



January 31, 2025

Mr. Joseph Huey
Lennar
joseph.huey@lennar.com

Re: Kings Point South
East Side
Aurora, CO
LSC #240810

Dear Mr. Huey:

In response to your request, LSC Transportation Consultants, Inc. has prepared this traffic impact analysis for the proposed Kings Point South East Side. As shown on Figure 1, the site is located east of E-470 and south of the future Aurora Parkway in Aurora, Colorado.

REPORT CONTENTS

The report contains the following: the projected background roadway and traffic conditions in the vicinity of the site including the lane geometries, traffic controls, posted speed limits, etc.; the projected short-term and long-term weekday peak-hour traffic volumes; the projected short-term and long-term daily traffic volumes in the area; the typical weekday site-generated traffic volume projections for the site; the assignment of the projected traffic volumes to the area roadways; the resulting total traffic volumes on the area roadways; the site's projected traffic impacts; and any recommended roadway improvements to mitigate the site's traffic impacts.

LAND USE AND ACCESS

The site is proposed to include 436 single-family residential dwelling units. Two access points are proposed to Aurora Parkway as shown in the site plan in Figure 2. The west site access is planned to be restricted to right-in/right-out-only and the east site access is planned to be full movement. Two additional connections are planned on the east end of the site through the Vistas at Kings Ranch development. A copy of the site plan showing the proposed signing and striping for the internal roadways has been attached.

ROADWAY AND TRAFFIC CONDITIONS

Area Roadways

The major roadways in the site's vicinity are shown on Figure 1 and are described below.

- **Aurora Parkway:** The *Aurora Southeast Area Transportation Study 2007 Update (SEATS)* shows Aurora Parkway as a six-lane major arterial that parallels E-470. Aurora Parkway

has been constructed with three through lanes in each direction from the terminus of Gun Club Road to Smoky Hill Road and with two through lanes in each direction from Smoky Hill Road to S. Quemoy Way. It is our understanding that Aurora Parkway is planned to be constructed from its existing terminus to Parker Road, including the section adjacent to the site, with two through lanes in each direction in the near term.

- **Kings Point Way** is a north-south, two-lane collector that extends from Cottonwood Drive to the future E. Aurora Parkway right-of-way. The intersection with E. Aurora Parkway is planned to be constructed as a two-lane modern roundabout.

Background Traffic

Figures 3 and 4 show the estimated 2030 and 2050 background traffic volumes, respectively. The background volumes are estimates by LSC based on the 2030 and 2040 total traffic volumes shown in the *Vistas at Kings Point Traffic Impact Study* by Fix Tuttle dated January 16, 2024 and the *Overlook at Kings Point Traffic Impact Study* by Fox Tuttle dated February 24, 2023. Some adjustments have been made based on the *Transportation Impact Study - Revised Kings Point South* by Aldridge Transportation Consultants, LLC, dated June 27, 2023, and the latest known land use plans for Prairie Point (formerly Kings Point North) just north of the site and Vistas at Kings Point. The 2040 total traffic volumes were adjusted to 2050 volumes assuming a 1.2 percent growth rate per year for the through traffic volumes which is consistent with the growth rate assumed in the *Vistas at Kings Point Traffic Impact Study*. Key pages from traffic studies completed in the area are attached for reference.

2030 and 2050 Background Levels of Service

Level of service (LOS) is a quantitative measure of the level of congestion or delay at an intersection. Level of service is indicated on a scale from “A” to “F”. LOS A is indicative of little congestion or delay and LOS F is indicative of a high level of congestion or delay. Attached are specific level of service definitions for signalized and unsignalized intersections.

The study area intersections were analyzed to determine the 2030 and 2050 background levels of service using Synchro Version 11. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. **Aurora Parkway/Kings Point Way:** This planned two-lane modern roundabout is expected to operate at an overall LOS “A” during both peak-hours through 2050.
2. **Aurora Parkway/Kings Point South East Side Right-In/Right-Out-Only Access/ Kings Point South PA 5 Right-In/Right-Out Only Access:** All movements at this future limited access, stop-sign controlled intersection are expected to operate at LOS “B” or better through 2050.
3. **Aurora Parkway/Kings Point South East Side Collector:** This intersection was only analyzed for the total traffic scenarios.
4. **Aurora Parkway/Vistas at Kings Point Collector/Prairie Point Access:** All movements at this intersection are expected to operate at LOS “D” or better during the peak-hours through 2050 if it is constructed as a two-way, stop-sign controlled intersection.

TRIP GENERATION

Table 2 shows the estimated average weekday, morning peak-hour, and afternoon peak-hour trip generation for the proposed land use based on the rates from *Trip Generation*, 11th Edition, 2021 by the Institute of Transportation Engineers (ITE).

The site is expected to generate about 4,111 new external vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, which generally occurs for one hour between 6:30 and 8:30 a.m., about 76 vehicles would enter and about 229 vehicles would exit the site. During the afternoon peak-hour, which generally occurs for one hour between 4:00 and 6:00 p.m., about 258 vehicles would enter and about 152 vehicles would exit.

DIRECTIONAL DISTRIBUTION

Figure 5 shows the estimated directional distribution of the site-generated traffic volumes on the area roadways. The directional distribution estimates were based on the location of the site with respect to the regional population, employment, and activity centers; and the site's proposed land use.

TRIP ASSIGNMENT

Figure 6 shows the site-generated traffic volumes which are based on the directional distribution percentages (from Figure 5) and the trip generation estimate (from Table 2).

TOTAL TRAFFIC

Figure 7 shows the estimated 2030 total traffic for the study area intersections. These volumes are the sum of the 2030 background traffic volumes from Figure 3 plus the site-generated traffic volumes from Figure 6.

Figure 8 shows the estimated 2050 total traffic for the study area intersections. These volumes are the sum of the 2050 background traffic volumes from Figure 4 plus the site-generated traffic volumes from Figure 6.

TRAFFIC SIGNAL WARRANT ANALYSIS

Intersection #4 (Aurora Parkway/Vistas at Kings Point Access/Prairie Point Access) was analyzed to determine if the projected total traffic volumes would meet the thresholds criteria for Eight-Hour, Four-Hour, and Peak-Hour Vehicular Volume Traffic Signal Warrants in the *Manual on Uniform Traffic Control Devices* (MUTCD). The off-peak-hour volumes are estimates based on the hourly distribution of entering and exiting vehicle-trips for Land Use 210 Single-Family Detached Housing published by the Institute of Transportation Engineers in 2021. The results of the signal warrant analysis are shown in the Table 3.

As shown in Table 3, based on the 2050 total traffic volumes Aurora Parkway/Vistas at Kings Point Access/Prairie Point Access is expected to meet the Four-Hour Vehicular Volume Traffic Signal Warrant and Peak-hour Vehicular Volume Traffic Signal Warrants. Only four hours are expected to meet the thresholds for an Eight-Hour Vehicular Volume Traffic Signal Warrant. The *Vistas at Kings Point Traffic Impact Study* and the *Overlook at Kings Point Traffic Study* both

show the potential for Pine Drive to be extended north through the two developments. If this extension is constructed it is likely additional hours will meet the thresholds for the vehicular volume signal warrants.

Intersection #4 (Aurora Parkway/Vistas at Kings Point Access/Prairie Point Access) is an appropriate traffic signal location because it serves both sides of Aurora Parkway. Drivers using Intersection #3 (Aurora Parkway/Kings Point South East Side Collector) will have the ability to use Intersection #4 via the proposed cross access so it is unlikely Intersection #3 will meet a traffic signal warrant once Intersection #4 is signalized.

PROJECTED LEVELS OF SERVICE

The study area intersections were analyzed to determine the 2030 and 2050 total levels of service using Synchro Version 11. Table 1 shows the level of service analysis results. The level of service reports are attached.

1. **Aurora Parkway/Kings Point Way:** This planned two-lane modern roundabout is expected to operate at an overall LOS “A” during both peak-hours through 2050.
2. **Aurora Parkway/Kings Point South East Side Right-In/Right-Out-Only Access:** All movements at this proposed limited access, stop-sign controlled intersection are expected to operate at LOS “B” or better through 2050.
3. **Aurora Parkway/Kings Point South East Side Collector:** If this intersection is constructed as a stop-sign controlled intersection, the northbound left-turn movement at this intersection is expected to operate at LOS “D” during the morning peak-hour and LOS “E” during the afternoon peak-hour based on the projected 2030 total traffic volumes. All other movements are expected to operate at LOS “B” or better. By 2050 the northbound left-turn movement is expected to operate at LOS “E” during the morning peak-hour and LOS “F” during the afternoon peak-hour if it remains a stop-sign controlled intersection and if the intersection to the east (#4 Aurora Parkway/Vistas at Kings Point Access/Prairie Point Access) remains stop-sign controlled. If Intersection #4 is converted to traffic signal control, the traffic signal will help to create gaps in the through traffic that will improve the delay for the northbound left-turn movement at the Kings Point South East Side Collector to LOS “E” during the afternoon peak-hour.
4. **Aurora Parkway/Vistas at Kings Point Collector/Prairie Point Access:** All movements at this intersection are expected to operate at LOS “D” or better during the peak-hours through 2030 if it is constructed as a two-way, stop-sign controlled intersection. By 2050 the northbound left-turn movement is expected to operate at LOS “E” during the afternoon peak-hour. If this intersection were to be converted to traffic signal control it is expected to operate at an overall LOS “B” or better during the peak-hours.

95TH PERCENTILE QUEUE LENGTHS

The estimated 2050 95th percentile queue lengths for the study area intersections are shown in Table 4. Table 4 also shows the recommended turn lane lengths based on the NR-B classification criteria in the CDOT *State Highway Access Code* and the projected 95th percentile queue lengths.

RECOMMENDED IMPROVEMENTS

Table 5 and Figures 7 and 8 show the recommended improvements. The recommended turn lane lengths are based on the criteria contained in the CDOT *State Highway Access Code* for the NR-B classification, the projected total traffic volumes shown in Figure 8, and the projected 95th percentile queue lengths shown in Table 4. A posted speed limit of 45 mph was assumed for Aurora Parkway and a design speed of 35 mph was assumed for the collector roads within the study area.

CONCLUSIONS AND RECOMMENDATIONS

Trip Generation

1. The site is expected to generate about 4,111 vehicle-trips on the average weekday, with about half entering and half exiting during a 24-hour period. During the morning peak-hour, about 76 vehicles would enter and about 229 vehicles would exit the site. During the afternoon peak-hour, about 258 vehicles would enter and about 152 vehicles would exit.

Projected Levels of Service

2. **Aurora Parkway/Kings Point Way:** This planned two-lane modern roundabout is expected to operate at an overall LOS "A" during both peak-hours through 2050.
3. **Aurora Parkway/Kings Point South East Side Right-In/Right-Out-Only Access/ Kings Point South PA 5 Right-in/Right-out Only Access:** All movements at this proposed limited access, stop-sign controlled intersection are expected to operate at LOS "B" or better through 2050.
4. **Aurora Parkway/Kings Point South East Side Collector:** If this intersection is constructed as a stop-sign controlled intersection, the northbound left-turn movement at this intersection is expected to operate at LOS "D" during the morning peak-hour and LOS "E" during the afternoon peak-hour based on the projected 2030 total traffic volumes. All other movements are expected to operate at LOS "B" or better. By 2050 the northbound left-turn movement is expected to operate at LOS "E" during the morning peak-hour and LOS "F" during the afternoon peak-hours if it remains a stop-sign controlled intersection and if the intersection to the east (#4 Aurora Parkway/Vistas at Kings Point Access/ Prairie Point Access) remains stop-sign controlled. If Intersection #4 is converted to traffic signal control the traffic signal will help to create gaps in the through traffic that will improve the delay for the northbound left-turn movement at the Kings Point South East Side Collector to LOS "E" during the afternoon peak-hour. The proposed cross access will allow vehicles to shift from Intersection #3 to Intersection #4 if desired.
5. **Aurora Parkway/Vistas at Kings Point Collector/Prairie Pont Access:** All movements at this intersection are expected to operate at LOS "D" or better during the peak-hours through 2030 if it is constructed as a two-way, stop-sign controlled intersection. By 2050 the northbound left-turn movement is expected to operate at LOS "E" during the afternoon peak-hour. If this intersection were to be converted to traffic signal control it is expected to operate at an overall LOS "B" or better during the peak-hours.

Conclusions

6. The impact of the site can be accommodated by the planned roadway improvements with the following recommended improvements.

Recommendations

7. The recommended improvements for 2030 and 2050 are shown in Figures 7 and 8 and are detailed in Tables 4 and 5.

* * * * *

We trust our findings will assist you in gaining approval of the proposed Kings Point South East Side. Please contact me if you have any questions or need further assistance.

Sincerely,

LSC TRANSPORTATION CONSULTANTS, INC.

By

Christopher S. McGranahan, PE
Principal/President

CSM/wc

Enclosures: Tables 1 - 5
Figures 1 - 8
Signing and Striping Plan
Key Pages from Area Traffic Studies
Level of Service Definitions
Level of Service Reports
Queuing Reports

Table 1
Intersection Levels of Service Analysis
Kings Point South - East Side
Aurora, Colorado
LSC #240810; January, 2025

Intersection Location	Traffic Control	2030 Background Traffic				2030 Total Traffic				2050 Background Traffic				2050 Total Traffic			
		Level of Service	Move-ment Delay	Level of Service	Move-ment Delay	Level of Service	Move-ment Delay	Level of Service	Move-ment Delay	Level of Service	Move-ment Delay	Level of Service	Move-ment Delay	Level of Service	Move-ment Delay	Level of Service	Move-ment Delay
1) <u>Aurora Parkway/Kings Point Way</u>	Roundabout																
EB Approach		A	3.9	A	5.1	A	4.3	A	5.9	A	4.8	A	7.2	A	5.5	A	8.4
WB Approach		A	5.3	A	4.3	A	6.0	A	4.8	A	7.2	A	6.8	A	8.3	A	7.6
NB Approach		A	4.0	A	5.6	A	4.3	A	7.3	A	5.0	A	8.8	A	5.5	B	12.2
SB Approach		A	6.2	A	4.3	A	7.4	A	4.8	B	14.8	A	8.0	C	20.3	A	9.2
Entire Intersection Delay (sec /veh)		4.9		4.8		5.5		5.6		7.7		7.3		9.2		8.5	
Entire Intersection LOS		A		A		A		A		A		A		A		A	
2) <u>Aurora Parkway/Kings Point South East Side RIRO</u>	TWSC																
NB Right		--	--	--	--	A	9.4	B	10.6	--	--	--	--	A	9.8	B	11.2
SB Right		--	--	--	--	--	--	--	--	B	11.3	A	9.7	B	12.2	B	10.2
3) <u>Aurora Parkway/Kings Point South East Side Collector</u>	TWSC With TWSC at Intersection #4																
NB Left		--	--	--	--	D	26.0	E	35.9	--	--	--	--	E	41.9	E	36.9
NB Right		--	--	--	--	A	9.6	B	10.5	--	--	--	--	B	10.0	B	11.1
WB Left		--	--	--	--	A	8.1	A	9.4	--	--	--	--	A	8.4	B	10.1
	TWSC With Signal Control at Intersection #4																
NB Left		--	--	--	--	--	--	--	--	--	--	--	--	E	41.9	F	61.9
NB Right		--	--	--	--	--	--	--	--	--	--	--	--	B	10.0	B	11.1
WB Left		--	--	--	--	--	--	--	--	--	--	--	--	A	8.4	B	10.1
4) <u>Aurora Parkway/Vistas at Kings Point Access/</u> <u>Prairie Point Access</u>	TWSC																
NB Left		C	19.5	C	22.6	C	23.0	D	26.9	D	28.0	D	32.5	D	34.9	E	40.5
NB Through/Right		A	9.3	A	9.7	A	9.6	B	9.9	A	9.7	B	10.3	A	9.9	B	10.5
EB Left		A	8.5	A	7.9	A	8.5	A	8.1	A	9.0	A	8.1	A	9.1	A	8.4
WB Left		A	7.9	A	8.7	A	8.1	A	8.9	A	8.2	A	9.2	A	8.4	A	9.4
SB Left		C	17.5	C	17.1	C	19.1	C	19.6	C	23.1	C	21.2	D	25.3	C	24.6
SB Through/Right		B	10.1	A	9.2	B	10.2	A	9.5	B	10.8	A	9.5	B	10.9	A	9.8
	Signalized																
EB Left		--	--	--	--	--	--	--	--	--	--	--	--	A	7.4	A	6.5
EB Through		--	--	--	--	--	--	--	--	--	--	--	--	A	6.6	A	6.3
EB Right		--	--	--	--	--	--	--	--	--	--	--	--	A	5.8	A	5.6
EB Approach & Delay		--	--	--	--	--	--	--	--	--	--	--	--	A	6.6	A	6.2
WB Left		--	--	--	--	--	--	--	--	--	--	--	--	A	6.9	A	7.7
WB Through/Right		--	--	--	--	--	--	--	--	--	--	--	--	A	7.6	A	6.1
WB Approach & Delay		--	--	--	--	--	--	--	--	--	--	--	--	A	7.6	A	6.2
NB Left		--	--	--	--	--	--	--	--	--	--	--	--	C	27.6	C	30.9
NB Through/Right		--	--	--	--	--	--	--	--	--	--	--	--	C	23.9	C	28.4
NB Approach & Delay		--	--	--	--	--	--	--	--	--	--	--	--	C	26.5	C	30.1
SB Left		--	--	--	--	--	--	--	--	--	--	--	--	C	24.4	C	28.7
SB Through/Right		--	--	--	--	--	--	--	--	--	--	--	--	C	23.6	C	28.1
SB Approach & Delay		--	--	--	--	--	--	--	--	--	--	--	--	C	23.8	C	28.2
Entire Intersection Delay (sec /veh)		--	--	--	--	--	--	--	--	--	--	--	--	10.0		8.6	
Entire Intersection LOS		--	--	--	--	--	--	--	--	--	--	--	--	B		A	

Table 2
Trip Generation Estimate
Kings Point South - East Side
Aurora, CO
LSC #240810; January, 2025

Land Use Description	Trip Generation Units	Trip Generation Rates ⁽¹⁾					Total Trips Generated				
		Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour		Average Weekday Traffic	Morning Peak Hour		Afternoon Peak Hour	
			In	Out	In	Out		In	Out	In	Out
Single Family Detached Housing ⁽²⁾	436 DU ⁽³⁾	9.43	0.175	0.525	0.592	0.348	4,111	76	229	258	152

Notes:

(1) Source: *Trip Generation, Institute of Transportation Engineers*, 11th Edition, 2021.

(2) ITE Land Use No. 210 - Single-Family Detached Housing

(3) DU = dwelling unit

Table 3
Intersection #4 - Aurora Parkway/Vistas at Kings Point Access
Kings Point South - East Side
Aurora, CO
LSC #240810; January, 2025

Warrant Analysis ⁽¹⁾																		
Traffic Volume (vph) ⁽²⁾			Warrant 1: Eight Hour Vehicular Volume Evaluation								Warrant 2: Four Hour Vehicular Volume Evaluation			Warrant 3: Peak Hour Vehicular Volume Evaluation				
			Warrant Thresholds				Warrant Threshold Met?				70% Warrant Threshold Minimum	Warrant Threshold Met?		70% Warrant Threshold Minimum	Warrant Threshold Met?			
			Condition A (70%)		Condition B (70%)		Minor 1 NB Leg		Minor 2 SB Leg			Minor 1 NB Leg	Minor 2 SB Leg		Minor 1 NB Leg	Minor 2 SB Leg		
Major ⁽³⁾	Minor 1 NB ⁽⁴⁾	Minor 2 SB ⁽⁴⁾	Major	Minor	Major	Minor	A	B	A	B								
2050 Background Traffic																		
12-1 AM	77	3	1	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
1-2 AM	37	3	1	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
2-3 AM	25	0	0	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
3-4 AM	37	3	1	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
4-5 AM	86	10	3	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
5-6 AM	184	26	6	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
6-7 AM	558	75	17	420	140	630	70	No	No	No	No	196	No	No	338	No	No	
7-8 AM	1018	130	30	420	140	630	70	No	Yes	No	No	80	Yes	No	145	No	No	
8-9 AM	988	109	25	420	140	630	70	No	Yes	No	No	80	Yes	No	153	No	No	
9-10 AM	732	69	16	420	140	630	70	No	No	No	No	129	No	No	249	No	No	
10-11 AM	860	69	16	420	140	630	70	No	No	No	No	90	No	No	195	No	No	
11-12 PM	996	65	16	420	140	630	70	No	No	No	No	80	No	No	151	No	No	
12-1 PM	1412	45	11	420	140	630	70	No	No	No	No	80	No	No	100	No	No	
1-2 PM	667	65	16	420	140	630	70	No	No	No	No	152	No	No	278	No	No	
2-3 PM	749	68	16	420	140	630	70	No	No	No	No	123	No	No	243	No	No	
3-4 PM	844	66	16	420	140	630	70	No	No	No	No	94	No	No	203	No	No	
4-5 PM	1045	82	19	420	140	630	70	No	Yes	No	No	80	Yes	No	137	No	No	
5-6 PM	1027	81	19	420	140	630	70	No	Yes	No	No	80	Yes	No	142	No	No	
6-7 PM	846	65	16	420	140	630	70	No	No	No	No	94	No	No	202	No	No	
7-8 PM	611	47	11	420	140	630	70	No	No	No	No	171	No	No	309	No	No	
8-9 PM	565	34	8	420	140	630	70	No	No	No	No	193	No	No	334	No	No	
9-10 PM	413	26	6	420	140	630	70	No	No	No	No	282	No	No	418	No	No	
10-11 PM	197	13	3	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
11-12 AM	119	8	2	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
Numbers of hours the thresholds are met								0	4	0	0	4		0	0		0	
Warrant met?								No				Yes				No		
2050 Total Traffic																		
12-1 AM	87	3	1	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
1-2 AM	42	3	1	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
2-3 AM	30	0	0	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
3-4 AM	42	3	1	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
4-5 AM	94	10	3	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
5-6 AM	199	26	6	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
6-7 AM	605	75	17	420	140	630	70	No	No	No	No	173	No	No	312	No	No	
7-8 AM	1110	130	30	420	140	630	70	No	Yes	No	No	80	Yes	No	118	Yes	No	
8-9 AM	1086	109	25	420	140	630	70	No	Yes	No	No	80	Yes	No	124	No	No	
9-10 AM	813	69	16	420	140	630	70	No	No	No	No	102	No	No	219	No	No	
10-11 AM	963	69	16	420	140	630	70	No	No	No	No	80	No	No	159	No	No	
11-12 PM	1124	65	16	420	140	630	70	No	No	No	No	80	No	No	115	No	No	
12-1 PM	1533	45	11	420	140	630	70	No	No	No	No	80	No	No	100	No	No	
1-2 PM	754	65	16	420	140	630	70	No	No	No	No	121	No	No	241	No	No	
2-3 PM	844	68	16	420	140	630	70	No	No	No	No	94	No	No	203	No	No	
3-4 PM	943	66	16	420	140	630	70	No	No	No	No	80	No	No	164	No	No	
4-5 PM	1168	82	19	420	140	630	70	No	Yes	No	No	80	Yes	No	106	No	No	
5-6 PM	1148	81	19	420	140	630	70	No	Yes	No	No	80	Yes	No	110	No	No	
6-7 PM	943	65	16	420	140	630	70	No	No	No	No	80	No	No	164	No	No	
7-8 PM	682	47	11	420	140	630	70	No	No	No	No	146	No	No	270	No	No	
8-9 PM	625	34	8	420	140	630	70	No	No	No	No	166	No	No	301	No	No	
9-10 PM	457	26	6	420	140	630	70	No	No	No	No	253	No	No	394	No	No	
10-11 PM	218	13	3	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
11-12 AM	132	8	2	420	140	630	70	No	No	No	No	Low Vol	No	No	Low Vol	No	No	
Numbers of hours the thresholds are met								0	4	0	0	4		0	1		0	
Warrant met?								No				Yes				Yes		

Notes:

- (1) Thresholds are based on 2 or more lanes on the major approach and 2 or more lanes on the minor approach with the 70% factor applied for a posted speed limit above 40 mph
(2) Off peak hour traffic volumes are estimates by LSC based on ITE Vehicle Time of Day Distribution Data
(3) The major street traffic includes all movements (left, through, and right)
(4) The minor street traffic includes left, through, and half of right-turn volumes from the minor street

Source: LSC Transportation Consultants, Inc.

Table 4
95th Percentile Queue Lengths
Kings Point South - East Side
Aurora, Colorado
LSC #240810; January, 2025

Intersection No. & Location	Classification	Posted Speed Limit (mph)	Proposed Lane Lengths (feet)	95th Percentile Queue Length			
				2050 Total With TWSC at #4		2050 Total With Signal at #4	
				AM Peak (feet)	PM Peak (feet)	AM Peak (feet)	PM Peak (feet)
<u>1) Aurora Parkway/Kings Point Way</u>							
EB Approach	Major Arterial	45	Construct as a modern roundabout	25	75	25	75
WB Approach	Major Arterial	45		75	25	75	25
NB Approach	Collector	35		<25	25	<25	25
SB Approach	Collector	35		100	50	100	50
<u>2) Aurora Parkway/Kings Point South East Side Right-in/Right-out Access</u>							
NB Right	Local	25	- - -	<25	<25	<25	<25
SB Right	Local	25	- - -	<25	<25	<25	<25
EB Right	Major Arterial	45	273	<25	<25	<25	<25
<u>3) Aurora Parkway/Kings Point South Filing East Side Full-Movement Access</u>							
EB Right	Major Arterial	45	273	<25	<25	<25	<25
WB Left	Major Arterial	45	273	<25	<25	<25	<25
NB Left	Collector	35	105	105	100	105	68
NB Right	Collector	35	- - -	<25	<25	<25	<25
<u>4) Aurora Parkway/Vistas at Kings Point Access/Prairie Point Access</u>							
EB Left	Major Arterial	45	273	<25	<25	8	16
EB Through	Major Arterial	45	- - -	<25	<25	90	123
EB Right	Major Arterial	45	273	<25	<25	2	22
WB Left	Major Arterial	45	273	<25	<25	9	22
WB Through/Right	Major Arterial	45	- - -	<25	<25	142	90
NB Left	Collector	35	190	63	48	107	72
NB Through/Right	Collector	35	- - -	<25	<25	0	0
SB Left	Local	25	90	<25	<25	20	15
SB Through/Right	Local	25	- - -	<25	<25	0	0

Table 5
Recommended Improvements to Public Street Network
Kings Point South - East Side
Aurora, CO
LSC #240810; January, 2025

Inter- section No.	Intersection Location	Recommended Improvements ⁽¹⁾	Responsibility
#1	Aurora Parkway/Kings Point Way	Construct as modern roundabout	Kings Point South Fil No. 1
#2	Aurora Parkway/ Proposed Right-in/Right-out Access	EB RT - construct lane - 1 @ 273 feet and 162-foot transition taper	Kings Point South East Side
#3	Aurora Parkway/ Proposed Full-Movement Access	WB LT - construct lane - 1 @ 273 feet and 162-foot transition taper	Kings Point South East Side
		EB RT - construct lane - 1 @ 273 feet and 162-foot transition taper	Kings Point South East Side
		NB LT - construct lane - 105 feet and 120-foot transition taper	Kings Point South East Side
#4	Aurora Parkway/ Vistas at Kings Point Collector/ Kings Point North Access	WB LT - construct lane - 1 @ 273 feet and 162-foot transition taper	Others ⁽²⁾
		WB RT - construct lane 1 @ 273 feet and 162-foot transition taper	Others ⁽²⁾
		EB LT - construct lane - 1 @ 273 feet and 162-foot transition taper	Others ⁽²⁾
		NB LT - construct lane 1 @ 190 feet and 120-foot transition taper	Others ⁽²⁾
		SB LT - construct lane 1 @ 90 feet and 90-foot transition taper	Others ⁽²⁾
		Traffic signalization when warranted	Others ⁽²⁾

- (1) A transition taper of 13.5:1 was used for Aurora Parkway based a posted speed limit of 45 mph (162 feet).
 An appropriate redirect taper for 45 mph is 45:1
 A transition taper of 10:1 was used for all Collectors based on a posted speed limit of 35 mph (120 feet).
 An appropriate redirect taper for 35 mph is 20:1
 A transition taper of 7.5:1 was used for all Locals based a posted speed limit of 25 mph (90 feet).
 An appropriate redirect taper for 25 mph is 15:1
- (2) Others may include Prairie Point, the Vistas at Kings Point and the Overlook at Kings Point
 The site may have a contribution towards the future traffic signal at intersection #4

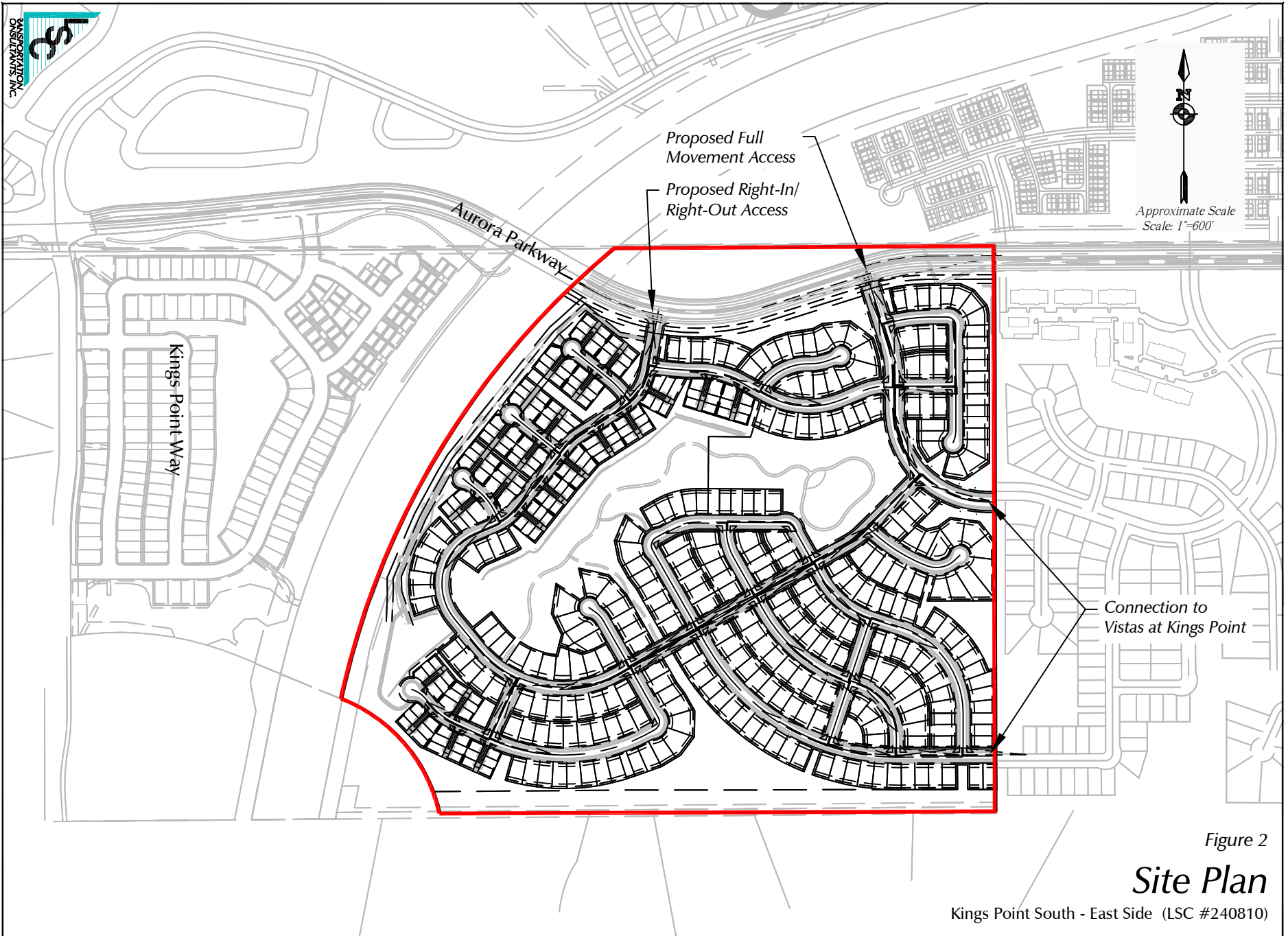


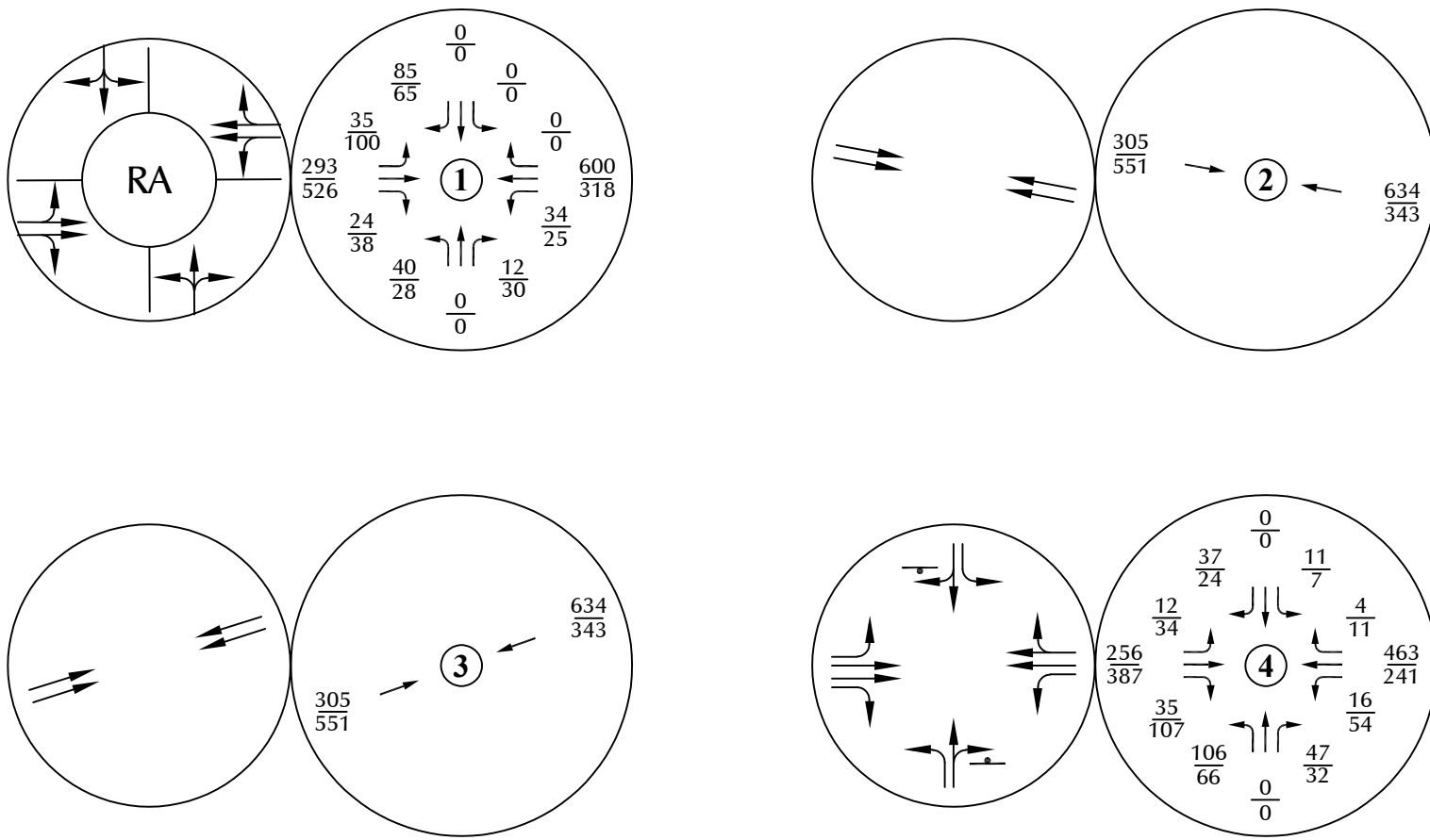
TRANSPORTATION
CONSULTANTS, INC.

Figure 1

Vicinity Map

Kings Point South - East Side (LSC #240810)





LEGEND:

- = Stop Sign
- = Traffic Signal
- = Modern Roundabout
- $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic

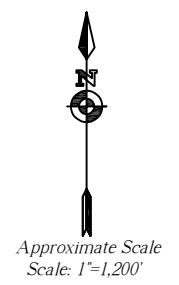
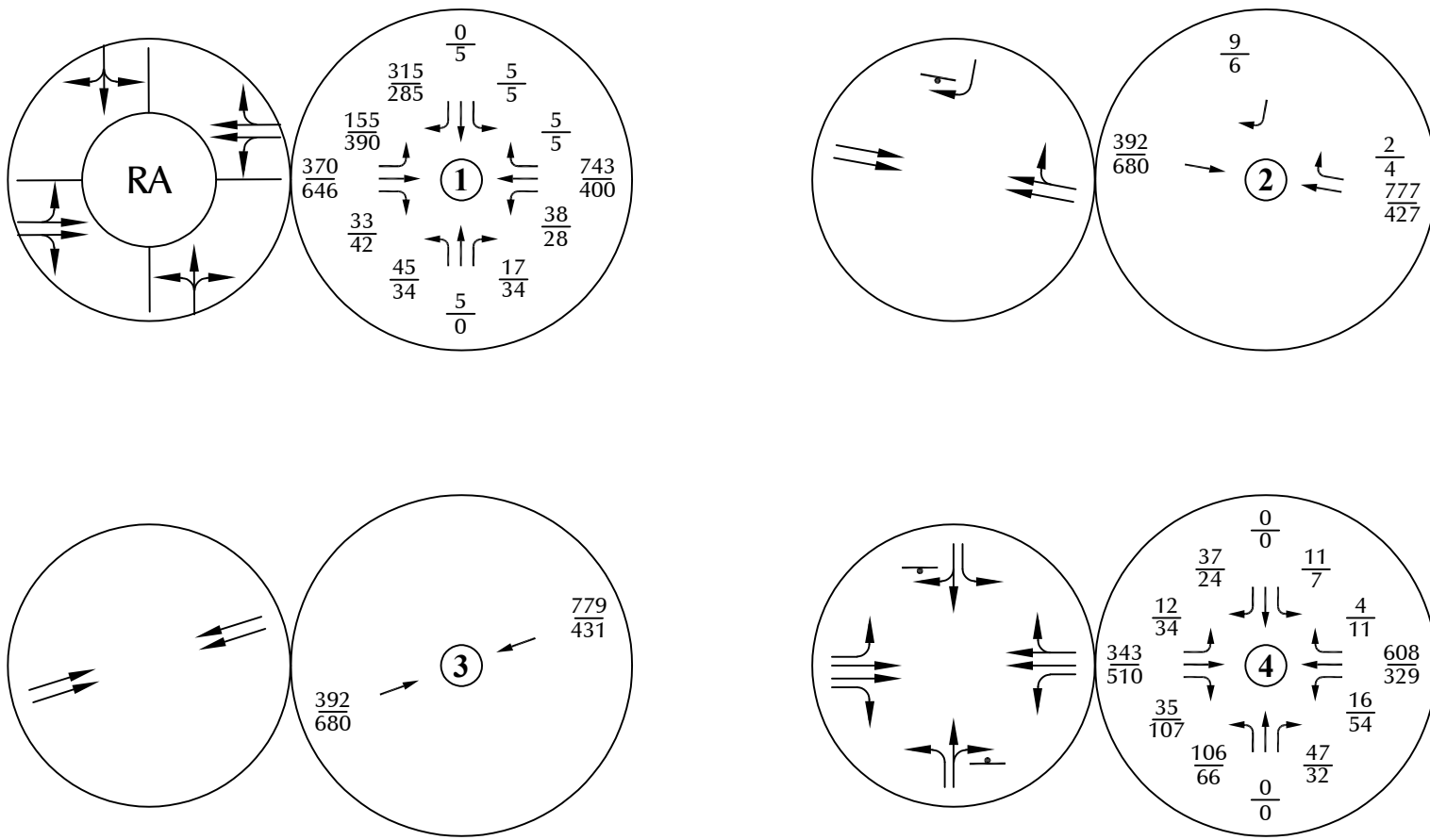


Figure 3

Year 2030 Background Traffic,
Lane Geometry and Traffic Control
Kings Point South - East Side (LSC #240810)



LEGEND:

- = Stop Sign
- = Traffic Signal
- = Modern Roundabout
- $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic

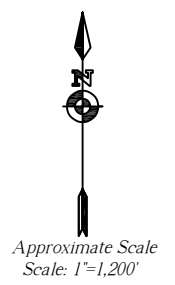


Figure 4

**Year 2050 Background Traffic,
Lane Geometry and Traffic Control**
Kings Point South - East Side (LSC #240810)



Approximate Scale
Scale: 1"=2,000'

LEGEND:


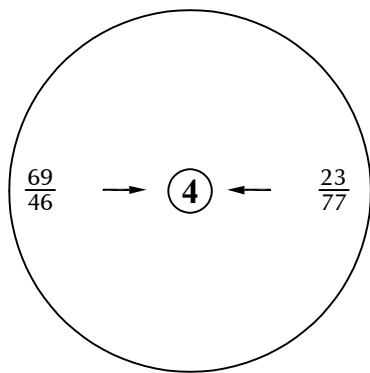
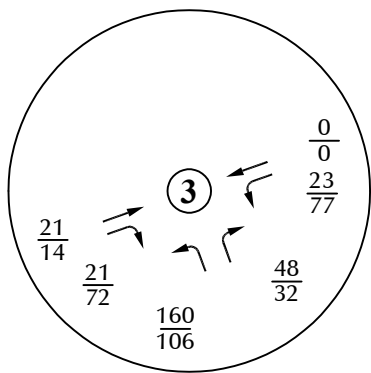
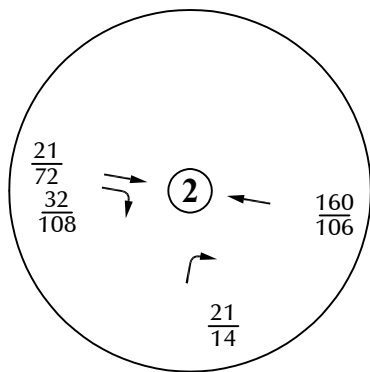
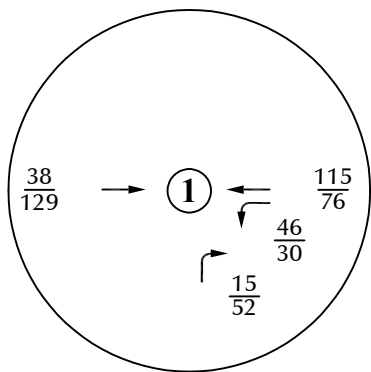
 = Percent Directional Distribution

Figure 5
*Directional Distribution
of Site-Generated Traffic*

Kings Point South - East Side (LSC #240810)



LEGEND:

$\frac{26}{35}$ = AM Peak Hour Traffic
 $\frac{35}{35}$ = PM Peak Hour Traffic
 1,000 = Average Daily Traffic

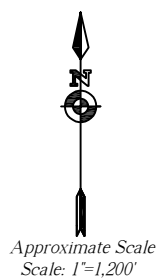
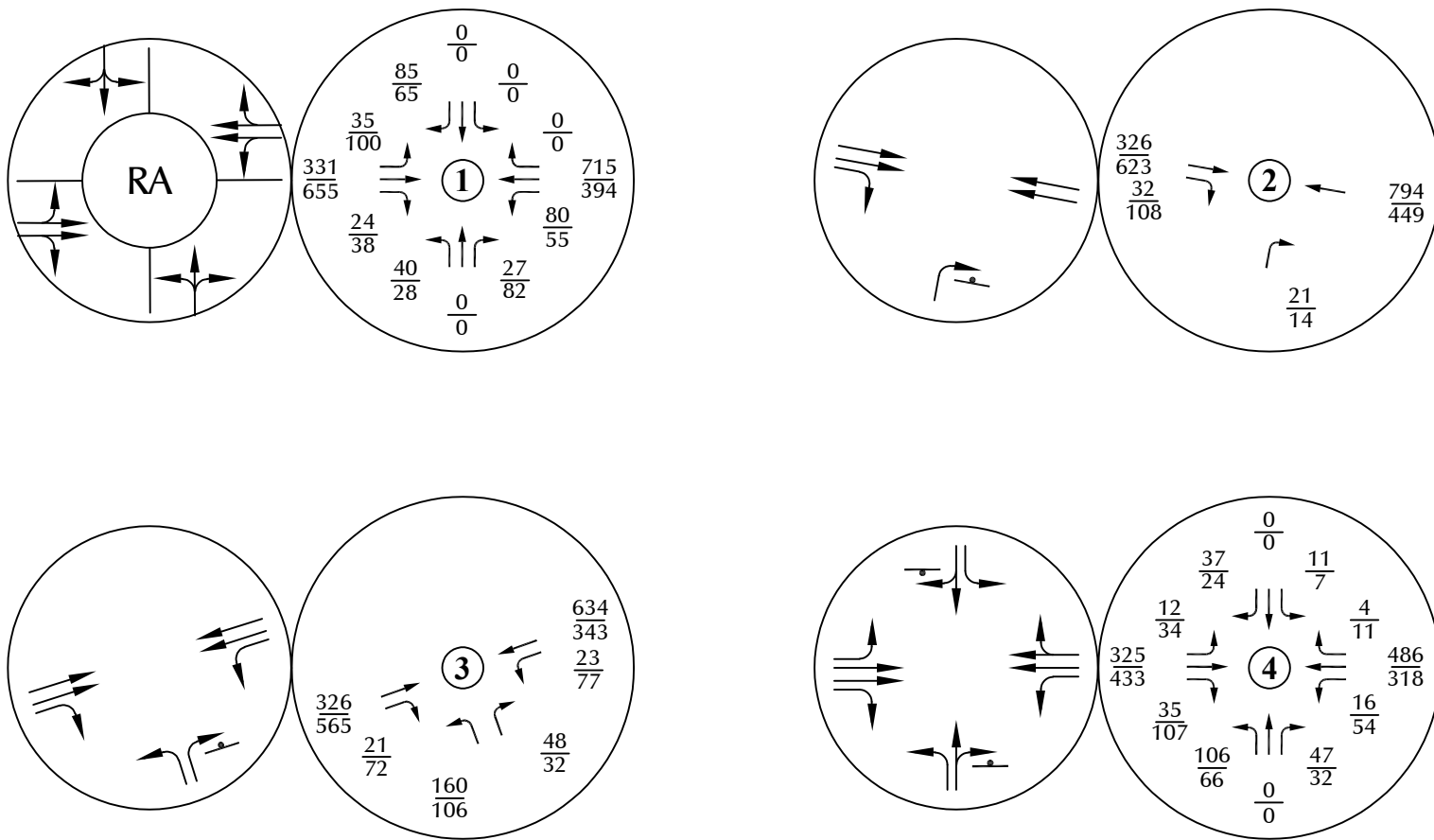


Figure 6

**Assignment of
 Site-Generated Traffic**
 Kings Point South - East Side (LSC #240810)



LEGEND:

- = Stop Sign
- = Traffic Signal
- = Modern Roundabout
- $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic

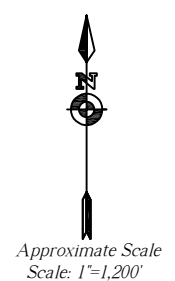
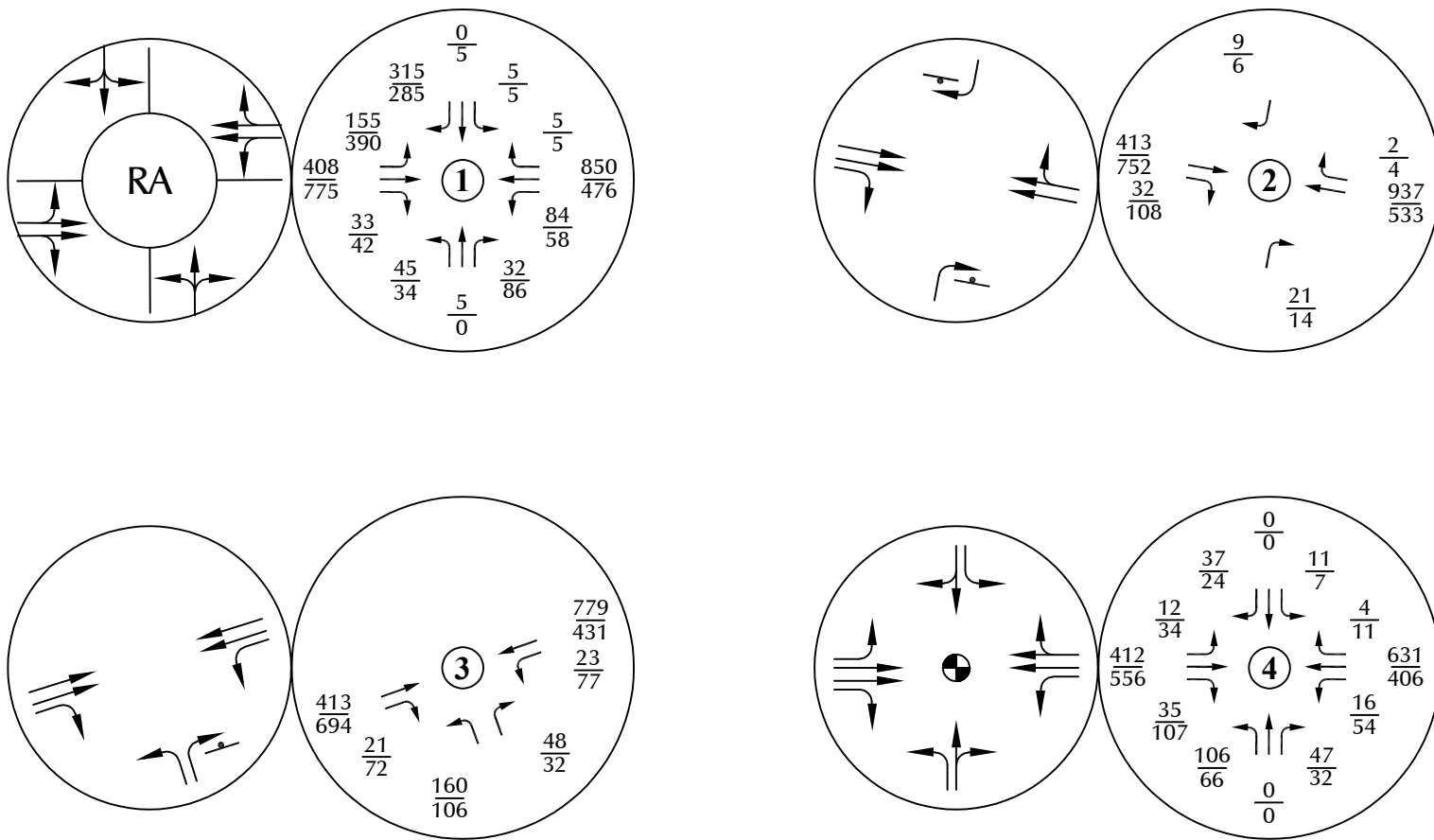


Figure 7

**Year 2030 Total Traffic,
Lane Geometry and Traffic Control**
Kings Point South - East Side (LSC #240810)



LEGEND:

- = Stop Sign
- = Traffic Signal
- = Modern Roundabout
- $\frac{26}{35}$ = AM Peak Hour Traffic / PM Peak Hour Traffic
- 1,000 = Average Daily Traffic

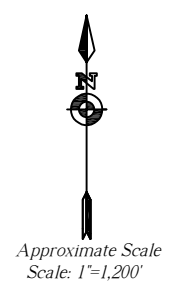
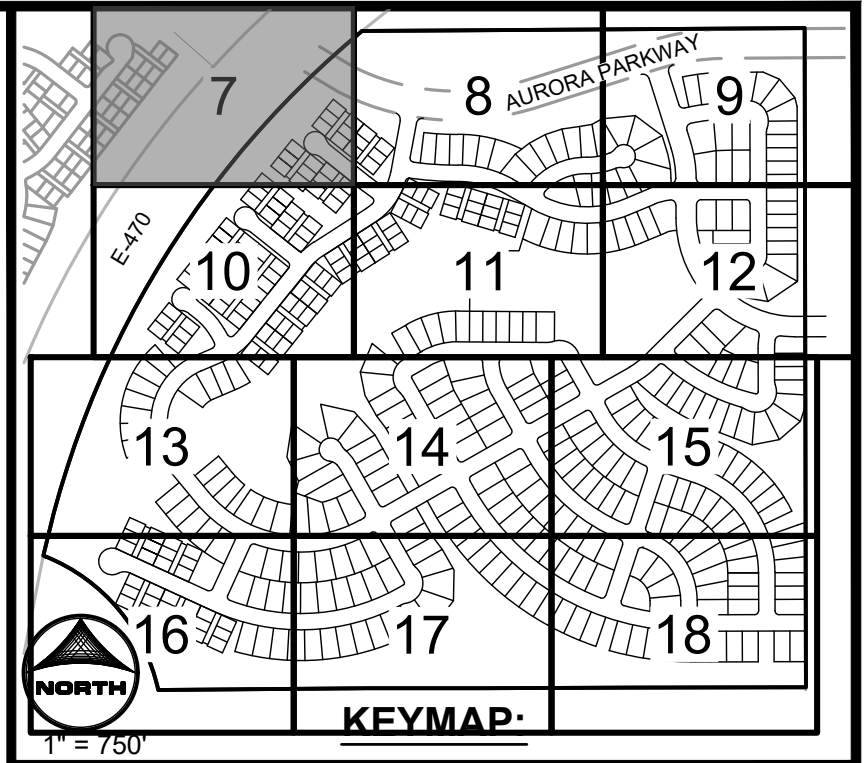
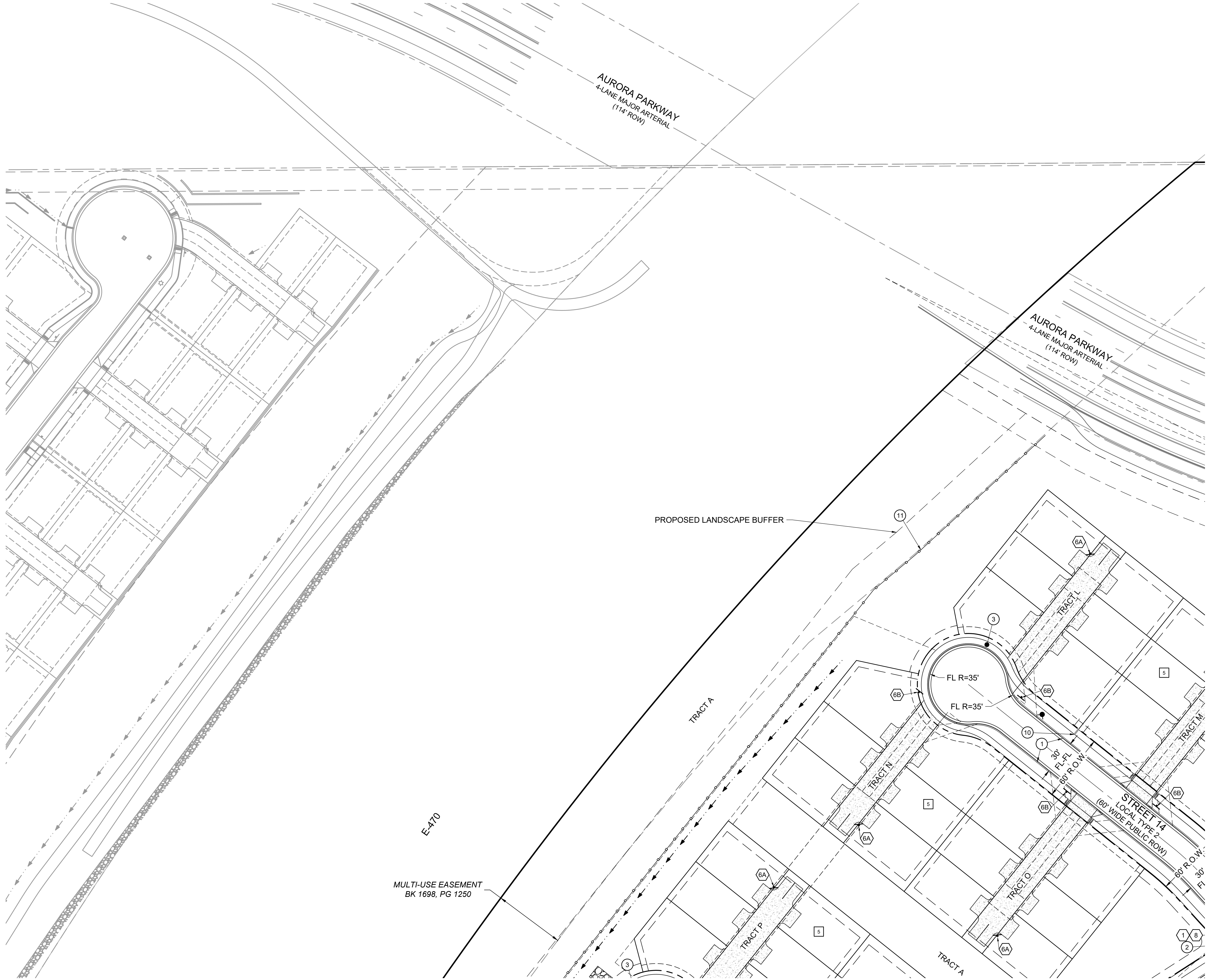


Figure 8

**Year 2050 Total Traffic,
Lane Geometry and Traffic Control**
Kings Point South - East Side (LSC #240810)

KINGS POINT SOUTH - PA 5-9



LEGEND

ROW/PROPERTY LINE	---
PROPERTY BOUNDARY	---
LOT LINE	---
EASEMENT	---
CENTER LINE	---
SETBACK	---
SIGHT TRIANGLE	---
LANDSCAPE TRIANGLE	---
PHASE LINE	-----
FIRE HYDRANT	⬮
STORM SEWER STRUCTURES	⊙ □ ▢
BLOCK NUMBER	1
LOT NUMBER	1
STREET LIGHT	☆

SIGNAGE LEGEND:

1 STOP R1-1 30"x30"	2 NO LEFT TURN R3-2 24"x24"	3 NO OUTLET W14-2 30"x30"	4 SPEED LIMIT 25 R2-1 24"x30"
5A WALKER W11-1 30"x30"	5B AHEAD W11-2 30"x30"	6A NO FIRE LANE R8-3 (CENTER) 12"x18"	6B NO FIRE LANE R8-3-MOD 12"x18"
7A ANY TIME R7-1 (CENTER) 12"x18"	7B ANY TIME R7-1 (LEFT) 12"x18"	7C ANY TIME R7-1 (RIGHT) 12"x18"	
8 Main Street D3-1 PLACED ABOVE R1-1			

- KEYNOTES**
- 1 MOUNTABLE CURB AND GUTTER
 - 1A VERTICAL CURB AND GUTTER
 - 1B MEDIAN CURB AND GUTTER
 - 2 CURB RAMPS
 - 3 SIDEWALK
 - 4 CROSSSPAN
 - 5 10' TRAIL / SIDEWALK
 - 6 MAIL KIOSK
 - 7 PEDESTRIAN CROSSWALK (2'X10' SOLID WHITE STRIPES)
 - 8 MAINTENANCE ACCESS
 - 9 PRIVATE RETAINING WALL
 - 10 SIDEWALK CHASE
 - 11 SOUND ATTENUATION WALL

NOTE:
1. SEE SHEET 2 FOR LINE AND CURVE TABLES
2. PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL
3. PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE

LEGEND

0 20 40
NORTH

PROJECT: KINGS POINT SOUTH - FILING NO. 2		SHEET NUMBER SP1	
DRAWING: SITE PLAN		SHEET 7 OF 54 PROJECT NO. 212000.02	
CLIENT: LENNAR		DESIGNED BY: STM DRAWN BY: AMC CHECKED BY: RWL	
SCALE: HORIZ. 1"=40'		DATE: 01-25-2025	
VERT. NOT APPLICABLE			

CIVIL ENGINEER: HR GREEN
ATTN: RYAN LITTLETON, PE
5613 DTC PARKWAY, SUITE 950
DENVER, COLORADO 80111
P: 720.600.4569
E: RLITTLETON@HGREEN.COM

KINGS POINT SOUTH - PA 5-9

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TRACT A

TRACT B

TRACT M

TRACT Y

TRACT X

TRACT W

TRACT Z

TRACT V

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TRACT T

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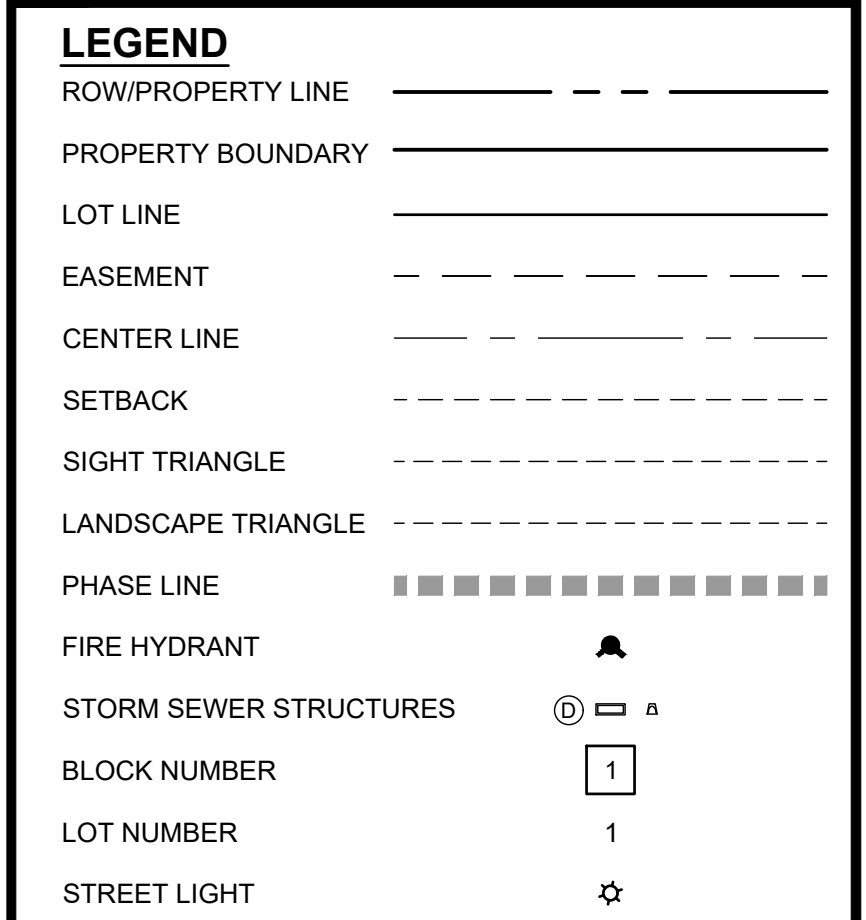
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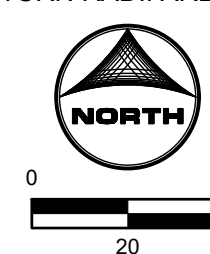
TRACT 357




<p>1</p>  <p>R1-1 30"x30"</p>	<p>2</p>  <p>R3-2 24"x24"</p>	<p>3</p>  <p>W14-2 30"x30"</p>	<p>4</p>  <p>R2-1 24"x30"</p>
<p>5A</p>  <p>W11-2 30"x30" W16-7p 24"x12"</p>	<p>5B</p>  <p>W11-2 30"x30" W16-9p 24"x12"</p>	<p>6A</p>  <p>R8-3 (CENTER) 12"x18" R7-201a 12"x6"</p>	<p>6B</p>  <p>R8-3-MOD 12"x18" R7-201a 12"x6"</p>
<p>7A</p>  <p>R7-1 (CENTER) 12"x18" R7-201a 12"x6"</p>	<p>7B</p>  <p>R7-1 (LEFT) 12"x18" R7-201a 12"x6"</p>	<p>7C</p>  <p>R7-1 (RIGHT) 12"x18" R7-201a 12"x6"</p>	

NOTE:

1. SEE SHEET 2 FOR LINE AND CURVE TABLES
2. PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL.
3. PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE



PROJECT:	KINGS POINT SOUTH - FILING NO. 2		
DRAWING:	SITE PLAN		
CLIENT:	LENNAR		
DESIGNED BY:	STM	SCALE:	HORIZ. 1"=50'
DRAWN BY:	AMC		VERT. NOT APPLICABLE
CHECKED BY:	RWL	DATE:	01 - 25 - 2025

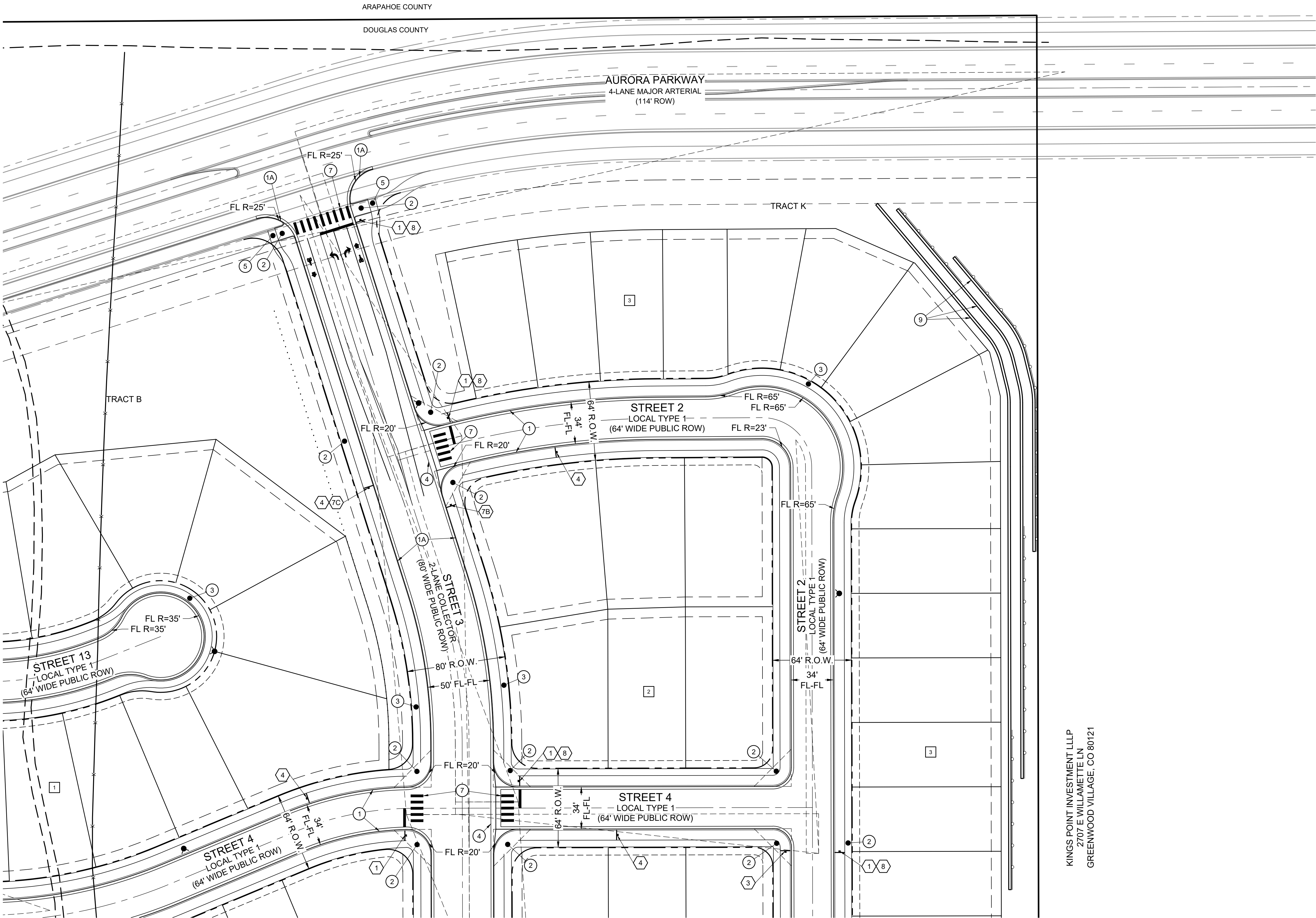


SHEET NUMBER

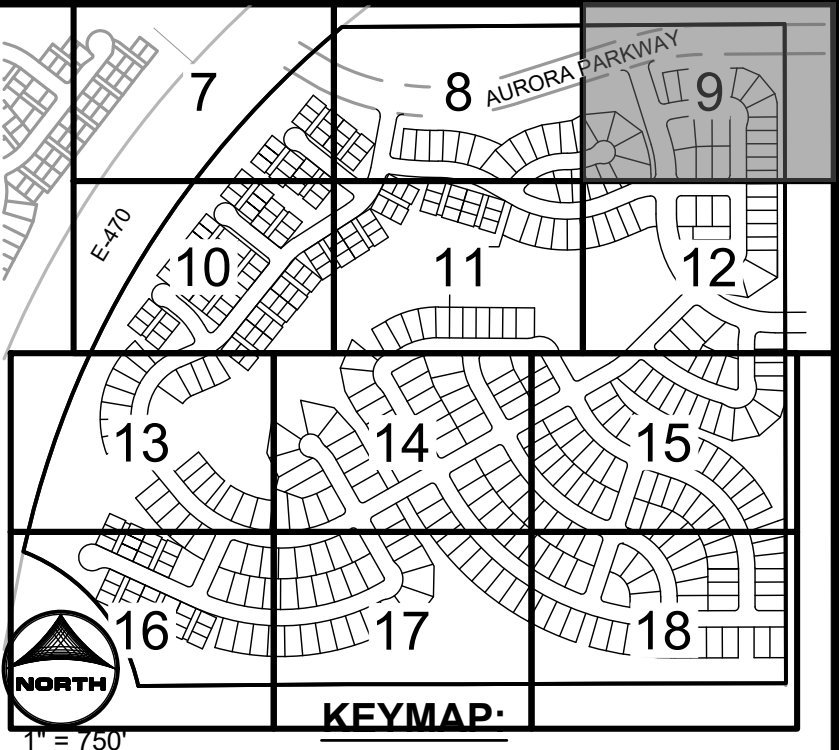
SP2

SHEET 8 OF 54
PROJECT NO. 212000.02

KINGS POINT SOUTH - PA 5-9



KINGS POINT INVESTMENT LLLP
2707 E WILLAMETTE LN
GREENWOOD VILLAGE, CO 80121



LEGEND

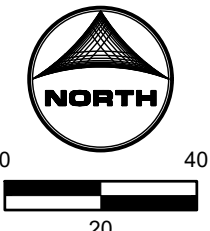
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PROPERTY BOUNDARY	_____
LOT LINE	_____
EASEMENT	-----
CENTER LINE	_____
SETBACK	-----
SIGHT TRIANGLE	_____
LANDSCAPE TRIANGLE	-----
PHASE LINE	=====
FIRE HYDRANT	⬮
STORM SEWER STRUCTURES	⊙ □ ▢
BLOCK NUMBER	1
LOT NUMBER	1
STREET LIGHT	☆

SIGNAGE LEGEND:

1 STOP R1-1 30"x30"	2 NO LEFT TURN R3-2 24"x24"	3 NO OUTLET W14-2 30"x30"	4 SPEED LIMIT 25 R2-1 24"x30"
5A WALKER W11-2 30"x30"	5B AHEAD W11-2 30"x30"	6A NO PARKING R8-3 (CENTER) 12"x18"	6B NO PARKING R8-3-MOD 12"x18"
7A ANY TIME R7-1 (CENTER) 12"x18"	7B ANY TIME R7-1 (LEFT) 12"x18"	7C ANY TIME R7-1 (RIGHT) 12"x18"	
8 Main Street D3-1 PLACED ABOVE R1-1			

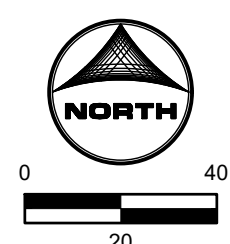
- KEYNOTES**
- 1 MOUNTABLE CURB AND GUTTER
 - 1A VERTICAL CURB AND GUTTER
 - 1B MEDIAN CURB AND GUTTER
 - 2 CURB RAMPS
 - 3 SIDEWALK
 - 4 CROSSSPAN
 - 5 10' TRAIL / SIDEWALK
 - 6 MAIL KIOSK
 - 7 PEDESTRIAN CROSSWALK (2'X10' SOLID WHITE STRIPES)
 - 8 MAINTENANCE ACCESS
 - 9 PRIVATE RETAINING WALL
 - 10 SIDEWALK CHASE
 - 11 SOUND ATTENUATION WALL

NOTE:
1. SEE SHEET 2 FOR LINE AND CURVE TABLES
2. PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL
3. PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE



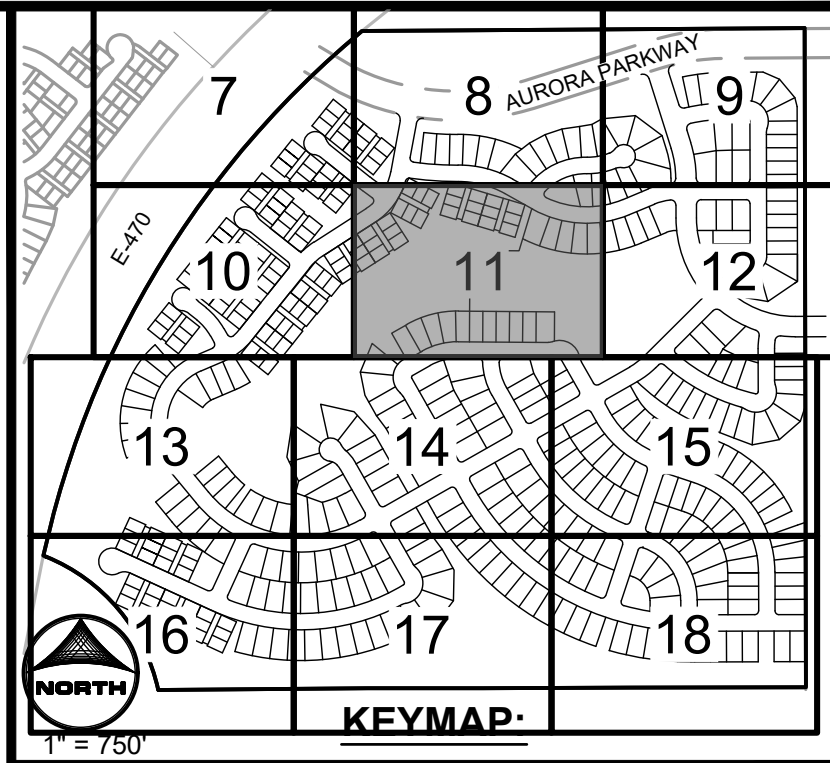
PROJECT:	KINGS POINT SOUTH - FILING NO. 2	DRAWING:	SITE PLAN	CLIENT:	LENNAR	DESIGNED BY:	STM	SCALE:	HORIZ. 1"=50'
						DRAWN BY:	AMC	VERT. NOT APPLICABLE	
						CHECKED BY:	RWL		
				CIVIL ENGINEER: HR GREEN ATTN: RYAN LITTLETON, PE 5613 DTC PARKWAY, SUITE 950 GREENWOOD VILLAGE, CO 80111 P: 726.602.4669 E: RLITTLETON@HGREEN.COM		SHEET 9 OF 54 PROJECT NO. 212000.02			

SEE SHEET 13



HEET **10** OF 54
T NO. 21200

KINGS POINT SOUTH - PA 5-9



LEGEND

ROW/PROPERTY LINE	---
PROPERTY BOUNDARY	---
LOT LINE	---
EASEMENT	---
CENTER LINE	---
SETBACK	---
SIGHT TRIANGLE	---
LANDSCAPE TRIANGLE	---
PHASE LINE	-----
FIRE HYDRANT	▲
STORM SEWER STRUCTURES	⊙ □ ▢
BLOCK NUMBER	1
LOT NUMBER	1
STREET LIGHT	☆

SIGNAGE LEGEND:

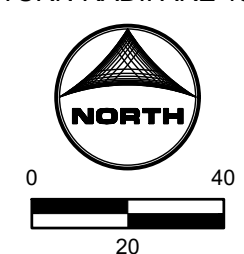
1 STOP R1-1 30"x30"	2 NO LEFT TURN R3-2 24"x24"	3 NO OUTLET W14-2 30"x30"	4 SPEED LIMIT 25 R2-1 24"x30"
5A WALKER W11-2 30"x30"	5B AHEAD W11-2 30"x30"	6A NO PARKING R8-3 (CENTER) 12"x18"	6B NO PARKING R8-3 MOD 12"x18"
7A ANY TIME R7-1 (CENTER) 12"x18"	7B ANY TIME R7-1 (LEFT) 12"x18"	7C ANY TIME R7-1 (RIGHT) 12"x18"	

8 Main Street
D3-1
PLACED ABOVE
R1-1

- KEYNOTES
- 1 MOUNTABLE CURB AND GUTTER
 - 1A VERTICAL CURB AND GUTTER
 - 1B MEDIAN CURB AND GUTTER
 - 2 CURB RAMPS
 - 3 SIDEWALK
 - 4 CROSSSPAN
 - 5 10' TRAIL / SIDEWALK
 - 6 MAIL KIOSK
 - 7 PEDESTRIAN CROSSWALK (2'X10' SOLID WHITE STRIPES)
 - 8 MAINTENANCE ACCESS
 - 9 PRIVATE RETAINING WALL
 - 10 SIDEWALK CHASE
 - 11 SOUND ATTENUATION WALL

NOTE:

- SEE SHEET 2 FOR LINE AND CURVE TABLES
- PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL
- PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE



REVISIONS

#	DATE	

PROJECT: KINGS POINT SOUTH - FILING NO. 2

DRAWING: SITE PLAN

CLIENT: LENNAR

DESIGNED BY: STM

DRAWN BY: AMC

CHECKED BY: RWL

SCALE: HORIZ. 1"=50'

VERT. NOT APPLICABLE

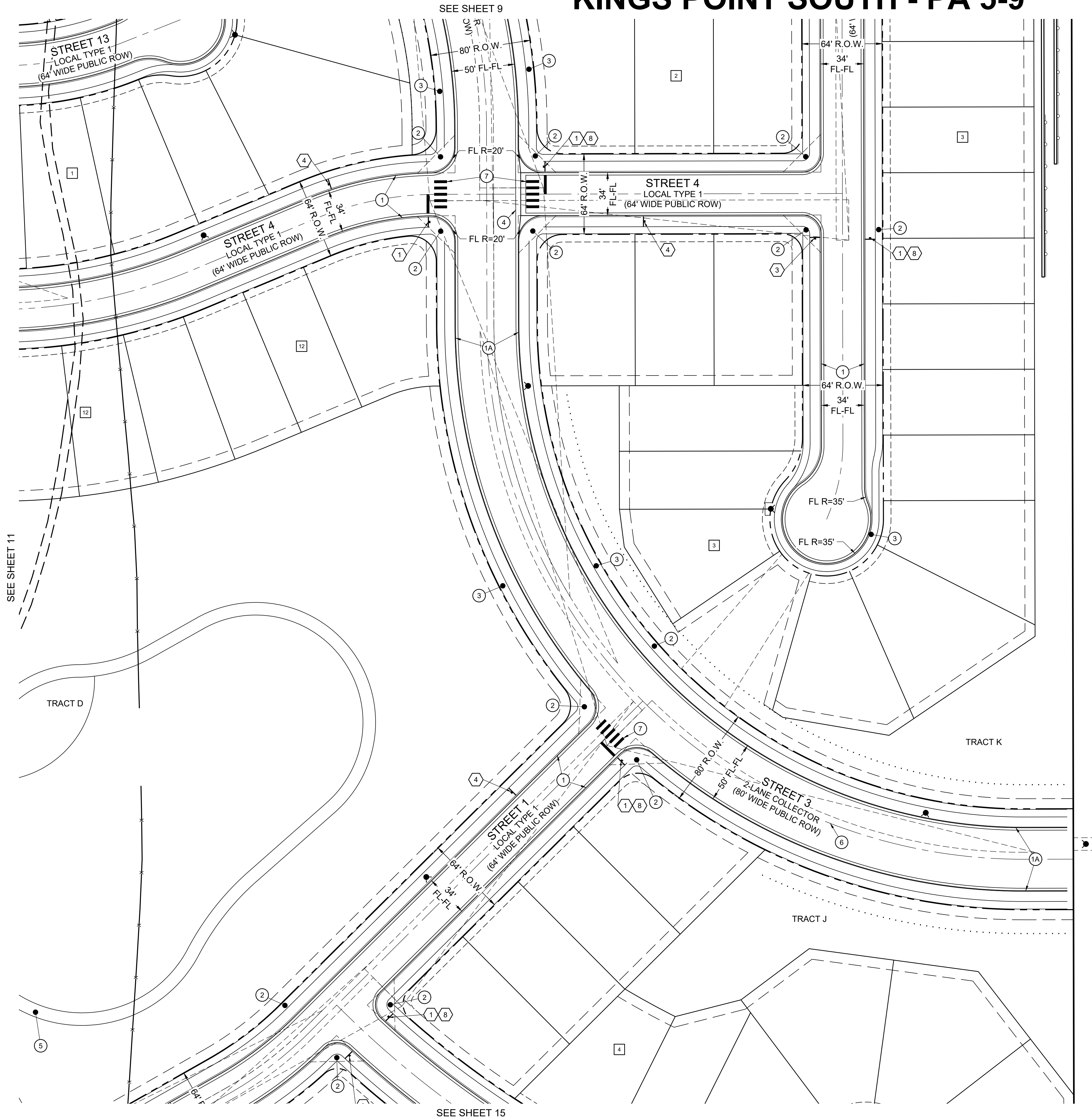
DATE: 01-25-2025

CIVIL ENGINEER: HR GREEN
ATTN: RYAN LITTLETON, PE
5613 DTC PARKWAY, SUITE 950
DENVER, COLORADO 80111
P: 720.409.4569
E: RLITTLETON@HGREEN.COM

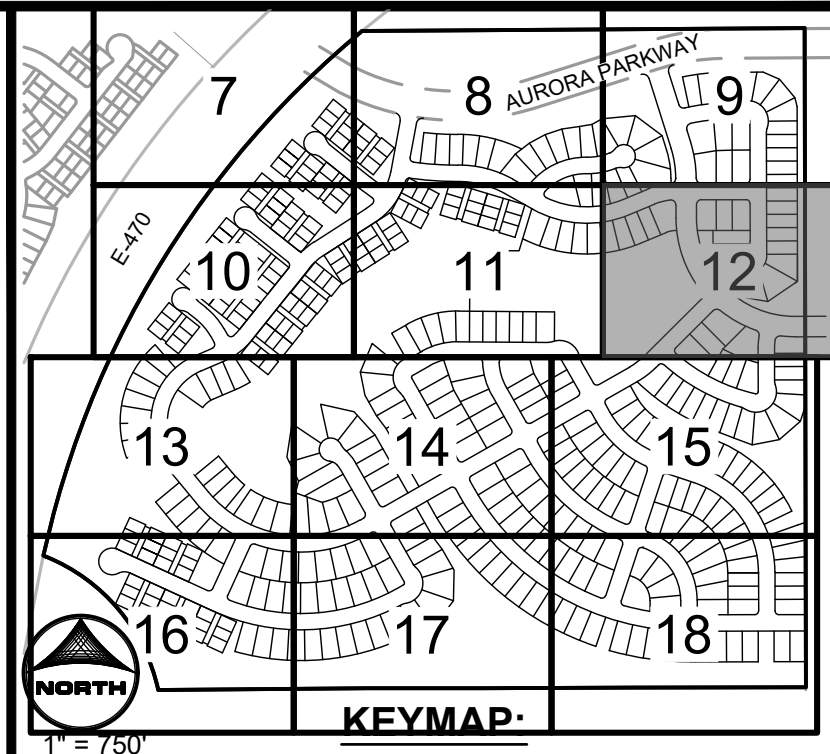
H3Green

SHEET NUMBER
SP5
SHEET 11 OF 54
PROJECT NO. 212000.02

SEE SHEET 11



KINGS POINT INVESTMENT LLLP
2707 E WILLAMETTE LN
GREENWOOD VILLAGE, CO 80121

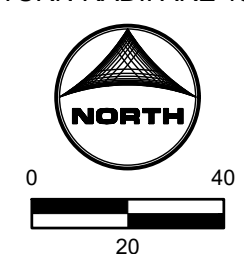


- LEGEND**
- ROW/PROPERTY LINE
 - PROPERTY BOUNDARY
 - LOT LINE
 - EASEMENT
 - CENTER LINE
 - SETBACK
 - SIGHT TRIANGLE
 - LANDSCAPE TRIANGLE
 - PHASE LINE
 - FIRE HYDRANT
 - STORM SEWER STRUCTURES
 - BLOCK NUMBER
 - LOT NUMBER
 - STREET LIGHT

- SIGNAGE LEGEND:**
- 1 STOP (R1-1 30"x30")
 - 2 NO LEFT TURN (R3-2 24"x24")
 - 3 NO OUTLET (W14-2 30"x30")
 - 4 SPEED LIMIT 25 (R2-1 24"x30")
 - 5A AHEAD (W11-2 30"x30")
 - 5B AHEAD (W16-9p 24"x12")
 - 6A FIRE LANE (R8-3 (CENTER) 12"x18")
 - 6B FIRE LANE (R8-3-MOD 12"x18")
 - 7A ANY TIME (R7-1 (CENTER) 12"x18")
 - 7B ANY TIME (R7-1 (LEFT) 12"x18")
 - 7C ANY TIME (R7-1 (RIGHT) 12"x18")
 - 8 Main Street (D3-1 PLACED ABOVE R1-1)

- KEYNOTES**
- 1 MOUNTABLE CURB AND GUTTER
 - 1A VERTICAL CURB AND GUTTER
 - 1B MEDIAN CURB AND GUTTER
 - 2 CURB RAMPS
 - 3 SIDEWALK
 - 4 CROSSSPAN
 - 5 10' TRAIL / SIDEWALK
 - 6 MAIL KIOSK
 - 7 PEDESTRIAN CROSSWALK (2'X10' SOLID WHITE STRIPES)
 - 8 MAINTENANCE ACCESS
 - 9 PRIVATE RETAINING WALL
 - 10 SIDEWALK CHASE
 - 11 SOUND ATTENUATION WALL

NOTE:
1. SEE SHEET 2 FOR LINE AND CURVE TABLES
2. PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL
3. PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE



PROJECT: KINGS POINT SOUTH - FILING NO. 2		SHEET NUMBER SP6	
DRAWING: SITE PLAN		SHEET 12 OF 54 PROJECT NO. 212000.02	
CLIENT: LENNAR		DESIGNED BY: STM DRAWN BY: AMC CHECKED BY: RWL	
SCALE: HORIZ. 1"=50'		DATE: 01-25-2025	
VERT. NOT APPLICABLE			

CIVIL ENGINEER: HR GREEN
ATTN: RYAN LITTLETON, PE
5613 DTC PARKWAY, SUITE 950
GREENWOOD VILLAGE, CO 80111
P: 720.602.4690
E: RLITTLETON@HGREEN.COM

KINGS POINT SOUTH - PA 5-9

SEE SHEET 10

PARCEL TK-31-1
BK 1698, PG 1250
E-470

75' DIRECTOR'S OWNERSHIP
PARCEL REC. NO. 2002125960

PROPOSED LANDSCAPE BUFFER

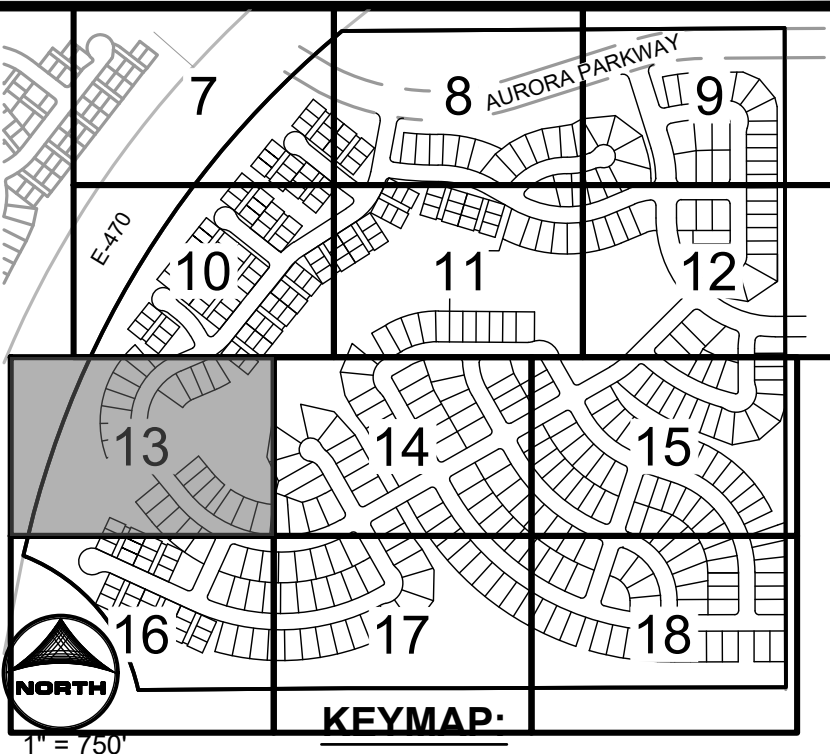
TRACT A

TRACT C

FL R=35'
FL R=65'
FL R=37'

SEE SHEET 16

SEE SHEET 14



LEGEND

ROW/PROPERTY LINE	---
PROPERTY BOUNDARY	---
LOT LINE	---
EASEMENT	---
CENTER LINE	---
SETBACK	---
SIGHT TRIANGLE	---
LANDSCAPE TRIANGLE	---
PHASE LINE	-----
FIRE HYDRANT	⬮
STORM SEWER STRUCTURES	⊕ □ ▢
BLOCK NUMBER	1
LOT NUMBER	1
STREET LIGHT	☆

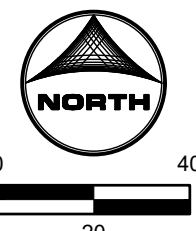
SIGNAGE LEGEND:

1 STOP R1-1 30"x30"	2 NO LEFT TURN R3-2 24"x24"	3 NO OUTLET W14-2 30"x30"	4 SPEED LIMIT 25 R2-1 24"x30"
5A WALKING W11-1 30"x30"	5B AHEAD W11-2 30"x30"	6A NO PARKING R8-3 (CENTER) 12"x18"	6B NO PARKING R8-3-MOD 12"x18"
7A ANY TIME R7-1 (CENTER) 12"x18"	7B ANY TIME R7-1 (LEFT) 12"x18"	7C ANY TIME R7-1 (RIGHT) 12"x18"	

8 Main Street
D3-1
PLACED ABOVE
R1-1

- KEYNOTES**
- 1 MOUNTABLE CURB AND GUTTER
 - 1A VERTICAL CURB AND GUTTER
 - 1B MEDIAN CURB AND GUTTER
 - 2 CURB RAMPS
 - 3 SIDEWALK
 - 4 CROSSSPAN
 - 5 10' TRAIL / SIDEWALK
 - 6 MAIL KIOSK
 - 7 PEDESTRIAN CROSSWALK (2'X10' SOLID WHITE STRIPES)
 - 8 MAINTENANCE ACCESS
 - 9 PRIVATE RETAINING WALL
 - 10 SIDEWALK CHASE
 - 11 SOUND ATTENUATION WALL

NOTE:
1. SEE SHEET 2 FOR LINE AND CURVE TABLES
2. PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL
3. PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE



PROJECT: KINGS POINT SOUTH - FILING NO. 2		SHEET NUMBER SP7	
DRAWING: SITE PLAN		SHEET 13 OF 54 PROJECT NO. 212000.02	
CLIENT: LENNAR		DESIGNED BY: STM	
DRAWN BY: A/C		CHECKED BY: R/W	
DATE: 01-25-2025		SCALE: HORIZ. 1"=50'	
REVISIONS		VERT. NOT APPLICABLE	

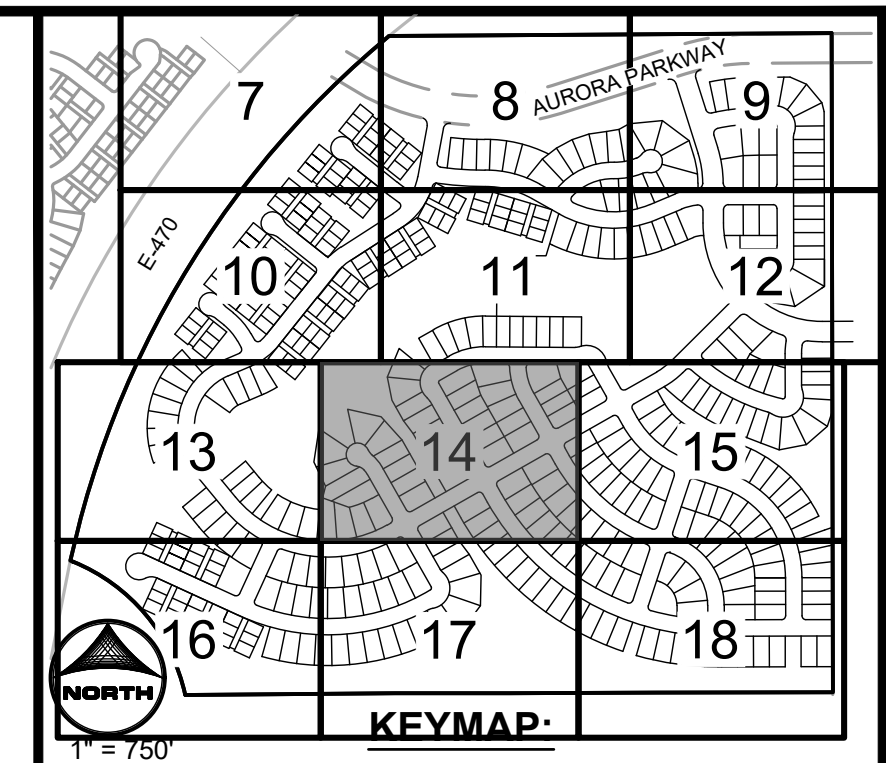
CIVIL ENGINEER: HR GREEN
ATTN: RYAN LITTLETON, PE
5613 DTC PARKWAY, SUITE 950
DENVER, COLORADO 80111
P: 720.602.4869
E: RLITTLETON@HGREEN.COM

[illegible]

SEE SHEET 11

SEE SHEET 13

SEE SHEET 15



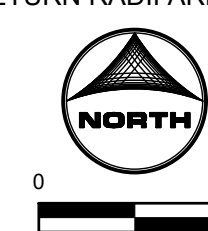
ROW/PROPERTY LINE	
PROPERTY BOUNDARY	
LOT LINE	
EASEMENT	
CENTER LINE	
SETBACK	
SIGHT TRIANGLE	
LANDSCAPE TRIANGLE	
PHASE LINE	
FIRE HYDRANT	
STORM SEWER STRUCTURES	
BLOCK NUMBER	
LOT NUMBER	
STREET LIGHT	

<p>1</p>  <p>R1-1 30"x30"</p>	<p>2</p>  <p>R3-2 24"x24"</p>	<p>3</p>  <p>W14-2 30"x30"</p>	<p>4</p>  <p>R2-1 24"x30"</p>
<p>5A</p>  <p>W11-2 30"x30" W16-7p 24"x12"</p>	<p>5B</p>  <p>W11-2 30"x30" W16-5p 24"x12"</p>	<p>6A</p>  <p>R8-3 (CENTER) 12"x18" R7-201a 12"x6"</p>	<p>6B</p>  <p>R8-3 MOD 12"x18" R7-201a 12"x6"</p>
<p>7A</p>  <p>R7-1 (CENTER) 12"x18" R7-201a 12"x6"</p>	<p>7B</p>  <p>R7-1 (LEFT) 12"x18" R7-201a 12"x6"</p>	<p>7C</p>  <p>R7-1 (RIGHT) 12"x18" R7-201a 12"x6"</p>	
<p>8</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p>Main Street</p> </div> <p>D3-1 PLACED</p>			

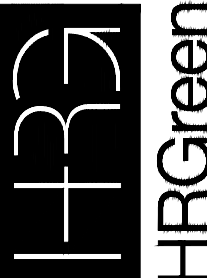
- ① MOUNTABLE CURB AND GUTTER
- ①A VERTICAL CURB AND GUTTER
- ①B MEDIAN CURB AND GUTTER
- ② CURB RAMPS
- ③ SIDEWALK
- ④ CROSSSPAN
- ⑤ 10' TRAIL / SIDEWALK
- ⑥ MAIL KIOSK
- ⑦ PEDESTRIAN CROSSWALK (2'X10' SOLID WHITE STRIPES)
- ⑧ MAINTENANCE ACCESS
- ⑨ PRIVATE RETAINING WALL
- ⑩ SIDEWALK CHASE
- ⑪ SOUND ATTENUATION WALL

NOTE:

1. SEE SHEET 2 FOR LINE AND CURVE TABLES
2. PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL.
3. PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE



CIVIL ENGINEER: HR GREEN
ATTN: RYAN LITTLETON, PE
5613 DTC PARKWAY, SUITE 950
GREENWOOD VILLAGE, CO 80111
P: 720-602-4999
E: RLITTLETON@HRRGREEN.COM



SP8

SHEET 14 OF 54
PROJECT NO. 212000.02

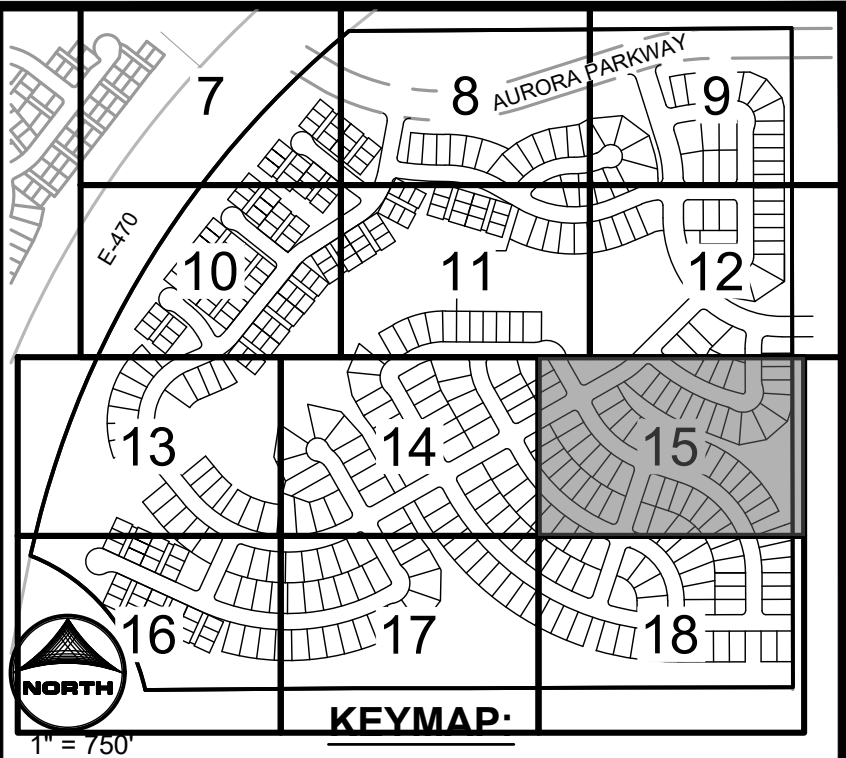
KINGS POINT SOUTH - PA 5-9

SEE SHEET 12

SEE SHEET 11

SEE SHEET 14

SEE SHEET 18

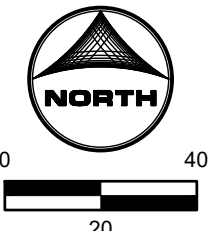


- LEGEND**
- ROW/PROPERTY LINE
 - PROPERTY BOUNDARY
 - LOT LINE
 - EASEMENT
 - CENTER LINE
 - SETBACK
 - SIGHT TRIANGLE
 - LANDSCAPE TRIANGLE
 - PHASE LINE
 - FIRE HYDRANT
 - STORM SEWER STRUCTURES
 - BLOCK NUMBER
 - LOT NUMBER
 - STREET LIGHT

- SIGNAGE LEGEND:**
- 1 STOP R1-1 30"x30"
 - 2 R3-2 24"x24"
 - 3 NO OUTLET W14-2 30"x30"
 - 4 SPEED LIMIT 25 R2-1 24"x30"
 - 5A W11-2 30"x30"
 - 5B W16-7p 24"x12"
 - 6A W11-2 30"x30"
 - 6B W16-9p 24"x12"
 - 7A R7-1 (CENTER) 12"x18"
 - 7B R7-1 (LEFT) 12"x18"
 - 7C R7-1 (RIGHT) 12"x18"
 - 8 Main Street D3-1 PLACED ABOVE R1-1
 - 5A W11-2 30"x30"
 - 5B W16-7p 24"x12"
 - 6A W11-2 30"x30"
 - 6B W16-9p 24"x12"
 - 7A R7-1 (CENTER) 12"x18"
 - 7B R7-1 (LEFT) 12"x18"
 - 7C R7-1 (RIGHT) 12"x18"
 - 8 R8-3 (CENTER) 12"x18"
 - 8 R8-3-MOD 12"x18"
 - 8 R7-201a 12"x6"

- KEYNOTES**
- 1 MOUNTABLE CURB AND GUTTER
 - 1A VERTICAL CURB AND GUTTER
 - 1B MEDIAN CURB AND GUTTER
 - 2 CURB RAMPS
 - 3 SIDEWALK
 - 4 CROSSSPAN
 - 5 10' TRAIL / SIDEWALK
 - 6 MAIL KIOSK
 - 7 PEDESTRIAN CROSSWALK (2'X10' SOLID WHITE STRIPES)
 - 8 MAINTENANCE ACCESS
 - 9 PRIVATE RETAINING WALL
 - 10 SIDEWALK CHASE
 - 11 SOUND ATTENUATION WALL

- NOTE:**
- SEE SHEET 2 FOR LINE AND CURVE TABLES
 - PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL
 - PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE



KINGS POINT INVESTMENT, LLP
2707 E WILLAMETTE LN
GREENWOOD VILLAGE, CO 80121

REVISIONS	
#	DATE
PROJECT: KINGS POINT SOUTH - FILING NO. 2	
DRAWING:	SITE PLAN
CLIENT:	LENNAR
DESIGNED BY:	STM
DRAWN BY:	AMC
CHECKED BY:	RWL
SCALE:	HORIZ: 1"=50'
DATE:	01-25-2025
SHEET NUMBER SP9	
SHEET 15 OF 54 PROJECT NO. 212000.02	

CIVIL ENGINEER: HR GREEN
ATTN: RYAN LITTLETON, PE
5613 DTC PARKWAY, SUITE 950
GREENWOOD VILLAGE, CO 80111
P: 720.609.4569
E: RLITTLETON@HGREEN.COM

2025-01-31 11:10am By: smorton
J:\2021\212000\02\00\Drawings\SitePlan\02-SITE_PLAN.dwg

SEE SHEET 13

KINGS POINT SOUTH - PA 5-9

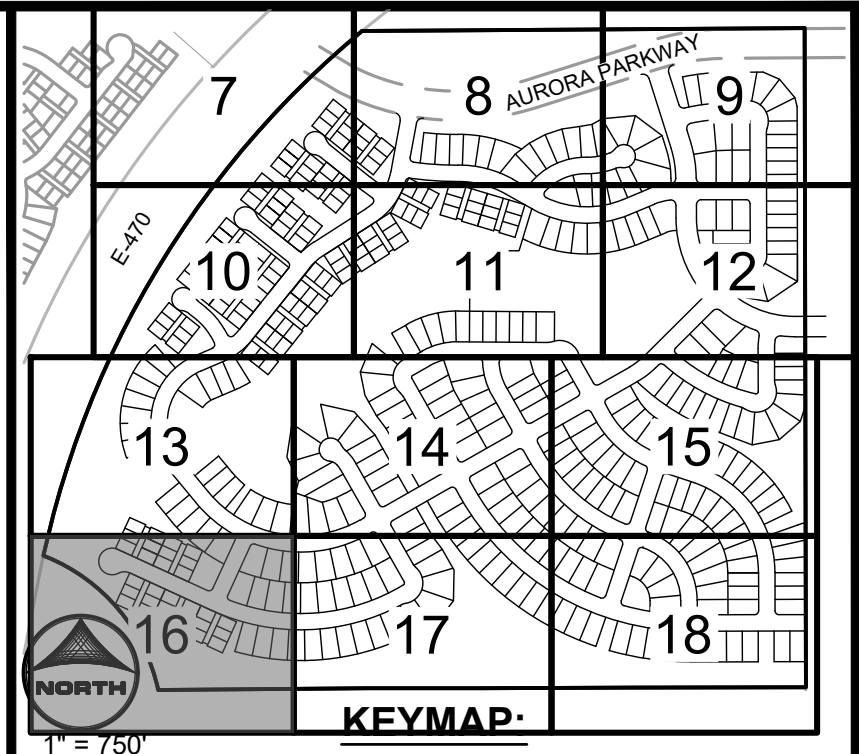
DOUGLAS COUNTY ASSOCIATED LIMITED PARTNERSHIP LLLP
C/O BILL MOORE
1900 16TH ST. SUITE 300
DENVER, CO 80202

STONE CANYON PARTNERS LLC
428 E. WINCHESTER ST. SUITE 100
SALT LAKE CITY, UT 84107

100' LANDSCAPE BUFFER

IREA EASEMENT
REC. NO. 2003057363 30'
TEMPORARY CONSTRUCTION EASEMENT
REC. NO. 2003057363 20'

SEE SHEET 17



LEGEND

ROW/PROPERTY LINE	---
PROPERTY BOUNDARY	---
LOT LINE	---
EASEMENT	---
CENTER LINE	---
SETBACK	---
SIGHT TRIANGLE	---
LANDSCAPE TRIANGLE	---
PHASE LINE	-----
FIRE HYDRANT	⬮
STORM SEWER STRUCTURES	⊕ □ ▽
BLOCK NUMBER	1
LOT NUMBER	1
STREET LIGHT	☆

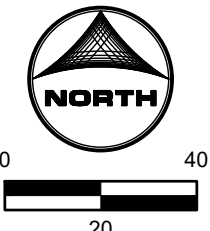
SIGNAGE LEGEND:

1 STOP R1-1 30"x30"	2 NO LEFT TURN R3-2 24"x24"	3 NO OUTLET W14-2 30"x30"	4 SPEED LIMIT 25 R2-1 24"x30"
5A PEDESTRIAN CROSSWALK AHEAD W11-2 30"x30"	5B PEDESTRIAN CROSSWALK AHEAD W16-7p 24"x12"	6A FIRE LANE R8-3 (CENTER) 12"x18"	6B FIRE LANE R8-3-MOD 12"x18"
7A NO ANY TIME R7-1 (CENTER) 12"x18"	7B NO ANY TIME R7-1 (LEFT) 12"x18"	7C NO ANY TIME R7-1 (RIGHT) 12"x18"	
8 Main Street D3-1 PLACED ABOVE R1-1			

KEYNOTES

- 1 MOUNTABLE CURB AND GUTTER
- 1A VERTICAL CURB AND GUTTER
- 1B MEDIAN CURB AND GUTTER
- 2 CURB RAMPS
- 3 SIDEWALK
- 4 CROSSSPAN
- 5 10' TRAIL / SIDEWALK
- 6 MAIL KIOSK
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NOTE:
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2. PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL
3. PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE



PROJECT: KINGS POINT SOUTH - FILING NO. 2		SHEET NUMBER SP10	
DRAWING: SITE PLAN		SHEET 16 OF 54 PROJECT NO. 212000.02	
CLIENT: LENNAR		DESIGNED BY: STM DRAWN BY: AMC CHECKED BY: RWL	
SCALE: HORIZ. 1"=50'		DATE: 01-25-2025	
PROJECT: KINGS POINT SOUTH - FILING NO. 2		SHEET NUMBER SP10	
DRAWING: SITE PLAN		SHEET 16 OF 54 PROJECT NO. 212000.02	
CLIENT: LENNAR		DESIGNED BY: STM DRAWN BY: AMC CHECKED BY: RWL	
SCALE: HORIZ. 1"=50'		DATE: 01-25-2025	
PROJECT: KINGS POINT SOUTH - FILING NO. 2		SHEET NUMBER SP10	
DRAWING: SITE PLAN		SHEET 16 OF 54 PROJECT NO. 212000.02	
CLIENT: LENNAR		DESIGNED BY: STM DRAWN BY: AMC CHECKED BY: RWL	
SCALE: HORIZ. 1"=50'		DATE: 01-25-2025	

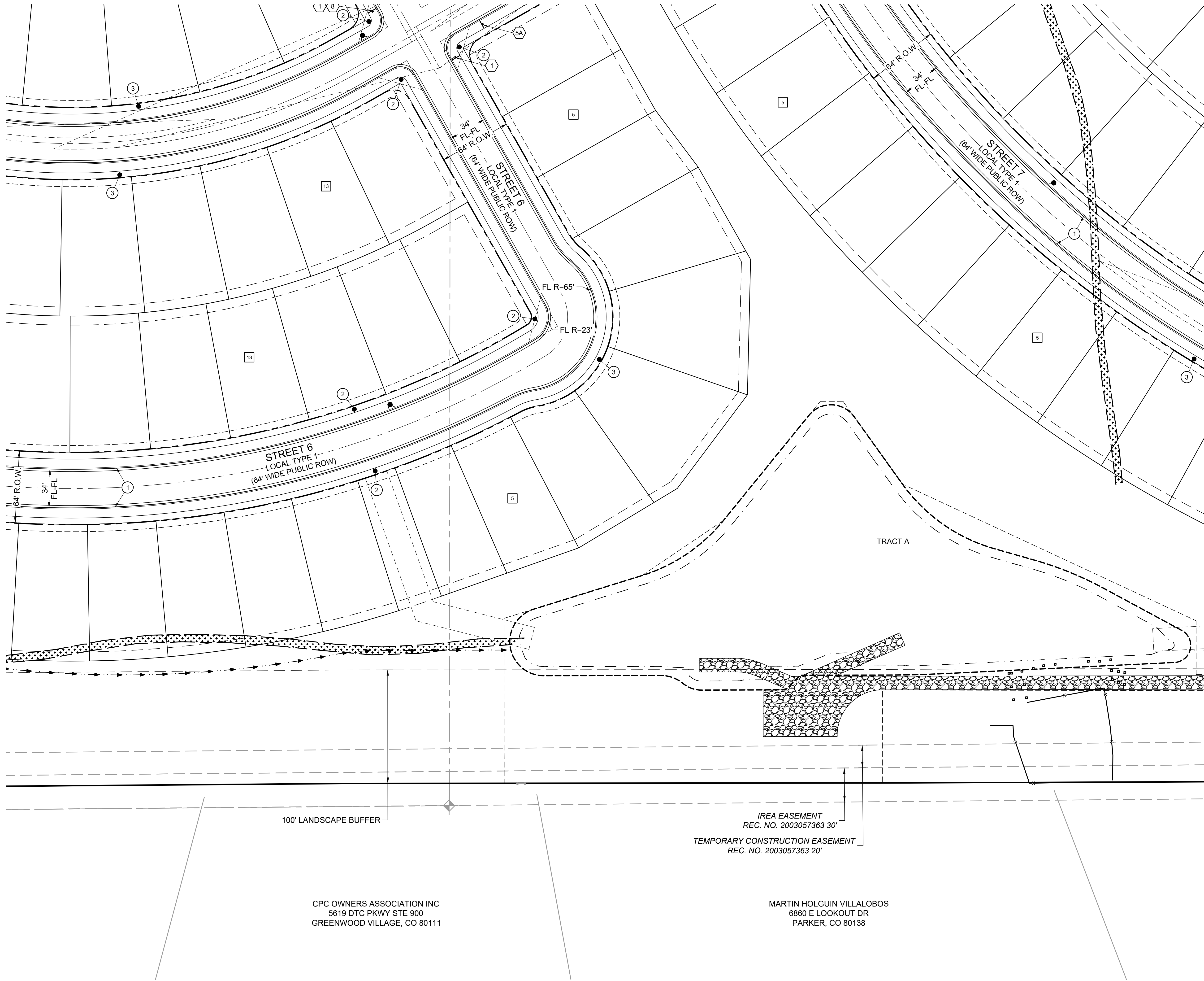
CIVIL ENGINEER: HR GREEN
ATTN: RYAN LITTLETON, PE
5613 DTC PARKWAY, SUITE 950
DENVER, COLORADO 80231
P: 720.600.4600
E: RLITTLETON@HRCGREEN.COM

2025-01-31 11:10am By: smorton
J:\2021\212000\02\00\Drawings\Station 02-SITE_PLAN.dwg

SEE SHEET 16

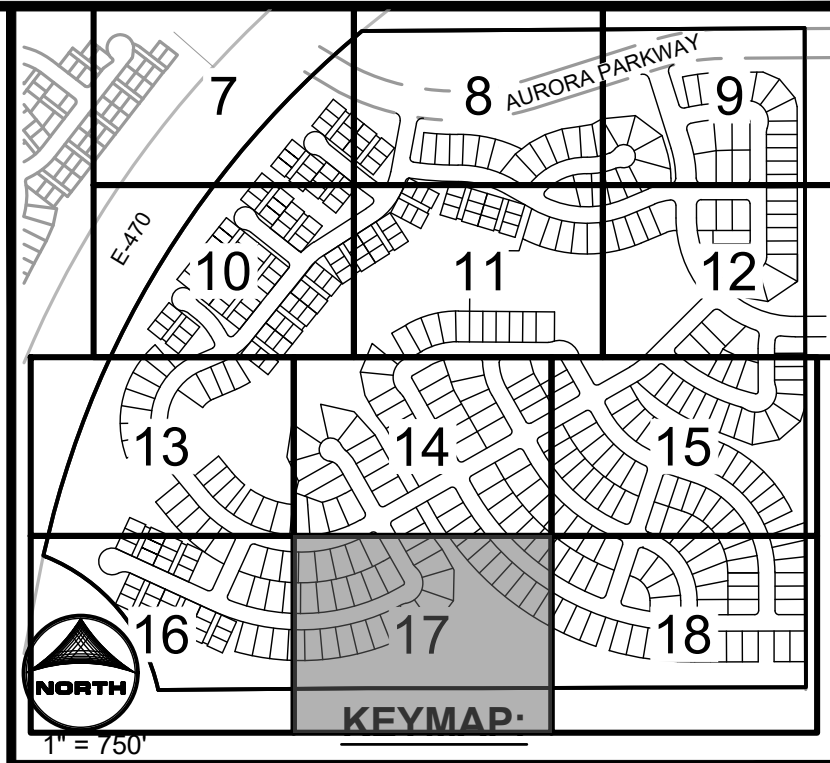
SEE SHEET 14

KINGS POINT SOUTH - PA 5-9



CPC OWNERS ASSOCIATION INC
5619 DTC PKWY STE 900
GREENWOOD VILLAGE, CO 80111

MARTIN HOLGUIN VILLALOBOS
6860 E LOOKOUT DR
PARKER, CO 80138



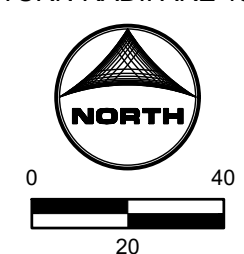
- LEGEND**
- ROW/PROPERTY LINE
 - PROPERTY BOUNDARY
 - LOT LINE
 - EASEMENT
 - CENTER LINE
 - SETBACK
 - SIGHT TRIANGLE
 - LANDSCAPE TRIANGLE
 - PHASE LINE
 - FIRE HYDRANT
 - STORM SEWER STRUCTURES
 - BLOCK NUMBER
 - LOT NUMBER
 - STREET LIGHT

- SIGNAGE LEGEND:**
- 1 STOP (R1-1 30"x30")
 - 2 NO LEFT TURN (R3-2 24"x24")
 - 3 NO OUTLET (W14-2 30"x30")
 - 4 SPEED LIMIT 25 (R2-1 24"x30")
 - 5A WALKWAY AHEAD (W11-2 30"x30")
 - 5B WALKWAY AHEAD (W16-7p 24"x12")
 - 6A FIRE LANE (R8-3 (CENTER) 12"x18")
 - 6B FIRE LANE (R8-3-MOD 12"x18")
 - 7A ANY TIME (R7-1 (CENTER) 12"x18")
 - 7B ANY TIME (R7-1 (LEFT) 12"x18")
 - 7C ANY TIME (R7-1 (RIGHT) 12"x18")
 - 8 Main Street (D3-1 PLACED ABOVE R1-1)

- KEYNOTES**
- 1 MOUNTABLE CURB AND GUTTER
 - 1A VERTICAL CURB AND GUTTER
 - 1B MEDIAN CURB AND GUTTER
 - 2 CURB RAMPS
 - 3 SIDEWALK
 - 4 CROSSSPAN
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 - 9 PRIVATE RETAINING WALL
 - 10 SIDEWALK CHASE
 - 11 SOUND ATTENUATION WALL

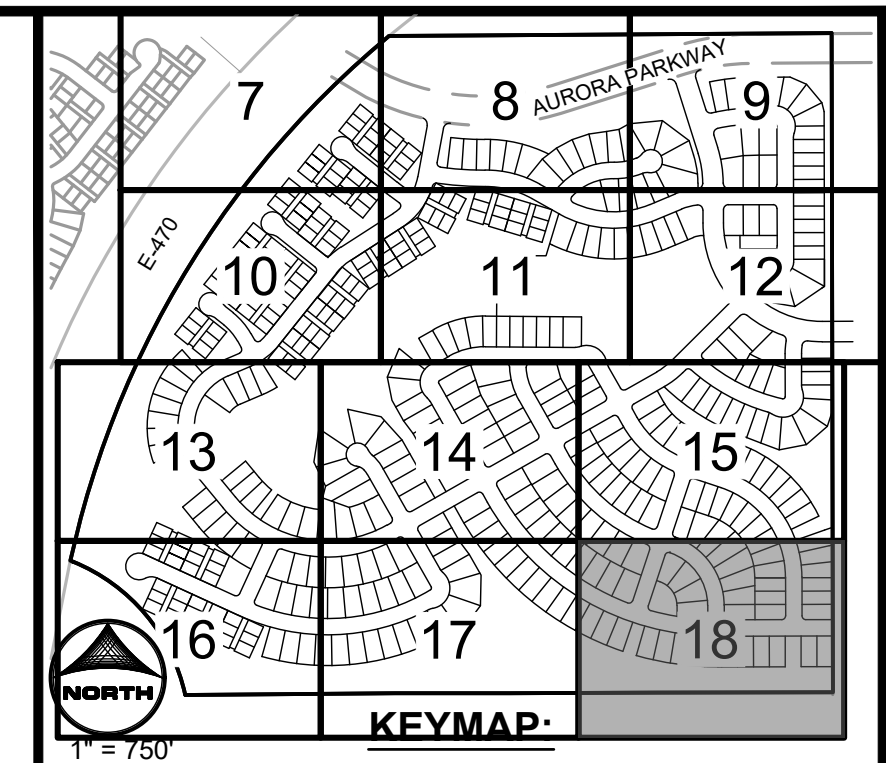
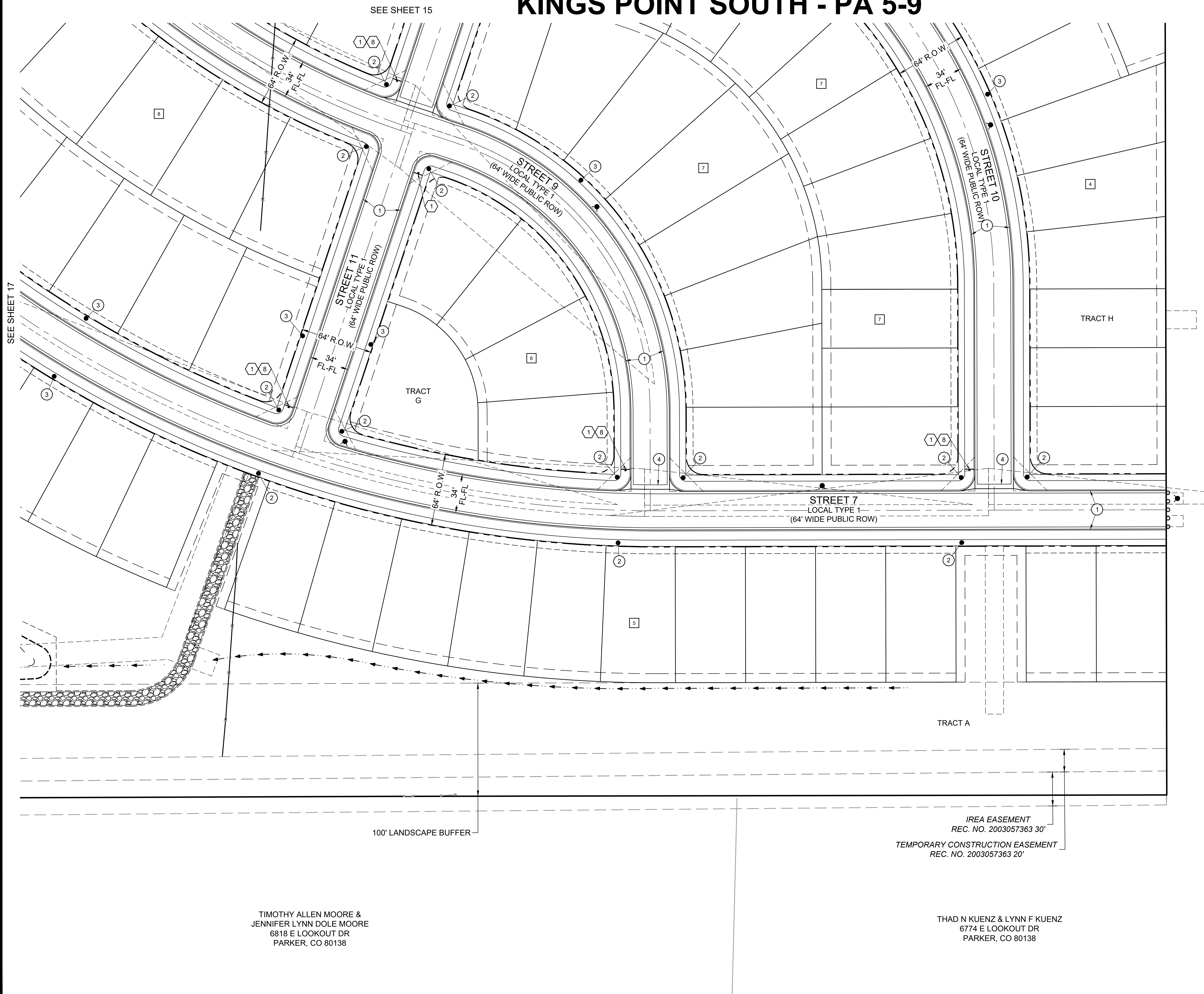
NOTE:

- SEE SHEET 2 FOR LINE AND CURVE TABLES
- PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL
- PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE
















REVISIONS	
#	DATE
PROJECT: KINGS POINT SOUTH - FILING NO. 2	
DRAWING: SITE PLAN	CLIENT: LENNAR
DESIGNED BY: STM	SCALE: HORIZ. 1"=50'
DRAWN BY: AMC	VERT. NOT APPLICABLE
CHECKED BY: RWL	DATE: 01-25-2025
CIVIL ENGINEER: HR GREEN ATTN: RYAN LITTLETON, PE 5613 DTC PARKWAY, SUITE 900 GREENWOOD VILLAGE, CO 80111 P: 720.602.4660 E: RLITTLETON@HREGREEN.COM	
SHEET NUMBER SP11	
SHEET 17 OF 54 PROJECT NO. 212000.02	









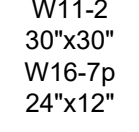
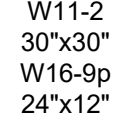
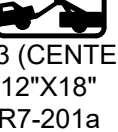
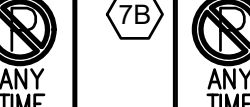
KINGS POINT SOUTH - PA 5-9



LEGEND

- | | |
|------------------------|---|
| ROW/PROPERTY LINE |  |
| PROPERTY BOUNDARY |  |
| LOT LINE |  |
| EASEMENT |  |
| CENTER LINE |  |
| SETBACK |  |
| SIGHT TRIANGLE |  |
| LANDSCAPE TRIANGLE |  |
| PHASE LINE |  |
| FIRE HYDRANT |  |
| STORM SEWER STRUCTURES |  |
| LOT NUMBER |  |
| LOT NUMBER | 1 |
| STREET LIGHT |  |

SIGNAGE LEGEND:

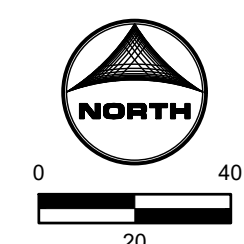
- | | | | | | | | |
|----|---|----|---|----|---|----|---|
| 1 |  | 2 |  | 3 |  | 4 |  |
| | R1-1
30"x30" | | R3-2
24"x24" | | W14-2
30"x30" | | R2-1
24"x30" |
| 5A |  | 5B |  | 6A |  | 6B |  |
| | W11-1
30"x30"
W16-7p
24"x12" | | W11-2
30"x30"
W16-5p
24"x12" | | R8-3 (CENTER)
12"x18"
R7-201a
12"x6" | | R8-3-MOD
12"x18"
R7-201a
12"x6" |
| 7A |  | 7B |  | 7C |  | | |
| | R7-1 (CENTER)
12"x18"
R7-201a
12"x6" | | R7-1 (LEFT)
12"x18"
R7-201a
12"x6" | | R7-1 (RIGHT)
12"x18"
R7-201a
12"x6" | | |
| 8 |  | | | | | | |

KEYNOTES

- ① MOUNTABLE CURB AND GUTTER
- ①A VERTICAL CURB AND GUTTER
- ①B MEDIAN CURB AND GUTTER
- ② CURB RAMPS
- ③ SIDEWALK
- ④ CROSSSPAN
- ⑤ 10' TRAIL / SIDEWALK
- ⑥ MAIL KIOSK
- ⑦ PEDESTRIAN CROSSWALK (2'X10' SOLID WHITE STRIPES)
- ⑧ MAINTENANCE ACCESS
- ⑨ PRIVATE RETAINING WALL
- ⑩ SIDEWALK CHASE
- ⑪ SOUND ATTENUATION WALL

NOTE:

1. SEE SHEET 2 FOR LINE AND CURVE TABLES
2. PROPOSED STREET LIGHT LOCATIONS ARE CONCEPTUAL. FINAL LOCATIONS WILL BE DETERMINED BY PHOTOMETRIC ANALYSIS SUBMITTED WITH THE STREET LIGHTING PLANS IN THE CIVIL PLAN SUBMITTAL.
3. PROPOSED CURB RETURN RADII ARE 15' UNLESS NOTED OTHERWISE



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SITE FLAIN

11003.1¹-EO¹

SCALE: VERT: NOT APPLICABLE

DATE: 01-25-2025

0

ATTN: RYAN LITTLETON, PE
5613 DTC PARKWAY, SUITE 950
GREENWOOD VILLAGE, CO 80111
P: 720-602-4999
E: RLITTLETON@HARGREEN.COM



SHEET NUMBER

P12

SHEET **18** OF 54
PROJECT NO. 212000.02

Vista at Kings Point

Traffic Impact Study



Previous Submittal Dates: April 4 & November 9, 2023

Updated: January 16, 2024



Submitted To:

Kings Point Investment, LLC
2707 E Willamette Lane
Greenwood Village, CO 80121

Submitted By:

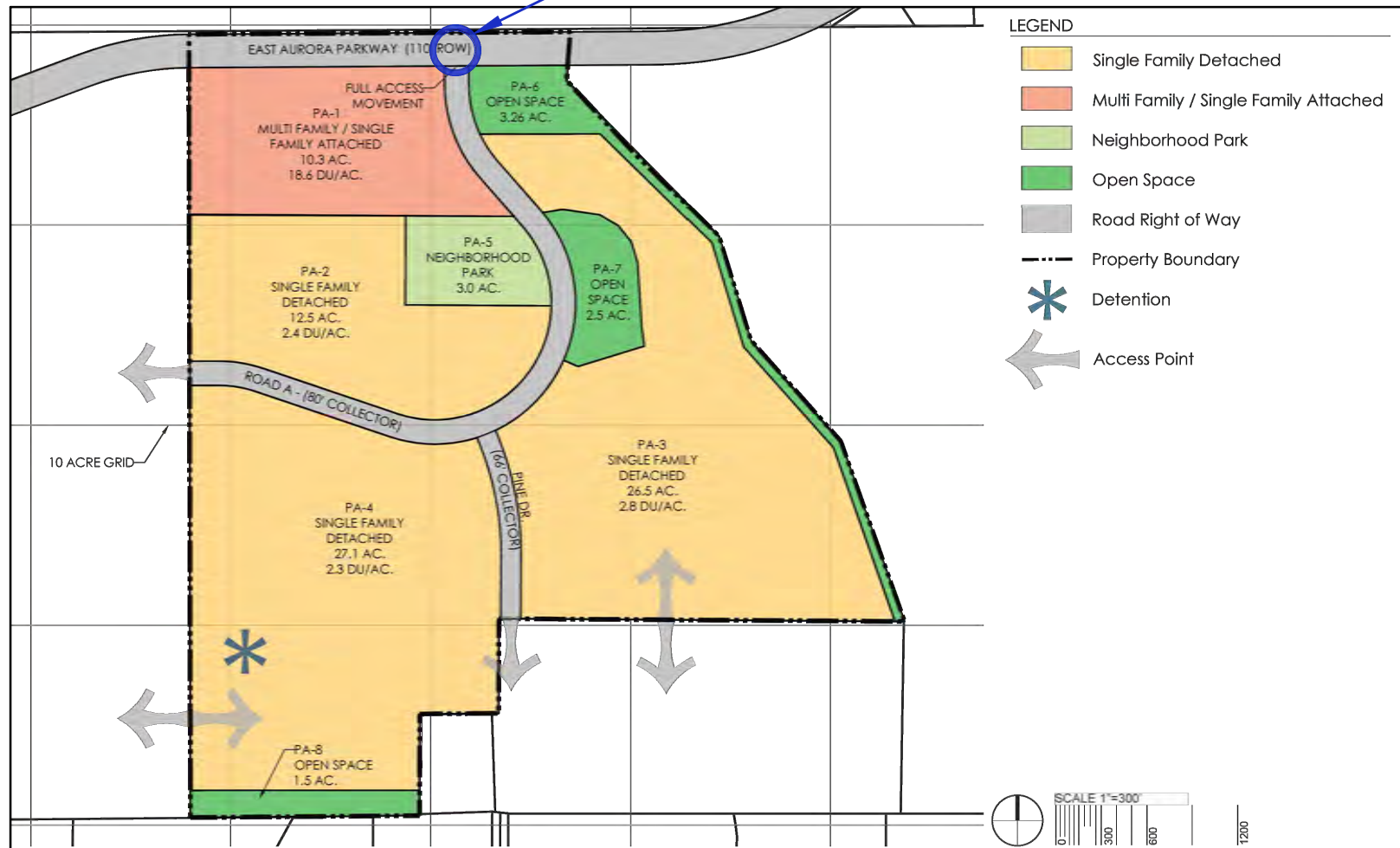
Fox Tuttle Transportation Group, LLC
1580 Logan Street, 6th Floor
Denver, CO 80203

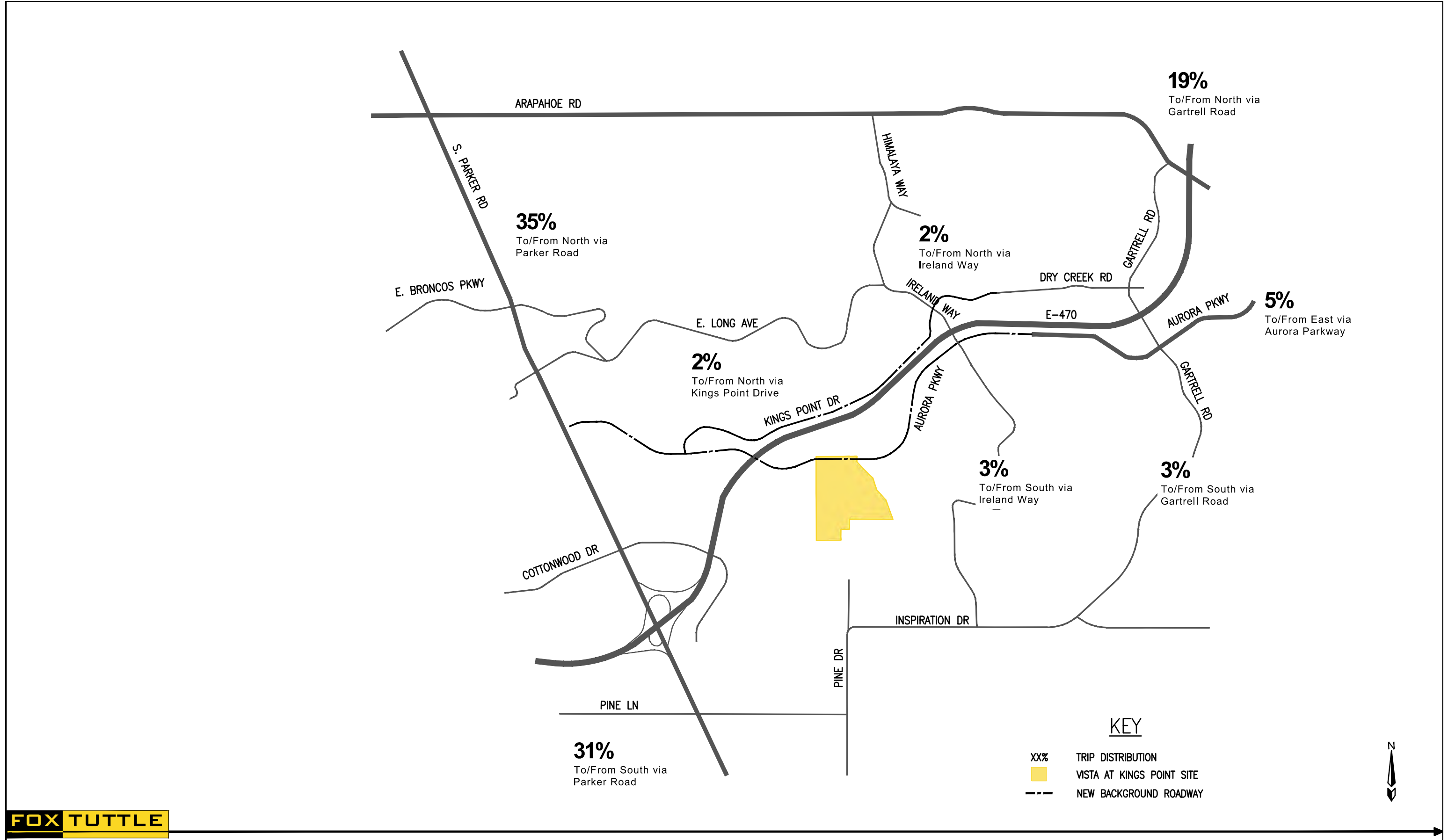
Table 5 - Trip Generation Summary

Land Use	Size	Unit	Internal Capture	Non-Auto Factor	Average Daily Trips				AM Peak Hour Trips				PM Peak Hour Trips			
					Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
ITE#210: Single Family Detached Housing	166	du	1.00	0.95	9.43	1,487	744	743	0.70	110	29	81	0.94	148	93	55
ITE#221: Multifamily Housing (Mid-Rise)	192	du	1.00	0.95	4.54	828	414	414	0.37	67	15	52	0.39	71	43	28
Total Trips					2,315	1,158	1,157		177	44	133		219	136	83	

Source : ITE Trip Generation 11th Edition, 2021.

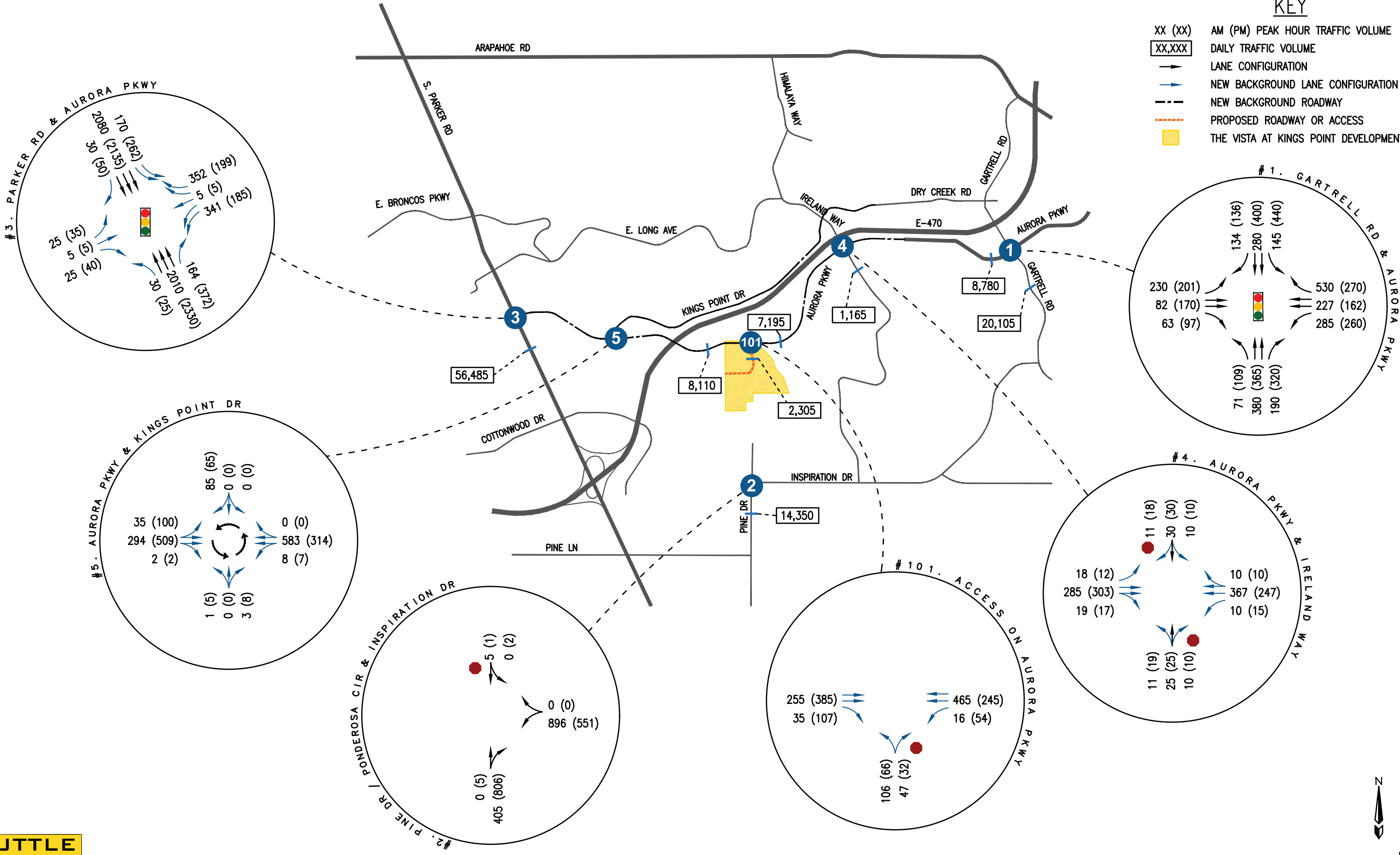
PROPOSED FULL-MOVEMENT
WITHOUT PINE DRIVE EXTENSION: STOP CONTROLLED ACCESS
WITH PINE DRIVE EXTENSION: SIGNAL





KEY

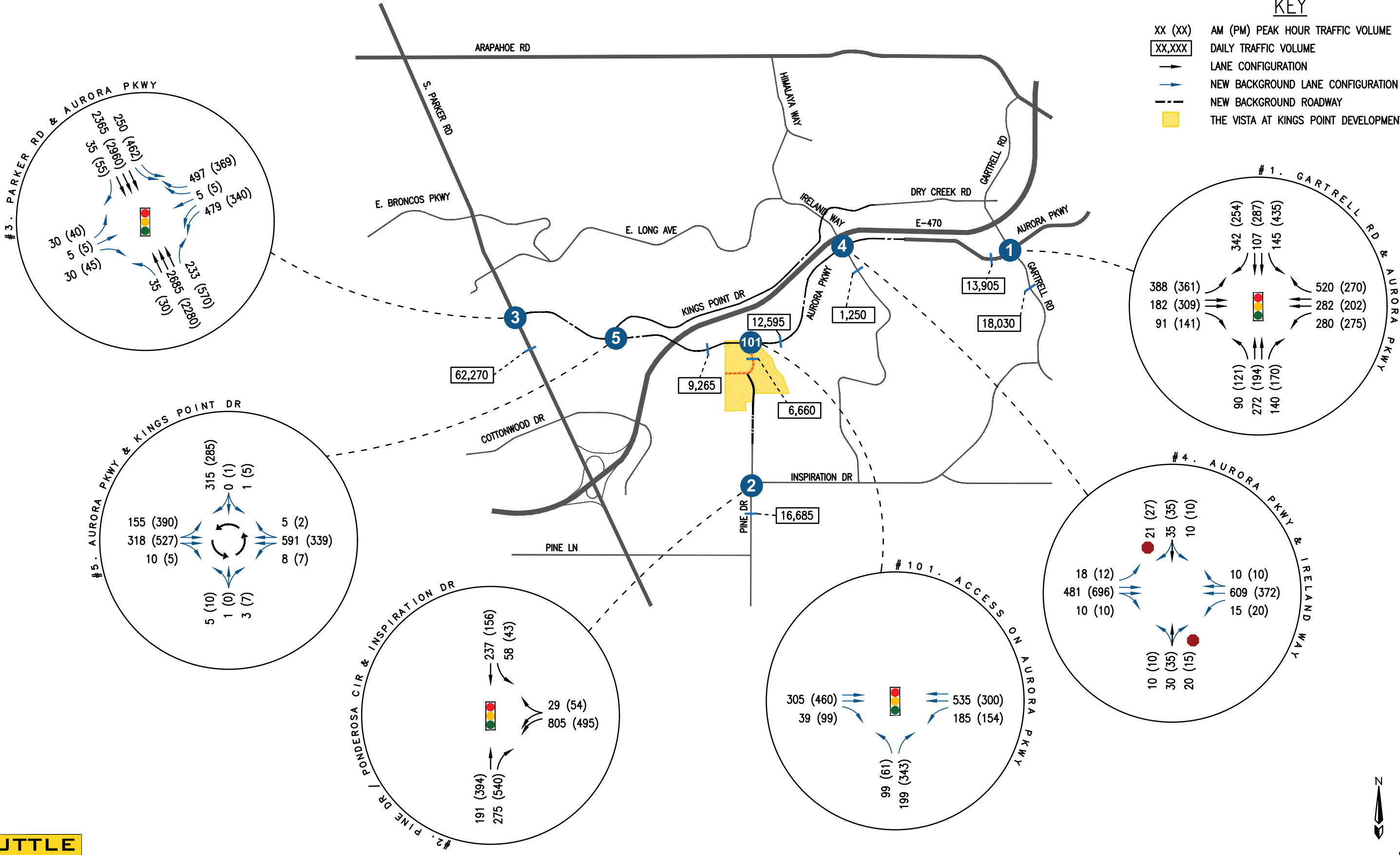
- XX (XX) AM (PM) PEAK HOUR TRAFFIC VOLUME
- XX,XXX DAILY TRAFFIC VOLUME
- LANE CONFIGURATION
- NEW BACKGROUND LANE CONFIGURATION
- NEW BACKGROUND ROADWAY
- PROPOSED ROADWAY OR ACCESS
- THE VISTA AT KINGS POINT DEVELOPMENT



VISTA AT KINGS POINT TRAFFIC IMPACT STUDY
 YEAR 2030 BACKGROUND + PROJECT TRAFFIC VOLUMES [WITHOUT PINE DRIVE EXTENSION]

KEY

- XX (XX) AM (PM) PEAK HOUR TRAFFIC VOLUME
- XX,XXX DAILY TRAFFIC VOLUME
- LANE CONFIGURATION
- NEW BACKGROUND LANE CONFIGURATION
- - - NEW BACKGROUND ROADWAY
- THE VISTA AT KINGS POINT DEVELOPMENT



VISTA AT KINGS POINT TRAFFIC IMPACT STUDY
YEAR 2040 BACKGROUND + PROJECT TRAFFIC VOLUMES [WITH PINE DRIVE EXTENSION]

Overlook at Kings Point Traffic Impact Study



Date: February 24, 2023

Submitted To:

Redland
1500 West Canal Court
Littleton, CO 80120

Submitted By:

Fox Tuttle Transportation Group, LLC
1624 Market Street, Suite 202
Denver, CO 80202

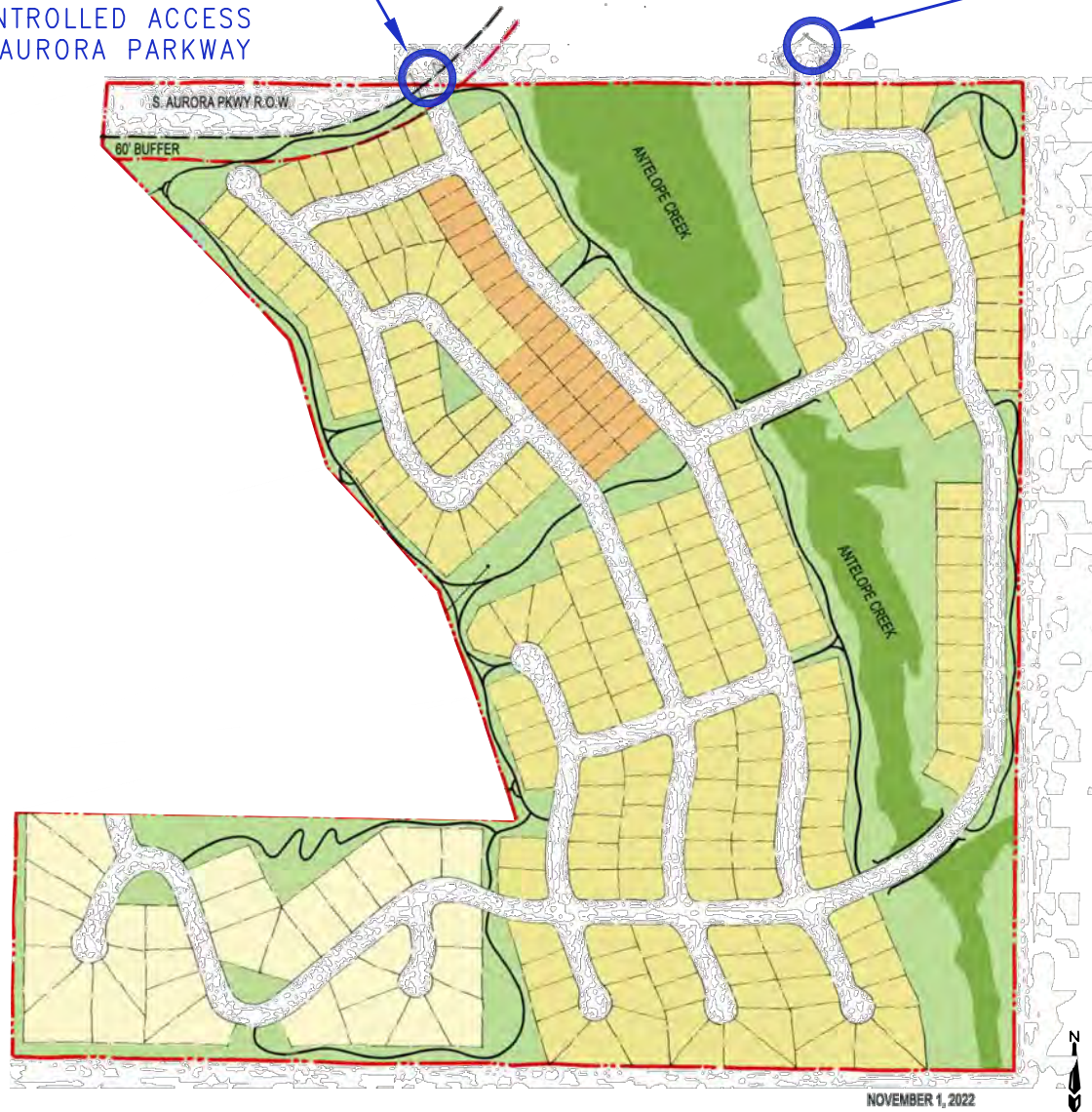
Table 5 - Trip Generation Summary

Land Use	Size	Unit	Internal Capture	Non-Auto Factor	Average Daily Trips				AM Peak Hour Trips				PM Peak Hour Trips			
					Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
ITE#210: Single Family Detached Housing	269	du	1.00	0.95	9.43	2,410	1,205	1,205	0.70	179	47	132	0.94	240	151	89
Total Trips						2,410	1,205	1,205		179	47	132		240	151	89

Source: ITE Trip Generation 11th Edition, 2021.

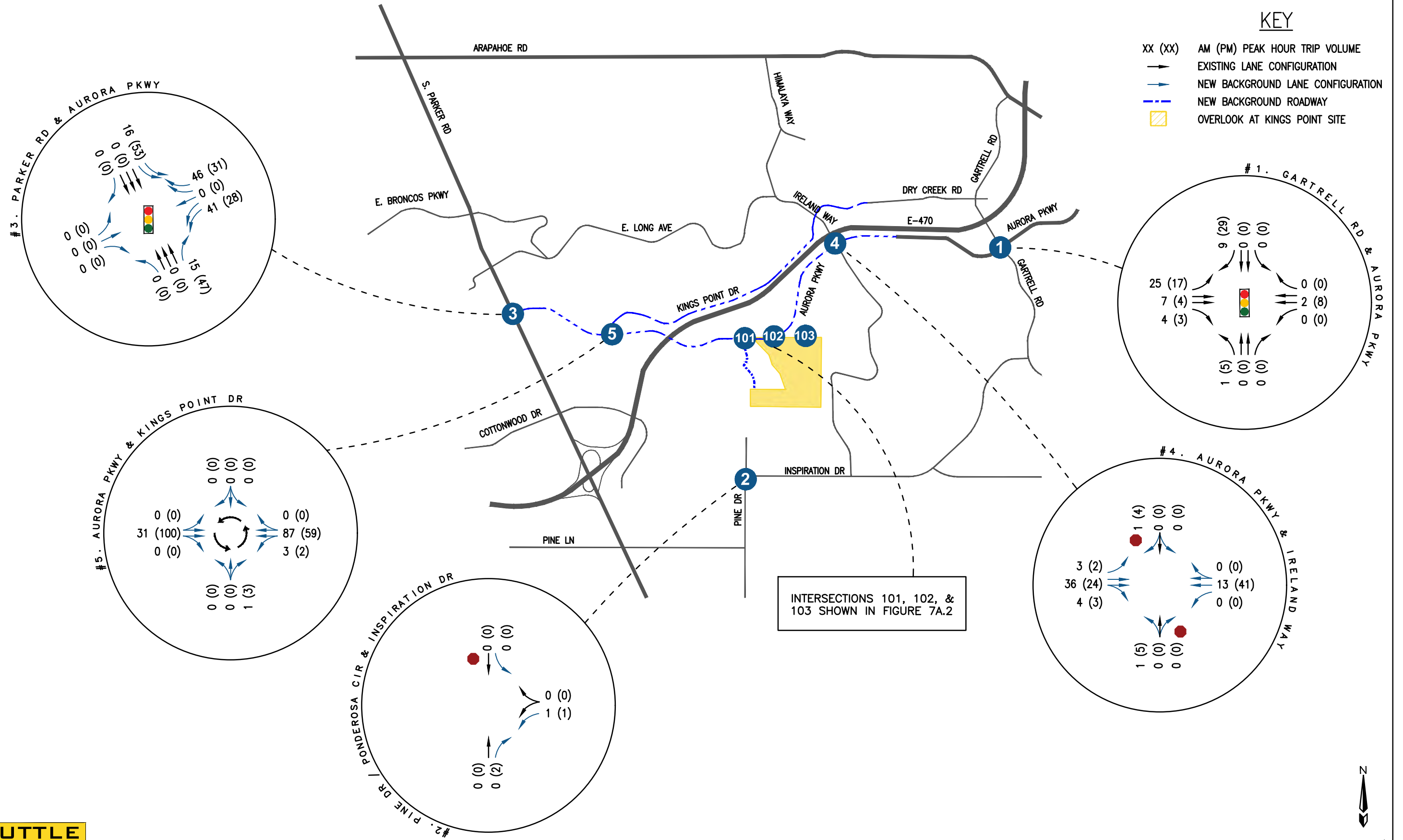
PROPOSED
FULL-MOVEMENT STOP
CONTROLLED ACCESS
AT AURORA PARKWAY

PROPOSED
FULL-MOVEMENT STOP
CONTROLLED ACCESS
AT AURORA PARKWAY



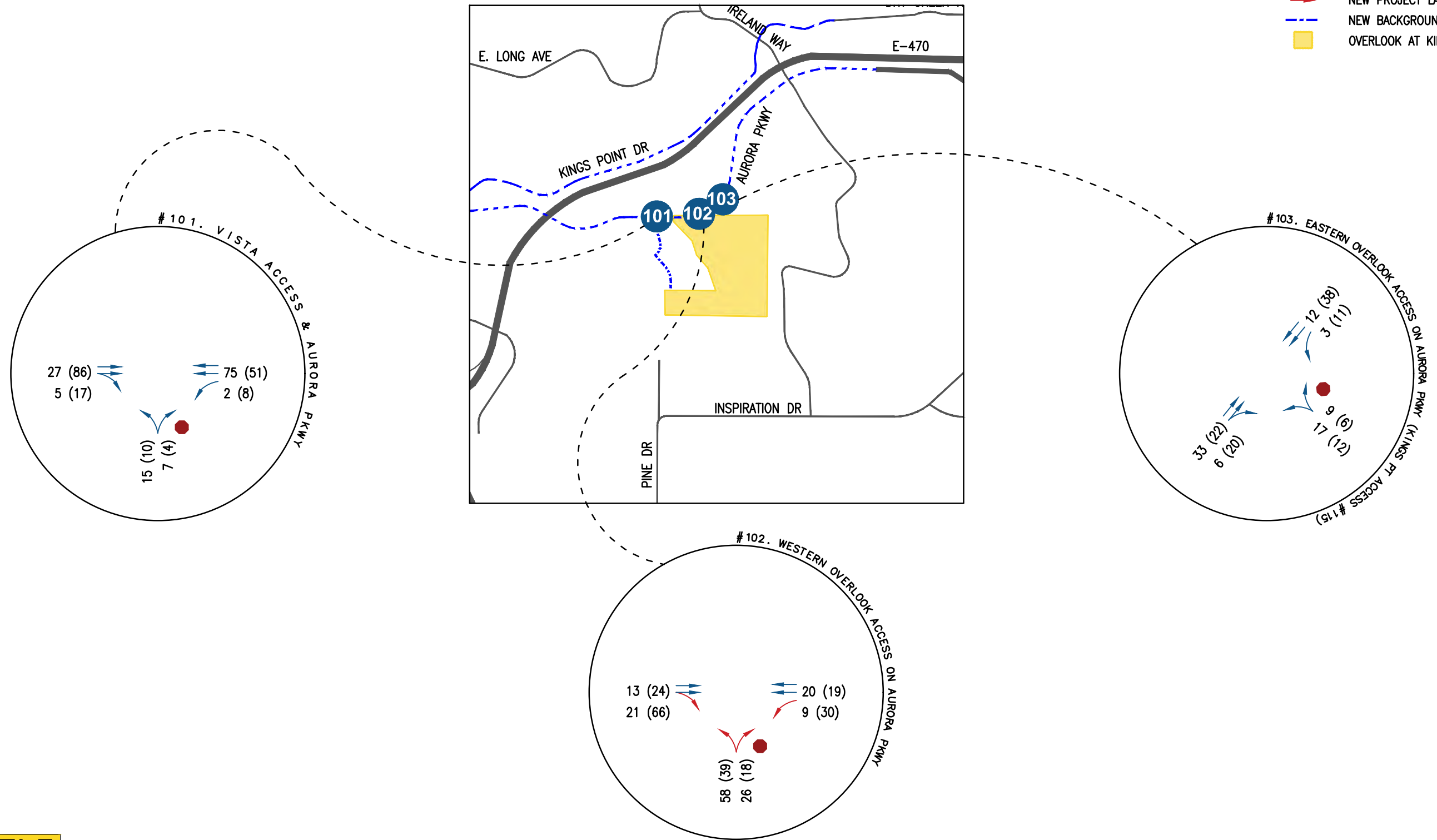
KEY

- XX (XX) AM (PM) PEAK HOUR TRIP VOLUME
- EXISTING LANE CONFIGURATION
- NEW BACKGROUND LANE CONFIGURATION
- NEW BACKGROUND ROADWAY
- OVERLOOK AT KINGS POINT SITE



KEY

- XX (XX) AM (PM) PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- NEW BACKGROUND LANE CONFIGURATION
- NEW PROJECT LANE CONFIGURATION
- - - NEW BACKGROUND ROADWAY
- OVERLOOK AT KINGS POINT SITE





ALDRIDGE TRANSPORTATION CONSULTANTS, LLC

Advanced Transportation Planning and Traffic Engineering

John M.W. Aldridge, P.E.
Colorado Licensed Professional Engineer

Approved.
CEH 8/1/23.

1082 Chimney Rock Road
Highlands Ranch, CO 80126
303-703-9112

June 27, 2023

Julie Gamec
THK Associates
2953 South Peoria St. #101
Aurora, CO 80014

RE: Transportation Impact Study - Revised
Kings Point South – Aurora, CO

Dear Ms. Gamec:

Aldridge Transportation Consultants (ATC) is pleased to present this traffic impact study for the proposed construction of Kings Point South a residential development in Aurora.

ATC is a professional service firm specializing in traffic engineering and transportation planning. ATC's principal, John M.W. Aldridge, is a Colorado licensed professional engineer. In the past 25 years, ATC has prepared over 1,200 traffic impact studies, designed over 120 traffic signals, and has provided expert witness testimony on engineering design and access issues on multi-million-dollar interchange and highway projects in Kansas and Colorado.

We acknowledge that City of Aurora's review of this study is only for general performance with submittal requirements, current design criteria, and standard engineering principles and practice.

ATC appreciates the opportunity to be of service. Please call if you have any questions. We can be reached on 303-703-9112.



Respectfully submitted,

Aldridge Transportation Consultants, LLC

John M.W. Aldridge, P.E.
Principal



Figure 2 Site Plan and Access Locations

LAND USE and TRIP GENERATION

The property will be developed with 194 single family homes on approximately 60 acres. The buildout is expected by 2025. The trip generation rates are from the *ITE Trip Generation Manual, 10th Edition*. The following worksheet Table 1 provides the ADT and AM/PM Peak Hour traffic volumes.

Table 1

Trip Generation Worksheet										
ITE CODE	LAND USE	UNIT	QUANTITY	ADT	AM			PM		
					IN	OUT	TOTAL	IN	OUT	TOTAL
210	Single Family	DU	194	9.44	0.19	0.56		0.67	0.33	
				1831	37	109	146	130	64	194
Total Trips				1831	37	109	146	130	64	194

TRAFFIC DISTRIBUTION & ASSIGNMENT

The distribution and assignment of the site generated traffic at each access and at each intersection in the 2025- and 2040-time frame are shown on the Synchro graphics attached and in Figure 3 and 4. The FHU study which focused on Kings Point South, projected that 35 percent of the trip generation would use the parkway to head north and come back south on SH-83. The traffic headed

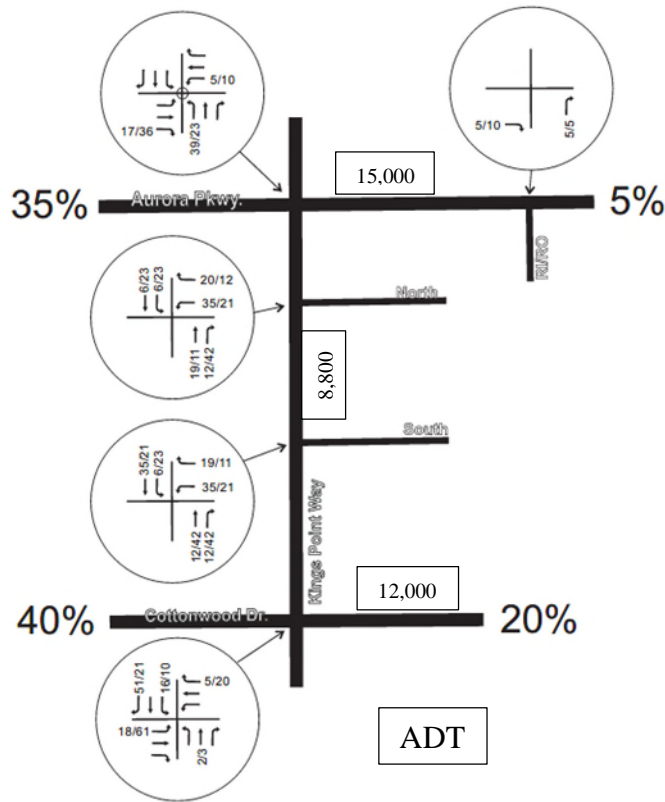


Figure 4 2040 Site Generated Trip Distribution and Assignment

FUTURE TRAFFIC VOLUMES

The City's Traffic Impact Study Guidelines state that future traffic volumes are generally available from the City's Transportation Planning. It also states, "For some cases developers may instead calculate future background traffic by applying a 2% growth rate factor per year, compounded annually, to existing traffic. In either case, the estimates should account for future development adjacent to or near the proposed site based on the current zoning for undeveloped parcels within the study area." The city participates in the development of the DRCOG Focus Model by providing growth and development data on households, employment, income, etc. for the model's traffic analysis zones (TAZ). The Focus model provides assigned volumes for 2020 and 2050 which are based on data provided by the city. The DRCOG urban travel model was employed to develop the short-term and long-term traffic projections in the Atkins and FHU studies. To maintain consistency with those studies we have incorporated their peak hour volume projections in this study.

The Atkins' projections tended to be higher particularly on Kings Point Way as it assumed diversion of the site generated traffic from SH-83 to Kings Point Way. In particular, the projected long-term ADT on Kings Point Way in the FHU study was 1,600 ADT. In the Atkins' study it

Kings Point Development Traffic Impact Study



1st Submittal Date: September 1, 2021

2nd Submittal Date: November 12, 2021

3rd Submittal Date: February 9, 2022

Submitted To:

Kings Point Metropolitan District
450 E. 17th Avenue, Suite 400
Denver, Colorado 80203

Submitted By:

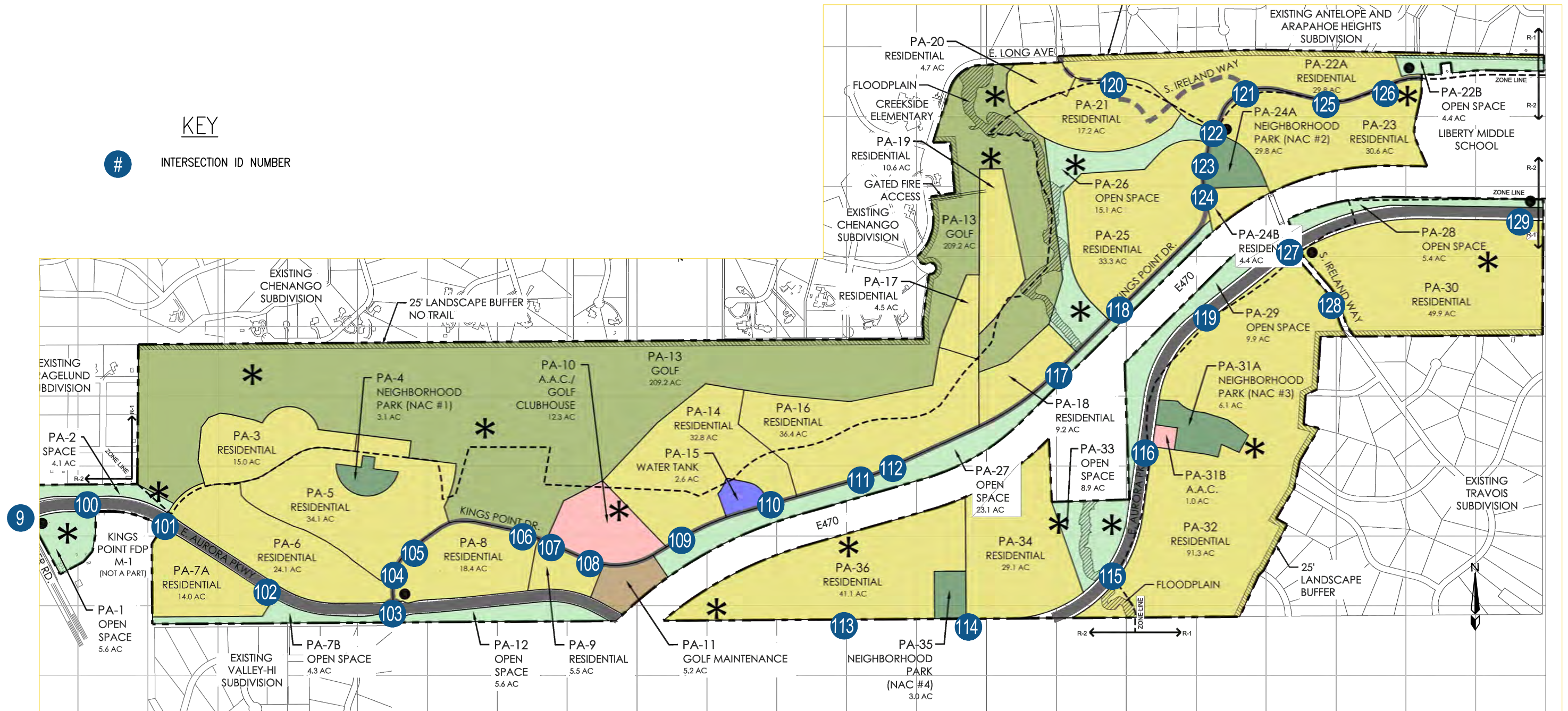
Fox Tuttle Transportation Group, LLC
1624 Market Street, Suite 202
Denver, CO 80202

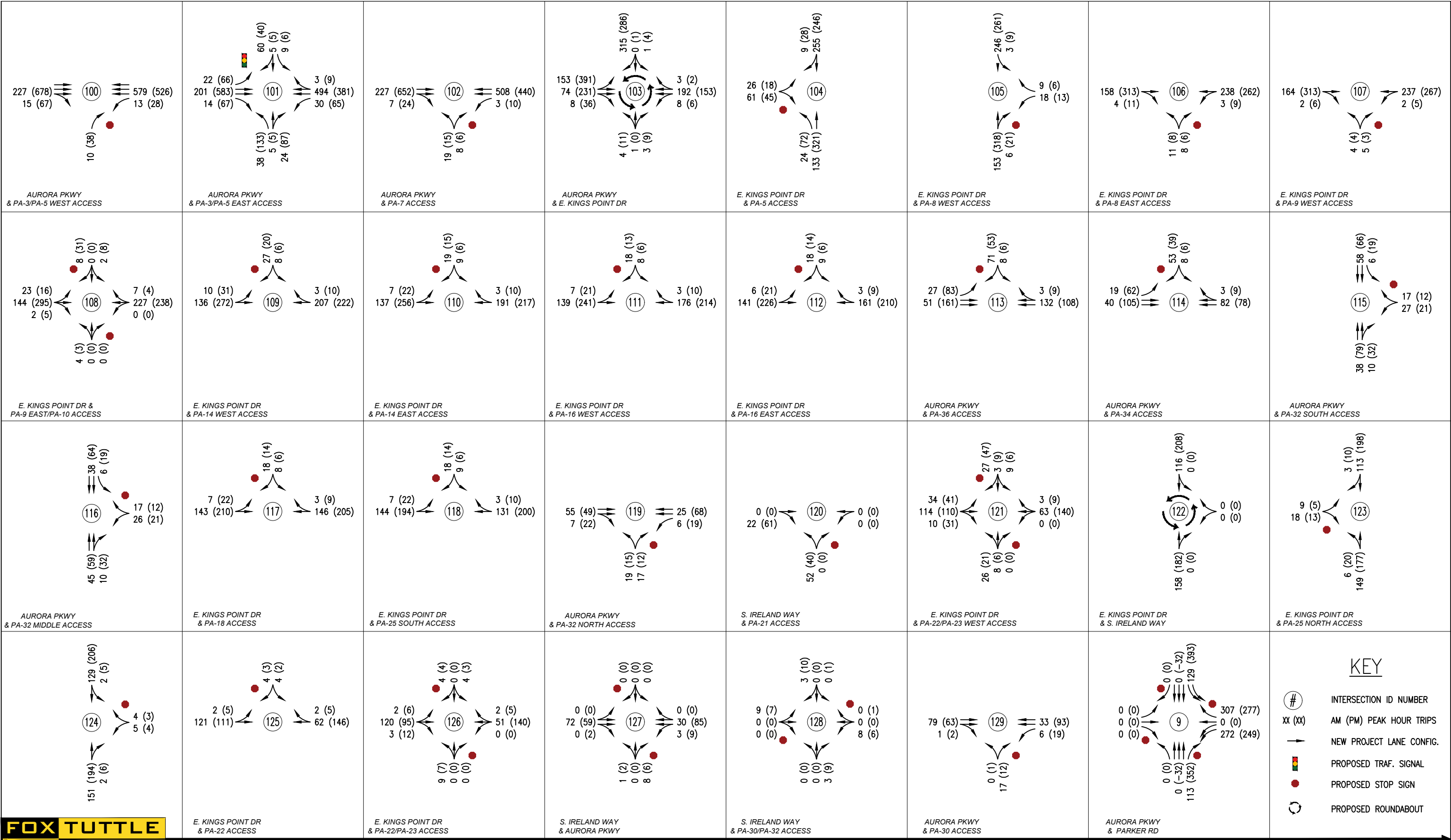
Table 5 - Trip Generation Summary

Planning Area	Land Use	Size	Unit	Internal Capture & Non-Auto	Average Daily Trips				AM Peak Hour Trips				PM Peak Hour Trips			
					Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
PA-3	ITE 210 - Single-Family Detached Housing	59	DU	10%	9.44	501	251	250	0.74	39	10	29	0.99	53	33	20
PA-5	ITE 210 - Single-Family Detached Housing	145	DU	10%	9.44	1232	616	616	0.74	97	24	73	0.99	129	81	48
PA-6	ITE 210 - Single-Family Detached Housing	128	DU	10%	9.44	1087	544	543	0.74	85	21	64	0.99	114	72	42
PA-7	ITE 220 - Multi-Family (Low Rise) Housing	125	DU	10%	7.32	824	412	412	0.46	52	12	40	0.56	63	40	23
PA-8	ITE 210 - Single-Family Detached Housing	75	DU	10%	9.44	637	319	318	0.74	50	13	37	0.99	67	42	25
PA-9	ITE 210 - Single-Family Detached Housing	15	DU	10%	9.44	127	64	63	0.74	10	3	7	0.99	13	8	5
PA 11 & 13	ITE 430 - Golf Course	210.8	Acres	0%	3.74	788	394	394	0.19	40	30	10	0.28	59	20	39
PA-12	ITE 210 - Single-Family Detached Housing	10	DU	10%	9.44	85	43	42	0.74	7	2	5	0.99	9	6	3
PA-14	ITE 210 - Single-Family Detached Housing	110	DU	10%	9.44	935	468	467	0.74	73	18	55	0.99	98	62	36
PA-16	ITE 210 - Single-Family Detached Housing	100	DU	10%	9.44	850	425	425	0.74	67	17	50	0.99	89	56	33
PA-17	ITE 210 - Single-Family Detached Housing	6	DU	10%	9.44	51	26	25	0.74	4	1	3	0.99	5	3	2
PA-18	ITE 210 - Single-Family Detached Housing	25	DU	10%	9.44	212	106	106	0.74	17	4	13	0.99	22	14	8
PA-19	ITE 210 - Single-Family Detached Housing	30	DU	10%	9.44	255	128	127	0.74	20	5	15	0.99	27	17	10
PA-20	ITE 210 - Single-Family Detached Housing	5	DU	10%	9.44	42	21	21	0.74	3	1	2	0.99	4	3	1
PA-21	ITE 210 - Single-Family Detached Housing	66	DU	10%	9.44	561	281	280	0.74	44	11	33	0.99	59	37	22
PA-22	ITE 210 - Single-Family Detached Housing	25	DU	10%	9.44	212	106	106	0.74	17	4	13	0.99	22	14	8
PA-23	ITE 210 - Single-Family Detached Housing	100	DU	10%	9.44	850	425	425	0.74	67	17	50	0.99	89	56	33
PA-24B	ITE 210 - Single-Family Detached Housing	6	DU	10%	9.44	51	26	25	0.74	4	1	3	0.99	5	3	2
PA-25	ITE 210 - Single-Family Detached Housing	107	DU	10%	9.44	909	455	454	0.74	71	18	53	0.99	95	60	35
PA-30	ITE 210 - Single-Family Detached Housing	49	DU	10%	9.44	416	208	208	0.74	33	8	25	0.99	44	28	16
PA-32	ITE 210 - Single-Family Detached Housing	291	DU	10%	9.44	2472	1236	1236	0.74	194	49	145	0.99	259	163	96
PA-34	ITE 210 - Single-Family Detached Housing	133	DU	10%	9.44	1130	565	565	0.74	89	22	67	0.99	119	75	44
PA-36	ITE 220 - Multi-Family (Low Rise) Housing	176	DU	10%	7.32	1159	580	579	0.46	73	17	56	0.56	89	56	33
M-1	ITE 820 - Shopping Center	108.90	KSF	5%	37.75	3905	1953	1952	0.94	97	60	37	3.81	394	189	205
Pass-by Trips: Shopping Center 34%						-1328	-664	-664		0	0	0		-134	-64	-70
Total New Trips						17963	8988	8975		1253	368	885		1793	1074	719
Total Pass-By Trips						1328	664	664		0	0	0		134	64	70
Total Trips						19291	9652	9639		1253	368	885		1927	1138	789

KEY

INTERSECTION ID NUMBER





LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board

SIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)

LOS	<u>Average Vehicle Delay</u> sec/vehicle	<u>Operational Characteristics</u>
A	<10 seconds	Describes operations with low control delay, up to 10 sec/veh. This LOS occurs when progression is extremely favorable and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	10 to 20 seconds	Describes operations with control delay greater than 10 seconds and up to 20 sec/veh. This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of delay.
C	20 to 35 seconds	Describes operations with control delay greater than 20 and up to 35 sec/veh. These higher delays may result from only fair progression, longer cycle length, or both. Individual cycle failures may begin to appear at this level. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflows occur. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.
D	35 to 55 seconds	Describes operations with control delay greater than 35 and up to 55 sec/veh. At LOS D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, and high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	55 to 80 seconds	Describes operations with control delay greater than 55 and up to 80 sec/veh. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent.
F	>80 seconds	Describes operations with control delay in excess of 80 sec/veh. This level, considered unacceptable to most drivers, often occurs with over-saturation, that is, when arrival flow rates exceed the capacity of lane groups. It may also occur at high v/c ratios with many individual cycle failures. Poor progression and long cycle lengths may also contribute significantly to high delay levels.

LEVEL OF SERVICE DEFINITIONS

From *Highway Capacity Manual*, Transportation Research Board

UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS)













Applicable to Two-Way Stop Control, All-Way Stop Control, and Roundabouts

LOS	Average Vehicle Control Delay	Operational Characteristics
A	<10 seconds	Normally, vehicles on the stop-controlled approach only have to wait up to 10 seconds before being able to clear the intersection. Left-turning vehicles on the uncontrolled street do not have to wait to make their turn.
B	10 to 15 seconds	Vehicles on the stop-controlled approach will experience delays before being able to clear the intersection. <u>The delay could be up to 15 seconds.</u> Left-turning vehicles on the uncontrolled street may have to wait to make their turn.
C	15 to 25 seconds	Vehicles on the stop-controlled approach can expect delays in the range of 15 to 25 seconds before clearing the intersection. Motorists may begin to take chances due to the long delays, thereby posing a safety risk to through traffic. <u>Left-turning vehicles on the uncontrolled street will now be required to wait to make their turn causing a queue to be created in the turn lane.</u>
D	25 to 35 seconds	<u>This is the point at which a traffic signal may be warranted for this intersection.</u> The delays for the stop-controlled intersection are not considered to be excessive. The length of the queue may begin to block other public and private access points.
E	35 to 50 seconds	The delays for all critical traffic movements are considered to be unacceptable. The length of the queues for the stop-controlled approaches as well as the left-turn movements are extremely long. <u>There is a high probability that this intersection will meet traffic signal warrants.</u> The ability to install a traffic signal is affected by the location of other existing traffic signals. Consideration may be given to restricting the accesses by eliminating the left-turn movements from and to the stop-controlled approach.
F	>50 seconds	The delay for the critical traffic movements are probably in excess of 100 seconds. The length of the queues are extremely long. Motorists are selecting alternative routes due to the long delays. <u>The only remedy for these long delays is installing a traffic signal or restricting the accesses.</u> The potential for accidents at this intersection are extremely high due to motorist taking more risky chances. If the median permits, motorists begin making two-stage left-turns.

HCM 6th Roundabout
1: Kings Point Way & Aurora Pkwy

2030 Background Traffic
AM Peak Hour













Intersection						
Intersection Delay, s/veh	4.9					
Intersection LOS	A					
Approach	EB		WB		NB	
Entry Lanes	2		2		1	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	382		689		56	
Demand Flow Rate, veh/h	390		703		57	
Vehicles Circulating, veh/h	38		83		363	
Vehicles Exiting, veh/h	803		337		65	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	3.9		5.3		4.0	
Approach LOS	A		A		A	
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.469	0.531	0.469	0.531	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	183	207	330	373	57	94
Cap Entry Lane, veh/h	1303	1375	1251	1323	1043	753
Entry HV Adj Factor	0.980	0.977	0.981	0.979	0.982	0.979
Flow Entry, veh/h	179	202	324	365	56	92
Cap Entry, veh/h	1278	1344	1227	1296	1025	737
V/C Ratio	0.140	0.151	0.264	0.282	0.055	0.125
Control Delay, s/veh	4.0	3.9	5.3	5.3	4.0	6.2
LOS	A	A	A	A	A	A
95th %tile Queue, veh	0	1	1	1	0	0

Intersection												
Int Delay, s/veh	3.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	256	35	16	463	4	106	0	47	11	0	37
Future Vol, veh/h	12	256	35	16	463	4	106	0	47	11	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	278	38	17	503	4	115	0	51	12	0	40
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	507	0	0	316	0	0	590	845	139	704	881	254
Stage 1	-	-	-	-	-	-	304	304	-	539	539	-
Stage 2	-	-	-	-	-	-	286	541	-	165	342	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1054	-	-	1241	-	-	391	298	884	324	284	745
Stage 1	-	-	-	-	-	-	681	662	-	494	520	-
Stage 2	-	-	-	-	-	-	697	519	-	821	637	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1054	-	-	1241	-	-	362	290	884	299	277	745
Mov Cap-2 Maneuver	-	-	-	-	-	-	362	290	-	299	277	-
Stage 1	-	-	-	-	-	-	673	654	-	488	513	-
Stage 2	-	-	-	-	-	-	650	512	-	764	629	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			16.4			11.8		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	362	884	1054	-	-	1241	-	-	299	745		
HCM Lane V/C Ratio	0.318	0.058	0.012	-	-	0.014	-	-	0.04	0.054		
HCM Control Delay (s)	19.5	9.3	8.5	-	-	7.9	-	-	17.5	10.1		
HCM Lane LOS	C	A	A	-	-	A	-	-	C	B		
HCM 95th %tile Q(veh)	1.3	0.2	0	-	-	0	-	-	0.1	0.2		

HCM 6th Roundabout
1: Kings Point Way & Aurora Pkwy

2030 Background Traffic
PM Peak Hour

Intersection						
Intersection Delay, s/veh	4.8					
Intersection LOS	A					
Approach	EB		WB		NB	
Entry Lanes	2		2		1	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	722		373		63	
Demand Flow Rate, veh/h	736		381		65	
Vehicles Circulating, veh/h	28		142		694	
Vehicles Exiting, veh/h	456		617		70	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	5.1		4.3		5.6	
Approach LOS	A		A		A	
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	346	390	179	202	65	72
Cap Entry Lane, veh/h	1316	1387	1185	1259	787	1000
Entry HV Adj Factor	0.980	0.981	0.980	0.979	0.969	0.986
Flow Entry, veh/h	339	382	175	198	63	71
Cap Entry, veh/h	1289	1360	1160	1232	763	987
V/C Ratio	0.263	0.281	0.151	0.160	0.083	0.072
Control Delay, s/veh	5.1	5.1	4.4	4.3	5.6	4.3
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	1	1	1	0	0

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	387	107	54	241	11	66	0	32	7	0	24
Future Vol, veh/h	34	387	107	54	241	11	66	0	32	7	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	421	116	59	262	12	72	0	35	8	0	26
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	274	0	0	537	0	0	744	887	211	671	997	137
Stage 1	-	-	-	-	-	-	495	495	-	386	386	-
Stage 2	-	-	-	-	-	-	249	392	-	285	611	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1286	-	-	1027	-	-	303	282	794	342	243	886
Stage 1	-	-	-	-	-	-	525	544	-	609	609	-
Stage 2	-	-	-	-	-	-	733	605	-	698	482	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1286	-	-	1027	-	-	275	258	794	306	223	886
Mov Cap-2 Maneuver	-	-	-	-	-	-	275	258	-	306	223	-
Stage 1	-	-	-	-	-	-	510	528	-	591	574	-
Stage 2	-	-	-	-	-	-	671	571	-	648	468	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			1.5			18.4			11		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	275 794		1286	-	-	1027	-	-	306	886		
HCM Lane V/C Ratio	0.261 0.044		0.029	-	-	0.057	-	-	0.025	0.029		
HCM Control Delay (s)	22.6 9.7		7.9	-	-	8.7	-	-	17.1	9.2		
HCM Lane LOS	C A		A	-	-	A	-	-	C	A		
HCM 95th %tile Q(veh)	1 0.1		0.1	-	-	0.2	-	-	0.1	0.1		

HCM 6th Roundabout
1: Kings Point Way & Aurora Pkwy

2030 Total Traffic
AM Peak Hour

Intersection						
Intersection Delay, s/veh	5.5					
Intersection LOS	A					
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	424		864		72	92
Demand Flow Rate, veh/h	433		882		74	94
Vehicles Circulating, veh/h	89		83		406	926
Vehicles Exiting, veh/h	931		397		116	39
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	4.3		6.0		4.3	7.4
Approach LOS	A		A		A	A
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.471	0.529	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	204	229	415	467	74	94
Cap Entry Lane, veh/h	1244	1317	1251	1323	1006	646
Entry HV Adj Factor	0.976	0.981	0.979	0.981	0.973	0.979
Flow Entry, veh/h	199	225	406	458	72	92
Cap Entry, veh/h	1214	1291	1224	1298	978	633
V/C Ratio	0.164	0.174	0.332	0.353	0.074	0.145
Control Delay, s/veh	4.4	4.2	6.1	6.0	4.3	7.4
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	1	1	2	0	1

HCM 6th TWSC
2: Kings Point South East Side RIRO & Aurora Pkwy













2030 Total Traffic
AM Peak Hour

Intersection						
Int Delay, s/veh	0.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗		↑↑		↗
Traffic Vol, veh/h	326	32	0	794	0	21
Future Vol, veh/h	326	32	0	794	0	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	354	35	0	863	0	23
Major/Minor	Major1	Major2	Minor1			
Conflicting Flow All	0	0	-	-	-	177
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	835
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	835
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		NB		
HCM Control Delay, s	0	0		9.4		
HCM LOS	A					
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT		
Capacity (veh/h)	835	-	-	-		
HCM Lane V/C Ratio	0.027	-	-	-		
HCM Control Delay (s)	9.4	-	-	-		
HCM Lane LOS	A	-	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	-		

HCM 6th TWSC
3: Kings Point South East Side Collector & Aurora Pkwy

2030 Total Traffic
AM Peak Hour

Intersection						
Int Delay, s/veh	4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑↑	↖	↗
Traffic Vol, veh/h	326	21	23	634	160	48
Future Vol, veh/h	326	21	23	634	160	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	200	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	354	23	25	689	174	52
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	377	0	749	177
Stage 1	-	-	-	-	354	-
Stage 2	-	-	-	-	395	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1178	-	348	835
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	650	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1178	-	341	835
Mov Cap-2 Maneuver	-	-	-	-	341	-
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	636	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.3		22.2	
HCM LOS	C					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	341	835	-	-	1178	-
HCM Lane V/C Ratio	0.51	0.062	-	-	0.021	-
HCM Control Delay (s)	26	9.6	-	-	8.1	-
HCM Lane LOS	D	A	-	-	A	-
HCM 95th %tile Q(veh)	2.8	0.2	-	-	0.1	-

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	325	35	16	486	4	106	0	47	11	0	37
Future Vol, veh/h	12	325	35	16	486	4	106	0	47	11	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	353	38	17	528	4	115	0	51	12	0	40
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	532	0	0	391	0	0	677	945	177	767	981	266
Stage 1	-	-	-	-	-	-	379	379	-	564	564	-
Stage 2	-	-	-	-	-	-	298	566	-	203	417	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1032	-	-	1164	-	-	339	260	835	292	248	732
Stage 1	-	-	-	-	-	-	615	613	-	478	507	-
Stage 2	-	-	-	-	-	-	686	506	-	780	590	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1032	-	-	1164	-	-	314	253	835	268	241	732
Mov Cap-2 Maneuver	-	-	-	-	-	-	314	253	-	268	241	-
Stage 1	-	-	-	-	-	-	607	605	-	472	499	-
Stage 2	-	-	-	-	-	-	639	498	-	723	582	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.3			18.9			12.2		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	314		835	1032	-	-	1164	-	-	268	732	
HCM Lane V/C Ratio	0.367		0.061	0.013	-	-	0.015	-	-	0.045	0.055	
HCM Control Delay (s)	23		9.6	8.5	-	-	8.1	-	-	19.1	10.2	
HCM Lane LOS	C		A	A	-	-	A	-	-	C	B	
HCM 95th %tile Q(veh)	1.6		0.2	0	-	-	0	-	-	0.1	0.2	

HCM 6th Roundabout
1: Kings Point Way & Aurora Pkwy

2030 Total Traffic
PM Peak Hour

Intersection						
Intersection Delay, s/veh	5.6					
Intersection LOS	A					
Approach	EB		WB		NB	
Entry Lanes	2		2		1	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	862		488		119	
Demand Flow Rate, veh/h	879		498		122	
Vehicles Circulating, veh/h	61		142		837	
Vehicles Exiting, veh/h	540		817		103	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	5.9		4.8		7.3	
Approach LOS	A		A		A	
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	413	466	234	264	122	72
Cap Entry Lane, veh/h	1276	1348	1185	1259	697	906
Entry HV Adj Factor	0.981	0.980	0.981	0.981	0.975	0.986
Flow Entry, veh/h	405	457	230	259	119	71
Cap Entry, veh/h	1252	1322	1162	1234	680	893
V/C Ratio	0.324	0.346	0.198	0.210	0.175	0.079
Control Delay, s/veh	5.9	5.9	4.8	4.7	7.3	4.8
LOS	A	A	A	A	A	A
95th %tile Queue, veh	1	2	1	1	1	0

HCM 6th TWSC
2: Kings Point South East Side RIRO & Aurora Pkwy

2030 Total Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑		↑↑		↑
Traffic Vol, veh/h	623	108	0	449	0	14
Future Vol, veh/h	623	108	0	449	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	677	117	0	488	0	15

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	- - - 339
Stage 1	-	-	- - -
Stage 2	-	-	- - -
Critical Hdwy	-	-	- - - 6.94
Critical Hdwy Stg 1	-	-	- - -
Critical Hdwy Stg 2	-	-	- - -
Follow-up Hdwy	-	-	- - - 3.32
Pot Cap-1 Maneuver	-	-	0 - 0 657
Stage 1	-	-	0 - 0 -
Stage 2	-	-	0 - 0 -
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	- - - 657
Mov Cap-2 Maneuver	-	-	- - -
Stage 1	-	-	- - -
Stage 2	-	-	- - -













Approach	EB	WB	NB
HCM Control Delay, s	0	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	657	-	-	-
HCM Lane V/C Ratio	0.023	-	-	-
HCM Control Delay (s)	10.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

HCM 6th TWSC
3: Kings Point South East Side Collector & Aurora Pkwy

2030 Total Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	4.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑↑	↖	↗
Traffic Vol, veh/h	565	72	77	343	106	32
Future Vol, veh/h	565	72	77	343	106	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	200	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	614	78	84	373	115	35
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	692	0	969	307
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	355	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	899	-	251	689
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	681	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	899	-	228	689
Mov Cap-2 Maneuver	-	-	-	-	228	-
Stage 1	-	-	-	-	502	-
Stage 2	-	-	-	-	618	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.7		30	
HCM LOS					D	
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	228	689	-	-	899	-
HCM Lane V/C Ratio	0.505	0.05	-	-	0.093	-
HCM Control Delay (s)	35.9	10.5	-	-	9.4	-
HCM Lane LOS	E	B	-	-	A	-
HCM 95th %tile Q(veh)	2.6	0.2	-	-	0.3	-













Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	433	107	54	318	11	66	0	32	7	0	24
Future Vol, veh/h	34	433	107	54	318	11	66	0	32	7	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	471	116	59	346	12	72	0	35	8	0	26
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	358	0	0	587	0	0	836	1021	236	780	1131	179
Stage 1	-	-	-	-	-	-	545	545	-	470	470	-
Stage 2	-	-	-	-	-	-	291	476	-	310	661	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1197	-	-	984	-	-	260	235	766	285	202	833
Stage 1	-	-	-	-	-	-	490	517	-	543	558	-
Stage 2	-	-	-	-	-	-	693	555	-	675	458	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1197	-	-	984	-	-	235	214	766	254	184	833
Mov Cap-2 Maneuver	-	-	-	-	-	-	235	214	-	254	184	-
Stage 1	-	-	-	-	-	-	475	501	-	526	525	-
Stage 2	-	-	-	-	-	-	631	522	-	624	444	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			1.3			21.3			11.8		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1		NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2	
Capacity (veh/h)	235		766	1197	-	-	984	-	-	254	833	
HCM Lane V/C Ratio	0.305		0.045	0.031	-	-	0.06	-	-	0.03	0.031	
HCM Control Delay (s)	26.9		9.9	8.1	-	-	8.9	-	-	19.6	9.5	
HCM Lane LOS	D		A	A	-	-	A	-	-	C	A	
HCM 95th %tile Q(veh)	1.2		0.1	0.1	-	-	0.2	-	-	0.1	0.1	

HCM 6th Roundabout
1: Kings Point Way & Aurora Pkwy

2050 Background Traffic
AM Peak Hour

Intersection						
Intersection Delay, s/veh	7.7					
Intersection LOS	A					
Approach	EB		WB		NB	
Entry Lanes	2		2		1	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	606		854		72	
Demand Flow Rate, veh/h	618		871		73	
Vehicles Circulating, veh/h	47		226		586	
Vehicles Exiting, veh/h	1223		433		79	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	4.8		7.2		5.0	
Approach LOS	A		A		A	
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.469	0.531	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	290	328	409	462	73	354
Cap Entry Lane, veh/h	1293	1364	1096	1172	863	652
Entry HV Adj Factor	0.982	0.979	0.981	0.980	0.985	0.980
Flow Entry, veh/h	285	321	401	453	72	347
Cap Entry, veh/h	1270	1336	1076	1148	850	639
V/C Ratio	0.224	0.240	0.373	0.394	0.085	0.543
Control Delay, s/veh	4.8	4.7	7.2	7.1	5.0	14.8
LOS	A	A	A	A	A	B
95th %tile Queue, veh	1	1	2	2	0	3

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Traffic Vol, veh/h	0	392	777	2	0	9
Future Vol, veh/h	0	392	777	2	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	426	845	2	0	10
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	424
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	579
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	579
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		11.3		
HCM LOS	B					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	579		
HCM Lane V/C Ratio	-	-	-	0.017		
HCM Control Delay (s)	-	-	-	11.3		
HCM Lane LOS	-	-	-	B		
HCM 95th %tile Q(veh)	-	-	-	0.1		

Intersection												
Int Delay, s/veh	3.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	343	35	16	608	4	106	0	47	11	0	37
Future Vol, veh/h	12	343	35	16	608	4	106	0	47	11	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	373	38	17	661	4	115	0	51	12	0	40
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	665	0	0	411	0	0	764	1098	187	910	1134	333
Stage 1	-	-	-	-	-	-	399	399	-	697	697	-
Stage 2	-	-	-	-	-	-	365	699	-	213	437	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	920	-	-	1144	-	-	293	211	823	230	201	663
Stage 1	-	-	-	-	-	-	598	601	-	398	441	-
Stage 2	-	-	-	-	-	-	627	440	-	769	578	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	920	-	-	1144	-	-	269	205	823	211	195	663
Mov Cap-2 Maneuver	-	-	-	-	-	-	269	205	-	211	195	-
Stage 1	-	-	-	-	-	-	590	593	-	392	434	-
Stage 2	-	-	-	-	-	-	580	433	-	711	570	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.2			22.4			13.6		
HCM LOS							C			B		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	269	823	920	-	-	1144	-	-	211	663		
HCM Lane V/C Ratio	0.428	0.062	0.014	-	-	0.015	-	-	0.057	0.061		
HCM Control Delay (s)	28	9.7	9	-	-	8.2	-	-	23.1	10.8		
HCM Lane LOS	D	A	A	-	-	A	-	-	C	B		
HCM 95th %tile Q(veh)	2	0.2	0	-	-	0	-	-	0.2	0.2		

HCM 6th Roundabout
1: Kings Point Way & Aurora Pkwy













2050 Background Traffic
PM Peak Hour

Intersection						
Intersection Delay, s/veh	7.3					
Intersection LOS	A					
Approach	EB		WB		NB	
Entry Lanes	2		2		1	
Conflicting Circle Lanes	2		2		2	
Adj Approach Flow, veh/h	1172		470		74	
Demand Flow Rate, veh/h	1195		480		76	
Vehicles Circulating, veh/h	41		470		1153	
Vehicles Exiting, veh/h	798		759		83	
Ped Vol Crossing Leg, #/h	0		0		0	
Ped Cap Adj	1.000		1.000		1.000	
Approach Delay, s/veh	7.2		6.8		8.8	
Approach LOS	A		A		A	
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.471	0.529	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	562	633	226	254	76	326
Cap Entry Lane, veh/h	1300	1371	876	952	533	918
Entry HV Adj Factor	0.980	0.981	0.978	0.981	0.974	0.981
Flow Entry, veh/h	551	621	221	249	74	320
Cap Entry, veh/h	1274	1346	857	935	519	901
V/C Ratio	0.432	0.462	0.258	0.267	0.143	0.355
Control Delay, s/veh	7.1	7.3	6.9	6.6	8.8	8.0
LOS	A	A	A	A	A	A
95th %tile Queue, veh	2	3	1	1	0	2

HCM 6th TWSC
2: Aurora Pkwy & Kings Point South PA 5 RIRO

2050 Background Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↗
Traffic Vol, veh/h	0	680	427	4	0	6
Future Vol, veh/h	0	680	427	4	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	739	464	4	0	7
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	-	0	-	0	-	234
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	768
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	768
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB	WB		SB		
HCM Control Delay, s	0	0		9.7		
HCM LOS	A					
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1		
Capacity (veh/h)	-	-	-	768		
HCM Lane V/C Ratio	-	-	-	0.008		
HCM Control Delay (s)	-	-	-	9.7		
HCM Lane LOS	-	-	-	A		
HCM 95th %tile Q(veh)	-	-	-	0		

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	510	107	54	329	11	66	0	32	7	0	24
Future Vol, veh/h	34	510	107	54	329	11	66	0	32	7	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	554	116	59	358	12	72	0	35	8	0	26
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	370	0	0	670	0	0	925	1116	277	833	1226	185
Stage 1	-	-	-	-	-	-	628	628	-	482	482	-
Stage 2	-	-	-	-	-	-	297	488	-	351	744	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1185	-	-	916	-	-	224	206	720	261	177	826
Stage 1	-	-	-	-	-	-	437	474	-	534	552	-
Stage 2	-	-	-	-	-	-	687	548	-	639	420	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1185	-	-	916	-	-	201	187	720	230	161	826
Mov Cap-2 Maneuver	-	-	-	-	-	-	201	187	-	230	161	-
Stage 1	-	-	-	-	-	-	423	459	-	517	517	-
Stage 2	-	-	-	-	-	-	622	513	-	589	407	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			1.3			25.3			12.1		
HCM LOS							D			B		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	201	720	1185	-	-	916	-	-	230	826		
HCM Lane V/C Ratio	0.357	0.048	0.031	-	-	0.064	-	-	0.033	0.032		
HCM Control Delay (s)	32.5	10.3	8.1	-	-	9.2	-	-	21.2	9.5		
HCM Lane LOS	D	B	A	-	-	A	-	-	C	A		
HCM 95th %tile Q(veh)	1.5	0.2	0.1	-	-	0.2	-	-	0.1	0.1		

HCM 6th Roundabout
1: Kings Point Way & Aurora Pkwy

2050 Total Traffic
AM Peak Hour

Intersection						
Intersection Delay, s/veh	9.2					
Intersection LOS	A					
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	647		1029		89	347
Demand Flow Rate, veh/h	660		1050		91	354
Vehicles Circulating, veh/h	98		226		628	1095
Vehicles Exiting, veh/h	1351		493		130	181
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	5.2		8.3		5.5	20.3
Approach LOS	A		A		A	C
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	310	350	494	556	91	354
Cap Entry Lane, veh/h	1233	1307	1096	1172	833	560
Entry HV Adj Factor	0.981	0.980	0.979	0.981	0.977	0.980
Flow Entry, veh/h	304	343	484	546	89	347
Cap Entry, veh/h	1210	1280	1074	1150	813	549
V/C Ratio	0.251	0.268	0.451	0.474	0.109	0.632
Control Delay, s/veh	5.2	5.2	8.3	8.3	5.5	20.3
LOS	A	A	A	A	A	C
95th %tile Queue, veh	1	1	2	3	0	4

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑				↑			↑
Traffic Vol, veh/h	0	413	32	0	937	2	0	0	21	0	0	9
Future Vol, veh/h	0	413	32	0	937	2	0	0	21	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	449	35	0	1018	2	0	0	23	0	0	10
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	225	-	-	510
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	778	0	0	509
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	778	-	-	509
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			9.8			12.2		
HCM LOS							A			B		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	778	-	-	-	-	509						
HCM Lane V/C Ratio	0.029	-	-	-	-	0.019						
HCM Control Delay (s)	9.8	-	-	-	-	12.2						
HCM Lane LOS	A	-	-	-	-	B						
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.1						

HCM 6th TWSC
3: Kings Point South East Side Collector & Aurora Pkwy













2050 Total Traffic
AM Peak Hour

Intersection						
Int Delay, s/veh	5.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑↑	↖	↗
Traffic Vol, veh/h	413	21	23	779	160	48
Future Vol, veh/h	413	21	23	779	160	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	200	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	449	23	25	847	174	52
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	472	0	923	225
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	474	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1086	-	269	778
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	592	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1086	-	263	778
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	578	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.2		34.5	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	263	778	-	-	1086	-
HCM Lane V/C Ratio	0.661	0.067	-	-	0.023	-
HCM Control Delay (s)	41.9	10	-	-	8.4	-
HCM Lane LOS	E	B	-	-	A	-
HCM 95th %tile Q(veh)	4.2	0.2	-	-	0.1	-

Intersection						
Int Delay, s/veh	5.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑↑	↖	↗
Traffic Vol, veh/h	413	21	23	779	160	48
Future Vol, veh/h	413	21	23	779	160	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	200	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	449	23	25	847	174	52
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	472	0	923	225
Stage 1	-	-	-	-	449	-
Stage 2	-	-	-	-	474	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	1086	-	269	778
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	592	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1086	-	263	778
Mov Cap-2 Maneuver	-	-	-	-	263	-
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	578	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.2		34.5	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	263	778	-	-	1086	-
HCM Lane V/C Ratio	0.661	0.067	-	-	0.023	-
HCM Control Delay (s)	41.9	10	-	-	8.4	-
HCM Lane LOS	E	B	-	-	A	-
HCM 95th %tile Q(veh)	4.2	0.2	-	-	0.1	-

Intersection

Int Delay, s/veh 3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	412	35	16	631	4	106	0	47	11	0	37
Future Vol, veh/h	12	412	35	16	631	4	106	0	47	11	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	448	38	17	686	4	115	0	51	12	0	40

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	690	0	0	486	0	0	851	1198	224	972	1234	345
Stage 1	-	-	-	-	-	-	474	474	-	722	722	-
Stage 2	-	-	-	-	-	-	377	724	-	250	512	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	900	-	-	1073	-	-	253	184	779	207	175	651
Stage 1	-	-	-	-	-	-	540	556	-	384	429	-
Stage 2	-	-	-	-	-	-	616	429	-	732	535	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	900	-	-	1073	-	-	232	178	779	189	170	651
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	178	-	189	170	-
Stage 1	-	-	-	-	-	-	532	548	-	379	422	-
Stage 2	-	-	-	-	-	-	569	422	-	674	528	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2	-	-	0.2	-	-	27.2	-	-	14.2	-	-
HCM LOS	-	-	-	-	-	-	D	-	-	B	-	-



















Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	232	779	900	-	-	1073	-	-	189	651
HCM Lane V/C Ratio	0.497	0.066	0.014	-	-	0.016	-	-	0.063	0.062
HCM Control Delay (s)	34.9	9.9	9.1	-	-	8.4	-	-	25.3	10.9
HCM Lane LOS	D	A	A	-	-	A	-	-	D	B
HCM 95th %tile Q(veh)	2.5	0.2	0	-	-	0	-	-	0.2	0.2

Timings

2050 Total Traffic With Signal Control at #4

4: Vistas at Kings Point Access/Prairie Point Access & Aurora Pkwy

AM Peak Hour

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	12	412	35	16	631	106	0	11	0
Future Volume (vph)	12	412	35	16	631	106	0	11	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	5	2		1	6		8		4
Permitted Phases	2		2	6		8		4	
Detector Phase	5	2	2	1	6	8	8	4	4
Switch Phase									
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	10.0	20.0	20.0	10.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	10.0	55.0	55.0	10.0	55.0	25.0	25.0	25.0	25.0
Total Split (%)	11.1%	61.1%	61.1%	11.1%	61.1%	27.8%	27.8%	27.8%	27.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Max	Max	None	Max	Max	Max	Max	Max
Act Effect Green (s)	52.0	50.2	50.2	53.0	52.0	20.1	20.1	20.1	20.1
Actuated g/C Ratio	0.62	0.60	0.60	0.63	0.62	0.24	0.24	0.24	0.24
v/c Ratio	0.03	0.21	0.04	0.03	0.32	0.35	0.07	0.04	0.07
Control Delay	5.4	8.7	0.2	5.4	8.4	31.6	0.2	27.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.4	8.7	0.2	5.4	8.4	31.6	0.2	27.3	0.2
LOS	A	A	A	A	A	C	A	C	A
Approach Delay		8.0			8.3		22.0		6.5
Approach LOS		A			A		C		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 84

Natural Cycle: 50

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.35

Intersection Signal Delay: 9.7

Intersection LOS: A

Intersection Capacity Utilization 41.7%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4: Vistas at Kings Point Access/Prairie Point Access & Aurora Pkwy






















		
10 s	55 s	25 s
		
10 s	55 s	25 s

HCM 6th Signalized Intersection Summary

2050 Total Traffic With Signal Control at #4

4: Vistas at Kings Point Access/Prairie Point Access & Aurora Pkwy

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	412	35	16	631	4	106	0	47	11	0	37
Future Volume (veh/h)	12	412	35	16	631	4	106	0	47	11	0	37
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	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	13	448	38	17	686	4	115	0	51	12	0	40
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	497	2221	991	612	2264	13	405	0	396	395	0	396
Arrive On Green	0.00	0.63	0.63	0.00	0.63	0.63	0.25	0.00	0.25	0.25	0.00	0.25
Sat Flow, veh/h	1781	3554	1585	1781	3622	21	1367	0	1585	1354	0	1585
Grp Volume(v), veh/h	13	448	38	17	336	354	115	0	51	12	0	40
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1867	1367	0	1585	1354	0	1585
Q Serve(g_s), s	0.1	4.3	0.7	0.1	7.0	7.0	5.7	0.0	2.0	0.6	0.0	1.6
Cycle Q Clear(g_c), s	0.1	4.3	0.7	0.1	7.0	7.0	7.2	0.0	2.0	2.5	0.0	1.6
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	497	2221	991	612	1111	1167	405	0	396	395	0	396
V/C Ratio(X)	0.03	0.20	0.04	0.03	0.30	0.30	0.28	0.00	0.13	0.03	0.00	0.10
Avail Cap(c_a), veh/h	606	2221	991	721	1111	1167	405	0	396	395	0	396
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(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.4	6.4	5.8	6.9	6.9	6.9	25.9	0.0	23.2	24.2	0.0	23.1
Incr Delay (d2), s/veh	0.0	0.2	0.1	0.0	0.7	0.7	1.8	0.0	0.7	0.1	0.0	0.5
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	1.3	0.2	0.1	2.2	2.3	2.0	0.0	0.8	0.2	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.4	6.6	5.8	6.9	7.6	7.6	27.6	0.0	23.9	24.4	0.0	23.6
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h	499			707			166			52		
Approach Delay, s/veh	6.6			7.6			26.5			23.8		
Approach LOS	A			A			C			C		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	55.0		25.0	0.0	55.0		25.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.0	50.0		20.0	5.0	50.0		20.0				
Max Q Clear Time (g_c+I1), s	0.0	0.0		0.0	0.0	0.0		0.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay				10.0								
HCM 6th LOS				B								

HCM 6th Roundabout
1: Kings Point Way & Aurora Pkwy

2050 Total Traffic
PM Peak Hour

Intersection						
Intersection Delay, s/veh	8.5					
Intersection LOS	A					
Approach	EB		WB		NB	SB
Entry Lanes	2		2		1	1
Conflicting Circle Lanes	2		2		2	2
Adj Approach Flow, veh/h	1312		585		130	320
Demand Flow Rate, veh/h	1338		596		133	326
Vehicles Circulating, veh/h	74		470		1296	629
Vehicles Exiting, veh/h	881		959		116	437
Ped Vol Crossing Leg, #/h	0		0		0	0
Ped Cap Adj	1.000		1.000		1.000	1.000
Approach Delay, s/veh	8.4		7.6		12.2	9.2
Approach LOS	A		A		B	A
Lane	Left	Right	Left	Right	Left	Left
Designated Moves	LT	TR	LT	TR	LTR	LTR
Assumed Moves	LT	TR	LT	TR	LTR	LTR
RT Channelized						
Lane Util	0.470	0.530	0.470	0.530	1.000	1.000
Follow-Up Headway, s	2.667	2.535	2.667	2.535	2.535	2.535
Critical Headway, s	4.645	4.328	4.645	4.328	4.328	4.328
Entry Flow, veh/h	629	709	280	316	133	326
Cap Entry Lane, veh/h	1261	1334	876	952	472	832
Entry HV Adj Factor	0.980	0.981	0.981	0.981	0.977	0.981
Flow Entry, veh/h	617	695	275	310	130	320
Cap Entry, veh/h	1236	1308	860	934	461	816
V/C Ratio	0.499	0.532	0.320	0.332	0.282	0.392
Control Delay, s/veh	8.3	8.5	7.7	7.4	12.2	9.2
LOS	A	A	A	A	B	A
95th %tile Queue, veh	3	3	1	1	1	2

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑	↑		↑↑				↑			↑
Traffic Vol, veh/h	0	752	108	0	533	4	0	0	14	0	0	6
Future Vol, veh/h	0	752	108	0	533	4	0	0	14	0	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	200	-	-	-	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	817	117	0	579	4	0	0	15	0	0	7
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	409	-	-	292
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	592	0	0	704
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	592	-	-	704
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			11.2			10.2		
HCM LOS							B			B		
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1						
Capacity (veh/h)	592	-	-	-	-	704						
HCM Lane V/C Ratio	0.026	-	-	-	-	0.009						
HCM Control Delay (s)	11.2	-	-	-	-	10.2						
HCM Lane LOS	B	-	-	-	-	B						
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0						

HCM 6th TWSC
3: Kings Point South East Side Collector & Aurora Pkwy

2050 Total Traffic
PM Peak Hour

Intersection						
Int Delay, s/veh	5.4					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	694	72	77	431	106	32
Future Vol, veh/h	694	72	77	431	106	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	200	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	754	78	84	468	115	35

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	0	832
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	-	796
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	796
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	50.1
HCM LOS	F		













Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	170	621	-	-	796	-
HCM Lane V/C Ratio	0.678	0.056	-	-	0.105	-
HCM Control Delay (s)	61.9	11.1	-	-	10.1	-
HCM Lane LOS	F	B	-	-	B	-
HCM 95th %tile Q(veh)	4	0.2	-	-	0.4	-

HCM 6th TWSC
3: Kings Point South East Side Collector & Aurora Pkwy

2050 Total Traffic With Signal Control at #4

PM Peak Hour

Intersection						
Int Delay, s/veh	3.6					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	694	72	77	431	106	32
Future Vol, veh/h	694	72	77	431	106	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	200	200	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	754	78	84	468	115	35
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	832	0	1156	377
Stage 1	-	-	-	-	754	-
Stage 2	-	-	-	-	402	-
Critical Hdwy	-	-	4.14	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.22	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	796	-	250	621
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	880	-
Platoon blocked, %	-	-		-	1	
Mov Cap-1 Maneuver	-	-	796	-	224	621
Mov Cap-2 Maneuver	-	-	-	-	224	-
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	787	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		1.5		30.9	
HCM LOS	D					
Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	224	621	-	-	796	-
HCM Lane V/C Ratio	0.514	0.056	-	-	0.105	-
HCM Control Delay (s)	36.9	11.1	-	-	10.1	-
HCM Lane LOS	E	B	-	-	B	-
HCM 95th %tile Q(veh)	2.7	0.2	-	-	0.4	-



















Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	556	107	54	406	11	66	0	32	7	0	24
Future Vol, veh/h	34	556	107	54	406	11	66	0	32	7	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	200	200	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	37	604	116	59	441	12	72	0	35	8	0	26
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	453	0	0	720	0	0	1017	1249	302	941	1359	227
Stage 1	-	-	-	-	-	-	678	678	-	565	565	-
Stage 2	-	-	-	-	-	-	339	571	-	376	794	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1104	-	-	877	-	-	192	172	694	218	147	776
Stage 1	-	-	-	-	-	-	408	450	-	477	506	-
Stage 2	-	-	-	-	-	-	649	503	-	617	398	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1104	-	-	877	-	-	171	155	694	191	132	776
Mov Cap-2 Maneuver	-	-	-	-	-	-	171	155	-	191	132	-
Stage 1	-	-	-	-	-	-	394	435	-	461	472	-
Stage 2	-	-	-	-	-	-	585	469	-	566	384	-
Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			1.1			30.7			13.1		
HCM LOS							D			B		
Minor Lane/Major Mvmt	NBLn1 NBLn2		EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2		
Capacity (veh/h)	171	694	1104	-	-	877	-	-	191	776		
HCM Lane V/C Ratio	0.42	0.05	0.033	-	-	0.067	-	-	0.04	0.034		
HCM Control Delay (s)	40.5	10.5	8.4	-	-	9.4	-	-	24.6	9.8		
HCM Lane LOS	E	B	A	-	-	A	-	-	C	A		
HCM 95th %tile Q(veh)	1.9	0.2	0.1	-	-	0.2	-	-	0.1	0.1		

Timings

2050 Total Traffic With Signal Control at #4

4: Vistas at Kings Point Access/Prairie Point Access & Aurora Pkwy

PM Peak Hour

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	34	556	107	54	406	66	0	7	0
Future Volume (vph)	34	556	107	54	406	66	0	7	0
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	NA	Perm	NA
Protected Phases	5	2		1	6		8		4
Permitted Phases	2		2	6		8		4	
Detector Phase	5	2	2	1	6	8	8	4	4
Switch Phase									
Minimum Initial (s)	5.0	15.0	15.0	5.0	15.0	15.0	15.0	15.0	15.0
Minimum Split (s)	10.0	20.0	20.0	10.0	20.0	20.0	20.0	20.0	20.0
Total Split (s)	10.0	55.0	55.0	10.0	55.0	25.0	25.0	25.0	25.0
Total Split (%)	11.1%	61.1%	61.1%	11.1%	61.1%	27.8%	27.8%	27.8%	27.8%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	C-Max	C-Max	None	C-Max	Max	Max	Max	Max
Act Effect Green (s)	56.0	52.0	52.0	57.0	54.0	20.0	20.0	20.0	20.0
Actuated g/C Ratio	0.62	0.58	0.58	0.63	0.60	0.22	0.22	0.22	0.22
v/c Ratio	0.06	0.30	0.12	0.11	0.21	0.24	0.06	0.03	0.04
Control Delay	5.5	10.6	2.2	5.9	9.2	31.2	0.2	27.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.5	10.6	2.2	5.9	9.2	31.2	0.2	27.9	0.1
LOS	A	B	A	A	A	C	A	C	A
Approach Delay		9.1			8.8		21.1		6.6
Approach LOS		A			A		C		A

Intersection Summary

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 10 (11%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.30

Intersection Signal Delay: 9.8

Intersection LOS: A

Intersection Capacity Utilization 44.5%

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 4: Vistas at Kings Point Access/Prairie Point Access & Aurora Pkwy

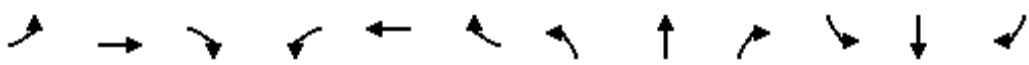











HCM 6th Signalized Intersection Summary

2050 Total Traffic With Signal Control at #4

4: Vistas at Kings Point Access/Prairie Point Access & Aurora Pkwy

PM Peak Hour










												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	556	107	54	406	11	66	0	32	7	0	24
Future Volume (veh/h)	34	556	107	54	406	11	66	0	32	7	0	24
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			
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	37	604	116	59	441	12	72	0	35	8	0	26
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	663	2369	1057	520	2356	64	370	0	352	361	0	352
Arrive On Green	0.00	0.67	0.67	0.00	0.67	0.67	0.22	0.00	0.22	0.22	0.00	0.22
Sat Flow, veh/h	1781	3554	1585	1781	3534	96	1385	0	1585	1373	0	1585
Grp Volume(v), veh/h	37	604	116	59	221	232	72	0	35	8	0	26
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1853	1385	0	1585	1373	0	1585
Q Serve(g_s), s	0.1	6.1	2.4	0.1	4.3	4.3	3.9	0.0	1.6	0.4	0.0	1.2
Cycle Q Clear(g_c), s	0.1	6.1	2.4	0.1	4.3	4.3	5.1	0.0	1.6	2.0	0.0	1.2
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	663	2369	1057	520	1185	1235	370	0	352	361	0	352
V/C Ratio(X)	0.06	0.25	0.11	0.11	0.19	0.19	0.19	0.00	0.10	0.02	0.00	0.07
Avail Cap(c_a), veh/h	760	2369	1057	617	1185	1235	370	0	352	361	0	352
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	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.5	6.0	5.4	7.6	5.7	5.7	29.7	0.0	27.8	28.6	0.0	27.7
Incr Delay (d2), s/veh	0.0	0.3	0.2	0.1	0.3	0.3	1.2	0.0	0.6	0.1	0.0	0.4
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	1.8	0.7	0.4	1.3	1.4	1.4	0.0	0.6	0.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.5	6.3	5.6	7.7	6.1	6.0	30.9	0.0	28.4	28.7	0.0	28.1
LnGrp LOS	A	A	A	A	A	A	C	A	C	C	A	C
Approach Vol, veh/h	757				512				107			
Approach Delay, s/veh	6.2				6.2				30.1			
Approach LOS	A				A				C			
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	0.0	65.0		25.0	0.0	65.0		25.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.0	50.0		20.0	5.0	50.0		20.0				
Max Q Clear Time (g_c+I1), s	0.0	0.0		0.0	0.0	0.0		0.0				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 6th Ctrl Delay	8.6											
HCM 6th LOS	A											

Queues

2050 Total Traffic With Signal Control at #4

4: Vistas at Kings Point Access/Prairie Point Access & Aurora Pkwy

AM Peak Hour










									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	13	448	38	17	690	115	51	12	40
v/c Ratio	0.03	0.21	0.04	0.03	0.32	0.35	0.07	0.04	0.07
Control Delay	5.4	8.7	0.2	5.4	8.4	31.6	0.2	27.3	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.4	8.7	0.2	5.4	8.4	31.6	0.2	27.3	0.2
Queue Length 50th (ft)	2	44	0	3	75	47	0	5	0
Queue Length 95th (ft)	8	90	2	9	142	107	0	20	0
Internal Link Dist (ft)	730			1123			365		580
Turn Bay Length (ft)	200		200	200					
Base Capacity (vph)	487	2113	979	613	2190	325	720	322	604
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.21	0.04	0.03	0.32	0.35	0.07	0.04	0.07
Intersection Summary									

Queues

2050 Total Traffic With Signal Control at #4

4: Vistas at Kings Point Access/Prairie Point Access & Aurora Pkwy

PM Peak Hour

									
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	37	604	116	59	453	72	35	8	26
v/c Ratio	0.06	0.30	0.12	0.11	0.21	0.24	0.06	0.03	0.04
Control Delay	5.5	10.6	2.2	5.9	9.2	31.2	0.2	27.9	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.5	10.6	2.2	5.9	9.2	31.2	0.2	27.9	0.1
Queue Length 50th (ft)	6	90	0	10	63	34	0	4	0
Queue Length 95th (ft)	16	123	22	22	90	72	0	15	0
Internal Link Dist (ft)		730			1123		365		580
Turn Bay Length (ft)	200		200	200					
Base Capacity (vph)	616	2045	964	516	2116	306	616	303	705
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.30	0.12	0.11	0.21	0.24	0.06	0.03	0.04
Intersection Summary									