04-27-2018 LETTING ITEM 180

FOR INDEX OF SHEETS, SEE SHEET NO. 2

FOR HIGHWAY STANDARDS, SEE SHEET NO. 2

STATE OF ILLINOIS

DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU ROUTE 2566 (NORTH MAIN STREET) SEMINARY AVENUE TO COLE AVENUE RESURFACING, CURB, AND SIDEWALK SECTION: 15-00113-00-RS **PROJECT: NFEW(468) CITY OF WHEATON DUPAGE COUNTY** JOB NO: C-91-187-16

3RD P.M. R 10 E PROJECT ENDS STA. 162+61

MILTON TOWNSHIP

Know what's below.

Call before you dig.

LOCATION MAP

N.T.S.

NORTH MAIN STREET GROSS LENGTH = 6,158 FT. = 1.17 MILES NORTH MAIN STREET NET LENGTH = 6,071 FT. = 1.15 MILES

MAIN STREET

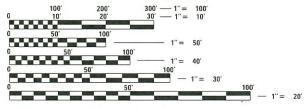
SCHAUMBURG,

P.E. (847) 705-4406,

CHARLES

ENGINEER:

DESIGN DESIGNATION: MINOR ARTERIAL SPEED LIMIT = 35 MPH TRAFFIC = 15,100 ADT (2016)



ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

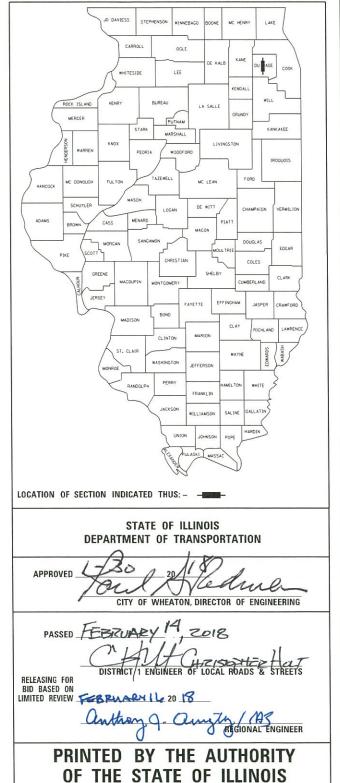
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811

PROJECT MANAGER: JIM YURATOVAC

CONTRACT NO. 61E65



SECTION



I HEREBY CERTIFY THAT THIS SUBMISSION WAS PREPARED UNDER MY PERSONAL DIRECTION. THIS TECHNICAL SUBMISSION IS INTENDED TO BE USED AS AN INTEGRAL PART OF AND IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS AND CONTRACT DOCUMENTS.

ILLINOIS REG. PROF. ENGINEER NO.062-060059 EXPIRATION DATE 11-30-2019

INDEX OF SHEETS

- TITLE SHEET
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- **SUMMARY OF QUANTITIES** 3-4
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- PLAN SHEETS 6-11
- 12-17 PAVEMENT MARKING PLANS
- SIDEWALK INTERSECTION DETAILS 18-25
- 26-28 DETECTOR LOOP PLANS
- WHEATON CONSTRUCTION DETAILS *2*9–30
- DISTRICT 1 DETAILS 31-37

DISTRICT 1 HIGHWAY STANDARDS

BD-22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
BD-32	BUTT JOINT AND HMA TAPER DETAILS
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS AND
	DRIVEWAYS
TC-13	TYPICAL PAVEMENT MARKINGS
TC-16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS
TS-07	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

IDOT STATE STANDARDS

000001-06

000001 00	CITATO TABLE OF MEDICE VICTORIO, TARRETT AT TENTO
424001-10	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-03	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-03	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-04	MID-BLOCK CURB RAMPS FOR SIDEWALKS
424021-04	DEPRESSED CORNER FOR SIDEWALKS
424026-02	ENTRANCE / ALLEY PEDESTRIAN CROSSINGS
442201-03	CLASS C AND D PATCHES
606001-07	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTT
606301-04	PC CONCRETE ISLANDS AND MEDIANS
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15'TO 24" FROM PAVEMENT EDGE
701101-05	OFF-ROAD 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
701502-08	URBAN LANE CLOSURE, 2L, 2W, WITH DIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS

STANDARD SYMBOLS ARRESTATIONS AND PATTERNS

GENERAL NOTES:

- 1. ALL REFERENCES TO "STANDARD SPECIFICATIONS" IN THESE GENERAL NOTES SHALL BE INTERPRETED TO MEAN STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION APRIL 1, 2016
- 2. ALL REFERENCES TO "ENGINEER" SHALL BE INTERPRETED TO MEAN THE RESIDENT ENGINEER.
- 3 THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS, AND REFERENCE MARKERS UNTIL THE OWNER, THEIR AGENT, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS
- 4 THE CONTRACTOR SHALL COORDINATE PAVING OPERATIONS FOR BOTH HMALEVEL RINDER AND SURFACE COURSES SO THAT THE LONGITUDINAL JOINS ARE CLOSED AND COMPACTED AT THE END OF EACH DAY. PAVING OPERATIONS SHALL BE SCHEDULED SO THAT ADJACENT LANES ARE PAVED IN THE SAME DIRECTION AS THE INITIAL LANE MINIMIZING THE TIME THE EDGE OF A PAVEMENT MAT IS ALLOWED TO COOL
- 5. THE CONTRACTOR SHALL USE 2 CHANGEABLE MESSAGE SIGNS AT LOCATIONS TO BE DETERMINED BY THE ENGINEER FOR A PERIOD FROM ONE WEEK PRIOR TO THE START OF CONSTRUCTION TO THE CONCLUSION OF THE PROJECT.
- 6. THE CONTRACTOR SHALL ENSURE ALL WATER SYSTEM VALVES, VALVE VAULTS, AND SANITARY SEWER MANHOLES REMAIN READILY ACCESSIBLE FOR EMERGENCY OPERATIONS. THE LOCATIONS OF ALL WATER AND SANITARY FACILITIES SHALL BE MARKED AND READILY VISIBLE AT ALL TIMES.
- 7. THE INDISCRIMINATE USE OF FIRE HYDRANTS, EXISTING STREAMS, CREEKS, WETLANDS, OR PONDS IS STRICTLY PROHIBITED. THE CONTRACTOR SHALL PROVIDE A WATER TRUCK AND DRIVER AS REQUIRED TO OBTAIN AND TRANSPORT THIS WATER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WATER FROM AN APPROVED SOURCE, IF THIS WATER IS FROM A JURISDICTION FOR THE SOURCE OF THE WATER MUST BE RECEIVED BY THE CONTRACTOR PRIOR TO THE
- 8. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO SELECT DUMPING SITES. HE/SHE SHALL PROVIDE A LIST OF THESE SITES TO THE ENGINEER FOR HIS/HER EXAMINATION AND GENERAL INFORMATION
- 9. ALL EXCESS MATERIAL (BROKEN CONCRETE, ASPHALT, CULVERT PIPE, WASTE ROADWAY EXCAVATION, AND SURPLUS MATERIALS FROM UTILITY TRENCHES) SHALL BE WASTED OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY
- 10. ALL PROPERTY AND SURFACE STRUCTURES WITHIN THE RIGHT-OF-WAY SHALL BE PROTECTED DURING CONSTRUCTION OPERATIONS UNLESS THE ENGINEER DIRECTS REMOVAL FOR PURPOSES RELATED TO CONSTRUCTION UNDER THIS CONTRACT, ANY FENCES, POLES, FLAGSTONE, DECORATIVE STONE, SPECIAL LANDSCAPING, OR OTHER MAN MADE SURFACE IMPROVEMENT WHICH IS REMOVED OR DISTURBED BY THE CONTRACTOR SHALL BE RESTORED BY HIM/HER TO ITS ORIGINAL CONDITION AFTER THE CONSTRUCTION ACTIVITIES ARE COMPLETED
- 11. ALL FRAMES, GRATES, LIDS, FIRE HYDRANTS, AND VALVE BOXES WHICH ARE REMOVED AND ARE TO BE ABANDONED SHALL REMAIN THE PROPERTY OF THE CITY OF WHEATON. ANY OF THESE ITEMS WHICH ARE DAMAGED BY THE CONTRACTOR DURING HANDLING SHALL BE REPLACED BY HIM/HER AT HIS/HER EXPENSE. UPON REMOVAL FROM THEIR WORKING LOCATIONS. THEY ARE TO BE STOCKPILED AT AN ON-SITE LOCATION DETERMINED BY THE ENGINEER WHERE THEY WILL BE PICKED UP BY CITY PERSONNEL AT THE CONCLUSION OF WORK ON THAT STREET
- 12. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR ALL PRIVATE AND PUBLIC DRAINS. SEWERS, AND CATCH BASINS. THE CONTRACTOR SHALL PROVIDE FACILITIES TO ACCEPT ALL STORM WATER THAT WILL BE DELIVERED BY THESE DRAINS AND BASINS AND SHALL DISCHARGE THE SAME. IF NECESSARY, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AN EFFICIENT PUMPING PLANT AND TEMPORARY OUTLIFT AND BE PREPARED AT ALL TIMES TO DISPOSE OF WATER WHICH IS RECEIVED FROM ALL TEMPORARY CONNECTIONS. THESE TEMPORARY FACILITIES SHALL BE MAINTAINED UNTIL ALL PERMANENT CONNECTIONS
- 13. FROSION AND SEDIMENT CONTROL MEASURES SHALL BE FOLLOWED WHEN EXISTING CURB AND GUTTER IS REMOVED AND EXISTING DRAINAGE STRUCTURES ARE TO REMAIN ACTIVE. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAIL PROVIDED IN THE CONTRACT DOCUMENTS
- 14. THE THICKNESS OF THE HMA SHOWN ON THE PLANS IS NOMINAL. DEVIATIONS MAY OCCUR IN THE FIELD DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE UPON WHICH THE HMA IS BEING PLACED.
- 15. THE LOCATIONS AND ELEVATIONS OF THE VARIOUS UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE NOT TO BE TAKEN AS EXACT. THE CONTRACTOR SHALL EXERCISE CARE WHEN CONDUCTING CONSTRUCTION OPERATIONS NEAR UTILITIES TO PREVENT DAMAGE. THE FAILURE OF A UTILITY COMPANY TO ACCURATELY LOCATE THEIR UTILITY DOES NOT FREE THE CONTRACTOR FROM RESPONSIBILITY. THE MAJOR CONCERN OF THE CITY OF WHEATON IS PUBLIC SAFETY.
- 16. THE CONTRACTOR SHALL COOPERATE WITH THE CITY IN ANY UNDERGROUND UTILITY CONSTRUCTION WHICH THE CITY MAY WANT TO PERFORM DURING THE CONTRACTOR'S OPERATIONS.
- 17. THE CONTRACTOR SHALL HAVE LINE AND/OR FORMS SET A MINIMUM OF FOUR WORKING HOURS PRIOR TO THE SCHEDULED ARRIVAL OF CONCRETE ON SITE FOR THE PLACEMENT OF CURB AND GUTTER, DRIVEWAYS, AND SIDEWALK TO ALLOW THE ENGINEER TIME TO CHECK LINE AND GRADE.
- 18. ALL RADII FOR PROPOSED COMBINATION CONCRETE CURB AND GUTTER SHALL BE PLACED AT THE EXISTING DIMENSION UNLESS OTHERWISE INDICATED ON THE PROJECT PLANS OR AS DIRECTED BY THE ENGINEER. ELEVATIONS SHOWN AT POINT ON THE CURB INDICATED FLOW LINE ELEVATIONS UNLESS NOTED OTHERWISE.
- 19. WHEN WATER SERVICE BOXES FALL WITHIN THE LIMITS OF CONCRETE FLATWORK, THE CONTRACTOR SHALL PROVIDE EITHER A SECTION OF 4" POLY VINYL CHLORIDE (PVC) PIPE OR 4" HIGH DESITY POLYETHYLENE (HDPE) PIPE TO SLEEVE THE BOX. THE SLEEVE SHALL EITHER BE REMOVED OR TRIMMED TO MATCH THE FINISHED CONCRETE GRADE LEVEL. THE FINAL RESULT SHALL BE A SMOOTH FINISHED "BOX-OUT" AROUND THE SERVICE BOX WHICH, SHALL FACILITATE FASY REMOVAL OF THE CAP AT MEET THE FINISHED GRADE. ALL WATER SERVICE BOXES WITHIN PAVEMENT RESURFACING SHALL BE ADJUSTED TO MEET THE FINISHED GRADE LEVEL.
- 20. WHEN A SEWER STRUCTURE FALLS WITHIN THE LIMITS OF A CONCRETE DRIVEWAY, THE CONTRACTOR SHALL PLACE EXPANSION MATERIAL IN A BOX APPROXIMATELY EIGHTEEN (18") INCHES FROM THE CENTER OF THE LID FORMING A SQUARE "BOX-OUT" AROUND THE FRAME. THE RESULT SHALL BE A CONDITION THAT WILL ALLOW FOR THE REMOVAL OF THE SQUARE OF CONCRETE FROM THE DRIVEWAY FOR THE PURPOSE OF REPLACING THE FRAME WITHOUT DAMAGING THE REMAINDER OF THE DRIVEWAY PAVEMENT
- 21. ALL CONSTRUCTION PERSONNEL SHALL BE REQUIRED TO WEAR A FLUORESCENT YELLOW / GREEN SAFETY VEST AT ALL TIMES WHILE ON THE CONSTRUCTION SITE

- 22. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1-1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3 INCHES MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
- 23. BEFORE BEGINNING ANY WORK, THE CONTRACTOR SHALL RETAIN AND RECORD THE LOCATIONS OF ALL EXISTING PAVEMENT MARKING LINES (AND RAISED REFLECTIVE PAVEMENT MARKERS) IN ORDER THAT THESE LOCATIONS CAN BE REESTABLISHED. FOR STRIPING. EXACT LOCATIONS OF ALL PAVEMENT MARKINGS SHALL BE AS DIRECTED BY THE ENGINEER.
- 24. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 25. THE CONTRACTOR SHALL PROVIDE SAFE AND ORDERLY PASSAGE FOR TRAFFIC AND PEDESTRIANS WHERE CONSTRUCTION OPERATIONS IMPACT PUBLIC THOROUGHFARES AND ADJACENT PROPERTY. THE CONTRACTOR SHALL PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.
- 26 ALL SIDEWALK CURB RAMPS SHALL BE COMPLIANT WITH ALL APPLICABLE ADA STANDARDS AND INCLUDED DETAILS. INDIVIDUAL DESIGN DETAILS HAVE BEEN PROVIDED FOR ALL LOCATIONS WITH AN EXISTING SLOPE OVER 5%
- 27. A NOMINAL QUANTITY HAS BEEN INCLUDED FOR THE FOLLOWING PAY ITEMS:
- EARTH EXCAVATION - AGGREGATE SUBGRADE IMPROVEMENT
- REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- COMBINATION CURB AND GUTTER REMOVAL
 - SIDEWALK REMOVAL

- CLASS D PATCHES - TREE ROOT PRUNING - COMBINATION CONCRETE CURB AND GUTTER,

GENERAL NOTES - SEWERS:

1. ALL FRAMES WITH CLOSED LIDS BEING FURNISHED FOR THIS PROJECT AS CONSTRUCTION, ADJUSTMENT, OR RECONSTRUCTION OF ANY MANHOLE, CATCH BASIN, INLET, OR WATER VALVE VAULT SHALL HAVE CAST INTO THE LID ONE OR MORE OF THE FOLLOWING WORDS:

ALL LIDS BEING USED FOR STORM SEWER MANHOLES SHALL BEAR THE WORD "STORM". ALL LIDS BEING USED FOR SANITARY MANHOLES SHALL BEAR THE WORD "SANITARY". ALL LIDS BEING USED FOR CITY'S WATER SYSTEM STRUCTURES SHALL BEAR THE WORD "WATER". THE INCLUSION OF THESE LIDS SHALL BE INCLUDED IN THE COST OF THE APPROPRIATE CONTRACT LINE ITEM. ALL CURB INLET FRAMES SHALL BE STAMPED WITH A 'FISH" SYMBOL DIRECTLY ON THE CURB BACK.

2. IF AT ANY TIME DURING THE CONSTRUCTION OF THIS PROJECT LOOSE MATERIAL IS DEPOSITED INTO THE FLOW LINE OF A SEWER STRUCTURE IN SUCH A WAY AS TO RESTRICT OR OBSTRUCT THE NATURAL FLOW OF WATER IN THE STRUCTURE. THE MATERIAL SHALL BE REMOVED BEFORE THE CLOSE OF THE WORKING DAY DURING WHICH IT WAS DEPOSITED. AT THE CONCLUSION OF CONSTRUCTION ACTIVITIES, AND BEFORE THE ENGINEER ACCEPTS THE PROJECT, ALL SEWERS AND SEWER STRUCTURES THAT FALL WITHIN THE LIMITS OF THE PROJECT SHALL BE FREE OF CONSTRUCTION DEBRIS AND

SCALE:

SHEET

TO STA.

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CODE NO.	ITEM	UNIT	TOTAL QTY. CONSTR. CODE 0005
20101200	TREE ROOT PRUNING	EACH	10
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	20
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	1003
25200110	SODDING, SALT TOLERANT	SQ YD	1003
25200200	SUPPLEMENTAL WATERING	LIMIT	20
23200200	SUFFICIVENTAL WATERING	UNIT	30
28000510	INLET FILTERS	EACH	51
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	20
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	18863
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	14
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	2347
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	369
40600990	TEMPORARY RAMP	SQ YD	628
40000330	1 LIVE CANAL PAINE	30,10	020
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	2347
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQFT	9784
42400800	DETECTABLE WARNINGS	SQFT	916
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	27945

	CODE NO.	ITEM	UNIT	TOTAL QTY. CONSTR. CODE 0005
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1901
	44000600	SIDEWALK REMOVAL	SQFT	7855
Δ	44201725	· CLASS D PATCHES, TYPE I, 7 INCH	SQ YD	138
Δ	44201729	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	276
•				
Δ	44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	414
Δ	44201735	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	553
	56500600	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH	29
	60261200	INLETS TO BE ADJUSTED WITH NEW TYPE 10 FRAME AND GRATE	EACH	1
	60600605	CONCRETE CURB, TYPE B	FOOT	1667
Δ	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	1901
	67100100	MOBILIZATION	L SUM	1
	70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	L SUM	1
	70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	907
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQFT	299

* SPECIALTY ITEMS

th@mas.	thomas engineeri 762 shoreline driv sulte 200
ervice at the highest grade	aurora, illinois 60 phone: 855-533-1

SER NAME = jamesy	DESIGNED -	REVISED -
	DRAWN -	REVISED -
LOT SCALE = 2.0000 '/ in.	CHECKED -	REVISED -
LOT DATE = 2/6/2018	DATE -	REVISED -

SCALE:

SUMMARY OF QUANTITIES

CODE			TOTAL QTY. CONSTR. CODE
NO.	ITEM	UNIT	0005
78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	1414
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	12660
78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	2670
78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	338
70000050			
78000650	THERWOPLASTIC PAVEMENT MARKING - LINE 24"	F001	550
88600600	DETECTOR LOOP REPLACEMENT	FOOT	2784
89502376	REBUILD EXISTING HANDHOLE	EACH	4
X0320050	CONSTRUCTION LAYOUT (SPECIAL)	L SUM	1
X0327611	REMOVE AND REINSTALL BRICK PAVER	SQ FT	1647
X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	51
V7045005	SUMMED AND THE MEDIA OF SIGN	011 011	400
X/015005	CHANGEABLE MESSAGE SIGN	CAL DAY	130
Z0019600	DUST CONTROL WATERING	LINIT	18
250,0000	2007 COLINICE PARTICIPATION	5.41	,,,
	78000100 78000200 78000400 78000650 78000650 88600600 89502376 X0320050	NO. ITEM 78000100 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS 78000200 THERMOPLASTIC PAVEMENT MARKING - LINE 4" 78000400 THERMOPLASTIC PAVEMENT MARKING - LINE 6" 78000600 THERMOPLASTIC PAVEMENT MARKING - LINE 12" 78000650 THERMOPLASTIC PAVEMENT MARKING - LINE 24" 88600600 DETECTOR LOOP REPLACEMENT 89502376 REBUILD EXISTING HANDHOLE X0320050 CONSTRUCTION LAYOUT (SPECIAL) X0327611 REMOVE AND REINSTALL BRICK PAVER X6030310 FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) X7015005 CHANGEABLE MESSAGE SIGN	NO. ITEM UNIT 78000100 THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS SQ FT 78000200 THERMOPLASTIC PAVEMENT MARKING - LINE 4" FOOT 78000400 THERMOPLASTIC PAVEMENT MARKING - LINE 6" FOOT 78000600 THERMOPLASTIC PAVEMENT MARKING - LINE 12" FOOT 78000650 THERMOPLASTIC PAVEMENT MARKING - LINE 12" FOOT 88600600 DETECTOR LOOP REPLACEMENT FOOT 89502376 REBUILD EXISTING HANDHOLE EACH X0320050 CONSTRUCTION LAYOUT (SPECIAL) L SUM X0327611 REMOVE AND REINSTALL BRICK PAVER SQ FT X6030310 FRAMES AND LIDS TO BE ADJUSTED (SPECIAL) EACH X7015005 CHANGEABLE MESSAGE SIGN CAL DAY

△ SPECIAL PROVISION

* SPECIALTY ITEMS

th@mas.	th 76
engineering group	aı
service at the highest grades	nh

thomas engineering group, II 762 shoreline drive suite 200 aurora, illinois 60504 phone: 855-533-1700

USER NAME = Jamesy	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
PLOT SCALE = 2.0000 '/ in.	CHECKED -	REVISED -	
PLDT DATE = 2/6/2018	DATE -	REVISED -	

EXISTING

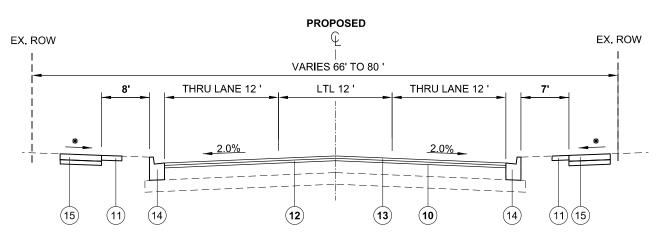
EX. ROW EX. ROW VARIES 66' TO 80 VARIES 0'-5' MEDIAN. THRU LANE 12 ' THRU LANE 12' LTL 12 ' VARIES 0'-8' 2.0% & VAR 2.0% & VAR **(2**) **(1)** (6) (4)(3)(5)

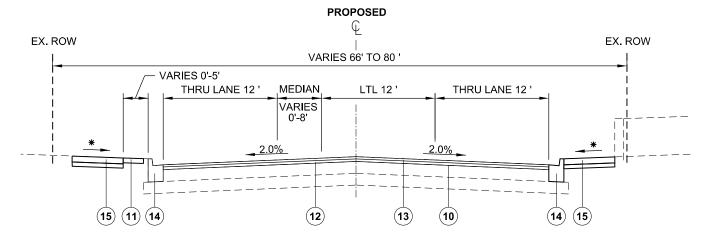
EXISTING

NORTH MAIN STREET SEMINARY AVE TO WAKEMAN AVE STA. 101+03 TO STA. 143+60



NORTH MAIN STREET WAKEMAN AVE TO COLE AVE STA. 143+60 TO STA. 162+61





PROPOSED TYPICAL SECTION

NORTH MAIN STREET SEMINARY AVE TO WAKEMAN AVE STA. 101+03 TO STA. 143+60

HOT-MIX ASPHALT MIXTURE REQUIREMENTS			
MIXTURE TYPE	AIR VOIDS		
WIXTURE TYPE	@ Ndes		
ROADWAY RESURFACING			
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm)	4% @ 70 Gyr.		
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	3.5% @ 50 Gyr.		
ROADWAY PATCHING -(PAY ITEM = CLASS D PATCHES) AND TEMPORARY RAMP			
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	4% @ 70 Gyr.		

- 1. THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ YD/IN.
- 2. THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76 -22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL "PG 64 -22" UNLESS MODIFIED BY DISTRICT ONE SPECIALS PROVISIONS. FOR "PERCENT OF RAP" SEE DISTRICT ONE SPECIAL PROVISIONS.
- 3. THE CONTRACTOR SHALL MILL BEFORE PATCHING.

LEGEND

- EX SUB-BASE GRAN MATL, THICKNESS VARIES
- 2) EX HMA PAVEMENT, 10"
- 3 EX PCC SIDEWALK
- (4) EX COMB. CONC. CURB AND GUTTER
- (5) EX RETAINING WALL (WAKEMAN AVE TO PARKWAY DR)
- (6) HMA SURFACE REMOVAL, 3"
- (7) COMB. CURB AND GUTTER REMOVAL (SEE NOTE A)
- (8) PR CLASS D PATCHES, 7" (SEE NOTE A)
- (9) PR SIDEWALK REMOVAL (SEE NOTE A)
- (10) PR BITUMINOUS MATERIALS (TACK COAT)
- 11) PR SODDING, SALT TOLERANT AND TOPSOIL FURNISH AND PLACE, 4" (SEE NOTE A)
- (12) PR POLYMERIZED LEVELING BINDER (MM), IL-4.75, N50, 1-1/2"
- (13) PR HMA SURF CSE, MIX "D", N70, 1-1/2"
- (14) PR COMB CONC CURB AND GUTTER, TY B-6.12 (SEE NOTE A)
- (15) PR PCC SIDEWALK, 5" (SEE NOTES A & B)

PROPOSED TYPICAL SECTION

NORTH MAIN STREET WAKEMAN AVE TO COLE AVE STA. 143+60 TO STA. 162+61

NOTES

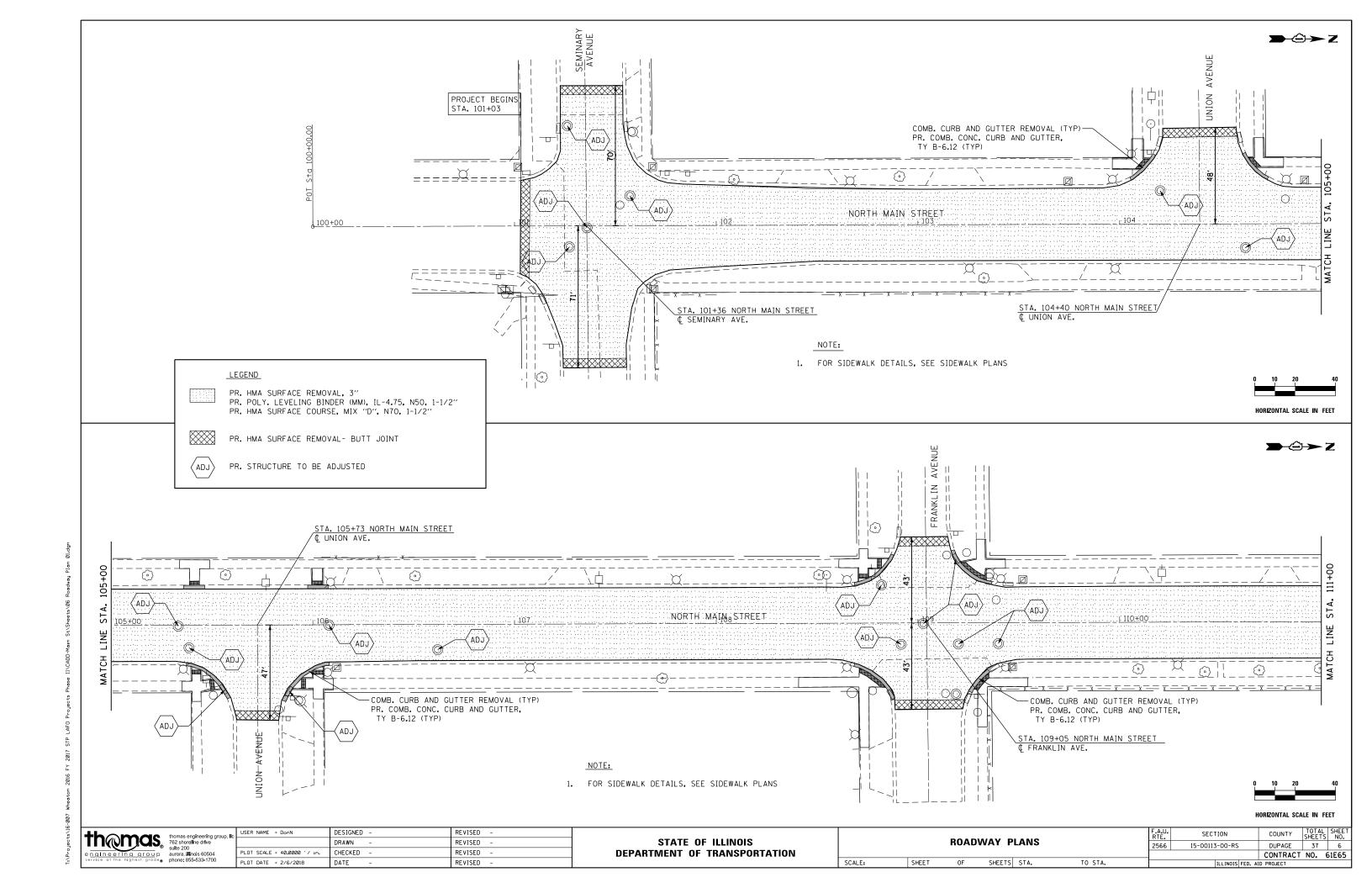
- A. LOCATIONS OF C&G REMOVAL/REPLACEMENT, SIDEWALK REMOVAL/REPLACEMENT, CLASS D PATCHES, SODDING AND TOPSOIL WILL BE SPECIFIED BY THE ENGINEER IN THE FIELD DURING CONSTRUCTION
- PR AGG BASE COURSE IS INCLUDED IN PCC SIDEWALK PAY ITEM. SEE PROJECT SPECIFICATIONS FOR DETAILS.
- C. PROJECT OMISSION OF IDOT S/N #: 022-7199
- * 1.5% DESIREABLE, 2% MAXIMUM

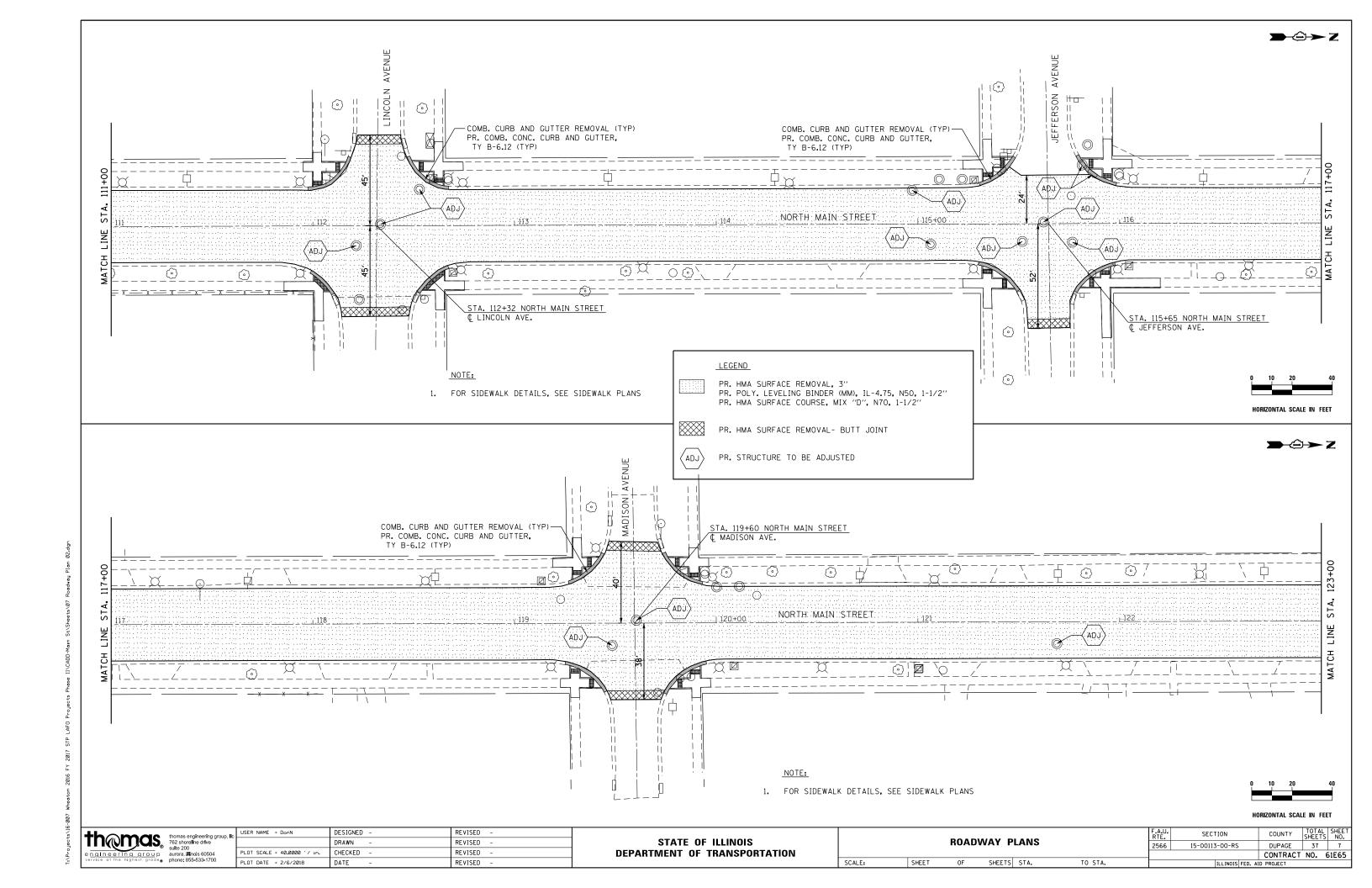


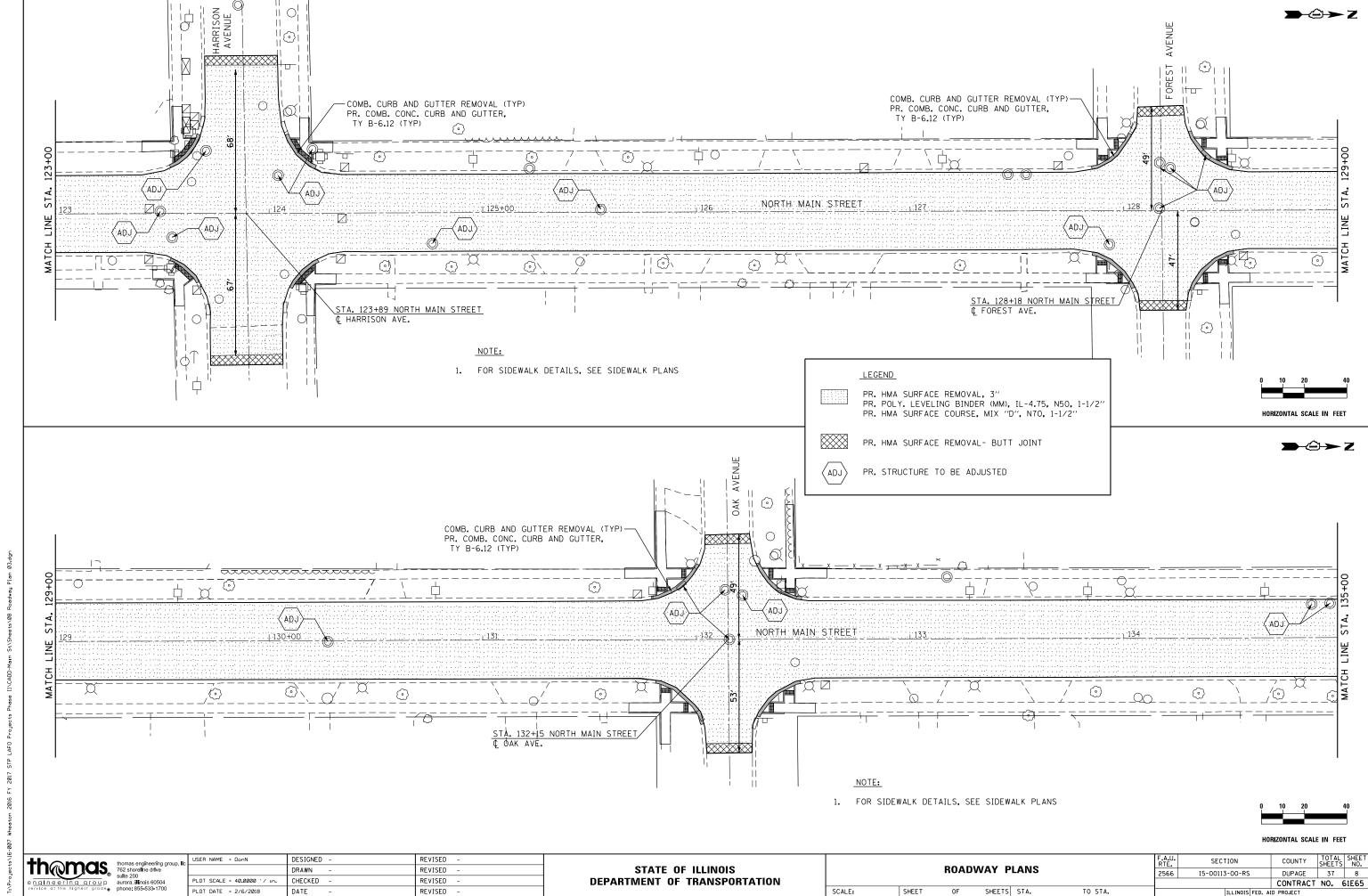
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

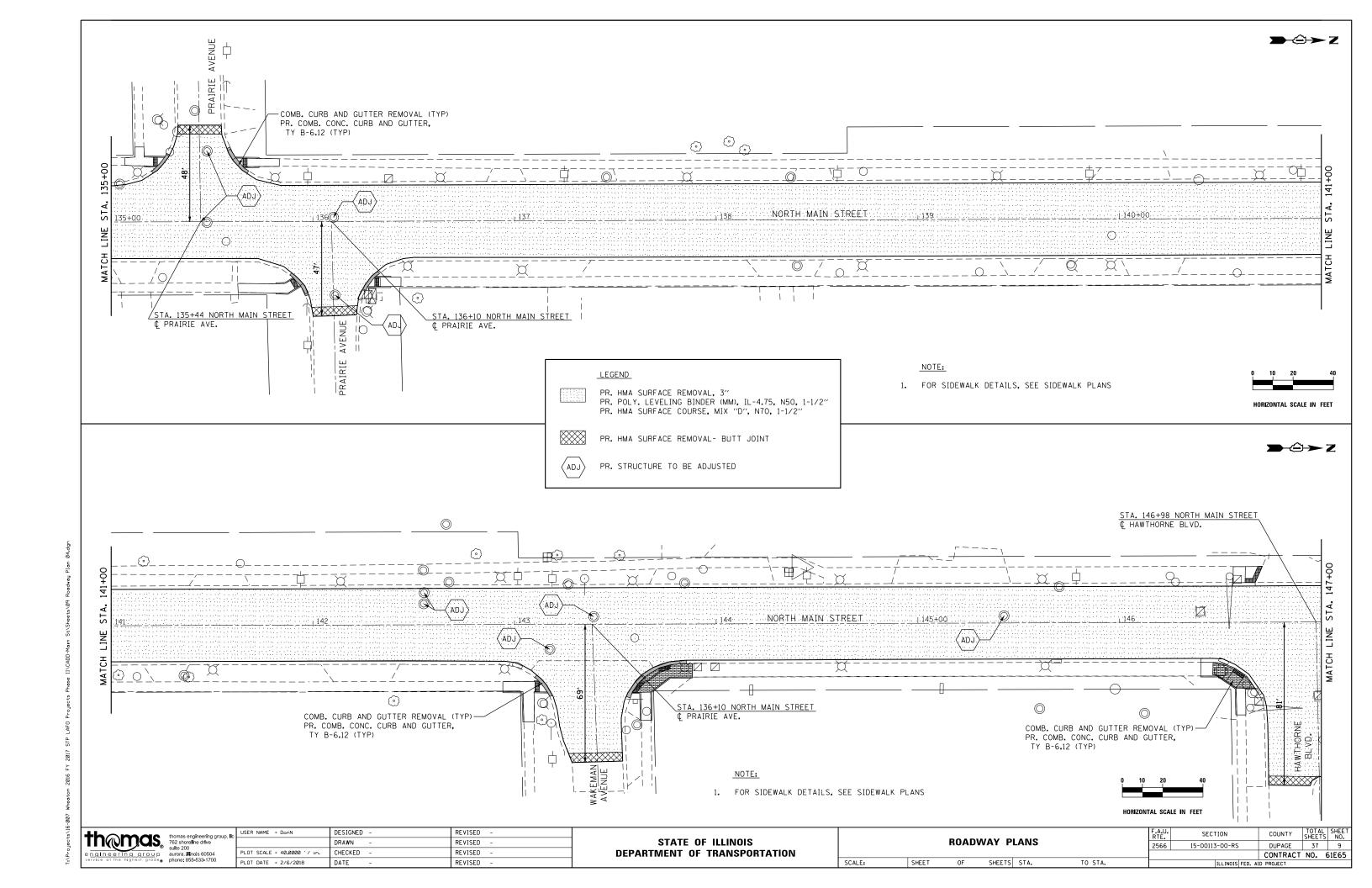
TYPICAL SECTIONS

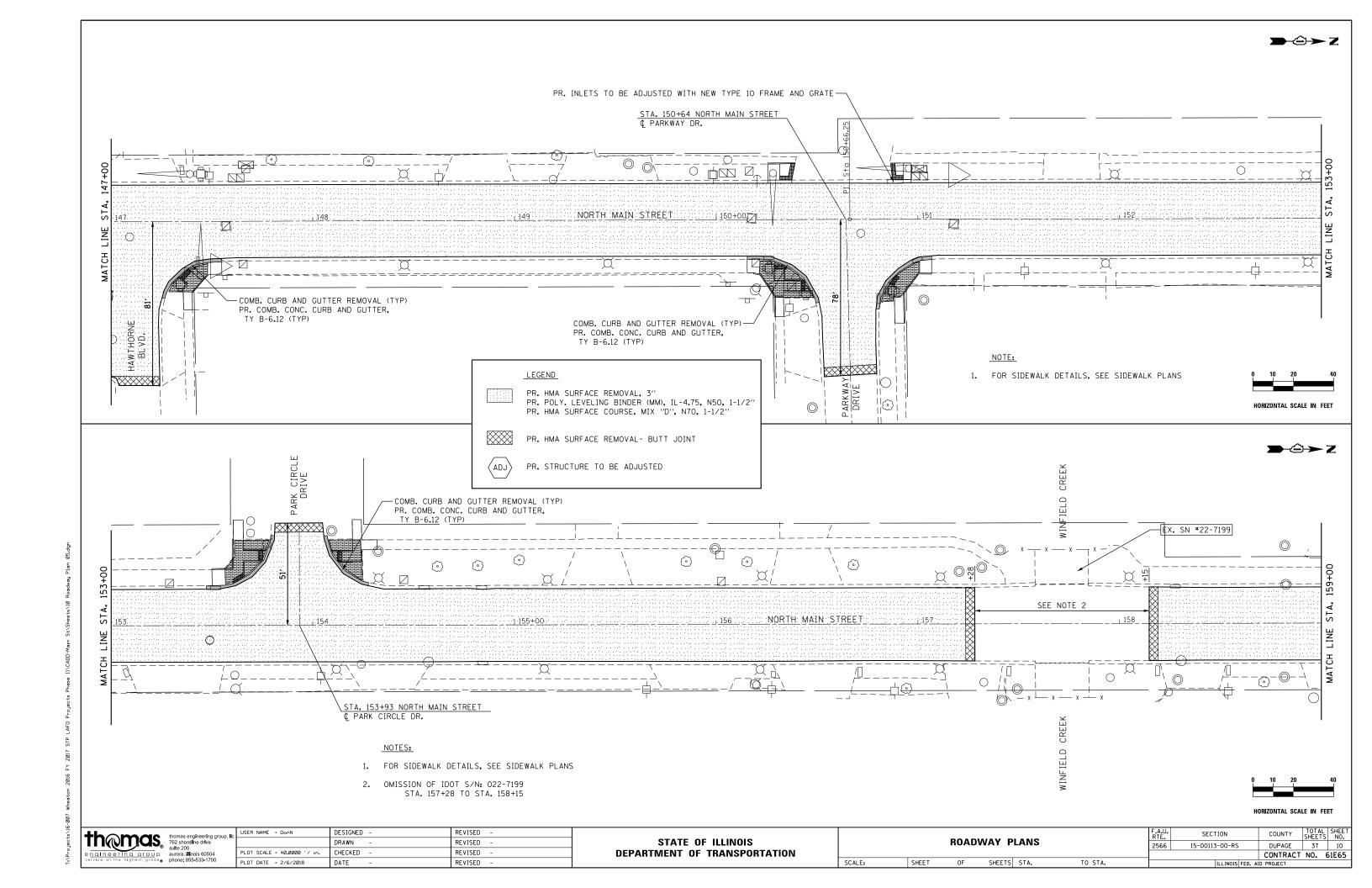
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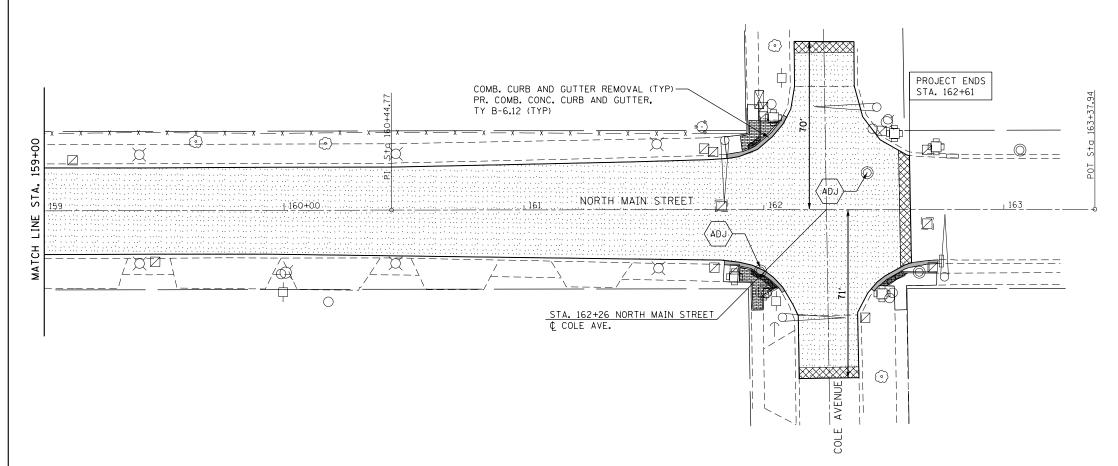












NOTE:

1. FOR SIDEWALK DETAILS, SEE SIDEWALK PLANS

LEGEND

PR. HMA SURFACE REMOVAL, 3"

PR. POLY. LEVELING BINDER (MM), IL-4.75, N50, 1-1/2" PR. HMA SURFACE COURSE, MIX "D", N70, 1-1/2"

PR. HMA SURFACE REMOVAL- BUTT JOINT

(ADJ)

SCALE:

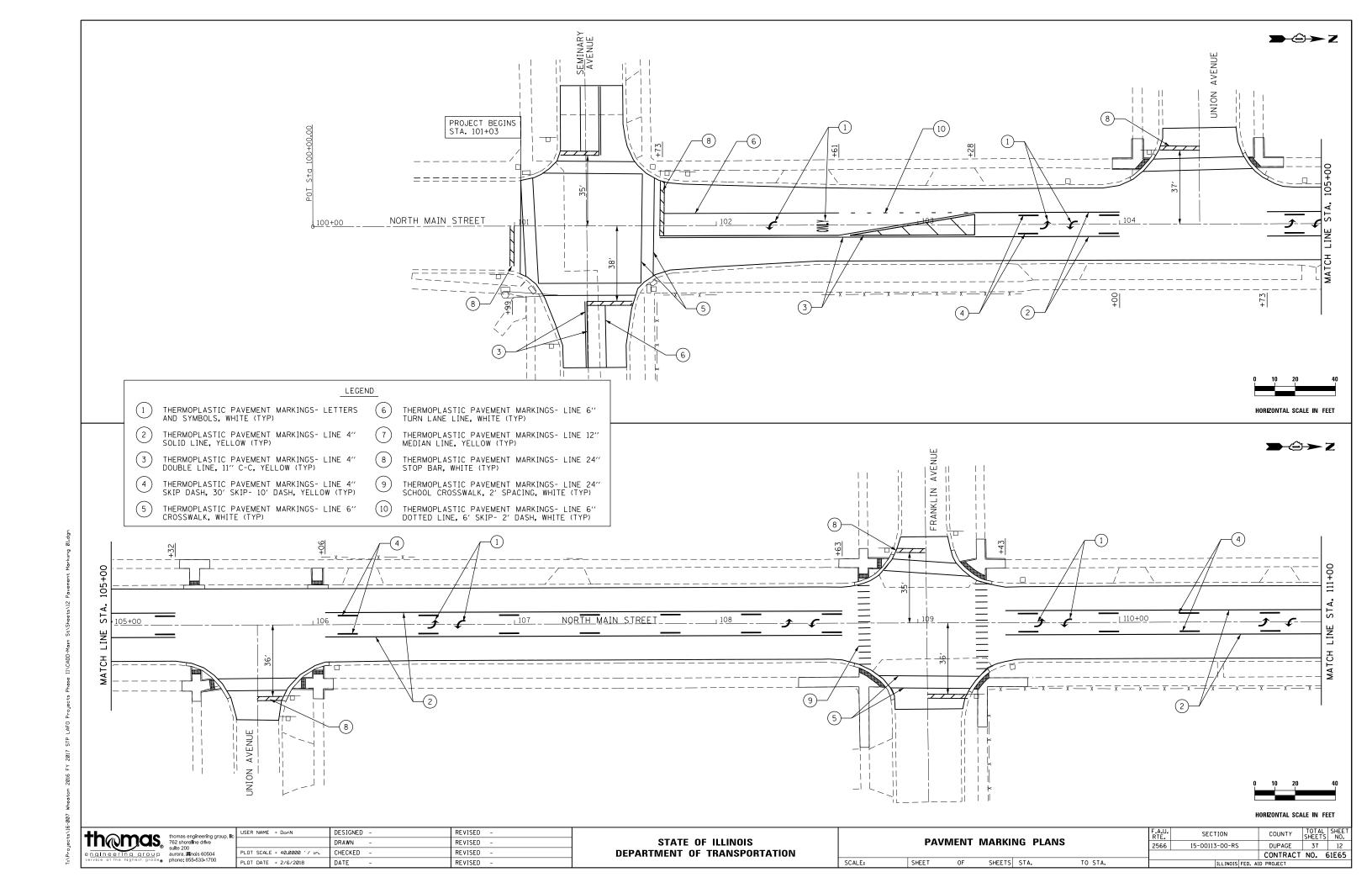
PR. STRUCTURE TO BE ADJUSTED

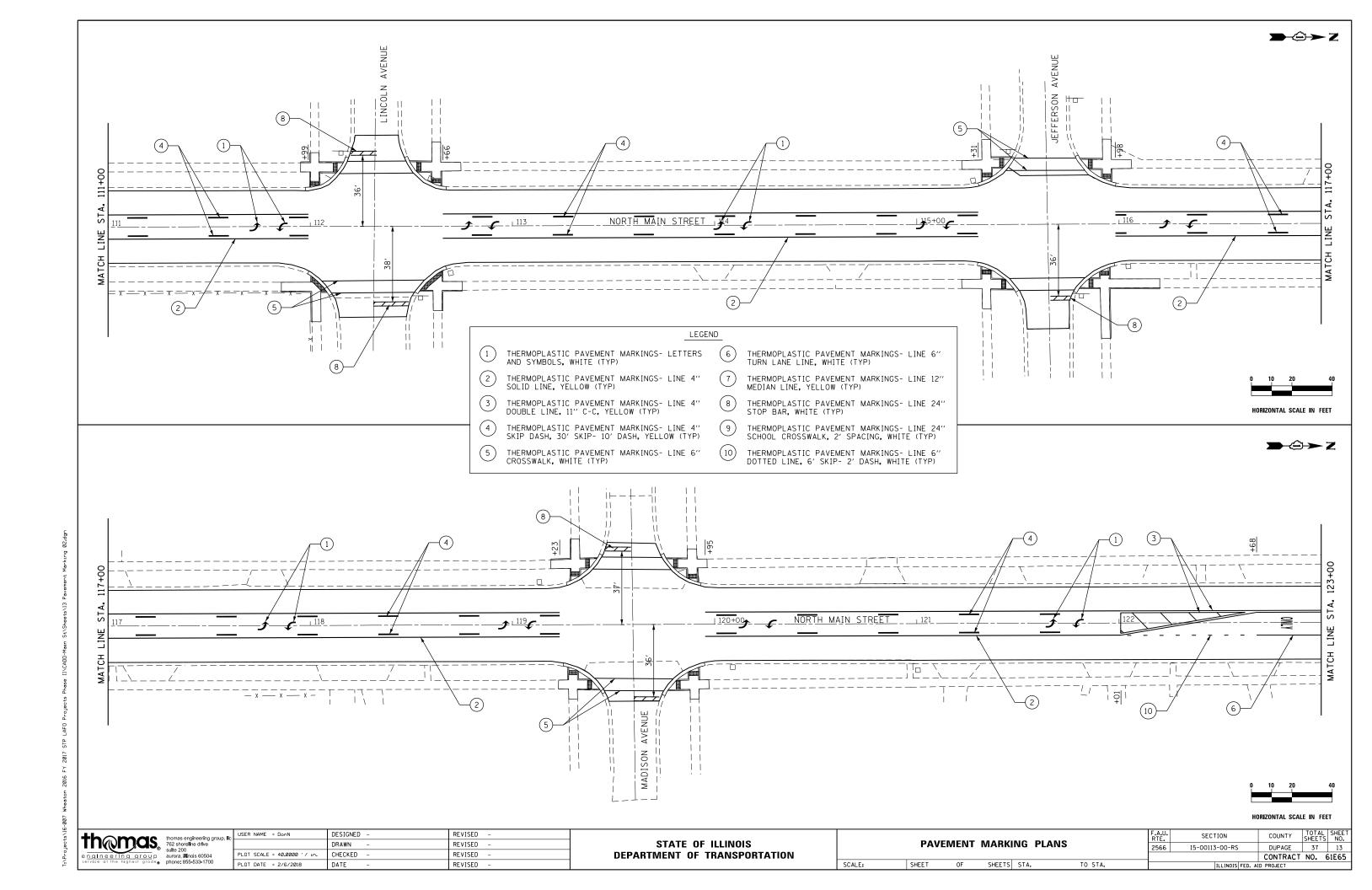


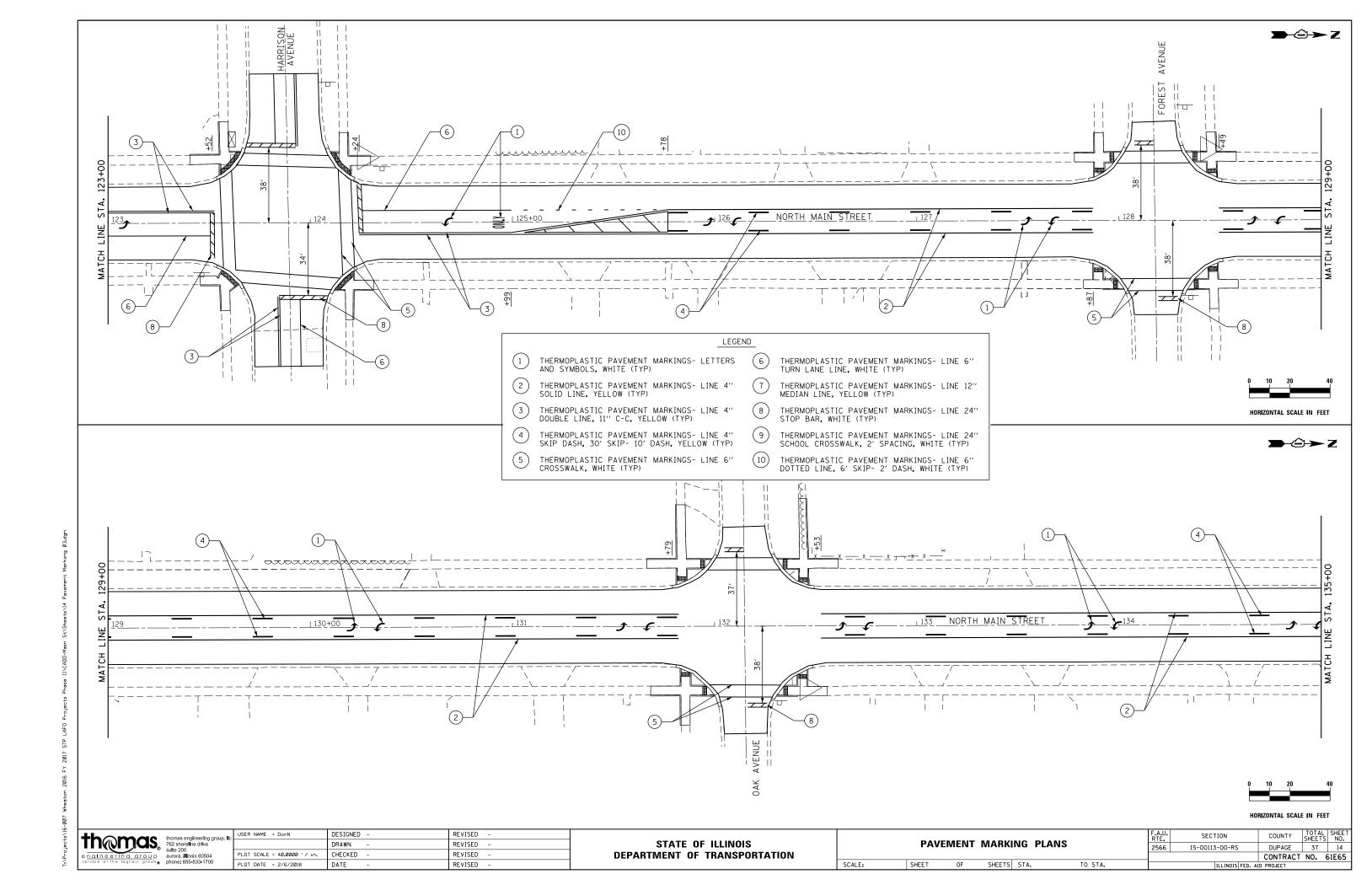
HORIZONTAL SCALE IN FEET

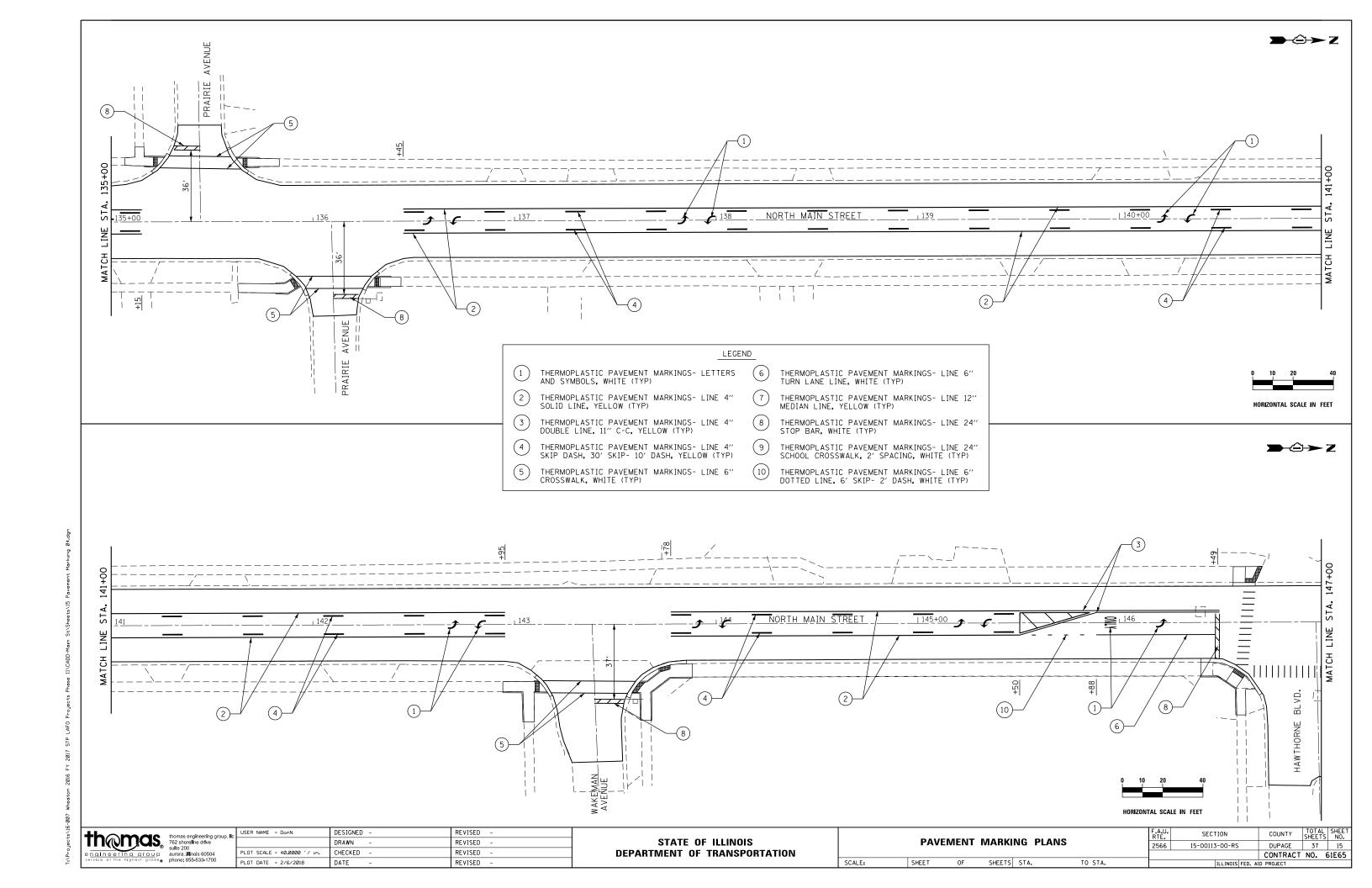


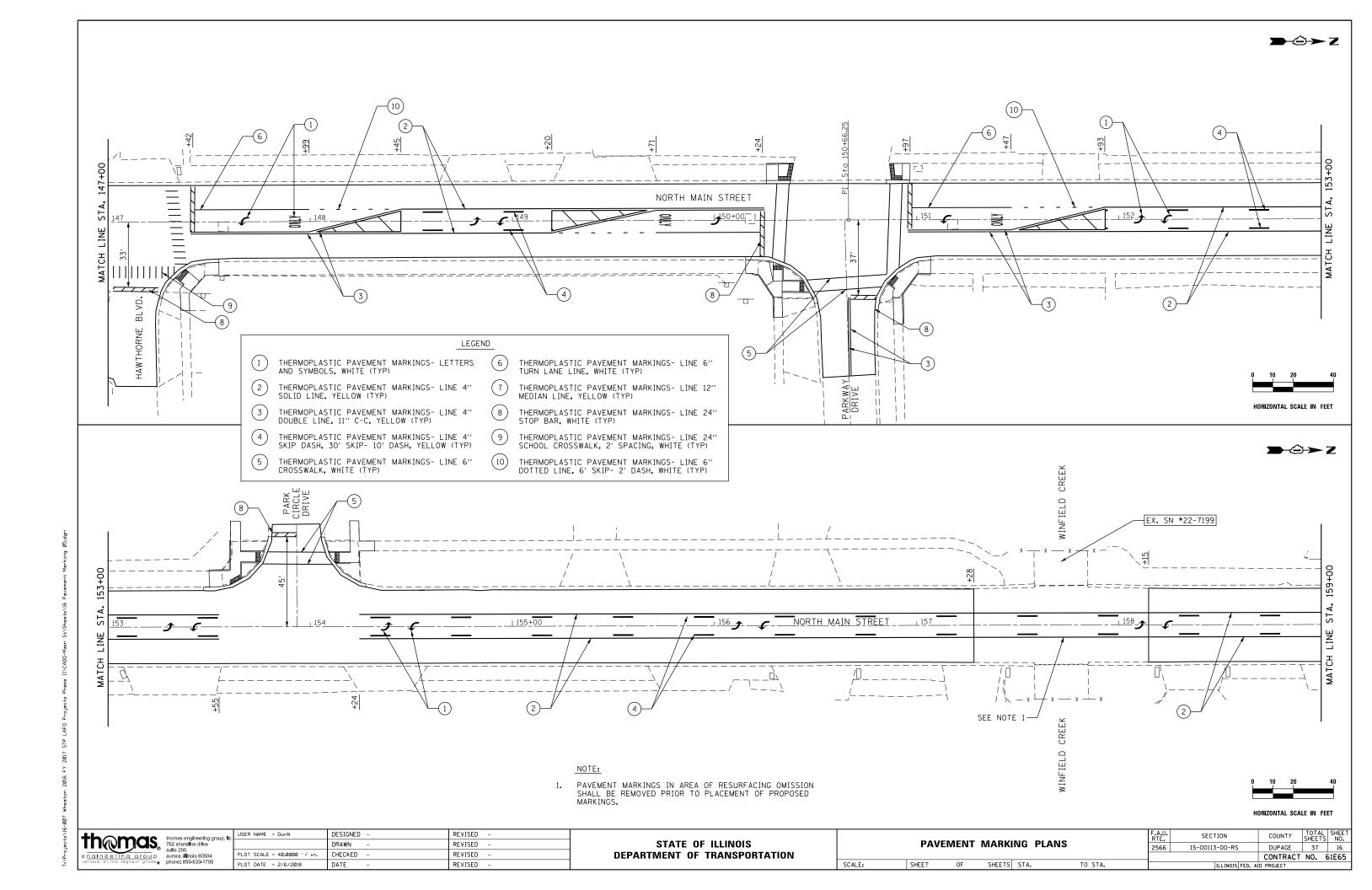
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	LEGEND

- THERMOPLASTIC PAVEMENT MARKINGS- LETTERS AND SYMBOLS, WHITE (TYP)
- THERMOPLASTIC PAVEMENT MARKINGS- LINE 4" SOLID LINE, YELLOW (TYP)
- THERMOPLASTIC PAVEMENT MARKINGS- LINE 4"
 DOUBLE LINE, 11" C-C, YELLOW (TYP)
- THERMOPLASTIC PAVEMENT MARKINGS- LINE 4" SKIP DASH, 30' SKIP- 10' DASH, YELLOW (TYP)
- THERMOPLASTIC PAVEMENT MARKINGS- LINE 6" CROSSWALK, WHITE (TYP)
- THERMOPLASTIC PAVEMENT MARKINGS- LINE 6"
 TURN LANE LINE, WHITE (TYP)
- THERMOPLASTIC PAVEMENT MARKINGS- LINE 12"
 MEDIAN LINE, YELLOW (TYP)
- THERMOPLASTIC PAVEMENT MARKINGS- LINE $24^{\prime\prime}$ STOP BAR, WHITE (TYP)
- THERMOPLASTIC PAVEMENT MARKINGS- LINE 24" SCHOOL CROSSWALK, 2" SPACING, WHITE (TYP)
- THERMOPLASTIC PAVEMENT MARKINGS- LINE 6"
 DOTTED LINE, 6' SKIP- 2' DASH, WHITE (TYP)



HORIZONTAL SCALE IN FEET

th@mas.
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service at the highest grade

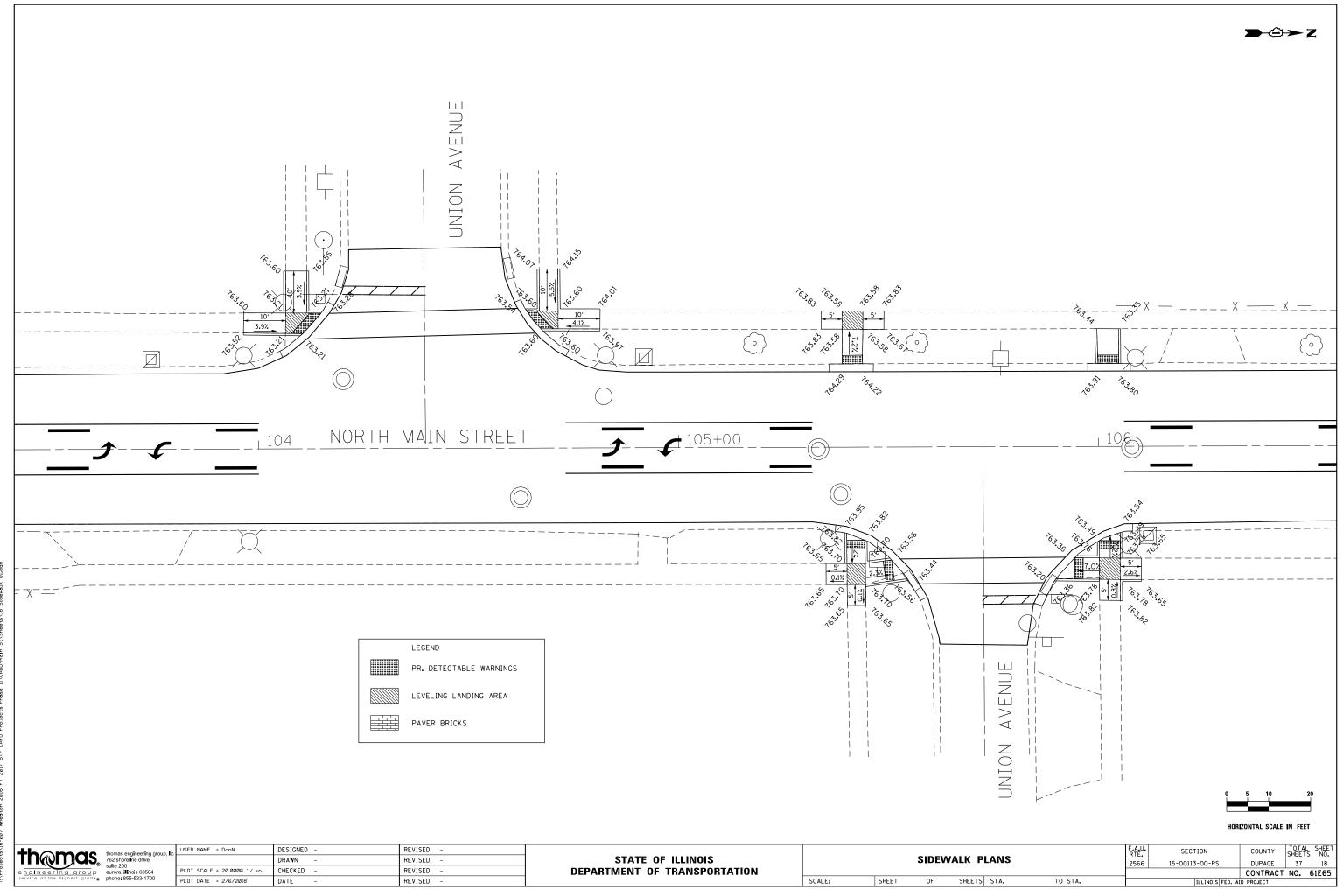
thomas engineering group, IIc 762 shoreline drive sulte 200 aurora, illinois 60504 phone: 855-533-1700

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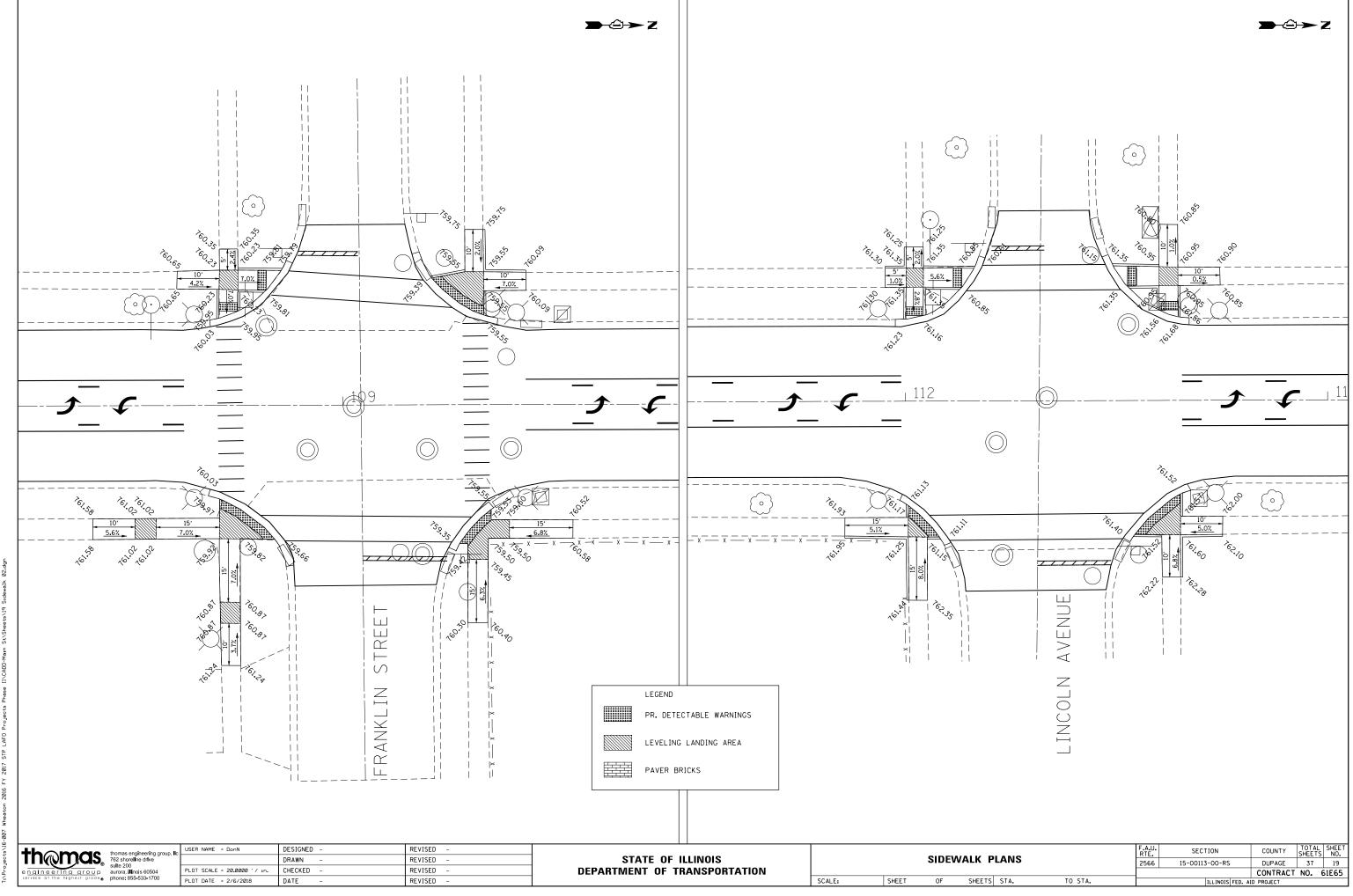
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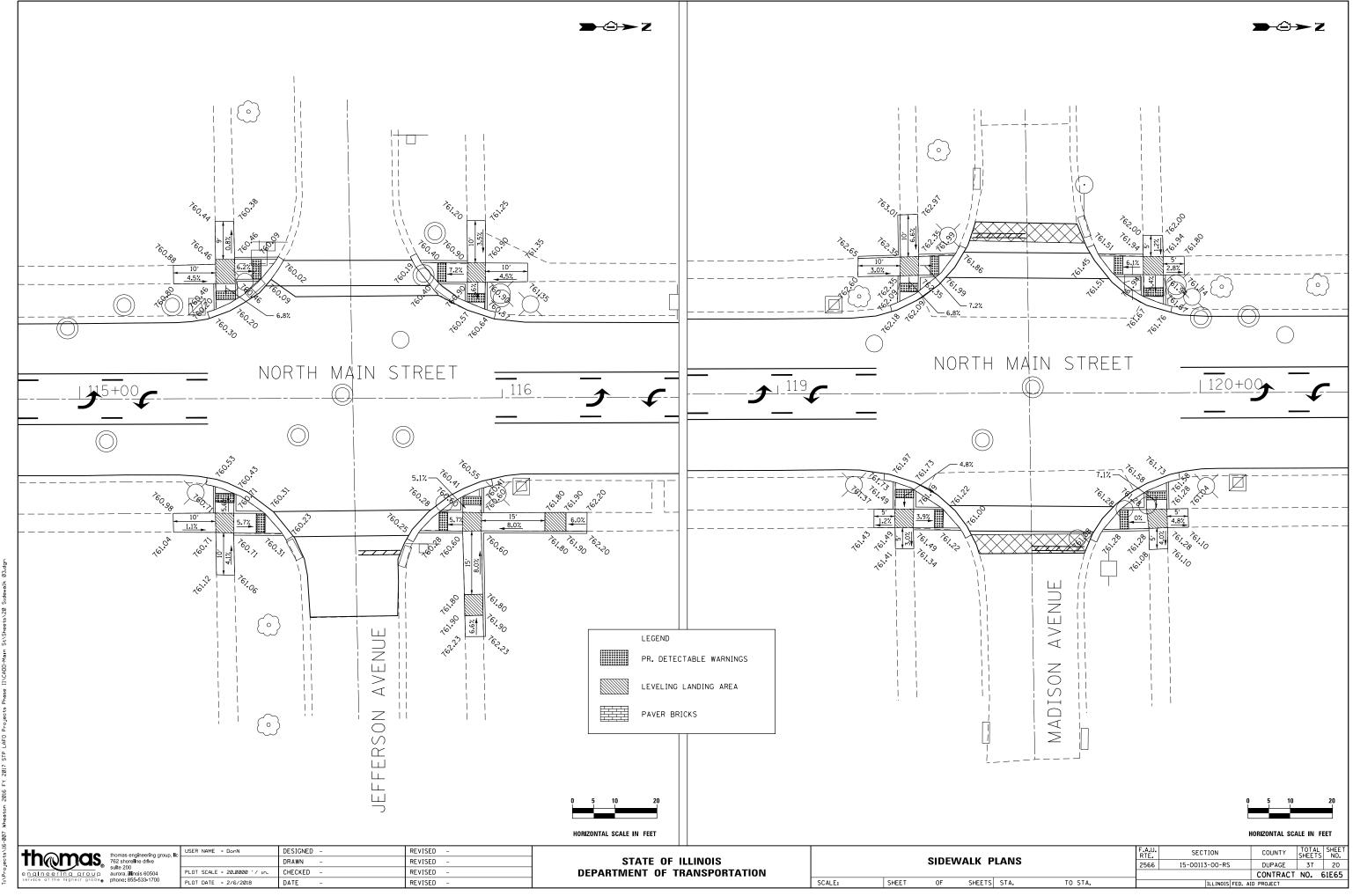
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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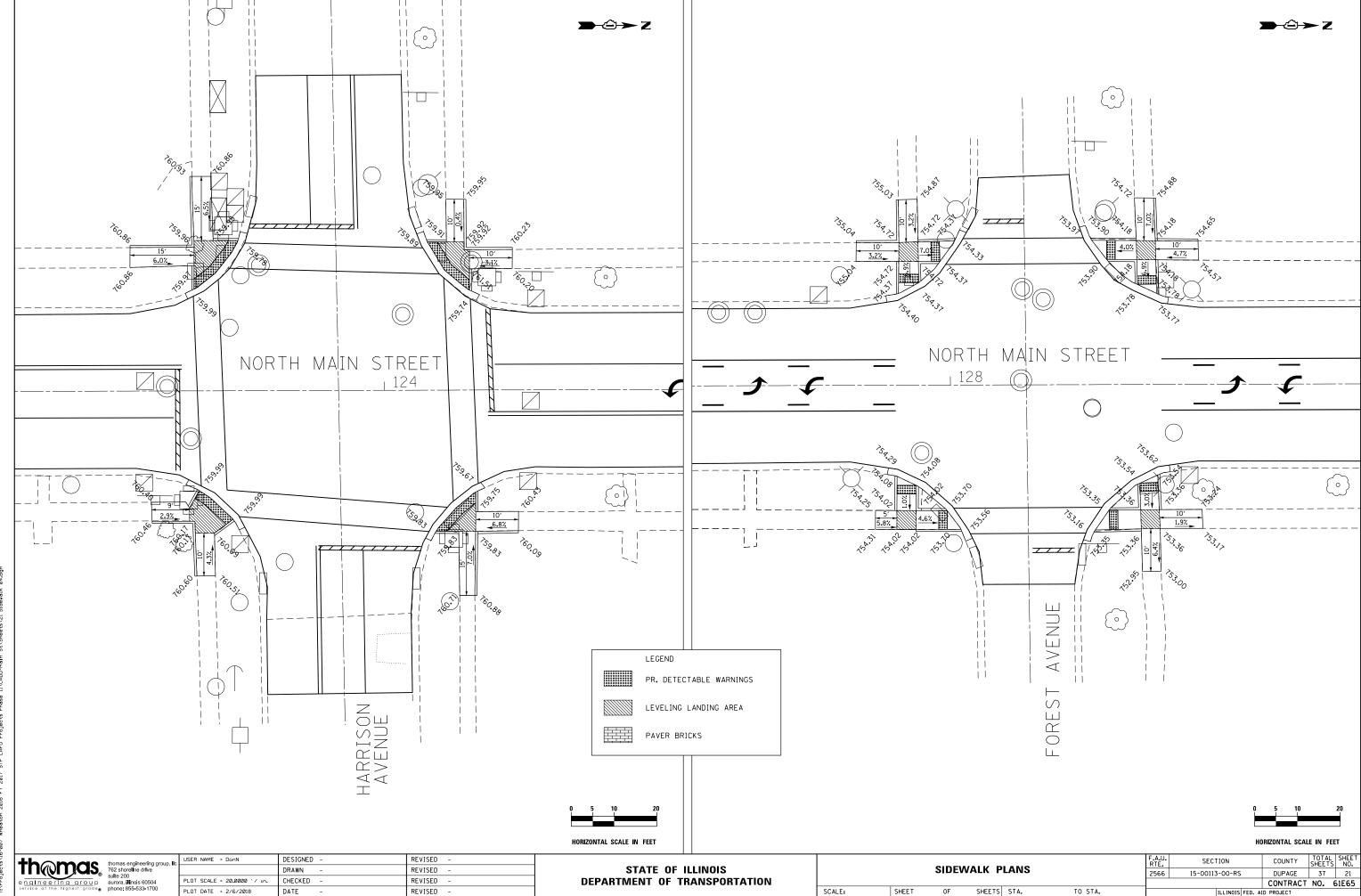


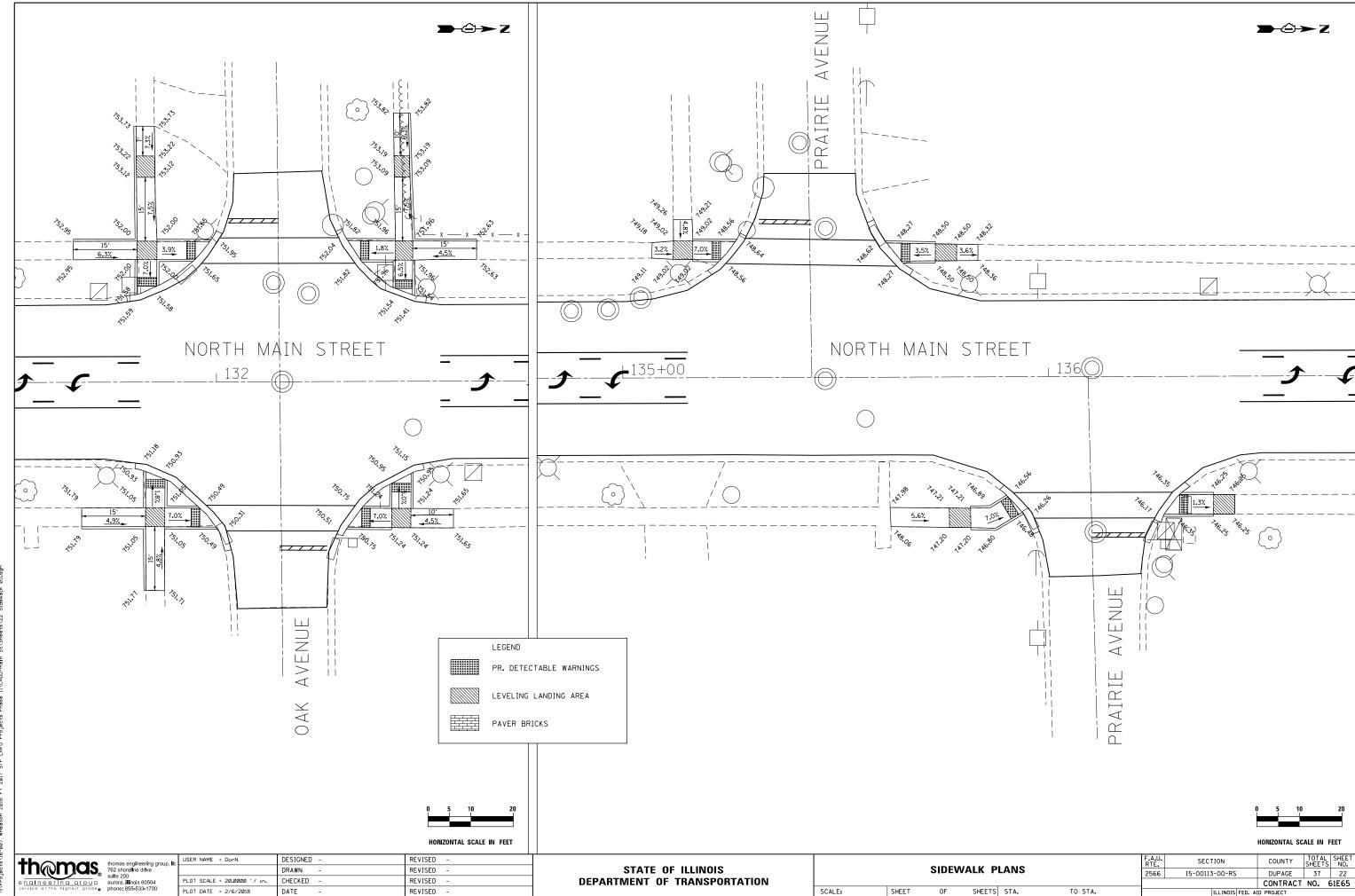
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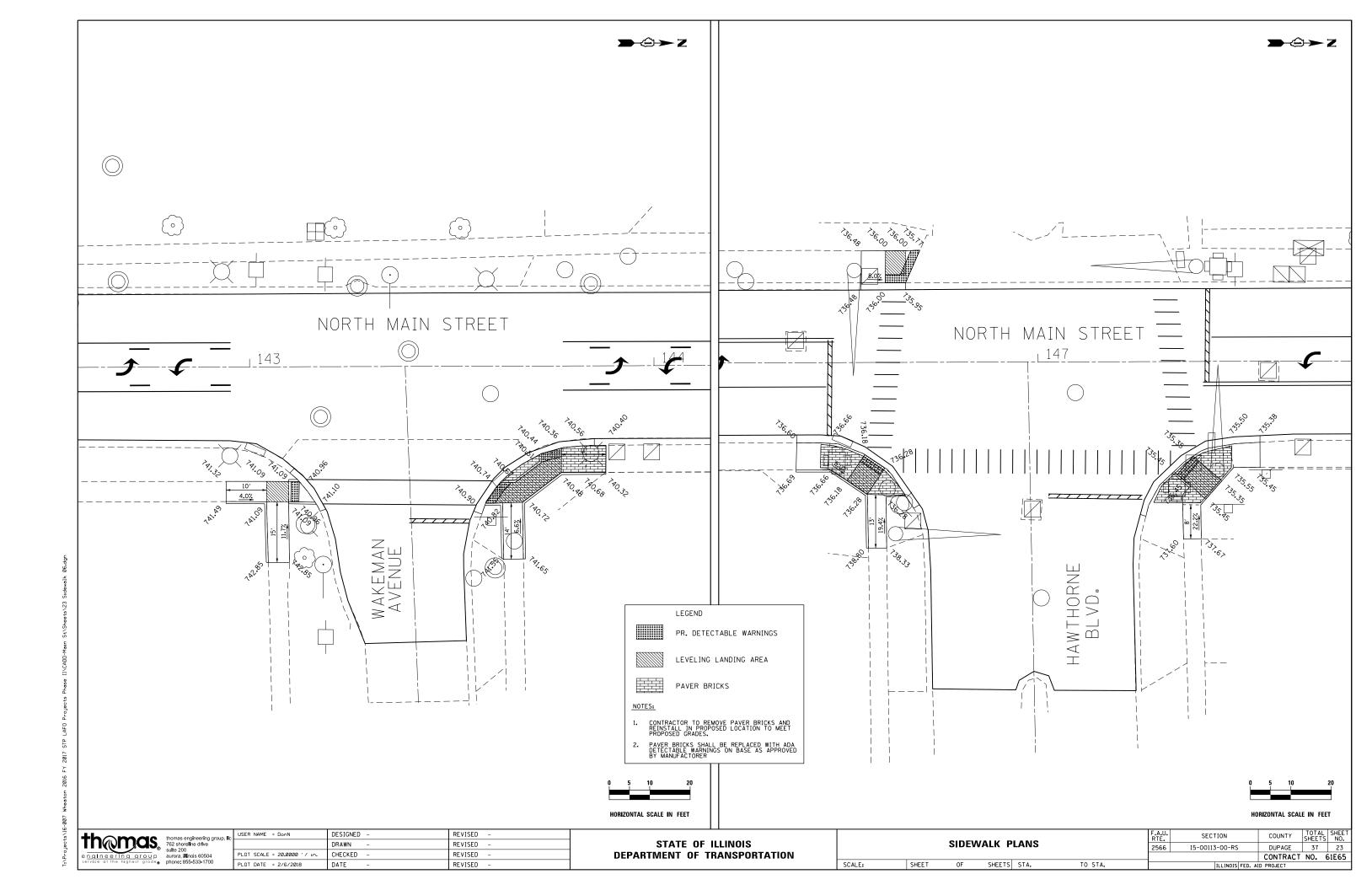


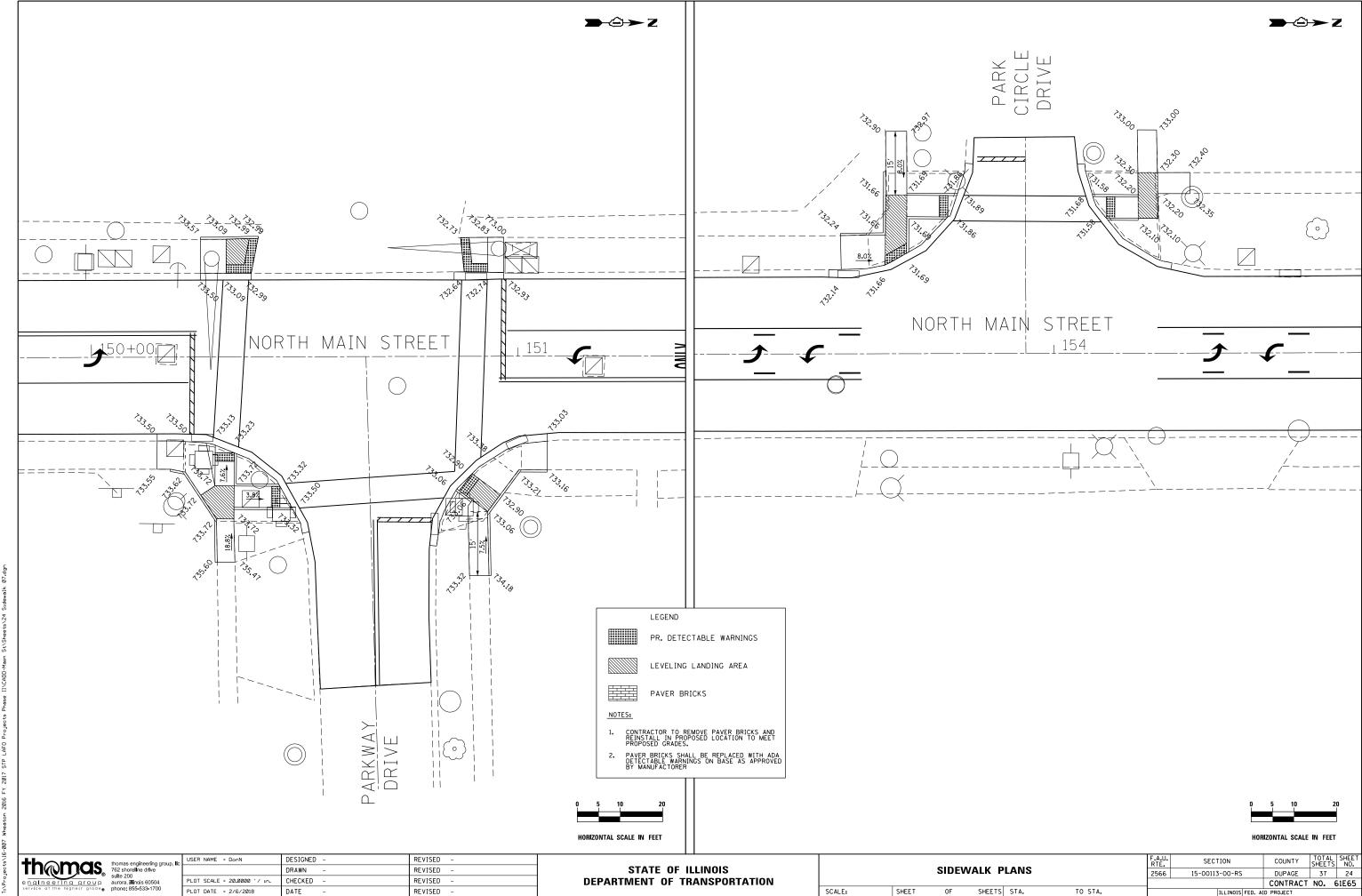


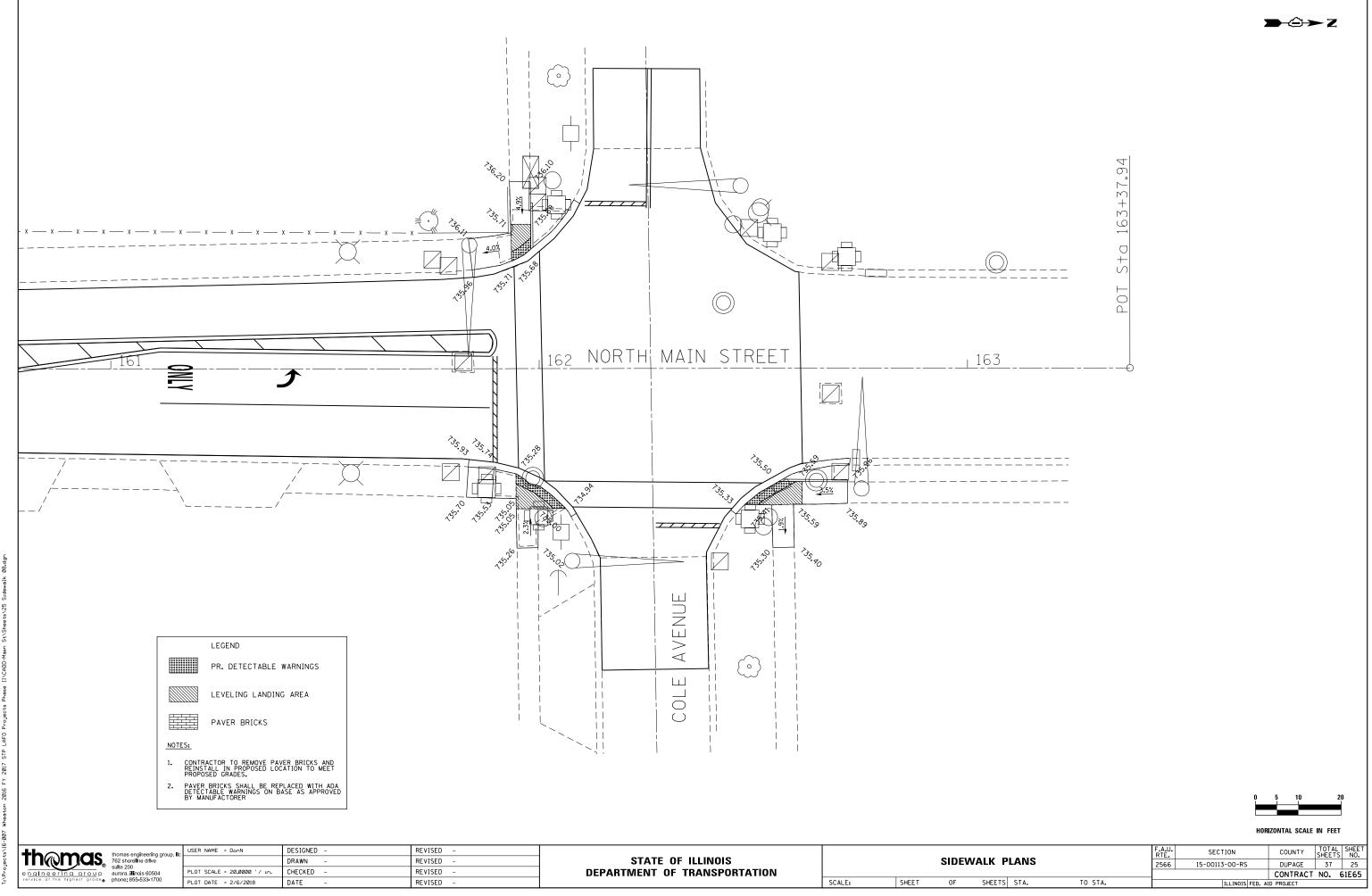




AProlects/16-007 Wheaton 2016 FY 2017 STP LAFO Prolects Phase II/CADD-Main St







thomas engineering group 762 shoreline drive sulte 200
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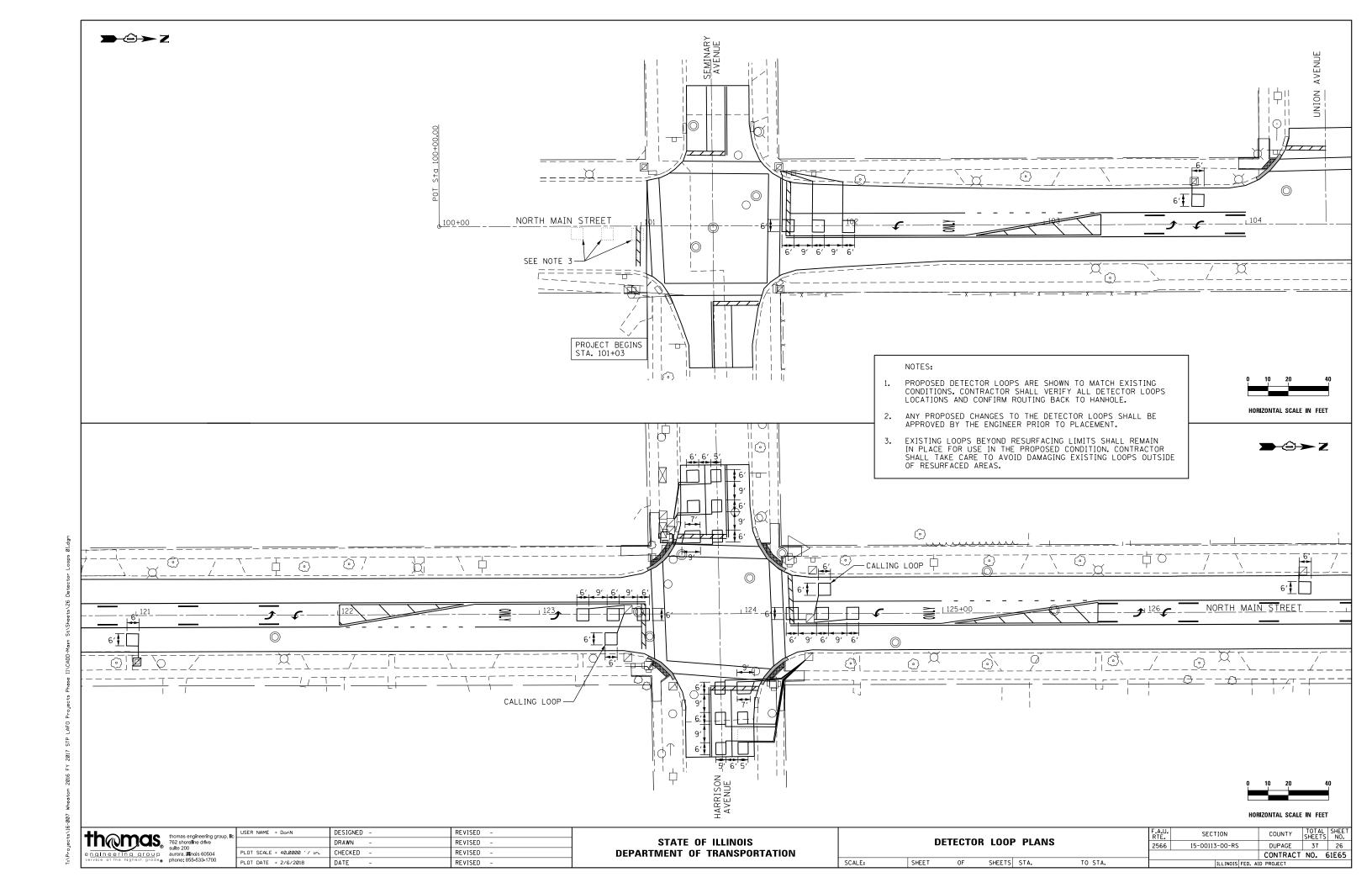
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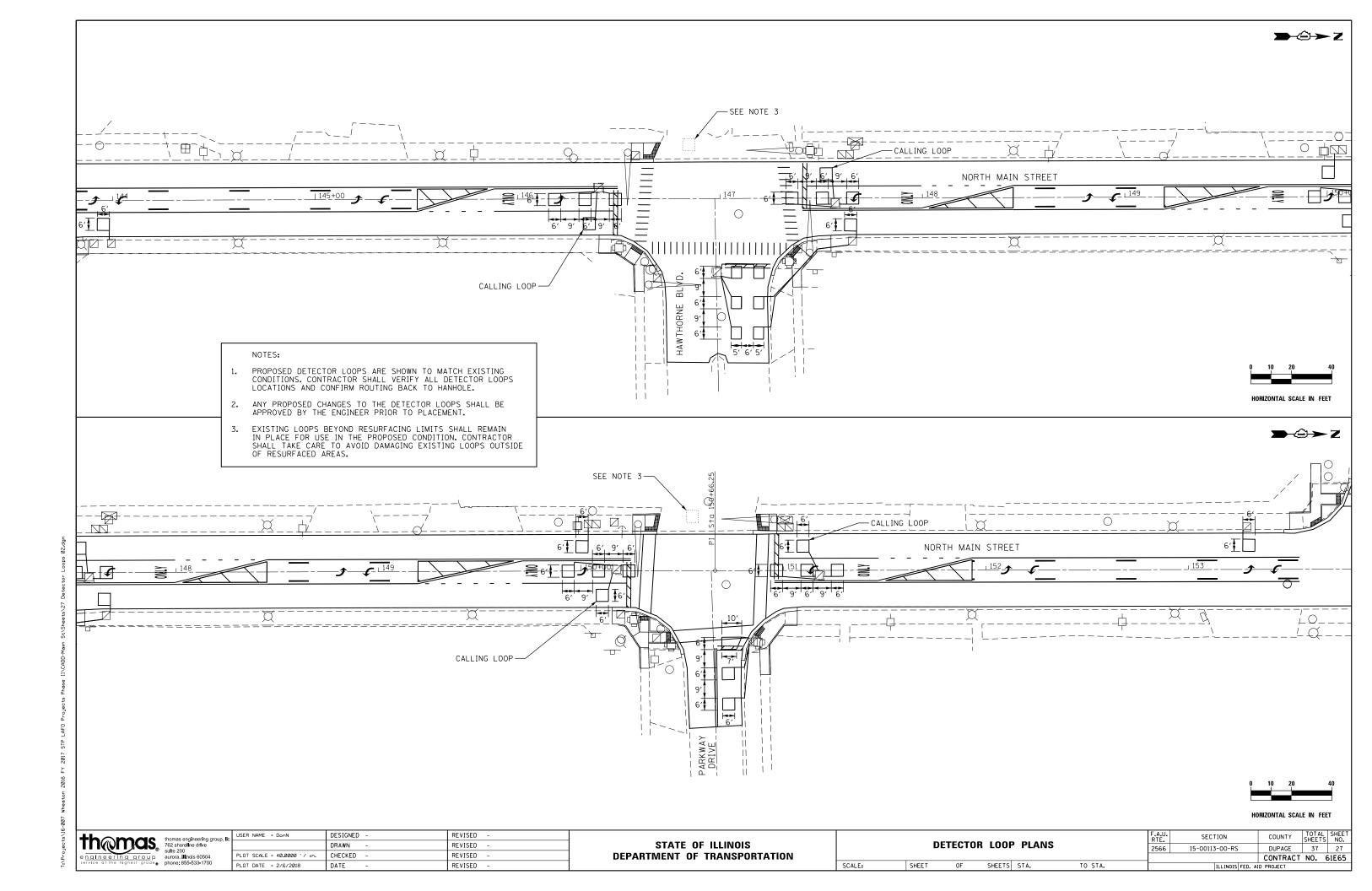
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEWALK PLANS SHEET OF SHEETS STA.

SCALE:

2566 15-00113-00-RS TO STA.

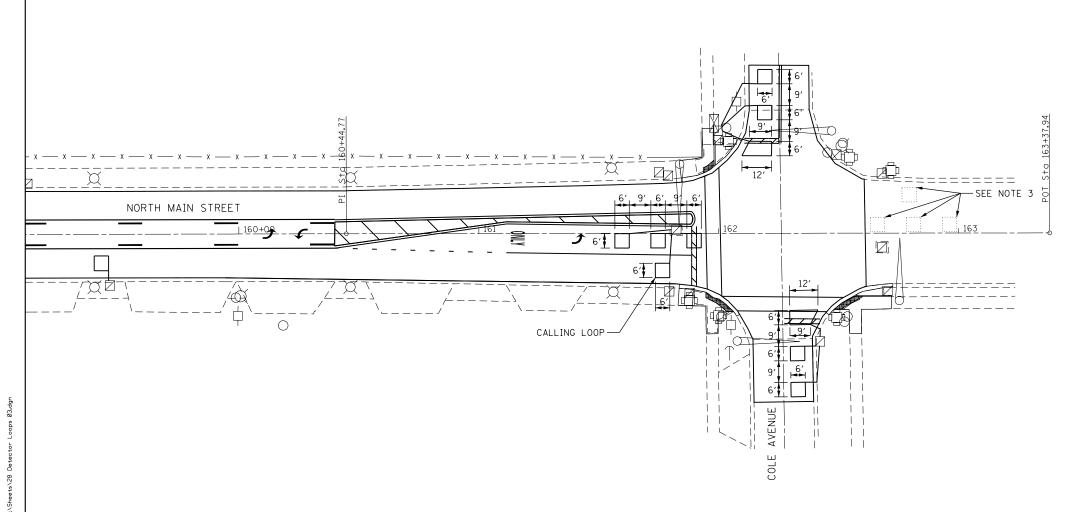




COUNTY TOTAL SHEET NO.

DUPAGE 37 28

CONTRACT NO. 61E65



NOTES:

- PROPOSED DETECTOR LOOPS ARE SHOWN TO MATCH EXISTING CONDITIONS. CONTRACTOR SHALL VERIFY ALL DETECTOR LOOPS LOCATIONS AND CONFIRM ROUTING BACK TO HANHOLE.
- 2. ANY PROPOSED CHANGES TO THE DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACEMENT.
- 3. EXISTING LOOPS BEYOND RESURFACING LIMITS SHALL REMAIN IN PLACE FOR USE IN THE PROPOSED CONDITION. CONTRACTOR SHALL TAKE CARE TO AVOID DAMAGING EXISTING LOOPS OUTSIDE OF RESURFACED AREAS.



HORIZONTAL SCALE IN FEET

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thomas engineering group, lic 762 shoreline drive sulte 200 aurora, illinois 60504 phone: 855-533-1700

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DETECTOR LOOP PLANS			2566	15-00113-00-RS		
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DRIVE APPROACH & SIDEWALK GENERAL STANDARDS RESIDENTIAL APPROACH 1. All Portland Cement Concrete shall conform to Illinois 1. Shall be 5" thick, Portland Cement Concrete, Class SI Department of Transportation Class SI mix 2. 1 1/2" Bituminous Concrete, on an 8" thick aggregate base 2. Where new concrete work meets or abuts any existing concrete structures, the existing concrete 3. Brick pavers shall be constructed in accordance with the manufacturer's specifications. Manufacturer's specifications must be shall be saw cut to a straight and clean edge and expansion material placed between the new and FOR NEW DEPRESSED CURB, ADD 1 1/2" LIP ABOVE GUTTER submitted as part of the permit application. existing work. COMMERCIAL APPROACH Expansion material is also required between new curb and new concrete approaches; new sidewalk and new concrete driveways; and new curb and new sidewalk. 1. 6" thick, Portland Cement Concrete, Class SI (Bituminous is not MAXIMUM APPROACH SLOPE IS 4. A culvert will be required where the street does not have MINIMUM APPROACH SLOPE IS SIDEWALK 1. 4" thick, Portland Cement Concrete on a compacted crushed 5. Replacement of barrier curb and gutter with depresse ** See Note 6 curb and gutter to be with a single pour. Gutter shall be a minimum of 8" thick. aggregate or bank run gravel base. 2. 5" thick through Residential Approaches 6. Wire mesh is not required - COVER OVER CULVERT SHALL BE A MINIMUM OF 5" OR 1/2 CULVERT DIAMETER, OR WHICHEVER IS LARGER 3. 6" thick through Commercial Approaches 7. Pea gravel is not allowed as fill or base materia 4. Walk shall be no lower than the centerline of the street 8. All curb replacements shall be a minimum of 5' in length. - MINIMUM CULVERT SIZE: 10" DIAMETER 5. The sidewalk shall have scored transverse joints at equal spacing not FLARE: 3' ON MINOR STREETS; 6' ON ARTERIAL AND COLLECTOR STREETS. FLARE TO COMMENCE A MINIMUM OF 7' FROM THE BACK OF CURB. to exceed five (5) feet or less than four (4) feet 6. The maximum transverse gradient of a sidewalk shall not exceed two 28' MAXIMUM WIDTH FOR THREE CAR 7. The maximum gradient of a sidewalk shall not exceed eight (8) percent. TRANSVERSE EXPANSION JOINT EVERY 40' MINIMUM. LIGHT STANDARD ALL SIDEWALK IS OR TRAFFIC SIGNAL, NORMALLY PLACED 1'

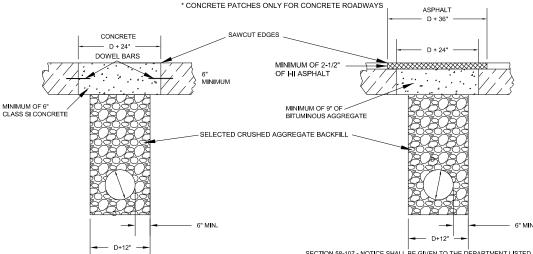
MINIMUM DISTANCE OF 30' ON RESIDENTIAL LOT.

MINIMUM DISTANCE OF 100' ON COMMERCIAL LOT. (REFERS TO APPROACHES ON SAME PARCEL) MAXIMUM OF 2 APPROACHES FOR A SINGLE

STREET CUT REPAIR SPECIFICATIONS

Reference "Standard Specifications for Road and Bridge Construction" LATEST VERSION.

* ASPHALT PATCHES ONLY FOR ASPHALT ROADWAYS



SECTION 58-106 - ANY STREET OR SIDEWALK DISTURBED BY EXCAVATION SHALL BE RESTORED TO ITS ORIGINAL CONDITION WITHIN 72 HOURS FROM THE TIME THE WORK COMMENCED, UNLESS GRANTED AN EXTENSION BY THE CITY ENGINEER. IN ALL CASES HOWEVER, STREET OPENINGS SHALL BE BACK FILLED WITH APPROVED GRANULAR MATERIAL AND A TEMPORARY PAVEMENT SURFACE OF COMPACTED, COLD ASPHALT MATERIAL, A MINIMUM OF TWO INCHES IN DEPTH, SHALL BE PLACED ON THE AREA DISTURBED BY CONSTRUCTION WITHIN 12 HOURS FROM THE TIME THE WORK COMMENCED.

ON ARTERIAL, COLLECTOR AND CENTRAL BUSINESS DISTRICT ROADWAYS, OR OTHER ROADWAYS THAT MAY BE DESIGNATED BY THE DIRECTOR OF ENGINEERING. ALL STREET CUTS MUST BE BACK FILLED AND PATCHED THE DAY OF CONSTRUCTION. REFERENCE CROSS SECTIONS ABOVE.

PERMIT REQUIREMENTS: A STREET CUT PERMIT IS REQUIRED PRIOR TO ANY WORK

A MINIMUM OF 24 HRS. NOTICE IS REQUIRED PRIOR TO INSPECTION

RETURN INSPECTION SLIP TO THE ENGINEERING DEPARTMENT

SECTION 58-107 - NOTICE SHALL BE GIVEN TO THE DEPARTMENT LISTED ON THE PERMIT AT LEAST 24 HOURS BEFORE THE WORK OF REFILLING ANY EXCAVATION OR TUNNEL IN ANY STREET, ALLEY OR OTHER PUBLIC PLACE COMMENCES

CTION 58-14 - ANY PERSON DOING ANY PERMITTED WORK WITHIN ANY STREET OR SECTION 58-14 - ANY PERSON DOING ANY PERMITTED WORK WITHIN ANY STREET OR ALLEY RIGHT-OF-WAY WITHIN THE CITY SHALL MAINTAIN SUFFICIENT AND SUITABLE SIGNS, BARRICADES AND LIGHTS DESIGNED TO WARN THE PUBLIC AGAINST HAZARDS CREATED BY THE PERMITTED WORK BEING DONE OR TO PREVENT DAMAGE TO ANY SUCH

- T. ONE LANE OF TRAFFIC SHALL BE MAINTAINED FOR PERMITTED FULL WIDTH STREET CUTS.

 2. NO CONCRETE PATCHES ON ASPHALT STREETS.

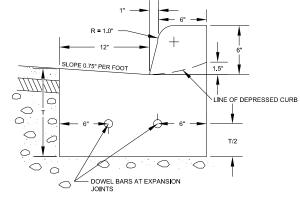
 3. DOWEL BARS SHALL BE USED TO TIE NEW CONCRETE INTO EXISTING CONCRETE.

PAVER BRICK WALKWAYS

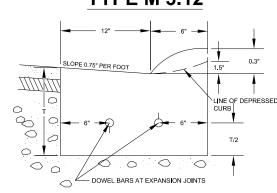
- SAW CUT AT CURB

For more information ref. "Wheaton City Code" CONCRETE SHADOWBOX PATTERN BUILDING CLAY PAVER BROOM ALTERNATE SQUARES IN OPPOSITE CLAY PAVER 8X8X2-1/4 **EXISTING** CONCRETE PAVER INSET (TOP VIEW) **EXISTING** BEDDING COURSE OF CLEAN WELL CONCRETE CURE GRADED SAND TO ASTM SPECIFICATION C 33, 1" TO 1 1/2 PAVER BRICK ON CONCRETE SIDEWALK BASE EXISTING EXISTING CONCRETE CONCRETE PAVER INSET CROSS SECTION

BARRIER CURB AND GUTTER TYPE B 6,12



TYPE M 3.12



SCALE:

T = THICKNESS OF PAVEMENT

1. TWO NO.6 STEEL DOWEL BARS WITH CAPS TO BE USED AT ALL EXPANSION JOINTS 100 ft, INTERVALS.

- 2. CONSTRUCTION JOINTS AT 25 ft. INTERVALS.
- 3. THREE 3/8" RE-BARS AT ALL TRENCH CROSSINGS. BARS TO EXTEND TWO FEET BEYOND EDGE OF TRENCH AND HAVE A MINIMUM LENGTH OF 10 FT.
- 4. THE BASE COURSE WILL BE OF A DEPTH SUFFICIENT TO BRING THE CURB AND GUTTER TO THE PROPOSED GRADE.
- 5. THE BASE COURSE LOCATED UNDER THE CURB AND GUTTER WILL NOT BE MEASURED FOR PAYMENT, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR COMBINATION CONCRETE CURB AND GUTTER OF THE TYPE SPECIFIED.

thomas engineering group, la 762 shoreline drive sulte 200 aurora, illinois 60504 phone: 855-533-1700

SAW CUT AT CURB

DESIGNED REVISED ORAWN REVISED PLOT SCALE = 2.0000 '/ in. CHECKED REVISED PLOT DATE = 2/6/2018 REVISED DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

When an existing manhole or b-box falls

with expansion material

within the sidewalk, box the sidewalk square

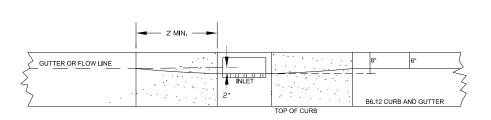
Public sidewalk to be ramped at intersection with curb. Barrier curb to be replaced with

depressed curb. (In accordance with ADA). *See IDOT Highway Standard 606001.

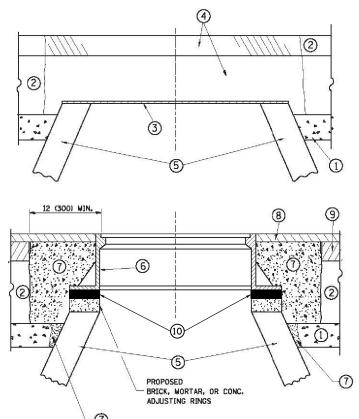
> SECTION COUNTY WHEATON CONSTRUCTION DETAILS 2566 15-00113-00-RS DUPAGE 37 29 CONTRACT NO. 61E65 SHEETS STA. TO STA. SHEET

TRANSITION CURB AT INLET OR C.B.

- 1. A MAXIMUM ADJUSTMENT OF 8" USING 2 (TWO) RUBBER RINGS IS ALLOWED. A MINIMUM OF 1 (ONE) RUBBER RING SHOULD BE INSTALLED BETWEEN THE FRAME AND STRUCTURE
- 2. BRICKS ARE NOT PERMITTED FOR ADJUSTMENTS.
- FOR ROLLED AND/OR BARRIER CURB USE NEENAH R-3010 OR EJIW 7045Z FRAME, 7040M1 GRATE AND 7050T1 CURB BACK
- 4. ALL JOINTS BETWEEN BARREL SECTION, RISER, AND CASTING SHALL BE SEALED WITH FLEXIBLE BUTYL MASTIC MATERIAL 2-1/4" WIDE AND 3/8" THICK OR ENGINEER APPROVED SUBSTITUTE. MORTAR IS NOT ALLOWED.
- 5. THE GRATE SHALL BE A BICYCLE SAFETY GRATE.
- REFERENCE: STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, MAY 1996 SECTION 33.
- 7. ANY SUBSTITUTIONS MUST BE APPROVED BY THE CITY ENGINEER.
- 8. 2' INSIDE DIAMETER TO BE USED AT END OF PIPE RUN ONLY. IN ALL INSTANCES WHERE 2 OR MORE PIPES ENTER OR EXIT C.B., 4' INSIDE DIAMETER STRUCTURE MUST BE USED.
- 9. MINIMUM PIPE DIAMETER IS 12" ON 2' STRUCTURE.
- 10. FRAME BACKS MUST HAVE STAMPED FISH SYMBOL PER NPDES REQUIREMENTS.



FRAMES AND LIDS ADJUSTMENT WITH MILLING



- 1 SUB-BASE GRANULAR MATERIAL
- 2 EXISTING PAVEMENT
- 3 36" DIAMETER METAL PLATE
- 4 PROPOSED CRUSHED STONE AND HMA SURFACE MIX
- (5) EXISTING STRUCTURE
- 6) FRAME AND LID (SEE NOTES)
- 7 CLASS PP-1 CONCRETE
- 8 PROPOSED HMA SURFACE COURSE
- 9 PROPOSED HMA BINDER COURSE
- PROPOSED RUBBER ADJUSTMENT RISER RING



STAGE 1 (BEFORE PAVEMENT MILLING)

- A) REMOVE A MINIMUM OF 12" OF THE PAVEMENT FROM AROUND THE STRUCTURE.
- B) REMOVE THE EXISTING FRAME AND LID FROM THE STRUCTURE. C) COVER THE STRUCTURE OPENING WITH A 36" DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1 1/2" THICK HMA SURFACE MIX APPROVED BY THE ENGINEER.

STAGE 2 (AFTER PAVEMENT MILLING)

- A) REMOVE THE HMA SURFACE MIX AND CRUSHED STONE.
- B) INSTALL THE FRAME AND LID; ADJUST THE FRAME TO ITS FINAL SURFACE ELEVATION. A MINIMUM OF ONE RUBBER ADJUSTMENT RISER RING SHALL BE USED.

 C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1• CONCRETE TO THE
- C) THE SURROUNDING SPACE SHALL BE FILLED WITH CLASS PP-1. CONCRETE TO THE ELEVATION OF THE SURFACE OF THE EXISTING BASE COURSE OR THE BINDER COURSE.
- UNLESS OTHERWISE SPECIFIED IN THE PLANS.

THE PROCEDURE EXPLAINED ABOVE SHALL CONFORM TO THE APPLICABLE PORTIONS OF SECTIONS 353, 406, 602, AND 603 OF THE STANDARD SPECIFICATIONS EXCEPT THAT "THE CONTRACTOR SHALL ADJUST THE STRUCTURES TO THE FINISHED PAVEMENT ELEVATION NO MORE THAN 5 CALENDAR DAYS PRIOR TO PLACEMENT OF THE FINAL LIFT OF SURFACE UNLESS APPROVED BY THE ENGINEER,"

SCALE:

LOCATION OF STRUCTURES:

THE CONTRACTOR WILL BE REQUIRED TO KEEP A RECORD OF THE LOCATIONS OF THE BURIED STRUCTURES ACCORDING TO THE STATION AND DISTANCE LEFT OR RIGHT OF THE CENTERLINE OF PAVEMENT. UPON COMPLETION OF THE WORK, THE CONTRACTOR WILL DELIVER THE RECORD TO THE ENGINEER.

BASIS OF PAYMENT:

REMOVING FRAMES AND LIDS ON DRAINAGE AND UTILITY STRUCTURES IN THE PAVEMENT PRIOR TO MILLING, AND ADJUSTING TO FINAL GRADE PRIOR TO PLACING THE SURFACE COURSE, WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR AS "STRUCTURE TO BE ADJUSTED." OF THE TYPE OF STRUCTURE SPECIFIED.

THIS WORK WILL NOT BE PAID FOR WHEN DRAINAGE AND UTILITY STRUCTURES ARE SPECIFIED FOR PAYMENT AS STRUCTURE RECONSTRUCTION.

NEW FRAMES AND LIDS, WHEN SPECIFIED, WILL BE PAID FOR SEPARATELY.

NOTES:

EXISTING BROKEN FRAMES AND LIDS SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR AND SHALL BE REPLACED AS DIRECTED BY THE ENGINEER, REPLACEMENT FRAMES AND LIDS WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS UNLESS A SEPARATE PAY ITEM HAS BEEN PROVIDED.

IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

THE METAL PLATE USED TO COVER THE STRUCTURE SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

WHEN STRUCTURES ARE TO BE ADJUSTED OR RECONSTRUCTED, THE LOWERING AND RAISING OF THE FRAMES AND LIDS WILLNOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.



BICYCLE SAFETY GRATE

4" MIN. CONCRETE BASE

3" SAND CUSHION

2.0

MINIMUM PRECAST

17 74 4 47 77 44 47 77 44 47 77

ONE PIECE

PRE-CAST REINFORCED CONCRETE

. CONCRETE STRUCTURE

SLOPE TO DRAIN

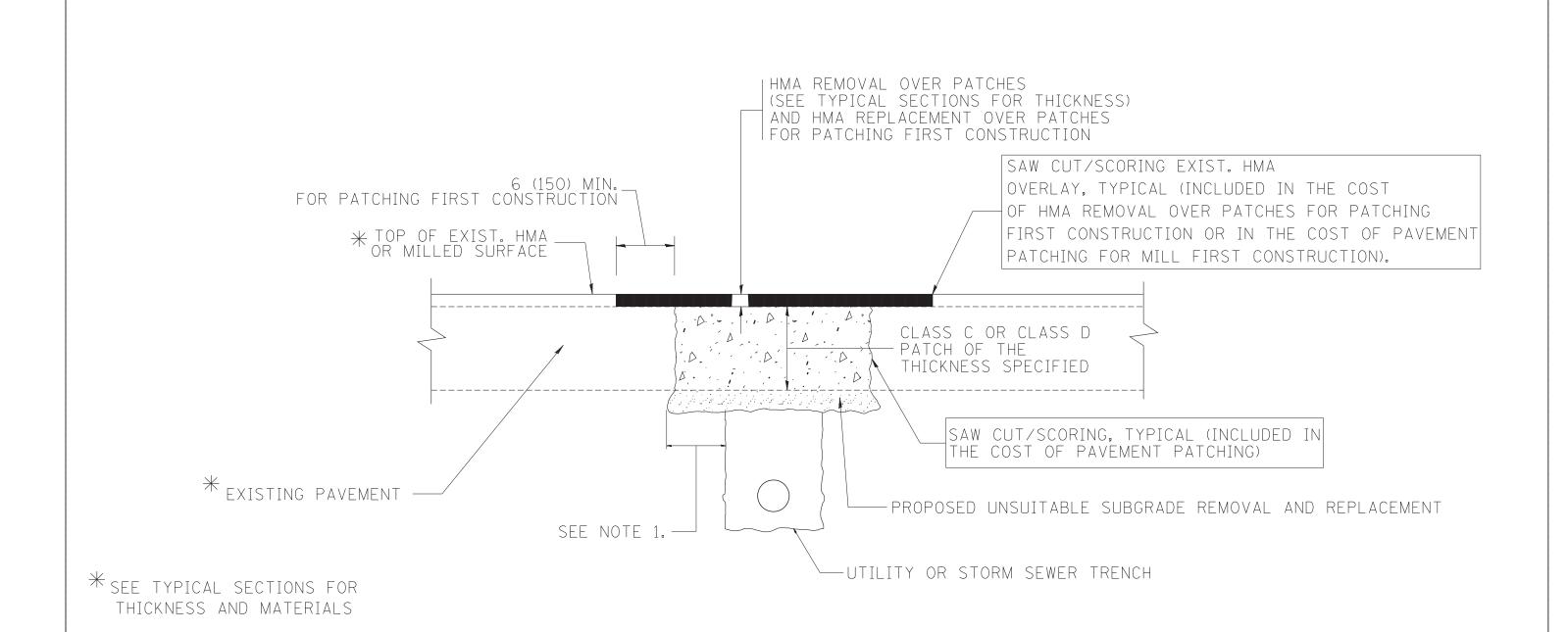
■----- BACK OF CURB

- BUTYL MASTIC

ME MUST BE BOLTED

2' MIN

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	DRAWN -	REVISED -
PLOT SCALE = 2.0000 '/ in.	CHECKED -	REVISED -
PLOT DATE = 2/6/2018	DATE -	REVISED -



NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

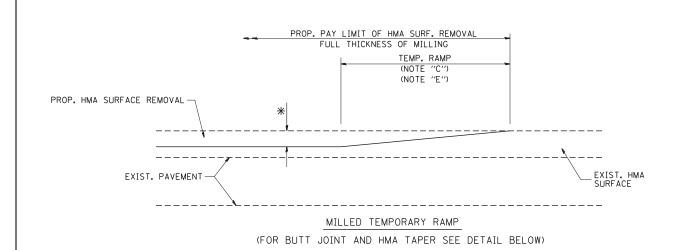
- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

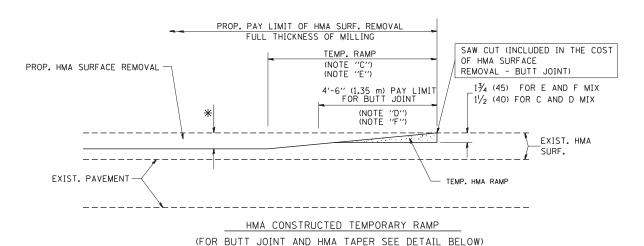
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

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

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED -	A. ABBAS 04-27-98			PAVEMENT PATCHING FOR		RTF.	SECTION	COUNTY	SHEETS NO.
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED -	R. BORO 01-01-07	STATE OF ILLINOIS				2556	15-00113-00-RS	DuPage	37 31
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -	R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION		HMA SURFACED PAVEMENT			BD400-04 (BD-22)	CONTRACT	T NO. 61E65
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED -	K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. RO	AD DIST. NO. 1 ILLINOIS FED.	AID PROJECT	01200

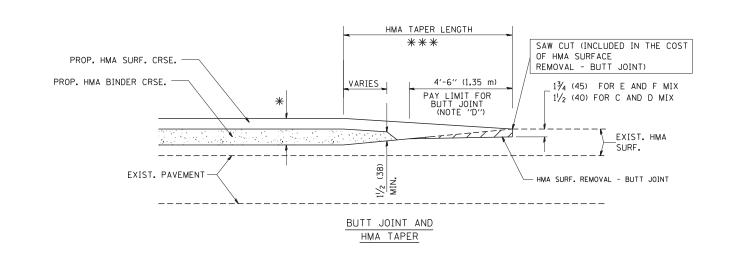


OPTION 1



OPTION 2

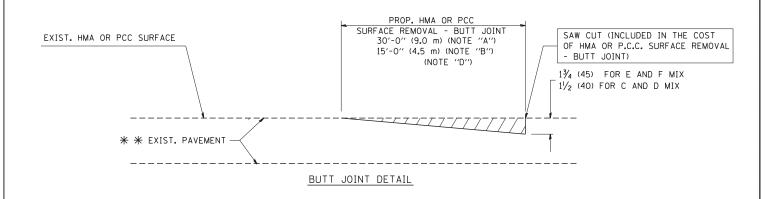
TYPICAL TEMPORARY RAMP

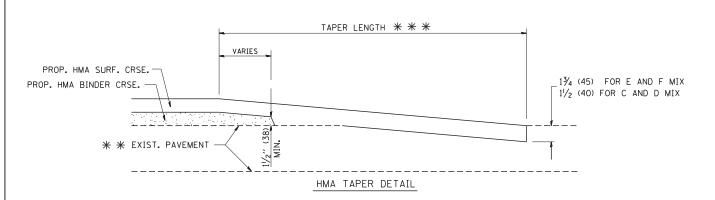


TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = USER NAME = gaglianobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94 W:\diststd\22x34\bd32.dqr DRAWN REVISED A. ABBAS 03-21-97 CHECKED REVISED M. GOMEZ 04-06-01 DATE R. BORO 01-01-07 PLOT DATE = 1/4/2008 06-13-90 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

* * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

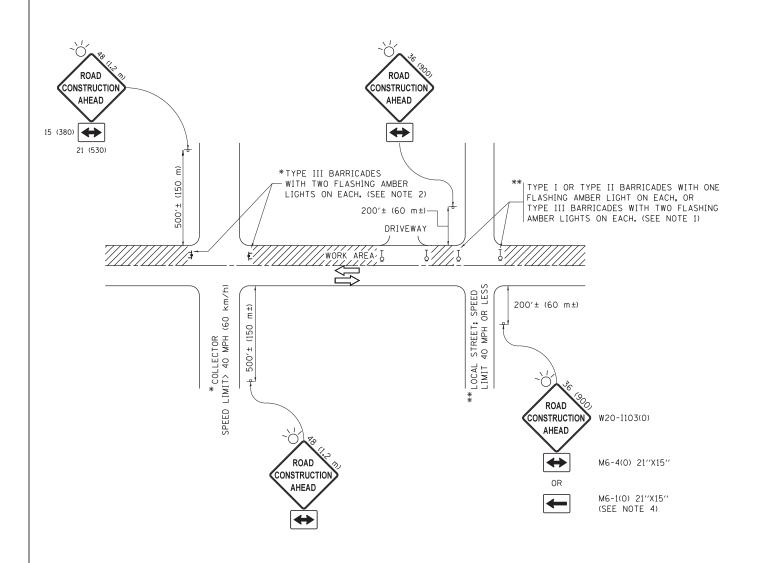
- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (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".

SCALE: NONE

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



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:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200" (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
 - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500" (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- 3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710)
- 4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).

SCALE: NONE

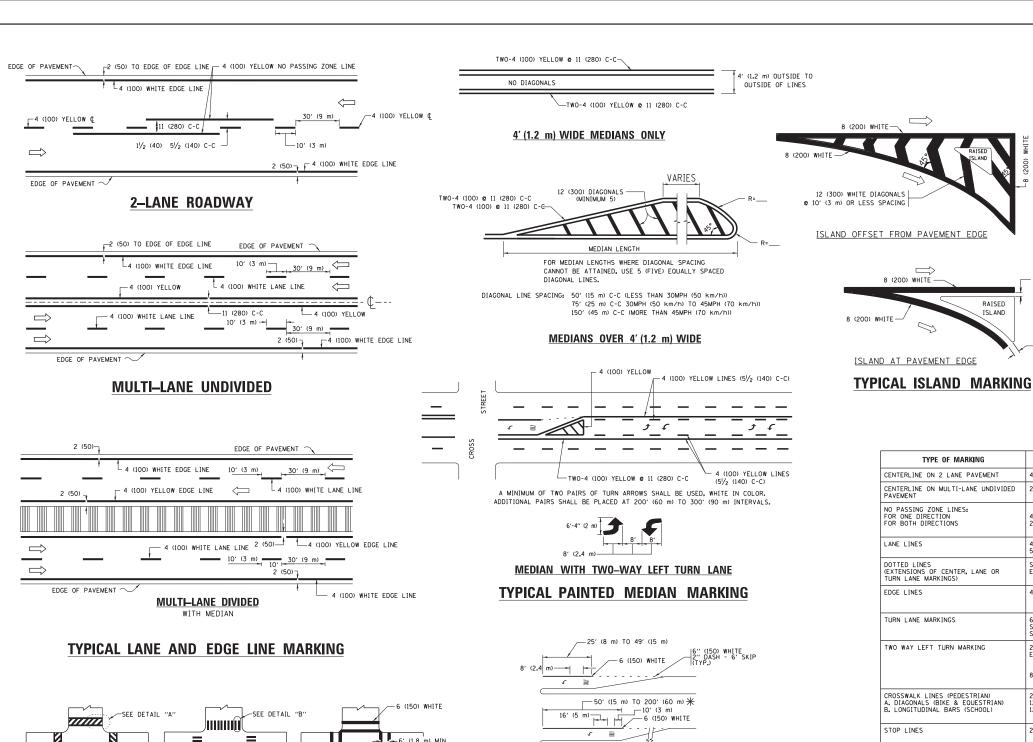
- 5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
- 6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED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

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

FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED	- A. HOUSEH 10-15-96
pw:\\ILØ84EBIDINTEG.:1ll:no1s.gov:PWIDOT\Do	cuments\IDOT Offices\District 1\Projects\Dist	GRAWM\CADData\CADsheets\tc10.dgn	REVISED	-T. RAMMACHER 01-06-00
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED	- A. SCHUETZE 07-01-13
Default	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED	- A. SCHUETZE 09-15-16

STATI	E OF	ILLINOIS
DEPARTMENT	OF	TRANSPORTATION

	TRAFFIC C	ONTROI	. AND P	ROTEC	TION FOR	F.A.U. RTE.	SECTION
SI.	DE ROADS	INTERS	ECTIONS	ΔND	DRIVEWAYS	2556	15-00113-00-RS
JI	DE HUADS	, IIVI LIIO	LUTIONS	AIND	DIIIVEVVAIS		TC-10
	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED. A



___ 6 (150) WHITE PEDESTRIAN

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

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

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING

FILE NAME = DESIGNED - EVERS REVISED -C. JUCIUS 09-09-09 USER NAME = footemj w:\\ILØ84EBIDINTEG.:111:n ments\IDOT Offices\District 1\Projects\Distbt@R2W84\CADDete\CADsheets\tcl3.dor REVISED C. JUCIUS 07-01-13 CHECKED REVISED C. JUCIUS 12-21-15 PLOT DATE = 4/13/2016 DATE REVISED C. JUCIUS 04-12-16

TYPICAL CROSSWALK MARKING

* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF

2' (600)

DETAIL "B"

12 (300) WHITE

6 (150) WHITE

DETAIL "A"

BICYCLE & EQUESTRIAN

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

SECTION COUNTY DISTRICT ONE 2556 15-00113-00-RS TYPICAL PAVEMENT MARKINGS TC-13 CONTRACT NO. 61E65 TO STA. SHEET 1 OF 1 SHEETS STA.

6'-4" (1930)

COMBINATION LEFT AND U-TURN

— 2 (50)

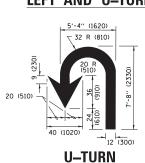
2 (50)

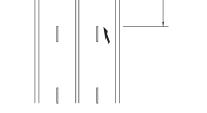
RAISED

ISLAND

8 (200) WHITE -

SCALE: NONE





D(FT)

425

500

580

665

750

SPEED LIMIT

45

50

55

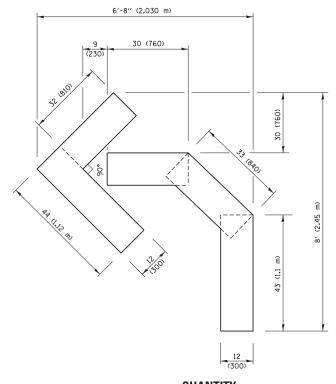
LANE REDUCTION TRANSITION

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

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	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE 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	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5½ (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE E 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 5EE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS @ 45°	SOLID	WHITE	DIAGONALS: 15' (4,5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO, FT. (0.33 m²) EACH "X"=54.0 SO, FT. (5.0 m²)
SHOULDER DIAGONALS (REOUIRED FOR SHOULDERS ≥ 8')	12 (300) & 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h 150' (45 m) C-C (0VER 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

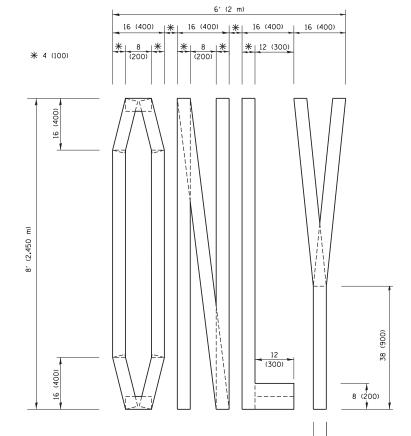
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001.

DuPage 37 34

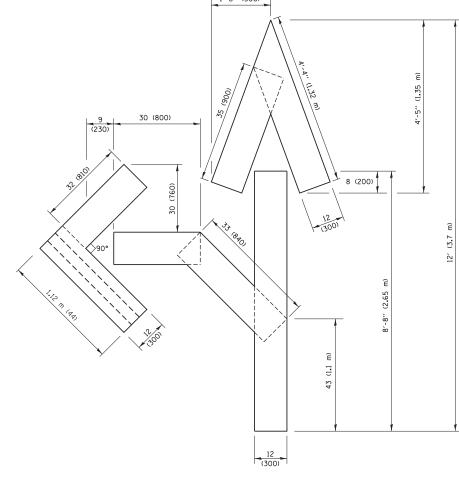


QUANTITY

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



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

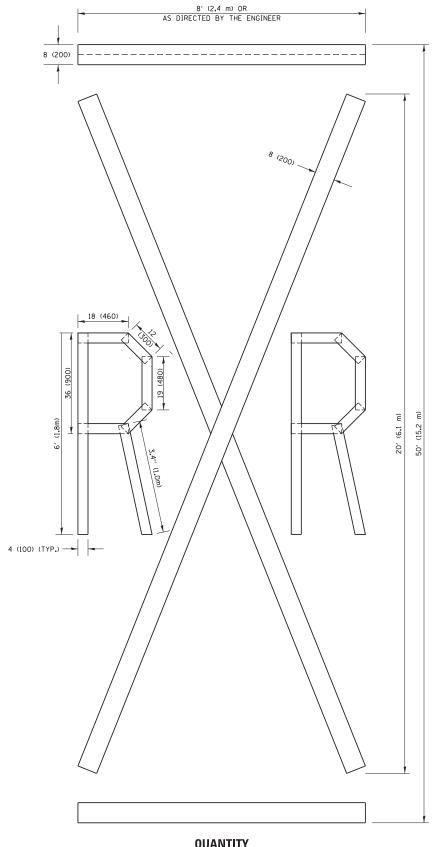


QUANTITY

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.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED	-T. RAMMACHER 03-02-98
pw:\\IL084EBIDINTEG.:ll1:no1s.gov:PWIDOT\Do	cuments\IDOT Offices\District 1\Projects\Dist	CADData\CADbata\tc16.dgn	REVISED	-E. GOMEZ 08-28-00
	PLOT SCALE = 50.0000 '/ in.	CHECKED -	REVISED	-E. GOMEZ 08-28-00
	PLOT DATE = 9/15/2016	DATE - 09-18-94	REVISED	- A. SCHUETZE 09-15-16

QUANTITY

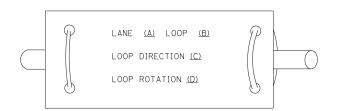
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

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SHORT	TERM	PAVEN	/IENT	MARKING	LETTERS A	ND SYMBOLS	2556	15-0011	3-00-RS	DuPage	37	35
								TC-16		CONTRACT	NO.	61E6
SCALE: NONE	SHEET	NO. 1	OF 1	SHEETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1	ILLINOIS FED.	AID PROJECT		

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.

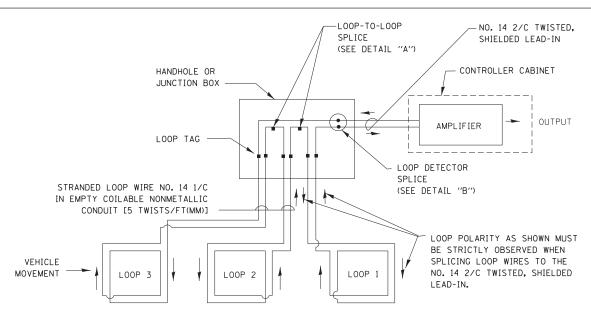
LOOP LEAD-IN CABLE TAG



- 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.

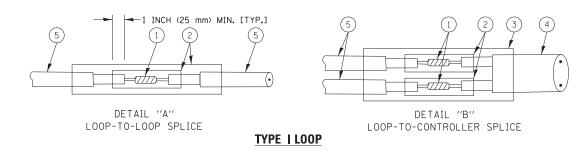
DAD

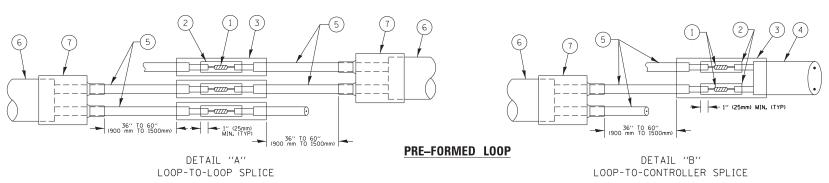
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DETECTOR LOOP WIRING SCHEMATIC

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





LOOP DETECTOR SPLICE

- 1 WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH, 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 LENGHT 6" (150 mm), UNDERWATER GRADE.
- 4 NO. 14 2/C TWISTED, SHIELDED CABLE.

- (5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.
- 6 PRE-FORMED LOOP
- XL POLYOLEFIN 2 CONDUCTOR
 BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME -	OSEN MAINE - TOO COMITY	DESIGNED - DAD	MENISED - DAG I-I-I4	l ·	i
c:\pw_work\pwidot\footemj\d0108315\ts05.	dgn	DRAWN - BCK	REVISED -	STATE OF ILLINOIS	I
	PLOT SCALE = 50.0000 '/ in.	CHECKED - DAD	REVISED -	DEPARTMENT OF TRANSPORTATION	1
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -		SCALE: NONE

DAC 1-1-14

	DIS	STRICT ON	IE		F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
STANDARD	TDAEE	C SIGNAL	DECICN	I DETAILS	2556	15-00113-00-RS	DuPage	37	36
STANDARD	INALL	C SIGNAL	DESIGN	DETAILS		TS-05	CONTRACT	NO.	61E65
SHEET NO. 2	OF 7	SHEETS	STA.	TO STA.	FED. RO	DAD DIST, NO. 1 ILLINOIS FED.	ID PROJECT		

LOOPS NEXT TO SHOULDERS PROVIDE A PAVEMENT REPLACEMENT NOTE WHICH SHOULD EQUAL 3' (900 mm) X WIDTH OF PAVED SHOULDER. PAVED OR NON-PAVED SHOULDER \mathbb{H} Ê (1.5 m) (1.8 m) (1.5 m) 1" (25 mm) UNI DUCT-TRENCHED TO E/P •• (3.0 m) (3.0 m) * = (600 mm)* * UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

FILE NAME =

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LEFT TURN LANES WITH MEDIANS VOLUME DENSITY ("FAR OUT" DETECTION) ON SAME APPROACH (PROTECTED / PERMITTED LEFT TURN PHASING) HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD BI4001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN. TRENCHED 1" (25 mm) VI WITT DUCT (3) ** ** = (600 mm) ** | 12' (3.6 m) ** | 12' (3.7 m) ** | 12' (3.8 m) ** | 12' (3.8 m) ** | 12' (3.9 m) ** | 12' (3.9 m) ** | 12' (3.1 m) ** | 12' (3.2 m) ** | 12' (3.3 m) ** | 12' (3.4 m) ** | 12' (3.6 m) ** | 12' (3.6 m) ** | 12' (3.7 m) ** | 12' (3.8 m

NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO

PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

VOLUME DENSITY ("FAR OUT" DETECTION)

ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)

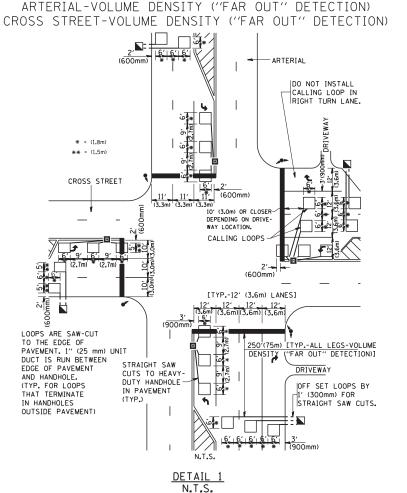
* = (600 mm)

* = (600 mm)

* = (600 mm)

| 12' | (3.6 m) | 12' | (3.6 m)
| DUTY HANDHOLE (TYP.) PLACE HEAVY DUTY HANDHOLE BETWEEN FIRST AND SECOND LOOP AS SHOWN.

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



DESIGNED

CHECKED

R.K.F.

DRAWN

DATE

USER NAME = gaglianobt

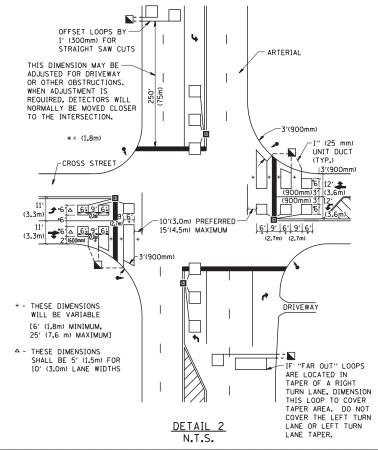
PLOT DATE = 1/4/2008

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NOTE:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

JOTE.

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

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

DE	
DE	

DISTRICT 1 - DETECTOR LOOP INSTALLATION
DETAILS FOR ROADWAY RESURFACING

SHEET NO. 1 OF 1 SHEETS STA. TO STA.

SCALE: NONE

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION