Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS

TRAFFIC IMPACT STUDY

Pocono Manor
Resort & Casino

TOBYHANNA TOWNSHIP
MONROE COUNTY, PA

Prepared for:
Pocono Manor Investors L.P.
P.O. Box 38, Pocono Manor Inn
Pocono Manor, PA 18349

Prepared by:
Pennoni Associates, Inc.
2041 Avenue C, Suite 100
Bethlehem, PA 18017
(610) 231-0600

December 2005
Revised July 2006
Revised November 2006

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11/3/06

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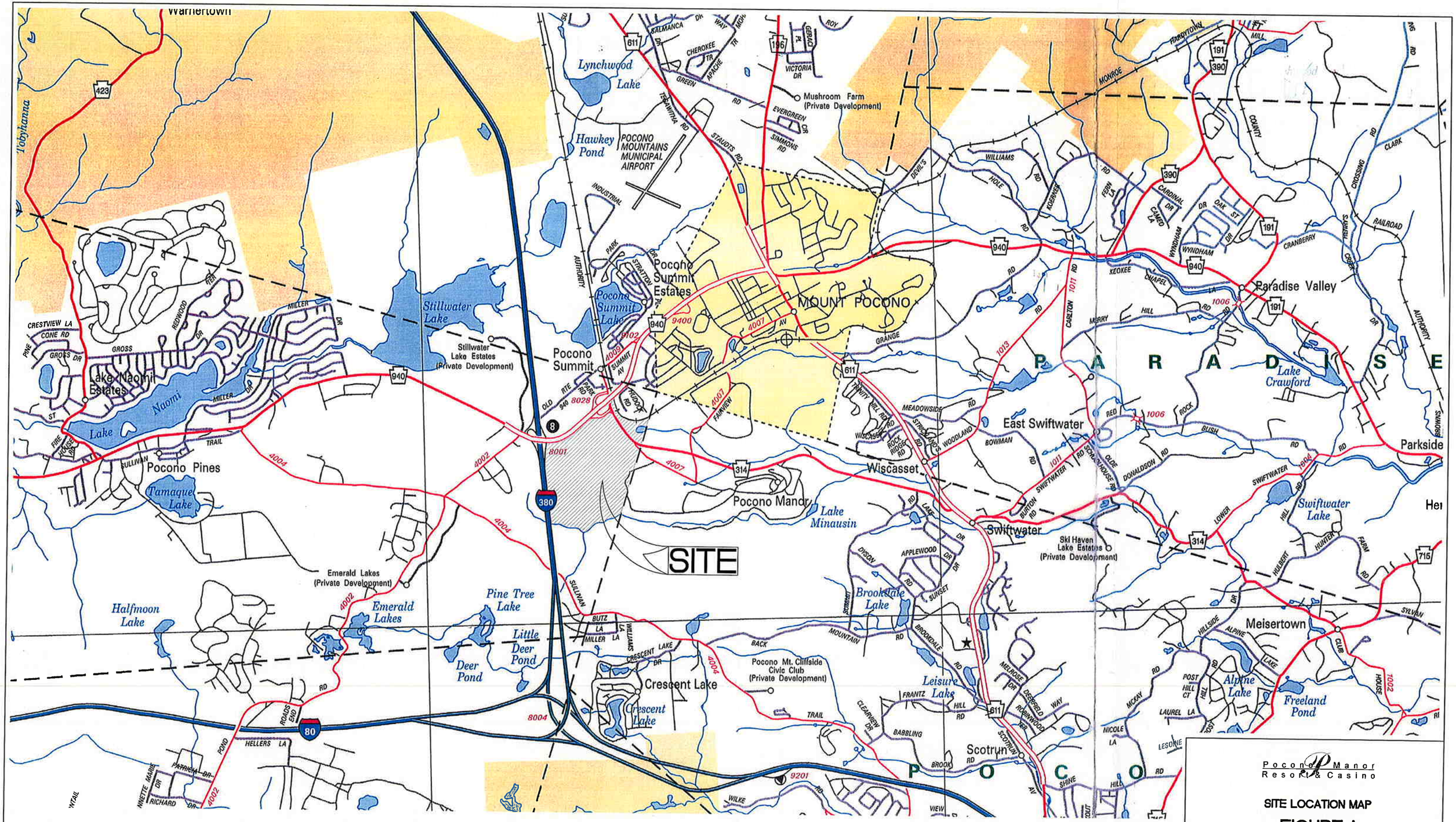
EXECUTIVE SUMMARY

This revised Traffic Impact Study addresses comments made by the Pennsylvania Gaming Control Board (PGCB), the Pennsylvania Department of Transportation (PENNDOT) and the Federal Highway Administration (FHWA). See enclosed correspondence in **Appendix M**.

Pocono Manor Investors L.P. proposes to construct a resort development to be known as Pocono Manor Resort & Casino. The site is ideally located on the southeast quadrant of the intersection of two major highways, Interstate 380 and State Route 940, in Tobyhanna Township, Monroe County (**Figure 1**). The proposed development will consist of a resort/casino with 8,000 slot machines, an 831,200 square foot multi-level indoor shopping/family entertainment center, a 50,000 square foot professional office building, and 475 residential condominiums/townhouses. In addition to the aforementioned, the resort/casino portion of the development includes the following amenities: hotel rooms/time share villas, pools, spas, convention/meeting rooms, restaurants, theater, retail shops, and a hospitality/gaming school. **Figure 2** illustrates the proposed layout for the Pocono Manor Resort & Casino. Access to the site will be provided via two high volume driveways and one medium volume driveway onto State Route 314 and from northbound I-380 via a proposed frontage road access. Enclosed in the back pocket of this report are conceptual roadway improvement plans illustrating the proposed site access. The project is anticipated to be completed by the end of 2009.

The scope of this traffic impact study includes the following off site intersections:

- SR 0940/Long Pond Road/Private Road
- SR 0940/Southbound I-380 Ramps
- SR 0940/Northbound I-380 Ramps
- SR 0314/Westbound SR 0940 Ramps
- SR 0314/Eastbound SR 0940 Ramps
- SR 0940/Spruce Street/Harvest Lane
- SR 0940/Summit Avenue/Commerce Street
- SR 0940/Industrial Drive
- SR 0940/Oak Street
- SR 0940/SR 0611/SR 0196/Driveway
- SR 0314 (West Leg)/SR 0611
- SR 0314 (East Leg)/SR 0611



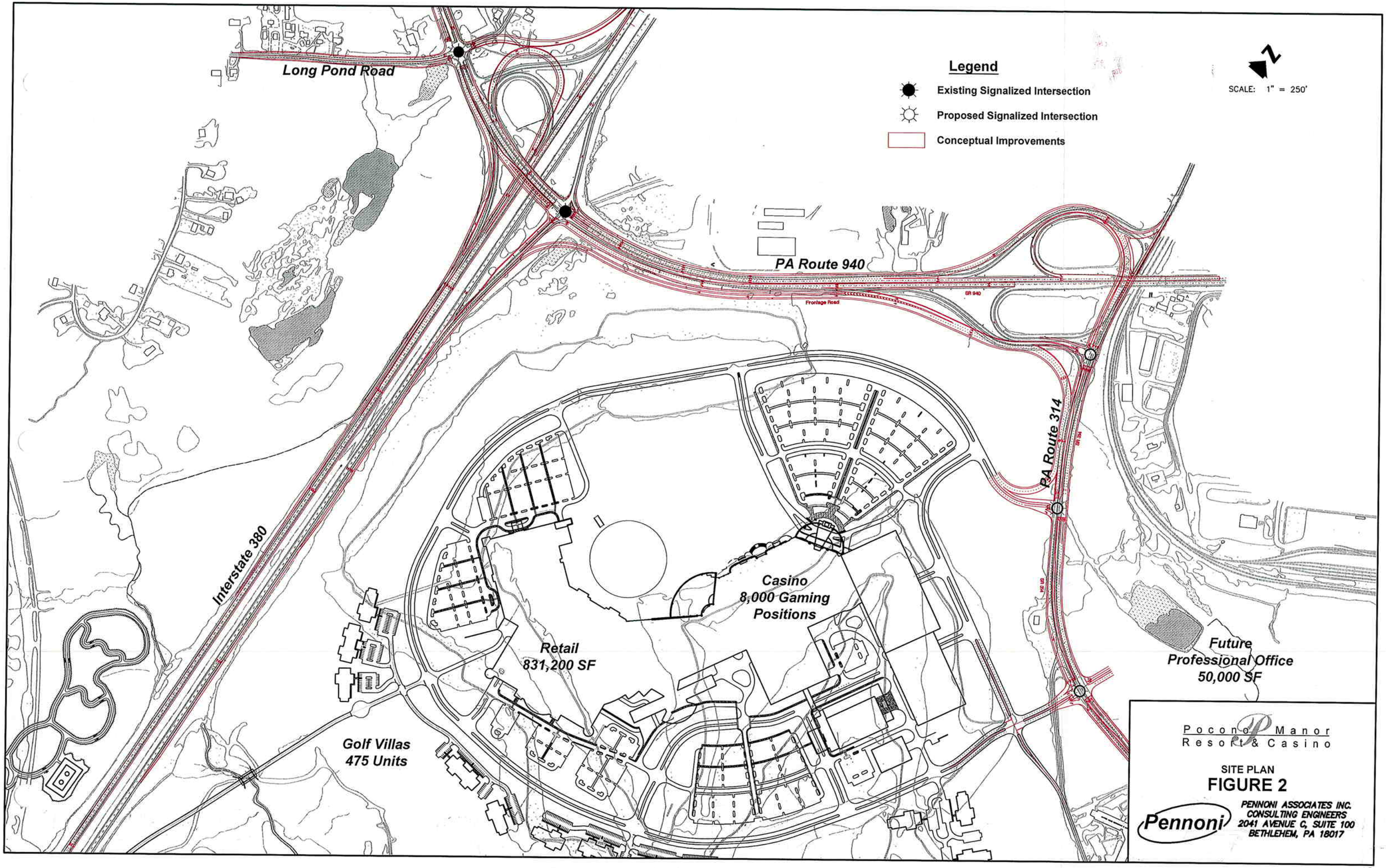
NOT TO SCALE

Pocono Manor Resort & Casino

SITE LOCATION MAP

FIGURE 1

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100


Long Pond Road
PA Route 940
Frontage Road
SR 940
PA Route 314
SR 314
Interstate 380
Casino
8,000 Gaming
Positions
Retail
831,200 SF
Golf Villas
475 Units
Future
Professional Office
50,000 SF
Legend
Existing Signalized Intersection
Proposed Signalized Intersection
Conceptual Improvements
SCALE: 1" = 250'
Pocono Manor
Resort & Casino
SITE PLAN
FIGURE 2
Pennoni
PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

Given that the proposed development is a resort and casino, manual traffic turning movement counts were conducted for a Friday late afternoon peak period (4:00 PM to 6:00 PM – 'peak hour of adjacent street traffic'), a Friday evening peak period (6:00 PM to 8:00PM - Casino peak) and a Saturday evening peak period (4:00 PM to 8:00 PM - Casino peak).

Trip Generation for the proposed development resulted in a total of 5,792 new trips for the Friday late afternoon peak hour; 6,586 new trips for the Friday evening peak hour; and 6,966 new trips for the Saturday evening peak hour. To accommodate the additional traffic to the area roadways, the following off site roadway improvements are recommended. **Conceptual plans are enclosed in the back pocket of this report illustrating the recommended roadway improvements and site access.**

SR 0940/ Long Pond Road /Southbound I-380 Off Ramp

- Relocate the ramp to align opposite Long Pond Road and relocate the Stillwater Lake Estates Access west of its existing location (Stillwater Lake Estates Property Owners Association is not opposed to relocation if access that accommodates their needs is provided elsewhere. See enclose letter in **Appendix M.**)
- Dual left turn lanes and a shared through/right turn lane for the Southbound I-380 Off Ramp
- Dual left turn lanes westbound from SR 0940 to southbound Long Pond Road
- Right turn lane and two through lanes eastbound on SR 0940
- Dual left turn lanes and a right turn lane northbound on Long Pond Road

SR 0940/Southbound I-380 On Ramp

- Two ramp lanes
- Shift southbound I-380 to accommodate four lane section under SR 0940 bridge

SR 0940/Northbound I-380 Off Ramp

- Four through lanes on westbound SR 0940
- Dual left turn lanes on northbound I-380 Off Ramp
- Left turn lane eastbound on SR 0940
- Frontage road to SR 0314
- Signal phasing and timing

SR 0314/SR 0940 Westbound Ramps

- Eliminate the southbound through movement on SR 0314 to provide free flow conditions to/from the ramps
- Dual left turn lanes northbound on SR 0314

SR 0314/SR 0940 Eastbound Ramps

- Triple right turn lanes off the ramp
- A left turn lane and three through lanes northbound on SR 0314
- Signalize the intersection

SR 0314/Spruce Street/Harvest Lane

- Signal timing adjustments

SR 0314/Summit Avenue/Commerce Street

- Signal timing adjustments

SR 0940/Industrial Drive

- Signal timing adjustments

SR 0940/Oak Street

- Signal timing adjustments

SR 0940/SR 0611/SR 0196/Driveway

- Contribution towards construction of additional lanes on SR 0611

SR 0611/SR 0314 (West leg)

- Signalization

SR 0611/SR 0314 (East leg)

- Signal timing adjustments

Two study years were evaluated: 2009 (the year of opening) and 2019 (the ten-year buildout). **Table 1** summarizes the levels of service for the study intersections for both study years. Although level of service drops are expected, the proposed off-site improvements mitigate most of the drops. Given the ideal location along Interstate Route 380 and State Route 940, the Pocono Manor Resort & Casino development traffic can be adequately accommodated by the proposed roadway network with the recommended improvements mentioned above. Where mitigation is not attainable, a fair share contribution to the affected municipality is proposed.

TABLE 1
LEVEL OF SERVICE COMPARISON
November 2006

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0940/Long Pond Road/ Private Road/I-380 Relocated SB Ramp	EB L	C	B	B	n/a	n/a	n/a	C	B	B	n/a	n/a	n/a
	EB T	F(91.1)	C	C	D	C	C	F(211.0)	D	D	D	C	C
	EB R				A	A	A				A	A	A
	WB L	F(92.3)	B	B	D	D	C	F(255.4)	D	D	E	D	D
	WB T	A	A	A	B	B	B	A	A	A	C	B	B
	WB R				n/a	n/a	n/a				n/a	n/a	n/a
	NB L	F(106.3)	C	C	E	D	D	F(195.5)	D	E	E	D	D
	NB T				n/a	n/a	n/a				n/a	n/a	n/a
	NB R				A	A	A				A	A	A
	SB L	C	C	C	D	C	C	D	C	C	D	C	C
	SB TR				B	B	B				C	B	B
Overall Intersection		E	B	B	C	C	C	F(143.5)	C	D	D	C	C

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0940/ I-380 Southbound Ramps	EB T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	EB R	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	WB T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	WB R	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	SB L	F(ERR)	F(250.7)	F(238.9)	n/a	n/a	n/a	F(ERR)	F(ERR)	F(1005.0)	n/a	n/a	n/a
	SB R	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Overall Intersection		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0940/ I-380 Northbound Ramps	EB L	C	A	B	D	C	C	F(176.6)	B	B	E	C	D
	EB T				A	A	A				A	A	A
	WB T	C	B	B	C	C	C	D	B	B	E	C	C
	NB L	D	C	B	D	C	C	F(123.6)	D	C	E	D	C
	NB R				A	A	A				A	A	A
Overall Intersection		C	B	B	C	B	C	F(95.8)	C	B	D	C	C

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0314/ SR 0940 Westbound Ramps	EB L	A	A	A	n/a	n/a	n/a	B	A	A	n/a	n/a	n/a
	EB R				n/a	n/a	n/a				n/a	n/a	n/a
	NB L	A	A	A	n/a	n/a	n/a	A	A	A	n/a	n/a	n/a
	NB LT	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	SB T	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	SB R	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Overall Intersection		n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

TABLE 1
LEVEL OF SERVICE COMPARISON
November 2006

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0314/ SR 0940 Eastbound Ramps	EB L	B	B	B	D	D	D	C	B	B	D	D	D
	EB R				n/a	n/a	n/a				n/a	n/a	n/a
	NB L	A	A	A	A	A	A	A	A	A	A	A	A
	NB T	n/a	n/a	n/a	A	A	B	n/a	n/a	n/a	B	A	C
	SB T	n/a	n/a	n/a	A	A	A	n/a	n/a	n/a	A	A	A
	SB R	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Overall Intersection		n/a	n/a	n/a	A	A	B	n/a	n/a	n/a	B	A	C

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0940/ Spruce Street	EB L	B	A	A	B	A	A	A	A	A	A	A	A
	EB TR	A	A	A	A	A	A	A	A	A	A	A	A
	WB L	A	A	A	A	A	A	A	A	A	A	A	A
	WB TR	B	A	A	D	A	B	F(118.9)	A	A	F(216.7)	A	A
	NB LTR	D	C	B	E	C	B	E	C	C	E	C	C
	SB LTR	C	C	B	D	B	B	D	C	C	D	B	B
Overall Intersection		B	A	A	C	A	B	E	A	A	F(113.0)	A	A

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0940/ Summit Avenue	EB L	B	A	A	A	A	A	A	A	A	A	A	A
	EB TR	A	A	A	A	A	A	A	A	A	B	A	A
	WB L	A	A	A	A	A	A	A	A	A	A	A	A
	WB TR	F(92.8)	A	A	F(138.8)	B	B	F(243.4)	C	A	F(291.9)	E	B
	NB LTR	C	B	C	C	B	C	C	C	C	C	C	C
	SB LTR	F(119.3)	D	D	F(119.3)	D	D	F(160.6)	E	D	F(160.6)	E	D
Overall Intersection		E	A	A	F(82.9)	B	A	F(142.8)	B	A	F(169.8)	C	B

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0940/ Industrial Drive	EB L	D	D	D	D	D	D	D	D	D	D	D	D
	EB T	D	C	C	D	C	C	D	C	C	D	C	C
	EB R	B	A	A	B	A	B	B	A	A	B	A	A
	WB L	D	C	D	D	C	D	F(85.5)	D	E	E	D	E
	WB T	C	B	B	C	B	B	C	A	B	C	A	B
	WB R	A	A	A	A	A	A	A	A	A	A	A	A
	NB L	D	C	C	D	C	C	E	D	D	E	D	D
	NB T	D	C	C	D	C	C	E	D	D	E	D	D
	NB R	A	A	A	A	A	A	A	A	A	A	A	A
	SB L	D	C	C	D	C	C	D	D	C	E	D	C
	SB T	D	C	C	D	C	C	D	D	C	E	D	C
	SB R	A	A	A	A	A	A	A	A	A	A	A	A
Overall Intersection		C	B	B	C	C	C	C	C	C	D	C	C

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LEVEL OF SERVICE COMPARISON
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Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0940/ Oak Street	EB L	A	A	B	A	A	B	C	B	C	C	B	C
	EB TR	A	A	A	A	A	A	B	A	A	B	A	A
	WB L	C	B	A	C	B	A	D	C	A	D	C	A
	WB T	B	B	B	B	B	B	C	C	C	C	C	C
	WB R	A	A	A	A	A	A	A	A	A	A	A	A
	NB L	E	D	C	E	D	C	E	D	D	E	D	D
	NB R	A	A	A	A	A	A	A	A	A	A	A	A
	SB L	D	D	C	D	D	C	D	D	D	D	D	D
	SB R	A	A	A	A	A	A	A	A	A	A	A	A
Overall Intersection		B	B	B	B	B	B	C	B	B	C	B	B

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0940 Westbound/ SR 0611/SR 0196	EB L	E	D	D	E	D	D	F(84.6)	E	D	F(84.6)	E	D
	EB T	F(92.8)	F(80.2)	D	F(157.4)	F(132.4)	F(92.4)	F(142.3)	F(159.2)	F(81.9)	F(221.7)	F(241.6)	F(140.7)
	EB R	F(187.7)	C	B	F(253.4)	F(117.0)	B	F(184.7)	F(181.8)	D	F(257.0)	F(319.6)	F(139.8)
	WB L	F(732.5)	E	E	F(732.5)	E	F(84.1)	F(437.7)	F(154.5)	E	F(540.3)	F(154.5)	E
	WB TR	D	D	D	E	F(87.0)	D	D	D	D	E	E	D
	NB L	F(120.6)	F(92.7)	C	F(185.7)	F(156.9)	D	D	F(173.2)	E	E	F(242.1)	F(129.9)
	NB T	A	A	A	B	A	A	F(84.8)	B	A	F(93.8)	B	A
	NB R	F(90.8)	C	C	F(92.8)	C	B	F(169.3)	F(111.3)	C	F(172.9))	F(102.4)	C
	SB LT	F(470.9)	D	E	F(469.3)	D	E	F(847.9)	F(185.3)	E	F(847.9)	F(187.8)	E
	SB R	D	B	A	D	B	A	F(184.1)	B	A	F(184.1)	B	A
Overall Intersection		F(204.7)	D	C	F(220.9)	F(80.3)	D	F(288.7)	F(123.4)	D	F(305.7)	F(162.2)	F(83.6)

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0940 Eastbound/ SR 0611/Driveway	EB LTR	F(164.6)	E	D	F(172.5)	E	F(298.9)	F(717.4)	F(121.6)	F(722.8)	F(717.4)	F(121.6)	F(722.8)
	WB LT	D	D	D	D	D	D	D	D	D	D	D	D
	WB R	E	C	A	F(192.1)	F(459.4)	A	F(182.3)	B	C	F(273.3)	C	F(88.5)
	NB L	C	C	C	C	C	C	C	C	C	C	C	C
	NB TR	E	D	D	E	F(105.1)	D	F(336.4)	F(237.9)	E	F(316.8)	F(298.3)	F(114.2)
	SB L	F(261.0)	C	B	F(339.9)	D	B	F(227.3)	F(100.6)	B	F(288.0)	F(168.8)	C
	SB TR	F(263.5)	B	B	F(272.2)	B	B	F(508.4)	F(85.0)	B	F(525.2)	F(99.3)	C
Overall Intersection		F(164.5)	D	C	F(204.6)	F(131.9)	C	F(365.0)	F(129.5)	E	F(386.7)	F(161.1)	F(85.4)

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0611/ SR 0314 (West Leg)	EB LR	F(ERR)	E	B	B	B	B	F(ERR)	F(461.7)	C	C	C	B
	NB L	E	A	A	C	B	B	F(223.2)	B	B	D	C	C
	NB T	n/a	n/a	n/a	A	A	A	n/a	n/a	n/a	A	A	A
	SB TR	n/a	n/a	n/a	C	B	A	n/a	n/a	n/a	D	B	B
Overall Intersection		n/a	n/a	n/a	B	B	A	n/a	n/a	n/a	C	B	A

TABLE 1
LEVEL OF SERVICE COMPARISON
November 2006

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0611/ SR 0314 (East Leg)	WB L	E	C	C	D	D	D	F(128.9)	C	C	F(118.9)	D	D
	WB R	A	A	A	B	A	B	B	A	A	A	B	B
	NB TR	C	B	B	D	B	B	F(183.2)	F(131.6)	B	F(180.7)	C	B
	SB L	B	B	A	C	C	A	B	B	A	D	D	B
	SB TR	A	A	A	B	A	A	B	A	A	A	A	A
Overall Intersection		C	B	A	D	B	A	F(107.8)	F(80.5)	B	F(104.1)	C	B

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0314/ Site Driveway A	EB L				D	D	E				D	D	E
	EB R				A	A	A				A	A	A
	NB L				C	C	C				C	C	C
	NB T				C	C	D				C	C	E
	SB T				C	C	C				C	C	C
	SB R				n/a	n/a	n/a				n/a	n/a	n/a
Overall Intersection					C	C	D				C	C	D

Intersection	Move	2009 After No-Build	2009 PM No-Build	2009 SAT No-Build	2009 After Build	2009 PM Build	2009 SAT Build	2019 After No-Build	2019 PM No-Build	2019 SAT No-Build	2019 After Build	2019 PM Build	2019 SAT Build
SR 0314/ Site Driveway B	EB L				D	D	D				D	D	D
	EB LT				D	D	D				D	D	D
	EB R				A	A	A				A	A	A
	WB LT				D	D	D				D	D	D
	WB R				E	D	D				E	D	D
	NB L				C	C	D				D	C	D
	NB TR				C	C	C				D	C	C
	SB L				B	A	B				B	A	B
	SB T				B	A	B				B	A	B
	SB R				C	C	B				C	B	B
Overall Intersection					D	D	D				D	D	D

PROJECT DESCRIPTION

Pocono Manor Investors L.P. proposes to construct a resort development to be known as Pocono Manor Resort & Casino. The site is ideally located on the southeast quadrant of the intersection of two major highways, Interstate 380 and State Route 940, in Tobyhanna Township, Monroe County. The proposed development will consist of a resort/casino with 8,000 slot machines, an 831,200 square foot multi-level indoor shopping/family entertainment center, a 50,000 square foot professional office building, and 475 residential condominiums/townhouses. In addition to the aforementioned, the resort/casino portion of the development includes the following amenities: hotel rooms/time share villas, pools, spas, convention/meeting rooms, restaurants, theater, retail shops, and a hospitality/gaming school. Access to the site will be provided via two high volume driveways and one medium volume driveway onto State Route 314 and from northbound I-380 via a proposed frontage road access. Enclosed in the back pocket of this report are conceptual roadway improvement plans illustrating the proposed site access. The project is anticipated to be completed by the end of 2009.

EXISTING ROADWAY CHARACTERISTICS

Following are descriptions of the major roadways in the vicinity of the site which are expected to carry site traffic to/from the proposed Pocono Manor Resort & Casino.

Interstate 380 is a north-south roadway that borders the Pocono Manor Resort & Casino development to the west providing about 6,600 feet of frontage. The road is classified as an Urban Interstate. The I-380 Northbound Off Ramp onto SR 0940 is signalized with a two-phase operation while the Southbound Off Ramp is stop controlled. The Traffic Signal Permit Plan for the intersection of SR 0940 and the I-380 Northbound Off Ramp is located in **Appendix A**.

SR 0940 is a state maintained road with a primarily east-west orientation that borders the Pocono Manor Resort & Casino development to the north providing about 3,600 feet of frontage. It is classified an Urban Minor Arterial in the vicinity of the site frontage. SR 0940 has two through travel lanes in each direction with varying widths of shoulder and is posted with a speed limit of 45 miles-per-hour. At its intersection with Long Pond Road, it is signalized with a three-phase operation. The westbound approach of SR 0940 is provided an advance phase. Left turn lanes

are provided for both the eastbound and westbound approaches of SR 0940. At its intersection with Industrial Drive, it is signalized with a six-phase operation. Advance phases are provided for the westbound approach of SR 0940 and the northbound and southbound approaches of Industrial Drive. Eastbound left turns are prohibited at the intersection but are accommodated via a nearside jughandle. At its intersections with Oak Street SR 0940 is also signalized with a six-phase operation. The eastbound and westbound approaches of SR 0940 are provided advances and Oak Street is split-phased to accommodate the southbound dual left turn lanes. Through movements across Oak Street are prohibited. Traffic Signal Permit Plans for the aforementioned intersections are located in **Appendix A**.

SR 0611 is a north-south state-maintained road in the vicinity of the site. It is classified as a Central Rural Minor Arterial near the site. The road has two travel lanes in each direction with none to 10-foot shoulders and is posted with a speed limit of 45 miles-per-hour. At its intersection with SR 0940 and SR 0196 the intersection is signalized with a five-phase operation to accommodate the six legs of the intersection. Locally, this intersection is known as the 'Five Points' intersection. The Traffic Signal Permit Plan is located in **Appendix A**.

SR 0314 is a primarily a north-south state maintained road adjacent to the site. The road has one travel lane in each direction. West of SR 0611 the road has ten-foot lanes with four-foot shoulders with a speed limit of 40 miles-per-hour and east of SR 0611 the road has 12-foot lanes with no shoulders with a speed limit of 35 miles-per-hour. The west leg of SR 0314 at SR 0611 is stop controlled while the east leg is signalized with a three-phase operation. The southbound approach of SR 0314 is provided an advance phase. The Traffic Signal Permit Plan for the intersection of SR 0611 and SR 0314 is located in **Appendix A**. SR 0314 also intersects SR 0940 with a grade separate interchange. The SR 0940 Eastbound and Westbound Off Ramps onto SR 0314 are stop controlled.

PLANNED ROADWAY IMPROVEMENTS

The Borough of Mount Pocono currently has a project under design for the 'Five-Points' intersection of SR 0940/SR 0611/SR 0196/Driveway. Construction is expected to be completed by the end of 2006. **Appendix B** contains the proposed traffic signal layout and geometry for the intersection. Proposed additional lanes include:

- Northbound left turn lane from SR 0611 into the Driveway;
- Westbound right turn lane from SR 0940 onto Northbound SR 0611;
- Southbound right turn lane from SR 0196 onto Northbound SR 0611;
- Southbound SR 0611 right turn lane onto Westbound SR 0940; and
- Eastbound SR 0940 right turn lane onto Southbound SR 0611.

The Hirshland/Lowe's development located on SR 0940 east of Industrial Drive in Mount Pocono Borough proposes improvements to the intersection of SR 0940/Idustrial Drive. **Appendix B** contains the proposed traffic signal layout and geometry for the intersection. Proposed improvements include:

- Elimination of the 'jug handle';
- Dual left turn lanes eastbound on SR 0940;
- Right turn lane eastbound on SR 0940;
- Channelized right turn lane southbound on Industrial Drive;
- Dual left turn lanes southbound on Industrial Drive;
- Dual left turn lanes northbound on Industrial Drive; and,
- Signal phasing and timing adjustments.

All of the above listed improvements for the intersections of SR 0611/SR 0940/SR 0196 and SR 0940/Industrial Drive were assumed to be completed by 2010 and were included in both the no-build and build analyses.

EXISTING TRAFFIC VOLUMES

Turning movement counts were taken during October 2005 at the following intersections:

- SR 0940/Long Pond Road/Private Road
- SR 0940/Southbound I-380 Ramps
- SR 0940/Northbound I-380 Ramps
- SR 0314/Westbound SR 0940 Ramps
- SR 0314/Eastbound SR 0940 Ramps
- SR 0940/Industrial Drive

- SR 0940/Oak Street
- SR 0940/SR 0611/SR 0196/Driveway
- SR 0314 (West Leg)/SR 0611
- SR 0314 (East Leg)/SR 0611

Turning movement counts were taken during September 2006 at the following intersections:

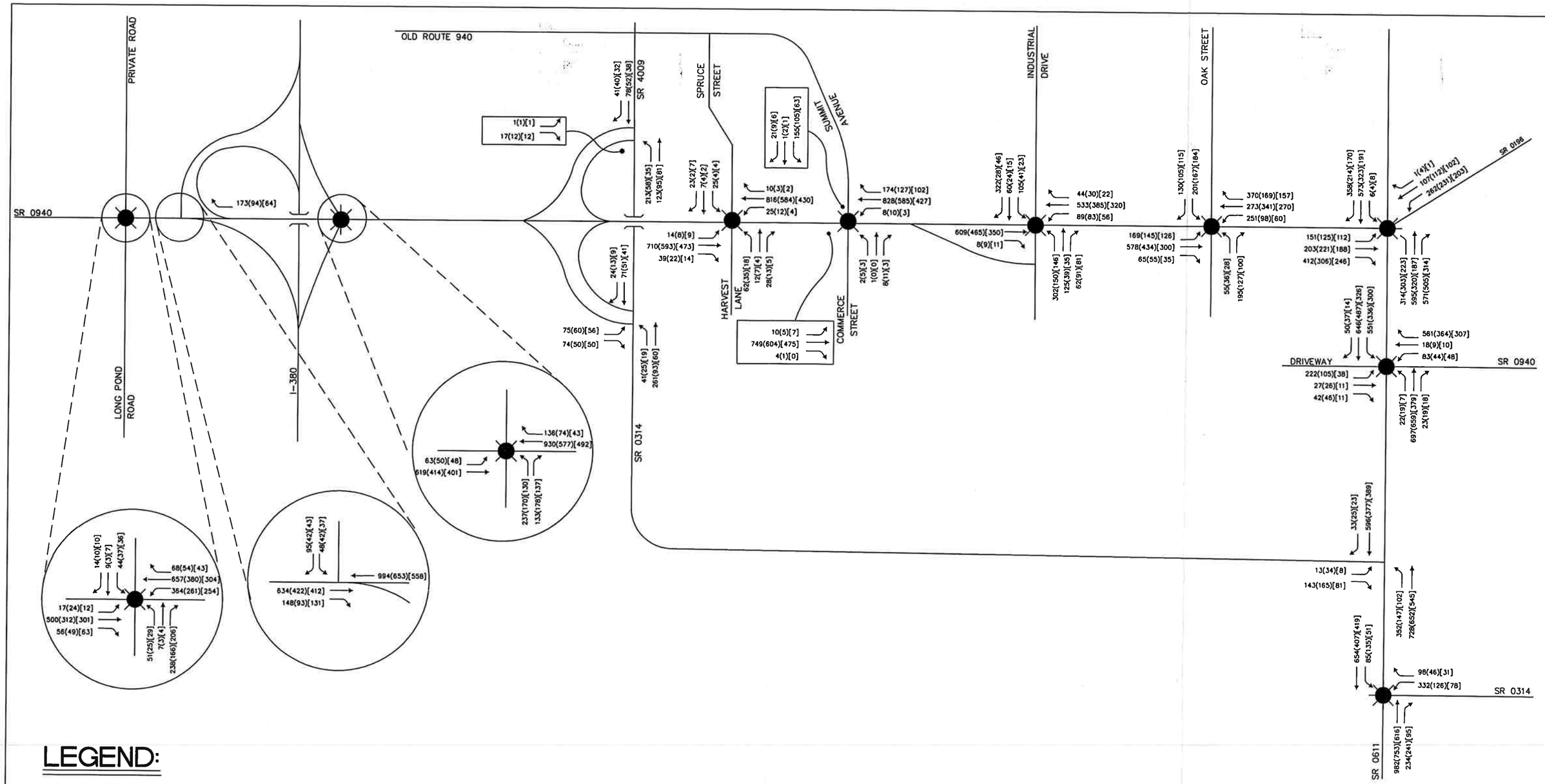
- SR 0940/ Spruce Street/Harvest Lane
- SR 0940/ Summit Avenue/Commerce Street

Given that the proposed development is a resort and casino, manual traffic turning movement counts were conducted for a Friday late afternoon peak period (4:00 PM to 6:00 PM – 'peak hour of adjacent street traffic'), a Friday evening peak period (6:00 PM to 8:00PM - Casino peak) and a Saturday evening peak period (4:00 PM to 8:00 PM - Casino peak). The existing traffic volumes are illustrated in **Figure 3**. Volume data obtained from the manual turning movement counts are located in **Appendix C**.

The following table presents the Average Daily Traffic (ADT) for the major roadways in the vicinity of the site as obtained from the PENNDOT ITMS Website.

Road	**ADT** (vehicles per day)
I-380	22,000
SR 0940	20,000
SR 0314	3,500
SR 0611	14,500

Analysis and discussion of existing operations follow in the Operational Analysis section of the report.



LEGEND:

– Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR TRAFFIC VOLUMES

N

NOT TO SCALE

Pocono Manor Resort & Casino

2005 Existing Peak Hour Traffic Volumes

FIGURE 3

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CRASH HISTORY

Appendix D contains collision diagrams and crash data obtained from PENNDOT. As expected, the higher traffic volume intersections experience the higher rate of accidents. The proposed traffic signals at the intersections of SR 0940/Southbound I-380 Ramp and SR 0940/Eastbound SR 0940 Ramps should alleviate the angle accidents.

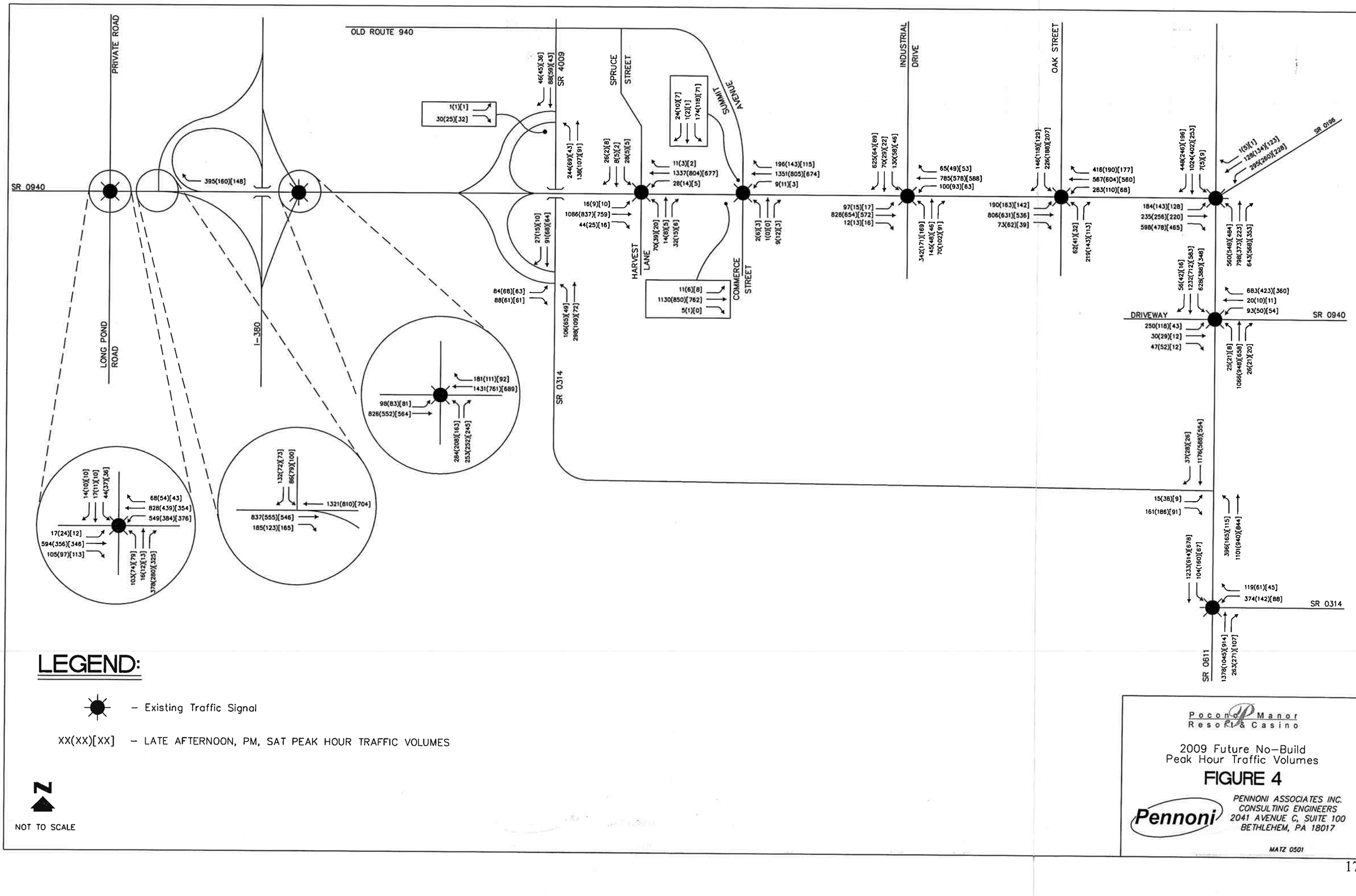
2009 NO-BUILD TRAFFIC VOLUMES

It is expected that the Pocono Manor Resort & Casino development will be fully constructed and operational by the end of 2009. Since the traffic counts were conducted in October 2005 and September 2006, a compounded growth rate of 3.0% was used to calculate future traffic for the opening design year. The 3.0% was obtained from the PENNDOT ITMS Website published population and traffic growth data for Monroe County and the specific roadway classifications. ITMS data can be found in **Appendix E**. **Figure A** in **Appendix E** illustrates the base 2009 traffic volumes.

Typically, in addition to the background growth rate used, traffic volumes from other approved developments in the immediate area should be included in the no-build traffic volumes. Three developments are included in these projects; Lowe's/Hirshland located on SR 0940 west of Industrial Drive; Arcadia located north of Industrial Drive and Hirshland Long Pond located on Long Pond Road south of SR 0940. **Figures C, D and E** in **Appendix E** illustrate site traffic for the aforementioned developments respectively. **Figure 4** illustrates the future 2009 no-build volumes (the summation of values on **Figures A, C, D, and E**).

2019 NO-BUILD TRAFFIC VOLUMES

A ten-year from opening year analysis is provided. A 3.0% compounded growth rate was used to project peak hour traffic volumes to 2019. **Figure B** in **Appendix E** illustrates the base 2019 traffic volumes. **Figure 5** illustrates the 2019 no-build peak hour volumes used in the analyses (the summation of **Figures B, C, D, and E**). Analysis and discussion of future no-build operations follow in the Operational Analysis section of the report.



LEGEND:

– Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR TRAFFIC VOLUMES

N

NOT TO SCALE

Pocono Manor Resort & Casino

2009 Future No-Build
Peak Hour Traffic Volumes

FIGURE 4

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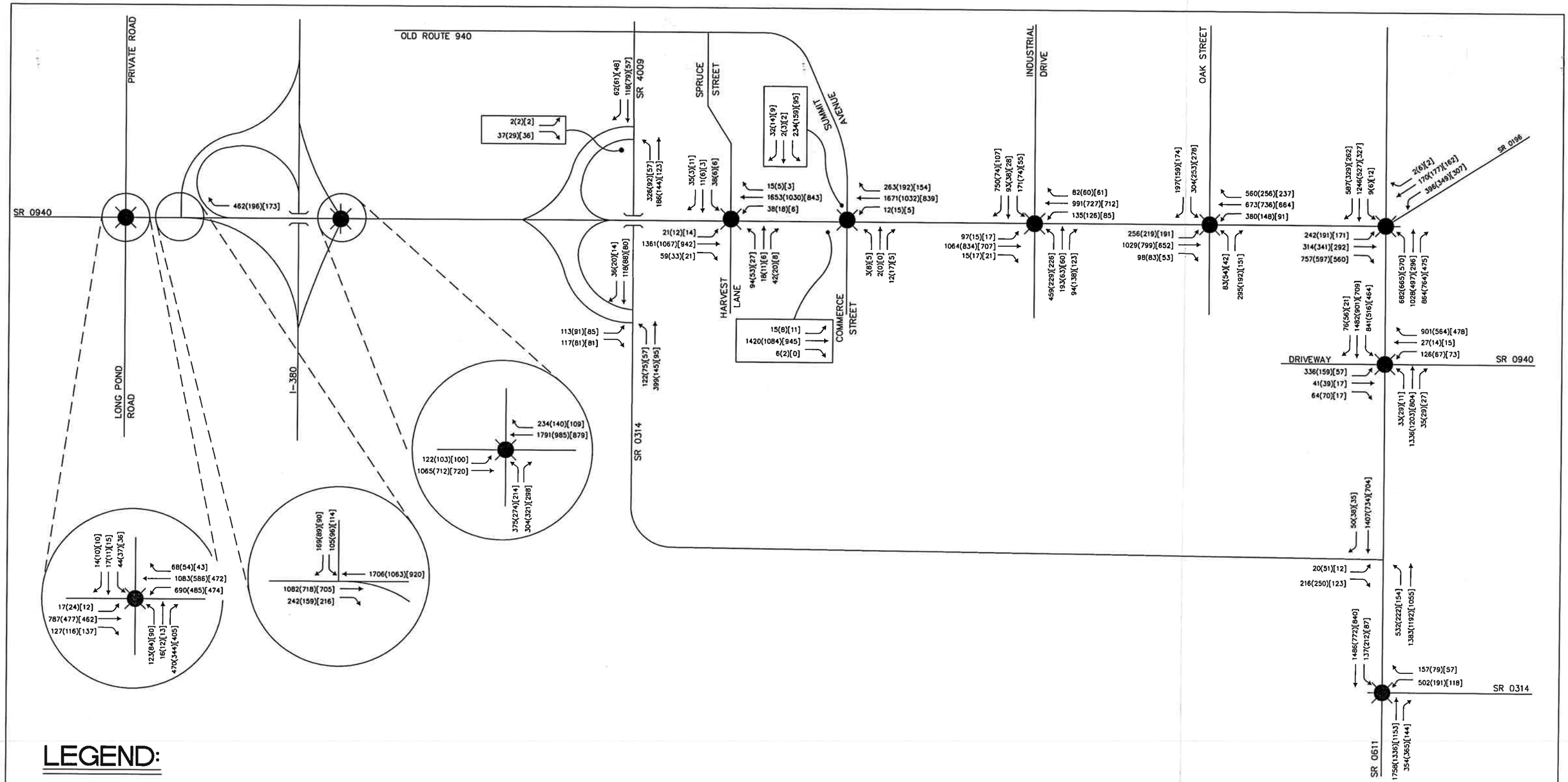

LEGEND:

- Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR TRAFFIC VOLUMES

N

NOT TO SCALE

Pocono Manor Resort & Casino

2019 Future No-Build
Peak Hour Traffic Volumes

FIGURE 5

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TRIP GENERATION AND DISTRIBUTION

Trip Generation is the method of determining the amount of future traffic associated with a proposed land use. The Institute of Transportation Engineers' (ITE) Trip Generation, 7th Edition (2003), is the standard publication used to determine anticipated trips generated by a proposed site. Pocono Manor Investors L.P. proposes to construct a resort development to be known as Pocono Manor Resort & Casino. The proposed development will consist of a resort/casino with 8,000 slots machines, an 831,200 square foot multi-level indoor shopping/family entertainment center, a 50,000 square foot professional office building, and 475 condominiums/townhouses (golf villas). In addition to the aforementioned, the resort/casino portion of the development includes the following amenities: hotel rooms/time share villas, pools, spas, convention/meeting rooms, restaurants, theater, retail shops, and a hospitality/gaming school. The Trip Generation manual does not contain data for a resort/casino; however, the ITE Journal has presented data for resort/casino developments throughout the country. **Appendix F** contains copies of the documents presented by ITE. Trip generation for the Friday afternoon adjacent street traffic and the Friday and Saturday casino peak hour traffic are based on ITE article "Trip Generation Characteristics of Small & Medium Size Casinos" trip generation rates found in Tables 2 and 3 of that article. For the shopping/family entertainment center, ITE's 'shopping Center" land use code was assumed. According to ITE a shopping center ***"is an integrated group of commercial establishments that is planned, developed, owned and managed as a unit. Shopping centers, including neighborhood centers, community centers, regional centers and super regional centers, were surveyed for this land use. Some of these centers contained non-merchandising facilities such as office buildings, movie theaters, restaurants, post offices, banks, health clubs, and recreational facilities (for example, ice skating rinks or indoor miniature golf courses.) The centers ranged in size from 1,700 to 2.2 million square feet of gross leasable area (GLA)."*** To provide a conservative (highest volume) estimate, it was assumed that the outlying golf villas would generate traffic typical of a year round standard residential community. **Table 2** provides a trip generation summary for the Pocono Manor Resort & Casino development.

TABLE 2: TRIP GENERATION SUMMARY

	X		Friday Late Afternoon			Friday PM			Saturday PM		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Casino	8000	slots	4720	2480	2240	5520	2880	2640	6240	3360	2880
Shopping Center (LUC 820)	831.2	ksf	2533	1216	1317	2210	1143	1067	1514	417	1097
General Office (LUC 710)	50	ksf	135	23	112	7	2	5	7	2	5
Golf Villas (LUC 230)	475	units	216	145	71	105	64	41	105	64	41
Total Trips			**7604**	**3864**	**3740**	**7842**	**4089**	**3753**	**7866**	**3843**	**4023**

ITE suggests that retail-oriented developments, such as the shopping center portion of the Pocono Manor Casino & Resort, often attract a portion of their trips from traffic passing the site on the way from an origin to an ultimate destination. Diverted linked trips are defined by ITE as trips that are attracted from the traffic volume on roadways within the vicinity of the generator but that require a diversion from that roadway to another roadway to gain access to the site. These trips could travel on highways adjacent to a generator, but without access to the generator. Diverted linked trips add traffic to streets adjacent to a site, but may not add traffic to the areas major travel routes. Therefore, it was determined that a percentage of trips attracted to the shopping center would be diverted from I-380. Table 5.4 of the ITE Trip Generation Handbook reports pass-by and diverted linked trip data for Land Use 820 (Shopping Center) for the weekday afternoon peak period. In order to determine the percentage of diverted linked trips for the 831,200 square foot shopping center at the Pocono Manor Casino & Resort, an average was calculated of the diverted linked trip percentages of all shopping centers at least 500,000 square feet in size from ITE Trip Generation Handbook Table 5.4. The resulting average of 29% was utilized for the diverted linked trip percentage for the Friday afternoon peak hour for this study. For other time periods, ITE typically recommended utilizing a percentage 10% less than the weekday afternoon peak period. Therefore, a diverted linked trip percentage of 19% was applied for the Friday evening and Saturday evening time periods. The resulting reductions are shown in **Table 3** below. These trips were distributed evenly to I-380 (Northbound and I-380

Southbound), as illustrated in **Figure 6C**. **Appendix F** contains copies of Table 5.4 presented by ITE, as well as a summary table containing only those shopping centers (at least 500,000 square feet) that were utilized to calculate the 29%.

TABLE 3: DIVERTED LINKED SHOPPING CENTER TRIPS

	Friday Late Afternoon			Friday PM			Saturday PM		
	Total	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**
Shopping Center (LUC 820)	2533	1216	1317	2210	1143	1067	1514	417	1097
Diverted Linked Percentages	29%			19%			19%		
Diverted Linked Trips	***734***	***367***	***367***	***420***	***210***	***210***	***288***	***144***	***144***
Primary (Non-Diverted Linked) Trips	1799	849	950	1790	933	857	1226	273	953

Given the nature of the development, an interaction reduction was applied to the raw trip generation estimates. Interaction is expected between the multi-level indoor shopping/family entertainment center (excluding the aforementioned diverted linked trips), the golf villas, the office building and the casino. The developer has stated that the office building will primarily serve residents of Pocono Manor who will have satellite offices in the proposed building. Internal capture rates for trips interacting between the shopping/family entertainment center, the golf villas and the office building were obtained from Tables 7.1 and 7.2 of the ITE Trip Generation Handbook and can be found in **Appendix F**. ITE does not provide data on interaction with a casino, so in order to be conservative, interaction between the casino and other amenities was assumed to be 20%. The internal capture worksheets, included in **Appendix F**, resulted in overall interaction reductions of 16%, 11% and 8% for the Friday afternoon, Friday evening and Saturday evening peak hours, respectively.

Furthermore, non-typical peak hours were studied as a result of the type of development. The casino is expected to peak during the evening peak period (6:00PM-7:00PM) on a Friday and on Saturday. To estimate trip generation for these non-typical peak hours, ITE was used for the shopping center component, the ITE resort/casino data was used for the resort/casino and the

"Columbia Chart" was used for the residential and office components. The "Columbia Chart" was developed by researchers at Columbia University and is based on counts conducted for specific land uses. These counts were then used to develop percentages of site traffic throughout a typical weekday. **Appendix F** includes a copy of this chart. All supporting documentation is in **Appendix F. Table 4** illustrates the total new trips anticipated to be generated by the Pocono Manor Resort & Casino development.

TABLE 4: POCONO MANOR RESORT & CASINO NEW TRIP GENERATION

	X		Friday Late Afternoon			Friday PM			Saturday PM		
			Total	**Enter**	**Exit**	**Total**	**Enter**	**Exit**	**Total**	**Enter**	**Exit**
Casino	8000	slots	4290	2254	2036	5140	2700	2440	5972	3160	2812
Shopping Center (LUC 820)	831.2	ksf	1332	624	708	1394	729	665	942	201	741
General Office (LUC 710)	50	ksf	82	11	71	5	2	3	5	2	3
Golf Villas (LUC 230)	475	units	88	69	19	47	30	17	47	30	17
Total New Trips			**7604**	**5792**	**2958**	**2834**	**6586**	**3461**	**3125**	**6966**	**3393**

Trips were then assigned to the study intersections by examination of current volume distributions; the roadway network; and the location of two major interstate highways, I-380 (north-south) and I-80 (east-west), in the vicinity of the site. Furthermore, it is expected that a regional resort/casino of this type, ideally situated along an interstate route, will have a website with directions. These directions will bring guests via the interstate highways. It is expected that visitors to the casino and golf villas will travel longer distances than shopping center patrons and office building employees. Therefore, taking into account all of the above, two gravity models were prepared utilizing 2005 census data for counties in Pennsylvania, New Jersey and New York.

On the "casino/golf villas" map in **Appendix G,** the counties that were considered for the gravity model for the casino/golf villas are outlined, and the competing casinos in the area are located. It

is assumed, based on data provided by the casino that 33% of the population will gamble. Furthermore, it is expected that gamblers with competing venues closer than Pocono Manor are much less likely to travel to Pocono Manor. Similar reductions in patrons to Pocono Manor were developed considering the number of competing venues approximately equidistant from a given county. These factors, the 'competing venue factors', were developed and assigned to the counties to present the most logical capturing of gamblers to the Pocono Manor Resort & Casino. The resulting patrons of the casino and golf villas of the Pocono Manor Resort & Casino were then assigned to the roadway network. **Appendix G** contains all of the casino/golf villas gravity model data and calculations. Therefore, it is expected that this traffic will arrive and depart the site via the following distribution:

- 75% to/from the south on I-380
- 15% to/from the north on I-380
- 2% to/from the west on SR 0940
- 3% to/from the east on SR 0940
- 2% to/from the north on SR 0196
- 3% to/from the south on SR 0611

Figure 6A illustrates the trip generation assignments for the casino and villas.

On the "shopping center/office" map in **Appendix G,** the counties that were considered for the gravity model for the shopping center/office building are outlined. This encompasses a smaller area than the casino/golf villas map, and there is no reduction to account for other shopping centers in the area. The distribution is based exclusively on distance from the Pocono Manor Casino & Resort. The resulting patrons of the shopping center and office building of the Pocono Manor Resort & Casino were then assigned to the roadway network. **Appendix G** contains all of the casino/golf villas gravity model data and calculations. Therefore, it is expected that this traffic will arrive and depart the site via the following distribution:

- 65% to/from the south on I-380
- 25% to/from the north on I-380
- 4% to/from the west on SR 0940
- 2% to/from the east on SR 0940
- 2% to/from the north on SR 0196
- 2% to/from the south on SR 0611

Figure 6B illustrates the trip generation assignments for the casino and villas.

2009 and 2019 BUILD TRAFFIC VOLUMES

Future 2009 build volumes are shown in **Figure 7** (the summation of values on **Figures 4, 6A, 6B and 6C**) and 2019 build volumes are shown in **Figure 8** (the summation of values on **Figures 5, 6A, 6B and 6C**). Build volumes were derived by adding the site generated traffic volumes to the no-build traffic volumes for the respective design years. Given the extent of the roadway improvements recommended, traffic volumes had to be redistributed to account for the relocation of the I-380 Southbound Ramp opposite Long Pond Road and the eliminating of the SR 0314 southbound movement at the westbound SR 0940 Ramps. Traffic volume spread sheets are located in **Appendix H.**

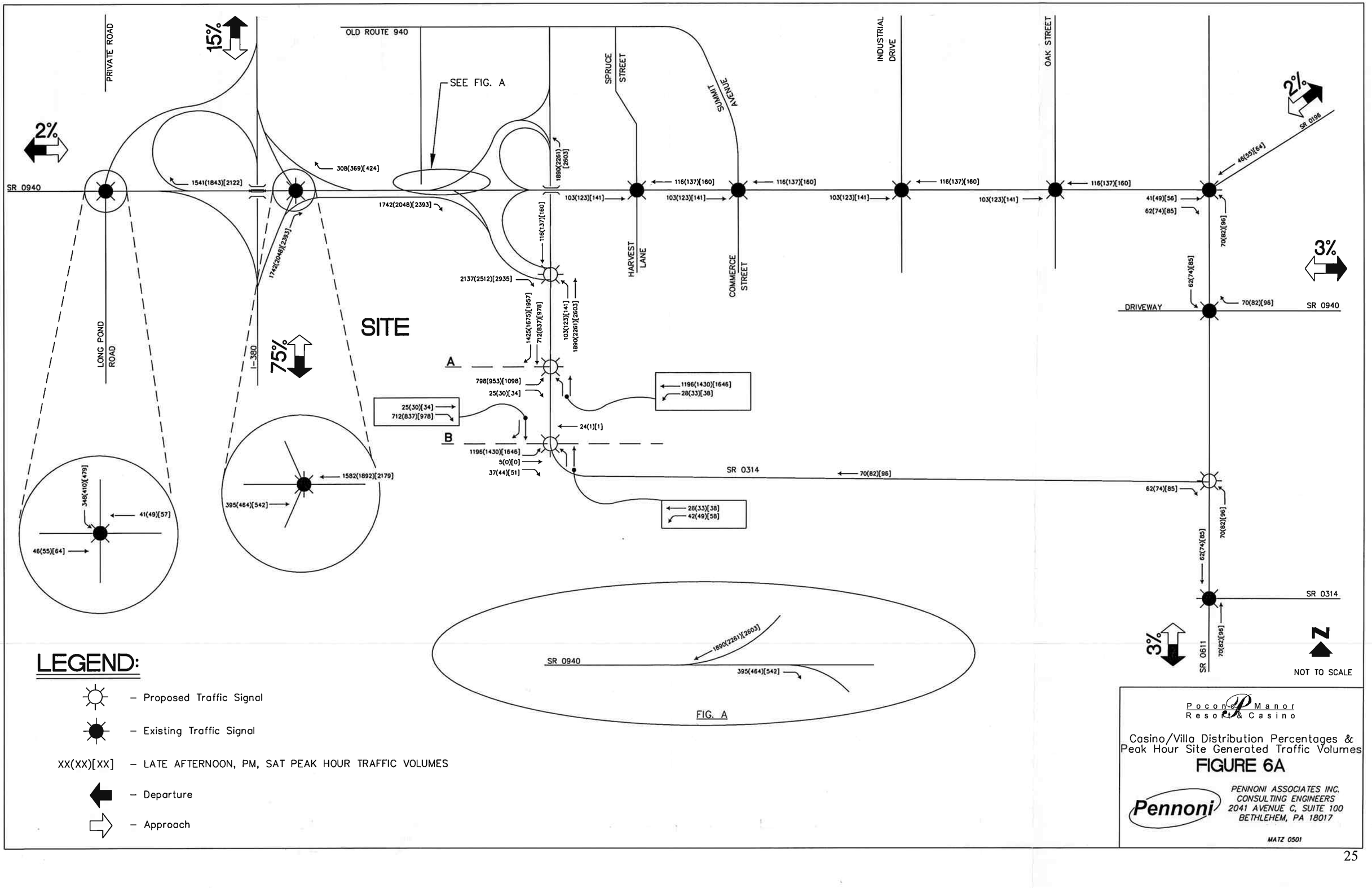

FIG. A

LEGEND:

- – Proposed Traffic Signal
- – Existing Traffic Signal
- XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR TRAFFIC VOLUMES
- – Departure
- – Approach

Pocono Manor Resort & Casino

Casino/Villa Distribution Percentages & Peak Hour Site Generated Traffic Volumes

FIGURE 6A

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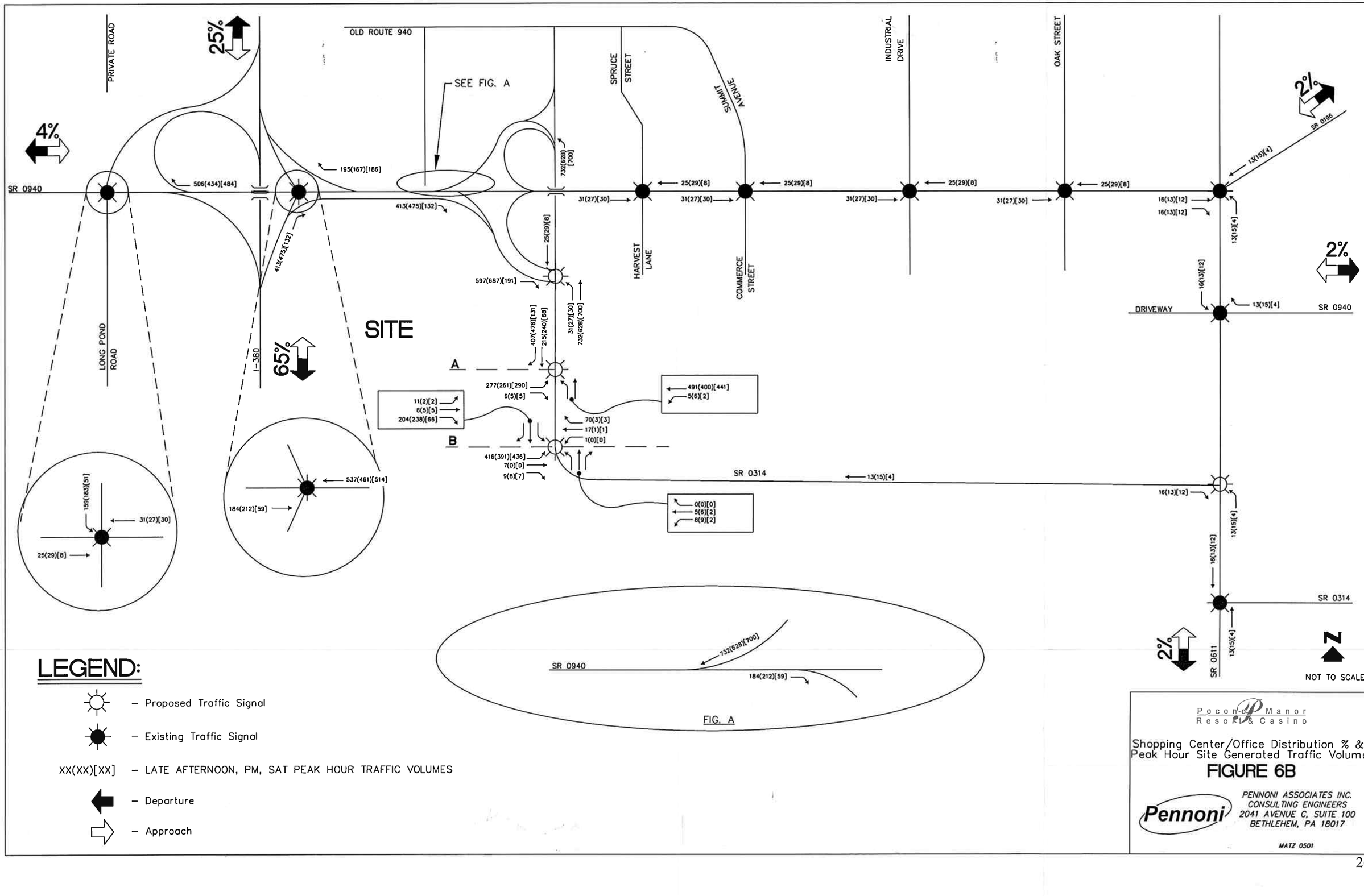

FIG. A

LEGEND:

- – Proposed Traffic Signal
- – Existing Traffic Signal
- XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR TRAFFIC VOLUMES
- – Departure
- – Approach

Pocono Manor Resort & Casino

Shopping Center/Office Distribution % & Peak Hour Site Generated Traffic Volumes

FIGURE 6B

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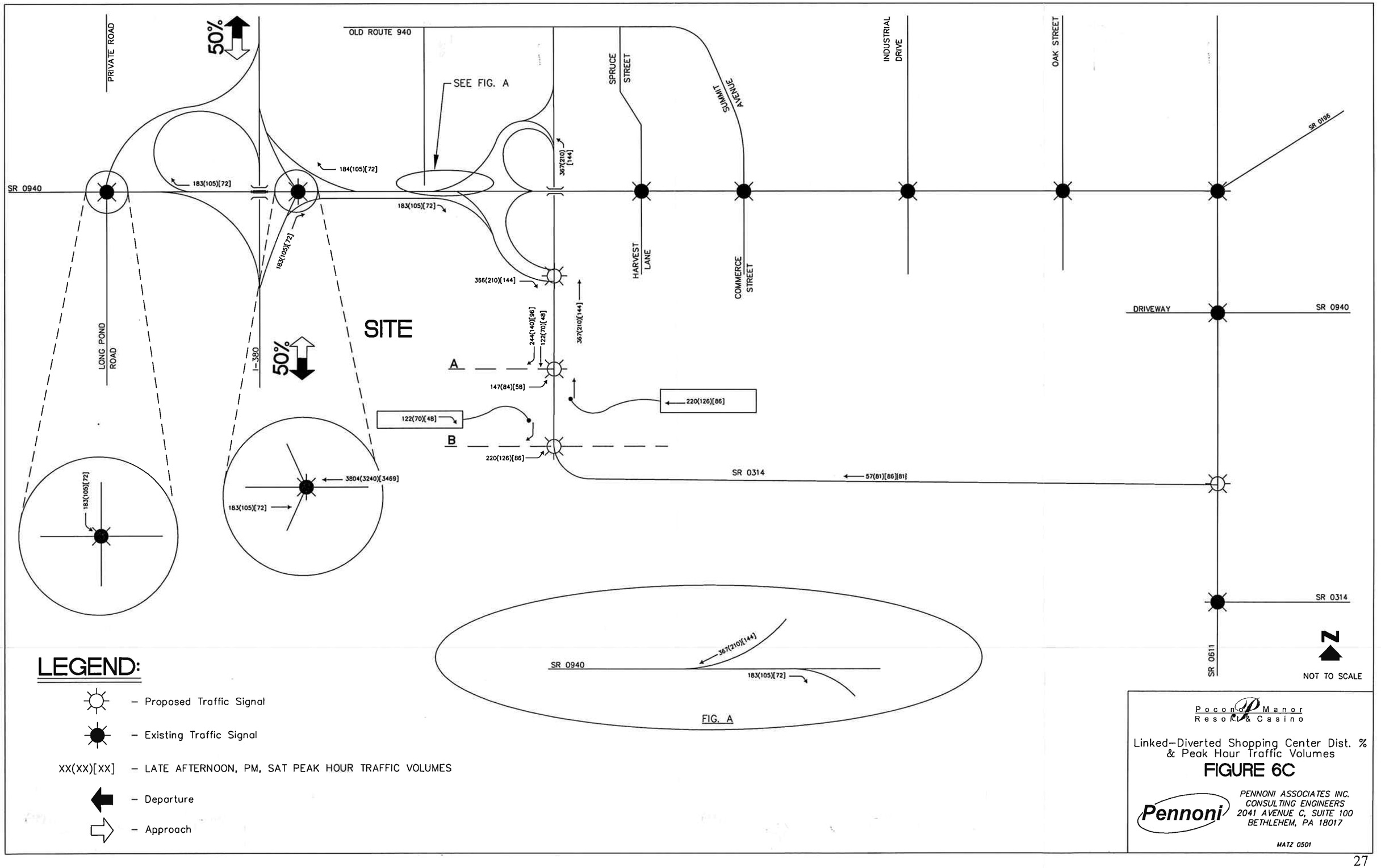

FIG. A

LEGEND:

- – Proposed Traffic Signal
- – Existing Traffic Signal
- XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR TRAFFIC VOLUMES
- – Departure
- – Approach

Pocono Manor Resort & Casino

Linked–Diverted Shopping Center Dist. % & Peak Hour Traffic Volumes

FIGURE 6C

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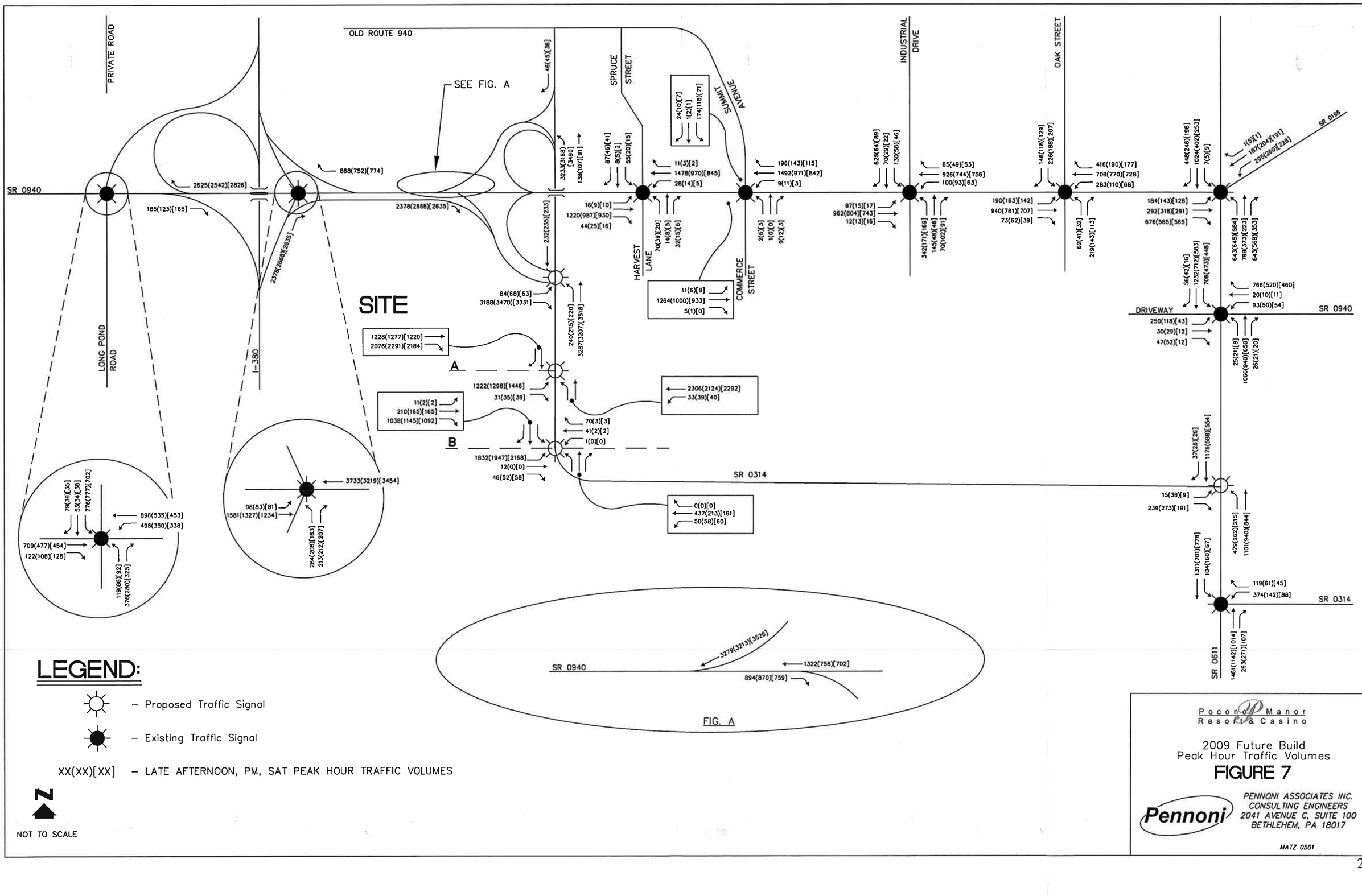

FIG. A

LEGEND:

- – Proposed Traffic Signal
- – Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR TRAFFIC VOLUMES

N

NOT TO SCALE

Pocono Manor Resort & Casino

2009 Future Build
Peak Hour Traffic Volumes

FIGURE 7

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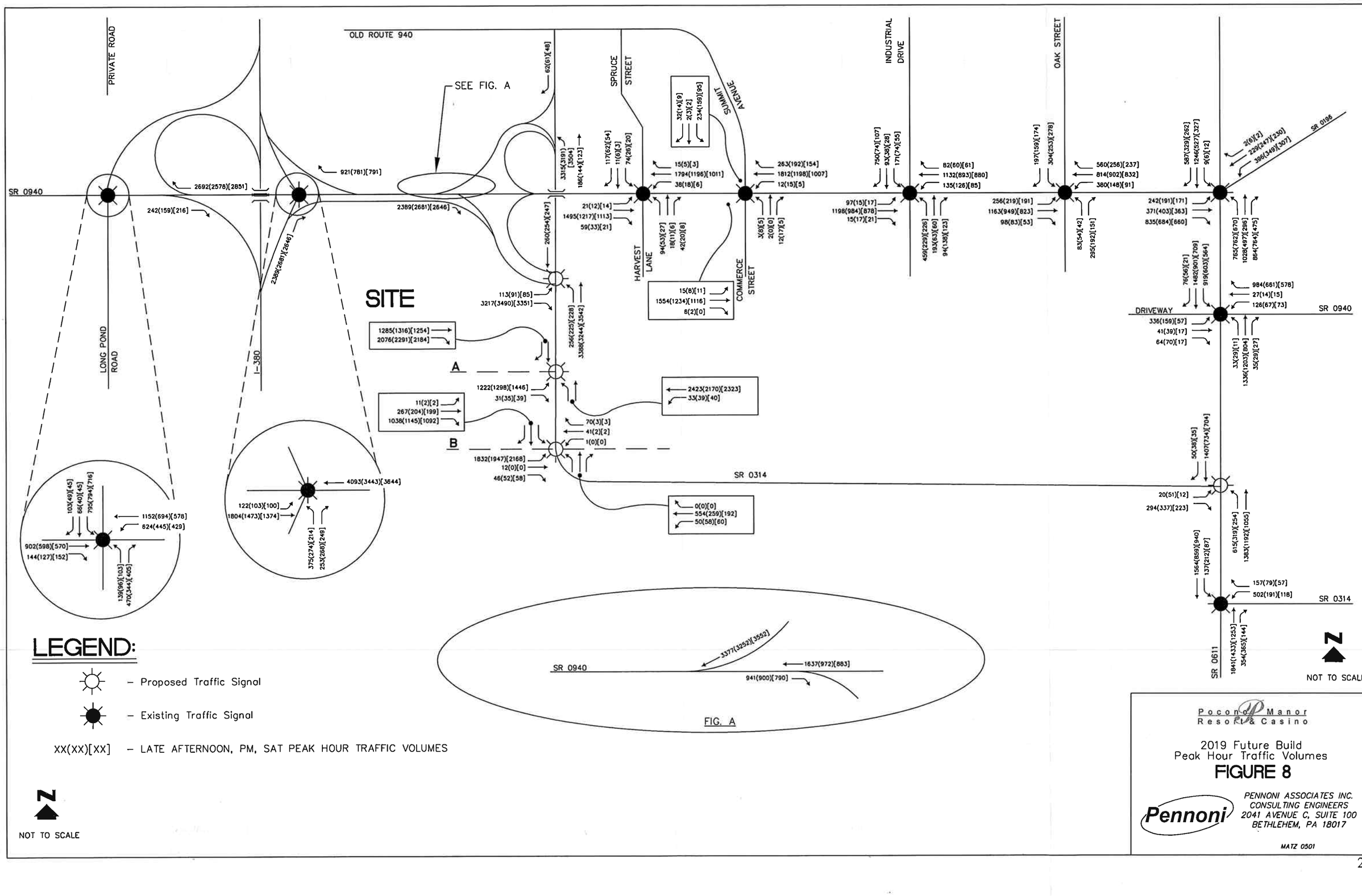

LEGEND:

– Proposed Traffic Signal

– Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR TRAFFIC VOLUMES

NOT TO SCALE

FIG. A

NOT TO SCALE

Pocono Manor Resort & Casino

2019 Future Build
Peak Hour Traffic Volumes

FIGURE 8

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OPERATIONAL ANALYSIS

Operations were evaluated at the study intersections. The analyses were performed in accordance with the procedures outlined in the Highway Capacity Manual, Special Report 209, published by the Transportation Research Board, Washington, D.C., using the latest version of the SYNCHRO software. The results of these analyses provide Level of Service, volume/capacity descriptions and average seconds of delay for the intersection movements.

Level of Service (LOS) is a terminology used by the Highway Capacity Manual for assignment and assessment of intersection operation. LOS designations between "A" and "F" are used; LOS A defines a very good operation with no congestion or delay, while LOS F defines a poor operation with substantial delay and congestion. The definitions of Levels of Service "A" through "F" for both signalized and unsignalized intersections are contained in **Appendix J**.

The analyses were conducted for three time periods; the Friday late afternoon street peak hour, the Friday evening casino peak hour and the Saturday evening casino peak hour. **Figures 9 through 13** illustrate the levels of service for all study conditions. Summaries of all the capacity analyses results are included in **Appendix K** grouped by study intersection. Enclosed in the back pocket of this report are conceptual roadway improvement plans illustrating the proposed site access and recommended roadway improvements.

Following are operational characteristics for each of the study intersections.

SR 0940 and Long Pond Road/ Southbound I-380 Off Ramp

2005 Existing: At this four leg signalized intersection, all approaches operate at LOS D or better during all peak hours studied.

2009 No-Build: Without the proposed Pocono Manor Resort & Casino development, this intersection is expected to fail during the late afternoon peak hour even with signal timing optimization provided.

2019 No-Build: Without the proposed development, some approaches are expected to operate at LOS F during the late afternoon peak hour, specifically, the eastbound through movement, the northbound approach and the westbound left turn movement.

2009 Build: Upon completion of the Pocono Manor Resort & Casino development, level of service drops are expected. In order to provide better traffic flow through the intersection and mitigate some of the existing as well as future level of service deficiencies, extensive roadway improvements are proposed. The improvements include:

- Relocate the ramp to align opposite Long Pond Road and relocate the Stillwater Lake Estates Access west of its existing location (Stillwater Lake Estates Property Owners Association is not opposed to relocation if access that accommodates their needs is provided elsewhere.) See enclose letter in **Appendix M**.
- Dual left turn lanes and a shared through/right turn lane for the Southbound I-380 Off Ramp
- Dual left turn lanes westbound from SR 0940 to southbound Long Pond Road
- Right turn lane and two through lanes eastbound on SR 0940
- Dual left turn lanes and a right turn lane northbound on Long Pond Road

With the roadway improvements listed above, it is expected that all movements at the intersection will operate at levels of service D or better with the exception of the northbound left turns during the late afternoon which are expected to operate at level of service E.

2019 Build: As in the 2009 build scenario, with the recommended improvements levels of service are improved. It is expected that all movements at the intersection will operate at levels of service D or better with the exception of the northbound left turns and the westbound left turns during the late afternoon which are expected to operate at level of service E.

SR 0940 and Southbound I-380 Off Ramps

2005 Existing: The off ramp currently operates at LOS F during the late afternoon peak hour. This intersection currently meets PENNDOT Publication 201, Traffic and Engineering Studies guideline for signalization based on peak hour traffic volumes (**Appendix I**).

2009 No-Build: Without the proposed Pocono Manor Resort & Casino development, the off ramp is expected to operate at LOS F during all three peak hours analyzed.

2019 No-Build: As in 2009, without the proposed development, the off ramp is expected to continue operate at LOS F.

2009 Build: With the proposed Pocono Manor Resort & Casino development, the off ramp would continue to operate at LOS F if nothing is done. To provide better traffic flow to the area, it is proposed to realign the Southbound I-380 Off Ramp opposite Long Pond Road and relocate the Private Road further west on SR 0940.

2019 Build: With the addition of the proposed Pocono Manor Resort & Casino site generated traffic, the intersection is expected to continue to operate with deficient levels of service. As previously stated, to provide better traffic flow to the area, it is proposed to realign the Southbound I-380 Off Ramp opposite Long Pond Road and relocate the Private Road further west on SR 0940.

SR 0940 and Northbound I-380 Ramps

2005 Existing: This signalized intersection's northbound approach currently operates at LOS D during the PM peak hour. All other movements operate at LOS C or better during all peak hours analyzed.

2009 No-Build: Without the development and signal optimization, all movements are expected to operate at LOS D or better during all peak hours analyzed.

2019 No-Build: As in 2009, without the proposed development and signal optimization, all movements are expected to operate at LOS D or better during all peak hours analyzed with the exception of the eastbound and northbound approaches during the late afternoon peak hour.

2009 Build: With the proposed Pocono Manor Resort & Casino development, the off ramp is expected to operate at LOS F. To provide better levels of service and improve traffic flow in the

area, it is proposed to enhance the Northbound I-380 Off Ramp to provide a frontage road directly to SR 0314. Other roadway improvements proposed include:

- Four through lanes westbound on SR 0940
- Left turn lane and two through lanes eastbound on SR 0940
- Dual left turn lanes on the Northbound I-380 Off Ramp

By providing these improvements, as well as optimizing signal phasing and timing, levels of service are expected to be D or better during all three peak hours analyzed.

2019 Build: As in 2009, providing the recommended improvements will improve levels of service to D or better with the exception of the late afternoon peak hour which is expected to experience levels of service E.

SR 0314 and Westbound 0940 Ramps

2005 Existing: This unsignalized intersection currently operates at LOS A during all peak hours analyzed.

2009 No-Build: Without the proposed Pocono Manor Resort & Casino development, this unsignalized intersection is expected to continue to operate at LOS A or better during all peak hours analyzed.

2019 No-Build: Without the proposed Pocono Manor Resort & Casino development, this unsignalized intersection is expected to operate at LOS B or better during all peak hours analyzed.

2009 Build: With the proposed Pocono Manor Resort & Casino development, the Westbound SR 0940 Off Ramp is expected to operate at LOS F. To mitigate the level of service drops, it is proposed to eliminate the southbound through movement to provide free flow conditions to/from the ramps. The eliminated movement can be accommodated via the adjacent SR 0940 intersection of Spruce Street/Harvest Lane.

2019 Build: As in 2009, with the recommended improvements free flow conditions will exist.

SR 0314 and Eastbound 0940 Ramps

2005 Existing: This unsignalized intersection currently operates at LOS B or better during all peak hours analyzed.

2009 No-Build: Without the proposed Pocono Manor Resort & Casino development, this unsignalized intersection is expected to continue to operate at LOS B or better during all peak hours analyzed.

2019 No-Build: Without the proposed Pocono Manor Resort & Casino development, this unsignalized intersection is expected to continue to operate at LOS C or better during all peak hours analyzed.

2009 Build: With the proposed Pocono Manor Resort & Casino development, it is proposed to provide triple right turn lanes and a left turn lane off the ramp. It is also proposed to provide a northbound left turn lane and three through lanes northbound with signalization (Peak Hour Signal Warrant investigation is located in **Appendix I**). With these improvements, all levels of service are expected to be B or better with the exception of the left turn movement off the ramp which is expected to operate at level of service D during all peak hours analyzed. It should be noted that the Township requested that the left turns off the ramp should not be eliminated.

2019 Build: With the proposed improvements to the intersection, all levels of service are expected to be C or better with the exception of the left turn movement off the ramp which is expected to operate at level of service D during all peak hours analyzed.

SR 0940 and Spruce Street/Harvest Lane

2005 Existing: This signalized intersection currently operates at LOS C or better during all peak hours analyzed.

2009 No-Build: Without the proposed casino and signal optimization, this intersection is expected to operate at LOS D or better during all peak hours analyzed.

2019 No-Build: Without the proposed casino and signal optimization, this intersection is expected to operate at LOS E or better during all peak hours analyzed with the exception of the westbound through movement which is expected to operate at LOS F during the late afternoon peak hour.

2009 Build: With the proposed casino and signal optimization, this intersection is expected to continue to operate at LOS D or better during all peak hours analyzed with the exception of the northbound approach which is expected to operate at level of service E during the late afternoon peak hour.

2019 Build: With the proposed casino and signal optimization, this intersection is expected to continue to operate at LOS D or better during all peak hours analyzed with the exception of the northbound approach which is expected to operate at level of service E and the westbound approach which is expected to operate at level of service F during the late afternoon peak hour.

SR 0940 and Summit Avenue/Commerce Street

2005 Existing: This signalized intersection currently operates at LOS D or better during all peak hours analyzed.

2009 No-Build: Without the proposed casino and signal optimization, this intersection is expected to operate at LOS D or better during all peak hours analyzed with the exception of the westbound and southbound approaches which are expected to fail.

2019 No-Build: Without the proposed casino and signal optimization, this intersection is expected to operate at LOS E or better during all peak hours analyzed with the exception of the westbound through movement and southbound approach which are expected to fail.

2009 Build: With the proposed casino and signal optimization, this intersection is expected to continue to operate at LOS D or better during all peak hours analyzed with the exception of the westbound and southbound approaches which are expected to fail.

2019 Build: With the proposed casino and signal optimization, this intersection is expected to operate at LOS E or better during all peak hours analyzed with the exception of the westbound and southbound approaches which are expected to fail.

SR 0940 and Industrial Drive

2005 Existing: This signalized intersection currently operates at LOS C or better during all peak hours analyzed, with the exception of the northbound left turn movement during the late afternoon peak hour which operates at LOS E.

2009 No-Build: Without the proposed Pocono Manor Resort & Casino development and the roadway improvements recommended by other developments as listed earlier in this report, this intersection is expected to operate at LOS D or better during all peak hours analyzed.

2019 No-Build: Without the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to operate at LOS E or better during all peak hours analyzed with the exception of the westbound left turn movement during the late afternoon peak hour which is expected to fail.

2009 Build: With the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to continue to operate at LOS D or better during all peak hours analyzed.

2019 Build: Without the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to continue to operate at LOS E or better during all peak hours analyzed.

SR 0940 and Oak Street

2005 Existing: This signalized intersection currently operates at LOS D or better during all peak hours analyzed.

2009 No-Build: Without the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to operate at LOS E or better during all peak hours analyzed.

2019 No-Build: Without the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to operate at LOS E or better during all peak hours analyzed.

2009 Build: With the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to continue to operate at LOS E or better during all peak hours analyzed.

2019 Build: As in 2009, without the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to continue to operate at LOS E or better during all peak hours analyzed.

SR 0940/SR 0611/SR 0196 and Driveway

2005 Existing: This signalized intersection currently operates at LOS F during all peak hours analyzed.

2009 No-Build: Without the proposed Pocono Manor Resort & Casino development and the geometric/signal improvements mentioned under the Planned Roadway Improvements section of this report, this intersection is expected to improve in its operation; however, LOS F are still expected for some movements.

2019 No-Build: As in 2009, without the proposed Pocono Manor Resort & Casino development and the geometric/signal improvements mentioned under the Planned Roadway Improvements section of this report, this intersection is expected to improve in its operation; however, LOS F are still expected for some movements.

2009 Build: With the proposed Pocono Manor Resort & Casino development, this intersection is expected to continue to operate with some movements at LOS F. With the additional site traffic added to this intersection, even though it is 100 directional trips or less, some level of service drops are expected. It is proposed that a fair share contribution be made for the construction of additional lanes on SR 0611 at this intersection.

2019 Build: As in 2009, with the proposed Pocono Manor Resort & Casino development, this intersection is expected to continue to operate with some movements at LOS F. It is proposed that a fair share contribution be made for the construction of additional lanes on SR 0611 at this intersection.

SR 0611 and SR 0314 (West Leg)

2005 Existing: This unsignalized intersection currently operates at LOS D during the late afternoon peak hour. This intersection currently meets PENNDOT Publication 201, Traffic and Engineering Studies guideline for signalization based on peak hour traffic volumes.

2009 No-Build: Without the proposed Pocono Manor Resort & Casino development, this unsignalized intersection is expected to operate at LOS F during the late afternoon peak hour.

2019 No-Build: Without the proposed Pocono Manor Resort & Casino development, this unsignalized intersection is expected to continue to operate at LOS F during the late afternoon and PM peak hours.

2009 Build: With the proposed Pocono Manor Resort & Casino development, this unsignalized intersection is expected to continue to operate at LOS F. It is proposed to signalize this

intersection to mitigate some of the levels of service drops and improve traffic flows in the area (Peak Hour Signal Warrant investigation is located in **Appendix I**).

2019 Build: As in 2009, with the proposed Pocono Manor Resort & Casino development, this unsignalized intersection is expected to continue to operate at LOS F. It is proposed to signalize this intersection to mitigate some of the levels of service drops and improve traffic flows in the area.

SR 0611 and SR 0314 (East Leg)

2005 Existing: This signalized intersection currently operates at LOS C or better during all peak hours analyzed.

2009 No-Build: Without the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to operate at LOS C or better during all peak hours analyzed with the exception of the westbound left turn movement which is expected to operate at LOS E during the late afternoon peak hour.

2019 No-Build: Without the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to operate at LOS C or better during all peak hours analyzed with the exception of the westbound left turn movement and the northbound approach during the late afternoon peak hour.

2009 Build: With the proposed Pocono Manor Resort & Casino development and signal optimization, this intersection is expected to operate at LOS D or better during all peak hours analyzed. Mitigation is not completely obtained, therefore, a fair share contribution to the affected municipality is proposed for future roadway improvements.

2019 Build: As in 2009, with the proposed Pocono Manor Resort & Casino development and signal optimization, mitigation is not completely obtained with the recommended improvements, therefore, a fair share contribution to the affected municipality is proposed for future roadway improvements.

SR 0940 and Site Driveway A

***2009 Build*:** Upon completion of the Pocono Manor Resort & Casino development, the site driveway is expected to operate at LOS D or better during all peak hours analyzed with the exception of the left turns from the driveway which is expected to operate at level of service E during the Saturday evening peak hour. It is proposed to provide dual left turn lanes and a right turn lane out of the site and exclusive dual right turn lanes and a left turn lane into the site. Two through lanes southbound and three through lanes northbound are proposed on SR 0314. Peak Hour Signal Warrant investigation is located in **Appendix I.**

2019 Build: With the configuration mentioned above, the site driveway is expected to operate at LOS D or better during all peak hours analyzed with the exception of the left turns from the driveway and the northbound through movement which are expected to operate at level of service E during the Saturday evening peak.

SR 0940 and Site Driveways B

***2009 Build*:** Upon completion of the Pocono Manor Resort & Casino development, the site driveway is expected to operate at LOS D or better during all peak hours analyzed with the exception of the right turns from the westbound site driveway which is expected to operate at level of service E during the late afternoon peak hour. It is proposed to provide an exclusive left turn lane, a shared left-through lane and a right turn lane out and exclusive right and left turn lanes into the resort/casino section of the site. Opposite the resort/casino driveway will be the professional office driveway. This driveway is proposed to have a shared left/through lane and a right turn lane. Two through lanes in each direction are proposed for SR 0314. Peak Hour Signal Warrant investigation is located in **Appendix I.**

2019 Build: With the configuration mentioned above, the site driveways are expected to operate at levels of service D or better with the exception of the westbound right turns from the office driveway which is expected to operate at level of service E during the late afternoon peak hour during all peak hours analyzed.

I-380/SR 0940 MERGE/DIVERGE ANALYSES

Operations were evaluated for the entrance and exit ramps at the I-380/SR 0940 interchange. The analyses were performed in accordance with the procedures outlined in the Highway Capacity Manual, Special Report 209, published by the Transportation Research Board, Washington, D.C., using the Highway Capacity Software. The results of these analyses provide Level of Service and volume/capacity descriptions for the ramp influence areas. The influence areas consist of 1,500 feet including the acceleration or deceleration lane(s) and the two lanes of I-380.

The analyses were conducted on both the 2009 and 2019 Build conditions for three time periods: the Friday late afternoon street peak hour, the Friday evening casino peak hour and the Saturday evening casino peak hour. Volume calculations, HCS worksheets and a summary of all the capacity analyses results are included in **Appendix L**.

As can be seen, all ramp junctions with I-380 are expected to operate at LOS C or better with the exception of the 2019 Saturday conditions at the Southbound I-380 On Ramp from Westbound SR 0940 which will operate at LOS D.

QUEUES

Table 5 summarizes the no-build and build queues for 2019. As can be seen there are a few instances where build queues exceed no-build queues and exceed the storage length available.

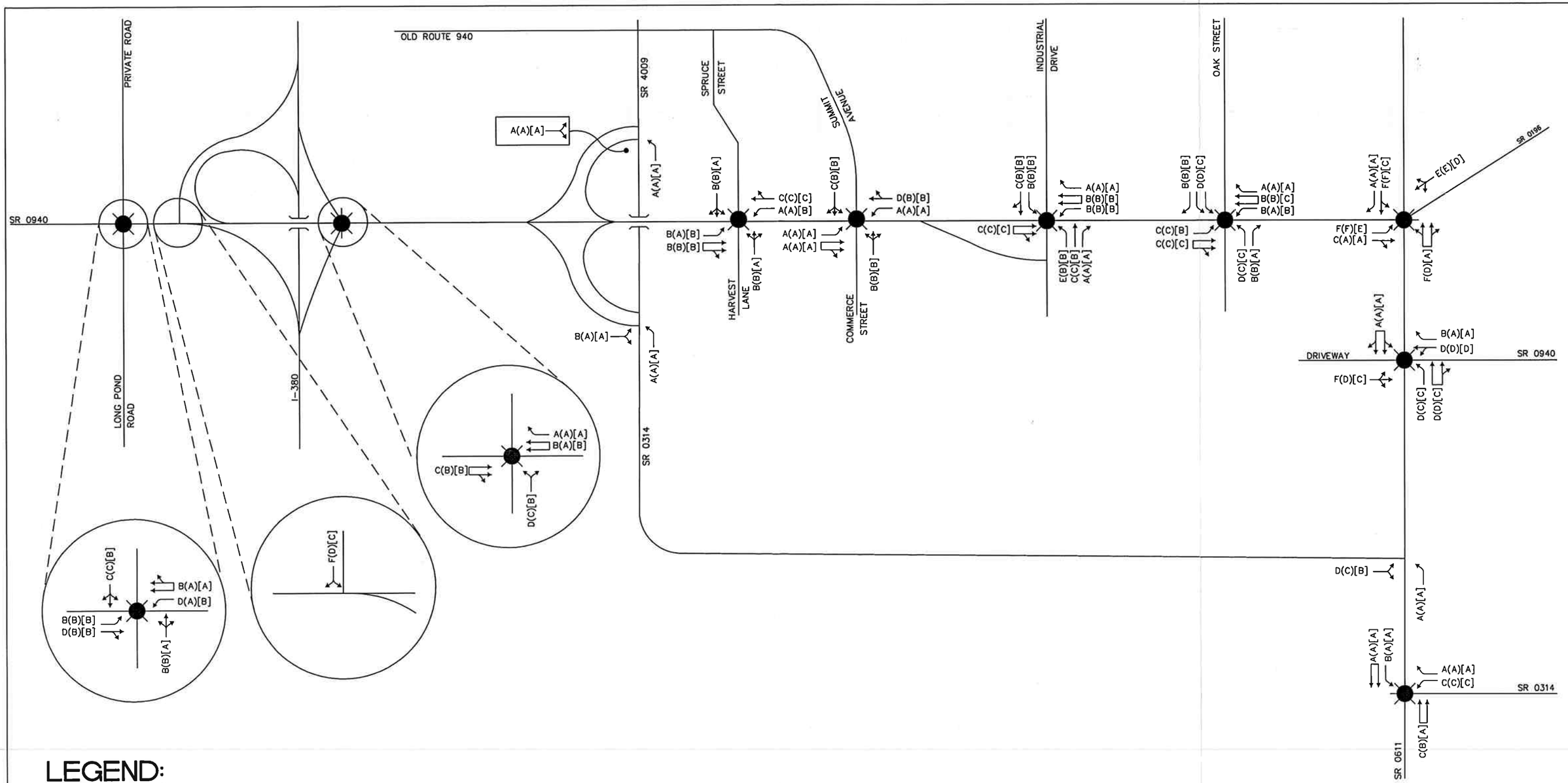
TABLE 5 - QUEUE LENGTH SUMMARY

Intersection	Auxiliary Lane	Existing/ **Proposed** Storage Length (feet)	2019 After No-Build (feet)	2019 PM No-Build (feet)	2019 SAT No-Build (feet)	2019 After Build (feet)	2019 PM Build (feet)	2019 SAT Build (feet)
SR 0940/Long Pond Road/ Relocated I-380 SB Off Ramp	EB R	**210**	n/a	n/a	n/a	54	41	44
	WB L	**560**	754	368	405	397	204	193
	NB L	**225***	n/a	n/a	n/a	111	50	53
	SB L	**425**	n/a	n/a	n/a	417	272	244
	SB TR	**300**	n/a	n/a	n/a	145	48	52
SR 0940/ I-380 Northbound Ramp	NB L	**450**	n/a	n/a	n/a	227	118	89
	EB L	**275**	n/a	n/a	n/a	201	95	101
SR 0314/ SR 0940 EB Ramps	NB L	**185**	n/a	n/a	n/a	123	113	103
	EB L	**315**	n/a	n/a	n/a	26	22	23
SR 0940/ Spruce Street/Harvest Lane	EB L	100	10	7	3	14	11	11
	WB L	250	6	0	0	7	0	1
SR 0940/Summit Ave/Commerce St	EB L	75	6	0	0	8	1	0
	WB L	75	1	1	0	1	1	0
SR 0940/Industrial Drive	EB L	350	65	10	11	58	9	10
	EB R	350	8	8	18	8	4	12
	WB L	250	220	155	114	212	151	115
	WB R	250	15	0	30	18	0	24
	NB L	150	408	152	148	408	152	148
	NB R	150	0	0	0	0	0	0
	SB L	190	177	72	56	178	75	56
	SB R	190	0	0	0	0	0	0

SR 0940/ Oak Street	EB L	235	147	71	152	142	116	153
	WB L	350	468	123	53	439	123	41
	WB R	350	0	0	0	0	0	0
	NB L	90	116	73	61	148	73	62
	NB R	180	0	0	0	0	0	0
	SB L	150	175	120	129	173	120	152
	SB R	150	0	0	0	0	0	0
SR 0940/ SR 0611/SR 0196	EB L	330	322	252	211	332	252	211
	EB R	330	574	497	346	697	659	532
	WB R	75	201	222	194	302	342	272
	NB L	260	409	467	463	342	655	650
	NB R	160	404	306	236	246	300	225
	SB R	100	423	190	83	640	190	83
SR 0940/ SR 0611/Driveway	WB R	335	180	56	54	253	59	57
	NB L	220	40	41	22	40	41	22
	SB L	260	233	272	254	259	325	315
SR 0611/ SR 0314 (East Leg)	WB L	100	519	120	78	717	210	150
	SB L	300	77	126	28	154	200	52
SR 0314/ Casino Driveway A	EB L	**535****	n/a	n/a	n/a	523	552	686
	NB L	**200**	n/a	n/a	n/a	11	18	17
SR 0314/ Casino Driveway B	EB L	**350****	n/a	n/a	n/a	876	922	1063
	EB LT	**350****	n/a	n/a	n/a	890	923	1062
	WB R	**160**	n/a	n/a	n/a	80	9	9
	NB L	**200**	n/a	n/a	n/a	64	73	87
	SB L	**115**	n/a	n/a	n/a	5	1	1

*** Length Shown is length of right turn lane. Left turn queue will not block the right turn lane. Actual length of left turn lanes is the length of the ramp.**

**** Length shown is to the end of the median. Actual length is the entire length of the internal loop road.**



LEGEND:

- Existing Traffic Signal

A(A)[A] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

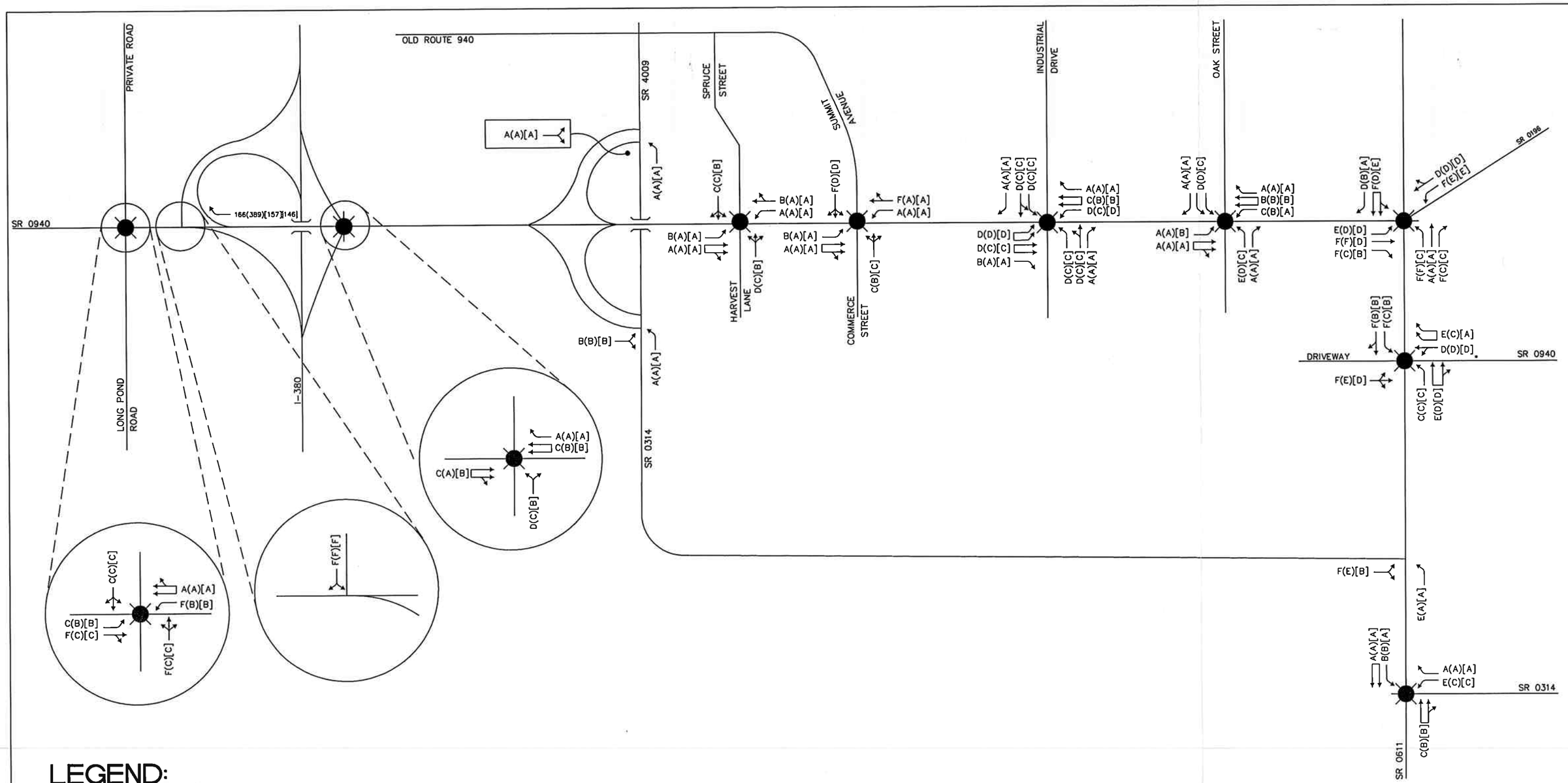
2005 Existing Peak Hour Levels of Service

FIGURE 9

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501



LEGEND:

- Existing Traffic Signal

A(A)[A] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

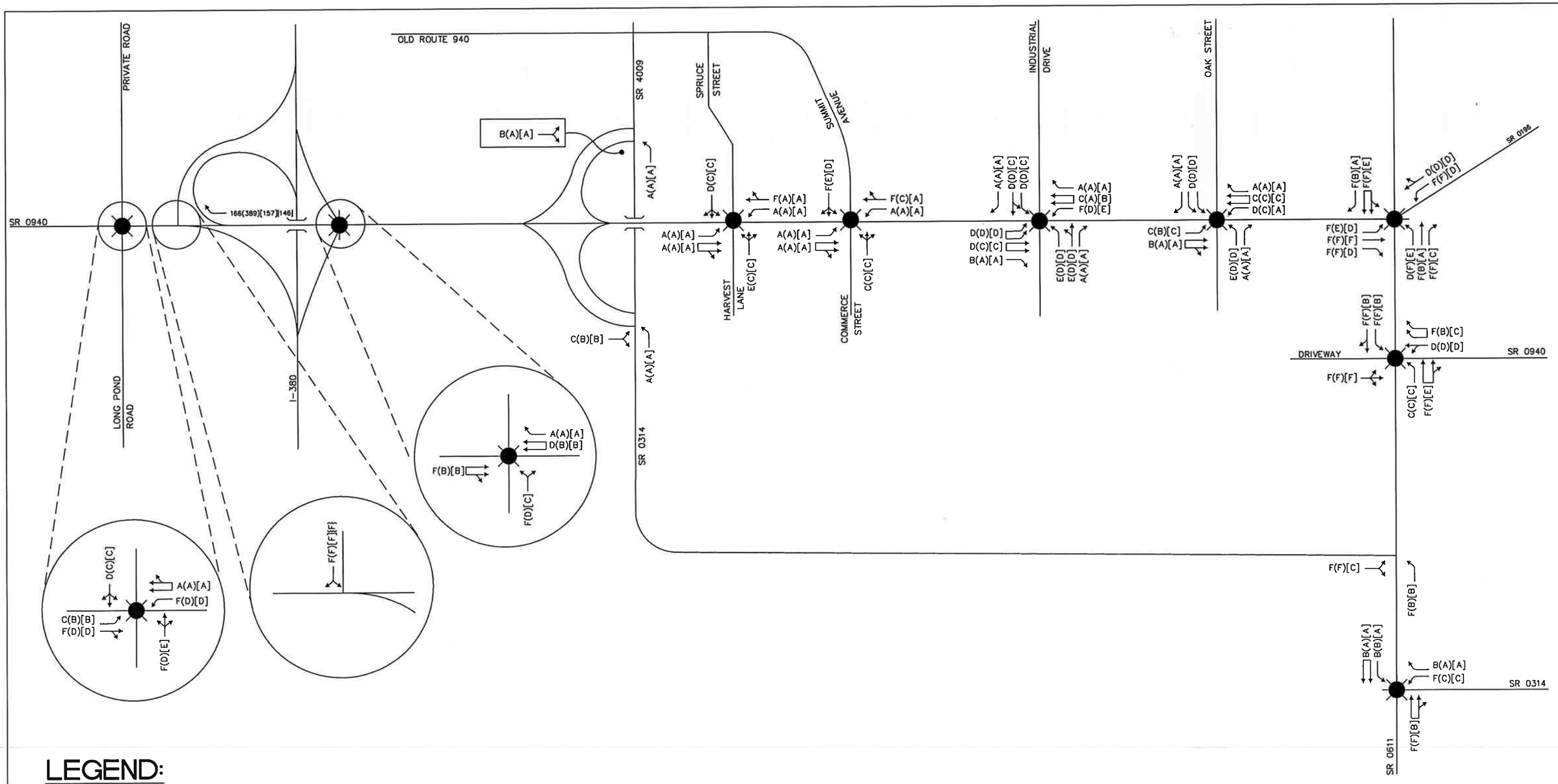
2009 Future No-Build
Peak Hour Levels of Service

FIGURE 10

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501



LEGEND:

– Existing Traffic Signal

A(A)[A] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

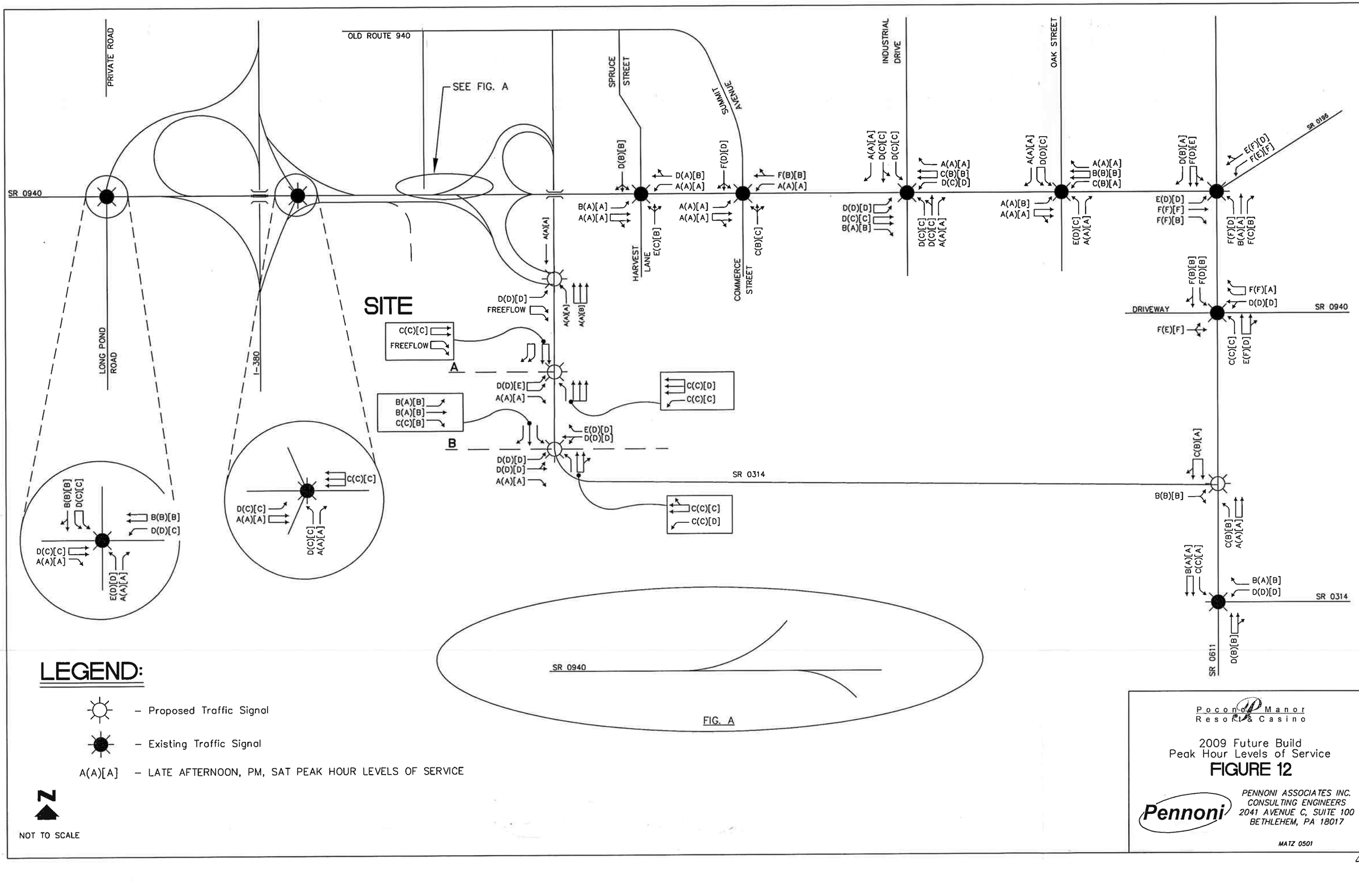
2019 Future No-Build
Peak Hour Levels of Service

FIGURE 11

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501



LEGEND:

- ☼ – Proposed Traffic Signal
- ✹ – Existing Traffic Signal
- A(A)[A] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

2009 Future Build
Peak Hour Levels of Service

FIGURE 12

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501

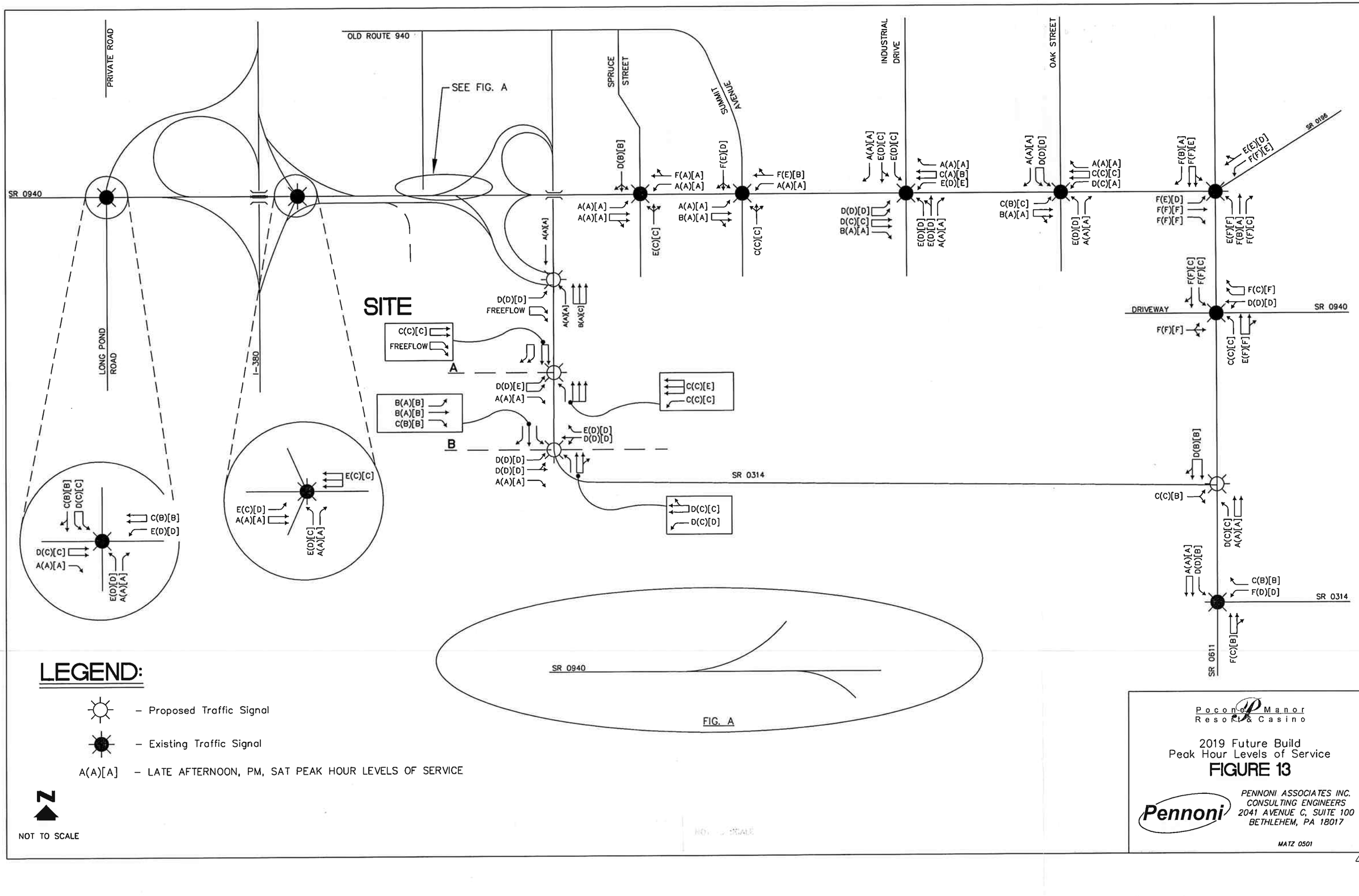


FIG. A

LEGEND:

- – Proposed Traffic Signal
- – Existing Traffic Signal

A(A)[A] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

2019 Future Build
Peak Hour Levels of Service

FIGURE 13

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501

CONCLUSIONS

Trip Generation for the proposed development resulted in a total of 5,792 new trips for the Friday late afternoon peak hour; 6,586 new trips for the Friday evening peak hour; and 6,966 new trips for the Saturday evening peak hour. To accommodate the additional traffic to the area roadways, the following off site roadway improvements are recommended. **Conceptual plans are enclosed in the back pocket of this report illustrating the recommended roadway improvements and site access.**

SR 0940/ Long Pond Road /Southbound I-380 Off Ramp

- Relocate the ramp to align opposite Long Pond Road and relocate the Stillwater Lake Estates Access west of its existing location (Stillwater Lake Estates Property Owners Association is not opposed to relocation if access that accommodates their needs is provided elsewhere. See enclose letter in **Appendix M.**)
- Dual left turn lanes and a shared through/right turn lane for the Southbound I-380 Off Ramp
- Dual left turn lanes westbound from SR 0940 to southbound Long Pond Road
- Right turn lane and two through lanes eastbound on SR 0940
- Dual left turn lanes and a right turn lane northbound on Long Pond Road

SR 0940/Southbound I-380 On Ramp

- Two ramp lanes
- Shift southbound I-380 to accommodate four lane section under SR 0940 bridge

SR 0940/Northbound I-380 Off Ramp

- Four through lanes on westbound SR 0940
- Dual left turn lanes on northbound I-380 Off Ramp
- Left turn lane eastbound on SR 0940
- Frontage road to SR 0314
- Signal phasing and timing

SR 0314/SR 0940 Westbound Ramps

- Eliminate the southbound through movement on SR 0314 to provide free flow conditions to/from the ramps
- Dual left turn lanes northbound on SR 0314

SR 0314/SR 0940 Eastbound Ramps

- Triple right turn lanes off the ramp
- A left turn lane and three through lanes northbound on SR 0314
- Signalize the intersection

SR 0314/Spruce Street/Harvest Lane

- Signal timing adjustments

SR 0314/Summit Avenue/Commerce Street

- Signal timing adjustments

SR 0940/Industrial Drive

- Signal timing adjustments

SR 0940/Oak Street

- Signal timing adjustments

SR 0940/SR 0611/SR 0196/Driveway

- Contribution towards construction of additional lanes on SR 0611

SR 0611/SR 0314 (West leg)

- Signalization

SR 0611/SR 0314 (East leg)

- Signal timing adjustments

Two study years were evaluated: 2009 (the year of opening) and 2019 (the ten-year buildout). **Table 1** summarizes the levels of service for the study intersections for both study years. Although level of service drops are expected, the proposed off-site improvements mitigate most of the drops. Given the ideal location along Interstate Route 380 and State Route 940, the Pocono Manor Resort & Casino development traffic can be adequately accommodated by the proposed roadway network with the recommended improvements mentioned above. Where mitigation is not attainable, a fair share contribution to the affected municipality is proposed.

APPENDIX A

Traffic Signal Permit Plans

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	SR 940		
	TOBYHANNA TOWNSHIP			
PERMIT NO. 45-215-4		SHEET 2 OF 2		
DATE ISSUED 8-9-91		DATE REVISED *10/29/03		

*CONDITION DIAGRAM ONLY

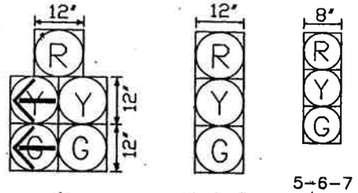
PHASING, TIMING and COLOR SEQUENCE CHART

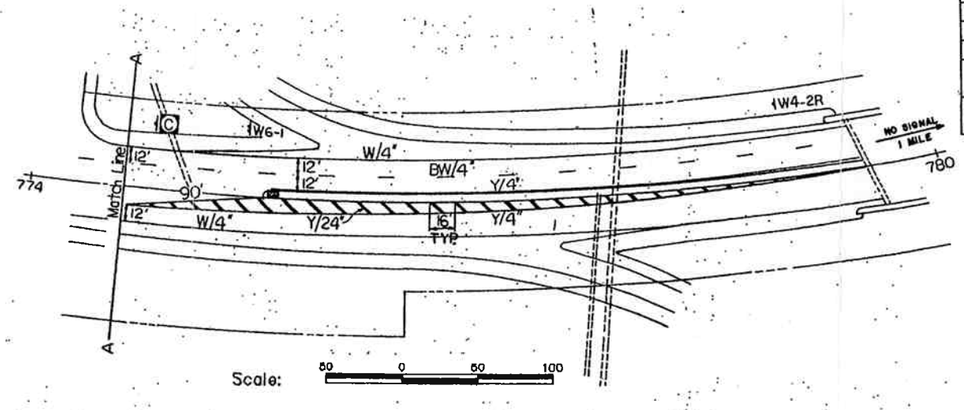
	PHASE 1		PHASE 2			PHASE 3			PHASE 4	① FLASHING OPERATION
	INTERVALS		INTERVALS			INTERVALS			INTERVALS	
SIGNALS	1	2	3	4	5	6	7	8		
1	G	G	G	Y	R	R	R	R		Y
2	G	G	G	Y	R	R	R	R		Y
3-4	R	R	G	Y	R	R	R	R		Y
5-6-9	R	R	R	R	R	G	Y	R		R
7-8	R	R	R	R	R	G	Y	R		R
FIXED		5		5	2		4	2		
MINIMUM	6					7				
PASSAGE	3					3				
MAXIMUM 1	9		26			17				
MAXIMUM 2	9		33			30				
MAXIMUM 3	17		32			23				
MEMORY	NL		MR			NL				

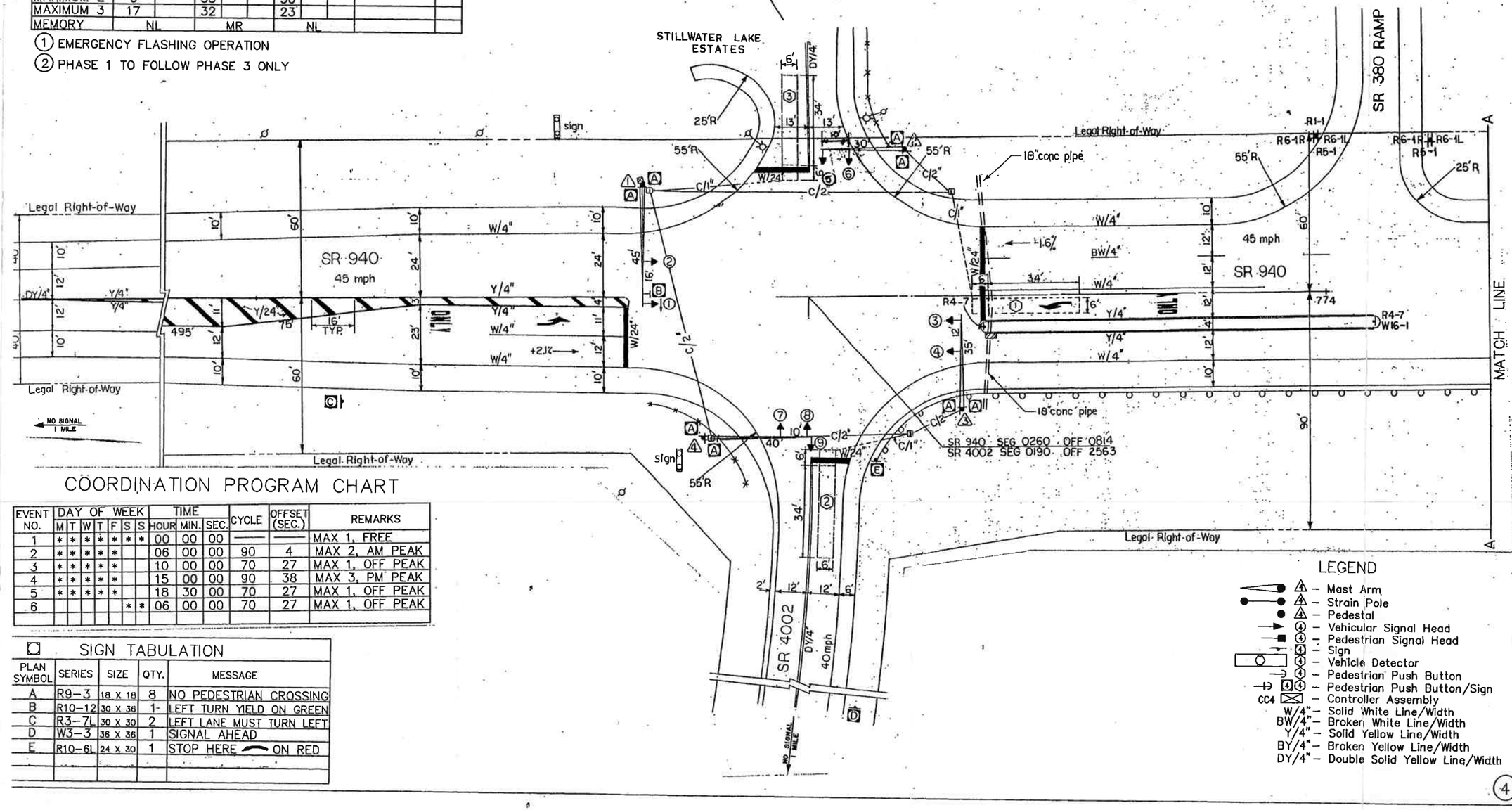
① EMERGENCY FLASHING OPERATION

② PHASE 1 TO FOLLOW PHASE 3 ONLY

SIGNAL INDICATIONS







COORDINATION PROGRAM CHART

EVENT NO.	DAY OF WEEK							TIME			CYCLE	OFFSET (SEC.)	REMARKS
	M	T	W	T	F	S	S	HOUR	MIN.	SEC.			
1	*	*	*	*	*	*	*	00	00	00	——	——	MAX 1, FREE
2	*	*	*	*	*			06	00	00	90	4	MAX 2, AM PEAK
3	*	*	*	*	*			10	00	00	70	27	MAX 1, OFF PEAK
4	*	*	*	*	*			15	00	00	90	38	MAX 3, PM PEAK
5	*	*	*	*	*			18	30	00	70	27	MAX 1, OFF PEAK
6						*	*	06	00	00	70	27	MAX 1, OFF PEAK

SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	QTY.	MESSAGE
A	R9-3	18 X 18	8	NO PEDESTRIAN CROSSING
B	R10-12	30 X 36	1	LEFT TURN YIELD ON GREEN
C	R3-7L	30 X 30	2	LEFT LANE MUST TURN LEFT
D	W3-3	36 X 36	1	SIGNAL AHEAD
E	R10-6L	24 X 30	1	STOP HERE ON RED

LEGEND

- Mast Arm
- Strain Pole
- Pedestal
- Vehicular Signal Head
- Pedestrian Signal Head
- Sign
- Vehicle Detector
- Pedestrian Push Button
- Pedestrian Push Button/Sign
- CC4 — Controller Assembly
- W/4" — Solid White Line/Width
- BW/4" — Broken White Line/Width
- Y/4" — Solid Yellow Line/Width
- BY/4" — Broken Yellow Line/Width
- DY/4" — Double Solid Yellow Line/Width

GENERAL NOTES

Installation, operation and maintenance of this traffic signal to be in accordance with Pennsylvania Department of Transportation Regulations on Official Traffic Control Devices.

No modifications of this installation are permitted unless prior approval is granted, in writing, by the Department.

All maintenance necessary for proper visibility of the signals, including trimming trees, is the responsiblity of the Permittee.

All signs and pavement markings indicated on this drawing are considered part of the permit and are to be installed and maintained by the Permittee, unless otherwise indicated, except the longitudinal pavement markings on State highways which will be maintained by the Department.

Install post mounted signals with the signal heads a minimum of 2 feet behind the face of the curb or edge of the shoulder. Support poles for overhead signals will have a minimum horizontal clearance of 2 feet.

The bottom of signal heads and signs erected over the roadway are not to be less than 15 feet nor more than 19 feet above the roadway. The bottom of post mounted signal heads are to be not less than 8 feet nor more than 15 feet above the sidewalk or pavement grade.

The minimum horizontal distance between signal heads measured at right angles to the approach is to be 8 feet.

In addition to this signal permit, the Permittee will obtain a Highway Occupancy Permit prior to any openings being made in or under any portion of a State Highway.

This drawing cannot be used as a construction drawing unless the Permittee complies with the provisions of Act 172, Prevention of Damage to Underground Utilities. Prior to construction consult with utility companies to resolve any problems which may be created due to the location of utilities.

Place pavement markings in accordance with the Department of Transportation Pavement Marking Handbook.

County: MONROE

Municipality: TOBYHANNA TOWNSHIP

Intersection: S.R. 940 AND S.R. 4002 (LONG POND ROAD)

Reviewed: _____ Municipal Official — 6/20/03 Date

Reviewed: _____ District Traffic Signals Div. — 6/24/03 Date

Recommended: _____ District Traffic Engineer — 6/25/03 Date

Scale: 20 0 20 40

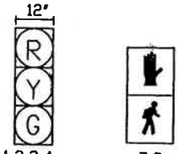
④

PHASING, TIMING and COLOR SEQUENCE CHART

	PHASE 2+6				PHASE 4					EMERGENCY FLASHING OPERATION
	INTERVALS				INTERVALS			INTERVALS	INTERVALS	
SIGNALS	1	2	3	4	5	6	7			
1,2,9	G	G	Y	R	R	R	R			Y
3,4,10	G	G	Y	R	R	R	R			Y
5,6	R	R	R	R	G	Y	R			R
7,8	M	FH	FH	H	H	H	H			OFF
FIXED			4.5	2		4.5	2			
MIN GREEN					10					
PASSAGE					3					
MAX 1	29				28					
MAX 2	40				37					
MAX 3	42				35					
MAX 4	20				17					
✳ PED	7	7								
MEM	MR				NL					

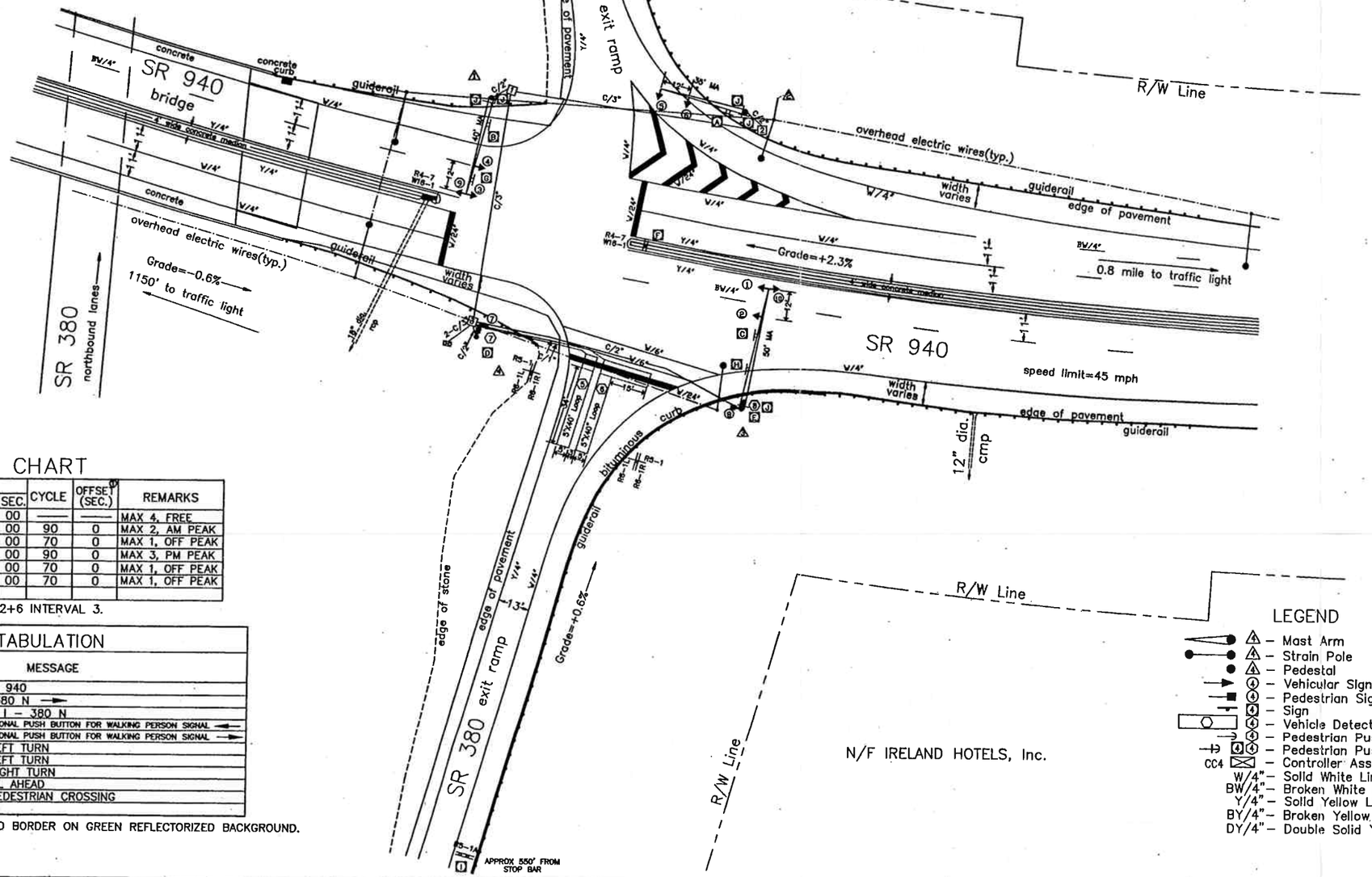
✳ UPON PEDESTRIAN ACTUATION ONLY, OTHERWISE HAND AT ALL TIMES

SIGNAL INDICATIONS



- SIGNAL HEADS 1,2,3,4,5,6,9,10 SHALL BE EQUIPPED WITH BACKPLATES.

ALL SIGNAL HEADS SHALL HAVE LED'S



PROGRAM CHART

EVENT NO.	DAY OF WEEK M	T	W	T	F	S	S	TIME HOUR	MIN.	SEC.	CYCLE	OFFSET ① (SEC.)	REMARKS
1	✳	✳	✳	✳	✳	✳	✳	00	00	00	——	——	MAX 4, FREE
2	✳	✳	✳	✳	✳			06	00	00	90	0	MAX 2, AM PEAK
3	✳	✳	✳	✳	✳			10	00	00	70	0	MAX 1, OFF PEAK
4	✳	✳	✳	✳	✳			15	00	00	90	0	MAX 3, PM PEAK
5	✳	✳	✳	✳	✳			18	30	00	70	0	MAX 1, OFF PEAK
6						✳	✳	06	00	00	70	0	MAX 1, OFF PEAK

① OFFSET REFERENCED TO PHASE 2+6 INTERVAL 3.

SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	QTY.	MESSAGE
✳ A	D3-4	78x16	1	Route 940
✳ B	D3-4	96x16	1	I - 380 N →
✳ C	D3-4	96x16	1	← I - 380 N
D	R10-3B	12x9	1	EDUCATIONAL PUSH BUTTON FOR WALKING PERSON SIGNAL ←
E	R10-3B	12x9	1	EDUCATIONAL PUSH BUTTON FOR WALKING PERSON SIGNAL →
F	R3-2	24x24	1	NO LEFT TURN
G	R3-2	30x30	1	NO LEFT TURN
H	R3-1	30x30	1	NO RIGHT TURN
I	W3-3	48X48	1	SIGNAL AHEAD
J	R9-3A	24x24	6	NO PEDESTRIAN CROSSING

✳ WHITE REFLECTORIZED LEGEND AND BORDER ON GREEN REFLECTORIZED BACKGROUND.

LEGEND

- Mast Arm
- Strain Pole
- Pedestal
- Vehicular Signal Head
- Pedestrian Signal Head
- Sign
- Vehicle Detector
- Pedestrian Push Button
- Pedestrian Push Button/Sign
- CC4 – Controller Assembly
- W/4" – Solid White Line/Width
- BW/4" – Broken White Line/Width
- Y/4" – Solid Yellow Line/Width
- BY/4" – Broken Yellow Line/Width
- DY/4" – Double Solid Yellow Line/Width

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE			
	TOBYHANNA TOWNSHIP			
PERMIT NO. 45-215-009		SHEET 2 OF 2		
DATE ISSUED 7-7-03		DATE REVISED		

GENERAL NOTES

Installation, operation and maintenance of this traffic signal to be in accordance with Pennsylvania Department of Transportation Regulations on Official Traffic Control Devices.

No modifications of this installation are permitted unless prior approval is granted, in writing, by the Department.

All maintenance necessary for proper visibility of the signals, including trimming trees, is the responsibility of the Permittee.

All signs and pavement markings indicated on this drawing are considered part of the permit and are to be installed and maintained by the Permittee, unless otherwise indicated, except the longitudinal pavement markings on State highways which will be maintained by the Department.

Install post mounted signals with the signal heads a minimum of 2 feet behind the face of the curb or edge of the shoulder. Support poles for overhead signals will have a minimum horizontal clearance of 2 feet.

The bottom of signal heads and signs erected over the roadway are not to be less than 15 feet nor more than 19 feet above the roadway. The bottom of post mounted signal heads are to be not less than 8 feet nor more than 15 feet above the sidewalk or pavement grade.

The minimum horizontal distance between signal heads measured at right angles to the approach is to be 8 feet.

In addition to this signal permit, the Permittee will obtain a Highway Occupancy Permit prior to any openings being made in or under any portion of a State Highway, if applicable.

This drawing cannot be used as a construction drawing unless the Permittee complies with the provisions of Act 187, Prevention of Damage to Underground Utilities. Prior to construction consult with utility companies to resolve any problems which may be created due to the location of utilities.

Place pavement markings in accordance with the Department of Transportation Pavement Marking Handbook, Standards Series 7600.

Maintenance and protection of traffic for the installation and maintenance of this traffic signal to be in accordance with Publication 203, Work Zone Traffic Control.

County: MONROE

Municipality: TOBYHANNA TOWNSHIP

Intersection: S.R. 940 & S.R. 380 (entrance and exit ramps)

Reviewed: _____ Municipal Official — 6/20/03 Date

Reviewed: _____ District Traffic Signals Div. — 6/24/03 Date

Recommended: _____ District Traffic Engineer — 6/25/03 Date

Scale: 0 25 50 75

PHASING, TIMING and COLOR SEQUENCE CHART

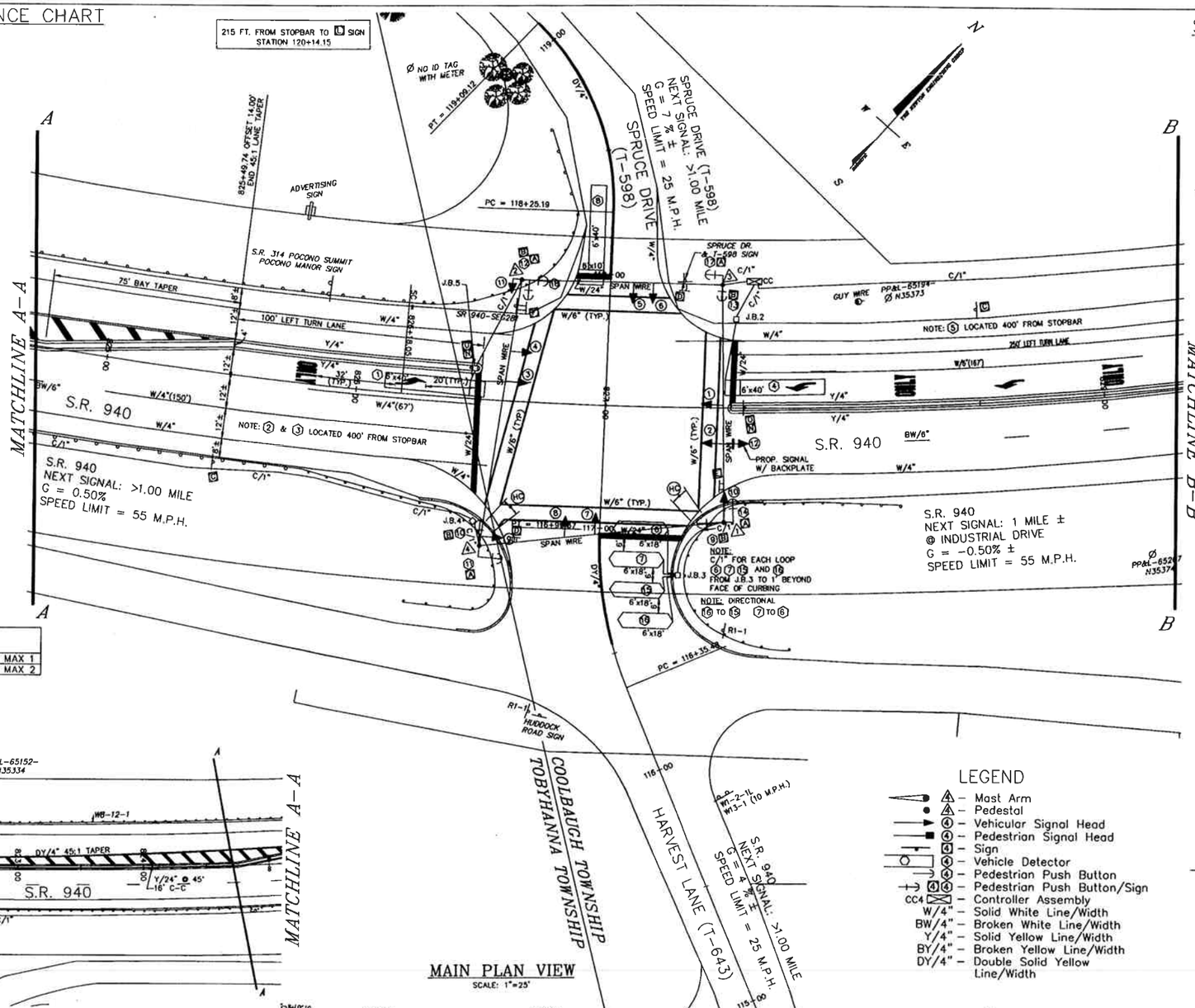
	PHASE 2+6			PHASE 4+8			EMERGENCY FLASHING OPERATION
	INTERVALS			INTERVALS			
SIGNALS	1	2	3	4	5	6	
1,2,3,4,12	G	Y	R	R	R	R	Y
5,6,7,8	R	R	R	G	Y	R	R
9	G	Y	R	R	R	R	Y
10,11	R	R	R	G	Y	R	R
FIXED		5.5	1.5		3	2	
MINIMUM	12			3			
ADDED INITIAL	4						
MAX. INITIAL	20						
PASSAGE	6			3			
TO REDUCE	10						
BEFORE RED	20						
MIN. GAP	2						
MAXIMUM 1	50			28			
MAXIMUM 2	30			18			
PEDESTRIAN ②	18			19			
MEMORY	mR			NL			

① VOLUME DENSITY TIMINGS TO BEGIN UPON SIDE STREET ACTUATION

② UPON PEDESTRIAN ACTUATION ONLY

PROGRAM CHART

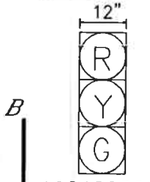
EVENT NO.	DAY OF WEEK							TIME			CYCLE	OFFSET (SEC.)	REMARKS
	M	T	W	T	F	S	S	HOUR	MIN.	SEC			
1	•	•	•	•	•	•	•	06	00	00	90	--	VOLUME DENSITY MAX 1
1	•	•	•	•	•	•	•	23	00	00	60	--	VOLUME DENSITY MAX 2



SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	QTY.	MESSAGE
A	R10-3	9"x12"	4	PUSH BUTTON FOR GREEN LIGHT →
B	R10-3	9"x12"	4	PUSH BUTTON FOR GREEN LIGHT ←
C	R3-7L	30"x30"	2	LEFT LANE MUST TURN LEFT
D	D3-4	96"x16"	2	Route 940
E	D3-5	96"x28"	1	← Spruce Dr Harvest Ln →
F	D3-5	96"x28"	1	← Harvest Ln Spruce Dr →
K	W3-3	48"x48"	2	SIGNAL AHEAD (SYMBOL) WITH FLASHERS
C	W3-3	48"x48"	2	SIGNAL AHEAD (SYMBOL)
N	W16-1	18"x18"	2	HAZARD MARKER
O	R4-7	24"x30"	1	KEEP RIGHT

SIGNAL INDICATIONS



NOTE:
1. SIGNALS 1,2,3,4, & 12 TO BE EQUIPPED WITH STROBE FOR RED INDICATION.
2. SIGNAL 12 TO BE EQUIPPED WITH A BACKPLATE.

DISTRICT	COUNTY	ROUTE	SECTION
5-0	MONROE	S.R.940	
TOBYHANNA & COOLBAUGH TOWNSHIPS			
PERMIT NO. 45-215-5		SHEET 2	OF
DATE ISSUED		DATE REVISED	

GENERAL NOTES

Installation, operation, and maintenance of this traffic signal to be in accordance with Pennsylvania Department of Transportation Regulations on Official Traffic Control Devices.

No modifications of this installation are permitted unless prior approval is granted, in writing, by the Department.

All maintenance necessary for proper visibility of the signals, including trimming trees, is the responsibility of the Permittee.

All signs and pavement markings indicated on this drawing are considered part of the permit and are to be installed and maintained by the Permittee, unless otherwise indicated, except the longitudinal pavement markings on State highways, which will be maintained by the Department.

Install post mounted signals with the signal heads a minimum of 2 feet behind the face of the curb or edge of the shoulder. Support poles for the overhead signals will have a minimum horizontal clearance of 2 feet.

The bottom of signal heads and signs erected over the roadway are not to be less than 15 feet nor more than 19 feet above the roadway. The bottom of post mounted signal heads are to be not less than 8 feet nor more than 15 feet above the sidewalk or pavement grade.

The minimum horizontal distance be signal heads measured at right angles the approach is to be 8 feet.

In addition to this signal permit, th Permittee will obtain a Highway Occup Permit prior to any openings being m in or under any portion of a State Hi if applicable.

This drawing cannot be used as a construction drawing unless the Permit complies with the provisions of Act 18 Prevention of Damage to Underground Prior to construction, consult with utili companies to resolve any problems wh be created due to the location of utili

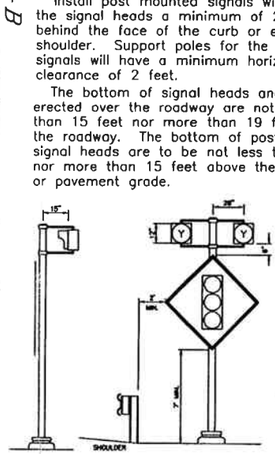
Pavement markings will be placed i accordance with the Department of Transportation Pavement Marking Hand

Maintenance and protection of traffic for the installation and maintenance of traffic signal to be in accordance with lication 203, work zone traffic control.

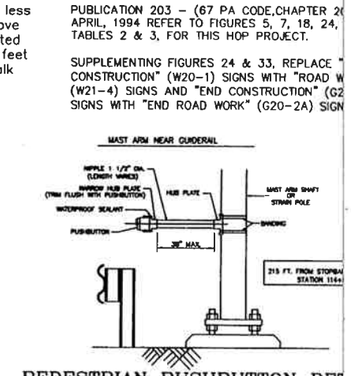
WORK ZONE TRAFFIC CONTROL

PUBLICATION 203 – (67 PA CODE,CHAPTER 2(APRIL, 1994 REFER TO FIGURES 5, 7, 18, 24, TABLES 2 & 3, FOR THIS HOP PROJECT.

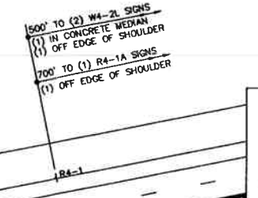
SUPPLEMENTING FIGURES 24 & 33, REPLACE " CONSTRUCTION" (W20-1) SIGNS WITH "ROAD W (W21-4) SIGNS AND "END CONSTRUCTION" (G2 SIGNS WITH "END ROAD WORK" (G20-2A) SIGN



K W3-3 DETAIL
N.T.S.



PEDESTRIAN PUSHBUTTON DET
N.T.S.



LEGEND

- Mast Arm
- Pedestal
- Vehicular Signal Head
- Pedestrian Signal Head
- Sign
- Vehicle Detector
- Pedestrian Push Button
- Pedestrian Push Button/Sign
- CC – Controller Assembly
- W/4" – Solid White Line/Width
- BW/4" – Broken White Line/Width
- Y/4" – Solid Yellow Line/Width
- BY/4" – Broken Yellow Line/Width
- DY/4" – Double Solid Yellow Line/Width

County:
MONROE

Municipality:
TOBYHANNA TOWNSHIP

Intersection:
S.R. 940, HARVEST LANE (T-64
and SPRUCE DRIVE (T-598)

Reviewed:

Municipal Official Da

Reviewed:

District Traffic Signals Div. Da

Recommended:

District Traffic Engineer Da

(5)

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	940		
	COOLBAUGH TOWNSHIP			
PERMIT NO. 45-203-16		SHEET 2 OF 3		
DATE ISSUED		DATE REVISED		

PROGRAM CHART

EVENT NO.	DAY OF WEEK M	T	W	T	F	S	S	TIME HOUR	MIN.	SEC.	CYCLE	REMARKS
1	*	*	*	*	*	*	*	06	00	00	60	VOLUME DENSITY MAX. 1
2	*	*	*	*	*	*	*	23	00	00	60	VOLUME DENSITY MAX. 2

SIGN TABULATION

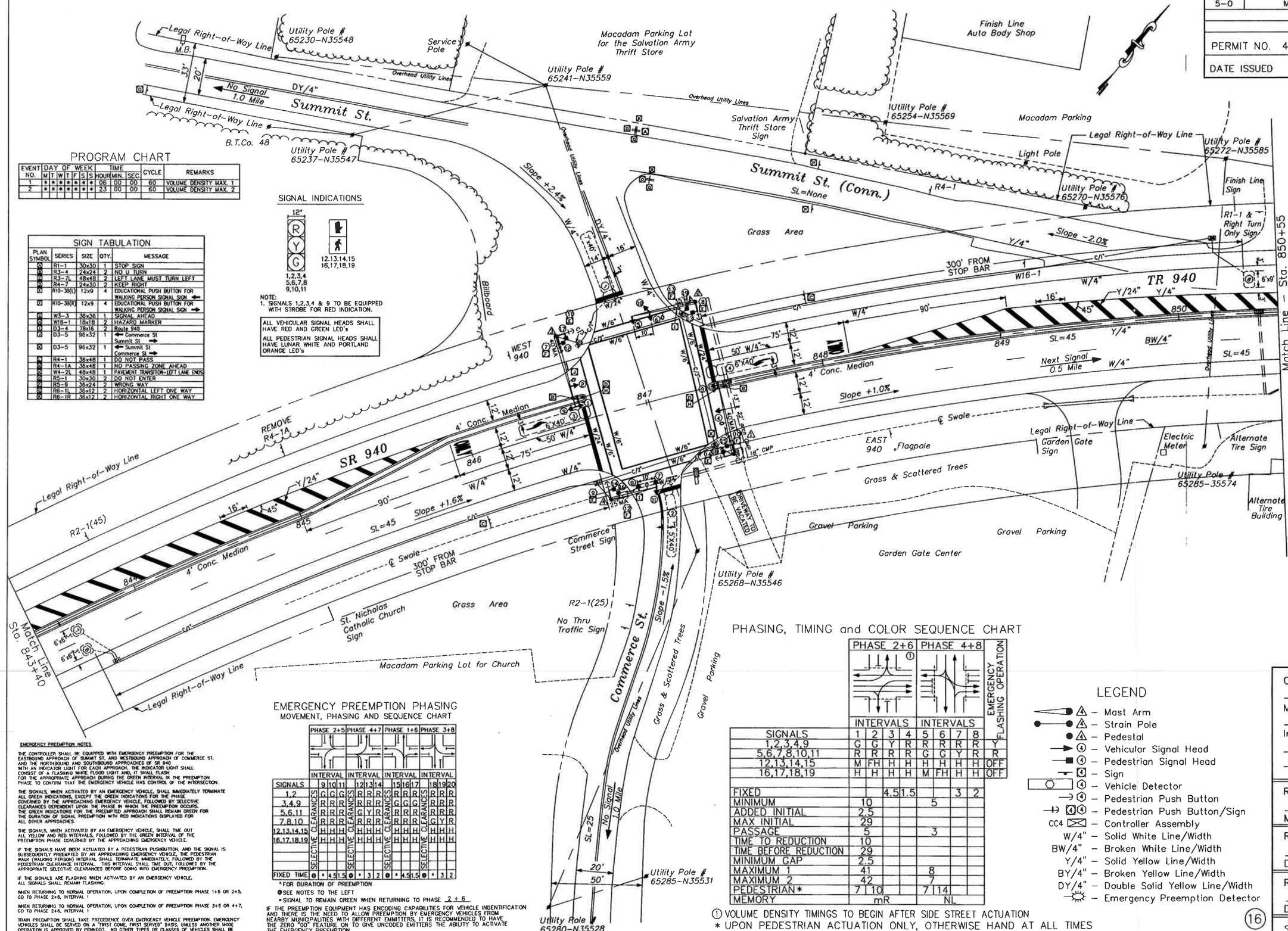
PLAN SYMBOL	SERIES	SIZE	QTY.	MESSAGE
	R1-1	30x30	1	STOP SIGN
	R3-4	24x24	2	NO U TURN
	R3-7L	48x48	2	LEFT LANE MUST TURN LEFT
	R4-7	24x30	2	KEEP RIGHT
	R10-3B(L)	12x9	4	EDUCATIONAL PUSH BUTTON FOR WALKING PERSON SIGNAL SIGN ←
	R10-3B(R)	12x9	4	EDUCATIONAL PUSH BUTTON FOR WALKING PERSON SIGNAL SIGN →
	W3-3	36x36	1	SIGNAL AHEAD
	W16-1	18x18	2	HAZARD MARKER
	D3-4	78x16	2	Route 940
	D3-5	96x32	1	← Commerce St / Summit St →
	D3-5	96x32	1	← Summit St / Commerce St →
	R4-1	36x48	1	DO NOT PASS
	R4-1A	36x48	1	NO PASSING ZONE AHEAD
	W4-2L	48x48	1	PAVEMENT TRANSITION-LEFT LANE ENDS
	R5-1	30x30	2	DO NOT ENTER
	R5-9	36x24	2	WRONG WAY
	R6-1L	36x12	2	HORIZONTAL LEFT ONE WAY
	R6-1R	36x12	2	HORIZONTAL RIGHT ONE WAY

SIGNAL INDICATIONS

NOTE:
1. SIGNALS 1,2,3,4 & 9 TO BE EQUIPPED WITH STROBE FOR RED INDICATION.

ALL VEHICULAR SIGNAL HEADS SHALL HAVE RED AND GREEN LED's

ALL PEDESTRIAN SIGNAL HEADS SHALL HAVE LUNAR WHITE AND PORTLAND ORANGE LED's



EMERGENCY PREEMPTION PHASING
MOVEMENT, PHASING AND SEQUENCE CHART

	PHASE 2+5			PHASE 4+7			PHASE 1+6			PHASE 3+8		
	INTERVAL			INTERVAL			INTERVAL			INTERVAL		
SIGNALS	9	10	11	12	13	14	15	16	17	18	19	20
1,2	G	G	G	R	R	R	R	R	R	R	R	R
3,4,9	R	R	R	R	R	R	G	G	G	R	R	R
5,6,11	R	R	R	G	Y	R	R	R	R	R	R	R
7,8,10	R	R	R	R	R	R	R	R	R	G	Y	R
12,13,14,15	H	H	H	H	H	H	H	H	H	H	H	H
16,17,18,19	H	H	H	H	H	H	H	H	H	H	H	H
	SELECTIVE CLEARANCES			SELECTIVE CLEARANCES			SELECTIVE CLEARANCES			SELECTIVE CLEARANCES		
FIXED TIME	●	•	4.5	1.5	●	•	3	2	●	•	4.5	1.5	●	•	3	2

*FOR DURATION OF PREEMPTION
●SEE NOTES TO THE LEFT
•SIGNAL TO REMAIN GREEN WHEN RETURNING TO PHASE 2 + 6

IF THE PREEMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE INDENTIFICATION AND THERE IS THE NEED TO ALLOW PREEMPTION BY EMERGENCY VEHICLES FROM NEARBY MUNICIPALITIES WITH DIFFERENT EMMITTERS, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PREEMPTION.

EMERGENCY PREEMPTION NOTES

THE CONTROLLER SHALL BE EQUIPPED WITH EMERGENCY PREEMPTION FOR THE EASTBOUND APPROACH OF SUMMIT ST. AND WESTBOUND APPROACH OF COMMERCE ST. AND THE NORTHBOUND AND SOUTHBOUND APPROACHES OF SR 940 WITH AN INDICATOR LIGHT FOR EACH APPROACH. THE INDICATOR LIGHT SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT AND, IT SHALL FLASH FOR THE APPROPRIATE APPROACH DURING THE GREEN INTERVAL IN THE PREEMPTION PHASE TO CONFIRM THAT THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION.

THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL IMMEDIATELY TERMINATE ALL GREEN INDICATIONS, EXCEPT THE GREEN INDICATIONS FOR THE PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE, FOLLOWED BY SELECTIVE CLEARANCES DEPENDENT UPON THE PHASE IN WHICH THE PREEMPTION OCCURS. THE GREEN INDICATIONS FOR THE PREEMPTED APPROACH SHALL REMAIN GREEN FOR THE DURATION OF SIGNAL PREEMPTION WITH RED INDICATIONS DISPLAYED FOR ALL OTHER APPROACHES.

THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TIME OUT ALL YELLOW AND RED INTERVALS, FOLLOWED BY THE GREEN INTERVAL OF THE PREEMPTION PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE.

IF THE SIGNALS HAVE BEEN ACTUATED BY A PEDESTRIAN PUSHBUTTON, AND THE SIGNAL IS SUBSEQUENTLY PREEMPTED BY AN APPROACHING EMERGENCY VEHICLE, THE PEDESTRIAN WALK (WALKING PERSON) INTERVAL SHALL TERMINATE IMMEDIATELY, FOLLOWED BY THE PEDESTRIAN CLEARANCE INTERVAL. THIS INTERVAL SHALL TIME OUT, FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES BEFORE GOING INTO EMERGENCY PREEMPTION.

IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE, ALL SIGNALS SHALL REMAIN FLASHING.

WHEN RETURNING TO NORMAL OPERATION, UPON COMPLETION OF PREEMPTION PHASE 1+6 OR 2+5, GO TO PHASE 2+6, INTERVAL 1

WHEN RETURNING TO NORMAL OPERATION, UPON COMPLETION OF PREEMPTION PHASE 3+8 OR 4+7, GO TO PHASE 2+6, INTERVAL 1

TRAIN PREEMPTION SHALL TAKE PRECEDENCE OVER EMERGENCY VEHICLE PREEMPTION. EMERGENCY VEHICLES SHALL BE SERVED ON A "FIRST COME, FIRST SERVED" BASIS, UNLESS ANOTHER MODE OPERATION IS APPROVED BY PENNDOT. NO OTHER TYPES OR CLASSES OF VEHICLES SHALL BE PERMITTED TO PREEMPT THE TRAFFIC SIGNAL UNLESS APPROVED BY PENNDOT.

PHASING, TIMING and COLOR SEQUENCE CHART

	PHASE 2+6 ①				PHASE 4+8				EMERGENCY FLASHING OPERATION
	INTERVALS				INTERVALS				
SIGNALS	1	2	3	4	5	6	7	8	
1,2,3,4,9	G	G	Y	R	R	R	R	R	Y
5,6,7,8,10,11	R	R	R	R	G	G	Y	R	R
12,13,14,15	M	FH	H	H	H	H	H	H	OFF
16,17,18,19	H	H	H	H	M	FH	H	H	OFF
FIXED			4.5	1.5			3	2	
MINIMUM	10				5				
ADDED INITIAL	2.5								
MAX INITIAL	29								
PASSAGE	5				3				
TIME TO REDUCTION	10								
TIME BEFORE REDUCTION	29								
MINIMUM GAP	2.5								
MAXIMUM 1	41				8				
MAXIMUM 2	42				7				
PEDESTRIAN*	7	10			7	14			
MEMORY	mR				NL				

① VOLUME DENSITY TIMINGS TO BEGIN AFTER SIDE STREET ACTUATION
* UPON PEDESTRIAN ACTUATION ONLY, OTHERWISE HAND AT ALL TIMES

LEGEND

- Mast Arm
- Strain Pole
- Pedestal
- Vehicular Signal Head
- Pedestrian Signal Head
- Sign
- Vehicle Detector
- Pedestrian Push Button
- Pedestrian Push Button/Sign
- CC4 – Controller Assembly
- W/4" – Solid White Line/Width
- BW/4" – Broken White Line/Width
- Y/4" – Solid Yellow Line/Width
- BY/4" – Broken Yellow Line/Width
- DY/4" – Double Solid Yellow Line/Width
- Emergency Preemption Detector

GENERAL NOTES

Installation, operation and maintenance of this traffic signal to be in accordance with Pennsylvania Department of Transportation Regulations on Official Traffic Control Devices.

No modifications of this installation are permitted unless prior approval is granted, in writing, by the Department.

All maintenance necessary for proper visibility of the signals, including trimming trees, is the responsiblity of the Permittee.

All signs and pavement markings indicated on this drawing are considered part of the permit and are to be installed and maintained by the Permittee, unless otherwise indicated, except the longitudinal pavement markings on State highways which will be maintained by the Department.

Install post mounted signals with the signal heads a minimum of 2 feet behind the face of the curb or edge of the shoulder. Support poles for overhead signals will have a minimum horizontal clearance of 2 feet.

The bottom of signal heads and signs erected over the roadway are not to be less than 15 feet nor more than 19 feet above the roadway. The bottom of post mounted signal heads are to be not less than 8 feet nor more than 15 feet above the sidewalk or pavement grade.

The minimum horizontal distance between signal heads measured at right angles to the approach is to be 8 feet.

In addition to this signal permit, the Permittee will obtain a Highway Occupancy Permit prior to any openings being made in or under any portion of a State Highway, if applicable.

This drawing cannot be used as a construction drawing unless the Permittee complies with the provisions of Act 187, Prevention of Damage to Underground Utilities. Prior to construction consult with utility companies to resolve any problems which may be created due to the location of utilities.

Place pavement markings in accordance with the Department of Transportation Pavement Marking Standards TC-7600 Series.

Maintenance and protection of traffic for the installation and maintenance of this traffic signal to be in accordance with Publication 203, Work Zone Traffic Control.

County: MONROE

Municipality: COOLBAUGH TOWNSHIP

Intersection: SR 0940 (TR 940), SUMMIT STREET & COMMERCE STREET

Reviewed: _____ Municipal Official _____ Date

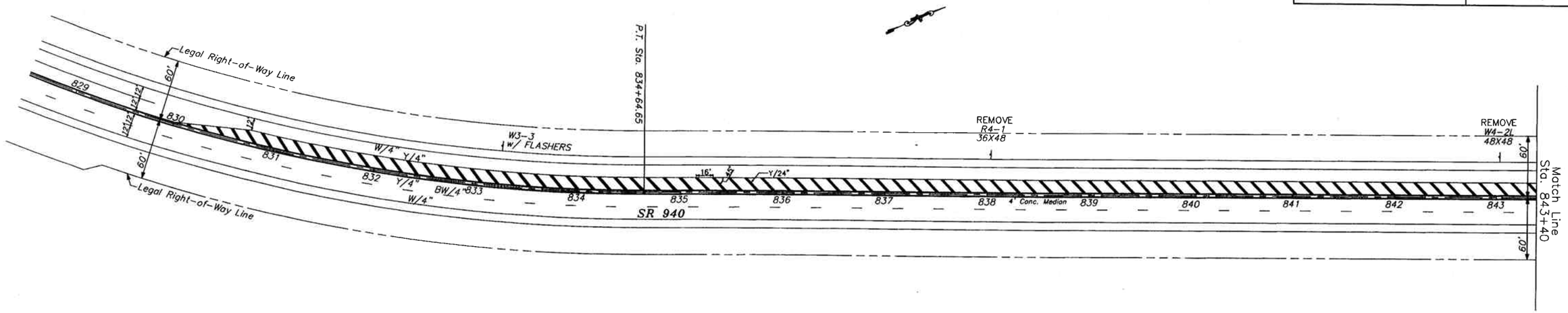
Reviewed: _____ District Traffic Signals Div. _____ Date

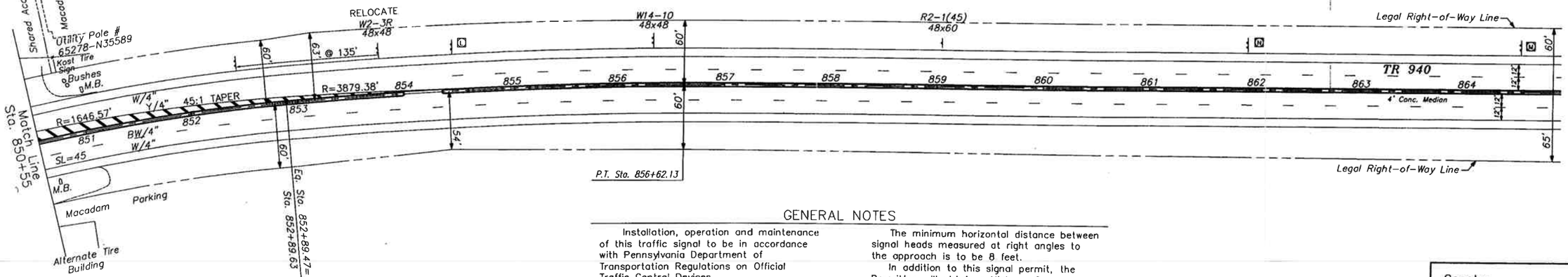
Recommended: _____ District Traffic Engineer _____ Date

Scale: 25 0 25 50

16

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	940		
	COOLBAUGH TOWNSHIP			
PERMIT NO. 45-203-16		SHEET 3 OF 3		
DATE ISSUED		DATE REVISED		





SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	QTY.	MESSAGE
A	R1-1	30x30	1	STOP SIGN
B	R3-4	24x24	2	NO U TURN
C	R3-7L	48x48	2	LEFT LANE MUST TURN LEFT
D	R4-7	24x30	2	KEEP RIGHT
E	R10-3B(L)	12x9	4	EDUCATIONAL PUSH BUTTON FOR WALKING PERSON SIGNAL SIGN ←
F	R10-3B(R)	12x9	4	EDUCATIONAL PUSH BUTTON FOR WALKING PERSON SIGNAL SIGN →
G	W3-3	36x36	1	SIGNAL AHEAD
H	W16-1	18x18	2	HAZARD MARKER
I	D3-4	78x16	2	Route 940
J	D3-5	96x32	1	← Commerce St Summit St →
K	D3-5	96x32	1	← Summit St Commerce St →
L	R4-1	36x48	1	DO NOT PASS
M	R4-1A	36x48	1	NO PASSING ZONE AHEAD
N	W4-2L	48x48	1	PAVEMENT TRANSITION-LEFT LANE ENDS
O	R5-1	30x30	2	DO NOT ENTER
P	R5-9	36x24	2	WRONG WAY
Q	R6-1L	36x12	2	HORIZONTAL LEFT ONE WAY
R	R6-1R	36x12	2	HORIZONTAL RIGHT ONE WAY

GENERAL NOTES

Installation, operation and maintenance of this traffic signal to be in accordance with Pennsylvania Department of Transportation Regulations on Official Traffic Control Devices.

No modifications of this installation are permitted unless prior approval is granted, in writing, by the Department.

All maintenance necessary for proper visibility of the signals, including trimming trees, is the responsibility of the Permittee.

All signs and pavement markings indicated on this drawing are considered part of the permit and are to be installed and maintained by the Permittee, unless otherwise indicated, except the longitudinal pavement markings on State highways which will be maintained by the Department.

Install post mounted signals with the signal heads a minimum of 2 feet behind the face of the curb or edge of the shoulder. Support poles for overhead signals will have a minimum horizontal clearance of 2 feet.

The bottom of signal heads and signs erected over the roadway are not to be less than 15 feet nor more than 19 feet above the roadway. The bottom of post mounted signal heads are to be not less than 8 feet nor more than 15 feet above the sidewalk or pavement grade.

The minimum horizontal distance between signal heads measured at right angles to the approach is to be 8 feet.

In addition to this signal permit, the Permittee will obtain a Highway Occupancy Permit prior to any openings being made in or under any portion of a State Highway, if applicable.

This drawing cannot be used as a construction drawing unless the Permittee complies with the provisions of Act 187, Prevention of Damage to Underground Utilities. Prior to construction consult with utility companies to resolve any problems which may be created due to the location of utilities.

Place pavement markings in accordance with the Department of Transportation Pavement Marking Standards TC-7600 Series.

Maintenance and protection of traffic for the installation and maintenance of this traffic signal to be in accordance with Publication 203, Work Zone Traffic Control.

LEGEND

- Mast Arm
- Strain Pole
- Pedestal
- Vehicular Signal Head
- Pedestrian Signal Head
- Sign
- Vehicle Detector
- Pedestrian Push Button
- Pedestrian Push Button/Sign
- CC4 – Controller Assembly
- W/4" – Solid White Line/Width
- BW/4" – Broken White Line/Width
- Y/4" – Solid Yellow Line/Width
- BY/4" – Broken Yellow Line/Width
- DY/4" – Double Solid Yellow Line/Width
- Emergency Preemption Detector

County: MONROE

Municipality: COOLBAUGH TOWNSHIP

Intersection: SR 0940 (TR 940), SUMMIT STREET & COMMERCE STREET

Reviewed: _____ Municipal Official _____ Date

Reviewed: _____ District Traffic Signals Div. _____ Date

Recommended: _____ District Traffic Engineer _____ Date

Scale: 50 0 50 100

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	SR 940		1 of 1
BOROUGH OF MOUNT POCONO				
PERMIT NO. 45-403-2	SHEET 2 OF 2			
DATE ISSUED 7-13-90	DATE REVISED 5-25-00*			

* Condition Diagram Only

PHASING, TIMING, AND COLOR SEQUENCE CHART

SIGNALS	PHASE 2+5 ② INTERVALS 1	2	3	PHASE 2+6 ⑩ INTERVALS 4	5	6	PHASE 3+7 INTERVALS 7	8	9	PHASE 4+7 INTERVALS 10	11	12	PHASE 3+8 INTERVALS 13	14	15	PHASE 4+8 INTERVALS 16	17	18	EMERGENCY FLASHING
1	G/G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
2,3	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
4	G	Y/Y	R	G	Y	R	R/G	R/Y	R	R	R	R	R/G	R/Y	R	R	R	R	Y
5,6	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
7	R	R	R	R	R	R	R/G	R/Y	R	G/G	Y	R	R	R	R	G	Y	R	R
8	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	G	Y	R	R
9	R	R	R	R	R	R	R/G	R/Y	R	R	R	R	G/G	Y	R	G	Y	R	R
10	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	Y	R	R
11,12	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
13,14	G	Y	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	Y
15,16	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	G	Y	R	R
17,18	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	G	Y	R	R
FIXED		5	2		5	2		3	2		3	2		3	2		3	2	
MINIMUM	2			12			2			2			2			2			
ADDED INITIAL				4															
MAX INITIAL				20															
PASSAGE	2			6			2			2			2			2			
TO REDUCE				15															
BEFORE RED				20															
MIN. GAP				3															
MAXIMUM 1	10			24			11			11			11			16			
MAXIMUM 2	9			33			15			15			15			9			
PEDESTRIAN ①				22												24			
MEMORY	NL			mR			NL			NL			NL			NL			

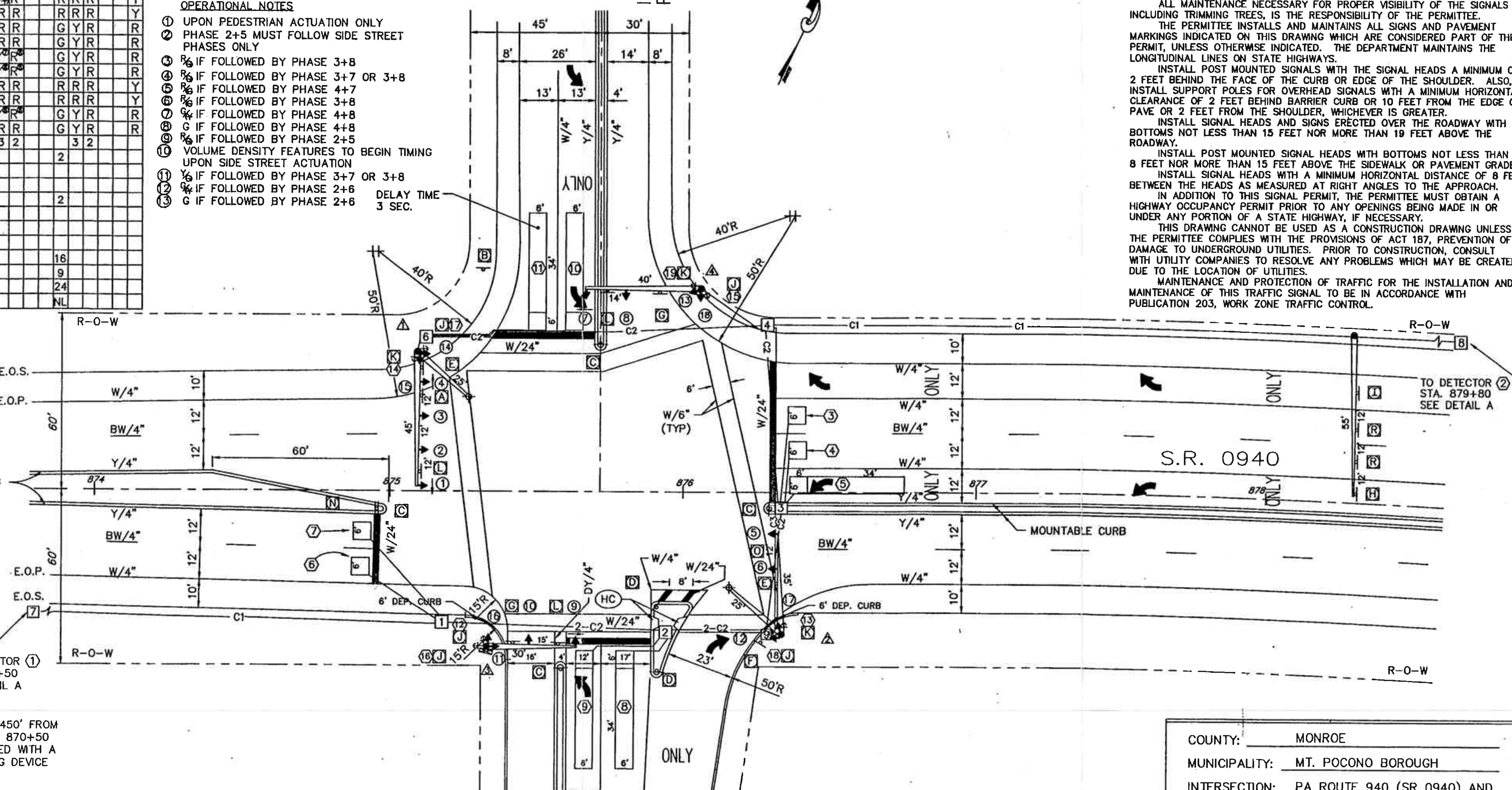
PROGRAM CHART

EVENT	DAY	HOUR	MIN.	SEC.	PROGRAM	CYCLE	OFFSET	REMARKS
1	1-5	15	00	00	MAX 1	85	0	COORDINATION
2	1-5	22	00	00	MAX 2	90	–	VOLUME DENSITY
3	6,7	11	00	00	MAX 1	85	0	COORDINATION
4	6,7	15	00	00	MAX 2	90	–	VOLUME DENSITY

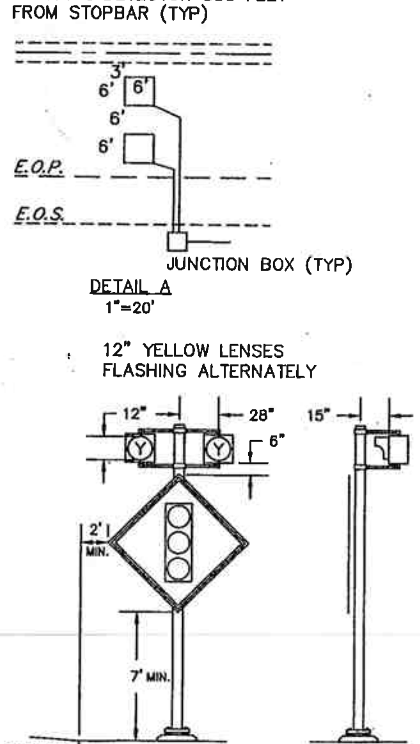
DAY 1 = MONDAY
OFFSETS ARE IN SECONDS
OFFSETS REFERENCED TO THE BEGINNING OF INTERVAL 5, PHASE 2+6

OPERATIONAL NOTES

① UPON PEDESTRIAN ACTUATION ONLY
② PHASE 2+5 MUST FOLLOW SIDE STREET PHASES ONLY
③ R/G IF FOLLOWED BY PHASE 3+8
④ R/G IF FOLLOWED BY PHASE 3+7 OR 3+8
⑤ R/G IF FOLLOWED BY PHASE 4+7
⑥ R/G IF FOLLOWED BY PHASE 3+8
⑦ G/Y IF FOLLOWED BY PHASE 4+8
⑧ G IF FOLLOWED BY PHASE 4+8
⑨ R/G IF FOLLOWED BY PHASE 2+5
⑩ VOLUME DENSITY FEATURES TO BEGIN TIMING UPON SIDE STREET ACTUATION
⑪ Y/G IF FOLLOWED BY PHASE 3+7 OR 3+8
⑫ G/Y IF FOLLOWED BY PHASE 2+6
⑬ G IF FOLLOWED BY PHASE 2+6



ADVANCE DETECTOR 350 FEET FROM STOPBAR (TYP)



DETAIL A
1"=20'

SIGN M DETAIL
N.T.S.

SIGN M LOCATED 450' FROM STOPBAR AT STA. 870+50 AND SUPPLEMENTED WITH A FLASHING WARNING DEVICE

GENERAL NOTES

INSTALL, OPERATE, AND MAINTAIN THIS TRAFFIC SIGNAL IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS ON OFFICIAL TRAFFIC CONTROL DEVICES.

NO MODIFICATION OF THIS INSTALLATION IS PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE DEPARTMENT.

ALL MAINTENANCE NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS INCLUDING TRIMMING TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.

THE PERMITTEE INSTALLS AND MAINTAINS ALL SIGNS AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING WHICH ARE CONSIDERED PART OF THE PERMIT, UNLESS OTHERWISE INDICATED. THE DEPARTMENT MAINTAINS THE LONGITUDINAL LINES ON STATE HIGHWAYS.

INSTALL POST MOUNTED SIGNALS WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF THE CURB OR EDGE OF THE SHOULDER. ALSO, INSTALL SUPPORT POLES FOR OVERHEAD SIGNALS WITH A MINIMUM HORIZONTAL CLEARANCE OF 2 FEET BEHIND BARRIER CURB OR 10 FEET FROM THE EDGE OF PAVE OR 2 FEET FROM THE SHOULDER, WHICHEVER IS GREATER.

INSTALL SIGNAL HEADS AND SIGNS ERECTED OVER THE ROADWAY WITH BOTTOMS NOT LESS THAN 15 FEET NOR MORE THAN 19 FEET ABOVE THE ROADWAY.

INSTALL POST MOUNTED SIGNAL HEADS WITH BOTTOMS NOT LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK OR PAVEMENT GRADE.

INSTALL SIGNAL HEADS WITH A MINIMUM HORIZONTAL DISTANCE OF 8 FEET BETWEEN THE HEADS AS MEASURED AT RIGHT ANGLES TO THE APPROACH.

IN ADDITION TO THIS SIGNAL PERMIT, THE PERMITTEE MUST OBTAIN A HIGHWAY OCCUPANCY PERMIT PRIOR TO ANY OPENINGS BEING MADE IN OR UNDER ANY PORTION OF A STATE HIGHWAY, IF NECESSARY.

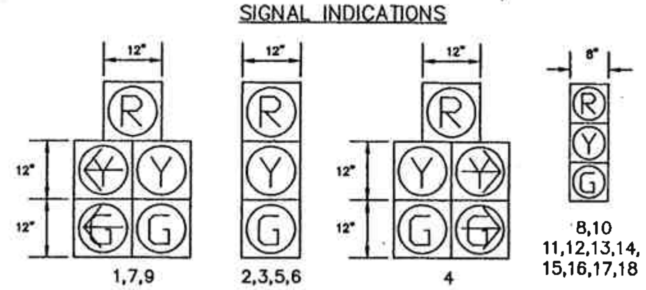
THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF ACT 187, PREVENTION OF DAMAGE TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

MAINTENANCE AND PROTECTION OF TRAFFIC FOR THE INSTALLATION AND MAINTENANCE OF THIS TRAFFIC SIGNAL TO BE IN ACCORDANCE WITH PUBLICATION 203, WORK ZONE TRAFFIC CONTROL.

SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	QTY	MESSAGE
A	R10-10R	24x30	1	RIGHT TURN SIGNAL
B	R3-7L	30x30	1	LEFT LANE MUST TURN LEFT
C	R4-7	24x30	5	KEEP RIGHT
D	W16-1	18x18	2	HAZARD MARKER
E	D3-4	96x16	2	Industrial Park Rd
F	R1-2	36x36	1	YIELD
G	D3-4	81x16	2	Route 940
H	R3-5L	30x36	2	LEFT TURN
I	R3-5R	30x36	2	RIGHT TURN
J	R10-3	9x12	5	PUSH BUTTON FOR GREEN LIGHT ←
K	R10-3	9x12	3	PUSH BUTTON FOR GREEN LIGHT →
L	R10-12	30x36	3	LEFT TURN YIELD ON GREEN "●"
M	W3-3	48x48	1	SIGNAL AHEAD
N	R3-3	24x24	1	NO TURNS
O	R3-3	36x36	1	NO TURNS
R	R3-5S	30x36	3	STRAIGHT THROUGH

SIGNAL INDICATIONS



SIGNALS 1,2,3,4,5 & 6 TO BE EQUIPPED WITH STROBE FOR RED INDICATION
SIGNALS 1,2,3,4,5, & 6 TO BE EQUIPPED WITH BACKPLATES AND FULL CIRCLE VISOR
SIGNALS 7,8,9,10,11,12,13,14,15,16,17, & 18 TO BE EQUIPPED WITH FULL CIRCLE VISOR
SIGNALS 11,13,15, & 17 TO BE EQUIPPED WITH LOUVERS

LEGEND

- —C2— – CONDUIT / SIZE
- ② – JUNCTION BOX
- 15' – MAST ARM AND LENGTH
- ②– VEHICULAR SIGNAL HEAD
- Ⓐ – SIGN
- ② – VEHICLE DETECTOR
- ④ⓘ – PEDESTRIAN PUSHBUTTON W/SIGN
- – CONTROLLER ASSEMBLY
- – LUMINAIRE
- W/6" – SOLID WHITE LINE / WIDTH
- Y/4" – SOLID YELLOW LINE / WIDTH
- DY/4" – DOUBLE SOLID YELLOW LINE / WIDTH
- DW/4" – DOTTED WHITE EXTENSION LINE / WIDTH

COUNTY: MONROE
MUNICIPALITY: MT. POCONO BOROUGH
INTERSECTION: PA ROUTE 940 (SR 0940) AND INDUSTRIAL PARK ROAD

REVIEWED: [signature] MUNICIPAL OFFICIAL	8-4-98 DATE
REVIEWED: [signature] DISTRICT TRAFFIC SIGNAL DIVISION	8-13-98 DATE
RECOMMENDED: [signature] DISTRICT TRAFFIC ENGINEER	8/19/98 DATE

②

SCALE: 0 20 40 80

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	SR 940		
BOROUGH OF MOUNT POCONO				
PERMIT NO. 45-403-3		SHEET 2 OF 2		
DATE ISSUED 8-25-98		DATE REVISED 11-8-00 ▲		

▲ CONDITION DIAGRAM ONLY

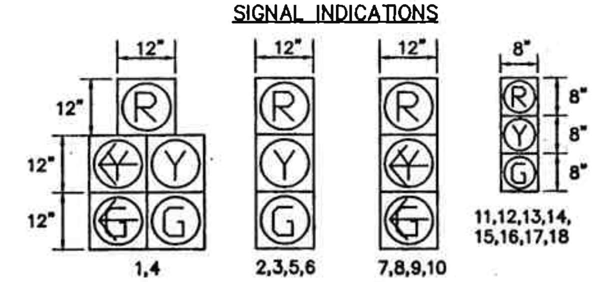
PHASING, TIMING, AND COLOR SEQUENCE CHART

SIGNALS	PHASE 1+5 INTERVALS 1	2	3	PHASE 1+6 INTERVALS 4	5	6	PHASE 2+5 INTERVALS 7	8	9	PHASE 2+6 INTERVALS 10	11	12	PHASE 4 INTERVALS 13	14	15	PHASE 8 INTERVALS 16	17	18	EMERGENCY FLASHING
	⑩			⑩			⑩			⑧									
1	R/G ⑥	R ① / Y ①	R ①	R	R	R	G/G ⑥	Y ④	R ④	G	Y ④	R ④	R	R	R	R	R	R	Y
2,3	R	R	R	R	R	R	G	Y ④	R ④	G	Y ④	R ④	R	R	R	R	R	R	Y
4	R/G ⑥	R ② / Y ②	R ②	G/G ⑥	Y ③	R ④	R	R	R	G	Y ④	R ④	R	R	R	R	R	R	Y
5,6	R	R	R	G	Y ④	R ④	R	R	R	G	Y ④	R ④	R	R	R	R	R	R	Y
7,8	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G/	Y/	R	R
9,10	R	R	R	R	R	R	R	R	R	R	R	R	G/	Y/	R	R	R	R	R
11,12	R	R	R	R	R	R	G	Y	R	G	Y	R	R	R	R	R	R	R	Y
13,14	R	R	R	G	Y	R	R	R	R	G	Y	R	R	R	R	R	R	R	Y
15,16	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R
17,18	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	R
FIXED		5.5	1.5		5.5	1.5		5.5	1.5		5.5	1.5		3	3		3	3	
MINIMUM	3			3			3			12			3			3			
ADDED INITIAL										4									
MAX INITIAL										20									
PASSAGE	3			3			3			6			3			3			
TO REDUCE										15									
BEFORE RED										20									
MIN. GAP										3									
MAXIMUM 1	7			7			7			32			10			10			
MAXIMUM 2	7			7			7			43			7			7			
PEDESTRIAN ⑨				⑦			⑦			20			22			22			
MEMORY	NL			NL			NL			mR			L			L			

OPERATIONAL NOTES

① R/G IF FOLLOWED BY 2+5
② R/G IF FOLLOWED BY 1+6
③ G/Y IF FOLLOWED BY 2+6
④ G IF FOLLOWED BY 2+6
⑤ G IF FOLLOWED BY 2+5
⑥ G IF FOLLOWED BY 1+6
⑦ TIMING WILL BE AS SHOWN IN PHASE 2+6. INTERVALS 1 & 2 MAY BE COMPLETED IN THIS PHASE OR MAY TIME OUT IN PHASE 2+6.
⑧ VOLUME DENSITY TIMINGS TO BEGIN AFTER PHASE 4 OR PHASE 8 ACTUATION.
⑨ UPON PEDESTRIAN ACTUATION ONLY
⑩ PHASE 1+5, PHASE 1+6, OR PHASE 2+5 TO FOLLOW PHASE 4 OR PHASE 8.

SIGNAL INDICATIONS



SIGNALS 1,2, & 3 TO BE EQUIPPED WITH STROBE FOR RED INDICATION

SIGNALS 1,2,3,4,5, & 6 TO BE EQUIPPED WITH BACKPLATES

SIGNALS 11,12,13,14,15,16,17, & 18 TO BE EQUIPPED WITH TUNNEL VISORS AND 0° LOUVERS

GENERAL NOTES

INSTALL, OPERATE, AND MAINTAIN THIS TRAFFIC SIGNAL IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS ON OFFICIAL TRAFFIC CONTROL DEVICES.

NO MODIFICATION OF THIS INSTALLATION IS PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE DEPARTMENT.

ALL MAINTENANCE NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS INCLUDING TRIMMING TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.

THE PERMITTEE INSTALLS AND MAINTAINS ALL SIGNS AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING WHICH ARE CONSIDERED PART OF THE PERMIT, UNLESS OTHERWISE INDICATED. THE DEPARTMENT MAINTAINS THE LONGITUDINAL LINES ON STATE HIGHWAYS.

INSTALL POST MOUNTED SIGNALS WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF THE CURB OR EDGE OF THE SHOULDER. ALSO, INSTALL SUPPORT POLES FOR OVERHEAD SIGNALS WITH A MINIMUM HORIZONTAL CLEARANCE OF 2 FEET BEHIND BARRIER CURB OR 10 FEET FROM THE EDGE OF PAVE OR 2 FEET FROM THE SHOULDER, WHICHEVER IS GREATER.

INSTALL SIGNAL HEADS AND SIGNS ERECTED OVER THE ROADWAY WITH BOTTOMS NOT LESS THAN 15 FEET NOR MORE THAN 19 FEET ABOVE THE ROADWAY.

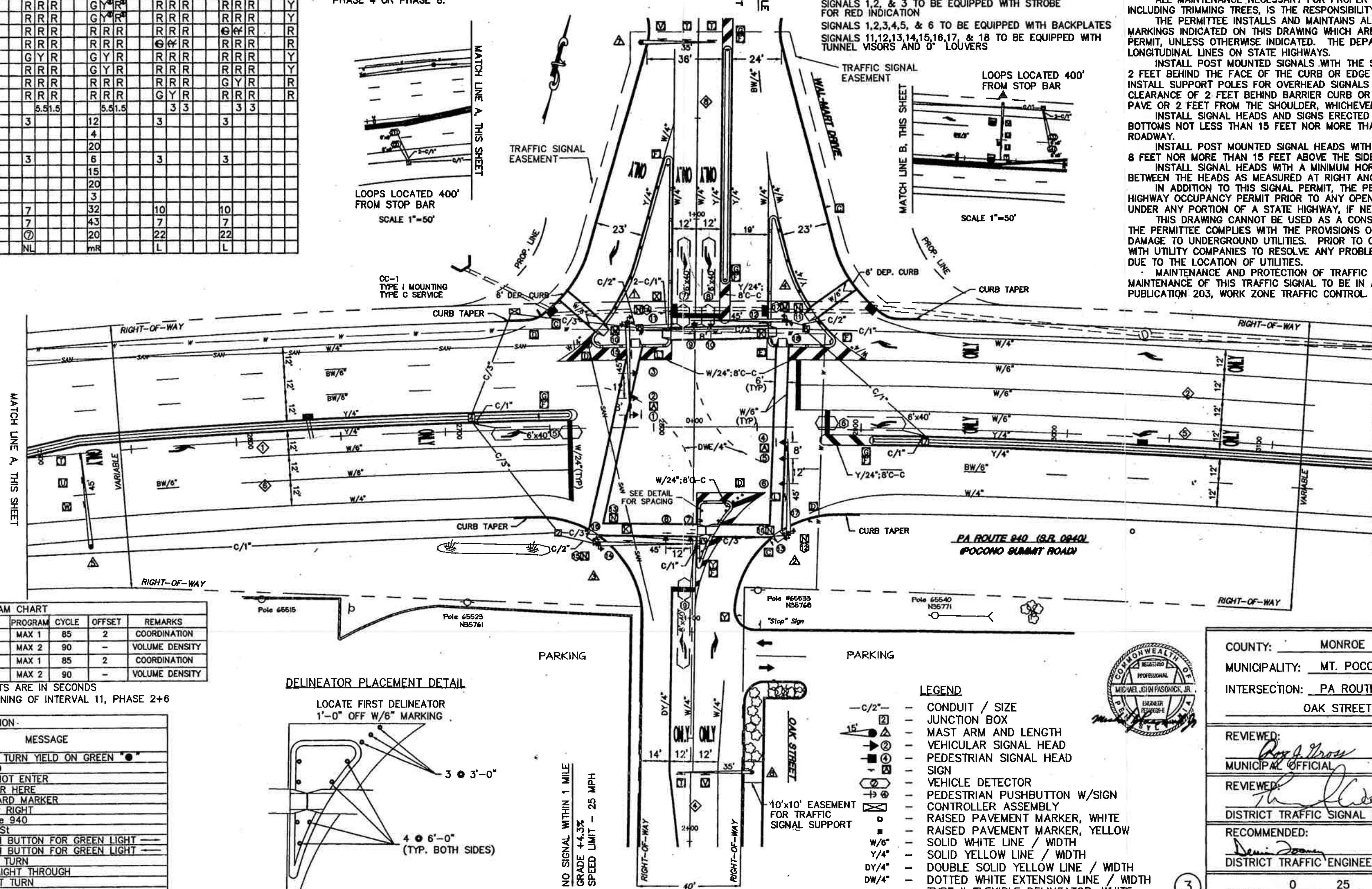
INSTALL POST MOUNTED SIGNAL HEADS WITH BOTTOMS NOT LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK OR PAVEMENT GRADE.

INSTALL SIGNAL HEADS WITH A MINIMUM HORIZONTAL DISTANCE OF 8 FEET BETWEEN THE HEADS AS MEASURED AT RIGHT ANGLES TO THE APPROACH.

IN ADDITION TO THIS SIGNAL PERMIT, THE PERMITTEE MUST OBTAIN A HIGHWAY OCCUPANCY PERMIT PRIOR TO ANY OPENINGS BEING MADE IN OR UNDER ANY PORTION OF A STATE HIGHWAY, IF NECESSARY.

THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF ACT 187, PREVENTION OF DAMAGE TO UNDERGROUND UTILITIES. PRIOR TO CONSTRUCTION, CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

MAINTENANCE AND PROTECTION OF TRAFFIC FOR THE INSTALLATION AND MAINTENANCE OF THIS TRAFFIC SIGNAL TO BE IN ACCORDANCE WITH PUBLICATION 203, WORK ZONE TRAFFIC CONTROL.



PROGRAM CHART								
EVENT	DAY	HOUR	MIN.	SEC.	PROGRAM	CYCLE	OFFSET	REMARKS
1	1-5	15	00	00	MAX 1	85	2	COORDINATION
2	1-5	22	00	00	MAX 2	90	-	VOLUME DENSITY
3	6,7	11	00	00	MAX 1	85	2	COORDINATION
4	6,7	15	00	00	MAX 2	90	-	VOLUME DENSITY

DAY 1 = MONDAY OFFSETS ARE IN SECONDS
OFFSETS REFERENCED TO THE BEGINNING OF INTERVAL 11, PHASE 2+6

SIGN TABULATION				
PLAN SYMBOL	SERIES	SIZE	QTY	MESSAGE
A	R10-12	30x36	2	LEFT TURN YIELD ON GREEN "●"
C	R1-2	36x36	3	YIELD
D	R5-1	30x30	4	DO NOT ENTER
E	R4-14	24x30	1	ENTER HERE
F	W16-1	18x18	7	HAZARD MARKER
G	R4-7	24x30	4	KEEP RIGHT
K	D3-4	81x16	2	Route 940
L	D3-4	54x16	2	Oak St
M	R10-3	9x12	2	PUSH BUTTON FOR GREEN LIGHT ⟶
N	R10-3	9x12	6	PUSH BUTTON FOR GREEN LIGHT ⟵
T	R3-5L	30x36	5	LEFT TURN
U	R3-5S	30x36	3	STRAIGHT THROUGH
V	R3-5R	30x36	3	RIGHT TURN
W	R3-5SR	30x36	1	OPTIONAL RIGHT TURN
X	R3-8LL	30x30	1	LANE USE CONTROL - DOUBLE LEFT TURN ONLY
Y	R3-8LR	30x30	2	LANE USE CONTROL - LEFT/RIGHT TURNS ONLY

COUNTY: MONROE

MUNICIPALITY: MT. POCONO BOROUGH

INTERSECTION: PA ROUTE 940 (SR 0940) AND OAK STREET/WAL-MART DRIVEWAY

COMMONWEALTH OF PENNSYLVANIA, REGISTERED PROFESSIONAL ENGINEER, MICHAEL JOHN PASONICK, JR.

REVIEWED: MUNICIPAL OFFICIAL	10/18/00 DATE
REVIEWED: DISTRICT TRAFFIC SIGNAL DIVISION	11/6/00 DATE
RECOMMENDED: DISTRICT TRAFFIC ENGINEER	11/7/00 DATE

SCALE: 0 25 50 100

③

3-0	MONROE	611	025
MT POCONO BOROUGH			
PERMIT NO. 45-403-1		SHEET 2 OF	
DATE ISSUED 11-23-88		DATE REVISED 8-2	

PHASING, TIMING and COLOR SEQUENCE CHART

SIGNALS	PHASE 1			PHASE 2			PHASE 3			PHASE 4			PHASE 5 EMERGENCY PREEMPTION			FLASHING
	INTERVALS			INTERVALS			INTERVALS			INTERVALS			INTERVALS			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	G	Y	R	R	R	R	R	R	R	R	R	R	SELECTIVE YELLOW	R	G/Y	R	Y
2	G	Y	R	R	R	R	R	R	R	R	R	R		R	G	Y	R	Y
3,4	G	Y	R	R	R	R	R	R	R	G	Y	R		R	R	R	R	Y
5,6	G	Y	R	R	R	R	R	R	R	R	R	R		R	R	R	R	Y
7	G	Y	R	G	Y	R	G	Y	R	R	R	R		R	G	Y	R	Y
8	G	Y	R	R	R	R	R	R	R	R	R	R		R	R	G/Y	R	Y
9	G	Y	R	R	R	R	R	R	R	R	R	R		R	G	Y	R	OFF
10, 11	R	R	R	R	R	R	G	Y	R	R	R	R		R	R	R	R	R
12, 13	R	R	R	G	Y	R	R	R	R	R	R	R		R	R	R	R	R
14	R	R	R	G	Y	R	R	R	R	R	R	R		R	R	R	R	R
15, 16	R	R	R	R	R	R	R	R	R	G	Y	R		R	R	R	R	R
17, 18	R	R	R	R	R	R	R	R	R	G	Y	R		R	R	R	R	R
FIXED TIME		4	2.25		4	2.25		4	2.25		4	2.25	4	2.25		4	2.25
MINIMUM	3			3			3			3							
PASSAGE	3			3			3			3							
MAX I	20			15			15			10					45		
MAX II	25			18			20			12							

FRI. MON.
5:30 PM - 7:00 AM
MAX II - 7:00 AM - 9:00 AM
3:30 PM - 5:30 PM
MAX I - ALL OTHER TIMES

CONTROLLER NOTES

1. UPON PEDESTRIAN ACTUATION ONLY
2. REMAINS G IF FOLLOWED BY PHASE 4.
3. REMAINS G IF FOLLOWED BY PHASE 1.
4. REMAINS G IF FOLLOWED BY PHASE 2 OR 3.
5. REMAINS G IF FOLLOWED BY PHASE 1 OR 3.
6. REMAINS G IF FOLLOWED BY PHASE 1 OR 2.
7. BECOMES Y/G IF FOLLOWED BY PHASE 2.
8. BECOMES R/G IF FOLLOWED BY PHASE 2.
9. REMAINS R/G IF FOLLOWED BY PHASE 1.
10. BECOMES Y/G IF FOLLOWED BY PHASE 4.
11. BECOMES R/G IF FOLLOWED BY PHASE 4.
12. REMAINS R/G IF FOLLOWED BY PHASE 2.
13. BECOMES Y/G IF FOLLOWED BY PHASE 1.
14. REMAINS G/G IF FOLLOWED BY PHASE 3.
15. REMAINS G/G IF FOLLOWED BY PHASE 2.

PREEMPTION NOTES

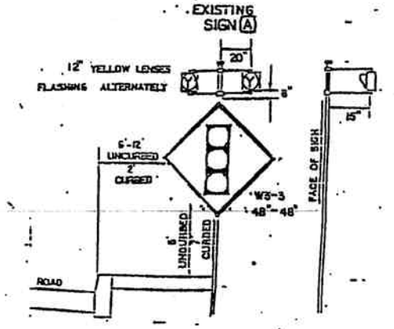
1. IF PREEMPTION OCCURS DURING INTERVAL 1, INTERVAL 13 MUST FOLLOW.
2. IF PREEMPTION OCCURS DURING ANY YELLOW INTERVAL, INTERVAL 14 MUST FOLLOW.
3. IF PREEMPTION OCCURS DURING ANY ALL RED INTERVAL, INTERVAL 15 MUST FOLLOW.
4. IF PREEMPTION OCCURS DURING INTERVAL 4, INTERVAL 15 MUST FOLLOW.
5. IF PREEMPTION OCCURS DURING INTERVAL 7, INTERVAL 15 MUST FOLLOW.
6. IF PREEMPTION OCCURS DURING INTERVAL 10, INTERVAL 15 MUST FOLLOW.
7. IF PREEMPTION OCCURS DURING FLASHING OPERATION, ALL SIGNALS MUST REMAIN IN FLASH.
8. PREEMPTION WILL BE ACTIVATED BY A PUSHBUTTON IN THE FIREHOUSE.

Sta. 785+30 (S.R. 611)=
Sta. 4+80 (Driveway A)

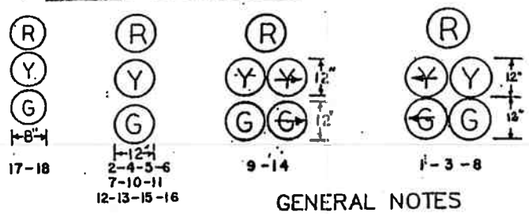
Sta. 784+69 (S.R. 611)=
Sta. 920+72 (S.R. 940)

Sta. 786+45 (S.R. 611)=
Sta. 0+00 (S.R. 196)

Sta. 900+00



SIGNAL INDICATIONS



SIGNALS 1,2,9 TUNNEL VISORS, LOUVERS
SIGNALS 10,11 TUNNEL VISORS

GENERAL NOTES

Installation, operation and maintenance of this traffic signal shall be in accordance with Pennsylvania Department of Transportation Regulations on Official Traffic Control Devices.

No modifications of this installation is permitted unless prior approval is granted, in writing, by the Department.

All maintenance necessary for proper visibility of the signals, including trimming trees, is the responsibility of the Permittee.

All signs and pavement markings indicated on this drawing are considered part of the permit and shall be installed and maintained by the Permittee, unless otherwise indicated. Except the longitudinal pavement markings on State highways which will be maintained by the Department.

Post mounted signals shall be installed with the signal heads a minimum of 2 feet behind the face of the curb or edge of the shoulder. Support poles for overhead signals shall also have a minimum horiz[illegible] of 2 feet.

The bottom of signal heads and signs erected over the roadway shall not be less than 15 feet nor more than 19 feet above the roadway. The bottom of post mounted signal heads shall not be less than 8 feet nor more than 15 feet above the sidewalk or pavement grade.

The minimum horizontal distance between signal heads measured at right angles to the approach, shall be 8 feet.

In addition to this signal permit, the Permittee shall obtain a Highway Occupancy Permit prior to any openings being made in or under any portion of a State Highway.

This drawing cannot be used as a construction drawing unless the Permittee complies with the provisions of Act 287, Prevention of Damage to Underground Utilities. Prior to construction, consult with utility companies to resolve any problems which may be created due to the location of utilities.

Pavement markings shall be placed in accordance with the Department of Transportation Pavement Marking Handbook.

SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	QTY.	MESSAGE
A	W3-3	48"x48"	2	SIGNAL AHEAD (SYMBOL)
B	R10-11	30"x36"	3	NO TURN ON RED
C	R10-10R	30"x36"	2	RIGHT TURN SIGNAL
D	R9-3	18"x18"	10	NO PEDESTRIAN CROSSING
E	W16-10	18"x18"	1	HAZARD MARKER
F	R10-20	30x36	1	OPPOSING TRAFFIC HAS EXTENDED GREEN

LEGEND

- Mast Arm
- Strain Pole
- Pedestal
- Vehicular Signal Head
- Pedestrian Signal Head
- Sign
- Vehicle Detector
- Pedestrian Push Button
- Pedestrian Push Button/Sign
- CC4 Controller Assembly
- W/4" – Solid White Line/Width
- BW/4" – Broken White Line/Width
- Y/4" – Solid Yellow Line/Width
- BY/4" – Broken Yellow Line/Width
- DY/4" – Double Solid Yellow Line/Width

BOMP 9516.00101

County: MONROE

Municipality: Borough of Mount Pocono

Intersection: SR 611 (BELMONT AVE.), SR 940 (SUMMIT RD.) & SR 196 (STERLING RD.)

Reviewed: _____ Municipal Official — See Resolution Dated

Reviewed: _____ District Traffic Signals Div. — Date

Recommended: _____ District Traffic Engineer — Date

Scale:

1

DISTRICT	COUNTY	ROUTE	SECTION	SHEE
5-0	MONROE	611	03S	1 OF

POCONO TOWNSHIP

SR 611. AND SR 314 WESTBOUND

PERMIT NO. 45-209-12	SHEET 2 OF 2
DATE ISSUED 9-18-91	DATE REVISED 10-21-04

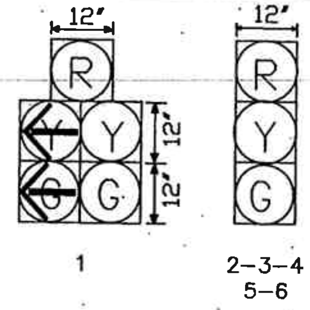
▲ CONDITION DIAGRAM ONLY

PHASING, TIMING and COLOR SEQUENCE CHART

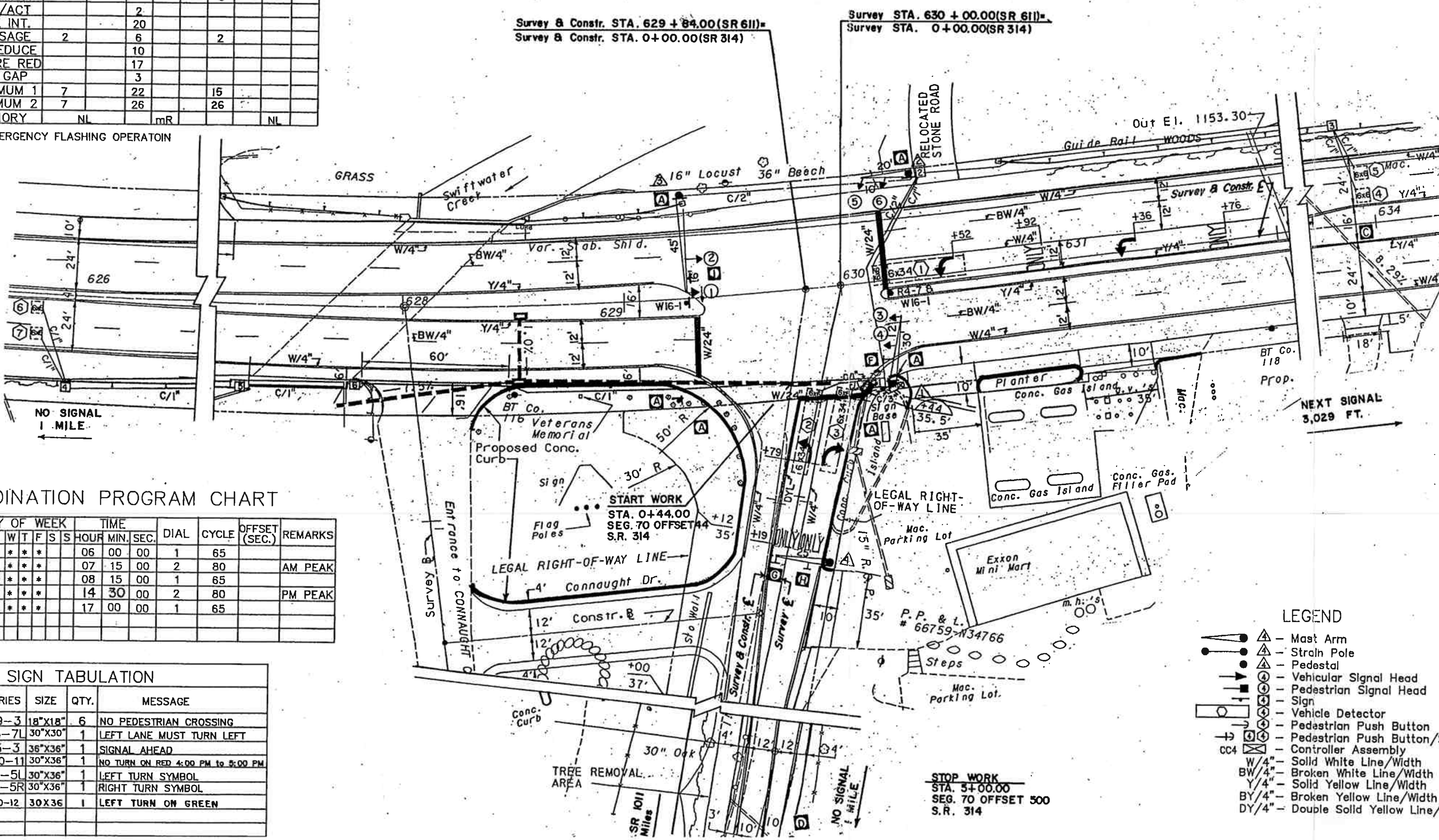
	PHASE 1		PHASE 2			PHASE 3			① FLASHING OPERATION
	INTERVALS		INTERVALS			INTERVALS			
SIGNALS	1	2	3	4	5	6	7	8	
1	~~G~~ G	~~Y~~ G	G	Y	R	R	R	R	Y
2	G	G	G	Y	R	R	R	R	Y
3,4	R	R	G	Y	R	R	R	R	Y
5,6	R	R	R	R	R	G	Y	R	R
FIXED		6		6	2		5	2	
MIMIMUM	0		5			0			
SEC/ACT			2						
MAX INT.			20						
PASSAGE	2		6			2			
TO REDUCE			10						
BEFORE RED			17						
MIN. GAP			3						
MAXIMUM 1	7		22			15			
MAXIMUM 2	7		26			26			
MEMORY	NL			mR				NL	

① EMERGENCY FLASHING OPERATOIN

SIGNAL INDICATIONS



"POCONO TOWNSHIP"



LEGEND

- Mast Arm
- Strain Pole
- Pedestal
- Vehicular Signal Head
- Pedestrian Signal Head
- Sign
- Vehicle Detector
- Pedestrian Push Button
- Pedestrian Push Button/Sign
- CC4 – Controller Assembly
- W/4" – Solid White Line/Width
- BW/4" – Broken White Line/Width
- Y/4" – Solid Yellow Line/Width
- BY/4" – Broken Yellow Line/Width
- DY/4" – Double Solid Yellow Line/Width

COORDINATION PROGRAM CHART

EVENT NO.	DAY OF WEEK M	T	W	T	F	S	S	TIME HOUR	MIN.	SEC.	DIAL	CYCLE	OFFSET (SEC.)	REMARKS
1	*	*	*	*	*			06	00	00	1	65		
2	*	*	*	*	*			07	15	00	2	80		AM PEAK
3	*	*	*	*	*			08	15	00	1	65		
4	*	*	*	*	*			14	30	00	2	80		PM PEAK
5	*	*	*	*	*			17	00	00	1	65		

SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	QTY.	MESSAGE
A	R9–3	18"X18"	6	NO PEDESTRIAN CROSSING
C	R3–7L	30"X30"	1	LEFT LANE MUST TURN LEFT
D	W3–3	36"X36"	1	SIGNAL AHEAD
F	R10–11	30"X36"	1	NO TURN ON RED 4:00 PM to 5:00 PM
G	R3–5L	30"X36"	1	LEFT TURN SYMBOL
H	R3–5R	30"X36"	1	RIGHT TURN SYMBOL
I	R10-12	30X36	1	LEFT TURN ON GREEN

GENERAL NOTES

Installation, operation and maintenance of this traffic signal to be in accordance with Pennsylvania Department of Transportation Regulations on Official Traffic Control Devices.

No modifications of this installation are permitted unless prior approval is granted, in writing, by the Department.

All maintenance necessary for proper visibility of the signals, including trimming trees, is the responsibility of the Permittee.

All signs and pavement markings indicated on this drawing are considered part of the permit and are to be installed and maintained by the Permittee, unless otherwise indicated, except the longitudinal pavement markings on State highways which will be maintained by the Department.

Install post mounted signals with the signal heads a minimum of 2 feet behind the face of the curb or edge of the shoulder. Support poles for overhead signals will have a minimum horizontal clearance of 2 feet.

The bottom of signal heads and signs erected over the roadway are not to be less than 15 feet nor more than 19 feet above the roadway. The bottom of post mounted signal heads are to be not less than 8 feet nor more than 15 feet above the sidewalk or pavement grade.

The minimum horizontal distance between signal heads measured at right angles to the approach is to be 8 feet.

In addition to this signal permit, the Permittee will obtain a Highway Occupancy Permit prior to any openings being made in or under any portion of a State Highway.

This drawing cannot be used as a construction drawing unless the Permittee complies with the provisions of Act 172, Prevention of Damage to Underground Utilities. Prior to construction consult with utility companies to resolve any problems which may be created due to the location of utilities.

Place pavement markings in accordance with the Department of Transportation Pavement Marking Handbook.

County: MONROE

Municipality: POCONO TOWNSHIP

Intersection: SR 611 AND SR 314 WESTBOUND

Reviewed: [signature] Municipal Official	4/3/91 Date
Reviewed: [signature] District Traffic Signals Div.	4/5/91 Date
Recommended: [signature] District Traffic Engineer	4/10/91 Date

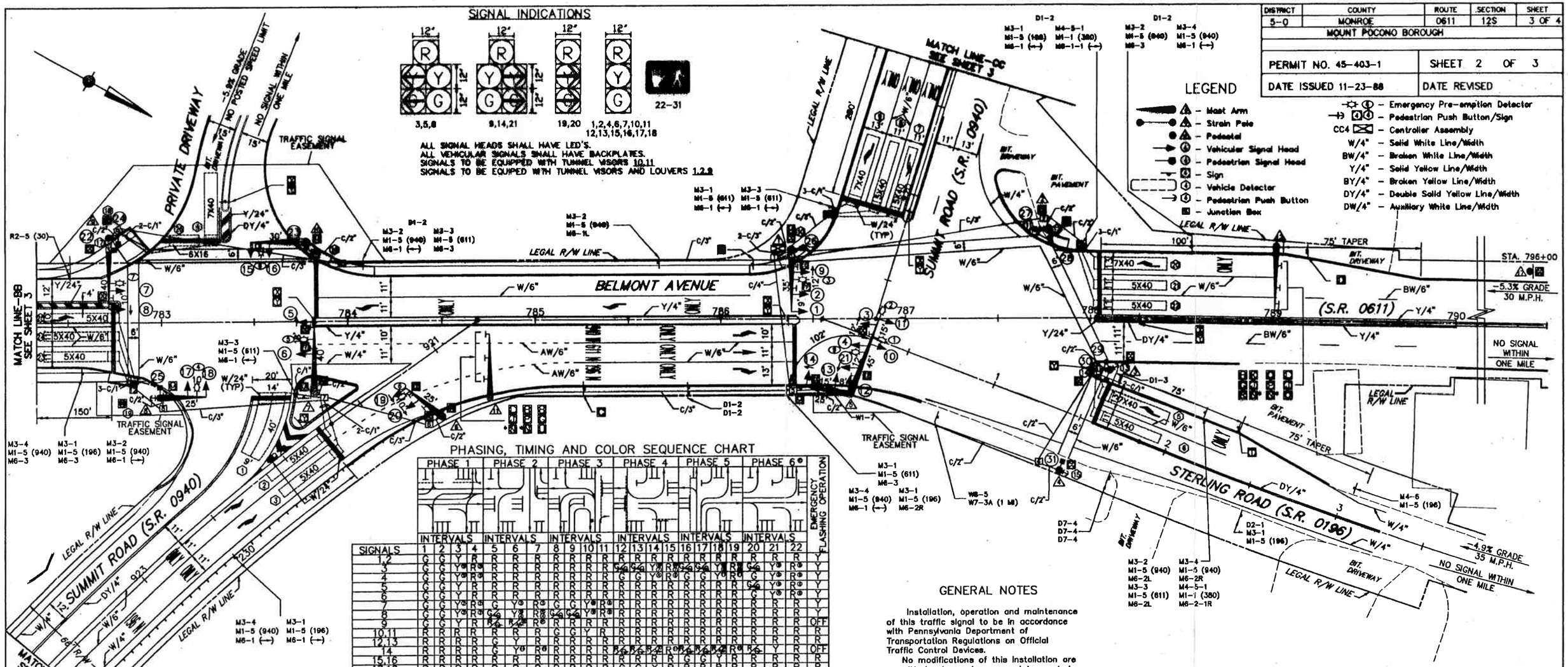
APPENDIX B

Planned Roadway Improvements

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	0611	12S	3 OF 4
	MOUNT POCONO BOROUGH			
PERMIT NO. 45-403-1		SHEET 2 OF 3		
DATE ISSUED 11-23-88		DATE REVISED		

SIGNAL INDICATIONS

ALL SIGNAL HEADS SHALL HAVE LED'S.
ALL VEHICULAR SIGNALS SHALL HAVE BACKPLATES.
SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS 10,11
SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS AND LOUVERS 1,2,9



LEGEND

- Mast Arm
- Strain Pole
- Pedestal
- Vehicular Signal Head
- Pedestrian Signal Head
- Sign
- Vehicle Detector
- Pedestrian Push Button
- Junction Box
- Emergency Pre-emption Detector
- Pedestrian Push Button/Sign
- CC4 — Controller Assembly
- W/4" — Solid White Line/Width
- BW/4" — Broken White Line/Width
- Y/4" — Solid Yellow Line/Width
- BY/4" — Broken Yellow Line/Width
- DY/4" — Double Solid Yellow Line/Width
- DW/4" — Auxiliary White Line/Width

PHASING, TIMING AND COLOR SEQUENCE CHART

	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	EMERGENCY FLASHING OPERATION
FIXED							
MIN. GREEN	10	7	7	7	7	3	
PASSAGE	3	3	3	3	3	3	
MAX 1	16	11	13	9	10	4	105 SEC
MAX 2	16	15	15	9	9	4	110 SEC
MAX 3	20	17	13	9	15	4	120 SEC
PEDESTRIAN	7 ⑫7		7 ⑰7	7 ⑭4	7 ⑭4		
MEMORY	Min R	NL	NL	NL	NL	NL	

SIGNALS	INTERVALS 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
1	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	
2	G	G	Y	R⑧	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y⑧	R⑧	Y
3	G	G	Y⑧	R⑧	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y⑧	R⑧	Y
4	G	G	Y⑧	R⑧	R	R	R	R	R	R	R	G	G	Y⑧	R⑧	G	G	R	R	G	Y⑧	R⑧	Y
5	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y⑧	R⑧	Y
6	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y⑧	R⑧	Y
7	G	G	Y⑧	R⑧	G	Y⑧	R⑧	G	G	Y⑧	R⑧	R	R	R	R	R	R	R	R	R	R	R	Y
8	G	G	Y⑧	R⑧	G⑧	Y⑧	R⑧	G⑧	G⑧	Y⑧	R⑧	R	R	R	R	R	R	R	R	R	R	R	Y
9	G	G	Y	R	R⑧	R⑧	R⑧	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	OFF
10,11	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R
12,13	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
14	R	R	R	R	G	Y⑧	R⑧	R	R	R	R	R	R	R	R	R	R	R	R	R	R	Y	OFF
15,16	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R
17,18	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R
19,20	R	R	R	R	R	R	R	G	G	Y⑧	R⑧	R	R	R	G	G	Y	R	R	R	R	R	R
21	G	G	Y⑧	R⑧	R	R	R	R⑧	R⑧	R⑧	R⑧	G	G	Y⑧	R⑧	G	G	Y⑧	R⑧	G	Y⑧	R⑧	OFF
22,23	M	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	OFF
24,25	H	H	H	H	H	H	H	H	H	H	H	M	FH	H	H	H	M	FH	H	H	H	H	OFF
26,27	M	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	OFF
28,29	H	H	H	H	H	H	H	M	FH	H	H	H	H	H	H	H	H	H	H	H	H	H	OFF
30,31	H	H	H	H	H	H	H	H	H	H	H	M	FH	H	H	H	H	H	H	H	H	H	OFF

PROGRAM CHART

EVENT NO.	DAY OF WEEK M	T	W	T	F	S	S	TIME HOUR	MIN.	SEC.	CYCLE	OFFSET (SEC.)	REMARKS	PROGRAM
1	X	X	X	X	X			07	30	00	105	---	MAX 1	FREE
2	X	X	X	X	X			09	00	00	120	---	MAX 3	FREE
3	X	X	X	X	X			14	30	00	110	---	MAX 2	FREE
4	X	X	X	X	X	X	X	19	00	00	120	---	MAX 3	FREE
5						X	X	11	00	00	105	---	MAX 1	FREE

OPERATION NOTES

①UPON PEDESTRIAN ACTIVATION ONLY, OTHERWISE H AT ALL TIMES.
②G IF FOLLOWED BY PHASE 2 OR PHASE 3.
③G IF FOLLOWED BY PHASE 1 OR PHASE 3.
④G/Ⓐ IF FOLLOWED BY PHASE 3.
⑤G IF FOLLOWED BY PHASE 4, PHASE 5, OR PHASE 6.
⑥G IF FOLLOWED BY PHASE 5, PHASE 6 OR PHASE 1.
⑦G/Ⓐ IF FOLLOWED BY PHASE 5 OR PHASE 6.
⑧G IF FOLLOWED BY PHASE 1.
⑨G/Ⓐ IF FOLLOWED BY PHASE 1.
⑩G/Ⓐ IF FOLLOWED BY PHASE 5.
⑪R/Ⓐ IF FOLLOWED BY PHASE 5 OR PHASE 6.
⑫MAY TIME OUT DURING THIS PHASE OR PHASE 5.
⑬MAY TIME OUT DURING THIS PHASE OR PHASE 1.
⑭Y/Ⓐ IF FOLLOWED BY PHASE 4, 5, OR 6.
⑮PHASE 6 SHALL ALWAYS BE FOLLOWED BY PHASE 1.
⑯G/Ⓐ IF FOLLOWED BY PHASE 6.
⑰G IF FOLLOWED BY PHASE 6.
⑱R/Ⓐ IF FOLLOWED BY PHASE 6.
⑲R/Ⓐ IF FOLLOWED BY PHASE 4, 5, OR 6.
⑳R/Ⓐ IF FOLLOWED BY PHASE 1.
㉑Y/Ⓐ IF FOLLOWED BY PHASE 6.
㉒R/Ⓐ IF FOLLOWED BY PHASE 6.

GENERAL NOTES

Installation, operation and maintenance of this traffic signal to be in accordance with Pennsylvania Department of Transportation Regulations on Official Traffic Control Devices.

No modifications of this installation are permitted unless prior approval is granted, in writing, by the Department.

All maintenance necessary for proper visibility of the signals, including trimming trees, is the responsibility of the Permittee.

All signs and pavement markings indicated on this drawing are considered part of the permit and are to be installed maintained by the Permittee, unless otherwise indicated, except the longitudinal pavement markings on State highways which will be maintained by the Department.

Install post mounted signals with the signal heads a minimum of 2 feet behind the face of the curb or edge of the shoulder. Support poles for overhead signals will have a minimum horizontal clearance of 2 feet.

The bottom of signal heads and signs erected over the roadway are not to be less than 15 feet nor more than 19 feet above the roadway. The bottom of post mounted signal heads are to be not less than 8 feet nor more than 15 feet above the sidewalk or pavement grade.

The minimum horizontal distance between signal heads measured at right angles to the approach is to be 8 feet.

In addition to this signal permit, the Permittee will obtain a Highway Occupancy Permit prior to any openings being made in or under any portion of a State Highway, if applicable.

This drawing cannot be used as a construction drawing unless the Permittee complies with the provisions of Act 199, Prevention of Damage to Underground Utilities. Prior to construction consult with utility companies to resolve any problems which may be created due to the location of utilities.

Place pavement markings in accordance with the Department of Transportation Pavement Marking Standards TC-8600 Series.

Maintenance and protection of traffic for the installation and maintenance of this traffic signal to be in accordance with Publication 203M, Work Zone Traffic Control.

County: MONROE

Municipality: BOROUGH OF MOUNT POCONO

Intersection: SR 0611 (BELMONT AVE)
SR 0940 (SUMMIT RD), PRIVATE DRIVEWAY &
SR 0196 (STERLING RD)

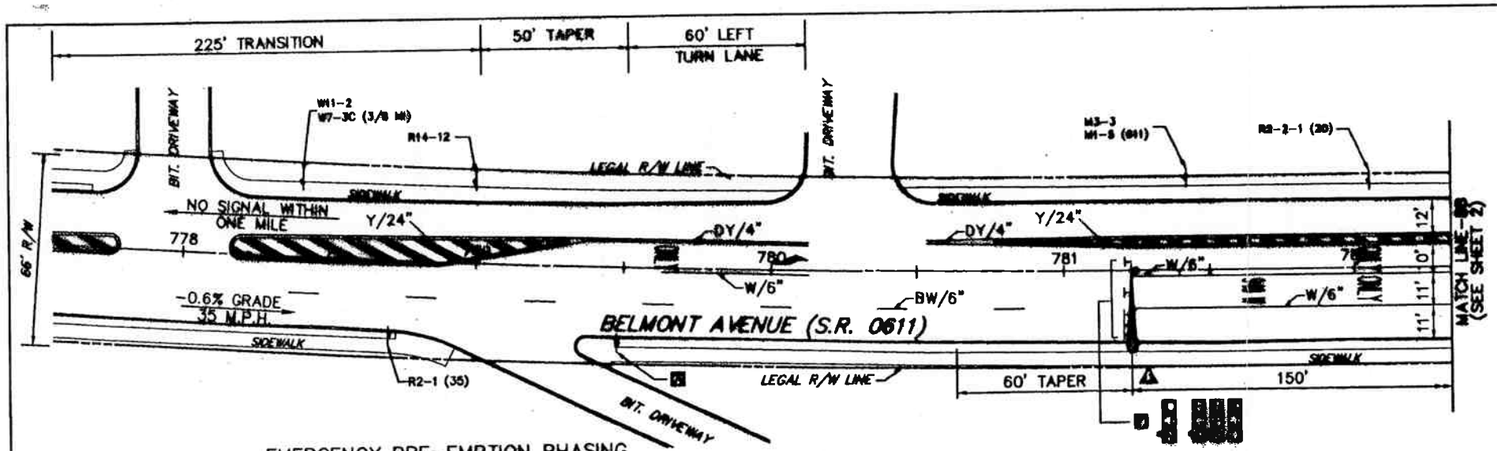
Reviewed: _____ 4/24/95
Municipal Official — Date

Reviewed: _____
District Traffic Signals Div. — Date

Recommended: _____
District Traffic Engineer — Date

Scale: 25 0 25 50

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	0611	12S	4 OF 4
	MOUNT POCONO BOROUGH			
PERMIT NO. 45-403-1		SHEET 3 OF 3		
DATE ISSUED 11-23-88		DATE REVISED		



EMERGENCY PRE-EMPTION PHASING

SIGNALS	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6
	INTERVALS	INTERVALS	INTERVALS	INTERVALS	INTERVALS	INTERVALS
	23 24 25	26 27 28	29 30 31	32 33 34	35 36 37	38 39 40
1	G Y R	R R R	R R R	R R R	R R R	R R R
2	R R R	R R R	R R R	R R R	R R R	R R R
3	R R R	R R R	R R R	R R R	R R R	R R R
4	R R R	R R R	R R R	R R R	R R R	R R R
5	R R R	R R R	R R R	R R R	R R R	R R R
6	R R R	R R R	R R R	R R R	R R R	R R R
7	R R R	R R R	R R R	R R R	R R R	R R R
8	R R R	R R R	R R R	R R R	R R R	R R R
9	R R R	R R R	R R R	R R R	R R R	R R R
10,11	R R R	R R R	R R R	R R R	R R R	R R R
12,13	R R R	R R R	R R R	R R R	R R R	R R R
14	R R R	R R R	R R R	R R R	R R R	R R R
15,16	R R R	R R R	R R R	R R R	R R R	R R R
17,18	R R R	R R R	R R R	R R R	R R R	R R R
19,20	R R R	R R R	R R R	R R R	R R R	R R R
21	R R R	R R R	R R R	R R R	R R R	R R R
22,23	R R R	R R R	R R R	R R R	R R R	R R R
24,25	R R R	R R R	R R R	R R R	R R R	R R R
26,27	R R R	R R R	R R R	R R R	R R R	R R R
28,29	R R R	R R R	R R R	R R R	R R R	R R R
30,31	R R R	R R R	R R R	R R R	R R R	R R R
	SELECTIVE CLEARANCES	SELECTIVE CLEARANCES	SELECTIVE CLEARANCES	SELECTIVE CLEARANCES	SELECTIVE CLEARANCES	SELECTIVE CLEARANCES
	* 4 3	* 4 3	* 4 3	* 4 3	* 4 3	* 4 3

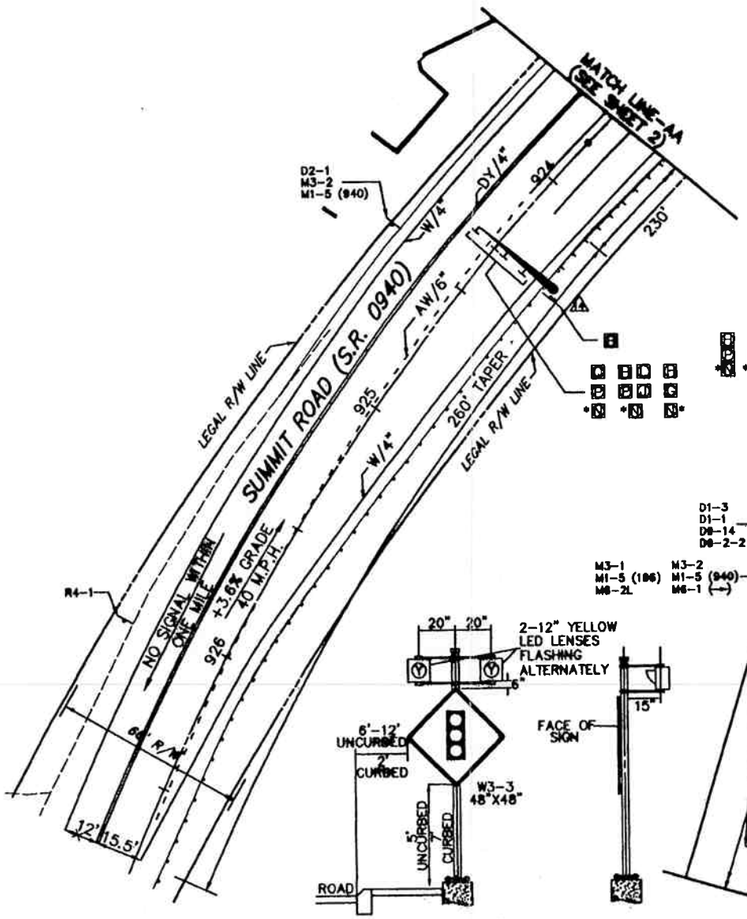
ⓐ G/A IF FOLLOWED BY NORMAL OPERATION
ⓑ G IF FOLLOWED BY NORMAL OPERATION
*FOR DURATION OF PRE-EMPTION

SIGN TABULATION

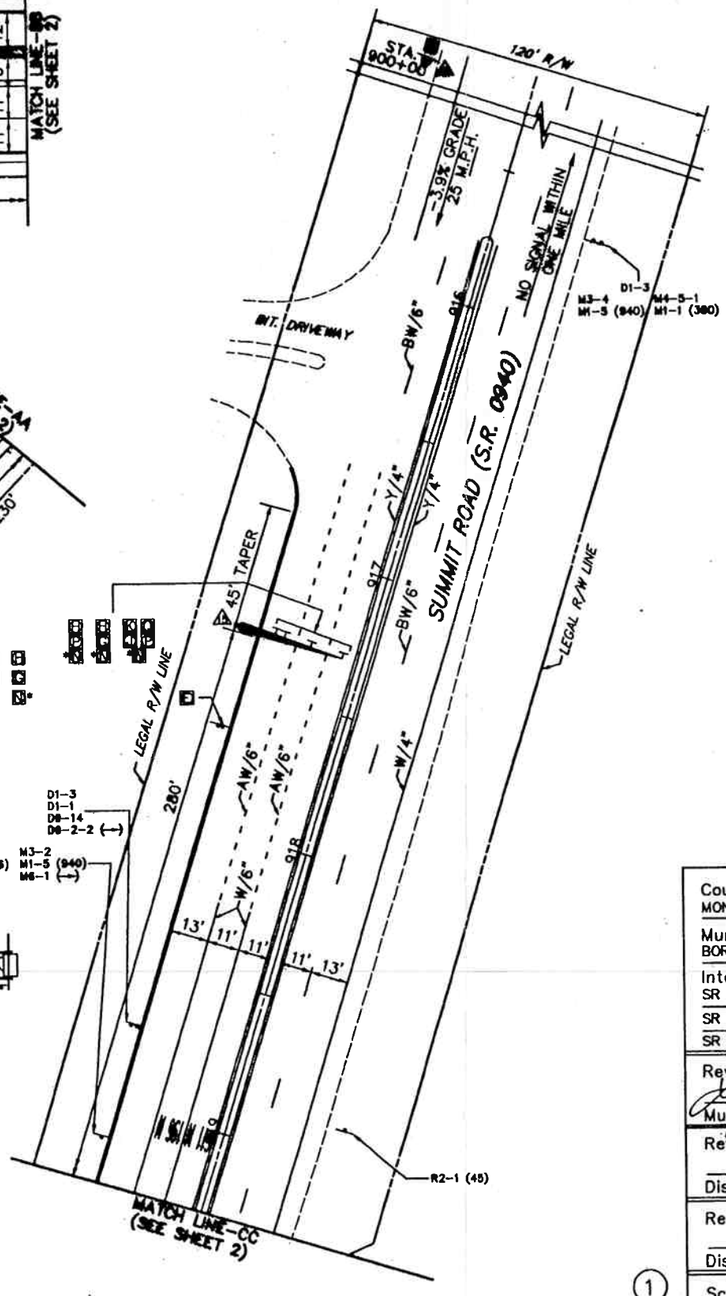
PLAN SYMBOL	SERIES NUMBER	SIZE	QUANTITY	REMARKS
	R3-7L	30"X30"	2	LEFT LANE MUST TURN LEFT
	R3-8BLSRR	48"X30"	1	LANE USE CONTROL (THREE LANES)
	R3-8BLSR	48"X30"	1	LANE USE CONTROL (THREE LANES)
	R3-8BLSSR	48"X30"	1	LANE USE CONTROL (THREE LANES)
	R3-8BULR	48"X30"	1	LANE USE CONTROL (THREE LANES)
	R3-5L	30"X36"	1	LEFT TURN SIGN
	M1-5	30"X24"	5	PA ROUTE MARKER (196)
	M3-1	30"X15"	9	NORTH MARKER
	M1-5	30"X24"	7	PA ROUTE MARKER (940)
	M3-2	30"X15"	3	EAST MARKER
	M3-4	30"X15"	4	WEST MARKER
*	M6-3	30"X18"	13	STRAIGHT THROUGH MARKER
	M5-1R	21"X15"	2	ADVANCE 90 DEGREE RIGHT TURN MARKER
	M1-5	30"X24"	7	PA ROUTE MARKER (611)
	M3-3	30"X15"	3	SOUTH MARKER
	M5-1L	21"X15"	1	ADVANCE 90 DEGREE LEFT TURN MARKER
	R3-8ASR	30"X30"	1	LANE USE CONTROL (TWO LANES)
	M5-2R	21"X15"	1	ADVANCE 45 DEGREE RIGHT TURN MARKER
	R4-7	24"X30"	5	KEEP RIGHT
	W16-1	18"X18"	7	HAZARD MARKER
	R9-3A	18"X18"	7	NO PEDESTRAIN CROSSING
	R10-3BL	9"X12"	4	EDUCATIONAL PUSH BUTTON FOR WALK←
	R10-3BR	9"X12"	6	EDUCATIONAL PUSH BUTTON FOR WALK→
	R10-12	30"X36"	3	LEFT TURN YIELD ON GREEN ●
	R10-10R	30"X36"	5	RIGHT TURN SIGNAL
	R10-20R	30"X36"	2	OPPOSING TRAFFIC HAS EXTENDED GREEN
	W3-3	48"X48"	2	SIGNAL AHEAD (SYMBOL)

* SIGN N ON MASTARM TO FACE DOWN TOWARDS ROADWAY.

ALL SIGNS TO UTILIZE REFLECTORIZED TYPE III OR TYPE VII SHEETING.



SIGN GG DETAIL
N.T.S.



EMERGENCY PRE-EMPTION NOTES:

CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE WESTBOUND APPROACH OF SR 0940 (SUMMIT ROAD), EASTBOUND APPROACH OF PRIVATE DRIVEWAY, EASTBOUND APPROACH OF SR 0940 (SUMMIT ROAD), SOUTHBOUND APPROACH OF SR 0611 (BELMONT AVENUE), SOUTHBOUND APPROACH OF SR 0196 (STERLING ROAD) AND THE NORTHBOUND APPROACH OF SR 0611 (BELMONT AVENUE) WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION.

THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS, EXCEPT THE GREEN INDICATIONS FOR THE PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE, FOLLOWED BY SELECTIVE CLEARANCES DEPENDENT UPON THE PHASE IN WHICH THE PRE-EMPTION OCCURS. THE GREEN INDICATIONS FOR THE PRE-EMPTED PHASE SHALL REMAIN GREEN FOR THE DURATION OF SIGNAL PRE-EMPTION AND RED INDICATIONS DISPLAYED FOR ALL OTHER PHASES.

THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TIME OUT ALL YELLOW AND RED INDICATIONS, FOLLOWED BY THE GREEN INTERVAL OF THE PRE-EMPTION PHASE GOVERNED BY THE ACTUATION OF THE APPROACHING EMERGENCY VEHICLE.

IF THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, ARE FLASHING ALL SIGNALS SHALL REMAIN FLASHING.

UPON COMPLETION OF PRE-EMPTION PHASE 1 OR 6, IN RETURNING TO NORMAL OPERATION, NORMAL PHASE 1 INTERVAL 1 SHALL FOLLOW.

UPON COMPLETION OF PRE-EMPTION PHASES 2, 3, 4 OR 5 IN RETURNING TO NORMAL OPERATION, NORMAL PHASE 1 INTERVAL 1 SHALL FOLLOW.

IF THE PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION AND THERE IS NEED TO ALLOW PRE-EMPTION BY EMERGENCY VEHICLES FROM NEARBY MUNICIPALITIES WITH DIFFERENT EMITTERS, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

County:
MONROE

Municipality:
BOROUGH OF MOUNT POCONO

Intersection:
SR 0611 (BELLMONT AVE)
SR 0940 (SUMMIT RD), PRIVATE DRIVEWAY &
SR 0196 (STERLING RD)

Reviewed:
Municipal Official — Date 10/24/05

Reviewed:
District Traffic Signals Div. — Date

Recommended:
District Traffic Engineer — Date

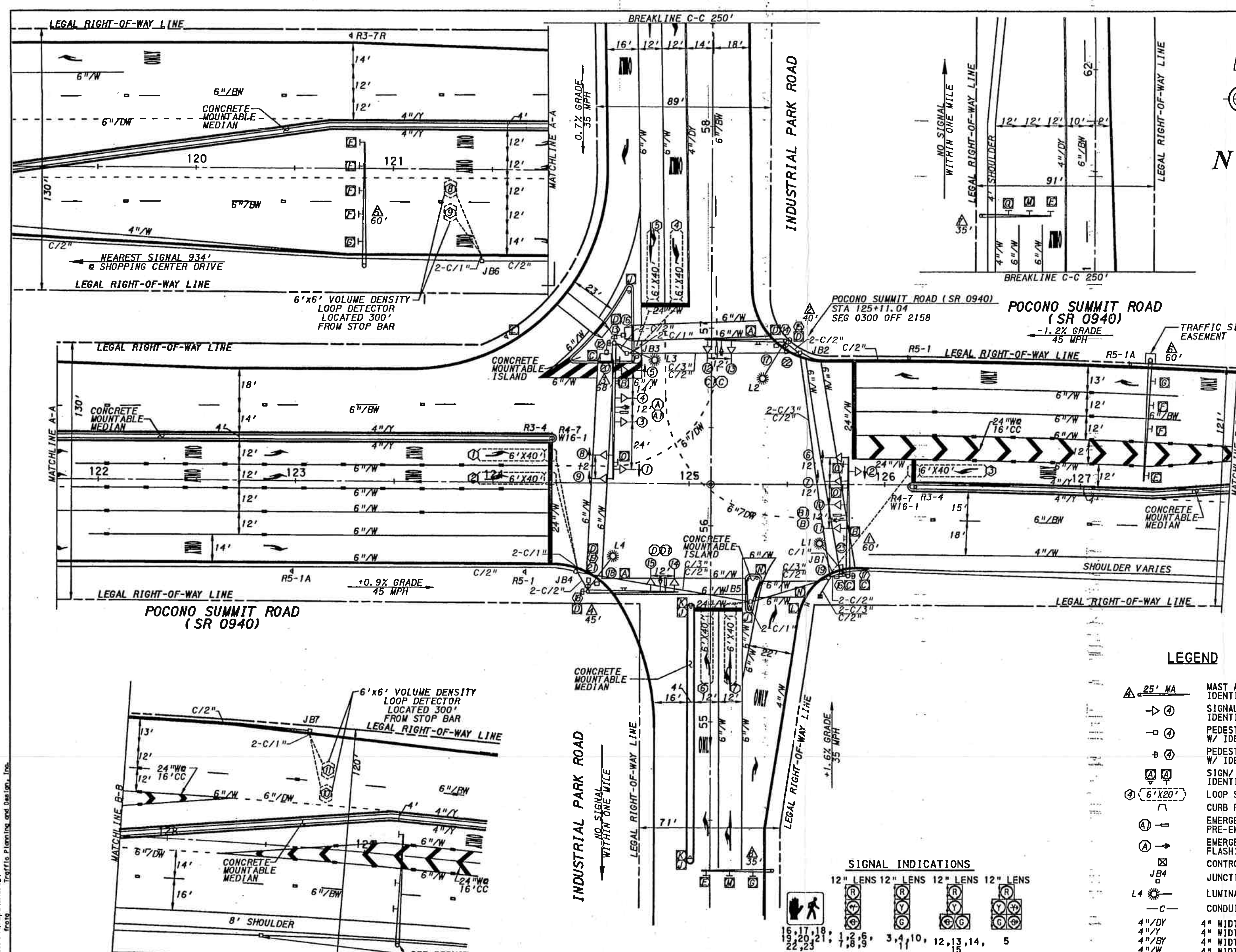
Scale: 25 0 25 50

1

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	SR 0940		2 OF 3
MOUNT POCONO BOROUGH				

PERMIT NO. 45-403-02 — SHEET 2 OF 3

DATE ISSUED: 7-13-90 — DATE REVISED:



GENERAL NOTES

INSTALLATION, OPERATION, AND MAINTENANCE OF THIS TRAFFIC SIGNAL TO BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS ON OFFICIAL TRAFFIC CONTROL DEVICES.

NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE DEPARTMENT.

ALL MAINTENANCE NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS, INCLUDING TRIMMING TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.

ALL SIGNS AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND ARE TO BE INSTALLED AND MAINTAINED BY THE PERMITTEE, UNLESS OTHERWISE INDICATED. EXCEPT THE LONGITUDINAL PAVEMENT MARKINGS ON STATE HIGHWAYS WHICH WILL BE MAINTAINED BY THE DEPARTMENT.

INSTALL POST MOUNTED SIGNALS WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF THE CURB OR EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS WILL HAVE A MINIMUM HORIZONTAL CLEARANCE OF 2 FEET.

THE BOTTOM OF SIGNAL HEADS AND SIGNS ERECTED OVER THE ROADWAY ARE NOT TO BE LESS THAN 15 FEET NOR MORE THAN 19 FEET ABOVE THE ROADWAY. THE BOTTOM OF POST MOUNTED SIGNAL HEADS ARE NOT TO BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK OR PAVEMENT GRADE.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL HEADS MEASURED AT RIGHT ANGLES TO THE APPROACH IS TO BE 8 FEET.

IN ADDITION TO THIS SIGNAL PERMIT, THE PERMITTEE WILL ALSO OBTAIN A HIGHWAY OCCUPANCY PERMIT PRIOR TO ANY OPENINGS BEING MADE IN OR UNDER ANY PORTION OF A STATE HIGHWAY.

THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF ACT 199, AS PER THE LATEST AMENDMENT OF PA ACT 287 OF 1974, EFFECTIVE NOVEMBER 30, 2004 PRIOR TO CONSTRUCTION CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

PAVEMENT MARKINGS WILL BE PLACED IN ACCORDANCE WITH THE DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING TC-8600 SERIES STANDARDS.

MAINTENANCE AND PROTECTION FOR THE INSTALLATION AND MAINTENANCE OF THIS SIGNAL TO BE IN ACCORDANCE WITH PUB. 203M, WORK ZONE TRAFFIC CONTROL.

LEGEND

Symbol	Description
25' MA	MAST ARM/ IDENTIFYING LENGTH
	SIGNAL HEAD/ IDENTIFYING NUMBER
	PEDESTRIAN SIGNAL HEAD W/ IDENTIFYING NUMBER
	PEDESTRIAN PUSHBUTTON W/ IDENTIFYING NUMBER
	SIGN/ IDENTIFYING LETTER
6'X20'	LOOP SENSOR/SIZE
	CURB RAMP
	EMERGENCY PRE-EMPTION DETECTOR
	EMERGENCY PRE-EMPTION FLASHING BEACON
	CONTROLLER CABINET
JB4	JUNCTION BOX
L4	LUMINAIRE
—C—	CONDUIT
4"/DY	4" WIDTH / DOUBLE YELLOW LINE
4"/Y	4" WIDTH / SOLID YELLOW LINE
4"/BY	4" WIDTH / BROKEN YELLOW LINE
4"/W	4" WIDTH / SOLID WHITE LINE
6"/BW	6" WIDTH / BROKEN WHITE LINE
6"/W	6" WIDTH / SOLID WHITE LINE
24"/W	24" WIDTH / SOLID WHITE LINE
24"/Y	24" WIDTH / SOLID YELLOW LINE
—X——X—	FENCE
	GUIDE RAIL
	UTILITY POLE
	RAISED PAVEMENT MARKER

ALL VEHICULAR SIGNAL HEADS SHALL HAVE RED, YELLOW, AND GREEN LEDS.

ALL PEDESTRIAN SIGNAL HEADS SHALL HAVE LUNAR WHITE AND PORTLAND ORANGE LEDS.

SIGNALS TO BE EQUIPPED WITH BACKPLATES 1-11

SIGNALS TO BE EQUIPPED WITH STROBES FOR RED INDICATIONS 1,3,4,6,7,10,11

COUNTY: MONROE

MUNICIPALITY: MOUNT POCONO BOROUGH

INTERSECTION: POCONO SUMMIT ROAD (SR 0940) & INDUSTRIAL PARK ROAD

REVIEWED: MUNICIPAL OFFICIAL — DATE

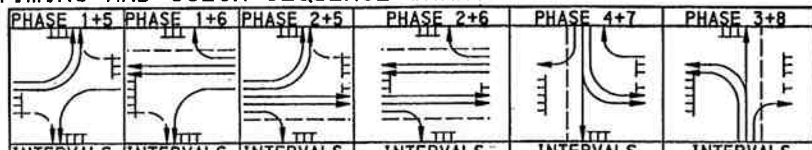
REVIEWED: DIST. TRAFFIC SIGNALS DIV. — DATE

RECOMMENDED: DISTRICT TRAFFIC ENGINEER — DATE

SCALE: 25' 0' 25' 50'

(2)

PHASING, TIMING AND COLOR SEQUENCE CHART



SIGNALS	PHASE 1+5 INTERVALS 1	2	3	PHASE 1+6 INTERVALS 4	5	6	PHASE 2+5 INTERVALS 7	8	9	PHASE 2+6 INTERVALS 10	11	12	13	PHASE 4+7 INTERVALS 14	15	16	17	PHASE 3+8 INTERVALS 18	19	20	21	EMERGENCY FLASHING OPERATION
1,2	←G	←Y①	R①	←G	←Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	OFF
3,4	R	R	R	G	Y②	R②	R	R	R	G	G	Y③	R③	R	R	R	R	R	R	R	R	Y
5	R	R	R	G	Y②	R②	R	R	R	G	G	Y⑥	R⑥	R/←G	R/←G	R/←Y	R	R	R	R	R	OFF
6,7,8,9	←G	←Y④	R④	R	R	R	←G	←Y	R	R	R	R	R	R	R	R	R	R	R	R	R	OFF
10,11	R	R	R	R	R	R	G	Y	R	G	G	Y⑤	R⑤	R	R	R	R	R	R	R	R	Y
12,13	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G/←G	G/←G	Y	R	R
14,15	R	R	R	R	R	R	R	R	R	R	R	R	R	G/←G	G/←G	Y	R	R	R	R	R	R
16,17	H	H	H	M	M	M	H	H	H	M	FH	H	H	H	H	H	H	H	H	H	H	OFF
18,19	H	H	H	H	H	H	M	M	M	M	FH	H	H	H	H	H	H	H	H	H	H	OFF
20,21	H	H	H	H	H	H	H	H	H	H	H	H	H	M	FH	H	H	H	H	H	H	OFF
22,23	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	H	M	FH	H	H	OFF
FIXED		5	2		5	2		5	2			5	2			3.5	3			3.5	3	
MINIMUM	3			3			3			15				3				3				
SEC/ACT										1.5												
MAX INT										32												
PASSAGE	3			3			3			6				3				3				
TBR										32												
TTR										16												
MIN GAP										4												
MAXIMUM I	15			15			15			48				20				20				
PEDESTRIAN ⑦				⑧			⑧			10	22			7	25			7	24			
MEMORY	NL			NL			NL			mR				NL				NL				

																		CYCLE
DIAL 1	19	5	2	19	5	2	19	5	2	54	5	2	14	3.5	3	16	3.5	3	130 SEC
DIAL 2	18	5	2	18	5	2	18	5	2	44	5	2	20	3.5	3	21	3.5	3	130 SEC
DIAL 3	15	5	2	15	5	2	15	5	2	49	5	2	19	3.5	3	20	3.5	3	130 SEC

mR DENOTES MINIMUM RECALL
NL DENOTES NON LOCKING

PRE-EMPTION OPERATION NOTES

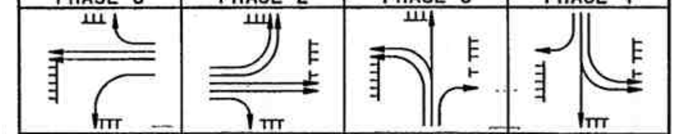
ⓐ SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION
ⓑ SIGNAL TO INDICATE G/←Y WHEN RETURNING TO NORMAL OPERATION

OPERATION NOTES

① ←G IF FOLLOWED BY 1+6
② G IF FOLLOWED BY 2+6
③ G IF FOLLOWED BY 1+6
④ ←G IF FOLLOWED BY 2+5
⑤ G IF FOLLOWED BY 2+5
⑥ G IF FOLLOWED BY 1+6 OR R/←Y IF FOLLOWED BY 4+7
⑦ UPON PEDESTRIAN ACTUATION ONLY OTHERWISE H AT ALL TIMES
⑧ TIMING WILL BE AS SHOWN IN PHASE 2+6 IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6
• VOLUME DENSITY TIMINGS TO BEGIN UPON SIDE STREET ACTUATION

EMERGENCY PRE-EMPTION PHASING

PHASING, TIMING, AND COLOR SEQUENCE CHART

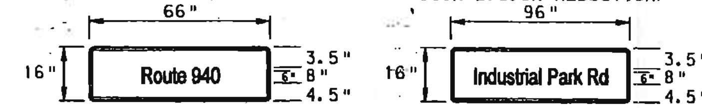


SIGNALS	PHASE 6	INTERVALS 22	23	24	PHASE 2	INTERVALS 25	26	27	PHASE 8	INTERVALS 28	29	30	PHASE 4	INTERVALS 31	32	33
1,2	SELECTIVE CLEARANCES	←G	←Y	R	SELECTIVE CLEARANCES	R	R	R	SELECTIVE CLEARANCES	R	R	R	SELECTIVE CLEARANCES	R	R	R
3,4		G	Yⓐ	Rⓐ		R	R	R		R	R	R		R	R	R
5		G/←G	Yⓑ	Rⓐ		R	R	R		R	R	R		R	R	R
6,7,8,9		R	R	R		←G	←Y	R		R	R	R		R	R	R
10,11		R	R	R		G	Yⓐ	Rⓐ		R	R	R		R	R	R
12,13		R	R	R		R	R	R		G/←G	Y	R		R	R	R
14,15		R	R	R		R	R	R		R	R	R		G/←G	Y	R
16,17,18,19,20,21,22,23		H	H	H		H	H	H		H	H	H		H	H	H
FIXED TIME		▲	5	2		▲	5	2		▲	3.5	3		▲	3.5	3

▲ FOR DURATION OF PRE-EMPTION

CLEARVIEWONE CD-45
8" UPPER CASE
6" LOWER CASE LETTERS
SIGN A

CLEARVIEWONE CD-45
8" UPPER CASE
6" LOWER CASE LETTERS
SIGN B(8.9% REDUCTION)



N

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	SR 0940		3 OF 3
MOUNT POCONO BOROUGH				

PERMIT NO. 45-403-02	SHEET 3 OF 3
DATE ISSUED: 7-13-90	DATE REVISED:

GENERAL NOTES

INSTALLATION, OPERATION, AND MAINTENANCE OF THIS TRAFFIC SIGNAL TO BE IN ACCORDANCE WITH PENNSYLVANIA DEPARTMENT OF TRANSPORTATION REGULATIONS ON OFFICIAL TRAFFIC CONTROL DEVICES.

NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED, IN WRITING, BY THE DEPARTMENT.

ALL MAINTENANCE NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS, INCLUDING TRIMMING TREES, IS THE RESPONSIBILITY OF THE PERMITTEE.

ALL SIGNS AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND ARE TO BE INSTALLED AND MAINTAINED BY THE PERMITTEE, UNLESS OTHERWISE INDICATED. EXCEPT THE LONGITUDINAL PAVEMENT MARKINGS ON STATE HIGHWAYS WHICH WILL BE MAINTAINED BY THE DEPARTMENT.

INSTALL POST MOUNTED SIGNALS WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF THE CURB OR EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS WILL HAVE A MINIMUM HORIZONTAL CLEARANCE OF 2 FEET.

THE BOTTOM OF SIGNAL HEADS AND SIGNS ERECTED OVER THE ROADWAY ARE NOT TO BE LESS THAN 15 FEET NOR MORE THAN 19 FEET ABOVE THE ROADWAY. THE BOTTOM OF POST MOUNTED SIGNAL HEADS ARE NOT TO BE LESS THAN 8 FEET NOR MORE THAN 15 FEET ABOVE THE SIDEWALK OR PAVEMENT GRADE.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNAL HEADS MEASURED AT RIGHT ANGLES TO THE APPROACH IS TO BE 8 FEET.

IN ADDITION TO THIS SIGNAL PERMIT, THE PERMITTEE WILL ALSO OBTAIN A HIGHWAY OCCUPANCY PERMIT PRIOR TO ANY OPENINGS BEING MADE IN OR UNDER ANY PORTION OF A STATE HIGHWAY.

THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITTEE COMPLIES WITH THE PROVISIONS OF ACT 199, AS PER THE LATEST AMENDMENT OF PA ACT 287 OF 1974, EFFECTIVE NOVEMBER 30, 2004 PRIOR TO CONSTRUCTION CONSULT WITH UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

PAVEMENT MARKINGS WILL BE PLACED IN ACCORDANCE WITH THE DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING TC-8600 SERIES STANDARDS.

MAINTENANCE AND PROTECTION FOR THE INSTALLATION AND MAINTENANCE OF THIS SIGNAL TO BE IN ACCORDANCE WITH PUB. 203M, WORK ZONE TRAFFIC CONTROL.

SIGN TABULATION

PLAN SYMBOL	SERIES	SIZE	QTY	MESSAGE
• A	D3-4	66"x16"	2	STREET SIGN "Route 940"
• B	D3-4	96"x16"	2	STREET SIGN "Industrial Park Dr"
C	R10-3B	9"x12"	3	EDUCATIONAL PUSH BUTTON SIGN →
D	R10-3B	9"x12"	5	EDUCATIONAL PUSH BUTTON SIGN ←
E	R3-5L	30"x36"	5	LEFT TURN SIGN
F	R3-5S	30"x36"	4	STRAIGHT THROUGH SIGN
G	R3-5R	30"x36"	4	RIGHT TURN SIGN
J	W16-1	18"x18"	4	HAZARD MARKER
K	R4-7	24"x30"	2	KEEP RIGHT SIGN
L	R1-2	36"x36"	2	YIELD
M	R3-6LS	30"x36"	2	OPTIONAL LEFT TURN SIGN
N	R5-1	36"x36"	2	DO NOT ENTER SIGN
O	R10-10L	30"x36"	3	LEFT TURN SIGNAL
P	R10-10R	30"x36"	1	RIGHT TURN SIGNAL
Q	SPECIAL	36"x48"	1	DOUBLE RIGHT TURN SIGN

•ALL SIGNS TO UTILIZE REFLECTORIZED TYPE III OR TYPE VII SHEETING
•OVERHEAD STREET NAME SIGN TO BE STRUCTURE MOUNTED FLAT SHEET ALUMINUM WITH STIFFENERS AND LEGEND AND BORDER TO BE WHITE REFLECTORIZED TYPE IX SHEETING ON GREEN REFLECTORIZED TYPE III OR TYPE VII SHEETING

EMERGENCY PRE-EMPTION NOTES:

- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE NORTHBOUND AND SOUTHBOUND APPROACHES OF INDUSTRIAL PARK ROAD AND THE EASTBOUND AND WESTBOUND APPROACHES OF POCONO SUMMIT ROAD (SR 0940), WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION.
- THE SIGNALS, WHEN ACTIVATED BY EMERGENCY VEHICLES, SHALL TERMINATE ALL GREEN INDICATIONS, EXCEPT THE GREEN INDICATIONS FOR THE PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE, FOLLOWED BY SELECTIVE CLEARANCES DEPENDENT UPON THE PHASE IN WHICH THE PRE-EMPTION OCCURS. THE GREEN INDICATIONS FOR THE PRE-EMPTED PHASE SHALL REMAIN GREEN FOR THE DURATION OF SIGNAL PRE-EMPTION AND RED INDICATIONS DISPLAYED FOR ALL OTHER PHASES.
- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TIME OUT ALL YELLOW AND RED INDICATIONS, FOLLOWED BY THE GREEN INTERVAL OF THE PRE-EMPTION PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE.
- IF THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, ARE FLASHING ALL SIGNALS SHALL REMAIN FLASHING.
- UPON COMPLETION OF PRE-EMPTION PHASE 2 OR 6 IN RETURNING TO NORMAL OPERATION, PHASE 2+6 INTERVAL 10 SHALL FOLLOW.
- UPON COMPLETION OF PRE-EMPTION PHASE 4 OR 8 IN RETURNING TO NORMAL OPERATION, PHASE 2+6 INTERVAL 10 SHALL FOLLOW.
- IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION AND THERE IS NEED TO ALLOW PRE-EMPTION BY EMERGENCY VEHICLES FROM NEARBY MUNICIPALITIES WITH DIFFERENT EMITTERS, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON, TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

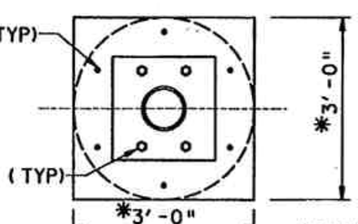
PROGRAM CHART

EVENT NO.	M	T	W	T	F	S	S	HOUR	MIN	SEC	PROGRAM	CYCLE	*OFFSET	REMARKS
1	*	*	*	*	*			0600	00	00	DIAL 1	130	0	COOR SYSTEM
2	*	*	*	*	*			1000	00	00	DIAL 3	130	0	COOR SYSTEM
3	*	*	*	*	*			1600	00	00	DIAL 2	130	0	COOR SYSTEM
4	*	*	*	*	*			2100	00	00	MAX 1	--	--	VOLUME DENSITY, FREE
5						*	*	0800	00	00	DIAL 3	130	0	COOR SYSTEM
6						*	*	1800	00	00	MAX 1	--	--	VOLUME DENSITY, FREE

* OFFSET REFERENCED TO THE BEGINING OF INTERVAL 12 PHASE 2+6

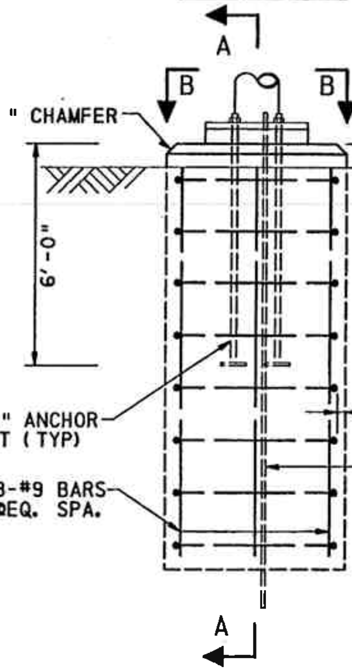
GENERAL NOTES:

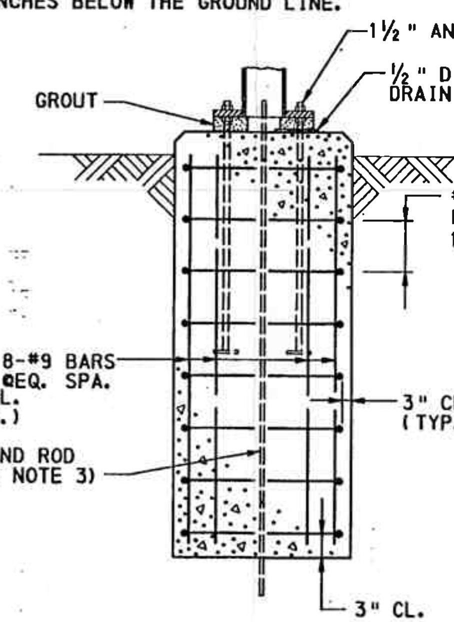
1. SEE TC-7801 FOR ANY ADDITIONAL DETAILS.
2. ANCHOR BOLTS SHALL BE PROVIDED WITH THREADS WHICH EXTEND A MINIMUM OF THREE INCHES BELOW THE TOP OF THE FOUNDATION. A 4"x4"x1/4" MINIMUM STEEL PLATE SHALL BE ATTACHED TO THE BOTTOM OF EACH ANCHOR BOLT.
3. FOR GROUND ROD SIZE AND INSTALLATION DETAILS SEE TC-7804.



SECTION B-B

* DIAMETER IF CIRCULAR OR SIDE IF SQUARE. CIRCULAR FOUNDATIONS SHALL BE SQUARE FROM THE TOP TO A POINT SIX INCHES BELOW THE GROUND LINE.





SECTION A-A

68 FOOT MAST ARM FOUNDATION

N. T. S.

COUNTY:
MONROE
MUNICIPALITY:
MOUNT POCONO BOROUGH
INTERSECTION:
POCONO SUMMIT ROAD (SR 0940) & INDUSTRIAL PARK ROAD

REVIEWED:
MUNICIPAL OFFICIAL DATE
REVIEWED:
DIST. TRAFFIC SIGNALS DIV. DATE
RECOMMENDED:
DISTRICT TRAFFIC ENGINEER DATE

SCALE: 25' 0' 25' 50'

②

APPENDIX C

Traffic Counts

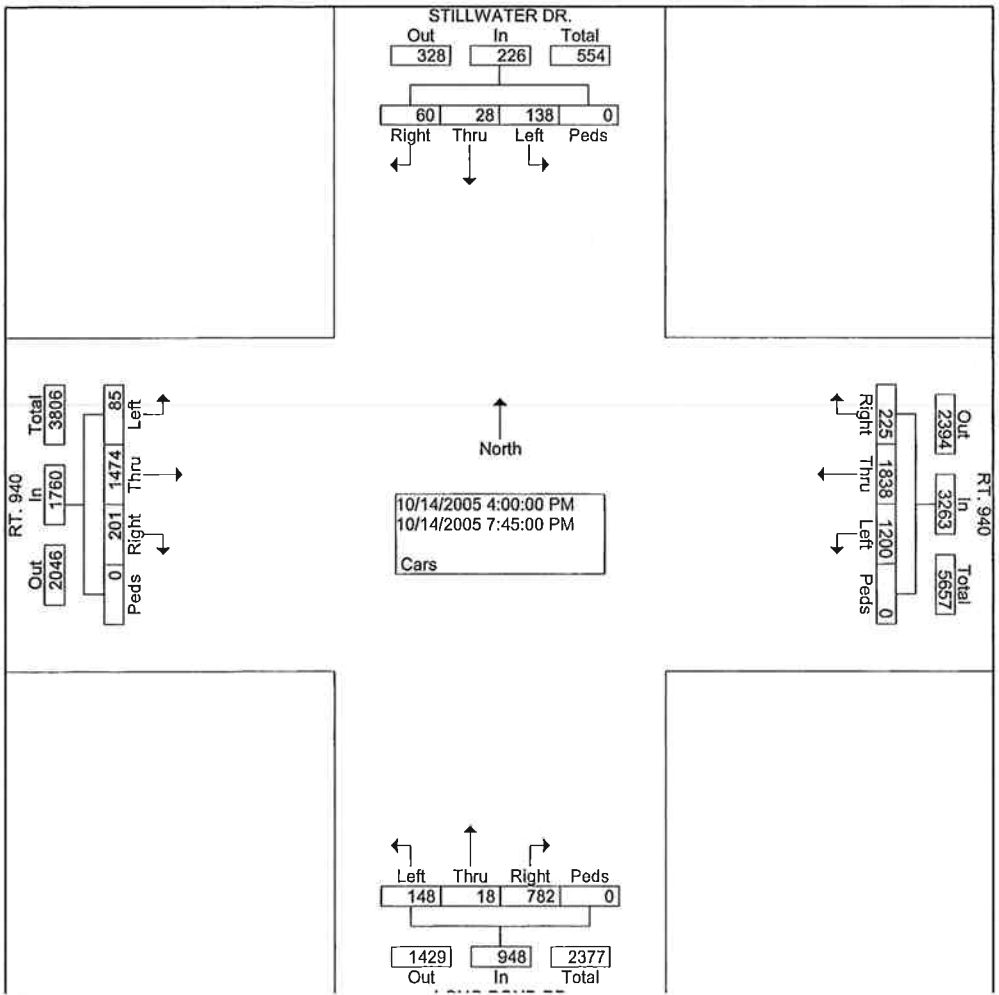
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

cation:Monroe County ,PA
ersection: Long Pond Rd /Rt. 940
te: Friday October 14, 2005
unter: CMK

File Name : BG1014
Site Code : 000000
Start Date : 10/14/2
Page No : 1

Groups Printed- Cars

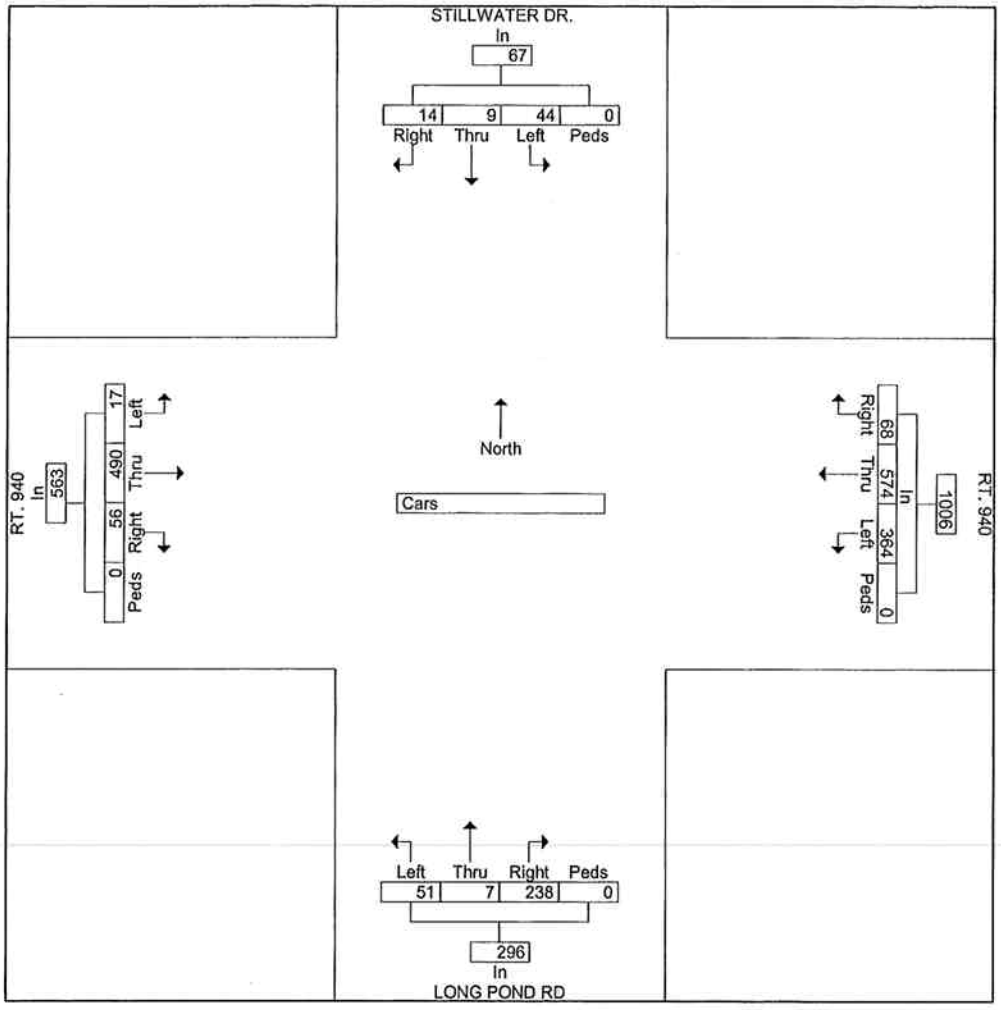
	STILLWATER DR. From North					RT. 940 From East					LONG POND RD From South					RT. 940 From West					
art Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	I To
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
4:00 PM	4	7	9	0	20	15	149	77	0	241	42	2	13	0	57	7	147	2	0	156	4
4:15 PM	4	0	9	0	13	14	128	82	0	224	71	2	10	0	83	24	112	4	0	140	4
4:30 PM	6	3	8	0	17	13	143	96	0	252	64	2	8	0	74	11	104	4	0	119	4
4:45 PM	5	4	5	0	14	16	159	88	0	263	61	1	20	0	82	14	127	7	0	148	5
Total	19	14	31	0	64	58	579	343	0	980	238	7	51	0	296	56	490	17	0	563	19
5:00 PM	1	1	10	0	12	19	131	89	0	239	45	1	10	0	56	14	108	8	0	130	4
5:15 PM	1	2	15	0	18	20	141	91	0	252	60	1	13	0	74	9	118	2	0	129	4
5:30 PM	7	2	14	0	23	19	136	91	0	246	45	0	6	0	51	14	114	6	0	134	4
5:45 PM	9	1	4	0	14	10	123	76	0	209	47	3	10	0	60	16	93	7	0	116	3
Total	18	6	43	0	67	68	531	347	0	946	197	5	39	0	241	53	433	23	0	509	17
6:00 PM	3	2	6	0	11	18	123	86	0	227	65	2	10	0	77	16	92	6	0	114	4
6:15 PM	3	1	13	0	17	10	96	77	0	183	55	3	9	0	67	10	93	2	0	105	3
6:30 PM	1	0	9	0	10	19	101	69	0	189	40	0	7	0	47	22	58	7	0	87	3
6:45 PM	4	2	8	0	14	12	89	67	0	168	35	0	3	0	38	10	71	9	0	90	3
Total	11	5	36	0	52	59	409	299	0	767	195	5	29	0	229	58	314	24	0	396	14
7:00 PM	2	0	7	0	9	13	94	48	0	155	36	0	6	0	42	7	66	6	0	79	2
7:15 PM	4	1	6	0	11	9	88	66	0	163	41	1	8	0	50	11	79	3	0	93	3
7:30 PM	5	1	8	0	14	6	76	52	0	134	51	0	10	0	61	10	49	3	0	62	2
7:45 PM	1	1	7	0	9	12	61	45	0	118	24	0	5	0	29	6	43	9	0	58	2
Total	12	3	28	0	43	40	319	211	0	570	152	1	29	0	182	34	237	21	0	292	10
Grand Total	60	28	138	0	226	225	1838	1200	0	3263	782	18	148	0	948	201	1474	85	0	1760	61
pprch %	26.5	12.4	61.1	0.0		6.9	56.3	36.8	0.0		82.5	1.9	15.6	0.0		11.4	83.8	4.8	0.0		
Total %	1.0	0.5	2.2	0.0	3.6	3.6	29.7	19.4	0.0	52.7	12.6	0.3	2.4	0.0	15.3	3.2	23.8	1.4	0.0	28.4	



184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1014
Site Code : 000000
Start Date : 10/14/2
Page No : 2

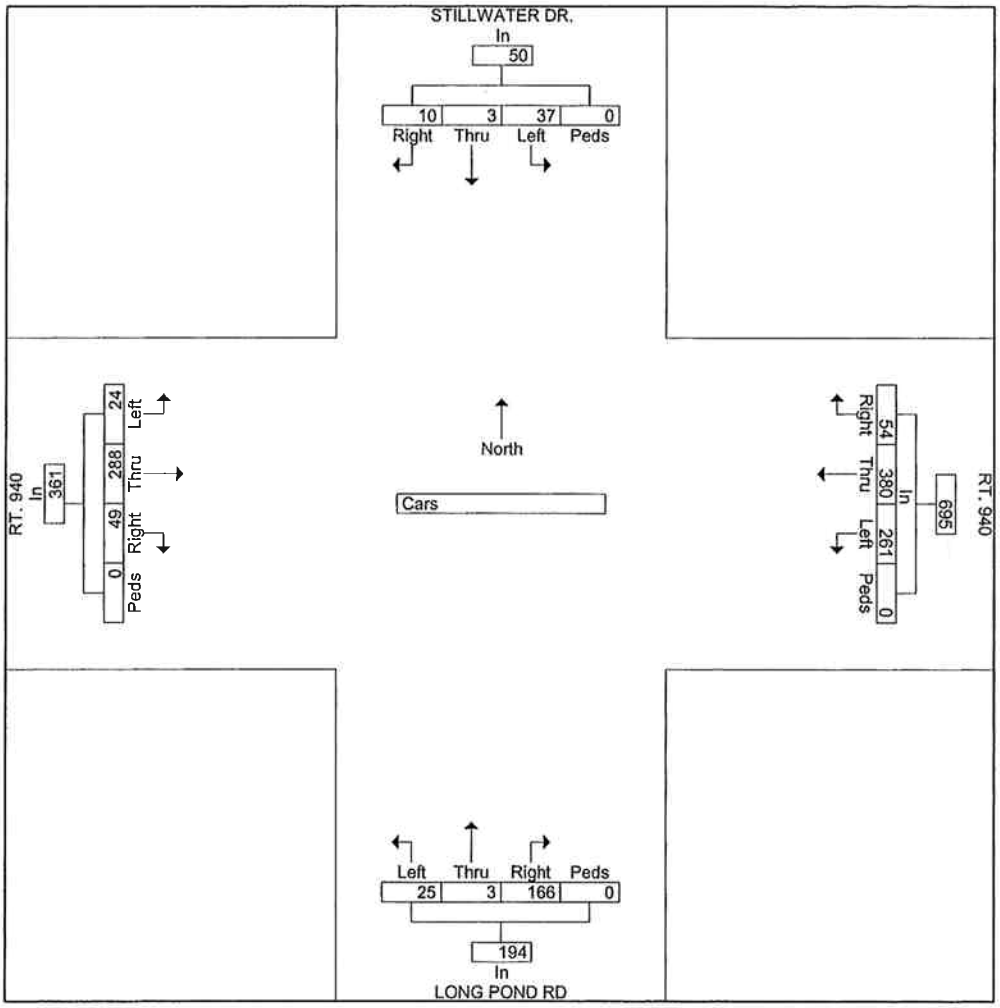
	STILLWATER DR. From North					RT. 940 From East					LONG POND RD From South					RT. 940 From West					
art Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	I To
k Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By pproach	04:45 PM					04:30 PM					04:00 PM					04:00 PM					
Volume	14	9	44	0	67	68	574	364	0	1006	238	7	51	0	296	56	490	17	0	563	
Percent	20.9	13.4	65.7	0.0		6.8	57.1	36.2	0.0		80.4	2.4	17.2	0.0		9.9	87.0	3.0	0.0		
High Int.	05:30 PM					04:45 PM					04:15 PM					04:00 PM					
Volume	7	2	14	0	23	16	159	88	0	263	71	2	10	0	83	7	147	2	0	156	
Peak Factor					0.728					0.956					0.892					0.902	



184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1014
Site Code : 000000
Start Date : 10/14/2
Page No : 3

	STILLWATER DR. From North					RT. 940 From East					LONG POND RD From South					RT. 940 From West					
art Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	I To
k Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By pproach	06:15 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	10	3	37	0	50	54	380	261	0	695	166	3	25	0	194	49	288	24	0	361	
Percent	20.0	6.0	74.0	0.0		7.8	54.7	37.6	0.0		85.6	1.5	12.9	0.0		13.6	79.8	6.6	0.0		
High Int.	06:15 PM					06:30 PM					06:15 PM					06:15 PM					
Volume	3	1	13	0	17	19	101	69	0	189	55	3	9	0	67	10	93	2	0	105	
Peak Factor					0.735					0.919					0.724					0.860	



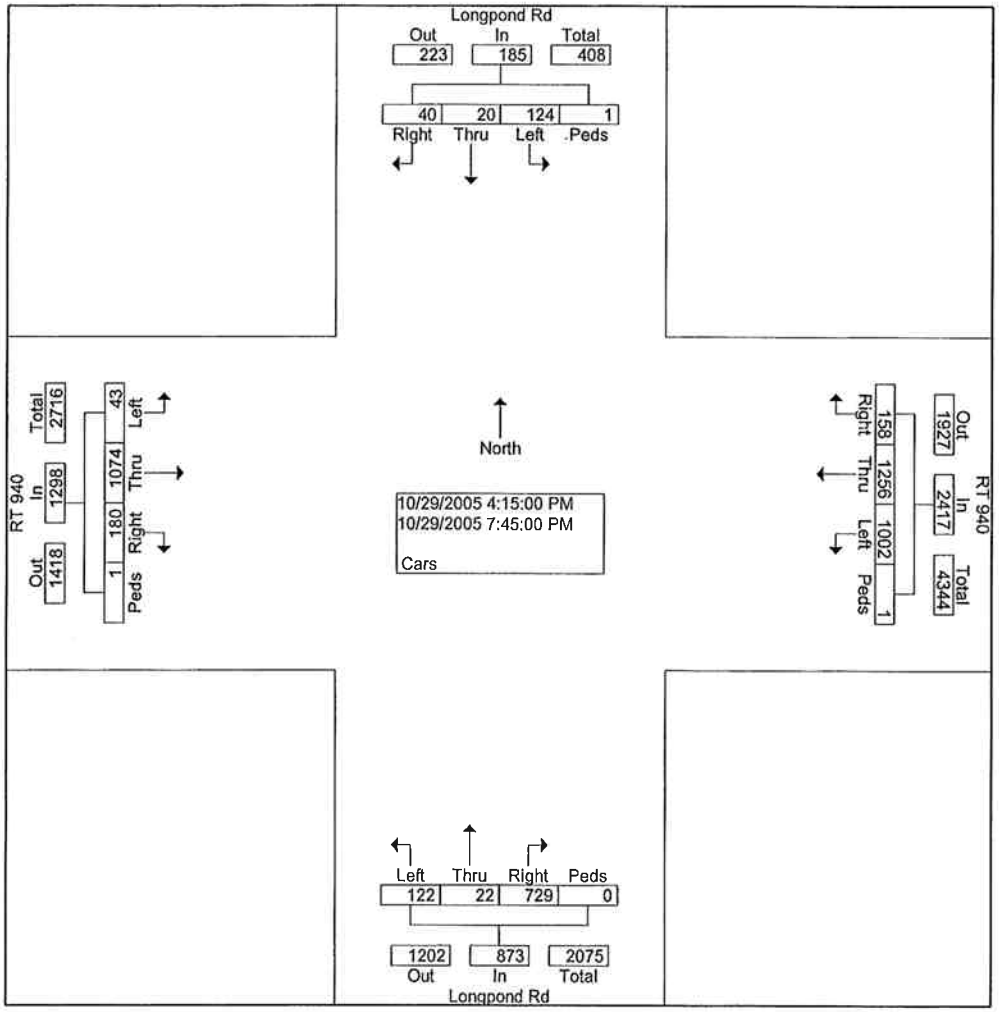
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

cation: Monroe County, PA
ersectionj Rt 940 / Longpond Rd
te: Saturday, October 29,2005
unter: RZ

File Name : BG1029
Site Code : 000000
Start Date : 10/29/2
Page No : 1

Groups Printed- Cars

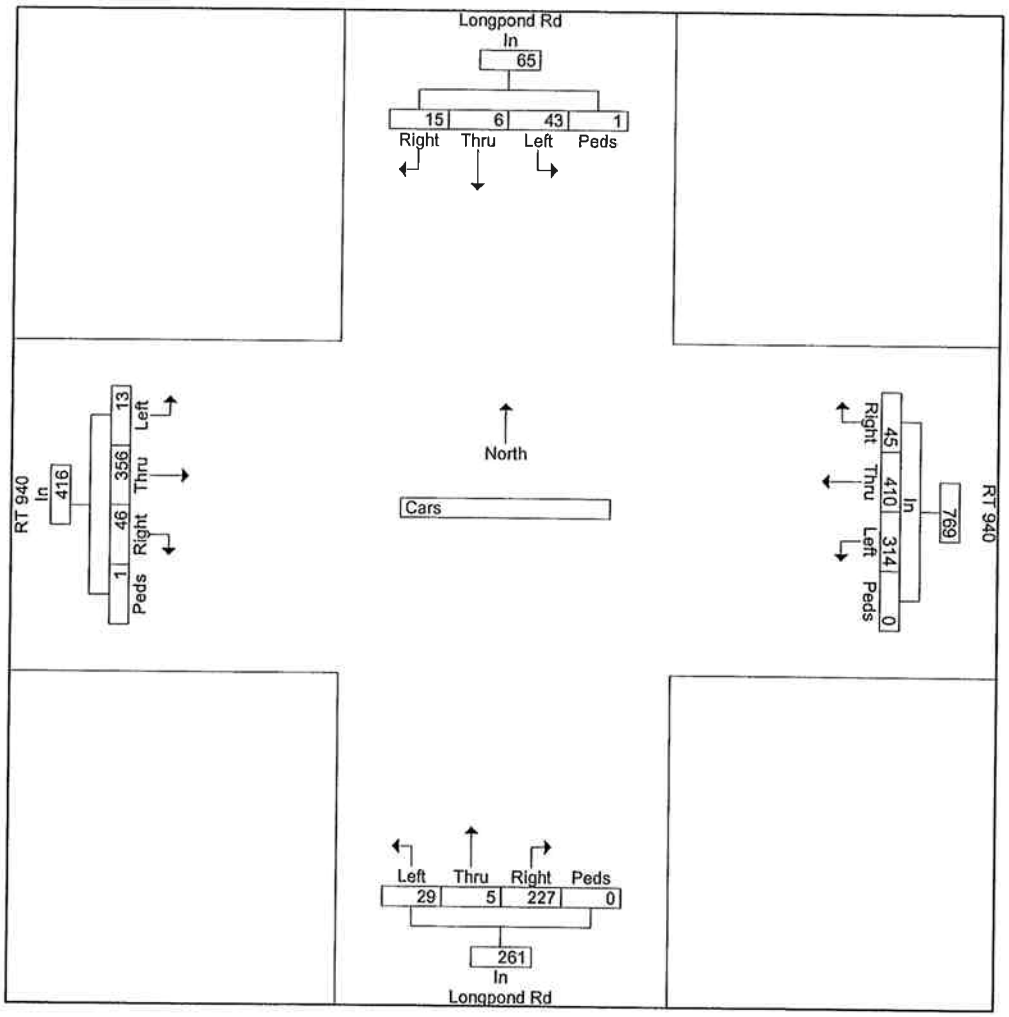
	Longpond Rd From North					RT 940 From East					Longpond Rd From South					RT 940 From West					
art Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	I To
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
4:15 PM	6	3	14	0	23	11	111	88	0	210	64	1	12	0	77	11	94	2	0	107	4
4:30 PM	1	0	11	1	13	8	96	76	0	180	48	2	7	0	57	16	81	2	1	100	3
4:45 PM	5	2	7	0	14	11	109	83	0	203	61	0	3	0	64	10	100	5	0	115	3
Total	12	5	32	1	50	30	316	247	0	593	173	3	22	0	198	37	275	9	1	322	11
5:00 PM	3	1	11	0	15	15	94	67	0	176	49	1	8	0	58	9	81	4	0	94	3
5:15 PM	2	0	5	0	7	18	80	78	0	176	41	2	11	0	54	11	63	1	0	75	3
5:30 PM	1	1	12	0	14	13	105	77	0	195	76	2	7	0	85	7	82	2	0	91	3
5:45 PM	1	3	5	0	9	10	99	70	0	179	47	2	7	0	56	10	70	4	0	84	3
Total	7	5	33	0	45	56	378	292	0	726	213	7	33	0	253	37	296	11	0	344	13
6:00 PM	2	5	11	0	18	12	93	69	0	174	52	1	11	0	64	20	81	5	0	106	3
6:15 PM	5	0	12	0	17	11	65	71	0	147	59	1	5	0	65	20	66	1	0	87	3
6:30 PM	1	0	6	0	7	12	61	60	1	134	48	1	8	0	57	7	82	4	0	93	2
6:45 PM	2	2	7	0	11	8	85	54	0	147	47	1	5	0	53	16	64	2	0	82	2
Total	10	7	36	0	53	43	304	254	1	602	206	4	29	0	239	63	293	12	0	368	12
7:00 PM	5	1	4	0	10	6	70	61	0	137	42	3	14	0	59	18	55	5	0	78	2
7:15 PM	2	1	7	0	10	5	71	55	0	131	38	1	11	0	50	13	61	4	0	78	2
7:30 PM	3	1	4	0	8	11	56	58	0	125	27	1	8	0	36	9	39	0	0	48	2
7:45 PM	1	0	8	0	9	7	61	35	0	103	30	3	5	0	38	3	55	2	0	60	2
Total	11	3	23	0	37	29	258	209	0	496	137	8	38	0	183	43	210	11	0	264	9
Grand Total	40	20	124	1	185	158	1256	1002	1	2417	729	22	122	0	873	180	1074	43	1	1298	47
pprch %	21.6	10.8	67.0	0.5		6.5	52.0	41.5	0.0		83.5	2.5	14.0	0.0		13.9	82.7	3.3	0.1		
Total %	0.8	0.4	2.6	0.0	3.9	3.3	26.3	21.0	0.0	50.6	15.3	0.5	2.6	0.0	18.3	3.8	22.5	0.9	0.0	27.2	



184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1029
Site Code : 000000
Start Date : 10/29/2
Page No : 2

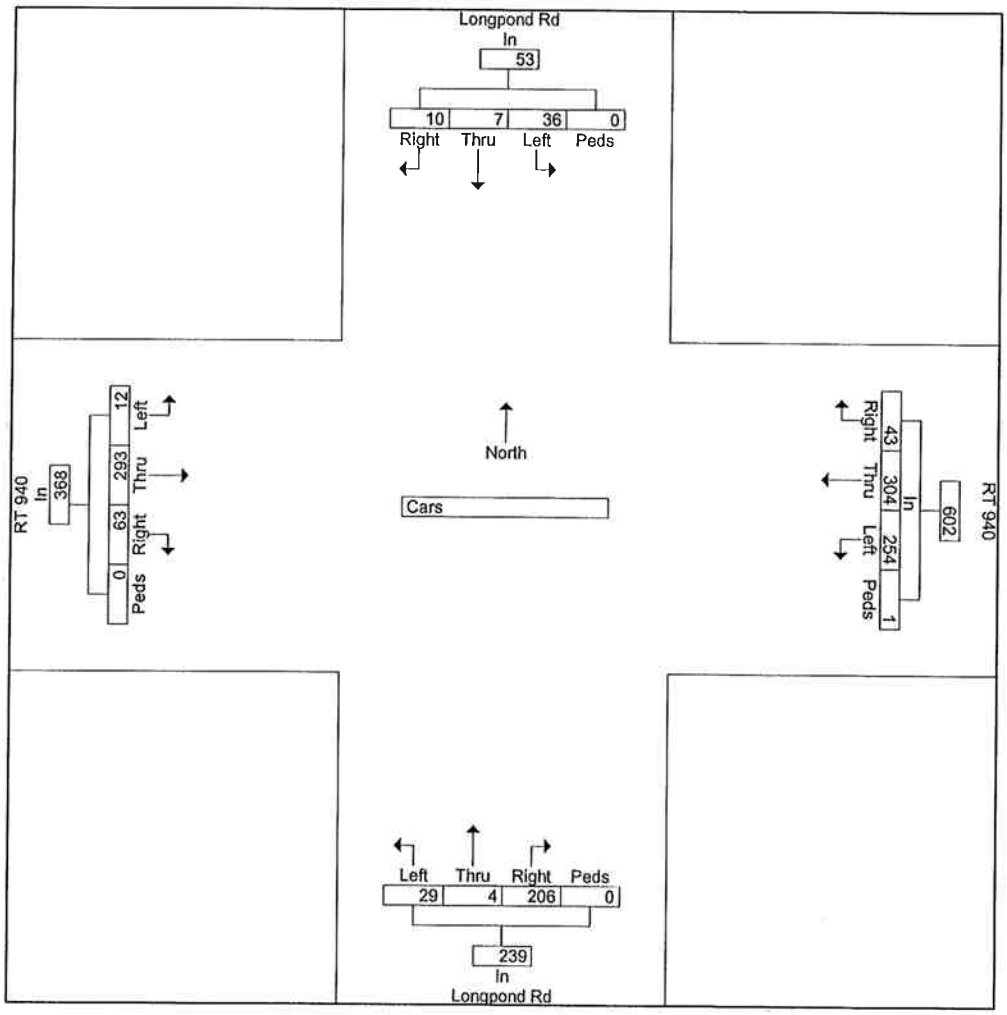
	Longpond Rd From North					RT 940 From East					Longpond Rd From South					RT 940 From West					
art Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	I To
k Hour From 04:15 PM to 06:00 PM - Peak 1 of 1																					
By pproach	04:15 PM					04:15 PM					04:45 PM					04:15 PM					
Volume	15	6	43	1	65	45	410	314	0	769	227	5	29	0	261	46	356	13	1	416	
Percent	23.1	9.2	66.2	1.5		5.9	53.3	40.8	0.0		87.0	1.9	11.1	0.0		11.1	85.6	3.1	0.2		
High Int.	04:15 PM					04:15 PM					05:30 PM					04:45 PM					
Volume	6	3	14	0	23	11	111	88	0	210	76	2	7	0	85	10	100	5	0	115	
Peak Factor					0.707					0.915					0.768					0.904	



184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1029
Site Code : 000000
Start Date : 10/29/2
Page No : 3

	Longpond Rd From North					RT 940 From East					Longpond Rd From South					RT 940 From West					
art Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	I To
k Hour From 06:00 PM to 07:45 PM - Peak 1 of 1																					
By pproach	06:00 PM					06:00 PM					06:00 PM					06:00 PM					
Volume	10	7	36	0	53	43	304	254	1	602	206	4	29	0	239	63	293	12	0	368	
Percent	18.9	13.2	67.9	0.0		7.1	50.5	42.2	0.2		86.2	1.7	12.1	0.0		17.1	79.6	3.3	0.0		
High Int.	06:00 PM					06:00 PM					06:15 PM					06:00 PM					
Volume	2	5	11	0	18	12	93	69	0	174	59	1	5	0	65	20	81	5	0	106	
Peak Factor					0.736					0.865					0.919					0.868	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co., PA
Intersection: Rt. 940 / I380 SB Ramps
Date: Friday, October 14, 2005
Counter: JT

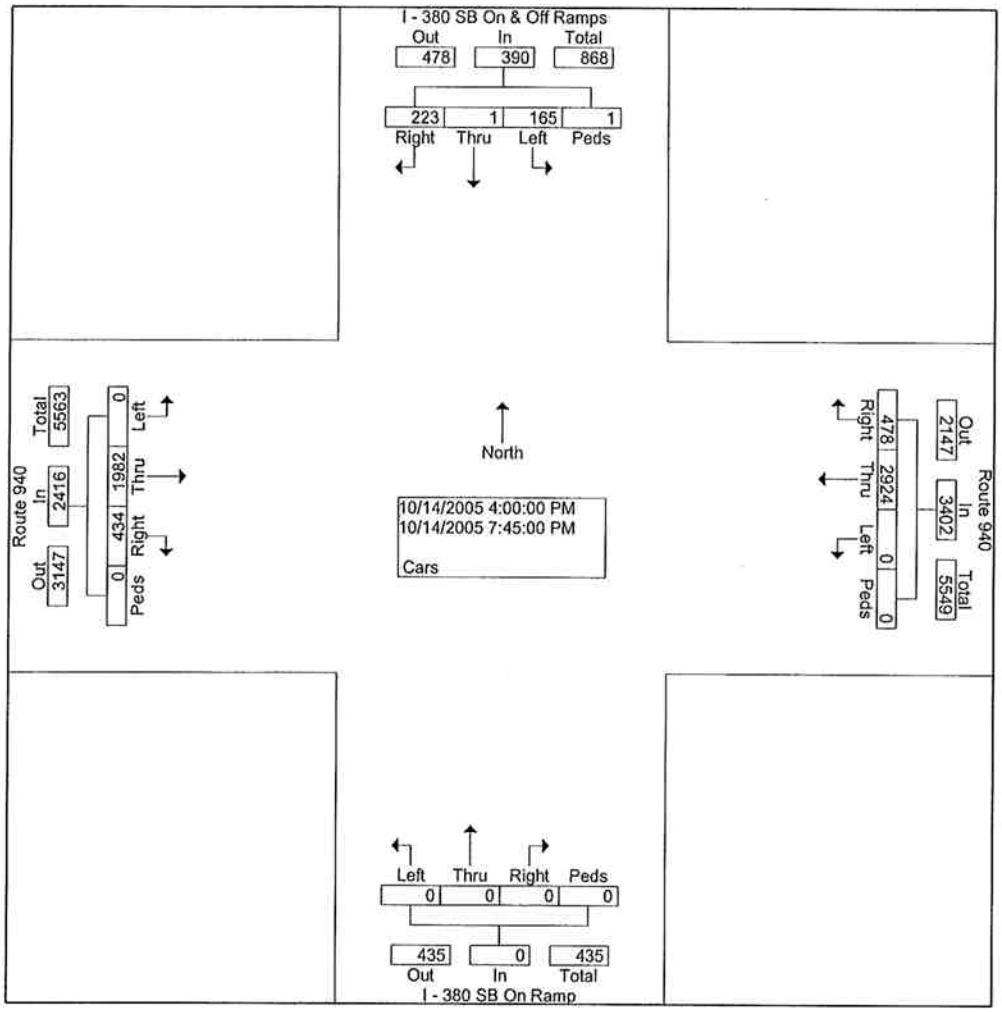
File Name : I380SB~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 1

Groups Printed- Cars

	I - 380 SB On & Off Ramps From North					Route 940 From East					I - 380 SB On Ramp From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	14	0	22	0	36	39	214	0	0	253	0	0	0	0	0	38	146	0	0	184	473
04:15 PM	39	0	17	0	56	31	183	0	0	214	0	0	0	0	0	36	169	0	0	205	475
04:30 PM	18	0	4	0	22	42	222	0	0	264	0	0	0	0	0	38	151	0	0	189	475
04:45 PM	24	0	5	0	29	33	226	0	0	259	0	0	0	0	0	36	159	0	0	195	483
Total	95	0	48	0	143	145	845	0	0	990	0	0	0	0	0	148	625	0	0	773	1906
05:00 PM	10	0	9	0	19	63	218	0	0	281	0	0	0	0	0	23	147	0	0	170	470
05:15 PM	8	0	13	0	21	35	231	0	0	266	0	0	0	0	0	36	150	0	0	186	473
05:30 PM	17	0	14	0	31	27	223	0	0	250	0	0	0	0	0	32	135	0	0	167	448
05:45 PM	11	0	9	0	20	37	192	0	0	229	0	0	0	0	0	24	123	0	0	147	396
Total	46	0	45	0	91	162	864	0	0	1026	0	0	0	0	0	115	555	0	0	670	1787
06:00 PM	21	0	15	0	36	25	204	0	0	229	0	0	0	0	0	36	132	0	0	168	433
06:15 PM	15	0	12	0	27	15	169	0	0	184	0	0	0	0	0	21	124	0	0	145	356
06:30 PM	10	1	20	0	31	30	157	0	0	187	0	0	0	0	0	17	108	0	0	125	343
06:45 PM	7	0	9	0	16	27	155	0	0	182	0	0	0	0	0	32	81	0	0	113	311
Total	53	1	56	0	110	97	685	0	0	782	0	0	0	0	0	106	445	0	0	551	1443
07:00 PM	10	0	1	1	12	22	147	0	0	169	0	0	0	0	0	23	94	0	0	117	298
07:15 PM	8	0	9	0	17	15	154	0	0	169	0	0	0	0	0	16	104	0	0	120	306
07:30 PM	5	0	6	0	11	23	130	0	0	153	0	0	0	0	0	13	97	0	0	110	274
07:45 PM	6	0	0	0	6	14	99	0	0	113	0	0	0	0	0	13	62	0	0	75	194
Total	29	0	16	1	46	74	530	0	0	604	0	0	0	0	0	65	357	0	0	422	1072
Grand Total	223	1	165	1	390	478	2924	0	0	3402	0	0	0	0	0	434	1982	0	0	2416	6208
Apprch %	57.2	0.3	42.3	0.3		14.1	85.9	0.0	0.0		0.0	0.0	0.0	0.0		18.0	82.0	0.0	0.0		
Total %	3.6	0.0	2.7	0.0	6.3	7.7	47.1	0.0	0.0	54.8	0.0	0.0	0.0	0.0	0.0	7.0	31.9	0.0	0.0	38.9	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

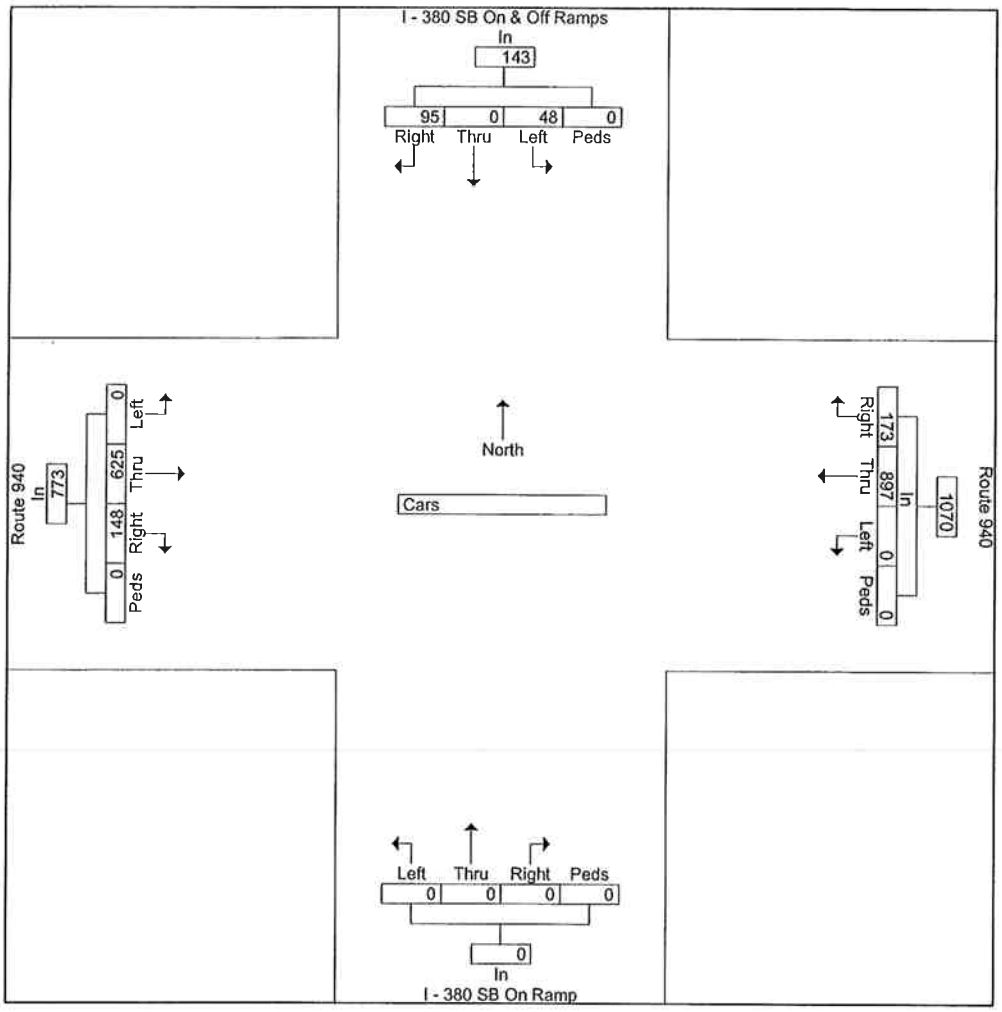
File Name : I380SB~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : I380SB~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 3

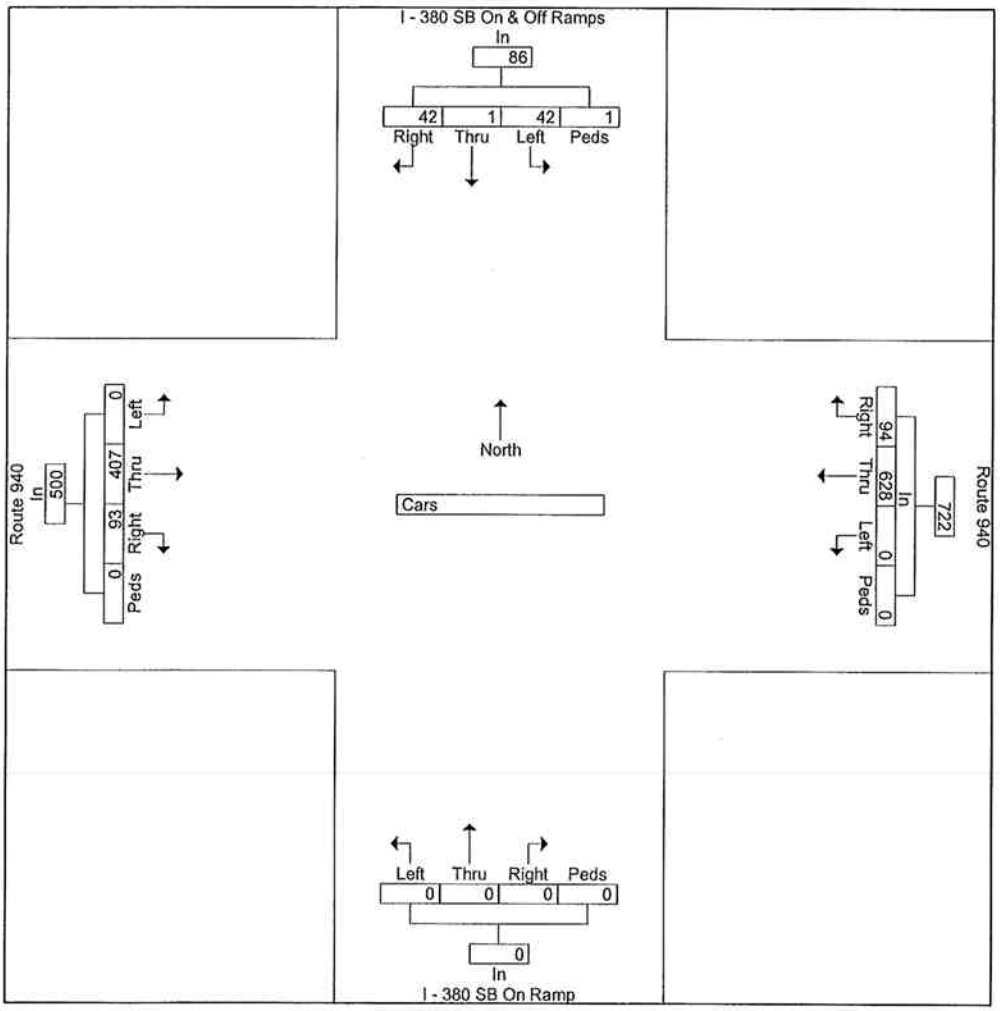
	I - 380 SB On & Off Ramps From North					Route 940 From East					I - 380 SB On Ramp From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:00 PM					04:30 PM					04:00 PM					04:00 PM					
Volume	95	0	48	0	143	173	897	0	0	1070	0	0	0	0	0	148	625	0	0	773	
Percent	66.4	0.0	33.6	0.0		16.2	83.8	0.0	0.0		-	-	-	-		19.1	80.9	0.0	0.0		
High Int.	04:15 PM					05:00 PM					-					04:15 PM					
Volume	39	0	17	0	56	63	218	0	0	281	-	-	-	-	-	36	169	0	0	205	
Peak Factor					0.638					0.952					-					0.943	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : I380SB~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 4

	I - 380 SB On & Off Ramps From North					Route 940 From East					I - 380 SB On Ramp From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:15 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	42	1	42	1	86	94	628	0	0	722	0	0	0	0	0	93	407	0	0	500	
Percent	48.8	1.2	48.8	1.2		13.0	87.0	0.0	0.0		-	-	-	-		18.6	81.4	0.0	0.0		
High Int.	06:30 PM					06:30 PM					-					06:15 PM					
Volume	10	1	20	0	31	30	157	0	0	187	-	-	-	-	-	21	124	0	0	145	
Peak Factor					0.694					0.965					-					0.862	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co., PA
Intersection: Rt. 940 / I380 SB Ramps
Date: Saturday, October 15, 2005
Counter: JT

File Name : BG1015-4
Site Code : 00000000
Start Date : 10/15/2005
Page No : 1

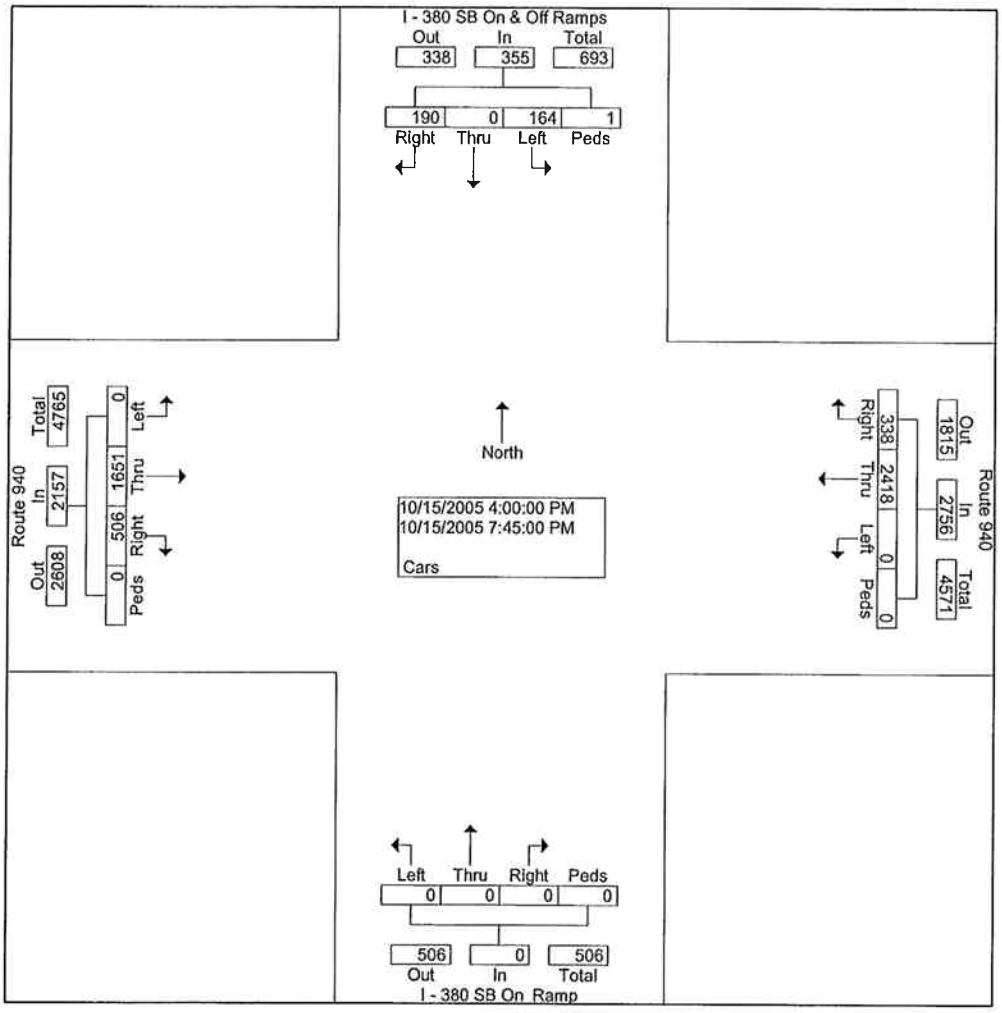
Groups Printed- Cars

	I - 380 SB On & Off Ramps From North					Route 940 From East					I - 380 SB On Ramp From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	16	0	11	0	27	40	218	0	0	258	0	0	0	0	0	31	111	0	0	142	427
04:15 PM	19	0	10	0	29	30	197	0	0	227	0	0	0	0	0	51	118	0	0	169	425
04:30 PM	12	0	8	0	20	32	170	0	0	202	0	0	0	0	0	32	133	0	0	165	387
04:45 PM	16	0	4	1	21	20	170	0	0	190	0	0	0	0	0	32	106	0	0	138	349
Total	63	0	33	1	97	122	755	0	0	877	0	0	0	0	0	146	468	0	0	614	1588
05:00 PM	12	0	14	0	26	24	165	0	0	189	0	0	0	0	0	23	104	0	0	127	342
05:15 PM	17	0	12	0	29	23	159	0	0	182	0	0	0	0	0	38	128	0	0	166	377
05:30 PM	15	0	13	0	28	20	147	0	0	167	0	0	0	0	0	36	112	0	0	148	343
05:45 PM	5	0	5	0	10	16	157	0	0	173	0	0	0	0	0	29	123	0	0	152	335
Total	49	0	44	0	93	83	628	0	0	711	0	0	0	0	0	126	467	0	0	593	1397
06:00 PM	8	0	14	0	22	19	157	0	0	176	0	0	0	0	0	22	76	0	0	98	296
06:15 PM	14	0	13	0	27	14	153	0	0	167	0	0	0	0	0	32	93	0	0	125	319
06:30 PM	11	0	11	0	22	17	132	0	0	149	0	0	0	0	0	36	134	0	0	170	341
06:45 PM	12	0	8	0	20	14	130	0	0	144	0	0	0	0	0	40	101	0	0	141	305
Total	45	0	46	0	91	64	572	0	0	636	0	0	0	0	0	130	404	0	0	534	1261
07:00 PM	6	0	5	0	11	19	126	0	0	145	0	0	0	0	0	23	81	0	0	104	260
07:15 PM	9	0	9	0	18	14	115	0	0	129	0	0	0	0	0	27	81	0	0	108	255
07:30 PM	9	0	17	0	26	23	126	0	0	149	0	0	0	0	0	37	79	0	0	116	291
07:45 PM	9	0	10	0	19	13	96	0	0	109	0	0	0	0	0	17	71	0	0	88	216
Total	33	0	41	0	74	69	463	0	0	532	0	0	0	0	0	104	312	0	0	416	1022
Grand Total	190	0	164	1	355	338	2418	0	0	2756	0	0	0	0	0	506	1651	0	0	2157	5268
Apprch %	53.5	0.0	46.2	0.3		12.3	87.7	0.0	0.0		0.0	0.0	0.0	0.0		23.5	76.5	0.0	0.0		
Total %	3.6	0.0	3.1	0.0	6.7	6.4	45.9	0.0	0.0	52.3	0.0	0.0	0.0	0.0	0.0	9.6	31.3	0.0	0.0	40.9	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co., PA
Intersection: Rt. 940 / I380 SB Ramps
Date: Saturday, October 15, 2005
Counter: JT

File Name : BG1015-4
Site Code : 00000000
Start Date : 10/15/2005
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co., PA
Intersection: Rt. 940 / I380 SB Ramps
Date: Saturday, October 15, 2005
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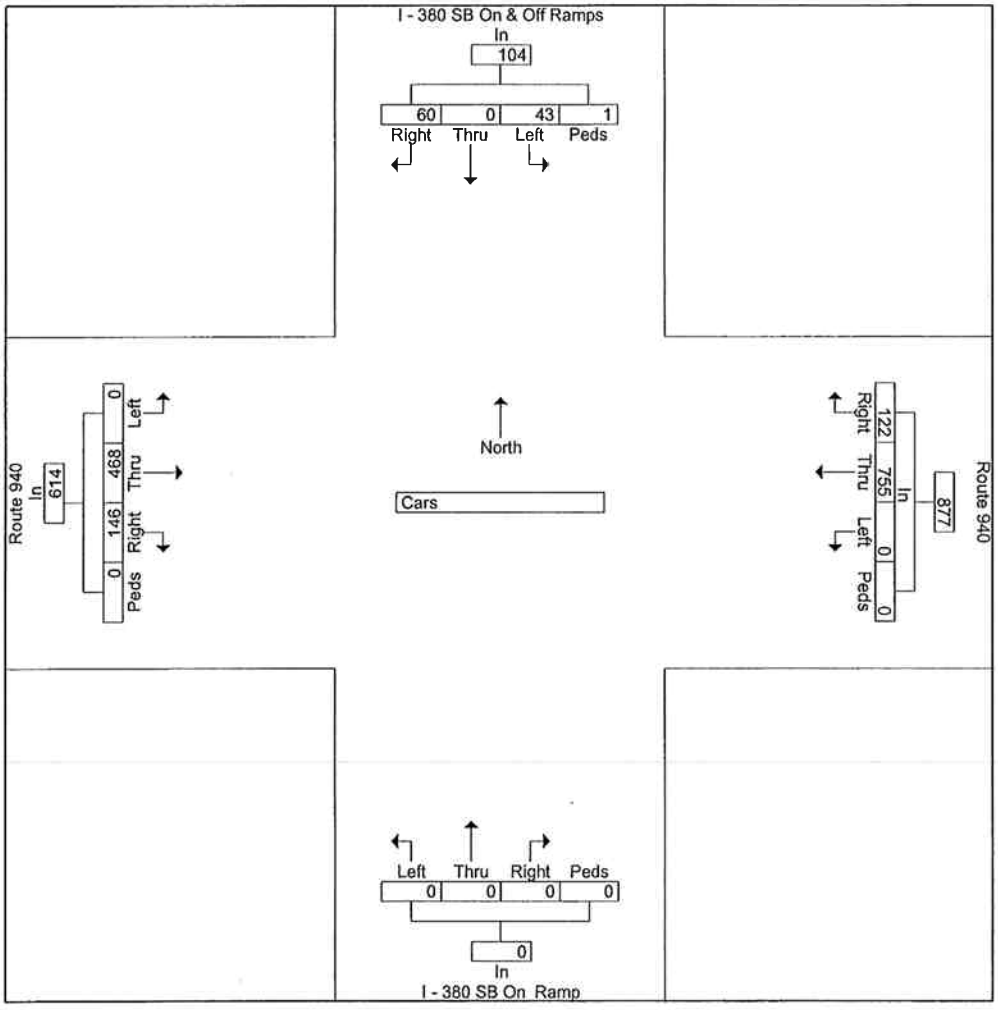
File Name : BG1015-4
Site Code : 00000000
Start Date : 10/15/2005
Page No : 3

	I - 380 SB On & Off Ramps From North					Route 940 From East					I - 380 SB On Ramp From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:45 PM					04:00 PM					04:00 PM					04:00 PM					
Volume	60	0	43	1	104	122	755	0	0	877	0	0	0	0	0	146	468	0	0	614	
Percent	57.7	0.0	41.3	1.0		13.9	86.1	0.0	0.0		-	-	-	-		23.8	76.2	0.0	0.0		
High Int.	05:15 PM					04:00 PM					-					04:15 PM					
Volume	17	0	12	0	29	40	218	0	0	258	-	-	-	-	-	51	118	0	0	169	
Peak Factor					0.897					0.850					-					0.908	

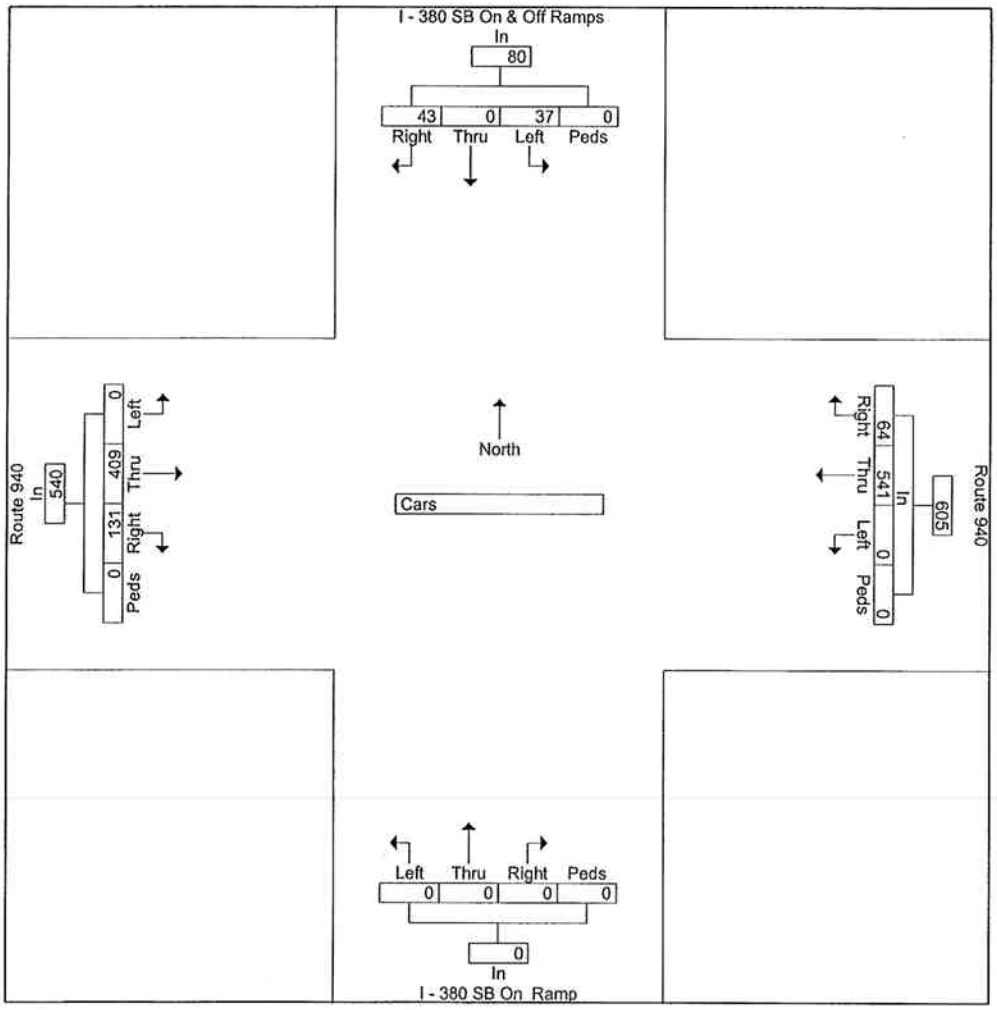


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co., PA
Intersection: Rt. 940 / I380 SB Ramps
Date: Saturday, October 15, 2005
Counter: JT

File Name : BG1015-4
Site Code : 00000000
Start Date : 10/15/2005
Page No : 4

	I - 380 SB On & Off Ramps From North					Route 940 From East					I - 380 SB On Ramp From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:15 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	43	0	37	0	80	64	541	0	0	605	0	0	0	0	0	131	409	0	0	540	
Percent	53.8	0.0	46.3	0.0		10.6	89.4	0.0	0.0		-	-	-	-		24.3	75.7	0.0	0.0		
High Int.	06:15 PM					06:15 PM					-					06:30 PM					
Volume	14	0	13	0	27	14	153	0	0	167	-	-	-	-	-	36	134	0	0	170	
Peak Factor					0.741					0.906					-					0.794	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co., PA
Intersection: Rt. 940 / I380 NB Ramps
Date: Friday, October 14, 2005
Counter: ET

File Name : I380NB~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 1

Groups Printed- Cars

	I-380 NB On Ramp From North					Route 940 From East					I-380 NB Off Ramp From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	21	195	0	0	216	34	1	51	0	86	0	156	18	0	174	476
04:15 PM	0	0	0	0	0	29	182	0	0	211	33	0	44	0	77	0	168	13	0	181	469
04:30 PM	0	0	0	0	0	34	249	0	0	283	30	0	36	0	66	0	142	18	0	160	509
04:45 PM	0	0	0	0	0	36	220	0	1	257	35	0	47	0	82	0	153	14	0	167	506
Total	0	0	0	0	0	120	846	0	1	967	132	1	178	0	311	0	619	63	0	682	1960
05:00 PM	0	0	0	0	0	30	249	0	0	279	28	1	45	0	74	0	142	14	0	156	509
05:15 PM	0	0	0	0	0	36	212	0	0	248	37	1	65	0	103	0	142	23	0	165	516
05:30 PM	0	0	0	0	0	28	208	0	0	236	25	1	53	0	79	0	137	16	0	153	468
05:45 PM	0	0	0	0	0	32	187	0	0	219	36	2	54	0	92	9	106	21	0	136	447
Total	0	0	0	0	0	126	856	0	0	982	126	5	217	0	348	9	527	74	0	610	1940
06:00 PM	0	0	0	0	0	14	168	0	0	182	35	0	65	0	100	0	121	27	0	148	430
06:15 PM	0	0	0	0	0	17	150	0	0	167	44	1	41	0	86	0	120	21	0	141	394
06:30 PM	0	0	0	0	0	15	155	0	0	170	39	0	41	0	80	0	119	13	0	132	382
06:45 PM	0	0	0	0	0	23	141	0	1	165	56	0	51	0	107	0	90	8	0	98	370
Total	0	0	0	0	0	69	614	0	1	684	174	1	198	0	373	0	450	69	0	519	1576
07:00 PM	0	0	0	0	0	19	129	0	0	148	39	0	37	0	76	0	85	8	0	93	317
07:15 PM	0	0	0	0	0	22	134	0	0	156	20	0	43	0	63	0	96	17	0	113	332
07:30 PM	0	0	0	0	0	11	109	0	0	120	33	1	52	0	86	0	84	19	0	103	309
07:45 PM	0	0	0	0	0	10	94	0	0	104	29	0	25	0	54	0	56	8	0	64	222
Total	0	0	0	0	0	62	466	0	0	528	121	1	157	0	279	0	321	52	0	373	1180
Grand Total	0	0	0	0	0	377	2782	0	2	3161	553	8	750	0	1311	9	1917	258	0	2184	6656
Apprch %	0.0	0.0	0.0	0.0		11.9	88.0	0.0	0.1		42.2	0.6	57.2	0.0		0.4	87.8	11.8	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	5.7	41.8	0.0	0.0	47.5	8.3	0.1	11.3	0.0	19.7	0.1	28.8	3.9	0.0	32.8	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
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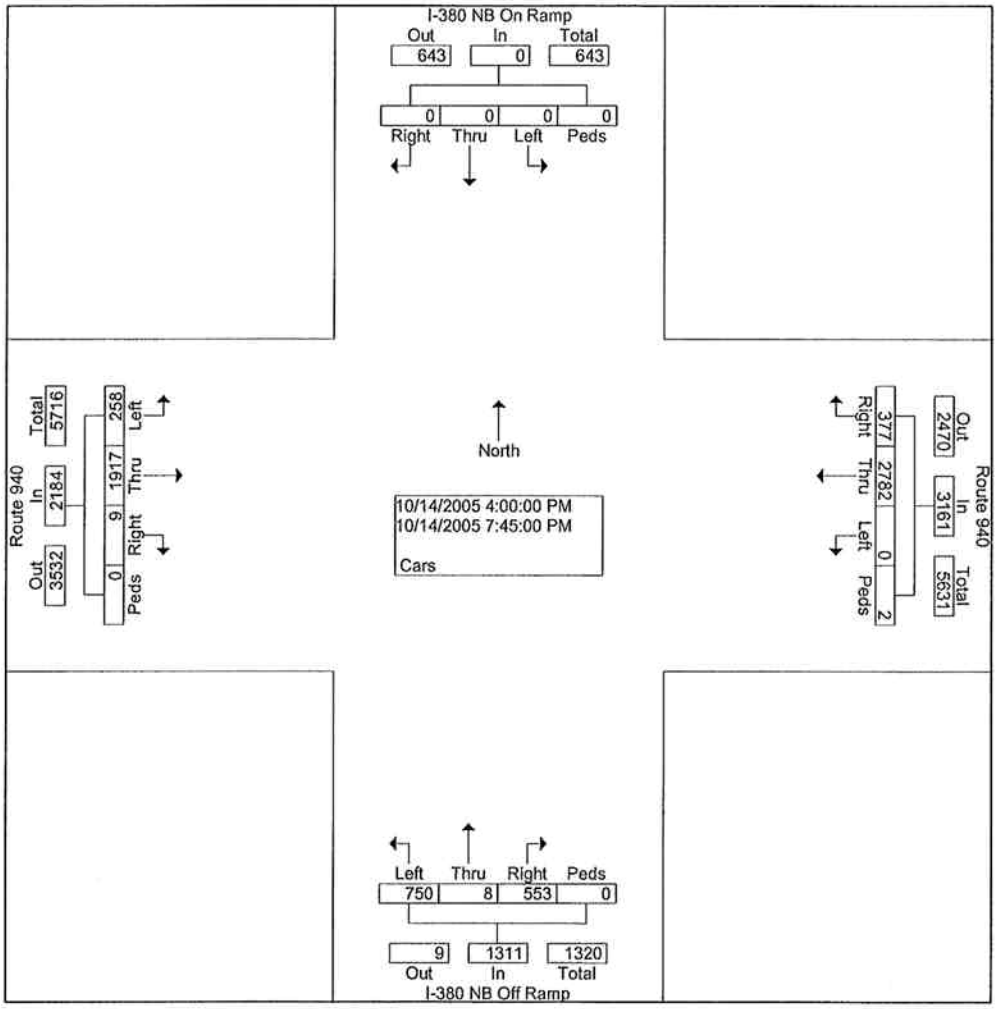

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
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File Name : I380NB~1
Site Code : 00000000
Start Date : 10/14/2005
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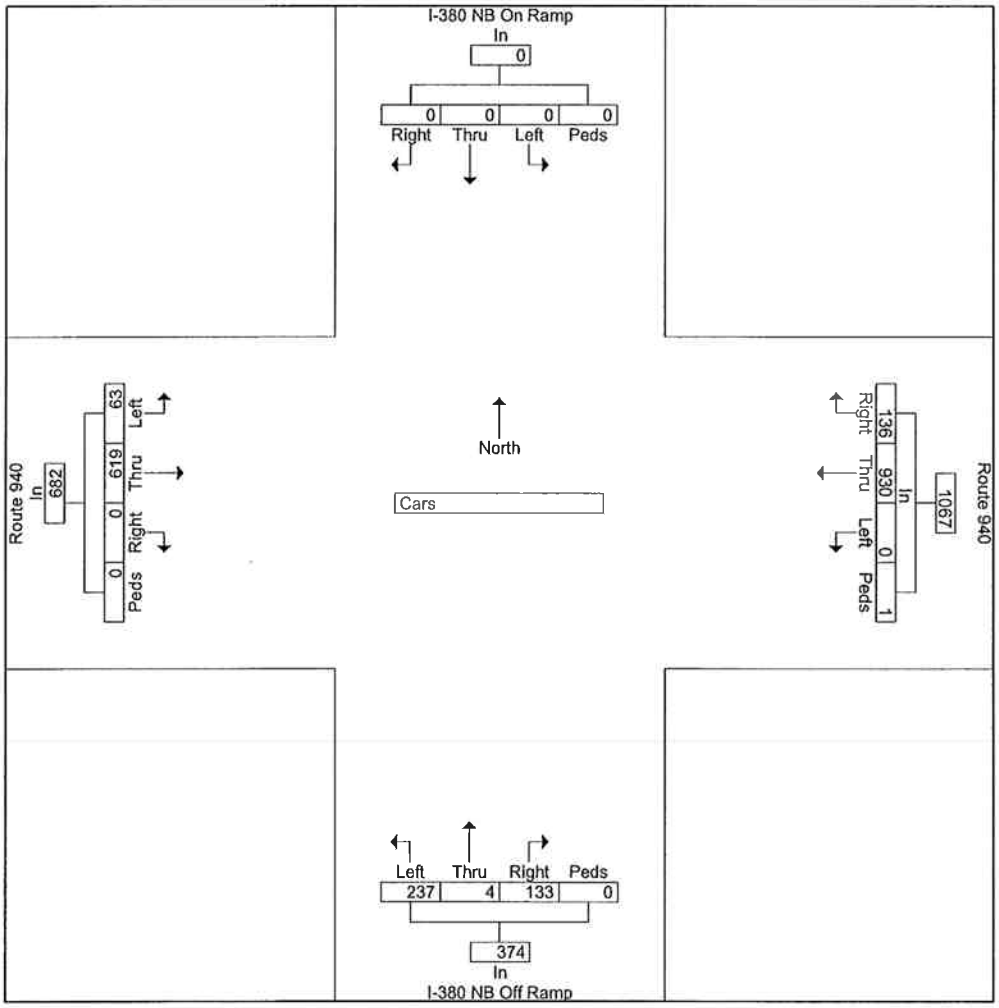
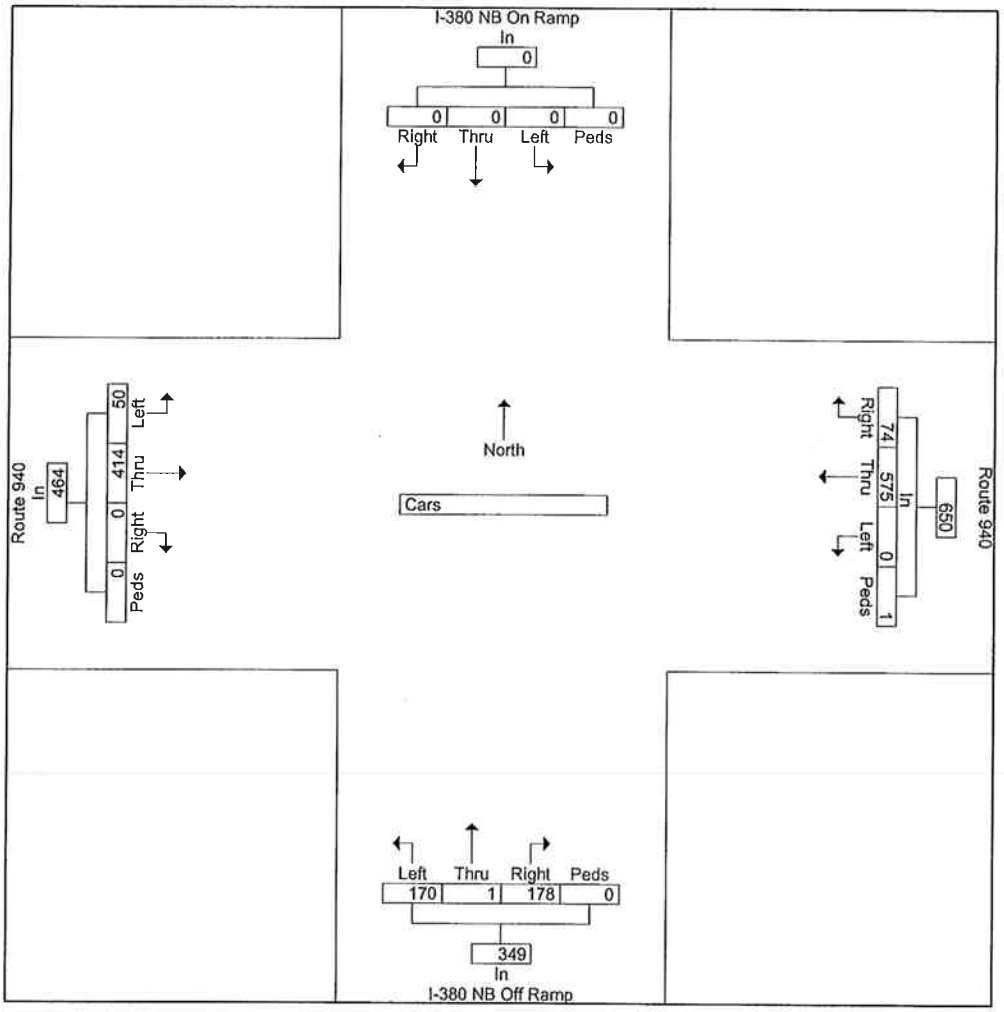
	I-380 NB On Ramp From North					Route 940 From East					I-380 NB Off Ramp From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:00 PM					04:30 PM					05:15 PM					04:00 PM					
Volume	0	0	0	0	0	136	930	0	1	1067	133	4	237	0	374	0	619	63	0	682	
Percent	-	-	-	-		12.7	87.2	0.0	0.1		35.6	1.1	63.4	0.0		0.0	90.8	9.2	0.0		
High Int.	-					04:30 PM					05:15 PM					04:15 PM					
Volume	-	-	-	-	-	34	249	0	0	283	37	1	65	0	103	0	168	13	0	181	
Peak Factor					-					0.943					0.908					0.942	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : I380NB~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 4

	I-380 NB On Ramp From North					Route 940 From East					I-380 NB Off Ramp From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:15 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	0	0	0	0	0	74	575	0	1	650	178	1	170	0	349	0	414	50	0	464	
Percent	-	-	-	-		11.4	88.5	0.0	0.2		51.0	0.3	48.7	0.0		0.0	89.2	10.8	0.0		
High Int.	-					06:30 PM					06:45 PM					06:15 PM					
Volume	-	-	-	-	-	15	155	0	0	170	56	0	51	0	107	0	120	21	0	141	
Peak Factor					-					0.956					0.815					0.823	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co., PA
Intersection: Rt. 940 / I380 NB Ramps
Date: Saturday, October 15, 2005
Counter: ET

File Name : BG1015-3
Site Code : 00000000
Start Date : 10/15/2005
Page No : 1

Groups Printed- Cars

	I-380 NB On Ramp From North					Rout 940 From East					I-380 NB Off Ramp From South					Rout 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	0	0	0	0	13	211	0	0	224	33	0	51	0	84	0	103	17	0	120	428
04:15 PM	0	0	0	0	0	14	187	0	0	201	29	0	43	0	72	0	122	6	0	128	401
04:30 PM	0	0	0	0	0	17	174	0	0	191	30	0	33	0	63	0	126	11	0	137	391
04:45 PM	0	0	0	1	1	7	153	0	0	160	28	1	43	0	72	0	99	10	0	109	342
Total	0	0	0	1	1	51	725	0	0	776	120	1	170	0	291	0	450	44	0	494	1562
05:00 PM	0	0	0	0	0	9	153	0	0	162	37	0	38	0	75	0	108	16	0	124	361
05:15 PM	0	0	0	0	0	6	137	0	0	143	29	0	45	0	74	0	121	20	0	141	358
05:30 PM	0	0	0	0	0	6	130	0	0	136	31	0	41	0	72	0	112	12	0	124	332
05:45 PM	0	0	0	0	0	10	134	0	0	144	31	2	38	0	71	0	117	13	0	130	345
Total	0	0	0	0	0	31	554	0	0	585	128	2	162	0	292	0	458	61	0	519	1396
06:00 PM	0	0	0	0	0	15	141	0	0	156	41	0	31	0	72	0	92	4	0	96	324
06:15 PM	0	0	0	0	0	5	138	0	0	143	48	3	33	0	84	0	92	14	0	106	333
06:30 PM	0	0	0	0	0	11	110	0	0	121	33	1	42	0	76	0	139	9	0	148	345
06:45 PM	0	0	0	0	0	8	125	0	0	133	30	0	23	0	53	0	94	15	0	109	295
Total	0	0	0	0	0	39	514	0	0	553	152	4	129	0	285	0	417	42	0	459	1297
07:00 PM	0	0	0	0	0	19	119	0	0	138	26	0	32	0	58	0	76	10	0	86	282
07:15 PM	0	0	0	0	0	8	111	0	0	119	21	0	28	0	49	0	80	7	0	87	255
07:30 PM	0	0	0	0	0	4	128	0	0	132	24	0	22	0	46	0	86	11	0	97	275
07:45 PM	0	0	0	0	0	5	87	0	0	92	27	0	22	0	49	0	68	11	0	79	220
Total	0	0	0	0	0	36	445	0	0	481	98	0	104	0	202	0	310	39	0	349	1032
Grand Total	0	0	0	1	1	157	2238	0	0	2395	498	7	565	0	1070	0	1635	186	0	1821	5287
Apprch %	0.0	0.0	0.0	100.0		6.6	93.4	0.0	0.0		46.5	0.7	52.8	0.0		0.0	89.8	10.2	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	3.0	42.3	0.0	0.0	45.3	9.4	0.1	10.7	0.0	20.2	0.0	30.9	3.5	0.0	34.4	

Tri-State Traffic Data, Inc.
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Coatsville, PA 19320
(610) 466-1469

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Date: Saturday, October 15, 2005
Counter: ET

File Name : BG1015-3
Site Code : 00000000
Start Date : 10/15/2005
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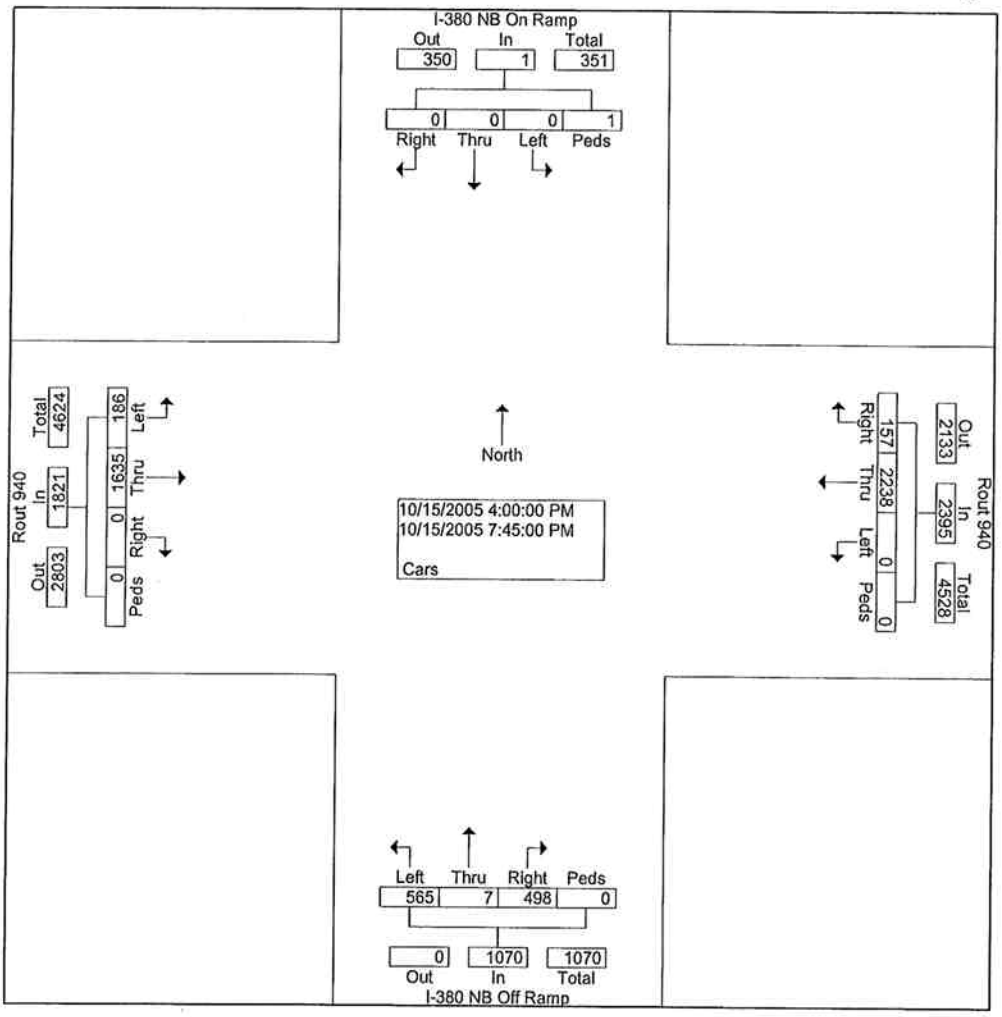

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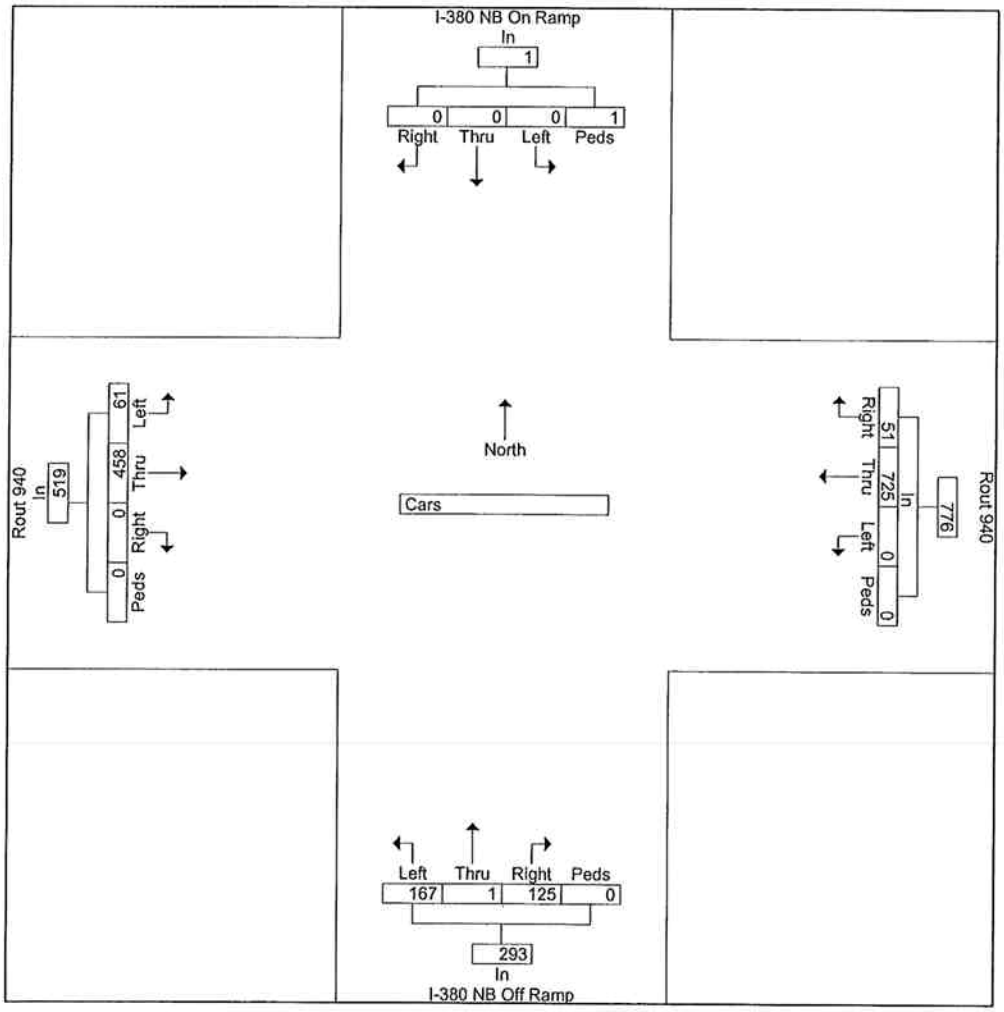
	I-380 NB On Ramp From North					Rout 940 From East					I-380 NB Off Ramp From South					Rout 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:00 PM					04:00 PM					04:45 PM					05:00 PM					
Volume	0	0	0	1	1	51	725	0	0	776	125	1	167	0	293	0	458	61	0	519	
Percent	0.0	0.0	0.0	100.0		6.6	93.4	0.0	0.0		42.7	0.3	57.0	0.0		0.0	88.2	11.8	0.0		
High Int.	04:45 PM					04:00 PM					05:00 PM					05:15 PM					
Volume	0	0	0	1	1	13	211	0	0	224	37	0	38	0	75	0	121	20	0	141	
Peak Factor					0.250					0.866					0.977					0.920	



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184 Baker Road
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Location: Monroe Co., PA
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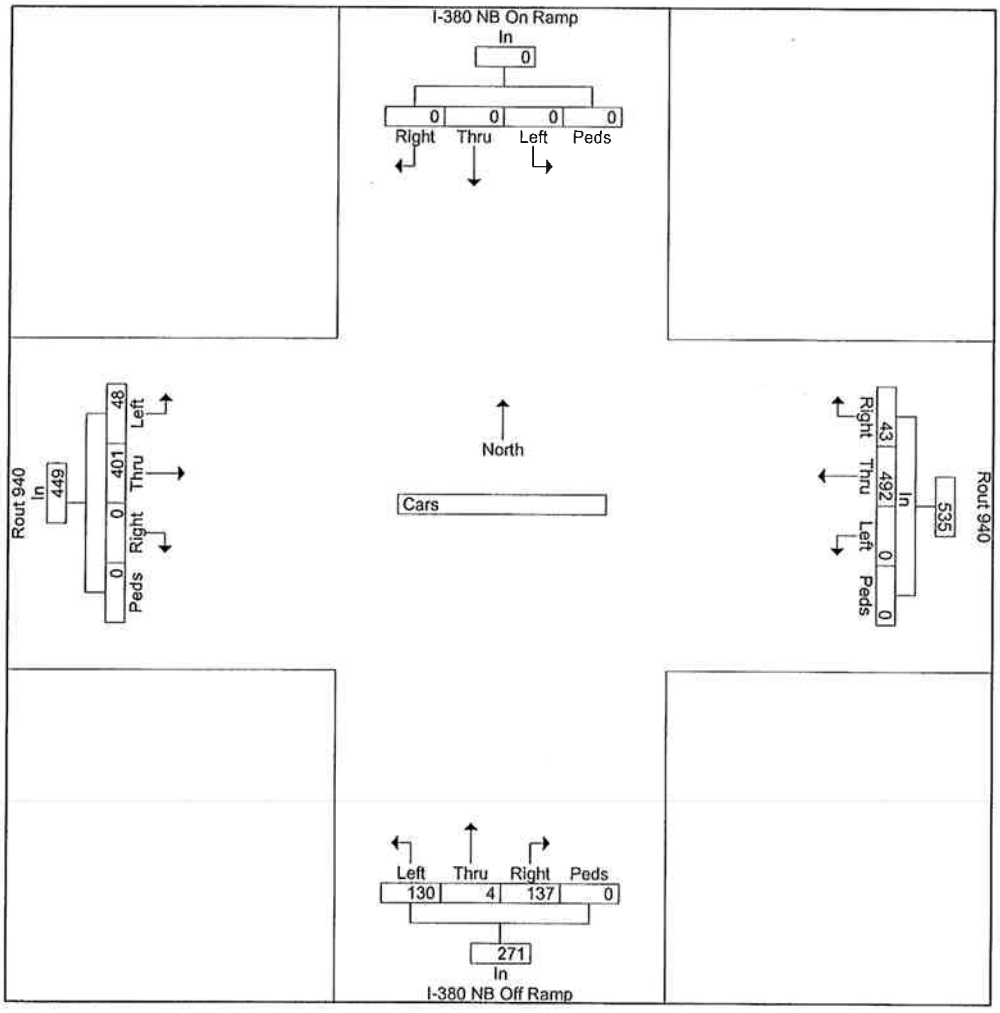
	I-380 NB On Ramp From North					Rout 940 From East					I-380 NB Off Ramp From South					Rout 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:15 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	0	0	0	0	0	43	492	0	0	535	137	4	130	0	271	0	401	48	0	449	
Percent	-	-	-	-		8.0	92.0	0.0	0.0		50.6	1.5	48.0	0.0		0.0	89.3	10.7	0.0		
High Int.	-					06:15 PM					06:15 PM					06:30 PM					
Volume	-	-	-	-	-	5	138	0	0	143	48	3	33	0	84	0	139	9	0	148	
Peak Factor					-					0.935					0.807					0.758	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co, PA
Intersectionj Rt 314 /EB Ramps To 940
Date:Friday October 14 2005
Counter: RZ

File Name : 314&94~2
Site Code : 00000000
Start Date : 10/14/2005
Page No : 1

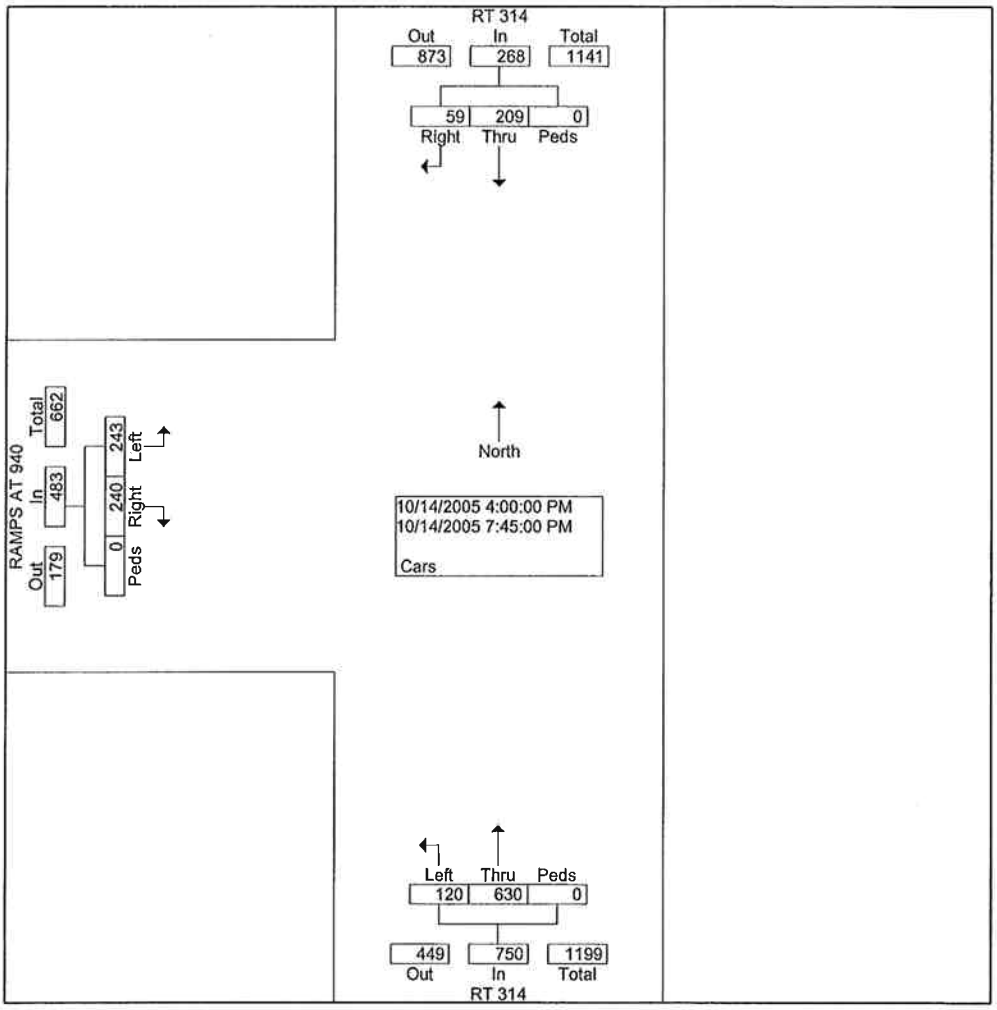
Groups Printed- Cars

	RT 314 From North					RT 314 From South					EB RAMPS AT 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	7	17	0	0	24	0	42	9	0	51	16	0	17	0	33	108
04:15 PM	7	17	0	0	24	0	54	7	0	61	19	0	13	0	32	117
04:30 PM	4	24	0	0	28	0	45	13	0	58	26	0	21	0	47	133
04:45 PM	6	13	0	0	19	0	81	11	0	92	12	0	21	0	33	144
Total	24	71	0	0	95	0	222	40	0	262	73	0	72	0	145	502
05:00 PM	4	15	0	0	19	0	56	9	0	65	17	0	17	0	34	118
05:15 PM	1	12	0	0	13	0	75	10	0	85	19	0	16	0	35	133
05:30 PM	4	17	0	0	21	0	49	11	0	60	23	0	14	0	37	118
05:45 PM	5	9	0	0	14	0	43	7	0	50	16	0	13	0	29	93
Total	14	53	0	0	67	0	223	37	0	260	75	0	60	0	135	462
06:00 PM	4	14	0	0	18	0	34	5	0	39	10	0	22	0	32	89
06:15 PM	3	9	0	0	12	0	25	3	0	28	16	0	16	0	32	72
06:30 PM	7	14	0	0	21	0	31	7	0	38	13	0	22	0	35	94
06:45 PM	3	10	0	0	13	0	18	10	0	28	15	0	15	0	30	71
Total	17	47	0	0	64	0	108	25	0	133	54	0	75	0	129	326
07:00 PM	0	12	0	0	12	0	19	5	0	24	6	0	7	0	13	49
07:15 PM	3	8	0	0	11	0	23	5	0	28	16	0	6	0	22	61
07:30 PM	0	7	0	0	7	0	17	4	0	21	12	0	11	0	23	51
07:45 PM	1	11	0	0	12	0	18	4	0	22	4	0	12	0	16	50
Total	4	38	0	0	42	0	77	18	0	95	38	0	36	0	74	211
Grand Total	59	209	0	0	268	0	630	120	0	750	240	0	243	0	483	1501
Apprch %	22.0	78.0	0.0	0.0		0.0	84.0	16.0	0.0		49.7	0.0	50.3	0.0		
Total %	3.9	13.9	0.0	0.0	17.9	0.0	42.0	8.0	0.0	50.0	16.0	0.0	16.2	0.0	32.2	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co, PA
Intersectionj Rt 314 /EB Ramps To 940
Date:Friday October 14 2005
Counter: RZ

File Name : 314&94~2
Site Code : 00000000
Start Date : 10/14/2005
Page No : 2

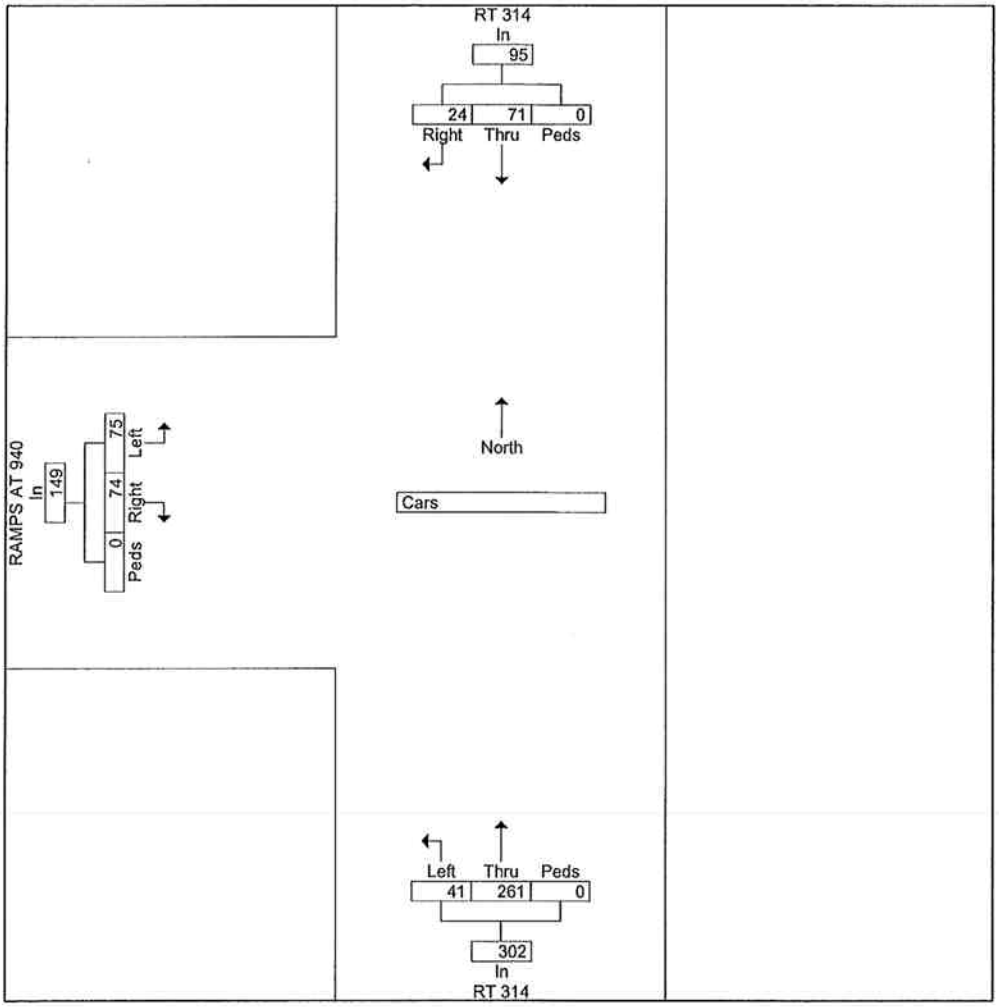


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co, PA
Intersectionj Rt 314 /EB Ramps To 940
Date:Friday October 14 2005
Counter: RZ

File Name : 314&94~2
Site Code : 00000000
Start Date : 10/14/2005
Page No : 3

	RT 314 From North					RT 314 From South					RAMPS AT 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																
By Approach	04:00 PM					04:45 PM					04:30 PM					
Volume	24	71	0	0	95	0	261	41	0	302	74	0	75	0	149	
Percent	25.3	74.7	0.0	0.0		0.0	86.4	13.6	0.0		49.7	0.0	50.3	0.0		
High Int.	04:30 PM					04:45 PM					04:30 PM					
Volume	4	24	0	0	28	0	81	11	0	92	26	0	21	0	47	
Peak Factor					0.848					0.821					0.793	

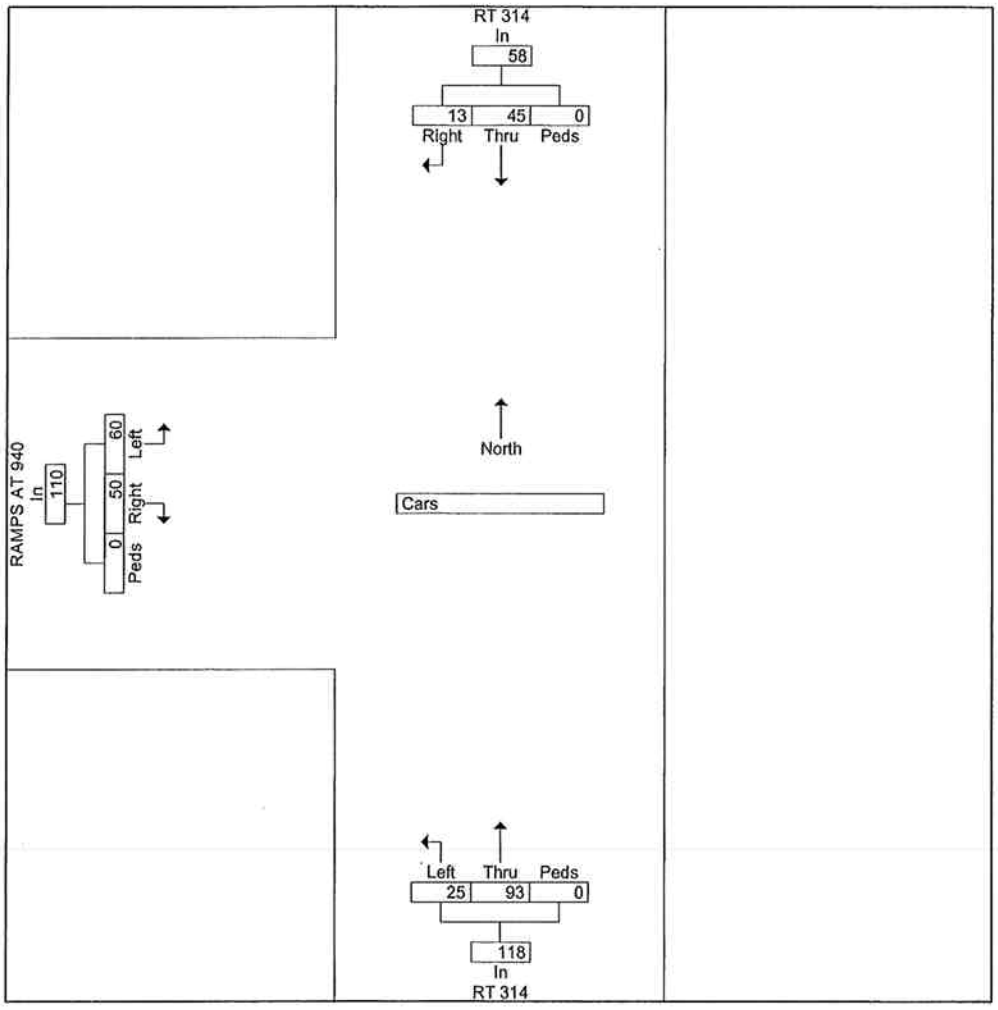


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co, PA
Intersectionj Rt 314 /EB Ramps To 940
Date:Friday October 14 2005
Counter: RZ

File Name : 314&94~2
Site Code : 00000000
Start Date : 10/14/2005
Page No : 4

	RT 314 From North					RT 314 From South					EB RAMPS AT 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																
By Approach	06:15 PM					06:15 PM					06:15 PM					
Volume	13	45	0	0	58	0	93	25	0	118	50	0	60	0	110	
Percent	22.4	77.6	0.0	0.0		0.0	78.8	21.2	0.0		45.5	0.0	54.5	0.0		
High Int.	06:30 PM					06:30 PM					06:30 PM					
Volume	7	14	0	0	21	0	31	7	0	38	13	0	22	0	35	
Peak Factor					0.690					0.776					0.786	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co, PA
Intersection: Rt 314 /EB Ramps to 940
Date:Saturday October 15 2005
Counter: RZ

File Name : BG1015-5
Site Code : 00000000
Start Date : 10/15/2005
Page No : 1

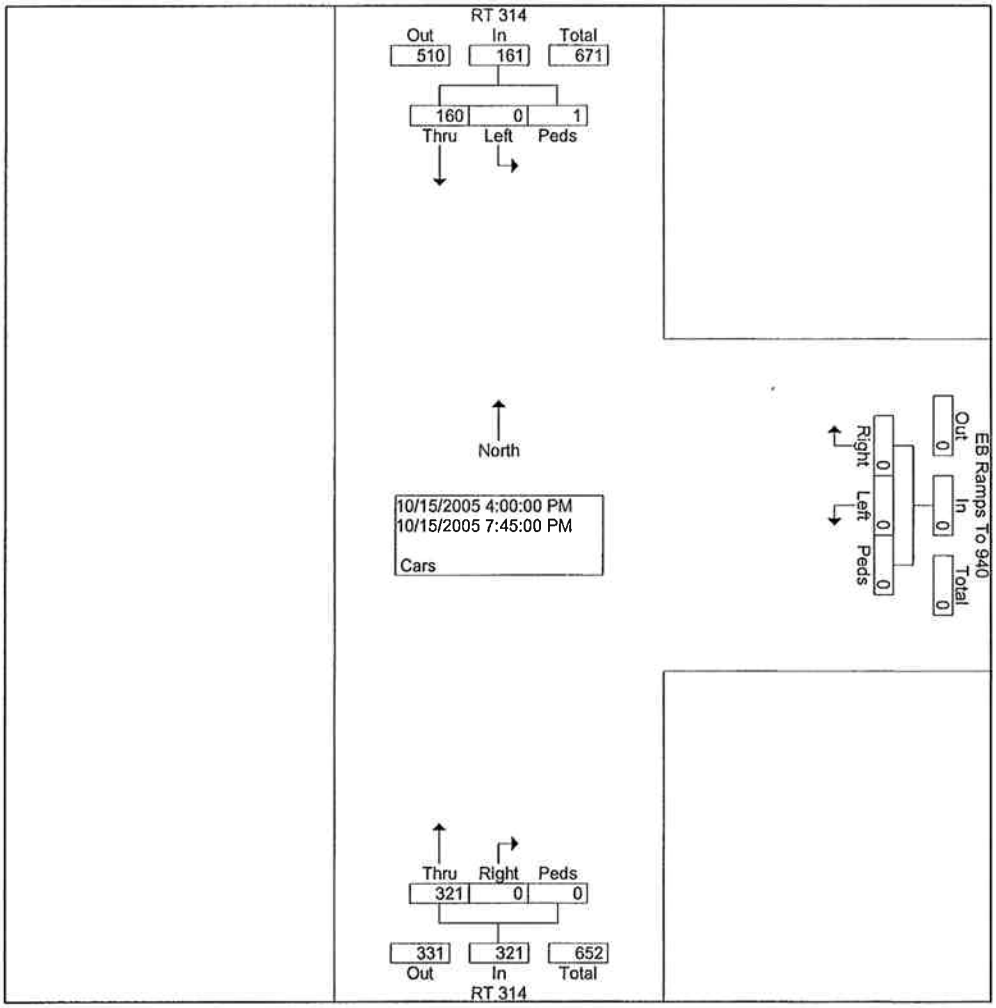
Groups Printed- Cars

	RT 314 From North					EB Ramps To 940 From East					RT 314 From South					EB RAMPS TO 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	4	7	0	0	11	0	0	0	0	0	0	37	5	0	42	13	0	12	0	25	78
04:15 PM	3	7	0	0	10	0	0	0	0	0	0	27	7	0	34	9	0	15	0	24	68
04:30 PM	4	14	0	0	18	0	0	0	0	0	0	24	7	0	31	18	0	11	0	29	78
04:45 PM	2	21	0	0	23	0	0	0	0	0	0	23	6	0	29	9	0	11	0	20	72
Total	13	49	0	0	62	0	0	0	0	0	0	111	25	0	136	49	0	49	0	98	296
05:00 PM	3	12	0	0	15	0	0	0	0	0	0	24	7	0	31	6	0	21	1	28	74
05:15 PM	4	8	0	1	13	0	0	0	0	0	0	17	8	0	25	14	0	12	0	26	64
05:30 PM	0	7	0	0	7	0	0	0	0	0	0	25	6	0	31	12	0	11	0	23	61
05:45 PM	3	18	0	0	21	0	0	0	0	0	0	19	5	0	24	7	0	7	0	14	59
Total	10	45	0	1	56	0	0	0	0	0	0	85	26	0	111	39	0	51	1	91	258
06:00 PM	6	10	0	0	16	0	0	0	0	0	0	24	4	0	28	12	0	11	0	23	67
06:15 PM	5	9	0	0	14	0	0	0	0	0	0	16	0	0	16	12	0	12	0	24	54
06:30 PM	1	12	0	0	13	0	0	0	0	0	0	10	8	0	18	21	0	18	0	39	70
06:45 PM	2	11	0	0	13	0	0	0	0	0	0	18	5	0	23	12	0	19	0	31	67
Total	14	42	0	0	56	0	0	0	0	0	0	68	17	0	85	57	0	60	0	117	258
07:00 PM	1	9	0	0	10	0	0	0	0	0	0	16	6	0	22	5	0	7	0	12	44
07:15 PM	1	5	0	0	6	0	0	0	0	0	0	12	2	0	14	7	0	7	0	14	34
07:30 PM	2	6	0	0	8	0	0	0	0	0	0	13	3	0	16	4	0	7	0	11	35
07:45 PM	2	4	0	0	6	0	0	0	0	0	0	16	2	0	18	10	0	8	0	18	42
Total	6	24	0	0	30	0	0	0	0	0	0	57	13	0	70	26	0	29	0	55	155
Grand Total	43	160	0	1	204	0	0	0	0	0	0	321	81	0	402	171	0	189	1	361	967
Apprch %	21.1	78.4	0.0	0.5		0.0	0.0	0.0	0.0		0.0	79.9	20.1	0.0		47.4	0.0	52.4	0.3		
Total %	4.4	16.5	0.0	0.1	21.1	0.0	0.0	0.0	0.0	0.0	0.0	33.2	8.4	0.0	41.6	17.7	0.0	19.5	0.1	37.3	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co, PA
Intersection: Rt 314 /EB Ramps to 940
Date:Saturday October 15 2005
Counter: RZ

File Name : BG1015-5
Site Code : 00000000
Start Date : 10/15/2005
Page No : 2

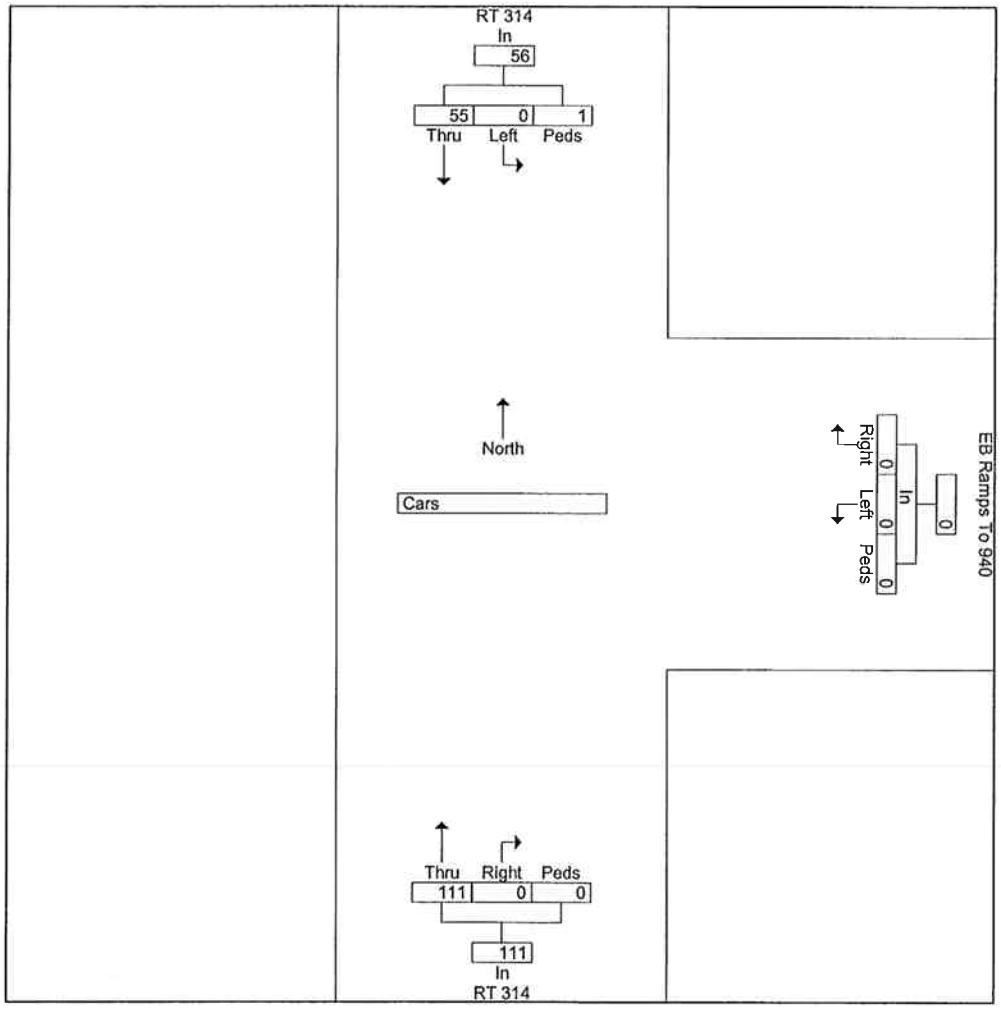


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co, PA
Intersection: Rt 314 /EB Ramps to 940
Date:Saturday October 15 2005
Counter: RZ

File Name : BG1015-5
Site Code : 00000000
Start Date : 10/15/2005
Page No : 3

	RT 314 From North					EB Ramps To 940 From East					RT 314 From South					EB RAMPS TO 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:30 PM					04:00 PM					04:00 PM					04:30 PM					
Volume	13	55	0	1	69	0	0	0	0	0	0	111	25	0	136	47	0	55	1	103	
Percent	18.8	79.7	0.0	1.4		-	-	-	-		0.0	81.6	18.4	0.0		45.6	0.0	53.4	1.0		
High Int.	04:45 PM					-					04:00 PM					04:30 PM					
Volume	2	21	0	0	23	-	-	-	-	-	0	37	5	0	42	18	0	11	0	29	
Peak Factor					0.750					-					0.810					0.888	

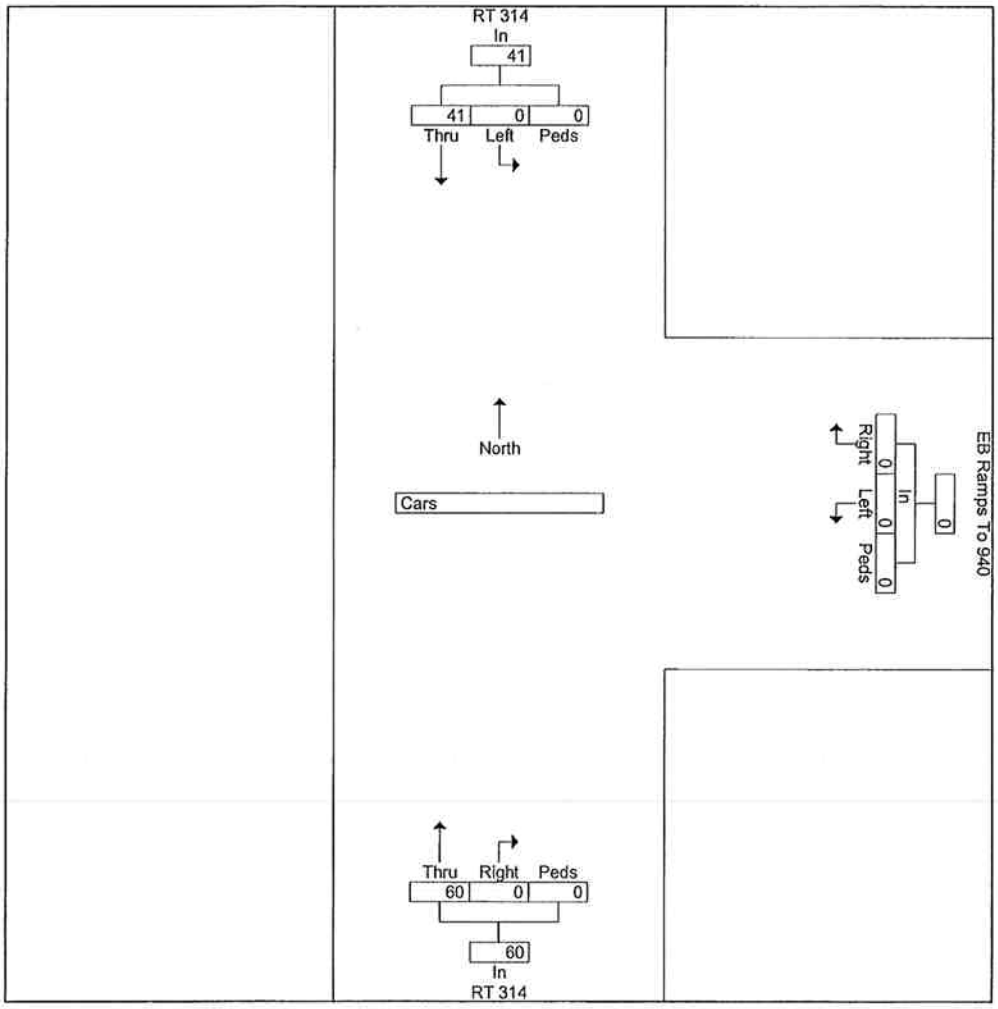


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co, PA
Intersection: Rt 314 /EB Ramps to 940
Date:Saturday October 15 2005
Counter: RZ

File Name : BG1015-5
Site Code : 00000000
Start Date : 10/15/2005
Page No : 4

	RT 314 From North					EB Ramps To 940 From East					RT 314 From South					EB RAMPS TO 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:15 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	9	41	0	0	50	0	0	0	0	0	0	60	19	0	79	50	0	56	0	106	
Percent	18.0	82.0	0.0	0.0		-	-	-	-		0.0	75.9	24.1	0.0		47.2	0.0	52.8	0.0		
High Int.	06:15 PM					-					06:45 PM					06:30 PM					
Volume	5	9	0	0	14	-	-	-	-	-	0	18	5	0	23	21	0	18	0	39	
Peak Factor					0.893					-					0.859					0.679	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co. Pa.
Intersection: Rt 314 / Rt 940
Date: Friday: October 14, 2005
Counter: JI

File Name : 314&94~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 1

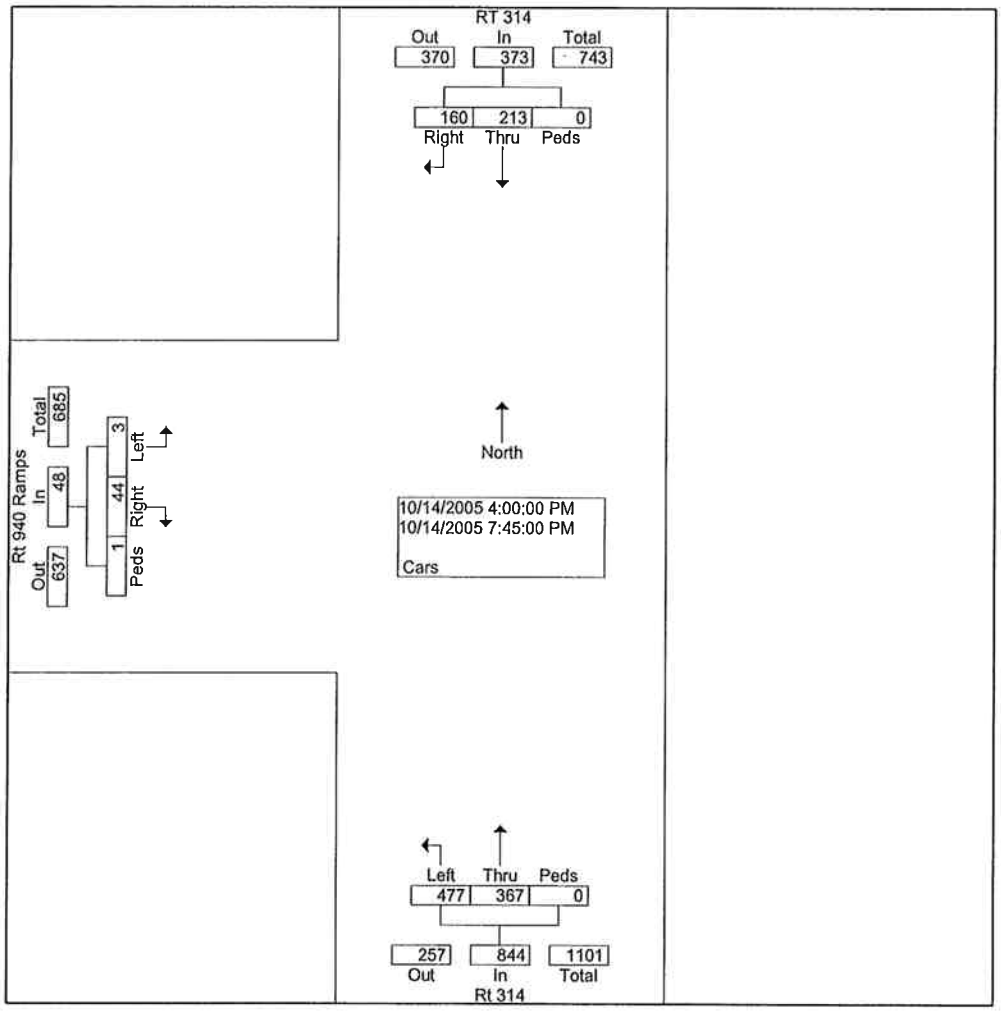
Groups Printed- Cars

	RT 314 From North					Rt 314 From South					Rt 940 Ramps From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	11	19	0	0	30	0	24	54	0	78	3	0	0	0	3	111
04:15 PM	11	18	0	0	29	0	24	30	0	54	3	0	0	0	3	86
04:30 PM	9	18	0	0	27	0	16	19	0	35	2	0	0	0	2	64
04:45 PM	10	20	0	0	30	0	37	64	0	101	2	0	1	0	3	134
Total	41	75	0	0	116	0	101	167	0	268	10	0	1	0	11	395
05:00 PM	19	11	0	0	30	0	23	52	0	75	6	0	0	1	7	112
05:15 PM	11	13	0	0	24	0	28	58	0	86	3	0	0	0	3	113
05:30 PM	12	17	0	0	29	0	28	39	0	67	4	0	0	0	4	100
05:45 PM	15	10	0	0	25	0	20	34	0	54	4	0	0	0	4	83
Total	57	51	0	0	108	0	99	183	0	282	17	0	0	1	18	408
06:00 PM	4	13	0	0	17	0	28	30	0	58	3	0	2	0	5	80
06:15 PM	10	12	0	0	22	0	23	17	0	40	1	0	0	0	1	63
06:30 PM	19	21	0	0	40	0	33	16	0	49	0	0	0	0	0	89
06:45 PM	7	10	0	0	17	0	22	13	0	35	1	0	0	0	1	53
Total	40	56	0	0	96	0	106	76	0	182	5	0	2	0	7	285
07:00 PM	4	9	0	0	13	0	13	12	0	25	4	0	0	0	4	42
07:15 PM	5	8	0	0	13	0	12	17	0	29	2	0	0	0	2	44
07:30 PM	8	6	0	0	14	0	18	13	0	31	3	0	0	0	3	48
07:45 PM	5	8	0	0	13	0	18	9	0	27	3	0	0	0	3	43
Total	22	31	0	0	53	0	61	51	0	112	12	0	0	0	12	177
Grand Total	160	213	0	0	373	0	367	477	0	844	44	0	3	1	48	1265
Apprch %	42.9	57.1	0.0	0.0		0.0	43.5	56.5	0.0		91.7	0.0	6.3	2.1		
Total %	12.6	16.8	0.0	0.0	29.5	0.0	29.0	37.7	0.0	66.7	3.5	0.0	0.2	0.1	3.8	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co. Pa.
Intersection: Rt 314 / Rt 940
Date: Friday: October 14, 2005
Counter: JI

File Name : 314&94~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 2

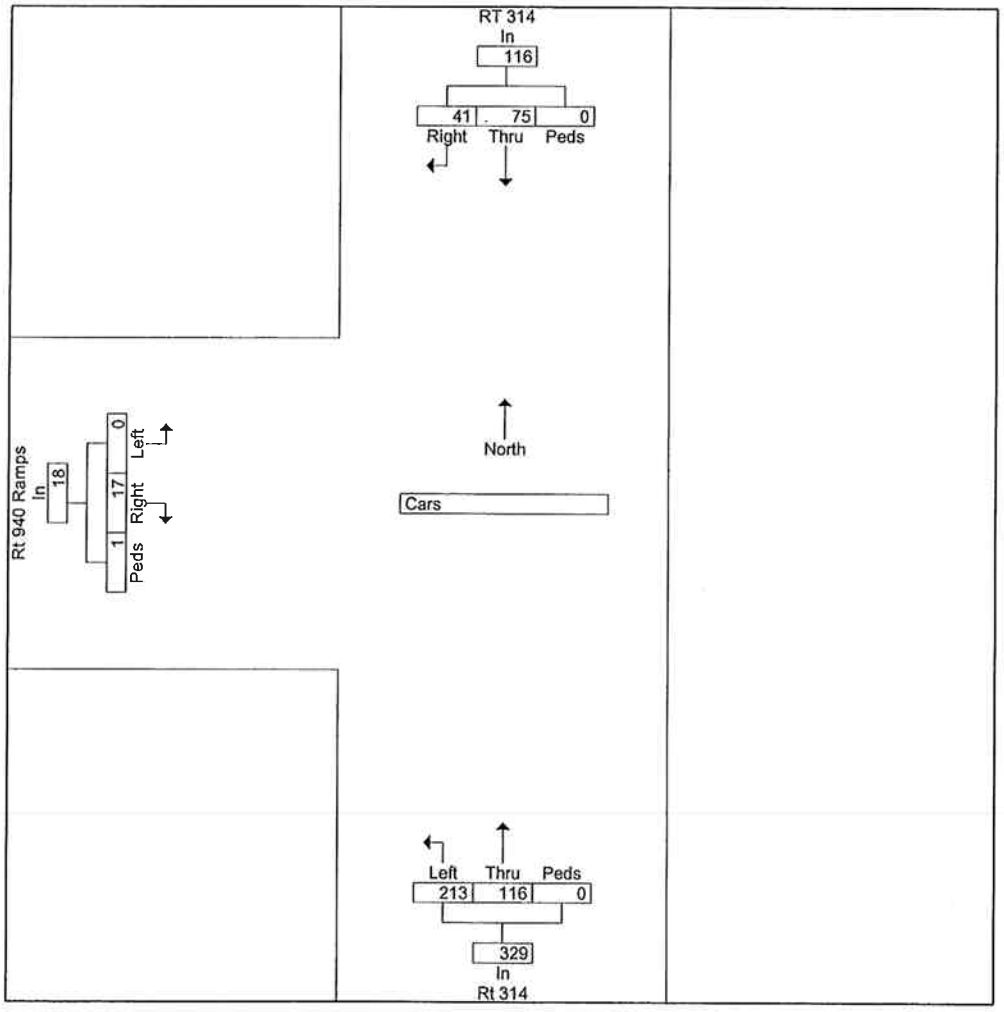


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co. Pa.
Intersection: Rt 314 / Rt 940
Date: Friday: October 14, 2005
Counter: JI

File Name : 314&94~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 3

	RT 314 From North					Rt 314 From South					Rt 940 Ramps From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																
By Approach	04:00 PM					04:45 PM					05:00 PM					
Volume	41	75	0	0	116	0	116	213	0	329	17	0	0	1	18	
Percent	35.3	64.7	0.0	0.0		0.0	35.3	64.7	0.0		94.4	0.0	0.0	5.6		
High Int.	04:00 PM					04:45 PM					05:00 PM					
Volume	11	19	0	0	30	0	37	64	0	101	6	0	0	1	7	
Peak Factor					0.967					0.814					0.643	

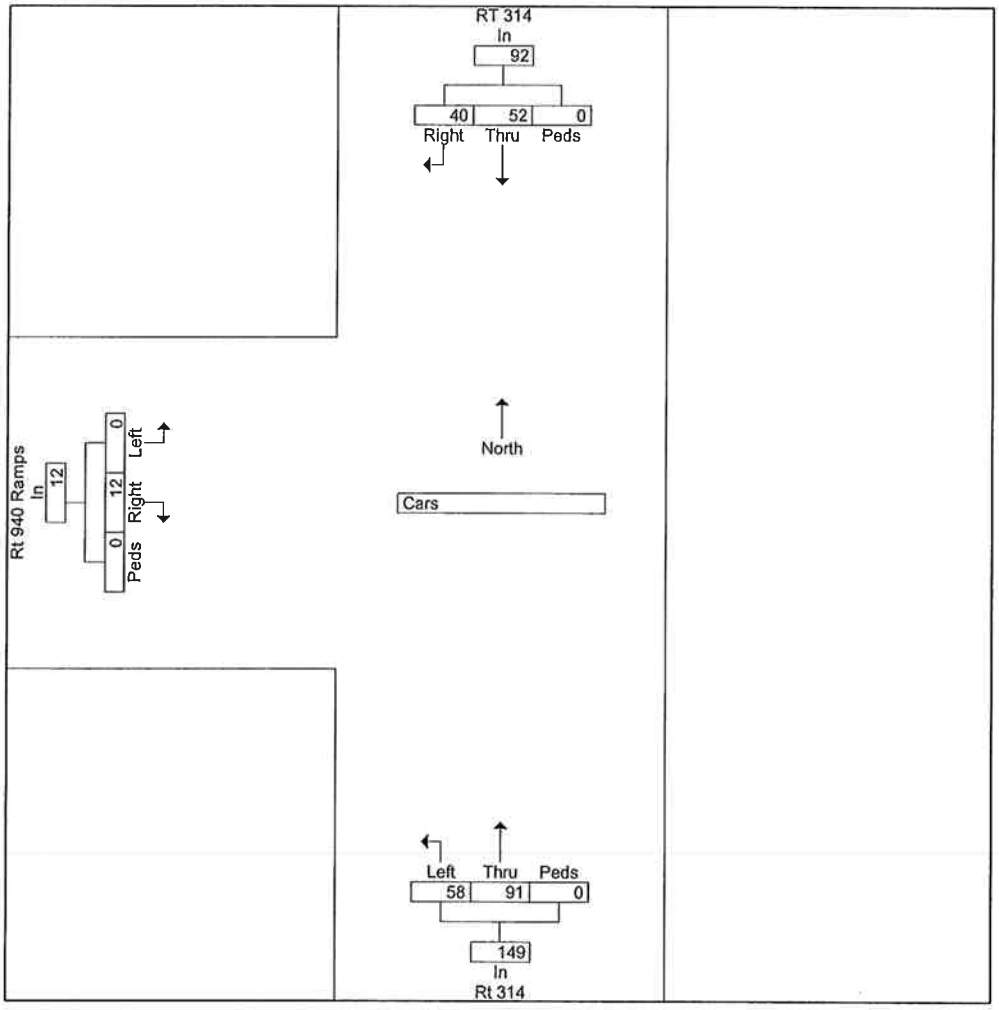


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co. Pa.
Intersection: Rt 314 / Rt 940
Date: Friday: October 14, 2005
Counter: JI

File Name : 314&94~1
Site Code : 00000000
Start Date : 10/14/2005
Page No : 4

	RT 314 From North					Rt 314 From South					Rt 940/Ramps From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																
By Approach	06:15 PM					06:15 PM					07:00 PM					
Volume	40	52	0	0	92	0	91	58	0	149	12	0	0	0	12	
Percent	43.5	56.5	0.0	0.0		0.0	61.1	38.9	0.0		100.0	0.0	0.0	0.0		
High Int.	06:30 PM					06:30 PM					07:00 PM					
Volume	19	21	0	0	40	0	33	16	0	49	4	0	0	0	4	
Peak Factor					0.575					0.760					0.750	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co. Pa.
Intersection: Rt 314 /Rt 940 WB Ramps
Date: Saturday: October 15, 2005
Counter: JI

File Name : BG1015-6
Site Code : 00000000
Start Date : 10/15/2005
Page No : 1

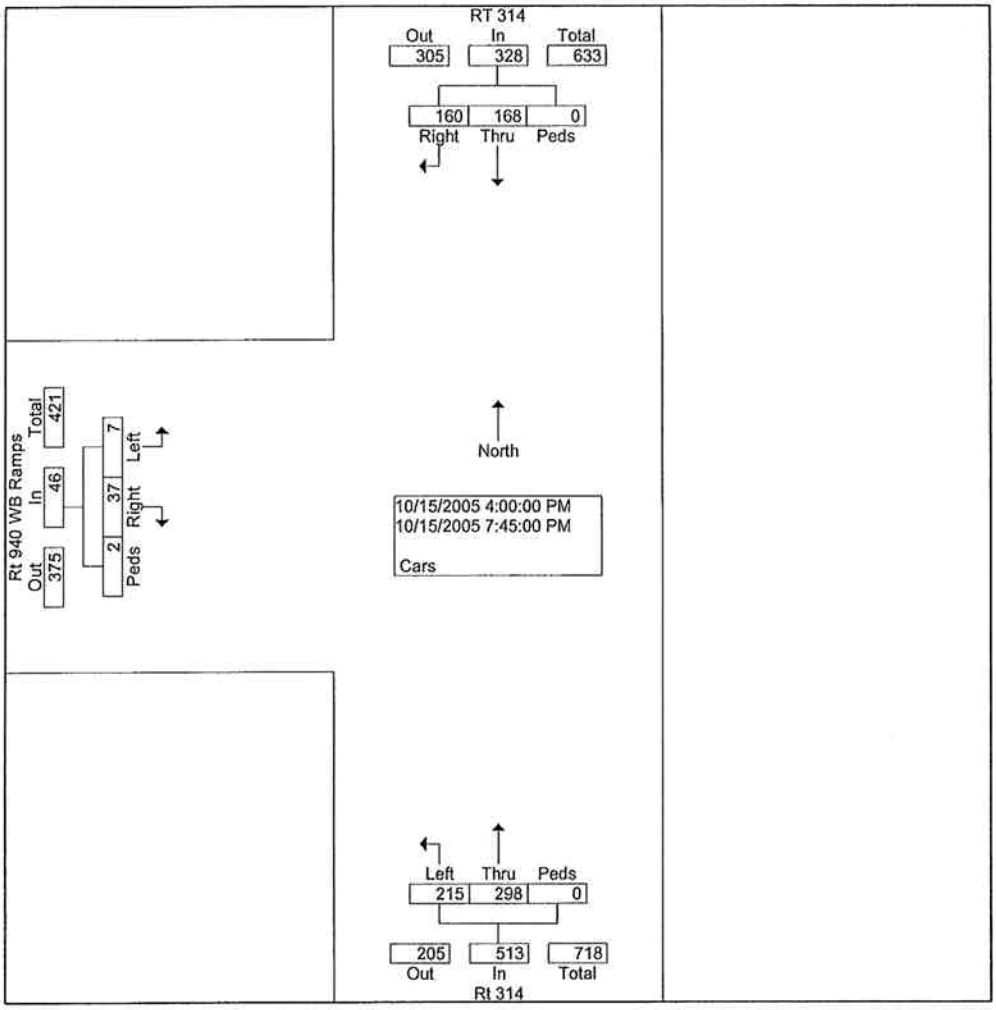
Groups Printed- Cars

	RT 314 From North					Rt 314 From South					Rt 940 WB Ramps From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	16	10	0	0	26	1	18	31	0	50	2	0	1	0	3	79
04:15 PM	11	10	0	0	21	0	25	17	0	42	1	0	1	0	2	65
04:30 PM	17	17	0	0	34	0	19	18	0	37	2	0	0	0	2	73
04:45 PM	8	14	0	0	22	0	20	15	0	35	8	0	0	0	8	65
Total	52	51	0	0	103	1	82	81	0	164	13	0	2	0	15	282
05:00 PM	10	12	0	0	22	0	28	16	0	44	4	0	0	1	5	71
05:15 PM	9	9	0	0	18	0	15	13	0	28	3	0	1	0	4	50
05:30 PM	9	5	0	0	14	0	23	13	0	36	1	0	3	0	4	54
05:45 PM	10	19	0	0	29	0	14	13	0	27	2	0	0	0	2	58
Total	38	45	0	0	83	0	80	55	0	135	10	0	4	1	15	233
06:00 PM	12	16	0	0	28	0	17	18	0	35	0	0	0	0	0	63
06:15 PM	3	13	0	0	16	0	19	9	0	28	2	0	0	0	2	46
06:30 PM	11	11	0	0	22	0	19	9	0	28	1	0	0	0	1	51
06:45 PM	14	8	0	0	22	0	26	11	0	37	4	0	0	0	4	63
Total	40	48	0	0	88	0	81	47	0	128	7	0	0	0	7	223
07:00 PM	4	6	0	0	10	0	17	6	0	23	4	0	0	0	4	37
07:15 PM	9	4	0	0	13	0	13	6	0	19	3	0	0	0	3	35
07:30 PM	10	8	0	0	18	0	12	8	0	20	0	0	1	0	1	39
07:45 PM	7	6	0	0	13	0	13	12	0	25	0	0	0	1	1	39
Total	30	24	0	0	54	0	55	32	0	87	7	0	1	1	9	150
Grand Total	160	168	0	0	328	1	298	215	0	514	37	0	7	2	46	888
Apprch %	48.8	51.2	0.0	0.0		0.2	58.0	41.8	0.0		80.4	0.0	15.2	4.3		
Total %	18.0	18.9	0.0	0.0	36.9	0.1	33.6	24.2	0.0	57.9	4.2	0.0	0.8	0.2	5.2	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co. Pa.
Intersection: Rt 314 /Rt 940 WB Ramps
Date: Saturday: October 15, 2005
Counter: JI

File Name : BG1015-6
Site Code : 00000000
Start Date : 10/15/2005
Page No : 2

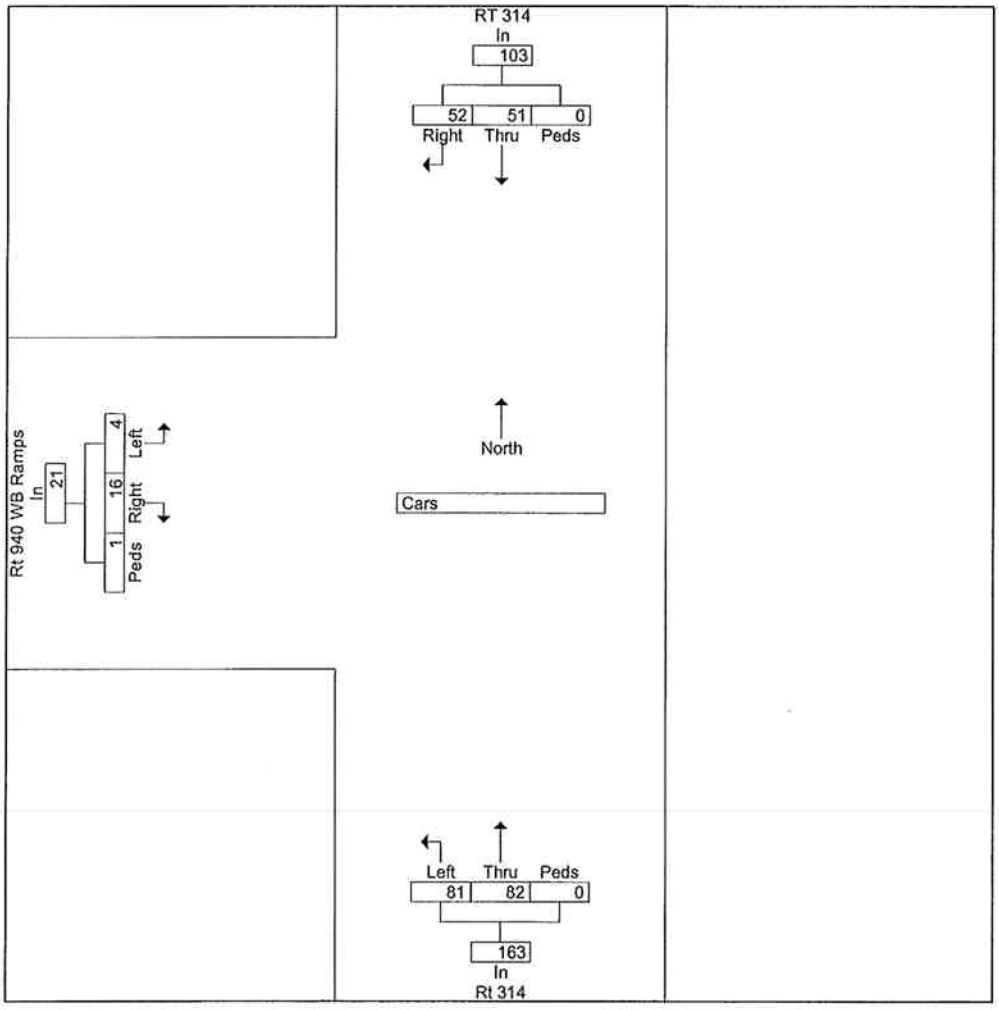


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co. Pa.
Intersection: Rt 314 /Rt 940 WB Ramps
Date: Saturday: October 15, 2005
Counter: JI

File Name : BG1015-6
Site Code : 00000000
Start Date : 10/15/2005
Page No : 3

	RT 314 From North					Rt 314 From South					Rt 940 WB Ramps From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																
By Approach	04:00 PM					04:00 PM					04:45 PM					
Volume	52	51	0	0	103	1	82	81	0	164	16	0	4	1	21	
Percent	50.5	49.5	0.0	0.0		0.6	50.0	49.4	0.0		76.2	0.0	19.0	4.8		
High Int.	04:30 PM					04:00 PM					04:45 PM					
Volume	17	17	0	0	34	1	18	31	0	50	8	0	0	0	8	
Peak Factor					0.757					0.820					0.656	

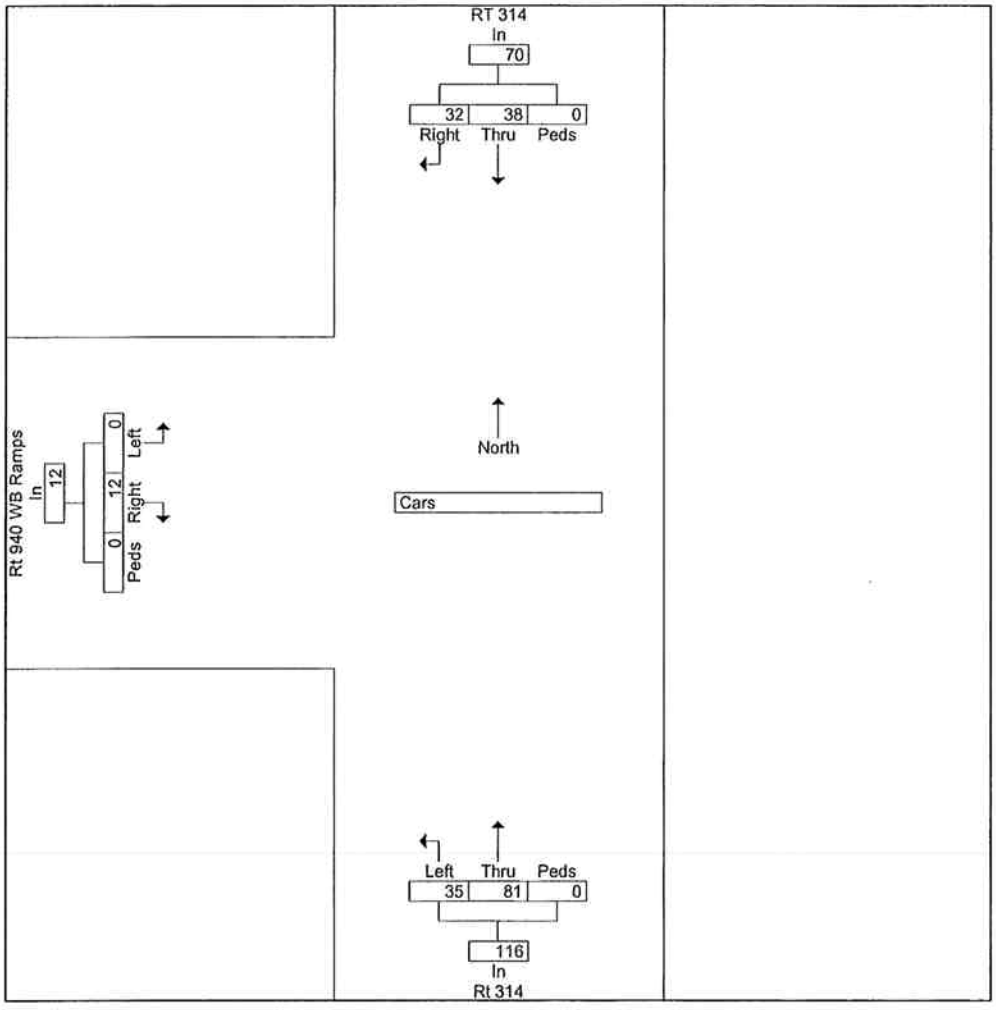


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe Co. Pa.
Intersection: Rt 314 /Rt 940 WB Ramps
Date: Saturday: October 15, 2005
Counter: JI

File Name : BG1015-6
Site Code : 00000000
Start Date : 10/15/2005
Page No : 4

	RT 314 From North					Rt 314 From South					Rt 940 WB Ramps From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																
By Approach	06:15 PM					06:15 PM					06:30 PM					
Volume	32	38	0	0	70	0	81	35	0	116	12	0	0	0	12	
Percent	45.7	54.3	0.0	0.0		0.0	69.8	30.2	0.0		100.0	0.0	0.0	0.0		
High Int.	06:30 PM					06:45 PM					06:45 PM					
Volume	11	11	0	0	22	0	26	11	0	37	4	0	0	0	4	
Peak Factor					0.795					0.784					0.750	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Coolbaugh, Monroe Co., PA
Intersection: Rt. 940 / Spruce
Date: Friday, September 29, 2006
Counter: JT

File Name : BG0929-2
Site Code : 00000000
Start Date : 09/29/2006
Page No : 1

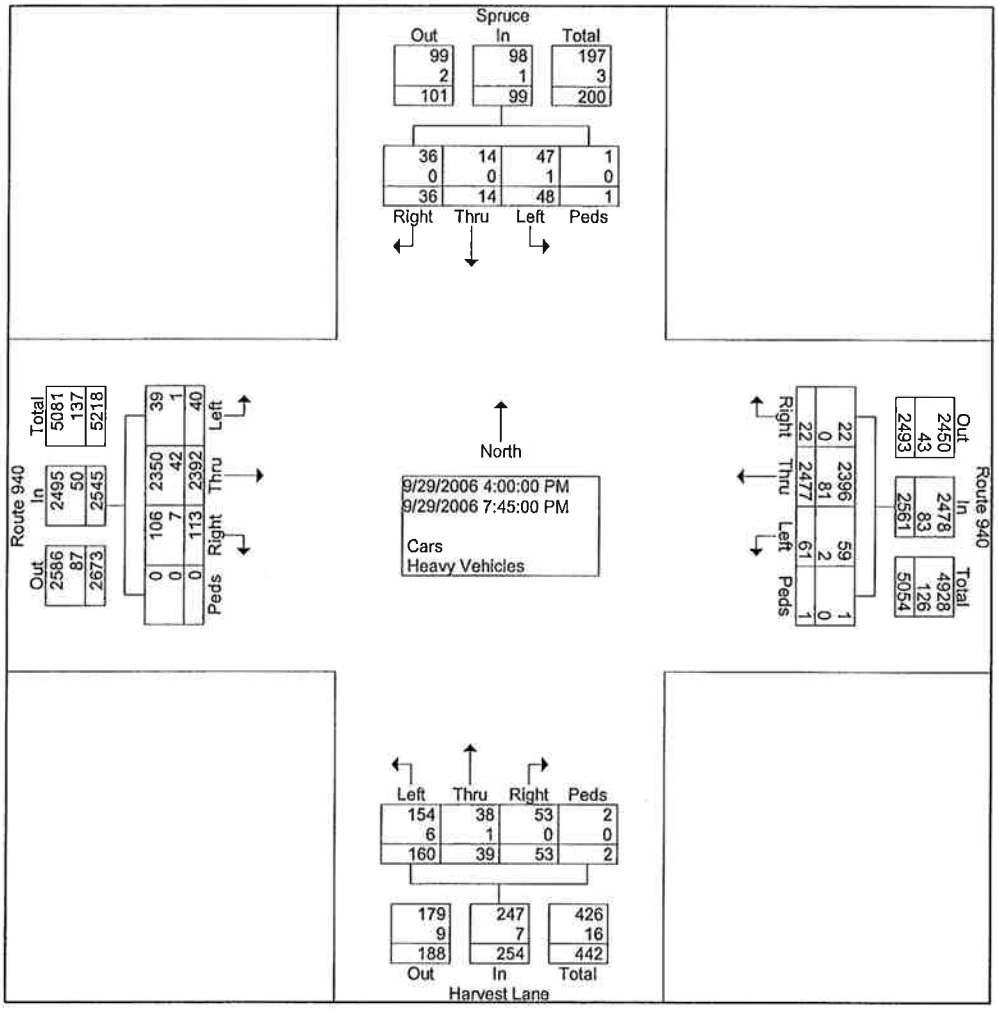
Groups Printed- Cars - Heavy Vehicles

	Spruce From North					Route 940 From East					Harvest Lane From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	8	1	6	0	15	7	167	6	0	180	4	4	10	0	18	11	136	7	0	154	367
04:15 PM	9	1	8	0	18	3	190	6	0	199	7	3	20	0	30	11	175	8	0	194	441
04:30 PM	3	3	3	0	9	4	219	7	1	231	8	4	15	0	27	2	185	3	0	190	457
04:45 PM	6	0	3	0	9	1	219	8	0	228	5	2	10	0	17	14	197	0	0	211	465
Total	26	5	20	0	51	15	795	27	1	838	24	13	55	0	92	38	693	18	0	749	1730
05:00 PM	5	3	11	0	19	2	188	4	0	194	8	3	17	1	29	12	153	3	0	168	410
05:15 PM	2	1	3	0	6	0	151	3	0	154	2	3	9	0	14	8	173	1	0	182	356
05:30 PM	0	0	3	0	3	1	172	1	0	174	0	3	7	0	10	11	172	0	0	183	370
05:45 PM	0	0	3	1	4	0	152	4	0	156	1	1	8	1	11	6	170	1	0	177	348
Total	7	4	20	1	32	3	663	12	0	678	11	10	41	2	64	37	668	5	0	710	1484
06:00 PM	0	0	0	0	0	0	175	2	0	177	0	3	7	0	10	3	157	0	0	160	347
06:15 PM	0	0	2	0	2	1	155	7	0	163	3	2	9	0	14	4	139	2	0	145	324
06:30 PM	1	2	0	0	3	0	128	3	0	131	4	2	11	0	17	11	158	6	0	175	326
06:45 PM	0	0	1	0	1	2	126	0	0	128	4	3	6	0	13	4	139	0	0	143	285
Total	1	2	3	0	6	3	584	12	0	599	11	10	33	0	54	22	593	8	0	623	1282
07:00 PM	0	1	1	0	2	1	123	2	0	126	2	0	9	0	11	4	123	2	0	129	268
07:15 PM	1	1	2	0	4	0	108	5	0	113	2	2	10	0	14	4	123	1	0	128	259
07:30 PM	0	0	0	0	0	0	94	2	0	96	0	3	8	0	11	5	102	3	0	110	217
07:45 PM	1	1	2	0	4	0	110	1	0	111	3	1	4	0	8	3	90	3	0	96	219
Total	2	3	5	0	10	1	435	10	0	446	7	6	31	0	44	16	438	9	0	463	963
Grand Total	36	14	48	1	99	22	2477	61	1	2561	53	39	160	2	254	113	2392	40	0	2545	5459
Apprch %	36.4	14.1	48.5	1.0		0.9	96.7	2.4	0.0		20.9	15.4	63.0	0.8		4.4	94.0	1.6	0.0		
Total %	0.7	0.3	0.9	0.0	1.8	0.4	45.4	1.1	0.0	46.9	1.0	0.7	2.9	0.0	4.7	2.1	43.8	0.7	0.0	46.6	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Coolbaugh, Monroe Co., PA
Intersection: Rt. 940 / Spruce
Date: Friday, September 29, 2006
Counter: JT

File Name : BG0929-2
Site Code : 00000000
Start Date : 09/29/2006
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Coolbaugh, Monroe Co., PA
Intersection: Rt. 940 / Spruce
Date: Friday, September 29, 2006
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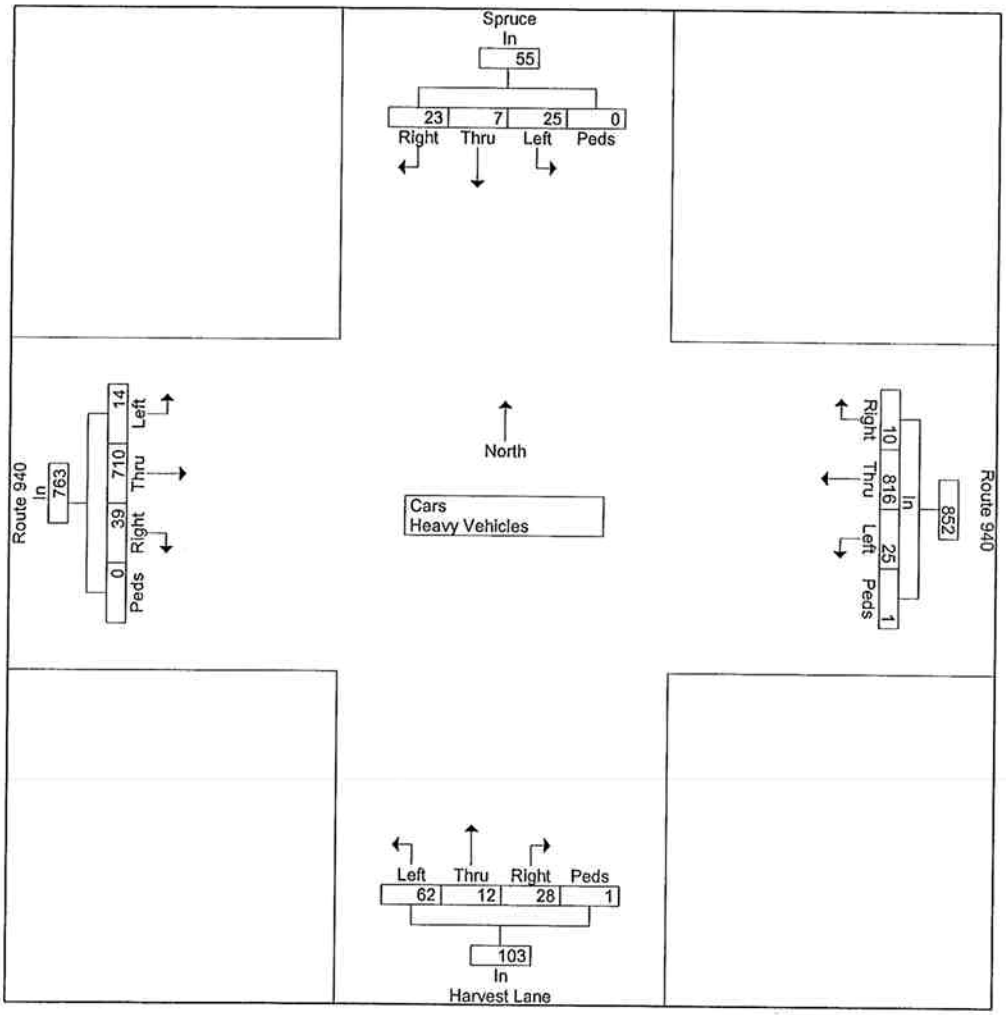
File Name : BG0929-2
Site Code : 00000000
Start Date : 09/29/2006
Page No : 3

	Spruce From North					Route 940 From East					Harvest Lane From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
By Approach	04:15 PM					04:15 PM					04:15 PM					04:15 PM					
Volume	23	7	25	0	55	10	816	25	1	852	28	12	62	1	103	39	710	14	0	763	
Percent	41.8	12.7	45.5	0.0		1.2	95.8	2.9	0.1		27.2	11.7	60.2	1.0		5.1	93.1	1.8	0.0		
High Int.	05:00 PM					04:30 PM					04:15 PM					04:45 PM					
Volume	5	3	11	0	19	4	219	7	1	231	7	3	20	0	30	14	197	0	0	211	
Peak Factor					0.724					0.922					0.858					0.904	

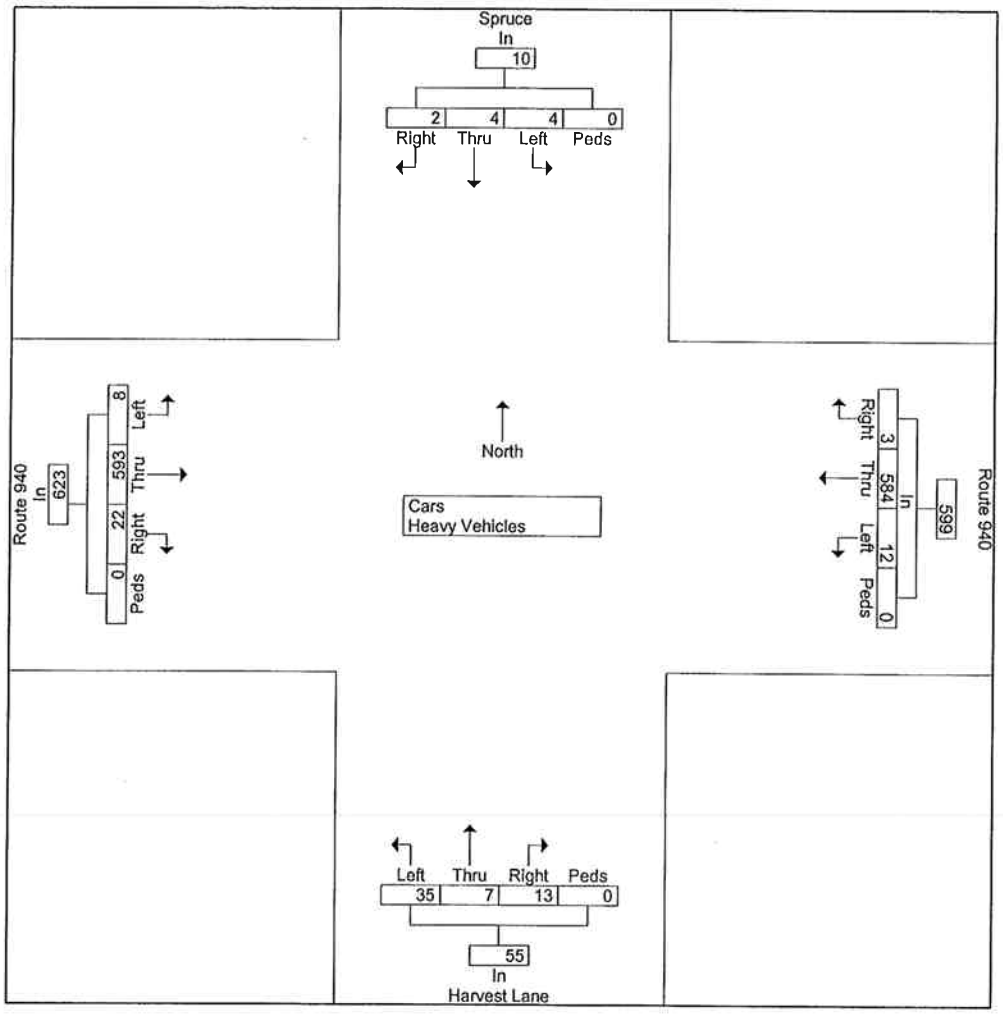


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Coolbaugh, Monroe Co., PA
Intersection: Rt. 940 / Spruce
Date: Friday, September 29, 2006
Counter: JT

File Name : BG0929-2
Site Code : 00000000
Start Date : 09/29/2006
Page No : 4

	Spruce From North					Route 940 From East					Harvest Lane From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:00 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:30 PM					06:00 PM					06:15 PM					06:00 PM					
Volume	2	4	4	0	10	3	584	12	0	599	13	7	35	0	55	22	593	8	0	623	
Percent	20.0	40.0	40.0	0.0		0.5	97.5	2.0	0.0		23.6	12.7	63.6	0.0		3.5	95.2	1.3	0.0		
High Int.	07:15 PM					06:00 PM					06:30 PM					06:30 PM					
Volume	1	1	2	0	4	0	175	2	0	177	4	2	11	0	17	11	158	6	0	175	
Peak Factor					0.625					0.846					0.809					0.890	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Tobyhanna, Monroe Co., PA
Intersection: Rt. 940 / Commerce
Date: Friday, September 29, 2006
Counter: ET

File Name : BG0929-1
Site Code : 00000000
Start Date : 09/29/2006
Page No : 1

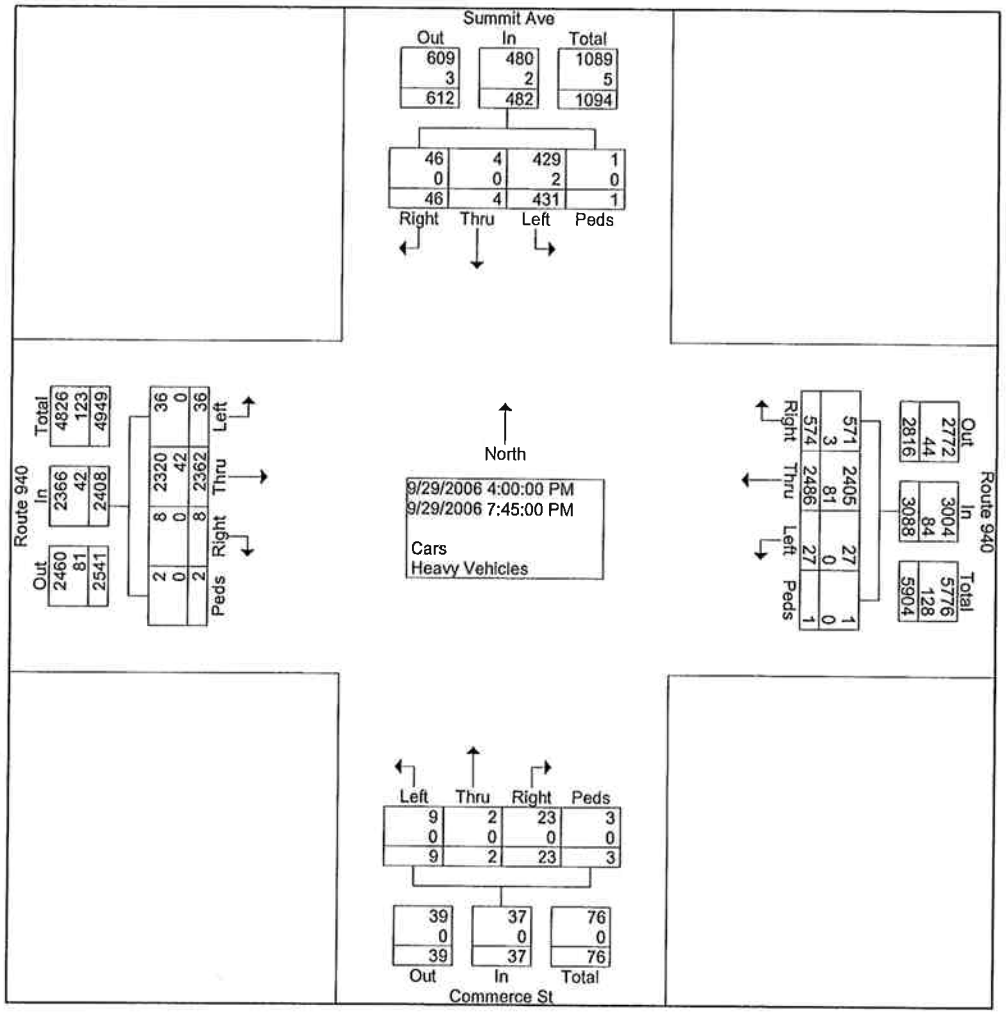
Groups Printed- Cars - Heavy Vehicles

	Summit Ave From North					Route 940 From East					Commerce St From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	7	0	32	0	39	32	182	0	0	214	0	1	0	0	1	0	141	5	0	146	400
04:15 PM	9	1	27	0	37	45	192	2	0	239	2	0	0	0	2	2	185	1	0	188	466
04:30 PM	2	0	40	0	42	43	227	0	0	270	1	0	0	0	1	0	193	2	0	195	508
04:45 PM	1	0	51	0	52	43	222	0	0	265	0	0	0	0	0	1	196	5	0	202	519
Total	19	1	150	0	170	163	823	2	0	988	3	1	0	0	4	3	715	13	0	731	1893
05:00 PM	9	0	37	0	46	43	172	6	0	221	5	0	2	1	8	1	172	2	0	175	450
05:15 PM	1	0	27	0	28	43	159	0	0	202	0	0	0	1	1	0	167	3	1	171	402
05:30 PM	4	0	27	0	31	33	158	3	0	194	2	1	0	0	3	0	166	6	0	172	400
05:45 PM	2	1	27	1	31	46	158	2	0	206	1	0	0	0	1	2	166	1	0	169	407
Total	16	1	118	1	136	165	647	11	0	823	8	1	2	2	13	3	671	12	1	687	1659
06:00 PM	2	1	28	0	31	25	176	3	1	205	2	0	1	1	4	1	144	3	1	149	389
06:15 PM	2	0	28	0	30	41	144	2	0	187	4	0	2	0	6	0	141	1	0	142	365
06:30 PM	5	0	26	0	31	38	129	2	0	169	2	0	1	0	3	0	154	0	0	154	357
06:45 PM	0	1	23	0	24	23	128	3	0	154	3	0	1	0	4	0	140	1	0	141	323
Total	9	2	105	0	116	127	577	10	1	715	11	0	5	1	17	1	579	5	1	586	1434
07:00 PM	2	0	19	0	21	32	120	0	0	152	0	0	1	0	1	0	117	1	0	118	292
07:15 PM	0	0	14	0	14	29	112	2	0	143	0	0	0	0	0	0	111	3	0	114	271
07:30 PM	0	0	12	0	12	32	97	1	0	130	0	0	0	0	0	0	90	1	0	91	233
07:45 PM	0	0	13	0	13	26	110	1	0	137	1	0	1	0	2	1	79	1	0	81	233
Total	2	0	58	0	60	119	439	4	0	562	1	0	2	0	3	1	397	6	0	404	1029
Grand Total	46	4	431	1	482	574	2486	27	1	3088	23	2	9	3	37	8	2362	36	2	2408	6015
Apprch %	9.5	0.8	89.4	0.2		18.6	80.5	0.9	0.0		62.2	5.4	24.3	8.1		0.3	98.1	1.5	0.1		
Total %	0.8	0.1	7.2	0.0	8.0	9.5	41.3	0.4	0.0	51.3	0.4	0.0	0.1	0.0	0.6	0.1	39.3	0.6	0.0	40.0	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Tobyhanna, Monroe Co., PA
Intersection: Rt. 940 / Commerce
Date: Friday, September 29, 2006
Counter: ET

File Name : BG0929-1
Site Code : 00000000
Start Date : 09/29/2006
Page No : 2

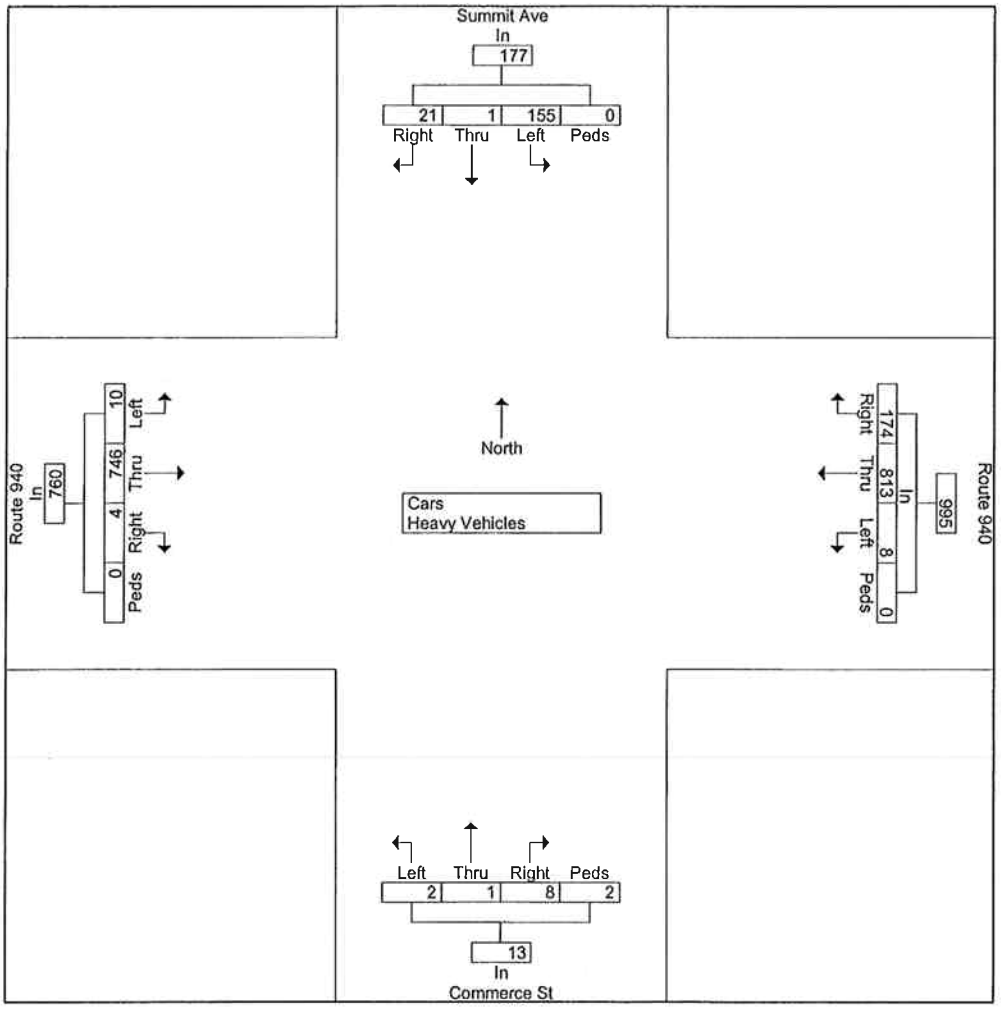


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Tobyhanna, Monroe Co., PA
Intersection: Rt. 940 / Commerce
Date: Friday, September 29, 2006
Counter: ET

File Name : BG0929-1
Site Code : 00000000
Start Date : 09/29/2006
Page No : 3

	Summit Ave From North					Route 940 From East					Commerce St From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
By Approach	04:15 PM					04:15 PM					05:00 PM					04:15 PM					
Volume	21	1	155	0	177	174	813	8	0	995	8	1	2	2	13	4	746	10	0	760	
Percent	11.9	0.6	87.6	0.0		17.5	81.7	0.8	0.0		61.5	7.7	15.4	15.4		0.5	98.2	1.3	0.0		
High Int.	04:45 PM					04:30 PM					05:00 PM					04:45 PM					
Volume	1	0	51	0	52	43	227	0	0	270	5	0	2	1	8	1	196	5	0	202	
Peak Factor					0.851					0.921					0.406					0.941	

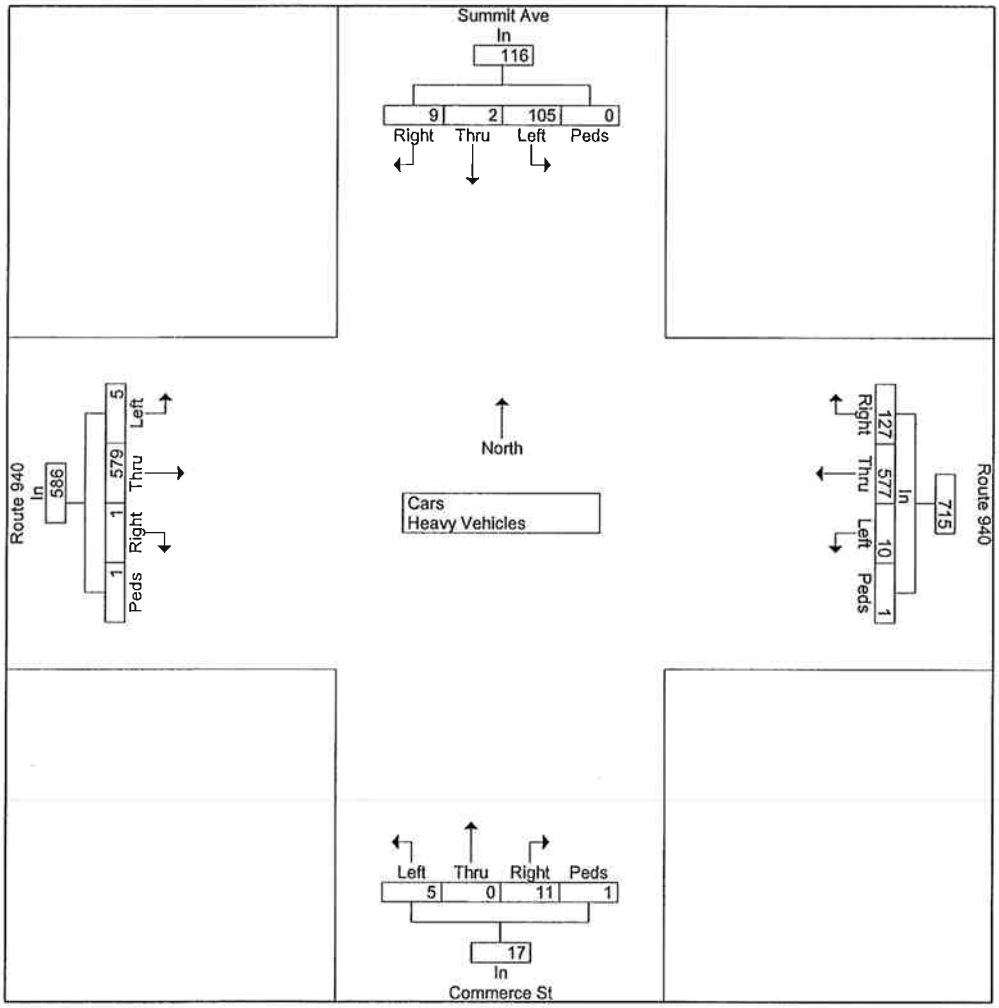


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Tobyhanna, Monroe Co., PA
Intersection: Rt. 940 / Commerce
Date: Friday, September 29, 2006
Counter: ET

File Name : BG0929-1
Site Code : 00000000
Start Date : 09/29/2006
Page No : 4

	Summit Ave From North					Route 940 From East					Commerce St From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:00 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:00 PM					06:00 PM					06:00 PM					06:00 PM					
Volume	9	2	105	0	116	127	577	10	1	715	11	0	5	1	17	1	579	5	1	586	
Percent	7.8	1.7	90.5	0.0		17.8	80.7	1.4	0.1		64.7	0.0	29.4	5.9		0.2	98.8	0.9	0.2		
High Int.	06:00 PM					06:00 PM					06:15 PM					06:30 PM					
Volume	2	1	28	0	31	25	176	3	1	205	4	0	2	0	6	0	154	0	0	154	
Peak Factor					0.935					0.872					0.708					0.951	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Tobyhanna, Monrroe Co., PA
Intersection: Rt. 940 / Commerce
Date: Saturday, September 30, 2006
Counter: ET

File Name : BG0930-1
Site Code : 00000000
Start Date : 09/30/2006
Page No : 1

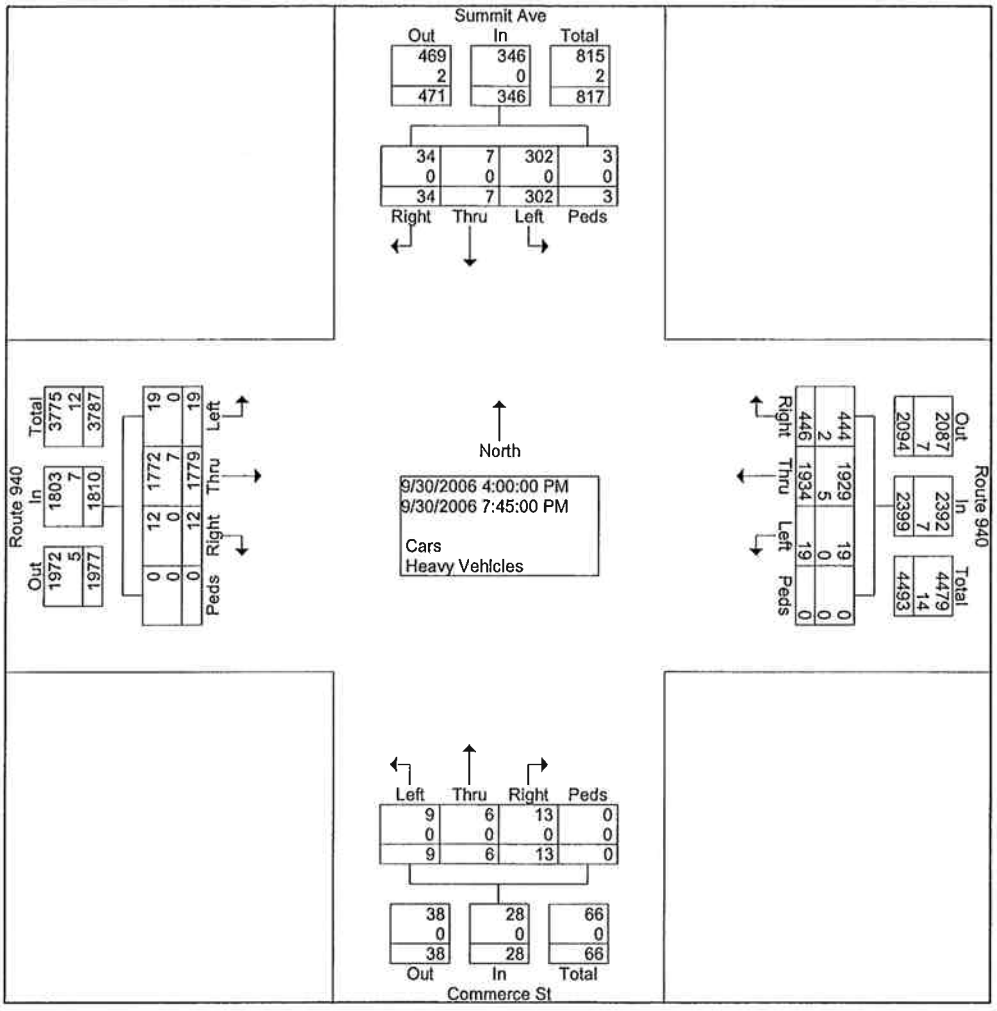
Groups Printed- Cars - Heavy Vehicles

	Summit Ave From North					Route 940 From East					Commerce St From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	3	1	24	0	28	26	149	2	0	177	2	1	1	0	4	2	147	1	0	150	359
04:15 PM	3	1	17	0	21	28	156	2	0	186	1	1	2	0	4	2	151	1	0	154	365
04:30 PM	3	2	30	0	35	36	161	0	0	197	0	0	1	0	1	1	120	2	0	123	356
04:45 PM	6	1	29	0	36	23	147	3	0	173	3	0	1	0	4	1	138	1	0	140	353
Total	15	5	100	0	120	113	613	7	0	733	6	2	5	0	13	6	556	5	0	567	1433
05:00 PM	3	1	29	0	33	38	140	2	0	180	0	0	0	0	0	0	104	2	0	106	319
05:15 PM	2	0	21	0	23	28	142	1	0	171	1	2	1	0	4	0	130	1	0	131	329
05:30 PM	0	0	22	0	22	27	113	0	0	140	1	0	0	0	1	0	147	1	0	148	311
05:45 PM	1	0	12	3	16	33	115	3	0	151	0	1	0	0	1	4	95	0	0	99	267
Total	6	1	84	3	94	126	510	6	0	642	2	3	1	0	6	4	476	4	0	484	1226
06:00 PM	5	0	13	0	18	29	111	0	0	140	1	1	0	0	2	0	122	1	0	123	283
06:15 PM	1	0	16	0	17	23	101	1	0	125	0	0	0	0	0	0	123	1	0	124	266
06:30 PM	2	0	12	0	14	26	95	1	0	122	1	0	0	0	1	0	111	2	0	113	250
06:45 PM	0	0	19	0	19	32	108	1	0	141	0	0	0	0	0	0	105	3	0	108	268
Total	8	0	60	0	68	110	415	3	0	528	2	1	0	0	3	0	461	7	0	468	1067
07:00 PM	2	1	14	0	17	18	118	0	0	136	2	0	0	0	2	1	80	2	0	83	238
07:15 PM	2	0	18	0	20	26	106	1	0	133	0	0	3	0	3	1	82	0	0	83	239
07:30 PM	0	0	11	0	11	32	85	1	0	118	1	0	0	0	1	0	66	0	0	66	196
07:45 PM	1	0	15	0	16	21	87	1	0	109	0	0	0	0	0	0	58	1	0	59	184
Total	5	1	58	0	64	97	396	3	0	496	3	0	3	0	6	2	286	3	0	291	857
Grand Total	34	7	302	3	346	446	1934	19	0	2399	13	6	9	0	28	12	1779	19	0	1810	4583
Apprch %	9.8	2.0	87.3	0.9		18.6	80.6	0.8	0.0		46.4	21.4	32.1	0.0		0.7	98.3	1.0	0.0		
Total %	0.7	0.2	6.6	0.1	7.5	9.7	42.2	0.4	0.0	52.3	0.3	0.1	0.2	0.0	0.6	0.3	38.8	0.4	0.0	39.5	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Tobyhanna, Monrroe Co., PA
Intersection: Rt. 940 / Commerce
Date: Saturday, September 30, 2006
Counter: ET

File Name : BG0930-1
Site Code : 00000000
Start Date : 09/30/2006
Page No : 2

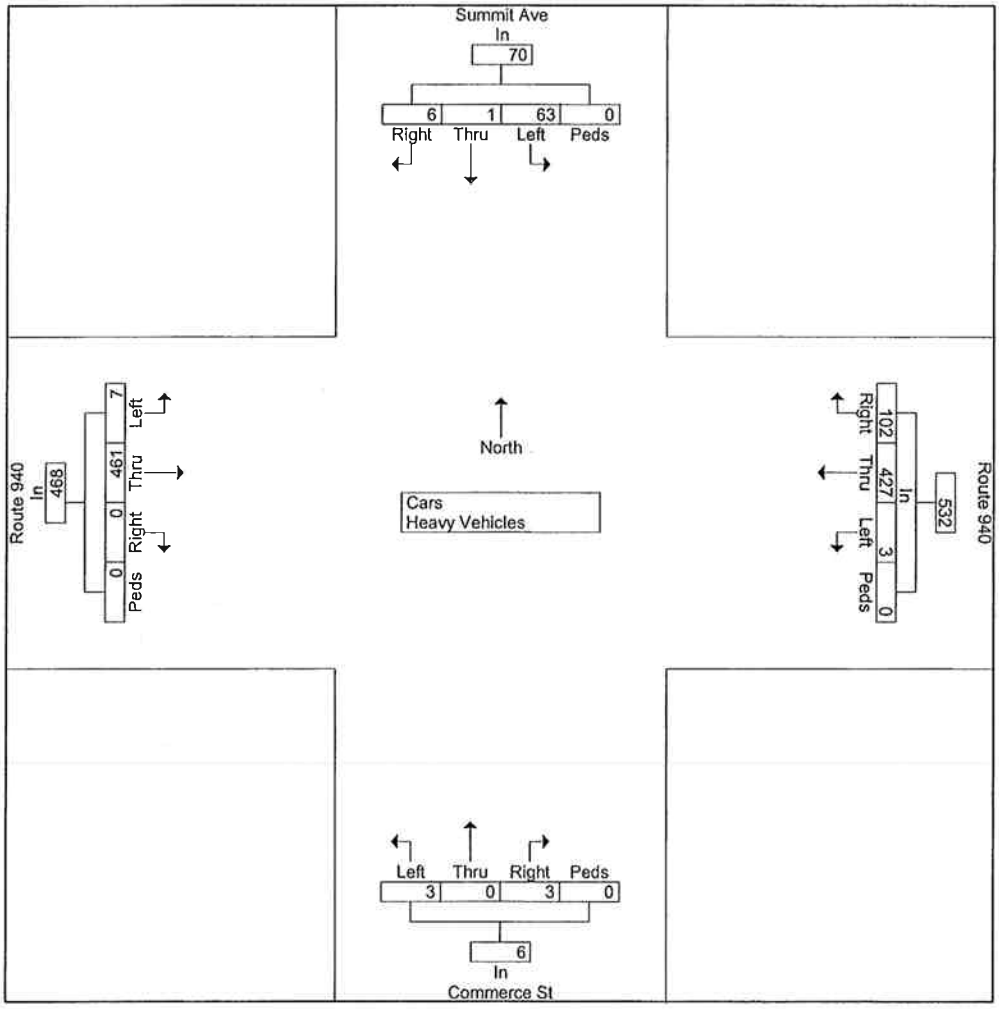


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Tobyhanna, Monrroe Co., PA
Intersection: Rt. 940 / Commerce
Date: Saturday, September 30, 2006
Counter: ET

File Name : BG0930-1
Site Code : 00000000
Start Date : 09/30/2006
Page No : 3

	Summit Ave From North					Route 940 From East					Commerce St From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:00 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:30 PM					06:30 PM					06:30 PM					06:00 PM					
Volume	6	1	63	0	70	102	427	3	0	532	3	0	3	0	6	0	461	7	0	468	
Percent	8.6	1.4	90.0	0.0		19.2	80.3	0.6	0.0		50.0	0.0	50.0	0.0		0.0	98.5	1.5	0.0		
High Int.	07:15 PM					06:45 PM					07:15 PM					06:15 PM					
Volume	2	0	18	0	20	32	108	1	0	141	0	0	3	0	3	0	123	1	0	124	
Peak Factor					0.875					0.943					0.500					0.944	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Coolbaugh, Monroe Co., PA
Intersection: Rt. 940 / Harvest Lane
Date: Saturday, September 30, 2006
Counter: JT

File Name : BG0930-2
Site Code : 00000000
Start Date : 09/30/2006
Page No : 1

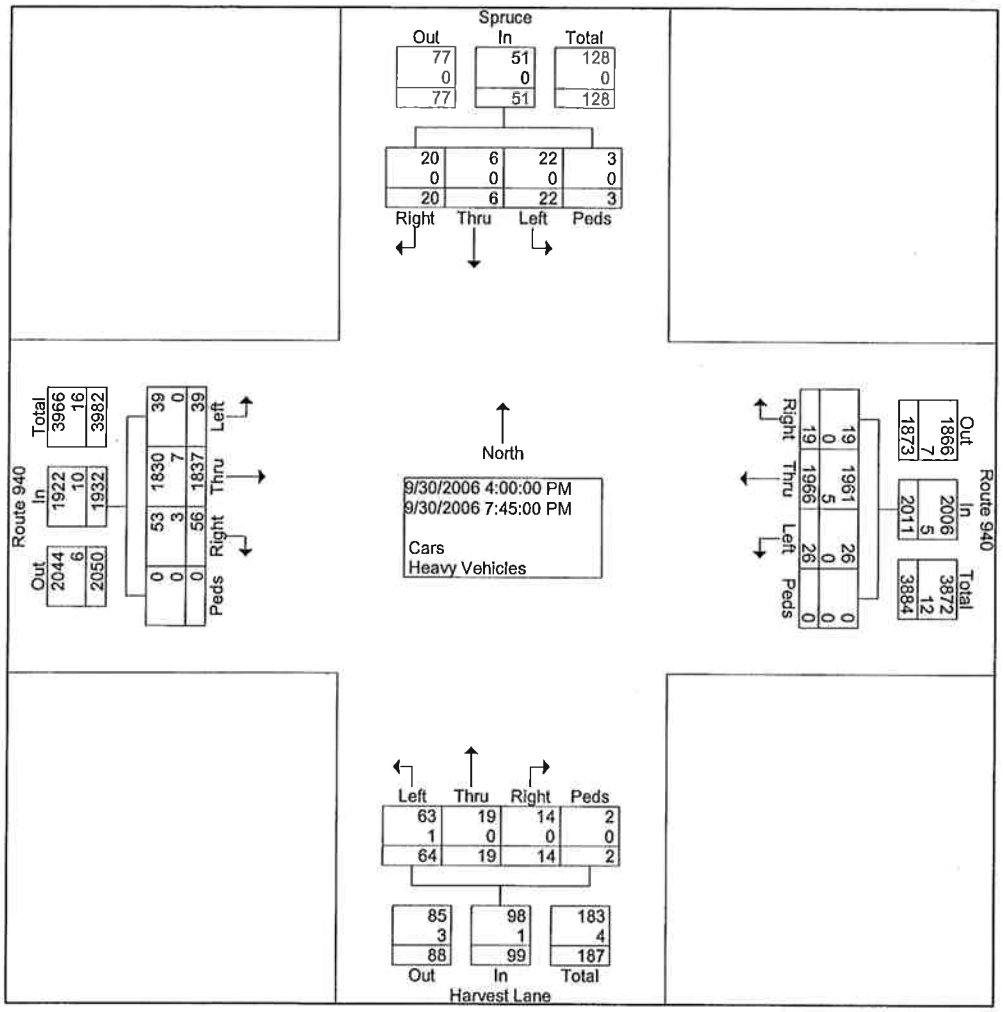
Groups Printed- Cars - Heavy Vehicles

	Spruce From North					Route 940 From East					Harvest Lane From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	1	1	5	0	7	5	151	3	0	159	3	2	3	0	8	3	145	6	0	154	328
04:15 PM	1	0	2	0	3	1	154	1	0	156	1	0	6	0	7	4	147	5	0	156	322
04:30 PM	1	0	1	0	2	2	169	1	0	172	0	0	5	0	5	1	126	2	0	129	308
04:45 PM	1	0	4	0	5	1	159	3	0	163	1	0	3	0	4	2	136	1	0	139	311
Total	4	1	12	0	17	9	633	8	0	650	5	2	17	0	24	10	554	14	0	578	1269
05:00 PM	0	1	2	0	3	1	143	2	0	146	0	0	3	0	3	3	103	1	0	107	259
05:15 PM	2	0	1	0	3	3	137	2	0	142	0	3	5	0	8	5	136	3	0	144	297
05:30 PM	4	0	1	3	8	2	117	0	0	119	0	1	5	0	6	4	145	2	0	151	284
05:45 PM	1	0	1	0	2	0	117	3	0	120	2	0	9	0	11	6	99	1	0	106	239
Total	7	1	5	3	16	6	514	7	0	527	2	4	22	0	28	18	483	7	0	508	1079
06:00 PM	0	1	0	0	1	0	117	2	0	119	1	0	2	0	3	3	126	5	0	134	257
06:15 PM	2	1	0	0	3	0	101	2	0	103	2	2	8	0	12	3	117	0	0	120	238
06:30 PM	2	0	2	0	4	1	98	1	0	100	2	1	6	0	9	5	117	3	0	125	238
06:45 PM	3	0	2	0	5	1	107	0	0	108	0	1	2	0	3	3	113	1	0	117	233
Total	7	2	4	0	13	2	423	5	0	430	5	4	18	0	27	14	473	9	0	496	966
07:00 PM	0	1	0	0	1	0	121	1	0	122	1	2	0	0	3	4	92	5	0	101	227
07:15 PM	2	1	0	0	3	0	104	2	0	106	0	0	2	2	4	5	94	1	0	100	213
07:30 PM	0	0	0	0	0	2	87	2	0	91	0	3	1	0	4	2	74	3	0	79	174
07:45 PM	0	0	1	0	1	0	84	1	0	85	1	4	4	0	9	3	67	0	0	70	165
Total	2	2	1	0	5	2	396	6	0	404	2	9	7	2	20	14	327	9	0	350	779
Grand Total	20	6	22	3	51	19	1966	26	0	2011	14	19	64	2	99	56	1837	39	0	1932	4093
Apprch %	39.2	11.8	43.1	5.9		0.9	97.8	1.3	0.0		14.1	19.2	64.6	2.0		2.9	95.1	2.0	0.0		
Total %	0.5	0.1	0.5	0.1	1.2	0.5	48.0	0.6	0.0	49.1	0.3	0.5	1.6	0.0	2.4	1.4	44.9	1.0	0.0	47.2	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Coolbaugh, Monroe Co., PA
Intersection: Rt. 940 / Harvest Lane
Date: Saturday, September 30, 2006
Counter: JT

File Name : BG0930-2
Site Code : 00000000
Start Date : 09/30/2006
Page No : 2

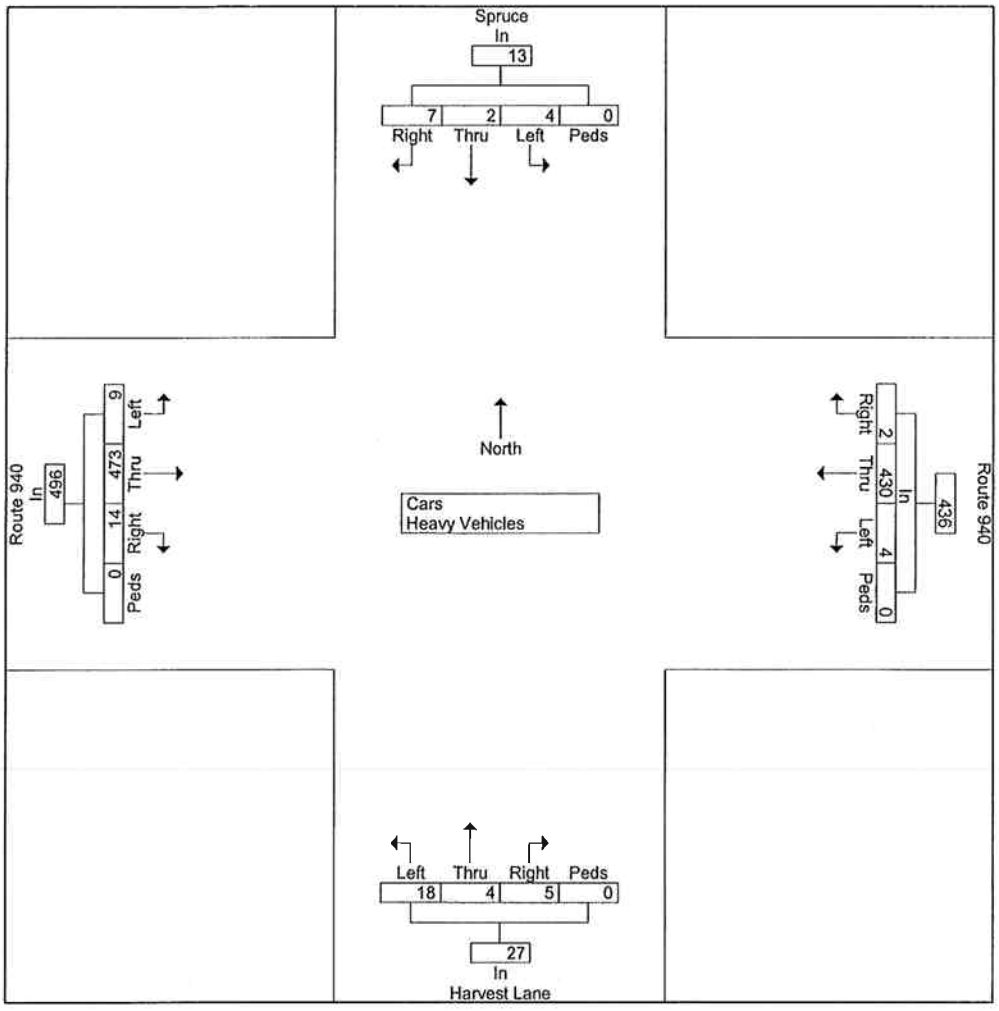


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Coolbaugh, Monroe Co., PA
Intersection: Rt. 940 / Harvest Lane
Date: Saturday, September 30, 2006
Counter: JT

File Name : BG0930-2
Site Code : 00000000
Start Date : 09/30/2006
Page No : 3

	Spruce From North					Route 940 From East					Harvest Lane From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:00 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:00 PM					06:30 PM					06:00 PM					06:00 PM					
Volume	7	2	4	0	13	2	430	4	0	436	5	4	18	0	27	14	473	9	0	496	
Percent	53.8	15.4	30.8	0.0		0.5	98.6	0.9	0.0		18.5	14.8	66.7	0.0		2.8	95.4	1.8	0.0		
High Int.	06:45 PM					07:00 PM					06:15 PM					06:00 PM					
Volume	3	0	2	0	5	0	121	1	0	122	2	2	8	0	12	3	126	5	0	134	
Peak Factor					0.650					0.893					0.563					0.925	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection:Rt.940/Industrial Park Dr.
Date: Friday, October 21, 2005
Counter: CMK

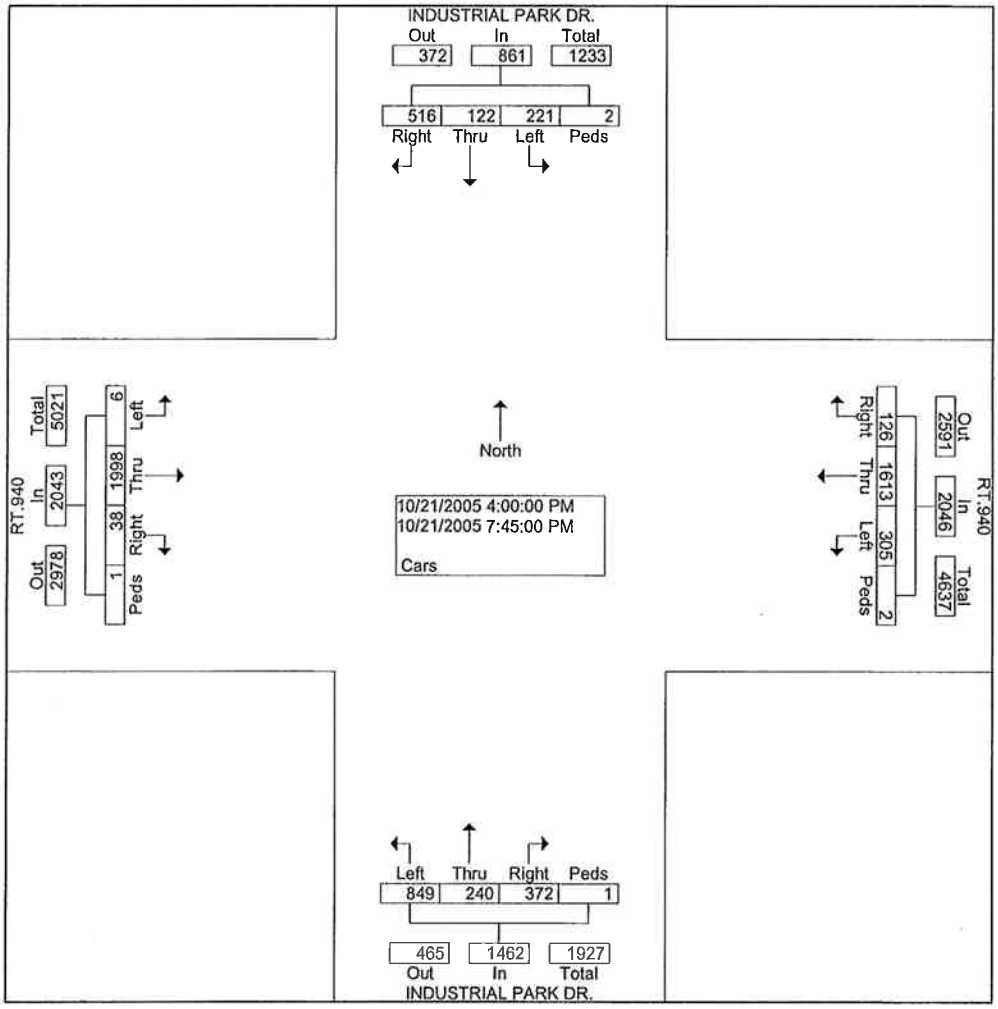
File Name : BG1021-7
Site Code : 00000000
Start Date : 10/21/2005
Page No : 1

Groups Printed- Cars

	INDUSTRIAL PARK DR. From North					RT.940 From East					INDUSTRIAL PARK DR. From South					RT.940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	93	10	14	0	117	4	27	11	1	43	12	32	89	0	133	7	137	2	0	146	439
04:15 PM	98	15	13	0	126	1	21	6	0	28	17	40	79	0	136	1	116	0	0	117	407
04:30 PM	88	25	55	0	168	24	126	17	0	167	14	33	75	0	122	3	138	2	0	143	600
04:45 PM	43	10	23	1	77	27	138	23	0	188	19	20	59	0	98	0	154	0	0	154	517
Total	322	60	105	1	488	56	312	57	1	426	62	125	302	0	489	11	545	4	0	560	1963
05:00 PM	24	4	16	1	45	10	124	18	0	152	39	9	64	1	113	2	138	0	0	140	450
05:15 PM	26	5	12	0	43	3	125	22	0	150	31	14	63	0	108	4	156	0	0	160	461
05:30 PM	22	4	11	0	37	4	146	26	1	177	24	9	53	0	86	2	161	0	0	163	463
05:45 PM	14	7	12	0	33	12	126	17	0	155	35	4	60	0	99	1	135	1	1	138	425
Total	86	20	51	1	158	29	521	83	1	634	129	36	240	1	406	9	590	1	1	601	1799
06:00 PM	13	3	8	0	24	3	110	26	0	139	27	6	51	0	84	3	136	0	0	139	386
06:15 PM	10	4	5	0	19	2	105	22	0	129	21	8	44	0	73	3	126	0	0	129	350
06:30 PM	17	7	5	0	29	4	84	25	0	113	30	5	31	0	66	2	102	0	0	104	312
06:45 PM	10	4	6	0	20	19	100	16	0	135	20	11	42	0	73	3	141	1	0	145	373
Total	50	18	24	0	92	28	399	89	0	516	98	30	168	0	296	11	505	1	0	517	1421
07:00 PM	15	7	20	0	42	5	96	20	0	121	20	15	33	0	68	1	96	0	0	97	328
07:15 PM	16	1	8	0	25	3	81	18	0	102	18	8	33	0	59	1	100	0	0	101	287
07:30 PM	21	5	9	0	35	2	110	20	0	132	19	5	41	0	65	3	84	0	0	87	319
07:45 PM	6	11	4	0	21	3	94	18	0	115	26	21	32	0	79	2	78	0	0	80	295
Total	58	24	41	0	123	13	381	76	0	470	83	49	139	0	271	7	358	0	0	365	1229
Grand Total	516	122	221	2	861	126	1613	305	2	2046	372	240	849	1	1462	38	1998	6	1	2043	6412
Apprch %	59.9	14.2	25.7	0.2		6.2	78.8	14.9	0.1		25.4	16.4	58.1	0.1		1.9	97.8	0.3	0.0		
Total %	8.0	1.9	3.4	0.0	13.4	2.0	25.2	4.8	0.0	31.9	5.8	3.7	13.2	0.0	22.8	0.6	31.2	0.1	0.0	31.9	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

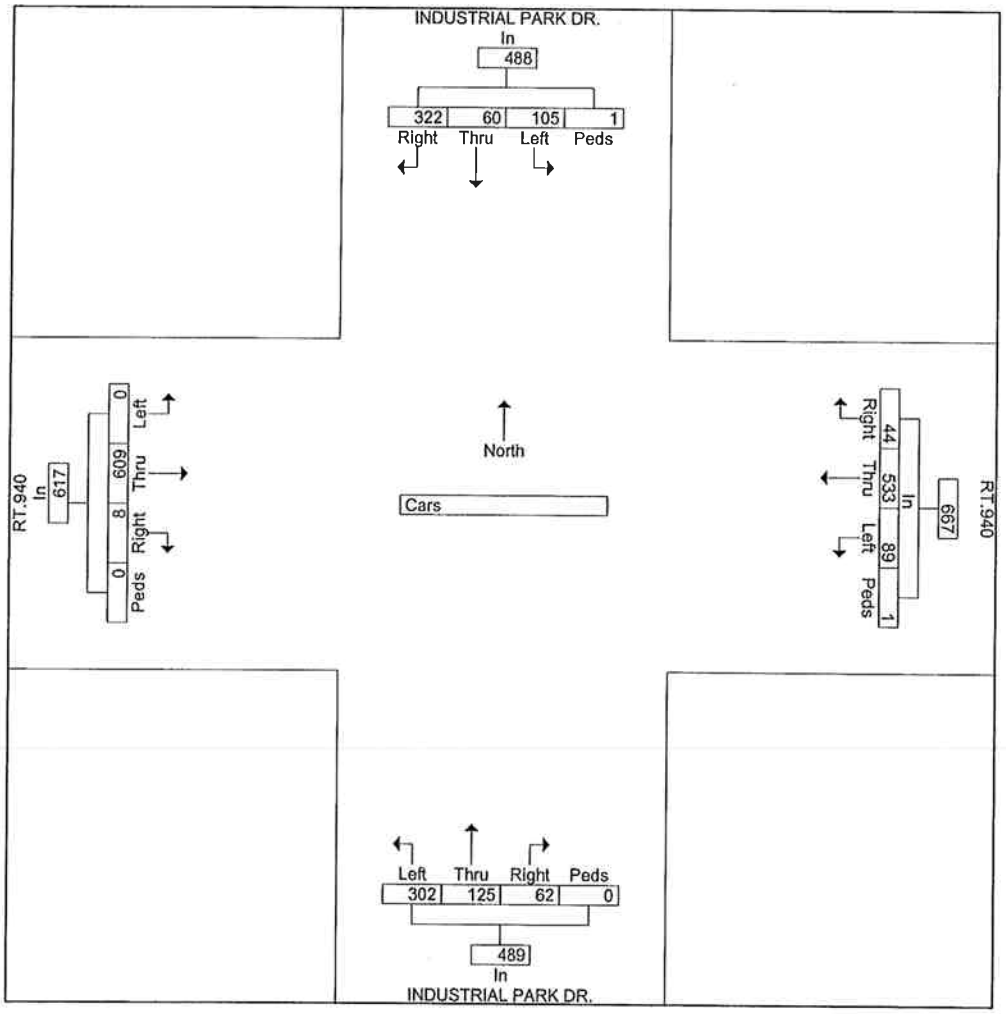
File Name : BG1021-7
Site Code : 00000000
Start Date : 10/21/2005
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021-7
Site Code : 00000000
Start Date : 10/21/2005
Page No : 3

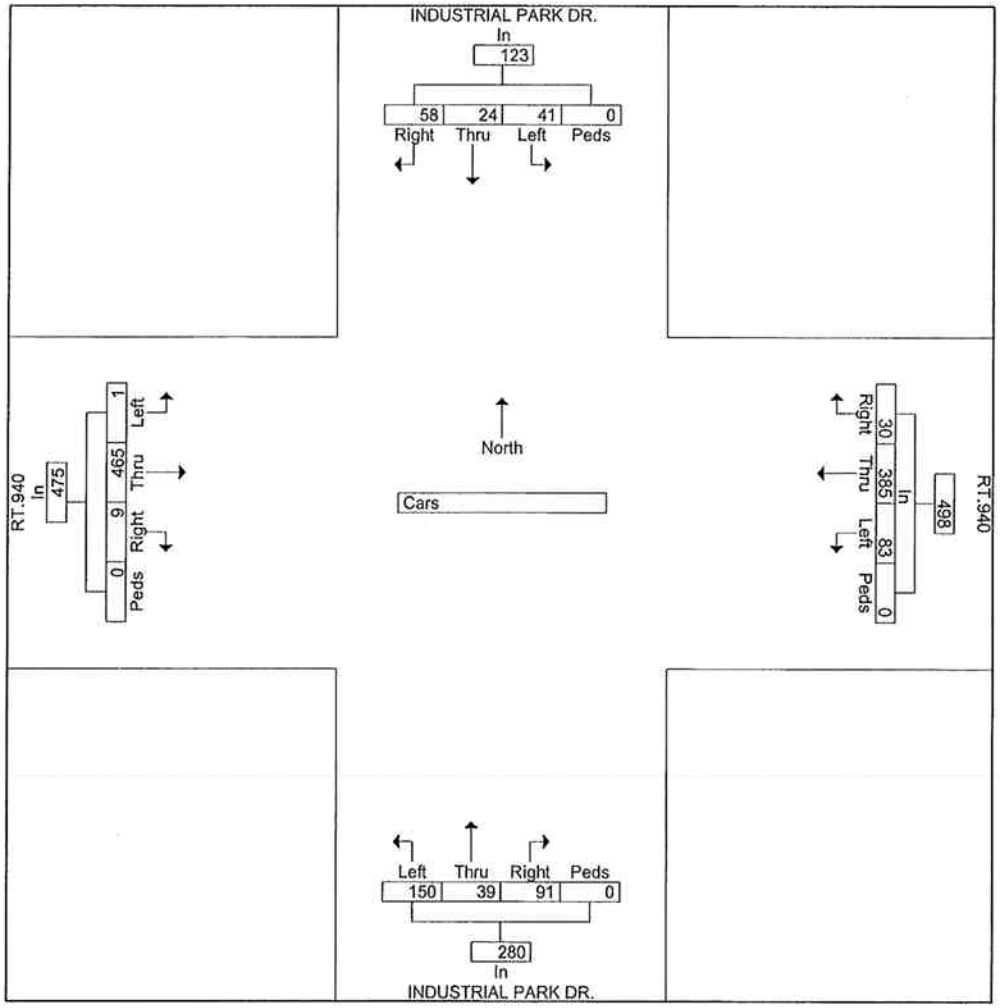
	INDUSTRIAL PARK DR. From North					RT.940 From East					INDUSTRIAL PARK DR. From South					RT.940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:00 PM					04:45 PM					04:00 PM					04:45 PM					
Volume	322	60	105	1	488	44	533	89	1	667	62	125	302	0	489	8	609	0	0	617	
Percent	66.0	12.3	21.5	0.2		6.6	79.9	13.3	0.1		12.7	25.6	61.8	0.0		1.3	98.7	0.0	0.0		
High Int.	04:30 PM					04:45 PM					04:15 PM					05:30 PM					
Volume	88	25	55	0	168	27	138	23	0	188	17	40	79	0	136	2	161	0	0	163	
Peak Factor					0.726					0.887					0.899					0.946	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021-7
Site Code : 00000000
Start Date : 10/21/2005
Page No : 4

	INDUSTRIAL PARK DR. From North					RT.940 From East					INDUSTRIAL PARK DR. From South					RT.940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	07:00 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	58	24	41	0	123	30	385	83	0	498	91	39	150	0	280	9	465	1	0	475	
Percent	47.2	19.5	33.3	0.0		6.0	77.3	16.7	0.0		32.5	13.9	53.6	0.0		1.9	97.9	0.2	0.0		
High Int.	07:00 PM					06:45 PM					06:15 PM					06:45 PM					
Volume	15	7	20	0	42	19	100	16	0	135	21	8	44	0	73	3	141	1	0	145	
Peak Factor					0.732					0.922					0.959					0.819	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Rt.940/IndustrialParkDr
Date:Saturday, October 22, 2005
Counter: CMK

File Name : BG1022-7
Site Code : 00000000
Start Date : 10/22/2005
Page No : 1

Groups Printed- Cars

	INDUSTRIAL PARK DR. From North					RT.940 From East					INDUSTRIAL PARK DR. From South					RT.940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	20	5	12	0	37	6	85	24	0	115	28	10	45	0	83	5	103	1	0	109	344
04:15 PM	20	3	8	0	31	8	132	25	1	166	29	9	46	0	84	1	91	0	0	92	373
04:30 PM	40	11	46	0	97	2	111	14	0	127	22	7	34	1	64	4	102	0	0	106	394
04:45 PM	19	3	7	0	29	8	107	17	0	132	28	4	45	0	77	3	100	0	0	103	341
Total	99	22	73	0	194	24	435	80	1	540	107	30	170	1	308	13	396	1	0	410	1452
05:00 PM	15	4	3	0	22	2	124	19	0	145	23	8	46	1	78	2	97	0	1	100	345
05:15 PM	11	5	2	0	18	4	76	26	0	106	23	8	35	0	66	3	113	0	0	116	306
05:30 PM	9	9	4	0	22	1	100	9	0	110	29	6	35	0	70	4	104	0	0	108	310
05:45 PM	12	4	4	0	20	0	96	13	0	109	18	4	39	0	61	0	93	0	0	93	283
Total	47	22	13	0	82	7	396	67	0	470	93	26	155	1	275	9	407	0	1	417	1244
06:00 PM	11	3	0	0	14	3	91	15	0	109	29	7	34	0	70	4	110	0	0	114	307
06:15 PM	10	2	2	0	14	1	68	12	0	81	25	6	37	0	68	0	95	0	0	95	258
06:30 PM	5	6	4	0	15	7	96	13	0	116	15	10	37	0	62	6	69	0	0	75	268
06:45 PM	13	1	4	0	18	5	69	18	0	92	28	12	32	0	72	2	78	0	0	80	262
Total	39	12	10	0	61	16	324	58	0	398	97	35	140	0	272	12	352	0	0	364	1095
07:00 PM	16	9	12	0	37	7	75	10	0	92	13	7	40	0	60	3	108	0	0	111	300
07:15 PM	3	1	7	0	11	3	80	15	0	98	14	3	38	0	55	1	76	1	0	78	242
07:30 PM	10	2	3	0	15	3	54	11	0	68	19	2	30	0	51	1	81	0	0	82	216
07:45 PM	17	3	1	1	22	2	74	9	0	85	9	4	33	0	46	4	60	1	0	65	218
Total	46	15	23	1	85	15	283	45	0	343	55	16	141	0	212	9	325	2	0	336	976
Grand Total	231	71	119	1	422	62	1438	250	1	1751	352	107	606	2	1067	43	1480	3	1	1527	4767
Apprch %	54.7	16.8	28.2	0.2		3.5	82.1	14.3	0.1		33.0	10.0	56.8	0.2		2.8	96.9	0.2	0.1		
Total %	4.8	1.5	2.5	0.0	8.9	1.3	30.2	5.2	0.0	36.7	7.4	2.2	12.7	0.0	22.4	0.9	31.0	0.1	0.0	32.0	

Tri-State Traffic Data, Inc.
184 Baker Road
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(610) 466-1469

File Name : BG1022-7
Site Code : 00000000
Start Date : 10/22/2005
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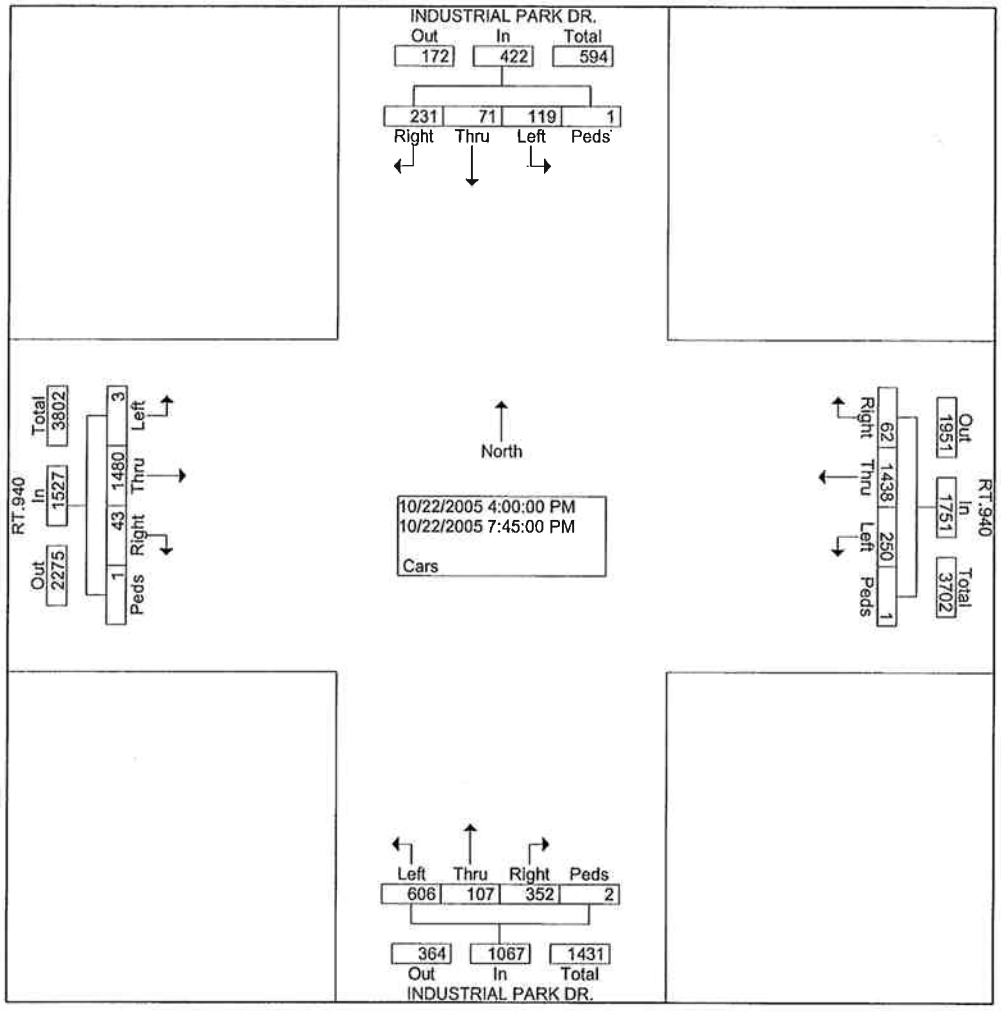

Tri-State Traffic Data, Inc.
184 Baker Road
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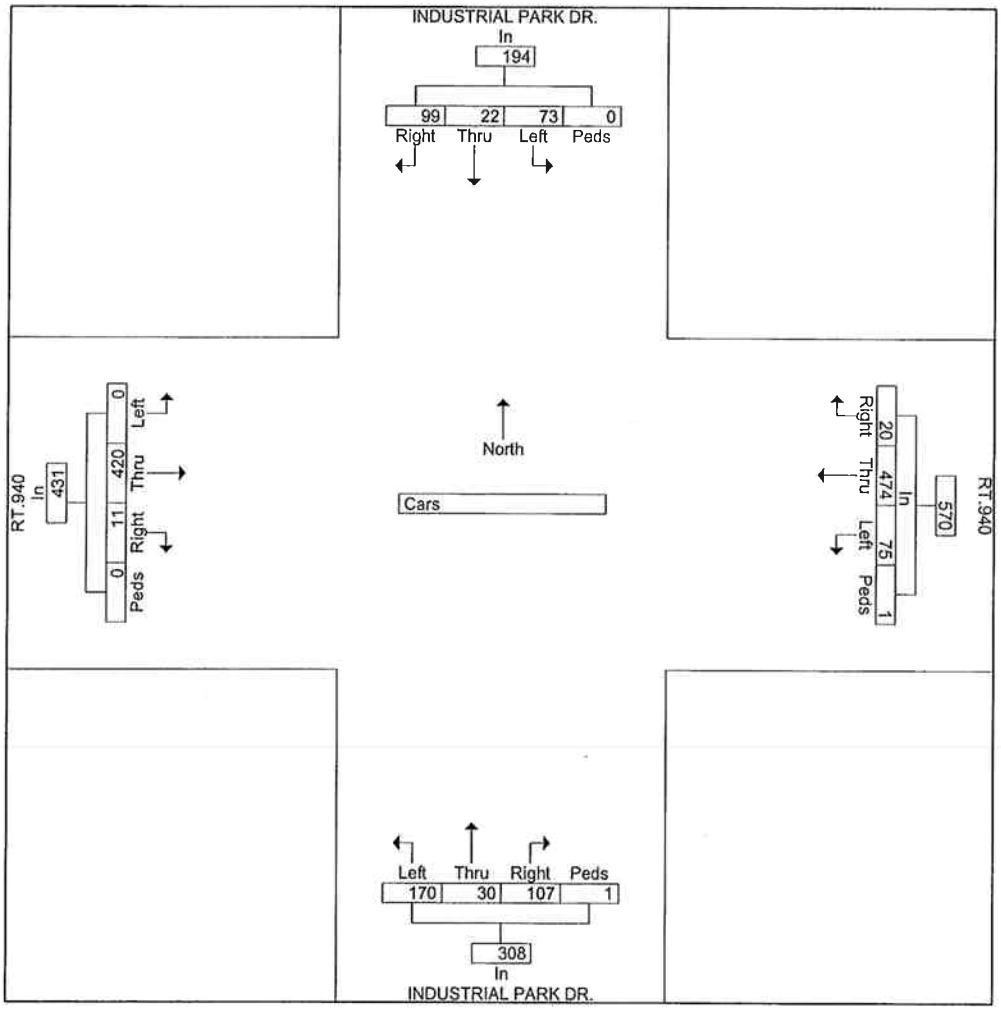
(610) 466-1469

File Name : BG1022-7
Site Code : 00000000
Start Date : 10/22/2005
Page No : 3

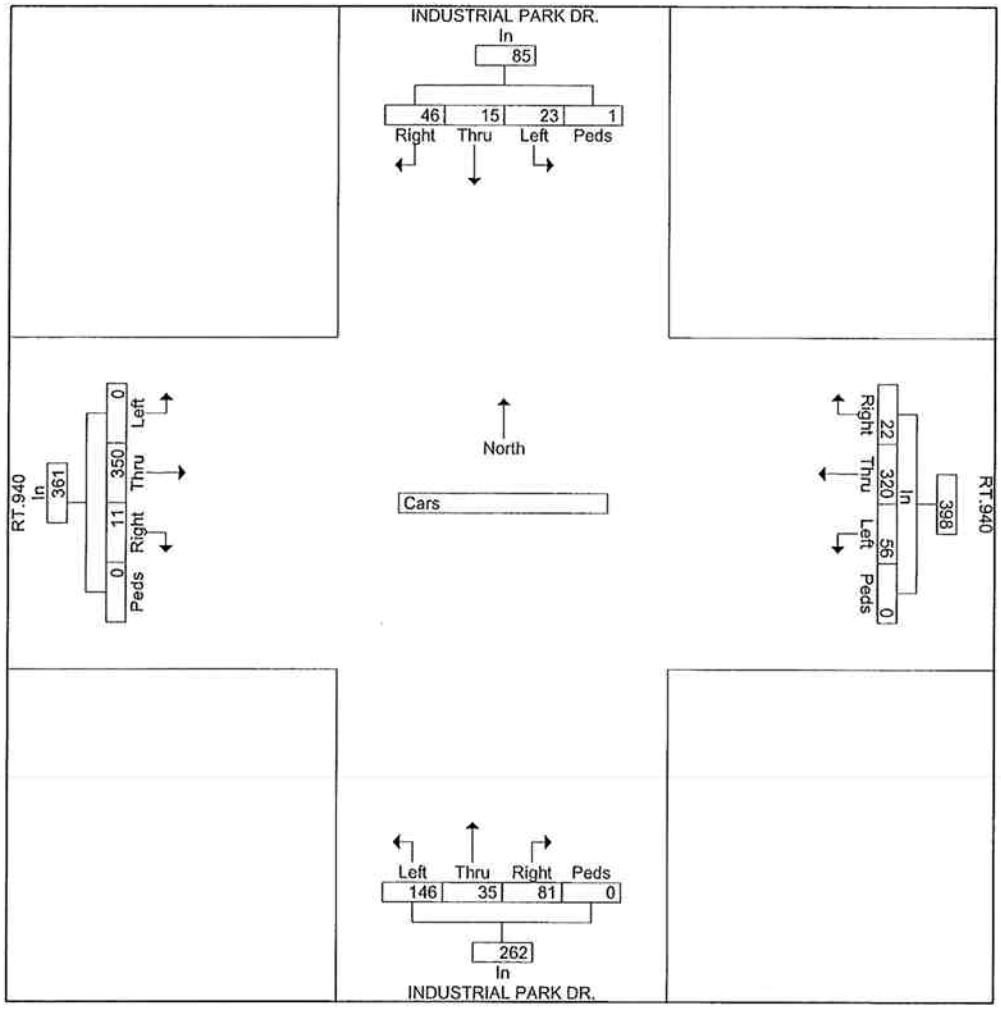
	INDUSTRIAL PARK DR. From North					RT.940 From East					INDUSTRIAL PARK DR. From South					RT.940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:00 PM					04:15 PM					04:00 PM					05:15 PM					
Volume	99	22	73	0	194	20	474	75	1	570	107	30	170	1	308	11	420	0	0	431	
Percent	51.0	11.3	37.6	0.0		3.5	83.2	13.2	0.2		34.7	9.7	55.2	0.3		2.6	97.4	0.0	0.0		
High Int.	04:30 PM					04:15 PM					04:15 PM					05:15 PM					
Volume	40	11	46	0	97	8	132	25	1	166	29	9	46	0	84	3	113	0	0	116	
Peak Factor					0.500					0.858					0.917					0.929	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022-7
Site Code : 00000000
Start Date : 10/22/2005
Page No : 4

	INDUSTRIAL PARK DR. From North					RT.940 From East					INDUSTRIAL PARK DR. From South					RT.940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	07:00 PM					06:30 PM					06:15 PM					06:15 PM					
Volume	46	15	23	1	85	22	320	56	0	398	81	35	146	0	262	11	350	0	0	361	
Percent	54.1	17.6	27.1	1.2		5.5	80.4	14.1	0.0		30.9	13.4	55.7	0.0		3.0	97.0	0.0	0.0		
High Int.	07:00 PM					06:30 PM					06:45 PM					07:00 PM					
Volume	16	9	12	0	37	7	96	13	0	116	28	12	32	0	72	3	108	0	0	111	
Peak Factor					0.574					0.858					0.910					0.813	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, Pa
Intersection: Oak St / Rt 940
Date: Friday, October 21,2005
Counter: RZ

File Name : BG1021-8
Site Code : 00000000
Start Date : 10/21/2005
Page No : 1

Groups Printed- Cars

	Oak St From North					RT 940 From East					Oak St From South					RT 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	39	0	41	0	80	131	1	88	0	220	47	0	3	0	50	21	117	9	0	147	497
04:15 PM	30	0	45	0	75	139	0	100	1	240	63	1	1	0	65	10	126	11	0	147	527
04:30 PM	28	0	60	0	88	54	141	28	0	223	46	0	19	0	65	26	155	45	3	229	605
04:45 PM	36	1	44	1	82	46	131	35	2	214	46	0	20	0	66	21	133	36	1	191	553
Total	133	1	190	1	325	370	273	251	3	897	202	1	43	0	246	78	531	101	4	714	2182
05:00 PM	38	1	42	1	82	34	110	41	1	186	40	0	15	0	55	11	157	46	1	215	538
05:15 PM	28	1	55	1	85	35	100	34	3	172	28	0	15	0	43	7	133	42	1	183	483
05:30 PM	45	1	41	0	87	36	104	26	3	169	37	0	21	0	58	17	125	46	0	188	502
05:45 PM	27	0	35	0	62	50	103	35	0	188	50	1	22	0	73	11	130	31	0	172	495
Total	138	3	173	2	316	155	417	136	7	715	155	1	73	0	229	46	545	165	2	758	2018
06:00 PM	27	0	54	0	81	42	103	20	0	165	35	0	11	0	46	18	104	47	0	169	461
06:15 PM	29	1	31	0	61	43	90	22	0	155	41	1	8	0	50	7	119	36	1	163	429
06:30 PM	32	0	44	0	76	36	71	29	0	136	30	0	6	0	36	17	92	45	2	156	404
06:45 PM	23	2	43	0	68	47	101	21	1	170	31	0	10	0	41	16	121	36	0	173	452
Total	111	3	172	0	286	168	365	92	1	626	137	1	35	0	173	58	436	164	3	661	1746
07:00 PM	21	0	32	0	53	43	79	26	2	150	25	0	12	0	37	15	102	28	0	145	385
07:15 PM	31	1	43	0	75	31	62	20	0	113	17	0	3	0	20	8	83	30	5	126	334
07:30 PM	30	0	49	0	79	35	86	21	0	142	29	0	13	0	42	14	67	29	2	112	375
07:45 PM	22	0	33	0	55	43	62	18	0	123	17	0	15	0	32	12	71	21	0	104	314
Total	104	1	157	0	262	152	289	85	2	528	88	0	43	0	131	49	323	108	7	487	1408
Grand Total	486	8	692	3	1189	845	1344	564	13	2766	582	3	194	0	779	231	1835	538	16	2620	7354
Apprch %	40.9	0.7	58.2	0.3		30.5	48.6	20.4	0.5		74.7	0.4	24.9	0.0		8.8	70.0	20.5	0.6		
Total %	6.6	0.1	9.4	0.0	16.2	11.5	18.3	7.7	0.2	37.6	7.9	0.0	2.6	0.0	10.6	3.1	25.0	7.3	0.2	35.6	

Tri-State Traffic Data, Inc.
184 Baker Road
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(610) 466-1469

File Name : BG1021-8
Site Code : 00000000
Start Date : 10/21/2005
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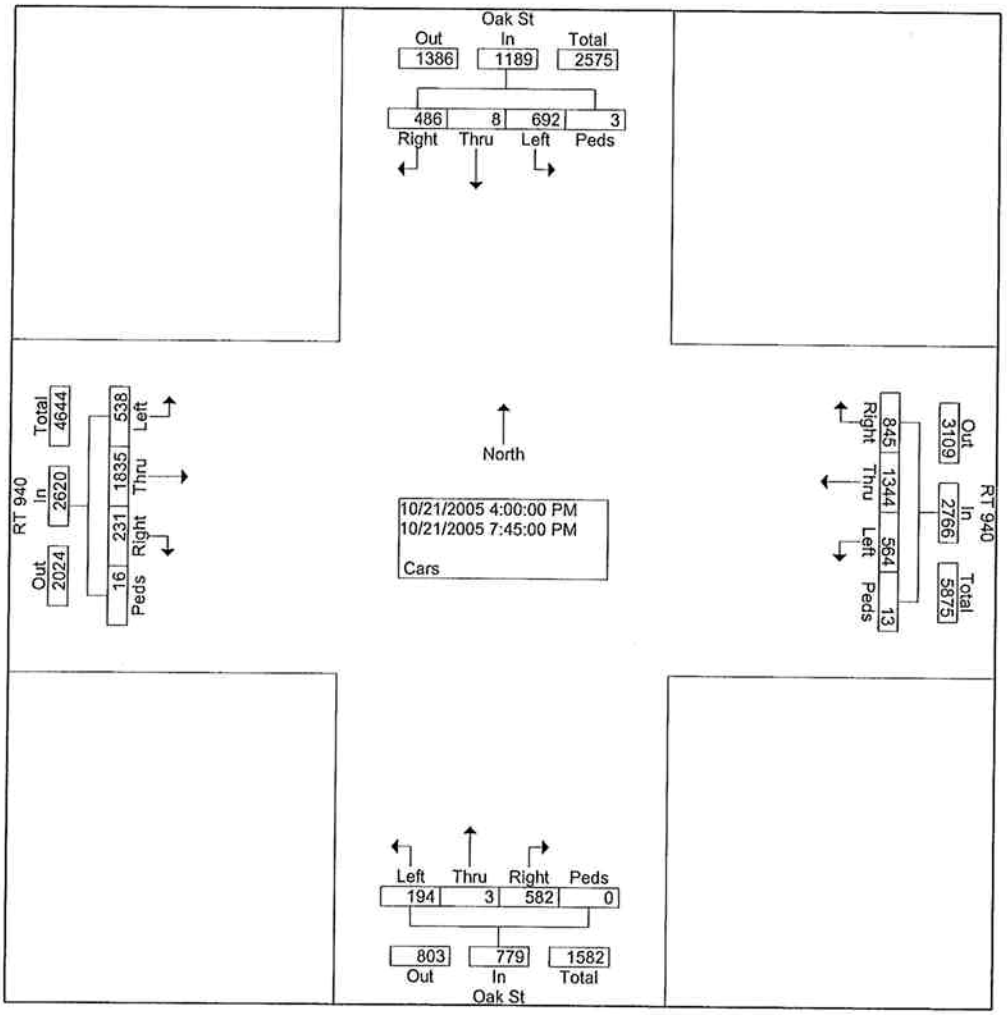
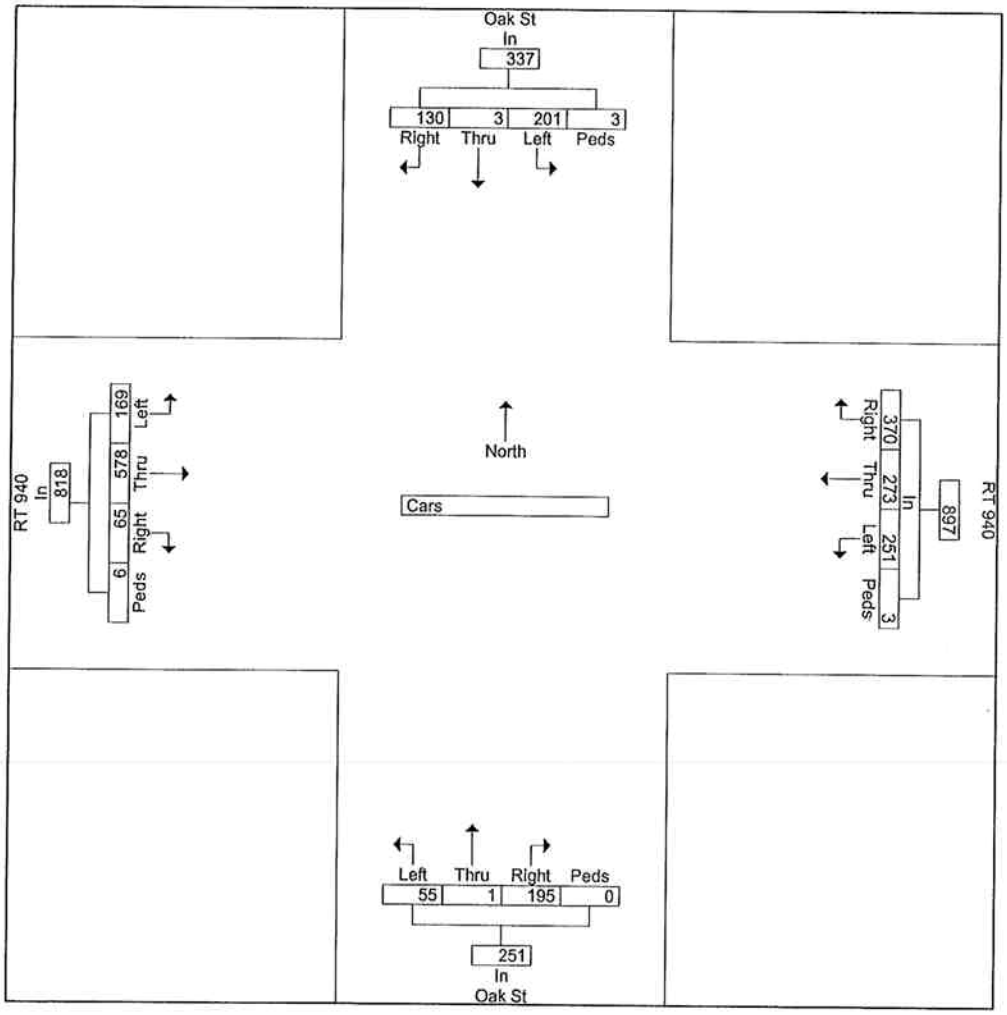


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021-8
Site Code : 00000000
Start Date : 10/21/2005
Page No : 3

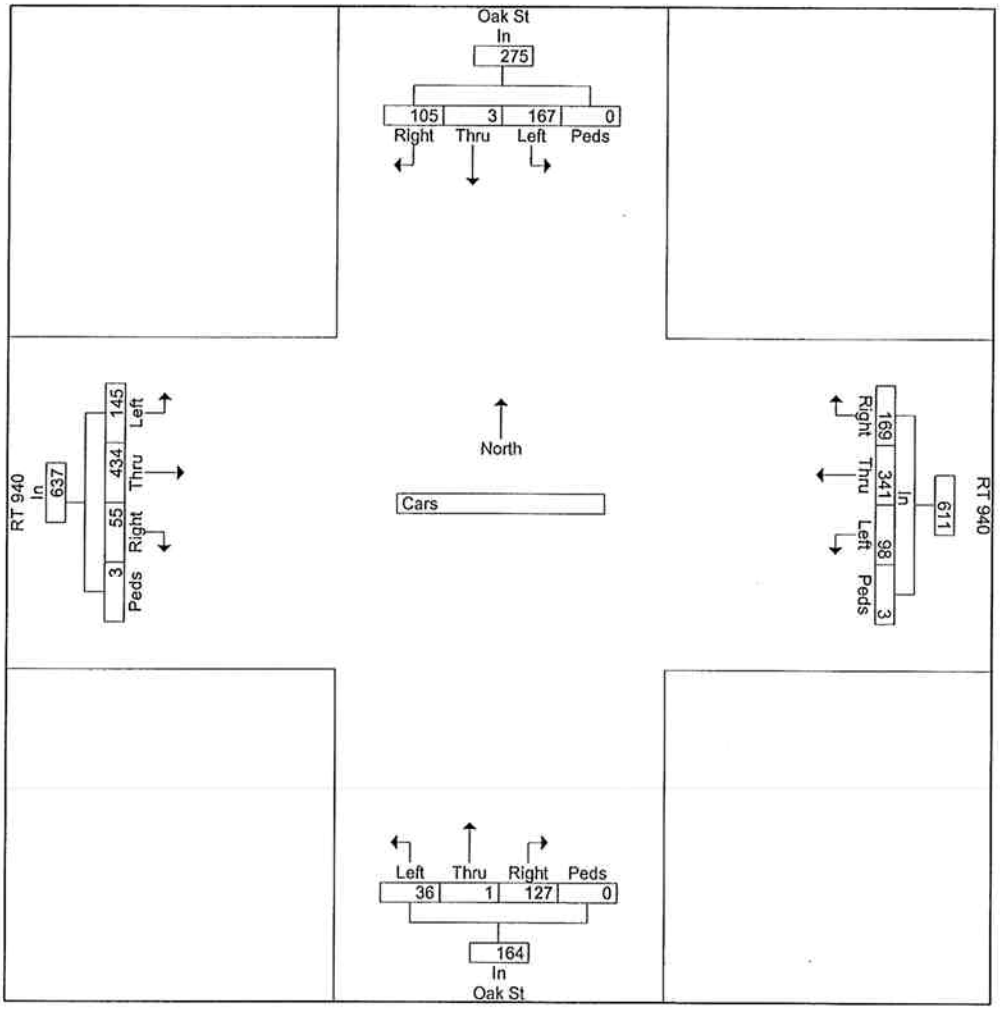
	Oak St From North					RT 940 From East					Oak St From South					RT 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:30 PM					04:00 PM					04:15 PM					04:30 PM					
Volume	130	3	201	3	337	370	273	251	3	897	195	1	55	0	251	65	578	169	6	818	
Percent	38.6	0.9	59.6	0.9		41.2	30.4	28.0	0.3		77.7	0.4	21.9	0.0		7.9	70.7	20.7	0.7		
High Int.	04:30 PM					04:15 PM					04:45 PM					04:30 PM					
Volume	28	0	60	0	88	139	0	100	1	240	46	0	20	0	66	26	155	45	3	229	
Peak Factor					0.957					0.934					0.951					0.893	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021-8
Site Code : 00000000
Start Date : 10/21/2005
Page No : 4

	Oak St From North					RT 940 From East					Oak St From South					RT 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:45 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	105	3	167	0	275	169	341	98	3	611	127	1	36	0	164	55	434	145	3	637	
Percent	38.2	1.1	60.7	0.0		27.7	55.8	16.0	0.5		77.4	0.6	22.0	0.0		8.6	68.1	22.8	0.5		
High Int.	07:30 PM					06:45 PM					06:15 PM					06:45 PM					
Volume	30	0	49	0	79	47	101	21	1	170	41	1	8	0	50	16	121	36	0	173	
Peak Factor					0.870					0.899					0.820					0.921	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Oak St / Rt 940
DateSaturday, October 22 2005
Counter: RZ

File Name : BG1022-8
Site Code : 00000000
Start Date : 10/22/2005
Page No : 1

Groups Printed- Cars

	Oak St From North					RT 940 From East					Oak St From South					RT 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	33	0	59	0	92	46	65	26	0	137	30	0	13	0	43	10	103	41	0	154	426
04:15 PM	39	1	51	0	91	61	107	17	0	185	19	0	22	0	41	16	65	28	0	109	426
04:30 PM	27	1	64	1	93	37	86	23	0	146	29	0	7	0	36	17	121	27	0	165	440
04:45 PM	31	0	54	0	85	53	90	21	0	164	31	0	12	4	47	15	102	31	0	148	444
Total	130	2	228	1	361	197	348	87	0	632	109	0	54	4	167	58	391	127	0	576	1736
05:00 PM	42	1	33	0	76	51	92	11	0	154	25	0	12	0	37	11	76	33	2	122	389
05:15 PM	26	1	51	0	78	42	70	40	0	152	25	0	6	0	31	9	87	39	0	135	396
05:30 PM	27	0	53	0	80	56	76	18	2	152	32	0	9	0	41	9	83	31	2	125	398
05:45 PM	27	0	44	0	71	44	72	25	0	141	23	0	18	0	41	6	86	28	0	120	373
Total	122	2	181	0	305	193	310	94	2	599	105	0	45	0	150	35	332	131	4	502	1556
06:00 PM	35	1	47	0	83	47	54	17	1	119	14	0	14	0	28	8	78	36	0	122	352
06:15 PM	31	2	48	0	81	37	57	16	1	111	29	0	6	1	36	10	83	43	1	137	365
06:30 PM	29	2	50	0	81	43	75	23	0	141	25	0	9	2	36	9	65	19	1	94	352
06:45 PM	27	0	42	0	69	42	60	11	0	113	25	0	8	0	33	7	58	28	0	93	308
Total	122	5	187	0	314	169	246	67	2	484	93	0	37	3	133	34	284	126	2	446	1377
07:00 PM	28	1	44	0	73	33	55	13	0	101	21	0	5	0	26	9	94	36	0	139	339
07:15 PM	26	0	42	0	68	39	80	13	0	132	25	0	6	0	31	7	54	30	0	91	322
07:30 PM	18	1	47	0	66	22	44	21	0	87	10	0	6	0	16	6	75	25	0	106	275
07:45 PM	16	3	31	0	50	34	54	13	0	101	16	0	9	1	26	7	38	25	0	70	247
Total	88	5	164	0	257	128	233	60	0	421	72	0	26	1	99	29	261	116	0	406	1183
Grand Total	462	14	760	1	1237	687	1137	308	4	2136	379	0	162	8	549	156	1268	500	6	1930	5852
Apprch %	37.3	1.1	61.4	0.1		32.2	53.2	14.4	0.2		69.0	0.0	29.5	1.5		8.1	65.7	25.9	0.3		
Total %	7.9	0.2	13.0	0.0	21.1	11.7	19.4	5.3	0.1	36.5	6.5	0.0	2.8	0.1	9.4	2.7	21.7	8.5	0.1	33.0	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022-8
Site Code : 00000000
Start Date : 10/22/2005
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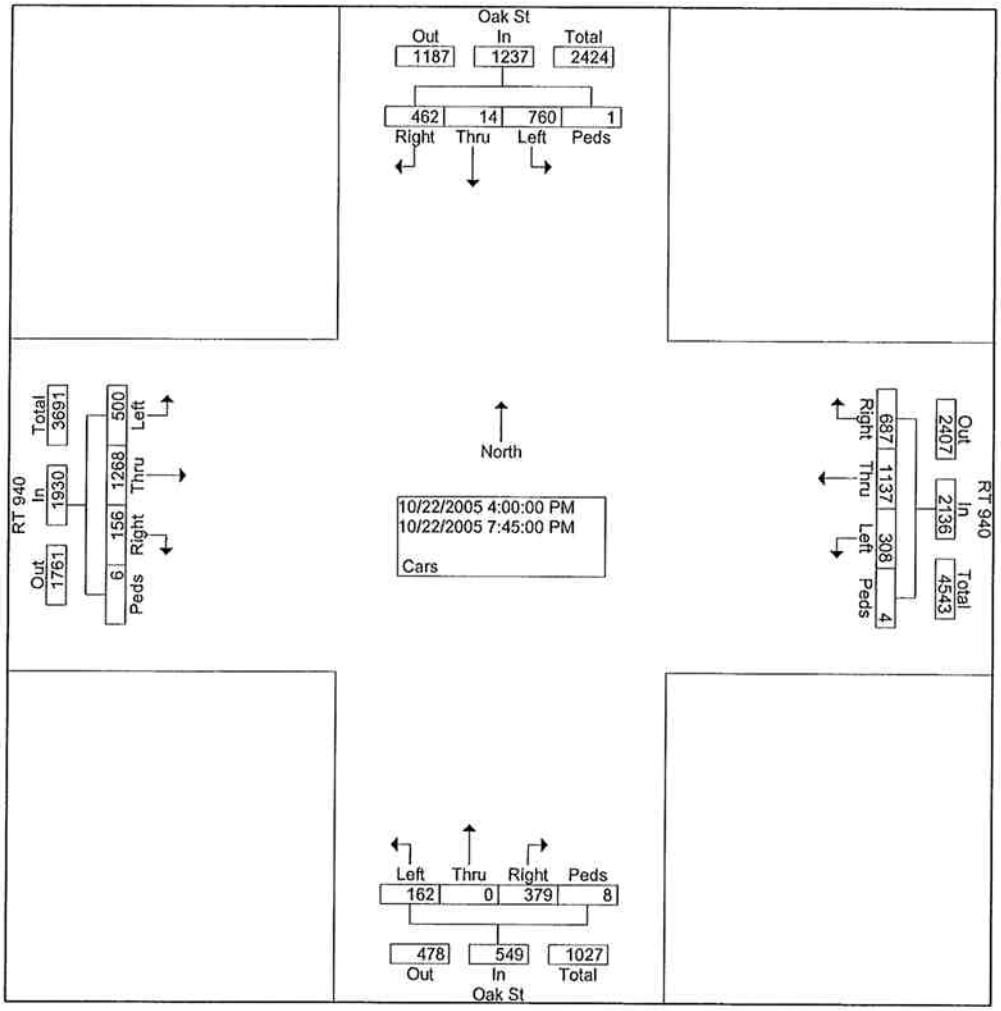
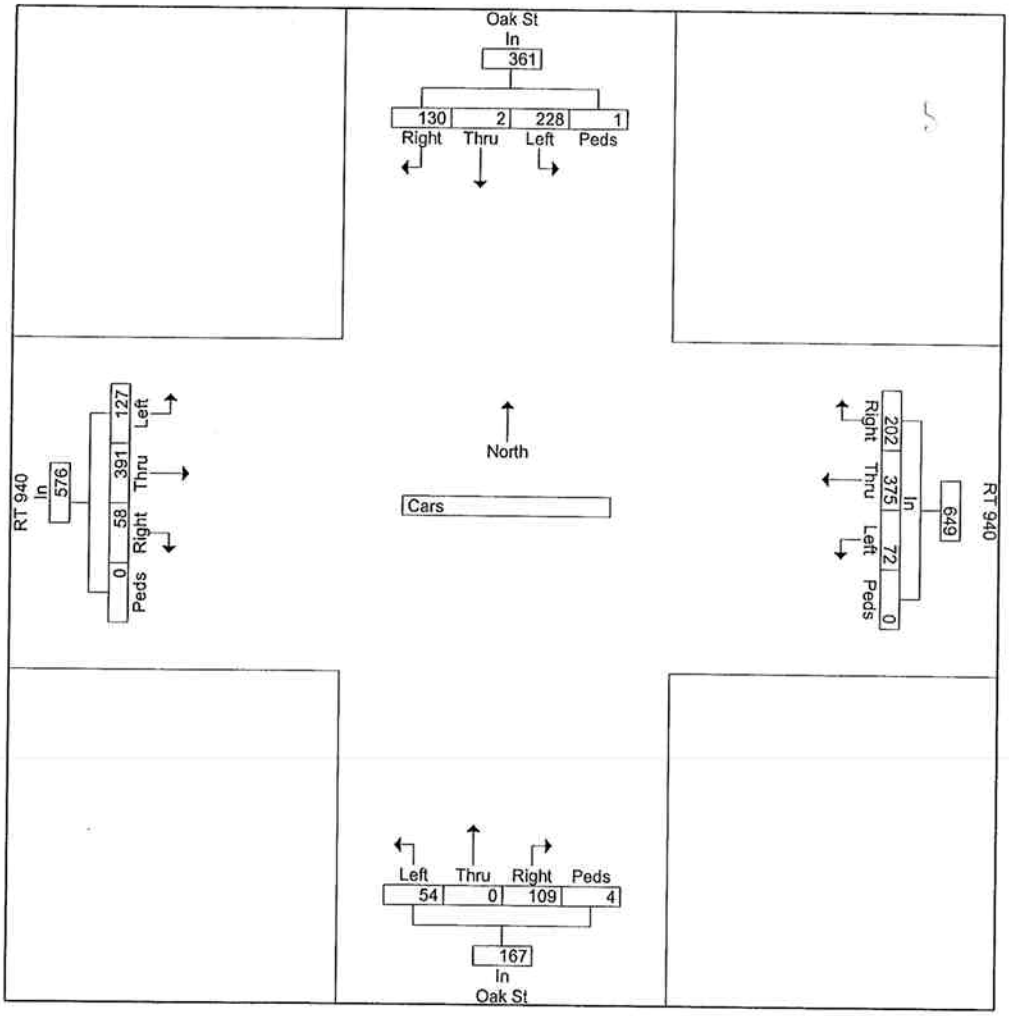


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022-8
Site Code : 00000000
Start Date : 10/22/2005
Page No : 3

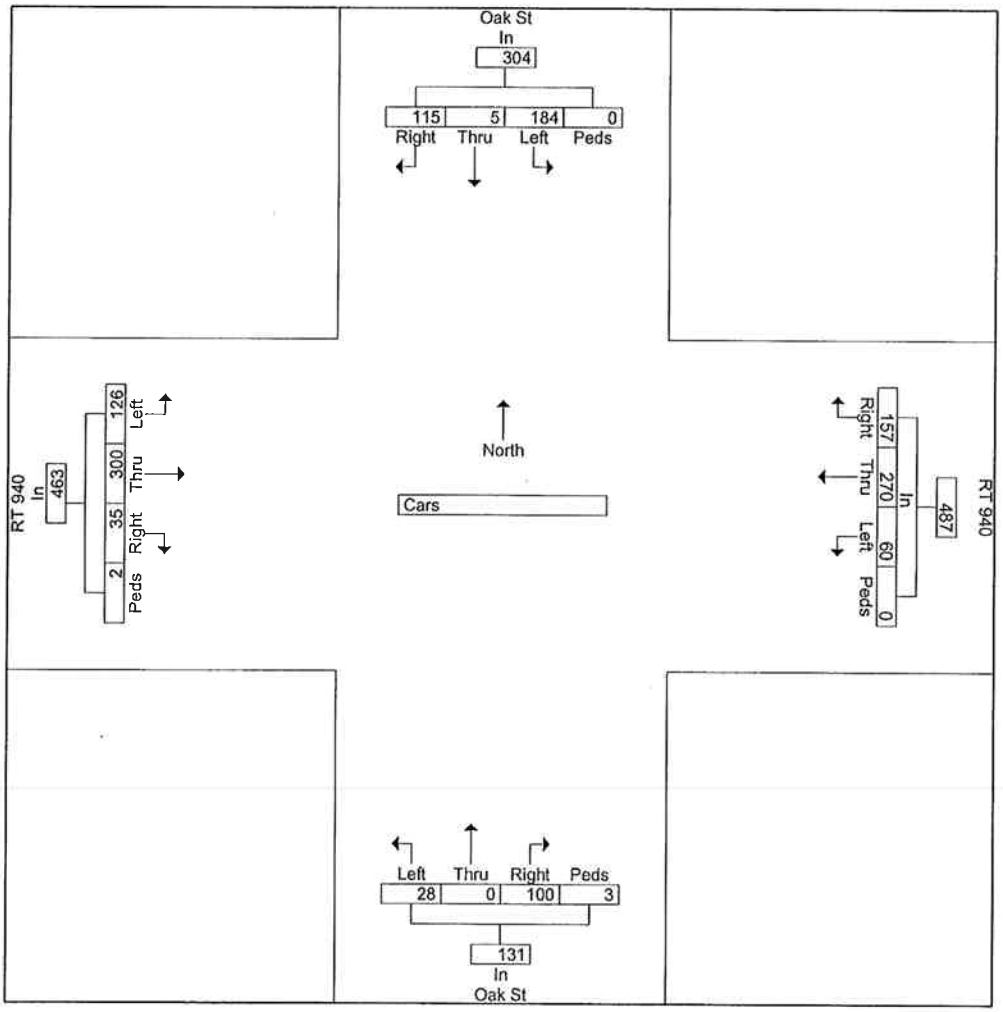
	Oak St From North					RT 940 From East					Oak St From South					RT 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:00 PM					04:15 PM					04:00 PM					04:00 PM					
Volume	130	2	228	1	361	202	375	72	0	649	109	0	54	4	167	58	391	127	0	576	
Percent	36.0	0.6	63.2	0.3		31.1	57.8	11.1	0.0		65.3	0.0	32.3	2.4		10.1	67.9	22.0	0.0		
High Int.	04:30 PM					04:15 PM					04:45 PM					04:30 PM					
Volume	27	1	64	1	93	61	107	17	0	185	31	0	12	4	47	17	121	27	0	165	
Peak Factor					0.970					0.877					0.888					0.873	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022-8
Site Code : 00000000
Start Date : 10/22/2005
Page No : 4

	Oak St From North					RT 940 From East					Oak St From South					RT 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:15 PM					06:30 PM					06:15 PM					06:15 PM					
Volume	115	5	184	0	304	157	270	60	0	487	100	0	28	3	131	35	300	126	2	463	
Percent	37.8	1.6	60.5	0.0		32.2	55.4	12.3	0.0		76.3	0.0	21.4	2.3		7.6	64.8	27.2	0.4		
High Int.	06:15 PM					06:30 PM					06:15 PM					07:00 PM					
Volume	31	2	48	0	81	43	75	23	0	141	29	0	6	1	36	9	94	36	0	139	
Peak Factor					0.938					0.863					0.910					0.833	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Rt. 611 / Rt. 940 WB
Date: Friday, October 21, 2005
Counter: JT

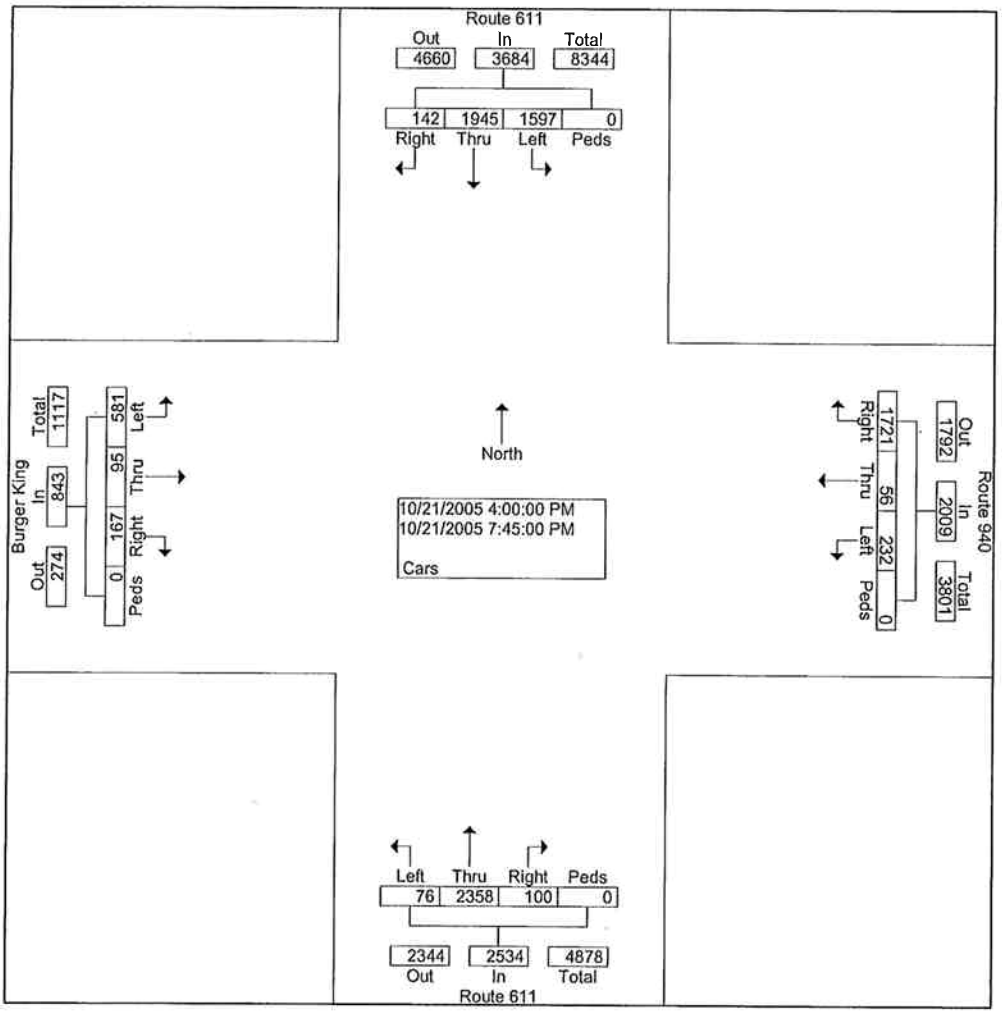
File Name : BG1021~2
Site Code : 00000000
Start Date : 10/21/2005
Page No : 1

Groups Printed- Cars

	Route 611 From North					Route 940 From East					Route 611 From South					Burger King From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	10	143	106	0	259	106	6	13	0	125	3	157	6	0	166	8	5	48	0	61	611
04:15 PM	10	141	137	0	288	157	4	17	0	178	13	137	8	0	158	21	8	24	0	53	677
04:30 PM	13	190	142	0	345	130	6	28	0	164	4	162	8	0	174	10	4	59	0	73	756
04:45 PM	20	175	125	0	320	132	1	13	0	146	4	191	3	0	198	17	5	56	0	78	742
Total	53	649	510	0	1212	525	17	71	0	613	24	647	25	0	696	56	22	187	0	265	2786
05:00 PM	7	140	147	0	294	142	7	25	0	174	8	163	4	0	175	7	10	51	0	68	711
05:15 PM	10	135	102	0	247	121	5	23	0	149	7	181	7	0	195	8	8	56	0	72	663
05:30 PM	8	128	109	0	245	132	4	6	0	142	8	162	3	0	173	11	5	51	0	67	627
05:45 PM	8	126	103	0	237	113	3	12	0	128	10	160	5	0	175	11	11	48	0	70	610
Total	33	529	461	0	1023	508	19	66	0	593	33	666	19	0	718	37	34	206	0	277	2611
06:00 PM	6	98	112	0	216	120	4	17	0	141	8	157	5	0	170	12	2	36	0	50	577
06:15 PM	14	99	84	0	197	117	1	12	0	130	5	129	5	0	139	10	6	42	0	58	524
06:30 PM	9	116	82	0	207	84	1	13	0	98	4	133	6	0	143	11	6	14	0	31	479
06:45 PM	6	112	94	0	212	92	4	11	0	107	4	117	4	0	125	14	12	30	0	56	500
Total	35	425	372	0	832	413	10	53	0	476	21	536	20	0	577	47	26	122	0	195	2080
07:00 PM	8	97	76	0	181	71	3	8	0	82	6	150	4	0	160	11	2	19	0	32	455
07:15 PM	3	98	63	0	164	74	5	6	0	85	9	117	2	0	128	8	6	11	0	25	402
07:30 PM	7	79	56	0	142	60	1	15	0	76	4	112	5	0	121	4	3	25	0	32	371
07:45 PM	3	68	59	0	130	70	1	13	0	84	3	130	1	0	134	4	2	11	0	17	365
Total	21	342	254	0	617	275	10	42	0	327	22	509	12	0	543	27	13	66	0	106	1593
Grand Total	142	1945	1597	0	3684	1721	56	232	0	2009	100	2358	76	0	2534	167	95	581	0	843	9070
Apprch %	3.9	52.8	43.3	0.0		85.7	2.8	11.5	0.0		3.9	93.1	3.0	0.0		19.8	11.3	68.9	0.0		
Total %	1.6	21.4	17.6	0.0	40.6	19.0	0.6	2.6	0.0	22.1	1.1	26.0	0.8	0.0	27.9	1.8	1.0	6.4	0.0	9.3	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

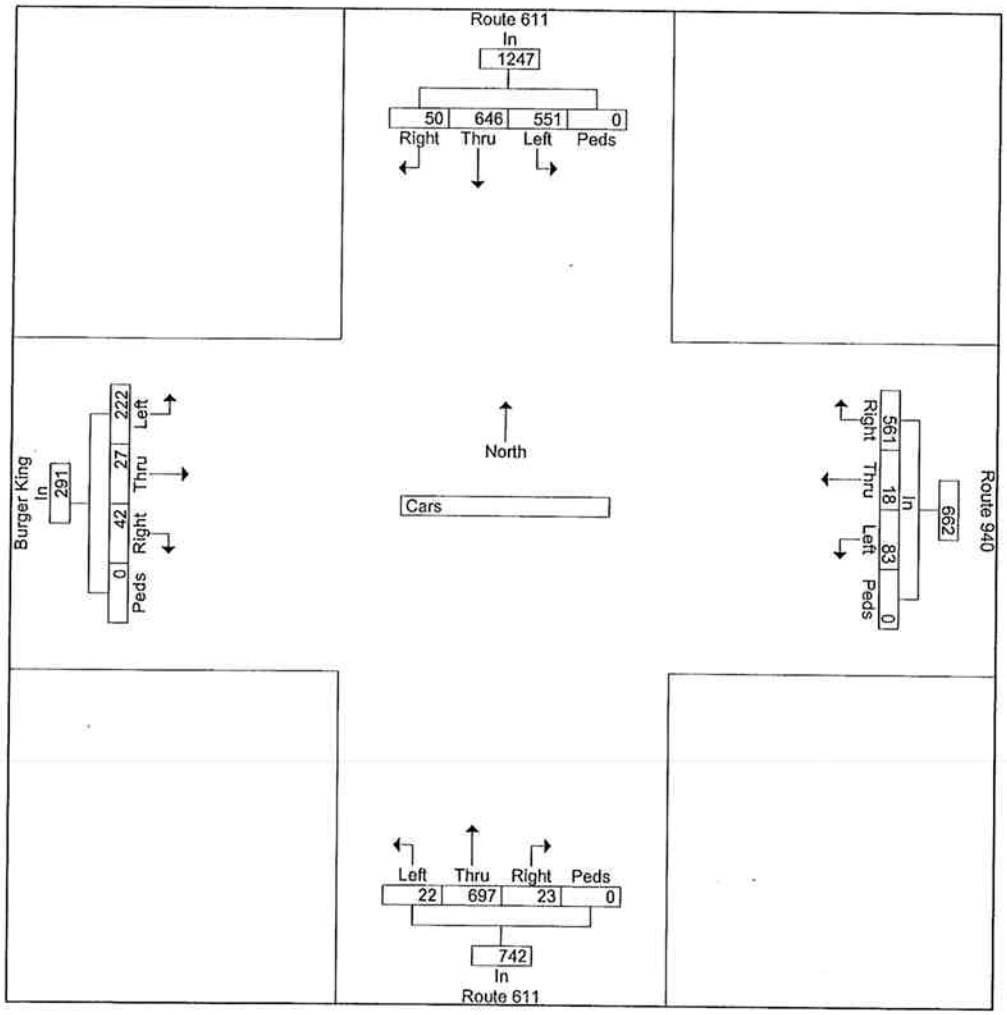
File Name : BG1021~2
Site Code : 00000000
Start Date : 10/21/2005
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021~2
Site Code : 00000000
Start Date : 10/21/2005
Page No : 3

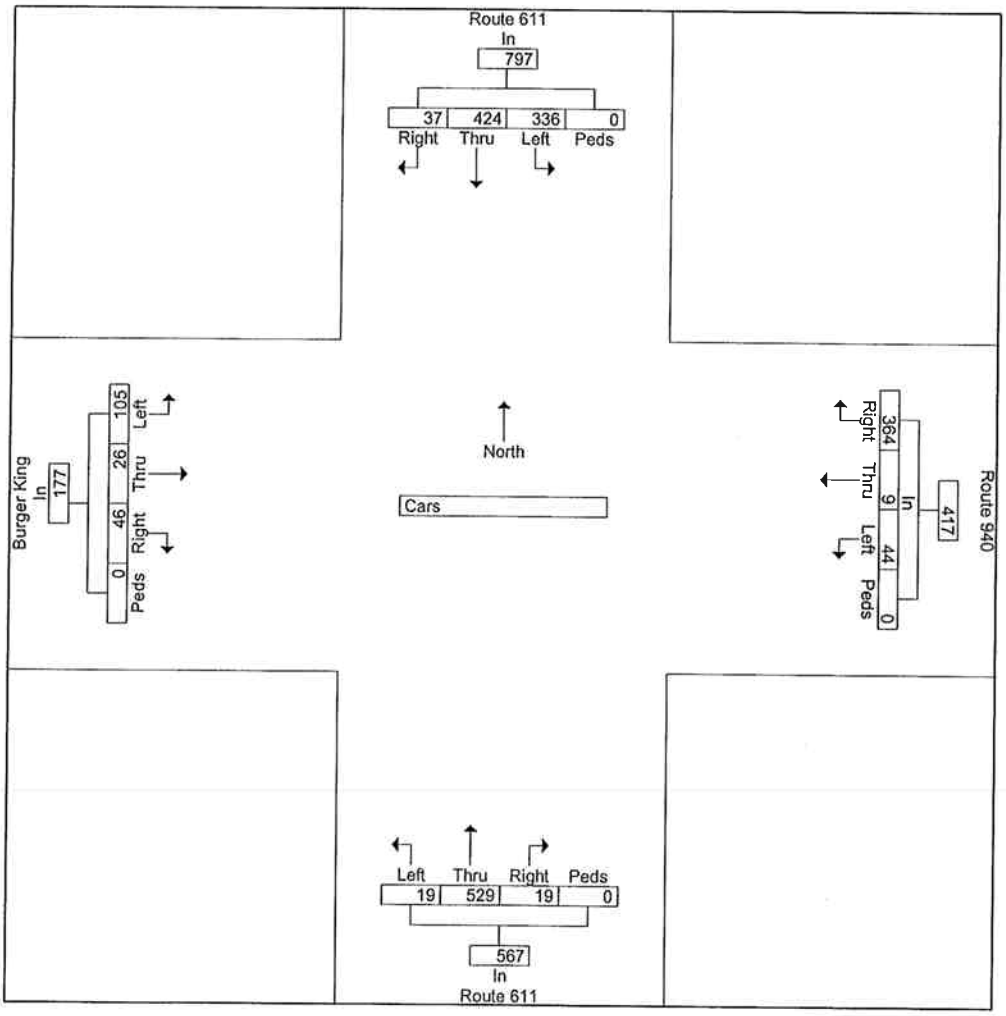
	Route 611 From North					Route 940 From East					Route 611 From South					Burger King From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:15 PM					04:15 PM					04:30 PM					04:30 PM					
Volume	50	646	551	0	1247	561	18	83	0	662	23	697	22	0	742	42	27	222	0	291	
Percent	4.0	51.8	44.2	0.0		84.7	2.7	12.5	0.0		3.1	93.9	3.0	0.0		14.4	9.3	76.3	0.0		
High Int.	04:30 PM					04:15 PM					04:45 PM					04:45 PM					
Volume	13	190	142	0	345	157	4	17	0	178	4	191	3	0	198	17	5	56	0	78	
Peak Factor					0.904					0.930					0.937					0.933	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021~2
Site Code : 00000000
Start Date : 10/21/2005
Page No : 4

	Route 611 From North					Route 940 From East					Route 611 From South					Burger King From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:15 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	37	424	336	0	797	364	9	44	0	417	19	529	19	0	567	46	26	105	0	177	
Percent	4.6	53.2	42.2	0.0		87.3	2.2	10.6	0.0		3.4	93.3	3.4	0.0		26.0	14.7	59.3	0.0		
High Int.	06:45 PM					06:15 PM					07:00 PM					06:15 PM					
Volume	6	112	94	0	212	117	1	12	0	130	6	150	4	0	160	10	6	42	0	58	
Peak Factor					0.940					0.802					0.886					0.763	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Rt. 611 / Rt. 940 WB
Date: Saturday, October 22, 2005
Counter: JT

File Name : BG1022~2
Site Code : 00000000
Start Date : 10/22/2005
Page No : 1

Groups Printed- Cars

	Route 611 From North					Route 940 From East					Route 611 From South					Burger King From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	12	103	83	0	198	92	3	18	0	113	5	104	2	0	111	1	8	17	0	26	448
04:15 PM	4	85	58	0	147	116	3	19	0	138	10	155	5	0	170	3	3	19	0	25	480
04:30 PM	8	115	87	0	210	97	1	13	0	111	4	132	2	0	138	5	6	48	0	59	518
04:45 PM	6	100	84	0	190	110	2	16	0	128	5	114	2	0	121	2	4	26	0	32	471
Total	30	403	312	0	745	415	9	66	0	490	24	505	11	0	540	11	21	110	0	142	1917
05:00 PM	5	78	79	0	162	105	2	14	0	121	8	106	3	0	117	2	4	18	0	24	424
05:15 PM	6	89	52	0	147	76	1	13	0	90	11	119	2	0	132	1	2	14	0	17	386
05:30 PM	4	99	82	0	185	79	2	11	0	92	9	130	3	0	142	4	1	15	0	20	439
05:45 PM	2	91	73	0	166	101	2	18	0	121	8	115	2	0	125	2	3	18	0	23	435
Total	17	357	286	0	660	361	7	56	0	424	36	470	10	0	516	9	10	65	0	84	1684
06:00 PM	7	67	72	0	146	74	2	10	0	86	4	108	4	0	116	4	5	12	0	21	369
06:15 PM	5	74	85	0	164	72	3	12	0	87	3	96	3	0	102	2	6	13	0	21	374
06:30 PM	1	86	79	0	166	95	3	11	0	109	5	97	3	0	105	2	2	7	0	11	391
06:45 PM	6	72	69	0	147	78	2	13	0	93	4	80	0	0	84	4	0	7	0	11	335
Total	19	299	305	0	623	319	10	46	0	375	16	381	10	0	407	12	13	39	0	64	1469
07:00 PM	2	94	67	0	163	62	2	12	0	76	4	96	1	0	101	3	3	11	0	17	357
07:15 PM	8	78	52	0	138	52	2	13	0	67	5	96	3	0	104	3	4	8	0	15	324
07:30 PM	1	63	65	0	129	57	3	7	0	67	5	72	4	0	81	2	5	7	0	14	291
07:45 PM	4	64	60	0	128	60	2	6	0	68	3	80	2	0	85	2	3	5	0	10	291
Total	15	299	244	0	558	231	9	38	0	278	17	344	10	0	371	10	15	31	0	56	1263
Grand Total	81	1358	1147	0	2586	1326	35	206	0	1567	93	1700	41	0	1834	42	59	245	0	346	6333
Apprch %	3.1	52.5	44.4	0.0		84.6	2.2	13.1	0.0		5.1	92.7	2.2	0.0		12.1	17.1	70.8	0.0		
Total %	1.3	21.4	18.1	0.0	40.8	20.9	0.6	3.3	0.0	24.7	1.5	26.8	0.6	0.0	29.0	0.7	0.9	3.9	0.0	5.5	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~2
Site Code : 00000000
Start Date : 10/22/2005
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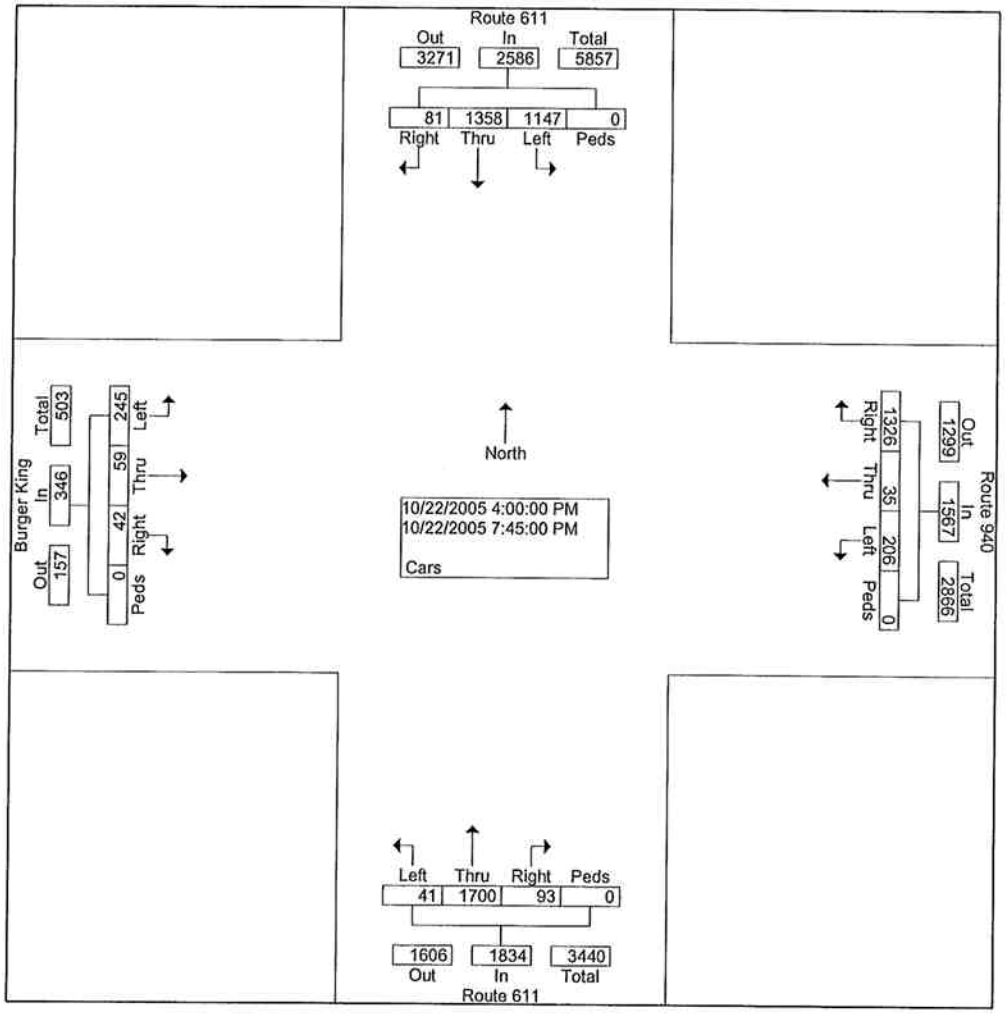
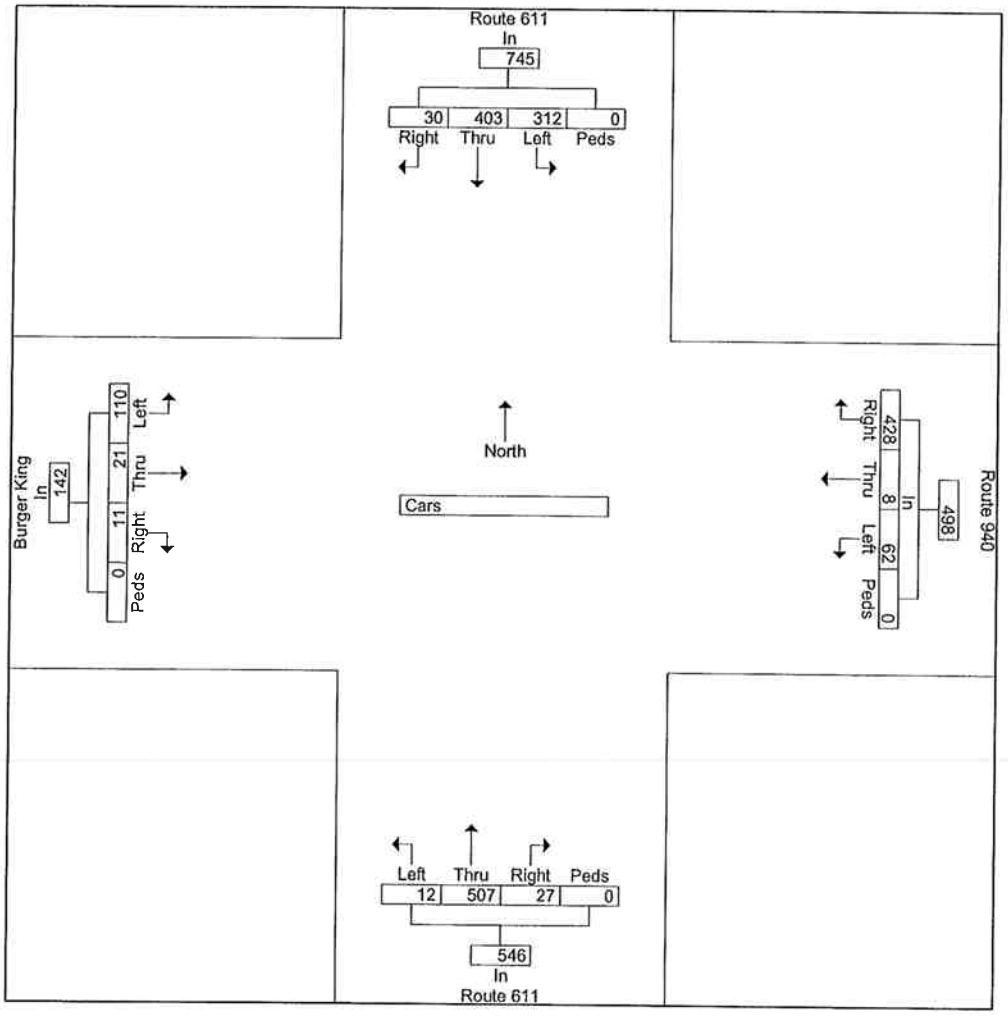


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~2
Site Code : 00000000
Start Date : 10/22/2005
Page No : 3

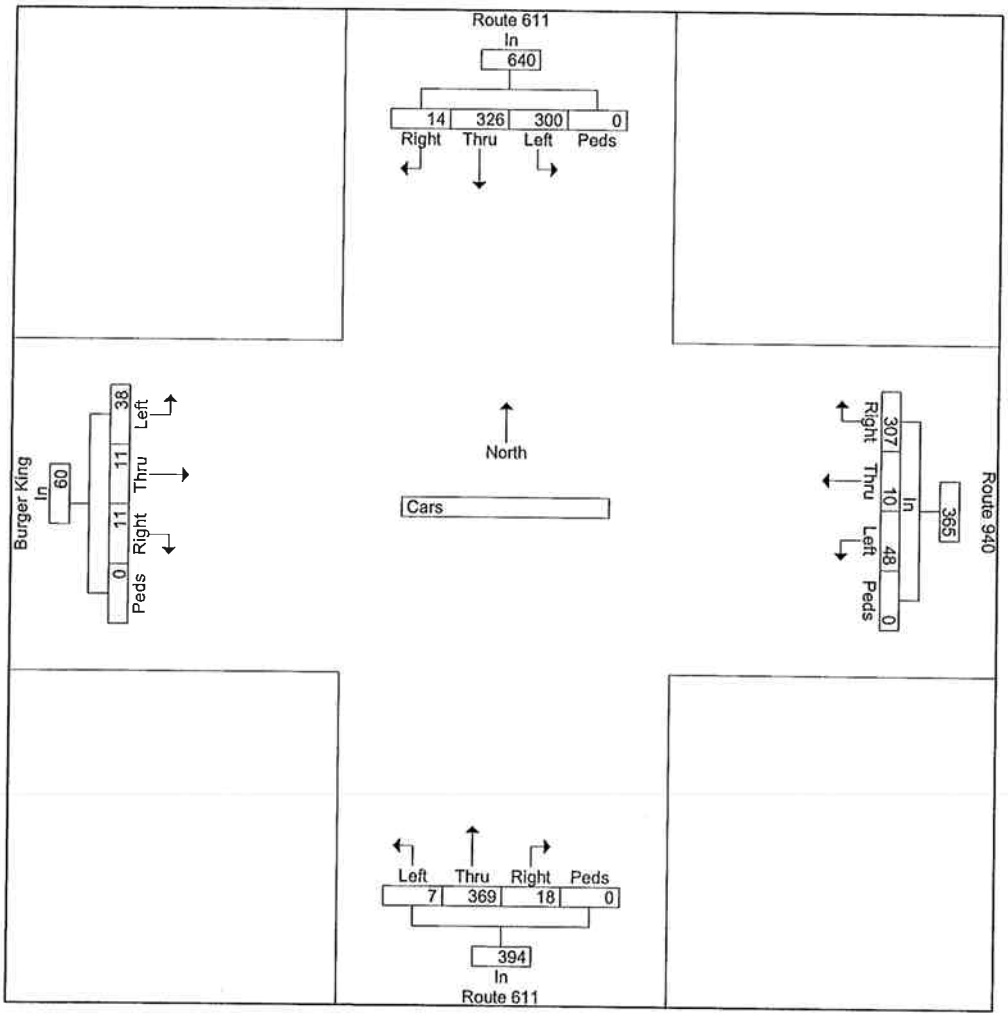
	Route 611 From North					Route 940 From East					Route 611 From South					Burger King From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:00 PM					04:15 PM					04:15 PM					04:00 PM					
Volume	30	403	312	0	745	428	8	62	0	498	27	507	12	0	546	11	21	110	0	142	
Percent	4.0	54.1	41.9	0.0		85.9	1.6	12.4	0.0		4.9	92.9	2.2	0.0		7.7	14.8	77.5	0.0		
High Int.	04:30 PM					04:15 PM					04:15 PM					04:30 PM					
Volume	8	115	87	0	210	116	3	19	0	138	10	155	5	0	170	5	6	48	0	59	
Peak Factor					0.887					0.902					0.803					0.602	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~2
Site Code : 00000000
Start Date : 10/22/2005
Page No : 4

	Route 611 From North					Route 940 From East					Route 611 From South					Burger King From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:15 PM					06:15 PM					06:30 PM					06:15 PM					
Volume	14	326	300	0	640	307	10	48	0	365	18	369	7	0	394	11	11	38	0	60	
Percent	2.2	50.9	46.9	0.0		84.1	2.7	13.2	0.0		4.6	93.7	1.8	0.0		18.3	18.3	63.3	0.0		
High Int.	06:30 PM					06:30 PM					06:30 PM					06:15 PM					
Volume	1	86	79	0	166	95	3	11	0	109	5	97	3	0	105	2	6	13	0	21	
Peak Factor					0.964					0.837					0.938					0.714	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Rt. 611 / Rt. 940 EB
Date: Friday, October 21, 2005
Counter: ET

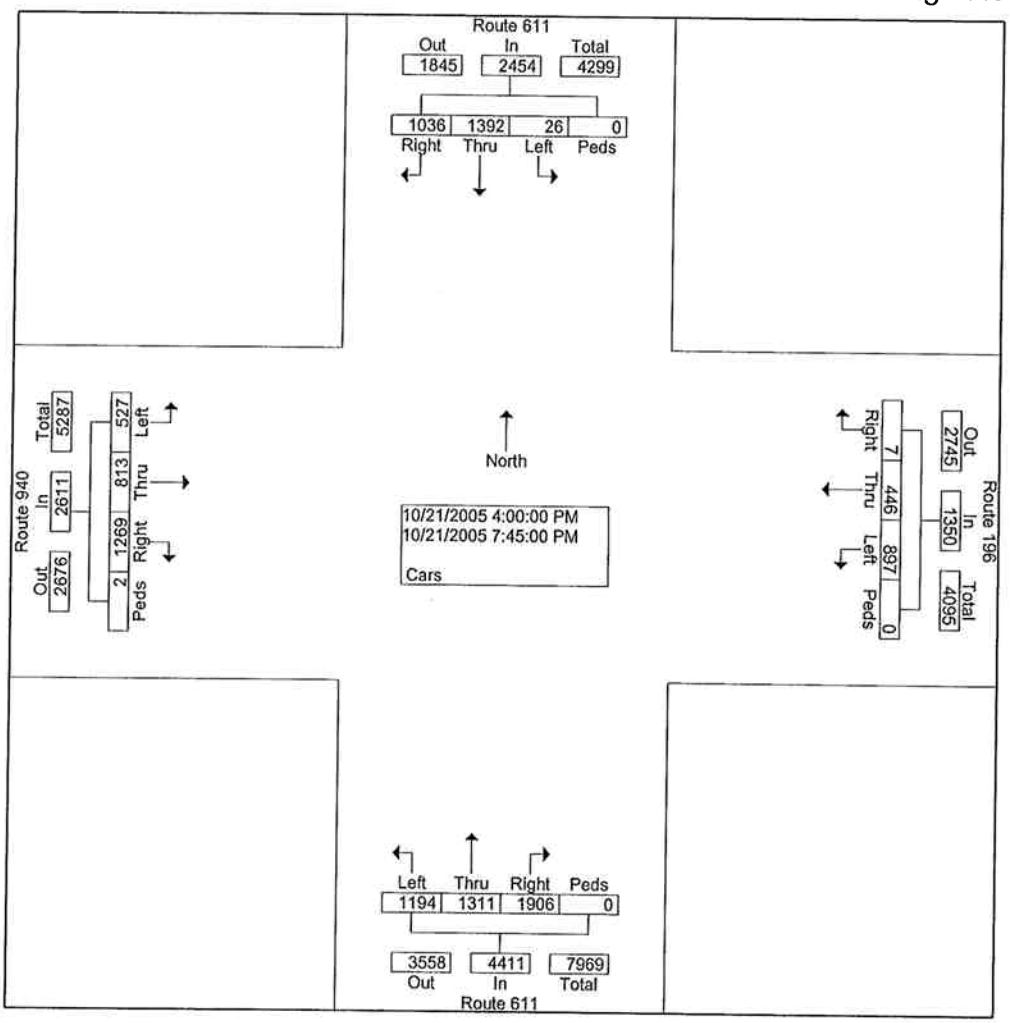
File Name : BG1021~1
Site Code : 00000000
Start Date : 10/21/2005
Page No : 1

Groups Printed- Cars

	Route 611 From North					Route 196 From East					Route 611 From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	79	133	3	0	215	0	28	51	0	79	108	107	76	0	291	80	59	24	0	163	748
04:15 PM	92	143	1	0	236	0	28	52	0	80	104	96	75	0	275	79	42	36	0	157	748
04:30 PM	98	144	2	0	244	1	33	59	0	93	131	94	79	0	304	126	52	39	0	217	858
04:45 PM	89	134	0	0	223	0	34	62	0	96	146	103	82	0	331	98	42	42	0	182	832
Total	358	554	6	0	918	1	123	224	0	348	489	400	312	0	1201	383	195	141	0	719	3186
05:00 PM	75	100	1	0	176	0	21	61	0	82	147	97	82	0	326	107	49	35	0	191	775
05:15 PM	60	78	0	0	138	0	23	67	0	90	141	106	83	0	330	81	60	35	0	176	734
05:30 PM	83	82	3	0	168	0	33	63	0	96	137	103	67	0	307	89	47	38	0	174	745
05:45 PM	57	90	2	0	149	1	30	71	0	102	134	95	83	0	312	74	56	31	0	161	724
Total	275	350	6	0	631	1	107	262	0	370	559	401	315	0	1275	351	212	139	0	702	2978
06:00 PM	43	83	1	0	127	0	30	47	0	77	129	92	81	0	302	83	59	31	0	173	679
06:15 PM	56	68	0	0	124	0	20	55	0	75	134	66	79	0	279	76	52	35	1	164	642
06:30 PM	58	82	1	0	141	3	32	58	0	93	108	67	60	0	235	73	54	28	0	155	624
06:45 PM	65	64	0	0	129	0	26	60	0	86	104	64	81	0	249	75	44	31	1	151	615
Total	222	297	2	0	521	3	108	220	0	331	475	289	301	0	1065	307	209	125	2	643	2560
07:00 PM	48	63	4	0	115	0	32	53	0	85	114	56	76	0	246	66	54	33	0	153	599
07:15 PM	46	44	2	0	92	2	21	42	0	65	96	58	57	0	211	68	43	32	0	143	511
07:30 PM	47	43	3	0	93	0	25	55	0	80	83	50	64	0	197	45	48	31	0	124	494
07:45 PM	40	41	3	0	84	0	30	41	0	71	90	57	69	0	216	49	52	26	0	127	498
Total	181	191	12	0	384	2	108	191	0	301	383	221	266	0	870	228	197	122	0	547	2102
Grand Total	1036	1392	26	0	2454	7	446	897	0	1350	1906	1311	1194	0	4411	1269	813	527	2	2611	10826
Apprch %	42.2	56.7	1.1	0.0		0.5	33.0	66.4	0.0		43.2	29.7	27.1	0.0		48.6	31.1	20.2	0.1		
Total %	9.6	12.9	0.2	0.0	22.7	0.1	4.1	8.3	0.0	12.5	17.6	12.1	11.0	0.0	40.7	11.7	7.5	4.9	0.0	24.1	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

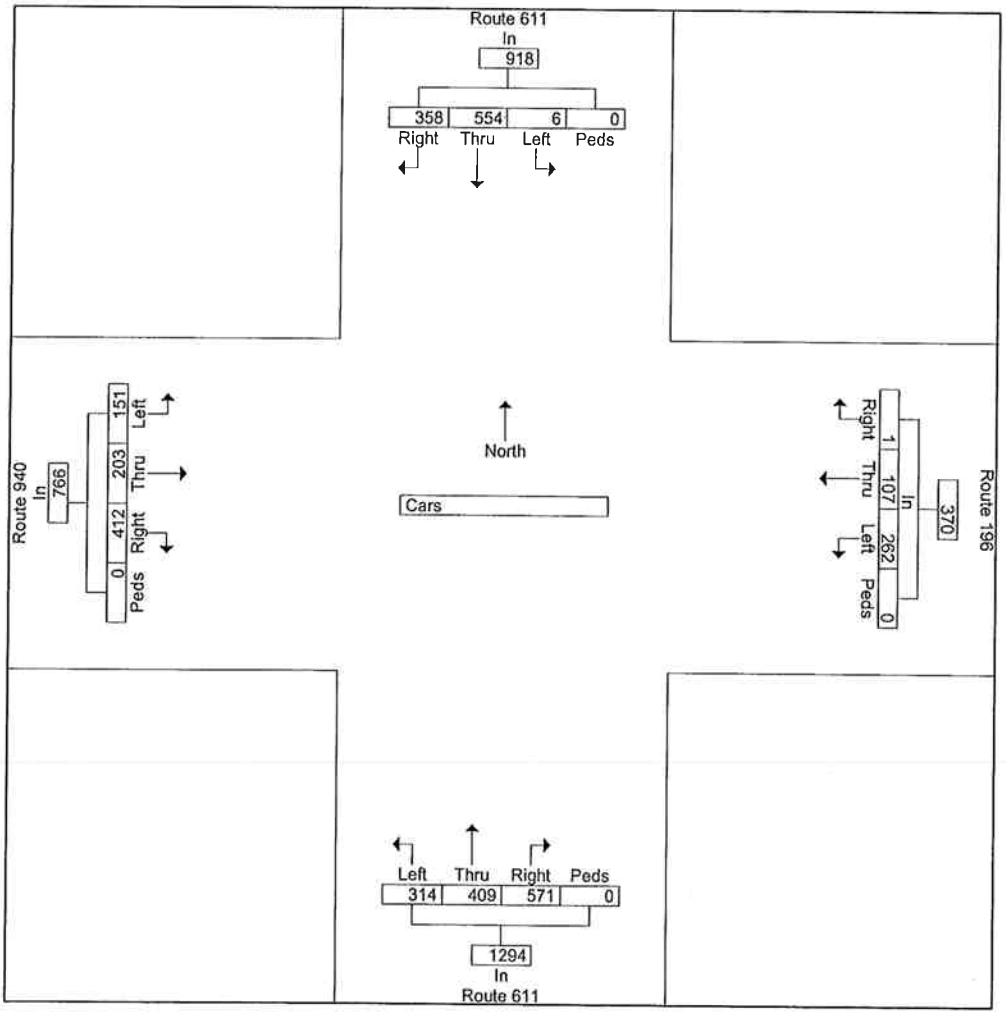
File Name : BG1021~1
Site Code : 00000000
Start Date : 10/21/2005
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021~1
Site Code : 00000000
Start Date : 10/21/2005
Page No : 3

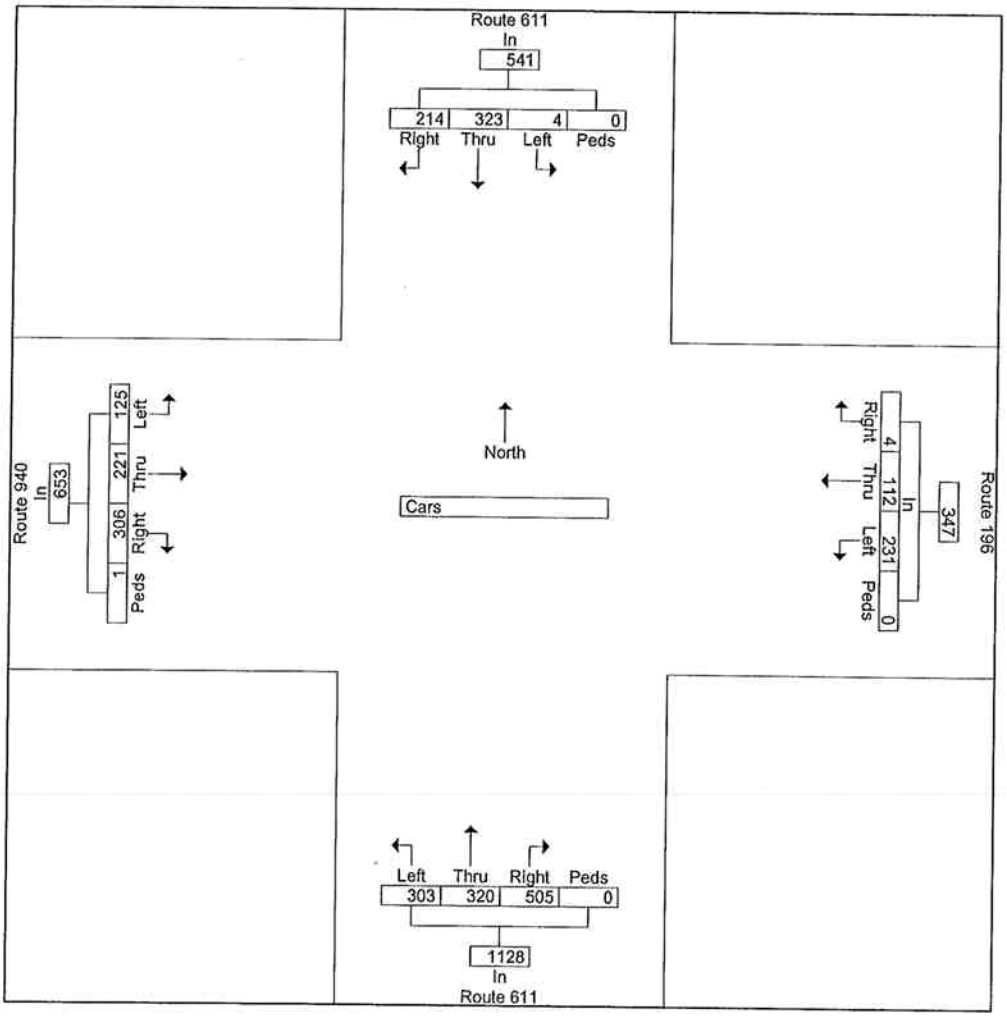
	Route 611 From North					Route 196 From East					Route 611 From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 05:45 PM - Peak 1 of 1																					
By Approach	04:00 PM					05:00 PM					04:45 PM					04:30 PM					
Volume	358	554	6	0	918	1	107	262	0	370	571	409	314	0	1294	412	203	151	0	766	
Percent	39.0	60.3	0.7	0.0		0.3	28.9	70.8	0.0		44.1	31.6	24.3	0.0		53.8	26.5	19.7	0.0		
High Int.	04:30 PM					05:45 PM					04:45 PM					04:30 PM					
Volume	98	144	2	0	244	1	30	71	0	102	146	103	82	0	331	126	52	39	0	217	
Peak Factor					0.941					0.907					0.977					0.882	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021~1
Site Code : 00000000
Start Date : 10/21/2005
Page No : 4

	Route 611 From North					Route 196 From East					Route 611 From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 05:45 PM to 07:45 PM - Peak 1 of 1																					
By Approach	05:45 PM					05:45 PM					05:45 PM					05:45 PM					
Volume	214	323	4	0	541	4	112	231	0	347	505	320	303	0	1128	306	221	125	1	653	
Percent	39.6	59.7	0.7	0.0		1.2	32.3	66.6	0.0		44.8	28.4	26.9	0.0		46.9	33.8	19.1	0.2		
High Int.	05:45 PM					05:45 PM					05:45 PM					06:00 PM					
Volume	57	90	2	0	149	1	30	71	0	102	134	95	83	0	312	83	59	31	0	173	
Peak Factor					0.908					0.850					0.904					0.944	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Rt. 611 / Rt. 940 EB
Date: Saturday, October 22, 2005
Counter: ET

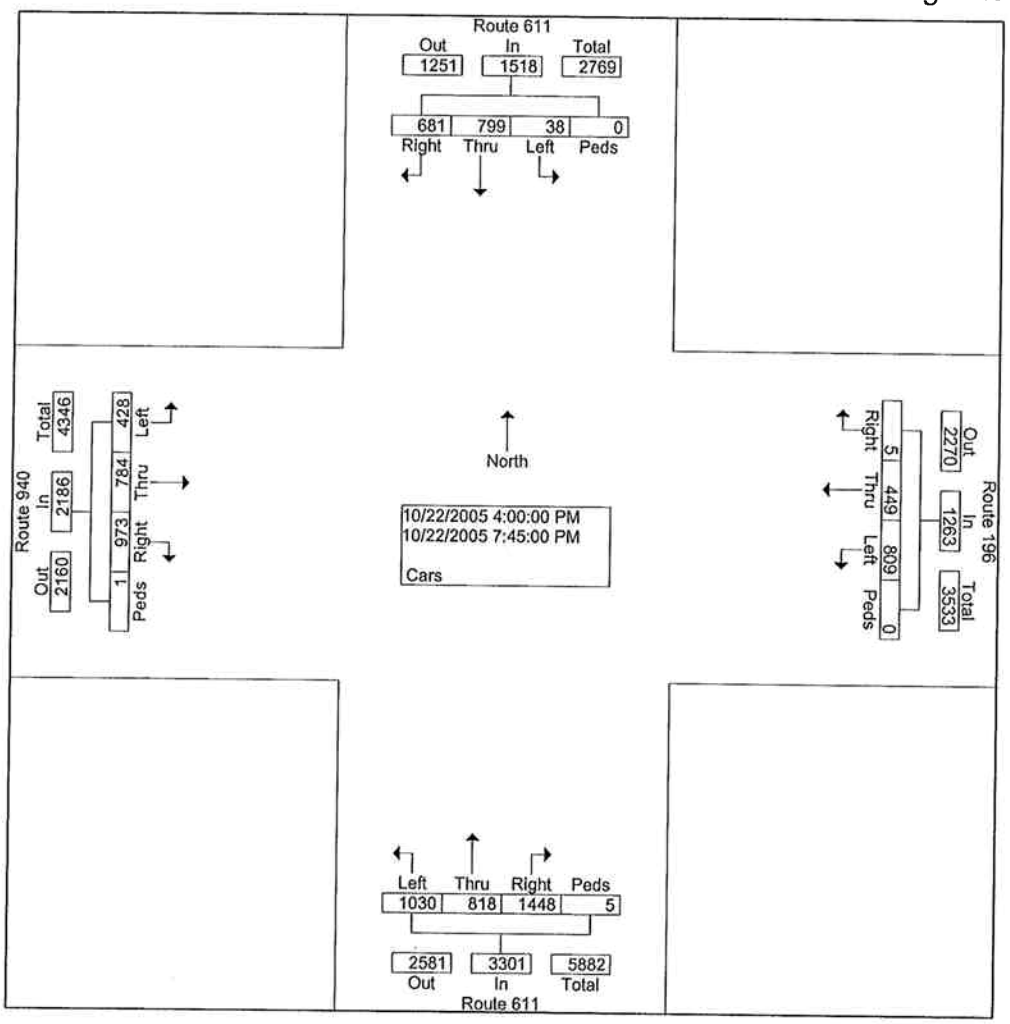
File Name : BG1022~1
Site Code : 00000000
Start Date : 10/22/2005
Page No : 1

Groups Printed- Cars

	Route 611 From North					Route 196 From East					Route 611 From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	49	61	3	0	113	1	26	57	0	84	82	62	63	0	207	82	52	26	0	160	564
04:15 PM	51	48	1	0	100	0	39	51	0	90	129	72	93	0	294	52	45	33	0	130	614
04:30 PM	49	65	0	0	114	0	24	66	0	90	118	57	81	0	256	81	45	34	0	160	620
04:45 PM	55	59	4	0	118	0	37	49	0	86	100	71	73	0	244	75	47	34	0	156	604
Total	204	233	8	0	445	1	126	223	0	350	429	262	310	0	1001	290	189	127	0	606	2402
05:00 PM	47	51	0	0	98	1	30	58	0	89	100	49	81	0	230	55	51	26	0	132	549
05:15 PM	47	46	3	0	96	1	34	51	0	86	90	63	63	0	216	62	66	22	1	151	549
05:30 PM	46	56	2	0	104	0	36	63	0	99	106	46	72	0	224	68	71	17	0	156	583
05:45 PM	36	57	4	0	97	0	35	50	0	85	111	54	70	0	235	46	52	35	0	133	550
Total	176	210	9	0	395	2	135	222	0	359	407	212	286	0	905	231	240	100	1	572	2231
06:00 PM	34	56	4	0	94	1	34	35	0	70	95	49	57	0	201	54	50	29	0	133	498
06:15 PM	35	46	1	0	82	0	21	56	0	77	72	54	58	4	188	59	45	34	0	138	485
06:30 PM	52	52	2	0	106	0	31	44	0	75	90	46	60	0	196	63	49	24	0	136	513
06:45 PM	38	51	1	0	90	0	25	52	0	77	74	38	57	1	170	45	40	26	0	111	448
Total	159	205	8	0	372	1	111	187	0	299	331	187	232	5	755	221	184	113	0	518	1944
07:00 PM	34	36	1	0	71	0	25	51	0	76	78	49	48	0	175	79	54	28	0	161	483
07:15 PM	46	40	4	0	90	0	20	45	0	65	77	36	54	0	167	51	43	21	0	115	437
07:30 PM	30	34	4	0	68	0	13	45	0	58	60	34	48	0	142	53	45	26	0	124	392
07:45 PM	32	41	4	0	77	1	19	36	0	56	66	38	52	0	156	48	29	13	0	90	379
Total	142	151	13	0	306	1	77	177	0	255	281	157	202	0	640	231	171	88	0	490	1691
Grand Total	681	799	38	0	1518	5	449	809	0	1263	1448	818	1030	5	3301	973	784	428	1	2186	8268
Apprch %	44.9	52.6	2.5	0.0		0.4	35.6	64.1	0.0		43.9	24.8	31.2	0.2		44.5	35.9	19.6	0.0		
Total %	8.2	9.7	0.5	0.0	18.4	0.1	5.4	9.8	0.0	15.3	17.5	9.9	12.5	0.1	39.9	11.8	9.5	5.2	0.0	26.4	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

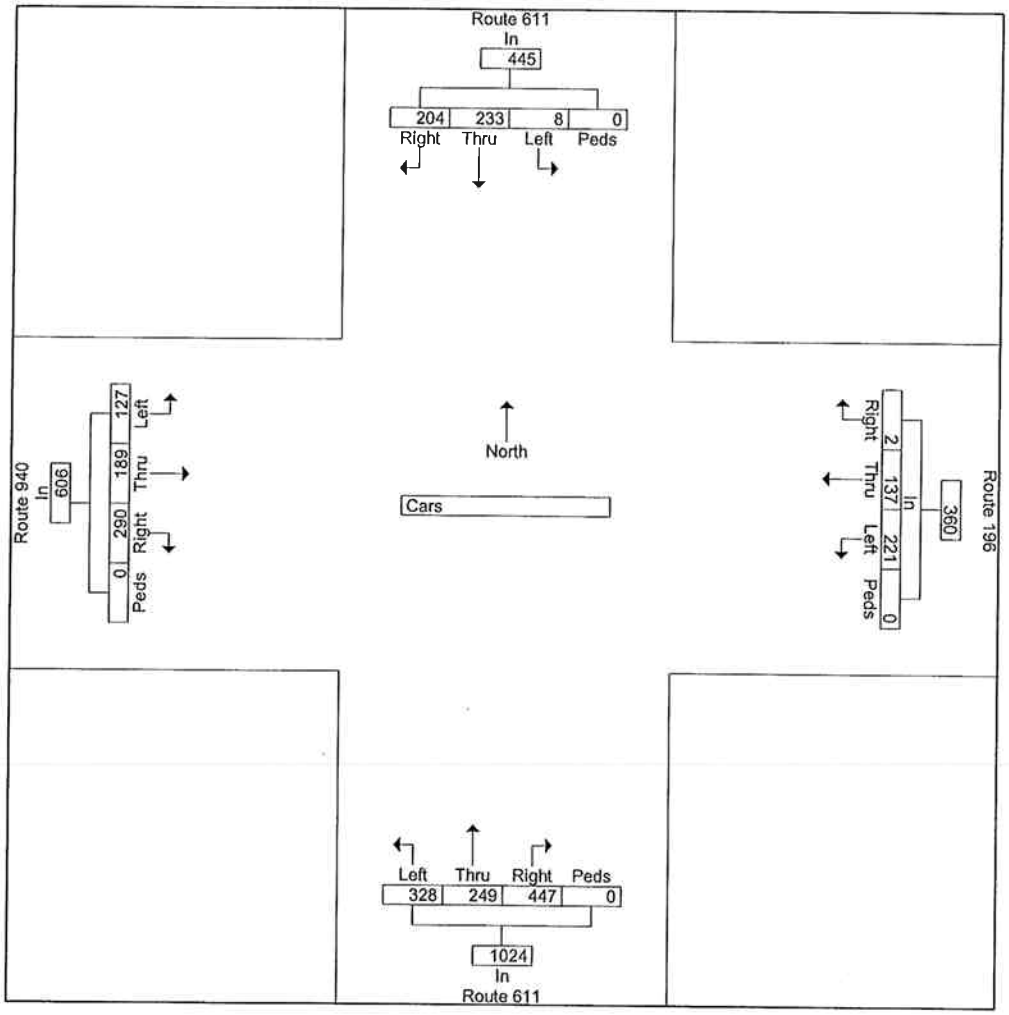
File Name : BG1022~1
Site Code : 00000000
Start Date : 10/22/2005
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~1
Site Code : 00000000
Start Date : 10/22/2005
Page No : 3

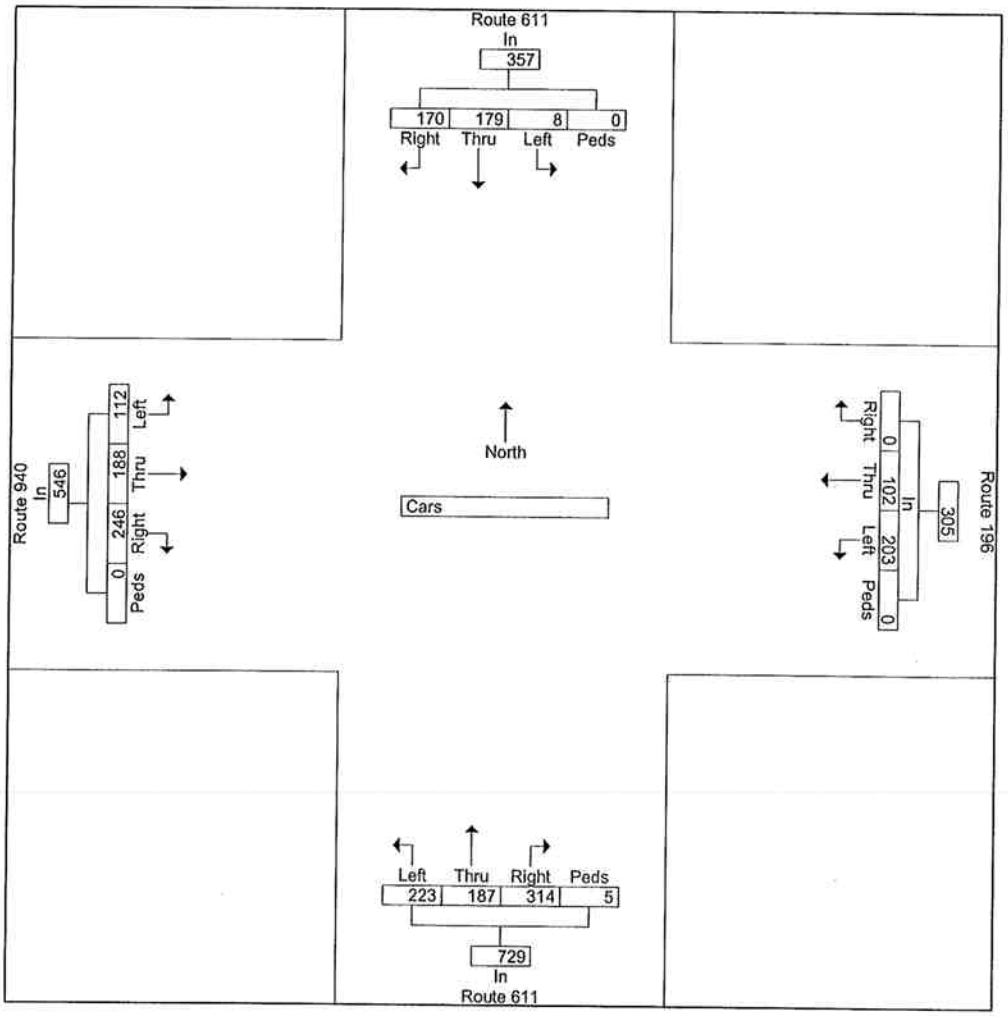
	Route 611 From North					Route 196 From East					Route 611 From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																					
By Approach	04:00 PM					04:45 PM					04:15 PM					04:00 PM					
Volume	204	233	8	0	445	2	137	221	0	360	447	249	328	0	1024	290	189	127	0	606	
Percent	45.8	52.4	1.8	0.0		0.6	38.1	61.4	0.0		43.7	24.3	32.0	0.0		47.9	31.2	21.0	0.0		
High Int.	04:45 PM					05:30 PM					04:15 PM					04:00 PM					
Volume	55	59	4	0	118	0	36	63	0	99	129	72	93	0	294	82	52	26	0	160	
Peak Factor					0.943					0.909					0.871					0.947	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~1
Site Code : 00000000
Start Date : 10/22/2005
Page No : 4

	Route 611 From North					Route 196 From East					Route 611 From South					Route 940 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																					
By Approach	06:30 PM					06:15 PM					06:15 PM					06:15 PM					
Volume	170	179	8	0	357	0	102	203	0	305	314	187	223	5	729	246	188	112	0	546	
Percent	47.6	50.1	2.2	0.0		0.0	33.4	66.6	0.0		43.1	25.7	30.6	0.7		45.1	34.4	20.5	0.0		
High Int.	06:30 PM					06:15 PM					06:30 PM					07:00 PM					
Volume	52	52	2	0	106	0	21	56	0	77	90	46	60	0	196	79	54	28	0	161	
Peak Factor					0.842					0.990					0.930					0.848	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Rt 611 & Rt 314(West)
Date: Friday, October 21, 2005
Counter: wc

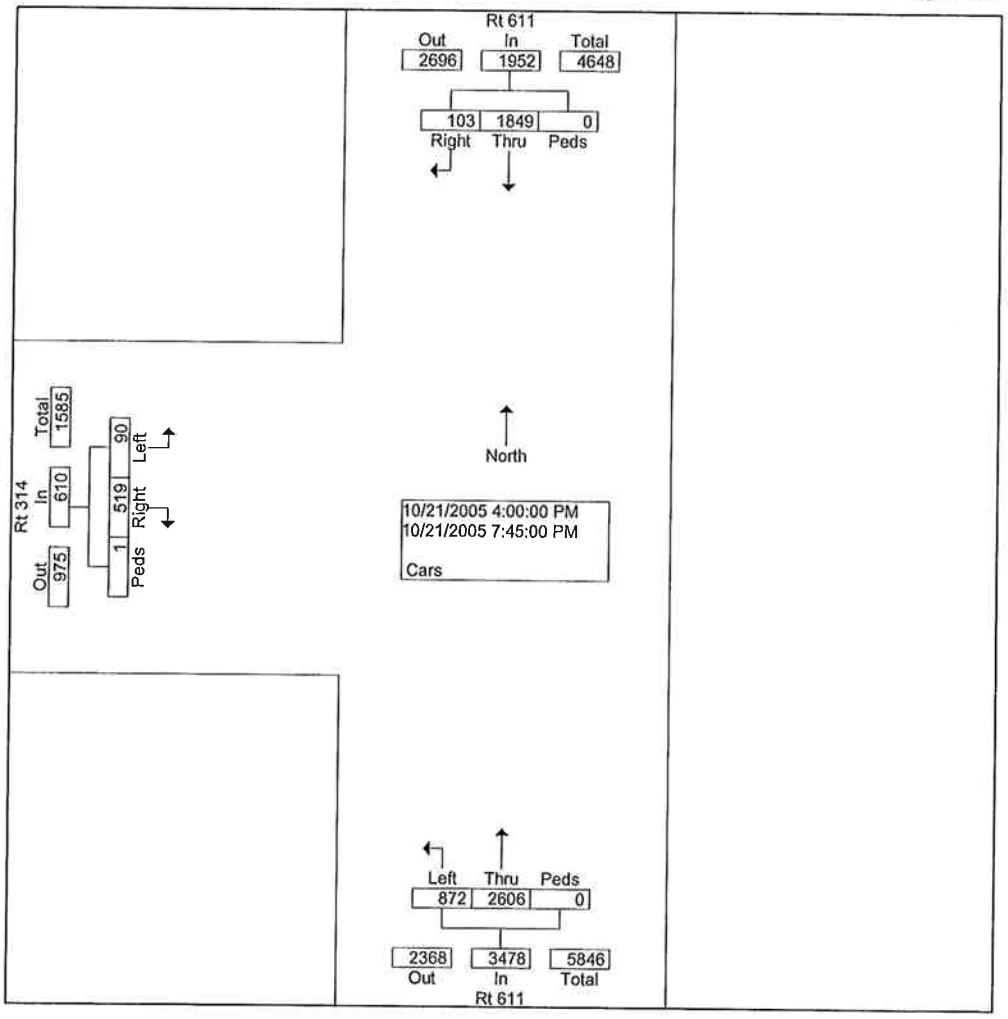
File Name : BG1021~4
Site Code : 00000000
Start Date : 10/21/2005
Page No : 1

Groups Printed- Cars

	Rt 611 From North					Rt 611 From South					Rt 314 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	12	136	0	0	148	0	171	63	0	234	44	0	5	1	50	432
04:15 PM	5	153	0	0	158	0	139	62	0	201	29	0	5	0	34	393
04:30 PM	11	145	0	0	156	0	184	82	0	266	28	0	2	0	30	452
04:45 PM	5	160	0	0	165	0	177	103	0	280	42	0	1	0	43	488
Total	33	594	0	0	627	0	671	310	0	981	143	0	13	1	157	1765
05:00 PM	4	133	0	0	137	0	188	67	0	255	37	0	2	0	39	431
05:15 PM	5	151	0	0	156	0	177	100	0	277	23	0	4	0	27	460
05:30 PM	8	153	0	0	161	0	181	59	0	240	26	0	8	0	34	435
05:45 PM	11	122	0	0	133	0	190	50	0	240	33	0	12	0	45	418
Total	28	559	0	0	587	0	736	276	0	1012	119	0	26	0	145	1744
06:00 PM	5	104	0	0	109	0	175	46	0	221	38	0	3	0	41	371
06:15 PM	4	84	0	0	88	0	165	43	0	208	60	0	2	0	62	358
06:30 PM	6	112	0	0	118	0	140	41	0	181	34	0	13	0	47	346
06:45 PM	7	93	0	0	100	0	177	30	0	207	49	0	14	0	63	370
Total	22	393	0	0	415	0	657	160	0	817	181	0	32	0	213	1445
07:00 PM	8	84	0	0	92	0	170	33	0	203	22	0	5	0	27	322
07:15 PM	1	84	0	0	85	0	98	33	0	131	18	0	4	0	22	238
07:30 PM	7	72	0	0	79	0	153	39	0	192	21	0	4	0	25	296
07:45 PM	4	63	0	0	67	0	121	21	0	142	15	0	6	0	21	230
Total	20	303	0	0	323	0	542	126	0	668	76	0	19	0	95	1086
Grand Total	103	1849	0	0	1952	0	2606	872	0	3478	519	0	90	1	610	6040
Apprch %	5.3	94.7	0.0	0.0		0.0	74.9	25.1	0.0		85.1	0.0	14.8	0.2		
Total %	1.7	30.6	0.0	0.0	32.3	0.0	43.1	14.4	0.0	57.6	8.6	0.0	1.5	0.0	10.1	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

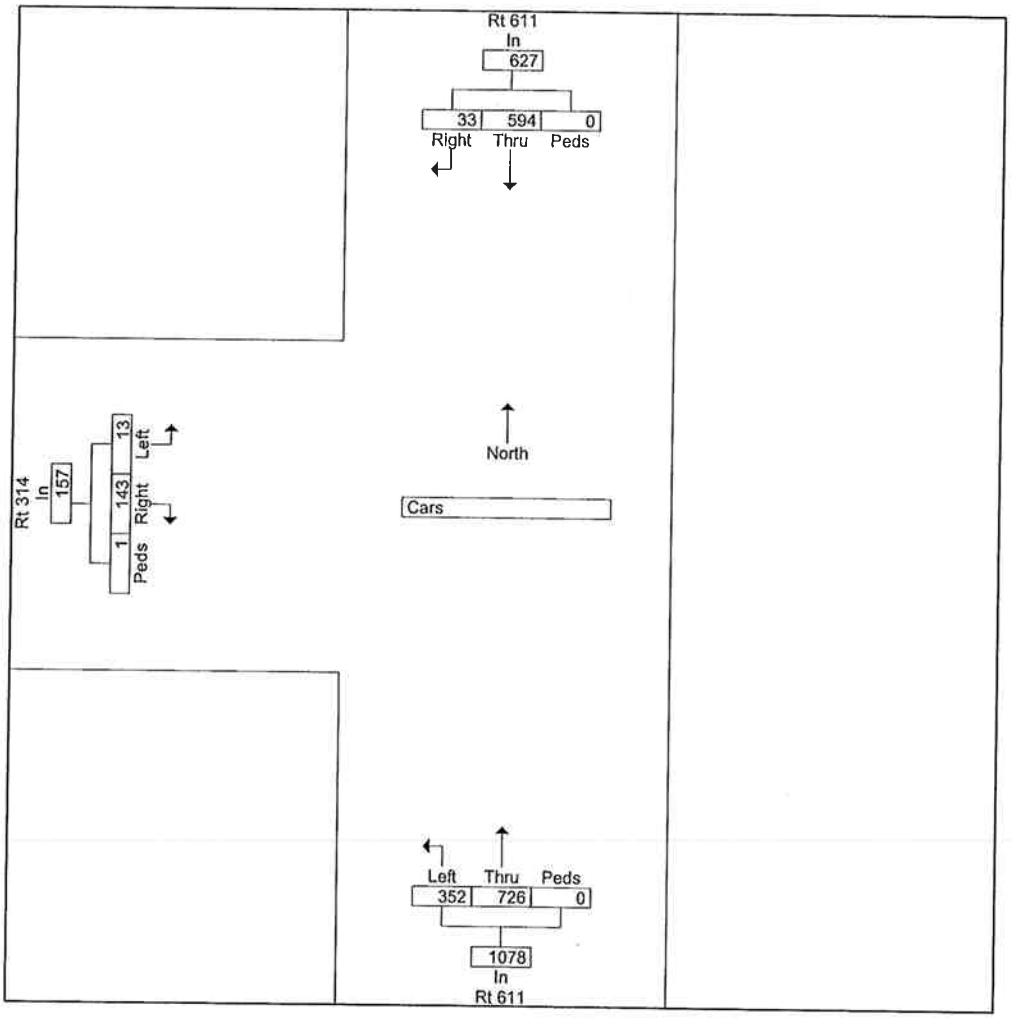
File Name : BG1021~4
Site Code : 00000000
Start Date : 10/21/2005
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021~4
Site Code : 00000000
Start Date : 10/21/2005
Page No : 3

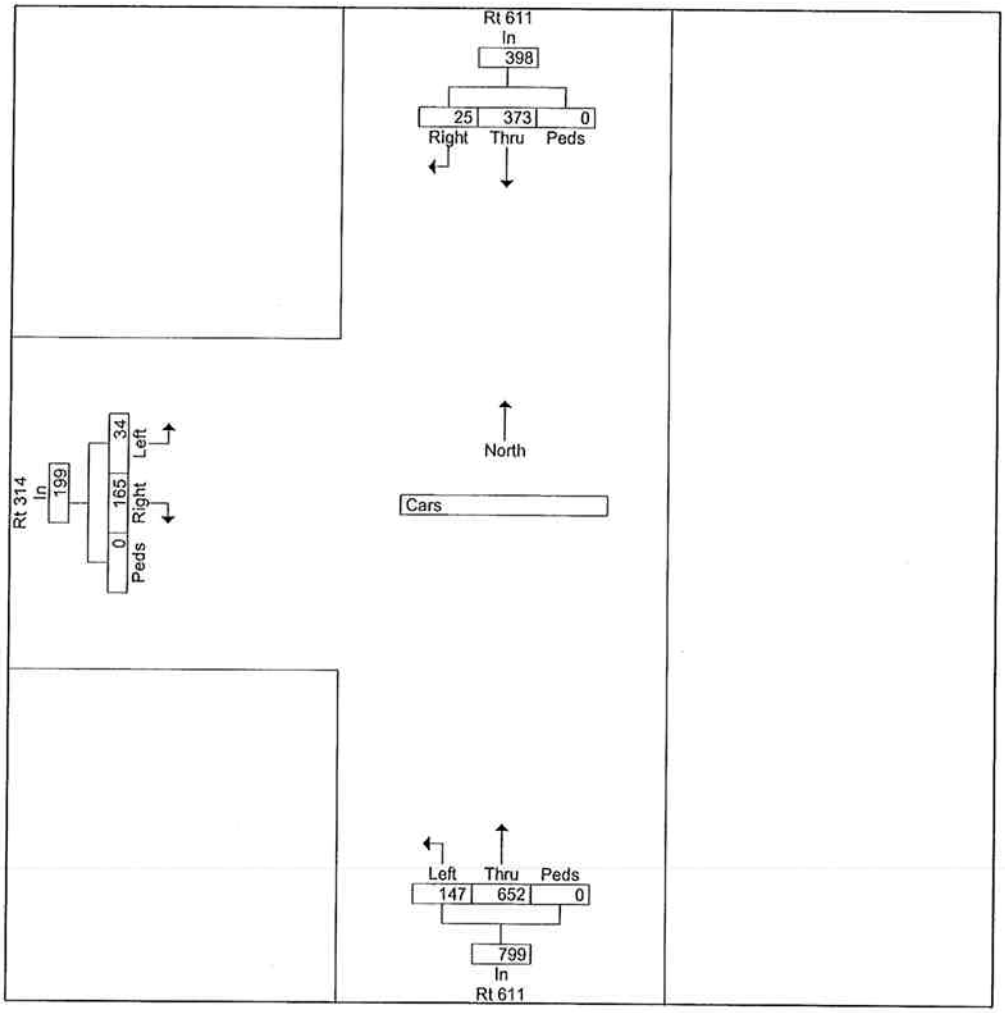
	Rt 611 From North					Rt 611 From South					Rt 314 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																
By Approach	04:00 PM					04:30 PM					04:00 PM					
Volume	33	594	0	0	627	0	726	352	0	1078	143	0	13	1	157	
Percent	5.3	94.7	0.0	0.0		0.0	67.3	32.7	0.0		91.1	0.0	8.3	0.6		
High Int.	04:45 PM					04:45 PM					04:00 PM					
Volume	5	160	0	0	165	0	177	103	0	280	44	0	5	1	50	
Peak Factor					0.950					0.963					0.785	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021~4
Site Code : 00000000
Start Date : 10/21/2005
Page No : 4

	Rt 611 From North					Rt 611 From South					Rt 314 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																
By Approach	06:15 PM					06:15 PM					06:15 PM					
Volume	25	373	0	0	398	0	652	147	0	799	165	0	34	0	199	
Percent	6.3	93.7	0.0	0.0		0.0	81.6	18.4	0.0		82.9	0.0	17.1	0.0		
High Int.	06:30 PM					06:15 PM					06:45 PM					
Volume	6	112	0	0	118	0	165	43	0	208	49	0	14	0	63	
Peak Factor					0.843					0.960					0.790	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Rt 611 & Rt 314 (West)
Date: Saturday, October 22, 2005
Counter: wc

File Name : BG1022~4
Site Code : 00000000
Start Date : 10/22/2005
Page No : 1

Groups Printed- Cars

	Rt 611 From North					Rt 611 From South					Rt 314 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	3	145	0	0	148	0	180	22	0	202	21	0	2	0	23	373
04:15 PM	6	136	0	0	142	0	200	16	0	216	24	0	0	0	24	382
04:30 PM	9	139	0	0	148	0	176	20	0	196	16	0	5	0	21	365
04:45 PM	3	143	0	0	146	0	151	20	0	171	23	0	4	0	27	344
Total	21	563	0	0	584	0	707	78	0	785	84	0	11	0	95	1464
05:00 PM	2	99	0	0	101	0	165	20	0	185	20	0	2	0	22	308
05:15 PM	5	122	0	0	127	0	168	23	0	191	19	0	3	0	22	340
05:30 PM	1	114	0	0	115	0	168	27	0	195	19	0	0	0	19	329
05:45 PM	2	114	0	0	116	0	129	23	0	152	22	0	3	0	25	293
Total	10	449	0	0	459	0	630	93	0	723	80	0	8	0	88	1270
06:00 PM	5	86	0	0	91	1	150	26	0	177	26	0	2	0	28	296
06:15 PM	10	106	0	0	116	0	156	23	0	179	22	1	2	0	25	320
06:30 PM	9	111	0	0	120	0	131	39	0	170	11	0	4	0	15	305
06:45 PM	3	75	0	0	78	0	117	25	0	142	16	0	0	0	16	236
Total	27	378	0	0	405	1	554	113	0	668	75	1	8	0	84	1157
07:00 PM	1	97	0	0	98	0	141	15	0	156	18	0	3	0	21	275
07:15 PM	2	100	0	0	102	0	122	24	0	146	16	0	3	0	19	267
07:30 PM	5	86	0	0	91	0	107	14	0	121	23	0	2	0	25	237
07:45 PM	10	98	0	0	108	0	107	9	0	116	24	0	0	0	24	248
Total	18	381	0	0	399	0	477	62	0	539	81	0	8	0	89	1027
*** BREAK ***																
Grand Total	76	1771	0	0	1847	1	2368	346	0	2715	320	1	35	0	356	4918
Apprch %	4.1	95.9	0.0	0.0		0.0	87.2	12.7	0.0		89.9	0.3	9.8	0.0		
Total %	1.5	36.0	0.0	0.0	37.6	0.0	48.1	7.0	0.0	55.2	6.5	0.0	0.7	0.0	7.2	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~4
Site Code : 00000000
Start Date : 10/22/2005
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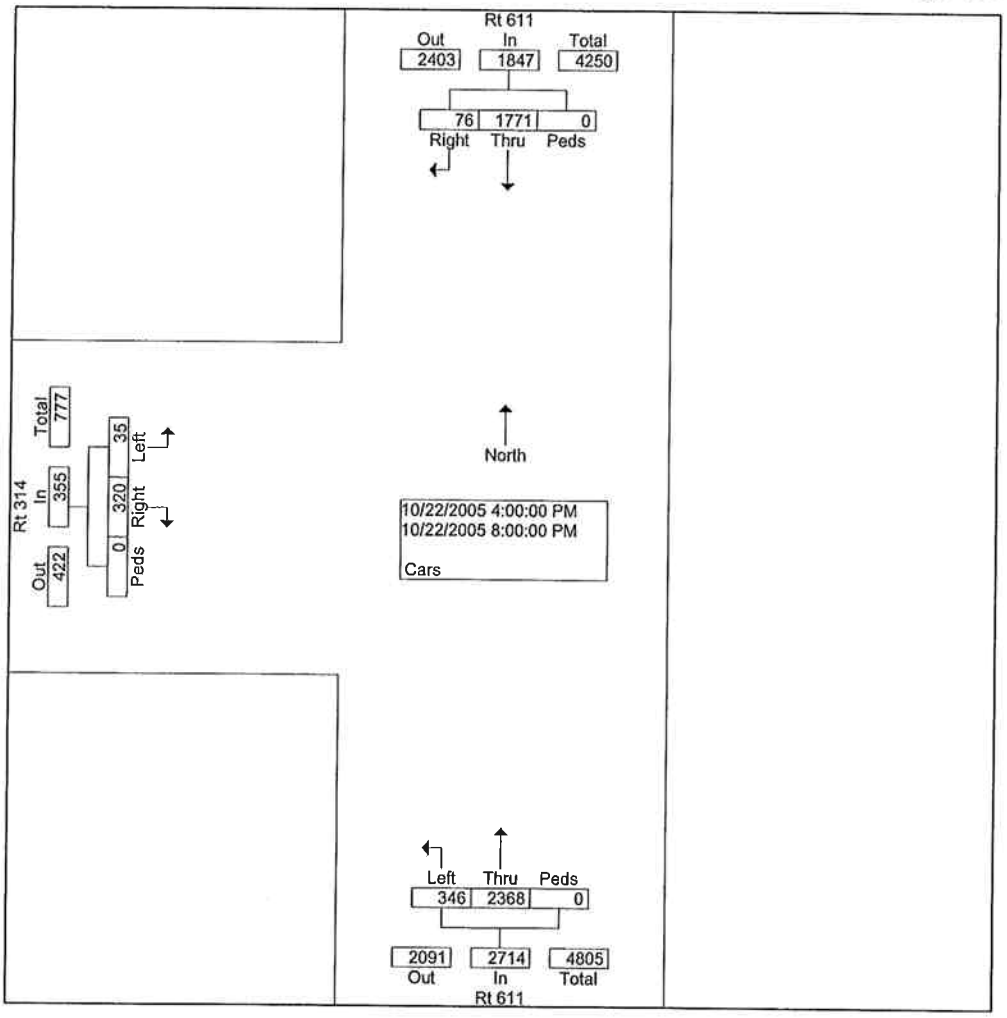
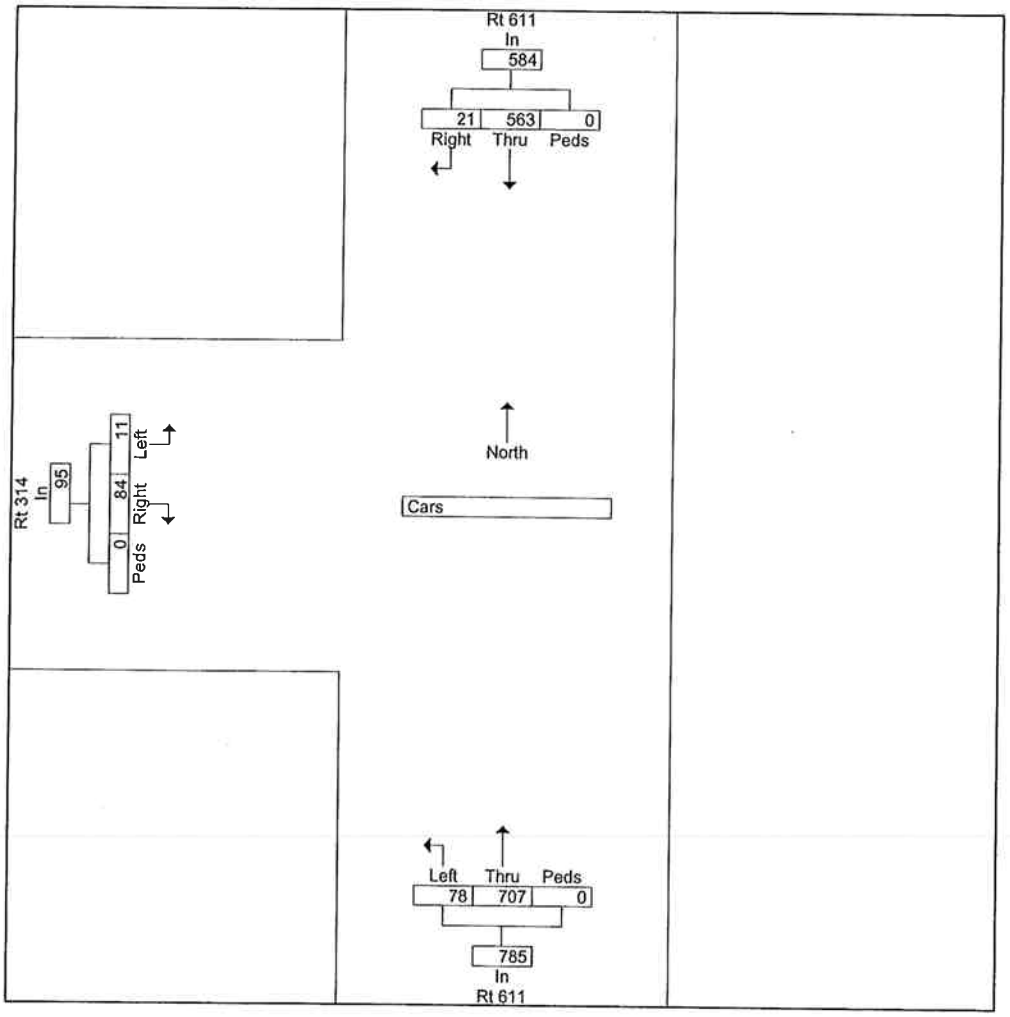


Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~4
Site Code : 00000000
Start Date : 10/22/2005
Page No : 3

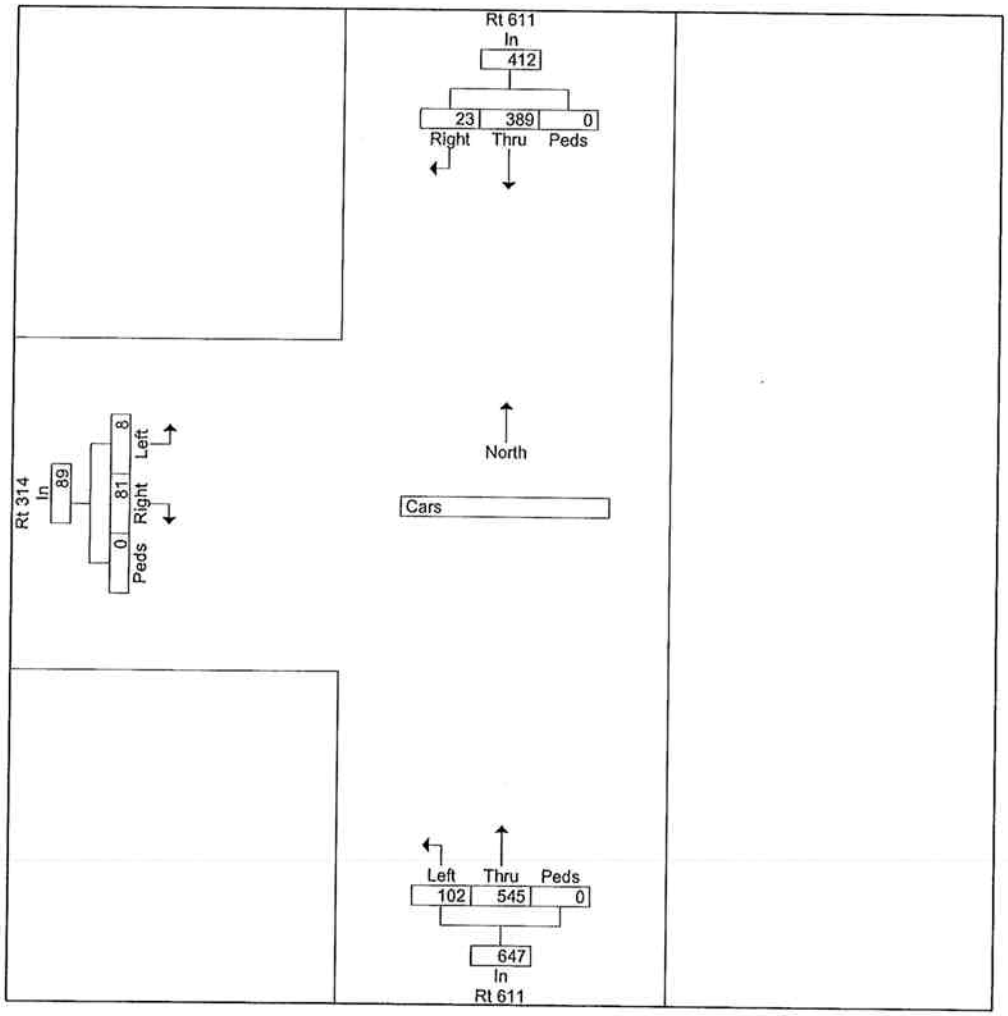
	Rt 611 From North					Rt 611 From South					Rt 314 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																
By Approach	04:00 PM					04:00 PM					04:00 PM					
Volume	21	563	0	0	584	0	707	78	0	785	84	0	11	0	95	
Percent	3.6	96.4	0.0	0.0		0.0	90.1	9.9	0.0		88.4	0.0	11.6	0.0		
High Int.	04:00 PM					04:15 PM					04:45 PM					
Volume	3	145	0	0	148	0	200	16	0	216	23	0	4	0	27	
Peak Factor					0.986					0.909					0.880	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~4
Site Code : 00000000
Start Date : 10/22/2005
Page No : 4

	Rt 611 From North					Rt 611 From South					Rt 314 From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 08:00 PM - Peak 1 of 1																
By Approach	06:15 PM					06:15 PM					07:00 PM					
Volume	23	389	0	0	412	0	545	102	0	647	81	0	8	0	89	
Percent	5.6	94.4	0.0	0.0		0.0	84.2	15.8	0.0		91.0	0.0	9.0	0.0		
High Int.	06:30 PM					06:15 PM					07:30 PM					
Volume	9	111	0	0	120	0	156	23	0	179	23	0	2	0	25	
Peak Factor					0.858					0.904					0.890	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Rt 611 & Rt 314 (East)
Date: Friday, October 21, 2005
Counter: ld

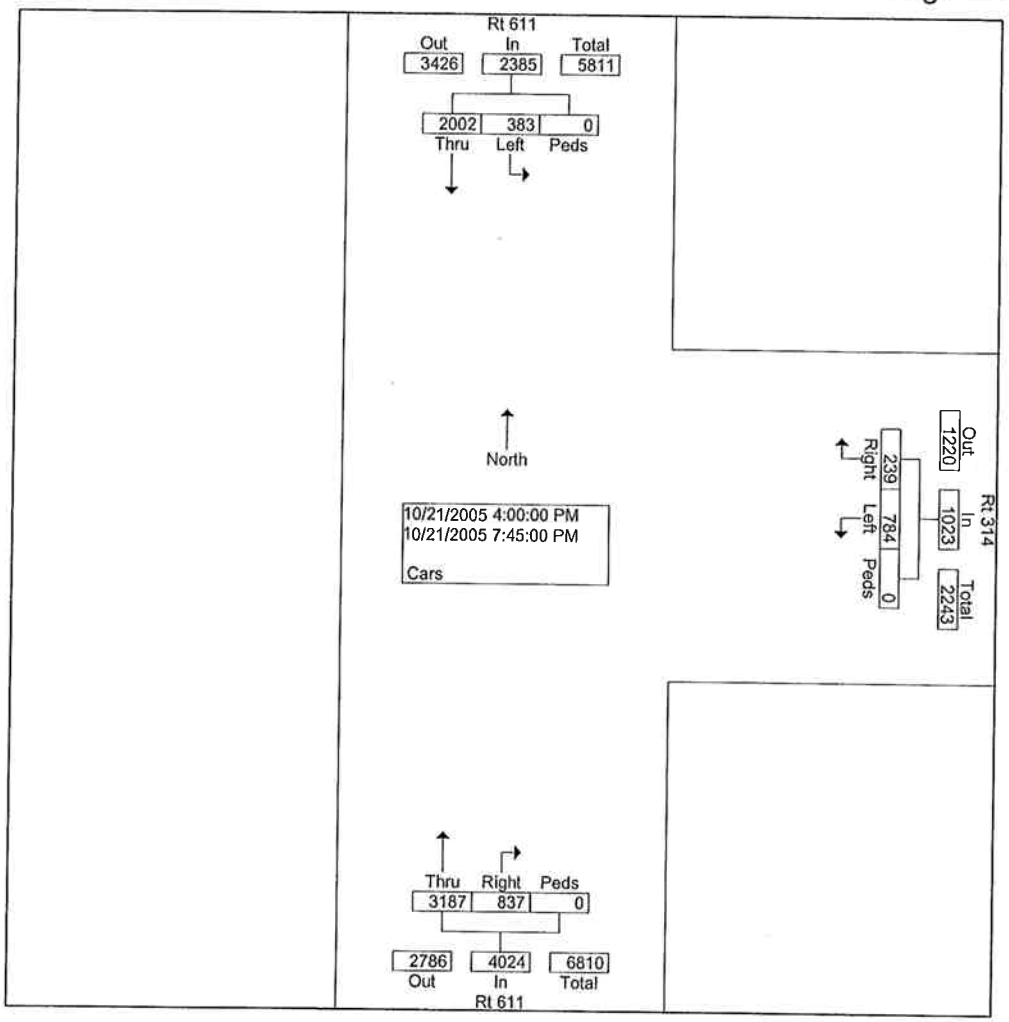
File Name : BG1021~3
Site Code : 00000000
Start Date : 10/21/2005
Page No : 1

Groups Printed- Cars

	Rt 611 From North					Rt 314 From East					Rt 611 From South					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	147	29	0	176	22	0	96	0	118	49	188	2	0	239	533
04:15 PM	0	166	17	0	183	22	0	75	0	97	57	185	3	0	245	525
04:30 PM	0	149	22	0	171	28	0	92	0	120	54	235	4	0	293	584
04:45 PM	0	184	23	0	207	26	0	69	0	95	50	255	2	0	307	609
Total	0	646	91	0	737	98	0	332	0	430	210	863	11	0	1084	2251
05:00 PM	0	155	23	0	178	23	0	58	0	81	67	236	0	0	303	562
05:15 PM	0	156	19	0	175	19	0	65	0	84	63	256	0	0	319	578
05:30 PM	0	159	15	0	174	13	0	58	0	71	48	220	2	0	270	515
05:45 PM	0	128	20	0	148	10	0	44	0	54	62	233	1	0	296	498
Total	0	598	77	0	675	65	0	225	0	290	240	945	3	0	1188	2153
06:00 PM	0	116	33	0	149	8	0	37	0	45	53	205	2	0	260	454
06:15 PM	0	120	37	0	157	11	0	29	0	40	59	183	2	0	244	441
06:30 PM	0	110	40	0	150	10	0	38	0	48	66	172	0	0	238	436
06:45 PM	0	95	35	0	130	9	0	28	0	37	58	186	2	0	246	413
Total	0	441	145	0	586	38	0	132	0	170	236	746	6	0	988	1744
07:00 PM	0	82	23	0	105	16	0	31	0	47	58	189	0	0	247	399
07:15 PM	0	86	20	0	106	7	0	22	0	29	44	130	0	0	174	309
07:30 PM	0	83	16	0	99	10	0	25	0	35	25	174	0	0	199	333
07:45 PM	0	66	11	0	77	5	0	17	0	22	24	140	0	0	164	263
Total	0	317	70	0	387	38	0	95	0	133	151	633	0	0	784	1304
Grand Total	0	2002	383	0	2385	239	0	784	0	1023	837	3187	20	0	4044	7452
Apprch %	0.0	83.9	16.1	0.0		23.4	0.0	76.6	0.0		20.7	78.8	0.5	0.0		
Total %	0.0	26.9	5.1	0.0	32.0	3.2	0.0	10.5	0.0	13.7	11.2	42.8	0.3	0.0	54.3	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

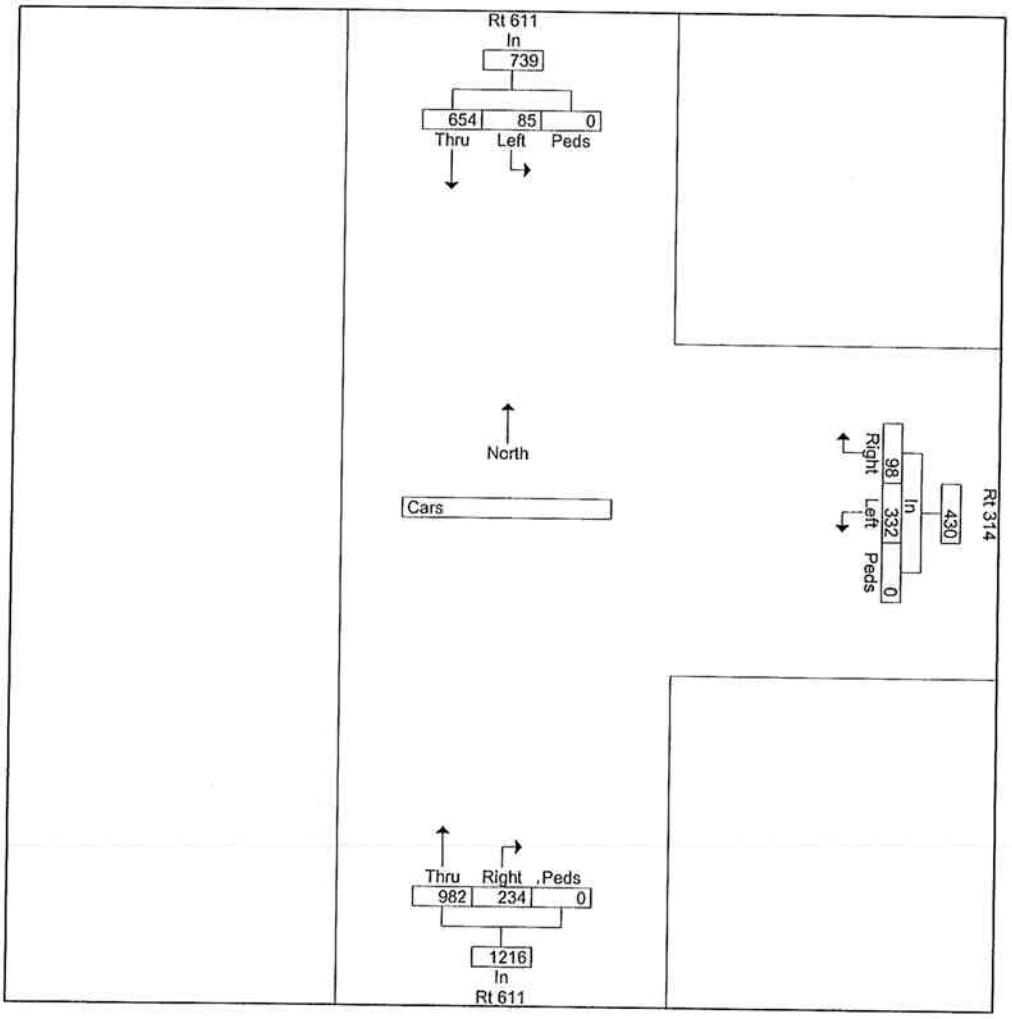
File Name : BG1021~3
Site Code : 00000000
Start Date : 10/21/2005
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021~3
Site Code : 00000000
Start Date : 10/21/2005
Page No : 3

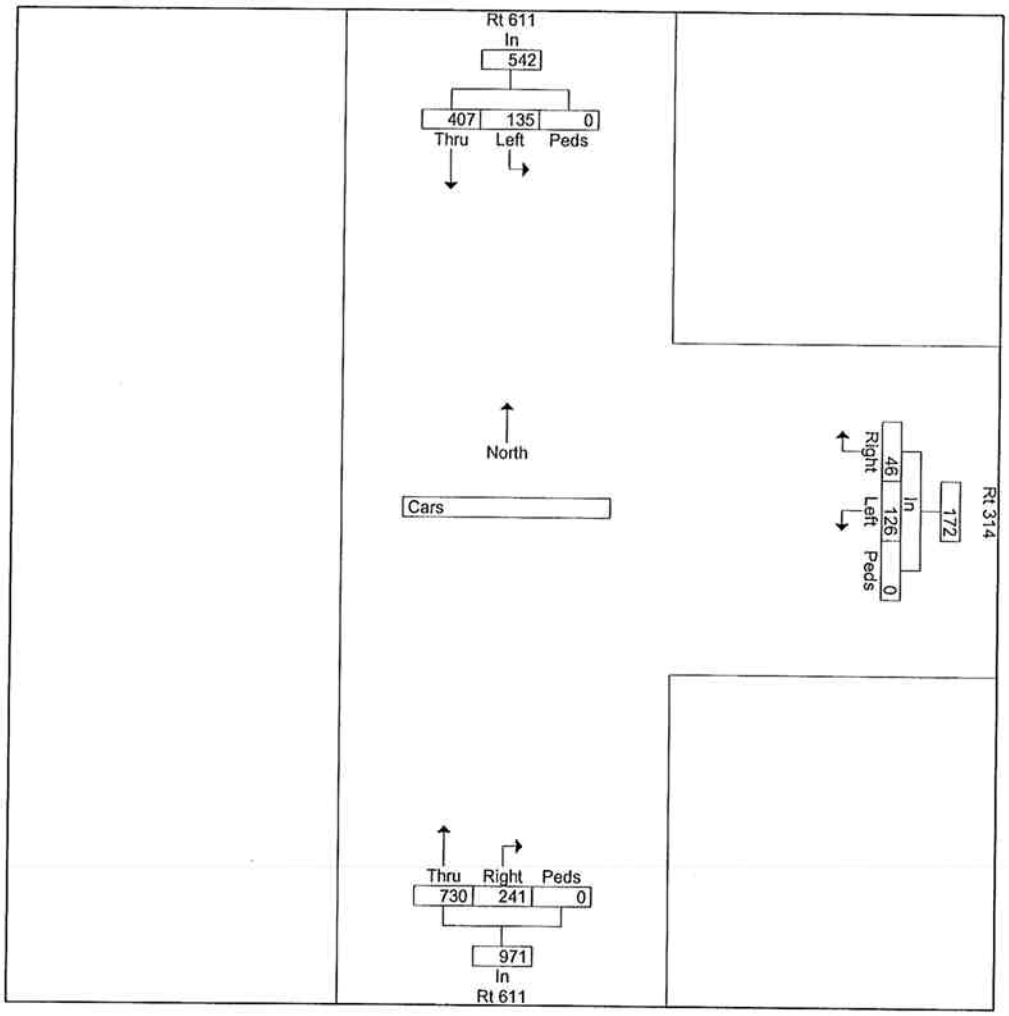
	Rt 611 From North					Rt 314 From East					Rt 611 From South					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																
By Approach	04:15 PM					04:00 PM					04:30 PM					
Volume	0	654	85	0	739	98	0	332	0	430	234	982	6	0	1222	
Percent	0.0	88.5	11.5	0.0		22.8	0.0	77.2	0.0		19.1	80.4	0.5	0.0		
High Int.	04:45 PM					04:30 PM					05:15 PM					
Volume	0	184	23	0	207	28	0	92	0	120	63	256	0	0	319	
Peak Factor					0.893					0.896					0.958	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1021~3
Site Code : 00000000
Start Date : 10/21/2005
Page No : 4

	Rt 611 From North					Rt 314 From East					Rt 611 From South					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																
By Approach	06:15 PM					06:15 PM					06:15 PM					
Volume	0	407	135	0	542	46	0	126	0	172	241	730	4	0	975	
Percent	0.0	75.1	24.9	0.0		26.7	0.0	73.3	0.0		24.7	74.9	0.4	0.0		
High Int.	06:15 PM					06:30 PM					07:00 PM					
Volume	0	120	37	0	157	10	0	38	0	48	58	189	0	0	247	
Peak Factor					0.863					0.896					0.987	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

Location: Monroe County, PA
Intersection: Rt 611 & Rt 314(East)
Date: Saturday, October 22, 2005
Counter: Id

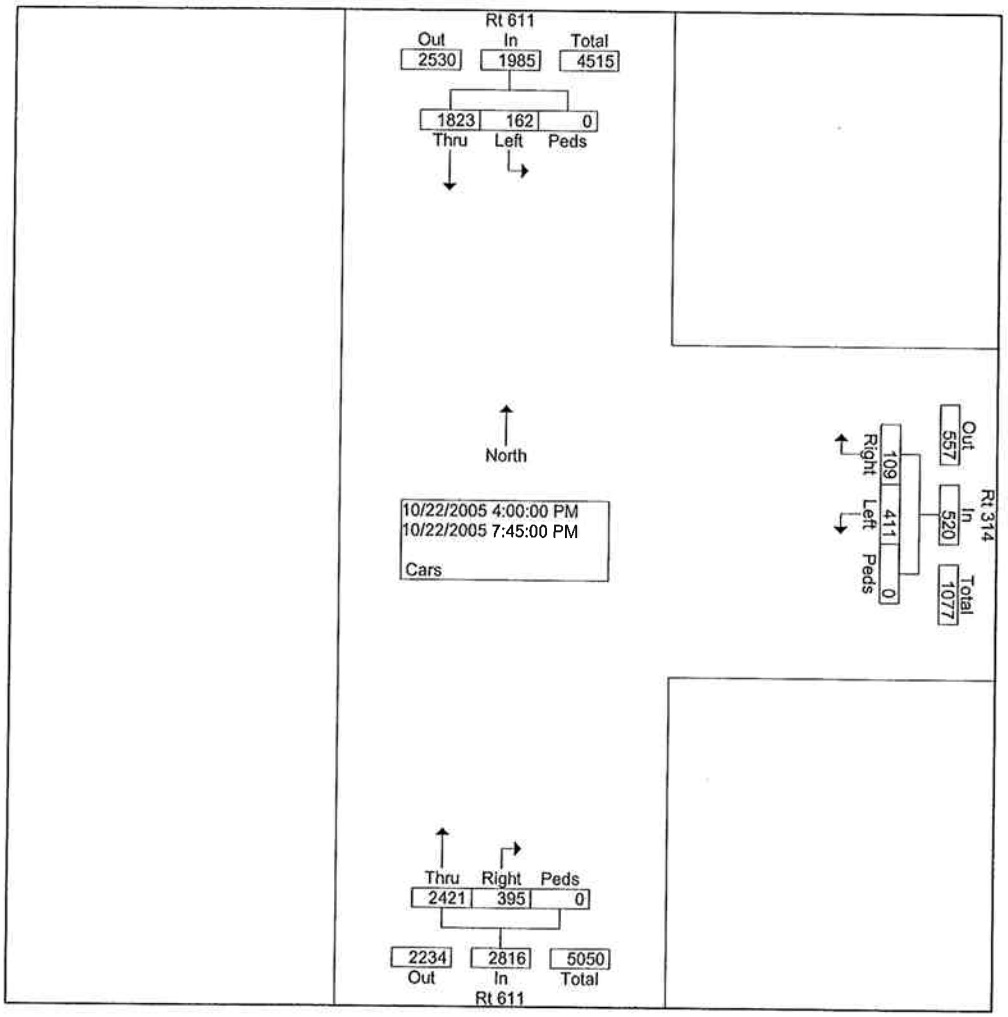
File Name : BG1022~3
Site Code : 00000000
Start Date : 10/22/2005
Page No : 1

Groups Printed- Cars

	Rt 611 From North					Rt 314 From East					Rt 611 From South					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Factor	1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		1.0	1.0	1.0	1.0		
04:00 PM	0	154	7	0	161	13	0	41	0	54	39	195	1	0	235	450
04:15 PM	0	132	13	0	145	7	0	38	0	45	21	193	1	0	215	405
04:30 PM	0	129	13	0	142	6	0	31	0	37	23	164	1	0	188	367
04:45 PM	0	135	10	0	145	4	0	29	0	33	34	163	2	0	199	377
Total	0	550	43	0	593	30	0	139	0	169	117	715	5	0	837	1599
05:00 PM	0	114	13	0	127	2	0	28	0	30	25	173	0	0	198	355
05:15 PM	0	123	8	0	131	9	0	28	0	37	31	171	0	0	202	370
05:30 PM	0	133	5	0	138	4	0	36	0	40	30	163	0	0	193	371
05:45 PM	0	125	9	0	134	6	0	23	0	29	23	139	1	0	163	326
Total	0	495	35	0	530	21	0	115	0	136	109	646	1	0	756	1422
06:00 PM	0	97	12	0	109	7	0	31	0	38	16	166	0	0	182	329
06:15 PM	0	104	10	0	114	6	0	17	0	23	33	164	0	0	197	334
06:30 PM	0	107	11	0	118	14	0	13	0	27	26	135	2	0	163	308
06:45 PM	0	85	0	0	85	7	0	16	0	23	20	131	0	0	151	259
Total	0	393	33	0	426	34	0	77	0	111	95	596	2	0	693	1230
07:00 PM	0	100	16	0	116	7	0	24	0	31	16	135	0	0	151	298
07:15 PM	0	101	10	0	111	3	0	25	0	28	24	129	0	0	153	292
07:30 PM	0	88	14	0	102	8	0	15	0	23	19	104	2	0	125	250
07:45 PM	0	96	11	0	107	6	0	16	0	22	15	96	4	0	115	244
Total	0	385	51	0	436	24	0	80	0	104	74	464	6	0	544	1084
Grand Total	0	1823	162	0	1985	109	0	411	0	520	395	2421	14	0	2830	5335
Apprch %	0.0	91.8	8.2	0.0		21.0	0.0	79.0	0.0		14.0	85.5	0.5	0.0		
Total %	0.0	34.2	3.0	0.0	37.2	2.0	0.0	7.7	0.0	9.7	7.4	45.4	0.3	0.0	53.0	

Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

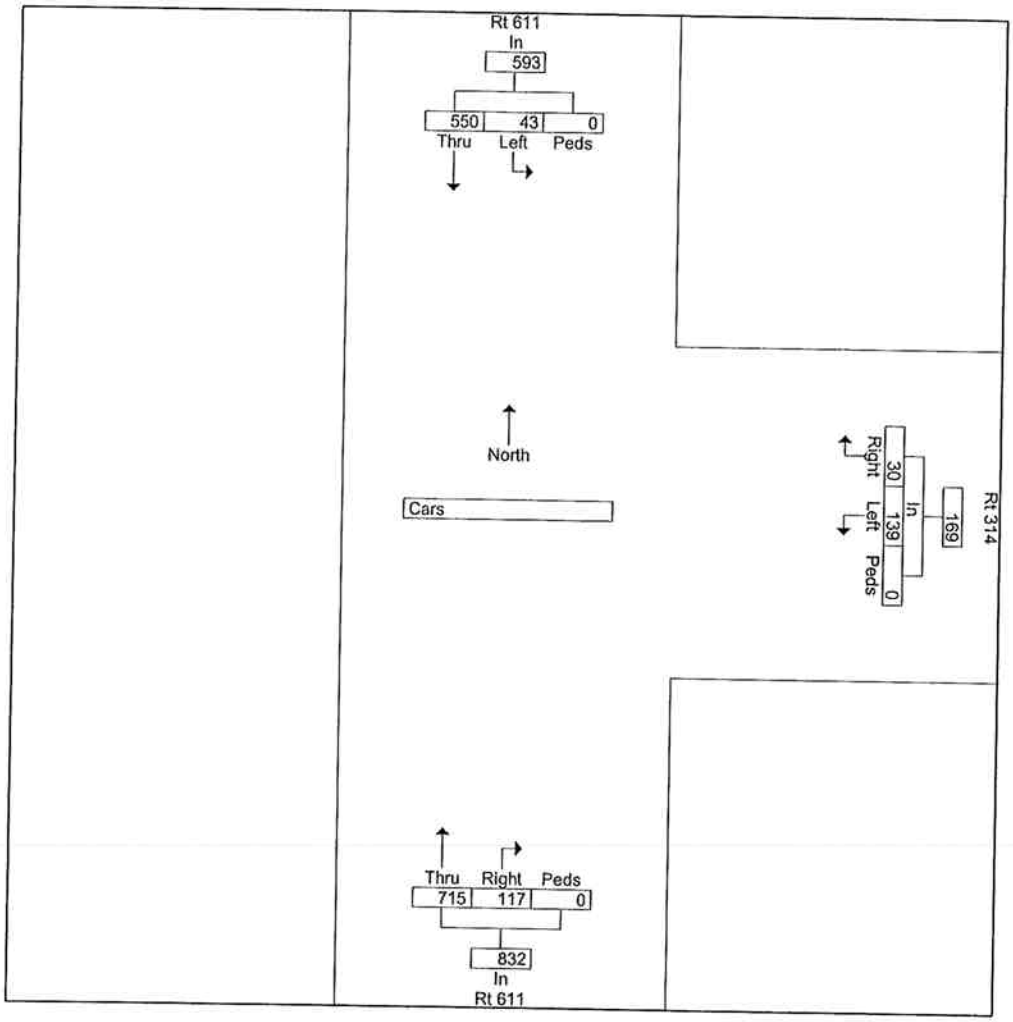
File Name : BG1022~3
Site Code : 00000000
Start Date : 10/22/2005
Page No : 2



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~3
Site Code : 00000000
Start Date : 10/22/2005
Page No : 3

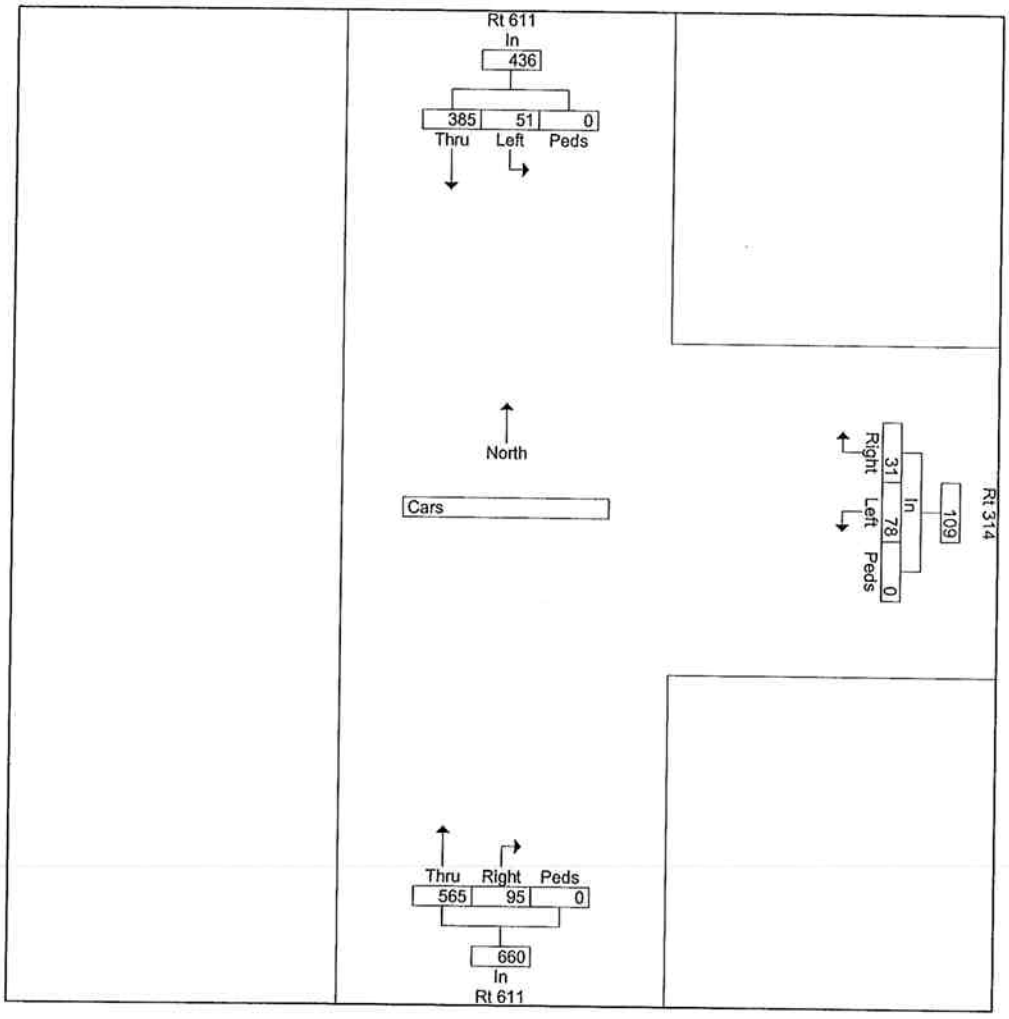
	Rt 611 From North					Rt 314 From East					Rt 611 From South					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 04:00 PM to 06:00 PM - Peak 1 of 1																
By Approach	04:00 PM					04:00 PM					04:00 PM					
Volume	0	550	43	0	593	30	0	139	0	169	117	715	5	0	837	
Percent	0.0	92.7	7.3	0.0		17.8	0.0	82.2	0.0		14.0	85.4	0.6	0.0		
High Int.	04:00 PM					04:00 PM					04:00 PM					
Volume	0	154	7	0	161	13	0	41	0	54	39	195	1	0	235	
Peak Factor					0.921					0.782					0.890	



Tri-State Traffic Data, Inc.
184 Baker Road
Coatsville, PA 19320
(610) 466-1469

File Name : BG1022~3
Site Code : 00000000
Start Date : 10/22/2005
Page No : 4

	Rt 611 From North					Rt 314 From East					Rt 611 From South					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour From 06:15 PM to 07:45 PM - Peak 1 of 1																
By Approach	07:00 PM					06:30 PM					06:15 PM					
Volume	0	385	51	0	436	31	0	78	0	109	95	565	2	0	662	
Percent	0.0	88.3	11.7	0.0		28.4	0.0	71.6	0.0		14.4	85.3	0.3	0.0		
High Int.	07:00 PM					07:00 PM					06:15 PM					
Volume	0	100	16	0	116	7	0	24	0	31	33	164	0	0	197	
Peak Factor					0.940					0.879					0.840	

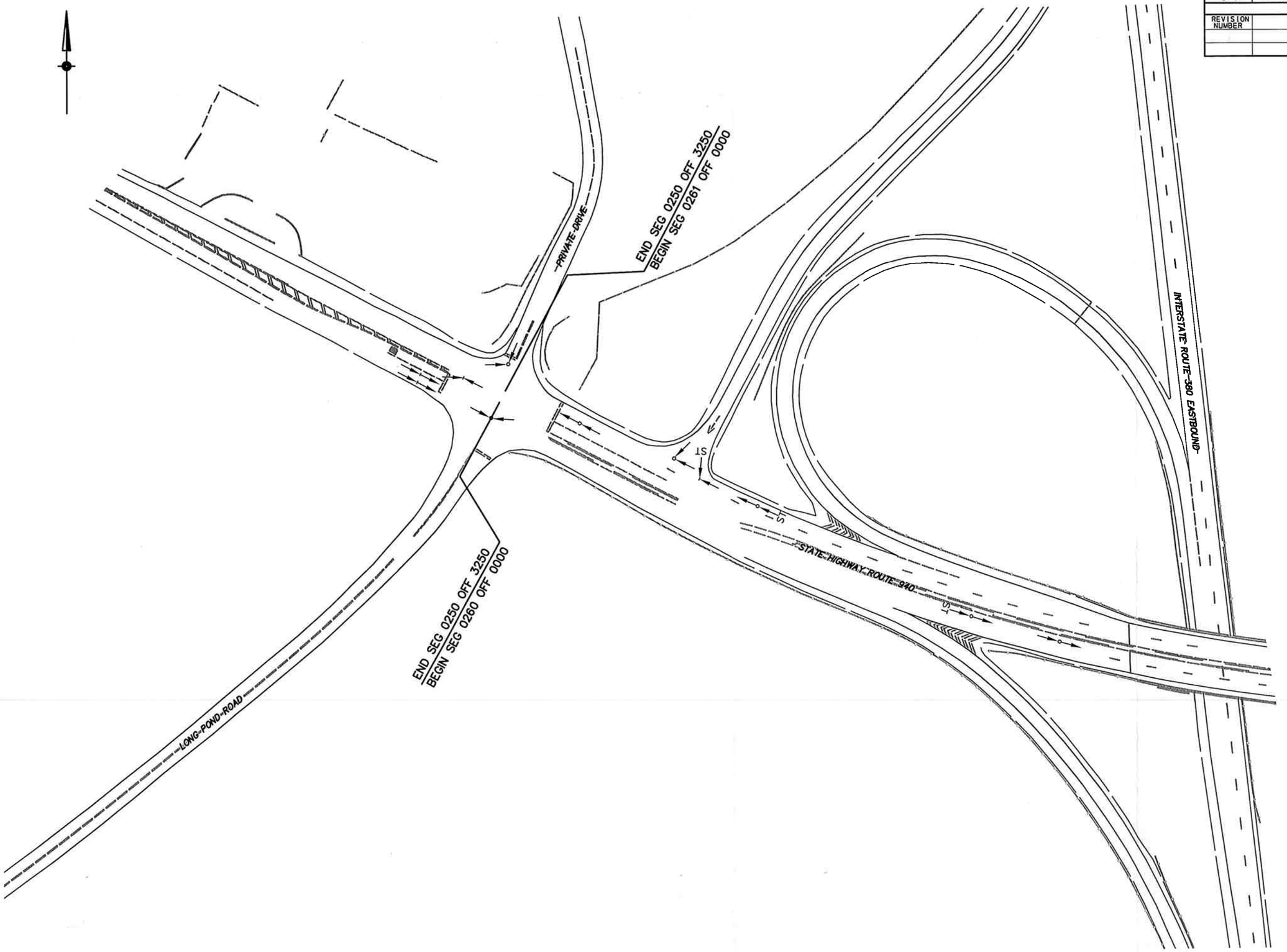


APPENDIX D

Crash Data and Collision Diagrams

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	380/940/314		1 OF 6
TOBYHANNA TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY



LEGEND

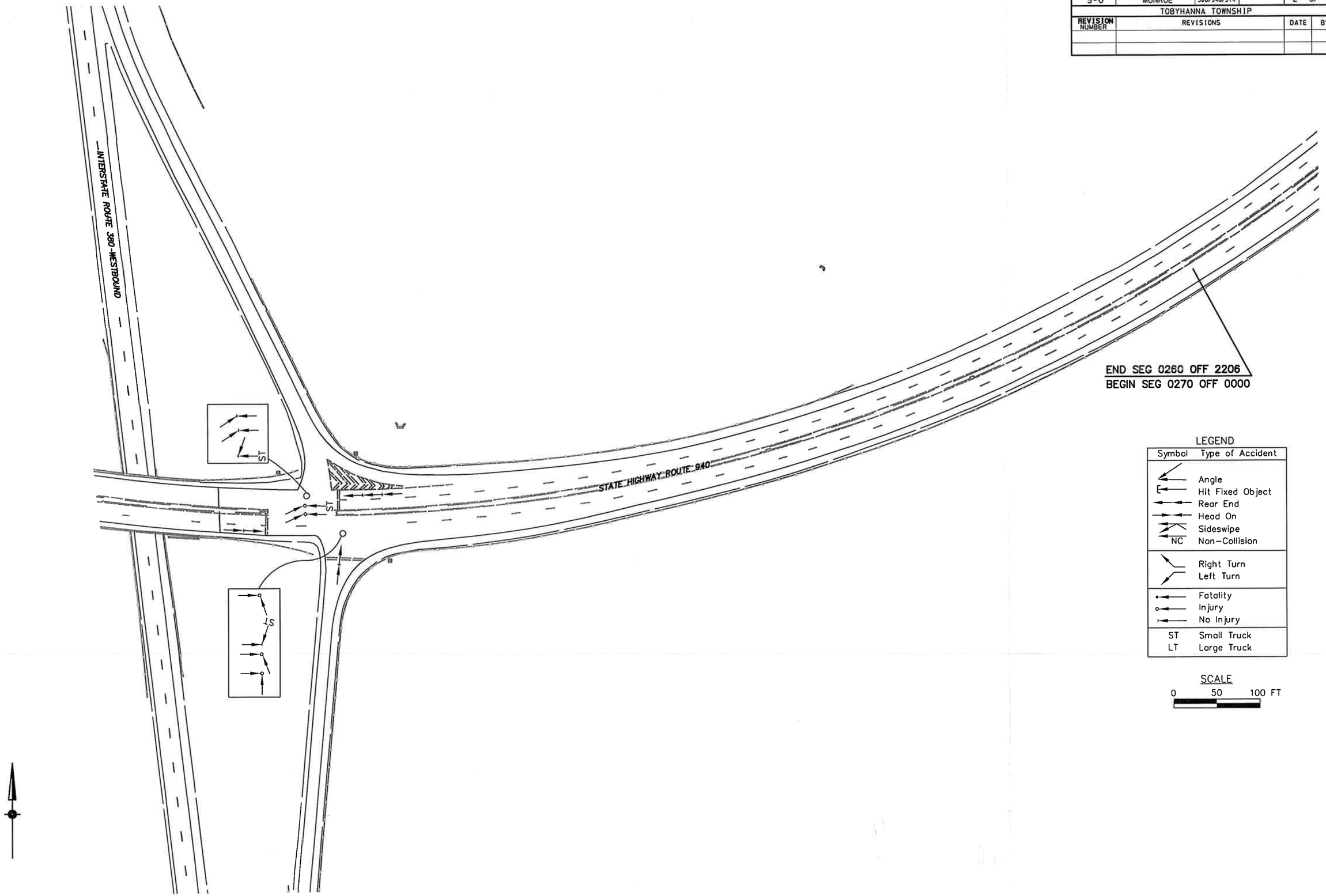
Symbol	Type of Accident
	Angle
	Hit Fixed Object
	Rear End
	Head On
	Sideswipe
NC	Non-Collision
	Right Turn
	Left Turn
	Fatality
	Injury
	No Injury
ST	Small Truck
LT	Large Truck

SCALE

0 50 100 FT

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	380/940/314		2 OF 6
TOBYHANNA TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY



LEGEND

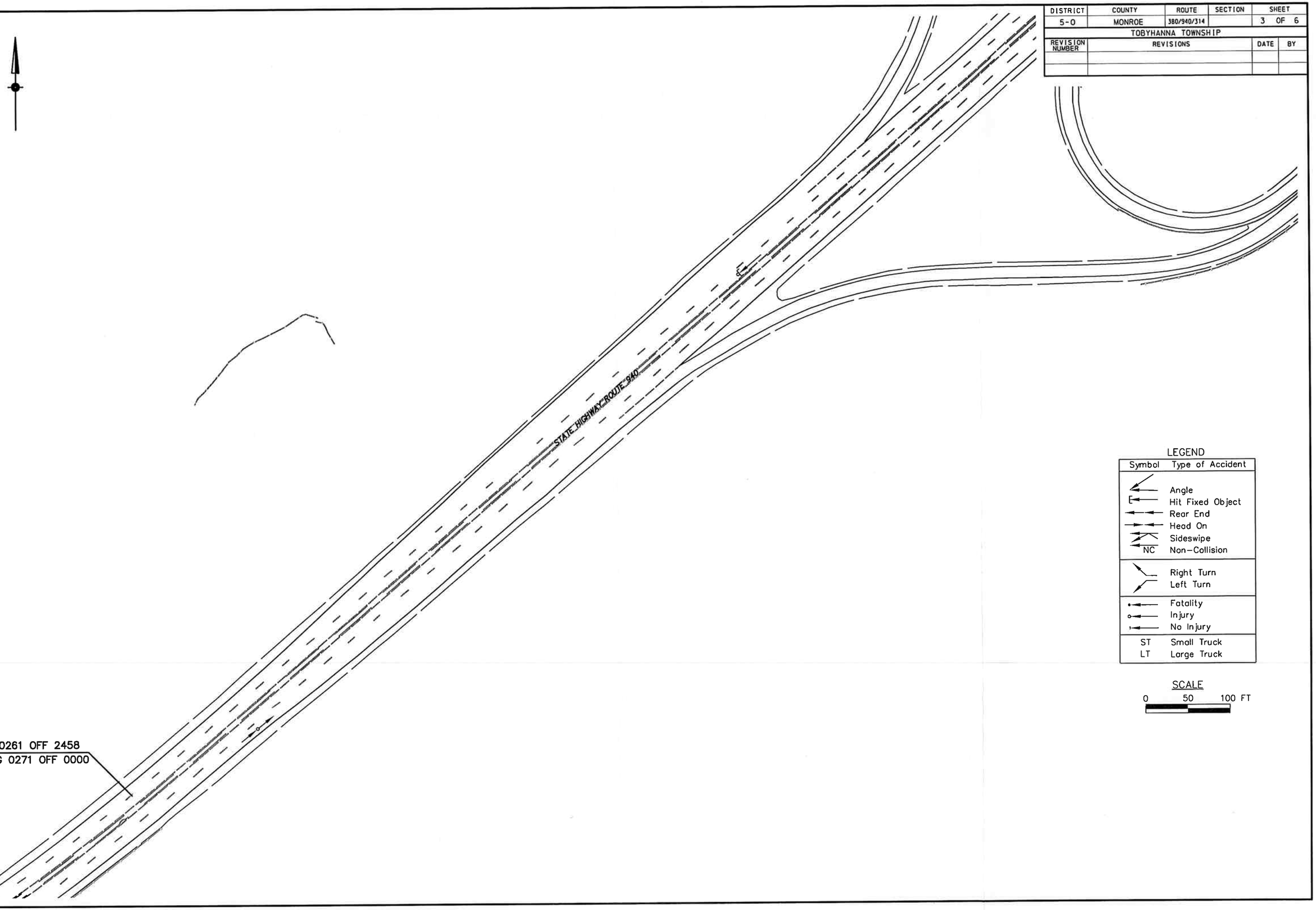
Symbol	Type of Accident
	Angle
	Hit Fixed Object
	Rear End
	Head On
	Sideswipe
NC	Non-Collision
	Right Turn
	Left Turn
	Fatality
	Injury
	No Injury
ST	Small Truck
LT	Large Truck

SCALE

0 50 100 FT

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	380/940/314		3 OF 6
TOBYHANNA TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY



LEGEND

Symbol	Type of Accident
	Angle
	Hit Fixed Object
	Rear End
	Head On
	Sideswipe
NC	Non-Collision
	Right Turn
	Left Turn
	Fatality
	Injury
	No Injury
ST	Small Truck
LT	Large Truck

SCALE

0 50 100 FT

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	380/940/314		5 OF 6
TOBYHANNA TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY

STATE HIGHWAY ROUTE 314

LEGEND

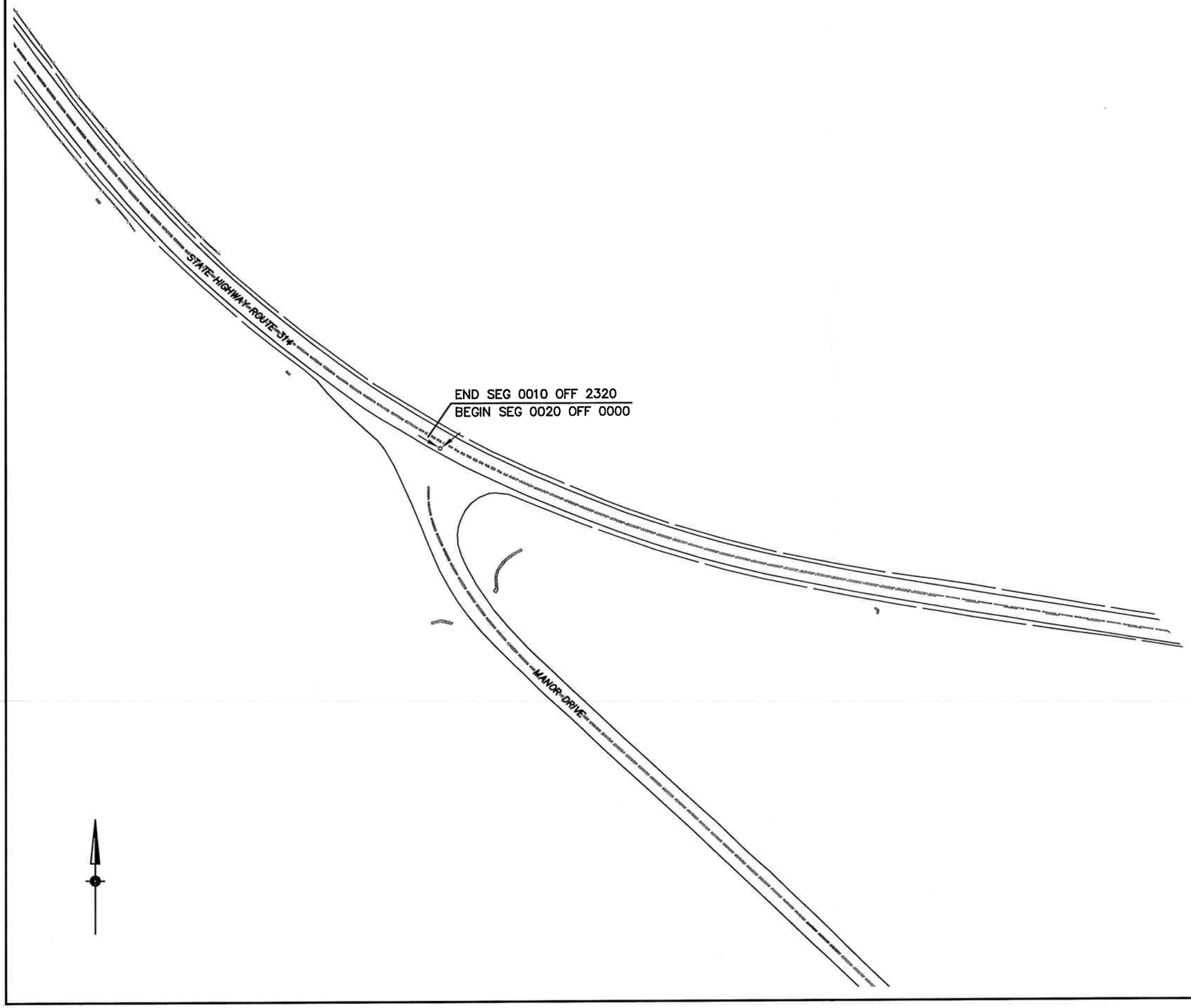
Symbol	Type of Accident
	Angle
E	Hit Fixed Object
	Rear End
	Head On
	Sideswipe
NC	Non-Collision
	Right Turn
	Left Turn
	Fatality
	Injury
	No Injury
ST	Small Truck
LT	Large Truck

SCALE

0 50 100 FT

DISTRICT	COUNTY	ROUTE	SECTION	SHEET
5-0	MONROE	380/940/314		6 OF 6
TOBYHANNA TOWNSHIP				

REVISION NUMBER	REVISIONS	DATE	BY



LEGEND

Symbol	Type of Accident
	Angle
F	Hit Fixed Object
	Rear End
	Head On
	Sideswipe
NC	Non-Collision
	Right Turn
	Left Turn
	Fatality
	Injury
	No Injury
ST	Small Truck
LT	Large Truck

SCALE

0 50 100 FT

OS-2 (4-01)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
www.dot.state.pa.us

Engineering District 5-0
1713 Lehigh Street
Allentown, Pennsylvania 18103
September 12, 2006

Monroe County – Tobyhanna Township
Route 940: SEG 260/0000 to SEG 290/2000
Crash History

Mr. Bob Gonzalez
Pennoni Associates, Inc.
2041 Avenue C, Suite 100
Bethlehem, PA 18017

Dear Mr. Gonzalez:

Thank you for your e-mail of September 11, 2006 requesting the crash history at the above referenced location in Monroe County.

Please find a copy of the most recent crash history for this roadway enclosed.

When reviewing this crash history, you should be aware of the definition of a reportable accident in Pennsylvania. A reportable accident is one in which an injury or a fatality occurs or if at least one of the vehicles involved requires towing from the scene.

The enclosed crash history is confidential under 75 PA Code Section 3754. This material is only provided to official agencies that have responsibility in the highway transportation system and can only be used by those agencies for traffic safety-related planning or research. Publication, reproduction, release or discussion of these materials, as well as the use of or reliance upon these materials for any purpose other than stated above, is expressly prohibited without the specific written consent of the Pennsylvania Department of Transportation.

Should you have any questions, please contact this office.

Very truly yours,

Joseph J. Rauscher, P.E.
District Traffic Studies/Safety Engineer
Engineering District 5-0

JJR/ljb

OS-2 (4-01)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
www.dot.state.pa.us

Engineering District 5-0
1713 Lehigh Street
Allentown, Pennsylvania 18103
September 20, 2006

Monroe County
Route 940: SEG 290/0000 to SEG 340/0000
Route 314: SEG 10/0000 to SEG 30/0000
Route 611: SEG 420/0000 to SEG 420/2298
Route 611: SEG 360/0000 to SEG 370/1050
Crash History

Mr. Bob Gonzalez
Pennoni Associates, Inc.
2041 Avenue C, Suite 100
Bethlehem, PA 18017

Dear Mr. Gonzalez:

Thank you for your e-mail of September 19, 2006 requesting the crash history at the above referenced locations in Monroe County.

Please find a copy of the most recent crash history for this roadway enclosed.

When reviewing this crash history, you should be aware of the definition of a reportable accident in Pennsylvania. A reportable accident is one in which an injury or a fatality occurs or if at least one of the vehicles involved requires towing from the scene.

The enclosed crash history is confidential under 75 PA Code Section 3754. This material is only provided to official agencies that have responsibility in the highway transportation system and can only be used by those agencies for traffic safety-related planning or research. Publication, reproduction, release or discussion of these materials, as well as the use of or reliance upon these materials for any purpose other than stated above, is expressly prohibited without the specific written consent of the Pennsylvania Department of Transportation.

Should you have any questions, please contact this office.

Very truly yours,

Joseph J. Rauscher, P.E.
District Traffic Studies/Safety Engineer
Engineering District 5-0

JJR/ljb

OS-2 (4-01)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION
www.dot.state.pa.us

Engineering District 5-0
1713 Lehigh Street
Allentown, Pennsylvania 18103
September 27, 2006

Monroe County
Route 940: SEG 290/0000 to SEG 340/0000
Route 611: SEG 420/0000 to SEG 420/2298
Crash History

Mr. Bob Gonzalez
Pennoni Associates, Inc.
2041 Avenue C
Suite 100
Bethlehem, PA 18017

Dear Mr. Gonzalez:

Thank you for your e-mail of September 26, 2006 requesting the crash history at the above referenced locations in Monroe County.

Please find copies of the most recent crash history for these roadways enclosed.

When reviewing this crash history, you should be aware of the definition of a reportable accident in Pennsylvania. A reportable accident is one in which an injury or a fatality occurs or if at least one of the vehicles involved requires towing from the scene.

The enclosed crash history is confidential under 75 PA Code Section 3754. This material is only provided to official agencies that have responsibility in the highway transportation system and can only be used by those agencies for traffic safety-related planning or research. Publication, reproduction, release or discussion of these materials, as well as the use of or reliance upon these materials for any purpose other than stated above, is expressly prohibited without the specific written consent of the Pennsylvania Department of Transportation.

Should you have any questions, please contact this office.

Very truly yours,

Joseph J. Rauscher, P.E.
District Traffic Studies/Safety Engineer
Engineering District 5-0

JJR/ljb

APPENDIX E

Growth Rate Data, Other Planned Development Volumes, Base Volumes

Table 371
County/Functional Class Group Trend Factors (Continued)

** Indicates the County contains no roads in this FCG*

Functional Class Group Trend Factors: 2003-2004							
	COUNTY	FCG 1	FCG 2	FCG 3	FCG 4	FCG 5	FCG 6
30	Greene	*	3.3%	*	1.4%	*	1.4%
31	Huntingdon	*	*	1.4%	1.8%	1.4%	1.8%
32	Indiana	*	*	1.4%	1.8%	1.4%	1.8%
33	Jefferson	*	3.3%	1.4%	1.8%	1.4%	1.8%
34	Juniata	*	*	*	1.8%	*	1.8%
35	Lackawanna	3.2%	3.3%	1.4%	1.6%	1.4%	1.6%
36	Lancaster	*	*	1.4%	1.8%	1.4%	1.8%
37	Lawrence	*	3.3%	1.2%	1.4%	1.2%	1.4%
38	Lebanon	*	3.3%	1.4%	2.0%	1.4%	2.0%
39	Lehigh	3.2%	3.3%	1.8%	2.6%	1.8%	2.6%
40	Luzerne	3.2%	3.3%	1.4%	1.6%	1.4%	1.6%
41	Lycoming	3.2%	3.3%	1.0%	1.2%	1.0%	1.2%
42	McKean	*	*	1.0%	1.2%	1.0%	1.2%
43	Mercer	3.2%	3.3%	1.2%	1.4%	1.2%	1.4%
44	Mifflin	*	*	1.4%	1.8%	1.4%	1.8%
45	Monroe	3.2%	3.3%	2.0%	3.0%	2.0%	3.0%
46	Montgomery	3.2%	*	1.4%	1.8%	1.4%	1.8%
47	Montour	*	3.3%	1.4%	1.8%	1.4%	1.8%
48	Northampton	3.2%	*	1.8%	2.6%	1.8%	2.6%
49	Northumberland	*	3.3%	1.4%	1.8%	1.4%	1.8%
50	Perry	*	*	1.4%	2.0%	*	2.0%
67	Philadelphia	3.2%	*	1.4%	*	1.4%	*
51	Pike	*	3.3%	*	3.0%	*	3.0%
52	Potter	*	*	*	1.2%	*	1.2%
53	Schuylkill	*	3.3%	1.4%	1.6%	1.4%	1.6%
54	Snyder	*	*	1.4%	1.8%	1.4%	1.8%
55	Somerset	*	*	1.2%	1.4%	1.2%	1.4%
56	Sullivan	*	*	*	1.2%	*	1.2%
57	Susquehanna	*	3.3%	*	1.2%	*	1.2%
58	Tioga	*	*	*	1.2%	*	1.2%
59	Union	*	3.3%	1.4%	1.8%	1.4%	1.8%
60	Venango	*	3.3%	1.4%	1.8%	1.4%	1.8%
61	Warren	*	*	1.0%	1.2%	1.0%	1.2%
62	Washington	3.2%	3.3%	1.2%	1.4%	1.2%	1.4%
63	Wayne	*	3.3%	*	3.0%	2.0%	3.0%
64	Westmoreland	3.2%	3.3%	1.2%	1.4%	1.2%	1.4%
65	Wyoming	*	*	*	1.2%	*	1.2%
66	York	3.2%	3.3%	1.4%	1.8%	1.4%	1.8%
	Average	3.2%	3.3%	1.3%	1.7%	1.4%	1.7%

Functional Class Groups

Traffic volume data displayed in PENNDOT's Roadway Management System (RMS) is projected to a current estimate year (2004) based on County/Functional Class Group (FCG). This provides the user with trends relative to a specific county. The factors are applied annually to the Department's Roadway Management System to produce the current year traffic volume estimate values.

This table shows the FCGs with a description and corresponding Functional Class Codes (FCCs).

FCG	DESCRIPTIVE NAME	FCC
FCG 1	URBAN INTERSTATE	FCC 11
FCG 2	RURAL INTERSTATE	FCC 01
FCG 3	URBAN - OTHER FREEWAYS/EXPRESSWAYS	FCC 12
	URBAN - OTHER PRINCIPAL ARTERIALS	FCC 14
	URBAN - MINOR ARTERIALS	FCC 16
	RAMPS	FCC 99
FCG 4	RURAL - OTHER PRINCIPAL ARTERIALS	FCC 02
	RURAL - MINOR ARTERIAL	FCC 06
FCG 5	URBAN COLLECTORS	FCC 17
	URBAN - LOCAL	FCC 19
FCG 6	RURAL - MAJOR COLLECTOR	FCC 07
	RURAL - MINOR COLLECTOR	FCC 08
	RURAL - LOCAL	FCC 09

iTMS

Close

Print

SITE NO: 3803

County	Route	Dir	Current Average Daily Traffic	Current Average Daily Truck Volume
MONROE (45)	0380	N	11247	2924

K Factor	D Factor	T Factor	Truck Percent	Base Traffic Year
9	54	12	26	2003

Traffic Pattern Group
URBAN - INTERSTATE

Online VideoLog

○ Fast(Cable, T1, DSL) ○ Slow (Dial-up)

Close

SITE NO: 3803

County	Route	Dir	Current Average Daily Traffic	Current Average Daily Truck Volume
MONROE (45)	0380	S	10299	2060

K Factor	D Factor	T Factor	Truck Percent	Base Traffic Year
9	54	12	20	2003

Traffic Pattern Group
URBAN - INTERSTATE

Online VideoLog

O Fast(Cable, T1, DSL) O Slow (Dial-up)

iTMS

Close

Print

SITE NO: 3808

County	Route	Dir	Current Average Daily Traffic	Current Average Daily Truck Volume
MONROE (45)	0940	E	10416	517

K Factor	D Factor	T Factor	Truck Percent	Base Traffic Year
8	50	6	5	2003

Traffic Pattern Group

CENTRAL RURAL- MINOR ARTERIALS

Online VideoLog

○ Fast(Cable, T1, DSL) ○ Slow (Dial-up)

Close

SITE NO: 3808

County	Route	Dir	Current Average Daily Traffic	Current Average Daily Truck Volume
MONROE (45)	0940	W	9976	533

K Factor	D Factor	T Factor	Truck Percent	Base Traffic Year
8	50	6	5	2003

Traffic Pattern Group

CENTRAL RURAL- MINOR ARTERIALS

Online VideoLog

○ Fast(Cable, T1, DSL) ○ Slow (Dial-up)

iTMS

Close

Print

SITE NO: 13385

County	Route	Dir	Current Average Daily Traffic	Current Average Daily Truck Volume
MONROE (45)	0314	B	3529	106

K Factor	D Factor	T Factor	Truck Percent	Base Traffic Year
11	55	2	3	2003

Traffic Pattern Group

CENTRAL RURAL- COLLECTORS AND LOCAL ROADS

Online VideoLog

○ Fast(Cable, T1, DSL) ○ Slow (Dial-up)

iTMS

Close

Print

SITE NO: 25184

County	Route	Dir	Current Average Daily Traffic	Current Average Daily Truck Volume
MONROE (45)	0611	B	14484	724

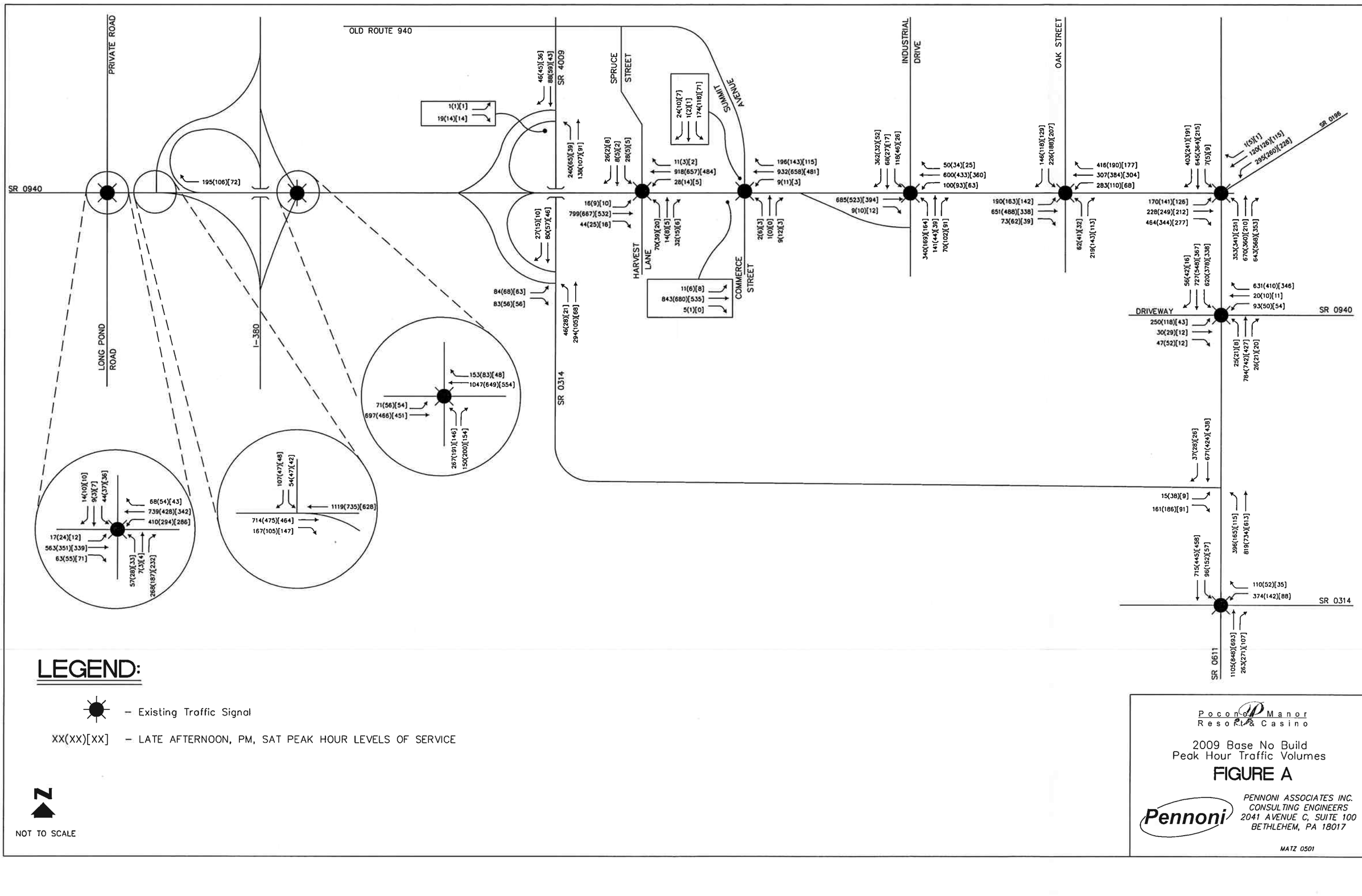
K Factor	D Factor	T Factor	Truck Percent	Base Traffic Year
8	60	2	5	2004

Traffic Pattern Group

URBAN - MINOR ARTERIALS, COLLECTORS, LOCAL ROADS

Online VideoLog

○ Fast(Cable, T1, DSL) ○ Slow (Dial-up)



LEGEND:

- Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

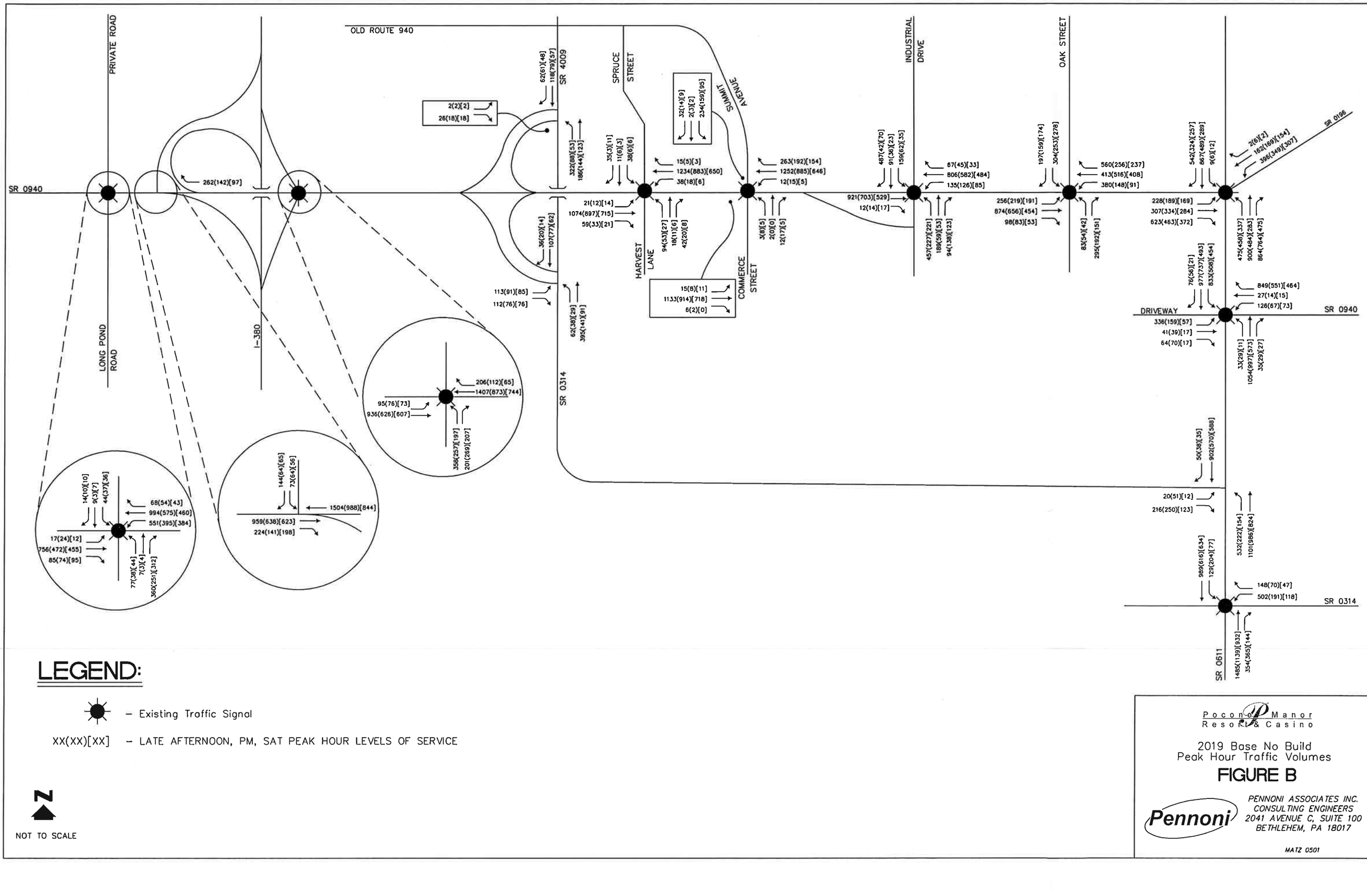
2009 Base No Build
Peak Hour Traffic Volumes

FIGURE A

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501



LEGEND:

- Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

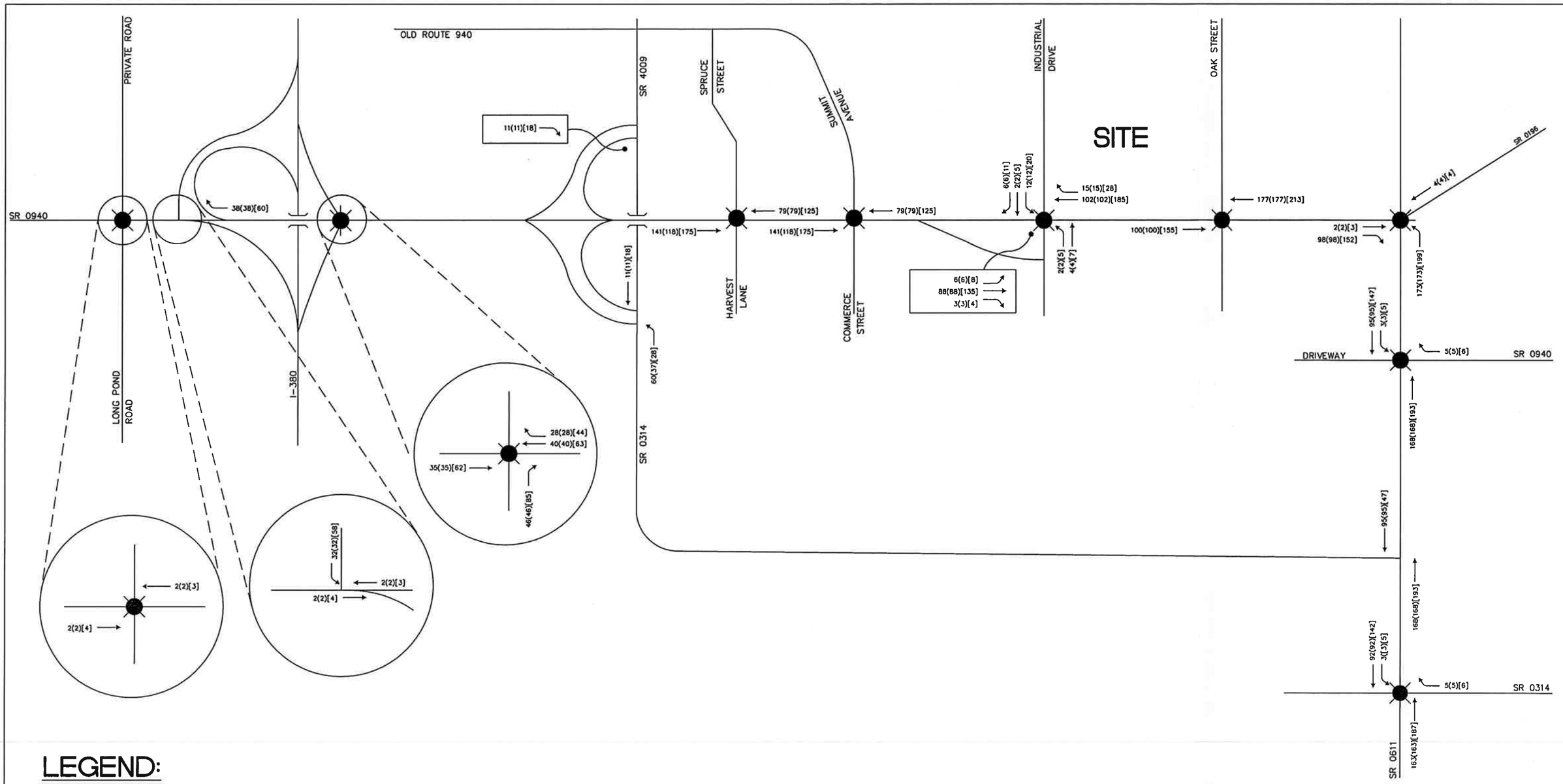
2019 Base No Build
Peak Hour Traffic Volumes

FIGURE B

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501



LEGEND:

– Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

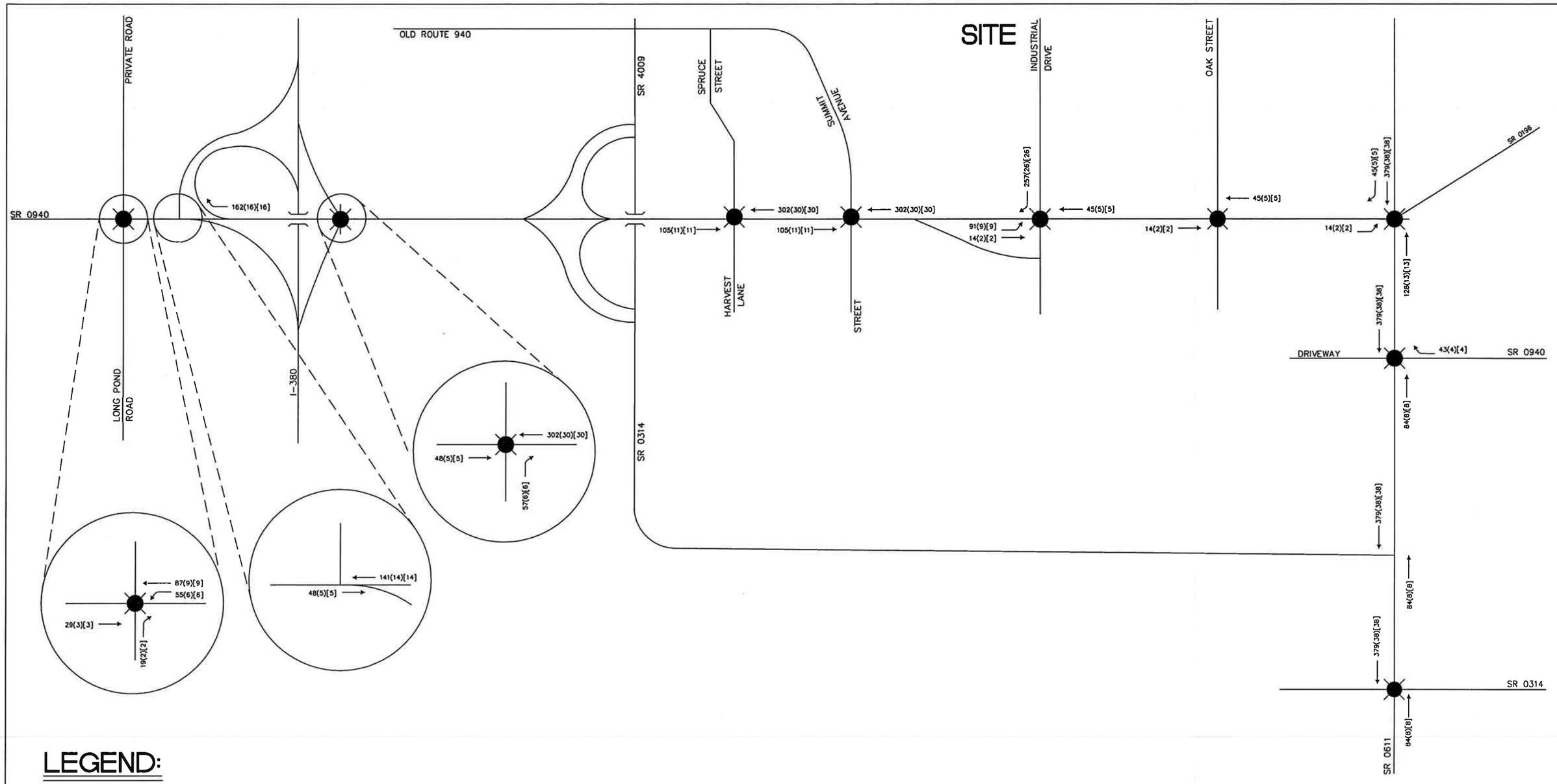
Lowe's / Hirshland Development Site
Generated Peak Hour Traffic Volumes

FIGURE C

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501



LEGEND:

- Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

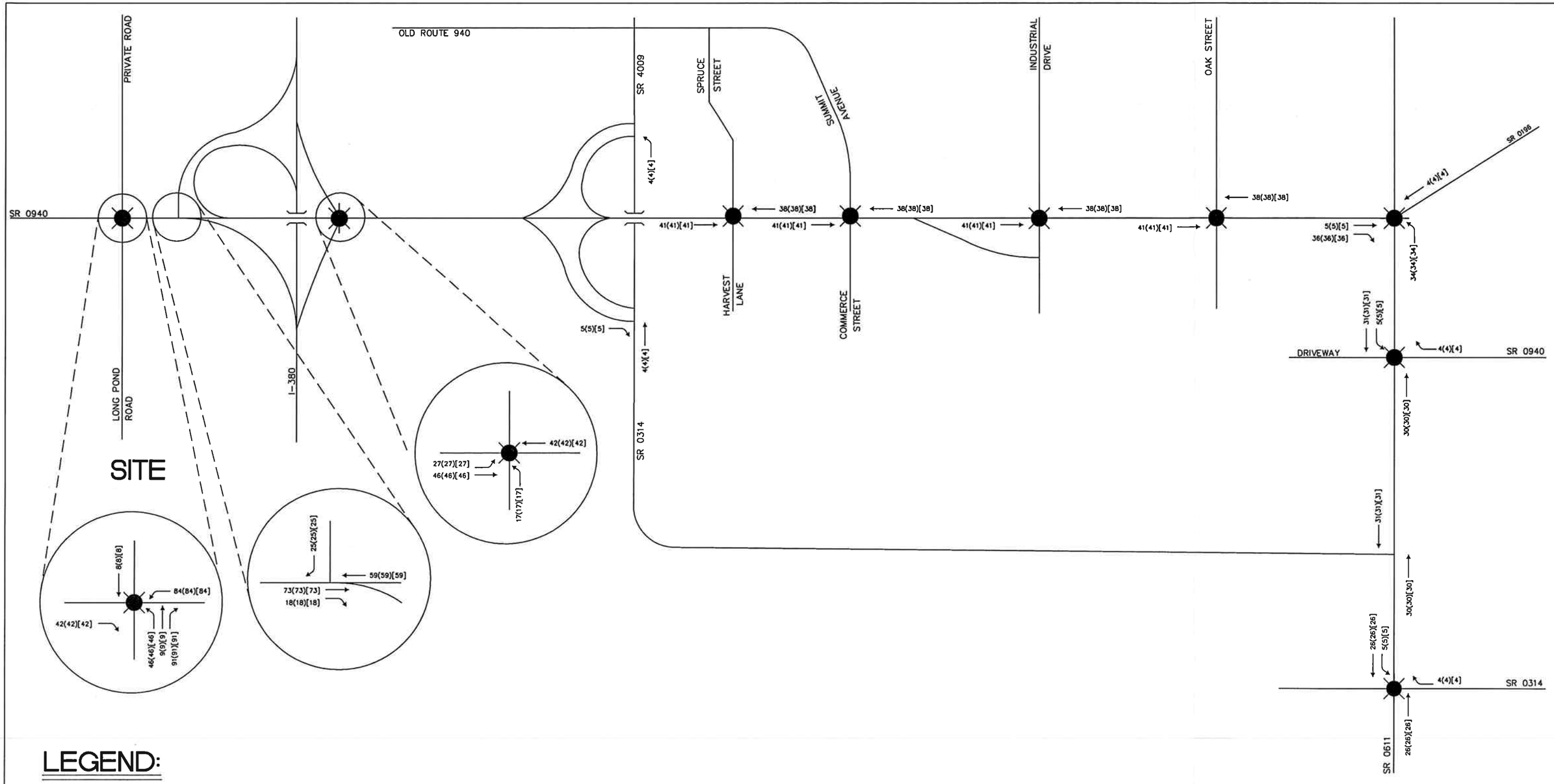
Arcadia Site Generated
Peak Hour Traffic Volumes

FIGURE D

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501



LEGEND:

– Existing Traffic Signal

XX(XX)[XX] – LATE AFTERNOON, PM, SAT PEAK HOUR LEVELS OF SERVICE

N

NOT TO SCALE

Pocono Manor Resort & Casino

Hirshland Long Pond Development Site
Generated Peak Hour Traffic Volumes

FIGURE E

Pennoni

PENNONI ASSOCIATES INC.
CONSULTING ENGINEERS
2041 AVENUE C, SUITE 100
BETHLEHEM, PA 18017

MATZ 0501

APPENDIX F

Trip Generation

Calculation of Trip Generation Without Adjustments

	X		Adjacent Street Traffic Peak Hour			Casino Traffic Peak Hour						SEE NOTES BELOW
			Friday Late Afternoon 4:00 to 6:00 PM			Friday Evening 6:00 to 8:00 PM			Saturday Evening 4:00 to 8:00 PM			
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	
Casino	8000	slots	4720	2480	2240	5520	2880	2640	6240	3360	2880	1
Shopping Center (LUC 820)	831.2	ksf	2533	1216	1317	2210	1143	1067	1514	417	1097	2
General Office Building (LUC 710)	50	ksf	135	23	112	7	2	5	7	2	5	3
Condos/Townhouses	475	units	216	145	71	105	64	41	105	64	41	4

Note 1

PM Weekday Adjacent Street Traffic and Friday & Saturday Casino Peak Hour Traffic based on ITE Article "Trip Generation Characteristics of Small & Medium Size Casinos" factors from Tables

Trip Generation for Casino	Adjacent Street Peak PM 4:00 to 6:00 PM		Casino Peak Friday Evening 6:00 to 8:00 PM		Saturday Evening 4:00 to 8:00 PM	
	In	Out	In	Out	In	Out
Reference Table	3	3	2	2	2	2
Factors	0.31	0.28	0.36	0.33	0.42	0.36
Traffic Volumes	2480	2240	2880	2640	3360	2880

Note 2

From ITE Shopping Center (820)
PM Adjacent Side Street, 48% In, 52% Out — LN(T)=0.66*LN(X)+ 3.40
Friday Casino Peak Hour
Ratio of Hourly Variations from ITE Shopping Centers (820), Page 1449, Table 2.

Weekday IN (6-7 PM) / Weekday IN (5-6 PM) — Multiplied by Weekday PM IN = 7.80% / 8.30% x 1,216 = 1,143

Weekday OUT (6-7 PM) / Weekday OUT (5-6 PM) — Multiplied by Weekday PM OUT = 7.70% / 9.50% x 1,317 = 1,067

Saturday Casino Hour, 52% In, 48% Out
Based on Peak Hour of Shopping (2-3 PM) from ITE Shopping Centers (820), Page 1455
LN(T)=0.65*LN(X)+ 3.77 = 3,428
Adjusted for Peak Hour of Casino (6-7 PM)
Ratio of Hourly Variations from ITE Shopping Centers (820). Page 1449, Table 2.

Saturday IN (6-7 PM) / Saturday IN (2-3 PM) — Multiplied by Saturday PM IN = 2.90% / 12.40% x 52% = 417

Saturday OUT (6-7 PM) / Saturday OUT (2-3 PM) — Multiplied by Saturday PM OUT = 8.00% / 12.00% x 48% = 1,097

Note 3

From ITE Office (710)
PM Adjacent Side Street, 17% In, 83% Out — T=1.12(X) +78.81
Friday & Saturday Casino Peak Hour

Ratio of Hourly Variations from Weekday Curve Catalogue at Columbia

Weekday IN (6-7 PM) / Weekday IN (4-6 PM Peak) — Multiplied by Weekday PM IN = 0.4 / 6 x 23 = 2

Weekday OUT (6-7 PM) / Weekday IN (4-6 PM Peak) — Multiplied by Weekday PM OUT = 1.2 / 28.4 x 112 = 5

Note 4

From ITE Condo/TH (230)
PM Adjacent Side Street, 67% In, 33% Out — LN(T)=0.82*LN(X)+ 0.32
Friday & Saturday Casino Peak Hour
Ratio of Hourly Variations from Weekday Curve Catalogue at Columbia

Weekday IN (6-7 PM) / Weekday IN (4-6 PM Peak) — Multiplied by Weekday PM IN = 12 / 27 x 145 = 64

Weekday OUT (6-7 PM) / Weekday IN (4-6 PM Peak) — Multiplied by Weekday PM OUT = 8 / 14 x 71 = 41

Total Trip Generation (NO REDUCTIONS APPLIED)

	X		Friday Late Afternoon			Friday PM			Saturday PM		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Casino	8000	slots	4720	2480	2240	5520	2880	2640	6240	3360	2880
Shopping Center (LUC 820)	831.2	ksf	2533	1216	1317	2210	1143	1067	1514	417	1097
General Office Building (LUC 710)	50	ksf	135	23	112	7	2	5	7	2	5
Golf Villas	475	units	216	145	71	105	64	41	105	64	41
Total Trips			7604	3864	3740	7842	4089	3753	7866	3843	4023

Shopping Center Diverted Linked Trips

	X		Friday Late Afternoon			Friday PM			Saturday PM		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Shopping Center (LUC 820)	831.2	ksf	2533	1216	1317	2210	1143	1067	1514	417	1097
Diverted Linked Percentages				29%			19%			19%	
Diverted Linked Trips			**734**	**367**	**367**	**420**	**210**	**210**	**288**	**144**	**144**
Primary (Non-Diverted Linked) Trips			1799	849	950	1790	933	857	1226	273	953

Primary (Non-Diverted Linked) Trips - Shopping Center Diverted Linked Trips Removed

	X		Friday Late Afternoon			Friday PM			Saturday PM		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Casino	8000	slots	4720	2480	2240	5520	2880	2640	6240	3360	2880
Shopping Center (LUC 820)	831.2	ksf	1799	849	950	1790	933	857	1226	273	953
General Office Building (LUC 710)	50	ksf	135	23	112	7	2	5	7	2	5
Golf Villas	475	units	216	145	71	105	64	41	105	64	41
Total Trips (Minus Diverted Linked)			6870	3497	3373	7422	3879	3543	7578	3699	3879

New Trips (External Trips from Internal Capture Worksheets)

	X		Friday Late Afternoon			Friday PM			Saturday PM		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Casino	8000	slots	4290	2254	2036	5140	2700	2440	5972	3160	2812
Shopping Center (LUC 820)	831.2	ksf	1332	624	708	1394	729	665	942	201	741
General Office Building (LUC 710)	50	ksf	82	11	71	5	2	3	5	2	3
Golf Villas	475	units	88	69	19	47	30	17	47	30	17
Total New Trips			**5792**	**2958**	**2834**	**6586**	**3461**	**3125**	**6966**	**3393**	**3573**

Interaction Reduction Calculation

		Friday Late Afternoon			Friday PM			Saturday PM		
		Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Total External (New) Trips		**5792**	**2958**	**2834**	**6586**	**3461**	**3125**	**6966**	**3393**	**3573**
Total Trips (Minus Diverted Linked)		**6870**	**3497**	**3373**	**7422**	**3879**	**3543**	**7578**	**3699**	**3879**
Resulting Interaction Reduction		**16%**			**11%**			**8%**		

New Trips - Figures 6A (Casino/Villas) & 6B (Shopping Center/Office)

		Friday Late Afternoon			Friday PM			Saturday PM		
		Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Casino	Casino/Villas	4290	2254	2036	5140	2700	2440	5972	3160	2812
Shopping Center (LUC 820)	Shopping/Office	1332	624	708	1394	729	665	942	201	741
General Office Building (LUC 710)	Shopping/Office	82	11	71	5	2	3	5	2	3
Golf Villas	Casino/Villas	88	69	19	47	30	17	47	30	17
Shopping/Office New Trip Total		**1414**	**635**	**779**	**1399**	**731**	**668**	**947**	**203**	**744**
Casino/Villas New Trip Total		**4378**	**2323**	**2055**	**5187**	**2730**	**2457**	**6019**	**3190**	**2829**

Office Interaction Breakdown (from Internal Capture Worksheets)

	X		Friday Late Afternoon			Friday PM			Saturday PM		
			Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
General Office Building (LUC 710)	50	ksf	135	23	112	7	2	5	7	2	5
Internal Trips			53	12	41	2	0	2	2	0	2
External Trips			82	11	71	5	2	3	5	2	3

Trip Generation Characteristics of Small to Medium Sized Casinos

Michael Trueblood, Tara Gude

OVERVIEW

This paper focuses on trip generation for small to medium sized casinos that are not part of a cluster of casinos. The data collection for this paper included three casinos located in Council Bluffs, Iowa. Two of the casinos are riverboat casinos and are located along the Missouri River, while the other casino includes an existing dog racetrack that later added slot machines.

In addition to the casinos located in Council Bluffs, the calculated trip generation rates were compared to rates included in a March 1998 ITE Journal article entitled *Gaming Casino Traffic*. The article calculated trip generation rates for two casinos in the St. Louis metropolitan area, the Casino Queen and the St. Charles Casino.

There is not an overwhelming amount of trip generation information available for casinos located outside of the typical Las Vegas or Atlantic City stereotype. The trip generation characteristics of casinos found in large clusters, like those in Las Vegas for example, are not similar to the casinos that will be covered in this article. For comparison purposes the MGM Grand Casino in Las Vegas has over 5,000 hotel rooms with over 3,500 slot machines, while the Treasure Island Casino has over 2,900 hotel rooms with over 2,000 slot machines. The trip generation characteristics of these casinos are quite different than the five covered in this paper due to their immense size and popularity. Another reason these casinos have different trip generation characteristics is because they are accessible by foot. In Las Vegas people tend to walk to and from the casinos or drive to one and then walk to several others throughout the course of a day.

It should be noted that each state has different rules and regulations that govern the actual type of establishment that can be used for gambling. Recent regulations have changed or have been modified in order to allow gambling facilities to be established beyond the typical riverboat casinos. Examples of these casinos are those operated by Indian Tribes. There are several casinos operated by Indian Tribes across the country. These casinos range in size, but they are good examples of the types of casinos this paper addresses.

LOCATION OF CASINOS

This section will provide a brief overview of the location of the three Council Bluffs casinos and the two casinos located in the St. Louis metropolitan area. The casino locations are shown in Figure 1. The three casinos in Council Bluffs, Iowa are located near the Missouri River in the Omaha metropolitan area. The Ameristar Casino and Harvey's Casino are located along the river within one mile of each other in the northwest quadrant of the I-29/I-80 interchange. Bluffs Run Casino is located about two miles east of these casinos along I-80. For comparison purposes to other casino locations, the 1998 average daily traffic (ADT) along I-29 was 40,500 vehicles, while the 1998 ADT along I-80 was 67,400 vehicles. The estimated 1999 population is 1,040,000 people within a 50-mile radius of the casinos.

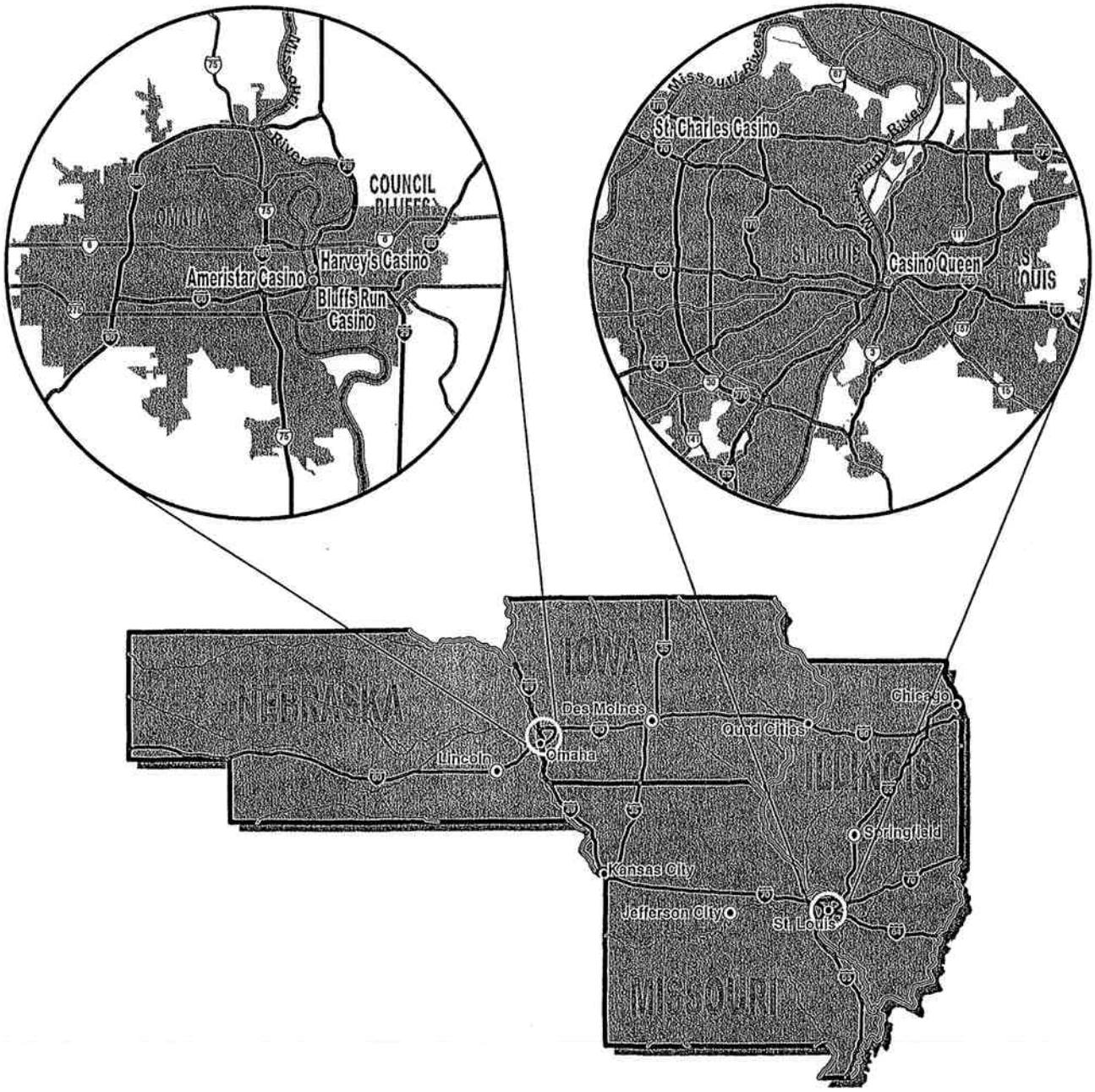


Figure 1 – Casino Location Map

The two St. Louis area casinos are also depicted in Figure 1. The St. Charles Casino is located along the Missouri River immediately north of I-70/Missouri River junction and about five miles to the west of I-270/I-70 junction in the City of St. Charles. The 1998 ADT along I-70 was 188,000 vehicles. The Casino Queen is located along the Mississippi River immediately east of the Gateway Arch and immediately north of the I-70/I-64/I-55 junction in the City of East St. Louis, Illinois. The ADT of these three interstates are 117,300 vehicles. The estimated 1999 population is 2,637,000 people within a 50-mile radius of the St. Louis area casinos.

GAMING REVENUES OF STUDY CASINOS

This section discusses the gaming revenues of the tri-state region where the five casinos presented in this paper are located. Between the years 1994-1999, St. Charles Casino had the second highest attendance of the eleven riverboat casinos within the state of Missouri. During the fiscal year 2000 the eleven riverboat casinos made over $1.0 billion in adjusted gross revenues (AGRs). In Illinois, the nine riverboat casinos made over $1.66 billion AGRs in 2000, with the Casino Queen ranked fifth out of the nine riverboats. In Iowa, Harvey's Casino and Ameristar Casino ranked one and two of out ten casinos in AGRs, respectively. The ten casinos in Iowa combined for over $575 million in AGRs. Casinos within the State of Iowa that also have pari-mutuel wagering are accounted for separately in terms of their AGRs. Bluffs Run Casino was ranked two out of three casinos in AGRs. The three racetrack casinos, as they are called in Iowa, combined for over $300 million in AGRs in 2000.

TRIP GENERATION CHARACTERISTICS OF STUDY CASINOS

Most of the available information concerning trip generation of casinos is related to large casinos or clusters of several casinos, such as those in Las Vegas. In order to determine the trip generation characteristics of small to medium sized casinos, HDR collected traffic information at three casinos in Council Bluffs, Iowa. Once the trip generation rates were computed, they were compared to trip generation rates of two St. Louis area casinos documented in a March 1998 issue of the ITE Journal.

Table 1 documents the five casinos' characteristics. It should be noted that the information for the Council Bluffs casinos is for the year 2000, while the information for the St. Louis casinos was collected in 1998.

Table 1 – General Casino Information

Amenities	Council Bluffs, Iowa			St. Louis Metro Area	
	Harvey's	Ameristar	Bluffs Run	St. Charles	Casino Queen
Slots	1169	1446	1479	1847	1020
Total Tables	53	51	0	90	51
Gaming sq. ft.	28,250	38,000	34,280	50,000	27,500
Hotel Rooms	251	356	0	*Not Applicable*	*Not Applicable*
Employees	1257	1329	1046	*Not Available*	1079
Pari-mutuel Wagering	No	No	Yes	No	No
Convention Center (seats)	900	170	No	*Not Available*	*Not Available*

The data collection for the Council Bluffs casinos was conducted during the following times:

- Ameristar – Saturday, July 15th to Tuesday, July 25th, 2000.
- Harvey's – Thursday, July 20th to Sunday, July 30th, 2000.
- Bluffs Run – Wednesday, July 19th to Saturday, July 29th and Saturday August 19th to Monday August 28th, 2000.

Automatic tube recorders were placed at all entrances and exits to the casinos. Data was collected in fifteen-minute intervals, 24-hours a day for each of the casinos. All five casinos operated on a 24-hour basis. As will be discussed later, the hourly information was unique when compared to other land uses. The following sections provide detailed information on the trip generation characteristics of the three Council Bluffs casinos. These rates were compared to the two St. Louis casinos and since the rates for all five casinos were similar, an average trip generation rate was computed.

Peak Hour Trip Generation Rates

A trip generation rate was calculated based on the number of slot machines that were located at each casino. Generation rates were calculated for both weekdays and weekends. Weekday trip generation rates were calculated for both the peak of facility and peak of adjacent street traffic. Traffic studies for new developments generally analyze the weekday peak hour of adjacent street traffic. However, several types of developments generate higher traffic levels during times other than the adjacent street traffic peak hour. Data from the casinos indicate that their peak trip generation rates are different than the peak hour of adjacent street traffic. Table 2 depicts the average PM peak hour trip generation rates of the five casinos for the peak hour of facility, while Table 3 depicts the average PM peak hour trip generation rate for the adjacent street traffic. The PM peak hour was chosen for purposes of calculating trip generation rates because they were generally higher than the AM peak hour. Tables A1, A2, and A3 located at the end of the paper document the three Iowa casinos daily raw peak hour and time of day data.

Table 2 – Facility Peak Hour Trip Generation

	PM Peak Hour										Average PM Peak Hour Trips	
	Harvey's		Ameristar		Bluffs Run		St. Charles		Casino Queen			
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Monday - Friday	502	380	423	477	537	491	725	625	348	336	507	462
Saturday/Sunday	482	375	624	471	553	579	850	750	*Not Available*		627	544
	PM Peak Hour Per Slot										Average PM Peak Hour Trips Per Slot	
	Harvey's		Ameristar		Bluffs Run		St. Charles		Casino Queen			
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Monday - Friday	0.43	0.33	0.29	0.33	0.36	0.33	0.39	0.34	0.34	0.33	0.36	0.33
Saturday/Sunday	0.41	0.32	0.43	0.33	0.37	0.39	0.46	0.41	*Not Available*		0.42	0.36

Note: St. Charles weekday rate is for Friday only.

Table 3 – Adjacent Street Peak Hour Trip Generation

	PM Peak Hour										Average PM Peak Hour Trips	
	Harvey's		Ameristar		Bluffs Run		St. Charles		Casino Queen			
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Monday - Friday	453	340	427	378	442	373	475	600	*Not Available*		449	423
Saturday/Sunday	423	334	491	413	490	467	*Not Available*		*Not Available*		468	404
	PM Peak Hour Per Slot										Average PM Peak Hour Trips Per Slot	
	Harvey's		Ameristar		Bluffs Run		St. Charles		Casino Queen			
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Monday - Friday	0.39	0.29	0.29	0.26	0.30	0.25	0.26	0.32	*Not Available*		0.31	0.28
Saturday/Sunday	0.36	0.29	0.34	0.29	0.33	0.32	*Not Available*		*Not Available*		0.34	0.30

Note: St. Charles weekday rate is for Friday only.

The PM peak hour trip generation rates were similar for each of the three Council Bluffs casinos. These rates were found to be comparable to the two St. Louis area casinos' trip generation rates. As shown above in Table 3, there is a correlation between the number of slot machines and the traffic generated by the casinos. For example, the two St. Louis area casinos have a difference in the number of trips generated by the facility. However when the trip generation rates were developed on a per slot machine basis, the rates are quite similar. Even though the St. Charles Casino has 800 slot machines more than the Casino Queen, their trip generation rates are comparable.

HDR's analysis of the five casinos in St. Louis and Council Bluffs found that their average weekday PM peak hour of adjacent street traffic trip generation rate was 0.59 trips per slot machine, while the average weekend PM peak hour trip generation rate was 0.64 trips per slot machine. These rates were close to the weekday and weekend PM peak hour of generator, which were 0.69 trips and 0.78 trips per slot machine, respectively.

The original trip generation rates calculated for the St. Louis area casinos were based on gaming positions. For purposes of this paper the rates provided in the March ITE Journal article were converted to trips per slot machine. This was done in order to directly compare the Council Bluffs and St. Louis trip generation rates. Gaming positions are calculated based on each type of game and are a percentage of the number of slot machines. Thus, calculating the number of gaming positions can get cumbersome. The other reason slot machines were used to calculate trip generation rates was because Bluffs Run Casino does not have table games.

Daily Trip Generation Rates

Table 4 shows the ADTs that were collected for the three Iowa casinos. An average daily trip rate was developed based on information from the three Iowa casinos and from the St. Charles Casino. Not enough information was available in order to include the Casino Queen in these calculations. Table 5 shows the weekday and weekend daily trip rates for each of the four casinos in addition to an average daily trip rate.

Table 4 – Average Daily Traffic (ADT)

Day	*Harvey's Daily Volume*			*Ameristar Daily Volume*			*Bluffs Run Daily Volume*		
	Inbound Volume	Outbound Volume	ADT	Inbound Volume	Outbound Volume	ADT	Inbound Volume	Outbound Volume	ADT
Sunday	7,038	6,749	13,787	7,438	8,175	15,613	8,871	8,887	17,758
Monday	5,402	4,745	10,147	5,378	5,394	10,771	6,665	6,741	13,406
Tuesday	9,334	8,496	17,830	6,903	6,761	13,663	7,702	7,180	14,882
Wednesday	6,401	5,221	11,622	5,823	5,730	11,553	7,499	6,827	14,326
Thursday	6,944	5,462	12,406	5,845	5,703	11,548	8,494	7,867	16,361
Friday	8,230	5,938	14,168	8,043	7,460	15,503	9,211	8,441	17,652
Saturday	8,075	7,025	15,100	8,311	8,129	16,440	9,957	9,392	19,349

Table 5 – Average Daily Traffic Rates

	ADT				ADT per slot				Average ADT per slot
	Harvey's	Ameristar	Bluffs Run	St. Charles	Harvey's	Ameristar	Bluffs Run	St. Charles	
Monday - Friday	13,249	12,496	15,325	17,362	11.33	8.64	10.36	9.40	9.93
Saturday/Sunday	14,443	16,026	18,554	19,959	12.36	11.08	12.54	10.81	11.70

Note: St. Charles weekday rate is for Friday only.

The ADT was higher on weekend days compared to weekdays. As shown in Table 4 there was more than a 50% increase in the ADT on weekends at some of the casinos. Another interesting factor that made relatively large increases in ADT was the special promotions that the casinos offer. For example, Harvey's Casino had double points for slot club members on Tuesdays, which generated more traffic than a typical weekend day. Double points allow slot club members to earn extra points that can be redeemed for cash.

Another finding of interest was the amount of traffic that occurs during the late night hours. It was assumed that this was related to the fact that all five casinos evaluated in this paper were located within a metropolitan area and relatively close to an interstate. Table 6 documents the time variation of trips at the three Council Bluffs casinos and the St. Charles Casino. Again, data was not available for Casino Queen.

Table 6 – Casino Related Time Variations of Trips

	Percentage of Traffic during each time period									
	Harvey's		Ameristar		Bluffs Run		St. Charles		Average	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
9 AM - 9 PM	64.6	58.4	69.0	61.9	66.1	59.5	65.7	69.5	66.3	62.3
9 PM - 9 AM	35.4	41.6	31.0	38.1	33.9	40.5	34.3	30.5	33.6	37.7
12 AM - 6 AM	10.9	17.9	9.2	16.2	10.9	17.4	13.8	9.0	11.2	15.1
6 AM - 12 PM	21.0	19.6	20.7	17.3	23.1	20.8	15.8	19.0	20.1	19.2
12 PM - 6 PM	34.3	31.2	37.9	32.3	34.7	31.7	34.6	33.6	35.4	32.2
6 PM - 12 AM	33.8	31.3	32.3	34.1	31.3	30.1	35.8	38.4	33.3	33.5

Generally, most land uses do not operate on a 24-hour basis. As a result, roadways located near these casinos tend to have more traffic on them during the late night hours. The daily trip information is important because it captures some of the impacts related to off-peak traffic levels. This could lead to potential concerns of nearby residents or business owners. If the location of a potential casino was proposed near a neighborhood, the future casino could cause lighting, noise, or other environmental concerns. Our data shows some justification to these concerns over late-night traffic. Typically between the hours of 12:00 AM and 6:00 AM most land uses are not in operation and thus do not generate trips. These four casinos, on the other hand, averaged over 15% of their daily trips during these same hours. This could lead to potential complaints by nearby residents or businesses.

SUMMARY

This paper included the trip generation rates of three Iowa casinos and compared their rates to that of two St. Louis casinos included in a March 1998 ITE Journal article. In general, the five casinos had comparable trip generation rates for both weekdays and weekends. These rates could be used when determining the viability of a proposed casino or the expansion of an existing casino. As always, data collected at or near the actual casino site should be used, but if this is not possible, these rates could provide for a relative comparison of whether the nearby roadways could handle the increase in traffic due to the casino.

HDR's analysis of the five casinos found that their average weekday PM peak hour of adjacent street traffic trip generation rate was 0.59 trips per slot machine, while the average weekend PM peak hour trip generation rate was 0.64 trips per slot machine. These rates were close to the weekday and weekend PM peak hour of generator, which were 0.69 trips and 0.78 trips per slot machine, respectively. The average weekday ADT was 9.93 trips per slot, while the weekend average ADT was 11.70 trips per slot.

It should also be noted that these casinos could be considered isolated in terms of walking from one to another. The generation rates of casinos that are found in clusters (Las Vegas) have different characteristics than the casinos studied in this paper. This can be related to the large number and size of casinos located within the clusters and the fact that they are generally located very close to each other. Another important piece of information that should be reviewed is a market analysis. A market analysis could give an estimate of the daily admissions expected at the casino. This could give an indication if these rates are applicable to the proposed casino. As with all land uses, variations in trip generation rates will exist, but knowing what the potential traffic impact could be is better than not having any comparative information.

Authors Information
Michael T. Trueblood, P.E., P.T.O.E
Traffic Engineer
HDR Engineering, Inc.
8404 Indian Hills Drive
Omaha, NE 68114
(402) 399-1277
Email: mtrueblo@hdrinc.com

Tara Gude, E.I.
Traffic Engineer
HDR Engineering, Inc.
8404 Indian Hills Drive
Omaha, NE 68114
(402) 399-1322
Email: tgude@hdrinc.com

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6. MGM Grand Casino Website, www.mgmgrand.com.

7. Treasure Island Casino Website, www.treasureisland.com.

Table A1 – Harvey's Peak Hour Raw Data

		AM Peak Hour			PM Peak Hour		
Day	Date	Time	Inbound Volume	Outbound Volume	Time	Inbound Volume	Outbound Volume
Thursday	7/20/00	11:00	358	209	6:00	458	317
Friday	7/21/00	10:45	323	252	5:00	548	387
Saturday	7/22/00	10:00	285	273	5:30	591	380
Sunday	7/23/00	11:00	433	265	3:30	409	462
Monday	7/24/00	10:45	280	208	4:30	347	279
Tuesday	7/25/00	11:00	562	469	6:00	715	606
Wednesday	7/26/00	10:45	320	203	5:00	440	352
Thursday	7/27/00	11:00	362	263	6:00	493	319
Friday	7/28/00	10:45	412	179	5:30	512	403
Saturday	7/29/00	11:00	304	256	5:00	518	317
Sunday	7/30/00	11:00	345	271	3:15	410	342

Table A2 – Ameristar Peak Hour Raw Data

Day	Date	AM Peak Hour			PM Peak Hour		
		Time	Inbound Volume	Outbound Volume	Time	Inbound Volume	Outbound Volume
Saturday	7/15/00	10:30	363	240	5:30	596	420
Sunday	7/16/00	11:00	379	388	6:00	609	543
Monday	7/17/00	10:45	248	282	3:15	314	435
Tuesday	7/18/00	11:00	430	287	3:00	463	637
Wednesday	7/19/00	10:45	340	230	5:30	429	334
Thursday	7/20/00	10:45	356	228	3:00	349	471
Friday	7/21/00	11:00	364	283	5:45	662	441
Saturday	7/22/00	11:00	370	265	5:45	700	461
Sunday	7/23/00	11:00	409	351	5:45	592	461
Monday	7/24/00	10:45	299	289	3:15	319	462
Tuesday	7/25/00	11:00	458	343	3:00	427	557

Table A3 – Bluffs Run Peak Hour Raw Data

Day	AM Peak Hour			PM Peak Hour		
	Time	Inbound Volume	Outbound Volume	Time	Inbound Volume	Outbound Volume
Monday	11:00	348	420	15:00	443	416
Tuesday	10:45	436	393	15:00	549	513
Wednesday	11:00	417	310	15:00	542	474
Thursday	10:45	425	370	15:30	571	507
Friday	11:00	406	379	15:30	580	544
Saturday	11:00	478	361	16:00	486	635
Sunday	10:15	423	378	15:00	620	523

Land Use: 820
Shopping Center

Description

A shopping center is an integrated group of commercial establishments that is planned, developed, owned and managed as a unit. A shopping center's composition is related to its market area in terms of size, location and type of store. A shopping center also provides on-site parking facilities sufficient to serve its own parking demands. Specialty retail center (Land Use 814) and factory outlet center (Land Use 823) are related uses.

Additional Data

Shopping centers, including neighborhood centers, community centers, regional centers and super regional centers, were surveyed for this land use. Some of these centers contained non-merchandising facilities, such as office buildings, movie theaters, restaurants, post offices, banks, health clubs and recreational facilities (for example, ice skating rinks or indoor miniature golf courses). The centers ranged in size from 1,700 to 2.2 million square feet of gross leasable area (GLA). The centers studied were located in suburban areas throughout the United States and therefore represent typical U.S. suburban conditions.

Many shopping centers, in addition to the integrated unit of shops in one building or enclosed around a mall, include outparcels (peripheral buildings or pads located on the perimeter of the center adjacent to the streets and major access points). These buildings are typically drive-in banks, retail stores, restaurants, or small offices. Although the data herein do not indicate which of the centers studied included peripheral buildings, it can be assumed that some of the data show their effect.

The vehicle trips generated at a shopping center are based upon the GLA of the center. In cases of smaller centers without an enclosed mall or peripheral buildings, the GLA could be the same as the gross floor area of the building.

Separate equations have been developed for shopping centers during the Christmas shopping season. Plots were included for the weekday peak hour of adjacent street traffic and the Saturday peak hour of the generator.

Information on approximate hourly, monthly and daily variation in shopping center traffic is shown in Tables 1–4. It should be noted, however, that the information contained in these tables is based on a limited sample size. Therefore, caution should be exercised when applying the data. Also, some information provided in the tables may conflict with the results obtained by applying the average rate or regression equations. When this occurs, it is suggested that the results from the average rate or regression equations be used, as they are based on a larger number of studies.

Shopping Center
(820)

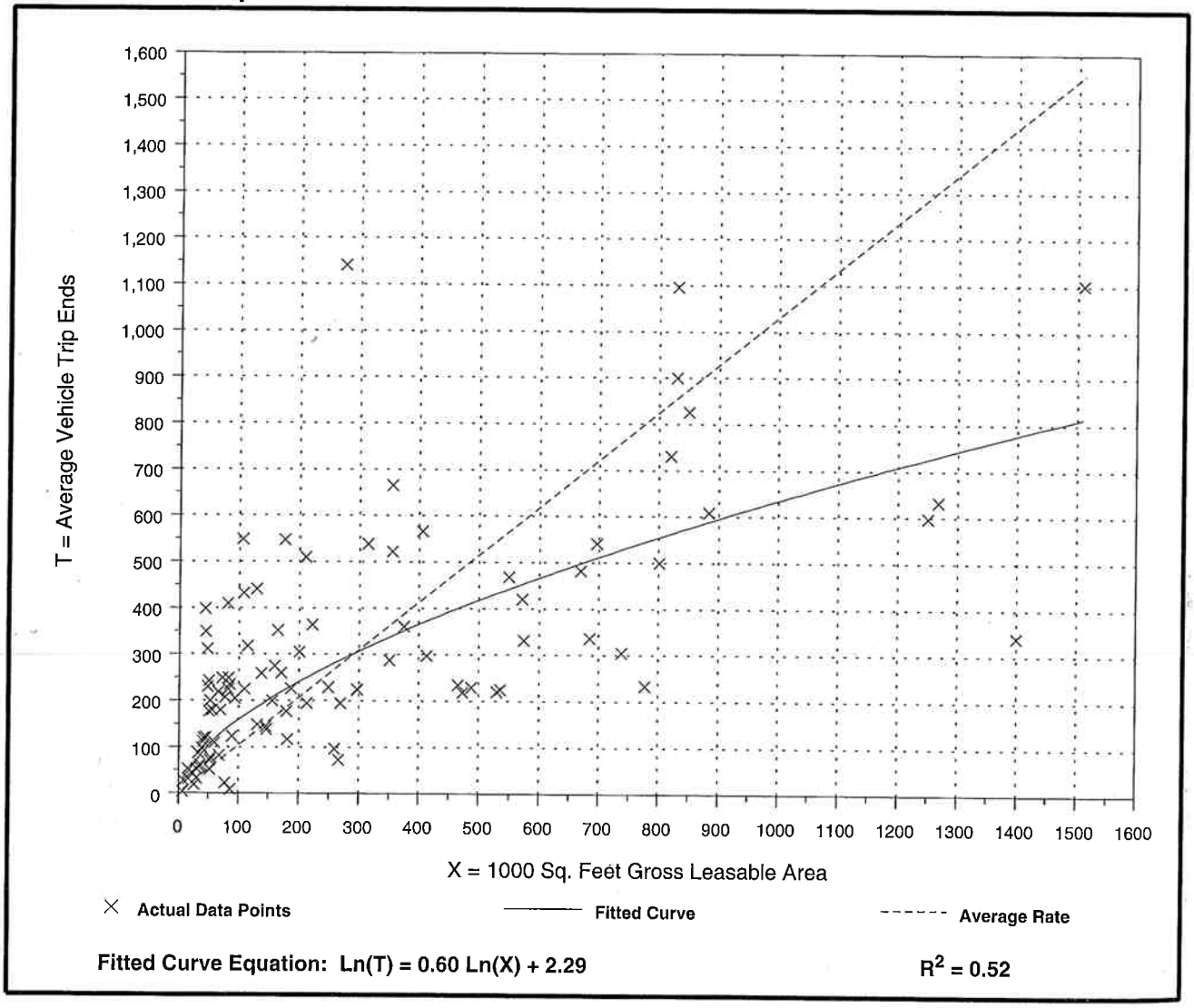
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Leasable Area**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 98
Average 1000 Sq. Feet GLA: 287
Directional Distribution: 61% entering, 39% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
1.03	0.10 - 9.05	1.40

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.60 Ln(X) + 2.29

R^2 = 0.52

Shopping Center
(820)

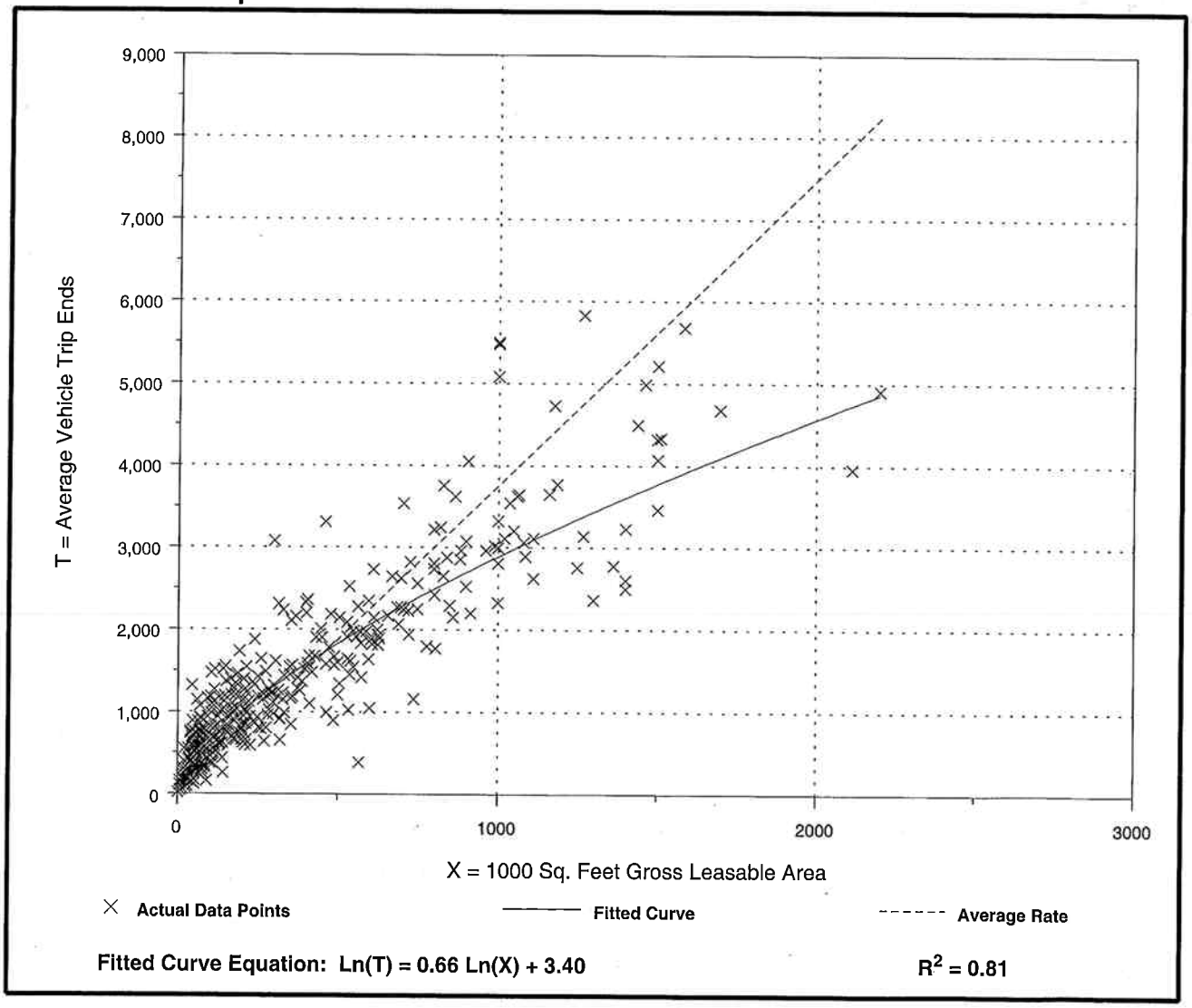
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Leasable Area**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 407
Average 1000 Sq. Feet GLA: 379
Directional Distribution: 48% entering, 52% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
3.75	0.68 - 29.27	2.75

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.66 Ln(X) + 3.40

R^2 = 0.81

Shopping Center
(820)

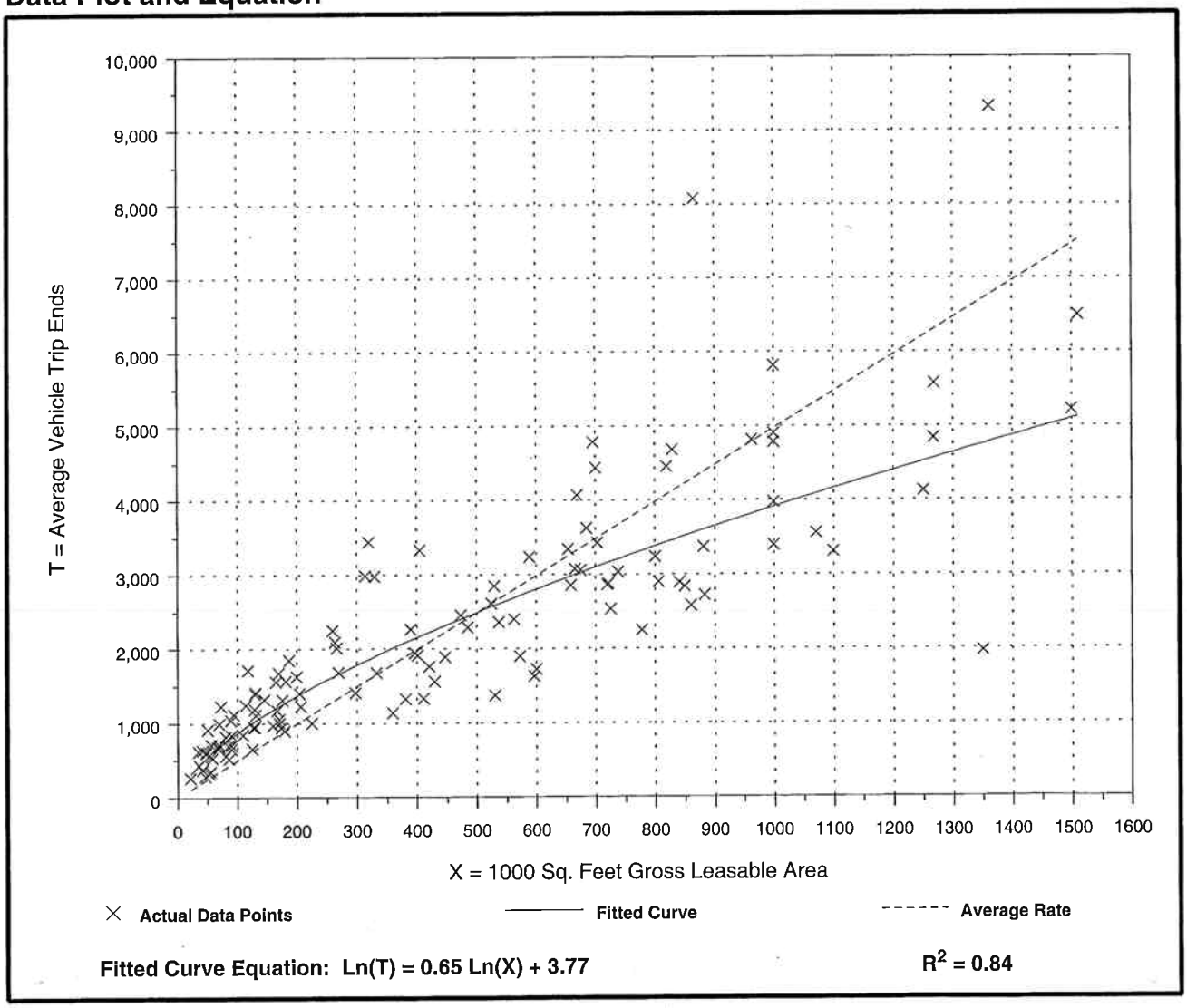
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Leasable Area**
On a: **Saturday,**
Peak Hour of Generator

Number of Studies: 124
Average 1000 Sq. Feet GLA: 447
Directional Distribution: 52% entering, 48% exiting

Trip Generation per 1000 Sq. Feet Gross Leasable Area

Average Rate	Range of Rates	Standard Deviation
4.97	1.46 - 18.32	3.11

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.65 Ln(X) + 3.77

R^2 = 0.84

Table 1 Hourly Variation in Shopping Center Traffic Less Than 100,000 Square Feet Gross Leasable Area				
Time	Average Weekday[a]		Average Saturday[b]	
	Percent of 24 Hour Entering Traffic	Percent of 24 Hour Exiting Traffic	Percent of 24 Hour Entering Traffic	Percent of 24 Hour Exiting Traffic
10–11 a.m.	7.6	6.5	6.8	5.8
11 a.m.–12 p.m.	7.6	8.4	8.8	8.9
12–1 p.m.	7.6	8.2	9.4	8.8
1–2 p.m.	6.9	7.5	10.0	10.1
2–3 p.m.	9.0	7.8	9.7	8.4
3–4 p.m.	9.6	9.5	10.3	9.6
4–5 p.m.	9.7	10.4	10.7	10.7
5–6 p.m.	10.3	11.0	9.4	8.7
6–7 p.m.	7.4	8.3	7.3	8.3
7–8 p.m.	5.4	5.3	5.0	5.7
8–9 p.m.	4.2	4.3	3.2	3.9
9–10 p.m.	1.9	1.8	2.0	3.3

[a] Source numbers - 95, 124; based on four studies.
[b] Source numbers - 95, 124; based on four studies.

Table 2 Hourly Variation in Shopping Center Traffic More Than 300,000 Square Feet Gross Leasable Area						
Time	Average Weekday[a]		Average Saturday[b]		Average Sunday[c]	
	Percent of 24 Hour Entering Traffic	Percent of 24 Hour Exiting Traffic	Percent of 24 Hour Entering Traffic	Percent of 24 Hour Exiting Traffic	Percent of 24 Hour Entering Traffic	Percent of 24 Hour Exiting Traffic
10–11 a.m.	7.5	3.7	8.3	4.3	3.5	1.7
11 a.m.–12 p.m.	8.6	5.9	10.9	6.9	9.4	3.5
12–1 p.m.	9.5	7.9	11.9	8.9	15.3	6.3
1–2 p.m.	8.7	8.2	12.5	10.4	17.3	11.0
2–3 p.m.	7.9	8.8	12.4	12.0	16.4	14.4
3–4 p.m.	7.7	8.9	11.2	12.9	13.8	16.2
4–5 p.m.	8.2	9.1	9.2	13.4	9.8	16.8
5–6 p.m.	8.3	9.5	5.2	12.7	5.5	15.7
6–7 p.m.	7.8	7.7	2.9	8.0	2.2	6.1
7–8 p.m.	8.4	7.0	1.9	2.1	1.3	1.9
8–9 p.m.	4.7	7.7	1.4	1.2	0.8	1.1
9–10 p.m.	1.8	9.1	2.9	0.8	0.6	0.9

[a] Source numbers - 48, 73, 88, 124; based on seven studies.
[b] Source numbers - 73, 88; based on three studies.
[c] Source numbers - 88; based on two studies.

Land Use: 710
General Office Building

Description

A general office building houses multiple tenants; it is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building or buildings may contain a mixture of tenants including professional services; insurance companies; investment brokers; and tenant services, such as a bank or savings and loan institution, a restaurant or cafeteria and service retail facilities. Nearly all of the buildings surveyed were in suburban locations. Corporate headquarters (Land Use 714), single tenant office building (Land Use 715), office park (Land Use 750), research and development center (Land Use 760) and business park (Land Use 770) are related uses.

If information is known about individual buildings, it is suggested that the general office building category be used rather than office parks when estimating trip generation for one or more office buildings in a single development. The office park category is more general and should be used when a breakdown of individual or different uses is not known. If the general office building category is used and if additional buildings, such as banks, restaurants, or retail stores are included in the development, then the development should be treated as a multiuse project. On the other hand, if the office park category is used, internal trips are already reflected in the data and do not need to be considered.

When the buildings are interrelated (defined by shared parking facilities or the ability to easily walk between buildings) or house one tenant, it is suggested that the total area or employment of all the buildings be used for calculating the trip generation. When the individual buildings are isolated and not related to one another, it is suggested that trip generation be calculated for each building separately and then summed.

Additional Data

Average weekday transit trip ends—

> Transit service was either nonexistent or negligible at the majority of the sites surveyed in this land use. Users may wish to modify trip generation rates presented in this land use to reflect the presence of public transit, carpools and other transportation demand management (TDM) strategies. Information has not been analyzed to document the impacts of TDM measures on the total site generation. See the ITE *Trip Generation Handbook* for additional information on this topic.

The average building occupancy varied considerably within the studies where occupancy data was provided. For buildings with occupancy rates reported, the average percent of occupied gross leasable area was 88 percent.

Some of the regression curves plotted for this land use may produce illogical trip end estimates for small office buildings. When the proposed site size is significantly smaller than the average-sized facility published in this report, caution should be used when applying these statistics. For more information, please refer to Chapter 3, "Guidelines for Estimating Trip Generation," of the *Trip Generation Handbook*.

In some regions peaking may occur earlier or later and last somewhat longer than the traditional 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. peak period time frames.

The sites were surveyed from the 1960s to the 2000s throughout the United States.

Trip Characteristics

The trip generation for the a.m. and p.m. peak hours of the generator typically coincided with the peak hours of the adjacent street traffic; therefore, only one a.m. peak hour and one p.m. peak hour, which represent both the peak hour of the generator and the peak hour of the adjacent street traffic, are shown for general office buildings.

Source Numbers

2, 5, 20, 21, 51, 53, 54, 72, 88, 89, 92, 95, 98, 100, 159, 161, 172, 175, 178, 183, 184, 185, 189, 193, 207, 212, 217, 247, 253, 257, 260, 262, 279, 295, 297, 298, 300, 301, 302, 303, 304, 321, 322, 323, 324, 327, 404, 407, 408, 418, 419, 423, 562

General Office Building
(710)

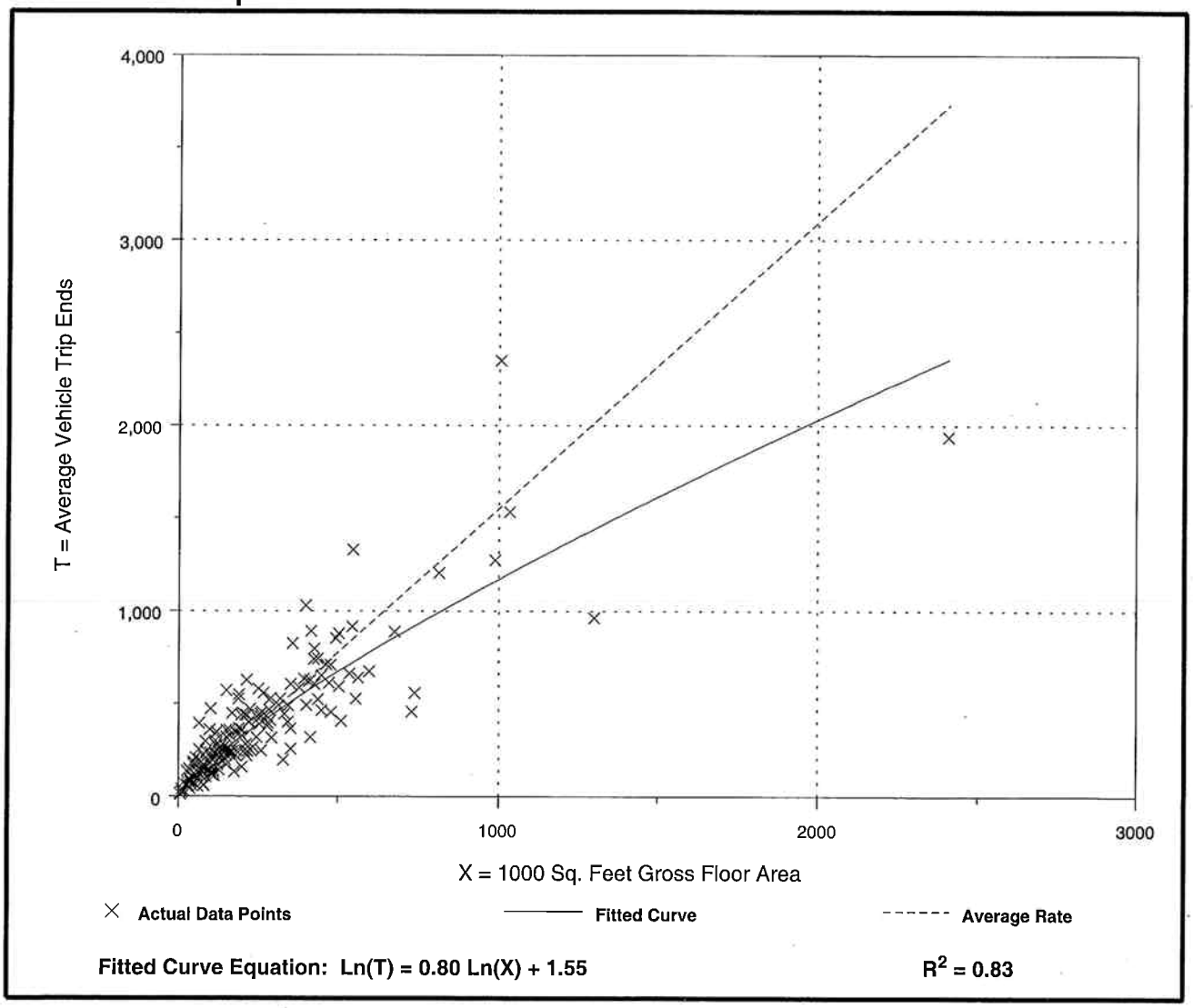
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Floor Area**
On a: **Weekday,**
A.M. Peak Hour

Number of Studies: 217
Average 1000 Sq. Feet GFA: 223
Directional Distribution: 88% entering, 12% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
1.55	0.60 - 5.98	1.39

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.80 Ln(X) + 1.55

R^2 = 0.83

General Office Building
(710)

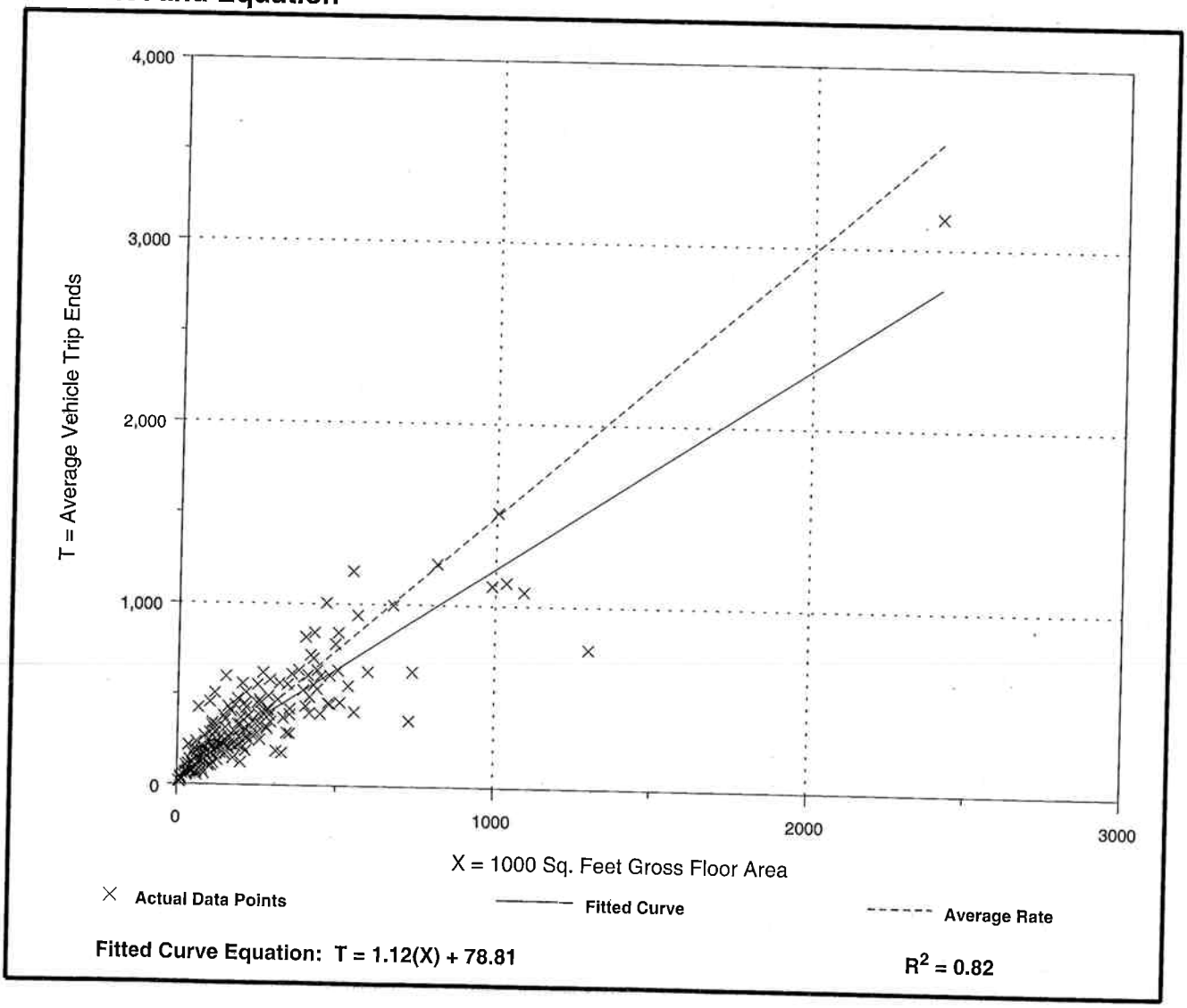
Average Vehicle Trip Ends vs: **1000 Sq. Feet Gross Floor Area**
On a: **Weekday,**
P.M. Peak Hour

Number of Studies: 235
Average 1000 Sq. Feet GFA: 216
Directional Distribution: 17% entering, 83% exiting

Trip Generation per 1000 Sq. Feet Gross Floor Area

Average Rate	Range of Rates	Standard Deviation
1.49	0.49 - 6.39	1.37

Data Plot and Equation



Fitted Curve Equation: T = 1.12(X) + 78.81

R^2 = 0.82

Land Use: 230
Residential Condominium/Townhouse

Description

Residential condominiums/townhouses are defined as ownership units that have at least one other owned unit within the same building structure. **Both condominiums and townhouses are included in this land use.** The studies in this land use did not identify whether the condominiums/townhouses were low-rise or high-rise. Low-rise residential condominium/townhouse (Land Use 231), high-rise residential condominium/townhouse (Land Use 232) and luxury condominium/townhouse (Land Use 233) are related land uses.

Additional Data

The number of vehicles and the number of residents had a high correlation with average weekday vehicle trip ends. The use of these variables was limited, however, because the number of vehicles and residents was often difficult to obtain or predict. The number of dwelling units was generally used as the independent variable of choice because it is usually readily available, easy to project and had a high correlation with average weekday vehicle trip ends.

The peak hour of the generator typically coincided with the peak hour of the adjacent street traffic.

The sites were surveyed from the mid-1970s to the 2000s throughout the United States and Canada.

Source Numbers

4, 92, 94, 95, 97, 100, 105, 106, 114, 168, 186, 204, 237, 253, 293, 319, 320, 321, 390, 412, 418, 561, 562, 583

Residential Condominium/Townhouse
(230)

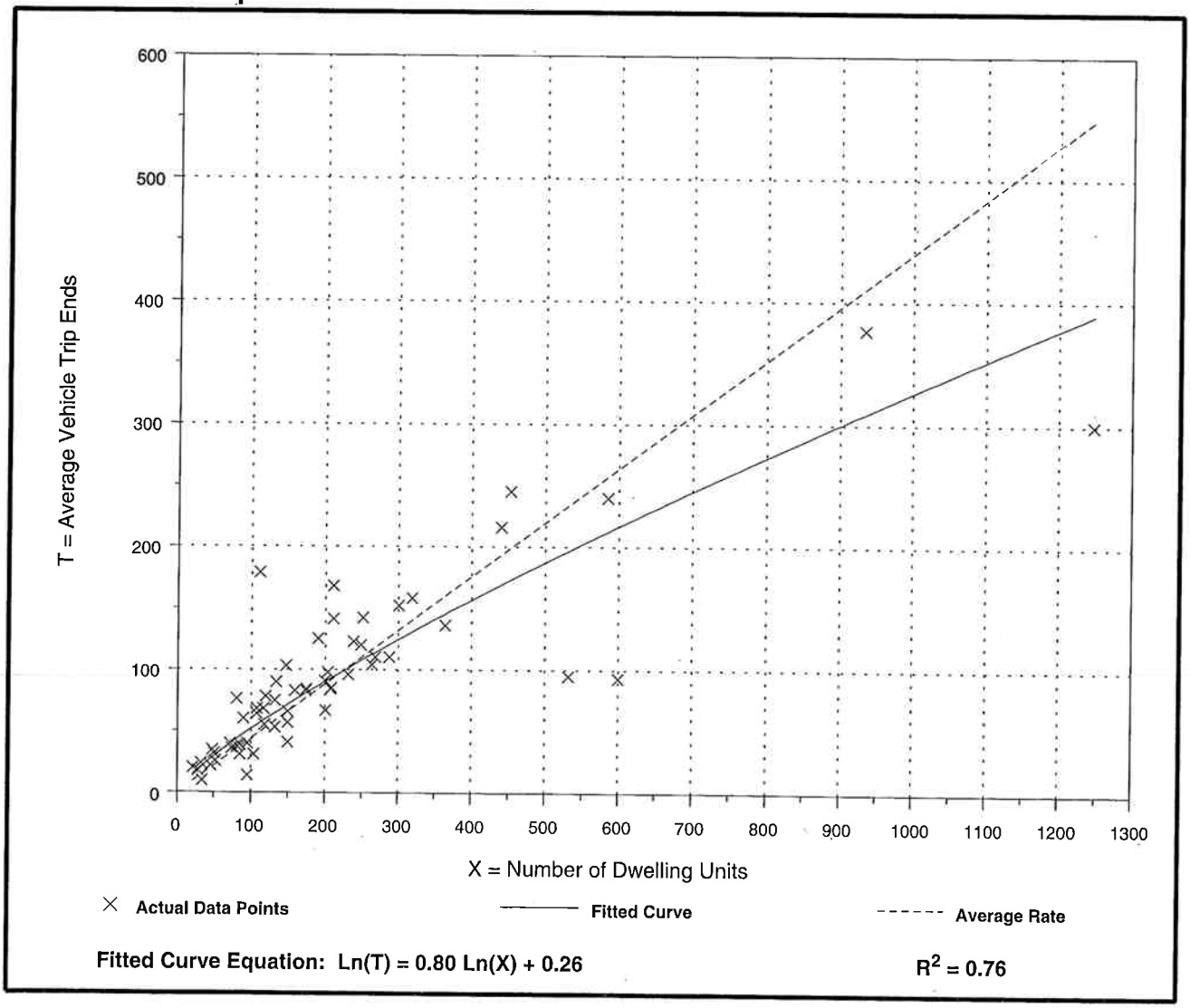
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

Number of Studies: 59
Avg. Number of Dwelling Units: 213
Directional Distribution: 17% entering, 83% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.15 - 1.61	0.69

Data Plot and Equation



Fitted Curve Equation: $Ln(T) = 0.80\ Ln(X) + 0.26$

$R^2 = 0.76$

Residential Condominium/Townhouse
(230)

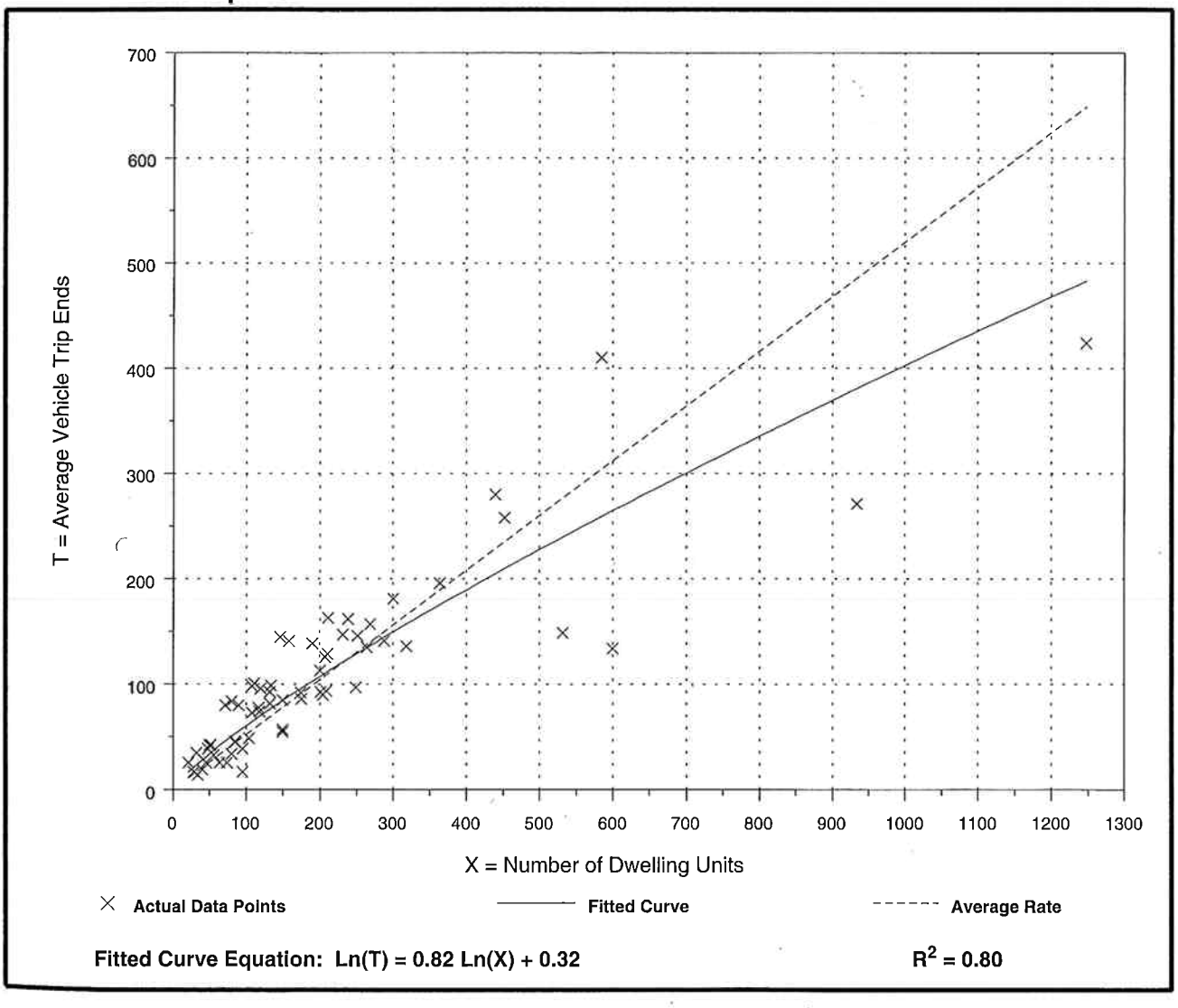
Average Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

Number of Studies: 62
Avg. Number of Dwelling Units: 205
Directional Distribution: 67% entering, 33% exiting

Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.52	0.18 - 1.24	0.75

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.82 Ln(X) + 0.32

R^2 = 0.80

Columbia

WEEKDAY CURVE CATALOGUE INBOUND TRIPS (% TWO WAY DAILY TRIPS)

Title	No.	AM 12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	PM 12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11
Nul Curve	IT-01-A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Retail	IT-02-S	0	0	0	0	0	0	0	0	2.0	5.0	7.0	8.0	8.0	9.0	7.0	6.0	6.0	8.0	9.0	12.0	9.0	4.0	0	0
Office	IT-03-W	0	0	0	0	0	0.6	1.2	9.6	25.6	10.8	8.2	7.6	4.4	7.2	7.6	9.2	6.0	1.6	0.6	0	0	0	0	0
Ind. Dist.	IT-04-W																								
Ind. R&D	IT-05-W																								
Ind. LMFG	IT-06-W																								
Housing	IT-07-A	0	0	0	0	0	0	0	1.0	4.0	3.0	2.0	3.0	3.0	2.0	3.0	5.0	11.0	27.0	32.0	7.0	6.0	5.0	4.0	2.0
Housing	IT-08-W																								
Housing	IT-09-S																								
Housing	IT-10-E																								
Housing	IT-11-O																								
Motel Rm.	IT-12-O	3.0	3.0	0	0	0	0	0	2.0	3.0	2.0	3.0	4.0	6.0	6.0	7.0	6.0	7.0	9.0	9.0	7.0	6.0	6.0	6.0	5.
Meet. Rms.	IT-13-O	0	0	0	0	0	0	0	6.2	7.6	6.2	7.6	4.0	7.6	4.4	5.8	8.9	10.2	9.3	10.7	4.9	4.4	1.8	0.4	0
Gas Station	IT-14-S																								
School	IT-15-E																								
Com. College	IT-16-E																								

WEEKDAY CURVE CATALOGUE OUTBOUND TRIPS (% TWO WAY DAILY TRIPS)

Title	No.	AM 12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-12	PM 12-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	10-11	11-
Nul Curve	OT-01-A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Retail	OT-02-S	0	0	0	0	0	0	0	0	0	1.0	3.0	6.0	7.0	8.0	9.0	8.0	7.0	8.0	7.0	7.0	10.0	13.0	6.0	0
Office	OT-03-W	0	0	0	0	0	0	0	0	1.2	6.8	9.2	7.2	3.2	6.8	10.4	11.8	28.4	13.6	1.2	0.4	0.2	0.2	0	0
Ind. Dist.	OT-04-W																								
Ind. R&D	OT-05-W																								
Ind. LMFG	OT-06-W																								
Housing	OT-07-A	0	0	0	0	0	0	4.0	16.0	23.0	9.0	4.0	1.0	1.0	3.0	4.0	2.0	5.0	14.0	8.0	2.0	1.0	1.0	1.0	1.0
Housing	OT-08-W																								
Housing	OT-09-S																								
Housing	OT-10-E																								
Housing	OT-11-O																								
Motel Rm.	OT-12-O	0	0	0	0	0	0	2.0	6.0	10.0	7.0	7.0	8.0	11.0	8.0	8.0	8.0	7.0	6.0	4.0	3.0	2.0	2.0	1.0	0
Meet. Rms.	OT-13-O	0	0	0	0	0	0	1.8	6.1	4.4	4.0	2.7	3.6	0.9	5.3	6.7	5.3	8.4	10.7	11.6	5.8	4.9	8.0	6.7	3.
Gas Station	OT-14-S																								
School	OT-15-E																								
Com. College	OT-16-E																								

Table 5.4
Pass-By Trips and Diverted Linked Trips
Weekday, P.M. Peak Period
Land Use 820--Shopping Center

Size (1,000 SF GLA)	Location	Weekday Survey Date	No. of Interviews	Time Period	Primary Trip (%)	Non-Pass-By Trip (%)	Diverted Linked Trip (%)	Pass-By Trip (%)	Adj. Street Peak Hour Volume	Average Daily Traffic	Source
738	East Brunswick, NJ	Apr. 1994	283	4-6 PM	79	-	7	14	8,059	n/a	ICSC
560	Harrisonburg, VA	Apr. 1994	437	4-6 PM	49	-	32	19	3,051	n/a	ICSC
667	Bourbonais, IL	May 1994	200	4-6 PM	53	-	31	16	2,770	n/a	ICSC
808	Laguna Hills, CA	Jun. 1994	240	4-6 PM	73	-	14	13	4,035	n/a	ICSC
800	San Jose, CA	May 1994	205	4-6 PM	51	-	28	21	7,474	n/a	ICSC
598	Greeley, CO	May 1994	205	4-6 PM	55	-	28	17	3,840	n/a	ICSC
581	Pueblo, CO	May 1994	296	4-6 PM	53	-	29	18	2,939	n/a	ICSC
720	Framingham, MA	Dec. 1982	92	3:30-7 PM	39	-	38	23	n/a	73,628	Raymond Keyes Assoc.
890	Newark, DE	Jul. 1984	179	3-8 PM	49	-	39	12	n/a	n/a	Raymond Keyes Assoc.
658	Wayne, NJ	Sept. 1984	243	3-6 PM	61	-	12	27	n/a	n/a	Raymond Keyes Assoc.
1,200	Washington, D.C.	1980	364	4-6 PM	35	-	40	25	n/a	n/a	Gorove-Slade
800	Southern CA	n/a	1,000	4-6 PM	45	-	43	12	n/a	n/a	Frischer
622	Ramsey, MN	Nov. 1985	46	4-9 PM	26	-	30	44	n/a	36,370	Raymond Keyes Assoc.
736	Pensacola, FL	Oct. 1985	383	3-7 PM	35	-	39	26	n/a	n/a	Raymond Keyes Assoc.
500	Meriden, CT	Apr. 1985	n/a	4-6 PM	-	92	-	8	n/a	n/a	Connecticut DOT
660	Enfield, CT	Apr. 1985	n/a	4-6 PM	-	78	-	22	n/a	n/a	Connecticut DOT
845	Waterford, CT	Apr. 1985	n/a	4-6 PM	-	86	-	14	n/a	n/a	Connecticut DOT
1,060	West Hartford, CT	Apr. 1985	n/a	4-6 PM	-	83	-	17	n/a	n/a	Connecticut DOT
762	Orlando, FL	Fall 1985	182	4-6 PM	52	-	23	25	n/a	n/a	Kimley Horn
921	Albany, NY	Jul. & Aug. 1985	196	4-6 PM	42	-	35	23	n/a	60,950	Raymond Keyes Assoc.
550	Greece, NY	Jun. 1988	117	4-6 PM	52	-	-	48	n/a	40,763	Sear Brown
1,090	Ross Twp, PA	Jul. 1988	411	2-8 PM	56	-	10	34	n/a	51,500	Wilbur Smith and Assoc.
760	Calgary, Alberta	Oct.-Dec. 1987	15,436	4-6 PM	39	-	41	20	n/a	n/a	City of Calgary DOT
549	Natick, MA	Feb. 1989	n/a	4:45-5:45 PM	26	-	41	33	n/a	48,782	Raymond Keyes Assoc.
Average of Shopping Centers 500,000 SF or greater					-	-	**29**	**22**	-	-	-

Source: ITE Trip Generation Handbook

Table 5.4
Pass-By Trips and Diverted Linked Trips
Weekday, P.M. Peak Period

Land Use 820—Shopping Center

SIZE (1,000 SQ. FEET GLA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PRIMARY TRIP (%)	NON-PASS-BY TRIP (%)	DIVERTED LINKED TRIP (%)	PASS-BY TRIP (%)	ADJ. STREET PEAK HOUR VOLUME	AVERAGE DAILY TRAFFIC	SOURCE
53	Port Orange, FL	1993	162	2-6 P.M.	-	41	-	59	n/a	n/a	TPD, Inc.
9	Kissimmee, FL	1994	107	2-6 P.M.	20	-	14	66	n/a	n/a	TPD, Inc.
77	Edgewater, FL	1992	365	2-6 P.M.	-	54	-	46	n/a	n/a	TPD, Inc.
82	Deltona, FL	1992	336	2-6 P.M.	-	66	-	34	n/a	n/a	TPD, Inc.
78	Orlando, FL	1991	702	2-6 P.M.	23	-	22	55	n/a	n/a	TPD, Inc.
45	Orlando, FL	1992	844	2-6 P.M.	24	-	20	56	n/a	n/a	TPD, Inc.
50	Orlando, FL	1992	555	2-6 P.M.	41	-	18	41	n/a	n/a	TPD, Inc.
52	Orlando, FL	1995	665	2-6 P.M.	33	-	25	42	n/a	n/a	TPD, Inc.
17	Orlando, FL	1994	196	2-6 P.M.	-	34	-	66	n/a	n/a	TPD, Inc.
60	Orlando, FL	1995	1,583	3-7 P.M.	38	-	22	40	n/a	n/a	TPD, Inc.
158	Crestwood, KY	Jun. 1993	129	4-6 P.M.	39	-	25	36	759	n/a	Barton-Aschman Assoc.
118	Louisville area, KY	Jun. 1993	133	4-6 P.M.	51	-	27	22	3,555	n/a	Barton-Aschman Assoc.
74	Louisville, KY	Jun. 1993	187	4-6 P.M.	43	-	27	30	922	n/a	Barton-Aschman Assoc.
59	Louisville area, KY	Jun. 1993	247	4-6 P.M.	52	-	17	31	2,659	n/a	Barton-Aschman Assoc.
145	Louisville area, KY	Jun. 1993	210	4-6 P.M.	30	-	17	53	2,636	n/a	Barton-Aschman Assoc.
104	Louisville area, KY	Jun. 1993	281	4-6 P.M.	50	-	22	28	2,111	n/a	Barton-Aschman Assoc.
235	Louisville, KY	Jun. 1993	211	4-6 P.M.	29	-	36	35	2,593	n/a	Barton-Aschman Assoc.
71	Louisville, KY	Jun. 1993	109	4-6 P.M.	42	-	33	25	1,559	n/a	Barton-Aschman Assoc.
350	Worcester, MA	Apr. 1994	224	4-6 P.M.	45	-	37	18	2,112	n/a	ICSC
738	East Brunswick, NJ	Apr. 1994	283	4-6 P.M.	79	-	7	14	8,059	n/a	ICSC
294	Philadelphia, PA	Apr. 1994	213	4-6 P.M.	51	-	24	25	4,055	n/a	ICSC
256	Hamden, CT	Apr. 1994	208	4-6 P.M.	51	-	22	27	3,422	n/a	ICSC
418	Glen Burnie, MD	Apr. 1994	281	4-6 P.M.	51	-	29	20	5,610	n/a	ICSC
560	Harrisonburg, VA	Apr. 1994	437	4-6 P.M.	49	-	32	19	3,051	n/a	ICSC

Table 5.4 (Cont'd)
Pass-By Trips and Diverted Linked Trips
Weekday, P.M. Peak Period

Land Use 820—Shopping Center

SIZE (1,000 SQ. FEET GLA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PRIMARY TRIP (%)	NON-PASS-BY TRIP (%)	DIVERTED LINKED TRIP (%)	PASS-BY TRIP (%)	ADJ. STREET PEAK HOUR VOLUME	AVERAGE DAILY TRAFFIC	SOURCE
361	Glen Allen, VA	Apr. 1994	315	4-6 P.M.	54	-	29	17	2,034	n/a	ICSC
375	Shelby, NC	May 1994	214	4-6 P.M.	48	-	22	30	3,053	n/a	ICSC
413	Texas City, TX	May 1994	228	4-6 P.M.	52	-	20	28	589	n/a	ICSC
488	Texas City, TX	May 1994	257	4-6 P.M.	75	-	13	12	1,094	n/a	ICSC
293	Berwyn, IL	May 1994	282	4-6 P.M.	70	-	6	24	4,606	n/a	ICSC
667	Bourbonais, IL	May 1994	200	4-6 P.M.	53	-	31	16	2,770	n/a	ICSC
225	Belleville, IL	May 1994	264	4-6 P.M.	32	-	33	35	1,970	n/a	ICSC
255	Bettendorf, IA	May 1994	222	4-6 P.M.	37	-	39	24	3,706	n/a	ICSC
808	Laguna Hills, CA	Jun. 1994	240	4-6 P.M.	73	-	14	13	4,035	n/a	ICSC
450	Hanford, CA	May 1994	321	4-6 P.M.	49	-	28	23	2,787	n/a	ICSC
800	San Jose, CA	May 1994	205	4-6 P.M.	51	-	28	21	7,474	n/a	ICSC
598	Greeley, CO	May 1994	205	4-6 P.M.	55	-	28	17	3,840	n/a	ICSC
581	Pueblo, CO	May 1994	296	4-6 P.M.	53	-	29	18	2,939	n/a	ICSC
476	Bellevue, WA	May 1994	234	4-6 P.M.	54	-	20	26	3,427	n/a	ICSC
720	Framingham, MA	Dec. 1982	92	3:30-7 P.M.	39	-	38	23	n/a	73,628	Raymond Keyes Assoc.
890	Newark, DE	Jul. 1984	179	3-8 P.M.	49	-	39	12	n/a	n/a	Raymond Keyes Assoc.
402	Manassas, VA	Jun. 1984	87	4-6 P.M.	25	-	27	48	n/a	n/a	Raymond Keyes Assoc.
462	Ross, PA	Jun. 1980	175	5:30-7 P.M.	-	64	-	36	n/a	27,200	Raymond Keyes Assoc.
234	Huntington LI, NY	Nov. 1985	181	4-7 P.M.	21	-	33	46	n/a	34,630	Raymond Keyes Assoc.
658	Wayne, NJ	Sept. 1984	243	3-6 P.M.	61	-	12	27	n/a	85,600	Raymond Keyes Assoc.
1,200	Washington, D.C.	1980	364	4-6 P.M.	35	-	40	25	n/a	n/a	Gorove-Slade
800	Southern CA	n/a	1,000	4-6 P.M.	45	-	43	12	n/a	n/a	Frischer
451	Portland, OR	n/a	n/a	5-6 P.M.	-	75	-	25	n/a	n/a	Buttke
113	Portland, OR	n/a	n/a	5-6 P.M.	-	83	-	17	n/a	n/a	Buttke

Table 5.4 (Cont'd)
Pass-By Trips and Diverted Linked Trips
Weekday, P.M. Peak Period

Land Use 820—Shopping Center

SIZE (1,000 SQ. FEET GLA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PRIMARY TRIP (%)	NON-PASS-BY TRIP (%)	DIVERTED LINKED TRIP (%)	PASS-BY TRIP (%)	ADJ. STREET PEAK HOUR VOLUME	AVERAGE DAILY TRAFFIC	SOURCE
622	Ramsey, MN	Nov. 1985	46	4-9 P.M.	26	-	30	44	n/a	36,370	Raymond Keyes Assoc.
736	Pensacola, FL	Oct. 1985	383	3-7 P.M.	35	-	39	26	n/a	n/a	Raymond Keyes Assoc.
84	Dover, DE	Jul. 1985	218	3:30-7 P.M.	6	-	44	50	n/a	n/a	Raymond Keyes Assoc.
500	Meriden, CT	Apr. 1985	n/a	4-6 P.M.	-	92	-	8	n/a	n/a	Connecticut DOT
660	Enfield, CT	Apr. 1985	n/a	4-6 P.M.	-	78	-	22	n/a	n/a	Connecticut DOT
845	Waterford, CT	Apr. 1985	n/a	4-6 P.M.	-	86	-	14	n/a	n/a	Connecticut DOT
1,060	West Hartford, CT	Apr. 1985	n/a	4-6 P.M.	-	83	-	17	n/a	n/a	Connecticut DOT
131	Pr Georges Co., MD	1982/83	88	4-6 P.M.	-	11	-	89	n/a	n/a	JHK
181	Pr Georges Co., MD	1982/83	105	4-6 P.M.	-	64	-	36	n/a	n/a	JHK
100	Pr Georges Co., MD	1982/83	93	4-6 P.M.	-	64	-	36	n/a	n/a	JHK
475	Pr Georges Co., MD	1982/83	130	4-6 P.M.	-	80	-	20	n/a	n/a	JHK
60	Pr Georges Co., MD	1982/83	72	4-6 P.M.	-	18	-	82	n/a	n/a	JHK
90	Pr Georges Co., MD	1982/83	91	4-6 P.M.	-	42	-	58	n/a	n/a	JHK
78	Pr Georges Co., MD	1982/83	113	4-6 P.M.	-	41	-	59	n/a	n/a	JHK
44	Pr Georges Co., MD	1982/83	97	4-6 P.M.	-	49	-	51	n/a	n/a	JHK
467	Pr Georges Co., MD	1982/83	99	4-6 P.M.	-	44	-	56	n/a	n/a	JHK
352	W Orange, NJ	Mar. 1986	149	4-6 P.M.	19	-	43	38	n/a	21,520	Raymond Keyes Assoc.
176	Tarpon Springs, FL	May 1986	124	3-7 P.M.	28	-	35	37	n/a	34,080	Raymond Keyes Assoc.
762	Orlando, FL	Fall 1985	182	4-6 P.M.	52	-	23	25	n/a	n/a	Kimley Horn
166	Orlando, FL	Fall 1985	124	4-6 P.M.	48	-	25	27	n/a	n/a	Kimley Horn
129	Orlando, FL	Fall 1985	116	4-6 P.M.	50	-	22	28	n/a	n/a	Kimley Horn
71	Orlando, FL	Fall 1985	81	4-6 P.M.	44	-	6	50	n/a	n/a	Kimley Horn

Table 5.4 (Cont'd)
Pass-By Trips and Diverted Linked Trips
Weekday, P.M. Peak Period

Land Use 820—Shopping Center

SIZE (1,000 SQ. FEET GLA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PRIMARY TRIP (%)	NON-PASS-BY TRIP (%)	DIVERTED LINKED TRIP (%)	PASS-BY TRIP (%)	ADJ. STREET PEAK HOUR VOLUME	AVERAGE DAILY TRAFFIC	SOURCE
921	Albany, NY	Jul. & Aug. 1985	196	4-6 P.M.	42	-	35	23	n/a	60,950	Raymond Keyes Assoc.
108	Overland Park, KS	Jul. 1988	111	4:30-5:30 P.M.	61	-	13	26	n/a	34,000	n/a
118	Overland Park, KS	Aug. 1988	123	4:30-5:30 P.M.	55	-	20	25	n/a	-	n/a
256	Greece, NY	Jun. 1988	120	4-6 P.M.	62	-	-	38	n/a	23,410	Sear Brown
160	Greece, NY	Jun. 1988	78	4-6 P.M.	71	-	-	29	n/a	57,306	Sear Brown
550	Greece, NY	Jun. 1988	117	4-6 P.M.	52	-	-	48	n/a	40,763	Sear Brown
51	Boca Raton, FL	Dec. 1987	110	4-6 P.M.	34	-	33	33	n/a	42,225	Kimley-Horn and Assoc.
1,090	Ross Twp, PA	Jul. 1988	411	2-8 P.M.	56	-	10	34	n/a	51,500	Wilbur Smith and Assoc.
97	Upper Dublin Twp, PA	Winter 1988/89	n/a	4-6 P.M.	-	59	-	41	n/a	34,000	McMahon Associates
118	Tredyffrin Twp, PA	Winter 1988/89	n/a	4-6 P.M.	-	76	-	24	n/a	10,000	Booz Allen & Hamilton
122	Lawnside, NJ	Winter 1988/89	n/a	4-6 P.M.	-	63	-	37	n/a	20,000	Pennoni Associates
126	Boca Raton, FL	Winter 1988/89	n/a	4-6 P.M.	-	57	-	43	n/a	40,000	McMahon Associates
150	Willow Grove, PA	Winter 1988/89	n/a	4-6 P.M.	-	61	-	39	n/a	26,000	Booz Allen & Hamilton
153	Broward Cnty, FL	Winter 1988/89	n/a	4-6 P.M.	-	50	-	50	n/a	85,000	McMahon Associates
153	Arden, DE	Winter 1988/89	n/a	4-6 P.M.	-	70	-	30	n/a	26,000	Orth Rodgers
154	Doylestown, PA	Winter 1988/89	n/a	4-6 P.M.	-	68	-	32	n/a	29,000	Orth Rodgers
164	Middletown Twp, PA	Winter 1988/89	n/a	4-6 P.M.	-	67	-	33	n/a	25,000	Booz Allen & Hamilton
166	Haddon Twp, NJ	Winter 1988/89	n/a	4-6 P.M.	-	80	-	20	n/a	6,000	Pennoni Associates
205	Broward Cnty, FL	Winter 1988/89	n/a	4-6 P.M.	-	45	-	55	n/a	62,000	McMahon Associates

Table 5.4 (Cont'd)
Pass-By Trips and Diverted Linked Trips
Weekday, P.M. Peak Period

Land Use 820—Shopping Center

SIZE (1,000 SQ. FEET GLA)	LOCATION	WEEKDAY SURVEY DATE	NO. OF INTERVIEWS	TIME PERIOD	PRIMARY TRIP (%)	NON-PASS-BY TRIP (%)	DIVERTED LINKED TRIP (%)	PASS-BY TRIP (%)	ADJ. STREET PEAK HOUR VOLUME	AVERAGE DAILY TRAFFIC	SOURCE
237	W Windsor Twp, NJ	Winter 1988/89	n/a	4-6 P.M.	-	52	-	48	n/a	46,000	Booz Allen & Hamilton
242	Willow Grove, PA	Winter 1988/89	n/a	4-6 P.M.	-	63	-	37	n/a	26,000	McMahon Associates
297	Whitehall, PA	Winter 1988/89	n/a	4-6 P.M.	-	67	-	33	n/a	26,000	Orth Rodgers
360	Broward County, FL	Winter 1988/89	n/a	4-6 P.M.	-	56	-	44	n/a	73,000	McMahon Associates
370	Pittsburgh, PA	Winter 1988/89	n/a	4-6 P.M.	-	81	-	19	n/a	33,000	Wilbur Smith
150	Portland, OR	n/a	519	4-6 P.M.	6	-	26	68	n/a	25,000	Kittleson and Associates
150	Portland, OR	n/a	655	4-6 P.M.	7	-	28	65	n/a	30,000	Kittleson and Associates
760	Calgary, Alberta	Oct-Dec 1987	15,436	4-6 P.M.	39	-	41	20	n/a	n/a	City of Calgary DOT
178	Bordentown, NJ	Apr. 1989	154	2-6 P.M.	-	65	-	35	n/a	37,980	Raymond Keyes Assoc.
144	Manalapan, NJ	Jul. 1990	176	3:30-6:15 P.M.	44	-	24	32	n/a	69,347	Raymond Keyes Assoc.
549	Natick, MA	Feb. 1989	n/a	4:45-5:45 P.M.	26	-	41	33	n/a	48,782	Raymond Keyes Assoc.

Average Pass-By Trip Percentage: 34

Table 7.1 Unconstrained Internal Capture Rates for Trip Origins within a Multi-Use Development

		WEEKDAY		
		MIDDAY PEAK HOUR	P.M. PEAK HOUR OF ADJACENT STREET TRAFFIC	DAILY
from OFFICE	to Office	2%	1%	2%
	to Retail	20%	23%	22%
	to Residential	0%	2%	2%
from RETAIL	to Office	3%	3%	3%
	to Retail	29%	20%	30%
	to Residential	7%	12%	11%
from RESIDENTIAL	to Office	N/A	N/A	N/A
	to Retail	34%	53%	38%
	to Residential	N/A	N/A	N/A

Caution: The estimated typical internal capture rates presented in this table rely directly on data collected at a limited number of multi-use sites in Florida. While ITE recognizes the limitations of these data, they represent the only known credible data on multi-use internal capture rates and are provided as illustrative of typical rates. ***If local data on internal capture rates by paired land uses can be obtained, the local data may be given preference.***

N/A — Not Available; logic indicates there is some interaction between these two land uses; however, the limited data sample on which this table is based did not record any interaction.

Table 7.2 Unconstrained Internal Capture Rates for Trip Destinations Within a Multi-Use Development

		WEEKDAY		
		MIDDAY PEAK HOUR	P.M. PEAK HOUR OF ADJACENT STREET TRAFFIC	DAILY
to OFFICE	from Office	6%	6%	2%
	from Retail	38%	31%	15%
	from Residential	0%	0%	N/A
to RETAIL	from Office	4%	2%	4%
	from Retail	31%	20%	28%
	from Residential	5%	9%	9%
to RESIDENTIAL	from Office	0%	2%	3%
	from Retail	37%	31%	33%
	from Residential	N/A	N/A	N/A

Caution: The estimated typical internal capture rates presented in this table rely directly on data collected at a limited number of multi-use sites in Florida. While ITE recognizes the limitations of these data, they represent the only known credible data on multi-use internal capture rates and are provided as illustrative of typical rates. ***If local data on internal capture rates by paired land uses can be obtained, the local data may be given preference.***

N/A — Not Available; logic indicates there is some interaction between these two land uses; however, the limited data sample on which this table is based did not record any interaction.

Calculation of Internal & External Trips
Time Period: PM Adjacent Street Traffic Peak Hour
Analysist: KAK

LU A = Casino
Size = 8000

	Total	Internal	External
		9%	*91%*
Enter	2480	226	2254
Exit	2240	204	2036
Total	4720	430	4290

LU B = Shopping Center
Size = 831.2

	Total	Internal	External
		26%	*74%*
Enter	849	225	624
Exit	950	242	708
Total	1799	467	1332

LU C = Office
Size = 50

	Total	Internal	External
		39%	*61%*
Enter	23	12	11
Exit	112	41	71
Total	135	53	82

LU D = Condo/TH
Size = 475

	Total	Internal	External
		24%	*76%*
Enter	145	76	69
Exit	71	52	19
Total	216	128	88

LU E =
Size =

	Total	Internal	External
		#DIV/0!	*#DIV/0!*
Enter	0	0	0
Exit	0	0	0
Total	0	0	0

Balancing Table

	A - B	B - A	A - C	C - A	A - D	D - A	A - E	E - A	B - C	C - B	B - D	D - B	B - E	E - B	C - D	D - C	C - E	E - C	D - E	E - D
From/To Percent (Origin)	20%	20%	20%	20%	20%	20%	0%	0%	3%	23%	12%	53%	0%	0%	2%	0%	0%	0%	0%	0%
From/To Trip Origins	448	190	448	22	448	14	0	0	29	26	114	38	0	0	2	0	0	0	0	0
To/From Percent (Destination)	20%	20%	20%	20%	20%	20%	0%	0%	2%	31%	9%	31%	0%	0%	0%	2%	0%	0%	0%	0%
To/From Trip Destinations	496	170	496	5	496	29	0	0	17	7	76	45	0	0	0	3	0	0	0	0
Balanced (Origin - Desitinations	170	190	5	22	29	14	0	0	7	17	45	38	0	0	2	0	0	0	0	0

Net External Trips

	A	B	C	D	E	Total	
Enter	2254	624	11	69	0	2958	
Exit	2036	708	71	19	0	2834	
Total	4290	1332	82	88	0	5792	Internal Capture
Single-Use Trip Gen. Est.	4720	1799	135	216	0	6870	16%

Percentage Calculations
Methodology based on ITE, Trip Generation Handbook, Recommended Pratice, Mutli-Use Development, March 2001
Assumptions:
- 20% Internal between Office & Casino
- 20% Internal between Condo/TH & Casino
- 20% Internal between Shopping & Casino

Calculation of Internal & External Trips
Time Period: Fri PM Casino Traffic Peak Hour
Analysist: KAK

LU A = Casino
Size = 8000

	Total	Internal	External
		7%	93%
Enter	2880	180	2700
Exit	2640	200	2440
Total	5520	380	5140

LU B = Shopping Center
Size = 831.2

	Total	Internal	External
		22%	78%
Enter	933	204	729
Exit	857	192	665
Total	1790	396	1394

LU C = Office
Size = 50

	Total	Internal	External
		29%	71%
Enter	2	0	2
Exit	5	2	3
Total	7	2	5

LU D = Condo/TH
Size = 475

	Total	Internal	External
		23%	77%
Enter	64	34	30
Exit	41	24	17
Total	105	58	47

LU E =
Size =

	Total	Internal	External
		#DIV/0!	#DIV/0!
Enter	0	0	0
Exit	0	0	0
Total	0	0	0

Balancing Table

	A - B	B - A	A - C	C - A	A - D	D - A	A - E	E - A	B - C	C - B	B - D	D - B	B - E	E - B	C - D	D - C	C - E	E - C	D - E	E - D
From/To Percent (Origin)	20%	20%	20%	20%	20%	20%	0%	0%	3%	22%	11%	38%	0%	0%	2%	0%	0%	0%	0%	0%
From/To Trip Origins	528	171	528	1	528	8	0	0	26	1	94	16	0	0	0	0	0	0	0	0
To/From Percent (Destination)	20%	20%	20%	20%	20%	20%	0%	0%	4%	15%	9%	33%	0%	0%	0%	2%	0%	0%	0%	0%
To/From Trip Destinations	576	187	576	0	576	13	0	0	37	0	84	21	0	0	0	1	0	0	0	0
Balanced (Origin - Desitinations	187	171	0	1	13	8	0	0	0	1	21	16	0	0	0	0	0	0	0	0

Net External Trips

	A	B	C	D	E	Total	
Enter	2700	729	2	30	0	3461	
Exit	2440	665	3	17	0	3125	
Total	5140	1394	5	47	0	6586	Internal Capture
Single-Use Trip Gen. Est.	5520	1790	7	105	0	7422	11%

Percentage Calculations

Methodology based on ITE, Trip Generation Handbook, Recommended Pratice, Mutli-Use Development, March 2001
Assumptions:
- 20% Internal between Office & Casino
- 20% Internal between Condo/TH & Casino
- 20% Internal between Shopping & Casino

Calculation of Internal & External Trips
Time Period: Saturday PM Casino Traffic Peak Hour
Analysist: KAK

LU A = **Casino**
Size = **8000**

	Total	Internal	External
		4%	*96%*
Enter	3360	200	3160
Exit	2880	68	2812
Total	6240	268	5972

LU B = **Shopping Center**
Size = **831.2**

	Total	Internal	External
		23%	*77%*
Enter	273	72	201
Exit	953	212	741
Total	1226	284	942

LU C = **Office**
Size = **50**

	Total	Internal	External
		29%	*71%*
Enter	2	0	2
Exit	5	2	3
Total	7	2	5

LU D = **Condo/TH**
Size = **475**

	Total	Internal	External
		23%	*77%*
Enter	64	34	30
Exit	41	24	17
Total	105	58	47

LU E =
Size =

	Total	Internal	External
		#DIV/0!	*#DIV/0!*
Enter	0	0	0
Exit	0	0	0
Total	0	0	0

Balancing Table

	A - B	B - A	A - C	C - A	A - D	D - A	A - E	E - A	B - C	C - B	B - D	D - B	B - E	E - B	C - D	D - C	C - E	E - C	D - E	E - D
From/To Percent (Origin)	20%	20%	20%	20%	20%	20%	0%	0%	3%	22%	11%	38%	0%	0%	2%	0%	0%	0%	0%	0%
From/To Trip Origins	576	191	576	1	576	8	0	0	29	1	105	16	0	0	0	0	0	0	0	0
To/From Percent (Destination)	20%	20%	20%	20%	20%	20%	0%	0%	4%	15%	9%	33%	0%	0%	0%	3%	0%	0%	0%	0%
To/From Trip Destinations	672	55	672	0	672	13	0	0	11	0	25	21	0	0	0	2	0	0	0	0
Balanced (Origin - Desitinations	55	191	0	1	13	8	0	0	0	1	21	16	0	0	0	0	0	0	0	0

Net External Trips

	A	B	C	D	E	Total	
Enter	3160	201	2	30	0	3393	
Exit	2812	741	3	17	0	3573	
Total	5972	942	5	47	0	6966	Internal Capture
Single-Use Trip Gen. Est.	6240	1226	7	105	0	7578	8%

Percentage Calculations
Methodology based on ITE, Trip Generation Handbook, Recommended Pratice, Mutli-Use Development, March 2001
Assumptions:
- 20% Internal between Office & Casino
- 20% Internal between Condo/TH & Casino
- 20% Internal between Shopping & Casino

APPENDIX G

Gravity Model Data

CASINO & GOLF VILLAS GRAVITY MODEL MAP AND OTHER CASINO LOCATIONS

① POCONO MANOR RESORT & CASINO

② BETHWORKS OR TROPICANA CASINO

③ TRUMP CASINO

④ RIVERWALK CASINO

⑤ ATLANTIC CITY

⑥ MIGHTY M GAMINY AT MONTICELLO RACEWAY

⑦ FOXWOOD RESORT CASINO

⑧ MOHEGAN SUN CASINO

Casino Golf Villas Gravity Model Trip Distribution Percentage Calculations

Pennsylvania

County	Population	Gambling Patrons (33%)	Competing Venue Factor	% To Pocono Manor	Pocono Manor Patrons	% To/From North via I-380	Patrons To/From North via I-380	% To/From South via I-380	Patrons To/From South via I-380
Berks	396,314	130,784	3	15%	19,618	0%	0	100%	19,618
Bradford	62,537	20,637	9	80%	16,510	100%	16,510	0%	0
Bucks	621,342	205,043	1	10%	20,504	0%	0	100%	20,504
Carbon	61,959	20,446	8	50%	10,223	0%	0	100%	10,223
Chester	474,027	156,429	1	10%	15,643	0%	0	100%	15,643
Columbia	64,939	21,430	9	80%	17,144	0%	0	100%	17,144
Dauphin	253,995	83,818	3	15%	12,573	0%	0	100%	12,573
Delaware	555,648	183,364	1	10%	18,336	0%	0	100%	18,336
Lackawanna	209,525	69,143	9	80%	55,315	100%	55,315	0%	0
Lancaster	490,562	161,885	3	15%	24,283	0%	0	100%	24,283
Lebanon	125,578	41,441	3	15%	6,216	0%	0	100%	6,216
Lehigh	330,433	109,043	1	10%	10,904	0%	0	100%	10,904
Luzerne	312,861	103,244	9	80%	82,595	60%	49,557	30%	24,779
Lycoming	118,395	39,070	9	80%	31,256	0%	0	100%	31,256
Monroe	163,234	53,867	10	90%	48,480	10%	4,848	40%	19,392
Montgomery	775,883	256,041	1	10%	25,604	0%	0	100%	25,604
Montour	18,032	5,951	9	80%	4,760	0%	0	100%	4,760
Northampton	287,767	94,963	1	10%	9,496	0%	0	100%	9,496
Northumberland	92,610	30,561	9	80%	24,449	0%	0	100%	24,449
Philadelphia	1,463,281	482,883	1	10%	48,288	0%	0	100%	48,288
Pike	56,337	18,591	8	50%	9,296	0%	0	0%	0
Schuylkill	147,447	48,658	8	50%	24,329	0%	0	100%	24,329
Snyder	38,207	12,608	9	80%	10,087	0%	0	100%	10,087
Sullivan	6,391	2,109	9	80%	1,687	100%	1,687	0%	0
Susquehanna	42,124	13,901	8	50%	6,950	100%	6,950	0%	0
Union	43,131	14,233	9	80%	11,387	0%	0	100%	11,387
Wayne	50,113	16,537	8	50%	8,269	100%	8,269	0%	0
Wyoming	28,160	9,293	9	80%	7,434	100%	7,434	0%	0
Total	***7,290,832***	***2,405,975***	-	***24%***	***581,637***	***26%***	***150,570***	***67%***	***389,271***

New Jersey

County	Population	Gambling Patrons (33%)	Competing Venue Factor	% To Pocono Manor	Pocono Manor Patrons	% To/From North via I-380	Patrons To/From North via I-380	% To/From South via I-380	Patrons To/From South via I-380
Bergen	902,561	297,845	6	20%	59,569	0%	0	100%	59,569
Essex	791,057	261,049	5	17%	44,378	0%	0	100%	44,378
Hudson	603,521	199,162	5	17%	33,858	0%	0	100%	33,858
Hunterdon	130,404	43,033	4	30%	12,910	0%	0	100%	12,910
Mercer	366,256	120,864	2	12%	14,504	0%	0	100%	14,504
Middlesex	789,516	260,540	2	12%	31,265	0%	0	100%	31,265
Morris	490,593	161,896	8	50%	80,948	0%	0	100%	80,948
Passaic	499,060	164,690	6	20%	32,938	0%	0	100%	32,938
Somerset	309,900	102,267	2	12%	12,272	0%	0	100%	12,272
Sussex	153,130	50,533	8	50%	25,266	0%	0	100%	25,266
Union	531,457	175,381	5	17%	29,815	0%	0	100%	29,815
Warren	110,376	36,424	8	50%	18,212	0%	0	100%	18,212
Total	***5,677,831***	***1,873,684***	-	***21%***	***395,934***	***0%***	***0***	***100%***	***395,934***

New York

County	Population	Gambling Patrons (33%)	Competing Venue Factor	% To Pocono Manor	Pocono Manor Patrons	% To/From North via I-380	Patrons To/From North via I-380	% To/From South via I-380	Patrons To/From South via I-380
Bronx	1,357,589	448,004	5	17%	76,161	0%	0	100%	76,161
Broome	196,947	64,993	8	50%	32,496	100%	32,496	0%	0
Chenango	51,755	17,079	8	50%	8,540	100%	8,540	0%	0
Cortland	48,622	16,045	8	50%	8,023	100%	8,023	0%	0
Delaware	47,534	15,686	4	30%	4,706	100%	4,706	0%	0
Kings	2,486,235	820,458	5	17%	139,478	0%	0	100%	139,478
New York	1,593,200	525,756	5	17%	89,379	0%	0	100%	89,379
Orange	372,893	123,055	4	30%	36,916	100%	36,916	0%	0
Putnam	100,507	33,167	4	30%	9,950	100%	9,950	0%	0
Queens	2,241,600	739,728	5	17%	125,754	0%	0	100%	125,754
Richmond	464,573	153,309	5	17%	26,063	0%	0	100%	26,063
Rockland	292,916	96,662	7	33%	31,899	0%	0	100%	31,899
Sullivan	76,539	25,258	1	10%	2,526	100%	2,526	0%	0
Tioga	51,475	16,987	8	50%	8,493	100%	8,493	0%	0
Ulster	182,693	60,289	4	30%	18,087	100%	18,087	0%	0
West Chester	940,807	310,466	7	33%	102,454	0%	0	100%	102,454
Total	***10,505,885***	***3,466,942***	-	***21%***	***720,922***	***18%***	***129,737***	***82%***	***591,186***

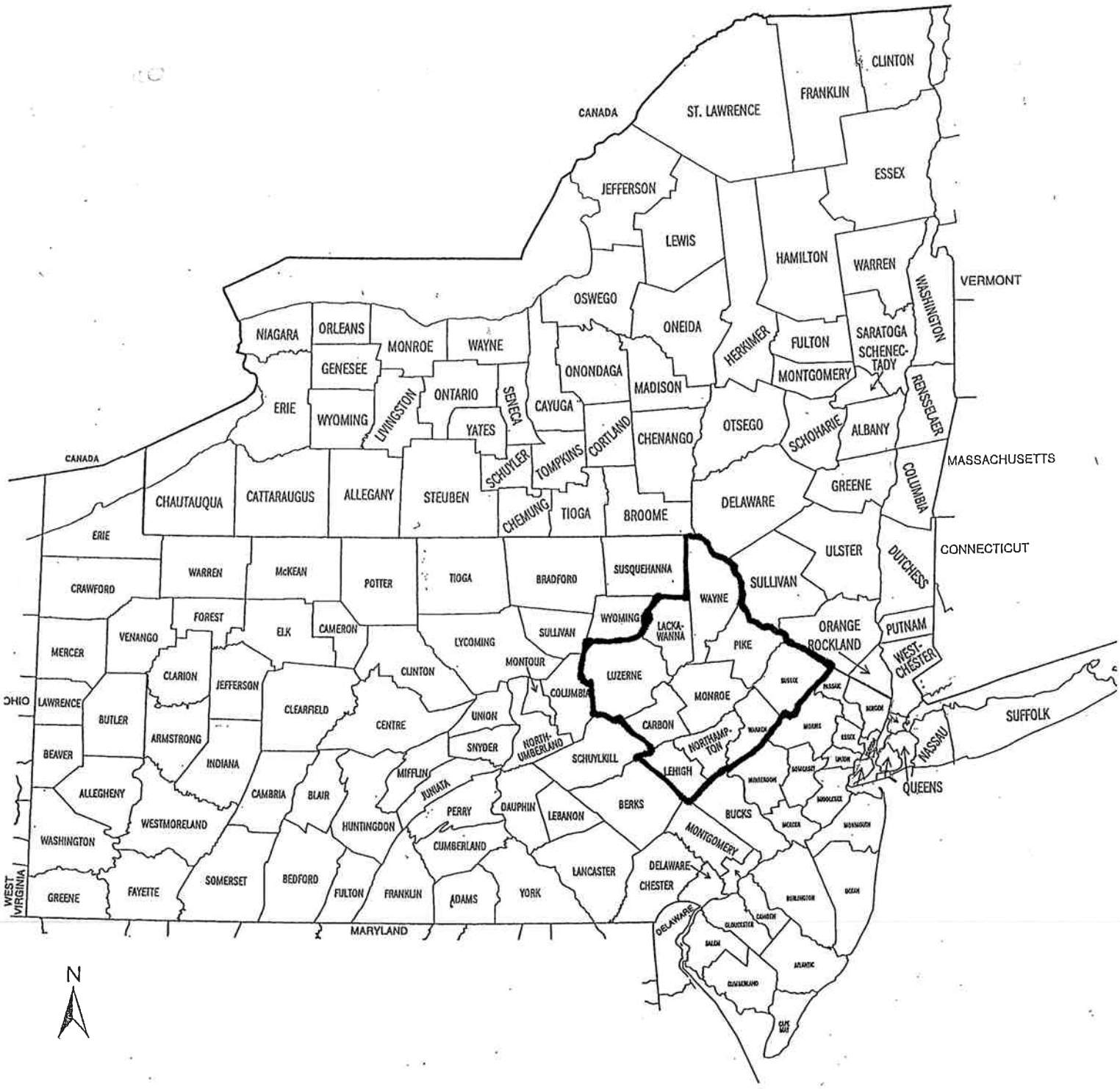
Total

County	Population	Gambling Patrons (33%)	Competing Venue Factor	% To Pocono Manor	Pocono Manor Patrons	% To/From North via I-380	Patrons To/From North via I-380	% To/From South via I-380	Patrons To/From South via I-380
Pennsylvania	7,290,832	2,405,975	-	24%	581,637	26%	150,570	67%	389,271
New Jersey	5,677,831	1,873,684	-	21%	395,934	0%	0	100%	395,934
New York	10,505,885	3,466,942	-	21%	720,922	18%	129,737	82%	591,186
Total	***23,474,548***	***7,746,601***	-	***22%***	***1,698,494***	***17%***	***280,307***	***81%***	***1,376,392***
					With 10% Local	15%		73%	
						Assume 15%		*Assume 75%*	

Competing Venue Factors for Casino Gravity Model

Competing Venue Factors	% To Pocono Manor	Description
10	90%	Pocono Manor
9	80%	Closer to Pocono Manor
8	50%	Equidistant from 1 other competing venue
7	33%	Equidistant from 2 other competing venues
-	*25%*	*Equidistant from 3 other competing venues*
6	20%	Equidistant from 4 other competing venues
5	17%	Equidistant from 5 other competing venues
4	30%	Nearer to 1 competing venue
3	15%	Nearer to 3 competing venues
2	12%	Nearer to 4 competing venues
1	10%	Venue present (assume greater Philadelphia region as a whole)

SHOPPING CENTER & OFFICE BUILDING GRAVITY MODEL MAP



Shopping Center Office Building Gravity Model Trip Distribution Percentage Calculations

Pennsylvania

County	Population	% To Pocono Manor	Pocono Manor Shoppers	% To/From North via I-380	Shoppers To/From North	% To/From South via I-380	Shoppers To/From South	% To/From East via 940	% To/From East via 940	% To/From West via 940	Shoppers To/From West
Carbon	61,959	100%	61,959	0%	0	100%	61,959	0%	0	0%	0
Lackawanna	209,525	100%	209,525	100%	209,525	0%	0	0%	0	0%	0
Lehigh	330,433	100%	330,433	0%	0	100%	330,433	0%	0	0%	0
Luzerne	312,861	100%	312,861	60%	187,717	30%	93,858	0%	0	10%	31,286
Monroe	163,234	100%	163,234	10%	16,323	40%	65,294	30%	48,970	20%	32,647
Northampton	287,767	100%	287,767	0%	0	100%	287,767	0%	0	0%	0
Pike	56,337	100%	56,337	0%	0	0%	0	100%	56,337	0%	0
Wayne	50,113	100%	50,113	100%	50,113	0%	0	0%	0	0%	0
Total	***1,472,229***	***100%***	***1,472,229***	***31%***	***463,678***	***57%***	***839,311***	***7%***	***105,307***	***4%***	***63,933***

New Jersey

County	Population	% To Pocono Manor	Pocono Manor Shoppers	% To/From North via I-380	Shoppers To/From North	% To/From South via I-380	Shoppers To/From South	% To/From East via 940	% To/From East via 940	% To/From West via 940	Shoppers To/From West
Sussex	153,130	100%	153,130	0%	0	100%	153,130	0%	0	0%	0
Warren	110,376	100%	110,376	0%	0	100%	110,376	0%	0	0%	0
Total	***263,506***	***100%***	***263,506***	***0%***	***0***	***100%***	***263,506***	***0%***	***0***	***0%***	***0***

Total

County	Population	% To Pocono Manor	Pocono Manor Shoppers	% To/From North via I-380	Shoppers To/From North	% To/From South via I-380	Shoppers To/From South	% To/From East via 940	% To/From East via 940	% To/From West via 940	Shoppers To/From West
Pennsylvania	1,472,229	100%	1,472,229	31%	463,678	57%	839,311	7%	105,307	4%	63,933
New Jersey	263,506	100%	263,506	0%	0	100%	263,506	0%	0	0%	0
Total	***1,735,735***	***100%***	***1,735,735***	***27%***	***463,678***	***64%***	***1,102,817***	***6%***	***105,307***	***4%***	***63,933***
				Assume 25%		*Assume 65%*					

APPENDIX H

Traffic Volume Spreadsheets

Existing Traffic Volumes

Intersection	Approach		2005 Existing Volumes		
			Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
Route 940 & Longpond Road	Eastbound	L	17	24	12
		T	500	312	301
		R	56	49	63
	Westbound	L	364	261	254
		T	657	380	304
		R	68	54	43
	Northbound	L	51	25	29
		T	7	3	4
		R	238	166	206
	Southbound	L	44	37	36
		T	9	3	7
		R	14	10	10
Route 940 & I-380 Southbound Ramps	Eastbound	T	634	422	412
		R	148	93	131
	Westbound	T	994	653	558
		R	173	94	64
	Southbound	L	48	42	37
		R	95	42	43
Route 940 & I-380 Northbound Ramps	Eastbound	L	63	50	48
		T	619	414	401
	Westbound	T	930	577	492
		R	136	74	43
	Northbound	L	237	170	130
		R	133	178	137
Route 314 & Route 940 Eastbound Ramps	Eastbound	L	75	60	56
		R	74	50	50
	Northbound	L	41	25	19
		T	261	93	60
	Southbound	T	71	51	41
		R	24	13	9
Route 314 & Route 940 Westbound Ramps	Eastbound	L	1	1	1
		R	17	12	12
	Northbound	L	213	58	35
		T	123	95	81
	Southbound	T	78	52	38
		R	41	40	32
Route 940 & Spruce Street/Harvest Lane	Eastbound	L	14	8	9
		T	710	593	473
		R	39	22	14
	Westbound	L	25	12	4
		T	816	584	430
		R	10	3	2
	Northbound	L	62	35	18
		T	12	7	4
		R	28	13	5
	Southbound	L	25	4	4
		T	7	4	2
		R	23	2	7
Route 940 & Summit Avenue/Commerce St	Eastbound	L	10	5	7
		T	749	604	475
		R	4	1	
	Westbound	L	8	10	3
		T	828	585	427
		R	174	127	102
	Northbound	L	2	5	3
		T	1		
		R	8	11	3
	Southbound	L	155	105	63
		T	1	2	1
		R	21	9	6

Route 940 & Industrial Drive	Eastbound	L			
		T	609	465	350
		R	8	9	11
	Westbound	L	89	83	56
		T	533	385	320
		R	44	30	22
	Northbound	L	302	150	146
		T	125	39	35
		R	62	91	81
	Southbound	L	105	41	23
		T	60	24	15
		R	322	28	46
Route 940 & Oak Street	Eastbound	L	169	145	126
		T	578	434	300
		R	65	55	35
	Westbound	L	251	98	60
		T	273	341	270
		R	370	169	157
	Northbound	L	55	36	28
		R	195	127	100
	Southbound	L	201	167	184
		R	130	105	115
Route 611 & Route 940 West/Route 196	Eastbound	L	151	125	112
		T	203	221	188
		R	412	306	246
	Westbound	L	262	231	203
		T	107	112	102
		R	1	4	1
	Northbound	L	314	303	223
		T	595	320	187
		R	571	505	314
	Southbound	L	6	4	8
		T	573	323	191
		R	358	214	170
Route 611 & Route 940 East/Driveway	Eastbound	L	222	105	38
		T	27	26	11
		R	42	46	11
	Westbound	L	83	44	48
		T	18	9	10
		R	561	364	307
	Northbound	L	22	19	7
		T	697	659	379
		R	23	19	18
	Southbound	L	551	336	300
		T	646	487	326
		R	50	37	14
Route 611 & Route 314 West	Eastbound	L	13	34	8
		R	143	165	81
	Northbound	L	352	147	102
		T	728	652	545
	Southbound	T	596	377	389
		R	33	25	23
Route 611 & Route 314 East	Westbound	L	332	126	78
		R	98	46	31
	Northbound	T	982	753	616
		R	234	241	95
	Southbound	L	85	135	51
		T	654	407	419

Year 2009 Traffic Volume Development

2009 Background Growth = 3% per year 1.126 Intersection	Approach		2009 Base No Build			Total Approved Dev. Traffic			2009 Future No Build			Pocono Manor Traffic			Improvements Adjustments			2009 Future Build		
			Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
Route 940 & Longpond Road	Eastbound	L	17	24	12				17	24	12									
		T	563	351	339	31	5	7	594	356	346	71	84	72	638	393	382	709	477	454
		R	63	55	71	42	42	42	105	97	113				122	108	128	122	108	128
	Westbound	L	410	294	286	139	90	90	549	384	376				496	350	338	496	350	338
		T	739	428	342	89	11	12	828	439	354	72	76	87	824	459	366	896	535	453
		R	68	54	43				68	54	43									
	Northbound	L	57	28	33	46	46	46	103	74	79				119	86	92	119	86	92
		T	7	3	4	9	9	9	16	12	13									
		R	268	187	232	110	93	93	378	280	325				378	280	325	378	280	325
	Southbound	L	44	37	36				44	37	36	690	698	602	86	79	100	776	777	702
		T	9	3	7	8	8	8	17	11	15				53	34	38	53	34	38
		R	14	10	10				14	10	10				79	38	35	79	38	35
Route 940 & I-380 Southbound Ramps	Eastbound	T	714	475	464	123	80	82	837	555	546									
		R	167	105	147	18	18	18	185	123	165				185	123	165	185	123	165
	Westbound	T	1119	735	628	202	75	76	1321	810	704									
		R	195	106	72	200	54	76	395	160	148	2230	2382	2678	395	160	148	2625	2542	2826
	Southbound	L	54	47	42	32	32	58	86	79	100									
		R	107	47	48	25	25	25	132	72	73									
Route 940 & I-380 Northbound Ramps	Eastbound	L	71	56	54	27	27	27	98	83	81				98	83	81	98	83	81
		T	697	466	451	129	86	113	826	552	564	762	781	673	819	546	561	1581	1327	1234
	Westbound	T	1047	649	554	384	112	135	1431	761	689	2302	2458	2765	1431	761	689	3733	3219	3454
		R	153	83	48	28	28	44	181	111	92	687	641	682	181	111	92	868	752	774
	Northbound	L	267	191	146	17	17	17	284	208	163				284	208	163	284	208	163
		R	150	200	154	103	52	91	253	252	245				213	212	207	213	212	207
Route 314 & Route 940 Eastbound Ramps	Eastbound	L	84	68	63				84	68	63				84	68	63	84	68	63
		R	83	56	56	5	5	5	88	61	61	3100	3409	3270	88	61	61	3188	3470	3331
	Northbound	L	46	28	21	60	37	28	106	65	49	134	150	171	106	65	49	240	215	220
		T	294	105	68	4	4	4	298	109	72	2989	3099	3447	298	109	72	3287	3208	3519
	Southbound	T	80	57	46	11	11	18	91	68	64	141	166	168	91	69	65	232	235	233
		R	27	15	10				27	15	10									
Route 314 & Route 940 Westbound Ramps	Eastbound	L	1	1	1				1	1	1									
		R	19	14	14	11	11	18	30	25	32									
	Northbound	L	240	65	39	4	4	4	244	69	43	2989	3099	3447	244	69	43	3233	3168	3490
		T	138	107	91				138	107	91				138	107	91	138	107	91
	Southbound	T	88	59	43				88	59	43									
		R	46	45	36				46	45	36				46	45	36	46	45	36
Route 940 & Spruce Street/Harvest Lane	Eastbound	L	16	9	10				16	9	10				16	9	10	16	9	10
		T	799	667	532	287	170	227	1086	837	759	134	150	171	1086	837	759	1220	987	930
		R	44	25	16				44	25	16				44	25	16	44	25	16
	Westbound	L	28	14	5				28	14	5				28	14	5	28	14	5
		T	918	657	484	419	147	193	1337	804	677	141	166	168	1337	804	677	1478	970	845
		R	11	3	2				11	3	2				11	3	2	11	3	2
	Northbound	L	70	39	20				70	39	20				70	39	20	70	39	20
		T	14	8	5				14	8	5				14	8	5	14	8	5
		R	32	15	6				32	15	6				32	15	6	32	15	6
	Southbound	L	28	5	5				28	5	5				55	20	15	55	20	15
		T	8	5	2				8	5	2				8	5	2	8	5	2
		R	26	2	8				26	2	8				87	46	41	87	46	41
Route 940 & Summit Avenue/Commerce St	Eastbound	L	11	6	8				11	6	8				11	6	8	11	6	8
		T	843	680	535	287	170	227	1130	850	762	134	150	171	1130	850	762	1264	1000	933
		R	5	1					5	1					5	1		5	1	
	Westbound	L	9	11	3				9	11	3				9	11	3	9	11	3
		T	932	658	481	419	147	193	1351	805	674	141	166	168	1351	805	674	1492	971	842
		R	196	143	115				196	143	115				196	143	115	196	143	115
	Northbound	L	2	6	3				2	6	3				2	6	3	2	6	3
		T	1						1						1			1		
		R	9	12	3				9	12	3				9	12	3	9	12	3
	Southbound	L	174	118	71				174	118	71				174	118	71	174	118	71
		T	1	2	1				1	2	1				1	2	1	1	2	1
		R	24	10	7				24	10	7				24	10	7	24	10	7

Year 2009 Traffic Volume Development

2009 Background Growth = 3% per year 1.126 Intersection	Approach		2009 Base No Build			Total Approved Dev. Traffic			2009 Future No Build			Pocono Manor Traffic			Improvements Adjustments			2009 Future Build		
			Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
Route 940 & Industrial Drive	Eastbound	L				97	15	17	97	15	17				97	15	17	97	15	17
		T	685	523	394	143	131	178	828	654	572	134	150	171	828	654	572	962	804	743
		R	9	10	12	3	3	4	12	13	16				12	13	16	12	13	16
	Westbound	L	100	93	63				100	93	63				100	93	63	100	93	63
		T	600	433	360	185	145	228	785	578	588	141	166	168	785	578	588	926	744	756
		R	50	34	25	15	15	28	65	49	53				65	49	53	65	49	53
	Northbound	L	340	169	164	2	2	5	342	171	169				342	171	169	342	171	169
		T	141	44	39	4	4	7	145	48	46				145	48	46	145	48	46
		R	70	102	91				70	102	91				70	102	91	70	102	91
	Southbound	L	118	46	26	12	12	20	130	58	46				130	58	46	130	58	46
		T	68	27	17	2	2	5	70	29	22				70	29	22	70	29	22
		R	362	32	52	263	32	37	625	64	89				625	64	89	625	64	89
Route 940 & Oak Street	Eastbound	L	190	163	142				190	163	142				190	163	142	190	163	142
		T	651	488	338	155	143	198	806	631	536	134	150	171	806	631	536	940	781	707
		R	73	62	39				73	62	39				73	62	39	73	62	39
	Westbound	L	283	110	68				283	110	68				283	110	68	283	110	68
		T	307	384	304	260	220	256	567	604	560	141	166	168	567	604	560	708	770	728
		R	416	190	177				416	190	177				416	190	177	416	190	177
	Northbound	L	62	41	32				62	41	32				62	41	32	62	41	32
		R	219	143	113				219	143	113				219	143	113	219	143	113
	Southbound	L	226	188	207				226	188	207				226	188	207	226	188	207
		R	146	118	129				146	118	129				146	118	129	146	118	129
Route 611 & Route 940 West/Route 196	Eastbound	L	170	141	126	14	2	2	184	143	128				184	143	128	184	143	128
		T	228	249	212	7	7	8	235	256	220	57	62	71	235	256	220	292	318	291
		R	464	344	277	134	134	188	598	478	465	78	87	100	598	478	465	676	565	565
	Westbound	L	295	260	228				295	260	228				295	260	228	295	260	228
		T	120	126	115	8	8	8	128	134	123	59	70	68	128	134	123	187	204	191
		R	1	5	1				1	5	1				1	5	1	1	5	1
	Northbound	L	353	341	251	207	207	233	560	548	484	83	97	100	560	548	484	643	645	584
		T	670	360	210	128	13	13	798	373	223				798	373	223	798	373	223
		R	643	568	353				643	568	353				643	568	353	643	568	353
	Southbound	L	7	5	9				7	5	9				7	5	9	7	5	9
		T	645	364	215	379	38	38	1024	402	253				1024	402	253	1024	402	253
		R	403	241	191	45	5	5	448	246	196				448	246	196	448	246	196
Route 611 & Route 940 East/Driveway	Eastbound	L	250	118	43				250	118	43				250	118	43	250	118	43
		T	30	29	12				30	29	12				30	29	12	30	29	12
		R	47	52	12				47	52	12				47	52	12	47	52	12
	Westbound	L	93	50	54				93	50	54				93	50	54	93	50	54
		T	20	10	11				20	10	11				20	10	11	20	10	11
		R	631	410	346	52	13	14	683	423	360	83	97	100	683	423	360	766	520	460
	Northbound	L	25	21	8				25	21	8				25	21	8	25	21	8
		T	784	742	427	282	206	231	1066	948	658				1066	948	658	1066	948	658
		R	26	21	20				26	21	20				26	21	20	26	21	20
	Southbound	L	620	378	338	8	8	10	628	386	348	78	87	100	628	386	348	706	473	448
		T	727	548	367	505	164	216	1232	712	583				1232	712	583	1232	712	583
		R	56	42	16				56	42	16				56	42	16	56	42	16
Route 611 & Route 314 West	Eastbound	L	15	38	9				15	38	9				15	38	9	15	38	9
		R	161	186	91				161	186	91	78	87	100	161	186	91	239	273	191
	Northbound	L	396	165	115				396	165	115	83	97	100	396	165	115	479	262	215
		T	819	734	613	282	206	231	1101	940	844				1101	940	844	1101	940	844
	Southbound	T	671	424	438	505	164	116	1176	588	554				1176	588	554	1176	588	554
		R	37	28	26				37	28	26				37	28	26	37	28	26
Route 611 & Route 314 East	Westbound	L	374	142	88				374	142	88				374	142	88	374	142	88
		R	110	52	35	9	9	10	119	61	45				119	61	45	119	61	45
	Northbound	T	1105	848	693	273	197	221	1378	1045	914	83	97	100	1378	1045	914	1461	1142	1014
		R	263	271	107				263	271	107				263	271	107	263	271	107
	Southbound	L	96	152	57	8	8	10	104	160	67				104	160	67	104	160	67
		T	736	458	472	497	156	206	1233	614	678	78	87	100	1233	614	678	1311	701	778

Year 2009 Traffic Volume Development

2009 Background Growth = 3% per year 1.126 Intersection	Approach		2009 Base No Build			Total Approved Dev. Traffic			2009 Future No Build			Pocono Manor Traffic			Improvements Adjustments			2009 Future Build		
			Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
Frontage Road from I-380 N	Northbound	R										2338	2628	2597	40	40	38	2378	2668	2635
Fig. A 314 Ramp & Route 940	Eastbound	R										762	781	673	132	89	86	894	870	759
	Westbound	T													1322	758	702	1322	758	702
	Southbound	R										2989	3099	3447	290	114	79	3279	3213	3526
Route 314 & Driveway A	Eastbound	L										1222	1298	1446				1222	1298	1446
		R										31	35	39				31	35	39
	Northbound	L										33	39	40				33	39	40
		T										1902	1950	2171	404	174	121	2306	2124	2292
	Southbound	T										1049	1147	1094	179	130	126	1228	1277	1220
		R										2076	2291	2184				2076	2291	2184
Route 314 & Driveway B	Eastbound	L										1832	1947	2168				1832	1947	2168
		T										12						12		
		R										46	52	58				46	52	58
	Westbound	L										1						1		
		T										41	2	2				41	2	2
		R										70	3	3				70	3	3
	Northbound	L										50	58	60				50	58	60
		T										33	39	40	404	174	121	437	213	161
		R																		
	Southbound	L										11	2	2				11	2	2
		T										31	35	39	179	130	126	210	165	165
		R										1038	1145	1092				1038	1145	1092

Year 2019 Traffic Volume Development

2019 Background Growth = 3% per year 1.513 Intersection	Approach		2019 Base No Build			Total Approved Dev. Traffic			2019 Future No Build			Pocono Manor Traffic			Improvements Adjustments			2019 Future Build		
			Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
Route 940 & Longpond Road	Eastbound	L	17	24	12				17	24	12									
		T	756	472	455	31	5	7	787	477	462	71	84	72	831	514	498	902	598	570
		R	85	74	95	42	42	42	127	116	137				144	127	152	144	127	152
	Westbound	L	551	395	384	139	90	90	690	485	474				624	445	429	624	445	429
		T	994	575	460	89	11	12	1083	586	472	72	76	87	1080	618	491	1152	694	578
		R	68	54	43				68	54	43									
	Northbound	L	77	38	44	46	46	46	123	84	90				139	96	103	139	96	103
		T	7	3	4	9	9	9	16	12	13									
		R	360	251	312	110	93	93	470	344	405				470	344	405	470	344	405
	Southbound	L	44	37	36				44	37	36	690	698	602	105	96	114	795	794	716
		T	9	3	7	8	8	8	17	11	15				66	40	45	66	40	45
		R	14	10	10				14	10	10				103	49	45	103	49	45
Route 940 & I-380 Southbound Ramps	Eastbound	T	959	638	623	123	80	82	1082	718	705									
		R	224	141	198	18	18	18	242	159	216				242	159	216	242	159	216
	Westbound	T	1504	988	844	202	75	76	1706	1063	920									
		R	262	142	97	200	54	76	462	196	173	2230	2382	2678	462	196	173	2692	2578	2851
	Southbound	L	73	64	56	32	32	58	105	96	114									
		R	144	64	65	25	25	25	169	89	90									
Route 940 & I-380 Northbound Ramps	Eastbound	L	95	76	73	27	27	27	122	103	100				122	103	100	122	103	100
		T	936	626	607	129	86	113	1065	712	720	762	781	673	1042	692	701	1804	1473	1374
	Westbound	T	1407	873	744	384	112	135	1791	985	879	2302	2458	2765	1791	985	879	4093	3443	3644
		R	206	112	65	28	28	44	234	140	109	687	641	682	234	140	109	921	781	791
	Northbound	L	358	257	197	17	17	17	375	274	214				375	274	214	375	274	214
		R	201	269	207	103	52	91	304	321	298				253	268	249	253	268	249
Route 314 & Route 940 Eastbound Ramps	Eastbound	L	113	91	85				113	91	85				113	91	85	113	91	85
		R	112	76	76	5	5	5	117	81	81	3100	3409	3270	117	81	81	3217	3490	3351
	Northbound	L	62	38	29	60	37	28	122	75	57	134	150	171	122	75	57	256	225	228
		T	395	141	91	4	4	4	399	145	95	2989	3099	3447	399	145	95	3388	3244	3542
	Southbound	T	107	77	62	11	11	18	118	88	80	141	166	168	119	88	79	260	254	247
		R	36	20	14				36	20	14									
Route 314 & Route 940 Westbound Ramps	Eastbound	L	2	2	2				2	2	2									
		R	26	18	18	11	11	18	37	29	36									
	Northbound	L	322	88	53	4	4	4	326	92	57	2989	3099	3447	326	92	57	3315	3191	3504
		T	186	144	123				186	144	123				186	144	123	186	144	123
	Southbound	T	118	79	57				118	79	57									
		R	62	61	48				62	61	48				62	61	48	62	61	48
Route 940 & Spruce Street/Harvest Lane	Eastbound	L	21	12	14				21	12	14				21	12	14	21	12	14
		T	1074	897	715	287	170	227	1361	1067	942	134	150	171	1361	1067	942	1495	1217	1113
		R	59	33	21				59	33	21				59	33	21	59	33	21
	Westbound	L	38	18	6				38	18	6				38	18	6	38	18	6
		T	1234	883	650	419	147	193	1653	1030	843	141	166	168	1653	1030	843	1794	1196	1011
		R	15	5	3				15	5	3				15	5	3	15	5	3
	Northbound	L	94	53	27				94	53	27				94	53	27	94	53	27
		T	18	11	6				18	11	6				18	11	6	18	11	6
		R	42	20	8				42	20	8				42	20	8	42	20	8
	Southbound	L	38	6	6				38	6	6				74	26	20	74	26	20
		T	11	6	3				11	6	3				11	6	3	11	6	3
		R	35	3	11				35	3	11				117	62	54	117	62	54
Route 940 & Summit Avenue/Commerce St	Eastbound	L	15	8	11				15	8	11				15	8	11	15	8	11
		T	1133	914	718	287	170	227	1420	1084	945	134	150	171	1420	1084	945	1554	1234	1116
		R	6	2					6	2					6	2		6	2	
	Westbound	L	12	15	5				12	15	5				12	15	5	12	15	5
		T	1252	885	646	419	147	193	1671	1032	839	141	166	168	1671	1032	839	1812	1198	1007
		R	263	192	154				263	192	154				263	192	154	263	192	154
	Northbound	L	3	8	5				3	8	5				3	8	5	3	8	5
		T	2						2						2			2		
		R	12	17	5				12	17	5				12	17	5	12	17	5
	Southbound	L	234	159	95				234	159	95				234	159	95	234	159	95
		T	2	3	2				2	3	2				2	3	2	2	3	2
		R	32	14	9				32	14	9				32	14	9	32	14	9

Year 2019 Traffic Volume Development

2019 Background Growth = 3% per year 1.513 Intersection	Approach		2019 Base No Build			Total Approved Dev. Traffic			2019 Future No Build			Pocono Manor Traffic			Improvements Adjustments			2019 Future Build		
			Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
Route 940 & Industrial Drive	Eastbound	L				97	15	17	97	15	17				97	15	17	97	15	17
		T	921	703	529	143	131	178	1064	834	707	134	150	171	1064	834	707	1198	984	878
		R	12	14	17	3	3	4	15	17	21				15	17	21	15	17	21
	Westbound	L	135	126	85				135	126	85				135	126	85	135	126	85
		T	806	582	484	185	145	228	991	727	712	141	166	168	991	727	712	1132	893	880
		R	67	45	33	15	15	28	82	60	61				82	60	61	82	60	61
	Northbound	L	457	227	221	2	2	5	459	229	226				459	229	226	459	229	226
		T	189	59	53	4	4	7	193	63	60				193	63	60	193	63	60
		R	94	138	123				94	138	123				94	138	123	94	138	123
	Southbound	L	159	62	35	12	12	20	171	74	55				171	74	55	171	74	55
		T	91	36	23	2	2	5	93	38	28				93	38	28	93	38	28
		R	487	42	70	263	32	37	750	74	107				750	74	107	750	74	107
Route 940 & Oak Street	Eastbound	L	256	219	191				256	219	191				256	219	191	256	219	191
		T	874	656	454	155	143	198	1029	799	652	134	150	171	1029	799	652	1163	949	823
		R	98	83	53				98	83	53				98	83	53	98	83	53
	Westbound	L	380	148	91				380	148	91				380	148	91	380	148	91
		T	413	516	408	260	220	256	673	736	664	141	166	168	673	736	664	814	902	832
		R	560	256	237				560	256	237				560	256	237	560	256	237
	Northbound	L	83	54	42				83	54	42				83	54	42	83	54	42
		R	295	192	151				295	192	151				295	192	151	295	192	151
	Southbound	L	304	253	278				304	253	278				304	253	278	304	253	278
		R	197	159	174				197	159	174				197	159	174	197	159	174
Route 611 & Route 940 West/Route 196	Eastbound	L	228	189	169	14	2	2	242	191	171				242	191	171	242	191	171
		T	307	334	284	7	7	8	314	341	292	57	62	71	314	341	292	371	403	363
		R	623	463	372	134	134	188	757	597	560	78	87	100	757	597	560	835	684	660
	Westbound	L	396	349	307				396	349	307				396	349	307	396	349	307
		T	162	169	154	8	8	8	170	177	162	59	70	68	170	177	162	229	247	230
		R	2	6	2				2	6	2				2	6	2	2	6	2
	Northbound	L	475	458	337	207	207	233	682	665	570	83	97	100	682	665	570	765	762	670
		T	900	484	283	128	13	13	1028	497	296				1028	497	296	1028	497	296
		R	864	764	475				864	764	475				864	764	475	864	764	475
	Southbound	L	9	6	12				9	6	12				9	6	12	9	6	12
		T	867	489	289	379	38	38	1246	527	327				1246	527	327	1246	527	327
		R	542	324	257	45	5	5	587	329	262				587	329	262	587	329	262
Route 611 & Route 940 East/Driveway	Eastbound	L	336	159	57				336	159	57				336	159	57	336	159	57
		T	41	39	17				41	39	17				41	39	17	41	39	17
		R	64	70	17				64	70	17				64	70	17	64	70	17
	Westbound	L	126	67	73				126	67	73				126	67	73	126	67	73
		T	27	14	15				27	14	15				27	14	15	27	14	15
		R	849	551	464	52	13	14	901	564	478	83	97	100	901	564	478	984	661	578
	Northbound	L	33	29	11				33	29	11				33	29	11	33	29	11
		T	1054	997	573	282	206	231	1336	1203	804				1336	1203	804	1336	1203	804
		R	35	29	27				35	29	27				35	29	27	35	29	27
	Southbound	L	833	508	454	8	8	10	841	516	464	78	87	100	841	516	464	919	603	564
		T	977	737	493	505	164	216	1482	901	709				1482	901	709	1482	901	709
		R	76	56	21				76	56	21				76	56	21	76	56	21
Route 611 & Route 314 West	Eastbound	L	20	51	12				20	51	12				20	51	12	20	51	12
		R	216	250	123				216	250	123	78	87	100	216	250	123	294	337	223
	Northbound	L	532	222	154				532	222	154	83	97	100	532	222	154	615	319	254
		T	1101	986	824	282	206	231	1383	1192	1055				1383	1192	1055	1383	1192	1055
	Southbound	T	902	570	588	505	164	116	1407	734	704				1407	734	704	1407	734	704
		R	50	38	35				50	38	35				50	38	35	50	38	35
Route 611 & Route 314 East	Westbound	L	502	191	118				502	191	118				502	191	118	502	191	118
		R	148	70	47	9	9	10	157	79	57				157	79	57	157	79	57
	Northbound	T	1485	1139	932	273	197	221	1758	1336	1153	83	97	100	1758	1336	1153	1841	1433	1253
		R	354	365	144				354	365	144				354	365	144	354	365	144
	Southbound	L	129	204	77	8	8	10	137	212	87				137	212	87	137	212	87
		T	989	616	634	497	156	206	1486	772	840	78	87	100	1486	772	840	1564	859	940

Year 2019 Traffic Volume Development

2019 Background Growth = 3% per year 1.513 Intersection	Approach		2019 Base No Build			Total Approved Dev. Traffic			2019 Future No Build			Pocono Manor Traffic			Improvements Adjustments			2019 Future Build		
			Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
Frontage Road from I-380 N	Northbound	R										2338	2628	2597	51	53	49	2389	2681	2646
Fig. A 314 Ramp & Route 940	Eastbound	R										762	781	673	179	119	117	941	900	790
	Westbound	T													1637	972	883	1637	972	883
	Southbound	R										2989	3099	3447	388	153	105	3377	3252	3552
Route 314 & Driveway A	Eastbound	L										1222	1298	1446				1222	1298	1446
		R										31	35	39				31	35	39
	Northbound	L										33	39	40				33	39	40
		T										1902	1950	2171	521	220	152	2423	2170	2323
	Southbound	T										1049	1147	1094	236	169	160	1285	1316	1254
		R										2076	2291	2184				2076	2291	2184
Route 314 & Driveway B	Eastbound	L										1832	1947	2168				1832	1947	2168
		T										12						12		
		R										46	52	58				46	52	58
	Westbound	L										1						1		
		T										41	2	2				41	2	2
		R										70	3	3				70	3	3
	Northbound	L										50	58	60				50	58	60
		T										33	39	40	521	220	152	554	259	192
		R																		
	Southbound	L										11	2	2				11	2	2
		T										31	35	39	236	169	160	267	204	199
		R										1038	1145	1092				1038	1145	1092

Intersection	Approach		Lowe's/Hirshland Dev. Site			Arcadia Site			Hirshland Long Pond Dev. Site			Total Other Approved Dev.		
			Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
Route 940 & Longpond Road	Eastbound	L												
		T	2	2	4	29	3	3				31	5	7
		R							42	42	42	42	42	42
	Westbound	L				55	6	6	84	84	84	139	90	90
		T	2	2	3	87	9	9				89	11	12
		R												
	Northbound	L							46	46	46	46	46	46
		T							9	9	9	9	9	9
		R				19	2	2	91	91	91	110	93	93
	Southbound	L												
		T							8	8	8	8	8	8
		R												
Route 940 & I-380 Southbound Ramps	Eastbound	T	2	2	4	48	5	5	73	73	73	123	80	82
		R							18	18	18	18	18	18
	Westbound	T	2	2	3	141	14	14	59	59	59	202	75	76
		R	38	38	60	162	16	16				200	54	76
	Southbound	L	32	32	58							32	32	58
		R							25	25	25	25	25	25
Route 940 & I-380 Northbound Ramps	Eastbound	L							27	27	27	27	27	27
		T	35	35	62	48	5	5	46	46	46	129	86	113
	Westbound	T	40	40	63	302	30	30	42	42	42	384	112	135
		R	28	28	44							28	28	44
	Northbound	L							17	17	17	17	17	17
		R	46	46	85	57	6	6				103	52	91
Route 314 & Route 940 Eastbound Ramps	Eastbound	L												
		R							5	5	5	5	5	5
	Northbound	L	60	37	28							60	37	28
		T							4	4	4	4	4	4
	Southbound	T	11	11	18							11	11	18
		R												
Route 314 & Route 940 Westbound Ramps	Eastbound	L												
		R	11	11	18							11	11	18
	Northbound	L							4	4	4	4	4	4
		T												
	Southbound	T												
		R												
Route 940 & Spruce Street/Harvest Lane	Eastbound	L												
		T	141	118	175	105	11	11	41	41	41	287	170	227
		R												
	Westbound	L												
		T	79	79	125	302	30	30	38	38	38	419	147	193
		R												
	Northbound	L												
		T												
		R												
	Southbound	L												
		T												
		R												
Route 940 & Summit Avenue/Commerce St	Eastbound	L												
		T	141	118	175	105	11	11	41	41	41	287	170	227
		R												
	Westbound	L												
		T	79	79	125	302	30	30	38	38	38	419	147	193
		R												
	Northbound	L												
		T												
		R												
	Southbound	L												
		T												
		R												
Route 940 & Industrial Drive	Eastbound	L	6	6	8	91	9	9				97	15	17
		T	88	88	135	14	2	2	41	41	41	143	131	178
		R	3	3	4							3	3	4
	Westbound	L												
		T	102	102	185	45	5	5	38	38	38	185	145	228
		R	15	15	28							15	15	28
	Northbound	L	2	2	5							2	2	5
		T	4	4	7							4	4	7
		R												
	Southbound	L	12	12	20							12	12	20
		T	2	2	5							2	2	5
		R	6	6	11	257	26	26				263	32	37
Route 940 & Oak Street	Eastbound	L												
		T	100	100	155	14	2	2	41	41	41	155	143	198
		R												
	Westbound	L												
		T	177	177	213	45	5	5	38	38	38	260	220	256
		R												
	Northbound	L												
		R												
	Southbound	L												
		R												

Route 611 & Route 940 West/Route 196	Eastbound	L				14	2	2				14	2	2
		T	2	2	3				5	5	5	7	7	8
		R	98	98	152				36	36	36	134	134	188
	Westbound	L												
		T	4	4	4				4	4	4	8	8	8
		R												
	Northbound	L	173	173	199				34	34	34	207	207	233
		T				128	13	13				128	13	13
		R												
	Southbound	L												
		T				379	38	38				379	38	38
		R				45	5	5				45	5	5
Route 611 & Route 940 East/Driveway	Eastbound	L												
		T												
		R												
	Westbound	L												
		T												
		R	5	5	6	43	4	4	4	4	4	52	13	14
	Northbound	L												
		T	168	168	193	84	8	8	30	30	30	282	206	231
		R												
	Southbound	L	3	3	5				5	5	5	8	8	10
		T	95	95	147	379	38	38	31	31	31	505	164	216
		R												
Route 611 & Route 314 West	Eastbound	L												
		R												
	Northbound	L												
		T	168	168	193	84	8	8	30	30	30	282	206	231
	Southbound	T	95	95	47	379	38	38	31	31	31	505	164	116
		R												
Route 611 & Route 314 East	Westbound	L												
		R	5	5	6				4	4	4	9	9	10
	Northbound	T	163	163	187	84	8	8	26	26	26	273	197	221
		R												
	Southbound	L	3	3	5				5	5	5	8	8	10
		T	92	92	142	379	38	38	26	26	26	497	156	206

Pocono Manor Trip Distribution

Intersection	Approach		Pocono Manor Casino/Villa "Long Distance" Trips					Pocono Manor Shopping Ctr/Office "Local" Trips					Diverted Linked Trips - Shopping Center					Total Pocono Manor Trips		
			Trip Distribution Percentages		Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Trip Distribution Percentages		Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Trip Distribution Percentages		Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
			Enter	Exit				Enter	Exit				Enter	Exit						
Route 940 & Longpond Road	Eastbound	L																		
		T	2%		46	55	64	4%		25	29	8								
		R																71	84	72
	Westbound	L																		
		T		2%	41	49	57		4%	31	27	30								
		R																72	76	87
	Northbound	L																		
		T																		
		R																		
	Southbound	L	15%		348	410	479	25%		159	183	51	50%		183	105	72	690	698	602
		T																		
		R																		
Route 940 & I-380 Southbound Ramps	Eastbound	T																		
		R																		
	Westbound	T																		
		R		75%	1541	1843	2122		65%	506	434	484		50%	183	105	72	2230	2382	2678
	Southbound	L																		
		R																		
Route 940 & I-380 Northbound Ramps	Eastbound	L																		
		T	17%		395	464	542	29%		184	212	59	50%		183	105	72	762	781	673
	Westbound	T		77%	1582	1892	2179		69%	537	461	514		50%	183	105	72	2302	2458	2765
		R		15%	308	369	424		25%	195	167	186		50%	184	105	72	687	641	682
	Northbound	L																		
		R																		
Route 314 & Route 940 Eastbound Ramps	Eastbound	L																		
		R	92%		2137	2512	2935	94%		597	687	191	100%		366	210	144	3100	3409	3270
	Northbound	L		5%	103	123	141		4%	31	27	30						134	150	171
		T		92%	1890	2261	2603		94%	732	628	700		100%	367	210	144	2989	3099	3447
	Southbound	T	5%		116	137	160	4%		25	29	8						141	166	168
		R																		
Route 314 & Route 940 Westbound Ramps	Eastbound	L																		
		R																		
	Northbound	L		92%	1890	2261	2603		94%	732	628	700		100%	367	210	144	2989	3099	3447
		T																		
	Southbound	T																		
		R																		
Route 940 & Spruce Street/Harvest Lane	Eastbound	L																		
		T		5%	103	123	141		4%	31	27	30						134	150	171
		R																		
	Westbound	L																		
		T	5%		116	137	160	4%		25	29	8						141	166	168
		R																		
	Northbound	L																		
		T																		
		R																		
	Southbound	L																		
		T																		
		R																		

Pocono Manor Trip Distribution

Intersection	Approach		Pocono Manor Casino/Villa "Long Distance" Trips					Pocono Manor Shopping Ctr/Office "Local" Trips					Diverted Linked Trips - Shopping Center					Total Pocono Manor Trips		
			Trip Distribution Percentages		Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Trip Distribution Percentages		Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Trip Distribution Percentages		Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
			Enter	Exit				Enter	Exit				Enter	Exit						
Route 940 & Summit Avenue/Commerce St	Eastbound	L																		
		T		5%	103	123	141		4%	31	27	30						134	150	171
		R																		
	Westbound	L																		
		T	5%		116	137	160	4%		25	29	8						141	166	168
		R																		
	Northbound	L																		
		T																		
		R																		
	Southbound	L																		
		T																		
		R																		
Route 940 & Industrial Drive	Eastbound	L																		
		T		5%	103	123	141		4%	31	27	30						134	150	171
		R																		
	Westbound	L																		
		T	5%		116	137	160	4%		25	29	8						141	166	168
		R																		
	Northbound	L																		
		T																		
		R																		
	Southbound	L																		
		T																		
		R																		
Route 940 & Oak Street	Eastbound	L																		
		T		5%	103	123	141		4%	31	27	30						134	150	171
		R																		
	Westbound	L																		
		T	5%		116	137	160	4%		25	29	8						141	166	168
		R																		
	Northbound	L																		
		R																		
	Southbound	L																		
		R																		
Route 611 & Route 940 West/Route 196	Eastbound	L																		
		T		2%	41	49	56		2%	16	13	15						57	62	71
		R		3%	62	74	85		2%	16	13	15						78	87	100
	Westbound	L																		
		T	2%		46	55	64	2%		13	15	4						59	70	68
		R																		
	Northbound	L	3%		70	82	96	2%		13	15	4						83	97	100
		T																		
		R																		
	Southbound	L																		
		T																		
		R																		
Route 611 & Route 940 East/Driveway	Eastbound	L																		
		T																		
		R																		
	Westbound	L																		
		T																		
		R	3%		70	82	96	2%		13	15	4						83	97	100
	Northbound	L																		
		T																		
		R																		
	Southbound	L		3%	62	74	85		2%	16	13	15						78	87	100
		T																		
		R																		

Pocono Manor Trip Distribution

Intersection	Approach		Pocono Manor Casino/Villa "Long Distance" Trips					Pocono Manor Shopping Ctr/Office "Local" Trips					Diverted Linked Trips - Shopping Center					Total Pocono Manor Trips		
			Trip Distribution Percentages		Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Trip Distribution Percentages		Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Trip Distribution Percentages		Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak	Friday Adj. St. PM Peak	Friday Casino PM Peak	Saturday Casino Peak
			Enter	Exit				Enter	Exit				Enter	Exit						
Route 611 & Route 314 West	Eastbound	L																		
		R		3%	62	74	85		2%	16	13	15								
	Northbound	L	3%		70	82	96	2%		13	15	4						78	87	100
		T																83	97	100
	Southbound	T																		
		R																		
Route 611 & Route 314 East	Westbound	L																		
		R																		
	Northbound	T	3%		70	82	96	2%		13	15	4								
		R																83	97	100
	Southbound	L																		
		T		3%	62	74	85		2%	16	13	15						78	87	100
Frontage Road from I-380 N	Northbound	R	75%		1742	2048	2393	65%		413	475	132	50%		183	105	72	2338	2628	2597
Fig. A 314 Ramp & Route 940	Eastbound	R	17%		395	464	542	29%		184	212	59	50%		183	105	72	762	781	673
	Westbound	T																		
	Southbound	R		92%	1890	2261	2603		94%	732	628	700		100%	367	210	144	2989	3099	3447
Route 314 & Driveway A	Eastbound	L			798	953	1098			277	261	290			147	84	58	1222	1298	1446
		R			25	30	34			6	5	5						31	35	39
	Northbound	L			28	33	38			5	6	2						33	39	40
		T			1196	1430	1646			486	394	439			220	126	86	1902	1950	2171
	Southbound	T			712	837	978			215	240	68			122	70	48	1049	1147	1094
		R			1425	1675	1957			407	476	131			244	140	96	2076	2291	2184
Route 314 & Driveway B	Eastbound	L			1196	1430	1646			416	391	436			220	126	86	1832	1947	2168
		T			5					7								12		
		R			37	44	51			9	8	7						46	52	58
	Westbound	L								1								1		
		T			24	1	1			17	1	1						41	2	2
		R								70	3	3						70	3	3
	Northbound	L			42	49	58			8	9	2						50	58	60
		T			28	33	38			5	6	2						33	39	40
		R																		
	Southbound	L								11	2	2						11	2	2
		T			25	30	34			6	5	5						31	35	39
		R			712	837	978			204	238	66			122	70	48	1038	1145	1092

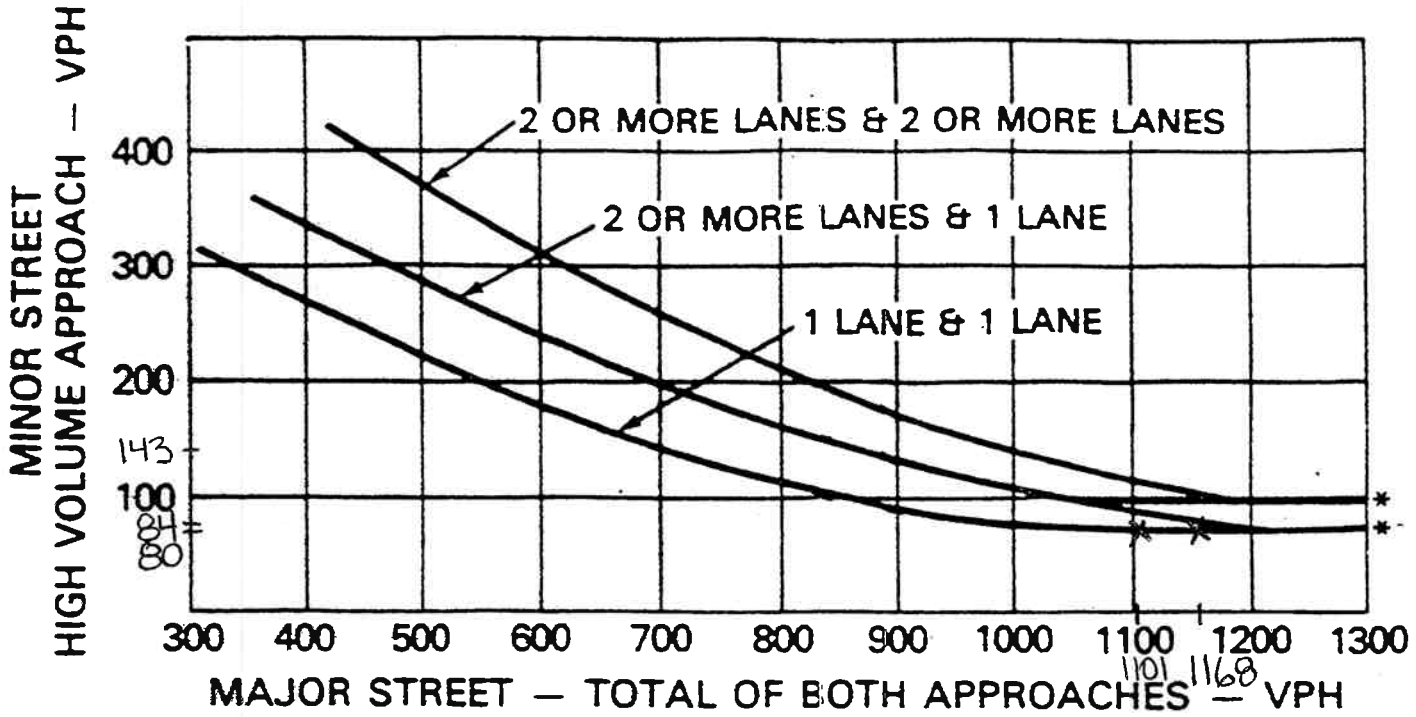
APPENDIX I

Traffic Signal Warrant Investigations

SR 0940 and Southbound I-380 Ramp
Existing Traffic Volumes

PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

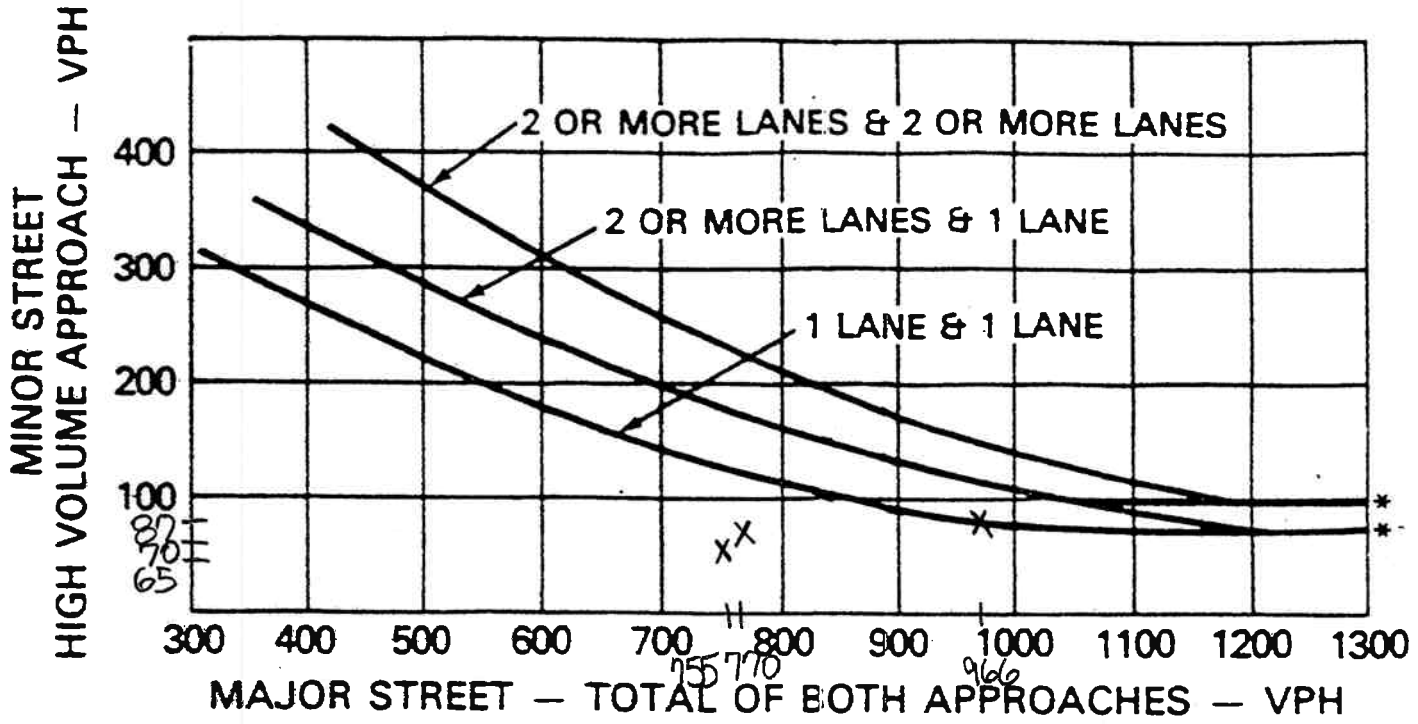
Afternoon (1776, 143)
PM (1168, 84)
Saturday (1101, 80)

Warrant is met for all three peak hours plotted.

SR 0314 and SR 0940 Eastbound Ramps
Build Traffic Volumes (lefts from minor street only)

PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

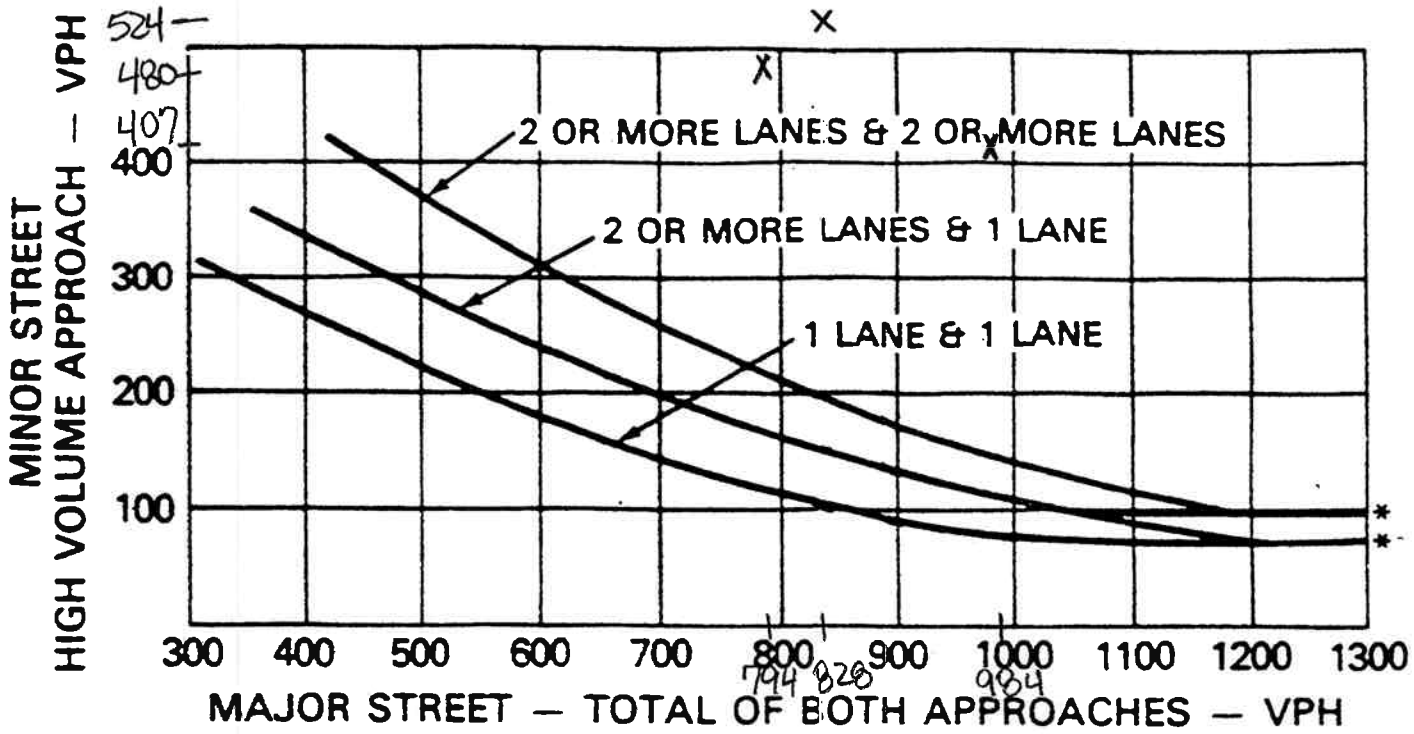
Afternoon (966, 87)
PM (770, 70)
Saturday (755, 65)

Warrant is met for the afternoon peak hour.

SR 0314 and Temporary Casino Driveway
Build Traffic Volumes (lefts from minor street only) – Driveway B

PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Afternoon	(984, 407)
PM	(794, 480)
Saturday	(828, 524)

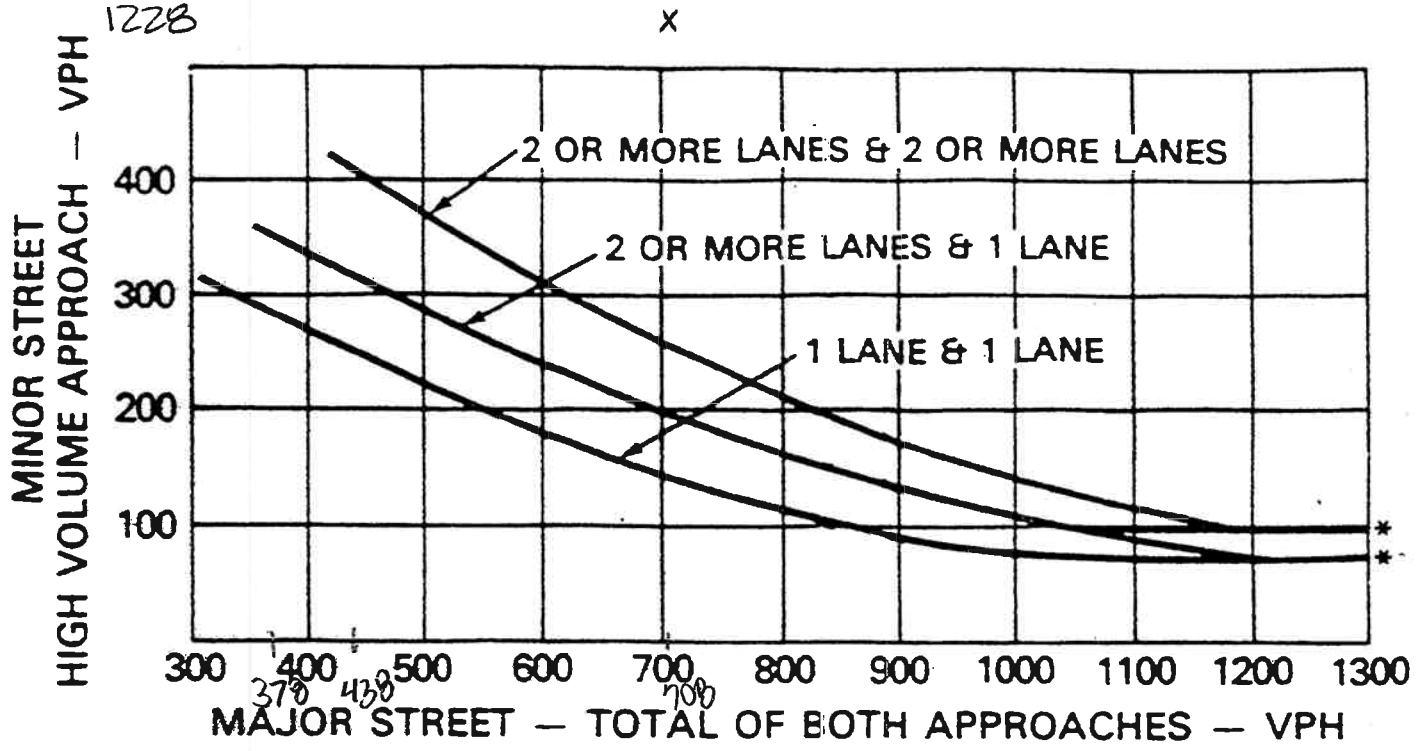
Warrant is met for all three peak hours plotted.

SR0314 and Casino Driveway A
(lefts from minor street only)

1446 X
1298 X

PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

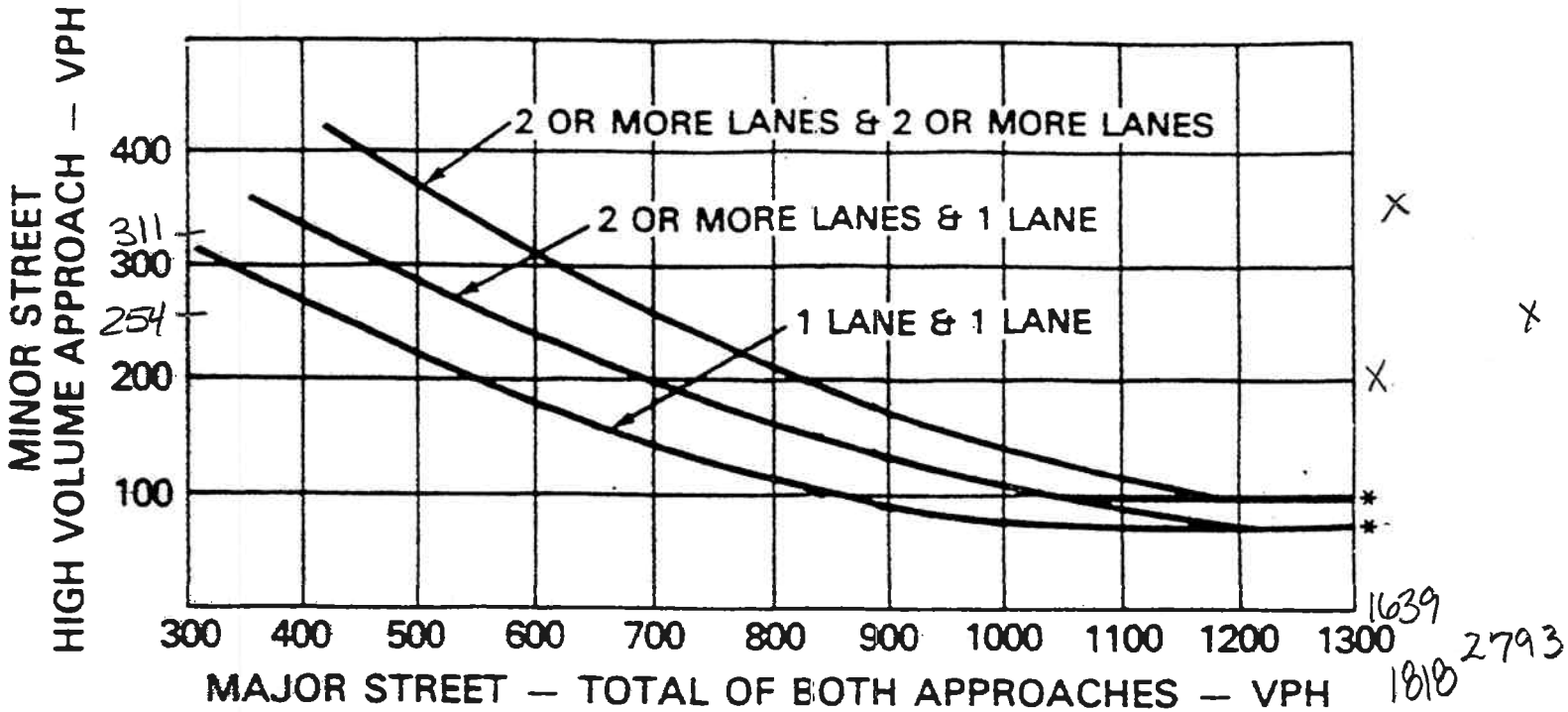
Afternoon	1222, 708
PM	1298, 438
Saturday	1446, 378

Warrant is met for all three peak hours plotted

SR 0611 and SR 0314 Westbound
Build Traffic Volumes

PEAK HOUR VOLUME WARRANT

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*NOTE: 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Afternoon	254, 2793
PM	311, 1818
Saturday	200, 1639

Warrant is met for all three peak hours plotted.

APPENDIX J

Level of Service Definitions

LEVEL OF SERVICE

Level of Service is a term used to describe vehicle operator satisfaction with the driving experience. Research has determined that operator satisfaction is based primarily on travel speed and delay. In urban environments these factors, travel speed and delay, are primarily controlled by the operation of intersections.

By utilizing models to simulate the flow of traffic at intersections, the average delay experienced by vehicles can be estimated. These models consider such factors as traffic volumes, roadway geometry, traffic control, and driver behavior. Levels of Service designations are based on a comparison of the average delays calculated by the models with perceived acceptable delays.

The following tables illustrate the guidelines used for designating Levels of Service at Intersections:

Level of Service Criteria
for Signalized Intersections[1]

Level of Service	Control Delay (seconds per vehicle)
A	< 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

[1] Table 6-3, Level of Service from Control Delay (2000 HCM)

Level of Service Criteria
for Unsignalized Intersections[2]

Level of Service	Intersection Delay (seconds per vehicle)
a	< 10
b	> 10 and ≤ 15
c	> 15 and ≤ 25
d	> 25 and ≤ 35
e	> 35 and ≤ 40
f	> 50

[2] Table 6-4, Level of Service Criteria for TWSC and AWSC intersections (2000 HCM)