

FOR INDEX OF SHEETS, SEE SHEET NO. 2

08-01-14 LETTING ITEM 141

FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

PROJECT LOCATED IN THE VILLAGE OF LA GRANGE AND THE VILLAGE OF WESTERN SPRINGS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID PROJECT

FAU ROUTE 2697 (WILLOW SPRINGS ROAD)
AT LYONS TOWNSHIP HIGH SCHOOL
TRAFFIC SIGNAL INSTALLATION

SECTION 12-00087-00-TL
PROJECT NO.: M-4003(083)
VILLAGE OF LA GRANGE
COOK COUNTY
C-91-009-13

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	1
STA.		TO STA.		
FED. ROAD DIST. NO. 1		ILLINOIS	FED AID PROJECT M-4003(083)	

CONTRACT 61A59

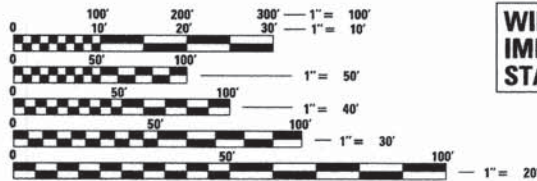


TRAFFIC DATA

WILLOW SPRINGS ROAD
POSTED SPEED LIMIT = 35 MPH
2014 ADT = 13,100 VPD

DESIGN DESIGNATION

MINOR ARTERIAL



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.

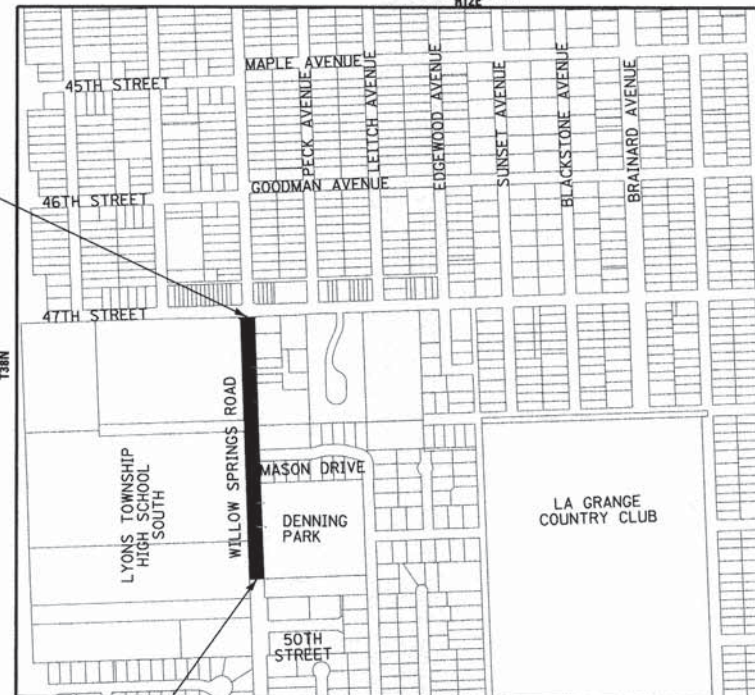
J.U.L.I.E. DESIGN STAGE REQUEST
DIG. No. A0450752/A0450753



CONTACT JULIE AT 811 OR 800-892-0123 WITH THE FOLLOWING:
COUNTY = COOK
CITY-TWNSHP. = LaGRANGE/WESTERN SPRINGS
SEC. & 1/4 SEC. NO. = 8NENW, T38N R12E
48 HOURS (2 working days) BEFORE YOU DIG

CONTRACT NO. 61A59

LOCATION MAP (NOT TO SCALE) R12E



WILLOW SPRINGS ROAD IMPROVEMENT ENDS STA 27 + 62

WILLOW SPRINGS ROAD IMPROVEMENT BEGINS STA 8 + 00

THE THIRD PRINCIPAL MERIDIAN
LYONS TOWNSHIP
GROSS LENGTH OF IMPROVEMENT = 1,962 LF OR 0.372 MILES
NET LENGTH OF IMPROVEMENT = 1,962 LF OR 0.372 MILES

BAXTER & WOODMAN
Consulting Engineers
BAXTER & WOODMAN CONSULTING ENGINEERS, INC.
8678 RIDGEFIELD ROAD
CRYSTAL LAKE, IL 60001
815-459-1260

THOMAS M. SLATTERY
62-050844
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

DATE 5/6/14
DRAWING NO. 1-6, 21-24

KLOA
KENIG, LINDGREN, O'HARA, ABOONA, INC.
9575 WEST HIGGINS ROAD
SUITE 400
ROSEMONT, IL 60018
847-518-9990

TOBY C. WICKET
62-053237
LICENSED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

DATE 5/9/14
DRAWING NO. 7-20

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED 5/6/2014
VILLAGE OF LA GRANGE

PASSED JUNE 12, 2014
CHRISTOPHER HOLT
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW
JUNE 12, 2014
John Forstmann Jr.
DEPUTY DIRECTOR OF HIGHWAYS, REGION 1 ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

B&W PROJECT NO.: 120725

CONTRACT NO. 61A59, SECTION 12-00087-00-TL, PROJECT NO. M-4003(083), VILLAGE OF LA GRANGE AND WESTERN SPRINGS, COOK COUNTY, ILLINOIS. DRAWN BY: BAXTER & WOODMAN CONSULTING ENGINEERS, INC. DATE: 5/9/14. CHECKED BY: T. WICKET. DATE: 5/9/14. APPROVED BY: J. HOLT. DATE: 6/12/14.

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE DETAILS IN THE PLANS, THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS, AND THE LATEST EDITION OF THE FOLLOWING STATE OF ILLINOIS SPECIFICATIONS: "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (REFERRED TO AS THE "STANDARD SPECIFICATIONS"), THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", AND THE "MANUAL OF TEST PROCEDURES FOR MATERIALS".
2. UTILITY LOCATIONS HAVE NOT BEEN SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES, INCLUDING SPRINKLER SYSTEMS, EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS.
3. THE CONTRACTOR SHALL NOTIFY THE VILLAGE DIRECTOR OF PUBLIC WORKS AT LEAST 48 HOURS IN ADVANCE OF BEGINNING WORK TO OBTAIN VILLAGE UTILITY LOCATIONS.
4. THE CONTRACTOR MAY OBTAIN MUNICIPAL WATER IN BULK, AT NO CHARGE, AS LONG AS THERE IS NOT A "WATERING BAN" IN EFFECT. THE INDISCRIMINATE USE OF FIRE HYDRANTS IS STRICTLY PROHIBITED. WATER FOR CONSTRUCTION SHALL BE METERED OR OTHERWISE ACCOUNTED FOR AND A DAILY LOG MAINTAINED. THE CONTRACTOR SHALL PROVIDE THE WATER TRUCK AND DRIVER REQUIRED TO OBTAIN AND TRANSPORT THIS WATER. THE VILLAGE RESERVES THE RIGHT TO RESTRICT OR REFUSE THE USE OF VILLAGE WATER IF DEEMED NECESSARY.
5. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY RESIDENTS AND THE ENGINEER WHEN ACCESS TO THEIR DRIVEWAYS WILL BE TEMPORARILY CLOSED DUE TO CURB AND GUTTER AND/OR DRIVEWAY REPLACEMENT. THE CONTRACTOR SHALL DISTRIBUTE NOTICES PROVIDED BY THE VILLAGE TO RESIDENTS AT LEAST 24 HOURS PRIOR TO PLANNED CLOSURE. EVERY EFFORT SHALL BE MADE TO ACCOMMODATE ACCESS TO THESE PROPERTIES INCLUDING KNOCKING ON DOORS WHEN DRIVEWAYS ARE ABOUT TO BE CLOSED.
6. PORTLAND CEMENT CONCRETE SIDEWALK SHALL BE THICKENED TO 6-INCHES AT LOCATIONS WHERE THE SIDEWALK CROSSES RESIDENTIAL DRIVEWAYS AND 8-INCHES WHERE THE SIDEWALK CROSSES COMMERCIAL DRIVEWAYS. TRANSVERSE EXPANSION JOINTS 3/4" SHALL BE PLACED EVERY 50 FEET OR AS DETERMINED BY THE ENGINEER. TRANSVERSE CONTRACTION JOINTS SHALL BE PLACED EVERY 5-FEET.
7. A 1/2-INCH THICK EXPANSION JOINT SHALL BE PROVIDED AT THE JUNCTION OF THE DRIVEWAY APRON AND CURB, AND AT THE JUNCTION OF THE DRIVEWAY APRON AND THE SIDEWALK. THIS WORK WILL BE INCLUDED IN THE COST OF PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT.
8. THE CONTRACTOR SHALL CONTACT THE ENGINEER AND LOCAL AGENCY MATERIAL INSPECTOR AT LEAST 48 HOURS PRIOR TO ANY CONCRETE OR HOT-MIX ASPHALT MATERIAL DELIVERIES.
9. DETECTABLE WARNINGS SHALL BE CONSTRUCTED WITH THE INSTALLATION OF A CAST-IN-PLACE 24" X 60" NOMINAL PANEL WIDTH. THE PANEL SHALL BE A POLYMER COMPOSITE AND COMPLY WITH ADA REQUIREMENTS. THE DOMES LOCATED ON THE PANEL SHALL PARALLEL THE PAVEMENT CROSS WALK WITH THE CLOSEST EDGE LOCATED AT THE BACK OF CURB. THE PANEL COLOR SHALL BE SELECTED BY THE ENGINEER AS COORDINATED WITH THE VILLAGE. INSTALLATION SHALL OCCUR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
10. IN AREAS WHERE THE EXISTING DRIVEWAY, SIDEWALK, OR CURB AND GUTTER IS TO BE REMOVED AND REPLACED, THE REMOVAL AND DISPOSAL OF ANY ADDITIONAL MATERIAL REQUIRED TO ESTABLISH THE PROPOSED DRIVEWAY, SIDEWALK, OR CURB AND GUTTER SUBGRADE ELEVATION SHALL BE INCLUDED IN THE REMOVAL PAY ITEMS.
11. THE CURB SHALL BE TAPERED TO THE GUTTER IN A FIVE (5) FOOT LENGTH WHEREVER THE CURB AND GUTTER TERMINATES, WITH AN EXPANSION JOINT PLACED AT THE START OF THE TAPER.
12. ALL POSTS, RAILROAD TIES, AND DECORATIVE TIMBER IN CONFLICT WITH THE PROPOSED IMPROVEMENTS SHALL BE REMOVED AND RELOCATED AS DETERMINED BY THE ENGINEER AT THE TIME OF CONSTRUCTION AND SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION. EVERY EFFORT SHALL BE MADE BY THE CONTRACTOR WHEN REMOVING THESE ITEMS TO PRESERVE THEM FROM HARM. ITEMS NOT RELOCATED SHALL BE PROPERLY DISPOSED OF BY THE CONTRACTOR.
13. FURNISHED EXCAVATION FROM AN OFF-SITE LOCATION, IF NECESSARY, SHALL BE INCLUDED IN THE ITEM EARTH EXCAVATION.
14. THE CONTRACTOR SHALL PROVIDE SOIL TESTING AND PROFESSIONAL ENGINEERING SERVICES AS NECESSARY FOR DISPOSAL OF MATERIAL WHICH INCLUDES: CERTIFYING SOILS ARE UNCONTAMINATED AND WITHIN PH OF 6.25 TO 9.0, COMPLETION OF IEPA FORM LPC-663 BY A LICENSED P.E., AND ADDITIONAL ANALYTICAL TESTING REQUIRED BY THE DISPOSAL SITE AND/OR ENGINEER. THE ENGINEER SHALL BE PROVIDED COPIES OF ALL TEST RESULTS AND CERTIFICATIONS (INCLUDING LPC-663). BASED ON PRELIMINARY SCREENING OF THE AREA, THE PROJECT SITE, TO THE OWNERS KNOWLEDGE, HAS NOT BEEN USED FOR COMMERCIAL OR INDUSTRIAL PURPOSES. IF MATERIAL IS TAKEN TO AN IEPA APPROVED FILL SITE, THE CONTRACTOR IS RESPONSIBLE FOR THE TESTING REQUIRED BY THE SITE. PID OR FID READINGS ARE NOT ACCEPTABLE RESULTS FOR CLASSIFYING THE MATERIAL. IF REJECTED, ANALYTICAL TESTING SHALL BE PERFORMED IN ACCORDANCE WITH ARTICLE 669.08. IF MATERIAL IS UNCONTAMINATED, IT SHALL BE REMOVED AND DISPOSED OF IN ACCORDANCE WITH THE APPROPRIATE PAY ITEM. IF THE MATERIAL IS CLASSIFIED AS NON-SPECIAL WASTE, THE CONTRACTOR SHALL REUSE THE MATERIAL ON SITE AT NO ADDITIONAL COST. IF ON-SITE USE IS NOT FEASIBLE, DISPOSAL SHALL BE PAID FOR ACCORDING TO ARTICLE 109.04. ALL ADDITIONAL CERTIFICATIONS AND ANALYSIS COMPLETED BY THE CONTRACTOR SHALL BE INCLUDED IN THE COST OF THE CONTRACT.
15. A VERTICAL REFLECTIVE STRIP SHALL BE ADDED TO ALL NEW SIGNAGE POSTS AND SUPPORTS AS APPLICABLE. THE COST OF THE STRIP SHALL BE INCLUDED IN THE NEW SIGN PAY ITEM.
16. THE CONTRACTOR SHALL CONTACT THE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4470 72 HOURS IN ADVANCE OF BEGINNING WORK.
17. THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" TO MATCH THE EXISTING ADJACENT SYSTEM.

HIGHWAY STANDARDS

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 280001-07 TEMPORARY EROSION CONTROL SYSTEMS
- 424001-07 PERPENDICULAR CURB RAMPS FOR SIDEWALKS
- 424006-01 DIAGONAL CURB RAMPS FOR SIDEWALKS
- 424011-01 CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
- 424016-01 MID-BLOCK CURB RAMPS FOR SIDEWALKS
- 606001-05 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
- 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701301-04 LANE CLOSURE, 2L, 2W, SHORE TIME OPERATIONS
- 701502-06 URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
- 701701-09 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-05 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-03 TRAFFIC CONTROL DEVICES
- 720001-01 SIGN PANEL MOUNTING DETAILS
- 720006-04 SIGN PANEL ERECTION DETAILS
- 720016-03 MAST ARM MOUNTED STREET NAME SIGNS
- 720021-02 SIGN PANELS EXTRUDED ALUMINUM TYPE
- 728001-01 TELESCOPING STEEL SIGN SUPPORT
- 780001-04 TYPICAL PAVEMENT MARKINGS
- 805001-01 ELECTRICAL SERVICE INSTALLATION DETAILS
- 814001-02 HANDHOLES
- 857001-01 STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
- 862001-01 UNINTERRUPTABLE POWER SUPPLY (UPS)
- 873001-02 TRAFFIC SIGNAL GROUNDING & BONDING
- 877001-05 STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
- 878001-09 CONCRETE FOUNDATION DETAILS
- 880006-01 TRAFFIC SIGNAL MOUNTING DETAILS
- 886001-01 DETECTOR LOOP INSTALLATIONS

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- 19 DISTRICT 1 MAST ARM MOUNTED STREET NAME SIGNS
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- 24 DISTRICT ONE DETAIL - TC22 ARTERIAL ROAD INFORMATION SIGN

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	DESIGNED - MWP	REVISED - IDOT REVIEW 05-05-14
	DRAWN - KAR	REVISED -
	CHECKED - TMS	REVISED -
	DATE - 3-10-14	FILE - I20725SHT-GenNotes.dgn

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

GENERAL NOTES, HIGHWAY STANDARDS, AND INDEX OF SHEETS	
SCALE: NONE	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	2
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT			CONTRACT NO. 61A59	

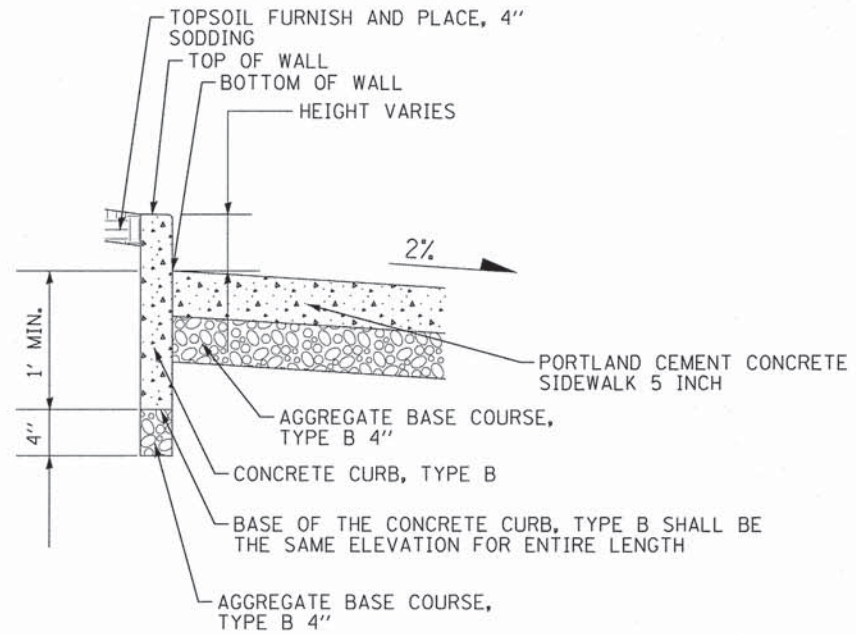
SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0021 QUANTITY
* 20200100	EARTH EXCAVATION	CU YD	12	12
* 20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	11	11
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	141	141
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	3	3
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	3	3
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	3	3
25200110	SODDING, SALT TOLERANT	SQ YD	141	141
25200200	SUPPLEMENTAL WATERING	UNIT	3	3
* 35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	167	167
* # 40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	9	9
* 42001300	PROTECTIVE COAT	SQ YD	159	159
* 42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	1,080	1,080
* # 42400800	DETECTABLE WARNINGS	SQ FT	80	80
* 44000300	CURB REMOVAL	FOOT	100	100
* 44000600	SIDEWALK REMOVAL	SQ FT	985	985
* 60600605	CONCRETE CURB, TYPE B	FOOT	140	140
67100100	MOBILIZATION	L SUM	1	1
# 70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1	1
# 70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1
# 70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1
* 72000100	SIGN PANEL - TYPE 1	SQ FT	19	19
* 72000200	SIGN PANEL - TYPE 2	SQ FT	57	57
* 72400200	REMOVE SIGN PANEL ASSEMBLY - TYPE B	EACH	3	3
* 72400310	REMOVE SIGN PANEL - TYPE 1	SQ FT	3	3
* 72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	30	30
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	111	111
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	520	520
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	540	540
* 78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	312	312
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	62	62
* 78300100	PAVEMENT MARKING REMOVAL	SQ FT	693	693
80500020	SERVICE INSTALLATION - POLE MOUNTED	EACH	1	1
81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	2,276	2,276
81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	32	32
81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	65	65
81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	183	183
81400100	HANDHOLE	EACH	9	9
81400200	HEAVY-DUTY HANDHOLE	EACH	1	1
81400300	DOUBLE HANDHOLE	EACH	1	1
85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1	1
86400100	TRANSCEIVER - FIBER OPTIC	EACH	1	1
87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	1,491	1,491
87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	709	709
87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	986	986
87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	1,328	1,328

* INDICATES SPECIALTY ITEM
INDICATES SPECIAL PROVISION AND/OR GENERAL NOTE AND/OR DETAIL

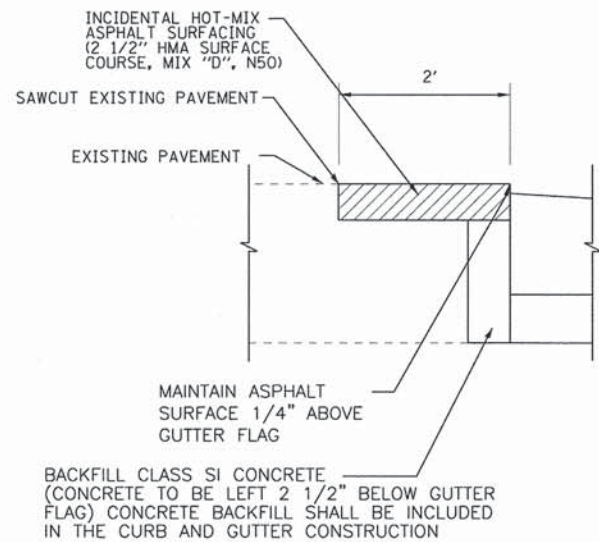
SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE	
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0021 QUANTITY
87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	327	327
87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	921	921
87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	357	357
87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	617	617
87502480	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.	EACH	3	3
87700170	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.	EACH	1	1
87700180	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.	EACH	1	1
87700190	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.	EACH	1	1
87700200	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.	EACH	1	1
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	28	28
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4	4
87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	30	30
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	11	11
87900200	DRILL EXISTING HANDHOLE	EACH	1	1
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	7	7
88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	3	3
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	1	1
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	1	1
88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	4	4
88102747	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	1	1
88200210	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	8	8
88500100	INDUCTIVE LOOP DETECTOR	EACH	7	7
88600100	DETECTOR LOOP, TYPE I	FOOT	751	751
88700200	LIGHT DETECTOR	EACH	2	2
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1	1
88800100	PEDESTRIAN PUSH-BUTTON	EACH	6	6
* # Z0004002	BOLLARDS	EACH	2	2
* # Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	165	165
# Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	52
# Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1	1
X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	224	224
X0325714	FLASHING BEACON, POST MOUNTED, SOLAR POWERED INSTALLATION	EACH	2	2
* # X8510200	PAINT TRAFFIC SIGNAL EQUIPMENT	L SUM	1	1
# X8570226	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL	EACH	1	1
# X8620200	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL	EACH	1	1
# X8710024	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	1,508	1,508
# XX008728	SOLAR POWERED LED FLASHING WARNING SIGN	EACH	2	2

* INDICATES SPECIALTY ITEM
INDICATES SPECIAL PROVISION AND/OR GENERAL NOTE AND/OR DETAIL

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CONCRETE CURB, TYPE B DETAIL
 (NOT TO SCALE)

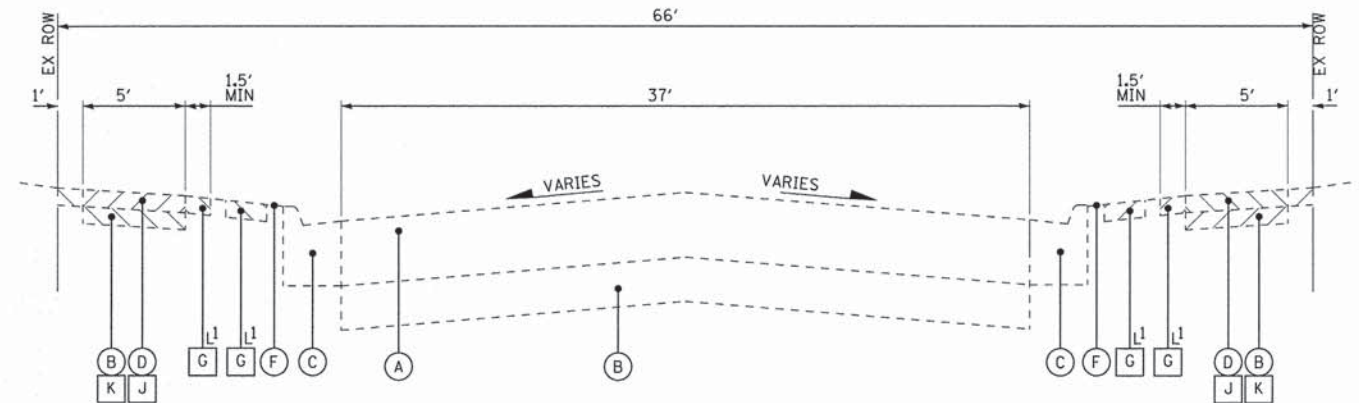


INCIDENTAL HOT-MIX ASPHALT DETAIL
 (NOT TO SCALE)

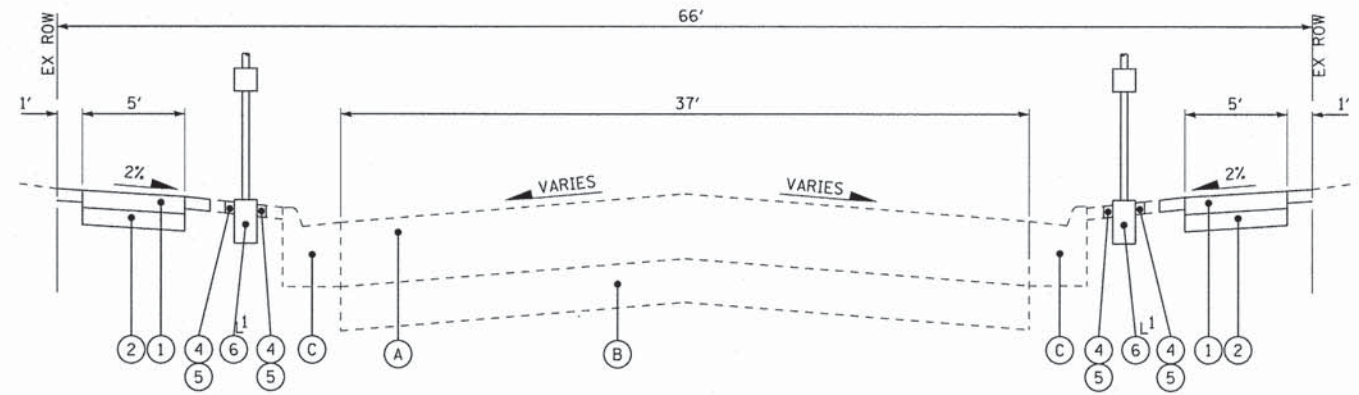
HOT-MIX ASPHALT MIXTURE REQUIREMENTS

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
INCIDENTAL HOT-MIX ASPHALT SURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5mm); ; 2 1/2"	4% @ 50 GYR

THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112LB/SY-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 HMA FULL DEPTH "AC TYPE" SEE SPECIAL PROVISIONS
 FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.



EXISTING TYPICAL SECTION
 STA 8+00 TO STA 27+62, WILLOW SPRINGS ROAD /GILBERT AVENUE^{L1} SEE PLANS FOR EXACT LOCATIONS



PROPOSED TYPICAL SECTION
 STA 8+00 TO STA 27+62, WILLOW SPRINGS ROAD /GILBERT AVENUE

^{L1} SEE PLANS FOR EXACT LOCATIONS

EXISTING LEGEND

- Ⓐ EXISTING HOT-MIX ASPHALT SURFACE AND BINDER COURSE
- Ⓑ EXISTING AGGREGATE BASE COURSE
- Ⓒ EXISTING COMBINATION CONCRETE CURB AND GUTTER
- Ⓓ EXISTING SIDEWALK
- Ⓔ EXISTING AGGREGATE SHOULDER
- Ⓕ GROUND SURFACE
- Ⓖ REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL (TOPSOIL)
- Ⓗ NOT USED
- Ⓙ SIDEWALK REMOVAL
- Ⓚ AGGREGATE BASE COURSE REMOVAL (INCLUDED IN EARTH EXCAVATION PAY ITEM)
- Ⓛ ITEM TO BE REMOVED

PROPOSED LEGEND

- ① PORTLAND CEMENT CONCRETE SIDEWALK - 5 INCH
- ② AGGREGATE BASE COURSE, TYPE B - 4"
- ③ AGGREGATE SUBGRADE IMPROVEMENT
- ④ TOPSOIL FURNISH AND PLACE, 4"
- ⑤ SODDING
- ⑥ SIGNAGE

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DESIGNED - MWP	REVISED - IDOT REVIEW 05-05-14
DRAWN - KAR	REVISED -
CHECKED - TMS	REVISED -
DATE - 3-10-14	FILE - 120725SHT-TypSec.dgn

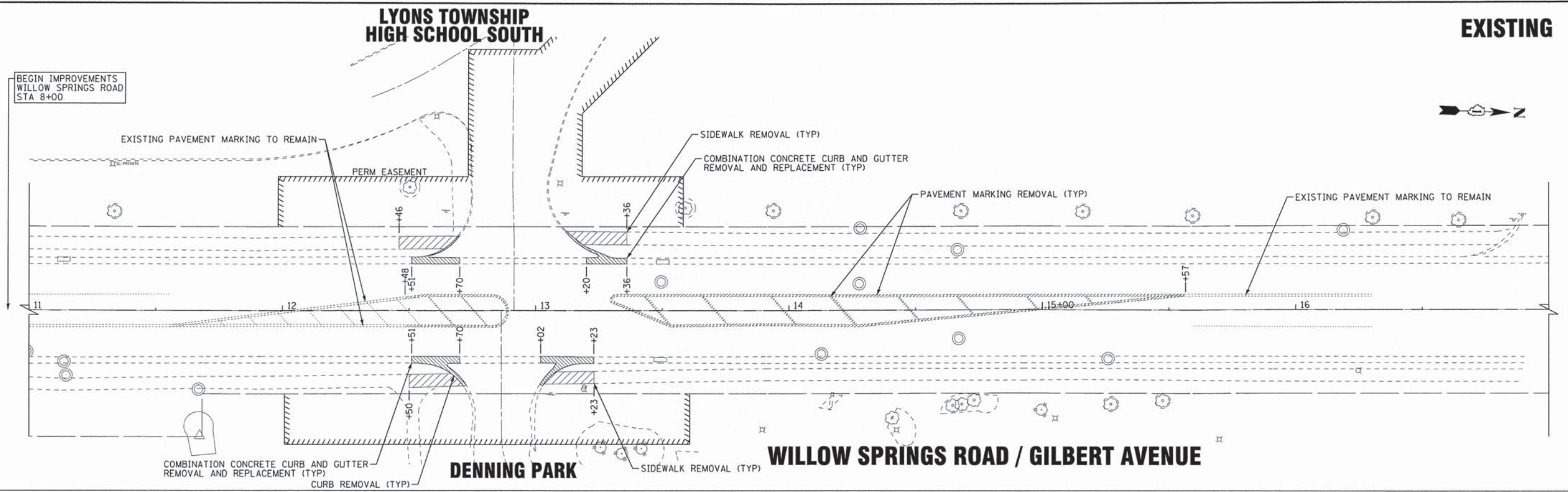
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS, HOT-MIX ASPHALT MIXTURE
 REQUIREMENTS, INCIDENTAL HOT-MIX ASPHALT DETAIL
 AND CONCRETE CURB, TYPE B DETAIL**

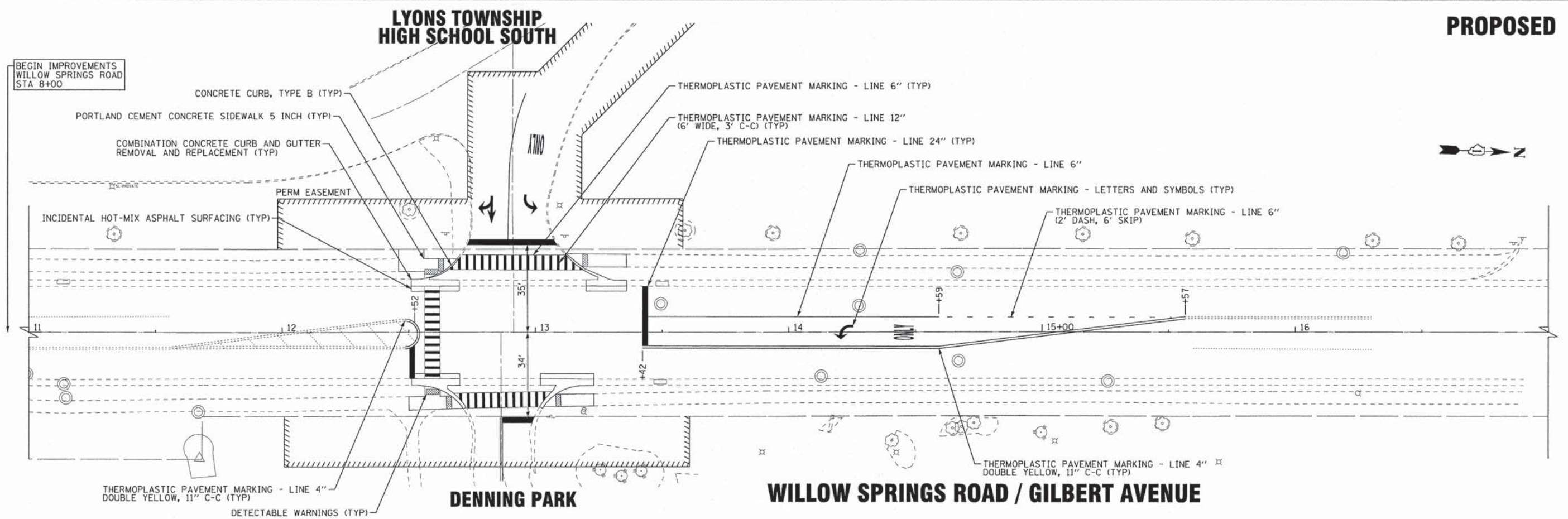
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	4
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 61A59	

EXISTING



PROPOSED



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BAXTER & WOODMAN Consulting Engineers	DESIGNED - MWP	REVISED - IDOT REVIEW 05-05-14
	DRAWN - KAR	REVISED -
	CHECKED - TMS	REVISED -
	DATE - 3-10-14	FILE - 120725SHT-Plan.dgn

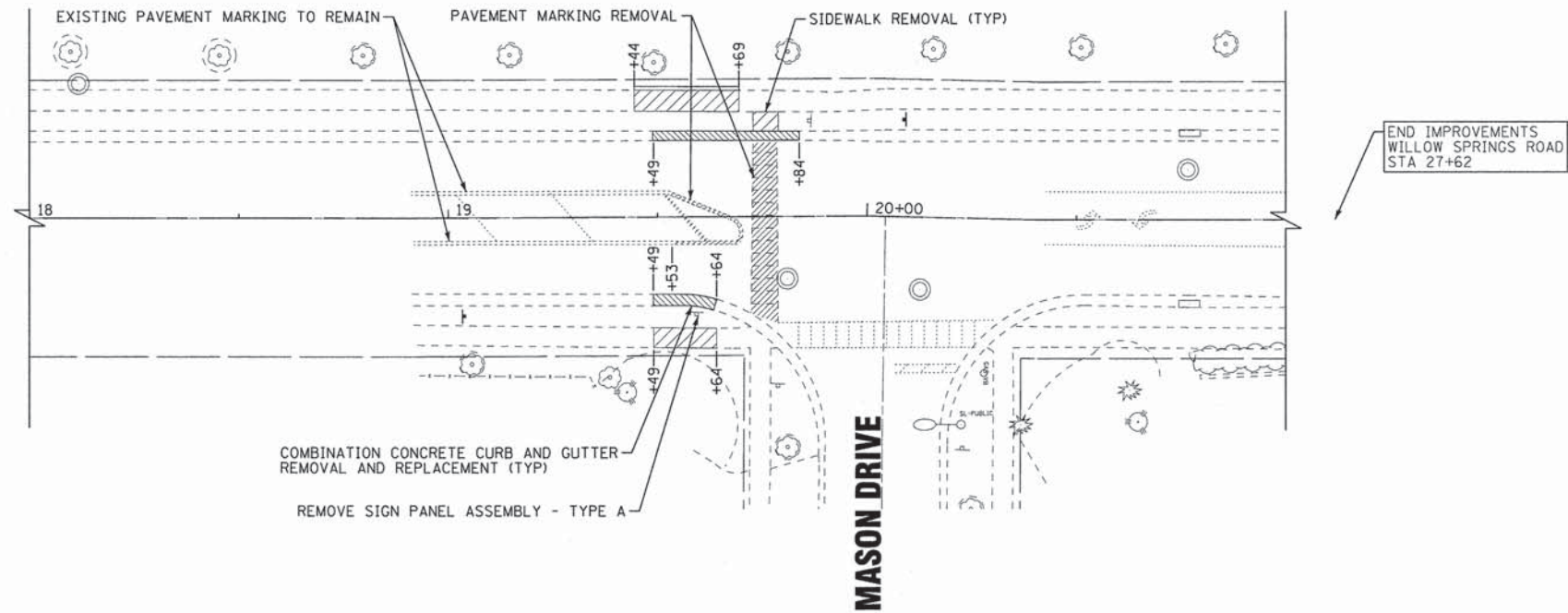
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN	
WILLOW SPRINGS ROAD / GILBERT AVENUE	
SCALE: 1" = 20'	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	5
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 61A59	

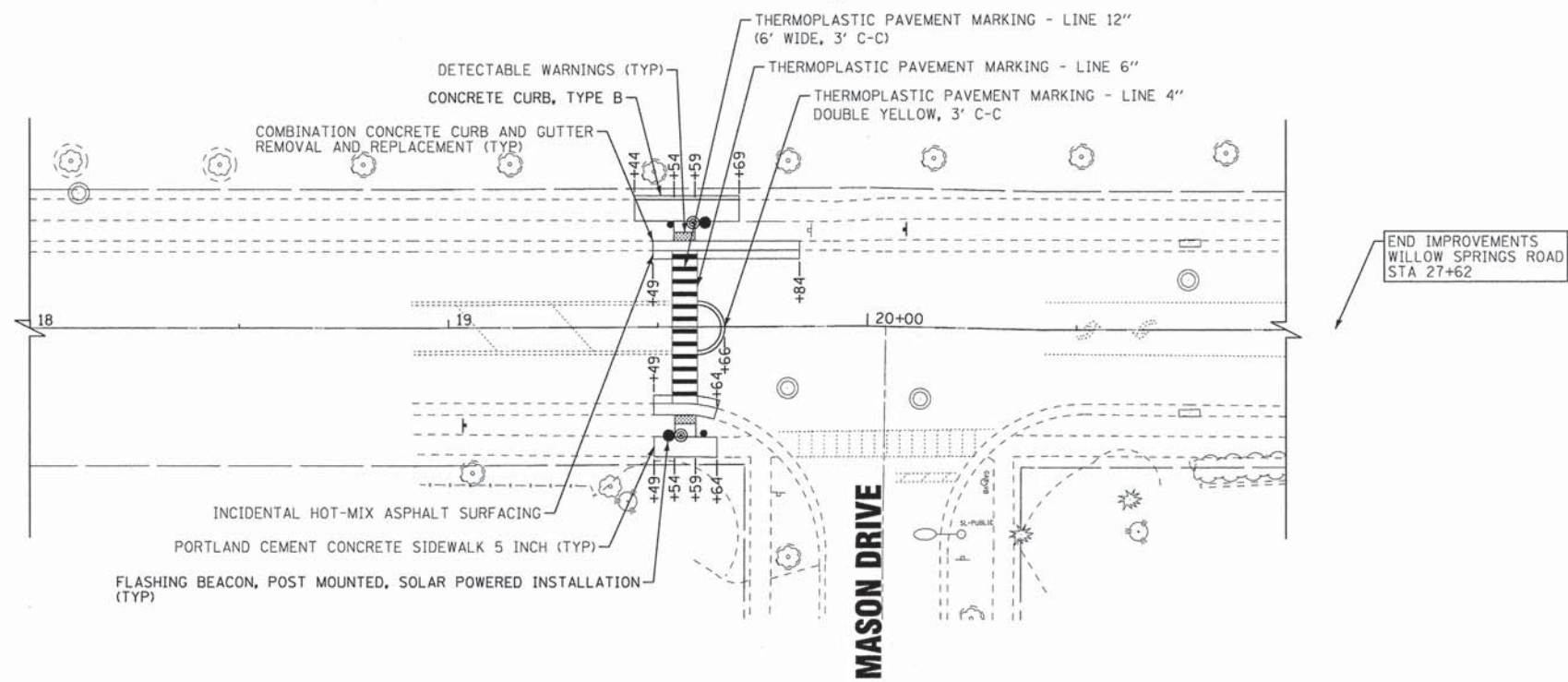
EXISTING

WILLOW SPRINGS ROAD / GILBERT AVENUE



PROPOSED

WILLOW SPRINGS ROAD / GILBERT AVENUE



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 1500 North Lake Street, Suite 100, Willow Springs, IL 60186
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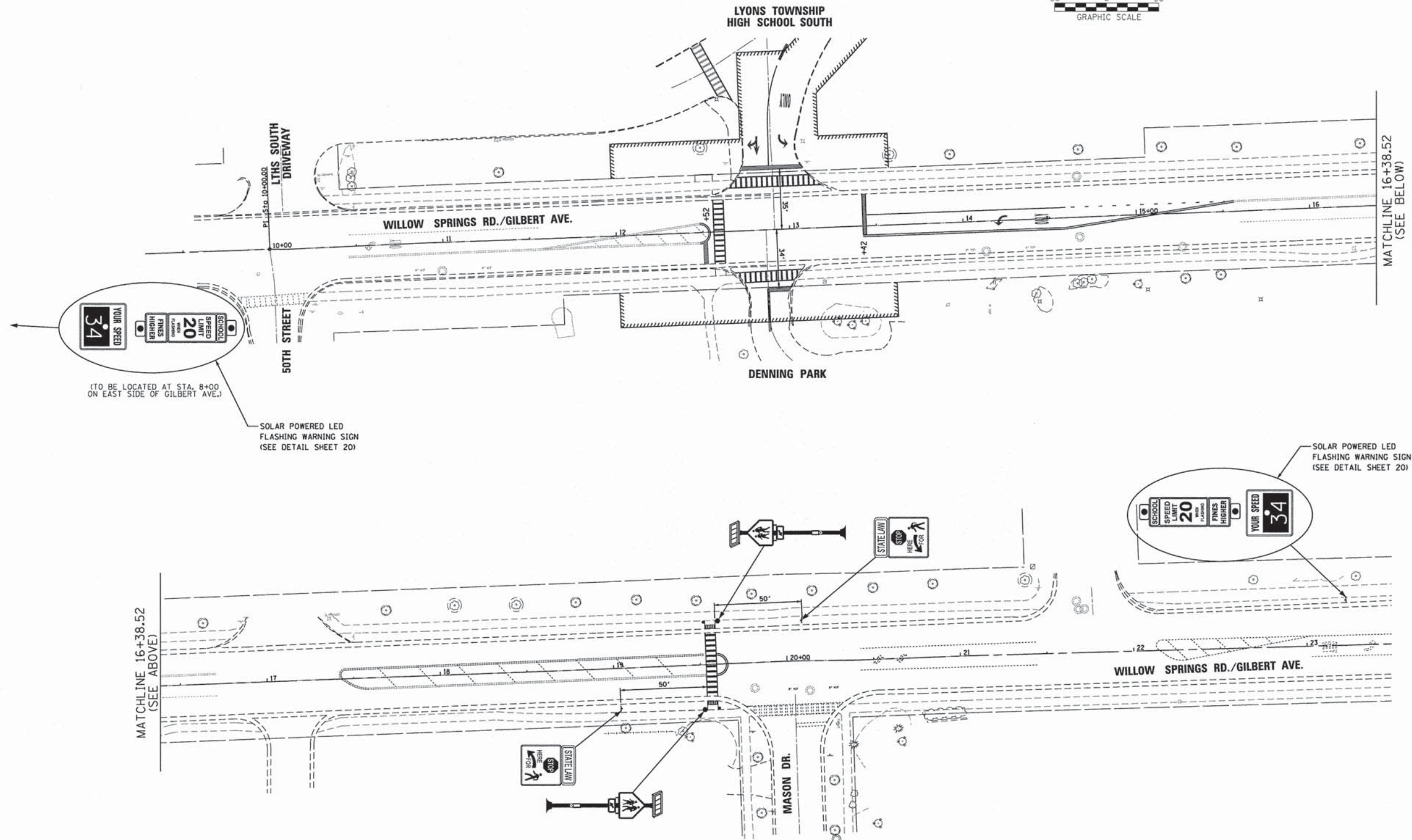
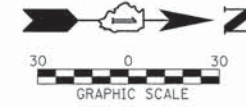


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DRAWN - KAR	REVISED -
CHECKED - TMS	REVISED -
DATE - 3-10-14	FILE - 120725SHT-Plan2.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN
WILLOW SPRINGS ROAD / GILBERT AVENUE
SCALE: 1" = 20'

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	6
CONTRACT NO. 61A59				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



(TO BE LOCATED AT STA. 8+00 ON EAST SIDE OF GILBERT AVE.)

 SOLAR POWERED LED FLASHING WARNING SIGN (SEE DETAIL SHEET 20)

SOLAR POWERED LED FLASHING WARNING SIGN (SEE DETAIL SHEET 20)

KLOA
 Kenig, Lindgren, O'Hara, Aboona, Inc.
 9575 West Higgins Road, Suite 400
 Rosemont, Illinois 60018
 P. (847) 518-9990 F. (847) 518-9987
 PROJECT # 13-115

FILE NAME =	USER NAME = #USER#	DESIGNED TCM	REVISED - IDOT REVIEW COMMENTS
#FILE#		DRAWN TCM	REVISED -
	PLOT SCALE =	CHECKED EDR	REVISED -
#MODELNAME#	PLOT DATE = 5/28/2014	DATE 5/05/14	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SIGNING PLAN
 WILLOW SPRINGS RD./GILBERT AVE.
 SCALE: 1" = 30' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	7
CONTRACT NO. 61A59				
ILLINOIS FED. AID PROJECT				

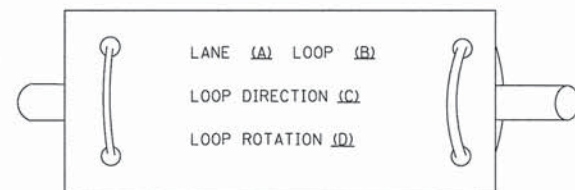
TRAFFIC SIGNAL LEGEND

ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED	ITEM	REMOVAL	EXISTING	PROPOSED																		
CONTROLLER CABINET				EMERGENCY VEHICLE LIGHT DETECTOR				ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1/C, UNLESS NOTED OTHERWISE																					
RAILROAD CONTROL CABINET				CONFIRMATION BEACON				COAXIAL CABLE																					
COMMUNICATIONS CABINET				HANDHOLE				VENDOR CABLE FOR CAMERA																					
MASTER CONTROLLER				HEAVY DUTY HANDHOLE				COPPER INTERCONNECT CABLE, NO. 18 3 PAIR TWISTED, SHIELDED																					
MASTER MASTER CONTROLLER				DOUBLE HANDHOLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F																					
UNINTERRUPTABLE POWER SUPPLY				JUNCTION BOX				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM12F																					
SERVICE INSTALLATION, (P) POLE OR (G) GROUND MOUNT				UNDERGROUND CONDUIT, GALVANIZED STEEL (UC)				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F																					
TELEPHONE CONNECTION (P) POLE OR (G) GROUND MOUNT				TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE				FIBER OPTIC CABLE NO. 62.5/125, MM12F SM24F																					
STEEL MAST ARM ASSEMBLY AND POLE				COMMON TRENCH				GROUND ROD AT (C) CONTROLLER, (H) HANDHOLE, (P) POST, (M) MAST ARM, OR (S) SERVICE																					
ALUMINUM MAST ARM ASSEMBLY AND POLE				COILABLE NONMETALLIC CONDUIT (EMPTY)				CONTROLLER CABINET AND FOUNDATION TO BE REMOVED																					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE				SYSTEM ITEM		S	S	STEEL MAST ARM POLE AND FOUNDATION TO BE REMOVED																					
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH PTZ CAMERA				INTERSECTION ITEM		I	IP	ALUMINUM MAST ARM POLE AND FOUNDATION TO BE REMOVED																					
SIGNAL POST				REMOVE ITEM	R			STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE AND FOUNDATION TO BE REMOVED																					
TEMPORARY WOOD POLE (CLASS 5 OR BETTER) 45 FOOT (13.7m) MINIMUM				RELOCATE ITEM	RL			SIGNAL POST AND FOUNDATION TO BE REMOVED																					
GUY WIRE				ABANDON ITEM	A			INTERSECTION & SAMPLING (SYSTEM) DETECTOR																					
SIGNAL HEAD				12" (300mm) TRAFFIC SIGNAL SECTION				SAMPLING (SYSTEM) DETECTOR																					
SIGNAL HEAD CONSTRUCTION STAGES (NUMBERS INDICATE THE CONSTRUCTION STAGE)				12" (300mm) RED WITH 8" (200mm) YELLOW AND GREEN TRAFFIC SIGNAL FACE				QUEUE DETECTOR																					
SIGNAL HEAD WITH BACKPLATE				SIGNAL FACE				PREFORMED QUEUE DETECTOR																					
SIGNAL HEAD OPTICALLY PROGRAMMED				SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD				PREFORMED INTERSECTION AND SAMPLING (SYSTEM) DETECTOR																					
FLASHER INSTALLATION (S DENOTES SOLAR POWER)				"RB" INDICATES REFLECTIVE BACKPLATE				PREFORMED SAMPLING (SYSTEM) DETECTOR																					
PEDESTRIAN SIGNAL HEAD				12" (300mm) PEDESTRIAN SIGNAL HEAD WALK/DON'T WALK SYMBOL				<h2 style="margin: 0;">RAILROAD SYMBOLS</h2> <table style="width: 100%; border: none;"> <thead> <tr> <th style="width: 50%;"></th> <th style="width: 25%; text-align: center;">EXISTING</th> <th style="width: 25%; text-align: center;">PROPOSED</th> </tr> </thead> <tbody> <tr> <td>RAILROAD CONTROL CABINET</td> <td></td> <td></td> </tr> <tr> <td>RAILROAD CANTILEVER MAST ARM</td> <td></td> <td></td> </tr> <tr> <td>FLASHING SIGNAL</td> <td></td> <td></td> </tr> <tr> <td>CROSSING GATE</td> <td></td> <td></td> </tr> <tr> <td>CROSSBUCK</td> <td></td> <td></td> </tr> </tbody> </table>					EXISTING	PROPOSED	RAILROAD CONTROL CABINET			RAILROAD CANTILEVER MAST ARM			FLASHING SIGNAL			CROSSING GATE			CROSSBUCK		
	EXISTING	PROPOSED																											
RAILROAD CONTROL CABINET																													
RAILROAD CANTILEVER MAST ARM																													
FLASHING SIGNAL																													
CROSSING GATE																													
CROSSBUCK																													
PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, OUTLINED																									
ACCESSIBLE PEDESTRIAN PUSHBUTTON DETECTOR				12" (300mm) PEDESTRIAN SIGNAL HEAD INTERNATIONAL SYMBOL, SOLID																									
ILLUMINATED SIGN "NO LEFT TURN"				PEDESTRIAN SIGNAL HEAD, INTERNATIONAL SYMBOL, WITH COUNTDOWN TIMER																									
ILLUMINATED SIGN "NO RIGHT TURN"				RADIO INTERCONNECT																									
DETECTOR LOOP, TYPE I				RADIO REPEATER																									
PREFORMED DETECTOR LOOP				DENOTES NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE, ALL DETECTOR LOOP CABLE TO BE SHIELDED																									
MICROWAVE VEHICLE SENSOR				GROUND CABLE IN CONDUIT NO. 6 SOLID COPPER (GREEN)																									
VIDEO DETECTION CAMERA																													
VIDEO DETECTION ZONE																													
PAN, TILT, ZOOM CAMERA																													
WIRELESS DETECTOR SENSOR																													
WIRELESS ACCESS POINT																													

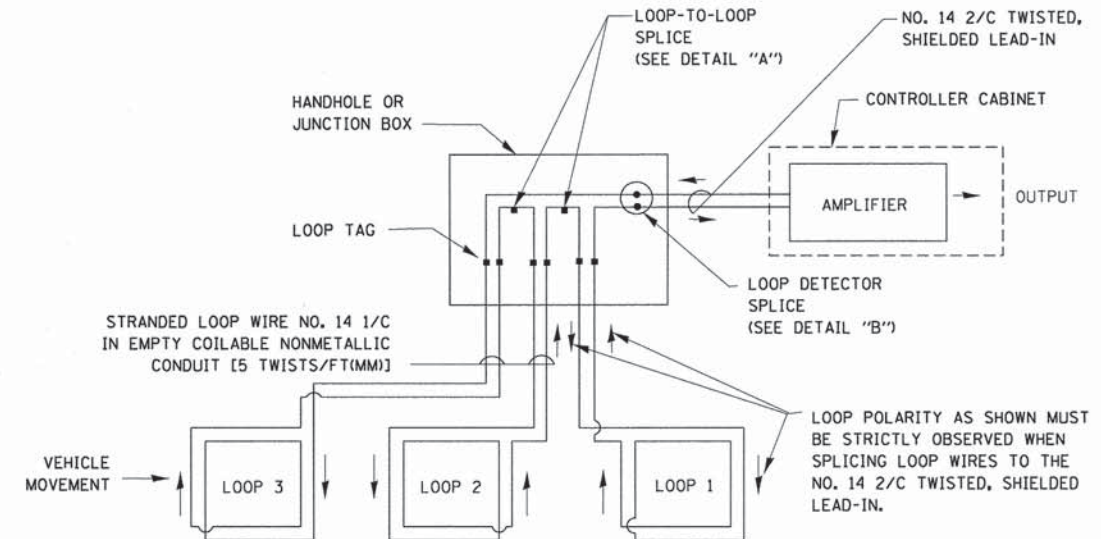
LOOP DETECTOR NOTES

1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE EMPTY COILABLE NONMETALLIC CONDUIT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). EMPTY COILABLE NONMETALLIC CONDUIT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
2. THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED BY THE AMPLIFIER MANUFACTURER. ALL ADJACENT SIDES OF THE LOOPS SHALL BE INSTALLED IN SUCH A WAY THAT THE CURRENT FLOW IS IN THE SAME DIRECTION TO REINFORCE ITS MAGNETIC FIELDS FOR SMALL VEHICLE DETECTION.
3. EACH LOOP LEAD-IN SHALL BE IDENTIFIED AND PERMANENTLY TAGGED IN THE HANDHOLE. EACH LEAD-IN CABLE TAG SHALL INDICATE THE LOCATION OF THE LOOP, LOOP ROTATION (CLOCKWISE/COUNTERCLOCKWISE), LOOP LEAD-IN DIRECTION (IN OR OUT), LOOP CABLE NUMBER AND LOCATION IN CABINET, AND NUMBER OF TURNS IN THE DETECTOR LOOPS IN WATER PROOF INK AS INDICATED ON THE DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAIL. THE CONTRACTOR SHALL MARK LOOP LOCATIONS ON RECORD DRAWINGS AND PRESENT TO THE ENGINEER AFTER FINAL INSPECTION. LOOPS SHALL BE MARKED BY LANE AND LOOP NUMBER. SEE DETAIL BELOW.
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
5. IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVEHOLES MARKED AT THE CURB WITH A SAW-CUT. THE SAW-CUT SHALL BE CUT IN ACCORDANCE WITH LOCAL AND E.P.A. DUST CONTROL REQUIREMENTS. DETECTOR LOOP(S) SHALL NOT BE INSTALLED IN WET CONDITIONS AND THE SAW-CUTS MUST BE FREE OF DEBRIS AND RESIDUE SUCH AS DUST AND WATER WHICH IS TO BE ACHIEVED BY THE USE OF COMPRESSED AIR, WIRE BRUSHING AND HEAT DRYING ACCORDING TO SEALANT MANUFACTURER REQUIREMENTS. THE DETECTOR WIRE SHALL BE HELD IN PLACE BY THE USE OF FORM WEDGES. WEDGES SHALL BE SPACED NO MORE THAN 18" (450 mm) APART.
6. LOOP SPLICES SHALL BE SOLDERED USING A SOLDERING IRON. BLOW TORCHES OR OTHER DEVICES WHICH OXIDIZE COPPER CABLE SHALL NOT BE ALLOWED FOR SOLDERING OPERATIONS. SEE DETAIL BELOW RIGHT.
7. PREFORMED DETECTOR LOOPS SHALL BE USED, AS SHOWN ON THE PLANS, WHERE NEW CONCRETE PAVEMENT IS PROPOSED. THE INSTALLATION OF PREFORMED LOOPS SHALL BE IN ACCORDANCE WITH THE DISTRICT 1 SPECIFICATIONS OR AS DIRECTED BY THE ENGINEER.

LOOP LEAD-IN CABLE TAG

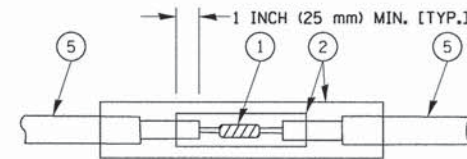


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

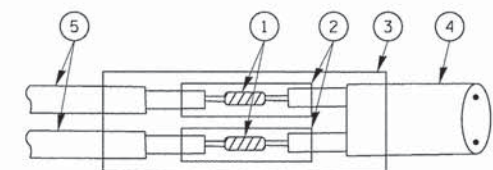


DETECTOR LOOP WIRING SCHEMATIC

- LOOPS SHALL BE SPLICED IN SERIES.
- SAW-CUTS SHALL BE A MINIMUM WIDTH OF 5/16" (8 mm).
- SAW-CUT DEPTHS SHALL BE 3" (75 mm). IF IN CONCRETE, THE SAW-CUT DEPTH SHALL BE TO THE TOP OF THE REINFORCEMENT.
- LOOP CORNERS SHALL BE DRILLED WITH A 2" (50 mm) DIAMETER CORE.

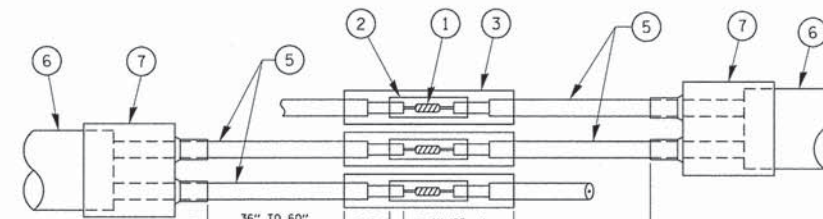


DETAIL "A"
LOOP-TO-LOOP SPLICE

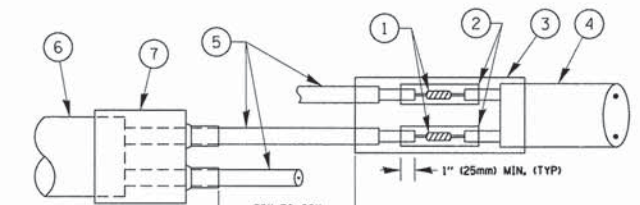


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

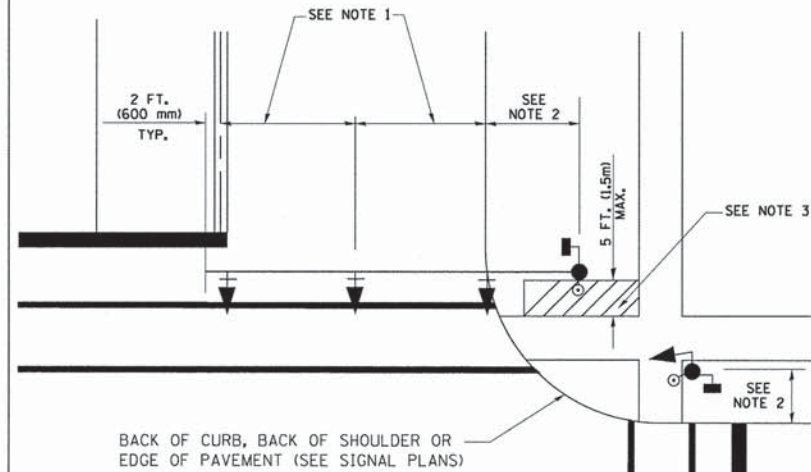
PREFORMED LOOP

LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.
- 2 WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- 3 WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.
- 5 LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PREFORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL.

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE = 50.0000' / in.		CHECKED - DAD	REVISED -		TS-05				CONTRACT NO. 61A59			
PLOT DATE = 1/13/2014		DATE - 10-28-09	REVISED -		SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

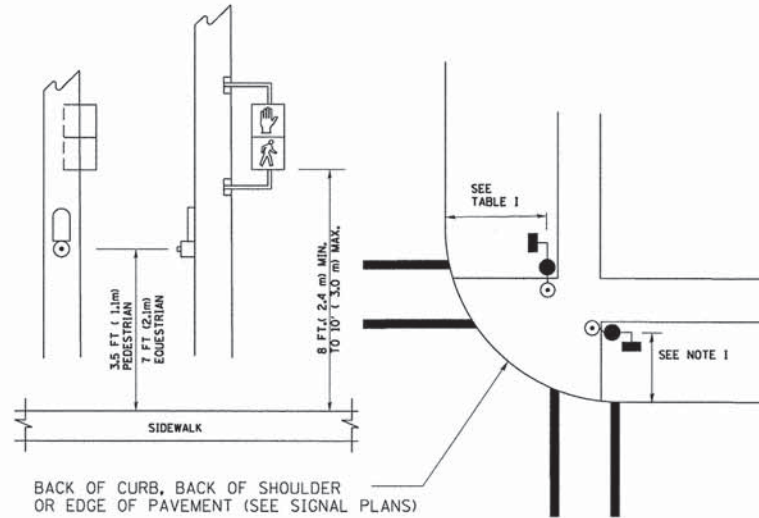
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

1. THE SIGNAL HEAD SPACING IS EQUAL TO THE LANE WIDTH OR AS SHOWN ON THE TRAFFIC SIGNAL PLAN.
2. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
3. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE MAST ARM SHAFT OR THE SIGNAL POST.
4. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
5. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

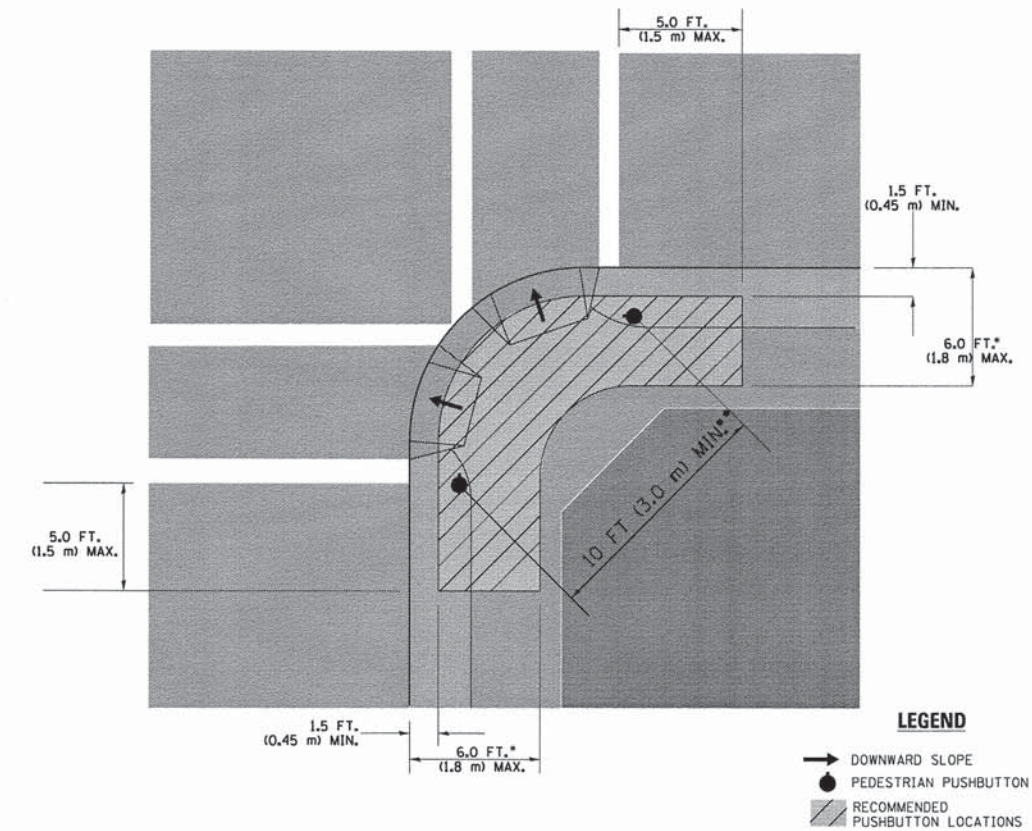
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

1. REFER TO THE TRAFFIC SIGNAL EQUIPMENT OFFSET TABLE.
2. PROVIDE A LEVEL ALL-WEATHER SURFACE (CONCRETE SIDEWALK, ASPHALT BICYCLE PATH SURFACE OR MATCHING MATERIAL TO THE ADJACENT SURFACE) UP TO THE PEDESTRIAN SIGNAL POST OR THE PEDESTRIAN PUSH BUTTON POST.
3. THE FACE OF THE PEDESTRIAN PUSHBUTTON SHALL BE PARALLEL TO THE CROSSWALK TO BE USED.
4. THE LOCATIONS AND INSTALLATION OF PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS SHALL MEET THE REQUIREMENTS OF THE MUTCD AND INFORMATION FOUND IN THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES."

RECOMMENDED PUSHBUTTON LOCATIONS



LEGEND

- DOWNWARD SLOPE
- PEDESTRIAN PUSHBUTTON
- ▨ RECOMMENDED PUSHBUTTON LOCATIONS

- WHERE THERE ARE CONSTRAINTS THAT MAKE IT IMPRACTICAL TO PLACE THE PEDESTRIAN PUSHBUTTON BETWEEN 1.5 FT (0.45 m) AND 6 FT (1.8 m) FROM THE EDGE OF THE CURB, SHOULDER, OR PAVEMENT, IT SHOULD NOT BE FURTHER THAN 10 FT (3 m) FROM THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
- WHERE THERE ARE CONSTRAINTS ON A PARTICULAR CORNER THAT MAKE IT IMPRACTICAL TO PROVIDE THE 10 FT (3 m) SEPERATION BETWEEN THE TWO PEDESTRIAN PUSHBUTTONS, THE PUSHBUTTONS MAY BE PLACED CLOSER TOGETHER OR ON THE SAME POLE.

NOTES:

1. PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGNAL HOUSING INCLUDING BRACKETS NOT LESS THAN 8 FT (2.4 m) OR MORE THAN 10 FT (3 m) ABOVE SIDEWALK LEVEL, AND SHALL BE POSITIONED AND ADJUSTED TO PROVIDE MAXIMUM VISIBILITY AT THE BEGINNING OF THE CONTROLLED CROSSWALK.
2. THE BOTTOM OF THE SIGNAL HOUSING (INCLUDING BRACKETS) OF A VEHICULAR SIGNAL FACE THAT IS NOT LOCATED OVER A HIGHWAY SHALL BE AT LEAST 8 FT (2.4 m) BUT NOT MORE THAN 19 FT (5.8 m) ABOVE THE SIDEWALK OR, IF THERE IS NO SIDEWALK, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE ROADWAY.
3. THE BOTTOM OF THE SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001, 877002, 877006, 877011 AND 877012 WITH A MINIMUM OF 16 FT (5.0 m) AND A MAXIMUM OF 18 FT. (5.5 m) FROM THE HIGHEST POINT OF PAVEMENT.
4. THE BOTTOM OF THE TEMPORARY SPAN WIRE MOUNTED SIGNAL HOUSING AND ANY RELATED ATTACHMENTS TO A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL BE ACCORDING TO CURRENT STATE STANDARD 880001 WITH A MINIMUM OF 17 FT (5.18 m) FROM THE HIGHEST POINT OF PAVEMENT.
5. THE TOP OF THE SIGNAL HOUSING OF A SIGNAL FACE LOCATED OVER ANY PORTION OF A HIGHWAY SHALL NOT BE MORE THAN 25.6 FT (7.8 m) ABOVE THE PAVEMENT.

TRAFFIC SIGNAL EQUIPMENT OFFSET

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MINIMUM DISTANCE FROM BACK OF CURB TO CENTERLINE OF FOUNDATION)	SHOULDER/NON-CURBED AREA (MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO CENTERLINE OF FOUNDATION)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
PEDESTRIAN PUSHBUTTON POST	4 FT (1.2m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
TEMPORARY WOOD POLE	6 FT (1.8m)	SHOULDER WIDTH + 2 FT (0.6m), MINIMUM 10 FT (3.0m)
CONTROLLER CABINET	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.
SERVICE INSTALLATION, GROUND MOUNT	6 FT (1.8m) MINIMUM DISTANCE SEE NOTE 2	SHOULDER WIDTH + 6 FT (1.8m), MINIMUM 16 FT (4.9m) SEE NOTE 3.

NOTES:

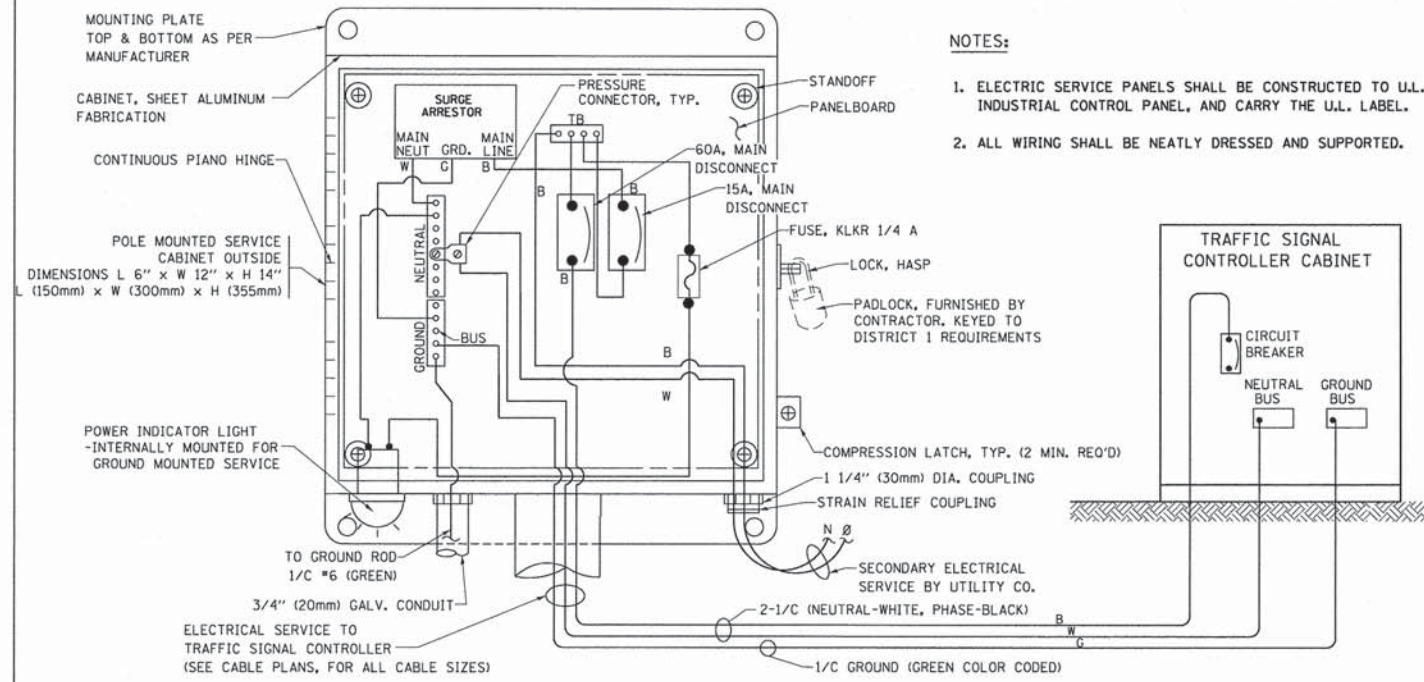
1. CONTACT THE "AREA TRAFFIC SIGNAL MAINTENANCE AND OPERATIONS ENGINEER" FOR ASSISTANCE IN LOCATING THE TRAFFIC SIGNAL EQUIPMENT WHEN THERE ARE CONFLICTS WITH DITCHES OR THE MINIMUM OFFSET DISTANCES CANNOT BE MET.
2. MINIMUM DISTANCE FROM THE BACK OF CURB TO THE ROADWAY SIDE OF THE FOUNDATION.
3. MINIMUM DISTANCE FROM THE EDGE OF PAVEMENT TO THE ROADWAY SIDE OF THE FOUNDATION.
4. ANY CHANGES TO THE OFFSETS OF THE FOUNDATIONS, FROM THE MINIMUM DISTANCES LISTED IN THE "TRAFFIC SIGNAL EQUIPMENT OFFSET" CHART AND THE TRAFFIC SIGNAL INSTALLATION PLAN, COULD EFFECT THE PLACEMENT OF THE SIGNAL HEADS, PEDESTRIAN SIGNAL HEADS AND THE PEDESTRIAN PUSHBUTTONS. THE SIGNAL HEAD PLACEMENT ON THE MAST ARMS SHALL REMAIN AS PER THE TRAFFIC SIGNAL INSTALLATION PLAN AND THE "TRAFFIC SIGNAL MAST ARM AND SIGNAL POST" DETAIL ABOVE. THE PROPOSED MAST ARM LENGTHS MAY NEED TO BE REVISED TO MEET THE ABOVE REQUIREMENTS. THE PEDESTRIAN SIGNAL HEADS AND PEDESTRIAN PUSHBUTTONS MUST MEET THE REQUIREMENTS UNDER THE DETAILS ON THIS SHEET.

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PLT DATE = 1/13/2014		DATE - 10-28-09	REVISED -

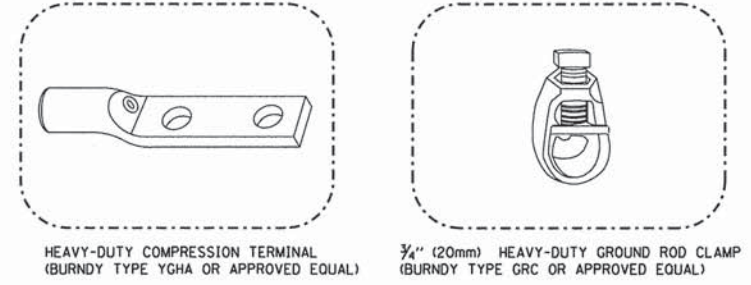
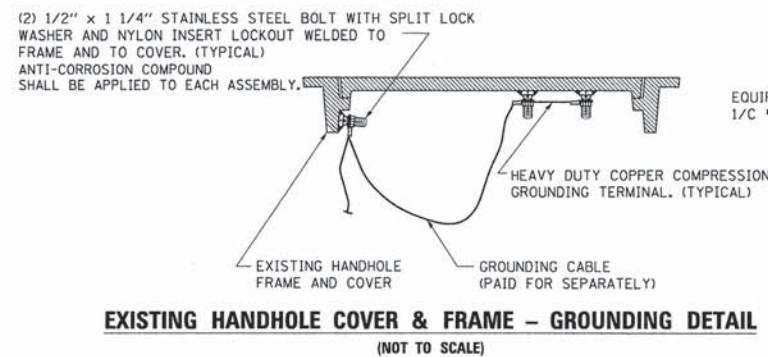
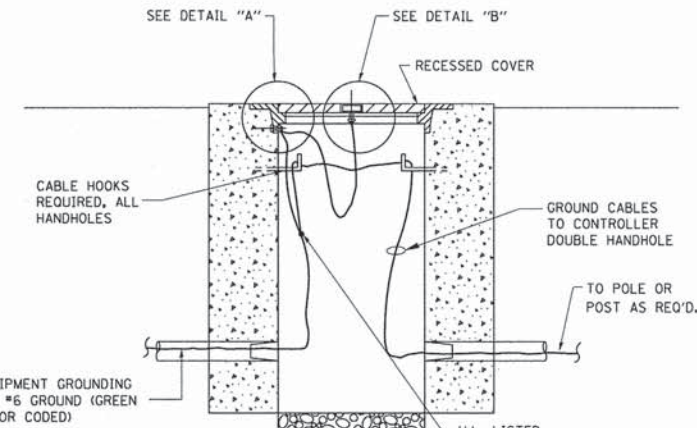
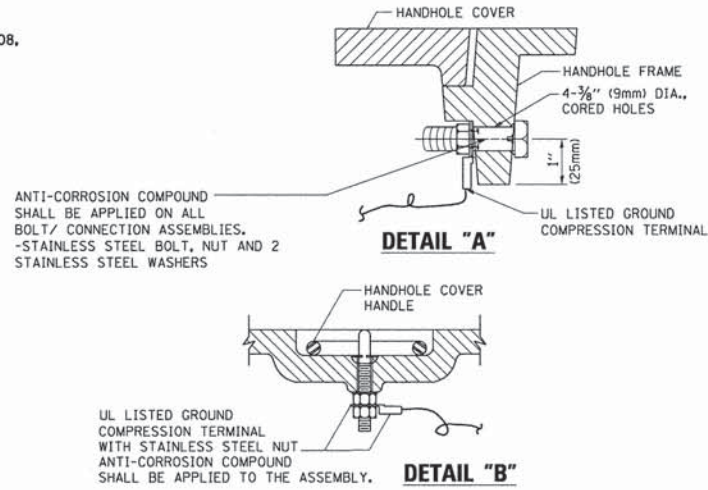
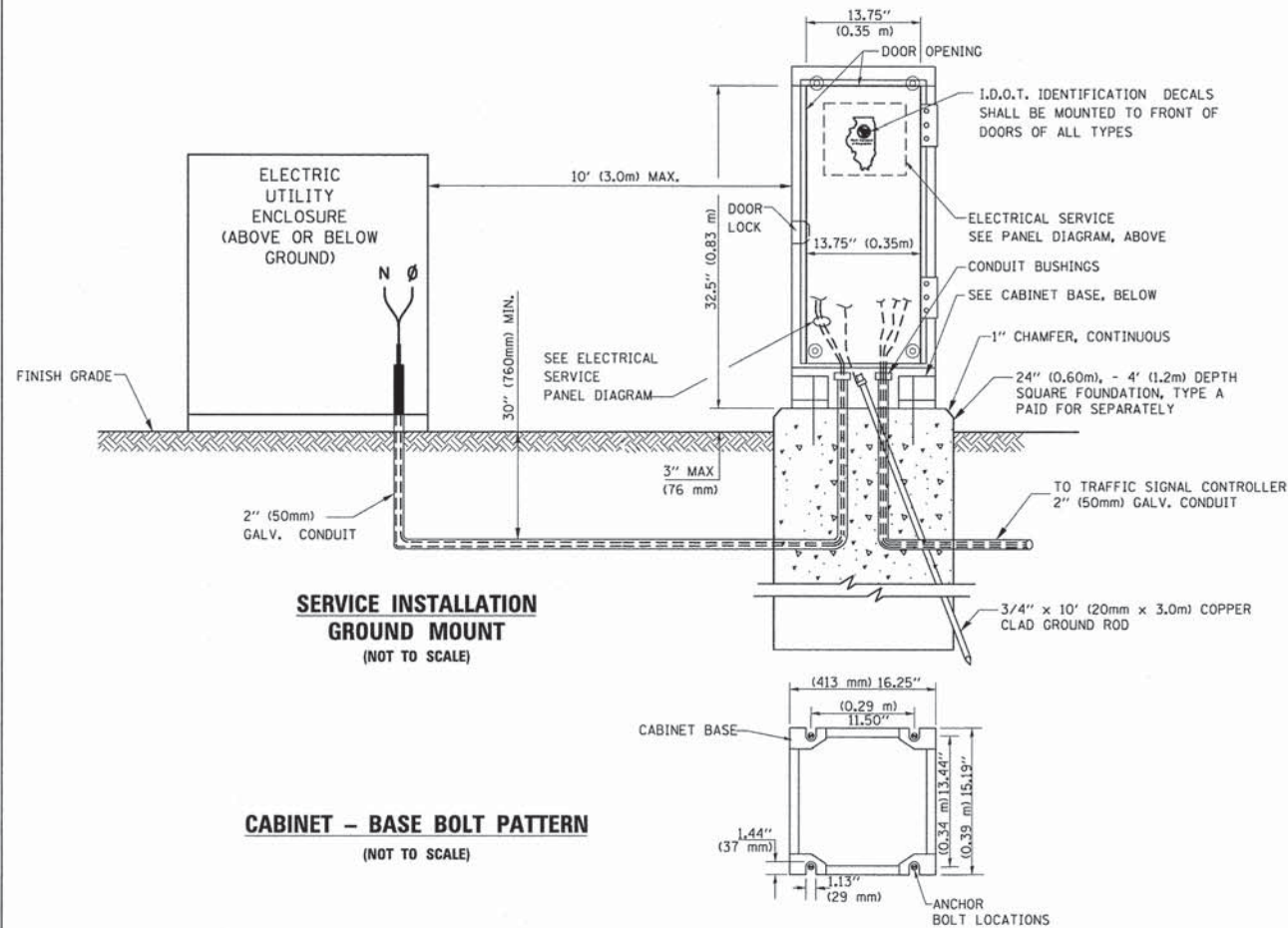
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
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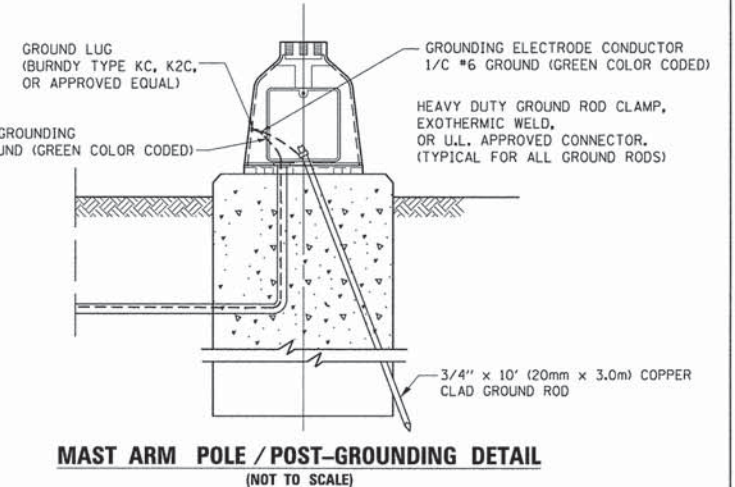
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	10
TS-05			CONTRACT NO. 61A59	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, U.L. APPROVED.
 - GROUND CABLE SHALL BE LOOPED OVER HOOKS IN THE HANDHOLES. 6.5' (2.0m) SLACK SHALL BE PROVIDED IN SINGLE HANDHOLES. 13' (4.0m) OF SLACK SHALL BE PROVIDED IN DOUBLE HANDHOLES. 5' (1.4m) OF SLACK SHALL BE PROVIDED BETWEEN FRAME AND COVER.



**NOTES:
GROUNDING SYSTEM**

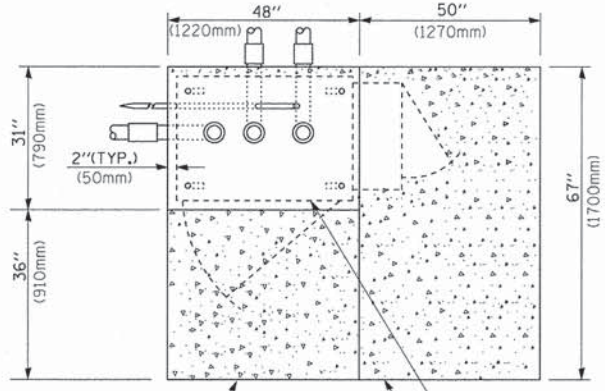
- THE GROUNDING SYSTEM SHALL CONSIST OF AN INSULATED CONDUCTOR TYPE XLP, NO. 6 A.W.G., STRANDED COPPER TO BE INSTALLED IN RACEWAYS. THE GROUNDING CABLE SHALL BE INSTALLED IN A CONTINUOUS MANNER AS SHOWN ON THE CABLE PLAN PROVIDED. ALL GROUNDING CONDUCTORS SHALL BE BONDED TO METAL ENCLOSURE (HANDHOLE, POST, MAST ARM, CONTROLLER, ETC.). GROUND ROD SHALL BE 3/4" DIA. x 10'-0" (20mm x 3.0m) LONG, COPPER CLAD. ONE GROUND ROD SHALL BE INSTALLED AT ALL POST FOUNDATIONS, POLE FOUNDATIONS, CONTROLLER CABINET FOUNDATION AND ELECTRICAL SERVICE INSTALLATION AS INDICATED ON THE CABLE PLAN. IF THERE ARE ANY SPECIAL CONDITIONS SUCH AS SUB-SURFACE CONDITIONS OR INSTALLATION PROBLEMS, THE RESIDENT ENGINEER SHALL BE NOTIFIED OR CONTACT THE BUREAU OF TRAFFIC, ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT ONE AT (847) 705-4139.
- THE NEUTRAL CONDUCTOR AND THE GROUND CONDUCTOR SHALL BE CONNECTED IN THE SERVICE INSTALLATION. AT NO OTHER POINT IN THE TRAFFIC SIGNAL SYSTEM SHALL THE NEUTRAL AND GROUND CONDUCTORS BE CONNECTED.
- ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME.

FILE NAME =	USER NAME = f00temj	DESIGNED - DAD	REVISED - DAG 1-1-14
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		CHECKED - DAD	REVISED -
		DATE - 10-28-09	REVISED -

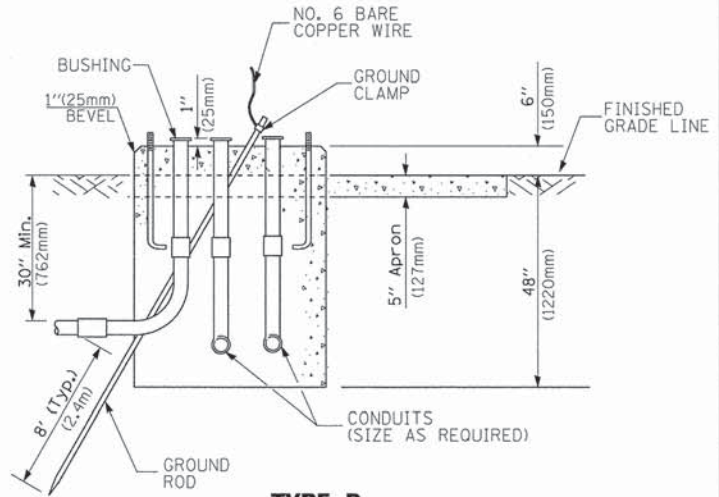
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE			
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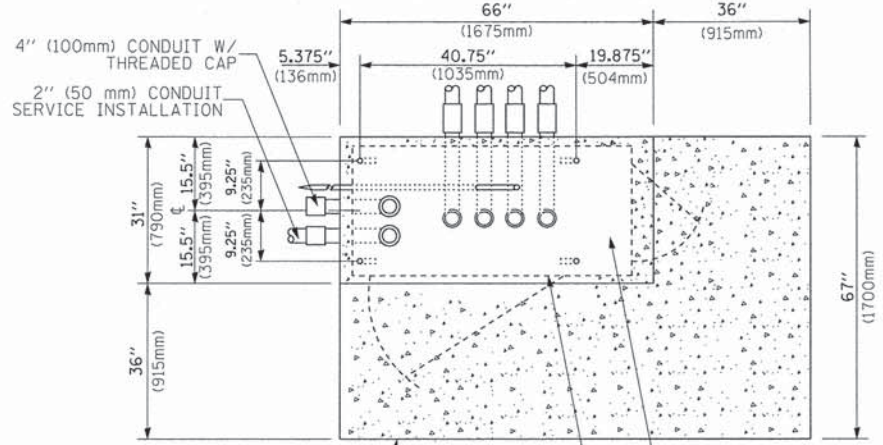
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	11
TS-05		CONTRACT NO. 61A59		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



TOP VIEW
EXISTING APRON
CONTROLLER CABINET BASE
PROPOSED APRON

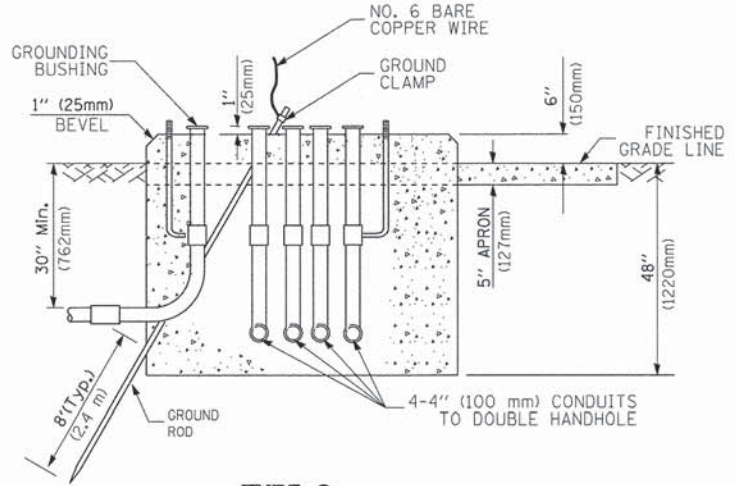


TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET

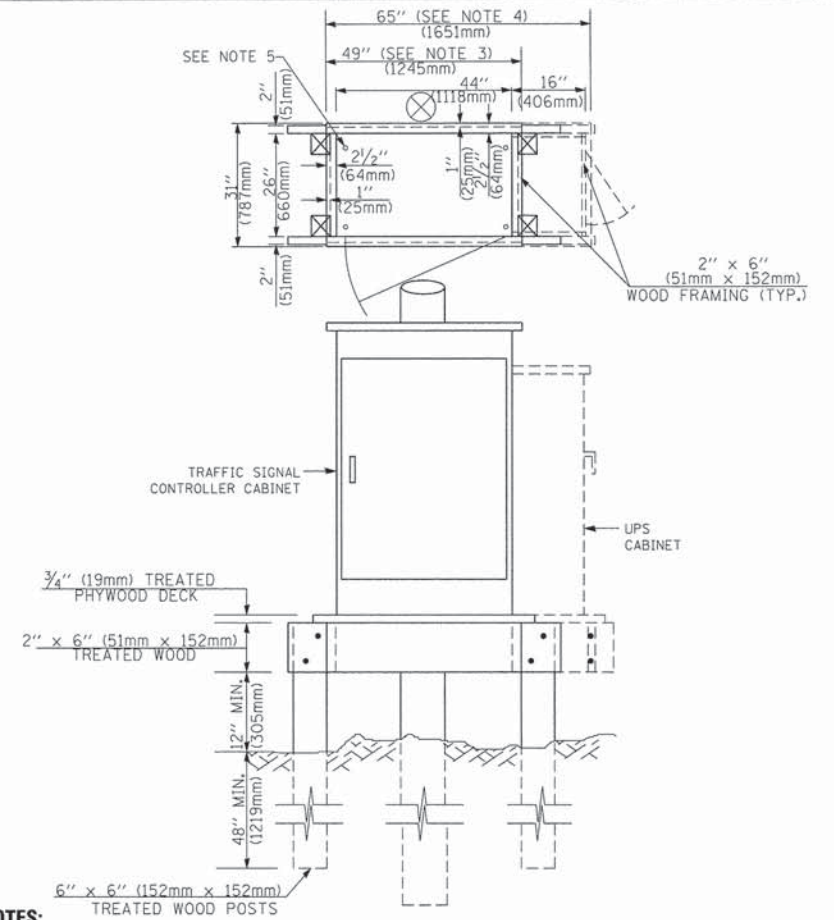


TOP VIEW
APRON
CONTROLLER CABINET BASE
UPS BATTERY COMPARTMENT

NOTE:
TOP OF FOUNDATION SHALL BE HIGHER THAN TOP OF DOUBLE HANDHOLE



TYPE C
FOR GROUND MOUNTED
SUPER P (TYPE IV) AND SUPER R (TYPE V)
CONTROLLER CABINETS



NOTES:

1. BASED ON CONTROLLER CABINET TYPE IV WITH BASE DIMENSIONS OF 26" x 44" (660mm x 1118mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
2. BASED ON UNINTERRUPTIBLE POWER SUPPLY CABINET WITH BASE DIMENSIONS OF 16" x 25" (406mm x 635mm). ADJUST PLATFORM SIZE TO FIT CABINET BASE DIMENSIONS BEING SUPPLIED.
3. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV.
4. PLATFORM SIZE FOR CONTROLLER CABINET TYPE IV AND UNINTERRUPTIBLE POWER SUPPLY CABINET.
5. DRILLED HOLES THROUGH THE PLATFORM BASE TO MATCH THE CONTROLLER CABINET BOLT TEMPLATE. FASTEN THE CONTROLLER CABINET TO THE PLATFORM WITH CARRIAGE BOLTS, WASHERS AND NUTS.
6. FASTEN ALL SUPPORT WOOD FRAMING TO THE WOOD POSTS WITH 2 LAG SCREWS FOR EACH CONNECTION.

TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM

CABLE SLACK LENGTH	FEET	METER
HANDHOLE	6.5	2.0
DOUBLE HANDHOLE	13.0	4.0
SIGNAL POST	2.0	0.6
MAST ARM	2.0	0.6
CONTROLLER CABINET	1.5	0.5
FIBER OPTIC AT CABINET	13.0	4.0
ELECTRIC SERVICE AT (CABINET OR SERVICE LOCATION)	1.5	0.5
GROUND CABLE (SIGNAL POST, MAST ARM, CABINET)	1.5	0.5
GROUND CABLE (BETWEEN FRAME AND COVER)	5.0	1.6

CABLE SLACK

VERTICAL CABLE LENGTH	FEET	METER
MAST ARM POLE (MAST ARM MOUNTED SIGNAL HEAD) (L = MAST ARM LENGTH - DISTANCE TO SIGNAL HEAD FROM END OF ARM)	20.0+L	6.0+L
BRACKET MOUNTED (MAST ARM POLE OR SIGNAL POLE)	13.0	4.0
PEDESTRIAN PUSH BUTTON	6.0	2.0
SERVICE INSTALLATION POLE MOUNT TO SERVICE DROP	13.5	4.1
SERVICE INSTALLATION POLE MOUNT TO GROUND	13.5	4.1
SERVICE INSTALLATION GROUND MOUNT	6.0	2.0
FOUNDATION (SIGNAL POST, MAST ARM POLE, CONTROLLER CABINET, SERVICE-GROUND MOUNT)	3.0	1.0

VERTICAL CABLE LENGTH

FOUNDATION	DEPTH
TYPE A - Signal Post	4'-0" (1.2m)
TYPE C - CONTROLLER W/ UPS	4'-0" (1.2m)
TYPE D - CONTROLLER	4'-0" (1.2m)
SERVICE INSTALLATION, GROUND MOUNT, TYPE A - SQUARE	4'-0" (1.2m)

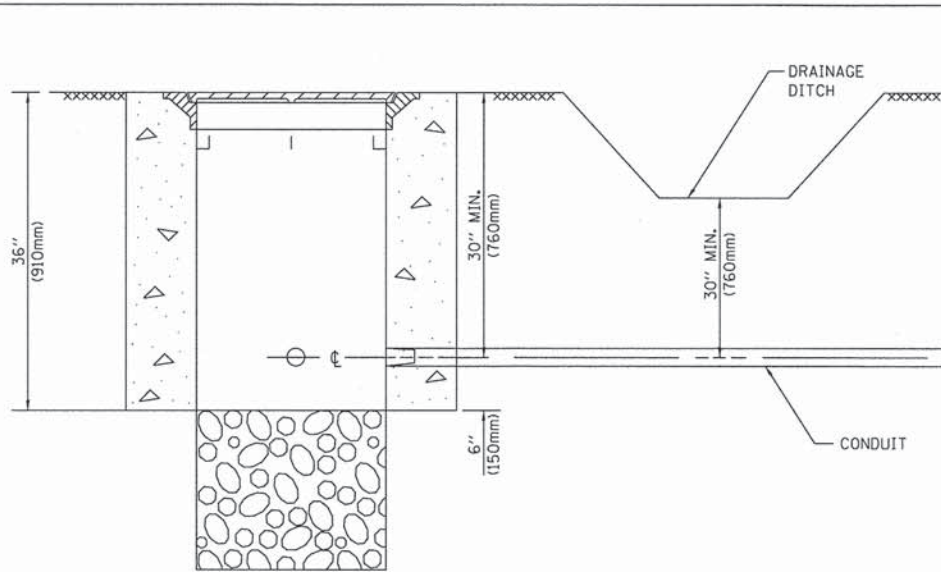
DEPTH OF FOUNDATION

Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m) 11'-0" (3.4 m)	30" (750mm) 36" (900mm)	24" (600mm) 30" (750mm)	8 12	6(19) 7(22)
Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)	13'-0" (4.0 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)	15'-0" (4.6 m)	36" (900mm)	30" (750mm)	12	7(22)
Greater than or equal to 56' (16.8 m) and less than 65' (19.8 m)	21'-0" (6.4 m)	42" (1060mm)	36" (900mm)	16	8(25)
Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)	25'-0" (7.6 m)	42" (1060mm)	36" (900mm)	16	8(25)

NOTES:

1. These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & structures should be contacted for a revised design if other conditions are encountered.
2. Combination mast arm assemblies under 55 feet (16.8 m) shall use 36" (900 mm) diameter foundations.
3. Combination mast arm assemblies under 56 feet (16.8 m) through 75 feet (22.9 m) shall use 42" (1060 mm) diameter foundations.
4. For mast arm assemblies with dual arms refer to state standard 878001..

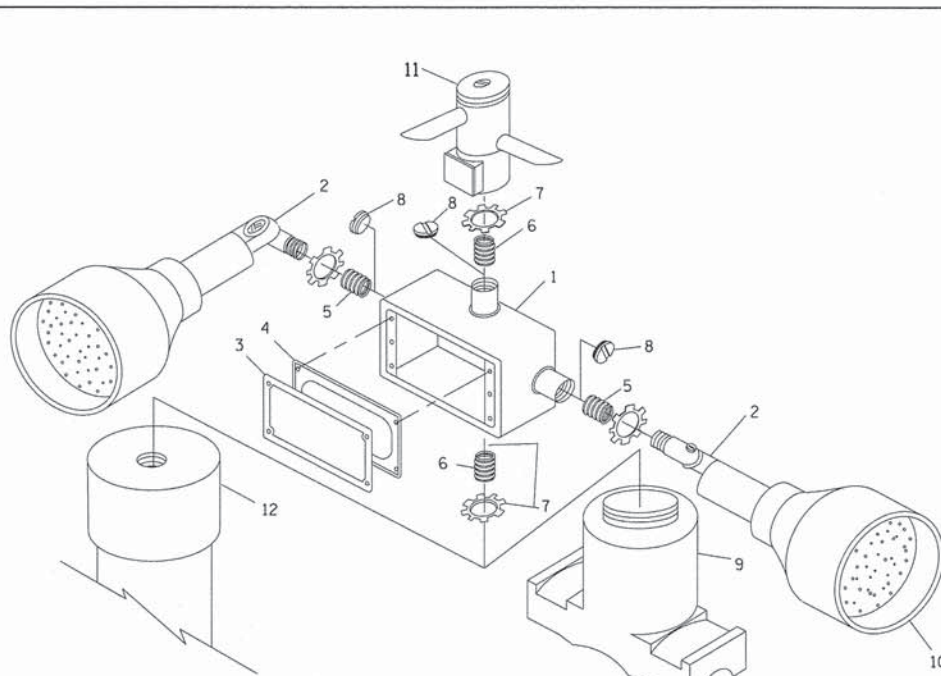
DEPTH OF MAST ARM FOUNDATIONS, TYPE E



NOTES:

1. CONDUIT DEPTH SHALL BE A MINIMUM OF 30" (760mm) BELOW THE BOTTOM OF THE DRAINAGE DITCH OR ANY SLOPING GROUND
2. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL CONDUIT PLACED UNDER ROADWAY PAVEMENT, MULTI-USE PATHS, SIDEWALKS AND SOIL SURFACES.
3. THE MINIMUM CONDUIT DEPTH APPLIES TO ALL HANDHOLES, HEAVY DUTY HANDHOLES AND DOUBLE HANDHOLES.

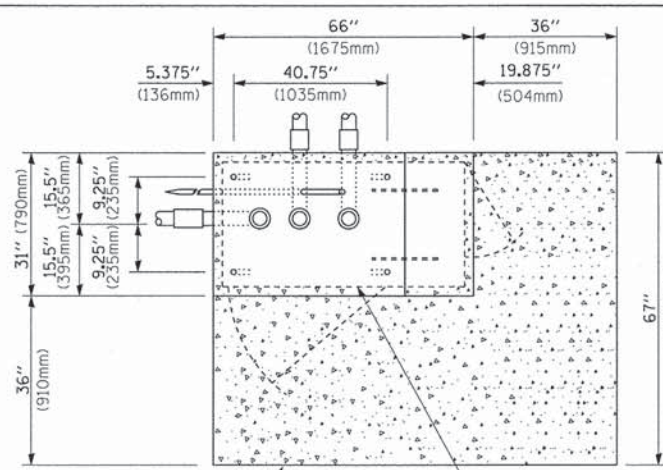
HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)



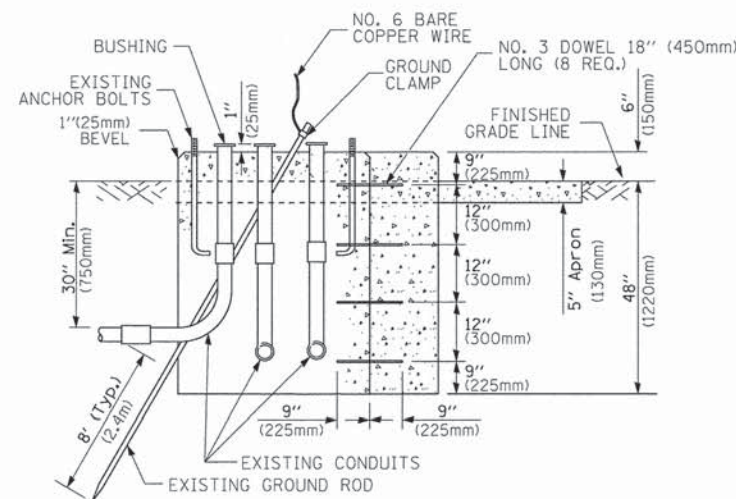
POST CAP MOUNT

MAST ARM MOUNT

EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL



TOP VIEW
(NOT TO SCALE)

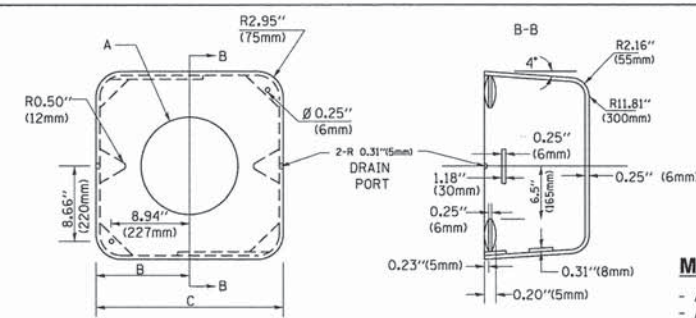


MODIFY EXISTING TYPE "D" FOUNDATION TO TYPE "C" FOUNDATION
(NOT TO SCALE)

ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0.000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. ITEM #1- OZ/GEDNEY FSX-1-50 OR EQUIVALENT
ITEM #2- MULBERRY CON-O-SHADE LAMP SHIELD OR EQUIVALENT
ITEM #9- "BAND-IT" SADDLE BRACKET OR EQUIVALENT
3. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



MATERIAL:
- ASTM A36 STEEL
- ASTM A-123 HOT DIPPED GALVANIZED

A	B	C	HEIGHT	WEIGHT
VARIES	9.5"(241mm)	19"(483mm)	7" (178mm) - 12" (300mm)	53 lbs (24kg)
VARIES	10.75"(273mm)	21.5"(546mm)	7" (178mm) - 12" (300mm)	68 lbs (31 kg)
VARIES	13.0"(330mm)	26"(660mm)	7" (178mm) - 12" (300mm)	81 lbs (37 kg)
VARIES	18.5"(470mm)	37"(940mm)	7" (178mm) - 12" (300mm)	126 lbs (57 kg)

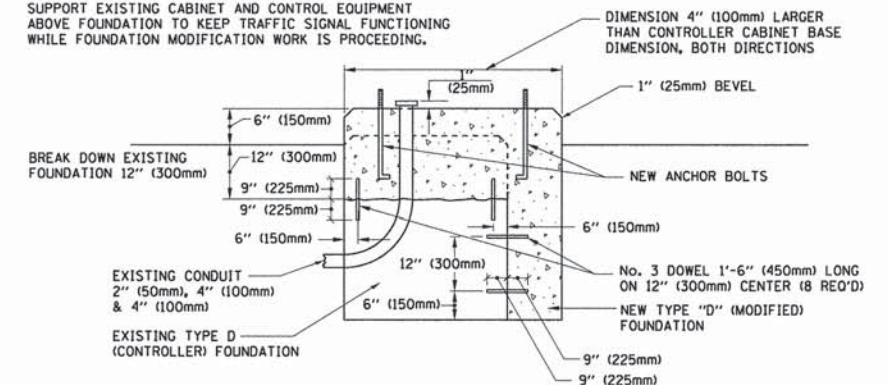
SHROUD

NOTES:

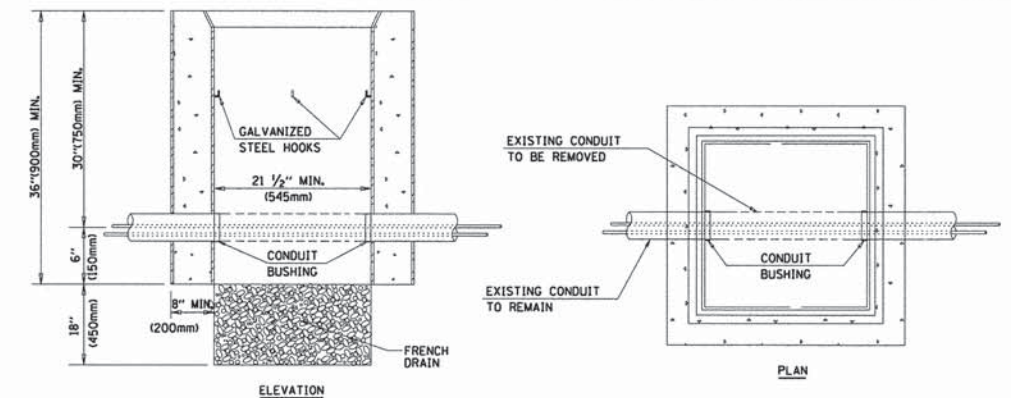
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

SUPPORT EXISTING CABINET AND CONTROL EQUIPMENT ABOVE FOUNDATION TO KEEP TRAFFIC SIGNAL FUNCTIONING WHILE FOUNDATION MODIFICATION WORK IS PROCEEDING.



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

1. HANDHOLE CONSTRUCTED PER STATE STANDARD 814001.
2. REMOVAL OF THE EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHINGS SHALL BE INCLUDED WITH THE COST OF THE HANDHOLE.

HANDHOLE TO INTERCEPT EXISTING CONDUIT

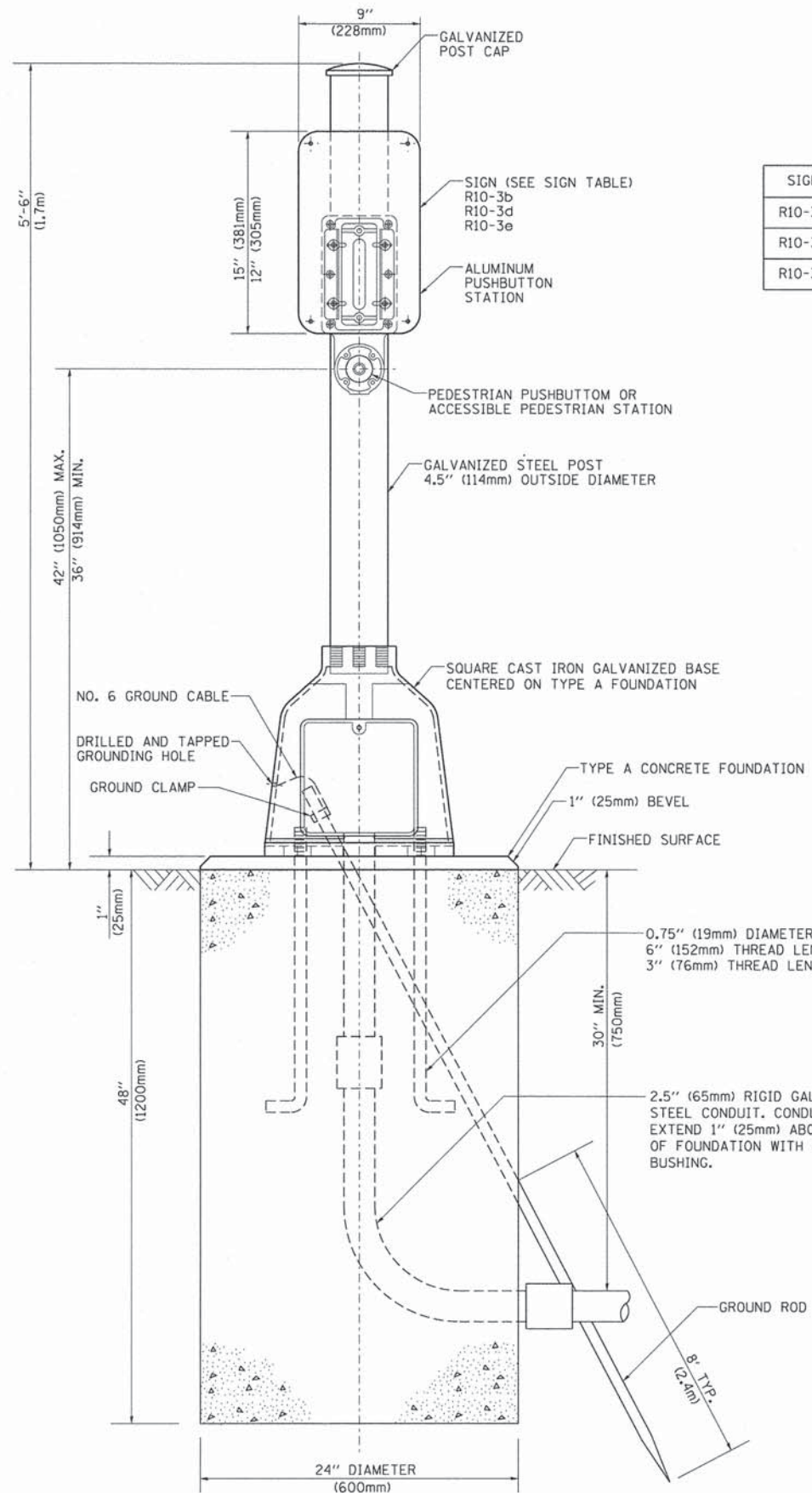
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	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

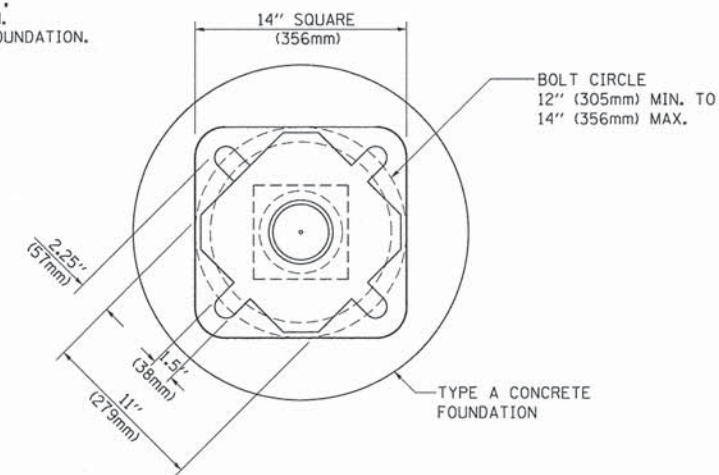
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TS-05		CONTRACT NO. 61A59		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



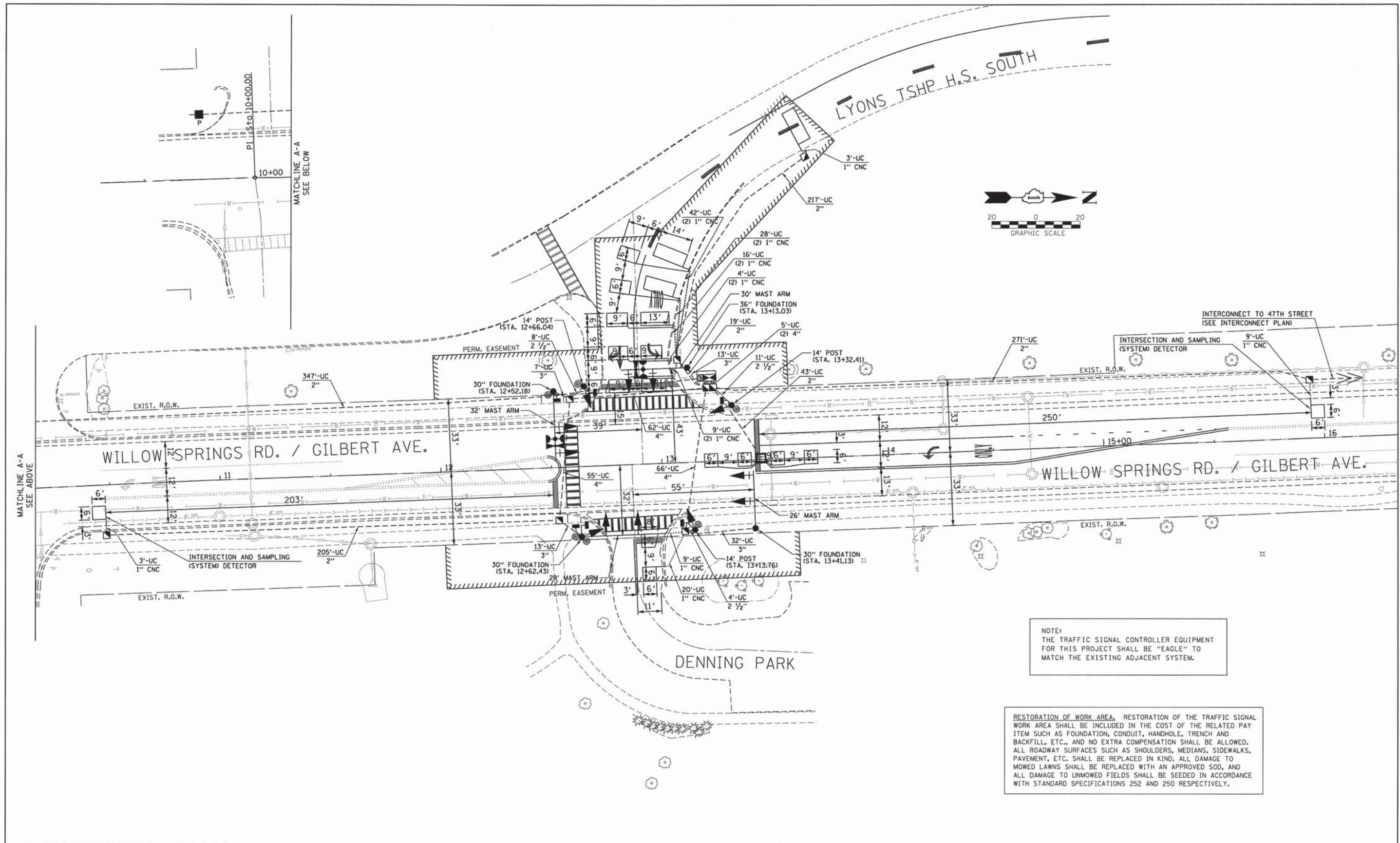
SIGN TABLE

SIGN	DIMENSIONS
R10-3b	9" (228mm) X 12" (305mm)
R10-3d	9" (228mm) X 12" (305mm)
R10-3e	9" (228mm) X 15" (381mm)



BOLT PATTERN
PEDESTRIAN PUSH BUTTON POST, TYPE A

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS		F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT DATE = 1/13/2014		DATE - 10/1/2012	REVISED -		SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



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

RESTORATION OF WORK AREA. RESTORATION OF THE TRAFFIC SIGNAL
 WORK AREA SHALL BE INCLUDED IN THE COST OF 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
 MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND
 ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE
 WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

KLOA
 Kenig, Lindgren, O'Hara, Aboona, Inc.
 9575 West Higgins Road, Suite 400
 Rosemont, Illinois 60018
 P: (847) 518-9990 F: (847) 518-9987
 PROJECT # 13-115

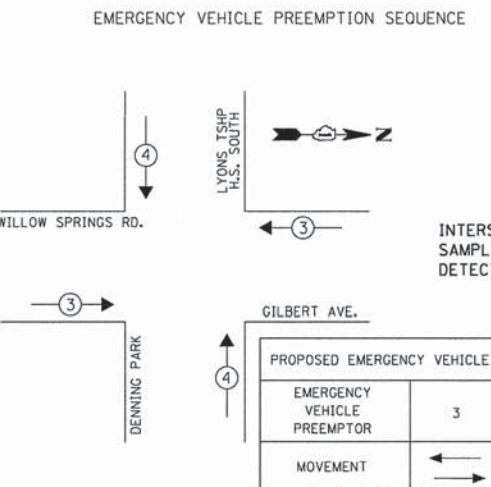
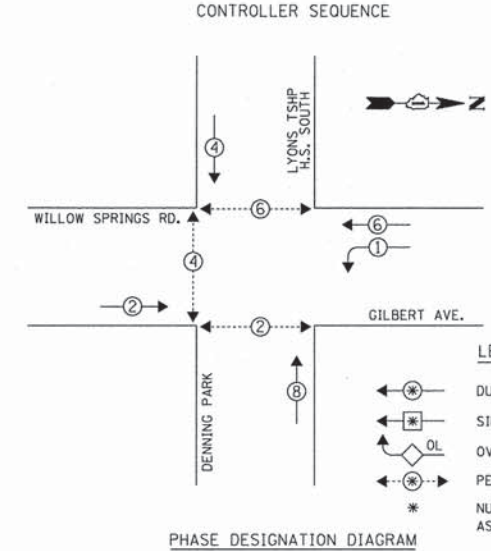
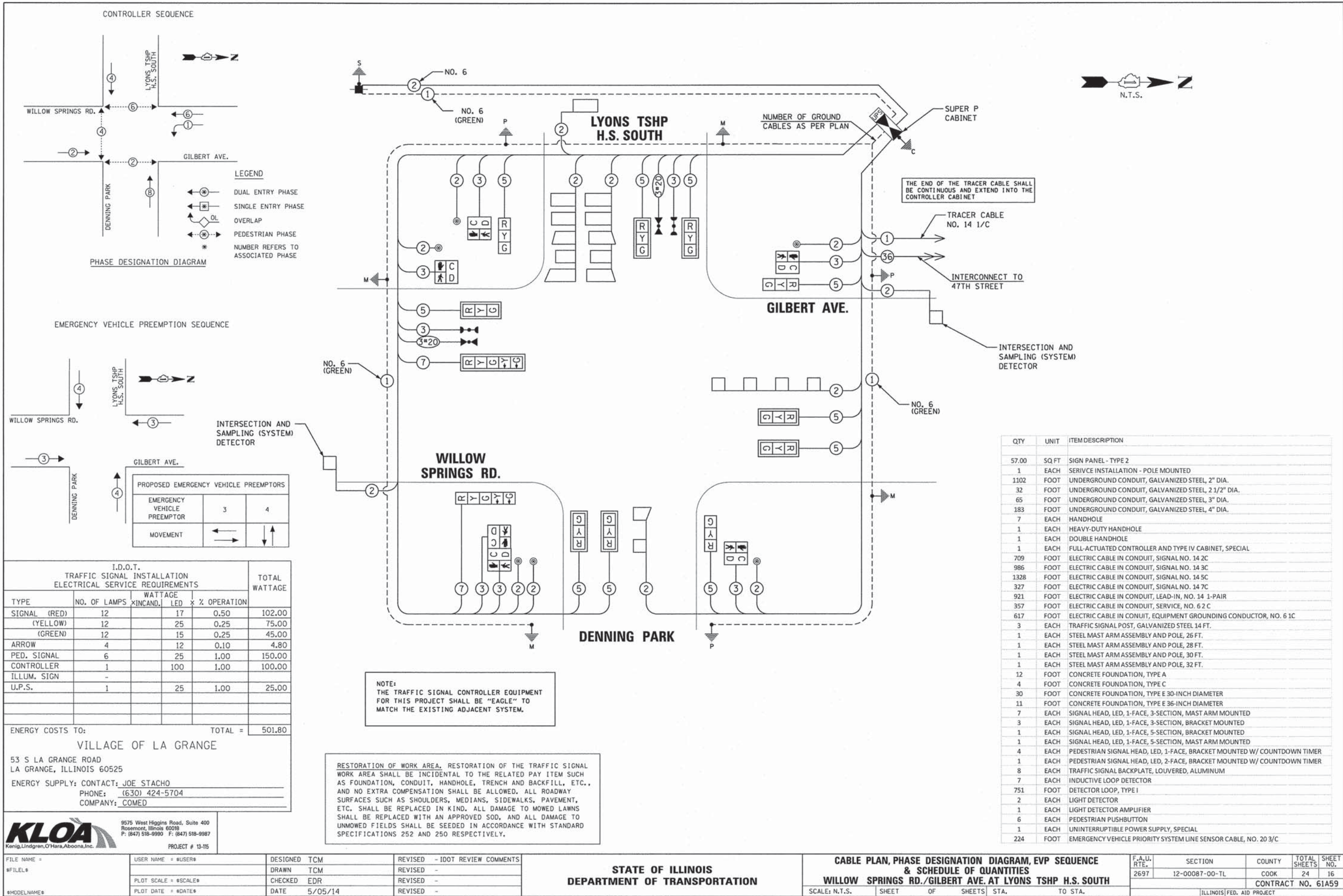
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#MODELNAME#	PLOT DATE = #DATE#	DATE 5/05/14	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TRAFFIC SIGNAL INSTALLATION PLAN
 WILLOW SPRINGS RD./GILBERT AVE. AND
 LYONS TWP HIGH SCHOOL SOUTH /DENNING PARK**

SCALE: 1" = 20' SHEET OF SHEETS STA. TO STA.

F.A.U. RT#	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	15
CONTRACT NO. 61A59				
ILLINOIS FED. AID PROJECT				



I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE X INCAND.	LED	% OPERATION	
SIGNAL (RED)	12		17	0.50	102.00
(YELLOW)	12		25	0.25	75.00
(GREEN)	12		15	0.25	45.00
ARROW	4		12	0.10	4.80
PED. SIGNAL	6		25	1.00	150.00
CONTROLLER	1		100	1.00	100.00
ILLUM. SIGN	-				
U.P.S.	1		25	1.00	25.00
TOTAL =					501.80

ENERGY COSTS TO: TOTAL = 501.80

VILLAGE OF LA GRANGE
 53 S LA GRANGE ROAD
 LA GRANGE, ILLINOIS 60525

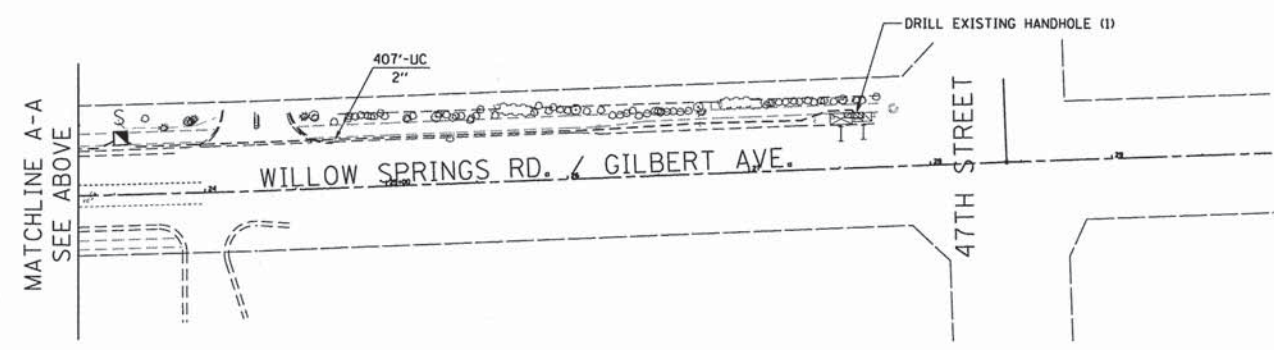
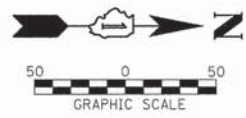
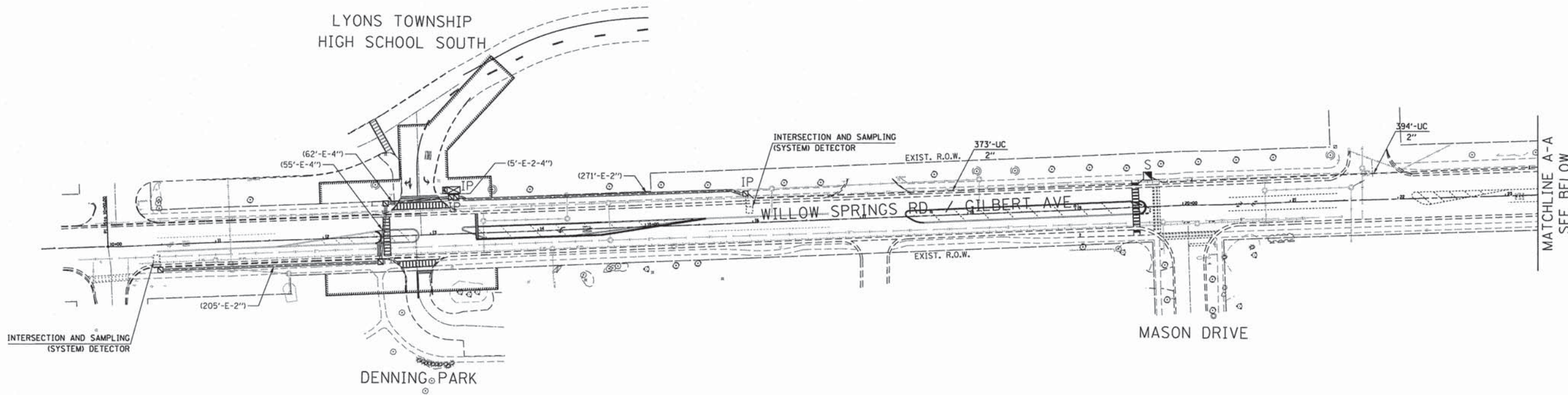
ENERGY SUPPLY: CONTACT: JOE STACHO
 PHONE: (630) 424-5704
 COMPANY: COMED

KLOA
 Konig, Lindgren, O'Hara, Aboona, Inc.
 9575 West Higgins Road, Suite 400
 Rosemont, Illinois 60018
 P: (847) 518-9990 F: (847) 518-9987
 PROJECT # 13-115

NOTE:
 THE TRAFFIC SIGNAL CONTROLLER EQUIPMENT FOR THIS PROJECT SHALL BE "EAGLE" 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 MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

QTY	UNIT	ITEM DESCRIPTION
57.00	SQ FT	SIGN PANEL - TYPE 2
1	EACH	SERVICE INSTALLATION - POLE MOUNTED
1102	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
32	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.
65	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.
183	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.
7	EACH	HANDHOLE
1	EACH	HEAVY-DUTY HANDHOLE
1	EACH	DOUBLE HANDHOLE
1	EACH	FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
709	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C
985	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C
1328	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C
327	FOOT	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C
921	FOOT	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1-PAIR
357	FOOT	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C
617	FOOT	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C
3	EACH	TRAFFIC SIGNAL POST, GALVANIZED STEEL 14 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 26 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 28 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 30 FT.
1	EACH	STEEL MAST ARM ASSEMBLY AND POLE, 32 FT.
12	FOOT	CONCRETE FOUNDATION, TYPE A
4	FOOT	CONCRETE FOUNDATION, TYPE C
30	FOOT	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER
11	FOOT	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER
7	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED
3	EACH	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED
1	EACH	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED
4	EACH	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED W/ COUNTDOWN TIMER
1	EACH	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED W/ COUNTDOWN TIMER
8	EACH	TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM
7	EACH	INDUCTIVE LOOP DETECTOR
751	FOOT	DETECTOR LOOP, TYPE I
2	EACH	LIGHT DETECTOR
1	EACH	LIGHT DETECTOR AMPLIFIER
6	EACH	PEDESTRIAN PUSHBUTTON
1	EACH	UNINTERRUPTIBLE POWER SUPPLY, SPECIAL
224	FOOT	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C



NOTE:
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RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCLUDED IN THE COST OF 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 MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

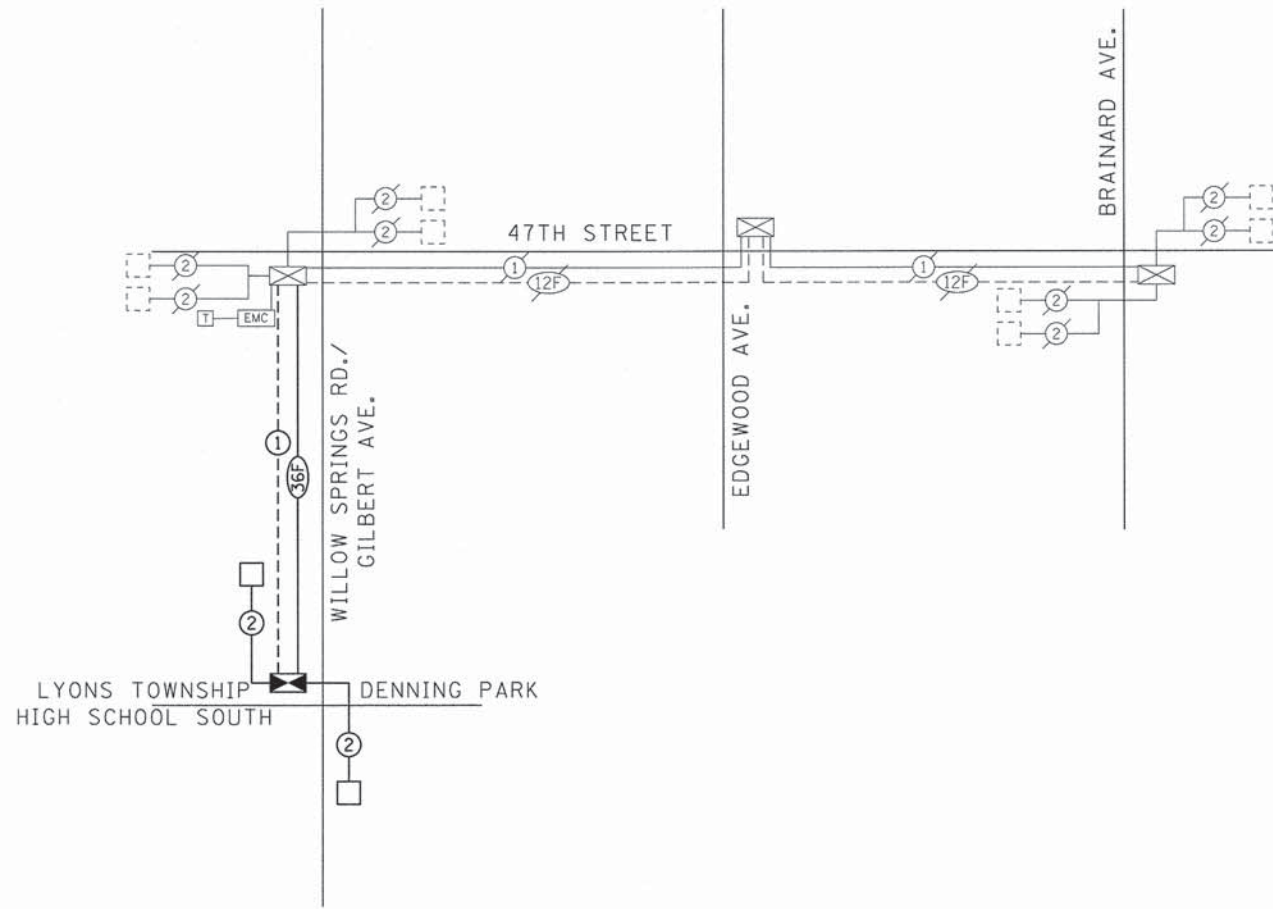
KLOA
 Kenig, Lindgren, O'Hara, Aboona, Inc.
 9575 West Higgins Road, Suite 400
 Rosemont, Illinois 60018
 P: (847) 518-9990 F: (847) 518-9987
 PROJECT # 13-115

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#MODELNAME#	PLOT DATE = #DATE#	DATE 5/05/14	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

INTERCONNECT PLAN
 WILLOW SPRINGS ROAD / GILBERT AVE. FROM LYONS TOWNSHIP
 HIGH SCHOOL TO 47TH STREET
 SCALE: 1" = 50' SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	17
				CONTRACT NO. 61A59
ILLINOIS FED. AID PROJECT				



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 MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDING IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

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

SCHEDULE OF QUANTITIES

QTY	UNIT	ITEM DESCRIPTION
1174	FOOT	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.
2	EACH	HANDHOLE
1	EACH	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION
1	EACH	TRANSCIVER - FIBER OPTIC
1491	FOOT	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C
1	EACH	DRILL EXISTING HANDHOLE
1508	FOOT	FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 MM12F SM24F
1	EACH	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, LEVEL 2

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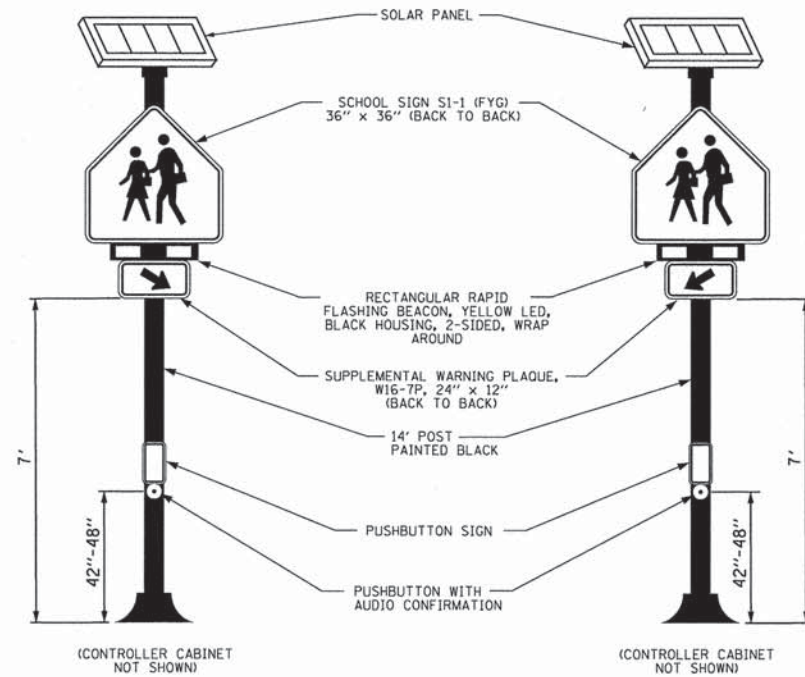
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

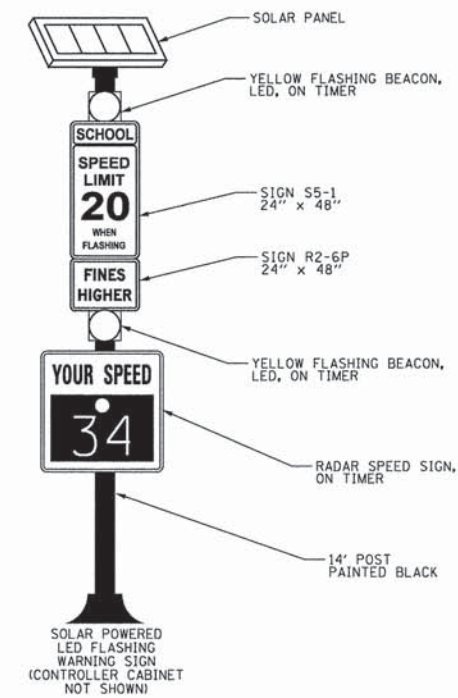
**INTERCONNECT SCHEMATIC AND SCHEDULE OF QUANTITIES
WILLOW SPRINGS ROAD /GILBERT AVE. AND 47TH STREET**

SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	18
ILLINOIS FED. AID PROJECT			CONTRACT NO. 61A59	



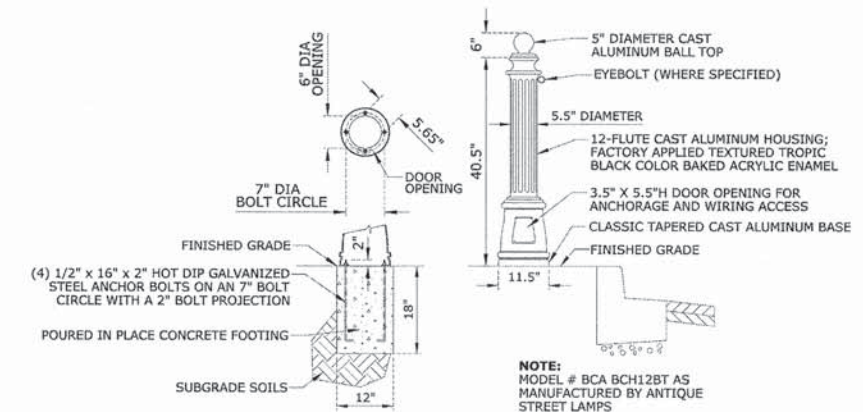
FLASHING BEACON, POST MOUNTED, SOLAR POWERED INSTALLATION DETAIL - NOT TO SCALE



SOLAR POWERED LED FLASHING WARNING SIGN - NOT TO SCALE

SIGN SCHEDULE			
 S5-1 24" x 48" 2 REQUIRED*	 S1-1 (FYG) 36" x 36" 4 REQUIRED*	 R1-5b 36" x 36" 2 REQUIRED	 RADAR SPEED SIGN 2 REQUIRED
 R2-6P 24" x 48" 2 REQUIRED	 W16-7PR (FYG) 12" x 24" 2 REQUIRED*	 W16-7PL (FYG) 12" x 24" 2 REQUIRED*	 STATE LAW BLACK LEGEND AND BORDER ON FLOURESCENT YELLOW-GREEN BACKGROUND 36" x 6" 2 REQUIRED*
			 PUSH BUTTON FOR PEDESTRIAN WARNING LIGHTS CROSS WITH CAUTION 2 REQUIRED

* SIGN SHOULD BE FLOURESCENT YELLOW-GREEN IN COLOR



ORNAMENTAL BOLLARDS

KLOA
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 Rosemont, Illinois 60018
 P: (847) 518-9990 F: (847) 518-9987
 PROJECT # 13-115

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	PLOT SCALE = #SCALE#	CHECKED EDR	REVISED -
#MODELNAME#	PLOT DATE = #DATE#	DATE 5/05/14	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

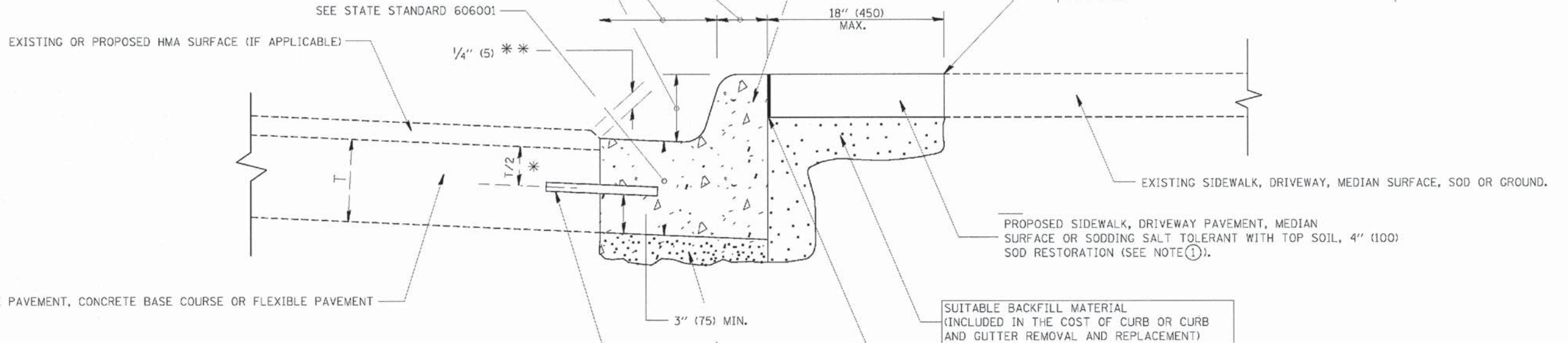
SCALE: N.T.S. SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2697	12-00087-00-TL	COOK	24	20
CONTRACT NO. 61A59				
ILLINOIS FED. AID PROJECT				

VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)

PROP. CONC. CURB OR CURB AND GUTTER REPLACEMENT IN ACCORDANCE WITH STATE STANDARD 606001. (SEE NOTE ②)

SAW CUT FULL DEPTH - INCLUDED IN THE COST OF SIDEWALK, DRIVEWAY OR MEDIAN SURFACE REMOVAL PAY ITEM.



* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

** IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.

SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

PROPOSED 3/4" (20) PREFORMED EXPANSION JOINT AT CONCRETE SIDEWALKS, DRIVEWAYS, AND MEDIANS. (INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.)

UNSUITABLE SUB-BASE MATERIAL TO BE REMOVED, IF DIRECTED BY THE ENGINEER, SHALL BE REPLACED WITH EITHER SUB-BASE GRANULAR MATERIAL, TYPE B OR ADDITIONAL THICKNESS OF CONCRETE.

REMOVAL AND REPLACEMENT 4" (100) OR LESS IS INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

REMOVAL AND REPLACEMENT IN EXCESS OF 4" (100) WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

PROPOSED #6 (20) EPOXY COATED TIE BARS 24" (600) LONG AT 24" (600) CENTERS WILL NOT BE PAID FOR SEPARATELY. DELETE EPOXY COATED TIE BARS IF EXISTING TIE BARS ARE USABLE AS DETERMINED BY THE ENGINEER. (SEE NOTE ③).

BASIS OF PAYMENT:

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

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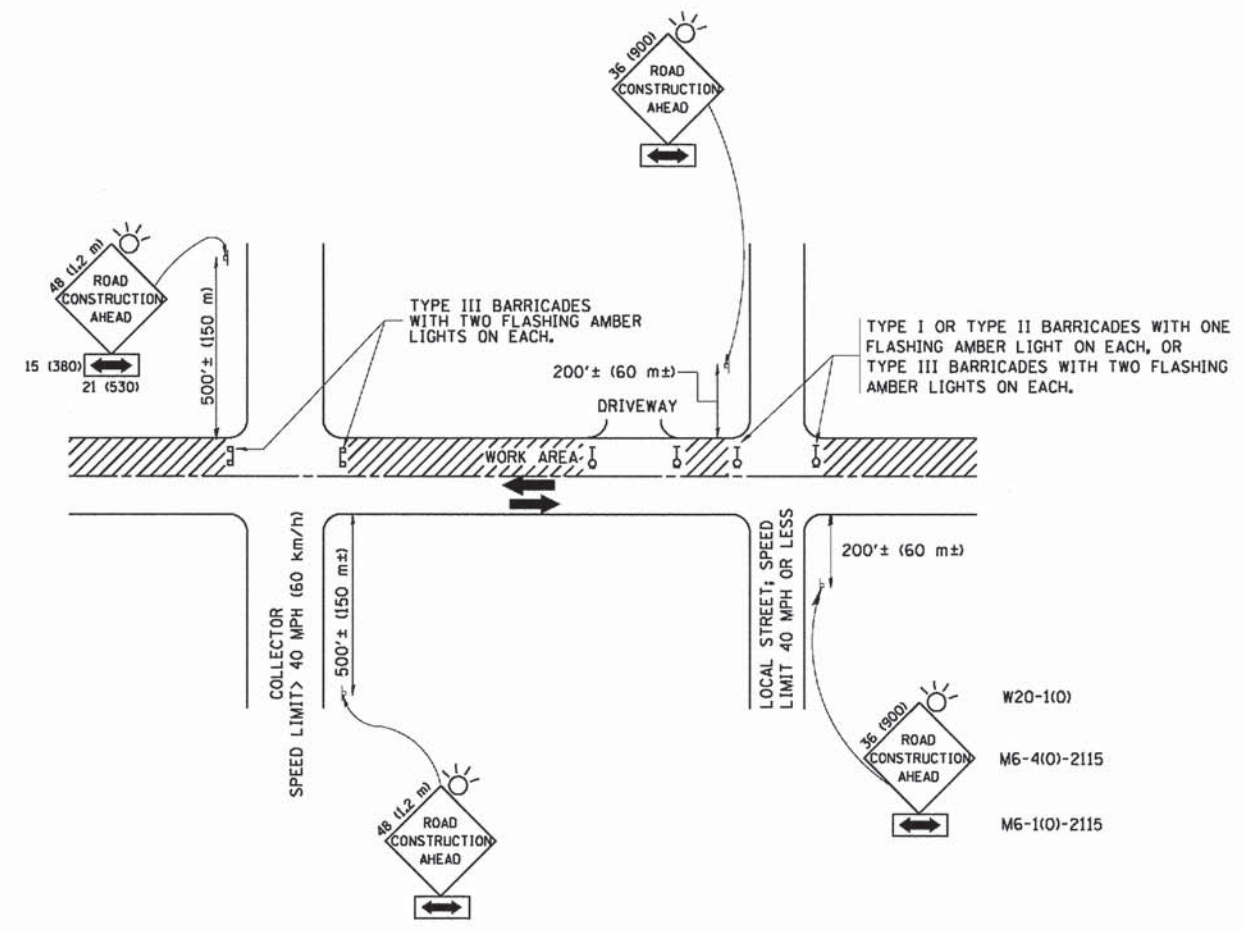
DESIGNED	A. HOUSEH	REVISED	R. SHAH 10-03-96
DRAWN	-	REVISED	A. ABBAS 03-21-97
CHECKED	-	REVISED	M. GOMEZ 01-22-01
DATE	03-11-94	REVISED	R. BORO 12-15-09

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CURB OR CURB AND GUTTER
REMOVAL AND REPLACEMENT

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEET NO.
289F	12-00087-00-TL	COOK	24 21
BD600-06 (BD-24)			CONTRACT NO. 61A59
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			



TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
 1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

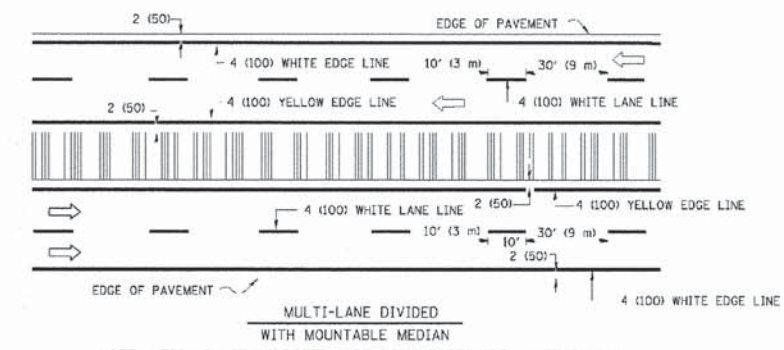
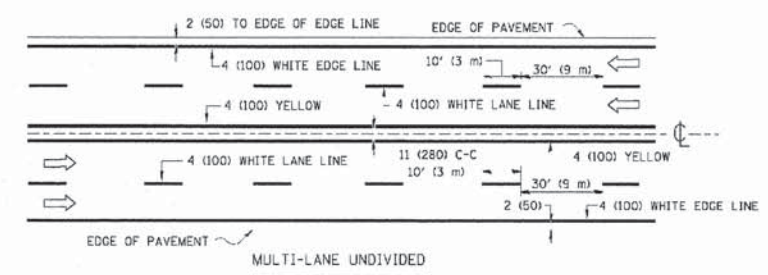
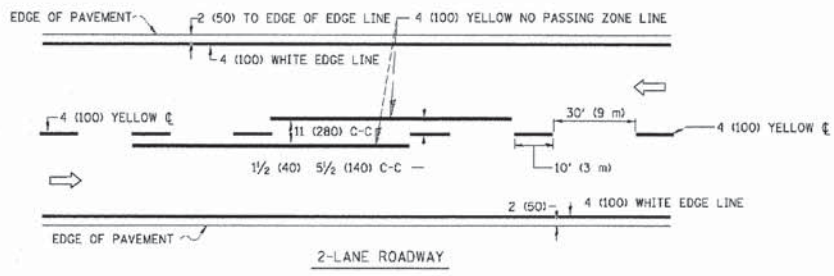
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

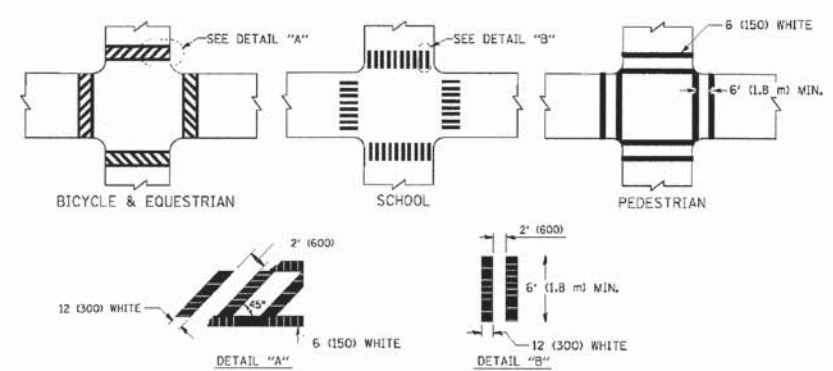
TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2691	12-00078-00-TL	COOK	24	22
TC-10			CONTRACT NO. 61A59	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

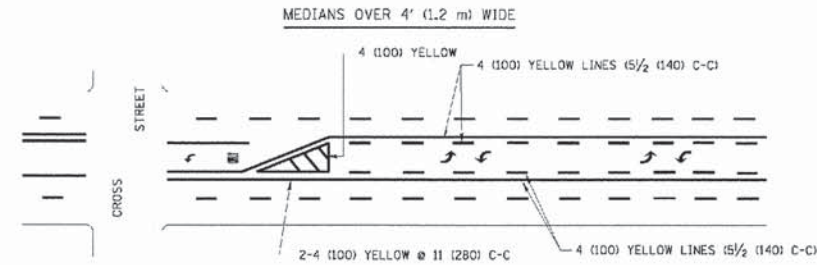
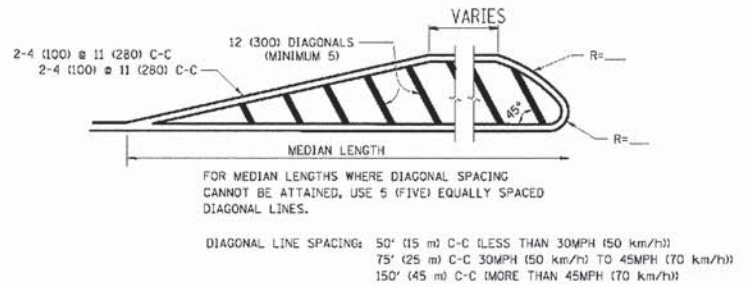
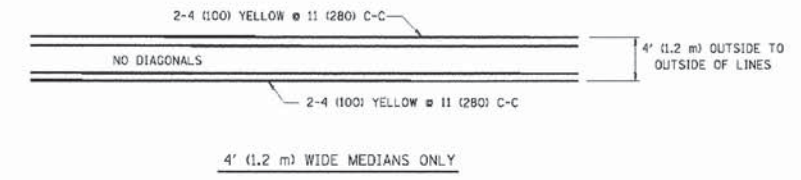


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

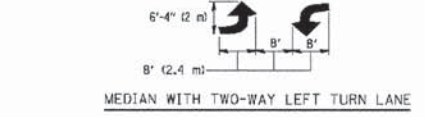
TYPICAL LANE AND EDGE LINE MARKING



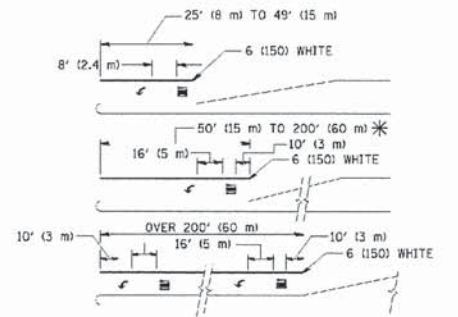
TYPICAL CROSSWALK MARKING



A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



TYPICAL TURN LANE MARKING

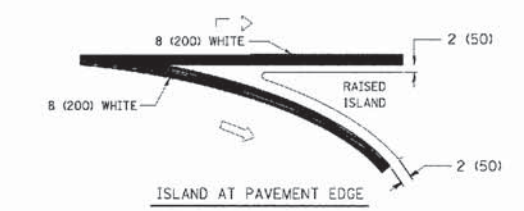
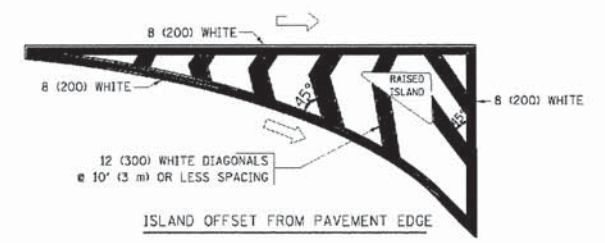


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED. AREA = 15.6 SQ. FT. (1.5 m²) ONLY AREA = 20.8 SQ. FT. (1.9 m²)

* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



TYPICAL ISLAND MARKING

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING / REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2' (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2' (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C (30MPH (50 km/h)) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES "RR" IS 6' (1.8 m) LETTERS: 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m ²) EACH "X"=54.0 SQ. FT. (5.0 m ²)
SHOULDER DIAGONALS	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h)) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))

FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

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

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 5/9/2004 9:08:43 AM

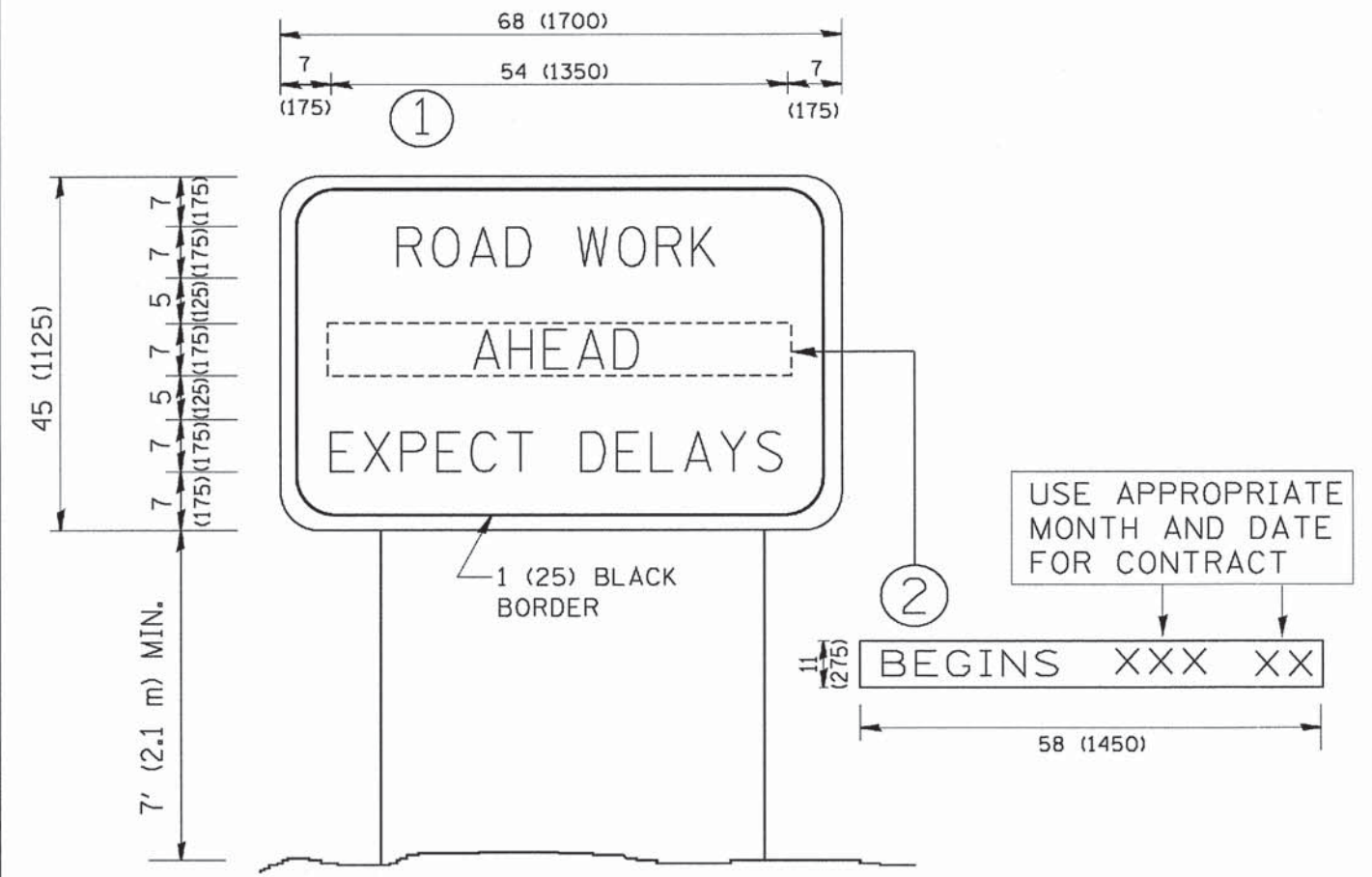
DESIGNED	EVERS	REVISED	T. RAMMACHER 10-27-94
DRAWN	-	REVISED	-C. JUCIUS 09-09-09
CHECKED	-	REVISED	-
DATE	03-19-90	REVISED	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE TYPICAL PAVEMENT MARKINGS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	

F.A.U. RITE: 2697	SECTION: 12-00078-00-TL	COUNTY: COOK	TOTAL SHEET NO.: 24	SHEET NO.: 23
TC-13		CONTRACT NO. 61A59		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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 STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
 LICENSE NO. - BR-00001 - EXPIRES 7/31/2015
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 W:\d\stata\22x34\to22.dgn
 C:\Users\jgagliano\Documents\CAD\Projects\2010\12-00078-TL\12-00078-TL.dwg
 5/29/2011 10:25:51 AM
 5/29/2011 10:25:51 AM



NOTES:

1. USE BLACK LETTERING ON ORANGE BACKGROUND.
2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
3. ERECT SIGN ① WITH INSTALLED PANEL ② ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
4. REMOVE PANEL ② SOON AFTER THE START OF CONSTRUCTION.
5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = W:\d\stata\22x34\to22.dgn	USER NAME = gagliano	DESIGNED -	REVISD - R. MIRS 09-15-97	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ARTERIAL ROAD INFORMATION SIGN	F.A.LL	SECTION	COUNTY	TOTAL	SHEET	
	PLOT SCALE = 50.000' / IN.	DRAWN -	REVISD - R. MIRS 12-11-97			2007	12-00078-00-TL	COOK	24	24	
	PLOT DATE = 1/4/2008	CHECKED -	REVISD - T. RAMMACHER 02-02-99			TC-22		CONTRACT NO. 61A59			
		DATE -	REVISD - C. JUCLUS 01-31-07			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT					
						SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.		