

MONROE TOWNSHIP, MIDDLESEX COUNTY

ORDINANCE NO.: O-1-2023-003

ORDINANCE OF THE MONROE TOWNSHIP COUNCIL
AUTHORIZING THE ACCEPTANCE OF A TRAFFIC CONTROL SIGNAL LOCATED AT
THE INTERSECTION OF FORSGATE DRIVE AND ROSSMOOR DRIVE
IN THE TOWNSHIP OF MONROE, COUNTY OF MIDDLESEX, STATE OF NEW JERSEY

BE IT ORDAINED by the Township Council of the Township of Monroe, in the County of Middlesex, State of New Jersey as follows:

SECTION 1. The intersection of Forsgate Drive and Rossmoor Drive shall be controlled by a Traffic Control Signal in accordance with the As-Built Traffic Signal Plan and Timing Directive prepared by T&M Associates, bearing the date of October 6, 2022, inspected on August 24, 2022.

SECTION 2. The Traffic Control Signal installed shall be in accordance with the provisions of the Manual on Uniform Traffic Control Devices, Title 39 of the Revised Statutes and the New Jersey Administrative Code, and ADA Standards. Said Traffic Control Signal shall be operated in conformance with the designated Plan.

SECTION 3. All prior Ordinances and/or Resolutions or portions thereof of the Township of Monroe inconsistent with the provisions of this Ordinance shall be and the same are hereby repealed.

SECTION 4. That this Ordinance shall become effective upon adoption and publication as required by law.

SECTION 5. That if any clause, section, paragraph, subdivision, or provision of this Ordinance declared invalid by a Court of competent jurisdiction, such provision shall be deemed a separate distinct and independent provision and shall not affect the validity of the remaining portion hereof.

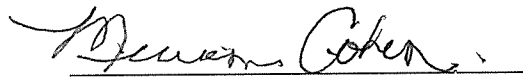
SECTION 6. When the Ordinance is finally adopted, the Township Clerk will send a certified copy of the Ordinance to Ronald Sendner, PE, Middlesex County Engineer, P.O. Box 871, 75 Bayard Street, 5th Floor, New Brunswick, N.J. 08901, for submission to the Middlesex County Board of County Commissioners for a consenting resolution.

SECTION 7. Any section of any other Township rule, regulation, policy, ordinance or requirements that conflicts with any part of this Ordinance is repealed to the extent of the conflict.

SECTION 8. If any chapter, section, subchapter or paragraph of this Ordinance be declared unconstitutional, invalid, or inoperative, in whole or in part, by a court of competent jurisdiction, such chapter, section, subchapter or paragraph shall to the extent that is not held unconstitutional, invalid, or inoperative remain in full effect and shall not affect the remainder of this Ordinance.

SECTION 9. This Ordinance shall take effect upon final passage and publication as provided by law.

SO ORDAINED, as aforesaid.


MIRIAM COHEN, Council President

RECORDED VOTE – INTRODUCTION – January 4, 2023						
COUNCIL	MOTION	SECOND	AYE	NAY	ABSTAIN	ABSENT
Councilman Dipierro		X	X			
Councilwoman Siegel			X			
Councilwoman Schneider			X			
Council V. President VanDzura	X		X			
Council President Cohen			X			

NOTICE

Notice is hereby given that the foregoing Ordinance was introduced and passed on first reading at the regular meeting of the Monroe Township Council held on January 4, 2023 and will be further considered for final passage after a Public Hearing during the council meeting to be held on February 6, 2023 at 6:30 p.m. in the Monroe Twp. Municipal Building, One Municipal Plaza, Monroe Twp., N.J. 08831. At said time and place, all persons will be granted the opportunity to be heard concerning this Ordinance prior to its consideration for adoption by Council.



PATRICIA REID, Township Clerk

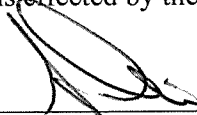
RECORDED VOTE – SECOND READING & FINAL ADOPTION– February 6, 2023						
COUNCIL	MOTION	SECOND	AYE	NAY	ABSTAIN	ABSENT
Councilman Dipierro		X	X			
Councilwoman Schneider			X			
Councilwoman Siegel			X			
Council V. President VanDzura	X		X			
Council President Cohen			X			

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MAYORAL APPROVAL

By virtue of the Optional Municipal Charter Law of 1950 and Chapter 3, Section 19 of the Code of the Township of Monroe, my approval of this Ordinance is effected by the affixing of my signature hereto.



STEPHEN DALINA, Mayor

Date signed: 2/7/2023



YOUR GOALS. OUR MISSION.

MDSX-00563

October 6, 2022

Ronald Sendner, P.E.
County Engineer
Office of Engineering
75 Bayard Street
New Brunswick, N.J. 08901

**Re: Forsgate Drive and Rossmoor Drive
Monroe Township, Middlesex County, NJ
As-Built Certification**

Dear Mr. Sendner,

I hereby certify that the traffic control signal installation at the referenced intersection has been inspected on August 24, 2022 and completed in accordance with the As-Built Traffic Signal Plan dated October 6, 2022, and Timing Chart dated October 6, 2022.

I hereby certify that the design is in accordance with the requirements set forth in the current "Manual on Uniform Traffic Control Devices for Streets and Highways" and all New Jersey State law requirements.

Very truly yours,

T&M ASSOCIATES

Bruce P. Klein, P.E.
P.E. # GE04739100



(Seal)

**SIGNAL TIMING CHART
 VEHICLE ACTUATED**

	<u>Vehicle Indications</u>						<u>Pedestrian Indications</u>		<u>Period 1</u>
	1-3	4	5-7	8-10	11-12	13	14-17	18-21	
<u>Phase 1</u>									
Forsgate Drive (C.R. 612) WB Lead	R	R	G	<G-	R	R/-G>	H	H	7 - 13
Change	R	R	G	<Y-	R	R/-Y>	H	H	3
Clearance	R	R	G	<R-	R	R	H	H	3
<u>Phase 2</u>									
Forsgate Drive (C.R. 612) R.O.W.	G	G	G	<R-	R	R	H	H	8 - 53
Change	Y	Y/-G>	Y	<R-	R	R	H	H	5
Clearance	R	R/-G>	R	<R-	R	R	H	H	2
<u>Phase 3</u>									
Rossmoor Drive R.O.W.	R	R/-G>	R	<R-	G	G	H	H	6 - 14
Change	R	R/-Y>	R	<R-	Y	Y/-G> (9)	H	H	3
Clearance	R	R	R	<R-	R	R/-G> (10)	H	H	4

PEDESTRIAN ACTUATED

	<u>Vehicle Indications</u>						<u>Pedestrian Indications</u>		<u>Period 1</u>
	1-3	4	5-7	8-10	11-12	13	14-17	18-21	
<u>Phase 1</u>									
Forsgate Drive (C.R. 612) WB Lead	R	R	G	<G-	R	R/-G>	H	H	7 - 13
Change	R	R	G	<Y-	R	R/-Y>	H	H	3
Clearance	R	R	G	<R-	R	R	H	H	3
<u>Phase 2</u>									
Forsgate Drive (C.R. 612) R.O.W.	G	G	G	<R-	R	R	H	M	32
Pedestrian Clearance	G	G	G	<R-	R	R	H	FH	32
Change	Y	Y	Y	<R-	R	R	H	H	5
Clearance	R	R	R	<R-	R	R	H	H	2
<u>Phase 3</u>									
Rossmoor Drive R.O.W.	R	R	R	<R-	G	G	M	H	33
Pedestrian Clearance	R	R	R	<R-	G	G	FH	H	33
Change	R	R	R	<R-	Y	Y/-G> (9)	H	H	3
Clearance	R	R	R	<R-	R	R/-G> (10)	H	H	4

Pedestrian timing only used when push button is actuated
 EMERGENCY FLASH Y Y Y <R- R R DARK DARK 50-60/min.

Notes for Full Actuation

- 1) Non-locking detection memory shall be used
- 2) Vehicle extension set at 2.0 seconds
- 3) Manual control is to be disconnected
- 4) Controller to skip phases not called
- 5) Phase 1 must be followed by Phase 2
- 6) Soft recall shall be set to Phase 2 (Forsgate Drive) ROW, H
- 7) The termination of EMERGENCY FLASH shall occur at the beginning of Phase 2 green
- 8) In the case of power failure, the traffic signal shall operate in full operation mode for four (4) hours and thereafter in flash mode.
- 9) Shall be Y if Phase 1 is skipped
- 10) Shall be R if Phase 1 is skipped

Time of day Operation

Period 1 timing shall occur all times

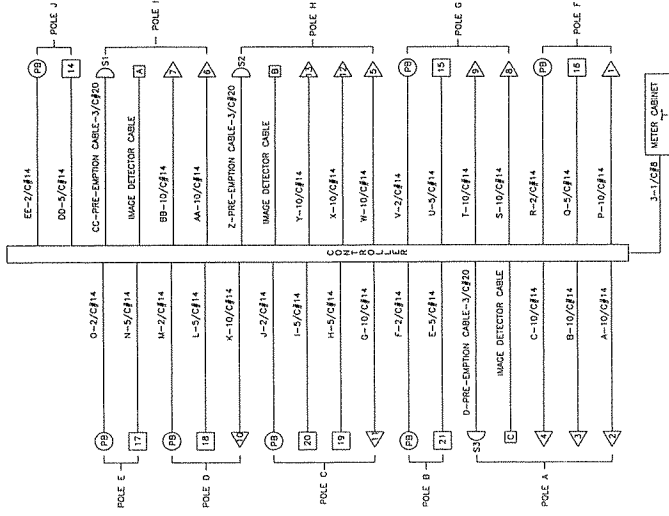
Emergency Preemption Notes

- 1) The intersection shall have a controller cabinet with a controller or other components capable of pre-emption feature
- 2) Remote-control pre-emption is permitted from all approaches to the intersection
- 3) The controller shall guarantee all vehicular and pedestrian minimums, change and clearance-interval timing
- 4) A pre-emption call from either direction of Forsgate Drive shall provide green interval ROW to phase 2
- 5) A pre-emption call from Rossmoor Drive shall provide green interval ROW to phase 3

COUNTY OF MIDDLESEX

TOWNSHIP OF MONROE

BLOCK WIRING DIAGRAM



NOTES:

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.
2. THREE BRANCHES SHALL BE TRIMMED AS NECESSARY AT THE DISCRETION OF THE ENGINEER.
3. FOUNDATION LAYOUT SHALL BE APPROVED IN THE FIELD BY THE ENGINEER PRIOR TO INSTALLATION.
4. ALL ALUMINUM ALLOY SIGNAL STANDARDS SHALL BE A MINIMUM OF 32 INCHES ABOVE FINISHED GRADE. ALL SIGNAL HEADS SHALL BE A MINIMUM OF 5' FROM CENTER OF STANDARD. ONE FACE OF THE BASE SHALL BE SET PARALLEL TO CURB FACE.
5. TRAFFIC SIGNAL HEADS 2-4, 6, 7, 9, 10, 13 TO BE MOUNTED AT A MIN. HEIGHT OF 32'. PEDESTRIAN SIGNAL HEADS 14 - 21 TO BE MOUNTED AT 8 FT.
6. WIRE CODING TO CONFORM WITH CURRENT STANDARDS IN USE BY THE COUNTY OF MIDDLESEX.
7. #8 AWG. INSULATED (COLORED GREEN) GROUND WIRE SHALL BE INSTALLED TO EACH SIGNAL HEAD AND SECURED TO ALL GROUND RODS, CABINETS, AND TRAFFIC SIGNAL BASES.
8. ACCESSIBLE PEDESTRIAN SIGNALS SHALL BE UTILIZED FOR ALL SIGNALIZED CROSSINGS. PUSH BUTTONS SHALL BE MOUNTED 42" ABOVE SIDEWALK SURFACE. MESSAGE SHALL BE PROVIDED FOR PB UNITS THAT ARE LESS THAN 10' APART.
9. CONTRACTOR SHALL COORDINATE AND OBTAIN ELECTRICAL SERVICE FOR THE INTERSECTION.
10. MOUNTING LOCATIONS FOR THE IMAGE DETECTORS SHALL BE DETERMINED BY THE MANUFACTURER'S REPRESENTATIVE TO ASSURE PROPER OPERATION.
11. ALL SIGNAL HEADS SHALL BE EQUIPPED WITH BAGGAGE PLATES THAT INCLUDE A YELLOW REFLECTORIZED STRIP ON THE OUTSIDE BORDER.
12. CONTRACTOR MUST MAINTAIN AN ACTIVE SYSTEM OF VEHICLE DETECTION THROUGHOUT CONSTRUCTION PERIOD. THE SIGNAL SHALL NOT BE IN FAULT MODE.
13. ALUMINUM HOUSINGS SHALL BE PROVIDED FOR ALL TRAFFIC SIGNAL HEADS MOUNTED ON TOP OF PROPOSED SIGNAL STANDARDS.
14. CONCRETE SIDEWALK SHALL EXTEND UNDERNEATH AND IN FRONT OF THE GENERATOR AUXILIARY CABINET (GAC).
15. THE CONTROLLER SHALL BE MOUNTED ON AN 18" ALUMINUM SKIRT - THE 18" SKIRT SHALL BE OF THE SAME MANUFACTURER AS THE CONTROLLER CABINET.

EQUIPMENT LAYOUT SCHEDULE

FOUNDATION DESIGNATOR	STATION	OFFSET	ELEVATION **	JUNCTION BOX DESIGNATION	STATION	OFFSET	ELEVATION **
A	10+72.4	77.47' RT.	143.21	1	10+72.0	66.07' RT.	143.01
B	10+46.5	84.36' RT.	144.43	2	10+02.3	71.77' RT.	144.24
C	10+05.4	75.32' RT.	144.63	3	9+38.6	70.51' RT.	144.21
D	9+40	79' RT.	144.16	4	9+40.5	5' LT.	145.25
E	9+24.7	67.74' RT.	144.23	5	10+03	54' LT.	144.25
F	9+24.9	12.75' RT.	145.54	6	9+13.0	63.22' LT.	144.05
G	9+24.9	11.13' LT.	145.37	7	9+17.7	63.22' LT.	144.05
H	10+24.4	55.90' LT.	143.28	* THE STATION AND OFFSET OF EACH FOUNDATION ARE BASED UPON CURB RAMP GRADING AS SHOWN ON THE PLAN. ** ELEVATIONS AS NOTED ARE FINISH GRADES UNLESS OTHERWISE PROPOSED GRADES.			
I	9+10.8	69.13' LT.	144.80				
J	9+22.3	55.92' LT.	144.31				

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	EST. QUANTITY	
			CONTRACT	AS-BUILT
34	CONCRETE SIDEWALK, REINFORCED, 4" THICK	SF	2	2
48	REGULATOR AND WARNING SIGN	SF	22	22
49	REFLECTORIZED MASTARM STREET NAME SIGNS	SF	13	13
50	7" RIGID METALLIC CONDUIT	LF	141	141
51	1/2" X 1/2" FIBER OPTIC CABLE	LF	7	7
52	FOUNDATION, TYPE 2F	U	4	4
53	FOUNDATION, TYPE P-MC MODIFIED	U	1	1
54	FOUNDATION, TYPE 2F	U	3	3
55	FOUNDATION, TYPE 2F	U	2	2
56	FOUNDATION, TYPE 2F	U	1	1
57	FOUNDATION, TYPE 2F	U	1	1
58	METER CABINET, TYPE T	U	1	1
59	GROUND WIRE, NO. 8 AWG	LF	862	905
60	SERVICE WIRE, NO. 8 AWG	LF	424	437
61	CONTROLLER, 8 PHASE WITH BATTERY BACKUP & GAC	U	1	1
62	TRAFFIC SIGNAL STANDARD, ALUMINUM	U	1	1
63	TRAFFIC SIGNAL STANDARD, ALUMINUM	U	1	1
64	TRAFFIC SIGNAL STANDARD, ALUMINUM	U	2	2
65	TRAFFIC SIGNAL STANDARD, ALUMINUM	U	3	3
66	TRAFFIC SIGNAL MAST ARM, ALUMINUM	U	3	3
67	TRAFFIC SIGNAL MAST ARM, STEEL	U	2	2
68	TRAFFIC SIGNAL CABLE, 2 CONDUCTOR	LF	1,414	1518
69	TRAFFIC SIGNAL CABLE, 5 CONDUCTOR	LF	1,687	1820
70	TRAFFIC SIGNAL CABLE, 10 CONDUCTOR	LF	2,583	2739
71	TRAFFIC SIGNAL HEAD	U	13	13
72	PEDESTRIAN SIGNAL HEAD	U	8	8
73	PUSH BUTTON	U	7	7
74	IMAGE DETECTOR	U	3	3
75	TEMPORARY TRAFFIC SIGNAL SYSTEM, LOCATION NO. 1	U	1	1
76	CONTROLLER TOWER-CAN	U	1	1
77	PROJECT CONTROL SYSTEM	U	1	1

AS BUILT



BRUCE P. KLEIN, P.E.
 Licensed Professional Engineer
 License No. 0E 47391

Scale: 1"=30'
 Sheet No. 22 of 33
 Date: October, 2022

REVISIONS
 NO. DATE BY
 1 10/20/22 JWK/AMZ
 2 10/20/22 JWK/AMZ

DESIGNED BY: JWK/AMZ
 CHECKED BY: JWK/AMZ
 DRAWN BY: JWK/AMZ
 IN CHARGE: JWK/AMZ

County of Middlesex
 Department of Transportation
 Office of Engineering
 75 Bayard St., New Brunswick, NJ 08901
 IMPROVEMENTS TO THE INTERSECTION OF
 FORESGATE DRIVE AND ROSSMOOR DRIVE,
 MONROE TOWNSHIP, NJ (MON001)

ELECTRICAL PLAN

Ronald M. Sender
 County Engineer
 N.J.P.E. No. 24620162200