ST. CHARLES SINCE 1834	**AGENDA ITEM EXECUTIVE SUMMARY**	
	Title:	Recommendation to Approve Construction Service Agreement for Red Gate Road / St. Charles North High School Intersection Improvements.
	Presenter:	Mark Koenen

Please check appropriate box:

	Government Operations	X	Government Services 3-25-13
	Planning & Development		City Council
	Public Hearing		

Estimated Cost:	$500,000	Budgeted:	YES		NO	X

If NO, please explain how item will be funded:

Executive Summary:

Based on securing an approved agreement between the City and School District 303 for the proposed intersection and extended eastbound right-turn lane improvements staff received an estimate from McHugh Construction for the construction activities.

As the lead contractor for the new Red Gate Bridge project, McHugh Construction was the most appropriate firm to complete this work with the remaining construction activities that will need to be completed as part of the Red Gate Bridge project. Staff requested a proposal from McHugh Construction for the proposed intersection and roadway improvements. McHugh Construction utilizing their competitively bid pricing numbers from the Red Gate Bridge project proposed to complete this work for a price not to exceed $646,431.

As part of their proposed price to complete this work McHugh Construction has also demonstrated on their attached proposal sheet that they will be maintaining or improving upon their competitively bid construction numbers from the Red Gate Bridge project in December of 2011. Based on the proposed construction pricing staff believes that this proposal demonstrates a good faith effort to maintain a low bid price for this work and for this reason recommends waiving the bidding process. Staff recommends awarding the contract for construction services to McHugh Construction for an amount not to exceed $646,431.

Attachments: *(please list)*

Copy of McHugh Construction's Cost Estimate sheet. (Will be provided prior to meeting).

Recommendation / Suggested Action *(briefly explain)***:**

Recommend approval of Construction Service Agreement with McHugh Construction for Red Gate Road / St. Charles North High School Intersection Improvements.

For office use only:	*Agenda Item Number: 4.b*

McHUGH

James McHugh Construction Co.
1737 South Michigan Avenue
Chicago, Illinois 60616-1211
P 312.986.8000
F 312.431.8518

March 13, 2013 Via Email

Mr. James Bernahl, PE, CFM
Publis Works Engineering Division Manager
City of St. Charles
Two East Main Street
St. Charles, IL 60174-1984

RE: Red Gate Road over Fox River between IL Route 31 and IL Route 25.
St. Charles, Kane County, IL
Subject: Red Gate Road and River Ridge Drive – Intersection and Traffic Signal Improvement

Dear Mr. Bernahl:

Following your email dated February 28, 2013 requesting a cost estimate to complete the new traffic signal and intersection improvements based upon the plans dated February 21, 2013 prepared by Benesch (copy attached), we hereby submit the attached unit price proposal to perform this work in the total amount of $646,430.47.

We have listed a summary of the costs of this work, line item unit prices, and notes and clarifications on the following pages for your review.

Please note that this proposal and pricing herein is based upon an anticipated award and notice to proceed by March 25, and April 8, 2013, and performing the roadway work this spring in conjunction with the completion of the Red Gate Road project, after which this proposal is no longer valid. The traffic signal equipment has a 14 week lead time, which will result in the traffic signal being activated approximately August 2, 2013.

Please feel free to contact me with any questions. We look forward to your acceptance and issuance of a PO agreement to authorize the start of this work.

Sincerely,
James McHugh Construction Co.

J. Bodzioch

Joseph Bodzioch, P.E.
Senior Project Manager

CC: Correspondence File

JAMES MCHUGH CONSTRUCTION CO.

RED GATE ROAD AT RIVER RIDGE DRIVE - INTERSECTION AND TRAFFIC SIGNAL IMPROVEMENT

BID ITEM NO.	ITEM DESCRIPTION	ENGINEER QUANTITY	ESTIMATED PROPOSAL QUANTITY	UNIT OF MEASURE	TOTAL UNIT BID	TOTAL BID
1	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	2063	2937	SQ YD	$ 2.49	$ 7,313.13
2	TOPSOIL FURNISH AND PLACE, 4"	3261	4800	SQ YD	$ 3.30	$ 15,840.00
3	EARTH EXCAVATION	4200	1	L SUM	$ 69,500.00	$ 69,500.00
4	EROSION CONTROL BLANKET	3261	4800	SQ YD	$ 1.10	$ 5,280.00
5	SEEDING CLASS 2A	0.7	1	ACRE	$ 1,925.00	$ 1,925.00
6	NITROGEN FERTILIZER NUTRIENT	70	90	POUND	$ 2.20	$ 198.00
7	PHOSPHORUS FERTILIZER NUTRIENT	70	90	POUND	$ 2.20	$ 198.00
8	POTASSIUM FERTILIZER NUTRIENT	70	90	POUND	$ 2.20	$ 198.00
9	INLET AND PIPE PROTECTION	2	2	EACH	$ 165.00	$ 330.00
10	AGGREGATE SUBGRADE, 12"	1,617	2,681	SQ YD	$ 11.55	$ 30,965.55
11	AGGREGATE BASE COURSE, TYPE B 6"	648	648	SQ YD	$ 5.94	$ 3,849.12
12	HOT MIX ASPHALT BASE COURSE, 8"	1313	1393	SQ YD	$ 34.13	$ 47,543.09
13	I EVELING BINDER (MACHINE METHOD), N5O	25	25	TON	$ 100.80	$ 2,520.00
14	HOT MIX ASPHALT SURFACE COURSE, MIX "C", NSD	73	73	TON	$ 110.25	$ 8,048.25
15	HOT MIX ASPHALTSURFACE COURSE, MIX "D", N70	741	792	TON	$ 75.60	$ 59,875.20
16	BITUMINOUS MATERIALS PRIME COAT	0	645	GAL	$ 2.10	$ 1,354.50
17	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	670	791	SQ FT	$ 6.71	$ 5,307.61
18	PAVEMENT REMOVAL	124	124	SQ YD	$ 24.09	$ 2,987.16
19	SAW CUTS	0	394	FOOT	$ 2.48	$ 977.12
20	HMA SURFACE REMOVAL, 2"	62	62	SQ YD	$ 8.93	$ 553.66
21	COMBINATION CURB AND GUTTER REMOVAL	260	260	FOOT	$ 6.11	$ 1,588.60
22	SIDEWALK REMOVAL	721	721	SQ FT	$ 2.06	$ 1,485.26
23	AGGREGATE SHOULDERS, TYPE B 8"	1437	1550	SQ YD	$ 10.78	$ 16,709.00
24	METAl END SECTIONS 12"	2	2	EACH	$ 327.80	$ 655.60
25	CONCRETE END SECTION, STANDARD 542001, 48", 1:2	1	1	EACH	$ 4,593.60	$ 4,593.60
26	COMBINATION CONCRETE CURB AND GUTTER, TYPE 8·6.24	316	316	FOOT	$ 33.55	$ 10,601.80
27	ENGINEER'S FIELD OFFICE, TYPE 8	4	0	CAL MO	No Bid	
28	MOBILIZATION	1	1	L SUM	$ 49,648.50	$ 49,648.50
29	SIGN PANEL TYPE 1	7	7	SQ FT	$ 22.00	$ 154.00
30	REMOVE SIGN PANEL ASSEMBLY · TYPE A	1	1	EACH	$ 55.00	$ 55.00
31	REMOVE SIGN PANEL· TYPE 1	7	7	SQ FT	$ 38.50	$ 269.50
32	RELOCATE SIGN PANEL ASSEMBLY· TYPE A	13	13	EACH	$ 137.50	$ 1,787.50
33	RELOCATE SIGN PANEL- TYPE 1	48	48	SQ FT	$ 13.20	$ 633.60

JAMES MCHUGH CONSTRUCTION CO.

RED GATE ROAD AT RIVER RIDGE DRIVE - INTERSECTION AND TRAFFIC SIGNAL IMPROVEMENT

BID ITEM NO.	ITEM DESCRIPTION	ENGINEER QUANTITY	ESTIMATED PROPOSAL QUANTITY	UNIT OF MEASURE	TOTAL UNIT BID	TOTAL BID
34	METAL POST· TYPE A	10	10	FOOT	$ 14.30	$ 143.00
35	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	255	255	SQ FT	$ 5.50	$ 1,402.50
36	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	4,551	4,551	FOOT	$ 0.74	$ 3,367.74
37	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	1252	1252	FOOT	$ 1.43	$ 1,790.36
38	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	504	504	FOOT	$ 2.75	$ 1,386.00
39	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	105	105	FOOT	$ 5.50	$ 577.50
40	PAVEMENT MARKING REMOVAL	51	51	SQ FT	$ 3.30	$ 168.30
41	PIPE CULVERTS CLASS A TYPE 1, 48"	8	8	FOOT	$ 499.68	$ 3,997.44
42	PIPE CULVERTS CLASS C TYPE 1, 12"	16	16	FOOT	$ 150.43	$ 2,406.88
43	BRICK PAVEMENT REMOVAL SPECIAL	45	45	SQ YD	$ 15.64	$ 703.80
44	PERIMETER EROSION BARRIER ROLLED EXCELCIOR	1,416	1,416	FOOT	$ 9.69	$ 13,721.04
45	TRAFFIC CONTROL AND PROTECTION	1	1	L SUM	$ 25,630.00	$ 25,630.00
46	SHORT TERM PAVEMENT MARKING	300	300	FOOT	$ 1.65	$ 495.00
47	SERVICE INSTALLATION· POL£ MOUNTED	1	1	EACH	$ 1,231.55	$ 1,231.55
48	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	1116	1116	FOOT	$ 15.12	$ 16,873.92
49	UNDERGROUND CONOUIT, GALVANIZED STEEL, 2 1/2" DIA.	41	41	FOOT	$ 24.89	$ 1,020.49
50	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	47	47	FOOT	$ 27.72	$ 1,302.84
51	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	333	333	FOOT	$ 37.59	$ 12,517.47
52	HANDHOLE	3	3	EACH	$ 1,656.80	$ 4,970.40
53	HEAVY-DUTY HANDHOLE	5	5	EACH	$ 2,272.52	$ 11,362.60
54	DOUBLE HANDHOLE	1	1	EACH	$ 3,667.97	$ 3,667.97
55	TRANSCEIVER - FIBER OPTIC	1	1	EACH	$ 7,774.10	$ 7,774.10
56	ELfCTRIC CABLE IN CONDUIT TRACER NO. 14 1C	728	728	FOOT	$ 0.84	$ 611.52
57	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	1149	1149	FOOT	$ 1.05	$ 1,206.45
58	EL£Cl'RIC CABLE IN CONOUtT, SIGNAL NO. 14 3C	1215	1215	FOOT	$ 1.16	$ 1,409.40
59	ELECTRIC CABLE IN CONDUIT SIGNAL NO. 14 5C	471	471	FOOT	$ 1.58	$ 744.18
60	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	1214	1214	FOOT	$ 1.79	$ 2,173.06
61	ELECTRIC CABLE IN CONDUIT l EAD-IN NO. 14 1 PAIR	1843	1843	FOOT	$ 1.16	$ 2,137.88
62	ELECTRIC CABLE IN CONDUIT SERVICE, NO. 6 2 C	50	50	FOOT	$ 4.41	$ 220.50
63	ELfCTRIC CABLE IN CONDUIT, EQlJPMENT GROUNDING CONDUCTOR, NO. 6 1C	787	787	FOOT	$ 1.68	$ 1,322.16
64	TRAFFIC SIGNAL POST GALVANIZED STEEL16 FT.	3	3	EACH	$ 1,443.44	$ 4,330.32
65	STEEL COMBINATION MAST ARM ASSEMBLY AND POL£ 30 FT.	1	1	EACH	$ 8,629.22	$ 8,629.22

JAMES MCHUGH CONSTRUCTION CO.

RED GATE ROAD AT RIVER RIDGE DRIVE - INTERSECTION AND TRAFFIC SIGNAL IMPROVEMENT

BID ITEM NO.	ITEM DESCRIPTION	ENGINEER QUANTITY	ESTIMATED PROPOSAL QUANTITY	UNIT OF MEASURE	TOTAL UNIT BID	TOTAL BID
66	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34FT.	2	2	EACH	$ 9,621.47	$ 19,242.94
67	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 22FT. AND 30FT.	1	1	EACH	$ 9,244.94	$ 9,244.94
68	CONCRETE FOUNDATiON, TYPE A	12	12	FOOT	$ 192.89	$ 2,314.68
69	CONCRETE FOUNDATION, TYPE C	4	4	FOOT	$ 771.65	$ 3,086.60
70	CONCRETE FOUNDATION, TYPE E 36 INCH DIAMETER	45	45	FOOT	$ 352.07	$ 15,843.15
71	DRILL EXISTING HANDHOLE	1	1	EACH	$ 275.31	$ 275.31
72	SIGNAL HEAD, LED, 1-FACE 3-SECTION MAST-ARM MOUNTED	2	2	EACH	$ 1,145.76	$ 2,291.52
73	SIGNAL HEAD, LED, 1-FACE 4-SECTION MAST-ARM MOUNTED	4	4	EACH	$ 1,323.00	$ 5,292.00
74	SIGNAL HEAD, LED, 1-FACE, 4-SECTlON, BRACKET MOUNTED	2	2	EACH	$ 1,174.11	$ 2,348.22
75	SIGNAL HEAD, LED, 1-FACE, 5-SECTION MAST-ARM MOUNTED	3	3	EACH	$ 1,664.67	$ 4,994.01
76	SIGNAL HEAD, LED, 1-FACE, 5-SECTION BRACKET MOUNTED	1	1	EACH	$ 1,372.56	$ 1,372.56
77	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER	4	4	EACH	$ 803.99	$ 3,215.96
78	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE BRACKET MOUNTED WITH COUNTDOWN TIMER	2	2	EACH	$ 1,443.44	$ 2,886.88
79	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	9	9	EACH	$ 174.41	$ 1,569.69
80	INDUCTIVE LOOP DETECTOR	8	8	EACH	$ 161.60	$ 1,292.80
81	DETECTOR LOOP TYPE I	627	627	FOOT	$ 24.78	$ 15,537.06
82	LIGHT DETECTOR	2	2	EACH	$ 1,633.28	$ 3,266.56
83	LIGHT DETECTOR AMPLIFIER	1	1	EACH	$ 2,409.75	$ 2,409.75
84	PEDESTRIAN PUSH-BUTTON	8	8	EACH	$ 469.35	$ 3,754.80
85	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	432	432	FOOT	$ 0.95	$ 410.40
86	SIGN PANEL TYPE 1 MAST ARM MOUNTED	16.5	16.5	SQ FT	$ 39.60	$ 653.40
87	SIGN PANEL TYPE 2 MOUNTED	21	21	SQ FT	$ 46.20	$ 970.20
88	DETECTABLE WARNINGS	135	135	SQ FT	$ 27.50	$ 3,712.50
89	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET. SPECIAL	1	1	EACH	$ 35,125.34	$ 35,125.34
90	UNINTERRUPTABLE POWER SUPPLY SPECIAL	1	1	EACH	$ 7,926.98	$ 7,926.98
91	FIBER OPTIC CABLE 62.5 24 SM, I2MM	751	751	FOOT	$ 3.68	$ 2,763.68
92	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	1	1	EACH	$ 1,701.00	$ 1,701.00
93	MAINTENANCE OF EXISTING TRAFFIC SIGNAL	1	1	EACH	$ 686.60	$ 686.60

TOTAL	**$ 646,430.47**

JAMES MCHUGH CONSTRUCTION CO.

RED GATE ROAD AT RIVER RIDGE DRIVE - INTERSECTION AND TRAFFIC SIGNAL IMPROVEMENT

BID ITEM NO.	ITEM DESCRIPTION	ENGINEER QUANTITY	ESTIMATED PROPOSAL QUANTITY	UNIT OF MEASURE	TOTAL UNIT BID	TOTAL BID

BID SUMMARY

	SUMMARY
ELECTRICAL	$ 232,359.46
CONCRETE	$ 19,621.91
TRAFFIC CONTROL / SIGNAGE / STRIPING	$ 39,483.60
EXCAVATION / REMOVAL / STONE	$ 136,078.74
ASPHALT	$ 119,894.70
LANDSCAPING / EROSION CONTROL	$ 37,690.04
SEWER	$ 11,653.52
OTHER	$ 49,648.50
	$ 646,430.47

NOTES / CLARIFICATIONS:

1. UNIT PRICE CONTRACT BASED UPON ACTUAL FINAL MEASURED WORK COMPLETED IN PLACE.
2. EXCLUDES ANY UTILITY RELOCATION OR SUPPORTS. THIS INCLUDES ANY HS PARKING LOT LIGHTING OR SIGNAGE RELOCATION.
3. A PERFORMANCE AND PAYMENT BOND IS INCLUDED.
4. SCHEDULE REQUIRES 14 WEEKS FOR DELIVERY OF TRAFFIC SIGNAL MAST ARMS FROM APPROVAL. (I.E. APPROVED APRIL 8 => JULY 15 DELIVERY.)
5. ROADWAY WORK WILL BE PERFORMED IN LATE APRIL / MAY IN CONJUNCTION WITH RED GATE ROAD COMPLETION.
6. ROADWAY WILL REMAIN OPEN TO TRAFFIC WITH DAYTIME FLAGGING OPERATIONS TO MAINTAIN ONE LANE AT ALL TIMES.
7. PROPOSAL DOES NOT INCLUDE REMOVAL, DISPOSAL OR REPLACEMENT OF CONTAMINATED OR UNSUITABLE SOILS.
8. NO BID IS INCLUDED FOR THE FIELD OFFICE OR SUPPLEMENTAL WATERING AS THIS SHOULD NOT BE NEEDED.
9. ITEMS WERE ADDED FOR BITUMINOUS PRIME COAT, AND SAW CUTS FOR PAVEMENT REMOVAL. THESE WILL NOT BE INCIDENTAL.
10. PERMITS AND ANY PERMIT COSTS ARE EXCLUDED.
11. TREE REMOVAL, ROOT PRUNING OR HAND EXCAVATION AROUND TREES IS EXCLUDED.
12. TRAFFIC SIGNAL MAINTENANCE OF IL 31 IS LIMITED TO CONNECT INTERCONNECT AND EXCLUDES MOTORIST DAMAGE.
13. LANDSCAPING AND RESTORATION OF TRAFFIC SIGNAL WORK AREAS WILL BE MEASURED FOR PAYMENT.
14. FINAL COMPLETION ESTIMATED AUGUST 2, 2013.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				1
	ILLINOIS	CONTRACT NO.		

FOR INDEX OF SHEETS, SEE SHEET NO. 2

CITY OF ST. CHARLES

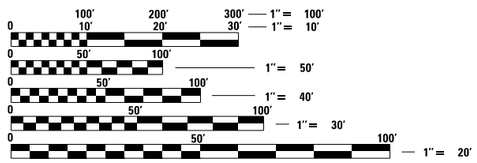
RED GATE ROAD AT RIVER RIDGE DRIVE

INTERSECTION AND TRAFFIC SIGNAL IMPROVEMENT

LOCATION OF SECTION INDICATED THUS: –

DESIGN DESIGNATION AND TRAFFIC DATA

2030 ADT VEHICLES		
RED GATE ROAD	=	15,500
RED GATE ROAD POSTED SPEED	=	35 MPH
RED GATE ROAD DESIGN SPEED	=	40 MPH

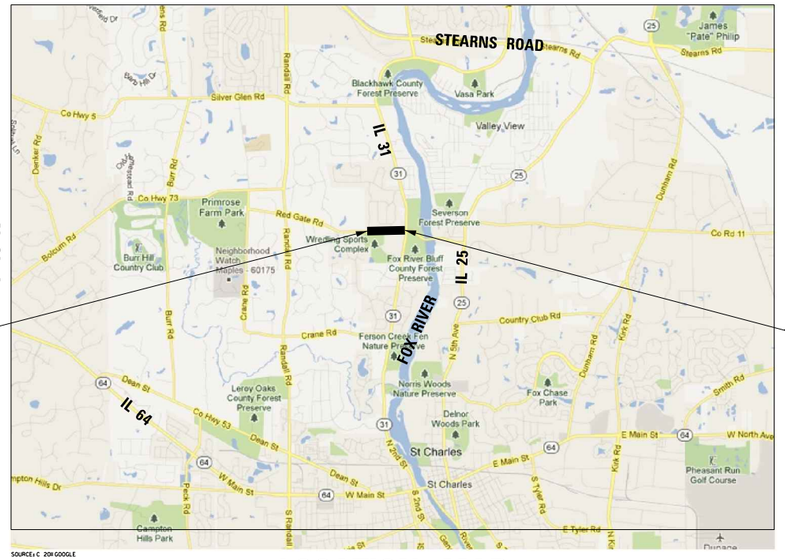


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1–800–892–0123
OR 811

R 8 E

T 40 N



BEGIN PROJECT
STA 81 + 57.00
RED GATE ROAD

END EXISTING
STA 95 + 51.80
RED GATE ROAD

N

LOCATION MAP

TOWNSHIP OF: ST CHARLES
NOT TO SCALE

CITY OF ST CHARLES

APPROVED _____ 20 _____

_____

CITY OF ST CHARLES PUBLIC WORKS ENGINEERING DIVISION MANAGER:
JIM BERNAHL 630–443–3709

GROSS LENGTH = 1,394.80 FT. = 0.264 MILE
NET LENGTH = 1,394.80 FT. = 0.264 MILE

benesch
engineers · scientists · planners
Alfred Benesch & Company
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0450 Job No. 10117

GENERAL NOTES

1. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT 800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)

2. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE ENGINEER AND ALL UTILITY COMPANIES INCLUDING THE CITY OF ST. CHARLES AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION.

3. LOCATIONS OF EXISTING UTILITIES SHOWN ON THE PLANS ARE FROM BEST AVAILABLE RECORD INFORMATION AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.

4. THE CONTRACTOR SHALL USE CARE IN REMOVING OR EXCAVATING NEAR ALL EXISTING ITEMS WHICH SHALL REMAIN. ALL DAMAGE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE

5. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS, AS REQUIRED, PRIOR TO COMMENCING WITH CONSTRUCTION.

6. POLLUTION CONTROL: THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH STATE AND LOCAL REGULATIONS REGARDING AIR, WATER AND NOISE POLLUTION.

7. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT.

8. SAW CUTTING PRIOR TO THE REMOVAL OF ANY ITEMS NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER SHALL BE INCLUDED IN THE COST OF THE ITEMS BEING REMOVED.

9. THE REMOVAL OF EXISTING STORM SEWERS, DRAINAGE STRUCTURES AND ENTRANCE PIPE CULVERTS SHALL BE INCLUDED IN THE COST OF THE CONTRACT WHEN REMOVED AS PART OF EARTH EXCAVATION OR DURING THE INSTALLATION OF THE PROPOSED ITEMS OF WORK.

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

11. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A SATISFACTORY PROGRESS SCHEDULE AND CRITICAL PATH SCHEDULE WHICH SHALL SHOW THE PROPOSED SEQUENCE OF WORK AT THE TIME OF THE PRE-CONSTRUCTION CONFERENCE. SEE SPECIAL PROVISIONS.

12. NO WORK SHALL COMMENCE UNTIL TRAFFIC CONTROL REQUIREMENTS ARE MET & TEMPORARY EROSION CONTROL MEASURES ARE IN PLACE.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SWEEPING AND CLEANING STREETS OF ANY DEBRIS AND MATERIAL THAT HAS ACCUMULATED AS A DIRECT RESULT OF THE CONSTRUCTION ACTIVITY. A MECHANICAL SWEEPER. MECHANICALLY DRIVEN AND HANDWORK WITH A SHOVEL AND BROOM SHALL BE UTILIZED TO PROVIDE A CLEAN STREET FOR MOTORING PUBLIC. THIS WORK SHALL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT.

14. THE CONTRACTOR SHALL USE CARE WHEN WORKING OVER, UNDER OR ADJACENT TO AN EXISTING UTILITY TO REMAIN. THE CONTRACTOR SHALL COORDINATE WITH THE INDIVIDUAL UTILITY COMPANY TO DETERMINE THE UTILITY REQUIREMENTS FOR WORKING OVER, UNDER OR ADJACENT TO THE UTILITY INCLUDING TEMPORARILY SUPPORTING OR PROTECTING THE UTILITY DURING CONSTRUCTION. MEASURE(S) REQUIRED BY THE UTILITY COMPANY WILL NOT BE PAID FOR SEPARATELY, THE COST OF THE MEASURES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE ASSOCIATED ADJACENT ITEM OF WORK.

15. THE CONTRACTOR SHALL TAKE EXTRA CARE IN GRADING AND EXCAVATING NEAR TREES WHICH ARE NOT MARKED FOR REMOVAL SO AS NOT TO CAUSE INJURY TO THE ROOT SYSTEM OR TRUNKS. HAND EXCAVATION SHALL BE PERFORMED IF MAJOR ROOTS ARE PRESENT. MAJOR ROOTS OF A TREE THAT ARE TO REMAIN IN PLACE EXTENDING INTO THE EXCAVATION AREAS AT AN ELEVATION THAT WOULD INTERFERE WITH ANY PORTION OF THE PLANNED CONSTRUCTION SHALL BE SEVERED AT A POINT IMMEDIATELY OUTSIDE OF THE EXCAVATION AREA IN A MANNER THAT WILL CAUSE THE LEAST AMOUNT OF SYSTEMIC TO THE REMAINING TREE STRUCTURE. THE EXPENSE OF ANY REQUIRED HAND EXCAVATION AND/OR THE CUTTING CONTRACT LINE ITEM BEING REMOVED OR INSTALLED AT THAT LOCATION. ANY DAMAGE OF MAJOR TREE ROOTS, AS DESCRIBED ABOVE, SHALL BE CONSIDERED INCIDENTAL TO THE DONE TO EXISTING ITEMS BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTORS EXPENSE.

PROJECT WORK HOURS:

16. 7:00am - 7:00pm MONDAY - FRIDAY
9:00am - 5:00pm SATURDAY
NO WORK ON SUNDAY

INDEX OF SHEETS

IDOT HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-06	TEMPORARY EROSION CONTROL SYSTEMS
424001-06	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
606001-04	CONC. CURB TYPE B & COMB. CONC. CURB AND GUTTER
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701901-02	TRAFFIC CONTROL DEVICES
720006-03	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS FOR SIGNS, MARKERS AND DELINEATORS
728001-01	TELESCOPING STEEL SIGN SUPPORT
720016-03	MAST ARM MOUNTED STREET NAME SIGNS
729011-01	APPLICATIONS OF TYPE A & TYPE B POSTS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
862001-01	UNINTERRUPTABLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING & BONDING
877001-05	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
877006-04	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS
878001-09	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATIONS
TS-02	MAST ARM MOUNTED STREET SIGNS
TS-03	HANDHOLE TO INTERCEPT EXISTING CONDUIT
TS-05	STANDARD TRAFFIC SIGNAL DESIGN
TS-07	DETECTOR LOOP INSTALLATION DETAIL FOR ROADWAY RESURFACING
TC-10	TRAFFIC CONTROL AND PROTECTION OFR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
TC-11	RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT)
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

MIXTURE TYPE	THICKNESS	AIR VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	2"	4% @ 70 Gyr
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	VARIES	4% @ 50 Gyr
HOT-MIX ASPHALT BINDER COURSE, 8", IL-19.0, N70 (3 LIFTS)	8"	4% @ 70 Gyr
HOT-MIX ASPHALT SHOULDER, 8" (3 LIFTS)	8"	4% @ 50 Gyr

NOTES

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE & BINDER MIXTURES IS 112 LBS/SQYD/IN

- WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22
- HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70 PAID FOR AS HMA BASE COURSE OR HMA BASE COURSE WIDENING

PLOT SCALE: $SCALESHORT$
PLOTDRIVE = $PLOTDRIVE$
$PENTBL$

FILE NAME =	DESIGNED -	REVISED -
$FILE$	DRAWN -	REVISED -
USER NAME = $USER$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

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ST. CHARLES since 1834

CITY OF ST. CHARLES

GENERAL NOTES, INDEX OF SHEETS AND STATE STANDARDS

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	2
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

DESCRIPTION	ITEM NUMBER	UNIT	TOTAL QUANTITY
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	21001000	SQ YD	2,063
TOPSOIL FURNISH AND PLACE, 4"	21101615	SQ YD	3,261
EARTH EXCAVATION	20200100	CU YD	4,200
SODDING, SALT TOLERANT	25200100	SQ YD	3,261
SUPPLEMENTAL WATERING	25200200	UNIT	16,452
INLET AND PIPE PROTECTION	28000500	EACH	2
AGGREGATE SUBGRADE IMPROVEMENT, 12"	30300112	SQ YD	1,617
AGGREGATE BASE COURSE, TYPE B 6"	35101800	SQ YD	648
HOT-MIX ASPHALT BASE COURSE, 8"	35501317	SQ YD	1,313
LEVELING BINDER MACHINE METHOD), N50	40600625	TON	25
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	40603310	TON	73
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	40603340	TON	741
PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	42400100	SQ FT	670
PAVEMENT REMOVAL	44000100	SQ YD	124
HMA SURFACE REMOVAL, 2"	44000157	SQ YD	62
COMBINATION CURB AND GUTTER REMOVAL	44000500	FOOT	260
SIDEWALK REMOVAL	44000600	SQ YD	721
AGGREGATE SHOULDERS, TYPE B 8"	48101600	SQ YD	1,437
METAL END SECTIONS 12"	54215547	EACH	2
CONCRETE END SECTION, STANDARD 542001, 48", 1:2	54261248	EACH	1
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	60605000	FOOT	316
ENGINEER'S FIELD OFFICE, TYPE B	67000500	CAL MO	4
MOBILIZATION	67100100	L SUM	1
SIGN PANEL TYPE 1	72000100	SQ FT	7
REMOVE SIGN PANEL ASSEMBLY - TYPE A	72400100	EACH	1
REMOVE SIGN PANEL - TYPE 1	72400310	SQ FT	7
RELOCATE SIGN PANEL ASSEMBLY - TYPE A	72400500	EACH	13
RELOCATE SIGN PANEL - TYPE 1	72400710	SQ FT	48
METAL POST - TYPE A	72900100	FOOT	10
THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	78000100	SQ FT	255
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	78000200	FOOT	4,551
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	78000400	FOOT	1,252
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	78000600	FOOT	504
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	78000650	FOOT	105
PAVEMENT MARKING REMOVAL	78300100	SQ FT	51
PIPE CULVERTS, CLASS A, TYPE 1 48"	542A0253	FOOT	8
PIPE CULVERTS, CLASS C, TYPE 1 12"	542C0217	FOOT	16
BRICK PAVEMENT REMOVAL SPECIAL	XXXXXXX	SQ YD	45
PERIMETER EROSION BARRIER, ROLLED EXCELLOR	XXXXXXX	FOOT	1,416
TRAFFIC CONTROL AND PROTECTION	XXXXXXX	L SUM	1

DESCRIPTION	UNIT	TOTAL QUANTITY
SERVICE INSTALLATION - POLE MOUNTED	EACH	1
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1116
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	41
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	47
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	333
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	5
DOUBLE HANDHOLE	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	1
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	728
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1149
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1215
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	471
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1214
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1843
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	50
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	787
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 22 FT. AND 30 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP TYPE I	FOOT	627
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
PEDESTRIAN PUSH-BUTTON	EACH	8
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	432
SIGN PANEL, TYPE I MAST ARM MOUNTED	SQ. FT.	16.5
SIGN PANEL, TYPE 2 MOUNTED	SQ. FT.	21
DETECTABLE WARNINGS	SQ. FT.	135
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC CABLE CABLE 62.5 24 SM, 12MM	FOOT	751
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL	EACH	1

PLOT SCALE: $SCALESHORT$
PLOTDATE: $PLOTDATE$
$PENTBL$

FILE NAME = $FILE$	DESIGNED -	REVISED -
	DRAWN -	REVISED -
USER NAME = $USER$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

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CITY OF ST. CHARLES

SUMMARY OF QUANTITIES

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	3
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

SUMMARY OF QUANTITIES

DESCRIPTION	UNIT	TOTAL QUANTITY
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	2,063
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SODDING, SALT TOLERANT	SQ YD	3,261
SUPPLEMENTAL WATERING	UNIT	16,452
INLET AND PIPE PROTECTION	EACH	2
AGGREGATE SUBGRADE IMPROVEMENT, 12"	SQ YD	1,617
AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	639
HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	1,313
LEVELING BINDER MACHINE METHOD), N50	TON	25
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	72
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	740
PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	670
PAVEMENT REMOVAL	SQ YD	124
HMA SURFACE REMOVAL, 2"	SQ YD	5,395
COMBINATION CURB AND GUTTER REMOVAL	FOOT	260
SIDEWALK REMOVAL	SQ YD	721
AGGREGATE SHOULDERS, TYPE B 8"	SQ YD	1,437
METAL END SECTIONS 12"	EACH	2
CONCRETE END SECTION, STANDARD 542001, 48", 1:2	EACH	1
COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	316
ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4
MOBILIZATION	L SUM	1
SIGN PANEL TYPE 1	SQ FT	7
REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	1
REMOVE SIGN PANEL - TYPE 1	SQ FT	7
RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	13
RELOCATE SIGN PANEL - TYPE 1	SQ FT	48
METAL POST - TYPE A	FOOT	10
THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	255
THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	4,551
THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,252
THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	504
THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	105
PAVEMENT MARKING REMOVAL	SQ FT	51
PIPE CULVERTS, CLASS A, TYPE 1 48"	FOOT	8
PIPE CULVERTS, CLASS C, TYPE 1 12"	FOOT	16
BRICK PAVEMENT REMOVAL SPECIAL	SQ YD	45
PERIMETER EROSION BARRIER, ROLLED EXCELLOR	FOOT	1,416
TRAFFIC CONTROL AND PROTECTION	L SUM	1

DESCRIPTION	UNIT	TOTAL QUANTITY
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UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	47
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	333
HANDHOLE	EACH	3
HEAVY-DUTY HANDHOLE	EACH	5
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ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1149
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1215
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	471
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1214
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1843
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	50
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	787
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	2
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 22 FT. AND 30 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	12
CONCRETE FOUNDATION, TYPE C	FOOT	4
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45
DRILL EXISTING HANDHOLE	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	4
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9
INDUCTIVE LOOP DETECTOR	EACH	8
DETECTOR LOOP TYPE I	FOOT	627
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
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EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	432
SIGN PANEL, TYPE I MAST ARM MOUNTED	SQ. FT.	16.5
SIGN PANEL, TYPE 2 MOUNTED	SQ. FT.	21
DETECTABLE WARNINGS	SQ. FT.	135
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1
FIBER OPTIC CABLE CABLE 62.5 24 SM, 12MM	FOOT	751
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL	EACH	1

PLOT SCALE: $SCALESHORT$
$PLTDRIVE$
$PENTBL$

FILE NAME =	DESIGNED -	REVISED -
$FILE$	DRAWN -	REVISED -
USER NAME = $USER$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

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ST. CHARLES SINCE 1834

CITY OF ST. CHARLES

SUMMARY OF QUANTITIES

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	3
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

PLOT SCALE: $SCALESHORT$
PLOTDRIVE$
$PENTBL$

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$FILE$	DRAWN -	REVISED -	
USER NAME = $USER$	CHECKED -	REVISED -	
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -	

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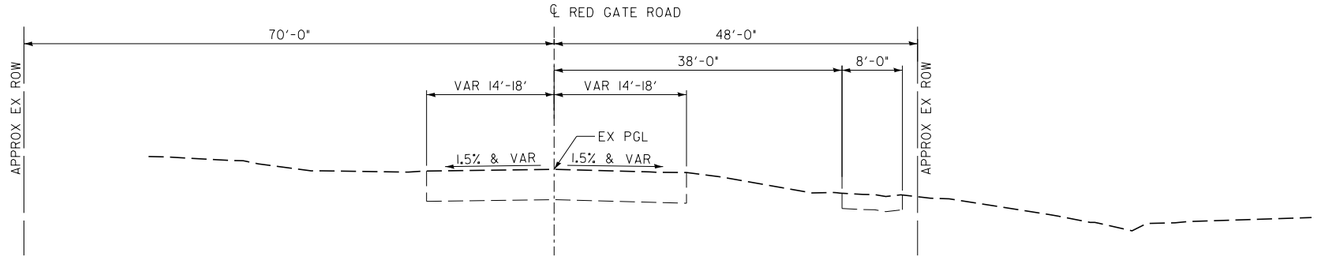
SINCE 1834

CITY OF ST. CHARLES

SCHEDULE OF QUANTITIES

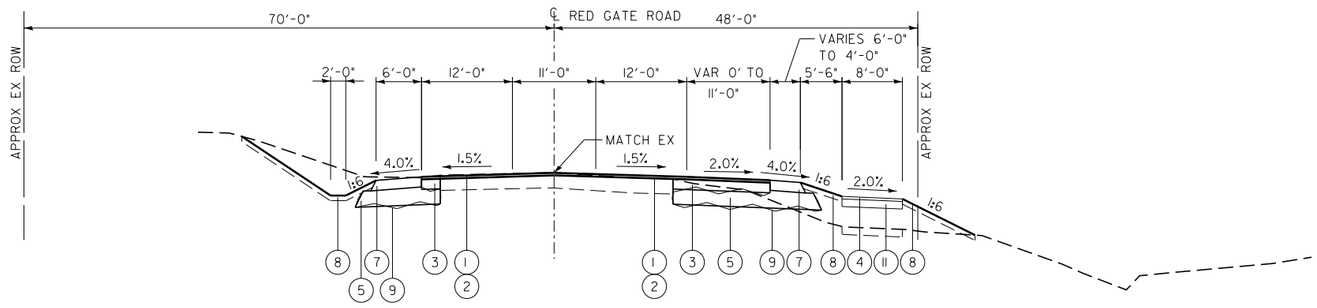
SCALE: | SHEET NO. 4 OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	4
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		



EXISTING TYPICAL SECTION

STA 81+57.00 TO STA 95+51.80, RED GATE ROAD

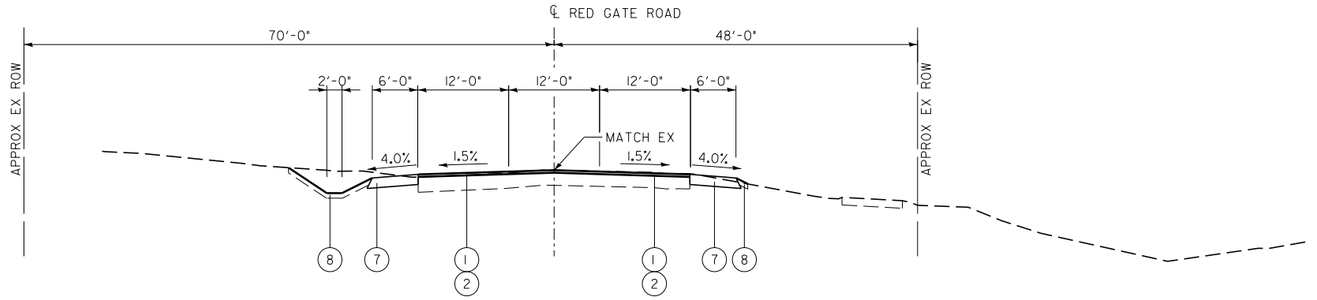


PROPOSED TYPICAL SECTION

STA 81+57.00 TO STA 91+97.00, RED GATE ROAD

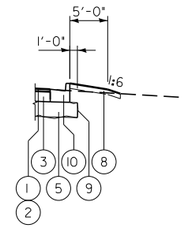
LEGEND

1. HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
2. LEVELING BINDER (MACHINE METHOD), N50
3. HOT-MIX ASPHALT BASE COURSE WIDENING, 8"
4. HOT MIX ASPHALT SURFACE COURSE, MIX "C", N50, 2"
5. AGGREGATE SUBGRADE, 12"
6. HOT-MIX ASPHALT SHOULDERS, 8" (IN 3 LIFTS)
7. AGGREGATE SHOULDERS TYPE B, 8"
8. TOPSOIL FURNISH AND PLACE, 4"
9. GEOTECHNICAL FABRIC
10. COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
11. AGGREGATE BASE COURSE TYPE B, 6"



PROPOSED TYPICAL SECTION

STA 91+97.00 TO STA 95+51.80, RED GATE ROAD



PROPOSED TYPICAL HALF SECTION

REDGATE RD AND RIVER RIDGE DR INTERSECTION

PLOT SCALE: $SCALESHORT$
$PLTDRIVE$
$PENTBL$

FILE NAME =	DESIGNED -	REVISED -
$FILE$	DRAWN -	REVISED -
USER NAME = $USER$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

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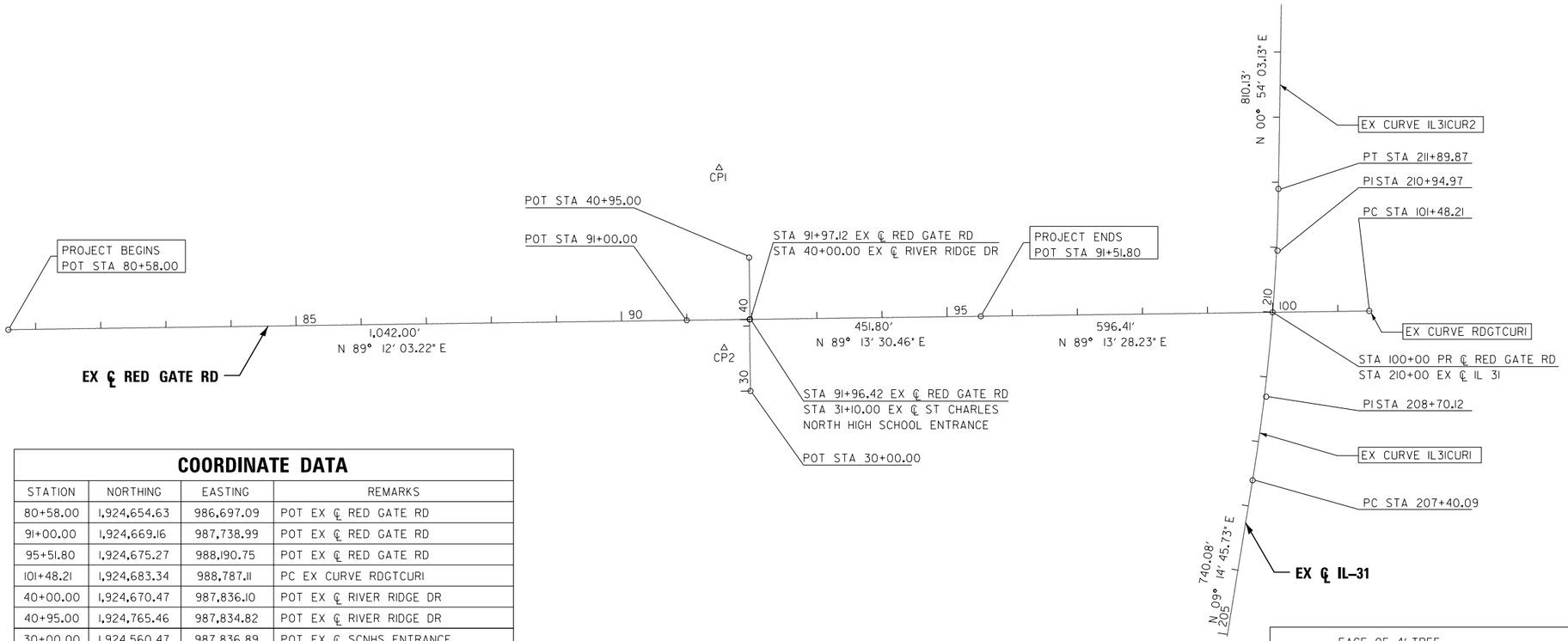
CITY OF ST. CHARLES

PROPOSED TYPICAL SECTIONS

SCALE: | SHEET NO. 5 OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	5
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		



COORDINATE DATA

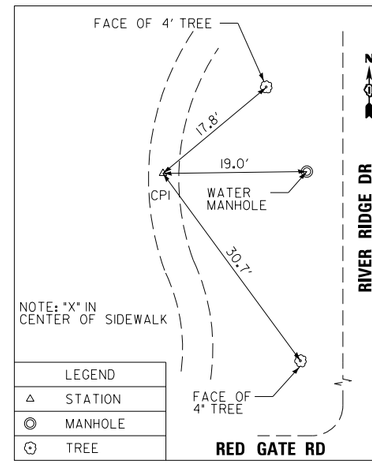
STATION	NORTHING	EASTING	REMARKS
80+58.00	1,924,654.63	986,697.09	POT EX ℄ RED GATE RD
91+00.00	1,924,669.16	987,738.99	POT EX ℄ RED GATE RD
95+51.80	1,924,675.27	988,190.75	POT EX ℄ RED GATE RD
101+48.21	1,924,683.34	988,787.11	PC EX CURVE RDGTCURI
40+00.00	1,924,670.47	987,836.10	POT EX ℄ RIVER RIDGE DR
40+95.00	1,924,765.46	987,834.82	POT EX ℄ RIVER RIDGE DR
30+00.00	1,924,560.47	987,836.89	POT EX ℄ SCNHS ENTRANCE
31+10.00	1,924,670.46	987,835.40	POT EX ℄ SCNHS ENTRANCE
207+40.08	1,924,423.35	988,607.99	PC EX IL31CURI
208+70.11	1,924,551.69	988,628.89	PI EX IL31CURI
210+00.00	1,924,681.34	988,638.91	PCC EX IL31CURI
210+94.96	1,924,776.02	988,646.24	PI EX IL31CUR2
211+89.87	1,924,870.98	988,647.73	PT EX IL31CUR2

BENCH MARK INFORMATION

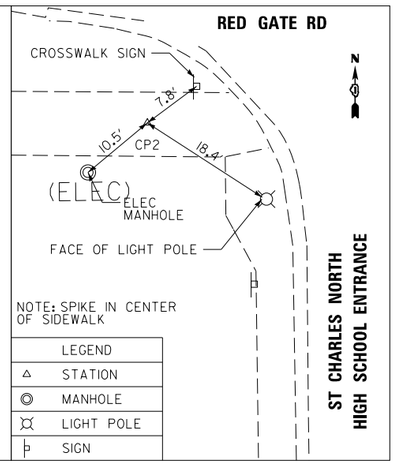
DESIGNATION - KAN3128
DATUM - NAVD 88
ELEVATION - 754.28

DESCRIPTION

STATION IS LOCATED WITHIN THE CITY OF ST. CHARLES APPROXIMATELY 2.3 MI WEST IF WAYNE, 3.8 MI NORTH OF GENEVA IN SECTION 15, T40N, R8E. TO REACH FROM THE JUNCTION OF IL RT 31 AND IL RT 64 PROCEED NORTH ON IL RT 31 2.6 MI TO THE STATION LOCATED 36.9 FT EAST OF CENTERLINE OF IL RT 31. STATION IS LOCATED 300 FT NORTH OF RED GATE ROAD, 150 FT SOUTH OF CENTERLINE OF GRAVEL ENTRANCE TO THE KANE COUNTY FOREST PRESERVE, 26.8 FT NORTH OF CENTERLINE OF BITUMINOUS DRIVE TO ADDRESS 5N746, 124 FT SOUTHEAST OF PP AND 2 FT WEST OF ORANGE FIBERGLASS WITNESS POST. NOTE - ACCESS TO THE DATUM POINT THROUGH 6 INCH LOGO CAP. DATUM POINT IS 0.75 FT BELOW CAP. PK NAILS WERE SET IN WOOD PHYSICAL TIES. (WB)



CONTROL POINT 1



CONTROL POINT 2

HORIZONTAL CONTROL

NO.	NORTHING	EASTING	DESCRIPTION
CPI	1,924,626.35	987,796.40	PK NAIL
CP2	1,924,903.24	987,788.78	CROSS CUT IN SIDEWALK

PLOT SCALE: $SCALESHORT$
PLOTDRVL$
$PENTBL$

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CITY OF ST. CHARLES

HORIZONTAL ALIGNMENT AND CONTROL
$TITLE2$

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	6
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

APPROX EXIST ROW (TAX MAP)

82+33.63
14.16' LT
BEGIN TAPER

BEGIN RESURFACING
STA 82+33.63
MEET EXISTING

EX PAVEMENT MARKING REMOVAL

POT STA 80+58.00

81

82

83

84

28.1'

2'

(BIT)

2'

220' TAPER

220' TAPER

EX ℄ RED GATE ROAD

RELOCATE SIGN PANEL - TYPE I
RELOCATE SIGN PANEL ASSEMBLY - TYPE A
STA 83+51, 29' LT

HMA BC, 8"
HMA SC "D" N70, 2"
AGG SHOULDERS, 8" (TYP)
PAVEMENT REMOVAL

83+17.11
14.24' LT

(GRASS)

83+77.00
17.50' LT
END TAPER

83+77.00
5.50' LT
END TAPER

TOP SOIL FURNISH AND PLACE, 4"
SODDING, SALT TOLERANT

EXTEND PROPOSED CULVERT - 8'
PIPE CULVERTS, CLASS A, TYPE 1, 48"
PRECAST REINF CONC FES, 48"
INV 752.62

RELOCATE SIGN PANEL - TYPE I
RELOCATE SIGN PANEL ASSEMBLY - TYPE A
STA 84+92, 30' LT

LIMIT OF CONSTRUCTION

N

6'
12'
11'
12'
VAR
175' TAPER

MATCH LINE STA 85+00

82+33.63
13.92' RT
BEGIN TAPER

82+50.00
26.85' RT
EL 761.69

83+02.21
13.63' RT

(BIT)

APPROX EXIST ROW (TAX MAP)

PROPOSED W3-3
STA 82+57, 26.5'
METAL POST - TYPE A

83+00.00
28.25' RT
EL 759.61

10'

83+50.00
26.83' RT
EL 758.50

(GRASS)

(BIT)

60'

84+29.67
24.82' RT

100'

84+80.00
37.82' RT
EL 754.98

10'

4'

20'

84+00.00
35.63' RT
EL 757.49

84+80.00
45.99' RT
EL 754.76

TRANSITION
TO MATCH
EX PATH

14'

PR TEMP
EASEMENT

PAVEMENT REMOVAL

BEGIN PROJECT
STA 81+57.00
BEGIN TAPER

PERIMETER EROSION BARRIER,
ROLLED EXCELIOR

16'-CULVERT CL C, T1, 12" @3.0%
2 - END SECTION 12"
PAVEMENT PATCHING, TYPE 11, 6 INCH

5'

83+77.00
17.50' RT
BEGIN/END TAPER

83+77.00
5.50' RT
END TAPER

83+77.00
23.50' RT

RELOCATE SIGN PANEL - TYPE I
RELOCATE SIGN PANEL ASSEMBLY - TYPE A
STA 84+99, 30' LT

TOP SOIL FURNISH AND PLACE, 4"
SODDING, SALT TOLERANT

INLET AND PIPE PROTECTION

PR PAVEMENT WIDENING

PLAN
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PLOTTED
CROSS CHECKED
RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
NO.
BY
DATE

PROFILE
SURVEYED
PLOTTED
CROSS CHECKED
BM. NOTED
STRUCTURE NO'S/NS CHKD
NOTE BOOK
NO.
BY
DATE

BEGIN RESURFACING
STA 82+33.63
MEET EXISTING
EL 763.32

EX & PR PROFILE GRADE RED GATE RD

770 765 760 755 750 745 740 735 730

769.62 767.13 764.73 762.68 761.02 759.50 758.30 757.46 756.95

81+00 81+50 82+00 82+50 83+00 83+50 84+00 84+50 85+00

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PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -	

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DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
RED GATE ROAD

SCALE: | SHEET NO. 7 OF SHEETS | STA. 80+58 TO STA. 85+00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-		KANE	20	7
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

PLAN
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RT. OF WAY CHECKED
CADD FILE NAME
NOTE BOOK
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BY
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NOTE BOOK
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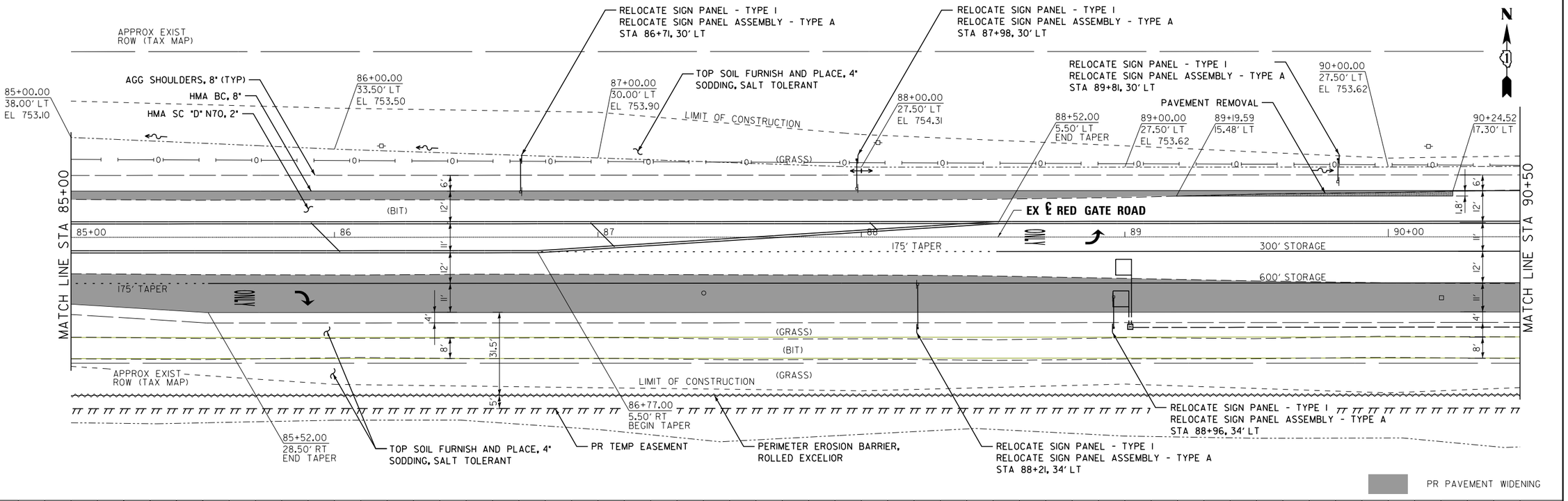

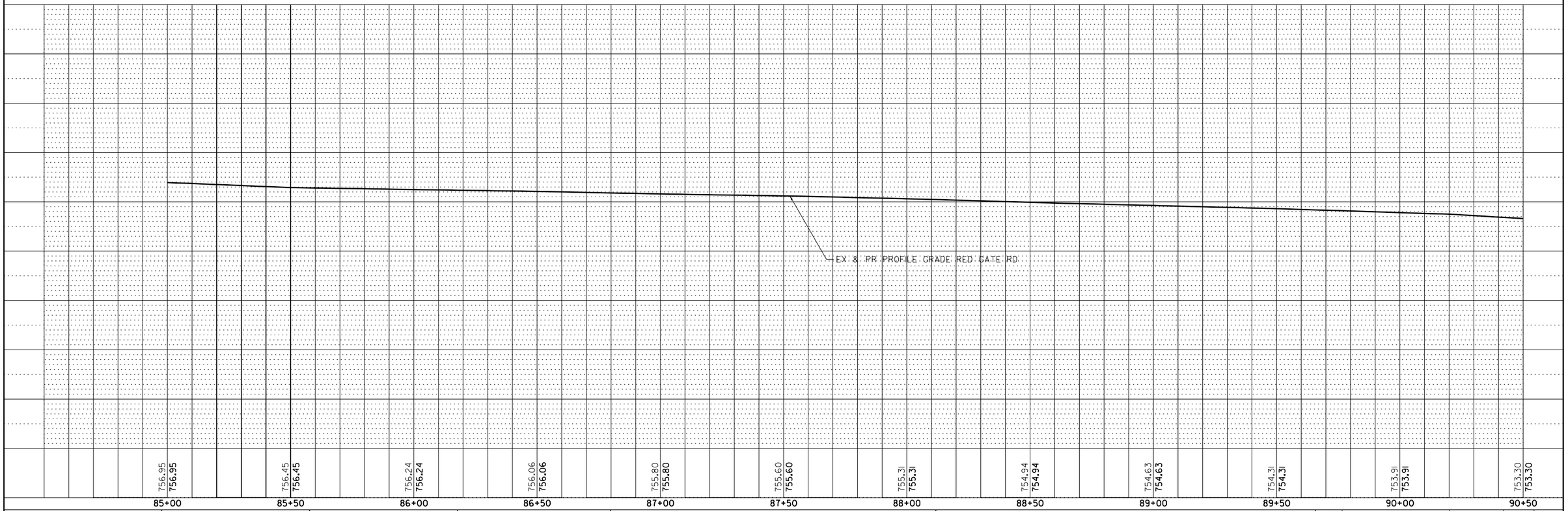

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PLAN AND PROFILE
RED GATE ROAD

SCALE: | SHEET NO. 8 OF SHEETS | STA. 85+00 TO STA. 90+50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-		KANE	20	8
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

RIVER RIDGE DR

40+77.33
14.50' LT

40+77.60
14.54' RT

40+72.79
14.53' RT

10' TRANSITION

SIDEWALK REMOVAL

29'

10' TRANSITION

SIDEWALK REMOVAL

40+67.33
14.41' LT

40+62.79
14.50' RT

(PCC)

SAN

PISTA 91+00.00

91+32.71
17.50' LT

92+56.62
18.00' LT

APPROXIMATE LOCATION
OF WATER MAIN

AGG SHOULDERS, 8" (TYP)
HMA SC "D" N70, 2"

APPROX EXIST
ROW (TAX MAP)

95+51.80
18.00' LT

END PROJECT
RESURFACING PR STA 95+51.80 =
MEET EXISTING

(GRASS)

MATCH LINE STA 90+50

MATCH LINE STA 96+50

R 50'

POT
STA 31+10.00

40+00

POT
STA 40+00.00

145' STORAGE

175' TAPER

EX ℄ RED GATE ROAD (BIT)

91

92

93

94

95+00

96

300' STORAGE

600' STORAGE

R 500'

PISTA 95+51.80

92+48.38
24.52' RT

93+28.87
18.00' RT

95+51.80
18.00' RT

(BIT)

(GRASS)

91+27.60
28.50' RT

(ELEC)

R 30'

REMOVE SIGN PANEL
STA 92+18, 58.5' RT

COMBINATION CONCRETE CURB
AND GUTTER, TYPE B-6.24 (TYP)

APPROX EXIST
ROW (TAX MAP)

HMA, BC, 2"

30+49.97
18.75' LT

30+48.64
18.34' RT

SIDEWALK REMOVAL
AND REPLACEMENT

PERIMETER EROSION
BARRIER, ROLLED
EXCELTOR

10' TRANSITION

SIDEWALK REMOVAL
AND REPLACEMENT

PR TEMP
EASEMENT

37.3'

18'

ONLY

30+36.00
18.40' RT

30+35.99
18.82' LT

RELOCATE SIGN PANEL - TYPE I
RELOCATE SIGN PANEL ASSEMBLY - TYPE A
STA 91+54, 34' LT

ST CHARLES NORTH HIGH SCHOOL ENTRANCE

2-CENTERED CURVE
500'-40'
6' OFFSET

PR PAVEMENT WIDENING

N

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RT. OF WAY CHECKED
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NOTE BOOK
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DATE

PR ℄ ST CHARLES NORTH
HIGH SCHOOL ENTRANCE
EL 750.60

PR ℄ RIVER RIDGE DRIVE
EL 750.59

EX & PR PROFILE GRADE RED GATE RD

END RESURFACING
STA 95+51.80
MEET EXISTING
EL 745.18

770
765
760
755
750
745
740
735
730

753.30 753.30
752.52 752.52
751.47 751.47
750.53 750.53
749.55 749.55
748.64 748.64
747.77 747.77
746.95 746.95
746.50 746.50
746.05 746.05
745.17 745.17
745.25
744.44

90+50 91+00 91+50 92+00 92+50 93+00 93+50 94+00 94+50 95+00 95+50 96+00 96+50

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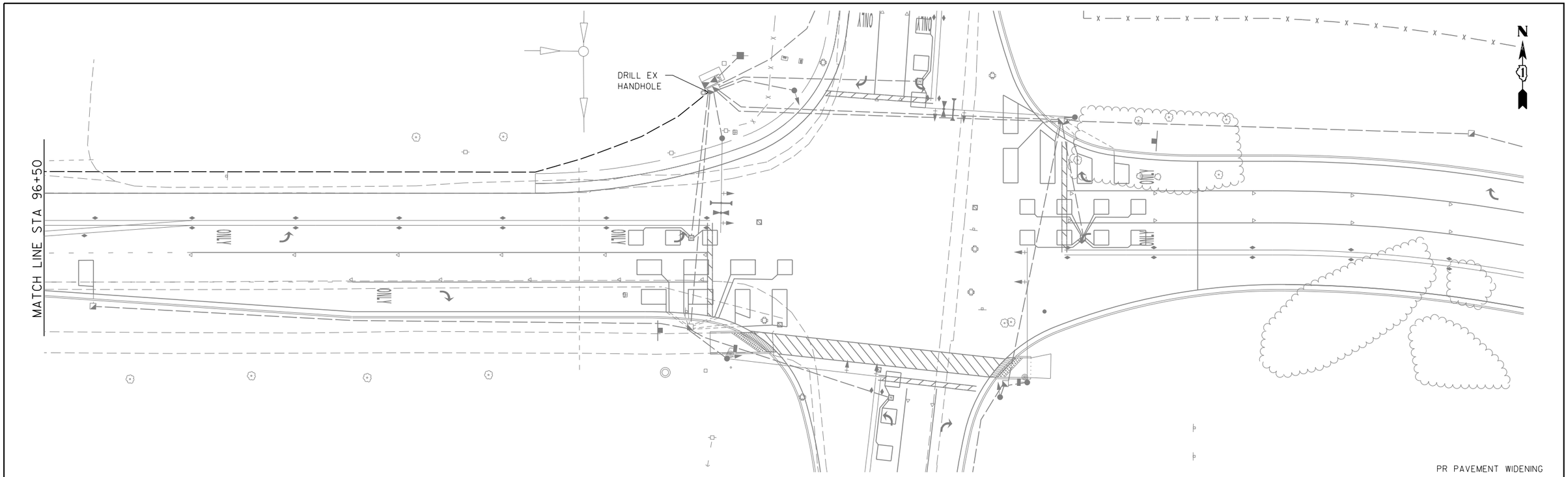
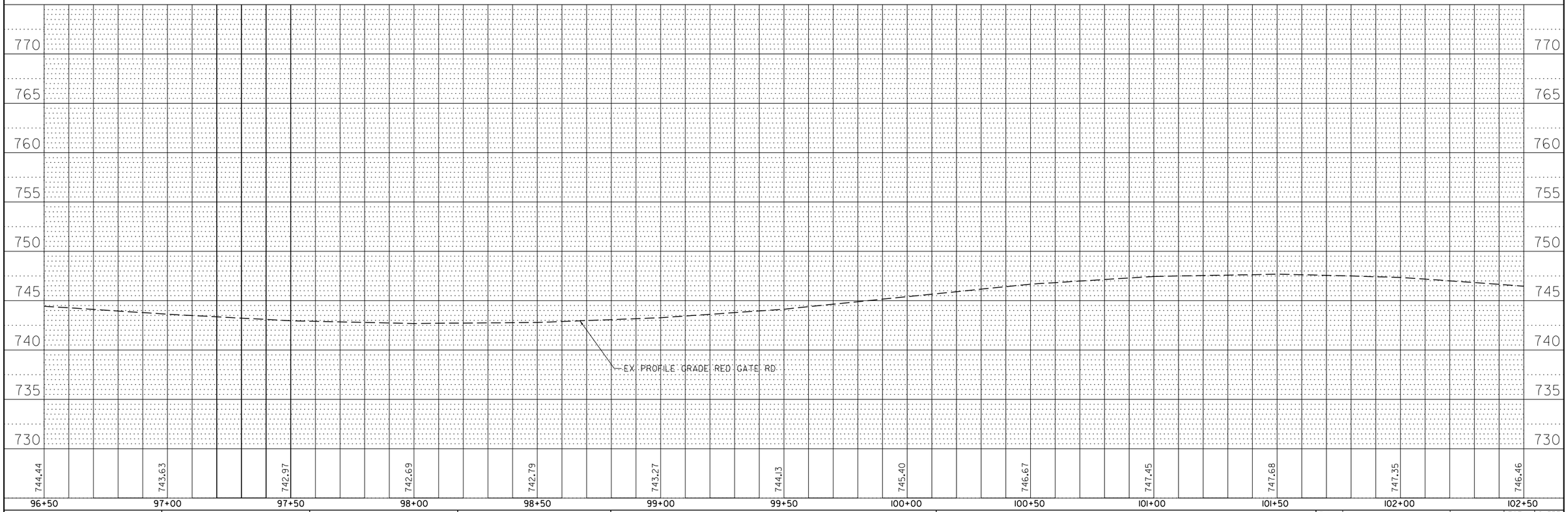
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
RED GATE ROAD

SCALE: | SHEET NO. 9 OF SHEETS | STA. 90+50 TO STA. 96+50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-		KANE	20	9
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		





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ALIGNMENT CHECKED
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CADD FILE NAME
NOTE BOOK
NO.
BY
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BM. NOTED
STRUCTURE NOTATNS CHKD
NOTE BOOK
NO.
BY
DATE

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USER NAME = $USER$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

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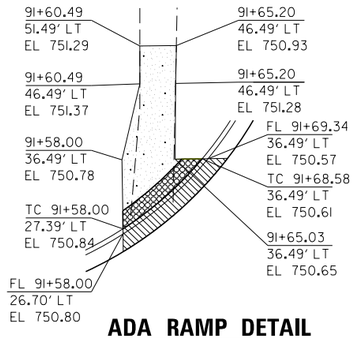
DEPARTMENT OF TRANSPORTATION

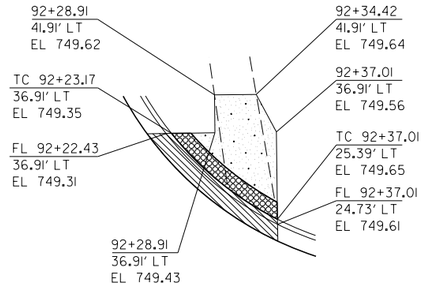
PLAN AND PROFILE
RED GATE ROAD

SCALE: | SHEET NO. 10 OF SHEETS | STA. 96+50 TO STA. 102+50

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
-		KANE	20	10
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		



ADA RAMP DETAIL



ADA RAMP DETAIL

ADA RAMP DETAIL

ADA RAMP DETAIL

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PLOTTED: $TIME$
$PENTBL$

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PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

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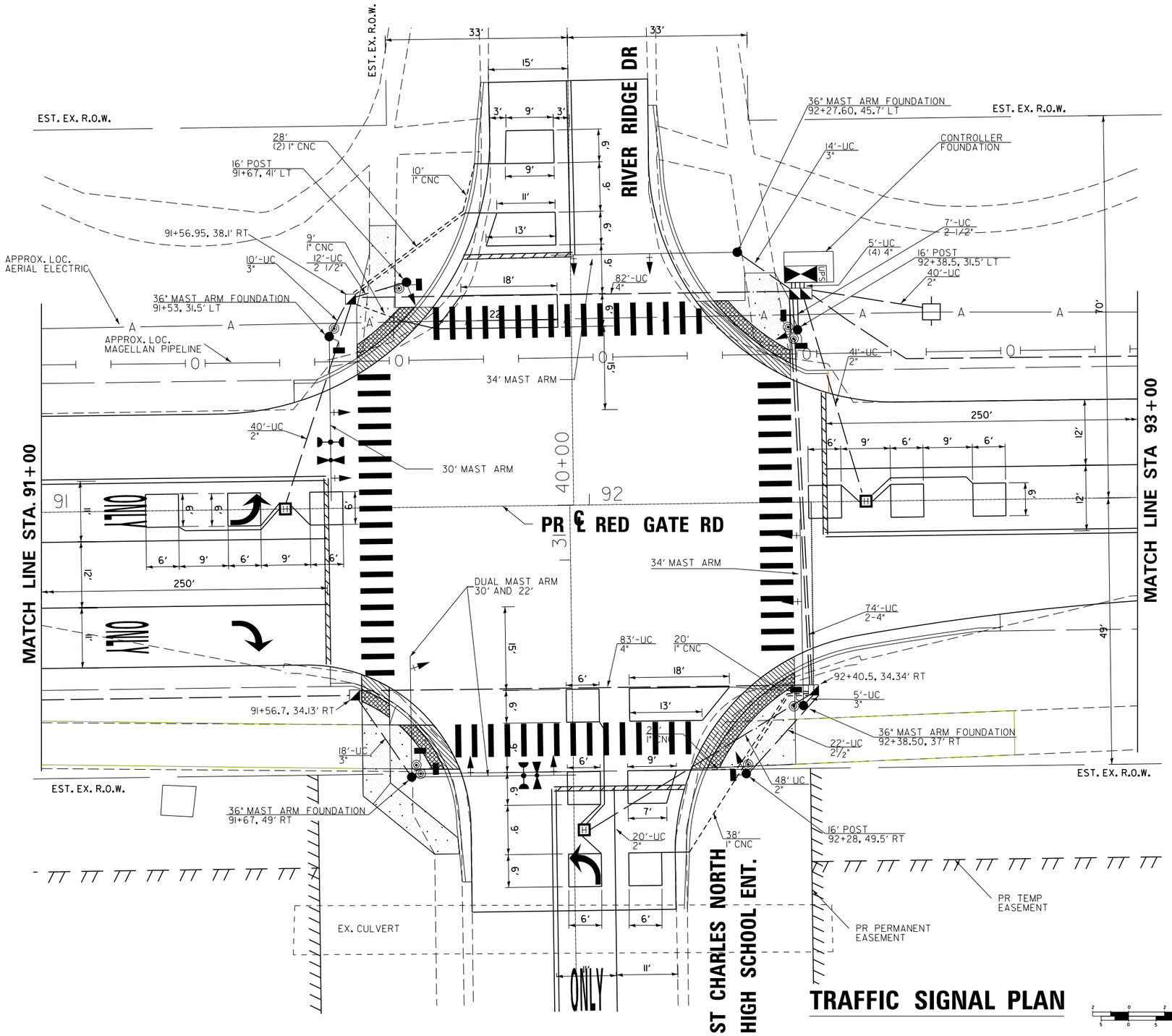
INTERSECTION DETAILS
RIVER RIDGE DRIVE AT RED GATE RD

SCALE: | SHEET NO. 11 OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	11
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		



NOTES:

1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION. THIS SHALL INCLUDE LOCATING THE MAST ARM FOUNDATIONS AND VERIFYING THE MAST ARMS' LENGTHS.
2. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE ORDERING ANY MATERIALS AND STARTING ANY WORK. FOR LOCATIONS OF UTILITIES, THE CONTRACTOR SHALL CALL 'JULIE' AT (800) 892-0123 OR 811.
3. THE CONTRACTOR SHALL CHECK THE PROPOSED TRAFFIC SIGNAL EQUIPMENT LOCATIONS FOR OVERHEAD UTILITY CONFLICTS. THE CONTRACTOR SHALL COORDINATE ANY CONFLICTS WITH THE UTILITY COMPANIES AND THE RESIDENT ENGINEER BEFORE ORDERING MATERIALS.
4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES, THE MAGELLAN PIPELINE COMPANY AND LOCAL GOVERNMENT AGENCIES.

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE:
ALL LOOP DETECTORS AT THIS INTERSECTION SHALL BE DETECTOR LOOP TYPE I INSTALLED IN THE SURFACE COURSE UNLESS OTHERWISE NOTED.

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOVED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOVED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

TRAFFIC SIGNAL PLAN

GRAPHIC SCALE
METERS 2 0 2 4 6 8 10
FEET 5 0 5 10 15 20 25

PLOT SCALE = $SCALE$/IN
PLOTTED BY = $PENTBL$

FILE NAME =	DESIGNED -	REVISED -
$FILE$	DRAWN -	REVISED -
USER NAME = $USER$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

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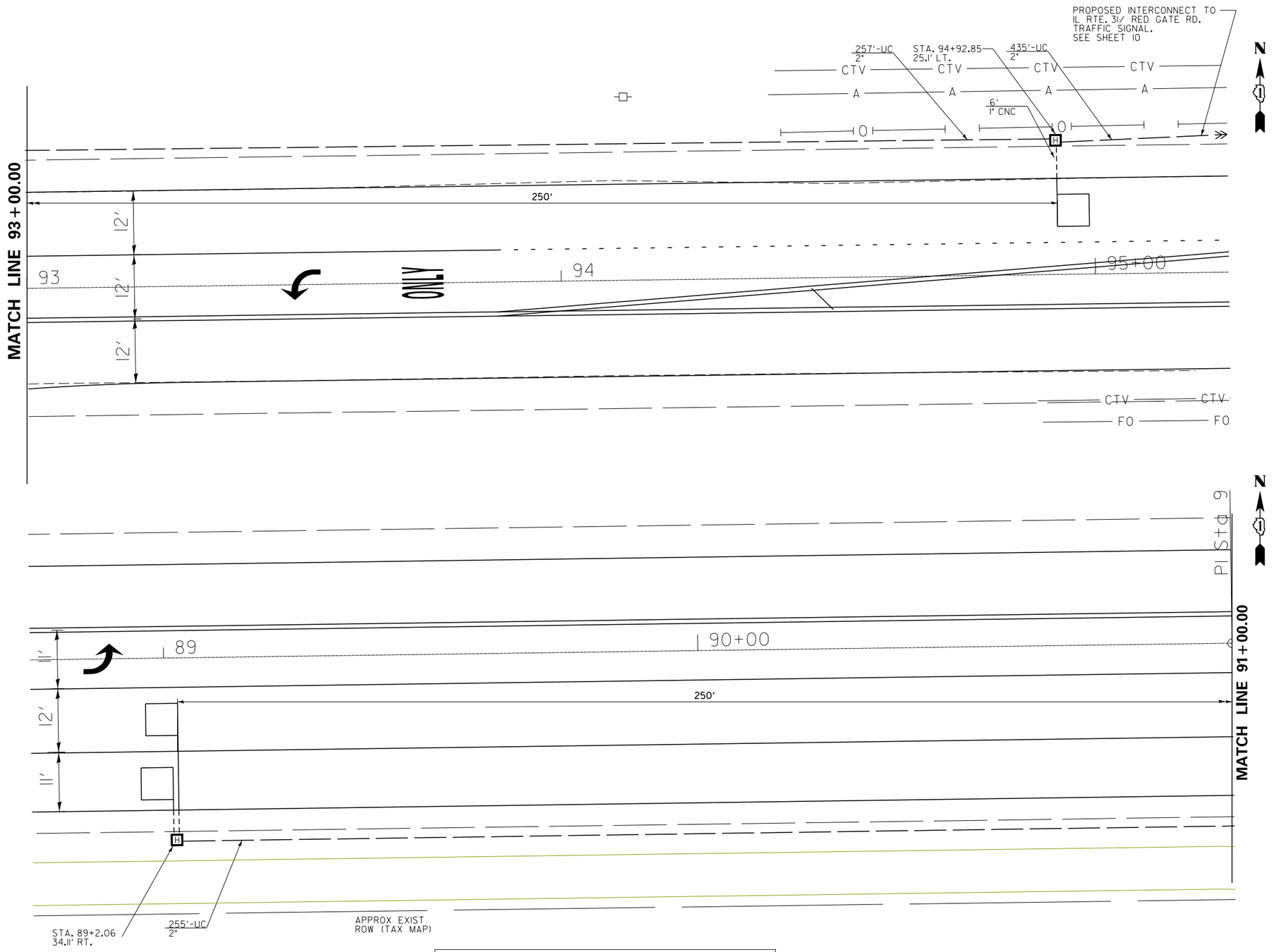
TRAFFIC SIGNAL PLAN
RIVER RIDGE DRIVE AT RED GATE RD

SCALE: | SHEET NO. 12 OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	12
		CONTRACT NO.		
		ILLINOIS	FED. AID PROJECT	

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE SIEMENS TO MATCH THE EXISTING ADJACENT SYSTEM.



RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC., AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOVED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOVED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

NOTE:
ALL LOOP DETECTORS AT THIS INTERSECTION SHALL BE DETECTOR LOOP TYPE I INSTALLED IN THE SURFACE COURSE UNLESS OTHERWISE NOTED.

GRAPHIC SCALE
METERS 2 0 2 4 6 8 10
FEET 5 0 5 10 15 20 25

TRAFFIC SIGNAL PLAN

FILE NAME =	DESIGNED -	REVISED -
$FILE$	DRAWN -	REVISED -
USER NAME = $USER$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

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CITY OF ST. CHARLES

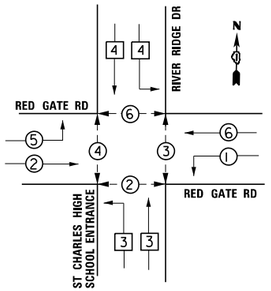
TRAFFIC SIGNAL PLAN
RIVER RIDGE DRIVE AT RED GATE RD

SCALE: | SHEET NO. 12 OF SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	13
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

PLOT SCALE: $SCALESHORT$
PLOT DRWG = $
$PENTBL$

CONTROLLER SEQUENCE

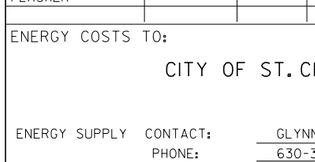


LEGEND

- DUAL ENTRY PHASE
- SINGLE ENTRY PHASE
- PEDESTRIAN PHASE
- * - NUMBER REFERS TO ASSOCIATED PHASE

PHASE DESIGNATION DIAGRAM

EMERGENCY VEHICLE PREEMPTION SEQUENCE

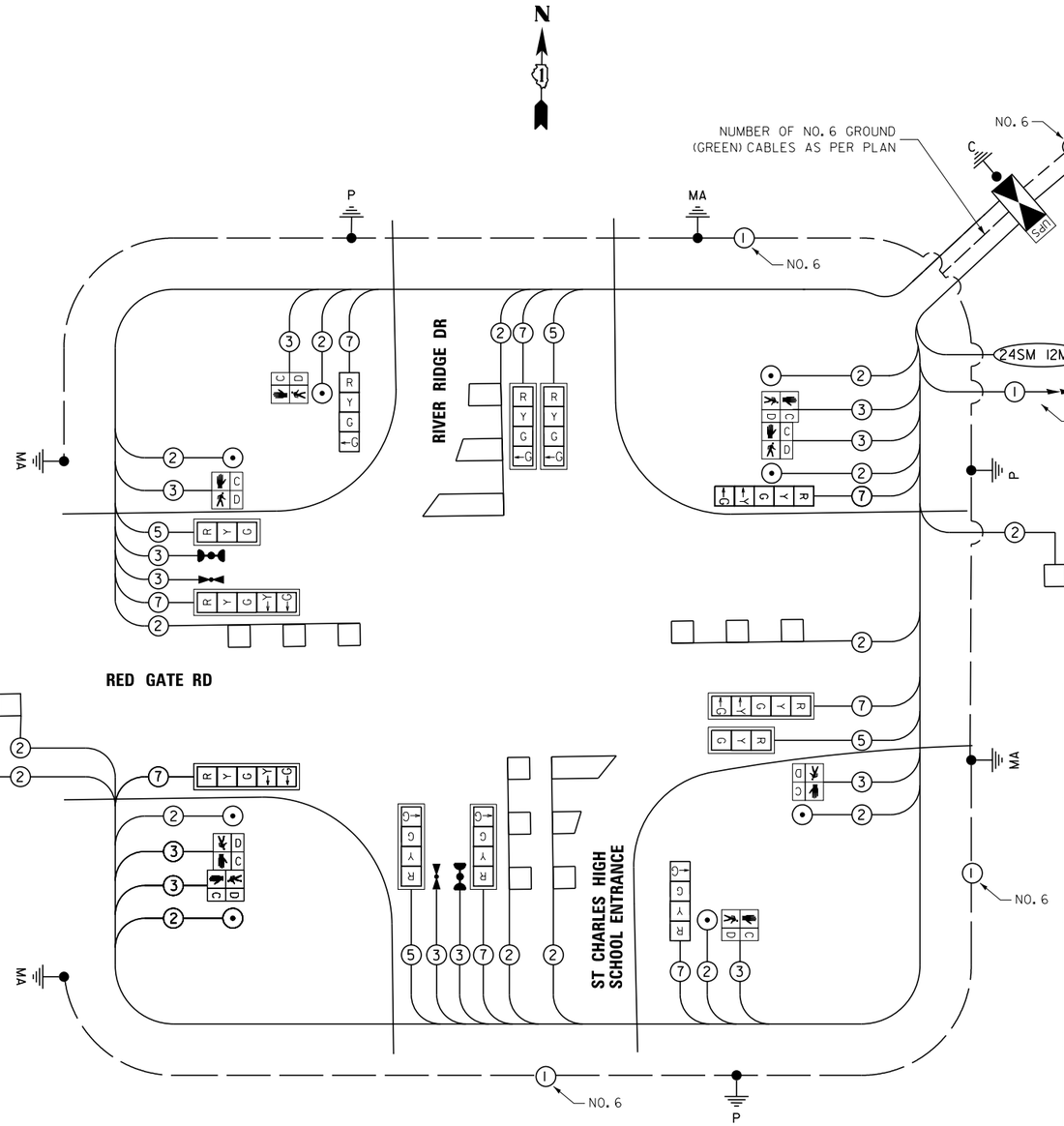


PROPOSED EMERGENCY VEHICLE PREEMPTORS		
EMERGENCY VEHICLE PREEMPTORS	3	4
MOVEMENT	← →	↓ ↑

I.D.O.T TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	WATTAGE LED	%OPERATION	
SIGNAL (RED)	12	-	17	0.50	102.00
(YELLOW)	12	-	25	0.25	75.00
(GREEN)	18	-	15	0.25	67.50
ARROW	8	-	12	0.10	21.60
PED. SIGNAL	8	-	25	1.00	200.00
CONTROLLER	1		100	1.00	100.00
FLASHER				0.50	
ENERGY COSTS TO:				TOTAL =	566.10

CITY OF ST. CHARLES

ENERGY SUPPLY CONTACT: GLYNN AMBURGEY
PHONE: 630-377-4407
COMPANY: CITY OF ST. CHARLES



NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS INTERSECTION SHALL BE SIEMENS TO MATCH THE EXISITNG ADJACENT SYSTEM.

CABLE PLAN

SCALE: NONE

THE TRACER CABLE SHALL BE CONTINUOUS AND EXTEND INTO THE CONTROLLER CABINET.

NOTE:
ALL DETECTOR LOOPS AT THIS INTERSECTION ARE TYPE I.

SUMMARY OF QUANTITES

SUMMARY OF QUANTITIES				
DESCRIPTION	UNIT	TOTAL QUANTITY	RED GATE.RIVER RIDGE DR.	INTERCONNECT
SERVICE INSTALLATION - POLE MOUNTED	EACH	1	1	
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	1116	681	435
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	41	41	
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	47	47	
UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	333	333	
HANDHOLE	EACH	3	3	
HEAVY-DUTY HANDHOLE	EACH	5	5	
DOUBLE HANDHOLE	EACH	1	1	
TRANSCEIVER - FIBER OPTIC	EACH	1	1	
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	728	0	728
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	1149	1149	
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	1215	1215	
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	471	471	
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1214	1214	
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1843	1843	
ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	50	50	
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	787	787	
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	3	3	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 30 FT.	EACH	1	1	
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE 34 FT.	EACH	2	2	
STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 22 FT. AND 30 FT.	EACH	1	1	
CONCRETE FOUNDATION, TYPE A	FOOT	12	12	
CONCRETE FOUNDATION, TYPE C	FOOT	4	4	
CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	45	45	
DRILL EXISTING HANDHOLE	EACH	1	0	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	2	2	
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, MAST-ARM MOUNTED	EACH	4	4	
SIGNAL HEAD, LED, 1-FACE, 4-SECTION, BRACKET MOUNTED	EACH	2	2	
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	3	3	
SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1	1	
PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4	4	
PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	2	2	
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	9	9	
INDUCTIVE LOOP DETECTOR	EACH	8	8	
DETECTOR LOOP TYPE I	FOOT	627	627	
LIGHT DETECTOR	EACH	2	2	
LIGHT DETECTOR AMPLIFIER	EACH	1	1	
PEDESTRIAN PUSH-BUTTON	EACH	8	8	
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	432	432	
SIGN PANEL, TYPE 1 MAST ARM MOUNTED	SQ. FT.	16.5	16.5	
SIGN PANEL, TYPE 2 MOUNTED	SQ. FT.	21	21	
DETECTABLE WARNINGS	SQ. FT.	135	135	
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	1	
UNINTERRUPTABLE POWER SUPPLY, SPECIAL	EACH	1	1	
FIBER OPTIC CABLE CABLE 62.5 24 SM, 12MM	FOOT	751	0	751
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	1	0	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL	EACH	1	0	1

PLOT SCALE= $SCALESHORT$
PLOT DATE= $DATE$
$PLOTBILL$
$PENTBILL$

FILE NAME =	DESIGNED -	REVISED -
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USER NAME = $USER$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

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TRAFFIC SIGNAL CABLE PLAN
RIVER RIDGE DRIVE AT RED GATE RD

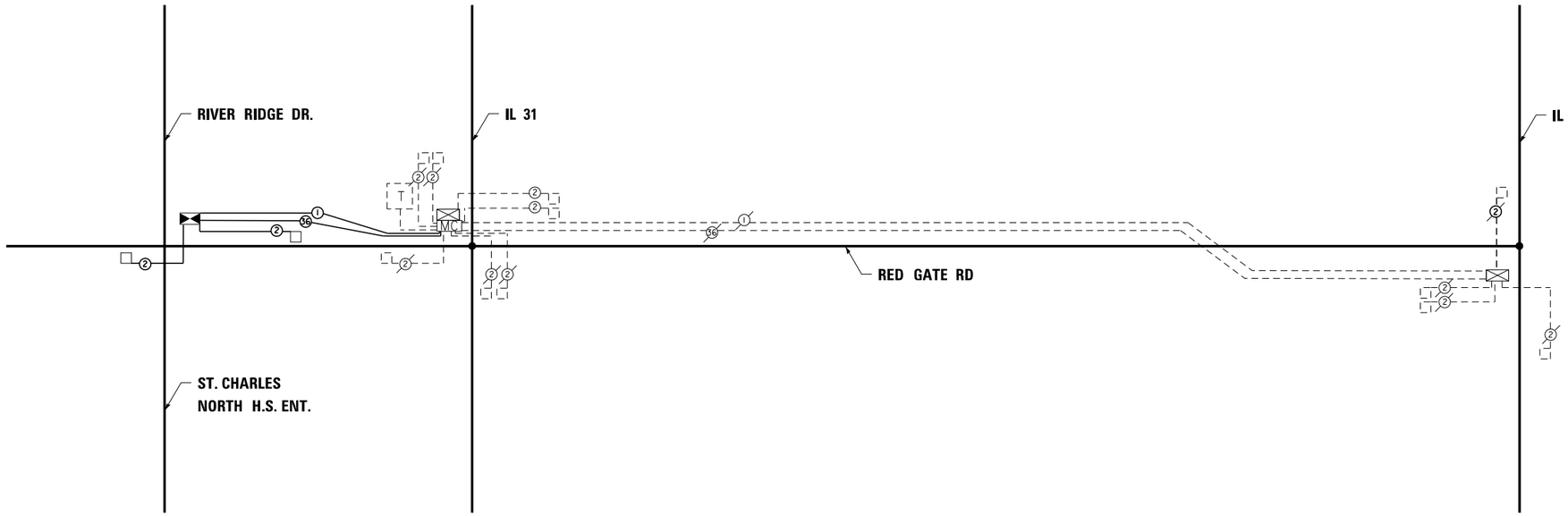
SCALE: $SCALE$ | SHEET NO. SNO OF 13 SHEETS | STA. $STA1$ | STA. $STA2$

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	14
		CONTRACT NO. $JOBNO$		
	ILLINOIS FED. AID PROJECT			

INTERCONNECT SCHEDULE OF QUANTITIES

SUMMARY OF QUANTITIES		
DESCRIPTION	UNIT	TOTAL QUANTITY
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	435
FIBER OPTIC CABLE IN CONDUIT, NO.62.5/125, 24SM 12MM	FOOT	751
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 IC	FOOT	728
DRILL EXISTING HANDHOLE	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL II	EACH	1
MAINTENANCE OF EXISTING TRAFFIC SIGNAL	EACH	1

N



SCALE: NONE

INTERCONNECT SCHEMATIC LEGEND

EXISTING INTERSECTION CONTROLLER	
PROPOSED INTERSECTION CONTROLLER	
EXISTING MASTER CONTROLLER	EMC
PROPOSED MASTER CONTROLLER	MC
MASTER MASTER CONTROLLER	MMC
EXISTING INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
PROPOSED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	
EXISTING INTERSECTION LOOP DETECTORS PROPOSED SAMPLING (SYSTEM) DETECTORS	P
EXISTING SAMPLING (SYSTEM) DETECTORS	ES
PROPOSED SAMPLING (SYSTEM) DETECTORS	PS
EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED INTERSECTION AND SAMPLING (SYSTEM) DETECTORS.	ESP
EXISTING SAMPLING (SYSTEM) DETECTORS. PROPOSED SAMPLING (SYSTEM) DETECTORS.	ESPS
EXISTING PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD
PROPOSED PREFORMED INTERSECTION & SAMPLING (SYSTEM) DETECTORS	PD
EXISTING SAMPLING (SYSTEM) PREFORMED DETECTORS	ESPD
PROPOSED SAMPLING (SYSTEM) PREFORMED DETECTORS	PSPD
EXISTING FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM 12F SM 12F	24
PROPOSED FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM 12F SM 12F	24
EXISTING INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
PROPOSED INTERCONNECT CABLE - NO. 62.5/125 12F FIBER OPTIC CABLE	12
EXISTING INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
PROPOSED INTERCONNECT CABLE - NO. 18 3 PAIR TWISTED, SHIELDED	6
EXISTING LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
PROPOSED LOOP DETECTOR CABLE 2/C TWISTED, SHIELDED	2
EXISTING ELECTRIC CABLE, I/C (AS SPECIFIED)	1
PROPOSED ELECTRIC CABLE, I/C (AS SPECIFIED)	1
EXISTING TELEPHONE CONNECTION	T
PROPOSED TELEPHONE CONNECTION	T

NOTE:
THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS INTERSECTION SHALL BE SIEMENS TO MATCH THE EXISITNG ADJACENT SYSTEM.

PLOT SCALE: $SCALESHORT$
$PLTDRIVE$
$PENTBL$

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	DRAWN -	REVISED -
USER NAME = $USER$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE - FEBRUARY 21, 2013	REVISED -

benesch engineers · scientists · planners

ST. CHARLES SINCE 1834

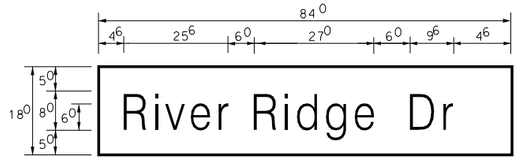
CITY OF ST. CHARLES

INTERCONNECT SCHEMATIC
RED GATE RD

SCALE: NTS | SHEET NO. X OF SHEETS | STA. | TO STA.

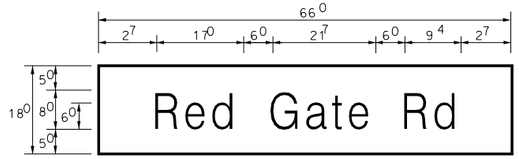
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	15
		CONTRACT NO.		
	ILLINOIS	FED. AID PROJECT		

PANEL SIGN DESIGN TYPE 1



10.5 Sq. Ft. each
2 Required
Design Series D

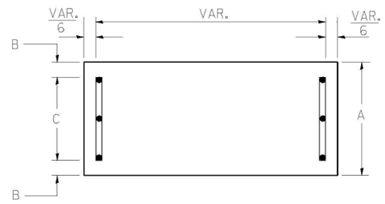
PANEL SIGN DESIGN TYPE 1



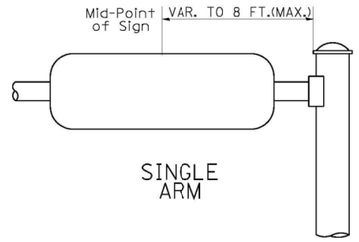
8.25 Sq. Ft. each
2 Required
Design Series D

NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS

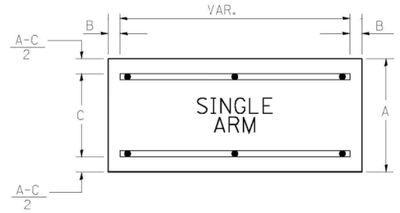
SUPPORTING CHANNELS



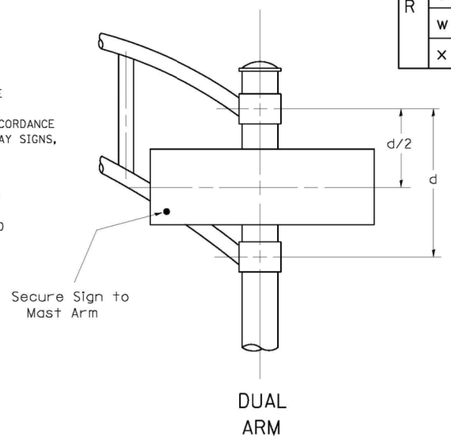
A	B	C
18"	2"	14"



SUPPORTING CHANNELS



A	B	C
18"	2"	12"
30"	2"	22"



GENERAL NOTES

1. WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 877001, 877002, 877006, 877011 AND 877012, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 8'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS FOR 80 M.P.H. WIND VELOCITY.
2. ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
3. THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 8'-0".
4. ALL BORDERS SHALL BE ¾" WIDE AND CORNER RADIUS SHALL BE 2-1/4 ".
5. SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM SHALL BE USED FOR ALL SIGNS ATTACHED TO SIGNAL POLES AND POSTS. LOCAL SUPPLIERS OF THE SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM ARE:

* J.O. HERBERT CO.
MIDLOTHIAN, VA.

* WESTERN REMAC INC.
WOODRIDGE, IL.

PARTS LISTING:

SIGN CHANNEL	PART #HPN053 (MED. CHANNEL)
SIGN SCREWS	¼" x 14 x 1" H.W.H. #3 SELF TAPPING WITH NEOPRENE WASHER
BRACKETS	PART #HPN034 (UNIVERSAL) CHANNEL CLAMPS WITH STAINLESS STEEL STRAPPING

OTHER BRANDS OF MOUNTING HARDWARE ARE ACCEPTABLE, BASED UPON THE DEPARTMENT'S APPROVAL AND COMPATIBILITY WITH THE CHANNEL/BRACKET OF THE ABOVE PRODUCT.

SIGNFIX ALUMINUM CHANNEL FRAMING SYSTEM shall be used. See Note #5.

Upper Case To Lower Case
Spacing Chart 8-6 Inch Series "C & D"

FIRST LETTER \ SECOND LETTER	a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{2}	1^{4}
B	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{6}	1^{7}
C E G	1^{4}	1^{5}	2^{0}	2^{1}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
D O Q R	1^{4}	1^{5}	2^{0}	2^{1}	1^{4}	1^{5}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}
F	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}
H I M N	2^{0}	2^{1}	2^{2}	2^{4}	2^{0}	2^{1}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}	2^{0}	2^{1}
J U	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}
K L	1^{1}	1^{2}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
P	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{4}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
S	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
T	1^{1}	1^{2}	1^{6}	1^{7}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
V	0^{6}	1^{0}	1^{4}	1^{5}	1^{1}	1^{2}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
Y	0^{5}	0^{6}	1^{4}	1^{5}	0^{6}	1^{0}	0^{5}	0^{6}	0^{5}	0^{7}	0^{5}	0^{6}	0^{6}	1^{0}	1^{1}	1^{2}
Z	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}	1^{6}	1^{7}	2^{0}	2^{1}

Lower Case To Lower Case
Spacing Chart 6 Inch Series "C & D"

FIRST LETTER \ SECOND LETTER	a c d e g o q		b h i k l m n p r u		f w		j		s t		v y		x		z	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
a d h g i j l m n q u	1^{6}	1^{7}	2^{2}	2^{4}	1^{6}	1^{7}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{6}	1^{7}
b f k o p s	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
c e	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}	1^{2}	1^{4}
r	0^{6}	1^{0}	1^{2}	1^{4}	0^{6}	1^{0}	0^{3}	0^{3}	0^{5}	0^{6}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}
t z	1^{2}	1^{4}	1^{6}	1^{7}	1^{2}	1^{4}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}	1^{2}	1^{4}
v y	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	0^{6}	1^{0}	0^{6}	1^{0}	1^{1}	1^{2}	1^{1}	1^{2}
w	1^{1}	1^{2}	1^{4}	1^{5}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}
x	1^{2}	1^{4}	1^{6}	1^{7}	1^{1}	1^{2}	0^{5}	0^{6}	1^{1}	1^{2}	1^{1}	1^{2}	1^{1}	1^{2}	1^{2}	1^{4}

Number To Number
Spacing Chart 8 Inch Series "C & D"

FIRST NUMBER \ SECOND NUMBER	0		1		2		3		4		5		6		7		8		9	
SERIES	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
0 9	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{6}	1^{7}
1	2^{0}	2^{1}	2^{0}	2^{1}	2^{0}	2^{1}	1^{6}	1^{7}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}	1^{4}	1^{5}	2^{0}	2^{1}	2^{0}	2^{1}
2 3 4	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{6}	1^{7}	1^{4}	1^{5}
5	1^{4}	1^{5}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
6	1^{6}	1^{7}	1^{4}	1^{5}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{4}	1^{5}
7	1^{2}	1^{4}	1^{2}	1^{4}	1^{4}	1^{5}	1^{2}	1^{5}	0^{5}	0^{6}	1^{2}	1^{4}	1^{4}	1^{5}	1^{1}	1^{2}	1^{4}	1^{5}	1^{2}	1^{4}
8	1^{6}	1^{7}	1^{6}	1^{7}	1^{4}	1^{5}	1^{2}	1^{5}	1^{2}	1^{4}	1^{4}	1^{5}	1^{6}	1^{7}	1^{2}	1^{4}	1^{6}	1^{7}	1^{4}	1^{5}

EXAMPLE, $2\overset{3}{\frown}$ DENOTES $\frac{3}{8}$"

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS SERIES C	6 INCH UPPER CASE LETTERS SERIES D	8 INCH UPPER CASE LETTERS SERIES C	8 INCH UPPER CASE LETTERS SERIES D	LETTERS	6 INCH LOWER CASE LETTERS SERIES C	6 INCH LOWER CASE LETTERS SERIES D
A	3^{6}	5^{0}	5^{0}	6^{5}	a	3^{5}	4^{2}
B	3^{2}	4^{0}	4^{3}	5^{3}	b	3^{5}	4^{2}
C	3^{2}	4^{0}	4^{3}	5^{3}	c	3^{5}	4^{1}
D	3^{2}	4^{0}	4^{3}	5^{3}	d	3^{5}	4^{2}
E	3^{0}	3^{5}	4^{0}	4^{7}	e	3^{5}	4^{2}
F	3^{0}	3^{5}	4^{0}	4^{7}	f	2^{3}	2^{6}
G	3^{2}	4^{0}	4^{3}	5^{3}	g	3^{5}	4^{2}
H	3^{2}	4^{0}	4^{3}	5^{3}	h	3^{5}	4^{2}
I	0^{7}	0^{7}	1^{1}	1^{2}	i	1^{1}	1^{1}
J	3^{0}	3^{6}	4^{0}	5^{0}	j	2^{0}	2^{2}
K	3^{2}	4^{1}	4^{3}	5^{4}	k	3^{5}	4^{2}
L	3^{0}	3^{5}	4^{0}	4^{7}	l	1^{1}	1^{1}
M	3^{7}	4^{5}	5^{1}	6^{1}	m	6^{0}	7^{0}
N	3^{2}	4^{0}	4^{3}	5^{3}	n	3^{5}	4^{2}
O	3^{4}	4^{2}	4^{5}	5^{5}	o	3^{6}	4^{3}
P	3^{2}	4^{0}	4^{3}	5^{3}	p	3^{5}	4^{2}
Q	3^{4}	4^{2}	4^{5}	5^{5}	q	3^{5}	4^{2}
R	3^{2}	4^{0}	4^{3}	5^{3}	r	2^{6}	3^{2}
S	3^{2}	4^{0}	4^{3}	5^{3}	s	3^{6}	4^{2}
T	3^{0}	3^{5}	4^{0}	4^{7}	t	2^{7}	3^{2}
U	3^{2}	4^{0}	4^{3}	5^{3}	u	3^{5}	4^{2}
V	3^{5}	4^{4}	4^{7}	6^{0}	v	4^{2}	4^{7}
W	4^{4}	5^{2}	6^{0}	7^{0}	w	5^{5}	6^{4}
X	3^{4}	4^{0}	4^{5}	5^{3}	x	4^{4}	5^{1}
Y	3^{6}	5^{0}	5^{0}	6^{6}	y	4^{6}	5^{3}
Z	3^{2}	4^{0}	4^{3}	5^{3}	z	3^{6}	4^{3}

NUMBER	6 INCH SERIES C	6 INCH SERIES D	8 INCH SERIES C	8 INCH SERIES D
1	1^{2}	1^{4}	1^{5}	2^{0}
2	3^{2}	4^{0}	4^{3}	5^{3}
3	3^{2}	4^{0}	4^{3}	5^{3}
4	3^{5}	4^{3}	4^{7}	5^{7}
5	3^{2}	4^{0}	4^{3}	5^{3}
6	3^{2}	4^{0}	4^{3}	5^{3}
7	3^{2}	4^{0}	4^{3}	5^{3}
8	3^{2}	4^{0}	4^{3}	5^{3}
9	3^{2}	4^{0}	4^{3}	5^{3}
0	3^{4}	4^{2}	4^{5}	5^{5}

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		DRAWN - BCK	REVISED -
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	PLOT DATE = 11/4/2009	DATE - 03-15-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
MAST ARM MOUNTED STREET NAME SIGNS

SCALE: NONE | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			20	16
	TS-02	CONTRACT NO.		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	17

STA. 82+00.00 TO STA. 84+18.11

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

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

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

PLOT DATE = $DATE$
FILE NAME = $FILEL$
PLOT SCALE = $SCALE$
USER NAME = $USER$

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

765
760
755
750

EX ROW

C RED GATE RD

757.94
INV 752.16
4.0% 5% 1.5% 2.0% 4.0%

84+18.11

754.78
758.30
4.0% 5% 1.5% 2.0% 4.0%

84+00.00

EMBANKMENT = 34.7 SQ FT
FILL = 1.7 SQ FT

761.02
759.55
761.19
4.0% 5% 1.5% 4.0% 3.8% 3.0%
INV 759.44
INV 758.89
16-12" PIPE CULVERTS, CLASS C, TYPE 1 12"

83+00.00

EMBANKMENT = 69.8 SQ FT
FILL = 7.2 SQ FT

82+00.00

RED GATE ROAD

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	18

STA. 85+00.00 TO STA. 88+00.00

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

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

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TYMAGE		
NOTE BOOK AREAS		
NO. AREAS CHECKED		

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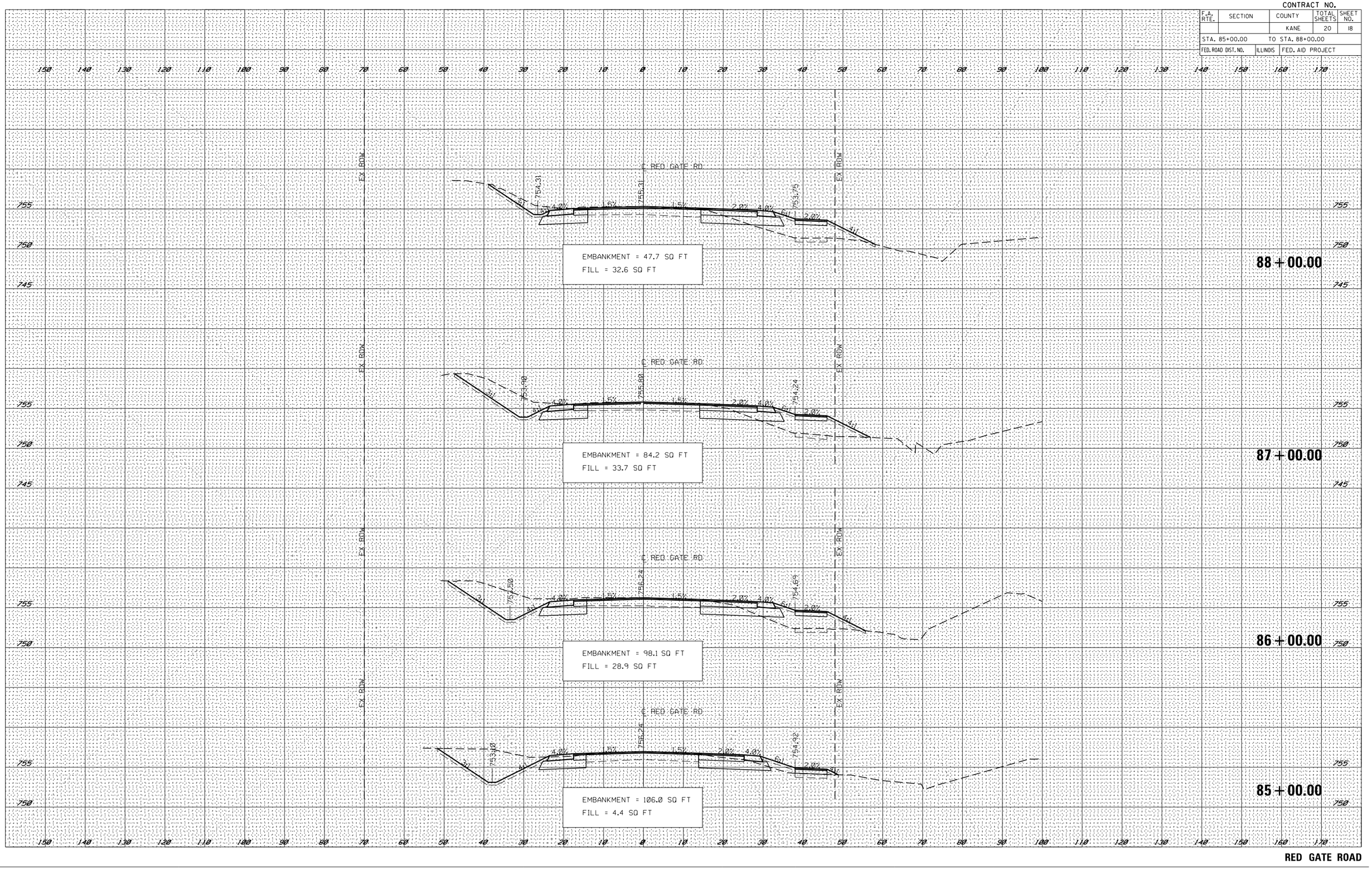
USER NAME = $USER$



RED GATE ROAD

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	19

STA. 89+00.00 TO STA. 92+00.00

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

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

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TYPING DATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

750 745

EX ROW

C RED GATE RD

751.52 752.52 758.97

1.5% 4.0% 2.0% 6:1 4:1

EMBANKMENT = 19.2 SQ FT
FILL = 9.1 SQ FT

92+00.00

91+00.00

755 750 745

EX ROW

C RED GATE RD

752.91 753.91 752.35

1.5% 4.0% 2.0% 6:1 4:1

EMBANKMENT = 31.6 SQ FT
FILL = 20.9 SQ FT

90+00.00

755 750 745

EX ROW

C RED GATE RD

753.62 754.63 753.07

1.5% 4.0% 2.0% 6:1 4:1

EMBANKMENT = 44.1 SQ FT
FILL = 24.3 SQ FT

89+00.00

PLOT DATE = $DATE$
FILE NAME = $FILEL$
PLOT SCALE = $SCALE$
USER NAME = $USER$

RED GATE ROAD

CONTRACT NO.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		KANE	20	20

STA. 93+00.00 TO STA. 95+00.00

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

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

ORIGINAL SURVEY	BY	DATE
NOTE BOOK	SURVEYED	
NO.	PLOTTED	
	TRANSFERRED	
	AREAS	
	AREAS CHECKED	

PLOT DATE = $DATE$
FILE NAME = $FILEL$
PLOT SCALE = $SCALE$
USER NAME = $USER$

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

745
740

FX ROW
SAN
W
O
C RED GATE RD
746.95
G
FO
4.0%
1.5%

95 + 00.00

EMBANKMENT = 7.2 SQ FT
FILL = 0.0 SQ FT

750
745
740

FX ROW
FO
W
O
C RED GATE RD
746.93
G
4.0%
1.5%

94 + 00.00

EMBANKMENT = 7.7 SQ FT
FILL = 0.0 SQ FT

750
745
740

FX ROW
FO
W
O
C RED GATE RD
748.64
G
CL
4.0%
1.5%

93 + 00.00

EMBANKMENT = 6.1 SQ FT
FILL = 0.0 SQ FT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170

RED GATE ROAD