HEATH&ASSOCIATES

June 7, 2024

To: David Boe Boe Architects

From: Linda Cuadra Heath and Associates

Subject: Trip Generation and Parking Memo - Bonney Watson SeaTac Major CUP

The memorandum addresses comments from the City of SeaTac on the proposed Bonney Watson SeaTac Major CUP. It discusses trip generation and parking for the proposed changes at the SeaTac location. A project description is provided below.

PROJECT DESCRIPTION

- Bonney Watson is proposing construction of a 7,500 square foot Celebration of Life Pavilion (Pavilion), as well as relocating the existing POW/MIA Memorial, at the existing cemetery in the City of SeaTac.
- The project would include creation of an area for parking vehicles in a cortege arrangement, a common arrangement for cemeteries. Vehicles will parallel park alongside internal one-way roadways. These would be adjacent to the Pavilion.
- The Pavilion is intended as an alternative location for end-of-life celebrations that now take place in other areas of the cemetery.

Figure 1 shows the site vicinity of the project. Access to the Bonney Watson facility will continue to be via three existing access points: at S 170th Street on the south, at International Boulevard/Hwy 99 on the east, and at Host Road on the west. **Figure 2** illustrates the concept for site usage and cortege parking.







Bonney Watson SeaTac Major CUP Trip Generation and Parking Memo



TRIP GENERATION

Trip generation is used to determine the level of traffic related to a specific development or redevelopment. This is usually denoted by the number of new trips that enter and exit a project during a designated time period, such as a specific peak hour (AM or PM) or an entire day. Data presented in this memo was derived from the Institute of Transportation Engineer's publication *Trip Generation Manual*, 11th Edition.

The proposed improvements are referred to as the Summit View Development Site. The subject area measures 56,800 square feet, or ~1.3 acres. The designated land use for this project in the *Trip Generation Manual* is defined as Cemetery (LUC 556). Acres were used as the input variable and average rates used to determine trip ends. **Table 1** summarizes the estimated project trip generation. Included are the average weekday daily traffic (AWDT) and the AM and PM peak hour vehicle trips. Refer to the appendix for trip generation specifics.



Table 1: Project Trip Generation								
Land Lico			AM Peak-Hour Trips			PM Peak-Hour Trips		
Land Use	Acres	AWDI	In	Out	Total	In	Out	Total
Cemetery (LUC 566)	1.3	8	0	0	0	0	1	1

Based on the data presented in Table 1, if the project actually resulted in additional services on weekdays, it is anticipated to generate 8 average weekday daily trips. No trips would occur in the AM peak hour and 1 trip (0 inbound, 1 outbound) during the PM peak hour.

It should be noted that Bonney Watson does not intend to add to their daily services, but rather offer an alternative location for services. Consequently, no new trips to or from the site are expected. Therefore, the ITE data, while nominal, could be considered conservative.

Generally, cemeteries offer services later in the morning (starting at 10:00 AM) or early in the afternoon (starting before 2:00 PM). Afternoon services are more common because they allow attendees to leave work for the latter part of the day rather than the full day. An earlier afternoon service allows private drivers and the funeral cortege to avoid peak traffic time (the same is true for morning services). In the Pacific Northwest, it is not practical to have late afternoon services during many months of the year due to early sunset.

A review of one year of service data from Bonney Watson supports a very low midweek activity rate. Data from 2019 shows an average of 64 services per year on a midweek day (Tuesday, Wednesday, or Thursday)¹. This equates to a little more than one event per midweek day. As stated above, the proposed changes are not intended to increase the level of activity at the cemetery, but rather to offer an alternative location for services within the grounds. As shown by ITE data and the information on existing cemetery practices, assuming one new PM peak hour trip is reasonable.

¹ Data from 2020 - 2023 were not used due to pandemic influences.



PARKING

The City of SeaTac does not have parking standards for cemeteries. Parking is commonly accommodated along the internal roadways near the service area in cemeteries. Therefore, parking requirements should rely on the proposed internal use at the cemetery, typical practice at cemeteries, and minimizing roadways and paved parking.

Cemeteries rely on cortege, or internal roadside verge parking, for many services. This allows for minimizing nonporous surfaces and is in keeping with the parklike setting often desired in cemeteries. This also allows visitors to park near their intended visiting location. The US Department of Veteran's Affairs recommends this type of parking in their *Design Guidelines* (2024). This is a long-standing practice for both National and private cemeteries.

In fact, cemeteries are largely empty for much of the day. Even when there are services, the area used for a service and parking is quite small compared to the overall size of the cemetery.

Those attending services will travel along internal roadways until reaching the designated parking strips along the one-way circulation aisles. Drivers will then parallel park on both sides of the drive aisle. **Figure 3** shows the location of the proposed parking near the Pavilion.





CONCURRENCY

Per the City of SeaTac Municipal Code (11.50.040), if a change of use does not occur, no concurrency evaluation shall be required. Further, this project would result in one PM peak hour trip. This very low level would not be expected to impact operations at any off-site locations.

CITY OF SEATAC STAFF COMMENTS

According to comments from City of SeaTac staff, a traffic study would be required as part of the project. However, with only one and possible no additional PM peak hour trips, no additional analyses are identified at this time. Although the City has no specific code provisions for cemeteries, parallel parking along internal roadways is a common practice that maximizes the use of available space. Since parking needs are temporary and only required during services, creating additional designated parking areas would result in spaces that remain unused most of the time.

SUMMARY

The Bonney Watson SeaTac Major CUP project would alter an existing area of the cemetery to provide a Pavilion space for services. The new space is not intended to create additional daily services, but rather to provide an alternative location for services. Applying ITE data for the subject area around the Pavilion space (~1.3-acres), an additional 8 daily trips and 1 PM peak hour trip is anticipated.

Please contact me should you have any question or require anything further,

Linda Cuadra, Transportation Planner



BONNEY WATSON SEATAC MAJOR CUP TRIP GENERATION AND PARKING MEMO

APPENDIX ITE TRIP GENERATION DATA



Cemetery (566)			
	Vehicle Trip Ends vs: On a:	Acres Weekday	
	Setting/Location: Number of Studies:	General Urban/Suburb	an
	Avg. Num. of Acres: Directional Distribution:	52 50% entering, 50% exiting	
Vehicle Trip Gener	ation per Acre		
Average Rate	Range o	Range of Rates	
6.02	4.00 - 9	9.27	1.66

Data Plot and Equation

Caution – Small Sample Size



Trip Gen Manual, 11th Edition

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Cemetery (566)				
Vehicle Trip Ends vs: On a:	Acres Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.			
Setting/Location:	General Urban/Suburban			
Number of Studies:	4			
Avg. Num. of Acres:	59			
Directional Distribution:	80% entering, 20% exiting			

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.17	0.09 - 0.28	0.06

Data Plot and Equation

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Cemetery (566)				
Vehicle Trip Ends vs:	Acres			
On a:	Weekday,			
	Peak Hour of Adjacent Street Traffic,			
	One Hour Between 4 and 6 p.m.			
Setting/Location:	General Urban/Suburban			
Number of Studies:	4			
Avg. Num. of Acres:	59			
Directional Distribution:	31% entering, 69% exiting			

Vehicle Trip Generation per Acre

Average Rate	Range of Rates	Standard Deviation
0.46	0.17 - 0.84	0.29

Data Plot and Equation

Caution – Small Sample Size



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APPENDIX SITE PLAN



