April 7, 2021

Mr. Matt Englhard
Proficiency Capital LLC
11777 San Vicente Boulevard, Suite 780
Los Angeles, CA 90049

SUBJECT: TEMESCAL VALLEY BUSINESS PARK (PAR190052) TRAFFIC ASSESSMENT

Dear Mr. Matt Englhard:

This letter has been prepared to summarize the peak hour operations and queuing assessment of the site adjacent intersections for the Temescal Valley Business Park development (**Project**), which is located south of Dawson Canyon Road and east of Temescal Canyon Road in the County of Riverside. Specifically, the peak hour intersection operations and queuing analyses have been updated to determine the appropriate geometric and stacking requirements needed to accommodate the 95th percentile peak hour queues due to the deletion of Driveway 3 on Temescal Canyon Road. As a result of the roadway design for the realigned Temescal Canyon Road and Old Temescal Canyon Road intersection, Driveway 3 was eliminated due to issues related to roadway grade. This traffic assessment is an update to the analysis included in the Temescal Valley Business Park (PAR190052) Traffic Analysis (prepared by Urban Crossroads, Inc., dated December 18, 2020, **2020 Traffic Study**). The peak hour operations have been updated for the following two intersections for all applicable analysis scenarios, while the queuing assessment has been conducted for Horizon Year (2040) With Project traffic conditions only to understand the long-term improvement needs at the realigned Temescal Canyon Road and Old Temescal Canyon Road intersection:

- Temescal Canyon Road & Driveway 2
- Temescal Canyon Road & Old Temescal Canyon Road

TRAFFIC VOLUMES

Traffic volumes for the Project driveways and site adjacent intersections have been obtained from the 2020 Traffic Study for each applicable analysis scenario, with the exception of project-related traffic volumes at Driveway 3 which were reallocated to Driveway 2 on Temescal Canyon Road to account for the elimination of Driveway 3. In addition, the northbound left turn volume has been increased to 935 during the PM peak hour consistent with recent near-by studies for Horizon Year (2040) traffic conditions only.

OPERATIONS ANALYSIS

The peak hour intersection operations analysis has been updated for Temescal Canyon Road at Driveway 2 and Temescal Canyon Road at Old Temescal Canyon Road for EAP (2022), EAPC (2022), and Horizon Year (2040) traffic conditions with the realignment and future extension of Temescal Canyon Road. Since Driveway 3 is no longer proposed to align with Old Temescal Canyon Road, the signal operations at Temescal Canyon Road and Old Temescal Canyon Road can operate with typical protected left-turn phasing (as opposed to the split phasing that was proposed and evaluated as part of the 2020 Traffic Study).

EAP (2022) CONDITIONS

Table 1 shows the updated operations analysis for Driveway 2 on Temescal Canyon Road and the intersection of Temescal Canyon Road at Old Temescal Canyon Road for EAP (2022) traffic conditions. There are no changes to the findings as compared to the 2020 Traffic Study. Peak hour operations analysis results for EAP (2022) traffic conditions are included in Attachment A.

TABLE 1: INTERSECTION ANALYSIS FOR EAP (2022) CONDITIONS

#	Intersection	Traffic Control[2]	Existing (2020)				EAP (2022) With Temescal Canyon Road Extension			
			Delay (sec)[1]		Level of Service		Delay (sec)[1]		Level of Service	
			AM	PM	AM	PM	AM	PM	AM	PM
1	I-15 SB Ramps & Weirick Rd.	TS	20.9	25.7	C	C	22.1	26.8	C	C
2	I-15 SB Ramps & Temescal Canyon Rd.	TS	20.0	35.0	C	D	23.4	35.7	C	D
3	Temescal Canyon Rd. & Trilogy Pkwy.	TS	8.5	11.6	A	B	7.5	12.1	A	B
4	Campbell Ranch Rd. & Temescal Canyon Rd.	TS	28.5	18.0	C	B	29.8	18.3	C	B
5	I-15 NB Ramps & Weirick Rd.	TS	16.5	17.1	B	B	17.1	17.2	B	C
6	I-15 NB Ramps & Temescal Canyon Rd.	TS	26.0	17.7	C	B	27.6	19.2	C	B
7	Temescal Canyon Rd. & Dos Lagos Dr.	TS	16.0	16.7	B	B	17.9	18.3	B	B
8	Temescal Canyon Rd. & Dawson Canyon Rd.	TS	38.3	9.1	D	A	10.9	8.8	B	A
9	Temescal Canyon Rd. & Driveway 1	**CSS**	Future Intersection				14.9	9.7	B	A
10	Temescal Canyon Rd. & Driveway 2	**TS**	Future Intersection				9.6	9.6	A	A
11	Temescal Canyon Rd. & Old Temescal Canyon Rd.	**TS**	Future Intersection				13.3	10.9	B	B
12	Driveway 4 & Dawson Canyon Rd.	**CSS**	Future Intersection				13.1	13.5	B	C
13	Driveway 5 & Dawson Canyon Rd.	**CSS**	Future Intersection				12.4	12.4	B	B
14	Dawson Canyon Rd. & Dawson Canyon Rd.	CSS	11.2	11.0	B	B	11.8	11.4	B	B
15	Dawson Canyon Rd. & Driveway 6	**CSS**	Future Intersection				8.8	9.0	A	A
16	Dawson Canyon Rd. & Driveway 7	**CSS**	Future Intersection				8.7	8.8	A	A

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst

[2] CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

EAPC (2022) CONDITIONS

Table 2 shows the updated operations analysis for Driveway 2 on Temescal Canyon Road while the peak hour operations analysis results for Temescal Canyon Road at Old Temescal Canyon Road is summarized on Table 3 for EAPC (2022) traffic conditions. The lane configurations shown for the intersection of Temescal Canyon Road and Old Temescal Canyon Road on Table 3 have been updated from the 2020 Traffic Study to be consistent with preliminary plans for the realigned intersection. Peak hour operations analysis results for EAPC (2022) traffic conditions are included in Attachment B.

TABLE 2: INTERSECTION ANALYSIS FOR EAPC (2022) CONDITIONS

#	Intersection	Traffic Control[2]	EAPC (2022) With Temescal Canyon Road Extension			
			Delay[1] (secs.)		Level of Service	
			AM	PM	AM	PM
1	I-15 SB Ramps & Weirick Rd.	TS	29.8	31.7	C	C
2	I-15 SB Ramps & Temescal Canyon Rd.	TS	**101.0**	**168.5**	**F**	**F**
3	Temescal Canyon Rd. & Trilogy Pkwy.	TS	23.4	14.5	C	B
4	Campbell Ranch Rd. & Temescal Canyon Rd.	TS	41.3	21.8	D	C
5	I-15 NB Ramps & Weirick Rd.	TS	19.6	17.6	B	B
6	I-15 NB Ramps & Temescal Canyon Rd.	TS	**90.5**	**187.6**	**F**	**F**
7	Temescal Canyon Rd. & Dos Lagos Dr.	TS	24.2	28.1	C	C
8	Temescal Canyon Rd. & Dawson Canyon Rd.	TS	18.0	20.5	B	C
9	Temescal Canyon Rd. & Driveway 1	**CSS**	23.3	12.3	C	B
10	Temescal Canyon Rd. & Driveway 2	**TS**	11.7	9.6	B	A
11	Temescal Canyon Rd. & Old Temescal Canyon Rd.	**TS**	**>200.0**	**>200.0**	**F**	**F**
12	Driveway 4 & Dawson Canyon Rd.	**CSS**	16.8	17.3	C	C
13	Driveway 5 & Dawson Canyon Rd.	**CSS**	15.6	15.5	C	C
14	Dawson Canyon Rd. & Dawson Canyon Rd.	CSS	11.8	11.4	B	B
15	Dawson Canyon Rd. & Driveway 6	**CSS**	8.8	9.0	A	A
16	Dawson Canyon Rd. & Driveway 7	**CSS**	8.7	8.8	A	A

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

TABLE 3: INTERSECTION ANALYSIS FOR EAPC (2022) CONDITIONS WITH IMPROVEMENTS WITH TEMESCAL CANYON ROAD EXTENSION

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
2	I-15 SB Ramps & Temescal Canyon Rd.																	
	- Without Improvements	TS	0	0	0	0	1	1	0	2	1>>	1	1	0	**101.0**	**168.5**	**F**	**F**
	- With Improvements	TS	0	0	0	**1**	1	**2**	0	2	1>>	1	1	0	48.8	53.8	D	D
3	Temescal Canyon Rd. & Trilogy Pkwy.																	
	- Without Improvements	TS	1	1	0	0	1	1	1	0	1	0	0	0	23.4	14.5	C	B
	- With Improvements		Not Applicable															
4	Campbell Ranch Rd. & Temescal Canyon Rd.																	
	- Without Improvements	TS	1	0	1	0	0	0	0	1	1	1	1	0	41.3	21.8	D	C
	- With Improvements		Not Applicable															
6	I-15 NB Ramps & Temescal Canyon Rd.																	
	- Without Improvements	TS	0	1	0	0	0	0	1	2	0	0	2	1	**90.5**	**187.6**	**F**	**F**
	- With Improvements	TS	0	1	**2**	0	0	0	**2**	**1**	0	0	2	1	54.0	24.1	D	C
11	Temescal Canyon Rd. & Old Temescal Canyon Rd.																	
	- Without Improvements	**TS**	**2**	**2**	0	0	**2**	**2>**	**2**	0	**2>**	0	0	0	**>200.0**	**>200.0**	**F**	**F**
	- With Improvements	**TS**	**2**	**2**	0	0	**2**	**2>**	**2**	0	**2>**	0	0	0	34.0	18.0	C	B

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; **TS** = Improvement

HORIZON YEAR (2040) CONDITIONS

Table 4 shows the updated operations analysis for Driveway 2 on Temescal Canyon Road while the peak hour operations analysis results for Temescal Canyon Road at Old Temescal Canyon Road is summarized on Table 5 for Horizon Year (2040) traffic conditions. The lane configurations shown for the intersection of Temescal Canyon Road and Old Temescal Canyon Road on Table 5 have been updated from the 2020 Traffic Study to be consistent with preliminary plans for the realigned intersection. Peak hour operations analysis results for Horizon Year (2040) Without Project and With Project traffic conditions are included in Attachment C and Attachment D, respectively.

TABLE 4: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS

#	Intersection	Traffic Control[3]	2040 Without Project				2040 With Project			
			Delay (secs.)[1]		LOS[2]		Delay (secs.)[1]		LOS[2]	
			AM	PM	AM	PM	AM	PM	AM	PM
1	I-15 SB Ramps & Weirick Rd.	TS	30.2	36.3	C	D	31.7	38.3	C	D
2	I-15 SB Ramps & Temescal Canyon Rd.	TS	**122.0**	**170.4**	**F**	**F**	**126.0**	**184.9**	**F**	**F**
3	Temescal Canyon Rd. & Trilogy Pkwy.	TS	45.4	15.2	D	B	46.0	15.6	D	B
4	Campbell Ranch Rd. & Temescal Canyon Rd.	TS	53.3	22.4	D	C	53.7	22.6	D	C
5	I-15 NB Ramps & Weirick Rd.	TS	29.6	20.2	C	C	30.2	20.1	C	C
6	I-15 NB Ramps & Temescal Canyon Rd.	TS	**118.1**	**195.8**	**F**	**F**	**133.3**	**>200.0**	**F**	**F**
7	Temescal Canyon Rd. & Dos Lagos Dr.	TS	25.8	28.2	C	C	30.9	29.9	C	C
8	Temescal Canyon Rd. & Dawson Canyon Rd.	TS	18.9	47.5	B	D	27.4	49.7	C	D
9	Temescal Canyon Rd. & Driveway 1	**CSS**	Future Intersection				25.9	17.0	D	C
10	Temescal Canyon Rd. & Driveway 2	**TS**	Future Intersection				17.1	25.3	B	C
11	Temescal Canyon Rd. & Old Temescal Canyon Rd.	**TS**	**>200.0**	**>200.0**	**F**	**F**	**>200.0**	**>200.0**	**F**	**F**
12	Driveway 4 & Dawson Canyon Rd.	**CSS**	Future Intersection				18.5	17.5	C	C
13	Driveway 5 & Dawson Canyon Rd.	**CSS**	Future Intersection				17.2	14.3	C	B
14	Dawson Canyon Rd. & Dawson Canyon Rd.	CSS	15.7	12.7	C	B	13.9	13.1	B	B
15	Dawson Canyon Rd. & Driveway 6	**CSS**	Future Intersection				8.7	8.8	A	A
16	Dawson Canyon Rd. & Driveway 7	**CSS**	Future Intersection				8.6	8.6	A	A

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street-stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] LOS = Level of Service

[3] CSS = Cross-street Stop; TS = Traffic Signal; **CSS** = Improvement

TABLE 5: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
2	I-15 SB Ramps & Temescal Canyon Rd.																	
	- Without Project	TS	0	0	0	**1**	1	**2**	0	2	1>>	1	1	0	34.1	45.6	C	D
	- With Project	TS	0	0	0	**1**	1	**2**	0	2	1>>	1	1	0	40.5	54.5	D	D
6	I-15 NB Ramps & Temescal Canyon Rd.																	
	- Without Project	TS	0	1	**2**	0	0	0	**2**	**1**	0	0	2	1	51.7	30.2	D	C
	- With Project	TS	0	1	**2**	0	0	0	**2**	**1**	0	0	2	1	54.7	31.2	D	C
11	Temescal Canyon Rd. & Old Temescal Canyon Rd.																	
	- Without Project	**TS**	**2**	**2**	0	0	**2**	**2>**	**2**	0	**2>**	0	0	0	17.4	42.2	B	D
	- With Project	**TS**	**2**	**2**	0	0	**2**	**2>**	**2**	0	**2>**	0	0	0	18.8	48.9	B	D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; >> = Free-Right Turn Lane; **1** = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal; **TS** = Improvement

Due to the change in volumes at Temescal Canyon Road at Old Temescal Canyon Road associated with the elimination of Driveway 3, the Project's fair share contribution at this location has decreased from 5.84% down to 5.33% (see Table 6).

TABLE 6: PROJECT FAIR SHARE CALCULATIONS

#	Intersection	Project	2040 With Project Volume	Project % of New Traffic
11	Temescal Canyon Rd. & Old Temescal Canyon Rd.			
	AM:	160	4,629	3.46%
	PM:	300	5,629	**5.33%**

BOLD = Denotes highest fair share percentage.

SITE ADJACENT QUEUING ANALYSIS

The queuing analysis has been conducted utilizing the SimTraffic software. SimTraffic is designed to model networks of signalized and unsignalized intersections, with the primary purpose of checking and fine-tuning signal operations. SimTraffic uses the input parameters from Synchro to generate random simulations. A SimTraffic simulation has been recorded five times, during the weekday AM and weekday PM peak hours, with 60-minute recording intervals. The queuing results for Horizon Year (2040) With Project traffic conditions is included in Attachment E.

Per the proposed plans for the reconfiguration of Temescal Canyon Road, there will be approximately 550-feet between the I-15 Northbound Ramps (intersection #6) and the future realigned Temescal Canyon Road (intersection #11). Based on the queues under Horizon Year (2040) With Project conditions, with improvements, the 95th percentile queue is not anticipated to exceed 550-feet during the AM and PM peak hours in the eastbound direction. As such, with the reconfiguration of Temescal Canyon Road and the proposed onsite Project design features, as discussed above, Temescal Canyon Road is not anticipated to experience queuing issues during the AM or PM peak hours under Horizon Year (2040) With Project traffic conditions.

Exhibit 1 illustrates the improvement recommendation changes to Old Temescal Canyon Road at Temescal Canyon Road. There are no changes at Driveway 2 on Temescal Canyon Road recommended from the recommendations identified in the 2020 Traffic Study. For the eastbound approach at Temescal Canyon Road and Old Temescal Canyon Road, a 300-foot eastbound right turn pocket is recommended for the Number 2 right turn lane while all other lanes are to extend back to the I-15 Freeway Northbound Ramps. It is recommended that other development projects to the south of the new Temescal Canyon Road Extension evaluate the potential storage lengths necessary for the northbound left turn pockets at Temescal Canyon Road and Old Temescal Canyon Road with respect future downstream intersection locations. Although based on the queuing analysis, 300-foot northbound dual left turn lanes appear to be sufficient to accommodate peak hour queues. Lastly, the southbound dual right turn lanes should

accommodate a minimum of 300-feet of storage.

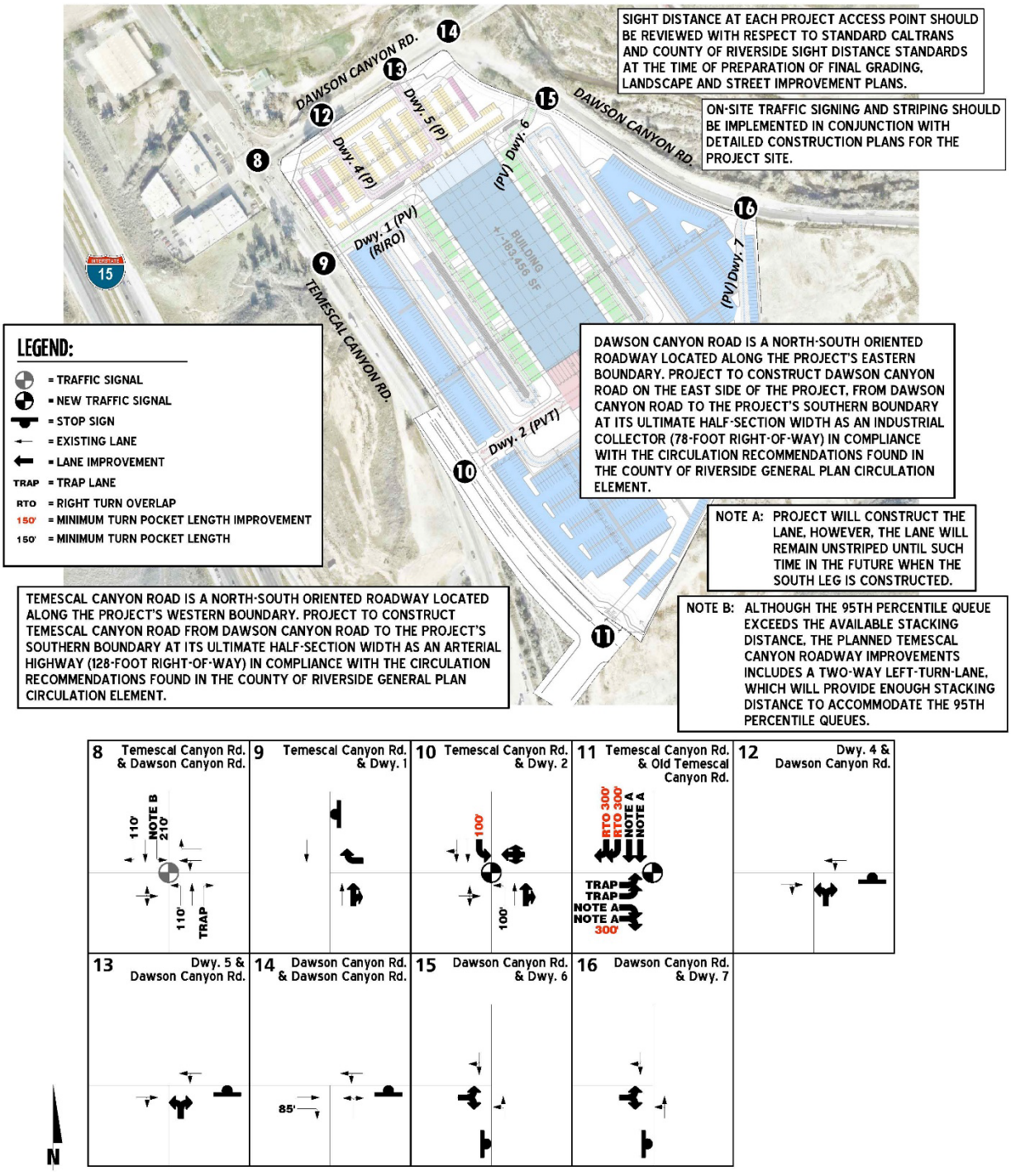
If you have any questions, please contact me directly at (949) 861-0177.

Respectfully submitted,
URBAN CROSSROADS, INC.

Charlene So

Charlene So, PE
Associate Principal

EXHIBIT 1: SITE ADJACENT ROADWAY AND SITE ACCESS RECOMMENDATIONS

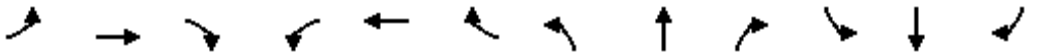


ATTACHMENT A
EAP (2022) HCM ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	21	0	39	0	21	1312	8	261
Future Volume (vph)	21	0	39	0	21	1312	8	261
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	21.6	21.6	26.6	26.6	9.6	22.8	9.6	22.8
Total Split (s)	28.0	28.0	28.0	28.0	12.0	81.0	11.0	80.0
Total Split (%)	23.3%	23.3%	23.3%	23.3%	10.0%	67.5%	9.2%	66.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		12.7		12.7	6.1	43.3	5.8	43.1
Actuated g/C Ratio		0.22		0.22	0.11	0.76	0.10	0.75
v/c Ratio		0.12		0.14	0.12	0.53	0.05	0.11
Control Delay		5.5		6.7	33.5	8.1	34.1	5.4
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		5.5		6.7	33.5	8.2	34.1	5.4
LOS		A		A	C	A	C	A
Approach Delay		5.5		6.7		8.5		6.2
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 57.1	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 8.0	Intersection LOS: A
Intersection Capacity Utilization 54.0%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Temescal Canyon Rd. & Driveway 2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	21	39	0	8	21	1312	23	8	261	21
Future Volume (veh/h)	21	0	21	39	0	8	21	1312	23	8	261	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	23	0	23	42	0	9	23	1426	25	9	284	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	182	30	112	287	12	38	49	2055	36	21	1864	150
Arrive On Green	0.14	0.00	0.14	0.14	0.00	0.14	0.03	0.57	0.57	0.01	0.55	0.55
Sat Flow, veh/h	573	212	785	1155	85	266	1810	3630	64	1810	3384	272
Grp Volume(v), veh/h	46	0	0	51	0	0	23	709	742	9	151	156
Grp Sat Flow(s),veh/h/ln	1570	0	0	1505	0	0	1810	1805	1889	1810	1805	1851
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.7	15.0	15.1	0.3	2.2	2.2
Cycle Q Clear(g_c), s	1.2	0.0	0.0	1.3	0.0	0.0	0.7	15.0	15.1	0.3	2.2	2.2
Prop In Lane	0.50		0.50	0.82		0.18	1.00		0.03	1.00		0.15
Lane Grp Cap(c), veh/h	324	0	0	337	0	0	49	1022	1069	21	994	1019
V/C Ratio(X)	0.14	0.00	0.00	0.15	0.00	0.00	0.47	0.69	0.69	0.43	0.15	0.15
Avail Cap(c_a), veh/h	769	0	0	761	0	0	250	2531	2648	216	2497	2561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	0.0	20.3	0.0	0.0	25.7	8.3	8.3	26.3	5.9	5.9
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	2.6	0.9	0.8	5.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.5	0.0	0.0	0.3	3.6	3.8	0.1	0.5	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.3	0.0	0.0	20.5	0.0	0.0	28.3	9.2	9.1	31.3	6.0	6.0
LnGrp LOS	C	A	A	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		46			51			1474			316	
Approach Delay, s/veh		20.3			20.5			9.5			6.7	
Approach LOS		C			C			A			A	

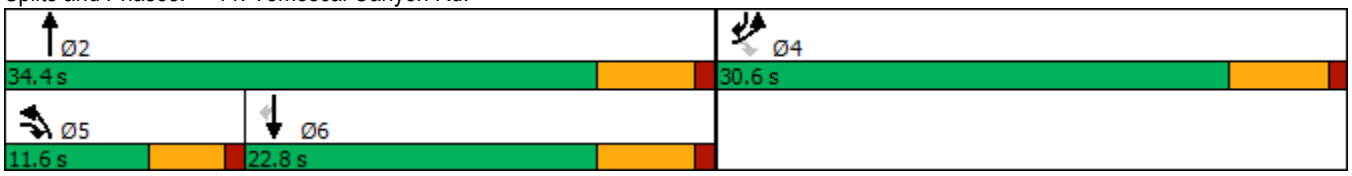
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.2	36.2		12.2	6.1	35.3		12.2				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	6.4	75.2		23.4	7.4	74.2		23.4				
Max Q Clear Time (g_c+I1), s	2.3	17.1		3.2	2.7	4.2		3.3				
Green Ext Time (p_c), s	0.0	13.3		0.1	0.0	1.7		0.2				

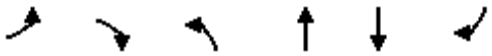
Intersection Summary												
HCM 6th Ctrl Delay			9.6									
HCM 6th LOS			A									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1017	361	105	340	81	240
Future Volume (vph)	1017	361	105	340	81	240
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	4
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	27.8	9.6	9.6	15.8	22.8	27.8
Total Split (s)	30.6	11.6	11.6	34.4	22.8	30.6
Total Split (%)	47.1%	17.8%	17.8%	52.9%	35.1%	47.1%
Yellow Time (s)	4.8	3.6	3.6	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	4.6	5.8	5.8	5.8
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	22.0	38.0	8.6	20.2	11.6	34.9
Actuated g/C Ratio	0.41	0.70	0.16	0.37	0.21	0.64
v/c Ratio	0.78	0.31	0.40	0.28	0.11	0.23
Control Delay	19.8	1.5	31.2	12.6	19.8	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.8	1.5	31.2	12.6	19.8	0.9
LOS	B	A	C	B	B	A
Approach Delay	15.0			17.0	5.7	
Approach LOS	B			B	A	

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 54.3	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.78	
Intersection Signal Delay: 14.0	Intersection LOS: B
Intersection Capacity Utilization 51.2%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 11: Temescal Canyon Rd.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1017	361	105	340	81	240
Future Volume (veh/h)	1017	361	105	340	81	240
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1105	392	114	370	88	193
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1395	771	147	1342	718	960
Arrive On Green	0.40	0.40	0.08	0.37	0.20	0.20
Sat Flow, veh/h	3510	1610	1810	3705	3705	1610
Grp Volume(v), veh/h	1105	392	114	370	88	193
Grp Sat Flow(s),veh/h/ln	1755	1610	1810	1805	1805	1610
Q Serve(g_s), s	13.9	8.4	3.1	3.6	1.0	2.8
Cycle Q Clear(g_c), s	13.9	8.4	3.1	3.6	1.0	2.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1395	771	147	1342	718	960
V/C Ratio(X)	0.79	0.51	0.78	0.28	0.12	0.20
Avail Cap(c_a), veh/h	1732	925	252	2054	1221	1185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	9.0	22.6	11.1	16.5	4.6
Incr Delay (d2), s/veh	2.1	0.5	3.3	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	8.4	1.3	1.1	0.3	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.4	9.5	25.9	11.1	16.6	4.8
LnGrp LOS	B	A	C	B	B	A
Approach Vol, veh/h	1497			484	281	
Approach Delay, s/veh	13.9			14.6	8.5	
Approach LOS	B			B	A	

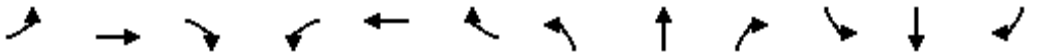
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		24.5		25.8	8.7	15.8
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		28.6		24.8	7.0	17.0
Max Q Clear Time (g_c+I1), s		5.6		15.9	5.1	4.8
Green Ext Time (p_c), s		1.4		4.1	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	18	0	38	0	18	394	28	698
Future Volume (vph)	18	0	38	0	18	394	28	698
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	21.6	21.6	26.6	26.6	9.6	22.8	9.6	22.8
Total Split (s)	32.0	32.0	32.0	32.0	17.0	70.0	18.0	71.0
Total Split (%)	26.7%	26.7%	26.7%	26.7%	14.2%	58.3%	15.0%	59.2%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		12.6		12.6	5.9	30.3	6.1	30.4
Actuated g/C Ratio		0.32		0.32	0.15	0.77	0.15	0.77
v/c Ratio		0.08		0.10	0.07	0.19	0.11	0.28
Control Delay		2.9		4.1	21.5	6.5	21.1	7.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		2.9		4.1	21.5	6.5	21.1	7.2
LOS		A		A	C	A	C	A
Approach Delay		2.9		4.1		7.1		7.7
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 39.5	
Natural Cycle: 60	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.28	
Intersection Signal Delay: 7.2	Intersection LOS: A
Intersection Capacity Utilization 40.3%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 10: Temescal Canyon Rd. & Driveway 2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	0	18	38	0	8	18	394	77	28	698	18
Future Volume (veh/h)	18	0	18	38	0	8	18	394	77	28	698	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	20	0	20	41	0	9	20	428	84	30	759	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	246	44	133	377	19	45	46	1082	211	66	1330	35
Arrive On Green	0.17	0.00	0.17	0.17	0.00	0.17	0.03	0.36	0.36	0.04	0.37	0.37
Sat Flow, veh/h	530	261	791	1109	114	268	1810	3013	587	1810	3593	95
Grp Volume(v), veh/h	40	0	0	50	0	0	20	255	257	30	381	398
Grp Sat Flow(s),veh/h/ln	1583	0	0	1491	0	0	1810	1805	1794	1810	1805	1883
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.4	3.6	3.7	0.6	5.8	5.8
Cycle Q Clear(g_c), s	0.7	0.0	0.0	0.8	0.0	0.0	0.4	3.6	3.7	0.6	5.8	5.8
Prop In Lane	0.50		0.50	0.82		0.18	1.00		0.33	1.00		0.05
Lane Grp Cap(c), veh/h	423	0	0	441	0	0	46	649	645	66	668	697
V/C Ratio(X)	0.09	0.00	0.00	0.11	0.00	0.00	0.44	0.39	0.40	0.46	0.57	0.57
Avail Cap(c_a), veh/h	1376	0	0	1352	0	0	653	3373	3354	706	3426	3574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	0.0	12.2	0.0	0.0	16.5	8.2	8.2	16.2	8.6	8.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.0	2.4	0.4	0.4	1.8	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.3	0.0	0.0	0.1	0.8	0.8	0.2	1.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.2	0.0	0.0	12.3	0.0	0.0	18.9	8.6	8.6	18.1	9.4	9.4
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		40			50			532			809	
Approach Delay, s/veh		12.2			12.3			9.0			9.7	
Approach LOS		B			B			A			A	

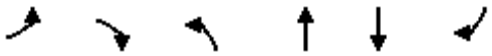
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	18.1		10.4	5.5	18.5		10.4				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	13.4	64.2		27.4	12.4	65.2		27.4				
Max Q Clear Time (g_c+I1), s	2.6	5.7		2.7	2.4	7.8		2.8				
Green Ext Time (p_c), s	0.0	3.0		0.1	0.0	4.9		0.2				

Intersection Summary												
HCM 6th Ctrl Delay			9.6									
HCM 6th LOS			A									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	364	22	84	125	189	566
Future Volume (vph)	364	22	84	125	189	566
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	4
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	27.8	9.6	9.6	15.8	22.8	27.8
Total Split (s)	28.0	13.3	13.3	37.0	23.7	28.0
Total Split (%)	43.1%	20.5%	20.5%	56.9%	36.5%	43.1%
Yellow Time (s)	4.8	3.6	3.6	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	4.6	5.8	5.8	5.8
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	None	Min	Min	None
Act Effct Green (s)	13.2	26.3	6.9	18.0	11.7	34.3
Actuated g/C Ratio	0.30	0.60	0.16	0.41	0.27	0.79
v/c Ratio	0.37	0.02	0.32	0.09	0.21	0.45
Control Delay	14.3	2.8	23.4	7.9	15.7	2.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.3	2.8	23.4	7.9	15.7	2.3
LOS	B	A	C	A	B	A
Approach Delay	13.7			14.1	5.6	
Approach LOS	B			B	A	

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 43.6	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.45	
Intersection Signal Delay: 9.2	Intersection LOS: A
Intersection Capacity Utilization 48.4%	ICU Level of Service A
Analysis Period (min) 15	

Splits and Phases: 11: Temescal Canyon Rd.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	364	22	84	125	189	566
Future Volume (veh/h)	364	22	84	125	189	566
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	396	24	91	136	205	547
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	807	494	139	1812	1151	883
Arrive On Green	0.23	0.23	0.08	0.50	0.32	0.32
Sat Flow, veh/h	3510	1610	1810	3705	3705	1610
Grp Volume(v), veh/h	396	24	91	136	205	547
Grp Sat Flow(s),veh/h/ln	1755	1610	1810	1805	1805	1610
Q Serve(g_s), s	4.2	0.5	2.1	0.8	1.8	10.0
Cycle Q Clear(g_c), s	4.2	0.5	2.1	0.8	1.8	10.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	807	494	139	1812	1151	883
V/C Ratio(X)	0.49	0.05	0.65	0.08	0.18	0.62
Avail Cap(c_a), veh/h	1802	950	364	2604	1494	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.5	10.6	19.4	5.6	10.6	6.7
Incr Delay (d2), s/veh	0.5	0.0	1.9	0.0	0.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.8	0.2	0.5	4.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.9	10.6	21.3	5.6	10.7	7.5
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	420			227	752	
Approach Delay, s/veh	14.7			11.9	8.4	
Approach LOS	B			B	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		27.5		15.7	7.9	19.6
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		31.2		22.2	8.7	17.9
Max Q Clear Time (g_c+I1), s		2.8		6.2	4.1	12.0
Green Ext Time (p_c), s		0.5		1.3	0.0	1.7

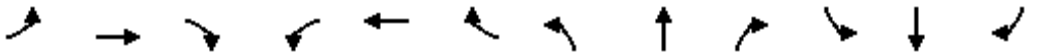
Intersection Summary		
HCM 6th Ctrl Delay		10.9
HCM 6th LOS		B

ATTACHMENT B
EAPC (2022) HCM ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	21	0	39	0	21	2035	8	673
Future Volume (vph)	21	0	39	0	21	2035	8	673
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	21.6	21.6	26.6	26.6	9.6	22.8	9.6	22.8
Total Split (s)	26.7	26.7	26.7	26.7	10.6	83.5	9.8	82.7
Total Split (%)	22.3%	22.3%	22.3%	22.3%	8.8%	69.6%	8.2%	68.9%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		12.5		12.5	5.8	76.1	5.4	73.9
Actuated g/C Ratio		0.13		0.13	0.06	0.81	0.06	0.78
v/c Ratio		0.18		0.20	0.21	0.77	0.09	0.27
Control Delay		6.4		8.3	53.8	11.2	52.0	5.4
Queue Delay		0.0		0.0	0.0	0.8	0.0	0.0
Total Delay		6.4		8.3	53.8	12.0	52.0	5.4
LOS		A		A	D	B	D	A
Approach Delay		6.4		8.3		12.4		5.9
Approach LOS		A		A		B		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 94.5	
Natural Cycle: 110	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.77	
Intersection Signal Delay: 10.7	Intersection LOS: B
Intersection Capacity Utilization 74.0%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 10: Temescal Canyon Rd. & Driveway 2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	21	39	0	8	21	2035	23	8	673	21
Future Volume (veh/h)	21	0	21	39	0	8	21	2035	23	8	673	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	23	0	23	42	0	9	23	2212	25	9	732	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	120	18	79	191	7	27	44	2653	30	20	2546	80
Arrive On Green	0.10	0.00	0.10	0.10	0.00	0.10	0.02	0.73	0.73	0.01	0.71	0.71
Sat Flow, veh/h	608	182	790	1194	71	271	1810	3656	41	1810	3573	112
Grp Volume(v), veh/h	46	0	0	51	0	0	23	1090	1147	9	370	385
Grp Sat Flow(s),veh/h/ln	1580	0	0	1536	0	0	1810	1805	1893	1810	1805	1880
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	1.2	38.4	38.8	0.5	6.8	6.8
Cycle Q Clear(g_c), s	2.2	0.0	0.0	2.4	0.0	0.0	1.2	38.4	38.8	0.5	6.8	6.8
Prop In Lane	0.50		0.50	0.82		0.18	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	217	0	0	225	0	0	44	1310	1373	20	1286	1339
V/C Ratio(X)	0.21	0.00	0.00	0.23	0.00	0.00	0.53	0.83	0.84	0.45	0.29	0.29
Avail Cap(c_a), veh/h	430	0	0	428	0	0	118	1529	1603	103	1513	1576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	0.0	0.0	38.2	0.0	0.0	44.2	8.7	8.8	45.1	4.8	4.8
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.5	0.0	0.0	3.6	3.6	3.5	5.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	1.1	0.0	0.0	0.5	10.7	11.3	0.2	1.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	0.0	0.0	38.7	0.0	0.0	47.8	12.3	12.3	50.7	4.9	4.9
LnGrp LOS	D	A	A	D	A	A	D	B	B	D	A	A
Approach Vol, veh/h		46			51			2260			764	
Approach Delay, s/veh		38.4			38.7			12.7			5.4	
Approach LOS		D			D			B			A	

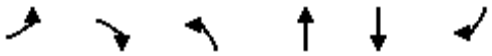
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	72.4		13.8	6.8	71.2		13.8				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.2	77.7		22.1	6.0	76.9		22.1				
Max Q Clear Time (g_c+I1), s	2.5	40.8		4.2	3.2	8.8		4.4				
Green Ext Time (p_c), s	0.0	25.8		0.1	0.0	4.7		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		11.7	
HCM 6th LOS		B	

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1920	359	442	160	113	620
Future Volume (vph)	1920	359	442	160	113	620
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	4
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	27.8	9.6	9.6	15.8	22.8	27.8
Total Split (s)	76.0	21.2	21.2	44.0	22.8	76.0
Total Split (%)	63.3%	17.7%	17.7%	36.7%	19.0%	63.3%
Yellow Time (s)	4.8	3.6	3.6	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	4.6	5.8	5.8	5.8
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	None	None	None	None
Act Effct Green (s)	70.2	92.6	16.6	32.6	11.4	87.4
Actuated g/C Ratio	0.61	0.81	0.15	0.28	0.10	0.76
v/c Ratio	0.97	0.16	0.94	0.17	0.34	0.31
Control Delay	35.6	0.4	77.4	31.1	50.5	4.5
Queue Delay	42.2	0.0	0.0	0.0	0.0	0.0
Total Delay	77.8	0.4	77.4	31.1	50.5	4.5
LOS	E	A	E	C	D	A
Approach Delay	65.6			65.1	11.6	
Approach LOS	E			E	B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 114.4	
Natural Cycle: 120	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 54.6	Intersection LOS: D
Intersection Capacity Utilization 83.7%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 11: Temescal Canyon Rd.



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1920	359	442	160	113	620
Future Volume (veh/h)	1920	359	442	160	113	620
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2087	390	480	174	123	606
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2128	2125	505	1059	396	2029
Arrive On Green	0.61	0.61	0.14	0.29	0.11	0.11
Sat Flow, veh/h	3510	2834	3510	3705	3705	2834
Grp Volume(v), veh/h	2087	390	480	174	123	606
Grp Sat Flow(s),veh/h/ln	1755	1417	1755	1805	1805	1417
Q Serve(g_s), s	66.7	4.6	15.7	4.1	3.6	8.9
Cycle Q Clear(g_c), s	66.7	4.6	15.7	4.1	3.6	8.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	2128	2125	505	1059	396	2029
V/C Ratio(X)	0.98	0.18	0.95	0.16	0.31	0.30
Avail Cap(c_a), veh/h	2134	2130	505	1194	531	2135
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	4.2	49.1	30.3	47.4	5.9
Incr Delay (d2), s/veh	15.1	0.0	27.9	0.0	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.8	0.0	8.6	1.7	1.6	8.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.2	4.2	77.0	30.3	47.8	6.0
LnGrp LOS	D	A	E	C	D	A
Approach Vol, veh/h	2477			654	729	
Approach Delay, s/veh	32.0			64.6	13.1	
Approach LOS	C			E	B	

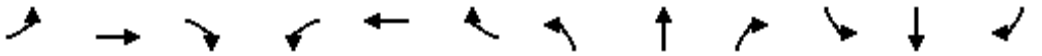
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		39.7		75.8	21.2	18.5
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		38.2		70.2	16.6	17.0
Max Q Clear Time (g_c+I1), s		6.1		68.7	17.7	10.9
Green Ext Time (p_c), s		0.6		1.3	0.0	1.8

Intersection Summary		
HCM 6th Ctrl Delay		34.0
HCM 6th LOS		C

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	18	0	38	0	18	946	28	1460
Future Volume (vph)	18	0	38	0	18	946	28	1460
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	21.6	21.6	26.6	26.6	9.6	22.8	9.6	22.8
Total Split (s)	27.0	27.0	27.0	27.0	11.0	81.0	12.0	82.0
Total Split (%)	22.5%	22.5%	22.5%	22.5%	9.2%	67.5%	10.0%	68.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min
Act Effct Green (s)		13.0		13.0	6.2	51.7	6.5	52.0
Actuated g/C Ratio		0.19		0.19	0.09	0.77	0.10	0.77
v/c Ratio		0.12		0.16	0.12	0.40	0.17	0.58
Control Delay		4.3		7.3	42.2	7.2	41.4	9.2
Queue Delay		0.0		0.0	0.0	0.0	0.0	0.0
Total Delay		4.3		7.3	42.2	7.2	41.4	9.2
LOS		A		A	D	A	D	A
Approach Delay		4.3		7.3		7.8		9.8
Approach LOS		A		A		A		A

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 67.3	
Natural Cycle: 80	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.58	
Intersection Signal Delay: 8.9	Intersection LOS: A
Intersection Capacity Utilization 57.9%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 10: Temescal Canyon Rd. & Driveway 2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	0	18	38	0	8	18	946	77	28	1460	18
Future Volume (veh/h)	18	0	18	38	0	8	18	946	77	28	1460	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	20	0	20	41	0	9	20	1028	84	30	1587	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	162	27	100	254	11	35	43	2008	164	59	2203	28
Arrive On Green	0.13	0.00	0.13	0.13	0.00	0.13	0.02	0.59	0.59	0.03	0.60	0.60
Sat Flow, veh/h	576	208	784	1152	84	271	1810	3379	276	1810	3651	46
Grp Volume(v), veh/h	40	0	0	50	0	0	20	549	563	30	784	823
Grp Sat Flow(s),veh/h/ln	1568	0	0	1507	0	0	1810	1805	1850	1810	1805	1892
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	0.0	0.7	10.9	10.9	1.0	18.6	18.7
Cycle Q Clear(g_c), s	1.3	0.0	0.0	1.6	0.0	0.0	0.7	10.9	10.9	1.0	18.6	18.7
Prop In Lane	0.50		0.50	0.82		0.18	1.00		0.15	1.00		0.02
Lane Grp Cap(c), veh/h	289	0	0	300	0	0	43	1073	1100	59	1089	1142
V/C Ratio(X)	0.14	0.00	0.00	0.17	0.00	0.00	0.47	0.51	0.51	0.51	0.72	0.72
Avail Cap(c_a), veh/h	649	0	0	644	0	0	189	2217	2273	219	2247	2355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	0.0	23.9	0.0	0.0	29.5	7.2	7.2	29.1	8.5	8.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.3	0.0	0.0	3.0	0.4	0.4	2.5	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0	0.6	0.0	0.0	0.3	2.7	2.8	0.4	4.7	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	0.0	0.0	24.2	0.0	0.0	32.5	7.6	7.6	31.6	9.4	9.4
LnGrp LOS	C	A	A	C	A	A	C	A	A	C	A	A
Approach Vol, veh/h		40			50			1132			1637	
Approach Delay, s/veh		23.9			24.2			8.1			9.8	
Approach LOS		C			C			A			A	

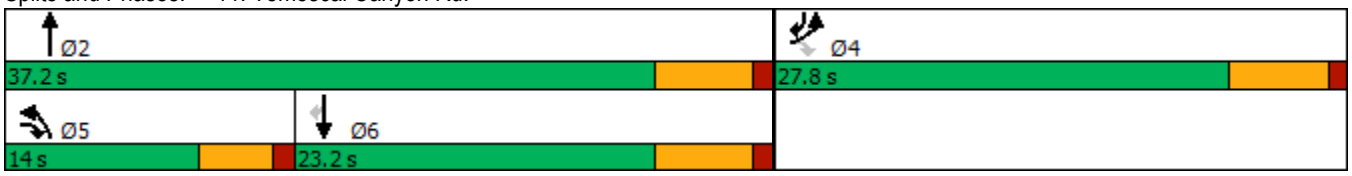
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.6	42.2		12.4	6.0	42.7		12.4				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	7.4	75.2		22.4	6.4	76.2		22.4				
Max Q Clear Time (g_c+I1), s	3.0	12.9		3.3	2.7	20.7		3.6				
Green Ext Time (p_c), s	0.0	8.4		0.1	0.0	16.2		0.2				

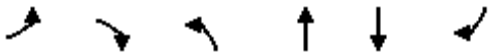
Intersection Summary												
HCM 6th Ctrl Delay			9.6									
HCM 6th LOS			A									

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	863	447	390	178	188	1329
Future Volume (vph)	863	447	390	178	188	1329
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	4
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	27.8	9.6	9.6	15.8	22.8	27.8
Total Split (s)	27.8	14.0	14.0	37.2	23.2	27.8
Total Split (%)	42.8%	21.5%	21.5%	57.2%	35.7%	42.8%
Yellow Time (s)	4.8	3.6	3.6	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	4.6	5.8	5.8	5.8
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	None	Min	Min	None
Act Effct Green (s)	21.5	36.6	9.3	25.2	11.3	38.6
Actuated g/C Ratio	0.37	0.63	0.16	0.43	0.19	0.66
v/c Ratio	0.73	0.25	0.76	0.12	0.29	0.76
Control Delay	20.5	1.0	35.3	10.2	21.3	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.5	1.0	35.3	10.2	21.3	9.8
LOS	C	A	D	B	C	A
Approach Delay	13.8			27.4	11.3	
Approach LOS	B			C	B	

Intersection Summary	
Cycle Length: 65	
Actuated Cycle Length: 58.3	
Natural Cycle: 65	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.76	
Intersection Signal Delay: 15.0	Intersection LOS: B
Intersection Capacity Utilization 66.3%	ICU Level of Service C
Analysis Period (min) 15	

Splits and Phases: 11: Temescal Canyon Rd.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	863	447	390	178	188	1329
Future Volume (veh/h)	863	447	390	178	188	1329
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	938	486	424	193	204	1377
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1116	1322	522	1797	997	1684
Arrive On Green	0.32	0.32	0.15	0.50	0.28	0.28
Sat Flow, veh/h	3510	2834	3510	3705	3705	2834
Grp Volume(v), veh/h	938	486	424	193	204	1377
Grp Sat Flow(s),veh/h/ln	1755	1417	1755	1805	1805	1417
Q Serve(g_s), s	15.7	7.0	7.4	1.8	2.7	17.4
Cycle Q Clear(g_c), s	15.7	7.0	7.4	1.8	2.7	17.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1116	1322	522	1797	997	1684
V/C Ratio(X)	0.84	0.37	0.81	0.11	0.20	0.82
Avail Cap(c_a), veh/h	1226	1411	524	1799	997	1684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	10.8	26.0	8.4	17.5	8.7
Incr Delay (d2), s/veh	5.0	0.2	8.8	0.0	0.1	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	6.5	3.4	0.5	1.0	10.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.0	11.0	34.8	8.4	17.6	12.0
LnGrp LOS	C	B	C	A	B	B
Approach Vol, veh/h	1424			617	1581	
Approach Delay, s/veh	20.2			26.5	12.7	
Approach LOS	C			C	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		37.2		25.8	14.0	23.2
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		31.4		22.0	9.4	17.4
Max Q Clear Time (g_c+I1), s		3.8		17.7	9.4	19.4
Green Ext Time (p_c), s		0.7		2.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

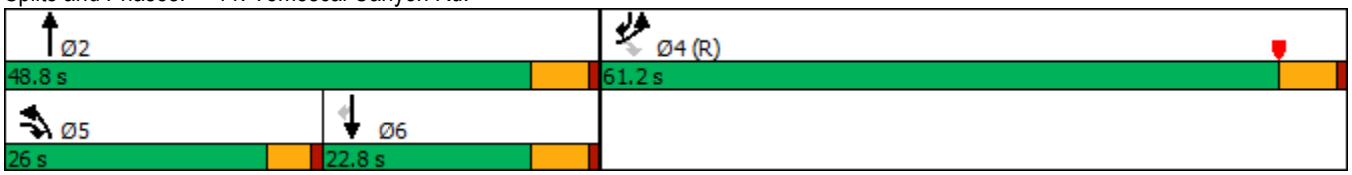
ATTACHMENT C
HORIZON YEAR (2040) WITHOUT PROJECT HCM ANALYSIS WORKSHEETS

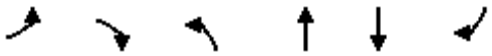
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1464	995	486	707	229	601
Future Volume (vph)	1464	995	486	707	229	601
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	4
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	27.8	9.6	9.6	15.8	22.8	27.8
Total Split (s)	61.2	26.0	26.0	48.8	22.8	61.2
Total Split (%)	55.6%	23.6%	23.6%	44.4%	20.7%	55.6%
Yellow Time (s)	4.8	3.6	3.6	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	4.6	5.8	5.8	5.8
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	C-Max	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 4:EBL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 11: Temescal Canyon Rd.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1464	995	486	707	229	601
Future Volume (veh/h)	1464	995	486	707	229	601
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1591	702	528	768	249	412
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2104	2126	593	1131	370	1938
Arrive On Green	1.00	0.58	0.17	0.31	0.10	0.10
Sat Flow, veh/h	3619	2834	3510	3705	3705	2834
Grp Volume(v), veh/h	1591	702	528	768	249	412
Grp Sat Flow(s),veh/h/ln	1810	1417	1755	1805	1805	1417
Q Serve(g_s), s	0.0	9.0	16.2	20.4	7.3	5.9
Cycle Q Clear(g_c), s	0.0	9.0	16.2	20.4	7.3	5.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	2104	2126	593	1131	370	1938
V/C Ratio(X)	0.76	0.33	0.89	0.68	0.67	0.21
Avail Cap(c_a), veh/h	2104	2126	683	1411	558	2085
HCM Platoon Ratio	2.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.09	0.09	1.00	1.00	0.87	0.87
Uniform Delay (d), s/veh	0.0	4.6	44.7	33.0	47.6	6.4
Incr Delay (d2), s/veh	0.2	0.0	11.6	0.5	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.3	13.4	9.0	11.8	3.9	6.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	0.2	4.6	56.3	33.5	49.5	6.5
LnGrp LOS	A	A	E	C	D	A
Approach Vol, veh/h	2293			1296	661	
Approach Delay, s/veh	1.6			42.8	22.7	
Approach LOS	A			D	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		40.3		69.7	23.2	17.1
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		43.0		55.4	21.4	17.0
Max Q Clear Time (g_c+I1), s		22.4		11.0	18.2	9.3
Green Ext Time (p_c), s		3.1		14.5	0.4	1.9

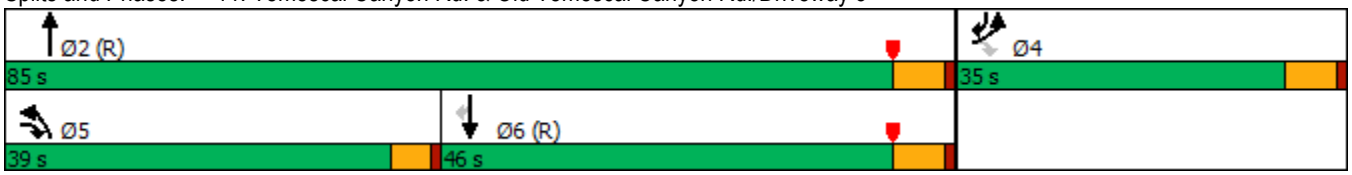
Intersection Summary		
HCM 6th Ctrl Delay	17.4	
HCM 6th LOS	B	

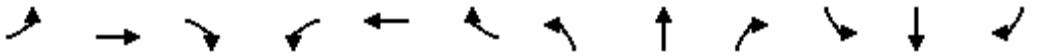
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	782	492	935	652	1096	1384
Future Volume (vph)	782	492	935	652	1096	1384
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	4
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	27.8	9.6	9.6	15.8	22.8	27.8
Total Split (s)	35.0	39.0	39.0	85.0	46.0	35.0
Total Split (%)	29.2%	32.5%	32.5%	70.8%	38.3%	29.2%
Yellow Time (s)	4.8	3.6	3.6	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	4.6	5.8	5.8	5.8
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 110
Control Type: Actuated-Coordinated

Splits and Phases: 11: Temescal Canyon Rd. & Old Temescal Canyon Rd./Driveway 3





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	782	0	492	0	0	0	935	652	0	0	1096	1384
Future Volume (veh/h)	782	0	492	0	0	0	935	652	0	0	1096	1384
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	0	1900				1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h	850	0	372				1016	709	0	0	1191	852
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	854	0	1502				1006	2383	0	0	1209	1639
Arrive On Green	0.24	0.00	0.24				0.29	0.66	0.00	0.00	0.34	0.34
Sat Flow, veh/h	3510	0	2834				3510	3705	0	0	3705	2834
Grp Volume(v), veh/h	850	0	372				1016	709	0	0	1191	852
Grp Sat Flow(s),veh/h/ln	1755	0	1417				1755	1805	0	0	1805	1417
Q Serve(g_s), s	29.0	0.0	8.5				34.4	10.0	0.0	0.0	39.3	21.8
Cycle Q Clear(g_c), s	29.0	0.0	8.5				34.4	10.0	0.0	0.0	39.3	21.8
Prop In Lane	1.00		1.00				1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h	854	0	1502				1006	2383	0	0	1209	1639
V/C Ratio(X)	1.00	0.00	0.25				1.01	0.30	0.00	0.00	0.98	0.52
Avail Cap(c_a), veh/h	854	0	1502				1006	2383	0	0	1209	1639
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.60	0.00	0.60				1.00	1.00	0.00	0.00	0.09	0.09
Uniform Delay (d), s/veh	45.3	0.0	15.3				42.8	8.6	0.0	0.0	39.6	15.3
Incr Delay (d2), s/veh	22.6	0.0	0.1				30.7	0.3	0.0	0.0	5.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.8	0.0	9.1				18.6	3.5	0.0	0.0	17.4	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.9	0.0	15.3				73.5	9.0	0.0	0.0	44.6	15.4
LnGrp LOS	E	A	B				F	A	A	A	D	B
Approach Vol, veh/h		1222						1725			2043	
Approach Delay, s/veh		51.9						47.0			32.4	
Approach LOS		D						D			C	

Timer - Assigned Phs		2		4	5	6						
Phs Duration (G+Y+Rc), s		85.0		35.0	39.0	46.0						
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8						
Max Green Setting (Gmax), s		79.2		29.2	34.4	40.2						
Max Q Clear Time (g_c+I1), s		12.0		31.0	36.4	41.3						
Green Ext Time (p_c), s		3.0		0.0	0.0	0.0						

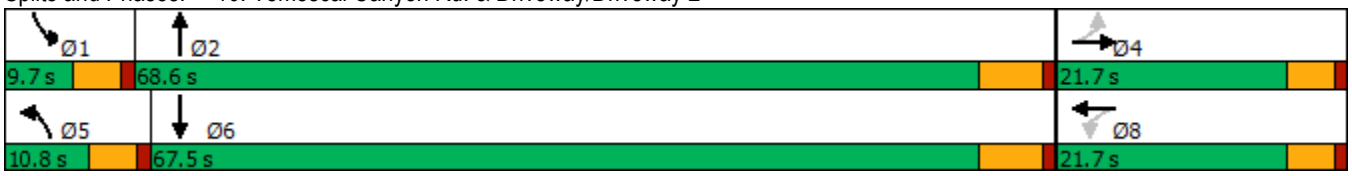
Intersection Summary												
HCM 6th Ctrl Delay			42.2									
HCM 6th LOS			D									

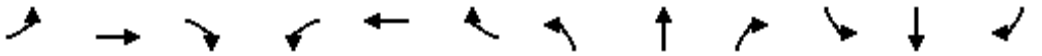
ATTACHMENT D
HORIZON YEAR (2040) WITH PROJECT HCM ANALYSIS WORKSHEETS

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	29	0	39	0	29	2178	8	861
Future Volume (vph)	29	0	39	0	29	2178	8	861
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	21.6	21.6	21.6	21.6	9.6	22.8	9.6	22.8
Total Split (s)	21.7	21.7	21.7	21.7	10.8	68.6	9.7	67.5
Total Split (%)	21.7%	21.7%	21.7%	21.7%	10.8%	68.6%	9.7%	67.5%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 89.7
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Temescal Canyon Rd. & Driveway/Driveway 2





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	0	29	39	0	8	29	2178	23	8	861	29
Future Volume (veh/h)	29	0	29	39	0	8	29	2178	23	8	861	29
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	32	0	32	42	0	9	32	2367	25	9	936	32
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	128	19	85	207	8	30	56	2588	27	20	2448	84
Arrive On Green	0.11	0.00	0.11	0.11	0.00	0.11	0.03	0.71	0.71	0.01	0.69	0.69
Sat Flow, veh/h	607	179	786	1215	69	275	1810	3659	39	1810	3561	122
Grp Volume(v), veh/h	64	0	0	51	0	0	32	1165	1227	9	474	494
Grp Sat Flow(s),veh/h/ln	1571	0	0	1560	0	0	1810	1805	1893	1810	1805	1878
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	0.0	1.5	46.2	46.6	0.4	9.6	9.6
Cycle Q Clear(g_c), s	3.0	0.0	0.0	2.2	0.0	0.0	1.5	46.2	46.6	0.4	9.6	9.6
Prop In Lane	0.50		0.50	0.82		0.18	1.00		0.02	1.00		0.06
Lane Grp Cap(c), veh/h	233	0	0	245	0	0	56	1276	1339	20	1241	1291
V/C Ratio(X)	0.28	0.00	0.00	0.21	0.00	0.00	0.57	0.91	0.92	0.44	0.38	0.38
Avail Cap(c_a), veh/h	368	0	0	373	0	0	130	1310	1374	107	1287	1339
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	0.0	0.0	35.4	0.0	0.0	41.4	10.5	10.5	42.5	5.7	5.7
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.0	3.4	9.8	9.7	5.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	3.5	3.6	0.0	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.0	0.0	0.0	35.5	0.0	0.0	44.7	20.3	20.3	48.0	5.9	5.9
LnGrp LOS	D	A	A	D	A	A	D	C	C	D	A	A
Approach Vol, veh/h		64			51			2424			977	
Approach Delay, s/veh		36.0			35.5			20.6			6.3	
Approach LOS		D			D			C			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.6	67.0		14.0	7.3	65.3		14.0				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	5.1	62.8		17.1	6.2	61.7		17.1				
Max Q Clear Time (g_c+I1), s	2.4	48.6		5.0	3.5	11.6		4.2				
Green Ext Time (p_c), s	0.0	12.5		0.1	0.0	6.6		0.1				

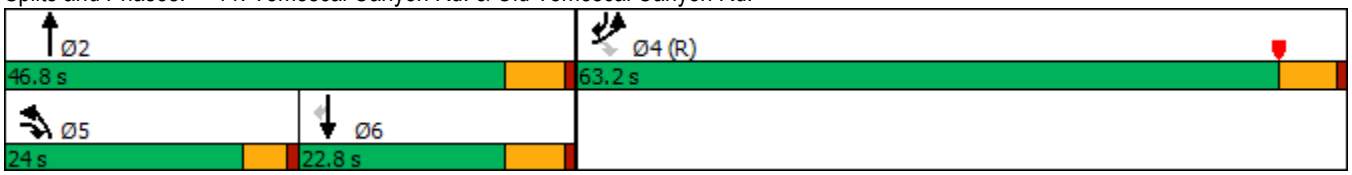
Intersection Summary			
HCM 6th Ctrl Delay		17.1	
HCM 6th LOS		B	

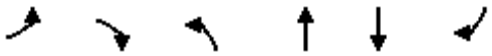
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1508	995	486	723	255	675
Future Volume (vph)	1508	995	486	723	255	675
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	4
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	27.8	9.6	9.6	15.8	22.8	27.8
Total Split (s)	63.2	24.0	24.0	46.8	22.8	63.2
Total Split (%)	57.5%	21.8%	21.8%	42.5%	20.7%	57.5%
Yellow Time (s)	4.8	3.6	3.6	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	4.6	5.8	5.8	5.8
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	C-Max	None	None	None	None	C-Max

Intersection Summary

Cycle Length: 110
Actuated Cycle Length: 110
Offset: 0 (0%), Referenced to phase 4:EBL, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 11: Temescal Canyon Rd. & Old Temescal Canyon Rd.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1508	995	486	723	255	675
Future Volume (veh/h)	1508	995	486	723	255	675
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1639	702	528	786	277	493
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2015	2101	587	1157	402	1943
Arrive On Green	0.96	0.57	0.17	0.32	0.11	0.11
Sat Flow, veh/h	3510	2834	3510	3705	3705	2834
Grp Volume(v), veh/h	1639	702	528	786	277	493
Grp Sat Flow(s),veh/h/ln	1755	1417	1755	1805	1805	1417
Q Serve(g_s), s	9.6	9.4	16.2	20.8	8.1	7.3
Cycle Q Clear(g_c), s	9.6	9.4	16.2	20.8	8.1	7.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	2015	2101	587	1157	402	1943
V/C Ratio(X)	0.81	0.33	0.90	0.68	0.69	0.25
Avail Cap(c_a), veh/h	2015	2101	619	1346	558	2065
HCM Platoon Ratio	1.67	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.50	0.50	1.00	1.00	0.94	0.94
Uniform Delay (d), s/veh	1.2	4.9	44.9	32.5	47.0	6.6
Incr Delay (d2), s/veh	1.9	0.2	15.0	0.8	2.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.5	13.6	9.3	12.1	4.3	7.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.1	5.1	59.9	33.2	49.0	6.6
LnGrp LOS	A	A	E	C	D	A
Approach Vol, veh/h	2341			1314	770	
Approach Delay, s/veh	3.7			44.0	21.9	
Approach LOS	A			D	C	

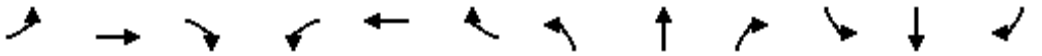
Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		41.0		69.0	23.0	18.1
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		41.0		57.4	19.4	17.0
Max Q Clear Time (g_c+I1), s		22.8		11.6	18.2	10.1
Green Ext Time (p_c), s		3.1		15.3	0.2	2.1

Intersection Summary	
HCM 6th Ctrl Delay	18.8
HCM 6th LOS	B

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	25	0	38	0	25	1538	28	2509
Future Volume (vph)	25	0	38	0	25	1538	28	2509
Turn Type	Perm	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases		4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	4	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	10.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	21.6	21.6	21.6	21.6	9.6	22.8	9.6	22.8
Total Split (s)	21.6	21.6	21.6	21.6	9.6	87.4	11.0	88.8
Total Split (%)	18.0%	18.0%	18.0%	18.0%	8.0%	72.8%	9.2%	74.0%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	4.8	3.6	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)		0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)		4.6		4.6	4.6	5.8	4.6	5.8
Lead/Lag					Lead	Lag	Lead	Lag
Lead-Lag Optimize?					Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 113.2
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Temescal Canyon Rd. & Driveway 2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	0	25	38	0	8	25	1538	77	28	2509	25
Future Volume (veh/h)	25	0	25	38	0	8	25	1538	77	28	2509	25
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	27	0	27	41	0	9	27	1672	84	30	2727	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	103	15	69	165	6	25	46	2624	131	49	2753	27
Arrive On Green	0.09	0.00	0.09	0.09	0.00	0.09	0.03	0.75	0.75	0.03	0.75	0.75
Sat Flow, veh/h	621	175	796	1217	69	282	1810	3499	175	1810	3662	36
Grp Volume(v), veh/h	54	0	0	50	0	0	27	858	898	30	1342	1412
Grp Sat Flow(s),veh/h/ln	1592	0	0	1569	0	0	1810	1805	1869	1810	1805	1893
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	0.0	1.6	25.0	25.5	1.8	79.4	80.4
Cycle Q Clear(g_c), s	3.2	0.0	0.0	2.8	0.0	0.0	1.6	25.0	25.5	1.8	79.4	80.4
Prop In Lane	0.50		0.50	0.82		0.18	1.00		0.09	1.00		0.02
Lane Grp Cap(c), veh/h	187	0	0	196	0	0	46	1354	1401	49	1357	1423
V/C Ratio(X)	0.29	0.00	0.00	0.26	0.00	0.00	0.59	0.63	0.64	0.61	0.99	0.99
Avail Cap(c_a), veh/h	289	0	0	292	0	0	82	1354	1401	105	1357	1424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	0.0	0.0	47.3	0.0	0.0	53.2	6.6	6.6	53.1	13.3	13.4
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	0.0	0.0	4.3	1.0	1.0	4.4	21.7	21.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.0	1.3	0.0	0.0	0.8	7.1	7.5	0.9	29.5	31.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.8	0.0	0.0	47.6	0.0	0.0	57.5	7.5	7.6	57.6	34.9	35.3
LnGrp LOS	D	A	A	D	A	A	E	A	A	E	C	D
Approach Vol, veh/h		54			50			1783			2784	
Approach Delay, s/veh		47.8			47.6			8.3			35.4	
Approach LOS		D			D			A			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	88.6		14.2	7.4	88.8		14.2				
Change Period (Y+Rc), s	4.6	5.8		4.6	4.6	5.8		4.6				
Max Green Setting (Gmax), s	6.4	81.6		17.0	5.0	83.0		17.0				
Max Q Clear Time (g_c+I1), s	3.8	27.5		5.2	3.6	82.4		4.8				
Green Ext Time (p_c), s	0.0	19.7		0.1	0.0	0.6		0.1				

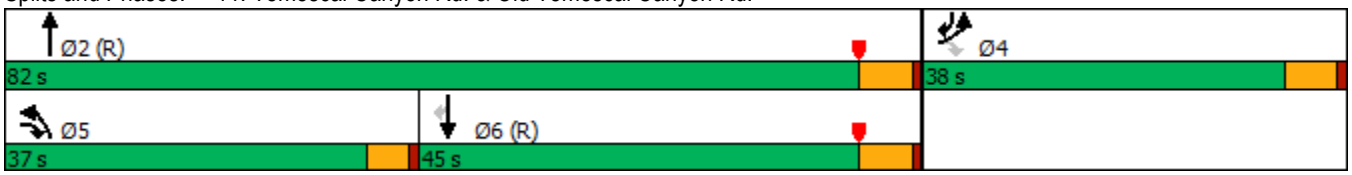
Intersection Summary												
HCM 6th Ctrl Delay			25.3									
HCM 6th LOS			C									

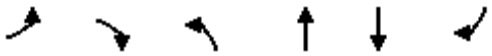
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	934	492	935	706	1120	1454
Future Volume (vph)	934	492	935	706	1120	1454
Turn Type	Prot	pm+ov	Prot	NA	NA	pm+ov
Protected Phases	4	5	5	2	6	4
Permitted Phases		4				6
Detector Phase	4	5	5	2	6	4
Switch Phase						
Minimum Initial (s)	10.0	5.0	5.0	10.0	10.0	10.0
Minimum Split (s)	27.8	9.6	9.6	15.8	22.8	27.8
Total Split (s)	38.0	37.0	37.0	82.0	45.0	38.0
Total Split (%)	31.7%	30.8%	30.8%	68.3%	37.5%	31.7%
Yellow Time (s)	4.8	3.6	3.6	4.8	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	4.6	5.8	5.8	5.8
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?		Yes	Yes		Yes	
Recall Mode	None	None	None	C-Min	C-Min	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 120
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 120
Control Type: Actuated-Coordinated

Splits and Phases: 11: Temescal Canyon Rd. & Old Temescal Canyon Rd.





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	934	492	935	706	1120	1454
Future Volume (veh/h)	934	492	935	706	1120	1454
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1976	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1015	372	1016	767	1217	928
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1010	1734	948	2292	1179	1686
Arrive On Green	0.45	0.27	0.27	0.63	0.33	0.33
Sat Flow, veh/h	3764	3220	3510	3705	3705	2834
Grp Volume(v), veh/h	1015	372	1016	767	1217	928
Grp Sat Flow(s),veh/h/ln	1882	1610	1755	1805	1805	1417
Q Serve(g_s), s	32.2	7.2	32.4	11.8	39.2	23.7
Cycle Q Clear(g_c), s	32.2	7.2	32.4	11.8	39.2	23.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1010	1734	948	2292	1179	1686
V/C Ratio(X)	1.00	0.21	1.07	0.33	1.03	0.55
Avail Cap(c_a), veh/h	1010	1734	948	2292	1179	1686
HCM Platoon Ratio	1.67	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	1.00	1.00	0.19	0.19
Uniform Delay (d), s/veh	33.1	14.5	43.8	10.2	40.4	14.6
Incr Delay (d2), s/veh	28.1	0.1	50.5	0.4	20.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.3	9.1	20.1	4.3	19.9	13.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	61.2	14.5	94.3	10.5	61.3	14.9
LnGrp LOS	F	B	F	B	F	B
Approach Vol, veh/h	1387			1783	2145	
Approach Delay, s/veh	48.7			58.3	41.2	
Approach LOS	D			E	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		82.0		38.0	37.0	45.0
Change Period (Y+Rc), s		5.8		5.8	4.6	5.8
Max Green Setting (Gmax), s		76.2		32.2	32.4	39.2
Max Q Clear Time (g_c+I1), s		13.8		34.2	34.4	41.2
Green Ext Time (p_c), s		3.3		0.0	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		48.9
HCM 6th LOS		D

ATTACHMENT E
HORIZON YEAR (2040) WITH PROJECT QUEUING ANALYSIS WORKSHEETS

Intersection: 8: Temescal Canyon Rd. & Private Driveway/Dawson Canyon Rd.

Movement	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LT	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	76	142	55	134	300	305	67	103	173	143
Average Queue (ft)	22	122	4	36	177	179	3	45	97	49
95th Queue (ft)	51	159	26	95	310	313	26	82	161	103
Link Distance (ft)	346	134	134		290	290	290		626	626
Upstream Blk Time (%)		9			1	1				
Queuing Penalty (veh)		18			7	8				
Storage Bay Dist (ft)				110				200		
Storage Blk Time (%)				1	14					
Queuing Penalty (veh)				6	7					

Intersection: 9: Temescal Canyon Rd. & Driveway 1

Movement	WB	NB	NB
Directions Served	R	T	TR
Maximum Queue (ft)	28	76	117
Average Queue (ft)	6	10	12
95th Queue (ft)	25	46	63
Link Distance (ft)	337	714	714
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Temescal Canyon Rd. & Driveway/Driveway 2

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	74	80	71	211	211	29	73	247
Average Queue (ft)	32	30	23	96	125	8	30	101
95th Queue (ft)	65	62	54	171	211	27	68	197
Link Distance (ft)	322	478	682	682	682		714	714
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)						100		
Storage Blk Time (%)							0	
Queuing Penalty (veh)							0	

Intersection: 11: Temescal Canyon Rd. & Old Temescal Canyon Rd.

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	450	556	576	534	225	250	512	512	169	387	250	225
Average Queue (ft)	389	445	139	88	181	249	510	429	81	115	73	164
95th Queue (ft)	509	546	462	310	297	250	534	636	130	272	246	257
Link Distance (ft)		526	526	526			497	497	682	682		
Upstream Blk Time (%)		2	2	0			69	4				
Queuing Penalty (veh)		16	13	1			0	0				
Storage Bay Dist (ft)	400				200	200					200	200
Storage Blk Time (%)	3	22			1	78	2				1	9
Queuing Penalty (veh)	19	167			3	283	8				1	11

Intersection: 12: Driveway 4 & Dawson Canyon Rd.

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	197	74
Average Queue (ft)	34	25
95th Queue (ft)	117	59
Link Distance (ft)	191	246
Upstream Blk Time (%)	0	
Queuing Penalty (veh)	1	
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Driveway 5 & Dawson Canyon Rd.

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	26	42
Average Queue (ft)	1	15
95th Queue (ft)	12	41
Link Distance (ft)	151	243
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Park Canyon & Dawson Canyon Rd.

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	30	52
Average Queue (ft)	2	27
95th Queue (ft)	12	49
Link Distance (ft)	739	307
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Park Canyon & Driveway 6

Movement	EB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	14
95th Queue (ft)	38
Link Distance (ft)	208
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Park Canyon & Driveway 7

Movement	EB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	7
95th Queue (ft)	27
Link Distance (ft)	350
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 568

Intersection: 8: Temescal Canyon Rd. & Private Driveway/Dawson Canyon Rd.

Movement	EB	WB	WB	NB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LT	R	L	T	T	R	L	T	TR
Maximum Queue (ft)	129	189	79	134	244	281	54	225	641	641
Average Queue (ft)	56	184	8	53	116	125	2	166	641	641
95th Queue (ft)	105	188	43	119	201	213	18	325	641	641
Link Distance (ft)	346	174	174		327	327	327		626	626
Upstream Blk Time (%)		74							99	99
Queuing Penalty (veh)		180							0	0
Storage Bay Dist (ft)				110				200		
Storage Blk Time (%)				0	6				100	
Queuing Penalty (veh)				0	5				80	

Intersection: 9: Temescal Canyon Rd. & Driveway 1

Movement	WB
Directions Served	R
Maximum Queue (ft)	28
Average Queue (ft)	6
95th Queue (ft)	25
Link Distance (ft)	393
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Temescal Canyon Rd. & Driveway 2

Movement	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	96	69	72	171	183	50	115	205
Average Queue (ft)	28	30	19	71	89	12	44	103
95th Queue (ft)	63	64	51	141	159	39	91	177
Link Distance (ft)	322	478	681	681	681		676	676
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)						100		
Storage Blk Time (%)							0	
Queuing Penalty (veh)							0	

Intersection: 11: Temescal Canyon Rd. & Old Temescal Canyon Rd.

Movement	EB	EB	EB	EB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	R	L	L	T	T	T	T	R	R
Maximum Queue (ft)	450	568	65	81	225	250	511	511	270	393	250	225
Average Queue (ft)	347	429	30	35	189	249	511	214	174	228	135	174
95th Queue (ft)	522	560	55	63	293	250	511	561	251	373	320	269
Link Distance (ft)		527	527	527			496	496	681	681		
Upstream Blk Time (%)		3					73	0				
Queuing Penalty (veh)		14					0	0				
Storage Bay Dist (ft)	400				200	200					200	200
Storage Blk Time (%)	0	15			1	74	0			7	1	12
Queuing Penalty (veh)	2	72			2	260	0			108	7	68

Intersection: 12: Driveway 4 & Dawson Canyon Rd.

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	168	257
Average Queue (ft)	161	210
95th Queue (ft)	175	311
Link Distance (ft)	153	242
Upstream Blk Time (%)	69	62
Queuing Penalty (veh)	258	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 13: Driveway 5 & Dawson Canyon Rd.

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	166	244
Average Queue (ft)	150	136
95th Queue (ft)	200	289
Link Distance (ft)	147	230
Upstream Blk Time (%)	53	40
Queuing Penalty (veh)	190	0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Park Canyon & Dawson Canyon Rd.

Movement	WB	NB
Directions Served	LT	LR
Maximum Queue (ft)	416	288
Average Queue (ft)	189	114
95th Queue (ft)	408	242
Link Distance (ft)	740	290
Upstream Blk Time (%)		1
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 15: Park Canyon & Driveway 6

Movement	EB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	13
95th Queue (ft)	36
Link Distance (ft)	342
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 16: Park Canyon & Driveway 7

Movement	EB
Directions Served	LR
Maximum Queue (ft)	29
Average Queue (ft)	4
95th Queue (ft)	20
Link Distance (ft)	372
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 1247