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** 

C STA 580+50 LARAWAY ROAD € STA 79+87.20 WOLF ROAD

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

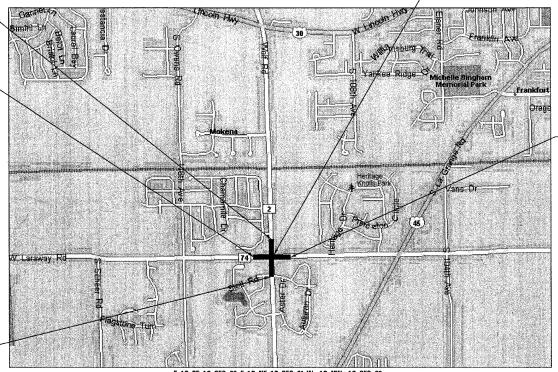
LARAWAY ROAD (FAU 0320) IMPROVEMENT BEGINS STA. 576 + 90

#### **ROADWAY DATA:**

LARAWAY ROAD ADT = 12,600 WOLF ROAD ADT = 6,250POSTED 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 1/2 SE 1/4 SEC 30 E 1/2 NE 1/4 SEC 31 W 1/2 NW 1/4 SEC 32 W 1/2 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





LARAWAY ROAD

**IMPROVEMENT BEGINS** 

(FAU 0320)

STA. 583 + 65

SECTION 07-00138-26-TL FED. ROAD DIST. NO ILLINOIS FED AID PROJEC CMM-9003 (023)

CONTRACT NO. 63329



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS OCTOBER 29, 2009 Dine M. O'lleaf

> PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS

ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

312.578.0050

815.459.1260

Burlington, Wisconsin Chicago, Illinois Crystal Lake, Illinois DeKalb, Illinois Grayslake, Illinois Itasca, Illinois Madison, Wisconsin Mokena, Illinois Plainfield, Illinois 608.347.1542 708.478.2090 815.609.7425

B&W PROJECT NO.: 071621

DATE: 09-16-09

**CONTRACT NO. 63329** 

262.763.7834

815.787.3111 847.223.5088 630.773.1870

(OFFICE WHICH PREPARED PLANS)

#### **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
	CONCRETE FOUNDATION DETAILS
880006-01	TRAFFIC SIGNAL MOUNTING DETAILS
	DETECTOR LOOP INSTALLATION
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

## **INDEX OF SHEETS**

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EROSION CONTROL PLAN	6
STRIPING, SIGNAGE AND GEOMETRIC PLAN	7
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## **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

SCALE:



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DESIGNED	-	NJP .	REVISED	-	PER	COUN	IT.Y	8-20-09
DRAWN	-	BCD	REVISED	-	PER	IDOT	09	-16-09
CHECKED	-	RWL	REVISED	-				
DATE	-	06-25-09	FILE -	0716	21-In	dex8	Hwv	Std sht

#### **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" (REFERED 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 LITTLITY 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.
- 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 CRIND 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 UNNECCESSARY. ALL APPLICABLE STANRDARDS. AS SUPPLEMENTED AND/OR ALTERED BY NOTES, SPECIFICATIONS, AND SPECIAL PROVISIONS SHALL BE FOLLOWED IN CONJUCTION 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
- 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.

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

ESIGNED	-	NJP	REVISED - PER COUNTY 8-20-09
RAWN	-	BCD	REVISED - PER IDOT 09-16-09
HECKED	-	RWL	REVISED -
ATE	-	06-25-09	FILE - 071621-CopNotos sht

ESSIONAL EXPIRES F e 2009, FLLINOIS 10. - 184-0

CONSTRUCTION TYPE CODE

SIGNALS YO31-1F

SIDEWALK YO44

ROADWAY 1000-1A

10

TOTAL QUANTITY

10

UNIT

FOOT

EACH

			FUUT				
	28000400	PERIMETER EROSION BARRIER	FOOT	95	95		
	28000510	INLET FILTER	EACH	2	2		
×	35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	133	/33		
, ×	40603310	HOT-MIX ASPHALT SURFACE COURCE, MIX "C", N50	TON	2	2		
×	42400430	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH, SPECIAL	SQ FT	949	949		,
×	42400800	DETECTABLE WARNINGS	SQ FT	80	80		-
×	44001700	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	94	94		
. ×	44004700	SIDEWALK REMOVAL (SPECIAL)	SQ FT	444	444		
	67100100	MOBILIZATION	L SUM	1	1		
×	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		
×	70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	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		
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	16	16		
	72000100	SIGN PANEL, TYPE 1	SQ FT	64.5	36	28.5	
×	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		
× ••	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	1	95	
			1	1	1		1

<sup>..</sup> DENOTES SPECIALTY ITEMS

CODE NO. DESCRIPTION

TEMPORARY DITCH CHECKS

28000305

\*\* 87502500 TRAFFIC SIGNAL POST, GALVANIZED STEEL, 16 FT.

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

WILL COUNTY DEPARTMENT OF HIGHWAYS LARAWAY ROAD AT WOLF ROAD

SUMMARY OF QUANTITIES STA. TO STA. SCALE:

COPYRICHT © 2009, BY BAXTER & WOODMAN, INC. STATE OF ILLINOIS - PROFESSIONAL DESIGN FIRM LENGEN NO. - 184-00121. EXPRES 4 3730-2011 FAFES AMSERGED OF 9-05-15, AM

<sup>×</sup> DENOTES ITEMS REFERENCED IN A SPECIAL PROVISION

#### **SUMMARY OF QUANTITIES**

				1	CONSTRUC	TION TYPE COL	)E
-	CODE NO.	DESCRIPTION	UNIT	TOTAL	ROADWAY IOOO-1A	SIGNALS Y031-1F	SIDEWALK YO44
••	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	te i	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	h 1 m	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	
× **	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	

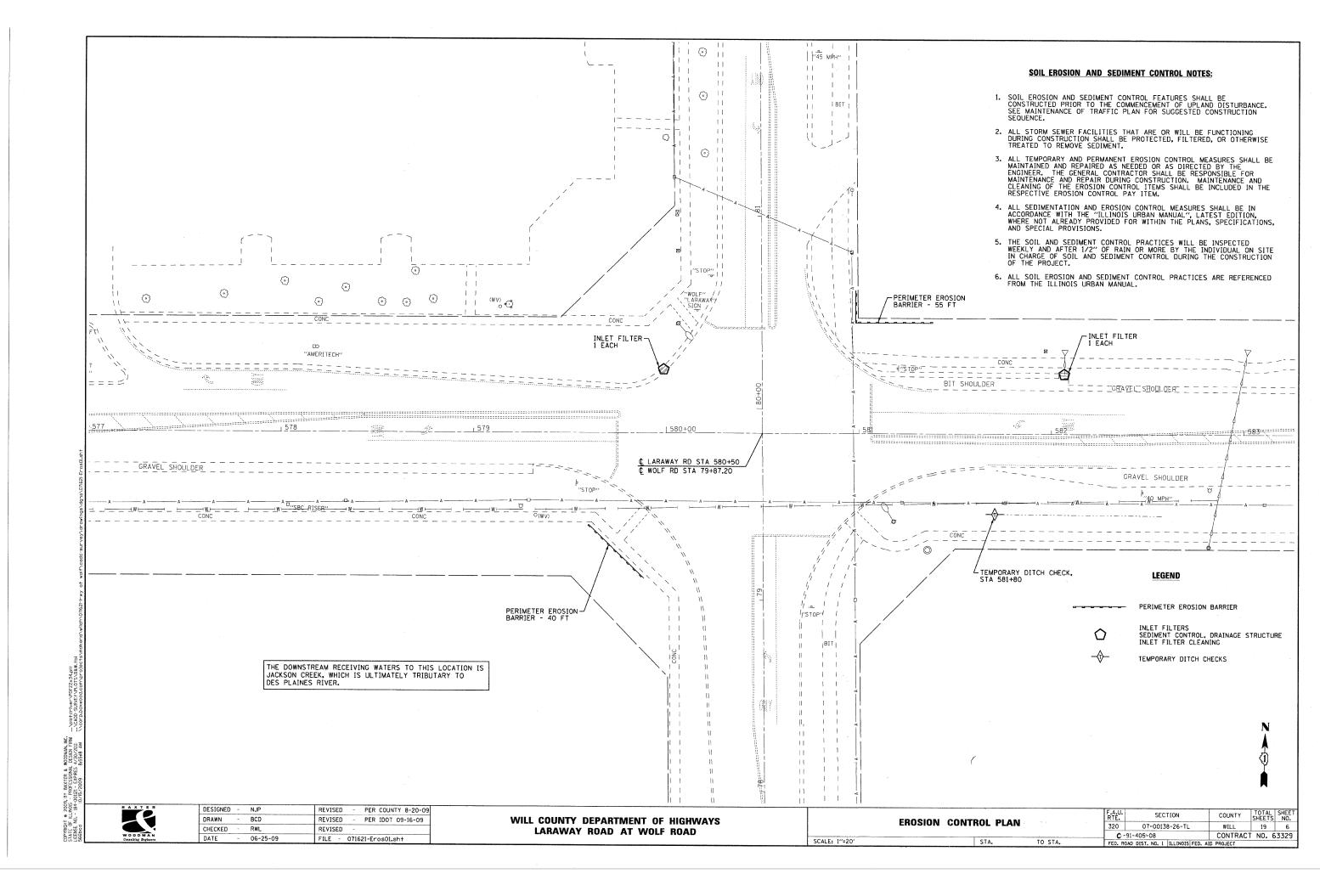
•• DENOTES SPECIALTY ITEMS
× DENOTES ITEMS REFERENCED IN A SPECIAL PROVISION

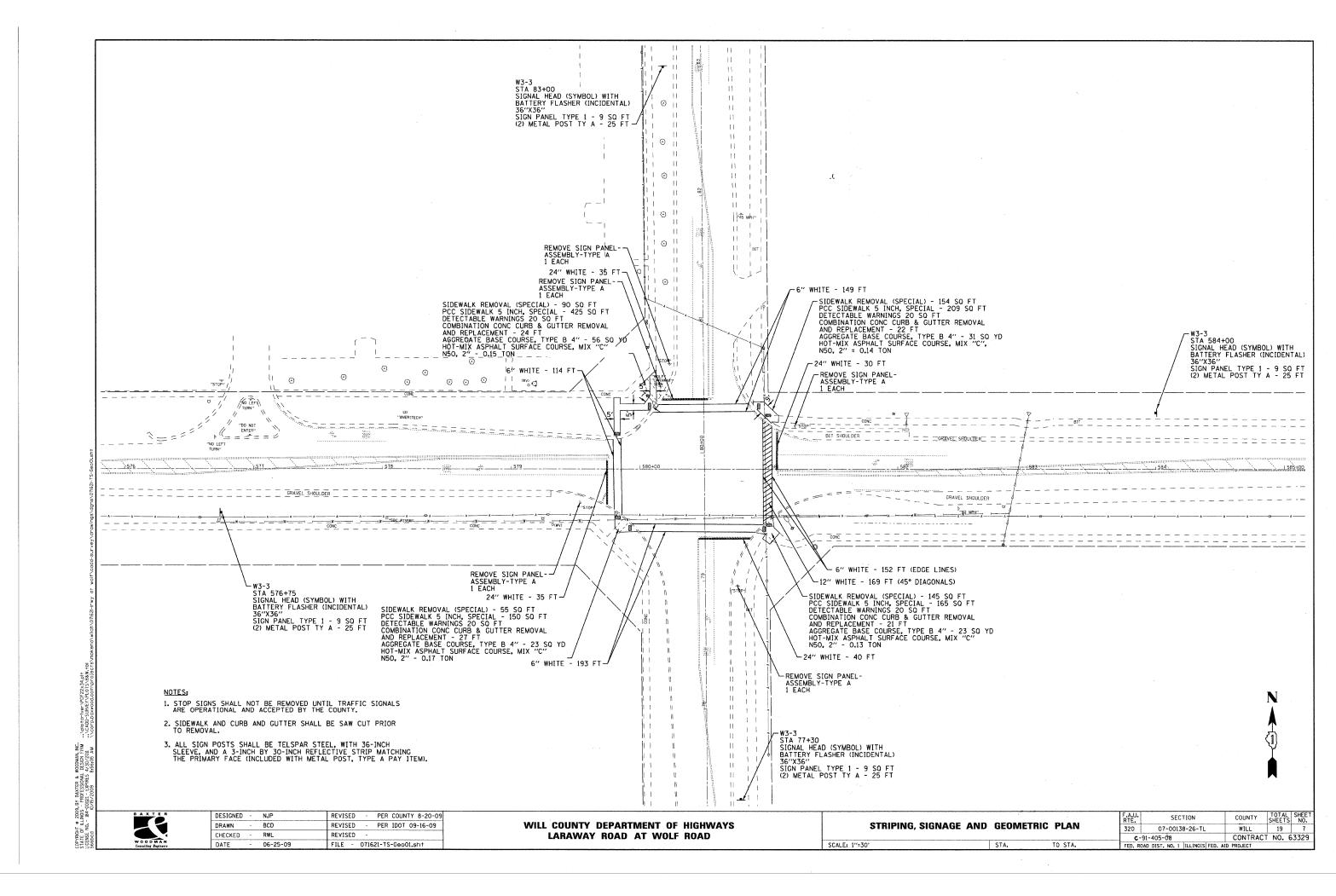
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WILL COUNTY DEPARTMENT OF HIGHWAYS LARAWAY ROAD AT WOLF ROAD

SUMMARY OF QUANTITIES TO STA. STA.

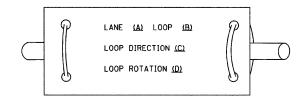
SCALE:



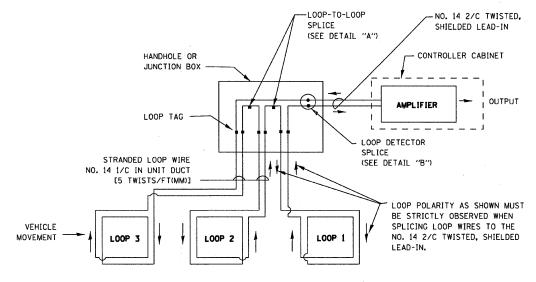


- 1. EACH PAIR OF LOOP WIRES SHALL BE PLACED IN A SEPARATE UNIT DUCT FROM THE EDGE OF PAVEMENT TO THE HANDHOLE. SPACING BETWEEN THE HOLES DRILLED IN THE PAVEMENT SHALL NOT BE LESS THAN 6" (150 mm). UNIT DUCT SHALL BE INCLUDED IN THE COST OF THE LOOP WIRE.
- THE NUMBER OF LOOP TURNS SHALL BE AS RECOMMENDED 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.
- 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



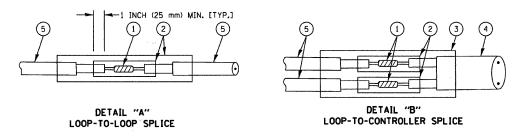
- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP \*1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.



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#### 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 DETECTOR SPLICE

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

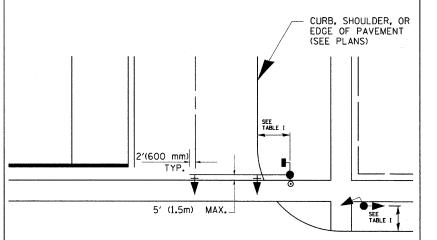
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		STANDARD TI	RAFFIC SIGNAL
		DESIGN	DETAILS
	<b> </b>	SCALE: VERT. NONE	DRAWN BY: RWP DESIGNED BY: DAD
	<b>1</b>	DATE 1-01-02	CHECKED BY: DAZ SHEET 1 OF 4

\*DATE-TIME\* \*DGN-SPEC\*

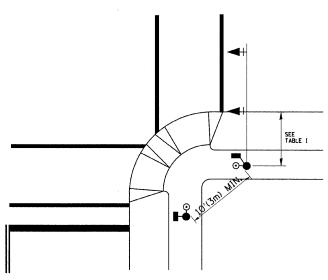
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# TRAFFIC SIGNAL MAST ARM AND POST

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 MUTCO (SEE NOTE 1). TO MEET MUTCO REQUIREMENTS, PEDESTRIAN SIGNAL PUSHBUTTONS MAY HAVE TO BE MOUNTED ON A SEPARATE POST.

#### NOTES:

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	9
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FED. RO	DAD DIST. NO. 1 ILLIN	OIS FED. AID	PROJECT	7

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

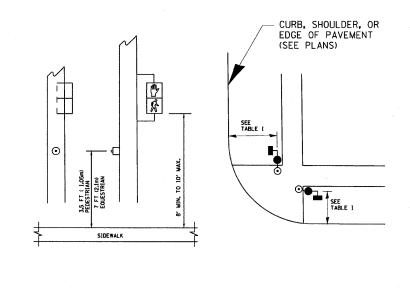
AT ACCESSIBLE PEDESTRIAN SIGNAL LOCATIONS, PUSHBUTTONS SHOULD CLEARLY INDICATE WHICH CROSSWALK SIGNAL IS ACTUATED BY EACH PUSHBUTTON. PUSHBUTTONS AND TACTILE ARROWS SHOULD HAVE HIGH VISUAL CONTRAST (SEE THE DEPARTMENT OF JUSTICE'S AMERICANS WITH DISABILITIES ACT STANDARDS FOR ACCESSIBLE DESIGN, 1991). 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.
- 3. 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.
- 4. 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

DISTRICT 1

STANDARD TRAFFIC SIGNAL

DESIGN DETAILS

SCALE; VERT. NONE

DESIGNED BY: DATE

SCALE; VERT. NONE

DESIGNED BY: DATE

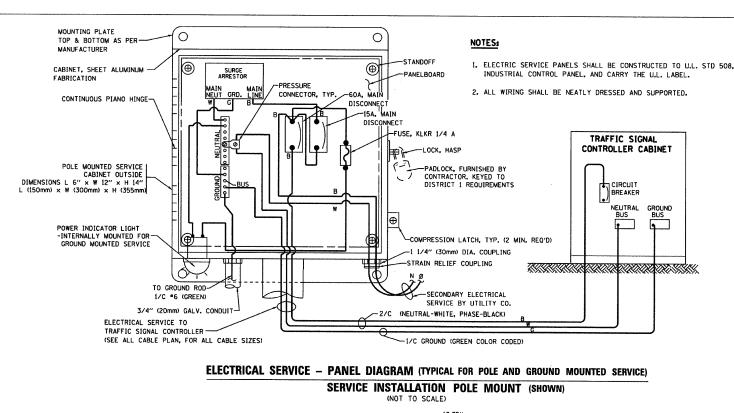
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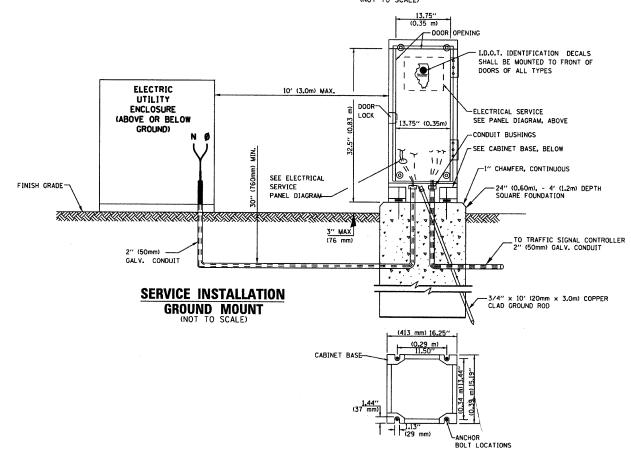
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DRAWN BY: RWP DESIGNED BY: DAD CHECKED BY: DAZ SHEET 2 OF 4

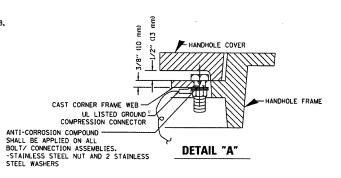
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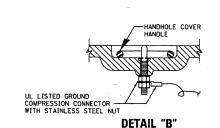
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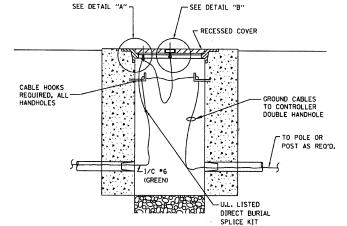




**CABINET - BASE BOLT PATTERN** 







### HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

(2) 1/2"  $\times$  1 1/4" STAINLESS STEEL BOLT WITH SPLIT LOCK WASHER AND NYLON INSERT LOCKOUT WELDED TO  $\overline{\phantom{M}}$ 7 FRAME AND TO COVER. (TYPICAL) HEAVY DUTY COPPER COMPRESSION GROUNDING TERMINAL. (TYPICAL) ∠ EXISTING HANDHOLF GROUNDING CABLE
(PAID FOR SEPARATELY)

EXISTING HANDHOLE COVER & FRAME - GROUNDING DETAIL

(NOT TO SCALE)

NOTES:

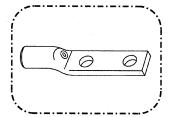
#### GROUNDING SYSTEM

COUNTY SECTION 320 07-00138-26-TL WILL 19 STA. TO STA. FED. ROAD DIST. NO. \_ ILLINOIS FED. AID PROJECT

C-91-405-08

CONTRACT NO. 63329 1. 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.  $\times$  10'-0" (20mm  $\times$  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.

- 2. 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.
- 3. ALL EQUIPMENT GROUNDING CONDUCTORS SHALL TERMINATE AT THE GROUND BUS IN THE CONTROLLER CABINET.
- 4. THE CONTRACTOR SHALL PROVIDE A GROUND CABLE WITH CONNECTORS BETWEEN THE HANDHOLE COVER AND HANDHOLE FRAME,

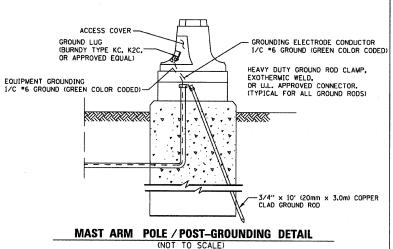




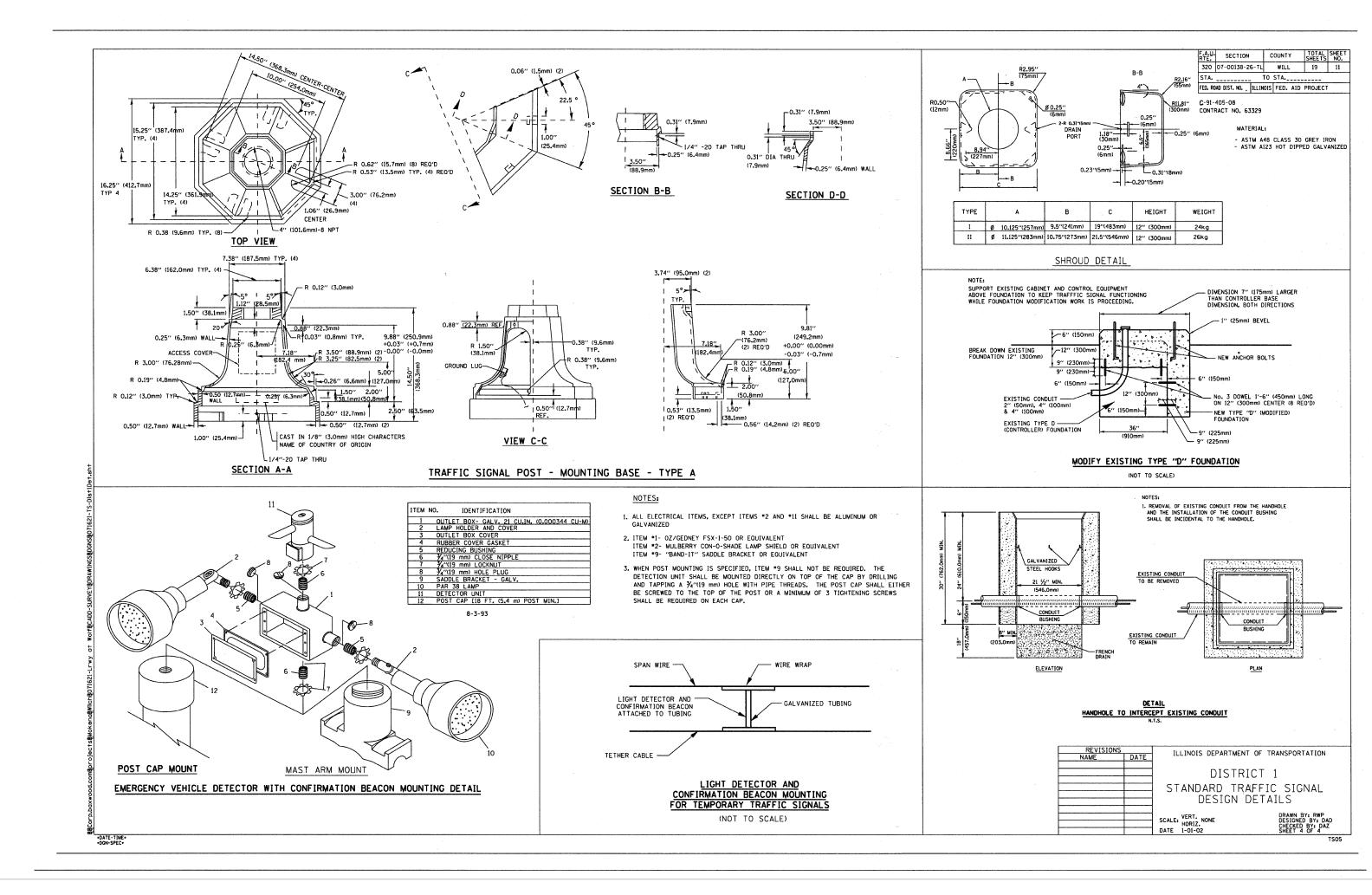
HEAVY-DUTY COMPRESSION TERMINAL (BURNDY TYPE YGHA OR APPROVED EQUAL)

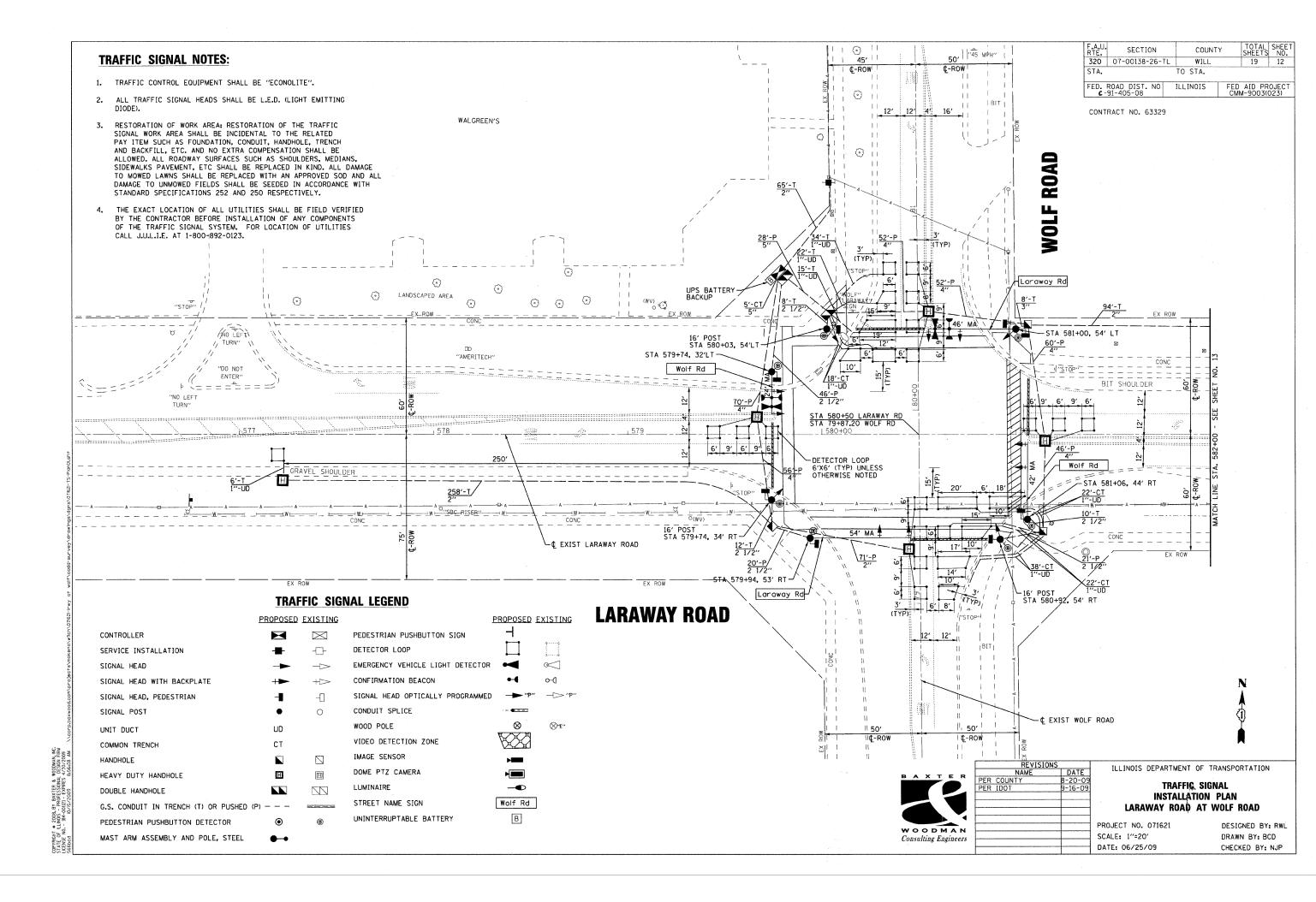
3/4" (20mm) HEAVY-DUTY CROUND ROD CLAMP. (BURNDY TYPE GRC OR APPROVED EUAL)

· 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.



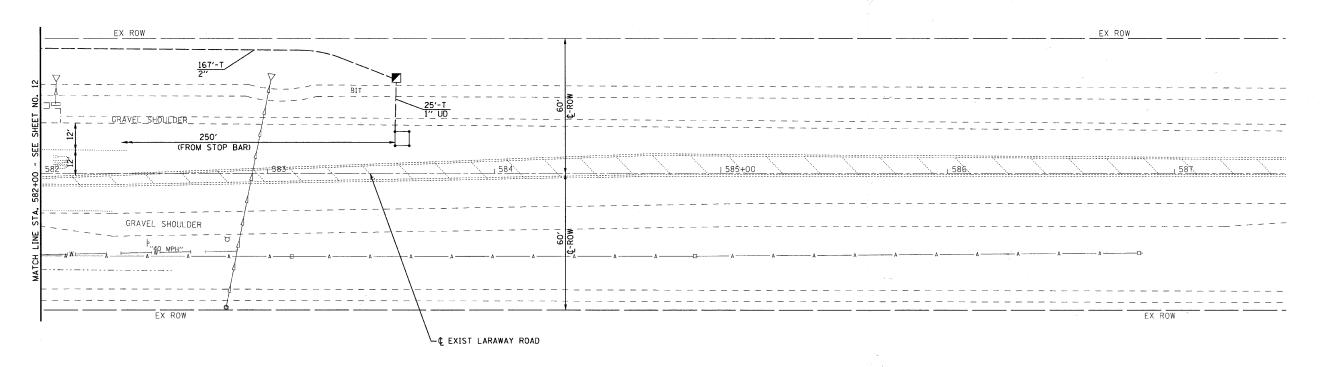
ILLINOIS DEPARTMENT OF TRANSPORTATION DISTRICT 1 STANDARD TRAFFIC SIGNAL DESIGN DETAILS SCALE: VERT. NONE DATE 1-01-02





F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07-00138-26-TL	WILL	19	13
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	ROAD DIST. NO	ILLINOIS FE	D AID PR	

CONTRACT NO. 63329



**LARAWAY ROAD** 

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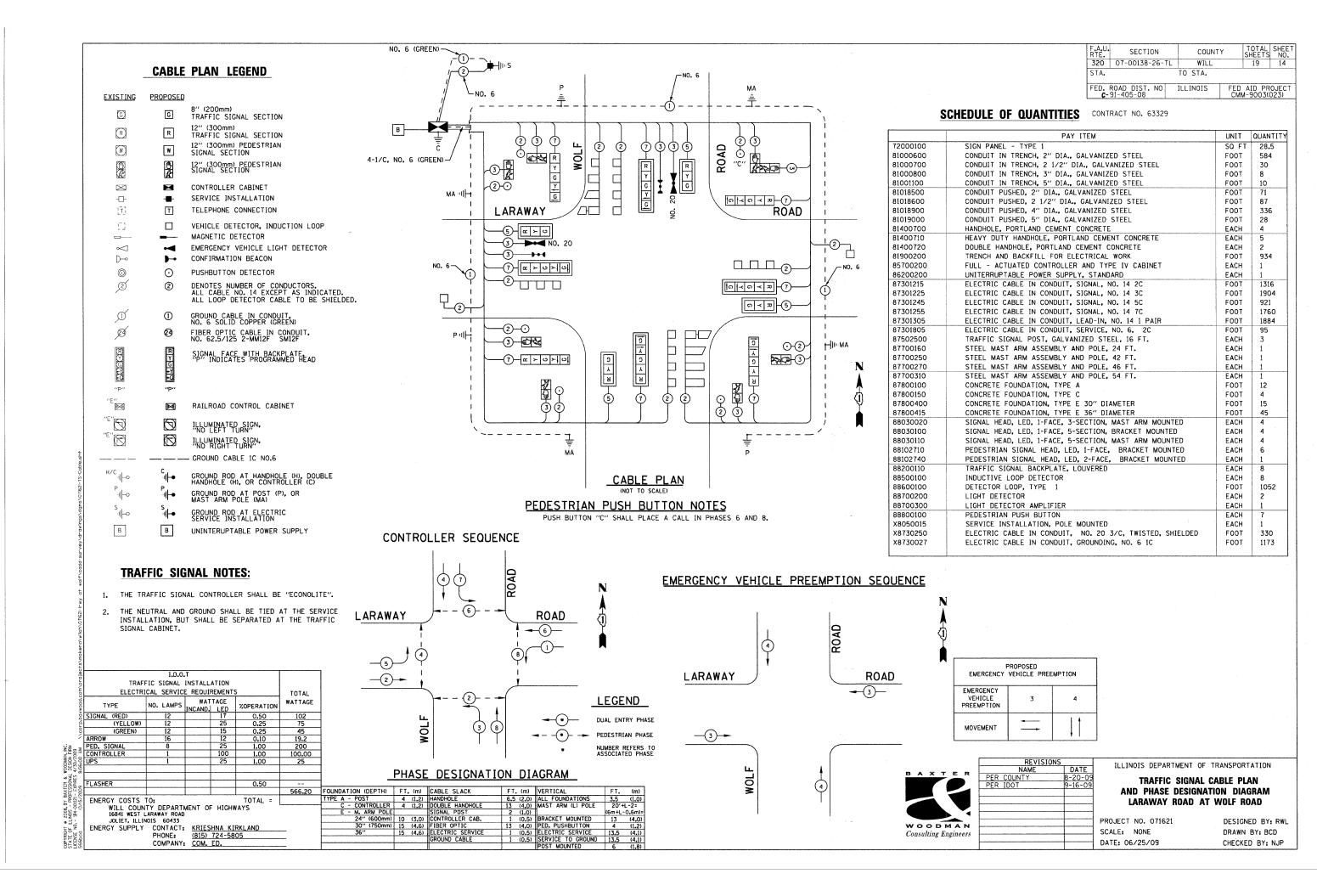


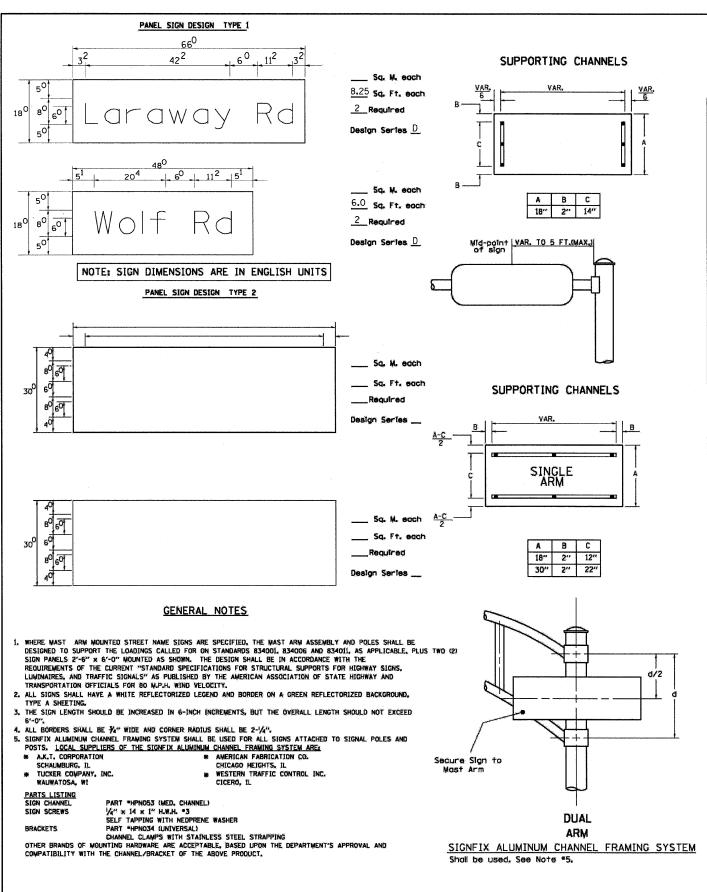
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NAME	DATE
PER COUNTY	8-20-09
PER IDOT	9-16-09
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ILLINOIS DEPARTMENT OF TRANSPORTATION

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





Upper Case to Lower Case

Spacing Chart 8-6 Inch Series "C & D"

# EXAMPLE, 2 DENOTES 3"

#### UPPER AND LOWER CASE LETTER WIDTHS

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

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

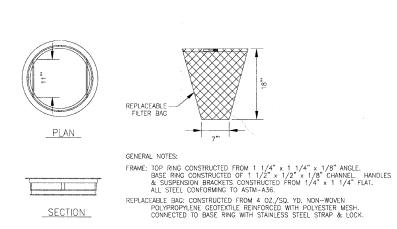
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В	32	40	43	53	D	35	42
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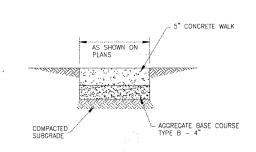
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9	32	40	43	5.3
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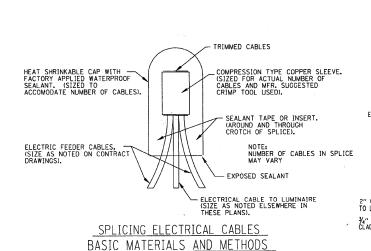
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i	PLOT SCALE # 50.0000 // IN.	CHECKED - R.F.K.	REVISED - 10-01-00	DEPARTMENT OF TRANSPORTATION			CONTRACT NO. 63329			
	PLOT DATE = 1/4/2008	DATE - 02-79	REVISED -		SCALE: SHEET NO. 1 OF 1 SHEETS STA. TO STA. FED. ROAD DISY. NO. 1  ILLINOIS FED. AID PROJE			AID PROJECT		



INLET PROTECTION INLET FILTER NO SCALE



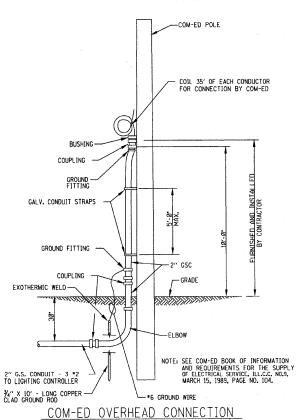
P.C.C. SIDEWALK 5", (SPECIAL)



SCALE: NONE

12" MAXIMUM WIDTH EXCEPT AS APPROVED BY THE ENGINEER . KKKKKKKK - WARNING TAPE - UNIT DUCT AND WIRING AS PER PLANS, COMPLETE WITH INTERNAL INSULATED EQUIPMENT GROUND WIRE.

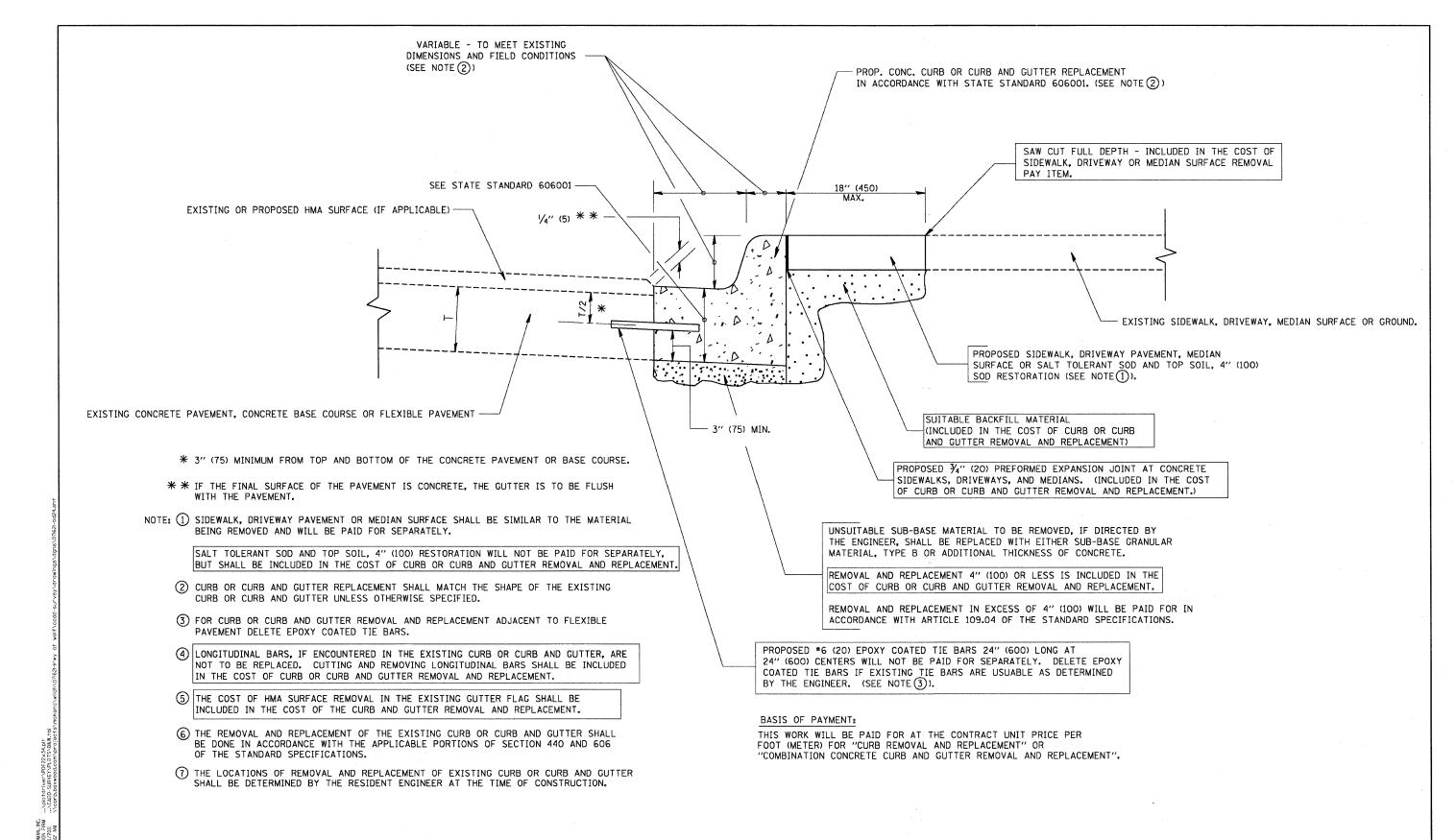
TYPICAL WIRING IN TRENCH DETAIL



DESIGNED	-	NJP	REVISED - PER COUNTY 8-20-0
DRAWN	-	BCD	REVISED -
CHECKED	-	RWL	REVISED -
DATE	-	06-25-09	FILE - 071621-ConstDet.sht

			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CONSTRUCTION DETAILS			320	07-00138-26-TL	WILL	19	16
	,		Ç.	91-405-08	CONTRACT	NO. 6	3329
	STA.	TO STA.	FED. R	DAD DIST. NO. 1   ILLINOIS FED. AI	D PROJECT		

DEPURIENT & 2009, BY BAXTER & WODDWAN, INC.
STATE OF ILLNOSS - PROFESSIONAL DESIGN FIRM
MENSEN NO. 184-00121. EXPRES 4730/2011
SECENT NO. 184-00121.



# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

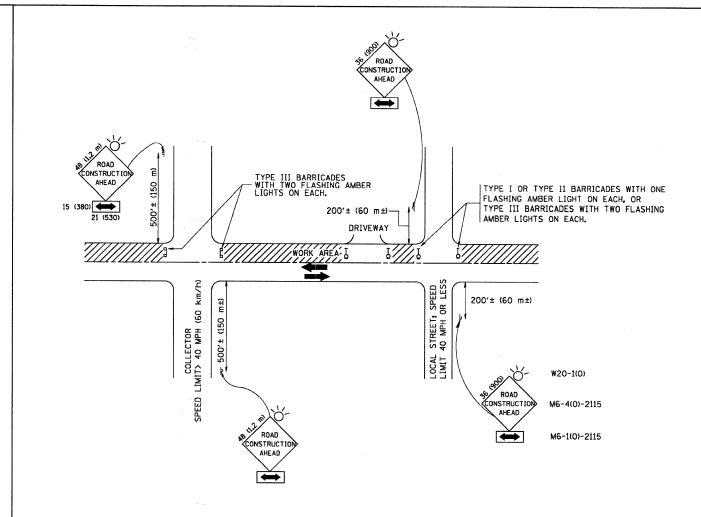
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS)
UNLESS OTHERWISE SHOWN.



	USER NAME = gaglianobt	DESIGNED	-	A. HOUSEH	REVISED	-	R.	SHAH 10-03-96
		DRAWN	-		REVISED	-	Α.	ABBAS 03-21-97
	PLOT SCALE = 50.000 '/ IN.	CHECKED	-		REVISED	-	M.	GOMEZ 01-22-01
	PLOT DATE = 1/4/2008	DATE	-	03-11-94	REVISED	-	R.	BORO 01-01-07
_								

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

	CURB OR CURB AND GUTTER	F.A.U. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.	
	REMOVAL AND REPLACEMENT	320	07-00138-26-TL	. WILL	19	17	
	Children Park Int. Brownia.	BD600-06 (BD-24)   CONTRACT NO. 63329					
	SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. R	DAD DIST. NO. 1   ILLINOIS FED. A	D PROJECT			
_		,					



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

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- 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;
- O) ONE ROAD CONSTRUCTION AHEAD SIGN 36 × 36 (900×900) 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 CREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- o) ONE ROAD CONSTRUCTION AHEAD SIĞN 48  $\times$  48 (1.2 m  $\times$  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 (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-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 CLOSUIRF.

- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY LINLESS 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.



BY BAXTER & WOODMAN, INC.

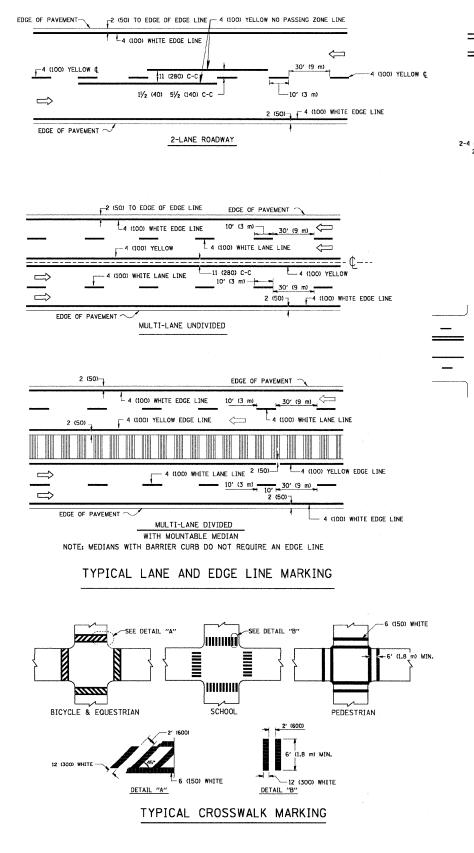
- PROFESSIONAL DESIGN FRIM MOIZE: EXPRES 4/30/2011

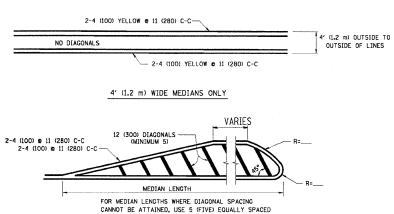
DPYRIGHT @ 2009, R TATE OF ILLINOIS -CENSE NO. - 184-00

USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
	DRAWN	REVISED - A. HOUSEH 03-06-96
PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
PLOT DATE = 1/4/2008	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				F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
				320	07-00138-26-TL	WILL	19	18
					TC-10	CONTRACT	NO. 63	229
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			

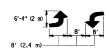




DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h))
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

# MEDIANS OVER 4' (1.2 m) WIDE 4 (100) YELLOW LINES (5½ (140) C-C) 2-4 (100) YELLOW © 11 (280) C-C 4 (100) YELLOW LINES (5½ (140) C-C)

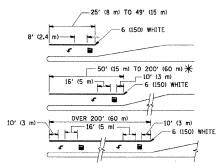
A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



DIAGONAL LINES.

MEDIAN WITH TWO-WAY LEFT TURN LANE

#### TYPICAL PAINTED MEDIAN MARKING

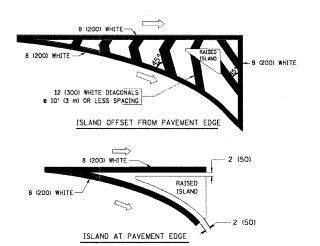


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALE BE USED.  $\P$  AREA = 15.6 SQ. FT. (1.5 m²)  $\P$  AREA = 20.8 SQ. FT. (1.9 m²)

\* 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 2 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 to 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (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	SKIP-DASH AND SOLID	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 51/2 (140) C-C BETWEEN SOLID L'INE AND SKIP-DASH LINE
7 94	8' (2.4m) LEFT ARROW	IN PAIRS	WHITE	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 CROSSMALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 to 4 (100) WITH 12 (300) DIAGONALS to 45°	SOLID	YELLOW: TWO WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
	NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS		WHITE: ONE WAY TRAFFIC	SEE TIFTONE PAINTED MEDIAN MANATHO.
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 (T0 km/h)) 30' (9 m) C-C (OVER 45MPH (T0 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 ml LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"-3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X"-54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS	12 (300) <b>e</b> 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) T0 45MPH (70 km/h)) 150' (45 m) C-C (0VER 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.

2009, INDIS 184-C

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION