

B-19. Zero Place Parking Analysis with Modified Building and Site Plan

Date: 28 Dec 2016

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Table of Contents

- Background and Analysis.....2**
- 1. Repeating Maser Consulting’s Analysis with the new building design4**
 - Table Set 1. Parking Demand with New Building Design.....4
- 2. Applying observed residential demand at Mulberry Square Apartments5**
 - Table Set 2. Parking Demand Adjusted for Observed Parking at Mulberry Square Apartments.....6
- 3. Available Retail Parking Supply at All Hours.....7**
 - Table Set 3. Available Retail Parking Supply at All Hours8
 - Table 4. Comparison of Zero Place Retail to Water Street Market8
- 4. Parking Demand Estimated Using More Extreme Demand Factors.....9**
 - Table Set 5. Parking Demand with More Extreme Demand Factors9
- Appendix A. Survey of New Paltz Stores (excluding evening restaurants)10**
- Appendix B. Parking counts at Mulberry Square Apartments, New Paltz, NY11**

This memo describes the results of additional parking analysis performed on the Zero Place project, including:

1. We re-accomplish the parking analysis performed by Philip Greal, PhD of Maser Consulting provided in his Memorandum dated September 2, 2016 but with a smaller Zero Place, reduced 23’ in length (equivalent to a reduction of 8x 1-bedroom units) and reduction in Mulberry parking to two parallel, handicap parking spaces.
2. We repeat the analysis in #1 but replace the general residential ULI distribution of demand across hours by the observed demand at Mulberry Square apartments for both weekdays and weekends. This is a more accurate representation of the residential parking demand as it reflects the local conditions and demographics of New Paltz. This analysis also acts as a validation of the ULI-modeled residential demand.
3. We turn the analysis around and show the level of parking supply available for retail uses and compare that supply to Water Street Market.
4. Finally, we extend the analysis in #2 to more extreme retail demand factors.

Summary: With the new design modifications of Zero Place, the parking supply exceeds the parking demand for all reasonable combination of uses at all times of day and night. This remains the case even when more extreme demand factors are used to estimate retail parking demand. The excess supply of parking is even greater when the observations from Mulberry Square Apartments are used to model residential supply. The observations at Mulberry Square provide both more realistic modeling assumptions and also serve to validate the ULI numbers used in the base analysis. The results of this analysis indicate that Zero Place will no longer need to (1) assign parking spaces to residential tenants or (2) employ advanced park sharing technology to ensure adequate parking supply.

Background and Analysis

The current NBR zoning for on-site parking reads:

212-13, G., (13) On-site parking guidelines. The Planning Board will determine the number and configuration of on-site parking spaces required for any particular use to ensure pedestrian and vehicular safety, provide adequate parking and minimize adverse visual impacts. The following subsections shall be used as guidelines by the Planning Board.

- (a) Residential uses: 0.50 space per bedroom.*
- (b) Commercial uses: one space for each 500 feet of net interior floor space, or fraction thereof, except as otherwise required by this chapter in connection with specific uses.*

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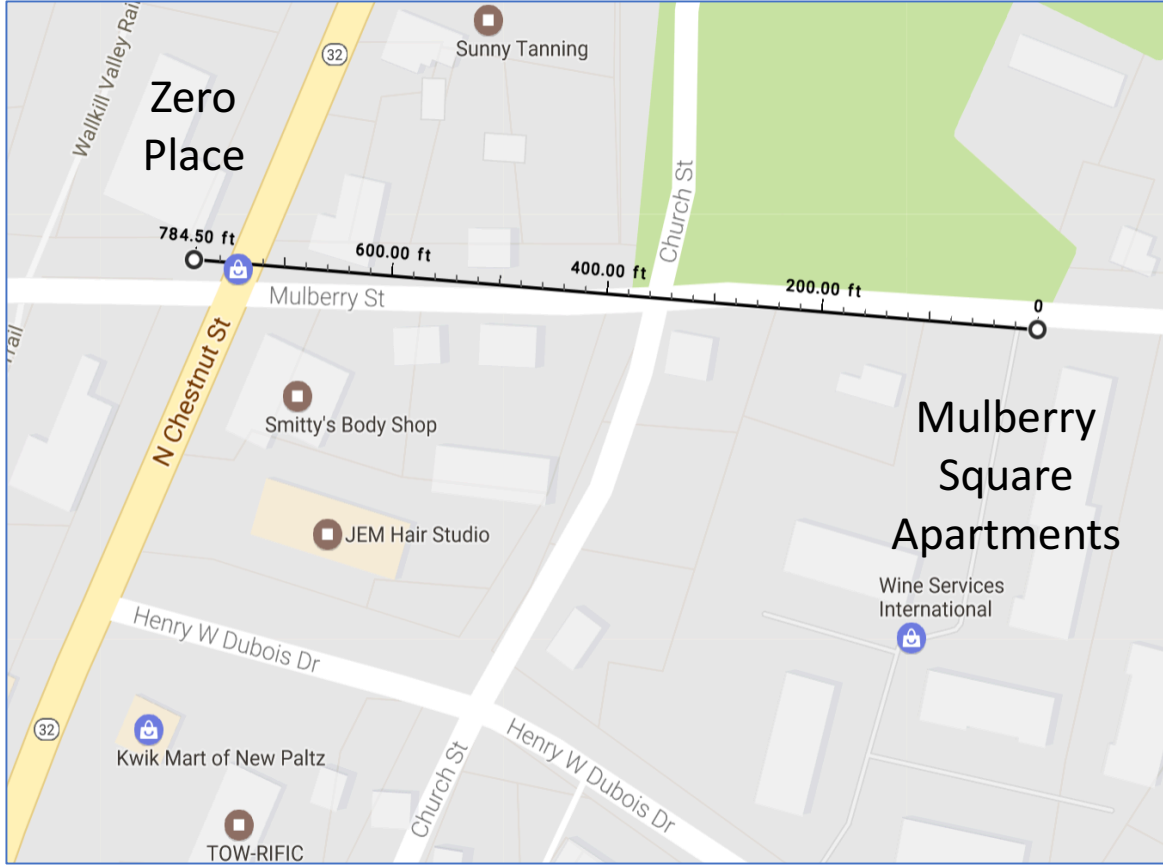
The guidelines as provided suggest the following parking supply for the two Zero Place alternatives:

	Original Zero Place Design	New Design (15 Dec '16)
Building Details	<ul style="list-style-type: none"> • 48 residential units (24x 1-bed, 24x 2-bed = 72 bedrooms) • 14,450 Sqft retail 	<ul style="list-style-type: none"> • 46 residential units (21x 1-bed, 25x 2-bed = 71 bedrooms) • 8,200 Sqft retail
NBR Guidelines for Parking	Residential = 36 Retail = 29 TOTAL = 65	Residential = 35 Retail = 17 TOTAL = 53
Parking Supply*	80 (15 over)	76 (23 over)

* Assumes two disabled parking spaces on Mulberry St and seven spaces on 32N.

The public and the Planning Board have expressed some concern that the previous modeled residential parking demand may be underestimated when considering the needs of guest visitors and multi-car families. In an effort to understand true residential demand in the proximity of Zero Place, we selected the closest similar apartment complex (Mulberry Square Apartments) and monitored parking from 23 Oct 2016 to 13 Dec 2016 across all times of day, weekends and weekdays.

Mulberry Square Apartments sit 785 feet from Zero Place, directly to the east on Mulberry St.



Although certainly not identical, Mulberry Square Apartments offer units of similar quality to those envisioned at Zero Place. However, Mulberry Square apartments consist entirely of 2-bedroom apartments (no 1-bedroom apartments). Here is a comparison of the details.

	Zero Place	Mulberry Square Apartments
Units	46 (21x 1-bed, 25x 2-bed)	56 (all 2-bedrooms)
Bedrooms	71	112
Parking Supply	76	123*
Comments	This analysis assumes full occupancy. Units are restricted to one unit by permit. Any further allowances will be provided based on future observed circumstances.	Fully occupied with waiting list. Seakill manager claims that multiple units are occupied by more than 1 auto while other units have no cars (tenants rely on public transportation).

*According to the builder, George Sifre of Seakill, the code required an excessive number of spaces per unit when the apartments were built. The counts in Appendix B reveal the significant gap between parking supply and actual demand with more than twice the necessary parking at nearly all times of day (see Appendix B).

1. Repeating Maser Consulting’s Analysis with the new building design

Results: As the tables below show, the available parking supply more than meets the parking demand across all times of day for weekdays and weekends. When adjusted for more realistic store hours, the parking demand peaks weekdays at 5pm at 64 vehicles, leaving 12 spaces of available parking supply.

***Note:** In our first set of calculations, we left all of Dr. Grealy’s conventional assumptions regarding retail store hours and anticipated demand factors. After surveying locally owned stores in the Village of New Paltz, we discovered that store hours are significantly more limited than what he has modeled. For example, Dr. Grealy modeled non-restaurant retail demand at 89% 6pm-7pm and 87% 7pm-8pm. These conventional numbers are far too high for this community. The vast majority of locally-owned, non-food-related businesses close by 6pm or 7pm (see Appendix A). To be conservative, we adjusted the model so that half of the stores would be open between 6pm and 8pm.

Table Set 1. Parking Demand with New Building Design

WEEKDAY		USE SIZE	Retail 7200 SF		Restaurant 1000 SF		Residential 46 Units		Total Demand	Adjusted for NP Store Hours*
		Demand Factor	2.65		10.6		1			
		PK HR Demand	20 Parking		11 Parking		46 Parking			
12:00 AM	12:59 AM		0	0	25	3	100	46	49	
1:00 AM	1:59 AM		0	0	0	0	100	46	46	
2:00 AM	2:59 AM		0	0	0	0	100	46	46	
3:00 AM	3:59 AM		0	0	0	0	100	46	46	
4:00 AM	4:59 AM		0	0	0	0	100	46	46	
5:00 AM	5:59 AM		0	0	0	0	100	46	46	
6:00 AM	6:59 AM		8	2	25	3	87	40	45	
7:00 AM	7:59 AM		18	4	50	6	79	36	46	
8:00 AM	8:59 AM		42	9	60	7	73	34	50	
9:00 AM	9:59 AM		68	14	75	8	68	31	53	
10:00 AM	10:59 AM		87	18	85	9	59	27	54	
11:00 AM	11:59 PM		97	20	90	10	60	28	58	
12:00 PM	12:59 PM		100	20	100	11	59	27	58	
1:00 PM	1:59 PM		97	20	90	10	60	28	58	
2:00 PM	2:59 PM		95	19	50	6	61	28	53	
3:00 PM	3:59 PM		87	18	45	5	66	30	53	
4:00 PM	4:59 PM		79	16	45	5	77	35	56	
5:00 PM	5:59 PM		82	17	75	8	85	39	64	
6:00 PM	6:59 PM		89 (50)	18 (10)	80	9	94	43	70	(62)
7:00 PM	7:59 PM		87 (50)	18 (10)	80	9	96	44	71	(63)
8:00 PM	8:59 PM		61 (50)	13 (10)	80	9	98	45	67	(64)
9:00 PM	9:59 PM		32	7	60	7	99	46	60	
10:00 PM	10:59 PM		13	3	55	6	100	46	55	
11:00 PM	11:59 PM		0	0	50	6	100	46	52	

SATURDAY		USE SIZE Demand Factor PK HR Demand	Retail 7200 SF 2.65 20 Parking		Restaurant 1000 SF 13.5 14 Parking		Residential 46 Units 1 46 Parking		Total Demand	Adjusted for NP Store Hours*
12:00 AM	12:59 AM		0	0	10	1	100	46	47	
1:00 AM	1:59 AM		0	0	0	0	100	46	46	
2:00 AM	2:59 AM		0	0	0	0	100	46	46	
3:00 AM	3:59 AM		0	0	0	0	100	46	46	
4:00 AM	4:59 AM		0	0	0	0	100	46	46	
5:00 AM	5:59 AM		0	0	0	0	100	46	46	
6:00 AM	6:59 AM		0	0	10	1	100	46	47	
7:00 AM	7:59 AM		3	1	25	4	95	44	49	
8:00 AM	8:59 AM		10	2	45	6	88	40	48	
9:00 AM	9:59 AM		30	6	70	10	81	37	53	
10:00 AM	10:59 AM		45	9	90	13	74	34	56	
11:00 AM	11:59 PM		73	15	90	13	71	33	61	
12:00 PM	12:59 PM		85	17	100	14	71	33	64	
1:00 PM	1:59 PM		95	19	85	12	70	32	63	
2:00 PM	2:59 PM		100	20	65	9	71	33	62	
3:00 PM	3:59 PM		100	20	40	6	73	34	60	
4:00 PM	4:59 PM		90	18	45	6	75	35	59	
5:00 PM	5:59 PM		75	15	60	8	81	37	60	
6:00 PM	6:59 PM		65 (50)	13 (10)	70	10	85	39	62	(59)
7:00 PM	7:59 PM		60 (50)	12 (10)	70	10	87	40	62	(60)
8:00 PM	8:59 PM		55 (50)	11 (10)	65	9	92	42	62	(61)
9:00 PM	9:59 PM		40	8	30	4	95	44	56	
10:00 PM	10:59 PM		38	8	25	4	96	44	56	
11:00 PM	11:59 PM		13	3	15	2	98	45	50	

2. Applying observed residential demand at Mulberry Square Apartments

Results: The following alternative analysis demonstrates that Zero Place has more than sufficient parking for all times of days and night for weekdays and weekends. The highest peak hour for any time was 7:00pm-8:00pm on weekdays, and the total demand was 68 spaces (or 60 spaces when more realistic assumptions based on New Paltz store hours are used), more than met by the supply of 76 spaces. The parking circumstances improved for the peak hours while generally confirming the ULI-based distributions used in the first analysis. For example, the highest hour (7:00pm-7:59pm) on weekdays improved from 68 total spaces demanded down to 60 spaces when more appropriate store hours were assumed. **The numbers modeled in this section are the most accurate, as they take into account the local conditions and demographics.** These represent worst-case conditions because Mulberry Square apartments are larger (all 2-bedroom apartments) and do not impose a one-auto limit on residents. Zero Place will select tenants from the beginning who are willing to comply with this limitation and who respect the general conservation ethic of the Zero Place concept.

Methodology: We sampled parking count at Mulberry Square at all times of day and night (by hour) for weekdays, Saturdays, and Sundays (with minor exceptions at early morning hours such as 4am). We derived a weekday count for each hour of the day by selecting the highest parking count at that hour across the 5 weekdays. For example, at 7am-7:59am we observed 47 on Tue, 51 on Thu and 50 on Fri. We thus chose “51” as the parking count for 7am-7:59am

weekdays in our modeling. We then determined the parking count factor based on the number of units at Mulberry Square (56). In this case $51/56 = 91\%$. We then applied 91% to the number of units at Zero Place (46) to estimate a parking demand of 42 at that hour. We believe this is a significant overestimation for two reasons: (1) Mulberry Square apartments are all 2-bedroom units that allow multiple tenancy and automobiles per unit. (2) Mulberry Square has never tried to select tenants based on the conservation ethic that Zero Place seeks, both in terms of energy use as well as automobile ownership. Zero Place will restrict on-site maintenance of vehicles to one per unit with exceptions granted only as supply allows.

Table Set 2. Parking Demand Adjusted for Observed Parking at Mulberry Square Apartments

WEEKDAY	USE SIZE Demand Factor PK HR Demand	Retail 7200 SF 2.65 20 Parking		Restaurant 1000 SF 10.6 11 Parking		Residential 46 Units 1 46 Parking		Total	Adjusted for NP Store Hours*
12:00 AM	12:59 AM	0	0	25	3	100	46	49	
1:00 AM	1:59 AM	0	0	0	0	100	46	46	
2:00 AM	2:59 AM	0	0	0	0	100	46	46	
3:00 AM	3:59 AM	0	0	0	0	100	46	46	
4:00 AM	4:59 AM	0	0	0	0	100	46	46	
5:00 AM	5:59 AM	0	0	0	0	100	46	46	
6:00 AM	6:59 AM	8	2	25	3	95	44	49	
7:00 AM	7:59 AM	18	4	50	6	91	42	52	
8:00 AM	8:59 AM	42	9	60	7	86	40	56	
9:00 AM	9:59 AM	68	14	75	8	68	31	53	
10:00 AM	10:59 AM	87	18	85	9	70	32	59	
11:00 AM	11:59 PM	97	20	90	10	63	29	59	
12:00 PM	12:59 PM	100	20	100	11	66	30	61	
1:00 PM	1:59 PM	97	20	90	10	63	29	59	
2:00 PM	2:59 PM	95	19	50	6	61	28	53	
3:00 PM	3:59 PM	87	18	45	5	70	32	55	
4:00 PM	4:59 PM	79	16	45	5	73	34	55	
5:00 PM	5:59 PM	82	17	75	8	75	35	60	
6:00 PM	6:59 PM	89 (50)	18 (10)	80	9	77	35	62	(54)
7:00 PM	7:59 PM	87 (50)	18 (10)	80	9	89	41	68	(60)
8:00 PM	8:59 PM	61 (50)	13 (10)	80	9	89	41	63	(60)
9:00 PM	9:59 PM	32	7	60	7	93	43	57	
10:00 PM	10:59 PM	13	3	55	6	100	46	55	
11:00 PM	11:59 PM	0	0	50	6	100	46	52	

* See the "Note" on page 4 to understand the new numbers based on more realistic New Paltz store hours.

SATURDAY		Retail		Restaurant		Residential		Total
USE	SIZE	7200	SF	1000	SF	46	Units	
Demand Factor	2.65			13.5		1		
PK HR Demand	20	Parking		14	Parking	46	Parking	
12:00 AM	12:59 AM	0	0	10	1	100	46	47
1:00 AM	1:59 AM	0	0	0	0	100	46	46
2:00 AM	2:59 AM	0	0	0	0	100	46	46
3:00 AM	3:59 AM	0	0	0	0	100	46	46
4:00 AM	4:59 AM	0	0	0	0	100	46	46
5:00 AM	5:59 AM	0	0	0	0	100	46	46
6:00 AM	6:59 AM	0	0	10	1	97	45	46
7:00 AM	7:59 AM	3	1	25	4	86	40	45
8:00 AM	8:59 AM	10	2	45	6	83	38	46
9:00 AM	9:59 AM	30	6	70	10	81	37	53
10:00 AM	10:59 AM	45	9	90	13	74	34	56
11:00 AM	11:59 PM	73	15	90	13	68	31	59
12:00 PM	12:59 PM	85	17	100	14	70	32	63
1:00 PM	1:59 PM	95	19	85	12	58	27	58
2:00 PM	2:59 PM	100	20	65	9	67	31	60
3:00 PM	3:59 PM	100	20	40	6	74	34	60
4:00 PM	4:59 PM	90	18	45	6	75	35	59
5:00 PM	5:59 PM	75	15	60	8	77	35	58
6:00 PM	6:59 PM	65	13	70	10	81	37	60
7:00 PM	7:59 PM	60	12	70	10	92	42	64
8:00 PM	8:59 PM	55	11	65	9	92	42	62
9:00 PM	9:59 PM	40	8	30	4	97	45	57
10:00 PM	10:59 PM	38	8	25	4	100	46	58
11:00 PM	11:59 PM	13	3	15	2	100	46	51

3. Available Retail Parking Supply at All Hours

We now turn the table and look at the expected parking supply for all retail purposes based upon the observed parking demand at Mulberry Square apartments.

Results: Given the earlier modeling demonstrating ample parking at all times of day, it is not surprising to see that the available parking supply compares favorably to the parking seen at Water Street Market. Zero Place retail parking ranges between 43% and 70% of available parking seen at Water Street Market with retail square footage of only 51% of that of Water Street. In other words, when all residential parking spaces are utilized (46 of the 76), only 30 remain for retail purposes, which is 43% of the parking supply offered at Water Street (69). Given that Zero Place will only offer 51% of the retail space offered at Water Street, even at the most heavily used residential hours of the day, Zero Place nearly matches the retail supply at Water Street on a proportional basis. Moreover, Zero Place parking supply exceeds 51% of that provided at Water Street Market from 8am until 9pm on all days of the week, **meaning that Zero Place has greater available parking supply for retail customers than does Water Street Market during daily operating hours.** Additionally, the intensity of uses is expected to be greater at Water Street Market, where many food-related businesses sit alongside the other 19 uses on site. We intend to select for fewer food uses (likely a single café/restaurant), particularly given that we do not want to encourage late-night uses due to Zero Place’s proximity to residential neighborhoods. **Finally, the New Paltz Village Planning Board will**

review every new use at Zero Place, providing an opportunity for the Board to guide the selection of uses to match the considerable parking supply shown here.

Table Set 3. Available Retail Parking Supply at All Hours

WEEKDAY		USE	Residential		Available	SATURDAY		USE	Residential		Available
	SIZE		46	Units	Retail		SIZE		46	Units	Retail
	Demand Factor		1		Parking		Demand Factor		1		Parking
	PK HR Demand		46	Units	Supply*		PK HR Demand		46	Units	Supply*
12:00 AM	12:59 AM		100	46	30 (43%)	12:00 AM	12:59 AM		100	46	30 (43%)
1:00 AM	1:59 AM		100	46	30 (43%)	1:00 AM	1:59 AM		100	46	30 (43%)
2:00 AM	2:59 AM		100	46	30 (43%)	2:00 AM	2:59 AM		100	46	30 (43%)
3:00 AM	3:59 AM		100	46	30 (43%)	3:00 AM	3:59 AM		100	46	30 (43%)
4:00 AM	4:59 AM		100	46	30 (43%)	4:00 AM	4:59 AM		100	46	30 (43%)
5:00 AM	5:59 AM		100	46	30 (43%)	5:00 AM	5:59 AM		100	46	30 (43%)
6:00 AM	6:59 AM		95	44	32 (46%)	6:00 AM	6:59 AM		97	45	31 (45%)
7:00 AM	7:59 AM		91	42	34 (49%)	7:00 AM	7:59 AM		86	40	36 (52%)
8:00 AM	8:59 AM		86	40	36 (52%)	8:00 AM	8:59 AM		83	38	38 (55%)
9:00 AM	9:59 AM		68	31	45 (65%)	9:00 AM	9:59 AM		81	37	39 (57%)
10:00 AM	10:59 AM		70	32	44 (64%)	10:00 AM	10:59 AM		74	34	42 (61%)
11:00 AM	11:59 PM		63	29	47 (68%)	11:00 AM	11:59 PM		68	31	45 (65%)
12:00 PM	12:59 PM		66	30	46 (67%)	12:00 PM	12:59 PM		70	32	44 (64%)
1:00 PM	1:59 PM		63	29	47 (68%)	1:00 PM	1:59 PM		58	27	49 (71%)
2:00 PM	2:59 PM		61	28	48 (70%)	2:00 PM	2:59 PM		67	31	45 (65%)
3:00 PM	3:59 PM		70	32	44 (64%)	3:00 PM	3:59 PM		74	34	42 (61%)
4:00 PM	4:59 PM		73	34	42 (61%)	4:00 PM	4:59 PM		75	35	41 (59%)
5:00 PM	5:59 PM		75	35	41 (59%)	5:00 PM	5:59 PM		77	35	41 (59%)
6:00 PM	6:59 PM		77	35	41 (59%)	6:00 PM	6:59 PM		81	37	39 (57%)
7:00 PM	7:59 PM		89	41	35 (51%)	7:00 PM	7:59 PM		92	42	35 (49%)
8:00 PM	8:59 PM		89	41	35 (51%)	8:00 PM	8:59 PM		92	42	35 (49%)
9:00 PM	9:59 PM		93	43	33 (48%)	9:00 PM	9:59 PM		97	45	32 (45%)
10:00 PM	10:59 PM		100	46	30 (43%)	10:00 PM	10:59 PM		100	46	30 (43%)
11:00 PM	11:59 PM		100	46	30 (43%)	11:00 PM	11:59 PM		100	46	30 (43%)

* Percentages reflect the relative supply compared to Water Street Market's 69 parking spaces. Zero Place's retail square footage is 51% of that of Water Street Market.

Looking beyond the ULI modeling standards used elsewhere in this report, we compare the expected supply and expected uses at Zero Place to a reasonable retail analog: Water Street Market. The following table provides the comparison:

Table 4. Comparison of Zero Place Retail to Water Street Market

	Zero Place Retail	Water Street Market
Square Footage (relative %)	8,200 (51%)	16,000 (100%)
Uses	5-6	25
Parking Supply (relative %)	31-50 (time of day variance) (45%-72%)	69 (100%)
Food Uses	1 Café	6 Food uses <ul style="list-style-type: none"> - 1 café – Mudd Puddle - 1 full restaurant – the Parish - 1 small bar – Jar'D - 3 small food

4. Parking Demand Estimated Using More Extreme Demand Factors

To further demonstrate the sufficiency of parking supply at Zero Place, we now apply more extreme demand factors for all retail uses and the café/restaurant use.

Results: After applying the more extreme demand factors for weekdays and Saturdays, the peak demand for weekdays rises to 67 for weekdays and 68 on Saturdays, occurring at 7pm for both. Again, the parking supply available at Zero Place is 76 spaces, meaning that there remain 8 spaces of extra capacity at the peak hour. The results in Table Set 5 reflect an increased demand factor of 3.0 for all retail (up from 2.65 on all days) and 15.0 (up from 10.6 weekdays and 13.5 Saturdays) for the restaurant use. The analysis applies the observed residential demand at Mulberry Square Apartments and the more realistic retail hours observed in New Paltz (Appendix A), as discussed previously.

Table Set 5. Parking Demand with More Extreme Demand Factors

WEEKDAY	USE SIZE Demand Factor PK HR Demand	Retail 7200 SF		Restaurant 1000 SF		Residential 46 Units		Total
		3	22 Parking	15	15 Parking	1	46 Units	
12:00 AM	12:59 AM	0	0	25	4	100	46	50
1:00 AM	1:59 AM	0	0	0	0	100	46	46
2:00 AM	2:59 AM	0	0	0	0	100	46	46
3:00 AM	3:59 AM	0	0	0	0	100	46	46
4:00 AM	4:59 AM	0	0	0	0	100	46	46
5:00 AM	5:59 AM	0	0	0	0	100	46	46
6:00 AM	6:59 AM	8	2	25	4	95	44	50
7:00 AM	7:59 AM	18	4	50	8	91	42	54
8:00 AM	8:59 AM	42	10	60	9	86	40	59
9:00 AM	9:59 AM	68	15	75	11	68	31	57
10:00 AM	10:59 AM	87	20	85	13	70	32	65
11:00 AM	11:59 PM	97	22	90	14	63	29	65
12:00 PM	12:59 PM	100	22	100	15	66	30	67
1:00 PM	1:59 PM	97	22	90	14	63	29	65
2:00 PM	2:59 PM	95	21	50	8	61	28	57
3:00 PM	3:59 PM	87	20	45	7	70	32	59
4:00 PM	4:59 PM	79	18	45	7	73	34	59
5:00 PM	5:59 PM	82	19	75	11	75	35	65
6:00 PM	6:59 PM	50	11	100	15	77	35	61
7:00 PM	7:59 PM	50	11	100	15	89	41	67
8:00 PM	8:59 PM	50	11	80	12	89	41	64
9:00 PM	9:59 PM	32	8	60	9	93	43	60
10:00 PM	10:59 PM	13	3	55	8	100	46	57
11:00 PM	11:59 PM	0	0	50	8	100	46	54

SATURDAY		USE SIZE Demand Factor PK HR Demand	Retail 7200 SF 3 demand 22 Parking	Restaurant 1000 SF 15 15 Parking	Residential 46 Units 1 46 Units			Total	
12:00 AM	12:59 AM		0	0	10	2	100	46	48
1:00 AM	1:59 AM		0	0	0	0	100	46	46
2:00 AM	2:59 AM		0	0	0	0	100	46	46
3:00 AM	3:59 AM		0	0	0	0	100	46	46
4:00 AM	4:59 AM		0	0	0	0	100	46	46
5:00 AM	5:59 AM		0	0	0	0	100	46	46
6:00 AM	6:59 AM		0	0	10	2	97	45	47
7:00 AM	7:59 AM		3	1	25	4	86	40	45
8:00 AM	8:59 AM		10	3	45	7	83	38	48
9:00 AM	9:59 AM		30	7	70	11	81	37	55
10:00 AM	10:59 AM		45	10	90	14	74	34	58
11:00 AM	11:59 PM		73	17	90	14	68	31	62
12:00 PM	12:59 PM		85	19	100	15	70	32	66
1:00 PM	1:59 PM		95	21	85	13	58	27	61
2:00 PM	2:59 PM		100	22	65	10	67	31	63
3:00 PM	3:59 PM		100	22	40	6	74	34	62
4:00 PM	4:59 PM		90	20	45	7	75	35	62
5:00 PM	5:59 PM		75	17	60	9	77	35	61
6:00 PM	6:59 PM		50	11	100	15	81	37	63
7:00 PM	7:59 PM		50	11	100	15	92	42	68
8:00 PM	8:59 PM		50	11	80	12	92	42	65
9:00 PM	9:59 PM		40	9	30	5	97	45	59
10:00 PM	10:59 PM		38	9	25	4	100	46	59
11:00 PM	11:59 PM		13	3	15	2	100	46	51

Appendix A. Survey of New Paltz Stores (excluding evening restaurants)

Store	Type	Days Open	Open Time	Close Time
The Cheese Plate	Cheese shop	7 days/week	11 am	6 pm
Mudd Puddle	Café	7 days/week	8:30 am	6:30 pm
Paws of Distinction	Pet supplies	7 days/week	11 am	6 pm
Descovich OD	Optometrist	Closed Sundays	9 am	5 pm (6 pm Thu)
Manny's	Art supplies	7 days/week	10 am	6 pm
Cocoon	General goods	7 days/week	11 am	7 pm
Handmade and More	Gift shop	7 days/week	10 am	9 pm
M & T Bank	Bank	Closed Sundays	9 am	4 pm (6 pm Fri)
Wells Fargo Bank	Bank	Closed Sundays	9 am	5 pm (6 pm Fri)
Pegasus	Shoe store	7 days/week	10 am	7 pm
Dedrick's Pharmacy	Pharmacy	7 days/week	8:30 am	8 pm (5 pm Sat, 1 pm Sun)
Antiques Barn	Antiques	7 days/week	10 am	5 pm
Eden Boutique	Clothing	7 days/week	10:30 am	6 pm (7 pm weekends)
Horsefeathers	Antiques	Closed Weekends	11am	7 pm
Rock and Snow	Outdoor Sports	7 days/week	9 am	6 pm (8 pm weekends)
Agway	Hardware	7 days/week	8 am	5:30 pm
My Market	Grocery/deli	7 days/week	7 am	9 pm (8pm Sun)

Appendix B. Parking counts at Mulberry Square Apartments, New Paltz, NY

1. Parking counts by days of week

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
12:00 AM – 12:59 AM	60						56
1:00 AM-1:59 AM	56						
2:00 AM-2:59 AM	56			56			
3:00 AM – 3:59 AM		54					
4:00 AM – 4:59 AM							
5:00 AM – 5:59 AM			58				
6:00 AM – 6:59 AM				53			55
7:00 AM – 7:59 AM	56		47		51	50	54
8:00 AM – 8:59 AM	51			41	48		48
9:00 AM – 9:59 AM	46			38			46
10:00 AM – 10:59 AM	39	32	39	36			45
11:00 AM – 11:59 AM	43		35	35			41
12:00 PM – 12:59 PM	35	37	35	24			38
1:00 PM – 1:59 PM	33			35			39
2:00 PM – 2:59 PM	38		34	30			32
3:00 PM – 3:59 PM	35		39		31		37
4:00 PM – 4:59 PM	38	41		36			41
5:00 PM – 5:59 PM	48	42		41			42
6:00 PM – 6:59 PM	45		43	43		43	43
7:00 PM – 7:59 PM	49		50	45		49	45
8:00 PM – 8:59 PM	52	49		46		50	51
9:00 PM – 9:59 PM	52		52	47			51
10:00 PM – 10:59 PM	52		40	59			54
11:00 PM – 11:59 PM			63				56

2. Raw data of parking counts

Date	Time	Car Count
Sunday, 10/23/2016	5:00 PM	48
Monday, 10/24/2016	5:23 PM	42
Tuesday, 10/25/2016	11:30 PM	63
Wednesday, 10/26/2016	12:30 PM	35
Thursday, 10/27/2016	7:30 AM	51
Friday, 10/28/2016	6:30 PM	43
Friday, 10/28/2016	8:45 PM	50
Saturday, 10/29/2016	6:30 AM	55
Saturday, 10/29/2016	1:00 PM	39
Tuesday, 11/1/2016	6:30 PM	43
Wednesday, 11/2/2016	4:15 PM	23
Wednesday, 11/2/2016	8:30 PM	46
Thursday, 11/3/2016	3:30 PM	31

Wednesday, 11/9/2016	6:20 PM	43
Wednesday, 11/9/2016	8:20 PM	47
Saturday, 11/12/2016	11:00 AM	41
Sunday, 11/13/2016	10:40 AM	39
Monday, 11/14/2016	3:00 AM	54
Wednesday, 11/16/2016	2:00 AM	56
Wednesday, 11/16/2016	12:00 PM	24
Wednesday, 11/16/2016	9:30 PM	59
Thursday, 11/17/2016	8:30 AM	48
Monday, 11/28/2016	8:50 PM	49
Tuesday, 11/29/2016	5:23 AM	58
Tuesday, 11/29/2016	7:50 AM	47
Tuesday, 11/29/2016	10:30 AM	39
Tuesday, 11/29/2016	11:45 AM	35
Tuesday, 11/29/2016	12:30 PM	35
Tuesday, 11/29/2016	2:30 PM	34
Tuesday, 11/29/2016	3:30 PM	39
Tuesday, 11/29/2016	7:05 PM	50
Wednesday, 11/30/2016	6:30 AM	53
Wednesday, 11/30/2016	8:30 AM	41
Wednesday, 11/30/2016	9:30 AM	38
Wednesday, 11/30/2016	10:30 AM	36
Wednesday, 11/30/2016	11:40 AM	35
Wednesday, 11/30/2016	2:45 PM	30
Wednesday, 11/30/2016	4:30 PM	36
Wednesday, 11/30/2016	5:50 PM	41
Wednesday, 11/30/2016	7:30 PM	45
Friday, 12/2/2016	7:15 AM	50
Friday, 12/2/2016	7:30 PM	49
Saturday, 12/3/2016	12:30 AM	60
Saturday, 12/3/2016	8:50 AM	48
Saturday, 12/3/2016	2:15 PM	32
Saturday, 12/3/2016	3:50 PM	37
Saturday, 12/3/2016	4:50 PM	41
Saturday, 12/3/2016	6:00 PM	43
Saturday, 12/3/2016	7:15 PM	45
Saturday, 12/3/2016	9:40 PM	51
Sunday, 12/4/2016	7:15 AM	56
Sunday, 12/4/2016	8:45 AM	51
Sunday, 12/4/2016	9:50 AM	46
Sunday, 12/4/2016	11:00 AM	43
Sunday, 12/4/2016	12:00 PM	35
Sunday, 12/4/2016	1:00 PM	33
Sunday, 12/4/2016	2:00 PM	38
Sunday, 12/4/2016	3:00 PM	35
Sunday, 12/4/2016	4:00 PM	38
Sunday, 12/4/2016	5:50 PM	42
Sunday, 12/4/2016	6:50 PM	45
Sunday, 12/4/2016	7:30 PM	49
Sunday, 12/4/2016	8:20 PM	52
Sunday, 12/4/2016	9:30 PM	52
Monday, 12/5/2016	12:20 PM	37
Saturday, 12/10/2016	7:30 AM	54
Saturday, 12/10/2016	12:40 PM	38
Saturday, 12/10/2016	5:00 PM	51
Saturday, 12/10/2016	10:15 PM	54
Saturday, 12/10/2016	11:50 PM	56
Sunday, 12/11/2016	12:25 AM	56
Sunday, 12/11/2016	1:20 AM	56
Sunday, 12/11/2016	2:30 AM	56
Tuesday, 12/13/2016	9:40 PM	52
Sunday, 12/4/2016	10:30 PM	52
Monday, 12/5/2016	10:30 AM	32
Monday, 12/5/2016	4:30 PM	41
Tuesday, 12/6/2016	10:30 AM	32
Tuesday, 12/6/2016	10:30 PM	40
Wednesday, 12/7/2016	1:00 PM	25
Monday, 12/12/2016	4:00 PM	40