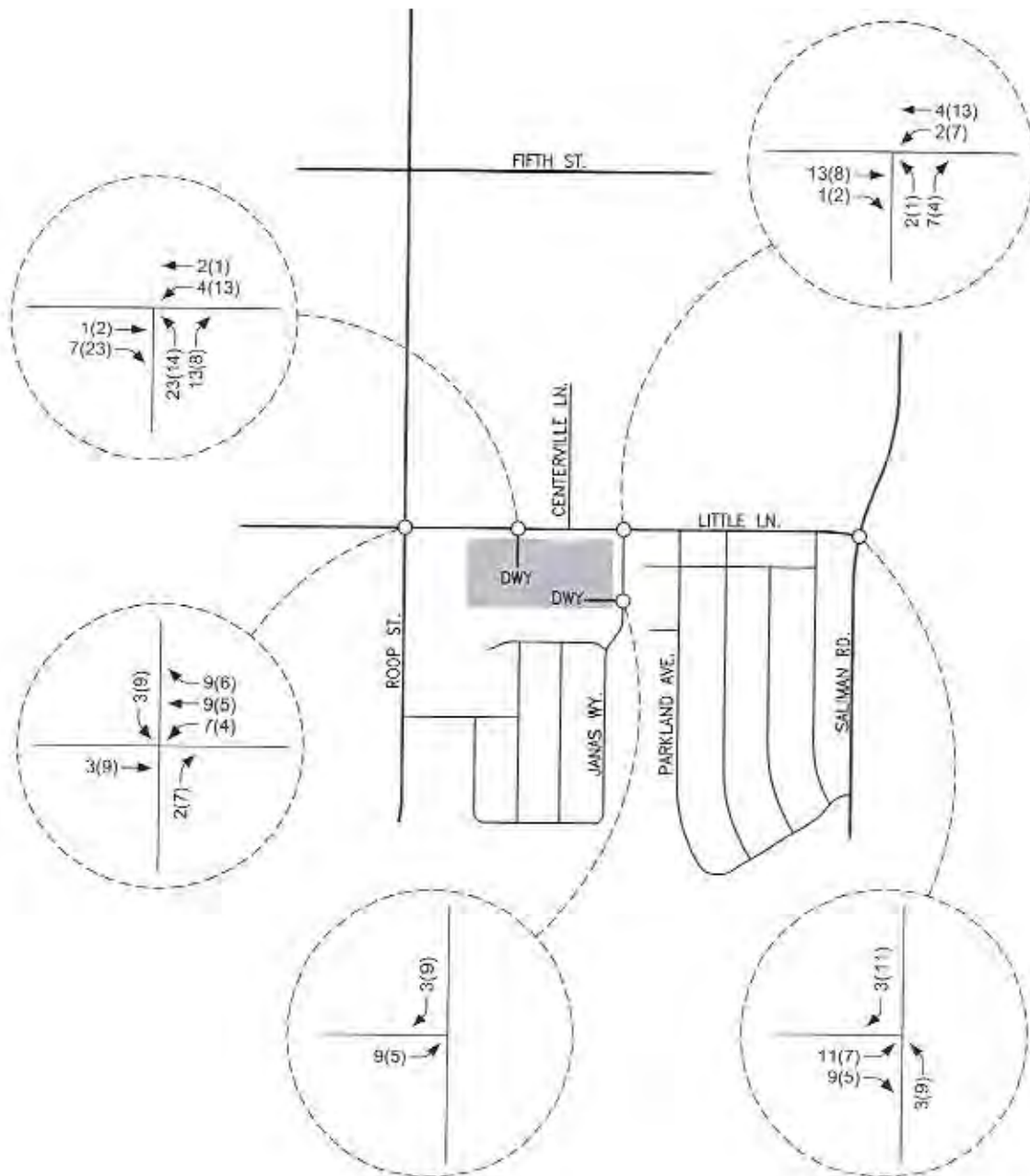


LEGEND

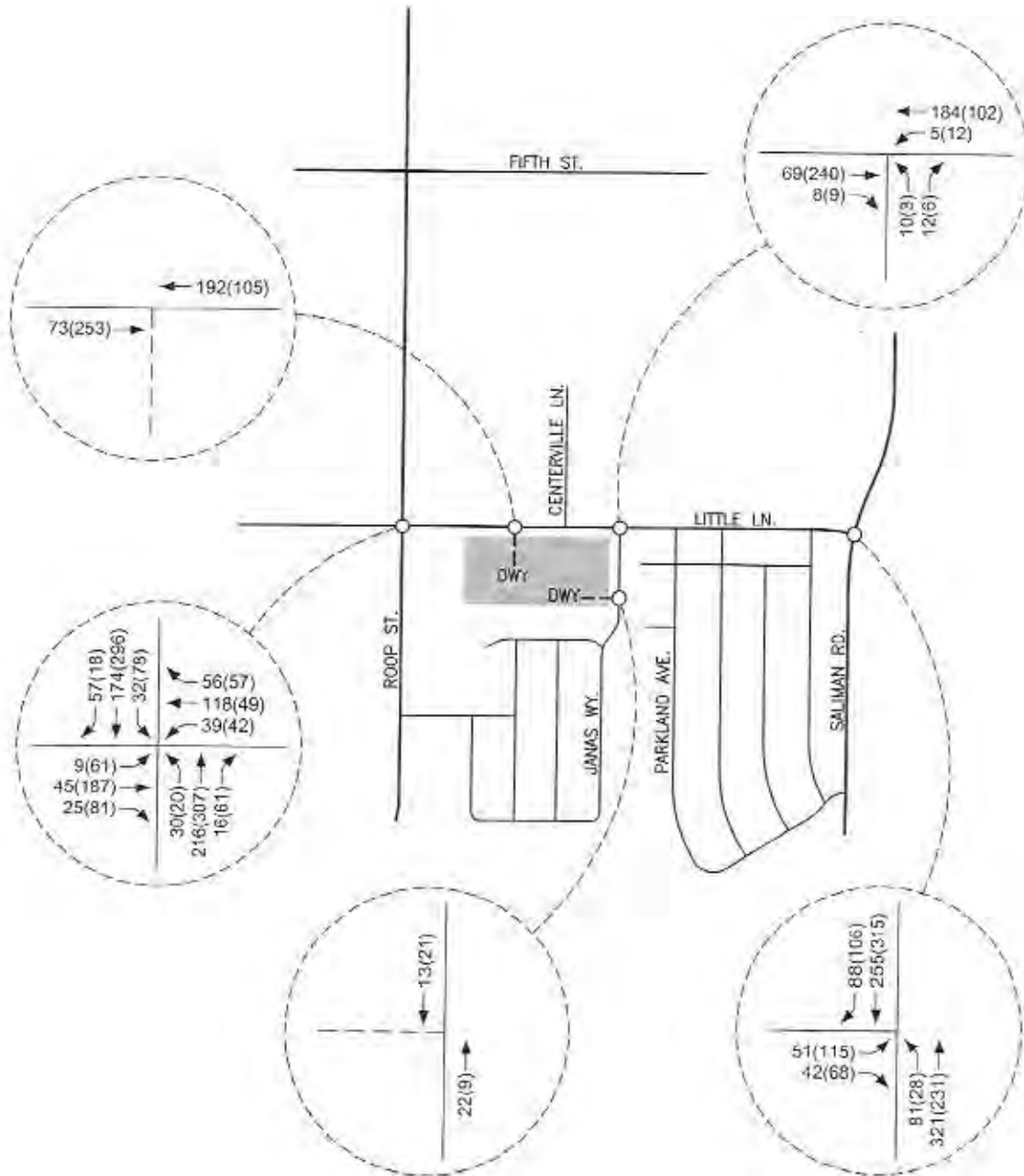
— AM PEAK HOUR
(-) PM PEAK HOUR



LITTLE LANE APARTMENTS
TRIP ASSIGNMENT
FIGURE 3

LEGEND

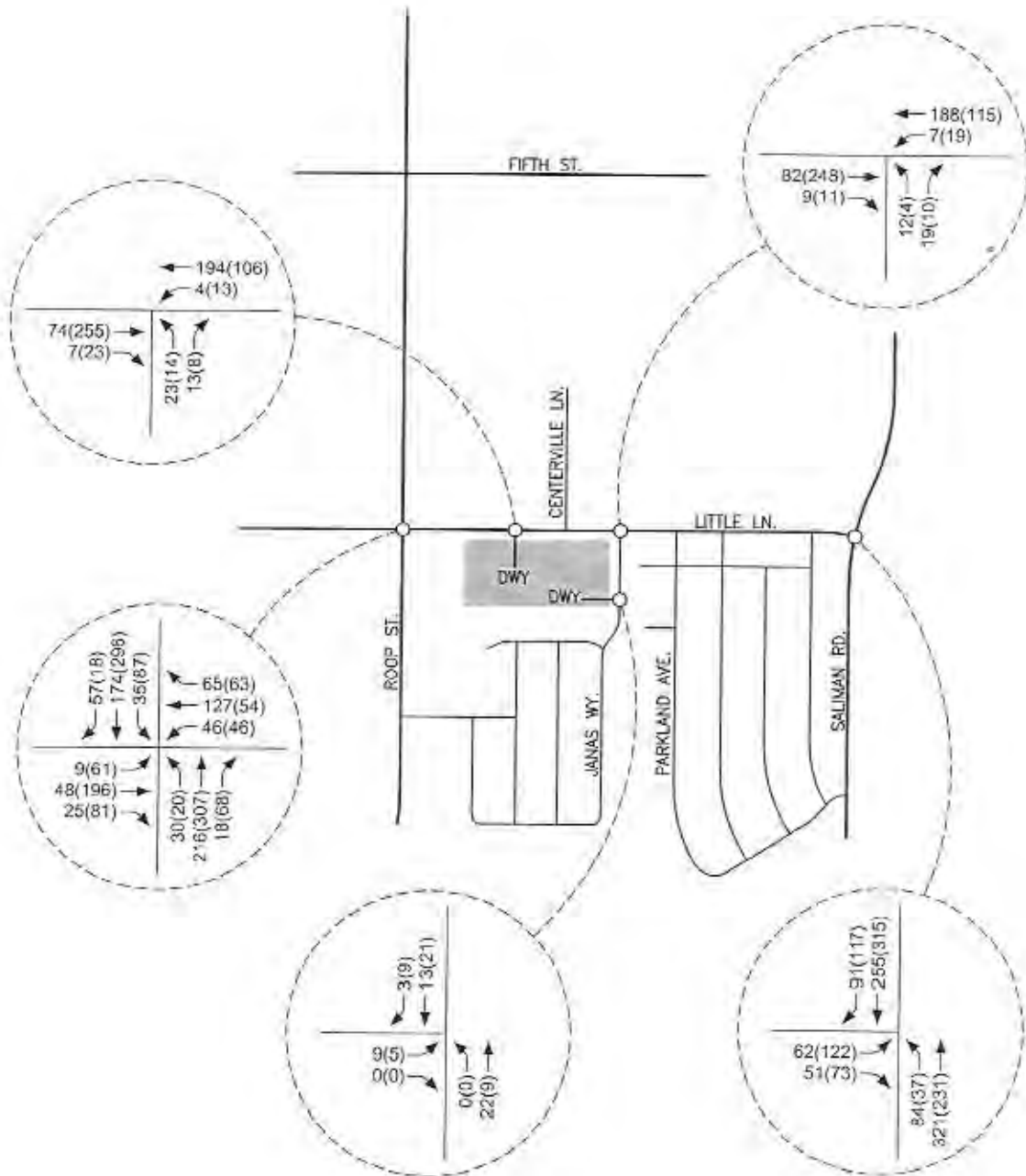
- AM PEAK HOUR
(-) PM PEAK HOUR



LITTLE LANE APARTMENTS
EXISTING TRAFFIC VOLUMES
FIGURE 4

LEGEND

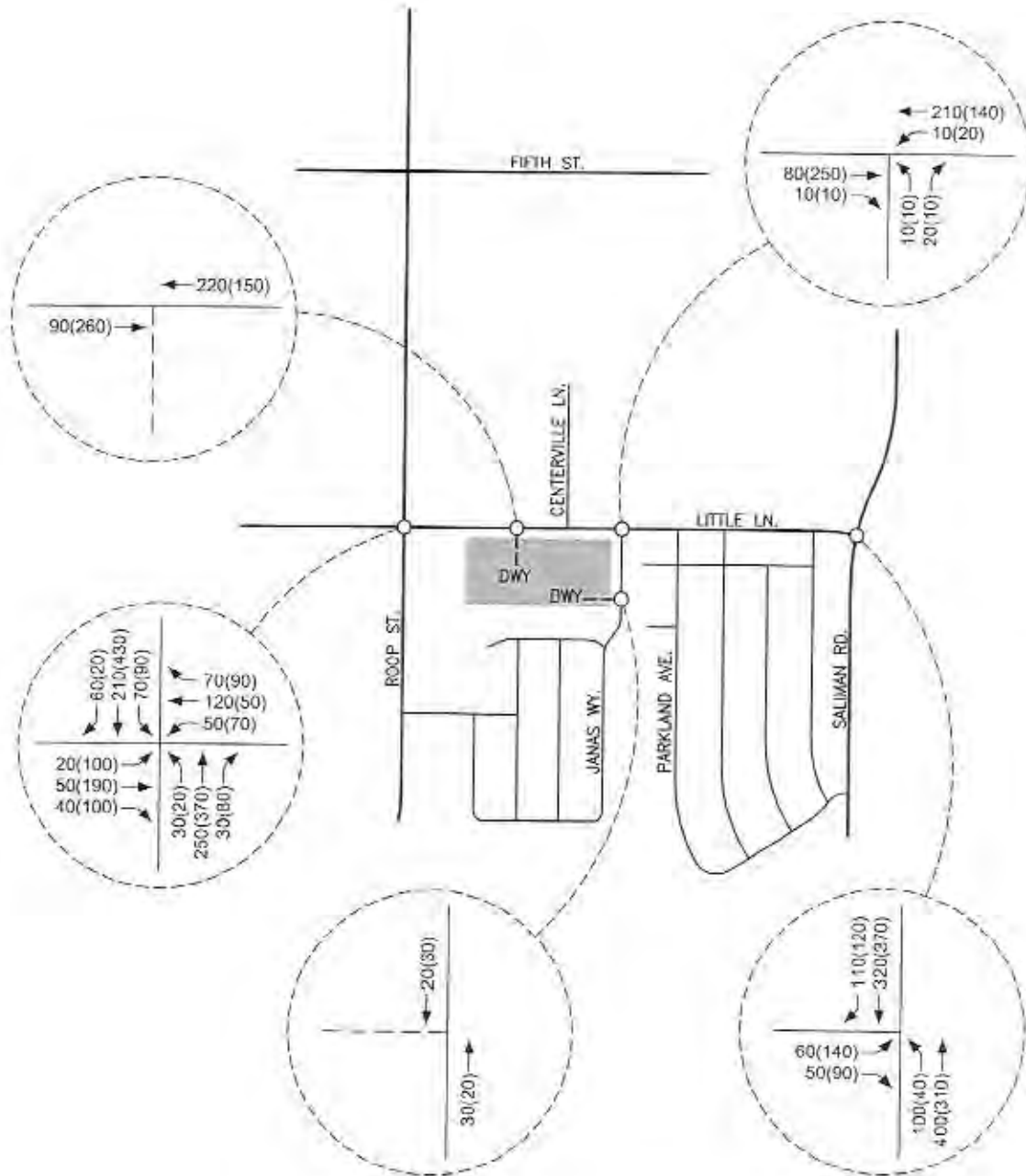
— AM PEAK HOUR
(-) PM PEAK HOUR



LITTLE LANE APARTMENTS
EXISTING PLUS PROJECT TRAFFIC VOLUMES
FIGURE 5

LEGEND

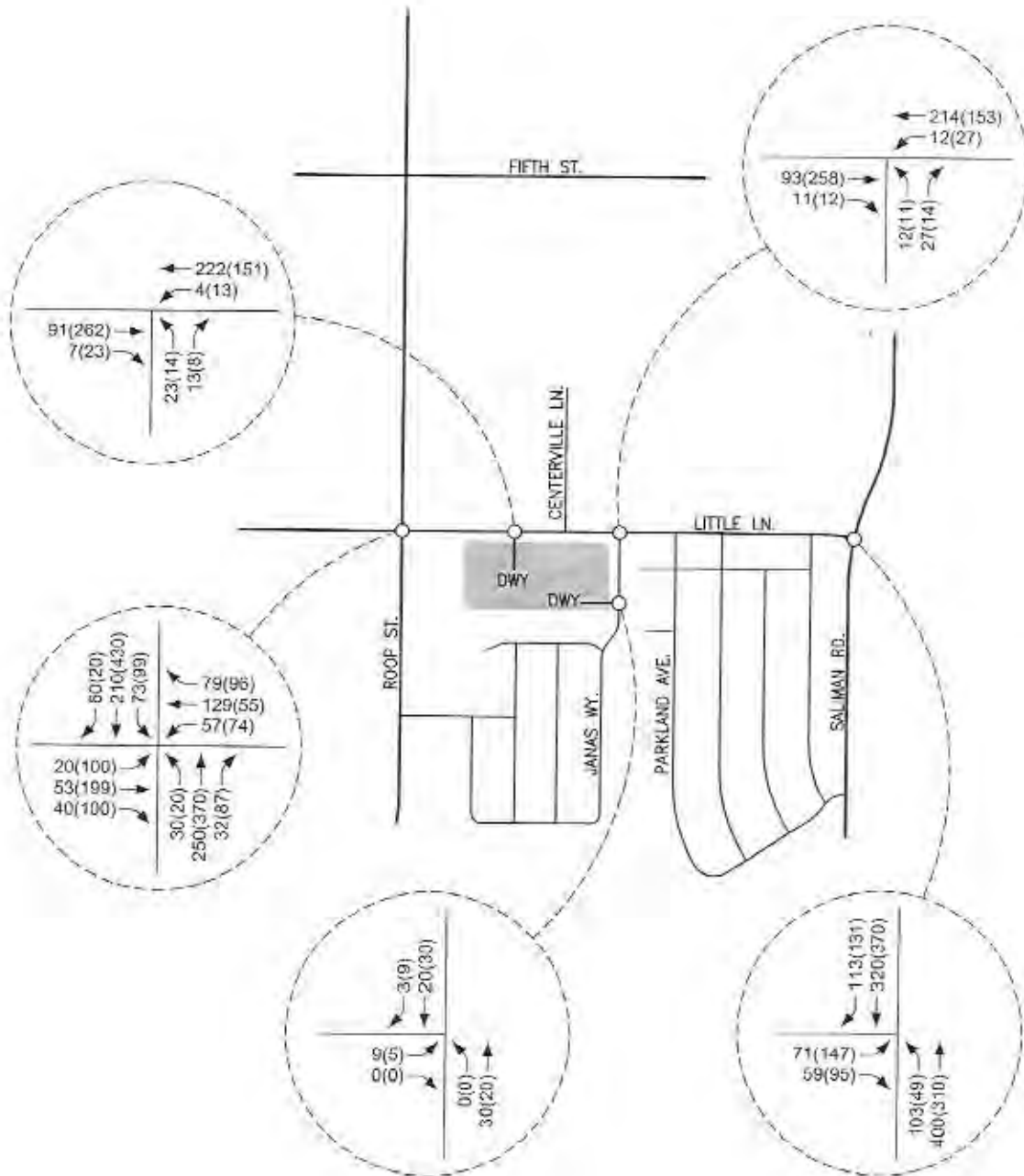
— AM PEAK HOUR
(-) PM PEAK HOUR



LITTLE LANE APARTMENTS
2040 BASE TRAFFIC VOLUMES
FIGURE 6

LEGEND

— AM PEAK HOUR
(-) PM PEAK HOUR



LITTLE LANE APARTMENTS
2040 BASE PLUS PROJECT TRAFFIC VOLUMES
FIGURE 7

INTERSECTION CAPACITY ANALYSIS

The key intersections were analyzed for capacity based on procedures presented in the *Highway Capacity Manual (6th Edition)*, prepared by the Transportation Research Board, for unsignalized and signalized intersections.

The result of capacity analysis is a level of service (LOS) rating for each signalized intersection and unsignalized intersection minor movement. Level of service is a qualitative measure of traffic operating conditions where a letter grade "A" through "F", corresponding to progressively worsening traffic operation, is assigned to the intersection or minor movement. Carson City design standards indicate that LOS D is the level of service standard for all city maintained streets and intersections.

The *Highway Capacity Manual* defines level of service for stop controlled intersections in terms of computed or measured control delay for each minor movement. Level of service is not defined for the intersection as a whole. The level of service criteria for unsignalized intersections is shown in Table 2.

TABLE 2 LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS	
LEVEL OF SERVICE	DELAY RANGE (SEC/VEH)
A	≤ 10
B	>10 and ≤ 15
C	>15 and ≤ 25
D	>25 and ≤ 35
E	>35 and ≤ 50
F	>50

Level of service for signalized intersections is stated in terms of the average control delay per vehicle for a peak 15 minute analysis period. The level of service criteria for signalized intersections is shown in Table 3.

TABLE 3 LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS	
LEVEL OF SERVICE	CONTROL DELAY PER VEHICLE (SEC)
A	≤ 10
B	>10 and ≤ 20
C	>20 and ≤ 35
D	>35 and ≤ 55
E	>55 and ≤ 80
F	>80

Table 4 shows a summary of the peak hour level of service and delay results at the key intersections for the existing, existing plus project, 2040 base, and 2040 base plus project scenarios. The intersection operational analysis worksheets are included in the Appendix.

TABLE 4 INTERSECTION LEVEL OF SERVICE AND DELAY RESULTS								
INTERSECTION	EXISTING		EXISTING + PROJECT		2040 BASE		2040 BASE + PROJECT	
	AM	PM	AM	PM	AM	PM	AM	PM
Roop/Little (Signal)	B17.1	B18.1	B17.2	B18.2	B17.6	C21.1	B17.7	C21.1
Saliman/Little (Stop at West Leg) EB Left-Right NB Left	B14.8 A8.3	C16.8 A8.4	C15.6 A8.3	C18.2 A8.5	C19.1 A8.7	D25.3 A8.7	C20.8 A8.7	D29.0 A8.8
Little/Janas (Stop at South Leg) WB Left NB Left-Right	A7.4 A9.5	A7.8 B10.2	A7.4 A9.6	A7.9 B10.4	A7.4 A9.5	A7.9 B11.0	A7.5 A9.7	A7.9 B11.1
Little/Driveway (Stop at South Leg) WB Left NB Left-Right	N/A N/A	N/A N/A	A7.4 B10.0	A7.9 B11.1	N/A N/A	N/A N/A	A7.4 B10.3	A7.9 B11.4
Janas/Driveway (Stop at West Leg) EB Left-Right NB Left	N/A N/A	N/A N/A	A8.7 A7.3	A8.7 A7.3	N/A N/A	N/A N/A	A8.8 A7.3	A8.8 A7.3

Roop Street/Little Lane Intersection

The Roop Street/Little Lane intersection was analyzed as a signalized four-leg intersection with the existing phasing for all scenarios. The intersection currently operates at LOS B with a delay of 17.1 seconds per vehicle during the AM peak hour and LOS B with a delay of 18.1 seconds per vehicle during the PM peak hour. For the existing plus project traffic volumes the intersection continues to operate at LOS B with delays slightly increasing to 17.2 seconds per vehicle during the AM peak hour and 18.2 seconds per vehicle during the PM peak hour. For the 2040 base traffic volumes the intersection is anticipated to operate at LOS B with a delay of 17.6 seconds per vehicle during the AM peak hour and LOS C with a delay of 21.1 seconds per vehicle during the PM peak hour. For the 2040 base plus project volumes the intersection continues to operate at LOS B with delay slightly increasing to 17.7 seconds per vehicle during the AM peak hour and LOS C with no change in delay during the PM peak hour. The intersection was analyzed with the existing approach lanes for all scenarios. The intersection meets Carson City's policy LOS D standard for all study scenarios.

The project is anticipated to add traffic to the left turn movements at the north and east approaches of the Roop Street/Little Lane intersection. Storage requirements were subsequently reviewed for these two left turn movements based on 95th percentile queue lengths calculated from the operational analysis. The operational analysis results for the existing plus project traffic volumes indicate 95th percentile queue lengths of 50 feet for both left turn movements. The existing left turn lane at the east approach contains ± 125 feet of storage length which will accommodate the 50 foot storage requirement. The existing continuous two-way left turn lane at the north approach contains over 500 feet of storage length which will easily accommodate the 50 foot requirement.

Saliman Road/Little Lane Intersection

The Saliman Road/Little Lane intersection was analyzed as an unsignalized three-leg intersection with stop control at the west approach for all scenarios. The intersection minor movements currently operates at LOS B or better during the AM peak hour and LOS C or better during the PM peak hour. For the existing plus project traffic volumes the intersection minor movements operate at LOS C or better during the AM and PM peak hours. For the 2040 base traffic volumes the intersection minor movements are anticipated to operate at LOS C or better during the AM peak hour and LOS D or better during the PM peak hour. For the 2040 base plus project traffic volumes the intersection minor movements continue to operate at LOS C or better during the AM peak hour and LOS D or better during the PM peak hour with slight increases in delay. The intersection was analyzed with the existing approach lanes for all scenarios. The intersection meets Carson City's policy LOS D standard for all study scenarios.

The project is anticipated to add traffic to the left turn movements at the west and south approaches of the Saliman Road/Little Lane intersection. Storage requirements were subsequently reviewed for these left turn movements based on 95th percentile queue lengths calculated from the operational analysis. The operational analysis results for the existing plus project traffic volumes indicate a 95th percentile queue length of 75 feet for the shared left turn-right turn movement at the west approach and less than 50 feet for the left turn movement at the south approach. The existing continuous two-way left turn lane at the south approach contains over 300 feet of storage length which will easily accommodate the 50 foot storage requirement. The west approach does not contain an exclusive left turn lane. However, ± 170 feet of available queue length exists on Little Lane between Saliman Road and the nearest street to the west (Spartan Avenue) which will accommodate the 75 foot queuing requirement.

Peak hour traffic signal warrant 3 per the latest edition of the *Manual on Uniform Traffic Control Devices* (MUTCD) was reviewed at the Saliman Road/Little Lane intersection per Carson City requirements. The total traffic volume on the minor street approach, the total traffic volume on both major street approaches, and the speed limit on the major street are considered when reviewing the peak hour signal warrant. The peak hour traffic signal warrant is not met based on the existing, existing plus project, 2040 base, and 2040 base plus project traffic volumes and 35 mile per hour speed limit on Saliman Road.

Little Lane/Janas Way Intersection

The Little Lane/Janas Way intersection was analyzed as an unsignalized three-leg intersection with stop control at the south approach for all scenarios. The intersection minor movements currently operates at LOS A during the AM peak hour and LOS B or better during the PM peak hour. For the existing plus project traffic volumes the intersection minor movements continue to operate at LOS A during the AM peak hour and LOS B or better during the PM peak hour. For the 2040 base traffic volumes the intersection minor movements are anticipated to operate at LOS A during the AM peak hour and LOS B or better during the PM peak hour. For the 2040 base plus project traffic volumes the intersection minor movements continue to operate at LOS A during the AM peak hour and LOS B or better during the PM peak hour. The intersection was analyzed with the existing approach lanes for all scenarios. The intersection meets Carson City's policy LOS D standard for all study scenarios.

The need for an exclusive left turn lane at the east approach of the Little Lane/Janas Way intersection was reviewed based on AASHTO guidelines for left turn lanes on two-lane roadways. The guidelines list traffic volumes and operating speeds which necessitate the installation of left turn lanes on two-lane roads. The traffic volumes to be considered include advancing traffic volumes, opposing traffic volumes, and the percent of advancing traffic which is turning left. The existing plus project traffic volumes do not trigger the need for an exclusive westbound left turn lane at this intersection based on the existing 25 mile per hour speed limit on Little Lane.

Multi-way stop control was qualitatively reviewed at the Little Lane/Janas Way intersection based on minimum volume thresholds presented in the *Manual on Uniform Traffic Control Devices* (MUTCD). The MUTCD states that multi-way stop control should be considered if the major street volume averages at least 300 vehicles per hour and the minor street averages at least 200 vehicles, pedestrians, and bicycles per hour for the same eight-hours of an average day. This study analyzed only the AM and PM peak hours. The existing plus project traffic volumes on Janas Way amount to 31 vehicles during the AM peak hour and 14 vehicles during the PM peak hour with little pedestrian/bicycle activity observed at the intersection. The peak hour minor street volumes are well below the 200 vehicle per hour threshold and therefore it can be assumed that traffic volumes during the remaining non-peak hours of an average day will also fall below the threshold.

Little Lane/Project Driveway Intersection

The Little Lane/Project Driveway intersection was analyzed as an unsignalized three-leg intersection with stop control at the south approach for the existing plus project and 2040 base plus project scenarios. For the existing plus project traffic volumes the intersection minor movements are anticipated to operate at LOS B or better during the AM and PM peak hours. For the 2040 base plus project traffic volumes the intersection minor movements continue to operate at LOS B or better during the AM and PM peak hours with slight increases in delay. The intersection was analyzed with one shared through-right turn lane at the west approach, one shared left turn-through lane at the east approach, and one shared left turn-right turn lane at the south approach. The intersection meets Carson City's policy LOS D standard for both scenarios.

The need for an exclusive left turn lane at the east approach of the Little Lane/Project Driveway intersection was reviewed based on AASHTO guidelines for left turn lanes on two-lane roadways. The guidelines list traffic volumes and operating speeds which necessitate the installation of left turn lanes on two-lane roads. The traffic volumes to be considered include advancing traffic volumes, opposing traffic volumes, and the percent of advancing traffic which is turning left. The existing plus project traffic volumes do not trigger the need for an exclusive left turn lane at the driveway based on the existing 25 mile per hour speed limit on Little Lane. It is recommended that the Little Lane/Project Driveway intersection be constructed with stop sign control at the south approach and contain single ingress and egress lanes.

Janas Way/Project Driveway Intersection

The Janas Way/Project Driveway intersection was analyzed as an unsignalized three-leg intersection with stop control at the west approach for the existing plus project and 2040 base plus project scenarios. For the existing plus project traffic volumes the intersection minor movements are anticipated to operate at LOS A during the AM and PM peak hours. For the 2040 base plus project traffic volumes the intersection minor movements continue to operate at LOS A during the AM and PM peak hours with slight increases in delay. The intersection was analyzed with one shared through-right turn lane at the north approach, one shared left turn-through lane at the south approach, and one shared left turn-right turn lane at the west approach. The intersection meets Carson City's policy LOS D standard for both scenarios. It is recommended that the Janas Way/Project Driveway intersection be constructed with stop sign control at the west approach and contain single ingress and egress lanes.

SITE PLAN REVIEW

A copy of the site plan for the proposed Little Lane Apartment development is included with this submittal. The site plan indicates that project access will be provided from one driveway each on Little Lane and Janas Way. The two project driveways will connect to the interior streets and on-site parking areas. The proposed driveways, interior streets, and parking areas are anticipated to provide good access and on-site circulation. It is recommended that the project driveways, internal streets and on-site parking areas be designed per Carson City standards. The site plan indicates that the project driveway on Little Lane will be offset east of an existing apartment driveway on the north side of Little Lane. This easterly offset will not impact opposing left turn ingress movements at the driveways.

RECOMMENDATIONS

Traffic generated by the Little Lane Apartment development will have some impact on the adjacent street network. The following recommendations are made to mitigate project traffic impacts.

It is recommended that any required signing, striping or traffic control improvements comply with Carson City requirements.

It is recommended that the Little Lane/Project Driveway intersection be constructed with stop sign control at the south approach and contain single ingress and egress lanes.

It is recommended that the Janas Way/Project Driveway intersection be constructed with stop sign control at the west approach and contain single ingress and egress lanes.

It is recommended that the project driveways, internal streets and on-site parking areas be designed per Carson City standards.

APPENDIX

Multifamily Housing (Low-Rise) (220)

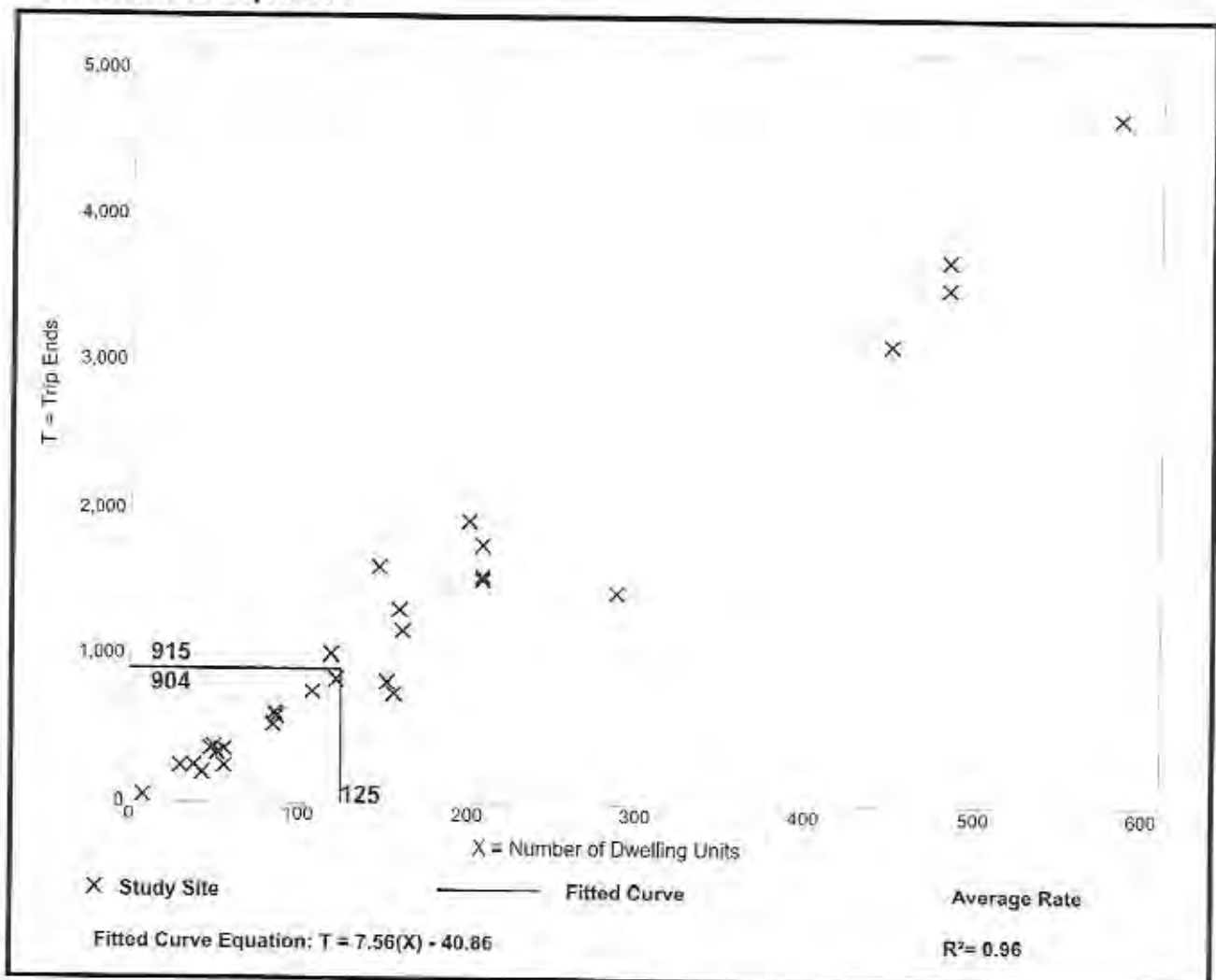
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 29
Avg. Num. of Dwelling Units: 168
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.32	4.45 - 10.97	1.31

Data Plot and Equation



Multifamily Housing (Low-Rise) (220)

Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,

Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Setting/Location: General Urban/Suburban

Number of Studies: 42

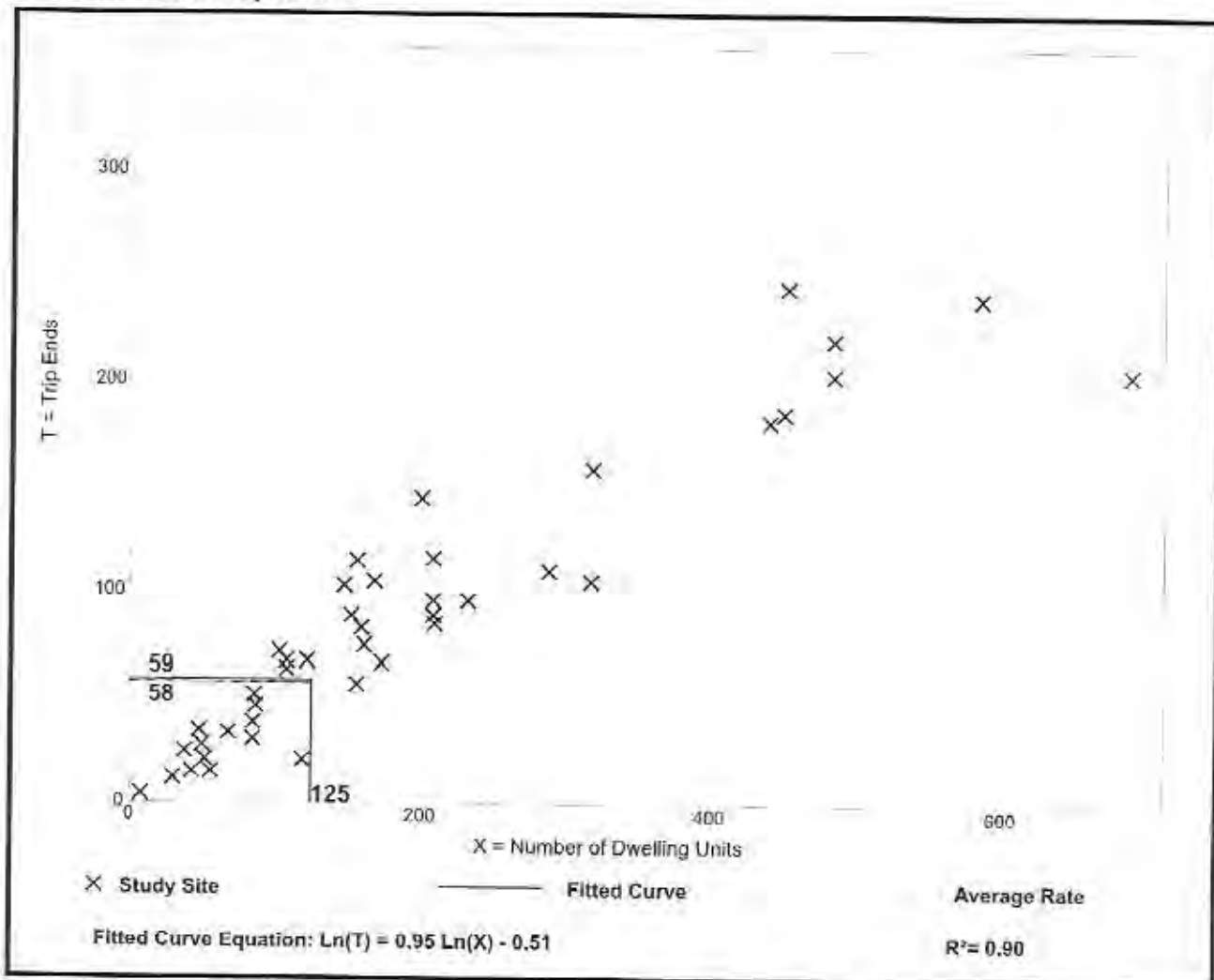
Avg. Num. of Dwelling Units: 199

Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.46	0.18 - 0.74	0.12

Data Plot and Equation



Multifamily Housing (Low-Rise) (220)

Vehicle Trip Ends vs: Dwelling Units

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: 50

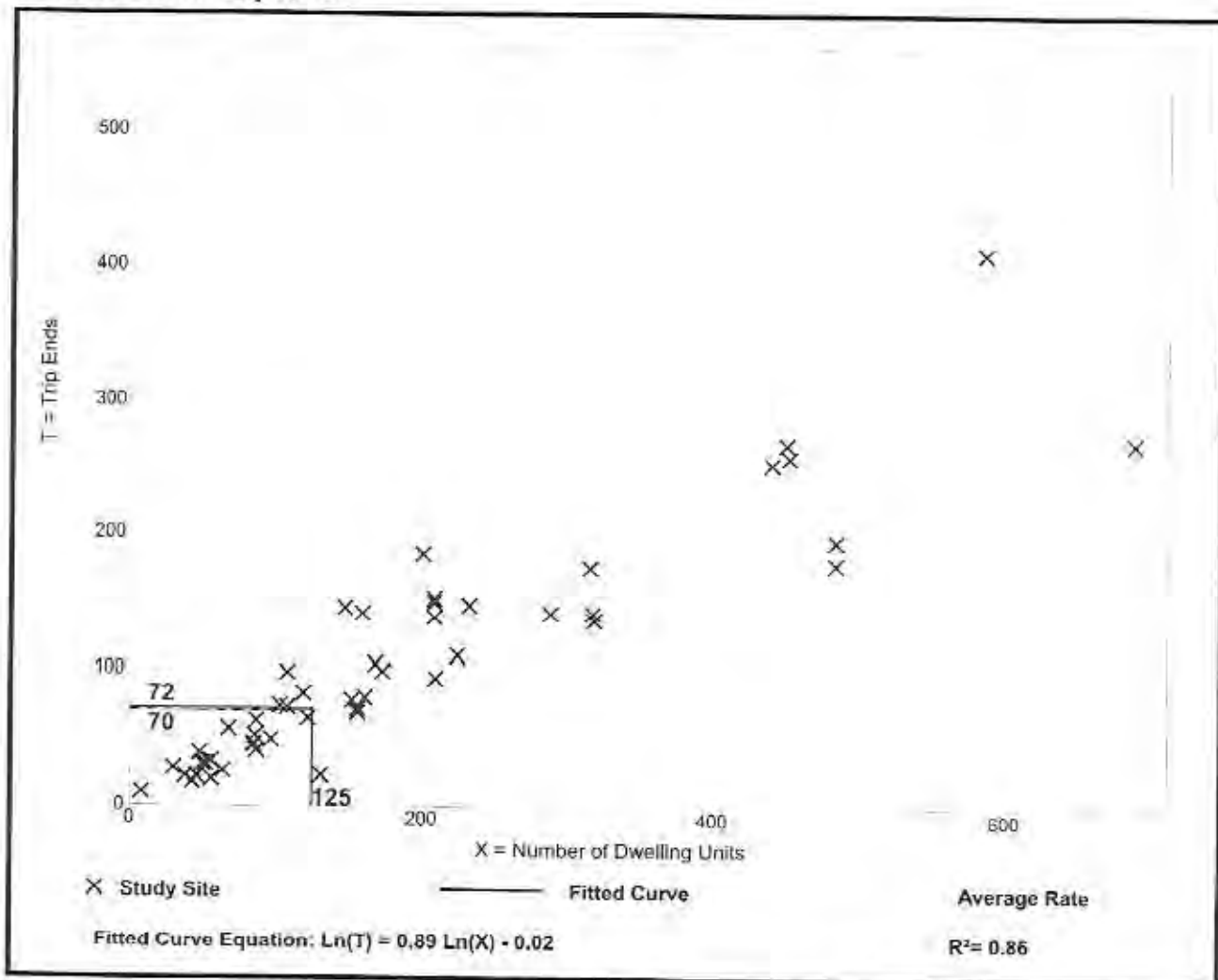
Avg. Num. of Dwelling Units: 187

Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.56	0.18 - 1.25	0.16

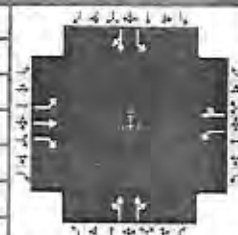
Data Plot and Equation



HCS7 Signalized Intersection Results Summary

General Information

Agency	Solaegui Engineers			Intersection Information	
Analyst	MSH	Analysis Date	Sep 11, 2019	Duration, h	0.25
Jurisdiction	Carson City	Time Period	AM Peak Hour	Area Type	Other
Urban Street		Analysis Year	Existing	PHF	0.90
Intersection	Roop & Little	File Name	RoLi19ax.xus	Analysis Period	1 > 7:00
Project Description					



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	9	45	25	39	118	56	30	216	16	32	174	57

Signal Information

Cycle, s	65.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	22.0	8.0	20.0	0.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0	0.0	0.0
				Red	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8		2		6
Case Number	2.0	3.0	2.0	4.0		8.0		6.0
Phase Duration, s	13.0	25.0	13.0	25.0		27.0		27.0
Change Period, (Y+R), s	5.0	5.0	5.0	5.0		5.0		5.0
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2		3.2		3.2
Queue Clearance Time (g _s), s	2.3	3.2	3.4	7.6		9.3		9.3
Green Extension Time (g _e), s	0.0	0.5	0.0	0.4		1.0		1.0
Phase Call Probability	1.00	1.00	1.00	1.00		1.00		1.00
Max Out Probability	0.00	0.00	0.08	0.00		0.01		0.01

Movement Group Results

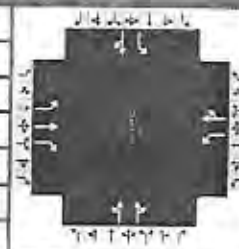
Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	10	50	28	43	193		150		141	36	257	
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870	1531	1781	1755		1649		1656	1116	1774	
Queue Service Time (g _s), s	0.3	1.2	0.8	1.4	5.6		0.1		4.0	1.5	7.3	
Cycle Queue Clearance Time (g _c), s	0.3	1.2	0.8	1.4	5.6		7.3		4.0	5.5	7.3	
Green Ratio (g/C)	0.12	0.31	0.31	0.12	0.31		0.34		0.34	0.34	0.34	
Capacity (c), veh/h	219	575	471	219	540		626		560	420	600	
Volume-to-Capacity Ratio (X)	0.046	0.087	0.059	0.198	0.358		0.240		0.251	0.085	0.427	
Back of Queue (Q), ft/ln (95 th percentile)	5.9	22.2	12.3	26.3	94.1		65.5		61.6	16.8	122.3	
Back of Queue (Q), veh/ln (95 th percentile)	0.2	0.9	0.5	1.0	3.7		2.6		2.5	0.7	4.8	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh	25.1	16.0	15.9	25.6	17.5		15.5		15.5	17.5	16.6	
Incremental Delay (d ₂), s/veh	0.0	0.0	0.0	0.2	0.1		0.1		0.1	0.0	0.2	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Control Delay (d), s/veh	25.2	16.0	15.9	25.8	17.7		15.5		15.6	17.6	16.8	
Level of Service (LOS)	C	B	B	C	B		B		B	B	B	
Approach Delay, s/veh / LOS	17.0		B	19.1		B	15.6		B	16.9		B
Intersection Delay, s/veh / LOS	17.1						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91		B	2.10		B	1.90		B	2.09		B
Bicycle LOS Score / LOS	0.63		A	0.88		A	0.73		A	0.97		A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Solaegui Engineers			Duration, h	0.25
Analyst	MSH	Analysis Date	Sep 11, 2019	Area Type	Other
Jurisdiction	Carson City	Time Period	PM Peak Hour	PHF	0.90
Urban Street		Analysis Year	Existing	Analysis Period	1> 7:00
Intersection	Roop & Little	File Name	RoLi19px.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	61	187	81	42	49	57	20	307	61	78	296	18

Signal Information											
Cycle, s	65.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	Yes	Simult. Gap E/W	On	Green	22.0	8.0	20.0	0.0	0.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0	0.0
				Red	1.0	1.0	1.0	0.0	0.0	0.0	0.0

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8		2		6
Case Number	2.0	3.0	2.0	4.0		8.0		6.0
Phase Duration, s	13.0	25.0	13.0	25.0		27.0		27.0
Change Period, (Y+R _c), s	5.0	5.0	5.0	5.0		5.0		5.0
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2		3.2		3.2
Queue Clearance Time (g _s), s	4.3	7.6	3.5	5.4		8.3		13.1
Green Extension Time (g _e), s	0.0	0.7	0.0	0.7		1.7		1.4
Phase Call Probability	1.00	1.00	1.00	1.00		1.00		1.00
Max Out Probability	0.39	0.00	0.10	0.00		0.02		0.12

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	68	208	90	47	118		229		202	87	349	
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870	1531	1781	1685		1807		1585	973	1847	
Queue Service Time (g_s), s	2.3	5.6	2.8	1.5	3.4		0.0		6.3	4.8	10.0	
Cycle Queue Clearance Time (g_c), s	2.3	5.6	2.8	1.5	3.4		6.0		6.3	11.1	10.0	
Green Ratio (g/C)	0.12	0.31	0.31	0.12	0.31		0.34		0.34	0.34	0.34	
Capacity (c), veh/h	219	575	471	219	518		672		536	346	625	
Volume-to-Capacity Ratio (X)	0.309	0.361	0.191	0.213	0.227		0.341		0.376	0.250	0.558	
Back of Queue (Q), ft/ln (95 th percentile)	41.8	101.3	41.5	28.4	54.8		104.8		92.8	46.6	179.1	
Back of Queue (Q), veh/ln (95 th percentile)	1.6	4.0	1.6	1.1	2.2		4.2		3.7	1.8	7.1	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	26.0	17.5	16.5	25.7	16.7		16.2		16.3	20.5	17.5	
Incremental Delay (d_2), s/veh	0.3	0.1	0.1	0.2	0.1		0.1		0.2	0.1	0.7	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Control Delay (d), s/veh	26.3	17.7	16.6	25.8	16.8		16.3		16.5	20.6	18.2	
Level of Service (LOS)	C	B	B	C	B		B		B	C	B	
Approach Delay, s/veh / LOS	19.0	B		19.4	B		16.4	B		18.7	B	
Intersection Delay, s/veh / LOS	18.1						B					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		2.10	B		1.90	B		2.09	B	
Bicycle LOS Score / LOS	1.09	A		0.76	A		0.84	A		1.21	A	

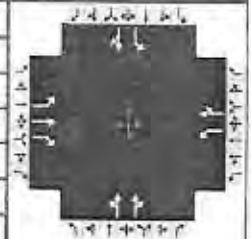
HCS7 Signalized Intersection Results Summary

General Information

Agency	Solaegui Engineers			Duration, h	0.25
Analyst	MSH	Analysis Date	Sep 11, 2019	Area Type	Other
Jurisdiction	Carson City	Time Period	AM Peak Hour	PHF	0.90
Urban Street		Analysis Year	Existing + Project	Analysis Period	1> 7:00
Intersection	Roop & Little	File Name	RoLi19aw.xus		
Project Description					

Intersection Information

Duration, h	0.25
Area Type	Other
PHF	0.90
Analysis Period	1> 7:00



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	9	48	25	46	127	65	30	216	18	35	174	57

Signal Information

Cycle, s	65.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	Yes	Simult. Gap E/W	On											
Force Mode	Fixed	Simult. Gap N/S	On					Green	22.0	8.0	20.0	0.0	0.0	0.0
								Yellow	4.0	4.0	4.0	0.0	0.0	0.0
Red	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0						

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8		2		6
Case Number	2.0	3.0	2.0	4.0		8.0		6.0
Phase Duration, s	13.0	25.0	13.0	25.0		27.0		27.0
Change Period, (Y+R _c), s	5.0	5.0	5.0	5.0		5.0		5.0
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2		3.2		3.2
Queue Clearance Time (g _s), s	2.3	3.3	3.7	8.3		9.3		9.3
Green Extension Time (g _e), s	0.0	0.5	0.0	0.4		1.0		1.0
Phase Call Probability	1.00	1.00	1.00	1.00		1.00		1.00
Max Out Probability	0.00	0.00	0.14	0.00		0.01		0.01

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	10	53	28	51	213		152		141	39	257	
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870	1531	1781	1749		1656		1651	1114	1774	
Queue Service Time (g _s), s	0.3	1.3	0.8	1.7	6.3		0.1		4.0	1.7	7.3	
Cycle Queue Clearance Time (g _c), s	0.3	1.3	0.8	1.7	6.3		7.3		4.0	5.7	7.3	
Green Ratio (g/C)	0.12	0.31	0.31	0.12	0.31		0.34		0.34	0.34	0.34	
Capacity (c), veh/h	219	575	471	219	538		628		559	419	600	
Volume-to-Capacity Ratio (X)	0.046	0.093	0.059	0.233	0.396		0.242		0.253	0.093	0.427	
Back of Queue (Q), ft/ln (95 th percentile)	5.9	23.7	12.3	31.1	105.2		66.3		62	18.5	122.3	
Back of Queue (Q), veh/ln (95 th percentile)	0.2	0.9	0.5	1.2	4.1		2.7		2.5	0.7	4.8	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh	25.1	16.0	15.9	25.7	17.7		15.5		15.6	17.6	16.6	
Incremental Delay (d ₂), s/veh	0.0	0.0	0.0	0.2	0.2		0.1		0.1	0.0	0.2	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Control Delay (d), s/veh	25.2	16.1	15.9	25.9	17.9		15.6		15.6	17.7	16.8	
Level of Service (LOS)	C	B	B	C	B		B		B	B	B	
Approach Delay, s/veh / LOS	17.0		B	19.5		B	15.6		B	16.9		B
Intersection Delay, s/veh / LOS	17.2						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91		B	2.10		B	1.90		B	2.09		B
Bicycle LOS Score / LOS	0.64		A	0.92		A	0.73		A	0.98		A

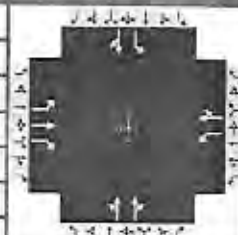
HCS7 Signalized Intersection Results Summary

General Information

Agency	Solaegui Engineers		
Analyst	MSH	Analysis Date	Sep 11, 2019
Jurisdiction	Carson City	Time Period	PM Peak Hour
Urban Street		Analysis Year	Existing + Project
Intersection	Roop & Little	File Name	RoLi19pw.xus
Project Description			

Intersection Information

Duration, h	0.25
Area Type	Other
PHF	0.90
Analysis Period	1> 7:00



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	61	196	81	46	54	63	20	307	68	87	296	18

Signal Information

Cycle, s	65.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8		2		6
Case Number	2.0	3.0	2.0	4.0		8.0		6.0
Phase Duration, s	13.0	25.0	13.0	25.0		27.0		27.0
Change Period, (Y+R), s	5.0	5.0	5.0	5.0		5.0		5.0
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2		3.2		3.2
Queue Clearance Time (g _c), s	4.3	7.9	3.7	5.8		8.4		13.9
Green Extension Time (g _e), s	0.0	0.7	0.0	0.8		1.7		1.4
Phase Call Probability	1.00	1.00	1.00	1.00		1.00		1.00
Max Out Probability	0.39	0.00	0.14	0.00		0.02		0.17

Movement Group Results

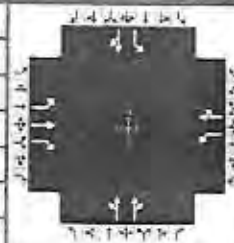
Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	68	218	90	51	130		234		205	97	349	
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870	1531	1781	1685		1809		1574	966	1847	
Queue Service Time (g _s), s	2.3	5.9	2.8	1.7	3.8		0.0		6.4	5.5	10.0	
Cycle Queue Clearance Time (g _c), s	2.3	5.9	2.8	1.7	3.8		6.2		6.4	11.9	10.0	
Green Ratio (g/C)	0.12	0.31	0.31	0.12	0.31		0.34		0.34	0.34	0.34	
Capacity (c), veh/h	219	575	471	219	518		673		533	342	625	
Volume-to-Capacity Ratio (X)	0.309	0.378	0.191	0.233	0.251		0.348		0.384	0.282	0.558	
Back of Queue (Q), ft/ln (95 th percentile)	41.8	106.8	41.5	31.1	61		107.2		94.5	52.9	179.1	
Back of Queue (Q), veh/ln (95 th percentile)	1.6	4.2	1.6	1.2	2.4		4.3		3.8	2.1	7.1	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh	26.0	17.6	16.5	25.7	16.9		16.3		16.3	20.9	17.5	
Incremental Delay (d ₂), s/veh	0.3	0.2	0.1	0.2	0.1		0.1		0.2	0.2	0.7	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Control Delay (d), s/veh	26.3	17.8	16.6	25.9	17.0		16.4		16.5	21.0	18.2	
Level of Service (LOS)	C	B	B	C	B		B		B	C	B	
Approach Delay, s/veh / LOS	19.0		B	19.5		B	16.4		B	18.8		B
Intersection Delay, s/veh / LOS	18.2						B					

Multimodal Results

Pedestrian LOS Score / LOS	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Bicycle LOS Score / LOS	1.11		A	0.79		A	0.85		A	1.22		A

HCS7 Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Solaegui Engineers			Duration, h	0.25
Analyst	MSH	Analysis Date	Sep 11, 2019	Area Type	Other
Jurisdiction	Carson City	Time Period	AM Peak Hour	PHF	0.90
Urban Street		Analysis Year	2040 Base	Analysis Period	1> 7:00
Intersection	Roop & Little	File Name	RoLi40ax.xus		
Project Description					



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	20	50	40	50	120	70	30	250	30	70	210	60

Signal Information													
Cycle, s	65.0	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On	Green	22.0	8.0	20.0	0.0	0.0	0.0			
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0			
				Red	1.0	1.0	1.0	0.0	0.0	0.0			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8		2		6
Case Number	2.0	3.0	2.0	4.0		8.0		6.0
Phase Duration, s	13.0	25.0	13.0	25.0		27.0		27.0
Change Period, (Y+R), s	5.0	5.0	5.0	5.0		5.0		5.0
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2		3.2		3.2
Queue Clearance Time (g _s), s	2.7	3.4	3.8	8.2		10.8		10.7
Green Extension Time (g _e), s	0.0	0.5	0.0	0.5		1.3		1.3
Phase Call Probability	1.00	1.00	1.00	1.00		1.00		1.00
Max Out Probability	0.01	0.00	0.19	0.00		0.03		0.03

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	22	56	44	56	211		179		166	78	300	
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870	1531	1781	1739		1659		1630	1064	1783	
Queue Service Time (g_s), s	0.7	1.4	1.3	1.8	6.2		0.1		4.9	3.8	8.7	
Cycle Queue Clearance Time (g_c), s	0.7	1.4	1.3	1.8	6.2		8.8		4.9	8.6	8.7	
Green Ratio (g/C)	0.12	0.31	0.31	0.12	0.31		0.34		0.34	0.34	0.34	
Capacity (c), veh/h	219	575	471	219	535		627		552	391	604	
Volume-to-Capacity Ratio (X)	0.101	0.097	0.094	0.253	0.394		0.285		0.301	0.199	0.497	
Back of Queue (Q), ft/ln (95 th percentile)	13.3	24.7	19.8	33.9	104.1		79.1		74.1	39.5	147.4	
Back of Queue (Q), veh/ln (95 th percentile)	0.5	1.0	0.8	1.3	4.1		3.2		3.0	1.6	5.8	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	25.3	16.1	16.0	25.8	17.7		15.7		15.8	19.0	17.1	
Incremental Delay (d_2), s/veh	0.1	0.0	0.0	0.2	0.2		0.1		0.1	0.1	0.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Control Delay (d), s/veh	25.4	16.1	16.1	26.0	17.9		15.8		15.9	19.1	17.3	
Level of Service (LOS)	C	B	B	C	B		B		B	B	B	
Approach Delay, s/veh / LOS	17.8	B		19.6	B		15.9	B		17.7	B	
Intersection Delay, s/veh / LOS	17.6						B					

Multimodal Results	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		2.10	B		1.90	B		2.09	B	
Bicycle LOS Score / LOS	0.69	A		0.93	A		0.77	A		1.11	A	

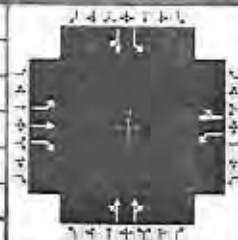
HCS7 Signalized Intersection Results Summary

General Information

Agency	Solaegui Engineers		
Analyst	MSH	Analysis Date	Sep 11, 2019
Jurisdiction	Carson City	Time Period	PM Peak Hour
Urban Street		Analysis Year	2040 Base
Intersection	Roop & Little	File Name	RoLi40px.xus
Project Description			

Intersection Information

Duration, h	0.25
Area Type	Other
PHF	0.90
Analysis Period	1> 7:00



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	100	190	100	70	50	90	20	370	80	90	430	20

Signal Information

Cycle, s	65.0	Reference Phase	2																																																																																																																																																																										
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Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8		2		6
Case Number	2.0	3.0	2.0	4.0		8.0		6.0
Phase Duration, s	13.0	25.0	13.0	25.0		27.0		27.0
Change Period, (Y+R _c), s	5.0	5.0	5.0	5.0		5.0		5.0
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2		3.2		3.2
Queue Clearance Time (g _s), s	5.8	7.7	4.6	6.7		18.7		17.9
Green Extension Time (g _e), s	0.0	0.8	0.0	0.8		1.1		1.3
Phase Call Probability	1.00	1.00	1.00	1.00		1.00		1.00
Max Out Probability	1.00	0.00	0.67	0.00		0.97		0.78

Movement Group Results

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	111	211	111	78	156		273		249	100	500	
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870	1531	1781	1653		1489		1578	895	1852	
Queue Service Time (g _s), s	3.8	5.7	3.5	2.6	4.7		0.8		8.1	6.4	15.9	
Cycle Queue Clearance Time (g _c), s	3.8	5.7	3.5	2.6	4.7		16.7		8.1	14.5	15.9	
Green Ratio (g/C)	0.12	0.31	0.31	0.12	0.31		0.34		0.34	0.34	0.34	
Capacity (c), veh/h	219	575	471	219	509		564		534	303	627	
Volume-to-Capacity Ratio (X)	0.507	0.367	0.236	0.355	0.306		0.485		0.466	0.330	0.798	
Back of Queue (Q), ft/ln (95 th percentile)	71	103.2	51.9	48.2	74.5		128.8		118.8	57.9	294.5	
Back of Queue (Q), veh/ln (95 th percentile)	2.8	4.1	2.0	1.9	2.9		5.2		4.8	2.3	11.6	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	
Uniform Delay (d _r), s/veh	26.7	17.6	16.8	26.1	17.2		16.8		16.9	22.6	19.5	
Incremental Delay (d _i), s/veh	0.8	0.1	0.1	0.4	0.1		0.2		0.2	0.2	6.6	
Initial Queue Delay (d _s), s/veh	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Control Delay (d), s/veh	27.4	17.7	16.9	26.5	17.3		17.0		17.1	22.8	26.1	
Level of Service (LOS)	C	B	B	C	B		B		B	C	C	
Approach Delay, s/veh / LOS	20.0		B	20.4		C	17.1		B	25.5		C
Intersection Delay, s/veh / LOS	21.1						C					

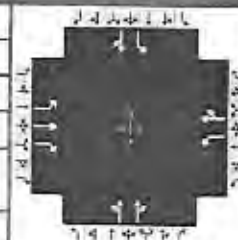
Multimodal Results

Pedestrian LOS Score / LOS	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Bicycle LOS Score / LOS	1.91		B	2.10		B	1.90		B	2.09		B
	1.20		A	0.87		A	0.92		A	1.48		A

HCS7 Signalized Intersection Results Summary

General Information

Agency	Solaegui Engineers	Intersection Information	
Analyst	MSH	Duration, h	0.25
Jurisdiction	Carson City	Area Type	Other
Urban Street		PHF	0.90
Intersection	Roop & Little	Analysis Period	1> 7:00
Project Description		File Name	RoLi40aw.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	20	53	40	57	129	79	30	250	32	73	210	60

Signal Information

Signal Information															
Cycle, s	65.0	Reference Phase	2												
Offset, s	0	Reference Point	End												
Uncoordinated	Yes	Simult. Gap E/W	On	Green	22.0	8.0	20.0	0.0	0.0	0.0					
				Yellow	4.0	4.0	4.0	0.0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	1.0	1.0	1.0	0.0	0.0	0.0					

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8		2		6
Case Number	2.0	3.0	2.0	4.0		8.0		6.0
Phase Duration, s	13.0	25.0	13.0	25.0		27.0		27.0
Change Period, (Y+R), s	5.0	5.0	5.0	5.0		5.0		5.0
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2		3.2		3.2
Queue Clearance Time (g _s), s	2.7	3.5	4.1	8.9		10.8		10.9
Green Extension Time (g _e), s	0.0	0.6	0.0	0.5		1.3		1.3
Phase Call Probability	1.00	1.00	1.00	1.00		1.00		1.00
Max Out Probability	0.01	0.00	0.30	0.00		0.03		0.03

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	22	59	44	63	231		180		167	81	300	
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870	1531	1781	1736		1664		1626	1062	1783	
Queue Service Time (g _s), s	0.7	1.5	1.3	2.1	6.9		0.1		4.9	4.0	8.7	
Cycle Queue Clearance Time (g _c), s	0.7	1.5	1.3	2.1	6.9		8.8		4.9	8.9	8.7	
Green Ratio (g/C)	0.12	0.31	0.31	0.12	0.31		0.34		0.34	0.34	0.34	
Capacity (c), veh/h	219	575	471	219	534		629		550	390	604	
Volume-to-Capacity Ratio (X)	0.101	0.102	0.094	0.289	0.433		0.286		0.303	0.208	0.497	
Back of Queue (Q), ft/ln (95 th percentile)	13.3	26.2	19.8	38.9	115.6		79.7		74.5	41.5	147.4	
Back of Queue (Q), veh/ln (95 th percentile)	0.5	1.0	0.8	1.5	4.6		3.2		3.0	1.6	5.8	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh	25.3	16.1	16.0	25.9	18.0		15.7		15.8	19.1	17.1	
Incremental Delay (d ₂), s/veh	0.1	0.0	0.0	0.3	0.2		0.1		0.1	0.1	0.2	
Initial Queue Delay (d ₃), s/veh	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Control Delay (d), s/veh	25.4	16.1	16.1	26.2	18.2		15.8		16.0	19.2	17.3	
Level of Service (LOS)	C	B	B	C	B		B		B	B	B	
Approach Delay, s/veh / LOS	17.7		B	19.9		B	15.9		B	17.7		B
Intersection Delay, s/veh / LOS	17.7						B					

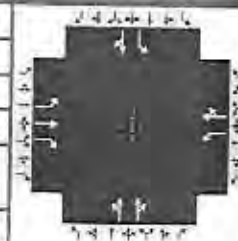
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91		B	2.10		B	1.90		B	2.09		B
Bicycle LOS Score / LOS	0.69		A	0.97		A	0.77		A	1.12		A

HCS7 Signalized Intersection Results Summary

General Information

Agency	Solaegui Engineers			Intersection Information	
Analyst	MSH	Analysis Date	Sep 11, 2019	Duration, h	0.25
Jurisdiction	Carson City	Time Period	PM Peak Hour	Area Type	Other
Urban Street		Analysis Year	2040 Base + Project	PHF	0.90
Intersection	Roop & Little	File Name	RoLi40pw.xus	Analysis Period	1> 7:00
Project Description					



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	100	199	100	74	55	96	20	370	87	99	430	20

Signal Information

Cycle, s	65.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	22.0	8.0	20.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	1.0	1.0	1.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8		2		6
Case Number	2.0	3.0	2.0	4.0		8.0		6.0
Phase Duration, s	13.0	25.0	13.0	25.0		27.0		27.0
Change Period, (Y+R), s	5.0	5.0	5.0	5.0		5.0		5.0
Max Allow Headway (MAH), s	3.1	3.2	3.1	3.2		3.2		3.2
Queue Clearance Time (g _s), s	5.8	8.0	4.8	7.1		18.7		17.9
Green Extension Time (g _e), s	0.0	0.9	0.0	0.9		1.1		1.3
Phase Call Probability	1.00	1.00	1.00	1.00		1.00		1.00
Max Out Probability	1.00	0.01	0.84	0.00		0.97		0.79

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	111	221	111	82	168		278		252	110	500	
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1870	1531	1781	1655		1490		1570	889	1852	
Queue Service Time (g_s), s	3.8	6.0	3.5	2.8	5.1		0.8		8.2	7.2	15.9	
Cycle Queue Clearance Time (g_c), s	3.8	6.0	3.5	2.8	5.1		16.7		8.2	15.4	15.9	
Green Ratio (g/C)	0.12	0.31	0.31	0.12	0.31		0.34		0.34	0.34	0.34	
Capacity (c), veh/h	219	575	471	219	509		564		531	299	627	
Volume-to-Capacity Ratio (X)	0.507	0.384	0.236	0.375	0.329		0.493		0.474	0.367	0.798	
Back of Queue (Q), ft/ln (95 th percentile)	71	108.7	51.9	51.2	81		131.5		120.6	64.9	294.5	
Back of Queue (Q), veh/ln (95 th percentile)	2.8	4.3	2.0	2.0	3.2		5.3		4.8	2.6	11.6	
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00		0.00		0.00	0.00	0.00	
Uniform Delay (d_1), s/veh	26.7	17.7	16.8	26.2	17.3		16.9		16.9	23.0	19.5	
Incremental Delay (d_2), s/veh	0.8	0.2	0.1	0.4	0.1		0.2		0.2	0.3	6.6	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0		0.0		0.0	0.0	0.0	
Control Delay (d), s/veh	27.4	17.8	16.9	26.6	17.5		17.1		17.2	23.3	26.1	
Level of Service (LOS)	C	B	B	C	B		B		B	C	C	
Approach Delay, s/veh / LOS	20.0	B		20.5	C		17.1	B		25.6	C	
Intersection Delay, s/veh / LOS	21.1						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		2.10	B		1.90	B		2.09	B	
Bicycle LOS Score / LOS	1.22	A		0.90	A		0.92	A		1.49	A	

HCS7 Two-Way Stop-Control Report

General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	AM Existing
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Salimani & Little
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Saliman Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	T				T	TR
Volume (veh/h)		51		42					0	81	321				255	88
Percent Heavy Vehicles (%)		2		2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.84		6.94						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			103							90						
Capacity, c (veh/h)			472							1174						
v/c Ratio			0.22							0.08						
95% Queue Length, Q ₉₅ (veh)			0.8							0.2						
Control Delay (s/veh)			14.8							8.3						
Level of Service (LOS)			B							A						
Approach Delay (s/veh)	14.8								1.7							
Approach LOS	B															

HCS7 Two-Way Stop-Control Report

General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	PM Existing
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Saliman & Little
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Saliman Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	T				T	TR
Volume (veh/h)		115		68					0	28	231				315	106
Percent Heavy Vehicles (%)		2		2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.84		6.94						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			203							31						
Capacity, c (veh/h)			505							1090						
v/c Ratio			0.40							0.03						
95% Queue Length, Q ₉₅ (veh)			1.9							0.1						
Control Delay (s/veh)			16.8							8.4						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)	16.8								0.9							
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	AM Existing + Project
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Saliman & Little
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Saliman Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	T				T	TR
Volume (veh/h)		62		51					0	84	321				255	91
Percent Heavy Vehicles (%)		2		2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.84		6.94						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			126							93						
Capacity, c (veh/h)			466							1171						
v/c Ratio			0.27							0.08						
95% Queue Length, Q ₉₅ (veh)			1.1							0.3						
Control Delay (s/veh)			15.6							8.3						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)	15.6								1.7							
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

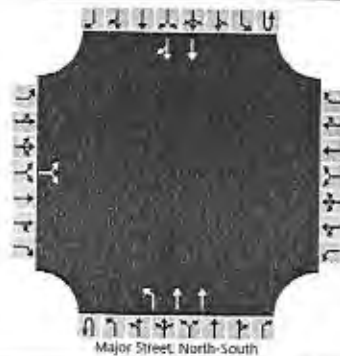
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	PM Existing + Project
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Saliman & Little
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Saliman Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	T				T	TR
Volume (veh/h)		122		73					0	37	231				315	117
Percent Heavy Vehicles (%)		2		2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.84		6.94						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			217							41						
Capacity, c (veh/h)			487							1079						
v/c Ratio			0.44							0.04						
95% Queue Length, Q ₉₅ (veh)			2.3							0.1						
Control Delay (s/veh)			18.2							8.5						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)	18.2								1.2							
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

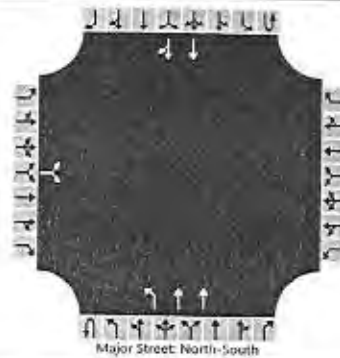
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2040
Time Analyzed	AM Base
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Saliman & Little
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Saliman Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	T				T	TR
Volume (veh/h)		60		50					0	100	400				320	110
Percent Heavy Vehicles (%)		2		2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.84		6.94						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			122							111						
Capacity, c (veh/h)			376							1081						
v/c Ratio			0.33							0.10						
95% Queue Length, Q ₉₅ (veh)			1.4							0.3						
Control Delay (s/veh)			19.1							8.7						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)	19.1								1.7							
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

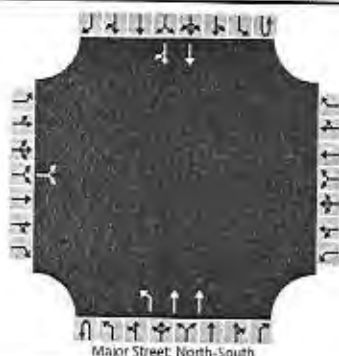
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2040
Time Analyzed	PM Base
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Saliman & Little
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Saliman Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	T				T	TR
Volume (veh/h)		140		90					0	40	310				370	120
Percent Heavy Vehicles (%)		2		2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.84		6.94						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			256							44						
Capacity, c (veh/h)			427							1021						
v/c Ratio			0.60							0.04						
95% Queue Length, Q ₉₅ (veh)			3.8							0.1						
Control Delay (s/veh)			25.3							8.7						
Level of Service (LOS)			D							A						
Approach Delay (s/veh)	25.3								1.0							
Approach LOS	D															

HCS7 Two-Way Stop-Control Report

General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2040
Time Analyzed	AM Base + Project
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Saliman & Little
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Saliman Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	10	1	2	3	40	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	T				T	TR
Volume (veh/h)		71		59					0	103	400				320	113
Percent Heavy Vehicles (%)		2		2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.84		6.94						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			144							114						
Capacity, c (veh/h)			371							1078						
v/c Ratio			0.39							0.11						
95% Queue Length, Q ₉₅ (veh)			1.8							0.4						
Control Delay (s/veh)			20.8							8.7						
Level of Service (LOS)			C							A						
Approach Delay (s/veh)	20.8								1.8							
Approach LOS	C															

HCS7 Two-Way Stop-Control Report

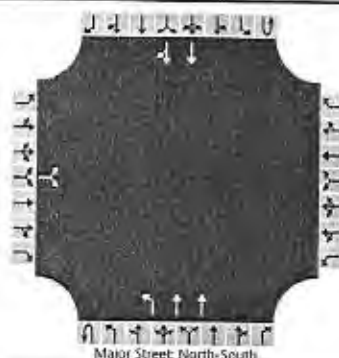
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2040
Time Analyzed	PM Base + Project
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Saliman & Little
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Saliman Road
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	1	2	0	0	0	2	0
Configuration			LR							L	T				T	TR
Volume (veh/h)		147		95					0	49	310				370	131
Percent Heavy Vehicles (%)		2		2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)		7.5		6.9						4.1						
Critical Headway (sec)		6.84		6.94						4.14						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			269							54						
Capacity, c (veh/h)			410							1010						
v/c Ratio			0.66							0.05						
95% Queue Length, Q ₉₅ (veh)			4.5							0.2						
Control Delay (s/veh)			29.0							8.8						
Level of Service (LOS)			D							A						
Approach Delay (s/veh)	29.0								1.2							
Approach LOS	D															

HCS7 Two-Way Stop-Control Report

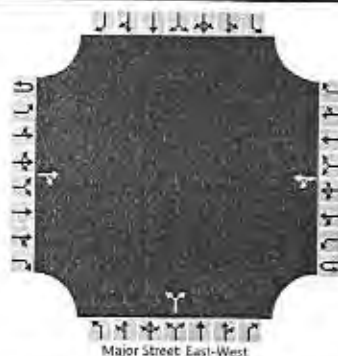
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	AM Existing
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Little & Janas
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			69	8		5	184			10		12				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						6					24					
Capacity, c (veh/h)						1511					823					
v/c Ratio						0.00					0.03					
95% Queue Length, Q ₉₅ (veh)						0.0					0.1					
Control Delay (s/veh)						7.4					9.5					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.2				9.5							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

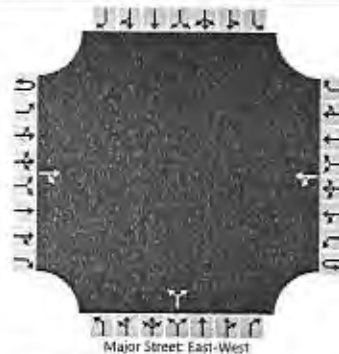
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	PM Existing
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Little & Janas
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			240	9		12	102			3		6				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						13					10					
Capacity, c (veh/h)						1286					697					
v/c Ratio						0.01					0.01					
95% Queue Length, Q ₉₅ (veh)						0.0					0.0					
Control Delay (s/veh)						7.8					10.2					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)					0.9				10.2							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

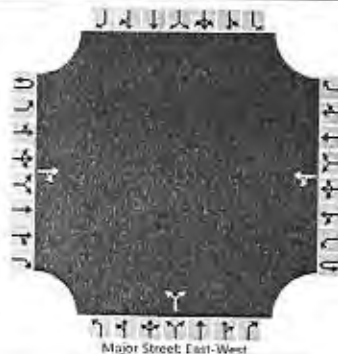
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	AM Existing + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Little & Janas
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			82	9		7	188			12		19				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage					Undivided											

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						8					34					
Capacity, c (veh/h)						1491					822					
v/c Ratio						0.01					0.04					
95% Queue Length, Q ₉₅ (veh)						0.0					0.1					
Control Delay (s/veh)						7.4					9.6					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)					0.3				9.6							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

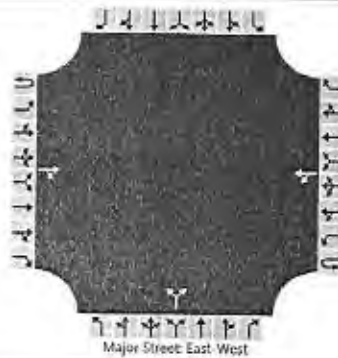
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	PM Existing + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Little & Janas
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			248	11		19	115			4		10				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						21					16					
Capacity, c (veh/h)						1274					686					
v/c Ratio						0.02					0.02					
95% Queue Length, Q ₉₅ (veh)						0.1					0.1					
Control Delay (s/veh)						7.9					10.4					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)					1.2				10.4							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

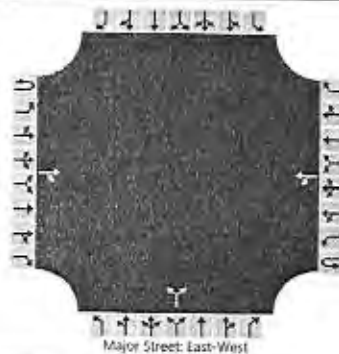
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2040
Time Analyzed	AM Base
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Little & Janas
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			80	10		10	210			10		20				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)					4.1				7.1		6.2					
Critical Headway (sec)					4.12				6.42		6.22					
Base Follow-Up Headway (sec)					2.2				3.5		3.3					
Follow-Up Headway (sec)					2.22				3.52		3.32					

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)					11				33							
Capacity, c (veh/h)					1493				825							
v/c Ratio					0.01				0.04							
15% Queue Length, Q ₉₅ (veh)					0.0				0.1							
Control Delay (s/veh)					7.4				9.5							
Level of Service (LOS)					A				A							
Approach Delay (s/veh)					0.4				9.5							
Approach LOS									A							

HCS7 Two-Way Stop-Control Report

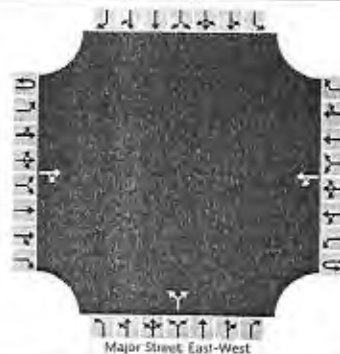
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2040
Time Analyzed	PM Base
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Little & Janas
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			250	10		20	140			10		10				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Left Turn Channelized																
Intersection Type Storage	Undivided															

Critical and Follow-up Headways

Critical Headway (sec)						4.1				7.1		6.2				
Initial Headway (sec)						4.12				6.42		6.22				
Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Arrival Rate, v (veh/h)						22					22					
Capacity, c (veh/h)						1273					624					
Ratio						0.02					0.04					
Queue Length, Q ₉₅ (veh)						0.1					0.1					
Control Delay (s/veh)						7.9					11.0					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)					1.1				11.0							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

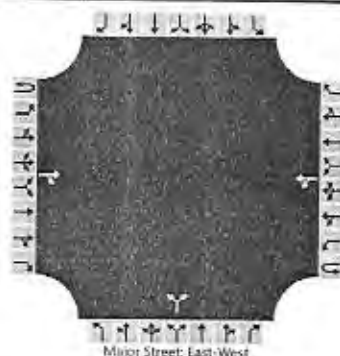
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2040
Time Analyzed	AM Base + Project
Section Orientation	East-West
Project Description	

Site Information

Intersection	Little & Janas
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

BS



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Segment	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Volume	10	1	2	3	4	4	5	6	7	8	9	10	11	12	13	14
Number of Lanes	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0
Configuration				TR		LT					LR					
Time (veh/h)			93	11		12	214		12		27					
Percent Heavy Vehicles (%)						2			2		2					
Station Time Blocked																
Percent Grade (%)									0							
Turn Channelized																
Storage Type	Undivided															

Signal and Follow-up Headways

Critical Headway (sec)					4.1				7.1		6.2					
Follow-Up Headway (sec)					4.12				6.42		6.22					
Follow-Up Headway (sec)					2.2				3.5		3.3					
Follow-Up Headway (sec)					2.22				3.52		3.32					

Queue Length, and Level of Service

Volume, v (veh/h)					13				43							
Capacity, c (veh/h)					1473				814							
Ratio					0.01				0.05							
Queue Length, Q ₉₅ (veh)					0.0				0.2							
Delay (s/veh)					7.5				9.7							
Level of Service (LOS)					A				A							
Delay (s/veh)					0.5				9.7							
LOS									A							

HCS7 Two-Way Stop-Control Report

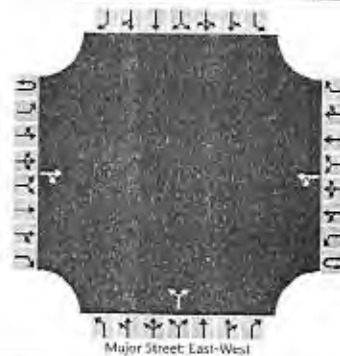
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2040
Time Analyzed	PM Base + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Little & Janas
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			258	12		27	153			11		14				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						30					28					
Capacity, c (veh/h)						1261					614					
v/c Ratio						0.02					0.05					
95% Queue Length, Q ₉₅ (veh)						0.1					0.1					
Control Delay (s/veh)						7.9					11.1					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)					1.4				11.1							
Approach LOS									B							

HCS7 Two-Way Stop-Control Report

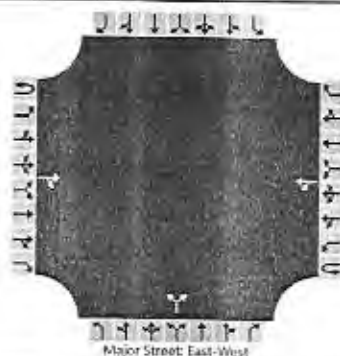
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	AM Existing + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Little & Driveway
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Project Driveway
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			74	7		4	194			23		13				
Percent Heavy Vehicles (%)						2				2		2				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type Storage																

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.12				6.42		6.22				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						4					40					
Capacity, c (veh/h)						1505					763					
v/c Ratio						0.00					0.05					
95% Queue Length, Q ₉₅ (veh)						0.0					0.2					
Control Delay (s/veh)						7.4					10.0					
Level of Service (LOS)						A					A					
Approach Delay (s/veh)									0.2							
Approach LOS																

HCS7 Two-Way Stop-Control Report

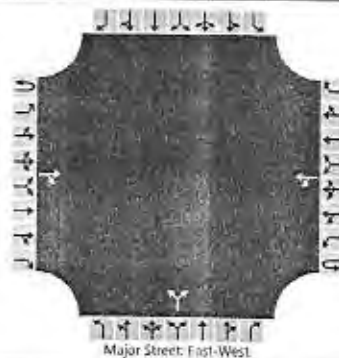
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	PM Existing + Project
Intersection Orientation	East-West
Project Description	

Site Information

Intersection	Little & Driveway
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Project Driveway
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			255	23		13	106			14		8				
Percent Heavy Vehicles (%)						2				2		2				
Reduction Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Storage Type Storage																

Critical and Follow-up Headways

Critical Headway (sec)					4.1				7.1		6.2					
Follow-up Headway (sec)					4.12				6.42		6.22					
Follow-up Headway (sec)					2.2				3.5		3.3					
Follow-up Headway (sec)					2.22				3.52		3.32					

Queue Length, and Level of Service

Flow, v (veh/h)					14				24							
Flow, c (veh/h)					1252				619							
Flow, d (veh/h)					0.01				0.04							
Queue Length, Q ₉₅ (veh)					0.0				0.1							
Delay (s/veh)					7.9				11.1							
Level of Service (LOS)					A				B							
Delay (s/veh)					1.0				11.1							
Level of Service									B							

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Client	MSH	Intersection	Little & Driveway
Agency/Co.	Solaegui Engineers	Jurisdiction	Carson City
Analysis Performed	9/11/2019	East/West Street	Little Lane
Analysis Year	2040	North/South Street	Project Driveway
Analysis	AM Base + Project	Peak Hour Factor	0.90
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Description			

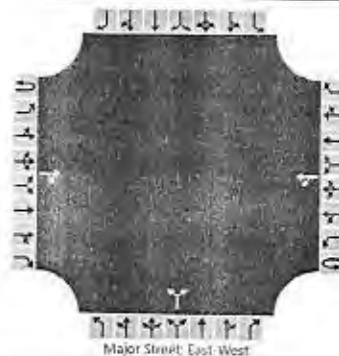


Table Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Volume	10	1	2	3	4	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Control				TR		LT					LR					
Volume (veh/h)			91	7		4	222			23		13				
Heavy Vehicles (%)						2				2		2				
Signal Time Blocked																
Grade (%)									0							
Turn Channelized																
Storage Type					Undivided											

Headway and Follow-up Headways

Critical Headway (sec)					4.1				7.1		6.2					
Headway (sec)					4.12				6.42		6.22					
Follow-Up Headway (sec)					2.2				3.5		3.3					
Stop Headway (sec)					2.22				3.52		3.32					

Queue Length, and Level of Service

Volume, v (veh/h)					4				40							
Capacity, c (veh/h)					1482				722							
Ratio					0.00				0.06							
Queue Length, Q ₉₅ (veh)					0.0				0.2							
Delay (s/veh)					7.4				10.3							
Service (LOS)					A				B							
Delay (s/veh)					0.2				10.3							
Delay LOS									B							

HCS7 Two-Way Stop-Control Report

General Information

Site	MSH
Engineer/Co.	Solaegui Engineers
Report Date	9/11/2019
Analysis Year	2040
Analysis Type	PM Base + Project
Intersection Orientation	East-West
Intersection Description	

Site Information

Intersection	Little & Driveway
Jurisdiction	Carson City
East/West Street	Little Lane
North/South Street	Project Driveway
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Volume	10	1	2	3	4	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			262	23		13	151			14		8				
Heavy Vehicles (%)						2				2		2				
Intersection Time Blocked																
Grade (%)									0							
Turn Channelized																
Storage Type					Undivided											

Queue and Follow-up Headways

Critical Headway (sec)					4.1				7.1		6.2					
Headway (sec)					4.12				6.42		6.22					
Follow-Up Headway (sec)					2.2				3.5		3.3					
Up Headway (sec)					2.22				3.52		3.32					

Queue Length, and Level of Service

Volume, v (veh/h)					14				24							
Capacity, c (veh/h)					1243				585							
Ratio					0.01				0.04							
Queue Length, Q ₉₅ (veh)					0.0				0.1							
Delay (s/veh)					7.9				11.4							
Level of Service (LOS)					A				B							
Delay (s/veh)					0.7				11.4							
LOS									B							

HCS7 Two-Way Stop-Control Report

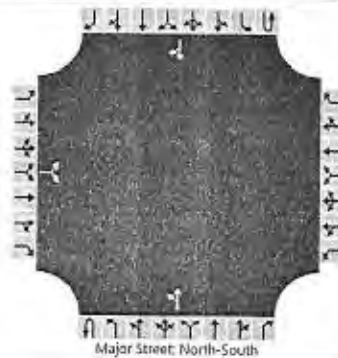
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	AM Existing + Project
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Janas & Driveway
Jurisdiction	Carson City
East/West Street	Project Driveway
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		9		0						0	22				13	3
Percent Heavy Vehicles (%)		2		2						2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			10							0						
Capacity, c (veh/h)			971							1599						
v/c Ratio			0.01							0.00						
95% Queue Length, Q ₉₅ (veh)			0.0							0.0						
Control Delay (s/veh)			8.7							7.3						
Level of Service (LOS)			A							A						
Approach Delay (s/veh)	8.7								0.0							
Approach LOS	A															

HCS7 Two-Way Stop-Control Report

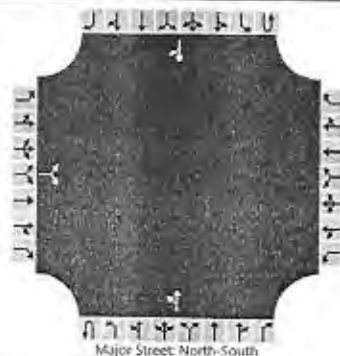
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2019
Time Analyzed	PM Existing + Project
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Janas & Driveway
Jurisdiction	Carson City
East/West Street	Project Driveway
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		5		0						0	9				21	9
Percent Heavy Vehicles (%)		2		2						2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6							0							
Capacity, c (veh/h)		974							1578							
v/c Ratio		0.01							0.00							
95% Queue Length, Q ₉₅ (veh)		0.0							0.0							
Control Delay (s/veh)		8.7							7.3							
Level of Service (LOS)		A							A							
Approach Delay (s/veh)	8.7								0.0							
Approach LOS	A															

HCS7 Two-Way Stop-Control Report

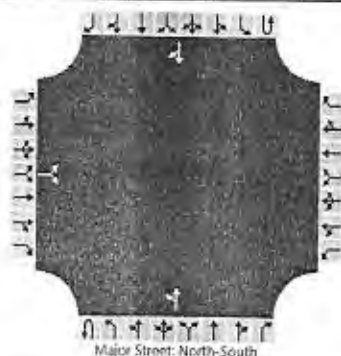
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
Analysis Year	2040
Time Analyzed	AM Base + Project
Intersection Orientation	North-South
Project Description	

Site Information

Intersection	Janas & Driveway
Jurisdiction	Carson City
East/West Street	Project Driveway
North/South Street	Janas Way
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		9		0						0	30				20	3
Percent Heavy Vehicles (%)		2		2						2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			10							0						
Capacity, c (veh/h)			950							1589						
Flow Ratio			0.01							0.00						
15% Queue Length, Q ₉₅ (veh)			0.0							0.0						
Control Delay (s/veh)			8.8							7.3						
Level of Service (LOS)			A							A						
Right Turn Delay (s/veh)	8.8								0.0							
Average LOS	A															

HCS7 Two-Way Stop-Control Report

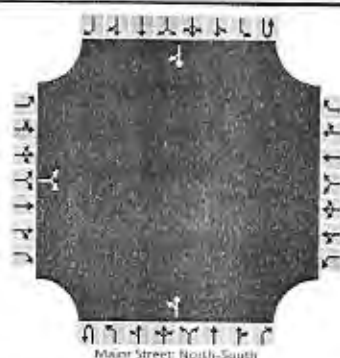
General Information

Analyst	MSH
Agency/Co.	Solaegui Engineers
Date Performed	9/11/2019
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Site Information

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Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		5		0						0	20				30	9
Percent Heavy Vehicles (%)		2		2						2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.42		6.22						4.12						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.52		3.32						2.22						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			6							0						
Capacity, c (veh/h)			946							1565						
v/c Ratio			0.01							0.00						
95% Queue Length, Q ₉₅ (veh)			0.0							0.0						
Control Delay (s/veh)			8.8							7.3						
Level of Service (LOS)			A							A						
Approach Delay (s/veh)	8.8								0.0							
Approach LOS	A															

LITTLE LANE APARTMENTS

CARSON CITY, NEVADA
SEPTEMBER 19TH, 2019

SPECIAL USE PERMIT APPLICATION | CITY OF CARSON



DIRECTORY

OWNER / DEVELOPER

CLARK RSF ENTERPRISES, LLC.
3377 CARMEL MOUNTAIN ROAD
SAN DIEGO, CA 92121
CONTACT: CRAIG CLARK
E: CCLARK@CWCLARKINC.COM

ARCHITECT

NOVAK ARCHITECTURE INC
17020 SW BOONES FERRY | SUITE 200
PORTLAND, OREGON 97224
CONTACT: TERRY J NOVAK
T: (503) 352-4987
E: tnovak@novakarchitecture.com

CIVIL/LANDSCAPE

LUMOS & ASSOCIATES
308 N CURRY ST. SUITE 200
CARSON CITY, NEVADA 89703
CONTACT: JUSTIN SAND
T: (775) 883.7077
E: JSAND@LUMOSINC.COM

PROJECT SUMMARY

PROJECT SUMMARY

WORK SCOPE: NEW 126 UNIT APARTMENT COMPLEX
W/ CLUBHOUSE
JURISDICTION: CARSON CITY, NEVADA
ZONING: NB (NEIGHBORHOOD BUSINESS)
MASTER PLAN DESIGNATION : HIGH DENSITY RESIDENTIAL
OCCUPANCY GROUP: R-2
SPRINKLER SYSTEM: FULLY SPRINKLERED - BIDDER DESIGNED
FIRE ALARM SYSTEM: YES - BIDDER DESIGNED

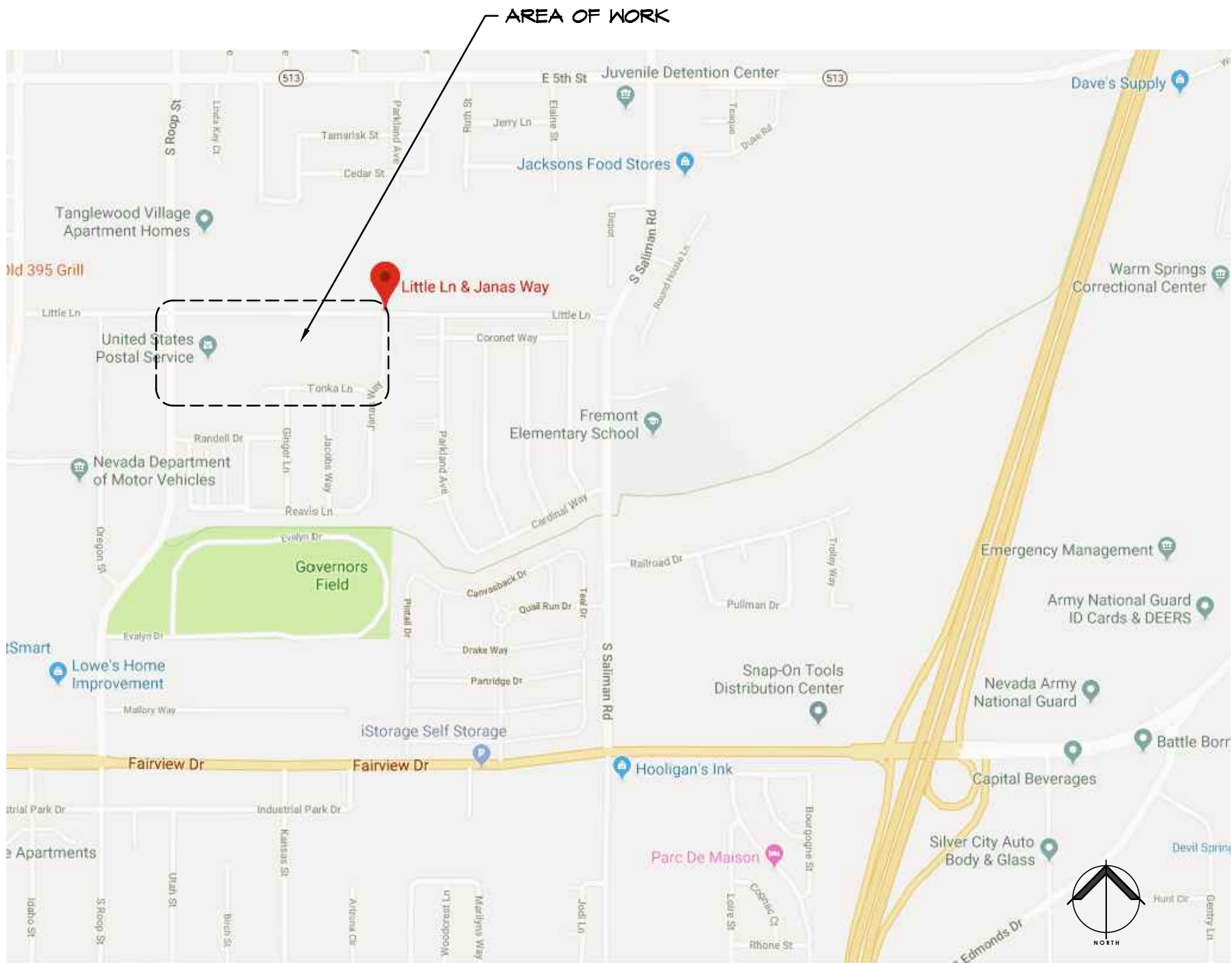
SHEET INDEX

ARCHITECTURAL

- A1 COVER SHEET
- A2 CONCEPTUAL SITE PLAN
- A3 CONCEPTUAL OPEN SPACE & CIRCULATION PLAN
- A4 CONCEPTUAL ENLARGED SITE PLANS
- A5 CONCEPTUAL ELEVATIONS
- A6 CONCEPTUAL ELEVATIONS
- A7 CONCEPTUAL ELEVATIONS - COLORED
- A8 CONCEPTUAL ELEVATIONS - COLORED
- A9 CONCEPTUAL ELEVATIONS
- A10 CONCEPTUAL ELEVATIONS
- A11 CONCEPTUAL ELEVATIONS - COLORED
- A12 CONCEPTUAL ELEVATIONS - COLORED

CIVIL/ LANDSCAPE

- C1.0 PRELIMINARY GRADING PLAN
- C2.0 PRELIMINARY UTILITY PLAN
- L-1.0 CONCEPTUAL LANDSCAPE SITE PLAN



VICINITY MAP



SHEET NOTES



LITTLE LANE APARTMENTS
SPECIAL USE PERMIT APPLICATION
CARSON CITY, NEVADA
CLARK RSF ENTERPRISES, LLC
3377 CARMEL MOUNTAIN ROAD
SAN DIEGO, CA 92121

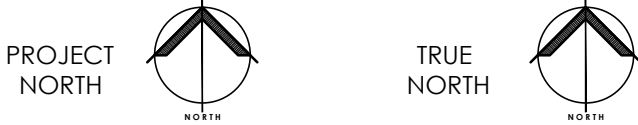
project number 19-15
date 09/19/19
revisions

KEY NOTES

COVER SHEET

sheet number

A1



PROJECT INFORMATION

ZONING SUMMARY
ADDRESS : LITTLE LANE
APN : 004-015-06
PARCEL SIZE : 6.12 ACRES
MASTER PLAN DESIGNATION : HIGH DENSITY RESIDENTIAL (HDR)
ZONING : NEIGHBORHOOD BUSINESS (NB)
REQUIRED BUILDING SETBACKS :
EAST P.L. : 30 FT FROM THE CENTERLINE OF THE ADJACENT PUBLIC OR PRIVATE RIGHT OF WAY.
WEST P.L. : 0 FT
NORTH P.L. 30 FT FROM THE CENTERLINE OF THE ADJACENT PUBLIC OR PRIVATE RIGHT OF WAY.
SOUTH SIDE : 30 FT FROM THE RESIDENTIALLY ZONED PARCELS

SITE REQUIREMENTS

PARKING SUMMARY
PER SECTION 2.2 OF THE CARSON CITY DEVELOPMENT STANDARDS, 2 PARKING SPACES SHALL BE REQUIRED PER DWELLING UNIT, PLUS GUEST PARKING.
GUEST PARKING CAN BE ACCOMMODATED ON ADJACENT ROADWAYS, THEREFORE THIS CRITERIA HAS BEEN MET.
UNIT COUNT : 126 APARTMENTS
126 APARTMENTS X 2 STALLS EACH UNIT = 252 PARKING SPACES REQ.
252 PARKING STALLS PROVIDED.
ADA ACCESSIBLE PARKING REQUIREMENTS : 7 ADA STALLS REQ'D
7 ADA ACCESSIBLE STALLS PROVIDED
ALL PARKING SPACES INDICATED IN PLAN ARE 9'-0" WIDE X 18'-6" IN DEPTH
UNIT SUMMARY
BUILDING TYPE 1 - BLDGS 1-10
12,800 S.F./ 12 UNITS EACH BUILDING = 120 UNITS
BUILDING TYPE 2 - BLDG 11
6,400 S.F. / 6 UNIT BUILDING = 6 UNITS
126 UNITS TOTAL
UNIT TYPE
2 BEDROOM / 2 BATHROOM - 84 UNITS
1 BEDROOM / 1 BATHROOM - 42 UNITS

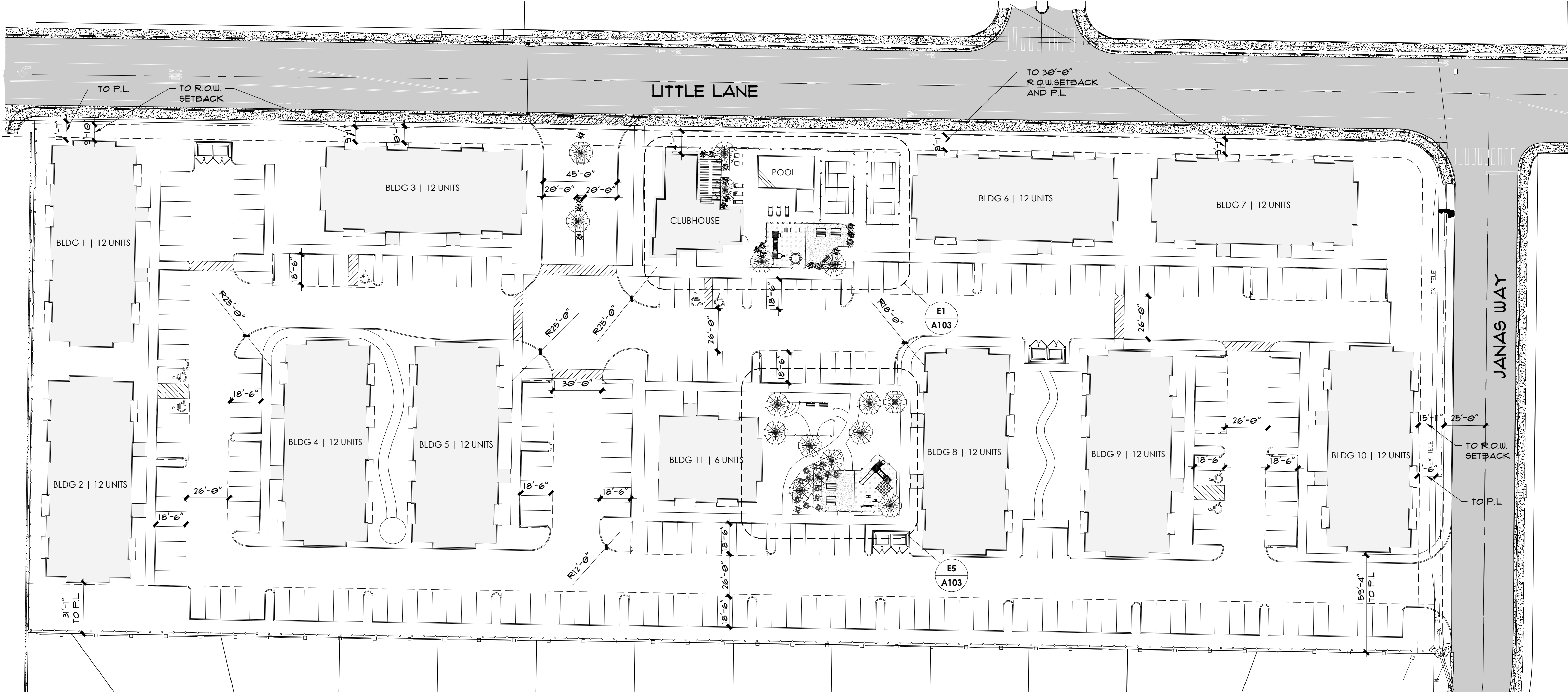
SHEET NOTES

KEY NOTES

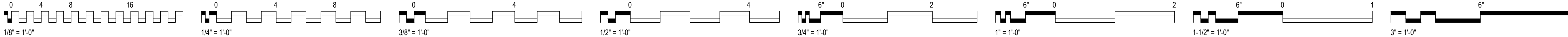
CONCEPTUAL SITE PLAN

sheet number

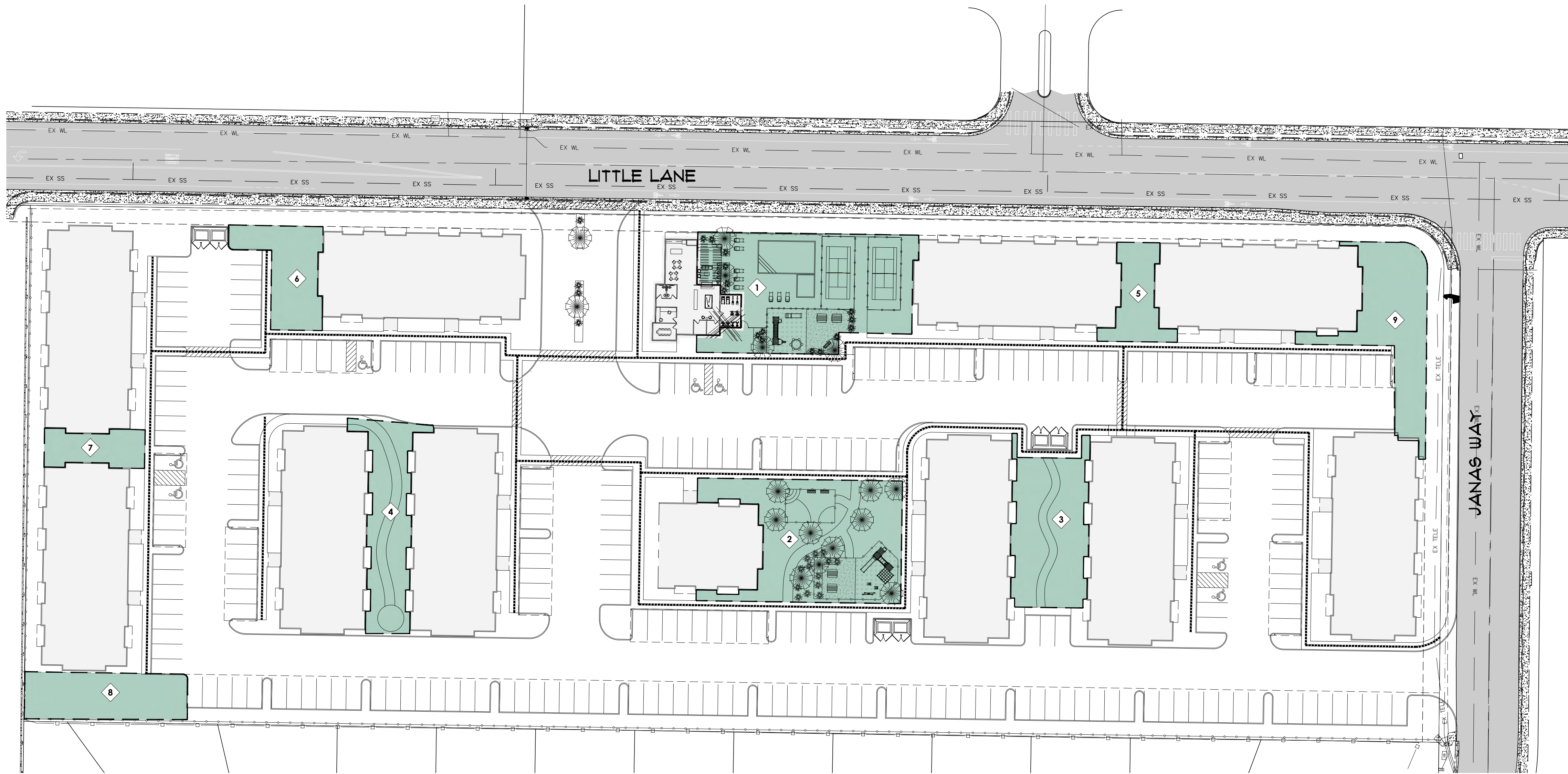
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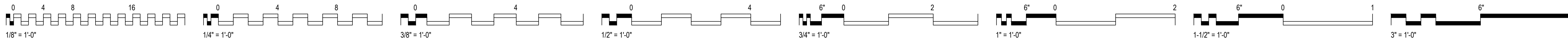
E1 CONCEPTUAL SITE PLAN
SCALE: 1" = 40'-0"



LOT COVERAGE			
BLDG NUMBER	LOT SQ. FT.	BUILDING FOOTPRINT SQ. FT.	% COVERED
BLDG #1-10	210,188 SQ FT	6,400 x 10 = 64,000	30.4%
BLDG #11		3,200 x 1 = 3,200 SF	1.5%
CLUBHOUSE		2,100 x 1 = 2,100	1.0%
TOTAL SQ. FT.		TOTAL COVERAGE	TOTAL % COVERED
LOTS 1-12	210,188 SQ FT	69,300 SQ. FT.	32.9%
OPEN SPACE			
REQUIRED COMMON AREA 150 SF PER UNIT X 125 UNITS = 18,750			
REQUIRED ADDITIONAL AREA 100 SF PER UNIT X 125 UNITS = 12,500			
TOTAL OPEN SPACE REQUIRED = 31,250			
OPEN SPACE AREA KEY :			
1 OPEN SPACE AREA 1 = 8400 SF			
2 OPEN SPACE AREA 2 = 6800 SF			
3 OPEN SPACE AREA 3 = 4100 SF			
4 OPEN SPACE AREA 4 = 3220 SF			
5 OPEN SPACE AREA 5 = 1400 SF			
6 OPEN SPACE AREA 6 = 2400 SF			
7 OPEN SPACE AREA 7 = 1300 SF			
8 OPEN SPACE AREA 8 = 2700 SF			
9 OPEN SPACE AREA 9 = 3900 SF			
TENANT PATIOS OPEN SPACE = 40 SF EACH UNIT X 125 UNITS = 5,000 SF			
TOTAL OPEN SPACE PROVIDED = 39,220 SF			
SITE CIRCULATION KEY			
----- PEDESTRIAN CIRCULATION			



E1 CONCEPTUAL OPEN SPACE AND SITE CIRCULATION PLAN
SCALE: 1" = 40'-0"



SHEET NOTES



LITTLE LANE APARTMENTS
SPECIAL USE PERMIT APPLICATION
CARSON CITY, NEVADA

CLARK RSF ENTERPRISES, LLC
3377 CARVEL MOUNTAIN ROAD
SAN DIEGO, CA 92121

project number 19-15
date 09/19/19

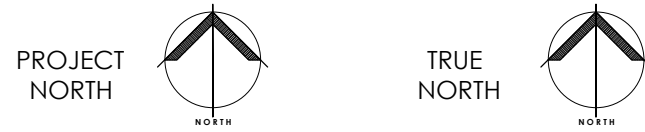
revisions

KEY NOTES

CONCEPTUAL
OPEN SPACE &
CIRCULATION PLAN

sheet number

A3



1 2 3 4 5 6

A

B

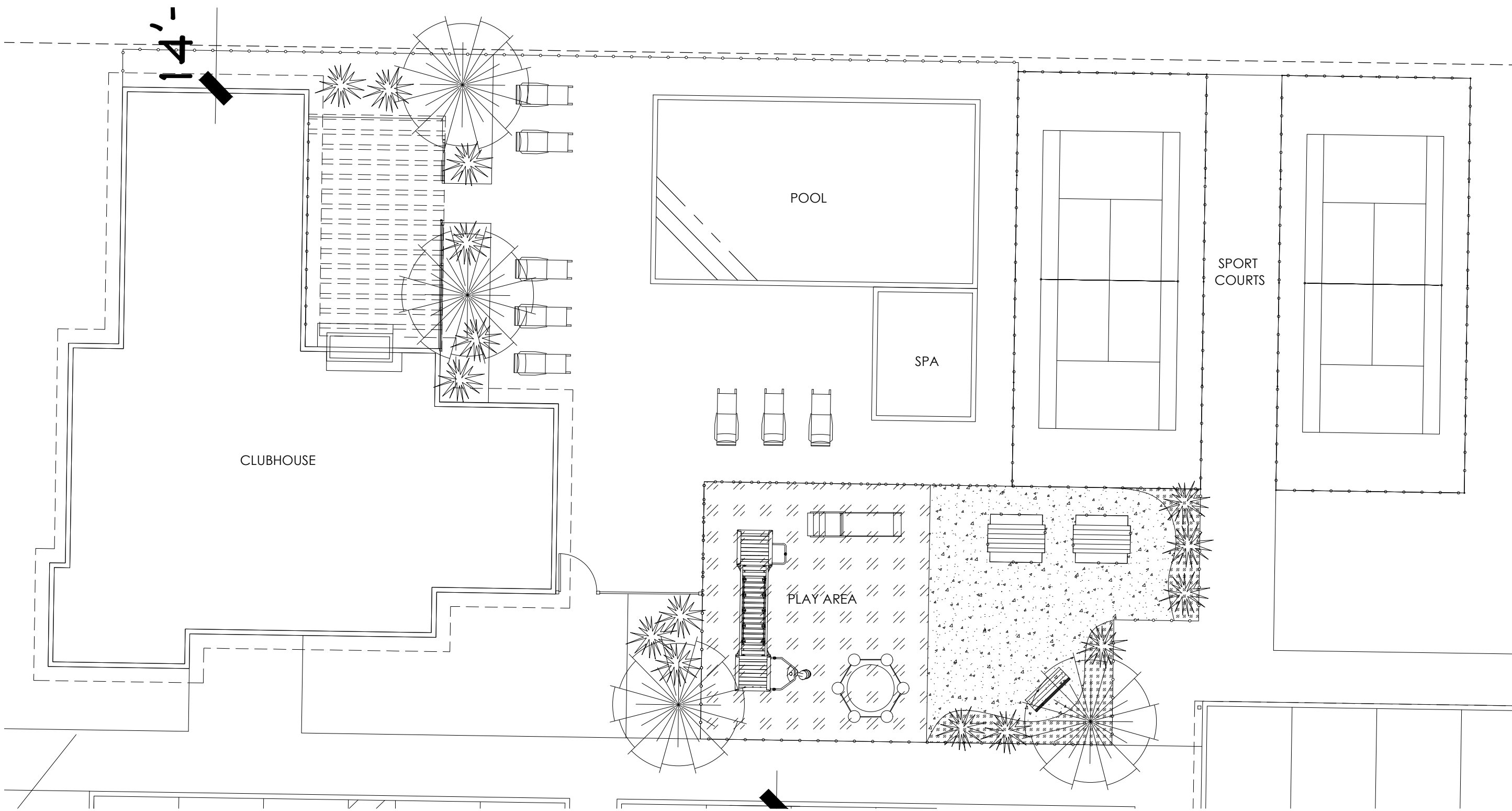
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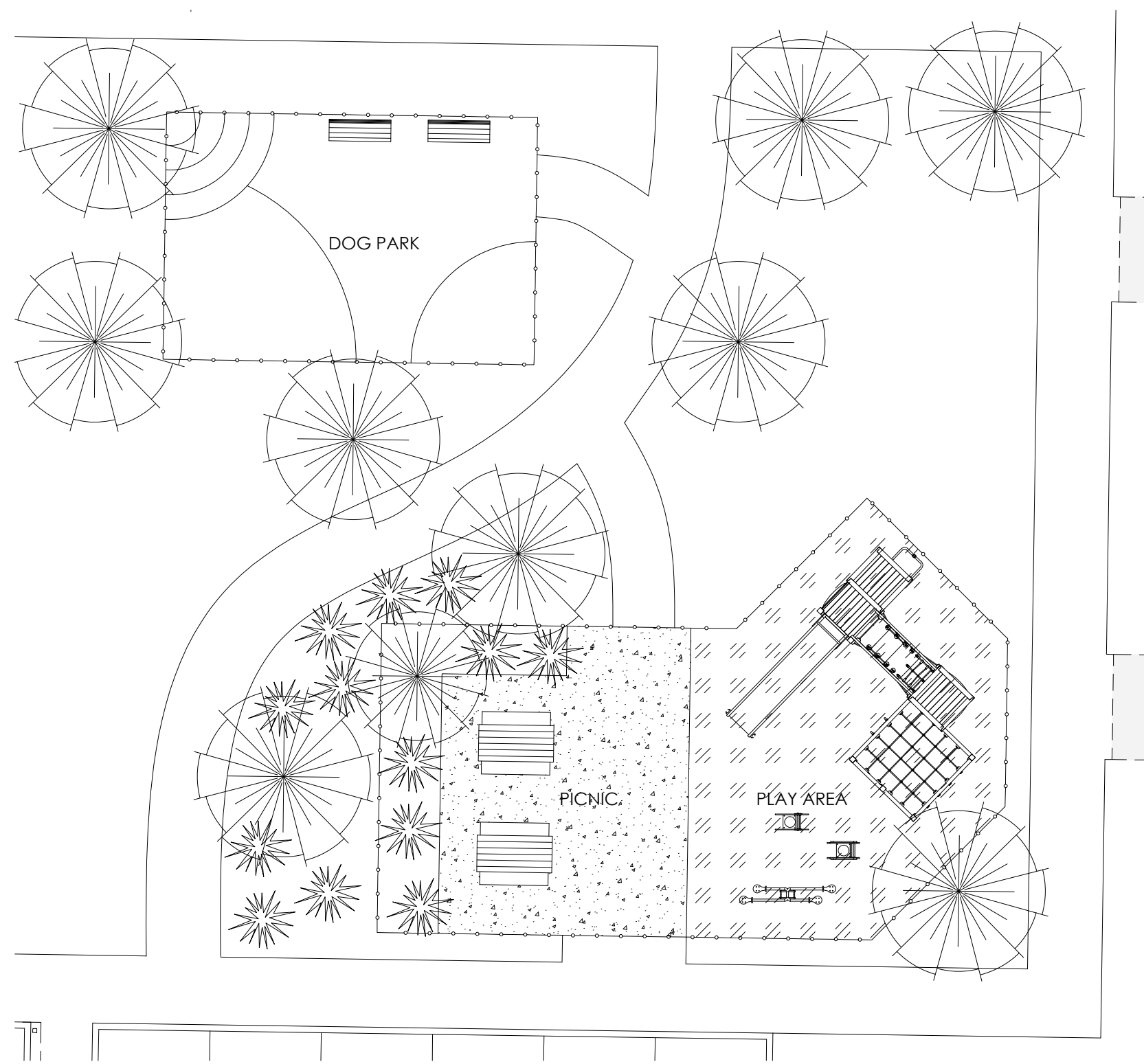
C1 CONCEPTUAL COURTYARD RENDERING
SCALE: 1/4" = 1'-0"

D

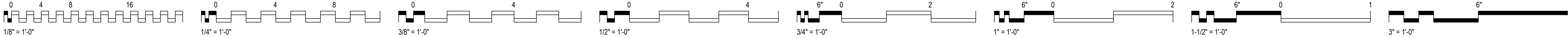
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E1 CONCEPTUAL ENLARGED PLAN - COURTYARD
SCALE: 3/32" = 1'-0"

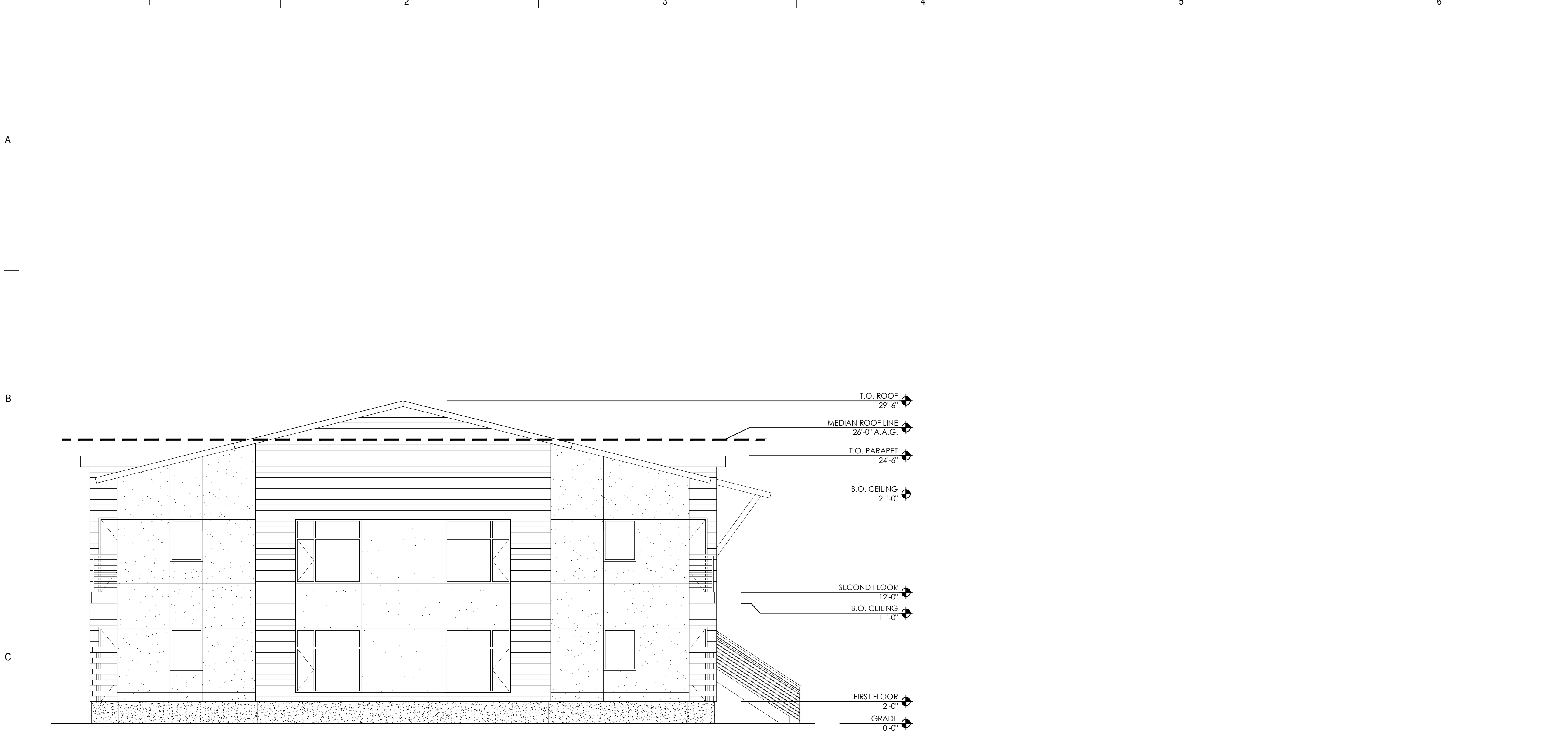


E5 CONCEPTUAL ENLARGED PLAN - PLAY AREA & DOG PARK
SCALE: 3/32" = 1'-0"

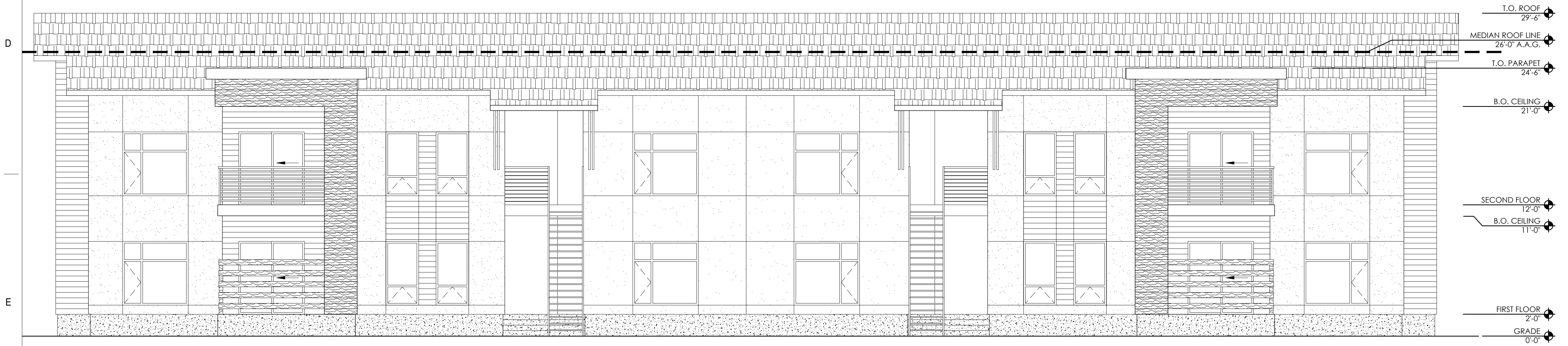


SHEET NOTES

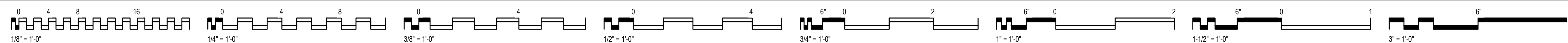
KEY NOTES



C1 CONCEPTUAL APARTMENT WEST ELEVATION
SCALE: 3/16" = 1'-0"

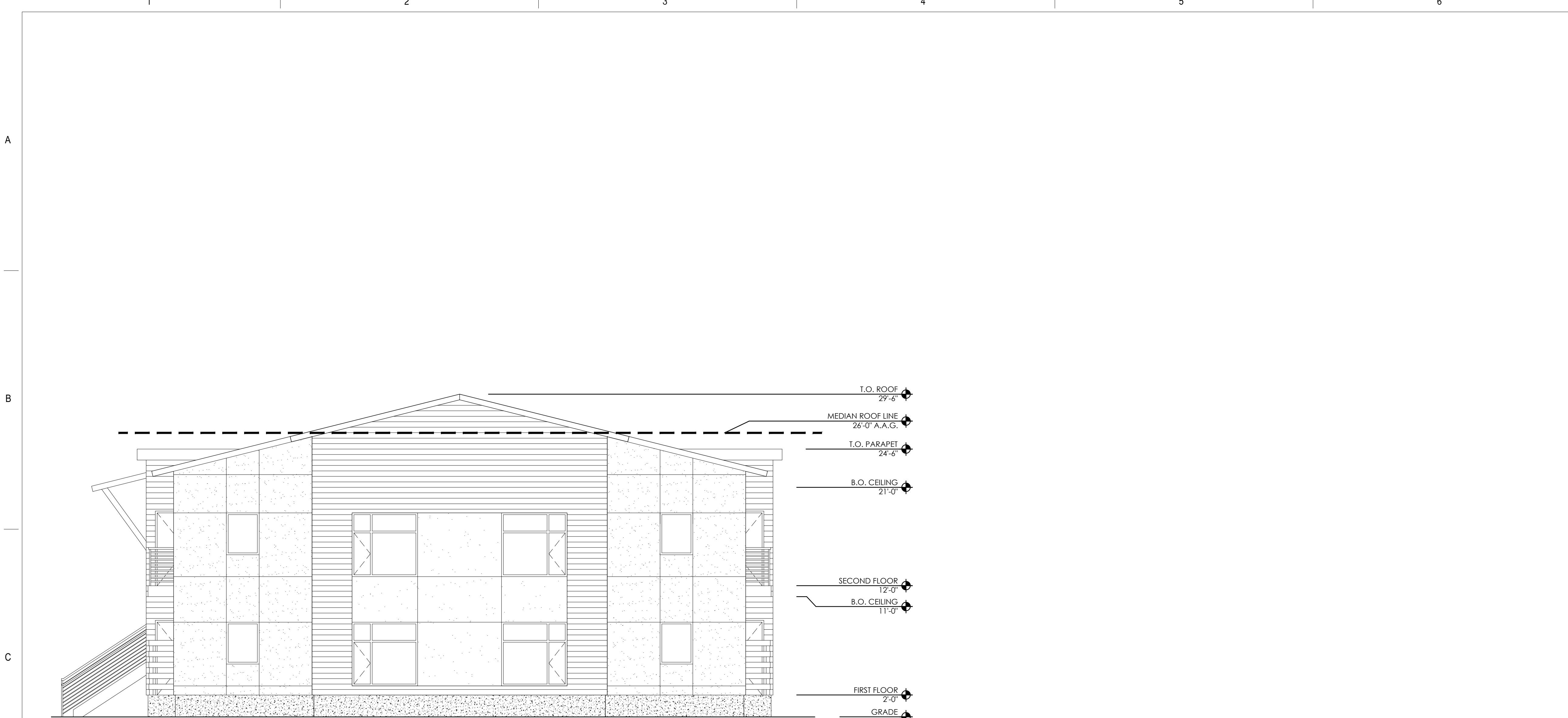


E1 CONCEPTUAL APARTMENT SOUTH ELEVATION
SCALE: 3/16" = 1'-0"

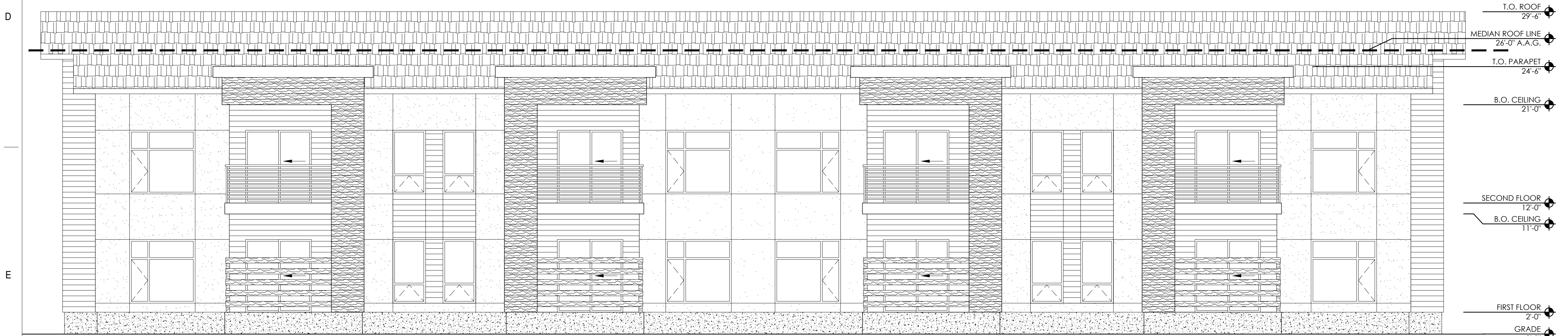


SHEET NOTES

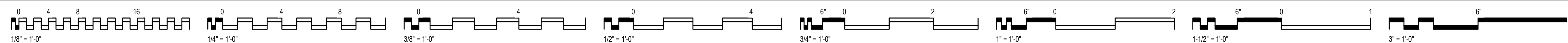
KEY NOTES



C1 CONCEPTUAL APARTMENT EAST ELEVATION
SCALE: 3/16" = 1'-0"



E1 CONCEPTUAL APARTMENT NORTH ELEVATION
SCALE: 3/16" = 1'-0"



SHEET NOTES



LITTLE LANE APARTMENTS
SPECIAL USE PERMIT APPLICATION
CARSON CITY, NEVADA

CLARK RSF ENTERPRISES, LLC
3377 CARMEL MOUNTAIN ROAD
SAN DIEGO, CA 92121

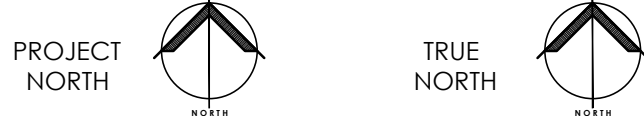
project number 19-15
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revisions

KEY NOTES

CONCEPTUAL
ELEVATIONS

sheet number

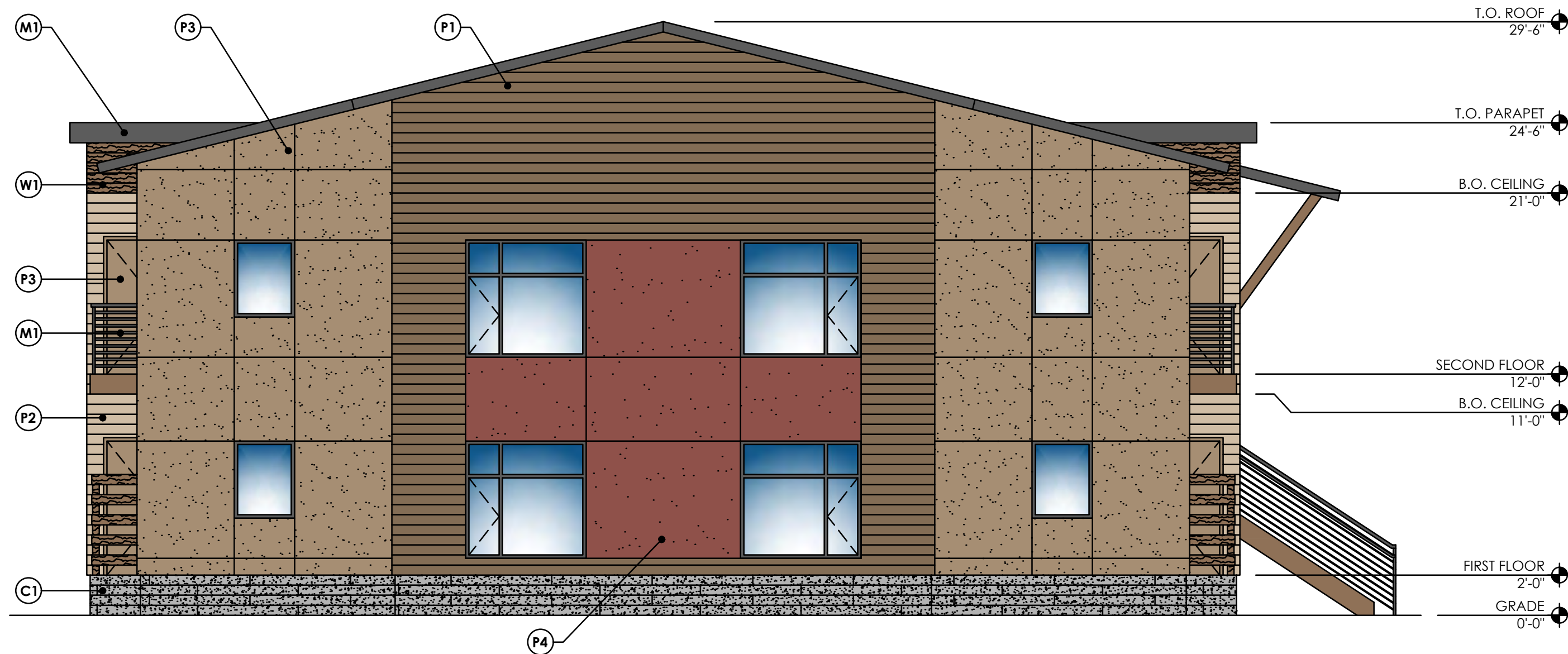
A6



A

B

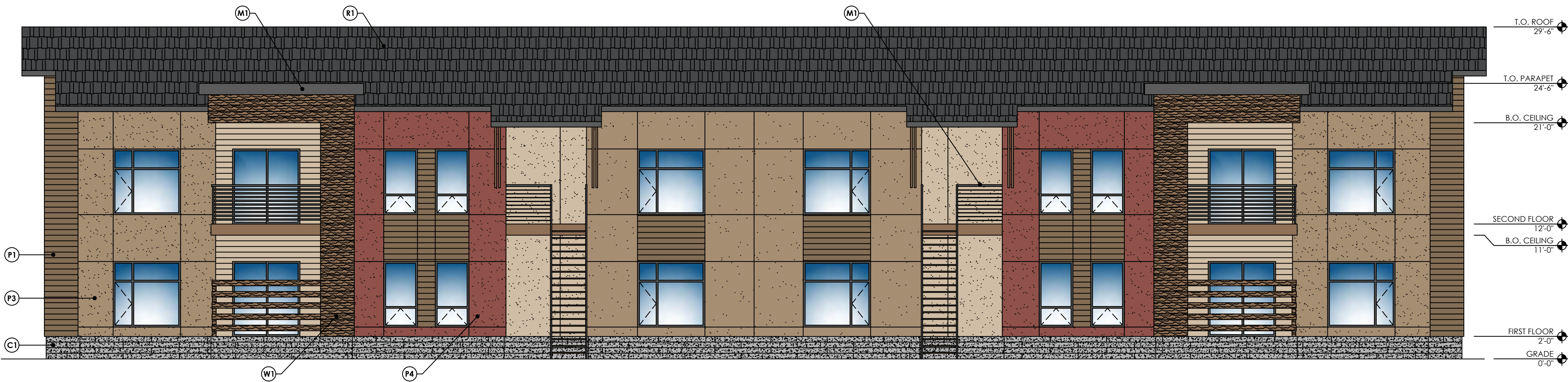
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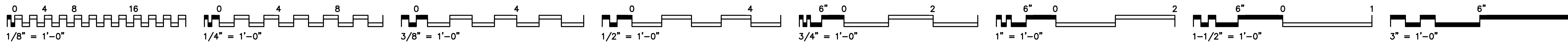
C1 CONCEPTUAL APARTMENT WEST ELEVATION
SCALE: 3/16" = 1'-0"

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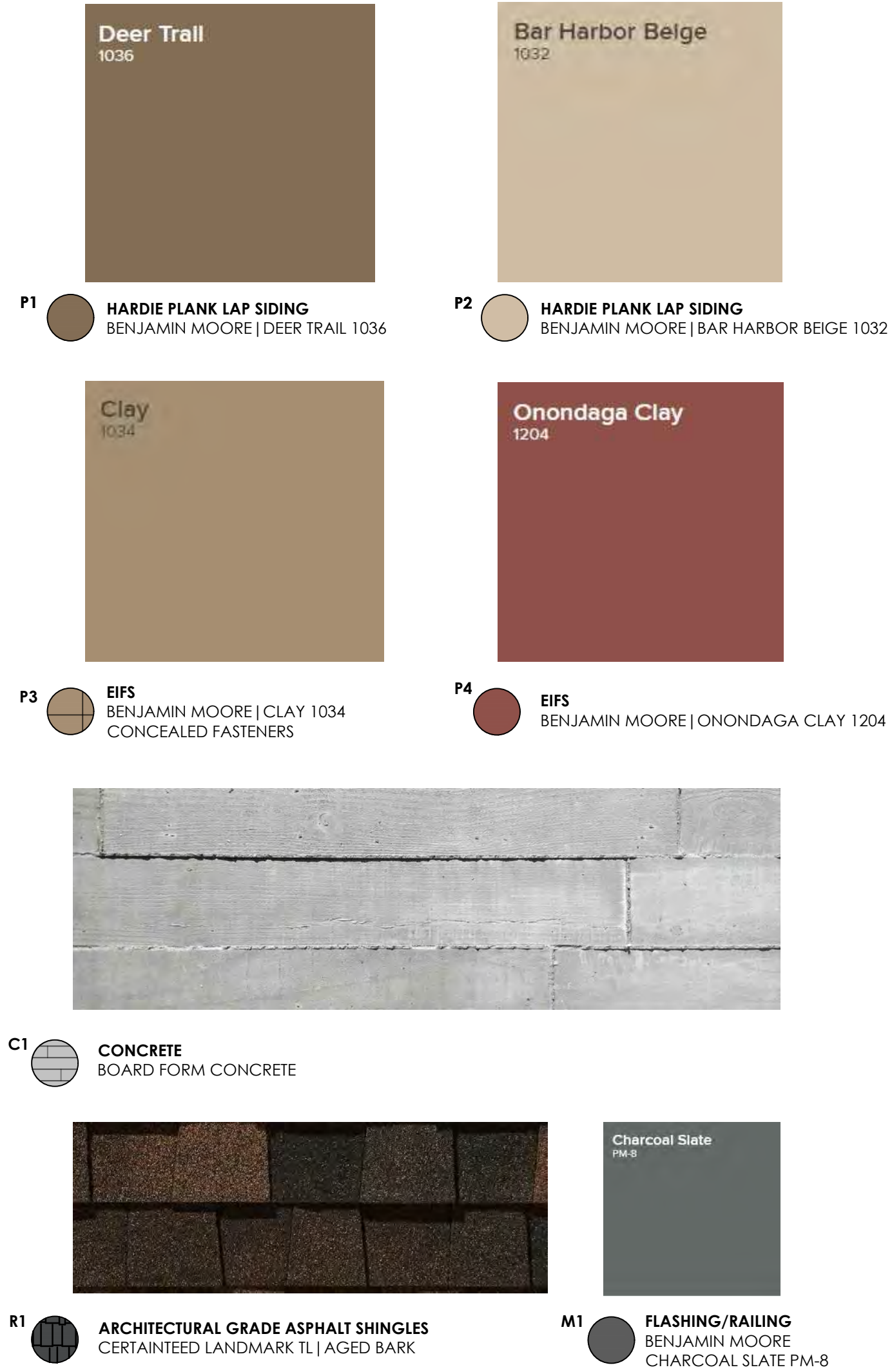
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E1 CONCEPTUAL APARTMENT SOUTH ELEVATION
SCALE: 3/16" = 1'-0"



MATERIALS LEGEND



W1 HARDIE PLANK WOOD GRAIN LAP SIDING
RUSTIC SERIES BY WOODTONE
WINCHESTER BROWN

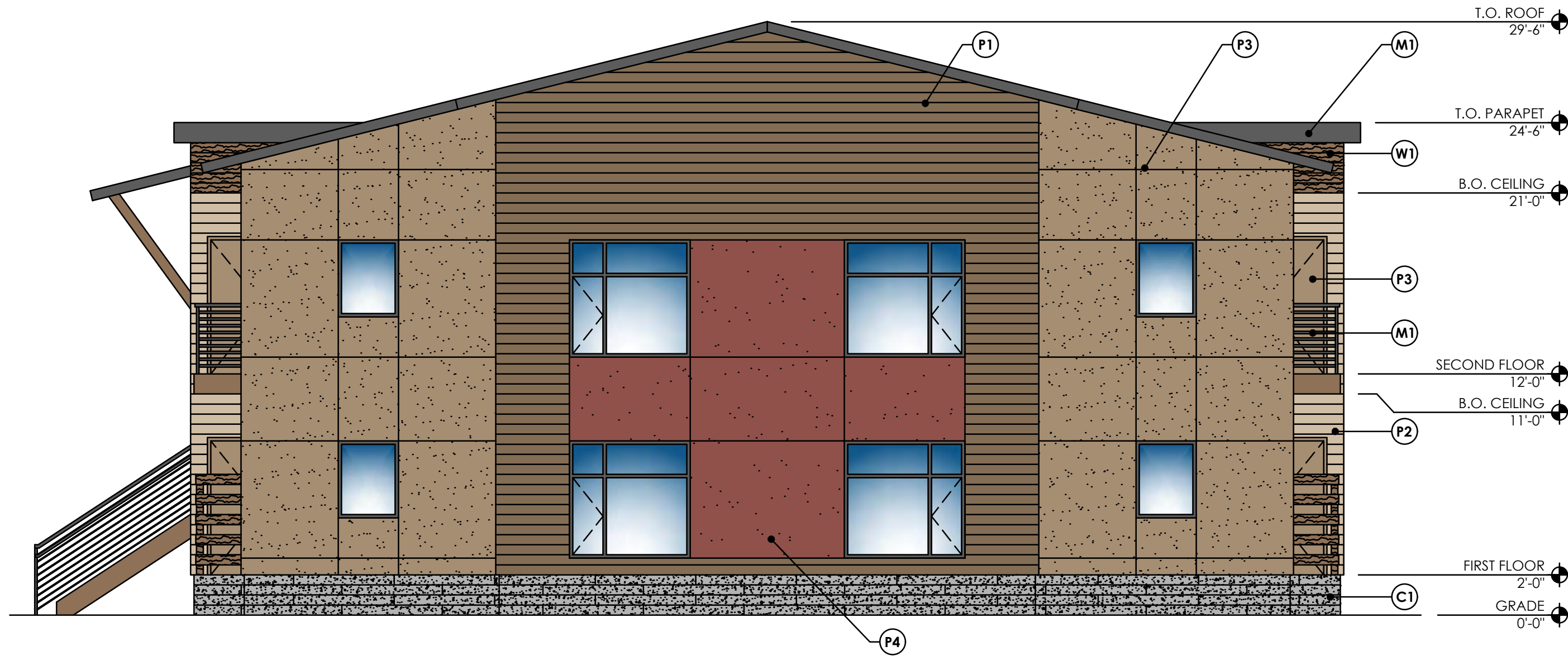
SHEET NOTES

KEY NOTES

A

B

C



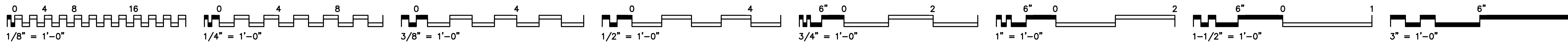
C1 CONCEPTUAL APARTMENT EAST ELEVATION
SCALE: 3/16" = 1'-0"

D

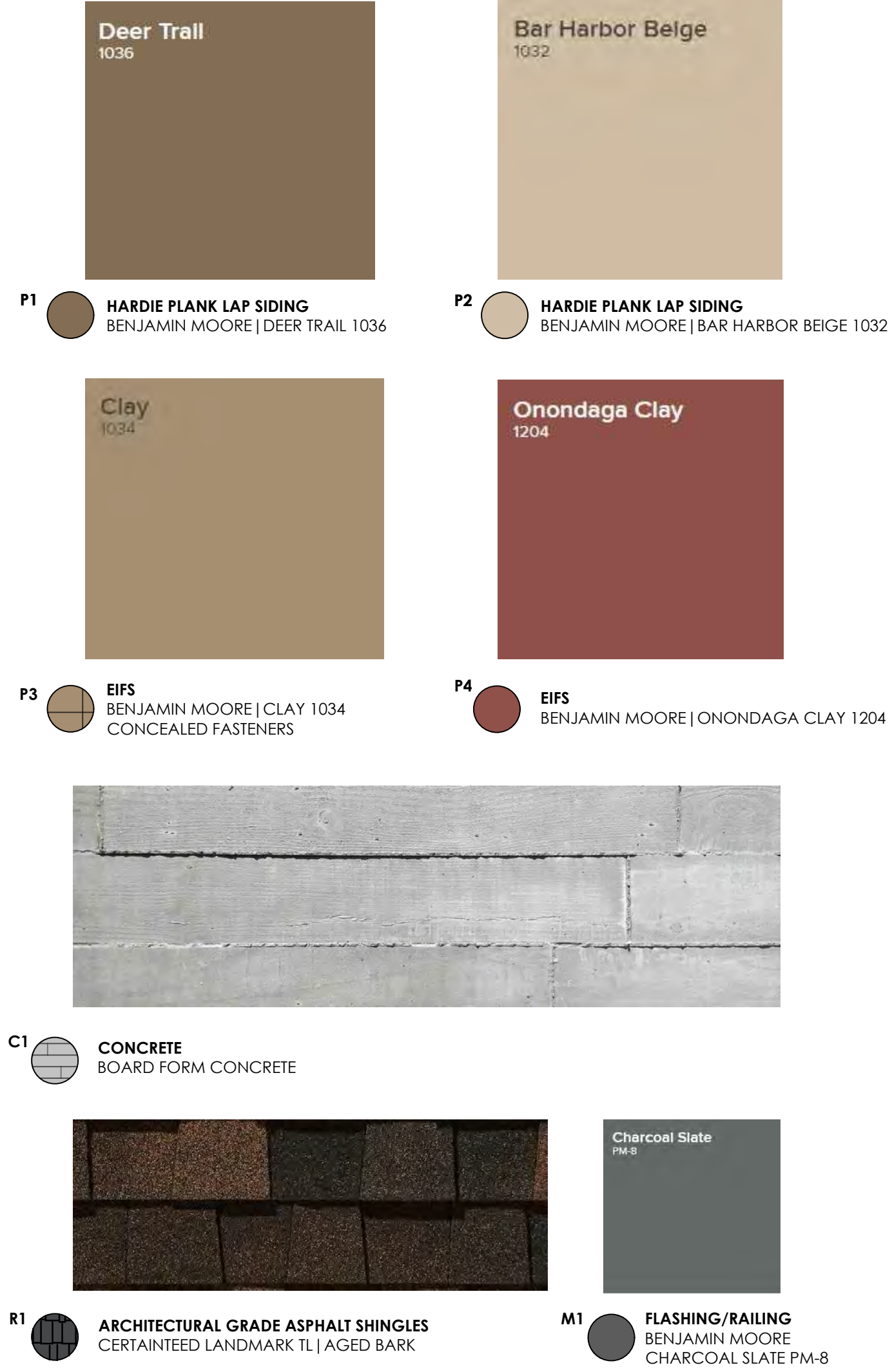
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E1 CONCEPTUAL APARTMENT NORTH ELEVATION
SCALE: 3/16" = 1'-0"



MATERIALS LEGEND



SHEET NOTES

KEY NOTES