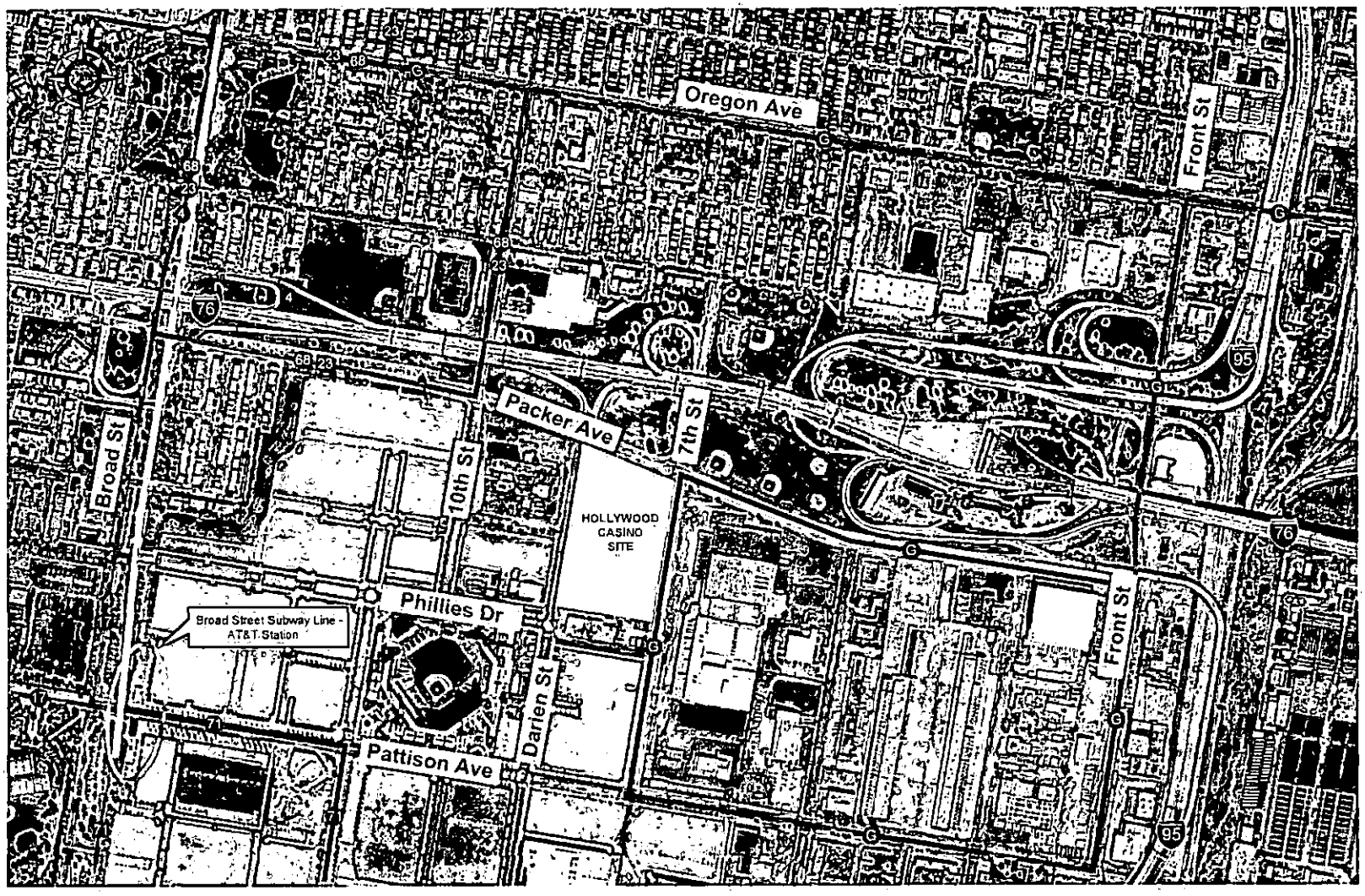


PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012
REVISED FEBRUARY 1, 2013

LEGEND

SEPTA Broad Street Line Subway

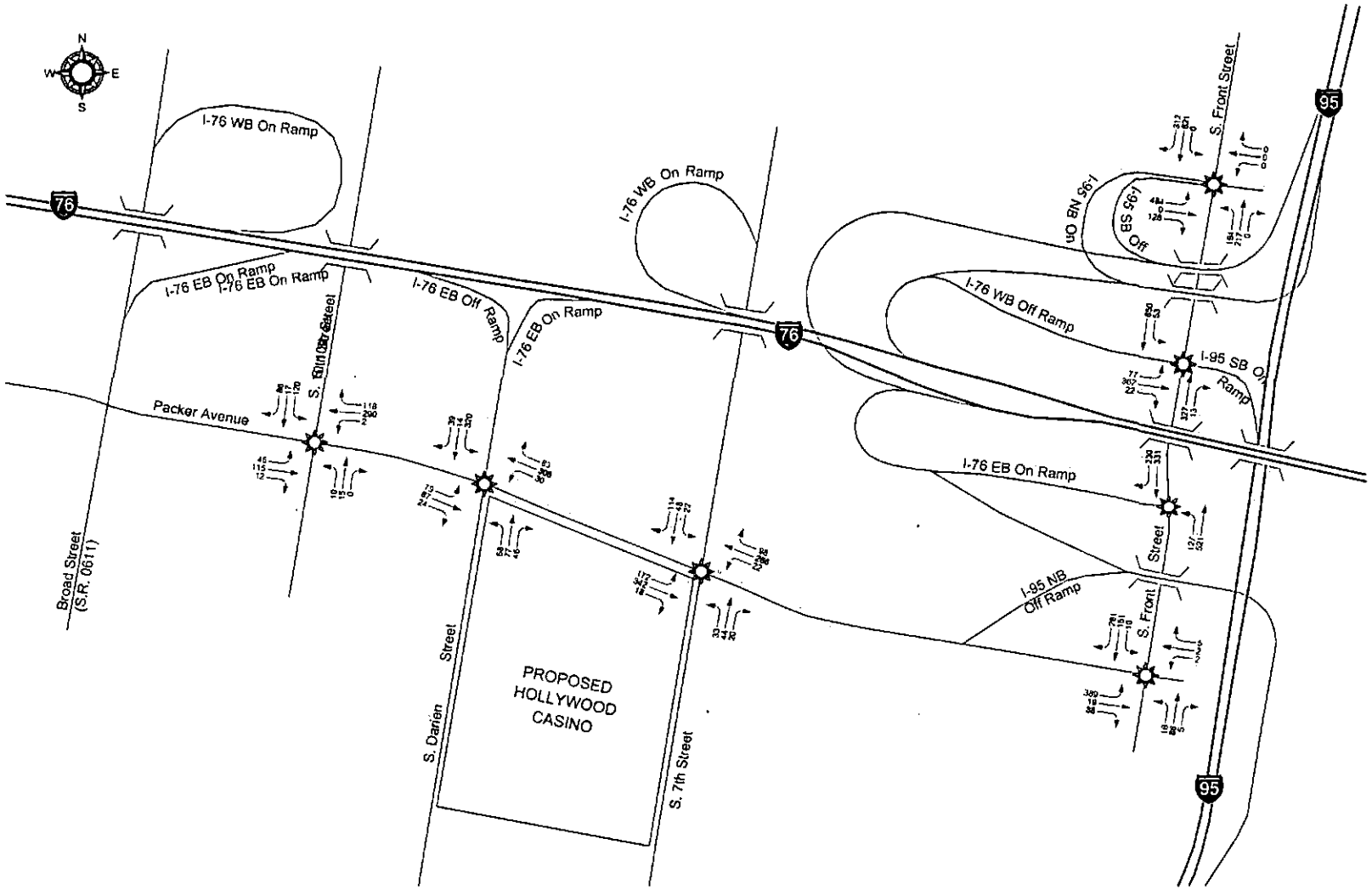
SEPTA Bus Route

FIGURE 8

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

EXISTING TRANSIT FACILITIES



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012
REVISED FEBRUARY 1, 2013

LEGEND

- Surface Street
- Interstate Highway
- Interstate Ramp
- Signalized Intersection
- Unsignalized Intersection
- 000 Peak Hour Traffic Volume
- Lane Configuration

FIGURE 9

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2012 EXISTING VOLUMES

WEEKDAY PM PEAK HOUR

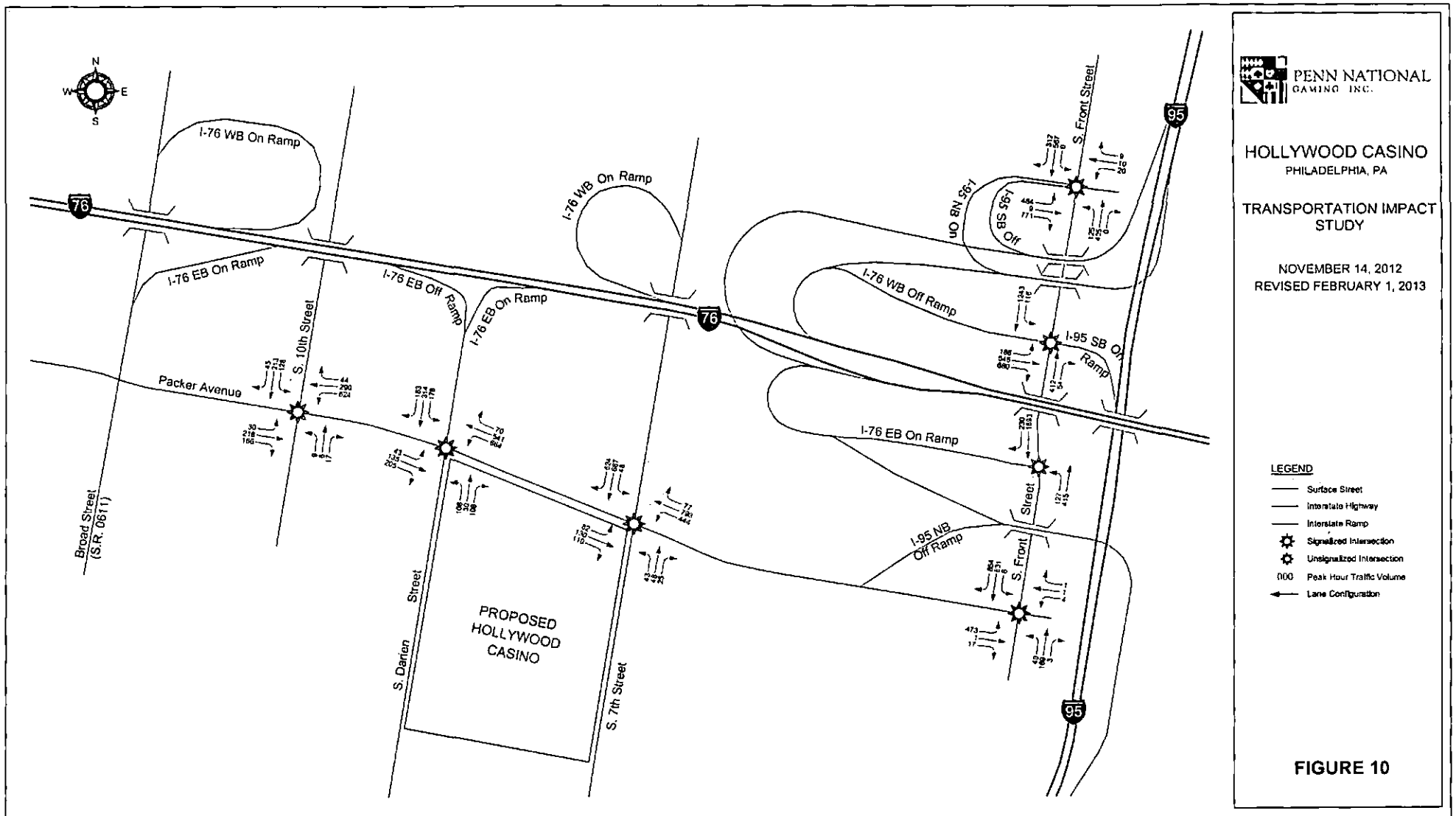


FIGURE 10

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

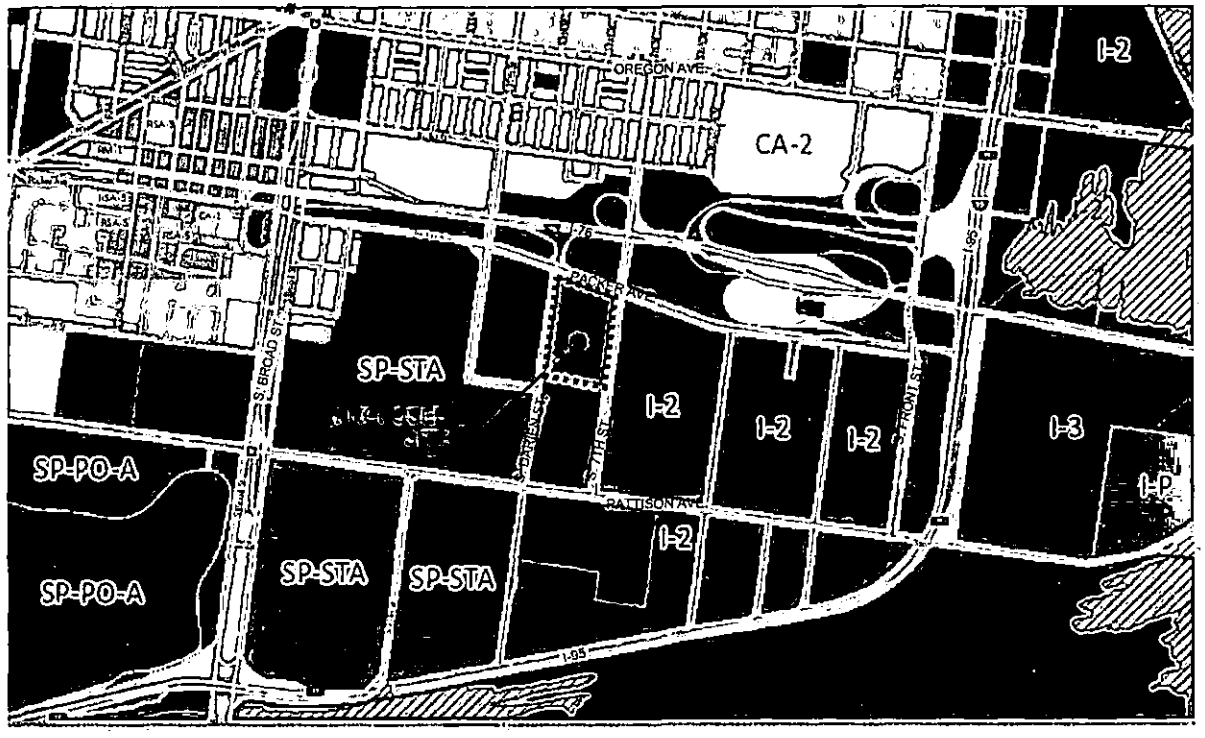
2012 EXISTING VOLUMES WEEKDAY

PRE-PHILLIES EVENT PEAK HOUR

N
W E
S

LEGEND:

- CA-1, Auto-Oriented Commercial-1
- CA-2, Auto-Oriented Commercial-2
- CMX-1, Neighborhood Commercial Mixed-Use-1
- CMX-2, Neighborhood Commercial Mixed-Use-2
- CMX-2.5, Neighborhood Commercial Mixed-Use-2.5
- CMX-3, Community Commercial Mixed-Use
- CMX-4, Center City Commercial Mixed-Use
- CMX-5, Center City Core Commercial Mixed-Use
- I-1, Light Industrial
- I-2, Medium Industrial
- I-3, Heavy Industrial
- I-P, Port Industrial
- ICMX, Industrial Commercial Mixed-Use
- IRMX, Industrial Residential Mixed-Use
- RM-1, Residential Multi-Family-1
- RM-2, Residential Multi-Family-2
- RM-3, Residential Multi-Family-3
- RM-4, Residential Multi-Family-4
- RMX-1, Residential Mixed-Use-1
- RMX-2, Residential Mixed-Use-2
- RMX-3, Residential (Center City) Mixed-Use-3
- RSA-1, Residential Single-Family Attached-1
- RSA-2, Residential Single-Family Attached-2
- RSA-3, Residential Single-Family Attached-3
- RSA-4, Residential Single-Family Attached-4
- RSA-5, Residential Single-Family Attached-5
- RTA-1, Residential Two-Family Attached-1
- RSD-1, Residential Single-Family Detached-1
- RSD-2, Residential Single-Family Detached-2
- RSD-3, Residential Single-Family Detached-3
- SP-AIR, Airport (Special Purpose)
- SP-ENT, SP-ENT, Entertainment (Special Purpose)
- SP-INS, Institutional (Special Purpose)
- SP-PO-A, Active Parks and Open Space (Special Purpose)
- SP-PO-P, Passive Parks and Open Space (Special Purpose)
- SP-STA, Sports Stadium (Special Purpose)



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012

FIGURE 11

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

EXISTING LAND ZONING

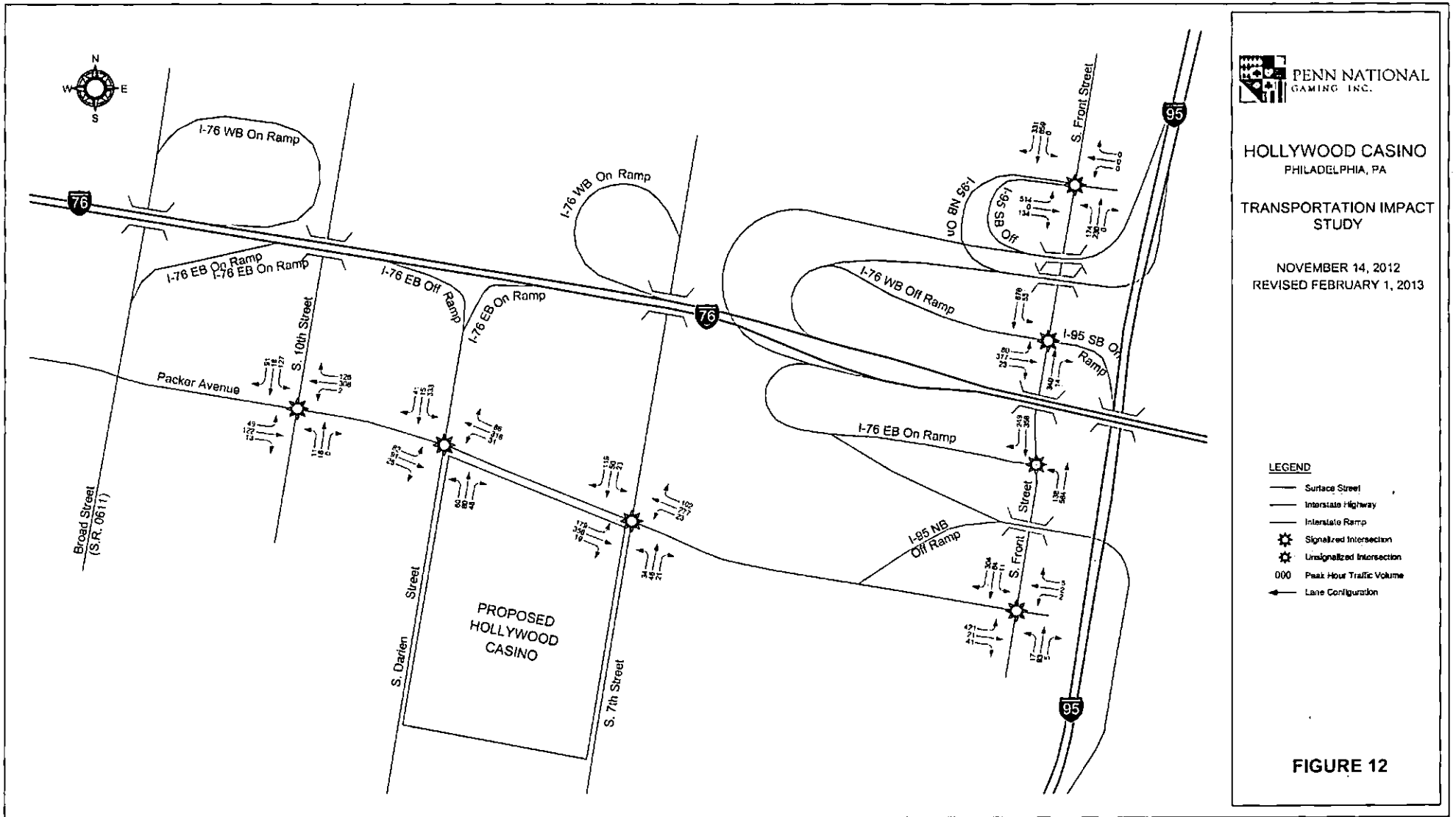


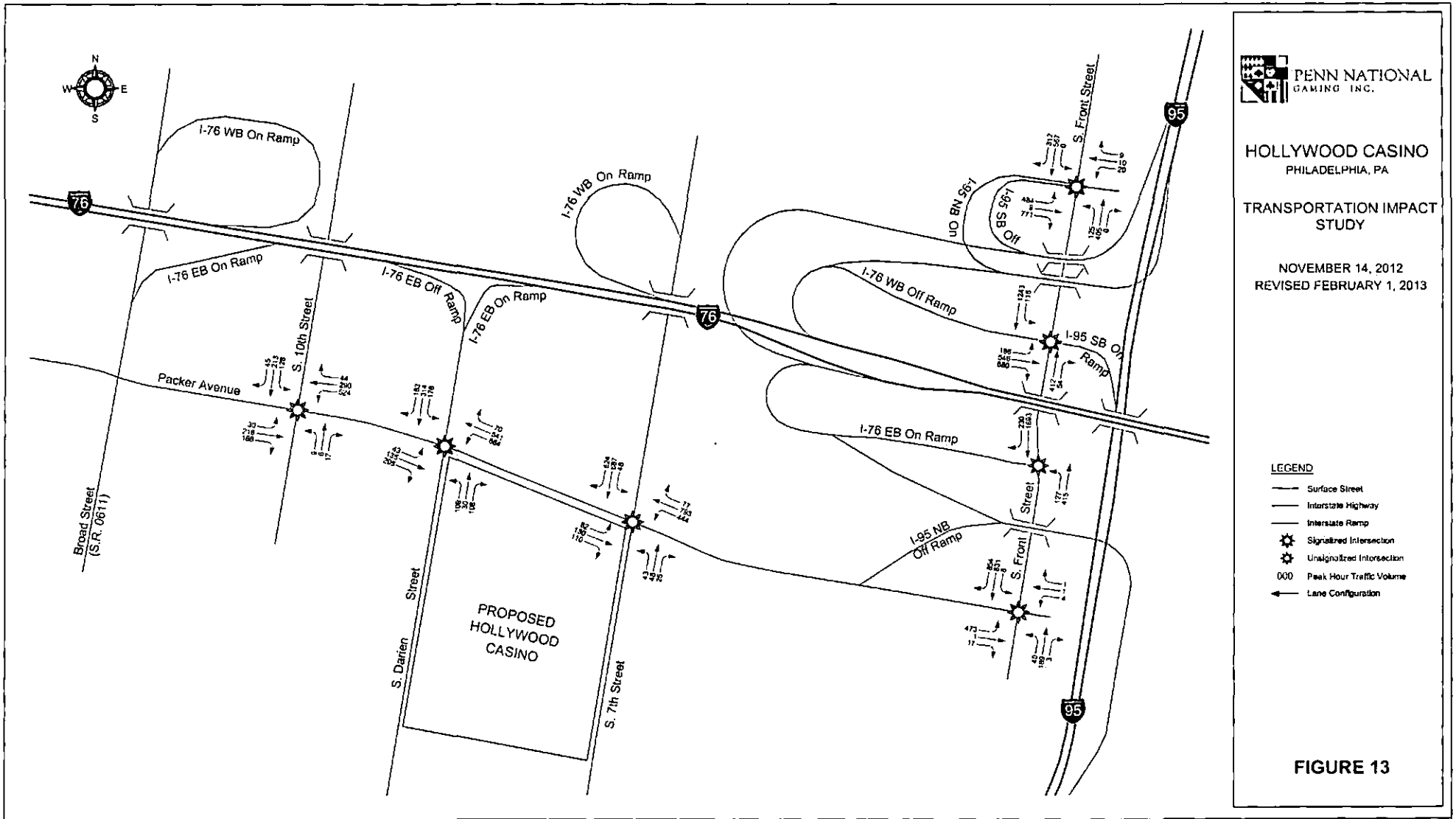
FIGURE 12

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2016 OPENING DAY NO BUILD VOLUMES

WEEKDAY PM PEAK HOUR

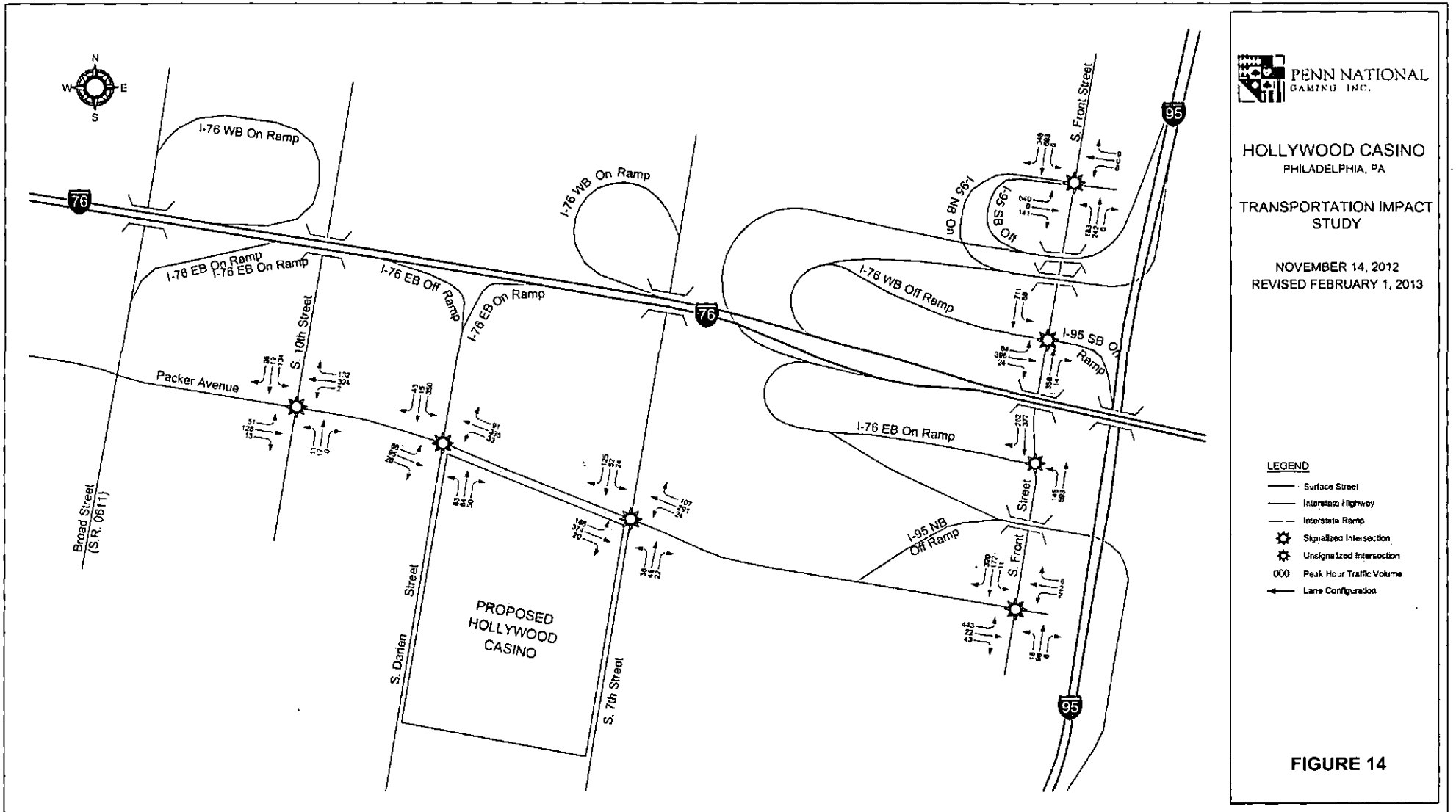


Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2016 OPENING DAY NO BUILD VOLUMES

WEEKDAY PRE-PHILLIES EVENT PEAK HOUR

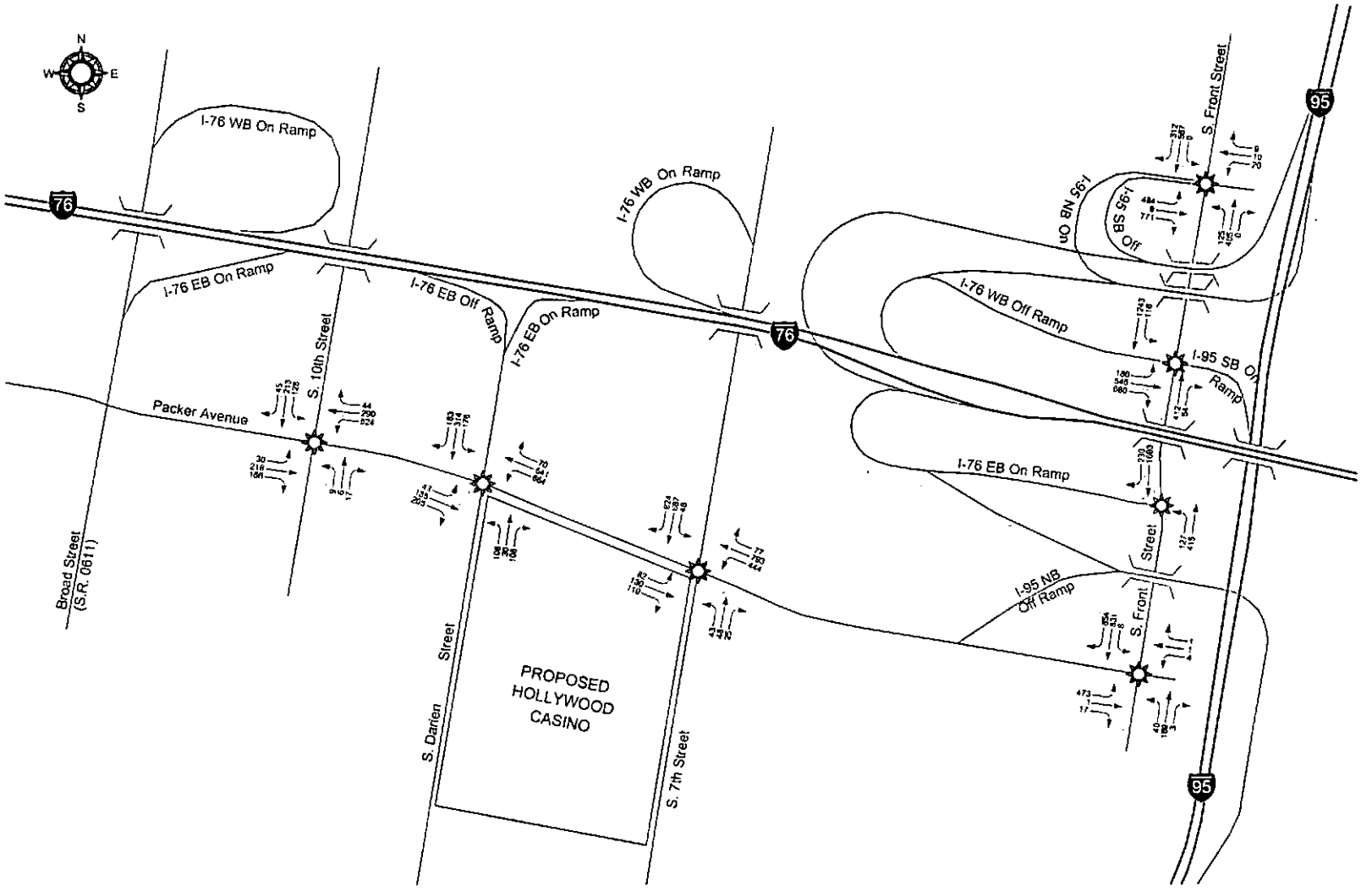


Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2021 HORIZON NO BUILD VOLUMES

WEEKDAY PM PEAK HOUR



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012
REVISED FEBRUARY 1, 2013

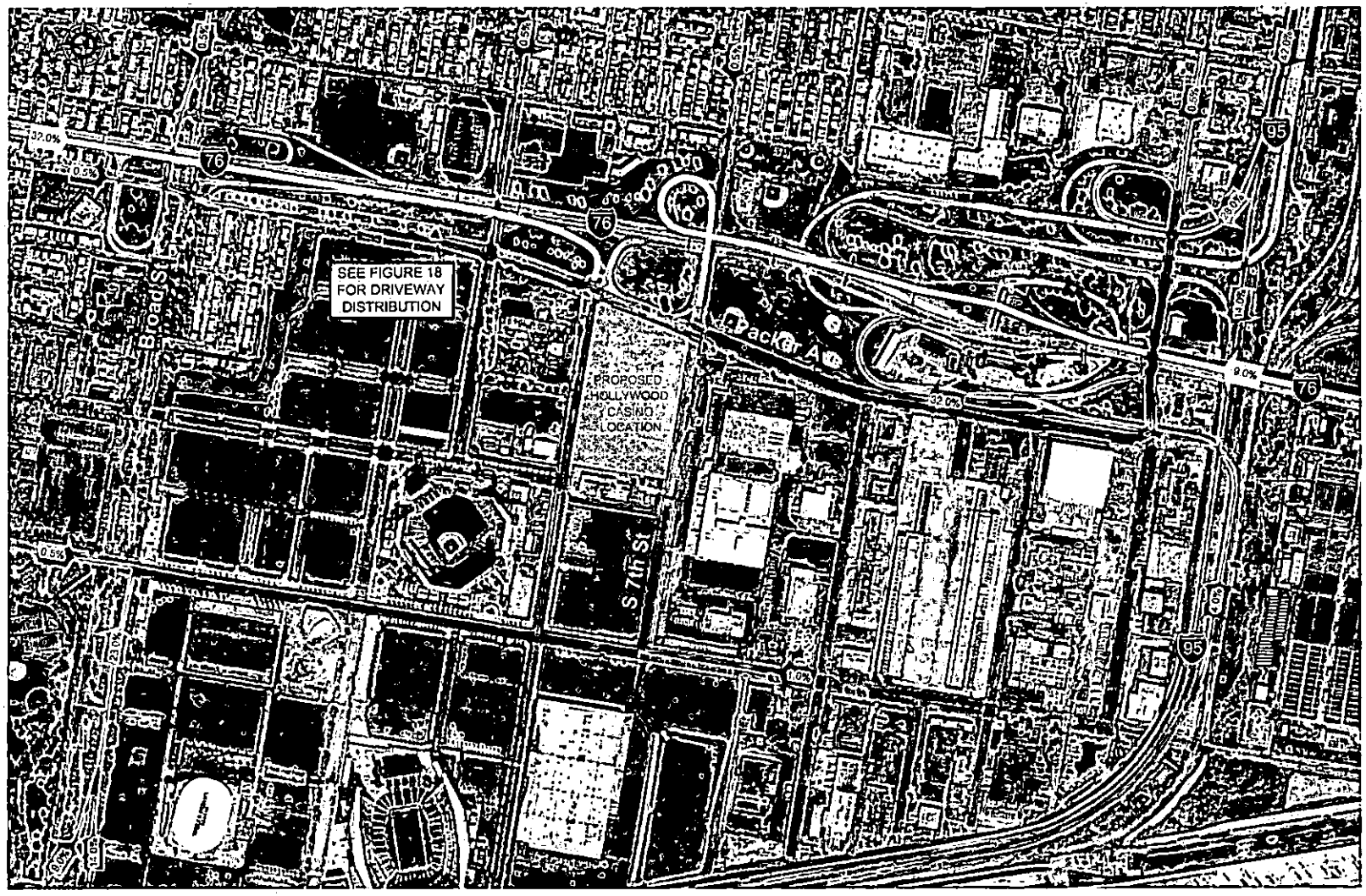
LEGEND
- Surface Street
- Interstate Highway
- Interstate Ramp
- Signalized Intersection
- Unsignalized Intersection
- 000 Peak Hour Traffic Volume
- Lane Configuration

FIGURE 15

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2021 HORIZON NO BUILD VOLUMES
WEEKDAY PRE-PHILLIES EVENT PEAK HOUR



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012

LEGEND

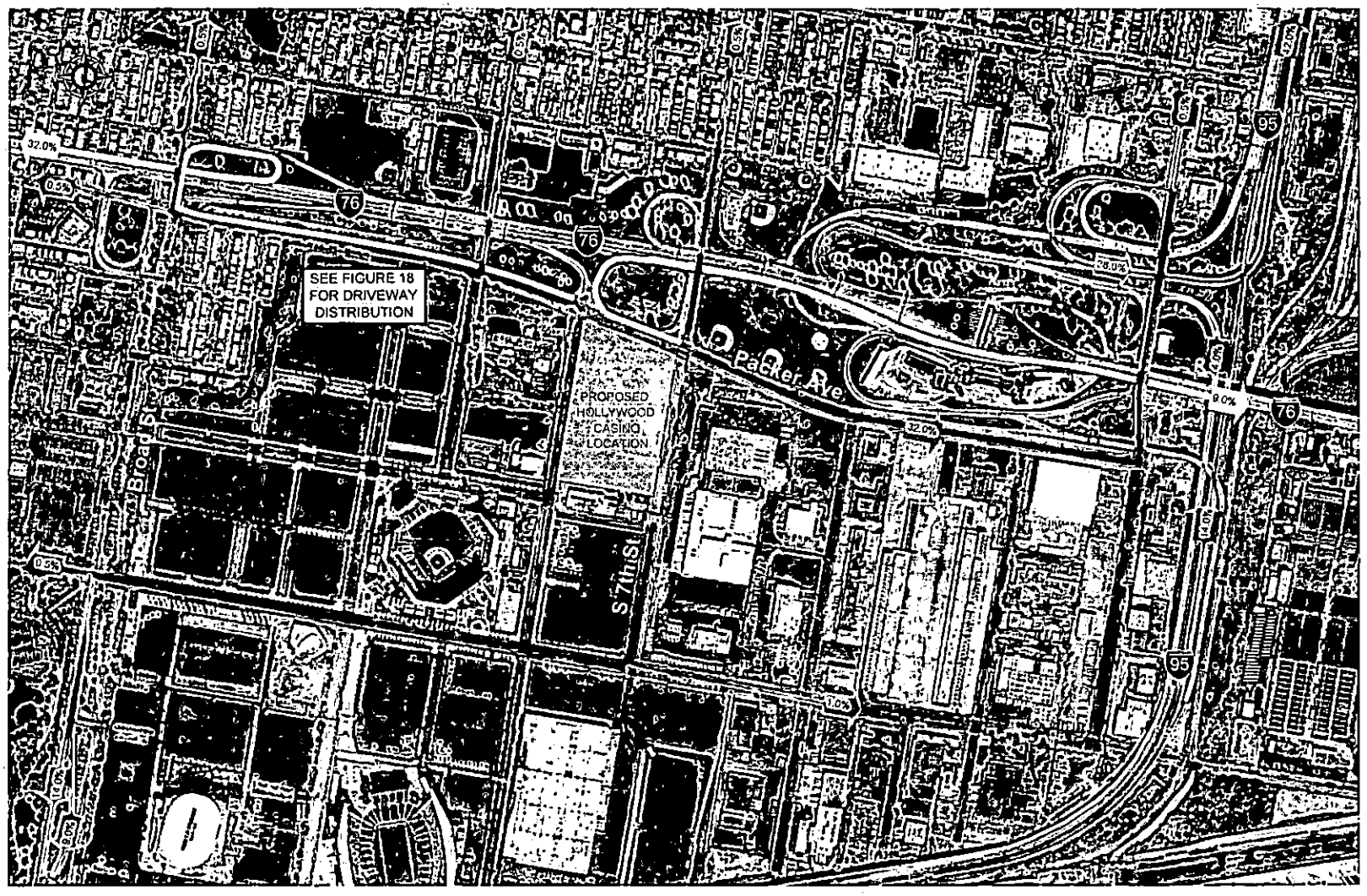
- Local Street Contribution
- From I-76
- From I-95

FIGURE 16

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

DISTRIBUTION AND ASSIGNMENT OF ENTRY TRAFFIC



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012

LEGEND

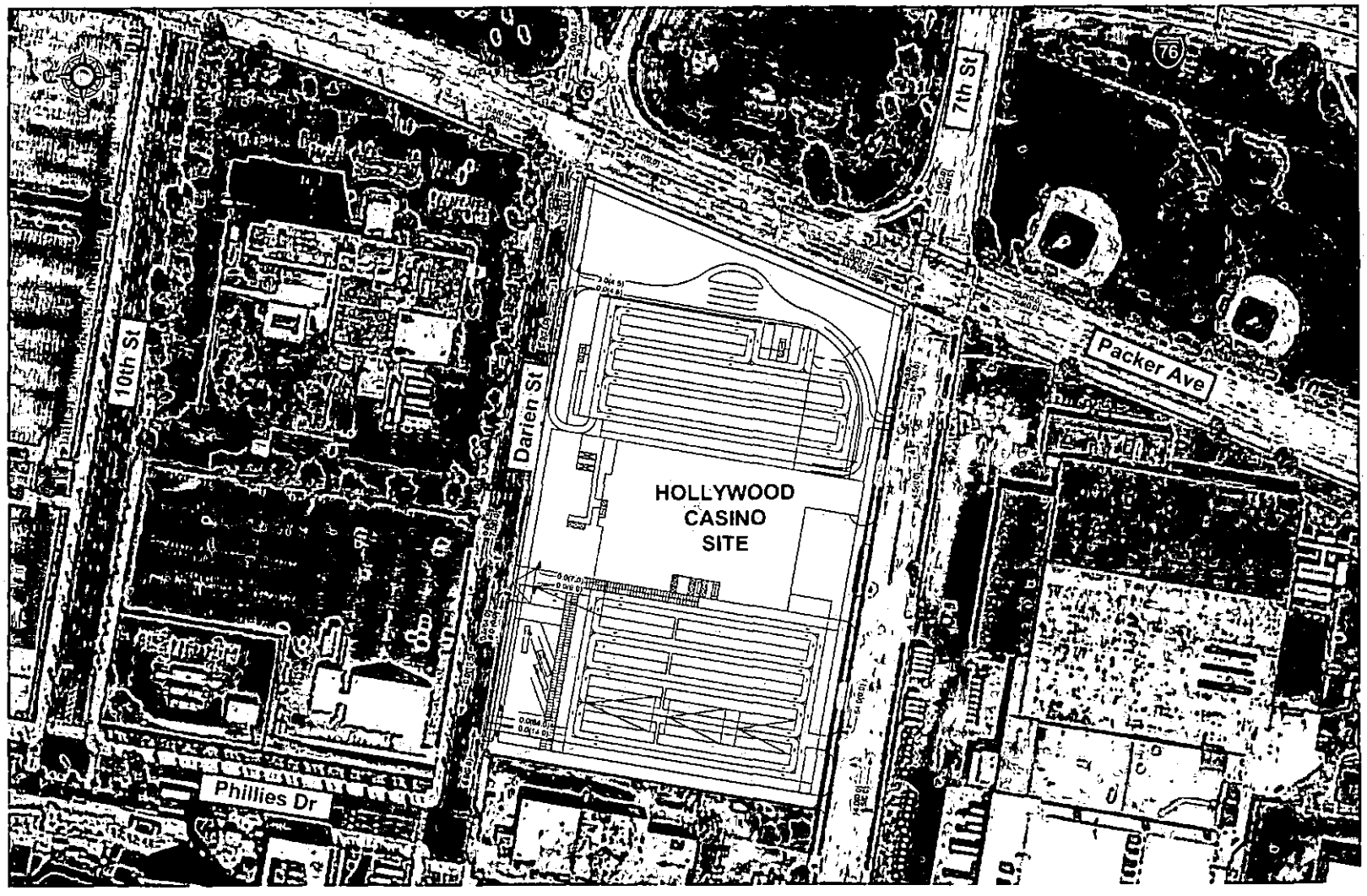
- Local Street Contribution
- To I-76
- To I-95

FIGURE 17

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

DISTRIBUTION AND ASSIGNMENT OF EXIT TRAFFIC



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012
REVISED FEBRUARY 1, 2013

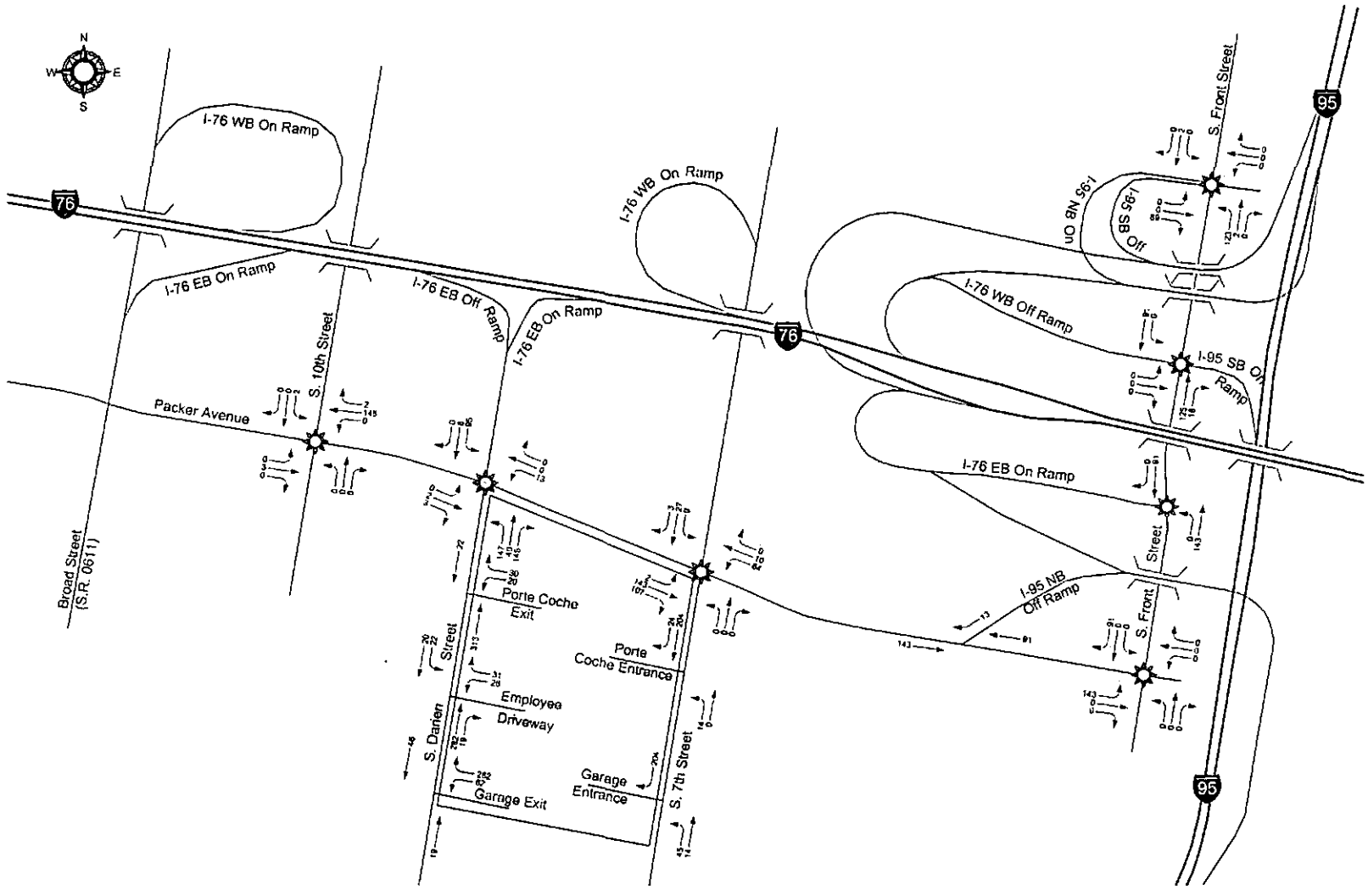
LEGEND
##(##) Entry % (Exit %)

FIGURE 18

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

DRIVEWAY DISTRIBUTION



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012
REVISED FEBRUARY 1, 2013

LEGEND

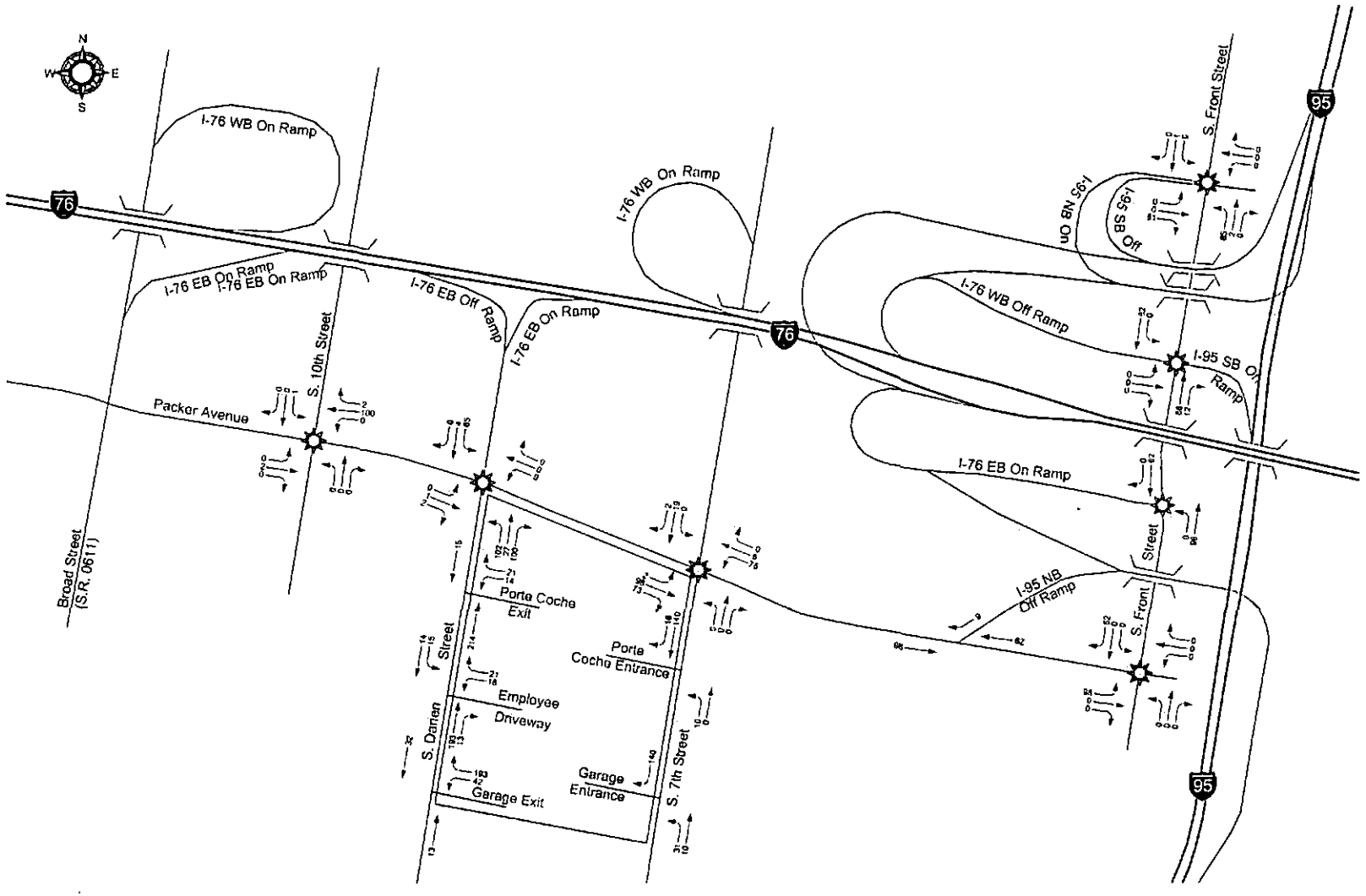
- Surface Street
- Interstate Highway
- Interstate Ramp
- Signalized Intersection
- Unsignalized Intersection
- 000 Peak Hour Traffic Volume
- Lane Configuration

FIGURE 19

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2016 AND 2021 SITE TRIPS
WEEKDAY PM PEAK HOUR



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012
REVISED FEBRUARY 1, 2013

LEGEND
- Surface Street
- Interstate Highway
- Interstate Ramp
- Signalized Intersection
- Unsignalized Intersection
- 000 Peak Hour Traffic Volume
- Lane Configuration

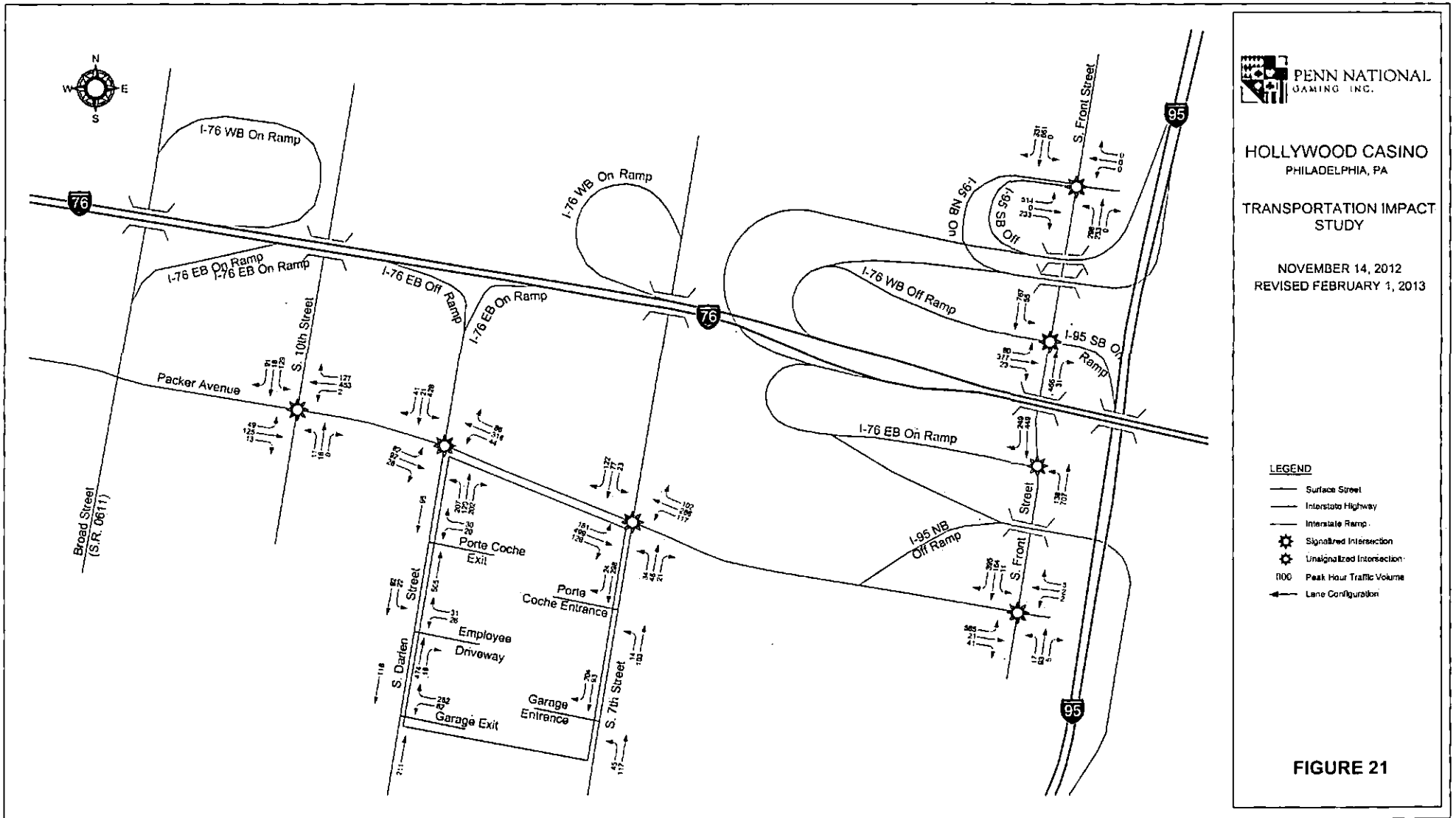
FIGURE 20

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2016 AND 2021 SITE TRIPS WEEKDAY

PRE-PHILLIES EVENT PEAK HOUR

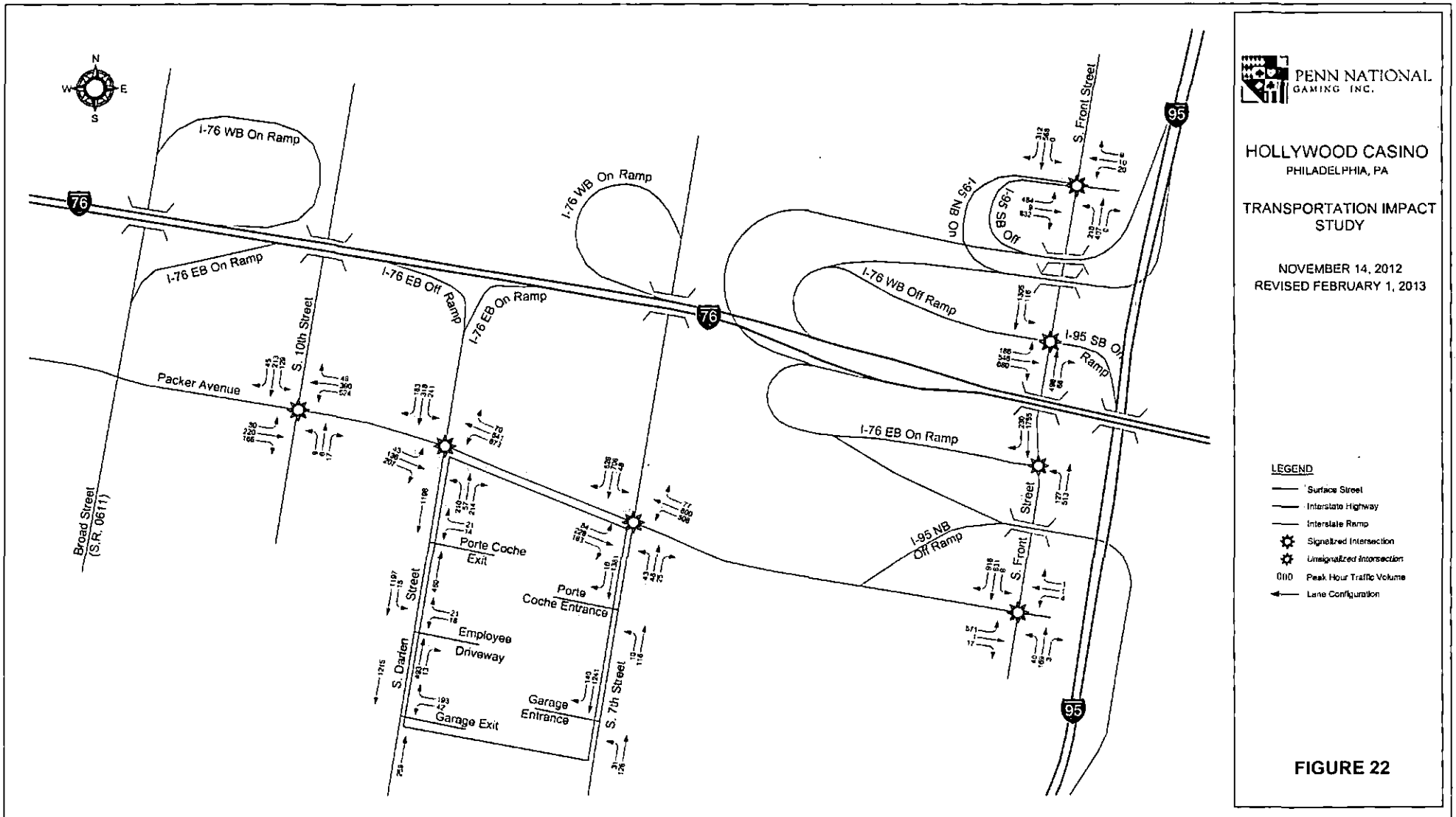


Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2016 OPENING DAY BUILD VOLUMES

WEEKDAY PM PEAK HOUR

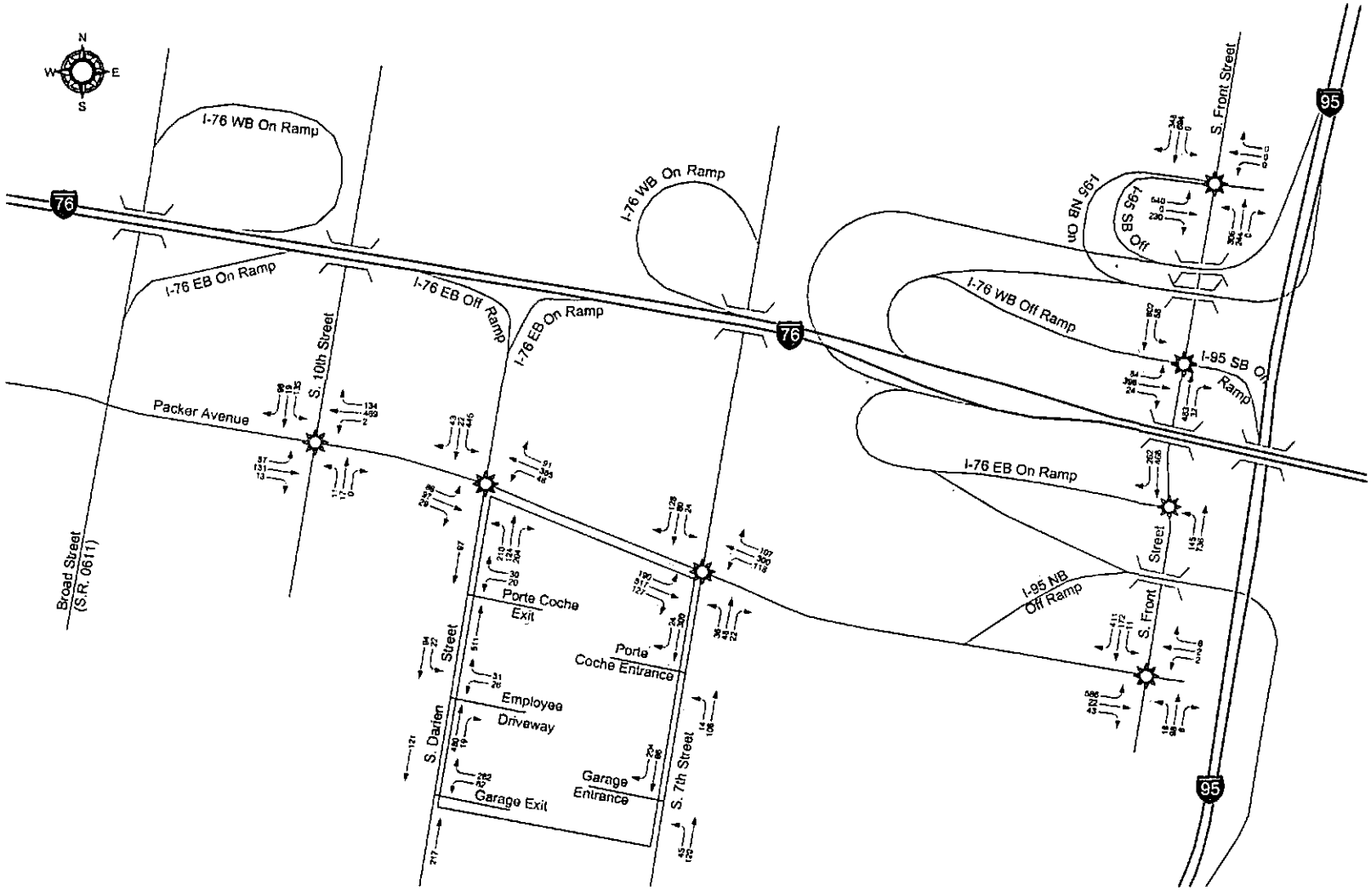


Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2016 OPENING DAY BUILD VOLUMES

WEEKDAY PRE-PHILLIES EVENT PEAK HOUR



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012
REVISED FEBRUARY 1, 2013

LEGEND
- Surface Street
- Interstate Highway
- Interstate Ramp
- Signalized Intersection
- Unsignalized Intersection
- (000) Peak Hour Traffic Volume
- Lane Configuration

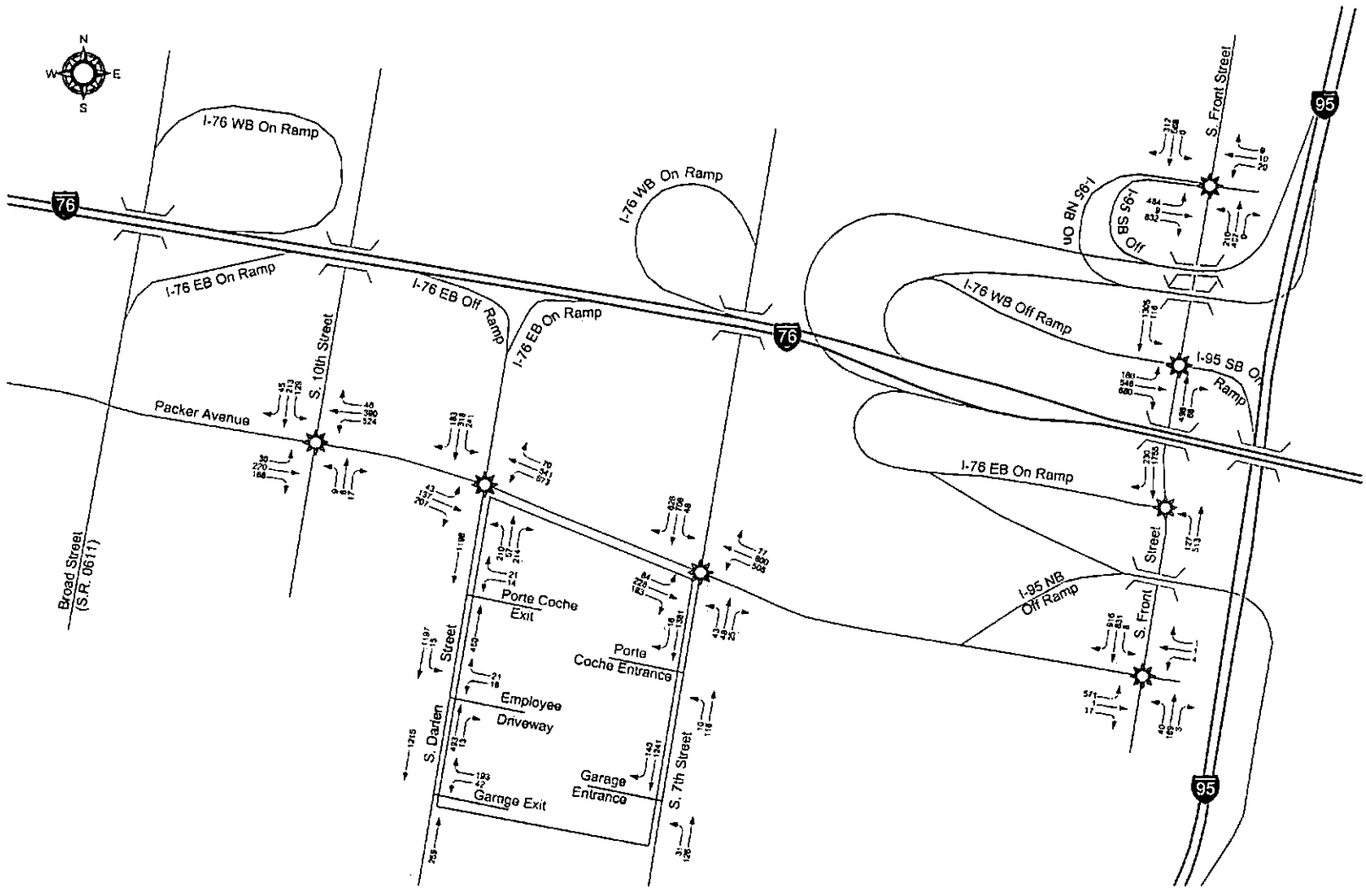
FIGURE 23

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2021 HORIZON BUILD VOLUMES

WEEKDAY PM PEAK HOUR



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012
REVISED FEBRUARY 1, 2013

LEGEND
- Surface Street
- Interstate Highway
- Interstate Ramp
- Signalized Intersection
- Unsignalized Intersection
- 000 Peak Hour Traffic Volume
- Lane Configuration

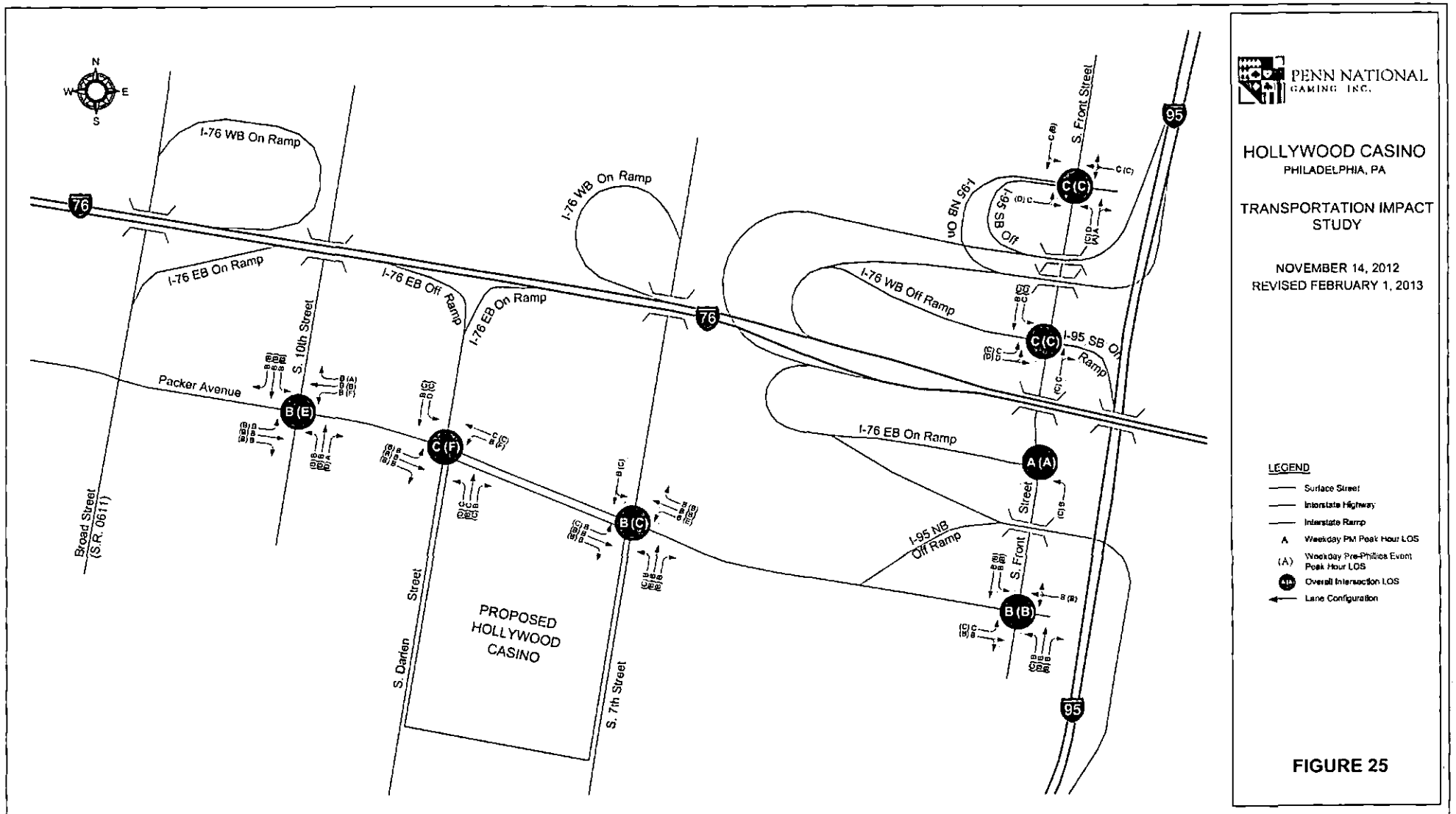
FIGURE 24

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2021 HORIZON BUILD VOLUMES

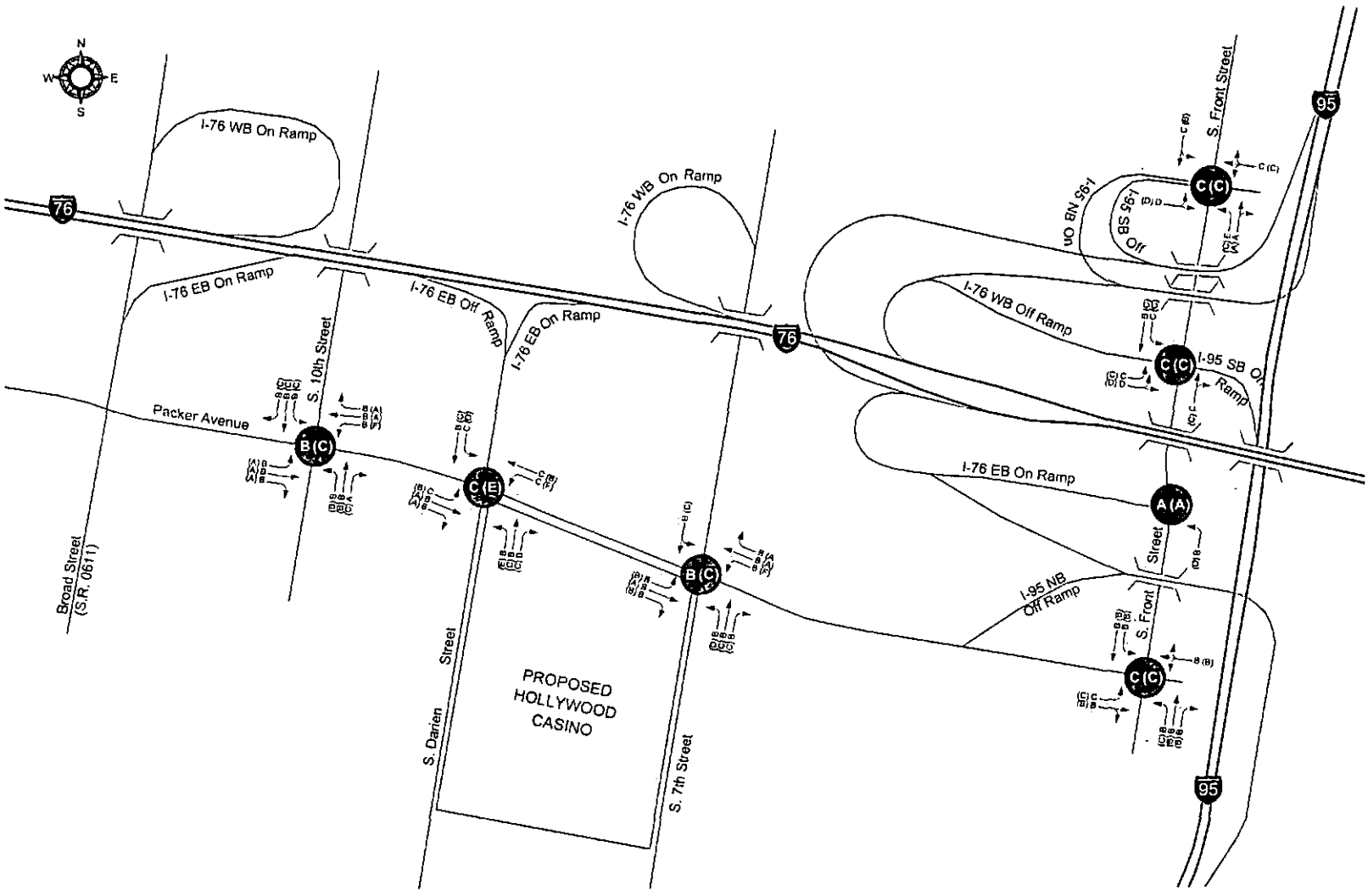
WEEKDAY PRE-PHILLIES EVENT PEAK HOUR



Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2021 HORIZON NO BUILD LEVEL OF SERVICE WEEKDAY PM PEAK HOUR



PENN NATIONAL GAMING INC.

HOLLYWOOD CASINO
PHILADELPHIA, PA

TRANSPORTATION IMPACT STUDY

NOVEMBER 14, 2012
REVISED FEBRUARY 1, 2013

LEGEND

- Surface Street
- Interstate Highway
- Interstate Ramp
- A — Weekday PM Peak Hour LOS
- (A) — Weekday Pre-Phillies Event Peak Hour LOS
- (A) — Overall Intersection LOS
- Lane Configuration

FIGURE 26

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
3001 MARKET STREET
PHILADELPHIA, PA 19104

2021 HORIZON BUILD WITH IMPROVEMENTS
LEVEL OF SERVICE
WEEKDAY PM PEAK HOUR

APPENDIX A

LEVEL OF SERVICE CRITERIA AND RESULTS TABLE

Level of Service Criteria: Automobile Mode – Signalized Intersections

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	≤1.0	>1.0
≤10	A	F
>10-20	B	F
>20-35	C	F
>35-55	D	F
>55-80	E	F
>80	F	F

Source: Exhibit 18-4 (2010 HCM)

Level of Service Criteria: Automobile Mode – Unsignalized Intersections

Control Delay (s/veh)	LOS by Volume-to-Capacity Ratio[a]	
	≤1.0	>1.0
0-10	A	F
>10-15	B	F
>15-25	C	F
>25-35	D	F
>35-50	E	F
>50	F	F

Source: Exhibit 19-1 (2010 HCM)

TABLE A
INTERSECTION LEVEL OF SERVICE RESULTS - WEEKDAY PM PEAK HOUR

Intersection	Approach (Movement)	Existing 2012 Traffic Conditions		2016 No Build Traffic Conditions		2016 Build Traffic Conditions		2016 Build Traffic Conditions with Improvements		2021 No Build Traffic Conditions		2021 Build Traffic Conditions		2021 Build Traffic Conditions with Improvements	
		PM Peak		PM Peak		PM Peak		PM Peak		PM Peak		PM Peak		PM Peak	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Packer Avenue and 10th Street	EB	B	15.3	B	15.4	B	15.8	B	13	B	15.5	B	16	B	11.8
	(EBL)	B	17.7	B	18.1	B	19.7	B	15.8	B	18.4	C	20.1	B	14.4
	(EBT)	B	14.3	B	14.3	B	14.4	B	11.9	B	14.4	B	14.4	B	10.8
	(EBR)	B	14.4	B	14.4	B	14.4	B	12	B	14.4	B	14.5	B	10.9
	WB	B	15.4	B	15.5	B	16.2	B	13.3	B	15.6	B	16.3	B	12.1
	(WBL)	B	14.7	B	14.7	B	14.7	B	12.1	B	14.8	B	14.8	B	11
	(WBT)	B	15.3	B	15.4	B	16	B	13.2	B	15.5	B	16.1	B	11.9
	(WBR)	B	15.6	B	15.7	B	16.5	B	13.6	B	15.9	B	16.6	B	12.3
	NB	B	15.7	B	15.8	B	15.8	B	16.5	B	15.8	B	15.8	B	17.7
	(NBL)	B	16.5	B	16.7	B	16.7	B	17.4	B	16.8	B	16.8	B	18.8
	(NBT)	B	15.2	B	15.2	B	15.2	B	15.9	B	15.2	B	15.2	B	17
	(NBR)	A	0	A	0	A	0	A	0	A	0	A	0	A	0
	SB	B	16.9	B	17	B	17	B	17.7	B	17.1	B	17.1	B	19.2
	(SBL)	B	17.5	B	17.7	B	17.7	B	18.4	B	17.9	B	17.9	B	20
	(SBT)	B	15.3	B	15.3	B	15.3	B	15.9	B	15.3	B	15.3	B	17.1
	(SBR)	B	16	B	16.1	B	16.1	B	16.7	B	16.2	B	16.2	B	18
	Overall	B	15.8	B	15.9	B	16.3	B	14.3	B	16	B	16.4	B	13.7
Packer Avenue and Darien Street	EB	B	11.8	B	11.8	B	11.8	B	19.1	B	11.9	B	11.9	C	21.5
	(EBL)	B	13.5	B	13.6	B	13.6	C	23.7	B	13.7	B	13.7	C	26.5
	(EBT)	B	10.5	B	10.5	B	10.6	B	15.7	B	10.6	B	10.6	B	17.8
	(EBR)	B	10.8	B	10.6	B	10.6	B	15.8	B	10.6	B	10.7	B	18
	WB	C	20.9	C	21	C	21	C	27.4	C	21.2	C	21.2	C	30.9
	(WBL)	B	19.4	B	19.4	B	19.7	C	25.6	B	19.4	B	19.8	C	28.4
	(WBT)	C	21.1	C	21.2	C	21.2	C	27.7	C	21.4	C	21.4	C	31.3
	NB	B	19.9	B	20	C	23.5	B	14.7	C	20	C	23.6	B	13
	(NBL)	C	20.3	C	20.3	C	24.9	B	15.6	C	20.4	C	25.1	B	13.8
	(NBT)	B	19.9	B	19.9	C	20.6	B	13.1	C	20	C	20.7	B	11.6
	(NBR)	B	19.4	B	19.4	C	23.7	B	14.7	B	19.5	C	23.8	B	13
	SB	C	34.7	D	38.4	F	109.7	C	34.1	D	39.2	F	129.1	C	31.3
	(SBL)	D	35.4	D	37.2	F	114.2	D	35.2	D	40.1	F	134.6	C	32.3
	(SBT)	B	18.9	B	18.9	B	19	B	12.2	B	18.9	B	19	B	10.8
	Overall	C	23.6	C	24.2	D	46.8	C	24	C	25.2	D	52.7	C	23.8
Packer Avenue and South 7th Street	EB	B	15.3	B	15.5	B	15.9	B	11.9	B	15.8	B	16.2	B	12.1
	(EBL)	B	19.2	B	19.7	C	20	B	14.8	C	20.5	C	20.8	B	15.3
	(EBT)	B	13.3	B	13.4	B	14.5	B	10.9	B	13.4	B	14.6	B	11
	(EBR)	B	13.5	B	13.6	B	15.1	B	11.4	B	13.7	B	15.2	B	11.5
	WB	B	13.4	B	13.5	B	15.8	B	11.9	B	13.6	B	15.9	B	12
	(WBL)	B	14.7	B	14.9	C	23	B	16.8	B	15.1	C	23.5	B	17.2
	(WBT)	B	13.2	B	13.3	B	13.3	B	10.2	B	13.4	B	13.4	B	10.2
	(WBR)	B	13.6	B	13.6	B	13.7	B	10.4	B	13.7	B	13.8	B	10.5
	NB	B	14.5	B	14.5	B	14.6	B	18.4	B	14.6	B	14.7	B	18.5
	(NBL)	B	15	B	15	B	15.3	B	19.3	B	15.1	B	15.4	B	19.4
	(NBT)	B	14.2	B	14.2	B	14.2	B	17.9	B	14.3	B	14.3	B	17.9
	(NBR)	B	14.3	B	14.3	B	14.3	B	18	B	14.3	B	14.3	B	18
	SB	B	14.3	B	14.3	B	14.5	B	18.2	B	14.3	B	14.5	B	18.2
	(SBL)	B	14.3	B	14.3	B	14.5	B	18.2	B	14.3	B	14.5	B	18.2
	(SBT)	B	14.3	B	14.3	B	14.5	B	18.2	B	14.3	B	14.5	B	18.2
	Overall	B	14.5	B	14.7	B	15.7	B	12.8	B	14.8	B	15.9	B	12.9
Front Street and Packer Avenue	EB	C	25.9	C	26.5	C	30.7	—	—	C	21.9	C	24.9	—	—
	(EBL)	C	26.9	C	27.6	C	31.9	—	—	C	22.4	C	25.6	—	—
	(EBTR)	B	17.3	B	17.4	B	17.4	—	—	B	17.5	B	17.5	—	—
	WB	B	16.4	B	16.4	B	16.4	—	—	B	16.4	B	16.4	—	—
	(WBLTR)	B	16.4	B	16.4	B	16.4	—	—	B	16.4	B	16.4	—	—
	NB	B	12.9	B	12.9	B	12.9	—	—	B	13	B	13	—	—
	(NBL)	B	13.7	B	13.8	B	13.8	—	—	B	13.9	B	13.9	—	—
	(NBT)	B	12.7	B	12.8	B	12.8	—	—	B	12.8	B	12.8	—	—
	(NBR)	B	12.7	B	12.8	B	12.8	—	—	B	12.8	B	12.8	—	—
	SB	B	13	B	13	B	13.1	—	—	B	13.1	B	13.1	—	—
	(SBL)	B	13	B	13.1	B	13.1	—	—	B	13.1	B	13.1	—	—
	(SBT)	B	13	B	13	B	13.1	—	—	B	13.1	B	13.1	—	—
	Overall	C	20.9	C	21.3	C	25	—	—	B	18.5	C	21	—	—
Front Stret and I-76 EB On Ramp	(NBL)	A	9.8	A	9.9	B	10.5	—	—	B	10.3	B	10.5	—	—
	Overall	A		A		A		—	—	A		A		—	—
Front Street and I-76 WB Off Ramp & I-95 SB On Ramp	EB	C	34.6	D	36	D	36	—	—	D	38.3	D	38.3	—	—
	(EBL)	C	23.6	C	23.7	C	23.7	—	—	C	23.8	C	23.8	—	—
	(EBLT)	D	36.9	D	38.6	D	38.6	—	—	D	41.4	D	41.4	—	—
	NB	C	20.4	C	20.5	C	22.3	—	—	C	20.8	C	22.6	—	—
	(NBTR)	C	20.4	C	20.5	C	22.3	—	—	C	20.8	C	22.6	—	—
	SB	B	10.6	B	10.8	B	11.7	—	—	B	11.2	B	12.1	—	—
	(SBL)	C	21.1	C	21.5	C	24.8	—	—	C	22.1	C	25.5	—	—
	(SBT)	A	9.8	A	10	B	10.8	—	—	B	10.3	B	11.2	—	—
	Overall	B	20	C	20.5	C	20.9	—	—	C	21.4	C	21.8	—	—
Front Street and I-95 Ramps	EB	C	30.2	C	31.2	C	31.2	D	39.1	C	32.1	C	32.1	D	40.8
	(EBLT)	C	30.2	C	31.2	C	31.2	D	39.1	C	32.1	C	32.1	D	40.8
	WB	C	21.1	C	21.1	C	21.1	C	25.2	C	21.1	C	21.1	C	25.2
	(WBLTR)	C	21.1	C	21.1	C	21.1	C	25.2	C	21.1	C	21.1	C	25.2
	NB	C	22	C	23.6	E	73.6	C	31.1	C	25.4	F	93.1	D	35
	(NBL)	D	41.3	D	44.8	F	125.2	D	51.7	D	48.9	F	151.2	E	59.1
	(NBTR)	A	7.5	A	7.6	A	7.6	A	4.8	A	7.6	A	7.6	A	4.8
	SB	C	25.7	C	26.9	C	26.9	C	28.5	C	28.1	C	28.8	C	29.9
	(SBLT)	C	25.7	C	26.9	C	26.9	C	28.5	C	28.1	C	28.8	C	29.9
	Overall	C	26.2	C	27.4	D	42.7	C	32.5	C	28.7	D	49.4	C	34.8
South 7th Street and Porte Cochere Entrance	(NBL)	—	—	—	—	A	8	—	—	—	—	A	8.1	—	—
	Overall	—	—	—	—	A	0.3	—	—	—	—	A	0.2	—	—
South 7th Street and Garage Entrance	(NBL)	—	—	—	—	A	8.1	—	—	—	—	A	8.1	—	—
	Overall	—	—	—	—	A	0.8	—	—	—	—	A	0.8	—	—
Darrien Street and Porte Cochere Exit	(WBLR)	—	—	—	—	B	11.7	—	—	—	—	B	11.8	—	—
	Overall	—	—	—	—	A	0.9	—	—	—	—	A	0.9	—	—
Darrien Street and Employee Driveway	(WBLR)	—	—	—	—	B	12	—	—	—	—	B	12	—	—
	(SBL)	—	—	—	—	A	8.6	—	—	—	—	B	8.6	—	—
	Overall	—	—	—	—	A	1.3	—	—	—	—	A	1.3	—	—
Darrien Street and Garage Exit	(WBLR)	—	—	—	—	B	12.5	—	—	—	—	B	13.4	—	—
	Overall	—	—	—	—	A	6.4	—	—	—	—	A	6.2	—	—

TABLE B
INTERSECTION LEVEL OF SERVICE RESULTS - WEEKDAY PRE-PHILLIES EVENT PEAK HOUR

Intersection	Approach (Movement)	Existing 2012 Traffic Conditions		2016 No Build Traffic Conditions		2016 Build Traffic Conditions		2016 Build Traffic Conditions with Improvements		2021 No Build Traffic Conditions		2021 Build Traffic Conditions		2021 Build Traffic Conditions with Improvements	
		Event Peak		Event Peak		Event Peak		Event Peak		Event Peak		Event Peak		Event Peak	
		LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay
Packer Avenue and 10th Street	EB	B	15.8	B	15.8	B	15.9	A	7.9	B	15.8	B	15.9	A	7.9
	(EBL)	B	16.6	B	16.6	B	17.6	A	8.4	B	16.6	B	17.6	A	8.4
	(EBT)	B	15.2	B	15.2	B	15.2	A	7.6	B	15.2	B	15.2	A	7.6
	(EBR)	B	16.5	B	16.5	B	16.5	A	8.3	B	16.5	B	16.5	A	8.3
	WB	F	105	F	105	F	95.8	D	39.6	F	105	F	95.8	D	39.6
	(WBL)	F	154.9	F	154.9	F	155.6	F	63.5	F	154.9	F	155.6	F	63.5
	(WBT)	B	15	B	15	B	15.4	A	7.6	B	15	B	15.4	A	7.6
	(WBR)	A	0	A	0	A	0	B	0	A	0	A	0	B	0
	NB	B	15.9	B	15.9	B	15.9	C	19.8	B	15.9	B	15.9	C	19.8
	(NBL)	B	17.5	B	17.5	B	17.5	B	21.8	B	17.5	B	17.5	B	21.8
	(NBT)	B	15.1	B	15.1	B	15.1	B	18.8	B	15.1	B	15.1	B	18.8
	(NBR)	B	15.3	B	15.3	B	15.3	C	19	B	15.3	B	15.3	C	19
	SB	B	16.9	B	16.9	B	16.9	C	21.2	B	16.9	B	16.9	C	21.2
	(SBL)	B	17.5	B	17.5	B	17.5	C	21.9	B	17.5	B	17.5	C	21.9
	(SBT)	B	16.6	B	16.6	B	16.6	C	20.7	B	16.6	B	16.6	C	20.7
	(SBR)	B	16.6	B	16.6	B	16.6	C	20.7	B	16.6	B	16.6	C	20.7
	Overall	E	61.3	E	61.3	E	58.8	C	27.8	E	61.3	E	58.8	C	27.8
Packer Avenue and Darien Stret	EB	B	12.2	B	12.2	B	12.2	A	7.6	B	12.2	B	12.2	A	7.6
	(EBL)	B	14	B	14	B	14	B	12.9	B	14	B	14	B	12.9
	(EBT)	B	10.8	B	10.8	B	10.8	A	6.3	B	10.8	B	10.8	A	6.3
	(EBR)	B	12.7	B	12.7	B	12.7	A	7.4	B	12.7	B	12.7	A	7.4
	WB	F	183.3	F	183.3	F	190.3	F	128.2	F	183.3	F	190.3	F	128.2
	(WBL)	F	313	F	313	F	324	F	219.2	F	313	F	324	F	219.2
	(WBT)	C	24	C	24	C	24	B	15.1	C	24	C	24	B	15.1
	NB	C	27.2	C	27.2	D	37.7	D	47.3	C	27.2	D	37.7	D	47.3
	(NBL)	D	35	D	35	E	55.2	E	71.9	D	35	E	55.2	E	71.9
	(NBT)	B	19.2	B	19.2	B	19.6	C	22.8	B	19.2	B	19.6	C	22.8
	(NBR)	C	21	C	21.1	C	24.7	C	28.7	C	21	C	24.7	C	28.7
	SB	C	25.3	C	25.3	C	28.6	C	33.5	C	25.3	C	28.6	C	33.5
	(SBL)	C	25.2	C	25.2	C	32.1	D	37.8	C	25.2	C	32.1	D	37.8
	(SBT)	C	25.3	C	25.3	C	26	C	30.2	C	25.3	C	26	C	30.2
	Overall	F	105.8	F	105.8	F	102.7	E	76	F	105.8	F	102.7	E	76
Packer Avenue and South 7th Street	EB	B	15.8	B	15.8	B	15.7	A	9.2	B	15.8	B	15.7	A	9.2
	(EBL)	C	23.3	C	23.3	C	23.6	B	13.1	C	23.3	C	23.6	B	13.1
	(EBT)	B	12.8	B	12.8	B	13.4	A	8	B	12.8	B	13.4	A	8
	(EBR)	B	13.5	B	13.5	B	14.8	B	8.8	B	13.5	B	14.8	B	8.8
	WB	C	30.1	C	30.1	F	82.6	D	44.9	C	30.1	F	82.6	D	44.9
	(WBL)	E	56.9	E	56.9	F	193.7	F	104.2	E	56.9	F	193.7	F	104.2
	(WBT)	B	15.7	B	15.7	B	15.7	A	9.2	B	15.7	B	15.7	A	9.2
	(WBR)	B	16.5	B	16.5	B	16.5	A	9.7	B	16.5	B	16.5	A	9.7
	NB	B	19.2	B	19.2	B	19.4	C	28.1	B	19.2	B	19.4	C	28.1
	(NBL)	C	27.1	C	27.1	C	27.6	D	40.4	C	27.1	C	27.6	D	40.4
	(NBT)	B	14.3	B	14.3	B	14.3	C	20.5	B	14.3	B	14.3	C	20.5
	(NBR)	B	14.4	B	14.4	B	14.4	C	20.6	B	14.4	B	14.4	C	20.6
	SB	C	21.4	C	21.4	C	21.7	C	31.4	C	21.4	C	21.7	C	31.4
	(SBL)	C	20.9	C	20.9	C	21.7	C	30.7	C	20.9	C	21.7	C	30.7
	(SBT)	C	22	C	22	C	22.4	C	32.3	C	22	C	22.4	C	32.3
	Overall	C	25.2	C	25.2	D	51	C	31.4	C	25.2	D	51	C	31.4
Front Street and Packer Avenue	EB	C	21.4	C	21.4	C	23.6	—	—	C	21.4	C	23.6	—	—
	(EBL)	C	21.5	C	21.5	C	23.7	—	—	C	21.5	C	23.7	—	—
	(EBLT)	B	15.2	B	15.2	B	15.2	—	—	B	15.2	B	15.2	—	—
	WB	B	15.2	B	15.2	B	15.2	—	—	B	15.2	B	15.2	—	—
	(WBLTR)	B	15.2	B	15.2	B	15.2	—	—	B	15.2	B	15.2	—	—
	NB	B	15.5	B	15.5	B	15.5	—	—	B	15.5	B	15.5	—	—
	(NBL)	C	28.5	C	28.5	C	28.6	—	—	C	28.5	C	28.6	—	—
	(NBT)	B	12.5	B	12.5	B	12.5	—	—	B	12.5	B	12.5	—	—
	(NBR)	B	12.5	B	12.5	B	12.5	—	—	B	12.5	B	12.5	—	—
	SB	B	19.7	B	19.7	B	19	—	—	B	19.7	B	19	—	—
	(SBL)	B	12.8	B	12.8	B	12.8	—	—	B	12.8	B	12.8	—	—
	(SBT)	B	19.8	B	19.8	B	19.9	—	—	B	19.8	B	19.9	—	—
	Overall	B	19.7	B	19.7	C	20.6	—	—	B	19.7	C	20.6	—	—
Front Stret and I-76 EB On Ramp	(NBL)	C	23.9	C	23.9	D	26.2	—	—	C	23.9	D	26.2	—	—
	Overall	A		A	0	A		—	—	A	0	A	0	—	—
Front Street and I-76 WB Off Ramp & I-95 SB On Ramp	EB	D	38.1	D	38.1	D	38.1	—	—	D	38.1	D	38.1	—	—
	(EBL)	C	21.6	C	21.6	C	21.6	—	—	C	21.6	C	21.6	—	—
	(EBLT)	D	43.7	D	43.7	D	43.7	—	—	D	43.7	D	43.7	—	—
	NB	C	25.5	C	25.5	C	27.4	—	—	C	25.5	C	27.4	—	—
	(NBTR)	C	25.5	C	25.5	C	27.4	—	—	C	25.5	C	27.4	—	—
	SB	C	27.7	C	27.7	C	35.5	—	—	C	27.7	C	35.5	—	—
	(SBL)	C	27.7	C	27.7	D	30.8	—	—	C	27.7	D	30.8	—	—
	(SBT)	C	27.7	C	27.7	C	35.9	—	—	C	27.7	C	35.9	—	—
	Overall	C	30.4	C	30.4	C	34.7	—	—	C	30.4	C	34.7	—	—
Front Street and I-95 Ramps	EB	D	36.5	D	36.5	D	36.5	—	—	D	36.5	D	36.5	—	—
	(EBLT)	D	36.5	D	36.5	D	36.5	—	—	D	36.5	D	36.5	—	—
	WB	C	24.6	C	24.6	C	24.6	—	—	C	24.6	C	24.6	—	—
	(WBLTR)	C	24.6	C	24.6	C	24.6	—	—	C	24.6	C	24.6	—	—
	NB	A	8.7	A	8.7	B	12.4	—	—	A	8.7	B	12.4	—	—
	(NBL)	C	21.8	C	21.8	C	27.3	—	—	C	21.8	C	27.3	—	—
	(NBTR)	A	4.6	A	4.6	A	4.7	—	—	A	4.6	A	4.7	—	—
	SB	B	17.4	B	17.4	B	17.4	—	—	B	17.4	B	17.4	—	—
	(SBLT)	B	17.4	B	17.4	B	17.4	—	—	B	17.4	B	17.4	—	—
	Overall	C	20.5	C	20.5	C	21.2	—	—	C	20.5	C	21.2	—	—
South 7th Street and Porte Cochere Entance	(NBL)	—	—	—	—	B	13.7	—	—	—	—	B	13.7	—	—
	Overall	—	—	—	—	A	0.1	—	—	—	—	A	0.1	—	—
South 7th Street and Garage Entrance	(NBL)	—	—	—	—	B	14.1	—	—	—	—	B	14.1	—	—
	Overall	—	—	—	—	A	0.3	—	—	—	—	A	0.3	—	—
Darrien Street and Porte Cochere Ext	(WBLR)	—	—	—	—	B	13.2	—	—	—	—	B	13.2	—	—
	Overall	—	—	—	—	A	0.3	—	—	—	—	A	0.3	—	—
Darrien Street and Employee Driveway	(WBLR)	—	—	—	—	B	13.8	—	—	—	—	B	13.8	—	—
	(SBL)	—	—	—	—	A	8.5	—	—	—	—	A	8.5	—	—
	Overall	—	—	—	—	A	0.4	—	—	—	—	A	0.4	—	—
Darrien Street and Garage Ext	(WBLR)	—	—	—	—	B	13.1	—	—	—	—	B	13.1	—	—
	Overall	—	—	—	—	A	1.8	—	—	—	—	A	1.8	—	—

APPENDIX B

QUEUE ANALYSIS RESULTS TABLE

TABLE C
QUEUE ANALYSIS RESULTS - WEEKDAY PM PEAK HOUR

Intersection	Movement	2012 Existing Traffic Conditions	2016 No Build Traffic Conditions	2016 Build Traffic Conditions	2016 Build with Improvements Traffic Conditions	2021 No Build Traffic Conditions	2021 Build Traffic Conditions	2021 Build with Improvements Traffic Conditions	Storage length
		PM Peak	PM Peak	PM Peak	PM Peak	PM Peak	PM Peak	PM Peak	
Packer Avenue and South 10th Street	EBL	69	70	70	68	74	70	64	150
	EBT	81	82	83	85	80	86	81	+1,000
	EBTR	34	44	45	43	36	39	42	+1,000
	WBL	8	6	6	7	5	9	12	250
	WBT	70	65	112	106	75	106	108	590
	WBTR	40	44	50	102	42	46	44	590
	NBL	22	22	19	42	21	26	23	150
	NBT	28	31	28	23	38	29	29	+1,000
	NBR	0	0	0	29	0	0	0	+1,000
	SBL	99	93	112	109	100	104	95	250
	SBT	33	27	28	29	27	28	28	870
	SBTR	64	64	61	67	77	71	66	870
Packer Avenue and I-76 Eastbound Ramps - Darien Street	EBL	65	65	77	104	71	101	87	200
	EBT	47	46	54	55	48	57	52	590
	EBTR	38	39	43	46	41	54	54	590
	WBL	34	41	46	56	37	59	59	225
	WBT	133	121	121	150	126	165	160	560
	NBL	68	66	144	139	63	117	123	150
	NBT	75	88	141	96	86	105	94	+1,000
	NBR	52	49	88	79	58	77	79	+1,000
	SBLT	309	326	342	319	315	336	332	560
	SBR	111	126	130	133	132	116	136	300
Packer Avenue and South 7th Street	EBL	145	150	139	120	150	151	138	200
	EBT	92	93	115	101	96	117	113	560
	EBTR	88	95	135	114	79	145	152	560
	WBL	40	29	141	112	34	147	115	275
	WBT	76	71	75	67	82	64	58	+1,000
	WBTR	69	76	80	68	78	68	68	+1,000
	NBL	42	43	45	38	52	39	40	225
	NBT	38	35	40	43	10	38	39	+1,000
	NBTR	50	48	53	43	56	49	51	+1,000
	SBLT	64	62	62	62	62	69	63	+1,000
	SBT	12	21	51	52	16	67	68	+1,000
	SBR	0	0	0	0	0	0	0	+1,000
Front Street and Packer Avenue	EBL	220	252	279	289	222	315	279	+1,000
	EBTR	75	90	79	77	75	75	75	+1,000
	WBLTR	26	23	27	27	18	31	33	---
	NBL	30	32	33	37	35	39	33	100
	NBT	83	86	89	87	88	97	94	+1,000
	NBTR	19	24	37	23	55	49	23	+1,000
	SBL	25	34	24	28	32	23	18	100
	SBT	111	110	102	103	107	127	128	980
	SBTR	183	197	169	169	217	200	190	980
Front Street and I-76 Eastbound On Ramp	NBL	116	125	137	136	129	152	134	180
	SBTR	53	73	104	84	58	116	99	590
Front Street and I-76 Westbound Off Ramp - I-95 Southbound On Ramp	EBL	145	138	107	110	102	130	136	+1,000
	EBLT	297	312	299	287	318	309	317	+1,000
	EBR	58	105	117	76	126	121	99	240
	NBT	221	227	290	261	257	320	313	980
	NBTR	181	197	259	244	212	264	281	980
	SBL	89	97	51	60	101	55	57	240
	SBT	276	261	335	385	357	328	181	540
Front Street and I-95 Ramps	EBL	313	313	377	283	301	370	382	760
	EBLTR	281	271	365	257	254	359	376	760
	WBLTR	14	9	13	10	7	8	0	---
	NBL	206	218	229	214	237	249	243	250
	NBT	95	83	91	48	73	89	45	540
	NBTR	96	102	47	42	1	51	54	540
	SBT	328	341	348	341	353	342	343	650
	SBTR	364	377	376	368	380	365	358	650
South 7th Street and Porte Cochere Entance	NBLT	---	---	19	15	---	20	23	---
South 7th Street and Garage Entrance	NBLT	---	---	34	37	---	37	34	---
Darrien Street and Porte Cochere Exit	WBLR	---	---	52	55	---	55	50	---
Darrien Street and Employee Driveway	WBLR	---	---	59	50	---	53	50	---
	SBL	---	---	29	24	---	33	31	---
Darrien Street and Garage Exit	WBLR	---	---	110	109	---	121	121	---

TABLE D
QUEUE ANALYSIS RESULTS - WEEKDAY PRE-PHILLIES EVENT PEAK HOUR

Intersection	Movement	2012 Existing Traffic Conditions	2016 No Build Traffic Conditions	2016 Build Traffic Conditions	2016 Build with Improvements Traffic Conditions	2021 No Build Traffic Conditions	2021 Build Traffic Conditions	2021 Build with Improvements Traffic Conditions	Storage length
		Event Peak	Event Peak	Event Peak	Event Peak	Event Peak	Event Peak	Event Peak	
Packer Avenue and South 10th Street	EBL	54	54	50	42	54	50	42	150
	EBT	79	79	87	51	79	87	51	+1,000
	EBTR	153	153	157	104	153	157	104	+1,000
	WBL	366	366	359	206	366	359	206	250
	WBT	596	596	513	43	596	513	43	590
	WBTR	371	371	187	11	371	187	11	590
	NBL	29	29	33	32	29	33	32	150
	NBT	18	18	18	23	18	18	23	+1,000
	NBR	26	26	28	33	26	28	33	+1,000
	SBL	95	95	107	146	95	107	146	250
	SBT	105	105	102	150	105	102	150	870
	SBTR	88	88	81	140	88	81	140	870
Packer Avenue and I-76 Eastbound Ramps - Darien Street	EBL	50	50	46	45	50	46	45	200
	EBT	54	54	49	50	54	49	50	590
	EBTR	101	101	112	105	101	112	105	590
	WBL	326	326	325	365	326	325	365	225
	WBT	613	613	651	750	613	651	750	560
	NBL	146	146	183	190	146	183	190	150
	NBT	67	67	245	305	67	245	305	+1,000
	NBR	66	66	96	96	66	96	96	+1,000
	SBLT	368	368	336	358	368	336	358	560
	SBR	232	232	331	281	232	331	281	300
Packer Avenue and South 7th Street	EBL	91	91	97	120	91	97	120	200
	EBT	55	55	68	85	55	68	85	560
	EBTR	87	87	124	164	87	124	164	560
	WBL	466	466	434	471	466	434	471	275
	WBT	1563	1563	1453	1017	1563	1453	1017	+1,000
	WBTR	775	775	736	276	775	736	276	+1,000
	NBL	73	73	70	88	73	70	88	225
	NBT	46	46	38	41	46	38	41	+1,000
	NBTR	54	54	53	53	54	53	53	+1,000
	SBLT	745	745	752	563	745	752	563	+1,000
	SBT	643	643	694	825	643	694	825	+1,000
	SBR	649	649	644	804	649	644	804	+1,000
Front Street and Packer Avenue	EBL	258	258	291	319	258	291	319	+1,000
	EBTR	40	40	38	43	40	38	43	+1,000
	WBLTR	13	13	15	22	13	15	22	---
	NBL	72	72	86	88	72	86	88	100
	NBT	119	119	108	114	119	108	114	+1,000
	NBTR	43	43	35	38	43	35	38	+1,000
	SBL	29	29	27	40	29	27	40	100
	SBT	273	273	252	276	273	252	276	980
	SBTR	398	398	392	390	398	392	390	980
Front Street and I-76 Eastbound On Ramp	NBL	136	136	145	187	136	145	187	180
	SBTR	409	409	511	221	409	511	221	590
Front Street and I-76 Westbound Off Ramp - I-95 Southbound On Ramp	EBL	205	205	124	183	205	124	183	+1,000
	EBLT	317	317	330	316	317	330	316	+1,000
	EBR	226	226	111	231	226	111	231	240
	NBT	169	169	308	200	169	308	200	980
	NBTR	139	139	258	173	139	258	173	980
	SBL	115	115	40	131	115	40	131	240
	SBT	356	356	285	362	356	285	362	540
Front Street and I-95 Ramps	EBL	468	468	395	481	468	395	481	760
	EBLTR	478	478	515	176	478	515	176	760
	WBLTR	57	57	60	56	57	60	56	---
	NBL	138	138	159	208	138	159	208	250
	NBT	68	68	53	62	68	53	62	540
	NBTR	55	55	48	56	55	48	56	540
	SBT	278	278	288	266	278	288	266	650
	SBTR	304	304	326	289	304	326	289	650
South 7th Street and Porte Cochere Entance	NBLT	---	---	28	37	---	28	37	---
South 7th Street and Garage Entrance	NBLT	---	---	47	50	---	47	50	---
Darrien Street and Porte Cochere Exit	WBLR	---	---	53	105	---	53	105	---
Darrien Street and Employee Driveway	WBLR	---	---	46	53	---	46	53	---
	SBL	---	---	23	22	---	23	22	---
Darrien Street and Garage Exit	WBLR	---	---	99	107	---	99	107	---

APPENDIX C

TRAFFIC COUNT DATA

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: PHILADELPHIA
MUNICIPALITY: PHILADELPHIA

INTERSECTION: North-South Street & East-West Street
STREETS: DARIEN ST / I-76 EB OFF RAMP PACKER AVE

DATE: 8/3/10
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 43AM

AM INTERVAL COUNTS

STARTING TIME	DARIEN ST / I-76 EB OFF RAMP 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	PACKER AVE 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
6:00 6:15	2	1	2	5	38	6	3	47	2	10	2	14	10	24	20	54	52	68	120
6:15 6:30	0	2	1	3	52	7	4	63	7	19	3	29	4	24	25	53	66	82	148
6:30 6:45	3	2	2	7	48	11	4	63	9	12	2	23	18	45	9	72	70	95	165
6:45 7:00	6	3	6	15	66	10	3	79	9	18	5	32	16	26	10	52	94	84	178
7:00 7:15	7	2	5	14	49	8	1	58	8	16	2	26	9	39	14	62	72	88	160
7:15 7:30	6	0	5	11	59	5	3	67	13	31	6	50	16	40	15	71	78	121	199
7:30 7:45	10	2	2	14	71	10	2	83	15	33	4	52	14	38	12	64	97	116	213
7:45 8:00	8	5	1	14	89	10	11	110	16	28	3	47	12	44	14	70	124	117	241
8:00 8:15	9	1	6	16	60	8	6	74	6	28	5	39	11	49	9	69	90	108	198
8:15 8:30	12	1	12	25	65	17	4	86	8	21	6	35	8	44	5	57	111	92	203
8:30 8:45	8	1	6	15	50	12	1	63	14	22	3	39	19	35	14	68	78	107	185
8:45 9:00	14	4	6	24	60	21	0	81	15	21	4	40	13	53	15	81	105	121	226
9:00 9:15	15	2	12	29	42	17	5	64	8	29	3	40	23	31	11	65	93	105	198
9:15 9:30	13	3	9	25	48	11	3	62	7	20	5	32	21	37	18	76	87	108	195
TOTALS	113	29	75	217	797	153	50	1000	137	308	53	498	194	529	191	914	1217	1412	2629

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: PHILADELPHIA
MUNICIPALITY: PHILADELPHIA

INTERSECTION: North-South Street & East-West Street
STREETS: DARIEN ST / I-76 EB OFF RAMP PACKER AVE

DATE: 8/3/10
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 43AM

AM INTERVAL COUNTS

STARTING TIME	DARIEN ST / I-76 EB OFF RAMP 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	PACKER AVE 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
11:00 11:15	16	8	2	26	58	20	2	80	17	22	10	49	7	56	5	68	106	117	223
11:15 11:30	13	3	5	21	76	9	10	95	9	22	15	46	18	53	13	84	116	130	246
11:30 11:45	10	6	2	18	75	8	6	89	11	29	10	50	26	48	11	85	107	135	242
11:45 12:00	20	6	4	30	67	12	6	85	9	18	11	38	24	46	17	87	115	125	240
12:00 12:15	13	7	13	33	54	13	3	70	7	31	12	50	18	64	17	99	103	149	252
12:15 12:30	14	15	5	34	55	11	10	76	10	39	16	65	17	76	20	113	110	178	288
12:30 12:45	17	9	6	32	77	6	11	94	19	43	9	71	20	66	18	104	126	175	301
12:45 1:00	12	7	7	26	63	9	7	79	18	37	11	66	15	71	22	108	105	174	279
TOTALS	115	61	44	220	525	88	55	668	100	241	94	435	145	480	123	748	888	1183	2071
P.H. am																			
P.H. pm																			

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: PHILADELPHIA
MUNICIPALITY: PHILADELPHIA

INTERSECTION: North-South Street & East-West Street
STREETS: DARIEN ST / I-76 EB OFF RAMP PACKER AVE

DATE: 8/3/10
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 43PM

PM INTERVAL COUNTS

STARTING TIME	DARIEN ST / I-76 EB OFF RAMP 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	PACKER AVE 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
3:00 3:15	17	20	9	46	87	9	24	120	13	21	6	40	10	64	24	98	166	138	304
3:15 3:30	44	12	7	63	65	10	10	85	19	50	6	75	5	47	11	63	148	138	286
3:30 3:45	10	12	9	31	103	7	10	120	16	16	8	40	11	57	14	82	151	122	273
3:45 4:00	10	15	9	34	77	3	7	87	17	12	7	36	15	71	21	107	121	143	264
4:00 4:15	17	16	14	47	94	3	7	104	17	21	5	43	6	79	23	108	151	151	302
4:15 4:30	11	19	13	43	75	2	10	87	20	25	8	53	12	86	22	120	130	173	303
4:30 4:45	27	27	12	66	74	3	10	87	22	17	7	46	8	75	20	103	153	149	302
4:45 5:00	13	15	7	35	77	6	12	95	20	24	4	48	4	66	18	88	130	136	266
5:00 5:15	17	22	10	49	81	2	7	90	23	21	1	45	8	68	19	95	139	140	279
5:15 5:30	15	10	8	33	72	2	4	78	23	12	6	41	13	73	17	103	111	144	255
5:30 5:45	14	15	4	33	64	2	5	71	11	15	1	27	8	67	15	90	104	117	221
5:45 6:00	14	17	5	36	62	10	2	74	19	27	9	55	13	56	11	80	110	135	245
6:00 6:15	19	12	3	34	75	4	8	87	17	10	7	34	12	51	16	79	121	113	234
6:15 6:30	10	7	4	21	57	5	9	71	12	14	6	32	8	51	13	72	92	104	196
6:30 6:45	4	5	2	11	58	4	14	76	10	15	5	30	9	43	14	66	87	96	183
6:45 7:00	5	5	3	13	49	5	11	65	7	11	4	22	7	37	12	56	78	78	156
TOTALS	247	229	119	595	1170	77	150	1397	266	311	90	667	149	991	270	1410	1992	2077	4069

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: PHILADELPHIA
MUNICIPALITY: PHILADELPHIA

INTERSECTION: North-South Street & East-West Street
STREETS: FRONT ST I-76 EB OFF RAMP / I-95 SB ON RAMP

DATE: 8/10/10
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 45AM

AM INTERVAL COUNTS

	FRONT ST								I-76 EB OFF RAMP / I-95 SB ON RAMP										
STARTING	1-NORTHBOUND				2-SOUTHBOUND				3-EASTBOUND				4-WESTBOUND				N-S	E-W	
TIME	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	L	S	R	TOTAL	TOTAL	TOTAL	TOTAL
6:00 6:15	0	22	3	25	15	63	0	78	31	129	18	178	0	0	0	0	103	178	281
6:15 6:30	0	88	10	98	23	119	0	142	36	258	22	316	0	0	0	0	240	316	556
6:30 6:45	0	32	2	34	12	101	0	113	27	144	16	187	0	0	0	0	147	187	334
6:45 7:00	0	52	4	56	13	86	0	99	10	129	6	145	0	0	0	0	155	145	300
7:00 7:15	0	49	3	52	25	140	0	165	42	212	27	281	0	0	0	0	217	281	498
7:15 7:30	0	100	11	111	47	205	0	252	31	279	10	320	0	0	0	0	363	320	683
7:30 7:45	0	134	22	156	30	142	0	172	30	240	15	285	0	0	0	0	328	285	613
7:45 8:00	0	80	13	93	18	115	0	133	35	171	15	221	0	0	0	0	226	221	447
8:00 8:15	0	99	14	113	34	135	0	169	29	212	4	245	0	0	0	0	282	245	527
8:15 8:30	0	115	27	142	47	165	0	212	46	228	6	280	0	0	0	0	354	280	634
8:30 8:45	0	89	15	104	30	140	0	170	32	211	13	256	0	0	0	0	274	256	530
8:45 9:00	0	95	19	114	18	173	0	191	27	155	12	194	0	0	0	0	305	194	499
9:00 9:15	0	123	21	144	39	185	0	224	37	175	8	220	0	0	0	0	368	220	588
9:15 9:30	0	96	11	107	25	103	0	128	21	110	5	136	0	0	0	0	235	136	371
TOTALS	0	1174	175	1349	376	1872	0	2248	434	2653	177	3264	0	0	0	0	3597	3264	6861

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: PHILADELPHIA
MUNICIPALITY: PHILADELPHIA

INTERSECTION: North-South Street & East-West Street
STREETS: FRONT ST I-76 EB OFF RAMP / I-95 SB ON RAMP

DATE: 8/10/10
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 45AM

AM INTERVAL COUNTS

STARTING TIME	FRONT ST 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	I-76 EB OFF RAMP / I-95 SB ON RAMP 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
11:00 11:15	0	127	9	136	11	163	0	174	31	89	1	121	0	0	0	0	310	121	431
11:15 11:30	0	148	14	162	13	187	0	200	48	91	3	142	0	0	0	0	362	142	504
11:30 11:45	0	130	6	136	20	135	0	155	27	138	7	172	0	0	0	0	291	172	463
11:45 12:00	0	101	7	108	29	150	0	179	23	82	6	111	0	0	0	0	287	111	398
12:00 12:15	0	85	5	90	28	151	0	179	37	94	4	135	0	0	0	0	269	135	404
12:15 12:30	0	128	1	129	7	150	0	157	32	103	1	136	0	0	0	0	286	136	422
12:30 12:45	0	145	7	152	18	182	0	200	48	172	11	231	0	0	0	0	352	231	583
12:45 1:00	0	178	10	188	24	218	0	242	35	151	2	188	0	0	0	0	430	188	618
TOTALS	0	1042	59	1101	150	1336	0	1486	281	920	35	1236	0	0	0	0	2587	1236	3823
P.H. am																			
P.H. pm																			

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: PHILADELPHIA
MUNICIPALITY: PHILADELPHIA

INTERSECTION: North-South Street & East-West Street
STREETS: FRONT ST I-76 EB OFF RAMP / I-95 SB ON RAMP

DATE: 8/10/10
DAY: TUESDAY
WEATHER: FAIR

FILE NUMBER: 45PM

PM INTERVAL COUNTS

STARTING TIME	FRONT ST 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	I-76 EB OFF RAMP / I-95 SB ON RAMP 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
3:00 3:15	0	28	0	28	11	53	0	64	12	36	3	51	0	0	0	0	92	51	143
3:15 3:30	0	186	3	189	38	270	0	308	26	117	11	154	0	0	0	0	497	154	651
3:30 3:45	0	37	1	38	4	134	0	138	17	48	7	72	0	0	0	0	176	72	248
3:45 4:00	0	66	9	75	11	118	0	129	13	108	8	129	0	0	0	0	204	129	333
4:00 4:15	0	33	2	35	0	105	0	105	5	37	6	48	0	0	0	0	140	48	188
4:15 4:30	0	114	2	116	14	179	0	193	24	104	10	138	0	0	0	0	309	138	447
4:30 4:45	0	75	2	77	8	150	0	158	24	126	3	153	0	0	0	0	235	153	388
4:45 5:00	0	105	7	112	31	216	0	247	24	95	3	122	0	0	0	0	359	122	481
5:00 5:15	0	121	3	124	20	181	0	201	22	153	29	204	0	0	0	0	325	204	529
5:15 5:30	0	199	2	201	46	392	0	438	33	273	29	335	0	0	0	0	639	335	974
5:30 5:45	0	69	2	71	18	240	0	258	30	143	14	187	0	0	0	0	329	187	516
5:45 6:00	0	119	2	121	27	444	0	471	23	169	78	270	0	0	0	0	592	270	862
6:00 6:15	0	158	1	159	25	595	0	620	23	213	73	309	0	0	0	0	779	309	1088
6:15 6:30	0	127	8	135	34	705	0	739	25	189	99	313	0	0	0	0	874	313	1187
6:30 6:45	0	89	1	90	22	419	0	441	21	139	63	223	0	0	0	0	531	223	754
6:45 7:00	0	101	3	104	31	427	0	458	11	101	41	153	0	0	0	0	562	153	715
TOTALS	0	1627	48	1675	340	4628	0	4968	333	2051	477	2861	0	0	0	0	6643	2861	9504

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL MAM INTERVAL COUNTS

COUNTY: PHILADELPHIA
MUNICIPALITY: PHILADELPHIA

INTERSECTION: North-South Street & East-West Street
STREETS: FRONT ST I-95 NB ON/ SB OFF RAMPS

DATE: 8/12/10
DAY: THURSDAY
WEATHER: FAIR

FILE NUMBER: 44AM

AM INTERVAL COUNTS

STARTING TIME	FRONT ST 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	I-95 NB ON/ SB OFF RAMPS 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
6:00 6:15	12	17	0	29	0	17	20	37	13	0	17	30	0	0	0	0	66	30	96
6:15 6:30	26	62	0	88	0	64	53	117	60	0	35	95	0	0	0	0	205	95	300
6:30 6:45	31	68	0	99	0	125	80	205	150	0	74	224	0	0	0	0	304	224	528
6:45 7:00	24	87	0	111	0	101	59	160	101	0	60	161	0	0	0	0	271	161	432
7:00 7:15	20	61	0	81	0	69	35	104	65	0	36	101	0	0	0	0	185	101	286
7:15 7:30	31	51	0	82	0	79	45	124	69	0	22	91	0	0	0	0	206	91	297
7:30 7:45	18	33	0	51	0	73	50	123	86	0	37	123	0	0	0	0	174	123	297
7:45 8:00	30	32	0	62	0	63	56	119	71	0	27	98	0	0	0	0	181	98	279
8:00 8:15	38	41	0	79	0	79	60	139	85	0	24	109	0	0	0	0	218	109	327
8:15 8:30	55	45	0	100	0	103	69	172	96	0	31	127	0	0	0	0	272	127	399
8:30 8:45	55	43	0	98	0	67	42	109	96	0	21	117	0	0	0	0	207	117	324
8:45 9:00	40	46	0	86	0	74	77	151	67	0	15	82	0	0	0	0	237	82	319
9:00 9:15	46	48	0	94	0	97	71	168	71	0	26	97	0	0	0	0	262	97	359
9:15 9:30	43	45	0	88	0	85	74	159	69	0	42	111	0	0	0	0	247	111	358
TOTALS	469	679	0	1148	0	1096	791	1887	1099	0	467	1566	0	0	0	0	3035	1566	4601

DELAWARE VALLEY REGIONAL PLANNING COMMISSION
OFFICE OF TRAVEL M AM INTERVAL COUNTS

COUNTY: PHILADELPHIA
MUNICIPALITY: PHILADELPHIA

INTERSECTION: North-South Street & East-West Street
STREETS: FRONT ST I-95 NB ON/ SB OFF RAMPS

DATE: 8/9/10
DAY: MONDAY
WEATHER: FAIR

FILE NUMBER: 44PM

PM INTERVAL COUNTS

STARTING TIME	FRONT ST 1-NORTHBOUND L	S	R	TOTAL	2-SOUTHBOUND L	S	R	TOTAL	I-95 NB ON/ SB OFF RAMPS 3-EASTBOUND L	S	R	TOTAL	4-WESTBOUND L	S	R	TOTAL	N-S TOTAL	E-W TOTAL	TOTAL
3:00 3:15	17	41	0	58	0	151	67	218	73	0	35	108	0	0	0	0	276	108	384
3:15 3:30	30	47	0	77	0	215	54	269	160	0	47	207	0	0	0	0	346	207	553
3:30 3:45	33	29	0	62	0	154	99	253	120	0	25	145	0	0	0	0	315	145	460
3:45 4:00	83	45	0	128	0	244	83	327	149	0	33	182	0	0	0	0	455	182	637
4:00 4:15	37	54	0	91	0	178	120	298	178	0	45	223	0	0	0	0	389	223	612
4:15 4:30	53	62	0	115	0	156	77	233	121	0	37	158	0	0	0	0	348	158	506
4:30 4:45	36	40	0	76	0	119	55	174	60	0	20	80	0	0	0	0	250	80	330
4:45 5:00	38	61	0	99	0	168	60	228	125	0	24	149	0	0	0	0	327	149	476
5:00 5:15	30	40	0	70	0	114	42	156	128	0	29	157	0	0	0	0	226	157	383
5:15 5:30	51	65	0	116	0	111	70	181	166	0	37	203	0	0	0	0	297	203	500
5:30 5:45	55	66	0	121	0	190	81	271	122	0	28	150	0	0	0	0	392	150	542
5:45 6:00	31	81	0	112	0	163	73	236	159	0	51	210	0	0	0	0	348	210	558
6:00 6:15	36	96	0	132	0	207	72	279	118	0	31	149	0	0	0	0	411	149	560
6:15 6:30	16	42	0	58	0	87	43	130	97	0	21	118	0	0	0	0	188	118	306
6:30 6:45	12	43	0	55	0	106	32	138	90	0	15	105	0	0	0	0	193	105	298
6:45 7:00	16	25	0	41	0	123	75	198	81	0	8	89	0	0	0	0	239	89	328
TOTALS	574	837	0	1411	0	2486	1103	3589	1947	0	486	2433	0	0	0	0	5000	2433	7433

Pennoni Associates, Inc.

3001 Market Street
Philadelphia, PA 19104

7th Street and Packer Avenue

File Name : 7th and packer
Site Code : 00000002
Start Date : 11/2/2012
Page No : 1

Groups Printed- Cars - Trucks/Buses

	7th Street Northbound						7th Street Southbound						Packer Avenue Eastbound						Packer avenue Westbound						
Start Time	Right on Red	Right	Thru	Left	Peds	App. Total	Right on Red	Right	Thru	Left	Peds	App. Total	Right on Red	Right	Thru	Left	Peds	App. Total	Right on Red	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	8	14	10	0	32	0	34	18	7	0	59	0	1	92	46	0	139	8	18	58	4	0	88	318
04:15 PM	1	5	6	12	0	24	0	27	7	3	1	38	3	2	94	42	2	143	8	16	52	10	0	86	291
04:30 PM	2	4	9	6	2	23	0	23	14	6	1	44	0	7	100	43	0	150	8	13	83	4	0	108	325
04:45 PM	0	0	15	5	2	22	0	30	9	6	1	46	2	3	56	41	0	102	9	18	73	4	0	104	274
Total	3	17	44	33	4	101	0	114	48	22	3	187	5	13	342	172	2	534	33	65	266	22	0	386	1208
Grand Total	3	17	44	33	4	101	0	114	48	22	3	187	5	13	342	172	2	534	33	65	266	22	0	386	1208
Apprch %	3	16.8	43.6	32.7	4		0	61	25.7	11.8	1.6		0.9	2.4	64	32.2	0.4		8.5	16.8	68.9	5.7	0		
Total %	0.2	1.4	3.6	2.7	0.3	8.4	0	9.4	4	1.8	0.2	15.5	0.4	1.1	28.3	14.2	0.2	44.2	2.7	5.4	22	1.8	0	32	
Cars	3	12	44	32	4	95	0	113	44	22	3	182	5	12	322	172	2	513	33	65	251	19	0	368	1158
% Cars	100	70.6	100	97	100	94.1	0	99.1	91.7	100	100	97.3	100	92.3	94.2	100	100	96.1	100	100	94.4	86.4	0	95.3	95.9
Trucks/Buses	0	5	0	1	0	6	0	1	4	0	0	5	0	1	20	0	0	21	0	0	15	3	0	18	50
% Trucks/Buses	0	29.4	0	3	0	5.9	0	0.9	8.3	0	0	2.7	0	7.7	5.8	0	0	3.9	0	0	5.6	13.6	0	4.7	4.1

	7th Street Northbound						7th Street Southbound						Packer Avenue Eastbound						Packer avenue Westbound						
Start Time	Right on Red	Right	Thru	Left	Peds	App. Total	Right on Red	Right	Thru	Left	Peds	App. Total	Right on Red	Right	Thru	Left	Peds	App. Total	Right on Red	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																									
Peak Hour for Entire Intersection Begins at 04:00 PM																									
04:00 PM	0	8	14	10	0	32	0	34	18	7	0	59	0	1	92	46	0	139	8	18	58	4	0	88	318
04:15 PM	1	5	6	12	0	24	0	27	7	3	1	38	3	2	94	42	2	143	8	16	52	10	0	86	291
04:30 PM	2	4	9	6	2	23	0	23	14	6	1	44	0	7	100	43	0	150	8	13	83	4	0	108	325
04:45 PM	0	0	15	5	2	22	0	30	9	6	1	46	2	3	56	41	0	102	9	18	73	4	0	104	274
Total Volume	3	17	44	33	4	101	0	114	48	22	3	187	5	13	342	172	2	534	33	65	266	22	0	386	1208
% App. Total	3	16.8	43.6	32.7	4		0	61	25.7	11.8	1.6		0.9	2.4	64	32.2	0.4		8.5	16.8	68.9	5.7	0		
PHF	.375	.531	.733	.688	.500	.789	.000	.838	.667	.786	.750	.792	.417	.464	.855	.935	.250	.890	.917	.903	.801	.550	.000	.894	.929

Pennoni Associates, Inc.

3001 Market Street
Philadelphia, PA 19104

Intersection: Packer Ave & S 10th Street
Day: Friday, Nov 2, 2012
Counter: Deb

File Name : 10th and Packer
Site Code : 00000001
Start Date : 11/2/2012
Page No : 1

Groups Printed- Passenger Cars - Trucks and Busses

	S 10th Street Southbound				Packer Avenue Westbound				S 10th Street Northbound				Packer Avenue Eastbound				
Start Time	Right	Thru	Left	RTOR	Right	Thru	Left	RTOR	Right	Thru	Left	RTOR	Right	Thru	Left	RTOR	Int. Total
04:00 PM	16	6	24	11	15	66	0	8	0	5	4	0	2	24	15	3	199
04:15 PM	15	4	32	5	20	65	1	12	0	2	2	0	0	38	11	2	209
04:30 PM	9	4	28	10	16	78	0	15	0	3	2	0	1	23	7	2	198
04:45 PM	12	3	36	8	20	81	1	12	0	5	2	0	2	30	13	0	225
Total	52	17	120	34	71	290	2	47	0	15	10	0	5	115	46	7	831
Grand Total	52	17	120	34	71	290	2	47	0	15	10	0	5	115	46	7	831
Apprch %	23.3	7.6	53.8	15.2	17.3	70.7	0.5	11.5	0	60	40	0	2.9	66.5	26.6	4	
Total %	6.3	2	14.4	4.1	8.5	34.9	0.2	5.7	0	1.8	1.2	0	0.6	13.8	5.5	0.8	
Passenger Cars	43	17	119	30	71	283	2	47	0	15	9	0	5	112	44	4	801
% Passenger Cars	82.7	100	99.2	88.2	100	97.6	100	100	0	100	90	0	100	97.4	95.7	57.1	96.4
Trucks and Busses	9	0	1	4	0	7	0	0	0	0	1	0	0	3	2	3	30
% Trucks and Busses	17.3	0	0.8	11.8	0	2.4	0	0	0	0	10	0	0	2.6	4.3	42.9	3.6

	S 10th Street Southbound					Packer Avenue Westbound					S 10th Street Northbound					Packer Avenue Eastbound					
Start Time	Right	Thru	Left	RTOR	App. Total	Right	Thru	Left	RTOR	App. Total	Right	Thru	Left	RTOR	App. Total	Right	Thru	Left	RTOR	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	16	6	24	11	57	15	66	0	8	89	0	5	4	0	9	2	24	15	3	44	199
04:15 PM	15	4	32	5	56	20	65	1	12	98	0	2	2	0	4	0	38	11	2	51	209
04:30 PM	9	4	28	10	51	16	78	0	15	109	0	3	2	0	5	1	23	7	2	33	198
04:45 PM	12	3	36	8	59	20	81	1	12	114	0	5	2	0	7	2	30	13	0	45	225
Total Volume	52	17	120	34	223	71	290	2	47	410	0	15	10	0	25	5	115	46	7	173	831
% App. Total	23.3	7.6	53.8	15.2		17.3	70.7	0.5	11.5		0	60	40	0		2.9	66.5	26.6	4		
PHF	.813	.708	.833	.773	.945	.888	.895	.500	.783	.899	.000	.750	.625	.000	.694	.625	.757	.767	.583	.848	.923

Pennoni Associates, Inc.

3001 Market Street
Philadelphia, PA 19104

Intersection: Darien St & Turf Club Driv
Day: Friday, Nov 2, 2012
Counter: Deb

File Name : Darien and Turf Club Drwy - Holiday Inn Drwy
Site Code : 00000003
Start Date : 11/2/2012
Page No : 1

Groups Printed- Passenger Cars - Trucks and Busses

	Darien Street Southbound				Turf Club Driveway Westbound					Darien Street Northbound				Holiday Inn Driveway Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	NJ Plates	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
05:00 PM	5	6	14	25	17	0	0	0	17	0	69	2	71	1	1	6	8	121
05:15 PM	1	8	7	16	32	0	0	0	32	0	78	1	79	0	0	14	14	141
05:30 PM	5	6	14	25	17	0	0	4	21	1	32	1	34	0	0	3	3	83
05:45 PM	3	6	13	22	17	0	1	1	19	1	19	0	20	0	1	4	5	66
Total	14	26	48	88	83	0	1	5	89	2	198	4	204	1	2	27	30	411
06:00 PM	5	5	23	33	15	0	0	0	15	0	29	2	31	2	0	3	5	84
Grand Total	19	31	71	121	98	0	1	5	104	2	227	6	235	3	2	30	35	495
Apprch %	15.7	25.6	58.7		94.2	0	1	4.8		0.9	96.6	2.6		8.6	5.7	85.7		
Total %	3.8	6.3	14.3	24.4	19.8	0	0.2	1	21	0.4	45.9	1.2	47.5	0.6	0.4	6.1	7.1	
Passenger Cars	19	30	71	120	98	0	1	5	104	2	225	6	233	3	2	30	35	492
% Passenger Cars	100	96.8	100	99.2	100	0	100	100	100	100	99.1	100	99.1	100	100	100	100	99.4
Trucks and Busses	0	1	0	1	0	0	0	0	0	0	2	0	2	0	0	0	0	3
% Trucks and Busses	0	3.2	0	0.8	0	0	0	0	0	0	0.9	0	0.9	0	0	0	0	0.6

	Darien Street Southbound				Turf Club Driveway Westbound					Darien Street Northbound				Holiday Inn Driveway Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	NJ Plates	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 06:00 PM - Peak 1 of 1																		
Peak Hour for Entire Intersection Begins at 05:00 PM																		
05:00 PM	5	6	14	25	17	0	0	0	17	0	69	2	71	1	1	6	8	121
05:15 PM	1	8	7	16	32	0	0	0	32	0	78	1	79	0	0	14	14	141
05:30 PM	5	6	14	25	17	0	0	4	21	1	32	1	34	0	0	3	3	83
05:45 PM	3	6	13	22	17	0	1	1	19	1	19	0	20	0	1	4	5	66
Total Volume	14	26	48	88	83	0	1	5	89	2	198	4	204	1	2	27	30	411
% App. Total	15.9	29.5	54.5		93.3	0	1.1	5.6		1	97.1	2		3.3	6.7	90		
PHF	.700	.813	.857	.880	.648	.000	.250	.313	.695	.500	.635	.500	.646	.250	.500	.482	.536	.729

Pennoni Associates, Inc.

3001 Market Street
Philadelphia, PA 19104

Intersection: 7th St & Site Driveway
Day: Friday, Nov 2, 2012
Counter: SDS

File Name : 7TH and Site Drwy
Site Code : 00000003
Start Date : 11/2/2012
Page No : 1

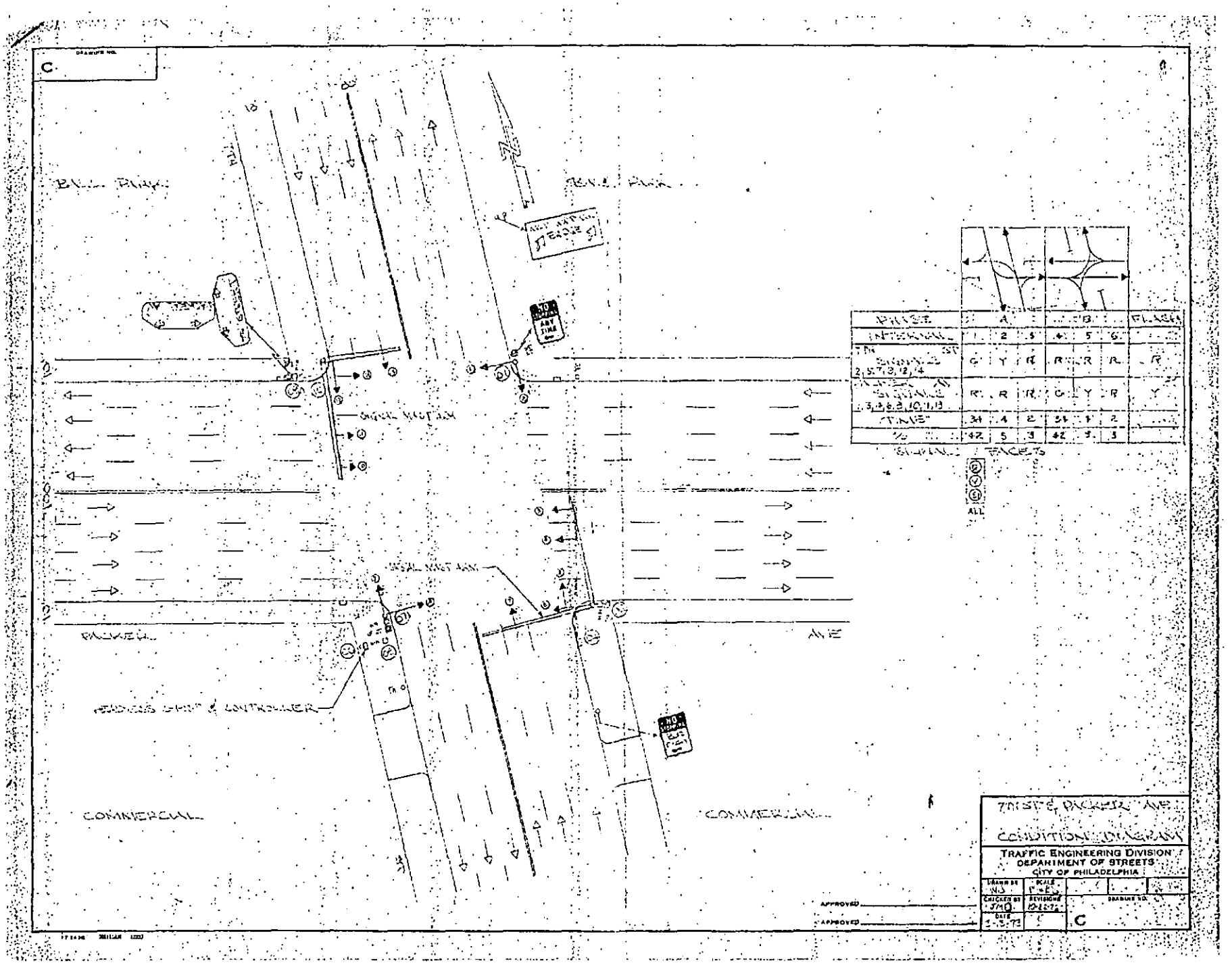
Groups Printed- Passenger Cars - Trucks and Busses

	7th Street Northbound			7th Street Southbound			Site Driveway Eastbound			
Start Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Int. Total
05:00 PM	0	0	0	3	0	0	0	0	4	7
05:15 PM	0	0	0	5	0	0	0	0	6	11
05:30 PM	0	0	1	4	0	0	0	0	7	12
05:45 PM	0	0	0	4	0	0	1	0	4	9
Total	0	0	1	16	0	0	1	0	21	39
*** BREAK ***										
Grand Total	0	0	1	16	0	0	1	0	21	39
Apprch %	0	0	100	100	0	0	4.5	0	95.5	
Total %	0	0	2.6	41	0	0	2.6	0	53.8	
Passenger Cars	0	0	1	16	0	0	1	0	21	39
% Passenger Cars	0	0	100	100	0	0	100	0	100	100
Trucks and Busses	0	0	0	0	0	0	0	0	0	0
% Trucks and Busses	0	0	0	0	0	0	0	0	0	0

	7th Street Northbound				7th Street Southbound				Site Driveway Eastbound				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 05:00 PM to 06:00 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 05:00 PM													
05:00 PM	0	0	0	0	3	0	0	3	0	0	4	4	7
05:15 PM	0	0	0	0	5	0	0	5	0	0	6	6	11
05:30 PM	0	0	1	1	4	0	0	4	0	0	7	7	12
05:45 PM	0	0	0	0	4	0	0	4	1	0	4	5	9
Total Volume	0	0	1	1	16	0	0	16	1	0	21	22	39
% App. Total	0	0	100		100	0	0		4.5	0	95.5		
PHF	.000	.000	.250	.250	.800	.000	.000	.800	.250	.000	.750	.786	.813

APPENDIX D

EXISTING SIGNAL PLANS/TIMINGS


C
PACKER
AVE
COMMERCIAL
COMMERCIAL
PHASE
A
B
FLASH
INTERVAL
1
2
3
4
5
6
SIGNAL FACES
ALL
7th ST & PACKER AVE
CONDITION DIAGRAM
TRAFFIC ENGINEERING DIVISION
DEPARTMENT OF STREETS
CITY OF PHILADELPHIA
APPROVED
APPROVED
C

PRESCRIBED TIMING SEQUENCE

7TH STREET & PACKER AVENUE

ESTABLISHED 6/2/82

STILL IN EFFECT

80 Second Cycle

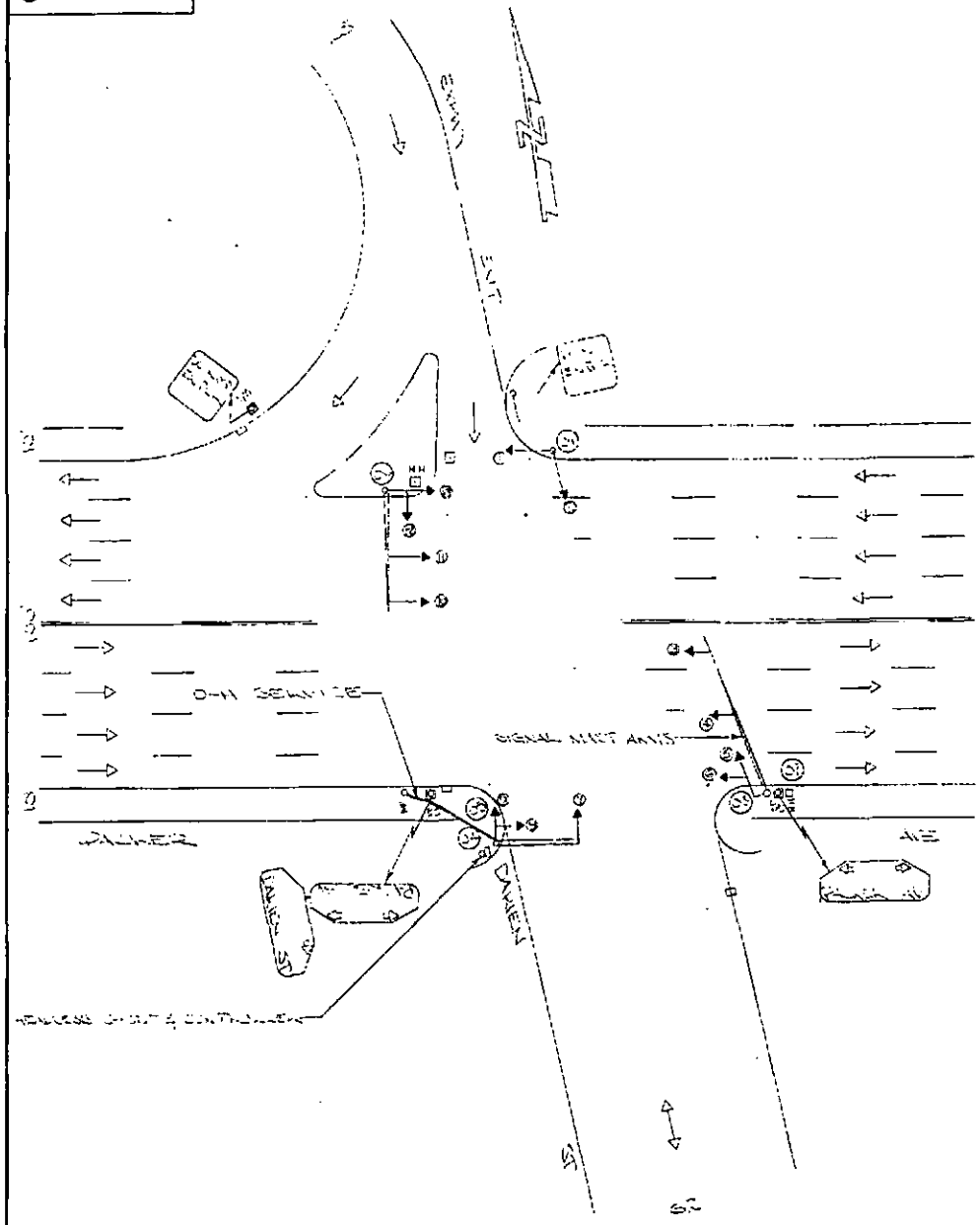
Packer	G	Y	R	R	R	R
7th	R	R	R	G	Y	R
Seconds	34.4	4.0	1.6	35.2	3.2	1.6
%	43	5	2	44	4	2

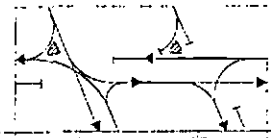
mm/2:88(February 1992)

Prescribed Timing Sequence
10th & Packer Avenue
Established 6/2/82

Packer Avenue	G	Y	R	R	R	R
10th Street	R	R	R	G	Y	R
Seconds	34.4	4.0	1.6	35.2	3.2	1.6

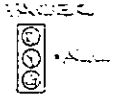
C





PHASE	A			B			FLASH
INTERVAL	1	2	3	4	5	6	
SIGNALS 2,12	G	Y	R	L	R	R	R
SIGNALS 5,7,9	G	Y	R	G	R	R	R
SIGNALS 1,3,4,6,8,10,11,13	R	R	R	G	Y	R	Y
TIME	21	4	1.5	48	4	1.5	
%	26	5	2	60	5	2	

SIGNAL HEAD



DALKEN ST & DALKEN AVE

CONDITION DIAGRAM

TRAFFIC ENGINEERING DIVISION
DEPARTMENT OF STREETS
CITY OF PHILADELPHIA

DRAWN BY	SCALE			
WJ	1"=25'			
CHECKED BY	REVISIONS			DRAWING NO.
JMO	10-22-76			C
DATE				
5-15-72				

APPROVED _____

APPROVED _____

WORK ORDER
S11100

Front St & Delaware exp Ramp E & F

Traffic District #1

SIGNAL

Prepared by Charles Denny — Date 6/30/09
Approved by Charles J. Denny — Date ~~6/30/09~~ 7/3/09
WORK COMPLETED by — Date 3-31-10
INSPECTED by — Date
Release date

#	PHASE intervals	1	2	3	4	5	6	7	9	10	11	12	13	14	flash	G	M	FH	Max
		2 + 6			2 + 5			4 + 8								Minimums			
2	NB Front St	G	G	G	G	Y	R	R	R	R					y	21			
5	Left turn to I 95 on	G	G	G	<-G	<-Y	R	R	R	R					off	7			
6	SB Front St	G	Y	R	R	R	R	R	R	R					y	21			
1																			
4	Off Ramp	R	R	R	R	R	R	G	Y	R					R	21			
7																			
8	driveway	R	R	R	R	R	R	G	Y	R					R	21			
3																			
P2																			
P6																			
P4																			
P8																			
															secs				
	#1	35	4	2	12	4	2	25	4	2					90				
	#2	35	4	2	12	4	2	35	4	2					100				
	#3	37	4	2	35	4	2	30	4	2					120				
															0				

PN	Day	Time	Prog	cycle	off
1	S-S	0:00	1	90	77
2	M-F	7:00	1	90	77
3	M-F	15:00	2	100	87
4	M-F.	19:00	1	90	77
pre			1	90	77
post			3	120	107

Instructions: Change timings and off sets

MSB

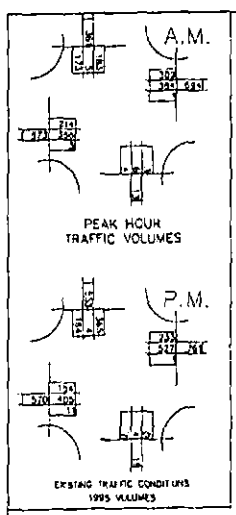
DIST	COUNTY	ROUTE	SEC	SHEET
6-0	PHILADELPHIA			S3 OF 6

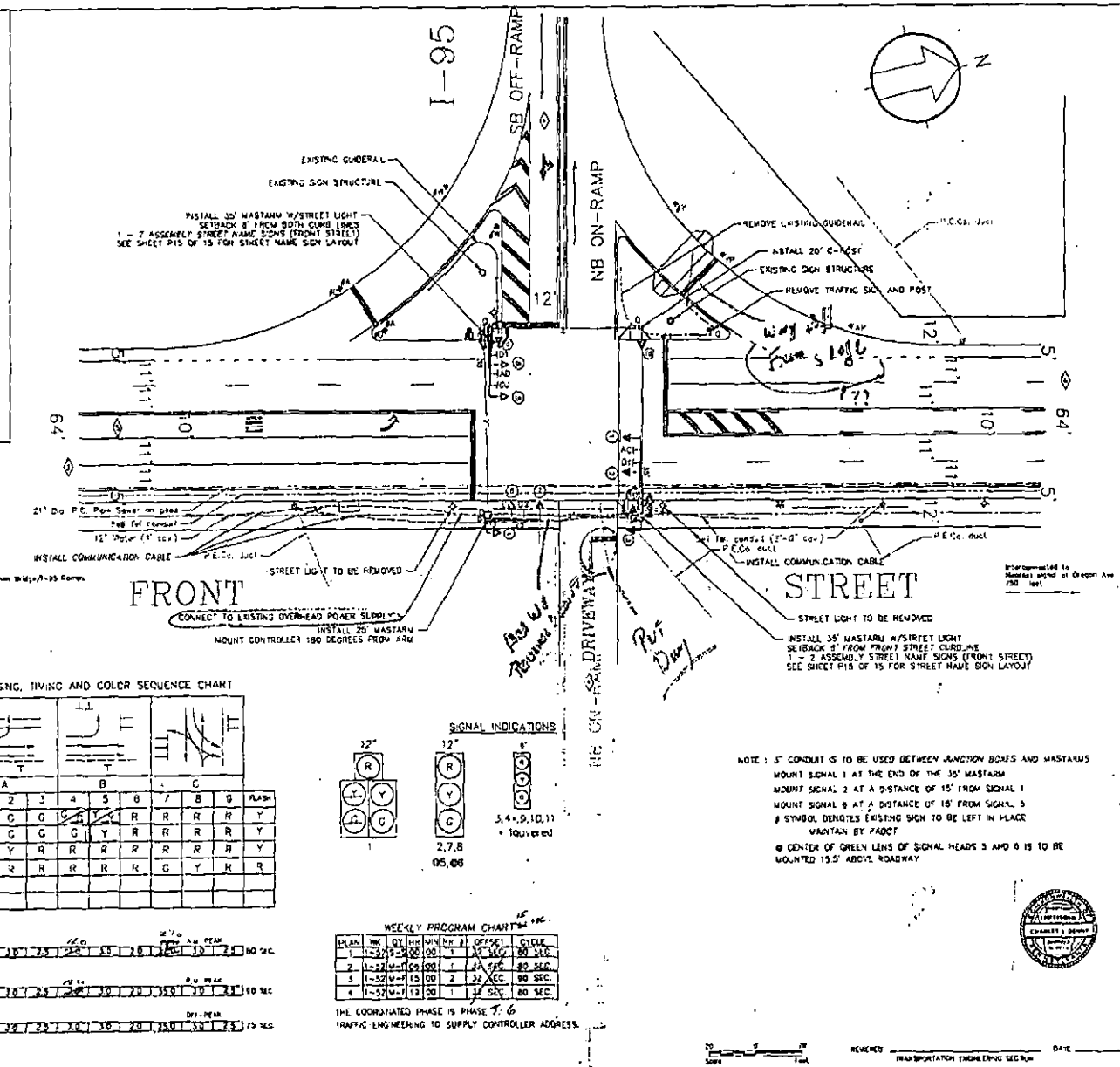
CITY OF PHILADELPHIA

NO	REVISION	DATE	BY

APPROVED [signature] DATE 5/4/97
TRAFFIC ENGINEERING DIVISION

DESIGN REVIEW [signature] DATE 5/14/97
PENNDOT TRAFFIC ENGINEER





MATERIAL LIST

1	EA	170 TYPE CONTROLLER
220	LF	TRAFFIC CONDUIT 2-INCH
25	LF	TRAFFIC CONDUIT 3-INCH
8	EA	CONDUIT ELBOW 2-INCH
6	EA	CONDUIT ELBOW 3-INCH
1	EA	TRAFFIC C-POST 20'
5	EA	SIGNAL HEAD 8-INCH, 3-SECTION
5	EA	SIGNAL HEAD 12-INCH, 3-SECTION (OVERHEAD)
1	EA	SIGNAL HEAD 12-INCH, 5-SECTION
330	LF	TRAFFIC SIGNAL CABLE, 5-CONDUCTOR
65	LF	TRAFFIC SIGNAL CABLE, 7-CONDUCTOR
270	LF	TRAFFIC SIGNAL CABLE, 20-CONDUCTOR
100	LF	ELECTRICAL SERVICE WIRE-2 CONDUCTOR 10AWG
12	EA	TRAFFIC SIGNS
3	EA	TRAFFIC SIGN CHANNEL POST
2	EA	STREET NAME SIGN, 2-SIGN ASSEMBLY
3	EA	OVERHEAD STREET NAME SIGNS
3	EA	TRAFFIC JUNCTION BOXES, 12" X 18"
3	EA	TRAFFIC MASTARM FOUNDATION
1	EA	TRAFFIC MASTARM, 25' (CONTROLLER HUB (A) 180')
2	EA	TRAFFIC MASTARM, 35' W/STREET LIGHT
2	EA	STREET LIGHT LUMINAIRE, 200 W HPS
2	EA	STREET LIGHT DAVIT 6' ON MASTARM

LEGEND

Existing Mast Arm, Length	New curb ramp
New mast Arm, Length	Existing curb ramp
Existing C-Post	Existing Tree
New C-Post	Existing grate inlet
Controller	Existing inlet
Existing Signal Head And Number	Existing street light
New Signal Head And Number	New street light
Existing 2" Conduit	Existing fire hydrant
Existing Conduit and Size	Existing mail box
New Conduit and Size	Junction Box
Phase number	Existing wood pole

SIGN TABULATION

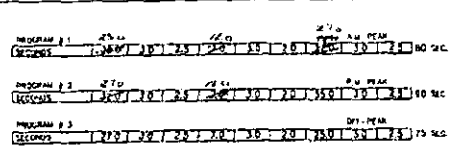
PLAN	SYM	SIGNS	SIZE	LEGEND
1	A	R1-1	30 X 30	STOP
1	AC	R10-12	30 X 30	LEFT TURN YIELD ON GREEN
1	AE	R10-6	30 X 36	OPPOSING TRAFFIC HAS EXTENDED GREEN
1	AF	W11-2A	36 X 36	PEDESTRIAN CROSSING SIGN
1	E	R5-1	30 X 30	DO NOT ENTER [illegible]
2	DK			I-95 NORTH (SEE SHEET P13 OF 15)
2	DL			FRONT STREET (SEE SHEET P15 OF 15)
3	J	R3-3	24 X 24	NO TURNS
3	DJ	R3-3	36 X 36	NO TURNS
1	Q	R9-3	24 X 18	NO PEDESTRIAN CROSSING
1	U	R10-6L	24 X 30	STOP HERE ON RED
1	V	R3-5	36 X 24	WRONG WAY [illegible]
1	Y	R1-2	36 X 36	YIELD
1	YY	R1-5	24 X 30	YIELD TO PED IN CROSSWALK

PHASING, TIMING AND COLOR SEQUENCE CHART

MAX	MIN	PHASE	PHASE INTERVAL SECONDS	A 1	A 2	A 3	B 4	B 5	B 6	C 7	C 8	C 9	FLASH
15	5	5	1	G	G	G	G	Y	R	R	R	R	Y
50	15	2	2,3,4	G	G	G	G	Y	R	R	R	R	Y
35	15	6	5,6	G	Y	R	R	R	R	R	R	R	Y
35	17	4	7,8,9,10,11	R	R	R	R	R	R	G	Y	R	R

SIGNAL INDICATIONS

NOTE : 3" CONDUIT IS TO BE USED BETWEEN JUNCTION BOXES AND MASTARMS
MOUNT SIGNAL 1 AT THE END OF THE 35' MASTARM
MOUNT SIGNAL 2 AT A DISTANCE OF 15' FROM SIGNAL 1
MOUNT SIGNAL 8 AT A DISTANCE OF 15' FROM SIGNAL 5
SYMBOL DENOTES EXISTING SIGN TO BE LEFT IN PLACE UNLESS BY PADOT
@ CENTER OF GREEN LENS OF SIGNAL HEADS 5 AND 6 IS TO BE MOUNTED 15.5' ABOVE ROADWAY



WEEKLY PROGRAM CHART

PLAN	MK	DY	HR	MIN	NK #	OFFSET	CYCLE
1	1-52	S-S	00	00	1	32 SEC.	80 SEC.
2	1-52	W-F	09	00	1	34 SEC.	80 SEC.
3	1-52	W-F	15	00	2	32 SEC.	80 SEC.
4	1-52	W-F	19	00	1	34 SEC.	80 SEC.

THE COORDINATED PHASE IS PHASE 2 & 6
TRAFFIC ENGINEERING TO SUPPLY CONTROLLER ADDRESS.

REVIEWED _____ DATE _____
TRANSPORTATION ENGINEERING SECTION

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

FRONT STREET & I-95 RAMPS (NORTH)

APPROX. 750' S. OF OREGON AVE.

T940703 April 25, 1997 S3 OF 6

11099
work order

SIGNAL

Front St & Delaware exp Ramp H & K

Traffic District #1

Prepared by Charles Denny — Date 6/30/09
Approved by Charles J. Denny — Date 6/30/09 7/3/09
WORK COMPLETED by — Date 3-31-10
INSPECTED by — Date
Release date

		2 + 6			2 + 5			4 + 8									Minimums			Max
#	PHASE intervals	1	2	3	4	5	6	7	9	10	11	12	13	14	flash	G	M	FH	
2	NB Front St	G	Y	R	R	R	R	R	R	R					y	21			
5																			
6	SB Front St	G	G	G	G	Y	R	R	R	R					y	21			
1	Left turn to I 95 on	G	G	G	<-G/G	<-Y/Y	R	R	R	R					off	7			
4	Whitman Off	R	R	R	R	R	R	G	Y	R					R	21			
7																			
8																			
3																			
P2																			
P6																			
P4																			
P8																			
															secs				
	#1	25	4	2	12	4	2	35	4	2					90				
	#2	35	4	2	12	4	2	35	4	2					100				
	#3	62	4	2	10	4	2	30	4	2					120				
															0				

PN	Day	Time	Prog	cycle	off
1	S-S	0:00	1	90	54
2	M-F	7:00	1	90	54
3	M-F	15:00	2	90	64
4	M-F	19:00	1	90	54
pre			1	90	54
post			3	120	84

Instructions: Change timings and off sets

MSB

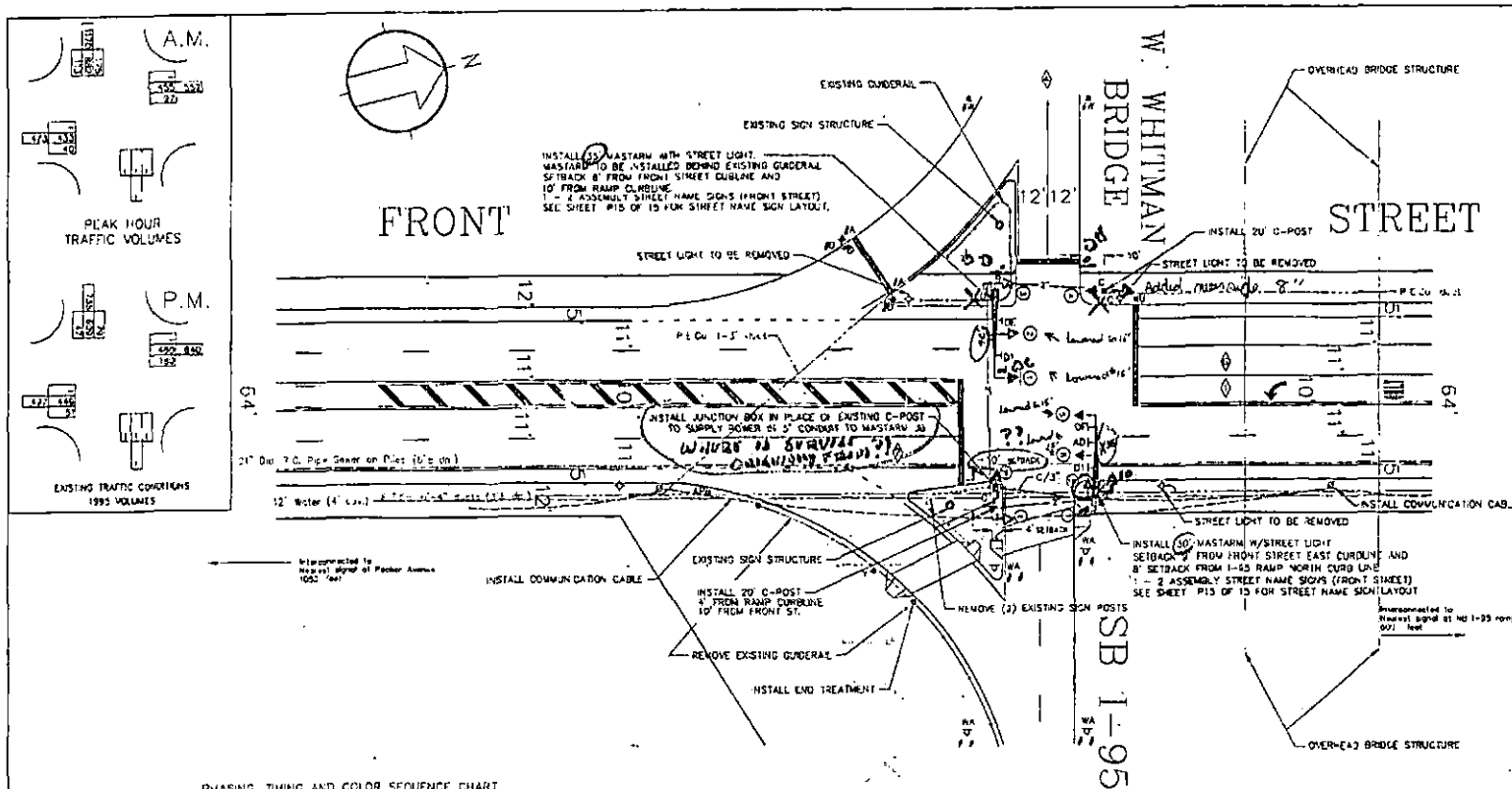
DIST	COUNTY	ROUTE	SECT	SHEET
6-0	PHILADELPHIA			S2 OF 6

CITY OF PHILADELPHIA

NO.	REVISION	DATE	BY

APPROVED [signature] TRAFFIC ENGINEERING DIVISION DATE 5/6/97

DESIGN REVIEW [signature] PENNDOT TRAFFIC ENGINEER DATE 5/6/97



MATERIAL LIST

1	EA	170 TYPE CONTROLLER
200	LF	TRAFFIC CONDUIT 2-INCH
60	LF	TRAFFIC CONDUIT 3-INCH
6	EA	CONDUIT ELBOW 2-INCH
6	EA	CONDUIT ELBOW 3-INCH
2	EA	TRAFFIC C-POST 20'
3	EA	SIGNAL HEAD 8-INCH, 3-SECTION
1	EA	SIGNAL HEAD 12-INCH, 3-SECTION (OVERHEAD)
5	EA	SIGNAL HEAD 12-INCH, 3-SECTION (POLE MOUNTED)
1	EA	SIGNAL HEAD 12-INCH, 5-SECTION
270	LF	TRAFFIC SIGNAL CABLE, 5-CONDUCTOR
60	LF	TRAFFIC SIGNAL CABLE, 7-CONDUCTOR
230	LF	TRAFFIC SIGNAL CABLE, 15-CONDUCTOR
75	LF	ELECTRICAL SERVICE WIRE-2 CONDUCTOR 10AWG
12	EA	TRAFFIC SIGNS
5	EA	TRAFFIC SIGN CHANNEL POST
2	EA	STREET NAME SIGN,-2-SIGN ASSEMBLY
2	EA	OVERHEAD STREET NAME SIGNS
3	EA	TRAFFIC JUNCTION BOXES, 12" X 18"
2	EA	TRAFFIC MASTARM FOUNDATION
1	EA	TRAFFIC MASTARM (40) W/STREET LIGHT
1	EA	TRAFFIC MASTARM, 35' W/STREET LIGHT
2	EA	STREET LIGHT LUMINAIRE, 200 W HPS
2	EA	STREET LIGHT DAVIT 6' ON MASTARM

LEGEND

- Existing Mast Arm, Length
- New Mast Arm, Length
- Existing C-Post
- New C-Post
- Controller
- Existing Signal Head And Number
- New Signal Head And Number
- Existing 2" Conduit
- Existing Conduit and Size
- New Conduit and Size
- Phase Number
- New curb ramp
- Existing curb ramp
- Existing Tree
- Existing grate inlet
- Existing inlet
- Existing street light
- New street light
- Existing fire hydrant
- Existing mail box
- Junction Box
- Existing wood pole

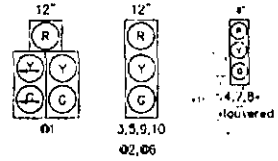
SIGN TABULATION

COLUMN	SYM	SERIES	SIZE	LEGEND
A	VA	V1-1L	36 x 36	PAVEMENT WIDTH TRANS.-LEFT LANE ENDS
A	R	R1-1	30 x 30	STOP
I	AD	R10-8	30 x 36	OPPOSING TRAFFIC HAS EXTENDED GREEN
I	AP	W11-2A	36 x 36	PEDESTRIAN CROSSING SIGN
I	B	R3-1L	36 x 18	ONE WAY LEFT ARROW
I	C	R3-1R	36 x 18	ONE WAY RIGHT ARROW
E	D	R3-1	36 x 30	DO NOT ENTER
E	EX			I-95 SOUTH (SEE PLAN P13 OF 15)
I	EK	R6-2L	30 x 36	ONE WAY LEFT ARROW
I	DF	R6-2R	30 x 36	ONE WAY RIGHT ARROW
4	G	R9-1	18 x 18	NO PEDESTRIAN CROSSING
I	U	R10-6L	24 x 30	STOP HERE ON RED
I	V	R5-1	36 x 24	WRONG WAY (CHANGEABLE FORMAT)
I	Y	R1-2	36 x 36	YIELD

PHASING, TIMING AND COLOR SEQUENCE CHART

MAX.	MIN.G	PHASE	PHASE / SIGNAL	A 1	A 2	A 3	B 4	B 5	B 6	C 7	C 8	C 9	FLASH
20	5	1	1	G	G	G	G	Y	R	R	R	R	Y
60	15	6	2,3	G	G	G	Y	R	R	R	R	R	Y
40	15	7	4,5,6,7,8	G	Y	R	R	R	R	R	R	R	Y
35	17	4	9,10,11	R	R	R	R	R	R	G	Y	R	R

SIGNAL INDICATIONS

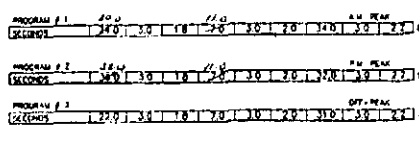


NOTE: 3" CONDUIT IS TO BE USED BETWEEN JUNCTION BOXES AND MASTARMS MOUNT SIGNALS 2 AND 6 OVER CENTER OF RESPECTIVE LANE.

SYMBOL DENOTES AN EXISTING SIGN TO BE LEFT IN PLACE MAINTAINED BY PORT AUTHORITY.

SYMBOL DENOTES SIGN TO BE MAINTAINED BY PENNDOT. SIGNS TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

@ CENTER OF GREEN LENS FOR SIGNAL HEADS 1, 2 AND 6 ARE TO BE MOUNTED 15.5' ABOVE ROADWAY.



WEEKLY PROGRAM CHART

PLAN	HR	DY	HR	MIN	PR #	OFFSET	CYCLE
1	1-5	S-S	05	00	1	34 SEC.	80 SEC.
2	1-5	M-F	06	30	1	34 SEC.	80 SEC.
3	1-5	M-F	15	00	2	24 SEC.	90 SEC.
4	1-5	M-F	19	00	1	34 SEC.	80 SEC.

THE COORDINATED PHASE IS PHASE 2.

TRAFFIC ENGINEERING TO SUPPLY CONTROLLER ADDRESS.

SCALE 20 0 20 Inches Feet

REVIEWED _____ TRANSPORTATION ENGINEERING SECTION DATE _____

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

FRONT STREET & I-95 RAMP (SOUTH)/ W. WHITMAN BRIDGE RAMP

APPROX. 1050' N. OF PACKER AVE.

T940702	April 25, 1997	S2 OF 6

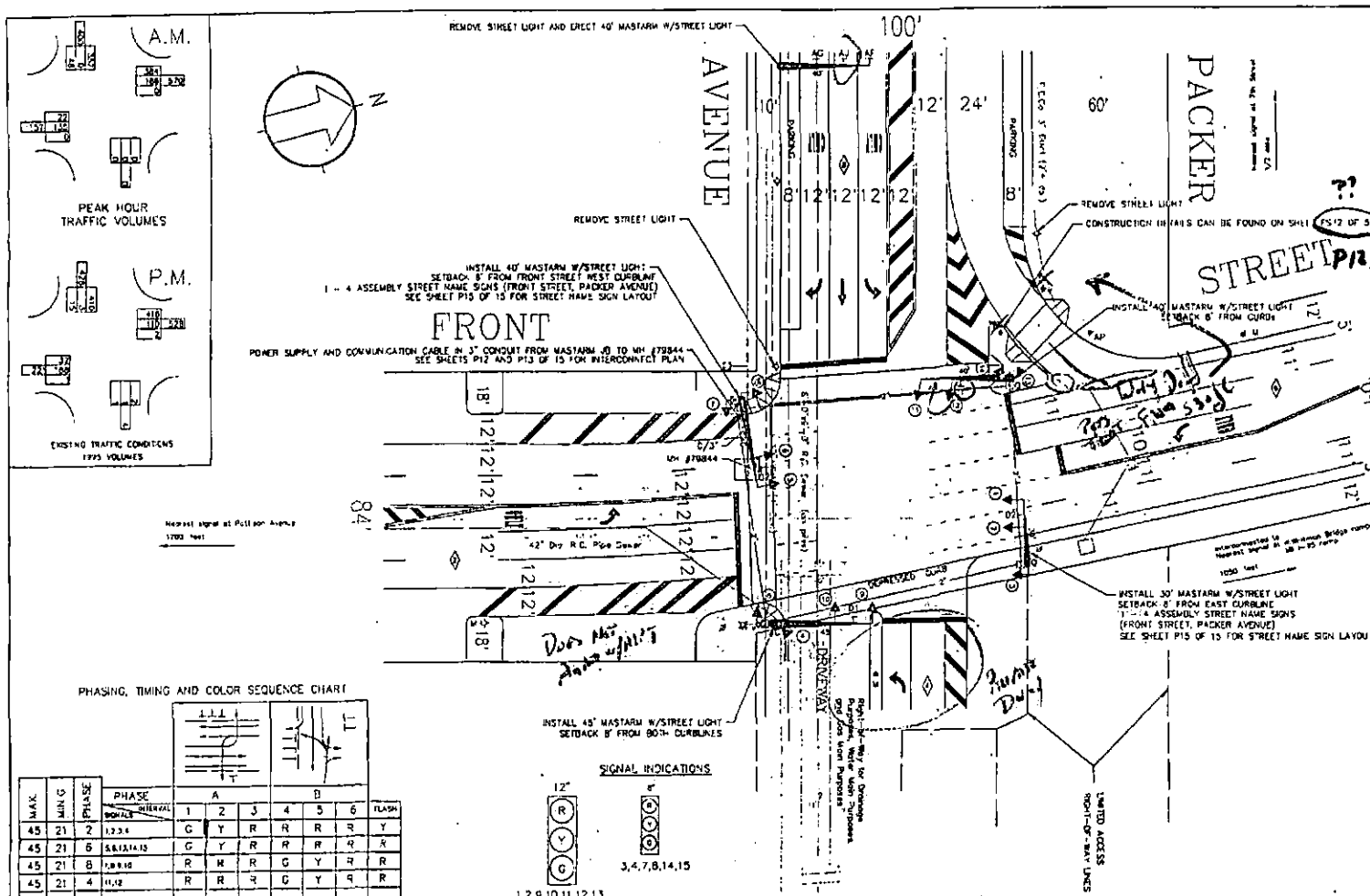
DIST	COUNTY	ROUTE	SECT	SHEET
6-0	PHILADELPHIA			S1 OF 6

CITY OF PHILADELPHIA

NO.	REVISION	DATE	BY

APPROVED [signature] TRAFFIC CONTROLLING DIRECTOR DATE 5-6-97

DESIGN REVIEW [signature] PENNDOT TRAFFIC ENGINEER DATE 5/16/97



PHASING, TIMING AND COLOR SEQUENCE CHART

MAX.	MIN. G	PHASE	PHASE / INTERVAL	A 1	A 2	A 3	B 4	B 5	B 6	FLASH
45	21	2	1,2,3,4	G	Y	R	R	R	R	Y
45	21	6	5,6,13,14,15	G	Y	R	R	R	R	R
45	21	8	7,8,9,10	R	R	R	G	Y	R	R
45	21	4	11,12	R	R	R	G	Y	R	R

SIGNAL INDICATIONS

12" R Y G — 1,2,9,10,11,12,13

8" — 3,4,7,8,14,15

5@,6@ ● Center of Green signal lens is to be mounted 15.5' above roadway.

PROGRAM # 1 — A.M. PEAK

SEQUENCE	1	2	3	4	5	6	
SECONDS	37.0	3.0	5.0	31.0	3.0	3.0	80 SEC

PROGRAM # 2 — P.M. PEAK

SEQUENCE	1	2	3	4	5	6	
SECONDS	34.0	3.0	3.0	37.0	3.0	3.0	90 SEC

PROGRAM # 3 — OFF-PEAK

SEQUENCE	1	2	3	4	5	6	
SECONDS	33.0	3.0	3.0	30.0	3.0	3.0	75 SEC

WEEKLY PROGRAM CHART

PLAN	WK	DY	HR	MIN	PH	OFFSET	CYCLE
1	1-52	S-F	00	00	1	77 SEC.	80 SEC.
2	1-52	M-F	06	00	1	77 SEC.	80 SEC.
3	1-52	M-F	15	00	2	84 SEC.	90 SEC.
4	1-52	M-F	19	00	1	77 SEC.	80 SEC.

THE COORDINATED PHASE IS PHASE 2.
TRAFFIC ENGINEERING TO SUPPLY CONTROLLER ADDRESS

NOTE : 3" CONDUIT IS TO BE USED BETWEEN JUNCTION BOXES AND MASTARMS

APPROVED _____ TRANSPORTATION ENGINEERING SECTION DATE _____

MATERIAL LIST

1	EA	170 TYPE CONTROLLER
325	LF	TRAFFIC CONDUIT 2-INCH
60	LF	TRAFFIC CONDUIT 3-INCH
6	EA	CONDUIT ELBOW 2-INCH
10	EA	CONDUIT ELBOW 3-INCH
6	EA	SIGNAL HEAD 8-INCH, 3-SECTION
8	EA	SIGNAL HEAD 12-INCH, 3-SECTION (OVERHEAD)
1	EA	SIGNAL HEAD 12-INCH, 3-SECTION (POLE MOUNTED)
520	LF	TRAFFIC SIGNAL CABLE 5-CONDUCTOR
325	LF	TRAFFIC SIGNAL CABLE 15-CONDUCTOR
75	LF	ELECTRICAL SERVICE WIRE-2 CONDUCTOR 10AWG
12	EA	TRAFFIC SIGNS
5	EA	TRAFFIC SIGN CHANNEL POST
2	EA	STREET NAME SIGN, 4-SIGN ASSEMBLY
4	EA	OVERHEAD STREET NAME SIGNS
4	EA	TRAFFIC JUNCTION BOXES, 12" X 18"
5	EA	TRAFFIC MASTARM FOUNDATION
1	EA	TRAFFIC MASTARM, 30' W/STREET LIGHT
3	EA	TRAFFIC MASTARM, 40' W/STREET LIGHT
1	EA	TRAFFIC MASTARM, 45' W/STREET LIGHT
5	EA	STREET LIGHT LUMINARE, 200 W HPS
5	EA	STREET LIGHT 5' DAVIT ON MASTARM

LEGEND

Existing Mast Arm, Length	New curb ramp
New Mast Arm, Length	Existing curb ramp
Existing C-Post	Existing tree
New C-Post Controller	Existing grate inlet
Existing Signal Head And Number	Existing inlet
New Signal Head And Number	Existing street light
Existing 2" Conduit	New street light
Existing Conduit and Size	Existing fire hydrant
New Conduit and Size	Existing mail box
Phase Number	Junction Box
	Existing wood pole

SIGN TABULATION

SIGN	SYM	SERIES	SIZE	LEGEND
1	AF	R3-7L	36 x 36	LEFT TURN SIGN
1	AG	R3-8R	36 x 36	RIGHT TURN SIGN
1	AH	R3-5	36 x 36	[illegible]
1	AJ	W11-2A	36 x 36	PEDESTRIAN CROSSING FRONT STREET (SEE SHEET P13 OF 15) PACKER AVENUE (SEE SHEET P13 OF 15)
2	O	R9-3	18 x 18	NO PEDESTRIAN CROSSING
1	Y	R1-2	36 x 36	YIELD
3	H	R3-7L	36 x 36	LEFT LANE MUST TURN LEFT
1	U	R5-1	30 x 30	DO NOT ENTER

CITY OF PHILADELPHIA
TRAFFIC CONTROL SYSTEM

FRONT STREET & PACKER AVENUE

T940701 | APRIL 25, 1997 | S1 OF 6

WORK ORDER
S11098

Front St & Packer

Traffic District #1

SIGNAL

Prepared by Charles Denny — Date 6/30/09
Approved by Charles J. Denny — Date ~~6/30/09~~ 7/3/09
WORK COMPLETED by — Date 3-31-10
INSPECTED by — Date
Release date

#	PHASE intervals	1	2	3	4	5	6	7	8	9	10	11	12	13	14	flash	Minimums G	M	FH	Max
			2 + 6			4 + 8														
2	NB Front St	G	Y	R	R	R	R									y	21			
5																				
6	SB Front St	G	Y	R	R	R	R									y	21			
1																				
4	Packer	R	R	R	G	Y	R									R	21			
7																				
8	driveway	R	R	R	G	Y	R									R	21			
3																				
P2																				
P6																				
P4																				
P8																				
																secs				
	#1	38	4	3	38	4	3									90				
	#2	43	4	3	43	4	3									100				
	#3	53	4	3	53	4	3									120				
																0				

PN	Day	Time	Prog	cycle	off
1	S-S	0:00	1	90	24
2	M-F	7:00	1	90	24
3	M-F	15:00	2	100	34
4	M-F	19:00	1	90	24
pre			1	90	0
post			3	120	74

Instructions: Change timings and off sets

MSB

APPENDIX E

TRIP GENERATION

Sugarhouse Casino

Date	Trips In	Trips Out	Gaming Positions	Trips/Position In	Trips/Position Out	Total
Weekday Evening (Nov 2010)	219	300	1840	0.12	0.16	0.28
	42%	58%				
Saturday Evening (Nov 2010)	352	435	1840	0.19	0.24	0.43
	45%	55%				

The Sugarhouse Casino rate includes a modal split which is estimated to be as much as 6 % based on information contained in the Interim Report of Findings of the Philadelphia Gaming Advisory Task Force (2007)

Utilizing ate developed from Sugarhouse Casino counts to develop base trip rate for proposed site

	Weekday	Saturday
Sugarhouse Trips (weekday PM peak hour of generator)	519	787
Sugarhouse Gaming Positions	1840	1840
Rate	0.28	0.43
Seasonal Adjustment	20%	20%
Modal Trip Adjustment	6%	6%
Adjusted base trip rate rate (trips/gaming position)	0.36	0.54

Hollywood casino Trip Generation (Non-Event PM Peak)

	Weekday	Saturday
Weekday PM base trip rate (trips/gaming position)	0.36	0.54
Modal Trip Adjustment	-2%	-2%
Adjusted trip rate (trips/gaming position)	0.35	0.53
Hollywood Casino Gaming positions	2736	2736
Hollywood Casino Base Trips	958	1450
Existing Site trips (Turf Club- weekday 5-6 PM)	159	159
Existing Site trips (Commercial- weekday 5-6 PM)	39	39
New Hollywood Casino Trips	**760**	**1252**

Hollywood casino Trip Generation (Event PM Peak)

	Weekday	Saturday
Weekday PM base trip rate (trips/gaming position)	0.36	0.54
Modal Trip Adjustment	-2%	-2%
Adjusted trip rate (trips/gaming position)	0.35	0.53
Hollywood Casino Gaming positions	2736	2736
Hollywood Casino Base Trips	958	1450
Casino/Event Linked Trip Adjustment (-15%)	-144	-218
Casino/Event Stay-Away Adjustment (-15%)	-144	-218
Existing Site trips (Turf Club- weekday PM)	159	159
Turf Club/Event Linked Trip Adjustment (-15%)	-24	-24
Turf Club/Event Stay-Away Adjustment (-15%)	-24	-24
Existing Site trips (Commercial- weekday PM)	39	39
New Hollywood Casino Trips	**520**	**865**

Weekday Distribution

	In - 42%	Out - 58%
Base	402	555
New (non-event)	319	441
New (pre-event)	218	302

Weekday Daily Total

	In - 42%	Out - 58%
Base	402	555
% daily Traffic	0.078	0.071
Daily Traffic	5156	7823
Weekday Total	12979	

Saturdayy Distribution

	In - 45%	Out - 55%
Base	653	798
New (non-event)	563	689
New (pre-event)	363	502

Saturday Daily Total

	In - 45%	Out - 55%
Base	653	798
% daily Traffic	0.078	0.069
Daily Traffic	8366	11559
Saturday Total	19924	

Traffic Count Summary at Sugarhouse Casino
Friday, November 19, 2010 and Saturday November 13, 2010

Time Period		South Casino Driveway			Main Casino Driveway			North Casino Driveway			Casino Total		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Friday 11-19-10	3:00	1	2	3	27	18	45	39	46	85	67	66	133
	3:15	0	3	3	20	18	38	28	29	57	48	50	98
	3:30	2	3	5	27	21	48	32	53	85	61	77	138
	3:45	2	5	7	20	18	38	36	54	90	58	77	135
	4:00	0	1	1	18	31	49	31	46	77	49	78	127
	4:15	0	4	4	20	18	38	31	46	77	51	68	119
	4:30	2	2	4	26	24	50	38	43	81	66	69	135
	4:45	3	5	8	18	15	33	39	24	63	60	44	104
	5:00	0	1	1	23	18	41	25	47	72	48	66	114
	5:15	1	3	4	25	25	50	29	50	79	55	78	133
	5:30	0	2	2	29	24	53	42	43	85	71	69	140
	5:45	2	1	3	19	19	38	35	30	65	56	50	106

Friday PM Peak	
3:00-4:00	504
3:15-4:15	498
3:30-4:30	519
3:45-4:45	516
4:00-5:00	485
4:15-5:15	472
4:30-5:30	486
4:45-5:45	491
5:00-6:00	493

Time Period		South Casino Driveway			Main Casino Driveway			North Casino Driveway			Casino Total		
		Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
Saturday 11-13-10	12:00	2	0	2	32	12	44	35	54	89	69	66	135
	12:15	2	2	4	28	14	42	34	34	68	64	50	114
	12:30	2	2	4	31	11	42	27	23	50	60	36	96
	12:45	1	3	4	34	13	47	23	33	56	58	49	107
	1:00	0	4	4	20	12	32	23	32	55	43	48	91
	1:15	2	3	5	21	11	32	17	30	47	40	44	84
	1:30	2	7	9	25	17	42	32	14	46	59	38	97
	1:45	4	3	7	25	17	42	33	28	61	62	48	110
	2:00	3	5	8	35	12	47	32	49	81	70	66	136
	2:15	4	0	4	31	26	57	37	29	66	72	55	127
	2:30	1	6	7	29	25	54	16	36	52	46	67	113
	2:45	5	4	9	36	19	55	22	34	56	63	57	120
	3:00	4	7	11	32	16	48	22	28	50	58	51	109
	3:15	4	2	6	28	20	48	33	30	63	65	52	117
	3:30	1	7	8	30	22	52	35	41	76	66	70	136
	3:45	1	4	5	33	29	62	35	52	87	69	85	154
	9:00	1	9	10	48	35	83	34	58	92	83	102	185
	9:15	4	3	7	50	33	83	45	61	106	99	97	196
	9:30	1	6	7	30	41	71	28	47	75	59	94	153
	9:45	7	6	13	54	43	97	43	72	115	104	121	225
	10:00	9	6	15	47	48	95	34	69	103	90	123	213
	10:15	6	6	12	41	35	76	29	52	81	76	93	169
	10:30	4	7	11	36	42	78	42	42	84	82	91	173
	10:45	5	5	10	43	39	82	46	54	100	94	98	192

Saturday Peak	
12:00-1:00	452
12:15-1:15	408
12:30-1:30	378
12:45-1:45	379
1:00-2:00	382
1:15-2:15	427
1:30-2:30	470
1:45-2:45	486
2:00-3:00	496
2:15-3:15	469
2:30-3:30	459
2:45-3:45	482
3:00-4:00	516
9:00-9:15	759
9:15-10:15	787
9:30-10:30	760
9:45-10:45	780
10:00-11:00	747

APPENDIX F

TRIP DISTRIBUTION

Traffic Volume Calculations 2016 PM Peak

Weekday PM Peak								Casino Trips						
								319		441				
	mvmt	mvmt #	2010/2012 Existing Volumes	PHF	HV%	RTOR	2016 No Build Volumes	% enter	vol	% exit	vol	2016 Build Volumes	mvmt #	mvmt
	nb left	1	16	0.93	27		17		0		0	17	1	nb left
	nb thru	2	86	0.93	32		93		0		0	93	2	nb thru
	nb right	3	5	0.93	41		5		0		0	5	3	nb right
Front	wb left	4	2	0.93	33		2		0		0	2	4	wb left
and	wb thru	5	2	0.93	22		2		0		0	2	5	wb thru
Packer	wb right	6	5	0.93	15		5		0		0	5	6	wb right
	sb left	7	10	0.93	16		11		0		0	11	7	sb left
	sb thru	8	151	0.93	25		164		0		0	164	8	sb thru
	sb right	9	281	0.93	12		304	28.5	91		0	395	9	sb right
	eb left	10	389	0.93	12		421		0	32.5	143	565	10	eb left
	eb thru	11	19	0.93	17		21		0		0	21	11	eb thru
	eb right	12	38	0.93	38		41		0		0	41	12	eb right
	nb left	13	127	0.80			138		0		0	138	13	nb left
Front	nb thru	14	521	0.80			564		0	32.5	143	707	14	nb thru
and	sb thru	15	331	0.80			358	28.5	91		0	449	15	sb thru
I-76 EB	sb right	16	230	0.80			249		0		0	249	16	sb right
	nb thru	17	327	0.80			340		0	28.5	126	466	17	nb thru
	nb right	18	13	0.80			14		0	4.0	18	31	18	nb right
Front	sb left	19	53	0.80			55		0		0	55	19	sb left
and	sb thru	20	650	0.80			676	28.5	91		0	767	20	sb thru
from I-76 WB/to I-95 SB	eb left	21	77	0.80			80		0		0	80	21	eb left
	eb thru	22	362	0.80			377		0		0	377	22	eb thru
	eb right	23	22	0.80			23		0		0	23	23	eb right
	nb left	24	164	0.80			174		0	28.0	123	298	24	nb left
	nb thru	25	217	0.80			230		0	0.5	2	233	25	nb thru
	nb right	26	0	0.80			0		0		0	0	26	nb right
Front	wb left	27	0	0.80			0		0		0	0	27	wb left
and	wb thru	28	0	0.80			0		0		0	0	28	wb thru
Dunkin Donuts/I-95	wb right	29	0	0.80			0		0		0	0	29	wb right
	sb left	30	0	0.80			0		0		0	0	30	sb left
	sb thru	31	621	0.80			659	0.5	2		0	661	31	sb thru
	sb right	32	312	0.80			331		0		0	331	32	sb right
	eb left	33	484	0.80			514		0		0	514	33	eb left
	eb thru	34	0	0.80			0		0		0	0	34	eb thru
	eb right	35	126	0.80			134	28.0	89		0	223	35	eb right
	nb left	36	33	0.93	3		34		0		0	34	36	nb left
	nb thru	37	44	0.93	0		46		0		0	46	37	nb thru
	nb right	38	20	0.93	29	3	21		0		0	21	38	nb right
Packer	wb left	39	22	0.93	14		23	29.5	94		0	117	39	wb left
and	wb thru	40	286	0.93	6		277	3.0	10		0	286	40	wb thru
7th	wb right	41	98	0.93	0	33	102		0		0	102	41	wb right
	sb left	42	22	0.93	0		23		0		0	23	42	sb left
	sb thru	43	46	0.93	8		50	8.5	27		0	77	43	sb thru
	sb right	44	114	0.93	1	0	119	1.0	3		0	122	44	sb right
	eb left	45	172	0.93	0		179		0	0.5	2	181	45	eb left
	eb thru	46	342	0.93	6		356		0	32.5	143	499	46	eb thru
	eb right	47	18	0.93	7	13	19	33.5	107		0	126	47	eb right

Traffic Volume Calculations 2016 PM Peak

Weekday PM Peak								Casino Trips						
								319		441				
	mvml	mvml #	2010/2012 Existing Volumes	PHF	HV%	RTOR	2016 No Build Volumes	% enter	vol	% exit	vol	2016 Build Volumes	mvml #	mvml
	nb left	48	58	0.96			60		0	33.5	147	207	48	nb left
	nb thru	49	77	0.96			80		0	9.0	40	120	49	nb thru
	nb right	50	46	0.96			48	3.0	10	33.0	145	202	50	nb right
Packer	wb left	51	30	0.96			31	4.0	13		0	44	51	wb left
and	wb thru	52	306	0.96			318		0		0	318	52	wb thru
Darien Street	wb right	53	83	0.96			86		0		0	86	53	wb right
	sb left	54	320	0.96			333	30.0	95		0	428	54	sb left
	sb thru	55	14	0.96			15	2.0	6		0	21	55	sb thru
	sb right	56	39	0.96			41		0		0	41	56	sb right
	eb left	57	79	0.96			82		0		0	82	57	eb left
	eb thru	58	87	0.96			91	0.5	2		0	92	58	eb thru
	eb right	59	24	0.96			25	1.0	3		0	28	59	eb right
	nb left	60	10	0.92	10		11		0		0	11	60	nb left
	nb thru	61	15	0.92	0		16		0		0	16	61	nb thru
	nb right	62	0	0.92	0	0	0		0		0	0	62	nb right
Packer	wb left	63	2	0.92	0		2		0		0	2	63	wb left
and	wb thru	64	290	0.92	2		308		0	33.0	146	453	64	wb thru
10th	wb right	65	118	0.92	0	47	125		0	0.5	2	127	65	wb right
	sb left	66	120	0.92	1		127	0.5	2		0	129	66	sb left
	sb thru	67	17	0.92	0		18		0		0	18	67	sb thru
	sb right	68	86	0.92	17	34	91		0		0	91	68	sb right
	eb left	69	46	0.92	4		49		0		0	49	69	eb left
	eb thru	70	115	0.92	3		122	1.0	3		0	125	70	eb thru
	eb right	71	12	0.92	0	7	13		0		0	13	71	eb right
	nb left	72					0		0		0	0	72	nb left
Packer	nb right	73					0		0		0	0	73	nbright
and	sb right	74	165				172	4.0	13		0	184	74	sbright
95 Ramp	eb thru	75					0		0	32.5	143	143	75	eb thru
	eb right	76					0		0		0	0	76	eb right
	wb thru	77					0	28.5	91		0	91	77	wb thru
	wb right	78					0		0		0	0	78	wb right
	nb left	103	0	0.92	10		0		0		0	0	103	nb left
	nb thru	104	181	0.92	0		192		0	71.0	313	505	104	nb thru
	nb right	105	0	0.92	0	0	0		0		0	0	105	nb right
Darien & N. Site	wb left	106	0	0.92	0		0		0	4.5	20	20	106	wb left
Driveway	wb thru	107	0	0.92	2		0		0		0	0	107	wb thru
	wb right	108	0	0.92	0	47	0	3.0	10	4.5	20	30	108	wb right
	sb left	109	0	0.92	1		0		0		0	0	109	sb left
	sb thru	110	68	0.92	0		72	7.0	22		0	95	110	sb thru
	sb right	111	0	0.92	17	34	0		0		0	0	111	sb right
	eb left	112	0	0.92	4		0		0		0	0	112	eb left
	eb thru	113	0	0.92	3		0		0		0	0	113	eb thru
	eb right	114	0	0.92	0	7	0		0		0	0	114	eb right

Traffic Volume Calculations 2016 PM Peak

Weekday PM Peak								Casino Trips						
								319		441				
	mvmt	mvmt #	2010/2012 Existing Volumes	PHF	HV%	RTOR	2016 No Build Volumes	% enter	vol	% exit	vol	2016 Build Volumes	mvmt #	mvmt
	nb left	115	0	0.92	10		0		0		0	0	115	nb left
	nb thru	116	181	0.92	0		192		0	64.0	282	474	116	nb thru
	nb right	117	0	0.92	0	0	0	6.0	19		0	19	117	nb right
Darion & Employee	wb left	118	0	0.92	0		0		0	6.0	26	26	118	wb left
Driveway	wb thru	119	0	0.92	2		0		0		0	0	119	wb thru
	wb right	120	0	0.92	0	47	0		0	7.0	31	31	120	wb right
	sb left	121	0	0.92	1		0	7.0	22		0	22	121	sb left
	sb thru	122	68	0.92	0		72		0	4.5	20	92	122	sb thru
	sb right	123	0	0.92	17	34	0		0		0	0	123	sb right
	eb left	124	0	0.92	4		0		0		0	0	124	eb left
	eb thru	125	0	0.92	3		0		0		0	0	125	eb thru
	eb right	126	0	0.92	0	7	0		0		0	0	126	eb right
	nb left	127	0	0.92	10		0	4.5	14		0	14	127	nb left
	nb thru	128	97	0.92	0		103		0		0	103	128	nb thru
	nb right	129	0	0.92	0	0	0		0		0	0	129	nb right
7th Street &	wb left	130	0	0.92	0		0		0		0	0	130	wb left
North Site Driveway	wb thru	131	0	0.92	2		0		0		0	0	131	wb thru
	wb right	132	0	0.92	0	47	0		0		0	0	132	wb right
	sb left	133	0	0.92	1		0		0		0	0	133	sb left
	sb thru	134	88	0.92	0		93	64.0	204		0	298	134	sb thru
	sb right	135	0	0.92	17	34	0	7.5	24		0	24	135	sb right
	eb left	136	0	0.92	4		0		0		0	0	136	eb left
	eb thru	137	0	0.92	3		0		0		0	0	137	eb thru
	eb right	138	0	0.92	0	7	0		0		0	0	138	eb right
	nb left	139	0	0.92	10		0	14.0	45		0	45	139	nb left
	nb thru	140	97	0.92	0		103	4.5	14		0	117	140	nb thru
	nb right	141	0	0.92	0	0	0		0		0	0	141	nb right
7th Street &	wb left	142	0	0.92	0		0		0		0	0	142	wb left
Garage Driveway	wb thru	143	0	0.92	2		0		0		0	0	143	wb thru
	wb right	144	0	0.92	0	47	0		0		0	0	144	wb right
	sb left	145	0	0.92	1		0		0		0	0	145	sb left
	sb thru	146	88	0.92	0		93		0		0	93	146	sb thru
	sb right	147	0	0.92	17	34	0	64.0	204		0	204	147	sb right
	eb left	148	0	0.92	4		0		0		0	0	148	eb left
	eb thru	149	0	0.92	3		0		0		0	0	149	eb thru
	eb right	150	0	0.92	0	7	0		0		0	0	150	eb right
	nb left	151	0	0.92	10		0		0		0	0	151	nb left
	nb thru	152	181	0.92	0		192	6.0	19		0	211	152	nb thru
	nb right	153	0	0.92	0	0	0		0		0	0	153	nb right
Darrien &	wb left	154	0	0.92	0		0		0	14.0	62	62	154	wb left
Garage Driveway	wb thru	155	0	0.92	2		0		0		0	0	155	wb thru
	wb right	156	0	0.92	0	47	0		0	64.0	282	282	156	wb right
	sb left	157	0	0.92	1		0		0		0	0	157	sb left
	sb thru	158	88	0.92	0		72		0	10.5	46	118	158	sb thru
	sb right	159	0	0.92	17	34	0		0		0	0	159	sb right
	eb left	160	0	0.92	4		0		0		0	0	160	eb left
	eb thru	161	0	0.92	3		0		0		0	0	161	eb thru
	eb right	162	0	0.92	0	7	0		0		0	0	162	eb right

Traffic Volume Calculations 2021 PM Peak

Weekday PM Peak								Casino Trips 319 % enter	Casino Trips 319 vol	Casino Trips 441 % exit	Casino Trips 441 vol				Weekday PM Peak
	mvmt	mvmt #	2010/2012 Existing Volumes	PHF	HV%	RTOR	2021 No Build Volumes					2021 Build Volumes	mvmt #	mvmt	
	nb left	1	16	0.93	27		18		0		0	18	1	nb left	
	nb thru	2	86	0.93	32		98		0		0	98	2	nb thru	
	nb right	3	5	0.93	41		6		0		0	6	3	nb right	
Front	wb left	4	2	0.93	33		2		0		0	2	4	wb left	Front
and	wb thru	5	2	0.93	22		2		0		0	2	5	wb thru	and
Packer	wb right	6	5	0.93	15		6		0		0	6	6	wb right	Packer
	sb left	7	10	0.93	16		11		0		0	11	7	sb left	
	sb thru	8	151	0.93	25		172		0		0	172	8	sb thru	
	sb right	9	281	0.93	12		320	28.5	91		0	411	9	sb right	
	eb left	10	389	0.93	12		443		0	32.5	143	586	10	eb left	
	eb thru	11	19	0.93	17		22		0		0	22	11	eb thru	
	eb right	12	38	0.93	38		43		0		0	43	12	eb right	
	nb left	13	127	0.80			145		0		0	145	13	nb left	
Front	nb thru	14	521	0.80			593		0	32.5	143	736	14	nb thru	Front
and	sb thru	15	331	0.80			377	28.5	91		0	468	15	sb thru	and
I-76 EB	sb right	16	230	0.80			262		0		0	262	16	sb right	I-76 EB
	nb thru	17	327	0.80			358		0	28.5	126	483	17	nb thru	
	nb right	18	13	0.80			14		0	4.0	18	32	18	nb right	
Front	sb left	19	53	0.80			58		0		0	58	19	sb left	Front
and	sb thru	20	650	0.80			711	28.5	91		0	802	20	sb thru	and
from I-76 WB/to I-95 SB	eb left	21	77	0.80			84		0		0	84	21	eb left	from I-76 WB/to I-95 SB
	eb thru	22	362	0.80			396		0		0	396	22	eb thru	
	eb right	23	22	0.80			24		0		0	24	23	eb right	
	nb left	24	164	0.80			183		0	28.0	123	306	24	nb left	
	nb thru	25	217	0.80			242		0	0.5	2	244	25	nb thru	
	nb right	26	0	0.80			0		0		0	0	26	nb right	
Front	wb left	27	0	0.80			0		0		0	0	27	wb left	Front
and	wb thru	28	0	0.80			0		0		0	0	28	wb thru	and
Dunkin Donuts/I-95	wb right	29	0	0.80			0		0		0	0	29	wb right	Dunkin Donuts/I-95
	sb left	30	0	0.80			0		0		0	0	30	sb left	Dunkin Donuts/I-95
	sb thru	31	621	0.80			693	0.5	2		0	694	31	sb thru	
	sb right	32	312	0.80			348		0		0	348	32	sb right	
	eb left	33	484	0.80			540		0		0	540	33	eb left	
	eb thru	34	0	0.80			0		0		0	0	34	eb thru	
	eb right	35	126	0.80			141	28.0	89		0	230	35	eb right	
	nb left	36	33	0.93	3		36		0		0	36	36	nb left	
	nb thru	37	44	0.93	0		48		0		0	48	37	nb thru	
	nb right	38	20	0.93	29	3	22		0		0	22	38	nb right	
Packer	wb left	39	22	0.93	14		24	29.5	94		0	118	39	wb left	Packer
and	wb thru	40	266	0.93	6		291	3.0	10		0	300	40	wb thru	and
7th	wb right	41	98	0.93	0	33	107		0		0	107	41	wb right	7th
	sb left	42	22	0.93	0		24		0		0	24	42	sb left	
	sb thru	43	48	0.93	8		52	8.5	27		0	80	43	sb thru	
	sb right	44	114	0.93	1	0	125	1.0	3		0	128	44	sb right	
	eb left	45	172	0.93	0		188		0	0.5	2	190	45	eb left	
	eb thru	46	342	0.93	6		374		0	32.5	143	517	46	eb thru	
	eb right	47	18	0.93	7	13	20	33.5	107		0	127	47	eb right	

Traffic Volume Calculations 2021 PM Peak

Weekday PM Peak								Casino Trips 319 % enter	319 vol	441 % exit	441 vol				Weekday PM Peak
	mvmt	mvmt #	2010/2012 Existing Volumes	PHF	HV%	RTOR	2021 No Build Volumes					2021 Build Volumes	mvmt #	mvmt	
	nb left	48	58	0.96			63		0	33.5	147	210	48	nb left	
	nb thru	49	77	0.96			84		0	9.0	40	124	49	nb thru	
	nb right	50	46	0.96			50	3.0	10	33.0	145	204	50	nb right	
Packer	wb left	51	30	0.96			33	4.0	13		0	46	51	wb left	Packer
and	wb thru	52	306	0.96			335		0		0	335	52	wb thru	and
Darien Street	wb right	53	83	0.96			91		0		0	91	53	wb right	Darien Street
	sb left	54	320	0.96			350	30.0	95		0	445	54	sb left	
	sb thru	55	14	0.96			15	2.0	6		0	22	55	sb thru	
	sb right	56	39	0.96			43		0		0	43	56	sb right	
	eb left	57	79	0.96			86		0		0	86	57	eb left	
	eb thru	58	87	0.96			95	0.5	2		0	97	58	eb thru	
	eb right	59	24	0.96			26	1.0	3		0	29	59	eb right	
	nb left	60	10	0.92	10		11		0		0	11	60	nb left	
	nb thru	61	15	0.92	0		17		0		0	17	61	nb thru	
	nb right	62	0	0.92	0	0	0		0		0	0	62	nb right	
Packer	wb left	63	2	0.92	0		2		0		0	2	63	wb left	Packer
and	wb thru	64	290	0.92	2		324		0	33.0	146	469	64	wb thru	and
10th	wb right	65	118	0.92	0	47	132		0	0.5	2	134	65	wb right	10th
	sb left	66	120	0.92	1		134	0.5	2		0	135	66	sb left	
	sb thru	67	17	0.92	0		19		0		0	19	67	sb thru	
	sb right	68	86	0.92	17	34	96		0		0	96	68	sb right	
	eb left	69	46	0.92	4		51		0		0	51	69	eb left	
	eb thru	70	115	0.92	3		128	1.0	3		0	131	70	eb thru	
	eb right	71	12	0.92	0	7	13		0		0	13	71	eb right	
	nb left	72					0		0		0	0	72	nb left	
Packer	nb right	73					0		0		0	0	73	nbright	Packer
and	sb right	74	165				180	4.0	13		0	193	74	sbright	and
95 Ramp	eb thru	75					0		0	32.5	143	143	75	eb thru	3rd
	eb right	76					0		0		0	0	76	eb right	
	wb thru	77					0	28.5	91		0	91	77	wb thru	
	wb right	78					0		0		0	0	78	wb right	
	nb left	103	0	0.92	10		0		0		0	0	103	nb left	
	nb thru	104	181	0.92	0		198		0	71.0	313	511	104	nb thru	
	nb right	105	0	0.92	0	0	0		0		0	0	105	nb right	
Darien & N. Site	wb left	106	0	0.92	0		0		0	4.5	20	20	106	wb left	Packer
Driveway	wb thru	107	0	0.92	2		0		0		0	0	107	wb thru	and
	wb right	108	0	0.92	0	47	0	3.0	10	4.5	20	30	108	wb right	10th
	sb left	109	0	0.92	1		0		0		0	0	109	sb left	
	sb thru	110	68	0.92	0		74	7.0	22		0	97	110	sb thru	
	sb right	111	0	0.92	17	34	0		0		0	0	111	sb right	
	eb left	112	0	0.92	4		0		0		0	0	112	eb left	
	eb thru	113	0	0.92	3		0		0		0	0	113	eb thru	
	eb right	114	0	0.92	0	7	0		0		0	0	114	eb right	

Traffic Volume Calculations 2021 PM Peak

Weekday PM Peak								Casino Trips 319 % enter	Casino Trips 319 vol	Casino Trips 441 % exit	Casino Trips 441 vol				Weekday PM Peak
	mvmt	mvmt #	2010/2012 Existing Volumes	PHF	HV%	RTOR	2021 No Build Volumes					2021 Build Volumes	mvmt #	mvmt	
	nb left	115	0	0.92	10		0		0		0	0	115	nb left	
	nb thru	116	181	0.92	0		198		0	64.0	282	480	116	nb thru	
	nb right	117	0	0.92	0	0	0	6.0	19		0	19	117	nb right	
Darion & Employee	wb left	118	0	0.92	0		0		0	6.0	26	26	118	wb left	Packer
Driveway	wb thru	119	0	0.92	2		0		0		0	0	119	wb thru	and
	wb right	120	0	0.92	0	47	0		0	7.0	31	31	120	wb right	10th
	sb left	121	0	0.92	1		0	7.0	22		0	22	121	sb left	
	sb thru	122	68	0.92	0		74		0	4.5	20	94	122	sb thru	
	sb right	123	0	0.92	17	34	0		0		0	0	123	sb right	
	eb left	124	0	0.92	4		0		0		0	0	124	eb left	
	eb thru	125	0	0.92	3		0		0		0	0	125	eb thru	
	eb right	126	0	0.92	0	7	0		0		0	0	126	eb right	
	nb left	127	0	0.92	10		0	4.5	14		0	14	127	nb left	
	nb thru	128	97	0.92	0		106		0		0	106	128	nb thru	
	nb right	129	0	0.92	0	0	0		0		0	0	129	nb right	
7th Street &	wb left	130	0	0.92	0		0		0		0	0	130	wb left	Packer
North Site Driveway	wb thru	131	0	0.92	2		0		0		0	0	131	wb thru	and
	wb right	132	0	0.92	0	47	0		0		0	0	132	wb right	10th
	sb left	133	0	0.92	1		0		0		0	0	133	sb left	
	sb thru	134	88	0.92	0		96	64.0	204		0	300	134	sb thru	
	sb right	135	0	0.92	17	34	0	7.5	24		0	24	135	sb right	
	eb left	136	0	0.92	4		0		0		0	0	136	eb left	
	eb thru	137	0	0.92	3		0		0		0	0	137	eb thru	
	eb right	138	0	0.92	0	7	0		0		0	0	138	eb right	
	nb left	139	0	0.92	10		0	14.0	45		0	45	139	nb left	
	nb thru	140	97	0.92	0		106	4.5	14		0	120	140	nb thru	
	nb right	141	0	0.92	0	0	0		0		0	0	141	nb right	
7th Street &	wb left	142	0	0.92	0		0		0		0	0	142	wb left	Packer
Garage Driveway	wb thru	143	0	0.92	2		0		0		0	0	143	wb thru	and
	wb right	144	0	0.92	0	47	0		0		0	0	144	wb right	10th
	sb left	145	0	0.92	1		0		0		0	0	145	sb left	
	sb thru	146	88	0.92	0		96		0		0	96	146	sb thru	
	sb right	147	0	0.92	17	34	0	64.0	204		0	204	147	sb right	
	eb left	148	0	0.92	4		0		0		0	0	148	eb left	
	eb thru	149	0	0.92	3		0		0		0	0	149	eb thru	
	eb right	150	0	0.92	0	7	0		0		0	0	150	eb right	
	nb left	151	0	0.92	10		0		0		0	0	151	nb left	
	nb thru	152	181	0.92	0		198	6.0	19		0	217	152	nb thru	
	nb right	153	0	0.92	0	0	0		0		0	0	153	nb right	
Darrion &	wb left	154	0	0.92	0		0		0	14.0	62	62	154	wb left	Packer
Garage Driveway	wb thru	155	0	0.92	2		0		0		0	0	155	wb thru	and
	wb right	156	0	0.92	0	47	0		0	64.0	282	282	156	wb right	10th
	sb left	157	0	0.92	1		0		0		0	0	157	sb left	
	sb thru	158	68	0.92	0		74		0	10.5	46	121	158	sb thru	
	sb right	159	0	0.92	17	34	0		0		0	0	159	sb right	
	eb left	160	0	0.92	4		0		0		0	0	160	eb left	
	eb thru	161	0	0.92	3		0		0		0	0	161	eb thru	
	eb right	162	0	0.92	0	7	0		0		0	0	162	eb right	

Traffic Volume Calculations 2016 & 2021 Event Peak

Weekday Pre-Phillies Event Peak	mvmt	mvmt #	2009 Existing Volumes	PHF	HV%	RTOR	2016 No Build Volumes	Casino Trips 218 % enter	218 vol	302 % exit	302 vol	2016 Build Volumes	mvmt #	mvmt	Weekday Pre-Phillies Event Peak
	nb left	1	40	0.90			40		0		0	40	1	nb left	
	nb thru	2	169	0.90			169		0		0	169	2	nb thru	
	nb right	3	3	0.90			3		0		0	3	3	nb right	
Front	wb left	4	4	0.90			4		0		0	4	4	wb left	Front
and	wb thru	5	1	0.90			1		0		0	1	5	wb thru	and
Packer	wb right	6	1	0.90			1		0		0	1	6	wb right	Packer
	sb left	7	8	0.90			8		0		0	8	7	sb left	
	sb thru	8	831	0.90			831		0		0	831	8	sb thru	
	sb right	9	854	0.90			854	28.5	62		0	916	9	sb right	
	eb left	10	473	0.90			473		0	32.5	98	571	10	eb left	
	eb thru	11	1	0.90			1		0		0	1	11	eb thru	
	eb right	12	17	0.90			17		0		0	17	12	eb right	
	nb left	13	127	0.90			127		0		0	127	13	nb left	
Front	nb thru	14	415	0.90			415		0	32.5	98	513	14	nb thru	Front
and	sb thru	15	1693	0.90			1693	28.5	62		0	1755	15	sb thru	and
I-76 EB	sb right	16	230	0.90			230		0		0	230	16	sb right	I-76 EB
	nb thru	17	412	0.90			412		0	28.5	86	498	17	nb thru	
	nb right	18	54	0.90			54		0	4.0	12	88	18	nb right	
Front	sb left	19	116	0.90			116		0		0	116	19	sb left	Front
and	sb thru	20	1243	0.90			1243	28.5	62		0	1305	20	sb thru	and
from I-76 WB/to I-95 SB	eb left	21	186	0.90			186		0		0	186	21	eb left	from I-76 WB/to I-95 SB
	eb thru	22	546	0.90			546		0		0	546	22	eb thru	
	eb right	23	680	0.90			680		0		0	680	23	eb right	
	nb left	24	125	0.90			125		0	28.0	85	210	24	nb left	
	nb thru	25	405	0.90			405		0	0.5	2	407	25	nb thru	
	nb right	26	0	0.90			0		0		0	0	26	nb right	
Front	wb left	27	20	0.90			20		0		0	20	27	wb left	Front
and	wb thru	28	10	0.90			10		0		0	10	28	wb thru	and
Dunkin Donuts/I-95	wb right	29	9	0.90			9		0		0	9	29	wb right	Dunkin Donuts/I-95
	sb left	30	0	0.90			0		0		0	0	30	sb left	Dunkin Donuts/I-95
	sb thru	31	567	0.90			567	0.5	1		0	568	31	sb thru	
	sb right	32	312	0.90			312		0		0	312	32	sb right	
	eb left	33	484	0.90			484		0		0	484	33	eb left	
	eb thru	34	9	0.90			9		0		0	9	34	eb thru	
	eb right	35	771	0.90			771	28.0	61		0	832	35	eb right	
	nb left	36	43	0.90			43		0		0	43	36	nb left	
	nb thru	37	48	0.90			48		0		0	48	37	nb thru	
	nb right	38	25	0.90			25		0		0	25	38	nb right	
Packer	wb left	39	444	0.90			444	29.5	64		0	508	39	wb left	Packer
and	wb thru	40	793	0.90			793	3.0	7		0	800	40	wb thru	and
7th	wb right	41	77	0.90			77		0		0	77	41	wb right	7th
	sb left	42	48	0.90			48		0		0	48	42	sb left	
	sb thru	43	687	0.90			687	8.5	19		0	706	43	sb thru	
	sb right	44	624	0.90			624	1.0	2		0	626	44	sb right	
	eb left	45	82	0.90			82		0	0.5	2	84	45	eb left	
	eb thru	46	130	0.90			130		0	32.5	98	228	46	eb thru	
	eb right	47	110	0.90			110	33.5	73		0	183	47	eb right	
	nb left	48	108	0.90			108		0	33.5	102	210	48	nb left	
	nb thru	49	30	0.90			30		0	9.0	27	57	49	nb thru	
	nb right	50	108	0.90			108	3.0	7	33.0	100	214	50	nb right	
Packer	wb left	51	664	0.90			664	4.0	9		0	673	51	wb left	Packer
and	wb thru	52	541	0.90			541		0		0	541	52	wb thru	and
Darien Street	wb right	53	70	0.90			70		0		0	70	53	wb right	Darien Street
	sb left	54	176	0.90			176	30.0	65		0	241	54	sb left	
	sb thru	55	314	0.90			314	2.0	4		0	318	55	sb thru	
	sb right	56	183	0.90			183		0		0	183	56	sb right	
	eb left	57	43	0.90			43		0		0	43	57	eb left	
	eb thru	58	135	0.90			135	0.5	1		0	136	58	eb thru	
	eb right	59	205	0.90			205	1.0	2		0	207	59	eb right	

Traffic Volume Calculations 2016 & 2021 Event Peak

Weekday Pre-Phillies Event Peak								Casino Trips 218 % entor	Casino Trips 218 vol	Casino Trips 302 % exit	Casino Trips 302 vol				Weekday Pre-Phillies Event Peak
	mvmt	mvmt #	2009 Existing Volumes	PHF	HV%	RTOR	2016 No Build Volumes					2016 Build Volumes	mvmt #	mvmt	
	nb left	1	40	0.90			40		0		0	40	1	nb left	
	nb thru	2	169	0.90			169		0		0	169	2	nb thru	
	nb right	3	3	0.90			3		0		0	3	3	nb right	
Front	wb left	4	4	0.90			4		0		0	4	4	wb left	Front
	nb left	60	9	0.90			9		0		0	9	60	nb left	
	nb thru	61	6	0.90			6		0		0	6	61	nb thru	
	nb right	62	17	0.90			17		0		0	17	62	nb right	
Packer	wb left	63	524	0.90			524		0		0	524	63	wb left	Packer
and	wb thru	64	290	0.90			290		0	33.0	100	390	64	wb thru	and
10th	wb right	65	44	0.90			44		0	0.5	2	46	65	wb right	10th
	sb left	66	128	0.90			128	0.5	1		0	129	66	sb left	
	sb thru	67	213	0.90			213		0		0	213	67	sb thru	
	sb right	68	45	0.90			45		0		0	45	68	sb right	
	eb left	69	30	0.90			30		0		0	30	69	eb left	
	eb thru	70	218	0.90			218	1.0	2		0	220	70	eb thru	
	eb right	71	166	0.90			166		0		0	166	71	eb right	
	nb left	72					0		0		0	0	72	nb left	
Packer	nb right	73					0		0		0	0	73	nbright	Packer
and	sb right	74	421				421	4.0	9		0	430	74	sbright	and
95 Ramp	eb thru	75					0		0	32.5	98	98	75	eb thru	3rd
	eb right	76					0		0		0	0	76	eb right	
	wb thru	77					0	28.5	62		0	62	77	wb thru	
	wb right	78					0		0		0	0	78	wb right	
	nb left	103	0	0.92	10		0		0		0	0	103	nb left	
	nb thru	104	246	0.92	0		246		0	71.0	214	460	104	nb thru	
	nb right	105	0	0.92	0	0	0		0		0	0	105	nb right	
Darien & N. Site	wb left	106	0	0.92	0		0		0	4.5	14	14	106	wb left	Packer
Driveway	wb thru	107	0	0.92	2		0		0		0	0	107	wb thru	and
	wb right	108	0	0.92	0	47	0	3.0	7	4.5	14	21	108	wb right	10th
	sb left	109	0	0.92	1		0		0		0	0	109	sb left	
	sb thru	110	1183	0.92	0		1183	7.0	15		0	1198	110	sb thru	
	sb right	111	0	0.92	17	34	0		0		0	0	111	sb right	
	eb left	112	0	0.92	4		0		0		0	0	112	eb left	
	eb thru	113	0	0.92	3		0		0		0	0	113	eb thru	
	eb right	114	0	0.92	0	7	0		0		0	0	114	eb right	
	nb left	115	0	0.92	10		0		0		0	0	115	nb left	
	nb thru	116	246	0.92	0		246		0	64.0	193	439	116	nb thru	
	nb right	117	0	0.92	0	0	0	8.0	13		0	13	117	nb right	
Darien & Employee	wb left	118	0	0.92	0		0		0	6.0	18	18	118	wb left	Packer
Driveway	wb thru	119	0	0.92	2		0		0		0	0	119	wb thru	and
	wb right	120	0	0.92	0	47	0		0	7.0	21	21	120	wb right	10th
	sb left	121	0	0.92	1		0	7.0	15		0	15	121	sb left	
	sb thru	122	1183	0.92	0		1183		0	4.5	14	1197	122	sb thru	
	sb right	123	0	0.92	17	34	0		0		0	0	123	sb right	
	eb left	124	0	0.92	4		0		0		0	0	124	eb left	
	eb thru	125	0	0.92	3		0		0		0	0	125	eb thru	
	eb right	126	0	0.92	0	7	0		0		0	0	126	eb right	
	nb left	127	0	0.92	10		0	4.5	10		0	10	127	nb left	
	nb thru	128	116	0.92	0		116		0		0	116	128	nb thru	
	nb right	129	0	0.92	0	0	0		0		0	0	129	nb right	
7th Street &	wb left	130	0	0.92	0		0		0		0	0	130	wb left	Packer
North Site Driveway	wb thru	131	0	0.92	2		0		0		0	0	131	wb thru	and
	wb right	132	0	0.92	0	47	0		0		0	0	132	wb right	10th
	sb left	133	0	0.92	1		0		0		0	0	133	sb left	
	sb thru	134	1241	0.92	0		1241	64.0	140		0	1381	134	sb thru	
	sb right	135	0	0.92	17	34	0	7.5	16		0	16	135	sb right	
	eb left	136	0	0.92	4		0		0		0	0	136	eb left	
	eb thru	137	0	0.92	3		0		0		0	0	137	eb thru	
	eb right	138	0	0.92	0	7	0		0		0	0	138	eb right	
	nb left	139	0	0.92	10		0	14.0	31		0	31	139	nb left	
	nb thru	140	116	0.92	0		116	4.5	10		0	126	140	nb thru	
	nb right	141	0	0.92	0	0	0		0		0	0	141	nb right	
7th Street &	wb left	142	0	0.92	0		0		0		0	0	142	wb left	Packer
Garage Driveway	wb thru	143	0	0.92	2		0		0		0	0	143	wb thru	and
	wb right	144	0	0.92	0	47	0		0		0	0	144	wb right	10th
	sb left	145	0	0.92	1		0		0		0	0	145	sb left	
	sb thru	146	1241	0.92	0		1241		0		0	1241	146	sb thru	
	sb right	147	0	0.92	17	34	0	64.0	140		0	140	147	sb right	
	eb left	148	0	0.92	4		0		0		0	0	148	eb left	
	eb thru	149	0	0.92	3		0		0		0	0	149	eb thru	
	eb right	150	0	0.92	0	7	0		0		0	0	150	eb right	
	nb left	151	0	0.92	10		0		0		0	0	151	nb left	
	nb thru	152	246	0.92	0		246	8.0	13		0	259	152	nb thru	
	nb right	153	0	0.92	0	0	0		0		0	0	153	nb right	
Darien &	wb left	154	0	0.92	0		0		0	14.0	42	42	154	wb left	Packer
Garage Driveway	wb thru	155	0	0.92	2		0		0		0	0	155	wb thru	and
	wb right	156	0	0.92	0	47	0		0	64.0	193	193	156	wb right	10th
	sb left	157	0	0.92	1		0		0		0	0	157	sb left	
	sb thru	158	1183	0.92	0		1183		0	10.5	32	1215	158	sb thru	
	sb right	159	0	0.92	17	34	0		0		0	0	159	sb right	
	eb left	160	0	0.92	4		0		0		0	0	160	eb left	
	eb thru	161	0	0.92	3		0		0		0	0	161	eb thru	
	eb right	162	0	0.92	0	7	0		0		0	0	162	eb right	

APPENDIX G

CRASH DATA ANALYSIS

Crash Analysis

Crash histories for the length of the affected area were requested from the City of Philadelphia Streets Department. The City data represents the five year period from 2007 to 2011 and is the most recent data available from City at the time of preparation of this report. The City provided data for the following study intersections:

1. Packer Avenue and S. 10th Street
2. Packer Avenue and I-76 Eastbound Ramps – S. Darien Street
3. Packer Avenue and S. 7th Street
4. Packer Avenue and S. Front Street
5. S. Front Street and I-76 Eastbound On Ramp
6. S. Front Street and I-76 Westbound Off Ramp – I-95 Southbound On Ramp
7. S. Front Street and I-95 Ramps

The engineering extract summary classifies accident data into various categories. Accidents are broken down by year, roadway conditions, time-of-day, type of vehicle, severity of the accident, month, and probable cause, among many other categories. For each category, data is presented by number of vehicles per year and by the percentage of total vehicles in the time frame.

Packer Avenue at South 10th Street
There were 4 reportable crashes, three (3) angle and one (1) rear end, with four (4) being injury occupant accidents (100%). Of the reportable crashes, three (3) or (75%) occurred at the intersection with one (1) listed as other location accidents. One accident occurred due to the driver being under the influence. Accidents peaked on Wednesday with 24% followed by Tuesday and Sunday with 17% each. Approximately 78% occurred in dry weather conditions and two-thirds (66%) during daylight hours. South 10th Street has three lanes and a left turn lane SB and on through and a dedicated left and dedicated right lane NB. Packer Avenue is an east to west roadway with two lanes in each direction and an entrance to I-76 EB ramp just north of the intersection.

Packer Avenue at I-76 EB Ramps and South Darien Street
There were 7 reportable crashes with five (5) being injury occupant accidents (71%) and two (2) being property damage with towing accidents (29%). Of the reportable crashes, seven (7) or (100%) occurred at the intersection. Accidents peaked on Friday with 24% followed by Sunday and Monday with 21% and 16% respectively. Approximately 86% occurred in dry weather conditions and four (4) accidents (57%) during daylight hours.

Packer Avenue at South 7th Street
There were 9 reportable crashes with four (4) being injury occupant accidents (44%), three (3) being property damage with towing accidents (33%) one accident was a fatal pedestrian accident and one was an injury pedestrian accident. Of the reportable crashes, all nine (9) or (100%) occurred at the intersection. Accidents peaked on Thursday with 27% followed by Wednesday and Friday with 18% and 15% respectively. Approximately seven (7) accidents or 78% occurred in dry weather conditions and seven (7) accidents (78%) during daylight hours.

Packer Avenue at South Front Street
There were 7 reportable crashes with five (5) of those being property damage with towing accidents (71%) and two (2) being injury occupant accidents (29%). Of the reportable crashes, 2 accidents (29%) occurred at the intersection with two (2) listed as other and three (3) as midblock accidents. Accidents peaked on Friday with 23% followed by Thursday and Sunday with 18% and 16% respectively. Approximately six (6) accidents or 86% occurred in dry weather conditions and five (5) accidents (71%) during daylight hours.

South Front Street at I-76 WB Off Ramp- I-95 SB on Ramp (Ramp E-DE)
There were 17 reportable crashes with five (5) of those being property damage with towing accidents (29%) and twelve (12) being injury occupant accidents (71%). Of the reportable crashes, 9 accidents (53%) occurred at the intersection with four (4) listed as other and four (4) as midblock accidents.

Accidents peaked on Friday with 23% followed by Tuesday and Wednesday with 17% and 17% respectively. Approximately fourteen (14) accidents or 82% occurred in dry weather conditions and eight (8) accidents (47%) during dark hours and seven (7) accidents (41%) during daylight hours.

South Front Street at I-95 Ramps (Ramp H)

There were 8 reportable crashes with six (6) being injury occupant accidents (75%) and two (2) being property damage with towing accidents (25%). Of the reportable crashes, 1 (12%) occurred at the intersection with six (6) listed as other (assumed to be on the ramp) and one (1) as midblock accidents. Accidents peaked on Tuesday and Friday with 21% each followed by Sunday with 14%. Approximately six (6) accidents or 75% occurred in dry weather conditions and five (5) accidents (63%) during daylight hours and three (3) accidents (38%) during dark hours.

City of Philadelphia Streets Department

REPORTABLE CRASHES

	Packer Avenue & South 10th Street		Packer Avenue & I-76 Eastbound Ramps/South Darien Street		Packer Avenue & South 7th Street		Packer Avenue & South Front Street		South Front Street & I-76 WB Off Ramp/I-95 SB On Ramp (Ramp E-DE)		South Front Street & I-95 Ramp (Ramp H)	
COLLISION TYPE	**TOT.**	**(%)**	**TOT.**	**(%)**	**TOT.**	**(%)**	**TOT.**	**(%)**	**TOT.**	**(%)**	**TOT.**	**(%)**
Head On			1	14	2	22	1	14	2	12		
Hit Pedestrian					2	22		0				
Angle	3	75	4	57	1	11	1	14	5	29	2	25
Other/Unknown			1	14	1	11	2	29	2	12		
Rear End	1	25	1	14	1	11	2	29	4	24	1	12
Rear to Rear (Backing)					1	11						
Sideswipe (Same Direction)									1	6	1	12
Non-Collision											1	12
Fixed Object							1	14	1	6	3	38
Sideswipe (Opposite Direction)					1	11			2	12		
TOTAL	**4**	**100**	**7**	**100**	**9**	**100**	**7**	**100**	**17**	**100**	**8**	**100**

City of Philadelphia Streets Department
CRASH SEVERITY

	Packer Avenue & South 10th Street		Packer Avenue & I-76 Eastbound Ramps/South Darien Street		Packer Avenue & South 7th Street		Packer Avenue & South Front Street		South Front Street & I-76 WB Off Ramp/I-95 SB On Ramp (Ramp E-DE)		South Front Street & I-95 Ramp (Ramp H)	
CRASH SEVERITY	**TOT.**	**(%)**	**TOT.**	**(%)**	**TOT.**	**(%)**	**TOT.**	**(%)**	**TOT.**	**(%)**	**TOT.**	**(%)**
Injury Occupant	4	100	5	71	4	44	2	29	12	71	6	75
Property Damage with Towing			2	29	3	33	5	71	5	29	2	25
Fatality Pedestrian					1	11						
Injury Pedestrian					1	11						
Fatality Bike												
Fatality Occupant												
Injury Bike												
Not Coded												
Not Stated												
TOTAL	**4**	**100**	**7**	**100**	**9**	**100**	**7**	**100**	**17**	**100**	**8**	**100**

APPENDIX H

LEVEL OF SERVICE ANALYSIS WORKSHEETS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	46	115	12	2	290	118	10	15	0	120	17	86
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1850	1850	1900	1873	1873	1727	1900	0	1881	1663	1663
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	464	2207	95	630	1839	432	567	802	0	666	702	597
Arriving On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.42	0.42	0.00	0.42	0.42	0.42
Sat Flow, veh/h	968.6	4965.2	213.4	1279.6	4138.8	972.4	1223.3	1900.0	0.0	1404.9	1663.1	1413.7
Grp Volume(v), veh/h	50.0	84.3	46.1	2.2	257.3	135.1	10.9	16.3	0.0	130.4	18.5	56.5
Grp Sat Flow(s),veh/h/ln	968.6	1683.3	1812.1	1279.6	1704.8	1701.8	1223.3	1900.0	0.0	1404.9	1663.1	1413.7
Q Serve(g_s), s	3.0	1.3	1.3	0.1	4.1	4.3	0.5	0.5	38.0	5.4	0.6	2.2
Cycle Q Clear(g_c), s	7.3	1.3	1.3	1.4	4.1	4.3	2.7	0.5	38.0	5.8	0.6	2.2
Proportion In Lane	1.000		0.118	1.000		0.571	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	464.1	1496.2	805.4	630.1	1515.3	756.3	567.0	802.2	0.0	666.2	702.2	596.9
V/C Ratio(X)	0.108	0.056	0.057	0.003	0.170	0.179	0.019	0.020	0.000	0.196	0.026	0.095
Avail Cap(c_a), veh/h	464.1	1496.2	805.4	630.1	1515.3	756.3	567.0	802.2	0.0	666.2	702.2	596.9
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)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	17.3	14.2	14.3	14.6	15.0	15.1	16.4	15.2	0.0	16.8	15.2	15.6
Incr Delay (d2), s/veh	0.5	0.1	0.1	0.0	0.2	0.5	0.1	0.0	0.0	0.7	0.1	0.3
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
Lane Group Delay (d), s/veh	17.7	14.3	14.4	14.7	15.3	15.6	16.5	15.2	0.0	17.5	15.3	16.0
Lane Group LOS	B	B	B	B	B	B	B	B		B	B	B
Approach Volume, veh/h		180			395			27			205	
Approach Delay, s/veh		15.3			15.4			15.7			16.9	
Approach LOS		B			B			B			B	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	46.00	46.00	44.00	44.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	40.00	40.00	38.00	38.00
Max Q Clear Time (g_c+I1), s	9.27	6.31	4.65	7.82
Green Extension Time (p_c)	1.71	1.72	0.57	0.57

Intersection Summary	
HCM 2010 Control Delay	15.8
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	172	342	18	22	266	98	33	44	20	22	48	114
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	179.2	177.6	166.7	182.0	190.0	184.5	173.9	147.3	190.0	187.3	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	512	2231	36	455	1800	433	623	965	369	421	951	660
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	1040	4958	81	899	4000	963	1334	2340	893	847	2307	1599
Grp Volume(v), veh/h	185	242	132	24	235	123	35	32	34	41	35	0
Grp Sat Flow(s),veh/h/ln	1040	1630	1777	899	1656	1650	1334	1652	1582	1534	1620	1599
Q Serve(g_s), s	10.3	3.5	3.5	1.3	3.4	3.6	1.3	0.9	1.0	0.0	1.0	0.0
Cycle Q Clear(g_c), s	13.9	3.5	3.5	4.8	3.4	3.6	2.3	0.9	1.0	1.1	1.0	0.0
Prop In Lane	1.00		0.05	1.00		0.58	1.00		0.56	0.58		1.00
Lane Grp Cap(c), veh/h	512	1467	800	455	1491	743	623	682	652	704	668	660
V/C Ratio(X)	0.36	0.16	0.17	0.05	0.16	0.17	0.06	0.05	0.05	0.06	0.05	0.00
Avail Cap(c_a), veh/h	512	1467	800	455	1491	743	623	682	652	704	668	660
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.2	13.1	13.1	14.5	13.0	13.1	14.8	14.1	14.1	14.1	14.1	0.0
Incr Delay (d2), s/veh	2.0	0.2	0.4	0.2	0.2	0.5	0.2	0.1	0.1	0.2	0.1	0.0
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 Back of Q (50%), veh/ln	2.8	1.4	1.5	0.3	1.3	1.4	0.4	0.4	0.4	0.5	0.4	0.0
Lane Grp Delay (d), s/veh	19.2	13.3	13.5	14.7	13.2	13.6	15.0	14.2	14.3	14.3	14.3	0.0
Lane Grp LOS	B	B	B	B	B	B	B	B	B	B	B	
Approach Vol, veh/h		559			382			101			76	
Approach Delay, s/veh		15.3			13.4			14.5			14.3	
Approach LOS		B			B			B			B	

Timer				
Assigned Phs	2	6	8	4
Phs Duration (G+Y+Rc), s	41.0	41.0	39.0	39.0
Change Period (Y+Rc), s	5.0	5.0	6.0	6.0
Max Green Setting (Gmax), s	36.0	36.0	33.0	33.0
Max Q Clear Time (g_c+I1), s	15.9	6.8	4.3	3.1
Green Ext Time (p_c), s	2.6	2.7	0.4	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	14.5
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	79	87	24	30	306	83	58	77	46	320	14	39
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	188.1	185.2	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	188.1	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	579	2214	437	539	1234	507	554	669	522	488	669	569
Arrive On Green	0.11	0.52	0.52	0.36	0.36	0.00	0.36	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	1792	4239	837	1291	3471	1425	1353	1881	1468	1247	1881	1600
Grp Volume(v), veh/h	82	71	39	31	319	0	60	80	36	333	15	0
Grp Sat Flow(s),veh/h/ln	1792	1686	1705	1291	1736	1425	1353	1881	1468	1247	1881	1600
Q Serve(g_s), s	2.2	0.9	1.0	1.4	5.9	0.0	2.7	2.6	1.5	22.1	0.5	0.0
Cycle Q Clear(g_c), s	2.2	0.9	1.0	1.4	5.9	0.0	3.2	2.6	1.5	24.7	0.5	0.0
Prop In Lane	1.00		0.49	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	579	1761	890	539	1234	507	554	669	522	488	669	569
V/C Ratio(X)	0.14	0.04	0.04	0.06	0.26	0.00	0.11	0.12	0.07	0.68	0.02	0.00
Avail Cap(c_a), veh/h	579	1761	890	539	1234	507	554	669	522	488	669	569
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.0	10.5	10.5	19.1	20.6	0.0	19.9	19.5	19.2	27.8	18.8	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.2	0.5	0.0	0.4	0.4	0.3	7.6	0.1	0.0
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 Back of Q (50%), veh/ln	1.0	0.4	0.4	0.5	2.6	0.0	1.0	1.2	0.6	7.8	0.2	0.0
Lane Grp Delay (d), s/veh	13.5	10.5	10.6	19.4	21.1	0.0	20.3	19.9	19.4	35.4	18.9	0.0
Lane Grp LOS	B	B	B	B	C		C	B	B	D	B	
Approach Vol, veh/h		192			350			176			348	
Approach Delay, s/veh		11.8			20.9			19.9			34.7	
Approach LOS		B			C			B			C	
Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	15.0	53.0			38.0			37.0			37.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	9.5	47.0			32.0			32.0			32.0	
Max Q Clear Time (g_c+I1), s	4.2	3.0			7.9			5.2			26.7	
Green Ext Time (p_c), s	0.1	1.3			1.3			1.5			0.8	
Intersection Summary												
HCM 2010 Ctrl Delay			23.6									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	389	19	38	2	2	5	16	86	5	10	151	281
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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
Adj Sat Flow Rate	1496	1376	1376	1639	1639	1639	1638	1528	1528	1696	1454	1454
Lanes	2	1	0	0	1	0	1	2	0	1	2	0
Capacity, veh/h	930	216	319	136	139	289	505	1231	71	561	1250	0
Arriving On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.57	0.57	0.57	0.57	0.57	0.00
Sat Flow, veh/h	2180.5	503.5	741.9	268.6	256.4	671.5	1071.6	2862.2	165.0	1176.8	2908.1	0.0
Grp Volume(v), veh/h	418.3	0.0	50.5	9.7	0.0	0.0	17.2	49.0	48.8	10.8	162.4	0.0
Grp Sat Flow(s),veh/h/ln	1090.3	0.0	1245.4	1208.7	0.0	0.0	1071.6	1528.2	1499.1	1176.8	1454.1	0.0
Q Serve(g_s), s	15.2	0.0	2.4	0.0	0.0	0.0	0.8	1.4	1.5	0.4	2.6	0.0
Cycle Q Clear(g_c), s	22.2	0.0	2.4	7.0	0.0	0.0	3.3	1.4	1.5	1.9	2.6	0.0
Proportion In Lane	1.000		0.596	0.222		0.556	1.000		0.110	1.000		0.000
Lane Grp Cap(c), veh/h	929.7	0.0	535.5	563.7	0.0	0.0	505.1	657.1	644.6	560.9	1250.5	0.0
V/C Ratio(X)	0.450	0.000	0.094	0.017	0.000	0.000	0.034	0.075	0.076	0.019	0.130	0.000
Avail Cap(c_a), veh/h	929.7	0.0	535.5	563.7	0.0	0.0	505.1	657.1	644.6	560.9	1250.5	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	25.3	0.0	16.9	16.4	0.0	0.0	13.5	12.5	12.5	12.9	12.8	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.3	0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.2	0.0
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
Lane Group Delay (d), s/veh	26.9	0.0	17.3	16.4	0.0	0.0	13.7	12.7	12.7	13.0	13.0	0.0
Lane Group LOS	C		B	B			B	B	B	B	B	
Approach Volume, veh/h		469			10			115			173	
Approach Delay, s/veh		25.9			16.4			12.9			13.0	
Approach LOS		C			B			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	50.00	50.00	50.00	50.00
Change Period (Y+Rc), s	7.00	7.00	7.00	7.00
Max Green Setting (Gmax), s	43.00	43.00	43.00	43.00
Max Q Clear Time (g_c+I1), s	24.15	8.97	5.34	4.58
Green Extension Time (p_c)	2.01	2.23	0.82	0.82

Intersection Summary	
HCM 2010 Control Delay	20.9
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	77	362	22	0	1	0	0	327	13	53	650	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1900	0	0	1638	1638	1624	1624	0
Lanes	1	1	1	0	1	0	0	2	0	1	2	0
Capacity, veh/h	529	605	514	0	665	0	0	1147	0	470	1635	0
Arriving On Green	0.35	0.35	0.00	0.00	0.35	0.00	0.00	0.47	0.00	0.16	0.70	0.00
Sat Flow, veh/h	1307.6	1727.3	1468.2		1900.0	0.0		3275.9	0.0	1546.6	3166.7	0.0
Grp Volume(v), veh/h	96.3	452.5	0.0		1.3	0.0		408.8	0.0	66.3	812.5	0.0
Grp Sat Flow(s),veh/h/ln	1307.6	1727.3	1468.2		1900.0	0.0		1637.9	0.0	1546.6	1542.7	0.0
Q Serve(g_s), s	5.2	23.1	0.0		0.0	0.0		8.0	0.0	0.0	12.0	0.0
Cycle Q Clear(g_c), s	5.2	23.1	0.0		0.0	0.0		8.0	0.0	0.0	12.0	0.0
Proportion In Lane	1.000		1.000			0.000			0.000	1.000		0.000
Lane Grp Cap(c), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	469.7	1635.3	0.0
V/C Ratio(X)	0.182	0.748	0.000		0.002	0.000		0.357	0.000	0.141	0.497	0.000
Avail Cap(c_a), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	469.7	1635.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00		1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	1.000	0.000		1.000	0.000		1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	22.8	28.6	0.0		21.1	0.0		19.5	0.0	20.5	8.7	0.0
Incr Delay (d2), s/veh	0.8	8.3	0.0		0.0	0.0		0.9	0.0	0.6	1.1	0.0
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
Lane Group Delay (d), s/veh	23.6	36.9	0.0		21.1	0.0		20.4	0.0	21.1	9.8	0.0
Lane Group LOS	C	D			C			C		C	A	
Approach Volume, veh/h		549			1			409			879	
Approach Delay, s/veh		34.6			21.1			20.4			10.6	
Approach LOS		C			C			C			B	

Timer												
Assigned Phase		4			8			2		1	6	
Phase Duration (G+Y+Rc), s		41.00			41.00			41.00		18.00	59.00	
Change Period (Y+Rc), s		6.00			6.00			6.00		6.00	6.00	
Max Green Setting (Gmax), s		35.00			35.00			35.00		12.00	53.00	
Max Q Clear Time (g_c+I1), s		25.07			2.04			10.00		2.00	13.96	
Green Extension Time (p_c)		1.15			1.48			4.24		0.07	4.39	

Intersection Summary	
HCM 2010 Control Delay	20.0
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	484	1	126	0	1	0	164	217	0	0	621	312
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1976	0	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	1031	0	514	0	692	0	346	1736	0	0	1137	0
Arriving On Green	0.35	0.35	0.00	0.00	0.35	0.00	0.16	0.70	0.00	0.00	0.47	0.00
Sat Flow, veh/h	2536.8	0.0	1468.2	0.0	1976.0	0.0	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h	605.0	0.0	0.0	0.0	1.3	0.0	205.0	271.3	0.0		776.3	0.0
Grp Sat Flow(s),veh/h/ln	1268.4	0.0	1468.2	0.0	1976.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s	20.4	0.0	0.0	0.0	0.0	0.0	1.0	2.7	0.0		18.7	0.0
Cycle Q Clear(g_c), s	20.4	0.0	0.0	0.0	0.0	0.0	1.0	2.7	0.0		18.7	0.0
Proportion In Lane	1.000		1.000	0.000		0.000	1.000		0.000			0.000
Lane Grp Cap(c), veh/h	1030.8	0.0	513.9	0.0	691.6	0.0	346.0	1736.2	0.0		1136.8	0.0
V/C Ratio(X)	0.587	0.000	0.000	0.000	0.002	0.000	0.592	0.156	0.000		0.683	0.000
Avail Cap(c_a), veh/h	1030.8	0.0	513.9	0.0	691.6	0.0	346.0	1736.2	0.0		1136.8	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh	27.8	0.0	0.0	0.0	21.1	0.0	34.0	7.3	0.0		22.4	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.0	0.0	0.0	0.0	7.3	0.2	0.0		3.3	0.0
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
Lane Group Delay (d), s/veh	30.2	0.0	0.0	0.0	21.1	0.0	41.3	7.5	0.0		25.7	0.0
Lane Group LOS	C				C		D	A			C	
Approach Volume, veh/h		605			1			476			776	
Approach Delay, s/veh		30.2			21.1			22.0			25.7	
Approach LOS		C			C			C			C	
Timer												
Assigned Phase		4			8		5	2			6	
Phase Duration (G+Y+Rc), s		41.00			41.00		18.00	59.00			41.00	
Change Period (Y+Rc), s		6.00			6.00		6.00	6.00			6.00	
Max Green Setting (Gmax), s		35.00			35.00		12.00	53.00			35.00	
Max Q Clear Time (g_c+I1), s		22.41			2.04		3.04	4.75			20.73	
Green Extension Time (p_c)		1.96			2.41		0.33	3.66			3.13	
Intersection Summary												
HCM 2010 Control Delay			26.2									
HCM 2010 Level of Service			C									

2016 NO BUILD WEEKDAY PM PEAK HOUR CONDITIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	122	13	2	308	125	11	16	0	127	18	91
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1850	1850	1900	1873	1873	1727	1900	0	1881	1665	1665
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	451	2193	106	625	1826	444	561	802	0	665	703	597
Arriving On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.42	0.42	0.00	0.42	0.42	0.42
Sat Flow, veh/h	944.7	4934.5	239.6	1269.5	4107.6	999.0	1216.0	1900.0	0.0	1403.5	1664.6	1414.9
Grp Volume(v), veh/h	53.3	89.9	49.2	2.2	275.5	144.0	12.0	17.4	0.0	138.0	19.6	62.0
Grp Sat Flow(s),veh/h/ln	944.7	1683.3	1807.5	1269.5	1704.7	1697.1	1216.0	1900.0	0.0	1403.5	1664.6	1414.9
Q Serve(g_s), s	3.3	1.4	1.4	0.1	4.4	4.6	0.5	0.5	38.0	5.7	0.6	2.4
Cycle Q Clear(g_c), s	7.9	1.4	1.4	1.5	4.4	4.6	2.9	0.5	38.0	6.2	0.6	2.4
Proportion In Lane	1.000		0.133	1.000		0.589	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	451.2	1496.3	803.3	624.5	1515.3	754.2	561.3	802.2	0.0	665.1	702.8	597.4
V/C Ratio(X)	0.118	0.060	0.061	0.003	0.182	0.191	0.021	0.022	0.000	0.208	0.028	0.104
Avail Cap(c_a), veh/h	451.2	1496.3	803.3	624.5	1515.3	754.2	561.3	802.2	0.0	665.1	702.8	597.4
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)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	17.6	14.3	14.3	14.7	15.1	15.2	16.6	15.2	0.0	17.0	15.2	15.7
Incr Delay (d2), s/veh	0.5	0.1	0.1	0.0	0.3	0.6	0.1	0.0	0.0	0.7	0.1	0.3
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
Lane Group Delay (d), s/veh	18.1	14.3	14.4	14.7	15.4	15.7	16.7	15.2	0.0	17.7	15.3	16.1
Lane Group LOS	B	B	B	B	B	B	B	B		B	B	B
Approach Volume, veh/h		192			422			29			220	
Approach Delay, s/veh		15.4			15.5			15.8			17.0	
Approach LOS		B			B			B			B	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	46.00	46.00	44.00	44.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	40.00	40.00	38.00	38.00
Max Q Clear Time (g_c+I1), s	9.90	6.64	4.92	8.21
Green Extension Time (p_c)	1.85	1.85	0.62	0.61

Intersection Summary	
HCM 2010 Control Delay	15.9
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	179	356	19	23	277	102	34	46	21	23	50	119
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	179.2	177.6	166.7	182.0	190.0	184.5	173.9	147.3	190.0	187.4	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	503	2226	41	447	1790	442	621	962	371	421	950	660
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	1024	4946	90	886	3977	983	1331	2333	899	848	2303	1599
Grp Volume(v), veh/h	192	252	138	25	246	129	37	34	35	43	36	0
Grp Sat Flow(s),veh/h/ln	1024	1630	1776	886	1656	1647	1331	1652	1580	1531	1620	1599
Q Serve(g_s), s	11.0	3.7	3.7	1.4	3.5	3.7	1.4	1.0	1.1	0.0	1.1	0.0
Cycle Q Clear(g_c), s	14.8	3.7	3.7	5.1	3.5	3.7	2.4	1.0	1.1	1.1	1.1	0.0
Prop In Lane	1.00		0.05	1.00		0.60	1.00		0.57	0.58		1.00
Lane Grp Cap(c), veh/h	503	1467	799	447	1491	741	621	681	652	703	668	660
V/C Ratio(X)	0.38	0.17	0.17	0.06	0.16	0.17	0.06	0.05	0.05	0.06	0.05	0.00
Avail Cap(c_a), veh/h	503	1467	799	447	1491	741	621	681	652	703	668	660
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.5	13.1	13.1	14.6	13.1	13.1	14.9	14.1	14.1	14.1	14.1	0.0
Incr Delay (d2), s/veh	2.2	0.3	0.5	0.2	0.2	0.5	0.2	0.1	0.2	0.2	0.2	0.0
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 Back of Q (50%), veh/ln	3.0	1.5	1.6	0.3	1.4	1.5	0.5	0.4	0.4	0.5	0.4	0.0
Lane Grp Delay (d), s/veh	19.7	13.4	13.6	14.9	13.3	13.6	15.0	14.2	14.3	14.3	14.3	0.0
Lane Grp LOS	B	B	B	B	B	B	B	B	B	B	B	
Approach Vol, veh/h		582			400			106			79	
Approach Delay, s/veh		15.5			13.5			14.5			14.3	
Approach LOS		B			B			B			B	
Timer												
Assigned Phs		2			6			8			4	
Phs Duration (G+Y+Rc), s		41.0			41.0			39.0			39.0	
Change Period (Y+Rc), s		5.0			5.0			6.0			6.0	
Max Green Setting (Gmax), s		36.0			36.0			33.0			33.0	
Max Q Clear Time (g_c+I1), s		16.8			7.1			4.4			3.1	
Green Ext Time (p_c), s		2.7			2.8			0.4			0.4	
Intersection Summary												
HCM 2010 Ctrl Delay			14.7									
HCM 2010 LOS			B									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	82	91	25	31	318	86	60	80	48	333	15	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	188.1	185.2	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	188.1	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	573	2210	440	537	1234	563	553	669	522	484	669	569
Arrive On Green	0.11	0.52	0.52	0.36	0.36	0.00	0.36	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	1792	4232	843	1285	3471	1583	1352	1881	1468	1241	1881	1600
Grp Volume(v), veh/h	85	75	40	32	331	0	62	83	38	347	16	0
Grp Sat Flow(s),veh/h/ln	1792	1686	1704	1285	1736	1583	1352	1881	1468	1241	1881	1600
Q Serve(g_s), s	2.3	1.0	1.0	1.5	6.1	0.0	2.8	2.7	1.5	23.6	0.5	0.0
Cycle Q Clear(g_c), s	2.3	1.0	1.0	1.5	6.1	0.0	3.3	2.7	1.5	26.2	0.5	0.0
Prop In Lane	1.00		0.49	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	573	1761	890	537	1234	563	553	669	522	484	669	569
V/C Ratio(X)	0.15	0.04	0.05	0.06	0.27	0.00	0.11	0.12	0.07	0.72	0.02	0.00
Avail Cap(c_a), veh/h	573	1761	890	537	1234	563	553	669	522	484	669	569
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.0	10.5	10.5	19.2	20.7	0.0	19.9	19.6	19.2	28.4	18.8	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.2	0.5	0.0	0.4	0.4	0.3	8.8	0.1	0.0
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 Back of Q (50%), veh/ln	1.0	0.4	0.4	0.5	2.7	0.0	1.0	1.3	0.6	8.3	0.2	0.0
Lane Grp Delay (d), s/veh	13.6	10.5	10.6	19.4	21.2	0.0	20.3	19.9	19.5	37.2	18.9	0.0
Lane Grp LOS	B	B	B	B	C		C	B	B	D	B	
Approach Vol, veh/h		200			363			183			363	
Approach Delay, s/veh		11.8			21.0			20.0			36.4	
Approach LOS		B			C			B			D	
Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	15.0	53.0			38.0			37.0			37.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	9.5	47.0			32.0			32.0			32.0	
Max Q Clear Time (g_c+I1), s	4.3	3.0			8.1			5.3			28.2	
Green Ext Time (p_c), s	0.1	1.4			1.4			1.6			0.7	
Intersection Summary												
HCM 2010 Ctrl Delay			24.2									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	421	21	41	2	2	5	17	93	5	11	164	304
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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
Adj Sat Flow Rate	1496	1378	1378	1639	1639	1639	1638	1528	1528	1696	1454	1454
Lanes	2	1	0	0	1	0	1	2	0	1	2	0
Capacity, veh/h	930	216	320	136	138	288	497	1236	66	556	1251	0
Arriving On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.57	0.57	0.57	0.57	0.57	0.00
Sat Flow, veh/h	2180.5	503.4	743.1	268.3	256.1	670.8	1058.0	2874.7	153.4	1168.8	2908.5	0.0
Grp Volume(v), veh/h	452.7	0.0	55.9	9.7	0.0	0.0	18.3	52.8	52.6	11.8	176.3	0.0
Grp Sat Flow(s),veh/h/ln	1090.3	0.0	1246.6	1207.4	0.0	0.0	1058.0	1527.6	1500.5	1168.8	1454.2	0.0
Q Serve(g_s), s	16.8	0.0	2.7	0.0	0.0	0.0	0.8	1.6	1.6	0.5	2.8	0.0
Cycle Q Clear(g_c), s	23.7	0.0	2.7	7.0	0.0	0.0	3.6	1.6	1.6	2.0	2.8	0.0
Proportion In Lane	1.000		0.596	0.222		0.556	1.000		0.102	1.000		0.000
Lane Grp Cap(c), veh/h	929.7	0.0	536.0	563.2	0.0	0.0	497.1	656.9	645.2	556.2	1250.6	0.0
V/C Ratio(X)	0.487	0.000	0.104	0.017	0.000	0.000	0.037	0.080	0.082	0.021	0.141	0.000
Avail Cap(c_a), veh/h	929.7	0.0	536.0	563.2	0.0	0.0	497.1	656.9	645.2	556.2	1250.6	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	25.8	0.0	17.0	16.4	0.0	0.0	13.7	12.5	12.5	13.0	12.8	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.4	0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.2	0.0
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
Lane Group Delay (d), s/veh	27.6	0.0	17.4	16.4	0.0	0.0	13.8	12.8	12.8	13.1	13.0	0.0
Lane Group LOS	C		B	B			B	B	B	B	B	
Approach Volume, veh/h		509			10			124			188	
Approach Delay, s/veh		26.5			16.4			12.9			13.0	
Approach LOS		C			B			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	50.00	50.00	50.00	50.00
Change Period (Y+Rc), s	7.00	7.00	7.00	7.00
Max Green Setting (Gmax), s	43.00	43.00	43.00	43.00
Max Q Clear Time (g_c+I1), s	25.73	8.97	5.65	4.82
Green Extension Time (p_c)	2.15	2.43	0.89	0.90

Intersection Summary	
HCM 2010 Control Delay	21.3
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	377	23	0	1	0	0	340	14	55	676	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1900	0	0	1638	1638	1624	1624	0
Lanes	1	1	1	0	1	0	0	2	0	1	2	0
Capacity, veh/h	529	605	514	0	665	0	0	1147	0	463	1635	0
Arriving On Green	0.35	0.35	0.00	0.00	0.35	0.00	0.00	0.47	0.00	0.16	0.70	0.00
Sat Flow, veh/h	1307.6	1727.3	1468.2		1900.0	0.0		3275.9	0.0	1546.6	3166.7	0.0
Grp Volume(v), veh/h	100.0	471.3	0.0		1.3	0.0		425.0	0.0	68.8	845.0	0.0
Grp Sat Flow(s),veh/h/ln	1307.6	1727.3	1468.2		1900.0	0.0		1637.9	0.0	1546.6	1542.7	0.0
Q Serve(g_s), s	5.4	24.4	0.0		0.0	0.0		8.4	0.0	0.0	12.7	0.0
Cycle Q Clear(g_c), s	5.4	24.4	0.0		0.0	0.0		8.4	0.0	0.0	12.7	0.0
Proportion In Lane	1.000		1.000			0.000			0.000	1.000		0.000
Lane Grp Cap(c), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	463.3	1635.3	0.0
V/C Ratio(X)	0.189	0.780	0.000		0.002	0.000		0.371	0.000	0.148	0.517	0.000
Avail Cap(c_a), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	463.3	1635.3	0.0
HCM Platoon Ratio.	1.00	1.00	1.00		1.00	1.00		1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	1.000	0.000		1.000	0.000		1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	22.9	29.1	0.0		21.1	0.0		19.6	0.0	20.8	8.8	0.0
Incr Delay (d2), s/veh	0.8	9.6	0.0		0.0	0.0		0.9	0.0	0.7	1.2	0.0
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
Lane Group Delay (d), s/veh	23.7	38.6	0.0		21.1	0.0		20.5	0.0	21.5	10.0	0.0
Lane Group LOS	C	D			C			C		C	A	
Approach Volume, veh/h		571			1			425			914	
Approach Delay, s/veh		36.0			21.1			20.5			10.8	
Approach LOS		D			C			C			B	

Timer					
Assigned Phase		4	8	2	1	6
Phase Duration (G+Y+Rc), s		41.00	41.00	41.00	18.00	59.00
Change Period (Y+Rc), s		6.00	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s		35.00	35.00	35.00	12.00	53.00
Max Q Clear Time (g_c+I1), s		26.39	2.04	10.38	2.00	14.71
Green Extension Time (p_c)		1.13	1.55	4.44	0.07	4.62

Intersection Summary	
HCM 2010 Control Delay	20.5
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	514	1	134	0	1	0	174	230	0	0	659	331
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1976	0	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	1031	0	514	0	692	0	332	1736	0	0	1137	0
Arriving On Green	0.35	0.35	0.00	0.00	0.35	0.00	0.16	0.70	0.00	0.00	0.47	0.00
Sat Flow, veh/h	2536.8	0.0	1468.2	0.0	1976.0	0.0	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h	642.5	0.0	0.0	0.0	1.3	0.0	217.5	287.5	0.0		823.8	0.0
Grp Sat Flow(s),veh/h/ln	1268.4	0.0	1468.2	0.0	1976.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s	22.1	0.0	0.0	0.0	0.0	0.0	3.0	2.9	0.0		20.5	0.0
Cycle Q Clear(g_c), s	22.1	0.0	0.0	0.0	0.0	0.0	3.0	2.9	0.0		20.5	0.0
Proportion In Lane	1.000		1.000	0.000		0.000	1.000		0.000			0.000
Lane Grp Cap(c), veh/h	1030.8	0.0	513.9	0.0	691.6	0.0	332.2	1736.2	0.0		1136.8	0.0
V/C Ratio(X)	0.623	0.000	0.000	0.000	0.002	0.000	0.655	0.166	0.000		0.725	0.000
Avail Cap(c_a), veh/h	1030.8	0.0	513.9	0.0	691.6	0.0	332.2	1736.2	0.0		1136.8	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh	28.3	0.0	0.0	0.0	21.1	0.0	35.1	7.4	0.0		22.8	0.0
Incr Delay (d2), s/veh	2.8	0.0	0.0	0.0	0.0	0.0	9.7	0.2	0.0		4.0	0.0
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
Lane Group Delay (d), s/veh	31.2	0.0	0.0	0.0	21.1	0.0	44.8	7.6	0.0		26.9	0.0
Lane Group LOS	C				C		D	A			C	
Approach Volume, veh/h		642			1			505			824	
Approach Delay, s/veh		31.2			21.1			23.6			26.9	
Approach LOS		C			C			C			C	

Timer												
Assigned Phase		4			8		5	2			6	
Phase Duration (G+Y+Rc), s		41.00			41.00		18.00	59.00			41.00	
Change Period (Y+Rc), s		6.00			6.00		6.00	6.00			6.00	
Max Green Setting (Gmax), s		35.00			35.00		12.00	53.00			35.00	
Max Q Clear Time (g_c+I1), s		24.10			2.04		4.97	4.93			22.46	
Green Extension Time (p_c)		1.97			2.59		0.30	3.94			3.20	

Intersection Summary												
HCM 2010 Control Delay			27.4									
HCM 2010 Level of Service			C									

2016 BUILD WEEKDAY PM PEAK HOUR CONDITIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	125	13	2	453	127	11	16	0	129	18	91
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1850	1850	1900	1871	1871	1727	1900	0	1881	1665	1665
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	385	2174	103	614	1929	334	576	836	0	682	732	623
Arriving On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.44	0.44	0.00	0.44	0.44	0.44
Sat Flow, veh/h	815.2	4940.6	234.2	1265.8	4383.3	758.5	1216.0	1900.0	0.0	1403.5	1664.6	1414.9
Grp Volume(v), veh/h	53.3	92.0	50.4	2.2	380.2	199.1	12.0	17.4	0.0	140.2	19.6	62.0
Grp Sat Flow(s),veh/h/ln	815.2	1683.2	1808.4	1265.8	1702.4	1736.9	1216.0	1900.0	0.0	1403.5	1664.6	1414.9
Q Serve(g_s), s	3.5	1.2	1.2	0.1	5.4	5.6	0.6	0.5	44.0	6.3	0.7	2.6
Cycle Q Clear(g_c), s	9.1	1.2	1.2	1.3	5.4	5.6	3.1	0.5	44.0	6.8	0.7	2.6
Proportion In Lane	1.000		0.130	1.000		0.437	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	384.9	1481.2	795.7	613.8	1498.1	764.3	575.9	836.0	0.0	682.3	732.4	622.6
V/C Ratio(X)	0.138	0.062	0.063	0.004	0.254	0.261	0.021	0.021	0.000	0.206	0.027	0.100
Avail Cap(c_a), veh/h	384.9	1481.2	795.7	613.8	1498.1	764.3	575.9	836.0	0.0	682.3	732.4	622.6
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	15.0	11.9	11.9	12.1	12.7	12.8	17.3	15.8	0.0	17.7	15.9	16.4
Incr Delay (d2), s/veh	0.7	0.1	0.2	0.0	0.4	0.8	0.1	0.0	0.0	0.7	0.1	0.3
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
Lane Group Delay (d), s/veh	15.8	11.9	12.0	12.1	13.2	13.6	17.4	15.9	0.0	18.4	15.9	16.7
Lane Group LOS	B	B	B	B	B	B	B	B		B	B	B
Approach Volume, veh/h		196			582			29			222	
Approach Delay, s/veh		13.0			13.3			16.5			17.7	
Approach LOS		B			B			B			B	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	50.00	50.00	50.00	50.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	44.00	44.00	44.00	44.00
Max Q Clear Time (g_c+I1), s	11.11	7.61	5.15	8.79
Green Extension Time (p_c)	2.43	2.44	0.63	0.63

Intersection Summary	
HCM 2010 Control Delay	14.3
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	181	499	126	117	286	102	34	46	21	23	77	122
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	178.9	177.6	166.7	182.0	190.0	184.5	173.9	147.3	190.0	186.2	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	498	1800	400	340	1801	432	601	962	371	324	1068	660
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	1014	3999	889	691	4003	959	1297	2333	899	628	2588	1599
Grp Volume(v), veh/h	195	435	224	126	252	133	37	34	35	58	50	0
Grp Sat Flow(s),veh/h/ln	1014	1628	1632	691	1656	1650	1297	1652	1580	1607	1609	1599
Q Serve(g_s), s	11.4	6.8	7.0	11.4	3.6	3.8	1.4	1.0	1.1	0.0	1.5	0.0
Cycle Q Clear(g_c), s	15.2	6.8	7.0	18.4	3.6	3.8	2.9	1.0	1.1	1.5	1.5	0.0
Prop In Lane	1.00		0.54	1.00		0.58	1.00		0.57	0.43		1.00
Lane Grp Cap(c), veh/h	498	1465	734	340	1490	743	601	681	652	727	664	660
V/C Ratio(X)	0.39	0.30	0.30	0.37	0.17	0.18	0.06	0.05	0.05	0.08	0.08	0.00
Avail Cap(c_a), veh/h	498	1465	734	340	1490	743	601	681	652	727	664	660
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.7	14.0	14.0	19.9	13.1	13.2	15.1	14.1	14.1	14.3	14.2	0.0
Incr Delay (d2), s/veh	2.3	0.5	1.1	3.1	0.2	0.5	0.2	0.1	0.2	0.2	0.2	0.0
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 Back of Q (50%), veh/ln	3.0	2.6	2.8	2.1	1.5	1.6	0.5	0.4	0.4	0.7	0.6	0.0
Lane Grp Delay (d), s/veh	20.0	14.5	15.1	23.0	13.3	13.7	15.3	14.2	14.3	14.5	14.5	0.0
Lane Grp LOS	C	B	B	C	B	B	B	B	B	B	B	
Approach Vol, veh/h		854			511			106			108	
Approach Delay, s/veh		15.9			15.8			14.6			14.5	
Approach LOS		B			B			B			B	
Timer												
Assigned Phs		2			6			8			4	
Phs Duration (G+Y+Rc), s		41.0			41.0			39.0			39.0	
Change Period (Y+Rc), s		5.0			5.0			6.0			6.0	
Max Green Setting (Gmax), s		36.0			36.0			33.0			33.0	
Max Q Clear Time (g_c+I1), s		17.2			20.4			4.9			3.5	
Green Ext Time (p_c), s		4.0			3.8			0.5			0.5	
Intersection Summary												
HCM 2010 Ctrl Delay			15.7									
HCM 2010 LOS			B									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	82	92	28	44	318	86	207	120	202	428	21	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	188.1	185.3	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	188.1	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	573	2158	485	535	1234	563	548	669	522	400	669	569
Arrive On Green	0.11	0.52	0.52	0.36	0.36	0.00	0.36	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	1792	4132	930	1280	3471	1583	1344	1881	1468	1032	1881	1600
Grp Volume(v), veh/h	85	77	42	46	331	0	216	125	198	446	22	0
Grp Sat Flow(s),veh/h/ln	1792	1686	1689	1280	1736	1583	1344	1881	1468	1032	1881	1600
Q Serve(g_s), s	2.3	1.0	1.1	2.2	6.1	0.0	11.2	4.1	9.0	27.9	0.7	0.0
Cycle Q Clear(g_c), s	2.3	1.0	1.1	2.2	6.1	0.0	11.9	4.1	9.0	32.0	0.7	0.0
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	573	1761	882	535	1234	563	548	669	522	400	669	569
V/C Ratio(X)	0.15	0.04	0.05	0.09	0.27	0.00	0.39	0.19	0.38	1.12	0.03	0.00
Avail Cap(c_a), veh/h	573	1761	882	535	1234	563	548	669	522	400	669	569
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.0	10.5	10.5	19.4	20.7	0.0	22.8	20.0	21.6	33.9	18.9	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.1	0.3	0.5	0.0	2.1	0.6	2.1	80.3	0.1	0.0
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 Back of Q (50%), veh/ln	1.0	0.4	0.4	0.7	2.7	0.0	4.0	2.0	3.5	18.0	0.3	0.0
Lane Grp Delay (d), s/veh	13.6	10.6	10.6	19.7	21.2	0.0	24.9	20.6	23.7	114.2	19.0	0.0
Lane Grp LOS	B	B	B	B	C		C	C	C	F	B	
Approach Vol, veh/h		204			377			539			468	
Approach Delay, s/veh		11.8			21.0			23.5			109.7	
Approach LOS		B			C			C			F	

Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	15.0	53.0			38.0			37.0			37.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	9.5	47.0			32.0			32.0			32.0	
Max Q Clear Time (g_c+I1), s	4.3	3.1			8.1			13.9			34.0	
Green Ext Time (p_c), s	0.1	1.4			1.4			2.9			0.0	

Intersection Summary			
HCM 2010 Ctrl Delay			46.8
HCM 2010 LOS			D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	565	21	41	2	2	5	17	93	5	11	164	395
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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
Adj Sat Flow Rate	1496	1378	1378	1639	1639	1639	1638	1528	1528	1696	1441	1441
Lanes	2	1	0	0	1	0	1	2	0	1	2	0
Capacity, veh/h	930	216	320	136	138	288	497	1236	66	556	1239	0
Arriving On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.57	0.57	0.57	0.57	0.57	0.00
Sat Flow, veh/h	2180.5	503.4	743.1	268.3	256.1	670.8	1058.0	2874.7	153.4	1168.8	2882.1	0.0
Grp Volume(v), veh/h	607.5	0.0	55.9	9.7	0.0	0.0	18.3	52.8	52.6	11.8	176.3	0.0
Grp Sat Flow(s),veh/h/ln	1090.3	0.0	1246.6	1207.4	0.0	0.0	1058.0	1527.6	1500.5	1168.8	1441.0	0.0
Q Serve(g_s), s	24.7	0.0	2.7	0.0	0.0	0.0	0.8	1.6	1.6	0.5	2.9	0.0
Cycle Q Clear(g_c), s	31.7	0.0	2.7	7.0	0.0	0.0	3.7	1.6	1.6	2.0	2.9	0.0
Proportion In Lane	1.000		0.596	0.222		0.556	1.000		0.102	1.000		0.000
Lane Grp Cap(c), veh/h	929.7	0.0	536.0	563.2	0.0	0.0	496.8	656.9	645.2	556.2	1239.3	0.0
V/C Ratio(X)	0.653	0.000	0.104	0.017	0.000	0.000	0.037	0.080	0.082	0.021	0.142	0.000
Avail Cap(c_a), veh/h	929.7	0.0	536.0	563.2	0.0	0.0	496.8	656.9	645.2	556.2	1239.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	28.4	0.0	17.0	16.4	0.0	0.0	13.7	12.5	12.5	13.0	12.8	0.0
Incr Delay (d2), s/veh	3.6	0.0	0.4	0.1	0.0	0.0	0.1	0.2	0.2	0.1	0.2	0.0
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
Lane Group Delay (d), s/veh	31.9	0.0	17.4	16.4	0.0	0.0	13.8	12.8	12.8	13.1	13.1	0.0
Lane Group LOS	C		B	B			B	B	B	B	B	
Approach Volume, veh/h		663			10			124			188	
Approach Delay, s/veh		30.7			16.4			12.9			13.1	
Approach LOS		C			B			B			B	
Timer												
Assigned Phase		4			8			2			6	
Phase Duration (G+Y+Rc), s		50.00			50.00			50.00			50.00	
Change Period (Y+Rc), s		7.00			7.00			7.00			7.00	
Max Green Setting (Gmax), s		43.00			43.00			43.00			43.00	
Max Q Clear Time (g_c+I1), s		33.67			8.97			5.68			4.85	
Green Extension Time (p_c)		2.24			3.35			0.89			0.90	
Intersection Summary												
HCM 2010 Control Delay			25.0									
HCM 2010 Level of Service			C									

Intersection	
Intersection Delay (sec/veh):	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	0	0	0	0	138	707	0	0	449	249
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	180		0	0		0
Median Width		0			0			10			10	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	0	0	0	0	0	0	16	16	0	0	17	17
Movement Flow Rate	0	0	0	0	0	0	172	884	0	0	561	311
Number of Lanes	0	0	0	0	1	0	1	2	0	0	2	0

Major/Minor				Minor 1			Major 1			Major 2	
Conflicting Flow Rate - All			-	2102	-	872	0	-	884	0	0
Stage 1			-	1230	-	-	-	-	-	-	-
Stage 2			-	872	-	-	-	-	-	-	-
Follow-up Headway			0	4	0	2.36	-	0	2.2	-	-
Pot Capacity-1 Maneuver			0	76	0	830	-	0	1093	-	-
Stage 1			0	368	0	-	-	0	-	-	-
Stage 2			0	469	0	-	-	0	-	-	-
Time blocked-Platoon(%)			0	42	0	15	-	0	27	-	-
Mov Capacity-1 Maneuver			0	61	-	830	-	-	1093	-	-
Mov Capacity-2 Maneuver			0	61	-	-	-	-	-	-	-
Stage 1			0	291	-	-	-	-	-	-	-
Stage 2			0	469	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	0	1.7	0
HCM LOS	A	A	A

Lane	NBL	NBT	WBLn1	SBL	SBT	SBR
Capacity (vph)			0			
HCM Control Delay (s)	10.472	-	0	0	-	-
HCM Lane VC Ratio	0.208	-	-	-	-	-
HCM Lane LOS	B	-	A	A	-	-
HCM 95th Percentile Queue (veh)	0.78	-	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	80	377	23	0	1	0	0	466	31	55	767	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1900	0	0	1638	1638	1624	1624	0
Lanes	1	1	1	0	1	0	0	2	0	1	2	0
Capacity, veh/h	529	605	514	0	665	0	0	1147	0	406	1635	0
Arriving On Green	0.35	0.35	0.00	0.00	0.35	0.00	0.00	0.47	0.00	0.16	0.70	0.00
Sat Flow, veh/h	1307.6	1727.3	1468.2		1900.0	0.0		3275.9	0.0	1546.6	3166.7	0.0
Grp Volume(v), veh/h	100.0	471.3	0.0		1.3	0.0		582.5	0.0	68.8	958.8	0.0
Grp Sat Flow(s),veh/h/ln	1307.6	1727.3	1468.2		1900.0	0.0		1637.9	0.0	1546.6	1542.7	0.0
Q Serve(g_s), s	5.4	24.4	0.0		0.0	0.0		12.4	0.0	0.0	15.6	0.0
Cycle Q Clear(g_c), s	5.4	24.4	0.0		0.0	0.0		12.4	0.0	0.0	15.6	0.0
Proportion In Lane	1.000		1.000			0.000			0.000	1.000		0.000
Lane Grp Cap(c), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	406.1	1635.3	0.0
V/C Ratio(X)	0.189	0.780	0.000		0.002	0.000		0.508	0.000	0.169	0.586	0.000
Avail Cap(c_a), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	406.1	1635.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00		1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	1.000	0.000		1.000	0.000		1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	22.9	29.1	0.0		21.1	0.0		20.7	0.0	23.9	9.2	0.0
Incr Delay (d2), s/veh	0.8	9.6	0.0		0.0	0.0		1.6	0.0	0.9	1.5	0.0
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
Lane Group Delay (d), s/veh	23.7	38.6	0.0		21.1	0.0		22.3	0.0	24.8	10.8	0.0
Lane Group LOS	C	D			C			C		C	B	
Approach Volume, veh/h		571			1			582			1028	
Approach Delay, s/veh		36.0			21.1			22.3			11.7	
Approach LOS		D			C			C			B	
Timer												
Assigned Phase		4			8			2		1	6	
Phase Duration (G+Y+Rc), s		41.00			41.00			41.00		18.00	59.00	
Change Period (Y+Rc), s		6.00			6.00			6.00		6.00	6.00	
Max Green Setting (Gmax), s		35.00			35.00			35.00		12.00	53.00	
Max Q Clear Time (g_c+I1), s		26.39			2.04			14.45		2.00	17.63	
Green Extension Time (p_c)		1.13			1.55			5.47		0.07	5.98	
Intersection Summary												
HCM 2010 Control Delay			20.9									
HCM 2010 Level of Service			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	514	1	223	0	1	0	298	233	0	0	661	331
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1976	0	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	879	0	426	0	573	0	432	1933	0	0	1104	0
Arriving On Green	0.29	0.29	0.00	0.00	0.29	0.00	0.25	0.78	0.00	0.00	0.45	0.00
Sat Flow, veh/h	2536.8	0.0	1468.2	0.0	1976.0	0.0	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h	642.5	0.0	0.0	0.0	1.3	0.0	372.5	291.3	0.0		826.3	0.0
Grp Sat Flow(s),veh/h/ln	1268.4	0.0	1468.2	0.0	1976.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s	24.1	0.0	0.0	0.0	0.0	0.0	13.4	2.2	0.0		21.1	0.0
Cycle Q Clear(g_c), s	24.1	0.0	0.0	0.0	0.0	0.0	13.4	2.2	0.0		21.1	0.0
Proportion In Lane	1.000		1.000	0.000		0.000	1.000		0.000			0.000
Lane Grp Cap(c), veh/h	878.5	0.0	425.8	0.0	573.0	0.0	431.9	1932.8	0.0		1104.3	0.0
V/C Ratio(X)	0.731	0.000	0.000	0.000	0.002	0.000	0.862	0.151	0.000		0.748	0.000
Avail Cap(c_a), veh/h	878.5	0.0	425.8	0.0	573.0	0.0	431.9	1932.8	0.0		1104.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh	33.8	0.0	0.0	0.0	25.2	0.0	31.9	4.6	0.0		23.8	0.0
Incr Delay (d2), s/veh	5.3	0.0	0.0	0.0	0.0	0.0	19.8	0.2	0.0		4.7	0.0
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
Lane Group Delay (d), s/veh	39.1	0.0	0.0	0.0	25.2	0.0	51.7	4.8	0.0		28.5	0.0
Lane Group LOS	D				C		D	A			C	
Approach Volume, veh/h		642			1			664			826	
Approach Delay, s/veh		39.1			25.2			31.1			28.5	
Approach LOS		D			C			C			C	

Timer								
Assigned Phase		4		8		5	2		6
Phase Duration (G+Y+Rc), s		35.00		35.00		25.00	65.00		40.00
Change Period (Y+Rc), s		6.00		6.00		6.00	6.00		6.00
Max Green Setting (Gmax), s		29.00		29.00		19.00	59.00		34.00
Max Q Clear Time (g_c+I1), s		26.14		2.04		15.42	4.17		23.06
Green Extension Time (p_c)		0.80		2.54		0.39	3.98		3.04

Intersection Summary	
HCM 2010 Control Delay	32.5
HCM 2010 Level of Service	C

Intersection	
Intersection Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	14	103	298	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0	150			0
Median Width	0			0	0	
Grade, %	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	16	114	331	27
Number of Lanes	0	1	0	3	2	0

Major/Minor				Major 1	Major 2	
Conflicting Flow All	421	179	358	0	-	0
Stage 1	344	-	-	-	-	-
Stage 2	77	-	-	-	-	-
Follow-up Headway	3.67	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	578	833	1197	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	896	-	-	-	-	-
Time blocked-Platoon, %	0	0	0	-	-	-
Mov Capacity-1 Maneuver	570	833	1197	-	-	-
Mov Capacity-2 Maneuver	570	-	-	-	-	-
Stage 1	666	-	-	-	-	-
Stage 2	883	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	1	0
HCM LOS	A	-	-

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Cap, veh/h	1197	-	0	-	-
HCM Control Delay, s	8.047	0	0	-	-
HCM Lane V/C Ratio	0.01	-	-	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th-tile Q, veh	0.0	-	-	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	45	117	93	204
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0	100			0
Median Width	0			12	12	
Grade, %	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	50	130	103	227
Number of Lanes	0	1	1	2	2	0

Major/Minor				Major1	Major2	
Conflicting Flow All	382	165	330	0	-	0
Stage 1	217	-	-	-	-	-
Stage 2	165	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	593	850	1226	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Time blocked-Platoon, %	0	0	0	-	-	-
Mov Capacity-1 Maneuver	569	850	1226	-	-	-
Mov Capacity-2 Maneuver	627	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	812	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	2.2	0
HCM LOS	A	-	-

Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Cap, veh/h	1226	-	0	-	-
HCM Control Delay, s	8.061	-	0	-	-
HCM Lane V/C Ratio	0.04	-	-	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th-tile Q, veh	0.1	-	-	-	-

Notes:

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	20	29	505	0	0	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		12			12
Grade, %	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	32	561	0	0	106
Number of Lanes	1	0	2	0	0	2

Major/Minor			Major 1		Major 2	
Conflicting Flow All	614	281	0	0	561	0
Stage 1	561	-	-	-	-	-
Stage 2	53	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	424	716	-	-	1006	-
Stage 1	535	-	-	-	-	-
Stage 2	963	-	-	-	-	-
Time blocked-Platoon, %	0	0	-	-	0	-
Mov Capacity-1 Maneuver	424	716	-	-	1006	-
Mov Capacity-2 Maneuver	471	-	-	-	-	-
Stage 1	535	-	-	-	-	-
Stage 2	963	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	0
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Cap, veh/h	-	-	591	1006	-
HCM Control Delay, s	-	-	11.7	0	-
HCM Lane V/C Ratio	-	-	0.09	-	-
HCM Lane LOS	-	-	B	A	-
HCM 95th-tile Q, veh	-	-	0.3	0.0	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	26	31	474	19	22	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	100	
Median Width	12		12			12
Grade, %	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	34	527	21	24	102
Number of Lanes	1	0	2	0	1	2

Major/Minor			Major1		Major 2	
Conflicting Flow All	637	274	0	0	548	0
Stage 1	537	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	410	724	-	-	1018	-
Stage 1	550	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Time blocked-Platoon, %	0	0	-	-	0	-
Mov Capacity-1 Maneuver	400	724	-	-	1018	-
Mov Capacity-2 Maneuver	470	-	-	-	-	-
Stage 1	550	-	-	-	-	-
Stage 2	891	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	1.7
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Cap, veh/h	-	-	581	1018	-
HCM Control Delay, s	-	-	12	8.623	-
HCM Lane V/C Ratio	-	-	0.11	0.02	-
HCM Lane LOS	-	-	B	A	-
HCM 95th-tile Q, veh	-	-	0.4	0.1	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	6.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	62	282	211	0	0	118
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	100	
Median Width	12		12			12
Grade, %	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	313	234	0	0	131
Number of Lanes	1	0	2	0	0	2

Major/Minor			Major1		Major2	
Conflicting Flow All	300	117	0	0	234	0
Stage 1	234	-	-	-	-	-
Stage 2	66	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	667	913	-	-	1331	-
Stage 1	783	-	-	-	-	-
Stage 2	949	-	-	-	-	-
Time blocked-Platoon, %	0	0	-	-	0	-
Mov Capacity-1 Maneuver	667	913	-	-	1331	-
Mov Capacity-2 Maneuver	684	-	-	-	-	-
Stage 1	783	-	-	-	-	-
Stage 2	949	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Cap, veh/h	-	-	861	1331	-
HCM Control Delay, s	-	-	12.5	0	-
HCM Lane V/C Ratio	-	-	0.44	-	-
HCM Lane LOS	-	-	B	A	-
HCM 95th-tile Q, veh	-	-	2.3	0.0	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

2016 BUILD WITH IMPROVEMENTS WEEKDAY PM PEAK HOUR CONDITIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	49	125	13	2	453	127	11	16	0	129	18	91
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1850	1850	1900	1871	1871	1727	1900	0	1881	1665	1665
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	385	2174	103	614	1929	334	576	836	0	682	732	623
Arriving On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.44	0.44	0.00	0.44	0.44	0.44
Sat Flow, veh/h	815.2	4940.6	234.2	1265.8	4383.3	758.5	1216.0	1900.0	0.0	1403.5	1664.6	1414.9
Grp Volume(v), veh/h	53.3	92.0	50.4	2.2	380.2	199.1	12.0	17.4	0.0	140.2	19.6	62.0
Grp Sat Flow(s),veh/h/ln	815.2	1683.2	1808.4	1265.8	1702.4	1736.9	1216.0	1900.0	0.0	1403.5	1664.6	1414.9
Q Serve(g_s), s	3.5	1.2	1.2	0.1	5.4	5.6	0.6	0.5	44.0	6.3	0.7	2.6
Cycle Q Clear(g_c), s	9.1	1.2	1.2	1.3	5.4	5.6	3.1	0.5	44.0	6.8	0.7	2.6
Proportion In Lane	1.000		0.130	1.000		0.437	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	384.9	1481.2	795.7	613.8	1498.1	764.3	575.9	836.0	0.0	682.3	732.4	622.6
V/C Ratio(X)	0.138	0.062	0.063	0.004	0.254	0.261	0.021	0.021	0.000	0.206	0.027	0.100
Avail Cap(c_a), veh/h	384.9	1481.2	795.7	613.8	1498.1	764.3	575.9	836.0	0.0	682.3	732.4	622.6
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	15.0	11.9	11.9	12.1	12.7	12.8	17.3	15.8	0.0	17.7	15.9	16.4
Incr Delay (d2), s/veh	0.7	0.1	0.2	0.0	0.4	0.8	0.1	0.0	0.0	0.7	0.1	0.3
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
Lane Group Delay (d), s/veh	15.8	11.9	12.0	12.1	13.2	13.6	17.4	15.9	0.0	18.4	15.9	16.7
Lane Group LOS	B	B	B	B	B	B	B	B		B	B	B
Approach Volume, veh/h		196			582			29			222	
Approach Delay, s/veh		13.0			13.3			16.5			17.7	
Approach LOS		B			B			B			B	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	50.00	50.00	50.00	50.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	44.00	44.00	44.00	44.00
Max Q Clear Time (g_c+I1), s	11.11	7.61	5.15	8.79
Green Extension Time (p_c)	2.43	2.44	0.63	0.63

Intersection Summary	
HCM 2010 Control Delay	14.3
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	181	499	126	117	286	102	34	46	21	23	77	122
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	178.9	177.6	166.7	182.0	190.0	184.5	173.9	147.3	190.0	186.2	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	526	1920	427	362	1921	460	579	957	369	314	1054	656
Arrive On Green	0.64	0.64	0.64	0.64	0.64	0.64	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	1014	3999	889	691	4003	959	1297	2333	899	641	2570	1599
Grp Volume(v), veh/h	195	435	224	126	252	133	37	34	35	58	50	0
Grp Sat Flow(s),veh/h/ln	1014	1628	1632	691	1656	1650	1297	1652	1580	1602	1609	1599
Q Serve(g_s), s	10.5	5.9	6.1	10.7	3.1	3.3	1.8	1.2	1.3	0.0	1.9	0.0
Cycle Q Clear(g_c), s	13.7	5.9	6.1	16.7	3.1	3.3	3.7	1.2	1.3	1.9	1.9	0.0
Prop In Lane	1.00		0.54	1.00		0.58	1.00		0.57	0.43		1.00
Lane Grp Cap(c), veh/h	526	1563	783	362	1590	792	579	677	648	708	660	656
V/C Ratio(X)	0.37	0.28	0.29	0.35	0.16	0.17	0.06	0.05	0.05	0.08	0.08	0.00
Avail Cap(c_a), veh/h	526	1563	783	362	1590	792	579	677	648	708	660	656
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	12.8	10.5	10.5	14.2	10.0	10.0	19.1	17.8	17.8	18.0	18.0	0.0
Incr Delay (d2), s/veh	2.0	0.4	0.9	2.6	0.2	0.5	0.2	0.1	0.2	0.2	0.2	0.0
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 Back of Q (50%), veh/ln	2.6	2.2	2.3	1.9	1.2	1.3	0.6	0.5	0.5	0.9	0.8	0.0
Lane Grp Delay (d), s/veh	14.8	10.9	11.4	16.8	10.2	10.4	19.3	17.9	18.0	18.2	18.2	0.0
Lane Grp LOS	B	B	B	B	B	B	B	B	B	B	B	
Approach Vol, veh/h		854			511			106			108	
Approach Delay, s/veh		11.9			11.9			18.4			18.2	
Approach LOS		B			B			B			B	
Timer												
Assigned Phs		2			6			8			4	
Phs Duration (G+Y+Rc), s		53.0			53.0			47.0			47.0	
Change Period (Y+Rc), s		5.0			5.0			6.0			6.0	
Max Green Setting (Gmax), s		48.0			48.0			41.0			41.0	
Max Q Clear Time (g_c+I1), s		15.7			18.7			5.7			3.9	
Green Ext Time (p_c), s		4.3			4.3			0.5			0.5	
Intersection Summary												
HCM 2010 Ctrl Delay			12.8									
HCM 2010 LOS			B									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	82	92	28	44	318	86	207	120	202	428	21	41
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	188.1	185.3	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	188.1	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	387	1570	353	405	902	412	750	959	749	562	959	816
Arrive On Green	0.09	0.51	0.51	0.35	0.35	0.00	0.51	0.51	0.51	0.51	0.51	0.00
Sat Flow, veh/h	1792	4132	930	1280	3471	1583	1344	1881	1468	1032	1881	1600
Grp Volume(v), veh/h	85	77	42	46	331	0	216	125	198	446	22	0
Grp Sat Flow(s),veh/h/ln	1792	1686	1689	1280	1736	1583	1344	1881	1468	1032	1881	1600
Q Serve(g_s), s	3.2	1.2	1.3	2.5	7.1	0.0	9.5	3.5	7.6	39.9	0.6	0.0
Cycle Q Clear(g_c), s	3.2	1.2	1.3	2.5	7.1	0.0	10.1	3.5	7.6	43.4	0.6	0.0
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	387	1282	642	405	903	412	750	959	749	562	959	816
V/C Ratio(X)	0.22	0.06	0.07	0.11	0.37	0.00	0.29	0.13	0.26	0.79	0.02	0.00
Avail Cap(c_a), veh/h	387	1282	642	405	903	412	750	959	749	562	959	816
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.4	15.6	15.6	25.0	26.5	0.0	14.6	12.9	13.9	24.3	12.1	0.0
Incr Delay (d2), s/veh	1.3	0.1	0.2	0.6	1.2	0.0	1.0	0.3	0.9	11.0	0.0	0.0
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 Back of Q (50%), veh/ln	1.5	0.5	0.6	0.8	3.1	0.0	3.3	1.6	2.8	11.6	0.3	0.0
Lane Grp Delay (d), s/veh	23.7	15.7	15.8	25.6	27.7	0.0	15.6	13.1	14.7	35.2	12.2	0.0
Lane Grp LOS	C	B	B	C	C		B	B	B	D	B	
Approach Vol, veh/h		204			377			539			468	
Approach Delay, s/veh		19.1			27.4			14.7			34.1	
Approach LOS		B			C			B			C	
Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	12.0	44.0			32.0			56.0			56.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	6.5	38.0			26.0			51.0			51.0	
Max Q Clear Time (g_c+I1), s	5.2	3.3			9.1			12.1			45.4	
Green Ext Time (p_c), s	0.0	1.4			1.3			3.1			1.7	
Intersection Summary												
HCM 2010 Ctrl Delay			24.0									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	514	1	223	0	1	0	298	233	0	0	661	331
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1976	0	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	879	0	426	0	573	0	432	1933	0	0	1104	0
Arriving On Green	0.29	0.29	0.00	0.00	0.29	0.00	0.25	0.78	0.00	0.00	0.45	0.00
Sat Flow, veh/h	2536.8	0.0	1468.2	0.0	1976.0	0.0	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h	642.5	0.0	0.0	0.0	1.3	0.0	372.5	291.3	0.0		826.3	0.0
Grp Sat Flow(s),veh/h/ln	1268.4	0.0	1468.2	0.0	1976.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s	24.1	0.0	0.0	0.0	0.0	0.0	13.4	2.2	0.0		21.1	0.0
Cycle Q Clear(g_c), s	24.1	0.0	0.0	0.0	0.0	0.0	13.4	2.2	0.0		21.1	0.0
Proportion In Lane	1.000		1.000	0.000		0.000	1.000		0.000			0.000
Lane Grp Cap(c), veh/h	878.5	0.0	425.8	0.0	573.0	0.0	431.9	1932.8	0.0		1104.3	0.0
V/C Ratio(X)	0.731	0.000	0.000	0.000	0.002	0.000	0.862	0.151	0.000		0.748	0.000
Avail Cap(c_a), veh/h	878.5	0.0	425.8	0.0	573.0	0.0	431.9	1932.8	0.0		1104.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh	33.8	0.0	0.0	0.0	25.2	0.0	31.9	4.6	0.0		23.8	0.0
Incr Delay (d2), s/veh	5.3	0.0	0.0	0.0	0.0	0.0	19.8	0.2	0.0		4.7	0.0
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
Lane Group Delay (d), s/veh	39.1	0.0	0.0	0.0	25.2	0.0	51.7	4.8	0.0		28.5	0.0
Lane Group LOS	D				C		D	A			C	
Approach Volume, veh/h		642			1			664			826	
Approach Delay, s/veh		39.1			25.2			31.1			28.5	
Approach LOS		D			C			C			C	

Timer								
Assigned Phase		4			8		5	2			6	
Phase Duration (G+Y+Rc), s		35.00			35.00		25.00	65.00			40.00	
Change Period (Y+Rc), s		6.00			6.00		6.00	6.00			6.00	
Max Green Setting (Gmax), s		29.00			29.00		19.00	59.00			34.00	
Max Q Clear Time (g_c+I1), s		26.14			2.04		15.42	4.17			23.06	
Green Extension Time (p_c)		0.80			2.54		0.39	3.98			3.04	

Intersection Summary	
HCM 2010 Control Delay	32.5
HCM 2010 Level of Service	C

2021 NO BUILD WEEKDAY PM PEAK HOUR CONDITIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	128	13	2	324	132	11	17	0	134	19	96
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1850	1850	1900	1873	1873	1727	1900	0	1881	1665	1665
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	440	2198	102	620	1811	456	555	802	0	664	703	597
Arriving On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.42	0.42	0.00	0.42	0.42	0.42
Sat Flow, veh/h	923.2	4946.4	229.1	1262.0	4074.5	1027.1	1208.9	1900.0	0.0	1402.1	1664.6	1414.9
Grp Volume(v), veh/h	55.4	94.1	51.5	2.2	292.4	152.2	12.0	18.5	0.0	145.7	20.7	67.4
Grp Sat Flow(s),veh/h/ln	923.2	1683.1	1809.2	1262.0	1704.8	1692.1	1208.9	1900.0	0.0	1402.1	1664.6	1414.9
Q Serve(g_s), s	3.5	1.4	1.5	0.1	4.7	4.9	0.5	0.5	38.0	6.1	0.7	2.6
Cycle Q Clear(g_c), s	8.5	1.4	1.5	1.6	4.7	4.9	3.1	0.5	38.0	6.6	0.7	2.6
Proportion In Lane	1.000		0.127	1.000		0.607	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	439.6	1496.1	804.1	620.4	1515.3	752.0	555.5	802.2	0.0	664.1	702.8	597.4
V/C Ratio(X)	0.126	0.063	0.064	0.004	0.193	0.202	0.022	0.023	0.000	0.219	0.029	0.113
Avail Cap(c_a), veh/h	439.6	1496.1	804.1	620.4	1515.3	752.0	555.5	802.2	0.0	664.1	702.8	597.4
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)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	17.8	14.3	14.3	14.7	15.2	15.3	16.7	15.2	0.0	17.1	15.2	15.8
Incr Delay (d2), s/veh	0.6	0.1	0.2	0.0	0.3	0.6	0.1	0.1	0.0	0.8	0.1	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
Lane Group Delay (d), s/veh	18.4	14.4	14.4	14.8	15.5	15.9	16.8	15.2	0.0	17.9	15.3	16.2
Lane Group LOS	B	B	B	B	B	B	B	B		B	B	B
Approach Volume, veh/h		201			447			30			234	
Approach Delay, s/veh		15.5			15.6			15.8			17.1	
Approach LOS		B			B			B			B	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	46.00	46.00	44.00	44.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	40.00	40.00	38.00	38.00
Max Q Clear Time (g_c+I1), s	10.45	6.94	5.15	8.60
Green Extension Time (p_c)	1.96	1.97	0.66	0.65

Intersection Summary	
HCM 2010 Control Delay	16.0
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	188	374	20	24	291	107	36	48	24	24	52	125
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	179.2	177.6	166.7	182.0	190.0	184.5	173.3	147.3	190.0	187.4	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	493	2215	49	438	1784	447	620	936	389	421	948	660
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	1005	4923	110	869	3964	994	1329	2268	944	847	2298	1599
Grp Volume(v), veh/h	202	266	145	26	259	136	39	37	38	44	38	0
Grp Sat Flow(s),veh/h/ln	1005	1630	1772	869	1656	1645	1329	1646	1566	1525	1620	1599
Q Serve(g_s), s	12.1	3.9	3.9	1.5	3.7	4.0	1.5	1.1	1.2	0.0	1.1	0.0
Cycle Q Clear(g_c), s	16.0	3.9	3.9	5.4	3.7	4.0	2.6	1.1	1.2	1.1	1.1	0.0
Prop In Lane	1.00		0.06	1.00		0.60	1.00		0.60	0.59		1.00
Lane Grp Cap(c), veh/h	493	1467	797	438	1491	740	620	679	646	700	668	660
V/C Ratio(X)	0.41	0.18	0.18	0.06	0.17	0.18	0.06	0.05	0.06	0.06	0.06	0.00
Avail Cap(c_a), veh/h	493	1467	797	438	1491	740	620	679	646	700	668	660
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.0	13.2	13.2	14.8	13.1	13.2	14.9	14.1	14.2	14.1	14.1	0.0
Incr Delay (d2), s/veh	2.5	0.3	0.5	0.3	0.3	0.5	0.2	0.2	0.2	0.2	0.2	0.0
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 Back of Q (50%), veh/ln	3.2	1.5	1.7	0.3	1.5	1.6	0.5	0.4	0.5	0.5	0.4	0.0
Lane Grp Delay (d), s/veh	20.5	13.4	13.7	15.1	13.4	13.7	15.1	14.3	14.3	14.3	14.3	0.0
Lane Grp LOS	C	B	B	B	B	B	B	B	B	B	B	
Approach Vol, veh/h		613			421			114			82	
Approach Delay, s/veh		15.8			13.6			14.6			14.3	
Approach LOS		B			B			B			B	
Timer												
Assigned Phs		2			6			8			4	
Phs Duration (G+Y+Rc), s		41.0			41.0			39.0			39.0	
Change Period (Y+Rc), s		5.0			5.0			6.0			6.0	
Max Green Setting (Gmax), s		36.0			36.0			33.0			33.0	
Max Q Clear Time (g_c+I1), s		18.0			7.4			4.6			3.1	
Green Ext Time (p_c), s		2.8			3.0			0.4			0.4	
Intersection Summary												
HCM 2010 Ctrl Delay			14.8									
HCM 2010 LOS			B									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	86	95	26	33	335	91	63	84	50	350	15	43
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	188.1	185.2	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	188.1	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	563	2207	443	535	1234	563	553	669	522	479	669	569
Arrive On Green	0.11	0.52	0.52	0.36	0.36	0.00	0.36	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	1792	4226	848	1279	3471	1583	1352	1881	1468	1233	1881	1600
Grp Volume(v), veh/h	90	78	42	34	349	0	66	88	40	365	16	0
Grp Sat Flow(s),veh/h/ln	1792	1686	1703	1279	1736	1583	1352	1881	1468	1233	1881	1600
Q Serve(g_s), s	2.5	1.0	1.1	1.6	6.5	0.0	3.0	2.8	1.6	25.6	0.5	0.0
Cycle Q Clear(g_c), s	2.5	1.0	1.1	1.6	6.5	0.0	3.5	2.8	1.6	28.4	0.5	0.0
Prop In Lane	1.00		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	563	1761	889	535	1234	563	553	669	522	479	669	569
V/C Ratio(X)	0.16	0.04	0.05	0.06	0.28	0.00	0.12	0.13	0.08	0.76	0.02	0.00
Avail Cap(c_a), veh/h	563	1761	889	535	1234	563	553	669	522	479	669	569
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.1	10.5	10.5	19.2	20.8	0.0	20.0	19.6	19.2	29.2	18.8	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.2	0.6	0.0	0.4	0.4	0.3	10.9	0.1	0.0
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 Back of Q (50%), veh/ln	1.1	0.4	0.4	0.5	2.8	0.0	1.1	1.4	0.6	9.2	0.2	0.0
Lane Grp Delay (d), s/veh	13.7	10.6	10.6	19.4	21.4	0.0	20.4	20.0	19.5	40.1	18.9	0.0
Lane Grp LOS	B	B	B	B	C		C	C	B	D	B	
Approach Vol, veh/h		210			383			194			381	
Approach Delay, s/veh		11.9			21.2			20.0			39.2	
Approach LOS		B			C			C			D	
Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	15.0	53.0			38.0			37.0			37.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	9.5	47.0			32.0			32.0			32.0	
Max Q Clear Time (g_c+I1), s	4.5	3.1			8.5			5.5			30.4	
Green Ext Time (p_c), s	0.1	1.5			1.4			1.7			0.3	
Intersection Summary												
HCM 2010 Ctrl Delay			25.2									
HCM 2010 LOS			C									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	443	22	43	2	2	6	18	98	6	11	172	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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
Adj Sat Flow Rate	1496	1378	1378	1647	1647	1647	1638	1529	1529	1696	1454	1454
Lanes	2	1	0	0	1	0	1	2	0	1	2	0
Capacity, veh/h	1072	214	321	126	130	319	492	1227	74	552	1251	0
Arriving On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.57	0.57	0.57	0.57	0.57	0.00
Sat Flow, veh/h	2178.4	498.3	747.5	246.9	235.4	740.8	1049.8	2853.4	173.2	1162.0	2908.4	0.0
Grp Volume(v), veh/h	476.3	0.0	59.1	10.8	0.0	0.0	19.4	56.0	55.8	11.8	184.9	0.0
Grp Sat Flow(s),veh/h/ln	1089.2	0.0	1245.8	1234.7	0.0	0.0	1049.8	1528.6	1498.0	1162.0	1454.2	0.0
Q Serve(g_s), s	16.1	0.0	2.8	0.0	0.0	0.0	0.9	1.6	1.7	0.5	3.0	0.0
Cycle Q Clear(g_c), s	16.5	0.0	2.8	0.4	0.0	0.0	3.9	1.6	1.7	2.1	3.0	0.0
Proportion In Lane	1.000		0.600	0.200		0.600	1.000		0.116	1.000		0.000
Lane Grp Cap(c), veh/h	1071.7	0.0	535.7	574.1	0.0	0.0	492.2	657.3	644.1	552.2	1250.6	0.0
V/C Ratio(X)	0.444	0.000	0.110	0.019	0.000	0.000	0.039	0.085	0.087	0.021	0.148	0.000
Avail Cap(c_a), veh/h	1071.7	0.0	535.7	574.1	0.0	0.0	492.2	657.3	644.1	552.2	1250.6	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	21.1	0.0	17.1	16.4	0.0	0.0	13.7	12.6	12.6	13.0	12.8	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.4	0.1	0.0	0.0	0.1	0.3	0.3	0.1	0.2	0.0
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
Lane Group Delay (d), s/veh	22.4	0.0	17.5	16.4	0.0	0.0	13.9	12.8	12.8	13.1	13.1	0.0
Lane Group LOS	C		B	B			B	B	B	B	B	
Approach Volume, veh/h		535			11			131			197	
Approach Delay, s/veh		21.9			16.4			13.0			13.1	
Approach LOS		C			B			B			B	

Timer								
Assigned Phase		4			8			2			6	
Phase Duration (G+Y+Rc), s		50.00			50.00			50.00			50.00	
Change Period (Y+Rc), s		7.00			7.00			7.00			7.00	
Max Green Setting (Gmax), s		43.00			43.00			43.00			43.00	
Max Q Clear Time (g_c+I1), s		18.48			2.41			5.86			4.97	
Green Extension Time (p_c)		2.48			2.61			0.94			0.95	

Intersection Summary	
HCM 2010 Control Delay	18.5
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	396	24	0	1	0	0	358	14	58	711	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1900	0	0	1638	1638	1624	1624	0
Lanes	1	1	1	0	1	0	0	2	0	1	2	0
Capacity, veh/h	529	605	514	0	665	0	0	1147	0	455	1635	0
Arriving On Green	0.35	0.35	0.00	0.00	0.35	0.00	0.00	0.47	0.00	0.16	0.70	0.00
Sat Flow, veh/h	1307.6	1727.3	1468.2		1900.0	0.0		3275.9	0.0	1546.6	3166.7	0.0
Grp Volume(v), veh/h	105.0	495.0	0.0		1.3	0.0		447.5	0.0	72.5	888.8	0.0
Grp Sat Flow(s),veh/h/ln	1307.6	1727.3	1468.2		1900.0	0.0		1637.9	0.0	1546.6	1542.7	0.0
Q Serve(g_s), s	5.7	26.1	0.0		0.0	0.0		8.9	0.0	0.0	13.8	0.0
Cycle Q Clear(g_c), s	5.7	26.1	0.0		0.0	0.0		8.9	0.0	0.0	13.8	0.0
Proportion In Lane	1.000		1.000			0.000			0.000	1.000		0.000
Lane Grp Cap(c), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	454.6	1635.3	0.0
V/C Ratio(X)	0.198	0.819	0.000		0.002	0.000		0.390	0.000	0.159	0.543	0.000
Avail Cap(c_a), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	454.6	1635.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00		1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	1.000	0.000		1.000	0.000		1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	23.0	29.6	0.0		21.1	0.0		19.8	0.0	21.3	9.0	0.0
Incr Delay (d2), s/veh	0.8	11.8	0.0		0.0	0.0		1.0	0.0	0.7	1.3	0.0
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
Lane Group Delay (d), s/veh	23.8	41.4	0.0		21.1	0.0		20.8	0.0	22.1	10.3	0.0
Lane Group LOS	C	D			C			C		C	B	
Approach Volume, veh/h		600			1			448			961	
Approach Delay, s/veh		38.3			21.1			20.8			11.2	
Approach LOS		D			C			C			B	

Timer					
Assigned Phase		4	8	2	1	6
Phase Duration (G+Y+Rc), s		41.00	41.00	41.00	18.00	59.00
Change Period (Y+Rc), s		6.00	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s		35.00	35.00	35.00	12.00	53.00
Max Q Clear Time (g_c+I1), s		28.11	2.04	10.92	2.00	15.78
Green Extension Time (p_c)		1.07	1.64	4.73	0.08	4.94

Intersection Summary	
HCM 2010 Control Delay	21.4
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	1	141	0	1	0	183	242	0	0	693	348
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1976	0	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	1031	0	514	0	692	0	320	1736	0	0	1137	0
Arriving On Green	0.35	0.35	0.00	0.00	0.35	0.00	0.16	0.70	0.00	0.00	0.47	0.00
Sat Flow, veh/h	2536.8	0.0	1468.2	0.0	1976.0	0.0	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h	675.0	0.0	0.0	0.0	1.3	0.0	228.8	302.5	0.0		866.3	0.0
Grp Sat Flow(s),veh/h/ln	1268.4	0.0	1468.2	0.0	1976.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s	23.6	0.0	0.0	0.0	0.0	0.0	4.7	3.1	0.0		22.1	0.0
Cycle Q Clear(g_c), s	23.6	0.0	0.0	0.0	0.0	0.0	4.7	3.1	0.0		22.1	0.0
Proportion In Lane	1.000		1.000	0.000		0.000	1.000		0.000			0.000
Lane Grp Cap(c), veh/h	1030.8	0.0	513.9	0.0	691.6	0.0	320.2	1736.2	0.0		1136.8	0.0
V/C Ratio(X)	0.655	0.000	0.000	0.000	0.002	0.000	0.714	0.174	0.000		0.762	0.000
Avail Cap(c_a), veh/h	1030.8	0.0	513.9	0.0	691.6	0.0	320.2	1736.2	0.0		1136.8	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh	28.8	0.0	0.0	0.0	21.1	0.0	36.1	7.4	0.0		23.3	0.0
Incr Delay (d2), s/veh	3.2	0.0	0.0	0.0	0.0	0.0	12.8	0.2	0.0		4.9	0.0
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
Lane Group Delay (d), s/veh	32.1	0.0	0.0	0.0	21.1	0.0	48.9	7.6	0.0		28.1	0.0
Lane Group LOS	C				C		D	A			C	
Approach Volume, veh/h		675			1			531			866	
Approach Delay, s/veh		32.1			21.1			25.4			28.1	
Approach LOS		C			C			C			C	

Timer								
Assigned Phase		4		8		5	2		6	
Phase Duration (G+Y+Rc), s		41.00		41.00		18.00	59.00		41.00	
Change Period (Y+Rc), s		6.00		6.00		6.00	6.00		6.00	
Max Green Setting (Gmax), s		35.00		35.00		12.00	53.00		35.00	
Max Q Clear Time (g_c+I1), s		25.62		2.04		6.72	5.11		24.09	
Green Extension Time (p_c)		1.94		2.74		0.27	4.21		3.19	

Intersection Summary	
HCM 2010 Control Delay	28.7
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	131	13	2	469	134	11	17	0	135	19	96
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1849	1849	1900	1871	1871	1727	1900	0	1881	1665	1665
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	394	2278	103	636	1999	363	545	798	0	653	699	594
Arriving On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.42	0.42	0.00	0.42	0.42	0.42
Sat Flow, veh/h	796.5	4951.9	224.1	1258.3	4346.4	790.1	1208.9	1900.0	0.0	1402.1	1664.6	1414.9
Grp Volume(v), veh/h	55.4	96.3	52.7	2.2	397.1	207.2	12.0	18.5	0.0	146.7	20.7	67.4
Grp Sat Flow(s),veh/h/ln	796.5	1683.0	1809.9	1258.3	1702.5	1731.5	1208.9	1900.0	0.0	1402.1	1664.6	1414.9
Q Serve(g_s), s	3.5	1.2	1.2	0.1	5.4	5.5	0.6	0.6	42.0	6.8	0.7	2.9
Cycle Q Clear(g_c), s	9.1	1.2	1.2	1.2	5.4	5.5	3.5	0.6	42.0	7.4	0.7	2.9
Proportion In Lane	1.000		0.124	1.000		0.456	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	394.4	1548.4	832.6	636.0	1566.3	796.5	544.7	798.0	0.0	652.9	699.1	594.2
V/C Ratio(X)	0.141	0.062	0.063	0.003	0.254	0.260	0.022	0.023	0.000	0.225	0.030	0.113
Avail Cap(c_a), veh/h	394.4	1548.4	832.6	636.0	1566.3	796.5	544.7	798.0	0.0	652.9	699.1	594.2
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	13.6	10.7	10.7	11.0	11.5	11.6	18.7	17.0	0.0	19.2	17.0	17.7
Incr Delay (d2), s/veh	0.7	0.1	0.1	0.0	0.4	0.8	0.1	0.1	0.0	0.8	0.1	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
Lane Group Delay (d), s/veh	14.4	10.8	10.9	11.0	11.9	12.3	18.8	17.0	0.0	20.0	17.1	18.0
Lane Group LOS	B	B	B	B	B	B	B	B		B	B	B
Approach Volume, veh/h		204			607			30			235	
Approach Delay, s/veh		11.8			12.1			17.7			19.2	
Approach LOS		B			B			B			B	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	52.00	52.00	48.00	48.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	46.00	46.00	42.00	42.00
Max Q Clear Time (g_c+I1), s	11.07	7.53	5.51	9.42
Green Extension Time (p_c)	2.57	2.58	0.67	0.66

Intersection Summary	
HCM 2010 Control Delay	13.7
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	190	517	127	118	300	107	36	48	22	24	80	128
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	178.9	177.6	166.7	181.9	190.0	184.5	174.1	147.3	190.0	186.2	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	488	1806	395	333	1795	437	598	966	369	324	1066	660
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	996	4013	877	677	3988	971	1293	2342	894	629	2584	1599
Grp Volume(v), veh/h	204	449	231	127	266	139	39	36	37	60	52	0
Grp Sat Flow(s),veh/h/ln	996	1628	1634	677	1656	1648	1293	1654	1583	1604	1609	1599
Q Serve(g_s), s	12.4	7.0	7.2	11.8	3.8	4.1	1.5	1.0	1.1	0.0	1.6	0.0
Cycle Q Clear(g_c), s	16.4	7.0	7.2	19.1	3.8	4.1	3.1	1.0	1.1	1.6	1.6	0.0
Prop In Lane	1.00		0.54	1.00		0.59	1.00		0.56	0.43		1.00
Lane Grp Cap(c), veh/h	488	1465	735	333	1490	742	598	682	653	726	664	660
V/C Ratio(X)	0.42	0.31	0.31	0.38	0.18	0.19	0.07	0.05	0.06	0.08	0.08	0.00
Avail Cap(c_a), veh/h	488	1465	735	333	1490	742	598	682	653	726	664	660
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.2	14.0	14.1	20.2	13.2	13.2	15.2	14.1	14.1	14.3	14.3	0.0
Incr Delay (d2), s/veh	2.6	0.5	1.1	3.3	0.3	0.6	0.2	0.1	0.2	0.2	0.2	0.0
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 Back of Q (50%), veh/ln	3.3	2.7	3.0	2.2	1.5	1.7	0.5	0.4	0.4	0.7	0.6	0.0
Lane Grp Delay (d), s/veh	20.8	14.6	15.2	23.5	13.4	13.8	15.4	14.3	14.3	14.5	14.5	0.0
Lane Grp LOS	C	B	B	C	B	B	B	B	B	B	B	
Approach Vol, veh/h		884			532			112			112	
Approach Delay, s/veh		16.2			15.9			14.7			14.5	
Approach LOS		B			B			B			B	
Timer												
Assigned Phs		2			6			8			4	
Phs Duration (G+Y+Rc), s		41.0			41.0			39.0			39.0	
Change Period (Y+Rc), s		5.0			5.0			6.0			6.0	
Max Green Setting (Gmax), s		36.0			36.0			33.0			33.0	
Max Q Clear Time (g_c+I1), s		18.4			21.1			5.1			3.6	
Green Ext Time (p_c), s		4.1			3.9			0.5			0.5	
Intersection Summary												
HCM 2010 Ctrl Delay			15.9									
HCM 2010 LOS			B									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	86	97	29	46	335	91	210	124	204	445	22	43
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	188.1	185.3	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	188.1	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	563	2161	483	533	1234	563	547	669	522	396	669	569
Arrive On Green	0.11	0.52	0.52	0.36	0.36	0.00	0.36	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	1792	4138	924	1273	3471	1583	1343	1881	1468	1027	1881	1600
Grp Volume(v), veh/h	90	81	44	48	349	0	219	129	200	464	23	0
Grp Sat Flow(s),veh/h/ln	1792	1686	1690	1273	1736	1583	1343	1881	1468	1027	1881	1600
Q Serve(g_s), s	2.5	1.1	1.1	2.3	6.5	0.0	11.4	4.3	9.1	27.7	0.7	0.0
Cycle Q Clear(g_c), s	2.5	1.1	1.1	2.3	6.5	0.0	12.2	4.3	9.1	32.0	0.7	0.0
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	563	1761	882	533	1234	563	547	669	522	396	669	569
V/C Ratio(X)	0.16	0.05	0.05	0.09	0.28	0.00	0.40	0.19	0.38	1.17	0.03	0.00
Avail Cap(c_a), veh/h	563	1761	882	533	1234	563	547	669	522	396	669	569
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.1	10.5	10.5	19.4	20.8	0.0	22.9	20.1	21.6	33.9	18.9	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.3	0.6	0.0	2.2	0.6	2.1	100.6	0.1	0.0
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 Back of Q (50%), veh/ln	1.1	0.4	0.5	0.7	2.8	0.0	4.1	2.1	3.6	20.1	0.3	0.0
Lane Grp Delay (d), s/veh	13.7	10.6	10.7	19.8	21.4	0.0	25.1	20.7	23.8	134.6	19.0	0.0
Lane Grp LOS	B	B	B	B	C		C	C	C	F	B	
Approach Vol, veh/h		215			397			548			487	
Approach Delay, s/veh		11.9			21.2			23.6			129.1	
Approach LOS		B			C			C			F	

Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	15.0	53.0			38.0			37.0			37.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	9.5	47.0			32.0			32.0			32.0	
Max Q Clear Time (g_c+I1), s	4.5	3.1			8.5			14.2			34.0	
Green Ext Time (p_c), s	0.1	1.5			1.5			3.0			0.0	

Intersection Summary	
HCM 2010 Ctrl Delay	52.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	586	22	43	2	2	6	18	98	6	11	172	411
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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
Adj Sat Flow Rate	1496	1378	1378	1647	1647	1647	1638	1529	1529	1696	1442	1442
Lanes	2	1	0	0	1	0	1	2	0	1	2	0
Capacity, veh/h	1072	214	321	126	130	319	492	1227	74	552	1240	0
Arriving On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.57	0.57	0.57	0.57	0.57	0.00
Sat Flow, veh/h	2178.4	498.3	747.5	246.9	235.4	740.8	1049.8	2853.4	173.2	1162.0	2883.1	0.0
Grp Volume(v), veh/h	630.1	0.0	59.1	10.8	0.0	0.0	19.4	56.0	55.8	11.8	184.9	0.0
Grp Sat Flow(s),veh/h/ln	1089.2	0.0	1245.8	1234.7	0.0	0.0	1049.8	1528.6	1498.0	1162.0	1441.5	0.0
Q Serve(g_s), s	23.4	0.0	2.8	0.0	0.0	0.0	0.9	1.6	1.7	0.5	3.0	0.0
Cycle Q Clear(g_c), s	23.8	0.0	2.8	0.4	0.0	0.0	3.9	1.6	1.7	2.1	3.0	0.0
Proportion In Lane	1.000		0.600	0.200		0.600	1.000		0.116	1.000		0.000
Lane Grp Cap(c), veh/h	1071.7	0.0	535.7	574.1	0.0	0.0	491.9	657.3	644.1	552.2	1239.7	0.0
V/C Ratio(X)	0.588	0.000	0.110	0.019	0.000	0.000	0.039	0.085	0.087	0.021	0.149	0.000
Avail Cap(c_a), veh/h	1071.7	0.0	535.7	574.1	0.0	0.0	491.9	657.3	644.1	552.2	1239.7	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	23.2	0.0	17.1	16.4	0.0	0.0	13.8	12.6	12.6	13.0	12.8	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.4	0.1	0.0	0.0	0.1	0.3	0.3	0.1	0.3	0.0
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
Lane Group Delay (d), s/veh	25.6	0.0	17.5	16.4	0.0	0.0	13.9	12.8	12.8	13.1	13.1	0.0
Lane Group LOS	C		B	B			B	B	B	B	B	
Approach Volume, veh/h		689			11			131			197	
Approach Delay, s/veh		24.9			16.4			13.0			13.1	
Approach LOS		C			B			B			B	
Timer												
Assigned Phase		4			8			2			6	
Phase Duration (G+Y+Rc), s		50.00			50.00			50.00			50.00	
Change Period (Y+Rc), s		7.00			7.00			7.00			7.00	
Max Green Setting (Gmax), s		43.00			43.00			43.00			43.00	
Max Q Clear Time (g_c+I1), s		25.78			2.41			5.89			5.00	
Green Extension Time (p_c)		3.08			3.55			0.94			0.95	
Intersection Summary												
HCM 2010 Control Delay			21.0									
HCM 2010 Level of Service			C									

Intersection	
Intersection Delay (sec/veh):	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	0	0	0	0	145	736	0	0	468	262
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	180		0	0		0
Median Width		0			0			10			10	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles(%)	0	0	0	0	0	0	16	16	0	0	17	17
Movement Flow Rate	0	0	0	0	0	0	181	920	0	0	585	327
Number of Lanes	0	0	0	0	1	0	1	2	0	0	2	0

Major/Minor				Minor1			Major1			Major2	
Conflicting Flow Rate - All			~	2195	-	913	0	-	920	0	0
Stage 1			-	1282	-	-	-	-	-	-	-
Stage 2			-	913	-	-	-	-	-	-	-
Follow-up Headway			0	4	0	2.36	-	0	2.2	-	
Pot Capacity-1 Maneuver			0	64	0	830	-	0	1049	-	-
Stage 1			0	342	0	-	-	0	-	-	-
Stage 2			0	471	0	-	-	0	-	-	-
Time blocked-Platoon(%)			0	45	0	18	-	0	27	-	-
Mov Capacity-1 Maneuver			0	50	-	830	-	-	1049	-	-
Mov Capacity-2 Maneuver			0	50	-	-	-	-	-	-	-
Stage 1			0	267	-	-	-	-	-	-	-
Stage 2			0	471	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	0	1.7	0
HCM LOS	A	A	A

Lane	NBL	NBT	WBLn1	SBL	SBT	SBR
Capacity (vph)			0			
HCM Control Delay (s)	10.545	-	0	0	-	-
HCM Lane VC Ratio	0.218	-	-	-	-	-
HCM Lane LOS	B	-	A	A	-	-
HCM 95th Percentile Queue (veh)	0.83	-	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	84	396	24	0	1	0	0	483	32	58	802	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1900	0	0	1638	1638	1624	1624	0
Lanes	1	1	1	0	1	0	0	2	0	1	2	0
Capacity, veh/h	529	605	514	0	665	0	0	1147	0	399	1635	0
Arriving On Green	0.35	0.35	0.00	0.00	0.35	0.00	0.00	0.47	0.00	0.16	0.70	0.00
Sat Flow, veh/h	1307.6	1727.3	1468.2		1900.0	0.0		3275.9	0.0	1546.6	3166.7	0.0
Grp Volume(v), veh/h	105.0	495.0	0.0		1.3	0.0		603.8	0.0	72.5	1002.5	0.0
Grp Sat Flow(s),veh/h/ln	1307.6	1727.3	1468.2		1900.0	0.0		1637.9	0.0	1546.6	1542.7	0.0
Q Serve(g_s), s	5.7	26.1	0.0		0.0	0.0		13.0	0.0	0.0	16.9	0.0
Cycle Q Clear(g_c), s	5.7	26.1	0.0		0.0	0.0		13.0	0.0	0.0	16.9	0.0
Proportion In Lane	1.000		1.000			0.000			0.000	1.000		0.000
Lane Grp Cap(c), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	398.9	1635.3	0.0
V/C Ratio(X)	0.198	0.819	0.000		0.002	0.000		0.527	0.000	0.182	0.613	0.000
Avail Cap(c_a), veh/h	529.1	604.5	513.9		665.0	0.0		1146.6	0.0	398.9	1635.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00		1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	1.000	0.000		1.000	0.000		1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	23.0	29.6	0.0		21.1	0.0		20.9	0.0	24.5	9.4	0.0
Incr Delay (d2), s/veh	0.8	11.8	0.0		0.0	0.0		1.7	0.0	1.0	1.7	0.0
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
Lane Group Delay (d), s/veh	23.8	41.4	0.0		21.1	0.0		22.6	0.0	25.5	11.2	0.0
Lane Group LOS	C	D			C			C		C	B	
Approach Volume, veh/h		600			1			604			1075	
Approach Delay, s/veh		38.3			21.1			22.6			12.1	
Approach LOS		D			C			C			B	
Timer												
Assigned Phase		4			8			2		1	6	
Phase Duration (G+Y+Rc), s		41.00			41.00			41.00		18.00	59.00	
Change Period (Y+Rc), s		6.00			6.00			6.00		6.00	6.00	
Max Green Setting (Gmax), s		35.00			35.00			35.00		12.00	53.00	
Max Q Clear Time (g_c+I1), s		28.11			2.04			15.05		2.00	18.88	
Green Extension Time (p_c)		1.07			1.64			5.73		0.08	6.33	
Intersection Summary												
HCM 2010 Control Delay			21.8									
HCM 2010 Level of Service			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	1	230	0	1	0	306	244	0	0	694	348
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1976	0	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	879	0	426	0	573	0	420	1933	0	0	1104	0
Arriving On Green	0.29	0.29	0.00	0.00	0.29	0.00	0.25	0.78	0.00	0.00	0.45	0.00
Sat Flow, veh/h	2536.8	0.0	1468.2	0.0	1976.0	0.0	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h	675.0	0.0	0.0	0.0	1.3	0.0	382.5	305.0	0.0		867.5	0.0
Grp Sat Flow(s),veh/h/ln	1268.4	0.0	1468.2	0.0	1976.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s	25.8	0.0	0.0	0.0	0.0	0.0	15.4	2.3	0.0		22.7	0.0
Cycle Q Clear(g_c), s	25.8	0.0	0.0	0.0	0.0	0.0	15.4	2.3	0.0		22.7	0.0
Proportion In Lane	1.000		1.000	0.000		0.000	1.000		0.000			0.000
Lane Grp Cap(c), veh/h	878.5	0.0	425.8	0.0	573.0	0.0	420.4	1932.8	0.0		1104.3	0.0
V/C Ratio(X)	0.768	0.000	0.000	0.000	0.002	0.000	0.910	0.158	0.000		0.786	0.000
Avail Cap(c_a), veh/h	878.5	0.0	425.8	0.0	573.0	0.0	420.4	1932.8	0.0		1104.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh	34.4	0.0	0.0	0.0	25.2	0.0	32.9	4.7	0.0		24.3	0.0
Incr Delay (d2), s/veh	6.4	0.0	0.0	0.0	0.0	0.0	26.2	0.2	0.0		5.6	0.0
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
Lane Group Delay (d), s/veh	40.8	0.0	0.0	0.0	25.2	0.0	59.1	4.8	0.0		29.9	0.0
Lane Group LOS	D				C		E	A			C	
Approach Volume, veh/h		675			1			688			868	
Approach Delay, s/veh		40.8			25.2			35.0			29.9	
Approach LOS		D			C			D			C	

Timer												
Assigned Phase		4			8		5	2			6	
Phase Duration (G+Y+Rc), s		35.00			35.00		25.00	65.00			40.00	
Change Period (Y+Rc), s		6.00			6.00		6.00	6.00			6.00	
Max Green Setting (Gmax), s		29.00			29.00		19.00	59.00			34.00	
Max Q Clear Time (g_c+I1), s		27.80			2.04		17.40	4.29			24.69	
Green Extension Time (p_c)		0.39			2.69		0.21	4.24			2.97	

Intersection Summary												
HCM 2010 Control Delay			34.8									
HCM 2010 Level of Service			C									

Intersection	
Intersection Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	14	106	300	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0	150			0
Median Width	0			0	0	
Grade, %	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	16	118	333	27
Number of Lanes	0	1	0	3	2	0

Major/Minor			Major1		Major 2	
Conflicting Flow All	425	180	360	0	-	0
Stage 1	347	-	-	-	-	-
Stage 2	78	-	-	-	-	-
Follow-up Headway	3.67	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	575	832	1195	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	895	-	-	-	-	-
Time blocked-Platoon, %	0	0	0	-	-	-
Mov Capacity-1 Maneuver	567	832	1195	-	-	-
Mov Capacity-2 Maneuver	567	-	-	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	882	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0.9	0
HCM LOS	A	-	-

Minor Lane / Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Cap, veh/h	1195	-	0	-	-
HCM Control Delay, s	8.052	- 0	0	-	-
HCM Lane V/C Ratio	0.01	-	-	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th-tile Q, veh	0.0	-	-	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	45	120	96	204
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0	100			0
Median Width	0			12	12	
Grade, %	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	50	133	107	227
Number of Lanes	0	1	1	2	2	0

Major/Minor				Major1	Major2	
Conflicting Flow All	387	167	333	0	-	0
Stage 1	220	-	-	-	-	-
Stage 2	167	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	589	848	1223	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	845	-	-	-	-	-
Time blocked-Platoon, %	0	0	0	-	-	-
Mov Capacity-1 Maneuver	565	848	1223	-	-	-
Mov Capacity-2 Maneuver	624	-	-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	810	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	2.2	0
HCM LOS	A	-	-

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Cap, veh/h	1223	-	0	-	-
HCM Control Delay, s	8.069	-	0	-	-
HCM Lane V/C Ratio	0.04	-	-	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th-tile Q, veh	0.1	-	-	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	20	29	511	0	0	97
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		12			12
Grade, %	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	32	568	0	0	108
Number of Lanes	1	0	2	0	0	2

Major/Minor			Major 1		Major 2	
Conflicting Flow All	622	284	0	0	568	0
Stage 1	568	-	-	-	-	-
Stage 2	54	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	419	713	-	-	1000	-
Stage 1	530	-	-	-	-	-
Stage 2	962	-	-	-	-	-
Time blocked-Platoon, %	0	0	-	-	0	-
Mov Capacity-1 Maneuver	419	713	-	-	1000	-
Mov Capacity-2 Maneuver	467	-	-	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	962	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.8	0	0
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Cap, veh/h	-	-	587	1000	-
HCM Control Delay, s	-	-	11.8	0	-
HCM Lane V/C Ratio	-	-	0.09	-	-
HCM Lane LOS	-	-	B	A	-
HCM 95th-tile Q, veh	-	-	0.3	0.0	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	26	31	480	19	22	94
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	100	
Median Width	12		12			12
Grade, %	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	34	533	21	24	104
Number of Lanes	1	0	2	0	1	2

Major/Minor			Major 1		Major 2	
Conflicting Flow All	645	277	0	0	554	0
Stage 1	544	-	-	-	-	-
Stage 2	101	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	405	720	-	-	1012	-
Stage 1	546	-	-	-	-	-
Stage 2	912	-	-	-	-	-
Time blocked-Platoon, %	0	0	-	-	0	-
Mov Capacity-1 Maneuver	395	720	-	-	1012	-
Mov Capacity-2 Maneuver	466	-	-	-	-	-
Stage 1	546	-	-	-	-	-
Stage 2	890	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	1.6
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Cap, veh/h	-	-	577	1012	-
HCM Control Delay, s	-	-	12	8.645	-
HCM Lane V/C Ratio	-	-	0.11	0.02	-
HCM Lane LOS	-	-	B	A	-
HCM 95th-tile Q, veh	-	-	0.4	0.1	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	6.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	62	282	282	0	0	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	100	
Median Width	12		12			12
Grade, %	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	313	313	0	0	134
Number of Lanes	1	0	2	0	0	2

Major/Minor			Major1		Major2	
Conflicting Flow All	380	157	0	0	313	0
Stage 1	313	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	595	861	-	-	1244	-
Stage 1	715	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Time blocked-Platoon, %	0	0	-	-	0	-
Mov Capacity-1 Maneuver	595	861	-	-	1244	-
Mov Capacity-2 Maneuver	625	-	-	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	948	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	0
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Cap, veh/h	-	-	806	1244	-
HCM Control Delay, s	-	-	13.4	0	-
HCM Lane V/C Ratio	-	-	0.47	-	-
HCM Lane LOS	-	-	B	A	-
HCM 95th-tile Q, veh	-	-	2.6	0.0	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

2021 BUILD WITH IMPROVEMENTS WEEKDAY PM PEAK HOUR CONDITIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	51	131	13	2	469	134	11	17	0	135	19	96
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1849	1849	1900	1871	1871	1727	1900	0	1881	1665	1665
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	394	2278	103	636	1999	363	545	798	0	653	699	594
Arriving On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.42	0.42	0.00	0.42	0.42	0.42
Sat Flow, veh/h	796.5	4951.9	224.1	1258.3	4346.4	790.1	1208.9	1900.0	0.0	1402.1	1664.6	1414.9
Grp Volume(v), veh/h	55.4	96.3	52.7	2.2	397.1	207.2	12.0	18.5	0.0	146.7	20.7	67.4
Grp Sat Flow(s),veh/h/ln	796.5	1683.0	1809.9	1258.3	1702.5	1731.5	1208.9	1900.0	0.0	1402.1	1664.6	1414.9
Q Serve(g_s), s	3.5	1.2	1.2	0.1	5.4	5.5	0.6	0.6	42.0	6.8	0.7	2.9
Cycle Q Clear(g_c), s	9.1	1.2	1.2	1.2	5.4	5.5	3.5	0.6	42.0	7.4	0.7	2.9
Proportion In Lane	1.000		0.124	1.000		0.456	1.000		1.000	1.000		1.000
Lane Grp Cap(c), veh/h	394.4	1548.4	832.6	636.0	1566.3	796.5	544.7	798.0	0.0	652.9	699.1	594.2
V/C Ratio(X)	0.141	0.062	0.063	0.003	0.254	0.260	0.022	0.023	0.000	0.225	0.030	0.113
Avail Cap(c_a), veh/h	394.4	1548.4	832.6	636.0	1566.3	796.5	544.7	798.0	0.0	652.9	699.1	594.2
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	13.6	10.7	10.7	11.0	11.5	11.6	18.7	17.0	0.0	19.2	17.0	17.7
Incr Delay (d2), s/veh	0.7	0.1	0.1	0.0	0.4	0.8	0.1	0.1	0.0	0.8	0.1	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
Lane Group Delay (d), s/veh	14.4	10.8	10.9	11.0	11.9	12.3	18.8	17.0	0.0	20.0	17.1	18.0
Lane Group LOS	B	B	B	B	B	B	B	B		B	B	B
Approach Volume, veh/h		204			607			30			235	
Approach Delay, s/veh		11.8			12.1			17.7			19.2	
Approach LOS		B			B			B			B	

Timer								
Assigned Phase		2			6			8			4	
Phase Duration (G+Y+Rc), s		52.00			52.00			48.00			48.00	
Change Period (Y+Rc), s		6.00			6.00			6.00			6.00	
Max Green Setting (Gmax), s		46.00			46.00			42.00			42.00	
Max Q Clear Time (g_c+I1), s		11.07			7.53			5.51			9.42	
Green Extension Time (p_c)		2.57			2.58			0.67			0.66	

Intersection Summary			
HCM 2010 Control Delay		13.7	
HCM 2010 Level of Service		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	190	517	127	118	300	107	36	48	22	24	80	128
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	178.9	177.6	166.7	181.9	190.0	184.5	174.1	147.3	190.0	186.2	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	516	1926	421	354	1914	466	577	960	367	315	1052	656
Arrive On Green	0.64	0.64	0.64	0.64	0.64	0.64	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	996	4013	877	677	3988	971	1293	2342	894	642	2566	1599
Grp Volume(v), veh/h	204	449	231	127	266	139	39	36	37	60	52	0
Grp Sat Flow(s),veh/h/ln	996	1628	1634	677	1656	1648	1293	1654	1583	1599	1609	1599
Q Serve(g_s), s	11.5	6.1	6.3	11.1	3.2	3.4	1.9	1.3	1.4	0.0	2.0	0.0
Cycle Q Clear(g_c), s	14.9	6.1	6.3	17.4	3.2	3.4	3.9	1.3	1.4	2.0	2.0	0.0
Prop In Lane	1.00		0.54	1.00		0.59	1.00		0.56	0.43		1.00
Lane Grp Cap(c), veh/h	516	1563	784	354	1590	791	577	678	649	707	660	656
V/C Ratio(X)	0.40	0.29	0.29	0.36	0.17	0.18	0.07	0.05	0.06	0.08	0.08	0.00
Avail Cap(c_a), veh/h	516	1563	784	354	1590	791	577	678	649	707	660	656
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.1	10.5	10.5	14.4	10.0	10.0	19.2	17.8	17.8	18.0	18.0	0.0
Incr Delay (d2), s/veh	2.3	0.5	1.0	2.8	0.2	0.5	0.2	0.1	0.2	0.2	0.2	0.0
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 Back of Q (50%), veh/ln	2.8	2.2	2.4	2.0	1.3	1.4	0.6	0.6	0.6	0.9	0.8	0.0
Lane Grp Delay (d), s/veh	15.3	11.0	11.5	17.2	10.2	10.5	19.4	17.9	18.0	18.2	18.2	0.0
Lane Grp LOS	B	B	B	B	B	B	B	B	B	B	B	
Approach Vol, veh/h		884			532			112			112	
Approach Delay, s/veh		12.1			12.0			18.5			18.2	
Approach LOS		B			B			B			B	

Timer				
Assigned Phs	2	6	8	4
Phs Duration (G+Y+Rc), s	53.0	53.0	47.0	47.0
Change Period (Y+Rc), s	5.0	5.0	6.0	6.0
Max Green Setting (Gmax), s	48.0	48.0	41.0	41.0
Max Q Clear Time (g_c+I1), s	16.9	19.4	5.9	4.0
Green Ext Time (p_c), s	4.5	4.4	0.5	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	12.9
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	86	97	29	46	335	91	210	124	204	445	22	43
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	188.1	185.3	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	188.1	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	344	1448	323	365	798	364	790	1016	793	592	1016	864
Arrive On Green	0.09	0.47	0.47	0.31	0.31	0.00	0.54	0.54	0.54	0.54	0.54	0.00
Sat Flow, veh/h	1792	4138	924	1273	3471	1583	1343	1881	1468	1027	1881	1600
Grp Volume(v), veh/h	90	81	44	48	349	0	219	129	200	464	23	0
Grp Sat Flow(s),veh/h/ln	1792	1686	1690	1273	1736	1583	1343	1881	1468	1027	1881	1600
Q Serve(g_s), s	3.6	1.3	1.4	2.8	8.1	0.0	9.1	3.4	7.3	40.7	0.6	0.0
Cycle Q Clear(g_c), s	3.6	1.3	1.4	2.8	8.1	0.0	9.6	3.4	7.3	44.1	0.6	0.0
Prop In Lane	1.00		0.55	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	1180	591	365	798	364	790	1016	793	592	1016	864
V/C Ratio(X)	0.26	0.07	0.07	0.13	0.44	0.00	0.28	0.13	0.25	0.78	0.02	0.00
Avail Cap(c_a), veh/h	344	1180	591	365	798	364	790	1016	793	592	1016	864
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	24.7	17.7	17.8	27.7	29.5	0.0	13.0	11.4	12.2	22.3	10.7	0.0
Incr Delay (d2), s/veh	1.8	0.1	0.2	0.7	1.7	0.0	0.9	0.3	0.8	10.0	0.0	0.0
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 Back of Q (50%), veh/ln	1.7	0.6	0.6	0.9	3.5	0.0	3.1	1.5	2.7	11.7	0.3	0.0
Lane Grp Delay (d), s/veh	26.5	17.8	18.0	28.4	31.3	0.0	13.8	11.6	13.0	32.3	10.8	0.0
Lane Grp LOS	C	B	B	C	C		B	B	B	C	B	
Approach Vol, veh/h		215			397			548			487	
Approach Delay, s/veh		21.5			30.9			13.0			31.3	
Approach LOS		C			C			B			C	

Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	12.0	41.0			29.0			59.0			59.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	6.5	35.0			23.0			54.0			54.0	
Max Q Clear Time (g_c+I1), s	5.6	3.4			10.1			11.6			46.1	
Green Ext Time (p_c), s	0.0	1.5			1.3			3.3			2.2	

Intersection Summary			
HCM 2010 Ctrl Delay		23.8	
HCM 2010 LOS		C	

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	540	1	230	0	1	0	306	244	0	0	694	348
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1976	0	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	879	0	426	0	573	0	420	1933	0	0	1104	0
Arriving On Green	0.29	0.29	0.00	0.00	0.29	0.00	0.25	0.78	0.00	0.00	0.45	0.00
Sat Flow, veh/h	2536.8	0.0	1468.2	0.0	1976.0	0.0	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h	675.0	0.0	0.0	0.0	1.3	0.0	382.5	305.0	0.0		867.5	0.0
Grp Sat Flow(s),veh/h/ln	1268.4	0.0	1468.2	0.0	1976.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s	25.8	0.0	0.0	0.0	0.0	0.0	15.4	2.3	0.0		22.7	0.0
Cycle Q Clear(g_c), s	25.8	0.0	0.0	0.0	0.0	0.0	15.4	2.3	0.0		22.7	0.0
Proportion In Lane	1.000		1.000	0.000		0.000	1.000		0.000			0.000
Lane Grp Cap(c), veh/h	878.5	0.0	425.8	0.0	573.0	0.0	420.4	1932.8	0.0		1104.3	0.0
V/C Ratio(X)	0.768	0.000	0.000	0.000	0.002	0.000	0.910	0.158	0.000		0.786	0.000
Avail Cap(c_a), veh/h	878.5	0.0	425.8	0.0	573.0	0.0	420.4	1932.8	0.0		1104.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	0.000	1.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh	34.4	0.0	0.0	0.0	25.2	0.0	32.9	4.7	0.0		24.3	0.0
Incr Delay (d2), s/veh	6.4	0.0	0.0	0.0	0.0	0.0	26.2	0.2	0.0		5.6	0.0
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
Lane Group Delay (d), s/veh	40.8	0.0	0.0	0.0	25.2	0.0	59.1	4.8	0.0		29.9	0.0
Lane Group LOS	D				C		E	A			C	
Approach Volume, veh/h		675			1			688			868	
Approach Delay, s/veh		40.8			25.2			35.0			29.9	
Approach LOS		D			C			D			C	

Timer								
Assigned Phase		4		8		5	2		6	
Phase Duration (G+Y+Rc), s		35.00		35.00		25.00	65.00		40.00	
Change Period (Y+Rc), s		6.00		6.00		6.00	6.00		6.00	
Max Green Setting (Gmax), s		29.00		29.00		19.00	59.00		34.00	
Max Q Clear Time (g_c+I1), s		27.80		2.04		17.40	4.29		24.69	
Green Extension Time (p_c)		0.39		2.69		0.21	4.24		2.97	

Intersection Summary												
HCM 2010 Control Delay			34.8									
HCM 2010 Level of Service			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	218	166	524	290	44	9	6	17	128	213	45
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1868	1868	1900	1868	1868	1727	1900	1900	1881	1845	1845
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	520	1511	706	471	2266	0	491	802	682	676	1469	76
Arriving On Green	0.44	0.44	0.44	0.44	0.44	0.00	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1080.3	3400.1	1587.9	1042.0	5266.6	0.0	1081.1	1900.0	1615.0	1418.5	3480.3	178.8
Grp Volume(v), veh/h	33.3	242.2	176.7	582.2	322.2	0.0	10.0	6.7	18.9	142.2	124.9	124.0
Grp Sat Flow(s),veh/h/ln	1080.3	1700.0	1587.9	1042.0	1699.5	0.0	1081.1	1900.0	1615.0	1418.5	1845.3	1813.8
Q Serve(g_s), s	1.7	3.8	6.3	33.7	3.4	0.0	0.5	0.2	0.6	5.8	3.8	3.8
Cycle Q Clear(g_c), s	5.1	3.8	6.3	40.0	3.4	0.0	4.3	0.2	0.6	6.0	3.8	3.8
Proportion In Lane	1.000		1.000	1.000		0.000	1.000		1.000	1.000		0.099
Lane Grp Cap(c), veh/h	519.6	1511.1	705.8	470.6	2266.0	0.0	490.6	802.2	681.9	676.0	779.1	765.8
V/C Ratio(X)	0.064	0.160	0.250	1.237	0.142	0.000	0.020	0.008	0.028	0.210	0.160	0.162
Avail Cap(c_a), veh/h	519.6	1511.1	705.8	470.6	2266.0	0.0	490.6	802.2	681.9	676.0	779.1	765.8
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)	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	16.3	15.0	15.6	31.0	14.8	0.0	17.5	15.1	15.2	16.8	16.1	16.1
Incr Delay (d2), s/veh	0.2	0.2	0.8	123.9	0.1	0.0	0.1	0.0	0.1	0.7	0.4	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
Lane Group Delay (d), s/veh	16.6	15.2	16.5	154.9	15.0	0.0	17.5	15.1	15.3	17.5	16.6	16.6
Lane Group LOS	B	B	B	F	B		B	B	B	B	B	B
Approach Volume, veh/h		452			904			36			391	
Approach Delay, s/veh		15.8			105.0			15.9			16.9	
Approach LOS		B			F			B			B	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	46.00	46.00	44.00	44.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	40.00	40.00	38.00	38.00
Max Q Clear Time (g_c+I1), s	8.26	42.00	6.34	8.00
Green Extension Time (p_c)	5.86	0.00	1.02	1.02

Intersection Summary	
HCM 2010 Control Delay	61.3
HCM 2010 Level of Service	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	82	130	110	444	793	77	43	48	25	48	687	624
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	178.5	177.6	166.7	180.2	190.0	184.5	172.7	147.3	190.0	183.8	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	315	1462	683	514	2135	128	264	914	404	112	1328	660
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	693	3248	1517	1040	4745	285	771	2215	979	148	3221	1599
Grp Volume(v), veh/h	91	144	109	493	608	326	48	38	40	433	383	0
Grp Sat Flow(s),veh/h/ln	693	1624	1517	1040	1639	1751	771	1641	1554	1779	1589	1599
Q Serve(g_s), s	8.2	2.0	3.4	32.6	10.0	10.1	4.1	1.1	1.2	4.5	14.9	0.0
Cycle Q Clear(g_c), s	18.2	2.0	3.4	36.0	10.0	10.1	19.0	1.1	1.2	14.7	14.9	0.0
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.63	0.12		1.00
Lane Grp Cap(c), veh/h	315	1462	683	514	1475	788	264	677	641	784	656	660
V/C Ratio(X)	0.29	0.10	0.16	0.96	0.41	0.41	0.18	0.06	0.06	0.55	0.58	0.00
Avail Cap(c_a), veh/h	315	1462	683	514	1475	788	264	677	641	784	656	660
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.0	12.7	13.0	26.0	14.9	14.9	25.6	14.1	14.2	18.1	18.2	0.0
Incr Delay (d2), s/veh	2.3	0.1	0.5	30.9	0.9	1.6	1.5	0.2	0.2	2.8	3.8	0.0
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 Back of Q (50%), veh/ln	1.6	0.8	1.3	14.3	4.0	4.4	0.9	0.5	0.5	6.9	6.1	0.0
Lane Grp Delay (d), s/veh	23.3	12.8	13.5	56.9	15.7	16.5	27.1	14.3	14.4	20.9	22.0	0.0
Lane Grp LOS	C	B	B	E	B	B	C	B	B	C	C	
Approach Vol, veh/h		344			1427			126			816	
Approach Delay, s/veh		15.8			30.1			19.2			21.4	
Approach LOS		B			C			B			C	

Timer												
Assigned Phs		2			6			8			4	
Phs Duration (G+Y+Rc), s		41.0			41.0			39.0			39.0	
Change Period (Y+Rc), s		5.0			5.0			6.0			6.0	
Max Green Setting (Gmax), s		36.0			36.0			33.0			33.0	
Max Q Clear Time (g_c+I1), s		20.2			38.0			21.0			16.9	
Green Ext Time (p_c), s		5.2			0.0			2.2			2.3	

Intersection Summary												
HCM 2010 Ctrl Delay			25.2									
HCM 2010 LOS			C									

Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	43	135	205	664	541	70	108	30	108	176	314	183
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow,veh/h/ln	188.1	186.7	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	195.6	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	466	1774	829	460	1234	507	306	669	522	508	696	569
Arrive On Green	0.11	0.52	0.52	0.36	0.36	0.00	0.36	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	1792	3397	1587	1070	3471	1425	1048	1881	1468	1243	1956	1600
Grp Volume(v), veh/h	48	150	222	738	601	0	120	33	108	196	349	0
Grp Sat Flow(s),veh/h/ln	1792	1699	1587	1070	1736	1425	1048	1881	1468	1243	1956	1600
Q Serve(g_s), s	1.3	2.0	7.0	32.0	12.1	0.0	9.1	1.0	4.6	11.1	12.6	0.0
Cycle Q Clear(g_c), s	1.3	2.0	7.0	32.0	12.1	0.0	21.7	1.0	4.6	12.1	12.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	466	1774	829	460	1234	507	306	669	522	508	696	569
V/C Ratio(X)	0.10	0.08	0.27	1.60	0.49	0.00	0.39	0.05	0.21	0.39	0.50	0.00
Avail Cap(c_a), veh/h	466	1774	829	460	1234	507	306	669	522	508	696	569
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.5	10.7	11.9	31.8	22.6	0.0	31.3	19.0	20.2	23.0	22.7	0.0
Incr Delay (d2), s/veh	0.4	0.1	0.8	281.2	1.4	0.0	3.7	0.1	0.9	2.2	2.6	0.0
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 Back of Q (50%), veh/ln	0.6	0.8	2.7	46.5	5.3	0.0	2.7	0.5	1.8	3.7	6.5	0.0
Lane Grp Delay (d), s/veh	14.0	10.8	12.7	313.0	24.0	0.0	35.0	19.2	21.1	25.2	25.3	0.0
Lane Grp LOS	B	B	B	F	C		D	B	C	C	C	
Approach Vol, veh/h		420			1339			261			545	
Approach Delay, s/veh		12.2			183.3			27.2			25.3	
Approach LOS		B			F			C			C	

Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	15.0	53.0			38.0			37.0			37.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	9.5	47.0			32.0			32.0			32.0	
Max Q Clear Time (g_c+I1), s	3.3	9.0			34.0			23.7			14.6	
Green Ext Time (p_c), s	0.0	6.3			0.0			1.6			2.1	

Intersection Summary												
HCM 2010 Ctrl Delay			105.8									
HCM 2010 LOS			F									

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	1	17	4	1	1	40	169	3	8	831	854
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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
Adj Sat Flow Rate	1496	1352	1352	1542	1542	1542	1638	1522	1522	1696	1488	1488
Lanes	2	1	0	0	1	0	1	2	0	1	2	0
Capacity, veh/h	1078	62	433	283	68	57	195	1259	22	515	1257	0
Arriving On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.56	0.56	0.56	0.56	0.56	0.00
Sat Flow, veh/h	2188.5	146.4	1024.6	538.7	131.6	134.7	602.8	2982.8	52.8	1110.3	2977.0	0.0
Grp Volume(v), veh/h	525.6	0.0	8.9	6.7	0.0	0.0	44.4	95.7	95.5	8.9	923.3	0.0
Grp Sat Flow(s),veh/h/ln	1094.3	0.0	1171.0	808.1	0.0	0.0	602.8	1522.5	1513.2	1110.3	1488.5	0.0
Q Serve(g_s), s	16.5	0.0	0.4	0.0	0.0	0.0	5.5	2.7	2.7	0.3	20.8	0.0
Cycle Q Clear(g_c), s	16.7	0.0	0.4	0.2	0.0	0.0	26.3	2.7	2.7	3.1	20.8	0.0
Proportion In Lane	1.000		0.875	0.667		0.167	1.000		0.035	1.000		0.000
Lane Grp Cap(c), veh/h	1078.4	0.0	494.4	407.9	0.0	0.0	195.0	642.8	638.9	515.3	1257.0	0.0
V/C Ratio(X)	0.487	0.000	0.018	0.016	0.000	0.000	0.228	0.149	0.149	0.017	0.735	0.000
Avail Cap(c_a), veh/h	1078.4	0.0	494.4	407.9	0.0	0.0	195.0	642.8	638.9	515.3	1257.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	19.9	0.0	15.1	15.1	0.0	0.0	25.8	12.0	12.0	12.7	16.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.1	0.1	0.0	0.0	2.7	0.5	0.5	0.1	3.8	0.0
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
Lane Group Delay (d), s/veh	21.5	0.0	15.2	15.2	0.0	0.0	28.5	12.5	12.5	12.8	19.8	0.0
Lane Group LOS	C		B	B			C	B	B	B	B	
Approach Volume, veh/h		534			7			236			932	
Approach Delay, s/veh		21.4			15.2			15.5			19.7	
Approach LOS		C			B			B			B	
Timer												
Assigned Phase		4			8			2			6	
Phase Duration (G+Y+Rc), s		45.00			45.00			45.00			45.00	
Change Period (Y+Rc), s		7.00			7.00			7.00			7.00	
Max Green Setting (Gmax), s		38.00			38.00			38.00			38.00	
Max Q Clear Time (g_c+I1), s		18.74			2.23			28.32			22.83	
Green Extension Time (p_c)		2.44			2.70			3.13			3.78	
Intersection Summary												
HCM 2010 Control Delay			19.7									
HCM 2010 Level of Service			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	186	546	680	0	1	0	0	412	54	116	1243	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1900	0	0	1638	1638	1624	1624	0
Lanes	1	1	1	0	1	0	0	2	0	1	2	0
Capacity, veh/h	588	672	571	0	739	0	0	910	0	413	1474	0
Arriving On Green	0.39	0.39	0.00	0.00	0.39	0.00	0.00	0.37	0.00	0.18	0.64	0.00
Sat Flow, veh/h	1308.0	1727.3	1468.2		1900.0	0.0		3275.9	0.0	1546.6	3166.7	0.0
Grp Volume(v), veh/h	206.7	606.7	0.0		1.1	0.0		457.8	0.0	128.9	1381.1	0.0
Grp Sat Flow(s),veh/h/ln	1308.0	1727.3	1468.2		1900.0	0.0		1637.9	0.0	1546.6	1542.7	0.0
Q Serve(g_s), s	10.3	29.8	0.0		0.0	0.0		9.7	0.0	0.0	36.3	0.0
Cycle Q Clear(g_c), s	10.4	29.8	0.0		0.0	0.0		9.7	0.0	0.0	36.3	0.0
Proportion In Lane	1.000		1.000			0.000			0.000	1.000		0.000
Lane Grp Cap(c), veh/h	588.2	671.7	571.0		738.9	0.0		910.0	0.0	413.5	1474.2	0.0
V/C Ratio(X)	0.351	0.903	0.000		0.002	0.000		0.503	0.000	0.312	0.937	0.000
Avail Cap(c_a), veh/h	588.2	671.7	571.0		738.9	0.0		910.0	0.0	413.5	1474.2	0.0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00		1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	1.000	0.000		1.000	0.000		1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	20.0	25.9	0.0		16.8	0.0		23.6	0.0	25.7	15.2	0.0
Incr Delay (d2), s/veh	1.6	17.8	0.0		0.0	0.0		2.0	0.0	2.0	12.6	0.0
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
Lane Group Delay (d), s/veh	21.6	43.7	0.0		16.8	0.0		25.5	0.0	27.7	27.7	0.0
Lane Group LOS	C	D			B			C		C	C	
Approach Volume, veh/h		813			1			458			1510	
Approach Delay, s/veh		38.1			16.8			25.5			27.7	
Approach LOS		D			B			C			C	
Timer												
Assigned Phase		4			8			2		1	6	
Phase Duration (G+Y+Rc), s		41.00			41.00			31.00		18.00	49.00	
Change Period (Y+Rc), s		6.00			6.00			6.00		6.00	6.00	
Max Green Setting (Gmax), s		35.00			35.00			25.00		12.00	43.00	
Max Q Clear Time (g_c+I1), s		31.78			2.03			11.74		2.00	38.29	
Green Extension Time (p_c)		0.92			2.38			5.91		0.19	2.93	
Intersection Summary												
HCM 2010 Control Delay			30.4									
HCM 2010 Level of Service			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	484	9	771	20	10	9	125	405	0	0	567	312
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	1976	1976	1976	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	791	0	408	209	105	76	471	1929	0	0	1263	0
Arriving On Green	0.28	0.28	0.00	0.28	0.28	0.28	0.18	0.78	0.00	0.00	0.52	0.00
Sat Flow, veh/h	2456.9	0.0	1468.2	608.5	289.2	273.8	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h	537.8	0.0	0.0	43.3	0.0	0.0	138.9	450.0	0.0		630.0	0.0
Grp Sat Flow(s),veh/h/ln	1228.4	0.0	1468.2	1186.6	0.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s	18.7	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0		11.4	0.0
Cycle Q Clear(g_c), s	20.6	0.0	0.0	1.9	0.0	0.0	0.0	3.3	0.0		11.4	0.0
Proportion In Lane	1.000		1.000	0.513		0.231	1.000		0.000			0.000
Lane Grp Cap(c), veh/h	790.6	0.0	407.8	390.1	0.0	0.0	471.0	1929.1	0.0		1263.1	0.0
V/C Ratio(X)	0.680	0.000	0.000	0.111	0.000	0.000	0.295	0.233	0.000		0.499	0.000
Avail Cap(c_a), veh/h	790.6	0.0	407.8	390.1	0.0	0.0	471.0	1929.1	0.0		1263.1	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh	31.8	0.0	0.0	24.0	0.0	0.0	20.3	4.4	0.0		16.0	0.0
Incr Delay (d2), s/veh	4.7	0.0	0.0	0.6	0.0	0.0	1.6	0.3	0.0		1.4	0.0
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
Lane Group Delay (d), s/veh	36.5	0.0	0.0	24.6	0.0	0.0	21.8	4.6	0.0		17.4	0.0
Lane Group LOS	D			C			C	A			B	
Approach Volume, veh/h		538			43			589			630	
Approach Delay, s/veh		36.5			24.6			8.7			17.4	
Approach LOS		D			C			A			B	

Timer								
Assigned Phase		4			8		5	2			6	
Phase Duration (G+Y+Rc), s		31.00			31.00		18.00	59.00			41.00	
Change Period (Y+Rc), s		6.00			6.00		6.00	6.00			6.00	
Max Green Setting (Gmax), s		25.00			25.00		12.00	53.00			35.00	
Max Q Clear Time (g_c+I1), s		22.65			3.90		2.00	5.28			13.36	
Green Extension Time (p_c)		0.61			2.20		0.21	3.73			3.53	

Intersection Summary												
HCM 2010 Control Delay			20.5									
HCM 2010 Level of Service			C									

2016 AND 2021 NO BUILD WEEKDAY PRE-PHILLIES EVENT PEAK HOUR CONDITIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	218	166	524	290	44	9	6	17	128	213	45
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1868	1868	1900	1868	1868	1727	1900	1900	1881	1845	1845
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	520	1511	706	471	2266	0	491	802	682	676	1469	76
Arriving On Green	0.44	0.44	0.44	0.44	0.44	0.00	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1080.3	3400.1	1587.9	1042.0	5266.6	0.0	1081.1	1900.0	1615.0	1418.5	3480.3	178.8
Grp Volume(v), veh/h	33.3	242.2	176.7	582.2	322.2	0.0	10.0	6.7	18.9	142.2	124.9	124.0
Grp Sat Flow(s),veh/h/ln	1080.3	1700.0	1587.9	1042.0	1699.5	0.0	1081.1	1900.0	1615.0	1418.5	1845.3	1813.8
Q Serve(g_s), s	1.7	3.8	6.3	33.7	3.4	0.0	0.5	0.2	0.6	5.8	3.8	3.8
Cycle Q Clear(g_c), s	5.1	3.8	6.3	40.0	3.4	0.0	4.3	0.2	0.6	6.0	3.8	3.8
Proportion In Lane	1.000		1.000	1.000		0.000	1.000		1.000	1.000		0.099
Lane Grp Cap(c), veh/h	519.6	1511.1	705.8	470.6	2266.0	0.0	490.6	802.2	681.9	676.0	779.1	765.8
V/C Ratio(X)	0.064	0.160	0.250	1.237	0.142	0.000	0.020	0.008	0.028	0.210	0.160	0.162
Avail Cap(c_a), veh/h	519.6	1511.1	705.8	470.6	2266.0	0.0	490.6	802.2	681.9	676.0	779.1	765.8
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)	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	16.3	15.0	15.6	31.0	14.8	0.0	17.5	15.1	15.2	16.8	16.1	16.1
Incr Delay (d2), s/veh	0.2	0.2	0.8	123.9	0.1	0.0	0.1	0.0	0.1	0.7	0.4	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
Lane Group Delay (d), s/veh	16.6	15.2	16.5	154.9	15.0	0.0	17.5	15.1	15.3	17.5	16.6	16.6
Lane Group LOS	B	B	B	F	B		B	B	B	B	B	B
Approach Volume, veh/h		452			904			36			391	
Approach Delay, s/veh		15.8			105.0			15.9			16.9	
Approach LOS		B			F			B			B	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	46.00	46.00	44.00	44.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	40.00	40.00	38.00	38.00
Max Q Clear Time (g_c+I1), s	8.26	42.00	6.34	8.00
Green Extension Time (p_c)	5.86	0.00	1.02	1.02

Intersection Summary	
HCM 2010 Control Delay	61.3
HCM 2010 Level of Service	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	82	130	110	444	793	77	43	48	25	48	687	624
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	178.5	177.6	166.7	180.2	190.0	184.5	172.7	147.3	190.0	183.8	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	315	1462	683	514	2135	128	264	914	404	112	1328	660
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	693	3248	1517	1040	4745	285	771	2215	979	148	3221	1599
Grp Volume(v), veh/h	91	144	109	493	608	326	48	38	40	433	383	0
Grp Sat Flow(s),veh/h/ln	693	1624	1517	1040	1639	1751	771	1641	1554	1779	1589	1599
Q Serve(g_s), s	8.2	2.0	3.4	32.6	10.0	10.1	4.1	1.1	1.2	4.5	14.9	0.0
Cycle Q Clear(g_c), s	18.2	2.0	3.4	36.0	10.0	10.1	19.0	1.1	1.2	14.7	14.9	0.0
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.63	0.12		1.00
Lane Grp Cap(c), veh/h	315	1462	683	514	1475	788	264	677	641	784	656	660
V/C Ratio(X)	0.29	0.10	0.16	0.96	0.41	0.41	0.18	0.06	0.06	0.55	0.58	0.00
Avail Cap(c_a), veh/h	315	1462	683	514	1475	788	264	677	641	784	656	660
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.0	12.7	13.0	26.0	14.9	14.9	25.6	14.1	14.2	18.1	18.2	0.0
Incr Delay (d2), s/veh	2.3	0.1	0.5	30.9	0.9	1.6	1.5	0.2	0.2	2.8	3.8	0.0
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 Back of Q (50%), veh/ln	1.6	0.8	1.3	14.3	4.0	4.4	0.9	0.5	0.5	6.9	6.1	0.0
Lane Grp Delay (d), s/veh	23.3	12.8	13.5	56.9	15.7	16.5	27.1	14.3	14.4	20.9	22.0	0.0
Lane Grp LOS	C	B	B	E	B	B	C	B	B	C	C	
Approach Vol, veh/h		344			1427			126			816	
Approach Delay, s/veh		15.8			30.1			19.2			21.4	
Approach LOS		B			C			B			C	

Timer								
Assigned Phs		2		6		8		4
Phs Duration (G+Y+Rc), s		41.0		41.0		39.0		39.0
Change Period (Y+Rc), s		5.0		5.0		6.0		6.0
Max Green Setting (Gmax), s		36.0		36.0		33.0		33.0
Max Q Clear Time (g_c+I1), s		20.2		38.0		21.0		16.9
Green Ext Time (p_c), s		5.2		0.0		2.2		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.2
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	43	135	205	664	541	70	108	30	108	176	314	183
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	188.1	186.7	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	188.1	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	466	1774	829	460	1234	507	299	669	522	508	669	569
Arrive On Green	0.11	0.52	0.52	0.36	0.36	0.00	0.36	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	1792	3397	1587	1070	3471	1425	1048	1881	1468	1243	1881	1600
Grp Volume(v), veh/h	48	150	222	738	601	0	120	33	108	196	349	0
Grp Sat Flow(s),veh/h/ln	1792	1699	1587	1070	1736	1425	1048	1881	1468	1243	1881	1600
Q Serve(g_s), s	1.3	2.0	7.0	32.0	12.1	0.0	9.2	1.0	4.6	11.1	13.2	0.0
Cycle Q Clear(g_c), s	1.3	2.0	7.0	32.0	12.1	0.0	22.4	1.0	4.6	12.1	13.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	466	1774	829	460	1234	507	299	669	522	508	669	569
V/C Ratio(X)	0.10	0.08	0.27	1.60	0.49	0.00	0.40	0.05	0.21	0.39	0.52	0.00
Avail Cap(c_a), veh/h	466	1774	829	460	1234	507	299	669	522	508	669	569
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.5	10.7	11.9	31.8	22.6	0.0	31.8	19.0	20.2	23.0	22.9	0.0
Incr Delay (d2), s/veh	0.4	0.1	0.8	281.2	1.4	0.0	4.0	0.1	0.9	2.2	2.9	0.0
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 Back of Q (50%), veh/ln	0.6	0.8	2.7	46.5	5.3	0.0	2.8	0.5	1.8	3.7	6.5	0.0
Lane Grp Delay (d), s/veh	14.0	10.8	12.7	313.0	24.0	0.0	35.8	19.2	21.1	25.2	25.8	0.0
Lane Grp LOS	B	B	B	F	C		D	B	C	C	C	
Approach Vol, veh/h		420			1339			261			545	
Approach Delay, s/veh		12.2			183.3			27.6			25.6	
Approach LOS		B			F			C			C	
Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	15.0	53.0			38.0			37.0			37.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	9.5	47.0			32.0			32.0			32.0	
Max Q Clear Time (g_c+I1), s	3.3	9.0			34.0			24.4			15.2	
Green Ext Time (p_c), s	0.0	6.3			0.0			1.5			2.1	
Intersection Summary												
HCM 2010 Ctrl Delay			105.9									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	473	1	17	4	1	1	40	169	3	8	831	854
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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
Adj Sat Flow Rate	1496	1352	1352	1542	1542	1542	1638	1522	1522	1696	1488	1488
Lanes	2	1	0	0	1	0	1	2	0	1	2	0
Capacity, veh/h	1078	62	433	283	68	57	195	1259	22	515	1257	0
Arriving On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.56	0.56	0.56	0.56	0.56	0.00
Sat Flow, veh/h	2188.5	146.4	1024.6	538.7	131.6	134.7	602.8	2982.8	52.8	1110.3	2977.0	0.0
Grp Volume(v), veh/h	525.6	0.0	8.9	6.7	0.0	0.0	44.4	95.7	95.5	8.9	923.3	0.0
Grp Sat Flow(s),veh/h/ln	1094.3	0.0	1171.0	808.1	0.0	0.0	602.8	1522.5	1513.2	1110.3	1488.5	0.0
Q Serve(g_s), s	16.5	0.0	0.4	0.0	0.0	0.0	5.5	2.7	2.7	0.3	20.8	0.0
Cycle Q Clear(g_c), s	16.7	0.0	0.4	0.2	0.0	0.0	26.3	2.7	2.7	3.1	20.8	0.0
Proportion In Lane	1.000		0.875	0.667		0.167	1.000		0.035	1.000		0.000
Lane Grp Cap(c), veh/h	1078.4	0.0	494.4	407.9	0.0	0.0	195.0	642.8	638.9	515.3	1257.0	0.0
V/C Ratio(X)	0.487	0.000	0.018	0.016	0.000	0.000	0.228	0.149	0.149	0.017	0.735	0.000
Avail Cap(c_a), veh/h	1078.4	0.0	494.4	407.9	0.0	0.0	195.0	642.8	638.9	515.3	1257.0	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	19.9	0.0	15.1	15.1	0.0	0.0	25.8	12.0	12.0	12.7	16.0	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.1	0.1	0.0	0.0	2.7	0.5	0.5	0.1	3.8	0.0
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
Lane Group Delay (d), s/veh	21.5	0.0	15.2	15.2	0.0	0.0	28.5	12.5	12.5	12.8	19.8	0.0
Lane Group LOS	C		B	B			C	B	B	B	B	
Approach Volume, veh/h		534			7			236			932	
Approach Delay, s/veh		21.4			15.2			15.5			19.7	
Approach LOS		C			B			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	45.00	45.00	45.00	45.00
Change Period (Y+Rc), s	7.00	7.00	7.00	7.00
Max Green Setting (Gmax), s	38.00	38.00	38.00	38.00
Max Q Clear Time (g_c+I1), s	18.74	2.23	28.32	22.83
Green Extension Time (p_c)	2.44	2.70	3.13	3.78

Intersection Summary	
HCM 2010 Control Delay	19.7
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	186	546	680	0	1	0	0	412	54	116	1243	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1900	0	0	1638	1638	1624	1624	0
Lanes	1	1	1	0	1	0	0	2	0	1	2	0
Capacity, veh/h	588	672	571	0	739	0	0	910	0	413	1474	0
Arriving On Green	0.39	0.39	0.00	0.00	0.39	0.00	0.00	0.37	0.00	0.18	0.64	0.00
Sat Flow, veh/h	1308.0	1727.3	1468.2		1900.0	0.0		3275.9	0.0	1546.6	3166.7	0.0
Grp Volume(v), veh/h	206.7	606.7	0.0		1.1	0.0		457.8	0.0	128.9	1381.1	0.0
Grp Sat Flow(s),veh/h/ln	1308.0	1727.3	1468.2		1900.0	0.0		1637.9	0.0	1546.6	1542.7	0.0
Q Serve(g_s), s	10.3	29.8	0.0		0.0	0.0		9.7	0.0	0.0	36.3	0.0
Cycle Q Clear(g_c), s	10.4	29.8	0.0		0.0	0.0		9.7	0.0	0.0	36.3	0.0
Proportion In Lane	1.000		1.000			0.000			0.000	1.000		0.000
Lane Grp Cap(c), veh/h	588.2	671.7	571.0		738.9	0.0		910.0	0.0	413.5	1474.2	0.0
V/C Ratio(X)	0.351	0.903	0.000		0.002	0.000		0.503	0.000	0.312	0.937	0.000
Avail Cap(c_a), veh/h	588.2	671.7	571.0		738.9	0.0		910.0	0.0	413.5	1474.2	0.0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00		1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	1.000	0.000		1.000	0.000		1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	20.0	25.9	0.0		16.8	0.0		23.6	0.0	25.7	15.2	0.0
Incr Delay (d2), s/veh	1.6	17.8	0.0		0.0	0.0		2.0	0.0	2.0	12.6	0.0
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
Lane Group Delay (d), s/veh	21.6	43.7	0.0		16.8	0.0		25.5	0.0	27.7	27.7	0.0
Lane Group LOS	C	D			B			C		C	C	
Approach Volume, veh/h		813			1			458			1510	
Approach Delay, s/veh		38.1			16.8			25.5			27.7	
Approach LOS		D			B			C			C	

Timer					
Assigned Phase	4	8	2	1	6
Phase Duration (G+Y+Rc), s	41.00	41.00	31.00	18.00	49.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	35.00	35.00	25.00	12.00	43.00
Max Q Clear Time (g_c+I1), s	31.78	2.03	11.74	2.00	38.29
Green Extension Time (p_c)	0.92	2.38	5.91	0.19	2.93

Intersection Summary	
HCM 2010 Control Delay	30.4
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	484	9	771	20	10	9	125	405	0	0	567	312
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	1976	1976	1976	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	791	0	408	209	105	76	471	1929	0	0	1263	0
Arriving On Green	0.28	0.28	0.00	0.28	0.28	0.28	0.18	0.78	0.00	0.00	0.52	0.00
Sat Flow, veh/h	2456.9	0.0	1468.2	608.5	289.2	273.8	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h	537.8	0.0	0.0	43.3	0.0	0.0	138.9	450.0	0.0		630.0	0.0
Grp Sat Flow(s),veh/h/ln	1228.4	0.0	1468.2	1186.6	0.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s	18.7	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0		11.4	0.0
Cycle Q Clear(g_c), s	20.6	0.0	0.0	1.9	0.0	0.0	0.0	3.3	0.0		11.4	0.0
Proportion In Lane	1.000		1.000	0.513		0.231	1.000		0.000			0.000
Lane Grp Cap(c), veh/h	790.6	0.0	407.8	390.1	0.0	0.0	471.0	1929.1	0.0		1263.1	0.0
V/C Ratio(X)	0.680	0.000	0.000	0.111	0.000	0.000	0.295	0.233	0.000		0.499	0.000
Avail Cap(c_a), veh/h	790.6	0.0	407.8	390.1	0.0	0.0	471.0	1929.1	0.0		1263.1	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)	1.000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh	31.8	0.0	0.0	24.0	0.0	0.0	20.3	4.4	0.0		16.0	0.0
Incr Delay (d2), s/veh	4.7	0.0	0.0	0.6	0.0	0.0	1.6	0.3	0.0		1.4	0.0
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
Lane Group Delay (d), s/veh	36.5	0.0	0.0	24.6	0.0	0.0	21.8	4.6	0.0		17.4	0.0
Lane Group LOS	D			C			C	A			B	
Approach Volume, veh/h		538			43			589			630	
Approach Delay, s/veh		36.5			24.6			8.7			17.4	
Approach LOS		D			C			A			B	

Timer												
Assigned Phase		4			8		5	2			6	
Phase Duration (G+Y+Rc), s		31.00			31.00		18.00	59.00			41.00	
Change Period (Y+Rc), s		6.00			6.00		6.00	6.00			6.00	
Max Green Setting (Gmax), s		25.00			25.00		12.00	53.00			35.00	
Max Q Clear Time (g_c+I1), s		22.65			3.90		2.00	5.28			13.36	
Green Extension Time (p_c)		0.61			2.20		0.21	3.73			3.53	

Intersection Summary	
HCM 2010 Control Delay	20.5
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	220	166	524	390	46	9	6	17	129	213	45
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1868	1868	1900	1867	1867	1727	1900	1900	1881	1845	1845
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	781	2448	1143	815	3669	0	178	304	258	295	557	29
Arriving On Green	0.96	0.96	0.96	0.96	0.96	0.00	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	990.7	3399.9	1587.8	1040.2	5263.8	0.0	1081.1	1900.0	1615.0	1418.5	3480.3	178.8
Grp Volume(v), veh/h	33.3	244.4	176.7	582.2	433.3	0.0	10.0	6.7	18.9	143.3	124.9	124.0
Grp Sat Flow(s),veh/h/ln	990.7	1699.9	1587.8	1040.2	1698.6	0.0	1081.1	1900.0	1615.0	1418.5	1845.3	1813.8
Q Serve(g_s), s	0.2	0.3	0.6	10.9	0.4	0.0	0.8	0.3	1.0	9.5	6.1	6.2
Cycle Q Clear(g_c), s	0.6	0.3	0.6	11.5	0.4	0.0	7.0	0.3	1.0	9.8	6.1	6.2
Proportion In Lane	1.000		1.000	1.000		0.000	1.000		1.000	1.000		0.099
Lane Grp Cap(c), veh/h	781.3	2447.9	1143.2	815.2	3669.0	0.0	178.4	304.0	258.4	294.8	295.3	290.2
V/C Ratio(X)	0.043	0.100	0.155	0.714	0.118	0.000	0.056	0.022	0.073	0.486	0.423	0.427
Avail Cap(c_a), veh/h	781.3	2447.9	1143.2	815.2	3669.0	0.0	178.4	304.0	258.4	294.8	295.3	290.2
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	0.6	0.6	0.6	0.9	0.6	0.0	41.0	35.4	35.7	39.5	37.8	37.9
Incr Delay (d2), s/veh	0.1	0.1	0.3	5.3	0.1	0.0	0.6	0.1	0.5	5.6	4.4	4.5
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
Lane Group Delay (d), s/veh	0.7	0.7	0.9	6.2	0.7	0.0	41.6	35.5	36.2	45.2	42.2	42.4
Lane Group LOS	A	A	A	A	A		D	D	D	D	D	D
Approach Volume, veh/h		454			1016			36			392	
Approach Delay, s/veh		0.8			3.8			37.6			43.4	
Approach LOS		A			A			D			D	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	78.00	78.00	22.00	22.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	72.00	72.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	2.57	13.45	9.00	11.77
Green Extension Time (p_c)	6.69	6.68	0.66	0.48

Intersection Summary	
HCM 2010 Control Delay	11.9
HCM 2010 Level of Service	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	84	228	183	508	800	77	43	48	25	48	706	626
Number	5	2	12	1	6	16	3	8	18	7	4	14
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
Adj Sat Flow veh/h/ln	190.0	178.5	177.6	166.7	180.1	190.0	184.5	172.7	147.3	190.0	183.8	188.1
Lanes	1	3	0	1	3	0	1	2	0	0	2	1
Cap, veh/h	312	1462	683	423	2137	127	257	914	404	110	1330	660
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.41	0.41	0.41	0.41	0.41	0.00
Sat Flow, veh/h	689	3249	1517	897	4748	282	759	2215	979	144	3225	1599
Grp Volume(v), veh/h	93	253	190	564	613	329	48	38	40	444	393	0
Grp Sat Flow(s),veh/h/ln	689	1624	1517	897	1639	1752	759	1641	1554	1780	1589	1599
Q Serve(g_s), s	8.5	3.7	6.3	29.7	10.1	10.2	4.2	1.1	1.2	5.0	15.4	0.0
Cycle Q Clear(g_c), s	18.6	3.7	6.3	36.0	10.1	10.2	19.7	1.1	1.2	15.3	15.4	0.0
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.63	0.12		1.00
Lane Grp Cap(c), veh/h	312	1462	683	423	1475	788	257	677	641	785	656	660
V/C Ratio(X)	0.30	0.17	0.28	1.33	0.42	0.42	0.19	0.06	0.06	0.57	0.60	0.00
Avail Cap(c_a), veh/h	312	1462	683	423	1475	788	257	677	641	785	656	660
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	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.2	13.1	13.8	28.3	14.9	14.9	26.0	14.1	14.2	18.2	18.3	0.0
Incr Delay (d2), s/veh	2.4	0.3	1.0	165.4	0.9	1.6	1.6	0.2	0.2	2.9	4.0	0.0
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 Back of Q (50%), veh/ln	1.6	1.5	2.4	27.9	4.0	4.5	0.9	0.5	0.5	7.1	6.4	0.0
Lane Grp Delay (d), s/veh	23.6	13.4	14.8	193.7	15.7	16.5	27.6	14.3	14.4	21.2	22.4	0.0
Lane Grp LOS	C	B	B	F	B	B	C	B	B	C	C	
Approach Vol, veh/h		536			1506			126			837	
Approach Delay, s/veh		15.7			82.6			19.4			21.7	
Approach LOS		B			F			B			C	

Timer				
Assigned Phs	2	6	8	4
Phs Duration (G+Y+Rc), s	41.0	41.0	39.0	39.0
Change Period (Y+Rc), s	5.0	5.0	6.0	6.0
Max Green Setting (Gmax), s	36.0	36.0	33.0	33.0
Max Q Clear Time (g_c+I1), s	20.6	38.0	21.7	17.4
Green Ext Time (p_c), s	6.1	0.0	2.2	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	51.0
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	43	136	207	673	541	70	210	57	214	241	318	183
Number	5	2	12	1	6	16	3	8	18	7	4	14
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	0.90	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow veh/h/ln	188.1	186.7	188.1	188.1	182.7	186.3	181.0	188.1	172.7	182.7	188.1	188.2
Lanes	1	3	0	1	2	1	1	1	1	1	1	1
Cap, veh/h	466	1774	829	460	1234	507	296	669	522	449	669	569
Arrive On Green	0.11	0.52	0.52	0.36	0.36	0.00	0.36	0.36	0.36	0.36	0.36	0.00
Sat Flow, veh/h	1792	3397	1587	1068	3471	1425	1045	1881	1468	1108	1881	1600
Grp Volume(v), veh/h	48	151	224	748	601	0	233	63	226	268	353	0
Grp Sat Flow(s),veh/h/ln	1792	1699	1587	1068	1736	1425	1045	1881	1468	1108	1881	1600
Q Serve(g_s), s	1.3	2.0	7.1	32.0	12.1	0.0	18.6	2.0	10.6	19.1	13.4	0.0
Cycle Q Clear(g_c), s	1.3	2.0	7.1	32.0	12.1	0.0	32.0	2.0	10.6	21.1	13.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	466	1774	829	460	1234	507	296	669	522	449	669	569
V/C Ratio(X)	0.10	0.09	0.27	1.63	0.49	0.00	0.79	0.09	0.43	0.60	0.53	0.00
Avail Cap(c_a), veh/h	466	1774	829	460	1234	507	296	669	522	449	669	569
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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.5	10.8	12.0	31.8	22.6	0.0	36.4	19.3	22.1	26.4	23.0	0.0
Incr Delay (d2), s/veh	0.4	0.1	0.8	292.2	1.4	0.0	18.8	0.3	2.6	5.7	3.0	0.0
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 Back of Q (50%), veh/ln	0.6	0.8	2.7	47.8	5.3	0.0	6.9	1.0	4.1	6.0	6.6	0.0
Lane Grp Delay (d), s/veh	14.0	10.8	12.8	324.0	24.0	0.0	55.2	19.6	24.7	32.1	26.0	0.0
Lane Grp LOS	B	B	B	F	C		E	B	C	C	C	
Approach Vol, veh/h		423			1349			522			621	
Approach Delay, s/veh		12.2			190.3			37.7			28.6	
Approach LOS		B			F			D			C	
Timer												
Assigned Phs	5	2			6			8			4	
Phs Duration (G+Y+Rc), s	15.0	53.0			38.0			37.0			37.0	
Change Period (Y+Rc), s	5.5	6.0			6.0			5.0			5.0	
Max Green Setting (Gmax), s	9.5	47.0			32.0			32.0			32.0	
Max Q Clear Time (g_c+I1), s	3.3	9.1			34.0			34.0			23.1	
Green Ext Time (p_c), s	0.0	6.4			0.0			0.0			2.5	
Intersection Summary												
HCM 2010 Ctrl Delay			102.7									
HCM 2010 LOS			F									
Notes												

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	571	1	17	4	1	1	40	169	3	8	831	916
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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
Adj Sat Flow Rate	1496	1352	1352	1542	1542	1542	1638	1522	1522	1696	1484	1484
Lanes	2	1	0	0	1	0	1	2	0	1	2	0
Capacity, veh/h	1078	62	433	283	68	57	194	1259	22	515	1253	0
Arriving On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.56	0.56	0.56	0.56	0.56	0.00
Sat Flow, veh/h	2188.5	146.4	1024.6	538.7	131.6	134.7	602.8	2982.8	52.8	1110.3	2968.4	0.0
Grp Volume(v), veh/h	634.4	0.0	8.9	6.7	0.0	0.0	44.4	95.7	95.5	8.9	923.3	0.0
Grp Sat Flow(s),veh/h/ln	1094.3	0.0	1171.0	808.1	0.0	0.0	602.8	1522.5	1513.2	1110.3	1484.2	0.0
Q Serve(g_s), s	21.3	0.0	0.4	0.0	0.0	0.0	5.5	2.7	2.7	0.3	20.9	0.0
Cycle Q Clear(g_c), s	21.6	0.0	0.4	0.2	0.0	0.0	26.4	2.7	2.7	3.1	20.9	0.0
Proportion In Lane	1.000		0.875	0.667		0.167	1.000		0.035	1.000		0.000
Lane Grp Cap(c), veh/h	1078.4	0.0	494.4	407.9	0.0	0.0	194.3	642.8	638.9	515.3	1253.3	0.0
V/C Ratio(X)	0.588	0.000	0.018	0.016	0.000	0.000	0.229	0.149	0.149	0.017	0.737	0.000
Avail Cap(c_a), veh/h	1078.4	0.0	494.4	407.9	0.0	0.0	194.3	642.8	638.9	515.3	1253.3	0.0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	0.000	1.000	1.000	0.000	0.000	1.000	1.000	1.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	21.3	0.0	15.1	15.1	0.0	0.0	25.9	12.0	12.0	12.7	16.0	0.0
Incr Delay (d2), s/veh	2.4	0.0	0.1	0.1	0.0	0.0	2.7	0.5	0.5	0.1	3.9	0.0
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
Lane Group Delay (d), s/veh	23.7	0.0	15.2	15.2	0.0	0.0	28.6	12.5	12.5	12.8	19.9	0.0
Lane Group LOS	C		B	B			C	B	B	B	B	
Approach Volume, veh/h		643			7			236			932	
Approach Delay, s/veh		23.6			15.2			15.5			19.8	
Approach LOS		C			B			B			B	

Timer				
Assigned Phase	4	8	2	6
Phase Duration (G+Y+Rc), s	45.00	45.00	45.00	45.00
Change Period (Y+Rc), s	7.00	7.00	7.00	7.00
Max Green Setting (Gmax), s	38.00	38.00	38.00	38.00
Max Q Clear Time (g_c+I1), s	23.56	2.23	28.44	22.93
Green Extension Time (p_c)	2.75	3.35	3.11	3.78

Intersection Summary	
HCM 2010 Control Delay	20.6
HCM 2010 Level of Service	C

Intersection	
Intersection Delay (sec/veh):	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vph)	0	0	0	0	0	0	127	513	0	0	1755	230
Conflicting Peds.(#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
Right Turn Channelized	None	None	None	None	None	None	None	None	None	None	None	None
Storage Length	0		0	0		0	180		0	0		0
Median Width		0			0			10			10	
Grade (%)		0%			0%			0%			0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles(%)	0	0	0	0	0	0	16	16	0	0	17	17
Movement Flow Rate	0	0	0	0	0	0	141	570	0	0	1950	256
Number of Lanes	0	0	0	0	1	0	1	2	0	0	2	0

Major/Minor			Minor1			Major1			Major2	
Conflicting Flow Rate - All			3058	-	2206	0	-	570	0	0
Stage 1			852	-	-	-	-	-	-	-
Stage 2			2206	-	-	-	-	-	-	-
Follow-up Headway			4	0	2.36	-	0	2.2	-	-
Pot Capacity-1 Maneuver			6	0	308	-	0	1278	-	-
Stage 1			496	0	-	-	0	-	-	-
Stage 2			174	0	-	-	0	-	-	-
Time blocked-Platoon(%)			50	0	68	-	0	17	-	-
Mov Capacity-1 Maneuver			3	-	308	-	-	1278	-	-
Mov Capacity-2 Maneuver			3	-	-	-	-	-	-	-
Stage 1			269	-	-	-	-	-	-	-
Stage 2			174	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay (s)	0	5.2	0
HCM LOS	A	A	A

Lane	NBL	NBT	WBLn1	SBL	SBT	SBR
Capacity (vph)			0			
HCM Control Delay (s)	26.2	-	0	0	-	-
HCM Lane VC Ratio	0.458	-	-	-	-	-
HCM Lane LOS	D	-	A	A	-	-
HCM 95th Percentile Queue (veh)	2.286	-	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	186	546	680	0	1	0	0	498	66	116	1305	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow Rate	1727	1727	1727	0	1900	0	0	1638	1638	1624	1624	0
Lanes	1	1	1	0	1	0	0	2	0	1	2	0
Capacity, veh/h	588	672	571	0	739	0	0	910	0	381	1474	0
Arriving On Green	0.39	0.39	0.00	0.00	0.39	0.00	0.00	0.37	0.00	0.18	0.64	0.00
Sat Flow, veh/h	1308.0	1727.3	1468.2		1900.0	0.0		3275.9	0.0	1546.6	3166.7	0.0
Grp Volume(v), veh/h	206.7	606.7	0.0		1.1	0.0		553.3	0.0	128.9	1450.0	0.0
Grp Sat Flow(s),veh/h/ln	1308.0	1727.3	1468.2		1900.0	0.0		1637.9	0.0	1546.6	1542.7	0.0
Q Serve(g_s), s	10.3	29.8	0.0		0.0	0.0		12.4	0.0	0.0	41.1	0.0
Cycle Q Clear(g_c), s	10.4	29.8	0.0		0.0	0.0		12.4	0.0	0.0	41.1	0.0
Proportion In Lane	1.000		1.000			0.000			0.000	1.000		0.000
Lane Grp Cap(c), veh/h	588.2	671.7	571.0		738.9	0.0		910.0	0.0	380.9	1474.2	0.0
V/C Ratio(X)	0.351	0.903	0.000		0.002	0.000		0.608	0.000	0.338	0.984	0.000
Avail Cap(c_a), veh/h	588.2	671.7	571.0		738.9	0.0		910.0	0.0	380.9	1474.2	0.0
HCM Platoon Ratio	1.00	1.00	1.00		1.00	1.00		1.33	1.33	1.33	1.33	1.33
Upstream Filter(I)	1.000	1.000	0.000		1.000	0.000		1.000	0.000	1.000	1.000	0.000
Uniform Delay (d), s/veh	20.0	25.9	0.0		16.8	0.0		24.4	0.0	28.2	16.1	0.0
Incr Delay (d2), s/veh	1.6	17.8	0.0		0.0	0.0		3.0	0.0	2.4	19.8	0.0
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
Lane Group Delay (d), s/veh	21.6	43.7	0.0		16.8	0.0		27.4	0.0	30.6	35.9	0.0
Lane Group LOS	C	D			B			C		C	D	
Approach Volume, veh/h		813			1			553			1579	
Approach Delay, s/veh		38.1			16.8			27.4			35.5	
Approach LOS		D			B			C			D	

Timer												
Assigned Phase		4			8			2		1	6	
Phase Duration (G+Y+Rc), s		41.00			41.00			31.00		18.00	49.00	
Change Period (Y+Rc), s		6.00			6.00			6.00		6.00	6.00	
Max Green Setting (Gmax), s		35.00			35.00			25.00		12.00	43.00	
Max Q Clear Time (g_c+I1), s		31.78			2.03			14.36		2.00	43.12	
Green Extension Time (p_c)		0.92			2.38			5.69		0.19	0.00	

Intersection Summary	
HCM 2010 Control Delay	34.7
HCM 2010 Level of Service	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	484	0	832	20	10	9	210	407	0	0	568	312
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Queue, 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	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Adj Sat Flow Rate	1727	0	1727	1976	1976	1976	1638	1638	0	0	1624	1624
Lanes	2	0	1	0	1	0	1	2	0	0	2	0
Capacity, veh/h	0	0	0	61	31	9	471	1929	0	0	1263	0
Arriving On Green	0.00	0.00	0.00	0.28	0.28	0.28	0.18	0.78	0.00	0.00	0.52	0.00
Sat Flow, veh/h		0		74.0	290.2	33.3	1559.9	3275.9	0.0		3247.9	0.0
Grp Volume(v), veh/h		0.0		43.3	0.0	0.0	233.3	452.2	0.0		631.1	0.0
Grp Sat Flow(s),veh/h/ln				144.3	0.0	0.0	1559.9	1637.9	0.0		1623.9	0.0
Q Serve(g_s), s				0.0	0.0	0.0	0.0	3.3	0.0		11.4	0.0
Cycle Q Clear(g_c), s				25.0	0.0	0.0	0.0	3.3	0.0		11.4	0.0
Proportion In Lane				0.513		0.231	1.000		0.000			0.000
Lane Grp Cap(c), veh/h				100.6	0.0	0.0	470.6	1929.1	0.0		1263.1	0.0
V/C Ratio(X)				0.431	0.000	0.000	0.496	0.234	0.000		0.500	0.000
Avail Cap(c_a), veh/h				100.6	0.0	0.0	470.6	1929.1	0.0		1263.1	0.0
HCM Platoon Ratio				1.00	1.00	1.00	1.33	1.33	1.30		1.33	1.33
Upstream Filter(I)				1.000	0.000	0.000	1.000	1.000	0.000		1.000	0.000
Uniform Delay (d), s/veh				24.0	0.0	0.0	23.6	4.4	0.0		16.0	0.0
Incr Delay (d2), s/veh				12.9	0.0	0.0	3.7	0.3	0.0		1.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0
Lane Group Delay (d), s/veh				36.9	0.0	0.0	27.3	4.7	0.0		17.4	0.0
Lane Group LOS				D			C	A			B	
Approach Volume, veh/h					43			686			631	
Approach Delay, s/veh					36.9			12.4			17.4	
Approach LOS					D			B			B	
Timer												
Assigned Phase					8		5	2			6	
Phase Duration (G+Y+Rc), s					31.00		18.00	59.00			41.00	
Change Period (Y+Rc), s					6.00		6.00	6.00			6.00	
Max Green Setting (Gmax), s					25.00		12.00	53.00			35.00	
Max Q Clear Time (g_c+I1), s					27.00		2.00	5.30			13.39	
Green Extension Time (p_c)					0.00		0.42	3.74			3.54	
Intersection Summary												
HCM 2010 Control Delay			15.5									
HCM 2010 Level of Service			B									

Intersection	
Intersection Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	10	116	1381	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0	150			0
Median Width	0			0	0	
Grade, %	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	11	129	1534	18
Number of Lanes	0	1	0	3	2	0

Major/Minor				Major1	Major2	
Conflicting Flow All	1617	776	1552	0	-	0
Stage 1	1543	-	-	-	-	-
Stage 2	74	-	-	-	-	-
Follow-up Headway	3.67	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	119	340	423	-	-	-
Stage 1	159	-	-	-	-	-
Stage 2	899	-	-	-	-	-
Time blocked-Platoon, %	0	0	0	-	-	-
Mov Capacity-1 Maneuver	116	340	423	-	-	-
Mov Capacity-2 Maneuver	116	-	-	-	-	-
Stage 1	159	-	-	-	-	-
Stage 2	874	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	1.2	0
HCM LOS	A	-	-

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Cap, veh/h	423	-	0	-	-
HCM Control Delay, s	13.74	0.1	0	-	-
HCM Lane V/C Ratio	0.03	-	-	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th-tile Q, veh	0.1	-	-	-	-

Notes

~: Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	0	0	31	126	1241	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0	100			0
Median Width	0			12	12	
Grade, %	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	34	140	1379	156
Number of Lanes	0	1	1	2	2	0

Major/Minor				Major 1	Major 2	
Conflicting Flow All	1596	767	1534	0	-	0
Stage 1	1457	-	-	-	-	-
Stage 2	139	-	-	-	-	-
Follow-up Headway	3.52	3.32	2.22	-	-	-
Pot Capacity-1 Maneuver	97	345	430	-	-	-
Stage 1	181	-	-	-	-	-
Stage 2	873	-	-	-	-	-
Time blocked-Platoon, %	0	0	0	-	-	-
Mov Capacity-1 Maneuver	89	345	430	-	-	-
Mov Capacity-2 Maneuver	156	-	-	-	-	-
Stage 1	181	-	-	-	-	-
Stage 2	804	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	2.8	0
HCM LOS	A	-	-

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Cap, veh/h	430	-	0	-	-
HCM Control Delay, s	14.1	-	0	-	-
HCM Lane V/C Ratio	0.08	-	-	-	-
HCM Lane LOS	B	-	A	-	-
HCM 95th-tile Q, veh	0.3	-	-	-	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	14	20	460	0	0	1198
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	0	
Median Width	12		12			12
Grade, %	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	22	511	0	0	1331
Number of Lanes	1	0	2	0	0	2

Major/Minor			Major 1			Major 2
Conflicting Flow All	1177	256	0	0	511	0
Stage 1	511	-	-	-	-	-
Stage 2	666	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	184	743	-	-	1050	-
Stage 1	567	-	-	-	-	-
Stage 2	472	-	-	-	-	-
Time blocked-Platoon, %	0	0	-	-	0	-
Mov Capacity-1 Maneuver	184	743	-	-	1050	-
Mov Capacity-2 Maneuver	318	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	472	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.2	0	0
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Cap, veh/h	-	-	479	1050	-
HCM Control Delay, s	-	-	13.2	0	-
HCM Lane V/C Ratio	-	-	0.08	-	-
HCM Lane LOS	-	-	B	A	-
HCM 95th-tile Q, veh	-	-	0.3	0.0	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	18	21	439	13	15	1197
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	100	
Median Width	12		12			12
Grade, %	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	23	488	14	17	1330
Number of Lanes	1	0	2	0	1	2

Major/Minor			Major1		Major2	
Conflicting Flow All	1193	251	0	0	502	0
Stage 1	495	-	-	-	-	-
Stage 2	698	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	180	749	-	-	1059	-
Stage 1	578	-	-	-	-	-
Stage 2	455	-	-	-	-	-
Time blocked-Platoon, %	0	0	-	-	0	-
Mov Capacity-1 Maneuver	177	749	-	-	1059	-
Mov Capacity-2 Maneuver	309	-	-	-	-	-
Stage 1	578	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.8	0	0.1
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Cap, veh/h	-	-	452	1059	-
HCM Control Delay, s	-	-	13.8	8.454	-
HCM Lane V/C Ratio	-	-	0.10	0.02	-
HCM Lane LOS	-	-	B	A	-
HCM 95th-tile Q, veh	-	-	0.3	0.0	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

Intersection	
Intersection Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Vol, veh/h	42	193	259	0	0	1215
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	None	None	None	None	None	None
Storage Length	0	0		0	100	
Median Width	12		12			12
Grade, %	0%		0%			0%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	214	288	0	0	1350
Number of Lanes	1	0	2	0	0	2

Major/Minor			Major 1		Major 2	
Conflicting Flow All	963	144	0	0	288	0
Stage 1	288	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Follow-up Headway	3.52	3.32	-	-	2.22	-
Pot Capacity-1 Maneuver	253	877	-	-	1271	-
Stage 1	735	-	-	-	-	-
Stage 2	467	-	-	-	-	-
Time blocked-Platoon, %	0	0	-	-	0	-
Mov Capacity-1 Maneuver	253	877	-	-	1271	-
Mov Capacity-2 Maneuver	366	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	467	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.1	0	0
HCM LOS	B	-	-

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Cap, veh/h	-	-	702	1271	-
HCM Control Delay, s	-	-	13.1	0	-
HCM Lane V/C Ratio	-	-	0.37	-	-
HCM Lane LOS	-	-	B	A	-
HCM 95th-tile Q, veh	-	-	1.7	0.0	-

Notes

~ : Volume Exceeds Capacity; $: Delay Exceeds 300 Seconds; Error : Computation Not Defined

2016 AND 2021 BUILD WITH IMPROVEMENTS WEEKDAY PRE-PHILLIES EVENT PEAK HOUR CONDITIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	30	220	166	524	390	46	9	6	17	129	213	45
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Queue, 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
Adj Sat Flow Rate	1827	1868	1868	1900	1867	1867	1727	1900	1900	1881	1845	1845
Lanes	1	3	0	1	3	0	1	1	1	1	2	0
Capacity, veh/h	781	2448	1143	815	3669	0	178	304	258	295	557	29
Arriving On Green	0.96	0.96	0.96	0.96	0.96	0.00	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	990.7	3399.9	1587.8	1040.2	5263.8	0.0	1081.1	1900.0	1615.0	1418.5	3480.3	178.8
Grp Volume(v), veh/h	33.3	244.4	176.7	582.2	433.3	0.0	10.0	6.7	18.9	143.3	124.9	124.0
Grp Sat Flow(s),veh/h/ln	990.7	1699.9	1587.8	1040.2	1698.6	0.0	1081.1	1900.0	1615.0	1418.5	1845.3	1813.8
Q Serve(g_s), s	0.2	0.3	0.6	10.9	0.4	0.0	0.8	0.3	1.0	9.5	6.1	6.2
Cycle Q Clear(g_c), s	0.6	0.3	0.6	11.5	0.4	0.0	7.0	0.3	1.0	9.8	6.1	6.2
Proportion In Lane	1.000		1.000	1.000		0.000	1.000		1.000	1.000		0.099
Lane Grp Cap(c), veh/h	781.3	2447.9	1143.2	815.2	3669.0	0.0	178.4	304.0	258.4	294.8	295.3	290.2
V/C Ratio(X)	0.043	0.100	0.155	0.714	0.118	0.000	0.056	0.022	0.073	0.486	0.423	0.427
Avail Cap(c_a), veh/h	781.3	2447.9	1143.2	815.2	3669.0	0.0	178.4	304.0	258.4	294.8	295.3	290.2
HCM Platoon Ratio	1.33	1.33	1.33	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.000	1.000	1.000	1.000	1.000	0.000	1.000	1.000	1.000	1.000	1.000	1.000
Uniform Delay (d), s/veh	0.6	0.6	0.6	0.9	0.6	0.0	41.0	35.4	35.7	39.5	37.8	37.9
Incr Delay (d2), s/veh	0.1	0.1	0.3	5.3	0.1	0.0	0.6	0.1	0.5	5.6	4.4	4.5
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
Lane Group Delay (d), s/veh	0.7	0.7	0.9	6.2	0.7	0.0	41.6	35.5	36.2	45.2	42.2	42.4
Lane Group LOS	A	A	A	A	A		D	D	D	D	D	D
Approach Volume, veh/h		454			1016			36			392	
Approach Delay, s/veh		0.8			3.8			37.6			43.4	
Approach LOS		A			A			D			D	

Timer				
Assigned Phase	2	6	8	4
Phase Duration (G+Y+Rc), s	78.00	78.00	22.00	22.00
Change Period (Y+Rc), s	6.00	6.00	6.00	6.00
Max Green Setting (Gmax), s	72.00	72.00	16.00	16.00
Max Q Clear Time (g_c+I1), s	2.57	13.45	9.00	11.77
Green Extension Time (p_c)	6.69	6.68	0.66	0.48

Intersection Summary	
HCM 2010 Control Delay	11.9
HCM 2010 Level of Service	B