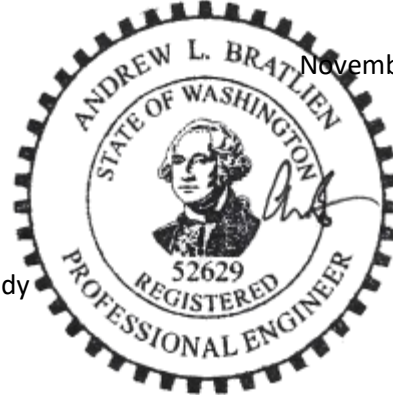


November 17, 2023

TO: Tom Decker, Anacortes Rotary Club

FROM: Andrew L. Bratlien, PE, PTOE
Daniel Hodun, EIT

SUBJECT: Cap Sante Viewpoint Traffic and Parking Study
Revised November 17, 2023
TSI #223047



This memorandum documents the methods, assumptions, and findings of the traffic and parking analysis for the Cap Sante Viewpoint improvement project, herein referred to as “the Project,” located in Cap Sante Park in Anacortes, Washington.

PROJECT DESCRIPTION

Cap Sante Viewpoint is a scenic lookout located in Cap Sante Park, a 37-acre City park located at the terminus of the V Avenue/W Avenue corridor in Anacortes. The site consists of a paved parking lot surrounded by several lookout locations, viewing benches, and an informational kiosk. Nonmotorized access to the site is provided via the Rotary Viewpoint Trail.

Vehicle parking is provided at the paved summit parking lot and at a lower summit parking pullout located approximately 600 feet north of the viewpoint. Parking for the Rotary Viewpoint Trail is provided at a base area parking lot on the east side of T Avenue south of the Anacortes Yacht Club.

A vicinity map is shown in **Figure 1**.

The Project proposes improvements to include a defined viewing platform with enhanced sight lines, ADA-accessible facilities, and parking improvements.

EXISTING CONDITIONS

Existing Streets and Trails

V Avenue/W Avenue is a north-south local street corridor which begins as V Avenue at 2nd Street to the north of the Project and proceeds to the south, becoming W Avenue approximately 0.3 miles north of the Project. The corridor terminates in a parking lot at the Cap Sante Viewpoint. V Avenue from 4th Street to 5th Street, V Avenue consists of a 24-30-foot paved width. South of 5th Street, the corridor narrows to a 16-20-foot paved width. V Avenue/W Avenue includes no lane markings, shoulders, or dedicated nonmotorized facilities. The posted speed limit is 25 mph.

Rotary Viewpoint Trail is an off-street gravel trail which provides nonmotorized access to the Project site. It begins to the east of Rotary Park and proceeds approximately 1,900 feet to the southeast, terminating at the Cap Sante Viewpoint. The trail includes directional signage and informational kiosks which direct users toward the Cap Sante Viewpoint.



Figure 1. Vicinity Map

Parking Facilities

Off-street parking is provided in three locations in the site vicinity. The summit parking lot includes 14 unmarked parking spaces at the Project site, based on City of Anacortes minimum parking dimensions as defined in Anacortes Municipal Code (AMC) 19.64.050. The lower summit parking pullout located on the southwest side of W Avenue approximately 600 feet north of the site is 37 feet wide, which is sufficient to support four perpendicular parking spaces, based on a minimum perpendicular parking space width of nine feet per AMC 19.64.050. The base area parking for Rotary Viewpoint Trail includes five parking spaces designated for Rotary Viewpoint Trail parking.

In addition to the designated parking facilities described above, overflow parking is available to the public south of the trailhead on T Avenue or at the adjacent Cap Sante Marina parking area west of the trailhead when spaces are open. The Cap Sante Marina parking lot includes approximately 200 parking spaces. A limited number of these parking spaces may be available for public use depending on marina use. Existing parking facilities are summarized in **Table 1**.

Table 1. Existing Parking Facilities

Name	Distance from Project Site	Existing Parking Spaces
Summit Parking	On-site	14 spaces
Lower Summit Parking Pullout	600 feet	4 spaces
Base Area Parking for Rotary Viewpoint Trail	1,900 feet via trail	5 spaces
Existing Parking Supply		23 spaces*

*The Cap Sante Marina parking lot includes approximately 200 parking spaces. A limited number of these parking spaces may be available for public use depending on marina use

Traffic Volume

Traffic counts were collected on V Avenue south of 4th Street for seven days from Monday, September 18, 2023 through Sunday, September 24, 2023. The street, which serves as the primary vehicle access route to the Project, serves a weekly average of 620 vehicles per day (vpd).

Highway Functional Classification Concepts, Criteria and Procedures (FHWA 2013) provides volume guidance based on roadway functional classification, identifying a typical range of up to 700 vpd for urban local streets. Based on FHWA guidance, V Avenue operates well within the range of typical volumes for local streets.

Traffic Speed

Historical travel speed data for V Avenue/W Avenue from 4th Street to the Cap Sante Viewpoint were acquired from the TomTom Move data platform for the 12-month period from August 2022 through July 2023. This data reflects travel speeds collected from smartphones, GPS units, and other location-enabled devices.

Peak travel speed along the V Avenue/W Avenue corridor occurs between 5th Street and 6th Street, where median travel speed is 21 mph. The 85th percentile travel speed, defined as the speed which is exceeded by no greater than 15 percent of all drivers, is 28 mph on V Avenue between 5th Street and 6th Street. This exceeds the posted 25-mph speed limit by 3 mph.

Safety Performance

Crash data for the V Avenue/W Avenue corridor were obtained from the Washington State Department of Transportation (WSDOT) for the five-year period from 2018 to 2022.

Three crashes were reported in the timeframe, an average frequency of 0.6 crashes per year. All three crashes were single-vehicle incidents involving roadway departure or stationary object collisions. No serious injuries or fatalities were reported. The crash history and travel speed analysis indicates no clear safety concerns on the V Avenue/W Avenue corridor.

FUTURE CONDITIONS

Trip Generation

Project-generated trips were forecast using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. Cap Sante Park is consistent with ITE Land Use Code (LUC) #411, “Public Park.” The *Trip Generation Manual* includes average trip generation rates for similar uses expressed for several typical time periods as trips per acre. Cap Sante Park consists of a total land area of 37 acres, of which approximately 20 acres is usable by park visitors. The 20-acre usable area includes the Summit and surrounding walkable area, the Rotary Viewpoint Trail, Marine Stadium, Marine Stadium Trail, and both parking areas. This park area was applied to the trip generation forecast.

The trip generation analysis calculated Project-generated trips using average trip rates for LUC #411. Trip forecasts were developed for the average weekday and weekday PM peak hour as well as the average Sunday and the Sunday peak hour, as summarized in **Table 2**. The weekday PM peak hour, defined as the peak one-hour period of travel demand between 4:00 and 6:00 PM on an average non-holiday weekday, generally corresponds with the period of peak travel demand and congestion during a typical week. The Sunday peak hour represents the period of peak travel demand for public parks, which generally corresponds with periods of low demand on adjacent public streets. The trip generation forecasts shown in Table 2 reflect gross trips generated by the improved Cap Sante Viewpoint site.

Table 2. Project Trip Generation Forecast

Time Period	Size	Trip Rate	% In	Trips In	Trips Out	Total Trips
Weekday Daily	20 ac.	0.78/ac	50%	8	8	16
Weekday PM Peak Hour	20 ac.	0.11/ac	55%	1	1	2
Sunday Daily	20 ac.	2.19/ac	50%	22	22	44
Sunday Peak Hour	20 ac.	0.31/ac	39%	2	4	6

The Project site is anticipated to generate a total of 16 weekday daily trips and 44 Sunday daily trips. Peak hour trip generation will occur on Sunday afternoon, when a total of 6 trips will be generated. Project-generated trips will increase daily travel demand on V Avenue/W Avenue by no more than 6.8 percent.

V Avenue/W Avenue currently serves 620 vehicles per day. *Highway Functional Classification Concepts, Criteria and Procedures* (FHWA 2013) identifies a typical volume range of up to 700 vpd for urban local streets. V Avenue/W Avenue will continue to operate within the range of typical volumes for local streets after the addition of Project-generated trips.

Safety Performance

Three crashes were reported between 2018 and 2022 in the Project vicinity. 85th percentile travel speeds on V Avenue between 5th Street and 6th Street are currently less than 5 mph above the 25-mph posted speed limit. Project-generated trips are not anticipated to impact travel speeds; however, speeds may be monitored after Project completion to confirm continued compliance with posted speeds. If speed limit compliance becomes a concern, the City may consider increased enforcement or dynamic speed feedback signs along V Avenue.

Parking Analysis

The Project's peak parking demand was calculated using data published in the ITE *Parking Generation Manual 5th Edition* for Land Use Code #411 "Public Park." ITE provides peak parking rates as trips per acre. Peak parking demand is anticipated to occur on Sunday between 1:00 PM and 3:00 PM, with an average peak parking rate of 1.21 spaces per acre. The Project peak parking demand was calculated as shown below:

$$\text{Peak Parking Demand} = [20 \text{ acres}] * [1.21 \text{ spaces per acre}] = 24 \text{ spaces}$$

The existing parking supply includes a total of 23 dedicated parking spaces, in addition to approximately 200 spaces in the Cap Sante Marina parking lot adjacent to the base area for Rotary Viewpoint Trail.

The parking analysis indicates that, given the existing parking configuration, an average of one vehicle will be required to utilize available overflow parking during periods of peak parking demand. Two possible mitigation strategies exist for accommodating the average weekly peak parking demand in the available dedicated parking facilities:

1. Expand the lower summit parking pullout to provide a minimum 45-foot width, sufficient to accommodate five perpendicular parking spaces, or
2. Expand the base area parking for Rotary Viewpoint Trail to include one additional parking space.

During special events, overflow parking may be accommodated at the adjacent Rotary Park parking lot.

Signage may be installed at the upper and lower summit parking areas to inform users of the available parking at the Rotary Viewpoint Trail.

FINDINGS

The findings of this analysis are summarized below.

- The Cap Sante Viewpoint will generate 16 weekday daily trips and 44 Sunday daily trips.
- V Avenue/W Avenue provides adequate capacity to support Project-generated trips.
- The available dedicated parking will accommodate the average weekly peak parking demand with the addition of one parking space. This space may be provided at the lower summit parking pullout or the base parking area for Rotary Park Trail.
- During special events and other periods of exceptional parking demand, overflow parking may be accommodated at the Rotary Park parking lot.
- No significant crash history exists on V Ave/W Ave from 4th St to the Viewpoint.
- Traffic speeds on V Avenue may be monitored after Project completion to ensure continued compliance with the 25-mph posted speed. If speed limit compliance becomes a concern, the City may consider increased enforcement or dynamic speed feedback signs along V Avenue.

Attachment 1. Traffic Counts.

TRAFFIC COUNT CONSULTANTS, INC.
 Team@tc2inc.com
 (253) 770-1407

ANACORTES, WASHINGTON
V AVE BETWEEN
4TH ST & 5TH ST
LOC# 01 V TSI23075T

Site Code: 01

Date Start: 18-Sep-23
 Date End: 24-Sep-23

Start Time	18-Sep-23		Tue		Wed		Thu		Fri		Sat		Sun		Week Average	
	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
12:00 AM	3	3	1	0	0	1	1	1	1	1	1	1	1	1	1	2
01:00	3	3	0	0	1	1	0	0	0	0	1	1	2	1	1	1
02:00	0	0	1	2	0	0	0	0	1	1	0	0	1	1	0	1
03:00	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
04:00	1	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0
05:00	2	4	1	0	1	1	2	2	2	2	0	2	0	0	1	1
06:00	7	5	4	4	6	4	4	8	5	3	3	3	2	3	6	4
07:00	13	5	8	11	15	11	8	15	10	7	9	9	5	6	11	8
08:00	15	21	21	19	13	16	14	16	10	8	9	9	12	14	13	16
09:00	24	18	18	17	19	21	17	17	18	25	20	20	17	17	20	20
10:00	21	20	19	17	21	25	17	18	21	24	24	21	23	23	21	21
11:00	19	16	23	24	16	21	18	26	23	28	44	24	24	30	21	27
12:00 PM	29	31	30	28	29	33	34	35	33	31	26	23	23	36	30	31
01:00	25	33	24	24	30	26	29	33	28	27	21	39	38	28	29	29
02:00	25	34	25	22	27	35	30	34	27	24	28	38	31	28	31	31
03:00	23	32	34	32	19	37	28	35	20	17	19	16	18	22	29	29
04:00	14	28	24	24	21	24	21	26	21	20	25	27	25	21	21	27
05:00	16	15	18	15	24	30	21	21	20	22	27	20	17	19	21	21
06:00	8	16	10	8	25	25	15	24	17	20	23	18	15	15	15	18
07:00	16	21	8	8	20	27	19	18	28	10	18	11	9	9	15	18
08:00	7	7	6	7	9	10	12	14	9	8	4	4	4	6	8	9
09:00	9	10	7	6	6	10	8	5	10	13	14	1	1	2	7	7
10:00	7	6	0	0	3	1	3	2	0	0	8	6	6	3	4	3
11:00	1	2	3	4	3	4	0	0	3	2	3	1	1	1	2	2
Lane	288	331	293	362	311	362	304	343	313	289	326	280	304	292	328	328
Day	619	619	565	673	673	647	647	652	652	615	584	584	620	620	620	620
AM Peak	09:00	08:00	11:00	10:00	10:00	11:00	11:00	11:00	11:00	10:00	11:00	11:00	11:00	10:00	10:00	11:00
Vol.	24	21	24	21	25	18	26	23	24	24	44	24	30	21	21	27
PM Peak	12:00	14:00	16:00	13:00	15:00	12:00	12:00	12:00	13:00	12:00	14:00	13:00	13:00	12:00	12:00	12:00
Vol.	29	34	36	30	37	34	35	33	31	31	28	39	38	30	30	31

Comb. Total 619 565 673 647 652 615 584 620

ADT ADT 622 AADT 622