

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DUPAGE	24	1
		ILLINOIS	CONTRACT NO. 61E37	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
**PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY**

FAU ROUTE 2551 (WEST STREET)  
IL ROUTE 38 (ROOSEVELT ROAD) TO WESLEY STREET  
RESURFACING, CURB AND SIDEWALK  
SECTION: 17-00116-00-RS  
PROJECT: 2W2M(423)  
CITY OF WHEATON  
DUPAGE COUNTY  
JOB NO: C-91-243-17



LOCATION OF SECTION INDICATED THUS:

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

APPROVED 11/20/2017  
*Paul Hedue*  
CITY OF WHEATON, DIRECTOR OF ENGINEERING

PASSED DECEMBER 14, 2017  
*Christopher Hill*  
DISTRICT 1 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW DECEMBER 18, 2017  
*Anthony J. Quigley*  
REGIONAL ENGINEER

**PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS**

PROFESSIONAL ENGINEER'S CERTIFICATION

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.

DATED THIS 22nd DAY OF November, 2017

*James M. Yuratovac*  
JAMES M. YURATOVAC  
ILLINOIS REG. PROF. ENGINEER NO. 062-060059 EXPIRATION DATE 11-30-2017

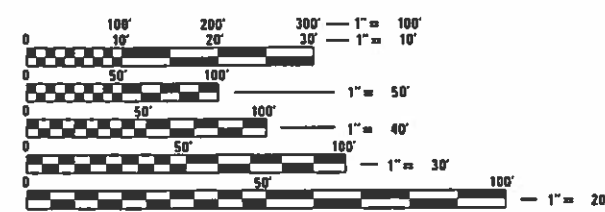


MILTON TOWNSHIP  
**LOCATION MAP**  
N.T.S.

WEST STREET GROSS LENGTH = 2671 FT. = 0.51 MILES  
WEST STREET NET LENGTH = 2569 FT. = 0.49 MILES

PROGRAM AND OFFICE ENGINEER: CHARLES F. RIDDLE, P.E. (847) 705-4406, SCHAUMBURG, IL

**WEST STREET**  
DESIGN DESIGNATION: MAJOR COLLECTOR  
SPEED LIMIT = 30 MPH  
TRAFFIC = 7,850 ADT (2016)



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



PROJECT MANAGER: JIM YURATOVAC

CONTRACT NO. 61E37

**INDEX OF SHEETS**

- 1 TITLE SHEET**
- 2 GENERAL NOTES**
- 3 SUMMARY OF QUANTITIES**
- 4 WEST STREET TYPICAL SECTIONS**
- 5-7 WEST STREET PLAN SHEETS**
- 8-10 WEST STREET PAVEMENT MARKING PLANS**
- 11-14 WEST STREET SIDEWALK PLANS**
- 15 WEST STREET & IL ROUTE 38 DETECTOR LOOP PLANS**
- 16-17 WHEATON CONSTRUCTION DETAILS**
- 18-24 DISTRICT 1 DETAILS**

**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	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
424001-10	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
424006-03	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-03	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
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 GUTTER
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
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATION FOR SPEEDS < 40 MPH
701502-08	URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE
701606-10	URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-07	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS

**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 HMA LEVEL BINDER 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 USE OF WATER.
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 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 AT HIS 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 OUTLET 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 ARE COMPLETED.
13. EROSION 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 DENSITY 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 EASY 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.

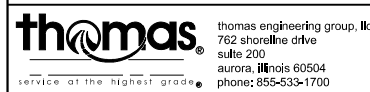
22. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MACHINE SHALL NOT EXCEED 1-1/2 INCHES WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1 INCH WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH. WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL 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	- REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL
- AGGREGATE SUBGRADE IMPROVEMENT	- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- COMBINATION CURB AND GUTTER REMOVAL	- SIDEWALK REMOVAL
- CLASS D PATCHES	- COMBINATION CONCRETE CURB AND GUTTER,
- TREE ROOT PRUNING	

**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 LOOSE MATERIAL.



USER NAME = DonN	DESIGNED -	REVISED
	DRAWN -	REVISED -
PLOT SCALE = 2.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 12/7/2017	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES**

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

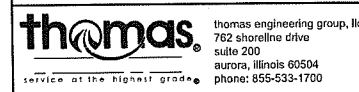
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	2
CONTRACT: 61E37			ILLINOIS FED. AID PROJECT	

**SUMMARY OF QUANTITIES**

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	553
△ 25200110	SODDING, SALT TOLERANT	SQ YD	553
25200200	SUPPLEMENTAL WATERING	UNIT	80
28000510	INLET FILTERS	EACH	15
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	20
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	8118
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	18
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50	TON	1010
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	324
40600990	TEMPORARY RAMP	SQ YD	75
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	1010
△ 42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	5058
42400800	DETECTABLE WARNINGS	SQ FT	244
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	12026
△ 44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	687
44000600	SIDEWALK REMOVAL	SQ FT	5058
△ 44201725	CLASS D PATCHES, TYPE I, 7 INCH	SQ YD	60
△ 44201729	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	120
△ 44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	180
△ 44201735	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	241

CODE NO.	ITEM	UNIT	TOTAL QTY. CONSTR. CODE 0005
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	630
56500600	DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED	EACH	25
60261200	INLETS TO BE ADJUSTED WITH NEW TYPE 10 FRAME AND GRATE	EACH	2
60261300	INLETS TO BE ADJUSTED WITH NEW TYPE 11 FRAME AND GRATE	EACH	4
△ 60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	673
67100100	MOBILIZATION	LSUM	1
70102622	TRAFFIC CONTROL AND PROTECTION, STANDARD 701502	LSUM	1
70102625	TRAFFIC CONTROL AND PROTECTION, STANDARD 701606	LSUM	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	LSUM	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	LSUM	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1550
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	511
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	637
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3834
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	1577
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	248
* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	136
△ * 89502376	REBUILD EXISTING HANDHOLE	EACH	6
△ X0320050	CONSTRUCTION LAYOUT (SPECIAL)	LSUM	1
△ X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	31
△ X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	120
△ Z0019600	DUST CONTROL WATERING	UNIT	18

△ SPECIAL PROVISION  
\* SPECIALTY ITEMS



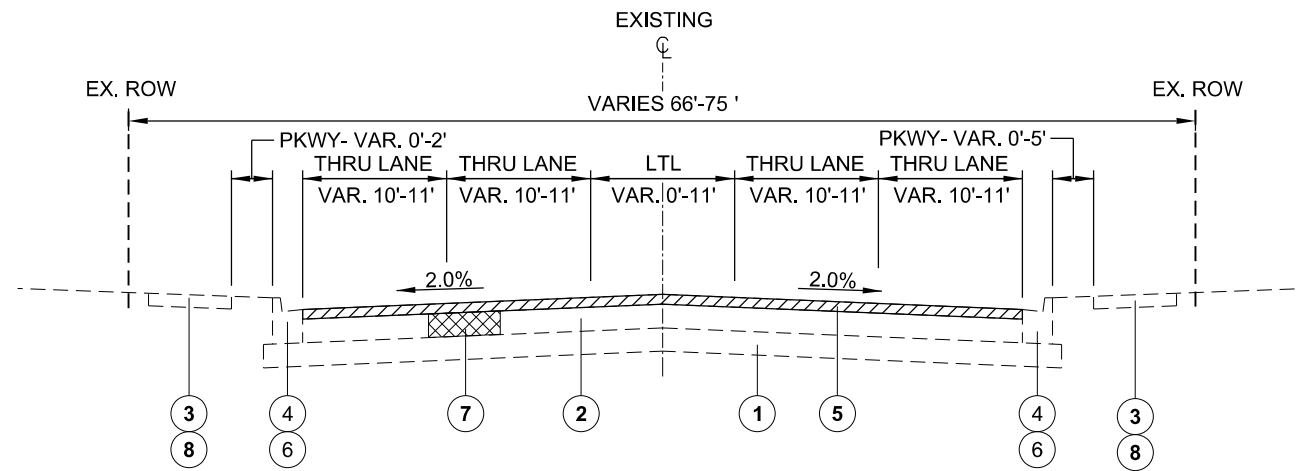
USER NAME = jomeasy	DESIGNED -	REVISED
PLOT SCALE = 2.0000' / 1"	CHECKED -	REVISED -
PLOT DATE = 12/7/2017	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

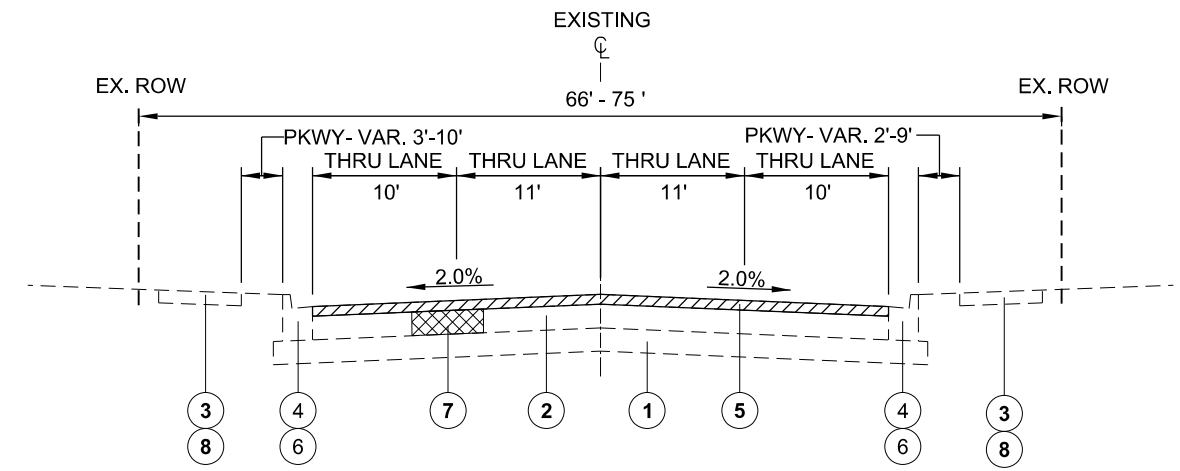
**SUMMARY OF QUANTITIES**

SCALE: SHEET OF SHEETS STA. TO STA.

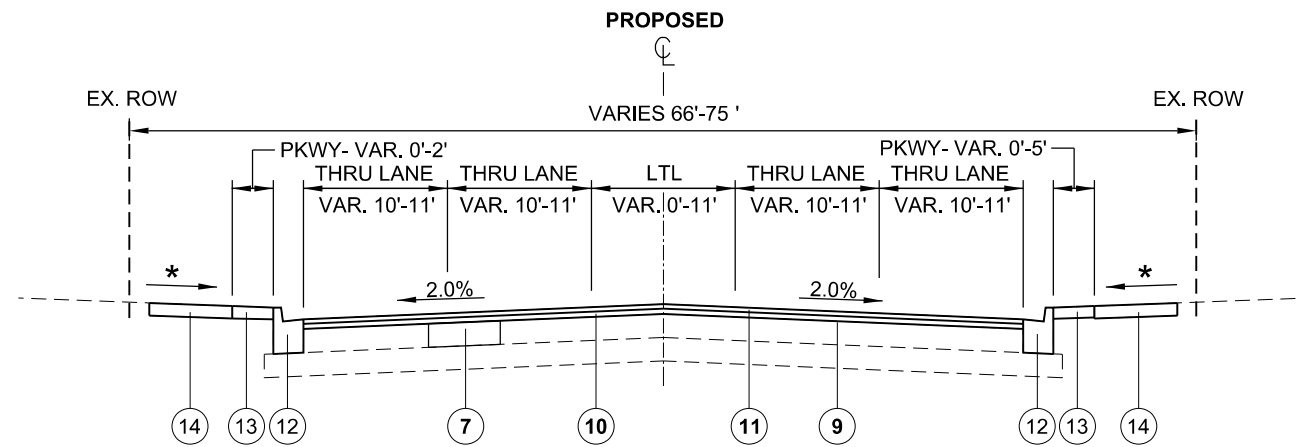
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	3
CONTRACT: 61E37				
ILLINOIS FED. AID PROJECT				



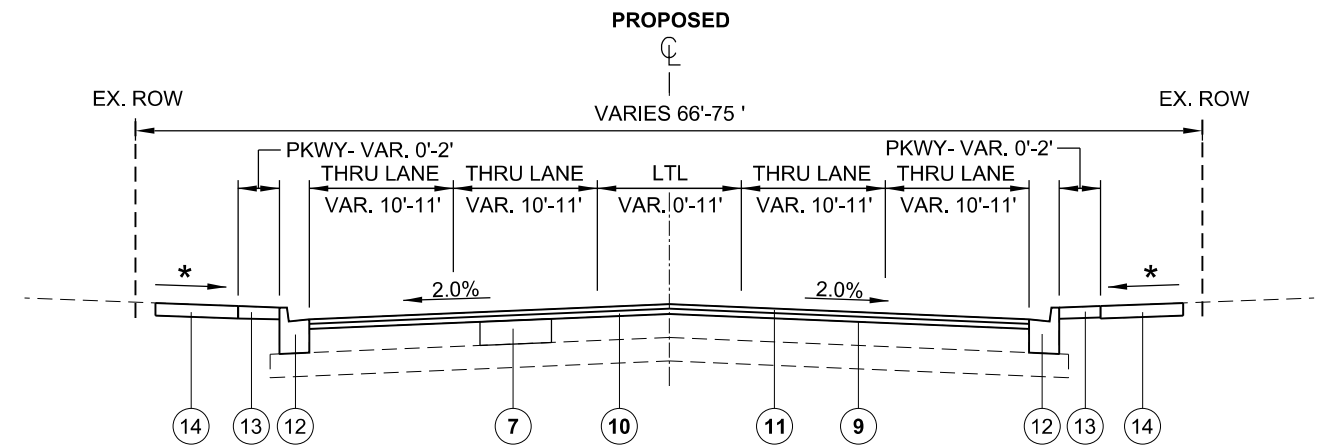
**EXISTING TYPICAL SECTION**  
WEST STREET  
STA. 100+60 TO STA. 107+06



**EXISTING TYPICAL SECTION**  
WEST STREET  
STA. 107+06 TO STA. 127+31



**PROPOSED TYPICAL SECTION**  
WEST STREET  
STA. 100+60 TO STA. 107+06



**PROPOSED TYPICAL SECTION**  
WEST STREET  
STA. 107+06 TO STA. 127+31

**LEGEND**

- 1 EX SUB-BASE GRAN MATL, THICKNESS VARIES
- 2 EX HMA PAVEMENT, 13"
- 3 EX PCC SIDEWALK
- 4 EX COMB. CONC. CURB AND GUTTER
- 5 HMA SURFACE REMOVAL, 3"
- 6 COMB. CURB AND GUTTER REMOVAL (SEE NOTE 1)
- 7 PR CLASS D PATCHES, 7" (SEE NOTE 1)
- 8 PR SIDEWALK REMOVAL (SEE NOTE 1)
- 9 PR BITUMINOUS MATERIALS (TACK COAT)
- 10 PR. LEVELING BINDER (MM), N50, 1-1/2"
- 11 PR. HMA SURFACE CRS, MIX "D", N50, 1-1/2"
- 12 PR COMB CONC CURB AND GUTTER, TY B-6.12 (SEE NOTE 1)
- 13 PR SODDING, SALT TOLERANT AND TOPSOIL FURNISH AND PLACE, 4" (SEE NOTE 1)
- 14 PR. P.C.C. SIDEWALK, 5" (SEE NOTE 1)

**LEGEND**

REMOVAL ITEMS

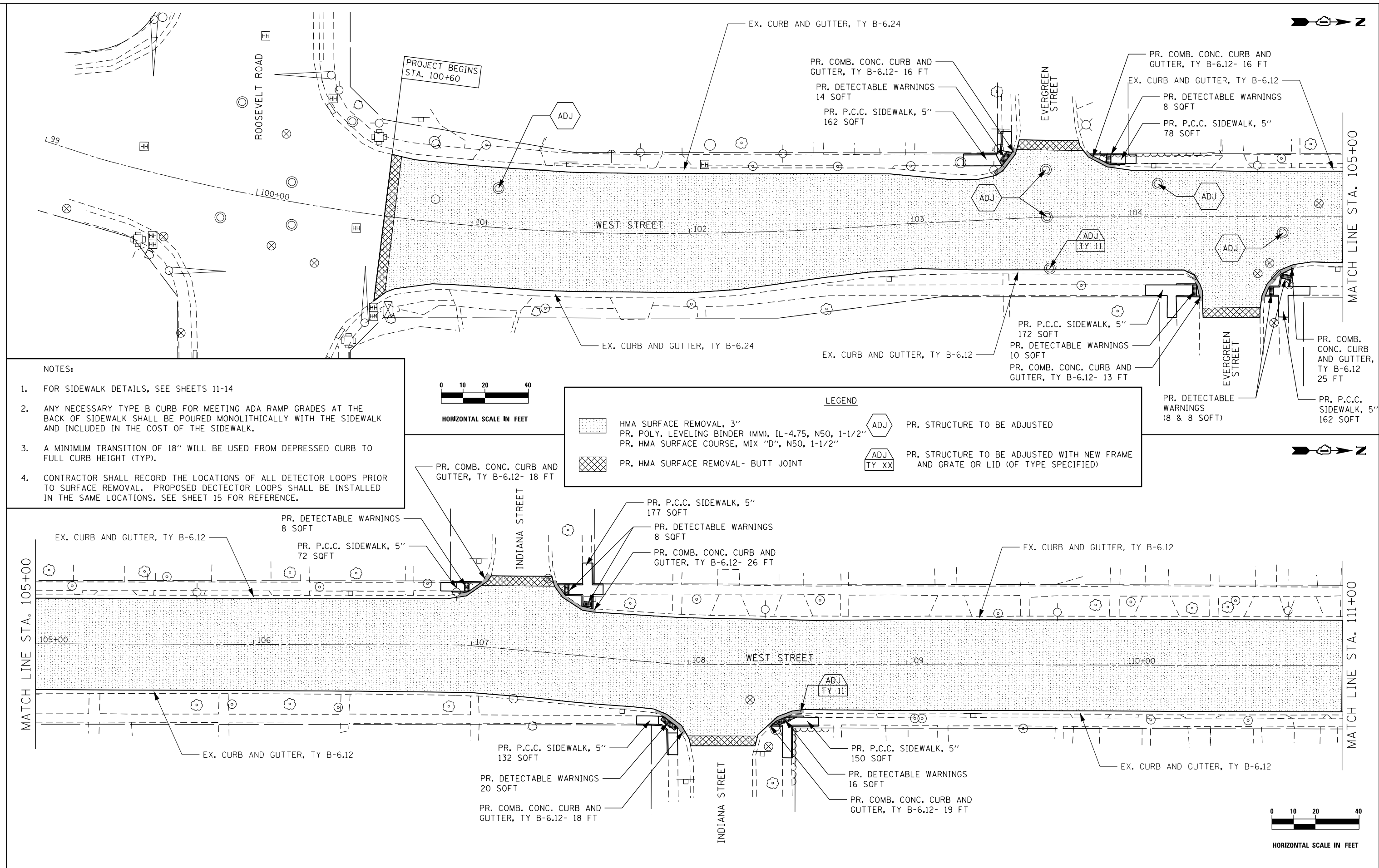
**NOTES:**

1. LOCATIONS WILL BE SPECIFIED BY THE ENGINEER IN THE FIELD DURING CONSTRUCTION

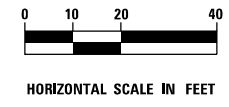
\* 1.5% DESIREABLE, 2.0% MAXIMUM

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	AIR VOIDS @ Ndes
ROADWAY RESURFACING	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm)	4% @ 50 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, N50	4% @ 50 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.



- NOTES:
- FOR SIDEWALK DETAILS, SEE SHEETS 11-14
  - ANY NECESSARY TYPE B CURB FOR MEETING ADA RAMP GRADES AT THE BACK OF SIDEWALK SHALL BE POURED MONOLITHICALLY WITH THE SIDEWALK AND INCLUDED IN THE COST OF THE SIDEWALK.
  - A MINIMUM TRANSITION OF 18" WILL BE USED FROM DEPRESSED CURB TO FULL CURB HEIGHT (TYP).
  - CONTRACTOR SHALL RECORD THE LOCATIONS OF ALL DETECTOR LOOPS PRIOR TO SURFACE REMOVAL. PROPOSED DETECTOR LOOPS SHALL BE INSTALLED IN THE SAME LOCATIONS. SEE SHEET 15 FOR REFERENCE.



LEGEND

	HMA SURFACE REMOVAL, 3"		PR. STRUCTURE TO BE ADJUSTED
	PR. POLY. LEVELING BINDER (MM), IL-4.75, N50, 1-1/2"		PR. STRUCTURE TO BE ADJUSTED WITH NEW FRAME AND GRATE OR LID (OF TYPE SPECIFIED)
	PR. HMA SURFACE COURSE, MIX "D", N50, 1-1/2"		
	PR. HMA SURFACE REMOVAL- BUTT JOINT		

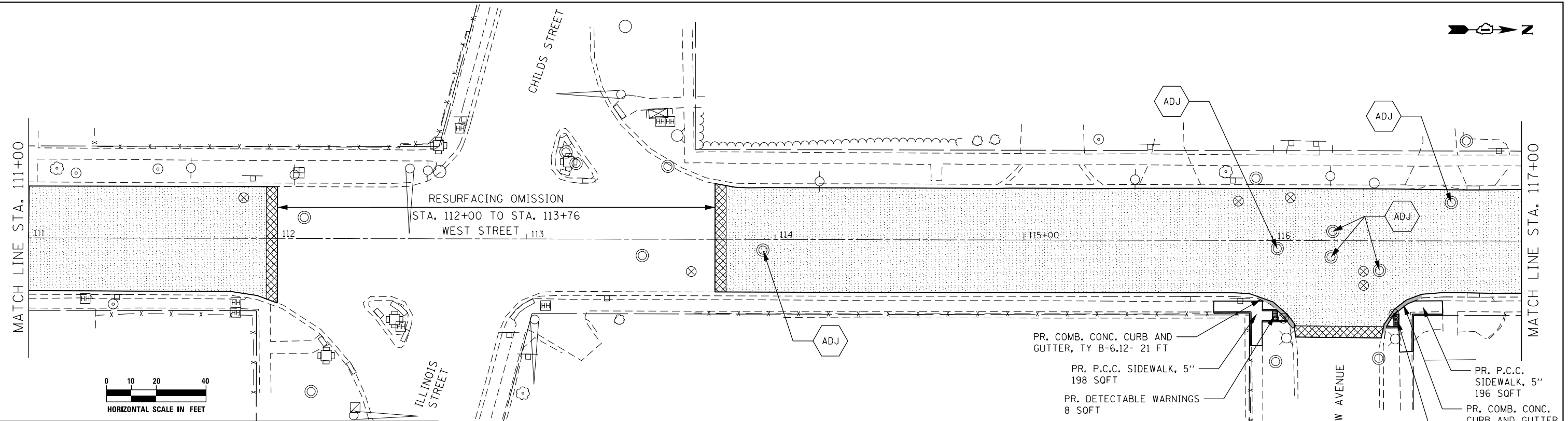
**thomas** thomas engineering group, llc  
762 shoreline drive  
suite 200  
aurora, illinois 60504  
phone: 855-533-1700

USER NAME = jamesj	DESIGNED -	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WEST STREET ROADWAY PLANS				
SCALE:	SHEET	OF SHEETS	STA.	TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	5
CONTRACT: 61E37				
ILLINOIS FED. AID PROJECT				

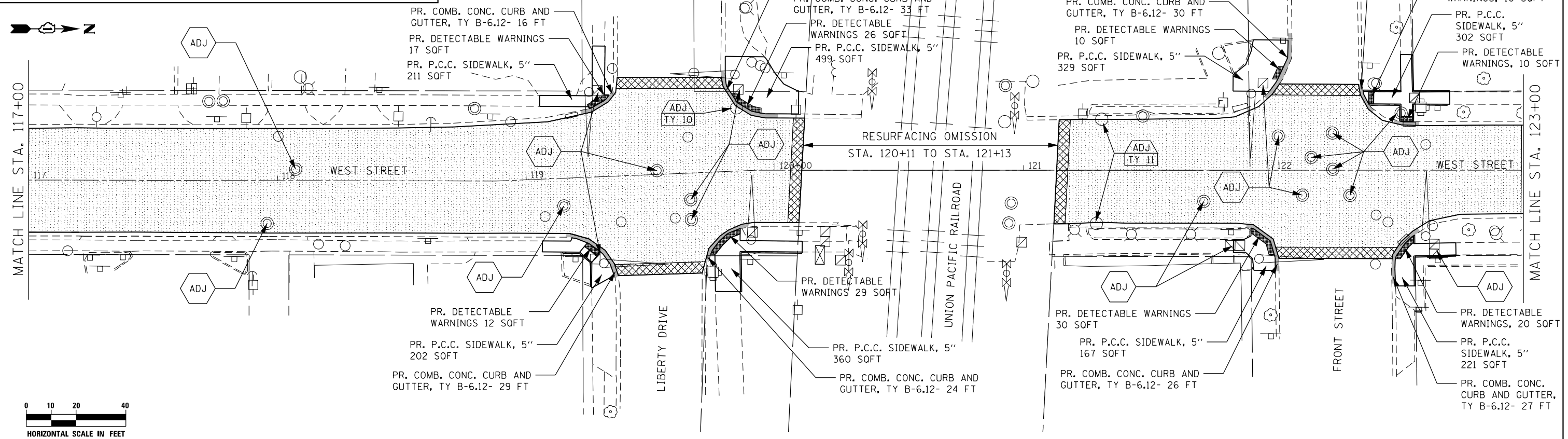


**NOTES:**

- FOR SIDEWALK DETAILS, SEE SHEETS 11-14
- ANY NECESSARY TYPE B CURB FOR MEETING ADA RAMP GRADES AT THE BACK OF SIDEWALK SHALL BE POURED MONOLITHICALLY WITH THE SIDEWALK AND INCLUDED IN THE COST OF THE SIDEWALK.
- A MINIMUM TRANSITION OF 18" WILL BE USED FROM DEPRESSED CURB TO FULL CURB HEIGHT (TYP).

**LEGEND**

	HMA SURFACE REMOVAL, 3"		PR. STRUCTURE TO BE ADJUSTED
	PR. POLY. LEVELING BINDER (MM), IL-4.75, N50, 1-1/2"		PR. STRUCTURE TO BE ADJUSTED WITH NEW FRAME AND GRATE OR LID (OF TYPE SPECIFIED)
	PR. HMA SURFACE COURSE, MIX "D", N50, 1-1/2"		
	PR. HMA SURFACE REMOVAL- BUTT JOINT		



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

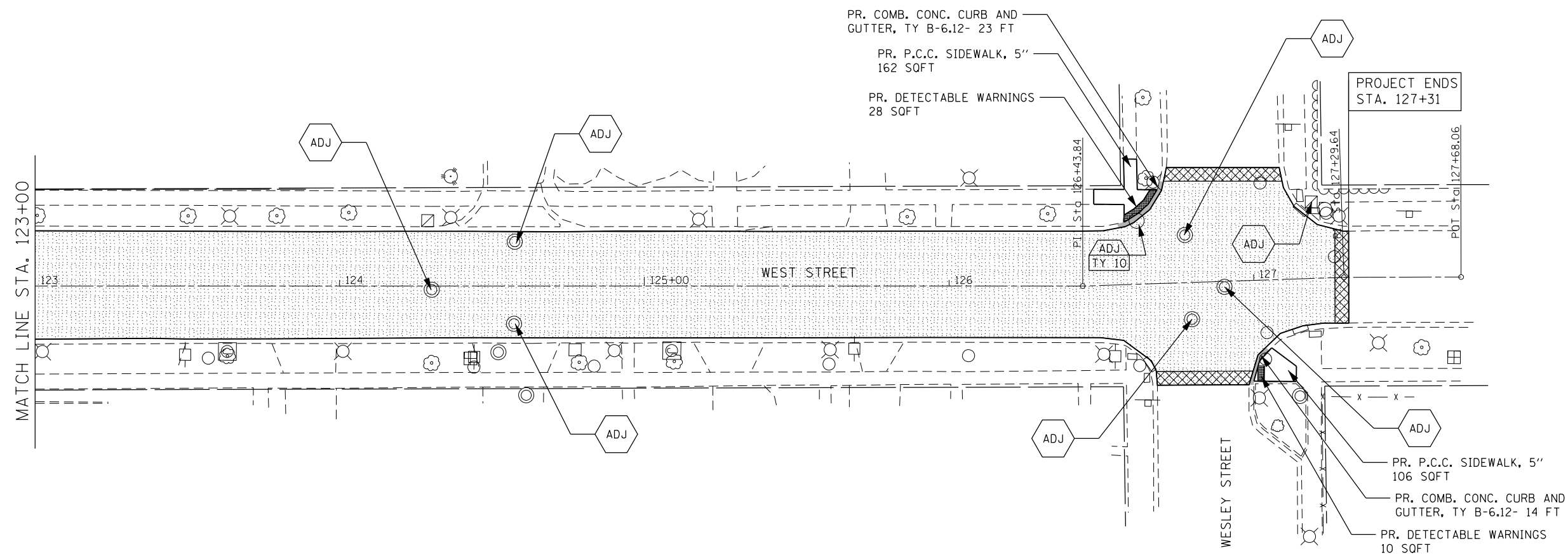
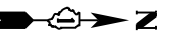
USER NAME = jamesy	DESIGNED -	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST STREET  
 ROADWAY PLANS**

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

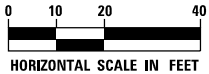
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	6
CONTRACT: 61E37				
ILLINOIS FED. AID PROJECT				



- NOTES:**
- FOR SIDEWALK DETAILS, SEE SHEETS 11-14
  - ANY NECESSARY TYPE B CURB FOR MEETING ADA RAMP GRADES AT THE BACK OF SIDEWALK SHALL BE POURED MONOLITHICALLY WITH THE SIDEWALK AND INCLUDED IN THE COST OF THE SIDEWALK.
  - A MINIMUM TRANSITION OF 18" WILL BE USED FROM DEPRESSED CURB TO FULL CURB HEIGHT (TYP).

**LEGEND**

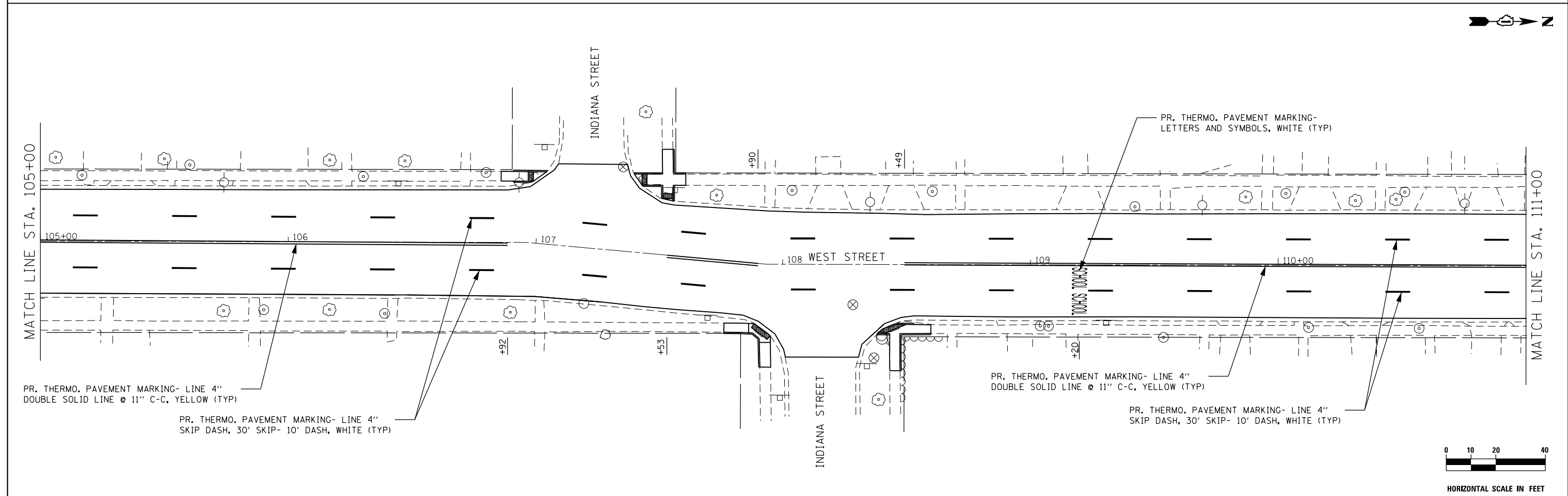
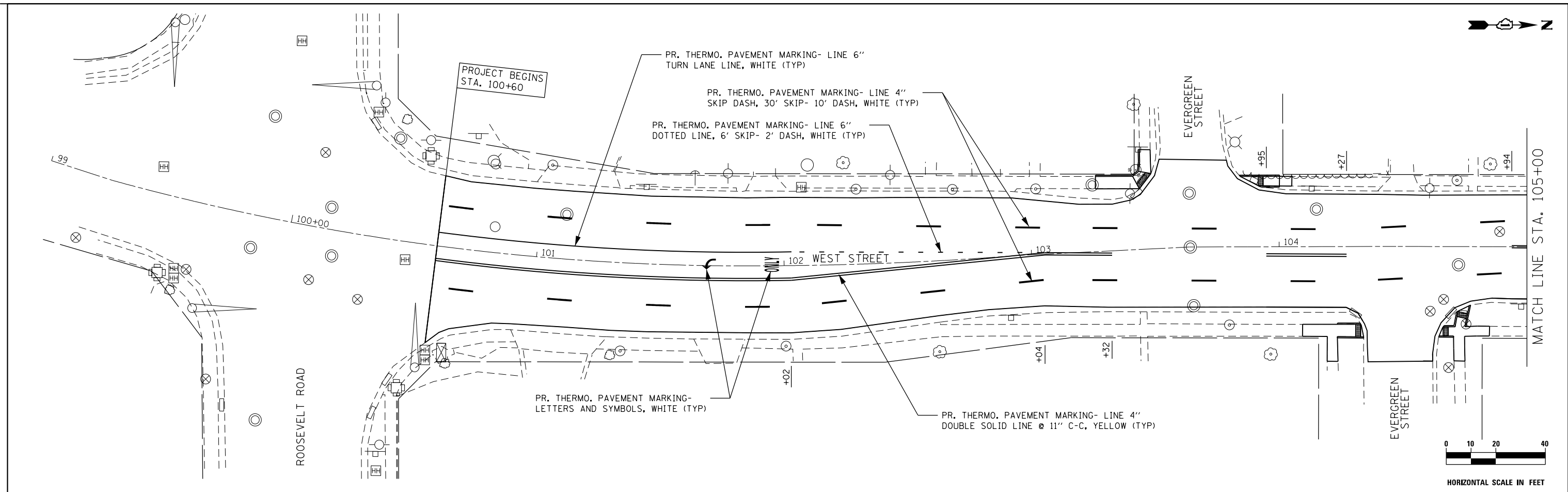
<p> HMA SURFACE REMOVAL, 3"</p> <p> PR. HMA SURFACE REMOVAL- BUTT JOINT</p>	<p> PR. POLY. LEVELING BINDER (MM), IL-4.75, N50, 1-1/2"</p> <p> PR. HMA SURFACE COURSE, MIX "D", N50, 1-1/2"</p> <p> PR. STRUCTURE TO BE ADJUSTED</p> <p> PR. STRUCTURE TO BE ADJUSTED WITH NEW FRAME AND GRATE OR LID (OF TYPE SPECIFIED)</p>
---	---



USER NAME = jamesj	DESIGNED -	REVISED
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

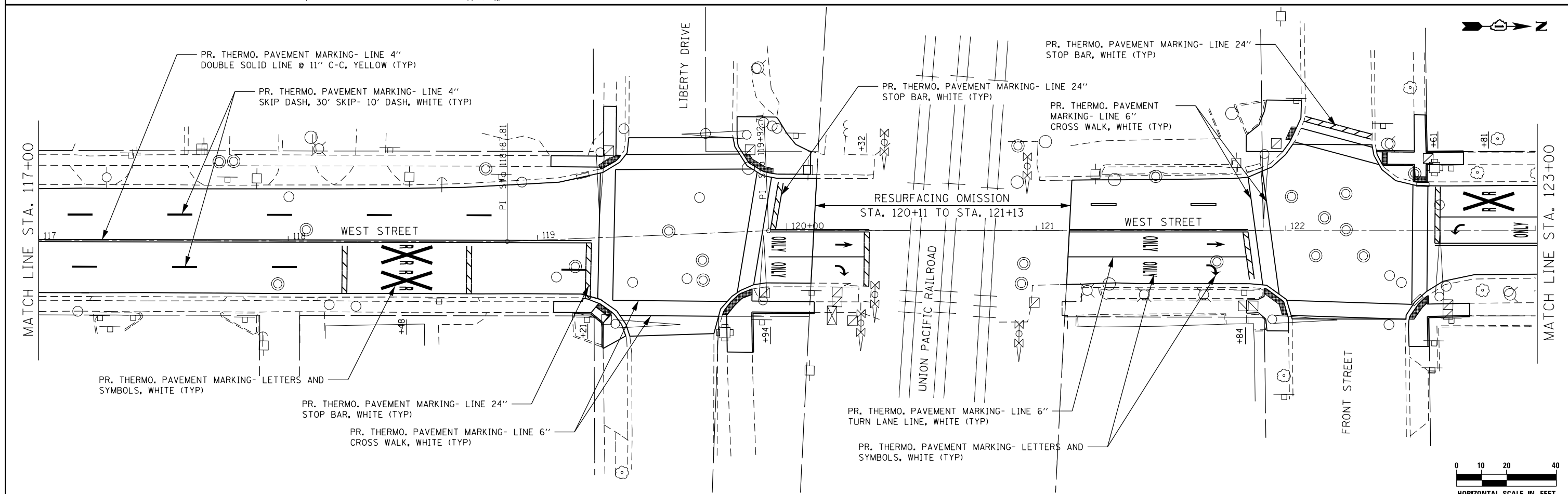
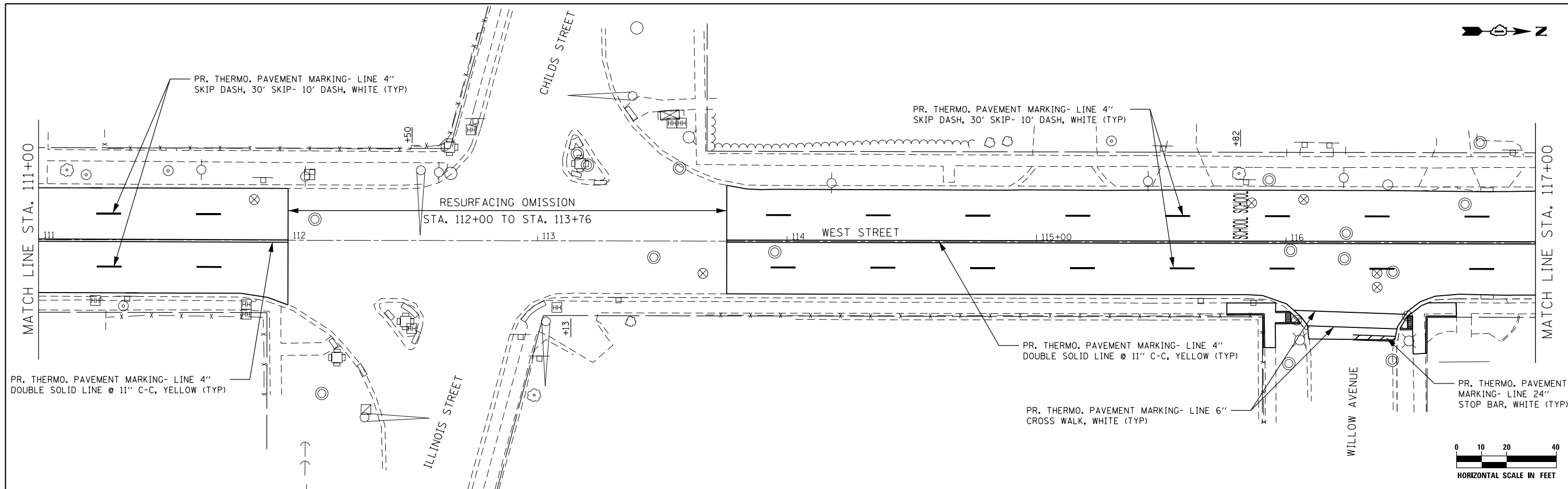
<b>WEST STREET ROADWAY PLANS</b>	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS		24	7
CONTRACT: 61E37			ILLINOIS FED. AID PROJECT	



thomas engineering group, llc 762 shoreline drive suite 200 aurora, illinois 60504 phone: 855-533-1700	USER NAME = DonN	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>WEST STREET</b> <b>PAVEMENT MARKING PLANS</b>		F.A.U. RTE. 2551	SECTION 17-00116-00-RS	COUNTY DuPAGE	TOTAL SHEETS 24	SHEET NO. 8
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -				CONTRACT: 61E37	ILLINOIS FED. AID PROJECT			
	PLOT DATE = 12/7/2017	DATE -	REVISED -	SCALE:	SHEET	OF SHEETS	STA.	TO STA.			





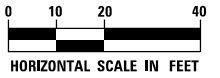
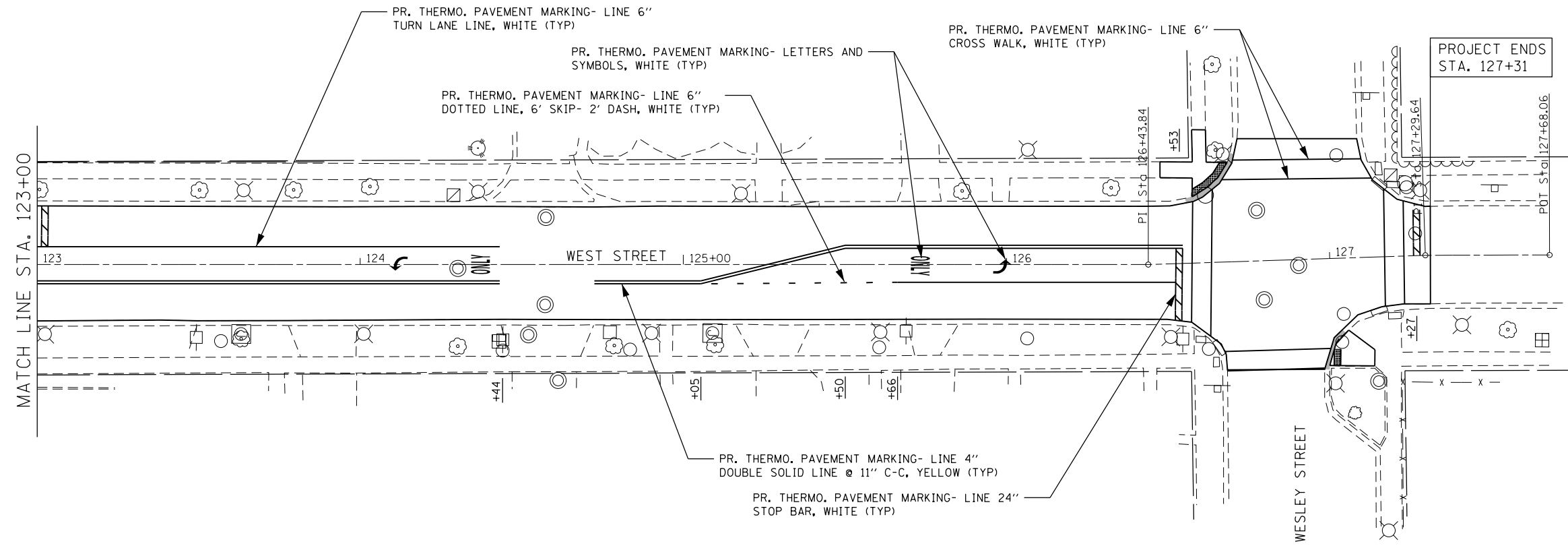
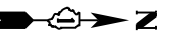
**thomas** thomas engineering group, llc  
 762 shoreline drive  
 suite 200  
 aurora, illinois 60504  
 phone: 855-533-1700

USER NAME = DonN	DESIGNED -	REVISED -
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

<b>WEST STREET PAVEMENT MARKING PLANS</b>			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	9
CONTRACT: 61E37				
ILLINOIS FED. AID PROJECT				



**thomas**  
 thomas engineering group, llc  
 762 shoreline drive  
 suite 200  
 aurora, illinois 60504  
 phone: 855-533-1700  
 service at the highest grade

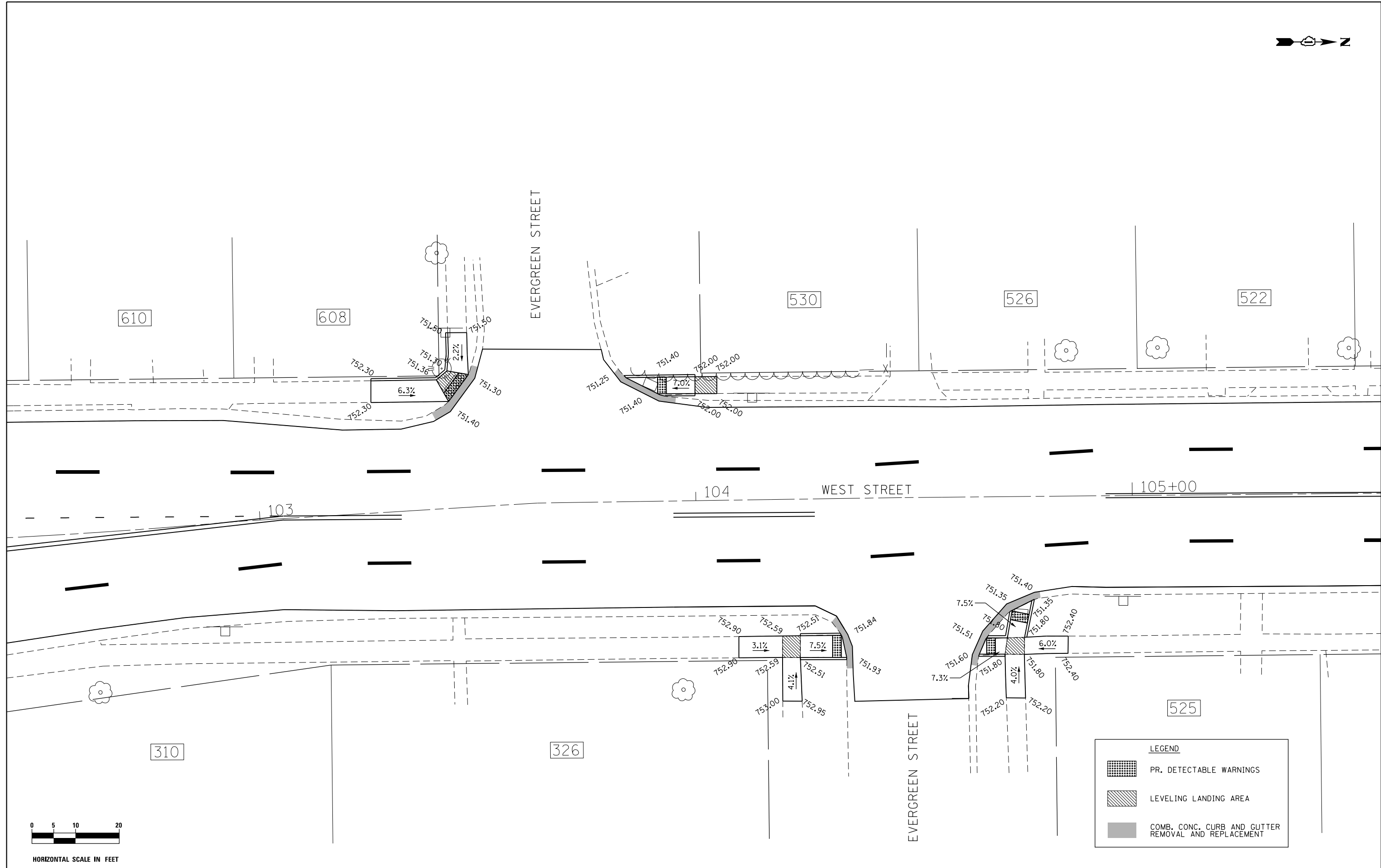
USER NAME = DonN	DESIGNED -	REVISED
PLOT SCALE = 40.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST STREET  
 PAVEMENT MARKING PLANS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	10
CONTRACT: 61E37				
ILLINOIS FED. AID PROJECT				



HORIZONTAL SCALE IN FEET

LEGEND	
	PR. DETECTABLE WARNINGS
	LEVELING LANDING AREA
	COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT

**thomas**  
 thomas engineering group, llc  
 762 shoreline drive  
 suite 200  
 aurora, illinois 60504  
 phone: 855-533-1700  
 service at the highest grade

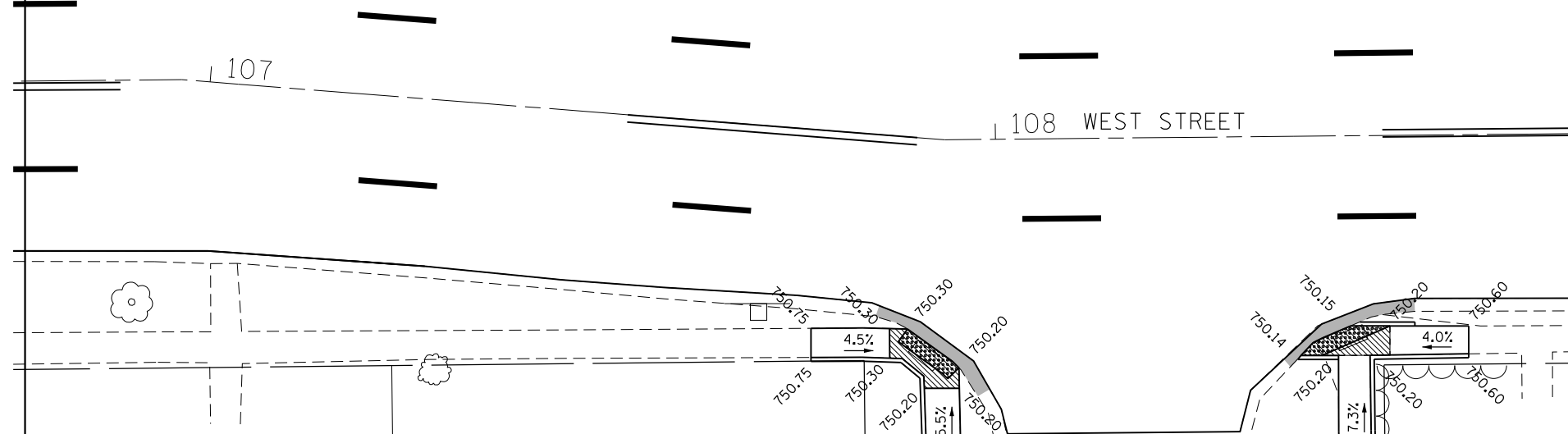
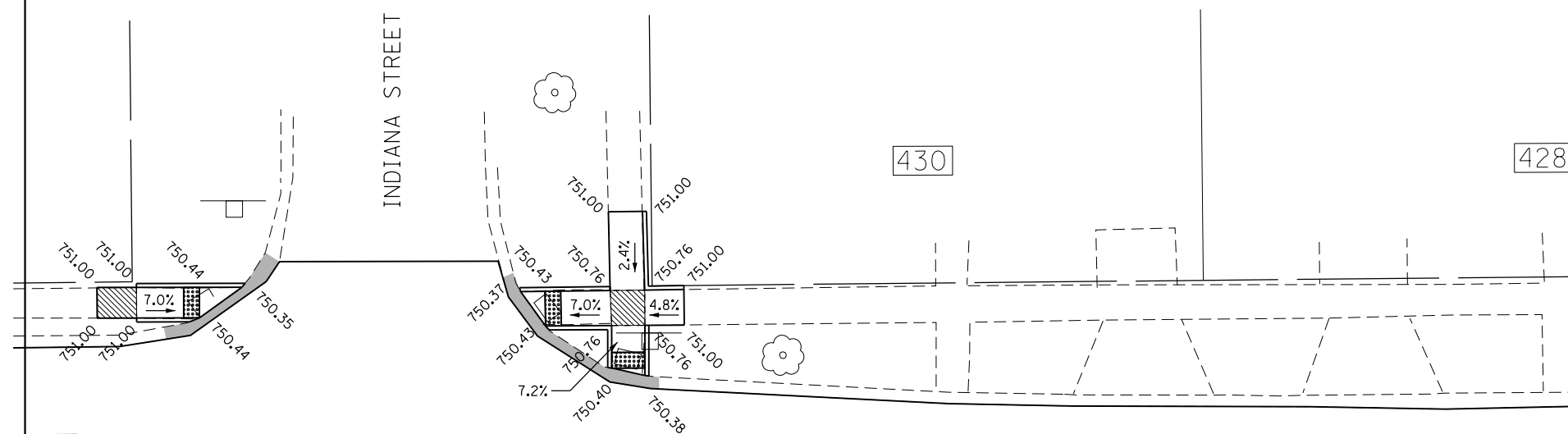
USER NAME = DonN	DESIGNED -	REVISED -
DRAWN -	REVISOR -	REVISOR -
PLOT SCALE = 20.0000' / in.	CHECKED -	REVISOR -
PLOT DATE = 12/7/2017	DATE -	REVISOR -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST STREET  
 SIDEWALK PLANS**

SCALE:      SHEET      OF      SHEETS      STA.      TO      STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	11
CONTRACT: 61E37			ILLINOIS FED. AID PROJECT	



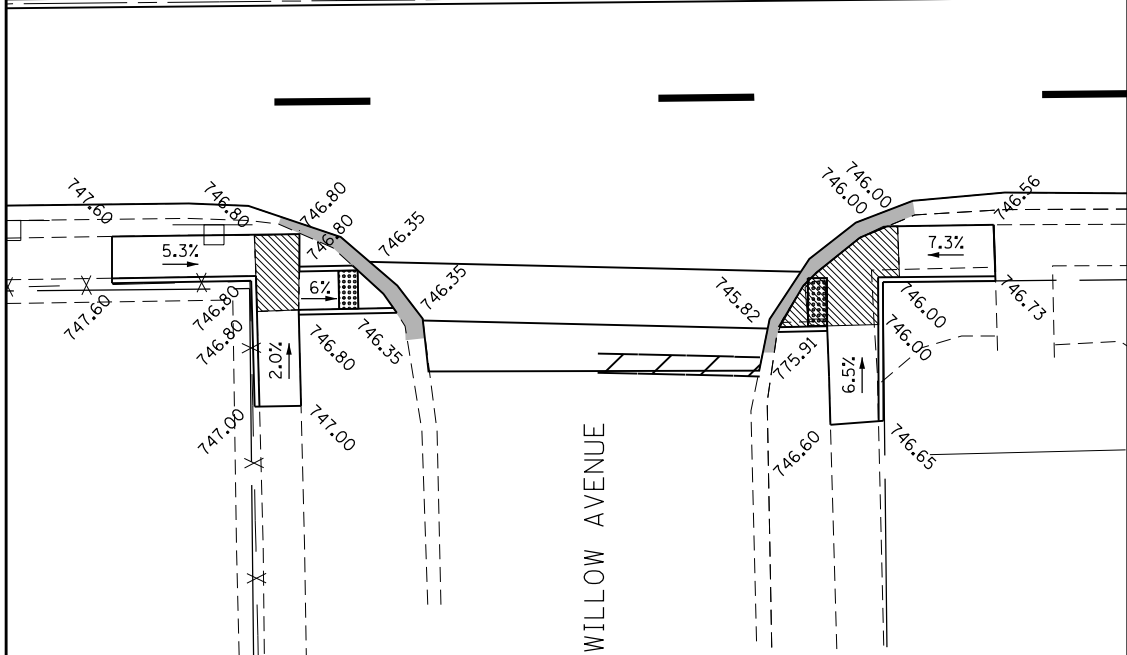
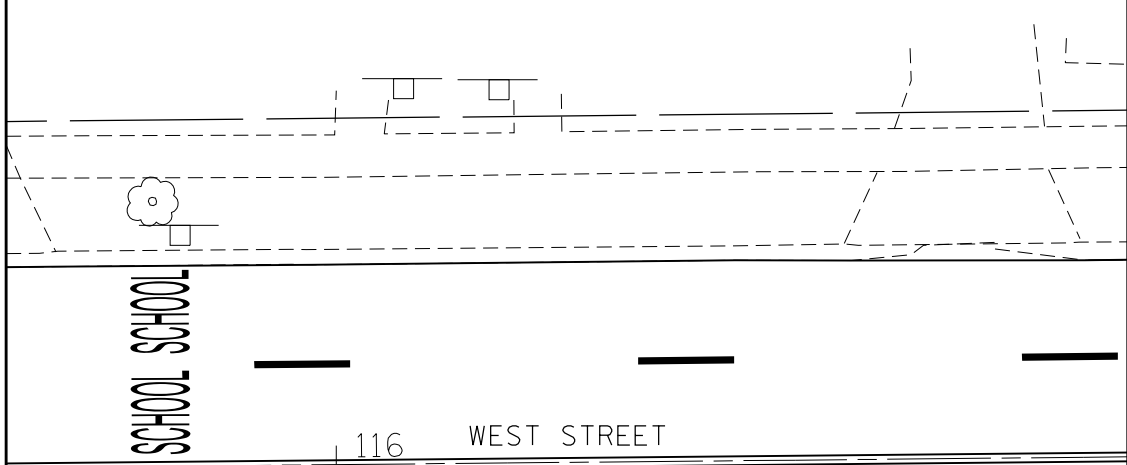
**LEGEND**

- PR. DETECTABLE WARNINGS
- LEVELING LANDING AREA
- COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT



**LEGEND**

- PR. DETECTABLE WARNINGS
- LEVELING LANDING AREA
- COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT



**thomas** thomas engineering group, llc  
 762 shoreline drive  
 suite 200  
 aurora, illinois 60504  
 phone: 855-533-1700  
 service at the highest grade

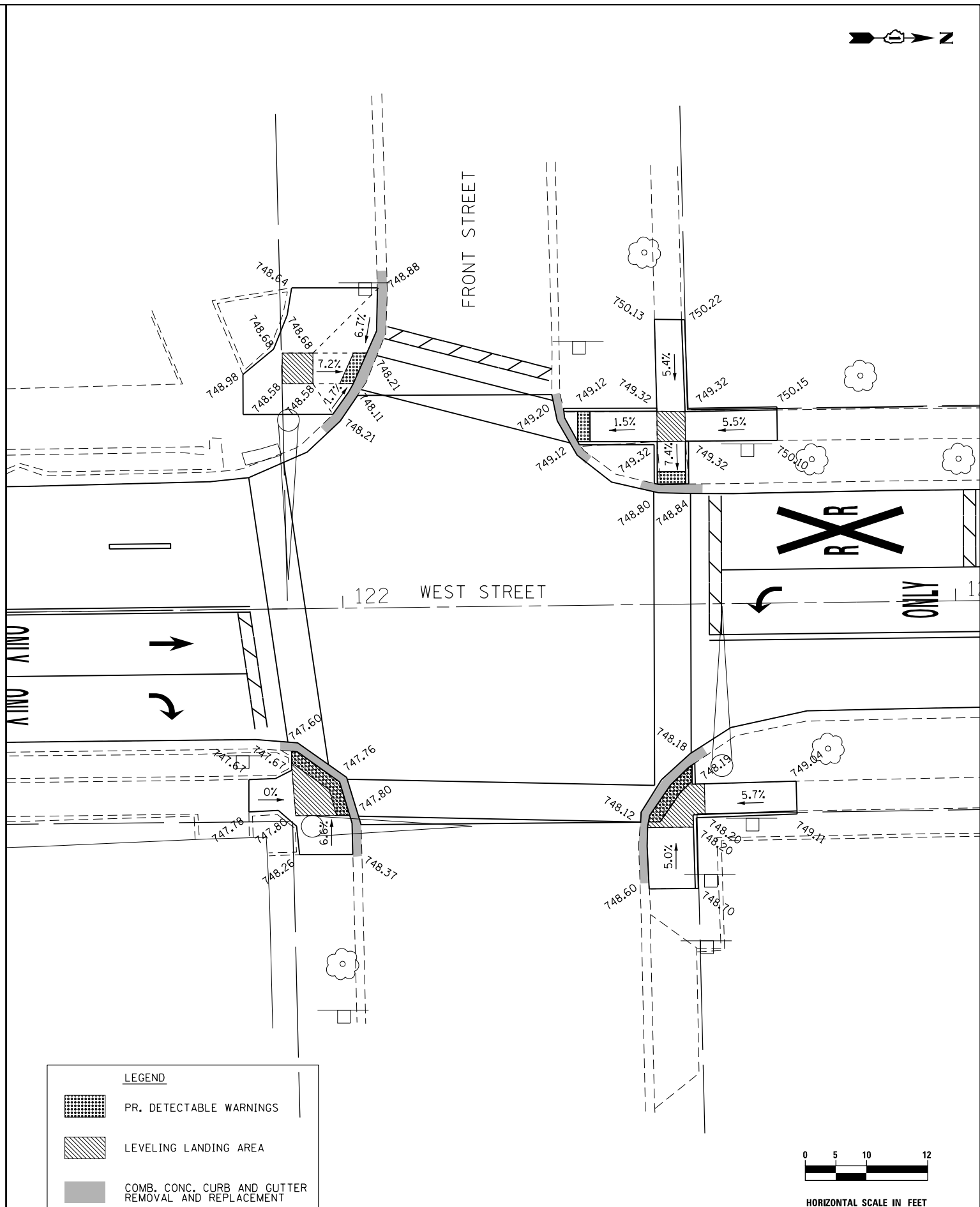
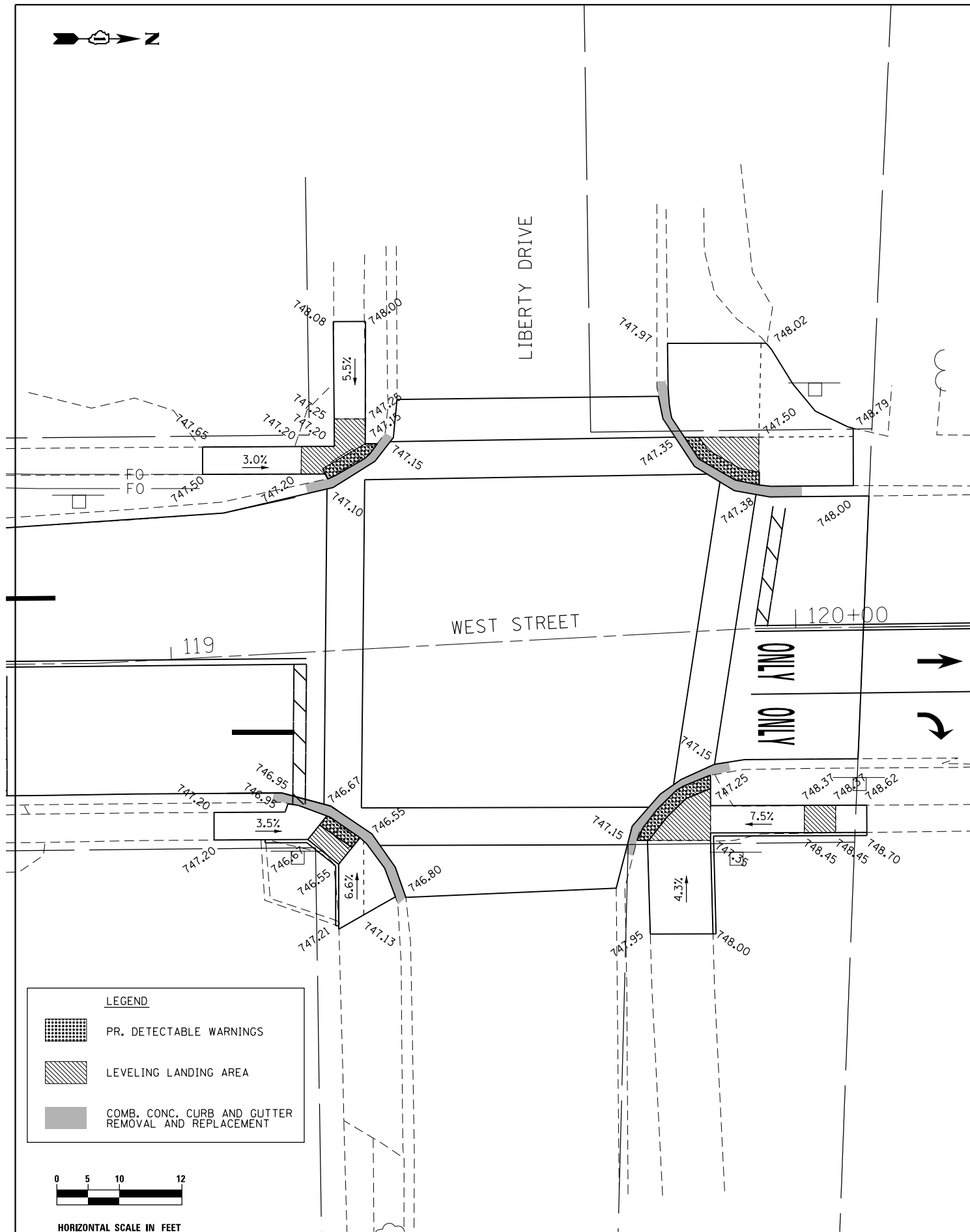
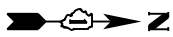
USER NAME = DonN	DESIGNED -	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST STREET  
 SIDEWALK PLANS**

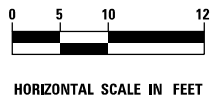
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RTE. 2551	SECTION 17-00116-00-RS	COUNTY DuPAGE	TOTAL SHEETS 24	SHEET NO. 12
CONTRACT: 61E37				
ILLINOIS FED. AID PROJECT				



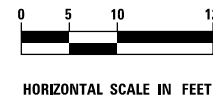
**LEGEND**

- PR. DETECTABLE WARNINGS
- LEVELING LANDING AREA
- COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT



**LEGEND**

- PR. DETECTABLE WARNINGS
- LEVELING LANDING AREA
- COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT



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

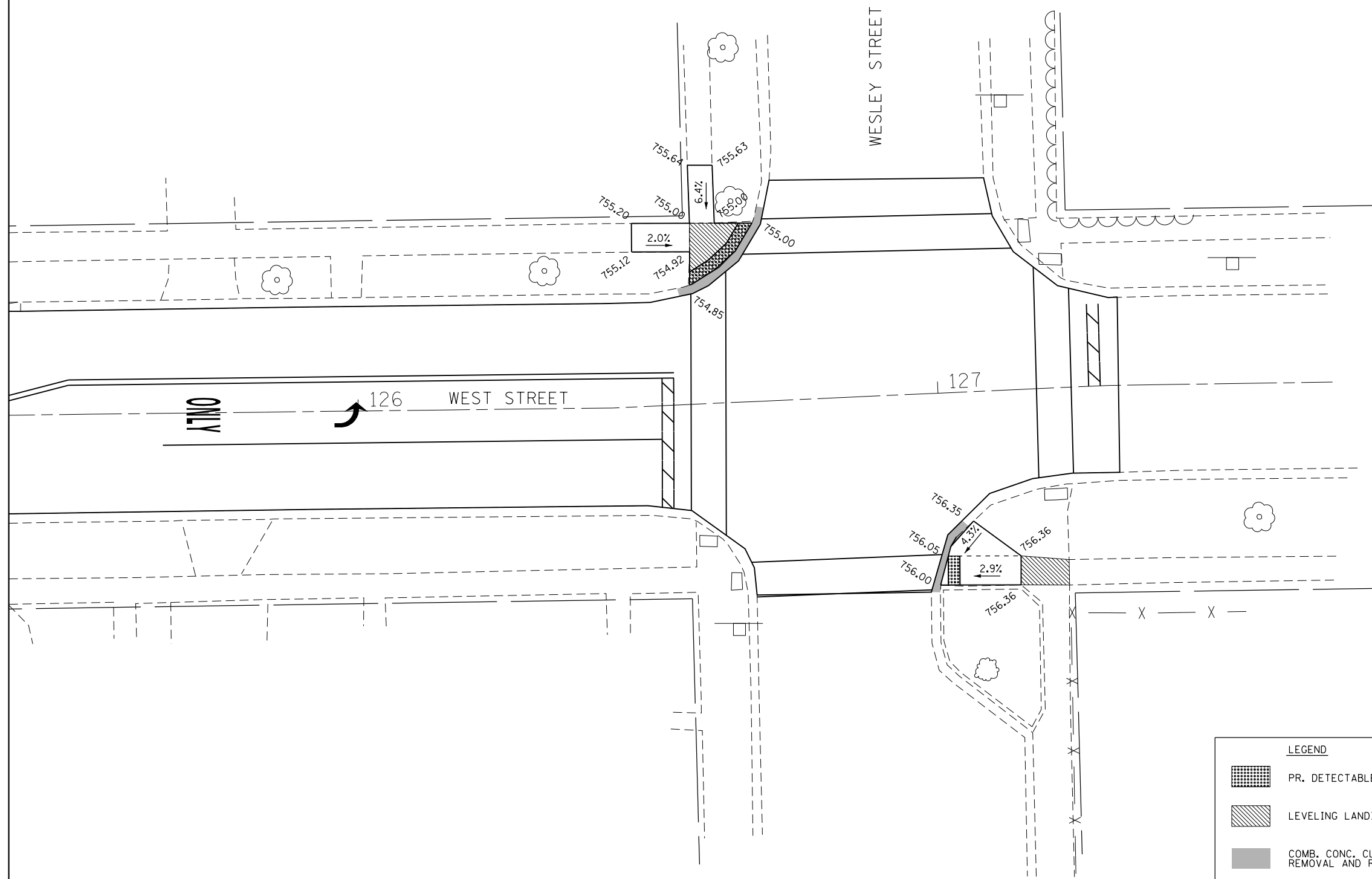
USER NAME = DonN	DESIGNED -	REVISED -
DRAWN -	REVISOR -	
PLOT SCALE = 20.0000' / 1" =	CHECKED -	REVISOR -
PLOT DATE = 12/7/2017	DATE -	REVISOR -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

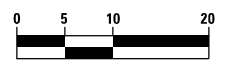
**WEST STREET  
 SIDEWALK PLANS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.U. RT. 2551	SECTION 17-00116-00-RS	COUNTY DuPAGE	TOTAL SHEETS 24	SHEET NO. 13
ILLINOIS FED. AID PROJECT CONTRACT: 61E37				



LEGEND	
	PR. DETECTABLE WARNINGS
	LEVELING LANDING AREA
	COMB. CONC. CURB AND GUTTER REMOVAL AND REPLACEMENT



HORIZONTAL SCALE IN FEET

**thomas**  
 thomas engineering group, llc  
 762 shoreline drive  
 suite 200  
 aurora, illinois 60504  
 phone: 855-533-1700  
 service at the highest grade

USER NAME = DonN	DESIGNED -	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

WEST STREET SIDEWALK PLANS			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	14
ILLINOIS FED. AID PROJECT				

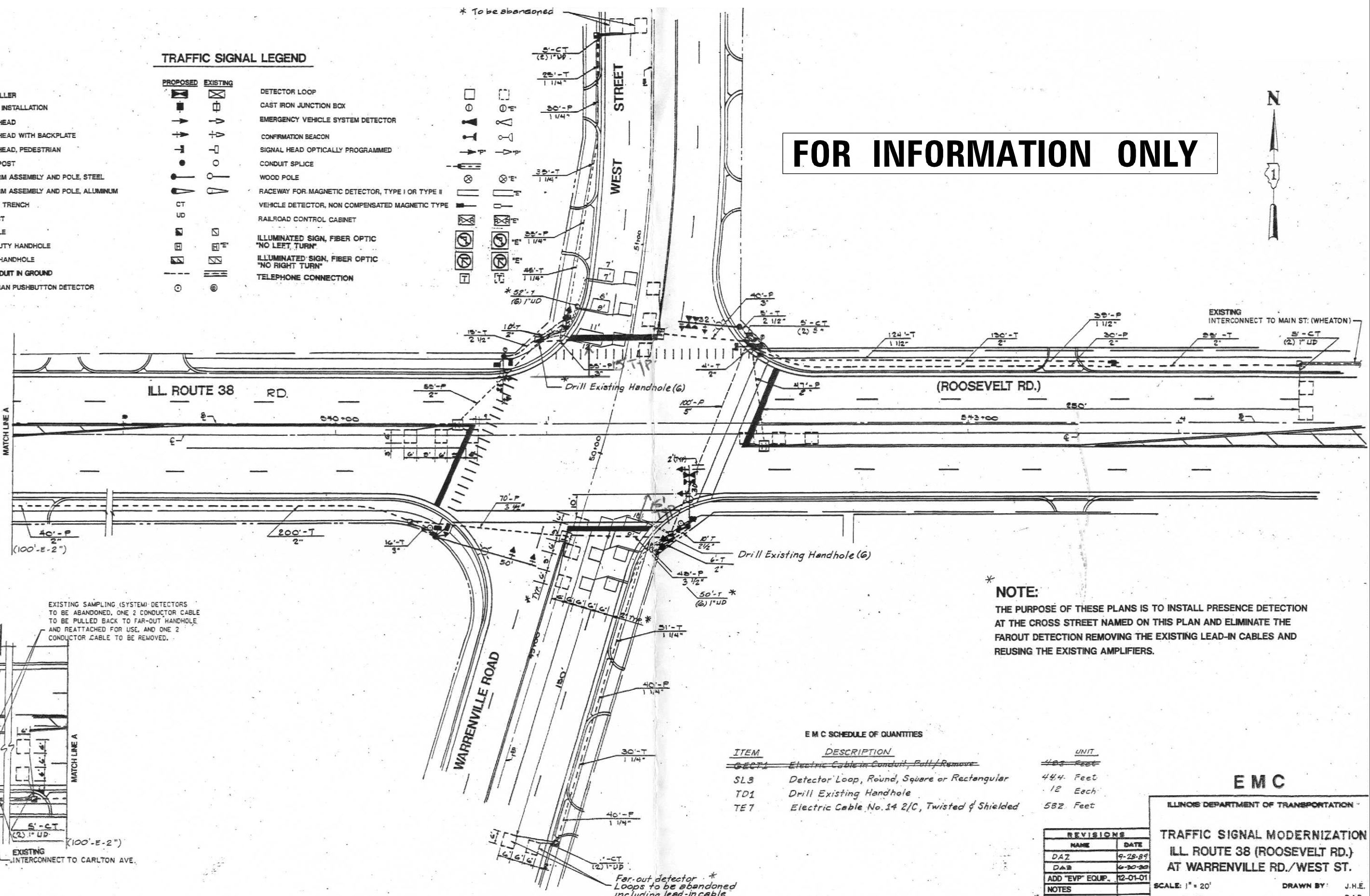
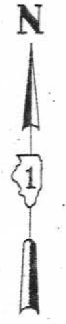
**TRAFFIC SIGNAL LEGEND**

- CONTROLLER
- SERVICE INSTALLATION
- SIGNAL HEAD
- SIGNAL HEAD WITH BACKPLATE
- SIGNAL HEAD, PEDESTRIAN
- SIGNAL POST
- MAST ARM ASSEMBLY AND POLE, STEEL
- MAST ARM ASSEMBLY AND POLE, ALUMINUM
- COMMON TRENCH
- UNIT DUCT
- HANDHOLE
- HEAVY DUTY HANDHOLE
- DOUBLE HANDHOLE
- G.S. CONDUIT IN GROUND
- PEDESTRIAN PUSHBUTTON DETECTOR

- PROPOSED**   **EXISTING**
- DETECTOR LOOP
  - CAST IRON JUNCTION BOX
  - EMERGENCY VEHICLE SYSTEM DETECTOR
  - CONFIRMATION BEACON
  - SIGNAL HEAD OPTICALLY PROGRAMMED
  - CONDUIT SPLICE
  - WOOD POLE
  - RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
  - VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
  - RAILROAD CONTROL CABINET
  - ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
  - ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
  - TELEPHONE CONNECTION

- DETECTOR LOOP
- CAST IRON JUNCTION BOX
- EMERGENCY VEHICLE SYSTEM DETECTOR
- CONFIRMATION BEACON
- SIGNAL HEAD OPTICALLY PROGRAMMED
- CONDUIT SPLICE
- WOOD POLE
- RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II
- VEHICLE DETECTOR, NON COMPENSATED MAGNETIC TYPE
- RAILROAD CONTROL CABINET
- ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"
- ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"
- TELEPHONE CONNECTION

**FOR INFORMATION ONLY**



EXISTING SAMPLING (SYSTEM) DETECTORS TO BE ABANDONED, ONE 2 CONDUCTOR CABLE TO BE PULLED BACK TO FAR-OUT HANDHOLE AND REATTACHED FOR USE, AND ONE 2 CONDUCTOR CABLE TO BE REMOVED.

**\* NOTE:**  
THE PURPOSE OF THESE PLANS IS TO INSTALL PRESENCE DETECTION AT THE CROSS STREET NAMED ON THIS PLAN AND ELIMINATE THE FAROUT DETECTION REMOVING THE EXISTING LEAD-IN CABLES AND REUSING THE EXISTING AMPLIFIERS.

**EMC SCHEDULE OF QUANTITIES**

ITEM	DESCRIPTION	UNIT
6-ECT1	Electric Cable in Conduit, Pull/Remove	400 Feet
SL3	Detector Loop, Round, Square or Rectangular	444 Feet
TD1	Drill Existing Handhole	12 Each
TE7	Electric Cable No. 14 2/C, Twisted & Shielded	582 Feet

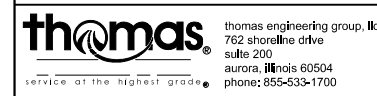
**EMC**

**REVISIONS**

NAME	DATE
DAZ	9-28-89
DAB	6-30-90
ADD "EVP" EQUIP.	12-01-01
NOTES	
* ADD Presence Det. JAN. 02	

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**TRAFFIC SIGNAL MODERNIZATION**  
ILL. ROUTE 38 (ROOSEVELT RD.)  
AT WARRENVILLE RD./WEST ST.

SCALE: 1" = 20'  
DATE: 3-87  
DRAWN BY: J.H.E.  
CHECKED BY: D.A.D.



USER NAME = DonN	DESIGNED -	REVISED -
PLOT SCALE = 20.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**IL ROUTE 38 AND WEST STREET**  
**EXISTING TRAFFIC SIGNAL PLANS**

SCALE: SHEET OF SHEETS STA. TO STA.

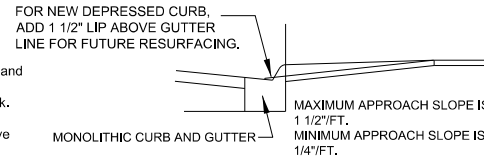
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	15

CONTRACT: 61E37  
ILLINOIS FED. AID PROJECT

# DRIVE APPROACH & SIDEWALK

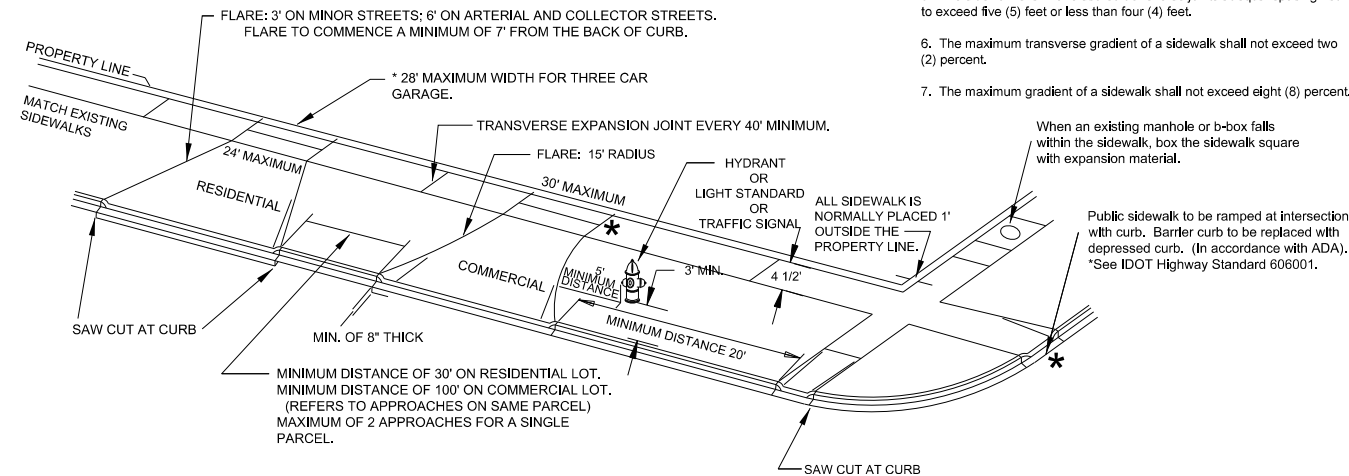
## GENERAL STANDARDS

- All Portland Cement Concrete shall conform to Illinois Department of Transportation Class SI mix.
- Where new concrete work meets or abuts any existing concrete structures, the existing concrete shall be saw cut to a straight and clean edge and expansion material placed between the new and existing work.
- Expansion material is also required between new curb and new concrete approaches; new sidewalk and new concrete driveways; and new curb and new sidewalk.
- A culvert will be required where the street does not have curb and gutter.
- Replacement of barrier curb and gutter with depressed curb and gutter to be with a single pour. Gutter shall be a minimum of 8" thick.
- Wire mesh is not required.
- Pea gravel is not allowed as fill or base material.
- All curb replacements shall be a minimum of 5' in length.



\*\* See Note 6

- COVER OVER CULVERT SHALL BE A MINIMUM OF 5" OR 1/2 CULVERT DIAMETER, OR WHICHEVER IS LARGER.
- MINIMUM CULVERT SIZE: 10" DIAMETER.



## RESIDENTIAL APPROACH

- Shall be 5" thick, Portland Cement Concrete, Class SI
- 1 1/2" Bituminous Concrete, on an 8" thick aggregate base
- Brick pavers shall be constructed in accordance with the manufacturer's specifications. Manufacturer's specifications must be submitted as part of the permit application.

## COMMERCIAL APPROACH

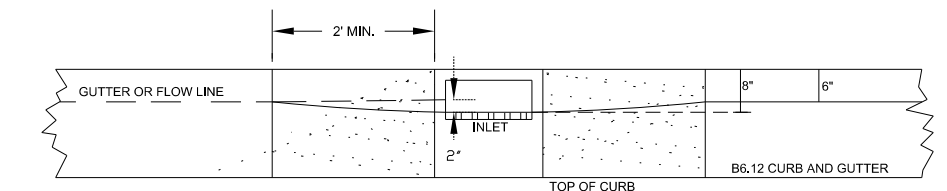
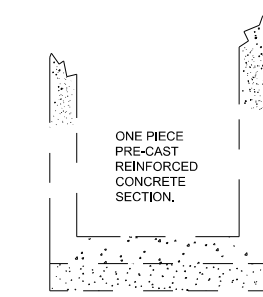
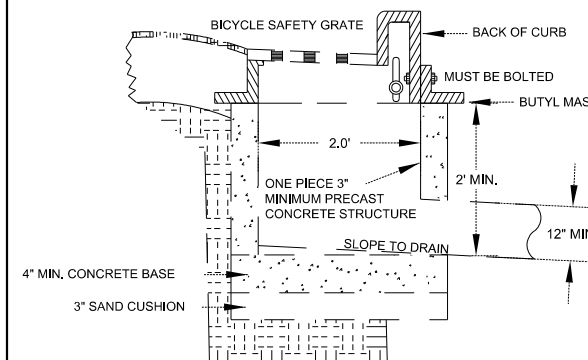
- 6" thick, Portland Cement Concrete, Class SI (Bituminous is not permitted)

## SIDEWALK

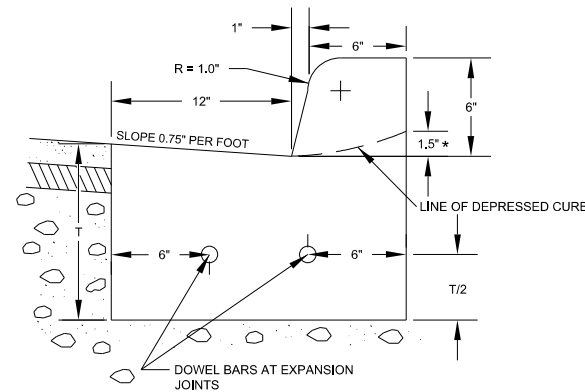
- 4" thick, Portland Cement Concrete on a compacted crushed aggregate or bank run gravel base.
- 5" thick through Residential Approaches
- 6" thick through Commercial Approaches
- Walk shall be no lower than the centerline of the street.
- The sidewalk shall have scored transverse joints at equal spacing not to exceed five (5) feet or less than four (4) feet.
- The maximum transverse gradient of a sidewalk shall not exceed two (2) percent.
- The maximum gradient of a sidewalk shall not exceed eight (8) percent.

# TRANSITION CURB AT INLET OR C.B.

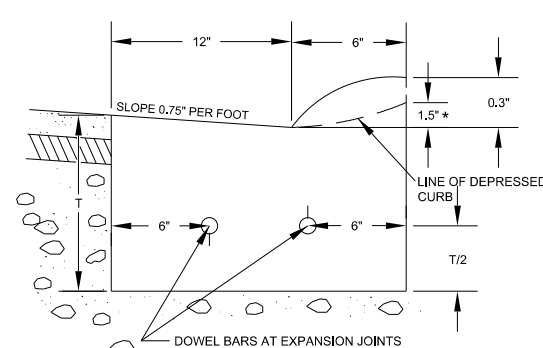
- A MAXIMUM ADJUSTMENT OF 8" USING 2 (TWO) RUBBER RINGS IS ALLOWED. A MINIMUM OF 1 (ONE) RUBBER RING SHOULD BE INSTALLED BETWEEN THE FRAME AND STRUCTURE
- BRICKS ARE NOT PERMITTED FOR ADJUSTMENTS.
- FOR ROLLED AND/OR BARRIER CURB USE NEENAH R-3010 OR EJIW 7045Z FRAME, 7040M1 GRATE AND 7050T1 CURB BACK OR US FOUNDRY 5132.
- 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.
- THE GRATE SHALL BE A BICYCLE SAFETY GRATE.
- REFERENCE: STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS, MAY 1996, SECTION 33.
- ANY SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER.
- 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.
- MINIMUM PIPE DIAMETER IS 12" ON 2' STRUCTURE.
- ANY NEW FRAME BACKS MUST HAVE STAMPED FISH SYMBOL PER NPDES REQUIREMENTS.



# BARRIER CURB AND GUTTER TYPE B 6.12



# TYPE M 3.12

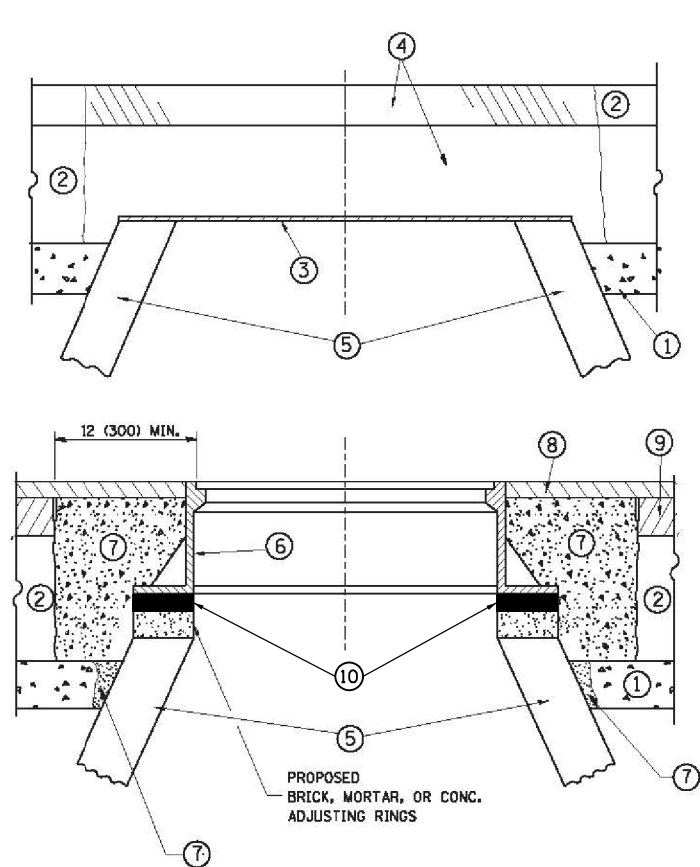


T = THICKNESS OF PAVEMENT  
\* = 1/2" AT ADA RAMP LOCATIONS

- NOTE:
- TWO NO.6 STEEL DOWEL BARS WITH CAPS TO BE USED AT ALL EXPANSION JOINTS 100 ft. INTERVALS.
  - CONSTRUCTION JOINTS AT 25 ft. INTERVALS.
  - 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.
  - THE BASE COURSE WILL BE OF A DEPTH SUFFICIENT TO BRING THE CURB AND GUTTER TO THE PROPOSED GRADE.
  - 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.
  - THE HEIGHT OF DEPRESSED CURB ADJACENT TO ADA RAMP LOCATIONS SHALL BE 1/2".
  - SEE STANDARD 606001-06.



# 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
- ⑩ PROPOSED ADJUSTMENT RISER RING  
- RUBBER (WHEATON)  
- PRECAST CONCRETE (DUPAGE)

**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 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."

**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.

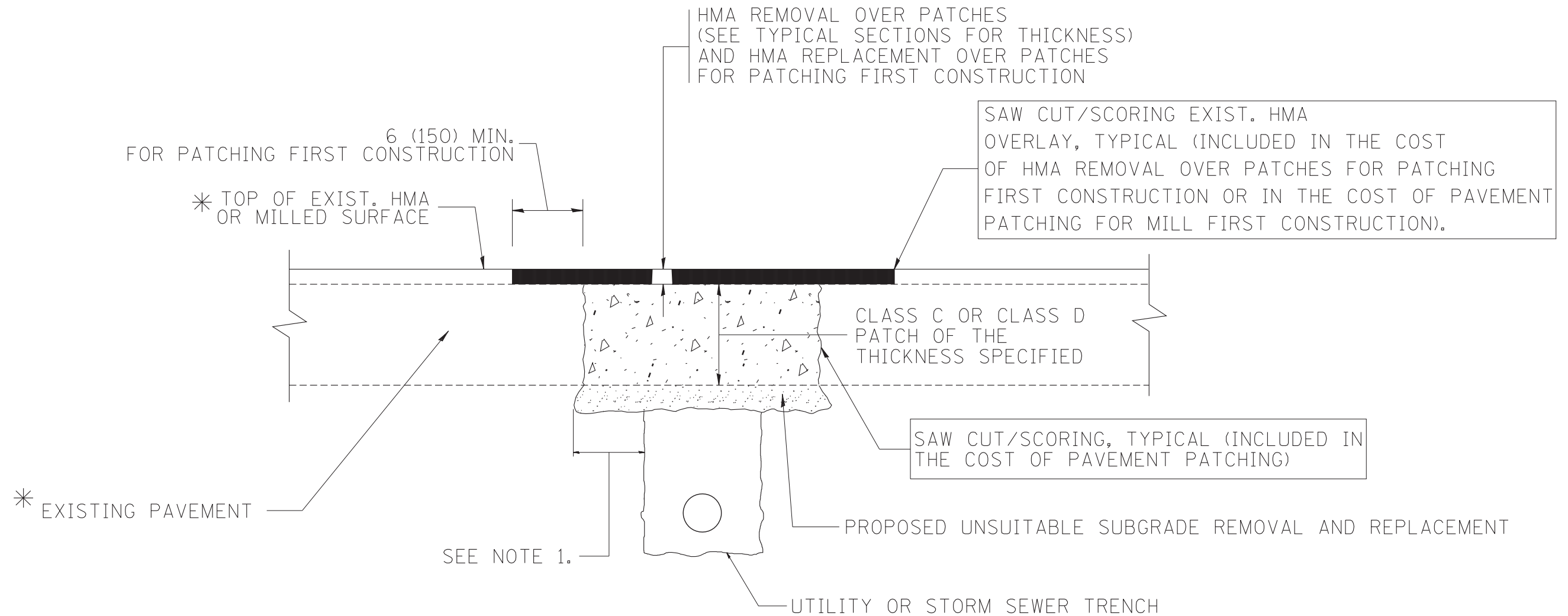
IF THE EXISTING LIDS ARE OPEN, THE FRAME WILL BE ADJUSTED TO THE ELEVATION OF THE MILLED PAVEMENT SURFACE PRIOR TO THE MILLING OPERATION. THE FRAME WILL NOT BE REMOVED AND COVERED BY THE METAL PLATE.

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 WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF THE CORRESPONDING PAY ITEM.

USER NAME = DonN	DESIGNED -	REVISED
PLOT SCALE = 2.0000' / in.	DRAWN -	REVISED -
PLOT DATE = 12/7/2017	CHECKED -	REVISED -
	DATE -	REVISED -

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	17
CONTRACT: 61E37				
ILLINOIS FED. AID PROJECT				



\* SEE TYPICAL SECTIONS FOR THICKNESS AND MATERIALS

**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 4 1/2 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.

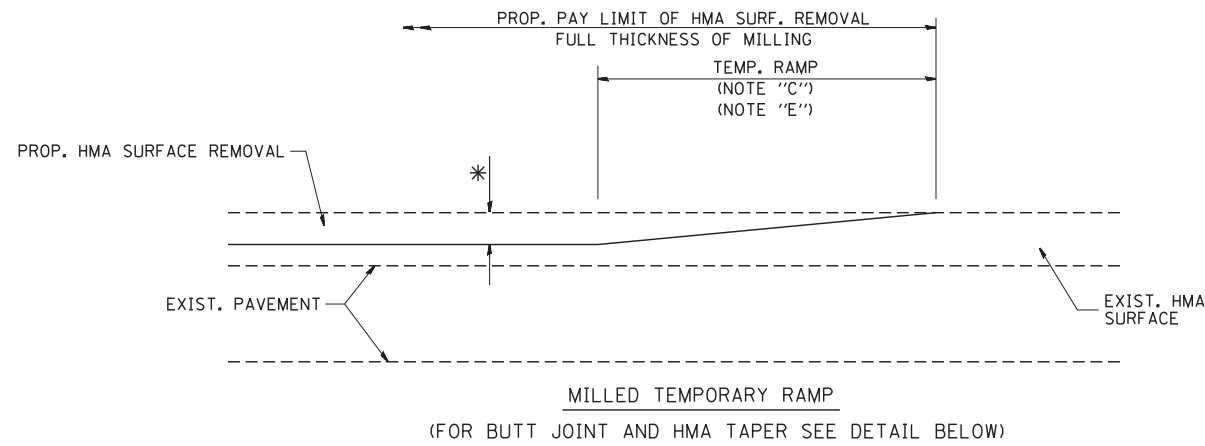
ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.

FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98
		DRAWN -	REVISED - R. BORO 01-01-07
		PLOT SCALE = 50.000' / IN.	REVISED - R. BORO 09-04-07
		PLOT DATE = 10/27/2008	REVISED - K. ENG 10-27-08

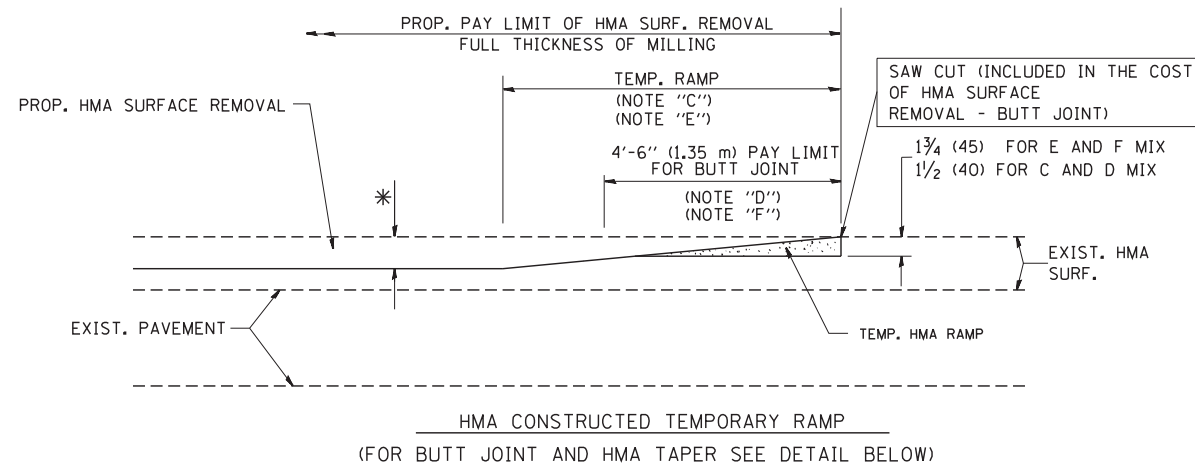
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>	
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	18
<b>BD400-04 (BD-22)</b>			CONTRACT NO. 61E37	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

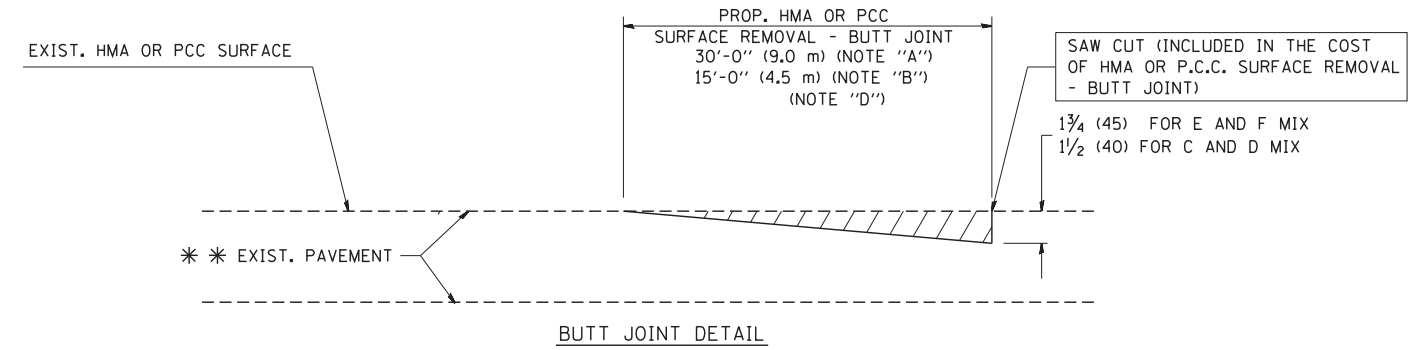


**OPTION 1**

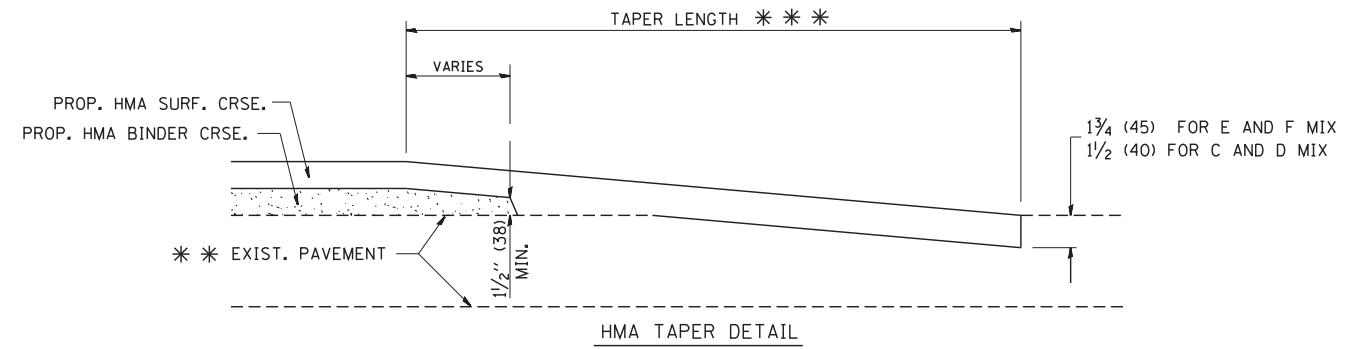


**OPTION 2**

**TYPICAL TEMPORARY RAMP**



**BUTT JOINT DETAIL**



**HMA TAPER DETAIL**

**TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY**

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

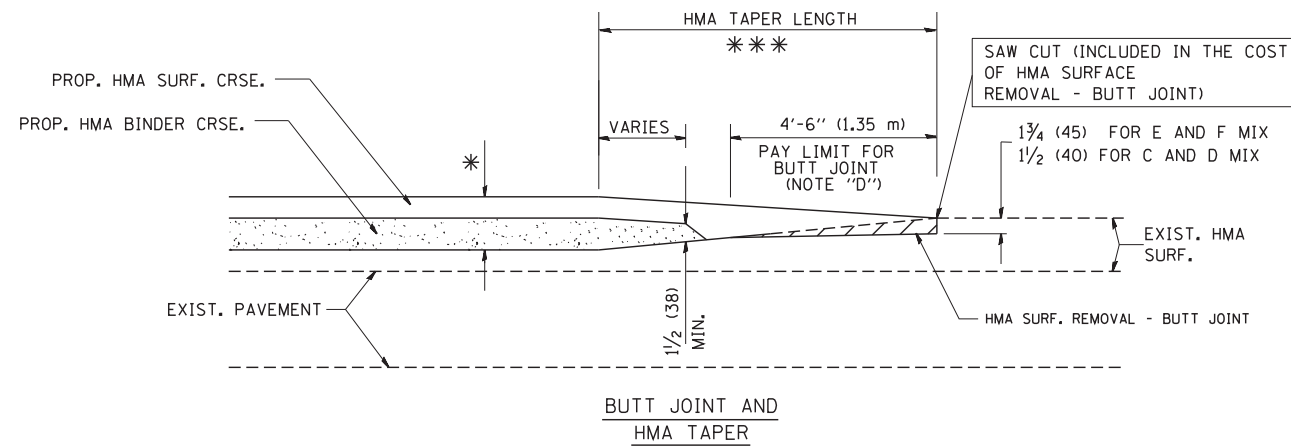
**NOTES**

- 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.



**TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING**

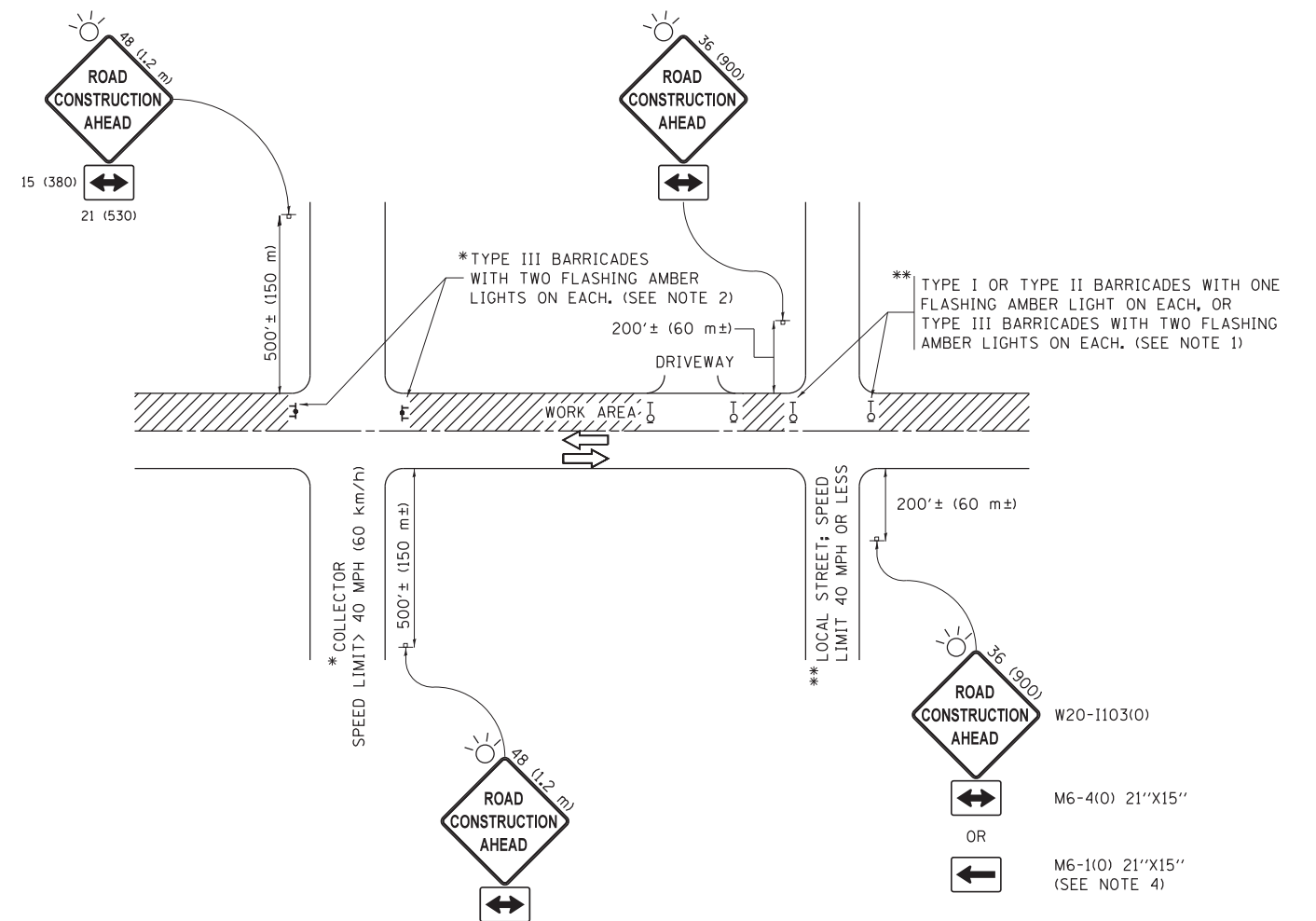
FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglianobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BUTT JOINT AND  
HMA TAPER DETAILS**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	19
<b>BD400-05 BD32</b>		CONTRACT NO. 61E37		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



**NOTES:**

1. SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 36 x 36 (900x900) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE I, TYPE II OR TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
  - a) ONE "ROAD CONSTRUCTION AHEAD" SIGN 48 x 48 (1.2 m x 1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
  - b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
3. CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 28 (710) IN HEIGHT.
4. WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-4).
5. WHEN WORK IS BEING PERFORMED ON A SIDE ROAD OR DRIVEWAY, FOLLOW THE APPLICABLE STANDARD(S). THE DIRECTIONAL ARROW (M6-1 OR M6-4) SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE TRAFFIC CONTROL SET-UP.
6. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAYS UNLESS OTHERWISE SPECIFIED IN THE PLANS OR BY THE ENGINEER.
7. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCLUDED IN THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME =	USER NAME = footemj	DESIGNED - L.H.A.	REVISED - A. HOUSEH 10-15-96
p:\11084EBIDINTEG\illinois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\Dist 1\11084EBIDINTEG\CADD\to\CAD\sheets\tc10.dgn			REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 50.000' / in.	CHECKED -	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 9/15/2016	DATE - 06-89	REVISED - A. SCHUETZE 09-15-16

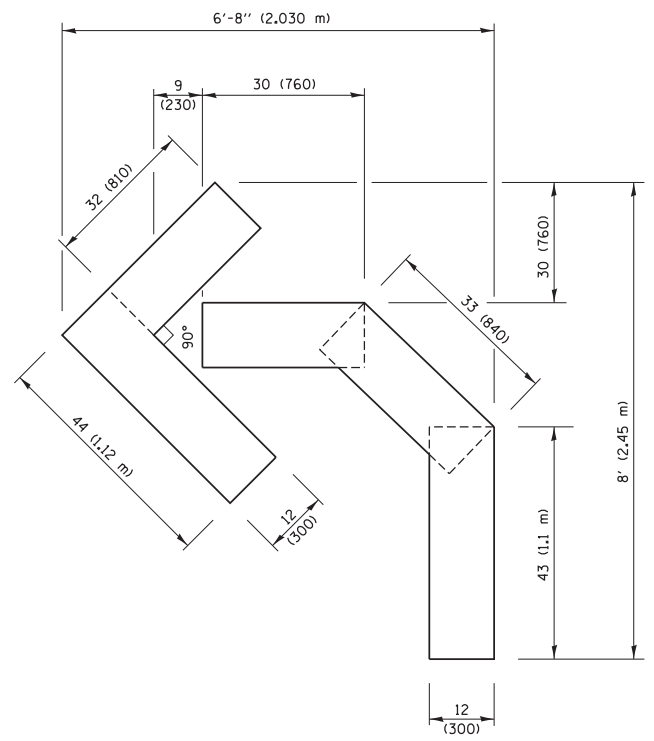
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

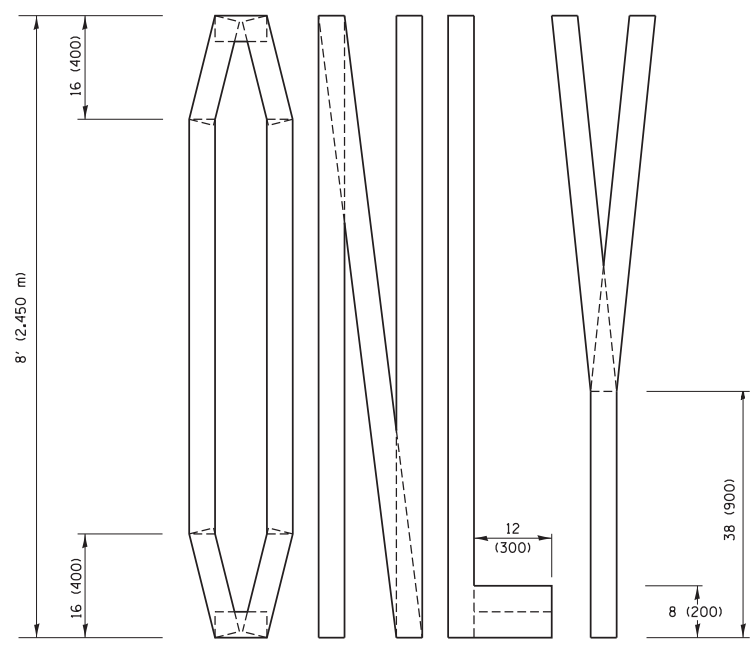
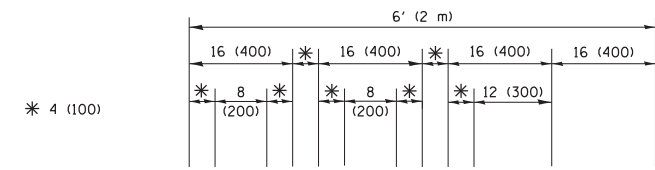
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00 RS	DuPAGE	24	20
<b>TC-10</b>			CONTRACT NO. 61E37	
ILLINOIS FED. AID PROJECT				

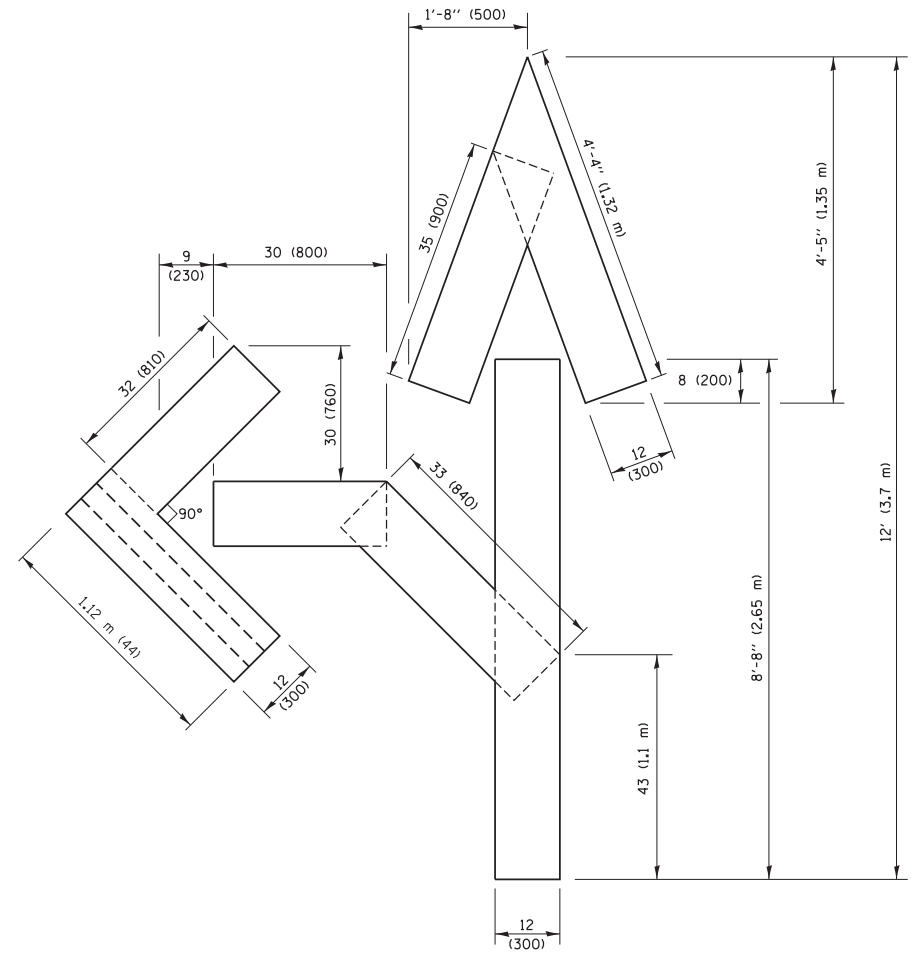




**QUANTITY**  
 4 (100) LINE = 45.5 ft. (13.9 m)  
 15.2 sq. ft. (1.41 sq. m)

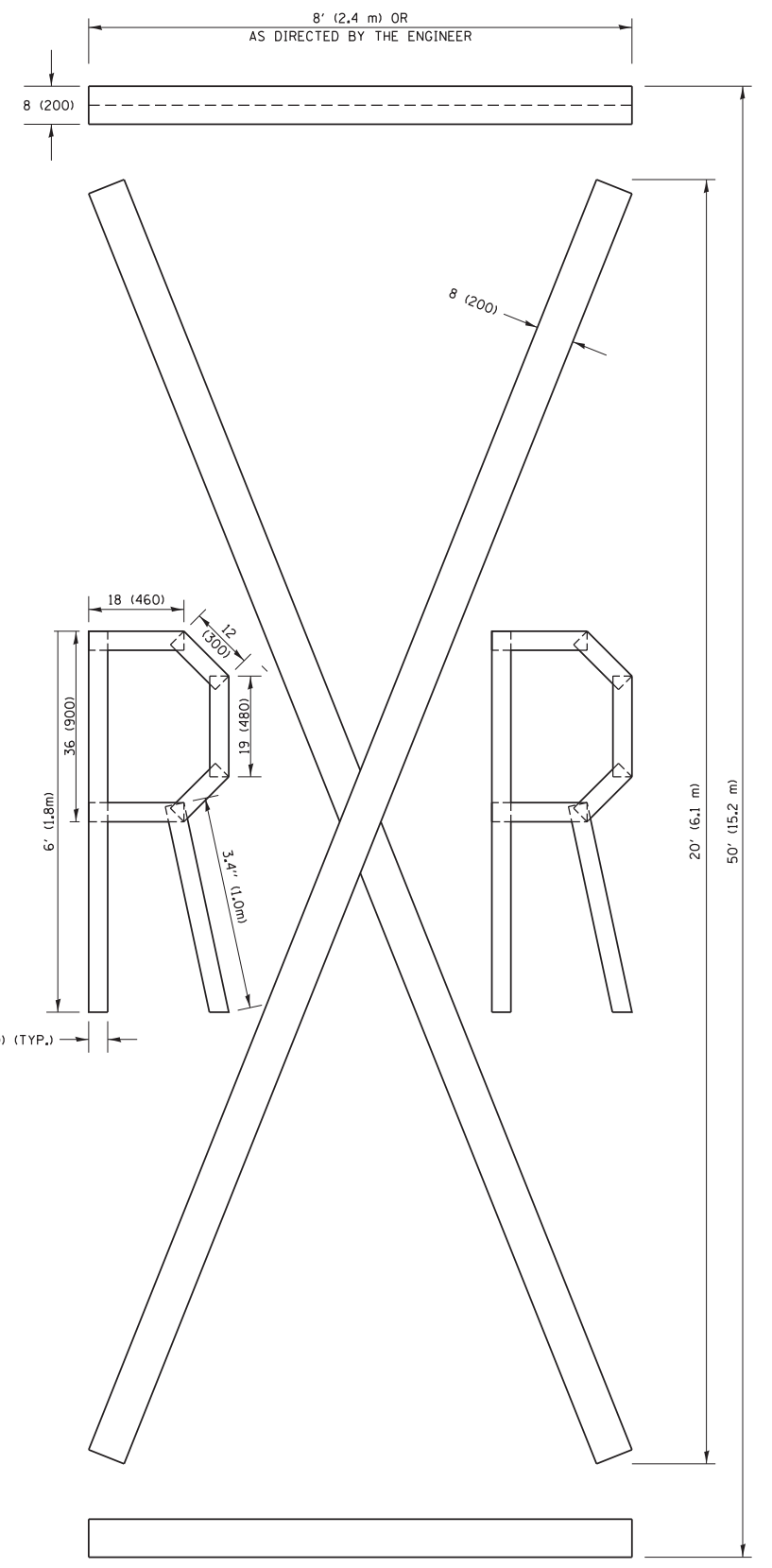


**QUANTITY**  
 4 (100) LINE = 64.1 ft. (19.5 m)  
 21.4 sq. ft. (1.99 sq. m)



**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.

FILE NAME =	USER NAME = footemj	DESIGNED -	REVISED - T. RAMMACHER 03-02-98
pw:\11\084EBIDINTEG\11\inois.gov\PIWIDOT\Documents\IDOT Offices\District 1\Projects\Dist 1\084EBIDINTEG\CADD\Drawings\TC16.dgn		CHECKED -	REVISED - E. GOMEZ 08-28-00
		DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00
			REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

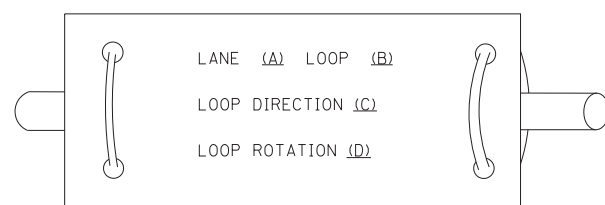
<b>SHORT TERM PAVEMENT MARKING LETTERS AND SYMBOLS</b>			
SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00016-00-RS	DuPAGE	24	22
<b>TC-16</b>		CONTRACT NO. 61E37		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

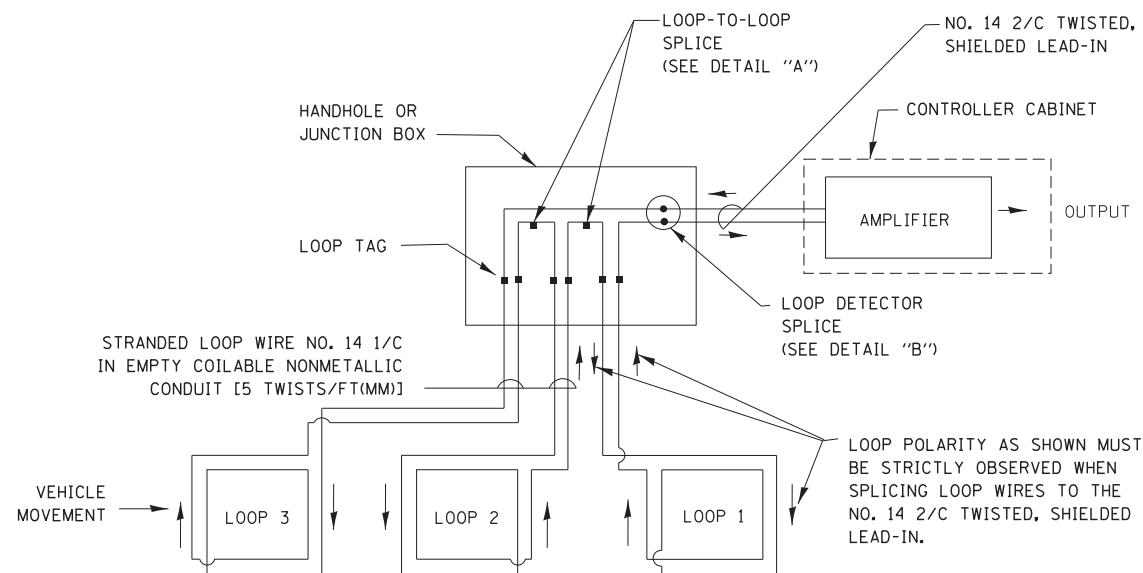
**LOOP DETECTOR NOTES**

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**

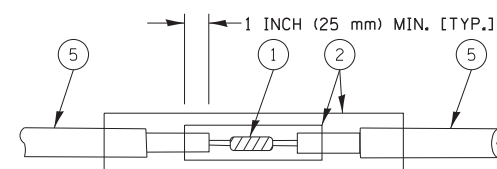


- A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY
- B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.
- C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".
- D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

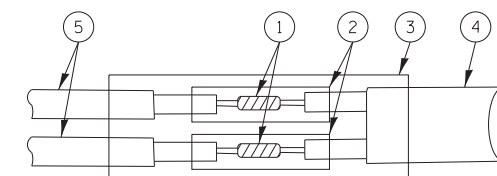


**DETECTOR LOOP WIRING SCHEMATIC**

- 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.

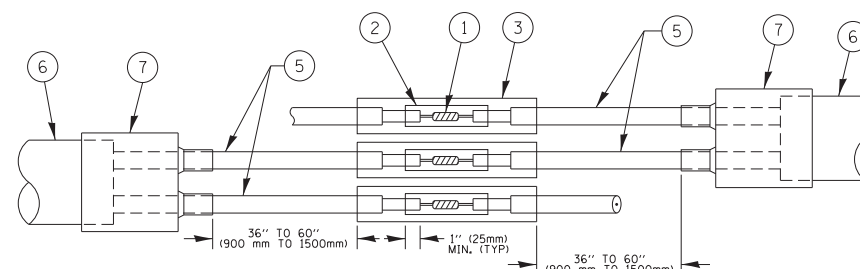


DETAIL "A"  
LOOP-TO-LOOP SPLICE

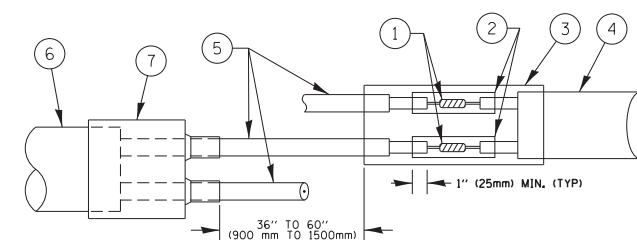


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PRE-FORMED 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 PRE-FORMED LOOP
- 7 XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME =	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
ca:\pw\work\p1dot\footemj\d0108315\ts05.pgn		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**

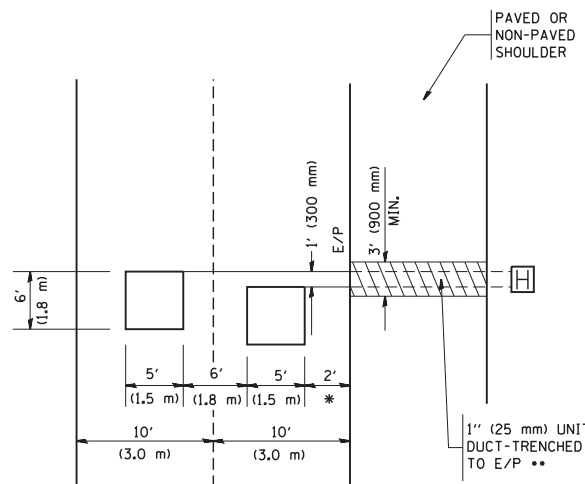
**DISTRICT ONE  
STANDARD TRAFFIC SIGNAL DESIGN DETAILS**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-000116-00-RS	DuPAGE	24	23
TS-05		CONTRACT NO. 61E37		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

LOOPS NEXT TO SHOULDERS

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

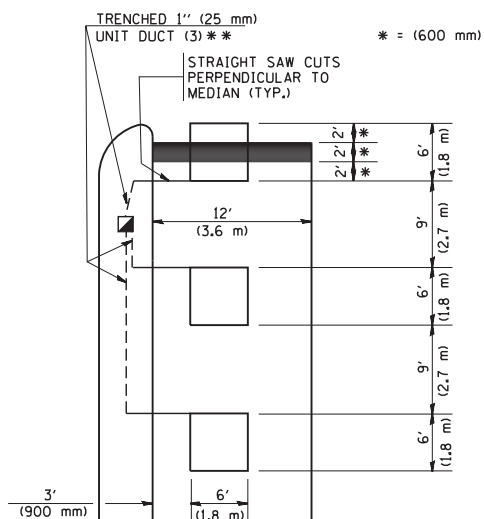


\* = (600 mm)

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

LEFT TURN LANES WITH MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)

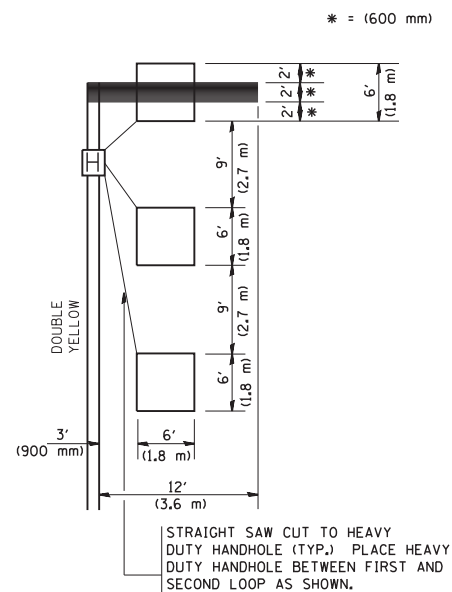
HANDHOLE LOCATION MAY VARY DEPENDING ON GEOMETRICS AND DESIGN OF TRAFFIC SIGNALS. HEAVY-DUTY HANDHOLES TO BE USED WHEN THE MEDIAN IS MOUNTABLE. REFER TO STANDARD 814001 TO ENSURE THAT HANDHOLE FITS IN MEDIAN.



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

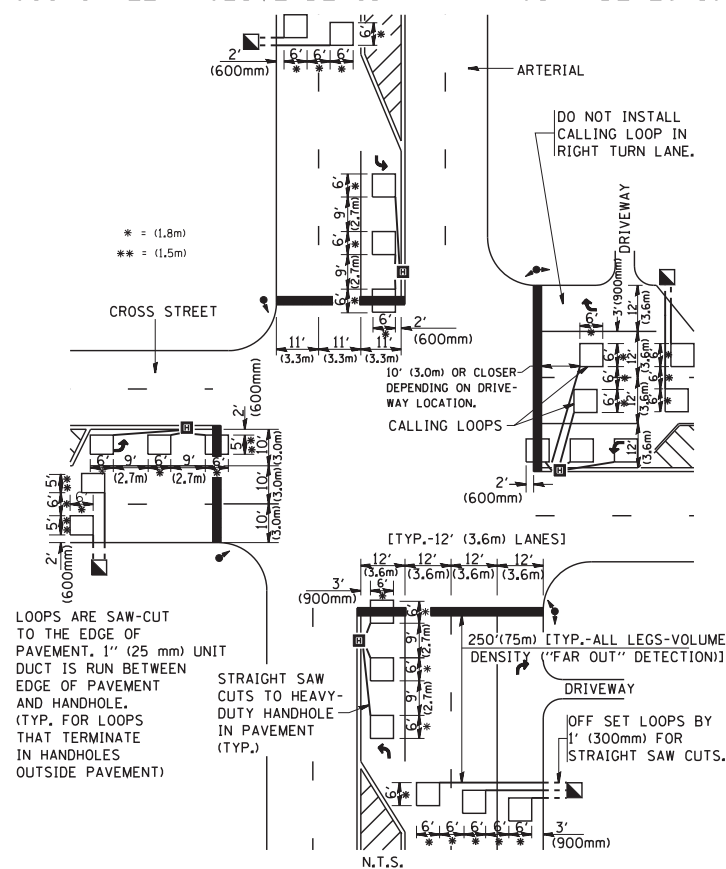
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH  
(PROTECTED / PERMITTED LEFT TURN PHASING)



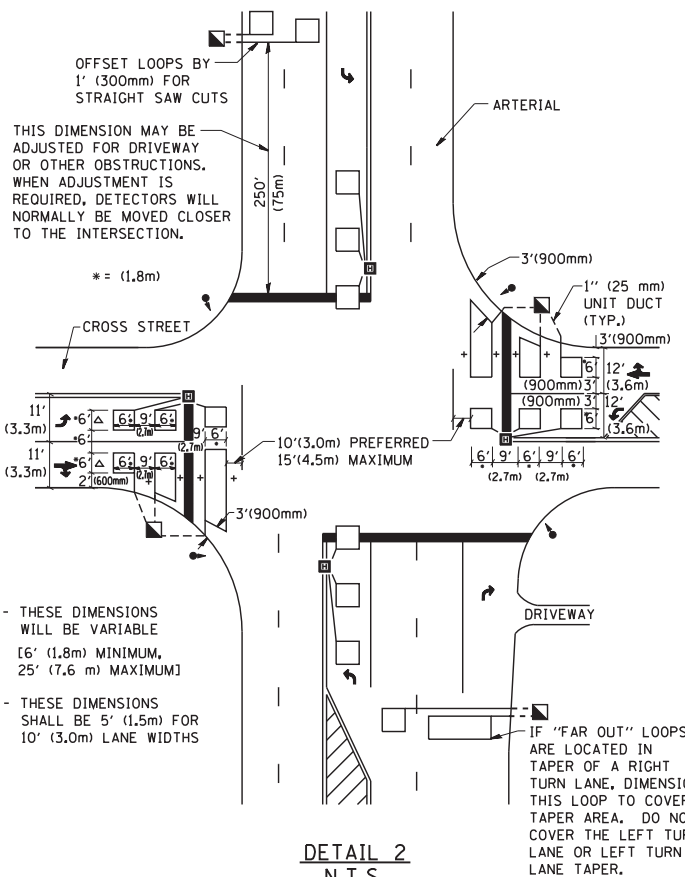
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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



DETAIL 1  
N.T.S.

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



DETAIL 2  
N.T.S.

NOTES:

VEHICLES LOOP DETECTORS

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

PLACEMENT OF DETECTORS

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

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

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

NOTE:

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

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

FILE NAME = W:\diststd\22x34\ts07.dgn

USER NAME = gaglianobt  
PLOT SCALE = 50.0000' / IN.  
PLOT DATE = 1/4/2008

DESIGNED -  
DRAWN -  
CHECKED - R.K.F.  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DISTRICT 1 - DETECTOR LOOP INSTALLATION  
DETAILS FOR ROADWAY RESURFACING

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2551	17-00116-00-RS	DuPAGE	24	24
<b>TS-07</b>		CONTRACT NO. 61E37		
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				