

FOR INDEX OF SHEETS, SEE SHEET NO. 2

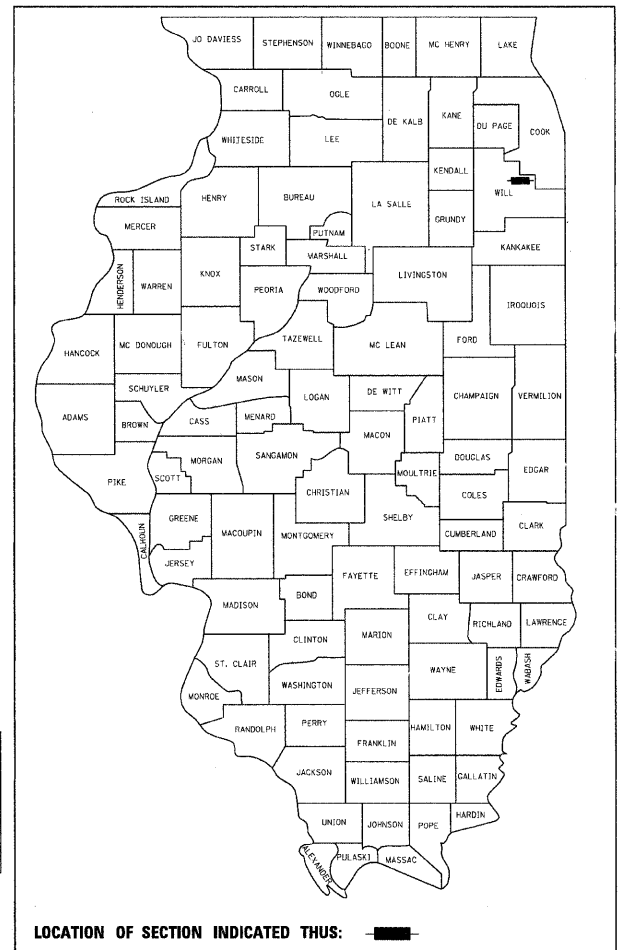
FOR INDEX OF HIGHWAY STANDARDS, SEE SHEET NO. 2

PROJECT LOCATED WITHIN THE VILLAGE OF FRANKFORT

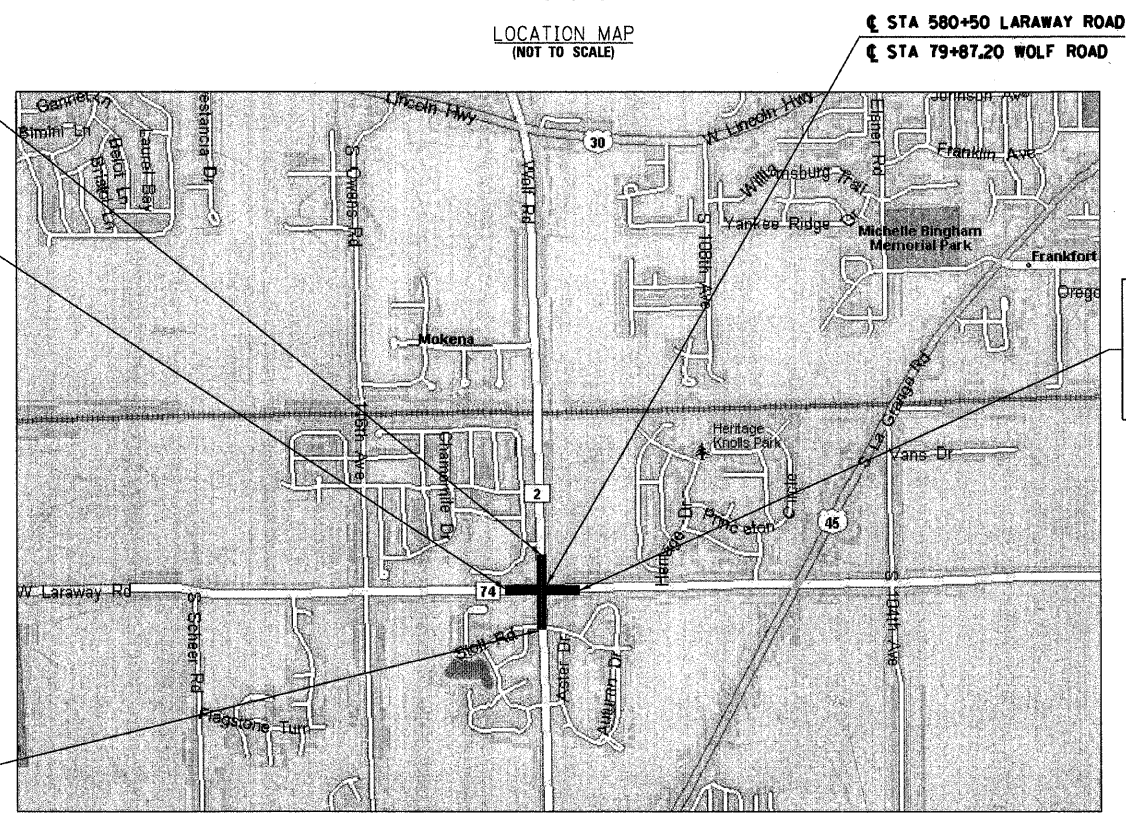
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**
FAU 0320 LARAWAY ROAD (C.H. 74) AT
FAU 2688 WOLF ROAD (C.H. 2)
TRAFFIC SIGNAL
PROJECT No.: CMM-9003 (023)
SECTION No.: 07-00138-26-TL
JOB No: C-91-405-08
WILL COUNTY

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	1
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED AID PROJECT		
C-91-405-08		CMM-9003 (023)		
CONTRACT NO. 63329				



LOCATION MAP
(NOT TO SCALE)



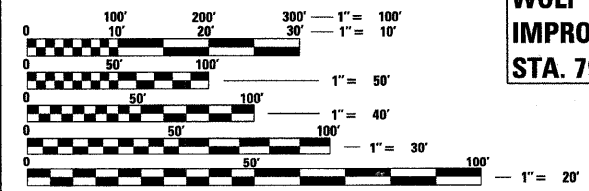
WOLF ROAD (FAU 2688)
IMPROVEMENT ENDS
STA. 81 + 65

LARAWAY ROAD (FAU 0320)
IMPROVEMENT BEGINS
STA. 576 + 90

LARAWAY ROAD
(FAU 0320)
IMPROVEMENT BEGINS
STA. 583 + 65

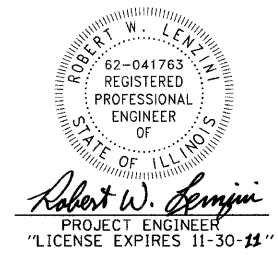
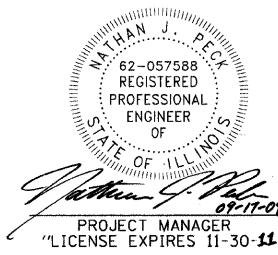
ROADWAY DATA:
 LARAWAY ROAD ADT=12,600
 WOLF ROAD ADT = 6,250
POSTED SPEED:
 LARAWAY ROAD = 40 MPH
 WOLF ROAD = 35 MPH
DESIGN SPEED:
 LARAWAY ROAD = 45 MPH
 WOLF ROAD = 35 MPH
FUNCTIONAL CLASSIFICATION:
 LARAWAY ROAD = ARTERIAL
 WOLF ROAD = COLLECTOR

WOLF ROAD (FAU 2688)
IMPROVEMENT BEGINS
STA. 79 + 00



E 12 SE 1/4 SEC 30 E 12 NE 1/4 SEC 31 W 12 NW 1/4 SEC 32
W 12 S.W. 1/4 SEC 29 T35N R12E OF THE THIRD PRINCIPAL MERIDIAN

FRANKFORT TOWNSHIP
GROSS LENGTH = 675 LF OR 0.13 MILES
NET LENGTH = 675 LF OR 0.13 MILES



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

APPROVED: 10/13/09
LOCAL AGENCY, COUNTY ENGINEER

PASSED: OCTOBER 27, 2009
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW: OCTOBER 29, 2009
DEPUTY DIRECTOR OF
HIGHWAYS, REGION 1 ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

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

CONTRACT NO. 63329

Burlington, Wisconsin	Chicago, Illinois	Crystal Lake, Illinois	DeKalb, Illinois	Grayslake, Illinois	Itasca, Illinois	Madison, Wisconsin	Mokena, Illinois	Plainfield, Illinois
262.763.7834	312.578.0050	815.459.1260	815.787.3111	847.223.5088	630.773.1870	608.347.1542	708.478.2090	815.609.7425

(OFFICE WHICH PREPARED PLANS)

B&W PROJECT NO.: 071621 DATE: 09-16-09

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 STATE OF ILLINOIS PROFESSIONAL DESIGN FIRM
 5660 S. W. 111th St., Suite 100, Mokena, IL 60450
 815/459-1260 FAX 815/459-1261
 BUREAU OF LOCAL ROADS AND STREETS: (MELCHOR MANGOBA, P.E.) 847-705-4408 SCHAUMBURG, IL

HIGHWAY STANDARDS

000001-05	STANDARD SYMBOLS ABBREVIATIONS AND SYMBOLS
280001-05	TEMPORARY EROSION CONTROL SYSTEMS
424001-05	CURB RAMPS FOR SIDEWALK
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB & GUTTER
701006-03	OFF-RD OPERATIONS, 2L, 2W, 4.5M (15') TO 600MM (24") FROM PAVEMENT EDGE
701011-02	OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS >= 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701501-05	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701701-06	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-04	LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS
720011-01	METAL POSTS (SIGNS, MARKERS AND DELINEATORS)
720016-02	MAST ARM MOUNTED STREET NAME SIGNS
729001-01	APPLICATION OF TYPE A AND B METAL POSTS
780001-02	TYPICAL PAVEMENT MARKINGS
805001-01	ELECTRICAL SERVICE INSTALLATION DETAILS
814001-02	HANDHOLES
814006-02	DOUBLE HANDHOLES
857001-01	STANDARD PHASE DESIGNATION DIAGRAMS AND PHASE SEQUENCES
862001-01	UNINTERRUPTIBLE POWER SUPPLY (UPS)
873001-02	TRAFFIC SIGNAL GROUNDING AND BONDING
877011-04	STEEL COMBINATION MAST ARM ASSEMBLY AND POLE
878001-08	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
886001-01	DETECTOR LOOP INSTALLATION
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

INDEX OF SHEETS

TITLE	SHEET NO.
COVER SHEET	1
INDEX OF SHEETS AND HIGHWAY STANDARDS	2
GENERAL NOTES	3
SUMMARY OF QUANTITIES	4-5
EROSION CONTROL PLAN	6
STRIPING, SIGNAGE AND GEOMETRIC PLAN	7
DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS	8-11
TRAFFIC SIGNAL PLANS	12-13
TRAFFIC SIGNAL CABLE PLAN	14
DISTRICT 1 MAST ARM MOUNTED STREET NAME SIGNS	15
CONSTRUCTION DETAILS	16
DISTRICT 1 STANDARD DETAILS	17-19

DISTRICT ONE STANDARD DETAILS

BD24	CURB AND GUTTER REMOVAL AND REPLACEMENT
TC10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS

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DESIGNED - NJP	REVISED - PER COUNTY 8-20-09
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**WILL COUNTY DEPARTMENT OF HIGHWAYS
LARAWAY ROAD AT WOLF ROAD**

INDEX OF SHEETS & HIGHWAY STANDARDS

SCALE: STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	2
C-91-405-08			CONTRACT NO. 63329	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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 "STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS", THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", THE "MANUAL OF TEST PROCEDURES FOR MATERIALS" AND THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS".
2. THE LOCATIONS OF PUBLIC OR PRIVATE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND THE COUNTY DOES NOT GUARANTEE THEIR ACCURACY. THE CONTRACTOR SHALL HAVE THE RESPECTIVE UTILITY COMPANIES FIELD LOCATE ALL THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL ALSO VERIFY THE DEPTHS OF THE EXISTING UTILITIES IF NECESSARY. ANY RELOCATION OR LOWERING OF UTILITIES SHALL BE COORDINATED BY THE CONTRACTOR.
3. 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. ANY UTILITY OR SPRINKLER SYSTEM THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE ENGINEER OR COUNTY.
4. THE CONTRACTOR SHALL NOTIFY THE WILL COUNTY DEPARTMENT OF HIGHWAYS AND THE ENGINEER AT LEAST TWO (2) WORKING DAYS IN ADVANCE OF BEGINNING WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH THE VILLAGE TO OBTAIN VILLAGE UTILITY LOCATIONS AND SHALL COORDINATE ALL CONSTRUCTION OPERATIONS NEAR THOSE FACILITIES WITH THE ENGINEER.
6. MATERIALS RESULTING FROM THE REMOVAL OF PAVEMENT, DRIVEWAYS, CURB AND GUTTER, HOT-MIX ASPHALT SURFACES, ETC. SHALL BE REMOVED AT THE END OF EACH DAY TO AN APPROVED SITE. IN THE JUDGMENT OF THE COUNTY, SHOULD IT BE NECESSARY TO REMOVE SUCH MATERIALS, THE COUNTY WILL HAVE THE MATERIAL REMOVED AND THE CONTRACTOR WILL BE BILLED (CHARGED) ACCORDINGLY.
7. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE OWNERS, HIS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

8. EXISTING PAVEMENT, DRIVEWAY PAVEMENT, CURB AND GUTTER AND SIDEWALK TO REMAIN IN PLACE SHALL BE SAW CUT FULL DEPTH TO PROVIDE A NEAT VERTICAL FACE BETWEEN THE PROPOSED AND EXISTING AND SHALL BE INCLUDED IN THE PRICE OF THE APPROPRIATE REMOVAL PAY ITEM.

9. 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 PAY ITEMS, SIDEWALK REMOVAL (SPECIAL) OR COMBINATION CURB AND GUTTER REMOVAL AND REPLACEMENT.

10. CURB AND GUTTER SHALL BE DEPRESSED AT DRIVEWAYS AND SIDEWALK RAMPS IN ACCORDANCE WITH THE IDOT HIGHWAY STANDARDS. SIDEWALK RAMPS FOR ACCESS FOR THE DISABLED SHALL BE PROVIDED AT THE PROPOSED CROSSWALKS IN ACCORDANCE WITH THE IDOT HIGHWAY STANDARDS OR AS DETERMINED BY THE ENGINEER.

11. THE FINISHED HOT-MIX ASPHALT SURFACE SHALL BE CONSTRUCTED 0.25 INCH ABOVE THE GUTTER FLAG.

12. THE CONTRACTOR SHALL PROVIDE AND INSTALL TWO (2) WEIGHTED SANDBAGS ON EACH TYPE I OR TYPE II BARRICADE USED. ONE (1) WEIGHTED SANDBAG SHALL BE PLACED ACROSS EACH BOTTOM RAIL.

13. A 1/2 INCH THICK EXPANSION JOINT SHALL BE PROVIDED AT THE JUNCTION OF THE SIDEWALK. THIS WORK WILL BE INCLUDED IN THE COST OF PORTLAND CEMENT CONCRETE SIDEWALK, 5 INCH, SPECIAL.

14. DETECTABLE WARNINGS SHALL CONSIST OF A CAST IN PLACE PRODUCT AND CONFORM TO SECTION 424 OF THE STANDARD SPECIFICATIONS. DYED CONCRETE WILL NOT BE ALLOWED.

15. 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 THE ASSOCIATED REMOVAL PAY ITEMS. 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.

16. PRIOR TO CONSTRUCTION OF ANY PROPOSED UTILITIES, THE CONTRACTOR SHALL EXCAVATE AND LOCATE THE EXISTING UTILITIES TO VERIFY THEIR LOCATION, SIZE, AND DEPTH TO INSURE THAT GRADE CONFLICTS WILL NOT OCCUR. THE COST OF THIS EXPLORATION SHALL BE INCLUDED IN THE COST OF THE PROPOSED UTILITY CONSTRUCTION.

17. THE DETAIL FOR COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT SHOWN IN THE PLANS SHALL BE MODIFIED TO INCLUDE THE FOLLOWING. THE WORK SHALL INCLUDE SAW-CUTTING AND REMOVING THE EXISTING PAVEMENT A MINIMUM OF 6-INCHES MEASURED FROM THE EXISTING EDGE OF PAVEMENT, AND FILLING THE 6" GAP WITH CLASS SI CONCRETE TO AN ELEVATION 1 3/4" BELOW THE PROPOSED CURB AND GUTTER FLAG. IF THE CONCRETE IS POURED HIGHER THAN 1 3/4" FROM THE GUTTER FLAG FOR STREETS TO BE RESURFACED, THE CONTRACTOR WILL BE REQUIRED TO GRIND ADDITIONAL CONCRETE TO THE REQUIRED 1 3/4" DEPTH. THE AREA BEHIND THE PROPOSED CURB AND GUTTER SHALL BE RESTORED WITH NATIVE SOD IN ACCORDANCE WITH SECTION 1081.03 RATHER THAN SALT TOLERANT SOD.

18. ANY DAMAGE TO PAVEMENT, SIDEWALK, CURB AND GUTTER, OR ANY OTHER PORTION OF THE ROADWAY NOT SPECIFICALLY INDICATED TO BE REMOVED AND REPLACED SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL CHARGE.

19. THE CONTRACTOR SHALL PROVIDED WARRANTIES OR GUARENTEES PROVIDING FOR SATISFACTORY IN-SERVICE OPERATION OF THE MECHANICAL AND ELECTRICAL EQUIREMENT AND RELATED COMPONENTS AS PER IDOT STANDARDS.

20. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR GROUNDING. GROUNDING CONNECTIONS AT THE FOUNDATION SHALL BE EXOTHERMICALLY WELDED, AS SPECIFIED, AND SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO BACKFILLING.

21. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR BURIED WARNING TAPE, SPECIFIED AS PART OF "TRENCH AND BACKFILL FOR ELECTRICAL WORK." THE INSTALLATION OF THE TAPE SHALL BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO BACKFILLING.

22. NO POLES SHALL BE ERECTED UNTIL THE RESPECTIVE FOUNDATIONS HAVE CURED, AS APPROVED BY THE ENGINEER.

23. THE CONTRACTOR SHALL MAKE SPECIAL NOTE OF THE REQUIREMENTS FOR WIRE MARKERS AND SHALL TAG ALL WIRE MARKERS AND SHALL TAG ALL WIRING ACCORDINGLY.

24. MAINTENANCE OF TRAFFIC ITEMS INCLUDED IN THE PLAN IS INTENDED TO BE SUPPLEMENTARY. ITEMS NOT VISUALLY SHOWN SHALL NOT BE CONSIDERED UNNECESSARY. ALL APPLICABLE STANRDARDS, AS SUPPLEMENTED AND/OR ALTERED BY NOTES, SPECIFICATIONS, AND SPECIAL PROVISIONS SHALL BE FOLLOWED IN CONJUNCTION WITH THE INFORMATION PRESENTED IN THE PLAN.

25. AREAS OF THE SIDEWALK REMOVAL SHOWN IN THE PLANS THAT ARE NOT REPLACED WITH NEW PCC SIDEWALK SHALL BE RESTORED WITH TOPSOIL AND NATIVE SOD. THIS SHALL BE INCLUDED IN THE COST OF SIDEWALK REMOVAL (SPECIAL).

26. A CHANGEABLE MESSAGE SIGN SHALL BE PLACED ON ALL LEGS OF THE INTERSECTION, A MINIMUM 72 HOURS PRIOR TO WORK AND REMAIN THROUGHOUT THE CONSTRUCTION WORK.

NOTE:

ITEMS SHOWN IN BOX INCLUDE WORK AND/OR MODIFICATIONS THAT ARE INCIDENTAL, OR OTHERWISE INDICATED

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DATE - 06-25-09	FILE - 071621-GenNotes.shp

**WILL COUNTY DEPARTMENT OF HIGHWAYS
LARAWAY ROAD AT WOLF ROAD**

GENERAL NOTES

SCALE: STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	3
C-91-405-08			CONTRACT NO. 63329	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				ROADWAY 1000-1A	SIGNALS Y031-1F	SIDEWALK Y044
** 28000305	TEMPORARY DITCH CHECKS	FOOT	10	10		
** 28000400	PERIMETER EROSION BARRIER	FOOT	95	95		
** 28000510	INLET FILTER	EACH	2	2		
x ** 35101600	AGGREGATE BASE COURSE, TYPE B 4"	SO YD	133	133		
x ** 40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	2	2		
x ** 42400430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SO FT	949	949		
x ** 42400800	DETECTABLE WARNINGS	SO FT	80	80		
x ** 44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	94	94		
x ** 44004700	SIDEWALK REMOVAL (SPECIAL)	SO FT	444	444		
	67100100	MOBILIZATION	L SUM	1	1	
x	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
x	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	1	
x	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	1	
x	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1	
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	16	16	
	72000100	SIGN PANEL, TYPE 1	SO FT	64.5	36	28.5
x	72400100	REMOVE SIGN PANEL ASSEMBLY, TYPE A	EACH	5	5	
	72900100	METAL POST, TYPE A	FOOT	100	100	
**	78000400	THERMOPLASTIC PAVEMENT MARKING, LINE 6"	FOOT	608	608	
**	78000600	THERMOPLASTIC PAVEMENT MARKING, LINE 12"	FOOT	169	169	
**	78000650	THERMOPLASTIC PAVEMENT MARKING, LINE 24"	FOOT	140	140	
x	81000600	CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	584		584
	81000700	CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	28.5		28.5
	81000800	CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	8		8
	81001100	CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10		10
	81018500	CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	71		71
	81018600	CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	87		87
	81018900	CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	336		336
	81019000	CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	28		28
	81400700	HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	4		4
	81400710	HEAVY DUTY HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	5		5
	81400720	DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	2		2
	81900200	TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	934		934
	85700200	FULL - ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1		1
	86200200	UNITERRUPTABLE POWER SUPPLY, STANDARD	EACH	1		1
	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	1316		1316
	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	1904		1904
	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	921		921
	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	1760		1760
	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1884		1884
	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6, 2C	FOOT	95		95
	87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	3		3

** DENOTES SPECIALTY ITEMS
x DENOTES ITEMS REFERENCED IN A SPECIAL PROVISION

Revised 12-14-09

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DATE - 06-25-09	FILE - 071621-soq.sht

**WILL COUNTY DEPARTMENT OF HIGHWAYS
 LARAWAY ROAD AT WOLF ROAD**

SUMMARY OF QUANTITIES

SCALE: STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	4
C-91-405-08		CONTRACT NO. 63329		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES

CODE NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
				ROADWAY 1000-1A	SIGNALS Y031-1F	SIDEWALK Y044
87700160	STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1		1	
87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1		1	
87700270	STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1		1	
87700310	STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1		1	
87800100	CONCRETE FOUNDATION, TYPE A	FOOT	12		12	
87800150	CONCRETE FOUNDATION, TYPE C	FOOT	4		4	
87800400	CONCRETE FOUNDATION, TYPE E 30" DIAMETER	FOOT	15		15	
87800415	CONCRETE FOUNDATION, TYPE E 36" DIAMETER	FOOT	45		45	
88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4		4	
88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4		4	
88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4		4	
88102710	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	6		6	
88102740	PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1		1	
88200110	TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	8		8	
88500100	INDUCTIVE LOOP DETECTOR	EACH	8		8	
88600100	DETECTOR LOOP, TYPE 1	FOOT	1052		1052	
88700200	LIGHT DETECTOR	EACH	2		2	
88700300	LIGHT DETECTOR AMPLIFIER	EACH	1		1	
x 88800100	PEDESTRIAN PUSH BUTTON	EACH	7		7	
X8050015	SERVICE INSTALLATION, POLE MOUNTED	EACH	1		1	
X8730027	ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1173		1173	
X8730250	ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	330		330	

•• DENOTES SPECIALTY ITEMS
x DENOTES ITEMS REFERENCED IN A SPECIAL PROVISION

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DATE - 06-25-09	FILE - 071621-soq.sht

**WILL COUNTY DEPARTMENT OF HIGHWAYS
 LARAWAY ROAD AT WOLF ROAD**

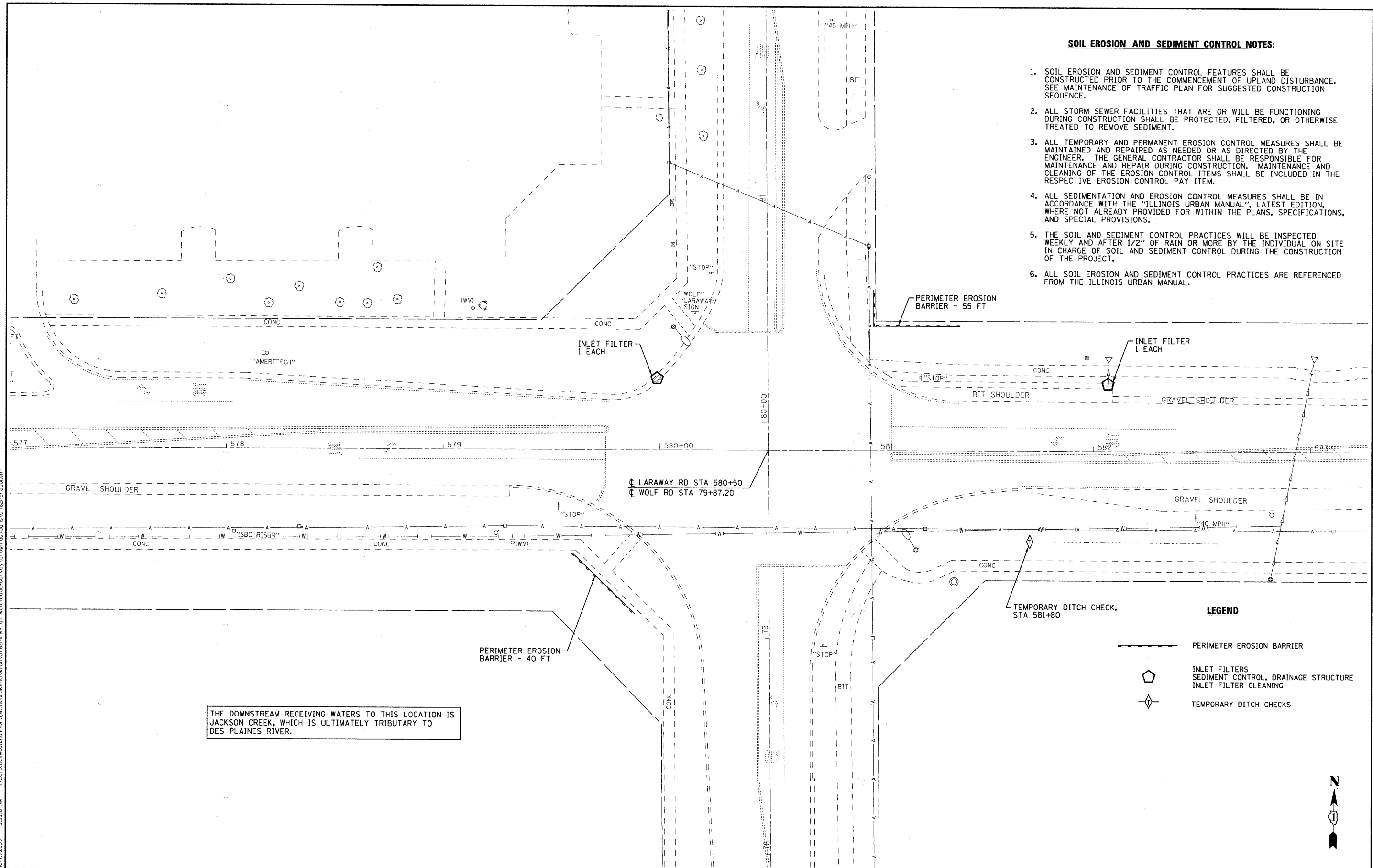
SUMMARY OF QUANTITIES

SCALE: STA. TO STA.

F.A.U. R/E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	5
C-91-405-08			CONTRACT NO. 63329	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

SOIL EROSION AND SEDIMENT CONTROL NOTES:

1. SOIL EROSION AND SEDIMENT CONTROL FEATURES SHALL BE CONSTRUCTED PRIOR TO THE COMMENCEMENT OF UPLAND DISTURBANCE. SEE MAINTENANCE OF TRAFFIC PLAN FOR SUGGESTED CONSTRUCTION SEQUENCE.
2. ALL STORM SEWER FACILITIES THAT ARE OR WILL BE FUNCTIONING DURING CONSTRUCTION SHALL BE PROTECTED, FILTERED, OR OTHERWISE TREATED TO REMOVE SEDIMENT.
3. ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REPAIRED AS NEEDED OR AS DIRECTED BY THE ENGINEER. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR DURING CONSTRUCTION. MAINTENANCE AND CLEANING OF THE EROSION CONTROL ITEMS SHALL BE INCLUDED IN THE RESPECTIVE EROSION CONTROL PAY ITEM.
4. ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE "ILLINOIS URBAN MANUAL", LATEST EDITION, WHERE NOT ALREADY PROVIDED FOR WITHIN THE PLANS, SPECIFICATIONS, AND SPECIAL PROVISIONS.
5. THE SOIL AND SEDIMENT CONTROL PRACTICES WILL BE INSPECTED WEEKLY AND AFTER 1/2" OF RAIN OR MORE BY THE INDIVIDUAL ON SITE IN CHARGE OF SOIL AND SEDIMENT CONTROL DURING THE CONSTRUCTION OF THE PROJECT.
6. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE REFERENCED FROM THE ILLINOIS URBAN MANUAL.



THE DOWNSTREAM RECEIVING WATERS TO THIS LOCATION IS JACKSON CREEK, WHICH IS ULTIMATELY TRIBUTARY TO DES PLAINES RIVER.

LEGEND

- PERIMETER EROSION BARRIER
- INLET FILTERS
SEDIMENT CONTROL, DRAINAGE STRUCTURE
INLET FILTER CLEANING
- TEMPORARY DITCH CHECKS

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 LICENSE NO. 07-00123 - EXPIRES 4/30/2011
 10/15/2009 8:55:48 AM



DESIGNED - NJP	REVISED - PER COUNTY 8-20-09
DRAWN - BCD	REVISED - PER IDOT 09-16-09
CHECKED - RWL	REVISED -
DATE - 06-25-09	FILE - 071621-Eros01.shp

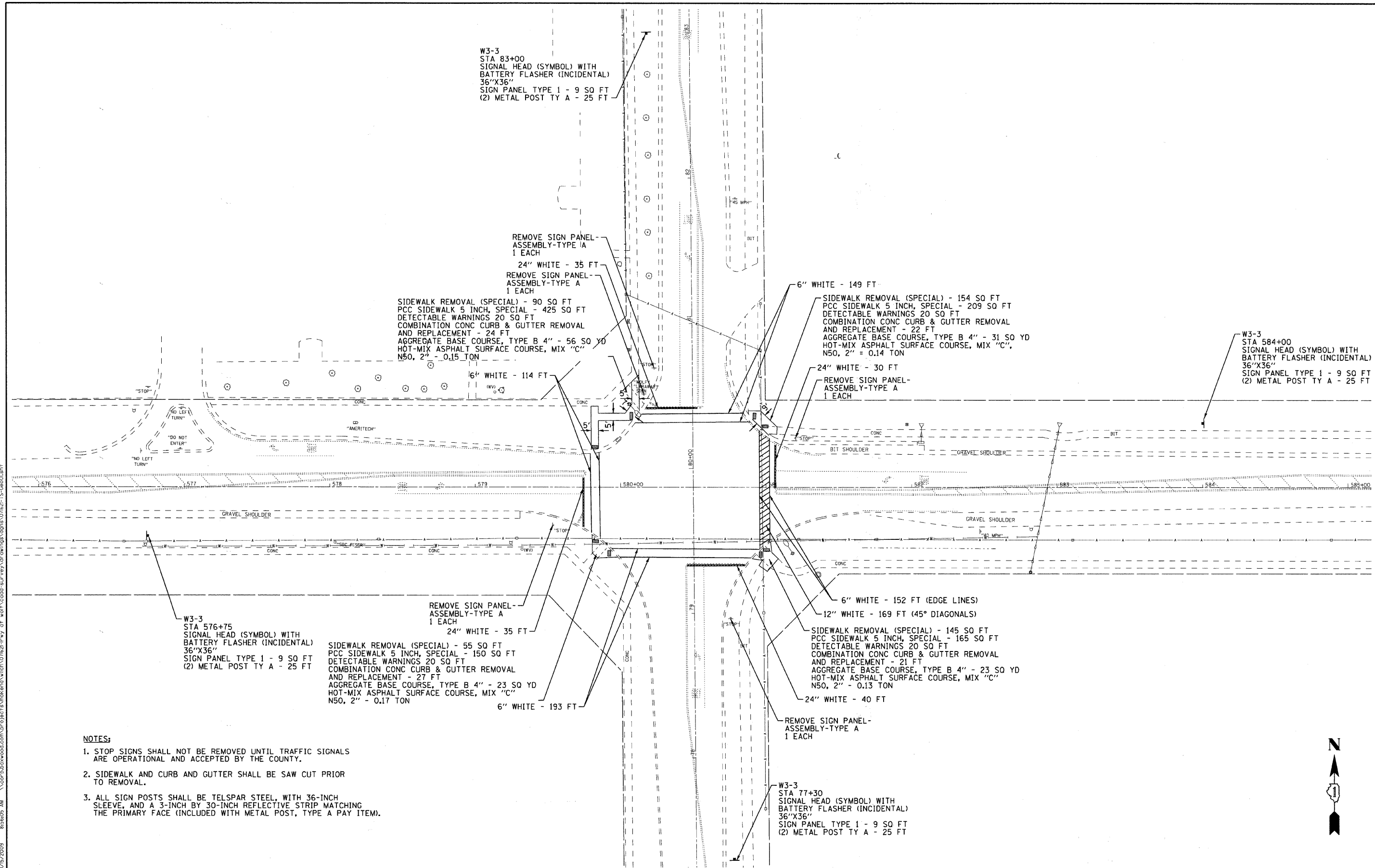
**WILL COUNTY DEPARTMENT OF HIGHWAYS
LARAWAY ROAD AT WOLF ROAD**

EROSION CONTROL PLAN

SCALE: 1"=20'

STA. TO STA.

F.A.U. RTE. 320	SECTION 07-00138-26-TL	COUNTY WILL	TOTAL SHEETS 19	SHEET NO. 6
C-91-405-08			CONTRACT NO. 63329	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



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 LICENSE NO. 184-00121 - EXPIRES 4/30/2011
 10/15/2009 8:56:05 AM



DESIGNED - NJP	REVISED - PER COUNTY 8-20-09
DRAWN - BCD	REVISED - PER IDOT 09-16-09
CHECKED - RWL	REVISED -
DATE - 06-25-09	FILE - 071621-TS-Geo01.sht

**WILL COUNTY DEPARTMENT OF HIGHWAYS
LARAWAY ROAD AT WOLF ROAD**

STRIPING, SIGNAGE AND GEOMETRIC PLAN

SCALE: 1"=30'

STA. TO STA.

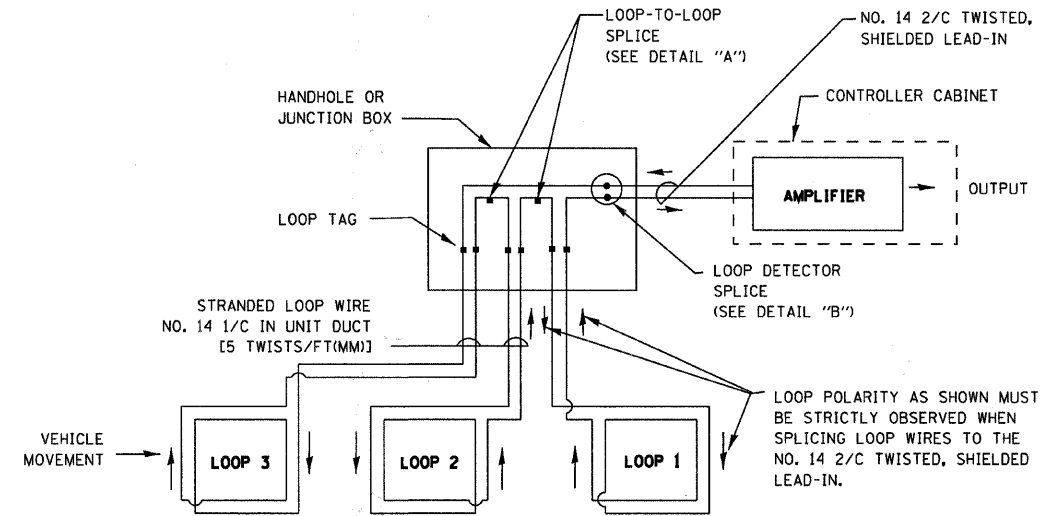
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	7
C-91-405-08		CONTRACT NO. 63329		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

F.A.W. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	8
STA. _____ TO STA. _____		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT		

C-91-405-08
CONTRACT NO. 63329

LOOP DETECTOR NOTES

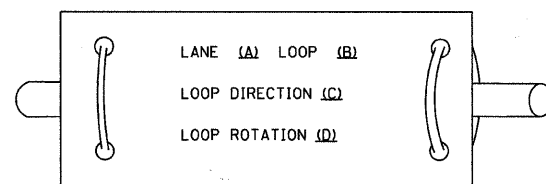
- EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED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



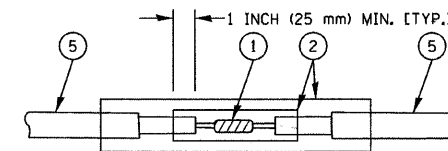
DETECTOR LOOP WIRING SCHEMATIC

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

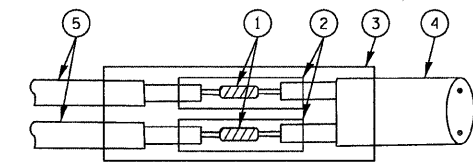
LOOP LEAD-IN CABLE TAG



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



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

- WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH.
- WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.
- WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGTH 6" (150 mm), UNDERWATER GRADE.
- NO. 14 2/C TWISTED, SHIELDED CABLE.
- LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT ONE
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
DATE 1-01-02

DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 1 OF 4

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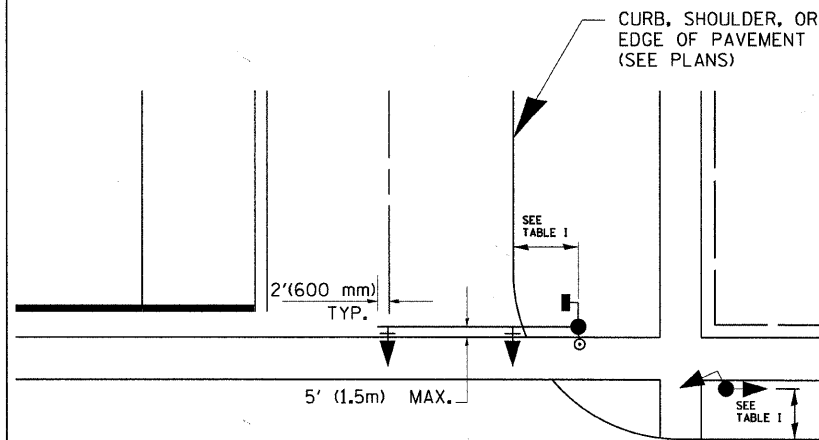
DATE-TIME
DGN-SPEC

F.A.U. RY:	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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STA.	TO STA.			
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

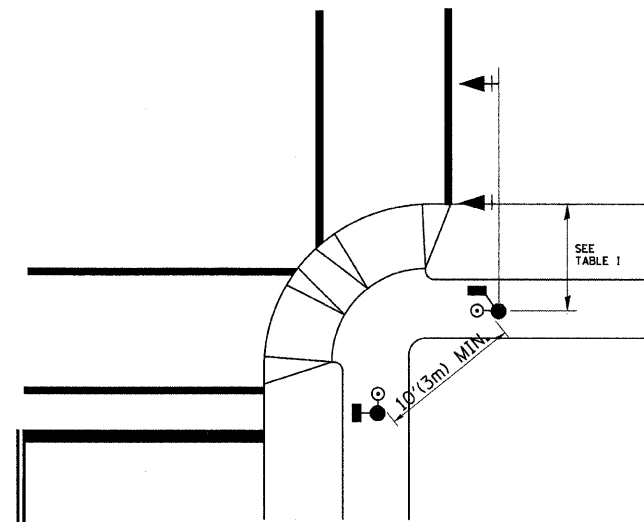
C-91-405-08
CONTRACT NO. 63329

TRAFFIC SIGNAL MAST ARM AND POST

MAST ARM MOUNTED SIGNAL IN PROPOSED & FUTURE SIDEWALK AREA. INTERSECTION SHOWN WITH PEDESTRIAN SIGNAL AND PUSHBUTTON DETECTOR



PEDESTRIAN SIGNAL PUSHBUTTON



RECOMMENDED PUSHBUTTON LOCATIONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE IN ACCORDANCE WITH THE CURRENT MUTCD (SEE NOTE 1). TO MEET MUTCD REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

NOTES:

- AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS WITH PEDESTRIAN ACTUATION, EACH PUSHBUTTON SHALL ACTIVATE BOTH THE WALK INTERVAL AND THE ACCESSIBLE PEDESTRIAN SIGNALS.

AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). TACTILE ARROWS SHOULD POINT IN THE SAME DIRECTION AS THE ASSOCIATED CROSSWALK. AT CORNERS OF SIGNALIZED LOCATIONS WITH ACCESSIBLE PEDESTRIAN SIGNALS WHERE PEDESTRIAN PUSHBUTTONS ARE PROVIDED, THE PUSHBUTTONS SHOULD BE SEPARATED BY THE DISTANCE OF AT LEAST 10 FT (3m). THIS ENABLES PEDESTRIANS WHO HAVE VISUAL DISABILITIES TO DISTINGUISH AND LOCATE THE APPROPRIATE PUSHBUTTON.

PUSHBUTTONS FOR ACCESSIBLE PEDESTRIAN SIGNALS SHOULD BE LOCATED AS FOLLOWS:
 - A: ADJACENT TO A LEVEL ALL-WEATHER SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS AN ALL WEATHER SURFACE, WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP.
 - B: WITHIN 5 FT (1.5m) OF THE CROSSWALK EXTENDED.
 - C: WITHIN 10 FT (3m) OF THE EDGE OF CURB, SHOULDER, OR PAVEMENT.
 - D: PARALLEL TO THE CROSSWALK TO BE USED (SEE MUTCD FIGURE 4E-2).
 - E: NORMAL PEDESTRIAN PUSHBUTTON MOUNTING HEIGHT SHOULD BE 3.5 FT (1.05m) ABOVE ADJACENT SIDEWALK
- PEDESTRIAN SIGNAL FACES SHALL BE MOUNTED WITH THE BOTTOM OF THE HOUSING NOT LESS THAN 8 FT (2.4m) NOR MORE THAN 10 FT (3.0m) ABOVE THE SIDEWALK LEVEL AND SO THERE IS A PEDESTRIAN INDICATION IN THE LINE OF PEDESTRIANS' VISION WHICH PERTAINS TO THE CROSSWALK BEING USED.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, NOT MOUNTED OVER A ROADWAY, SHALL BE AT LEAST 10 FT (3.0m) BUT NOT MORE THAN 15 FT (4.5m) ABOVE THE SIDEWALK OR, ABOVE THE PAVEMENT GRADE AT THE CENTER OF THE HIGHWAY IF NO SIDEWALKS EXIST.
- THE BOTTOM OF THE HOUSING OF A VEHICLE SIGNAL FACE, MOUNTED OVER A ROADWAY, SHALL BE ACCORDING TO CURRENT STATE STANDARDS 877001 AND 877006. (16 FT (5m) MIN., 18 FT (5.5m) MAX., FROM HIGHEST POINT OF PAVEMENT)

PEDESTRIAN SIGNAL POST

PEDESTRIAN SIGNAL HEAD AND PEDESTRIAN PUSHBUTTON DETECTOR LOCATION

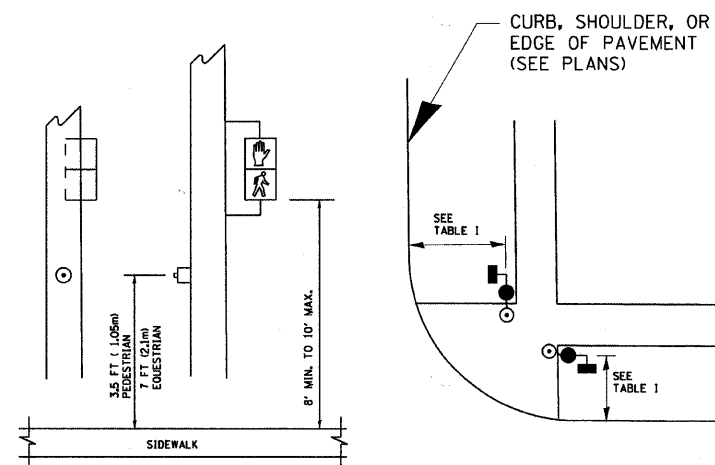


TABLE I

TRAFFIC SIGNAL EQUIPMENT	COMBINATION CONCRETE CURB AND GUTTER (MIN. DIST. FROM BACK OF CURB)	SHOULDER/NON-CURBED AREA (MIN. DIST. FROM EDGE OF PAVEMENT)
TRAFFIC SIGNAL MAST ARM POLE	6 FT (1.8m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
TRAFFIC SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN SIGNAL POST	4 FT (1.2m)	SHOULDER WIDTH + 2FT(0.6m), MINIMUM 10FT(3.0m)
PEDESTRIAN PUSHBUTTON	SEE NOTE 1	SEE NOTE 1

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT 1
STANDARD TRAFFIC SIGNAL
DESIGN DETAILS

SCALE: VERT. NONE
DATE 1-01-02

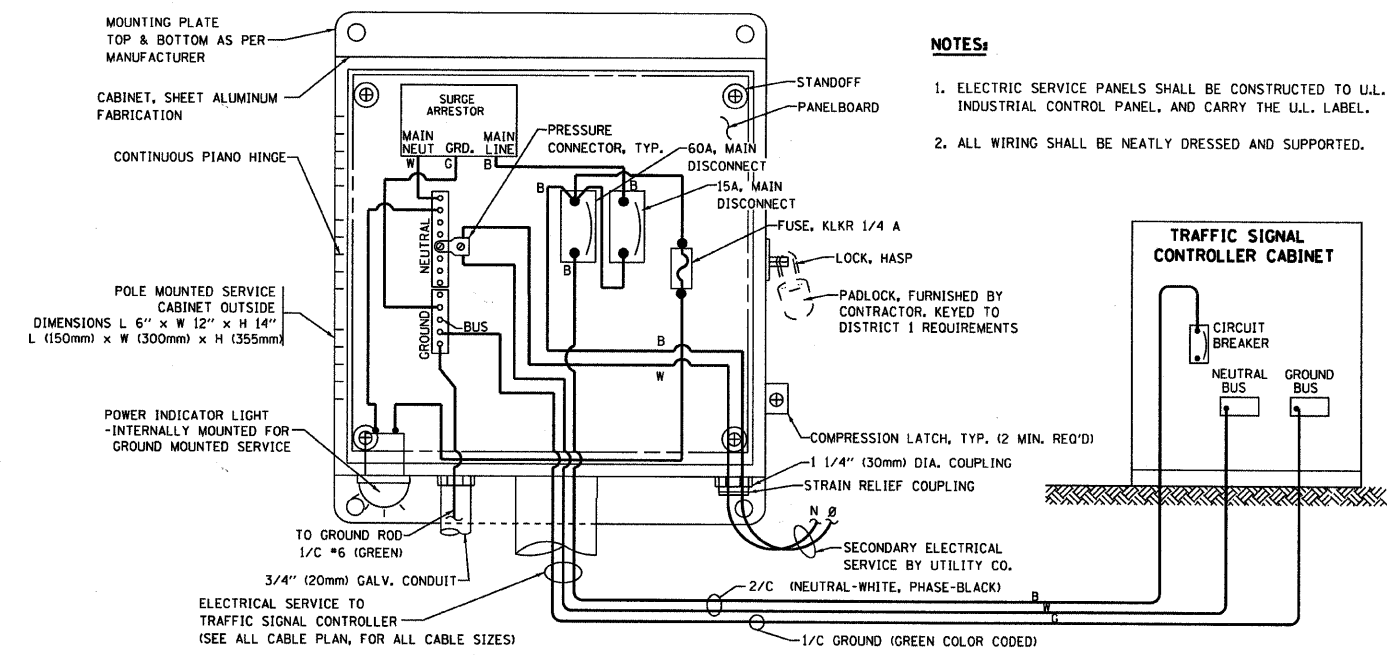
DRAWN BY: RWP
DESIGNED BY: DAD
CHECKED BY: DAZ
SHEET 2 OF 4

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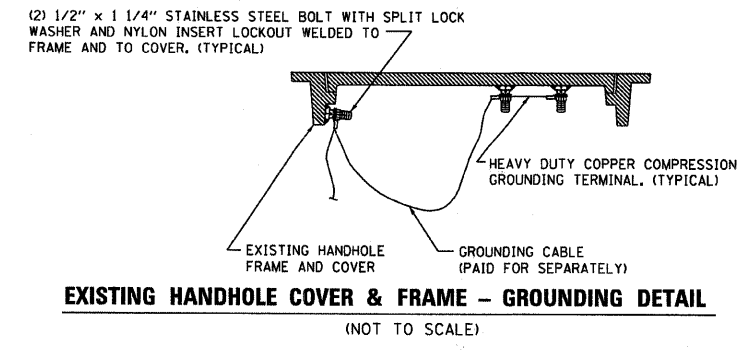
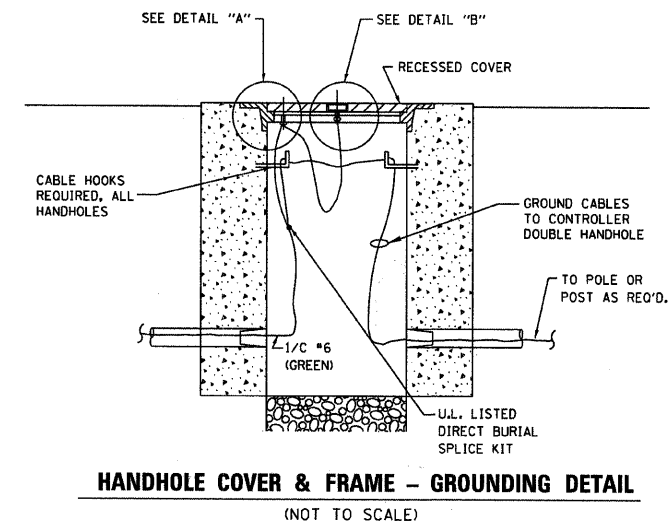
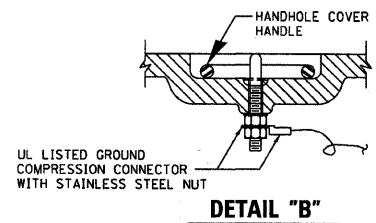
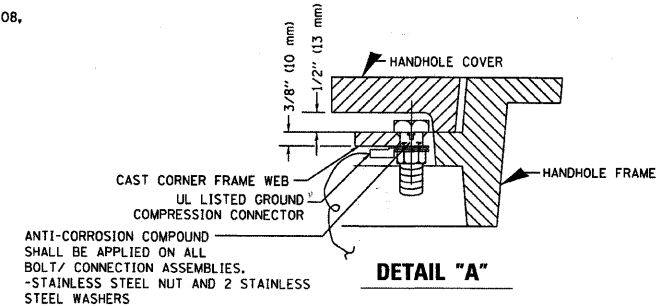
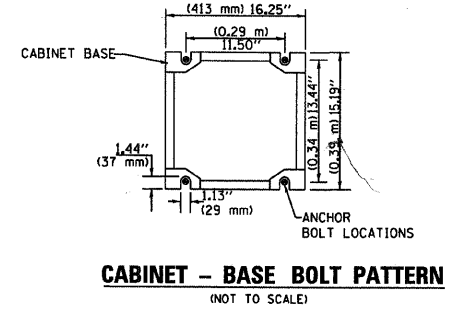
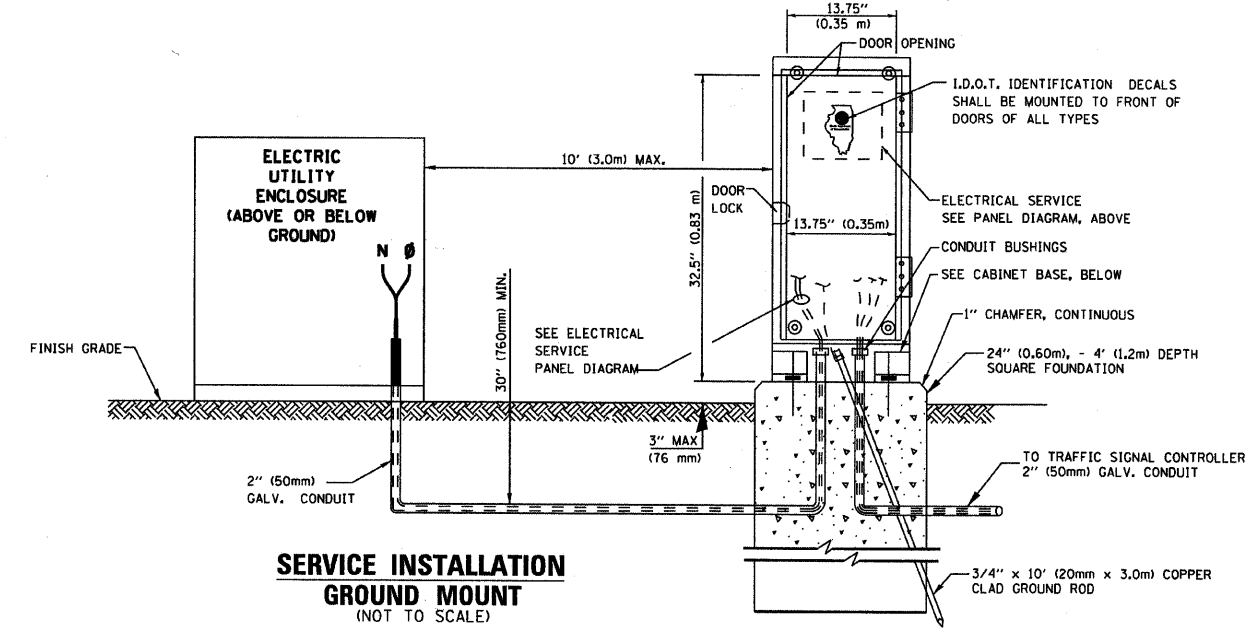
DATE-TIME
DGN-SPEC

TS05

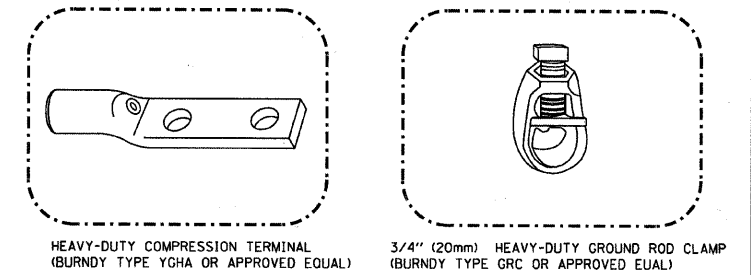
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	10
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



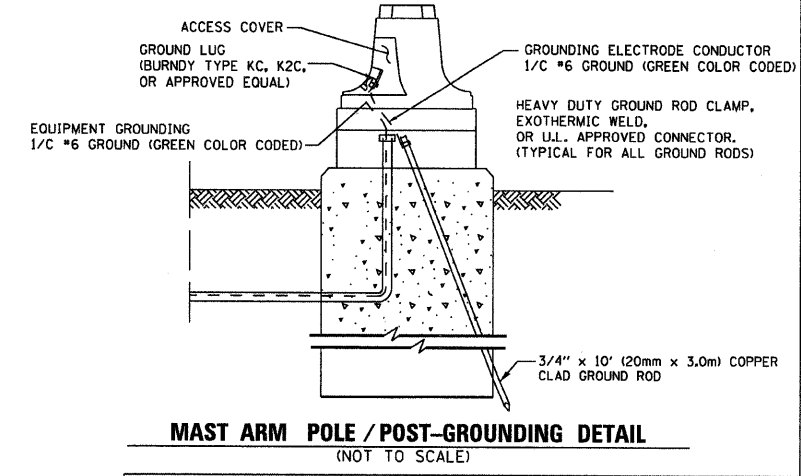
ELECTRICAL SERVICE - PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
 (NOT TO SCALE)



- 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.



- NOTES:**
- ALL CLAMPS SHALL BE BRONZE OR COPPER, UL 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.



REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DISTRICT 1
 STANDARD TRAFFIC SIGNAL
 DESIGN DETAILS

SCALE: VERT. NONE
 HORIZ. NONE
 DATE 1-01-02

DRAWN BY: RWP
 DESIGNED BY: DAD
 CHECKED BY: DAZ
 SHEET 3 OF 4

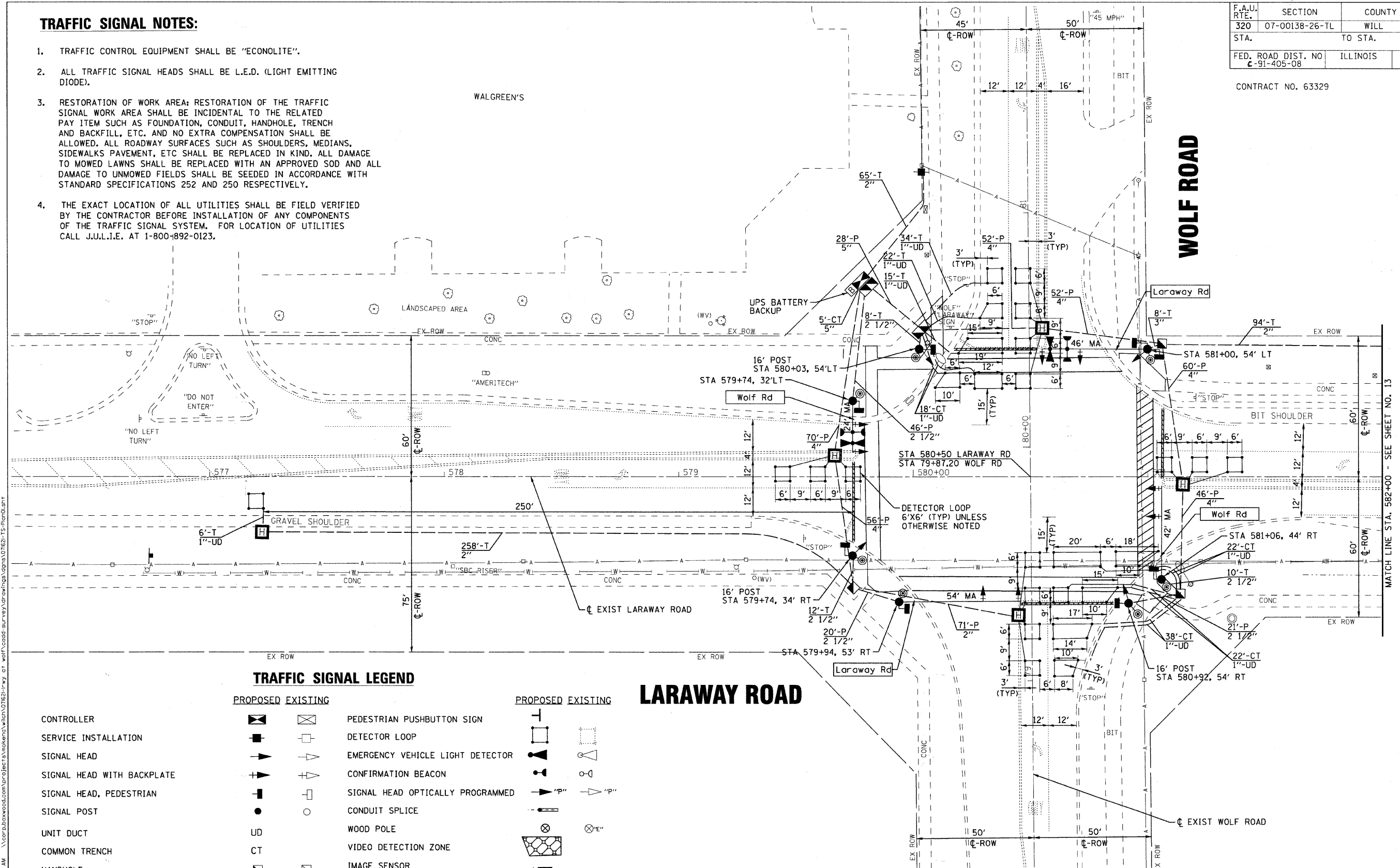
B2Corp.baxwood.com\proj\elect\gMokena\mich\071621-Lrwy at WolfBECADD-SURVEY\DRAWINGS\071621-TS-Dist1Det.sht
 DATE-TIME: 09N-SPEC

TRAFFIC SIGNAL NOTES:

1. TRAFFIC CONTROL EQUIPMENT SHALL BE "ECONOLITE".
2. ALL TRAFFIC SIGNAL HEADS SHALL BE L.E.D. (LIGHT EMITTING DIODE).
3. 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 SEEDDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.
4. THE EXACT LOCATION OF ALL UTILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR BEFORE INSTALLATION OF ANY COMPONENTS OF THE TRAFFIC SIGNAL SYSTEM. FOR LOCATION OF UTILITIES CALL J.U.L.I.E. AT 1-800-892-0123.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	12
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED AID PROJECT CMM-9003(023)		
e-91-405-08				

CONTRACT NO. 63329



TRAFFIC SIGNAL LEGEND

PROPOSED		EXISTING		
CONTROLLER				PEDESTRIAN PUSHBUTTON SIGN
SERVICE INSTALLATION				DETECTOR LOOP
SIGNAL HEAD				EMERGENCY VEHICLE LIGHT DETECTOR
SIGNAL HEAD WITH BACKPLATE				CONFIRMATION BEACON
SIGNAL HEAD, PEDESTRIAN				SIGNAL HEAD OPTICALLY PROGRAMMED
SIGNAL POST				CONDUIT SPLICE
UNIT DUCT				WOOD POLE
COMMON TRENCH				VIDEO DETECTION ZONE
HANDHOLE				IMAGE SENSOR
HEAVY DUTY HANDHOLE				DOME PTZ CAMERA
DOUBLE HANDHOLE				LUMINAIRE
G.S. CONDUIT IN TRENCH (T) OR PUSHED (P)				STREET NAME SIGN
PEDESTRIAN PUSHBUTTON DETECTOR				UNINTERRUPTIBLE BATTERY
MAST ARM ASSEMBLY AND POLE, STEEL				

LARAWAY ROAD

REVISIONS	
NAME	DATE
PER COUNTY	8-20-09
PER IDOT	9-16-09

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION PLAN
LARAWAY ROAD AT WOLF ROAD

PROJECT NO. 071621
SCALE: 1"=20'
DATE: 06/25/09

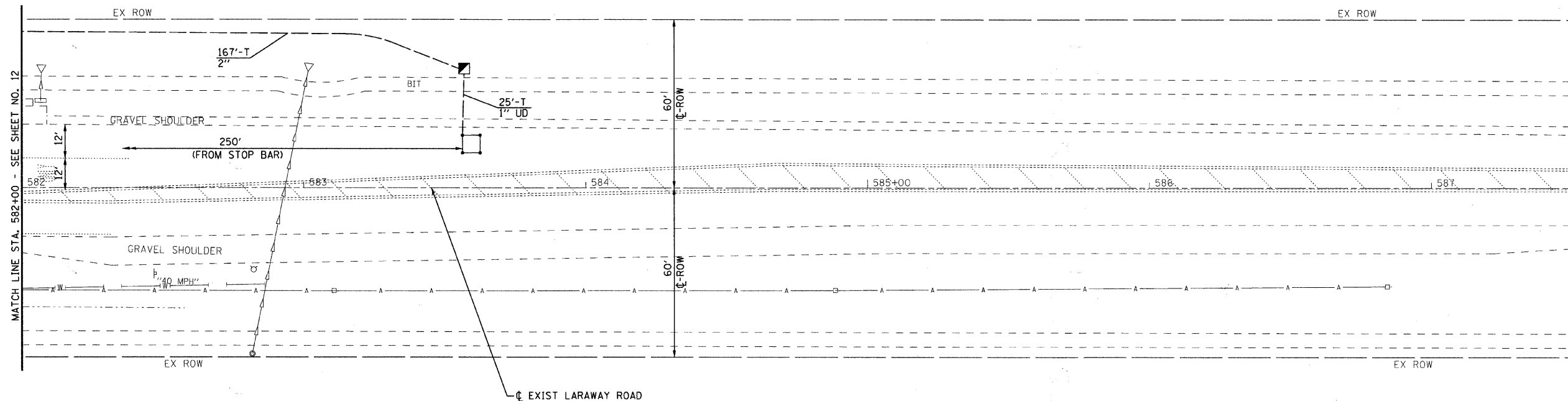
DESIGNED BY: RWL
DRAWN BY: BCD
CHECKED BY: NJP

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 STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	13
STA.		TO STA.		
FED. ROAD DIST. NO C-91-405-08		ILLINOIS	FED AID PROJECT CMM-9003(023)	

CONTRACT NO. 63329



LARAWAY ROAD

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 STATE OF ILLINOIS - PROFESSIONAL ENGINEER FIRM
 No. 07-00138-26-TL-13-110002.dwg
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REVISIONS	
NAME	DATE
PER COUNTY	8-20-09
PER IDOT	9-16-09

ILLINOIS DEPARTMENT OF TRANSPORTATION

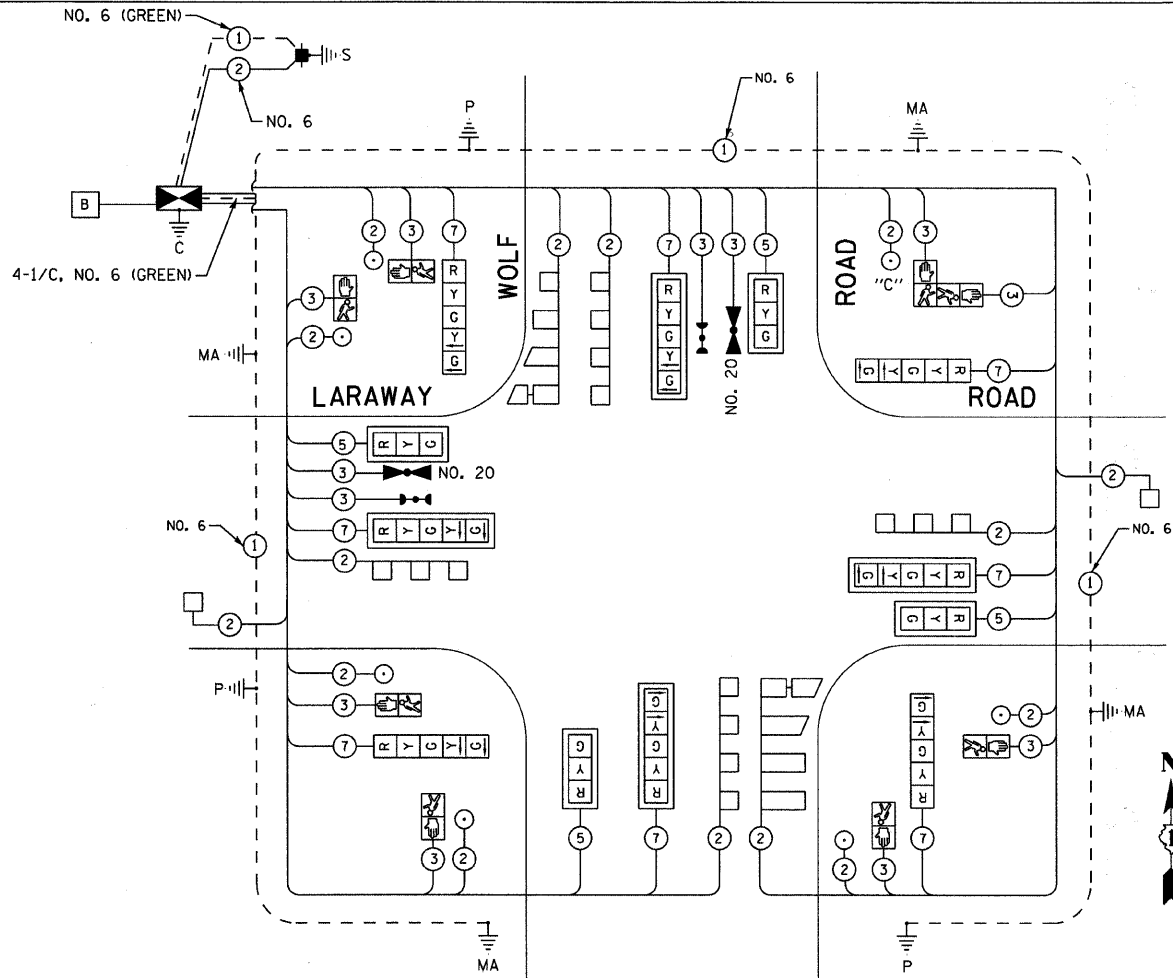
**TRAFFIC SIGNAL
INSTALLATION PLAN
LARAWAY ROAD AT WOLF ROAD**

PROJECT NO. 071621 DESIGNED BY: RWL
 SCALE: 1"=20' DRAWN BY: BCD
 DATE: 06/25/09 CHECKED BY: NJP

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	14
STA.		TO STA.		
FED. ROAD DIST. NO. 9-405-06		ILLINOIS	FED AID PROJECT CMM-9003(025)	

CABLE PLAN LEGEND

EXISTING	PROPOSED	DESCRIPTION
		8" (200mm) TRAFFIC SIGNAL SECTION
		12" (300mm) TRAFFIC SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		12" (300mm) PEDESTRIAN SIGNAL SECTION
		CONTROLLER CABINET
		SERVICE INSTALLATION
		TELEPHONE CONNECTION
		VEHICLE DETECTOR, INDUCTION LOOP
		MAGNETIC DETECTOR
		EMERGENCY VEHICLE LIGHT DETECTOR
		CONFIRMATION BEACON
		PUSHBUTTON DETECTOR
		DENOTES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED.
		FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 2-MM12F SM12F
		SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD
		RAILROAD CONTROL CABINET
		ILLUMINATED SIGN, "NO LEFT TURN"
		ILLUMINATED SIGN, "NO RIGHT TURN"
		GROUND CABLE 1C NO. 6
		GROUND ROD AT HANDHOLE (H), DOUBLE HANDHOLE (H), OR CONTROLLER (C)
		GROUND ROD AT POST (P), OR MAST ARM POLE (MA)
		GROUND ROD AT ELECTRIC SERVICE INSTALLATION
		UNINTERRUPTIBLE POWER SUPPLY



CABLE PLAN

(NOT TO SCALE)

PEDESTRIAN PUSH BUTTON NOTES

PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.

SCHEDULE OF QUANTITIES

CONTRACT NO. 63329

PAY ITEM	UNIT	QUANTITY
72000100 SIGN PANEL - TYPE 1	SQ FT	28.5
81000600 CONDUIT IN TRENCH, 2" DIA., GALVANIZED STEEL	FOOT	584
81000700 CONDUIT IN TRENCH, 2 1/2" DIA., GALVANIZED STEEL	FOOT	30
81000800 CONDUIT IN TRENCH, 3" DIA., GALVANIZED STEEL	FOOT	8
81001100 CONDUIT IN TRENCH, 5" DIA., GALVANIZED STEEL	FOOT	10
81018500 CONDUIT PUSHED, 2" DIA., GALVANIZED STEEL	FOOT	71
81018600 CONDUIT PUSHED, 2 1/2" DIA., GALVANIZED STEEL	FOOT	87
81018900 CONDUIT PUSHED, 4" DIA., GALVANIZED STEEL	FOOT	336
81019000 CONDUIT PUSHED, 5" DIA., GALVANIZED STEEL	FOOT	28
81400700 HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	4
81400710 HEAVY DUTY HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	5
81400720 DOUBLE HANDHOLE, PORTLAND CEMENT CONCRETE	EACH	2
81900200 TRENCH AND BACKFILL FOR ELECTRICAL WORK	FOOT	934
85700200 FULL - ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1
86200200 UNINTERRUPTIBLE POWER SUPPLY, STANDARD	EACH	1
87301215 ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 2C	FOOT	1316
87301225 ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	1904
87301245 ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 5C	FOOT	921
87301255 ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 7C	FOOT	1760
87301305 ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	1884
87301805 ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6, 2C	FOOT	95
87502500 TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.	EACH	3
87700160 STEEL MAST ARM ASSEMBLY AND POLE, 24 FT.	EACH	1
87700250 STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	1
87700270 STEEL MAST ARM ASSEMBLY AND POLE, 46 FT.	EACH	1
87700310 STEEL MAST ARM ASSEMBLY AND POLE, 54 FT.	EACH	1
87800100 CONCRETE FOUNDATION, TYPE A	FOOT	12
87800150 CONCRETE FOUNDATION, TYPE C	FOOT	4
87800400 CONCRETE FOUNDATION, TYPE E 30" DIAMETER	FOOT	15
87800415 CONCRETE FOUNDATION, TYPE E 36" DIAMETER	FOOT	45
88030020 SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	4
88030100 SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
88030110 SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
88102710 PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED	EACH	6
88102740 PEDESTRIAN SIGNAL HEAD, LED, 2-FACE, BRACKET MOUNTED	EACH	1
88200110 TRAFFIC SIGNAL BACKPLATE, LOUVERED	EACH	8
88500100 INDUCTIVE LOOP DETECTOR	EACH	8
88600100 DETECTOR LOOP, TYPE 1	FOOT	1052
88700200 LIGHT DETECTOR	EACH	2
88700300 LIGHT DETECTOR AMPLIFIER	EACH	1
88800100 PEDESTRIAN PUSH BUTTON	EACH	7
X8050015 SERVICE INSTALLATION, POLE MOUNTED	EACH	1
X8730250 ELECTRIC CABLE IN CONDUIT, NO. 20 3/C, TWISTED, SHIELDED	FOOT	330
X8730027 ELECTRIC CABLE IN CONDUIT, GROUNDING, NO. 6 1C	FOOT	1173

TRAFFIC SIGNAL NOTES:

- THE TRAFFIC SIGNAL CONTROLLER SHALL BE "ECONOLITE".
- THE NEUTRAL AND GROUND SHALL BE TIED AT THE SERVICE INSTALLATION, BUT SHALL BE SEPARATED AT THE TRAFFIC SIGNAL CABINET.

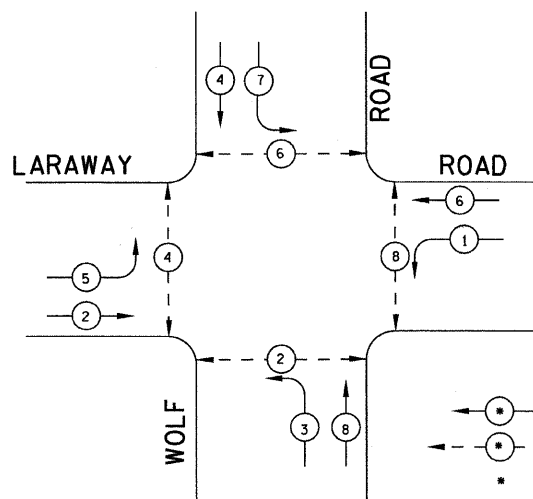
I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS					TOTAL WATTAGE
TYPE	NO. LAMPS	WATTAGE INCAND.	LED	%OPERATION	
SIGNAL (RED)	12	17		0.50	102
(YELLOW)	12	25		0.25	75
(GREEN)	12	15		0.25	45
ARROW	16	12		0.10	19.2
PED. SIGNAL	8	25		1.00	200
CONTROLLER	1	100		1.00	100.00
UPS	1	25		1.00	25
FLASHER				0.50	--
TOTAL =					566.20

ENERGY COSTS TO: WILL COUNTY DEPARTMENT OF HIGHWAYS
16841 WEST LARAWAY ROAD
JOLIET, ILLINOIS 60433

ENERGY SUPPLY CONTACT: KRISHNA KIRKLAND
PHONE: (815) 724-5805
COMPANY: COM. ED.

FOUNDATION (DEPTH)	FT. (m)	CABLE SLACK	FT. (m)	VERTICAL	FT. (m)
TYPE A - POST	4 (1.2)	HANDHOLE	6.5 (2.0)	ALL FOUNDATIONS	3.5 (1.0)
C - CONTROLLER	4 (1.2)	DOUBLE HANDHOLE	13 (4.0)	MAST ARM (L) POLE	20' H-2"
E - M. ARM POLE		SIGNAL POST	2 (0.6)		13m H-0.6m
24" (600mm)	10 (3.0)	CONTROLLER CAB.	1 (0.3)	BRACKET MOUNTED	4 (1.2)
30" (750mm)	15 (4.6)	FIBER OPTIC	13 (4.0)	PED. PUSHBUTTON	4 (1.2)
36"	15 (4.6)	ELECTRIC SERVICE	1 (0.3)	ELECTRIC SERVICE	13.5 (4.1)
		GROUND CABLE	1 (0.3)	SERVICE TO GROUND	13.5 (4.1)
				POST MOUNTED	6 (1.8)

CONTROLLER SEQUENCE

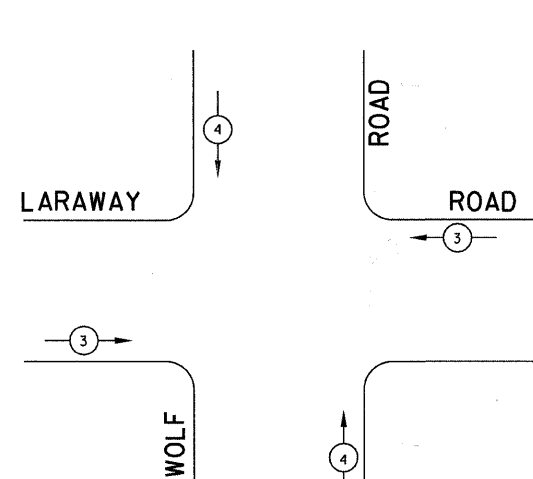


PHASE DESIGNATION DIAGRAM

LEGEND

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

EMERGENCY VEHICLE PREEMPTION SEQUENCE



PROPOSED EMERGENCY VEHICLE PREEMPTION		
EMERGENCY VEHICLE PREEMPTION	3	4
MOVEMENT	←	↑

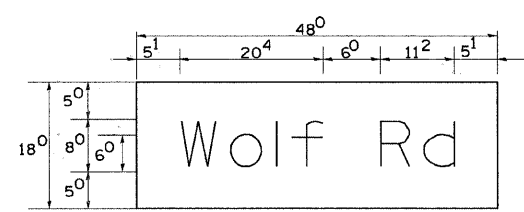
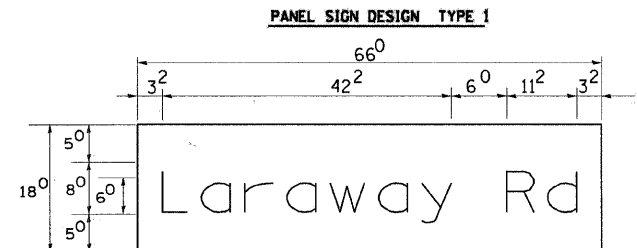
REVISIONS	
NAME	DATE
PER COUNTY	8-20-09
PER IDOT	9-16-09

ILLINOIS DEPARTMENT OF TRANSPORTATION
TRAFFIC SIGNAL CABLE PLAN AND PHASE DESIGNATION DIAGRAM
LARAWAY ROAD AT WOLF ROAD

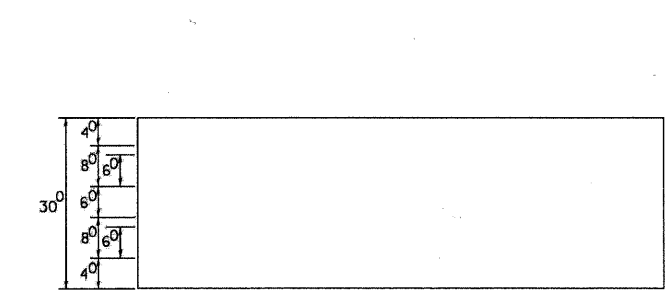
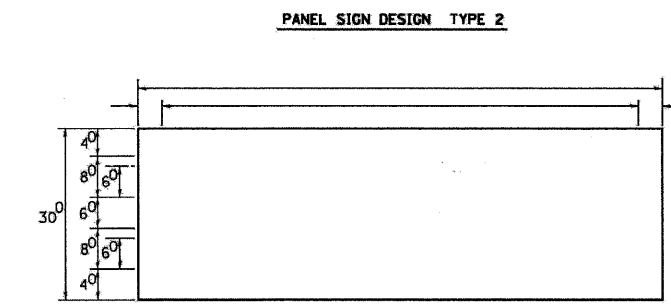
PROJECT NO. 071621 DESIGNED BY: RWL
SCALE: NONE DRAWN BY: BCD
DATE: 06/25/09 CHECKED BY: NJP



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NOTE: SIGN DIMENSIONS ARE IN ENGLISH UNITS



GENERAL NOTES

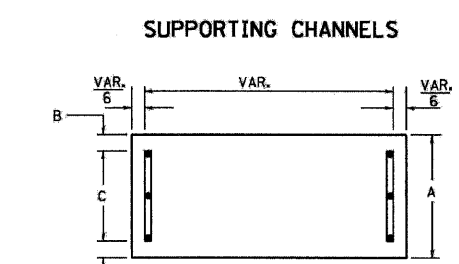
- WHERE MAST ARM MOUNTED STREET NAME SIGNS ARE SPECIFIED, THE MAST ARM ASSEMBLY AND POLES SHALL BE DESIGNED TO SUPPORT THE LOADINGS CALLED FOR ON STANDARDS 834001, 834006 AND 834011, AS APPLICABLE, PLUS TWO (2) SIGN PANELS 2'-6" x 6'-0" MOUNTED AS SHOWN. THE DESIGN SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS 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.
 - ALL SIGNS SHALL HAVE A WHITE REFLECTORIZED LEGEND AND BORDER ON A GREEN REFLECTORIZED BACKGROUND, TYPE A SHEETING.
 - THE SIGN LENGTH SHOULD BE INCREASED IN 6-INCH INCREMENTS, BUT THE OVERALL LENGTH SHOULD NOT EXCEED 6'-0".
 - ALL BORDERS SHALL BE 3/4" WIDE AND CORNER RADIUS SHALL BE 2-1/4".
 - 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:
 - * A.K.T. CORPORATION SCHAUMBURG, IL
 - * TUCKER COMPANY, INC. WAUWATOSA, WI
 - * AMERICAN FABRICATION CO. CHICAGO HEIGHTS, IL
 - * WESTERN TRAFFIC CONTROL INC. CICERO, IL
- PARTS LISTING**
- SIGN CHANNEL PART *HPN033 (MED. CHANNEL)
- SIGN SCREWS 1/4" x 14 x 1" H.W.H. #3
- 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.

Sq. M. each
8.25 Sq. Ft. each
2 Required
Design Series D

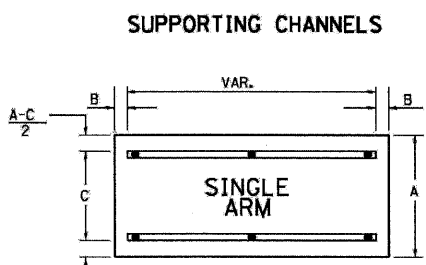
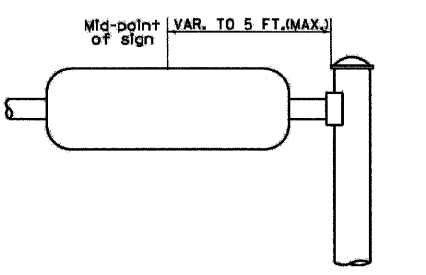
Sq. M. each
6.0 Sq. Ft. each
2 Required
Design Series D

Sq. M. each
Sq. Ft. each
Required
Design Series

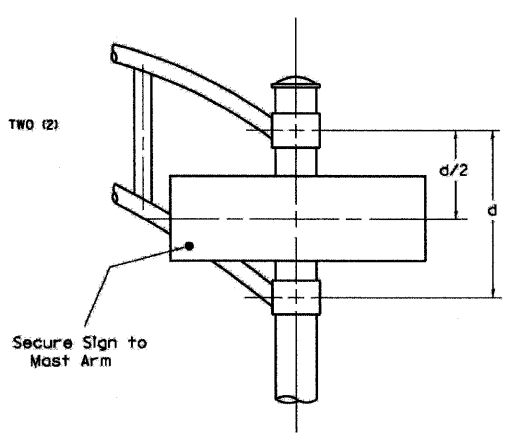
Sq. M. each
Sq. Ft. each
Required
Design Series



A	B	C
18"	2"	14"



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



DUAL ARM
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 c e		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
A W X	12	14	14	15	12	14	06	10	11	14	06	10	11	12	12	14
B	14	15	20	21	14	15	11	12	14	15	12	14	12	14	16	17
C E G	14	15	20	21	12	14	06	10	12	14	12	14	14	15	14	15
D O O R	14	15	20	21	14	15	06	10	12	14	12	14	14	15	14	15
F	05	06	14	15	06	10	05	06	05	06	10	06	10	11	12	
H I M N	20	21	22	24	20	21	14	15	16	17	16	17	20	21	20	21
J U	20	21	20	21	16	17	14	15	16	17	16	17	16	17	20	21
K L	11	12	16	17	11	12	05	06	11	12	11	12	11	12	12	14
P	12	14	14	15	12	14	05	06	11	12	11	12	12	14	12	14
S	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
T	11	12	16	17	06	10	06	10	11	12	11	12	11	12	12	14
V	06	10	14	15	11	12	06	10	12	14	12	14	12	14	12	14
Y	05	06	14	15	06	10	05	06	05	07	05	06	06	10	11	12
Z	16	17	22	24	16	17	12	14	16	17	16	17	16	17	20	21

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

FIRST LETTER	SECOND LETTER															
	a d h g i j		b h i k l		f w		j		s t		v y		x		z	
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D
ad h g i j	16	17	22	24	16	17	12	14	14	15	14	15	16	17	16	17
lm n q u																
b f k o p s	12	14	16	17	11	12	05	06	11	12	11	12	12	14	12	14
c e	12	14	16	17	12	14	06	10	12	14	12	14	12	14	12	14
r	06	10	12	14	06	10	03	03	05	06	05	06	06	10	06	10
t z	12	14	16	17	12	14	06	10	11	12	11	12	12	14	12	14
v y	11	12	14	15	11	12	05	06	06	10	06	10	11	12	11	12
w	11	12	14	15	11	12	05	06	11	12	11	12	11	12	12	14
x	12	14	16	17	11	12	05	06	11	12	11	12	11	12	12	14

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

FIRST NUMBER	SECOND NUMBER																				
	0		1		2		3		4		5		6		7		8		9		
	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	C	D	
0 9	16	17	16	17	14	15	12	14	14	15	14	15	16	17	12	14	16	17	16	17	
1	20	21	20	21	20	21	16	17	14	15	20	21	20	21	14	15	20	21	20	21	
2 3 4	14	15	14	15	14	15	12	14	12	14	14	15	14	15	11	12	16	17	14	15	
5	14	15	14	15	14	15	11	12	11	12	14	15	14	15	11	12	14	15	14	15	
6	16	17	14	15	14	15	12	14	14	15	14	15	11	12	14	15	14	15	14	15	
7	12	14	12	14	14	15	12	14	15	05	06	12	14	14	15	11	12	14	15	12	14
8	16	17	16	17	14	15	12	14	14	15	16	17	12	14	16	17	14	15	14	15	

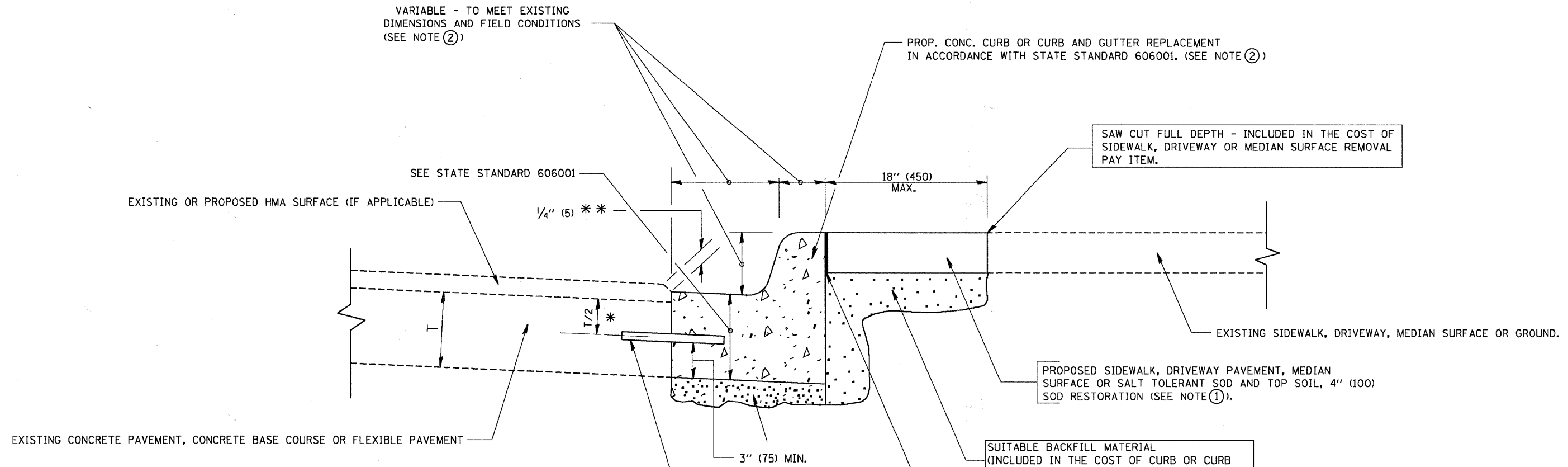
EXAMPLE. 2(3) DENOTES 3/8"

UPPER AND LOWER CASE LETTER WIDTHS

LETTERS	6 INCH UPPER CASE LETTERS				8 INCH UPPER CASE LETTERS				LETTERS	6 INCH LOWER CASE LETTERS	
	SERIES		SERIES		SERIES		SERIES			SERIES	
	C	D	C	D	C	D	C	D		C	D
A	36	50	50	65	a	35	42				
B	32	40	43	53	b	35	42				
C	32	40	43	53	c	35	41				
D	32	40	43	53	d	35	42				
E	30	35	40	47	e	35	42				
F	30	35	40	47	f	23	26				
G	32	40	43	53	g	35	42				
H	32	40	43	53	h	35	42				
I	07	07	11	12	i	11	11				
J	30	36	40	50	j	20	22				
K	32	41	43	54	k	35	42				
L	30	35	40	47	l	11	11				
M	37	45	51	61	m	60	70				
N	32	40	43	53	n	35	42				
O	34	42	45	55	o	36	43				
P	32	40	43	53	p	35	42				
Q	34	42	45	55	q	35	42				
R	32	40	43	53	r	26	32				
S	32	40	43	53	s	36	42				
T	30	35	40	47	t	27	32				
U	32	40	43	53	u	35	42				
V	35	44	47	60	v	42	47				
W	44	52	60	70	w	55	64				
X	34	40	45	53	x	44	51				
Y	36	50	50	66	y	46	53				
Z	32	40	43	53	z	36	43				

NUMBER	6 INCH SERIES		8 INCH SERIES	
	C	D	C	D
1	12	14	15	20
2	32	40	43	53
3	32	40	43	53
4	35	43	47	57
5	32	40	43	53
6	32	40	43	53
7	32	40	43	53
8	32	40	43	53
9	32	40	43	53
0	34	42	45	55

D-91-405-08



- * 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.

SALT TOLERANT SOD AND TOP SOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

- ② CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.
- ③ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.
- ④ 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.
- ⑤ 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.
- ⑥ 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.
- ⑦ 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.

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 USUABLE 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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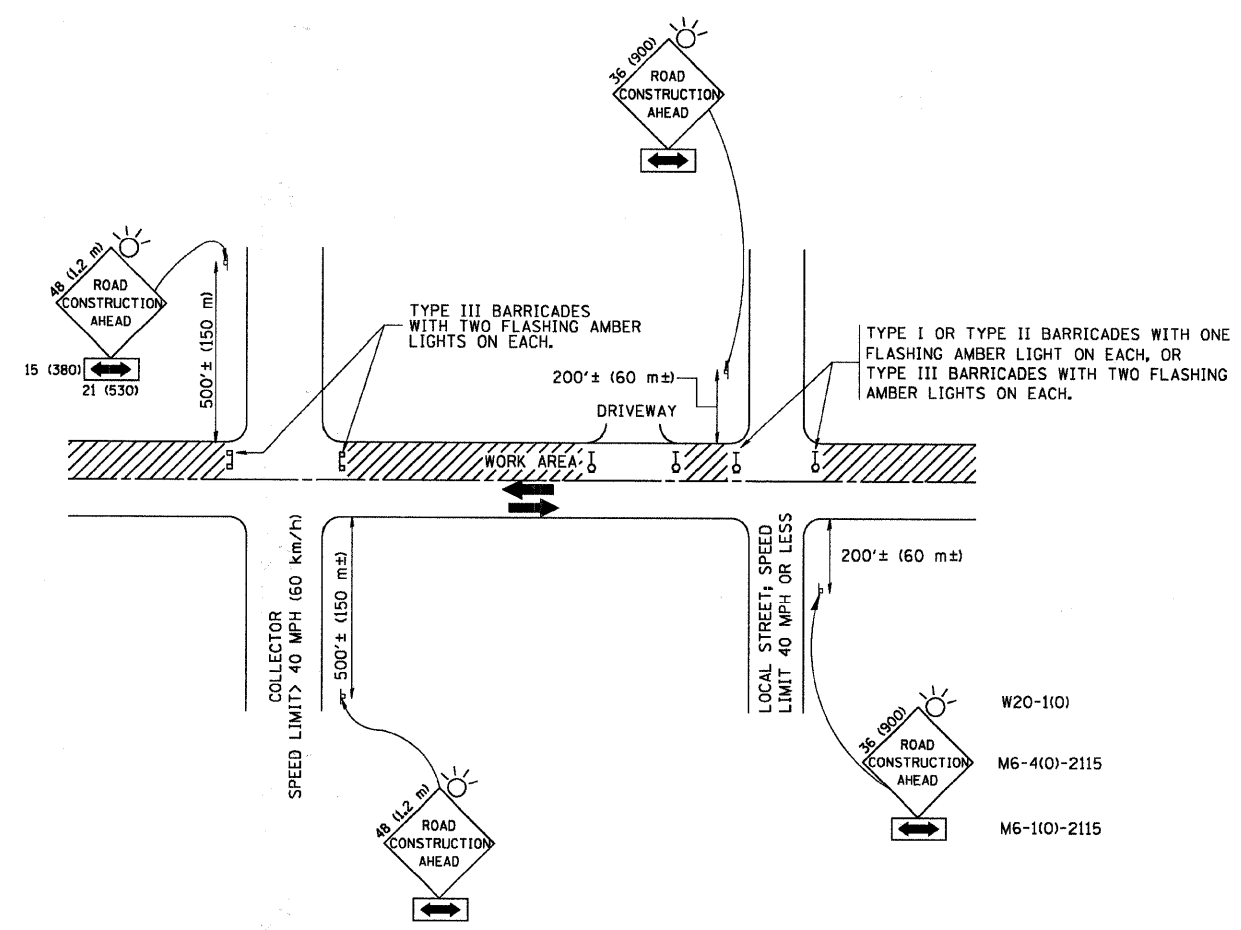
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 USER NAME = goglienobt
 DESIGNED - A. HOUSEH
 DRAWN -
 PLOT SCALE = 50.000' / IN.
 CHECKED -
 PLOT DATE = 1/4/2008
 DATE - 03-11-94
 REVISED - R. BORO 01-01-07

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 01-01-07

**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.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	17
BD600-06 (BD-24)			CONTRACT NO. 63329	
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 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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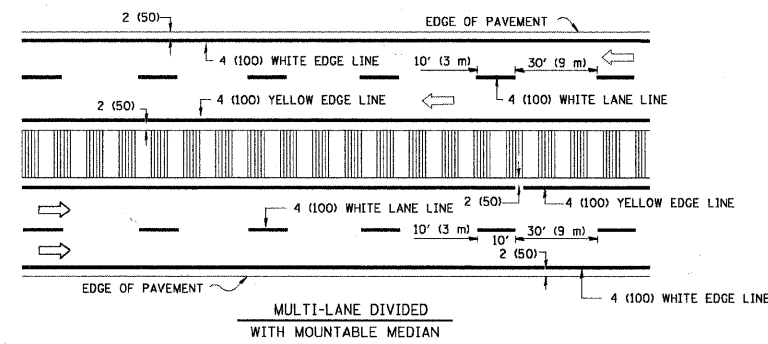
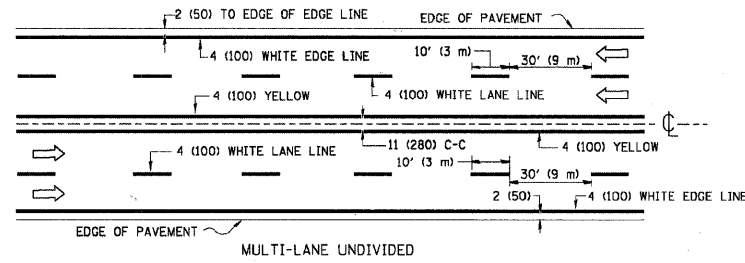
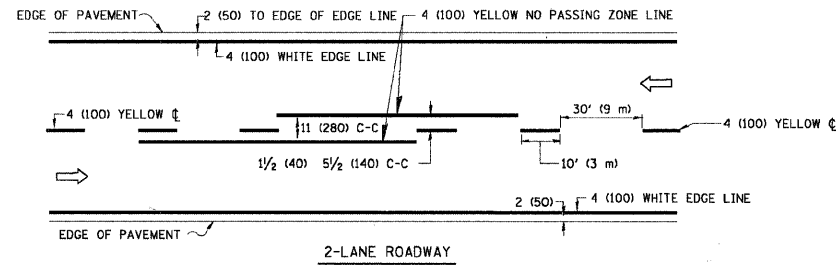
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	PLOT SCALE = 50.000' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2009	DATE - 06-89	REVISED - T. RAMMACHER 01-06-00

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

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

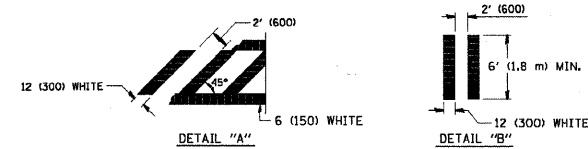
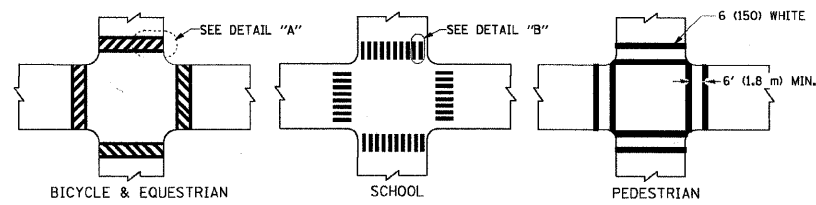
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TC-10			CONTRACT NO. 63229	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

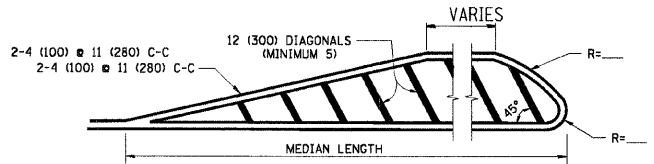
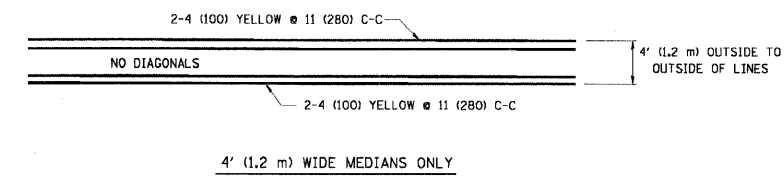


NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

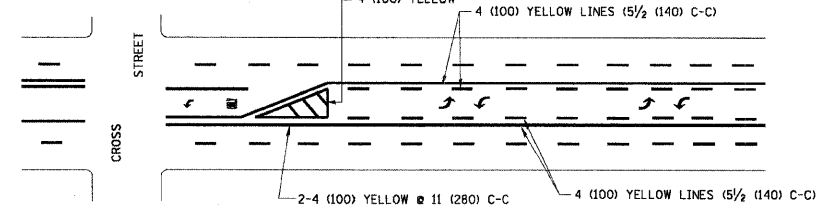


TYPICAL CROSSWALK MARKING

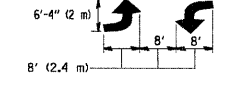


FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.
 DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
 75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)
 150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

MEDIANS OVER 4' (1.2 m) WIDE

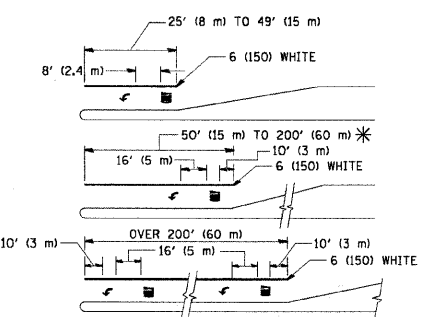


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

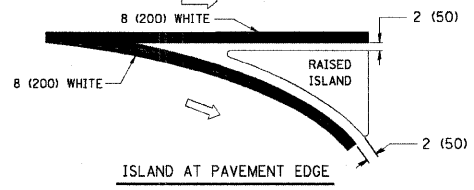
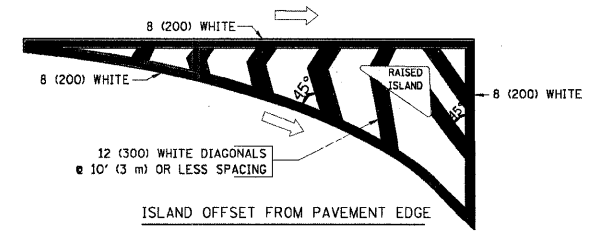
TYPICAL PAINTED MEDIAN MARKING



FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
 AREA = 15.6 SQ. FT. (1.5 m²) 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) 2' (600) @ 45° 12 (300) @ 90°	SOLID SOLID	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" 15 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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FILE NAME = BAXTER	USER NAME = drivakasn	DESIGNED - EVERS	REVISED - T. RAMMACHER 10-27-94
DRAWN -	CHECKED -	DATE - 03-19-90	REVISED - C. JUCIUS 09-09-09
PLOT SCALE = 50.000" / IN.	PLOT DATE = 9/9/2009		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE	
TYPICAL PAVEMENT MARKINGS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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