

FOR INDEX OF SHEETS, SEE SHEET NO. 2

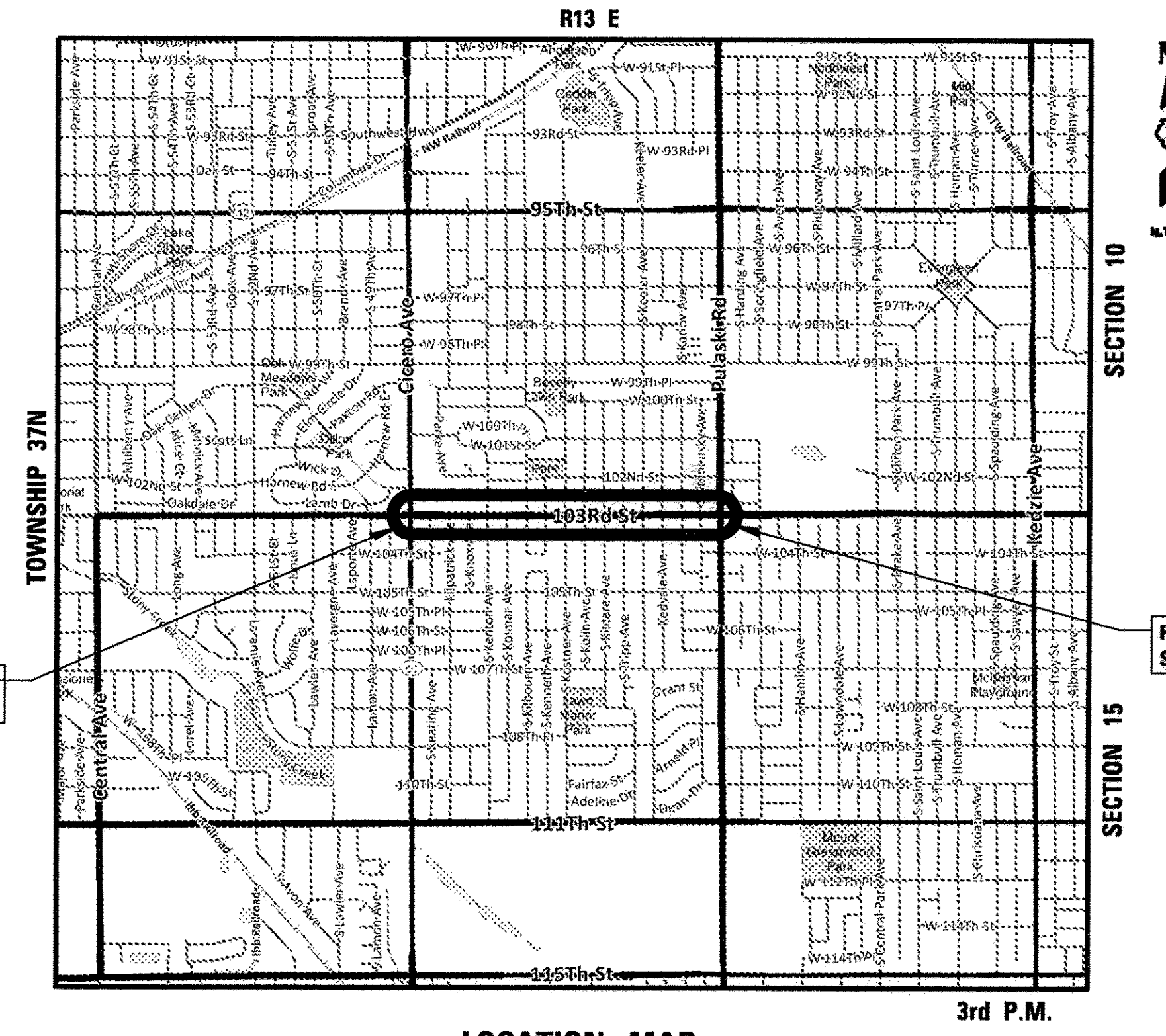
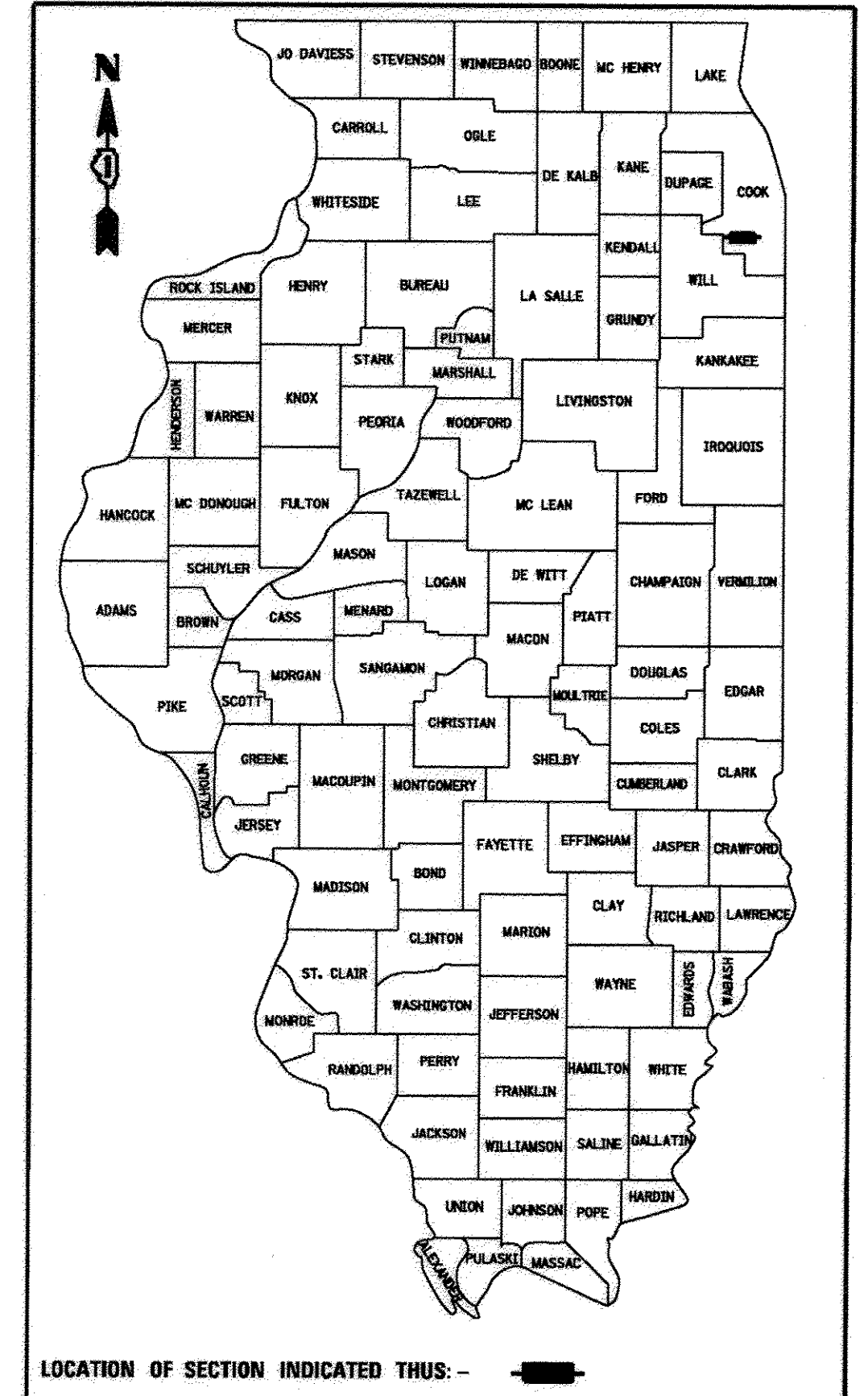
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 61D46		

PLANS FOR PROPOSED  
FEDERAL AID HIGHWAY

FAU 1574 (W. 103RD STREET)  
FAU 350 (S. CICERO AVENUE) TO FAU 3778 (S. PULASKI ROAD)  
RESURFACING

SECTION NO. 16-00188-00-RS  
PROJECT NO. M-4003(852)  
JOB NO. C-91-129-17  
VILLAGE OF OAK LAWN  
COOK COUNTY



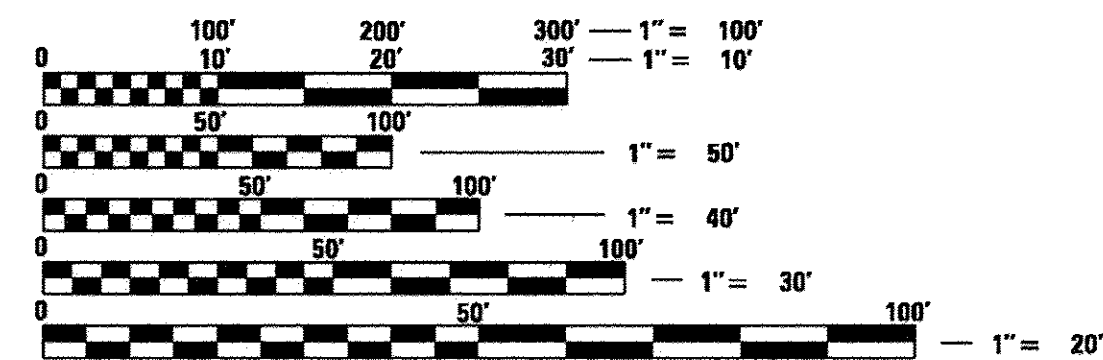
LOCATION MAP

W. 103RD STREET  
GROSS LENGTH OF PROJECT = 5,270 LINEAL FEET (0.99 MILES)  
NET LENGTH OF PROJECT = 5,270 LINEAL FEET (0.99 MILES)

TRAFFIC DATA

WEST 103RD STREET  
ADT (YEAR) = 20,550 (2014)  
POSTED SPEED LIMIT = 30 MPH

DESIGN DESIGNATION: MINOR COLLECTOR



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  
8-1-1 OR 1-800-892-0123

**CB** CHRISTOPHER B. BURKE ENGINEERING LTD.  
9575 West Higgins Road, Suite 600  
Rosemont, Illinois 60018 (847) 823-0500

PROFESSIONAL DESIGN FIRM NO. 184-001175  
EXPIRATION DATE: 04/30/17

CONTRACT NO. 61D46

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

APPROVED 10/12/2016  
*[Signature]*  
PUBLIC WORKS DIRECTOR, VILLAGE OF OAK LAWN

PASSED NOVEMBER 2, 2016  
*[Signature]*  
DISTRICT 1 ENGINEER OF LOCAL ROADS AND STREETS

RELEASING FOR  
BID BASED ON NOVEMBER 3, 2016  
LIMITED REVIEW  
*[Signature]*  
REGIONAL ENGINEER

**LEE M. FELL**  
REGISTERED PROFESSIONAL ENGINEER  
OF ILLINOIS

*[Signature]*  
ENGINEER

*[Signature]*  
DATE

LEE M. FELL  
ILLINOIS REGISTRATION No. 062-053708  
EXPIRATION DATE: 11/30/2017

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

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

**GENERAL NOTES**

SPECIFICATIONS, STANDARDS AND SPECIAL PROVISIONS

ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", THE LATEST REVISION; THE LATEST EDITION OF THE "ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", (IMUTCD); "THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS" JUNE 2014 SEVENTH EDITION, THE "DETAILS" IN THE PLANS AND THE "SPECIAL PROVISIONS" INCLUDED IN THE CONTRACT DOCUMENTS.

ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST IDOT HIGHWAY STANDARD.

CODES OF THE IEPA TITLE 35, AND O. S. H. A. SHALL BE ADHERED TO FOR THE CONSTRUCTION OF THIS PROJECT.

ALL TRAFFIC CONTROL AND OTHER ADVISORY SIGNS NEEDED FOR CONSTRUCTION ARE TO BE FURNISHED BY THE CONTRACTOR IN ACCORDANCE WITH SECTION 700 OF THE STANDARD SPECIFICATIONS.

ALL REQUIRED PERMITS FROM THE PROPER GOVERNING AGENCY SHALL BE OBTAINED FOR CONSTRUCTION ALONG OR ACROSS EXISTING STREETS OR HIGHWAYS. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE PROPER BRACING, SHEETING, SHORING AND OTHER REQUIRED PROTECTION OF ALL ROADWAYS BEFORE CONSTRUCTION BEGINS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE STREETS OR ROADWAYS AND ASSOCIATED STRUCTURES AND SHALL MAKE REPAIRS AS NECESSARY TO THE SATISFACTION OF THE AGENCY, AT THE CONTRACTOR'S OWN EXPENSE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC.

UTILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL EXISTING UTILITY FACILITIES SO THAT THE UTILITIES AND THEIR APPURTENANCES MAY BE LOCATED AND ADJUSTED OR MOVED, IF NECESSARY, PRIOR TO THE START OF CONSTRUCTION OPERATIONS. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS AS PROVIDED FOR IN THE STANDARD SPECIFICATIONS.

THE LOCATIONS OF EXISTING DRAINAGE STRUCTURES, STORM AND SANITARY SEWERS, WATER SERVICE LINES AND OTHER UTILITY LINES ARE APPROXIMATE, AND THE VILLAGE DOES NOT GUARANTEE THEIR ACCURACY. THEIR EXACT HORIZONTAL AND VERTICAL LOCATIONS ARE TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UNDERGROUND OR SURFACE UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY UTILITY THAT IS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE COVERED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "JULIE" AT 8-1-1 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE, GAS AND CABLE.

THE CONTRACTOR SHALL CONTACT IDOT'S BUREAU OF MATERIALS (PHONE 847-705-4337) AT LEAST 24 HOURS BEFORE PLACING HOT-MIX ASPHALT OR PORTLAND CEMENT CONCRETE.

STAKING

THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS OR PROPERTY OR REFERENCE MARKERS UNTIL THE ENGINEER, ITS AGENT OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.

MISCELLANEOUS

DIMENSIONS: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.

ALL SAWCUTTING SHALL BE INCLUDED TO REMOVAL ITEMS AND SHALL BE PERFORMED PRIOR TO BEGINNING REMOVAL. ANY ITEMS OF WORK REMOVED PRIOR TO SAWCUTTING WILL NOT BE MEASURED FOR PAYMENT.

COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT, SIDEWALK REMOVAL AND REPLACEMENT, DRIVEWAY REMOVAL AND REPLACEMENT, AND STRUCTURES TO BE ADJUSTED WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND WILL NOT EXCEED THE PLANNED QUANTITY.

THE THICKNESSES OF HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS ARE NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASIS ON WHICH THEY ARE TO BE PLACED. PLAN THICKNESSES SHOULD BE CONSIDERED THE MINIMUM THICKNESS PERMITTED.

DETECTABLE WARNINGS FOR THE HANDICAPPED SHALL BE INSTALLED AT INTERSECTING STREETS, DRIVEWAYS, AND ALLEYS AS SHOWN ON THE PLANS (SEE DETAIL ON SHEET 18).

PAVEMENT GRADES: THE ELEVATIONS INDICATED ON THE PLANS ARE FINISHED GRADES OF PROPOSED PAVEMENT OR SURFACE COURSE, UNLESS OTHERWISE INDICATED.

PROPOSED CONCRETE CURB AND GUTTER SHALL BE TRANSITIONED TO EXISTING CURB AND GUTTER OVER A LENGTH OF 5 FEET. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT FOR COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT.

CONTRACTOR SHALL NOT PLACE SOD UNTIL THE TEMPERATURE IS 80 OR LESS AND THE FORECAST FOR THE NEXT 7 DAYS SHOWS TEMPERATURES OF 80 OR LESS. IF ALL OTHER PAY ITEMS ARE COMPLETED, THE CONTRACTOR WILL NOT BE CHARGED WORKING DAYS FOR DELAYS IN PARKWAY RESTORATION DUE TO TEMPERATURE.

NO CONSTRUCTION SHALL BEGIN UNTIL ALL PROPER TEMPORARY SIGNS AND BARRICADES HAVE BEEN INSTALLED.

AT NO TIME SHALL LESS THAN HALF OF THE STREET BE AVAILABLE FOR PARKING.

ANY REPAIRS FOR DAMAGE BY THE CONTRACTOR OUTSIDE THE LIMITS OF WORK TO SIDEWALKS AND DRIVEWAY APRONS SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

FOR THIS PARTICULAR PROJECT, ANY AREAS WHICH REQUIRE PLACEMENT OF RADIUS TILES SHALL USE 24"x12" TILES WITH 15R WEDGES.

CONCRETE FILL BETWEEN NEW CURB AND GUTTER AND EXISTING PAVEMENT: FILLING THE GAP BETWEEN THE EXISTING PAVEMENT AND PROPOSED CURB AND GUTTER REMOVAL AND REPLACEMENT SHALL BE IN ACCORDANCE WITH IDOT HIGHWAY STANDARD 606001.

SPECIAL WASTE REPORT: THE SPECIAL WASTE REPORT (LPC 663) IS AVAILABLE UPON REQUEST. PLEASE CONTACT THE VILLAGE OF OAK LAWN FOR A COPY OF THE LPC 663.

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**HIGHWAY STANDARDS**

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
424001-01	CURB RAMPS FOR SIDEWALKS
424006-02	DIAGONAL CURB RAMPS FOR SIDEWALKS
424011-03	CORNER PARALLEL CURB RAMPS FOR SIDEWALKS
424016-03	MID-BLOCK CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
604001-04	FRAME AND LIDS TYPE 1
606001-05	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 M) TO 24' (600 MM) FROM PAVEMENT EDGE
701427-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS = 40 MPH
701602-08	URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER, OR CROSSWALK CLOSURE
701901-06	TRAFFIC CONTROL DEVICES
781001-04	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
780001-05	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATIONS

**DISTRICT 1 STANDARDS**

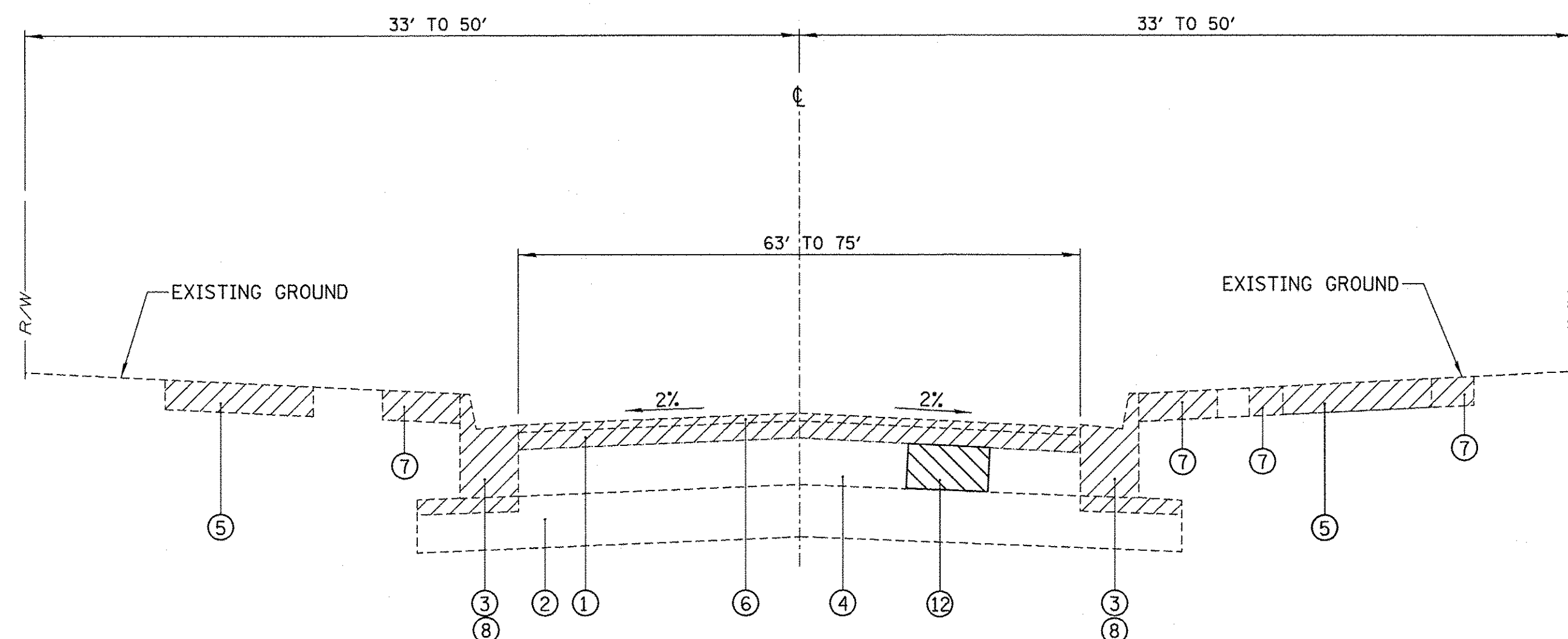
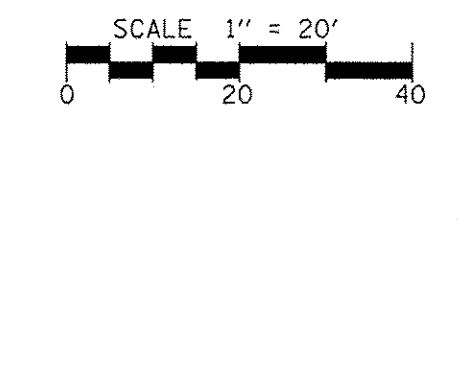
BD-08	FRAMES AND LIDS ADJUSTMENT WITH MILLING
BD-22	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT
BD-24	CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT
BD-32	BUTT JOINT AND HMA TAPER DETAILS
TC-10	TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS
TC-11	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
TS-05	STANDARD TRAFFIC SIGNAL DESIGN DETAILS
TS-07	DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING
TC-13	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-22	ARTERIAL ROAD INFORMATION SIGN



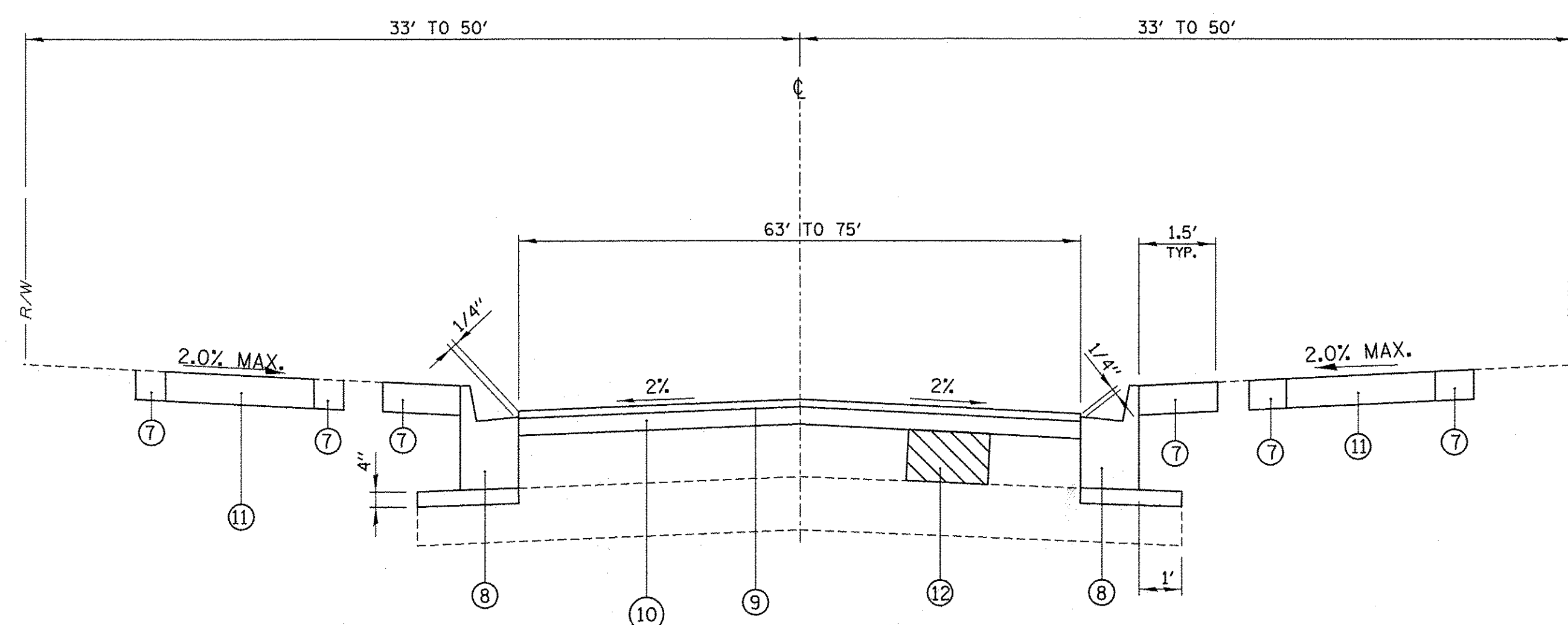
# SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	CONSTRUCTION CODE 0005 QUANTITY	100% LOCAL QUANTITY	PROJECT QUANTITY
20200100	EARTH EXCAVATION	CU YD	8	0	8
28000510	INLET FILTERS	EACH	57	0	57
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	29,300	0	29,300
40600400	MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS	TON	60	0	60
40600827	POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL 4.75, N50	TON	2,275	0	2,275
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	755	0	755
40603340	HOT MIX ASPHALT SURFACE COURSE, "MIX D", N70	TON	4,555	0	4,555
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	16,100	0	20,750
42400800	DETECTABLE WARNINGS	SQ FT	480	0	480
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 2"	SQ YD	100	0	100
44000160	HOT-MIX ASPHALT SURFACE REMOVAL, 2 3/4"	SQ YD	36,890	0	36,890
44000600	SIDEWALK REMOVAL	SQ FT	18,500	0	18,500
44201737	CLASS D PATCHES, TYPE I, 8 INCH	SQ YD	925	0	925
44201741	CLASS D PATCHES, TYPE II, 8 INCH	SQ YD	925	0	925
44201745	CLASS D PATCHES, TYPE III, 8 INCH	SQ YD	925	0	925
44201747	CLASS D PATCHES, TYPE IV, 8 INCH	SQ YD	925	0	925
52200800	SEGMENTAL CONCRETE BLOCK WALL	SQ FT	100	0	100
60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	54	0	54
67100100	MOBILIZATION	L SUM	1	0	1
70102635	TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	L SUM	1	0	1
70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	0	1
70102632	TRAFFIC CONTROL AND PROTECTION, STANDARD 701602	L SUM	1	0	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1	0	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1,500	0	1,500
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1,500	0	1,500
* 78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	500	0	500
* 78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	11,750	0	11,750
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	550	0	550
* 78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	1,054	0	1,054
~* 85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	4	0	4
~* 88600600	DETECTOR LOOP REPLACEMENT	FOOT	500	0	500
~* 89502376	REBUILD EXISTING HANDHOLE	EACH	7	0	7
~ X0326862	STRUCTURES TO BE ADJUSTED	EACH	73	0	73
~ X4021000	TEMPORARY ACCESS (PRIVATE ENTRANCE)	EACH	26	0	26
~ X4022000	TEMPORARY ACCESS (COMMERCIAL ENTRANCE)	EACH	20	0	20
~ X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	48	0	48
~* X7810300	RECESSED REFLECTIVE PAVEMENT MARKER	EACH	1,054	0	1,054
~ XX003435	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	200	0	200
~ XX006947	HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT	SQ YD	200	0	200
~ Z0004562	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	2,000	0	2,000
~ Z0013798	CONSTRUCTION LAYOUT	L SUM	1	0	1
~ Z0018300	DRAINAGE STRUCTURE REPAIR	EACH	0	73	73
~ X81H0215	HEAVY DUTY HANDHOLE <i>TO BE ADJUSTED</i>	EACH	6	0	6

\* INDICATES SPECIALITY ITEM  
 ~ INDICATES SPECIAL PROVISION



**EXISTING TYPICAL SECTION**  
STATION 11+25.34 TO STATION 62+27.94, 103RD STREET



**PROPOSED TYPICAL SECTION**  
STATION 11+25.34 TO STATION 62+27.94, 103RD STREET

**LEGEND**

- ① EXISTING HOT-MIX ASPHALT PAVEMENT
- ② EXISTING AGGREGATE SUBBASE
- ③ EXISTING CURB AND GUTTER
- ④ EXISTING AGGREGATE BASE
- ⑤ EXISTING PCC SIDEWALK
- ⑥ HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
- ⑦ SODDING, SALT TOLERANT (INCLUDED IN THE COST OF COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT AND SIDEWALK REMOVAL AND REPLACEMENT)
- ⑧ COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT (AS DIRECTED BY THE ENGINEER). INCLUDES 4" SUBBASE GRANULAR MATERIAL TYPE B.
- ⑨ PROPOSED BITUMINOUS MATERIAL (TACK COAT)
- ⑩ HOT-MIX ASPHALT PAVEMENT (RESURFACING) 3"  
\*HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 - 2"  
\*POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50 - 1"
- ⑪ PROPOSED PORTLAND CEMENT CONCRETE SIDEWALK, 5" AS DIRECTED BY THE ENGINEER
- ⑫ CLASS D PATCHES, 8 INCH

**CORE DETAILS**

CORE STATION	CORE NUMBER	ASPHALT TOTAL THICKNESS	SUBBASE THICKNESS
10+83.37	1	13"	25"
16+26.94	2	10"	20"
22+82.93	3	10"	16"
29+08.12	4	10.5"	21.5"
31+80.30	5	10.5"	12.5"
38+17.60	6	10.25"	27.75"
44+80.75	7	11.5"	12.5"
50+18.04	8	10.75"	23.25"
55+83.06	9	10.75"	11.25"
62+24.55	10	10.5"	10.5"

AVG. 10.8" 18.0"

**NOTE:**

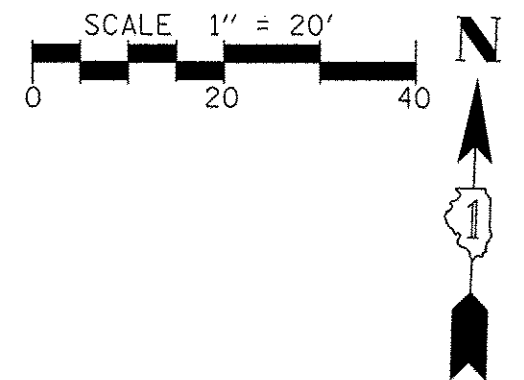
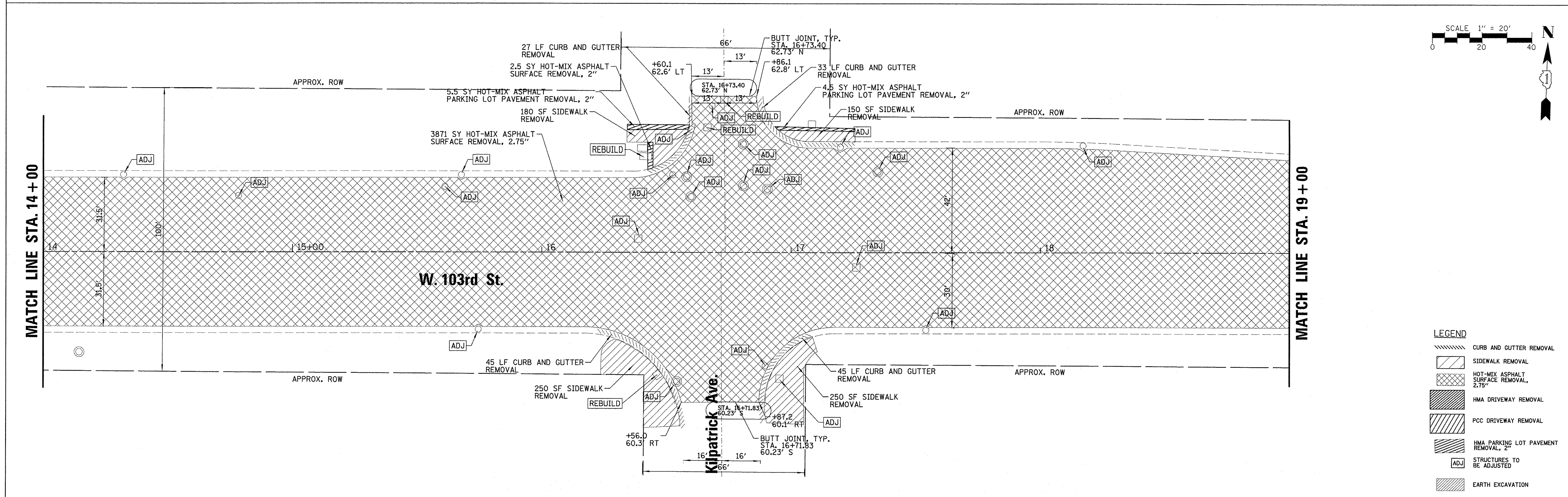
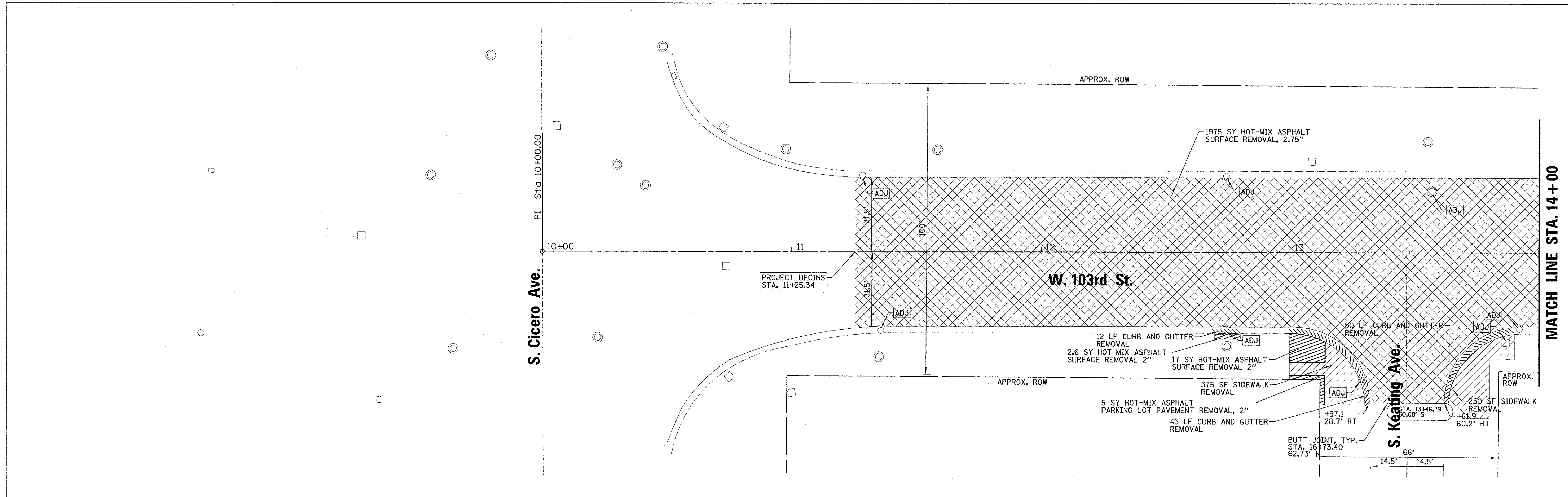
PAVING OF THE FULL ROADWAY WIDTH SHALL BE COMPLETED AT THE END OF EACH DAY OF PAVING TO PREVENT A LONGITUDINAL COLD JOINT FROM APPEARING WHEN OPPOSITE SIDES OF THE ROAD ARE PAVED ON DIFFERENT DAYS. THE CONTRACTOR SHALL ALSO ENSURE THAT AT THE END OF EACH DAY EACH PASS ENDS AT APPROXIMATELY THE SAME STATION TO PREVENT A COLD JOINT.

HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
ITEM	VOIDS
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 (IL 9.5 mm), 2"	4% @ 70 GYR.
POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"	3.5% @ 50 GYR.
CLASS D PATCHES, 8" (HMA BINDER IL-19MM)	4% @ 70 GYR.
HMA SC MIX "D" N-50	4% @ 50 GYR.

**NOTE:**

- THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE MIXTURE IS 112 LBS/SY/IN.
- THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
- FOR "PERCENT OF RAP AND RAS" SEE DISTRICT ONE SPECIAL PROVISIONS.
- THE HIGH SIDE OF THE ROADWAY SHALL BE PAVED FIRST.

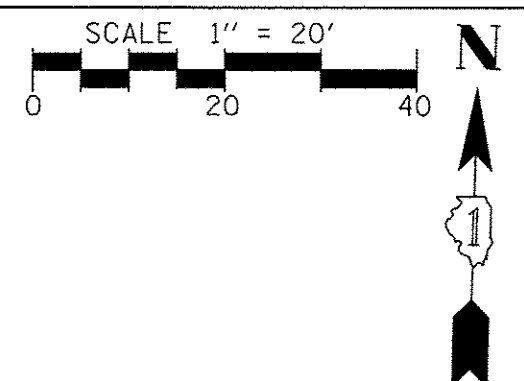
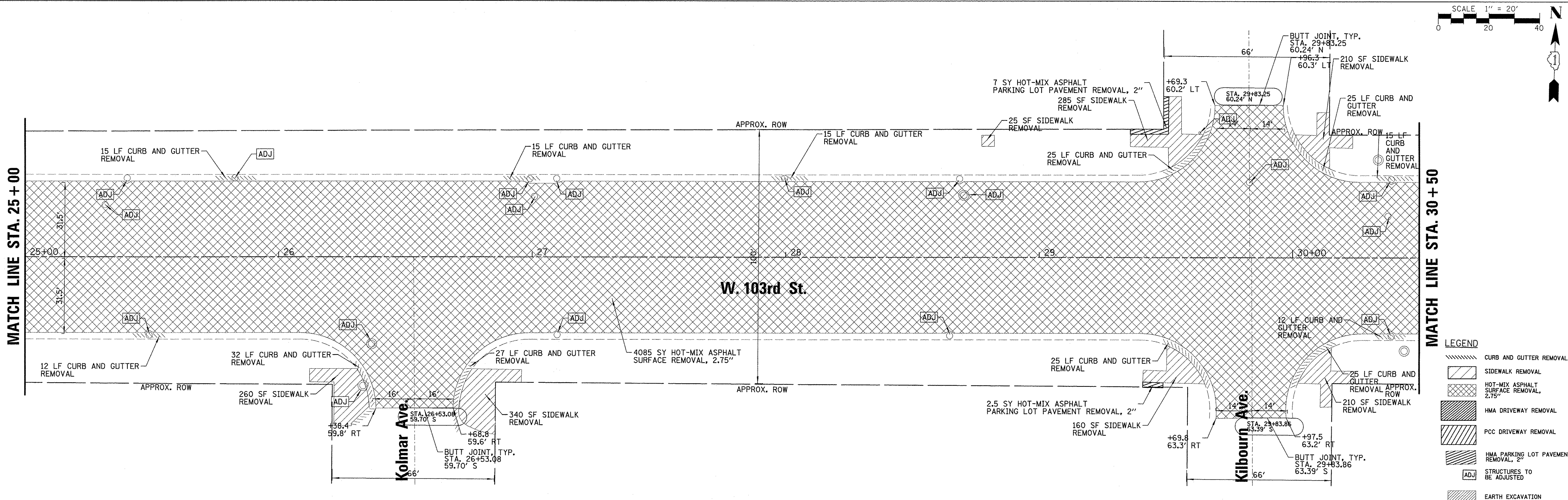
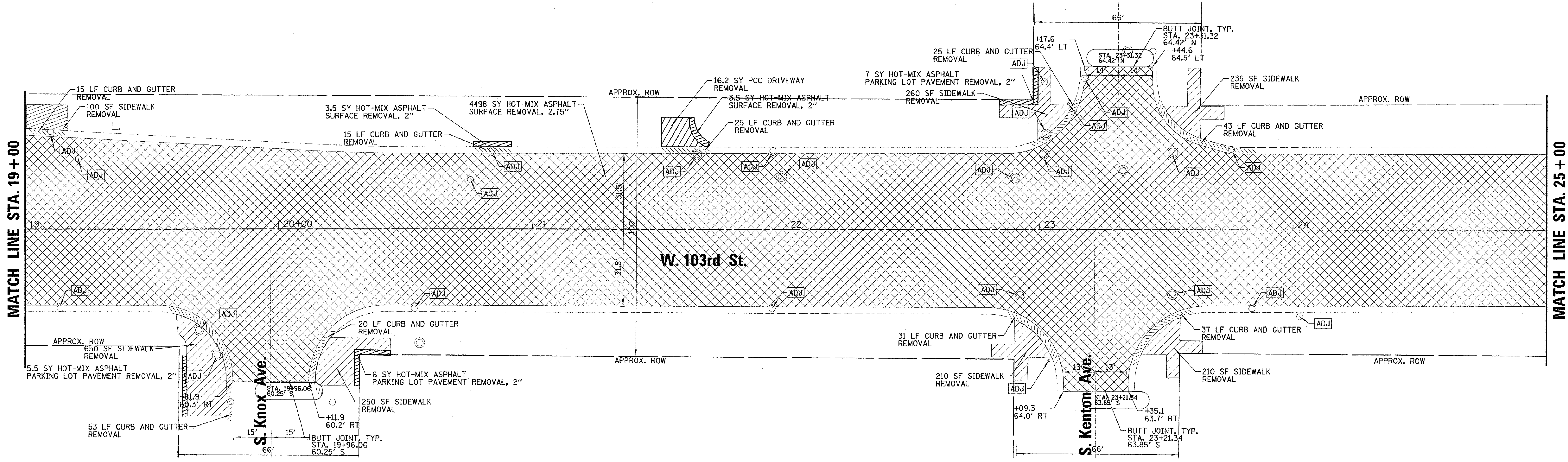




- LEGEND**
- CURB AND GUTTER REMOVAL
  - SIDEWALK REMOVAL
  - HOT-MIX ASPHALT SURFACE REMOVAL, 2.75\"/>
  - HMA DRIVEWAY REMOVAL
  - PCC DRIVEWAY REMOVAL
  - HMA PARKING LOT PAVEMENT REMOVAL, 2\"/>
  - STRUCTURES TO BE ADJUSTED
  - EARTH EXCAVATION

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WEST 103RD STREET EXISTING CONDITIONS AND REMOVAL PLAN</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\OakLawn\160313\Civil\rem_160313-01.sht	PLOT SCALE = 20'	DRAWN - EDT	REVISED -			1574	16-00188-00-RS	COOK	30	5	
PLOT DATE = 10/31/2016	DATE - 09/28/2016	CHECKED - LMF	REVISED -			CONTRACT NO. 61D46					
		DATE - 09/28/2016	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE: 20'	SHEET NO. 5 OF 30 SHEETS	STA.	TO STA.			





**LEGEND**

- CURB AND GUTTER REMOVAL
- SIDEWALK REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
- HMA DRIVEWAY REMOVAL
- PCC DRIVEWAY REMOVAL
- HMA PARKING LOT PAVEMENT REMOVAL, 2"
- STRUCTURES TO BE ADJUSTED
- EARTH EXCAVATION

FILE NAME =  
N:\OakLawn\160313\Civil\rem\_160313-02.sht

USER NAME = jhouseh  
PLOT SCALE = 20'  
PLOT DATE = 10/31/2016

DESIGNED - JEH  
DRAWN - EDT  
CHECKED - LMF  
DATE - 09/28/2016

REVISED -  
REVISED -  
REVISED -  
REVISED -

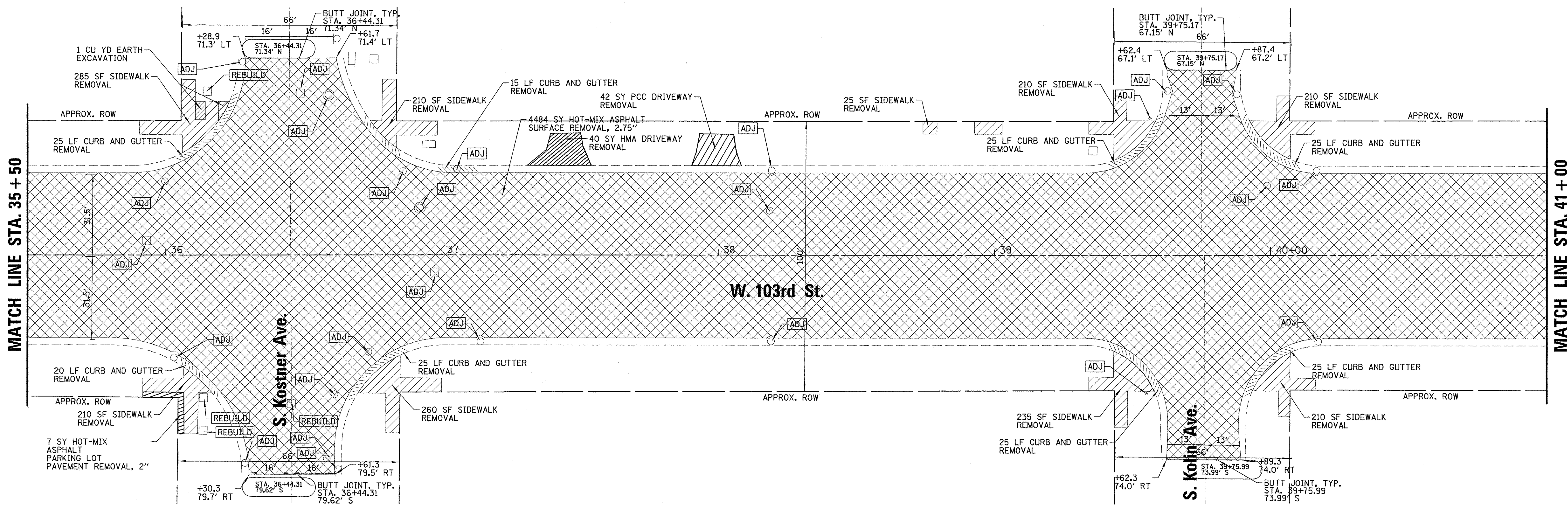
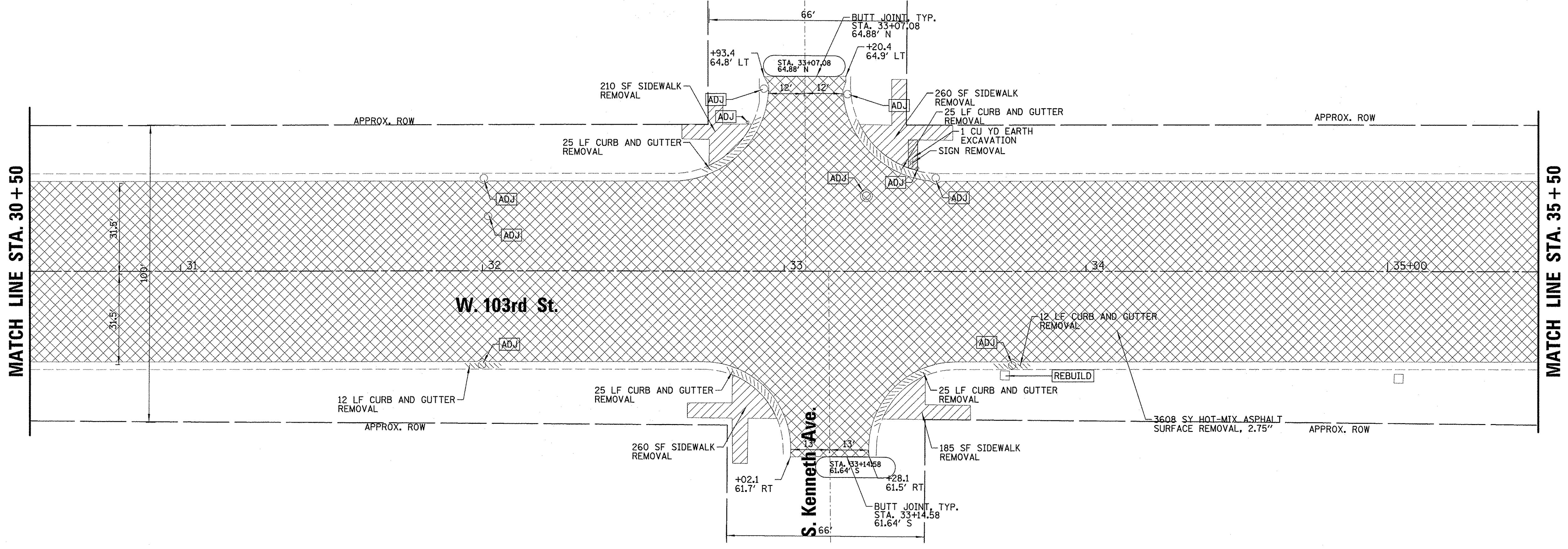
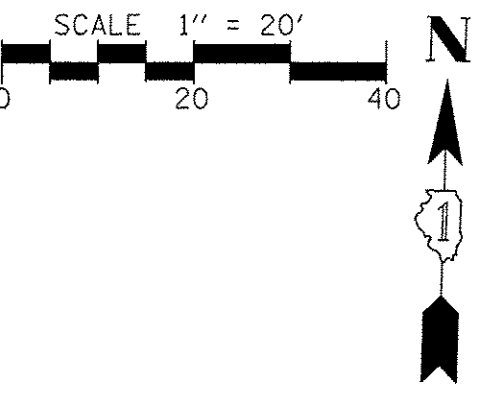
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST 103RD STREET  
EXISTING CONDITIONS AND REMOVAL PLAN**

SCALE: 20' SHEET NO. 6 OF 30 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	6
CONTRACT NO. 61D46				
ILLINOIS FED. AID PROJECT				





**LEGEND**

- CURB AND GUTTER REMOVAL
- SIDEWALK REMOVAL
- HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
- HMA DRIVEWAY REMOVAL
- PCC DRIVEWAY REMOVAL
- HMA PARKING LOT PAVEMENT REMOVAL, 2"
- STRUCTURES TO BE ADJUSTED
- EARTH EXCAVATION

FILE NAME =  
 N:\OakLawn\160313\Civil\rem\_160313-03.sht

USER NAME = jhouseh  
 PLOT SCALE = 20"  
 PLOT DATE = 10/31/2016

DESIGNED - JEH  
 DRAWN - EDT  
 CHECKED - LMF  
 DATE - 09/28/2016

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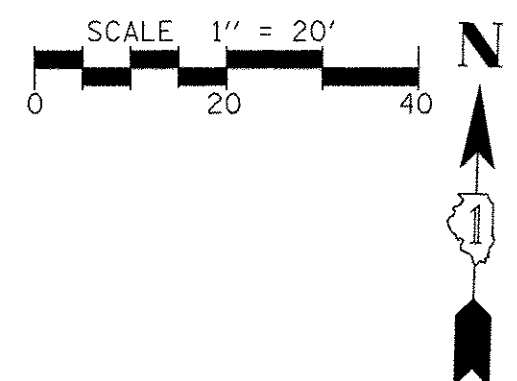
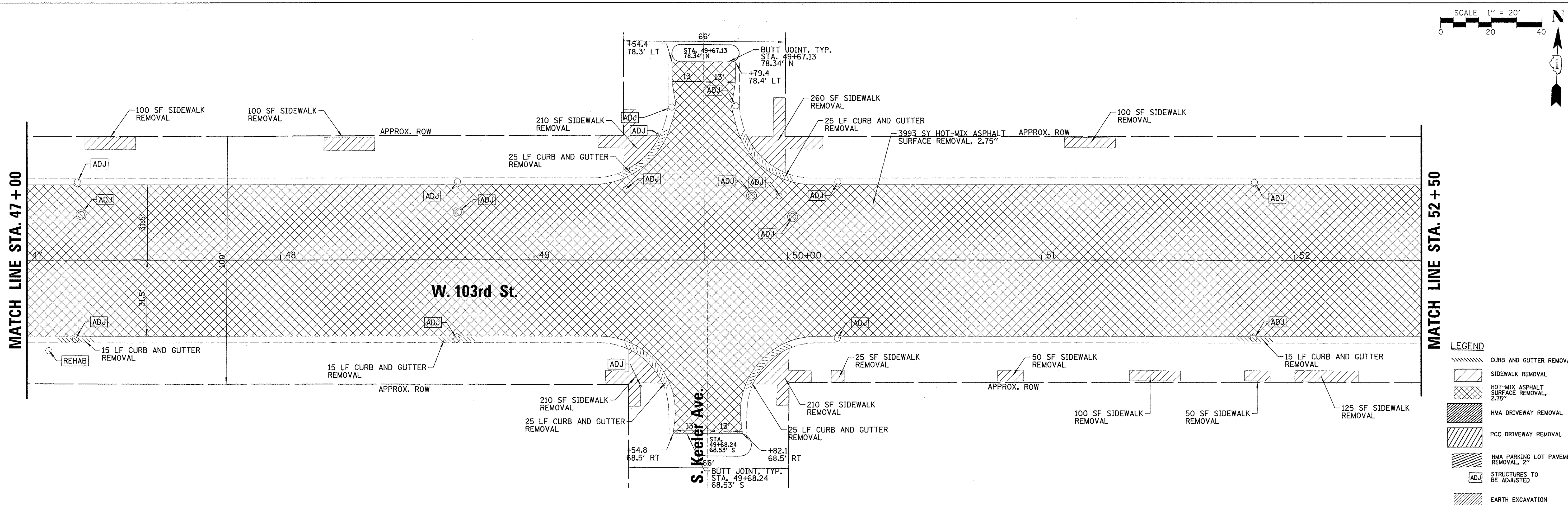
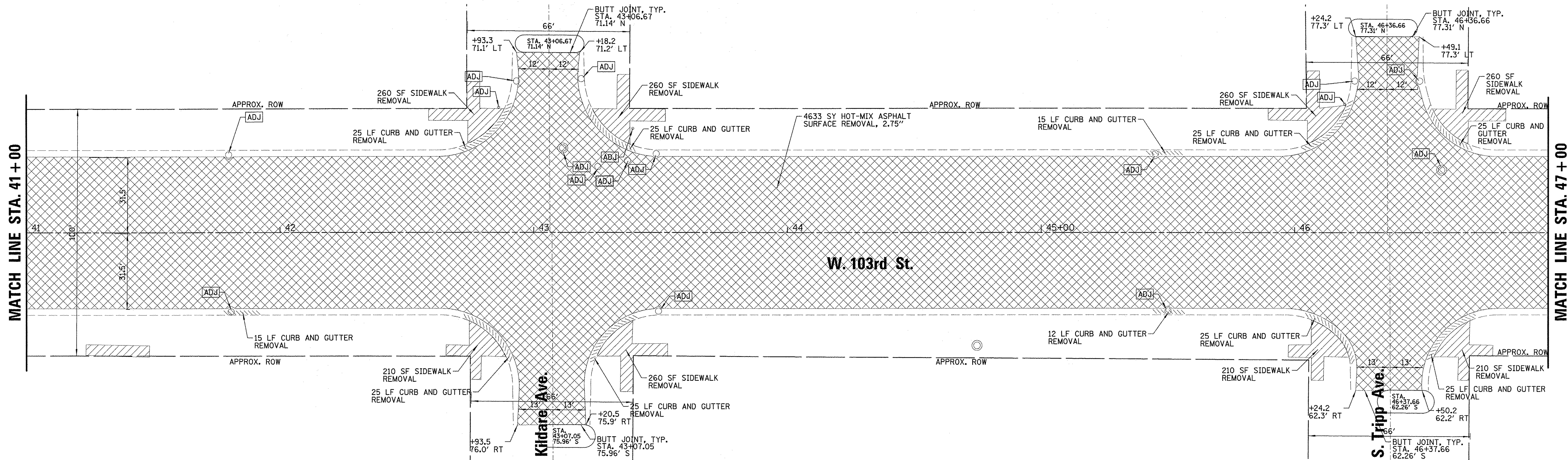
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST 103RD STREET  
 EXISTING CONDITIONS AND REMOVAL PLAN**

SCALE: 20" SHEET NO. 7 OF 30 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	7
CONTRACT NO. 61D46				
ILLINOIS FED. AID PROJECT				





- LEGEND**
- CURB AND GUTTER REMOVAL
  - SIDEWALK REMOVAL
  - HOT-MIX ASPHALT SURFACE REMOVAL, 2.75"
  - HMA DRIVEWAY REMOVAL
  - PCC DRIVEWAY REMOVAL
  - HMA PARKING LOT PAVEMENT REMOVAL, 2"
  - STRUCTURES TO BE ADJUSTED
  - EARTH EXCAVATION

FILE NAME =  
 N:\OakLawn\160313\Civil\rem\_160313-04.sht

USER NAME = jhouseh  
 PLOT SCALE = 28"  
 PLOT DATE = 10/31/2016

DESIGNED - JEJ  
 DRAWN - EDT  
 CHECKED - LMF  
 DATE - 09/28/2016

REVISED -  
 REVISED -  
 REVISED -  
 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST 103RD STREET  
 EXISTING CONDITIONS AND REMOVAL PLAN**

SCALE: 28' SHEET NO. 8 OF 30 SHEETS STA. TO STA.

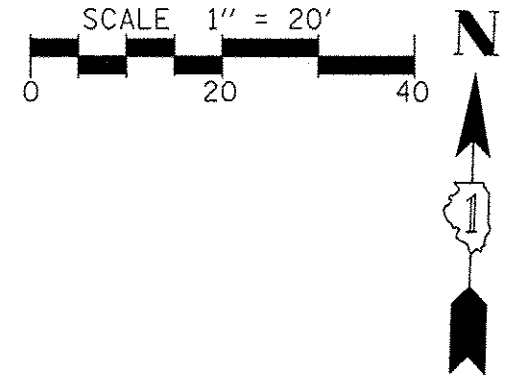
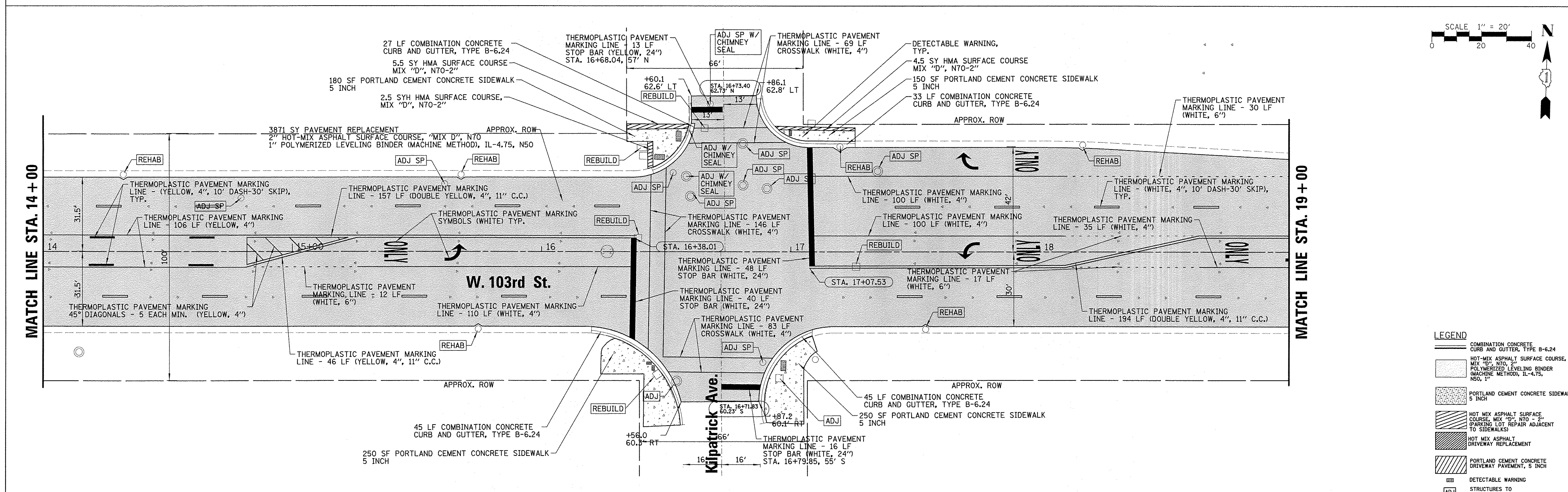
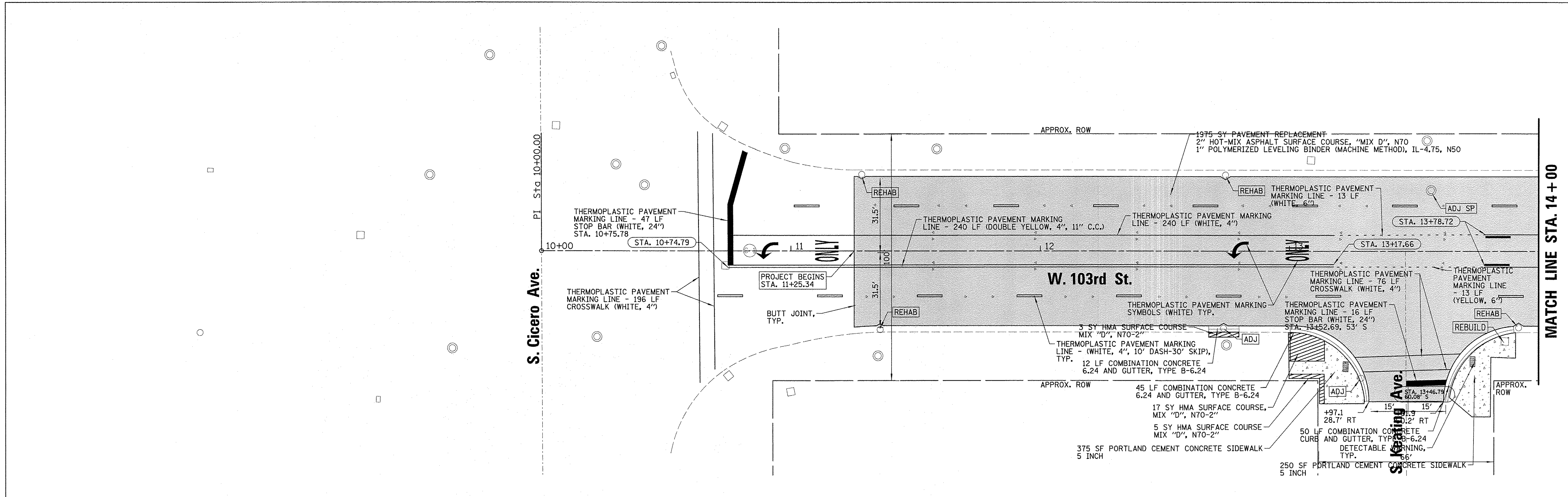
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	8

CONTRACT NO. 61D46  
 ILLINOIS FED. AID PROJECT









FILE NAME =  
N:\OakLawn\160313\Civil\pro\_160313-01.sht

USER NAME = jhouseh  
PLOT SCALE = 20'  
PLOT DATE = 10/31/2016

DESIGNED - JEH  
DRAWN - EDT  
CHECKED - LMF  
DATE - 09/28/2016

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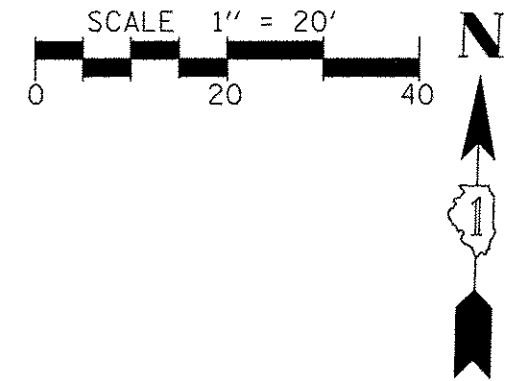
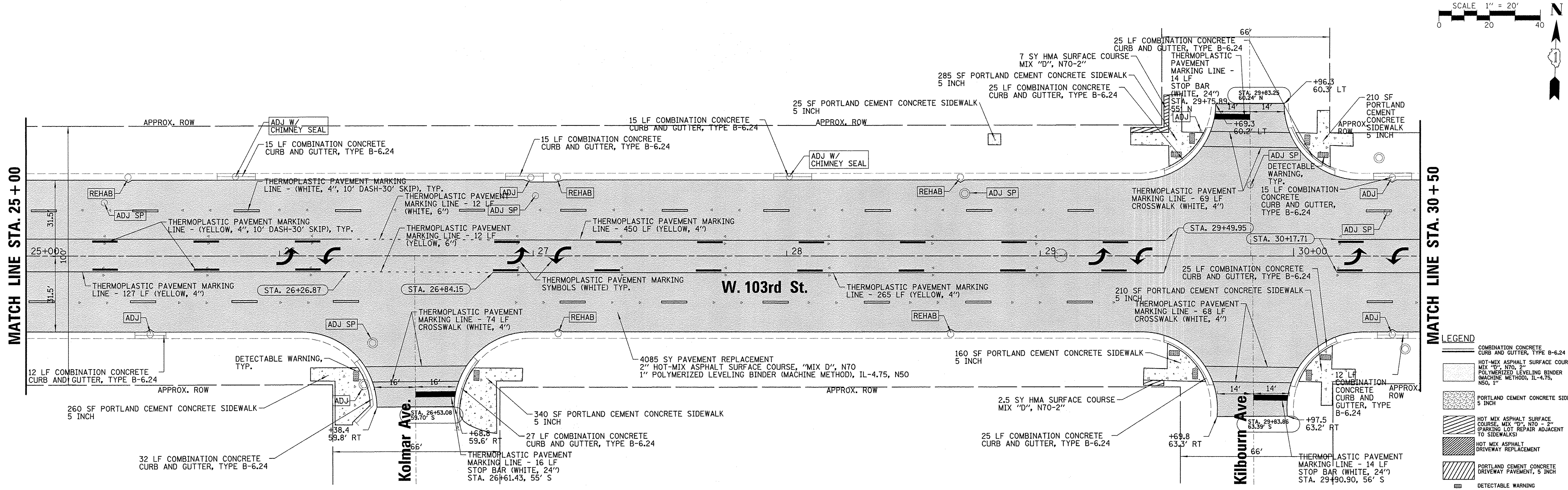
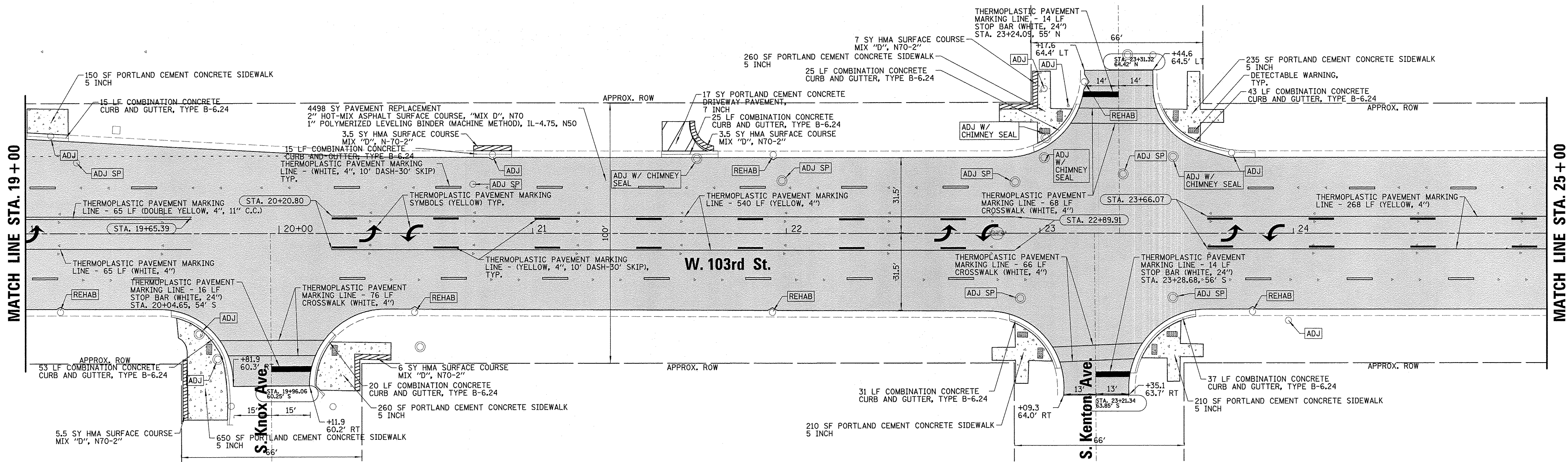
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST 103RD STREET  
PROPOSED PLAN**

SCALE: 20' SHEET NO. 10 OF 30 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	10
CONTRACT NO. 61D46				
ILLINOIS FED. AID PROJECT				





**LEGEND**

- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70-2"
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70-2" (PARKING LOT REPAIR ADJACENT TO SIDEWALKS)
- HOT-MIX ASPHALT DRIVEWAY REPLACEMENT
- PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 5 INCH
- DETECTABLE WARNING
- STRUCTURES TO BE ADJUSTED

FILE NAME =  
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USER NAME = jhouseh  
 PLOT SCALE = 20'  
 PLOT DATE = 10/31/2016

DESIGNED - JEH  
 DRAWN - EDT  
 CHECKED - LMF  
 DATE - 09/28/2016

REVISED -  
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 REVISED -

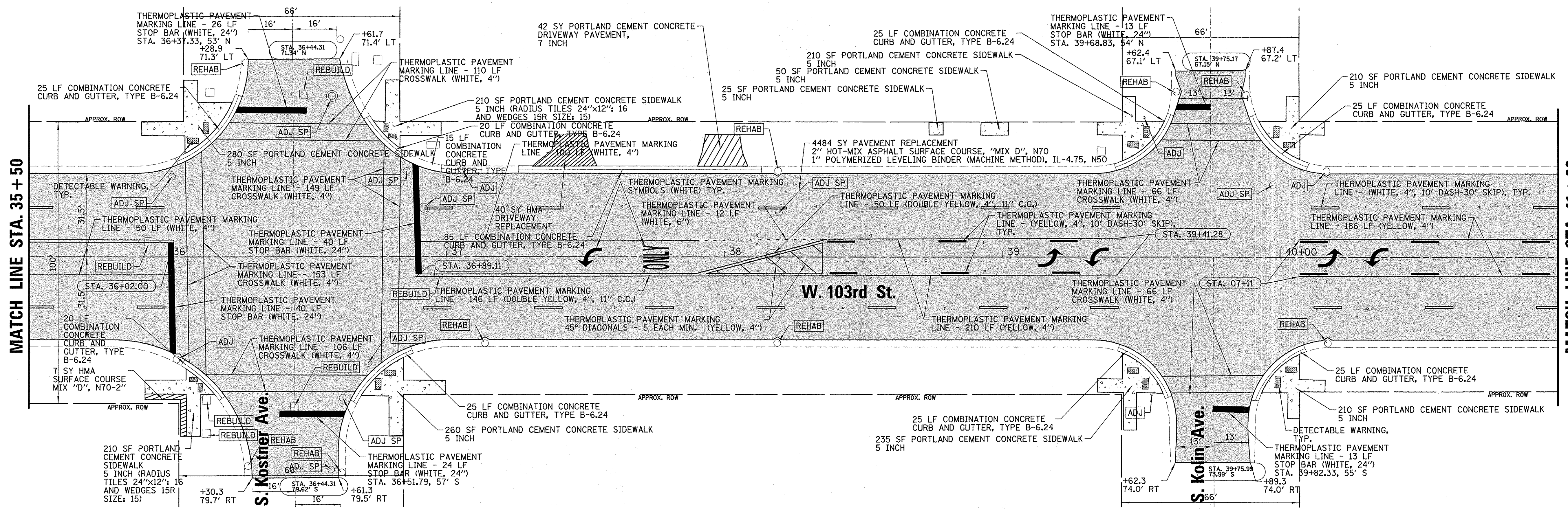
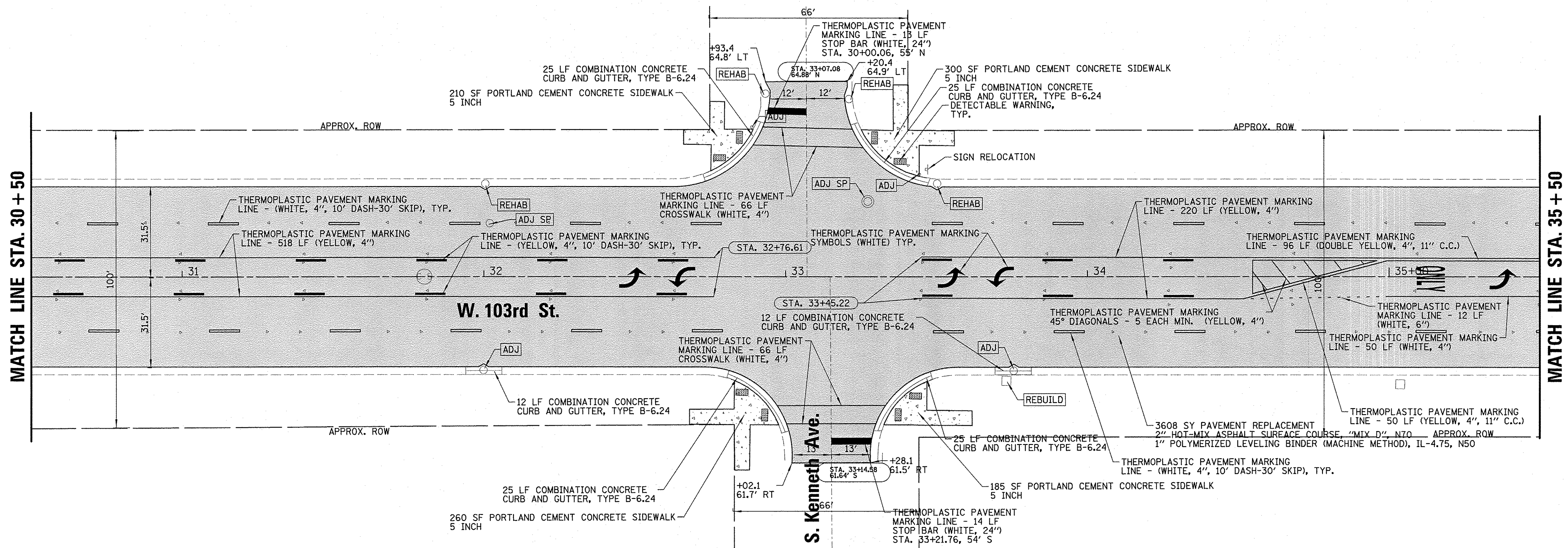
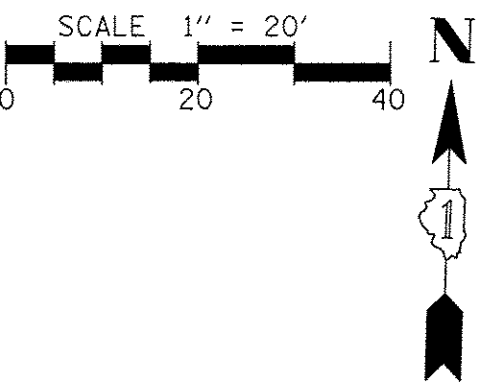
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**WEST 103RD STREET  
 PROPOSED PLAN**

SCALE: 20' SHEET NO. 11 OF 30 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	11
CONTRACT NO. 61D46				
ILLINOIS FED. AID PROJECT				





**LEGEND**

- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2" (PARKING LOT REPAIR ADJACENT TO SIDEWALKS)
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 - 2" (PARKING LOT REPAIR ADJACENT TO SIDEWALKS)
- HOT-MIX ASPHALT DRIVEWAY REPLACEMENT
- PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 5 INCH
- DETECTABLE WARNING
- STRUCTURES TO BE ADJUSTED

FILE NAME =	USER NAME = jhouseh	DESIGNED = JEJ	REVISED =
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	PLOT SCALE = 20'	CHECKED = LMF	REVISED =
	PLOT DATE = 10/31/2016	DATE = 09/28/2016	REVISED =

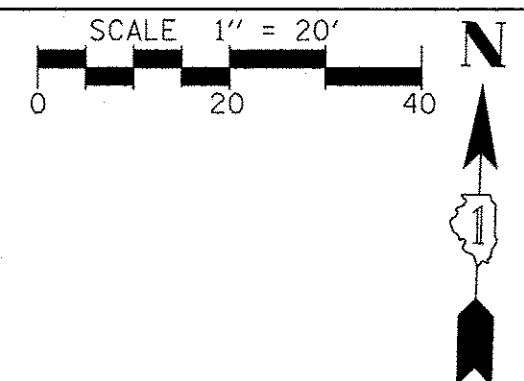
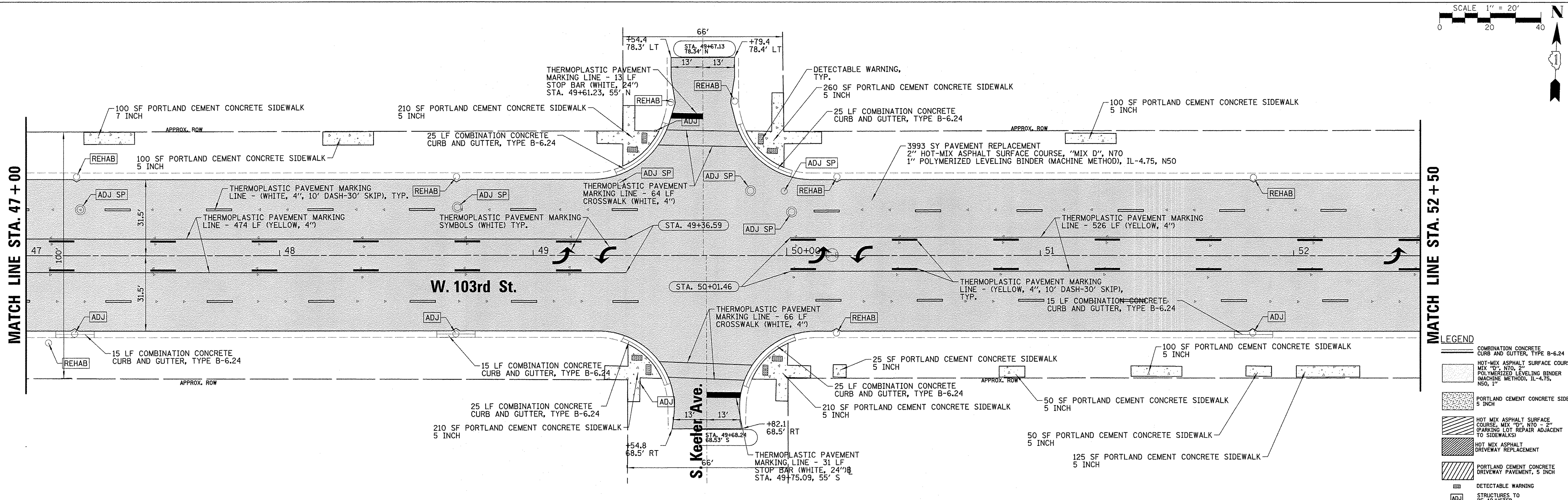
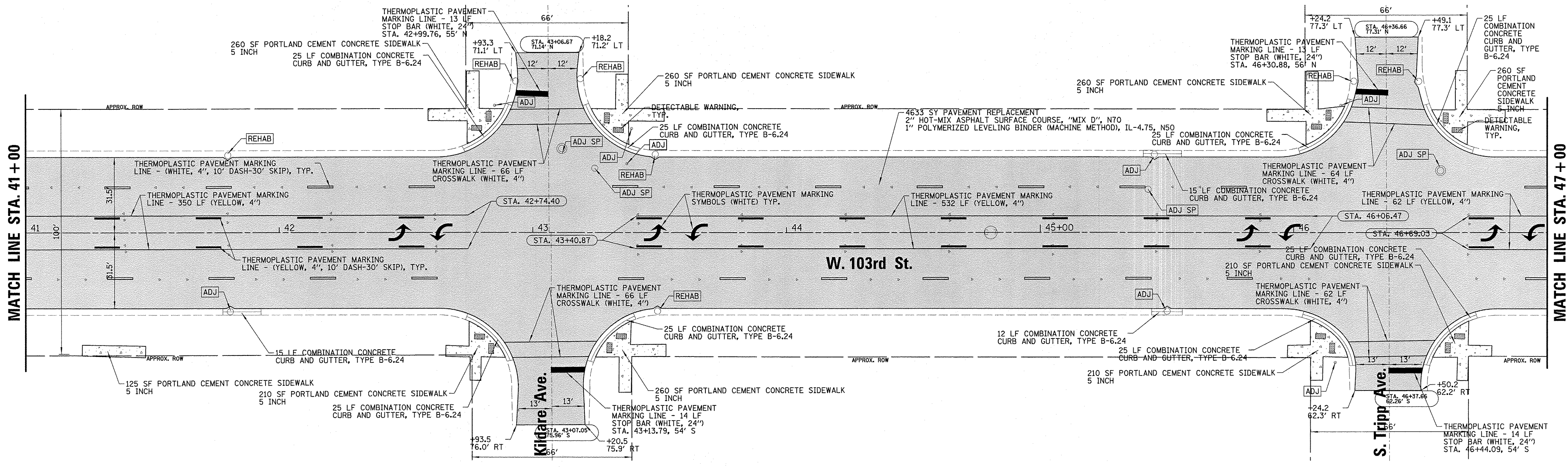
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST 103RD STREET  
PROPOSED PLAN**

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	12
CONTRACT NO. 61D46				
ILLINOIS FED. AID PROJECT				

SCALE: 20' SHEET NO. 12 OF 30 SHEETS STA. TO STA.



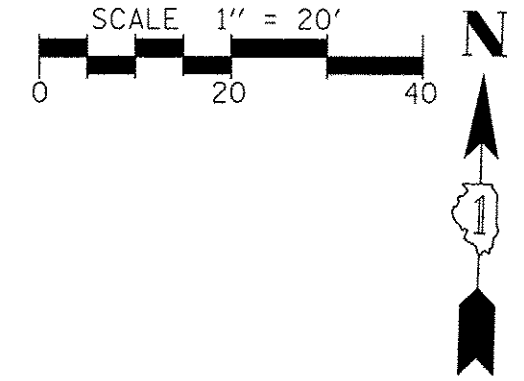
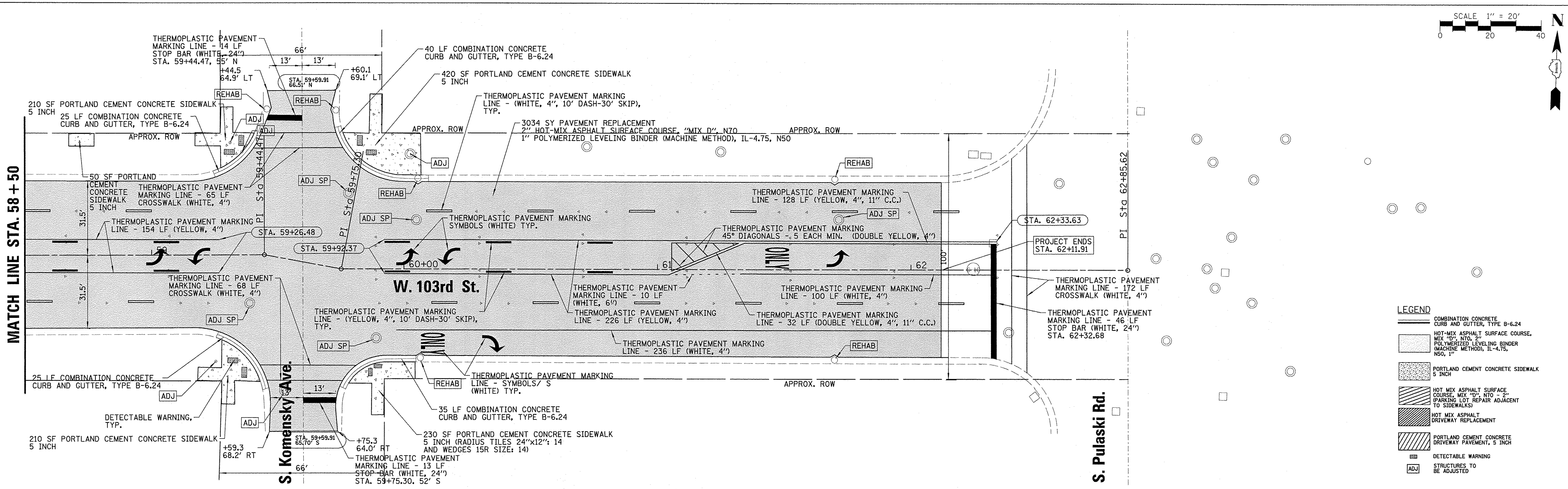
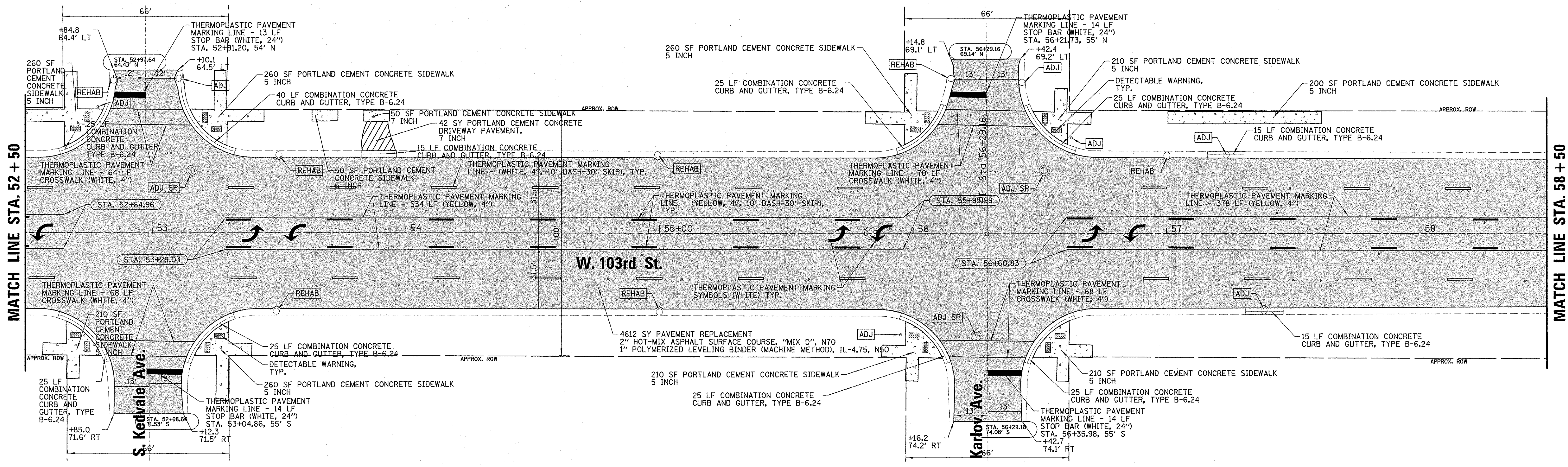


**LEGEND**

- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 - 2"
- POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"
- PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
- HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70 - 2" (PARKING LOT REPAIR ADJACENT TO SIDEWALKS)
- HOT-MIX ASPHALT DRIVEWAY REPLACEMENT
- PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 5 INCH
- DETECTABLE WARNING
- STRUCTURES TO BE ADJUSTED

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEJ	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WEST 103RD STREET PROPOSED PLAN</b>	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
N:\OakL\own\160313\Civil\pro-160313-04.sht	PLOT SCALE = 20'	DRAWN - EDT	REVISED -			1574	16-00188-00-RS	COOK	30	13	
PLOT DATE = 10/31/2016	DATE = 09/28/2016	CHECKED - LMF	REVISED -			CONTRACT NO. 61D46					
						ILLINOIS FED. AID PROJECT					





- LEGEND**
- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
  - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
  - POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50, 1"
  - PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH
  - HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2" (PARKING LOT REPAIR ADJACENT TO SIDEWALKS)
  - HOT-MIX ASPHALT DRIVEWAY REPLACEMENT
  - PORTLAND CEMENT CONCRETE DRIVEWAY REPLACEMENT, 5 INCH
  - DETECTABLE WARNING
  - STRUCTURES TO BE ADJUSTED

FILE NAME =  
N:\DokLawn\160313\Civil\p160313-05.shd

USER NAME = jhouseh  
PLOT SCALE = 20'  
PLOT DATE = 10/31/2016

DESIGNED - JEH  
DRAWN - EDT  
CHECKED - LMF  
DATE - 09/28/2016

REVISED -  
REVISED -  
REVISED -  
REVISED -

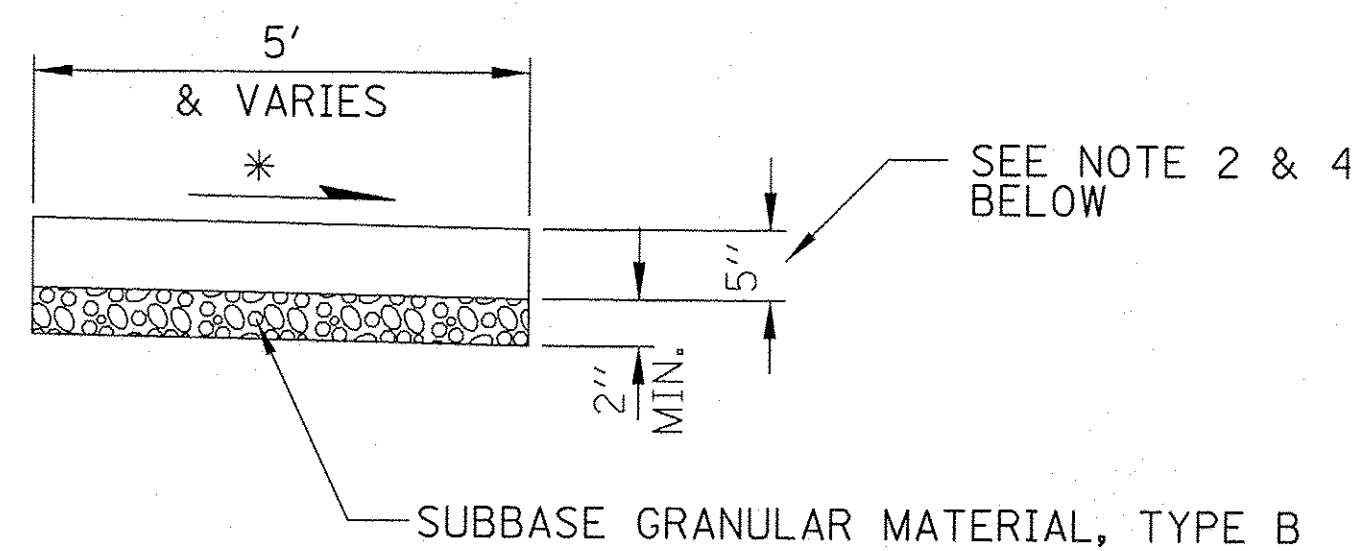
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**WEST 103RD STREET  
PROPOSED PLAN**

SCALE: 20' SHEET NO. 14 OF 30 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	14
CONTRACT NO. 61D46			ILLINOIS FED. AID PROJECT	

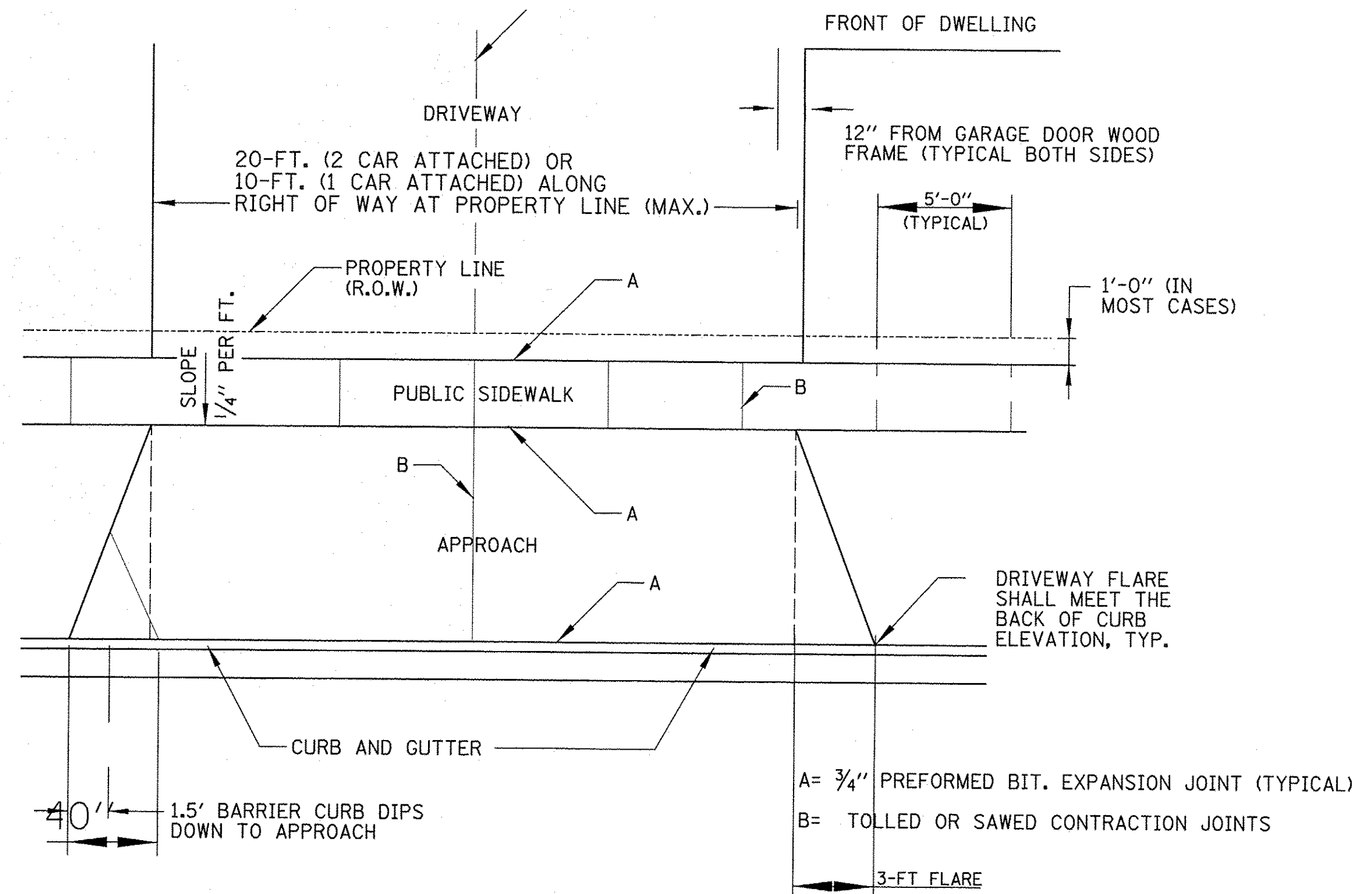




\* CROSS SLOPE 2% OR AS SHOWN ON CROSS SECTIONS

1. ALL REQUIRED EARTH EXCAVATION AND SUB BASE GRANULAR MATERIAL TYPE "B" TO CONSTRUCT P.C.C. SIDEWALK SHALL BE INCLUDED IN THE COST OF P.C.C. SIDEWALK 5 INCH, REMOVE AND REPLACE
2. WHEN FORMS ARE REMOVED FROM THE SIDEWALK EITHER THE SIDEWALK SHALL BE BARRICADED OR BACKFIELD WITHIN 24 HOURS.
3. SEEDING AND TOPSOIL, 4" (100) RESTORATION WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF SIDEWALK REMOVAL AND REPLACEMENT.
4. PUBLIC SIDEWALK SHALL BE 6" AT RESIDENTIAL DRIVEWAYS AND 8" AT COMMERCIAL/INDUSTRIAL DRIVEWAYS.

**P.C.C. SIDEWALK DETAIL**



**DRIVEWAY WITH A CURB AND GUTTER**

**GENERAL NOTES:**

1. DRIVEWAY SHALL HAVE A MIN. SLOPE OF 2% AND MAX. SLOPE OF 6%.
2. APPROACH SHALL HAVE A MIN. SLOPE OF 2% AND MAX. OF 6%.
3. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED. (95% PROCTOR)
4. PUBLIC SIDEWALK SHALL BE 6" AT RESIDENTIAL DRIVEWAYS AND 8" AT COMMERCIAL/INDUSTRIAL DRIVEWAYS. (NO WIRE MESH)
5. MINIMUM THICKNESS FOR APPROACH. (NO WIRE MESH). THIS WILL BE PAID FOR BY THE FOLLOWING ITEMS:
  - A. 7" THK. P.C. CONCRETE ON 2" AGGREGATE BASE COURSE TYPE B OR
  - B. 3" THK. HOT-MIX ASPHALT SURFACE, MIX "D" N50 ON 6" AGGREGATE BASE COURSE TYPE B
6. SEEDING AND TOPSOIL, 4" (100) RESTORATION WILL BE PAID FOR SEPARATELY AS THEIR RESPECTIVE PAY ITEMS.

FILE NAME = N:\DakLaw\160313\Civil\det\_160313-01.sht

USER NAME = jhouseh  
 PLOT SCALE = 5'  
 PLOT DATE = 10/31/2016

DESIGNED - JEH	REVISED -
DRAWN - EDT	REVISED -
CHECKED - LMF	REVISED -
DATE - 09/28/2016	REVISED -

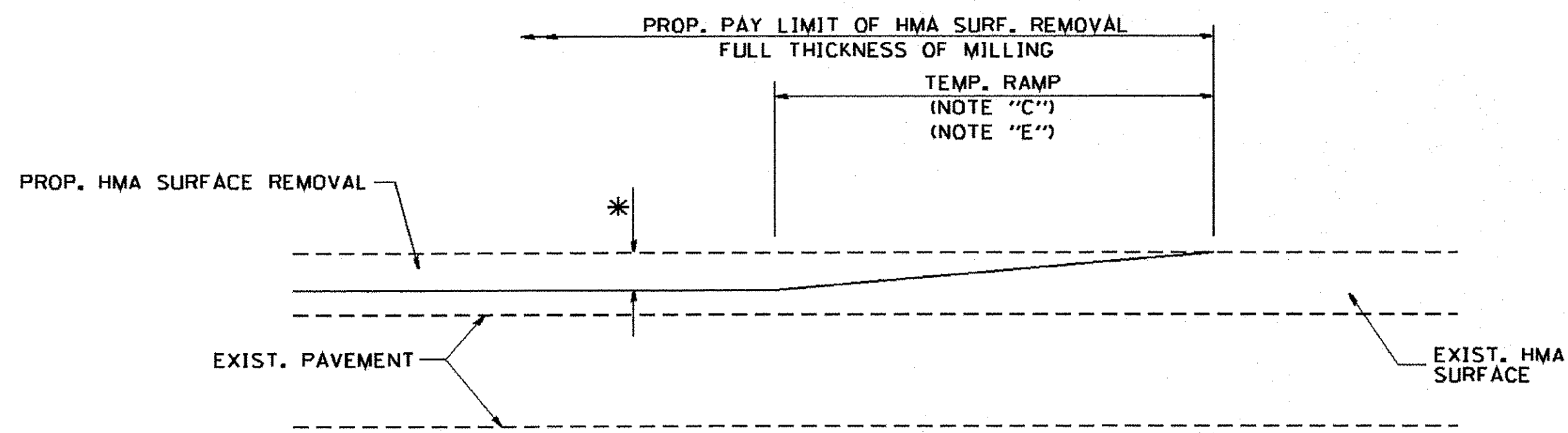
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

WEST 103RD STREET  
 CONSTRUCTION DETAILS

SCALE: 5' SHEET NO. 15 OF 30 SHEETS STA. TO STA.

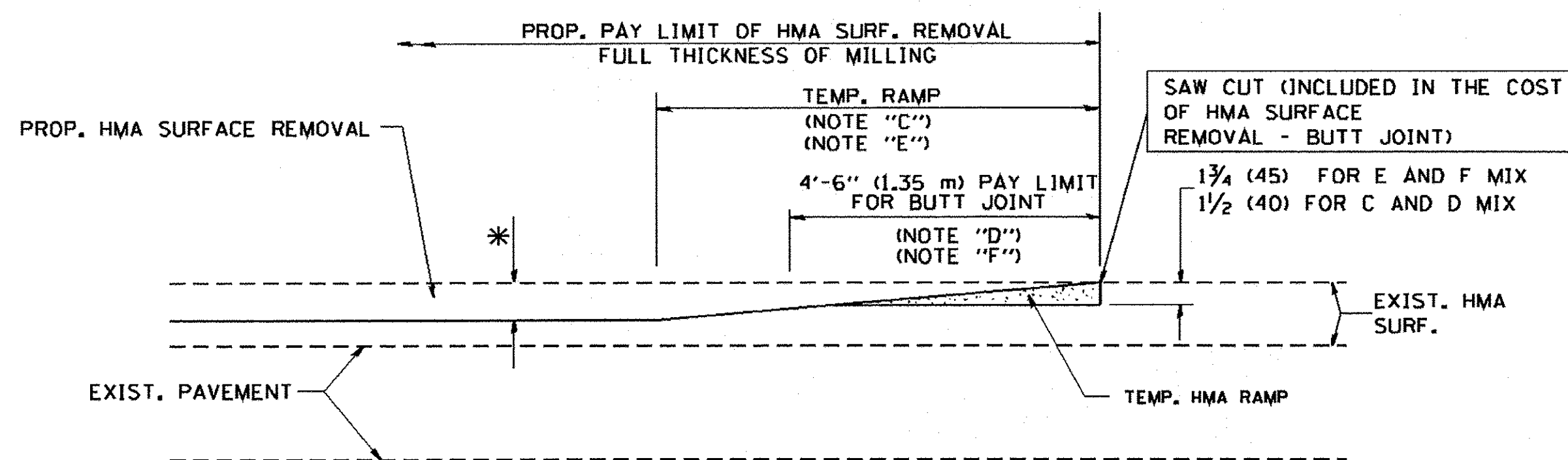
F.A.U. RTE. 1574	SECTION 16-00188-00-RS	COUNTY COOK	TOTAL SHEETS 30	SHEET NO. 15
CONTRACT NO. 61D46				ILLINOIS FED. AID PROJECT





MILLED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

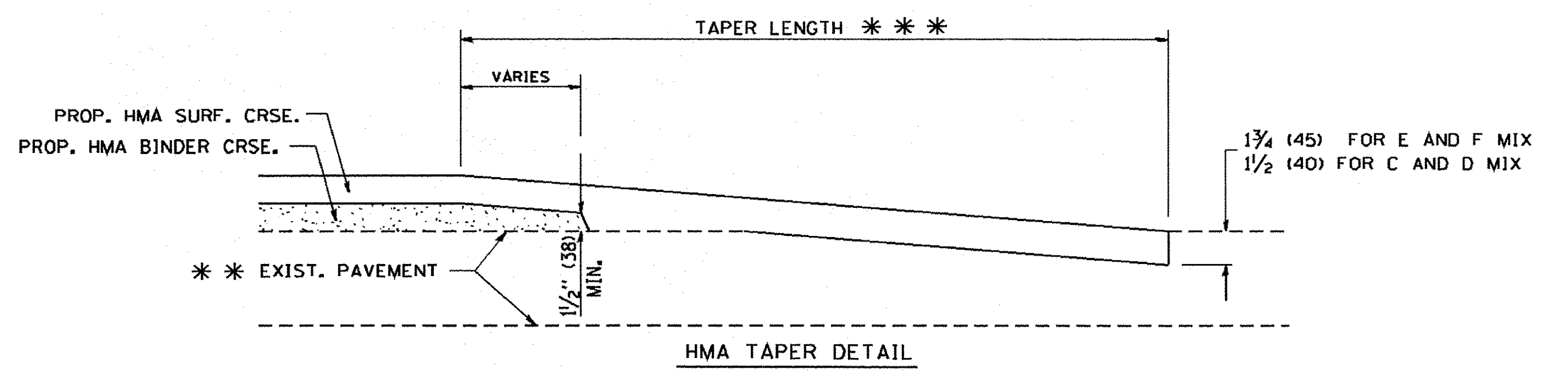
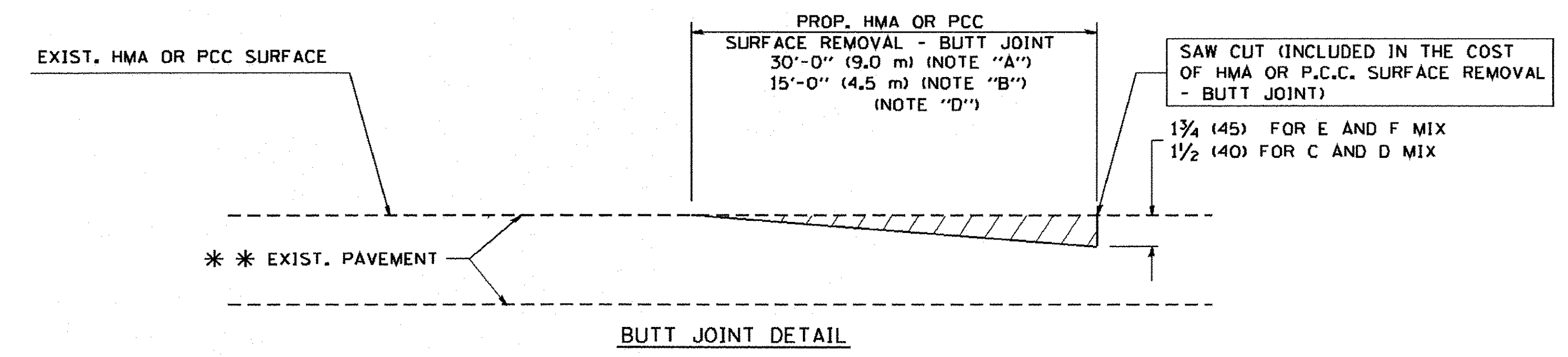
OPTION 1



HMA CONSTRUCTED TEMPORARY RAMP  
(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 2

TYPICAL TEMPORARY RAMP



TYPICAL BUTT JOINT AND HMA TAPER  
FOR RESURFACING ONLY

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

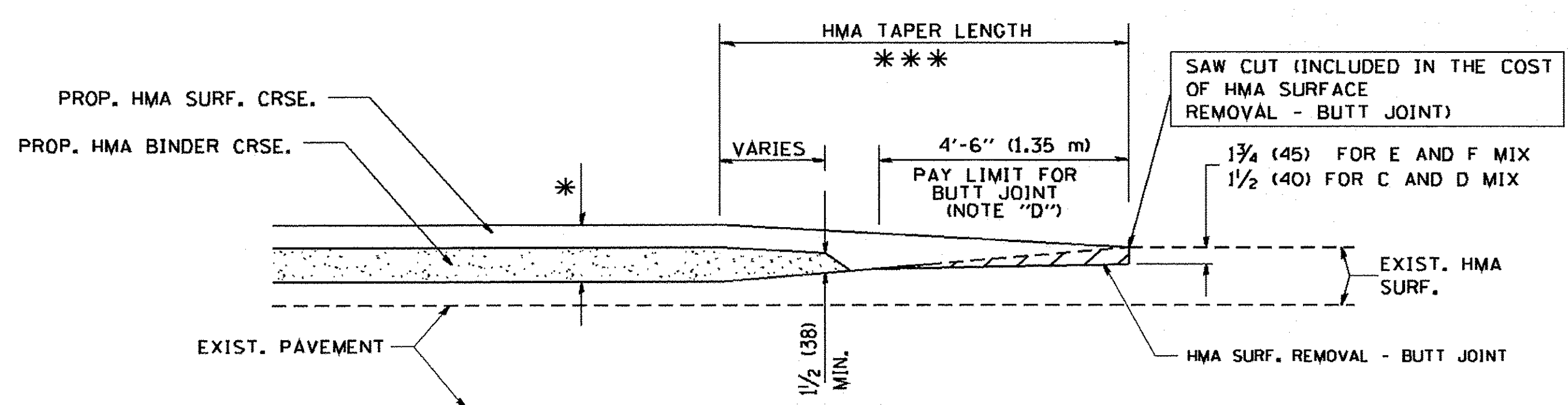
NOTES

- 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.

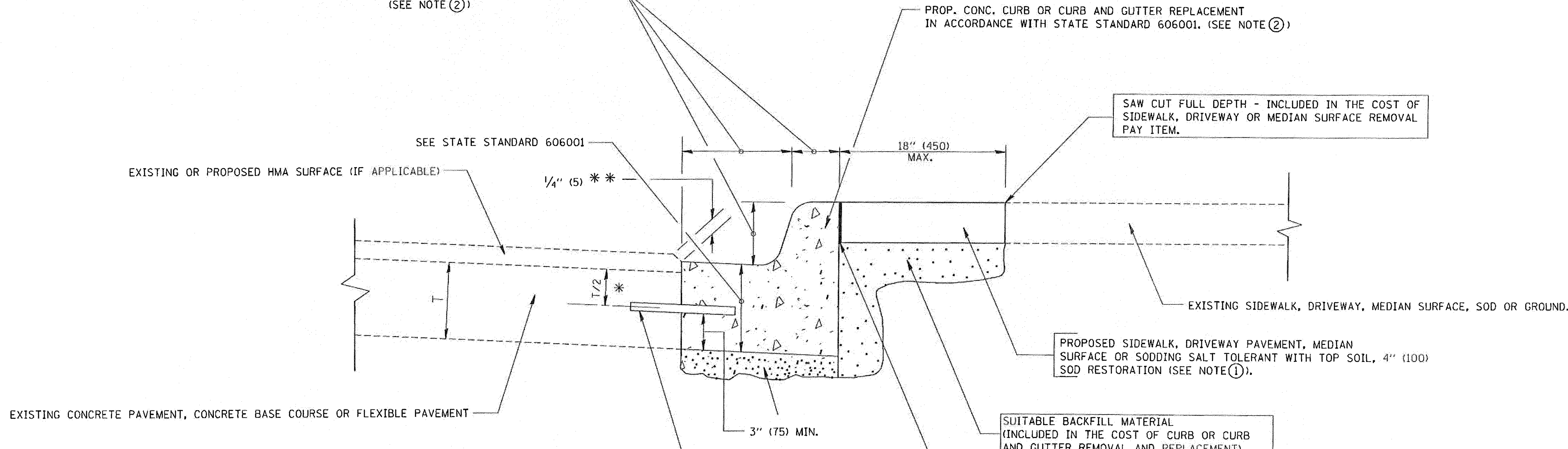


TYPICAL BUTT JOINT AND HMA TAPER  
FOR MILLING AND RESURFACING

FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gegljanabt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT AND HMA TAPER DETAILS			F.A. RTE. 1574	SECTION 16-00188-00-RS	COUNTY COOK	TOTAL SHEETS 30	SHEET NO. 16
	PLOT SCALE = 50.0000 / IN.	CHECKED -	REVISED - A. ABBAS 03-21-97					BD400-05 BD32	CONTRACT NO. 61D46			
PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - M. GOMEZ 04-06-01	REVISED - R. BORO 01-01-07	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



VARIABLE - TO MEET EXISTING DIMENSIONS AND FIELD CONDITIONS (SEE NOTE ②)



\* 3" (75) MINIMUM FROM TOP AND BOTTOM OF THE CONCRETE PAVEMENT OR BASE COURSE.

\*\* IF THE FINAL SURFACE OF THE PAVEMENT IS CONCRETE, THE GUTTER IS TO BE FLUSH WITH THE PAVEMENT.

NOTE: ① SIDEWALK, DRIVEWAY PAVEMENT OR MEDIAN SURFACE SHALL BE SIMILAR TO THE MATERIAL BEING REMOVED AND WILL BE PAID FOR SEPARATELY.  
SODDING, SALT TOLERANT AND TOP SOIL, FURNISH AND PLACE 4" WILL BE PAID FOR SEPARATELY.

② FERTILIZER FOR THE PLACEMENT OF THE SOD IS NOT REQUIRED

③ CURB OR CURB AND GUTTER REPLACEMENT SHALL MATCH THE SHAPE OF THE EXISTING CURB OR CURB AND GUTTER UNLESS OTHERWISE SPECIFIED.

④ FOR CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT ADJACENT TO FLEXIBLE PAVEMENT DELETE EPOXY COATED TIE BARS.

⑤ LONGITUDINAL BARS, IF ENCOUNTERED IN THE EXISTING CURB OR CURB AND GUTTER, ARE NOT TO BE REPLACED. CUTTING AND REMOVING LONGITUDINAL BARS SHALL BE INCLUDED IN THE COST OF CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑥ THE COST OF HMA SURFACE REMOVAL IN THE EXISTING GUTTER FLAG SHALL BE INCLUDED IN THE COST OF THE CURB AND GUTTER REMOVAL AND REPLACEMENT.

⑦ THE REMOVAL AND REPLACEMENT OF THE EXISTING CURB OR CURB AND GUTTER SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 440 AND 606 OF THE STANDARD SPECIFICATIONS.

⑧ THE LOCATIONS OF REMOVAL AND REPLACEMENT OF EXISTING CURB OR CURB AND GUTTER SHALL BE DETERMINED BY THE RESIDENT ENGINEER AT THE TIME OF CONSTRUCTION.

**BASIS OF PAYMENT:**

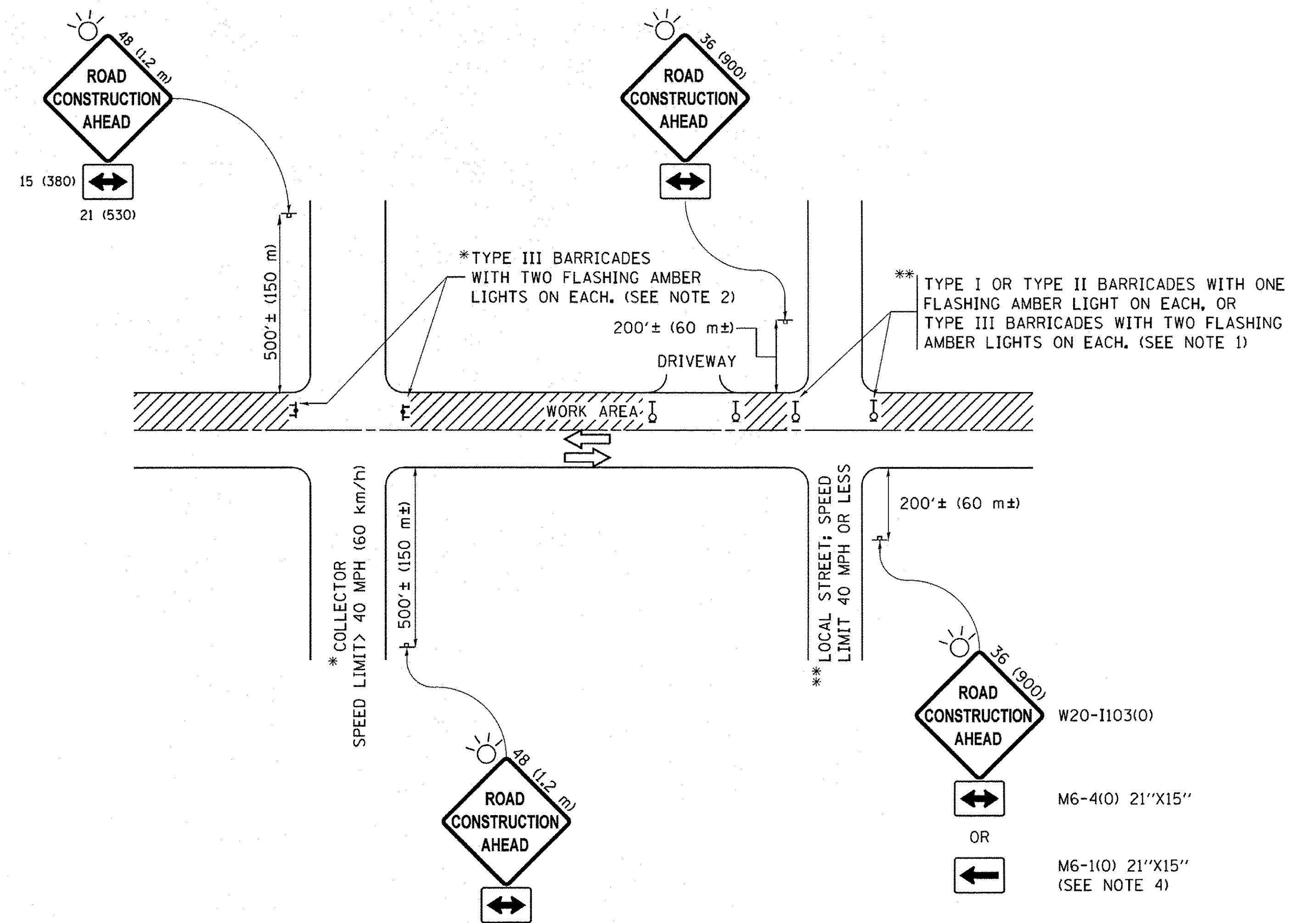
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER FOOT (METER) FOR "CURB REMOVAL AND REPLACEMENT" OR "COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT".

# CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

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

FILE NAME =	USER NAME = drivakosgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT</b>	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
o:\pwwork\pwwork\drivakosgn\10180315\1024.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	1574			16-00188-00-RS	COOK	30	17	
PLOT SCALE = 50.0000' / IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	<b>BD600-06 (BD-24)</b>			CONTRACT NO. 61D46				
PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BDRO 12-15-09	SCALE: NONE			SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	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 = foatemj	DESIGNED - L.H.A.	REVISED - A. HOUSE 10-15-96
pwr\IL084EBIDINTE6\illinois.govr\PIDOT\Documents\IDOT Offices\District 1\Projects\Dist	DRAWN\CADData\CADsheets\c10.dgn	CHECKED -	REVISED - T. RAMMACHER 01-06-00
Default	PLOT SCALE = 50.000' / in.	DATE - 06-89	REVISED - A. SCHUETZE 07-01-13
	PLOT DATE = 9/15/2016		REVISED - A. SCHUETZE 09-15-16

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

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

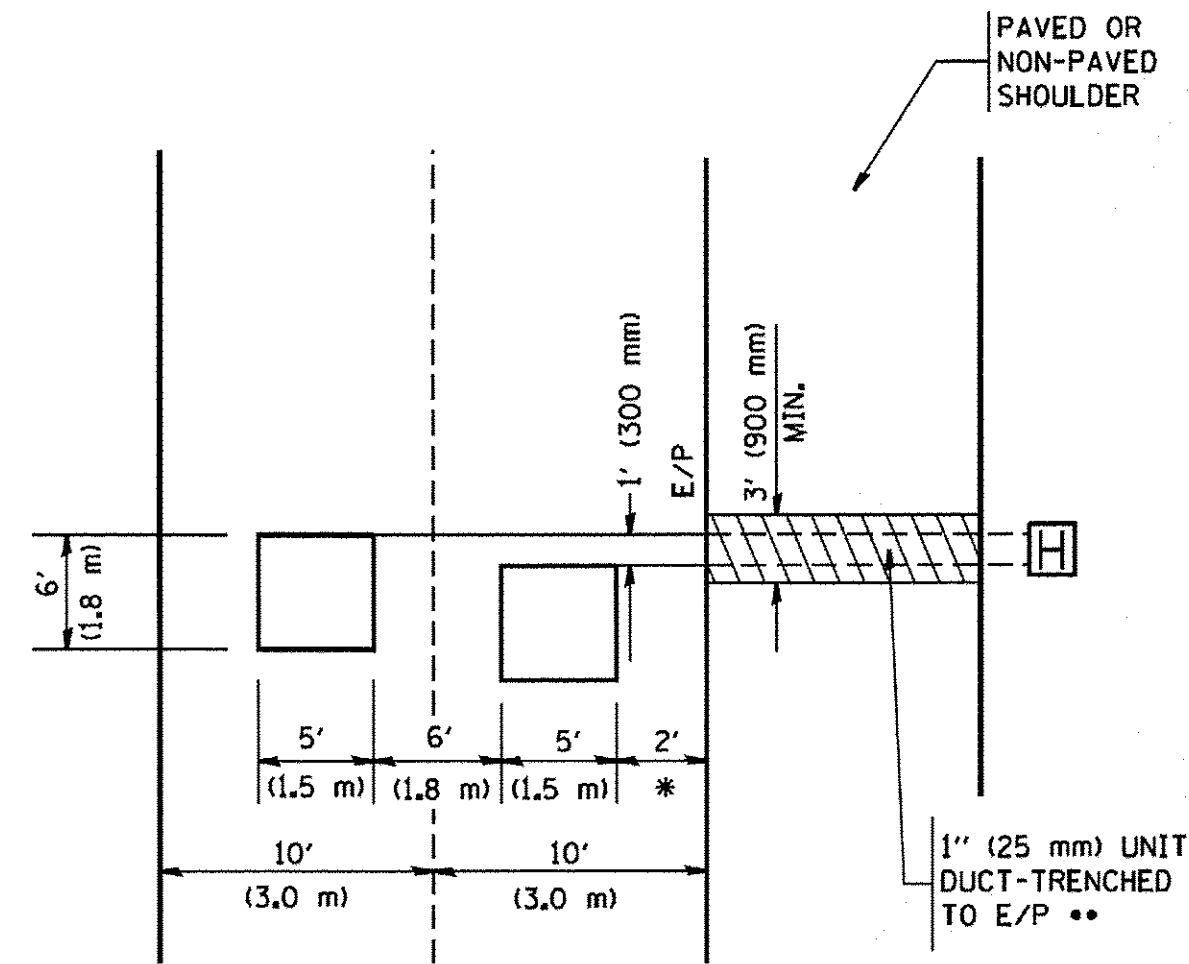
SCALE: NONE SHEET 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	18
TC-10			CONTRACT NO. 61D46	
ILLINOIS FED. AID PROJECT				



**LOOPS NEXT TO SHOULDERS**

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



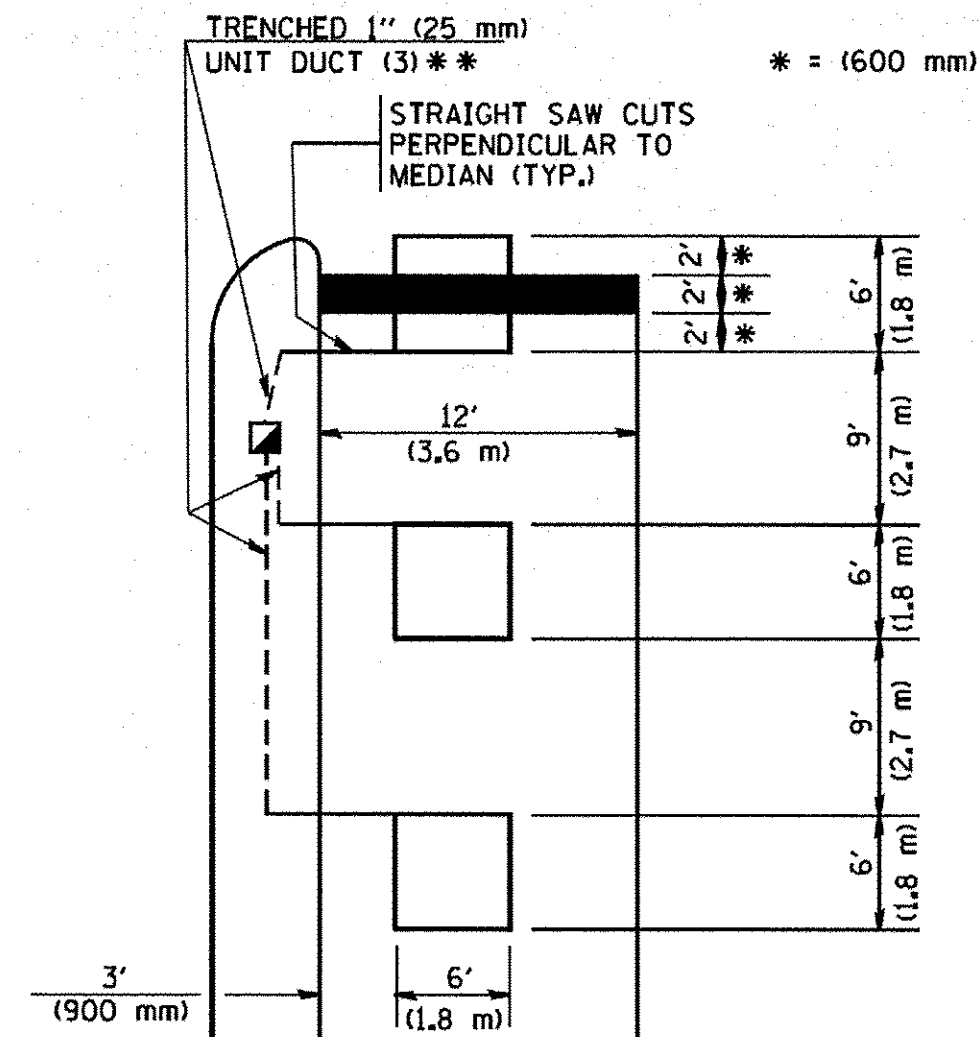
\* = (600 mm)

\*\* 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.

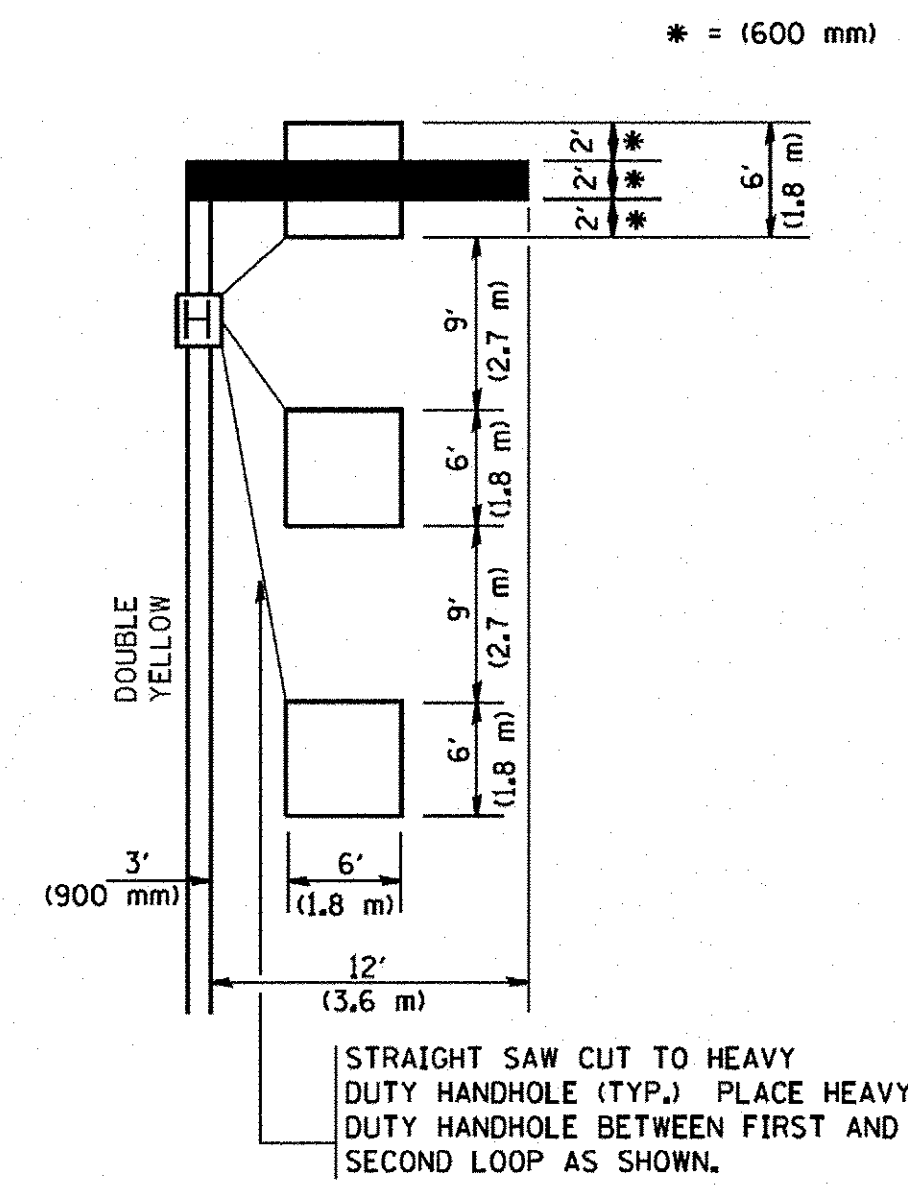


\*\* UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

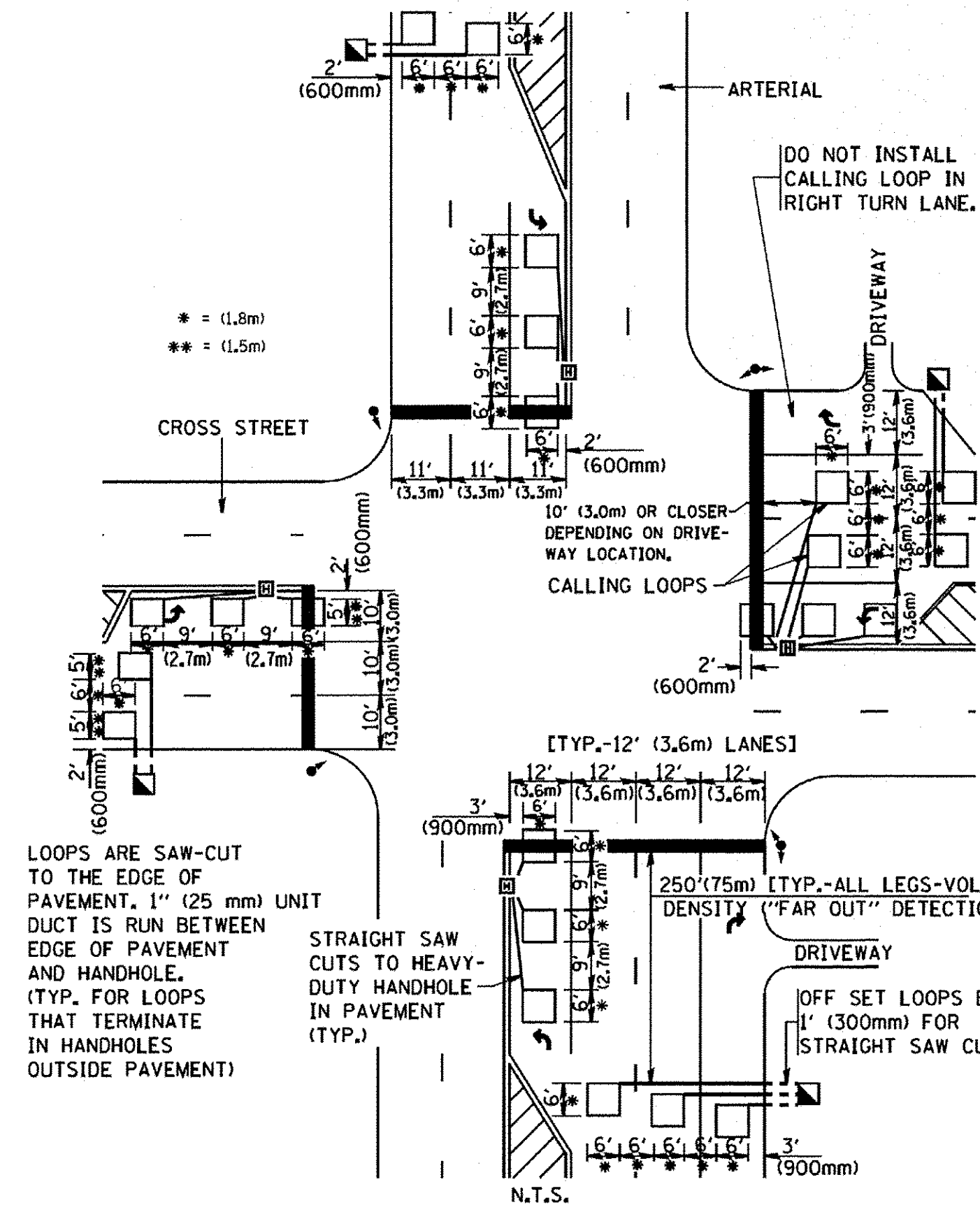
**LEFT TURN LANES WITHOUT MEDIANS  
VOLUME DENSITY ("FAR OUT" DETECTION)  
ON SAME APPROACH**

(PROTECTED / PERMITTED LEFT TURN PHASING)



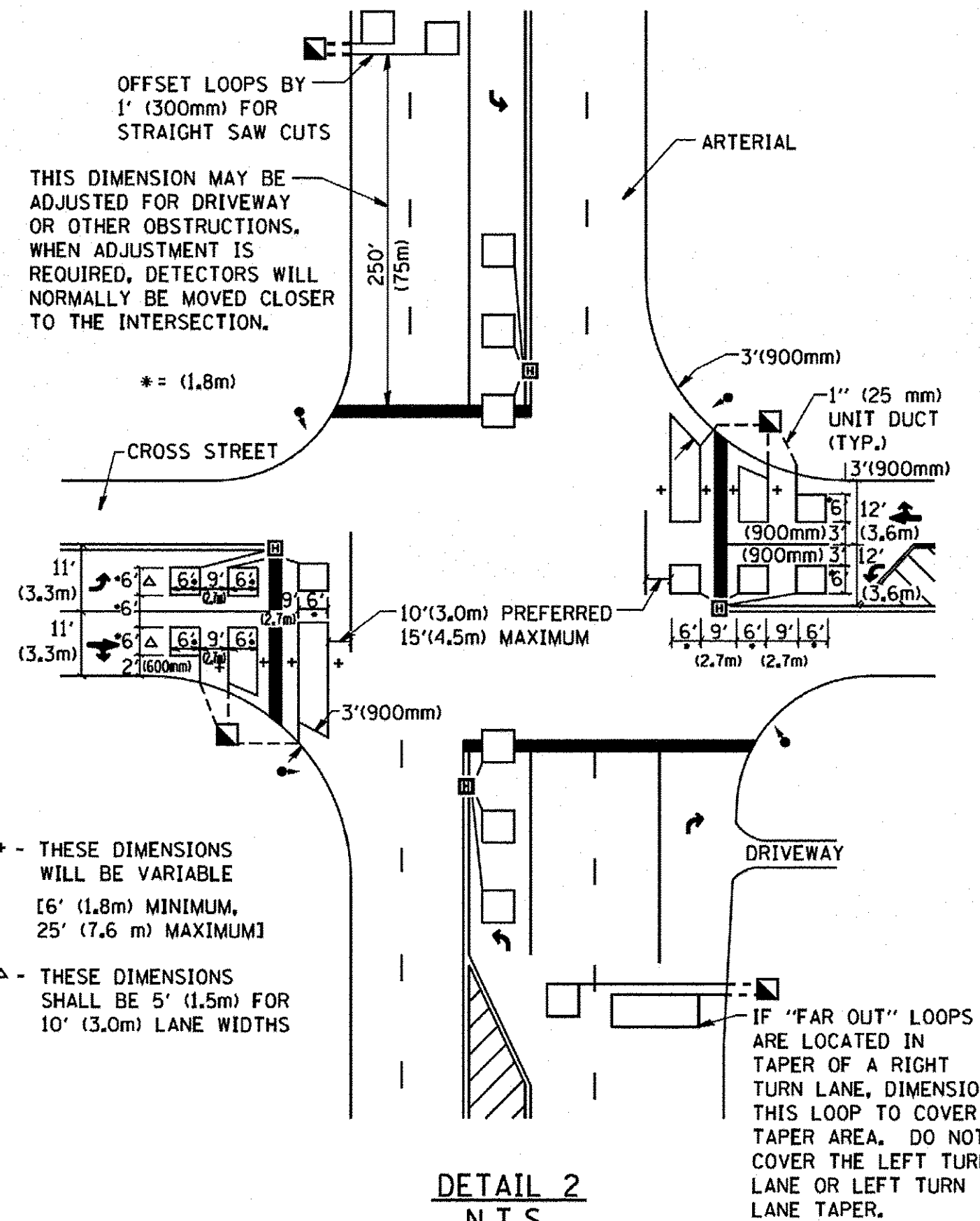
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

**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 DIMENSIONS 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:\dstatd\22x34\ts07.dgn

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

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

REVISED -  
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REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DISTRICT 1 - DETECTOR LOOP INSTALLATION  
DETAILS FOR ROADWAY RESURFACING**

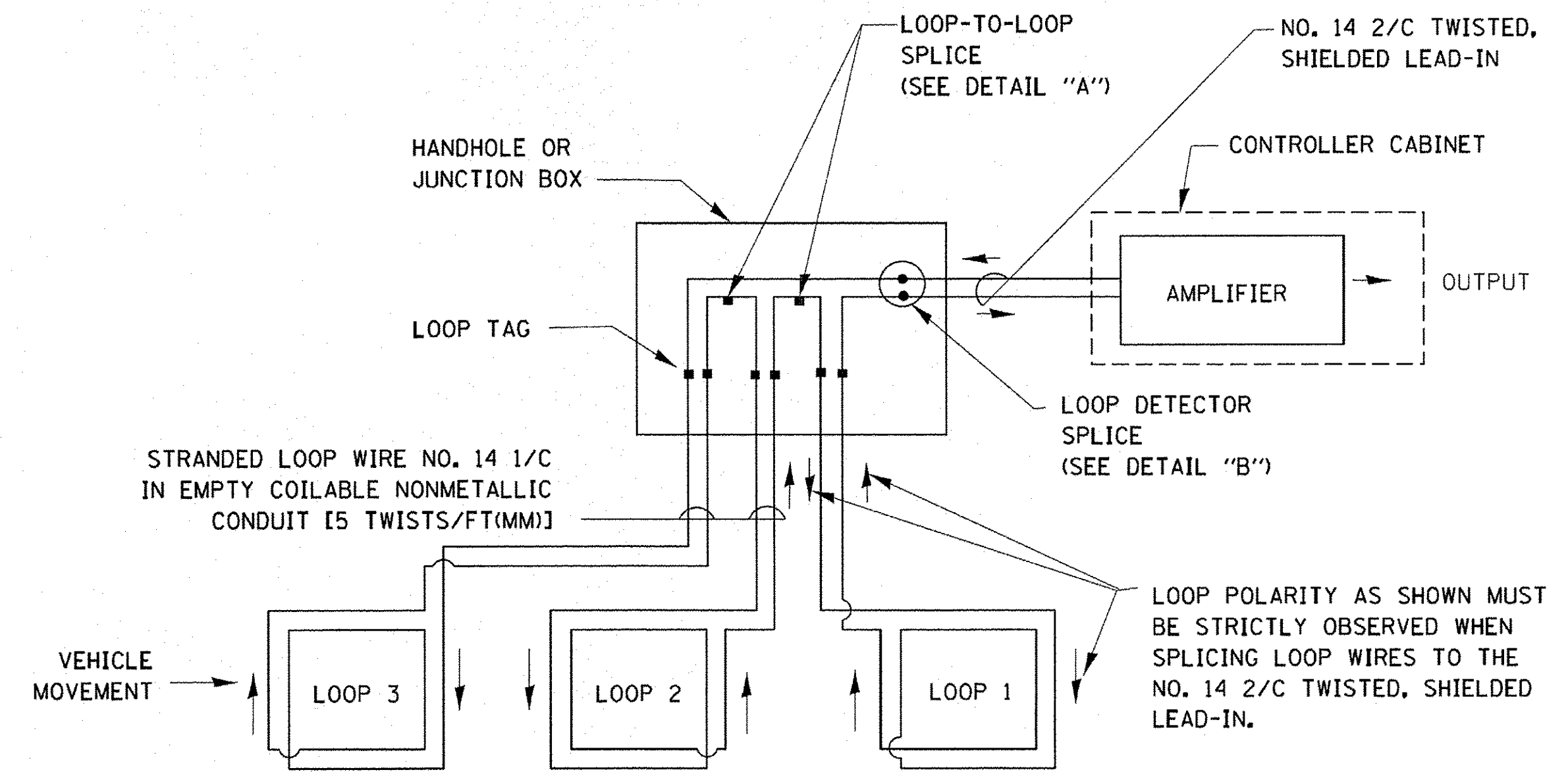
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	19
TS-07			CONTRACT NO. 61D46	
FED. ROAD DIST. NO. 1 [ILLINOIS] FED. AID PROJECT				



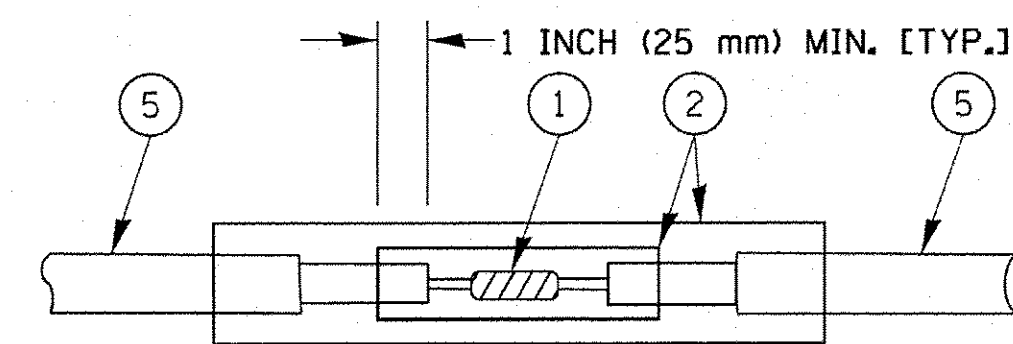
**LOOP DETECTOR NOTES**

- 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.
- 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.
- 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.
- ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.
- IN ASPHALT PAVEMENT, LOOPS SHOULD BE PLACED IN THE BINDER AND DIVESHOLES 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.
- 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.
- 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.

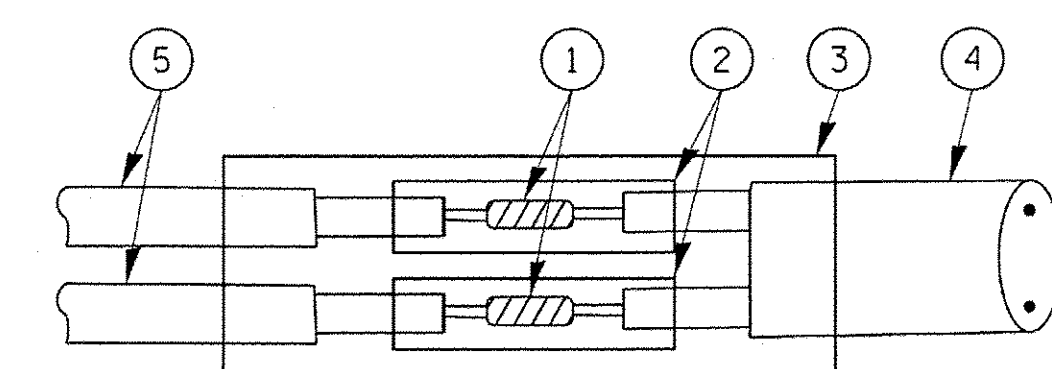


**DETECTOR LOOP WIRING SCHEMATIC**

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

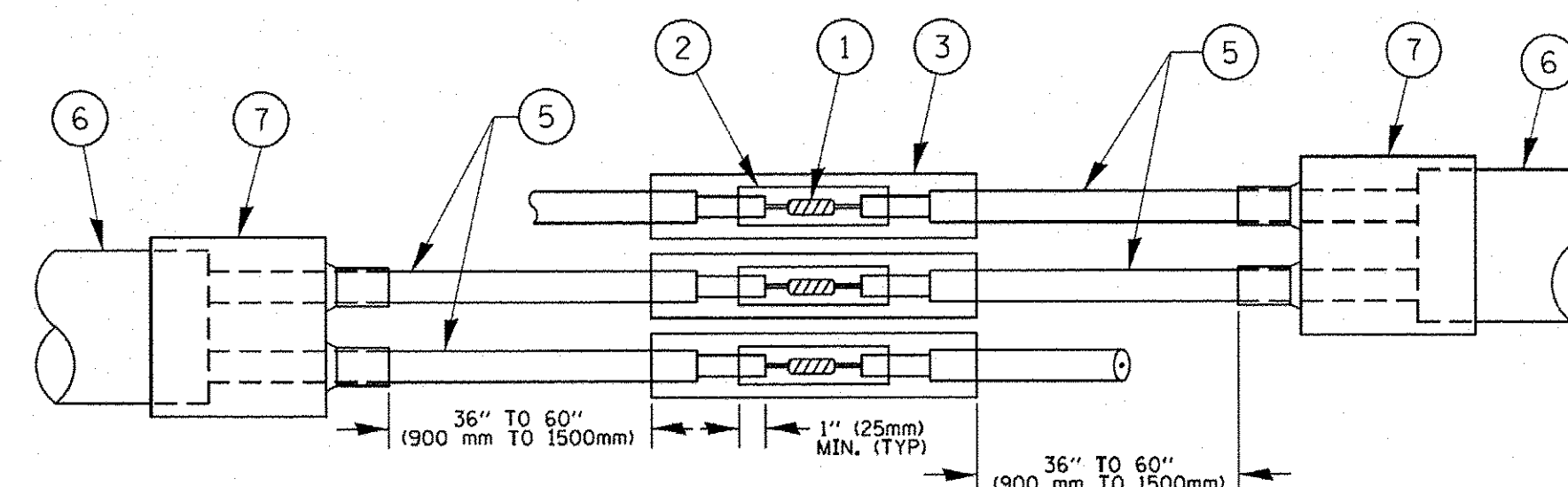


DETAIL "A"  
LOOP-TO-LOOP SPLICE

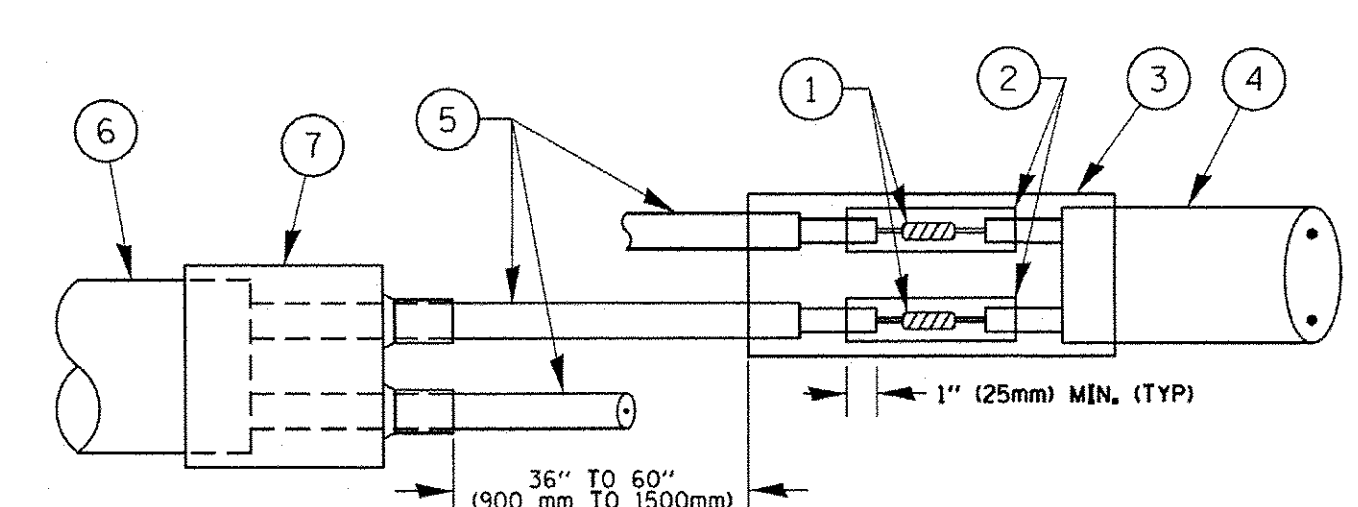


DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**TYPE I LOOP**



DETAIL "A"  
LOOP-TO-LOOP SPLICE



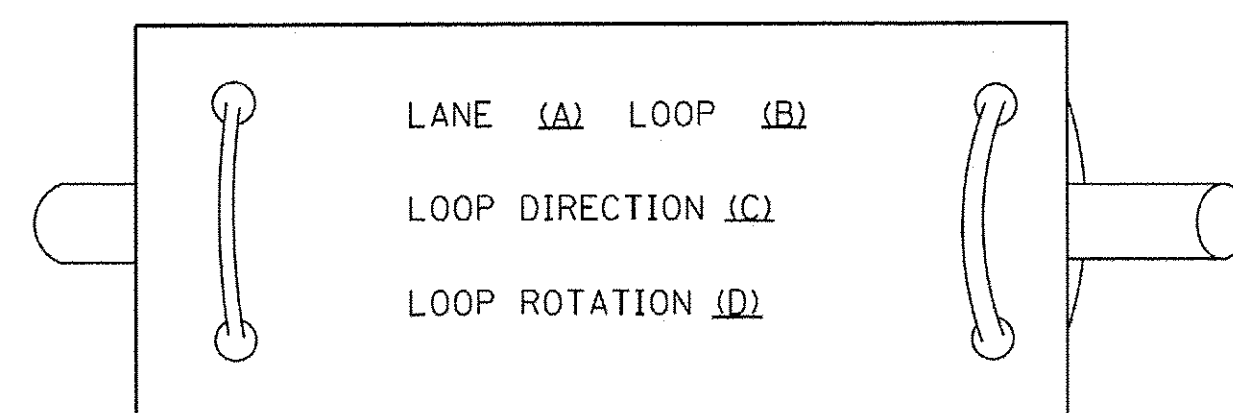
DETAIL "B"  
LOOP-TO-CONTROLLER SPLICE

**PREFORMED LOOP**

**LOOP DETECTOR SPLICE**

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

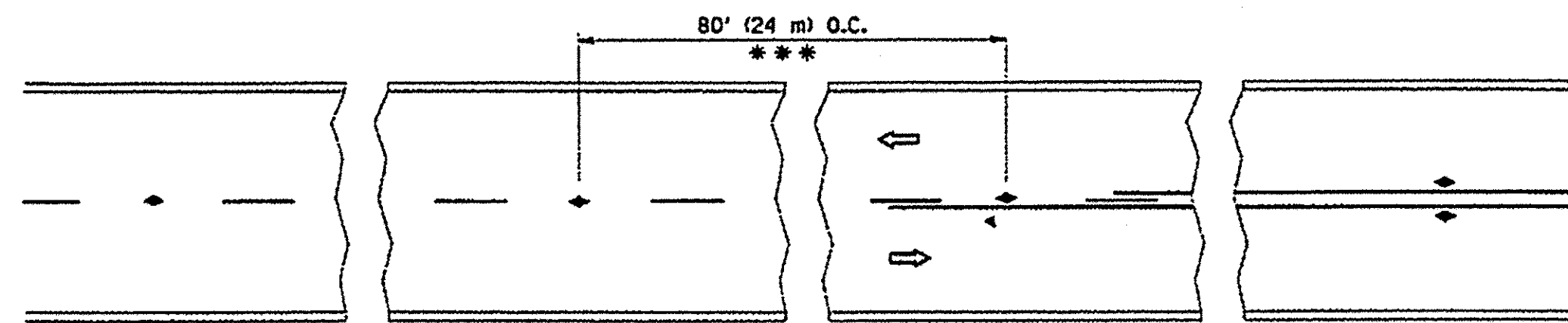
**LOOP LEAD-IN CABLE TAG**



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

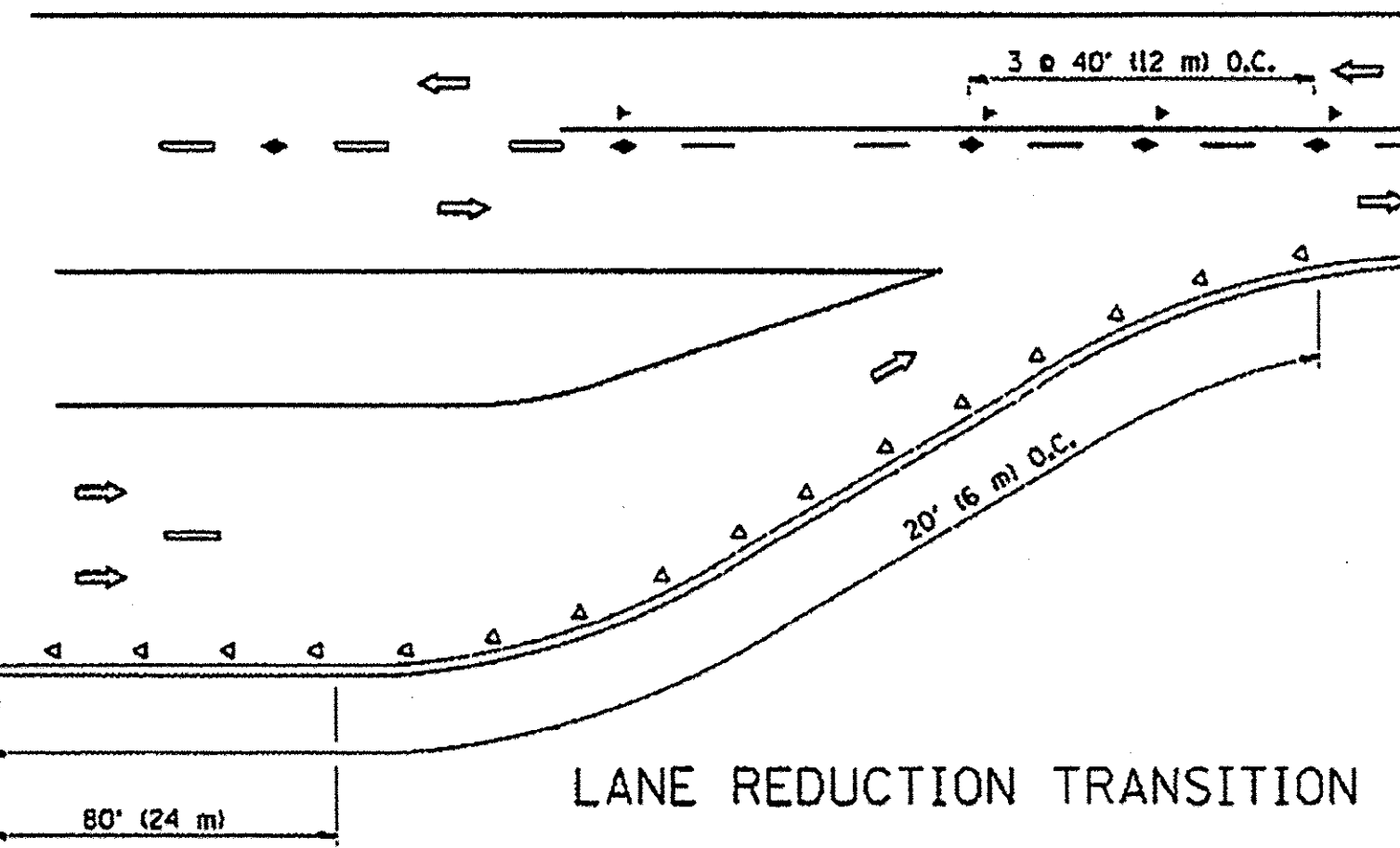
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CONTRACT NO. 61D46	SCALE: NONE	SHEET NO. 2 OF 7 SHEETS	STA. TO STA.			FED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT			
PLOT SCALE = 5/8"=1'-0"	CHECKED - DAD	REVISED -								
PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -								



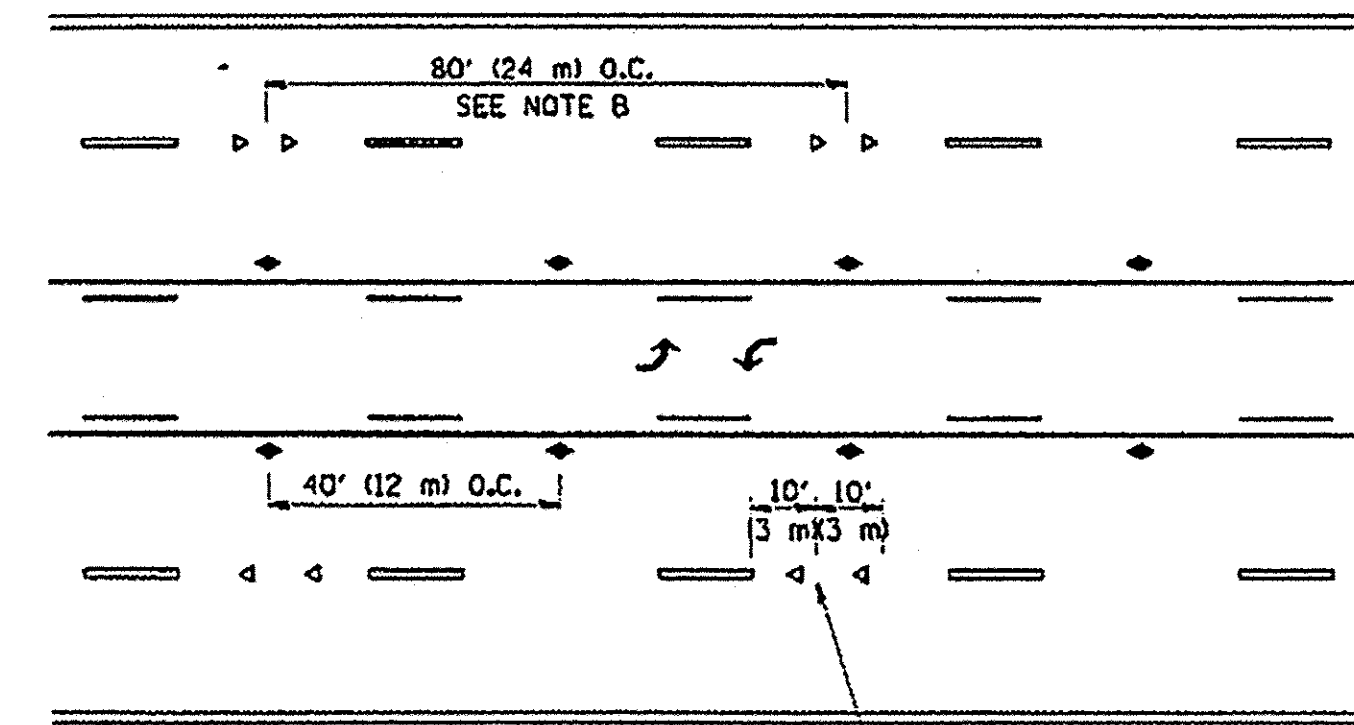


\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

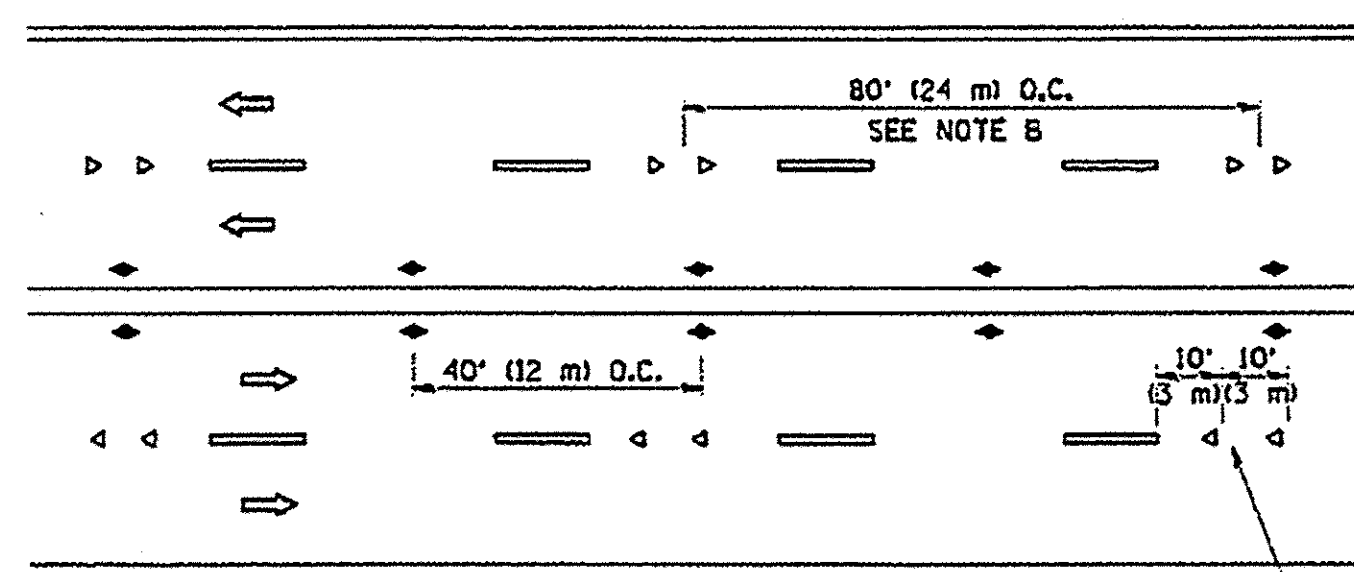
TWO-LANE/TWO-WAY



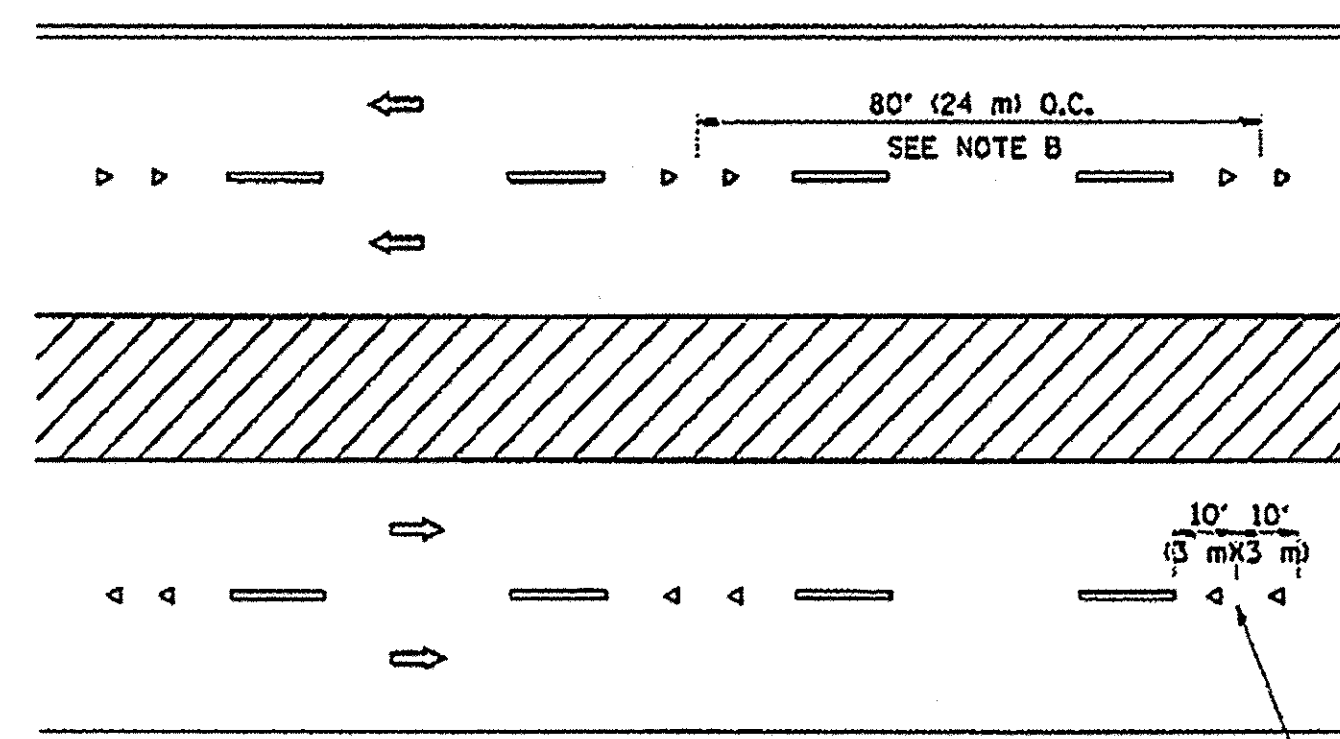
LANE REDUCTION TRANSITION



TWO-WAY LEFT TURN



MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

GENERAL NOTES

1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

SYMBOLS

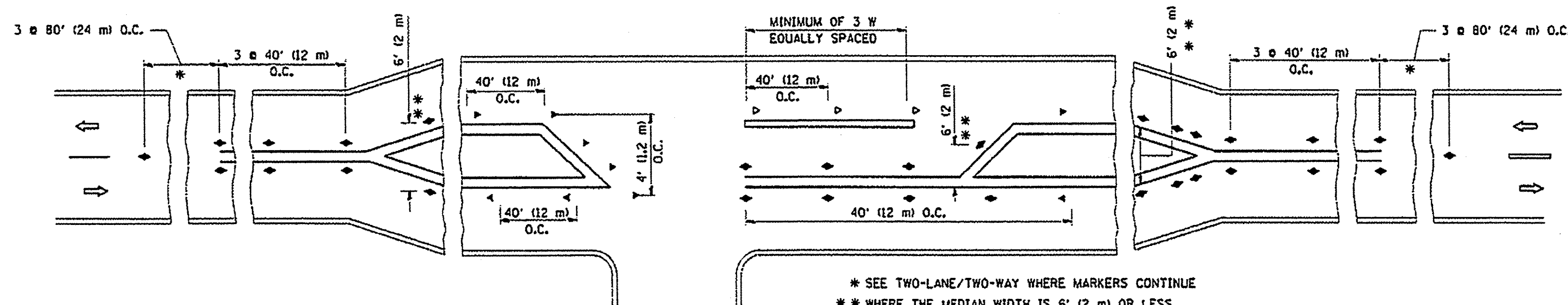
- YELLOW STRIPE
- WHITE STRIPE
- ◀ ONE-WAY AMBER MARKER
- ◁ ONE-WAY CRYSTAL MARKER (W/O)
- ◆ TWO-WAY AMBER MARKER

LANE MARKER NOTES

- A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.
- B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

DESIGN NOTES

1. DOUBLE LANE LINE MARKERS SHALL BE USED UNLESS SPECIFIED OTHERWISE.
2. EXCEPT AS SHOWN ON THE LANE REDUCTION TRANSITION AND FREEWAY EXIT RAMP DETAIL, MARKERS ARE NOT TO BE SPECIFIED ON RIGHT EDGE LINES.
3. THE EXACT MARKER LIMITS, SPACING, AND COLOR SHALL BE INCLUDED IN THE PLANS WHEN STANDARD SPECIFICATIONS ARE NOT BEING USED.
4. MARKERS SHOULD NOT BE USED ALONGSIDE CURBS EXCEPT FOR EXTREMELY SHORT SECTIONS OF CURBS WHERE NOT MORE THAN TWO MARKERS WOULD BE INVOLVED.



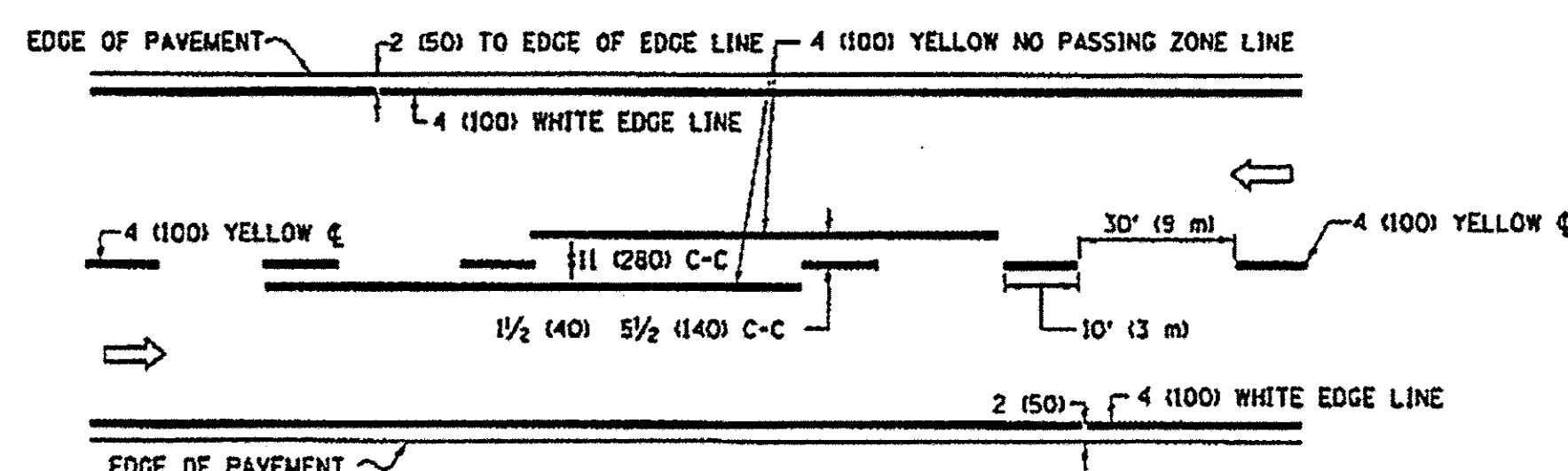
LEFT TURN

\* SEE TWO-LANE/TWO-WAY WHERE MARKERS CONTINUE  
 \*\* WHERE THE MEDIAN WIDTH IS 6' (2 m) OR LESS USE TWO-WAY MARKERS.

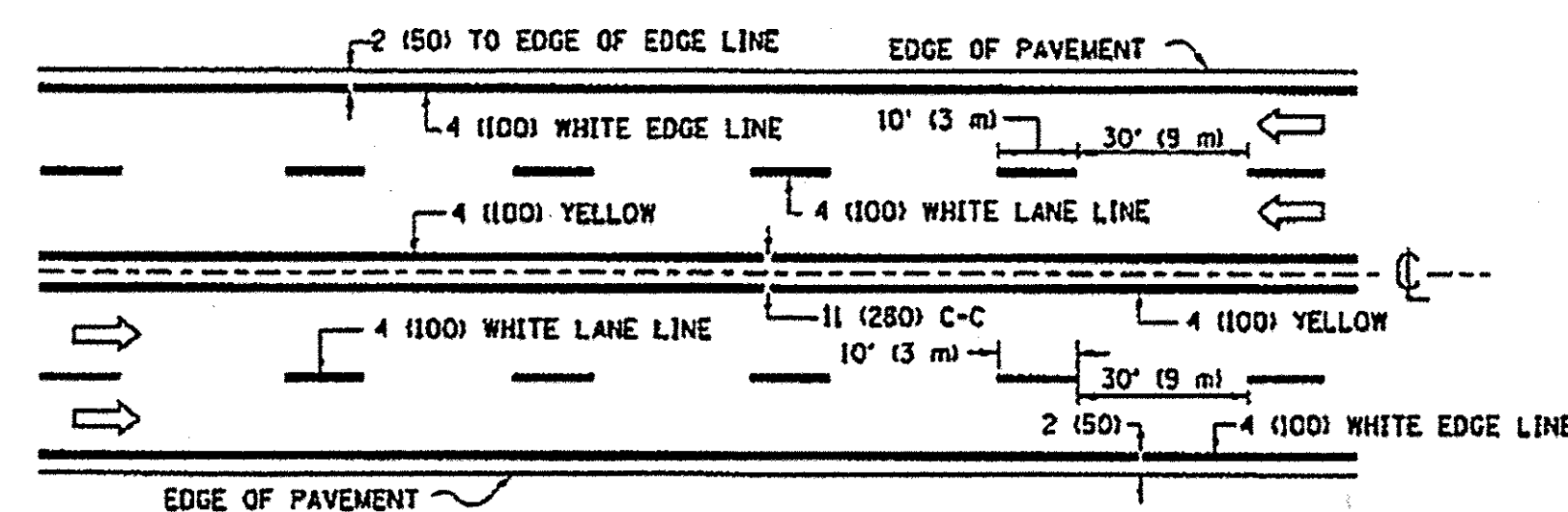
All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME : c:\p\work\pav\16-00188-00\16-00188-00-01.dgn	USER NAME : loyso	DESIGNED -	REVISED - T. RAMMACHER 09-19-94	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TYPICAL APPLICATIONS</b>		F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	PLOT SCALE = 50.000 / IN.	DRAWN -	REVISED - T. RAMMACHER 03-12-99		<b>RAISED REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RESISTANT)</b>		1574	16-00188-00-RS	COOK	32	21
PLOT DATE = 3/2/2011	CHECKED -	REVISED - T. RAMMACHER 01-06-00	REVISED - C. JUCIUS 09-09-09	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

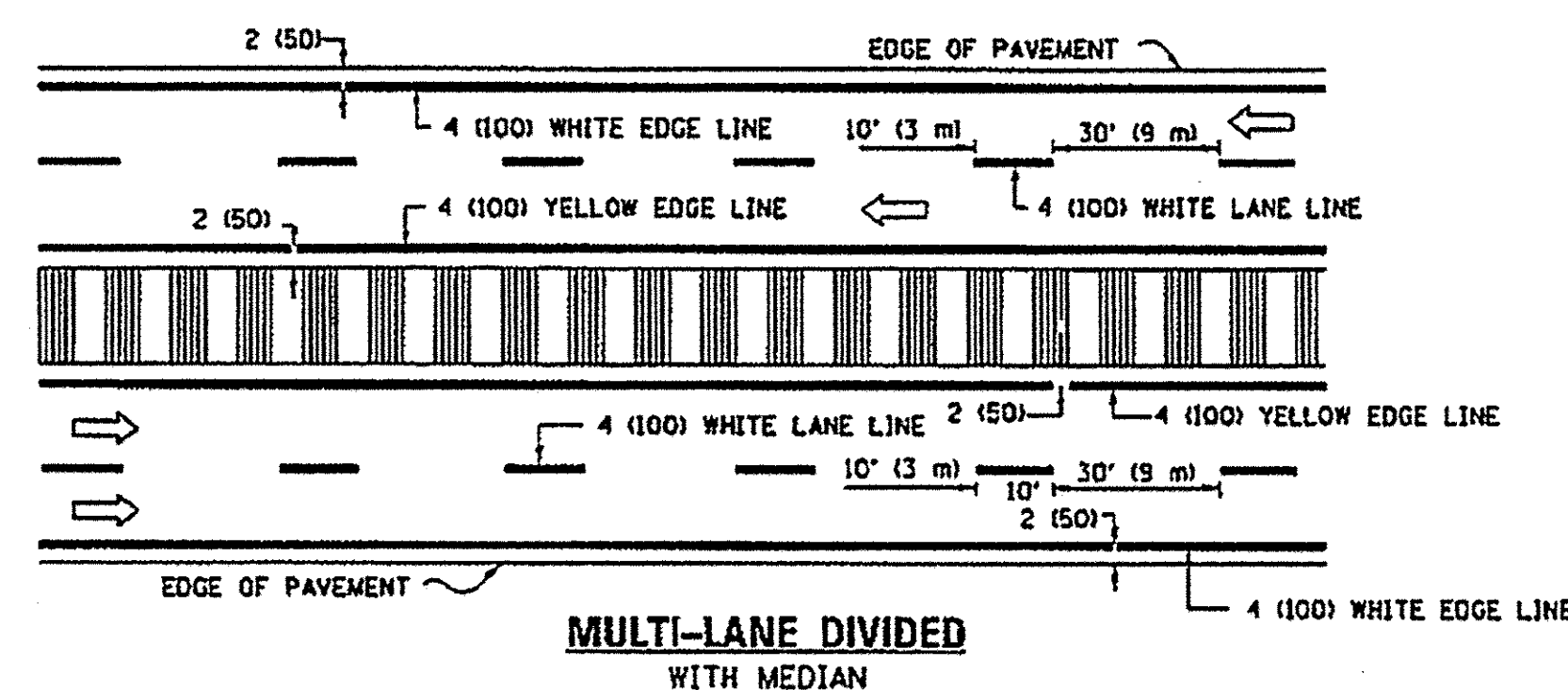




**2-LANE ROADWAY**

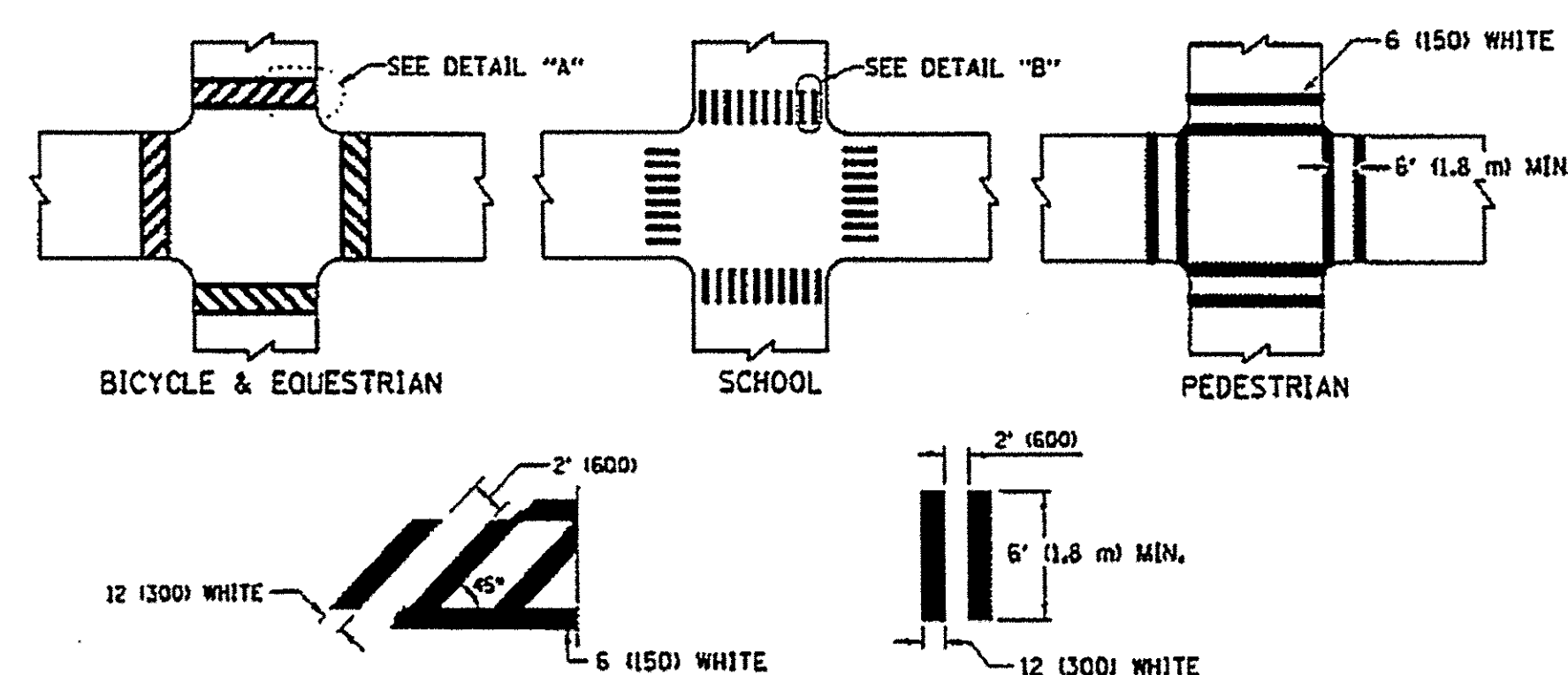


**MULTI-LANE UNDIVIDED**



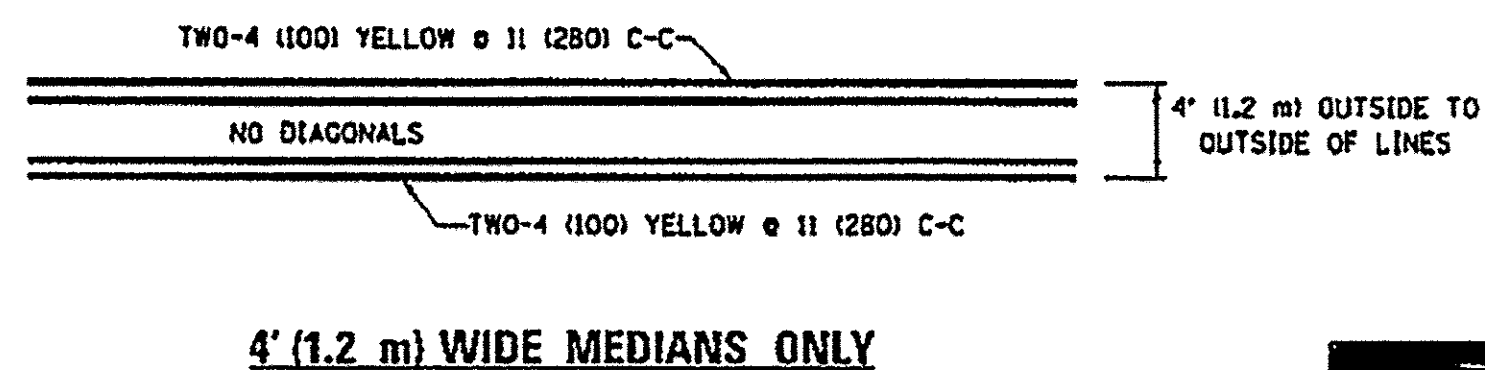
**MULTI-LANE DIVIDED WITH MEDIAN**

**TYPICAL LANE AND EDGE LINE MARKING**

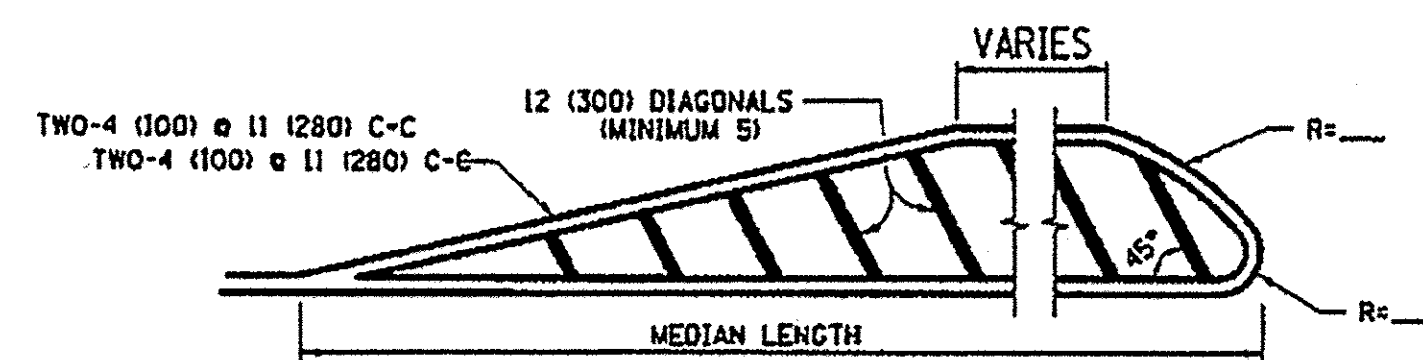


**TYPICAL CROSSWALK MARKING**

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



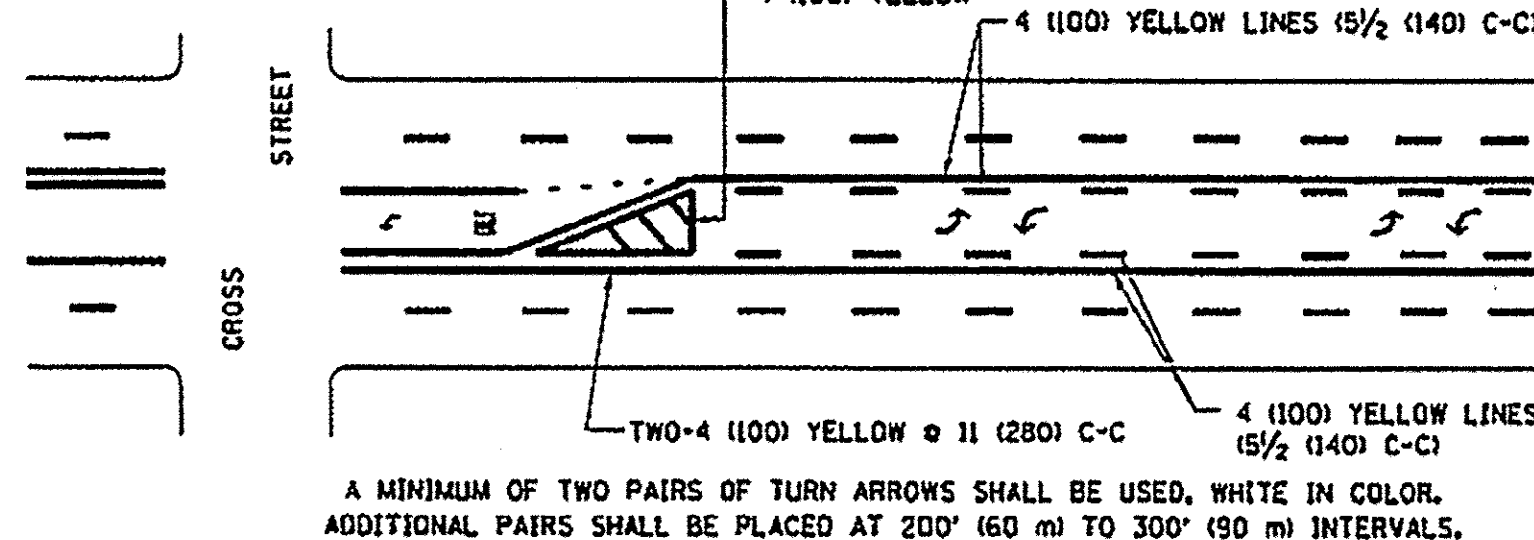
**4' (1.2 m) WIDE MEDIANS ONLY**



FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

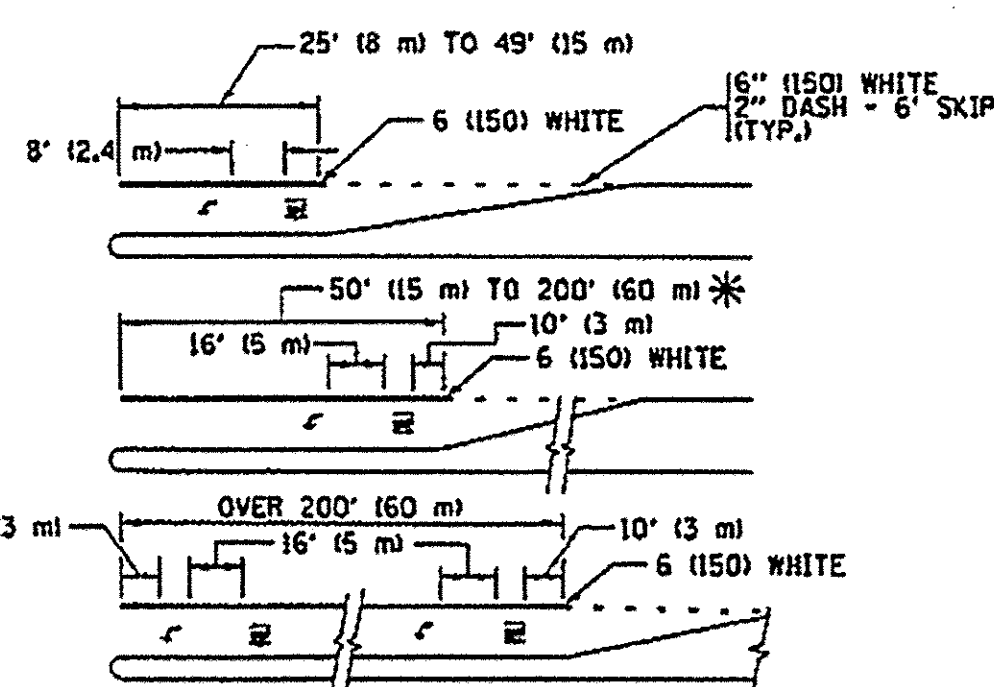
DIAGONAL LINE SPACING: 50' (15 m) C-C (LESS THAN 30MPH (50 km/h))  
75' (25 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)  
150' (45 m) C-C (MORE THAN 45MPH (70 km/h))

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



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

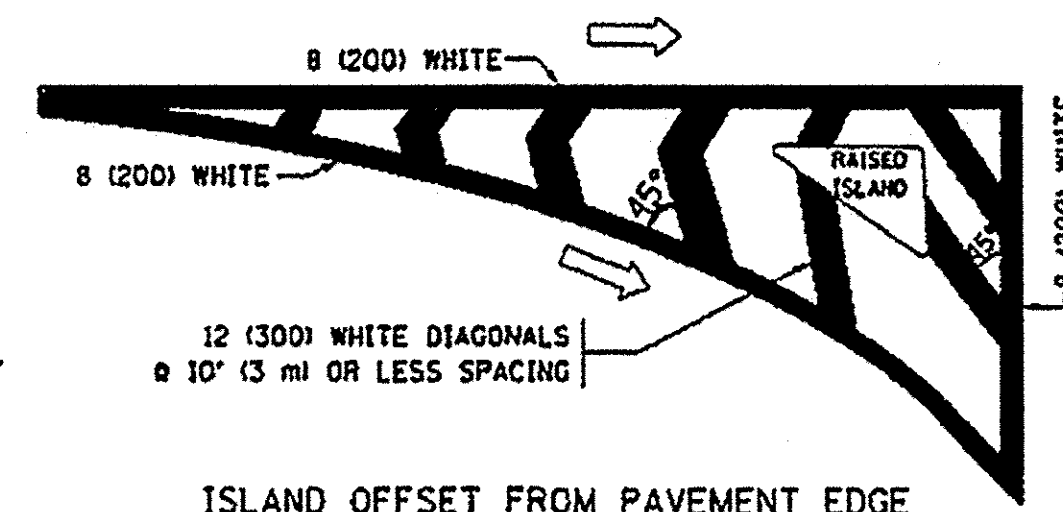
**TYPICAL PAINTED MEDIAN MARKING**



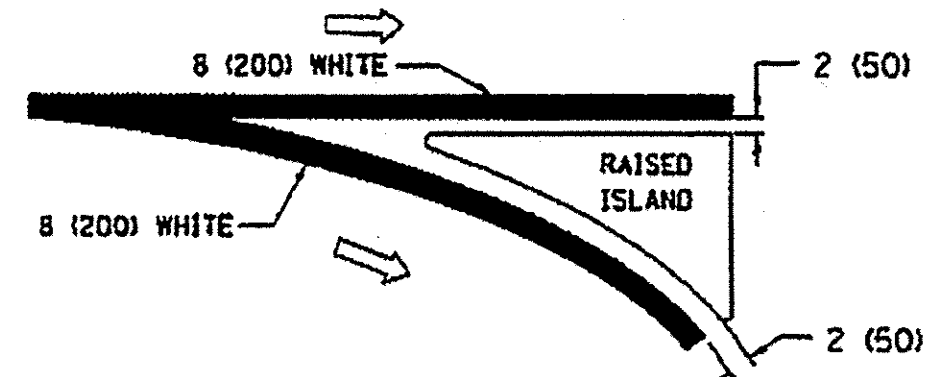
FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.  
AREA = 15.6 SQ. FT. (1.5 m<sup>2</sup>) ONLY AREA = 20.8 SQ. FT. (1.9 m<sup>2</sup>)  
\* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

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

**TYPICAL TURN LANE MARKING**

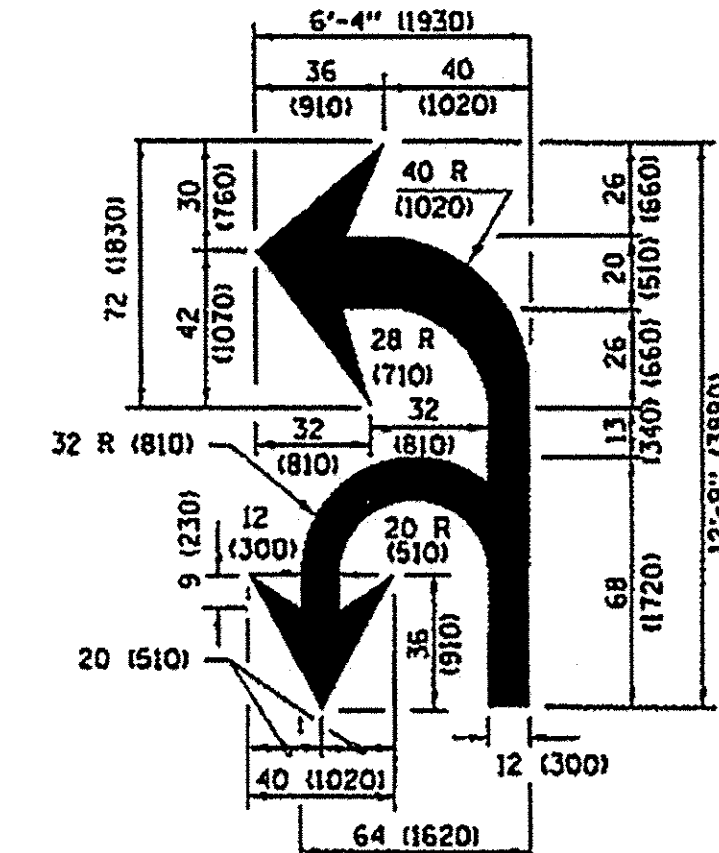


**ISLAND OFFSET FROM PAVEMENT EDGE**

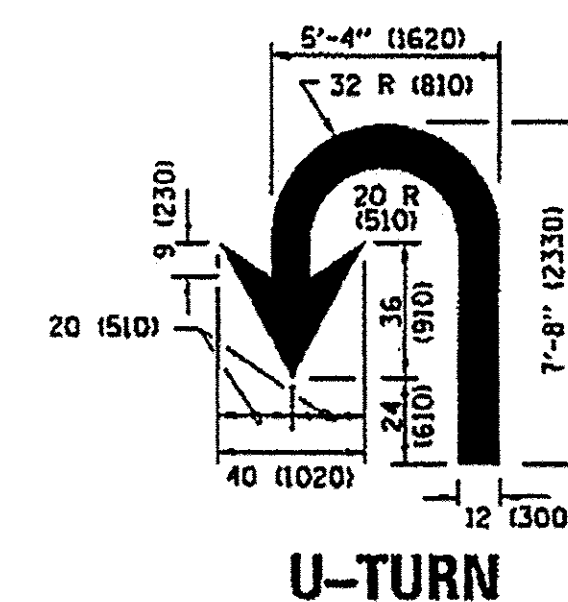


**ISLAND AT PAVEMENT EDGE**

**TYPICAL ISLAND MARKING**



**COMBINATION LEFT AND U-TURN**



**U-TURN**

**LANE REDUCTION TRANSITION**

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

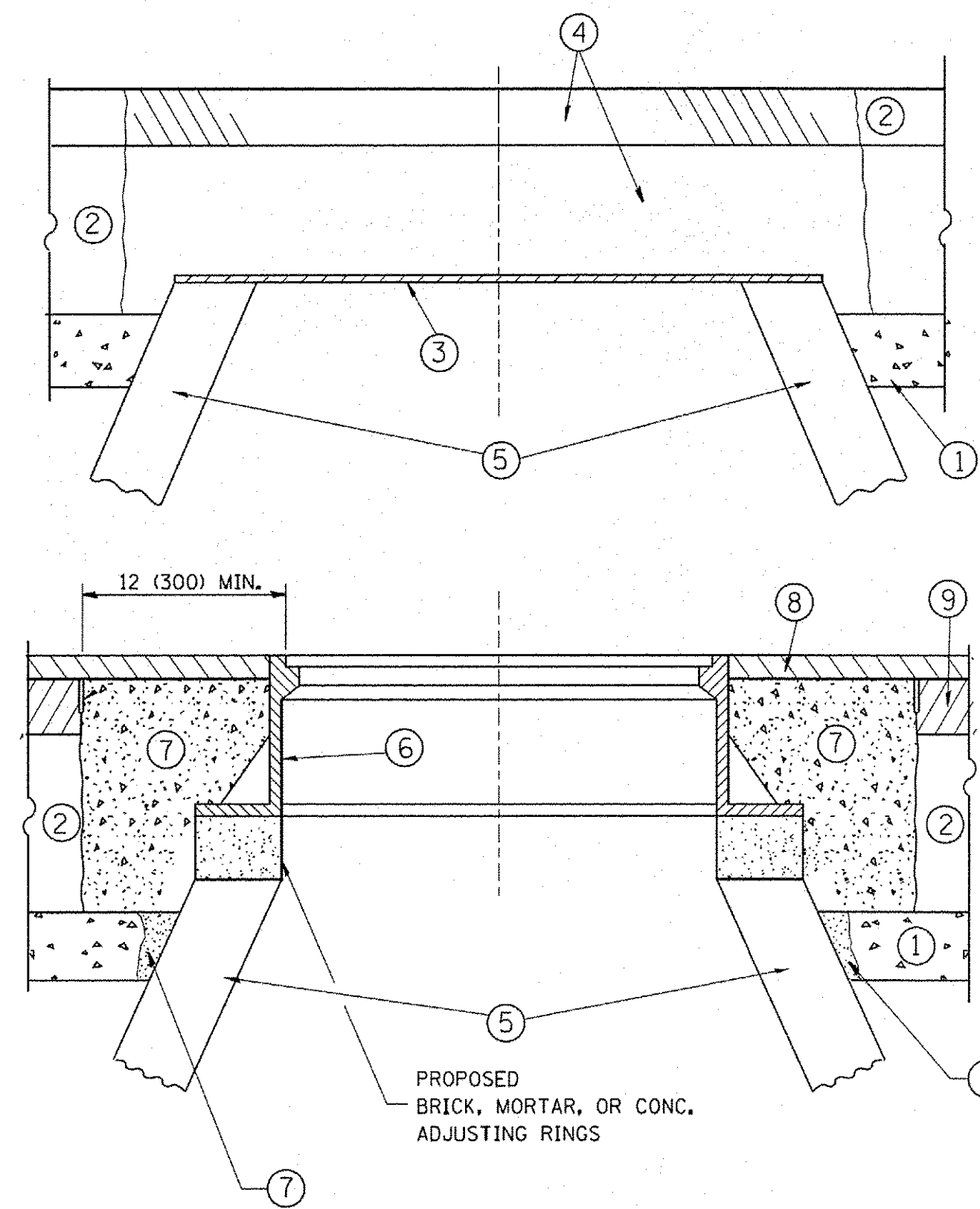
D(FT)	SPEED LIMIT
345	30
425	35
500	40
580	45
665	50
750	55

TYPE OF MARKING	WIDTH OF LINE	PATTERN	COLOR	SPACING /REMARKS
CENTERLINE ON 2 LANE PAVEMENT	4 (100)	SKIP-DASH	YELLOW	10' (3 m) LINE WITH 30' (9 m) SPACE
CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT	2 @ 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 @ 4 (100)	SOLID SOLID	YELLOW YELLOW	5/2 (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MEDIANS IN YELLOW
TURN LANE MARKINGS	6 (150) LINE, FULL SIZE LETTERS & SYMBOLS (8' (2.4m))	SOLID	WHITE	SEE TYPICAL TURN LANE MARKING DETAIL
TWO WAY LEFT TURN MARKING	2 @ 4 (100) EACH DIRECTION 8' (2.4m) LEFT ARROW	SKIP-DASH AND SOLID IN PAIRS	YELLOW WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL
CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL)	2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW TWO WAY TRAFFIC WHITE ONE WAY TRAFFIC	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" 15 6' (1.8 m) LETTERS 18 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF "RR" = 3.6 SQ. FT. (0.33 m <sup>2</sup> ) EACH "X" = 54.0 SQ. FT. (5.0 m <sup>2</sup> )
SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS ≥ 8' )	12 (300) @ 45°	SOLID	WHITE - RIGHT YELLOW - LEFT	50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) TO 45MPH (70 km/h)) 150' (45 m) C-C (OVER 45MPH (70 km/h))
U TURN ARROW	SEE DETAIL	SOLID	WHITE	16.3 SF
2 ARROW COMBINATION LEFT AND U TURN	SEE DETAIL	SOLID	WHITE	30.4 SF

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

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





**CONSTRUCTION PROCEDURES**

**STAGE 1 (BEFORE PAVEMENT MILLING)**

- A) REMOVE A MINIMUM OF 12 (300) 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 (900) DIAMETER METAL PLATE.
- D) BACKFILL WITH CRUSHED STONE AND A MINIMUM 1/2 (40) 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.
  - 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."

**LEGEND**

- ① SUB-BASE GRANULAR MATERIAL
- ② EXISTING PAVEMENT
- ③ 36 (900) 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

**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 "FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)."

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.

CITY OF CHICAGO CASTINGS ARE THE PROPERTY OF THE CITY AND THE CONTRACTOR SHALL NOTIFY THE CITY FOR REMOVAL AND DISPOSITION OF THE CASTINGS.

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.

**DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING**

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
ca:\pwwork\pwwork\bauserdl\d0108315\bd08.dgn		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

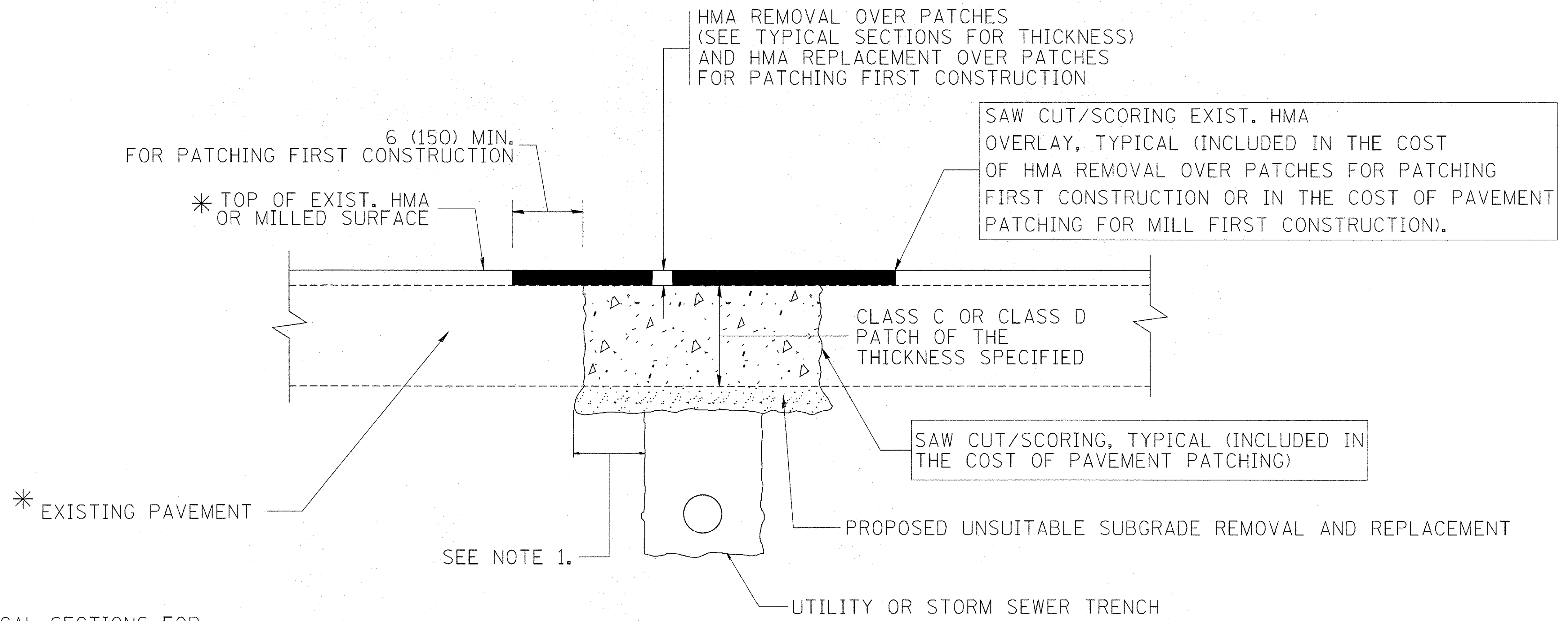
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**DETAILS FOR  
FRAMES AND LIDS ADJUSTMENT WITH MILLING**

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

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	22
BD600-03 (BD-8)		CONTRACT NO. 61D46		
FED. ROAD DIST. NO. 1 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.

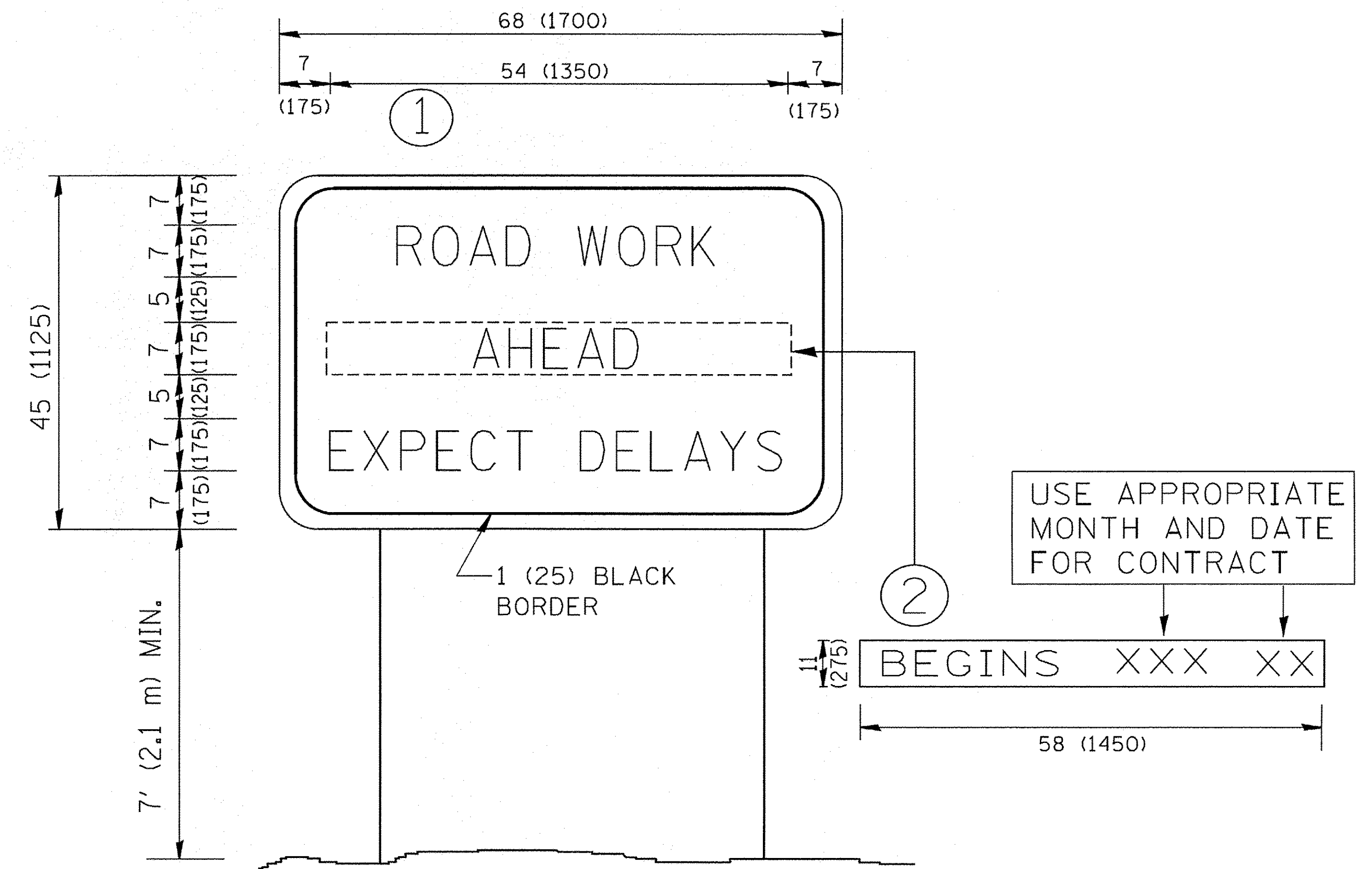
**SEQUENCE OF CONSTRUCTION (MILLING FIRST)**

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\dststd22x34\bd22.dgn	USER NAME = bouerd1	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT</b>			F.A. RTE. = 1574	SECTION = 16-00188-00-RS	COUNTY = COOK	TOTAL SHEETS = 30	SHEET NO. = 23			
	PLOT SCALE = 50,000' / IN.	CHECKED -	REVISED - R. BORO 01-01-07					SCALE: NONE		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.		CONTRACT NO. 61D46	
	PLOT DATE = 10/27/2008	DATE = 10-25-94	REVISED - K. ENG 10-27-08					FED. ROAD DIST. NO. 1		ILLINOIS		FED. AID PROJECT			





**NOTES:**

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

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

FILE NAME = W:\diststd\22x34\to22.dgn	USER NAME = geglienbt	DESIGNED -	REVISED - R. MIRS 09-15-97
		DRAWN -	REVISED - R. MIRS 12-11-97
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - T. RAMMACHER 02-02-99
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**ARTERIAL ROAD  
INFORMATION SIGN**

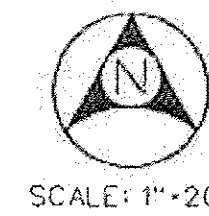
SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	24
TC-22			CONTRACT NO. 61D46	
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

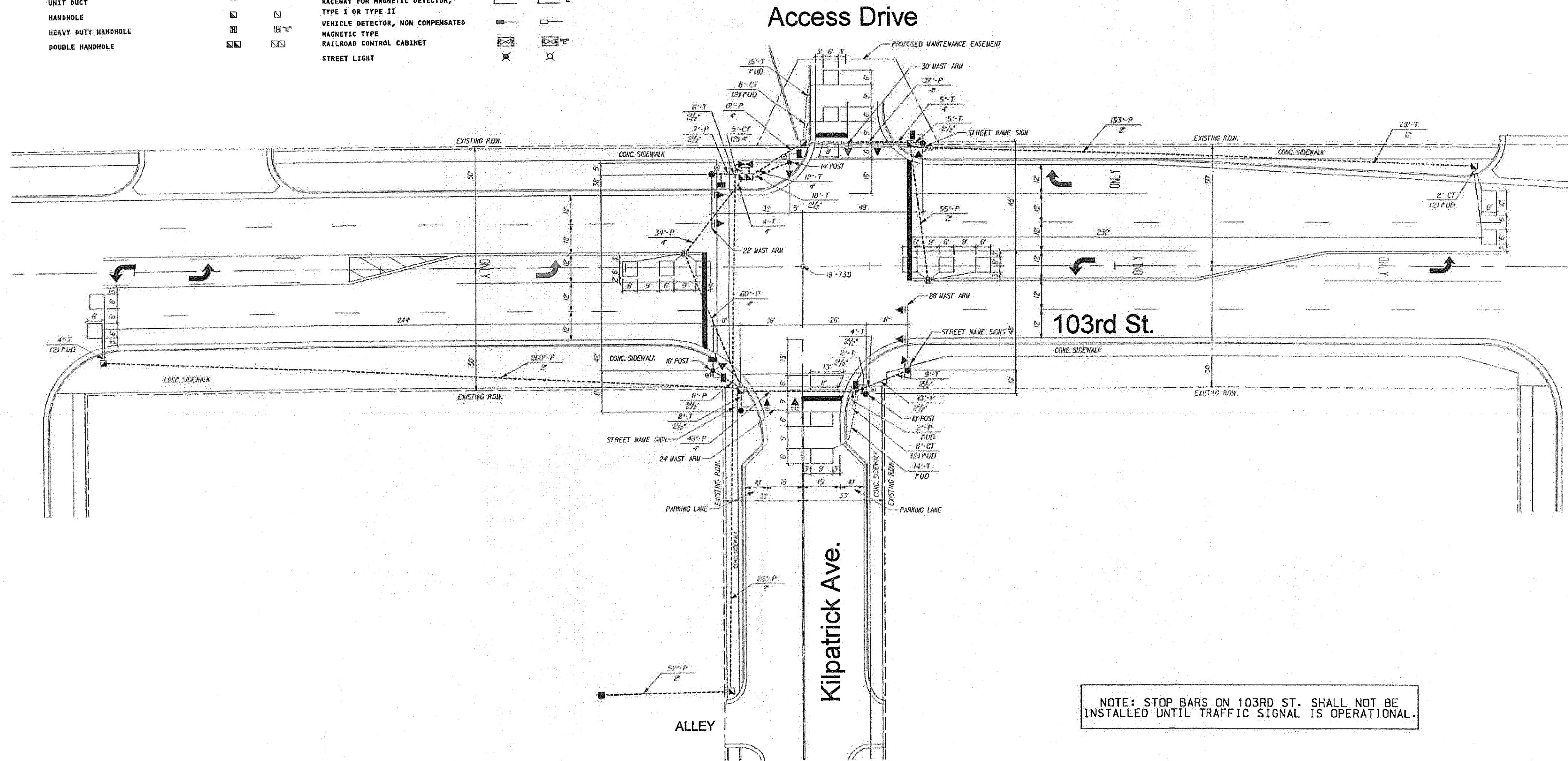


**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONTROLLER			G.S. CONDUIT IN TRENCH OR PUSHED		
SERVICE INSTALLATION			PEDESTRIAN PUSHBUTTON DETECTOR		
SIGNAL HEAD			DETECTOR LOOP		
SIGNAL HEAD WITH BACKPLATE			CAST IRON JUNCTION BOX		
SIGNAL HEAD, PEDESTRIAN			EMERGENCY VEHICLE SYSTEM DETECTOR		
SIGNAL POST			CONFIRMATION BEACON		
MAST ARM ASSEMBLY AND POLE, STEEL			SIGNAL HEAD OPTICALLY PROGRAMMED		
MAST ARM ASSEMBLY AND POLE, ALUMINUM			CONDUIT SPLICE		
COMMON TRENCH			WOOD POLE		
UNIT DUCT			RACEWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II		
HANDHOLE			VEHICLE DETECTOR, NON COMPENSATED		
HEAVY DUTY HANDHOLE			MAGNETIC TYPE		
DOUBLE HANDHOLE			RAILROAD CONTROL CABINET		
			STREET LIGHT		



**NOTE: THIS PLAN FOR DETECTOR LOOP REPLACEMENT ONLY.  
QUANTITY: 125 LF DETECTOR LOOP REPLACEMENT**

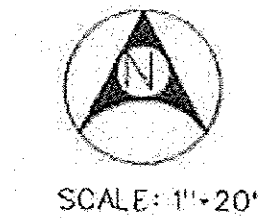
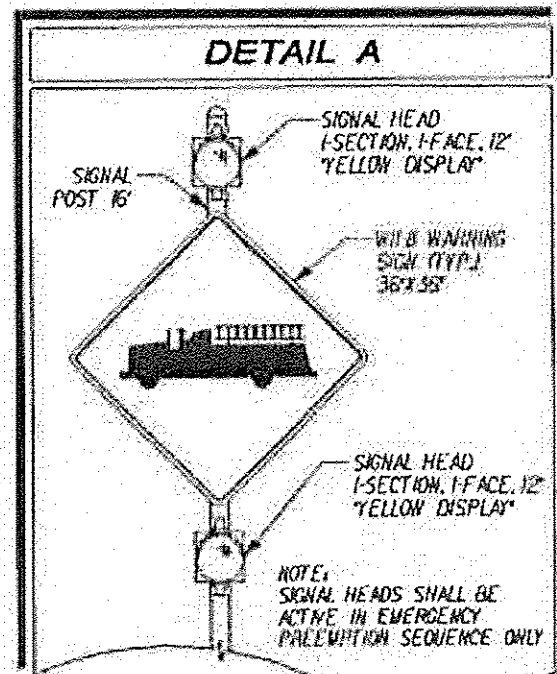


**NOTE: STOP BARS ON 103RD ST. SHALL NOT BE INSTALLED UNTIL TRAFFIC SIGNAL IS OPERATIONAL.**

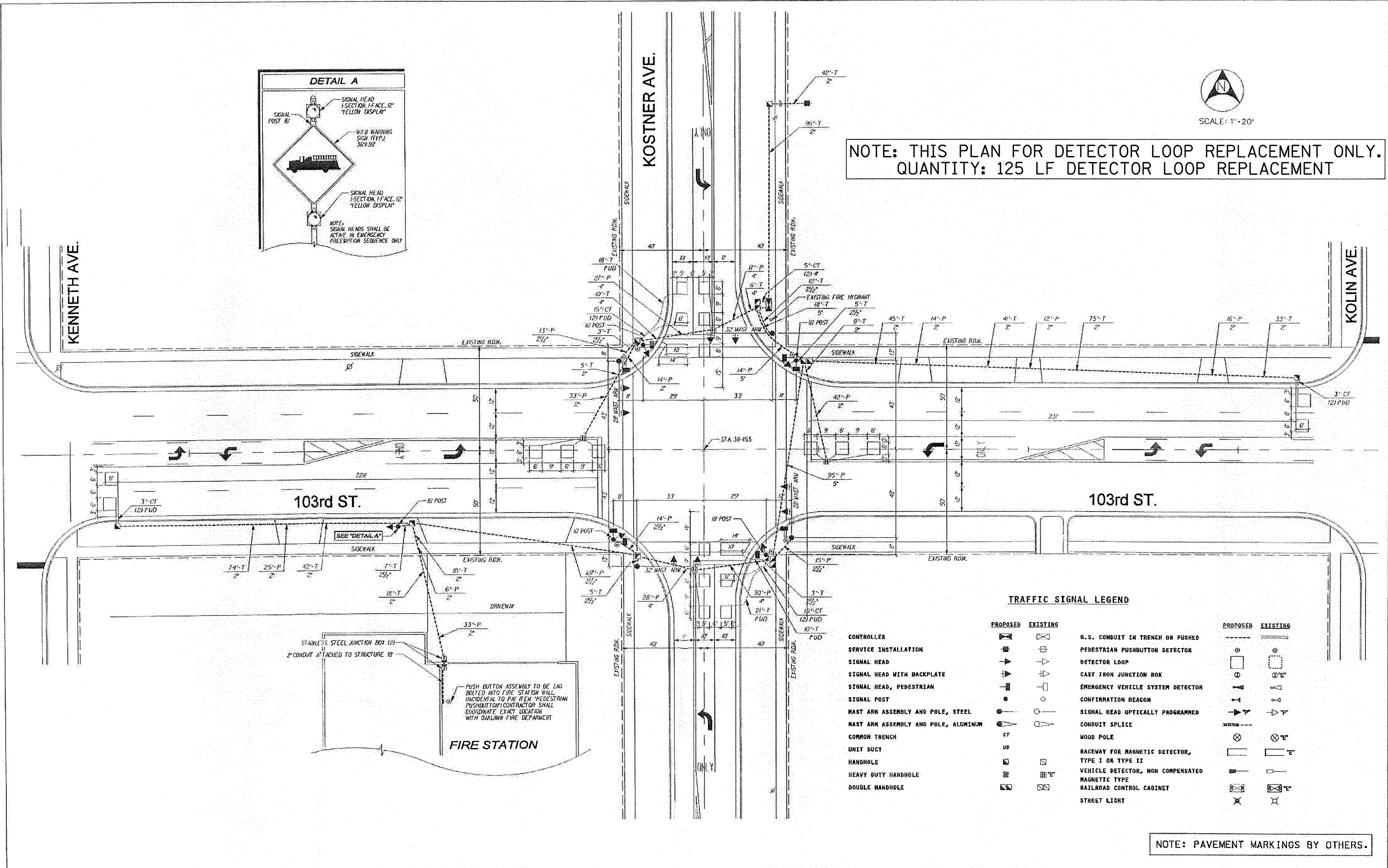
 <b>EDWIN HANCOCK ENGINEERING COMPANY</b> CONSULTING ENGINEERS 9933 ROOSEVELT ROAD WESTCHESTER, ILLINOIS 60154-2780 (708) 965-0300 ESTABLISHED 1911	prepared by METRO for EDWIN HANCOCK COMPANY METRO TRANSPORTATION GROUP, INC. TRANSPORTATION, PLANNING, ENGINEERING, AND DESIGN 1500 GREENBROOK BLVD., HANOVER PARK, IL 60139 PH# (630) 213-1000	 <b>SIGNAL INSTALLATION PLAN</b> 103rd STREET at KILPATRICK AVE. OAKLAWN, ILLINOIS	SCALE:	SHEET
			DRAWN BY: BOOK NO.: 1386 DATE: REVISION:	E.H.E. NO. 1640-00-25701 CF

FILE NAME = N:\OakLawn\160313\Civil\std.160313-04.sht	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>SIGNAL INSTALLATION PLAN FOR 103RD STREET</b> <b>AT KILPATRICK AVENUE</b>	F.A.U. RTE. 1574	SECTION 16-00188-00-RS	COUNTY COOK	TOTAL SHEETS 30	SHEET NO. 25	
PLOT SCALE = 1"	CHECKED - LMF	REVISED -	SCALE: 1'			SHEET NO. 25 OF 30 SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT		CONTRACT NO. 61D46	
PLOT DATE = 10/31/2016	DATE - 09/28/2016	REVISED -									





NOTE: THIS PLAN FOR DETECTOR LOOP REPLACEMENT ONLY.  
 QUANTITY: 125 LF DETECTOR LOOP REPLACEMENT



<b>EDWIN HANCOCK ENGINEERING COMPANY</b> CONSULTING ENGINEERS 9933 ROOSEVELT ROAD WESTCHESTER, ILLINOIS 60154-2780 (708) 865-0300 ESTABLISHED 1911	prepared by METRO for EDWIN HANCOCK COMPANY METRO TRANSPORTATION GROUP, INC. TRANSPORTATION, PLANNING, ENGINEERING, AND DESIGN 1500 GREENBROOK BLVD., HANOVER PARK, IL 60139 PH# (630) 213-1000		<b>SIGNAL INSTALLATION PLAN</b> 103rd STREET at KOSTNER AVE. OAKLAWN, ILLINOIS	SCALE: _____ DRAWN BY: _____ BOOK NO.: 1386 DATE: _____ E.H.E. NO. 1640-00-25701	SHEET _____ OF
				REVISION: _____	_____

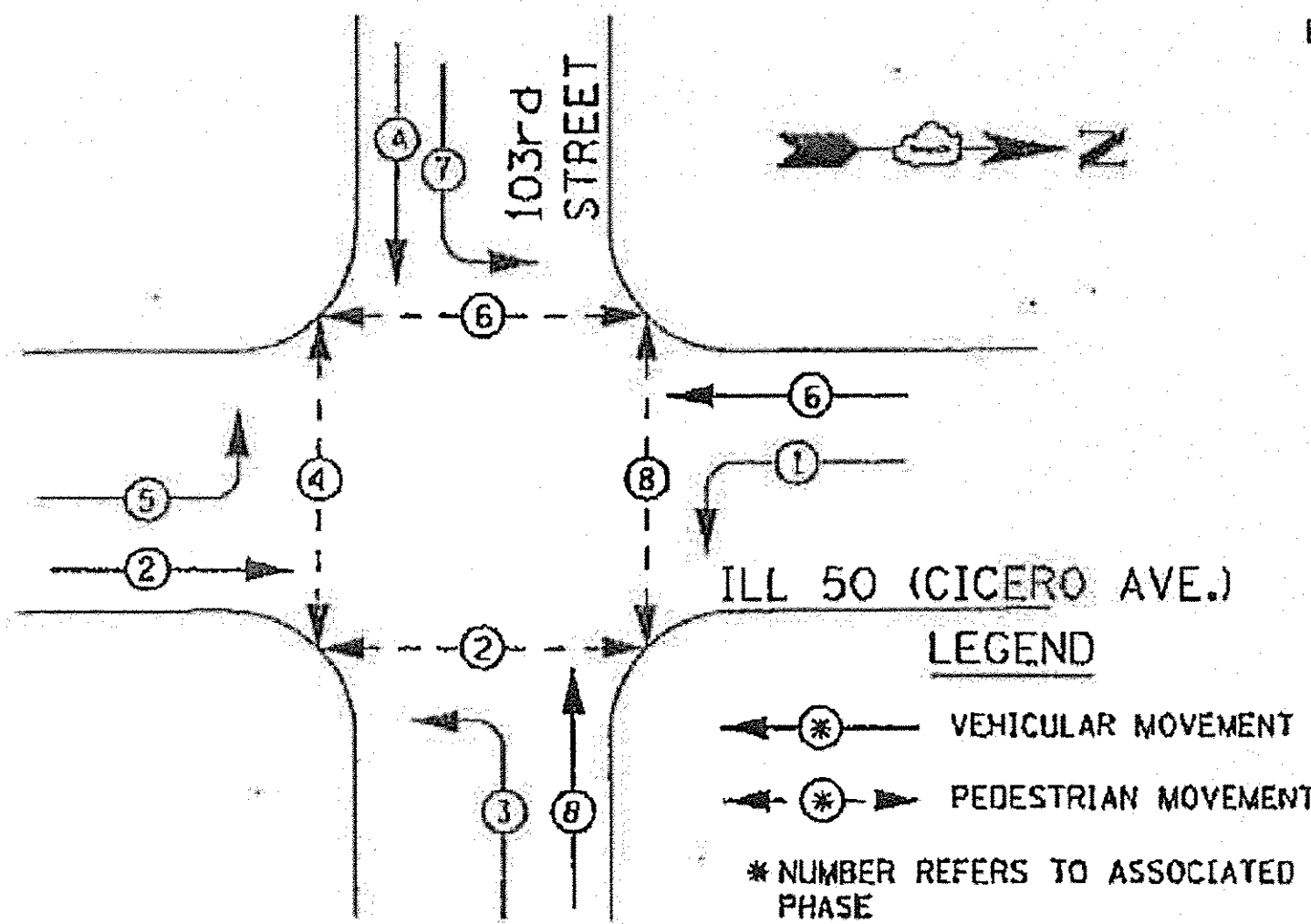






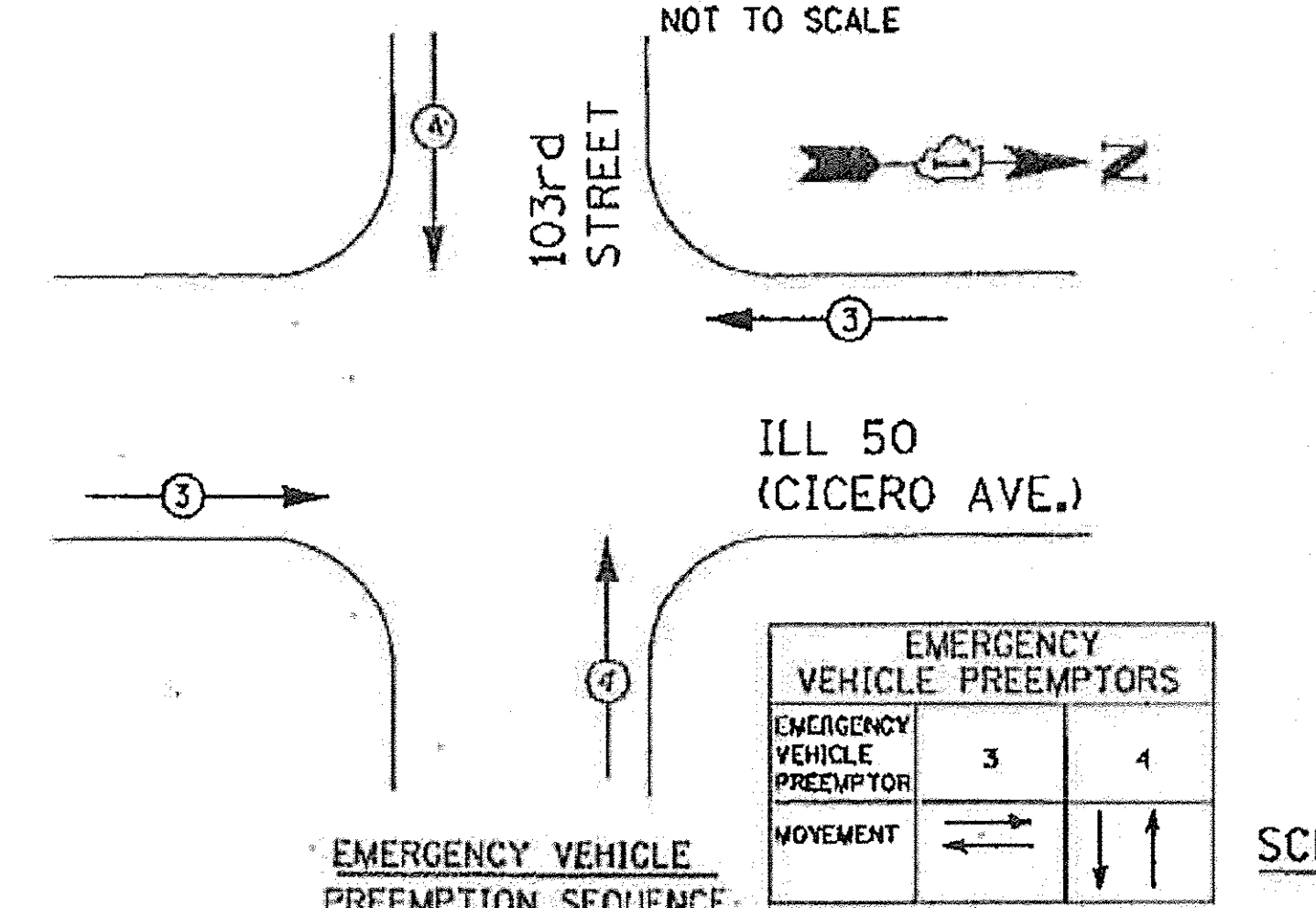
**CONTROLLER SEQUENCE IV**

REFERRING TO STANDARD 2393-1, THE VEHICULAR AND PEDESTRIAN PHASES USED DESIGNATED BELOW



**LEGEND**  
 ← \* → VEHICULAR MOVEMENT  
 ← \* → PEDESTRIAN MOVEMENT  
 \* NUMBER REFERS TO ASSOCIATED PHASE

**EXISTING & PROPOSED PHASE DESIGNATION DIAGRAM**  
 NOT TO SCALE



EMERGENCY VEHICLE PREEMPTION SEQUENCE		
EMERGENCY VEHICLE PREEMPTION	3	4
MOVEMENT	←	↑

**CABLE PLAN LEGEND**

- |                 |   |                 |   |
|-----------------|---|-----------------|---|
| <b>EXISTING</b> | <b>PROPOSED</b>   | <b>EXISTING</b> | <b>PROPOSED</b>   |
| (C)             | (B) 8" (200mm) TRAFFIC SIGNAL SECTION   | (R)             | (R) 12" (300mm) TRAFFIC SIGNAL SECTION                          |
| (R)             | (R) 12" (300mm) TRAFFIC SIGNAL SECTION  | (W)             | (W) 12" (300mm) PEDESTRIAN SIGNAL SECTION                       |
| (W)             | (W) 12" (300mm) PEDESTRIAN SIGNAL SECTION   | (C)             | (C) 12" (300mm) PEDESTRIAN SIGNAL SECTION W/ COUNTDOWN TIMER    |
| (C)             | (C) 12" (300mm) PEDESTRIAN SIGNAL SECTION W/ COUNTDOWN TIMER  | (P)             | (P) SIGNAL FACE WITH BACKPLATE. "P" INDICATES PROGRAMMED HEAD   |
| (S)             | (S) CONTROLLER CABINET  | (Z)             | (Z) RAILROAD CONTROL CABINET                                    |
| (S)             | (S) CONTROLLER CABINET  | (L)             | (L) ILLUMINATED SIGN, FIBER OPTIC "NO LEFT TURN"                |
| (I)             | (I) SERVICE INSTALLATION  | (R)             | (R) ILLUMINATED SIGN, FIBER OPTIC "NO RIGHT TURN"               |
| (T)             | (T) TELEPHONE CONNECTION  | (H/C)           | (H/C) GROUND ROD AT HANDHOLE, DOUBLE HANDHOLE, OR CONTROLLER    |
| (M)             | (M) MAGNETIC DETECTOR   | (P)             | (P) GROUND ROD AT POST OR MAST ARM POLE                         |
| (E)             | (E) EMERGENCY VEHICLE LIGHT DETECTOR  | (S)             | (S) GROUND ROD AT ELECTRIC SERVICE INSTALLATION                 |
| (C)             | (C) CONFIRMATION BEACON   | (1)             | (1) GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER (GREEN)         |
| (D)             | (D) PUSHBUTTON DETECTOR   | (24)            | (24) FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125 2-MM12F & 5M12F |
| (V)             | (V) VEHICLE DETECTOR, INDUCTION LOOP  | (B)             | (B) UNINTERRUPTED POWER SUPPLY                                  |
| (2)             | (2) DENOTES NUMBER OF CONDUCTORS, ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |                 |   |

**REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT**

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

- 6 EACH SIGNAL HEAD, 1 - FACE, 3 - SECTION
- 8 EACH SIGNAL HEAD, 1 - FACE, 5 - SECTION
- 10 EACH TRAFFIC SIGNAL BACKPLATE
- 8 EACH PEDESTRIAN SIGNAL HEAD, 1-FACE
- 8 EACH PEDESTRIAN PUSHBUTTON

**SCHEDULE OF QUANTITIES**

ITEM	UNIT	QUANTITY
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
SIGNAL HEAD, L.E.D., 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	8
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	4
SIGNAL HEAD, L.E.D., 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	4
PEDESTRIAN SIGNAL HEAD, L.E.D., 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	8
TRAFFIC SIGNAL BACKPLATE, LOUVERED, ALUMINUM	EACH	12
PEDESTRIAN PUSH-BUTTON	EACH	8
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1
UNINTERRUPTABLE POWER SUPPLY	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	493

FOUNDATION	DEPTH	DEPTH (FT.)	CABLE SLACK (FT.)	VERTICAL (FT.)
TYPE A - POST	4	HANDHOLE	6.5	ALL FOUNDATIONS
D - CONTROLLER	4	DOUBLE HANDHOLE	13	MAST ARM (L) POLE =20'x4'-2
E - MAST ARM POLE		SIGNAL POST	2	BRACKET MOUNTED
24"	10	CONTROLLER CAB.	1	PEDESTRIAN PUSHBUTTON
30"	15	FIBER OPTIC	13	ELECTRICAL SERVICE
		ELECTRICAL SERVICE	1	SERVICE TO GROUND
		GROUND CABLE	1	POSTMOUNTED

1) 5" THICK CONCRETE PAD SHALL BE POURED NEXT TO NEW CONTROLLER AND/OR UPS TO PROVIDE EASY MAINTENANCE ACCESS.

2) MAINTENANCE PAD SHALL EXTEND TO THE EDGE OF EXISTING CONTROLLER FOUNDATION.

3) COST OF PAD SHALL BE INCLUDED IN THE PRICE OF UPS CABINET.

**CONCRETE MAINTENANCE PAD DETAIL (TYPICAL)**  
 N.T.S.

I. D. O. T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				
TYPE	NO. LAMPS	WATTAGE		% OPERATIONS
		INCAND.	LED	
SIGNAL (RED)	16	135	17	0.50
(YELLOW)	16	135	25	0.25
(GREEN)	16	135	15	0.25
ARROW	16	135	12	0.10
LED. SIGNAL	8	90	25	1.00
CONTROLLER	1	100	100	100
ILLUM. SIGN				0.05
TOTAL =				615.2

**ENERGY COSTS - BILLED TO: IDOT DISTRICT I**  
 201 WEST CENTER COURT  
 SCHAMBERG, IL 60196-1096

**ENERGY SUPPLY - CONTACT MILTON RAY**  
 PHONE (708) 235-2315  
 COMPANY COMED

FILE NAME =	USER NAME = jhouseh	DESIGNED - JS	REVISED -
FILE#		DRAWN - DW	REVISED -
		CHECKED - JD	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

IL ROUTE 50 (CICERO AVE.) AND 103RD ST. - SCHEDULE OF QUANTITIES, CABLE PLAN, PHASE DESIGNATION DIAGRAM AND EVP SEQUENCE

SCALE: NONE SHEET NO. 11 OF 29 SHEETS STA. TO STA.

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL INSTALLATION PLAN FOR CICERO AVENUE

SCALE: N.T.S. SHEET NO. 28 OF 30 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
350	2009-013 TS	COOK	29	11
				CONTRACT NO. 60G11

FILE NAME =	USER NAME = jhouseh	DESIGNED - JEH	REVISED -
FILE#		DRAWN - EDT	REVISED -
		CHECKED - LMF	REVISED -
		DATE - 9/28/2016	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL INSTALLATION PLAN FOR CICERO AVENUE

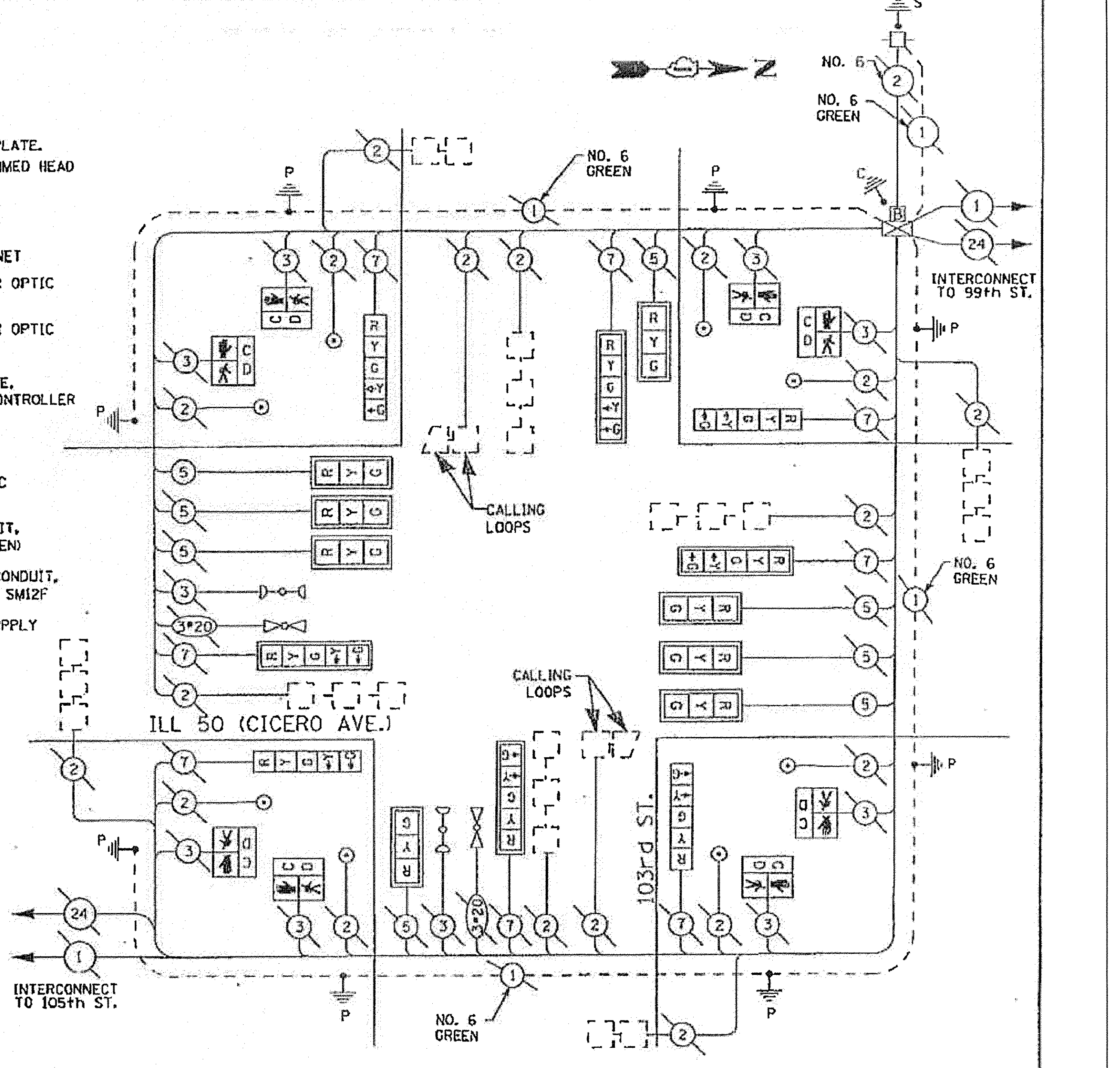
SCALE: N.T.S. SHEET NO. 28 OF 30 SHEETS STA. TO STA.

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

TRAFFIC SIGNAL INSTALLATION PLAN FOR CICERO AVENUE

SCALE: N.T.S. SHEET NO. 28 OF 30 SHEETS STA. TO STA.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1574	16-00188-00-RS	COOK	30	28
				CONTRACT NO. 61D46



**CABLE PLAN**

**CONSTRUCTION NOTES:**

- CONTRACTOR SHALL ADHERE TO PROCEDURES SET FORTH IN THE SPECIAL PROVISIONS FOR TRANSFER OF MAINTENANCE OF THE INTERSECTION.
- AS EXISTING SIGNAL INSTALLATION IS REMAINING OPERATIONAL DURING THIS CONTRACT, ANY DAMAGED EXISTING EQUIPMENT OR EXISTING EQUIPMENT NOT OPERATING PROPERLY FROM ANY CAUSE WHATSOEVER SHALL BE REPAIRED WITH NEW EQUIPMENT PROVIDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE CONTRACT AND OR OWNER OF THE TRAFFIC SIGNAL SYSTEM, ALL AS APPROVED BY THE ENGINEER.
- EXISTING CROSSWALKS AND STOP BARS SHALL BE REPLACED WHERE CONFIRMED FOR LOCATIONS BY THE ENGINEER.
- ALL CABINET MODIFICATIONS AND/OR LOAD SWITCH REPLACEMENTS REQUIRED FOR PROPER OPERATION OF LED SIGNAL AND LED CONFIRMATION BEACON INDICATIONS TO THE SATISFACTION OF THE ENGINEER SHALL BE INCIDENTAL TO THE PAY ITEM UNINTERRUPTABLE POWER SUPPLY.

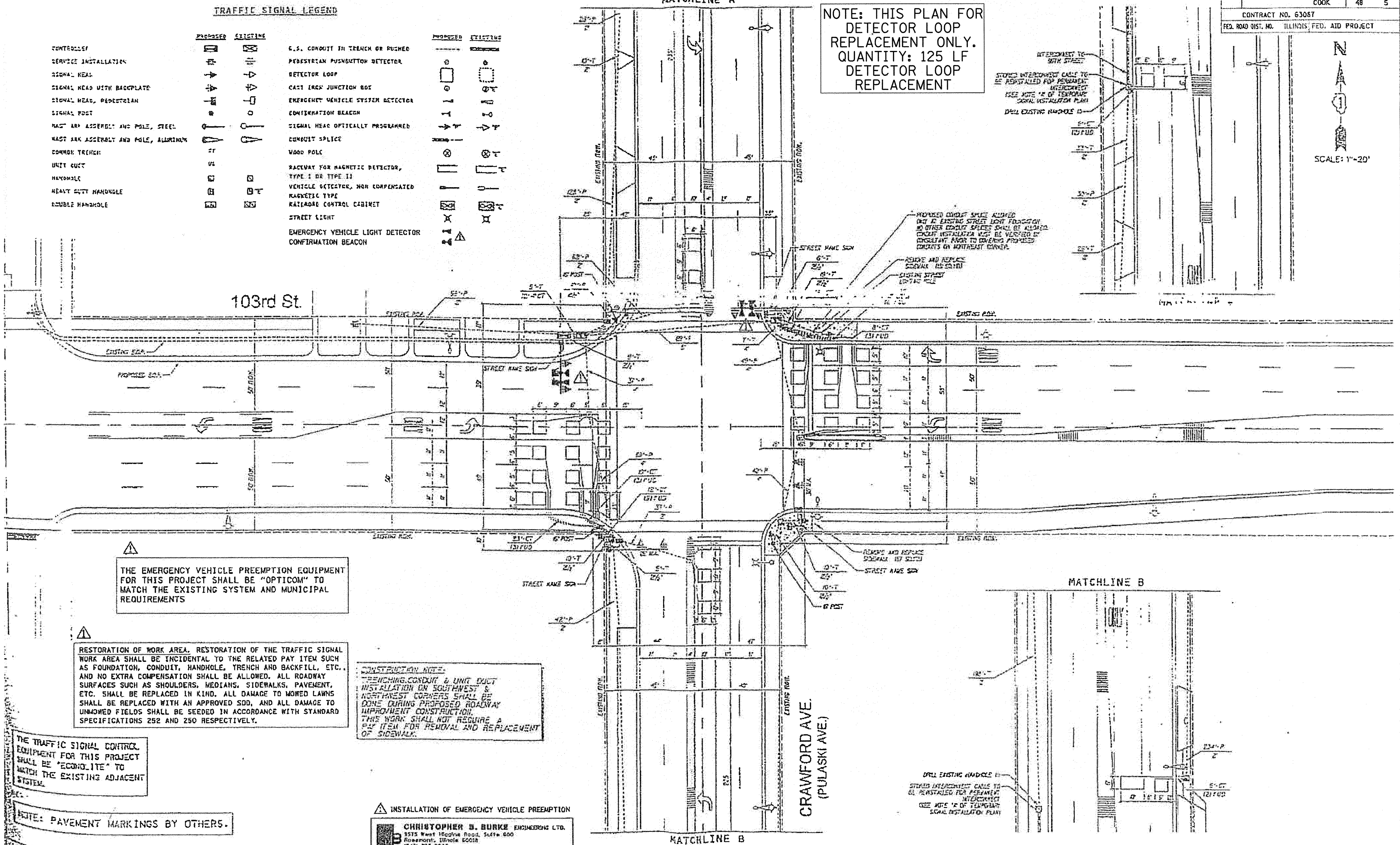
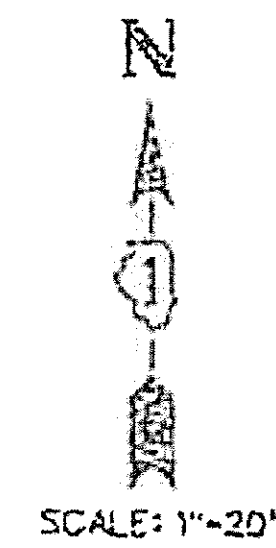


**TRAFFIC SIGNAL LEGEND**

	PROPOSED	EXISTING		PROPOSED	EXISTING
CONDUIT	[Symbol]	[Symbol]	U.S. CONDUIT IN TRENCH OR PULLED	[Symbol]	[Symbol]
SERVICE INSTALLATION	[Symbol]	[Symbol]	PEDESTRIAN PUSHBUTTON DETECTOR	[Symbol]	[Symbol]
SIGNAL HEAD	[Symbol]	[Symbol]	DETECTOR LOOP	[Symbol]	[Symbol]
SIGNAL HEAD WITH BACKPLATE	[Symbol]	[Symbol]	CAST IRON JUNCTION BOX	[Symbol]	[Symbol]
SIGNAL HEAD, PEDESTRIAN	[Symbol]	[Symbol]	EMERGENCY VEHICLE SYSTEM DETECTOR	[Symbol]	[Symbol]
SIGNAL POST	[Symbol]	[Symbol]	CONFIRMATION BEACON	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, STEEL	[Symbol]	[Symbol]	SIGNAL HEAD OPTICALLY PROGRAMMED	[Symbol]	[Symbol]
MAST ARM ASSEMBLY AND POLE, ALUMINUM	[Symbol]	[Symbol]	CONDUIT SPlice	[Symbol]	[Symbol]
CONDUIT TRENCH	[Symbol]	[Symbol]	WOOD POLE	[Symbol]	[Symbol]
UNIT GUY	[Symbol]	[Symbol]	RAILWAY FOR MAGNETIC DETECTOR, TYPE I OR TYPE II	[Symbol]	[Symbol]
HANDHOLE	[Symbol]	[Symbol]	VEHICLE DETECTOR, NON COMPENSATED	[Symbol]	[Symbol]
HEAVY GUY HANDHOLE	[Symbol]	[Symbol]	MAGNETIC TYPE	[Symbol]	[Symbol]
DOUBLE HANDHOLE	[Symbol]	[Symbol]	KATADRE CONTROL CABINET	[Symbol]	[Symbol]
			STREET LIGHT	[Symbol]	[Symbol]
			EMERGENCY VEHICLE LIGHT DETECTOR	[Symbol]	[Symbol]
			CONFIRMATION BEACON	[Symbol]	[Symbol]

**NOTE: THIS PLAN FOR DETECTOR LOOP REPLACEMENT ONLY. QUANTITY: 125 LF DETECTOR LOOP REPLACEMENT**

CONTRACT NO. 63067  
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" TO MATCH THE EXISTING SYSTEM AND MUNICIPAL REQUIREMENTS

RESTORATION OF WORK AREA, RESTORATION OF THE TRAFFIC SIGNAL WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUIT, HANDHOLE, TRENCH AND BACKFILL, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD, AND ALL DAMAGE TO UNMOWED FIELDS SHALL BE SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.

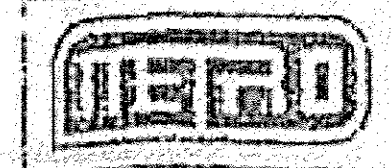
**CONSTRUCTION NOTE:**  
TRENCHING, CONDUIT & UNIT DUCT INSTALLATION ON SOUTHWEST & NORTHWEST CORNERS SHALL BE DONE DURING PROPOSED ROADWAY IMPROVEMENT CONSTRUCTION. THIS WORK SHALL NOT REQUIRE A PAY ITEM FOR REMOVAL AND REPLACEMENT OF SIDEWALK.

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

NOTE: PAVEMENT MARKINGS BY OTHERS.

INSTALLATION OF EMERGENCY VEHICLE PREEMPTION  
**CHRISTOPHER B. BURKE ENGINEERING LTD.**  
3515 West 116th Road, Suite 600  
Rosemont, Illinois 60018  
(630) 823-9500

prepared by METRO for EDWIN HANCOCK COMPANY  
METRO TRANSPORTATION GROUP, INC.  
TRANSPORTATION PLANNING, ENGINEERING, AND DESIGN  
1000 GILBERT ROAD, ROSEMONT, ILL. 60018  
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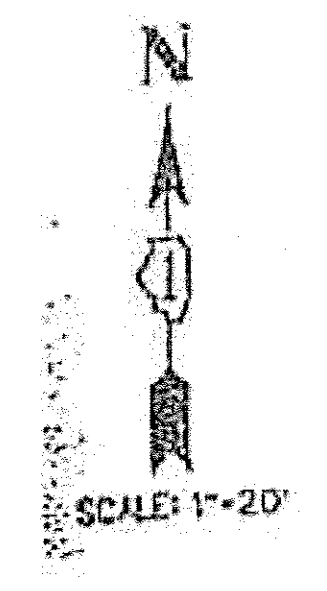


**SIGNAL INSTALLATION PLAN**  
103rd STREET at PULASKI AVE.  
OAKLAWN, ILLINOIS

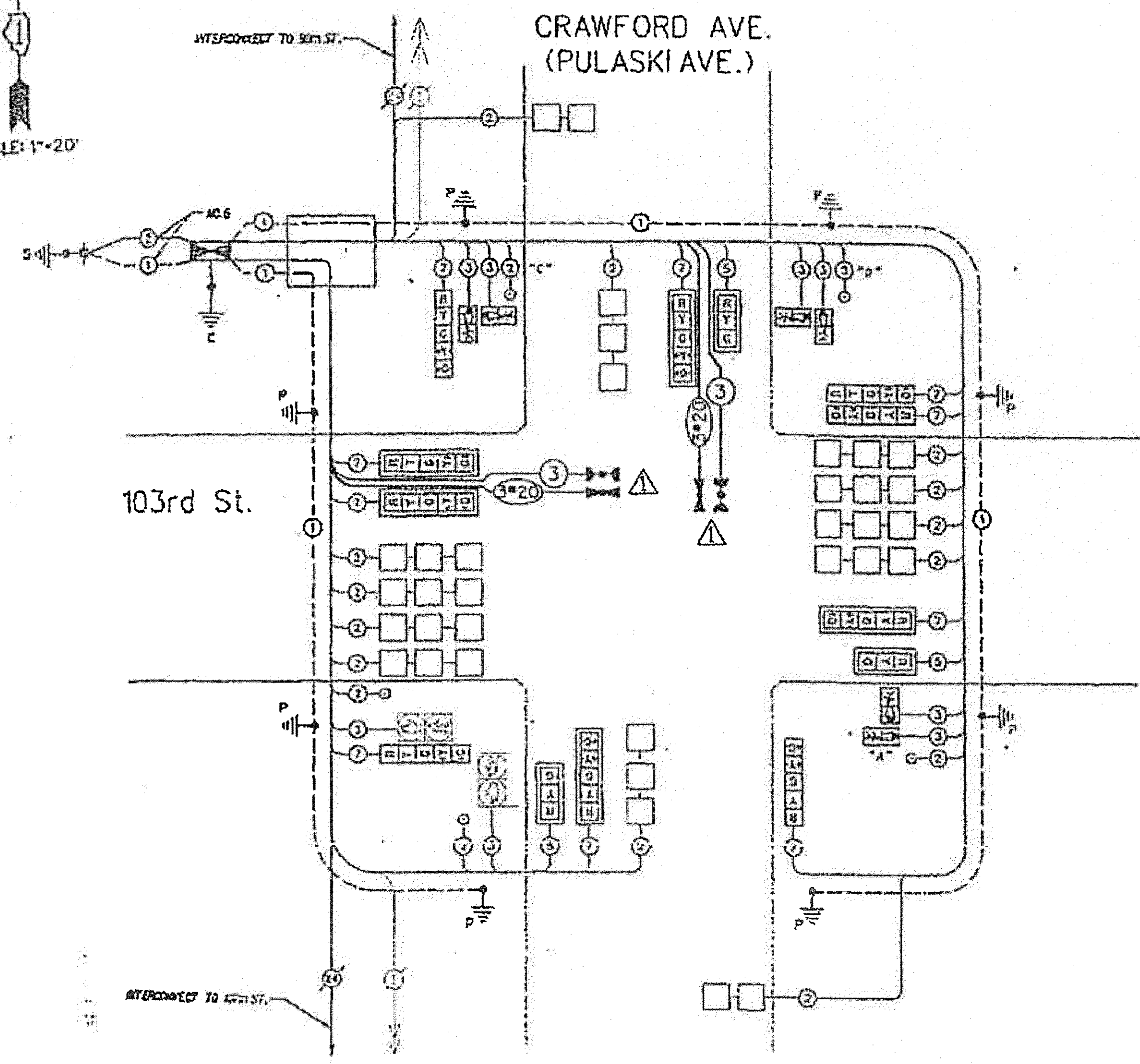
SCALE:	SHEET
DRAWN BY:	76
BOOK NO.:	1366
DATE:	12-7-03
E.I.C. NO. 2540-00-2510	105

FILE NAME = N:\OakLawn\160313\Civil\std.160313-04.sht	USER NAME = jhouseh	DESIGNED - JEH	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TRAFFIC SIGNAL INSTALLATION PLAN FOR PULASKI ROAD</b>		F.A.U. RTE. 1574	SECTION 16-00188-00-RS	COUNTY COOK	TOTAL SHEETS 30	SHEET NO. 29
PLOT SCALE = NOT TO SCALE	PLOT DATE = 9/28/2016	DRAWN - EDT	REVISED -		SCALE: N.T.S.	SHEET NO. 29 OF 30 SHEETS	STA. TO STA.	CONTRACT NO. 61D46		ILLINOIS FED. AID PROJECT	
		CHECKED - LMF	REVISED -								
		DATE - 9/28/2016	REVISED -								





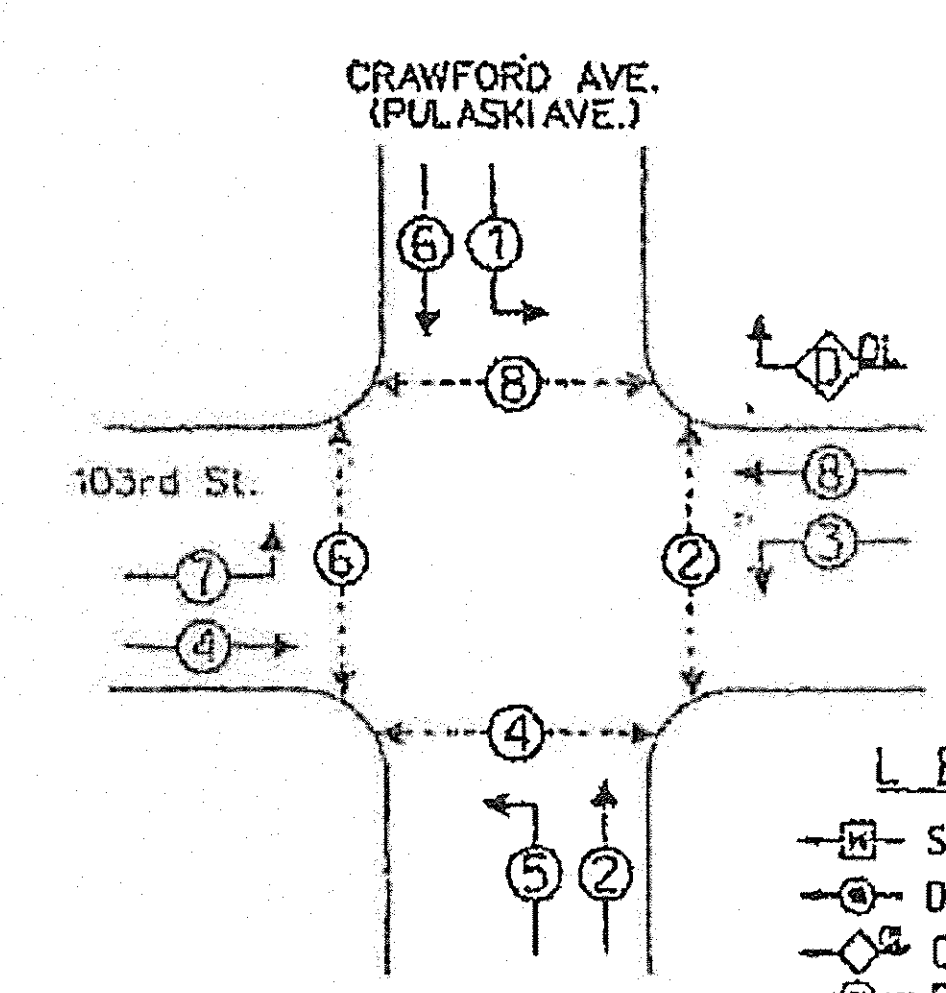
### CABLE PLAN



### CABLE PLAN LEGEND

- | EXISTING | PROPOSED |  |
|----------|----------|--|
|          |          | 6x1200MM TRAFFIC SIGNAL SECTION  |
|          |          | 12x300MM PEDESTRIAN SIGNAL SECTION   |
|          |          | 12x300MM PEDESTRIAN SIGNAL SECTION   |
|          |          | CONTROLLER CABINET   |
|          |          | SERVICE INSTALLATION   |
|          |          | VEHICLE DETECTOR INDUCTION LOOP  |
|          |          | MAGNETIC DETECTOR  |
|          |          | EMERGENCY VEHICLE LIGHT DETECTOR   |
|          |          | CONFIRMATION BEACON  |
|          |          | PUSHBUTTON DETECTOR  |
|          |          | NUMERICAL SYMBOL INDICATES NUMBER OF CONDUCTORS. ALL CABLE NO. 14 EXCEPT AS INDICATED. ALL LOOP DETECTOR CABLE TO BE SHIELDED. |
|          |          | SIGNAL FACE WITH BACKPLATE   |
|          |          | * INDICATES PROGRAMMED HEAD  |
|          |          | GROUND ROD AT HANDHOLE OR CONTROLLER   |
|          |          | GROUND ROD AT POST OR MAST ARM POLE  |
|          |          | GROUND ROD AT ELECTRIC SERVICE INSTALLATION  |
|          |          | GROUND ROD EXISTING TO BE REUSED   |
|          |          | GROUND CABLE IN CONDUIT, NO. 6 SOLID COPPER GREEN  |
|          |          | NO. 25/125 MM 12F & 5M 12F, FIBER OPTIC CABLE  |
|          |          | NO. 14 IC TRACER CABLE   |
- NOTE: ALL NEW GROUND RODS SHALL BE 3/4" x 10'-0" LONG COPPER CLAD. THE COST SHALL BE INCIDENTAL TO THE COST OF INSTALLATION.

### EXISTING AND PROPOSED CONTROLLER SEQUENCE



### LEGEND

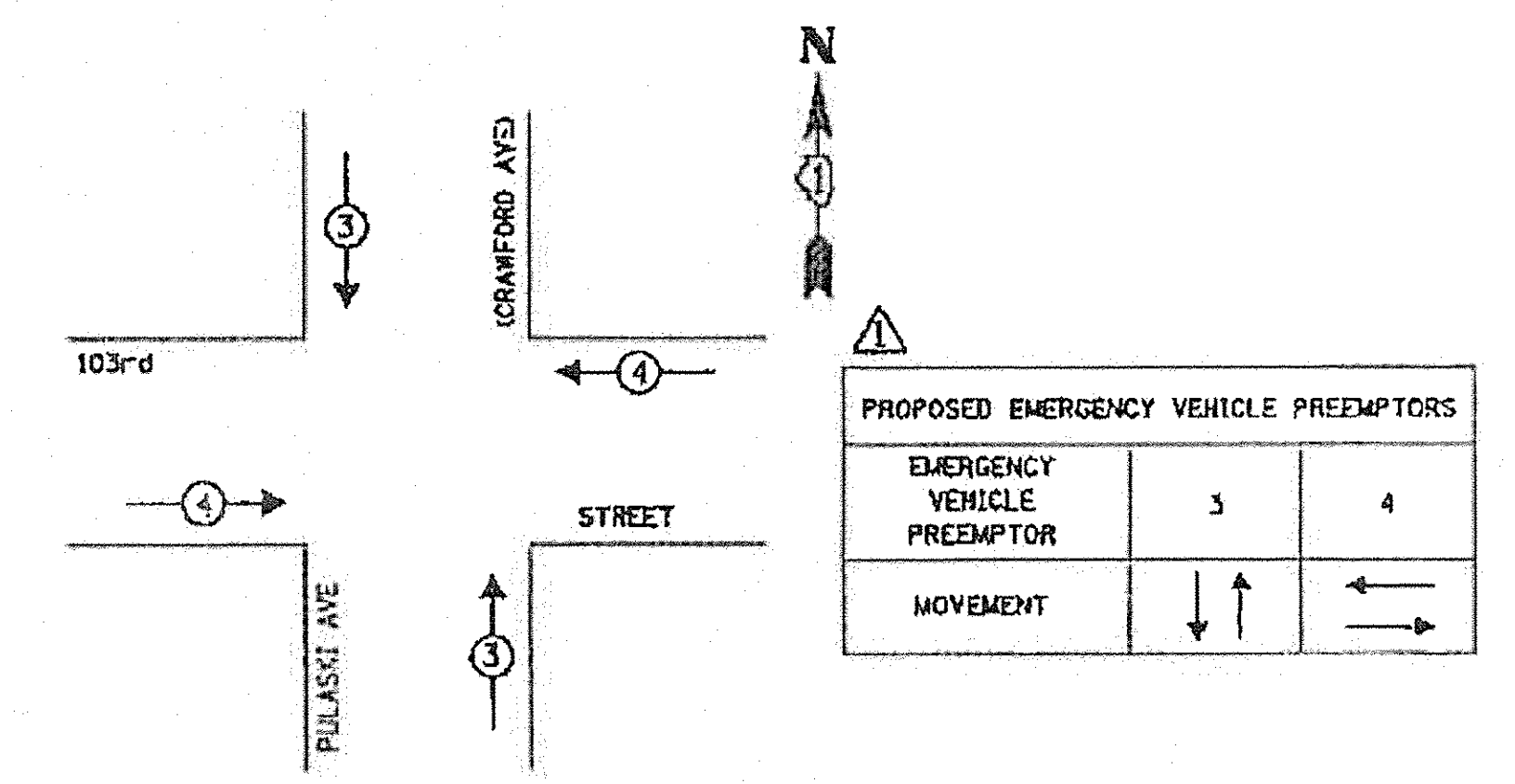
- SINGLE ENTRY PHASE
- DUAL ENTRY PHASE
- OVERLAP
- PEDESTRIAN PHASE
- NUMBER REFERS TO ASSOCIATED PHASE.

### PHASE DESIGNATION DIAGRAM

### RIGHT TURN OVERLAP PHASE DESIGNATION

OVERLAP LETTER	PERMISSIVE PHASE	PROTECTED PHASE
O	3	1

### EMERGENCY VEHICLE PREEMPTION SEQUENCE



### SCHEDULE OF QUANTITIES

ITEM	UNIT	TOTAL
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
ELECTRIC CABLE IN CONDUIT, SIGNAL, NO. 14 3C	FOOT	244
LIGHT DETECTOR	EACH	2
LIGHT DETECTOR AMPLIFIER	EACH	1
MODIFY EXISTING CONTROLLER CABINET	EACH	1
ELECTRIC CABLE IN CONDUIT, NO. 20 3C, TWISTED, SHIELDED	FOOT	244
TRAFFIC CONTROL AND PROTECTION, STANDARD 701701	EACH	1

- NOTE:
- PUSH BUTTON "A" SHALL PLACE A CALL IN PHASES 2 AND 4
  - PUSH BUTTON "C" SHALL PLACE A CALL IN PHASES 6 AND 8.
  - PUSH BUTTON "D" SHALL PLACE A CALL IN PHASES 8 AND 2

I.D.O.T. TRAFFIC SIGNAL INSTALLATION ELECTRICAL SERVICE REQUIREMENTS				TOTAL WATTAGE
TYPE	NO. OF LAMPS	WATTAGE PER LAMP	OPERATION	
SIGNAL (RED)	13	17	0.50	110.50
(YELLOW)	13	25	0.25	81.25
(GREEN)	13	15	0.25	48.75
ARROW	20	12	0.10	24.00
PED. SIGNAL	6	25	1.00	200.00
CONTROLLER	1	100	1.00	100.00
ILLUM. SIGN	-	25	0.05	-
FLASHER	-	-	0.50	-
TOTAL =				564.50

THE TRAFFIC SIGNAL CONTROL EQUIPMENT FOR THIS PROJECT SHALL BE "ECONOLITE" TO MATCH THE EXISTING ADJACENT SYSTEM.

FOUNDATION DEPTH	FT.	UNIT	CABLE SLACK	FT.	UNIT	VERTICAL	FT.	UNIT
TYPE A - POST	4	11.21	HANDHOLE	6.5	12.01	ALL FOUNDATIONS	3.5	11.01
D - CONTROLLER	4	11.21	GRABBLE HANDHOLE	13	14.00	MAST ARM (L) POLE	20'±1'-2"	
E - MAST ARM POLE	2	11.21	SIGNAL POST	2	11.01	BRACKET MOUNTED	13	14.01
24" (762mm)	10	13.01	CONTROLLER CAB.	1	10.51	FEEL PUSHBUTTON	4	11.01
30" (914mm)	15	14.01	FIBER OPTIC	13	14.01	ELECTRIC SERVICE	13.5	14.11
36" (1067mm)	15	14.01	ELECTRIC SERVICE	1	10.51	SERVICE TO GROUND	13.5	14.11
			GROUND CABLE	1	10.51	POST UNGRADED	6	11.01

THE EMERGENCY VEHICLE PREEMPTION EQUIPMENT FOR THIS PROJECT SHALL BE "OPTICOM" TO MATCH THE EXISTING SYSTEM AND MUNICIPAL REQUIREMENTS

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**CHRISTOPHER D. BURKE ENGINEERING LTD.**  
 2075 WEST Higgins Road, Suite 600  
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAY/DISTRICT 1  
 201 WEST CENTER COURT/SCHAUMBURG, ILLINOIS 60196-1096  
 ENERGY SUPPLY CONTACT:  
 PHONE:  
 COMPANY:

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 ESTABLISHED 1911

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 PH: (630) 213-1000



CABLE PLAN, PHASE DESIGNATION DIAGRAM AND SCHEDULE OF QUANTITIES  
 103rd STREET at PULASKI AVE.  
 OAKLAWN, ILLINOIS

SCALE: 1"=20'  
 DRAWN BY: JPH  
 BOOK NO.: 1386  
 DATE: 12-1-01  
 E.N.E. NO. 1640-05-25103  
 SHEET NO. 77  
 OF 105