DATE: MARCH 24, 2018
TO: BRUCE ANDERSON
COMPANY: CUTLER ANDERSON ARCHITECTS
ADDRESS: 135 PARFITT WAY SW
CITY/STATE: BAINBRIDGE ISLAND, WA
COPY TO:
FROM: DANIEL GARCIA, JEFF WECKSTEIN, STEFFEN TUROFF, MANUEL SOTO
PROJECT NAME: WINSLOW HOTEL PROJECT
PROJECT NUMBER: 39-1067.00

The purpose of this memorandum is to present the preliminary findings of our shared parking analysis for the Winslow Hotel Project in Bainbridge Island, Washington. Upon receiving feedback and client input, Walker can further refine the model and build upon this preliminary analysis to address the parking-related issues and priorities of the client. The following assumptions were used in developing these findings:

- Walker assumed the hotel project to be primarily a leisure hotel.
- The hotel was assumed to contain 70 rooms.
- Walker gathered census data to determine the employee drive ratio for the project.
- Guest drive ratios were taken from Walker's experience with similar projects.
- The convenience of the Bainbridge Island Ferry as a key transportation link to most of the Seattle area as well as Hotel patrons arriving at Seattle Tacoma International Airport was taken into account, as was the Hotel's plans for encouraging and accommodating guests who arrive without a car.
- Walker consolidated the programming data that was provided by the client into five general land uses (as shown in Figure 1).

SUMMARY OF CONCLUSIONS/RECOMMENDATIONS/NEXT STEPS

- The shared parking model recommends a parking supply of 120 parking spaces to accommodate peak design day demand, which is projected to occur at 9:00 PM on a weekend, likely in summer.
    - Design day projections assume that 3,600 square feet of the event space (main ballroom and pre-function) is used by a large party
    - Hotel guests (47 spaces) and event guests (57 spaces) make up the main components of needed parking supply at peak, with the remainder made up of hotel employees and external patrons of the hotel restaurant/lounge.
- The shared parking model recommends a parking supply of 179 parking spaces to accommodate peak parking demand assuming all 7,359 square feet of event space is in use concurrently, as well as full occupancy of the hotel rooms.
    - Walker recommends parking be planned for design day conditions, with a contingency plan for the max event scenario; building parking spaces that will sit empty for well over 300 days a year is not advised.
- Walker welcomes any input from Cutler Anderson Architects related to the projected mode choice of hotel patrons, and any additional information regarding the projected use of the event spaces.
- Walker considered information provided by Cutler Anderson Architects regarding potential transportation demand management (TDM) measures that the Hotel operator would be willing to deploy that could reduce the recommended parking supply such as:

- Shuttle service to the Bainbridge Island Ferry.
- Subsidized transit for employees.
- Availability of traditional and/or electric bikes to hotel guests.
- Potential deployment of rideshare vehicles such as electric Zipcars at the site, consistent with the Hotel's environmentally conscious ethos.

Figure 1: Consolidated Uses

Hotel Rooms	Restaurant w/Bar	Meeting/ Banquet Space	Spa/Fitness Center	Retail
70 rooms	4,730 sf	7,350 sf	1,670 sf	100 sf

Source: Walker Consultants, 2018

Figure 2 shows how the uses were consolidated. Any uses that were not consolidated are shown in white and not counted towards the parking analysis since they are components accessible only by either hotel employees or hotel guests and will not generate parking demand additive to the hotel guest rooms.

Figure 2: Consolidation of Original Program Data

	Use	SF
Lobby, Front Office, Circulation	Lobby	400
	Front Desk	150
	Luggage Storage + alcove near entry	100
	Ground Floor Circulation	600
	Back Office, Telecom, Reservations, Work Area (immediately behind front desk)	600
Indoor areas "found" spaces	Library	200
	Hospitality alcove with coffee seating	150
Administration	General Manager	200
	Sales/Marketing (two workstations)	200
	Food & Beverage (chef's office)	150
	General Office	200
	Accounting	300
Food & Beverage	Restaurant	
	Dining for 60 - Divisble into Two Sections	1350
	Private Dining - alcoved and open to dining at busy times	450
	Bar - 390sf bar and bar stools, 150sf table and seating, 200 high tops and soft seating, 40sf stage	780
	Morning espresso at bar	0
Meeting and Banquet Space	Main Ballroom - Divisble into 3 breakouts	2400
	Junior Ballroom	1200
	Breakout room one	600
	Breakout room two	450
	Board Room	600
	Wedding Gazebo	0
	Indoor Prefunction Space	1200
	Circulation, Restrooms, Coatroom	1000

	Use	SF
Food Services and Facilities	Main Kitchen	2000
	Banquet Kitchen and Dish-Up	0
	Room Service	150
	Food Storage (including walk-ins)	500
	Wine & Beer Storage	80
	Conference Services - rear service including storage for table and chairs	900
	AV Storage	120
Hotel Service Entrance, Receiving and Storage	Purchasing/Receiving Office	120
	Loading Docks (covered)	200
	Trash/Recycling Storage	120
	General Storage	500
Spa & Fitness	Total Spa sf	1670
	Fitness sf	600
	Shared - Steam Room (350sf) and Dry Sauna (300sf)	650
	Men's and Women's lockers, plus shower and restroom (300sf each)	600
Retail	Sundry Shop	100
	Apparel	0
	Business Center	0
Hotel Employee Facilities	Two unisex bathrooms	160
	Men's and Women's Lockers	250
	Employee Breakroom	150

Source: Walker Consultants, 2018

SHARED PARKING METHODOLOGY

This study entails a parking needs analysis that relies on estimates of parking requirements based on recommendations in studies from the Urban Land Institute (ULI), and namely Shared Parking[1]. For the analysis herein, Walker employed the use of a shared parking model to assess projected demand. Shared parking methodology was developed in the 1980s and has been a widely-accepted industry standard for rightsizing parking facilities over the past 30+ years. Adopted by cities throughout the U.S., and codified in zoning ordinances as an acceptable practice, shared parking is endorsed by the ULI, the American Planning Association (APA), the National Parking Association (NPA), and International Council of Shopping Centers (ICSC), as an acceptable method of parking planning and management.

Shared parking allows for the sharing of parking spaces among uses in a mixed-use environment—in lieu of providing a minimum number of parking spaces for each individual use. Shared parking commonly results in a reduction of required parking spaces. This reduction, which is sometimes significant, depends on the quantities and mix of uses and local code requirements.

Shared Parking is defined as the ability to use the same parking resource by multiple nearby or adjacent land uses without encroachment. Shared parking takes into account the parking demand for more than 45 different land uses; the availability and use of alternative modes of transportation; captive market effects[2]; and daily, hourly, and seasonal variations. In the case of the Winslow Hotel Project, a shared parking analysis recognizes the interrelationship of parking among the proposed hotel, restaurant, spa uses as well as the meeting/banquet uses.

A shared parking model generates 456 parking computations as follows:

- 19 hours during a day, beginning at 6 a.m. and concluding at 1 a.m.
- 2 days per week, a weekday and a weekend day
- 12 months of the year
- 19 x 2 x 12 = 456 different calculations

The recommended parking capacity is derived based on the highest figure generated from these 456 computations. Therefore, the intent is to design for the busiest hour of the year, busiest day of the year, and busiest month of the year, at an 85th percentile level of parking demand relative to similar properties.

A shared parking analysis begins first by taking the land use quantities of the project, e.g., number of hotel rooms, and multiplying by a base parking demand ratio and monthly and hourly adjustment factors. All base ratios and hourly and monthly adjustments are industry standards that are based on thousands of parking occupancy studies, vetted by leading parking consultants and real estate professionals, and documented within the Second Edition of ULI/ICSC's Shared Parking.

[1] Shared Parking, Second Edition. Washington DC: ULI-The Urban Land Institute, 2005.

[2] Recognition of a user group already on site for another primary purpose and not generating incremental parking demand for an accessory use. For example, a sandwich shop located in an office tower generates very little, if any, outside parking demand. Since the parking demand for the office tower tenants has already been accounted for, to avoid double counting, a non-captive adjustment factor is applied to the parking demand calculation for the sandwich shop. In this extreme example, the non-captive ratio may be 0 percent.

Walker, as the analyst for this particular study and in accordance with standard shared-parking methodology, applies two additional adjustments to the base parking demand ratios, one to reflect an estimate of the local transportation modal split (called the driving ratio) and another to account for the best estimate of captive market effects (called the non-captive ratio). These will all be described in more detail in the sections to follow.

The following graphic provides an illustrative view of the steps involved in the shared parking analysis. This graphic is used within this document to help the reader understand the shared parking process and to also assist in communicating the step of the analysis that is being described within this memorandum. The Shared Parking Analysis section follows this graphic in consecutive order, moving from left to right, and in subsequent sections, the gray highlighted section of the graphic (note: all sections are highlighted in Figure 3) designates the step that is being described.

Figure 3: Steps of Shared Parking Analysis

Land Use Units (Number of rooms, square footage, etc.)	X	Standard or Base Parking Generation Ratio	X	Monthly Factor	X	Hourly Factor	X	Driving Ratio	X	Non-Captive Ratio	=	TOTAL

Source: Walker Consultants, 2018

For most land uses, shared parking is based on the 85th percentile of peak-hour observations, a standard espoused by the ITE, the NPA's Parking Consultants Council, and renowned parking planners. This 85th percentile is a significant and high threshold to meet in terms of supplying parking capacity in that it is provides a parking supply that will not be needed by a majority of developments. The 85th percentile recommendation is informed by field data counts in the fourth edition of ITE's *Parking Generation*[3] and this threshold represents the 85th percentile of peak-hour observations supplied during the study. Comparatively, an average hotel project could be expected to generate parking needs near the 50th percentile level of activity.

The key goal of a shared parking analysis is to find the balance between providing adequate parking to support a development from a commercial and operational standpoint and protect the interests of neighboring property owners, while minimizing the negative aspects of excessive land area or resources devoted to parking. The ultimate goal of a shared parking analysis is to find a peak period, reasonably predictable worst-case scenario, or design day condition.

Allowing multiple land uses and entities to share parking spaces has allowed for and led to the creation of many popular real estate developments and districts, resulting in the combination of office, residential, retail, hotel, and entertainment districts that rely heavily on shared parking for economic viability while providing parking accommodations to meet the actual demand generated by the development. Traditional downtowns in large and small cities alike have depended on the practice in order to be compact, walkable, and economically viable. In the same way, mixed-use projects have also benefited from the shared-parking principle, which offers multiple benefits to a community, not the least of which is a lesser environmental impact due to the reduction in required parking needed to serve commercial developments, as well as the ability to create a more desirable mix of uses at one location, all the while ensuring that parking supply is designed for the busiest hour of the year, busiest day of the year, and busiest month of the year, at an 85th percentile relative to similar properties.

[3] Parking Generation, Fourth Edition. Washington DC: Institute of Transportation Engineers, 2010.

SHARED PARKING ANALYSIS

In accordance with accepted shared-use methodology, this section of the memorandum documents the steps taken to appropriately determine a recommended parking capacity for the project. Base parking generation ratios, representing weekday and weekend conditions, are taken verbatim from the Second Edition of ULI's *Shared Parking* and multiplied by the Project's land use quantities, yielding a product which is then adjusted by multiplying by hourly and monthly factors for each of the project's respective land uses. These are called "presence factors". Two final adjustments are made to the standard or base parking generation ratios. One adjustment discounts the demand to account for local transportation modal split characteristics, recognizing that not everyone drives an automobile for every trip, and a second adjustment is made to avoid double counting attendees who are on-site for more than one reason and are therefore not creating additive parking demand. These last two calculations are referred to as the "driving ratio" and "non-captive" adjustments. The balance of this section of the memorandum documents the math that underlies this analysis, following the steps listed below.

LAND USE UNITS: BUILDING PROGRAM DESCRIPTION

The consolidated proposed land uses were previously shown in Figure 1. Since Walker's goal with shared parking analysis is to project the recommended parking supply for a typically busy "85th percentile" day, two scenarios have been prepared related to the event space. The first is the typically busy day scenario, which would involve a large gathering utilizing the main ballroom and pre-function space. The second is a worst-case scenario assuming all event spaces are being used simultaneously. Walker recommends planning the parking supply to accommodate the typically busy day, with a contingency plan for the worst-case scenario.

Step 1: Identification and Quantification of Project Land Use Components

Land Use Units (Number of rooms, square footage, etc.)	X	Standard or Base Parking Generation Ratio	X	Monthly Factor	X	Hourly Factor	X	Non-Captive Ratio	X	Driving Ratio	=	TOTAL

Source: Walker Consultants, 2018

Table 1: Summary of Proposed Development

Land Use Component	Scenario	
	Design Day	Worst-Case
Hotel	70 rooms	70 rooms
Restaurant/Bar	4,730 SF	4,730 SF
Meeting/Banquet Space	3,600 SF	7,350 SF
Spa	1,670 SF	1,670 SF
Sundry Shop	100 SF	100 SF

Source: Cutler Anderson Architects, 2018

STANDARD OR BASE PARKING GENERATION RATIOS

Simply put, the base parking demand ratios represent how many spaces should be supplied to each use if the spaces are unshared, and the project is located in a suburban context where the driving ratio is at or near 100 percent. The following table documents the base parking generation rates employed, rates taken verbatim from the Second Edition of Shared Parking, and informed by thousands of field parking occupancy studies performed by parking and transportation professionals over decades. These ratios have been vetted by a team of consultants who specialize in parking demand analyses and who mutually agreed upon the use of these ratios prior to the publication of the Second Edition of Shared Parking.

Step 2: Application of Standard or Base Parking Generation Ratios

Land Use Units (Number of rooms, square footage, etc.)	X	Standard or Base Parking Generation Ratio	X	Monthly Factor	X	Hourly Factor	X	Non-Captive Ratio	X	Driving Ratio	=	TOTAL

Source: Walker Consultants, 2018

Table 2: Standard or Base Parking Generation Ratios

Land Use	Weekday		Weekend		Unit
	Visitor	Employee	Visitor	Employee	
Retail	2.90	0.70	3.20	0.80	/ksf GLA
Hotel Spa/Salon	3.00	3.00	3.00	3.00	/ksf GLA
Hotel-Leisure	0.90	0.25	1.00	0.18	/room
Restaurant/Lounge	10.00		10.00		/ksf GLA
Meeting/Banquet (20-50 sq ft/key)	30.00		30.00		/ksf GLA

Source: Shared Parking, Second Edition; Urban Land Institute; and International Council of Shopping Centers, 2005, Walker, 2018
Note: GLA = Gross Leasable Area

PRESENCE FACTORS

After the Project's land uses have been quantified and standard or base parking generation ratios have been applied to these land use quantities, adjustments are made to account for parking demand variability by hour of day and month of year. This is referred to as a "presence" adjustment.

Step 3: Application of Presence Factors

Land Use Units (Number of rooms, square footage, etc.)	X	Standard or Base Parking Generation Ratio	X	Monthly Factor	X	Hourly Factor	X	Non-Captive Ratio	X	Driving Ratio	=	TOTAL

Source: Walker Consultants, 2018

Presence is expressed as a percentage of peak potential demand modified for both time of day and month of the year. The fact that parking demand for each component may peak at different times generally means that fewer parking spaces are needed for the project than would be required if each component were a freestanding development.

NON-CAPTIVE ADJUSTMENT RATIO

A shared parking analysis recognizes that people often visit two or more land uses housed within the same development site, without increasing their on-site parking use. For example, at some events, a portion of the guests may also be staying at the hotel. A non-captive ratio allows for an adjustment to the parking needs analysis by taking into account the portion of on-site visitors who are already accounted for as hotel guest parking demand, and are therefore not creating additional parking demand. In this example, the hotel restaurant and hotel event space demand is captive to hotel demand and therefore care must be taken in the shared parking analysis to avoid double counting. This double counting is avoided by applying what is referred to as a "non-captive ratio."

Non-captive ratios can vary from one property to the next and from one function to the next within the same property. Typically, a reduction ranging from 20 to 70 percent has been used by parking and transportation professionals to fine tune the parking requirements for mixed-use projects with primary attractors and secondary attractors. The non-captive ratios included herein are intended to be reasonable and appropriate adjustments.

Step 4: Application of Non-Captive Adjustment

Land Use Units (Number of rooms, square footage, etc.)	X	Standard or Base Parking Generation Ratio	X	Monthly Factor	X	Hourly Factor	X	Non-Captive Ratio	X	Driving Ratio	=	TOTAL

Source: Walker Consultants, 2018

Since the hotel is modeled as the primary demand generator for the site, a 100 percent non-captive rate was applied for hotel guests and employees. This means that 100 percent of hotel guests are arriving on site with the intention of staying at the hotel. Additionally, employee parking across all uses was kept at a 100 percent non-captive ratio because they would be arriving on site with the intention of employment. For accessory uses,

adjustments were applied. The hotel restaurant/ lounge and spa were seen as accessory uses primarily serving existing hotel guests. For this reason, a 50 percent non-captive ratio adjustment was applied. This assumes 50 percent of users will arrive on site creating additional parking demand for these uses. Furthermore, the hotel sundry shop, due to its size, was seen as a use almost exclusively serving hotel guests. For this reason, a 25 percent non-captive adjustment ratio was applied. The non-captive ratio for event space is likely to vary from event to event; however, a baseline non-captive ratio of 60% on weekdays and 70% on weekends was applied based on Walker's experience. A summary of the non-captive ratios is shown below in Table 3.

Table 3: Non-Captive Ratio Summary Table

	Non-Captive Ratio	
Visitors	Weekday	Weekend
Hotel Guests	100%	100%
Spa	50%	50%
Restaurant/Lounge	50%	50%
Sundry Shop	25%	25%
Event Space	60%	70%

Source: Walker Consultants, 2018

DRIVING RATIO ADJUSTMENT

A driving ratio adjustment is the percentage of patrons and employees that are projected to drive to the site in a personal vehicle, expressed as a ratio. This excludes all non-driving modes of transportation including shuttle bus, taxi, ride-hailing (Lyft/Uber), walking, and carpooling passengers. Driving-ratio adjustments were made to the base ratios based on U.S. Census data (American Community Survey). Based on United States Census 2015 American Community Survey data, approximately 54% of those who work on Bainbridge commute to work in a single occupant vehicle and 4% carpool, the majority of which are in a two-person carpool (Table B08406).

Based on the data, we have assumed that 42% of employees commute by a non-auto mode.

A drive ratio of 80% was assumed for hotel guests.

Step 5: Application of Driving Ratio

Land Use Units (Number of rooms, square footage, etc.)	X	Standard or Base Parking Generation Ratio	X	Monthly Factor	X	Hourly Factor	X	Non-Captive Ratio	X	Driving Ratio	= TOTAL

Source: Walker Consultants, 2018

SUMMARY

The table below summarizes the shared parking analysis and recommended number of spaces which peaks on a Saturday at 9pm.

Table 4: Total Weekend Recommended Number of Spaces from Shared Parking Analysis

	Land Use Units	Base Ratio	Monthly Factor	Hourly Factor	Driving Ratio	Non-Captive Ratio	July 9:00 pm Total
Hotel	70 rooms	1.00 /room	100%	95%	70%	100%	47
Hotel Employee	70 rooms	0.18 /room	100%	55%	63%	100%	5
Restaurant/ Lounge	4,730 SF	10.0 /KSF	98%	67%	70%	50%	11
Hotel Sundry Shop	100 SF	3.2 /KSF	64%	50%	100%	25%	0
Hotel Sundry Employee	100 SF	0.8 /KSF	80%	65%	63%	100%	0
Spa	1,670 SF	3.00 /KSF	65%	0%	100%	50%	0
Spa Employee	1,670 SF	3.00 /KSF	75%	0%	63%	100%	0
Meeting/ Banquet Space	7,350 SF*	30.0 /KSF	100%	100%	75%	70%	57
Note: All figures 0.50 and greater are rounded up to the next whole number and then totaled. *Restaurant space includes kitchen space.* **Event square footage is projected to be at partial capacity, not full capacity during the design day for parking.* TOTAL							120

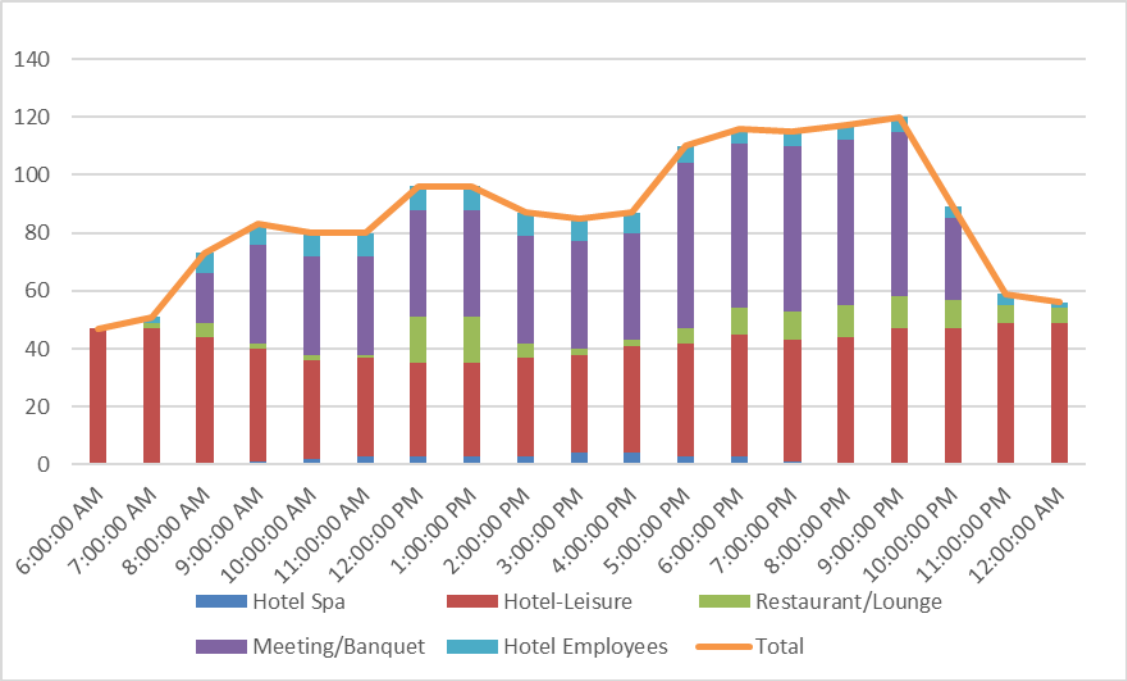
Source: Walker Consultants, 2018

For a high demand weekend, representing a sellout[4] of hotel guest rooms and an 85th percentile-level of activity relative to other similar properties, the shared parking model recommends 120 total spaces. The highest demand generator for the site, as seen above, is the event space, followed by the hotel rooms.

The following figure displays the demand fluctuations throughout an entire day for the weekend. Both graphs display the fluidity of demand based on the uses and adjustments factored into the analysis. It is important to note that when one use peaks (spa for example), another use may be in a lull (hotel restaurant/ lounge/event space). These relationships, in part, are what allow for the reduction in the number of spaces needed.

[4] Hotel guest room occupancy rates in the U.S. average around 70 percent over a year and the calculations included herein are based on 100 percent occupancy.

Figure 4: Shared Parking Projection by Hour of Day for a Weekend



Source: Walker Consultants, 2018

Walker also ran the shared parking model assuming that all of the event space (7,350 square feet) is used concurrently, a condition expected to occur rarely and which the Hotel would be able to control (and plan). Under this scenario, the meeting/banquet space generates the need for an additional 59 parking spaces, for a total of 179 parking spaces. As mentioned previously, Walker recommends designing the parking supply for a design day scenario, with a contingency plan to accommodate a max event type scenario.

PARKING INVENTORY

Walker has reviewed the applicant's plan to provide 96 off-street and 6 on-street parking spaces, for a total of 102 on-street spaces to provide parking at the Hotel site, taking into account some valeting of vehicles on the site, for greater space efficiency, when needed. The plan also includes the use of up to 40 commercial spaces across the street from the project site, that have been identified as available after 6:00 pm.[5] Finally, additional available, privately-owned parking spaces within walking and shuttle distance have also been identified proximate to the Hotel site.

For most hours on most days of the year, the 102 spaces are projected to be sufficient to provide parking for the Hotel and its auxiliary uses. To supply the recommended number of parking spaces for a design day, the use of some spaces in the commercial center across the street will provide sufficient parking capacity to meet the

[5] In most commercial districts, privately owned off-street parking experience the lowest occupancy rates, and sit empty much of the time. The sharing of these spaces by other land uses in the area is a (parking) planning best practice.

recommended parking supply. Under the worst-case scenario, the use of additional, available private parking in the area is a reasonable strategy to accommodate occasional peaks in event parking demand.