

TRAFFIC IMPACT STATEMENT

For

Proposed Mixed-Use Developments

Properties Located at:

66 Main, LLC
3 Central Avenue (CR 608)
Block 1802 – Lot 4

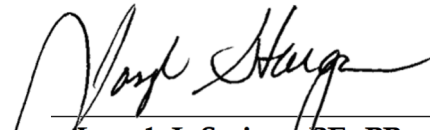
Ledan Holdings, LLC
5 Central Avenue (CR 608)
Block 1802 – Lot 3

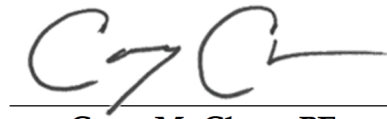
Borough of Madison, Morris County, NJ

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INTRODUCTION

It is proposed to construct two (2) four-story mixed use buildings (The Project) located in the Borough of Madison, Morris County, New Jersey, as illustrated on Figure 1, in the Technical Appendix of this report. Descriptions of each project are outlined below:

- 3 Central Avenue: a mixed-use building consisting of 1,603 SF of ground floor retail space and 6 residential units on the northern portion of the lot located on the corner of Route 124 (Main Street) and Central Avenue (CR 608). The site is designated as Block 1802 – Lot 4 on the Borough Tax Maps. The site is currently developed with the a three (3) story mixed use building that will remain and a one (1) story restaurant to be razed. There is currently no on-site parking. No additional parking will be provided as part of the construction of the mixed-use building.

- 5 Central Avenue: a mixed-use building consisting of 1,887 SF of ground floor retail space and 9 residential units on the lot located along the northbound side of Central Avenue (CR 608). The site is designated as Block 1802 – Lot 3 on the Borough Tax Maps. The site is currently developed with a one (1) story hair salon, a one (1) story restaurant and a two (2) story detached family dwelling. All buildings will be razed. There is currently no on-site parking. No additional parking will be provided as part of the construction of the mixed-use building.

Dynamic Traffic, LLC has been retained to prepare this study to assess the traffic and parking impact associated with the construction of The Project on the adjacent roadway network. This study documents the methodology, analyses, findings and conclusions of our study and includes:

- A detailed field inspection was conducted to obtain an inventory of existing roadway geometry, traffic control, and location and geometry of existing driveways and intersections.

- Projections of traffic to be generated by The Project were prepared utilizing trip generation data as published by the Institute of Transportation Engineers.

- The parking generation was assessed based on published data and demand experienced at similar developments.

- Parking counts were conducted on several typical days at municipal parking lots located in close proximity to The Project to determine the availability to accommodate resident parking demand.

EXISTING CONDITIONS

A review of the existing site and roadway conditions near the proposed site was conducted to provide the basis for assessing the traffic impact of the proposed mixed use development. This included field investigations of the surrounding roadways and intersections.

Existing Roadway Conditions

The following are descriptions of the roadways in the study area:

NJ Route 124 is an Urban Principal Arterial under the jurisdiction of the NJDOT. In the vicinity of the site the speed limit is 30 MPH and the roadway provides one (1) travel lane in each direction with a general north/south orientation. On-street parking is permitted along both sides of the roadway. Curb and sidewalk provided along both sides of the roadway. Route 124 provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Route 124 in the vicinity of The Project are a mixture of commercial and mixed-use developments.

Central Avenue (CR 608) is an Urban Major Collector roadway under the jurisdiction of Morris County. In the vicinity of the site the speed limit is 25 MPH and the roadway provides one (1) travel lane in each direction with a general east/west orientation. On-street parking is permitted along both sides of the roadway. Curb and sidewalk provided along both sides of the roadway. Central Avenue provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Central Avenue in the vicinity of The Project are a mixture of commercial and mixed-use developments.

Elmer Street is a local roadway under the jurisdiction of the Borough of Madison. In the vicinity of the site the speed limit is 25 MPH and the roadway provides one (1) travel lane in each direction with a general north/south orientation. On-street parking is permitted along the northbound side of the roadway. Curb and sidewalk provided along both sides of the roadway. Elmer Avenue provides a straight horizontal alignment and a relatively flat vertical alignment. The land uses along Elmer Avenue in the vicinity of The Project are a mixture of commercial and mixed-use developments.

FUTURE CONDITIONS

Traffic Generation

Conservatively, projections of future traffic volumes were developed utilizing data as published in the Institute of Transportation Engineers (ITE) publication *Trip Generation, 11th Edition* for Land Use Code (LUC) 220 – Multifamily Housing (Low-Rise) and LUC 822 – Strip Retail Plaza. The trip generation projections for the retail portion of the mixed-use developments is conservative as it does not consider the downtown setting and the multiple destinations of a single vehicular trip. Table I summarizes the projected trips generated by the proposed mixed-use development utilizing the ITE data for 3 Central Avenue, while Table II summarizes the projected trips for 5 Central Avenue.

**Table I
Trip Generation for 3 Central Avenue**

Land Use	AM PSH			PM PSH			SAT PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
6 Unit Residential Development	0	2	2	2	1	3	1	1	2
1,603 SF of Ground Floor Retail	2	2	4	11	10	21	6	5	11
Total	2	4	6	13	11	24	7	6	13

**Table II
Trip Generation for 5 Central Avenue**

Land Use	AM PSH			PM PSH			SAT PSH		
	In	Out	Total	In	Out	Total	In	Out	Total
9 Unit Residential Development	1	3	4	3	2	5	2	2	4
1,887 SF of Ground Floor Retail	2	2	4	12	12	24	6	6	12
Total	3	5	8	15	14	29	8	8	16

It should be noted that within a half mile from the site there is access to the Madison New Jersey Transit train station and the NJ Transit 873 bus line which has stops along NJ Route 124. This mass transit availability will likely result in trip generation even lower than that which is projected by the ITE data shown in Tables I and II, as these residential units will appeal to tenants who utilize mass transit as a means to commute to and from work.

Without consideration of trips generated by the existing site developments, the proposed mixed-use projects are projected to generate a maximum of 53 peak hour trips combined, which translates to a maximum of approximately one (1) additional trip per minute during the peak hour. Since no appreciable increase in trip generation is projected to be generated by the site, the operational conditions of the surrounding roadway network are not anticipated to change. The minimal delays and queues in the area will remain as existing and it is likely that there will be no perceptible change in the traffic conditions with the construction of the proposed residential development. In fact, both ITE and the New Jersey Department of Transportation (NJDOT) define a “significant” increase in traffic as 100 or more peak hour trips. The proposed developments generate about half of that threshold.

Parking Generation

The Borough Ordinance sets forth a parking requirement of 1.8 parking spaces per one-bedroom unit, 2.0 parking spaces per two-bedroom unit, and 2.1 parking spaces per three-bedroom unit for the residential use pursuant to the Residential Site Improvement Standards (RSIS). No parking is required for ground-floor nonresidential uses with street frontage within the CBD-1 zone. Lastly, the Ordinance sets forth a requirement of 4 spaces per 1,000 SF for offices, which is reduced by 20% within the CBD-1 zone.

For 3 Central Avenue, this equates to a parking requirement of 12 spaces for the new residential portion of the development. No off-street parking is required for the proposed ground-floor retail space. Note that no parking off-street parking is provided for the existing development, whereas 6 spaces are required for the existing residential units and 4 spaces required for the existing 900 SF office space. As such, this is an existing non-conformity that would remain.

For 5 Central Avenue, this equates to a parking requirement of 17 spaces for the residential portion of the development. No off-street parking is required for the proposed retail space.

There are no parking stalls the proposed for the new developments, and as such, a parking variance is required.

Projected Parking Demand

Based on data published by the ITE in their publication *Parking Generation, 5th Edition*, multi-family low-rise housing (LUC 220) located within ½ mile of rail transit has an average peak parking demand of 1.07 vehicles per unit. This would equate to a projected parking demand of 6 spaces for 3 Central Avenue and 10 spaces for 5 Central Avenue, for a total projected demand of 16 vehicles for the 15 residential units proposed.

Municipal Parking Lot Counts

It should be noted that there are several municipal parking lots within the vicinity of the subject properties which allow parking by Borough residents that obtain residential tenant parking permits. Based upon coordination with the Borough Business Development office staff, it is our understanding that there is currently ample capacity available for new tenant permits. Additionally, existing parking counts were conducted three of these lots in order to quantify the capacity available to accommodate the proposed residential units. Specifically, the following three lots were reviewed.

- **Elmer Street Lot**

The Elmer Street Lot is the closest municipal lot to the subject properties and permits parking for tenant permit holders from 9:00 PM to 8:00 AM Monday-Saturday and all day Sunday. The Elmer Street Lot contains 40 total parking stalls, 19 of which may be used by permit holders.

- **Cook Avenue Lot**

The Cook Avenue Lot is the second closest municipal lot to the subject properties and permits parking for tenant permit holders from 9:00 PM to 8:00 AM Monday-Saturday and all day Sunday. The Cook Avenue Lot contains 140 total parking stalls, 32 of which may be used by permit holders.

- **Green Avenue Lot**

The Green Avenue Lot is located approximately 700’ from the subject properties and permits parking for tenant permit holders from 6:00 PM to 8:00 AM Monday-Saturday and all day Sunday. The Green Avenue Lot contains 67 parking stalls, 48 of which may be used by permit holders.

Spot parking counts were conducted at the Green Avenue Lot on three days in August in the late evening (10:00 PM to 12:00 AM). Additionally, parking counts were subsequently conducted at all three lots on each of three typical days in November for two hours in the morning (8:00 AM to 10:00 AM), two hours in the early afternoon (12:00 PM to 2:00 PM), and two hours in the late evening (10:00 PM to 12:00 AM) on the following days. The count dates are listed below and the parking counts are contained in the Technical Appendix.

- Friday, August 12, 2022 (*Green Avenue Lot only*)
- Saturday, August 13, 2022 (*Green Avenue Lot only*)
- Sunday, August 14, 2022 (*Green Avenue Lot only*)
- Tuesday, November 15, 2022
- Wednesday, November 16, 2022
- Saturday, November 19, 2022

It is noted that residential units experience their peak parking demand overnight. Therefore, Table III below summarizes the minimum number of parking stalls that were empty and available to residential tenant permit holders during the late evening hours.

**Table III
Minimum Number of Parking Spaces Available for Tenant Permit Holders (10:00 PM – 12:00 AM)**

Date	Time	Elmer Street Lot	Cook Avenue Lot	Green Avenue Lot	Total
Friday, August 12, 2022	11:00 PM	-	-	29	29
Saturday, August 13, 2022	11:15 PM	-	-	25	25
Monday, August 15, 2022	10:30 PM	-	-	26	26
Tuesday, November 15, 2022	11:00 PM	12	14	30	56
Wednesday, November 16, 2022	11:30 PM	14	10	26	50
Saturday, November 19, 2022	10:00 PM	9	17	32	58

As seen above, there were at least 50 spaces available to tenant permit holders between the three lots during the observed November evenings, at least 24 of which were available in the Elmer Street and Cook Avenue lots which are nearest to the sites. The Green Avenue lot also showed substantial capacity available during all 6 observations. As noted previously, the anticipated parking demand of all new residential units from both projects is 16 spaces. As such, the municipal parking lots have more than adequate capacity to accommodate the demand of the proposed residential units.

FINDINGS & CONCLUSIONS

Findings

Based upon the detailed analyses as documented herein, the following findings are noted:

- 3 Central Avenue: The proposed 6 residential units plus the ground floor retail will generate a maximum of 2 entering trips and 4 exiting trips during the morning peak hour, 13 entering trips and 11 exiting trips during the evening peak hour and 7 entering trips and 6 exiting trips during the Saturday midday peak hour.
- 5 Central Avenue: The proposed 9 residential units plus the ground floor retail will generate a maximum of 3 entering trips and 5 exiting trips during the morning peak hour, 15 entering trips and 14 exiting trips during the evening peak hour and 8 entering trips and 8 exiting trips during the Saturday midday peak hour.
- The proposed residential units are located in close proximity to the NJ Transit train station and bus stop and will cater to tenants who want to utilize mass transit as their primary method of commuting in lieu of having a personal vehicle.
- The Municipal parking lots located along Green Avenue, Elmer Street, and Cook Avenue have the parking availability to accommodate the minimal parking demand expected to be generated by the proposed residential units and are located in close proximity to The Project.

Conclusions

Based upon our Traffic Impact Statement as detailed in the body of this report, it is the professional opinion of Dynamic Traffic, LLC that the adjacent street system of the Borough of Madison, County of Morris and the NJDOT will not experience any significant degradation in operating conditions with the construction of The Project as a significant increase in traffic will not result. The minimal projected parking demand can be accommodated in the Municipal parking lots located in close proximity to The Project.

Technical Appendix

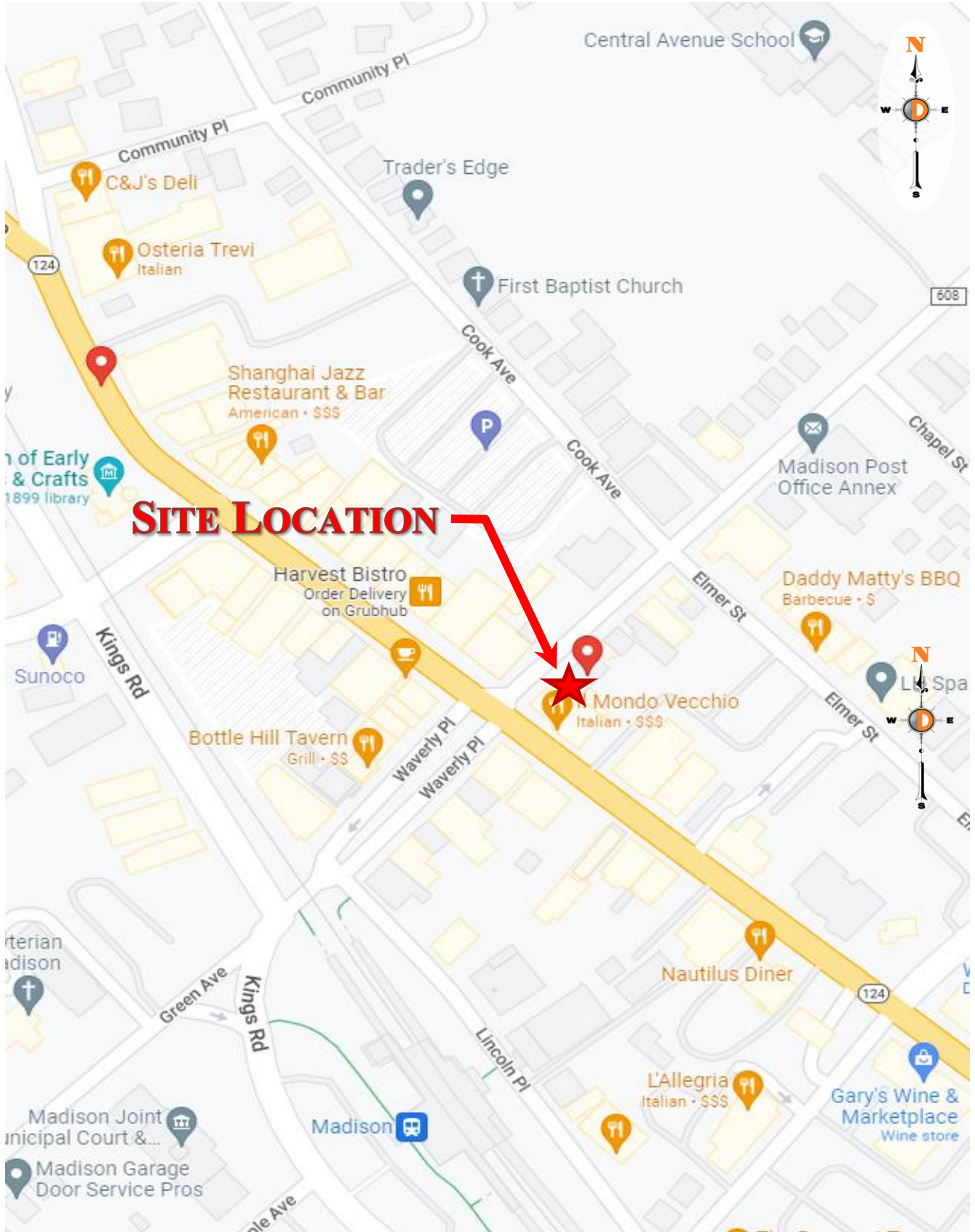


Figure 1

Site Location Map

**Number of Vehicles Parked
Tuesday, November 15, 2022**

Time	Type of Parking Space	Elmer Street Municipal Lot	Cook Avenue Municipal Lot	Green Avenue Municipal Lot	Total
Spaces Available	Total:	40	140	67	247
	<i>Unspecified:</i>	21	108	19	148
	<i>Allow Permit:</i>	19	32	48	99
	<i>ADA:</i>	2	1	0	3
8:00 AM	Total:	11	21	19	51
	<i>Unspecified:</i>	3	13	4	20
	<i>Allow Permit:</i>	8	8	15	31
	<i>ADA:</i>	0	0	0	0
8:30 AM	Total:	13	26	20	59
	<i>Unspecified:</i>	3	12	4	19
	<i>Allow Permit:</i>	10	14	16	40
	<i>ADA:</i>	0	0	0	0
9:00 AM	Total:	17	40	25	82
	<i>Unspecified:</i>	3	19	5	27
	<i>Allow Permit:</i>	14	21	20	55
	<i>ADA:</i>	0	0	0	0
9:30 AM	Total:	21	51	28	100
	<i>Unspecified:</i>	5	27	6	38
	<i>Allow Permit:</i>	16	24	22	62
	<i>ADA:</i>	0	0	0	0
12:00 PM	Total:	40	79	38	157
	<i>Unspecified:</i>	20	47	9	76
	<i>Allow Permit:</i>	19	32	29	80
	<i>ADA:</i>	1	0	0	1
12:30 PM	Total:	35	87	38	160
	<i>Unspecified:</i>	16	57	10	83
	<i>Allow Permit:</i>	19	30	28	77
	<i>ADA:</i>	0	0	0	0
1:00 PM	Total:	38	91	41	170
	<i>Unspecified:</i>	19	64	11	94
	<i>Allow Permit:</i>	19	27	30	76
	<i>ADA:</i>	0	0	0	0
1:30 PM	Total:	35	90	40	165
	<i>Unspecified:</i>	15	60	12	87
	<i>Allow Permit:</i>	19	30	28	77
	<i>ADA:</i>	1	0	0	1
10:00 PM	Total:	11	44	23	78
	<i>Unspecified:</i>	5	27	5	37
	<i>Allow Permit:</i>	6	17	18	41
	<i>ADA:</i>	0	0	0	0
10:30 PM	Total:	10	38	22	70
	<i>Unspecified:</i>	4	21	5	30
	<i>Allow Permit:</i>	6	17	17	40
	<i>ADA:</i>	0	0	0	0
11:00 PM	Total:	11	34	23	68
	<i>Unspecified:</i>	4	16	5	25
	<i>Allow Permit:</i>	7	18	18	43
	<i>ADA:</i>	0	0	0	0
11:30 PM	Total:	10	33	23	66
	<i>Unspecified:</i>	4	16	5	25
	<i>Allow Permit:</i>	6	17	18	41
	<i>ADA:</i>	0	0	0	0

**Number of Vehicles Parked
Wednesday, November 16, 2022**

Time	Type of Parking Space	Elmer Street Municipal Lot	Cook Avenue Municipal Lot	Green Avenue Municipal Lot	Total
Spaces Available	Total:	40	140	67	247
	<i>Unspecified:</i>	21	108	19	148
	<i>Allow Permit:</i>	19	32	48	99
	<i>ADA:</i>	2	1	0	3
8:00 AM	Total:	17	28	20	65
	<i>Unspecified:</i>	9	15	3	27
	<i>Allow Permit:</i>	8	13	17	38
	<i>ADA:</i>	0	0	0	0
8:30 AM	Total:	15	36	24	75
	<i>Unspecified:</i>	12	19	4	35
	<i>Allow Permit:</i>	3	17	20	40
	<i>ADA:</i>	0	0	0	0
9:00 AM	Total:	15	51	26	92
	<i>Unspecified:</i>	11	31	3	45
	<i>Allow Permit:</i>	4	20	23	47
	<i>ADA:</i>	0	0	0	0
9:30 AM	Total:	19	51	26	96
	<i>Unspecified:</i>	12	31	5	48
	<i>Allow Permit:</i>	6	20	21	47
	<i>ADA:</i>	1	0	0	1
12:00 PM	Total:	8	99	32	139
	<i>Unspecified:</i>	0	72	5	77
	<i>Allow Permit:</i>	8	27	27	62
	<i>ADA:</i>	0	0	0	0
12:30 PM	Total:	5	109	36	150
	<i>Unspecified:</i>	0	77	9	86
	<i>Allow Permit:</i>	5	32	27	64
	<i>ADA:</i>	0	0	0	0
1:00 PM	Total:	28	110	41	179
	<i>Unspecified:</i>	12	79	12	103
	<i>Allow Permit:</i>	16	31	29	76
	<i>ADA:</i>	0	0	0	0
1:30 PM	Total:	26	106	39	171
	<i>Unspecified:</i>	11	82	10	103
	<i>Allow Permit:</i>	15	24	29	68
	<i>ADA:</i>	0	0	0	0
10:00 PM	Total:	8	44	24	76
	<i>Unspecified:</i>	3	25	4	32
	<i>Allow Permit:</i>	5	19	20	44
	<i>ADA:</i>	0	0	0	0
10:30 PM	Total:	8	39	25	72
	<i>Unspecified:</i>	3	21	4	28
	<i>Allow Permit:</i>	5	18	21	44
	<i>ADA:</i>	0	0	0	0
11:00 PM	Total:	9	34	26	69
	<i>Unspecified:</i>	4	12	4	20
	<i>Allow Permit:</i>	5	22	22	49
	<i>ADA:</i>	0	0	0	0
11:30 PM	Total:	9	32	26	67
	<i>Unspecified:</i>	4	10	4	18
	<i>Allow Permit:</i>	5	22	22	49
	<i>ADA:</i>	0	0	0	0

**Number of Vehicles Parked
Saturday, November 19, 2022**

Time	Type of Parking Space	Elmer Street Municipal Lot	Cook Avenue Municipal Lot	Green Avenue Municipal Lot	Total
Spaces Available	Total:	40	140	67	247
	<i>Unspecified:</i>	21	108	19	148
	<i>Allow Permit:</i>	19	32	48	99
	<i>ADA:</i>	2	1	0	3
8:00 AM	Total:	9	38	24	71
	<i>Unspecified:</i>	3	19	6	28
	<i>Allow Permit:</i>	6	19	18	43
	<i>ADA:</i>	0	0	0	0
8:30 AM	Total:	11	49	26	86
	<i>Unspecified:</i>	2	29	7	38
	<i>Allow Permit:</i>	9	20	19	48
	<i>ADA:</i>	0	0	0	0
9:00 AM	Total:	14	58	28	100
	<i>Unspecified:</i>	4	38	9	51
	<i>Allow Permit:</i>	10	20	19	49
	<i>ADA:</i>	0	0	0	0
9:30 AM	Total:	19	72	33	124
	<i>Unspecified:</i>	8	49	11	68
	<i>Allow Permit:</i>	11	23	22	56
	<i>ADA:</i>	0	0	0	0
12:00 PM	Total:	29	113	45	187
	<i>Unspecified:</i>	16	86	15	117
	<i>Allow Permit:</i>	13	27	30	70
	<i>ADA:</i>	0	0	0	0
12:30 PM	Total:	28	126	42	196
	<i>Unspecified:</i>	17	96	14	127
	<i>Allow Permit:</i>	11	30	28	69
	<i>ADA:</i>	0	0	0	0
1:00 PM	Total:	33	131	51	215
	<i>Unspecified:</i>	22	99	18	139
	<i>Allow Permit:</i>	11	32	33	76
	<i>ADA:</i>	0	0	0	0
1:30 PM	Total:	40	130	45	215
	<i>Unspecified:</i>	25	100	14	139
	<i>Allow Permit:</i>	15	30	31	76
	<i>ADA:</i>	0	0	0	0
10:00 PM	Total:	20	63	19	102
	<i>Unspecified:</i>	10	48	3	61
	<i>Allow Permit:</i>	10	15	16	41
	<i>ADA:</i>	0	0	0	0
10:30 PM	Total:	13	65	20	98
	<i>Unspecified:</i>	6	50	3	59
	<i>Allow Permit:</i>	7	15	17	39
	<i>ADA:</i>	0	0	0	0
11:00 PM	Total:	15	48	20	83
	<i>Unspecified:</i>	6	34	3	43
	<i>Allow Permit:</i>	9	14	17	40
	<i>ADA:</i>	0	0	0	0
11:30 PM	Total:	15	46	20	81
	<i>Unspecified:</i>	7	32	3	42
	<i>Allow Permit:</i>	8	14	17	39
	<i>ADA:</i>	0	0	0	0