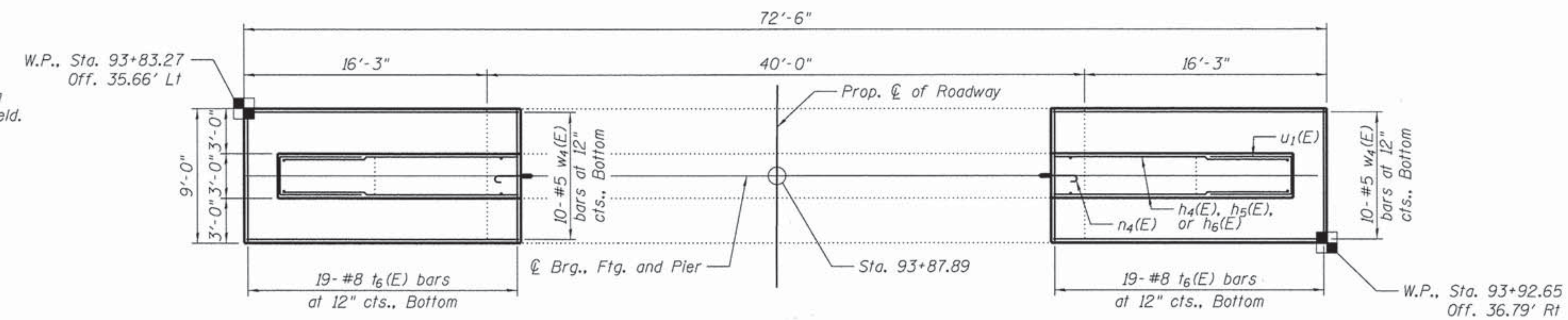
Verify with existing beams



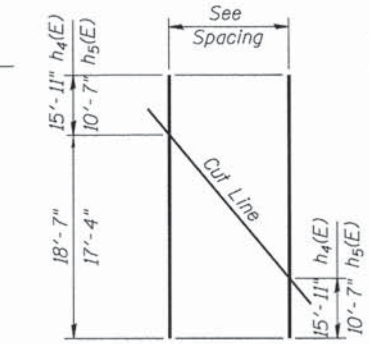
END VIEW



ELEVATION
(Looking East)

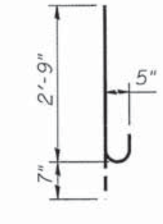


FOOTING PLAN

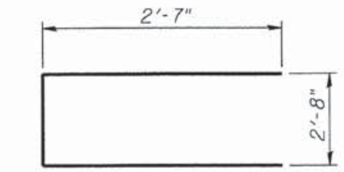


FIELD CUTTING DIAGRAM

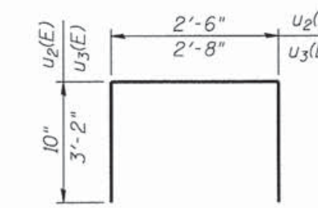
*** Order h4(E) & h5(E) bars full length. Cut to fit as shown and use remainder of bars in other face.



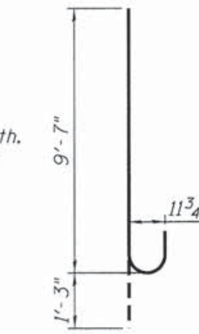
BAR n4(E)



BAR u1(E)



BAR u2(E) & u3(E)



BAR n3(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_4(E)	45	#5	34'-6"	straight
h_5(E)	8	#5	27'-11"	straight
h_6(E)	26	#5	10'-4"	straight
n_3(E)	132	#9	10'-10"	hooked
n_4(E)	45	#5	3'-4"	hooked
t_6(E)	38	#8	8'-8"	straight
u_1(E)	66	#5	7'-10"	⊓
u_2(E)	25	#5	4'-2"	⊓
u_3(E)	30	#5	9'-0"	⊓
v_{17}(E)	42	#9	33'-6"	straight
v_{18}(E)	24	#9	25'-10"	straight
v_{19}(E)	24	#9	24'-9"	straight
v_{20}(E)	42	#9	31'-5"	straight
v_{21}(E)	50	#5	2'-4"	straight
w_4(E)	20	#5	18'-2"	straight
Structure Excavation			Cu. Yd.	154.6
Rock Excavation for Structures			Cu. Yd.	18.2
Concrete Structures			Cu. Yd.	156.2
Reinforcement Bars, Epoxy Coated			Pound	22,860

* Elevations/dimensions based on Existing Design Plans, Contractor to verify in field.

** Fan and/or trim to fit.

ABBREVIATIONS

EF = Each Face

MIN BAR LAP

#5 Bar = 2'-7"
#9 Bar = 6'-10"

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 7:09:18 PM
DATE PLOTTED: 86110318-SW-Pier1.dgn
FILE NAME: pdf_DET-11FF.plt
PLOT DRIVER: standard-trans.tbl
PEN TABLE:

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HRGreen

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	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

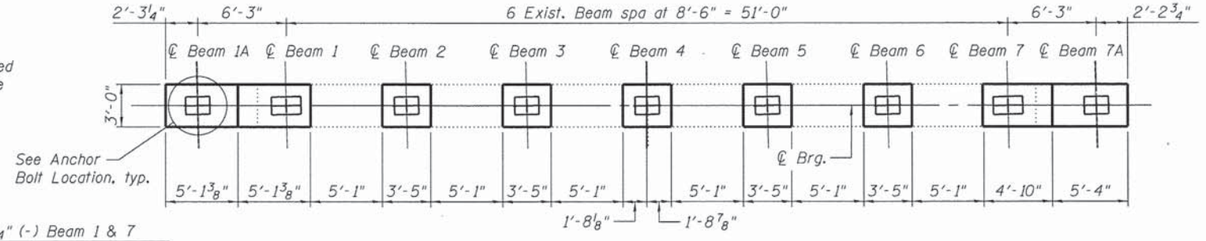
PIER 1
STRUCTURE NO. 045-3088
SHEET NO. SW-49 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	90
		CONTRACT NO. 63863		
	ILLINOIS	FED. AID PROJECT	#FEDPROJNO#	

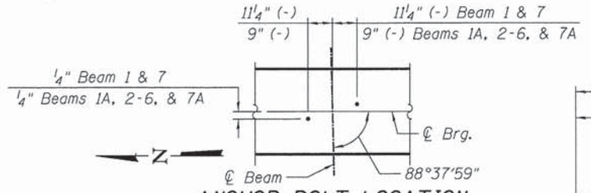
Notes:
Space reinforcement in cap to miss anchor bolts.
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

See sheet SW-41 for Concrete Removal details.

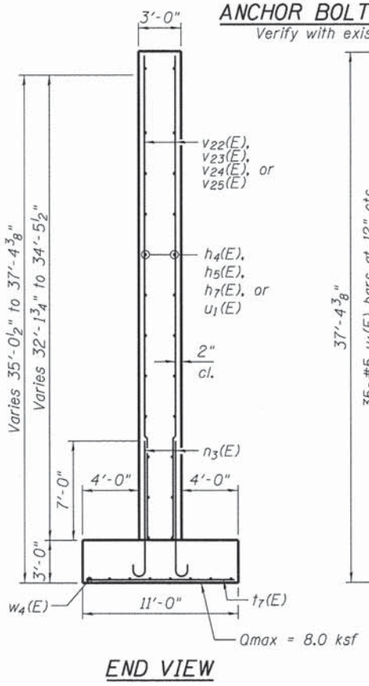
* Elevations/dimensions based on Existing Design Plans. Contractor to verify in field.



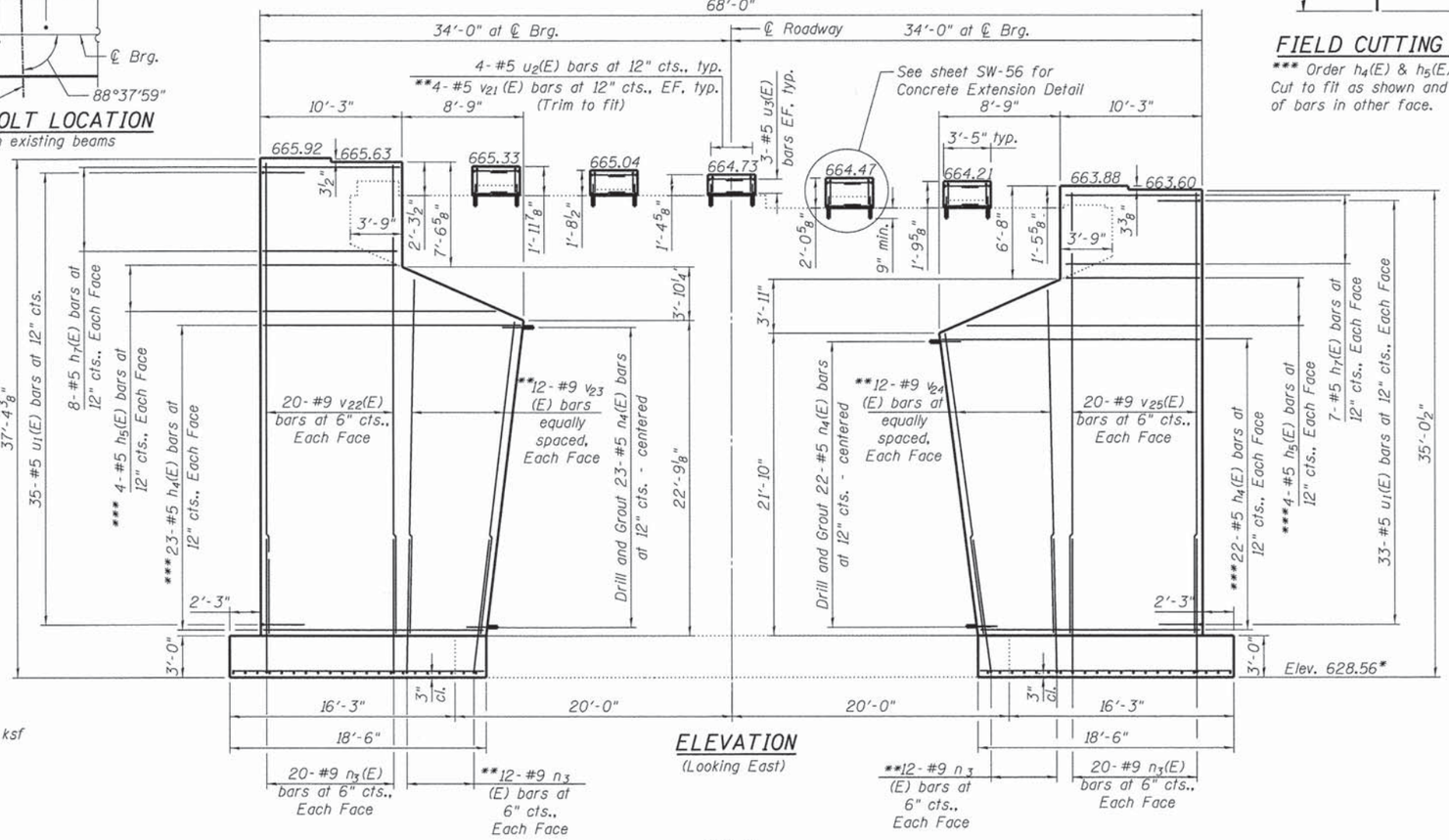
TOP PLAN



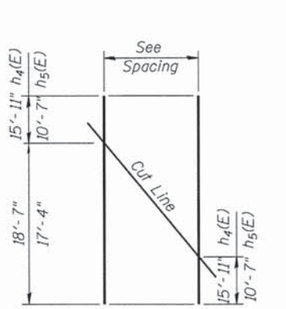
ANCHOR BOLT LOCATION
Verify with existing beams



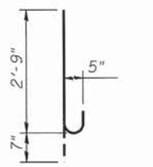
END VIEW



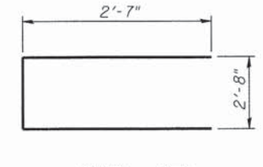
ELEVATION
(Looking East)



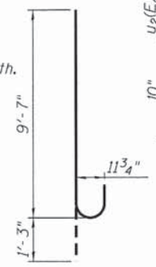
FIELD CUTTING DIAGRAM
*** Order h4(E) & h5(E) bars full length. Cut to fit as shown and use remainder of bars in other face.



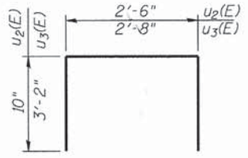
BAR n4(E)



BAR u1(E)



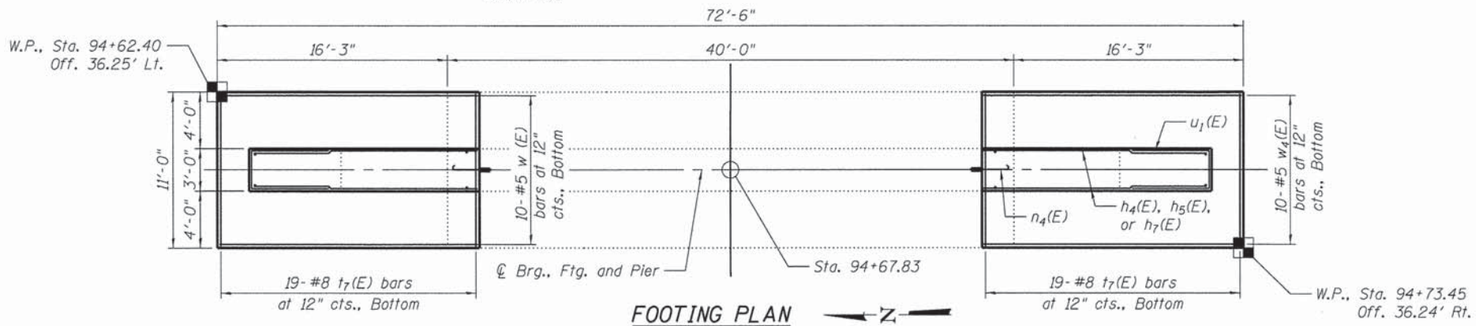
BAR n3(E)



BAR u2(E) & u3(E)

MIN. BAR LAP
#5 Bar = 2'-7"
#9 Bar = 6'-10"

** Fan and/or Trim to fit



FOOTING PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h4(E)	45	#5	34'- 6"	
h5(E)	8	#5	27'- 11"	
h7(E)	30	#5	9'- 11"	
n3 (E)	128	#9	10'- 10"	
n4 (E)	45	#5	3'- 4"	
t7 (E)	38	#8	10'- 8"	
u1 (E)	68	#5	7'- 10"	
u2 (E)	20	#5	4'- 2"	
u3 (E)	30	#5	9'- 0"	
v21 (E)	40	#5	12'- 4"	
v22 (E)	40	#9	33'- 10"	
v23 (E)	24	#9	26'- 3"	
v24 (E)	24	#9	25'- 4"	
v25 (E)	40	#9	32'- 8"	
w4	20	#5	18'- 2"	
Structure Excavation			Cu. Yd.	228.5
Rock Excavation for Structures			Cu. Yd.	20.9
Concrete Structures			Cu. Yd.	164.7
Reinforcement Bars, Epoxy Coated			Pound	22,770

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 10:9:47 PM
FILE NAME: 86110318-SW-Pier2.dgn
PLOT DRIVER: pdf.DE7-111.slt
PEN TABLE: standard-trans.tbl

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Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2
STRUCTURE NO. 045-3088
SHEET NO. SW-50 OF SW-62 SHEETS

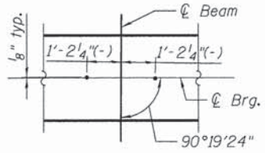
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	91
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	

Notes:
Space reinforcement in cap to miss anchor bolts. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

See sheet SW-41 for Concrete Removal details.

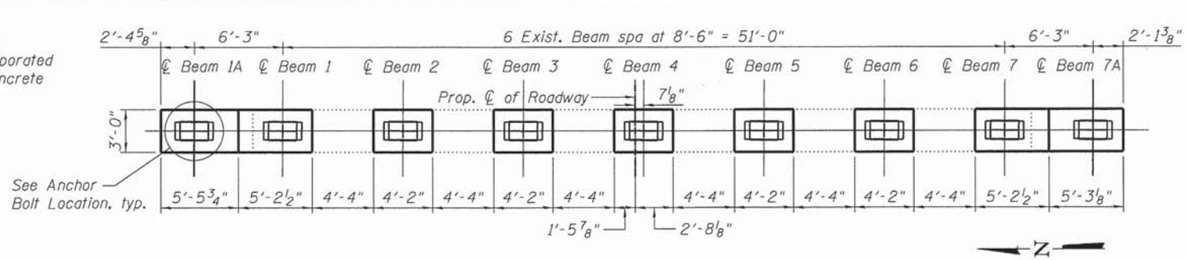
* Elevations/dimensions based on Existing Design Plans. Contractor to verify in field.

** Fan and/or trim to fit

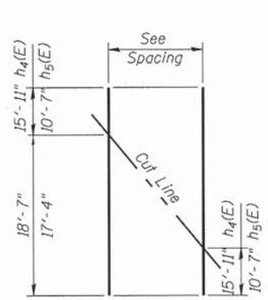


ANCHOR BOLT LOCATION

Verify with existing beams

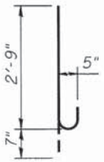


TOP PLAN

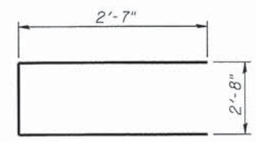


FIELD CUTTING DIAGRAM

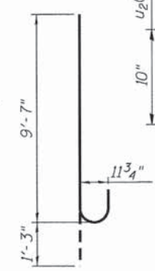
*** Order $h_4(E)$ & $h_5(E)$ bars full length. Cut to fit as shown and use remainder of bars in other face.



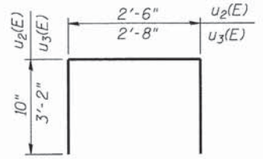
BAR $u_4(E)$



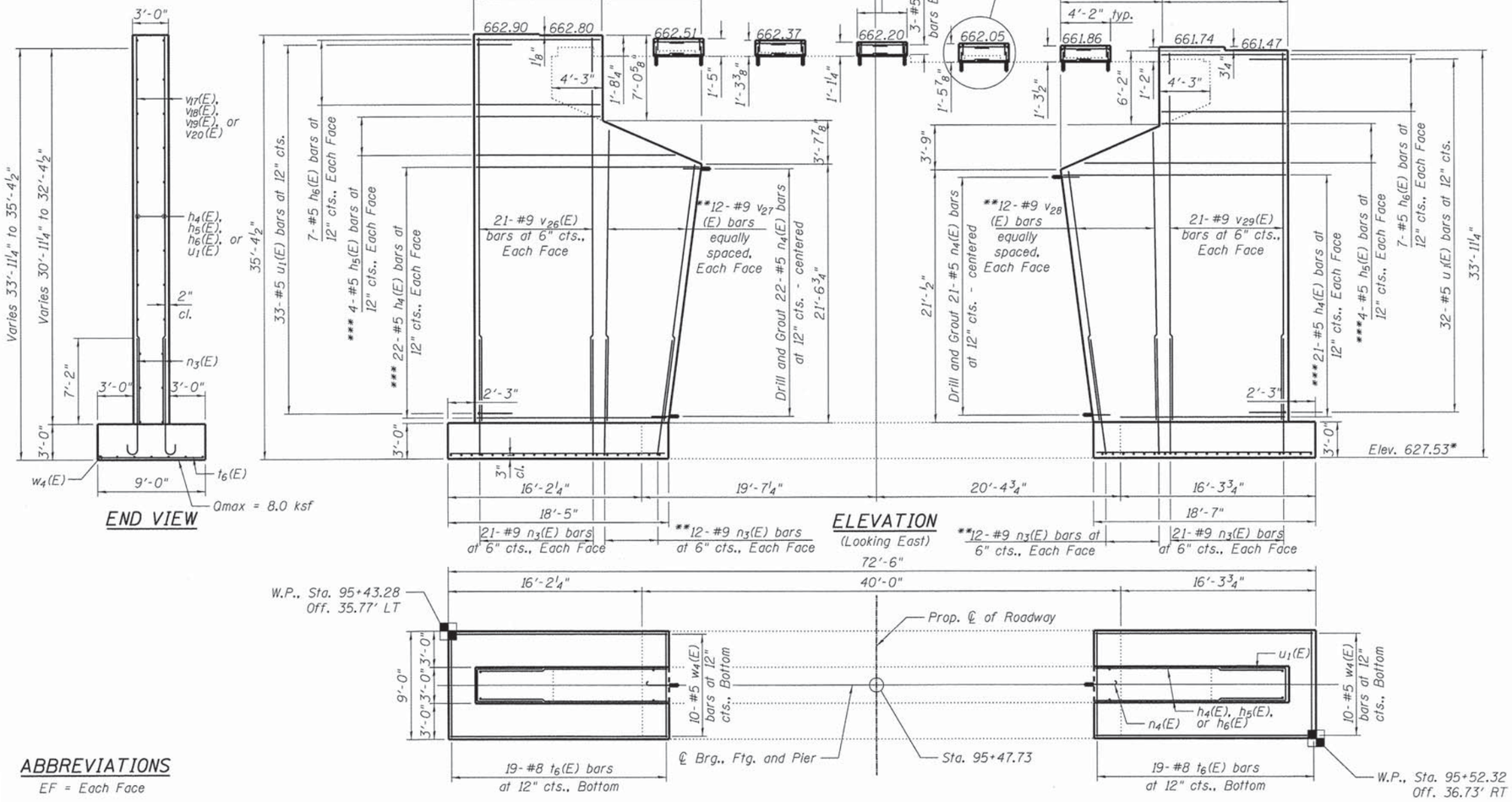
BAR $u_1(E)$



BAR $n_3(E)$



BAR $u_2(E)$ & $u_3(E)$



END VIEW

ELEVATION

(Looking East)

FOOTING PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_4(E)$	43	#5	34'- 6"	——
$h_5(E)$	8	#5	27'- 11"	——
$h_6(E)$	28	#5	10'- 4"	——
$n_3(E)$	132	#9	10'- 10"	⊂—⊃
$n_4(E)$	43	#5	3'- 4"	⊂—⊃
$t_6(E)$	38	#8	8'- 8"	——
$u_1(E)$	65	#5	7'- 10"	⊓
$u_2(E)$	25	#5	4'- 2"	⊓⊓
$u_3(E)$	30	#5	9'- 0"	⊓
$v_{21}(E)$	50	#5	2'- 4"	——
$v_{26}(E)$	42	#9	31'- 11"	——
$v_{27}(E)$	24	#9	24'- 8"	——
$v_{28}(E)$	24	#9	24'- 2"	——
$v_{29}(E)$	42	#9	29'- 7"	——
$w_4(E)$	20	#5	18'- 2"	——
Structure Excavation			Cu. Yd.	138.6
Rock Excavation for Structures			Cu. Yd.	18.2
Concrete Structures			Cu. Yd.	151.5
Reinforcement Bars, Epoxy Coated			Pound	22,170

ABBREVIATIONS

EF = Each Face

MIN BAR LAP

#5 Bar = 2'-7"
#9 Bar = 6'-10"

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 12:09 PM
FILE NAME: 86110318-SW-Pier3.dgn
PLOT DRIVER: pdf_DEI-11ft.pltt
PEN TABLE: standard-trans.tbl

HRGreen
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

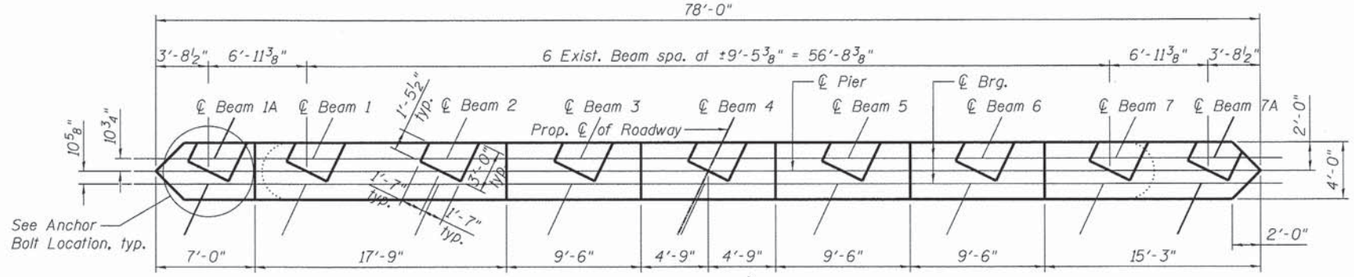
PIER 3
STRUCTURE NO. 045-3088
SHEET NO. SW-51 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	92
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT		$FEDPROJNO$

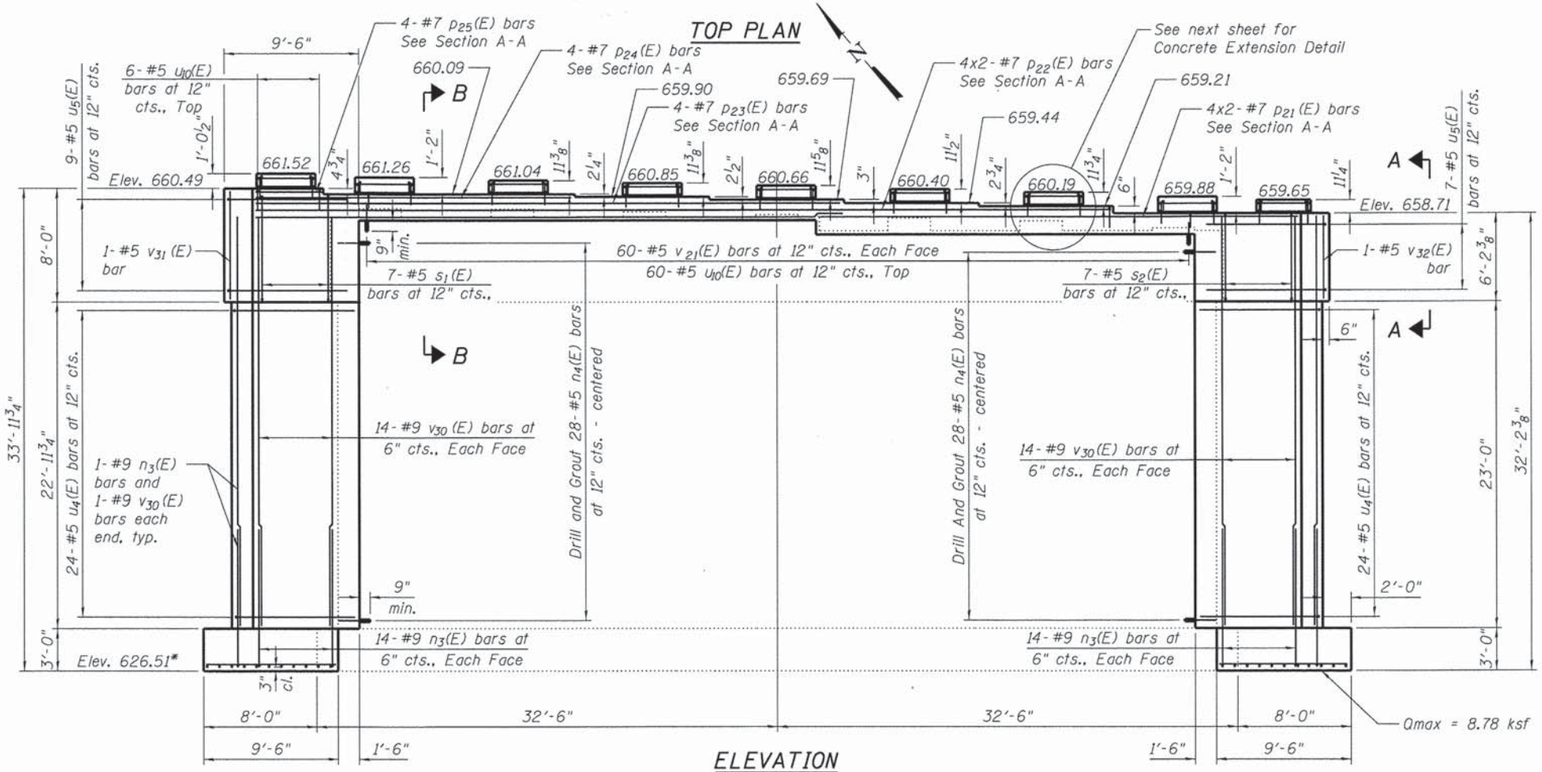
Notes:
Space reinforcement in cap to miss anchor bolts. Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

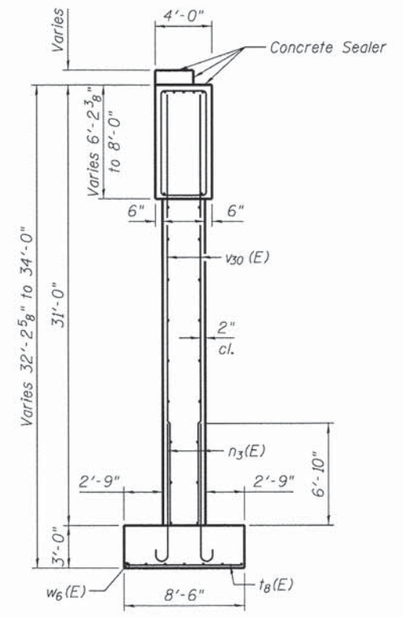
See sheet SW-42 for Concrete Removal details.

* Elevations/dimensions based on Existing Design Plans. Contractor to verify in field.

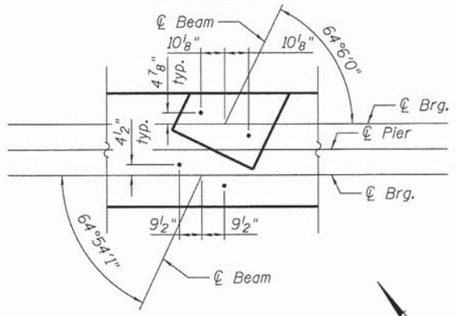


TOP PLAN

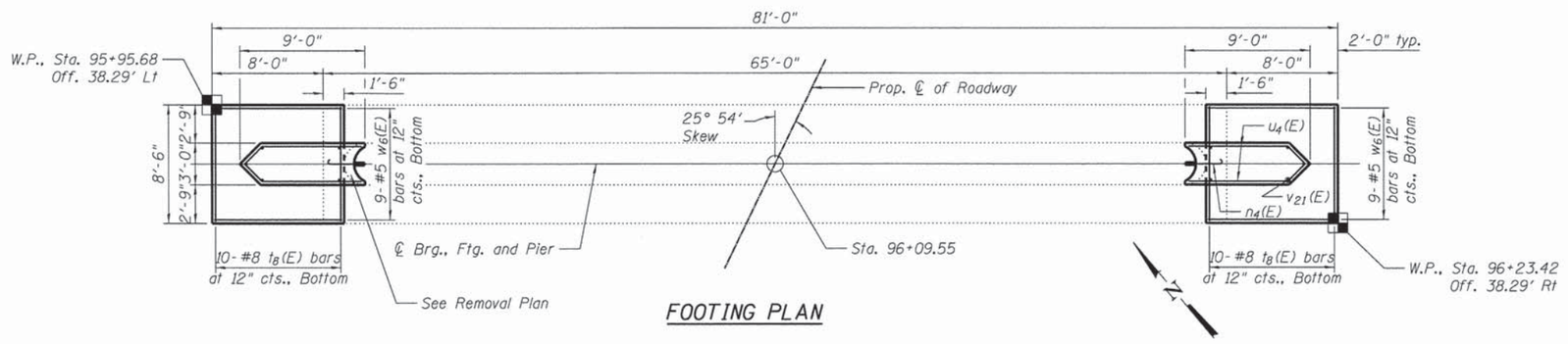




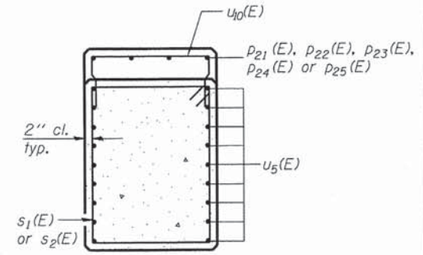
END VIEW



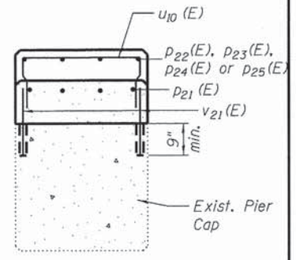
ANCHOR BOLT LOCATION
Verify with existing beams



FOOTING PLAN



SECTION A-A



SECTION B-B

MIN BAR LAP

#5	Bar = 2'-7"
#6	Bar = 3'-1"
#7	Bar = 4'-2"
#9	Bar = 6'-10"

COMPANY NAME: HRGreen.com
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 7:10:49 PM
FILE NAME: 8610318-SW-Pier-4.dgn
PLOT DRIVER: pdf_DET-TYP.pltt
PEN TABLE: standard-trans.tbl

HRGreen
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 4
STRUCTURE NO. 045-3088
SHEET NO. SW-52 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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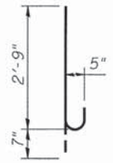
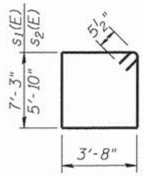
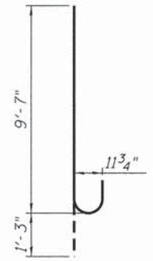
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	



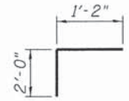
BAR $n_4(E)$



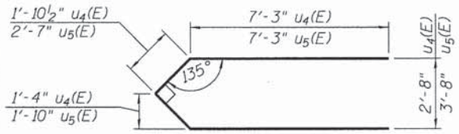
BARS $s_1(E)$ & $s_2(E)$



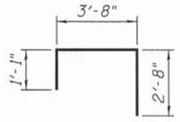
BAR $n_3(E)$



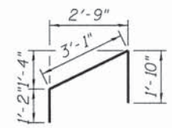
BAR $v_{33}(E)$



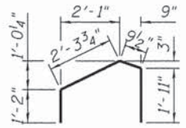
BARS $u_4(E)$ & $u_5(E)$



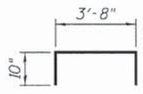
BAR $u_6(E)$



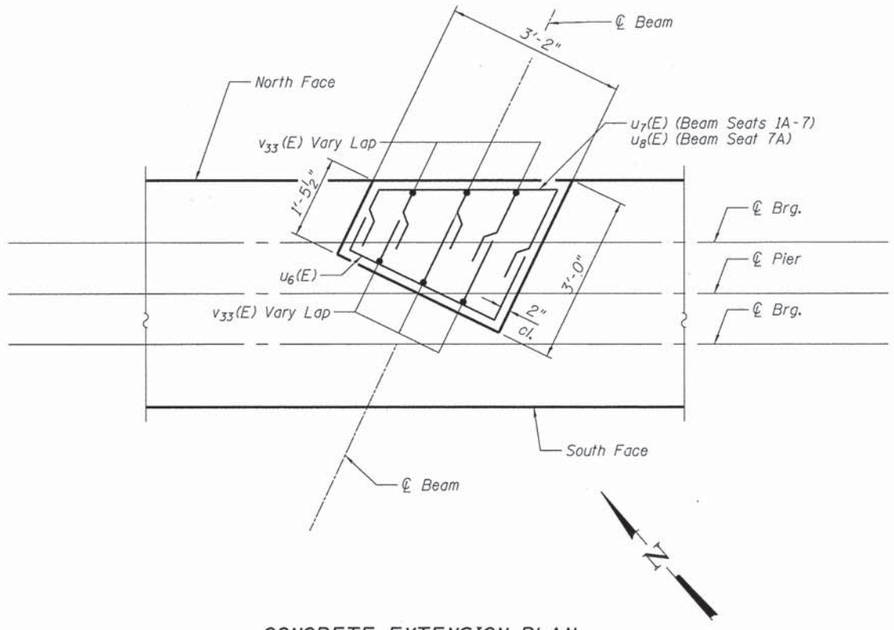
BAR $u_7(E)$



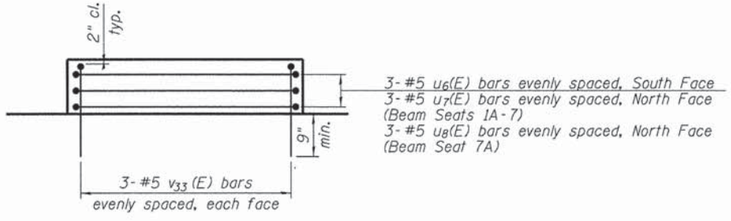
BAR $u_8(E)$



BAR $u_{10}(E)$



CONCRETE EXTENSION PLAN



CONCRETE EXTENSION ELEVATION

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n_3 (E)	58	#9	10'- 10"	
n_4 (E)	56	#5	3'- 4"	
pe_1(E)	8	#7	39'- 2"	
pe_2(E)	8	#7	31'- 6"	
pe_3(E)	4	#7	41'- 0"	
pe_4(E)	4	#7	22'- 5"	
pe_5(E)	4	#7	4'- 8"	
t_8 (E)	20	#8	8'- 2"	
u_4 (E)	48	#5	18'- 3"	
u_5 (E)	16	#5	19'- 8"	
u_6 (E)	27	#5	6'- 6"	
u_7 (E)	24	#5	6'- 1"	
u_8 (E)	3	#5	6'- 3"	
u_{10} (E)	66	#5	5'- 4"	
s_1 (E)	7	#5	22'- 9"	
s_2 (E)	7	#5	19'- 11"	
v_{21} (E)	120	#5	1'- 7"	
v_{30} (E)	58	#9	28'- 10"	
v_{31} (E)	1	#5	7'- 8"	
v_{32} (E)	1	#5	5'- 10"	
v_{33} (E)	54	#5	3'- 2"	
w_6 (E)	18	#5	9'- 2"	
Concrete Structures			Cu. Yd.	96.3
Reinforcement Bars, Epoxy Coated			Pound	12,990
Concrete Sealer			Sq. Ft.	381

See Cofferdam Plan for Excavation quantities

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 7:11:16 PM
FILE NAME: 86110318-SW-Pier4A.dgn
PLOT DRIVER: pdf_DET-111.pdf
PEN TABLE: standard-trans.tbl

HRGreen
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

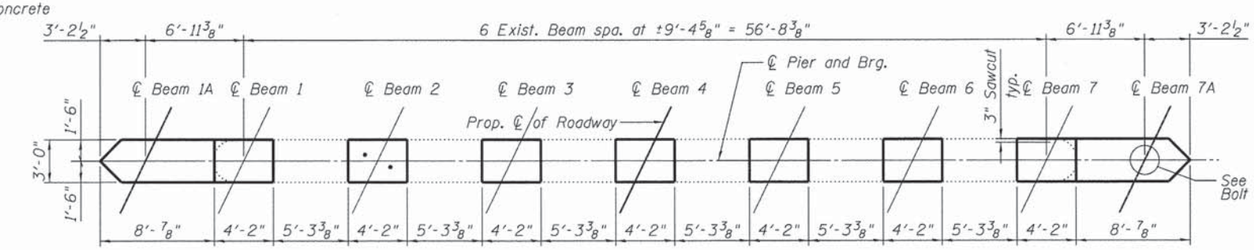
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 4
STRUCTURE NO. 045-3088
SHEET NO. SW-53 OF SW-62 SHEETS

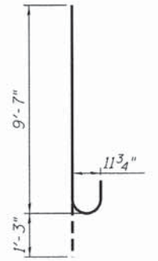
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	94
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		

Notes:
Space reinforcement in cap to miss anchor bolts.
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

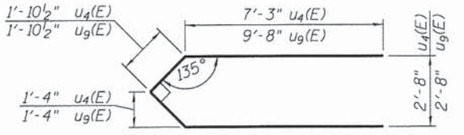
See sheet SW-42 for Concrete Removal details.



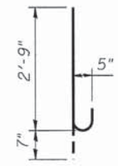
TOP PLAN



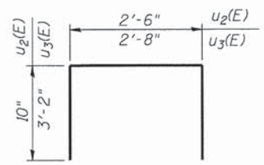
BAR n3(E)



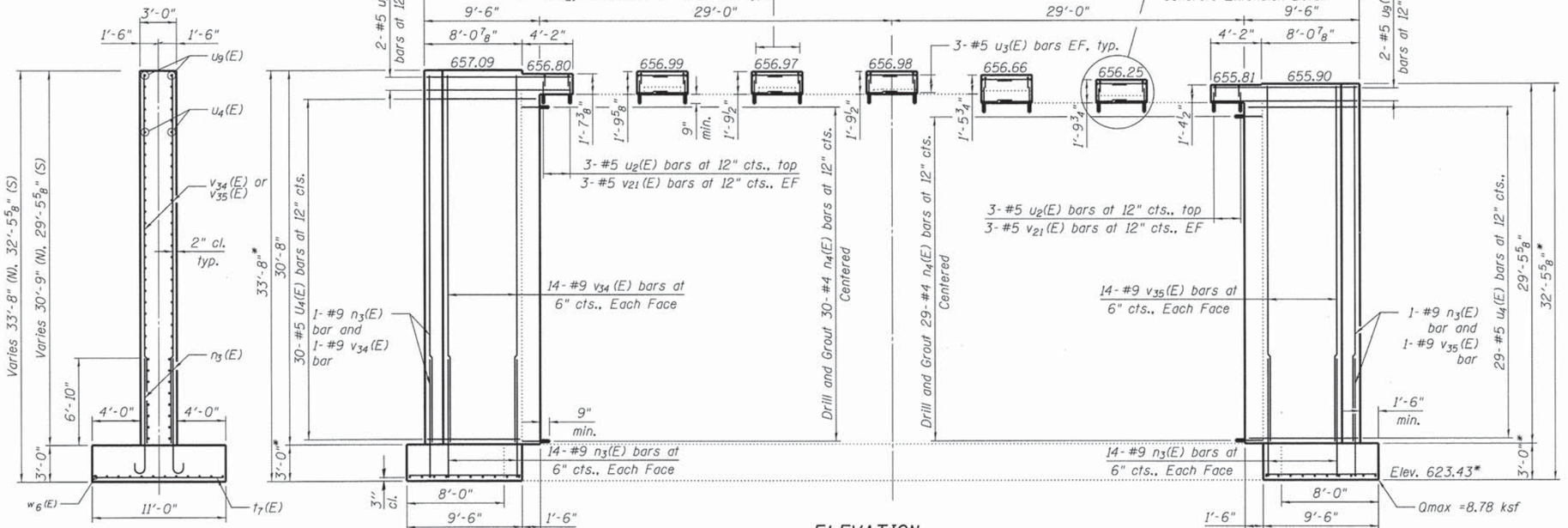
BARS u4(E) & u9(E)



BAR n4(E)



BAR u2(E) & u3(E)



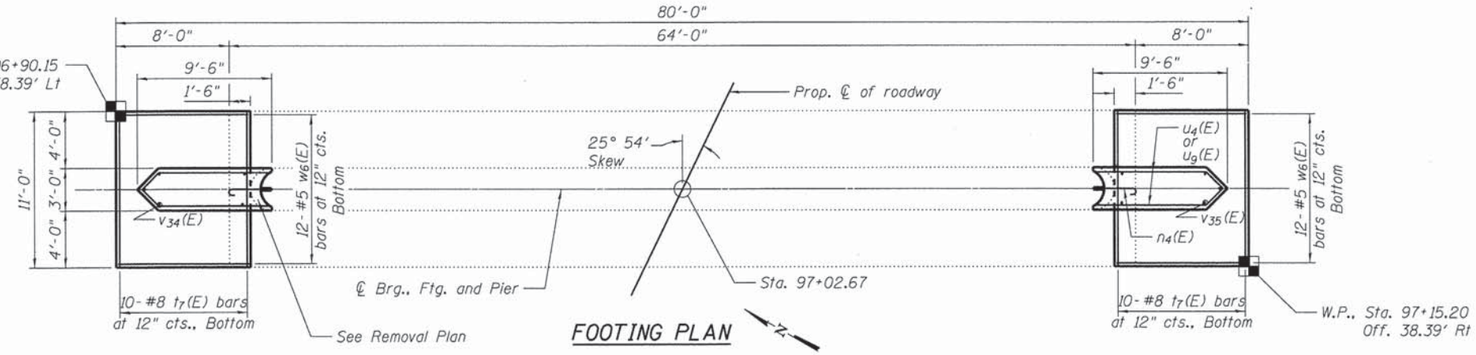
END VIEW

ELEVATION
(Looking East)

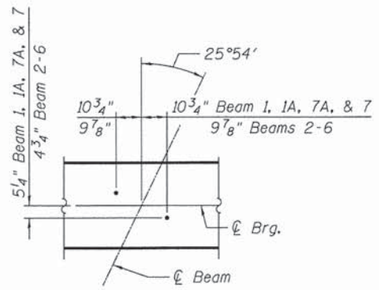
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
n3 (E)	58	#9	10'- 10"	
n4 (E)	59	#5	3'- 4"	
t7 (E)	20	#8	10'- 8"	
u2 (E)	31	#5	4'- 2"	
u3 (E)	30	#5	9'- 0"	
u4 (E)	59	#5	18'- 3"	
u9 (E)	4	#5	23'- 1"	
v21 (E)	62	#5	2'- 4"	
v34 (E)	29	#9	30'- 5"	
v35 (E)	29	#9	29'- 2"	
w6 (E)	24	#5	9'- 2"	
Concrete Structures			Cu. Yd.	86.7
Reinforcement Bars, Epoxy Coated			Pound	10,810

See Cofferdam Plan for Excavation quantities



FOOTING PLAN



ANCHOR BOLT LOCATION
Verify with existing beams

* Elevations/dimensions based on Existing Design Plans. Contractor to verify in field.

** Fan and/or trim to fit.

MIN. BAR LAP
#9 Bar 6'-10"

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 11:49 PM
DATE PLOTTED: 8610318-SW-Pier5.dgn
FILE NAME: par.DET-111.par
PLOT DRIVER: standard-trans.tbl
PEN TABLE:

HRGreen
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 5
STRUCTURE NO. 045-3088
SHEET NO. SW-54 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	95
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	⊕FEDPROJNO⊕		

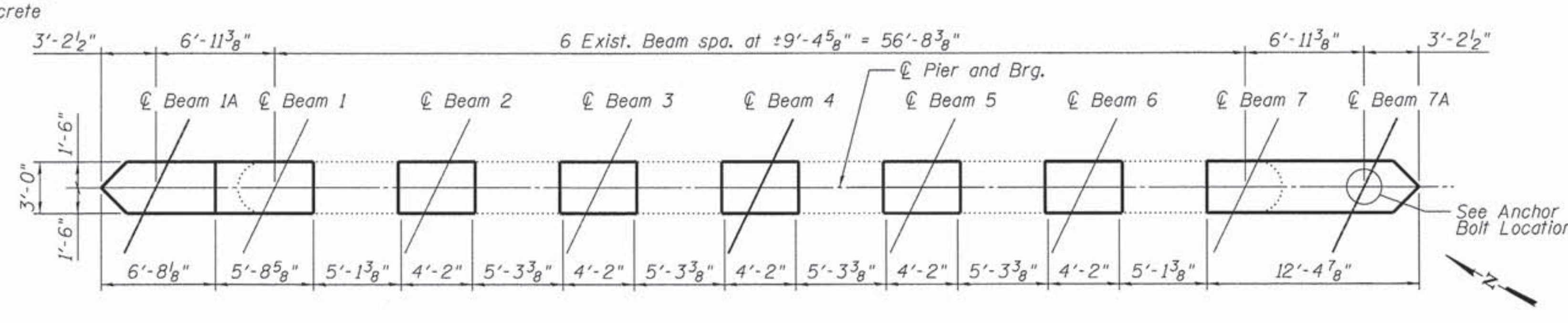
Notes:

Space reinforcement in cap to miss anchor bolts.
Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

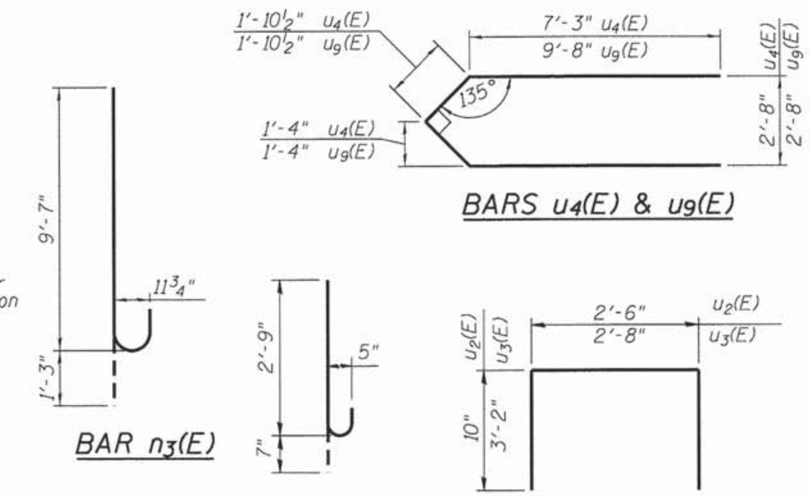
See sheet SW-42 for Concrete Removal details.

* Elevations/dimensions based on Existing Design Plans. Contractor to verify in field.

** Trim to fit



TOP PLAN

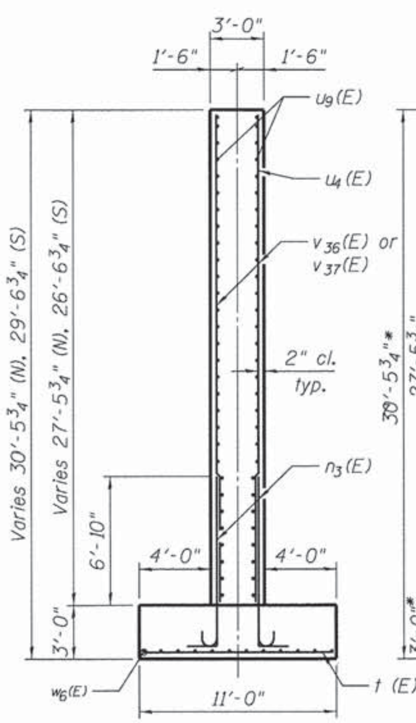


BARS u4(E) & u9(E)

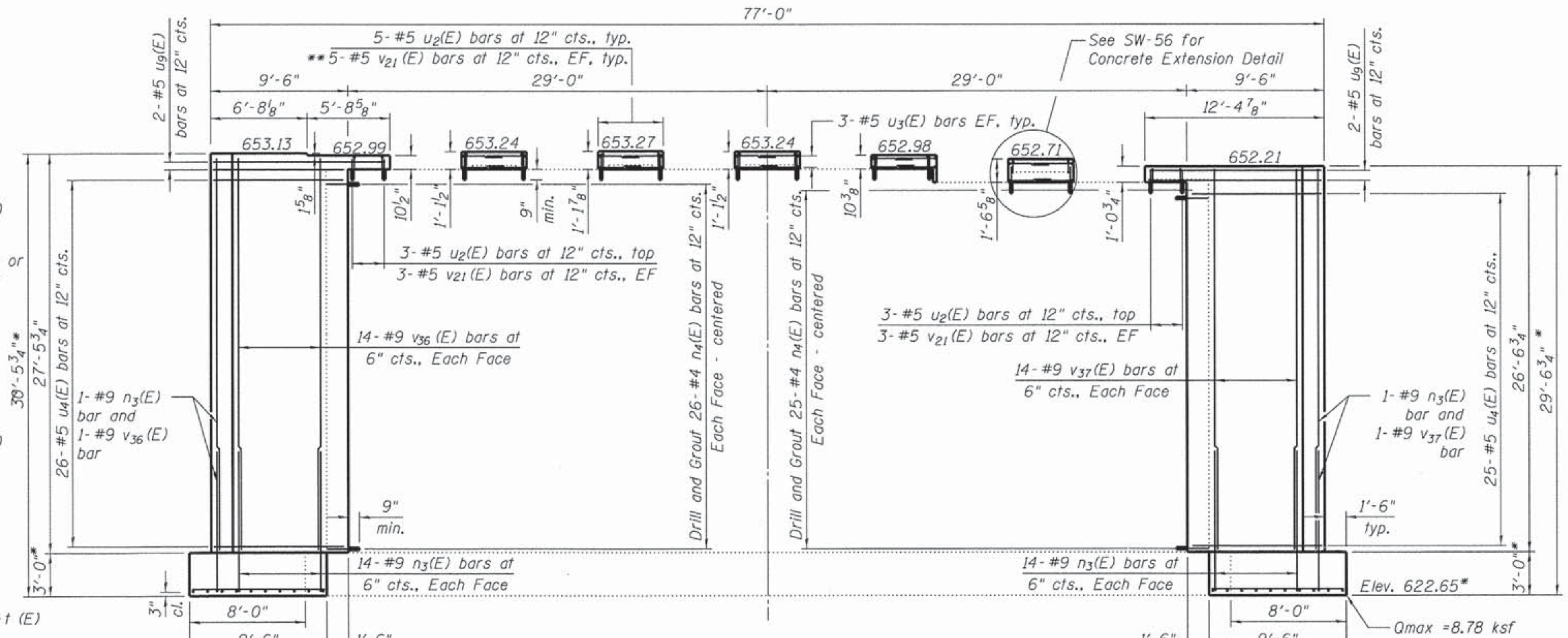
BAR n3(E)

BAR n4(E)

BAR u2(E) & u3(E)



END VIEW



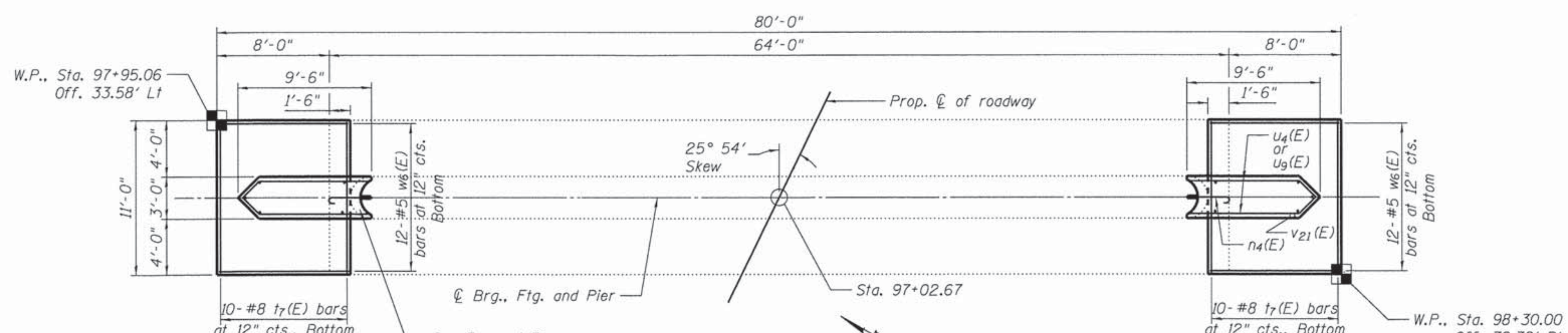
ELEVATION

Bar	No.	Size	Length	Shape
n3 (E)	58	#9	10'- 10"	
n4 (E)	51	#5	3'- 4"	
t7 (E)	20	#8	10'- 8"	
u2 (E)	31	#5	4'- 2"	
u3 (E)	30	#5	9'- 0"	
u4 (E)	51	#5	18'- 3"	
u9 (E)	4	#5	23'- 1"	
v21 (E)	62	#5	2'- 4"	
v36 (E)	29	#9	27'- 0"	
v37 (E)	29	#9	26'- 3"	
w6 (E)	24	#5	9'- 2"	
Concrete Structures			Cu. Yd.	79.1
Reinforcement Bars, Epoxy Coated			Pound	10,000

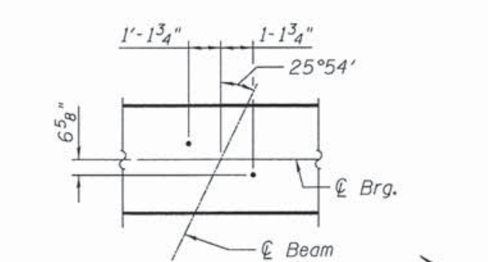
BILL OF MATERIAL

See Cofferdam Plan for Excavation Quantities

MIN. BAR LAP
#9 Bar 6'-10"



FOOTING PLAN



ANCHOR BOLT LOCATION

Verify with existing beams

COMPANY NAME: Kevin M. Artz
PROJECT CONTACT: City of Aurora
CLIENT: 8/22/2013 7:12:21 PM
DATE PLOTTED: 8610318-SW-Pier6.dgn
FILE NAME: pdf_DET-TIFF.plt
PLOT DRIVER: standard-trans.tbl
PEN TABLE:

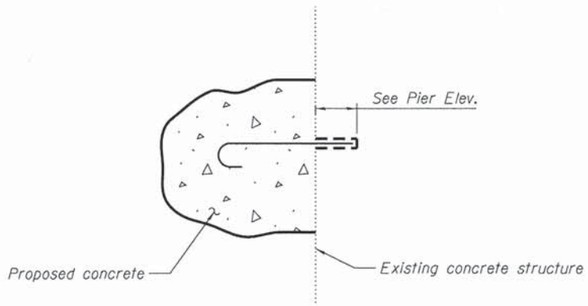
HRGreen.com Illinois Professional Design Firm # 184-001322	USER NAME = whood	DESIGNED - KMA	REVISED -
		CHECKED - RGD	REVISED -
	PLOT SCALE =	DRAWN - WJH	REVISED -
	PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 6
STRUCTURE NO. 045-3088

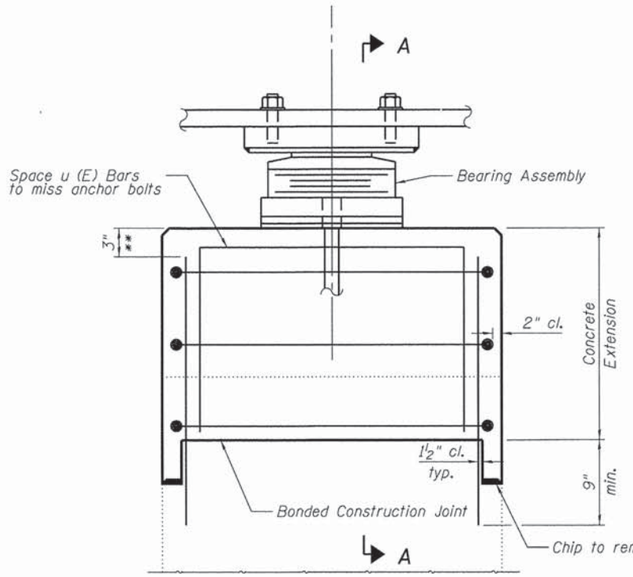
SHEET NO. SW-55 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	96
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		



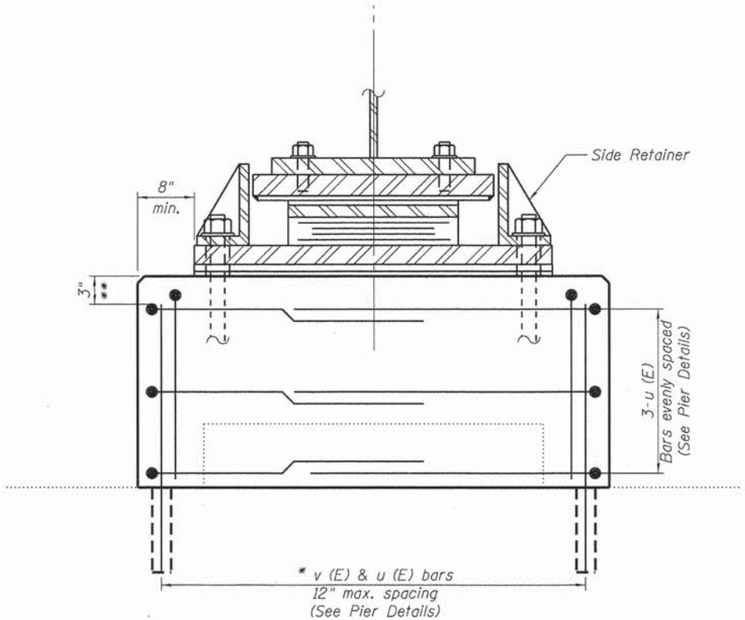
DRILL & GROUT DETAIL

Notes:
Drill and grout into existing concrete in conformance with Article 509.06 and furnish adhesive in conformance with Article 1027.01. The cost of drilling, cleaning and furnishing the adhesive shall be included under the contract unit price for "Reinforcement Bars" and will not be paid for separately. Follow the manufacturer's instructions except that the minimum embedment shall not be less than what is shown in the plan details.



** Trim dowel to 3" below top of concrete

PIER CONCRETE BRIDGE SEAT EXTENSION ELEVATION



SECTION A-A

Notes:
See plan details for bar quantities.

* Increase embedment or trim to fit

COMPANY NAME: Kevin M. Arft
PROJECT CONTACT: City of Aurora
CLIENT:
DATE PLOTTED: 8/22/2013 7:12:58 PM
FILE NAME: 8611038-SW-Pier Details.dgn
PLOT DRIVER: pdf.DET-TYP.pltr
PEN TABLE: standard-trans.tbl

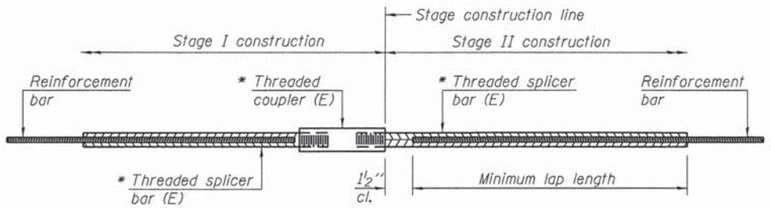
HRGreen
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER _DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-56 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	97
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		



STANDARD BAR SPLICER ASSEMBLY

Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

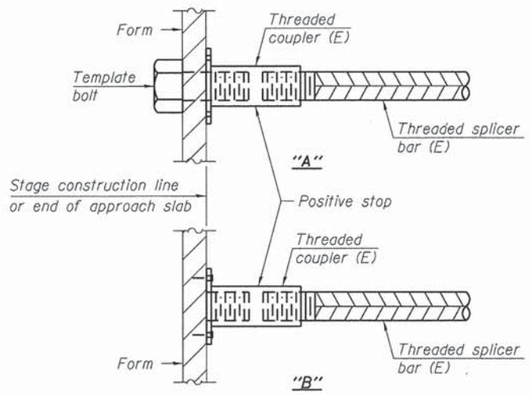
Table 1: Black bar, 0.8 Class C
Table 2: Black bar, Top bar lap, 0.8 Class C
Table 3: Epoxy bar, 0.8 Class C
Table 4: Epoxy bar, Top bar lap, 0.8 Class C
Table 5: Epoxy bar, Class C
Table 6: Epoxy bar, Top bar top, Class C

Threaded splicer bar length = min. lap length + 1½" + thread length

* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

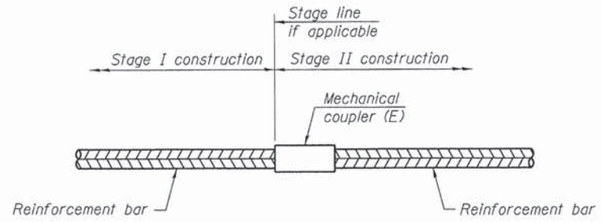
	Location	Bar size	No. assemblies required	Table for minimum lap length
**	Concrete Bridge Railing	#4	306	5

** Included for information only.
Cost included in Concrete Bridge Railing



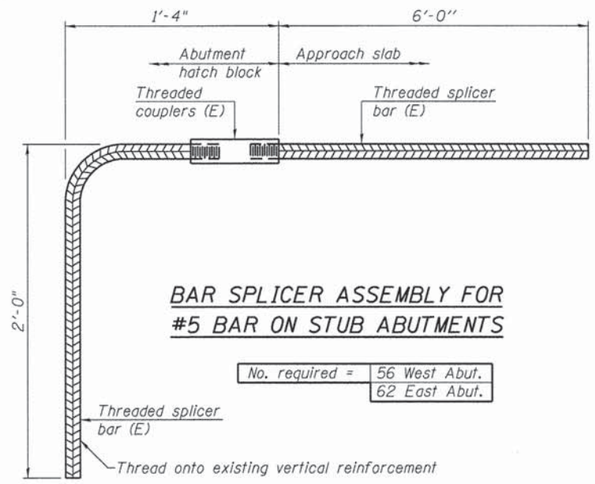
INSTALLATION AND SETTING METHODS

"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.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

COMPANY NAME: HRGreen
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 11:32:8 PM
FILE NAME: 8611018-SW-Bar Splicer.dgn
PLOT DRIVER: pdf.DET-111.pltr
PEN TABLES: standard-trans.tbl

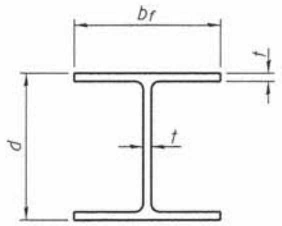
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -	
	CHECKED - RGD	REVISED -	
PLOT SCALE =	DRAWN - WJH	REVISED -	
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

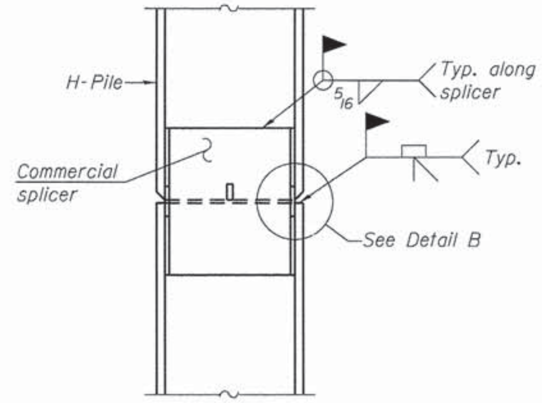
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-57 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	98
		CONTRACT NO. 63863		
	ILLINOIS FED. AID PROJECT	$FEDPROJNO$		

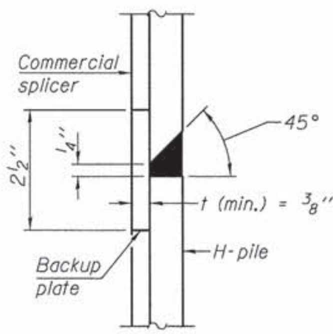


STEEL PILE TABLE

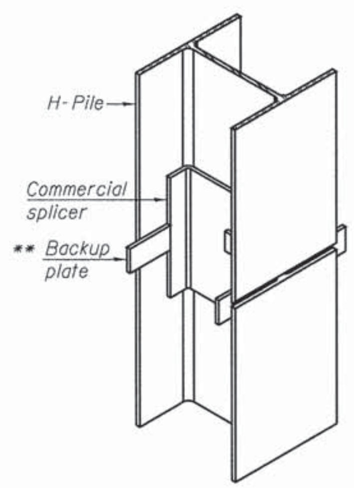
Designation	Depth d	Flange width b_f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION

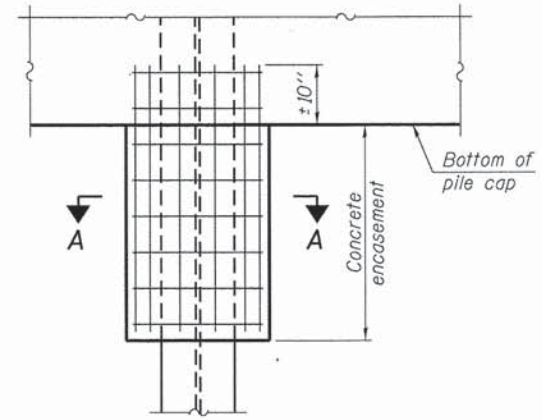


DETAIL "B"



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



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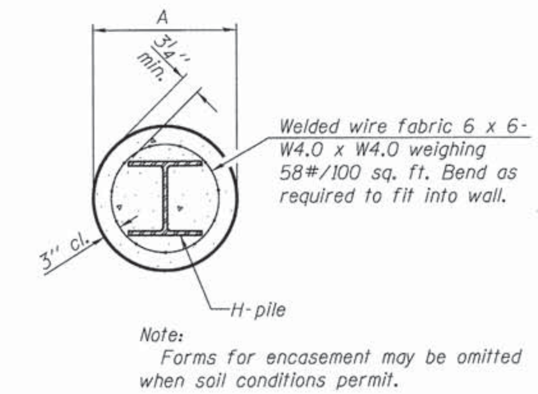
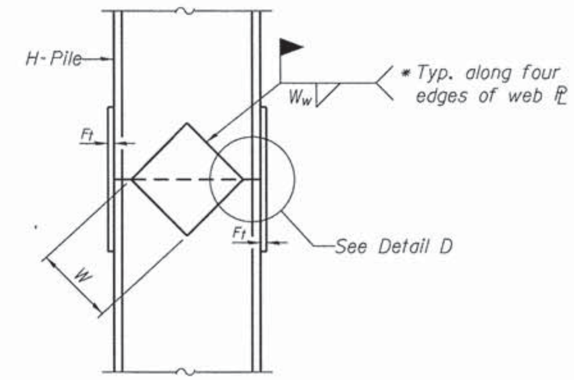


Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

PILE ENCASEMENT



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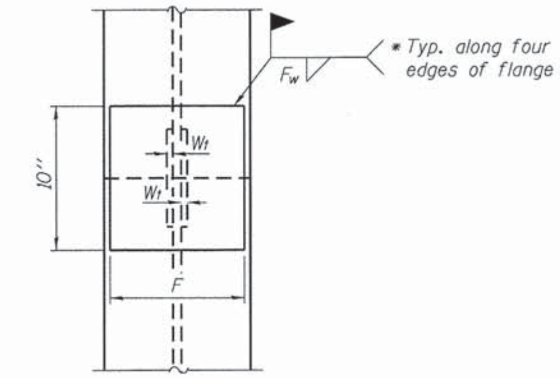
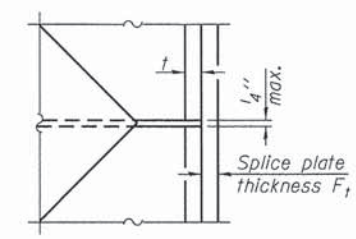


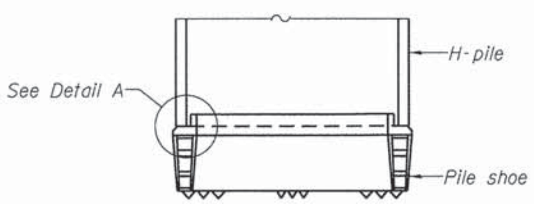
END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

WELDED PLATE FIELD SPLICE



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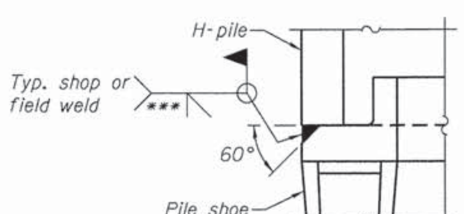
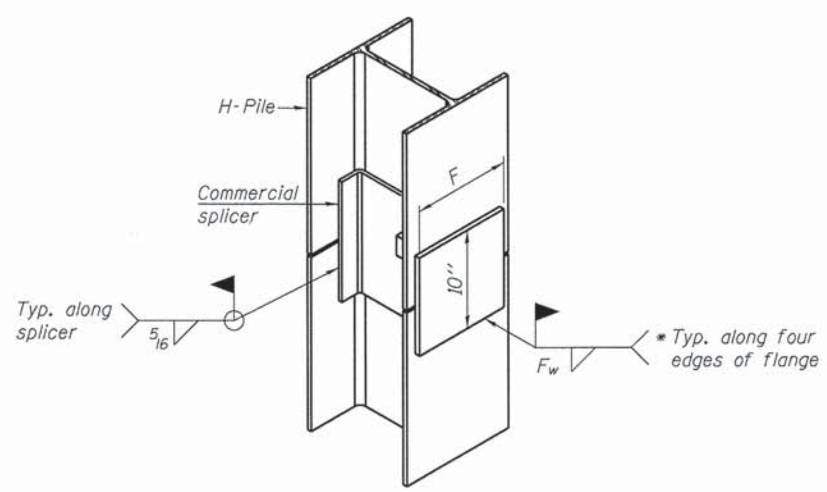


DETAIL A

H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

* Interrupt welds 1/4" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.

COMPANY NAME:
PROJECT CONTACT: Kevin M. Arft
CLIENT: City of Aurora
DATE PLOTTED: 8/22/2013 7:14:21 PM
FILE NAME: 86110318-SW-Piles.dgn
PLOT DRIVER: pdf_DET-11f.plt
PEN TABLE: standard-trans.tbl

HRGreen
HRGreen.com
Illinois Professional Design Firm # 184-001322

USER NAME = whood	DESIGNED - KMA	REVISED -
	CHECKED - RGD	REVISED -
PLOT SCALE =	DRAWN - WJH	REVISED -
PLOT DATE = 8/22/2013	CHECKED - 8/22/13	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 045-3088
SHEET NO. SW-58 OF SW-62 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1503	09-00286-00-BR	KANE	181	99
		CONTRACT NO. 63863		
		ILLINOIS FED. AID PROJECT	$FEDPROJNO$	

LOG OF BORING NO. B-1

MSET PROJECT NO.: 12316	Page 1 of 1
PROJECT: Indian Trail Road over the Fox River	SITE LOCATION: Aurora, Illinois
BORING LOCATION: Pier 2 - North	CLIENT: HR GReen, Inc.

DEPTH (feet)	Material Description	Elevation	SAMPLE TYPE/ INTERVAL	SAMPLE NO.	SAMPLE N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0	Dark Brown Silty CLAY, Topsoil	640.4	AU			14			
	Brown, Dark Brown, & Black Sandy Clay LOAM, A-6, mixed FILL	639.4	SS	1	17	17			
4			SS	2	4	17			
	Grey to Brown & grey Silty Clay LOAM, A- 6, stiff	634.9	SS	3	7	24	93	1.71	
8									
	Light Brown, Weathered, Dolomitic Limestone Bedrock	631.9	SS	4	76	6			
			SS	5	100/ 4"	7			
12									
	RQD=0% from 11.5' to 21.5'		RC						
16									
			RC						
20									
	RQD=57% from 21.5' to 26.5'								
24			RC						
	End of Boring at 26.5 Feet	613.9							

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING: 9.0'
IMMEDIATELY AFTER DRILLING:
DELAYED READING AFTER

MSET

BORING STARTED: 7/23/12
BORING COMPLETED: 7/23/12
LOGGED BY: MP
BORING METHOD: HSA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875

LOG OF BORING NO. B-2

MSET PROJECT NO.: 12316	Page 1 of 1
PROJECT: Indian Trail Road over the Fox River	SITE LOCATION: Aurora, Illinois
BORING LOCATION: P3-R (South)	CLIENT: HR GReen, Inc.

DEPTH (feet)	Material Description	Elevation	SAMPLE TYPE/ INTERVAL	SAMPLE NO.	SAMPLE N-VALUE Blows per ft.	TESTS Wc%	TESTS Dry Unit Weight, pcf	TESTS Unconfined Compressive Strength, tsf	REMARKS
0	Dark Brown Silty CLAY Topsoil	635.6	AU			13			
	Brown SAND & GRAVEL, A-1-a with some weathered limestone	634.6	SS	1	10	8			
4	Light Brown, weathered, Dolomitc Limestone with trace clay	632.1	SS	2	65/9"	12			
			RC						
8	RQD=13% from 5' to 10'								
12	RQD=10% from 10' to 15'		RC						
16	RQD=38% from 15' to 20'		RC						
20	End of Boring at 20.0 Feet	615.6							

WATER LEVEL OBSERVATIONS, ft.
DURING DRILLING:
IMMEDIATELY AFTER DRILLING:
DELAYED READING AFTER

MSET

BORING STARTED: 7/26/12
BORING COMPLETED: 7/26/12
LOGGED BY: MHP
BORING METHOD: CFA

Midland Standard Engineering & Testing, Inc. 558 Plate Drive Unit 6, East Dundee, IL 60118 (847) 844-1895 f(847) 844-3875