

03-09-2018 LETTING ITEM 118

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1802 14-00028-00-SW	COOK	32	01
STA.	TO STA.		
147TH STREET STA 10+59.58	147TH STREET STA 50+10.63		

CONTRACT #61E32

# PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU 1602 (147TH STREET) (IL RTE 83)  
FAU 3778 (PULASKI ROAD) TO HOMAN AVENUE  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS

SECTION NO.: 14-00028-00-SW

PROJECT NO.: BR78(203)

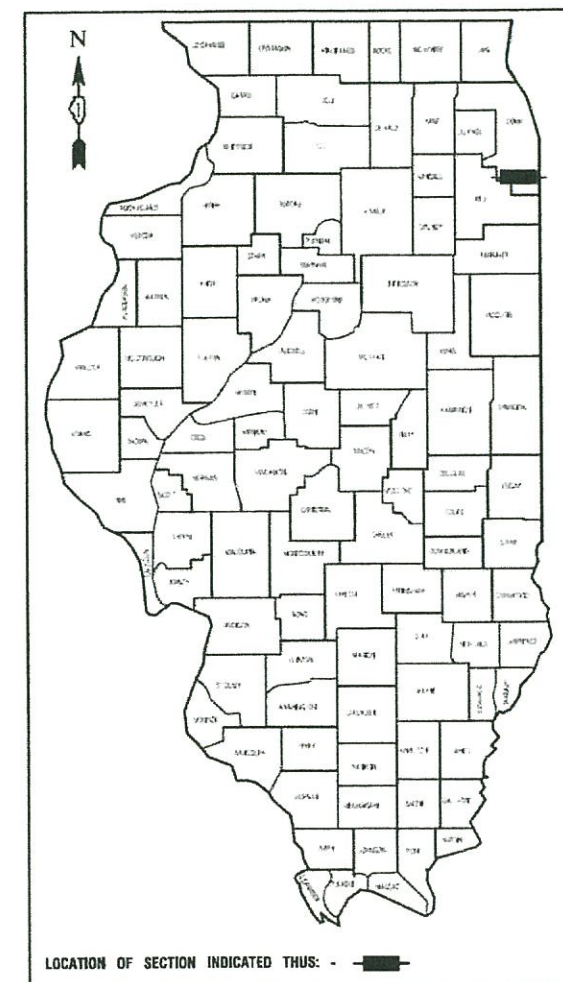
VILLAGE of MIDLOTHIAN

COOK COUNTY

C-91-244-16

INDEX OF SHEETS  
SEE SHEET NO. 2

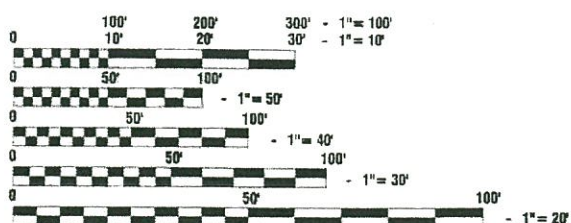
HIGHWAY STANDARDS  
SEE SHEET NO. 2



	<u>147TH STREET</u>
2017 ADT -	13,700
2030 ADT -	13,700
POSTED SPEED LIMIT -	30 mph
DESIGN PERIOD -	20 YEARS
DESIGN SPEED LIMIT -	35 mph
STREET CLASSIFICATION -	MINOR ARTERIAL

SCALES

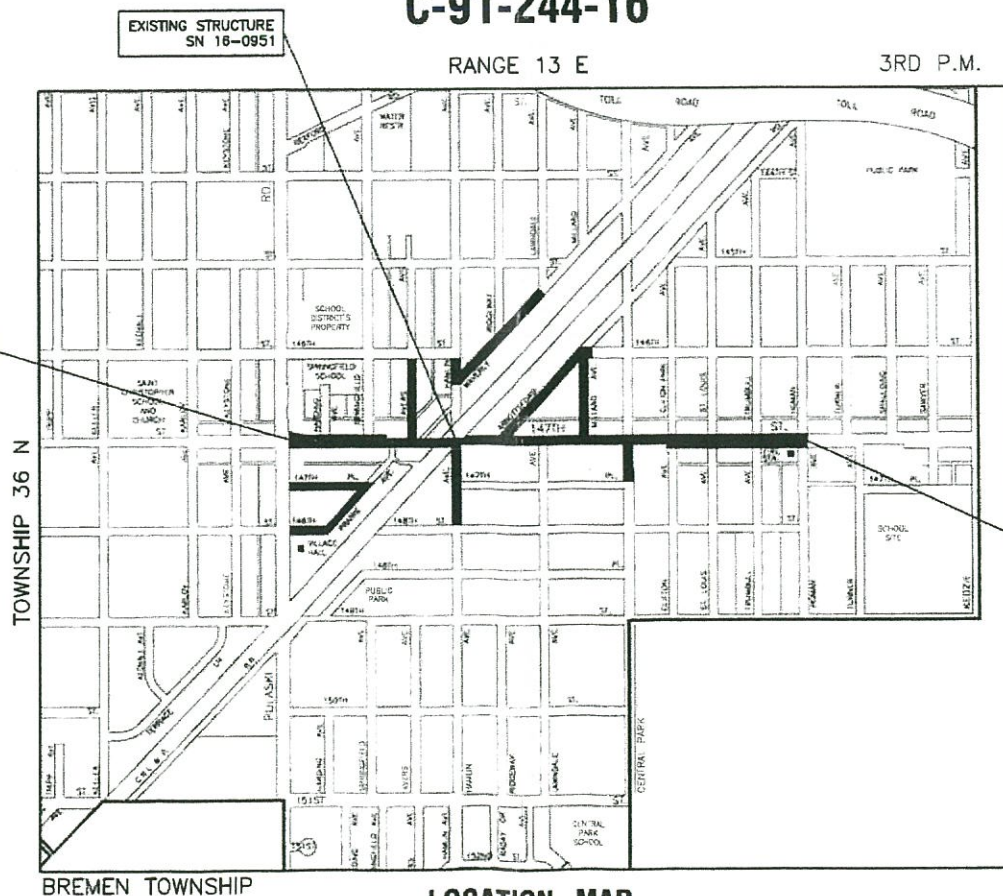
- PLAN - 1"=60'
- PROFILE HORIZ. - 1"=50'
- PROFILE VERT. - 1"=5'
- CROSS SECTIONS - 1"=10'



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

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

MEADE ELECTRIC CO. DISTRICT ONE ELECTRICAL MAINTENANCE CONTRACTOR LOCATES IDOT ELECTRICAL EQUIPMENT AND UNDERGROUND CABLES. CALL 1-773-287-7672.



LOCATION MAP

GROSS LENGTH=3,820.00 FEET=0.72 MILES  
NET LENGTH=3,820.00 FEET=0.72 MILES

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

Approved Nov. 3, 2017  
*[Signature]*  
MAYOR, Village of MIDLOTHIAN

Passed NOVEMBER 16, 2017  
*[Signature]*  
District 1 Engineer of Local Roads & Streets

Released for Bid Based on Limited Review  
NOVEMBER 17, 2017  
*[Signature]*  
Region One Engineer

PRINTED BY THE AUTHORITY OF  
THE STATE OF ILLINOIS

PREPARED BY OR UNDER THE  
DIRECT SUPERVISION OF

*[Signature]*  
11/9/2017



PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLER, Pl. 847-705-4406 SCHAUMBURG, IL  
CONSULTANTS: ROBINSON ENGINEERING, LTD. 708-331-6700

CONTRACT NO. 61E32

**INDEX OF SHEETS**

- 1. COVER SHEET
- 2. INDEX OF SHEETS, HIGHWAY STANDARDS AND GENERAL NOTES
- 3. SUMMARY OF QUANTITIES
- 4. TYPICAL CROSS SECTIONS
- 5.-15. SIDEWALK IMPROVEMENTS PLANS
- 16.-19. SIDEWALK ADA RAMP DETAILS
- 20.-22. STREET LIGHTING PLANS
- 23.-24. STREET LIGHTING DETAILS
- 25. FLASHING BEACON INSTALLATION DETAIL
- 26.-31. IDOT DISTRICT 1 STANDARD DETAILS
- 32. DETECTOR LOOP REPLACEMENT DETAIL REFERENCE SHEET

**HIGHWAY STANDARDS**

- 000001-06 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 424001-10 PERPENDICULAR CURB RAMPS FOR SIDEWALKS
- 424006-03 DIAGONAL CURB RAMPS FOR SIDEWALKS
- 424011-03 CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
- 424021-04 DEPRESSED CORNER FOR SIDEWALKS
- 424026-02 ENTRANCE/ALLEY PEDESTRIAN CROSSINGS
- 606001-07 CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
- 701006-05 OFF-RD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701101-05 OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701311-03 LANE CLOSURE, 2L, 2W, MOVING OPERATIONS-DAY ONLY
- 701427-05 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS LESS THAN 40MPH
- 701501-06 URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
- 701606-10 URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701611-01 URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
- 701701-10 URBAN LANE CLOSURE, MULTILANE INTERSECTION
- 701801-06 SIDEWALK, CORNER OR CROSSWALK CLOSURE
- 701901-07 TRAFFIC CONTROL DEVICES
- 780001-05 TYPICAL PAVEMENT MARKINGS
- 886001-01 DETECTOR LOOP INSTALLATIONS

**DISTRICT 1 STANDARD DETAILS**

- TS-07 DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
- TC-10 TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND DRIVEWAYS
- TC-13 TYPICAL PAVEMENT MARKINGS
- TC-22 ARTERIAL ROAD INFORMATION SIGN
- BE-220 ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT
- BE-305 LIGHT POLE FOUNDATION, METAL

**GENERAL NOTES**

- 1. THE ROBINSON ENGINEERING, LTD. FIELD OFFICE (708-331-6700), AND THE PUBLIC WORKS DIRECTOR, AT THE VILLAGE OF MIDLOTHIAN, SHALL BE NOTIFIED TWO (2) WORKING DAYS BEFORE CONSTRUCTION BEGINS.
- 2. BEFORE STARTING ANY EXCAVATION THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 AND (312) 744-7000 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. (48 HOUR NOTIFICATION REQUIRED)
- 3. UTILITIES INDICATED ON THE PLANS ARE PROVIDED FOR THE CONTRACTOR'S USE AND ARE BASED UPON INFORMATION AVAILABLE AT THE TIME OF THE ADVERTISEMENT FOR BIDS. THE OWNER AND ENGINEER DO NOT GUARANTEE THE ACCURACY OF UTILITY INFORMATION.
- 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 5. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DITCHES, GUTTERS OR OTHER DRAINAGE STRUCTURES SHALL BE REMOVED BY THE END OF EACH DAY BY THE CONTRACTOR AT THEIR EXPENSE.
- 6. THE COMED REPRESENTATIVE FOR COORDINATION OF ELECTRICAL SERVICE UTILITY CONNECTION IS JAMES SHADE: 708-235-2340.
- 7. AREAS DISTURBED BY CONSTRUCTION SHALL BE KEPT TO A MINIMUM. ALL AREAS DISTURBED UNNECESSARILY SHALL BE RESTORED AS REQUIRED IN THE SPECIAL PROVISION AT THE CONTRACTORS EXPENSE.
- 8. ACCESS TO EXISTING DRIVEWAYS, AND ALL PUBLIC FACILITIES SHALL BE MAINTAINED AT ALL TIMES BY PLACEMENT OF TEMPORARY AGGREGATE. THE CONTRACTOR SHALL PERIODICALLY MONITOR ALL AFFECTED AREAS DURING THE PROJECT, AND SHALL PLACE ADDITIONAL AGGREGATE WHEN NECESSARY.
- 9. CONTRACTOR SHALL BE RESPONSIBLE AT ALL TIMES FOR TRAFFIC CONTROL AND PROTECTION IN ACCORDANCE WITH IDOT STANDARD SPECIFICATIONS ADOPTED JANUARY 1, 2012. THE LATEST EDITION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
- 10. ITEMS OF WORK LISTED IN THE SUMMARY OF QUANTITIES NOT SPECIFICALLY CALLED OUT ON THE PLANS SHALL BE PERFORMED AS DIRECTED BY THE ENGINEER.
- 11. THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO NOT DAMAGE EXISTING TREES.
- 12. THE CONTRACTOR MAY PROSECUTE WORK BETWEEN THE HOURS OF 7:00 AM AND DUSK EACH WORKDAY. NO WORK WILL BE PERMITTED ON SUNDAYS, OR ON HOLIDAYS, WITHOUT PRIOR WRITTEN PERMISSION FROM THE ENGINEER.

**NO COMMITMENTS**

FILE NAME = 14528_02-INDX-01 - IDOT P01	USER NAME =	DESIGNED -- SDK	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAU 1602 (147TH STREET) (IL RTE 83)		F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED -- WPD	REVISED --		SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS		1602	14-00028-00-SW	COOK	32	02
	PLOT SCALE =	DRAWN -- KWM	REVISED --		INDEX OF SHEETS & STATE STANDARDS, HIGHWAY STANDARDS AND GENERAL NOTES		CONTRACT NO. 61E32				
	PLOT DATE = 10/16/17	CHECKED -- APG	REVISED --		SCALE: NONE	SHEET NO. 02	OF 32 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS

LAST SAVED BY: KMLHR ON 11/21/17  
PLOTTED BY: KEVIN MUMF ON 10/26/17



SUMMARY OF QUANTITIES					ROADWAY	SAFETY	LSNC
S.I.	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
					0005	0021	0031
	20200100	EARTH EXCAVATION	CUYD	255	255		
	21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	2,750			2,750
	21301084	EXPLORATION TRENCH 84" DEPTH	FOOT	220			220
	35101600	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	630	630		
	42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	100	100		
	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	53,500	53,500		
	42400800	DETECTABLE WARNINGS	SQ FT	450		450	
	44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	500	500		
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	340	340		
	44000600	SIDEWALK REMOVAL	SQ FT	52,150	52,150		
	56400300	FIRE HYDRANTS TO BE ADJUSTED	EACH	1	1		
	60255500	MANHOLES TO BE ADJUSTED	EACH	18	18		
	60266600	VALVE BOXES TO BE ADJUSTED	EACH	8	8		
	60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	160	160		
	60608562	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12	FOOT	180	180		
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	LSUM	1		1	
	70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	LSUM	1		1	
	70102634	TRAFFIC CONTROL AND PROTECTION, STANDARD 701611	LSUM	1		1	
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1		1	
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1		1	
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1,700		1,700	
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	250		250	
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	300		300	
*	80400100	ELECTRIC SERVICE INSTALLATION	EACH	2		2	
*	80400200	ELECTRIC UTILITY SERVICE CONNECTION	LSUM	1		1	
*	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	815		815	

\* - SPECIALTY ITEMS

SUMMARY OF QUANTITIES					ROADWAY	SAFETY	LSNC
S.I.	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION TYPE CODE		
					0005	0021	0031
*	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	130		130	
*	81603051	UNIT DUCT, 600V, 3-1C NO.6, 1/C NO.8 GROUND (XLP-TYPE USE), 1 1/4" DIA. POLYETHYLENE	FOOT	4,650		4,650	
*	81702440	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 1/0	FOOT	325		325	
*	82500350	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP	EACH	2		2	
*	83600352	LIGHT POLE FOUNDATION, METAL, 11 1/2" BOLT CIRCLE, 8 5/8" X 6'	EACH	22		22	
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	65		65	
	X2520650	SODDING, SALT TOLERANT (SPECIAL)	SQ YD	2,750			2,750
*	X7270015	FURNISH BREAKAWAY COUPLING SET	EACH	22		22	
*	X8250500	LIGHTING UNIT COMPLETE, SPECIAL	EACH	22		22	
	Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52		52	
*	Z0033028	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	4		4	
	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1		1	
*	XX006591	PAVEMENT TEXTURING	SQ FT	3500	3500		
*	XX008728	SOLAR POWERED LED FLASHING WARNING SIGN	EACH	4		4	
*	Z0004514	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4"	SQ YD	400	400		
	67100100	MOBILIZATION	L SUM	1	1		
*							

FILE NAME = 14528\_02-QUAN-01 - IDOT-001

USER NAME =	DESIGNED -- SDK	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE =	DRAWN -- KWM	REVISED --
PLOT DATE = 10/16/17	CHECKED -- APG	REVISED --

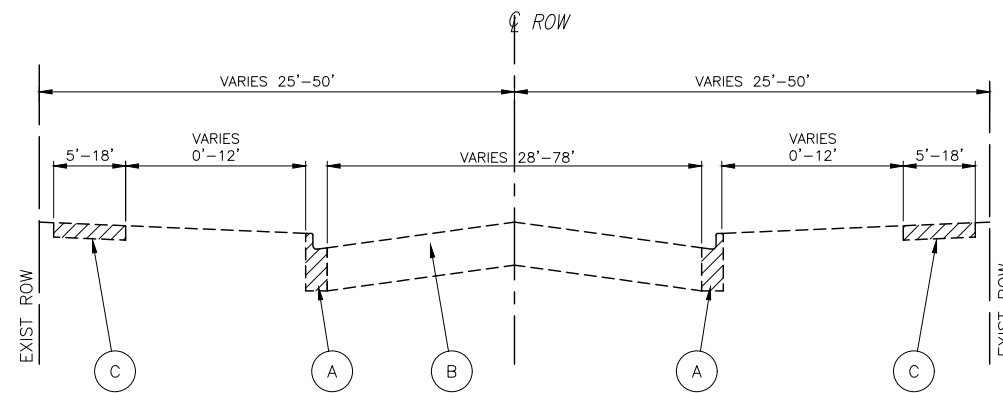
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
SUMMARY OF QUANTITIES

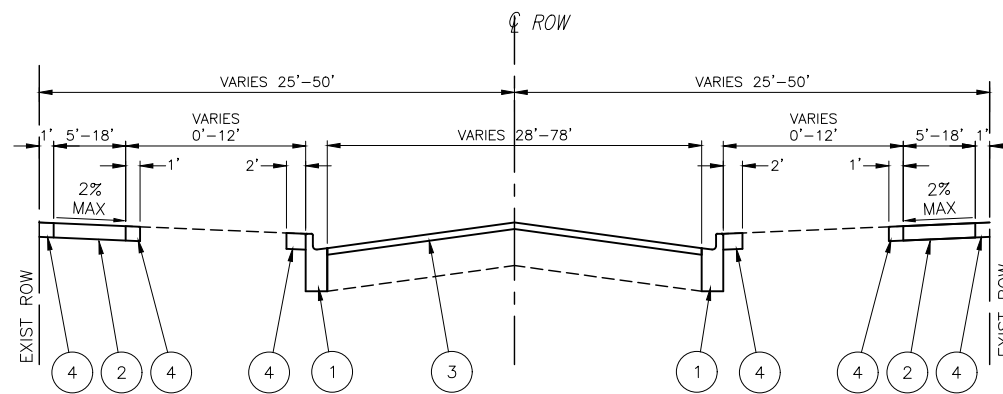
F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	03
FED. ROAD DIST. NO. 1 ILLINOIS			FED. AID PROJECT ---	

SCALE: SHEET NO. 03 OF 32 SHEETS STA. TO STA.

CONTRACT NO. 61E32



**EXISTING TYPICAL SECTION**  
\* VARIOUS STREETS



**PROPOSED TYPICAL SECTION**  
\* VARIOUS STREETS

**EXISTING LEGEND**

- (A) EXISTING CURB & GUTTER, REMOVAL AT LOCATIONS SHOWN ON PLANS
- (B) EXISTING HOT-MIX ASPHALT PAVEMENT
- (C) EXISTING PCC SIDEWALK TO BE REMOVED AT LOCATIONS SHOWN ON PLANS

**PROPOSED LEGEND**

- ① COMBINATION CONCRETE CURB AND GUTTER REPLACEMENT AT LOCATIONS AND TYPE SHOWN ON PLANS
- ② PORTLAND CEMENT CONCRETE SIDEWALK, 5" AT LOCATIONS SHOWN ON PLANS WITH AGGREGATE BASE COURSE, TYPE B, 4" AS DIRECTED BY THE ENGINEER
- ③ 6' WIDE HMA PAVEMENT TEXTURING AT LOCATIONS SHOWN ON PLANS
- ④ SODDING, SALT TOLERANT (SPECIAL) AS DIRECTED BY THE ENGINEER

**\* VARIOUS STREETS**

ILLINOIS ROUTE 83 (147TH STREET)  
147TH PLACE  
148TH STREET  
AVERS AVENUE  
HAMLIN AVENUE  
MILLARD AVENUE  
CENTRAL PARK AVENUE  
PRAIRIE AVENUE  
ABBOTTSFORD ROAD  
WAVERLY AVENUE

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

MIXTURE TYPE	AIR VOIDS @ Ndes
HOT MIX ASPHALT DRIVEWAYS	
HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5mm); 2"	4% @ 70 Gyr.
HOT MIX ASPHALT BINDER COURSE, IL-19.0, N50, 2"	4% @ 70 Gyr.

NOTE:  
THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE QUANTITIES IS 112 LBS/SY/IN.  
\* WHEN RAP EXCEEDS 20%, THE NEW ASPHALT BINDER IN THE MIX SHALL BE PG 58-22.

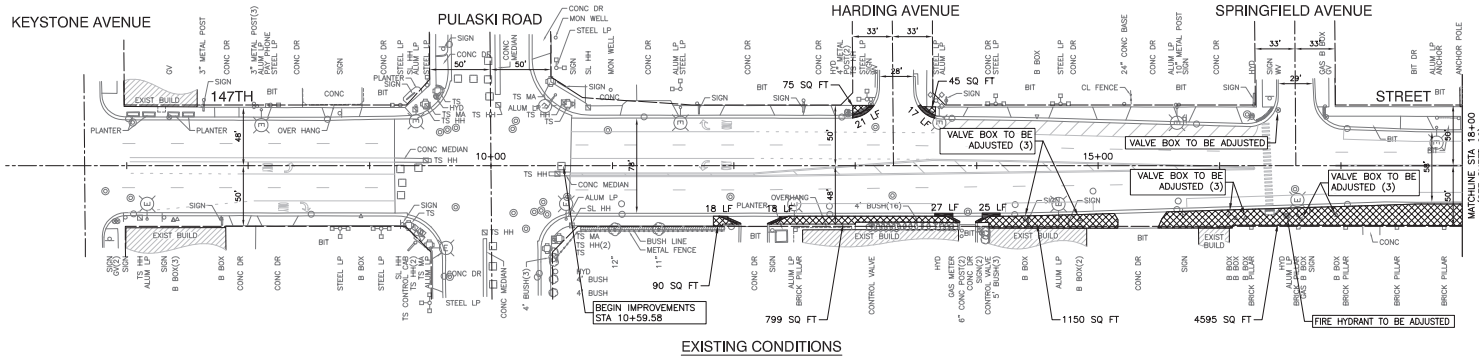


SECTION 11, TOWNSHIP 36, RANGE 13

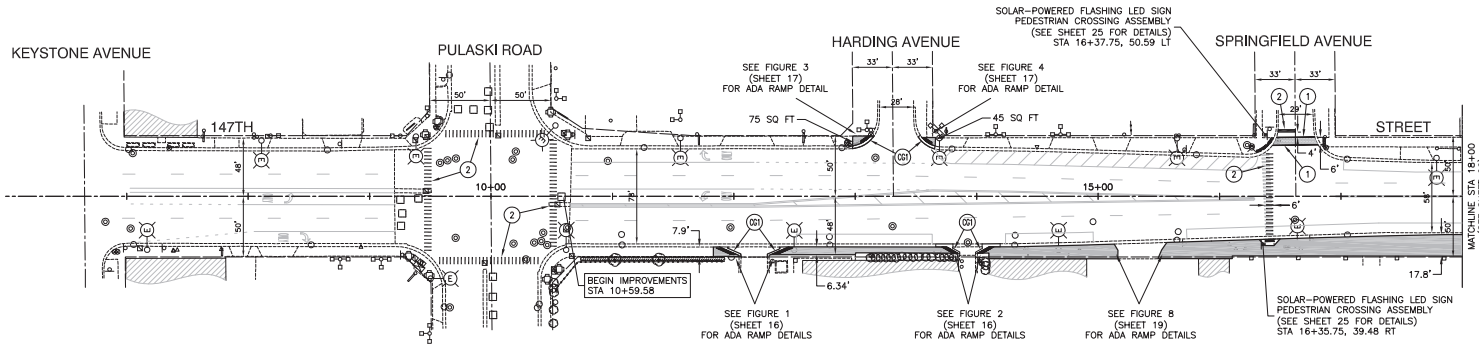


PLAN	SUBMITTED	DATE
NOTE BOOK	BY	
	NO.	
	DATE	

PROFILE	SUBMITTED	DATE
NOTE BOOK	BY	
	NO.	
	DATE	



EXISTING CONDITIONS



PROPOSED IMPROVEMENT

**LEGEND**

- PAVEMENT TEXTURING
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- CONCRETE CURB AND GUTTER REMOVAL
- DETECTABLE WARNING
- 6" WHITE CROSSWALK LINE
- 12" WHITE CROSSWALK BARS
- 24" WHITE STOP BAR
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12
- SOODING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
- EXISTING BUILDING

FILE NAME = 14528\_06-PULP01 -DDOT FLPR01

USER NAME =	DESIGNED -- SDK	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE =	DRAWN -- KWM	REVISED --
PLOT DATE = 10/16/17	CHECKED -- APG	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
SIDEWALK IMPROVEMENT PLAN

SCALE: 1" = 50'

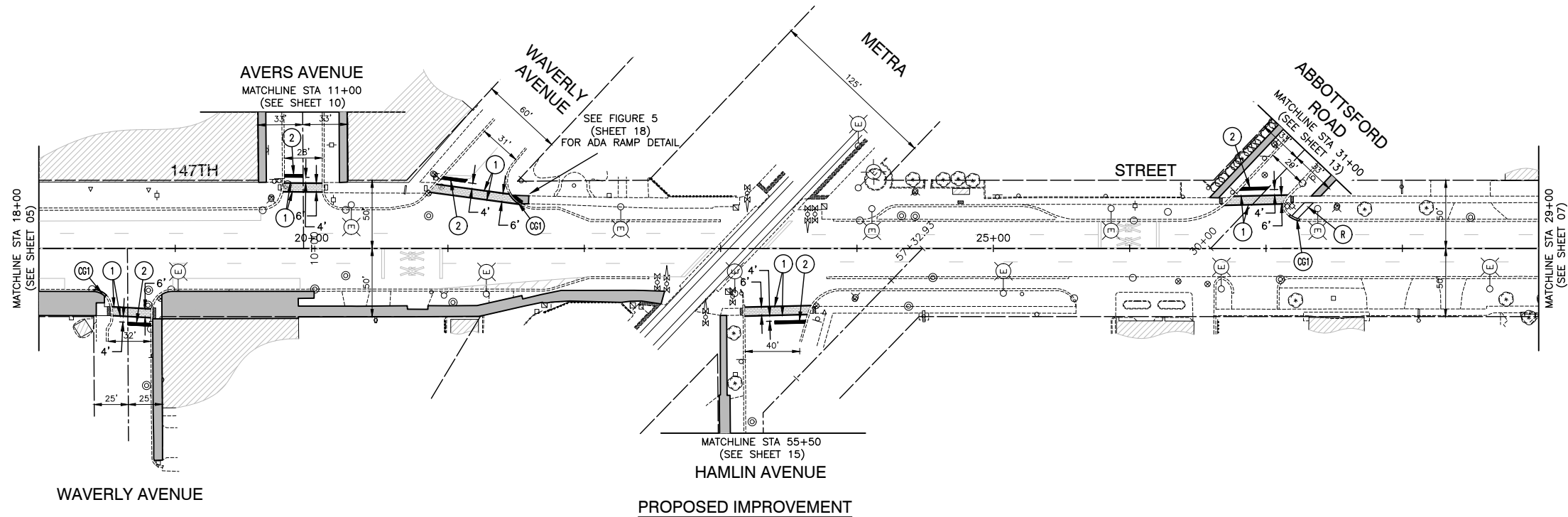
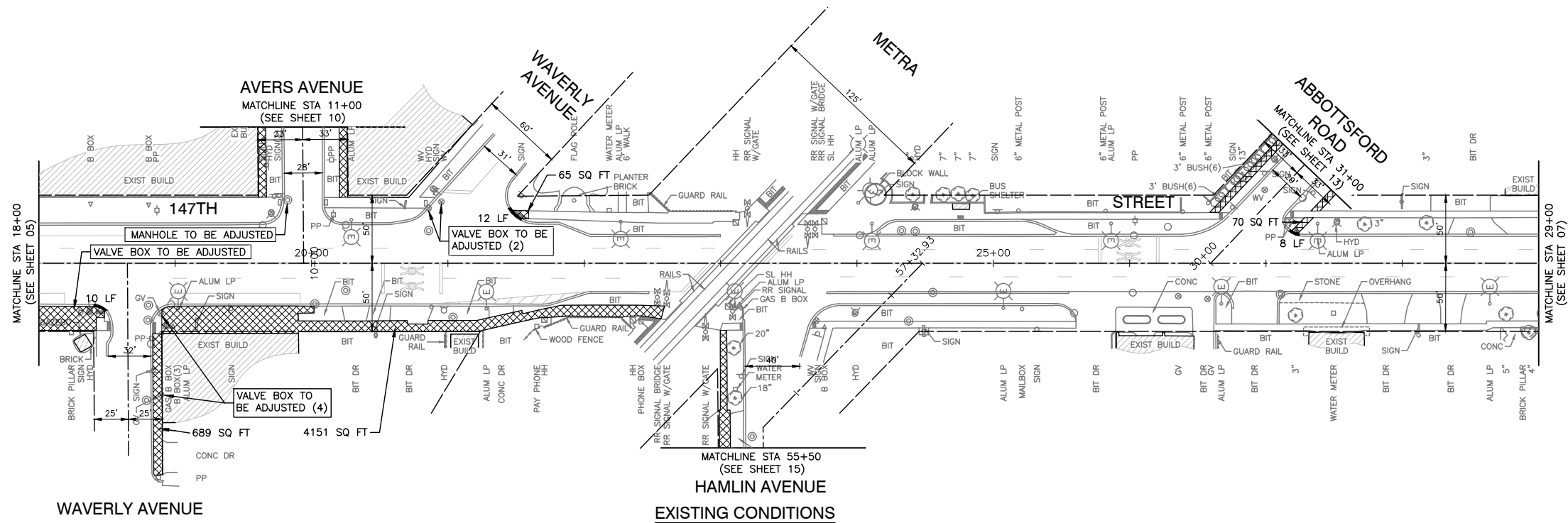
SHEET NO. 05 OF 32 SHEETS STA. 10+59.58 TO STA. 18+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-90-SW	COOK	32	05
FED. ROAD DIST. NO. 1 ILLINKS			FED. RD. PROJECT	
			CONTRACT NO. 61E32	



PLAN	SURVEYED	DATE
	ALIGNMENT CHECKED	
	RT. OF WAY CHECKED	
	NO. _____	
	SAID FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	
	B.M. NOTED	
	NOTE BOOK	



**LEGEND**

	PAVEMENT TEXTURING
	SIDEWALK REMOVAL
	PORTLAND CEMENT CONCRETE SIDEWALK, 5"
	CONCRETE CURB AND GUTTER REMOVAL
	DETECTABLE WARNING
	6" WHITE CROSSWALK LINE
	12" WHITE CROSSWALK BARS
	24" WHITE STOP BAR
	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12
	SODDING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
	EXISTING BUILDING

FILE NAME = 14528\_02-PLPR-01 - IDOT PLPR02

USER NAME =	DESIGNED -- SDK	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE =	DRAWN -- KWM	REVISED --
PLOT DATE = 10/16/17	CHECKED -- APG	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
SIDEWALK IMPROVEMENT PLAN

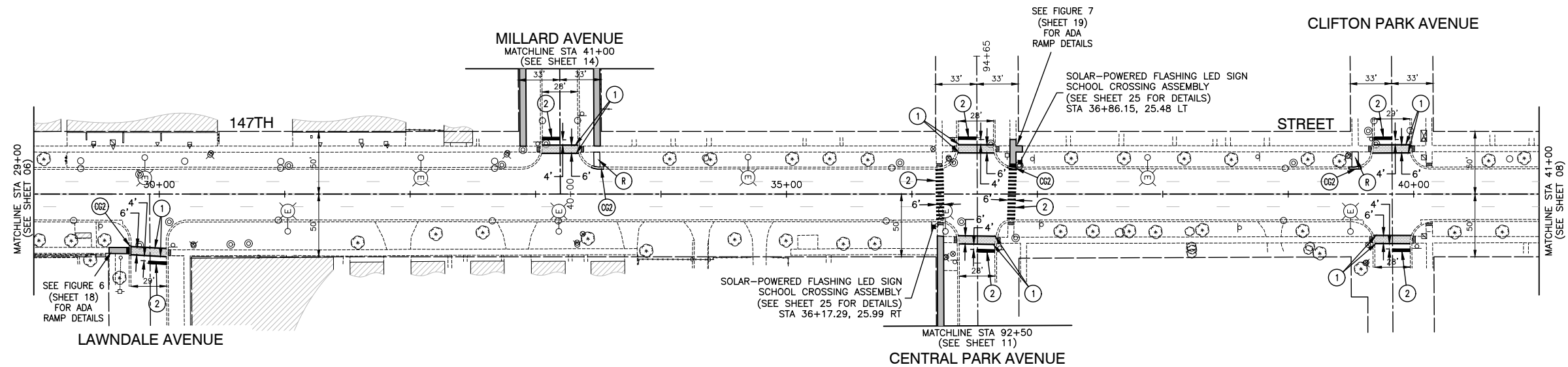
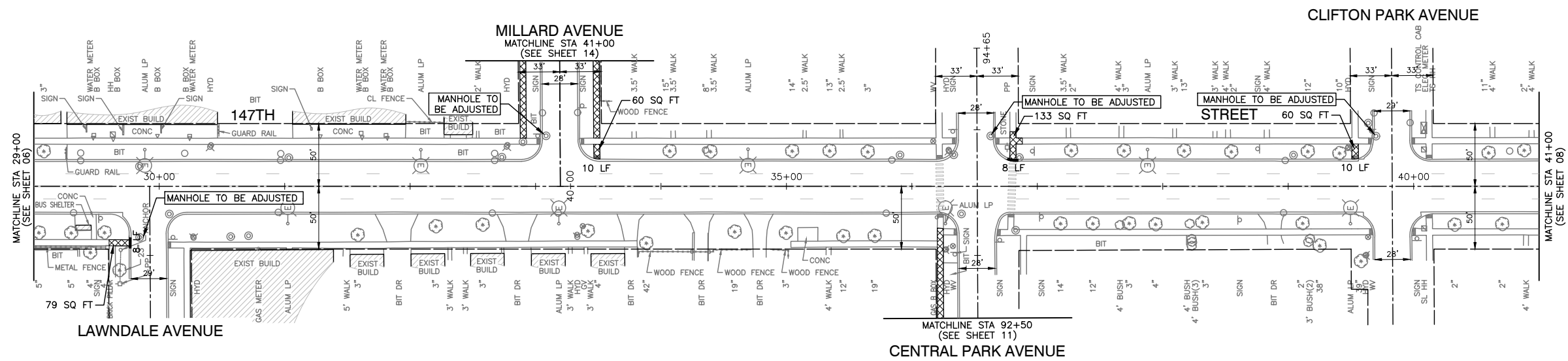
SCALE: 1" = 50' SHEET NO. 06 OF 32 SHEETS STA. 18+00 TO STA. 29+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	06
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	----	



PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNMENT CHECKED	
NO.	RT. OF WAY CHECKED	
	NO.	
	DATE	
	BY	
	FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES CHECKED	
NO.	B.M. NOTED	
	NO.	
	DATE	
	BY	
	FILE NAME	



**LEGEND**

- PAVEMENT TEXTURING
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- CONCRETE CURB AND GUTTER REMOVAL
- DETECTABLE WARNING
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- SODDING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
- EXISTING BUILDING

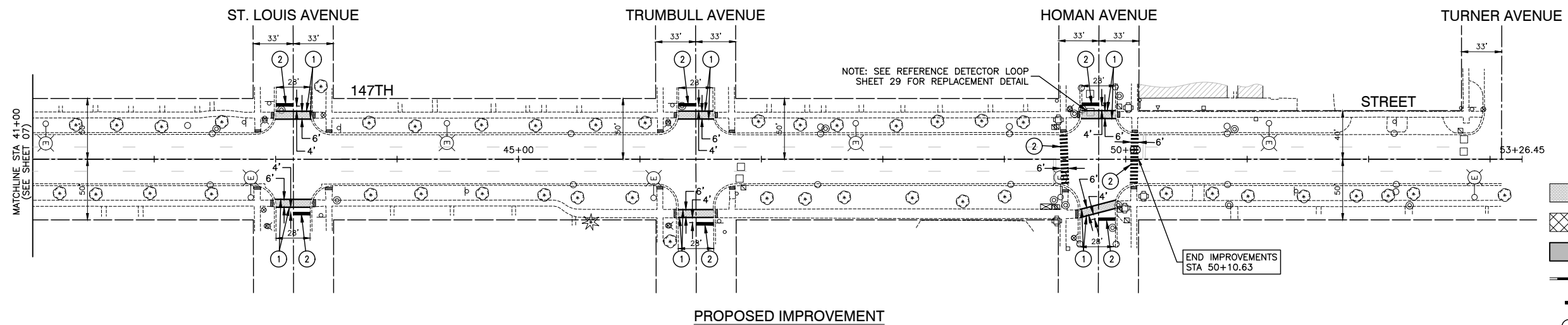
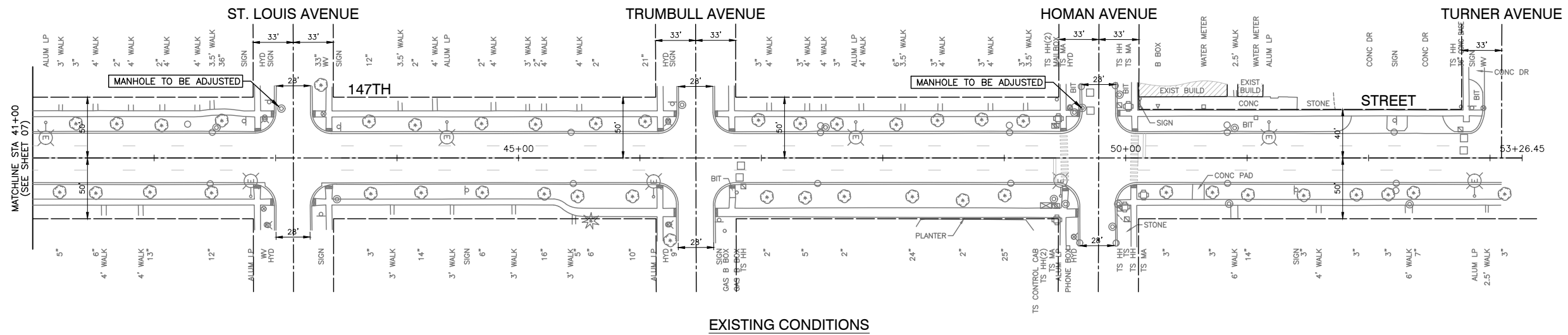
FILE NAME = 14528_02-PLPR-01 - IDOT PLPR03	USER NAME =	DESIGNED -- SDK	REVISED --	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FAU 1602 (147TH STREET) (IL RTE 83) SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS SIDEWALK IMPROVEMENT PLAN</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	CHECKED -- WPD	REVISED --		1602	14-00028-00-SW	COOK	32	07			
	PLOT DATE = 10/16/17	DRAWN -- KWM	REVISED --		SCALE: 1" = 50'			SHEET NO. 07 OF 32 SHEETS		CONTRACT NO. 61E32		
		CHECKED -- APG	REVISED --		STA. 29+00 TO STA. 41+00			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ----				





PLAN	DATE
SURVEYED	BY
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
NO.	

PROFILE	DATE
SURVEYED	BY
GRADES CHECKED	
B.M. NOTED	
NOTE BOOK	



**LEGEND**

- PAVEMENT TEXTURING
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK, 5"
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- SODDING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
- EXISTING BUILDING

FILE NAME = 14528\_02-PLPR-01 - IDOT PLPR04

USER NAME =	DESIGNED -- SDK	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE =	DRAWN -- KWM	REVISED --
PLOT DATE = 10/16/17	CHECKED -- APG	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

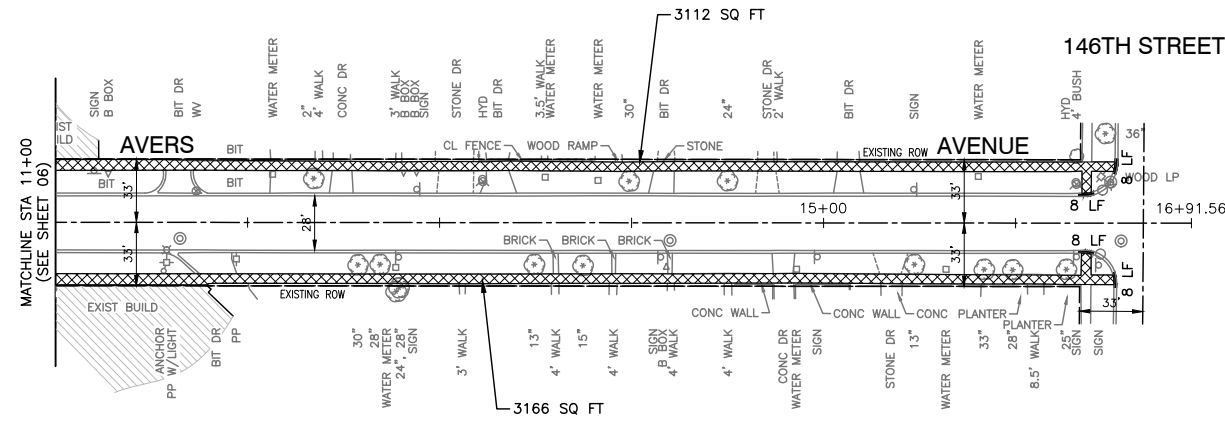
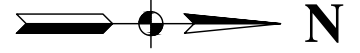
FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
SIDEWALK IMPROVEMENT PLAN

SCALE: 1" = 50'

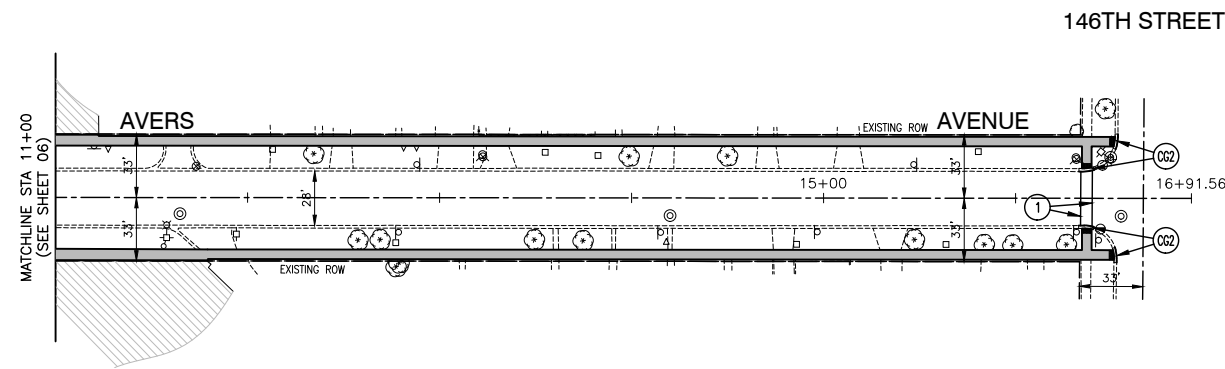
SHEET NO. 08 OF 32 SHEETS STA. 41+00 TO STA. 50+10.63

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	08
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		





EXISTING CONDITIONS



PROPOSED IMPROVEMENT

LEGEND

- PAVEMENT TEXTURING
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- CONCRETE CURB AND GUTTER REMOVAL
- DETECTABLE WARNING
- 6" WHITE CROSSWALK LINE
- 12" WHITE CROSSWALK BARS
- 24" WHITE STOP BAR
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12
- SODDING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
- EXISTING BUILDING

PLAN	SURVEYED	DATE
NOTE BOOK NO.	ALIGNMENT CHECKED	
	RT. OF WAY CHECKED	
	ASD FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES CHECKED	
	B.M. NOTED	

FILE NAME = 14528\_02-PLPR-01 - IDOT PLPR08

USER NAME =	DESIGNED — SDK	REVISED —
	CHECKED — WPD	REVISED —
PLOT SCALE =	DRAWN — KWM	REVISED —
PLOT DATE = 10/16/17	CHECKED — APG	REVISED —

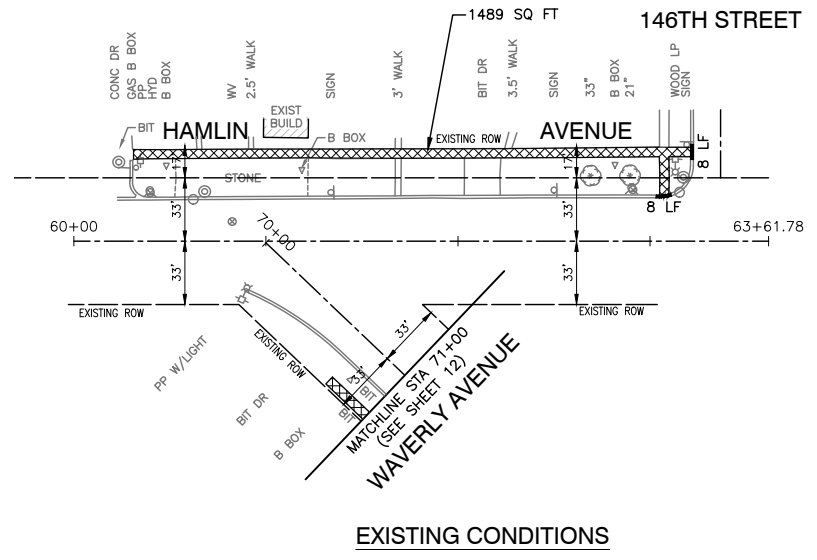
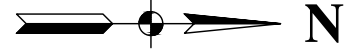
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
SIDEWALK IMPROVEMENT PLAN

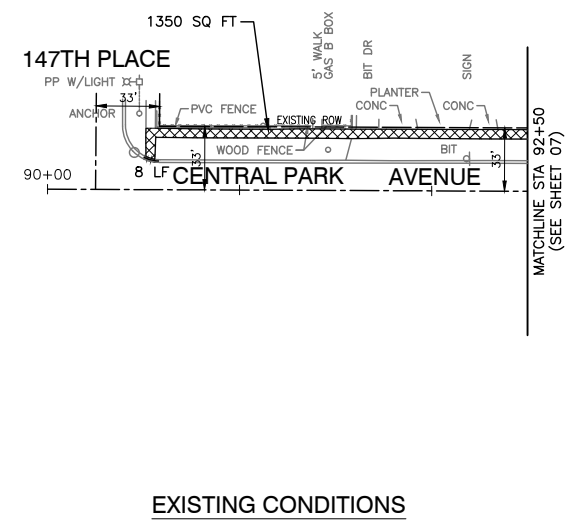
SCALE: 1" = 50' SHEET NO. 10 OF 32 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	10
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

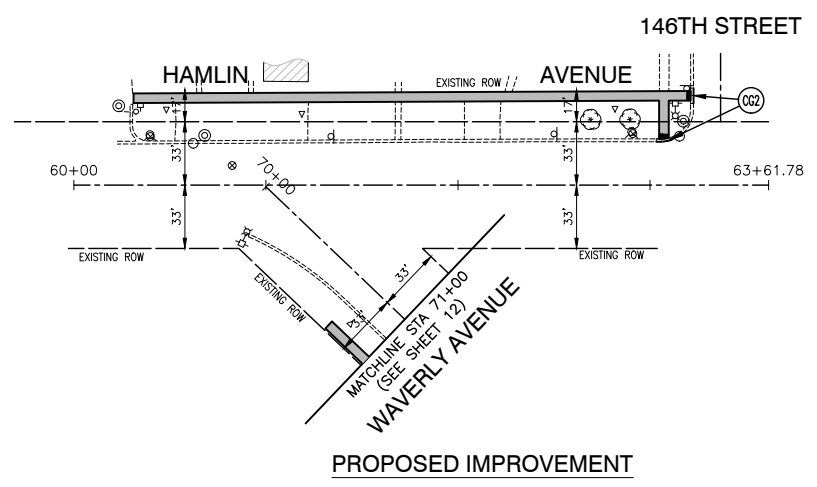




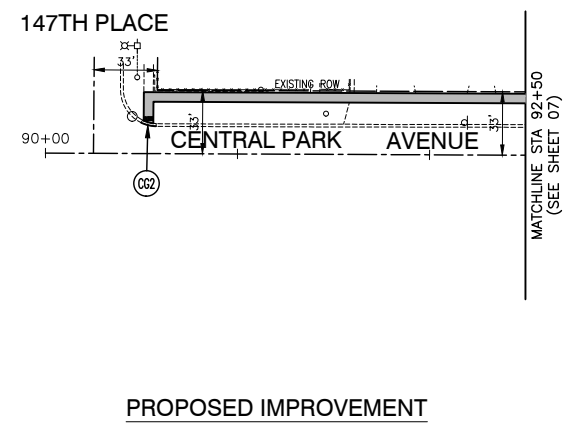
EXISTING CONDITIONS



EXISTING CONDITIONS



PROPOSED IMPROVEMENT



PROPOSED IMPROVEMENT

**LEGEND**

- PAVEMENT TEXTURING
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- CONCRETE CURB AND GUTTER REMOVAL
- DETECTABLE WARNING
- 6" WHITE CROSSWALK LINE
- 12" WHITE CROSSWALK BARS
- 24" WHITE STOP BAR
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12
- SODDING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
- EXISTING BUILDING

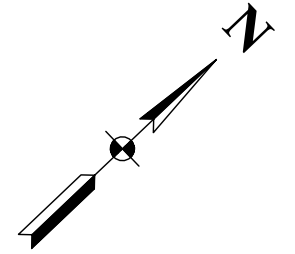
PLAN

DATE	
BY	
SURVEYED	
ALIGNMENT CHECKED	
RT. OF WAY CHECKED	
NO. OF WALK CHECKED	
NO.	
NOTE BOOK	
FILE NAME	

PROFILE

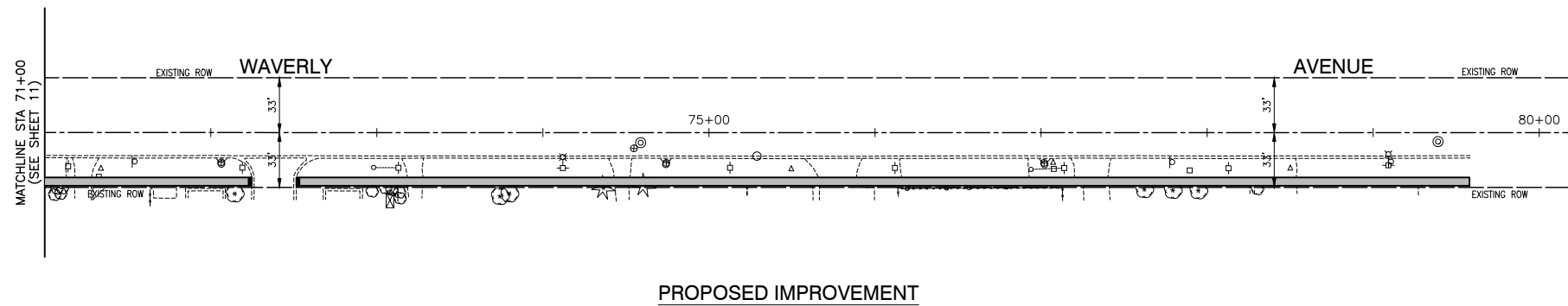
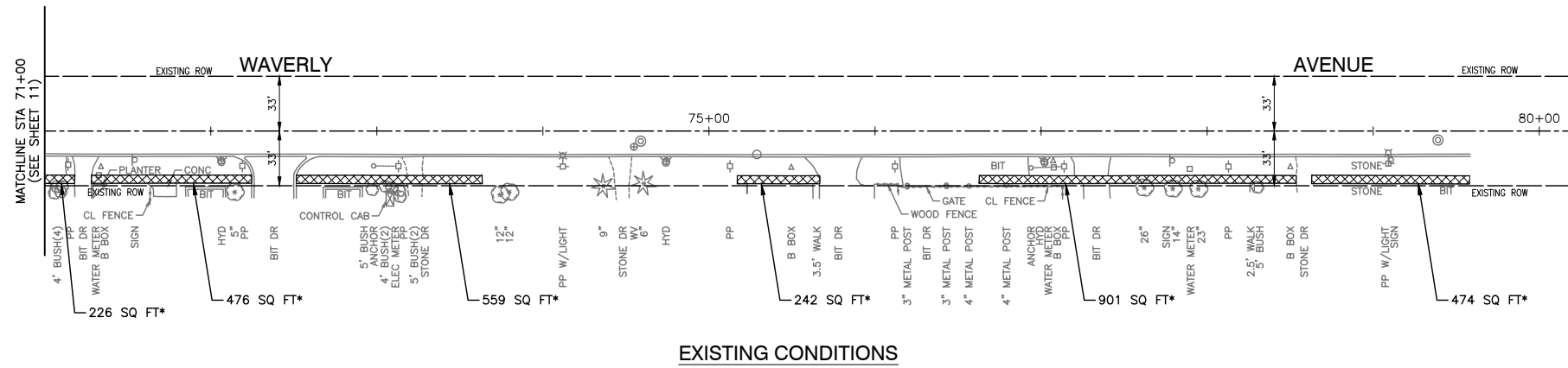
DATE	
BY	
SURVEYED	
GRADES CHECKED	
B.M. NOTED	
NOTE BOOK	
FILE NAME	

FILE NAME = 14528_02-PLPR-01 - IDOT PLPR08	USER NAME =	DESIGNED -- SDK	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAU 1602 (147TH STREET) (IL RTE 83) SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS SIDEWALK IMPROVEMENT PLAN		F.A.U. RTE. 1602	SECTION 14-00028-00-SW	COUNTY COOK	TOTAL SHEETS 32	SHEET NO. 11	
	PLOT SCALE =	CHECKED -- WPD	REVISED --		SCALE: 1" = 50'	SHEET NO. 11	OF 32 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT ----
	PLOT DATE = 10/16/17	DRAWN -- KWM	REVISED --		CONTRACT NO. 61E32							
		CHECKED -- APG	REVISED --									



PLAN	SURVEYED	DATE
	ALIGNMENT CHECKED	BY
NOTE BOOK NO.	RT. OF WAY CHECKED	
	ASD FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	BY
NOTE BOOK	B.M. NOTED	



**• NOTE**

LOCATIONS OF SIDEWALK REPLACEMENT ALONG WAVERLY AVENUE SHALL BE AS DIRECTED BY THE ENGINEER.

**LEGEND**

- PAVEMENT TEXTURING
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- CONCRETE CURB AND GUTTER REMOVAL
- DETECTABLE WARNING
- 6" WHITE CROSSWALK LINE
- 12" WHITE CROSSWALK BARS
- 24" WHITE STOP BAR
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12
- SODDING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
- EXISTING BUILDING

FILE NAME = 14528\_02-PLPR-01 - IDOT PLPR10

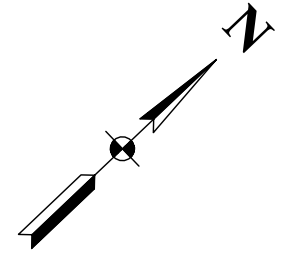
USER NAME =	DESIGNED — SDK	REVISED —
	CHECKED — WPD	REVISED —
PLOT SCALE =	DRAWN — KWM	REVISED —
PLOT DATE = 10/16/17	CHECKED — APG	REVISED —

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
SIDEWALK IMPROVEMENT PLAN

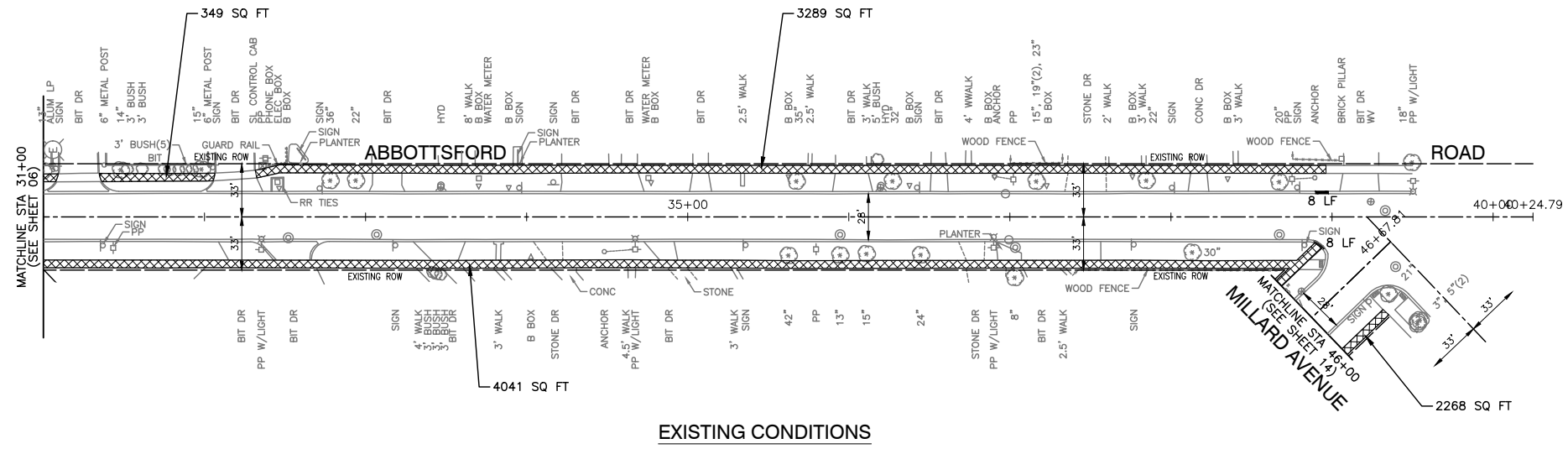
SCALE: 1" = 50' SHEET NO. 12 OF 32 SHEETS STA. 71+00 TO STA. 80+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	12
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT ----	

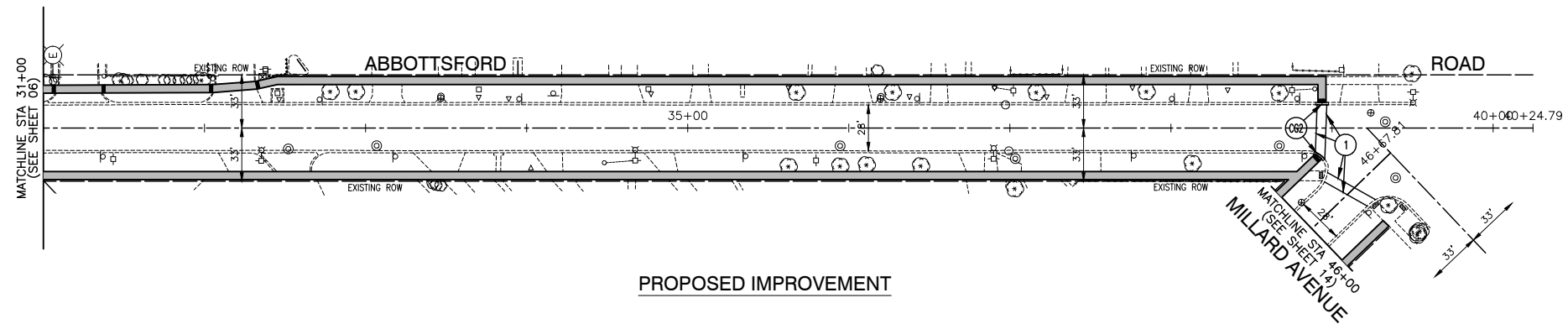


PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNMENT CHECKED	
NO.	RT. OF WAY CHECKED	
	CONC. FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES CHECKED	
	B.M. NOTED	



EXISTING CONDITIONS



PROPOSED IMPROVEMENT

LEGEND

- PAVEMENT TEXTURING
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- CONCRETE CURB AND GUTTER REMOVAL
- DETECTABLE WARNING
- 6" WHITE CROSSWALK LINE
- 12" WHITE CROSSWALK BARS
- 24" WHITE STOP BAR
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12
- SODDING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
- EXISTING BUILDING

FILE NAME = 14528\_02-PLPR-01 - IDOT PLPR11

USER NAME =	DESIGNED -- SDK	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE =	DRAWN -- KWM	REVISED --
PLOT DATE = 10/16/17	CHECKED -- APG	REVISED --

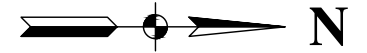
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
SIDEWALK IMPROVEMENT PLAN

SCALE: 1" = 50' SHEET NO. 13 OF 32 SHEETS STA. 31+00 TO STA. 40+00

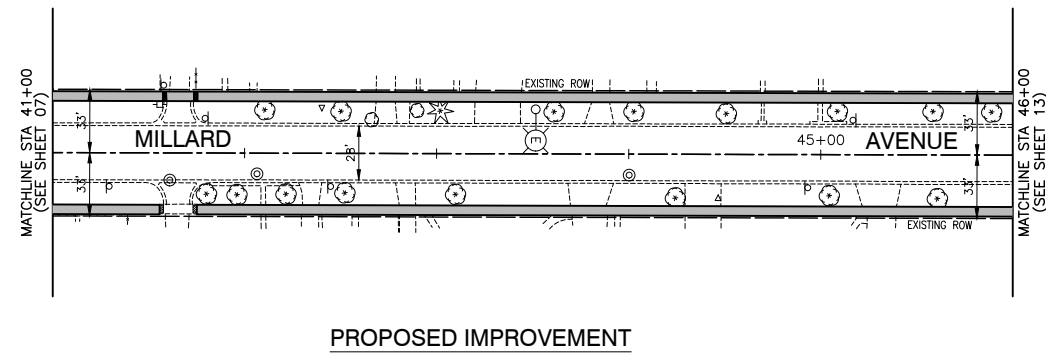
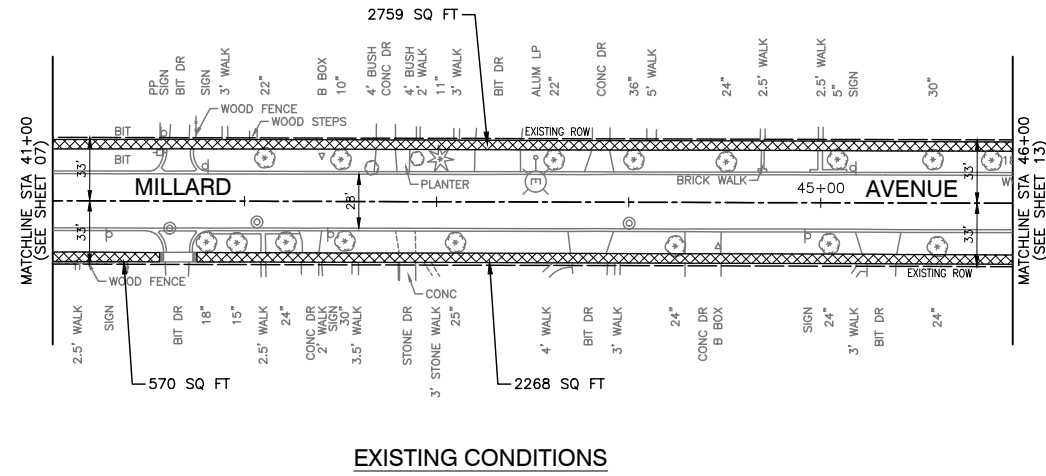
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	13
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	----	

















PLAN	SURVEYED	BY	DATE
NOTE BOOK NO.	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		
	ASD FILE NAME		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	GRADES CHECKED		
	B.M. NOTED		



**LEGEND**

-  PAVEMENT TEXTURING
-  SIDEWALK REMOVAL
-  PORTLAND CEMENT CONCRETE SIDEWALK, 5"
-  CONCRETE CURB AND GUTTER REMOVAL
-  DETECTABLE WARNING
-  6" WHITE CROSSWALK LINE
-  12" WHITE CROSSWALK BARS
-  24" WHITE STOP BAR
-  COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
-  COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12
-  SODDING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
-  EXISTING BUILDING

FILE NAME = 14528\_02-PLPR-01 - IDOT PLPR12

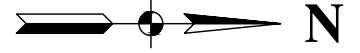
USER NAME =	DESIGNED — SDK	REVISED —
	CHECKED — WPD	REVISED —
PLOT SCALE =	DRAWN — KWM	REVISED —
PLOT DATE = 10/16/17	CHECKED — APG	REVISED —

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
SIDEWALK IMPROVEMENT PLAN

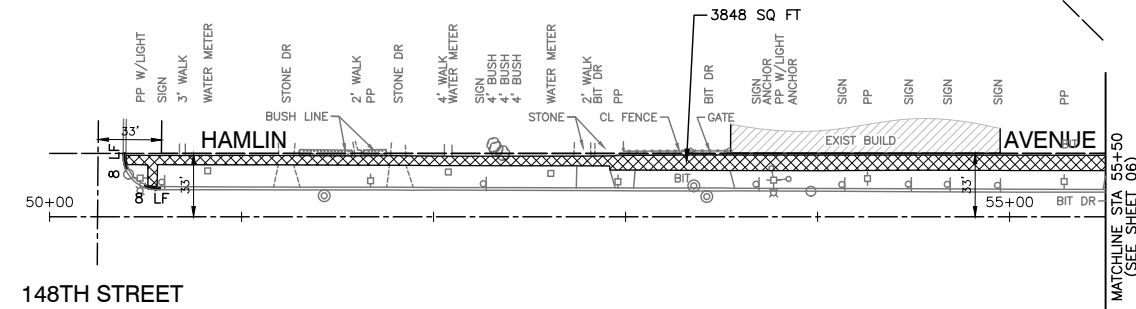
SCALE: 1" = 50' SHEET NO. 14 OF 32 SHEETS STA. 41+00 TO STA. 46+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	14
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

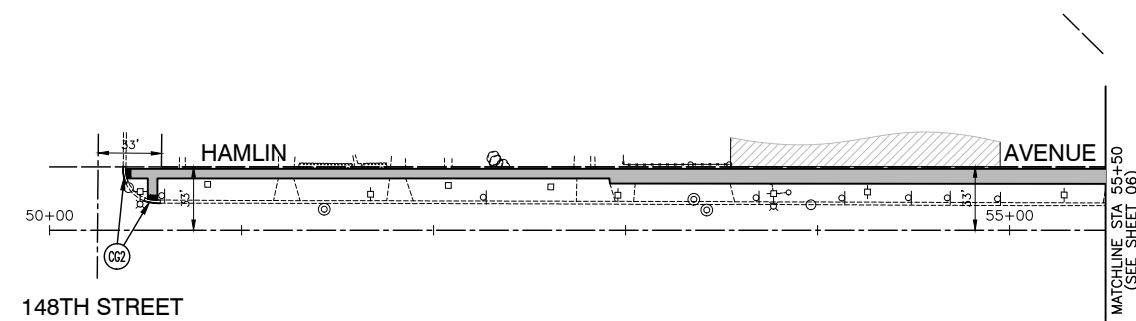


PLAN	SURVEYED	DATE
	ALIGNMENT CHECKED	
NOTE BOOK NO.	RT. OF WAY CHECKED	
	ASD FILE NAME	

PROFILE	SURVEYED	DATE
	GRADES CHECKED	
NOTE BOOK	B.M. NOTED	



EXISTING CONDITIONS



PROPOSED IMPROVEMENT

LEGEND

- PAVEMENT TEXTURING
- SIDEWALK REMOVAL
- PORTLAND CEMENT CONCRETE SIDEWALK, 5"
- CONCRETE CURB AND GUTTER REMOVAL
- DETECTABLE WARNING
- 6" WHITE CROSSWALK LINE
- 12" WHITE CROSSWALK BARS
- 24" WHITE STOP BAR
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12
- SODDING, SALT TOLERANT (SPECIAL) WITH TOPSOIL, FURNISH AND PLACE 4"
- EXISTING BUILDING

FILE NAME = 14528\_02-PLPR-01 - IDOT PLPR13

USER NAME =	DESIGNED — SDK	REVISED —
	CHECKED — WPD	REVISED —
PLOT SCALE =	DRAWN — KWM	REVISED —
PLOT DATE = 10/16/17	CHECKED — APG	REVISED —

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

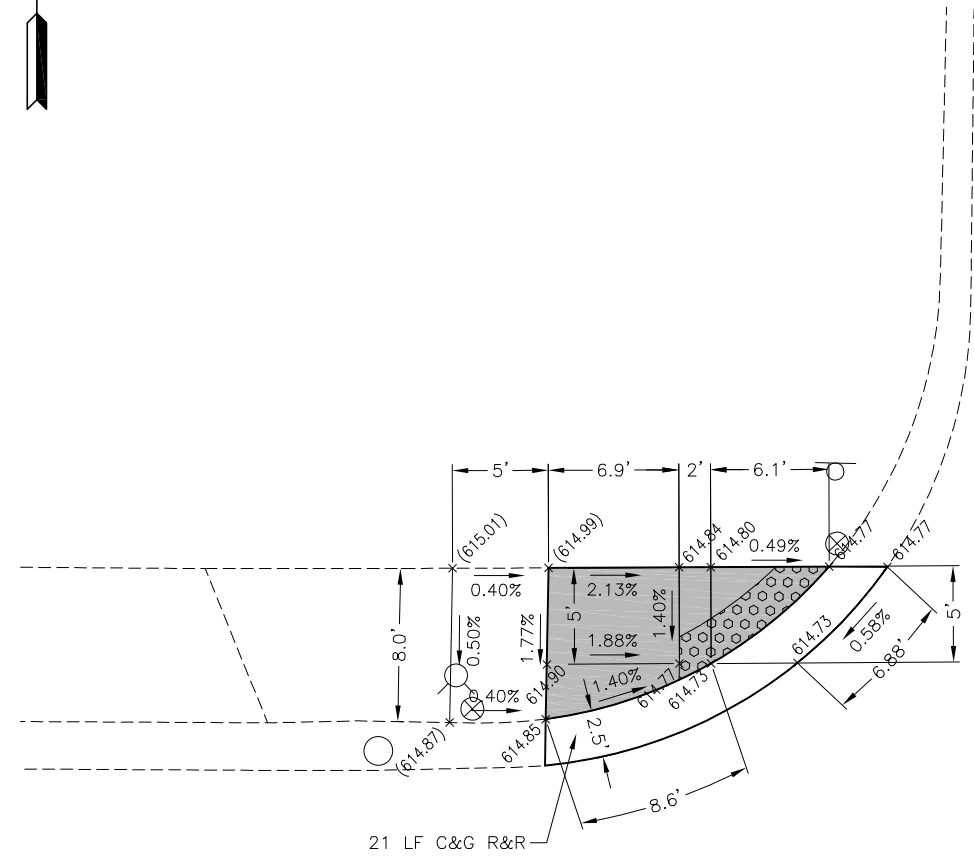
FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
SIDEWALK IMPROVEMENT PLAN

SCALE: 1" = 50' SHEET NO. 15 OF 32 SHEETS STA. 50+00 TO STA. 55+50

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	15
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ----				





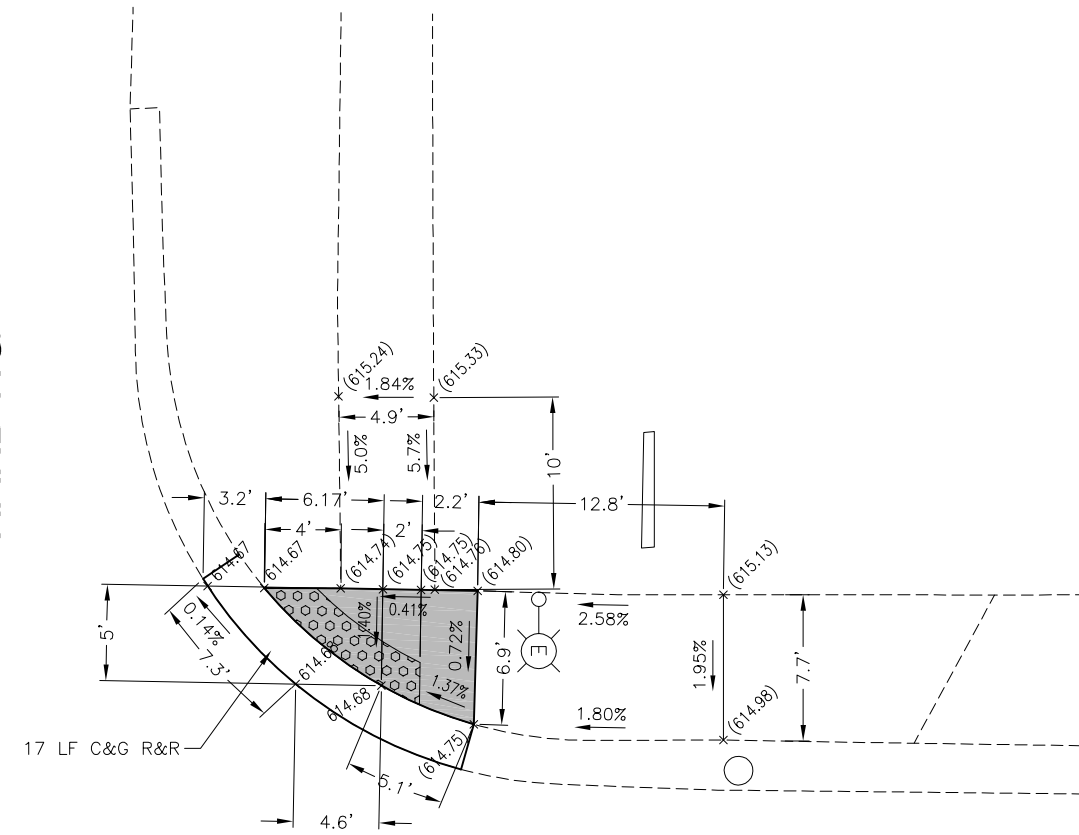


147TH STREET

IL. RTE 83

**FIGURE 3**  
STA 13+05

HARDING AVENUE



147TH STREET

IL. RTE 83

**FIGURE 4**  
STA 13+60

HARDING AVENUE

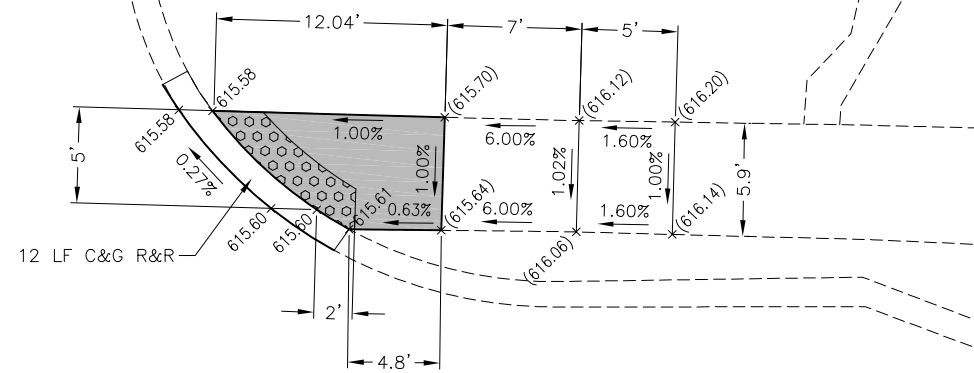
**LEGEND**

<span style="border: 1px solid black; padding: 2px;">xx.xx'</span>	EXISTING LENGTH		SIDEWALK REMOVAL AND REPLACEMENT
	PROPOSED SIDE CURB		DETECTABLE WARNINGS
( )	EXISTING ELEVATION/SLOPE		



FILE NAME = 14528_02-DTLS-01 - IDOT P02	USER NAME =	DESIGNED -- SDK	REVISED --	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FAU 1602 (147TH STREET) (IL RTE 83) SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS ADA RAMP DETAILS</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE =	DRAWN -- ACAD	REVISED --		SCALE: 1" = 5'	SHEET NO. 17	OF 32 SHEETS	STA.	TO STA.	1602	14-00028-00-SW	COOK
PLOT DATE = 10/16/17	CHECKED -- ACAD	REVISED --						CONTRACT NO. 61E32		FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT --

WAVERLY AVENUE



147TH STREET

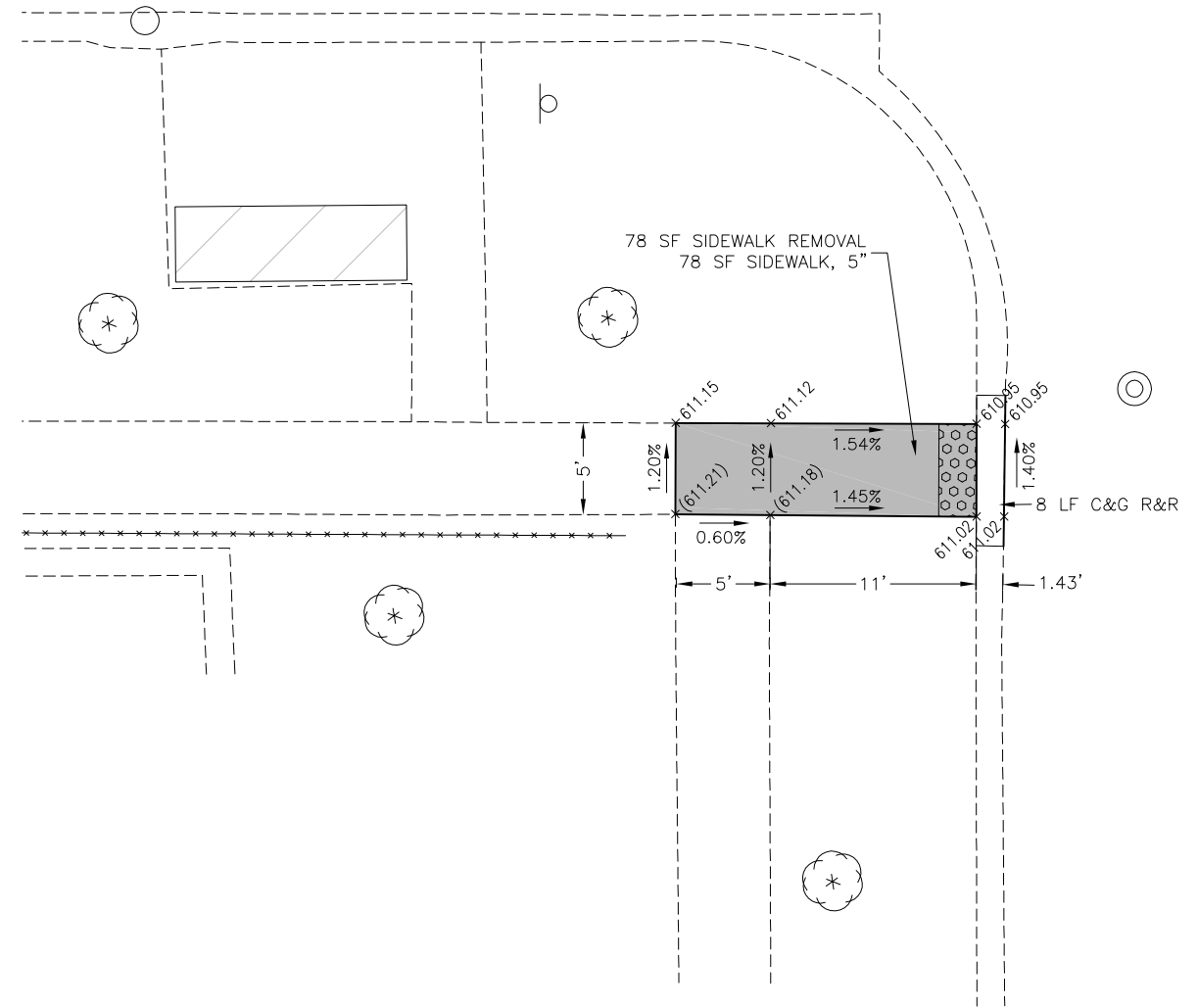
IL. RTE 83

FIGURE 5

STA 21+53

147TH STREET

IL. RTE 83



LAWNDALE AVENUE

LAWNDALE AVENUE

FIGURE 6

STA 29+68.03

LEGEND

xx.xx'

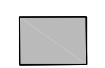
EXISTING LENGTH

=====

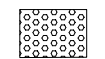
PROPOSED SIDE CURB

( )

EXISTING ELEVATION/SLOPE



SIDEWALK REMOVAL AND REPLACEMENT



DETECTABLE WARNINGS



SCALE: 1"= 5'

FILE NAME = 14528\_02-DTLS-01 - IDOT P03

USER NAME =	DESIGNED -- SDK	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE =	DRAWN -- ACAD	REVISED --
PLOT DATE = 10/16/17	CHECKED -- ACAD	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
ADA RAMP DETAILS

SCALE: 1" = 5'

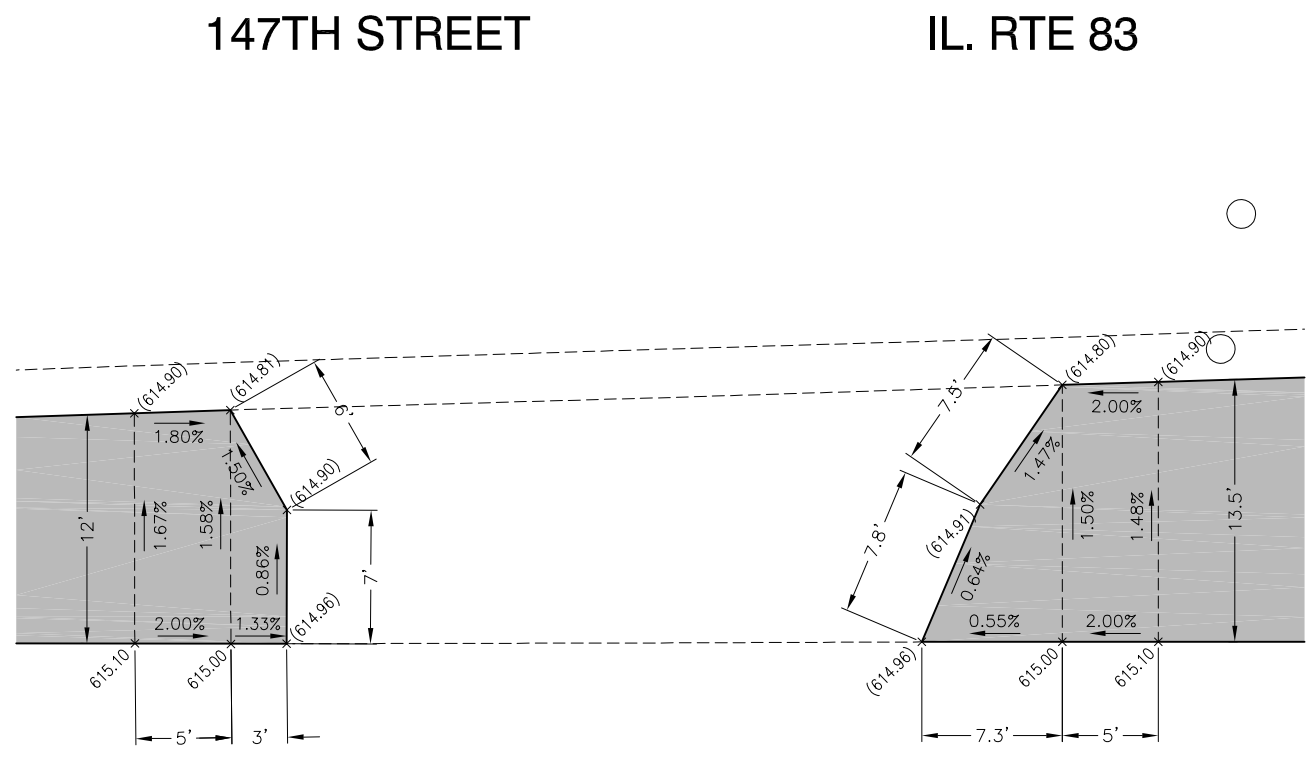
SHEET NO. 18 OF 32 SHEETS

STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	18
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT			CONTRACT NO. 61E32	



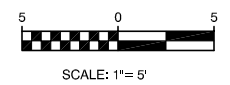
**FIGURE 7**  
STA 36+50.62



**FIGURE 8**  
STA 15+32.77

**LEGEND**

- xx.xx' EXISTING LENGTH
- ===== PROPOSED SIDE CURB
- ( ) EXISTING ELEVATION/SLOPE
- [Solid Grey Box] SIDEWALK REMOVAL AND REPLACEMENT
- [Dotted Box] DETECTABLE WARNINGS



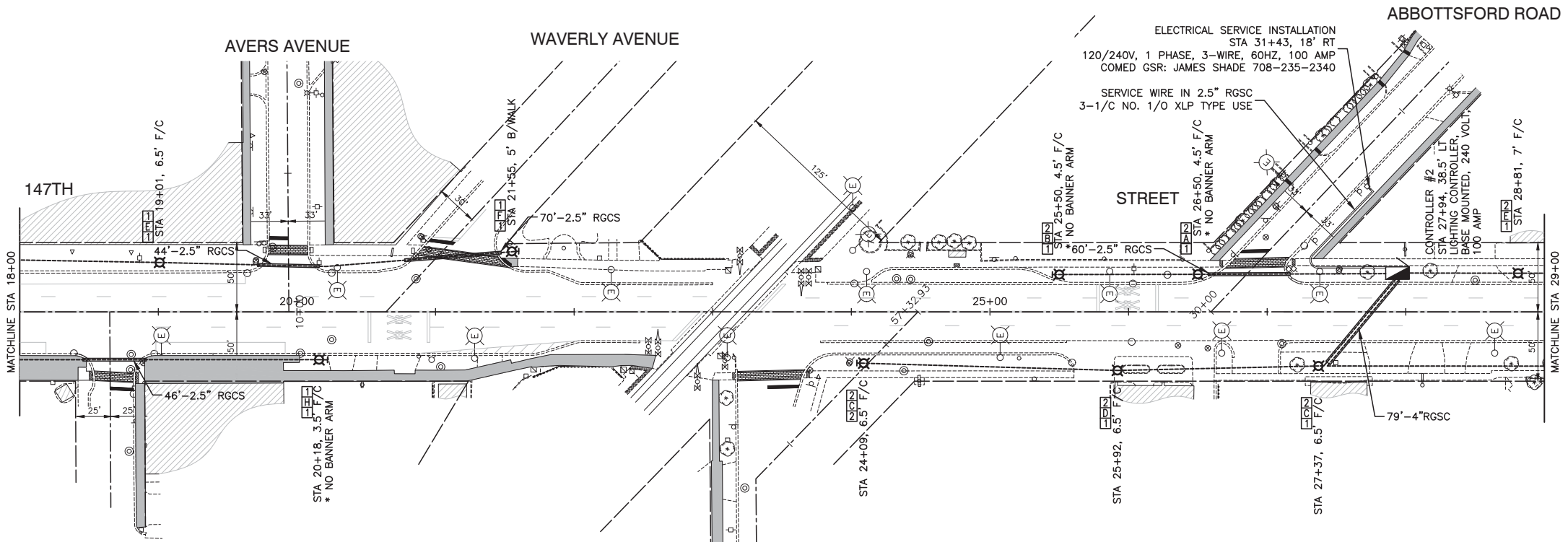
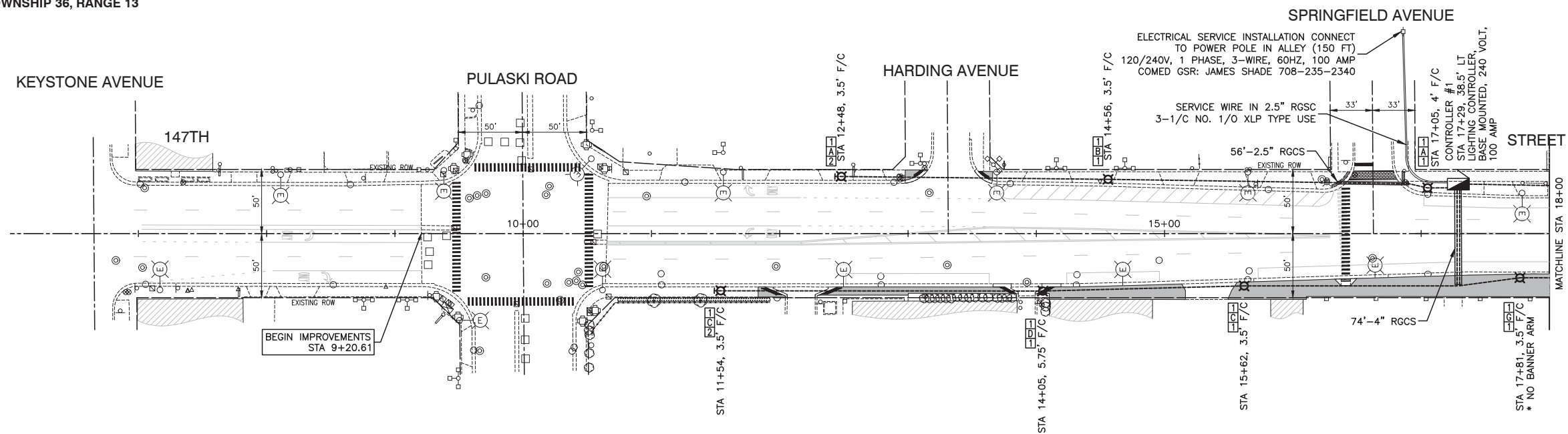
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	PLOT SCALE =	DRAWN -- ACAD	REVISED --
	PLOT DATE = 10/16/17	CHECKED -- ACAD	REVISED --

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
ADA RAMP DETAILS

SCALE: 1" = 5'      SHEET NO. 19 OF 32 SHEETS      STA.      TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	19
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



- LEGEND:**
- EXISTING STREET LIGHT
  - PROPOSED POST TOP PEDESTRIAN LIGHT  
40W LED, TYPE III DISTRIBUTION 16.5' MH,  
ON METAL FOUNDATION
  - PROPOSED CONTROLLER
  - EXISTING COMED POWERPOLE FOR SERVICE INSTALLATION
  - UNDERGROUND CONDUIT, RIGID GALVANIZED STEEL (RGSC)  
PUSHED, SIZE AS NOTED
  - UNIT DUCT, 3-1/C, NO.6 AWG AND  
NO.8 GROUND, 600V IN 1-1/4" POLYETHYLENE DUCT
  - CAPPED RACEWAY
  - SERVICE WIRE, IN 2.5" RGSC, 3-1/C, NO. 1/O AWG.  
XLP TYPE USE
  - F/C FACE OF CURB
  - B/WALK BACK OF SIDEWALK
  - B/ETP BACK OF EDGE OF TRAVELED PAVEMENT

- POLE IDENTIFICATION**
- CABINET NUMBER
  - CIRCUIT
  - POLE POSITION

- NOTES:**
1. ALL LUMINAIRE OPTICS SHALL BE ORIENTED TO FACE THE SIDEWALK.
  2. LIGHT POLE SETBACK IS MEASURED FROM THE FACE OF THE CURB TO THE CENTER OF THE POLE.

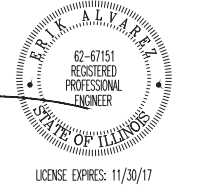
PLAN	SURVEYED	DATE
NOTE BOOK NO.	PLOTTED	BY
	CHECKED	
	ALIGNED	
	FILED	
	FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK NO.	GRADES CHECKED	BY
	B.M. NOTED	

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:

*[Signature]*

08-17-17



FILE NAME = 14528\_02-LGHT-01 - IDOT PLAN-01

USER NAME =	DESIGNED -- SDK	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE =	DRAWN -- KWM	REVISED --
PLOT DATE = 10/16/17	CHECKED -- APG	REVISED --

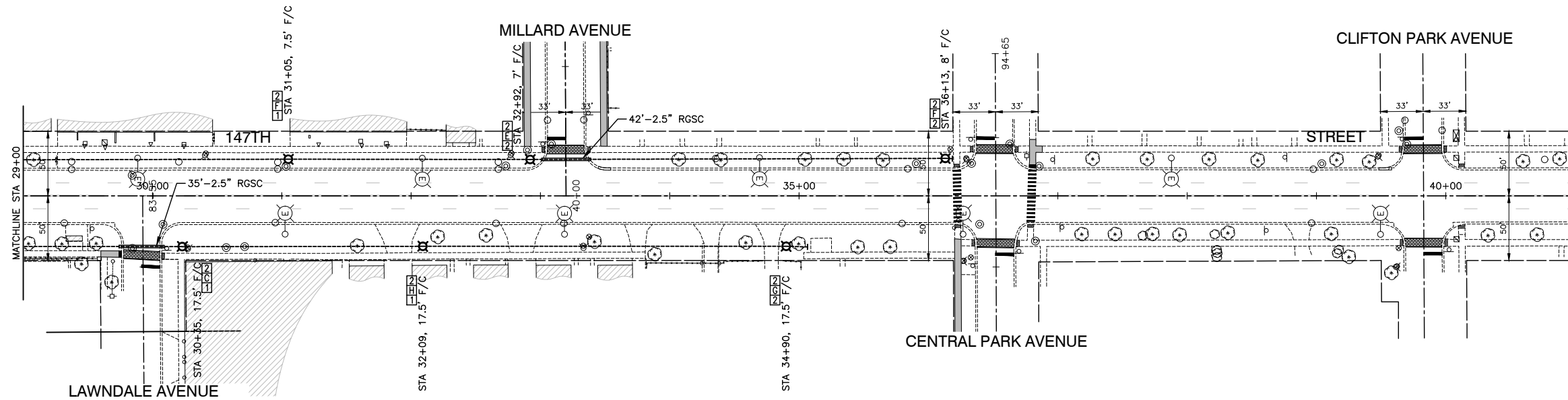
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
STREET LIGHTING

SCALE: 1" = 50' SHEET NO. 20 OF 32 SHEETS STA. 9+20.61 TO STA. 29+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	20
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT	---	





PLAN	SURVEYED	DATE
NOTE BOOK	ALIGNMENT CHECKED	
	RT. OF WAY CHECKED	
	GRID FILE NAME	

PROFILE	SURVEYED	DATE
NOTE BOOK	GRADES CHECKED	
	B.M. NOTED	

- LEGEND:**
- EXISTING STREET LIGHT
  - PROPOSED POST TOP PEDESTRIAN LIGHT  
40W LED, TYPE III DISTRIBUTION 16.5' MH,  
WITH 5/8" DIA. X 10' GROUND ROD
  - PROPOSED CONTROLLER
  - EXISTING COMED POWERPOLE FOR SERVICE INSTALLATION
  - UNDERGROUND CONDUIT, RIGID GALVANIZED STEEL (RGSC)  
PUSHED, SIZE AS NOTED
  - UNIT DUCT, 3-1/C, NO.6 AWG AND  
NO.8 GROUND, 600V IN 1-1/4" POLYETHYLENE DUCT
  - CAPPED RACEWAY
  - SERVICE WIRE, IN 2.5" RGSC, 3-1/C, NO. 1/0 AWG.  
XLP TYPE USE
  - F/C FACE OF CURB
  - B/WALK BACK OF SIDEWALK
  - B/ETP BACK OF EDGE OF TRAVELED PAVEMENT

**POLE IDENTIFICATION**



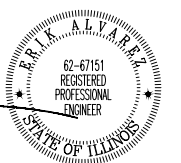
**NOTES:**

1. ALL LUMINAIRE OPTICS SHALL BE ORIENTED TO FACE THE SIDEWALK.
2. LIGHT POLE SETBACK IS MEASURED FROM THE FACE OF THE CURB TO THE CENTER OF THE POLE.

PREPARED BY OR UNDER THE DIRECT SUPERVISION OF:

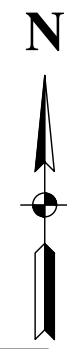
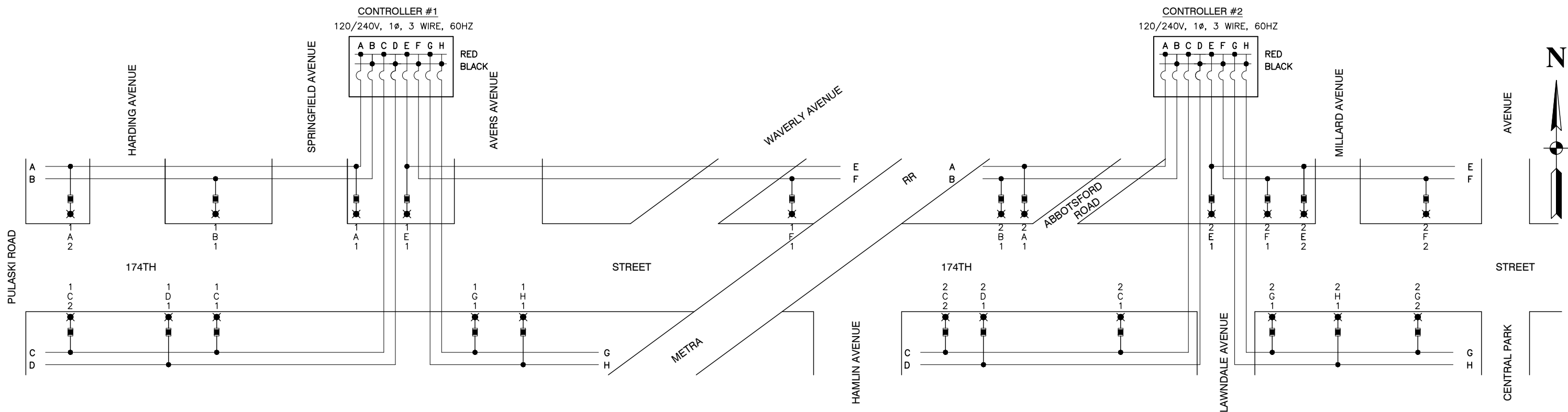
*[Signature]*

08-17-17



LICENSE EXPIRES: 11/30/17

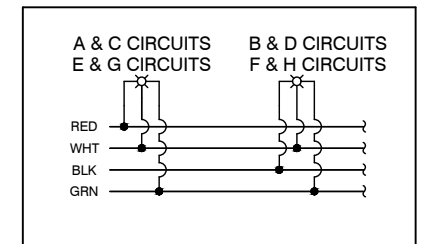
	FILE NAME = 14528_02-LGHT-01 - IDOT PLAN-01 (2)	DESIGNED -- SDK	REVISED --	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	FAU 1602 (147TH STREET) (IL RTE 83) SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS STREET LIGHTING	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	USER NAME =	CHECKED -- WPD	REVISED --			1602	14-00028-00-SW	COOK	32	21
	PLOT SCALE =	DRAWN -- KWM	REVISED --			CONTRACT NO. 61E32				
	PLOT DATE = 10/16/17	CHECKED -- APG	REVISED --			SCALE: 1" = 50'	SHEET NO. 21 OF 32 SHEETS	STA. 29+00 TO STA. 41+00	FED. ROAD DIST. NO. 1	ILLINOIS



NOMINAL WATTAGE	FUSE SIZE
60	1.5 AMP
GFI - 180	6.0 AMP

**FUSE SIZE TABLE**

**TYPICAL CIRCUIT WIRING**



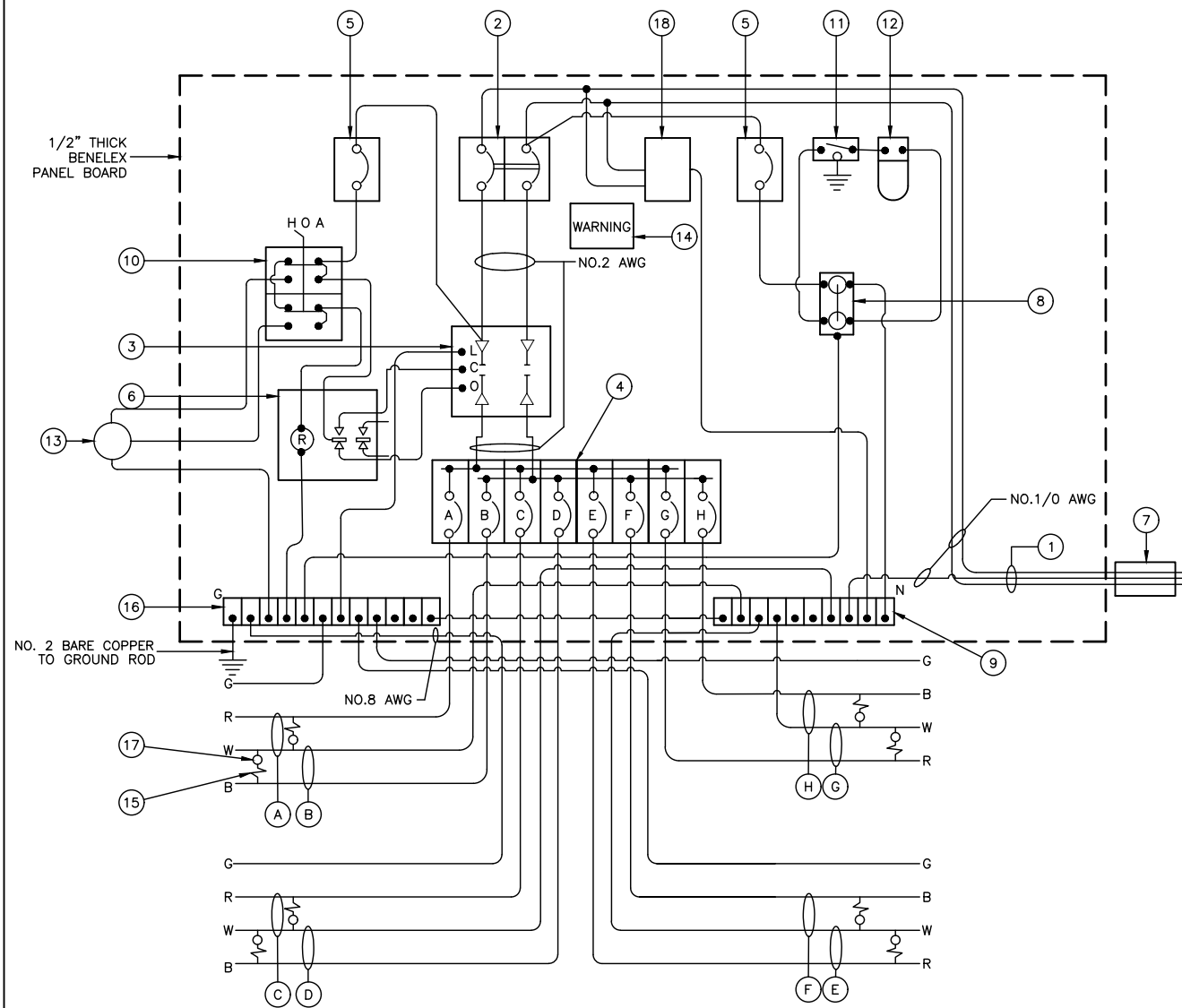
CABINET 1 - 147TH STREET AND SPRINGFIELD				CABINET 2 - 147TH STREET AND ABBOTSFORD			
CIRCUIT	WATTS	AMPS @ 120V		CIRCUIT	WATTS	AMPS @ 120V	
		RED PHASE	BLACK PHASE			RED PHASE	BLACK PHASE
A	490	4.08		A	245	2.04	
B	245		2.04	B	245		2.04
C	490	4.08		C	490	4.08	
D	245		2.04	D	245		2.04
E	245	2.04		E	490	4.08	
F	245		2.04	F	490		4.08
G	245	2.04		G	490	4.08	
H	245		2.04	H	245		2.04
SUBTOTAL	2,450	12.25	8.17	SUBTOTAL	2,940	14.29	10.21
TOTAL AMPS @ 120 V		20.42		TOTAL AMPS @ 120 V		24.50	

**NOTES**  
 1. EQUIPMENT GROUND CONDUCTORS SHALL BE SPLICED AND BOUNDED AT EACH LIGHT POLE OR OTHER EQUIPMENT.

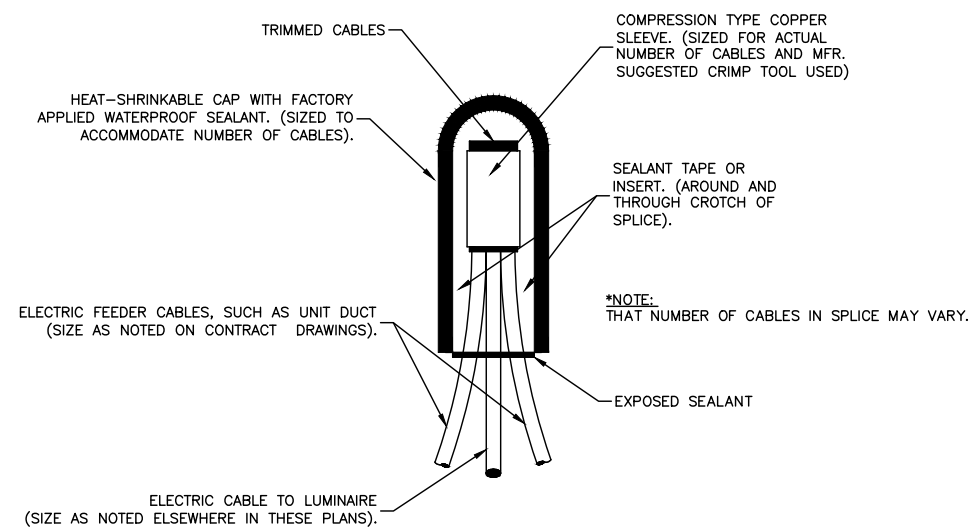
- LEGEND**
- ⊗ PROPOSED PEDESTRIAN LUMINAIRE, 60W LED
  - ⊞ PROPOSED FUSE - REFER TO FUSE SIZE TABLE
  - A LUMINAIRE CIRCUIT
  - ⌋ CIRCUIT BREAKER
  - CONNECTION

INDIVIDUAL LOAD DATA			
NOMINAL WATTAGE	INPUT VOLTS	MAX INPUT AMPS	INPUT WATTS
60	120	0.5	65
180	120	1.5	180





**PROPOSED CONTROLLER WIRING DIAGRAM - CABINET 3**



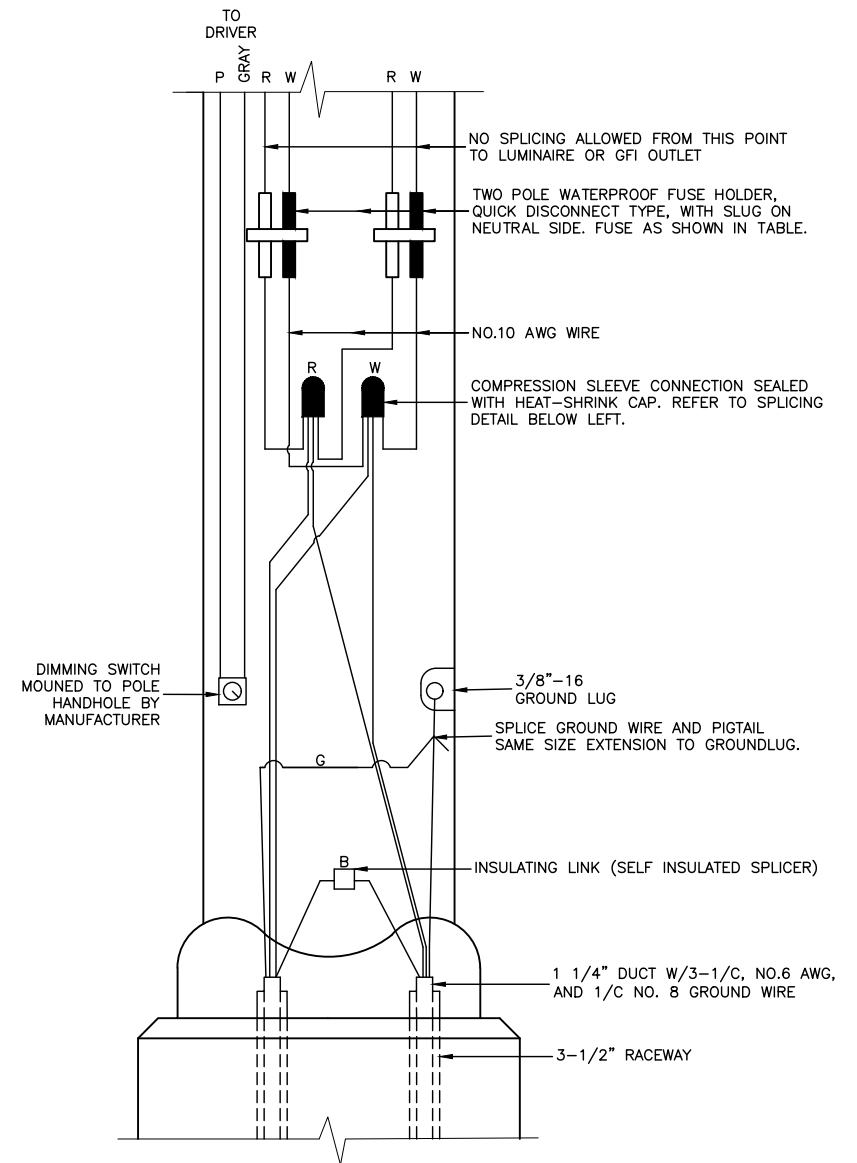
**SPLICING ELECTRIC CABLES  
BASIC MATERIALS AND METHODS**

**CONTROLLER WIRING DIAGRAM LEGEND**

- ① 3-1/C, NO. 1/0, 600V SERVICE WIRE IN 2.5" DIA. GALVANIZED STEEL CONDUIT FOR 120/240 VOLT, 1Ø, 3 WIRE, 60HZ. SERVICE.
- ② (1) 100 AMP MAIN CIRCUIT BREAKER, 2 POLE, 600 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA - 14000 AMP AT 480 V.
- ③ (1) 100 AMP REMOTE CONTROL CONTACTOR SWITCH, ELECTRICALLY OPERATED, MECHANICALLY HELD, 2 POLE, 600 VOLT
- ④ (8) 30 AMP CIRCUIT BREAKER, 1 POLE, 120 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP RATING NEMA - 14000 AMP AT 240 VOLTS.
- ⑤ (2) 20 AMP CONTROL CIRCUIT-CIRCUIT BREAKER, 1 POLE, 120 VOLT, 100 AMP BASE, NON-INTERCHANGEABLE TRIP INTERRUPTING RATING NEMA 14000 AMP AT 240 V.
- ⑥ (1) 20 AMP, 1 POLE DOUBLE THROW, 120 VOLT RELAY
- ⑦ METER SOCKET, 1Ø, 3 WIRE, 100A
- ⑧ (1) 20 AMP, 120 VOLT DUPLEX GFCI RECEPTACLE MOUNTED IN BOX.
- ⑨ NEUTRAL BUS BAR, 1/4"x1"x12" MINIMUM LENGTH MOUNTED ON PANEL WITH LUGS.
- ⑩ 3 POSITION SELECTOR SWITCH, 120V.
- ⑪ SWITCH FOR LIGHTING FIXTURE MOUNTED IN BOX, 20 AMP.
- ⑫ WEATHER-PROOF LIGHTING FIXTURE WITH 1600 LUMEN, 120 V LED LAMP.
- ⑬ PHOTOCCELL MOUNTED TO CABINET, 120 V. 1000 VA BALLAST RATING, 1-4 FC ON 3-12 FC OFF, 30 SECOND MINIMUM DELAY.
- ⑭ WARNING PLATE TO READ: WARNING, MAINTENANCE CIRCUIT IS LIVE WHEN MAIN BREAKER IS SWITCHED OFF
- ⑮ IN-LINE FUSEHOLDER WITH FUSE AS NOTED IN FUSE TABLE
- ⑯ GROUND BUS BAR 1/4"x1"x12" MINIMUM LENGTH MOUNTED ON PANEL WITH LUGS
- ⑰ LUMINAIRE OR GFI OUTLET
- ⑱ SURGE ARRESTER, UL LISTED, NEC 280 COMPLIANT, 1Ø, 3 WIRE 60 HZ. MAX. 3,405 JOULES
- A CIRCUIT (RED)
- B CIRCUIT (BLACK)
- C CIRCUIT (RED)
- D CIRCUIT (BLACK)
- E CIRCUIT (RED)
- F CIRCUIT (BLACK)
- G CIRCUIT (RED)
- H CIRCUIT (BLACK)

**GENERAL NOTES FOR CONTROL CABINET**

1. ENTIRE CONTROL CABINET SHALL BE GROUNDED.
2. ALL WIRING SHALL BE TAGGED WITH SELF-STICKING WIRE MARKERS.
3. GROUND BUS TO BE COLOR CODED GREEN, NEUTRAL BUS WHITE, AND BONDED TO CABINET ENCLOSURE, BY LISTED PRESSURE CONNECTORS OR LISTED CLAMPS.
4. ALL INTERNAL CONTROLLER WIRING TO BE NO.12 AWG UNLESS OTHERWISE SPECIFIED.
5. CABINET WIRING INSULATION TO BE TYPE XHHW OR APPROVED EQUAL.
6. THE CONTROLLER SHALL BE UL LISTED, NEMA 3R AND SUITABLE FOR USE AS SERVICE ENTRANCE



**ROADWAY  
POLE HANDHOLE WIRING DIAGRAM**

(RED PHASE SHOWN)

**NOTE:**  
ALLOW 36" LOOP OF CABLES TO ENSURE SUFFICIENT SLACK FOR WITHDRAWAL OF THE CONNECTORS OUTSIDE OF THE POLE HANDHOLE.

FILE NAME = 14528\_02-DTLS-02 - IDOT P01

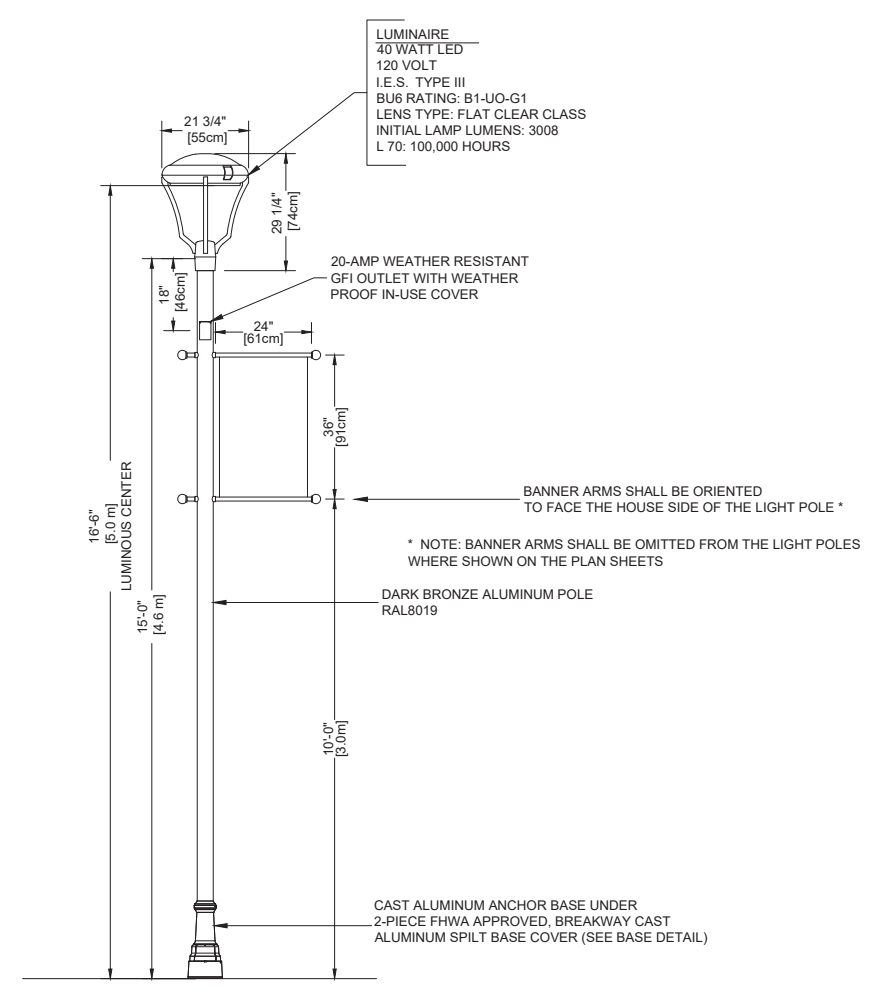
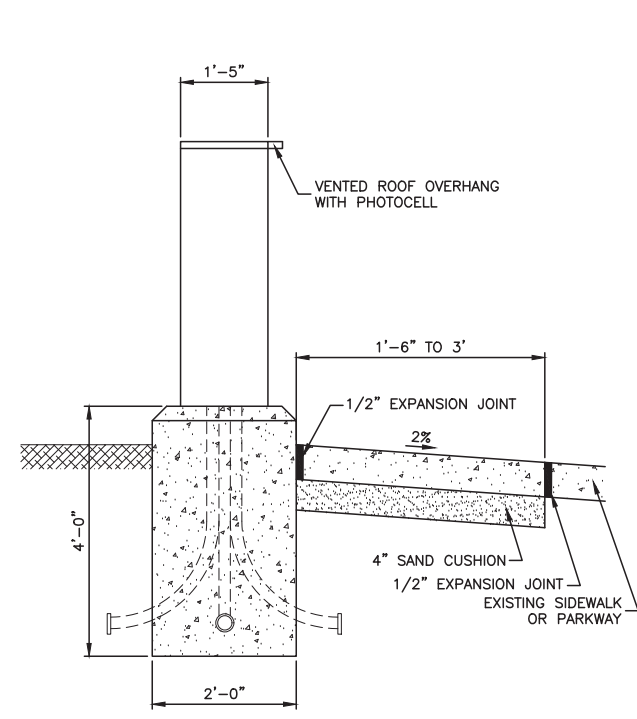
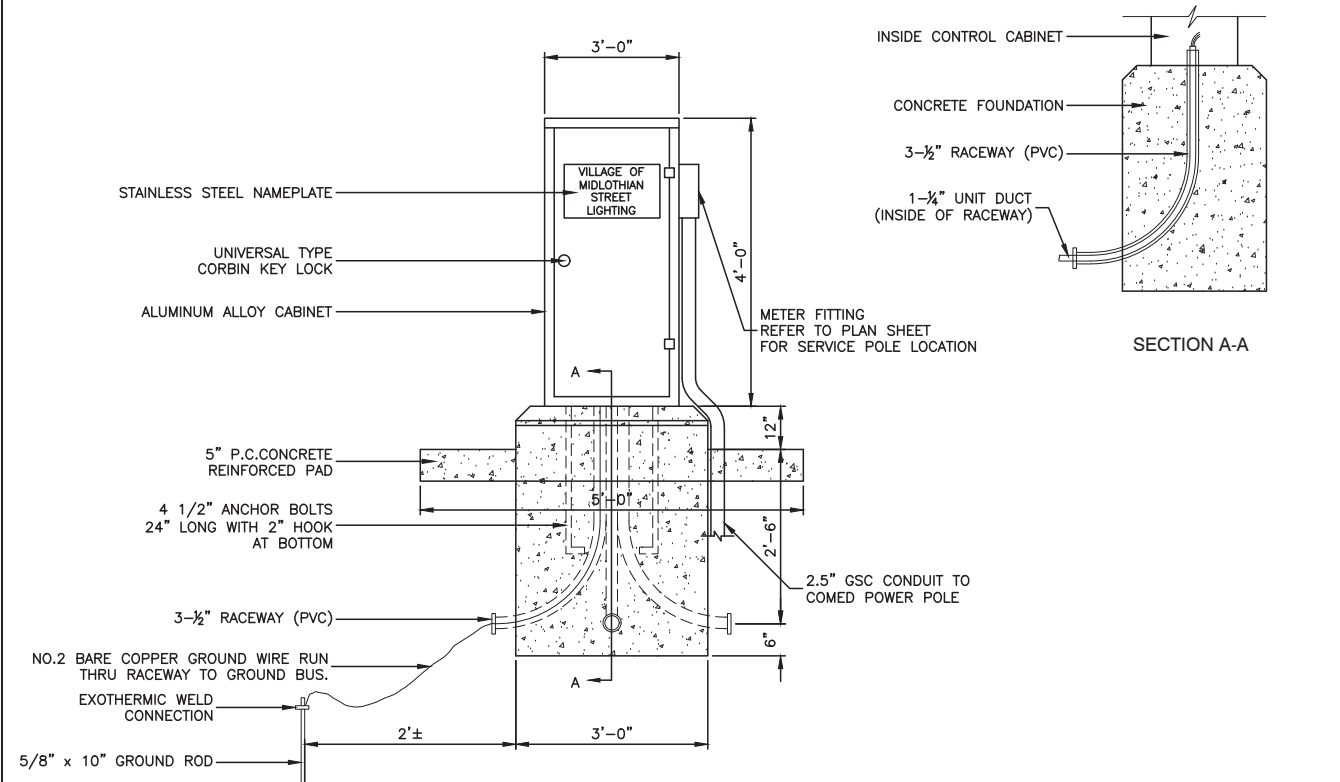
USER NAME =	DESIGNED -- SDK	REVISED --
	CHECKED -- WPD	REVISED --
PLOT SCALE =	DRAWN -- ACAD	REVISED --
PLOT DATE = 10/16/17	CHECKED -- ACAD	REVISED --

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
CONSTRUCTION DETAILS**

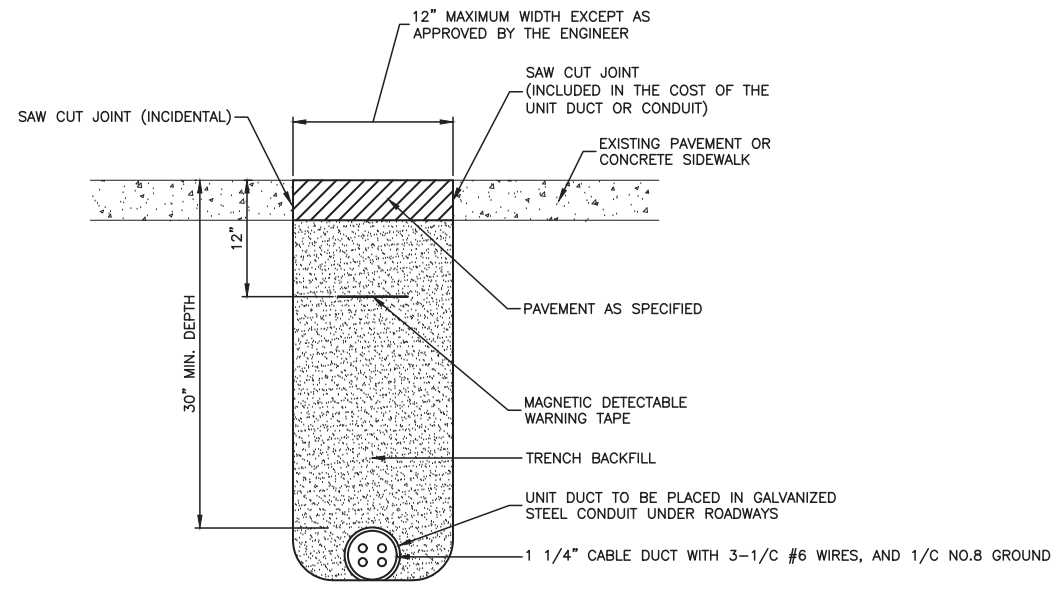
SCALE: SHEET NO. 23 OF 32 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	23
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ----				

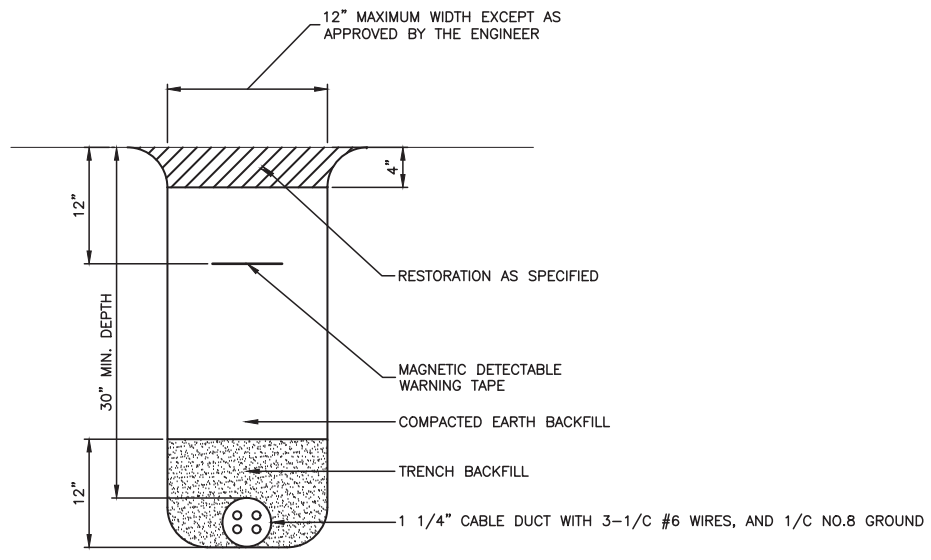


**LIGHTING CONTROLLER INSTALLATION**

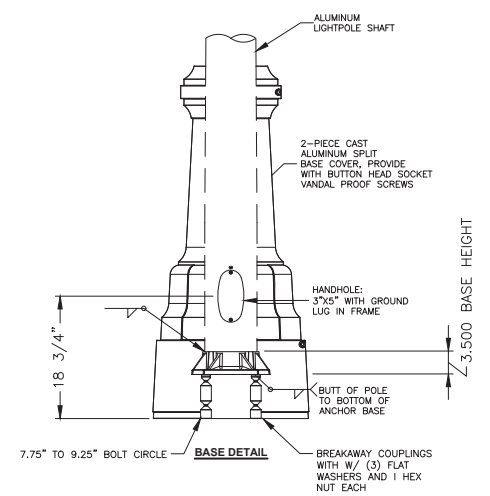
- NOTE:
1. ORIENT CABINET SO DOOR OPENS AWAY FROM TRAFFIC.
  2. METER FITTING TO BE LOCATED ON THE SIDE OF THE CABINET CLOSEST TO SERVICE POLE.



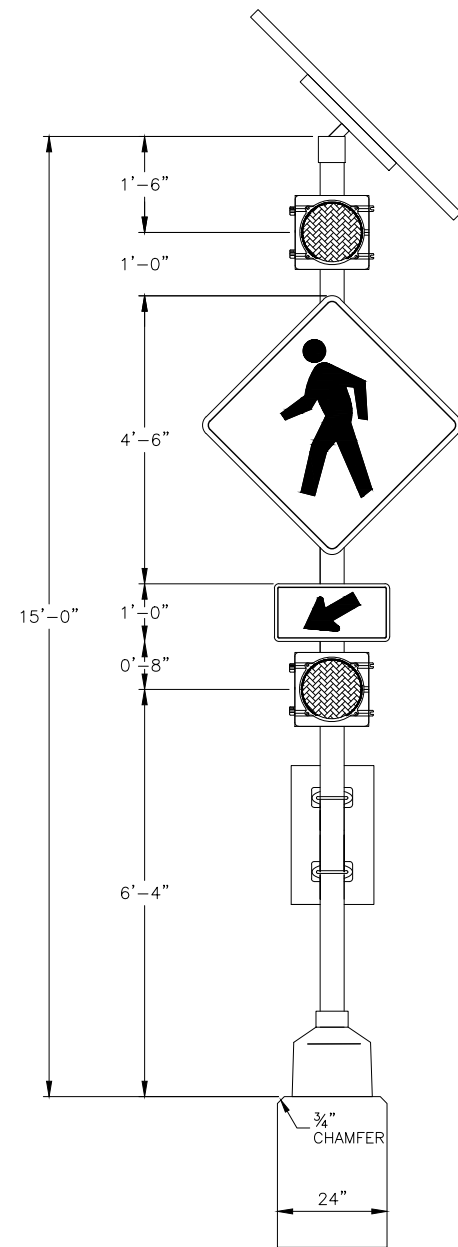
**TRENCH DETAIL - PAVED AREAS**



**TRENCH DETAIL - UNPAVED AREAS**



FILE NAME = 14528_02-DTLS-02 - IDOT P01 (2)	USER NAME =	DESIGNED -- SDK	REVISED --	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>FAU 1602 (147TH STREET) (IL RTE 83) SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS CONSTRUCTION DETAILS</b>			F.A.U. RTE. 1602	SECTION 14-00028-00-SW	COUNTY COOK	TOTAL SHEETS 32	SHEET NO. 24
	PLOT SCALE =	DRAWN -- ACAD	REVISED --		SCALE:	SHEET NO. 24 OF 32 SHEETS	STA. TO STA.	CONTRACT NO. 61E32				
	PLOT DATE = 10/16/17	CHECKED -- ACAD	REVISED --		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ----							



SOLAR MODULE ON PC STEEL OR MILL FINISH ALUMINUM MOUNTING STRUCTURE AT 45 DEG TILT, SOUTH

12" AMBER LED SIGNAL HEAD ASSEMBLY, INCLUDES UPPER AND LOWER ARM ASSEMBLY, ONE WAY HUB OR UNIVERSAL HUB, AND TUNNEL VISOR

PEDESTRIAN CROSSING ASSEMBLY W11-2 36" x 36"

ARROW PLAQUE W16-7P 24" x 12"

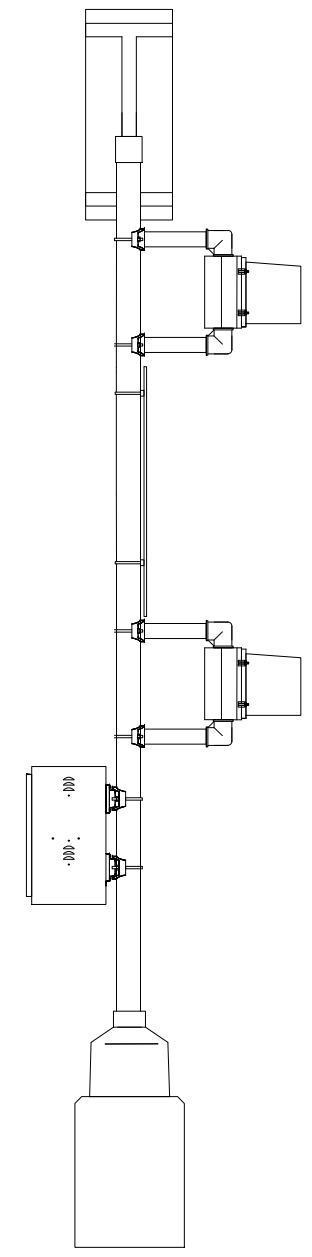
2B ENCLOSURE, MILL FINISH ALUMINUM

ASSUMPTIONS:  
 - 14' AL POLE, 4.5" O.D.  
 - THREADED SECTION OF POLE IS 2"  
 - AL BASE WITH HEIGHT OF 16" AND A 6" OVERLAP. DEAD AREA OF NECK IS 1.5"  
 - LAMP WITH BACKPLATE IS 24" SQUARE.  
 - NEED DETAIL ON THE MODULE AND MOUNT TO COMPLETE.

OR



SCHOOL CROSSING ASSEMBLY S1-1 36" x 36"



SOLAR POWERED LED FLASHING WARNING SIGN

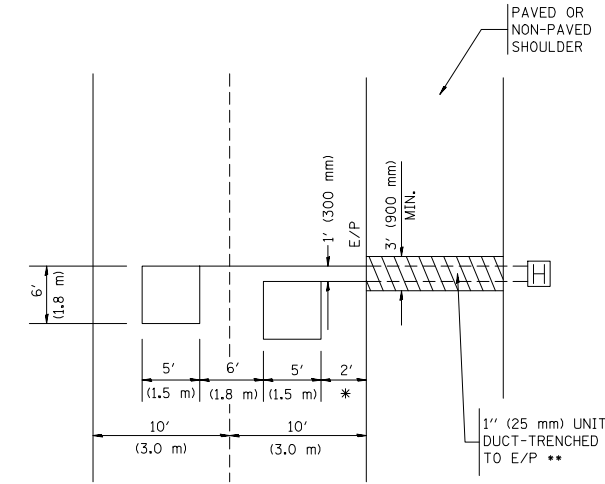
**NOTES**

1. THE SCHEDULE OF QUANTITIES LISTS ITEMS INCLUDED FOR ONE COMPLETE ASSEMBLY.
2. SEE THE SPECIAL PROVISIONS FOR SOLAR POWERED LED FLASHING WARNING SIGN FOR FURTHER DETAILS.

FILE NAME = 14528_02-DTIS-03 - IDOT P02	USER NAME =	DESIGNED -- SDK	REVISED --	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	FAU 1602 (147TH STREET) (IL RTE 83) SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS FLASHING BEACON INSTALLATION DETAIL			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED -- WPD	REVISED --		1602	14-00028-00-SW	COOK	32	25			
	PLOT SCALE =	DRAWN -- ACAD	REVISED --		CONTRACT NO. 61E32							
	PLOT DATE = 10/16/17	CHECKED -- ACAD	REVISED --		SCALE:	SHEET NO. 25 OF 32 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT ----		

**LOOPS NEXT TO SHOULDERS**

PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER.



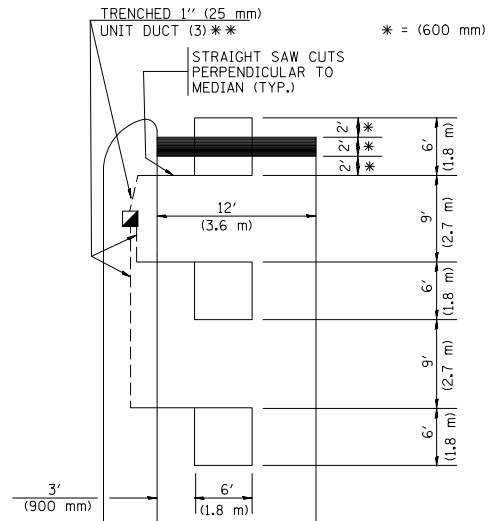
\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

**LEFT TURN LANES WITH MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)

HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD B14001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



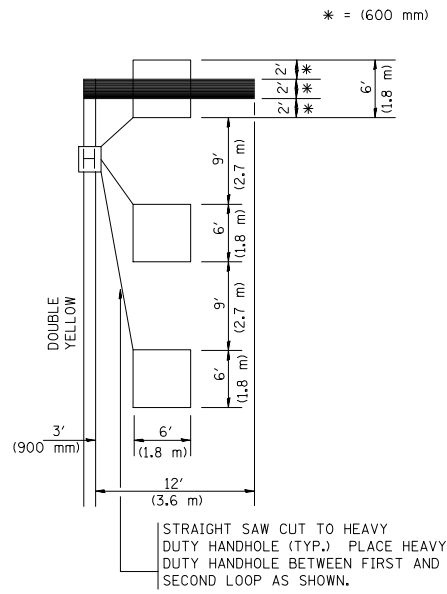
\* = (600 mm)

\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH**

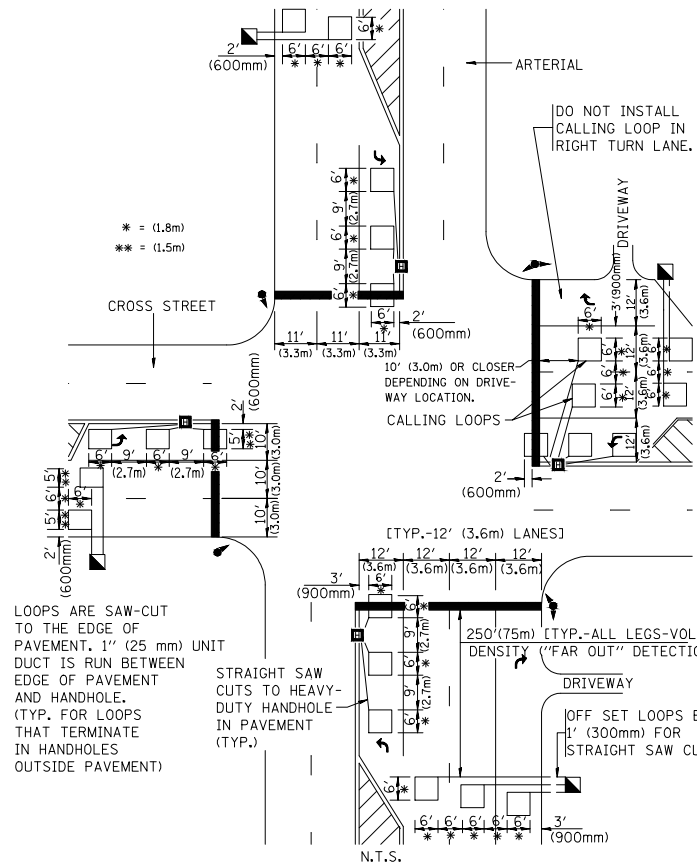
(PROTECTED / PERMITTED LEFT TURN PHASING)



\* = (600 mm)

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

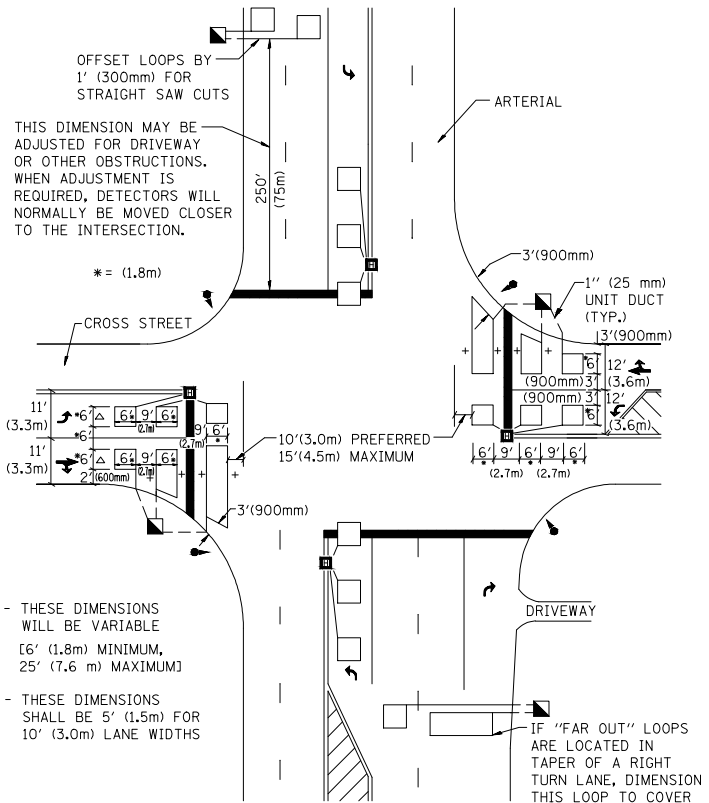
**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-VOLUME DENSITY ("FAR OUT" DETECTION)**



LOOPS ARE SAW-CUT TO THE EDGE OF PAVEMENT. 1" (25 mm) UNIT DUCT IS RUN BETWEEN EDGE OF PAVEMENT AND HANDHOLE. (TYP. FOR LOOPS THAT TERMINATE IN HANDHOLES OUTSIDE PAVEMENT)

DETAIL 1  
N.T.S.

**ARTERIAL-VOLUME DENSITY ("FAR OUT" DETECTION)  
CROSS STREET-NON VOLUME DENSITY ("UPTIGHT" PRESENCE DETECTION)**



+ - THESE DIMENSIONS WILL BE VARIABLE [6' (1.8m) MINIMUM, 25' (7.6 m) MAXIMUM]

△ - THESE DIMENSIONS SHALL BE 5' (1.5m) FOR 10' (3.0m) LANE WIDTHS

DETAIL 2  
N.T.S.

**NOTES:**

**VEHICLES LOOP DETECTORS**

- \* ALL LEAD IN CABLE SHALL BE TWO CONDUCTOR NO. 14 TWISTED, SHIELDED.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN SAW CUT FROM THE LOOP TO THE EDGE OF PAVEMENT OR TO A HANDHOLE IN THE PAVEMENT.
- \* EACH DETECTOR LOOP SHALL HAVE ITS OWN ONE INCH (25 mm) UNIT DUCT BETWEEN THE EDGE OF PAVEMENT AND THE FIRST HANDHOLE OR JUNCTION BOX. EACH UNIT DUCT RUN SHALL BE SHOWN ON THE PLANS BY THE DESIGNER, BUT SHALL NOT BE PAID FOR SEPARATELY. THIS ITEM IS INCIDENTAL TO THE PAY ITEM FOR DETECTOR LOOPS.
- \* ONE DIMENSION OF ALL DETECTOR LOOPS SHALL BE SIX FEET (1.8 m)
- \* EACH LANE OF NON-LOCKING, PRESENCE DETECTION AND EACH LANE OF A DOUBLE LEFT TURN LANE REQUIRES A SEPARATE INDUCTIVE LOOP DETECTOR AND LEAD IN CABLE.
- \* WHEN NON-LOCKING, PRESENCE DETECTION IS USED, MORE THAN ONE LOOP PER LANE IS REQUIRED BEHIND THE STOP BAR (i.e. 1-1/2, 1-3/4, 2).
- \* WHEN SYSTEM LOOPS ARE REQUIRED ON AN APPROACH OF AN INTERSECTION, THE LOOPS USED FOR VOLUME DENSITY AND INTERSECTION TIMING SHALL ALSO BE USED AS SYSTEM DETECTORS. EACH ONE OF THESE TYPE OF LOOPS REQUIRES A SEPARATE TWO CONDUCTOR NO. 14 TWISTED SHIELDED CABLE AND A SEPARATE INDUCTIVE LOOP DETECTOR WHEN NEW CONTROLLERS ARE UTILIZED. THE DESIGNER SHALL LABEL THESE TYPES OF LOOPS AS "INTERSECTION AND SAMPLING (SYSTEM) DETECTORS" ON THE SIGNAL LAYOUT, THE INTERCONNECT PLAN AND THE SYSTEM CABLE PLAN. WHEN AN EXISTING CONTROLLER IS UTILIZED FOR THIS TYPE OF DETECTION, THE PAY ITEM "INDUCTIVE LOOP DETECTOR WITH SYSTEM OUTPUT" SHOULD BE USED.

**PLACEMENT OF DETECTORS**

THE FOLLOWING FIGURES REPRESENT THE MOST COMMON DETECTOR LOOP LOCATIONS AND SIZES. ADJUSTMENTS WILL BE NECESSARY FOR SPECIFIC GEOMETRIC CONSIDERATIONS.

LOCATIONS AND DEMENSIONS OF DETECTOR LOOPS ARE REQUIRED ON ALL SIGNAL LAYOUT PLAN SHEETS.

"FAR OUT" DETECTION REFERS TO LOCKING, PRESENCE TYPE DETECTION LOCATED IN THRU LANES, RIGHT TURN LANES, AND RIGHT TURN LANE TAPER AREAS (IF APPLICABLE), USUALLY 250' (75 m) IN ADVANCE OF STOP BARS. "UPTIGHT" DETECTION REFERS TO NON-LOCKING PRESENCE TYPE DETECTION LOCATED IN ALL LANES AND 10'-15' (3.0 m-4.5 m) BEHIND THE CROSSING STREET'S EDGE OF PAVEMENT EXTENDED.

**NOTE:**

ALL DETAILS AND NOTES SHOWN ARE FROM THE I.D.O.T. DISTRICT 1 TRAFFIC SIGNAL DESIGN GUIDELINES DATED JANUARY 1995

THIS DRAWING HAS BEEN PREPARED TO ASSIST THE RESIDENT ENGINEER FOR ALL ROADWAY RESURFACING OR S.M.A.R.T. PROJECTS WHERE THE DIMENSIONS ARE NOT SHOWN ON THE PLANS AND THE FINAL LOCATIONS FOR CROSSWALKS OR STOP BARS ARE NOT DETERMINED.

FILE NAME = 14528\_02-DTIS-04 - TS07

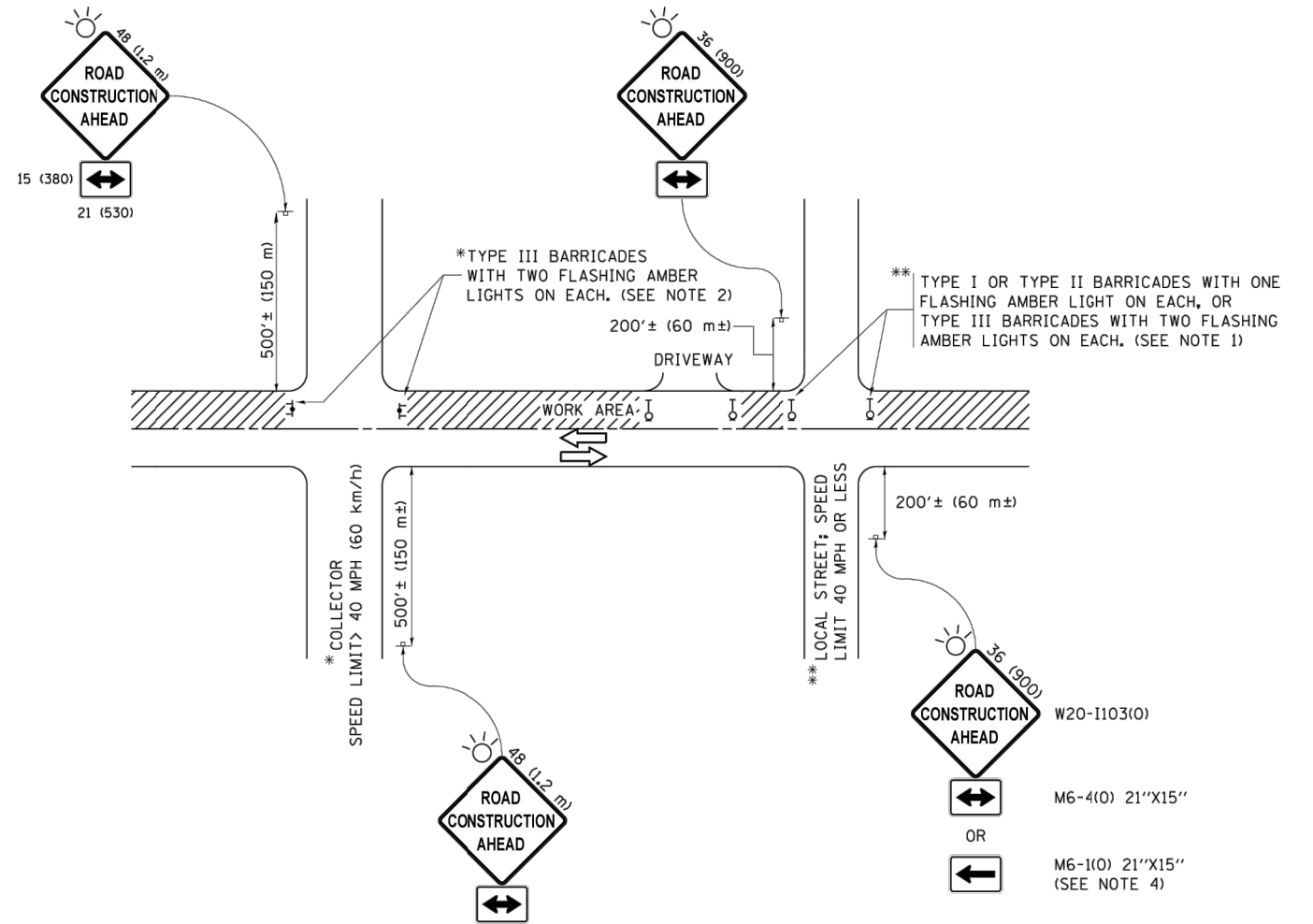
USER NAME = geglranobt	DESIGNED --	REVISED --
	CHECKED --	REVISED --
PLOT SCALE = 50,0000' / IN.	DRAWN --	REVISED --
PLOT DATE = 1/4/2008	CHECKED --	REVISED --

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION  
DETAILS FOR ROADWAY RESURFACING

SCALE: NONE SHEET NO. 26 OF 32 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	26
TS-07			CONTRACT NO. 61E32	
FED. ROAD DIST. NO. 1		ILLINOIS	FED. AID PROJECT ----	



**NOTES:**

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. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. 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).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

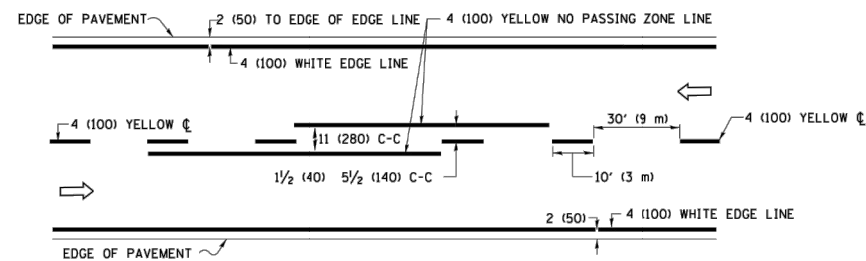
FILE NAME = 14528_02-DTIS-04 - TC10	USER NAME = footemj	DESIGNED -- L.H.A.	REVISED -- A. HOUSEH 10-15-96
	FILES\District 1\Projects\DI	CHECKED -- \CADsheets\lct10.dgn	REVISED -- , RAMMACHER 01-06-00
	PLOT SCALE = 50,000' / in.	DRAWN --	REVISED -- A. SCHUETZE 07-01-13
	PLOT DATE = 9/15/2016	CHECKED -- 06-89	REVISED -- A. SCHUETZE 09-15-16

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

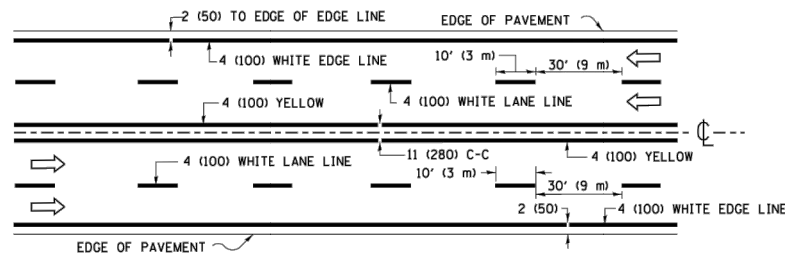
TRAFFIC CONTROL AND PROTECTION FOR  
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

SCALE: NONE SHEET NO. 27 OF 32 SHEETS STA. TO STA.

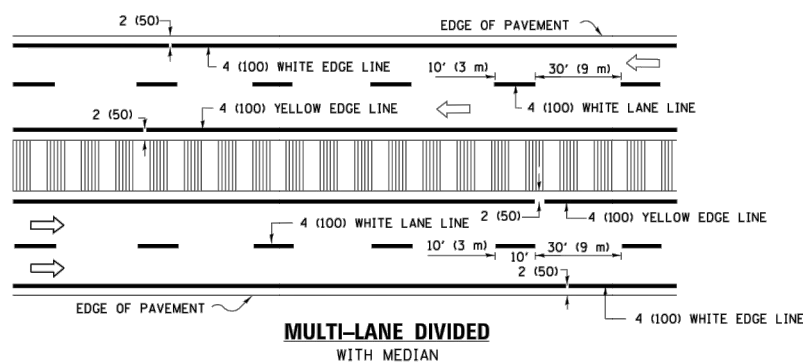
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1602	14-00028-00-SW	COOK	32	27
TC-10		CONTRACT NO. 61E32		
FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT ----		



**2-LANE ROADWAY**

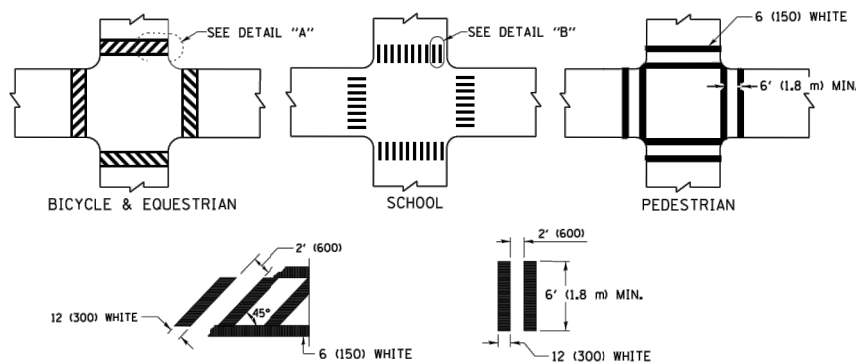


**MULTI-LANE UNDIVIDED**



**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

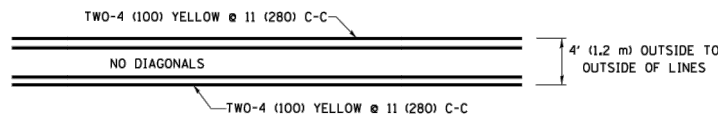


**DETAIL "A"**

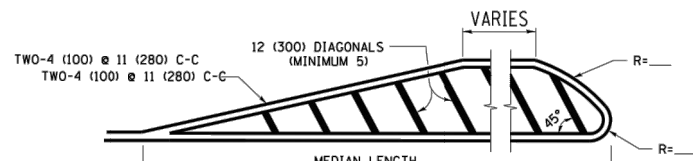
**DETAIL "B"**

**TYPICAL CROSSWALK MARKING**

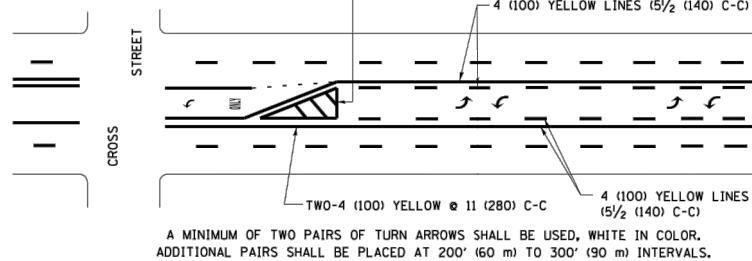
\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



**4' (1.2 m) WIDE MEDIANS ONLY**

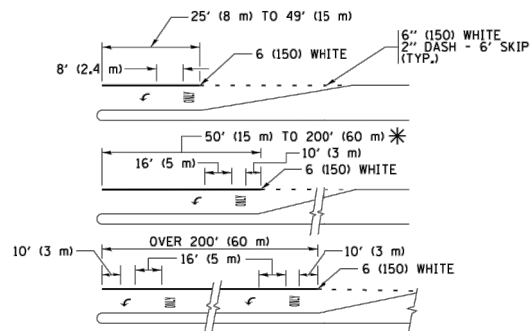


**MEDIANS OVER 4' (1.2 m) WIDE**



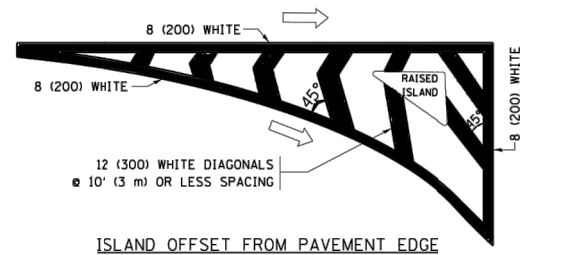
**MEDIAN WITH TWO-WAY LEFT TURN LANE**

**TYPICAL PAINTED MEDIAN MARKING**

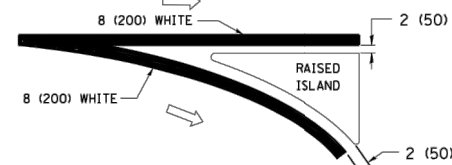


**TYPICAL LEFT (OR RIGHT) TURN LANE**

**TYPICAL TURN LANE MARKING**

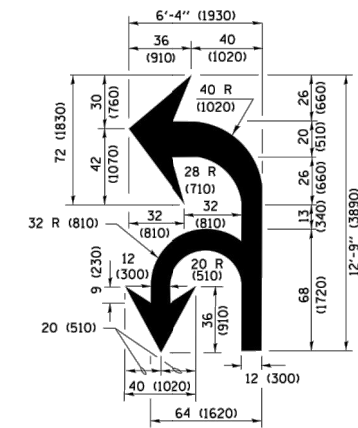


**ISLAND OFFSET FROM PAVEMENT EDGE**

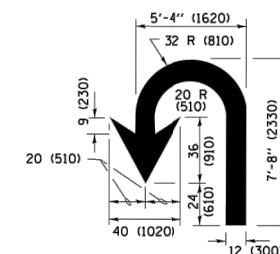


**ISLAND AT PAVEMENT EDGE**

**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**

\* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OR GREATER OR WHEN SPECIFIED IN PLANS.

D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

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 MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m <sup>2</sup> ) EACH "X"=54.0 SO. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8')	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))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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.

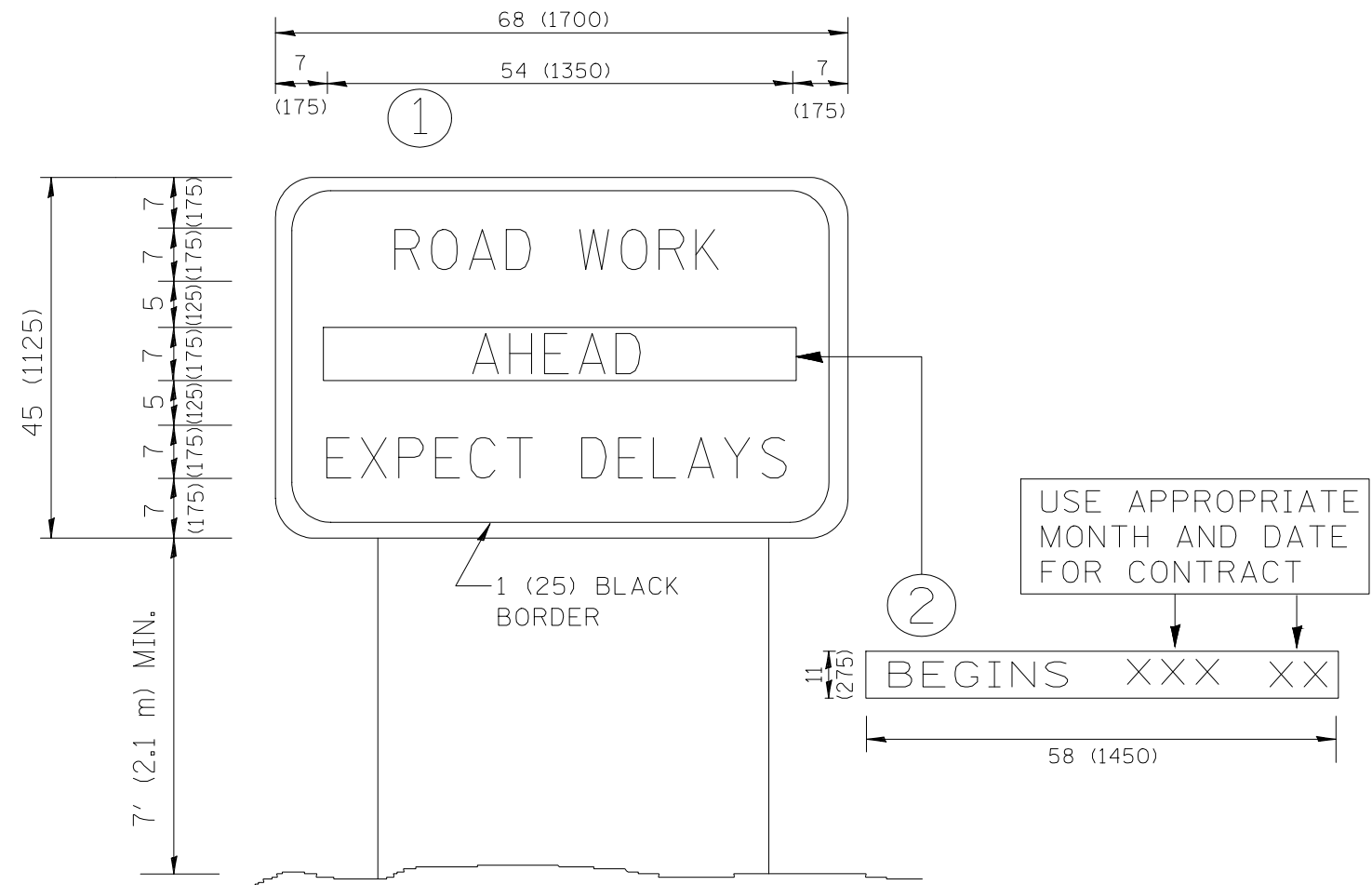
FILE NAME = 14528_02-DTUS-04 - TC13	USER NAME = footemj	DESIGNED -- EVERS	REVISED -- C. JUCIUS 09-09-09
	FILES\District 1\Projects\01	CHECKED -- CADsheets\vol3.dgn	REVISED -- C. JUCIUS 07-01-13
	PLOT SCALE = 50.0000' / in.	DRAWN --	REVISED -- C. JUCIUS 12-21-15
	PLOT DATE = 4/13/2016	CHECKED -- 03-19-90	REVISED -- C. JUCIUS 04-12-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE  
TYPICAL PAVEMENT MARKINGS**

SCALE: NONE	SHEET NO. 28 OF 32 SHEETS	STA. TO STA.	F.A.U. RTE. 1602	SECTION 14-00028-00-SW	COUNTY COOK	TOTAL SHEETS 32	SHEET NO. 28
			TC-13		CONTRACT NO. 61E32		
			FED. ROAD DIST. NO. 1		ILLINOIS FED. AID PROJECT ----		



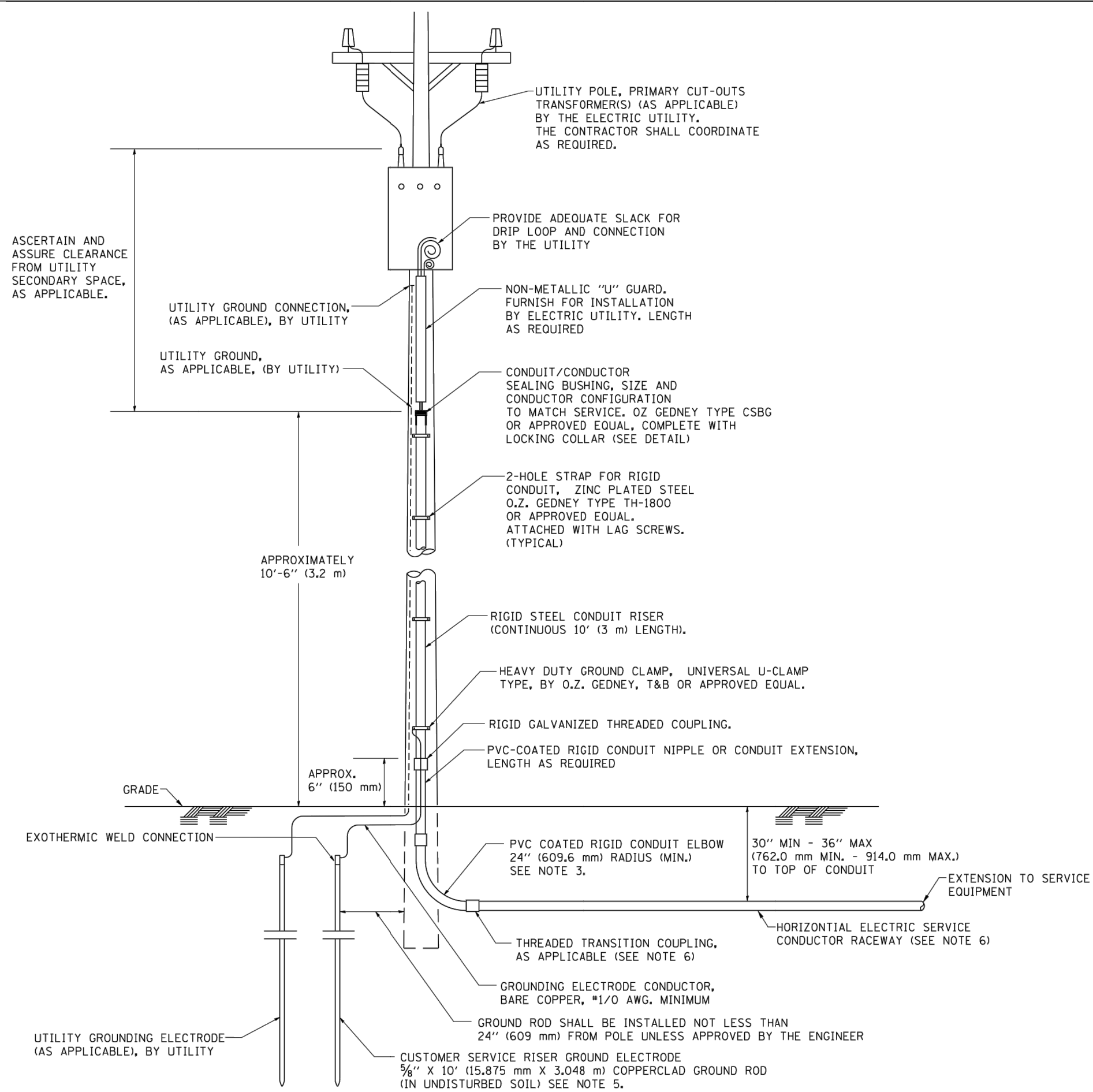


**NOTES:**

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

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

FILE NAME = 14528_02-DTIS-04 - TC22	USER NAME = geglrenobt	DESIGNED —	REVISED — R. MIRS 09-15-97	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ARTERIAL ROAD INFORMATION SIGN</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000' / IN.	CHECKED —	REVISED — R. MIRS 12-11-97					1602	14-00028-00-SW	COOK	32	29
	PLOT DATE = 1/4/2008	DRAWN —	REVISED — T. RAMMACHER 02-02-99					<b>TC-22</b>				CONTRACT NO. 61E32
		CHECKED —	REVISED — C. JUCIUS 01-31-07					SCALE: NONE	SHEET NO. 29 OF 32 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT ----

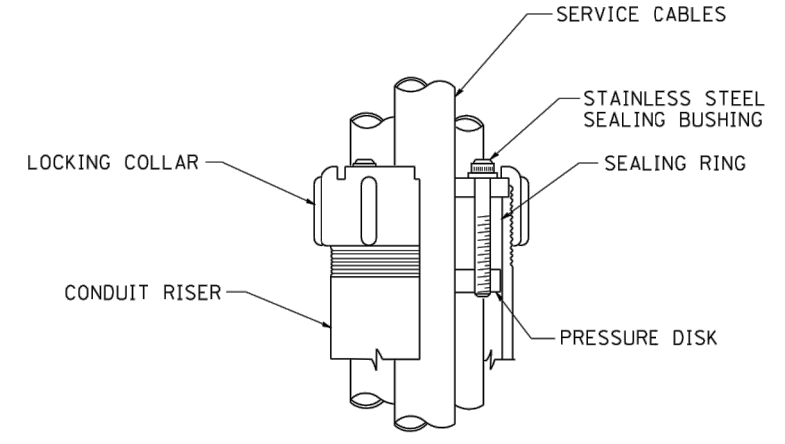


**APPLICATION**

THIS DETAIL APPLIES FOR LOW VOLTAGE ELECTRIC SERVICE (660 V OR LESS) FROM AN OVERHEAD UTILITY SUPPLY TO SEPERATLY-MOUNTED SERVICE EQUIPMENT.

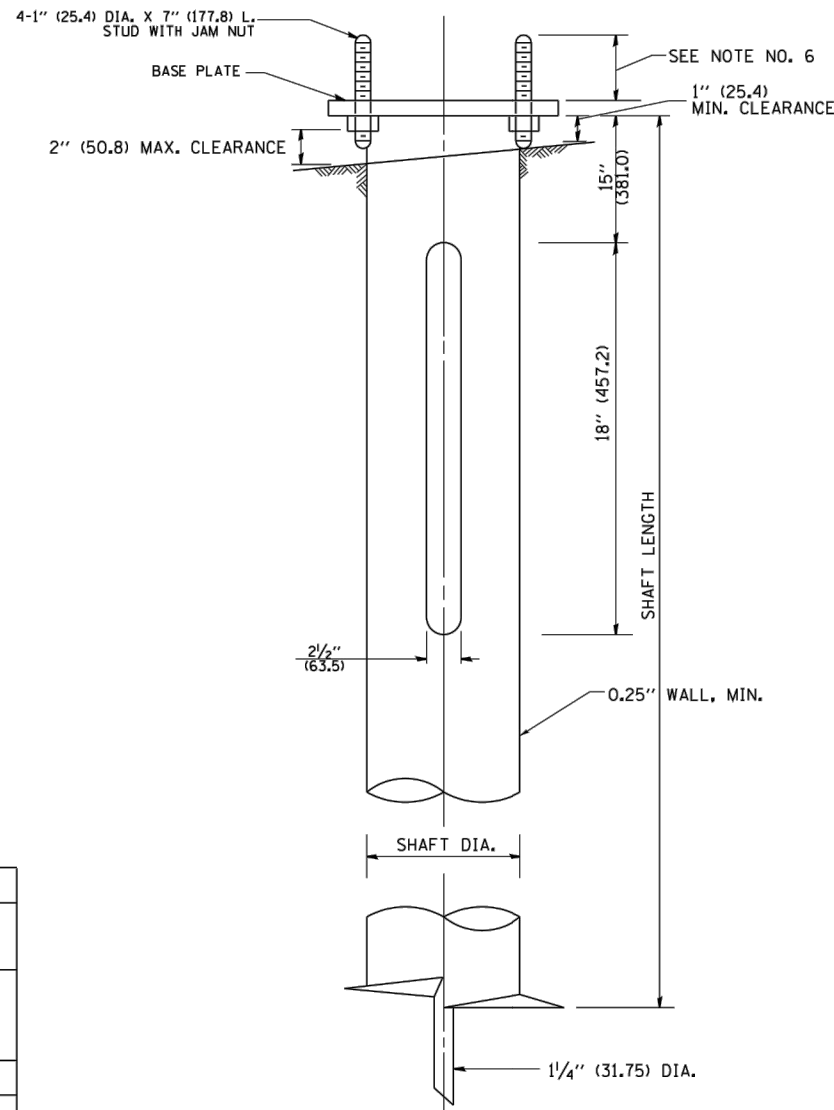
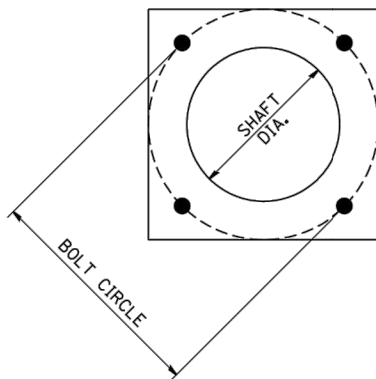
**NOTES**

- SERVICE VOLTAGE SHALL BE AS INDICATED ELSEWHERE IN THE DRAWINGS.
- UNLESS OTHERWISE INDICATED, ITEMS AND WORK SHALL BE INCLUDED AND PAID AS PART OF THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.
- CONDUIT AND CONNECTOR DIAMETER SHALL MATCH THE DIAMETER OF THE SERVICE CONDUCTOR RACEWAY AS INDICATED ON THE PLANS.
- PVC COATED RACEWAYS AND ACCESSORIES SHALL BE CAREFULLY INSTALLED WITH MFR RECOMMENDED TOOLS AND PROCEDURES TO AVOID DAMAGE. ANY DAMAGE SHALL BE REPAIRED WITH COMPATIBLE PVC TOUCH-UP MATERIAL TO THE SATISFACTION OF THE ENGINEER OR THE DAMAGED MATERIAL SHALL BE REPLACED AT NO ADDITIONAL COST.
- THE CONTRACTOR SHALL OBTAIN INSPECTION AND APPROVAL BY THE ENGINEER OF SERVICE RISER GROUND ELECTRODE, RISER ELBOW, NIPPLE AND CONNECTION TO SERVICE CONDUCTOR RACEWAY EXTENSION BEFORE BACKFILL AND SHALL ALSO OBTAIN INSPECTION OF SERVICE RISER AND SEALING BUSHING BEFORE UTILITY "U" GUARD INSTALLATION AND SERVICE CONNECTION.
- THE HORIZONTAL ELECTRIC SERVICE CONDUCTOR RACEWAY SHALL BE AS INDICATED AND SHALL BE MEASURED SEPARATELY FOR PAYMENT. WHEN THE RACEWAY IS PVC-COATED RIGID GALVANIZED STEEL, THE COUPLING SHALL BE THE SAME. WHEN THE RACEWAY IS PVC CONDUIT (IN CONCRETE), THE COUPLING SHALL BE A METALIC TO NON METALIC ADAPTER. WHEN THE RACEWAY IS ENCASED IN CONCRETE, THE CONCRETE SHALL EXTEND TO COVER THE COUPLING.
- PLANS AND DETAILS INDICATE THE GENERAL NATURE AND REQUIREMENTS. THEY DO NOT SHOW EVERY ACCESSORY AND ATTACHMENT, AND THEY DO NOT RELIEVE THE CONTRACTOR OF THE REQUIREMENTS OF THE SPECIFICATIONS AND SPECIAL PROVISIONS TO ASCERTAIN UTILITY REQUIREMENTS AND TO COORDINATE ACCORDINGLY, FURNISHING ALL ITEMS AND WORK NOT PROVIDED BY THE UTILITY, BUT NECESSARY FOR A COMPLETE SERVICE INSTALLATION IS REQUIRED AND SHALL BE INCLUDED IN THE ELECTRIC UTILITY SERVICE INSTALLATION PAY ITEM.



**SEALING BUSHING DETAIL**

FILE NAME = 14528_02-DTIS-04 - BE220	USER NAME = gaglienobt	DESIGNED --	REVISED -- 03-03-06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ELECTRIC SERVICE INSTALLATION AERIAL, REMOTE DISCONNECT</b>			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50,0000' / IN.	CHECKED --	REVISED --					1602	14-00028-00-SW	COOK	32	30
	PLOT DATE = 1/4/2008	DRAWN -- MEA	REVISED --					<b>BE-220</b>			CONTRACT NO. 61E32	
		CHECKED --	REVISED --					SCALE: NONE	SHEET NO. 30	OF 32 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1



**NOTES:**

1. ALL DIMENSION IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
2. ALL MATERIAL SHALL BE GALVANIZED ACCORDING TO AASHTO M111, UNLESS OTHERWISE SPECIFIED.
3. ALL WELDS SHALL BE CONTINUOUS AND NOT LESS THAN 1/4" (6.35 mm) FILLET WELDS. THE WELDED FOUNDATION SHALL BE CAPABLE OF WITHSTANDING 10,000 FT/LBS (13558.18 n.m) OF INSTALLATION TORQUE APPLIED ABOUT THE AXIS OF THE FOUNDATION.
4. THE HELIX FOUNDATION SHAFT SHALL BE INSTALLED VERTICAL AND THE BASE PLATE SHALL BE IN LEVEL. THE BREAKAWAY COUPLINGS AND HARDWARE SHALL NOT BE USED TO ALIGN THE POLE INSTALLATION.
5. THE CABLE TRENCH SHALL BE BACKFILLED AND FIRMLY COMPACTED BEFORE THE INSTALLATION OF THE LIGHT POLE.
6. THE CONTRACTOR SHALL COORDINATE EXTENSION OF ANCHOR BOLTS ABOVE TOP OF THE BASE PLATE WITH THE BREAKAWAY DEVICE MANUFACTURER'S REQUIREMENTS.
7. ANY VOIDS WITHIN THE METAL FOUNDATION SHALL BE FILLED WITH FINE AGGREGATE.
8. METAL FOUNDATIONS SHALL BE INSTALLED IN UNDISTURBED SOIL. PREDRILLING A PILOT HOLE AND/OR BACKFILLING AROUND THE FOUNDATION IS NOT ALLOWED.
9. THE METAL FOUNDATION SHALL NOT BE INSTALLED TO A TORQUE WHICH EXCEEDS THE MANUFACTURER'S MAXIMUM TORQUE RATING NOR SHALL IT BE INSTALLED TO AN INSTALLATION TORQUE VALUE OF LESS THAN 3,500 FT LB (4,750 KNM). METAL FOUNDATIONS THAT ARE NOT INSTALLED TO FULL INSTALLATION DEPTH OR DO NOT ACHIEVE THE MINIMUM INSTALLATION TORQUE SHALL BE REMOVED AND REPLACED WITH A CONCRETE FOUNDATION AT NO ADDITIONAL COST.
10. THE BASEPLATE SHALL BE PERPENDICULAR TO THE SHAFT AXIS ( $\pm 1^\circ$ ) AND THE HOLE CENTERLINE SHALL BE CONCENTRIC ( $\pm 0.188$ ) TO THE SHAFT AXIS.
11. THE PILOT POINT AND SHAFT AXIS SHALL BE CONCENTRIC ( $\pm 0.125$ ) AND IN LINE ( $\pm 2^\circ$ ).
12. THE BASEPLATE SHALL BE STAMPED WITH THE MANUFACTURERS NAME AND DATE OF MANUFACTURE.

**HELIX FOUNDATION SIZE**

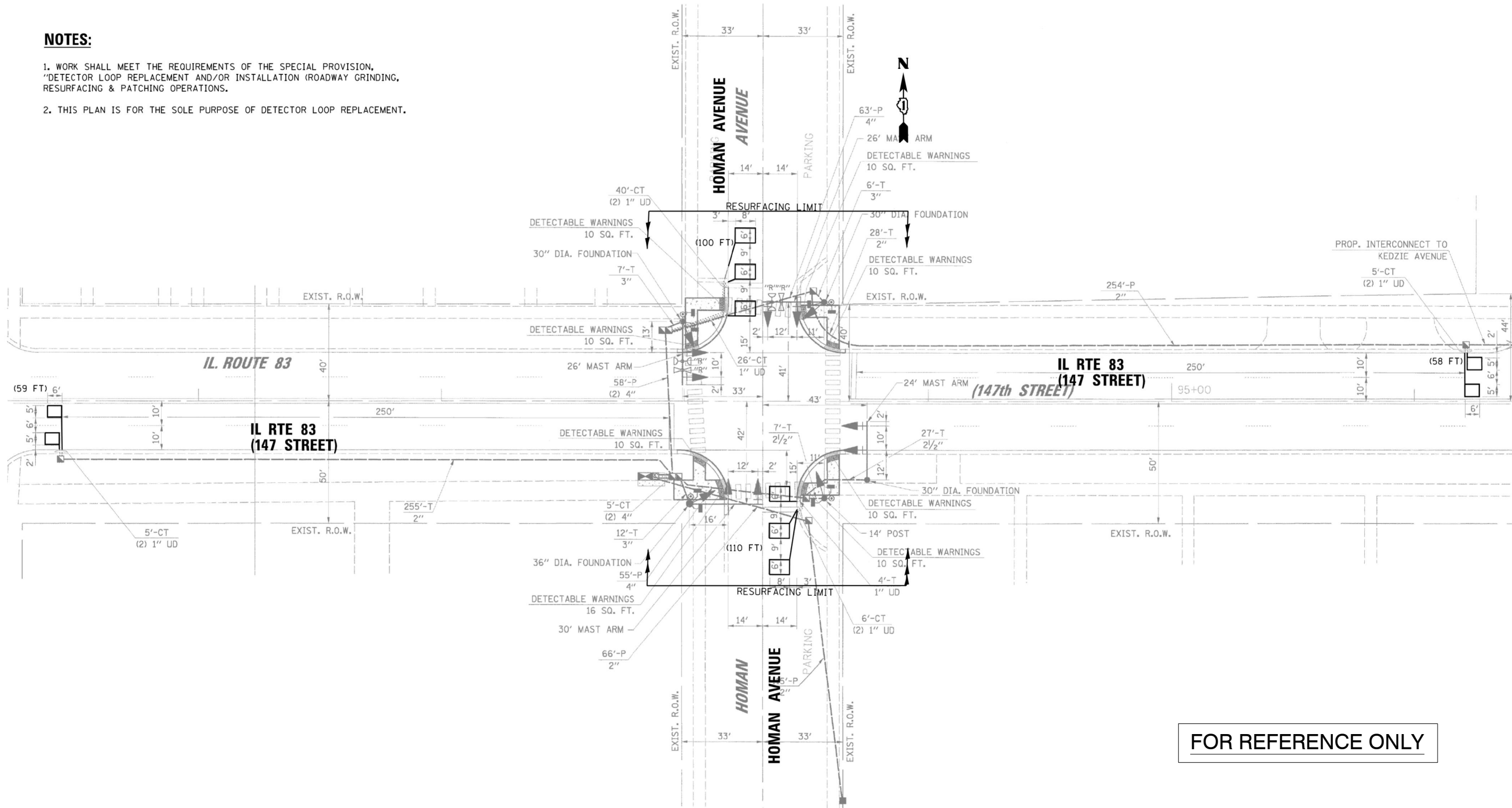
POLE MOUNTING HEIGHT	BOLT CIRCLE	SHAFT DIAMETER	SHAFT LENGTH	BASEPLATE
30 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
31 FT.-35 FT.	11 1/2"	8 5/8"	6 FT.	12"x12"x1"
36 FT.-40 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
41 FT.-45 FT.	15"	8 5/8"	6 FT.	15"x15"x1 1/4"
46 FT.-50 FT.	15"	10"	8 FT.	15"x15"x1 1/4"

**METAL HELIX FOUNDATION MATERIALS**

ITEM	MATERIAL REQUIREMENT
BASEPLATE	AASHTO M 270M, GRADE 36 (M270M, GRADE 250)
SHAFT	ASTM A 252, GRADE 2 (PHOSPHOROUS 0.04% MAXIMUM, SULFUR 0.05% MAXIMUM)
HELIX SCREW	AASHTO M 183 (ASTM A 635)
PILOT POINT	AASHTO M 270 (ASTM A 575)
ANCHOR RODS/STUDS	AASHTO M 314 (ASTM F 1554)
HEXAGON NUTS	AASHTO M 291M (ASTM A 563) GRADE DH, OR AASHTO M 292 (ASTM A 194) GRADE 2H
WASHERS	AASHTO M 293 (ASTM F 436)

**NOTES:**

1. WORK SHALL MEET THE REQUIREMENTS OF THE SPECIAL PROVISION, "DETECTOR LOOP REPLACEMENT AND/OR INSTALLATION (ROADWAY GRINDING, RESURFACING & PATCHING OPERATIONS).
2. THIS PLAN IS FOR THE SOLE PURPOSE OF DETECTOR LOOP REPLACEMENT.



**FOR REFERENCE ONLY**

**REPLACE ALL DETECTOR LOOPS AS SHOWN  
(WITHIN THE RESURFACING LIMITS)**

CODE	ITEM	QUANTITY	UNIT
88600600	DETECTOR LOOP REPLACEMENT	327	FOOT

FILE NAME = TS 3435 ILL RTE B3 & HOMAN AVENUE.1122016.dgn	USER NAME = jovanmardizg	DESIGNED - ZGJ	REVISED -
		DRAWN - ZGJ	REVISED -
		CHECKED - LP	REVISED -
		DATE - 11/22/2016	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETECTOR LOOP REPLACEMENT PLAN  
IL RTE 83 (147 STREET) AT HOMAN AVENUE**

F.A.U. RTE. 1602	SECTION (0406-180506-2)RS-2	COUNTY COOK	TOTAL SHEETS 25	SHEET NO. 14
CONTRACT NO. 62C45				
ILLINOIS FED. AID PROJECT				

FILE NAME = 14528_02-DTIS-03 - IDOT P01	USER NAME =	DESIGNED - SDK	REVISED -
		CHECKED - WPD	REVISED -
		DRAWN - ACAD	REVISED -
		CHECKED - ACAD	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**FAU 1602 (147TH STREET) (IL RTE 83)  
SIDEWALK AND PEDESTRIAN LIGHTING IMPROVEMENTS  
DETECTOR LOOP REPLACEMENT DETAIL REFERENCE SHEET**

F.A.U. RTE. 1602	SECTION 14-00028-00-SW	COUNTY COOK	TOTAL SHEETS 32	SHEET NO. 32
CONTRACT NO. 61E32				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				