01-30-15 LETTING ITEM 013

F.A.U RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	1
	ILLINOIS	CONTRACT NO. 61A79		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS FOR PROPOSED FEDERAL AID HIGHWAY

FAU ROUTE 1370 (JEFFERSON STREET)
CHURCH ROAD TO COUNTY LINE ROAD
RESURFACING
SECTION 14–00091–00–RS
PROJECT: M–4003(388)
VILLAGE OF BENSENVILLE
DUPAGE COUNTY
C–91–040–15

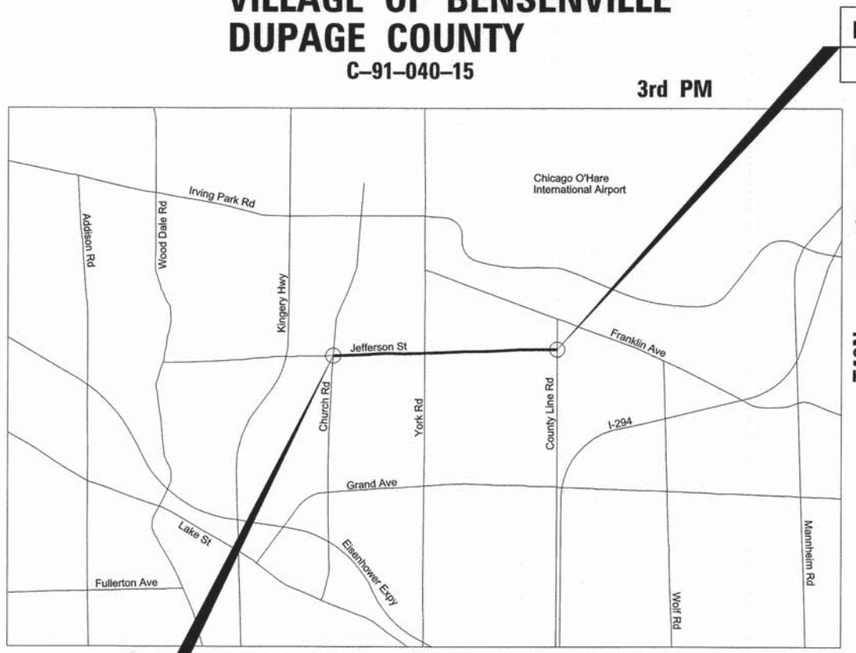
FEDERAL AID PROGRAM ENGINEER: FAWAD AQUEEL, P.E. (847) 705–4021 SCHAUMBURG, IL

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA
EXISTING ADT = 6,600 (2011)

SPEED LIMIT:
25 / 30 MPH (POSTED)

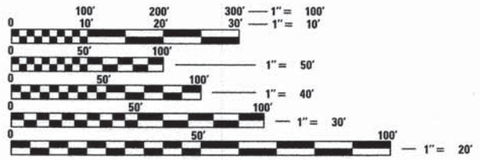
DESIGN DESIGNATION
MAJOR COLLECTOR



LOCATION MAP
NOT TO SCALE

GROSS LENGTH = 8750.25 FT. = 1.66 MILE
NET LENGTH = 8750.25 FT. = 1.66 MILE

LOCATION OF SECTION INDICATED THUS: –



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

CONSULTING ENGINEERS
Bollinger, Lach & Associates, Inc.
333 PIERCE ROAD SUITE 200 ITASCA, IL 60143
P:(630) 438 6400 F:(630) 438 6444 www.bollingerlach.com
ILLINOIS * INDIANA * WISCONSIN

JAYMIN I. PATEL
062-051494
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

JAYMIN I. PATEL DATE 10/14/14
ILLINOIS REGISTERED PROFESSIONAL ENGINEER NO. 062-051494
MY LICENSE EXPIRES ON 11-30-15.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

Approved Joseph M Caracci
Director of Public Works
VILLAGE OF BENSENVILLE

Passed NOVEMBER 3, 2014

C Holt CHRISTOPHER HOLT
District One Engineer of Local Roads & Streets

Releasing for Bid Based on Limited Review NOVember 6 2014

John Fortmann
Deputy Director of Highways, Region One Engineer

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

CONTRACT NO. 61A79

INDEX OF SHEETS

DISTRICT DETAILS

BD-8	DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING
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	DISTRICT ONE TYPICAL PAVEMENT MARKINGS
TC-16	PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING
TC-22	ARTERIAL ROAD INFORMATION SIGN
TS-05	DISTRICT ONE STANDARD TRAFFIC SIGNAL DESIGN DETAILS
TS-07	DISTRICT 1 - DETECTOR LOOP INSTALLATION DETAILS FOR ROADWAY RESURFACING

HIGHWAY STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL EQUIVALENTS OF AN INCH-FOOT
424001-08	PERPENDICULAR CURB RAMPS FOR SIDEWALKS
442201-03	CLASS C AND D PATCHES
606001-05	CONCRETE CURB TYPE B COMBINATION CURB AND GUTTER
630001-10	STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE 2L, 2W MOVING OPERATIONS- DAY ONLY
701501-06	URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
701006-05	OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701801-05	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-04	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
886001-01	DETECTOR LOOP INSTALLATION
886006-01	TYPICAL LAYOUTS FOR DETECTION LOOPS

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 2012 (HEREIN AFTER REFERRED TO AS THE STANDARD SPECIFICATIONS; THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 2015; THE LATEST EDITION OF THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS; THE STANDARD SPECIFICATIONS FOR WATER & SEWER MAIN CONSTRUCTION IN ILLINOIS, SEVENTH EDITION; THE DETAILS IN THE PLANS; AND THE SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.
2. ANY REFERENCE TO STANDARDS THROUGHOUT THE PLANS OR SPECIAL PROVISIONS SHALL BE INTERPRETED AS THE LATEST STANDARD OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
3. BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOURS NOTIFICATION IS REQUIRED.
4. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH LOCAL EMERGENCY SERVICES AND THE VILLAGE OF BENSENVILLE USING THE FOLLOWING TELEPHONE NUMBERS:

   POLICE DEPARTMENT: (630) 350-3455

   FIRE PROTECTION DISTRICT #2: (630) 350-3441

   EMERGENCY MANAGEMENT AGENCY: (630) 350-3461
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE OWNERS OF ALL UTILITIES PRIOR TO CONSTRUCTION TO DETERMINE THE LOCATION OF ALL EXISTING AND PROPOSED UTILITY EQUIPMENT. THE CONTRACTOR SHALL COOPERATE WITH ALL UTILITY OWNERS, IF UTILITY RELOCATION, ADJUSTMENT, OR PROTECTION IS NECESSARY.
6. THE LOCATION OF EXISTING DRAINAGE STRUCTURES, STORM SEWERS, WATER MAINS, SANITARY SEWERS, AND ANY OTHER PUBLIC OR PRIVATE UTILITIES AS SHOWN ON THE PLANS IS APPROXIMATE, AND THEIR EXACT LOCATION IS TO BE DETERMINED IN THE FIELD BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL SECTION OR SUBSECTION MONUMENTS, PROPERTY CORNERS AND REFERENCE MARKERS UNTIL THE OWNER, OWNER'S REPRESENTATIVE, OR AN AUTHORIZED SURVEYOR HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
8. ANY LOOSE MATERIAL DEPOSITED IN THE FLOW LINE OF DRAINAGE STRUCTURES WHICH OBSTRUCTS THE NATURAL FLOW OF WATER SHALL BE REMOVED AT THE CLOSE OF EACH WORKING DAY. PRIOR TO ACCEPTANCE OF IMPROVEMENT. ALL DRAINAGE STRUCTURES SHALL BE FREE OF DIRT AND DEBRIS. THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT.
9. THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE OR VILLAGE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT OR THE VILLAGE.
10. THE CONTRACTOR SHALL MAINTAIN EXISTING SIDE STREET ACCESS, EXISTING DRIVEWAY ACCESS AND PEDESTRIAN ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING CONSTRUCTION OF THE PROJECT UNLESS OTHERWISE NOTED IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
11. NITROGEN FERTILIZER, POTASSIUM FERTILIZER, AND PHOSPHORUS FERTILIZER NUTRIENTS SHALL BE PLACED OVER SODDING AT THE RATE OF 60 POUNDS PER ACRE.
12. SAW CUTTING OF CURB AND GUTTER SHALL BE FULL DEPTH AND SHALL RESULT IN A CLEAN STRAIGHT EDGE ON THE PORTION REMAINING. ALL SAW CUTTING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE ITEM BEING REMOVED.
13. THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN IN THE PLANS IS NOMINAL. DEVIATIONS MAY OCCUR DUE TO IRREGULARITIES IN THE SURFACES OR BASES ON WHICH THE HOT-MIX ASPHALT MIXTURES ARE TO BE PLACED.
14. PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS, FACE AND TOP OF CURB, SIDEWALKS, AND AS DIRECTED BY THE ENGINEER.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING FRESH CONCRETE FROM DAMAGE AND VANDALISM. ANY DAMAGED OR VANDALIZED CONCRETE SHALL BE REMOVED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
16. WHEN MILLED PAVEMENT IS OPEN TO TRAFFIC THE MAXIMUM GRADE DIFFERENTIAL BETWEEN PASSES OF THE MILLING MATCHING SHALL NOT EXCEED 1-1/2" WHERE THE SPEED LIMIT IS 45 MPH OR LESS AND 1" WHERE THE SPEED LIMIT IS GREATER THAN 45 MPH, WITH WRITTEN APPROVAL FROM THE ENGINEER, A MAXIMUM GRADE DIFFERENTIAL OF 3" MAY BE ALLOWED IF THE EDGE OF THE MILLING IS SLOPED A MINIMUM 1:3 (V:H).
17. BUTT JOINT WILL BE INSTALLED AT THE ENDS OF ALL RESURFACING (WHERE RESURFACING MEETS EXISTING PAVEMENT), IN ACCORDANCE WITH THE DISTRICT DETAIL "BUTT JOINT AND BITUMINOUS TAPER DETAILS" SHEET INCLUDED IN THE PLANS, UNLESS OTHERWISE SPECIFIED.
18. FOR CLASS D PATCHING, CONTRACTOR SHALL MILL BEFORE PATCHING AS DIRECTED BY THE ENGINEER.

[ ] = DENOTES COST IS INCLUDED IN CONTRACT LINE ITEM

CONSTR. CODE
ROADWAY
0005
S.N.

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
21101625	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	164	164
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	2	2
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	2	2
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	2	2
25100630	EROSION CONTROL BLANKET	SQ YD	164	164
25200110	SODDING, SALT TOLERANT	SQ YD	164	164
25200200	SUPPLEMENTAL WATERING	UNIT	1	1
28000510	INLET FILTERS	EACH	85	85
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	21745	21745
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	8.2	8.2
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	2229	2229
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	648	648
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	2283	2283
42001300	PROTECTIVE COAT	SQ YD	446	446

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE ROADWAY 0005 S.N.
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	48	48
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	60	60
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	741	741
42400800	DETECTABLE WARNINGS	SQ FT	14	14
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	26533	26533
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	108	108
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1411	1411
44000600	SIDEWALK REMOVAL	SQ FT	741	741
44201725	CLASS D PATCHES, TYPE I, 7 INCH	SQ YD	272	272
44201729	CLASS D PATCHES, TYPE II, 7 INCH	SQ YD	817	817
44201733	CLASS D PATCHES, TYPE III, 7 INCH	SQ YD	837	837
44201735	CLASS D PATCHES, TYPE IV, 7 INCH	SQ YD	272	272
44300200	STRIP REFLECTIVE CRACK CONTROL TREATMENT	FOOT	8750	8750
60266600	VALVE BOXES TO BE ADJUSTED	EACH	1	1

* SPECIALTY ITEM

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE ROADWAY 0005 S.N.
	60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	507	507
	60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	452	452
	60608562	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.12	FOOT	452	452
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	250	250
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	6	6
*	63200310	GUARDRAIL REMOVAL	FOOT	237	237
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	2	2
	67100100	MOBILIZATION	L SUM	1	1
	70102620	TRAFFIC CONTROL AND PROTECTION, STANDARD 701501	L SUM	1	1
	70102640	TRAFFIC CONTROL AND PROTECTION, STANDARD 701801	L SUM	1	1
	70106800	CHANGEABLE MESSAGE SIGN	CAL MO	4	4
	70300100	SHORT TERM PAVEMENT MARKING	FOOT	1590	1590
	70300210	TEMPORARY PAVEMENT MARKING LETTERS AND SYMBOLS	SQ FT	72	72
	70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	3146	3146

* SPECIALTY ITEM

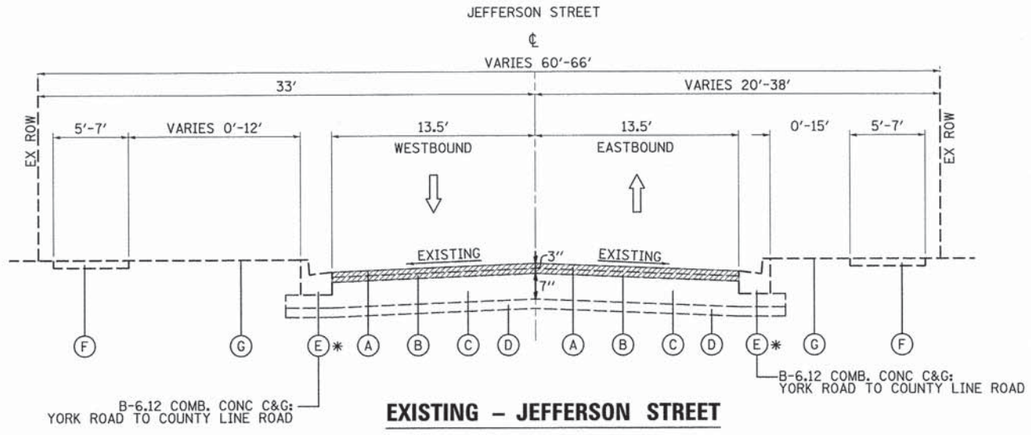
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE ROADWAY 0005 S.N.
	70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	605	605
	70300260	TEMPORARY PAVEMENT MARKING - LINE 12"	FOOT	54	54
	70300280	TEMPORARY PAVEMENT MARKING - LINE 24"	FOOT	110	110
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	2227	2227
*	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	72	72
*	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	3146	3146
*	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	605	605
*	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	54	54
*	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	110	110
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	65	65
*	78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	6	6
*	88600600	DETECTOR LOOP REPLACEMENT	FOOT	439	439
	X6030310	FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	EACH	62	62
	X6040205	FRAMES AND LIDS, SPECIAL	EACH	25	25

* SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE ROADWAY 0005 S.N.
Z0004522	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6"	SQ YD	18	18
Z0004530	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 8"	SQ YD	6	6
Z0004544	HOT-MIX ASPHALT DRIVEWAY PAVEMENT REMOVAL	SQ YD	24	24
△ Z0018500	DRAINAGE STRUCTURES TO BE CLEANED	EACH	85	85
Z0030850	TEMPORARY INFORMATION SIGNING	SQ FT	52	52

* SPECIALTY ITEM

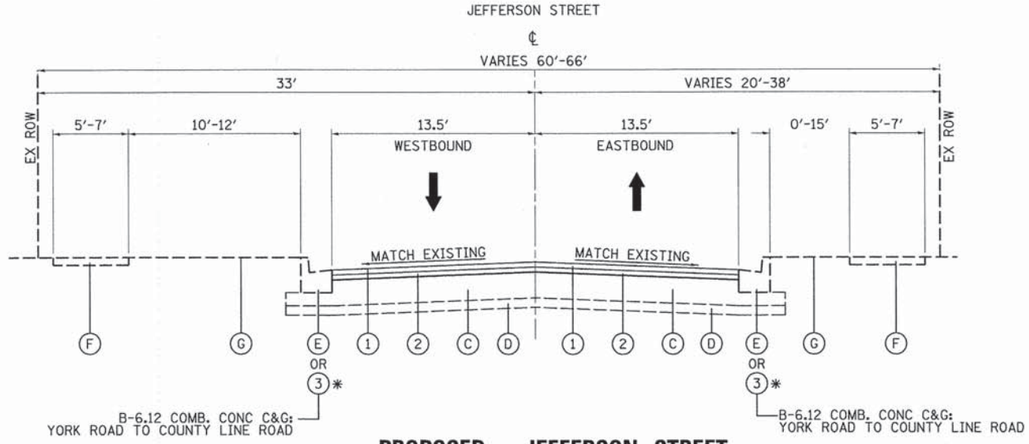
△ 100% VILLAGE OF BENSENVILLE COST



EXISTING – JEFFERSON STREET

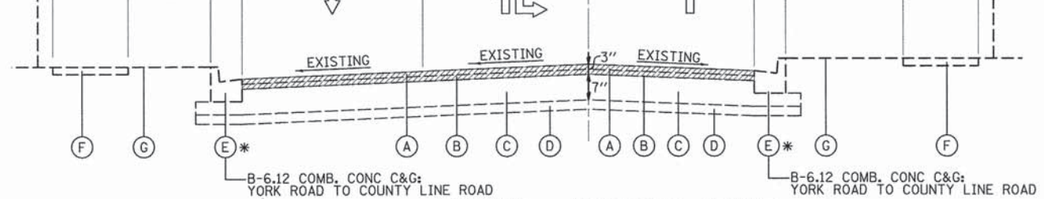
CHURCH ROAD TO CENTER STREET
MAY STREET TO COUNTY LINE ROAD
STA. 0+45.75 TO STA. 32+39.58
STA. 39+84.15 TO STA. 87+96.00

HMA SURFACE REMOVAL 3"



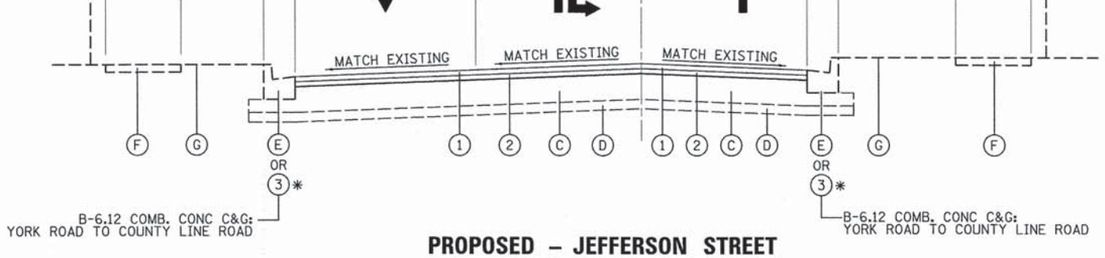
PROPOSED – JEFFERSON STREET

CHURCH ROAD TO CENTER STREET
MAY STREET TO COUNTY LINE ROAD
STA. 0+45.75 TO STA. 32+39.58
STA. 39+84.15 TO STA. 87+96.00



EXISTING – JEFFERSON STREET

CENTER STREET TO MAY STREET
STA. 32+39.58 TO STA. 39+84.15



PROPOSED – JEFFERSON STREET

CENTER STREET TO MAY STREET
STA. 32+39.58 TO STA. 39+84.15

1. THE UNIT WEIGHT USED TO CALCULATE ALL HOT-MIX ASPHALT SURFACE AND BINDER MIXTURES 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 BE PG 64-22 UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS. FOR THE USE OF RECYCLED MATERIALS SEE DISTRICT ONE SPECIAL PROVISIONS.

HMA MIXTURE REQUIREMENTS CHART

MIXTURE TYPE	AIR VOIDS @ N_{DES}	THICKNESS
ROADWAY PAVEMENT: HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL-9.5mm) LEVELING BINDER (MACHINE METHOD), N50 (IL-9.5mm)	 4% @ 50 GYR. 4% @ 50 GYR.	 1.5" 1.5"
PAVEMENT PATCHING: CLASS D PATCHES (HMA BINDER IL-19mm)	4% @ 70 GYR.	7" (3 LIFTS)

EXISTING

- (A) EXISTING HOT-MIX-ASPHALT SURFACE COURSE, 1 1/2" (R)
- (B) EXISTING HOT-MIX ASPHALT BINDER COURSE, 1 1/2" (R)
- (C) EXISTING HOT-MIX ASPHALT BASE COURSE, 7"
- (D) EXISTING SUB BASE GRANULAR MATERIAL, 4"
- *(E) EXISTING COMB. CONC. CURB AND GUTTER B-6.18 / B-6.12 / M-4.12
- (F) EXISTING CONC. SIDEWALK
- (G) EXISTING LANDSCAPE

PROPOSED

- (1) PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", 1 1/2"
- (2) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, 1 1/2"
- *(3) PROPOSED COMB. CONC. CURB AND GUTTER, TYPE B-6.18 / B-6.12 / M-4.12

* COMBINATION CONCRETE CURB AND GUTTER SHALL BE REMOVED AND REPLACED IN KIND AT THE LOCATIONS SHOWN ON THE PLANS AS DIRECTED BY THE ENGINEER.

COMBINATION CONCRETE CURB AND GUTTER USED IN RESIDENTIAL NEIGHBORHOODS SHALL BE OF TYPE M-4.12.

Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

USER NAME = $USER$	DESIGNED - MTC	REVISED -
	DRAWN - MTC	REVISED -
PLOT SCALE = $SCALE$	CHECKED - JIP	REVISED -
PLOT DATE = $DATE$	DATE - 10-20-2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JEFFERSON STREET
TYPICAL SECTIONS

SCALE: N.T.S. | SHEET 1 OF 1 SHEETS | STA. N/A | TO STA. N/A

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	8
		CONTRACT NO. 61A79		
	ILLINOIS FED. AID PROJECT			

LOCATION STATION-STATION	LEVELING BINDER COURSE (MACHINE METHOD), N50 1.5" (TON)	BITUMINOUS MATERIALS (PRIME COAT) (POUND)	HOT MIX ASPHALT SURFACE COURSE, MIX "D", N50 1.5" (TON)
JEFFERSON STREET			
0+45.75 - 13+00 RT	158	1510	159
0+45.75 - 13+00 LT	158	1547	163
13+00 - 26+00 RT	163	1584	167
13+00 - 26+00 LT	163	1648	173
26+00 - 39+00 RT	178	1739	182
26+00 - 39+00 LT	178	1776	187
39+00 - 52+00 RT	164	1611	168
39+00 - 52+00 LT	164	1643	172
52+00 - 65+00 RT	163	1579	166
52+00 - 65+00 LT	163	1616	168
65+00 - 78+00 RT	164	1557	164
65+00 - 78+00 LT	164	1557	164
78+00 - 87+96.00 RT	124	1189	125
78+00 - 87+96.00 LT	125	1189	125
TOTAL	2229	21745	2283

LOCATION STATION-STATION	HMA SURFACE REMOVAL, 3" (SQ YD)	HMA SURFACE REMOVAL - BUTT JOINT (SQ YD)
JEFFERSON STREET		
0+45.75 - 13+00 RT	1872	7
0+45.75 - 13+00 LT	1872	65
13+00 - 26+00 RT	1943	27
13+00 - 26+00 LT	1943	116
26+00 - 39+00 RT	2124	47
26+00 - 39+00 LT	2125	103
39+00 - 52+00 RT	1953	52
39+00 - 52+00 LT	1953	100
52+00 - 65+00 RT	1946	26
52+00 - 65+00 LT	1946	64
65+00 - 78+00 RT	1947	
65+00 - 78+00 LT	1947	
78+00 - 87+96.00 RT	1481	34
78+00 - 87+96.00 LT	1481	7
TOTAL	26533	648

FRAMES AND LIDS, SPECIAL		
STATION	OFFSET	TYPE
JEFFERSON STREET		
0+11	35' LT	VALVE VAULT
0+18	22' LT	VALVE VAULT
0+25	15' LT	VALVE VAULT
2+95	3' RT	SANITARY MANHOLE
5+51	22' LT	VALVE VAULT
5+75	4' RT	SANITARY MANHOLE
11+84	7' LT	VALVE VAULT
13+67	7' LT	VALVE VAULT
16+83	7' RT	VALVE VAULT
17+02	8' RT	SANITARY MANHOLE
18+44	11' RT	STORM MANHOLE
19+99	14' RT	CATCH BASIN
24+11	17' LT	VALVE VAULT
24+57	7' RT	SANITARY MANHOLE
28+37	11' RT	SANITARY MANHOLE
32+49	11' RT	SANITARY MANHOLE
35+76	17' LT	VALVE VAULT
35+92	12' LT	VALVE VAULT
46+34	14' RT	CATCH BASIN
49+33	10' LT	VALVE VAULT
52+63	13' RT	CATCH BASIN
53+13	13' LT	CATCH BASIN
53+14	14' RT	CATCH BASIN
54+92	13' LT	CATCH BASIN
63+00	5' LT	VALVE VAULT
	TOTAL	25

LOCATION STATION-STATION	THERMOPLASTIC PAVEMENT MARKING				
	4" (FT)	6" (FT)	12" (FT)	24" (FT)	LETTERS & SYMBOLS (SQ FT)
JEFFERSON STREET					
0+45.75 - 13+00 RT	193				
0+45.75 - 13+00 LT	192			14	
13+00 - 26+00 RT	152			13	
13+00 - 26+00 LT	152			13	
26+00 - 39+00 RT	790	156		21	36
26+00 - 39+00 LT	402	254		22	36
39+00 - 52+00 RT	234	55			
39+00 - 52+00 LT	133	85			
52+00 - 65+00 RT	163	27		13	
52+00 - 65+00 LT	163	28		14	
65+00 - 78+00 RT	161		27		
65+00 - 78+00 LT	161		27		
78+00 - 87+96.00 RT	125				
78+00 - 87+96.00 LT	125				
TOTAL	3146	605	54	110	72

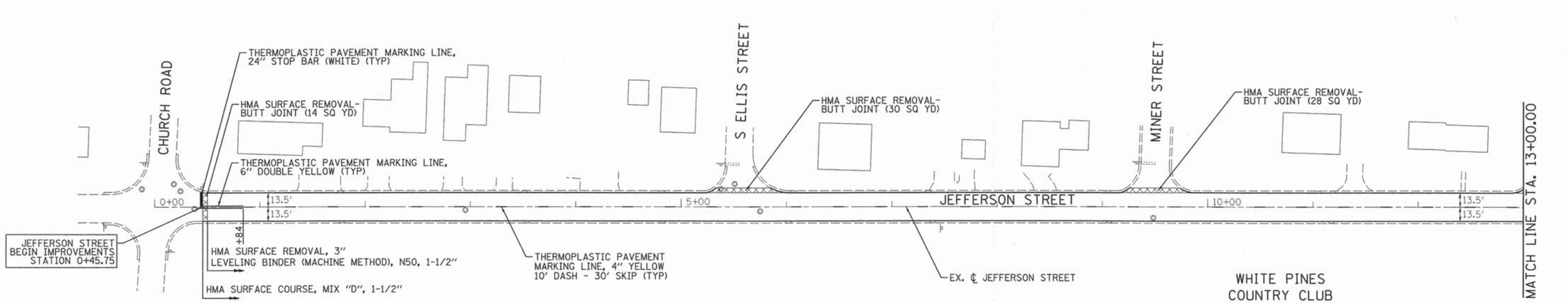
FRAMES AND LIDS TO BE ADJUSTED (SPECIAL)	
STATION	QUANTITY
JEFFERSON STREET	
0+00 - 13+00 RT	3
0+00 - 13+00 LT	3
13+00 - 26+00 RT	8
13+00 - 26+00 LT	2
26+00 - 39+00 RT	5
26+00 - 39+00 LT	3
39+00 - 52+00 RT	6
39+00 - 52+00 LT	8
52+00 - 65+00 RT	5
52+00 - 65+00 LT	7
65+00 - 78+00 RT	2
65+00 - 78+00 LT	4
78+00 - 87+96.00 RT	3
78+00 - 87+96.00 LT	3
TOTAL	62

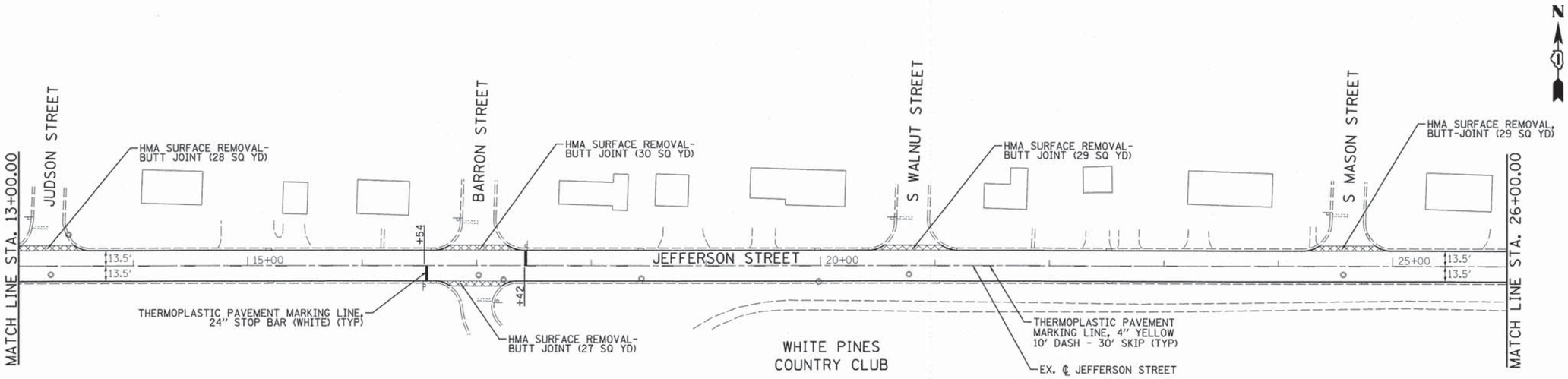
LOCATION STATION-STATION	TEMPORARY PAVEMENT MARKING				
	4" (FT)	6" (FT)	12" (FT)	24" (FT)	LETTERS & SYMBOLS (SQ FT)
JEFFERSON STREET					
0+45.75 - 13+00 RT	193				
0+45.75 - 13+00 LT	192			14	
13+00 - 26+00 RT	152			13	
13+00 - 26+00 LT	152			13	
26+00 - 39+00 RT	790	156		21	36
26+00 - 39+00 LT	402	254		22	36
39+00 - 52+00 RT	234	55			
39+00 - 52+00 LT	133	85			
52+00 - 65+00 RT	163	27		13	
52+00 - 65+00 LT	163	28		14	
65+00 - 78+00 RT	161		27		
65+00 - 78+00 LT	161		27		
78+00 - 87+96.00 RT	125				
78+00 - 87+96.00 LT	125				
TOTAL	3146	605	54	110	72

LOCATION STATION-STATION	DRAINAGE STRUCTURES TO BE CLEANED	INLET FILTERS
JEFFERSON STREET		
0+45.75 - 13+00 RT	7	7
0+45.75 - 13+00 LT	8	8
13+00 - 26+00 RT	7	7
13+00 - 26+00 LT	7	7
26+00 - 39+00 RT	8	8
26+00 - 39+00 LT	5	5
39+00 - 52+00 RT	6	6
39+00 - 52+00 LT	6	6
52+00 - 65+00 RT	4	4
52+00 - 65+00 LT	4	4
65+00 - 78+00 RT	6	6
65+00 - 78+00 LT	4	4
78+00 - 87+96.00 RT	5	5
78+00 - 87+96.00 LT	8	8
TOTAL	85	85

THERMOPLASTIC PAVEMENT MARKING - 24 INCH STOP BAR		
STATION	OFFSET	LENGTH (FOOT)
JEFFERSON STREET		
0+45	LT	14
16+57	RT	13
17+43	LT	13
35+88	RT	21
36+92	LT	22
58+21	RT	13
58+86	LT	14
TOTAL		110

(FOR LOCATION PURPOSES ONLY)





NOTES

- LOCATIONS OF CLASS D PAVEMENT PATCHING SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- LOCATIONS OF COMBINATION CURB AND GUTTER REMOVAL AND COMBINATION CURB AND GUTTER TYPE B-6.12/B-6.18/M-4.12 SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- CURB SHALL BE REPLACED IN KIND.
- ASPHALT DRIVEWAY APRONS ADJACENT TO COMBINATION CURB AND GUTTER REMOVAL SHALL BE SAW CUT AND REMOVED 24 INCHES FROM THE BACK OF THE CURB AND GUTTER LINE. CONCRETE DRIVEWAY APRONS ADJACENT TO COMBINATION CURB AND GUTTER REMOVAL SHALL BE REMOVED TO THE EXTENT OF THE NEAREST JOINT OR PANEL AS DETERMINED BY THE ENGINEER IN THE FIELD.
- DRIVEWAY APRONS SHALL BE REPLACED IN KIND.
- ALL FRAMES AND LIDS WITHIN THE PAVEMENT SHALL BE ADJUSTED TO FINISH GRADE PER THE DISTRCT DETAIL BD-8 DETAILS FOR FRAME AND LIDS ADJUSTMENT WITH MILLING AND SHALL BE PAID AT THE CONTRACT UNIT PRICE PER EACH FOR FRAMES AND LIDS TO BE ADJUSTED (SPECIAL). ALL 25 FRAMES AND LIDS WHICH ARE NOT STAMPED WITH "VILLAGE OF BENSENVILLE" SHALL BE REPLACED WITH STAMPED LIDS PER THE VILLAGE DETAILS "STORM FRAME AND LID STANDARD (OPEN)", "STORM FRAME AND LID STANDARD (CLOSED)", "SANITARY FRAME AND LID STANDARD", AND "FRAME AND CLOSED LID WATER STANDARD". ALL REMOVED FRAMES AND LIDS SHALL BE SALVAGED AND DELIVERED TO THE VILLAGE OF BENSENVILLE DEPARTMENT OF PUBLIC WORKS LOCATED AT 717 EAST JEFFERSON STREET, BENSENVILLE, ILLINOIS 60106.
- REMOVAL OF TRAFFIC BARRIER TERMINALS SHALL BE PAID FOR AS 'GUARDRAIL REMOVAL'.
- INLET FILTERS SHALL BE PLACED IN ALL OPEN FRAME STRUCTURES WITHIN THE PAVEMENT AND CURB.
- GUARDRAIL REFLECTORS SHALL BE INSTALLED ON ALL PROPOSED GUARDRAIL.

Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

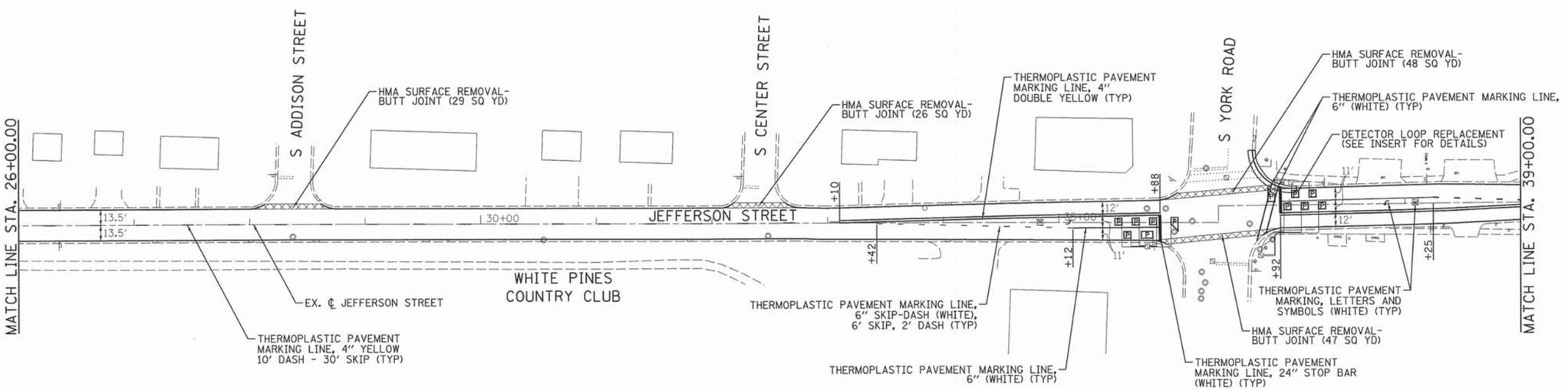
USER NAME = $USER$	DESIGNED - MTC	REVISED -
	DRAWN - MTC	REVISED -
PLOT SCALE = $SCALE$	CHECKED - JJP	REVISED -
PLOT DATE = $DATE$	DATE - 10-20-2014	REVISED -

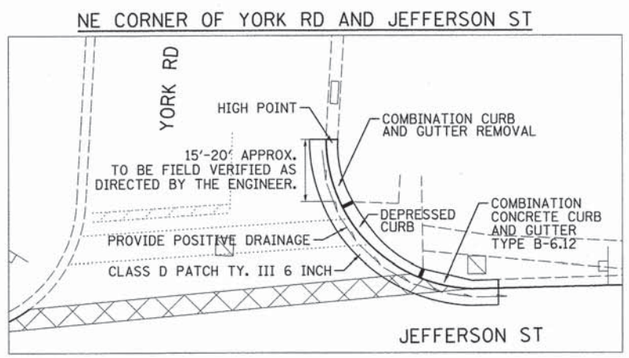
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

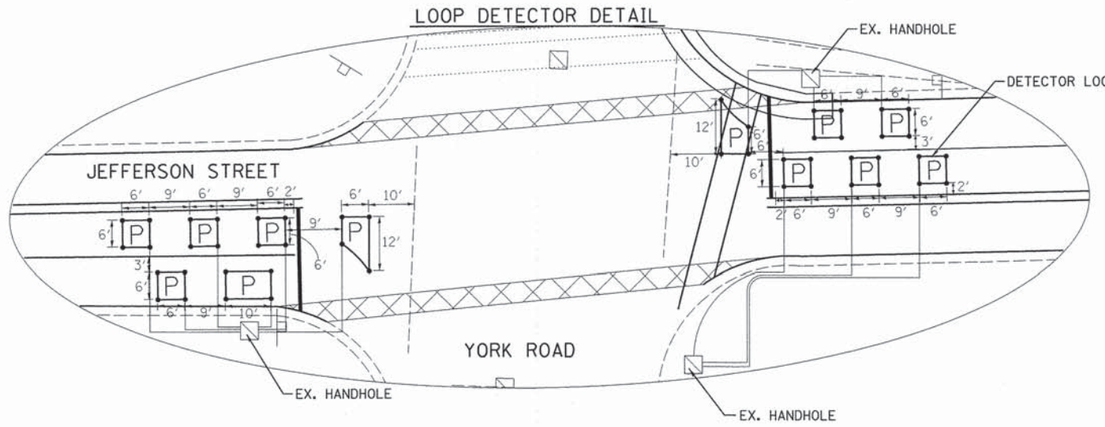
JEFFERSON STREET
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN

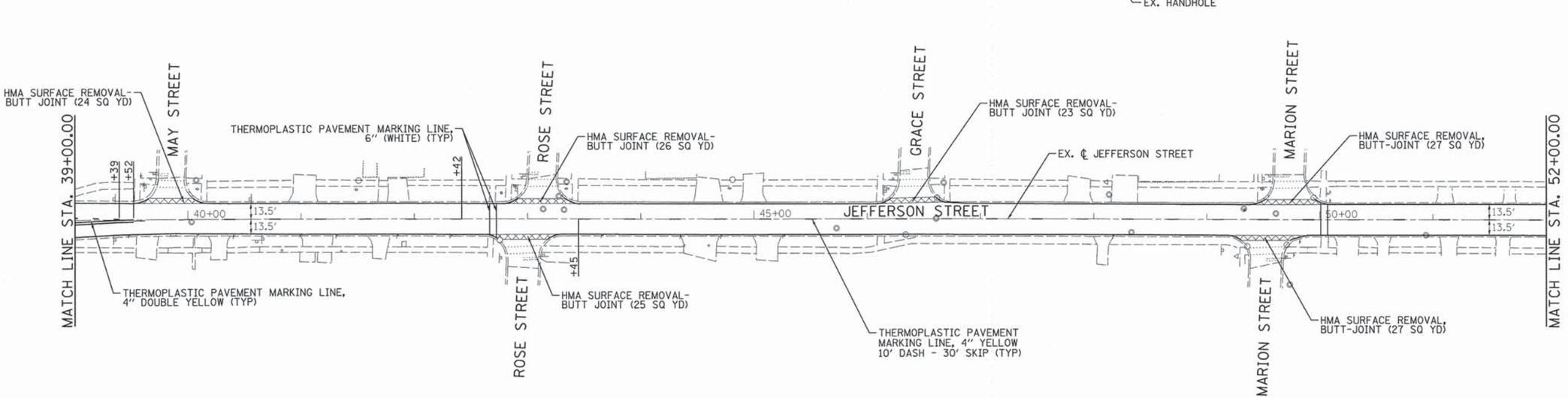
SCALE: 1" = 50' | SHEET 1 OF 4 SHEETS | STA. 0+45.75 TO STA. 26+00

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	10
		CONTRACT NO. 61A79		
	ILLINOIS FED. AID PROJECT			

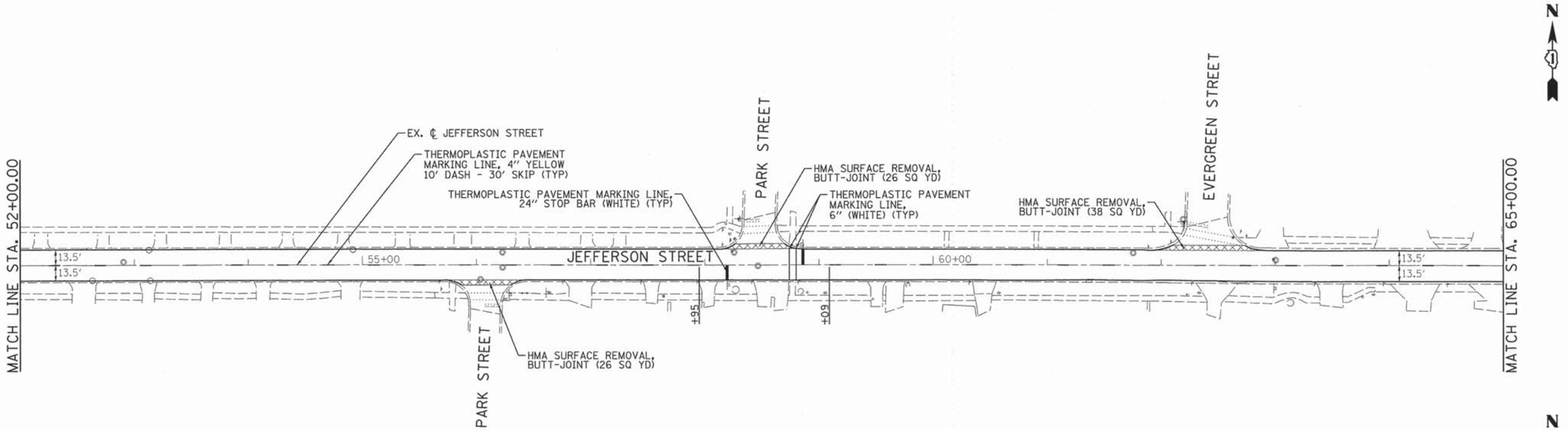






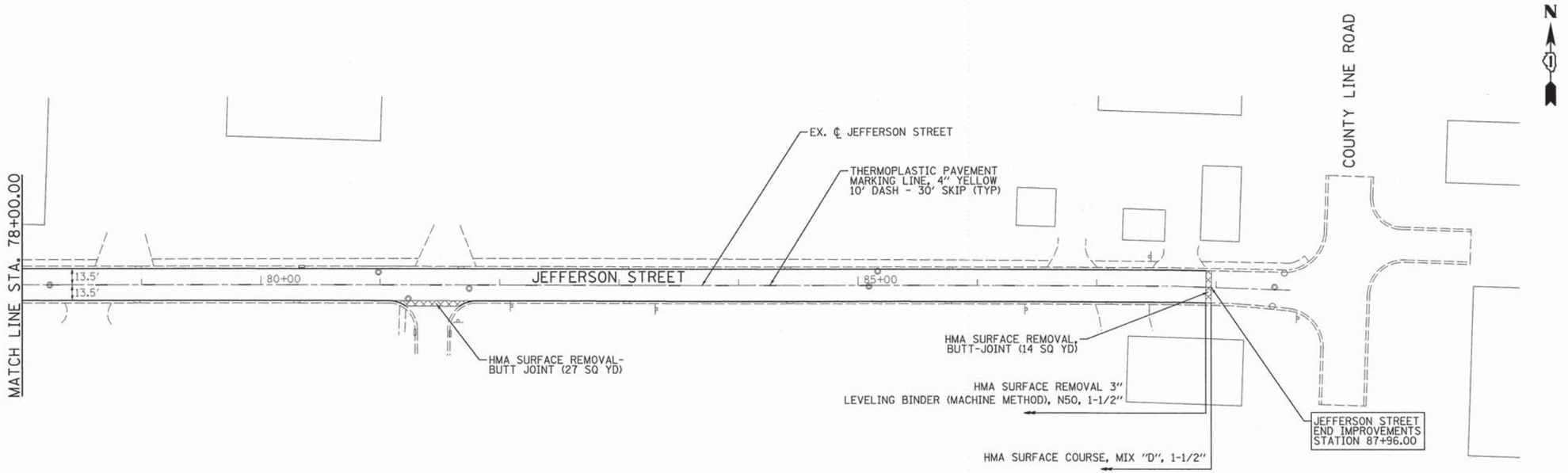


Bollinger, Lach & Associates, Inc. ITASCA, ILLINOIS	USER NAME = $USER$	DESIGNED - MTC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JEFFERSON STREET PROPOSED ROADWAY AND PAVEMENT MARKING PLAN	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - MTC	REVISED -			1370	14-00091-00-RS	DUPAGE	26	11
	PLOT SCALE = $SCALE$	CHECKED - JIP	REVISED -					CONTRACT NO. 61A79		
	PLOT DATE = $DATE$	DATE - 10-20-2014	REVISED -		SCALE: 1" = 50' SHEET 2 OF 4 SHEETS STA. 26+00 TO STA. 52+00			ILLINOIS FED. AID PROJECT		



Bollinger, Lach & Associates, Inc. ITASCA, ILLINOIS	USER NAME = $USER$	DESIGNED - MTC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JEFFERSON STREET PROPOSED ROADWAY AND PAVEMENT MARKING PLAN
		DRAWN - MTC	REVISED -		
	PLOT SCALE = $SCALE$	CHECKED - JIP	REVISED -		SCALE: 1" = 50' | SHEET 3 OF 4 SHEETS | STA. 52+00 TO STA. 78+00
	PLOT DATE = $DATE$	DATE - 10-20-2014	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	12
		CONTRACT NO. 61A79		
	ILLINOIS FED. AID PROJECT			



Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

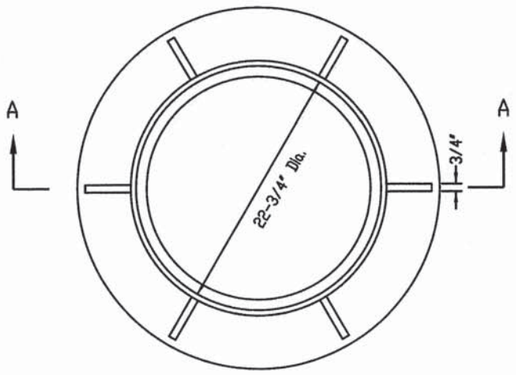
USER NAME = $USER$	DESIGNED - MTC	REVISED -	
	DRAWN - MTC	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - JIP	REVISED -	
PLOT DATE = $DATE$	DATE - 10-20-2014	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

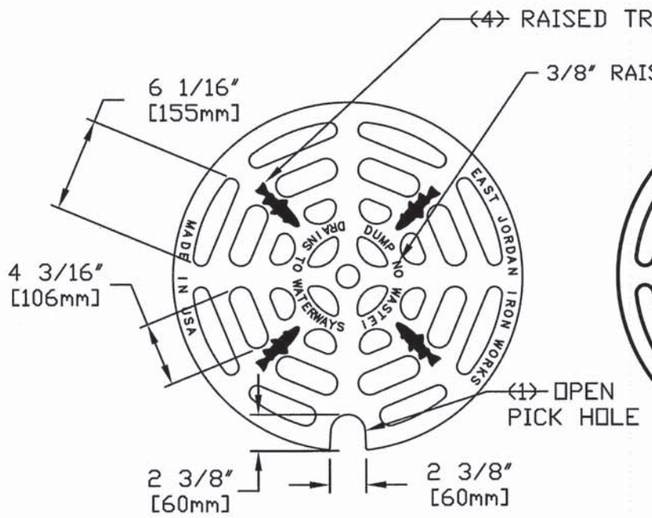
JEFFERSON STREET
PROPOSED ROADWAY AND PAVEMENT MARKING PLAN

SCALE: 1" = 50' | SHEET 4 OF 4 SHEETS | STA. 78+00 TO STA. 87+96.00

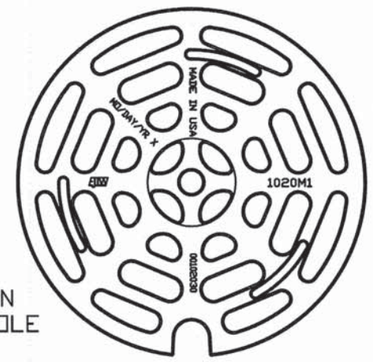
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	13
		CONTRACT NO. 61A79		
	ILLINOIS FED. AID PROJECT			



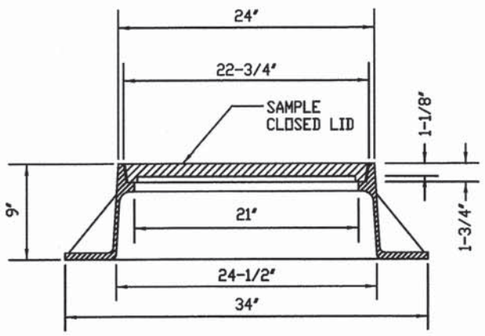
PLAN



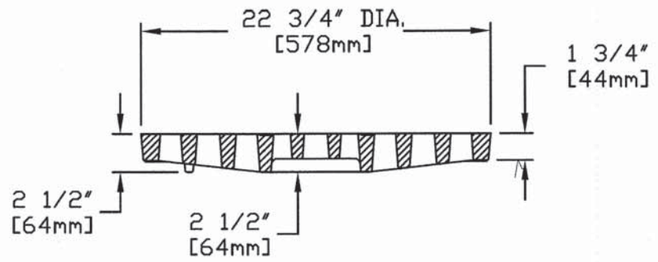
PLAN VIEW



BOTTOM VIEW



SECTION A-A



SECTION VIEW

(*) EAST JORDAN IRON WORKS, INC. P.O. BOX 439 EAST JORDAN, MI. 49727 1-800-874-4100 FAX 231-536-4458	
DRAWN TCL	DATE 09/26/02
APPROVED	DATE
CATCH BASIN GRATE	
PRODUCT NO. (*) 00102030 DIPPED	
(*) CATALOG NO. 1020M1	
REF. PRODUCT DRAWING 102031	
EST. WT. GRATE: 124 LBS (56 kg)	
OPEN AREA 120 SQ. INCHES (774 SQ. cm)	
MAT'L SPEC. GRATE - GRAY IRON ASTM A45 CL 35B	
LOAD RATING EXTRA HEAVY DUTY	

FURNISH HEAVY DUTY CASTING
AS REQUIRED BY THE VILLAGE ENGINEER

(*) or NEENAH CATALOG R-2015 SHOP DRAWING NF-2015 T17

OPEN LID

VILLAGE OF BENSENVILLE
12 S. CENTER STREET
BENSENVILLE, IL 60106
WWW.BENSENVILLE.IL.US

STORM FRAME AND LID STANDARD (OPEN)

VILLAGE OF BENSENVILLE SPECIFICATIONS AND DETAILS	REVISIONS
FILE LOCATION	
G:\ENGINEERING\STANDARDS\ NEW STANDARDS\STORM	

Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

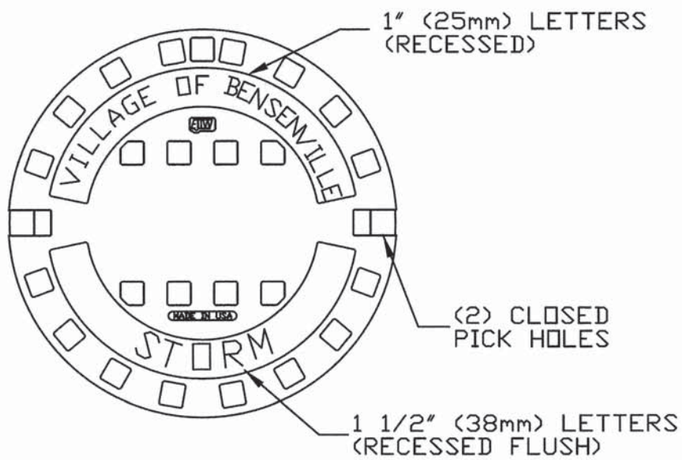
USER NAME = $USER$	DESIGNED - MTC	REVISED -	
	DRAWN - MTC	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - JIP	REVISED -	
PLOT DATE = $DATE$	DATE - 10-20-2014	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JEFFERSON STREET
STORM FRAME AND LID STANDARD (OPEN)

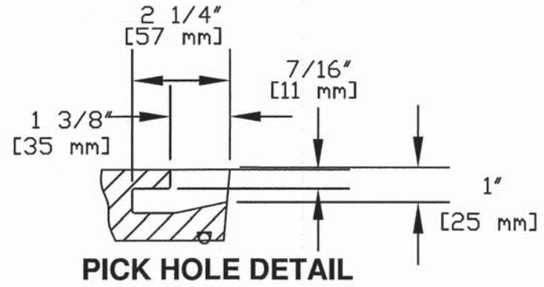
SCALE: N.T.S. | SHEET 1 OF 4 SHEETS | STA. N/A | TO STA. N/A

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	14
		CONTRACT NO. 61A79		
	ILLINOIS FED. AID PROJECT			

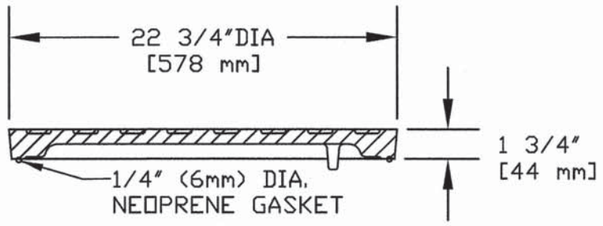


TOP VIEW

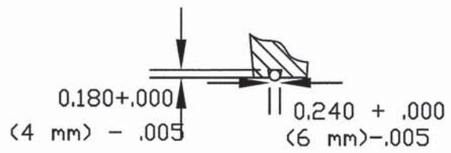
BOTTOM VIEW



PICK HOLE DETAIL



CROSS SECTION



GROOVE DETAIL

(*) OR NEENAH CATALOG R-1713 SHOP DRAWING NF-1015 T45

(*) EAST JORDAN IRON WORKS, INC.
P.O. BOX 439 EAST JORDAN, MI. 49727 1-800-874-4100 FAX 231-536-4458
DRAWN: SMH — DATE: 11/11/02
APPROVED: — DATE:
SPECIAL LETTERED COVER
(*) PRODUCT NO. **00102421**
CATALOG NO. (*) **1020A**
REF. PRODUCT DRAWING 102067
EST. WT. COVER WT: 115 LBS. (52 kg)
OPEN AREA N/A
MAT'L SPEC. COVER - GRAY IRON ASTM A48 CL 35
LOAD RATING **HEAVY DUTY**

VILLAGE OF BENSENVILLE
12 S. CENTER STREET
BENSENVILLE, IL 60106
WWW.BENSENVILLE.IL.US

STORM FRAME AND LID STANDARD (CLOSED)

VILLAGE OF BENSENVILLE
SPECIFICATIONS AND DETAILS

FILE LOCATION
G:\ENGINEERING\STANDARDS\ NEW STANDARDS\STORM

REVISIONS	

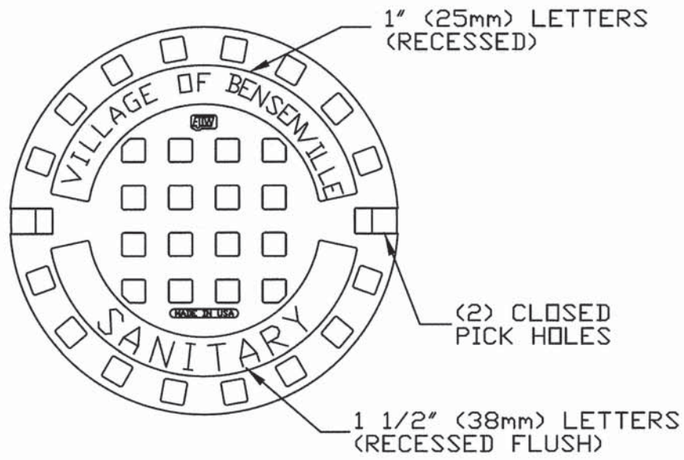
Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

USER NAME = $USER$	DESIGNED - MTC	REVISED -
	DRAWN - MTC	REVISED -
PLOT SCALE = $SCALE$	CHECKED - JIP	REVISED -
PLOT DATE = $DATE$	DATE - 10-20-2014	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

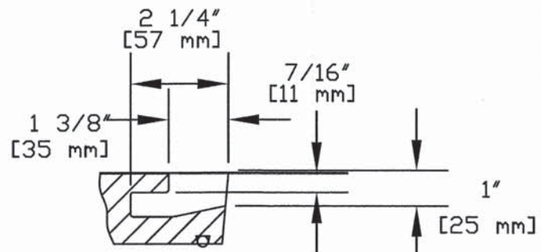
JEFFERSON STREET
STORM FRAME AND LID STANDARD (CLOSED)
SCALE: N.T.S. | SHEET 2 OF 4 SHEETS | STA. N/A | TO STA. N/A

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	15
		CONTRACT NO. 61A79		
	ILLINOIS FED. AID PROJECT			

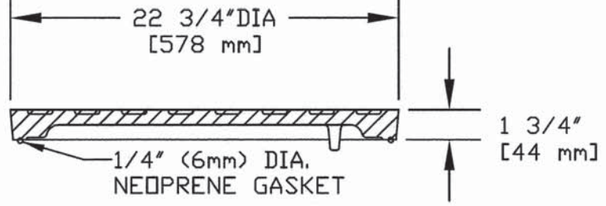


TOP VIEW

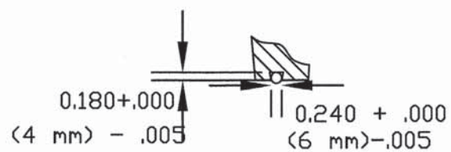
BOTTOM VIEW



PICK HOLE DETAIL



CROSS SECTION



GROOVE DETAIL

(*) OR NEENAH CATALOG R-1713 SHOP DRAWING NF-1015 T47

EAST JORDAN IRON WORKS, INC.	
P.O. BOX 439 EAST JORDAN, MI. 49727 1-800-874-4100 FAX 231-536-4458	
DRAWN SMH	DATE 11/11/02
APPROVED	DATE
SPECIAL LETTERED COVER	
(*) PRODUCT NO. **00102420**	
CATALOG NO. (*) **1020AGS**	
REF. PRODUCT DRAWING 00102108	
EST. WT. COVER WT: 115 LBS. (52 kg)	
OPEN AREA N/A	
MAT'L SPEC. COVER - GRAY IRON ASTM A48 CL 35	
LOAD RATING **HEAVY DUTY**	

VILLAGE OF BENSENVILLE
12 S. CENTER STREET
BENSENVILLE, IL 60106
WWW.BENSENVILLE.IL.US

SANITARY FRAME AND LID STANDARD

VILLAGE OF BENSENVILLE SPECIFICATIONS AND DETAILS	REVISIONS
FILE LOCATION	
G:\ENGINEERING\ STANDARDS\ NEW STANDARDS\SANITARY	

Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

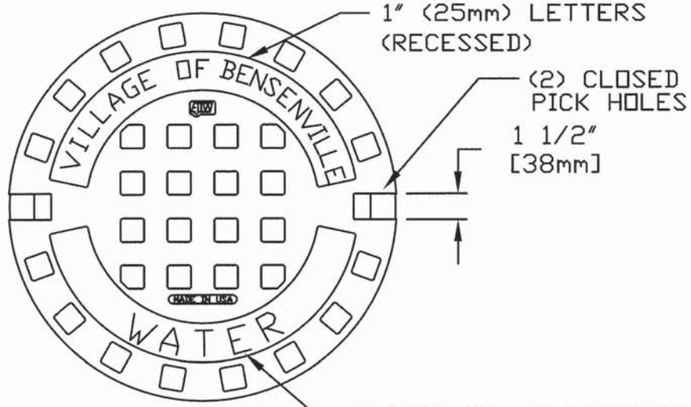
USER NAME = $USER$	DESIGNED - MTC	REVISED -	
	DRAWN - MTC	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - JIP	REVISED -	
PLOT DATE = $DATE$	DATE - 10-20-2014	REVISED -	

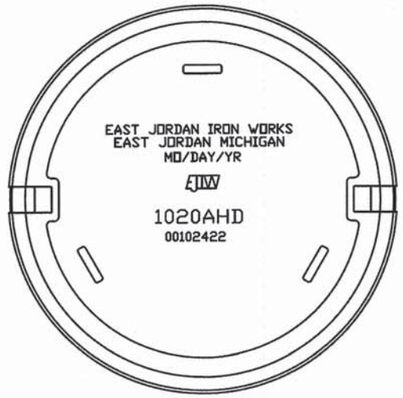
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JEFFERSON STREET
SANITARY FRAME AND LID STANDARD

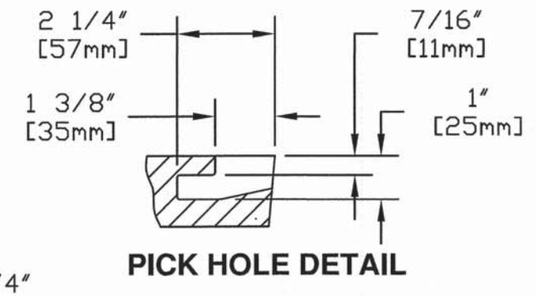
SCALE: N.T.S. | SHEET 3 OF 4 SHEETS | STA. N/A | TO STA. N/A

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	16
		CONTRACT NO. 61A79		
ILLINOIS FED. AID PROJECT				

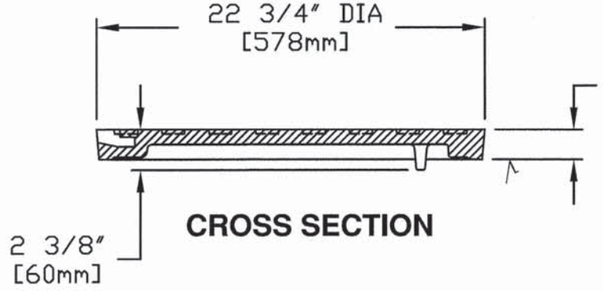




BOTTOM VIEW



PICK HOLE DETAIL



CROSS SECTION

(*) or NEENAH CATALOG R-1713
SHOP DRAWING NF-1015 T46

√ MACHINED SURFACE

(*) EAST JORDAN IRON WORKS, INC.
P.O. BOX 439
EAST JORDAN, MI. 49727
1-800-874-4100
FAX 231-536-4458

DRAWN	DATE
SMH	11/11/02
APPROVED	DATE

SPECIAL LETTERED COVER

(*) PRODUCT NO.
00102422

CATALOG NO.
(*) **1020A**

REF. PRODUCT DRAWING
00102067

EST. WT.
COVER WT: 115 LBS
(52kg)

OPEN AREA
N/A

MAT'L SPEC.
COVER - GRAY IRON
ASTM A48 CL 35

LOAD RATING
HEAVY DUTY

VILLAGE OF BENSENVILLE
12 S. CENTER STREET
BENSENVILLE, IL 60106
WWW.BENSENVILLE.IL.US

FRAME AND CLOSE LID WATER STANDARD

VILLAGE OF BENSENVILLE SPECIFICATIONS AND DETAILS
FILE LOCATION
G:\ENGINEERING\STANDARDS\ NEW STANDARDS\WATER

REVISIONS	

Bollinger, Lach & Associates, Inc.
ITASCA, ILLINOIS

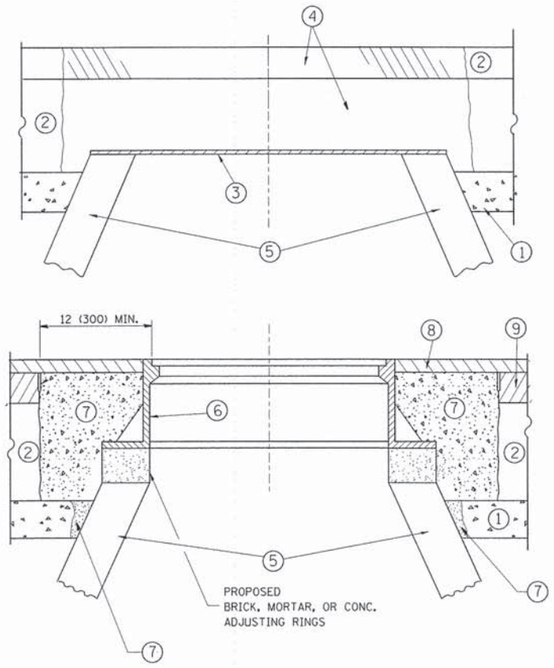
USER NAME = $USER$	DESIGNED - MTC	REVISED -	
	DRAWN - MTC	REVISED -	
PLOT SCALE = $SCALE$	CHECKED - JIP	REVISED -	
PLOT DATE = $DATE$	DATE - 10-20-2014	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

JEFFERSON STREET
FRAME AND CLOSE LID WATER STANDARD

SCALE: N.T.S. | SHEET 4 OF 4 SHEETS | STA. N/A | TO STA. N/A

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	17
		CONTRACT NO. 61A79		
	ILLINOIS FED. AID PROJECT			



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 1½ (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

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.

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.

DETAILS FOR FRAMES AND LIDS ADJUSTMENT WITH MILLING

ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN

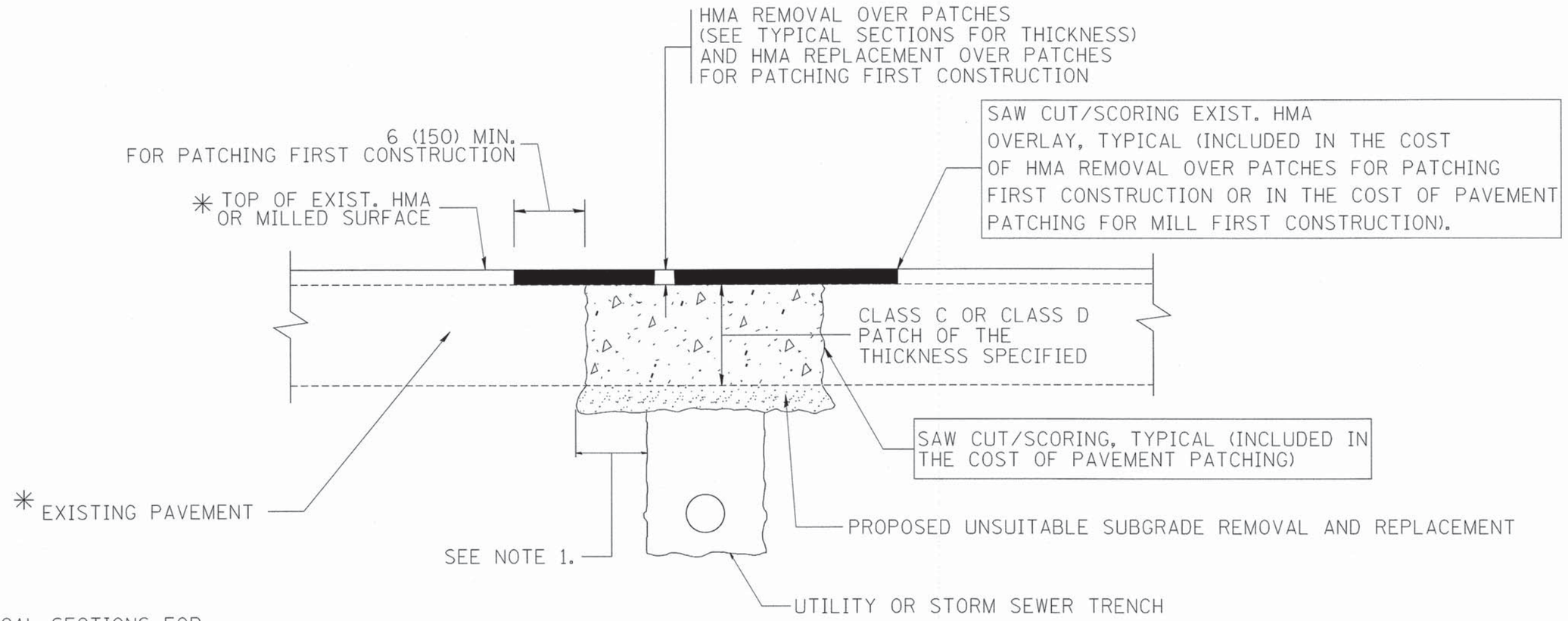
FILE NAME = c:\pw_work\pwidot\bauerdl\d0108315\bd08.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - R. WIEDEMAN 05-14-04
		DRAWN -	REVISED - R. BORO 01-01-07
	PLOT SCALE = 1968.5000 ' / m	CHECKED -	REVISED - R. BORO 03-09-11
	PLOT DATE = 12/6/2011	DATE - 10-25-94	REVISED - R. BORO 12-06-11

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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	18
	BD600-03 (BD-8)	CONTRACT NO. 61A79		
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)

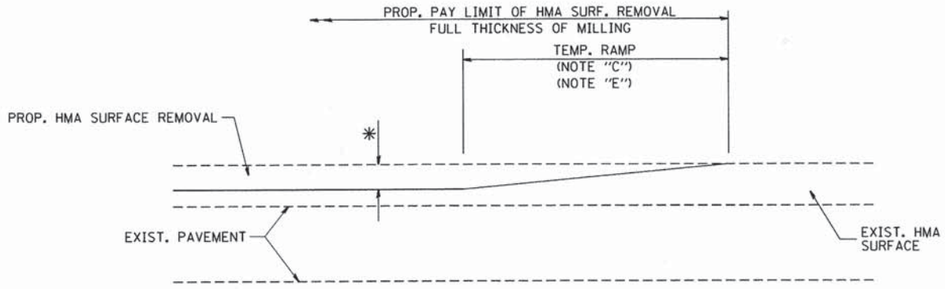
1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

SEQUENCE OF CONSTRUCTION (MILLING FIRST)

1. MILL HMA FIRST IF THERE IS AT LEAST 4½ 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.

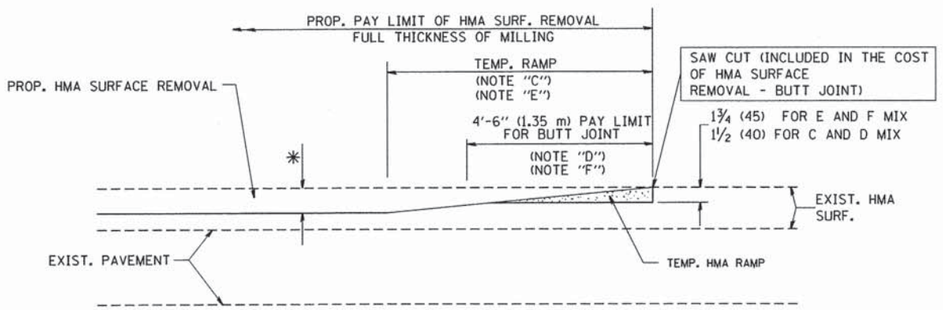
FILE NAME = c:\projects\diststd22x34\bd22.dgn	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PAVEMENT PATCHING FOR HMA SURFACED PAVEMENT			F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED - R. BORO 01-01-07					1370	14-00091-00-RS	DUPAGE	26	19
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - R. BORO 09-04-07						BD400-04 (BD-22)		CONTRACT NO. 61A79	
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



MILLED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

OPTION 1

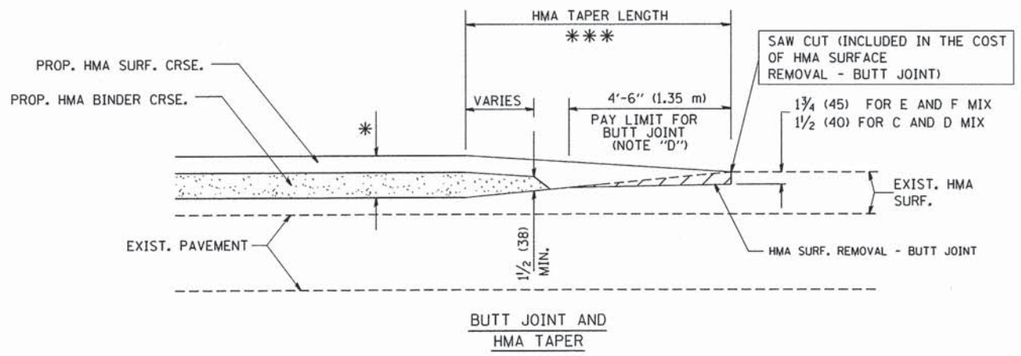


HMA CONSTRUCTED TEMPORARY RAMP

(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

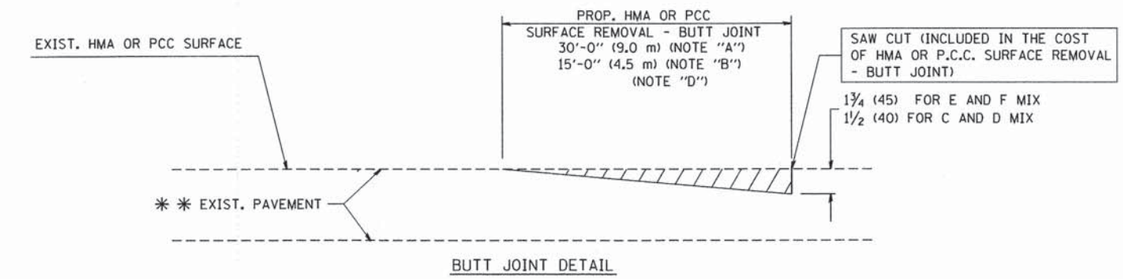
OPTION 2

TYPICAL TEMPORARY RAMP

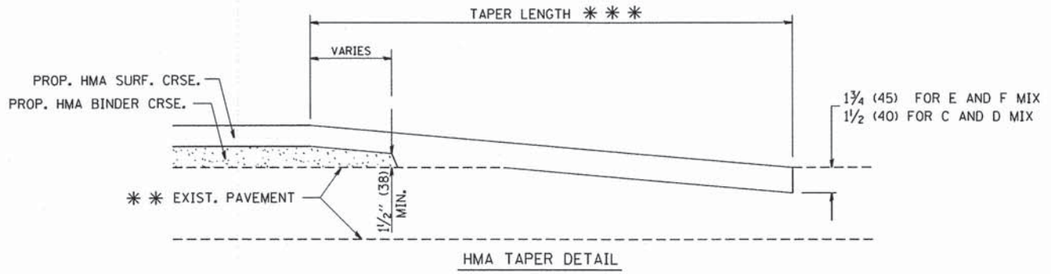


BUTT JOINT AND HMA TAPER

TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING



BUTT JOINT DETAIL



HMA TAPER DETAIL

TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

** PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

NOTES

A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.

B: MINOR SIDE ROADS.

C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.

D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.

E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.

F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT

G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".

* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.

*** 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A")
10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

BASIS OF PAYMENT:

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

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

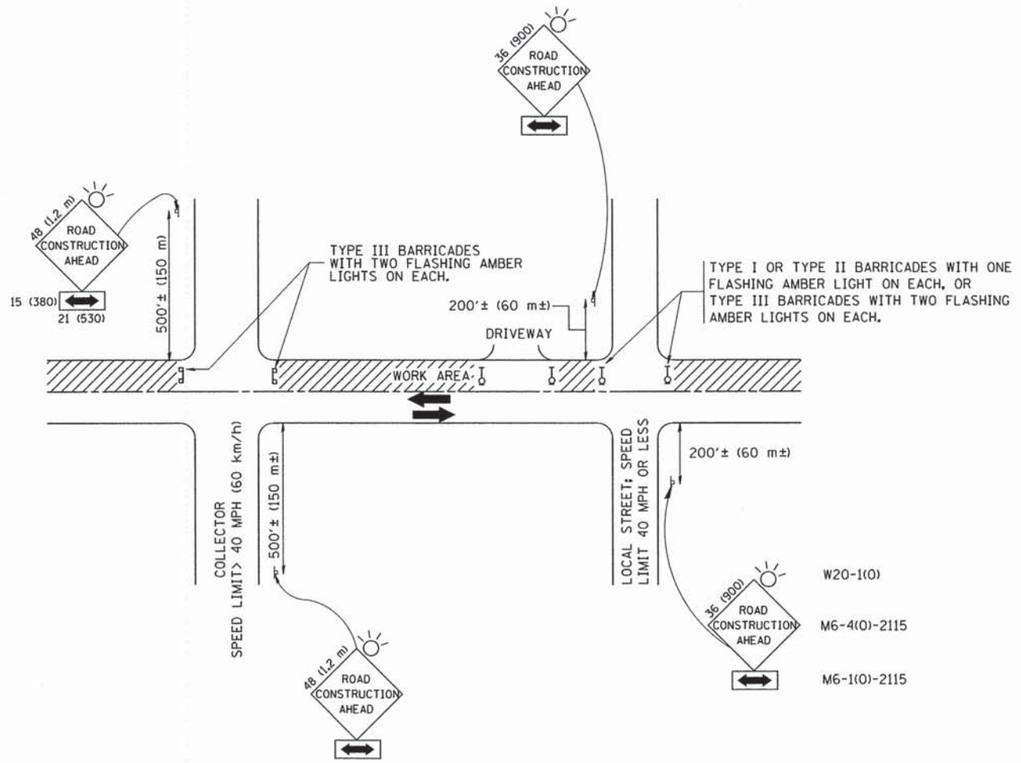
FILE NAME = W:\diststd\22x34\bd32.dgn	USER NAME = gaglionobt	DESIGNED - M. DE YONG	REVISED - R. SHAH 10-25-94
		DRAWN -	REVISED - A. ABBAS 03-21-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED - M. GOMEZ 04-06-01
	PLOT DATE = 1/4/2008	DATE - 06-13-90	REVISED - R. BORO 01-01-07

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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	20
	BD400-05 BD32	CONTRACT NO. 61A79		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



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

NOTES:

A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS

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 AND FLAG 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. 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).

B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.

D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

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

FILE NAME = W:\diststd\22x34\tc10.dgn	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	21
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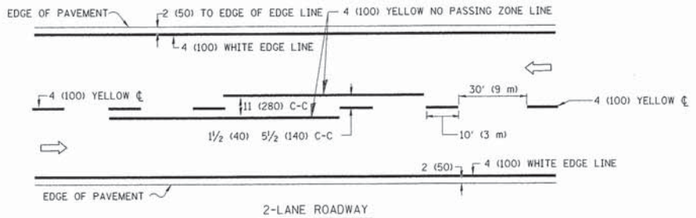
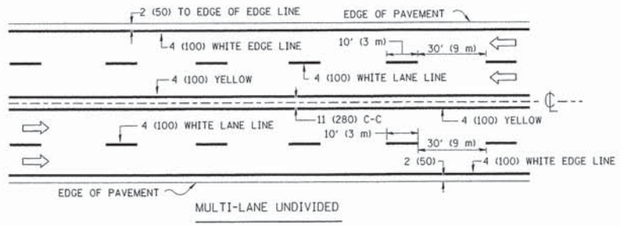
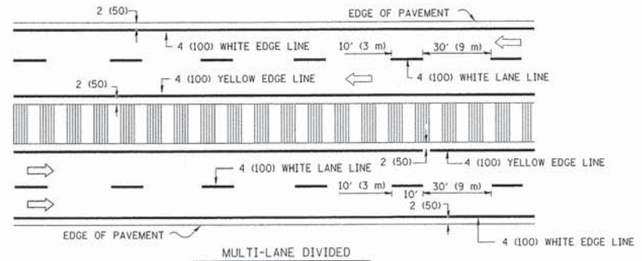
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



2-LANE ROADWAY



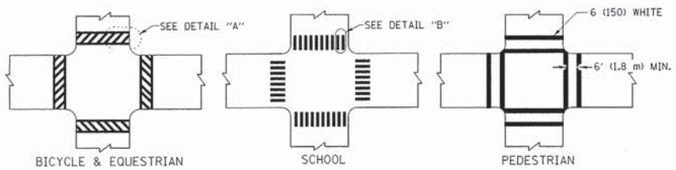
MULTI-LANE UNDIVIDED

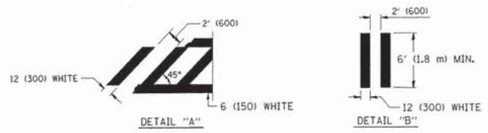


MULTI-LANE DIVIDED
WITH MOUNTABLE MEDIAN

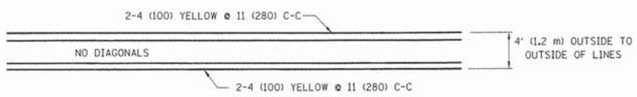
NOTE: MEDIANS WITH BARRIER CURB DO NOT REQUIRE AN EDGE LINE

TYPICAL LANE AND EDGE LINE MARKING

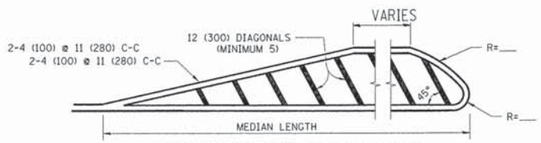




TYPICAL CROSSWALK MARKING



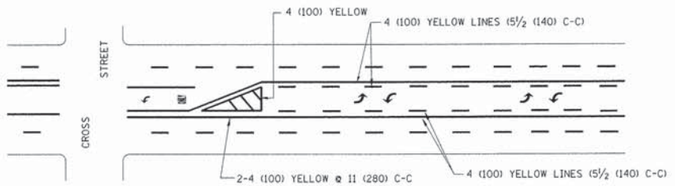
4' (1.2 m) WIDE MEDIANS ONLY



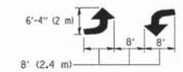
FOR MEDIAN LENGTHS WHERE DIAGONAL SPACING CANNOT BE ATTAINED, USE 5 (FIVE) EQUALLY SPACED DIAGONAL LINES.

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

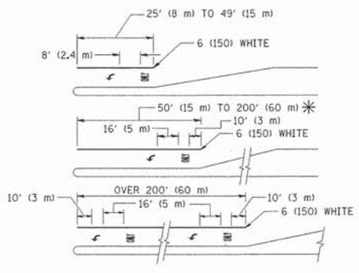


A MINIMUM OF TWO PAIRS OF TURN ARROWS SHALL BE USED, WHITE IN COLOR. ADDITIONAL PAIRS SHALL BE PLACED AT 200' (60 m) TO 300' (90 m) INTERVALS.



MEDIAN WITH TWO-WAY LEFT TURN LANE

TYPICAL PAINTED MEDIAN MARKING

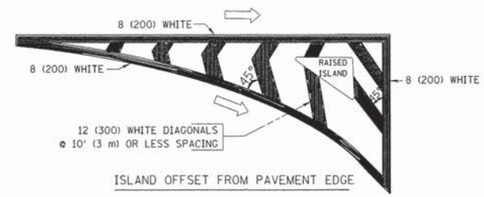


FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.
↰ AREA = 15.6 SQ. FT. (1.5 m^2) **ONLY** AREA = 20.8 SQ. FT. (1.9 m^2)

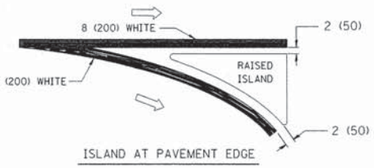
✳ TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF ARROW - "ONLY".

TYPICAL LEFT (OR RIGHT) TURN LANE

TYPICAL TURN LANE MARKING



ISLAND OFFSET FROM PAVEMENT EDGE



ISLAND AT PAVEMENT EDGE

TYPICAL ISLAND MARKING

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 ø 4 (100)	SOLID	YELLOW	11 (280) C-C
NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS	4 (100) 2 ø 4 (100)	SOLID SOLID	YELLOW YELLOW	5½ (140) C-C FROM SKIP-DASH CENTERLINE 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN
LANE LINES	4 (100) 5 (125) ON FREEWAYS	SKIP-DASH SKIP-DASH	WHITE WHITE	10' (3 m) LINE WITH 30' (9 m) SPACE
DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS)	SAME AS LINE BEING EXTENDED	SKIP-DASH	SAME AS LINE BEING EXTENDED	2' (600) LINE WITH 6' (1.8 m) SPACE
EDGE LINES	4 (100)	SOLID	YELLOW-LEFT WHITE-RIGHT	OUTLINE MOUNTABLE MEDIANS IN YELLOW; EDGE LINES ARE NOT USED NEXT TO BARRIER CURB
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 ø 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; 5½ (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 ø 6 (150) 12 (300) ø 45° 12 (300) ø 90°	SOLID SOLID SOLID	WHITE WHITE WHITE	NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SEE TYPICAL CROSSWALK MARKING DETAILS.
STOP LINES	24 (600)	SOLID	WHITE	PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSWALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT, PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE
PAINTED MEDIANS	2 ø 4 (100) WITH 12 (300) DIAGONALS ø 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS	SOLID	YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC	11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING.
GORE MARKING AND CHANNELIZING LINES	8 (200) WITH 12 (300) DIAGONALS ø 45°	SOLID	WHITE	DIAGONALS: 15' (4.5 m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6 m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9 m) C-C (OVER 45MPH (70 km/h))
RAILROAD CROSSING	24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 m) LETTERS; 16 (400) LINE FOR "X"	SOLID	WHITE	SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SQ. FT. (0.33 m^2) EACH "X"=54.0 SQ. FT. (5.0 m^2)
SHOULDER DIAGONALS	12 (300) ø 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))

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

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

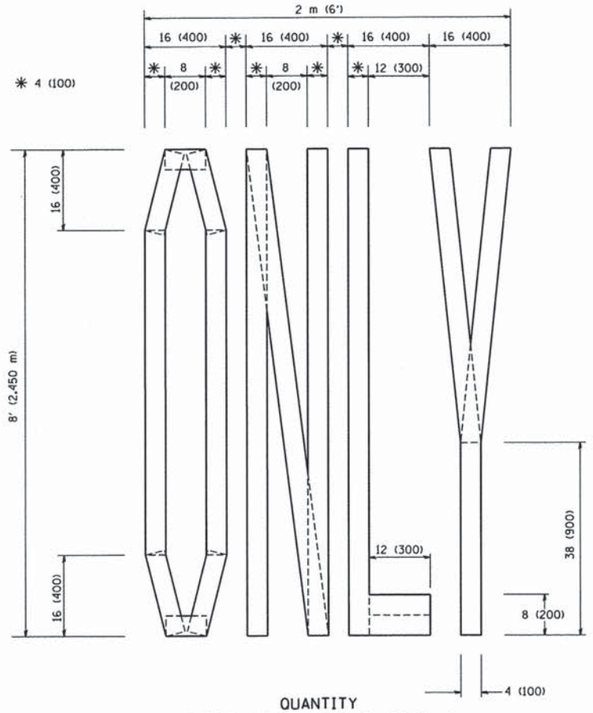
FILE NAME = c:\pw_work\pwidot\drivakosgn\d0108315\tc13.dgn	USER NAME = drivakosgn	DESIGNED - EVERS	REVISED -T. RAMMACHER 10-27-94
		DRAWN -	REVISED -C. JUCIUS 09-09-09
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 9/9/2009	DATE - 03-19-90	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

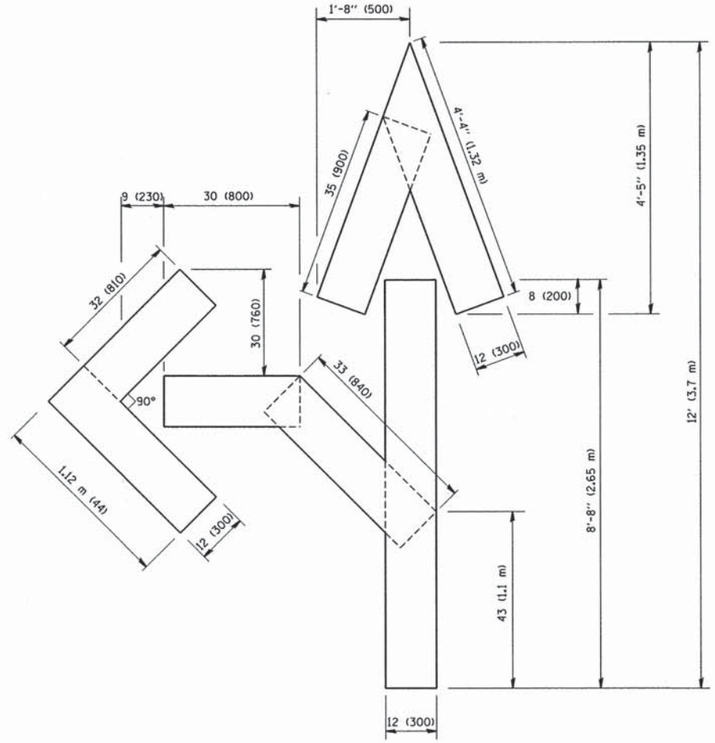
DISTRICT ONE
TYPICAL PAVEMENT MARKINGS

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

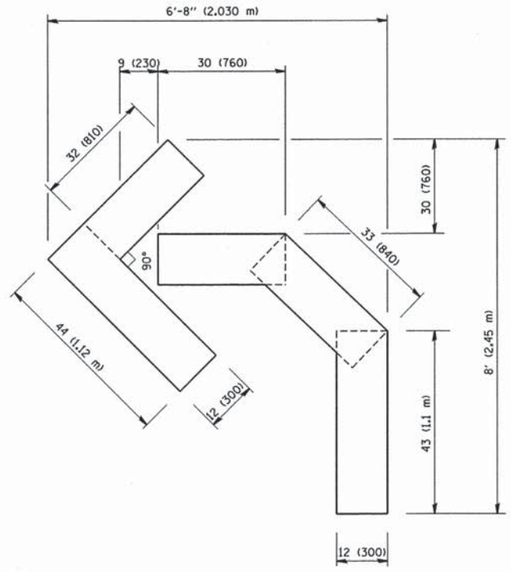
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	22
	TC-13	CONTRACT NO. 61A79		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		



QUANTITY
4 (100) LINE = 64.1 ft. (19.7 m)
21.1 sq. ft. (1.97 sq. m)



QUANTITY
4 (100) LINE = 82.5 ft. (25.3 m)
27.5 sq. ft. (2.53 sq. m)



QUANTITY
4 (100) LINE = 45.5 ft. (13.9 m)
15.2 sq. ft. (1.39 sq. m)

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

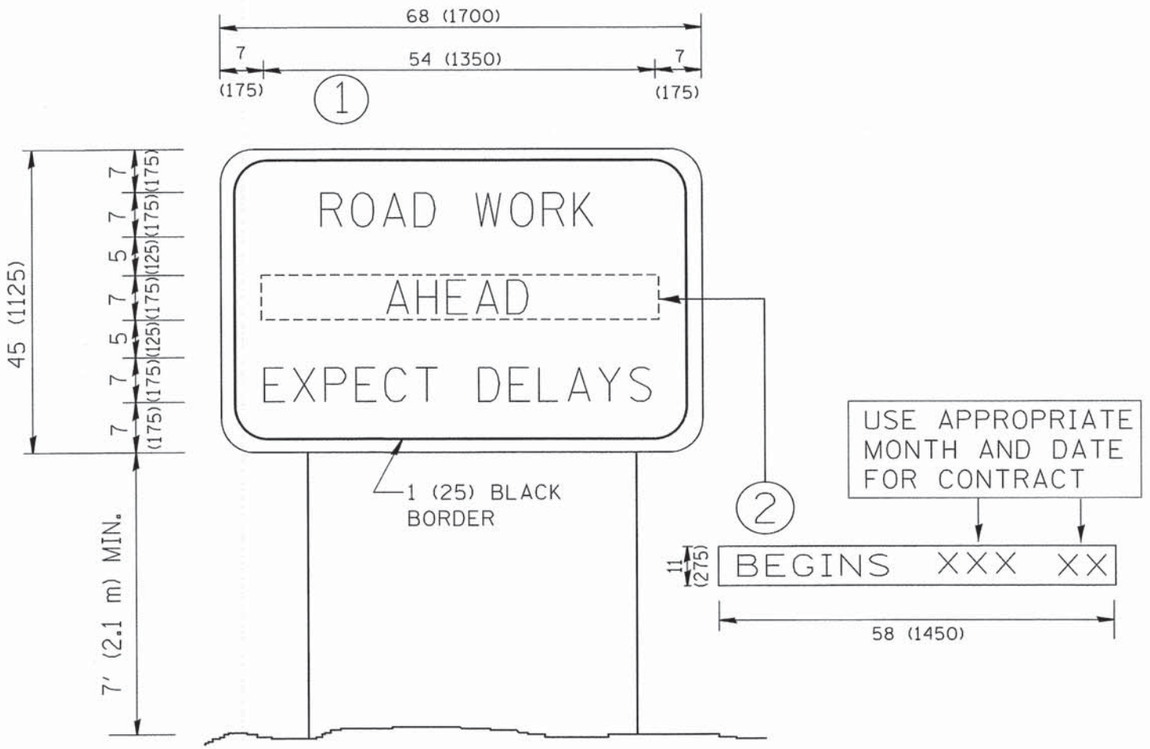
FILE NAME = W:\diststd\22x34\tc16.dgn	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96
		DRAWN -	REVISED -T. RAMMACHER 11-04-97
	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED -E. GOMEZ 08-28-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING LETTERS AND SYMBOLS FOR TRAFFIC STAGING

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	23
	TC-16	CONTRACT NO. 61A79		
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\tc22.dgn	USER NAME = gaglianobt	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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	24
	TC-22	CONTRACT NO. 61A79		
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.

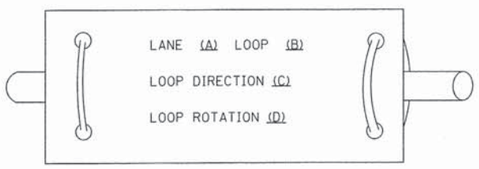
4. ALL LOOP CABLE SHALL BE FASTENED WITH PLASTIC TIE WRAP TO THE HANDHOLE HOOKS.

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

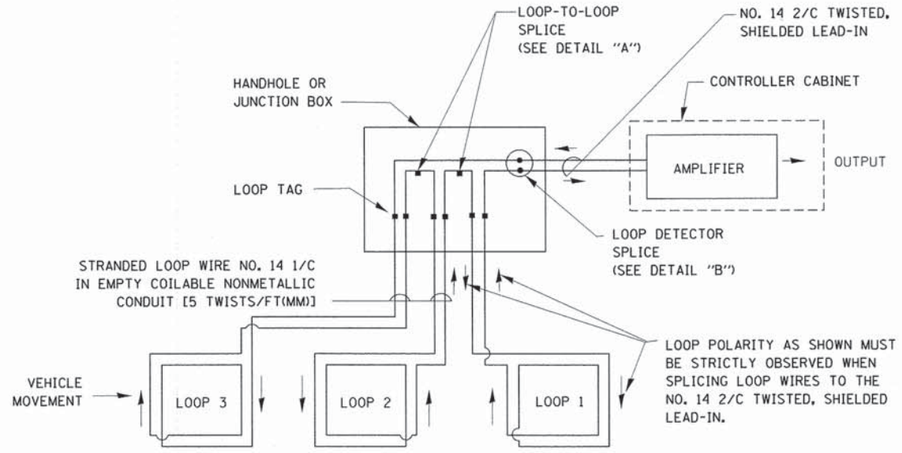


A. LANE 1 IS THE LANE CLOSEST TO THE CENTERLINE OF THE ROADWAY

B. LOOP #1 IS THE LOOP IN THE LANE CLOSEST TO THE INTERSECTION.

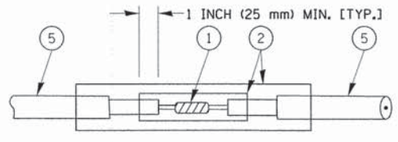
C. LABEL LOOP CABLE "IN" OR LOOP CABLE "OUT".

D. LABEL LOOP CABLE CLOCKWISE OR LOOP CABLE COUNTERCLOCKWISE.

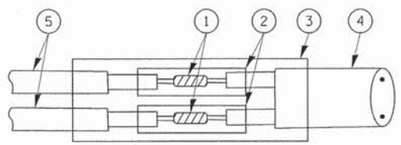


DETECTOR LOOP WIRING SCHEMATIC

- 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.

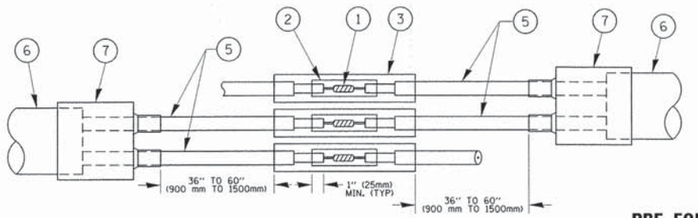


DETAIL "A"
LOOP-TO-LOOP SPLICE



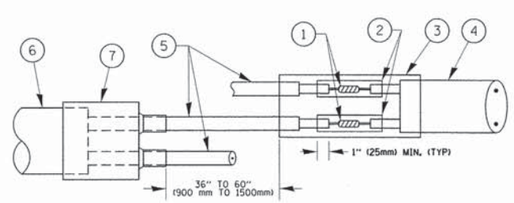
DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

TYPE I LOOP



DETAIL "A"
LOOP-TO-LOOP SPLICE

PRE-FORMED LOOP



DETAIL "B"
LOOP-TO-CONTROLLER SPLICE

LOOP DETECTOR SPLICE

(1) WESTERN UNION SPLICE SOLDERED WITH ROSIN CORE FLUX. ALL EXPOSED SURFACES OF THE SOLDER SHALL BE SMOOTH. THE WESTERN UNION SPLICES SHALL BE STAGGERED.

(2) WCSMW 30/100 HEAT SHRINK TUBE, MINIMUM LENGTH 3" (75 mm), UNDERWATER GRADE.

(3) WCS 200/750 HEAT SHRINK TUBE, MINIMUM LENGHT 6" (150 mm), UNDERWATER GRADE.

(4) NO. 14 2/C TWISTED, SHIELDED CABLE.

(5) LOOP CONDUCTOR WITH FLEXIBLE PLASTIC TUBE.

(6) PRE-FORMED LOOP

(7) XL POLYOLEFIN 2 CONDUCTOR BREAKOUT SEALS. TYCO CBR-2 OR APPROVED EQUAL

FILE NAME = c:\pw_work\pwidot\footemj\d0108315\ts05.dgn	USER NAME = footemj	DESIGNED - DAD	REVISED - DAG 1-1-14
		DRAWN - BCK	REVISED -
	PLOT SCALE = 50.0000 ' / in.	CHECKED - DAD	REVISED -
	PLOT DATE = 1/13/2014	DATE - 10-28-09	REVISED -

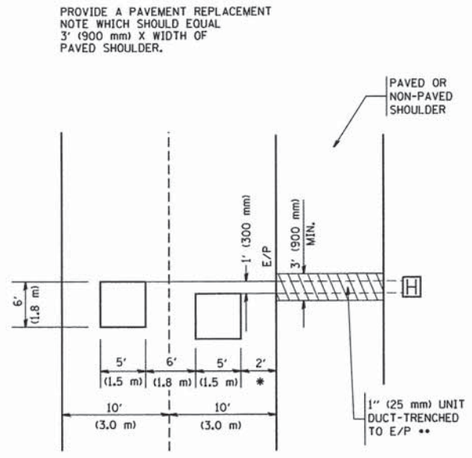
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DISTRICT ONE
STANDARD TRAFFIC SIGNAL DESIGN DETAILS

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

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	25
	TS-05	CONTRACT NO. 61A79		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		

LOOPS NEXT TO SHOULDERS

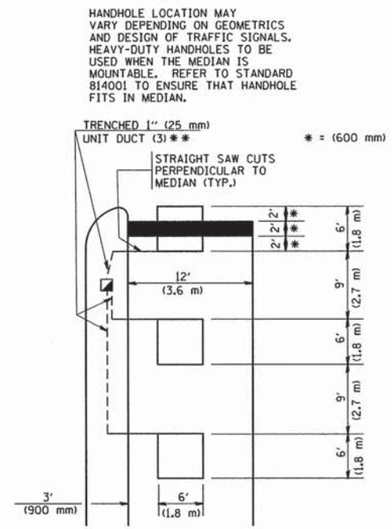


* = (600 mm)

** 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)

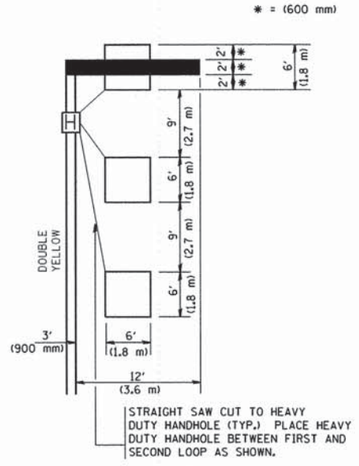


** UNIT DUCT IS TO BE SHOWN ON PLAN SHEETS BUT SHALL NOT BE INCLUDED IN THE PAY ITEMS.

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

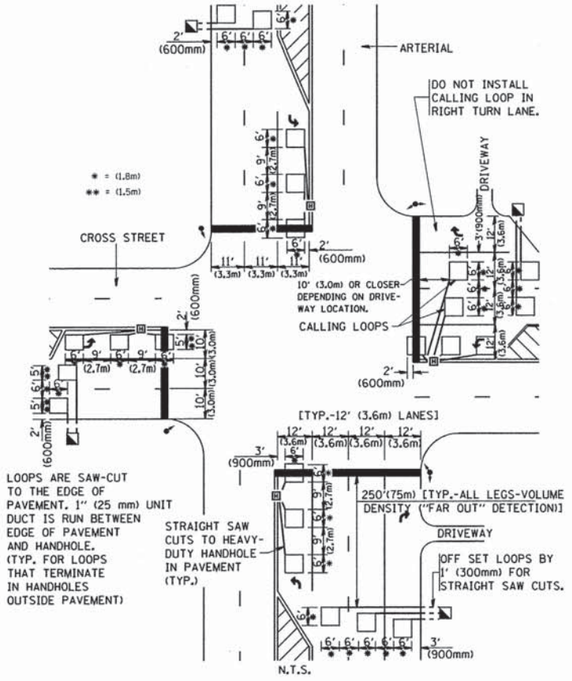
LEFT TURN LANES WITHOUT MEDIANS
VOLUME DENSITY ("FAR OUT" DETECTION)
ON SAME APPROACH

(PROTECTED / PERMITTED LEFT TURN PHASING)



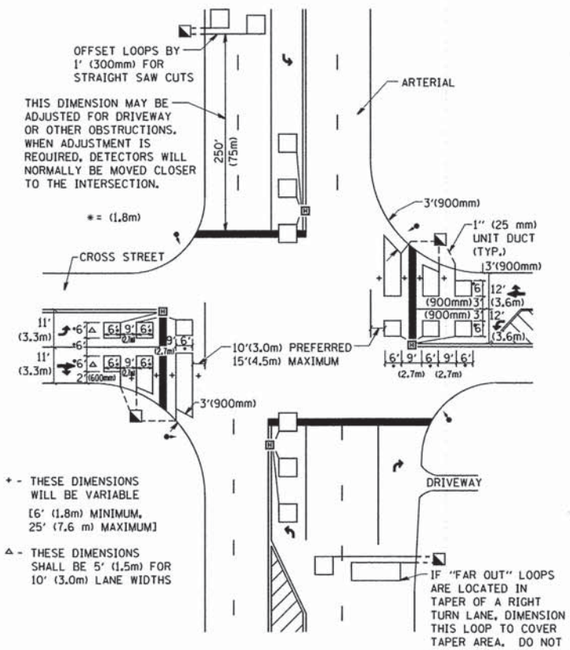
NOTE: DUAL LEFT TURNS NOT SHOWN REFER TO PLAN SHEET FOR DETECTOR LOOP REPLACEMENT

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 SEPARATLY. 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 = gaglionobt	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 50.0000 ' / IN.	CHECKED - R.K.F.	REVISED -
	PLOT DATE = 1/4/2008	DATE -	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.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1370	14-00091-00-RS	DUPAGE	26	26
	TS-07	CONTRACT NO. 61A79		
FED. ROAD DIST. NO. 1	ILLINOIS	FED. AID PROJECT		