FEASIBILITY STUDY (FINAL REPORT)

BACKYARD LOT PARKING GARAGE

SUBMITTED ON THE 20TH DAY OF OCTOBER, 2015

SUBMITTED TO:

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BACKYARD LOT PARKING GARAGE

BAR HARBOR, MAINE

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1. EXECUTIVE SUMMARY

In March 2013, the Town of Bar Harbor and Ocean Properties commissioned the team of Bermello Ajamil & Partners, Inc. and DESMAN, Inc. to study the physical and financial feasibility of building a parking structure on the site of the "Backyard Parking Lot". The study was divided into four phases: Site Feasibility, an Existing Conditions Assessment, a Future Conditions and Alternatives Analysis and a Financial Feasibility Assessment.

An initial Site Feasibility study showed that it could accommodate a four-story structure of roughly 371 spaces if the entire parcel was used or a structure of just 248 spaces (over four stories) if a smaller footprint was employed to preserve space for development along Roddick Street. In contrast, the review of Existing Conditions indicated that the entire town center was operating at full capacity during the summer months and at least 75 new spaces were needed just to ease congestion downtown. Paired with the necessity to replace those spaces (81) lost to the footprint of a proposed garage and estimated future need in the area (85 spaces), a structure of up to 300 spaces might be warranted.

Addition study under the Future Conditions phase suggested that the proper design capacity for any parking solution could be as high as 412 spaces. This figure incorporated the existing spaces lost to construction, new spaces to address current shortfalls, new capacity to support future growth and development, allocations to Ocean Properties as a principal partner in the project, and existing on-street vehicles displaced by Town policy changes.

Within the Alternatives Analysis, DESMAN considered multiple options for meeting the design goal of 412 spaces. These options included different designs for building on the Backyard Lot site, erecting a parking structure over the Roddick Place lot, developing a remote parking facility with shuttle service between the old Ferry Terminal and the Town center, and establishing a satellite parking facility at the new Gateway Center on Highway 3 with supporting shuttle service from the Island Explorer. After much debate with Town officials and citizens, it was decided that developing parking on the Backyard Lot site was the most advantageous course of action for both Ocean Properties and the Town.

Revision of some of the Town's policy goals reduced the target capacity for the proposed structure to between 300 and 350 spaces total. The negotiated agreement between Ocean Properties and the Town stated that the first level of any structure would include roughly 100 spaces for Ocean Properties' use, with the remaining supported levels belonging to the Town. Based on this agreement, Bermello Ajamil developed three different design options that met the capacity targets. The designs varied according to how much of a 1,620 SF parcel of privately-owned land was incorporated into the structure.

Depending on design, total project cost estimates varied between roughly $6.16M and $6.48M. DESMAN assumed that the total project cost would be amortized over a 20 year period at 4.0% APR with no equity reduction on principal at the outset. Revenue projections for the proposed garaged indicated that, if operated as a stand-alone facility, the project will not meet debt service in the first ten years of operation and therefore would not be viable without additional financing.

In order to generate adequate funding to cover the debt service on the garage, DESMAN suggested that the Town implement the following policies:

1. Create a parking fund to consolidate parking income into one source from which to carry debt service on the project;
2. Adopt fee-for use policy across downtown and charge a fair market price for parking in select Town facilities;
3. Acquire and install parking meters around the Town center;
4. Maintain or extend time-limited 'free' parking in outlying areas with option to purchase an all-day parking permit;
5. Purchase and install multi-space parking meters in the Town Pier, West Street, Newport Drive and Roddick Place lots.
6. Establish residential parking permit zone in residential neighborhoods to encourage visitors to park in proper areas around Town.

Assuming the proposed programs are implemented, DESMAN believes that the adoption of the recommended programs will provide an adequate cash flow to finance the facility without additional support from the General Fund.

2. INTRODUCTION

In March of 2013, the Town of Bar Harbor issued a RFP inviting qualified firms to submit proposals to execute a feasibility study. The objective of this engagement was to determine if the area known at the 'backyard parking lot' could support development of a parking structure. This parcel was identified as preferential for development into structured parking, as it would support the recently completed West Street Hotel as well as abutting existing businesses and nearby enterprises such as the whale watching expeditions. The site was also advantageous as it was felt it contained adequate dimensions to allow for inclusion of grade-level retail space along the Roddick Street face without negatively impacting the efficiency of structural design.

This engagement, as conceived by the Town, was divided into four phases:

- Phase 1: Site Feasibility.
- Phase 2: Existing Conditions Assessment.
- Phase 3: Future Conditions and Alternatives Analysis.
- Phase 4: Financial Feasibility Assessment.

Bermello Ajamil & Partners, Inc. (Bermello Ajamil) and DESMAN Associates (DESMAN) submitted a proposal to provide these services and were ultimately selected and engaged under contract in June of 2013.

As part of the ***Phase 1 Study,*** Bermello Ajamil engaged Town stakeholders in a series of interviews, conversations and charrettes to identify limitations, concerns and restrictions on the project site. Working off site plans provided by the Town, two conceptual designs were developed; one which accommodated the private residence located in the middle of the site and a second which contemplated design with the residence removed and a consolidated footprint for the structure.

Option 1, which straddled the existing residence, could contain 371 spaces across four stories, but would negate the development of any other building along Roddick Street. The structure was fairly efficient at 413 square feet per space and a base construction cost of roughly $7.42M, but spanned almost the entire footprint of the existing lot.

Option 2 contained fewer spaces (248) and a less efficient design (425 square feet/space), but also a smaller, more compact footprint due the removal of the private residence. This design would only occupy about half the footprint of Option 1, allowing development of a four-story, 248-space structure in the core of the block while still supporting development of a new building fronting Roddick Street – in front the garage - and essentially 'cloaking' the structure from public sight with buildings on every side.

Both of these options were vetted with Town leaders and the general public in separate presentations. Since presentation of these options, the private residence has been vacated and could be acquired without undue cost or process, eliminating the need for Option 1.

[*Note:* A third option on the site, which would assume spanning the entire site foot print with a parking structure, allowing for greater capacity on site without increasing height, but eliminating the option of building anything else there, is being considered as an alternative in the Phase 3 study.]

In the ***Phase 2 Study***, DESMAN performed a comprehensive parking supply inventory and occupancy observations in August of 2013 to establish existing conditions. DESMAN found that the 1,388 parking spaces inventoried across the defined study area were typically utilized to 88% or higher of capacity during the height of the summer tourist trade, with public parking facilities running at 93% - 99% of capacity on weekdays and weekends at the busiest hour of the day.

In practical terms, the Town needs at least 75 spaces immediately to reduce pressure plus replacement of whatever capacity is displaced when the garage is developed over the existing parking lot (~ 81 spaces). Additionally, given the amount of vacant space observed across the area during field surveys, DESMAN projected the Town may need as many as 85 additional spaces to support development in the near future. This suggested an initial design target of roughly 250 spaces.

The results of this analysis were vetted with Town leaders and the general public in separate presentations.

As part of the ***Phase 3 Study***, DESMAN met with Town stakeholders in early August of 2014 to review field work to date and identify any concerns about our prior findings. At the request of certain attendees, DESMAN expanded the scope of their observations to include vehicles parked on-street south of Mount Desert Street as it was felt that these could be area employees flowing out of the downtown proper into adjacent residential neighborhoods. Additionally, DESMAN was asked to expand field observations regarding typical length of stay and turnover on Town streets to cover larger sections of Main Street, West Street and Rodick Street. DESMAN also performed peak hour occupancy counts across the study area to update data collected at the same time the prior year (2013) with the objective of measuring natural growth in parking demand, year-to-year.

In mid-September 2014, the Town provided DESMAN with a list of seven properties that may be redeveloped in the next 10 years. DESMAN developed a statistical model, based on Urban Land Institute and Institute of Transportation Engineers standards, to model the impact of these developments. This was used to identify any potential parking supply shortfalls arising from future development which may need to be corrected.

Once future needs and potential supply shortfalls were quantified across the area, DESMAN reviewed preliminary plans for the proposed garage on the Backyard Lot and recommended adjustments to reflect these conditions. DESMAN also reviewed options for addressing projected parking shortfalls by other methods including development of structured parking options on other municipal parking lots and establishing remote parking facilities with connecting shuttle service into Bar Harbor.

DESMAN reviewed the potential benefits and liabilities of each of these options, relative to the proposed structure on the Backyard Lot, and identified the option most advantageous to the Town. As part of this phase of study, DESMAN also reviewed potential off-season uses for a proposed parking facility.

The objective of this engagement is to establish a final option for analysis to complete the ***Phase 4 Study.*** The purpose of that phase was to determine how the Town might finance the proposed improvements. Mechanisms to assist in financing and which may be needed to support the development included:

- Introduction of metered parking in certain areas;
- Introduction of time limits in certain areas;
- Introduction of a Residential Parking Permit program in certain areas;
- Introduction of 'fee for use' parking in certain facilities;
- Creation of a formal agency to manage municipal assets;
- Creation of financial/accounting structure to support financing of a parking asset;
- Revision of existing ordinances to support recommended actions.

This final analysis included a review of best practices, examples of prior implementation in comparable communities, necessary timing and action steps to implement, as well as an assessment of potential capital and operating costs, gross income, net operating income and debt service.

3. Existing Conditions (2014)

During an earlier phase of this project, parking surveys were conducted on Thursday, August 22, 2013 and Saturday, August 24, 2013. The study area for this initial phase was generally bounded by Bridge Street to the west, Atlantic Avenue to the south, Main Street to the east, and the coast to the north (shown in **yellow** in Figure 1, on the following page).

Prior to beginning the data collection process for this phase of the assignment (Phase 3), we met with City stakeholders to familiarize the group with the previous phases of the assignment and to reconfirm the boundaries of the study area. During this meeting, it was determined that the study area boundaries should be expanded in order to capture the full impact of tourist parking on the Town. With guidance from the stakeholders, the original study area was expanded farther to the west to Eden Street and farther to the south to the intersection of Main Street and Cromwell Harbor Road. **Figure 1,** next page, presents the boundaries of the expanded study area, shown in **red**, examined during Phase 3 of this project.

The impetus behind expanding the study area for this phase of the project was to try and quantify the impacts of tourist parking on residential streets farther from the center of town; it was the contention of the stakeholders that the impact of tourist parking extends beyond the limits of the original study area.

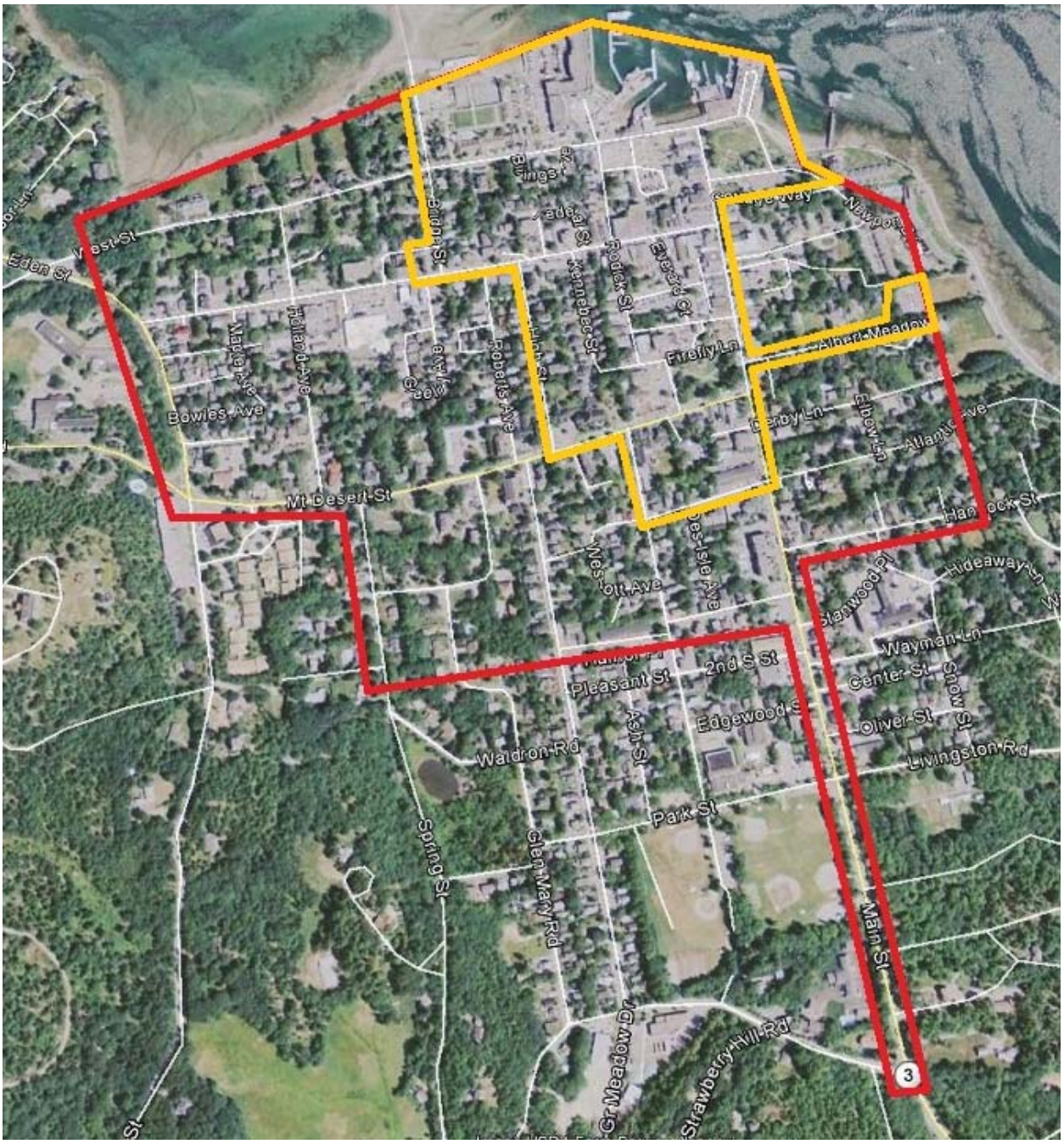
The prior field work performed in August 2013 was **not** replicated within this expanded area, as this was outside of the project's scope and likely to provide little benefit. Rather, DESMAN performed supplement counts of vehicles parked on-street south of Mount Desert Street as it was felt, among Steering Committee membership that these could be area employees flowing out of the downtown proper into adjacent residential neighborhoods. Additionally, DESMAN expanded field observations regarding typical length of stay and turnover on Town streets to cover larger sections of Main Street, West Street and Rodick Street. DESMAN also performed peak hour occupancy counts across the study area to update data collected at the same time the prior year (2013) with the objective of measuring natural growth in parking demand, year-to-year. First-hand observations of parking activity in the expanded study area were conducted on Thursday, August 14, 2014, between the hours of 9:00 AM and 5:00 PM, as well as Saturday, August 16, 2014, between the hours of 6:00 PM and 8:00 PM.

During the Friday survey period, hourly surveys were conducted of the parking spaces located on West Street, between Main Street and Eden Street, and Main Street, between Mt. Desert Street and 1st South Street. DESMAN's surveyors recorded partial license plate numbers of the vehicles parked in every space, every hour, in order to track which spaces were occupied and how long the same vehicle remained parked in a particular space.

In addition to monitoring the parking activity in these particular spaces, DESMAN also observed the volume of non-resident vehicles parking on the neighborhood streets east of Main Street and south of Mount Desert Street.

Lastly, during both the Thursday and Saturday survey periods, counts of the off-street public parking facilities were conducted during the peak demand period in order to determine the relationship between the demand for off-street parking and on-street parking, and to use for comparison with the data gathered in 2013.

Figure 1 – Phase 3 Study Area with Original Study Area Overlay



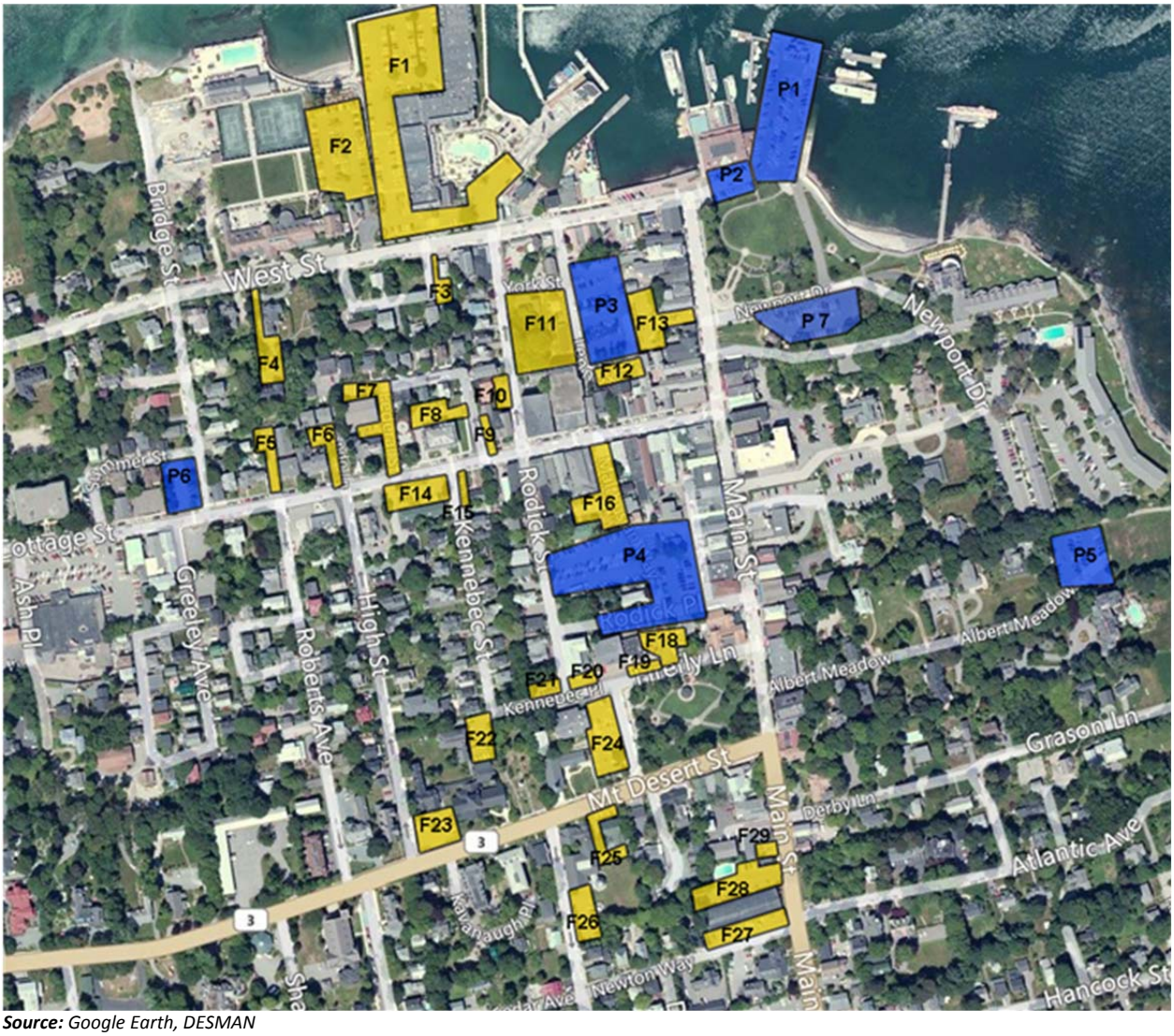
Source: *Google Earth, DESMAN*

Comparison of Peak Hour Occupancy Counts (2013 vs. 2014)

In order to get a sense of how the demand for parking in Bar Harbor grew from 2013 to 2014, it was necessary to compare the occupancy data taken during both survey efforts. By comparing peak hour occupancy between the prior and current years, DESMAN could quantify growth in parking demand generated by increases in tourist volumes year-to-year.

Prior to conducting the peak hour occupancy surveys, DESMAN confirmed the 2013 parking inventory performed in each of the public and private parking facilities in study area. The locations of each facility are shown in **Figure 2**. The facilities labelled with an "P" are those parking lots available to the general public, while the facilities labelled with an "F" are parking lots associated with specific businesses that generally permit parking by only patrons of those businesses.

Figure 2 – Locations of Public and Private Off-Street Parking Lots Surveyed



Source: *Google Earth, DESMAN*

The original (2013) weekday peak hour observations were conducted on Thursday, August 22, between 6:00 and 7:00 PM; the updated (2014) counts were conducted on Thursday, August 14 at the same hours. Prior weekend peak hour occupancy counts were conducted on Saturday, August 24, 2013 between 6:00 PM and 8:00 PM; the most recent counts were conducted during the same hours on Saturday, August 16, 2014. Weather conditions during both the primary and most recent observations were fair and warm.

Presented in **Tables 1** and **2** are the results of the off-street weekday and weekend survey efforts. These tables present the inventory of each facility, the practical capacity[1] of each facility, the recorded occupancies of each facility and the year-to-year variance in occupancy from 2013 to 2014.

Table 1 – Weekday Off-Street Parking Occupancy

Facility		Location	Inventory	Practical Capacity	08/22/13 6:00 PM	2013 Peak Utilization	08/14/14 6:00 PM	2014 Peak Utilization	Yr-to-Yr Variance	Yr-to-Yr Change	Surplus/ (Deficit)
Private	F1	Harbor Side	146	139	136	93%	122	84%	(14)	-10%	17
	F2	Bar Harbor Club	72	68	65	90%	60	83%	(5)	-8%	8
	F3	B&B Lot	6	5	4	67%	5	83%	1	25%	0
	F4	Manor House Inn	11	10	10	91%	14	127%	4	40%	(4)
	F5	Dentist Office	4	3	2	50%	2	50%	0	0%	1
	F6	SPA, Acadia Brochures Lot	11	10	3	27%	4	36%	1	33%	6
	F7	63-67 Cottage St. Lot	5	4	4	80%	4	80%	0	0%	0
	F8	USPS Lot	10	9	2	20%	0	0%	(2)	-100%	9
	F9	Federal St. Lot	9	8	8	89%	7	78%	(1)	-13%	1
	F10	23 Rodick St. Lot	9	8	3	33%	9	100%	6	200%	(1)
	F11	West St. Hotel Cust. Lot	67	63	67	100%	67	100%	0	0%	(4)
	F12	West St. Hotel Emp. Lot	21	20	7	33%	18	86%	11	157%	2
	F13	Bayside Landing Lot	35	33	30	86%	19	54%	(11)	-37%	14
	F14	Citgo Station Lot	10	9	2	20%	3	30%	1	50%	6
	F15	Little Notch Bakery Lot	7	6	4	57%	1	14%	(3)	-75%	5
	F16	Rite Aid Lot	24	22	17	71%	22	92%	5	29%	0
	F17	Aveda Spa Lot	6	5	2	33%	6	100%	4	200%	(1)
	F18	Police Lot	10	9	7	70%	16	160%	9	129%	(7)
	F19	Police Lot	8	7	8	100%	8	100%	0	0%	(1)
	F20	Serendipity Lot	4	3	2	50%	4	100%	2	100%	(1)
	F21	Dimatteo's Pasta Lot	5	4	5	100%	5	100%	0	0%	(1)
	F22	Rotory Library Back Lot	20	19	14	70%	12	60%	(2)	-14%	7
	F23	Church lot	14	13	7	50%	11	79%	4	57%	2
	F24	Reel Pizza / Church Lot	33	31	28	85%	31	94%	3	11%	0
	F25	Acadia Hotel Lot	10	9	10	100%	6	60%	(4)	-40%	3
	F26	Museum Lot	10	9	0	0%	0	0%	0	0%	9
	F27	Villager Motel Lot	18	17	14	78%	18	100%	4	29%	(1)
	F28	Villager Motel Lot	24	22	23	96%	24	100%	1	4%	(2)
	F29	Parkside Restaurant Back lot	10	9	7	70%	10	100%	3	43%	(1)
		Private Total	**619**	**574**	**491**	**79%**	**508**	**82%**	**17**	**3%**	**66**
					7:00 PM		**7:00 PM**				
Public	P1	Town Pier Lot	81	73	81	100%	82	101%	1	1%	(9)
	P2	West Street Lot	19	17	19	100%	19	100%	0	0%	(2)
	P3	Backyard Lot	66	60	67	102%	59	89%	(8)	-12%	1
	P4	Rodick Place Lot	115	104	117	102%	115	100%	(2)	-2%	(11)
	P5	Albert Meadow lot	44	40	37	84%	38	86%	1	3%	2
	P6	Bridge St. Municipal Lot	24	21	24	100%	22	92%	(2)	-8%	(1)
	P7	Newport Drive Lot	43	39	43	100%	42	98%	(1)	-2%	(3)
		Public Total	**392**	**354**	**388**	**99%**	**377**	**96%**	**(11)**	**-3%**	**(23)**
		STUDY AREA TOTAL	**1,011**	**928**	**879**	**87%**	**885**	**88%**	**6**	**1%**	**43**

Source: *DESMAN*

As shown in Table 1, weekday peak occupancy at the off-street private parking facilities increased by about 3%, while peak occupancy at the public lots decreased by about 3%. Factoring for rounding error,

[1] Practical capacity is a measure used to explain the point at which a parking facility has become functionally full. Typically, when the occupancy of a parking facility reaches between 85% and 95% of capacity, the facility is said to have reached its practical capacity. This is the point at which the last few available spaces are difficult to find, increasing the number of drivers circulating looking for a space, decreasing the operational efficiency of the facility and potentially leading to vehicle-vehicle or vehicle-pedestrian conflicts. In the case of off-street parking facilities, a 90% factor was used.

the Town-wide growth in weekday off-street parking demand was about 1% from 2013 to 2014, with a net impact of six more vehicles at the peak hour than observed in 2013.

In 2013, 80% of the privately-held off-street parking capacity and 99% of the public off-street capacity were utilized at the peak hour; comparable conditions were observed in 2014. The 2013 study projected a peak hour surplus of 68 spaces for private facilities and shortfall of 35 spaces for public lots at the peak hour on a weekday. The most recent observations show these impacts somewhat mitigated in 2014 with just 66 spaces open in private lots (82% utilization, +3% year-to-year), but a 23-space shortfall for public facilities at the peak hour on a weekday (96% utilization, -3% year-to-year).

Table 2 – Weekend Off-Street Parking Occupancy

Facility		Location	Inventory	Practical Capacity	08/22/13 6:00 PM	2013 Peak Utilization	08/14/14 6:00 PM	2014 Peak Utilization	Yr-to-Yr Variance	Yr-to-Yr Change	Surplus/ (Deficit)
Private	F1	Harbor Side	146	139	141	97%	142	97%	1	1%	(3)
	F2	Bar Harbor Club	72	68	63	88%	66	92%	3	5%	2
	F3	B&B Lot	6	5	6	100%	6	100%	0	0%	(1)
	F4	Manor House Inn	11	10	11	100%	11	100%	0	0%	(1)
	F5	Dentist Office	4	3	1	25%	2	50%	1	100%	1
	F6	SPA, Acadia Brochures Lot	11	10	2	18%	2	18%	0	0%	8
	F7	63-67 Cottage St. Lot	5	4	5	100%	4	80%	(1)	-20%	0
	F8	USPS Lot	10	9	2	20%	3	30%	1	50%	6
	F9	Federal St. Lot	9	8	7	78%	6	67%	(1)	-14%	2
	F10	23 Rodick St. Lot	9	8	6	67%	6	67%	0	0%	2
	F11	West St. Hotel Cust. Lot	67	63	67	100%	66	99%	(1)	-1%	(3)
	F12	West St. Hotel Emp. Lot	21	20	10	48%	9	43%	(1)	-10%	11
	F13	Bayside Landing Lot	35	33	35	100%	35	100%	0	0%	(2)
	F14	Citgo Station Lot	10	9	0	0%	1	10%	1	100%	8
	F15	Little Notch Bakery Lot	7	6	0	0%	2	29%	2	200%	4
	F16	Rite Aid Lot	24	22	17	71%	18	75%	1	6%	4
	F17	Aveda Spa Lot	6	5	3	50%	3	50%	0	0%	2
	F18	Police Lot	10	9	10	100%	10	100%	0	0%	(1)
	F19	Police Lot	8	7	8	100%	8	100%	0	0%	(1)
	F20	Serendipity Lot	4	3	2	50%	3	75%	1	50%	0
	F21	Dimatteo's Pasta Lot	5	4	3	60%	4	80%	1	33%	0
	F22	Rotory Library Back Lot	20	19	14	70%	16	80%	2	14%	3
	F23	Church lot	14	13	14	100%	13	93%	(1)	-7%	0
	F24	Reel Pizza / Church Lot	33	31	30	91%	32	97%	2	7%	(1)
	F25	Acadia Hotel Lot	10	9	2	20%	5	50%	3	150%	4
	F26	Museum Lot	10	9	0	0%	0	0%	0	0%	9
	F27	Villager Motel Lot	18	17	18	100%	18	100%	0	0%	(1)
	F28	Villager Motel Lot	24	22	13	54%	20	83%	7	54%	2
	F29	Parkside Restaurant Back lot	10	9	7	70%	6	60%	(1)	-14%	3
		Private Total	**619**	**574**	**497**	**80%**	**517**	**84%**	**20**	**4%**	**57**
					6:00 PM		**6:00 PM**				
Public	P1	Town Pier Lot	81	73	81	100%	81	100%	0	0%	(8)
	P2	West Street Lot	19	17	19	100%	19	100%	0	0%	(2)
	P3	Backyard Lot	66	60	66	100%	66	100%	0	0%	(6)
	P4	Rodick Place Lot	115	104	111	97%	115	100%	4	4%	(11)
	P5	Albert Meadow lot	44	40	29	66%	36	82%	7	24%	4
	P6	Bridge St. Municipal Lot	24	21	22	92%	24	100%	2	9%	(3)
	P7	Newport Drive Lot	43	39	43	100%	43	100%	0	0%	(4)
		Public Total	**392**	**354**	**371**	**95%**	**384**	**98%**	**13**	**4%**	**(30)**
		STUDY AREA TOTAL	**1,011**	**928**	**868**	**86%**	**901**	**89%**	**33**	**4%**	**27**

Source: *DESMAN*

Weekend peak parking demand in off-street facilities, as shown in **Table 2**, grew approximately 4% (+33 vehicles) for the private parking lots and the public parking lots, as well as the Town as a whole. During the weekend peak period, overall off-street parking demand grew from 86% to 89%. In private facilities, peak hour demand grew by 20 cars over 2013 observations. For the public parking facilities, the practical deficit of parking was 30 spaces, up from 18, during the weekend peak hour.

For on-street parking, weekday utilization grew by 14 vehicles over 2013 observations, with the projected peak hour shortfall growing from 42 spaces to 56 spaces as shown in **Table 3** on the following page. This represented a net increase in peak hour demand of 4% for on-street parking spaces over the 2013 observations.

Table 3 – Weekday On-Street Parking Occupancy

Street	Between	Inventory	Practical Capacity	8/22/13 6:00 PM	2013 Peak Utilization	08/14/14 6:00 PM	2014 Peak Utilization	Yr-to-Yr Variance	Yr-to-Yr Change	Surplus/ (Deficit)
West St.	Bridge St. & Rodick St.	26	22	26	100%	26	100%	0	0%	(4)
West St.	Main St. & Rodick St.	10	8	9	90%	10	100%	1	11%	(2)
West St.	Main St & Bridge St.	26	22	24	92%	26	100%	2	8%	(4)
Bridge St.	West St. & Cottage St.	14	12	12	86%	12	86%	0	0%	0
Cottage St.	Bridge St. & Rodick Pl.	24	20	21	88%	24	100%	3	14%	(4)
Cottage St.	Kennebec St. & Bridge St.	16	13	16	100%	16	100%	0	0%	(3)
Cottage St.	Main St. & Rodick Pl.	16	13	16	100%	15	94%	(1)	-6%	(2)
Cottage St.	Main St. & Kennebec St.	23	20	23	100%	22	96%	(1)	-4%	(2)
Kennebec St.	Cottage St. & Kennebec Pl.	19	16	16	84%	18	95%	2	13%	(2)
Kennebec Pl.	Kennebec St. & Main St	4	3	4	100%	4	100%	0	0%	(1)
Kennebec Pl.	Kennebec St. & Main St	18	15	18	100%	17	94%	(1)	-6%	(2)
Mt. Desert St.	Main St. & High St.	24	20	24	100%	25	104%	1	4%	(5)
Mt. Desert St.	Main St. & School St.	11	9	11	100%	12	109%	1	9%	(3)
Main St.	Newton Way & Mt. Desert St.	12	10	11	92%	12	100%	1	9%	(2)
Main St.	Mt. Desert St. & Cottage St.	17	14	16	94%	17	100%	1	6%	(3)
Main St.	Cottage St. & West St.	16	13	16	100%	16	100%	0	0%	(3)
Main St.	West St. & Atlantic Ave.	37	32	37	100%	37	100%	0	0%	(5)
School St.	Mt. Desert St. & Newton Way	12	10	11	92%	11	92%	0	0%	(1)
Newton Way	School St. & Main St.	11	9	8	73%	11	100%	3	38%	(2)
High St.	Mt. Desert St. & Cottage St.	30	26	30	100%	28	93%	(2)	-7%	(2)
Rodick Pl.	Cottage St. & West St.	13	11	13	100%	13	100%	0	0%	(2)
Federal St.	Entire Street	10	8	6	60%	10	100%	4	67%	(2)
	On-Street Total	**389**	**326**	**368**	**95%**	**382**	**98%**	**14**	**4%**	**(56)**

Source: *DESMAN*

On weekends, on-street utilization grew by 5 vehicles over 2013 observations, with the projected peak hour shortfall growing from 34 spaces to 39 spaces as shown in **Table 4** on the following page. This represented a net increase in peak hour demand of 1% for on-street parking spaces.

Due to the fact that the on-street and off-street peak demand periods did not coincide and the fact that this analysis relies on data from only a few days of observations, it is difficult to pinpoint the precise background parking demand growth rate currently experienced in the Town of Bar Harbor. What the data does point to is a current parking demand growth rate of between 1% and 4%, annually. This is the demand growth that can be attributed to an increase in general visitor volumes and not to any specific new development project or attraction that is drawing additional visitors to Town. Later in this report, an in-depth analysis of anticipated future development projects will be conducted in order to determine their potential impact on future parking demand.

Table 4 – Weekend On-Street Parking Occupancy

Street	Between	Inventory	Practical Capacity	08/22/13 6:00 PM	2013 Peak Utilization	08/14/14 6:00 PM	2014 Peak Utilization	Yr-to-Yr Variance	Yr-to-Yr Change	Surplus/ (Deficit)
West St.	Bridge St. & Rodick St.	26	22	25	96%	26	100%	1	4%	(4)
West St.	Main St. & Rodick St.	10	8	9	90%	10	100%	1	11%	(2)
West St.	Main St & Bridge St.	26	22	24	92%	26	100%	2	8%	(4)
Bridge St.	West St. & Cottage St.	14	12	9	64%	10	71%	1	11%	2
Cottage St.	Bridge St. & Rodick Pl.	24	20	22	92%	24	100%	2	9%	(4)
Cottage St.	Kennebec St. & Bridge St.	16	13	16	100%	16	100%	0	0%	(3)
Cottage St.	Main St. & Rodick Pl.	16	13	16	100%	15	94%	(1)	-6%	(2)
Cottage St.	Main St. & Kennebec St.	23	20	23	100%	23	100%	0	0%	(3)
Kennebec St.	Cottage St. & Kennebec Pl.	19	16	17	89%	19	100%	2	12%	(3)
Kennebec Pl.	Kennebec St. & Main St	4	3	3	75%	1	25%	(2)	-67%	2
Kennebec Pl.	Kennebec St. & Main St	18	15	18	100%	13	72%	(5)	-28%	2
Mt. Desert St.	Main St. & High St.	24	20	24	100%	24	100%	0	0%	(4)
Mt. Desert St.	Main St. & School St.	11	9	11	100%	11	100%	0	0%	(2)
Main St.	Newton Way & Mt. Desert St.	12	10	12	100%	11	92%	(1)	-8%	(1)
Main St.	Mt. Desert St. & Cottage St.	17	14	17	100%	15	88%	(2)	-12%	(1)
Main St.	Cottage St. & West St.	16	13	16	100%	16	100%	0	0%	(3)
Main St.	West St. & Atlantic Ave.	37	32	37	100%	37	100%	0	0%	(5)
School St.	Mt. Desert St. & Newton Way	12	10	9	75%	10	83%	1	11%	0
Newton Way	School St. & Main St.	11	9	10	91%	11	100%	1	10%	(2)
High St.	Mt. Desert St. & Cottage St.	30	26	24	80%	26	87%	2	8%	0
Rodick Pl.	Cottage St. & West St.	13	11	12	92%	12	92%	0	0%	(1)
Federal St.	Entire Street	10	8	6	60%	9	90%	3	50%	(1)
	On-Street Total	**389**	**326**	**360**	**93%**	**365**	**94%**	**5**	**1%**	**(39)**

Source: *DESMAN*

In addition to estimating the rate of background parking demand growth, this analysis indicates that during both the weekday and weekend peak demand periods, public off-street parking is exceeding 90% occupancy, reaching as high as 98% during the weekday peak demand period at on-street spaces. This has resulted in combined practical parking deficits at on- and off-street public parking locations of 79 spaces on weekdays and 69 spaces on weekends.

Given the extremely high demand for public on- and off-street parking spaces during the peak demand periods, there is a need to identify another solution to accommodate this demand. In addition to the existing demand and the background demand growth which is expected to continue in the future, changes to on-street parking policies and future development of available land could have an additional impact on the future supply of parking in Bar Harbor.

On-Street Parking Turnover Analysis

As part of the Phase 3 Study, hourly observations were conducted of the parking spaces located on West Street, between Main Street and Eden Street, and Main Street, between Mt. Desert Street and 1st South Street. On Thursday, August 14, 2014, DESMAN's surveyors recorded partial license plate numbers of the vehicles parked in every space, every hour, in order to track which spaces were occupied and how long the same vehicle remained parked in a particular space. In all, these street segments contain 229 parking spaces: 92 of these spaces are subject to a 2-hour time restriction, while 137 spaces provide unrestricted parking.

Table 5, next page, presents the inventory of spaces at which turnover surveys were performed. The spaces are broken-down by street segment, block face and parking restriction. As shown in the table, all

of the spaces surveyed on Main Street are 2-hour spaces[2], while on West Street only the two blocks that are closest to Town Pier contain 2-hour spaces. The remainder of West Street and the surveyed segment of Rodick Street had unrestricted spaces.

Table 5 – Inventory and Utilization of On-Street Spaces Examined for Turnover Survey

Street Segment	Block Face	Restriction	Inventory	9AM	10AM	11AM	12PM	1PM	2PM	3PM	4PM
West St. b/w Main & Rodick	N	2 Hours	15	10	11	12	10	12	13	13	12
West St. b/w Main & Rodick	S	2 Hours	10	9	9	9	10	10	10	9	10
			25	**19**	**20**	**21**	**20**	**22**	**23**	**22**	**22**
			Occupancy of Block	**76%**	**80%**	**84%**	**80%**	**88%**	**92%**	**88%**	**88%**
West St. b/w Rodick & Bridge	N	2 Hours	4	2	4	4	4	4	4	3	4
West St. b/w Billings & Rodick	S	2 Hours	14	13	14	12	14	14	14	12	14
West St. b/w Rodick & Bridge	N	None	7	7	7	6	7	7	7	7	7
West St. b/w Bridge & Rodick	S	None	12	12	12	12	12	12	12	12	10
			37	**34**	**37**	**34**	**37**	**37**	**37**	**34**	**35**
			Occupancy of Block	**92%**	**100%**	**92%**	**100%**	**100%**	**100%**	**92%**	**95%**
West St. b/w Bridge & Eden	N	None	53	34	39	50	53	53	53	46	40
West St. b/w Eden & Holland	S	None	27	20	26	25	27	27	27	25	26
West St. b/w Holland & Bridge	S	None	25	24	25	25	25	25	25	22	21
			105	**78**	**90**	**100**	**105**	**105**	**105**	**93**	**87**
			Occupancy of Block	**74%**	**86%**	**95%**	**100%**	**100%**	**100%**	**89%**	**83%**
Main St. b/w Mt. Desert & Newton Way	W	2 Hours	12	3	9	12	12	11	12	11	12
			12	**3**	**9**	**12**	**12**	**11**	**12**	**11**	**12**
			Occupancy of Block	**25%**	**75%**	**100%**	**100%**	**92%**	**100%**	**92%**	**100%**
Main St. b/w Newton Way & 1st South	W	2 Hours	16	6	6	11	15	17	15	15	13
			16	**6**	**6**	**11**	**15**	**17**	**15**	**15**	**13**
			Occupancy of Block	**38%**	**38%**	**69%**	**94%**	**106%**	**94%**	**94%**	**81%**
Main St. b/w Hancock & Atlantic	E	2 Hours	11	2	2	7	11	10	10	11	10
			11	**2**	**2**	**7**	**11**	**10**	**10**	**11**	**10**
			Occupancy of Block	**18%**	**18%**	**64%**	**100%**	**91%**	**91%**	**100%**	**91%**
Main St. b/w Atlantic & Derby	E	2 Hours	5	0	2	5	5	5	5	4	5
			5	**0**	**2**	**5**	**5**	**5**	**5**	**4**	**5**
			Occupancy of Block	**0%**	**40%**	**100%**	**100%**	**100%**	**100%**	**80%**	**100%**
Main St. b/w Derby & Mt. Desert	E	2 Hours	5	4	4	5	5	5	5	5	5
			5	**4**	**4**	**5**	**5**	**5**	**5**	**5**	**5**
			Occupancy of Block	**80%**	**80%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Rodick b/w Cottage & West	E	None	13	13	13	13	13	13	12	12	11
			13	**13**	**13**	**13**	**13**	**13**	**12**	**12**	**11**
			Occupancy of Block	**100%**	**100%**	**100%**	**100%**	**100%**	**92%**	**92%**	**85%**
		TOTAL	**229**	**159**	**183**	**208**	**223**	**225**	**224**	**207**	**200**
		% Occupied		**69%**	**80%**	**91%**	**97%**	**98%**	**98%**	**90%**	**87%**

Source: *DESMAN*

The hourly surveys of these spaces, also shown in Table 5, revealed a peak demand hour of 1:00 PM (shown in yellow on the next page), when 98% (225 out of 229) of the on-street spaces were occupied. Additionally, during both the 12:00 PM and 2:00 PM hours, the occupancy of these spaces remained at or above 97%. Furthermore, the occupancy of the on-street spaces exceeded 85% from 11:00 AM

[2] In order to inspire the turnover of parking spaces, the Town identifies a number of on-street spaces as "2-Hour" parking. The goal of this policy is to keep people coming to Bar Harbor, whether visitors or employees working in town, from parking in prime on-street locations for the entire day. As shown in the table, there are other on-street spaces farther from the core of downtown that do not carry the same two-hour time restriction. These are the spaces intended for longer-term parkers, such as employees and all-day visitors.

through 4:00 PM, which means that – to the casual visitor searching for the last few open parking spaces along a roadway – all curbside spaces were for all practical purposes.

Based on the results of the turnover survey, for the group of on-street spaces surveyed in 2014, the overall duration of stay was 2.5 hours. **Table 6**, next page, presents a summary of the turnover surveys conducted on Thursday, August 14, 2014, showing the number of vehicles parked in each street segment for durations of stay ranging from 1 – 9 hours. This table also shows that a total of 727 vehicles made use of the on-street parking spaces and each space turned-over an average of slightly more than 3 times over the course of the survey period.

While it is valuable to understand the duration of stay for all of the surveyed spaces, it is perhaps more valuable to have a sense of the duration of stay at the spaces which are intended to be used for two hours or less. The goal of this analysis is to show whether or not the two-hour parking restriction and the enforcement of that restriction is having the desired effect.

Table 7 presents a summary of the duration of stay and turnover characteristics observed at the two-hour parking spaces only.

Table 7 – Duration of Stay and Turnover of 2-Hour Parking Spaces

Street Segment	Block Face	Restriction	Inventory	Vehicle Utilization	Length Of Stay (Hrs)	Vehicle per Space Turnover
West St. b/w Main & Rodick	N	2 Hours	15	41	2.6	2.7
West St. b/w Main & Rodick	S	2 Hours	10	41	2.0	4.1
			25	**82**	**2.3**	**3.3**
Main St. b/w Mt. Desert & Newton Way	W	2 Hours	12	61	1.5	5.1
			12	**61**	**1.5**	**5.1**
Main St. b/w Newton Way & 1st South	W	2 Hours	16	63	1.8	3.9
			16	**63**	**1.8**	**3.9**
Main St. b/w Hancock & Atlantic	E	2 Hours	11	48	1.5	4.4
			11	**48**	**1.5**	**4.4**
Main St. b/w Atlantic & Derby	E	2 Hours	5	22	1.6	4.4
			5	**22**	**1.6**	**4.4**
Main St. b/w Derby & Mt. Desert	E	2 Hours	5	24	1.8	4.8
			5	**24**	**1.8**	**4.8**
			74	**300**	**1.8**	**4.1**

Source: *DESMAN*

Over the course of the survey period, 300 vehicles parked in the 74 two-hour parking spaces within the study area, indicating each spaced turned-over about 4.1 times. Additionally, the average length of time each vehicle remained parked in a two-hour space was 1.8 hours. This was consistent with observations conducted in 2013.

Table 6: Duration of Stay and Turnover by Street Segment and Parking Restriction

Street Segment	Block Face	Restriction	Inventory	1Hr	2 Hrs	3 Hrs	4 Hrs	5 Hrs	6 Hrs	7 Hrs	8 Hrs	9 Hrs	Vehicle Utilization	Length Of Stay (Hrs)	Vehicle per Space Turnover
West St. b/w Main & Rodick	N	2 Hours	15	23	5	4	2	0	1	0	5	1	41	2.6	2.7
West St. b/w Main & Rodick	S	2 Hours	10	20	13	3	3	0	0	0	1	1	41	2.0	4.1
			25	**43**	**18**	**7**	**5**	**0**	**1**	**0**	**6**	**2**	**82**	**2.3**	**3.3**
West St. b/w Rodick & Bridge	N	2 Hours	4	5	5	1	0	1	0	0	1	0	13	2.4	3.3
West St. b/w Billings & Rodick	S	2 Hours	14	49	23	6	0	0	0	0	1	0	79	1.5	5.6
West St. b/w Rodick & Bridge	N	None	7	7	4	0	2	3	0	1	2	0	19	3.2	2.7
West St. b/w Bridge & Rodick	S	None	12	16	8	4	3	0	7	0	1	0	39	2.7	3.3
			37	**77**	**40**	**11**	**5**	**4**	**7**	**1**	**5**	**0**	**150**	**2.1**	**4.1**
West St. b/w Bridge & Eden	N	None	53	27	28	11	17	11	13	1	5	4	117	3.4	2.2
West St. b/w Eden & Holland	S	None	27	24	17	10	7	7	2	2	2	4	75	3.1	2.8
West St. b/w Holland & Bridge	S	None	25	22	10	12	4	3	9	2	3	1	66	3.2	2.6
			105	**73**	**55**	**33**	**28**	**21**	**24**	**5**	**10**	**9**	**258**	**3.3**	**2.5**
Main St. b/w Mt. Desert & Newton Way	W	2 Hours	12	39	14	6	1	1	0	0	0	0	61	1.5	5.1
			12	**39**	**14**	**6**	**1**	**1**	**0**	**0**	**0**	**0**	**61**	**1.5**	**5.1**
Main St. b/w Newton Way & 1st South	W	2 Hours	16	36	21	2	1	0	0	0	0	3	63	1.8	3.9
			16	**36**	**21**	**2**	**1**	**0**	**0**	**0**	**0**	**3**	**63**	**1.8**	**3.9**
Main St. b/w Hancock & Atlantic	E	2 Hours	11	35	5	5	1	2	0	0	0	0	48	1.5	4.4
			11	**35**	**5**	**5**	**1**	**2**	**0**	**0**	**0**	**0**	**48**	**1.5**	**4.4**
Main St. b/w Atlantic & Derby	E	2 Hours	5	10	11	1	0	0	0	0	0	0	22	1.6	4.4
			5	**10**	**11**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**22**	**1.6**	**4.4**
Main St. b/w Derby & Mt. Desert	E	2 Hours	5	15	6	1	1	0	0	0	0	1	24	1.8	4.8
			5	**15**	**6**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**24**	**1.8**	**4.8**
Rodick b/w Cottage & West	E	None	13	3	1	0	2	4	0	1	2	6	19	5.8	1.5
			13	**3**	**1**	**0**	**2**	**4**	**0**	**1**	**2**	**6**	**19**	**5.8**	**1.5**
			229	**331**	**171**	**66**	**44**	**32**	**32**	**7**	**23**	**21**	**727**	**2.5**	**3.2**

Note: Delivery truck and bus parking on the north side of West St. between Main & Rodick account for the 7 spaces occupied for 6 hours or more (highlighted in blue).

Source: *DESMAN*

As indicated in the table, a number of spaces on the north side of West Street between Main and Rodick were occupied nearly continuously by tour buses or delivery trucks or were blocked off for those vehicles. This created durations of stay well in excess of the two hour restriction. However, these few anomalies did not skew the overall duration of stay pattern.

Based on this information, it appears as though, on average, drivers are abiding by the two-hour parking restriction. Obviously, as demonstrated in Table 7, a number of vehicles did violate the two-hour time limit on parking.

As for the unrestricted on-street parking spaces, **Table 8,** below, presents a summary of the duration of stay and turnover characteristics observed at these 137 spaces. Over the course of the survey period, 335 vehicles parked in the unrestricted parking spaces within the study area, indicating each spaced turned-over about 2.4 times. The average length of time each vehicle remained parked in a space was 3.3 hours, as compared to the 1.8 hour duration of stay at a 2-hour space.

Table 8 – Duration of Stay and Turnover of Unrestricted Parking Spaces

Street Segment	Block Face	Restriction	Inventory	Vehicle Utilization	Length Of Stay (Hrs)	Vehicle per Space Turnover
West St. b/w Rodick & Bridge	N	None	7	19	3.2	2.7
West St. b/w Bridge & Rodick	S	None	12	39	2.7	3.3
			19	**58**	**2.9**	**3.1**
West St. b/w Bridge & Eden	N	None	53	117	3.4	2.2
West St. b/w Eden & Holland	S	None	27	75	3.1	2.8
West St. b/w Holland & Bridge	S	None	25	66	3.2	2.6
			105	**258**	**3.3**	**2.5**
Rodick b/w Cottage & West	E	None	13	19	5.8	1.5
			13	**19**	**5.8**	**1.5**
			137	**335**	**3.3**	**2.4**

Source: *DESMAN*

The summary of these findings indicate that the majority of individuals parking curbside in the study area are visitors, not employees, as previously suspected. Based on these surveys it would appear that only Rodick Street currently attracts long duration parkers to the area.

Impact of Daily Parking Demand on Residential Streets

In response to the findings from the 2013 study, several Steering Committee members advanced the opinion that parking demand from the Town's core commercial district was advancing into predominately residential neighborhoods during periods of peak demand. Special concern was expressed for those areas south of Mount Desert Street and west of Main Street.

In order to test this hypothesis, it was necessary to try and differentiate between resident vehicles and visitor and employee vehicles. With no way to absolutely identify resident vehicles through a city sticker or resident parking permit, another method had to be devised. The solution was to conduct a series of counts of the number of vehicles parked on residential streets, with the initial count conducted at a time when it was presumed that most visitors and employees are not typically in Town (i.e. 5:00 AM). In theory, the vehicles parked on-street during the initial count would be associated with the adjacent residences, either as tenants or their guests. As vehicles accumulated throughout the course of the day, it was assumed that the additional cars belong to visitors and employees.

Additional counts were performed at noon, when inbound traffic to Town appeared to be at its peak, and again at 5:00 PM, the start of the traditional dinner hour. Comparisons of the establishing count to

the noon count were anticipated to indicate peak accumulation of visitor vehicles during the course of the day. The evening count was an additional data point, in case peak demand in this area was driven by diners, as opposed to daytime visitors. The variance between the establishing vehicle count and the noon and evening counts were represent a general measure of how many visitors and/or employees were parking in the neighborhoods on a typical day.

Table 9 – Occupancy Survey of Residential Streets

Street	Between	5:00 AM	12:00 PM	VARIANCE 5AM-12PM	5:00 PM	VARIANCE 12PM-5PM	VARIANCE 5AM-5PM
Newton Way	Main St. & School St.	6	10	***4***	9	***-1***	***3***
Des Isle Ave.	Newton Way & 1st South St.	7	7	***0***	7	***0***	***0***
1st South St.	Main St. & School St.	8	13	***5***	10	***-3***	***2***
Ledgelawn Ave.	Mt. Desert St. & Pleasant St.	13	31	***18***	42	***11***	***29***
School St.	Mt. Desert St. & 1st South St.	10	21	***11***	19	***-2***	***9***
Derby Lane	Main St. & Elbow St.	1	11	***10***	10	***-1***	***9***
Elbow St.	Derby St. & Atlantic Ave.	0	0	***0***	0	***0***	***0***
Atlantic St.	Elbow St. & Main St.	11	15	***4***	13	***-2***	***2***
Roberts Ave.	Cottage St. & Mt. Desert	17	17	***0***	17	***0***	***0***
Greeley Ave.	Cottage St. & Cottage St.	12	5	***-7***	5	***0***	***-7***
Ballpark Lot		0	15	***15***	5	***-10***	***5***
	On-Street Total	**85**	**145**	***60***	**137**	***-8***	***52***

Source: *DESMAN*

Table 9, above, presents the results of the occupancy surveys of the residential streets which were conducted at 5:00 AM, 12:00 PM and 5:00 PM. As shown in the table, during the establishing (5:00 AM) count, 85 vehicles were parked on the streets surveyed[3]. By noon, 145 vehicles were parked on the same streets, an increase of 60 vehicles. At 5:00 PM, 137 vehicles were parked on the surveyed streets, a total of 52 more cars than during the early morning counts.

This data suggests that, at peak, 60 visitor and employee vehicles bleed into the residential neighborhoods of Bar Harbor in order to find available parking. Should the Town move to ban this use in the future for any reason – such as institution of a Residential Parking Permit program in these areas – the proposed solution would need to accommodate these vehicles in addition to the current parking shortfall (79 spaces) increasing the target net design capacity to 139 spaces[4].

Impact of Policy Changes

In addition to the existing demand for public on- and off-street parking that would need to be accommodated at a new parking facility in order relieve pressure on existing parking facilities, two additional policy changes are being recommended that would contribute to the total peak parking demand that a new parking facility could be used to satisfy.

[3] All of which, presumably, belonged to residents living on those or adjoining streets.

[4] With displacement of existing spaces, which is estimated at roughly 81 spaces, the total design target capacity is 220 spaces.

Steering Committee members have suggested that planned street improvements in Town could result in the elimination of curbside parking along Rodick Street between Cottage Street and West Street. Casual observations suggest this change is both necessary and warranted; the sidewalk along this street facing is heavily travelled and in poor condition and widening it would reduce risk for the Town and improve pedestrian traffic flow. Eliminating curbside parking would also improve safety and traffic flow for motorists along Rodick Street, particularly those parking on the private lots along the left hand side of the street. This proposed policy change would result in the loss of 13 parking spaces which would need to be recovered in a proposed solution.

The industry standard for a roadway supporting two-way vehicular travel and parallel parking along one side is 34' in width from sidewalk to sidewalk. These dimensions allow for a 6" off-set from each curb face, two 12' driving lanes and a 9' wide parking stall oriented along the path of travel. Field observations along the section of Mount Desert Street between School Street and Spring Street indicate that roughly 50 vehicles park on the north side of roadway on a typical weekday, despite the fact that the roadway appears to be substantially narrower than the 34' standard. (DESMAN would estimate the roadway is not more than 29' wide through this section, although that measurement has not been tested to date.) This condition imperils parkers and passing motorists, as well as any bicyclists travelling through this area. DESMAN would strongly recommend that the Town Council consider banning this practice in the future. If this recommendation is implemented, the result would be the elimination of approximately 50 parking spaces which would need to be accommodated elsewhere.

Conclusions/Impacts on Design Capacity

It has been estimated that a proposed structure on the Backyard Lot site would eliminate roughly 81 parking spaces[5], which would need to be recovered in a proposed parking structure at this location. Our latest field observations demonstrate the need for an additional 79 spaces across the study area, inflating the design target to 160 spaces. Incorporating parking for individuals currently parking on residential streets (60 cars) would increase the design target to 220 spaces. Adopting the recommendations to eliminate parking along Rodick Street between Cottage and West Streets (13 spaces) and Mount Desert Street between School and Spring Streets (50 spaces) increases the target design capacity to 283 spaces under present day conditions.

[5] It bears noting that there are actually a total of 154 parking spaces on the site between the public lot (66 spaces), the parking allocated to West Street Hotel patrons (67 spaces) and that signed for West Street Hotel employees (21 spaces) at the back of the lot. The 81-space displacement estimate arose out of the Option 2 design, which would absorb only those spaces used by the general public and hotel employees. An alternate design, which encompassed the pad facing Rodick Street, west of the private residence, could displace all 154 spaces.

4. Future Demand

The future demand for parking in the Town of Bar Harbor will be impacted by a number of factors, the most obvious being changes in visitor volumes to the area. Any future growth in visitor volume will result in a natural growth in the demand for parking in Town.

In addition to this natural growth, there is the potential for planned redevelopment projects within the Town to contribute to increased parking demand. This is particularly true with developments that make use of currently-vacant space or ones that convert a building from a less-intense to a more-intense land use (e.g. repurposing a retail store into a restaurant).

The following section will examine the potential impacts of these factors on the future demand for parking in Bar Harbor, as well as presenting the total additional parking capacity necessary to satisfy this demand.

Natural Growth Assumption

As presented previously, based on observations of parking demand from August 2013 to August 2014, both weekday and weekend peak on- and off-street parking demand grew between 1% and 4%. In the area of Bar Harbor observed during the surveys, overall peak weekday demand grew from 1,247 spaces in 2013 to 1,267 spaces in 2014, a change of approximately 1.5%; overall peak weekend demand grew from 1,228 spaces in 2013 to 1,266 spaces in 2014, a change of approximately 3.1%. For the purposes of our analysis, we have assumed a universal long-term natural growth rate of 2.0%. This is seen as more representative of future growth in visitor volumes and parking demand over the long-term.

Emerging Developments

As part of the process for determining the ideal size of a proposed parking garage, it was necessary to determine if there are any in-progress, planned or proposed development projects that could have an impact on the demand for parking in Bar Harbor and what the expected impact might be.

Table 10 – Emerging Developments

			ASSUMED LAND USE ALLOCATIONS				
PARCEL [1]	STATUS	LOT/BUILDING SIZE (sf GFA)	FINE/CASUAL [2] RESTAURANT (sf GLA)	FAST/CASUAL [3] RESTAURANT (sf GLA)	CAFÉ/TAKE-OUT [4] RESTAURANT (sf GLA)	STREET LEVEL [5] RETAIL (sf GFA)	PERFORMING ARTS THEATRE (seats) [6]
56 Cottage Street	Vacant Building	19,602	1,862	2,793	4,656	9,311	-
77 Cottage Street	Vacant Lot	9,584	910	1,366	2,276	4,552	-
124 Cottage Street	Vacant Lot	13,940	1,324	1,987	3,311	6,622	-
121 Cottage Street	Vacant Building	11,761	1,117	1,676	2,793	5,586	-
135 Cottage Street	Vacant Building	2,614	248	373	621	1,242	-
216 Main Street	Vacant Lot	13,939	1,324	1,986	3,311	6,621	-
35 Cottage Street	Criterion Theatre	11,761	-	-	-	-	880
TOTALS		**83,201**	**6,785**	**10,181**	**16,968**	**33,934**	**880**

Notes:

1. Program as provided by Town leaders.
2. Fine/Casual restaurants have full bar service and serve primary lunch & dinner service. DESMAN assumed 20% of all restaurant space would be Fine/Casual.
3. Fast/Casual restaurants provide wine & beer service and serve breakfast, lunch and dinner.DESMAN assumed 30% of all restaurant space would be Fine/Casual.
4. Cafés and take-out restaurants have limited seating, resulting in less intensive parking demand . DESMAN assumed 50% of all restaurant space would be Café or Take-Out.
5. Street-level retail includes soft goods and services, but excludes big box and 'destination' [i.e. anchor] stores.
6. Program assumes full translation of current seating capacity into a new facility promoting musical performances and touring theatre.

Source: *DESMAN*

Within the study area, the Town identified a number of vacant lots and currently-vacant buildings which are likely to be developed or redeveloped in the near future. For the purposes of this study, we have assumed that all of the developments listed in **Table 10**, prior page, will be completed within 5 years.

Aside from the Criterion Theater, DESMAN was instructed to assume that any new or redeveloped buildings will cover approximately 95% of the lot, will average two stories in height and that the overall square footage will be split roughly 50/50 between retail and restaurant. Based on this information, aside from the Theater, these development projects will yield 66,867 SF of new retail and restaurant.

DESMAN assumed that these developments will be supported by roughly 40 existing parking spaces associated with the vacant lots or buildings. DESMAN did not assume any inclusion of new parking facilities, as the Town code appears not to require parking to support new development in the central business district.

To determine the impact of these developments, DESMAN prepared a parking demand model using Shared Use methodology to project future parking demand. The foundation of this model was parking demand ration taken from several sources, as shown in **Table 11**.

Table 11 – Parking Demand Ratios

Land Use	User Group	Weekday	Weekend	Unit	Source
Fine/Casual Dining	Customer	15.25	17.00	/ksf GLA	**Parking Generation: 3rd Edition**. Washington DC: *ITE - Institute of Transportation Engineers* , 2004
	Employee	2.75	3.00	/ksf GLA	**Parking Generation: 3rd Edition**. Washington DC: *ITE - Institute of Transportation Engineers* , 2004
Fast Casual Dining	Customer	9.00	12.75	/ksf GLA	**Parking Generation: 3rd Edition**. Washington DC: *ITE - Institute of Transportation Engineers* , 2004
	Employee	1.50	2.25	/ksf GLA	**Parking Generation: 3rd Edition**. Washington DC: *ITE - Institute of Transportation Engineers* , 2004
Café/Take Out	Customer	12.25	12.00	/ksf GLA	**Parking Generation: 3rd Edition**. Washington DC: *ITE - Institute of Transportation Engineers* , 2004
	Employee	2.25	2.00	/ksf GLA	**Parking Generation: 3rd Edition**. Washington DC: *ITE - Institute of Transportation Engineers* , 2004
Street Retail	Customer	2.90	3.20	/ksf GLA	**Shared Parking: 2nd Edition**. Washington DC: *ULI - Urban Land Institute* , 2005
	Employee	0.70	0.80	/ksf GLA	**Shared Parking: 2nd Edition**. Washington DC: *ULI - Urban Land Institute* , 2005
Performing Arts Theater	Customer	0.28	0.30	/seat	**Parking Generation: 3rd Edition**. Washington DC: *ITE - Institute of Transportation Engineers* , 2004
	Employee	0.06	0.09	/seat	**Parking Generation: 3rd Edition**. Washington DC: *ITE - Institute of Transportation Engineers* , 2004

Source: *DESMAN*

These demand ratios were adjusted to reflect for local conditions. For example, the most recent U.S. Census reports only 52.3% of surveyed employees in Bar Harbor drove to work by themselves; the remainder carpooled, walked, rode a bike or arrived by other means. Similarly, DESMAN estimated that roughly one in every three visitors (33%) coming into Bar Harbor arrived by bike, shuttle bus or means other than a single-occupant vehicle. These mitigating factors were applied to the base demand ratios as 'modal adjustments'.

The model also reflected the percentage of patrons and employees that were 'captive' within town, living or staying near where they worked or visited and leaving their vehicles at home or their hotel, rather than driving around town. Based on casual observations and conversations with employees, business owners and visitors, DESMAN estimated that only one in every four (25%) visitors to higher end restaurants or retail stores and all employees were non-captive users coming from outside town and thereby driving in. Workers estimated that only one in every ten (10%) of café or take-out patrons were driving into town to patronize their business. DESMAN assumed that roughly 50% of performing art theater event patrons and 50% of theater staff would also be coming in from outside of town.

These mitigating factors were applied to the base demand ratios rendering a model specific to observed conditions in Bar Harbor, rendering projected parking demand for 182 vehicles on a weekday and 206 vehicles on a weekend, as shown in **Table 12**.

Table 12 – Gross Parking Demand

				WEEKDAYS			WEEKDAY EVENINGS			WEEKEND DAYS			WEEKEND EVENINGS		
Land Use	**User Group**	**Land Use Data**		**Project Ratio**		**Vehicles**	**Project Ratio**		**Vehicles**	**Project Ratio**		**Vehicles**	**Project Ratio**		**Vehicles**
Fine/Casual Dining	Customer	6,785	sf GLA	2.52	/ksf GLA	17	2.52	/ksf GLA	17	2.81	/ksf GLA	19	2.81	/ksf GLA	19
	Employee			0.72	/ksf GLA	5	0.72	/ksf GLA	5	0.78	/ksf GLA	5	0.78	/ksf GLA	5
Fast Casual Dining	Customer	10,181	sf GLA	1.49	/ksf GLA	15	1.49	/ksf GLA	15	2.10	/ksf GLA	21	2.10	/ksf GLA	21
	Employee			0.39	/ksf GLA	4	0.39	/ksf GLA	4	0.59	/ksf GLA	6	0.59	/ksf GLA	6
Café/Take Out	Customer	16,968	sf GLA	0.81	/ksf GLA	14	0.81	/ksf GLA	14	0.79	/ksf GLA	13	0.79	/ksf GLA	13
	Employee			0.59	/ksf GLA	10	0.59	/ksf GLA	10	0.52	/ksf GLA	9	0.52	/ksf GLA	9
Street Retail	Customer	33,934	sf GLA	0.48	/ksf GLA	16	0.48	/ksf GLA	16	0.53	/ksf GLA	18	0.53	/ksf GLA	18
	Employee			0.18	/ksf GLA	6	0.18	/ksf GLA	6	0.21	/ksf GLA	7	0.21	/ksf GLA	7
Performing Arts Theater	Customer	880	seats	0.09	/seat	81	0.09	/seat	81	0.10	/seat	87	0.10	/seat	87
	Employee			0.02	/seat	14	0.02	/seat	14	0.02	/seat	21	0.02	/seat	21
Subtotal Customers						*143*			*143*			*158*			*158*
Subtotal Employees						*39*			*39*			*48*			*48*
Subtotal Residents (Unreserved)						*0*			*0*			*0*			*0*
Subtotal Reserved						*0*			*0*			*0*			*0*
TOTAL						**182**			**182**			**206**			**206**

Source: *DESMAN*

These parking demand projections were considered 'gross' in that they did not reflect variances in parking demand according to time of day or day of week for each of the different land uses, but rather assumes that all the land uses will experience peak demand at the same time. We know from common experience that this is an erroneous assumption; a café typically experiences peak demand mid-morning on a weekday, while a performing arts theater would peak in the late evening on a Friday or Saturday night during a performance. These variances in parking demand by time of year, day of week and time of day are called 'presence' in Shared Use methodology. DESMAN applied the appropriate presence factors to the gross demand projections to render accurate peak hour parking demand projections for the emerging developments.

As shown in **Table 13**, DESMAN projects the emerging developments will need a total of 153 spaces (as opposed to 182) to satisfy their needs when all the projects are complete and open.

Table 13 – Peak Weekday Demand Projections

		WEEKDAYS												
Land Use	**User Group**	**January 8:00 PM**	**February 8:00 PM**	**March 8:00 PM**	**April 7:00 PM**	**May 8:00 PM**	**June 8:00 PM**	**July 8:00 PM**	**August 8:00 PM**	**September 8:00 PM**	**October 7:00 PM**	**November 8:00 PM**	**December 8:00 PM**	**Holidays 8:00 PM**
Fine/Casual Dining	Customer	2	2	2	3	9	16	17	17	9	3	2	2	2
	Employee	1	1	1	1	3	5	5	5	3	1	1	1	1
Fast Casual Dining	Customer	1	1	1	3	6	11	12	12	6	3	1	1	1
	Employee	0	0	0	1	2	4	4	4	2	1	0	0	0
Café/Take Out	Customer	1	1	1	2	4	7	7	7	4	2	1	1	1
	Employee	1	1	1	2	3	6	6	6	3	2	1	1	1
Street Retail	Customer	0	0	0	1	2	4	4	5	2	1	0	0	0
	Employee	0	0	0	1	1	2	2	2	1	1	0	0	0
Performing Arts Theat	Customer	0	0	0	13	41	78	80	81	41	13	0	0	0
	Employee	0	0	0	3	7	14	14	14	7	3	0	0	0
Subtotal Customers		*4*	*4*	*4*	*22*	*62*	*116*	*120*	*122*	*62*	*22*	*4*	*4*	*4*
Subtotal Employees		*2*	*2*	*2*	*8*	*16*	*31*	*31*	*31*	*16*	*8*	*2*	*2*	*2*
Subtotal Residents (Unreserved)		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Subtotal Reserved		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL		**6**	**6**	**6**	**30**	**78**	**147**	**151**	**153**	**78**	**30**	**6**	**6**	**6**

PEAK DAY/HOUR =

Source: *DESMAN*

DESMAN projects the emerging developments will need a total of 187 spaces (as opposed to 206) to satisfy their needs when all the projects are complete and open.

Table 14 – Peak Weekend Day Demand Projections

		WEEKENDS												
Land Use	User Group	January 7:00 PM	February 7:00 PM	March 7:00 PM	April 7:00 PM	May 7:00 PM	June 7:00 PM	July 7:00 PM	August 7:00 PM	September 7:00 PM	October 7:00 PM	November 7:00 PM	December 7:00 PM	Holidays 7:00 PM
Fine/Casual Dining	Customer	2	2	2	4	9	17	18	18	9	4	2	2	2
	Employee	1	1	1	1	3	5	5	5	3	1	1	1	1
Fast Casual Dining	Customer	2	2	2	4	11	20	20	21	11	4	2	2	2
	Employee	1	1	1	1	3	6	6	6	3	1	1	1	1
Café/Take Out	Customer	1	1	1	2	5	10	10	10	5	2	1	1	1
	Employee	1	1	1	2	4	8	8	8	4	2	1	1	1
Street Retail	Customer	1	1	1	3	7	13	13	14	7	3	1	1	1
	Employee	1	1	1	1	3	6	6	6	3	1	1	1	1
Performing Arts Theat	Customer	0	0	0	16	39	70	71	78	39	16	0	0	0
	Employee	0	0	0	4	11	20	21	21	11	4	0	0	0
Subtotal Customers		*6*	*6*	*6*	*29*	*71*	*130*	*132*	*141*	*71*	*29*	*6*	*6*	*6*
Subtotal Employees		*4*	*4*	*4*	*9*	*24*	*45*	*46*	*46*	*24*	*9*	*4*	*4*	*4*
Subtotal Residents (Unreserved)		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
Subtotal Reserved		*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*
TOTAL		**10**	**10**	**10**	**38**	**95**	**175**	**178**	**187**	**95**	**38**	**10**	**10**	**10**

PEAK DAY/HOUR =

Source: *DESMAN*

Both projections include demand associated with a performance at the rehabilitated theater; excluding theater performances, the net peak projected parking demand from new development is 58 spaces on a weekday and 88 spaces on a weekend day. [The theater accounts for 95-99 vehicles for a performance, but these events will be infrequent enough that they do not warrant including this impact in the proposed capacity of a parking structure.] In summary, accounting for the 40 existing spaces associated with the development parcels, **an additional 48 spaces** will be needed to accommodate future demand from new development at the peak hour.

Summary of Demands

Incorporating the impacts of current conditions, plus a 2.0% annual growth factor and unmet demand from future development, DESMAN recommends a target design capacity of 337 spaces according the following calculations:

Spaces Needed to Address Current Shortfalls:	**79**
Spaces Displaced from the Existing Backyard Lots:	**81**
Spaces Displaced on Rodick Street:	**13**
Spaces Needed for Displaced Vehicles from Residential Areas:	**60**
Spaces Displaced from Mount Desert Street policy change:	**50**
Spaces Needed for Future Development	**48**
Spaces To Support Future Growth (2020)	**10**
MINIMUM SPACE CAPACITY OF PROPOSED GARAGE:	**341**

Off-Season Uses

As has been noted in prior discussions with Town leadership, DESMAN does not project a market for a facility as a commercial parking operation outside the summer season; demand across the Town falls too significantly to 'drive' users into a facility after Columbus Day. This is not to say a proposed parking structure in Town would not capture some elective use, especially during periods of inclement weather, but certainly not enough to generate adequate revenues to cover operating expenses or debt service.

Assuming standard floor-to-ceiling clearances of 7.5' throughout a proposed facility, DESMAN believes a parking structure could invite off-season use as a long-term storage facility for cars, small watercraft and motorcycles. A review of rates for comparable services offered at storage facilities in the area suggests the Town could charge $50.00-$75.00 per month for unheated but covered off-season storage for cars, trucks, boats, small craft, small recreational vehicles, motorcycles and the like. DESMAN believes the Town could attract up to 30 of these users each off-season, with an annual value of between $13,500 and $20,250, depending on pricing.

There are also a variety of vendors in the area that offer general storage as well. These are primarily businesses selling storage space in secured, enclosed facilities with or without climate control. The going rate for a 10' x 20' unit, which is roughly equivalent to the dimensions of a single parking space, is between $90.00 and $180.00 per month. These units are typically suitable for storing virtually any item not sensitive to fluctuations in temperature, including household wares, records, equipment and other sundries.

Without significant modification to a parking structure to accommodate this function, the Town could not offer comparable accommodations for individuals seeking off-season storage; to do so would require erecting fixed walls around the perimeter of parking stalls used to this purpose, which would negate any fiscal benefit. Depending on the dimensions of a unit, the Town may be able to accommodate portable storage 'pods' of 7' or less in height within the structure, but again the cost of procuring and transporting these units would mitigate any net fiscal benefit to the Town. The Town may be able to attract a limited number of individuals seeking covered, but laterally exposed, off-season storage for items such as recreational equipment, fishing gear, lawn furniture or similar items. DESMAN believes the Town could command a rate of $45.00 per month per 9' x 18' stall from up to 20 individuals, commanding annual net revenue of roughly $8,100.

5. Options and Alternatives

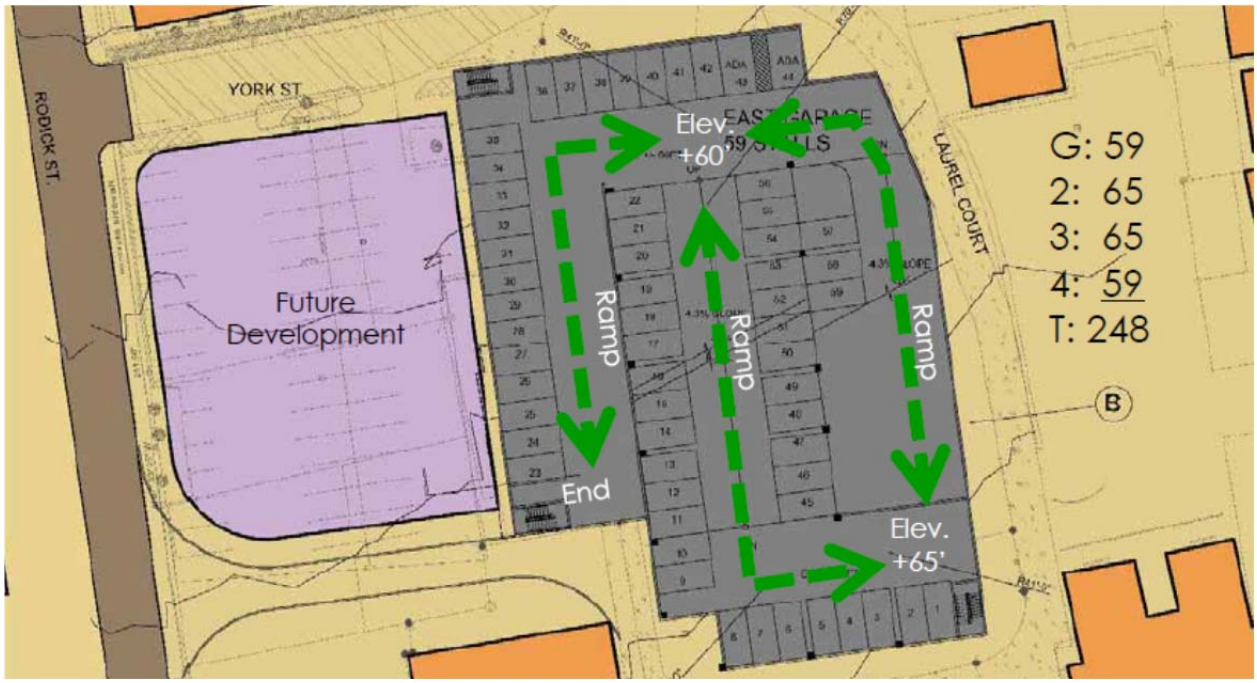
As part of this phase of study, DESMAN was charged with evaluating the capacity of the proposed designs for the Backyard Lot against the refined projections of parking need and other options for addressing parking need. The following section addresses this charge.

Backyard Lot (Option 2)

The Phase 1 Study produced two design concepts: *Option 1* - which spanned the full length and breadth of the site, straddling the single-story private residence in the middle of the site – and *Option 2* – which was restricted to the block's core, preserving the pad fronting Rodick Street for future development into a higher, better land use. Since the conclusion of that study, the private residence which split the site has become available, negating the need for Option 1.

As shown in **Figure 3**, Option 2 can support 248 spaces over four floors. Assuming a base construction cost of $52.50 per square foot[6], the structure would cost $5,530,875 or roughly $22,300 per space in total hard costs.

Figure 3 – Option 2 Illustration



Source: *Bermello Ajamil & Partners, DESMAN*

There are a number of merits to this option, including the following:

1. The location is well-situated to serve the locus of activity in town core, including the waterfront and a rehabilitated Criterion Theater.

[6] Per R.S. Means 2014 for the Maine marketplace.

2. The design concept preserves the pad fronting Rodick Street for higher, better land uses such as retail, hotel and/or restaurant which will generate strong property tax revenues and improve the property values of adjacent properties.
3. The structure would be 'masked' by surrounding buildings, mitigating any negative aesthetic impacts on the surrounding area.

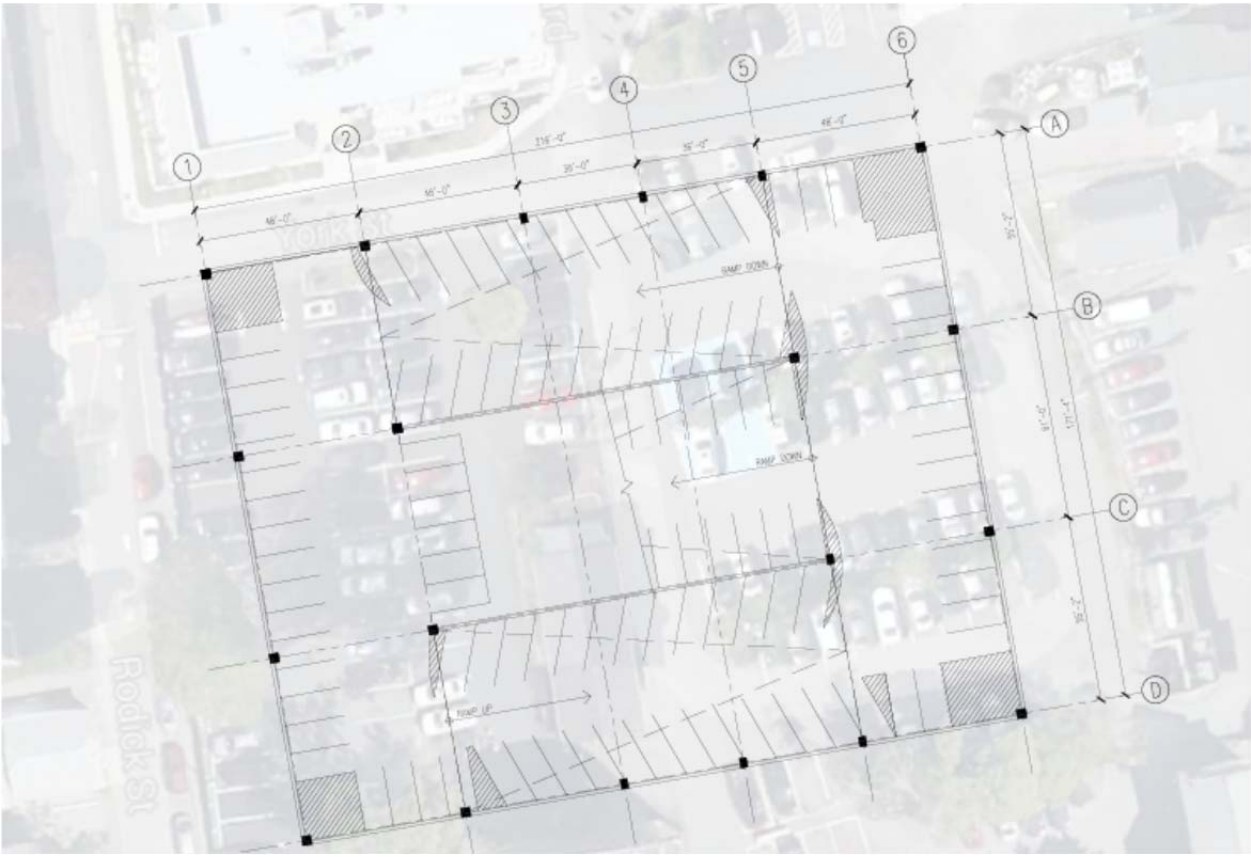
There are also a number of challenges with this option, including:

1. The design falls 89 spaces short of the design target (337 spaces).
2. The site is poorly situated to address businesses and/or parking shortfalls on the south side of downtown.
3. If the spaces (67) lost to developing the parcel fronting Rodick Street have to be recovered in the new structure, the net gain for this option is just 100 spaces, enough to accommodate current parking shortfalls and the loss of parking along Rodick Street, but not the displacement along Mount Desert Street and the neighborhoods on the south side of the town.
4. The option does not have adequate capacity to service any future demand.

Backyard Lot (Full Site Concept)

DESMAN also developed a conceptual design which would utilize the entire site for a parking structure, allowing for preservation of current easements for truck deliveries and the like.

Figure 4 – Backyard Lot Full Site Concept



Source: *Google Earth, DESMAN*

This concept, measuring roughly 216' x 171', could provide roughly 110 spaces at grade and 123 spaces on each supported level, although it would also displace a total of 154 existing spaces.

Assuming a three-story height limit, to keep scale with the surrounding buildings, the structure would have a gross capacity of 356 spaces[7]. With a total of 111,022 square feet, the proposed structure would support an efficiency of 311 square feet per space and a total cost of $5,828,602.50 or roughly $16,372.50 per space in base construction costs.

The concept would nearly meet the capacity target (337 spaces) for a solution, although the net gain (202 spaces) would only address existing conditions in the system; any demand from future development could not be accommodated by this option as currently conceived. (Adding a fourth level would net an additional 123 spaces, which would be more than enough to meet future needs.)

This option benefits from the site location, putting a large reservoir of parking within easy walking distance of the waterfront and main of the restaurants and shops that draw tourists to Bar Harbor. As with the prior design, the site is poor for accommodating those businesses along Mount Desert Street or lower Main Street. Unlike the prior option, this structure will not be 'hid' behind abutting buildings and does not offer opportunities for developing higher, better land uses fronting Rodick Street.

The concept does preserve all the existing easements and right-of-ways around the site allowing truck deliveries to abutting businesses and buildings.

Rodick Place Concept (Old Police Station Lot)

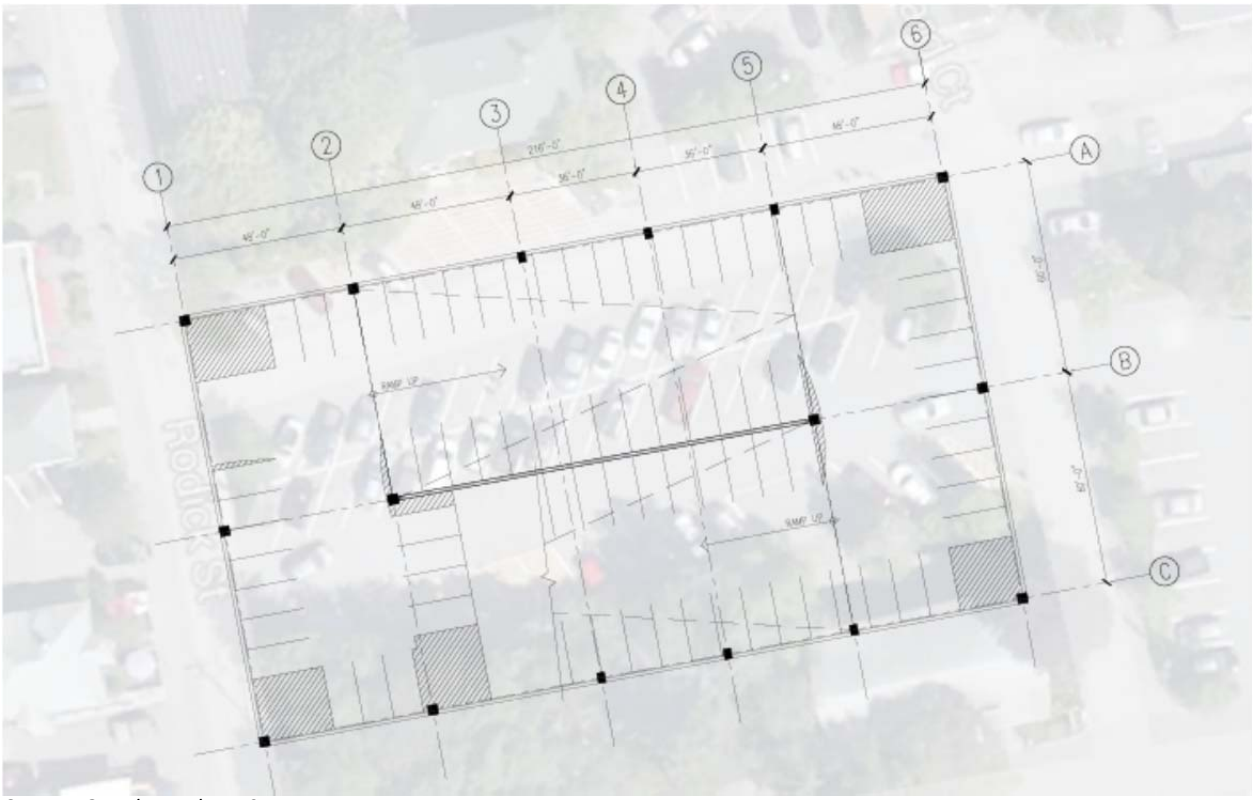
As an alternative, DESMAN examined the feasibility of building structured parking over the site of the current Rodick Place lot. This concept would displace roughly 50 spaces located between Rodick Street, Rodick Place and Everard Court, adjacent to the Dog & Pony Tavern. The 216' x 120' footprint would result in a 77,760 square feet over three levels with a total gross gain of 257 spaces (net gain of 207 spaces) and an estimated efficiency of 303 square feet per space. Applying a standard cost rate of $52.50/square foot, DESMAN estimates the concept would require $4,082,400 or roughly $15,885 per space in hard construction costs.

The Rodick Place Concept benefits from both displacing fewer existing spaces and being better positioned to service both the north and south ends of town. The site would be more attractive to those individuals parking in the residential neighborhoods south of Mount Desert Street and would have a better chance of capturing those parkers displaced when the Town Council prohibits parking along Mount Desert Street west of the Village Green as recommended by DESMAN.

As with the prior options, the net gain from this option (207 spaces) is only adequate to address current conditions; demand from future growth and development in the area could not be satisfied by the capacity of this structure. The building's footprint may encroach on abutting neighbor's lot lines, requiring a negotiated easement to move forward with refined design and construction.

[7] The structure could be increased by an additional floor to achieve a gross capacity of 479 spaces and a net gain of 325 spaces after displacement at an additional cost of $1,942.867.50.

Figure 5 – Rodick Place Concept



Source: *Google Earth, DESMAN*

The sole point of access would be off Rodick Street, which is currently not designed to carry a major vehicle load and may require improvement to support the structure. Finally, while the site is centrally located, it is well off the main arterial roadways feeding vehicles into the central business district which could make it difficult for casual visitors to find without ample wayfinding signage.

Ferry Terminal Intercept Facility

The currently idle Ferry Terminal located on Eden Street roughly 1.5 miles from the downtown core has adequate surface capacity to park ~ 380 vehicles. The majority of inbound vehicular traffic into town passes this location to access the central business district, making it an ideal location for an intercept facility. The Town would need to invest some capital funds initially to improve the site (resurfacing and restriping, signage, lighting and rehabilitation of the existing facilities to create an appropriate collection point for visitors waiting for a shuttle), but DESMAN estimates this one-time cost to be less than $500,000[8]. Additionally, the Town would need to spend roughly $50,000 per year to promote the alternative through various media channels.

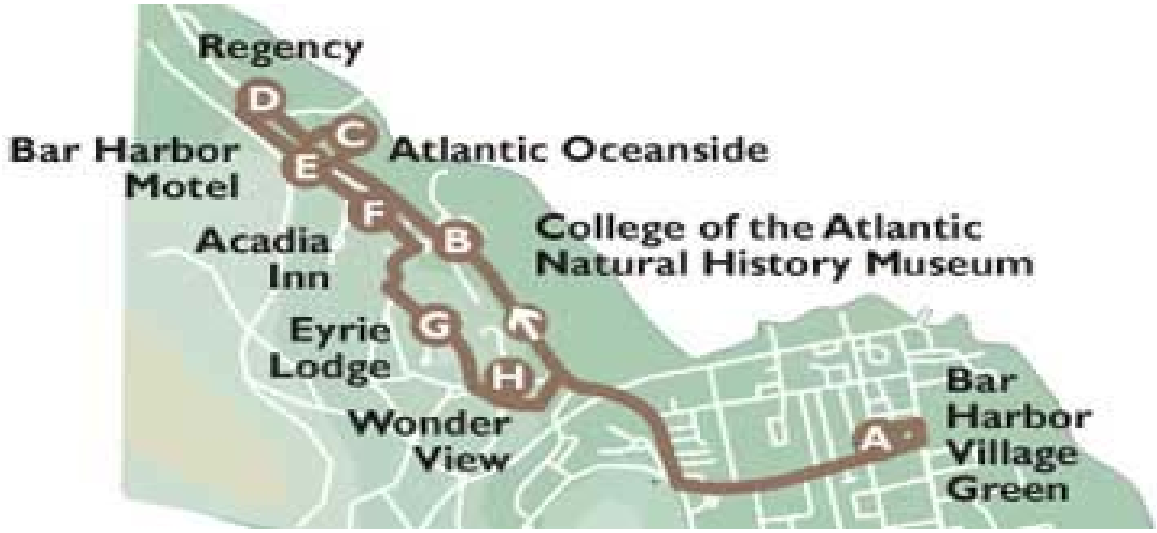
[8] This cost estimate doesn't include land acquisition and/or lease costs, which are yet to be determined. As DESMAN understands it, the site is currently owned by the Canadian government who is engaged in negotiations with the Maine Port Authority to acquire the facility with the objective of redeveloping the site to cruise ship terminal.

Figure 6 – Ferry Terminal

Source: *Google Earth, DESMAN*

There is already existing transit service – the Island Explorer's Eden Street route – that could provide 20-30 minute headways between this location and the central business district. This route departs the Village Green every 30 minutes from 6:45 AM until 3:15 PM and then every 15 minutes from 3:15 PM until 10:00 PM when the service shuts down for the evening. As **Figure 7** on the following page shows, the current route stops on either side of the Ferry Terminal.

Figure 7 – Eden Street Shuttle Route



Source: *Downeast Transportation*

There are two principle liabilities associated with this option. First, and foremost, conceptual plans show the current area that could be used for parking being redeveloped for other uses sometime after the terminal is acquired to retrofit the facility to service cruise ships; a parking facility developed at this location could be on a temporary facility, depending on the speed of redevelopment.

Secondly, while the site could support up to 380 cars, there is no guarantee it will capture that many vehicles. Route 3 is not the only approach to Bar Harbor and visitors may bypass the facility in favor of the other routes. Additionally, while the site is conveniently located right off Eden Road and well served by the existing shuttle system, it is not as convenient as parking in the core of downtown, so the facility's capacity may not equal its capture, meaning that roughly half of the facility's capacity (190 vehicles) worth the demand would be removed from Bar Harbor's core.

Based on Maine DOT vehicle volume estimates for traffic coming into Bar Harbor off major arterials and estimated headways for existing transit service, DESMAN estimates the facility will only capture a maximum of 150 vehicles at the peak hour, if both parking and transit are free of charge. For each dollar of charge for either parking or transit service, DESMAN estimates peak hour utilization will decline by 15-20%.

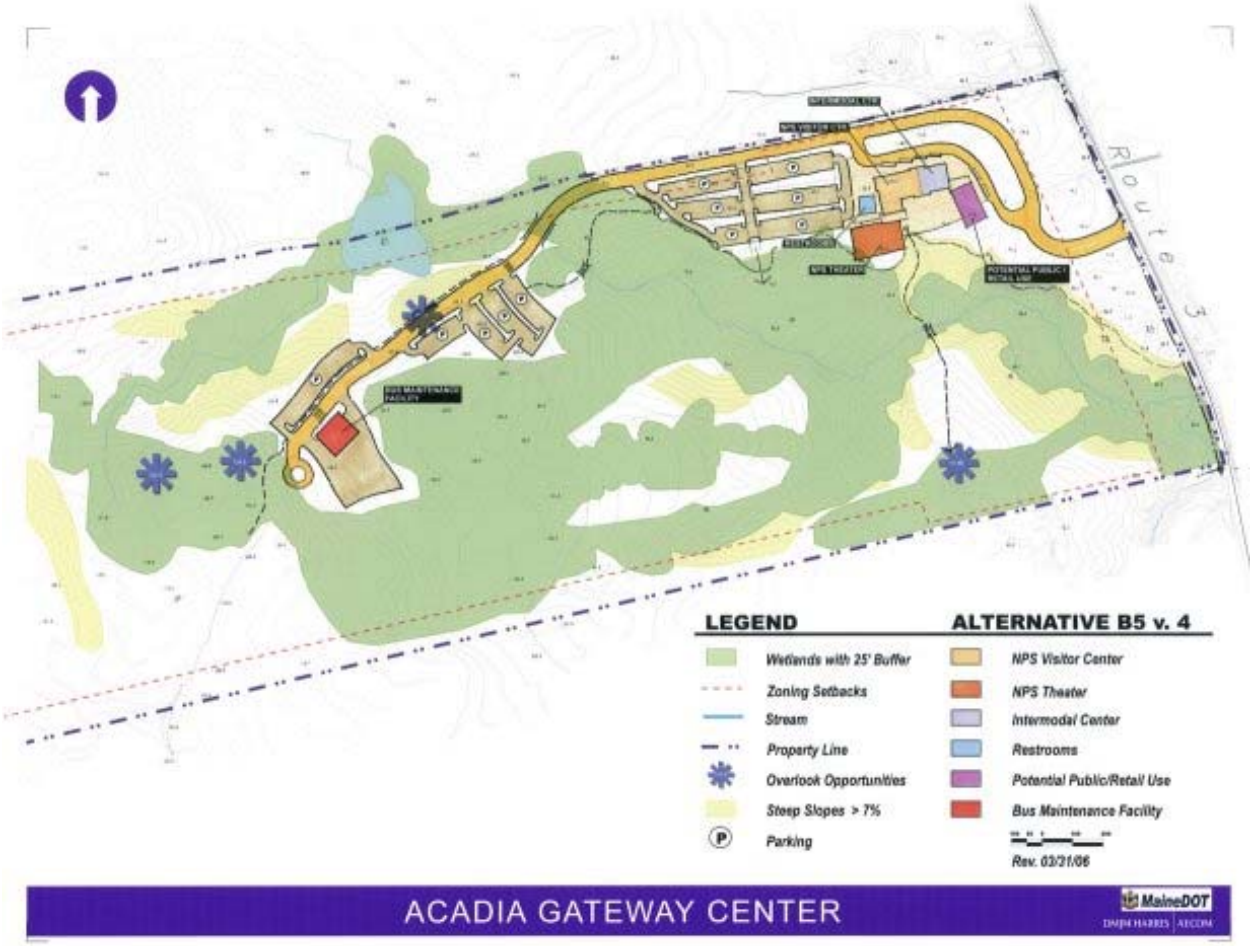
Gateway Center Intercept Facility

The Federal Transit Administration, in cooperation with the National Park Service, Maine Department of Transportation, the Town of Trenton (ME), the Friends of Acadia, and Downeast Transportation, Inc., collaborated to construct the Acadia Gateway Center. The facility was designed to serve as a visitor welcome center, public transportation hub, and bus maintenance facility. The goals of the project were to reduce traffic congestion on the Route 3 corridor and in Acadia National Park by attracting visitors and commuters to the Island Explorer Transit System and other transportation alternatives. This project has been developed outside the park's boundary along State Highway 3, approximately two miles north of the Trenton/Bar Harbor airport on a 369-acre property is bisected by Crippens Brook. It is strategically located to intercept traffic traveling south on Route 3 before arriving onto Mount Desert Island.

The facility is to be constructed in four phases:

- *Phase One*, completed in 2012, includes the construction of a bus maintenance and storage facility, commuter park and ride lot, access road and related utilities.
- *Phase Two*, which has been designed but not yet funded, includes construction of the intermodal center, a portion of the National Park Service welcome center, which will serve at the transfer point for visitors exiting their cars and boarding the Island Explorer.
- *Phase Three* includes construction of the remainder of the National Park Service welcome center. Preliminary designs have been completed, but there is no timeline on when the project will initiate construction.
- *Phase Four* includes a National Park Service theater building and an ancillary use building, which could be used to support local businesses. There is currently no funding or timeline for this phase of work.

Figure 8 – Gateway Center Concept



Source: *Maine Department of Transportation*

DESMAN visited this project in August 2014 and noted that there is a ~ 200 space surface parking lot with bus shelter already in place (shown **in Figure 8**), and functional, adjacent to the bus maintenance facility. This facility is set some distance back from Route 3 and the site itself is currently poorly identified, but the site is wired to allow for the installation of dynamic, programmable signage along Route 3 and the parking facility could easily be put into service with a nominal investment in trailblazing signage to direct drivers off the arterial and into parking. The current bus shelter (shown in **Figure 9**) appears immediately serviceable but would require the installation of dynamic signage to inform users of the arrival time of the next shuttle servicing the site.

Figure 9 – Shelter and Signage

Source: *DESMAN*

The site could be serviced by existing Island Explorer service (Campground Route, shown in **Figure 10**) which provides service to the village center in Bar Harbor every 30 minutes from 8:20 AM until 10:00 PM, as well as originating shuttles at 6:55 and 7:55 AM. The run between the Gateway Center and the Village Green is roughly 50 minutes with eight (8) intervening stops.

Figure 10 – Campground Route

Source: *Downeast Transportation*

DESMAN estimates it will require an initial investment of roughly $200,000 to install appropriate wayfinding signage along Route 3, trailblazing signage along the drive connecting Route 3 with the

existing parking lot and dynamic signage adjacent to the existing shelter to inform waiting passengers of the next shuttle's location and estimated time of arrival. In addition, DESMAN estimates the Town would need to spend approximately $150,000 per year for media promotions (i.e. television and radio advertisements, establishment and maintenance of an informational website, production and distribution of print materials, etc.) in order to make park visitors aware of the option and promote it as a viable alternative. Even with this promotion, DESMAN estimates the option will reduce parking demand in the Town's core by no more than 100 vehicles per day.

Biking Initiatives

The Town of Bar Harbor has investigated the potential of eliminating some on-street parking in the past to create better bikes lanes as shown in **Figure 11**.

Figure 11 – Proposed Roadway Reconfiguration to Support Installation of Bike Lanes

Source: *Town of Bar Harbor*

DESMAN fully supports this initiative as a means to reduce parking demand in Town, mitigate roadway congestion and promote environmentally responsible and sustainable alternatives to single-occupant vehicle travel. However, it is our opinion that these initiatives cannot substantially correct current parking supply shortfalls or address future needs adequately to be considered a sole-source solution.

Rather reconfiguration of roadways to better support bicycle and pedestrian travel should be considered and given priority as part of every roadway improvement project executed in or around Bar Harbor in the future.

Selected Option

As DESMAN has demonstrated, there is a significant need for additional parking in Bar Harbor to accommodate peak season activity. The area currently experiences a peak hour shortfall of 79 spaces at the peak hour of a busy summer weekday under existing conditions. If the Town were to elect to ban parking along Mount Desert Street to improve driver, bicyclist and pedestrian safety, this deficit would be compounded by an additional 50 spaces. Eliminating parking along Rodick Street between Cottage and West Streets would eliminate 13 parking spaces from the public inventory, but allow for better pedestrian and vehicular flow. Instituting a residential parking permit program to prevent tourists and area employees from parking in residential neighborhoods would add another 60 spaces to the projected shortfall. In total, the Town could need as many as 202 additional parking spaces immediately, without calculating for those spaces displaced by construction of a parking facility. In addition, new construction could increase the Town's need by an additional 44 spaces and natural growth could compound existing shortfalls by an additional 10 spaces over the next decade, increasing the target capacity to 256 spaces; again, before calculating the impact of displacing existing parking spaces to develop a solution.

DESMAN has addressed a total of six options, shown in **Table 15**, for addressing these shortfalls. As the table shows, only the full-site option at the Backyard Lot with four-stories has the capacity to meet the full needs of the Town over the next decade. If the Town decides to adopt all recommended policy changes and address all needs proactively, this option is the best alternative for addressing the Town's needs as outlined.

Table 15 – Summary of Options and Alternatives

Option/Alternative	Gross Capacity	Net Capacity	Hard Cost	Soft Cost [4]	Total Cost	Cost/ Gross Space	Cost/Net Space	Annual Debt Service [5,6]
Backyard Lot (Option 2)	248	167	$ 5,530,875	$ 1,106,175	$ 6,637,050	$ 26,762	$ 39,743	$ 488,366
Backyard Lot (Full Site 1)	356	202	$ 5,828,602	$ 1,165,720	$ 6,994,322	$ 19,647	$ 34,625	$ 514,655
Backyard Lot (Full Site 2)[1]	479	325	$ 7,771,469	$ 1,554,294	$ 9,325,763	$ 19,469	$ 28,695	$ 686,206
Rodick Place Concept	257	207	$ 4,082,400	$ 816,480	$ 4,898,880	$ 19,062	$ 23,666	$ 360,468
Ferry Terminal Intercept [2]	380	190	$ 500,000	$ 100,000	$ 600,000	$ 1,579	$ 3,158	$ 50,000
Gateway Center Option [3]	200	100	$ 200,000	$ 40,000	$ 240,000	$ 1,200	$ 2,400	$ 150,000

Notes:
1. *This option assumes a four-story structure, which would rise roughly 10' above the surrounding buildings.*
2. *Estimated capacity, after resurfacing and restriping, is 380 spaces with a 50% capture rate (190 vehicles per day).*
3. *Estimated capacity is 200 spaces with a 50% capture rate (100 vehicles per day).*
4. *Soft cost is equivalent to 20% of hard costs for design and construction administration services, financing, insurance and contingencies.*
5. *Debt service for parking structures is calculated at 4.0% APR over a 20 year term. Debt service shown for intercept facilities is the actual annual expense for promotional support, as it was assumed the Town could pay for capital improvements 'out of pocket'.*

Source: *DESMAN*

In early December 2014, the Town's Parking Task Force issued a recommendation to Bar Harbor Town Council that stipulated the following:

1. **The solution will be a parking structure of some type, located within the downtown area.** The Task Force recommended that the Town work with Downeast Transportation to refine analysis of potential 'park and ride' sites at the Ferry/Cruise Ship terminal and the parking lot adjacent to the Connors School to support future demand beyond what a structure might accommodate, but did not recommend pursuit of the Gateway Center option.
2. **The Backyard Lot Option 2 is the preferred design.** The Rodick Place was rejected as politically non-viable, given the number of abutters with easements on the property and the two full-site options for the Backyard Lot were determined to be unadvantageous to both the Town and Ocean Properties, as they would not allow for development of the Ocean Properties parcel fronting Rodick Street. In addition, it was the Town's desire to 'screen' any parking structure from the view of the general public by 'wrapping' it in abutting buildings.
3. **Option 2 must preserve circulation along Lenox Place and Laurel Court.** These easements are required to accommodate deliveries to the businesses fronting West, Main and Cottage Streets.
4. **The solution should preferably include between 300 and 340 spaces.** This figure reflects the following factors:
    a. Addressing the existing 79 space shortfall under peak hour conditions;
    b. Replacing the 81 existing spaces displaced by the development of structured parking on the Backyard Lot;
    c. Relocating 13 spaces currently located along Rodick Street between Cottage and West Street to improve safe travel and aesthetics along that corridor;
    d. Providing 48 spaces to support emerging developments across the downtown;
    e. Developing 10 spaces to support natural growth in parking demand through 2020;
    f. Adding 60 spaces to accommodate those seasonal visitor and employee vehicles currently parking on residential side streets across downtown;
    g. Including 49 spaces to replace the banning of parking along the south side of West Street from Eden to Bridge Street to support bicycle travel and safer traffic flow through that area.
5. **The solution must be a truly public/private venture between the Town and Ocean Properties.** The proposed facility must provide adequate capacity to accommodate full occupancy of the West Street Hotel and the agreement to develop the facility must clearly define the terms for sharing the cost of construction, ownership and operations.
6. **The project must be viable without support from the General Fund.** The cost to construct, operate and maintain the facility must not impact property tax assessments to the larger community.

The following section presents DESMAN's evaluation of the financial viability of this project under the preceding terms.

6. Financial Analysis

Development Structures

The results of the Backyard Lot Parking Study indicate the need to construct a parking garage containing between 300 and 340 spaces on the Backyard Parking Lot. Despite the fact that the Town owns the Backyard Parking Lot, much of the land and additional parking adjacent to the Lot is owned by various private interests, with the largest private parcel held by Ocean Properties ("OP"). In order to construct the most efficient and cost-effective parking garage possible, while at the same time limiting the height of the garage and providing commercial space along Rodick Street, it is necessary for the footprint of the garage to extend beyond the boundaries of the Town's property. For this reason, collaboration will be necessary between the Town and the private interests in order to make this project a success. The purpose of this section is to briefly outline the possible deal structures for public-private development and operation of a parking garage on the Backyard Parking Lot in Bar Harbor and identify the selected deal structure.

What follows is a brief description of the potential partnership structures that may be employed by the Town and Ocean Properties in developing a parking garage on the Backyard Parking Lot, including the main benefits and liabilities associated with each structure. Our research indicates that most agreements take one of three structures:

A. The municipality acts as the principal Owner and developer, with the Private entity contributing capital or some other fiscal benefit to facilitate development and operation of a structure.
B. The Private entity acts as the principal Owner and developer, with the municipality contributing capital or some other fiscal benefit to facilitate development and operation of structure.
C. Creation of a Special Purpose Entity ("SPE"), an independent agency formed specifically for the purpose of executing a project. With an SPE, both parties are equal partners in the venture with clearly defined roles and responsibilities.

Municipally Lead Partnerships

It is common for the municipality to take the lead in developing and/or operating a parking structure for several reasons. First and foremost, municipalities traditionally have been able to access tax-exempt financing at better interest rates and terms than a private developer could negotiate with a lender. In addition, most communities perceive parking as a public utility – and therefore under the jurisdiction of the municipality – rather than a development or business asset. Finally, outside a select number of major cities, operating a parking structure rarely returns enough gross revenue to make it a profitable enterprise. Without a profit motive, the only other common incentive for developing a structure is support community development and commerce, which is commonly considered the province of local government. Scenarios where the municipality takes lead include the following:

1. The Town as Owner, with the Private entity contributing capital towards the project to pay for a portion of the development cost. In the case of the Backyard Lot, this payment would correlate to OP buying "X" number of spaces in the finished garage to replace the capacity lost when the pad fronting Rodick Street is developed, plus whatever parking demand that new development will create when completed.

Benefits

- The Town would maintain their ownership interest in the property on which the garage is built.
- The full cost of development would not fall entirely on the Town.
- Reducing the amount borrowed reduces the cost of ongoing debt service payments.
- The Town may have access to tax-exempt financing for the portion of construction that will be debt-financed, resulting in lower borrowing costs.
- OP will be guaranteed a certain number of spaces in the garage for the life of the facility.
- OP and the Town will have a shared interest in properly operating and maintaining the garage over the long-term in order to protect their investments.

Liabilities

- The Town will not have complete control of the parking garage [unless an arrangement is made to 'buy out' OP's investment at a later date.]
- The spaces owned by OP would not be available for use by the general public, unless permitted by OP.
- It may be difficult to define and/or enforce the division of maintenance responsibilities between the Town and OP.
- The spaces owned by OP will not provide any ongoing revenue stream to the Town that can be used toward the payment of debt service on the garage.
- The Town may only be able to acquire tax-exempt financing for the 'public' portions of the garage.
- Terms of access to the private portion of the garage need to be considered and accommodated in the design of the facility, which could drive up costs.

2. The Town as Owner, with OP agreeing to waive lease rights (in lieu of capital contribution) for consideration of "X" number of spaces. This may or may not include an agreement to also share in revenue.

Benefits

- The Town would maintain their ownership interest in the property on which the garage is built.
- OP would relinquish ownership rights for their portion of the property to the City.
- The Town may have access to tax-exempt financing for the portion of construction that will be debt-financed, resulting in lower borrowing costs.
- OP will be guaranteed a certain number of spaces in the garage for the term of the agreement.
- Operating expenses for the facility would be less if the Town doesn't need to lease land from OP in order to develop and operate the garage.

Liabilities

- The full cost of development would fall entirely on the Town.
- The Town will not have complete control of the parking garage.
- OP will not have a direct interest in properly operating and maintaining the garage due to the fact that they do not have an ownership interest.

- The spaces dedicated to OP would not be available for use by the general public, unless permitted by OP.
- Full responsibility for the operation and maintenance of the garage will fall to the Town, including any shortfall between the revenues generated and expenses incurred.
- The spaces controlled by OP may not provide any ongoing revenue stream to the Town that can be used toward the payment of debt service on the garage, depending on the arrangement made between the two parties.
- Depending on the terms of revenue sharing, gross revenues needed to cover the cost of operation and debt service could be reduced.
- Depending on tax law, revenues received by OP from the garage under a sharing agreement may be taxable income.

3. The Town as Owner, with OP agreeing to a long-term lease of "X" number of spaces. These leases may or may not be at reduced cost due to a waiver of their lease rights.

Benefits

- The Town would maintain their ownership interest in the property on which the garage is built.
- OP may relinquish their ownership rights in the property for a reduced cost to lease spaces, but they will not have an ownership interest in the garage itself.
- The Town will have access to tax-exempt financing, resulting in lower borrowing costs
- OP will be guaranteed a certain number of spaces in the garage at the negotiated rate.
- The spaces leased to OP will provide a known, ongoing revenue stream to the Town that can be counted-on to pay for operating and maintaining the garage, as well as paying debt service.

Liabilities

- The full cost of development would fall entirely on the Town.
- OP will not have a direct interest in properly operating and maintaining the garage due to the fact that they do not have an ownership interest.
- The spaces dedicated to OP would not be available for use by the general public, unless permitted by OP.
- Full responsibility for the operation and maintenance of the garage will fall to the Town, including any shortfall between the revenues generated and expenses incurred.
- Depending on the terms of the lease agreement either OP is locked into the arrangement for an extended period or the Town is vulnerable to potential losses if OP withdraws from the arrangement before debt service is retired.

Privately Lead Partnerships

Parking structures are expensive to develop, so there needs to be a strong incentive for a Private entity to take the lead on a public-private project. Most often, the Private entity has already committed to building a structure to meet the parking requirement of a new development and invites the municipality into the project in exchange for some consideration in permitting or easements. Occasionally, the Private entity will seek a public partner if building the facility larger results in greater scales of economy, thereby reducing the Private entity's net cost. Occasionally, the Private entity will agree to lead the

process to control the design and/or construction process in hopes of controlling costs or expediting the development schedule. Scenarios where the Private entity takes lead include the following:

4. Ocean Properties ("OP") as Owner, with the Town agreeing to a fixed capital contribution for "X" spaces in the finished facility.

   Benefits
   - The Town would maintain their ownership interest in the property on which the garage is built.
   - The full cost of development would not fall entirely on the Town; the Town's liability would be limited to the capital contribution.
   - The Town will be guaranteed a certain number of spaces in the garage for public use in perpetuity.
   - The Town will have the ability to offer parking to the general public at any rate they choose for those spaces they control.
   - OP will control the design of the facility and development process.

   Liabilities
   - The project will not qualify for tax-exempt financing or finance terms specific to municipalities.
   - The Town will not have complete control of the parking garage unless an arrangement is made to pay back or retire OP's investment at a later date.
   - The spaces owned by OP would not be available for use by the general public, unless permitted by OP.
   - It may be difficult to define and/or enforce the division of maintenance responsibilities between the Town and OP if operation doesn't fall under a single entity.
   - Controlling access to public versus private spaces may be challenging give the geometrics of the project site.
   - If the Private entity elects to collect fees for use, a system will need to be designed to separate and account for public and private revenue streams.

5. The Private entity as the Owner, with the Town agreeing to lease a fixed number of spaces from them to offer to the general public.

   Benefits
   - The Town would maintain tenant rights in the property on which the garage is built.
   - The Town would not be responsible for the ongoing costs of operating or maintaining the garage.
   - The Town would not contribute any upfront capital to the cost of development.
   - The Town will be guaranteed a certain number of spaces in the garage to offer to the general public.
   - The Town will have the ability to offer parking to the general public at any rate they choose for those spaces they control.
   - The Private entity will control the design of the facility and development process.
   - The Private entity will own the asset.

Liabilities

- The Town will not have control of the parking garage unless an arrangement is made to pay back or retire OP's investment at a later date.
- The spaces leased by the Town may not generate enough revenue from the general public to cover the cost of leasing the spaces from OP, resulting in a deficit that will have to come from other Town revenue sources.
- The spaces not leased by the Town may not be available for use by the general public, unless permitted by OP.
- The spaces controlled by OP will not provide any ongoing revenue stream to the Town.
- The Town will need to ensure that the overall garage is maintained properly over the long-term in order to protect its investment, but with no actual ownership interest in the garage.

6. OP as the Owner under a revenue sharing agreement that recognizes the City's waiver of property rights on the site.

Benefits

- The full cost of development would fall entirely on OP.
- The Town would not be responsible for the ongoing costs of operating or maintaining the garage.
- The Town would not contribute any upfront capital to the cost of development.
- The Town will be guaranteed an ongoing revenue stream.
- Actual construction of the garage may be less expensive and take less time than if a public entity controlled the process; it is generally-held that private entities are more capable of holding-down construction costs and completing projects more quickly than public entities.

Liabilities

- The Town would relinquish their ownership rights to the property, inhibiting the alternatives available for future development on the site.
- The Town will not have control of who uses the parking garage; there is no guarantee that a certain number of spaces will be made available to the general public.
- The Town will not control the setting of rates for the parking spaces in the garage.
- The ongoing revenue stream to the Town will vary depending on the performance of the garage.
- The Town will need to ensure that the overall garage is maintained properly over the long-term in order to best serve the public, but with no actual ownership interest in the garage.

Public-Private Partnerships and Special Purpose Entities

A public–private partnership (PPP) is a government service or private business venture which is funded and operated through a partnership of government and one or more private sector companies. PPP involves a contract between a public sector authority and a private party, in which the private party provides a public service or project and assumes substantial financial, technical and operational risk in the project. In some types of PPP, like parking garages in major municipalities or on closed campuses,

the cost of using the service is born exclusively by the users of the service and not by the taxpayer. In other types (notably the private finance initiative), capital investment is made by the private sector on the basis of a contract with government to provide agreed services and the cost of providing the service is born wholly or in part by the government. Government contributions to a PPP may also be in kind (notably the transfer of existing assets). In projects that are aimed at creating public goods, like a parking structure, the government may provide a capital subsidy in the form of a one-time grant, so as to make it more attractive to the private investors. In some other cases, the government may support the project by providing revenue subsidies, including tax breaks or guaranteed annual revenues for a fixed time period.

There are usually two fundamental drivers for PPPs. First, PPPs are claimed to enable the public sector to harness the expertise and efficiencies that the private sector can bring to the delivery of facilities and services traditionally procured and delivered by the public sector. Second, a PPP is structured so that the public sector body seeking to make a capital investment does not incur any borrowing. Rather, the PPP borrowing is incurred by the private sector vehicle implementing the project. On PPP projects where the cost of using the service is intended to be born exclusively by the end user, the PPP is, from the public sector's perspective, an "off-balance sheet" method of financing the delivery of new public assets. On PPP projects where the public sector intends to compensate the private sector through availability payments once the facility is established, the financing is, from the public sector's perspective, "on-balance sheet", however the public sector will regularly benefit from significantly subsidized cash flows.

Typically, a private sector consortium forms a special company called a Special Purpose Entity (SPE) to develop, build, maintain and operate the asset for the contracted period. A SPE is a legal entity (usually a limited company of some type or, sometimes, a limited partnership) created to fulfill narrow, specific or temporary objectives. In the private sector, SPEs are typically used by companies to isolate the firm from financial risk. Normally a company will transfer assets to the SPE for management or use the SPE to finance a large project thereby achieving a narrow set of goals without putting the entire firm at risk. SPEs are also commonly used in complex financings to separate different layers of equity infusion. In addition, they are commonly used to own a single asset and associated permits and contract rights (such as a parking structure), to allow for easier transfer of that asset. A special purpose entity may be owned by one or more other entities and certain jurisdictions may require ownership by certain parties in specific percentages.

In cases where the government has invested in the project, it is typically (but not always) allotted an equity share in the SPE. The consortium is usually made up of a building contractor, a maintenance company and bank lender(s). It is the SPE that signs the contract with the government and with subcontractors to build the facility and then maintain it. In the infrastructure sector, complex arrangements and contracts that guarantee and secure the cash flows make PPP projects prime candidates for project financing. A typical PPP example would be a parking garage financed and constructed by a private developer and then leased to a municipality, hospital or university. The private developer then acts as landlord, providing housekeeping and other management services while the public agency focuses on its core mission and competencies.

Examples of PPP's and SPE's include the following:

7. Option A – The Town acquires the financing for the garage and manages the design and construction. Upon completion, OP agrees to purchase or lease and operate the garage long-

term. The Town retains first right of refusal to purchase the garage at fair market value once the debt service on the structure has been retired.

Benefits

- The Town would maintain their ownership interest in the property on which the garage is built.
- The Town can finance the cost of development with tax-exempt debt, reducing the total cost to build the garage.
- If OP purchases the garage upon completion, the debt used to finance the construction can be removed from the Town's books immediately.
- If OP agrees to lease the garage long-term, the revenue stream can be dedicated to repaying the debt, reducing the need for the Town to repay the debt service from other sources.
- Language can be written into the agreement between the Town and OP setting the rates that may be charged to the general public.
- The Town would not be responsible for the ongoing costs of operating or maintaining the garage.

Liabilities

- The Town will not have control of the parking garage after OP purchases or leases the garage.
- The Town will need to ensure that the overall garage is maintained properly over the long-term in order to best serve the public, but with no actual controlling interest in the garage.
- Actual construction of the garage may be more expensive and take more time than if a private entity controlled the process; it is generally-held that private entities are more capable of holding-down construction costs and completing projects more quickly than public entities.

8. Option B – OP builds the garage out of their own pocket and then leases/sells/deeds a portion to the Town. This is often done in conjunction with creation of a Business Improvement District ("BID") where the Town pays for the annual lease or loan payment on their portion of the garage through the funds generated by the assessment.

Benefits

- The Town would maintain their ownership interest in the property on which the garage is built.
- The Town does not need to issue new debt to finance the entire cost of constructing of the garage.
- The Town controls the operation of the portion of the garage that they lease/buy and can offer those spaces to the general public at whatever rate they choose.
- The Town is only responsible for maintaining the portion of the garage they control.
- Actual construction of the garage may be less expensive and take less time than if a public entity controlled the process; it is generally-held that private entities are more capable of holding-down construction costs and completing projects more quickly than public entities.

Liabilities
- The Town will not have control of the entire parking garage.
- The Town will need to ensure that the overall garage is maintained properly over the long-term in order to best serve the public, but with limited controlling interest in the garage.
- The private and public portions of the garage often have to be physically separated – usually through nesting – to ensure the public isn't parking in the private portion and vice versa.

9. Option C – OP finances and constructs the garage, with the Town agreeing to pay the principal on the debt through a Tax Increment Financing ("TIF") district and OP paying the interest on the debt and paying for long-term maintenance. TIF is a method to use future gains in taxes to subsidize current improvements, which are projected to create the conditions for gains above the routine yearly increases in taxes which often occur without the improvements.

Benefits
- The Town would maintain their ownership interest in the property on which the garage is built.
- The full cost of development would not fall entirely on the Town; the Town's liability would be limited to the principal on the debt, which would likely be less expensive than if the garage was developed by the Town itself.
- If the OP decides to charge for parking, the revenues have to go against the principal loan payment until the loan is retired.
- The Town will not be responsible for the ongoing costs of operating and maintaining the garage.
- Actual construction of the garage may be less expensive and take less time than if a public entity controlled the process; it is generally-held that private entities are more capable of holding-down construction costs and completing projects more quickly than public entities.

Liabilities
- The Town will not have control of who uses the parking garage; there is no guarantee that a certain number of spaces will be made available to the general public.
- The Town will not control the setting of rates for the parking spaces in the garage.
- The Town will not receive an ongoing revenue stream from the garage.
- The Town will need to ensure that the overall garage is maintained properly over the long-term in order to best serve the public, but with no actual ownership interest in the garage.

Other options beyond these have been negotiated between municipalities and private developers on a project-by-project basis; there is no fixed format for structuring a PPP. For example, OP could develop the structure under a Design/Build/Own/Operate contract with the Town agreeing to provide fixed revenues from parking meter/ garage/ permit revenues and parking citation fines to the project. OP would need to pledge that a certain number of spaces in the facility would be maintained for public access at rates set by the municipality in return for a waiver on lease rights to the portion of the site owned by the Town.

Alternately, the Town could take on the role of Owner and Operator, but require OP execute the Design/Build contract and pledge to guarantee a fixed revenue stream from hotel patronage each year. In exchange for a waiver on lease rights for the OP property absorbed by the new facility, the Town would guarantee a fixed number of spaces for OP's exclusive use.

Selected Agreement Structure and Terms

After careful negotiations, the Town and Ocean Properties (OP) have agreed to enter into an agreement wherein:

1. OP will be responsible for the costs of development, operations and maintenance for the grade level of the parking structure. This level will be accessed via York Street, will contain roughly 100 parking spaces and will not feature any vertical circulation between this level and the other portions of the garage. This area will be set aside exclusively for OP's use and OP will solely determine the terms for that usage, including rates, access control, hours and dates of operation, etc. OP will be solely responsible for the cost to operate and maintain that portion of the facility and will retain sole rights to any revenues generated from the use of those spaces. Any property taxes arising from the assessment of this property may be pledged against the debt service on the public portion of the garage.
2. Finally, OP has agreed that any West Street Hotel guests who cannot be accommodated in the portion of the garage allocated to their ownership may park in the publicly owned portion of the garage, at the posted rates, as availability allows. Furthermore, the revenue arising from these users will belong solely to the Town.
3. The Town will be solely responsible for the spaces contained on the upper floors of the garage. This area will only be accessible from the upper story entrance off Rodick Street and will not offer any vertical connection to the lower level of the garage.
4. The Town agrees to waive the right to compensation for use of the public lands that OP's portion of the facility will sit upon.
5. The Town also agrees to address any displacement of existing private parking spaces with each land owner on an individual, case-by-case basis.
6. The Town will be solely responsible for the costs associated with construction, financing, operations and maintenance of the public portion of the structure.
7. The Town will only use the parking fees generated by garage, lot and meter use and parking citation fines to offset the debt service for the public portion of the garage and not for any other reason, until such time as the debt service is retired. Once the debt on the public portion of the garage is retired, the Town agrees to use those revenues for the upkeep and improvement of the facility through the duration of its life.
8. Both parties will be responsible for meeting Americans with Disabilities Act (ADA) standards, local zoning code, and any regulatory and life safety regulations for their respective portions of the facility.
9. Development and maintenance costs associated with shared features of the facility, such a stairways and elevators, will be allocated to each party according to the portion of the facility (as determined by total square footage) that each party owns. Terms of payment for those

items, and compensation to the other party, are subject to negotiation and agreement between the Town and OP.

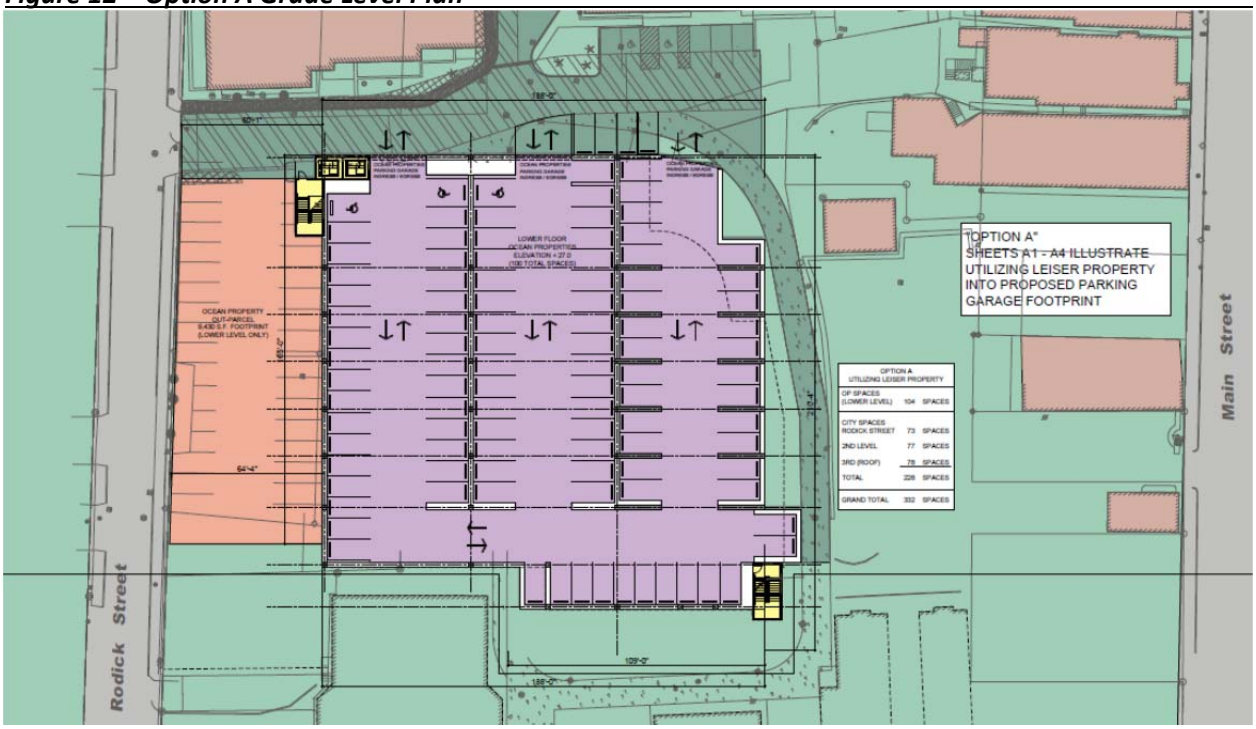
As OP has indicated that they intend to pay for their portion of the project directly, DESMAN has limited our analysis to the portion of the garage set aside for public use. For the purposes of this analysis, DESMAN has assumed a design that will provide a total of 300 spaces across three supported levels above grade.

Project Design Concept Impacts

As outlined in the prior section, the grade level of the proposed facility (~ 100 spaces) will be dedicated exclusively for Ocean Properties as they will be constructing and operating this portion of the project at their own expense.

Incorporation of Leiser Property, ten spaces occupying roughly 1,620 square feet on the north end of the project site, impacts design dynamics and project cost significantly. If the property is incorporated within the design, as shown as Option A in ***Figure 12,*** the structure can support a total of 332 spaces over four levels (one at grade and three supported). This design would offer Ocean Properties a total of 104 spaces at grade and the city 228 spaces on supported levels. Compensation to the Leisers for acquisition of their property, which could include payment for the land as well as provision of parking spaces in the new facility, would be subject to negotiations prior to construction.

Figure 12 – Option A Grade Level Plan



Source: *Bermello Ajamil & Partners, Inc.*

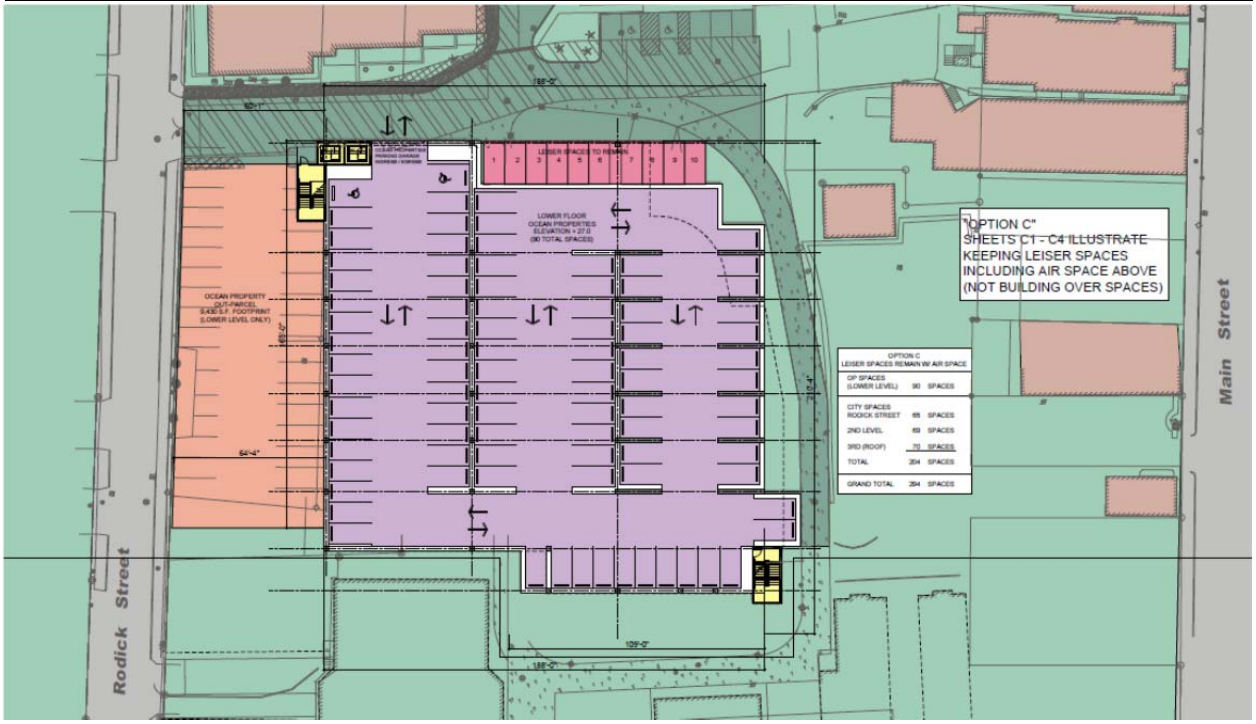
If the Leiser Property is not acquired, but the air rights above the property are, then the grade level footprint is reduced, as shown in Option B in ***Figure 13*** on the next page. Under this option, only 90 spaces can be included on grade, but the supported levels are unchanged from the Option A design.

Figure 13 – Option B Grade Level Plan

Source: *Bermello Ajamil & Partners, Inc.*

Option C, which anticipates a design wherein neither the ground nor air rights to the Leiser Property can be acquired, reduces the grade level floorplate to 90 spaces and the capacity of above grade parking to just 204 spaces, as shown in ***Figure 14***, next page.

Figure 14 – Option C Grade Level Plan



Source: *Bermello Ajamil & Partners, Inc.*

Detailed concept drawings of all three options are included as an addendum to this report.

Unfortunately, the design requirements outlined by the Task Force exceed the capacity of all three options. According to DESMAN's calculations, shown in ***Table 16***, the facility would need to accommodate a total of 412 spaces to meet all the needs previously outlined.

Table 16 – Revised Summary of Needs

REQUIREMENT	SPACES
Public Spaces Lost to Garage Construction [1]	66
Spaces Needed to Address Current Shortfalls	79
Spaces Needed to Address Growth of Existing Demand (2015-2020)	10
Spaces Needed to Support Future Development	48
Spaces Needed for Vehicles Parked in Residential Areas	60
Spaces Needed for West Street Reduction for Bikes	49
SubTotal Spaces Needed	***312***
Grade Level dedicated to Ocean Properties	100
TOTAL FACILITY CAPACITY TARGET	**412**

Notes:
1. This is the number of public spaces in the existing Backyard Lot that will be displaced by the project.

Source: *DESMAN*

This need would represent a total of five supported levels above grade or a six-story structure which would tower over the adjacent buildings and businesses. Based on our experience with the constituents of Bar Harbor, DESMAN did not believe that this design would be accepted. As such our following analysis was based on assumption that the project would contain three supported levels and roughly 300 total spaces, of which at least 200 would belong to the Town.

Due the limitations of the proposed capacity, DESMAN's analysis assumes adoption of the ban on the 49 parking spaces along the southside of West Street between Eden and Bridge and incorporation of the initiative to accommodate all of the roughly 60 vehicles parking in residential side streets will not be advanced due to the limited capacity of the facility. However, the proposed parking program for the Town does address how these users might be managed through other initiatives.

Estimate of Project Costs

The three options ranged from roughly 125,346 square feet in total size to 131,826 square feet, and 294 to 332 spaces, as shown in ***Table 17***.

Table 17 – Potential Design Options

	OPTION A [2]			OPTION B [3]			OPTION C [4]		
Level	**Sq. Footage**	**Spaces**	**Efficiency**	**Sq. Footage**	**Spaces**	**Efficiency**	**Sq. Footage**	**Spaces**	**Efficiency**
Grade [1]	33,078	104	318	31,458	90	350	31,458	90	350
1	32,916	73	451	32,916	73	451	31,296	65	481
2	32,916	77	427	32,916	77	427	31,296	69	454
3	32,916	78	422	32,916	78	422	31,296	70	447
TOTAL	**131,826**	**332**	**397**	**130,206**	**318**	**409**	**125,346**	**294**	**426**

Notes:
1. Ocean Properties portion of the structure.
2. Option incorporates Lesier Property.
3. Option excludes Lesier Property, but only at grade.
4. Option excludes Lesier Property, including air rights.

Source: *DESMAN*

As the preceding table indicates, exclusion of the Leiser Property has significant design impacts, influencing the capacity and efficiency of each option. At a standard cost of $52.50 per SF, per RS Means 2014 for the Maine market, the total project 'hard'[9] costs were estimated to be between $4,929,120 and $5,184,270 for the public portion of the garage[10].

Table 18 – Design Option Cost Estimates (Public Portion)

	OPTION A			OPTION B			OPTION C		
Hard Costs	98,748	@ $52.50/SF	$ 5,184,270	98,748	@ $52.50/SF	$ 5,184,270	93,888	@ $52.50/SF	$ 4,929,120
Soft Costs		@ 25%	$ 1,296,068		@ 25%	$ 1,296,068		@ 25%	$ 1,232,280
Total Cost			**$ 6,480,338**			**$ 6,480,338**			**$ 6,161,400**
Cost/Space	***228***	***spaces***	***$ 28,423***	***228***	***spaces***	***$ 28,423***	***204***	***spaces***	***$ 30,203***

Source: *DESMAN*

[9] Hard costs are base construction costs (i.e. labor and materials) direct to the proposed project, including items like lighting, required fire suppression, signage and PARCS equipment. This cost estimate assumes full automation for revenue collection and access control, standard fluorescent light elements, and medium-grade facades and finishes.

[10] Ocean Properties portion of each option as estimated to be between $1,651,545 for the 90-space options and $1,736,595 for the 104-space option.

'Soft' costs, which include project design fees, permitting, fees from legal and financial institutions managing the financing, contingency set asides, and insurance premiums, were assessed at 25% of total hard costs. These costs included any cash payments to displaced property owners, but did not include an assumption of taxes on issuance of financing or land acquisition costs beyond standard legal fees. Total soft costs were estimated to be between $1,232,280 and $1,296,068, depending on the design.

Total project cost varied between roughly $6.16M and $6.48M, depending on design. Option C which had the least number of spaces also had the lowest cost for the Town. However, due to the inefficiency of the design caused by the failure to secure Leiser Property air rights, the design also had the highest cost per space, as shown in ***Table 18***, prior page.

For the sake of this analysis, DESMAN assumed that total project cost would be amortized over a 20 year period at 4.0% APR with no equity reduction on principal at the outset. Under these terms, the Town's debt obligation would be $37,337 - $39,270 per month or $448,043 - $ 471,235 per year. This equates to roughly $2,067-$2,196 per space annually, $172.23-$183.02 per month, or $8.61-$9.15 per business day.

Best Practices for Municipal Asset Development and Management

According to the U.S. Census Bureau there were 295 incorporated places in the United States with a population of at least 100,000 as of July 1, 2014. Of these 295 cities, only 17[11] had adequate composition population density to generate parking revenues which would support the cost of a parking structure. In other words, less than 6% of the major cities in America can command the kind of consistent parking demand and rates such that a parking facility can generate adequate revenues to fully cover cost of financing and operating a parking facility. For the majority of U.S. cities and towns, the cost of building structured parking must be subsidized by additional revenues streams external to the facility in order to meet overhead costs and debt service obligations.

First and foremost, municipalities developing modern parking assets almost universally abandon 'free parking'[12] and adopt *fee-for-use* as their standard policy in advance of building the facility. Due to the cost of developing parking assets, this is often a fiscal necessity. In addition, it is fundamental part of any 'smart growth' initiative aimed at promoting sustainable practices, as charging a fee for parking provides the basis for individuals to evaluate the <u>tangible and direct</u> costs and benefits of different modes of transportation. Finally, it is often the only politically viable way to proceed forward with a project as few municipalities are willing to finance the development of a parking facility through a general tax levy on their constituents.

It should be noted that when a municipality converts from a 'free' to fee-for-use environment, the change typically must be global for the initiative to succeed. Instituting a fee for use in just one facility and allowing others to continue to operate as free commonly results in the facility charging for use to be un- or underutilized and the other facilities to be overused. In many communities where the leadership

[11] New York City, Los Angeles, Chicago, Philadelphia, San Diego, San Jose, San Francisco, Seattle, Washington DC, Boston, Baltimore, Long Beach, Miami, Oakland, Honolulu, Anaheim and Santa Ana.

[12] Over the last 20 years, most municipalities have come to acknowledge that 'free parking' is not truly free, as the cost of building and maintaining a parking space must be born somewhere in the municipal budget, the fees for which are derived from local taxes. Similarly, most constituents know that they are, in some form, paying for parking in the town center that has no direct cost associated with it.

does not want residents subject to fees, but still wants a mechanism in place preventing visitors and employees from parking in those districts to avoid paying fees, a *residential parking permit program* is established. This program allows residents to register their vehicles at low or no cost with the municipality and receive some form of credential which identifies the vehicle as authorized to park in a defined district or area. This program protects residents and makes it easier for parking enforcement personnel to identify and ticket unauthorized vehicles.

Many municipalities have paid for the cost of a parking structure by *creating a parking fund*. This fund collects the revenues generated by the facility itself, plus other parking related revenues such as revenues from other municipal parking facilities, on-street meter fees, on-street parking permit sales, and parking citation fines, in order to generate adequate revenue to cover the costs of operating and financing the facility. These other resources are drawn upon because there is often little to no overhead costs associated with these revenue streams, allowing the net income to be reinvested into the overall parking system.

Many municipalities also consolidate all parking-related functions under a single agency such as *a parking department* when forming the enterprise fund. This is done to take advantage of efficiencies that arise from bringing complimentary tasks under the direction of single authority. For example, one bookkeeper can manage the accounting for collected revenues in the municipality's off-street parking facilities, receipts from on-street meters, fees for permit sales, and fines for parking citations, rather than have 2-4 bookkeepers in other departments address these issues. In addition, with one person directing the operation for the whole parking system, it is easier to set and drive policy to meet the community's objectives. Finally, it is more convenient for residents, workers and visitors to get information from one agency.

Cities and towns have started to employ *demand-responsive pricing* as a strategy to drive both parking revenues and policy in the community. This approach recognizes that some parking facilities, due to their location relative to other businesses or attractions in the area, are going to be more popular and in greater demand than other facilities. Following the basic principles of supply and demand, things which are in greater demand command a greater price; so it is with parking as well. Municipalities who adopt this approach set objectives for each asset in the parking system, such as improving use of an underutilized asset at the edge of town and reducing congestion in an overused asset in the core, and set price accordingly. Many municipalities also set target goals for measuring change, such as agreeing to manipulate prices in Lots A and B until the typical peak hour demand in Lot A has decreased 10% and the typical peak hour demand in Lot B has increased by 10%. Once the goals and objectives are set, the body administering to the parking system adjusts rates periodically until their targets are met.

Demand-responsive pricing can be used to achieve a wide variety of goals and objectives including:

- Encouraging long-term parkers who are familiar with the area to utilize underutilized assets outside the town center, leaving these spaces open to new visitors and patrons;
- Improving turnover in valuable curbside parking spaces outside popular businesses or within certain districts;
- Discouraging certain types of onerous parking behaviors by raising the 'opportunity cost' of engaging in them through higher fines;

- Providing an incentive for individuals to consider alternative modes of transportation such as carpooling by offering free or reduced rate parking;
- Recognizing the contributions of year-round residents by offering free or reduced rate permits.

Parking is often the first introduction a new arrival gets to a community and commonly the last experience they have before departing. As such, most municipal parking structures have some element of staffing onsite during peak business hours to provide assistance and a human presence. However, many municipalities have recognized that having an attendant on-site at all times is not a good use of resources or cost effective and have embraced *automation* in the basic design of the facility. By including mechanisms which can collect parking fees during off-peak hours, the municipality can maintain operation of the facility around the clock without the cost burden of staffing the facility constantly. Municipalities that elect to go this route commonly include technology in the facility's design which allows a user in distress to quickly connect to a designated representative charged with providing assistance when needed.

These best practices informed DESMAN recommendations for how Bar Harbor should program parking in order to support development of the proposed parking structure.

Parking Program Recommendations

Bar Harbor currently has only one facility – the parking lot adjacent to the Bar Harbor Club servicing a whale watching expedition – that openly charges[13] for parking. The Town currently issues permits for use by residents and employees through the police department, but these are at no cost and there appears to be no mechanism for ensuring that individuals participate. Much of the on-street parking along major commercial streets is time limited, but there are few restrictions for use on side and residential streets. The Police Department manages parking enforcement, while Public Works maintains the existing facilities and the Finance Department processes fine payments. All funds from parking citations appear to currently go into the Town's General Fund.

DESMAN first recommends that the Town establish a parking fund into which all parking-related revenues are deposited and from which all parking-related expenses are paid. This would include existing revenues and expenses from parking enforcement, plus future revenues and expenses associated with other initiatives to be outlined in this section.

As a second step, DESMAN recommends the Town adopt fee-for-use parking in select areas and facilities as follows:

1. Purchase and install parking meters in the following locations:
    - 62 parking meters along West Street between Main and Bridge Streets;
    - 80 parking meters along Main Street between West Street and Atlantic Avenue/Newton Way;

[13] There may be other businesses – such a hotels or bed-and-breakfasts – which include a surcharge on the guest's bill for parking, but DESMAN did not observed any other facility in the study area advertising 'fee for use' parking.

- 35 parking meters along Mt. Desert Street between Main Street and High and School Streets; and -
- 79 parking meters along Cottage Street between Main Street and Bridge Street.

2. Maintain or extend two-hour time limited 'free parking' in the following areas, with option to purchase an all-day parking permit:
   - Along West Street between Bridge Street and Route 3[14];
   - Along Main Street between Atlantic Avenue/Newton Way and Cromwell Harbor Road;
   - Along Mt. Desert Street between High and School Streets to Route 3; and –
   - Along Cottage Street between Bridge/School Streets and Eden/Kebo Street.

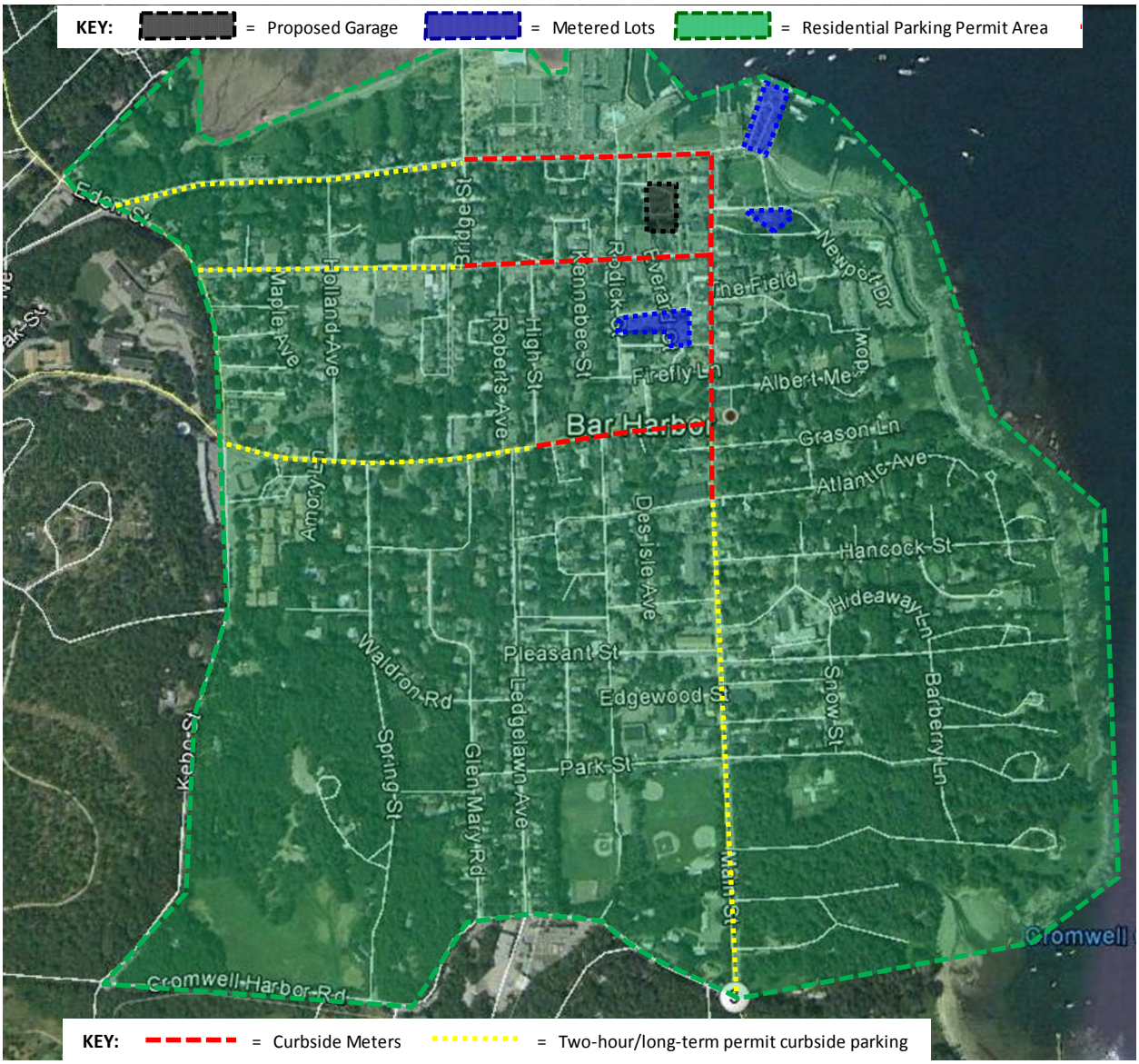
3. Purchase and install multi-space parking meters in the Town Pier, West Street, Newport Drive and Rodick Place lots.

4. Consider instituting a Residential Parking Permit Zone on all other Town streets within the following boundaries:
   - West Street to the north;
   - Cromwell Harbor Road to the south;
   - Eden/Kebo Streets to the west; and –
   - The water's edge to the east.

Figure 15, next page, illustrates the locations of each of these new areas.

[14] This would include extending two-hour parking into areas currently without a limitation ascribed to them.

Figure 15 – Proposed Parking Zones/Districts



Source: *Google Earth, DESMAN*

<u>On-Street Meter Program</u>

DESMAN selected the areas outlined in the prior figure (shown in red) for curbside meter installation based on our observations regarding current utilization of these curbside spaces. We propose hours of enforcement for these meters from 8 AM until 8 PM, Monday through Sunday, commencing on or about May 15 and concluding on or about October 15. Meters should be priced at a rate of at least 25% higher per hour than abutting off-street parking facilities to serve as an incentive for longer term parkers to seek off-street facilities and assure a steady turnover of curbside parking spaces in key areas around the Town core. Maximum length of stay at any curbside meter should be no more than four (4) hours. Fines for not paying a meter or parking at an expired meter should be $20.00 per instance or twice the fine for

parking beyond posted time limits in a 'free' space, to create adequate incentive for parkers to comply with the posted policy.

DESMAN recommends the Town purchase meters which accept both credit/debit card and coin payments and are solar powered with secure wireless (cellular) connections for processing credit/debit card transactions. DESMAN estimates total purchase and installation price per unit for this type of meter is $625.00, based on recent bid submissions to other municipalities. Under DESMAN's proposal, the Town would need to acquire 256 meters to cover the areas outlined, for an initial capital cost of roughly $160,000. Operating costs, which include cellular carrier charges (~$15.00/month), wireless licenses ($3.75/month) and software licenses ($2.00/month), would amount to approximately $20.75 per meter per month or $45,760 annually[15].

On-Street Parking Permit Program

The areas outlined in the prior figure (in yellow) will remain 'free' parking spaces subject to a maximum two-hour length of stay under DESMAN's proposed program. We propose hours of enforcement from 8 AM until 8 PM, Monday through Sunday, commencing on or about May 15 and concluding on or about October 15. The fine for exceeding the two-hour limitation will remain $10.00 per violation.

DESMAN also recommends that the Town offer visitors the option of purchasing a one-day pass to park in these areas for up to 24 hours. DESMAN recommends this pass be priced at a rate of $10.00 per day and passes should only be available to purchase at a rate of one per individual and for only one day[16]. The fine for parking with an expired pass should be double the fine for exceeding other posted time limits (i.e. $20.00 per violation).

Town Parking Lot Program

Under DESMAN's proposed program, the Albert Meadow and Bridge Street lots would continue to operate as they are currently programmed. However, the Town Pier, West Street, Newport Drive, and Rodick Place lots would all convert to a 'fee-for-use' program facilitated by the installation of multi-space parking meters. As with the single-space meters, DESMAN recommends units which are solar-powered, accept cash and debit/credit cards for payment, and have a wireless modem for processing credit/debit transactions.

We propose hours of enforcement for these lots from 8 AM until 8 PM, Monday through Sunday, commencing on or about May 15 and concluding on or about October 15. Meters should be priced at a rate per hour lower than abutting on-street meters to serve as an incentive for longer term parkers to seek off-street facilities and assure a steady turnover of curbside parking spaces in key areas around the Town core. Parkers should be able to purchase up to 24 hours of time in a single transaction, but no more. Fines for not paying a meter or parking at an expired meter should be $20.00 per instance or twice the fine for parking beyond posted time limits in a 'free' space, to create adequate incentive for parkers to comply with the posted policy.

[15] Depending on how the Town arranges to process credit/debit card transactions, there can be an additional surcharge of up to $0.13 per transaction, but this is typically absorbed by the parker, not the municipality.

[16] This policy prevents an individual from purchasing a block of passes and reselling them and/or purchasing a pass for multiple consecutive days and leaving their vehicle in place during that period.

DESMAN recommends the Town purchase meters which operate in a 'pay and display" format where the parker places a receipt for their time purchase on their dash; this is relatively easy to understand for first-time users and easy to enforce for patrolling officers. DESMAN estimates total purchase and installation price per unit for this type of meter is $7,850.00, based on recent bid submissions to other municipalities. Under DESMAN's proposal, the Town would need to acquire 8 meters to cover the lots outlined, for an initial capital cost of roughly $47,100. Operating costs, which include cellular carrier charges (~$20.00/month), wireless licenses ($20.00/month) and software licenses ($10.00/month), would amount to approximately $60.00 per meter per month or $1,800 annually[17].

Residential Parking Permit Program

In all other areas shown in the preceding figure in green, DESMAN recommends implementation of a residential parking permit program. Under this program, individuals submitting valid proof of residency[18] may register the vehicles within their household[19] with the Town and receive one identifier – typically a sticker or hangtag – per vehicle, free of charge. At the Town's discretion, residents may also register for visitor permits for their guests up to a stated maximum[20] free of charge.

The purpose of this program is to give the Town a mechanism for easily identifying non-authorized users parking in residential district and to protect the rights of residents to quiet enjoyment of the streets surrounding their home. DESMAN recommends the Town fine individuals found parking in a permit zone without a valid permit in the amount of $30.00 per incident, to provide a strong incentive for compliance with the policy.

It should be noted that this program does NOT reserve the parking spaces directly in front of an individual's home exclusively for their use, nor does it guarantee a parking space in front of resident's home will be available to them at all times. Rather it authorizes them to park in a defined area without fear of sanction or competition from outside users.

Capital costs to initiate this program will be nominal, as little is required beyond signage to identify those streets under the residential parking permit program and stickers or other credentials to identify program participants. For the purpose of this study, DESMAN is budgeting $5,000.00. Operating costs should be nominal and are not included in this analysis as a result.

Integration of Parking Enforcement Receipts

According to budget documents, the Town collected roughly $50,000 in parking fines in FY2014 and is budgeted to collected $34,000 in FY2015 and $35,000 in FY2016. Against this the Police Department

[17] Depending on how the Town arranges to process credit/debit card transactions, there can be an additional surcharge of up to $0.13 per transaction and/or 3% of the total transaction value, but this is typically absorbed by the parker, not the municipality.

[18] Common credential include a driver's license or passport verifying the individual's identity and a tax bill or lease/rental agreement identifying the individual as a resident of a property within the defined bounds of the program boundaries. For individuals submitting rental or lease agreements, the agreements term must be at least ninety (90) days to qualify as a resident.

[19] Typically, households are not allowed to register more than 3 or 4 vehicles in total, but each municipality makes their own determination of the maximum threshold according to their unique dynamics.

[20] Commonly, residents are allowed to request up to 2 visitor passes per household per month, but some communities are more stringent or flexible, depending on local conditions.

assessed total wages of roughly $13,673 in FY2014 for 'parking attendants' which DESMAN understands to mean parking enforcement personnel. These two positions, which currently operate from June to Columbus Day, are projected to cost the Town $13,000 in FY2015 and $14,205 in FY2016. Assuming a 55% inflation factor on wages to reflect payrolls taxes and benefits, DESMAN projects that these positions cost the Town between $20,150 and $22,018 per fiscal year, netting the Town roughly $13,000 to $14,000 under current conditions.

These funds, plus any additional revenues generated by the recommended fines outlined in the prior section or a longer enforcement 'season' than currently in place, could be dedicated to the parking enterprise fund to offset the cost of developing and operating the proposed parking structure.

Expense Projections

Traditionally, a financial feasibility analysis is executed by first establishing potential demand for the proposed facility; this was accomplished in Task 2 of the analysis and refined in Task 3. Then a rate survey is executed of the surrounding market and, from this, a recommended schedule of fees is developed. These proposed fees are applied to the projected demand for the facility to generate an estimated revenue stream for the facility. Finally, annual operating expenses and debt service are calculated and evaluated relative to the projected gross income to determine debt service coverage and net cash flow.

For this analysis, determining rates by market survey is not a viable action as the existing market is largely 'free' with only one benchmark. Developing a market assessment from comparable communities is also not a reasonable approach, as there are no communities within reasonable distance of Bar Harbor that might compete for parking demand for the proposed facility. In point of fact, Bar Harbor is a destination community with its own unique dynamics and parking is not one of the factors typically evaluated by visitors when choosing to come to town, as opposed to another potential vacation destination.

For this analysis, DESMAN applied an alternative approach to determining rates for the proposed structure. This approach is founded in establishing the debt service and operating expenses for the proposed structure first in order to estimate what the facility would need to generate in order to offset the cost of development and operation. This structure is in turn modified by potential subsidies for the facility which would allow it to generate less than the total value needed to offset debt obligations and overhead. Through this process, a recommended rate structure is determined which allows the facility to charge a fair price for service which should be palatable to its potential customers. This process also informs what might be charged at newly created competing facilities in the town center.

DESMAN assumes that the proposed facility will operate as a 'fee for service' facility starting on or about May 15 each year through sometime around October 15 on a 24/7 basis. The facility may see additional off-season use as well, but beyond some nominal income for storing vehicles or equipment, DESMAN did not assume additional operations outside this time span.

DESMAN recommends the Town operate the facility in a 'pay on foot' format, where visitors are directed to process their tickets and make payment prior to returning to their vehicle. Our proposed staffing model, which is applicable across all there design options, has included provision of central cashier to process tickets manually between the hours of 8 AM and 10 PM during the summer season,

but the facility should also come equipped with automated pay stations which will allow users to process their tickets at any time.

The proposed staffing model assumes a facility supervisor present in the facility during standard business hours through the operating season (i.e. May 15 – October 15) who will be on hand to help visitors process their tickets and make payment, but will also handle basic bookkeeping and accounting for the facility and act as a liaison to the community. An evening attendant will be on site through the length of the operating season each night until 10 PM. A custodian will work an abbreviated late night shift evening night during the operating season, cleaning the facility during off-hours and preparing it for business then next day. And during the busiest part of the operating season (July 1 to October 1) a second attendant will be on-site from late morning through to the early evening, Wednesday through Sunday, to help customers and assistant with basic bookkeeping and maintenance tasks. The proposed staffing schedule is shown below in ***Table 19.***

Table 19 – Proposed Staffing (All Options)

Position	Typical Schedule	Working Week	Total Hrs Day	Wage Rate [1]	Working Days/Yr	Annual Wages	Payroll Taxes [2]	Benefits [2]	Worker's Compensation [2]	Uniforms [2]
Facility Supervisor	8a-5p	Mo-Fr	8.0	$ 16.50	109	$14,388.00	$ 1,654.62	$ 791.34	$ 359.70	$ 100.00
AM Attendant	10a-6p	We-Su	8.0	$ 10.00	65	$ 5,200.00	$ 598.00	$ 286.00	$ 130.00	$ 50.00
PM Attendant	5p-10p	Mo-Su	5.0	$ 10.00	109	$ 5,450.00	$ 626.75	$ 299.75	$ 136.25	$ 50.00
Regular Custodian	10p-2a	Mo-Su	4.0	$ 15.50	109	$ 6,758.00	$ 777.17	$ 371.69	$ 168.95	$ 75.00
Total Labor Cost						**$31,796.00**	**$ 3,656.54**	**$ 1,748.78**	**$ 794.90**	**$ 275.00**

Notes:
1. Per U.S Bureau of Labor Statistics, Wage Data for the Northern Maine, NECTA, May 2014.
2. Per U.S Bureau of Labor Statistics, Compensation Data for the Northern Maine, NECTA, May 2014.

Source: *DESMAN*

Corresponding wage and compensation costs were developed from U.S Bureau of Labor Statistics wage and compensation data specific to the Maine market for each position.

Cost estimates for other expense line items were developed by reviewing historical operating statements for comparably-sized parking structures in the northeastern U.S. and applying the developed cost per unit values to the subject facility. Fixed line items, such as spending on utilities, insurance and repairs and maintenance, reflect costs as calculated for a year round operation.

Other costs, such as supplies, telephone tolls, landscaping, credit card and bank fees, all assume operation for only the limited season between May and October. Finally, DESMAN included regular contributions to a 'sinking fund' against major repair and replacement costs to the facility throughout its lifecycle. This is not commonly mandated by municipalities, but is a best practice DESMAN advocates.

All expenses, with the exception of the sinking fund contributions, were adjusted annually to reflect inflationary factors. ***Table 20,*** next page, shows expense projections through the first ten years of operations for Options A/B. As the table shows, an Option A/B will need to generate roughly $2,449 per space annually in the first year of operation to meet debt service obligations and cover operating overhead.

An Option C design will need to generate roughly $2,599 per space in the first year, about $150 per space more annually than the Option A/B designs. The total annual operating cost and debt service on the Option C designs is roughly $28,000 less per year than the larger capacity design, but the per space cost is greater in the smaller garage, as it has fewer spaces to spread fixed costs across.

Table 20– Option A/B Projected Operating Overhead and Debt Service Obligations (2016-2025)

Project Name: Option A/B ***Capacity:*** 228				Year 1 [2016]	Year 2 [2017]	Year 3 [2018]	Year 4 [2019]	Year 5 [2020]	Year 6 [2021]	Year 7 [2022]	Year 8 [2023]	Year 9 [2024]	Year 10 [2025]
Inflationary Assumption:				*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*
OPERATING EXPENSES:													
Payroll	$	143.64	/space	32,750	33,733	34,745	35,787	36,861	37,967	39,106	40,279	41,487	42,732
Payroll Taxes	$	16.52	/space	3,766	3,879	3,995	4,115	4,238	4,365	4,496	4,631	4,770	4,913
Benefits	$	7.90	/space	1,801	1,855	1,911	1,968	2,027	2,088	2,151	2,216	2,282	2,350
Worker's Compensation	$	3.59	/space	819	844	869	895	922	950	979	1,008	1,038	1,069
Uniforms	$	1.24	/space	283	291	300	309	318	328	338	348	358	369
Utilities	$	11.81	/space	2,772	2,855	2,941	3,029	3,120	3,214	3,310	3,409	3,511	3,616
Insurance	$	18.15	/space	4,262	4,390	4,522	4,658	4,798	4,942	5,090	5,243	5,400	5,562
Garage Supplies	$	1.48	/space	348	358	369	380	391	403	415	427	440	453
Office Supplies	$	0.75	/space	176	181	186	192	198	204	210	216	222	229
Printing & Tickets	$	1.03	/space	242	249	256	264	272	280	288	297	306	315
Telephone	$	0.60	/space	141	145	149	153	158	163	168	173	178	183
General R&M	$	55.89	/space	13,125	13,519	13,925	14,343	14,773	15,216	15,672	16,142	16,626	17,125
Elevator R&M	$	8.65	/space	2,031	2,092	2,155	2,220	2,287	2,356	2,427	2,500	2,575	2,652
PARCS R&M	$	3.62	/space	850	876	902	929	957	986	1,016	1,046	1,077	1,109
Landscaping	$	3.15	/space	740	762	785	809	833	858	884	911	938	966
Miscellaneous	$	0.55	/space	129	133	137	141	145	149	153	158	163	168
Overhead/G&A	$	0.95	/space	223	230	237	244	251	259	267	275	283	291
Bank Fees	$	3.85	/space	879	905	932	960	989	1,019	1,050	1,082	1,114	1,147
Credit Card Fees	$	20.24	/space	4,614	4,753	4,896	5,043	5,194	5,350	5,511	5,676	5,846	6,021
Sinking Fund	$	75.00	/space	17,100	17,100	17,100	17,100	17,100	17,100	17,100	17,100	17,100	17,100
Total Annual Operating Expenses				**$ 87,051**	**$ 89,150**	**$ 91,312**	**$ 93,539**	**$ 95,832**	**$ 98,197**	**$ 100,631**	**$ 103,137**	**$ 105,714**	**$ 108,370**
Annual Cost/Space				***$ 381.80***	***$ 391.01***	***$ 400.49***	***$ 410.26***	***$ 420.32***	***$ 430.69***	***$ 441.36***	***$ 452.36***	***$ 463.66***	***$ 475.31***
Debt Service Payment				**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**
Annual Cost/Space				***$ 2,066.82***	***$ 2,066.82***	***$ 2,066.82***	***$ 2,066.82***	***$ 2,066.82***	***$ 2,066.82***	***$ 2,066.82***	***$ 2,066.82***	***$ 2,066.82***	***$ 2,066.82***
NET CASH FLOW				**$ (558,286)**	**$ (560,385)**	**$ (562,547)**	**$ (564,774)**	**$ (567,067)**	**$ (569,432)**	**$ (571,866)**	**$ (574,372)**	**$ (576,949)**	**$ (579,605)**
Annual Cost/Space				***$ (2,448.62)***	***$ (2,457.83)***	***$ (2,467.31)***	***$ (2,477.08)***	***$ (2,487.14)***	***$ (2,497.51)***	***$ (2,508.18)***	***$ (2,519.17)***	***$ (2,530.48)***	***$ (2,542.13)***

Source: *DESMAN*

Parking Rates

In order to translate the costs outlined in the prior section into potential rates the garage would need to assess, DESMAN has to estimate the total annual volume of vehicles passing through the garage and how many hours during the season the garage would potentially be occupied. DESMAN developed a model that applied an assumption of the percentage of the public portion of the garage which would be occupied, which was in turn used to estimate the number of spaces occupied at the peak hour of each day.

DESMAN then applied an assumed number of turns per day – based on our field observations – to estimate the total number of vehicles per day that would pass through the facility. In order to determine the total number of operating hours per day, DESMAN multiplied the number of vehicles by an assumed typical length of stay, also based on prior field observations.

In total, DESMAN estimated that an Option A/B facility would support just under 34,800 vehicles per season or just under 162,600 parked hours, as shown in ***Table 21*** on the next page.

An Option C facility would support roughly 32,600 vehicles per season or around 147,200 parked hours, as shown in ***Table 22*** on the following page.

Table 21 – Option A/B Total Vehicle and Parked Hours Calculations for a Typical Season

MAY:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVG/ TOT
% Occupied:															0.175	0.175	0.175	0.125	0.125	0.125	0.125	0.25	0.25	0.25	0.25	0.15	0.15	0.15	0.2	0.2	0.2	0.18
Occ. Spaces:															40	40	40	29	29	29	29	57	57	57	57	34	34	34	46	46	46	41
Avg. Turns/Day:															1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.34
Vehicles/Day:															48	48	48	35	35	35	35	86	86	86	86	48	48	48	64	64	64	964
Typical LOS (hrs):															3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.29
Total Hrs/Day:															144	144	144	105	105	105	140	344	344	344	344	144	144	144	192	192	192	3,271

JUNE:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
% Occupied:	0.15	0.15	0.15	0.15	0.2	0.2	0.2	0.175	0.175	0.175	0.175	0.25	0.25	0.25	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.25	0.25	0.25	0.25	0.35	0.35	0.35	0.3	0.3		0.23
Occ. Spaces:	34	34	34	34	46	46	46	40	40	40	40	57	57	57	46	46	46	46	68	68	68	57	57	57	57	80	80	80	68	68		53
Avg. Turns/Day:	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9		1.71
Vehicles/Day:	51	51	51	51	74	74	74	64	64	64	64	97	97	97	78	78	78	78	122	122	122	103	103	103	103	152	152	152	129	129		2,777
Typical LOS (hrs):	3.0	3.0	3.0	3.0	4.0	4.0	4.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0		4.00
Total Hrs/Day:	153	153	153	153	296	296	296	192	192	192	256	388	388	388	312	312	312	312	610	610	610	412	412	412	412	608	760	760	645	645		11,640

JULY:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
% Occupied:	0.4	0.5	0.75	1	0.9	0.6	0.65	0.7	0.8	0.9	1	0.9	0.7	0.8	0.85	0.9	0.95	1	0.9	0.8	0.85	0.9	0.9	0.95	1	0.9	0.8	0.85	0.9	0.9	0.95	0.84
Occ. Spaces:	91	114	171	228	205	137	148	160	182	205	228	205	160	182	194	205	217	228	205	182	194	205	205	217	228	205	182	194	205	205	217	190
Avg. Turns/Day:	1.9	2.0	2.1	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.16
Vehicles/Day:	173	228	359	502	431	274	296	320	382	431	479	431	336	382	407	431	477	502	451	400	427	451	451	499	524	472	419	446	472	472	499	12,824
Typical LOS (hrs):	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.00
Total Hrs/Day:	865	1,140	1,795	2,510	2,155	1,370	1,480	1,600	1,910	2,155	2,395	2,155	1,680	1,910	2,035	2,155	2,385	2,510	2,255	2,000	2,135	2,255	2,255	2,495	2,620	2,360	2,095	2,230	2,360	2,360	2,495	64,120

AUGUST:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
% Occupied:	1	0.9	0.85	0.9	0.95	0.95	1	1	0.95	0.9	0.9	0.95	0.95	1	1	0.95	0.9	0.9	0.95	0.95	1	1	0.9	0.85	0.9	0.9	0.95	1	1	1	0.85	0.94
Occ. Spaces:	228	205	194	205	217	217	228	228	217	205	205	217	217	228	228	217	205	205	217	217	228	228	205	194	205	205	217	228	228	228	194	215
Avg. Turns/Day:	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.10
Vehicles/Day:	524	472	446	472	499	499	524	524	499	472	472	499	499	524	524	499	410	410	434	434	456	456	410	349	369	369	391	410	410	410	349	14,015
Typical LOS (hrs):	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0	4.81
Total Hrs/Day:	2,620	2,360	2,230	2,360	2,495	2,495	2,620	2,620	2,495	2,360	2,360	2,495	2,495	2,620	2,620	2,495	2,050	2,050	2,170	2,170	2,280	2,280	2,050	1,396	1,476	1,476	1,564	1,640	2,050	2,050	1,396	67,838

SEPTEMBER:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
% Occupied:	0.6	0.6	0.6	0.7	0.8	0.75	0.5	0.5	0.5	0.55	0.6	0.65	0.6	0.4	0.4	0.4	0.45	0.5	0.5	0.4	0.3	0.3	0.3	0.35	0.4	0.4	0.3	0.2	0.2	0.2		0.47
Occ. Spaces:	120	120	120	140	160	150	100	100	100	110	120	130	120	80	80	80	90	100	100	80	60	60	60	70	80	80	60	40	40	40		93
Avg. Turns/Day:	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2		1.45
Vehicles/Day:	216	216	216	252	288	270	150	150	150	165	180	195	180	112	112	112	126	140	140	104	78	78	78	91	104	96	72	48	48	48		4,215
Typical LOS (hrs):	4.0	4.0	4.0	5.0	5.0	5.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0		3.50
Total Hrs/Day:	864	864	864	1,260	1,440	1,350	450	450	450	660	720	585	540	336	336	336	504	560	420	312	234	234	234	364	416	288	216	144	144	144		15,719

OCTOBER:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
% Occupied:	0.25	0.25	0.15	0.15	0.15	0.15	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.2																	0.19
Occ. Spaces:	57	57	34	34	34	34	46	46	23	23	23	46	68	68	46																	43
Avg. Turns/Day:	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4																	1.61
Vehicles/Day:	103	103	61	61	61	61	69	69	35	35	35	69	102	95	64																	68
Typical LOS (hrs):	4.0	4.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	4.0	4.0	4.0	3.0																	3.47
Total Hrs/Day:	412	412	183	183	183	183	276	276	105	105	105	276	408	380	192																	245

TOTAL CARS/SEASON:	**34,795**
Annual Overhead:	$(558,286)
Minimum Charge/Car:	*$ (16.05)*
TOTAL HOURS/SEASON:	**162,588**
Annual Overhead:	$(558,286)
Minimum Charge/Hour:	*$ (3.43)*

Source: *DESMAN*

Table 22 – Option C Total Vehicle and Parked Hours Calculations for a Typical Season

MAY:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	AVG/ TOT
% Occupied:															0.175	0.175	0.175	0.125	0.125	0.125	0.125	0.25	0.25	0.25	0.25	0.15	0.15	0.15	0.2	0.2	0.2	0.18
Occ. Spaces:															36	36	36	26	26	26	26	51	51	51	51	31	31	31	41	41	41	37
Avg. Turns/Day:															1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.34
Vehicles/Day:															43	43	43	31	31	31	31	77	77	77	77	43	43	43	57	57	57	861
Typical LOS (hrs):															3.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	3.0	3.29
Total Hrs/Day:															129	129	129	93	93	93	124	308	308	308	308	129	129	129	171	171	171	2,922

JUNE:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
% Occupied:	0.15	0.15	0.15	0.15	0.2	0.2	0.2	0.175	0.175	0.175	0.175	0.25	0.25	0.25	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.25	0.25	0.25	0.25	0.35	0.35	0.35	0.3	0.3		0.23
Occ. Spaces:	31	31	31	31	41	41	41	36	36	36	36	51	51	51	41	41	41	41	61	61	61	51	51	51	51	71	71	71	61	61		48
Avg. Turns/Day:	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9		1.71
Vehicles/Day:	47	47	47	47	66	66	66	58	58	58	58	87	87	87	70	70	70	70	110	110	110	92	92	92	92	135	135	135	116	116		2,494
Typical LOS (hrs):	3.0	3.0	3.0	3.0	4.0	4.0	4.0	3.0	3.0	3.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	5.0	5.0		4.00
Total Hrs/Day:	141	141	141	141	264	264	264	174	174	174	232	348	348	348	280	280	280	280	550	550	550	368	368	368	368	540	675	675	580	580		10,446

JULY:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
% Occupied:	0.4	0.5	0.75	1	0.9	0.6	0.65	0.7	0.8	0.9	1	0.9	0.7	0.8	0.85	0.9	0.95	1	0.9	0.8	0.85	0.9	0.9	0.95	1	0.9	0.8	0.85	0.9	0.9	0.95	0.84
Occ. Spaces:	82	102	153	204	184	122	133	143	163	184	204	184	143	163	173	184	194	204	184	163	173	184	184	194	204	184	163	173	184	184	194	171
Avg. Turns/Day:	1.9	2.0	2.1	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.16
Vehicles/Day:	156	204	321	449	386	244	266	286	342	386	428	386	300	342	363	386	427	449	405	359	381	405	405	446	469	423	375	398	423	423	446	11,479
Typical LOS (hrs):	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.00
Total Hrs/Day:	780	1,020	1,605	2,245	1,930	1,220	1,330	1,430	1,710	1,930	2,140	1,930	1,500	1,710	1,815	1,930	2,135	2,245	2,025	1,795	1,905	2,025	2,025	2,230	2,345	2,115	1,875	1,990	2,115	2,115	2,230	57,395

AUGUST:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
% Occupied:	1	0.9	0.85	0.9	0.95	0.95	1	1	0.95	0.9	0.9	0.95	0.95	1	1	0.95	0.9	0.9	0.95	0.95	1	1	0.9	0.85	0.9	0.9	0.95	1	1	1	0.85	0.94
Occ. Spaces:	204	184	173	184	194	194	204	204	194	184	184	194	194	204	204	194	184	184	194	194	204	204	184	173	184	184	194	204	204	204	173	192
Avg. Turns/Day:	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	2.10
Vehicles/Day:	469	423	398	423	446	446	469	469	446	423	423	446	446	469	469	446	368	368	388	388	408	408	368	311	331	331	349	367	367	367	311	12,541
Typical LOS (hrs):	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	4.0	4.0	4.0	4.0	5.0	5.0	4.0	4.81
Total Hrs/Day:	2,345	2,115	1,990	2,115	2,230	2,230	2,345	2,345	2,230	2,115	2,115	2,230	2,230	2,345	2,345	2,230	1,840	1,840	1,940	1,940	2,040	2,040	1,840	1,244	1,324	1,324	1,396	1,468	1,835	1,835	1,244	60,705

SEPTEMBER:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
% Occupied:	0.6	0.6	0.6	0.7	0.8	0.75	0.5	0.5	0.5	0.55	0.6	0.65	0.6	0.4	0.4	0.4	0.45	0.5	0.5	0.4	0.3	0.3	0.3	0.35	0.4	0.4	0.3	0.2	0.2	0.2		0.47
Occ. Spaces:	120	120	120	140	160	150	100	100	100	110	120	130	120	80	80	80	90	100	100	80	60	60	60	70	80	80	60	40	40	40		93
Avg. Turns/Day:	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2		1.45
Vehicles/Day:	216	216	216	252	288	270	150	150	150	165	180	195	180	112	112	112	126	140	140	104	78	78	78	91	104	96	72	48	48	48		4,215
Typical LOS (hrs):	4.0	4.0	4.0	5.0	5.0	5.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	3.0	3.0		3.50
Total Hrs/Day:	864	864	864	1,260	1,440	1,350	450	450	450	660	720	585	540	336	336	336	504	560	420	312	234	234	234	364	416	288	216	144	144	144		15,719

OCTOBER:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
% Occupied:	0.25	0.25	0.15	0.15	0.15	0.15	0.2	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.2																	0.19
Occ. Spaces:	51	51	31	31	31	31	41	41	20	20	20	41	61	61	41																	38
Avg. Turns/Day:	1.8	1.8	1.8	1.8	1.8	1.8	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4																	1.61
Vehicles/Day:	92	92	56	56	56	56	62	62	30	30	30	62	92	85	57																	61
Typical LOS (hrs):	4.0	4.0	3.0	3.0	3.0	3.0	4.0	4.0	3.0	3.0	3.0	4.0	4.0	4.0	3.0																	3.47
Total Hrs/Day:	368	368	168	168	168	168	248	248	90	90	90	248	368	340	171																	220

TOTAL CARS/SEASON:	**31,590**
Annual Overhead:	$(530,160)
Minimum Charge/Car:	*$ (16.78)*
TOTAL HOURS/SEASON:	**147,187**
Annual Overhead:	$(530,160)
Minimum Charge/Hour:	*$ (3.60)*

Source: *DESMAN*

As the preceding table shows, the garage would need to collect an average of $3.33 per hour or $15.52 per vehicle in order to cover costs. As Bar Harbor's highest posted rate is $5.00 per day, DESMAN felt this rate scale was unreasonable.

As mentioned in a prior section, DESMAN has advocated for creation of parking fund which will draw revenues from all parking related operations and be used to support system improvements and new parking development in the future. This fund could be used to subsidize the cost of financing the proposed garage, allowing for reduced rates.

One of the potential funding sources would be the revenues from the metering of selected on-street areas and public parking lots, as outlined in an earlier section. In order to estimate the potential impact of this revenue source, DESMAN developed a projection of potential meter revenues.

Using the capacity of each facility, DESMAN applied an assumed occupancy rate, by month, rendering the number of parking spaces which may be occupied. DESMAN then applied an assumed rate per hour for each facility based on observed utilization and occupancy of each facility during peak season. For example, on-street parking along West, Cottage and Main Streets and Mt. Desert Street was very high during the summer season, so DESMAN assumed an aggressive rate of $2.00 per hour. For the Town Pier and West Street Lots, DESMAN assumed a slightly lower rate of $1.75 per hour and for the Newport Drive Lot and the Rodick Place Lot, an even more conservative rate of $1.50 per hour[21].

DESMAN applied assumptions regarding how many times the occupied spaces would turn each day to the estimate peak hour occupancy to render an estimated daily vehicle volume. And assumed rates per hour were multiplied by the estimated typical length of stay to get an average fee per vehicle. Total vehicle volume and estimated fee for vehicle were combined to get a projection of revenue per day, which was then multiplied by the number of operating days in the month to get an estimate of gross monthly revenue by facility. In total DESMAN estimates the Town could collect as much as $665,560 from meters per year.

This gross income was then adjusted to reflect the annual operating expenses for the meters (outlined in a prior section), estimated cost of supplemental materials such as signage and printed literature necessary to support the metered system in the first few years of operation, and annual debt service associated with acquiring the 256 single-head meters and 8 multi-space meters.

Annual debt service was calculated as total purchase, shipping and installation costs for the meters ($207,100), amortized over a five-year term at 4.0% interest. This resulted in a monthly payment of roughly $3,814 or an annual obligation of $45,769.

In total, DESMAN estimates that the proposed meter system could generate as much as $551,522 in net income for the parking enterprise fund in the first year of operation, as shown in ***Table 23*** on the following page.

[21] These rates will appear egregious to Bar Harbor residents, who are used to paying nothing, but are not out of line with larger communities in the northeastern US and major cities from across the world, from which Bar Harbor draws its visitors. These are the users most likely to incur these fees and it is DESMAN assertion that these rates will not be perceived as onerous by the majority of tourists and visitors.

Table 23 – Projected Parking Meter Income, Expenses and Net Cash Flow

Meters:	5/15-5/31	6/1-6/30	7/1-7/31	8/1-8/31	9/1-9/30	10/1-10/15	**TOTAL**
256	60%	75%	85%	95%	60%	40%	
Occ	154	192	218	243	154	102	
Rate/Hr	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	$ 2.00	
Avg Stay (hrs)	2.0	2.0	2.0	2.0	2.0	2.0	
Turns/Day	2.00	2.00	2.00	2.00	2.00	2.00	
Days/Mo	16	30	31	31	30	15	
$/ Month	$ 19,712.00	$ 46,080.00	$ 54,064.00	$ 60,264.00	$ 36,960.00	$ 12,240.00	**$ 229,320.00**
Town Pier Lot:	5/15-5/31	6/1-6/30	7/1-7/31	8/1-8/31	9/1-9/30	10/1-10/15	
81	50%	60%	70%	75%	50%	30%	
Occ	41	49	57	61	41	24	
Rate/Hr	$ 1.75	$ 1.75	$ 1.75	$ 1.75	$ 1.75	$ 1.75	
Avg Stay (hrs)	3.0	3.0	3.0	3.0	3.0	3.0	
Turns/Day	2.50	2.75	3.00	3.25	2.50	2.00	
Days/Mo	16	30	31	31	30	15	
$/ Month	$ 8,610.00	$ 21,223.13	$ 27,830.25	$ 32,265.19	$ 16,143.75	$ 3,780.00	**$ 109,852.31**
West Street Lot:	5/15-5/31	6/1-6/30	7/1-7/31	8/1-8/31	9/1-9/30	10/1-10/15	
19	60%	75%	85%	95%	60%	50%	
Occ	11	14	16	18	11	10	
Rate/Hr	$ 1.75	$ 1.75	$ 1.75	$ 1.75	$ 1.75	$ 1.75	
Avg Stay (hrs)	3.0	3.0	3.0	3.0	3.0	4.0	
Turns/Day	2.50	2.75	3.00	3.25	2.50	2.00	
Days/Mo	16	30	31	31	30	15	
$/ Month	$ 2,310.00	$ 6,063.75	$ 7,812.00	$ 9,520.88	$ 4,331.25	$ 2,100.00	**$ 32,137.88**
Newport Dr. Lot	5/15-5/31	6/1-6/30	7/1-7/31	8/1-8/31	9/1-9/30	10/1-10/15	
43	50%	75%	80%	85%	40%	30%	
Occ	58	86	92	98	46	35	
Rate/Hr	$ 1.50	$ 1.50	$ 1.50	$ 1.50	$ 1.50	$ 1.50	
Avg Stay (hrs)	3.0	3.0	3.0	3.0	3.0	4.0	
Turns/Day	2.50	2.75	3.00	3.25	2.50	2.00	
Days/Mo	16	30	31	31	30	15	
$/ Month	$ 10,440.00	$ 31,927.50	$ 38,502.00	$ 44,430.75	$ 15,525.00	$ 6,300.00	**$ 147,125.25**
Rodick Place Lot:	5/15-5/31	6/1-6/30	7/1-7/31	8/1-8/31	9/1-9/30	10/1-10/15	
115	50%	75%	80%	85%	40%	30%	
Occ	58	86	92	98	46	35	
Rate/Hr	$ 1.50	$ 1.50	$ 1.50	$ 1.50	$ 1.50	$ 1.50	
Avg Stay (hrs)	3.0	3.0	3.0	3.0	3.0	4.0	
Turns/Day	2.50	2.75	3.00	3.25	2.50	2.00	
Days/Mo	16	30	31	31	30	15	
$/ Month	$ 10,440.00	$ 31,927.50	$ 38,502.00	$ 44,430.75	$ 15,525.00	$ 6,300.00	**$ 147,125.25**
Gross Income							***$ 665,560.69***
Annual Operating Expenses							**$ (47,560.00)**
Supplemental Materials							**$ (20,710.00)**
Annual Debt Service							**$ (45,768.74)**
NET INCOME							**$ 551,521.95**

Source: *DESMAN*

According to budget documents, the Town collected roughly $50,000 in parking fines in FY2014[22] against total assessed total wages of roughly $13,673 in FY2014 for two 'parking attendants' operating from June to Columbus Day[23]. These two parking attendants patrolled the areas outlined in DESMAN's recommendations for instituting metering and permit sales for curbside spaces as well as the Town lots, enforcing posted time limits, as far more labor intensive practice than enforcing meters and checking for valid permits in the same areas. It is DESMAN's assertion that these areas can be administered by these individuals without adding new personnel. However, the operating season is likely to expand, as are the hours of operation, thereby driving up costs and potential necessitating additional personnel.

There are 137 days in the current June 1 to October 15 operating season. DESMAN assumes that there are two parking attendants working during this period at an average of eight hours per day, six days a week each. At a total cost of $13,673 in direct wages, plus an assumed 55% margin for payroll taxes and benefits, total annual labor cost is estimated to be roughly $21,200. In addition, DESMAN assumed that materials costs were roughly 15% of total labor costs, based on experience in other communities, accounting for an additional $3,180, bringing total overhead to $24,380. Dividing this figure by the total estimated staffing hours for the season (912), the total hourly overhead for enforcement operations is roughly $26.73.

In order to provide adequate coverage of the proposed metered zones and permit zones on-street, plus the metered public lots, as well as the residential permit areas, DESMAN believes the Town will need three attendants working an average of 4 hours per day each for the full 153 days between May 15 and October 15. At $26.73 per hour, this is a total estimated annual expense of $49,076.

As noted previously, the Town collected a total of $50,000 in parking fines in FY2014, averaging about $365.00 in fine revenues per day over a 137 day operating season. Assuming the same ratio, DESMAN projects the Town could collect as much as $55,840 over a 153 day season. In addition, DESMAN has recommended institution of higher fine totals for certain violations in prior sections. DESMAN estimates these higher or new fine rates, combined with greater manpower, will generate an additional 15% in fine revenues over current conditions or roughly another $8,375, raising total potential revenues to $64,215. Against projected overhead of $49,076, this results in net income of $15,139 that can be pledged to the enterprise fund.

Finally, DESMAN believes there is adequate demand in Bar Harbor to justify the sale of an average of 30 on-street parking permits per day at $10.00 per permit over the 153 day operating season, generating an additional $45,900 in revenues with no appreciable new overhead.

In total, the combined net estimated income from metering, expanded enforcement and permit sales totals roughly $612,561. Total estimated overhead (including debt service) for the garage in Year 1 is $530,160 - $558,286, depending on the design. Application of the net income from other parking function to the garage's overhead, reduces the figure to $0.00 and actually posts a surplus, as shown in ***Table 24*** on the following page.

[22] Bar Harbor Police Department officials stated that there were 5,441 tickets issued between 1/1/2014 and 12/31/2014, of which roughly 93% (5,042 total tickets) were written between Memorial Day and Columbus Day. Roughly 90% of all tickets issued were for overtime parking. The Police Department collected on roughly 50% of the total tickets issued in FY2014.

[23] Bar Harbor parking enforcement officers work either Monday to Friday (10 AM to 6 PM) or Tuesday to Saturday (10 AM to 6 PM). Currently, enforcement operations commence the first Monday after Memorial Day and end upon Columbus Day. After mid-August one of the officers returns to university, leaving the only a single officer remaining to patrol the area.

Table 24 – Adjusted Overhead and Rate Calculations

OPTION A/B			OPTION C		
Total Garage Overhead per Year:	$	(558,286)	Total Garage Overhead per Year:	$	(530,160)
Estimated Net Income from Meters:	$	551,522	Estimated Net Income from Meters:	$	551,522
Estimated Net Income from Enforcement:	$	15,139	Estimated Net Income from Enforcement:	$	15,139
Estimated Net Income from Permit Sales:	$	45,900	Estimated Net Income from Permit Sales:	$	45,900
Balance	***$***	***54,275***	***Balance***	***$***	***82,401***

Source: *DESMAN*

Under this scenario, the garage could charge anything per hour and generate adequate revenue, with addition of the other resources mentioned to meet its debt service requirements and overhead costs.

For this analysis, DESMAN elected to price the garage slightly higher than $1.00 per hour, to align it with the other facilities in the area (i.e. meters and lots), at $1.25 per hour for up to 8 hours, then flat rates for stays of 8-12 and 12-24 hours. A summary of proposed rates is included in ***Table 25***, below.

Table 25 – Proposed Fee and Fine Rates

GARAGE

Hourly

0 -1 hours	$	1.25	
1 - 2 hours	$	2.50	
2 - 3 hours	$	3.75	
3 - 4 hours	$	5.00	
4 - 5 hours	$	6.25	
5 - 6 hours	$	7.50	
6 - 7 hours	$	8.75	
7 - 8 hours	$	10.00	
8 - 12 hours	$	12.50	
12 - 24 hours	$	15.00	

Monthly (Off-Season Only: 10/16-5/14)

Uncovered	$	50.00	/month
Covered	$	75.00	/month

FINES

Exceeding posted time-limit	$	10.00	/incident
Parking at an expired meter	$	20.00	/incident
Parking with an expired permit	$	20.00	/incident
Parking in an RPP zone without a permit	$	30.00	/incident

METERS

On-Street	$	2.00	/hour - maximum stay of 4 hours
Town Pier Lot	$	1.75	/hour -maximum stay of 24 hours
West Street Lot	$	1.75	/hour -maximum stay of 24 hours
Newport Drive Lot	$	1.50	/hour -maximum stay of 24 hours
Rodick Place Lot	$	1.50	/hour -maximum stay of 24 hours

PERMITS

Designated Zones	$	10.00	/day - maximum stay of 24 hours

Source: *DESMAN*

Revenue Model

The revenue models for the design options assume a basic user volume of between 34,795 vehicles per season (Option A/B) to 31,590 vehicles per season (Option C) at an average rate of $5.00 per vehicle (equivalent to an average length of stay of 3-4 hours) in Year 1. User volumes are assumed to remain fixed, but rates are assumed to adjust by 10% each third year in response to inflationary factors. Revenue models also assume a fixed base of 30 off-season monthly renters per year at $75.00 per month for a covered space, with user volumes remaining fixed but rates inflating by 10% every third year.

For the parking system, revenues associated with meters, permit sales and parking fines are all expected to increase by 10% every third year as response to growth and rate adjustments to offset inflation of operating expenses.

Debt Service Coverage

As shown in ***Table 26,*** a proposed garage built on the Option A/B design will not meet debt service obligations as a standalone facility in the first ten years of operation.

Table 26 – Proposed Option A/B Garage Conceptual Pro Forma

Project Name: Option A/B				Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Capacity:	228	spaces		[2016]	[2017]	[2018]	[2019]	[2020]	[2021]	[2022]	[2023]	[2024]	[2025]
REVENUES:													
Transients	34,795	$ 5.00		173,975	173,975	191,373	191,373	191,373	210,510	210,510	210,510	231,561	231,561
Monthlies	30	$ 75.00		2,250	2,250	2,475	2,475	2,475	2,723	2,723	2,723	2,995	2,995
Gross Annual Revenues				**$ 176,225**	**$ 176,225**	**$ 193,848**	**$ 193,848**	**$ 193,848**	**$ 213,232**	**$ 213,232**	**$ 213,232**	**$ 234,555**	**$ 234,555**
Inflationary Assumption:				*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*
OPERATING EXPENSES:													
Payroll		$ 143.64	/space	32,750	33,733	34,745	35,787	36,861	37,967	39,106	40,279	41,487	42,732
Payroll Taxes		$ 16.52	/space	3,766	3,879	3,995	4,115	4,238	4,365	4,496	4,631	4,770	4,913
Benefits		$ 7.90	/space	1,801	1,855	1,911	1,968	2,027	2,088	2,151	2,216	2,282	2,350
Worker's Compensation		$ 3.59	/space	819	844	869	895	922	950	979	1,008	1,038	1,069
Uniforms		$ 1.24	/space	283	291	300	309	318	328	338	348	358	369
Utilities		$ 11.81	/space	2,772	2,855	2,941	3,029	3,120	3,214	3,310	3,409	3,511	3,616
Insurance		$ 18.15	/space	4,262	4,390	4,522	4,658	4,798	4,942	5,090	5,243	5,400	5,562
Garage Supplies		$ 1.48	/space	348	358	369	380	391	403	415	427	440	453
Office Supplies		$ 0.75	/space	176	181	186	192	198	204	210	216	222	229
Printing & Tickets		$ 1.03	/space	242	249	256	264	272	280	288	297	306	315
Telephone		$ 0.60	/space	141	145	149	153	158	163	168	173	178	183
General R&M		$ 55.89	/space	13,125	13,519	13,925	14,343	14,773	15,216	15,672	16,142	16,626	17,125
Elevator R&M		$ 8.65	/space	2,031	2,092	2,155	2,220	2,287	2,356	2,427	2,500	2,575	2,652
PARCS R&M		$ 3.62	/space	850	876	902	929	957	986	1,016	1,046	1,077	1,109
Landscaping		$ 3.15	/space	740	762	785	809	833	858	884	911	938	966
Miscellaneous		$ 0.55	/space	129	133	137	141	145	149	153	158	163	168
Overhead/G&A		$ 0.95	/space	223	230	237	244	251	259	267	275	283	291
Bank Fees		$ 3.09	/space	705	705	775	775	775	853	853	853	938	938
Credit Card Fees		$ 16.23	/space	3,701	3,701	4,071	4,071	4,071	4,478	4,478	4,478	4,926	4,926
Sinking Fund		$ 75.00	/space	17,100	17,100	17,100	17,100	17,100	17,100	17,100	17,100	17,100	17,100
Total Annual Operating Expenses				**$ 85,964**	**$ 87,898**	**$ 90,330**	**$ 92,382**	**$ 94,495**	**$ 97,159**	**$ 99,401**	**$ 101,710**	**$ 104,618**	**$ 107,066**
Debt Service Payment				**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**
NET CASH FLOW				**$ (380,973)**	**$ (382,907)**	**$ (367,718)**	**$ (369,770)**	**$ (371,883)**	**$ (355,161)**	**$ (357,403)**	**$ (359,712)**	**$ (341,297)**	**$ (343,745)**

Source: *DESMAN*

In point of fact, this option is projected to lose between $343,745 and $380,973 annually each year. As mentioned previously, this is not a unique condition for the majority of municipalities in the U.S., which must subsidize the development of structured parking with revenues from other facilities or a dedicated fund. Similarly, the Option C design is projected to lose between $336,115 and $368,972 annually through the first ten years of operation, if operated as a stand-alone facility.

If the Town establishes a parking fund and adopts DESMAN recommendations for program changes, the system as a whole can generate adequate net operating income to cover the garage's debt obligations as well as all other parking operating expenses and debt obligations through the first ten years. As shown in ***Table 27***, next page, the fund could generate as much as $513,931 annually in net cash flow after meeting debt obligations using an Option C design.

Table 27 – Proposed Parking Fund Conceptual Pro Forma – Option C

Option C Design (204 spaces) *Parking Fund*	Year 1 [2016]	Year 2 [2017]	Year 3 [2018]	Year 4 [2019]	Year 5 [2020]	Year 6 [2021]	Year 7 [2022]	Year 8 [2023]	Year 9 [2024]	Year 10 [2025]
REVENUES:										
Garage Revenues	160,200	160,200	176,220	176,220	176,220	193,842	193,842	193,842	213,226	213,226
On-Street Meter Revenues	229,320	229,320	252,252	252,252	252,252	277,477	277,477	277,477	277,477	305,225
Parking Lot Meter Revenues	436,241	436,241	479,865	479,865	479,865	527,851	527,851	527,851	527,851	580,636
Permit Sales Revenues	45,900	45,900	50,490	50,490	50,490	55,539	55,539	55,539	55,539	61,093
Parking Fines	64,215	64,215	70,637	70,637	70,637	77,701	77,701	77,701	77,701	85,471
Gross Annual Revenues	**$ 935,876**	**$ 935,876**	**$1,029,464**	**$1,029,464**	**$1,029,464**	**$1,132,410**	**$1,132,410**	**$1,132,410**	**$1,151,794**	**$1,245,651**
Inflationary Assumption:	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*
OPERATING EXPENSES:										
Garage	81,130	82,984	85,297	87,264	89,291	91,820	93,970	96,186	98,950	101,299
Meters	47,560	48,987	50,456	51,970	53,529	55,135	56,789	58,493	60,248	62,055
Meters - Supplemental Material	20,710	-	-	-	-	-	-	25,471	-	-
Meter Debt Service	45,769	45,769	45,769	45,769	45,769	-	-	56,290	56,290	56,290
Enforcement	49,076	50,549	52,065	53,627	55,236	56,893	58,600	60,358	62,168	64,033
Total Annual Operating Expenses	**$ 244,245**	**$ 228,288**	**$ 233,587**	**$ 238,629**	**$ 243,824**	**$ 203,848**	**$ 209,359**	**$ 296,797**	**$ 277,656**	**$ 283,677**
Debt Service Payment	**$ 448,042**	**$ 448,042**	**$ 448,042**	**$ 448,042**	**$ 448,042**	**$ 448,042**	**$ 448,042**	**$ 448,042**	**$ 448,042**	**$ 448,042**
Coverage Ratio	***1.54***	***1.58***	***1.78***	***1.77***	***1.75***	***2.07***	***2.06***	***1.87***	***1.95***	***2.15***
NET CASH FLOW	**$ 243,589**	**$ 259,545**	**$ 347,834**	**$ 342,792**	**$ 337,597**	**$ 480,520**	**$ 475,009**	**$ 387,570**	**$ 426,096**	**$ 513,931**

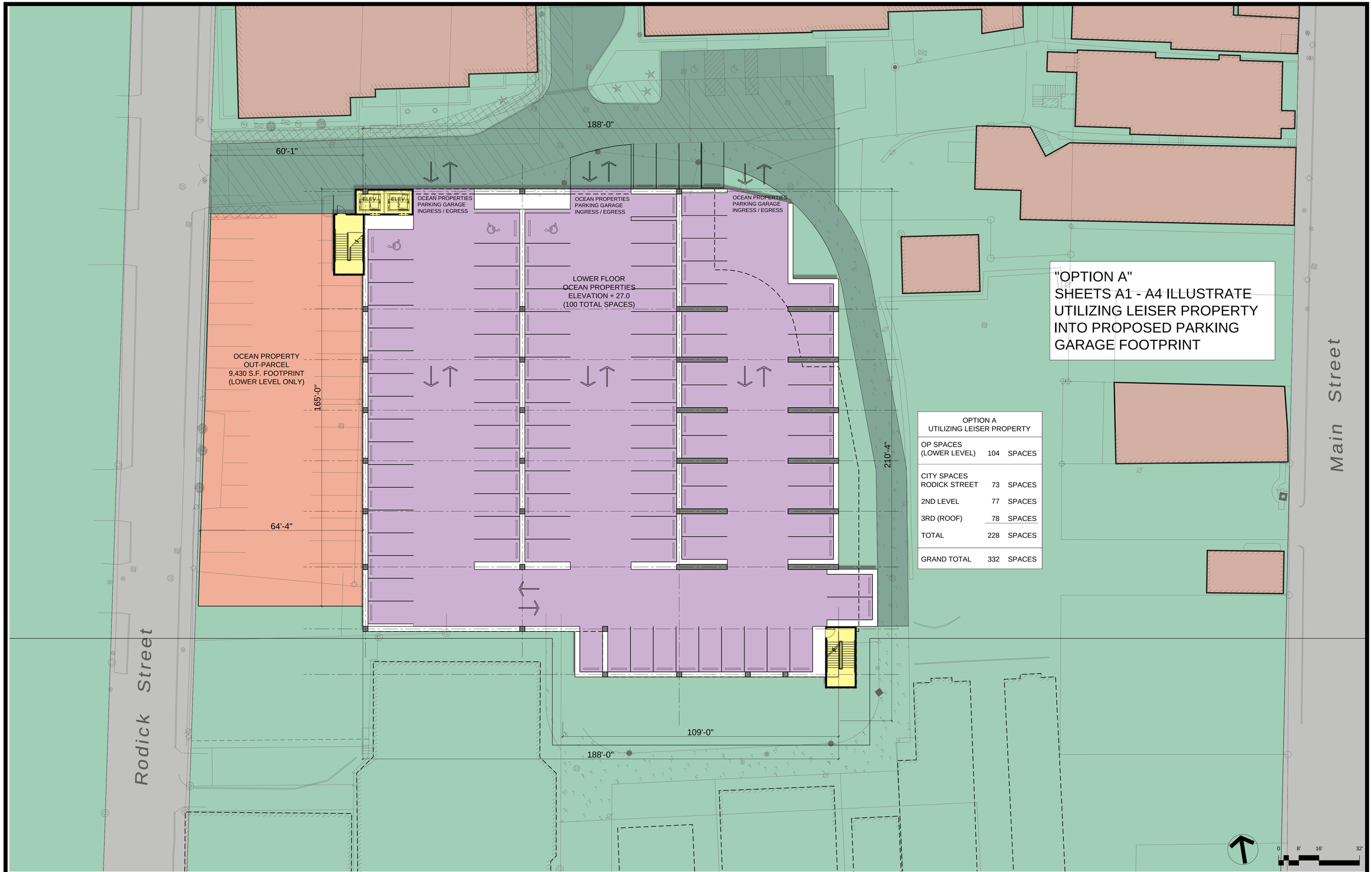
Source: *DESMAN*

As an Option A/B facility, the fund could generate as much as $506,301 annually in net flow, after meeting debt service, as shown in ***Table 28***.

Table 28 – Proposed Parking Fund Conceptual Pro Forma – Option A/B

Option A/B (228 spaces) *Parking Fund*	Year 1 [2016]	Year 2 [2017]	Year 3 [2018]	Year 4 [2019]	Year 5 [2020]	Year 6 [2021]	Year 7 [2022]	Year 8 [2023]	Year 9 [2024]	Year 10 [2025]
REVENUES:										
Garage Revenues	176,225	176,225	193,848	193,848	193,848	213,232	213,232	213,232	234,555	234,555
On-Street Meter Revenues	229,320	229,320	252,252	252,252	252,252	277,477	277,477	277,477	277,477	305,225
Parking Lot Meter Revenues	436,241	436,241	479,865	479,865	479,865	527,851	527,851	527,851	527,851	580,636
Permit Sales Revenues	45,900	45,900	50,490	50,490	50,490	55,539	55,539	55,539	55,539	61,093
Parking Fines	64,215	64,215	70,637	70,637	70,637	77,701	77,701	77,701	77,701	85,471
Gross Annual Revenues	**$ 951,901**	**$ 951,901**	**$1,047,091**	**$1,047,091**	**$1,047,091**	**$1,151,800**	**$1,151,800**	**$1,151,800**	**$1,173,123**	**$1,266,980**
Inflationary Assumption:	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*	*1.03*
OPERATING EXPENSES:										
Garage	85,964	87,898	90,330	92,382	94,495	97,159	99,401	101,710	104,618	107,066
Meters	47,560	48,987	50,456	51,970	53,529	55,135	56,789	58,493	60,248	62,055
Meters - Supplemental Material	20,710	-	-	-	-	-	-	25,471	-	-
Meter Debt Service	45,769	45,769	45,769	45,769	45,769	-	-	56,290	56,290	56,290
Enforcement	49,076	50,549	52,065	53,627	55,236	56,893	58,600	60,358	62,168	64,033
Total Annual Operating Expenses	**$ 249,079**	**$ 233,202**	**$ 238,620**	**$ 243,748**	**$ 249,029**	**$ 209,187**	**$ 214,790**	**$ 302,321**	**$ 283,324**	**$ 289,444**
Debt Service Payment	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**	**$ 471,235**
Coverage Ratio	***1.49***	***1.53***	***1.72***	***1.70***	***1.69***	***2.00***	***1.99***	***1.80***	***1.89***	***2.07***
NET CASH FLOW	**$ 231,588**	**$ 247,464**	**$ 337,236**	**$ 332,108**	**$ 326,827**	**$ 471,379**	**$ 465,776**	**$ 378,244**	**$ 418,565**	**$ 506,301**

Source: *DESMAN*



OPTION A UTILIZING LEISER PROPERTY		
OP SPACES (LOWER LEVEL)	104	SPACES
CITY SPACES RODICK STREET	73	SPACES
2ND LEVEL	77	SPACES
3RD (ROOF)	78	SPACES
TOTAL	228	SPACES
GRAND TOTAL	332	SPACES

Bermello Ajamil & Partners, Inc.

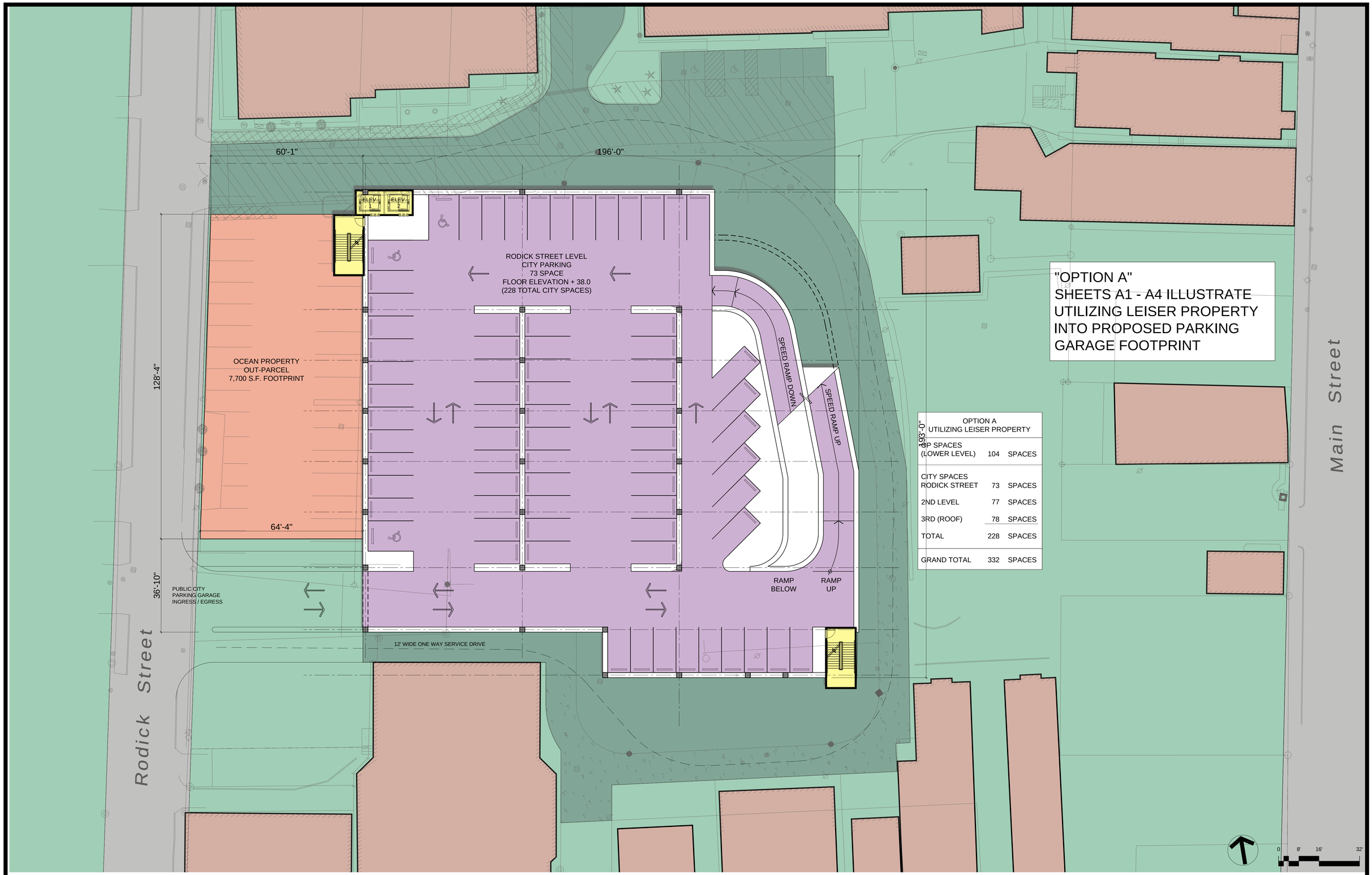
LOWER (BASEMENT) LEVEL
@ +27.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

A-1



OPTION A UTILIZING LEISER PROPERTY		
OP SPACES (LOWER LEVEL)	104	SPACES
CITY SPACES RODICK STREET	73	SPACES
2ND LEVEL	77	SPACES
3RD (ROOF)	78	SPACES
TOTAL	228	SPACES
GRAND TOTAL	332	SPACES

Bermello Ajamil & Partners, Inc.

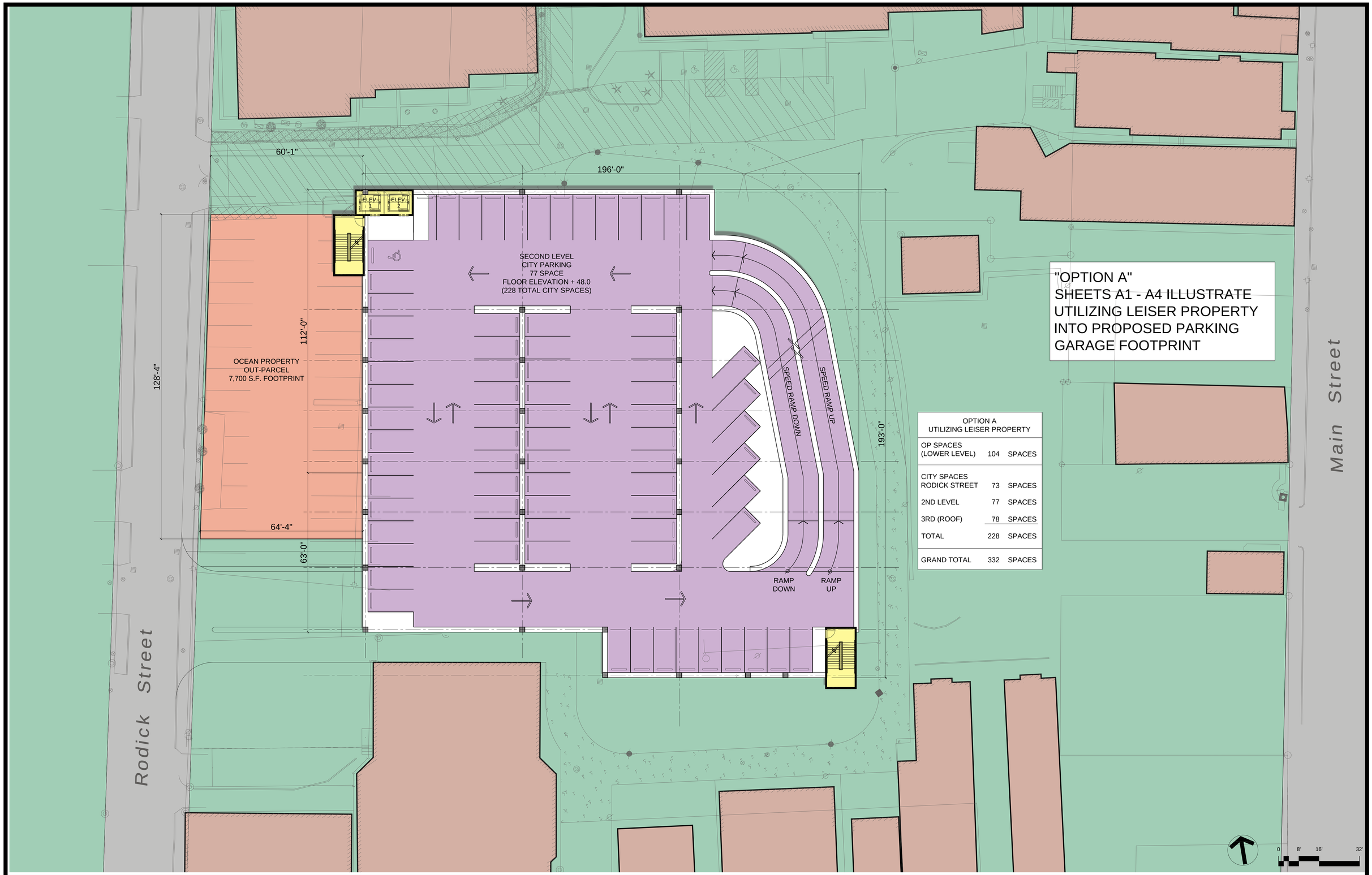
RODICK STREET ACCESS LEVEL
@ +38.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

A-2



OPTION A UTILIZING LEISER PROPERTY		
OP SPACES (LOWER LEVEL)	104	SPACES
CITY SPACES RODICK STREET	73	SPACES
2ND LEVEL	77	SPACES
3RD (ROOF)	78	SPACES
TOTAL	228	SPACES
GRAND TOTAL	332	SPACES

Bermello Ajamil & Partners, Inc.

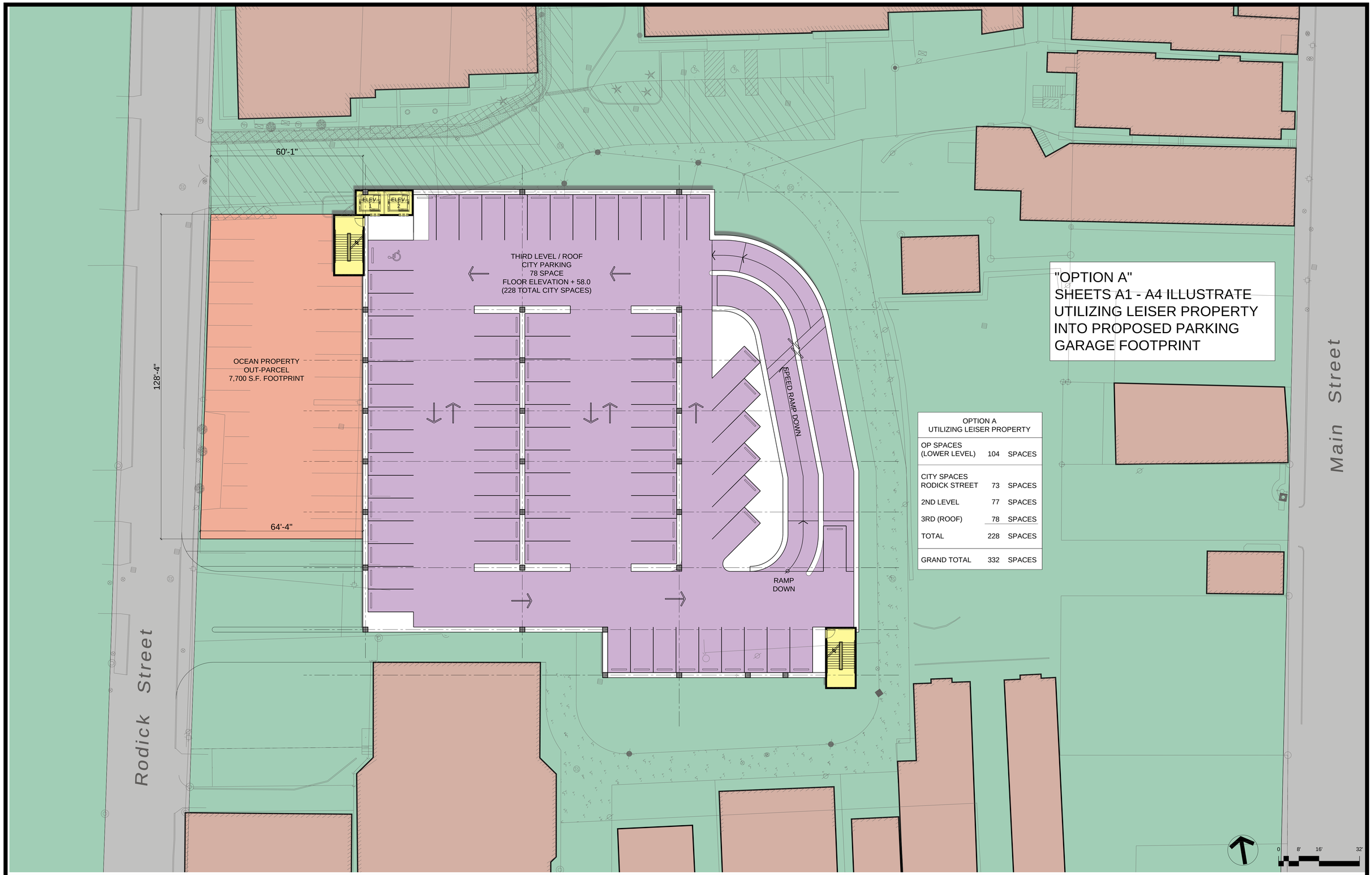
SECOND LEVEL
@ +48.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

A-3



OPTION A UTILIZING LEISER PROPERTY		
OP SPACES (LOWER LEVEL)	104	SPACES
CITY SPACES RODICK STREET	73	SPACES
2ND LEVEL	77	SPACES
3RD (ROOF)	78	SPACES
TOTAL	228	SPACES
GRAND TOTAL	332	SPACES

Bermello Ajamil & Partners, Inc.

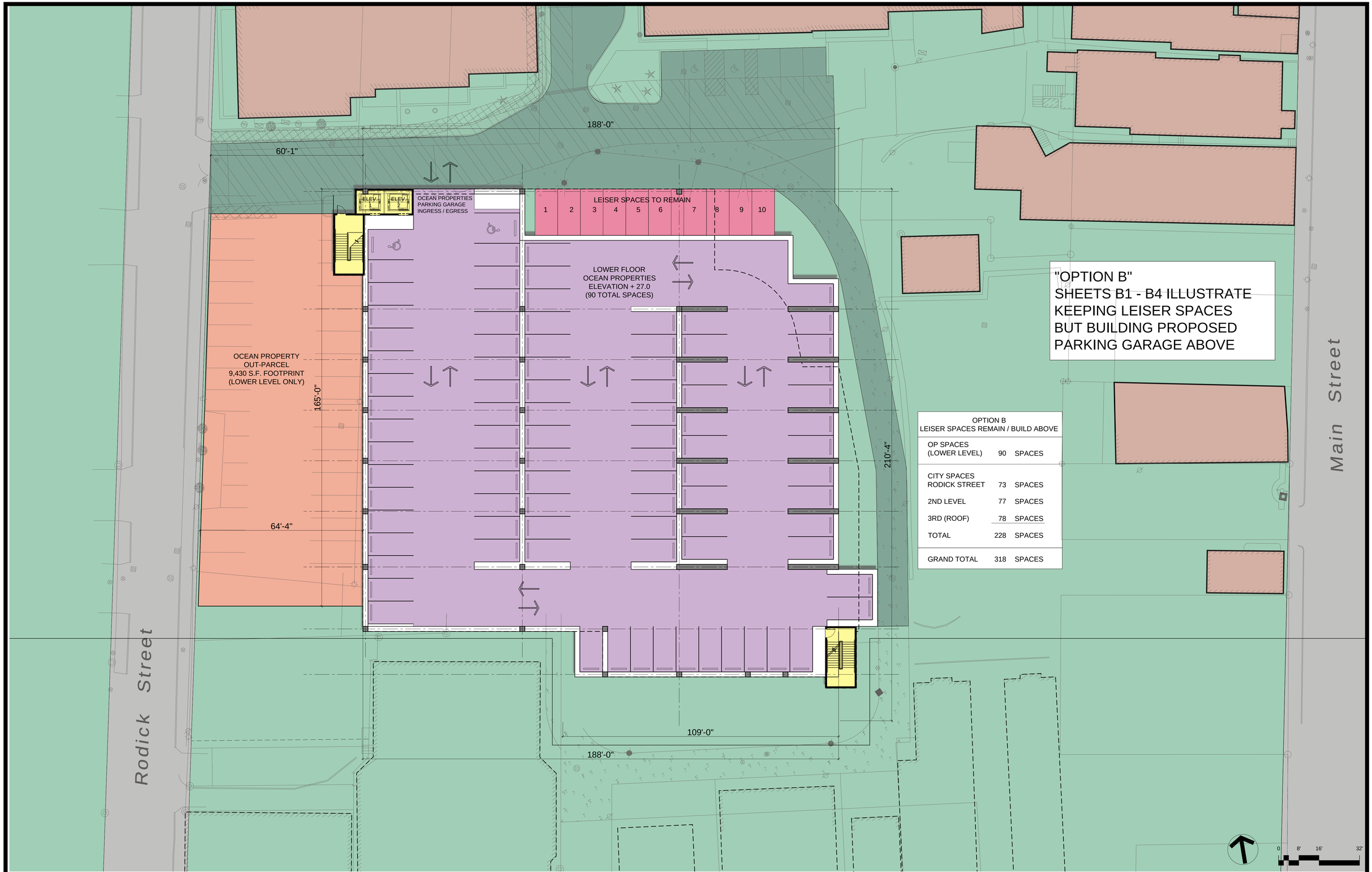
ROOF LEVEL
@ +58.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

A-4



OPTION B LEISER SPACES REMAIN / BUILD ABOVE		
OP SPACES (LOWER LEVEL)	90	SPACES
CITY SPACES RODICK STREET	73	SPACES
2ND LEVEL	77	SPACES
3RD (ROOF)	78	SPACES
TOTAL	228	SPACES
GRAND TOTAL	318	SPACES

Bermello Ajamil & Partners, Inc.

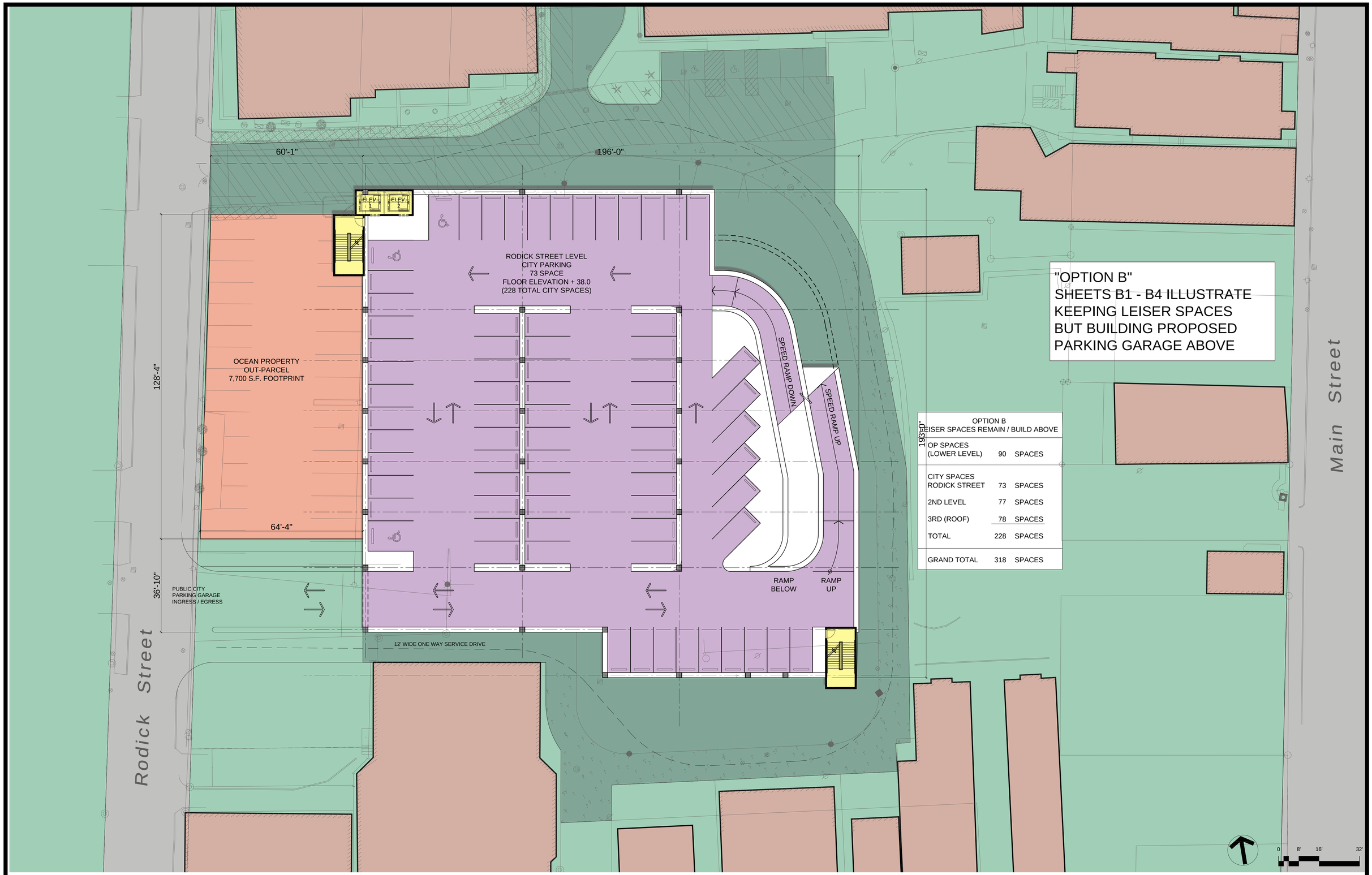
LOWER (BASEMENT) LEVEL
@ +27.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

B-1



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CITY SPACES RODICK STREET	73	SPACES
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3RD (ROOF)	78	SPACES
TOTAL	228	SPACES
GRAND TOTAL	318	SPACES

Bermello Ajamil & Partners, Inc.

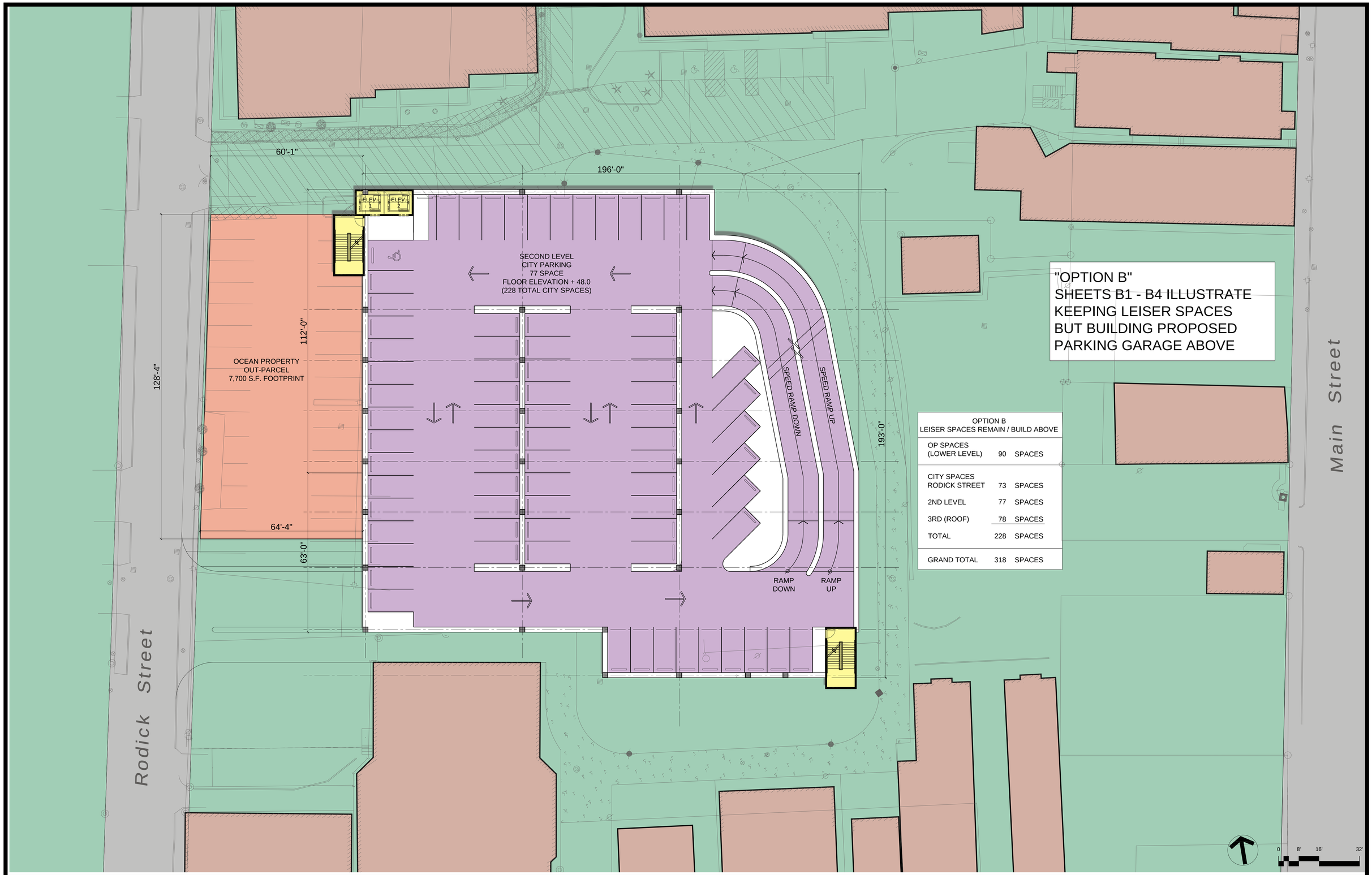
RODICK STREET ACCESS LEVEL
@ +38.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

B-2



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3RD (ROOF)	78	SPACES
TOTAL	228	SPACES
GRAND TOTAL	318	SPACES

Bermello Ajamil & Partners, Inc.

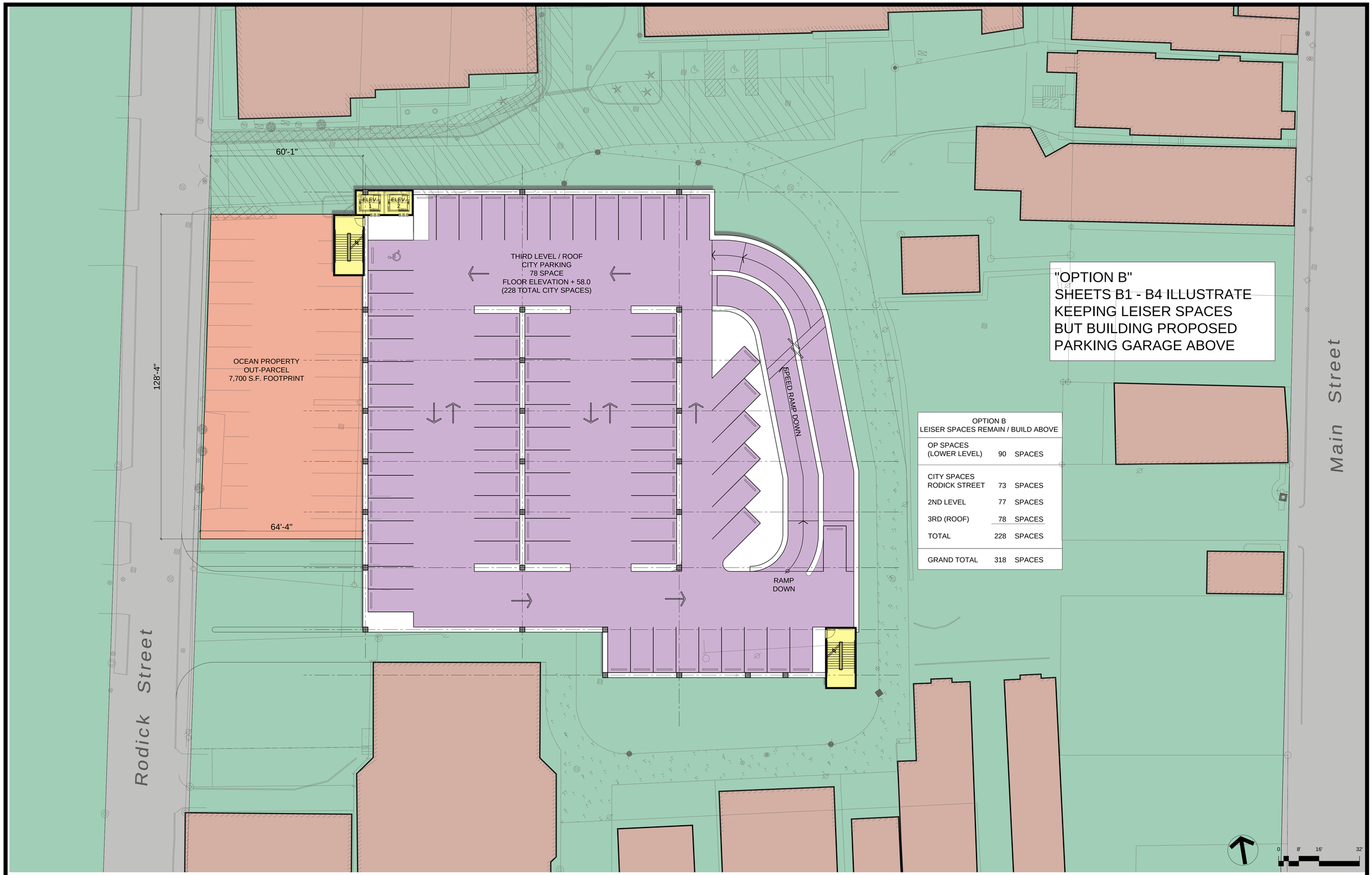
SECOND LEVEL
@ +48.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

B-3



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GRAND TOTAL	318	SPACES

Bermello Ajamil & Partners, Inc.

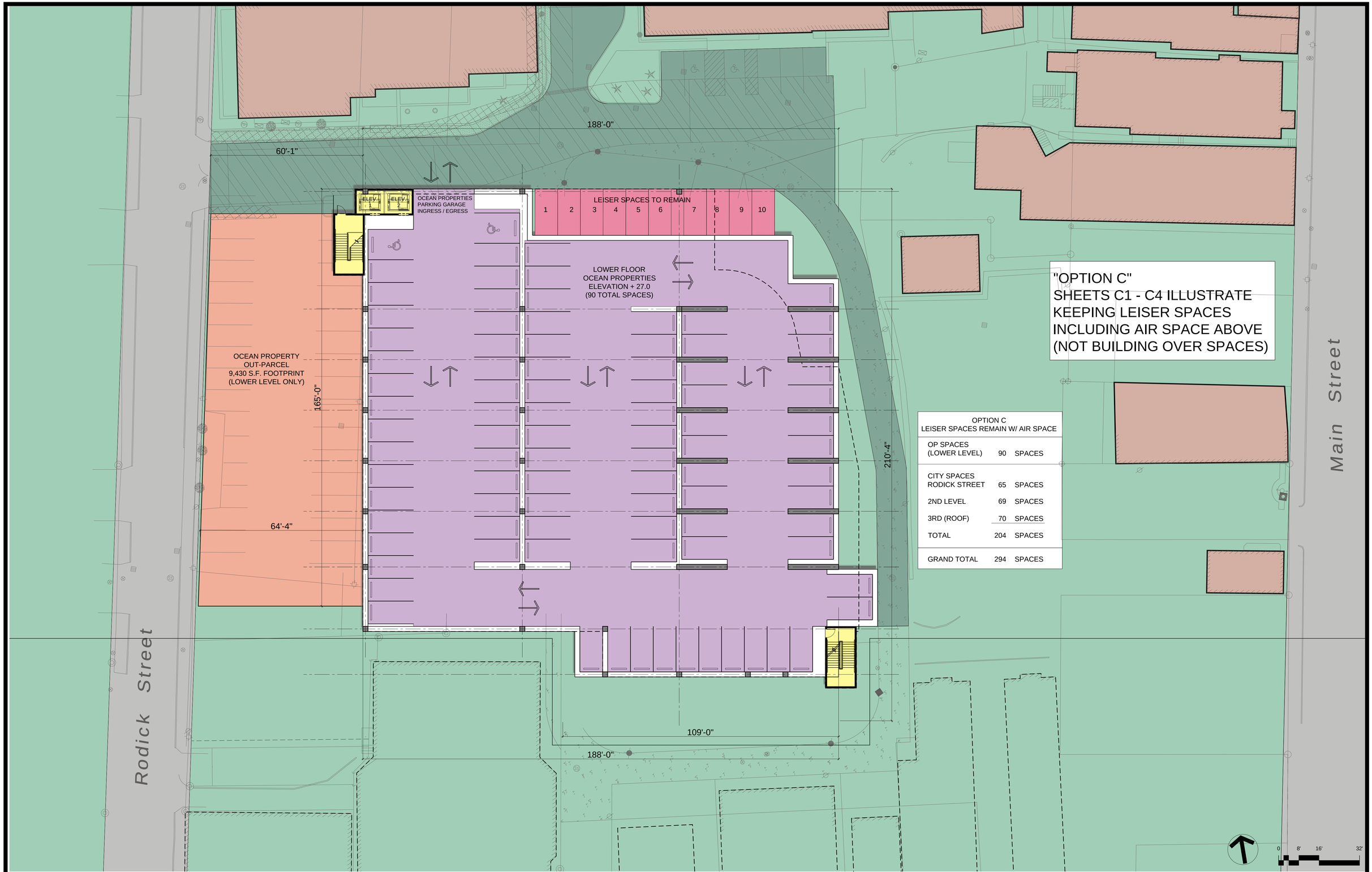
ROOF LEVEL
@ +58.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

B-4



OPTION C LEISER SPACES REMAIN W/ AIR SPACE		
OP SPACES (LOWER LEVEL)	90	SPACES
CITY SPACES RODICK STREET	65	SPACES
2ND LEVEL	69	SPACES
3RD (ROOF)	70	SPACES
TOTAL	204	SPACES
GRAND TOTAL	294	SPACES

Bermello Ajamil & Partners, Inc.

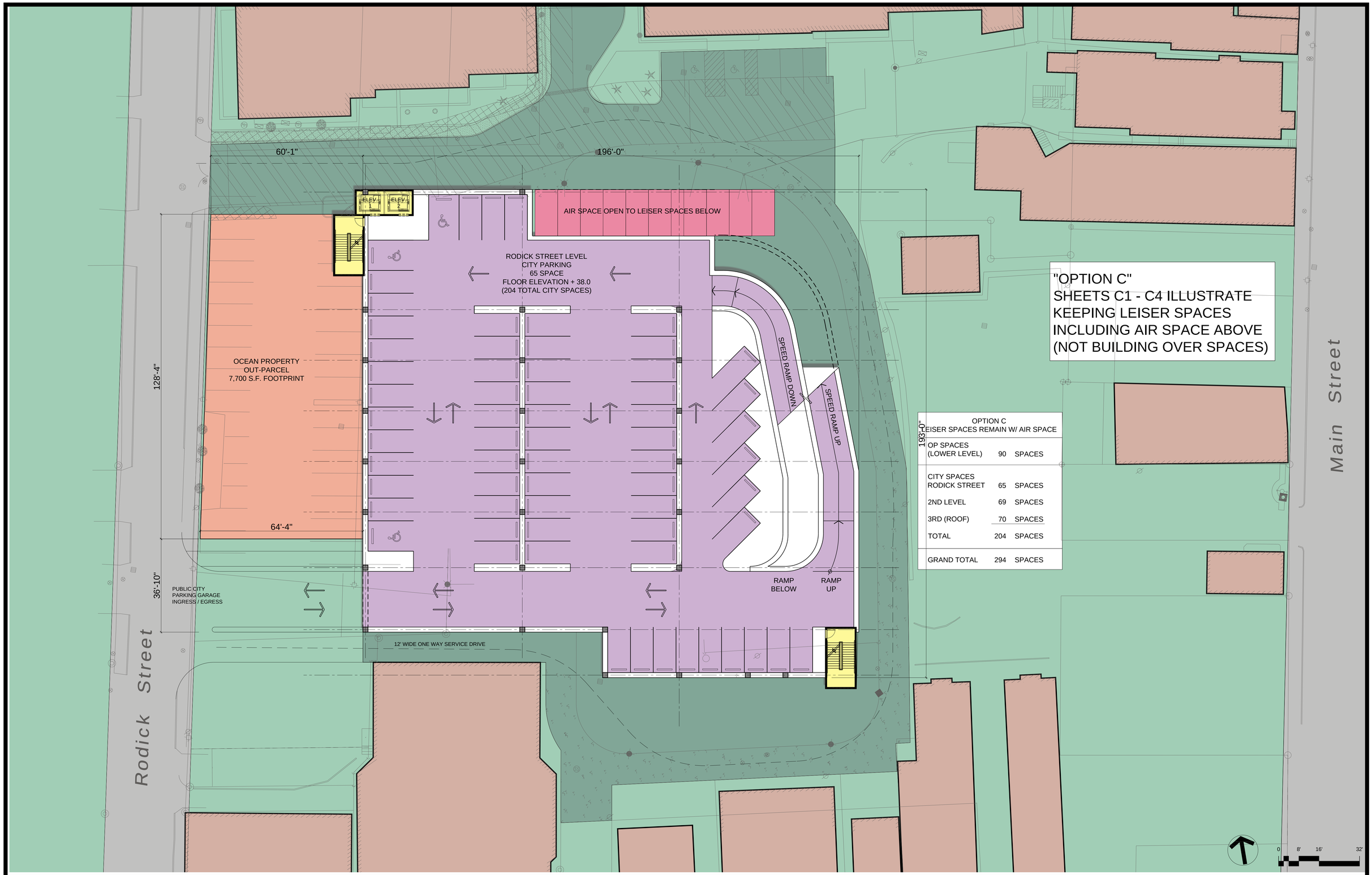
LOWER (BASEMENT) LEVEL
@ +27.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

C-1



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Bermello Ajamil & Partners, Inc.

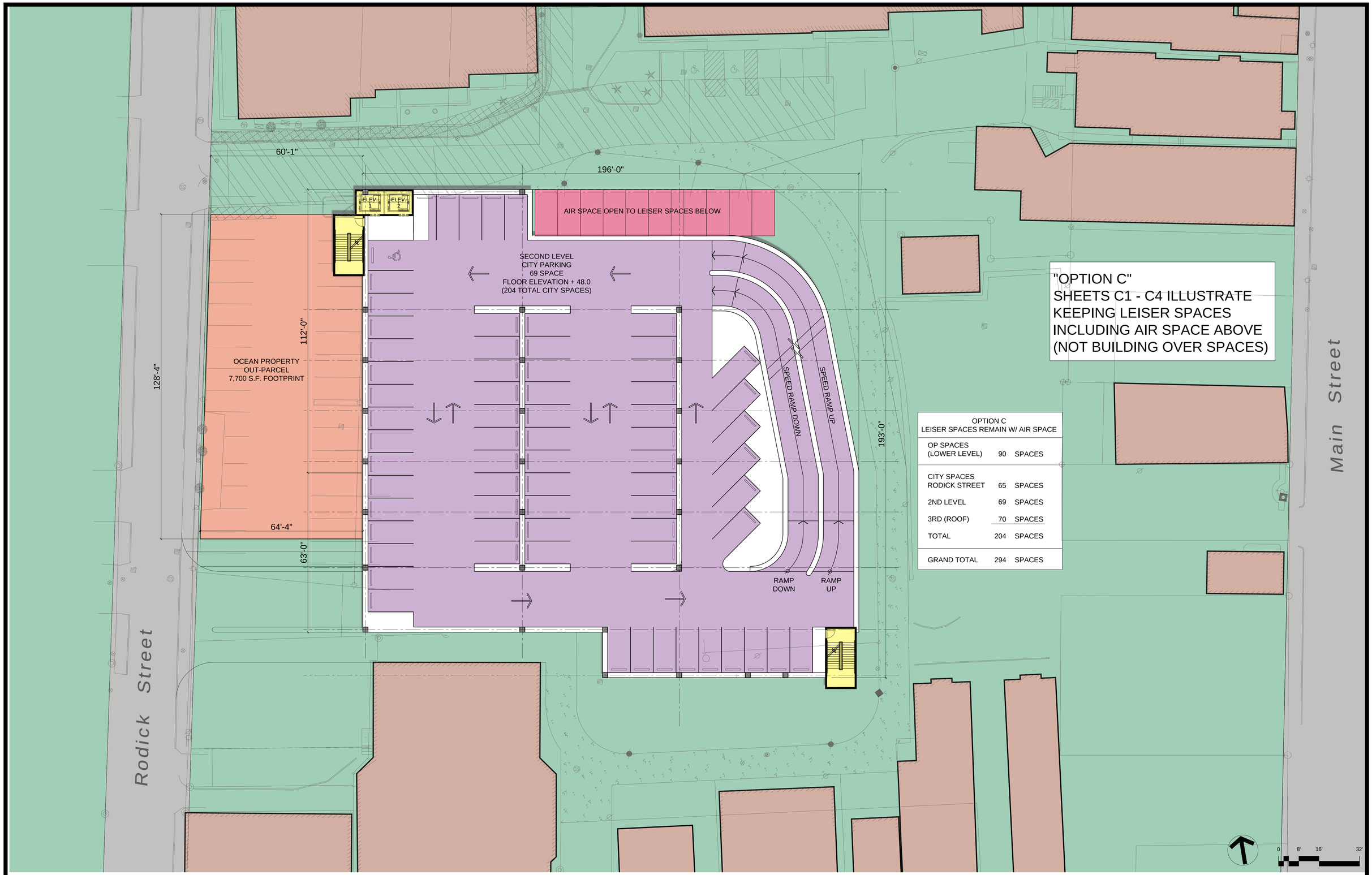
RODICK STREET ACCESS LEVEL
@ +38.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

C-2



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Bermello Ajamil & Partners, Inc.

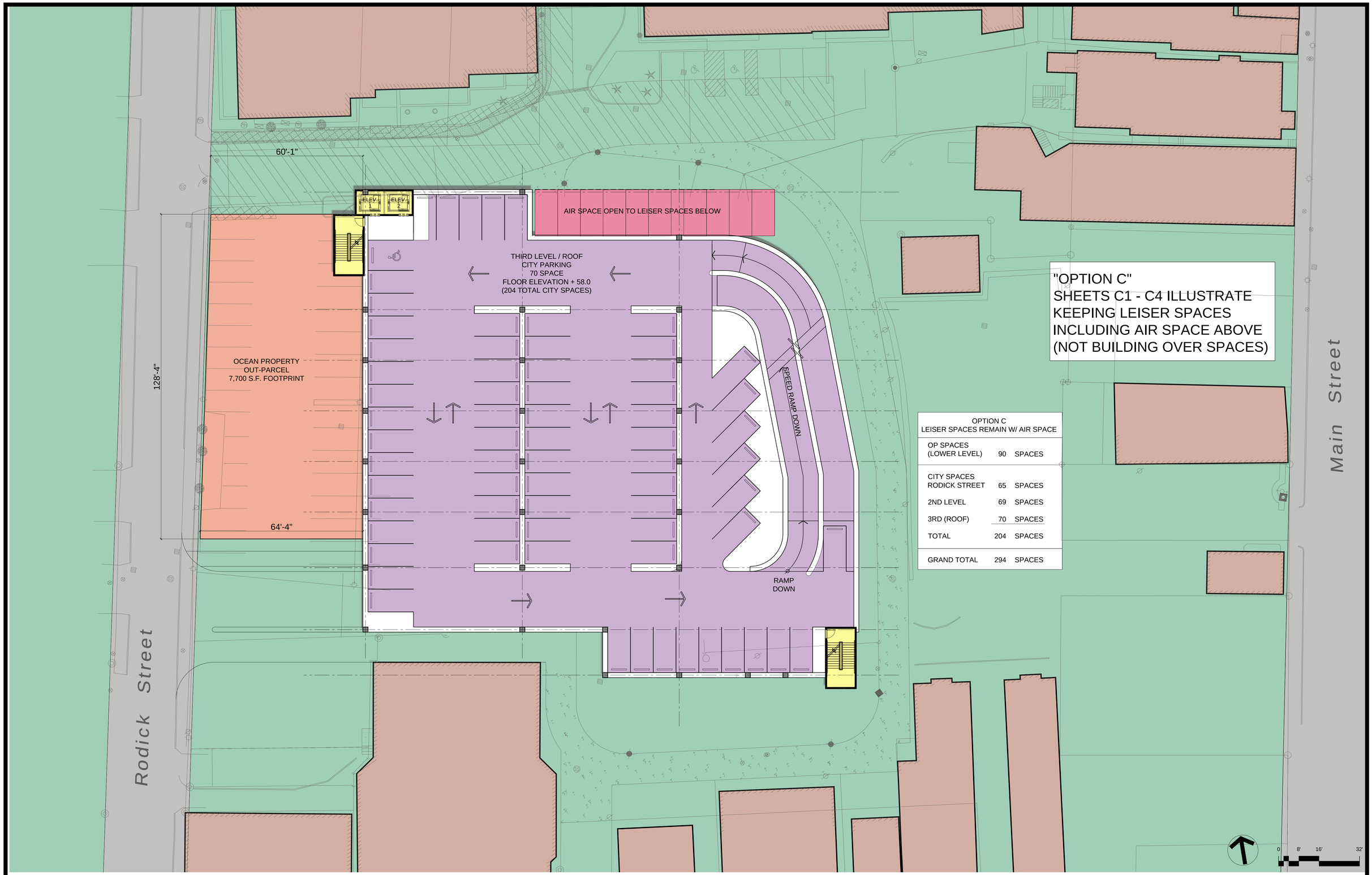
SECOND LEVEL
@ +48.0'
SCALE: $\frac{1}{16}$"=1'-0"

BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

C-3



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BAR HARBOR PARKING STUDY

PHASE 4 PLANS - JUNE 2015

TOWN OF BAR HARBOR,
HANCOCK COUNTY, MAINE

C-4