

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAP 360 (KIRK ROAD)

KIRK ROAD AT PINE STREET/FERMILAB CAMPUS
RECONSTRUCTION & INTERSECTION IMPROVEMENTS

SECTION 15-00342-01-CH

PROJECT: FLAP(015)

KANE COUNTY

C-91-343-16

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA

2015 ADT = 41,600 (NORTH LEG), 43,800 (SOUTH LEG),
4,150 (WEST LEG), 2,600 (EAST LEG)
2020 ADT = 43,000 (NORTH LEG), 45,200 (SOUTH LEG),
4,300 (WEST LEG), 2,950 (EAST LEG)

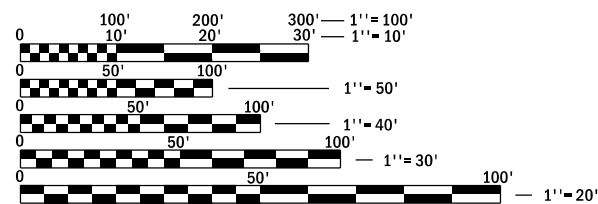
DESIGN/ POSTED SPEED

POSTED SPEED: 45 MPH (NORTH/SOUTH LEGS), 30 MPH (EAST/WEST LEGS)
DESIGN SPEED: 45 MPH (NORTH/SOUTH LEGS), 30 MPH (EAST/WEST LEGS)

DESIGN DESIGNATION

OTHER PRINCIPAL ARTERIAL (KIRK ROAD)
MAJOR COLLECTOR (PINE STREET)
LOCAL ROAD (FERMILAB ENTRANCE ROAD)

PROJECT LOCATED IN THE CITY OF BATAVIA



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



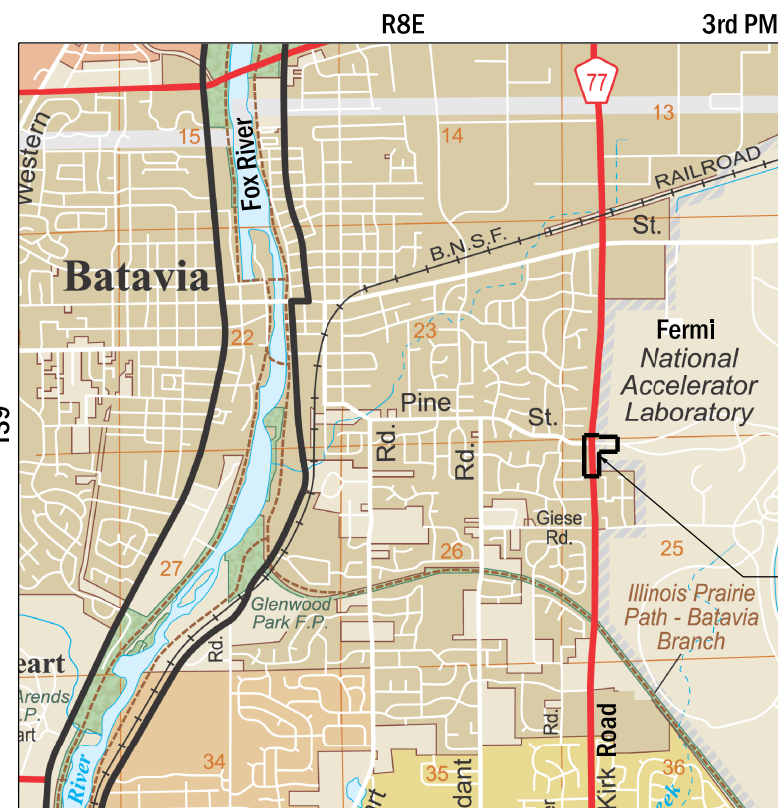
CONTRACT NO. 61E75



MARCH 16, 2018
Matthew Baldwin
MATTHEW BALDWIN
ILLINOIS REG. PROFESSIONAL ENGINEER NO. 062-063297
EXPIRATION DATE 11-30-2019
SHEETS 1-24, 30-42



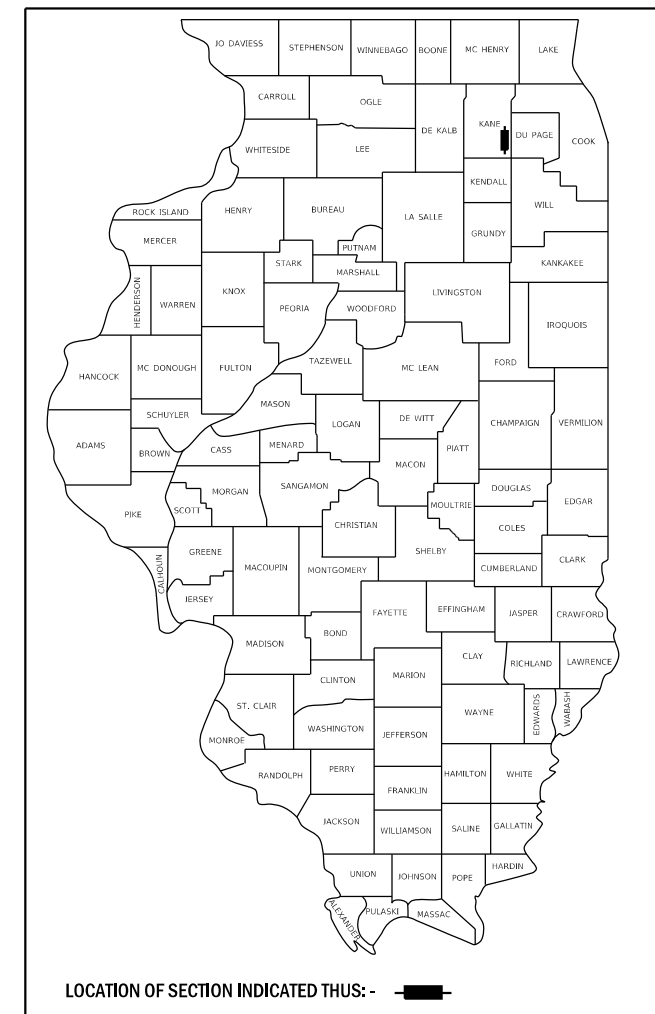
MARCH 16, 2018
Daniel P. Brinkman
DANIEL P. BRINKMAN
ILLINOIS REG. PROFESSIONAL ENGINEER NO. 062-055293
EXPIRATION DATE 11-30-2019
SHEETS 25-29



BATAVIA TOWNSHIP
PROJECT GROSS/NET LENGTH = 1079 LIN FT (0.20 MILE)

PROJECT LIMITS
STA. 120+56.87 TO
STA. 129+35.13 (KIRK ROAD)
STA. 55+87.47 TO
STA. 57+87.81 (PINE STREET)

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	1
		ILLINOIS	CONTRACT NO. 61E75	



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

APPROVED 02-08-2018
[Signature]
COUNTY OF KANE, COUNTY ENGINEER

PASSED MARCH 13, 2018
Carl Christopher Holt
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW MARCH 13, 2018
Anthony J. Quigley
REGIONAL ENGINEER

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PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E., SCHAUMBURG, IL

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE APPLICABLE REQUIREMENTS SET FORTH IN "THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016 THEREINAFTER REFERRED TO AS STANDARD SPECIFICATIONS, THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" IN EFFECT ON THE DATE OF INVITATION FOR BIDS; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" LATEST EDITION; INTERIM SPECIAL PROVISIONS AS INCLUDED IN THE CONTRACT DOCUMENTS; AND THE DETAILS AND STANDARDS CONTAINED IN THESE PLANS.
- BEFORE STARTING ANY EXCAVATIONS, THE CONTRACTOR SHALL CALL "JULIE" AT 1-800-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS FACILITIES. (48 HOUR NOTIFICATION IS REQUIRED)
- THE LOCATIONS OF THE EXISTING UTILITIES, AS SHOWN ON THE DRAWINGS, REPRESENT DATA RECEIVED FROM VARIOUS SOURCES. IT IS NOT GUARANTEED TO BE CORRECT OR ALL INCLUSIVE. THE CONTRACTOR SHALL CONDUCT HIS OWN INVESTIGATIONS INTO THE LOCATION, SIZE, DEPTH, AND NATURE OF ANY AND ALL EXISTING UTILITIES WHICH MAY INTERFERE WITH THE WORK UNDER THIS CONTRACT. ANY EXISTING UTILITIES WHICH ARE TO REMAIN IN SERVICE SHALL BE FULLY PROTECTED BY THE CONTRACTOR AND ANY DAMAGE CAUSED BY THE CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED AT NO ADDITIONAL COST IN ACCORDANCE WITH ARTICLE 105.07.
- ALL WORK SHALL BE COMPLETED WITHIN THE LIMITS OF THE PROJECT SHOWN. NO EQUIPMENT, MATERIAL YARD OR FIELD OFFICE SHALL BE SET UP OR STORED ON COUNTY OR PRIVATE PROPERTY WITHOUT WRITTEN PERMISSION OF THE ENGINEER.
- MAINTENANCE OF TRAFFIC - GENERAL: TRAFFIC CONDITIONS, ACCIDENTS AND OTHER UNFORESEEN EMERGENCY CONDITIONS MAY REQUIRE THE ENGINEER TO RESTRICT, MODIFY OR REMOVE LANE CLOSURES OR CHANNELIZATION SHOWN IN THE PLANS. THE CONTRACTOR SHALL RESPOND WITHIN 30 MINUTES OF THE TIME OF NOTIFICATION BY THE ENGINEER FOR THE MAINTENANCE OF TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

UTILITY	CONTACT	CONTACT INFORMATION
ATT	JANET AHERN	1000 COMMERCE DRIVE OAK BROOK, IL 60523 (630) 573-6414 JA1763@ATT.COM
CITY OF BATAVIA	RAHAT BARI, P.E.	100 N ISLAND AVENUE BATAVIA, IL 60510-1930 RBARI@CITYOFBATAVIA.NET
COMCAST	MARTHA GIERAS	688 INDUSTRIAL DRIVE ELMHURST, IL 60126 (630) 600-6352 MARTHA_GIERAS@CABLE.COMCAST.COM
COMMONWEALTH EDISON (POWER LINES)	AARON BABU	1 LINCOLN CENTRE OAKBROOK TERRACE, IL 60181 (708) 683-9348 AARON.BABU@COMED.COM
COMMONWEALTH EDISON (FIBER OPTIC)	AL HERRERA	565 WILLOWBROOK CENTRE PKWY WILLOWBROOK, IL 60527 (815) 482-7566 ALVARRO.HERRERA@ADESTAGROUP.COM
G4S	DOUG GONES	565 WILLOWBROOK CENTRE PKWY WILLOWBROOK, IL 60527 (630) 343-2826 DOUGLAS.GONES@USA.G4S.COM
KDOT	KURT NIKA	41W011 BURLINGTON ROAD CAMPTON HILLS, IL 60175 (630) 584-1170 NIKAKURT@CO.KANE.IL.US
NICOR GAS	BRUCE KOPPANG	1844 FERRY ROAD NAPERVILLE, IL 60563 (630) 388-3046 GASMAPS@AGLRESOURCES.COM

EARTHWORK AND ROADWAY

- GEOTECHNICAL FABRIC FOR GROUND STABILIZATION:
ITEM NO. 21001000 GEOTECHNICAL FABRIC FOR GROUND STABILIZATION WILL ONLY BE UTILIZED IN AREAS THAT HAVE BEEN IDENTIFIED AS SUBGRADE UNDERCUT AREAS OR WHERE DETERMINED IN THE FIELD BY A GEOTECHNICAL ENGINEER, THE FABRIC WILL BE USED IN COMBINATION WITH AGGREGATE SUBGRADE IMPROVEMENT. THE QUANTITY INCLUDED IN THE PLANS IS BASED ON THE SUBSURFACE INVESTIGATION PREPARED BY TESTING SERVICE CORPORATION RECOMMENDATIONS FOR UNDERCUT AREAS.
- ALL EXCAVATION AND EMBANKMENT LOCATIONS REQUIRING SEEDING SHALL BE CONSTRUCTED TO 6 INCHES BELOW FINISHED GRADE LINE TO ALLOW TOPSOIL PLACEMENT.
- PAVEMENT ELEVATIONS: THE ELEVATIONS SHOWN ON THE PLANS ARE FINISHED GRADES FOR THE PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.
- AGGREGATE SUBGRADE IMPROVEMENT (CU YD) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSTABLE AND/OR UNSUITABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH AGGREGATE SUBGRADE IMPROVEMENT (CU YD) WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE GEOTECHNICAL ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHOULD BE TESTED WITH A STATIC CONE AND/OR DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLE 301.04 (04/01/2016) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND THE CURRENT IDOT SUBGRADE STABILITY MANUAL. IF UNSTABLE AND/OR UNSUITABLE SOILS ARE NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE TO THE CONTRACTOR.

SURVEY DATUM

THE HORIZONTAL DATUM IS NAD 83 AND THE VERTICAL DATUM IS NAVD 88.

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS & STANDARDS
3-6	SUMMARY OF QUANTITIES
7-8	TYPICAL SECTIONS
9	ALIGNMENT, TIES & BENCHMARKS
10-11	REMOVAL PLANS
12-14	PLAN & PROFILES
15-18	MAINTENANCE OF TRAFFIC PLAN
19-20	EROSION & SEDIMENT CONTROL PLAN
21-22	EROSION & SEDIMENT CONTROL NOTES & DETAILS
23-24	PAVEMENT MARKING & SIGNING PLAN
25-29	SIGNAL PLANS
30	ADA DETAILS
31-42	STANDARD DRAWINGS

HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001-10	PERPENDICULAR CURB RAMPS
424006-03	DIAGONAL CURB RAMPS
424011-03	CORNER PARALLEL CURB RAMPS
424016-04	MID-BLOCK CURB RAMPS FOR SIDEWALKS
424021-04	DEPRESSED CORNER FOR SIDEWALKS
442201-03	CLASS C & D PATCHES
601001-05	PIPE UNDERDRAINS
602001-02	CATCH BASIN, TYPE A
602301-04	INLET, TYPE A
602401-04	PRECAST MANHOLE TYPE A 4' DIAMETER
602701-02	MANHOLE STEPS
604001-04	FRAME AND LIDS TYPE 1
604051-04	FRAME AND GRATE TYPE 11
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
701426-09	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH
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
720001-01	SIGN PANEL MOUNTING DETAILS
720006-04	SIGN PANEL ERECTION DETAILS
728001-01	TELESCOPING STEEL SIGN SUPPORT
780001-05	TYPICAL PAVEMENT MARKINGS
877001-07	STEEL MAST ARM ASSEMBLY AND POLE 16' THROUGH 55'
878001-10	CONCRETE FOUNDATION DETAILS

DISTRICT STANDARDS

STANDARD NO.	DESCRIPTION
BD-07	STORM SEWER CONNECTION TO EXISTING SEWER
BD-32	BUTT JOINT AND HMA TAPER DETAILS
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-16	SHORT-TERM PAVEMENT MARKING LETTERS AND SYMBOLS
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS (7 SHEETS)

FILE NAME = W:\Projects\2017\170286_KirkPine\PHILCAD\DWG\INDEX\170286-GENNOTE.dgn



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PLOT DATE = 8/15/2018	CHECKED - MNB	REVISED -
	DATE - 8/16/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**KIRK AT PINE INTERSECTION IMPROVEMENTS
GENERAL NOTES, INDEX OF SHEETS & STANDARDS**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	2
CONTRACT NO.61E75				
		ILLINOIS	FED. AID PROJECT X	

SUMMARY OF QUANTITIES

SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
						80% FEDERAL 20% STATE		100% LOCAL
						ROADWAY 0004 URBAN	SIGNALS 0021 URBAN	ROADWAY 0043 URBAN
		20101000	TEMPORARY FENCE	FOOT	115	115		
		20200100	EARTH EXCAVATION	CU YD	239	239		
		20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	38	38		
		21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	226	226		
		21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1,895	1,895		
		25000210	SEEDING, CLASS 2A	ACRE	0.5	0.5		
		25000400	NITROGEN FERTILIZER NUTRIENT	POUND	36	36		
		25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	36	36		
		25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	36	36		
		25100630	EROSION CONTROL BLANKET	SQ YD	2,085	2,085		
		28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	40	40		
		28000400	PERIMETER EROSION BARRIER	FOOT	1,137	1,137		
		28000510	INLET FILTERS	EACH	7	7		
	S	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	38	38		
	S	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	902	902		
		31101400	SUBBASE GRANULAR MATERIAL, TYPE B 6"	SQ YD	101	101		
		35501322	HOT-MIX ASPHALT BASE COURSE, 9 1/2"	SQ YD	349	349		
		35600714	HOT-MIX ASPHALT BASE COURSE WIDENING, 9 1/2"	SQ YD	308	308		
		40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	3,351	297		3,054
		40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	3	3		
		40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), 1L-4.75, N50	TON	283	28		255
		40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	487			487
		40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	9	9		594
		40800025	BITUMINOUS MATERIALS (PRIME COAT)	POUND	218	218		
		40800029	BITUMINOUS MATERIALS (TACK COAT)	POUND	44	44		
		42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	745	745		
		42400800	DETECTABLE WARNINGS	SQ FT	77	77		
		44000100	PAVEMENT REMOVAL	SQ YD	202	202		
		44000159	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/2"	SQ YD	6,007			6,007
		44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	973	973		
		44000600	SIDEWALK REMOVAL	SQ FT	205	205		
		44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	5	5		

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**KIRK AT PINE INTERSECTION IMPROVEMENTS
SUMMARY OF QUANTITIES**

SCALE: SHEET 1 OF 4 SHEETS STA. TO STA.

FAP RTE. 360	SECTION 15-00342-01-CH	COUNTY KANE	TOTAL SHEETS 42	SHEET NO. 3
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				

SUMMARY OF QUANTITIES

SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
						80% FEDERAL 20% STATE		100% LOCAL
						ROADWAY 0004 URBAN	SIGNALS 0021 URBAN	ROADWAY 0043 URBAN
		44201794	CLASS D PATCHES, TYPE III, 12 INCH	SQ YD	40	40		
		44201863	CLASS D PATCHES, TYPE II, 18 INCH	SQ YD	12	12		
		550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	56	56		
		55100500	STORM SEWER REMOVAL 12"	FOOT	7	7		
		55100900	STORM SEWER REMOVAL 18"	FOOT	10	10		
		59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	8	8		
		60108204	PIPE UNDERDRAINS, TYPE 2, 4"	FOOT	661	661		
		60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	2	2		
		60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1		
		60236800	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	1	1		
		60255800	MANHOLES TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID	EACH	2	2		
		60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1,008	1,008		
		67100100	MOBILIZATION	LSUM	1	1		
		70300100	SHORT TERM PAVEMENT MARKING	FOOT	580	580		
		70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	200	200		
		70300510	PAVEMENT MARKING TAPE, TYPE III - LETTERS AND SYMBOLS	SQ FT	74	74		
		70300520	PAVEMENT MARKING TAPE, TYPE III 4"	FOOT	4,518	4,518		
		70300560	PAVEMENT MARKING TAPE, TYPE III 12"	FOOT	20	20		
*		72000100	SIGN PANEL - TYPE 1	SQ FT	10	10		
*		72400100	REMOVE SIGN PANEL ASSEMBLY - TYPE A	EACH	1	1		
*		72400500	RELOCATE SIGN PANEL ASSEMBLY - TYPE A	EACH	2	2		
*		72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	15	15		
*		78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	146	146		
*		78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	180	180		
+		78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	4,955	4,955		
*		78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	456	456		
*		78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	455	455		
*		78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	140	140		
*		78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	35	35		
*	S	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	255		255	
*	S	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	32		32	
*	S	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	15		15	

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**KIRK AT PINE INTERSECTION IMPROVEMENTS
SUMMARY OF QUANTITIES**

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

FAP RTE. 360	SECTION 15-00342-01-CH	COUNTY KANE	TOTAL SHEETS 42	SHEET NO. 4
CONTRACT NO. 61E75			ILLINOIS FED. AID PROJECT X	

SUMMARY OF QUANTITIES

SPECIALTY ITEM	SPECIAL PROVISION	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
						80% FEDERAL 20% STATE		100% LOCAL
						ROADWAY 0004	SIGNALS 0021	ROADWAY 0043
						URBAN	URBAN	URBAN
*		81400100	HANDHOLE	EACH	1			
*		81702450	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	FOOT	198		198	
*	S	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1		1	
*		87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	342		342	
*		87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	181		181	
*		87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	374		374	
*		87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	393		393	
*		87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	776		776	
		87301615	ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	169		169	
*		87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	66		66	
*		87502500	TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1		1	
*		87800100	CONCRETE FOUNDATION, TYPE A	FOOT	8		8	
*		87800400	CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	13		13	
*		87900200	DRILL EXISTING HANDHOLE	EACH	4		4	
*		88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1		1	
*		88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1		1	
*		88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	5		5	
*	S	88600100	DETECTOR LOOP, TYPE I	FOOT	70		70	
*		88800100	PEDESTRIAN PUSH-BUTTON	EACH	4		4	
*	S	89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1		1	
*	S	89500100	RELOCATE EXISTING SIGNAL HEAD	EACH	3		3	
*		89501300	RELOCATE EXISTING MAST ARM ASSEMBLY AND POLE	EACH	1		1	
*	S	89501400	RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1		1	
*		89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	931		931	
*		89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1		1	
*		89502380	REMOVE EXISTING HANDHOLE	EACH	1		1	
*		89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	1		1	
*	S	X0323986	RELOCATE EXISTING VIDEO VEHICLE DETECTOR	EACH	1		1	
*	S	X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	191		191	
	S	X0326806	WASHOUT BASIN	LSUM	1	1		
	S	X0327036	BIKE PATH REMOVAL	SQ YD	100	100		
	S	X0327980	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	725	725		

FILE NAME = \\P:\projects\2017\170286 - Kirk Pine Intersection\Drawings\170286-S00-03.dgn



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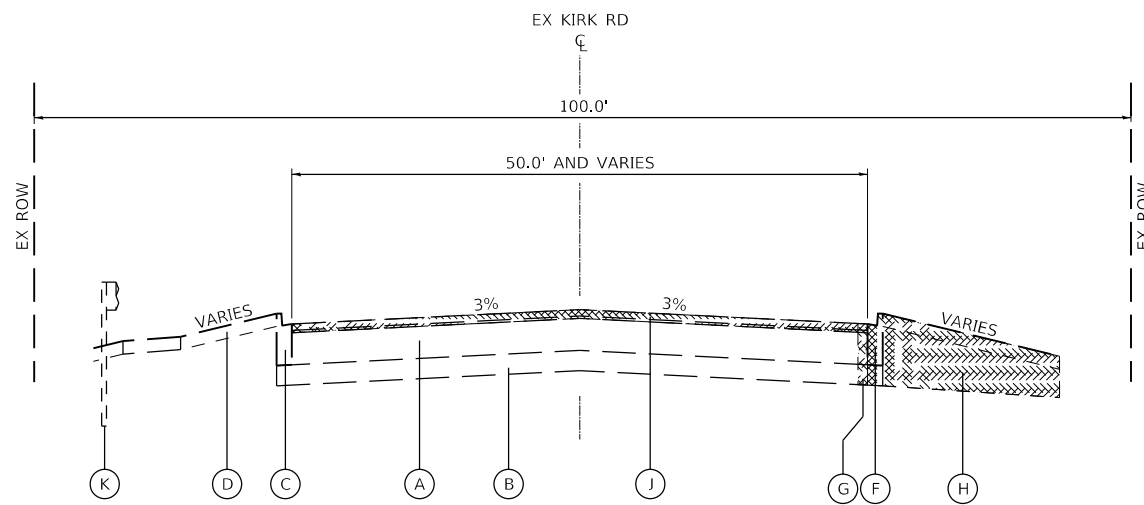
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**KIRK AT PINE INTERSECTION IMPROVEMENTS
SUMMARY OF QUANTITIES**

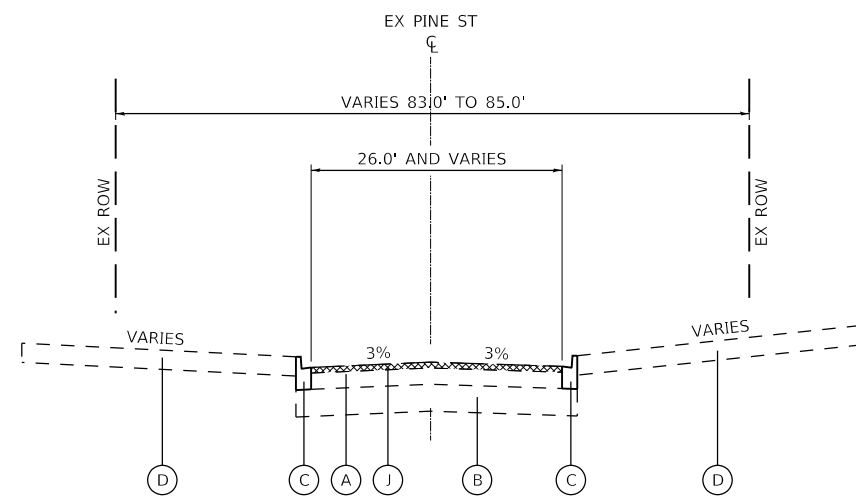
SCALE: SHEET 3 OF 4 SHEETS STA. TO STA.

FAP RTE. 360	SECTION 15-00342-01-CH	COUNTY KANE	TOTAL SHEETS 42	SHEET NO. 5
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				



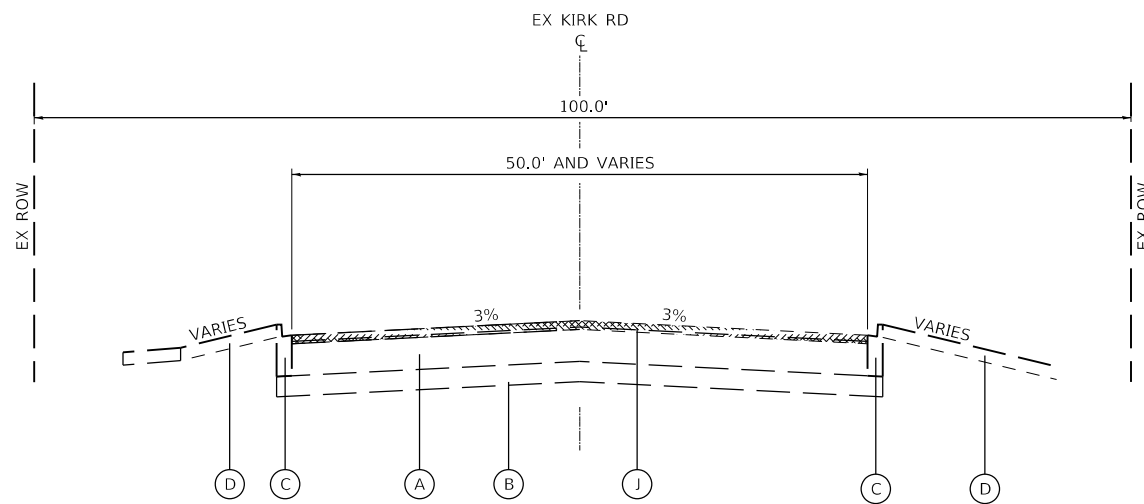
EXISTING TYPICAL SECTION 1

KIRK ROAD
 STA. 120+56.87 TO STA. 128+87.57
 (SOUTH OF PINE STREET)



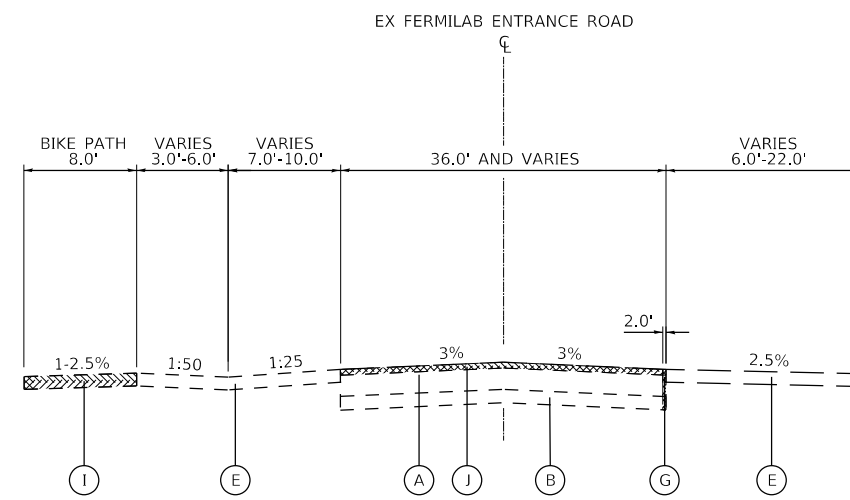
EXISTING TYPICAL SECTION 3

PINE STREET
 STA. 55+87.47 TO STA. 56+77.69



EXISTING TYPICAL SECTION 2

KIRK ROAD
 STA. 128+87.57 TO STA. 129+35.13
 (NORTH OF PINE STREET)



EXISTING TYPICAL SECTION 4

FERMI LAB ENTRANCE ROAD
 STA. 56+77.69 TO STA. 57+87.81

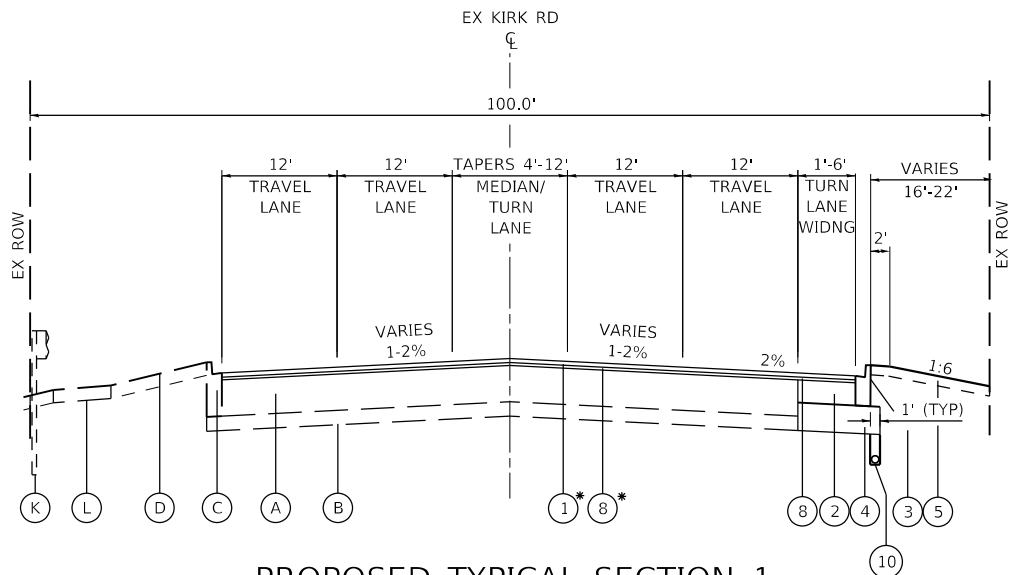
EXISTING LEGEND

- (A) HMA PAVEMENT STRUCTURE
 KIRK ROAD 18"
 PINE STREET 9 3/4"
 FERMI LAB ENTR 12"
- (B) CRUSHED STONE SUBBASE
 KIRK ROAD 6"
 PINE STREET 12"
 FERMI LAB ENTR 6"
- (C) COMBINATION CURB AND GUTTER, TYPE B-6.12
- (D) EXISTING GROUND
- (E) AGG. SHOULDER
- (F) COMBINATION CURB AND GUTTER REMOVAL (44000500)
- (G) PAVEMENT REMOVAL (44000100)
- (H) EARTH EXCAVATION (20200100)
- (I) BIKE PATH REMOVAL (X0327036)
- (J) HMA SURFACE REMOVAL 2 1/2" (44000159)
- (K) EXIST. GUARDRAIL (TO REMAIN)
- (L) HMA PATH (TO REMAIN)

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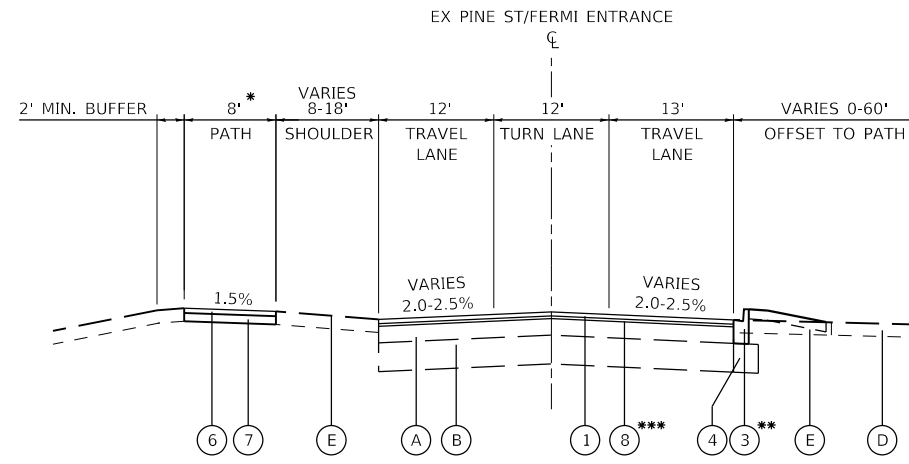
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360	15-00342-01-CH	KANE	42	7
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				



PROPOSED TYPICAL SECTION 1

KIRK ROAD
STA. 120+56.87 TO STA. 126+22.74
(SOUTH OF PINE STREET)

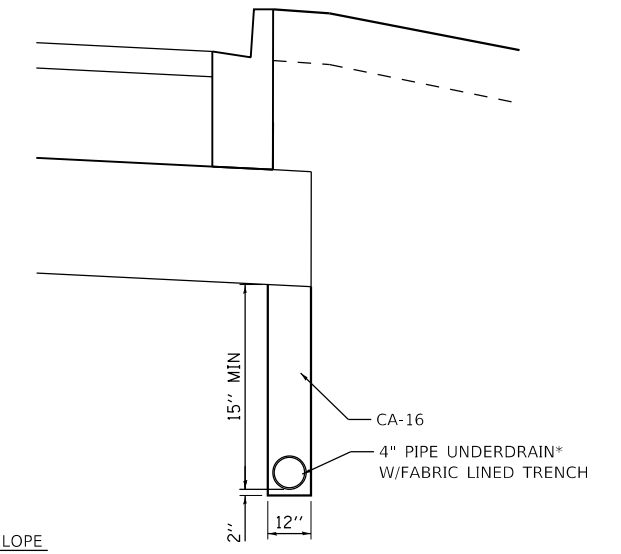
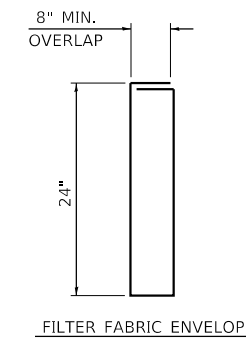
* THE ENTIRE SURFACE, EOP TO EOP, SHALL HAVE NEW SURFACE AND LEVELING COURSES LIMITS STA. 120+56.87 TO STA. 129+35.13



PROPOSED TYPICAL SECTION 3

PINE STREET/FERMLAB ENTRANCE ROAD
STA. 55+81.47 TO STA. 57+87.81

* PROPOSED PATH LIMITS STA. 57+30.00 TO 58+03.00 (PATH REALIGNMENT)
** PROPOSED COMB. CURB AND GUTTER STA. 57+62.00 TO 57+87.81
*** THE ENTIRE SURFACE, EOP TO EOP, SHALL HAVE NEW SURFACE AND LEVELING COURSES LIMITS STA. 55+87.47 TO STA. 57+87.81



PIPE UNDERDRAIN DETAIL

KIRK ROAD
STA. 122+00.00 TO STA. 128+29.40

EXISTING LEGEND

- | | |
|--|--|
| (A) HMA PAVEMENT STRUCTURE
KIRK ROAD 18"
PINE STREET 9 3/4"
FERMILAB ENTR 12" | (F) COMBINATION CURB AND GUTTER REMOVAL (44000500) |
| (B) CRUSHED STONE SUBBASE
KIRK ROAD 6"
PINE STREET 12"
FERMILAB ENTR 6" | (G) PAVEMENT REMOVAL (44000100) |
| (C) COMBINATION CURB AND GUTTER, TYPE B-6.12 | (H) EARTH EXCAVATION (20200100) |
| (D) EXISTING GROUND | (I) BIKE PATH REMOVAL (X0327036) |
| (E) AGG. SHOULDER | (J) HMA SURFACE REMOVAL 2 1/2" (44000159) |
| | (K) EXIST. GUARDRAIL (TO REMAIN) |
| | (L) HMA PATH (TO REMAIN) |

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

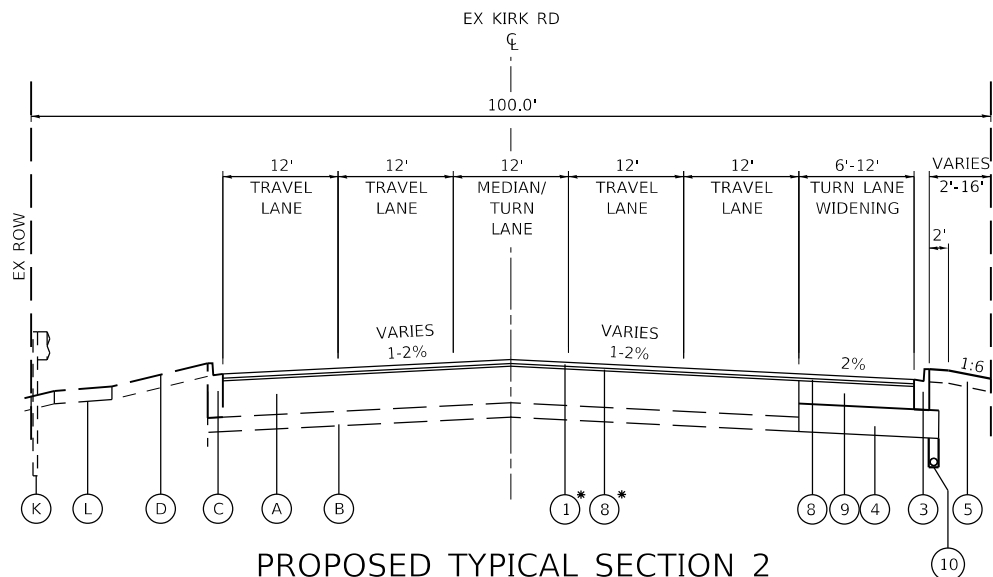
ITEM	AIR VOIDS @ Ndes
KIRK ROAD - RESURFACING	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80, 1 3/4"	3.5% @ 80 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"	3.5% @ 50 GYR.
KIRK ROAD - PAVEMENT WIDENING	
POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80, 1 3/4"	3.5% @ 80 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 3/4"	3.5% @ 50 GYR.
HOT-MIX ASPHALT BASE COURSE, (HMA BINDER IL-19.0 mm) 9 1/2" (2 1/4" MIN.)	4% @ 90 GYR.
HOT-MIX ASPHALT BASE COURSE WIDENING, (HMA BINDER IL-19.0 mm) 9 1/2" (2 1/4" MIN.)	4% @ 90 GYR.
HMA PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm), (2 1/4" MIN.)	4% @ 70 GYR.
HMA BIKE PATH	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm), 3"	4% @ 50 GYR.
TEMPORARY RAMP	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	4% @ 70 GYR.

PROPOSED LEGEND

- | |
|--|
| (1) 1 3/4" - POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 (40603153) |
| (2) HOT-MIX ASPHALT BASE COURSE WIDENING, 9 1/2" (35600714) (WIDTH ≤ 6 FT) |
| (3) COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (60603800) |
| (4) AGGREGATE SUBGRADE IMPROVEMENT 12" (30300112) |
| (5) TOPSOIL FURNISH AND PLACE, 4" (21101615) |
| (6) 3" - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (40603335) |
| (7) SUBBASE GRANULAR MATERIAL, TYPE B 6" (31101400) |
| (8) 3/4" - POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 (40600827) |
| (9) HOT-MIX ASPHALT BASE COURSE, 9 1/2" (35501322) (WIDTH > 6 FT) |
| (10) PIPE UNDERDRAINS, TYPE 2, 4" (60108204) |

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LB/SQ YD/IN.

THE AC TYPE FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.



PROPOSED TYPICAL SECTION 2

KIRK ROAD
STA. 126+22.74 TO STA. 128+61.60
(SOUTH OF PINE STREET)

* THE ENTIRE SURFACE, EOP TO EOP, SHALL HAVE NEW SURFACE AND LEVELING COURSES LIMITS STA. 120+56.87 TO STA. 129+35.13

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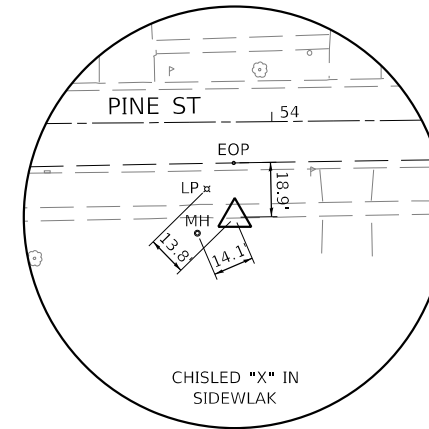
PT Sta 138+58.85
N 1885494.152
E 998942.981
(NOT SHOWN)

PI Sta 134+95.88
N 1885132.536
E 998907.568

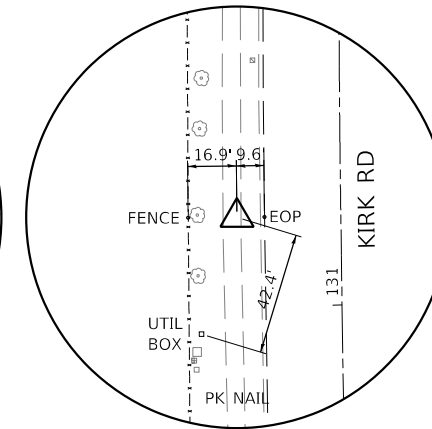
CURVE DATA

EXIST. CURVE KIRK-1
PI STA. = 134+96.26
Δ = 6° 23' 56" (RT)
D = 0° 52' 53"
R = 6,500.00'
T = 363.35'
L = 725.94'
E = 10.15'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 131+32.91
P.T. STA. = 138+58.85

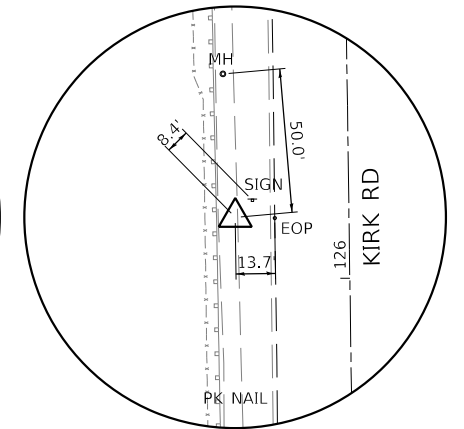
EXIST. CURVE PINE-1
PI STA. = 51+18.77
Δ = 40° 22' 14" (LT)
D = 17° 44' 06"
R = 323.07'
T = 118.77'
L = 227.63'
E = 21.14'
e = _____
T.R. = _____
S.E. RUN = _____
P.C. STA. = 50+00.00
P.T. STA. = 52+27.63



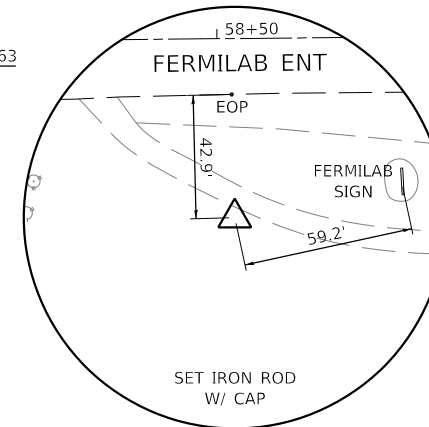
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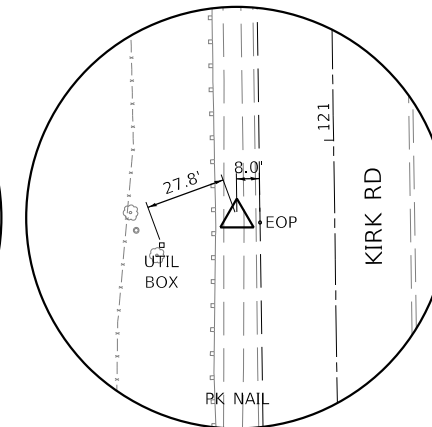
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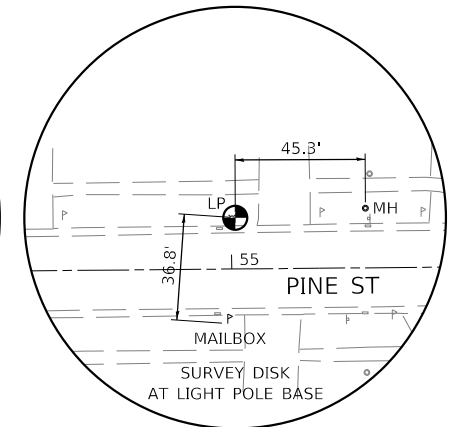
HORIZONTAL CONTROL POINT NO. 4



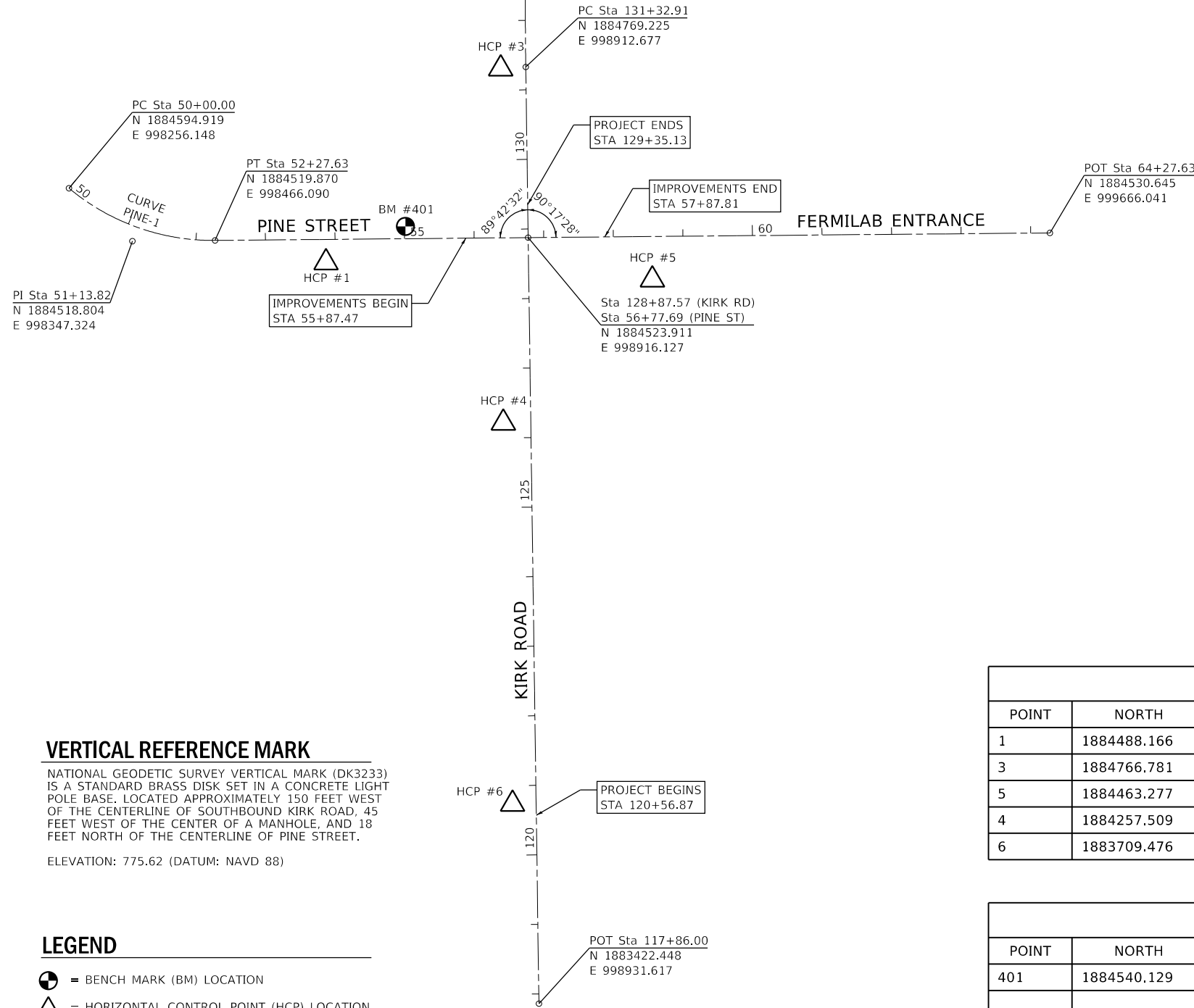
HORIZONTAL CONTROL POINT NO. 5



HORIZONTAL CONTROL POINT NO. 6



BENCH MARK NO. 401



VERTICAL REFERENCE MARK

NATIONAL GEODETIC SURVEY VERTICAL MARK (DK3233) IS A STANDARD BRASS DISK SET IN A CONCRETE LIGHT POLE BASE. LOCATED APPROXIMATELY 150 FEET WEST OF THE CENTERLINE OF SOUTHBOUND KIRK ROAD, 45 FEET WEST OF THE CENTER OF A MANHOLE, AND 18 FEET NORTH OF THE CENTERLINE OF PINE STREET.

ELEVATION: 775.62 (DATUM: NAVD 88)

LEGEND

- = BENCH MARK (BM) LOCATION
- = HORIZONTAL CONTROL POINT (HCP) LOCATION

HORIZONTAL CONTROL POINTS (NAD 83)

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
1	1884488.166	998625.552	777.10	EX_PINE	53+86.80	33.13' RT	CHISLED "X" IN SIDEWALK
3	1884766.781	998876.629	775.05	EX_KIRK	131+30.97	36.08' LT	PK NAIL
5	1884463.277	999094.610	773.45	EX_PINE	58+55.62	62.23' RT	SET IRON ROD WITH CAP
4	1884257.509	998880.371	778.05	EX_KIRK	126+21.70	39.50' LT	PK NAIL
6	1883709.476	998893.651	777.90	EX_KIRK	120+73.53	33.93 LT	PK NAIL

BENCH MARKS (NAVD 88)

POINT	NORTH	EAST	ELEVATION	CHAIN	STATION	OFFSET	DESCRIPTION
401	1884540.129	998739.682	775.68	EX_PINE	55+01.40	17.80' LT	SURVEY DISK AT LIGHT POLE BASE, NGS VERTICAL MARK (DK3233)

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USER NAME = rsikes	DESIGNED - RMS	REVISED -
PLOT SCALE = 1:200	DRAWN - RMS	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

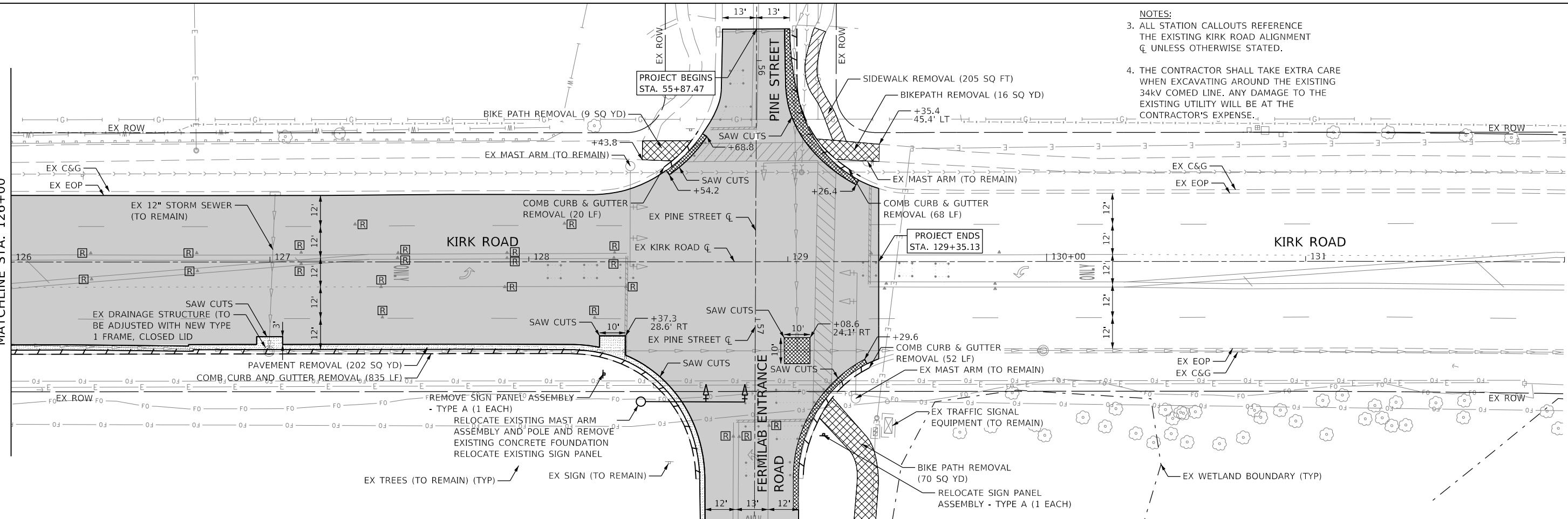
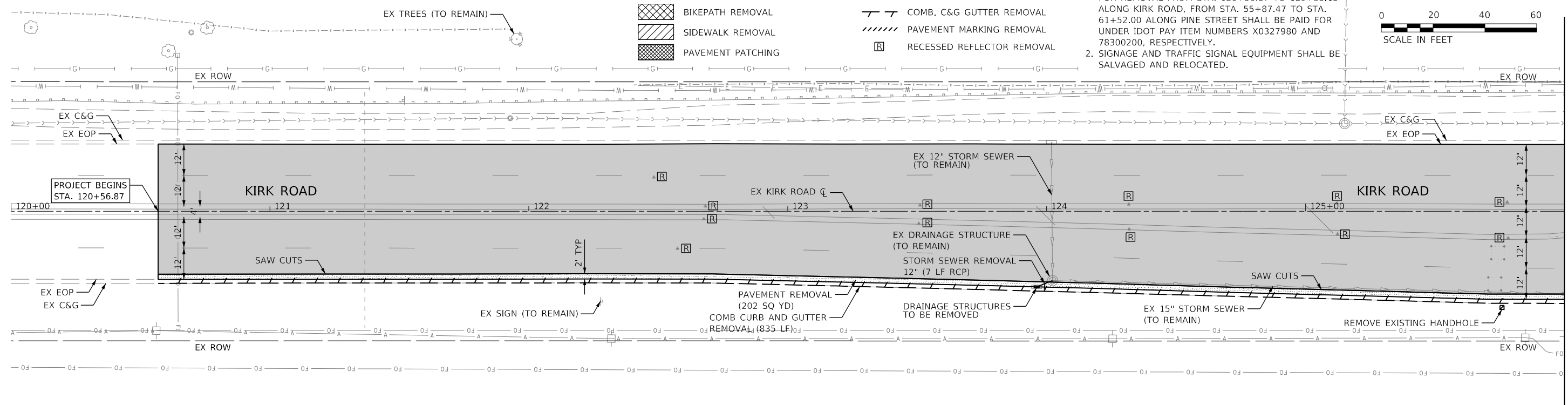
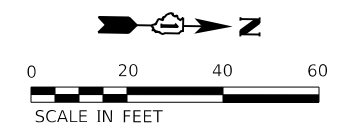
KIRK AT PINE INTERSECTION IMPROVEMENTS
ALIGNMENT, TIES & BENCHMARKS

SCALE: 1"=100' SHEET 1 OF 1 SHEETS STA. TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	9
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				

- LEGEND:**
- PAVEMENT REMOVAL (FULL DEPTH)
 - BIKEPATH REMOVAL
 - SIDEWALK REMOVAL
 - PAVEMENT PATCHING
 - HMA SURFACE REMOVAL, 2 1/2"
 - COMB. C&G GUTTER REMOVAL
 - PAVEMENT MARKING REMOVAL
 - RECESSED REFLECTOR REMOVAL

- NOTES:**
- EXISTING PAVEMENT MARKINGS AND RECESSED REFLECTIVE PAVEMENT MARKERS DESIGNATED FOR REMOVAL FROM STA. 120+56.87 TO 129+35.13 ALONG KIRK ROAD, FROM STA. 55+87.47 TO STA. 61+52.00 ALONG PINE STREET SHALL BE PAID FOR UNDER IDOT PAY ITEM NUMBERS X0327980 AND 78300200, RESPECTIVELY.
 - SIGNAGE AND TRAFFIC SIGNAL EQUIPMENT SHALL BE SALVAGED AND RELOCATED.



- NOTES:**
- ALL STATION CALLOUTS REFERENCE THE EXISTING KIRK ROAD ALIGNMENT \bar{C} UNLESS OTHERWISE STATED.
 - THE CONTRACTOR SHALL TAKE EXTRA CARE WHEN EXCAVATING AROUND THE EXISTING 34KV COMED LINE. ANY DAMAGE TO THE EXISTING UTILITY WILL BE AT THE CONTRACTOR'S EXPENSE.

FILE NAME = W:\Projects\2017\170286 - Kirk Pine\Plan\Case\CD\170286-REM_01.dgn

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 ST. CHARLES, ILLINOIS 60174
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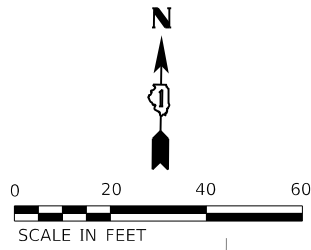
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

**KIRK AT PINE INTERSECTION IMPROVEMENTS
 REMOVAL PLAN**

SCALE: 1"=20'

SHEET 1 OF 2 SHEETS STA. 120+00.00 TO STA. 132+00.00

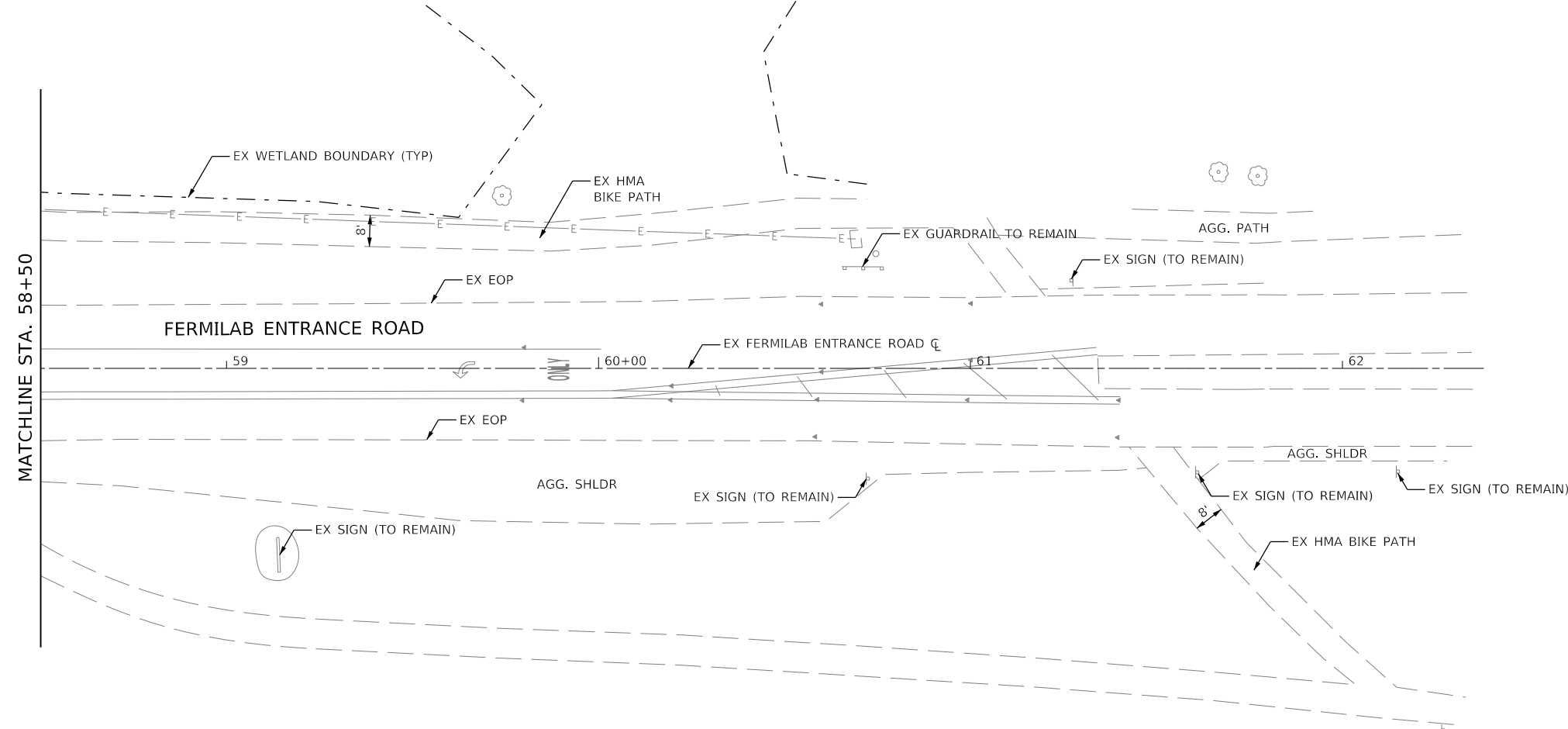
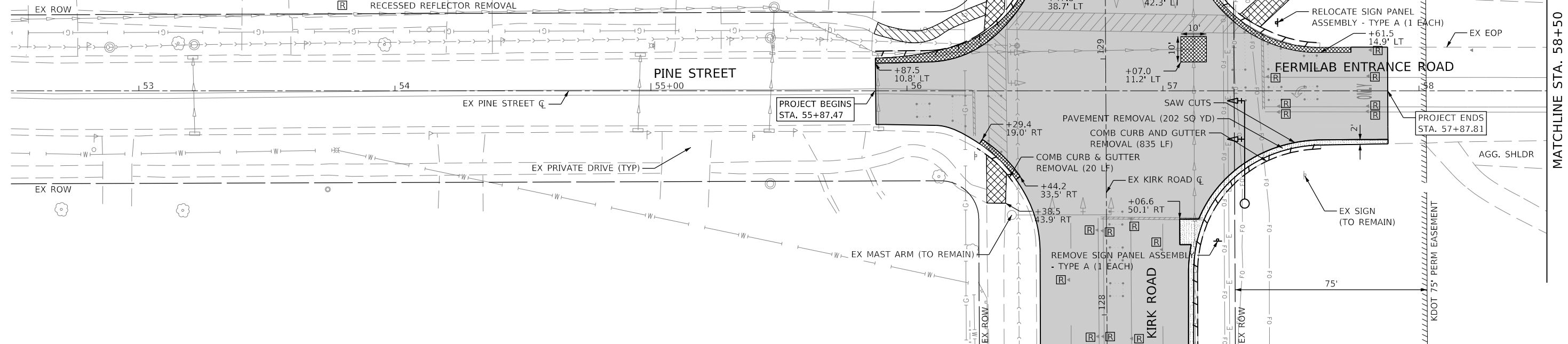
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360	15-00342-01-CH	KANE	42	10
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				



LEGEND:

	PAVEMENT REMOVAL (FULL DEPTH)
	BIKEPATH REMOVAL
	SIDEWALK REMOVAL
	PAVEMENT PATCHING
	HMA SURFACE REMOVAL, 2 1/2"
	COMB. C&G GUTTER REMOVAL
	PAVEMENT MARKING REMOVAL
	RECESSED REFLECTOR REMOVAL

- NOTES:**
- EXISTING PAVEMENT MARKINGS AND RECESSED REFLECTIVE PAVEMENT MARKERS DESIGNATED FOR REMOVAL FROM STA. 120+56.87 TO 129+35.13 ALONG KIRK ROAD, FROM STA. 55+87.47 TO STA. 57+87.81 ALONG PINE STREET SHALL BE PAID FOR UNDER IDOT PAY ITEM NUMBERS X0327980 AND 78300200, RESPECTIVELY.
 - SIGNAGE AND TRAFFIC SIGNAL EQUIPMENT SHALL BE SALVAGED AND RELOCATED.
 - ALL STATION CALLOUTS REFERENCE THE EXISTING PINE/FERMILAB ENTRANCE ROAD ALIGNMENT ζ UNLESS OTHERWISE NOTED.



FILE NAME = W:\Projects\2017\170286 - Kirk/PinePhit/Cadd/Civil/Dgn\170286-REM_02.dgn

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PLOT DATE = 8/15/2018	CHECKED - MNB	REVISED -
	DATE - 8/16/2018	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**KIRK AT PINE INTERSECTION IMPROVEMENTS
 REMOVAL PLAN**

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 52+50.00 TO STA. 64+27.63

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	11
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				

DATE	
BY	
PLAN	SURVEYED
	PLOTTED
	ALIGNED
	CHECKED
	FILED
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DATE	
BY	
PROFILE	SURVEYED
	PLOTTED
	GRADES CHECKED
	STRUCTURE NOTATIONS OK'D
NO.	
	FILE NAME

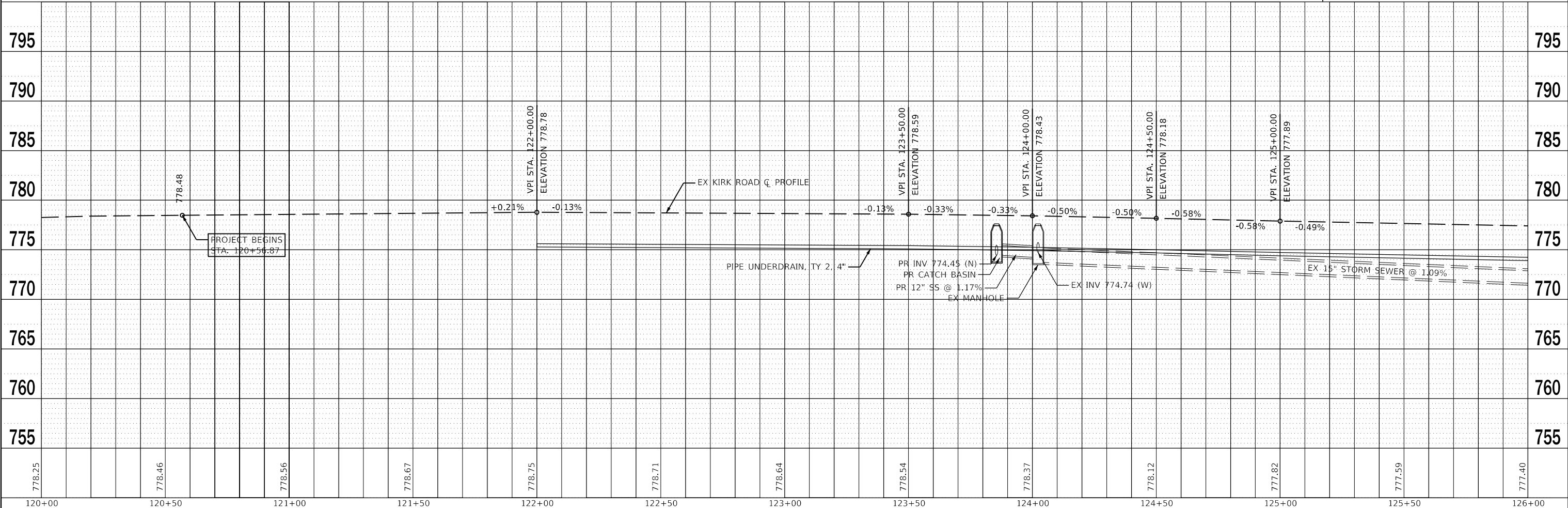
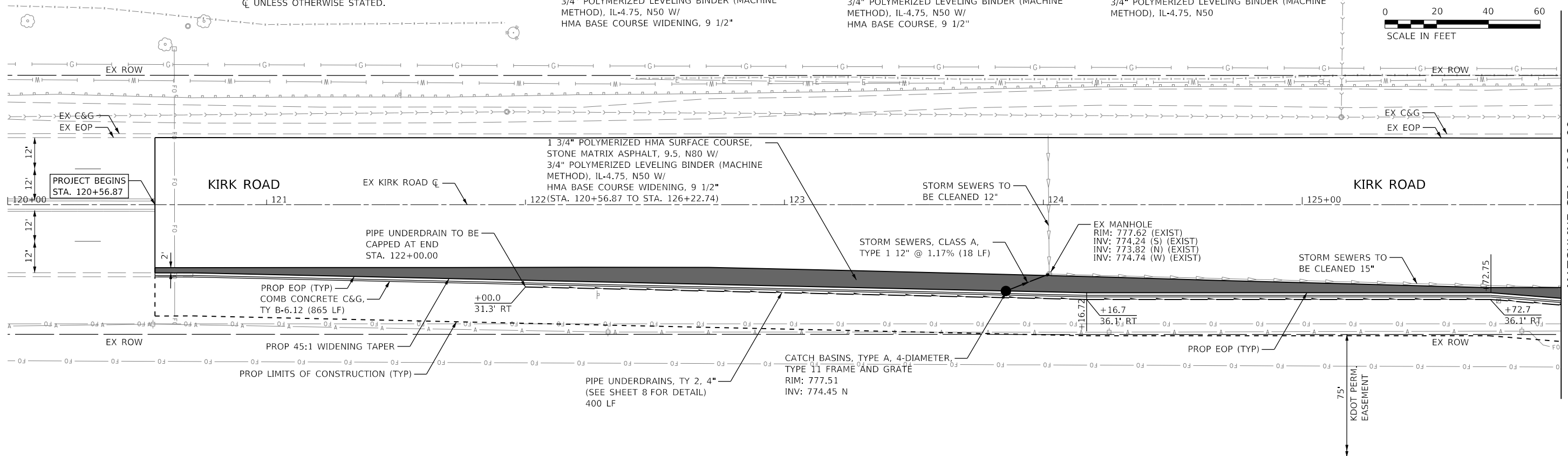
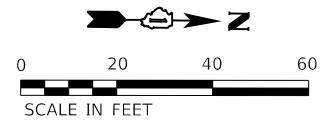
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NOTES:
 1. ALL STATION CALLOUTS REFERENCE THE EXISTING KIRK ROAD ALIGNMENT UNLESS OTHERWISE STATED.

LEGEND:
 1 3/4" POLYMERIZED HMA SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 W/ 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 W/ HMA BASE COURSE WIDENING, 9 1/2"

1 3/4" POLYMERIZED HMA SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 W/ 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 W/ HMA BASE COURSE, 9 1/2"

1 3/4" POLYMERIZED HMA SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50



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USER NAME =	bptoriff	DESIGNED -	RMS	REVISED -	
		DRAWN -	RMS	REVISED -	
PLOT SCALE =	1:40	CHECKED -	MNB	REVISED -	
PLOT DATE =	8/16/2018	DATE -	8/16/2018	REVISED -	

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

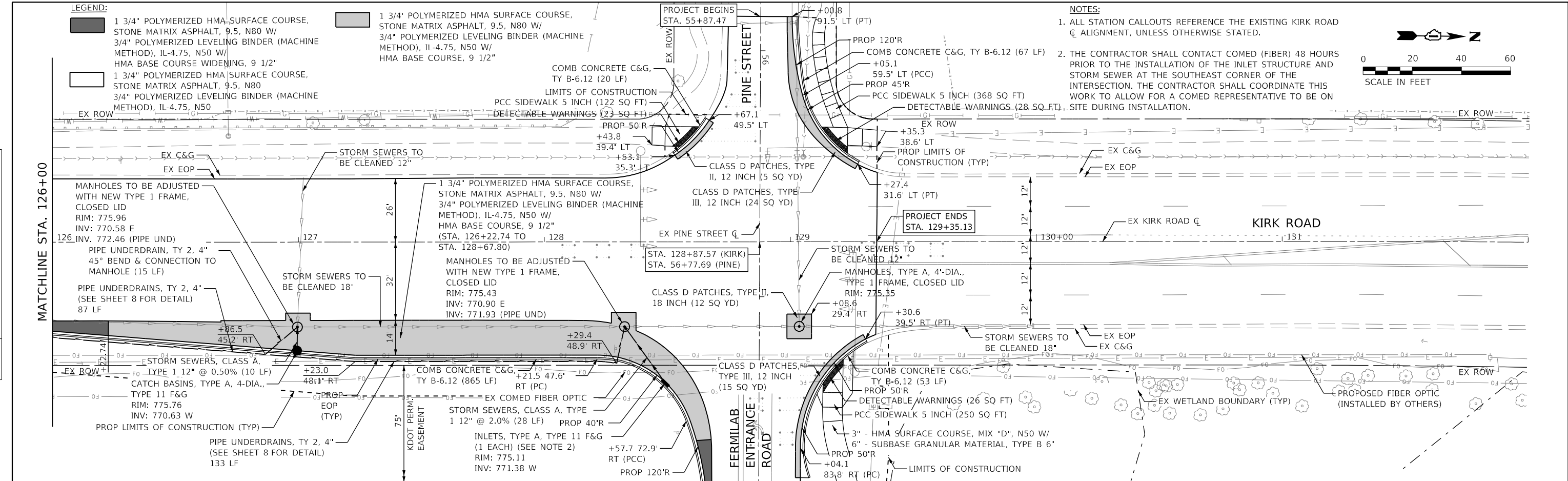
**KIRK AT PINE INTERSECTION IMPROVEMENTS
 PLAN & PROFILE**

SCALE: 1"=20' SHEET 1 OF 3 SHEETS STA. 120+00.00 TO STA. 126+00.00

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	12
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				

DATE	
BY	
PLAN	
NO.	
NO.	
NO.	
NO.	

DATE	
BY	
PROFILE	
NO.	
NO.	
NO.	
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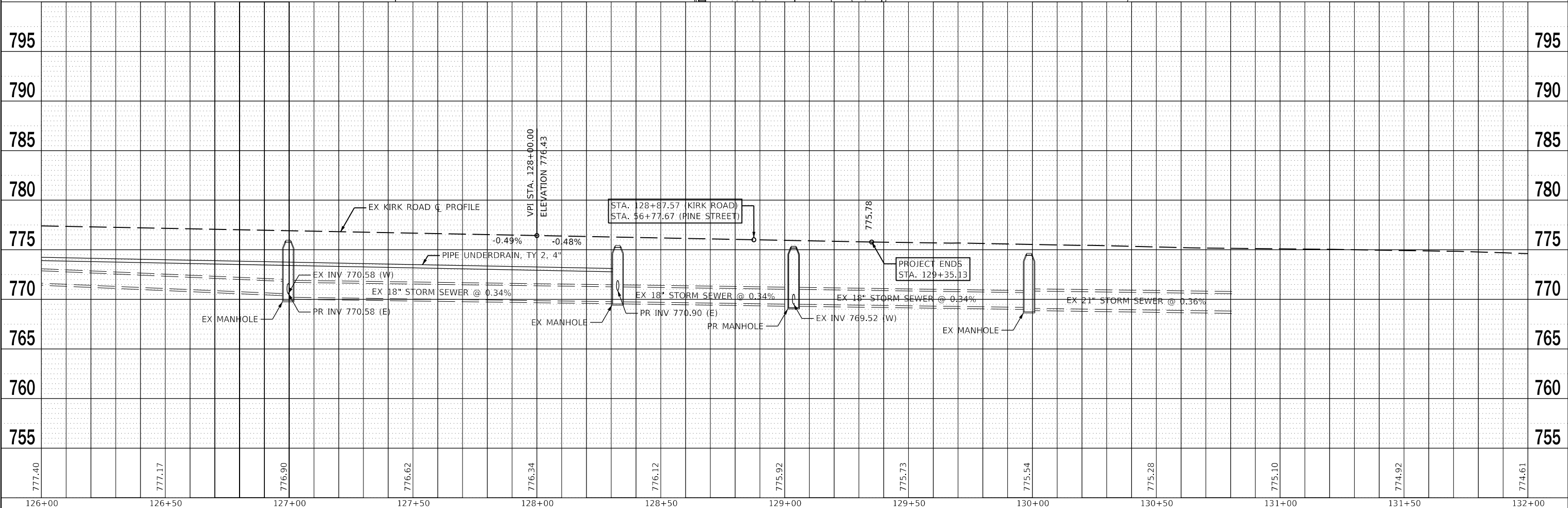
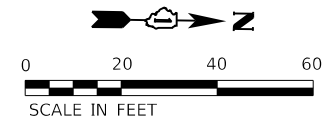


LEGEND:

- 1 3/4" POLYMERIZED HMA SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 W/ 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 W/ HMA BASE COURSE WIDENING, 9 1/2"
- 1 3/4" POLYMERIZED HMA SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 W/ 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 W/ HMA BASE COURSE, 9 1/2"

NOTES:

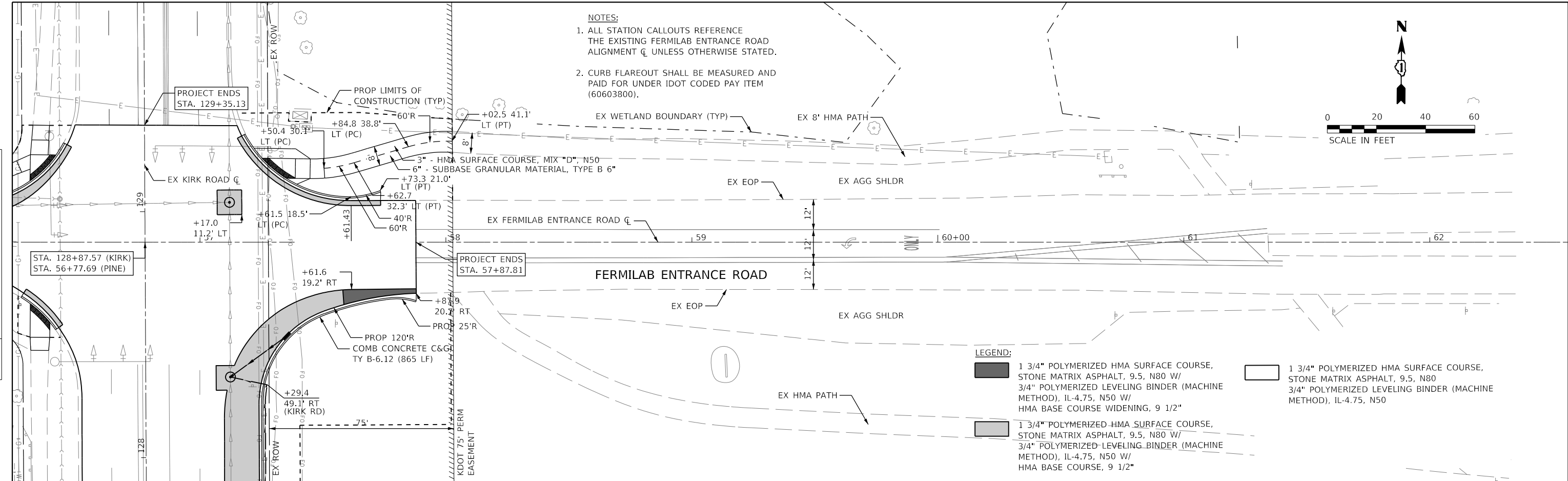
- ALL STATION CALLOUTS REFERENCE THE EXISTING KIRK ROAD C_l ALIGNMENT, UNLESS OTHERWISE STATED.
- THE CONTRACTOR SHALL CONTACT COMED (FIBER) 48 HOURS PRIOR TO THE INSTALLATION OF THE INLET STRUCTURE AND STORM SEWER AT THE SOUTHEAST CORNER OF THE INTERSECTION. THE CONTRACTOR SHALL COORDINATE THIS WORK TO ALLOW FOR A COMED REPRESENTATIVE TO BE ON SITE DURING INSTALLATION.



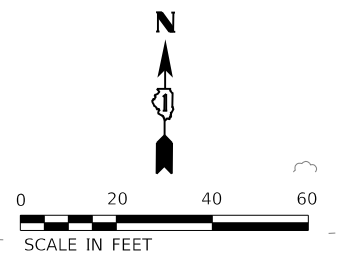
	USER NAME = bptorfff DESIGNED - RMS DRAWN - RMS CHECKED - MNB DATE - 8/16/2018	REVISED - REVISED - REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	KIRK AT PINE INTERSECTION IMPROVEMENTS PLAN & PROFILE	FAP RTE. = 360 SECTION = 15-00342-01-CH COUNTY = KANE TOTAL SHEETS = 42 SHEET NO. = 13
	PLOT SCALE = 1:40 PLOT DATE = 8/16/2018	SCALE: 1"=20' SHEET 2 OF 3 SHEETS STA. 126+00.00 TO STA. 132+00.00			CONTRACT NO. 61E75 ILLINOIS FED. AID PROJECT X

DATE	
BY	
PLAN	SURVEYED
	NOTED
	CHECKED
	FILED
	NO.

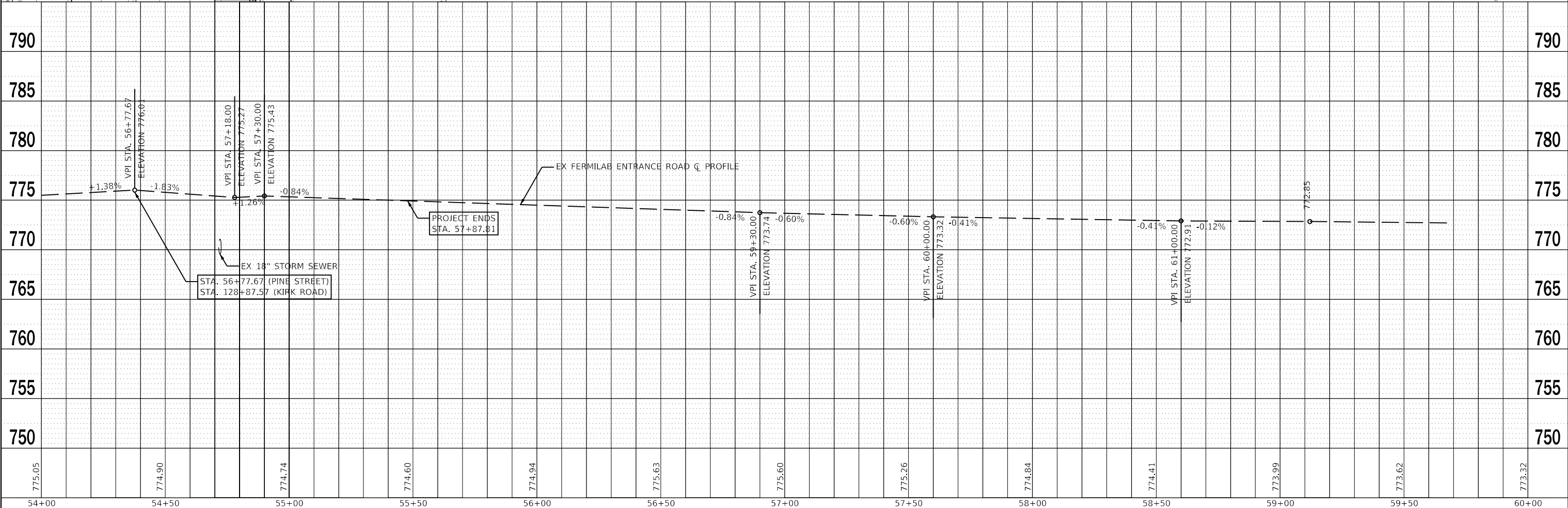
DATE	
BY	
PROFILE	SURVEYED
	NOTED
	CHECKED
	FILED
	NO.



- NOTES:
1. ALL STATION CALLOUTS REFERENCE THE EXISTING FERMILAB ENTRANCE ROAD ALIGNMENT \bar{C} UNLESS OTHERWISE STATED.
 2. CURB FLAREOUT SHALL BE MEASURED AND PAID FOR UNDER IDOT CODED PAY ITEM (60603800).



- LEGEND:
- 1 3/4" POLYMERIZED HMA SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 W/ 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 W/ HMA BASE COURSE WIDENING, 9 1/2"
 - 1 3/4" POLYMERIZED HMA SURFACE COURSE, STONE MATRIX ASPHALT, 9.5, N80 W/ 3/4" POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50



775.05	774.90	774.74	774.60	774.94	775.63	775.60	775.26	774.84	774.41	773.99	773.62	773.32
54+00	54+50	55+00	55+50	56+00	56+50	57+00	57+50	58+00	58+50	59+00	59+50	60+00

WBK engineering
 WBK ENGINEERING, LLC
 116 WEST MAIN STREET, SUITE 201
 ST. CHARLES, ILLINOIS 60174
 (630) 443-7755

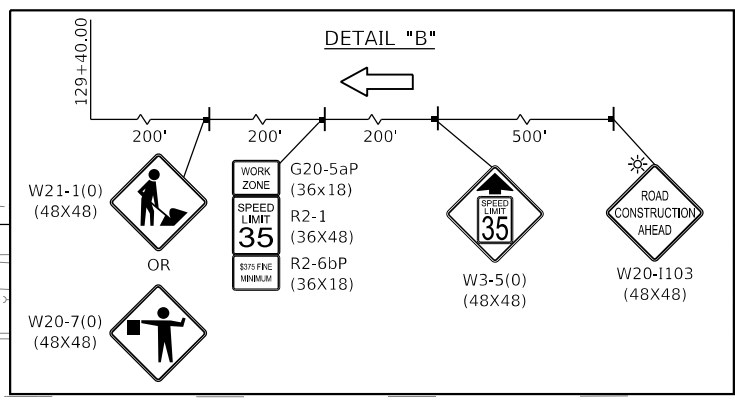
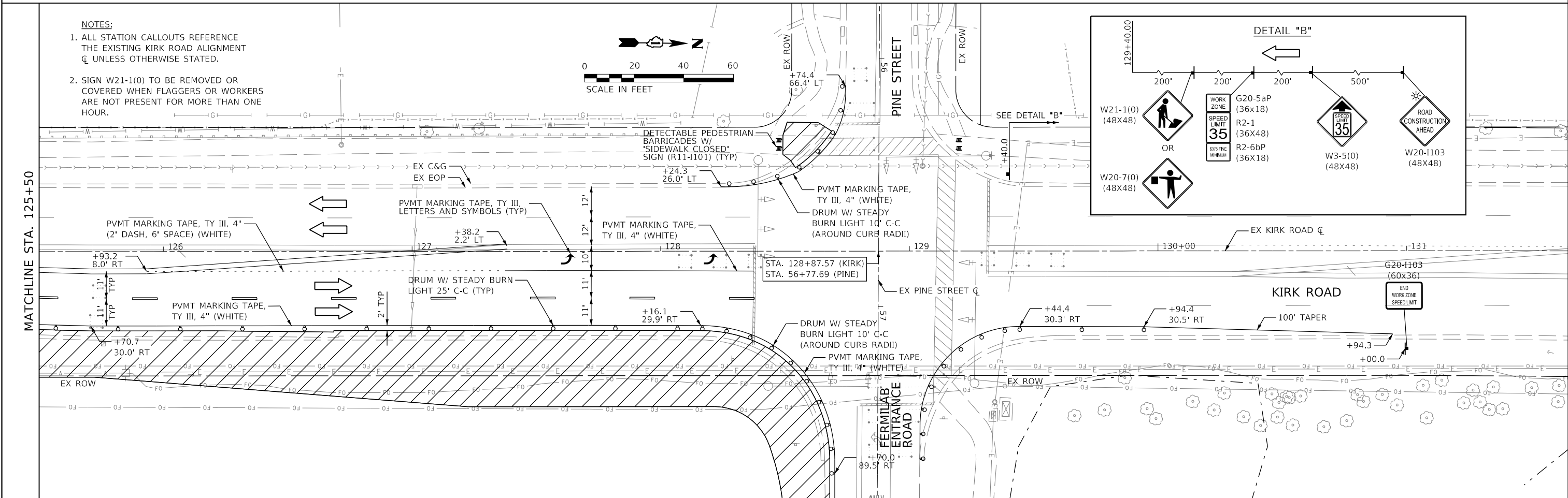
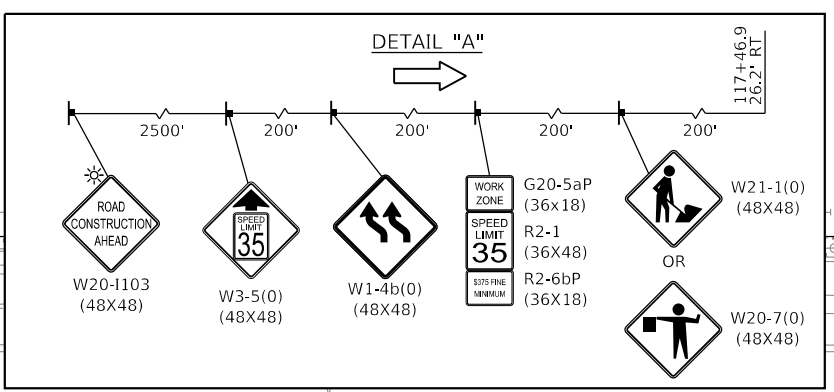
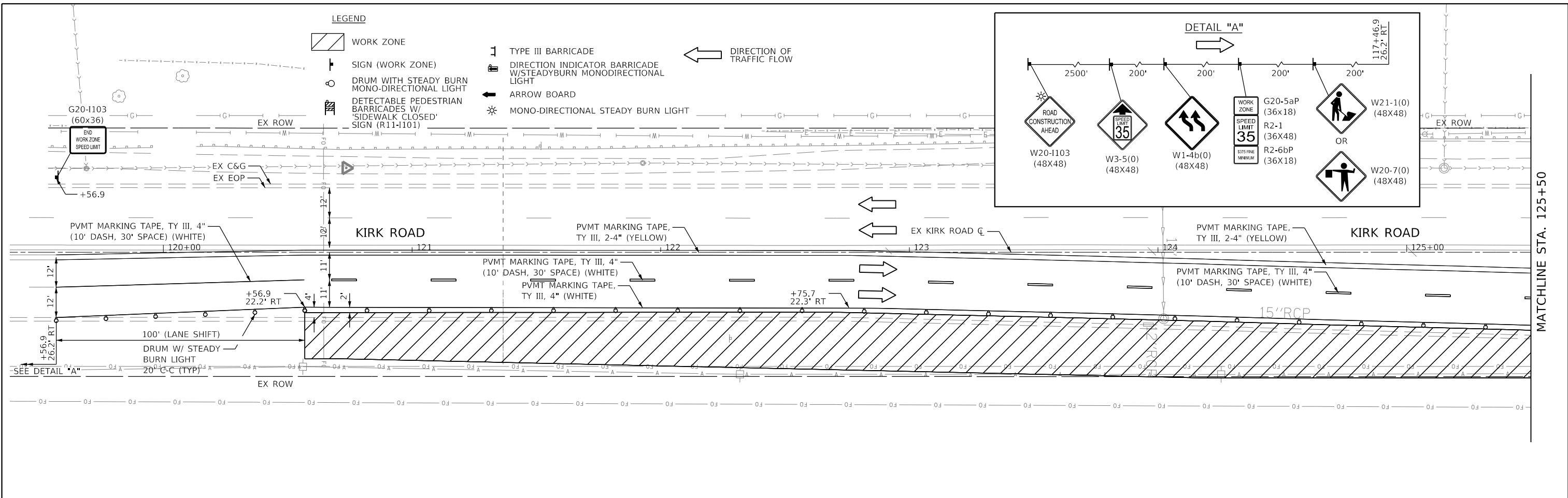
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	DATE - 8/16/2018	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

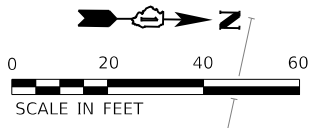
**KIRK AT PINE INTERSECTION IMPROVEMENTS
 PLAN & PROFILE**

SCALE: 1"=20' SHEET 3 OF 3 SHEETS STA. 54+00.00 TO STA. 60+00.00

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	14
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				



- NOTES:**
1. ALL STATION CALLOUTS REFERENCE THE EXISTING KIRK ROAD ALIGNMENT UNLESS OTHERWISE STATED.
 2. SIGN W21-1(0) TO BE REMOVED OR COVERED WHEN FLAGGERS OR WORKERS ARE NOT PRESENT FOR MORE THAN ONE HOUR.



WBK ENGINEERING, LLC
 116 WEST MAIN STREET, SUITE 201
 ST. CHARLES, ILLINOIS 60174
 (630) 443-7755

USER NAME = rsikes
 PLOT SCALE = 1:40
 PLOT DATE = 8/15/2018

DESIGNED - RMS
 DRAWN - RMS
 CHECKED - MNB
 DATE - 8/16/2018

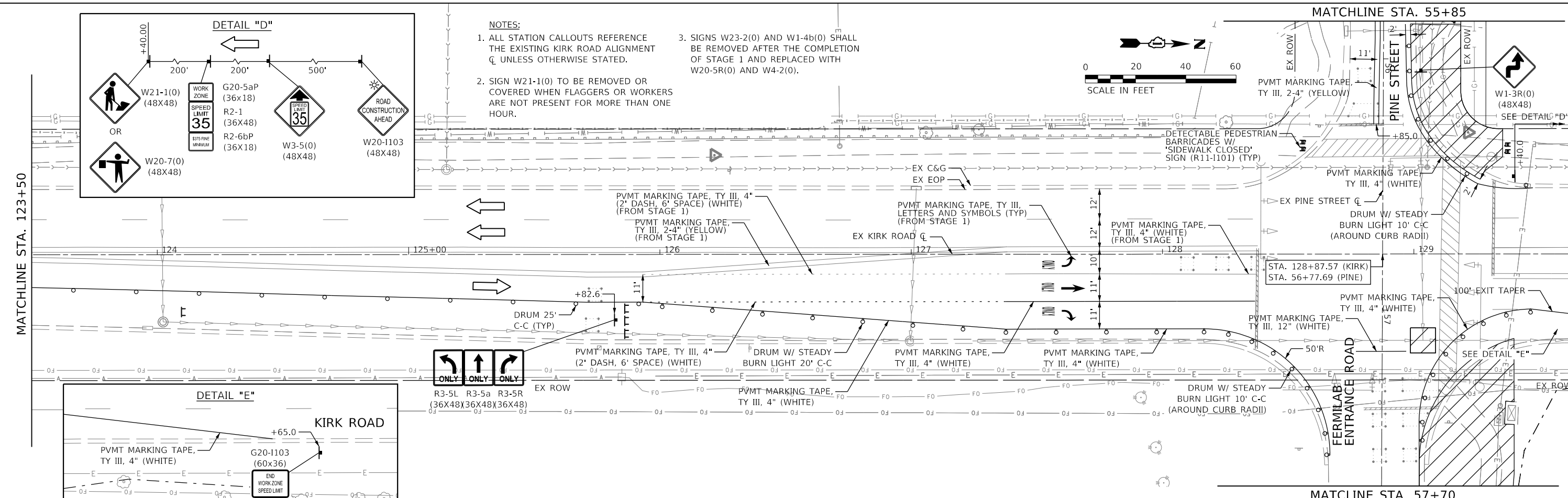
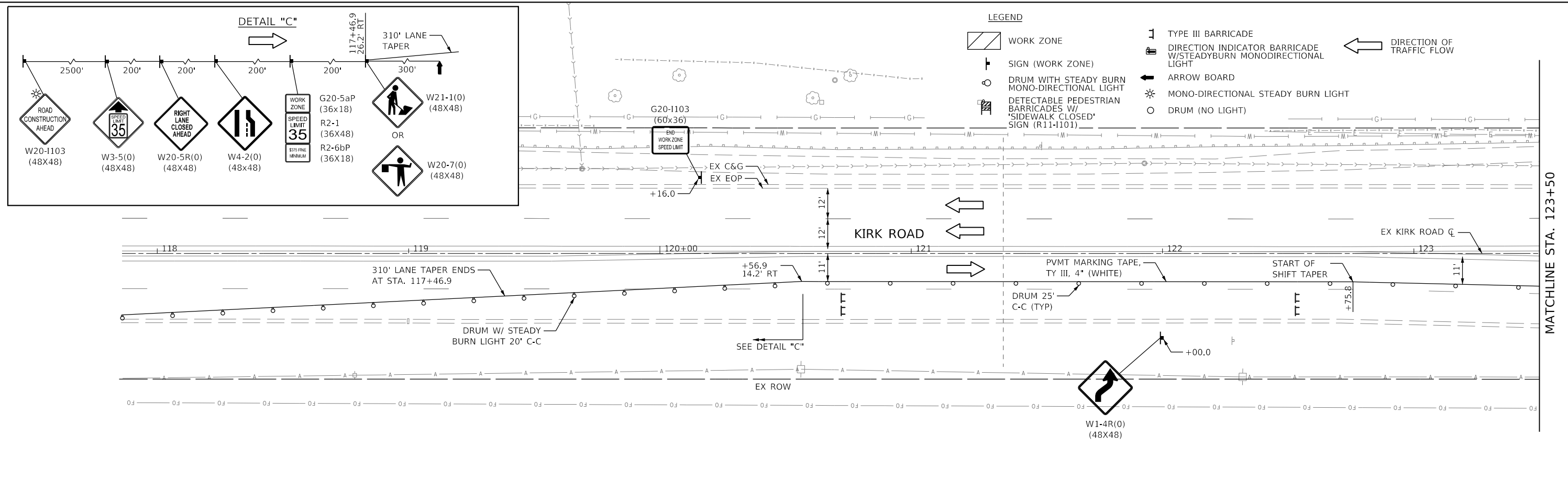
REVISED -
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

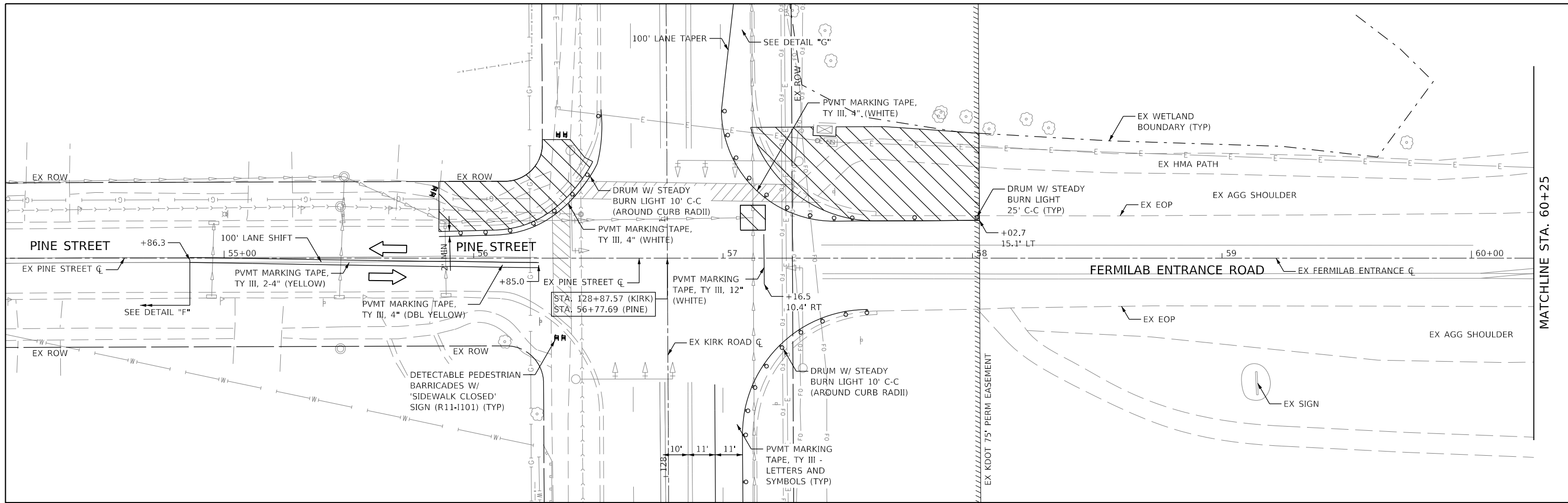
**KIRK AT PINE INTERSECTION IMPROVEMENTS
 MAINTENANCE OF TRAFFIC PLAN - STAGE 1**

SCALE: 1"=20'
 SHEET 1 OF 4 SHEETS
 STA. TO STA.

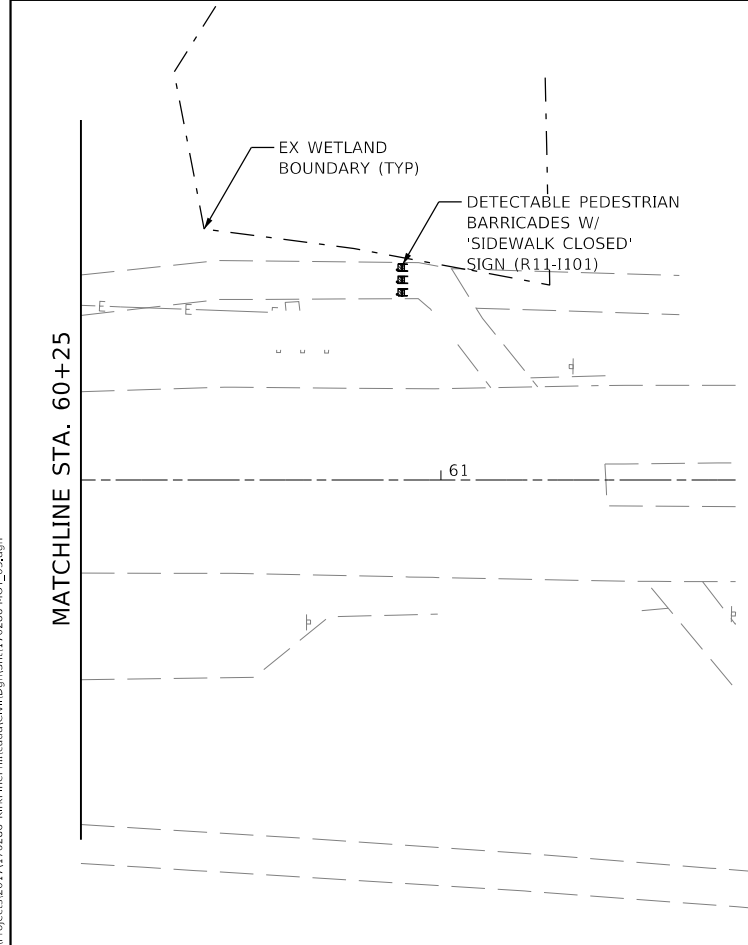
FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	15
CONTRACT NO. 61E75				
ILLINOIS		FED. AID PROJECT X		



	WBK ENGINEERING, LLC 116 WEST MAIN STREET, SUITE 201 ST. CHARLES, ILLINOIS 60174 (630) 443-7755	USER NAME = rsikes	DESIGNED - RMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	KIRK AT PINE INTERSECTION IMPROVEMENTS MAINTENANCE OF TRAFFIC PLAN - STAGE 2	FAP RTE. = 360	SECTION = 15-00342-01-CH	COUNTY = KANE	TOTAL SHEETS = 42	SHEET NO. = 16
		PLOT SCALE = 1:40	CHECKED - MNB	REVISED -			CONTRACT NO. 61E75	ILLINOIS FED. AID PROJECT X			
FILE NAME = W:\Projects\2017\170286_Kirk-Pine\Plan\Drawings\170286-MOT_02.dgn		PLOT DATE = 8/15/2018	DATE = 8/16/2018	REVISED -	SCALE: 1"=20'	SHEET 2 OF 4 SHEETS	STA. TO STA.				



MATCHLINE STA. 60+25

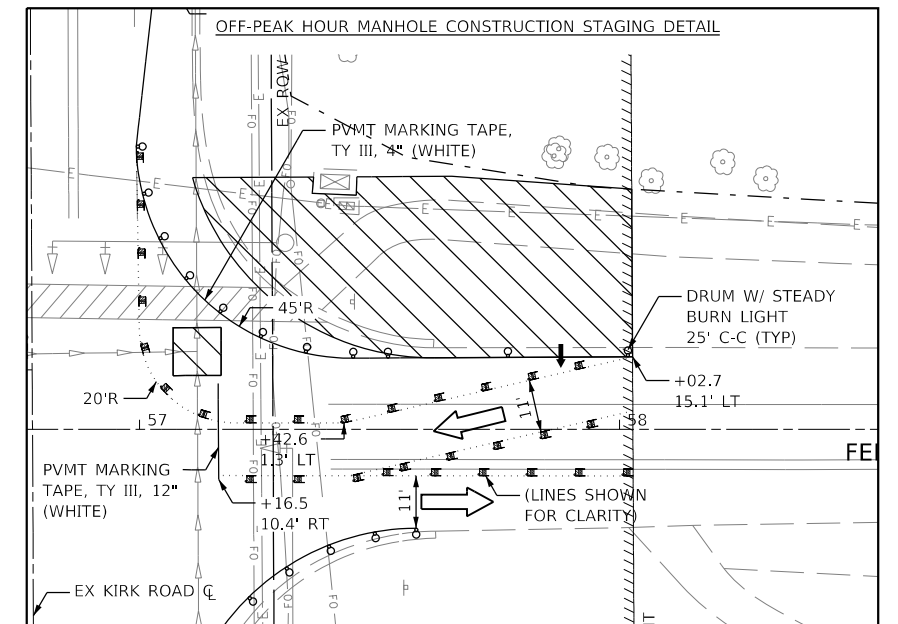
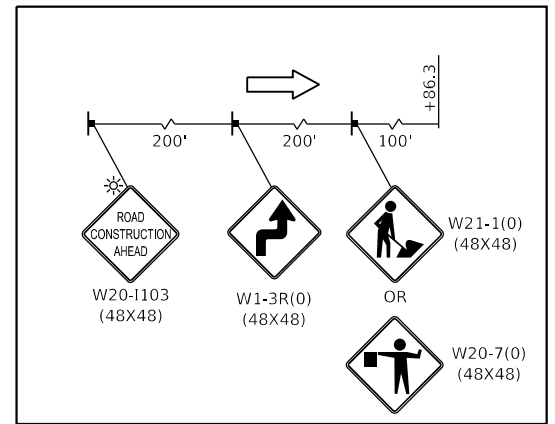
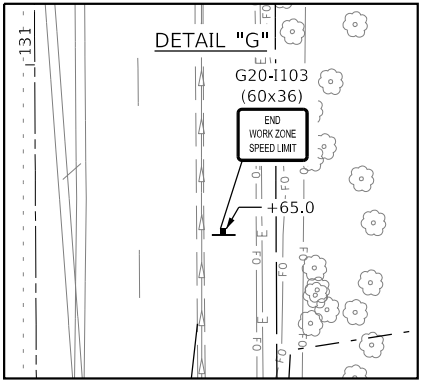
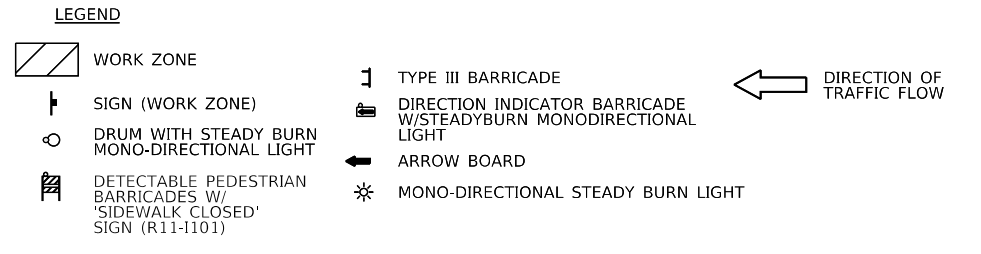
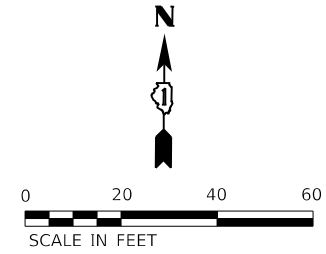


SPECIAL CONSIDERATIONS

- MANHOLE STRUCTURE TO BE CONSTRUCTED DURING OFF-PEAK HOURS (9AM-3PM OR AS DIRECTED BY THE ENGINEER) AND SHALL BE COVERED WITH A STEEL PLATE AT THE END OF EACH WORK DAY. STAGING FOR THIS WORK SHALL FOLLOW THE OFF-PEAK HOUR OPERATIONS DETAIL.
- DURING CONSTRUCTION AND WHEN UTILIZING THE OFF-PEAK MANHOLE CONSTRUCTION CONFIGURATION, THE CONTRACTOR SHALL PROVIDE A FLAGGER.

NOTES:

- ALL STATION CALLOUTS REFERENCE THE EXISTING FERTILIZER ENTRANCE ROAD ALIGNMENT C UNLESS OTHERWISE STATED.
- SIGN W23-2(0) SHOULD ONLY BE USED FOR UP TO TWO WEEKS.
- SIGN W21-1(0) TO BE REMOVED OR COVERED WHEN FLAGGERS OR WORKERS ARE NOT PRESENT FOR MORE THAN ONE HOUR.



USER NAME = rsikes	DESIGNED - RMS	REVISED -
PLOT SCALE = 1:40	DRAWN - RMS	REVISED -
PLOT DATE = 8/15/2018	CHECKED - MNB	REVISED -
	DATE - 8/16/2018	REVISED -

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	17
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				

GENERAL NOTES

1. DETECTABLE PEDESTRIAN OR TYPE III BARRICADES SHALL BE EQUIPPED WITH BI-DIRECTIONAL STEADY BURN LIGHTS AND SHALL BE PLACED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. BARRICADES WITH LEG EXTENSIONS SHALL BE USED WHERE NEEDED TO PROVIDE A MINIMUM DISTANCE OF 36" BETWEEN THE PAVEMENT AND TOP OF BARRICADE. BARRICADE IN TAPER SECTIONS SHALL HAVE DIRECTION INDICATOR PANELS.
2. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL PROPERTIES AND SIDE ROADS DURING CONSTRUCTION OPERATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY NEW PAVEMENT OR PAVEMENT NOT PROPOSED TO BE REPLACED AS PART OF THE PROJECT, INCLUDING SIDEWALK AND CURB AND GUTTER THAT IS DAMAGED BY CONSTRUCTION ACTIVITIES.
4. THE CONTRACTOR SHALL KEEP PEDESTRIAN ROUTES FREE AND CLEAR FROM DIRT, DEBRIS AND BLOCKAGE AT ALL TIMES UNLESS PLANS INDICATE THEY ARE TO BE CLOSED DURING CONSTRUCTION. IF AT THE ENGINEER'S SOLE DETERMINATION, PEDESTRIAN ROUTES ARE NOT BEING MAINTAINED PROPERLY, THE ENGINEER RESERVES THE RIGHT TO CONTRACT A THIRD PARTY TO PERFORM THE CLEANUP AND BACKCHARGE THE CONTRACTOR.
5. ADVANCE SIGNS PER APPLICABLE IDOT HIGHWAY STANDARDS SHALL BE MAINTAINED THROUGH ALL STAGES OF CONSTRUCTION.
6. THE CONTRACTOR SHALL CONTACT THE IDOT DISTRICT 1 TRAFFIC CONTROL SUPERVISOR AT 847-705-4470 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORK.
7. ALL LANE CLOSURES ON KIRK ROAD SHALL BE IN ACCORDANCE WITH APPLICABLE IDOT HIGHWAY STANDARDS DURING ALLOWABLE HOURS AS SPECIFIED IN THE SPECIAL PROVISION "KEEPING ARTERIAL ROADWAYS OPEN TO TRAFFIC".
8. THE CONTRACTOR SHALL INFORM THE ENGINEER OF ANY CHANGE IN STAGING AT LEAST TWO (2) WORKING DAYS IN ADVANCE.
9. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE DESIGNATED TRAFFIC CONTROL PLAN.
10. ARROW BOARDS WILL BE REQUIRED WHEN IMPLEMENTING ALL LANE CLOSURES AND SHALL BE CONSIDERED AS PART OF THE PAY ITEM "TRAFFIC CONTROL AND PROTECTION, (SPECIAL)".
11. THE CONTRACTOR SHALL MAINTAIN DRAINAGE OF THE ROADWAY DURING ALL STAGES OF CONSTRUCTION.
12. TYPE III BARRICADES ARE TO BE PLACED IN ACCORDANCE WITH STANDARD 701901 UNLESS AUTHORIZED BY THE ENGINEER TO USE AN ALTERNATE ARRANGEMENT. BARRICADES SHALL BE INCLUDED IN THE COST OF "TRAFFIC CONTROL PROTECTION, (SPECIAL)". ALL TYPE III BARRICADES SHALL HAVE TWO (2) FLASHING AMBER LIGHTS.
13. TEMPORARY PAVEMENT MARKING TAPE SHALL BE USED ON ALL SURFACES IN THE WORK ZONE.
14. A QUANTITY FOR THREE "CHANGEABLE MESSAGE SIGNS" HAS BEEN INCLUDED FOR USE WHEN DIRECTED BY THE ENGINEER.
15. FLAGGERS MUST BE CERTIFIED AND CARRY THEIR CERTIFICATION CARD ON THEM WHEN WORKING. PROPER STOP/SLOW PADDLES MUST BE UTILIZED AND ALL REQUIRED SAFETY GARMENTS MUST BE WORN ON THE JOB SITE. 'FLAGGER" WARNING SIGNS MUST BE IN PLACE WHENEVER FLAGGERS ARE PRESENT. THESE SIGNS MUST BE COVERED OR REMOVED WHEN NOT APPLICABLE.
16. "CAUTION" TAPE OR RIBBON IS NOT TO BE USED BETWEEN BARRICADES.
17. TYPE II, AND/ OR III BARRICADES WITH TWO-WAY FLASHING LIGHTS WILL BE REQUIRED TO GUIDE TRAFFIC AWAY FROM PAVEMENT AREAS CLOSED FOR CONSTRUCTION.
18. THE COST OF SUPPLYING, ERECTING, AND MAINTAINING BARRICADES, WARNING LIGHTS, AND SIGNS WILL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR TRAFFIC CONTROL AND PROTECTION, (SPECIAL).
19. WHEN REQUIRED, TRAFFIC SIGNS SHALL BE RELOCATED FROM EACH STAGE OF CONSTRUCTION AS PART OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

STAGE 1 NOTES

THIS STAGE WILL INCLUDE CONSTRUCTION OF THE NORTHBOUND RIGHT TURN LANE, CONSTRUCTION OF THE DRAINAGE STRUCTURES ALONG THE PROPOSED CURB AND GUTTER OF THE NORTHBOUND RIGHT TURN LANE, ADA COMPLIANCE OF THE SOUTHWEST CORNER SIDEWALK, REMOVAL OF THE EXISTING TRAFFIC SIGNAL MAST-ARM ASSEMBLY AT THE SOUTHEAST CORNER, AND INSTALLATION OF TEMPORARY TRAFFIC SIGNALS.

SPECIAL REQUIREMENTS AND CONSIDERATIONS FOR THIS STAGE INCLUDE:

1. THE CONTRACTOR SHALL REMOVE ALL CONFLICTING PAVEMENT MARKINGS AND RECESSED REFLECTIVE PAVEMENT MARKERS.
2. ALL TEMPORARY PAVEMENT MARKING TAPE AND TRAFFIC CONTROL SIGNAGE SHALL BE IN PLACE PRIOR TO BEGINNING ANY CONSTRUCTION.
3. EXISTING LANE WIDTHS SHALL BE MAINTAINED ALONG BOTH PINE STREET AND THE FERMILAB ENTRANCE ROAD DURING THIS STAGE UNLESS OTHERWISE SHOWN IN THE PLANS.
4. ANY SIGNS DESIGNATED FOR REMOVAL OR RELOCATION SHALL BE DONE SO PRIOR TO THE START OF CONSTRUCTION.
5. TEMPORARY TRAFFIC SIGNALS AND RELOCATION OF VIDEO DETECTION CAMERAS SHALL BE IN PLACE PRIOR TO THE START OF CONSTRUCTION.
6. ALL DISTURBED EARTH SHALL BE RE-GRADED AND SEEDED ACCORDING TO THE PLANS AT THE END OF THE STAGE.

STAGE 2 NOTES

THIS STAGE WILL INCLUDE CONSTRUCTION OF THE MANHOLE STRUCTURE AT THE BLIND STORM SEWER CONNECTION (STA. 129+03.62), SIDEWALK IMPROVEMENTS AT THE NORTHWEST AND NORTHEAST CORNERS OF THE INTERSECTION, AND INSTALLATION OF THE TRAFFIC SIGNAL MAST-ARM ASSEMBLY AT THE SOUTHEAST CORNER.

SPECIAL REQUIREMENTS AND CONSIDERATIONS FOR THIS STAGE INCLUDE:

1. CONSTRUCTION OF THE MANHOLE STRUCTURE AT THE BLIND STORM SEWER CONNECTION SHALL OCCUR DURING OFF-PEAK TRAFFIC VOLUME HOURS (BETWEEN 9AM AND 3PM).
2. ALL STAGE 1 WORK SHALL BE COMPLETED AND ALL TRAFFIC CONTROL SHALL BE IN PLACE PRIOR TO BEGINNING ANY WORK ON STAGE 2.
3. ACCESS TO THE FERMILAB ENTRANCE SHALL BE MAINTAINED AT ALL TIMES.
4. TEMPORARY TRAFFIC SIGNALS SHALL NOT BE REMOVED UNTIL THE TRAFFIC SIGNAL MAST-ARM ASSEMBLY IS FULLY FUNCTIONAL.

STAGE 3 NOTES

THIS STAGE WILL INCLUDE MILLING AND RESURFACING KIRK ROAD WITHIN THE PROJECT LIMITS, THE WEST LEG OF PINE STREET, AND THE EAST LEG OF THE FERMILAB ENTRANCE AS SHOWN ON THE PLANS.

SPECIAL REQUIREMENTS AND CONSIDERATIONS FOR THIS STAGE INCLUDE:

1. THE CONTRACTOR SHALL UTILIZE IDOT HIGHWAY STANDARD 701426-09 AND 701427-05 DURING MILLING AND RESURFACING OPERATIONS.
2. SHORT TERM PAVEMENT MARKINGS SHALL BE ESTABLISHED AFTER THE EXISTING PAVEMENT HAS BEEN MILLED AND REMOVED PRIOR TO RESURFACING.

STAGE 4 NOTES

THIS STAGE WILL INCLUDE PLACING PERMANENT PAVEMENT MARKINGS AND RESTORATION AS SHOWN IN THE PLANS.

SPECIAL REQUIREMENTS AND CONSIDERATIONS FOR THIS STAGE INCLUDE:

1. THE CONTRACTOR SHALL UTILIZE IDOT HIGHWAY STANDARD 701426-09 OR 701427-05 FOR THE INSTALLATION OF PERMANENT PAVEMENT MARKINGS.

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


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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

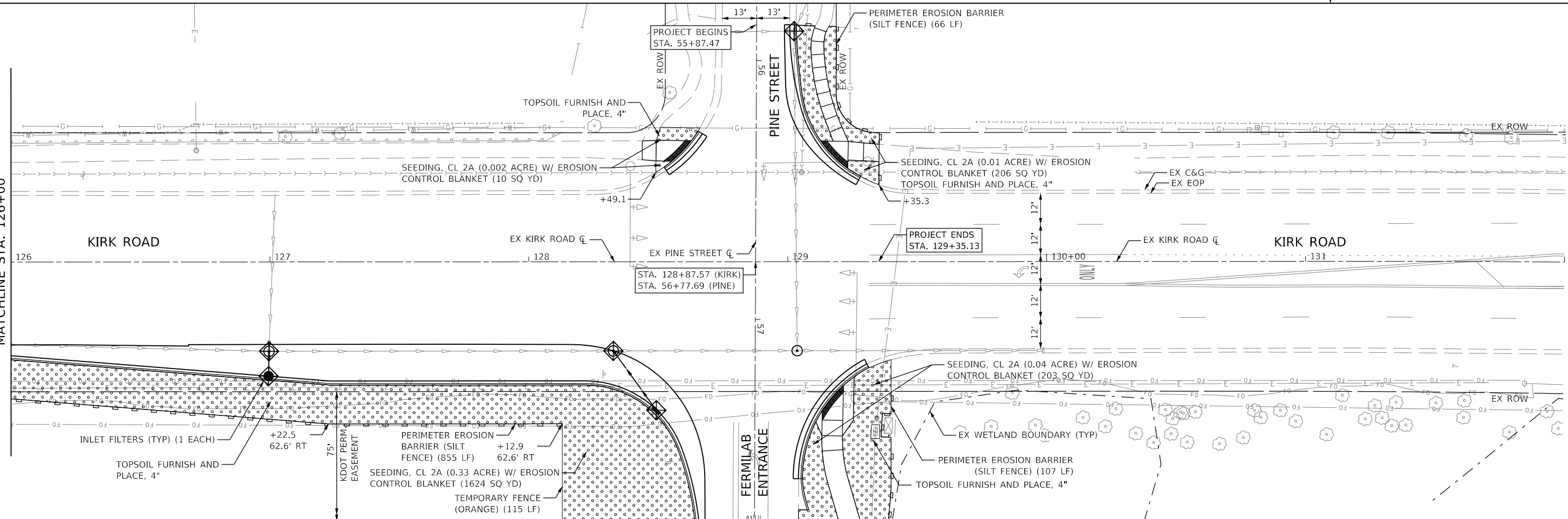
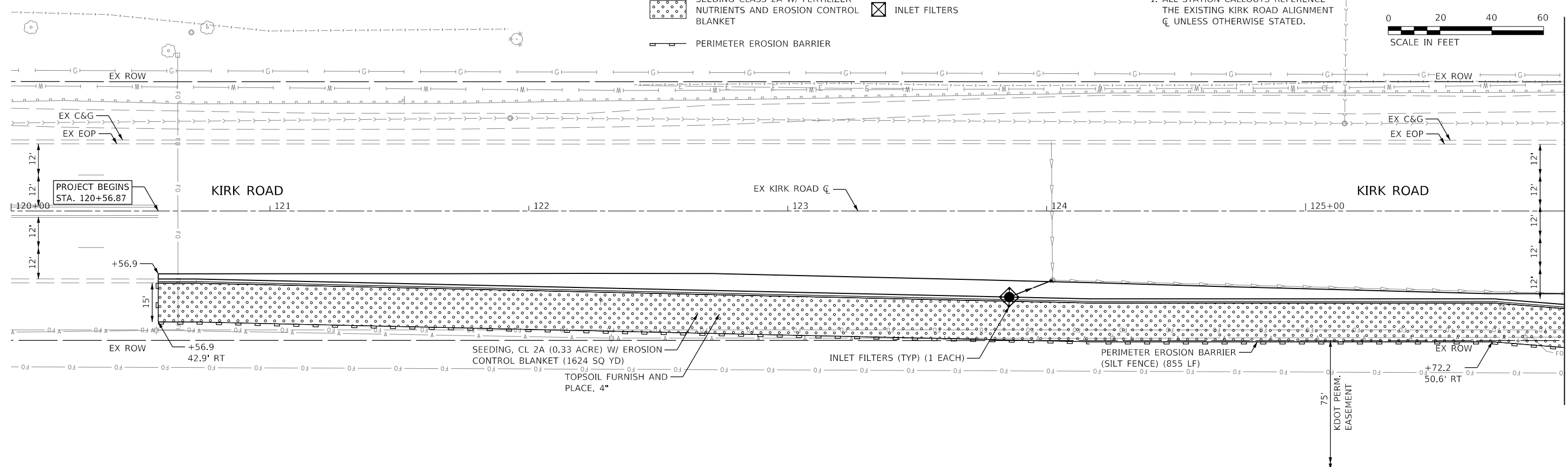
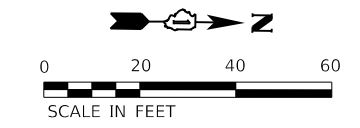
**KIRK AT PINE INTERSECTION IMPROVEMENTS
MAINTENANCE OF TRAFFIC PLAN - STAGING NOTES**

SCALE: SHEET 4 OF 4 SHEETS STA. TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	18
CONTRACT NO.61E75				
		ILLINOIS	FED. AID PROJECT	X

- LEGEND**
-  SEEDING CLASS 2A W/ FERTILIZER NUTRIENTS AND EROSION CONTROL BLANKET
 -  INLET FILTERS
 -  PERIMETER EROSION BARRIER

NOTES:
 1. ALL STATION CALLOUTS REFERENCE THE EXISTING KIRK ROAD ALIGNMENT UNLESS OTHERWISE STATED.



FILE NAME = W:\Projects\2017\170286_KirkPine\Plan\CAD\170286-EROS_01.dgn

WBK engineering
 WBK ENGINEERING, LLC
 116 WEST MAIN STREET, SUITE 201
 ST. CHARLES, ILLINOIS 60174
 (630) 443-7755

USER NAME = rsikes	DESIGNED - RMS	REVISED -
PLOT SCALE = 1:40	DRAWN - RMS	REVISED -
PLOT DATE = 8/15/2018	CHECKED - MNB	REVISED -
	DATE - 8/16/2018	REVISED -

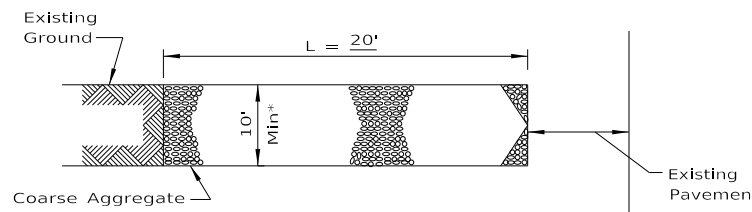
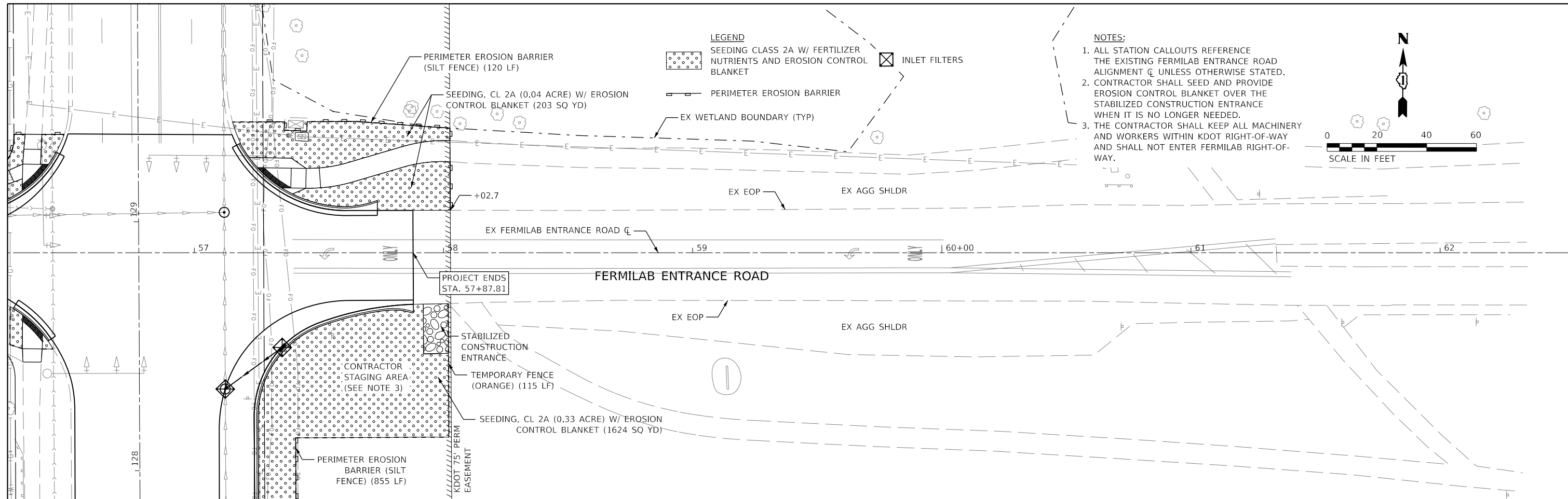
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DRAWN - RMS	REVISED -
CHECKED - MNB	REVISED -
DATE - 8/16/2018	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**KIRK AT PINE INTERSECTION IMPROVEMENTS
 EROSION & SEDIMENT CONTROL PLAN**

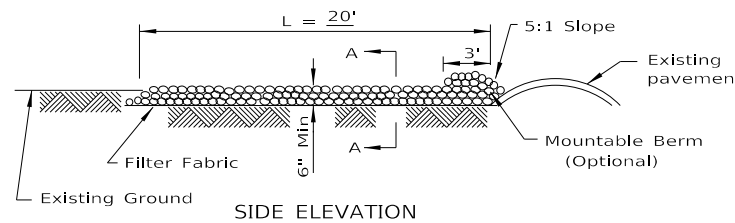
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 STA. 120+00.00 TO STA. 132+00.00

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	19
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				



* Must Extend Full Width Of Ingress And Egress Operation.

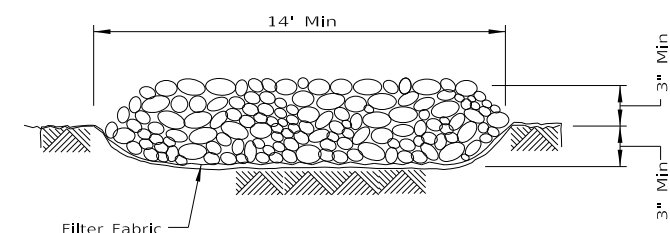
PLAN VIEW



SIDE ELEVATION

STABILIZED CONSTRUCTION ENTRANCE PLAN

STD. IL-630(A), IL-630(B)
(STABILIZED CONSTRUCTION ENTRANCE PLAN)



SECTION A-A

NOTES:

- FILTER FABRIC SHALL MEET THE REQUIREMENTS OF ARTICLE 1080.03 OF THE STANDARD SPECIFICATIONS AND SHALL BE PLACED OVER THE CLEARED SUBGRADE AREA PRIOR TO PLACING THE ROCK.
- AGGREGATE FILL SHALL MEET ONE OF THE FOLLOWING IDOT COARSE AGGREGATE GRADATIONS, CA-1, CA-2, CA-3 OR CA-4 AND BE PLACED ACCORDING TO SPECIAL PROVISION "STABILIZED CONSTRUCTION ENTRANCE".
- ANY DRAINAGE FACILITIES REQUIRED BECAUSE OF WASHING SHALL BE CONSTRUCTED ACCORDING TO MANUFACTURERS SPECIFICATIONS.
- IF WASH RACKS ARE USED THEY SHALL BE INSTALLED ACCORDING TO MANUFACTURERS SPECIFICATIONS.

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PLOT DATE = 8/15/2018	CHECKED - MNB	REVISED -
	DATE - 8/16/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**KIRK AT PINE INTERSECTION IMPROVEMENTS
EROSION & SEDIMENT CONTROL PLAN**

SCALE: 1"=20' SHEET 2 OF 4 SHEETS STA. 54+00.00 TO STA. 60+00.00

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	20
CONTRACT NO.61E75				
ILLINOIS FED. AID PROJECT X				

EROSION CONTROL INSPECTION

ALL EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND AFTER EACH 1/2" RAIN EVENT.

WINTER SHUT DOWN

A WINTER SHUT DOWN IS NOT ANTICIPATED FOR THIS PROJECT. BUT IN THE EVENT THAT UNAVOIDABLE CIRCUMSTANCE REQUIRE A WINTER SHUT DOWN, THE CONDITION OF THE CONSTRUCTION SITE FOR WINTER SHUTDOWN SHALL BE ADDRESSED EARLY IN THE FALL GROWING SEASON SO THAT SLOPES AND OTHER BARE EARTH AREAS MAY BE STABILIZED WITH TEMPORARY AND/OR PERMANENT VEGETATIVE COVER FOR PROPER EROSION AND SEDIMENT CONTROL. ALL OPEN AREAS THAT ARE TO REMAIN IDLE THROUGHOUT THE WINTER SHALL RECEIVE TEMPORARY EROSION CONTROL MEASURES INCLUDING TEMPORARY SEEDING, MULCHING AND/OR EROSION CONTROL BLANKET PRIOR TO THE END OF THE FALL GROWING SEASON. THE AREAS TO BE WORKED BEYOND THE END OF THE GROWING SEASON MUST INCORPORATE SOIL STABILIZATION MEASURES THAT DO NOT RELY ON VEGETATIVE COVER SUCH AS EROSION CONTROL BLANKET AND HEAVY MULCHING.

PERIMETER EROSION BARRIER (SILT FENCE)

PERIMETER EROSION CONTROL BARRIER (SILT FENCE) SHALL BE PLACED AT THE LOCATIONS SHOWN ON THE PLANS. THE PERIMETER EROSION CONTROL BARRIER SHALL BE CONSTRUCTED AS DETAILED ON THE PLANS AND AS SPECIFIED IN SECTION 280 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

STOCK PILE LOCATIONS AND PROTECTING STOCK PILE AREAS

STOCK PILES SHOULD NOT BE PLACED IN OR NEAR CRITICAL AREAS, OR AREAS THAT HAVE HIGH POTENTIAL FOR CONTRIBUTING SEDIMENTS TO STORMWATER FACILITIES.

CONTRACTOR MAY OPT TO STOCK PILE MATERIAL. STAGING OF THE PROJECT IS AT THE DISCRETION OF THE CONTRACTOR AND COORDINATION OF STOCK PILES WILL BE WITH THE ENGINEER AND KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD). STOCKPILES OF SOIL AND OTHER CONSTRUCTION MATERIALS TO REMAIN IN PLACE MORE THAN THREE (3) DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES, NOT BEING ACTIVELY WORKED AND TO REMAIN IN PLACE FOR 14 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.

STABILIZED CONSTRUCTION AREA

TEMPORARY STABILIZATION OF THE CONSTRUCTION AREA SHOULD TAKE PLACE AT THE END OF EACH WORK DAY.

PERMANENT STABILIZATION OF THE CONSTRUCTION AREA SHALL BE COMPLETED WITHIN 7 DAYS OF FINAL GRADING.

DEWATERING

WHEN DEWATERING THE CONSTRUCTION AREA IS NECESSARY, ALL WATERS SHALL BE FILTERED BY USING FILTER BAGS OR AN ALTERNATIVE MEASURE APPROVED BY THE KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT. ALL FILTER BAGS MUST HAVE SECONDARY CONTAINMENT DEVICES, AND SHOULD BE PLACED ON LEVEL GROUND. WATER MUST HAVE SEDIMENT REMOVED BEFORE BEING ALLOWED TO RETURN TO THE ORIGINAL CREEK. THE DISCHARGE SHALL BE DESIGNED SO THAT RETURNING WATERS DO NOT CAUSE EROSION. THE CONTRACTOR WILL COORDINATE THE METHOD, DESIGN AND LOCATION OF THE DEWATERING PLAN AND FILTER BAG(S) WITH KANE-DUPAGE SOIL & WATER CONSERVATION DISTRICT AT THE PRE-CONSTRUCTION MEETING.

DEWATERING AND FILTERING BAG SYSTEMS REQUIRED FOR ALL CONSTRUCTION OPERATIONS WILL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE COST OF THE RELATED WORK ITEM REQUIRING DEWATERING. DEWATERING WILL INCLUDE MEANS, METHODS AND ALL MATERIALS TO DEWATER AND TO PROVIDE FILTRATION OF WATERS BEFORE RE-ENTERING THE RIVER AND/OR WATERWAY.

KEEPING PAVEMENTS CLEAN

THE CONTRACTOR WILL KEEP ALL PERMANENT PAVEMENT SURFACES CLEAN OF DIRT OR CONSTRUCTION DEBRIS. THE PAVEMENT SHALL BE CLEANED AT THE END OF EACH DAYS OPERATION OR MORE FREQUENTLY AS REQUIRED BY THE ENGINEER IF THE DEBRIS IS DEEMED TO BE A HAZARD TO THE MOTORING PUBLIC.

STABILIZED CONSTRUCTION ENTRANCE

THE ENTRANCE WILL BE AS DETAILED IN THE EROSION CONTROL DETAILS.

CONCRETE WASHOUT

CONCRETE WASHOUT(S) ARE ANTICIPATED FOR THIS PROJECT. IT SHOULD BE DRAWN ON THESE PLANS BY THE CONTRACTOR AT THE TIME OF INSTALLATION. WASHOUTS ARE TO BE CONSTRUCTED AND MAINTAINED IN A MANNER CONSISTENT WITH THE DETAILS ON THE PLANS AND THE LATEST EDITION OF THE ILLINOIS URBAN MANUAL.

CONCRETE WASHOUT SHALL BE CONTAINED AT ALL TIMES. WASHOUT MATERIAL SHALL NOT BE ALLOWED TO ENTER WATER BODIES, STORM SEWERS OR LEACH INTO THE SOIL UNDER ANY CIRCUMSTANCES. ANY WASTE SHALL BE DISPOSED OF PROPERLY AND THE LOCATION OF THE WASHOUT SHALL BE DESIGNATED WITH PROPER SIGNAGE. FAILURE TO COMPLY COULD RESULT IN A VIOLATION.

STABILIZATION TYPE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
PERMANENT SEEDING				A		*	*	A				
DORMANT SEEDING	B										B	
TEMPORARY SEEDING			C									
EROSION CONTROL	D											

- A. CLASS 2A
- B. INCREASE SEEDING RATES BY 25% WHEN DORMANT SEEDING (NOT ANTICIPATED)
- C. TEMPORARY SEEDING (PERENNIAL RYE GRASS, SPRING OATS)
- D. TEMPORARY & EROSION CONTROL BLANKET (PERMANENT SEED AREAS, TEMPORARY SEED AREAS AS DIRECTED BY THE ENGINEER)

* IRRIGATION MAY BE NEEDED DURING JUNE AND JULY (INCLUDED IN SEEDING)

NOTE: SEEDING TO BE COMPLETED PER REQUIREMENTS OF SECTION 250 OF THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGES AND THE SPECIAL PROVISIONS.

GENERAL NOTES

- A) UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS IN THE ILLINOIS URBAN MANUAL, LATEST EDITION.
- B) THE KANE-DUPAGE SOIL AND WATER CONSERVATION DISTRICT (KDSWCD) MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITIES, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- C) A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- D) THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE KDSWCD.
- E) IT IS THE RESPONSIBILITY OF THE OWNER AND/OR GENERAL CONTRACTOR TO INFORM ANY SUB-CRACKTOR(S) WHO MAY PERFORM WORK ON THIS PROJECT, OF THE REQUIREMENTS IN IMPLEMENTING AND MAINTAINING THESE EROSION CONTROL PLANS AND THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT REQUIREMENTS SET FORTH BY THE ILLINOIS EPA.
- F) THE CONTRACTOR IS RESPONSIBLE FOR INDICATING THE CURRENT LOCATION OF THE CONCRETE WASHOUT AND ANY MODIFICATIONS TO THE LOCATIONS OR DETAILS OF EROSION AND SEDIMENT CONTROLS ON THESE PLANS.
- G) ALL DROP INLETS ON AND ADJACENT TO THE SITE MUST HAVE SEDIMENT TRAPPING OR CONTAINMENT DEVICE INSTALLED DURING CONSTRUCTION ACTIVITIES. FILTER FABRIC ON ITS OWN IS NOT AN APPROVED METHOD. PREFABRICATED DROP INLET PROTECTION SHOULD BE AS RESTRICTIVE AS THE ILLINOIS URBAN MANUAL STANDARD 861 FOR INLET PROTECTION.

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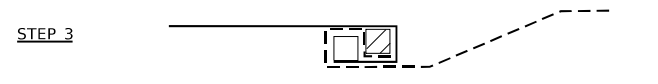
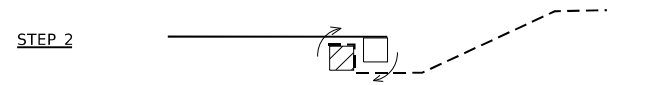
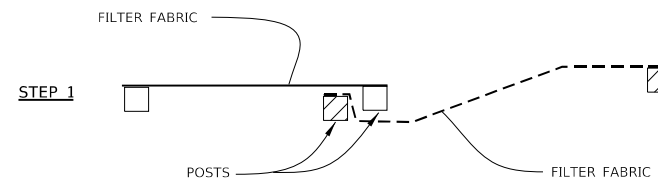
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PLOT SCALE = 1:2	CHECKED - MNB	REVISED -
PLOT DATE = 8/15/2018	DATE - 8/16/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**KIRK AT PINE INTERSECTION IMPROVEMENTS
EROSION & SEDIMENT CONTROL PLAN**

SCALE: 1"=20' SHEET 3 OF 4 SHEETS STA. TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	21
CONTRACT NO.61E75				
ILLINOIS FED. AID PROJECT X				



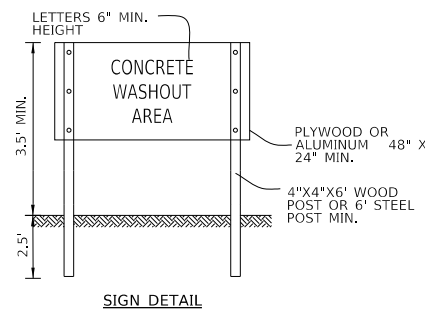
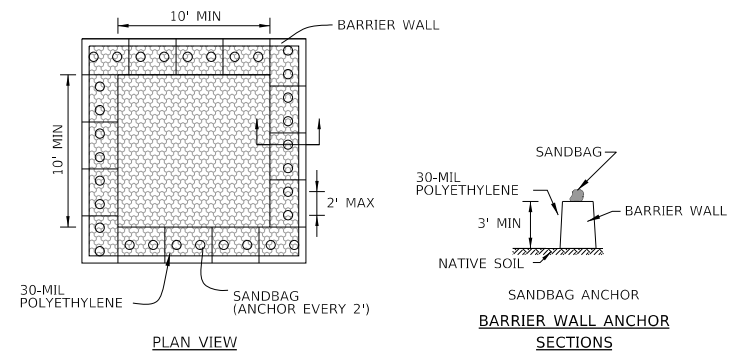
ATTACHING TWO SILT FENCES

NOTES:

1. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
2. ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
3. CUT THE FABRIC NEAR THE BOTTOM OF THE STAKES TO ACCOMMODATE THE 6" FLAP.
4. DRIVE BOTH POSTS A MINIMUM OF 18 INCHES INTO THE GROUND AND BURY THE FLAP.
5. COMPACT BACKFILL (PARTICULARLY AT SPLICES) COMPLETELY TO PREVENT STORMWATER PIPING.

**PERIMETER EROSION BARRIER
(SILT FENCE) - SPLICING TWO FENCES**

STD. IUM-620B
(SILT FENCE - SPLICING TWO FENCES)

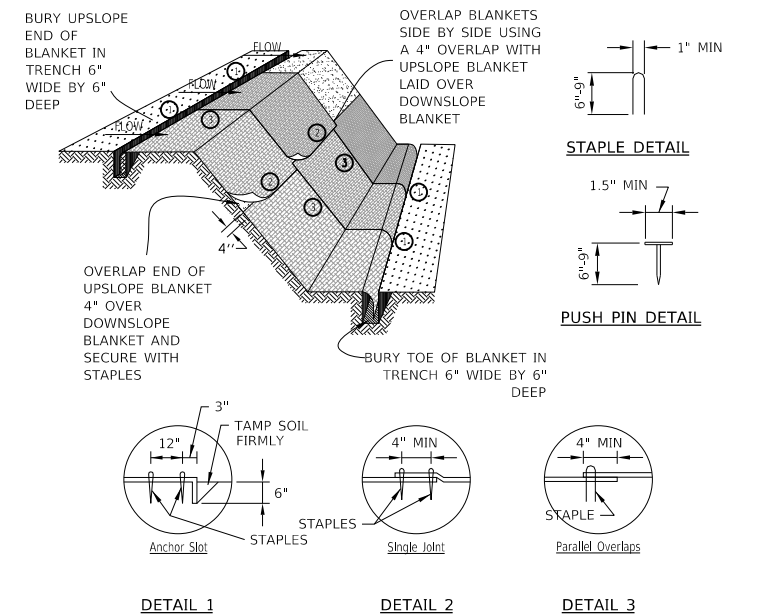


WASHOUT NOTES:

1. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND/OR SLURRY AND RETURNING THE FACILITIES TO A FUNCTIONAL CONDITION.
2. FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.

**TEMPORARY CONCRETE
WASHOUT FACILITY - BARRIER WALL**

STD. IUM-654BW
(TEMPORARY CONCRETE WASHOUT)

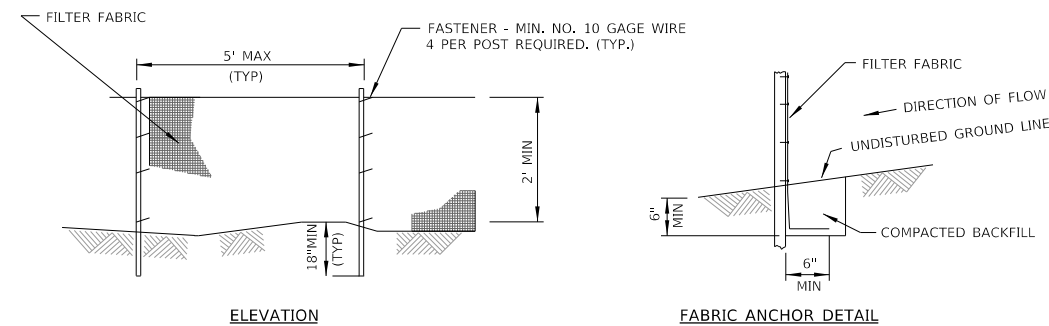


NOTES:

1. STAPLES SHALL BE PLACED IN A DIAMOND PATTERN AT 2 PER S.Y. FOR STITCHED BLANKETS. NON-STICHED SHALL USE 4 STAPLES PER S.Y. OF MATERIAL. THIS EQUATES TO 200 STAPLES WITH STITCHED BLANKET AND 400 STAPLES WITH NON-STICHED BLANKET PER 100 S.Y. OF MATERIAL
2. STAPLE OR PUSH PIN LENGTHS SHALL BE SELECTED BASED ON SOIL TYPE AND CONDITIONS. (MINIMUM STAPLE LENGTH IS 6")
3. EROSION CONTROL MATERIAL SHALL BE PLACED IN CONTACT WITH THE SOIL OVER A PREPARED SEEDBED.
4. ALL ANCHOR SLOTS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

**EROSION CONTROL BLANKET
INSTALLATION DETAILS**

STD. IL-530A, IL-530B, IUM-531
(EROSION CONTROL BLANKET)

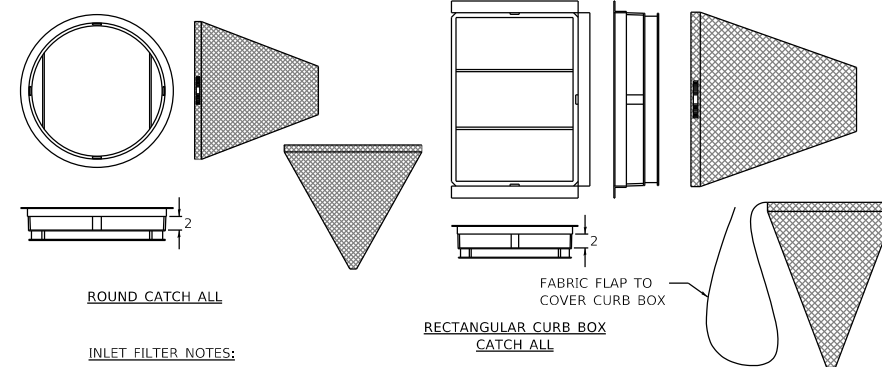


NOTES:

1. TEMPORARY SEDIMENT FENCE SHALL BE INSTALLED PRIOR TO ANY GRADING WORK IN THE AREA TO BE PROTECTED. THEY SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD AND REMOVED IN CONJUNCTION WITH THE FINAL GRADING AND SITE STABILIZATION.
2. FILTER FABRIC SHALL MEET THE REQUIREMENTS OF MATERIAL SPECIFICATION 592 GEOTEXTILE TABLE 1 OR 2, CLASS WITH EQUIVALENT OPENING SIZE OF AT LEAST 30 FOR NONWOVEN AND 40 FOR WOVEN.
3. FENCE POSTS SHALL BE EITHER STANDARD STEEL POST OR WOOD POST WITH A MINIMUM CROSS-SECTIONAL AREA OF 3.0 SQ. IN.

**PERIMETER EROSION BARRIER
(SILT FENCE)**

STD. IUM-620A
(SILT FENCE PLAN)



ROUND CATCH ALL

INLET FILTER NOTES:

FRAME: TOP FLANGE FABRICATED FROM 1 1/2"x1 1/2"x1/2" ANGLE. BASE RIM FABRICATED FROM 1 1/2"x1/2"x1/2" CHANNEL. HANDLES AND SUSPENSION BRACKETS FABRICATED FROM 1 1/2"x1/2" FLAT STOCK. ALL STEEL CONFORMING TO ASTM-A36.

SEDIMENT BAG: BAG FABRICATED FROM 4 OZ./SQ.YD. NON-WOVEN POLYPROPYLENE GEOTEXTILE REINFORCED WITH POLYESTER MESH. BAG SECURED TO BASE RIM WITH A STAINLESS STEEL BAND AND LOCK.

INLET FILTER DETAIL

N.T.S.

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USER NAME = rsikes	DESIGNED - RMS	REVISED -
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PLOT DATE = 8/15/2018	CHECKED - MNB	REVISED -
	DATE - 8/16/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

KIRK AT PINE INTERSECTION IMPROVEMENTS
EROSION & SEDIMENT CONTROL PLAN

SCALE: 1"=20'

SHEET 4 OF 4 SHEETS STA. TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	22
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				

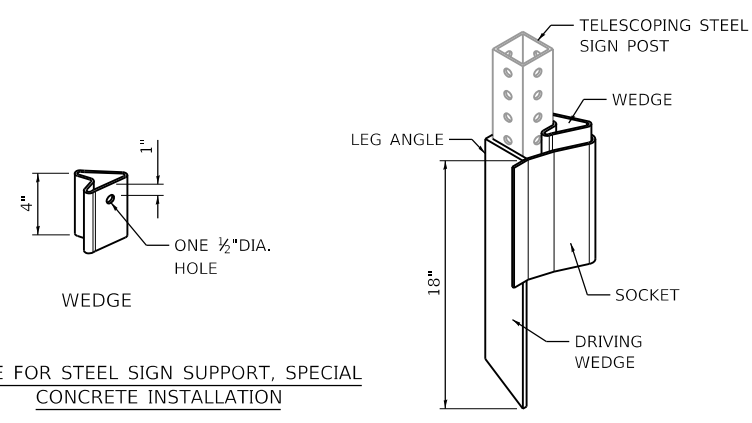
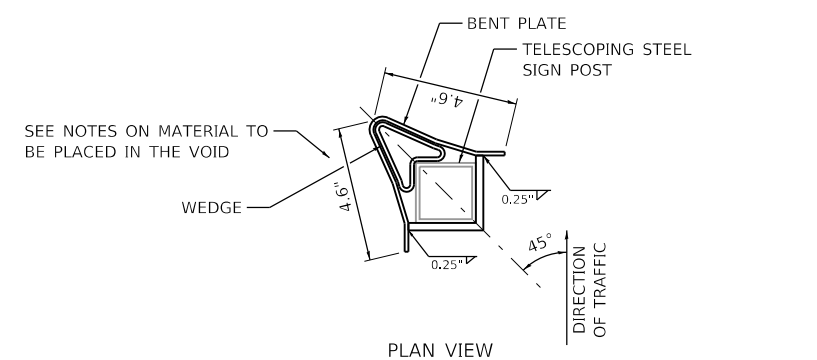
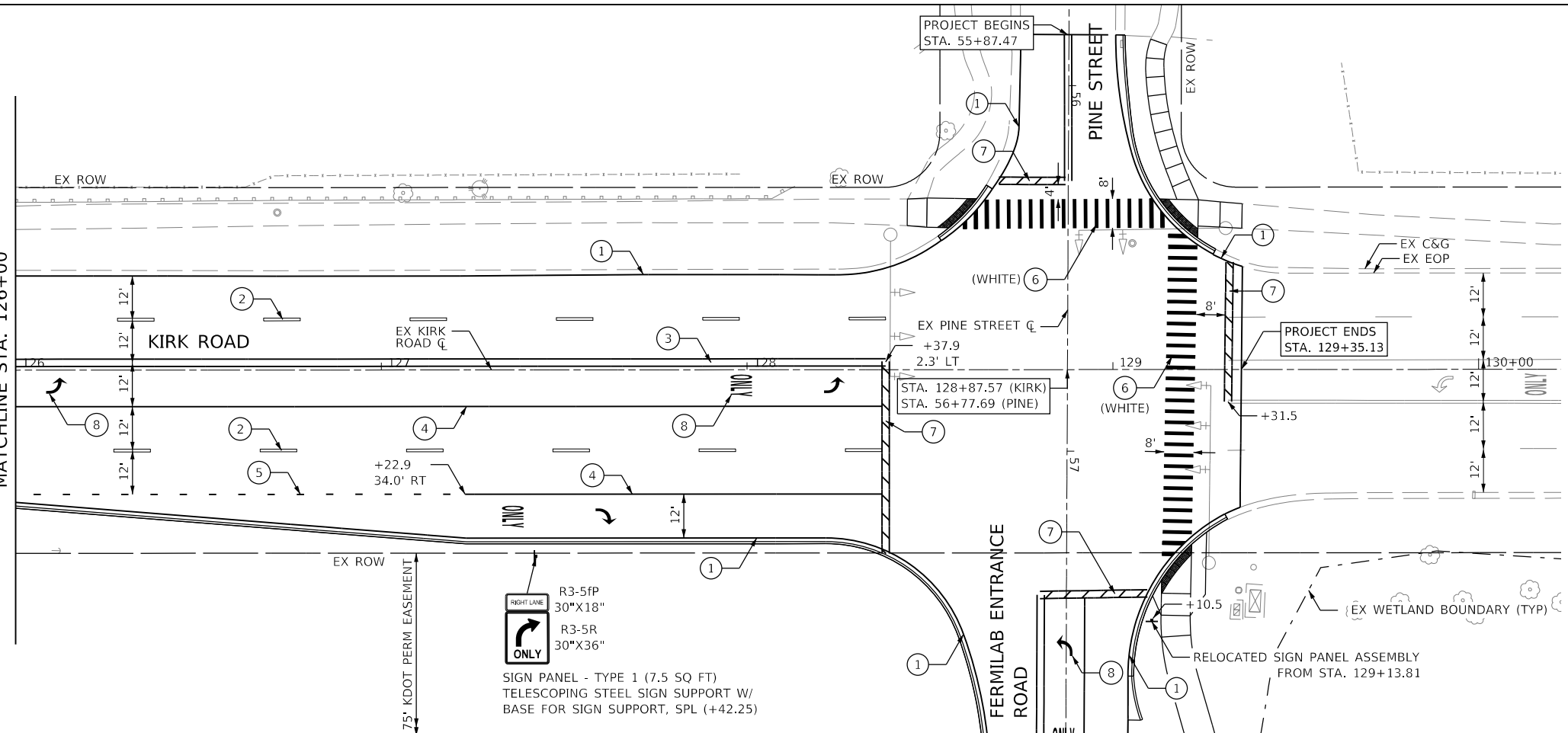
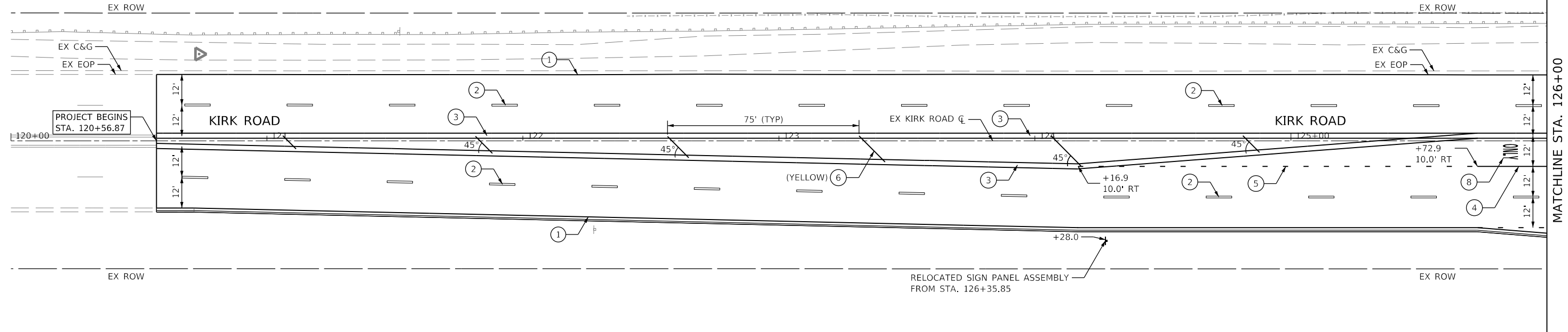
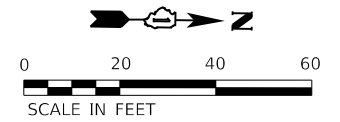
LEGEND:

- ① PVMT MARKING - LINE 6" (WHITE)
- ② PVMT MARKING - LINE 6" (10' LINE, 30' SPACE)
- ③ PVMT MARKING - LINE 6" (DBL YELLOW CENTERLINE)
- ④ PVMT MARKING - LINE 8"
- ⑤ PVMT MARKING - LINE 8" (2' LINE, 6' SPACE)
- ⑥ PVMT MARKING - LINE 12"
- ⑦ PVMT MARKING - LINE 24"
- ⑧ PVMT MARKING - LETTERS AND SYMBOLS

SIGN	MUTCD SIGN CODE	STA./OFF.	SIGN STATUS	RELOCATED TO STA.
TRI-FOLD STOP SIGN	R1-1 (36"X36")	128+29.02 (43.3'RT)	REMOVED	
YIELD TO PEDS	R1-5 (36"X36")	128+43.22 (54.0'RT)	RELOCATED	128+42.25 (61.1'RT)
YIELD TO PEDS	R1-5 (36"X36")	129+13.81 (66.8'RT)	RELOCATED	129+10.51 (68.5'RT)
RIGHT-TURN ONLY	R3-5R (30"X36")	127+42.25 (50.9'RT)	PROPOSED	
RIGHT LANE (PLAQUE)	R3-5FP (30"X12")	127+42.25 (50.9'RT)	PROPOSED	

NOTES:

1. ALL STATION CALLOUTS REFERENCE THE EXISTING KIRK ROAD ALIGNMENT \bar{C} UNLESS OTHERWISE STATED.
2. ALL PERMANENT PVMT MARKINGS SHALL FOLLOW IDOT D1 TC13 (DISTRICT ONE TYPICAL PVMT MARKINGS) DETAIL AND THIS PLAN.
3. ALL PROPOSED PVMT MARKINGS SHALL BE MODIFIED URETHANE UNLESS OTHERWISE NOTED.



BASE FOR STEEL SIGN SUPPORT, SPECIAL CONCRETE INSTALLATION
 TAPCO MODEL #200-VS1A 18" FOR 2"x2" SQUARE POSTS TO BE PROVIDED AND INSTALLED BY THE CONTRACTOR

FILE NAME = W:\Projects\2017\170286_KirkPine\Plan\Drawings\170286-PMK_01.dgn

WBK engineering
 WBK ENGINEERING, LLC
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USER NAME = rsikes	DESIGNED - RMS	REVISED -
PLOT SCALE = 1:40	DRAWN - RMS	REVISED -
PLOT DATE = 8/15/2018	CHECKED - MNB	REVISED -
	DATE - 8/16/2018	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

KIRK AT PINE INTERSECTION IMPROVEMENTS PAVEMENT MARKING & SIGNING PLAN

SCALE: 1"=20' SHEET 1 OF 2 SHEETS STA. 120+00.00 TO STA. 132+00.00

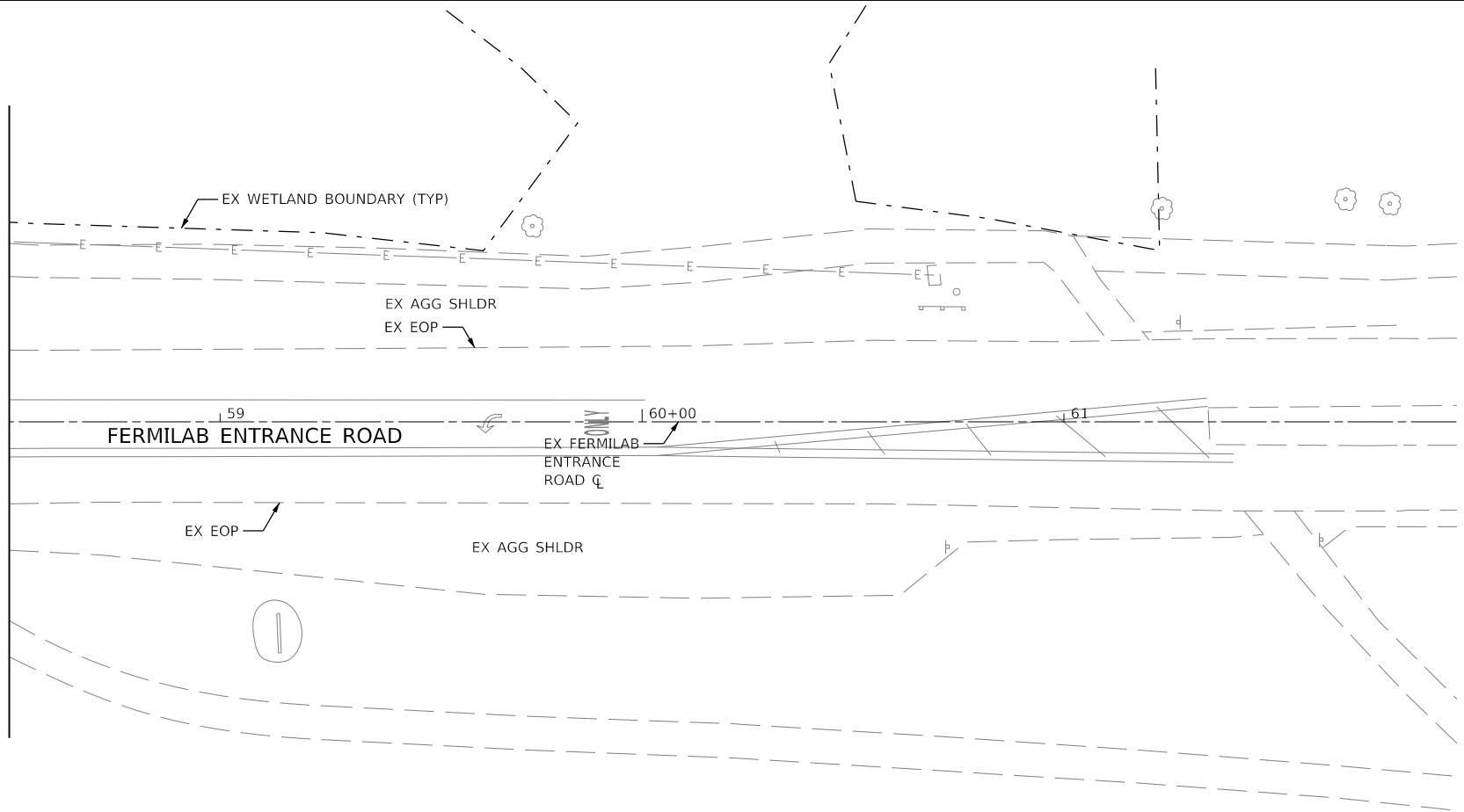
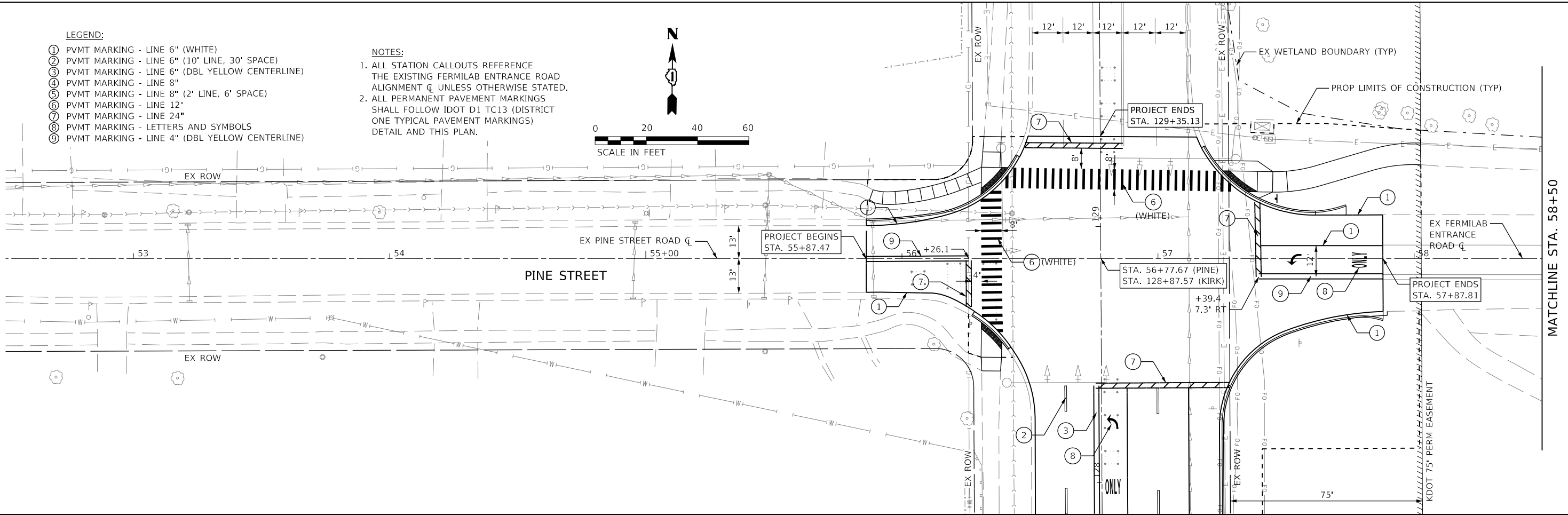
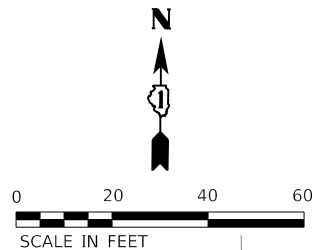
FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	23
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				

LEGEND:

- ① PVMT MARKING - LINE 6" (WHITE)
- ② PVMT MARKING - LINE 6" (10' LINE, 30' SPACE)
- ③ PVMT MARKING - LINE 6" (DBL YELLOW CENTERLINE)
- ④ PVMT MARKING - LINE 8"
- ⑤ PVMT MARKING - LINE 8" (2' LINE, 6' SPACE)
- ⑥ PVMT MARKING - LINE 12"
- ⑦ PVMT MARKING - LINE 24"
- ⑧ PVMT MARKING - LETTERS AND SYMBOLS
- ⑨ PVMT MARKING - LINE 4" (DBL YELLOW CENTERLINE)

NOTES:

1. ALL STATION CALLOUTS REFERENCE THE EXISTING FERMILAB ENTRANCE ROAD ALIGNMENT \bar{C} UNLESS OTHERWISE STATED.
2. ALL PERMANENT PAVEMENT MARKINGS SHALL FOLLOW IDOT D1 TC13 (DISTRICT ONE TYPICAL PAVEMENT MARKINGS) DETAIL AND THIS PLAN.



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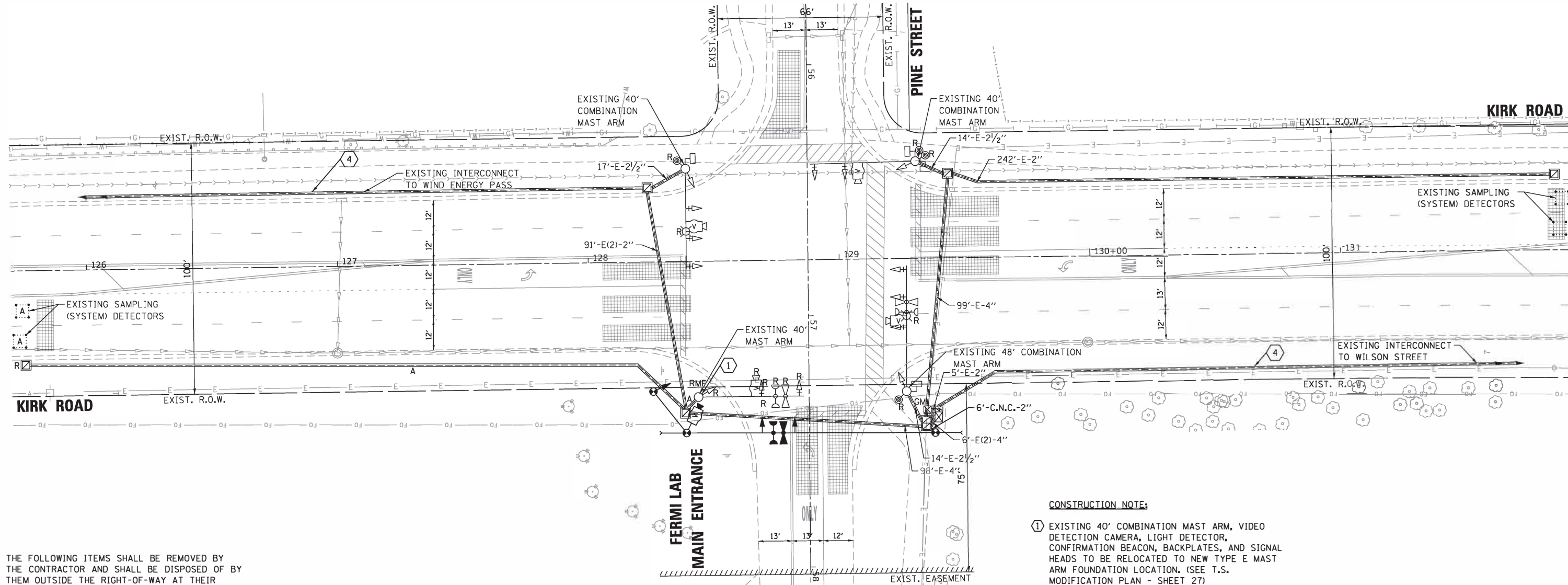
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	DATE - 8/16/2018	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**KIRK AT PINE INTERSECTION IMPROVEMENTS
PAVEMENT MARKING & SIGNING PLAN**

SCALE: 1"=20' SHEET 2 OF 2 SHEETS STA. 52+50.00 TO STA. 62+00.00

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	24
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				



THE FOLLOWING ITEMS SHALL BE REMOVED BY THE CONTRACTOR AND SHALL BE DISPOSED OF BY THEM OUTSIDE THE RIGHT-OF-WAY AT THEIR EXPENSE. THE SALVAGE VALUE OF THE REMOVED EQUIPMENT SHALL BE REFLECTED IN THE CONTRACT BID PRICE.

- 2 EACH LUMINAIRE
- 3 EACH PUSH-BUTTON

THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SAFELY STORED AND RELOCATED TO THE PROPOSED MAST ARM FOUNDATION, TYPE-E 36-INCH DIAMETER.

- 2 EACH SIGNAL HEAD, 1-FACE, 3-SECTION
- 1 EACH SIGNAL HEAD, 1-FACE, 5-SECTION
- 2 EACH TRAFFIC SIGNAL BACKPLATE
- 1 EACH LIGHT DETECTOR
- 1 EACH CONFIRMATION BEACON
- 1 EACH VIDEO VEHICLE DETECTION CAMERA

CONSTRUCTION NOTE:

- ① EXISTING 40' COMBINATION MAST ARM, VIDEO DETECTION CAMERA, LIGHT DETECTOR, CONFIRMATION BEACON, BACKPLATES, AND SIGNAL HEADS TO BE RELOCATED TO NEW TYPE E MAST ARM FOUNDATION LOCATION. (SEE T.S. MODIFICATION PLAN - SHEET 27)
- ② ALL OTHER TRAFFIC SIGNAL EQUIPMENT SHALL REMAIN OPERATIONAL DURING PARTIAL TEMPORARY TRAFFIC SIGNAL OPERATIONS.
- ③ REMOVE ALL CABLES TO RELOCATED TRAFFIC EQUIPMENT FROM EXISTING CONDUITS.
- ④ THE EXISTING INTERCONNECT AND ALL COMMUNICATION SHALL REMAIN DURING THE OPERATION OF THE PARTIAL TEMPORARY TRAFFIC SIGNAL INSTALLATION.

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 1

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5180.100
Date Plot

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PLOT SCALE = 1:20
PLOT DATE = 3/9/2018

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DRAWN - ZCW
CHECKED - DPB
DATE -

REVISED -
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REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PARTIAL TEMPORARY TRAFFIC SIGNAL INSTALLATION
AND REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT
KIRK ROAD AND PINE STREET /FERMI LAB MAIN ENTRANCE**

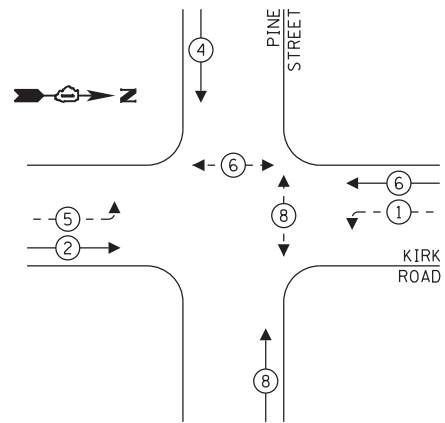
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 61E75				

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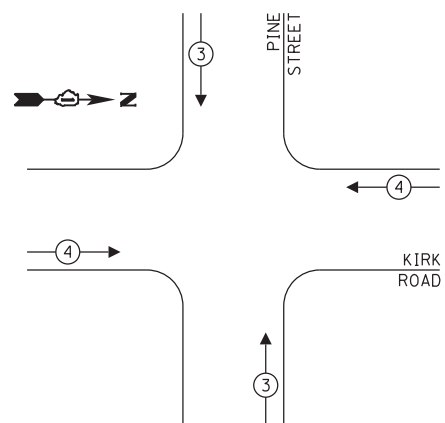
TEMPORARY CONTROLLER SEQUENCE



LEGEND:

- ← ⊛ ← PROTECTED PHASE
- ← ⊛ - - PROTECTED/PERMITTED PHASE
- ← ⊛ → PEDESTRIAN PHASE
- ← ⊛ OL OVERLAP

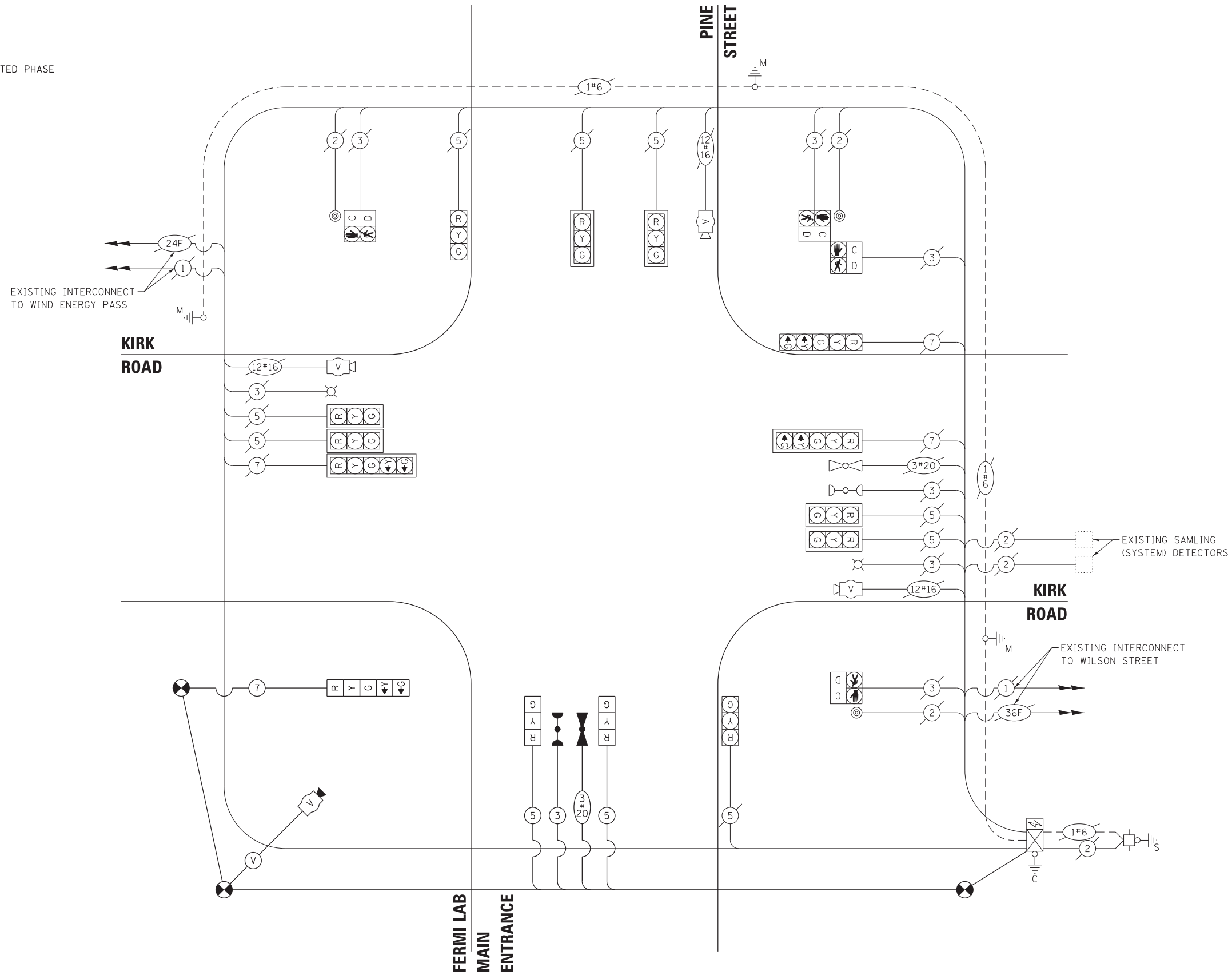
**TEMPORARY EMERGENCY VEHICLE
PREEMPTION SEQUENCE**



**TRAFFIC SIGNAL
ELECTRICAL SERVICE REQUIREMENTS**

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	14	11	50	77
(YELLOW)	14	20	5	14
(GREEN)	14	12	45	75.6
ARROW	8	10	10	10
PED. SIGNAL	4	20	100	80
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	1	150	100	-
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	2	250	50	250
TOTAL =				631.6

ENERGY COSTS TO:
 CITY OF BATAVIA
 100 N. ISLAND AVENUE
 BATAVIA, IL 60510
 ENERGY SUPPLY: CONTACT: _____
 PHONE: _____
 COMPANY: _____
 ACCOUNT NUMBER: _____



CABLE PLAN
(NOT TO SCALE)

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 2

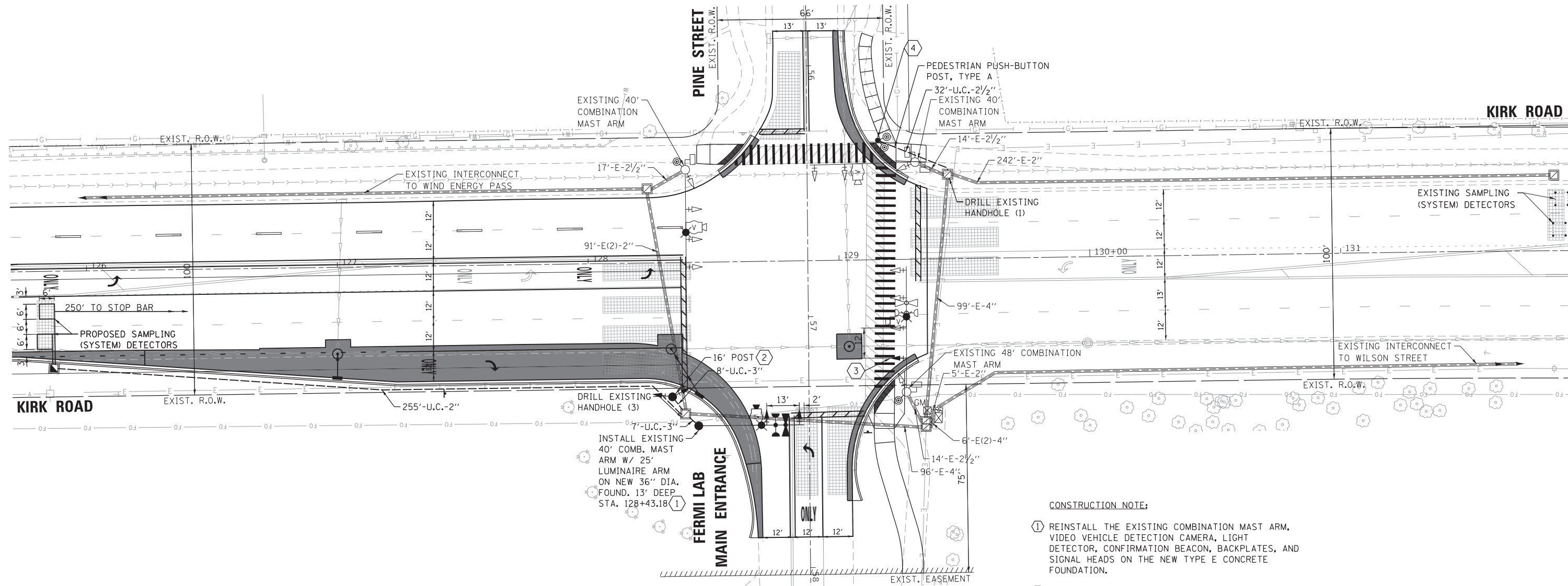
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Default	PLOT DATE = 3/9/2018	CHECKED - DPB	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PARTIAL TEMPORARY CABLE PLAN, PARTIAL TEMPORARY PHASE DESIGNATION
DIAGRAM, AND PARTIAL TEMPORARY EMERGENCY VEHICLE PREEMPTION SEQUENCE
KIRK ROAD AND PINE STREET /FERMILAB MAIN ENTRANCE**

F.A.P. RTE. 360	SECTION 15-00342-01-CH	COUNTY KANE	TOTAL SHEETS 42	SHEET NO. 26
CONTRACT NO. 61E75				ILLINOIS FED. AID PROJECT

SCALE: NONE SHEET OF SHEETS STA. TO STA.



- CONSTRUCTION NOTE:**
- ① REINSTALL THE EXISTING COMBINATION MAST ARM, VIDEO VEHICLE DETECTION CAMERA, LIGHT DETECTOR, CONFIRMATION BEACON, BACKPLATES, AND SIGNAL HEADS ON THE NEW TYPE E CONCRETE FOUNDATION.
 - ② REINSTALL THE EXISTING BRACKET MOUNTED SIGNAL HEAD ON THE NEW 16' SIGNAL POST.
 - ③ INSTALL NEW 3-SECTION SIGNAL HEAD WITH BACKPLATE TO EXISTING MAST ARM. ADJUST EXISTING MAST ARM MOUNTED SIGN IF NECESSARY.
 - ④ PEDESTRIAN PUSH-BUTTONS SHALL BE MOUNTED TO PEDESTRIAN PUSH-BUTTON POST USING ADAPTER TO ALLOW 90-DEGREE ORIENTATION.
 - ⑤ INSTALL NEW BACKPLATES ON EXISTING BRACKET MOUNTED SIGNAL HEADS.
 - ⑥ PROPOSED CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF 42".

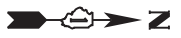
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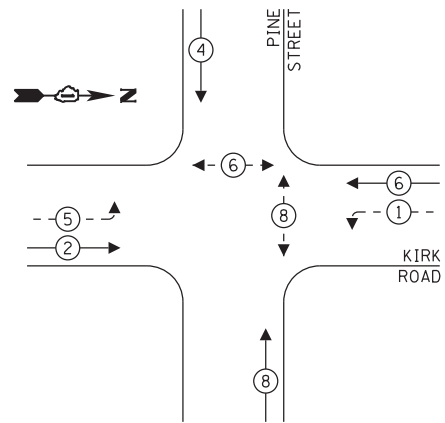
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL MODIFICATION PLAN KIRK ROAD AND PINE STREET /FERMI LAB MAIN ENTRANCE			
SCALE: 1"=20'	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	27
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT				



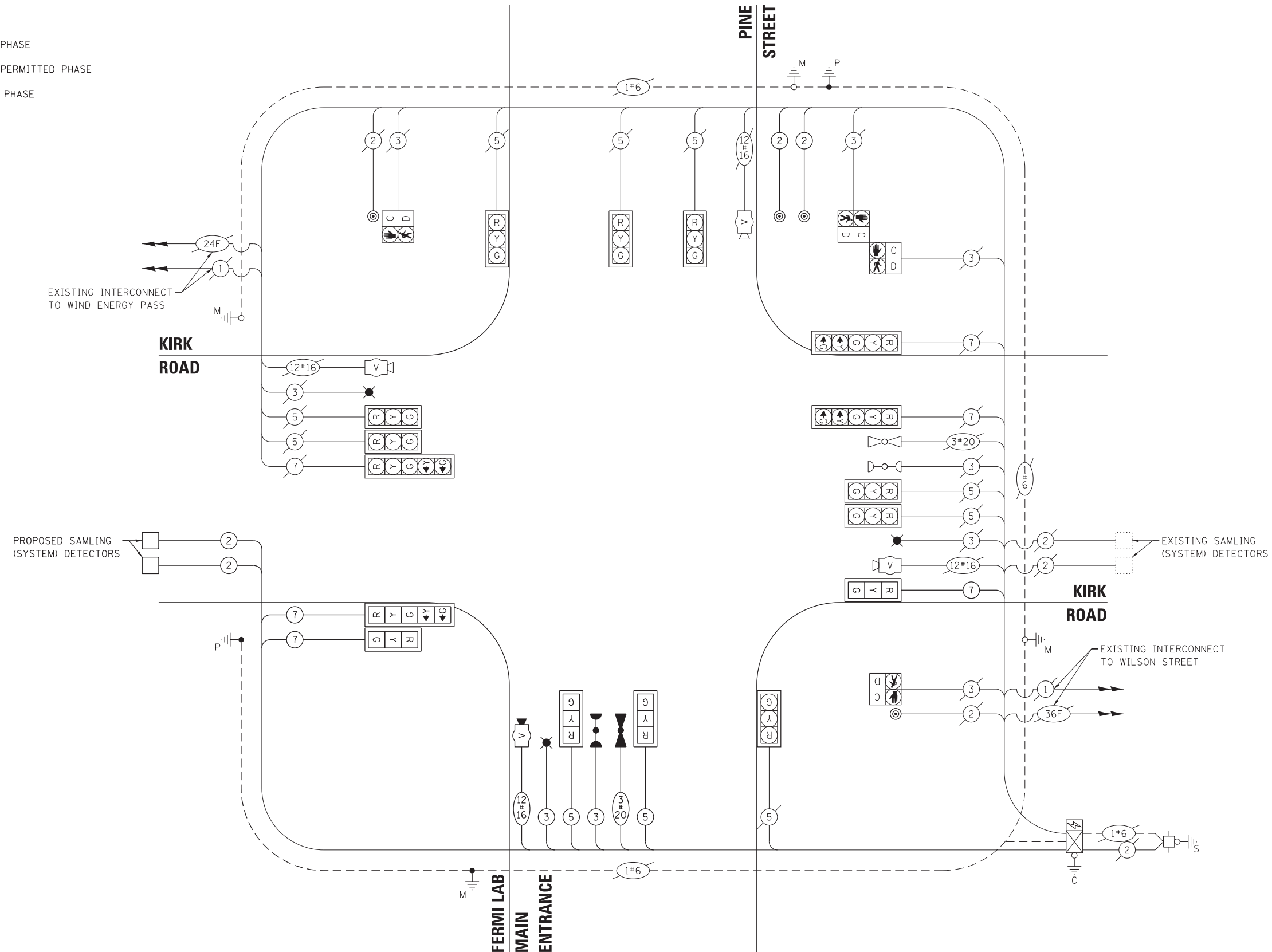
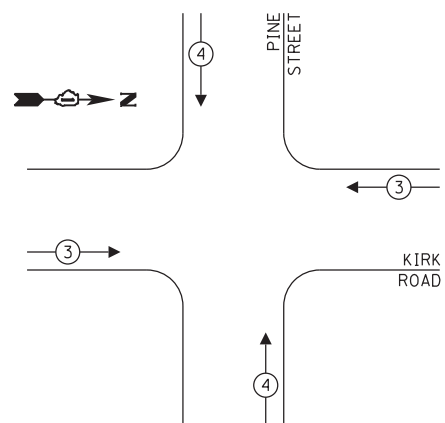
EXISTING AND PROPOSED CONTROLLER SEQUENCE



LEGEND:

- ← * → PROTECTED PHASE
- ← - * - → PROTECTED/PERMITTED PHASE
- ← * → PEDESTRIAN PHASE
- ← * OL → OVERLAP

EXISTING AND PROPOSED EMERGENCY VEHICLE PREEMPTION SEQUENCE



TRAFFIC SIGNAL ELECTRICAL SERVICE REQUIREMENTS

TYPE	NO. OF LAMPS	LED WATTAGE	% OPERATION	TOTAL WATTAGE
SIGNAL (RED)	16	11	50	88
(YELLOW)	16	20	5	16
(GREEN)	16	12	45	86.4
ARROW	8	10	10	8
PED. SIGNAL	4	20	100	80
CONTROLLER	1	100	100	100
UPS	1	25	100	25
VIDEO SYSTEM	1	150	100	150
BLANK-OUT SIGN	-	25	5	-
FLASHER	-	-	50	-
STREET NAME SIGN	-	120	50	-
LUMINAIRE	3	190	50	285
TOTAL =				838.4

ENERGY COSTS TO:

CITY OF BATAVIA
100 N. ISLAND AVENUE
BATAVIA, IL 60510

ENERGY SUPPLY: CONTACT: _____
PHONE: _____
COMPANY: _____
ACCOUNT NUMBER: _____

CABLE PLAN
(NOT TO SCALE)

GHA GEWALT HAMILTON ASSOCIATES, INC. TS SHT NO. 4

FILE NAME = 5180.200 - Perm Cable Sheet.dgn	USER NAME = zwellsten	DESIGNED - DPB	REVISED -
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Default	PLOT DATE = 3/9/2018	CHECKED - DPB	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE PLAN, PHASE DESIGNATION DIAGRAM,
AND EMERGENCY VEHICLE PREEMPTION SEQUENCE
KIRK ROAD AND PINE STREET / FERMI LAB MAIN ENTRANCE

SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	28
				CONTRACT NO. 61E75
ILLINOIS FED. AID PROJECT				

SCHEDULE OF QUANTITIES

ITEM DESCRIPTION	UNITS	TOTAL QTY.
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	255
UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	32
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	15
HANDHOLE	EACH	1
ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 3-1/C NO. 10	EACH	198
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	342
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	181
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	374
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	393
ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	776
ELECTRIC CABLE IN CONDUIT, COMMUNICATION NO. 16 6 PAIR	FOOT	169
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	66
TRAFFIC SIGNAL POST, GALVANIZED STEEL 16 FT.	EACH	1
CONCRETE FOUNDATION, TYPE A	FOOT	8
CONCRETE FOUNDATION, TYPE E 30-INCH DIAMETER	FOOT	13
DRILL EXISTING HANDHOLE	EACH	4
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	1
SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	1
TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	5
DETECTOR LOOP, TYPE I	FOOT	70
PEDESTRIAN PUSH-BUTTON	EACH	4
TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1
RELOCATE EXISTING SIGNAL HEAD	EACH	3
RELOCATE EXISTING MAST ARM ASSEMBLY AND POLE	EACH	1
RELOCATE EXISTING EMERGENCY VEHICLE PRIORITY SYSTEM, DETECTOR UNIT	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	931
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
REMOVE EXISTING HANDHOLE	EACH	1
REMOVE EXISTING CONCRETE FOUNDATION	EACH	1
RELOCATE EXISTING VIDEO VEHICLE DETECTOR	EACH	1
EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	191
PEDESTRIAN PUSH-BUTTON POST, TYPE A	EACH	1
RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	1
TEMPORARY TRAFFIC SIGNAL TIMING	EACH	1
LUMINAIRE, LED, HORIZONTAL MOUNT, 190 WATT (SPECIAL)	EACH	3

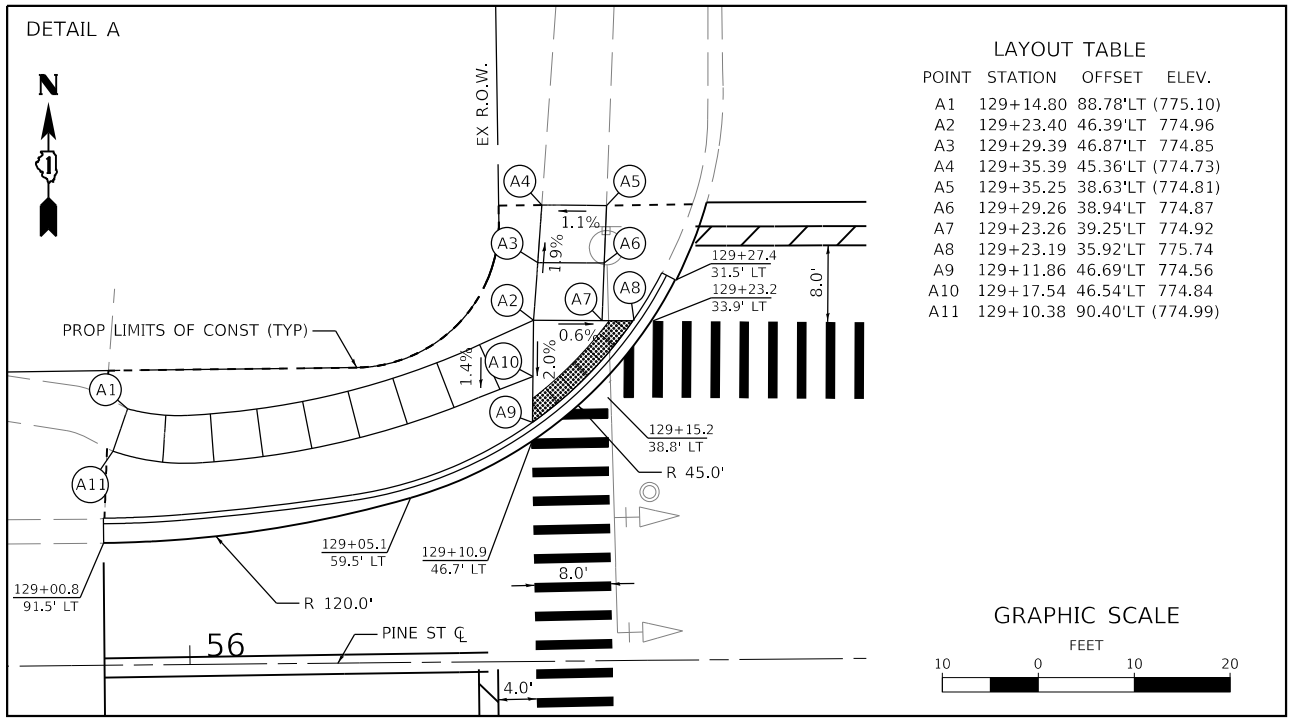
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Default	PLOT DATE = 3/9/2018	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**SCHEDULE OF QUANTITIES
KIRK ROAD AND PINE STREET /FERMI LAB MAIN ENTRANCE**

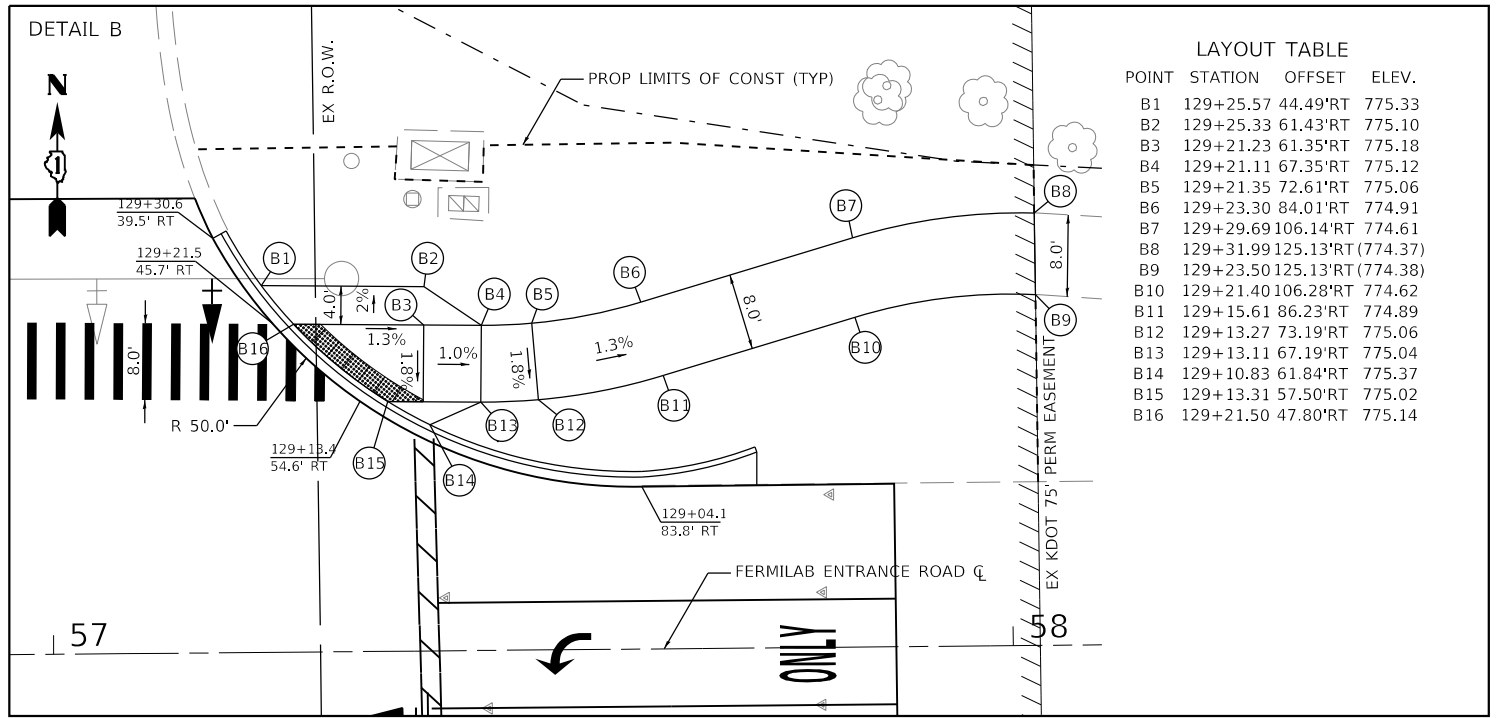
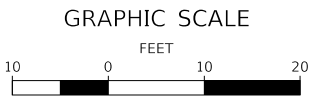
SCALE: NONE SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	29
			CONTRACT NO. 61E75	
ILLINOIS FED. AID PROJECT				



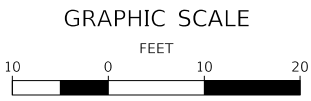
LAYOUT TABLE

POINT	STATION	OFFSET	ELEV.
A1	129+14.80	88.78'LT	(775.10)
A2	129+23.40	46.39'LT	774.96
A3	129+29.39	46.87'LT	774.85
A4	129+35.39	45.36'LT	(774.73)
A5	129+35.25	38.63'LT	(774.81)
A6	129+29.26	38.94'LT	774.87
A7	129+23.26	39.25'LT	774.92
A8	129+23.19	35.92'LT	775.74
A9	129+11.86	46.69'LT	774.56
A10	129+17.54	46.54'LT	774.84
A11	129+10.38	90.40'LT	(774.99)

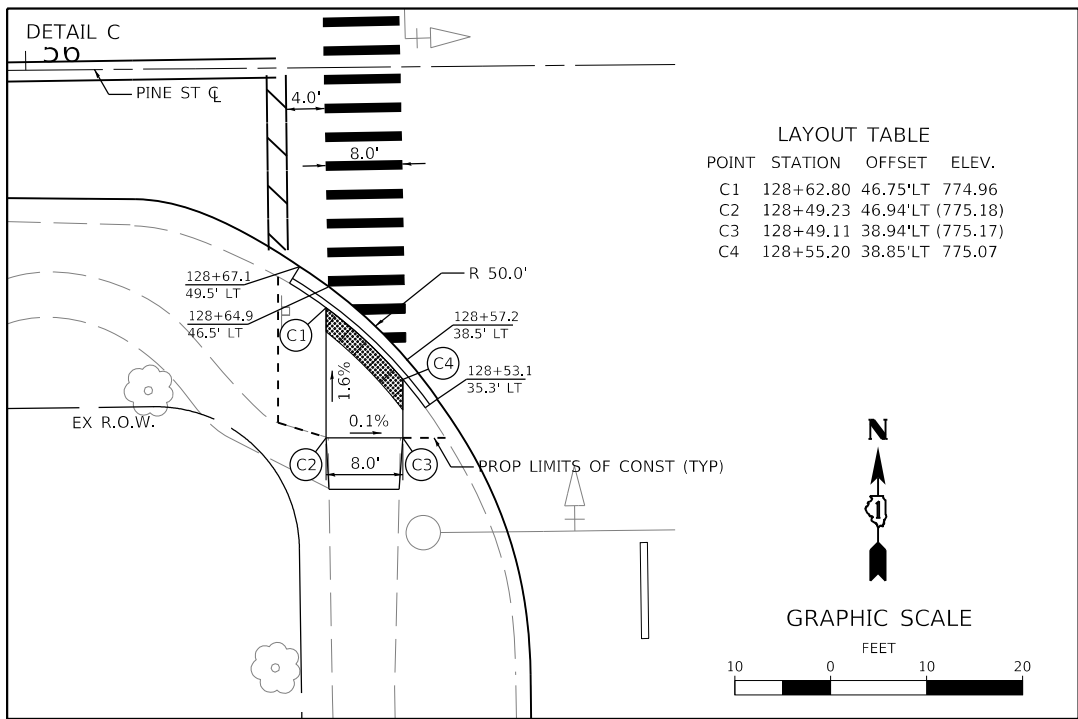


LAYOUT TABLE

POINT	STATION	OFFSET	ELEV.
B1	129+25.57	44.49'RT	775.33
B2	129+25.33	61.43'RT	775.10
B3	129+21.23	61.35'RT	775.18
B4	129+21.11	67.35'RT	775.12
B5	129+21.35	72.61'RT	775.06
B6	129+23.30	84.01'RT	774.91
B7	129+29.69	106.14'RT	774.61
B8	129+31.99	125.13'RT	(774.37)
B9	129+23.50	125.13'RT	(774.38)
B10	129+21.40	106.28'RT	774.62
B11	129+15.61	86.23'RT	774.89
B12	129+13.27	73.19'RT	775.06
B13	129+13.11	67.19'RT	775.04
B14	129+10.83	61.84'RT	775.37
B15	129+13.31	57.50'RT	775.02
B16	129+21.50	47.80'RT	775.14

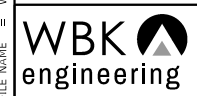
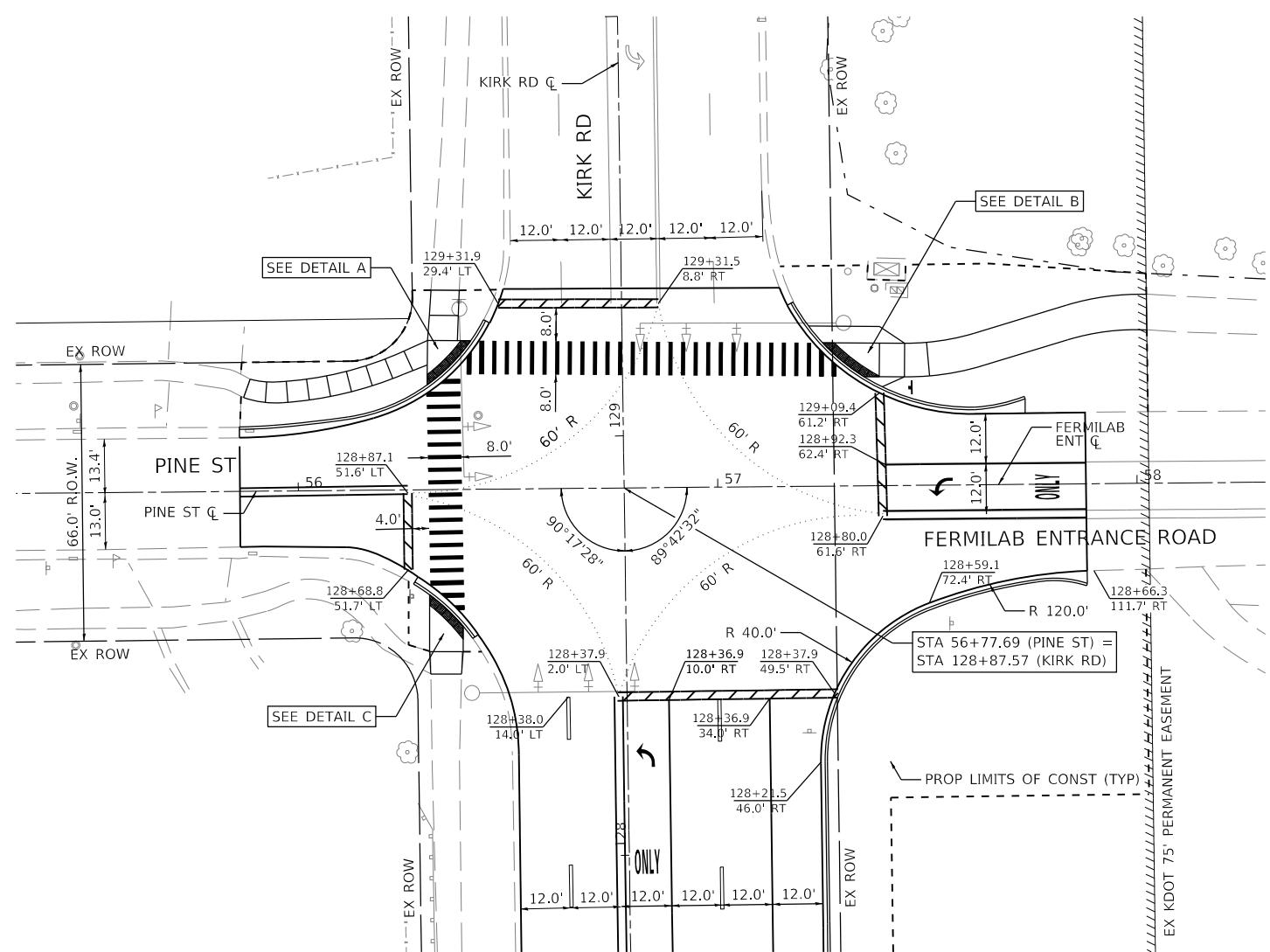
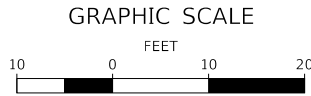


- NOTES
1. ALL STATION AND OFFSETS ARE REFERENCED TO THE KIRK ROAD C ALIGNMENT.
 2. ELEVATIONS IN THE LAYOUT TABLE DENOTED WITH PARENTHESES () INDICATE THE ELEVATION SHALL MATCH THE EXISTING CONDITIONS.
 3. THE DETAILS SHOWN ARE IN COMPLIANCE WITH THE AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS.



LAYOUT TABLE

POINT	STATION	OFFSET	ELEV.
C1	128+62.80	46.75'LT	774.96
C2	128+49.23	46.94'LT	(775.18)
C3	128+49.11	38.94'LT	(775.17)
C4	128+55.20	38.85'LT	775.07



WBK ENGINEERING, LLC
116 WEST MAIN STREET, SUITE 201
ST. CHARLES, ILLINOIS 60174
(630) 443-7755

USER NAME = rsikes
DESIGNED - RMS
DRAWN - RMS
CHECKED - MNB
DATE - 8/16/2018

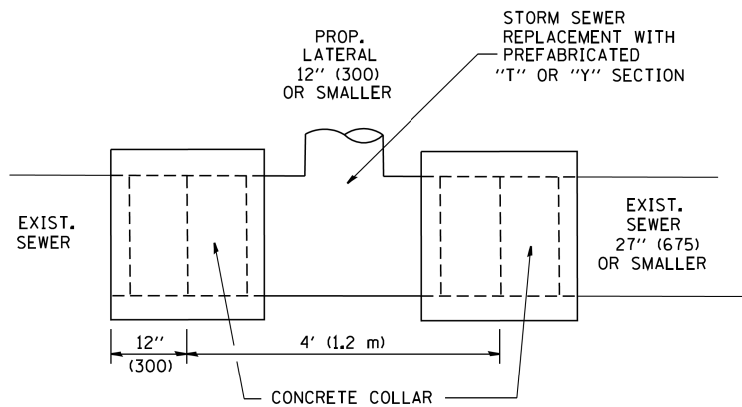
REVISER -
REVISION -
REVISION -
REVISION -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

KIRK AT PINE INTERSECTION IMPROVEMENTS
ADA DETAILS

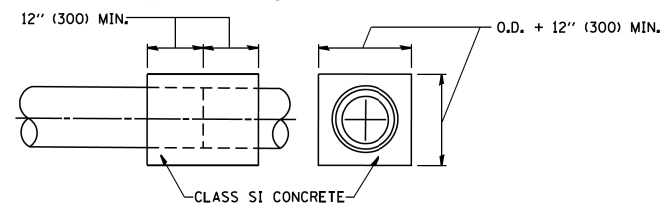
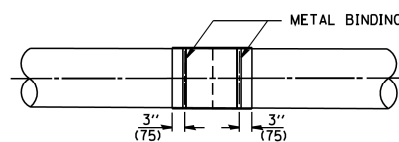
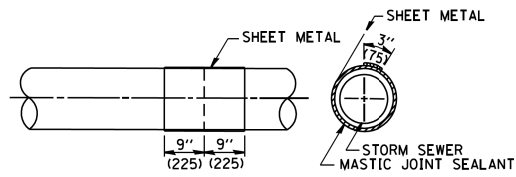
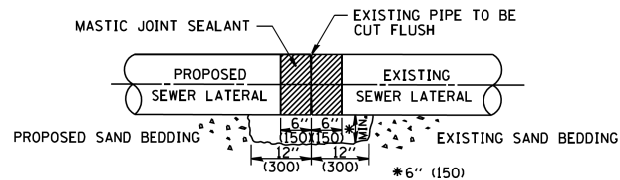
SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	30
CONTRACT NO. 61E75				
ILLINOIS FED. AID PROJECT X				



DETAIL "A"

LATERAL CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER

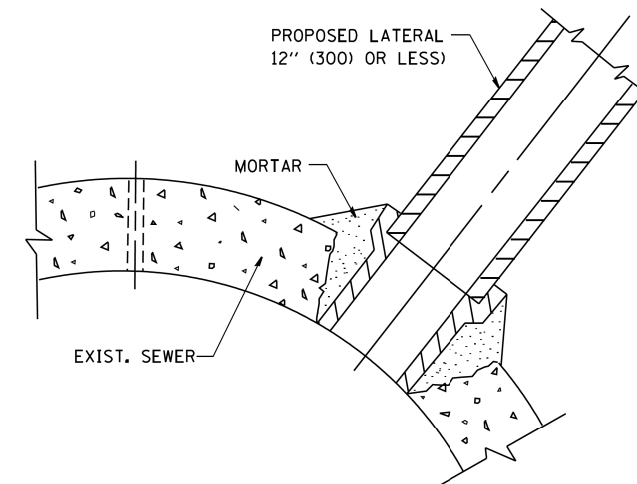


DETAIL "B"

CLASS SI CONCRETE COLLAR

CONSTRUCTION SEQUENCE

- CUT THE EXISTING END OF THE PIPE SO AS TO PRESENT A FLUSH BUTT JOINT. BRUSH AND CLEAN ALL PIPES.
- APPLY THE MASTIC JOINT SEALANT TO THE FIRST 6" (150) OF EACH PIPE.
- BUTT THE PIPES TOGETHER LEAVING A MINIMUM OF 12" x 6" (300 x 150) DEEP EXCAVATION UNDER AND AROUND EACH PIPE END.
- CUT A PIECE OF SHEET METAL GAGE NO. 19 1.1 (0.0418) 18" (450) WIDE BY THE OUTSIDE CIRCUMFERENCE OF THE PIPE PLUS 3" (75) LONG.
- WRAP THE SHEET METAL AROUND THE PIPES, 9" (225) ON EACH SIDE OF THE JOINT, STARTING AT THE TOP OF THE PIPE.
- LAP THE SHEET METAL AT LEAST 3" (75) AT THE TOP OF THE PIPE AND PLACE THE MASTIC JOINT SEALANT BETWEEN THE LAP.
- PLACE TWO METAL BANDS AROUND THE SHEET METAL AND TIGHTEN.
- WIPE OFF ANY EXCESS MASTIC JOINT SEALANT THAT OOOZES OUT FROM BETWEEN THE SHEET METAL AND THE PIPES.
- PLACE CLASS SI CONCRETE AROUND THE JOINT.



DETAIL "C"

PROPOSED LATERAL CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER

NOTES

MATERIAL

MATERIAL USED FOR THE TEE OR WYE SECTION SHALL BE COMPATIBLE WITH THE EXISTING STORM SEWER OR THE PROPOSED STORM SEWER.

CONSTRUCTION METHODS

- THIS WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE APPLICABLE PORTIONS OF SECTION 550 OF THE STANDARD SPECIFICATIONS.
- CONNECTION TO AN EXISTING STORM SEWER SHALL BE BY EITHER OF THE FOLLOWING METHODS:
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 27" (675) OR SMALLER SEE DETAIL "A" AND "B".
 - PROPOSED STORM SEWER CONNECTION TO EXISTING SEWER OF 30" (750) OR LARGER SEE DETAIL "C".

IF THE EXISTING SEWER PIPE IS CRACKED, BROKEN OR OTHERWISE DAMAGED BY THE CONTRACTOR IN MAKING THE CIRCULAR OPENING, THE CONTRACTOR SHALL REPLACE THAT SECTION OF PIPE WITH PIPE EQUAL AND SIMILAR IN ALL RESPECTS TO THE PIPE IN THE EXISTING SEWER, IN A CAREFUL WORKMANLIKE MANNER, WITHOUT EXTRA COMPENSATION.

GENERAL

CARE MUST BE TAKEN TO PREVENT DEBRIS FROM ENTERING THE SEWER. ALL DEBRIS WHICH ENTERS THE SEWER MUST BE REMOVED. THE SEWER MUST BE LEFT CLEAN AND UNOBSTRUCTED UPON COMPLETION OF THE CONTRACT.

CARE MUST BE TAKEN TO PREVENT ANY PART OF THE NEW PIPE CONNECTION FROM PROJECTING INTO THE EXISTING SEWER.

BASIS OF PAYMENT

TEE OR WYE CONNECTIONS SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR STORM SEWER TEE OR WYE OF THE TYPE AND SIZE SPECIFIED IN THE PLANS. THIS PRICE SHALL INCLUDE ALL EXCAVATION OF THE TRENCH, REMOVAL OF THE EXISTING STORM SEWER, FURNISHING AND INSTALLING THE SPECIFIED TEE OR WYE SECTION, FURNISHING AND INSTALLING THE REQUIRED CONCRETE COLLAR, AND ALL OTHER MATERIAL NECESSARY TO COMPLETE THIS WORK AS SHOWN AND SPECIFIED.

REMOVAL AND REINSTALLATION OF EXISTING STORM SEWER ADJACENT TO THE PROPOSED TEE OR WYE SECTION, FOR THE PURPOSE OF FACILITATING THE INSTALLATION OF THE TEE OR WYE SECTION, WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE WORK.

TRENCH BACKFILL, EXCAVATION IN ROCK AND REMOVAL AND REPLACEMENT OF UNSUITABLE MATERIAL BELOW PLAN BEDDING GRADE WILL BE PAID FOR SEPARATELY.

CONCRETE COLLAR FOR CONNECTING A PROPOSED STORM SEWER TO AN EXISTING STORM SEWER WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE PROPOSED STORM SEWER.

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

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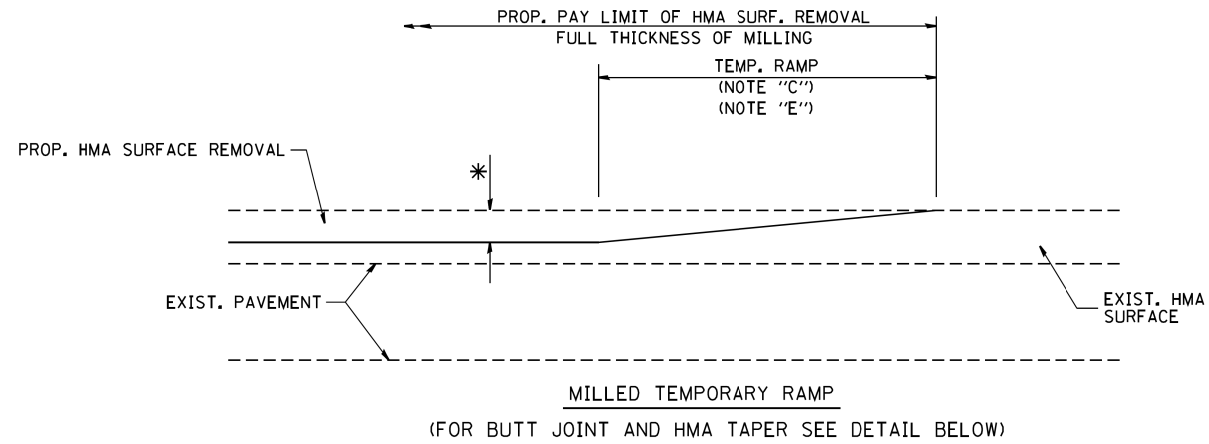
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

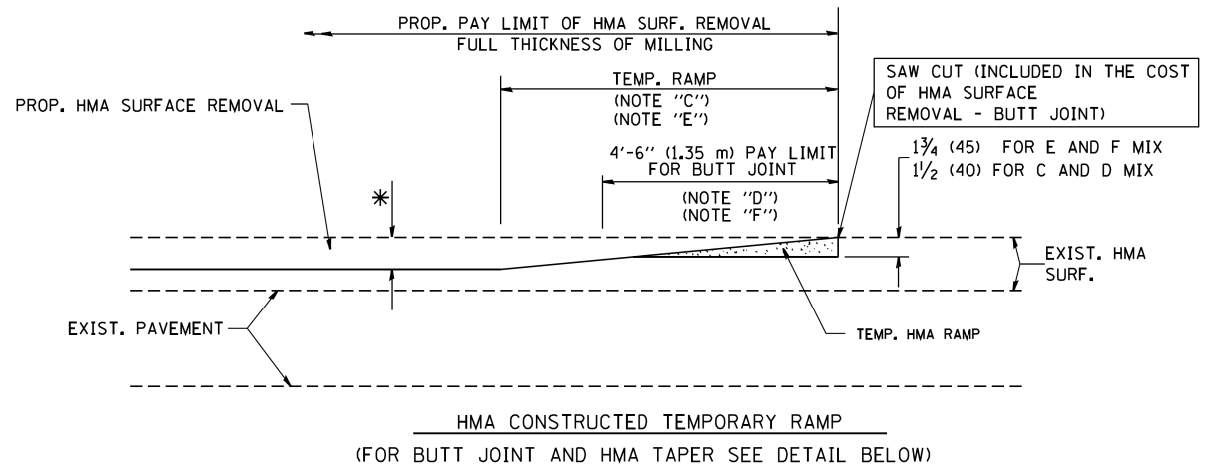
DETAIL OF STORM SEWER
CONNECTION TO EXISTING SEWER

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

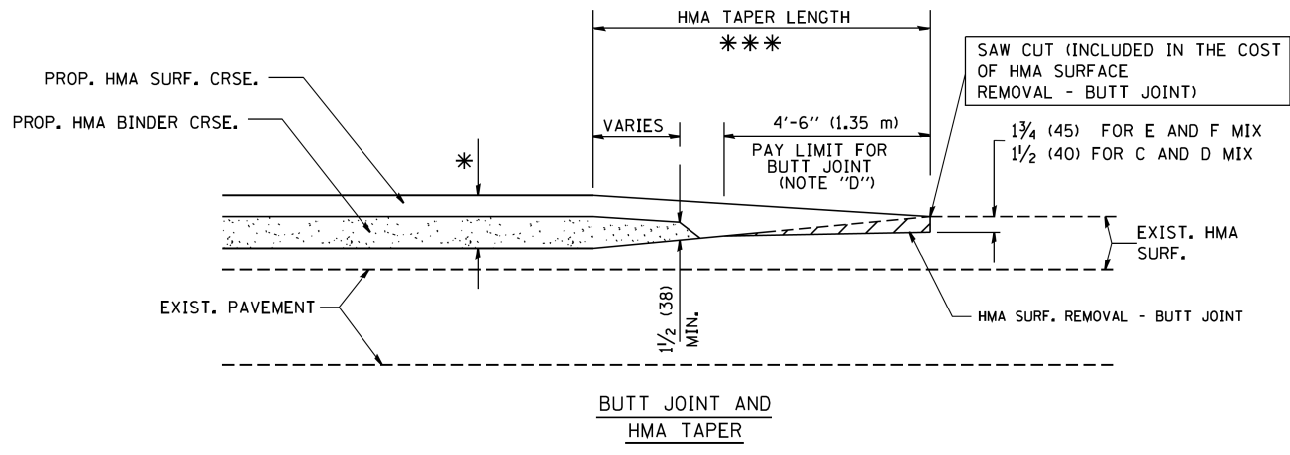
FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	31
BD500-01 (BD-7)		CONTRACT NO. 61E75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT X				



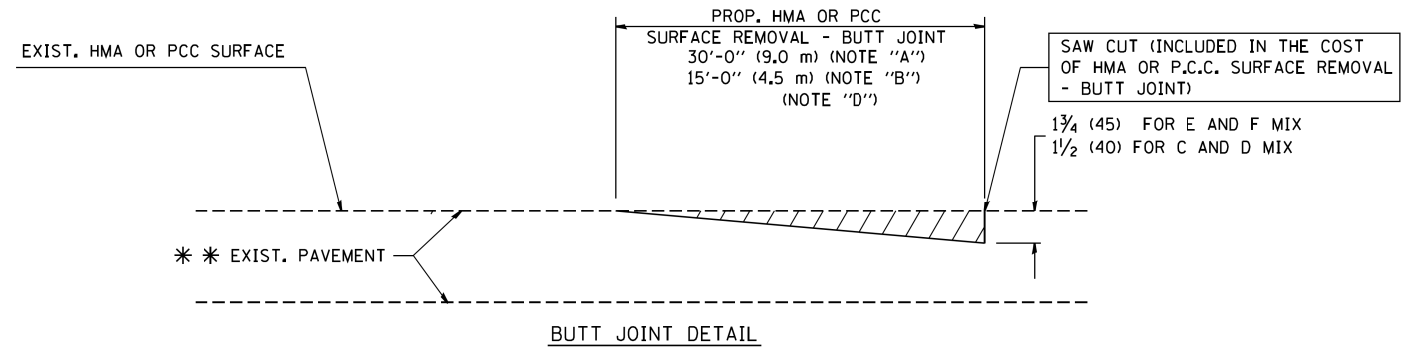
OPTION 1



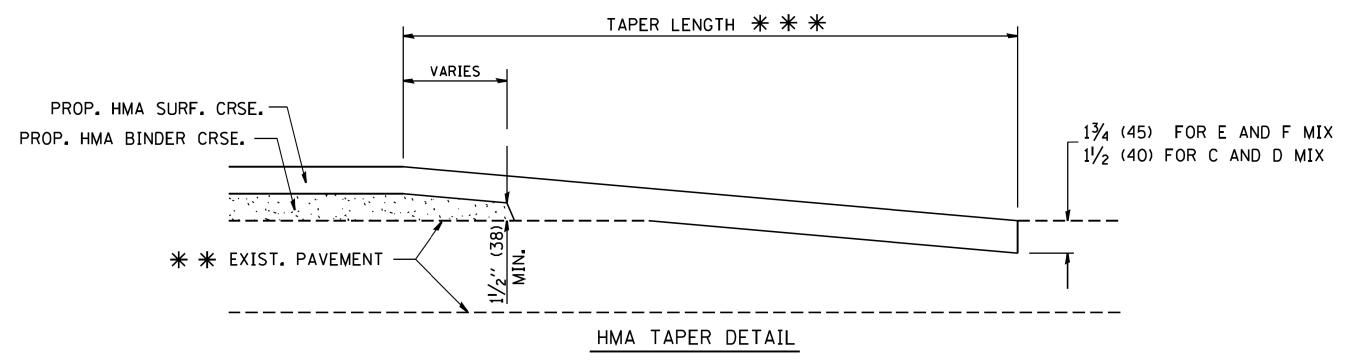
OPTION 2
TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

*** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B: MINOR SIDE ROADS.
 - C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
 - E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT
 - G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- *** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".

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

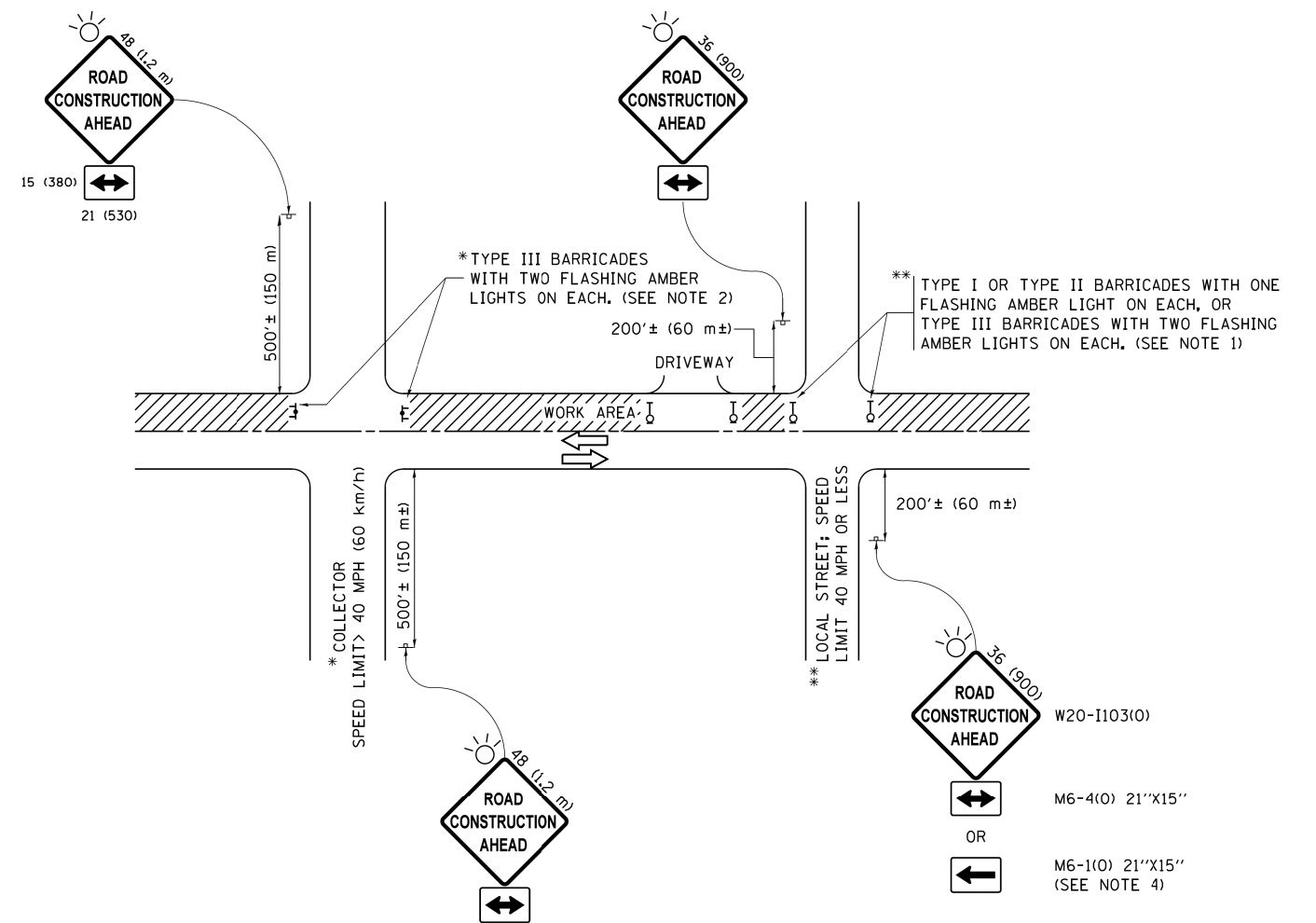
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	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINT AND HMA TAPER DETAILS	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS
STA.	TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	32
BD400-05 BD32		CONTRACT NO. 61E75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT X				



NOTES:

- 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:
 - 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.
 - 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.
- SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - 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.
 - 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.
- 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.
- 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).
- 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.
- ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
- 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.

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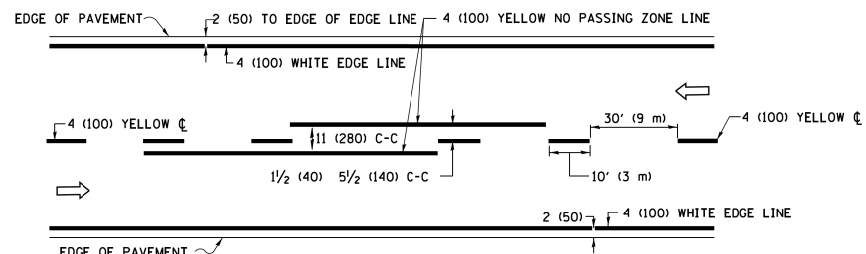
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

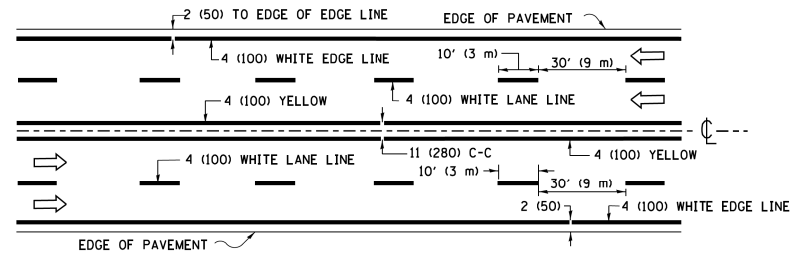
**TRAFFIC CONTROL AND PROTECTION FOR
SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS**

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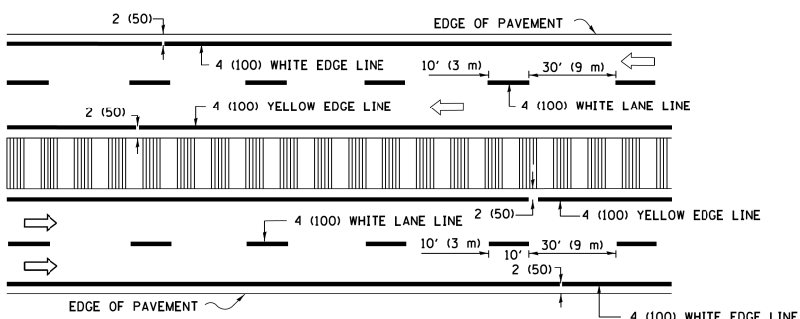
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360	15-00342-01-CH	KANE	42	33
TC-10			CONTRACT NO.61E75	
ILLINOIS FED. AID PROJECT X				



2-LANE ROADWAY

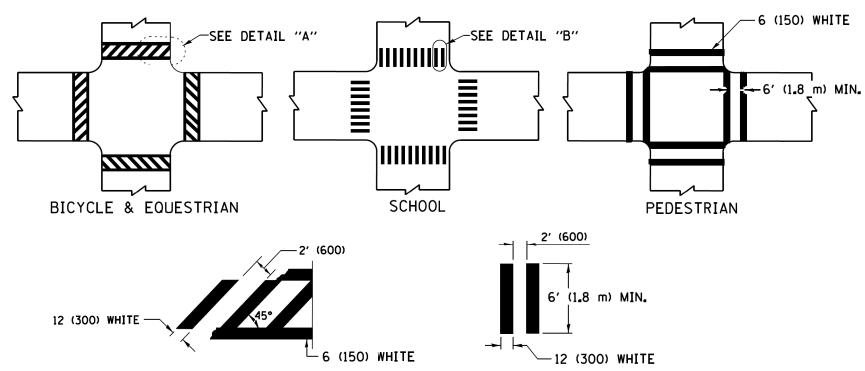


MULTI-LANE UNDIVIDED



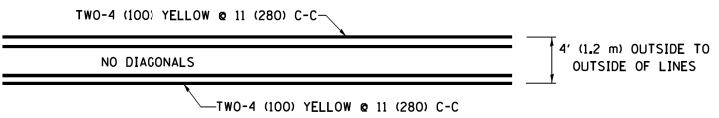
MULTI-LANE DIVIDED WITH MEDIAN

TYPICAL LANE AND EDGE LINE MARKING

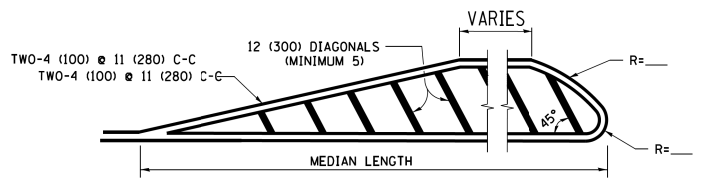


TYPICAL CROSSWALK MARKING

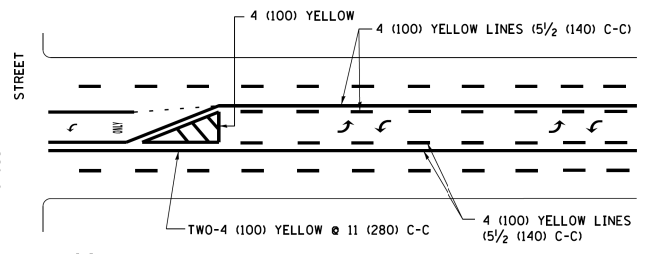
* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES



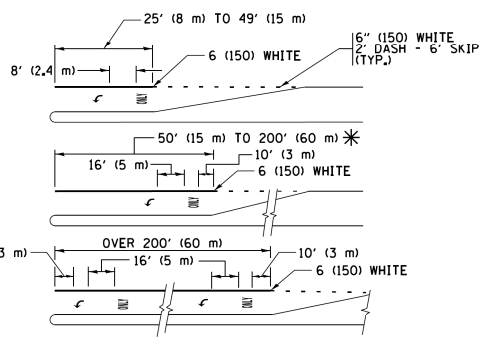
4' (1.2 m) WIDE MEDIANS ONLY



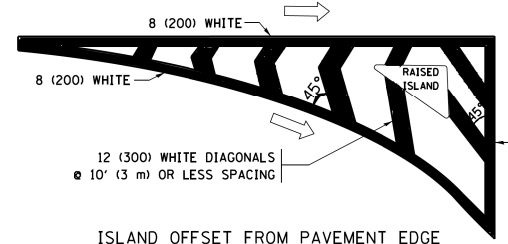
MEDIANS OVER 4' (1.2 m) WIDE



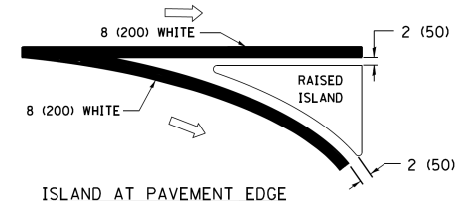
MEDIAN WITH TWO-WAY LEFT TURN LANE TYPICAL PAINTED MEDIAN MARKING



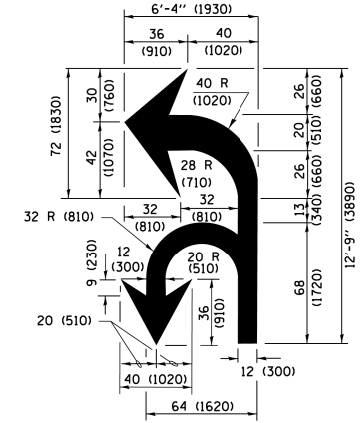
TYPICAL LEFT (OR RIGHT) TURN LANE TYPICAL TURN LANE MARKING



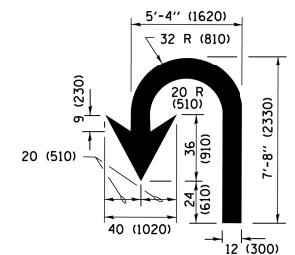
ISLAND OFFSET FROM PAVEMENT EDGE



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 1/2 (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 1/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT, OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE.
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW; TWO WAY TRAFFIC WHITE; ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m²) EACH "X"=54.0 SQ. FT. (5.0 m²)
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' (22.5 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.

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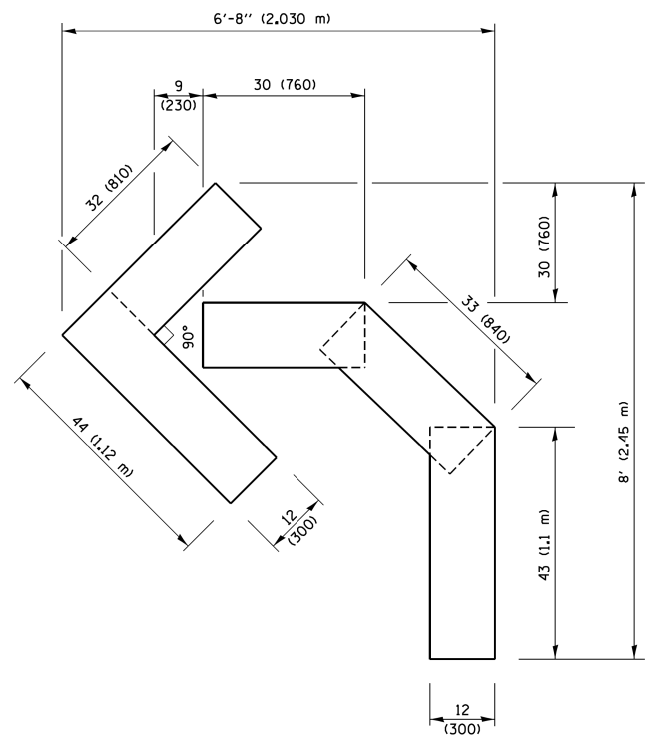
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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

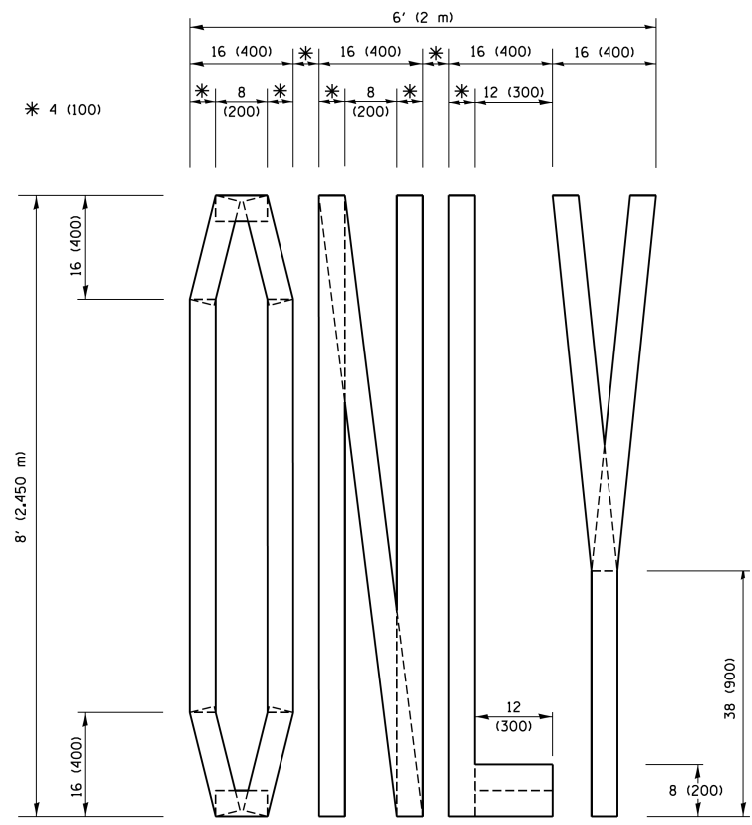
DISTRICT ONE TYPICAL PAVEMENT MARKINGS

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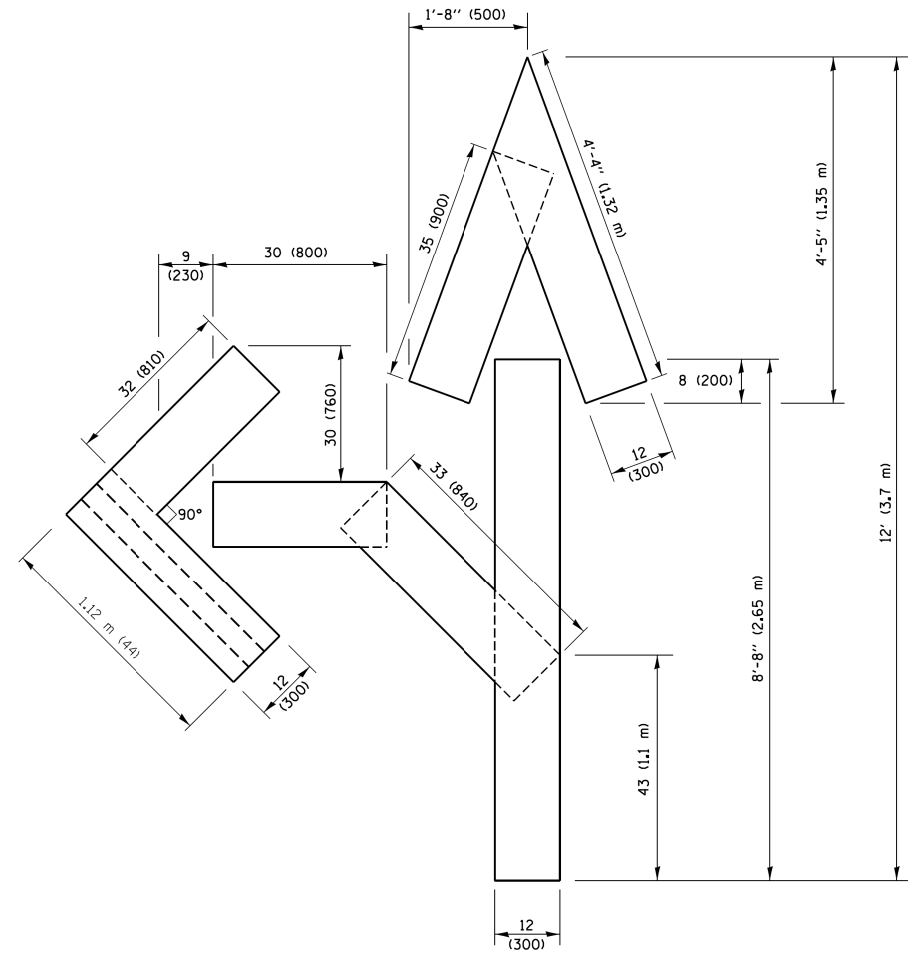
FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	34
TC-13		CONTRACT NO. 61E75		
ILLINOIS		FED. AID PROJECT X		



QUANTITY
 4 (100) LINE = 45.5 ft. (13.9 m)
 15.2 sq. ft. (1.41 sq. m)

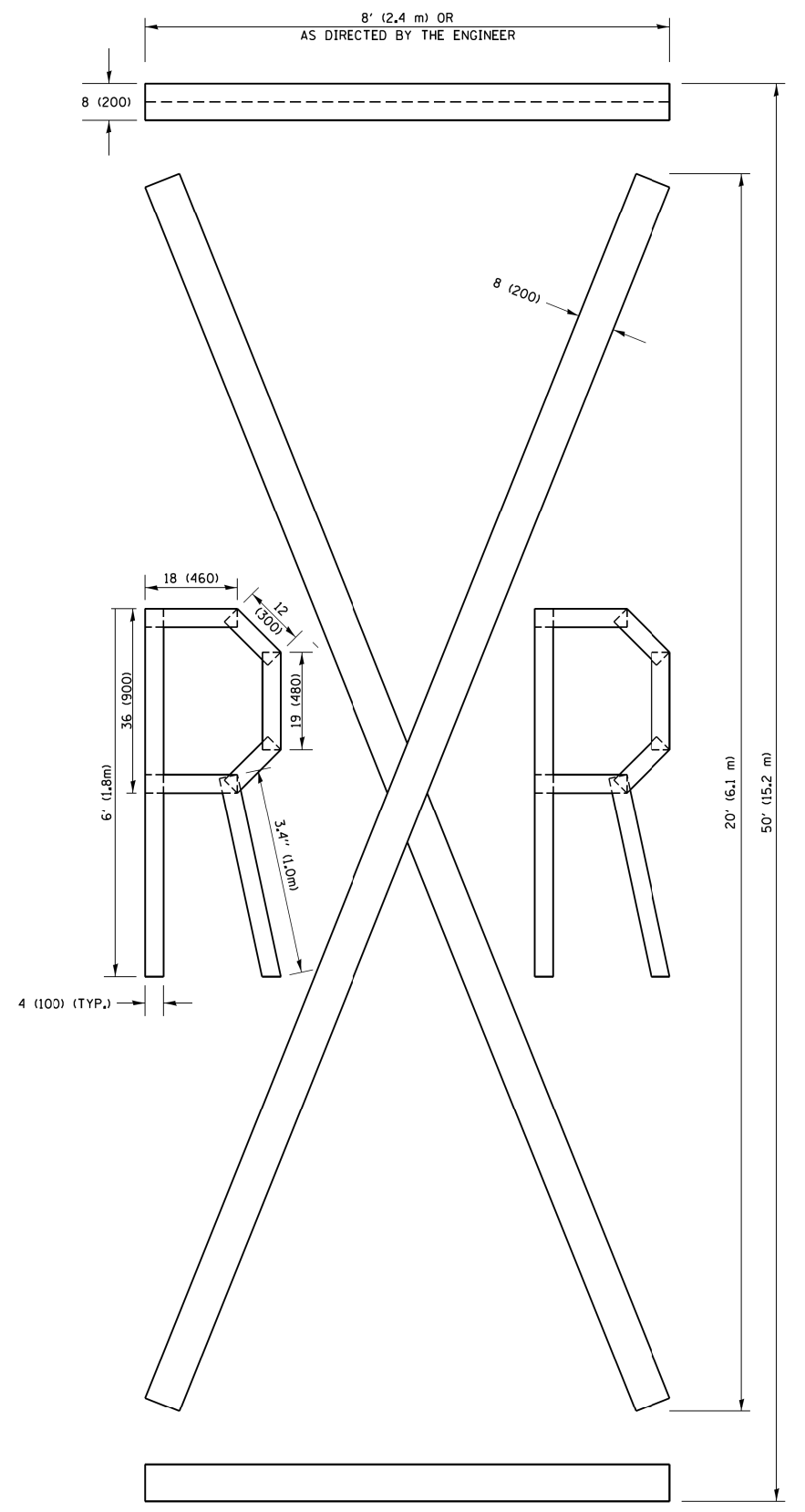


QUANTITY
 4 (100) LINE = 64.1 ft. (19.5 m)
 21.4 sq. ft. (1.99 sq. m)



QUANTITY
 4 (100) LINE = 82.5 ft. (25.1 m)
 27.5 sq. ft. (2.53 sq. m)

NOTE:
 ALL QUANTITIES OF PLACEMENT ARE REPRESENTED
 IN LINEAR FEET OF 4" LINES TO MATCH THE
 4" TEMPORARY TAPE PAY ITEM AND REPRESENTS
 THE TOTAL QUANTITY OF 4" TAPE REQUIRED.



QUANTITY
 4 (100) LINE = 225.9 ft. (68.9 m)
 75.3 sq. ft. (6.99 sq. m)

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

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PLOT DATE = 9/15/2016	DATE - 09-18-94	CHECKED -	REVISED -A. SCHUETZE 09-15-16

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	35
TC-16			CONTRACT NO.61E75	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT X				

TRAFFIC SIGNAL LEGEND

(NOT TO SCALE)

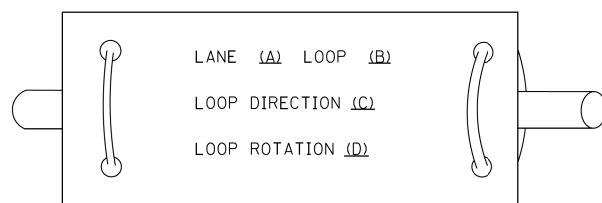
ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED	ITEM	EXISTING	PROPOSED
CONTROLLER CABINET			HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD -(P) PROGRAMMABLE SIGNAL HEAD		
COMMUNICATION CABINET			HEAVY DUTY HANDHOLE -SQUARE -ROUND	 	 	SIGNAL HEAD WITH BACKPLATE -(P) PROGRAMMABLE SIGNAL HEAD -(RB) RETROREFLECTIVE BACKPLATE	 	
MASTER CONTROLLER			DOUBLE HANDHOLE			PEDESTRIAN SIGNAL HEAD AT RAILROAD INTERSECTIONS		
MASTER MASTER CONTROLLER			JUNCTION BOX			PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER		
UNINTERRUPTABLE POWER SUPPLY			RAILROAD CANTILEVER MAST ARM			ILLUMINATED SIGN "NO LEFT TURN"/"NO RIGHT TURN"		
SERVICE INSTALLATION -(P) POLE MOUNTED			RAILROAD FLASHING SIGNAL			NUMBER OF CONDUCTORS, ELECTRIC CABLE NO. 14, UNLESS NOTED OTHERWISE. ALL DETECTOR LOOP CABLE TO BE SHIELDED		
SERVICE INSTALLATION -(G) GROUND MOUNTED -(GM) GROUND MOUNTED METERED	 	 	RAILROAD CROSSING GATE			GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)		
TELEPHONE CONNECTION			RAILROAD CROSSBUCK			ELECTRIC CABLE IN CONDUIT, TRACER NO. 14 1/C		
STEEL MAST ARM ASSEMBLY AND POLE			RAILROAD CONTROLLER CABINET			COAXIAL CABLE		
ALUMINUM MAST ARM ASSEMBLY AND POLE			UNDERGROUND CONDUIT (UC), GALVANIZED STEEL			VENDOR CABLE		
STEEL COMBINATION MAST ARM ASSEMBLY AND POLE WITH LUMINAIRE			TEMPORARY SPAN WIRE, TETHER WIRE, AND CABLE			COPPER INTERCONNECT CABLE, NO. 18, 3 PAIR TWISTED, SHIELDED		
SIGNAL POST -(BM) BARREL MOUNTED - TEMPORARY			SYSTEM ITEM			FIBER OPTIC CABLE -NO. 62.5/125, MM12F -NO. 62.5/125, MM12F SM12F -NO. 62.5/125, MM12F SM24F	 	
WOOD POLE			INTERSECTION ITEM			GROUND ROD -(C) CONTROLLER -(M) MAST ARM -(P) POST -(S) SERVICE	 	
GUY WIRE			REMOVE ITEM					
SIGNAL HEAD			RELOCATE ITEM					
SIGNAL HEAD WITH BACKPLATE			ABANDON ITEM					
SIGNAL HEAD OPTICALLY PROGRAMMED			CONTROLLER CABINET AND FOUNDATION TO BE REMOVED					
FLASHER INSTALLATION -(FS) SOLAR POWERED	 	 	MAST ARM POLE AND FOUNDATION TO BE REMOVED					
PEDESTRIAN SIGNAL HEAD			SIGNAL POST AND FOUNDATION TO BE REMOVED					
PEDESTRIAN PUSH BUTTON -(APS) ACCESSIBLE PEDESTRIAN PUSH BUTTON			DETECTOR LOOP, TYPE I					
RADAR DETECTION SENSOR			PREFORMED DETECTOR LOOP					
VIDEO DETECTION CAMERA			SAMPLING (SYSTEM) DETECTOR					
RADAR/VIDEO DETECTION ZONE			INTERSECTION AND SAMPLING (SYSTEM) DETECTOR					
PAN, TILT, ZOOM (PTZ) CAMERA			QUEUE AND SAMPLING (SYSTEM) DETECTOR					
EMERGENCY VEHICLE LIGHT DETECTOR			WIRELESS DETECTOR SENSOR					
CONFIRMATION BEACON			WIRELESS ACCESS POINT					
WIRELESS INTERCONNECT								
WIRELESS INTERCONNECT RADIO REPEATER								

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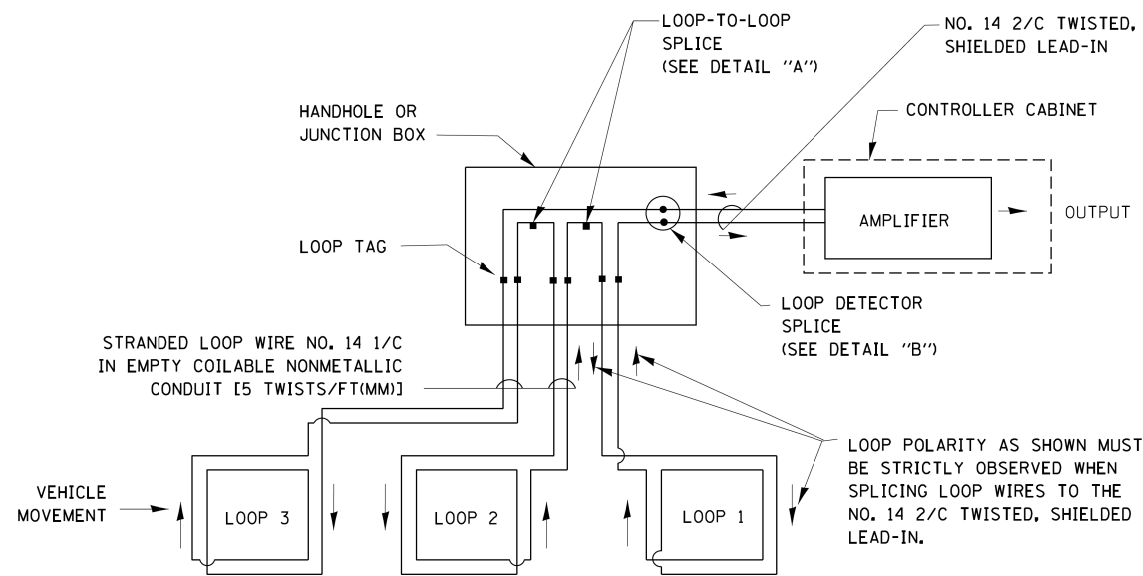
LOOP DETECTOR NOTES

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

LOOP LEAD-IN CABLE TAG

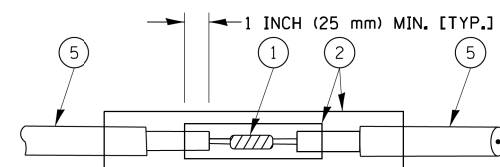


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

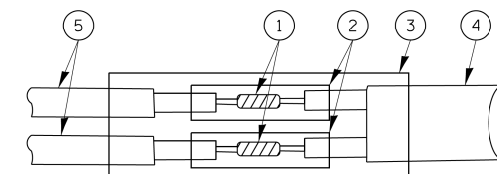


DETECTOR LOOP WIRING SCHEMATIC

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

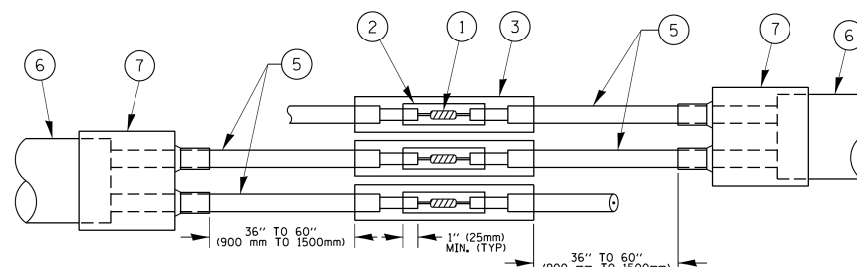


DETAIL "A"
LOOP-TO-LOOP SPLICE

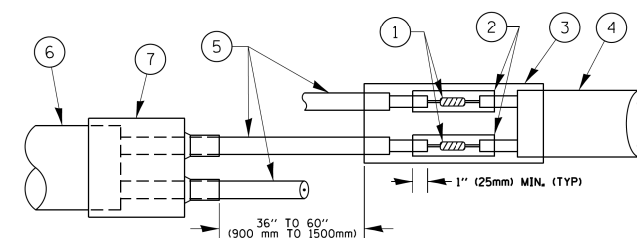


DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

PREFORMED LOOP

LOOP DETECTOR SPLICE

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

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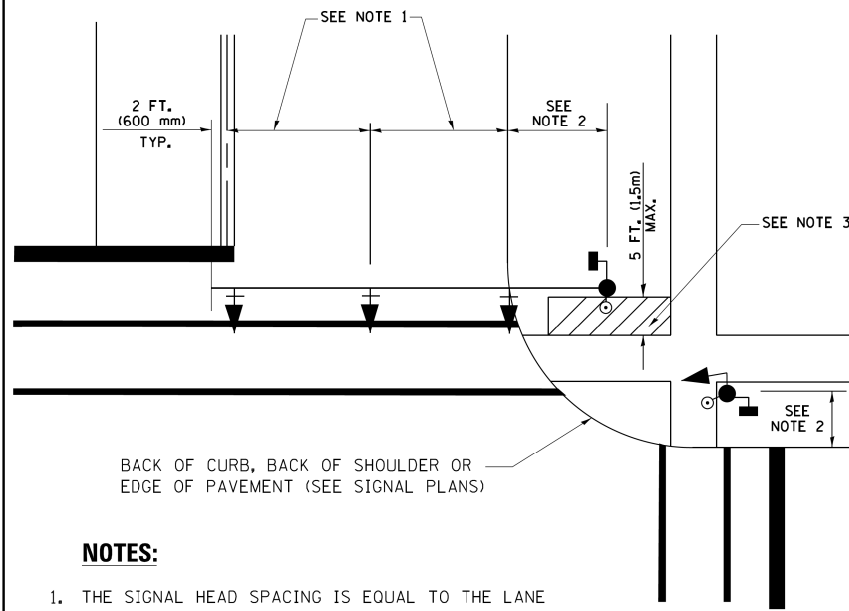
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 2 OF 7 SHEETS STA. TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	37
TS-05		CONTRACT NO. 61E75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT X				

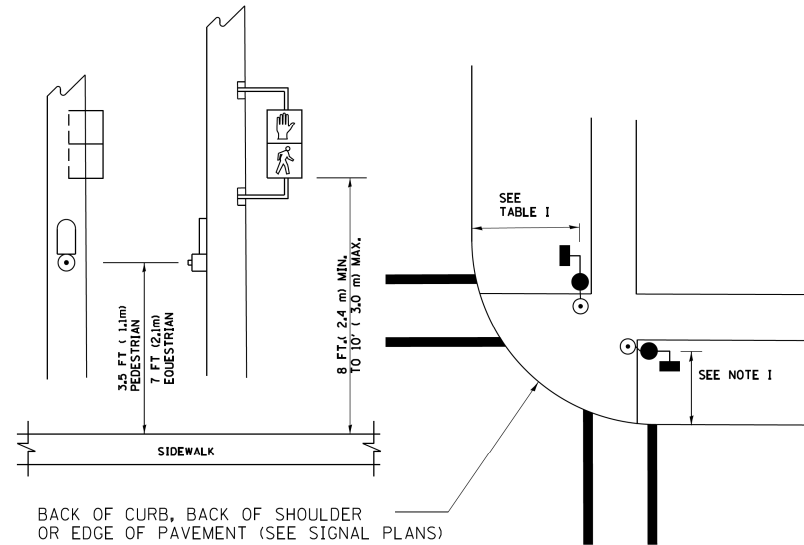
**TRAFFIC SIGNAL MAST ARM AND SIGNAL POST
MAST ARM MOUNTED SIGNALS IN EXISTING, PROPOSED OR
FUTURE SIDEWALK/BICYCLE PATH AREA. INTERSECTION SHOWN
WITH PEDESTRIAN SIGNALS AND PEDESTRIAN PUSHBUTTON DETECTORS.**



NOTES:

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

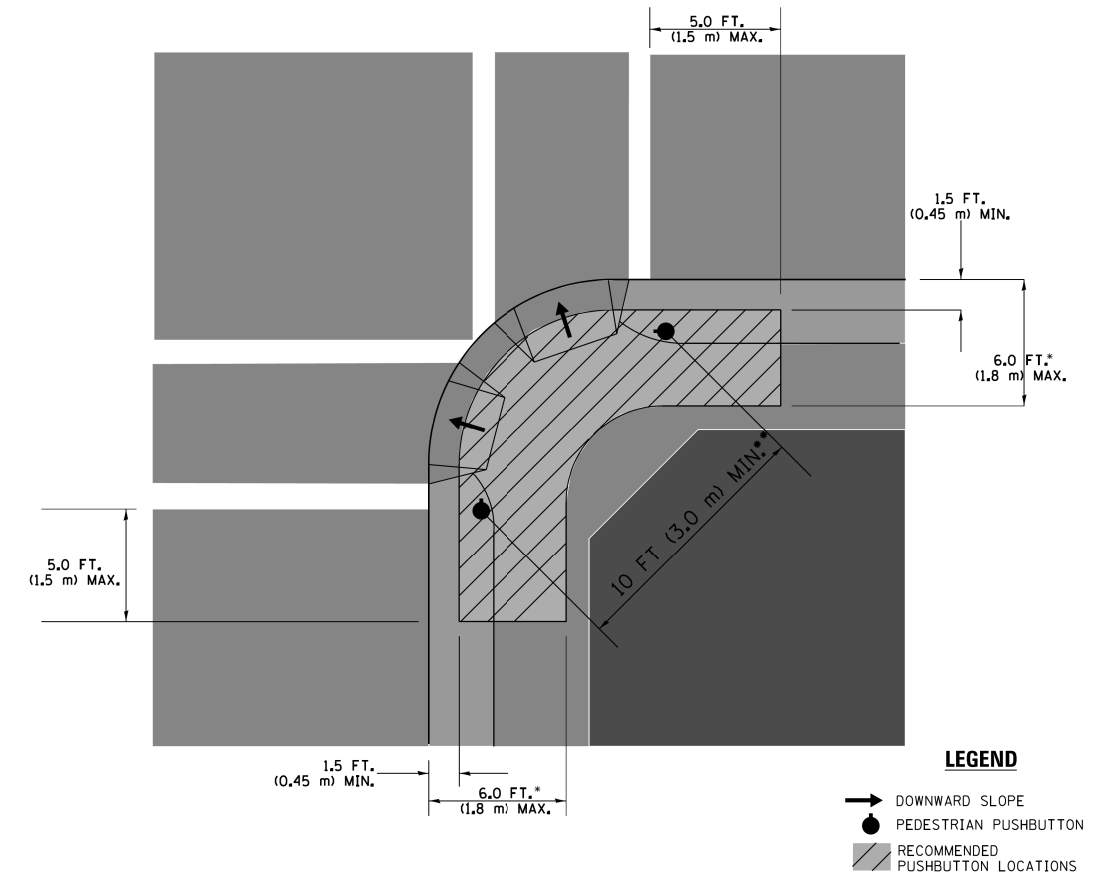
**PEDESTRIAN SIGNAL POST
AND
PEDESTRIAN PUSH BUTTON POST**



NOTES:

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

RECOMMENDED PUSHBUTTON LOCATIONS



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

NOTES:

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

TRAFFIC SIGNAL EQUIPMENT OFFSET

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

NOTES:

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

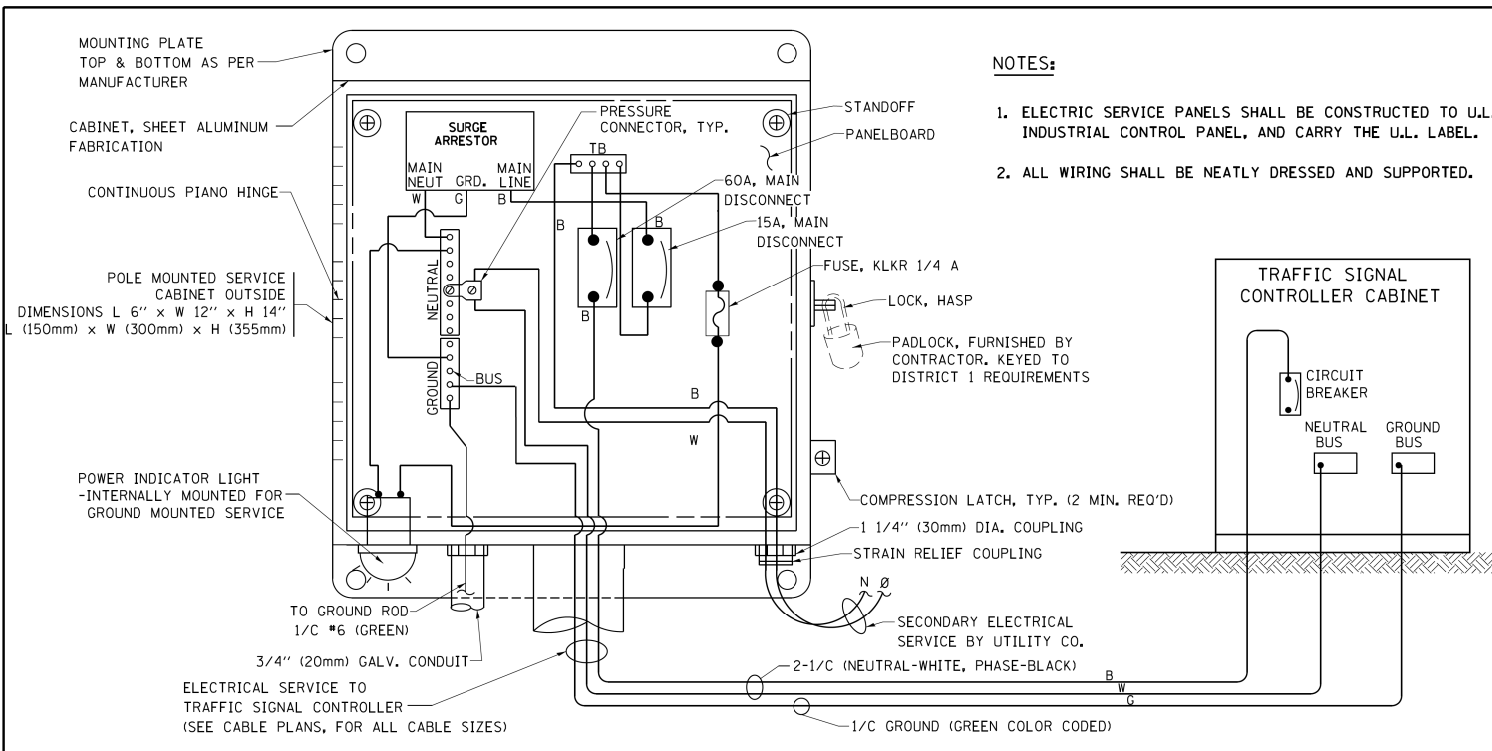
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

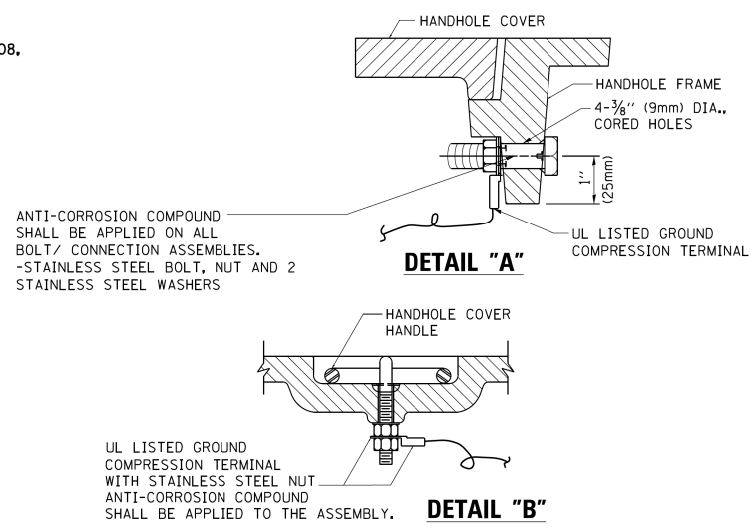
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

SCALE: NONE SHEET NO. 3 OF 7 SHEETS STA. TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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TS-05		CONTRACT NO.61E75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT X				

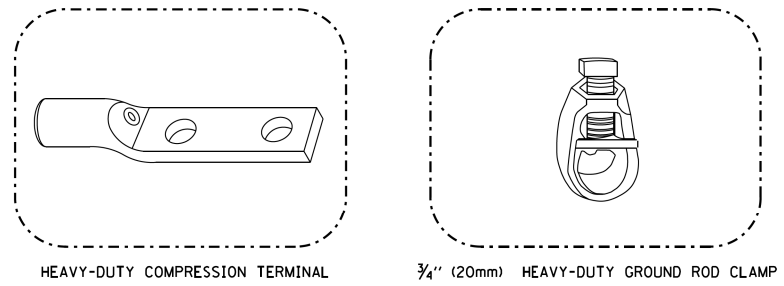
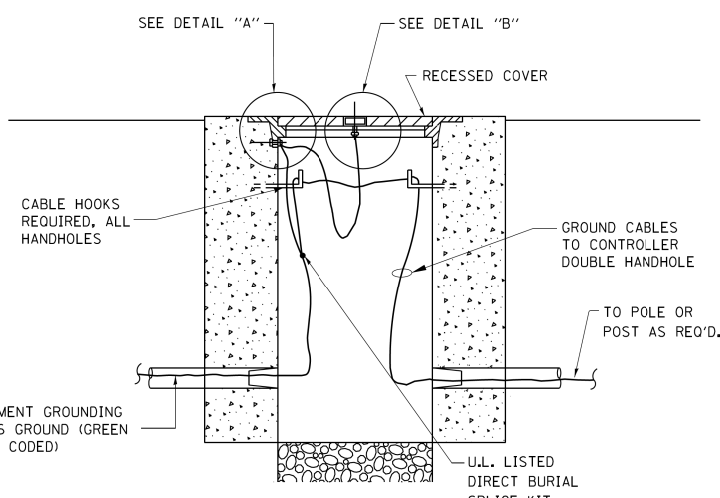


**ELECTRICAL SERVICE – PANEL DIAGRAM (TYPICAL FOR POLE AND GROUND MOUNTED SERVICE)
SERVICE INSTALLATION POLE MOUNT (SHOWN)
(NOT TO SCALE)**



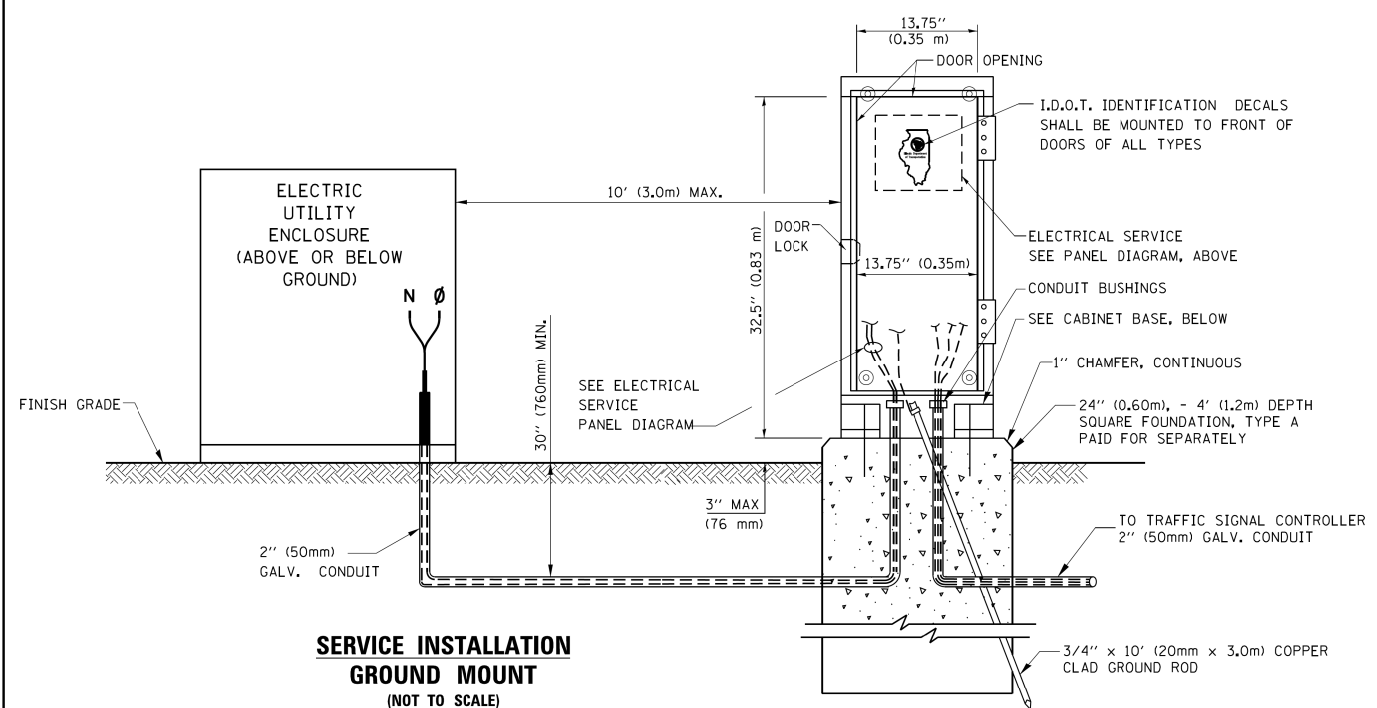
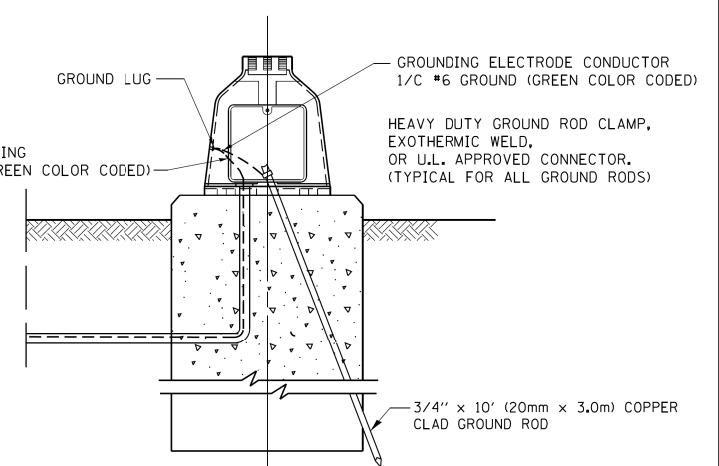
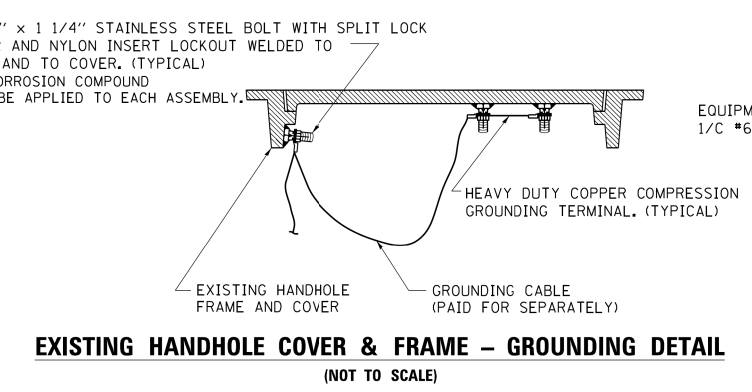
NOTES:
GROUNDING SYSTEM

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



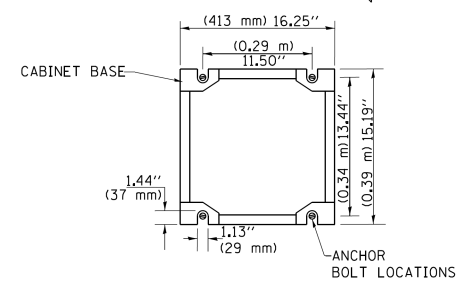
NOTES:

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



**SERVICE INSTALLATION GROUND MOUNT
(NOT TO SCALE)**

**CABINET – BASE BOLT PATTERN
(NOT TO SCALE)**



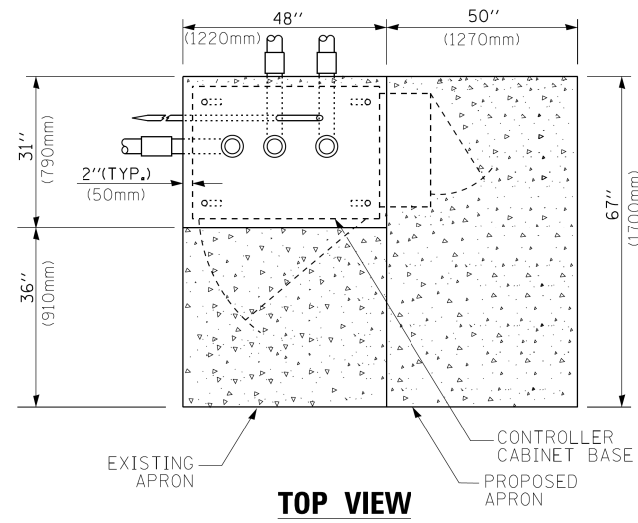
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

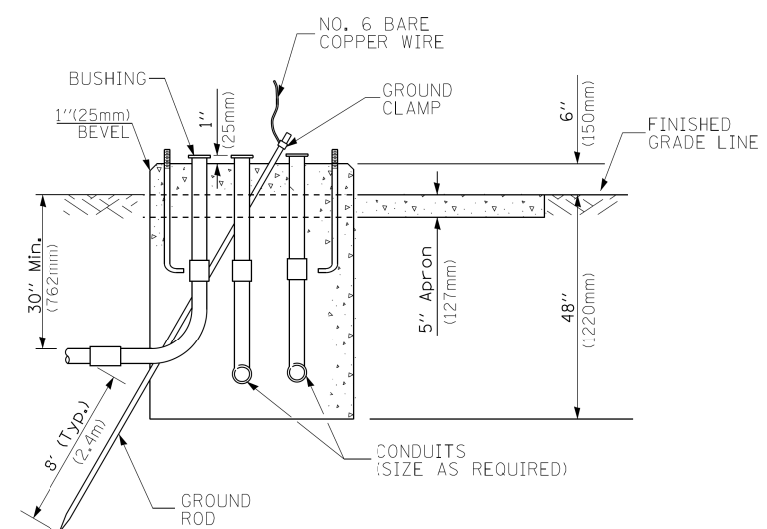
**DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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TS-05		CONTRACT NO.61E75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT X				

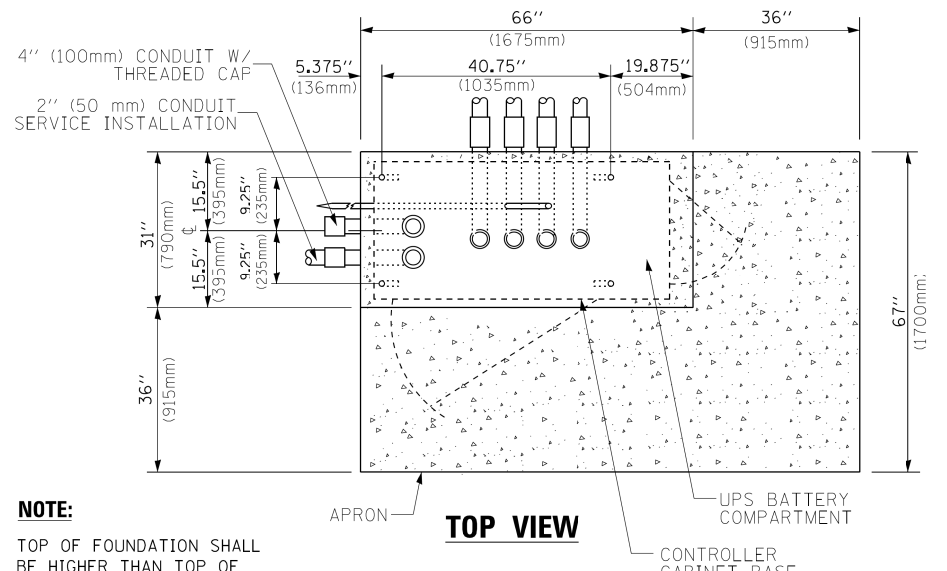
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TOP VIEW

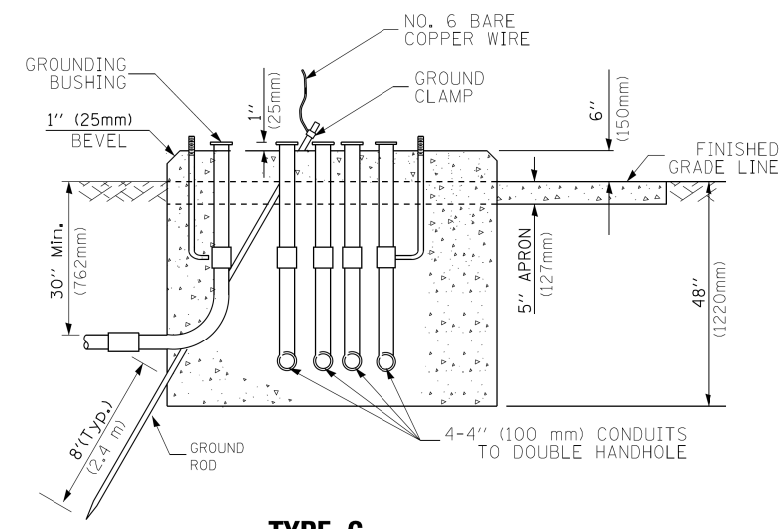


**TYPE D
FOR GROUND MOUNTED
CONTROLLER CABINET
AND UPS BATTERY CABINET**

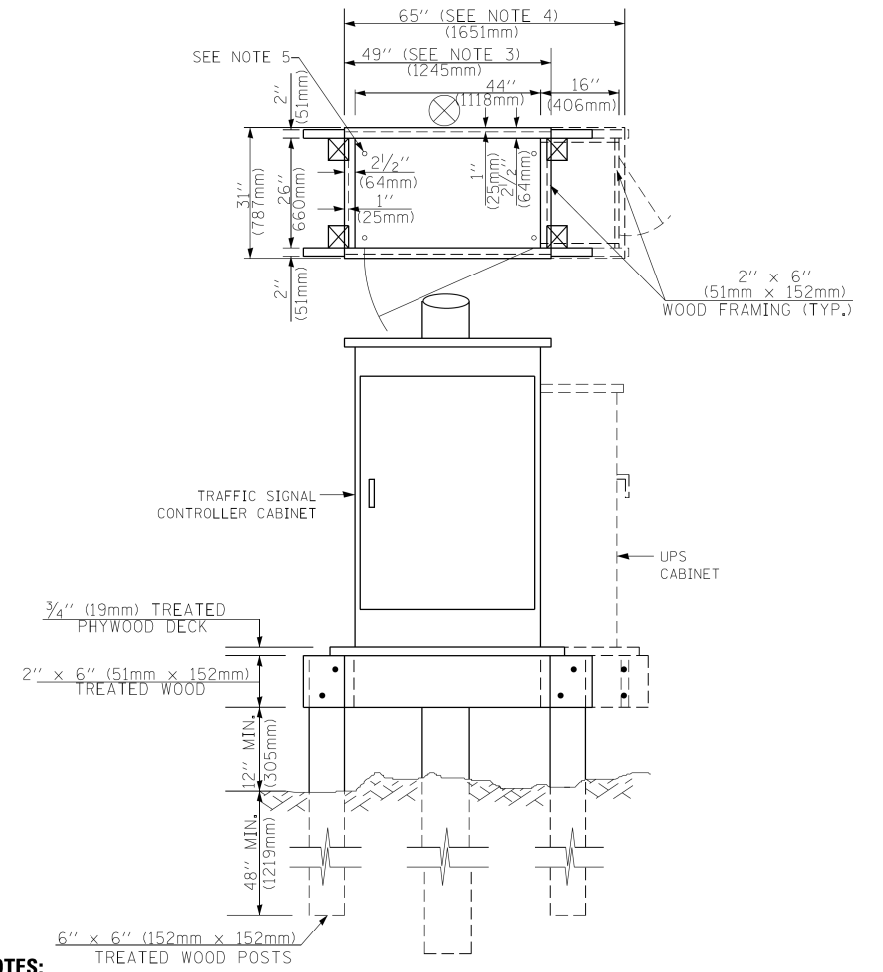


TOP VIEW

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



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



NOTES:

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

**TEMPORARY SIGNAL CONTROLLER
WOOD SUPPORT PLATFORM**

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

CABLE SLACK

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

VERTICAL CABLE LENGTH

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

DEPTH OF FOUNDATION

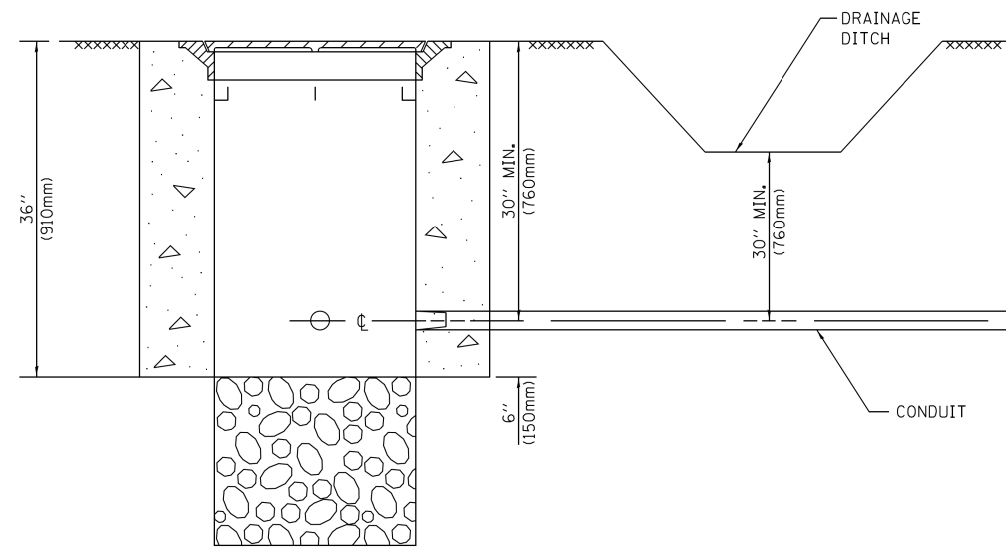
Mast Arm Length	① Foundation Depth	Foundation Diameter	Spiral Diameter	Quantity of Rebars	Size of Rebars
Less than 30' (9.1 m)	10'-0" (3.0 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)	13'-6" (4.1 m)	30" (750mm)	24" (600mm)	8	6(19)
Greater than or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

NOTES:

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

DEPTH OF MAST ARM FOUNDATIONS, TYPE E

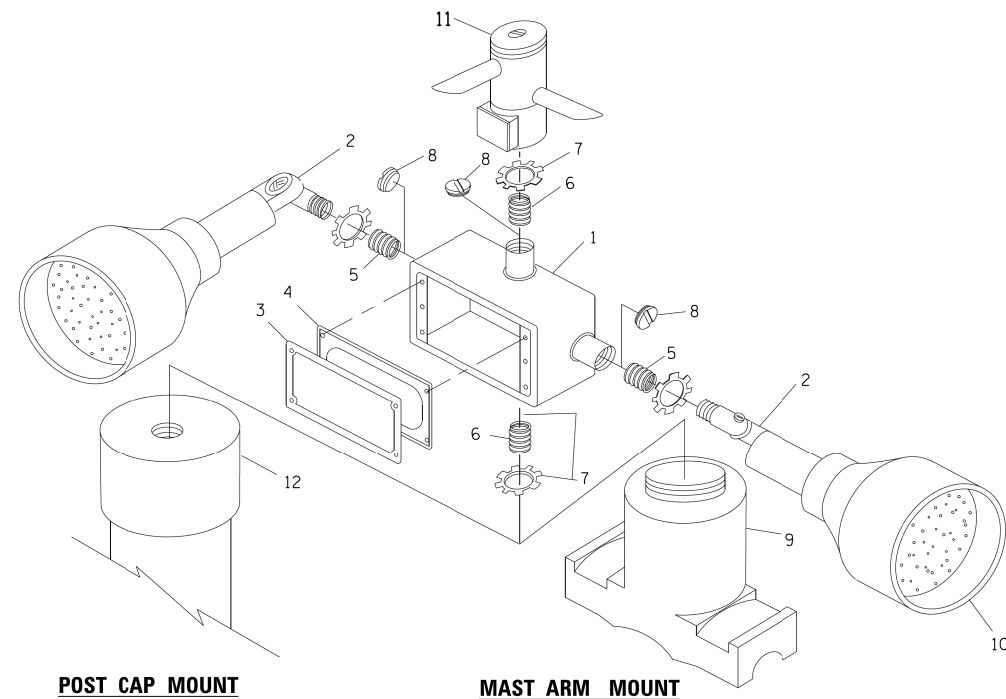
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NOTES:

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

HANDHOLE WITH MINIMUM CONDUIT DEPTH
(NOT TO SCALE)

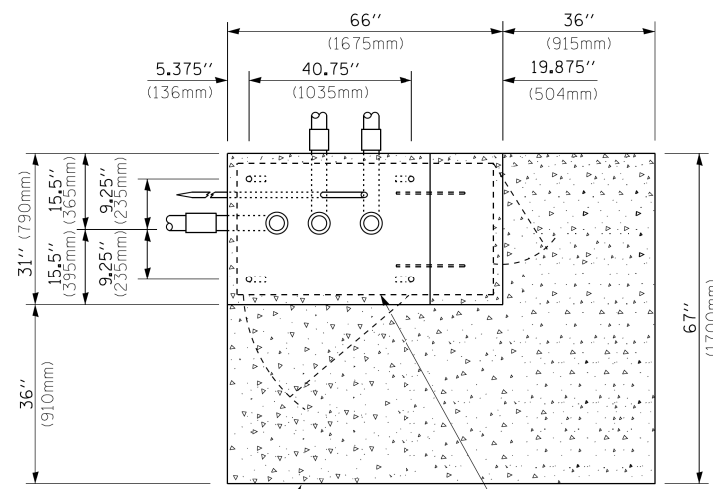


EMERGENCY VEHICLE DETECTOR WITH CONFIRMATION BEACON MOUNTING DETAIL

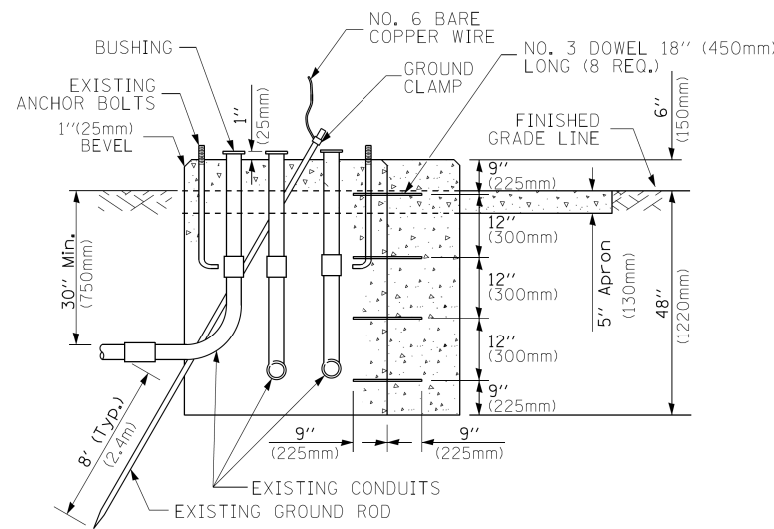
ITEM NO.	IDENTIFICATION
1	OUTLET BOX- GALV. 21 CU.IN. (0,000344 CU-M)
2	LAMP HOLDER AND COVER
3	OUTLET BOX COVER
4	RUBBER COVER GASKET
5	REDUCING BUSHING
6	3/4" (19 mm) CLOSE NIPPLE
7	3/4" (19 mm) LOCKNUT
8	3/4" (19 mm) HOLE PLUG
9	SADDLE BRACKET - GALV.
10	6 WATT PAR 38 LED FLOOD LAMP
11	DETECTOR UNIT
12	POST CAP [18 FT. (5.4 m) POST MIN.]

NOTES:

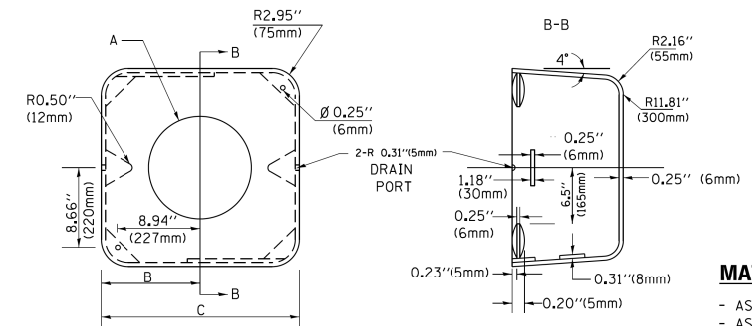
1. ALL ELECTRICAL ITEMS, EXCEPT ITEMS #2 AND #11 SHALL BE ALUMINUM OR GALVANIZED
2. WHEN POST MOUNTING IS SPECIFIED, ITEM #9 SHALL NOT BE REQUIRED. THE DETECTION UNIT SHALL BE MOUNTED DIRECTLY ON TOP OF THE CAP BY DRILLING AND TAPPING A 3/4" (19 mm) HOLE WITH PIPE THREADS. THE POST CAP SHALL EITHER BE SCREWED TO THE TOP OF THE POST OR A MINIMUM OF 3 TIGHTENING SCREWS SHALL BE REQUIRED ON EACH CAP.



TOP VIEW
(NOT TO SCALE)



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



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

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

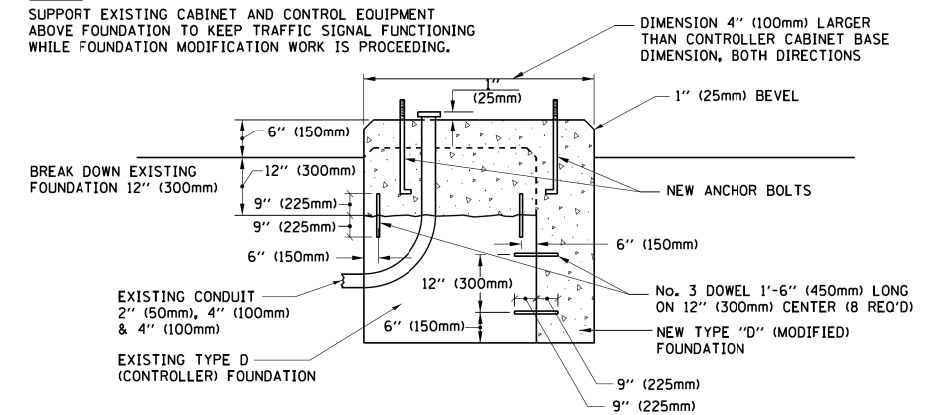
SHROUD

NOTES:

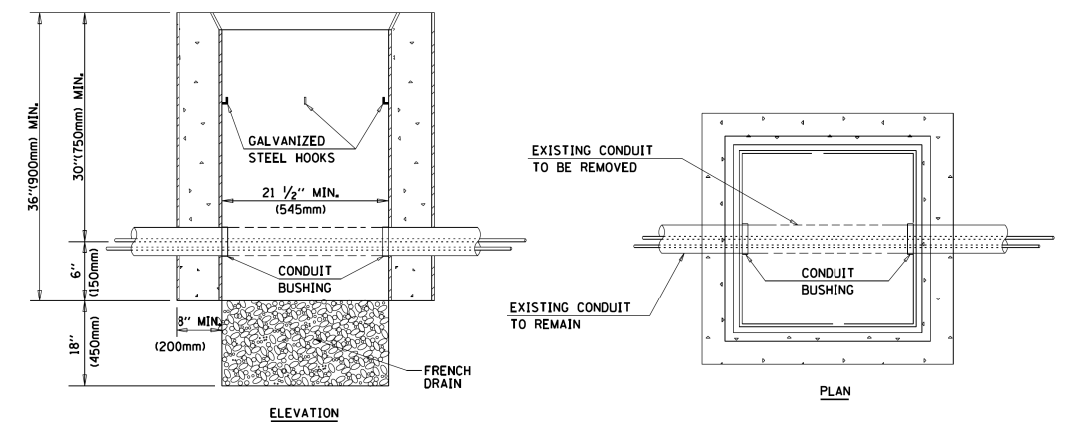
1. DIMENSION "A" IS EQUAL TO THE DIAMETER OF THE MAST ARM POLE AT THE TOP OF THE SHROUD. THE SHROUD SHALL BE TIGHT TO THE MAST ARM POLE.
2. THE SUPPLIER SHALL VERIFY THE ABOVE DIMENSIONS BASED ON MAST ARM REQUIREMENTS.
3. THE HEIGHT OF THE SHROUD SHALL COVER THE ANCHOR BOLTS, NUTS AND MAST ARM POLE BASE.

NOTE:

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



MODIFY EXISTING TYPE "D" FOUNDATION



NOTES:

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

HANDHOLE TO INTERCEPT EXISTING CONDUIT

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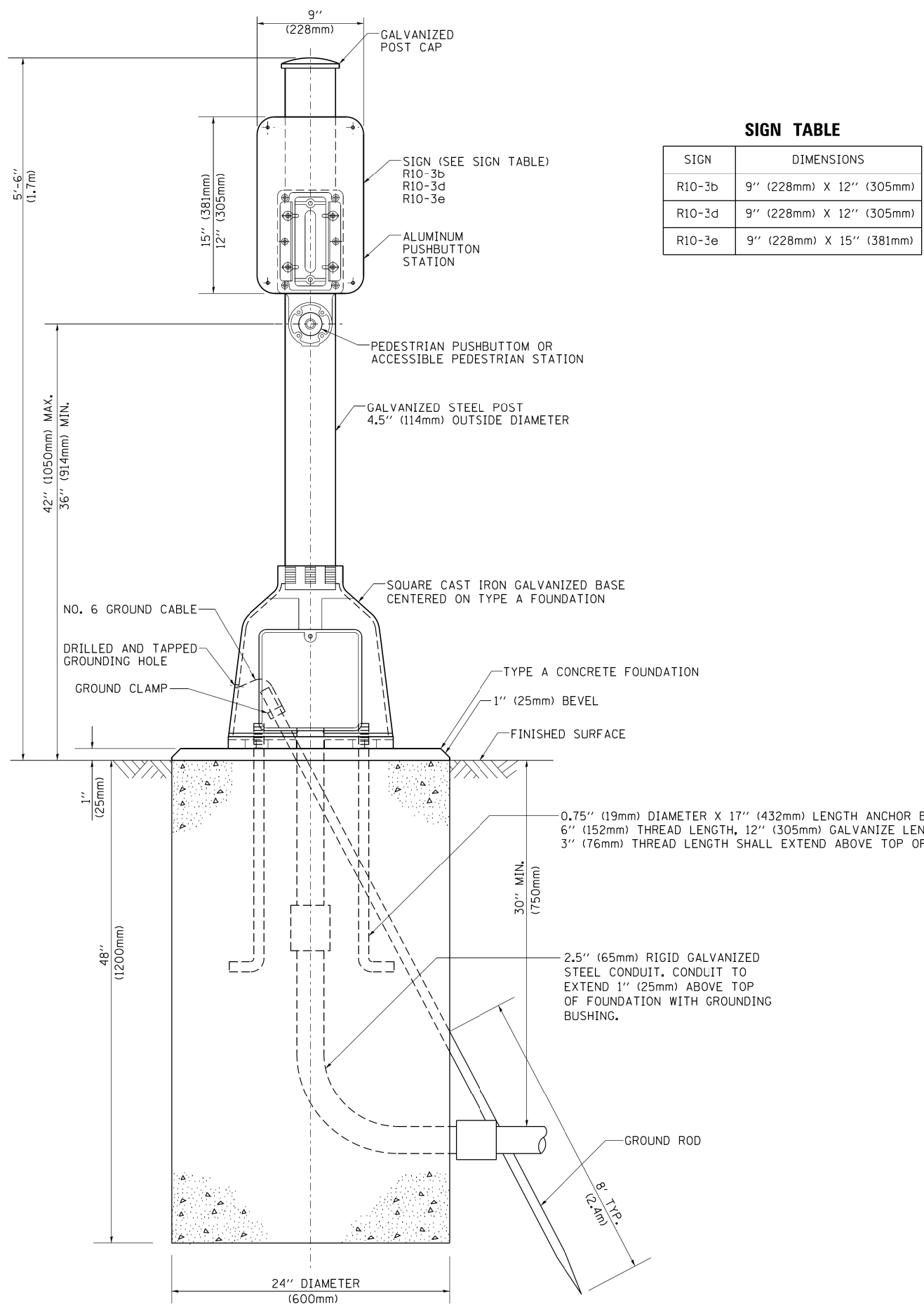
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ca:\pwork\pwork\footemj\d01088315\ts05.dgn		DRAWN - BCK	REVISED -
PLOT SCALE = 50.0000' / in.		CHECKED - DAD	REVISED -
PLOT DATE = 1/13/2014		DATE - 10-28-09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

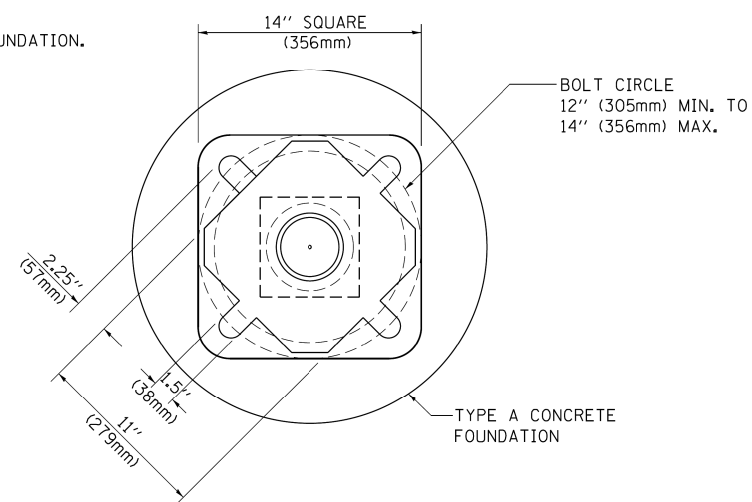
SCALE: NONE SHEET NO. 6 OF 7 SHEETS STA. TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	41
TS-05		CONTRACT NO. 61E75		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT X				



SIGN TABLE

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



BOLT PATTERN

PEDESTRIAN PUSH BUTTON POST, TYPE A

FILE NAME = W:\projects\2017\170286 - Kira\Phase\Initial\Drawings\170286-DETAILS_12.dgn
 USER NAME = footemj
 DESIGNED - DAG
 DRAWN - GND
 CHECKED - DAD
 DATE - 10/1/2012
 PLOT SCALE = 50.0000' / 1"
 PLOT DATE = 1/13/2014

FILE NAME =	USER NAME = footemj	DESIGNED - DAG	REVISED - DAG 1-1-14
ca:\pwork\work\pwork\footemj\d0108315\ts05.dgn		DRAWN - GND	REVISED -
		CHECKED - DAD	REVISED -
		DATE - 10/1/2012	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS			
SCALE: NONE	SHEET NO. 7 OF 7 SHEETS	STA.	TO STA.

FAP RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
360	15-00342-01-CH	KANE	42	42
TS-05			CONTRACT NO. 61E75	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT X				