

Appendix 30 - Index

Local Impact Reports

1. NPDES permit dated 5/12/03
2. Letter dated 9/1/05 Bucks County Conservation District
3. Letter dated 12/16/05 Bucks County Water and Sewer Authority
4. Letter dated 12/15/05 AQUA Pennsylvania
5. Letter dated 11/30/05 PECO
6. Traffic Impact Study by Pennoni Associates, Inc.

APPENDIX 30

Greenwood Gaming and Entertainment, Inc.

Local Impact Report

Market Street, 9th Floor, P.O. Box 865, Harrisburg, PA 17108-0865
(717) 237-7160 ■ Fax: (717) 237-7161 ■ www.WolfBlock.com

Alan C. Kohler
Direct Dial: (717) 237-7172
Direct Fax: (717) 237-2752
E-mail: akohler@wolfblock.com

December 21, 2005

VIA FEDERAL EXPRESS
CONFIDENTIAL

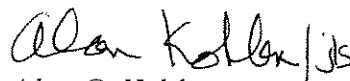
Joseph Pizzo, Esquire
Solicitor of Bensalem Township
Rudolph, Pizzo, Clark and Associates
4 Neshaminy Interplex
Suite 105
Trevose, PA 19053

Re: Greenwood Gaming and Entertainment, Inc. - Local Impact Report

Dear Mr. Pizzo:

Pursuant to Pennsylvania Gaming Control Board regulations at 58 Pa. Code § 441.3(c), enclosed please find a copy of the Local Impact Report being submitted with Greenwood Gaming and Entertainment, Inc.'s (Philadelphia Park) Application for a slot machine license. I would request that you keep this information confidential between you and your client, Bensalem Township, particularly until such time as the Application is filed with the Board on December 28, 2005. Thank you for your cooperation.

Sincerely,



Alan C. Kohler

For WOLF, BLOCK, SCHORR and SOLIS-COHEN LLP

ACK/jls
Enclosures

cc: Frank McDonnell (w/o encs)

HAR:62860.1/PHI273-230266

Certificate of Service

I hereby certify that I have this day served a true copy of the foregoing Local Impact Report upon the individual listed below.

VIA FEDERAL EXPRESS

Joseph Pizzo, Solicitor
Bensalem Township
Rudolph, Pizzo, Clark and Assoc.
4 Neshaminy Interplex
Suite 105
Trevose, PA 19053



Alan C. Kohler, Esquire

Date: December 21, 2005

LOCAL IMPACT REPORT

Greenwood Gaming and Entertainment, Inc. submits this Local Impact Report in accordance with 58 Pa. Code § 441.4(a)(21). The report demonstrates that the Applicant has exercised extensive effort to evaluate the impact of its proposed gaming operations on the local infrastructure in Bensalem, Bucks County, Pennsylvania.

As the attached documents indicate, the Philadelphia Park organization has been working with local and state authorities to assure adequate access to the licensed facility from the Pennsylvania Turnpike, I-95, Route 1 and Street Road. In fact, decisions on road access and traffic congestion issues with Bensalem Township officials and Pennsylvania Department of Transportation officials have been very active for approximately 18 months. In conjunction with these discussions, the Philadelphia Park organization has plans in place to construct additional entrances and exits to and from the Philadelphia Racetrack site to accommodate increased patronage (at significant cost to the Philadelphia Park organization). Furthermore, as a result of these discussions, a future dedicated exit for the Racetrack/Licensed Facility off the Pennsylvania Turnpike is being engineered which will eventually provide Turnpike access to the site from less than one mile. Finally, as a result of these ongoing discussions, plans are being developed to widen Street Road, the primary access road which fronts the Racetrack site – a project which, when finalized, will involve monetary contribution by the Philadelphia Park organization to Bensalem Township through payment of a traffic impact fee. The attached Traffic Report prepared by Pennoni Associates, Inc. documents the traffic and road access scenarios.

The Philadelphia Park organization has also taken steps to assure that adequate utility and police and fire infrastructure will be in place to serve the licensed facility. Local utilities have confirmed that adequate capacity is available and that any required additional facilities to serve

the site can be arranged in a timely manner. Geotechnical reports verify the environmental impact of the project. Finally, the Philadelphia Park organization has been in contact with local fire and emergency officials and have assurance that the emergency service capability is present to serve the additional demand which may be caused by the licensed facility.



**APPROVAL OF COVERAGE UNDER THE GENERAL NPDES
PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH
CONSTRUCTION ACTIVITIES
PAG-2 (2002 Amendment)**

NPDES PERMIT NO: PAG2000903046

Project Name & Address

PROPOSED ELECTRONIC GAMING DEVICE FACILITY
3001 STREET ROAD
BENSALEM, PA 19020-8512

Permittee Name & Address

PHILADELPHIA PARK, C/O MR. LEN CAREY
3001 STREET ROAD
BENSALEM, PA 19020-8512

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 et seq. ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., the Department of Environmental Protection hereby approves the Notice of Intent (NOI) submitted for coverage to discharge stormwater to the following surface water(s)

LOWER NESHAMINY CREEK (WWF, MF)

from 1 to less than 5-acre project with a point source discharge 5 acres or larger project

subject to the Department's enclosed PAG-2 which incorporates all effluent limitations, monitoring and reporting requirements and other terms, conditions, criteria and special requirements for the discharge of stormwater from point sources composed entirely of stormwater associated, in whole or in part, with construction activity, as defined in this general permit, to surface waters of the Commonwealth, including to municipal separate storm sewers and non-municipal separate storm sewer.

APPROVAL TO DISCHARGE IN ACCORDANCE WITH THE TERMS AND CONDITIONS HEREIN MAY COMMENCE ON THE DATE OF THE APPROVAL OF COVERAGE, AND IS VALID FOR A PERIOD OF FIVE YEARS WHEN CONDUCTED PURSUANT TO SUCH TERMS AND CONDITIONS. COVERAGE MAY BE EXTENDED BY THE DEPARTMENT IF A TIMELY ADMINISTRATIVELY COMPLETE AND ACCEPTABLE NOI RENEWAL IS SUBMITTED TO THE DEPARTMENT AT LEAST 90 DAYS PRIOR TO DATE OF COVERAGE TERMINATION, UNLESS PERMISSION FOR SUBMISSION AT A LATER DATE HAS BEEN GRANTED BY THE DEPARTMENT. THE PERMIT MAY BE TERMINATED PRIOR TO THE EXPIRATION DATE UPON NOTICE TO AND APPROVAL BY THE DEPARTMENT OR AUTHORIZED COUNTY CONSERVATION DISTRICT. NO CONDITION OF THIS PERMIT SHALL RELEASE THE PERMITTEE OR CO-PERMITTEE FROM ANY RESPONSIBILITY OR REQUIREMENT UNDER PENNSYLVANIA, OR FEDERAL ENVIRONMENTAL STATUTES, AND REGULATIONS OR LOCAL ORDINANCES.

COVERAGE APPROVAL DATE: 05/12/2003

COVERAGE EXPIRATION DATE: 05/12/2008

AUTHORIZED BY: *Fredrick S. Graham*

TITLE: BUCKS COUNTY CONSERVATION DISTRICT MANAGER

Table of Contents

<u>Subject</u>	<u>Page</u>
NOTICE OF INTENT SUBMITTAL	1
PART A – Effluent Limitations, Monitoring, Reporting and Recordkeeping Requirements, and Prohibitions	3
1. Effluent Limitations	3
2. Monitoring and Reporting Requirements	3
3. Record Keeping	4
4. Discharges Consistent with Terms and Conditions of Permit	4
PART B – STANDARD CONDITIONS	5
1. Management Requirements	5
2. Compliance Responsibilities	7
3. Definitions	8
PART C – OTHER CONDITIONS	10
1. Prohibition of Non-Stormwater Discharges	10
2. Erosion and Sediment Control Plans	10
3. Recycling and disposal of Building Materials and Wastes	10
4. Preparedness, Prevention and Contingency Plans	10
5. Post Construction Stormwater Management Plans	10
6. Pre-Construction Conferences	11
7. Spoil or Borrow Areas	11
8. Phased Projects	11
9. Clarification Assistance	11
10. Wetland Protection	11

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF WATERSHED MANAGEMENTGENERAL NPDES
PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES

PAG-2 (2002 Amendment)

This permit applies to earth disturbance activities, other than agricultural plowing and tilling, timber harvesting activities and road maintenance activities, that disturb five (5) or more acres, or an earth disturbance on any portion, part, or during any stage of, a larger common plan of development or sale that involves five (5) or more acres of earth disturbance, AND, earth disturbance activities with a point source discharging to surface waters of the Commonwealth that disturb from one (1) to less than five (5) acres, or an earth disturbance on any portion, part, or during any stage of, a larger common plan of development or sale that involves one (1) to less than five (5) acres of disturbance.

Notice of Intent (NOI) Submittal

1. GENERAL INFORMATION AND REQUIREMENTS

- a. Persons proposing to discharge stormwater associated with construction activities and eligible persons proposing to expand the scope of previously authorized construction activity which discharges stormwater, who wish to be covered by this general permit, must submit an administratively complete and acceptable Notice of Intent (NOI) to the Department or authorized County Conservation District at least 30 days prior to commencing the construction activity. The NOI shall be filed in accordance with the detailed instructions specified in the NOI instruction package.
- b. The Department or authorized County Conservation District may notify the permittee at any time that the activities pursuant to this permit are not being met. Upon plan review or site inspection the Department or authorized County Conservation District may require E & S Plan revisions or other appropriate action to ensure compliance with the conditions of this permit.
- c. Operators of all construction activities shall develop, implement, and maintain erosion and sediment and post construction stormwater best management practices (BMPs) and other pollution prevention measures required by this permit.
- d. Erosion and sediment control BMPs shall be designed and implemented to meet the standards and specifications identified in Chapters 91-105, any other applicable laws and regulations, and in the Department's Erosion and Sediment Pollution Control Manual, No. 363-2134-008, as amended and updated, or an approved alternative, when legally authorized.
- e. The Erosion and Sediment Control Plan (E&S Plan), Post Construction Stormwater Management Plan (PCSM Plan), and Preparedness, Prevention, and Contingency Plan (PPC Plan) shall identify appropriate BMPs that will be implemented to ensure that existing and designated uses of surface water are protected and maintained.
- f. The permittee or co-permittee shall have the E&S Plan, PPC Plan, PCSM Plan, and other documents required by this permit available at the site and available for review by the Department, Conservation District or other authorized local, state, or federal government official.

2. The following activities are not eligible for coverage under this permit:

- a. Discharges to waters with a designated or existing use of High Quality or Exceptional Value pursuant to 25 Pa. Code Chapter 93;
- b. Discharges which contain hazardous pollutants, toxics, or any other substance which - because of its quantity, concentration, or physical, chemical, or infectious characteristics - may cause or contribute to an increase in mortality or morbidity in either an individual or the total population, or pose a substantial present or future hazard to human health or the environment when discharged into surface waters of the Commonwealth;
- c. Discharges which individually or cumulatively have the potential to cause significant adverse environmental impact;

- d. Discharges to waters for which NPDES general permit coverage is prohibited under 25 Pa. Code Chapter 92;
 - e. Discharges which are not, or will not be in compliance with any of the terms or conditions of this general permit;
 - f. Discharges from a person who has failed and continues to fail to comply has shown a lack of ability or intention to comply with a regulation, permit, schedule of compliance or order issued by the Department.
 - g. Discharges subject to categorical point source effluent limitations promulgated by EPA;
 - h. Discharges which do not, or will not, result in compliance with applicable effluent limitations or water quality standards;
 - i. Discharges from construction activities for which the Department requires an Individual NPDES permit to ensure compliance with the Clean Water Act, the Clean Streams Law, or rules and regulations promulgated thereto; or where a change has occurred in the availability of demonstrated technology or practices for the control or abatement of pollutants applicable to the point source;
 - j. Discharges associated with coal mining or non-coal mining activities pursuant to the Department's regulations at 25 Pa. Code Chapters 77 and 86-90.
 - k. Discharges associated with a construction activity that may adversely affect a Pennsylvania or federal endangered or threatened species or its habitat;
 - l. Discharges from a site where other point source(s) require the issuance of an Individual NPDES permit.
3. The Department, or the authorized County Conservation District may require by written notice any person authorized by this permit to apply for an Individual NPDES permit. This notice shall include the following: (1) a brief statement of the reasons for the decision, (2) an application form for an Individual NPDES permit, and (3) a statement setting a 90 day deadline for the owner or operator to file the application.
- Persons requesting a renewal of coverage under this general permit must submit to the Department or authorized County Conservation District an administratively complete and acceptable NOI, at least 90 days prior to the expiration date of the coverage, unless permission has been granted by the Department or authorized County Conservation District for submission at a later date. In the event that a timely, administratively complete, and acceptable application for renewal of coverage has been submitted and the Department or authorized County Conservation District is unable, through no fault of the permittee, to reissue the approval for coverage before the expiration date of the approved coverage, the terms and conditions of the approved coverage will be automatically continued and will remain fully effective and enforceable pending the issuance or denial of the renewal of coverage, provided the permittee is, and has been, operating in compliance with the terms and conditions of the permit.
5. No condition of this permit shall release any person from any responsibility or requirements under other federal or Pennsylvania environmental statutes or regulations or local ordinances.

The General NPDES Permit for Stormwater Discharges Associated with Construction Activities PAG-2 is issued December 7, 2002 and shall expire at midnight December 7, 2007 unless reissued on or before this date by the Department.

BY Stuart I. Gansell
STUART I. GANSELL
DIRECTOR
BUREAU OF WATERSHED MANAGEMENT

PART A

EFFLUENT LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS

1. EFFLUENT LIMITATIONS

a. Best Management Practices (BMPs)

This permit establishes effluent limitations in the form of implemented BMPs identified in PPC Plans, PCSM Plans, and E&S Plans which restrict the rates and quantities of sediment, stormwater runoff and associated pollutants from being discharged into surface waters of the Commonwealth and which replicate preconstruction infiltration and runoff conditions to the maximum extent possible.

b. Applicable Effluent Limitations

All stormwater discharges associated with construction activities must comply with applicable effluent limitations established in 25 Pa. Code Chapters 91-105.

c. Water Quality Based Effluent Limitations

Water quality based effluent limitations shall be imposed under applicable state and federal law when necessary to ensure that the water quality standards of the receiving water are attained. Discharges of stormwater associated with a construction activity shall not result in a violation of the water quality standards.

2. MONITORING AND REPORTING REQUIREMENTS

a. Visual Inspections

The permittee and co-permittee must ensure that visual site inspections are conducted weekly, and after each measurable precipitation event by qualified personnel, trained and experienced in erosion and sediment control, to ascertain that the Erosion and Sediment Control (E&S) BMPs are operational and effective in preventing pollution to the waters of the Commonwealth. A written report of each inspection shall be kept, and include:

- (1) a summary of site conditions, E&S BMP's, and compliance; and
- (2) the date, time, and the name of the person conducting the inspection.

b. Non-compliance Reporting

Where E&S BMP's are found to be inoperative or ineffective during an inspection, or any other time, the permittee and co-permittee shall immediately contact the Department or authorized County Conservation District, by phone or personal contact, followed by the submission of a written report within 5 days of the initial contact. Non-compliance reports shall include the following information:

- (1) any condition on the project site which may endanger public health, safety, or the environment, or involve incidents which cause or threaten pollution;
- (2) the period of non-compliance, including exact dates and times and/or anticipated time when the activity will return to compliance;
- (3) steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance; and
- (4) the date or schedule of dates, and identifying remedies for correcting non-compliance conditions.

c. Supplemental Monitoring

The Department, and authorized County Conservation District, reserve the right to require additional monitoring where a danger of water pollution is present, or water pollution is suspected to be occurring from a construction activity subject to this general permit, or for any reason in accordance with, 25 Pa. Code Section 92.41. The permittee or co-permittee shall commence such monitoring upon notification from the Department, or authorized County Conservation District.

3 RECORD KEEPING

a. **Retention of Records**

The permittee and co-permittee shall retain records of all monitoring information including copies of all monitoring and inspection reports required by this permit, and records of data used to complete the Notice of Intent for this permit, for a period of three years from the date of the termination of coverage under this permit.

b. **Reporting of Monitoring Reports**

Monitoring results shall be submitted to the Department, or authorized County Conservation District upon request.

4. DISCHARGES CONSISTENT WITH TERMS AND CONDITIONS OF THE PERMIT

All discharges authorized by this NPDES permit shall be consistent with the terms and conditions of the permit.

PART B

STANDARD CONDITIONS

I. MANAGEMENT REQUIREMENTS

a. Permit Modification, Termination, or Revocation and Reissuance

- (1) This permit may be modified, suspended, revoked and reissued, or terminated during its term for any of the causes specified in 25 Pa. Code Chapter 92.

The Department may modify, revoke, suspend, or terminate previously issued coverage under this general NPDES permit, and require the stormwater discharger to apply for and obtain an Individual NPDES permit in accordance with 25 Pa. Code Chapter 92.

- (2) The filing of a request by the permittee or co-permittee for a permit or coverage modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated non-compliance, does not stay any permit condition.
- (3) Permit modification or revocation will be conducted according to 25 Pa. Code Chapter 92.

b. Duty to Provide Information

- (1) The permittee or co-permittee shall furnish to the Department, or authorized County Conservation District, within 30 days of the date of request, any information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or coverage approved under this permit, or to determine compliance with this permit.
- (2) The permittee or co-permittee shall furnish, upon request, to the Department, or authorized County Conservation District, copies of records required to be kept by this permit.
- (3) When the permittee or co-permittee becomes aware that he or she failed to submit any relevant facts or submitted incorrect information in the NOI, PPC Plan, E&S Plan, PCSM Plan or in any other report to the Department, or authorized County Conservation District, the permittee or co-permittee shall promptly submit or correct such facts or information.
- (4) The permittee or co-permittee shall give seven calendar days advance notice to the Department, or authorized County Conservation District, of any planned physical alterations or additions to the permitted facility which could, in any way, substantially affect the quality and/or quantity of stormwater discharged from the activity.

c. Signatory Requirements

Documents required, submitted, or maintained under this permit shall be signed in accordance with the following:

- (1) Notices of Intent, Transferree/Co-permittee Form, and Notices of Termination.
- (a) Corporations: (1) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or (2) the manager of one or more manufacturing, production or operating facilities, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;
- (b) Partnerships or sole proprietorships: a general partner or the proprietor, respectively; or
- (c) Municipalities, State, Federal, or other public agencies: either a principal executive officer or ranking elected official; (1) the chief executive officer of the agency, or (2) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

- (2) All reports, plans, documents, and other information required by the permit or requested by the Department, or authorized County Conservation District, shall be signed by the permittee or co-permittee, or by a duly authorized representative of the permittee or co-permittee.
- (3) If there is a change in the duly authorized representative of the permittee or co-permittee, respectively, the permittee or co-permittee shall notify the Department or authorized County Conservation District within 30 days of the change.

d. Transfer of Ownership or Control

- (1) This permit is not transferable to any person except after notice to the Department, or authorized County Conservation District.
 - (a) In the event of any pending change in control or ownership of facilities from which the authorized discharges emanate, the permittee or co-permittee shall notify the Department, or authorized County Conservation District, using the form entitled "Transferee/Co-permittee Application" of such pending change at least 30 days prior to the change in ownership or control.
 - (b) The Transferee/Co-permittee Application form shall be accompanied by a written agreement between the existing permittee and the new owner or operator stating that the existing permittee shall be liable for violations of the permit up to and until the date of coverage transfer and that the new owner or operator shall be jointly and individually liable for permit violations under the permit from that date on.
 - (c) After receipt of the required documentation, the Department, or authorized County Conservation District, shall notify the existing permittee and the new owner or controller of its decision concerning approval of the transfer. Such requests shall be deemed approved unless the Department, or authorized County Conservation District, notifies the applicant otherwise within 30 days.
- (2) The Department or authorized County Conservation District may require the new owner or operator to apply for and obtain an Individual NPDES permit.
- (3) For purposes of this permit, operators shall include general contractors. If, prior to construction activities, the owner is the permittee and an operator/general contractor is later identified to become a co-permittee, the owner shall:
 - (a) Notify the Department, or authorized County Conservation District by submitting an administratively complete and acceptable Transferee/Co-permittee Application Form.
 - (b) After receipt of the documentation described in (a) above, the permit will be considered modified by the Department. For purposes of this permit, this modification is considered to be a minor permit modification.
 - (c) Monitoring reports and any other information requested under this permit shall reflect all changes to the permittee and the co-permittee name.

e. Removed Substances

Solids, sediments and other pollutants removed in the course of treatment or control of stormwater shall be disposed in accordance with federal and state law and regulations in order to prevent any pollutant in such materials from adversely affecting the environment.

f. Facilities Construction, Operation, and Maintenance

The permittee and co-permittee are responsible for the design and installation of the BMPs identified in the E & S Plan, PPC Plan and PCSM Plan, and for the operation and maintenance of the BMPs identified in the E & S and PPC Plans.

g. **Adverse Impact**

The permittee and co-permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

h. **Reduction, Loss, or Failure of the BMPs**

Upon reduction, loss or failure of the BMPs, the permittee and co-permittee shall take immediate action to restore the BMPs or provide an alternative method of treatment.

i. **Termination of Coverage**

Notice of Termination. Where all stormwater discharges associated with construction activity that are authorized by this permit are eliminated, and BMPs identified in the PCSM Plan have been installed, the permittee or co-permittee of the facility must submit a Notice of Termination (NOT) form that is signed in accordance with Part B.1.c. (Signatory Requirements) of this permit. All letters certifying discharge termination are to be sent to the Department, or the authorized County Conservation District.

2. **COMPLIANCE RESPONSIBILITIES**

a. **Duty to Comply**

The permittee and co-permittee must comply with all terms and conditions of this general permit. Any permit non-compliance constitutes a violation of the Pennsylvania Clean Streams Law and the federal Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit or permit renewal.

b. **Penalties for Violations of Permit Conditions**

The permittee and co-permittee may be subject to criminal and/or civil penalties for violations of the terms and conditions of this general permit under Section 602 and 605 of the Clean Streams Law, 35 P.S. Sections 691.602 and 691.605, and under the Clean Water Act as specified in 40 C.F.R. Sections 122.41(a)(2) and (3), which are incorporated by reference.

c. **Need to Halt or Reduce Activity Not a Defense**

The permittee or co-permittee may not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit.

d. **Penalties and Liability**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee or co-permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the CWA (33 U.S.C. §1321) or Section 106 of CERCLA.

e. **Property Rights**

This permit does not convey any property rights of any sort, nor any exclusive privileges, nor does it authorize any injury to private property nor any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

f. **Severability**

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.

g. **Other Laws**

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee or co-permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Clean Water Act.

h. Right of Entry

Pursuant to Sections 5(b) and 305 of the Pennsylvania Clean Streams Law (35 P.S. §§691.5(b) and 691.305) and 25 Pa. Code Chapter 92, and §1917-A of the Administrative Code, the permittee and co-permittee shall allow the head of the Department, the EPA Regional Administrator, and/or an authorized representative of EPA, DEP, County Conservation District or, in the case of a facility which discharges to a municipal separate storm sewer, an authorized representative of the municipal operator or the separate storm sewer receiving the discharge, upon the presentation of credentials and other documents, as may be required by law, to:

- (1) Enter upon the permittee's or co-permittee's premises where a regulated facility or activity is located or conducted or where records must be kept under the conditions of this permit;
- (2) Have access to and copy at reasonable times, any records that must be kept under the terms and conditions of this permit;
- (3) Inspect any facilities or equipment (including monitoring and control equipment); and
- (4) Observe or sample any discharge of stormwater.

i. Availability of Reports.

Except for data determined to be confidential under Section 607 of the Clean Streams Law, (35 P.S. §691.607) all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Department or authorized County Conservation District. As required by the Clean Water Act, the Clean Streams Laws, and 25 Pa. Code, Chapter 92 of the Department's regulations, permit applications, permits, and other documents related to this permit shall not be considered confidential.

j. Penalties for Falsification of Reports

Section 309(c)(4) of the Clean Water Act provides that any person who knowingly makes any false material statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or by both. In addition, criminal sanctions are set forth for false swearing and unsworn falsification at 18 Pa. C.S. §§4903-4904.

3. DEFINITIONS

Authorized County Conservation District – For purposes of this permit, shall generally mean the local County Conservation District that has entered into a delegation agreement with the Department to administer the NPDES Program for Stormwater Discharges Associated with Construction Activities. The Department retains program administration and enforcement if the local County Conservation District is not delegated.

Best Management Practices (BMPs) – Activities, facilities, measures, or procedures used to protect, maintain, reclaim and restore the quality of waters, and existing and designated uses within this Commonwealth. BMPs include PPC Plans, E&S Plans, PCSM Plans, Storm Water Management Act Plans, and other treatment requirements, operating procedures, and practices to control project site runoff, spillage or leaks, and other drainage from the construction activity.

Co-Permittee – A discharger of stormwater associated with construction activity who is jointly and individually responsible for compliance with all conditions of a permit and applicable laws with another entity for discharges to surface waters of the Commonwealth from their construction activity.

Department – The Department of Environmental Protection ("DEP") of the Commonwealth.

Director – The Director of the Bureau of Watershed Management, or any authorized employee thereof.

Erosion and Sediment Control Plan ("E&S Plan") – A site-specific plan identifying BMPs to minimize accelerated erosion and sedimentation and which meets the requirements of 25 Pa. Code Chapter 102 Rules and Regulations.

Municipality – Any county, city, borough, town, township, school district, institution or any authority created by one or more of the foregoing.

NOI – “The Notice of Intent for Coverage under the Pennsylvania General Permit for Discharges of Stormwater Associated with Construction Activities (PAG-2).”

Owner - A person who holds legal title to the land subject to construction activity. This term also includes the person(s) who held legal title to the land subject to construction activity at the time such activity was commenced on a site.

Permanent Stabilization – Long-term protection of soil and water resources from accelerated erosion.

Person – Any natural person, partnership, association, corporation, business organization, or any agency, instrumentality or entity of Federal or State Government. Whenever used in any clause prescribing and imposing a penalty, or imposing a fine or imprisonment or both, the term “person” shall not exclude the members of an association and the directors, officers, or agents of a corporation.

Point Source - Any discernable, confined and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, CAFO, landfill leachate collection system, or vessel or other floating craft, from which pollutants are or may be discharged.

Preparedness, Prevention and Contingency Plan (PPC Plan) – A written plan that identifies an emergency response program, material and waste inventory, spill and leak prevention and response, inspection program, housekeeping program, security and external factors, developed and implemented at the construction site to control potential discharges of pollutants other than sediment into waters of the Commonwealth. Potential pollutants at construction activities can include, but are not limited to pesticides, fertilizers, lime, petrochemicals, construction-related chemicals and solvents, wastewater, wash water, core drilling wastewater, cement, sanitary wastes or hazardous wastes.

Post Construction Stormwater Management Plan (PCSM Plan) – A site specific plan identifying BMPs to manage stormwater runoff after construction activities have ended and the project site permanently stabilized to protect and maintain existing and designated uses. The PCSMP must contain a written narrative, including calculations or measurements, and justifications for each BMP. The BMPs should be designed to maximize infiltration technologies, minimize point source discharges to surface waters, preserve the integrity of stream channels, and protect the physical, biological and chemical qualities of the receiving water.

Runoff Coefficient – The fraction of total rainfall that will appear at the conveyance as runoff.

Stabilization – The proper placing, grading, constructing reinforcing, lining, and covering of soil, rock or earth to insure its resistance to erosion, sliding or other movement.

Stormwater – Stormwater runoff, snow melt runoff, and surface runoff and drainage.

Stormwater Associated with Construction Activity – The discharge into surface waters of the Commonwealth, municipal separate storm sewers, or non-municipal separate storm sewers from any conveyance which is used for collecting and conveying stormwater and which is related to construction activities. Construction activities include clearing, grading, and excavation activities. The term does not include non-point source stormwater discharges from silvicultural activities.

Surface Waters of the Commonwealth – Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, ponds, springs, wetlands and all other bodies or channels of conveyance of surface water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

Wetlands – Areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas.

PART C

OTHER CONDITIONS

1. PROHIBITION OF NON-STORMWATER DISCHARGES

All discharges covered by this permit shall be composed entirely of stormwater. Discharges of material other than stormwater must be in compliance with an NPDES permit (other than this permit) issued for the discharge. Discharge of sewage or industrial waste (other than sediment under this permit) to an erosion and sediment control BMP is not permitted.

The discharger may not discharge floating materials, oil grease, scum, foam, sheen and substances which produce odor, taste, turbidity, or settle to form deposits in concentrations or amounts sufficient to be, or create a danger of being, inimical to the water uses to be protected or to human, animal, plant or aquatic life.

2. EROSION AND SEDIMENT CONTROL PLANS

- a. An E&S Plan, must be prepared, developed, and implemented for each activity covered by this permit in accordance with the Department's Chapter 102 Rules and Regulations, and Department guidance. Each E & S plan must be submitted to the Department or authorized County Conservation District. The BMPs shall be designed to minimize the potential for accelerated erosion and sedimentation in order to protect, maintain, reclaim and restore water quality and existing and designated uses. Various BMPs and their design standards are listed in the Erosion and Sediment Pollution Control Program Manual (#363-2134-008). The manual is available from the Department or Authorized County Conservation District, or can be downloaded from the Department website www.dep.state.pa.us. E&S Plans, BMPs, and revisions thereto, which meet the requirements of 25 Pa Code Chapter 102, are conditions of this permit and incorporated by reference.
- b. E&S Plans required under this permit are considered reports that shall be available to the public under Section 607 of the Clean Streams Law, and 25 Pa. Code, Chapter 92 of the Department's regulations. The owner or operator of a facility with stormwater discharges covered by this permit shall make E & S plans available to the public upon request. E&S Plans must be made available at the site of the construction activity at all times.
- c. The staging of earth disturbance activities and maintenance requirements contained in the E&S Plan must be followed.

3. RECYCLING AND DISPOSAL OF BUILDING MATERIALS AND WASTES

All building materials and wastes must be removed from the site and recycled or disposed in accordance with the Department's Solid Waste Management Regulations at 25 Pa. Code §260.1 *et seq.*, §271.1 *et seq.*, and §287.1 *et seq.* No building material or wastes or unused building materials shall be burned, buried, dumped, or discharged at the site.

4. PREPAREDNESS, PREVENTION AND CONTINGENCY PLANS

If the potential exists for causing accidental pollution of air, land, or water, or for causing endangerment of public health and safety through accidental release of toxic, hazardous, or other polluting materials, the permittee or co-permittee must develop a Preparedness, Prevention, and Contingency (PPC) Plan. The PPC Plan shall be developed in accordance with Department regulations. The PPC Plan shall identify areas which may include, but are not limited to, waste management areas, raw material storage areas, temporary and permanent spoils storage areas, maintenance areas, and any other areas that may have the potential to cause non-compliance with the terms and conditions of this permit due to the storage, handling, or disposal of any toxic or hazardous substances such as oil, gasoline, pesticides, herbicides, solvents, etc. BMP's shall be developed and implemented for each identified area. The PPC Plan shall be maintained on site at all times and shall be made available for review at the Department's or authorized County Conservation Districts' request.

POST CONSTRUCTION STORMWATER MANAGEMENT PLANS

A PCSM Plan that identifies the BMPs to be installed to manage and treat the stormwater discharge to protect water quality after construction must be prepared and implemented. Such BMPs should be designed to maximize groundwater infiltration, to protect the structural integrity of the stream, and to protect and maintain existing and

designated uses. In addition, some counties have adopted Act 167 Stormwater Management Plans that incorporate measures to protect and maintain existing uses and protect and maintain water quality to maintain those existing uses. In areas where plans exist and are supported by local ordinances, the applicant must design the PCSM Plan in accordance with these ordinances. Permittees and co-permittees are responsible for proper installation of the PCSM Plan BMPs prior to the submission of the Notice of Termination of this Permit.

6. PRE-CONSTRUCTION CONFERENCES

The permittee or co-permittee shall contact the Department or authorized County Conservation District at least seven days before construction is to begin to determine if a pre-construction conference is required. The permittee, co-permittee and others undertaking the earth disturbance activity must attend a pre-construction conference when requested by the Department or authorized County Conservation District.

7. SPOIL OR BORROW AREA

An E&S Plan shall be submitted to the Department or authorized County Conservation District and implemented for all spoil and borrow areas, regardless of their location.

8. PHASED PROJECTS

Prior to the commencement of earth disturbance activities for subsequent phases of the project, the permittee or co-permittee shall submit an E&S Plan and PCSM Plan for each additional phase or portion of the project to the Department or authorized County Conservation District.

Coverage under this permit is only granted for those phases or portions of a project for which an E&S Plan and PCSM Plan has been submitted to the Department or authorized County Conservation District.

9. CLARIFICATION ASSISTANCE

The permittee or co-permittee shall contact the Department or authorized County Conservation District for clarification of any requirements contained in the E&S Plan, PCSM Plan, PPC Plan, or other documents related to this permit.

10. WETLAND PROTECTION

If hydric soils are present, a wetland determination must be conducted in accordance with Department procedures. All wetlands identified must be included on the E&S Plan and PCSM Plan.



PHONE: 215.343.2538 • 800.222.2068

FAX: 267.200.0324

December 16, 2005

Walter J. Kaupp, P.E.
Cairone & Kaupp, Inc.
1118 E. Columbia Avenue
Philadelphia, PA 19125-4206

Re: Proposed Electronic Gaming Device Facility
Philadelphia Park, Bensalem Township

Dear Mr. Kaupp,

The Authority has the willingness to provide sanitary sewer disposal service to the referenced project. Flows will be conveyed by the Neshaminy Interceptor to the Philadelphia Water Department's Northwest Wastewater Treatment Plant. The Authority's engineer has begun a review of the project to determine if a portion of 8" sanitary sewer will need to be upgraded to assure sufficient collection capacity. Please forward the Sewage Facilities Planning Module to my attention for processing.

If you require further information, please call this office.

Very truly yours,



Glenn Argue
Engineering Manager

GA:nm
Encl.

C: Benjamin W. Jones, Executive Director/CEO
John Swenson, Carroll State Engineers

**"Putting Your Morley to Work
For a Better & Cleaner Future"**

Bucks County Water and Sewer Authority
275 Almshouse Road, Warrington, PA 18976

www.bcwsa.net

AQUA Pennsylvania.

Aqua Pennsylvania, Inc.
700 W. Sprout Road
Springfield, PA 19064

www.aquapennsylvania.com

December 15, 2005

FAXED TO: (215) 291-2804

Walter J. Kaupp, P.E.
Cairone & Kaupp, Inc.
1118 E. Columbia Avenue
Philadelphia, PA 19125-4206

Re: Water Availability
Proposed Electronic Gaming Device Facility
Philadelphia Park Racetrack
3301 Street Road
Bensalem Township, Bucks County

Dear Mr. Kaupp:

In response to your request of November 18, 2005, this letter will serve as confirmation that the above referenced property is situated within Aqua Pennsylvania's (APA) service territory.

Domestic water service is available to property, and will be provided in accordance with APA's Rules and Regulations. A copy of the current Rules and Regulations booklet is enclosed for your use.

With regard to Aqua Pennsylvania's capacity for fire service, flow data information for this area can be obtained upon written request to Lisa Thomas-Oliva of our Distribution Department. Lisa can be reached at (610) 645-1034.

Should you have any further questions, please contact me at (610) 541-4160.

Sincerely,

Joseph M. Ciliberti
New Business Applications Coordinator

Enc.



An Exelon Company

Energy Services Organization East www.exeloncorp.com

PECO Energy Company
2301 Market Street - S10-1
Philadelphia, PA 19103

November 30, 2005

Mr. Len Carey,
Vice President Property
c/o Philadelphia Park
P O Box 1000
3001 Street Road
Bensalem, PA 19020

Subject: Greenwood Racing Incorporated
3001 Street Road
Bensalem, PA 19020

Dear Mr. Carey:

In response to your request, please be advised that PECO Energy Company presently has electric facilities to provide service to the aforementioned property.

When you are prepared to initiate a formal request for electric service, please complete a service and meter application with associated loads and two copies of an approved site plan to my attention if you have not already. **An advanced contribution may be applicable should the project not fulfill the revenue obligations contained in the Electric Service tariffs.**

If you desire additional information, please do not hesitate to contact me at 215-841-6656.

Sincerely,

A handwritten signature in cursive script that reads "Linda Drissel".

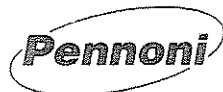
Linda Drissel
Account Manager

PHILADELPHIA PARK

TRAFFIC IMPACT STUDY

BUCKS COUNTY, PA

Prepared for:



Pennoni Associates Inc.
Consulting Engineers
One Drexel Plaza
3001 Market Street
Philadelphia, PA 19104-2897
BENS 0306001



Philadelphia Park
3001 Street Road
Bensalem, PA 19020

October 2004
BENS 0306001

PHILADELPHIA PARK TRAFFIC IMPACT STUDY

TABLE OF CONTENTS

INTRODUCTION	4
EXISTING TRAFFIC CONDITIONS.....	8
FUTURE "PRE-DEVELOPMENT" TRAFFIC CONDITIONS.....	16
PHILADELPHIA PARK DEVELOPMENT.....	28
FUTURE "POST DEVELOPMENT" TRAFFIC CONDITIONS	39
SUMMARY AND CONCLUSIONS	55

LIST OF FIGURES

FIGURE 1 : PROJECT LOCATION	7
FIGURES 2 & 3 : EXISTING TRAFFIC VOLUMES.....	12
FIGURES 4 & 5 : EXISTING LEVELS OF SERVICE.....	14
FIGURES 6 & 7 : 2005 PRE-DEVELOPMENT TRAFFIC VOLUMES	20
FIGURES 8 & 9 : 2015 PRE-DEVELOPMENT TRAFFIC VOLUMES	22
FIGURES 10 & 11 : 2005 PRE-DEVELOPMENT LEVELS OF SERVICE	24
FIGURES 12 & 13 : 2015 PRE-DEVELOPMENT LEVELS OF SERVICE	26
FIGURES 14-19 : DISTRIBUTION AND ASSIGNMENT OF PROJECT TRAFFIC.....	33
FIGURES 20 & 21 : 2005 POST-DEVELOPMENT TRAFFIC VOLUMES.....	43
FIGURES 22 & 23: 2015 POST-DEVELOPMENT TRAFFIC VOLUMES.....	45
FIGURES 24 & 25: 2005 POST-DEVELOPMENT LEVELS OF SERVICE.....	47
FIGURES 26 & 27: 2015 POST-DEVELOPMENT LEVELS OF SERVICE.....	49
FIGURES 28 & 29: 2015 POST-DEVELOPMENT LEVELS OF SERVICE.....	51
FIGURES 30 & 31: 2015 POST-DEVELOPMENT LEVELS OF SERVICE.....	53

LIST OF TABLES

TABLE 1:.....	31
TABLE 2:.....	31
TABLE 3:.....	57

PHILADELPHIA PARK TRAFFIC IMPACT STUDY

LIST OF APPENDICES

- APPENDIX A: TRAFFIC COUNTS & EXISTING SIGNAL PLANS
- APPENDIX B: LEVEL OF SERVICE DEFINITIONS
- APPENDIX C: EXISTING CONDITION LEVEL OF SERVICE ANALYSIS
- APPENDIX D: FUTURE TRAFFIC VOLUMES INFORMATION
- APPENDIX E: PRE-DEVELOPMENT CONDITIONS LEVEL OF SERVICE ANALYSIS
- APPENDIX F: TRIP GENERATION AND DISTRIBUTION DATA
- APPENDIX G: POST-DEVELOPMENT CONDITIONS LEVEL OF SERVICE ANALYSIS

INTRODUCTION

Philadelphia Park proposes to construct an electronic gaming device facility at their existing mixed venue entertainment complex which includes a horse racing facility (consisting of grandstands and box seating), restaurants, sports bars, lounges and simulcasting theaters. The proposed gaming device facility will be comprised of restaurants, bars, nightclubs, and 3000 electronic gaming units. The Philadelphia Park site is located along Street Road (SR 0132) within Bensalem Township, Bucks County and is in close proximity to several major arterials including the Pennsylvania Turnpike, U.S. Route 1, and Interstate 95.

This study addresses the traffic that may be generated by the addition of the proposed gaming device facility.

FIGURE 1 shows the location of the proposed Philadelphia Park facility and the general area.

In this figure, the aerial photo is aligned along the true north. For the purpose of this study, Street Road will be considered running along the east-west direction while Hulmeville Road (S.R. 0513), Lincoln Highway (U.S. Route 1) and Interstate 95 will be considered running along the north-south direction.

Currently, there are three (3) existing public access points for the site:

- **The Main Entrance (South Driveway)** provides full movement access to Street Road. The Philadelphia Park entrance forms the southbound approach of a signalized intersection with Street Road (eastbound and westbound approaches) and Tillman Drive East (northbound approach).
- **The East Driveway** provides full movement access to Mechanicsville Road. The East Driveway to Philadelphia Park forms the eastbound approach of a signalized intersection with Mechanicsville Road (northbound and southbound approaches) and Byberry Road (westbound approach).
- **The West Driveway** provides full movement access to Richlieu Road. The West Driveway to Philadelphia Park functions as a STOP-controlled minor (westbound) approach of an unsignalized T-intersection with Richlieu Road (northbound and southbound approaches).

This study presents an evaluation of the existing and future traffic conditions in the vicinity of this site and provides an analysis of the traffic impacts of the proposed development. Specific elements included in this study are:

- An inventory of the roadway facilities in the vicinity of the project, including the existing physical and operational characteristics.
- Peak hour capacity analysis of the study intersections for existing conditions.
- An evaluation of the future 2005 pre-development conditions (without traffic generated by the proposed development).
- Estimates of traffic generated by the proposed addition of the electronic gaming device facility.

- An evaluation of the future 2005 post-development traffic conditions (including traffic generated by the development) which will take into account the completion of the Rockhill Drive extension/connector road.
- An evaluation of the future 2015 post-development traffic conditions (including traffic generated by the development) which will take into account the completion of the Street Road / Route 1 Interchange Project.

Several roadway projects are in construction or in the design phase within the study area. Projects that are expected to be completed within the time frame of this study have been included in the analysis. The following projects have been reviewed as part of this report:

Rockhill Drive Extension/Connector

In conjunction with the redevelopment of the existing Youth Development Center (YDC) into a residential/retail development consisting of 149 single family residential units, a 13,500 square foot pharmacy and a 3,500 square foot bank, Rockhill Drive (SR 2044) will be extended from Neshaminy Boulevard to Richlieu Road (S.R. 2035). The extension will be a public, Township owned roadway, and will intersect Richlieu Road at a proposed signalized intersection approximately 4,500' north of Street Road. The two lane, two way roadway will consist of 11' lanes and 4' shoulders and is expected to be constructed prior to the opening of the proposed gaming device facility.

PA Turnpike/Interstate 95 Interchange Project

The Pennsylvania Turnpike Commission studied a proposed interchange between the Pennsylvania Turnpike and Interstate 95, the PA Turnpike/I-95 Interchange Project. In 1969, Interstate 95 was completed without a direct connection to the Pennsylvania Turnpike. The lack of a direct connection has created confusion for regional travelers, and resulted in increased congestion on local roads used by motorists to make the connection. At the time this study is written, this project has received federal environmental approval and is expected to be completed prior to the 2015 design year utilized in this study.

Route 1 Reconstruction Project

Preliminary design plans have been completed for the reconstruction of Route 1 in the vicinity of the Route 1/Pennsylvania Turnpike Interchange. The proposed modifications include the reconstruction of the Route 1/ Street Road interchange, the Route 1/Turnpike Interchange, and the Route 1/Rokchill Road Interchange. The Route 1/Street Road Interchange will be reconfigured and will include two proposed traffic signals along Street Road at the Route 1 Ramp locations. This project is expected to be constructed prior to the 2015 design year utilized in this study.

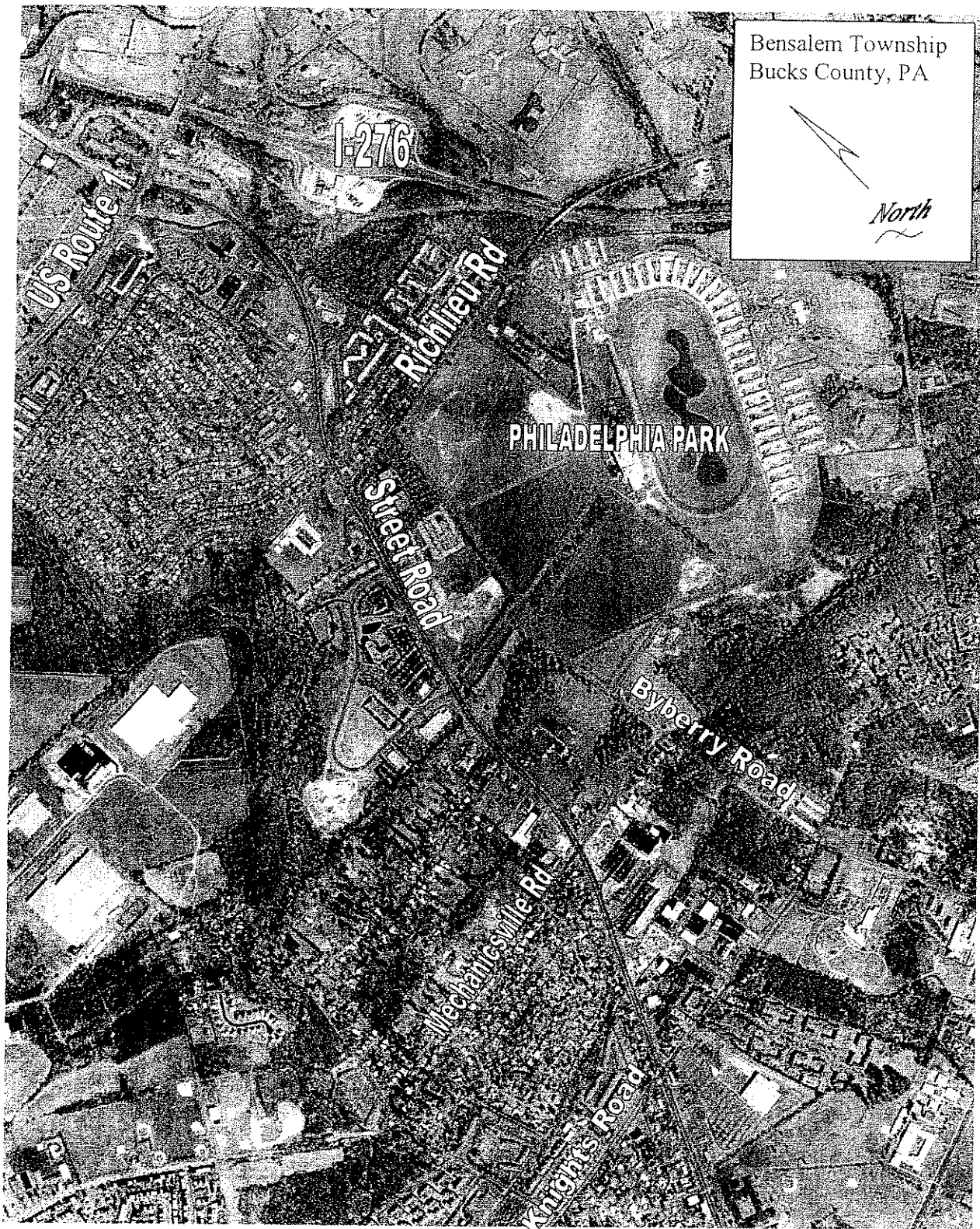
Street Road (SR 0132)/Interstate 95 Interchange Project

A draft Point of Access study has been completed for the reconfiguration of the Street Road/I-95 interchange. The construction of this project could be completed prior to the 2015 design year utilized in this study, however, at this time there is no funding in place on the most recent Transportation Improvement Program (FY 2005-2008).

Byberry Road and Knights Road Intersection Improvements

The intersection of Byberry Road and Knights Road is currently in construction for widening and signalization. The eastbound, westbound and southbound legs of the intersection are being widened to accommodate left turn lanes on all approaches, and a traffic signal is going to be installed. This project is expected to be constructed prior to the opening of the gaming device facility.

FIGURE 1 (Project Location)



EXISTING TRAFFIC CONDITIONS

Roadway Characteristics

The following intersections have been evaluated as part of this study:

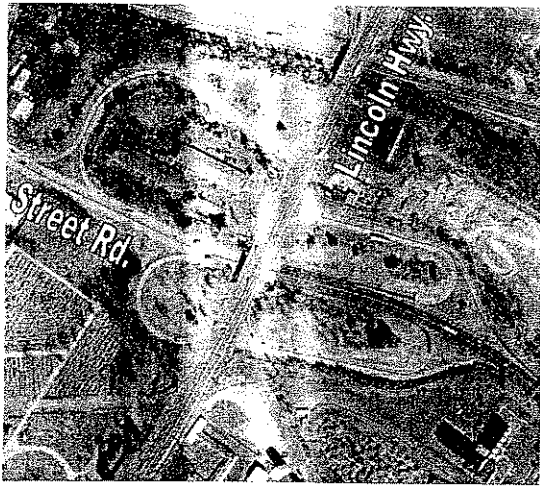
1. Street Road & Knights Road
2. Street Road & Mechanicsville Road
3. Street Road & Philadelphia Park Entrance/Tillman Drive
4. Street Road & Shopping Center Driveway (Applebee's Entrance)
5. Street Road & Tillman Drive North
6. Street Road & Richlieu Road
7. Street Road & Kingston Way
8. Rockhill Drive & Neshaminy Boulevard
9. Mechanicsville Road & Byberry Road / Philadelphia Park Entrance
10. Richlieu Road & Philadelphia Park Entrance
11. Galloway Road & Mechanicsville Road
12. Byberry Road & Knights Road
13. Street Road & Hulmeville Road
14. Street Road & I-95 Ramps
15. Street Road and Route 1 Ramps (Design Year 2015).

The following roadways have been evaluated as part of this study:

Street Road (S.R. 0132). Street Road is an east/west major arterial (recorded ADT = 33,000-41,000) that extends through Bensalem Township. The roadway generally consists of a five lane cross-section with additional turning lanes at major intersections. The through lanes generally measure 11' in width and there is a Two Way Left Turn Lane (TWLTL) serving the many access points along the corridor. The roadway is posted at 45 MPH and is curbed along most of its length with varying shoulder widths. The main entrance to Philadelphia Park is at a traffic signal opposite Tillman Drive (East).

Mechanicsville Road (S.R. 2021). Mechanicsville Road is a minor arterial (recorded ADT = 7,100-8,900) adjacent to the western boundary of the Philadelphia Park site. It is a two lane roadway that widens out at Street Road for left and right turn storage lanes in each direction. The posted speed limit in Mechanicsville Road is 45 mph and Philadelphia Park accesses the roadway at a traffic signal opposite Byberry Road.

Richlieu Road (S.R. 2035). Richlieu Road is a minor arterial (recorded ADT = 5,500 - 7,900) adjacent to the eastern boundary of the Philadelphia Park site. Richlieu Road is a two lane roadway that widens at Street Road and Galloway Road for auxiliary turn lanes. The posted speed limit on Richlieu Road is 40 mph. Philadelphia Park accesses the roadway at an unsignalized intersection north of Street Road.



Street Road (S.R. 0132) and Lincoln Highway (US Route 1) Interchange. This interchange is a two-level partial cloverleaf interchange in which all movements are accommodated with free flowing ramps except for one. This interchange restricts movements from Street Road eastbound to Lincoln Highway southbound.

Street Road (S.R. 0132) and I-95 and Bristol Pike Interchange. Street Road and Bristol Pike meet at a grade separated interchange, with ramps on both sides of Street Road, west of Bristol Pike. All the movements on Street Road are free flowing merges, and all the movements on Bristol Pike are controlled with traffic signals at the ends of the Street Road ramps. The interchange of Street Road (S.R. 0132) and I-95 is a diamond interchange. The I-95 North ramps form a signalized intersection at Street Road and the I-95 South ramps form an unsignalized intersection with Street Road. Street Road is elevated above Bristol Pike and I-95.



Existing Traffic Volumes

Manual turning movement traffic counts, including heavy vehicles and pedestrians, were conducted during the following time periods in order to analyze the highest volume scenario of existing traffic and proposed gaming traffic:

- Weekday, from 3 PM to 7 PM
- Saturday, from 11 AM to 2 PM
- Saturday, from 5 PM to 8 PM

24-hour Automatic Traffic Recorder (ATR) Counts were conducted at the ramps of Route 13 to/from Street Road and at the interchange of Route 1 and Street Road.

APPENDIX A contains the traffic counts.

FIGURES 2 & 3 illustrate the traffic volumes for the existing conditions.

Observation of existing traffic patterns at the Philadelphia Park site accesses shows the following:

- Currently, a majority of Philadelphia Park patrons utilize the main (South) entrance on Street Road.
- At the time the traffic counts were conducted, the secondary access to Mechanicsville Road (the East Access) was temporarily closed. Volumes for this access were taken from a 1999 traffic count that was conducted while the access was open.
- Distribution and assignment of Philadelphia Park traffic generated by the additional gaming units will take into account this Mechanicsville Road access.
- There is a second Richlieu Road access located further north of Street Road. This access was not open at the time of this study.

Capacity Analysis

Peak hour operations were evaluated at the study intersections for existing conditions. 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 Trafficware Software, Synchro 6.0. The results of these analyses provide Level of Service (LOS) designation, volume/capacity descriptions, and average seconds of delay experienced by motorists for each intersection movement.

Level of Service is a measure of vehicle operator satisfaction with the driving experience. For a *signalized* intersection this has been quantified with designations "A" through "F" based on the average vehicle delay per approach and the overall intersection. For an *unsignalized* intersection this has been quantified with designations "a" through "f". The Level of Service concept is a rating system established to objectively evaluate the operational adequacy of an intersection or roadway. The definitions of Levels of Service for signalized and unsignalized intersections are contained in **APPENDIX B**.

The Level of Service analyses at all intersections within the study area are based on existing signal timing plans provided by PENNDOT. In general Levels of Service "A/a" through "D/d" are considered excellent to acceptable and Levels of Service "E/e" through "F/f" are considered deficient.

Existing Levels of Service

Existing levels of service for the intersections along Street Road show that deficient Levels of Service are typically most prevalent during the evening weekday peak hour. The Saturday mid-day and Saturday evening peak hours had better Levels of Service than the evening weekday peak hour. The Saturday peak hours have similar existing traffic patterns. Therefore, this study will consider the Saturday evening peak hour as the weekend design hour, since the proposed development will generate a much higher percentage of its Saturday traffic in the evening. The

Saturday mid-day analyses will be utilized in developing proposed timing schemes in accordance with any proposed improvements.

The majority of the intersections within the study area operate with acceptable overall Levels of Service during existing conditions with the exception of the intersection of Street Road and the I-95 southbound ramps which operates at an overall LOS "F" during the weekday evening peak hour.

Further detailed analysis shows that the following individual movements experience deficient LOS for existing conditions:

Weekday Evening Peak Hour

- Street Road and I-95 northbound ramps; northbound left – LOS "E"
- Street Road and I-95 southbound ramps; westbound left - LOS "e", southbound left/through/right - LOS "F"
- Street Road and Hulmeville Road; northbound left, southbound through/right - LOS "E", eastbound left – LOS "F"
- Street Road and Knights Road; southbound through - LOS "E"
- Street Road and Mechanicsville Road; northbound left - LOS "F"
- Street Road and Philadelphia Park Entrance/Tillman Drive (S); northbound through/left - LOS "E", southbound through/left – LOS "F"
- Street Road and Tillman Drive (N); northbound left – LOS "E"
- Street Road and Richlieu Road; eastbound left, southbound left, southbound through/right - LOS "E"

Saturday Evening Peak Hour

- Street Road and Philadelphia Park Entrance/Tillman Drive (S); southbound through/left - LOS "F"
- Street Road and I-95 southbound ramps; southbound left/through/right - LOS "F"

Philadelphia Park Accesses

As noted above, the Philadelphia Park main entrance approach is operating at deficient Levels of Service during the weekday evening and Saturday evening peak hours. The Richlieu Road entrance is operating at LOS "c" and "b" during the weekday evening and Saturday evening peak hours respectively. The Mechanicsville Road entrance intersection with Byberry Road is operating at overall LOS "B" during the weekday evening and Saturday evening peak hours with all movement operating at LOS "C" or better.

APPENDIX C contains the summary outputs for the analysis software for the existing condition. **FIGURES 4 & 5** illustrate the existing conditions Levels of Service.

Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 5

Year 2004: Existing Conditions
 - Saturday PM Peak Hour
APPROACH LEVELS OF SERVICE

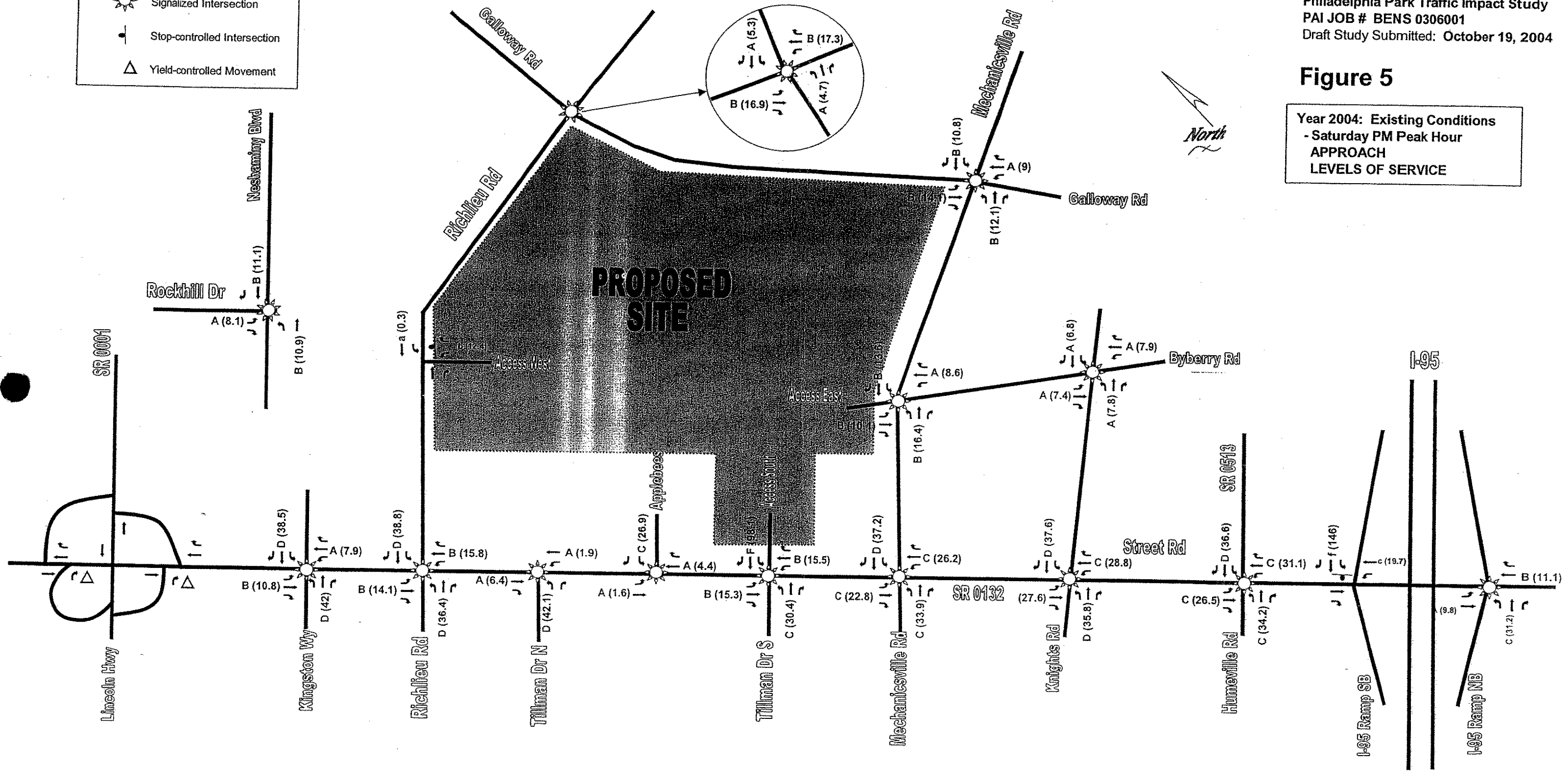


Figure 4

Year 2004: Existing Conditions
 - Weekday PM Peak Hour
 APPROACH
 LEVELS OF SERVICE

Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

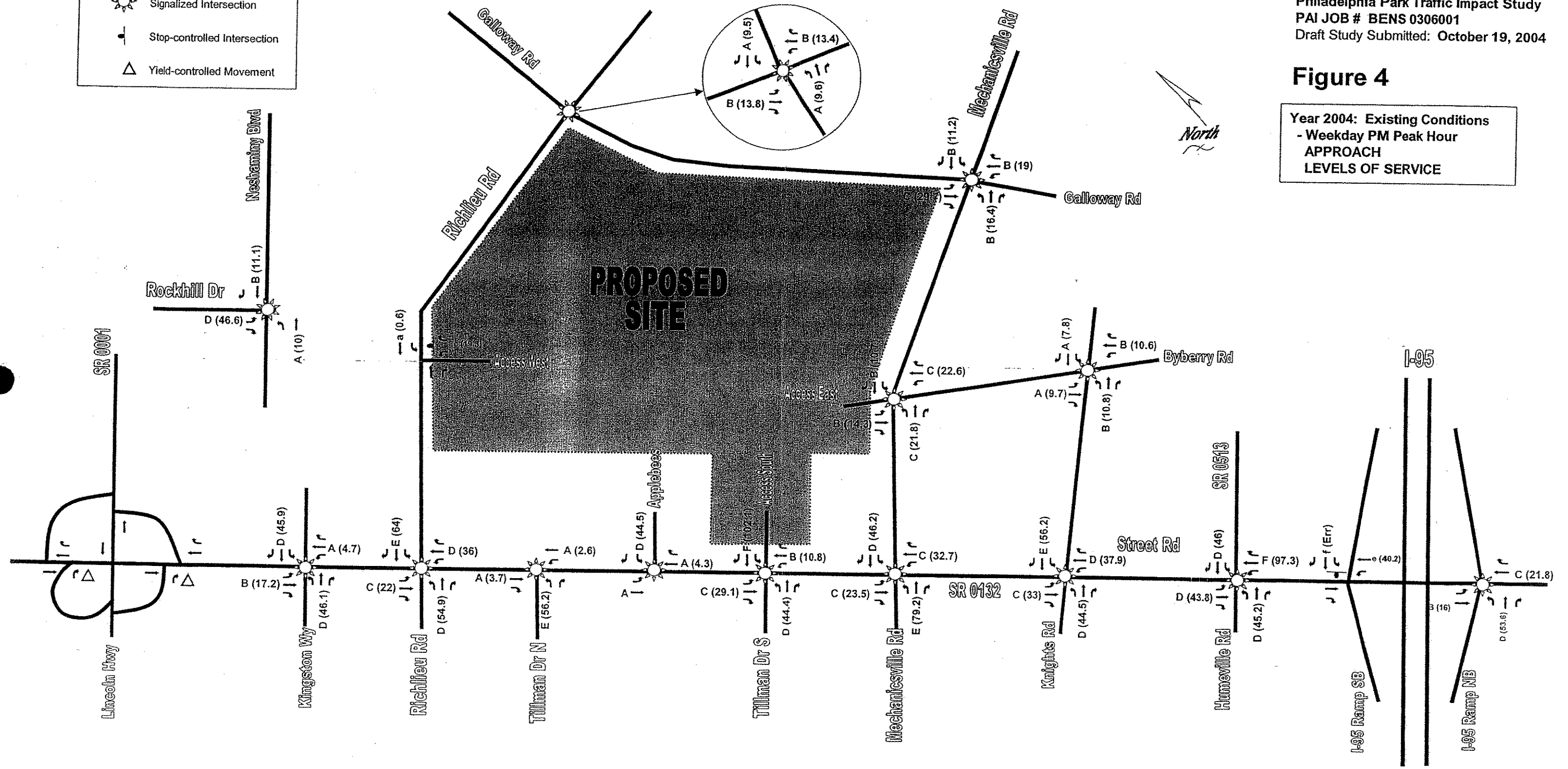
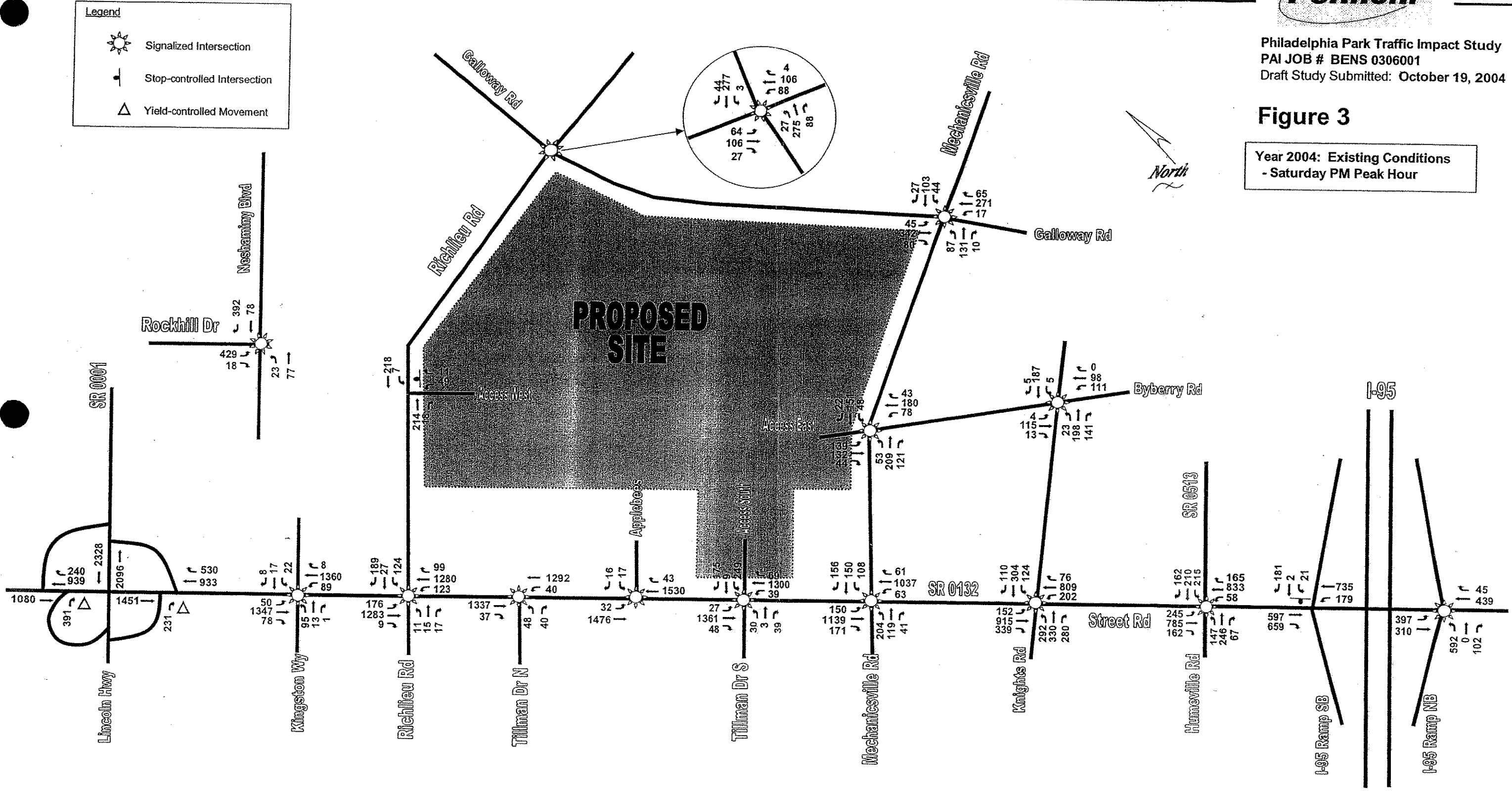


Figure 3

Year 2004: Existing Conditions
- Saturday PM Peak Hour



Legend




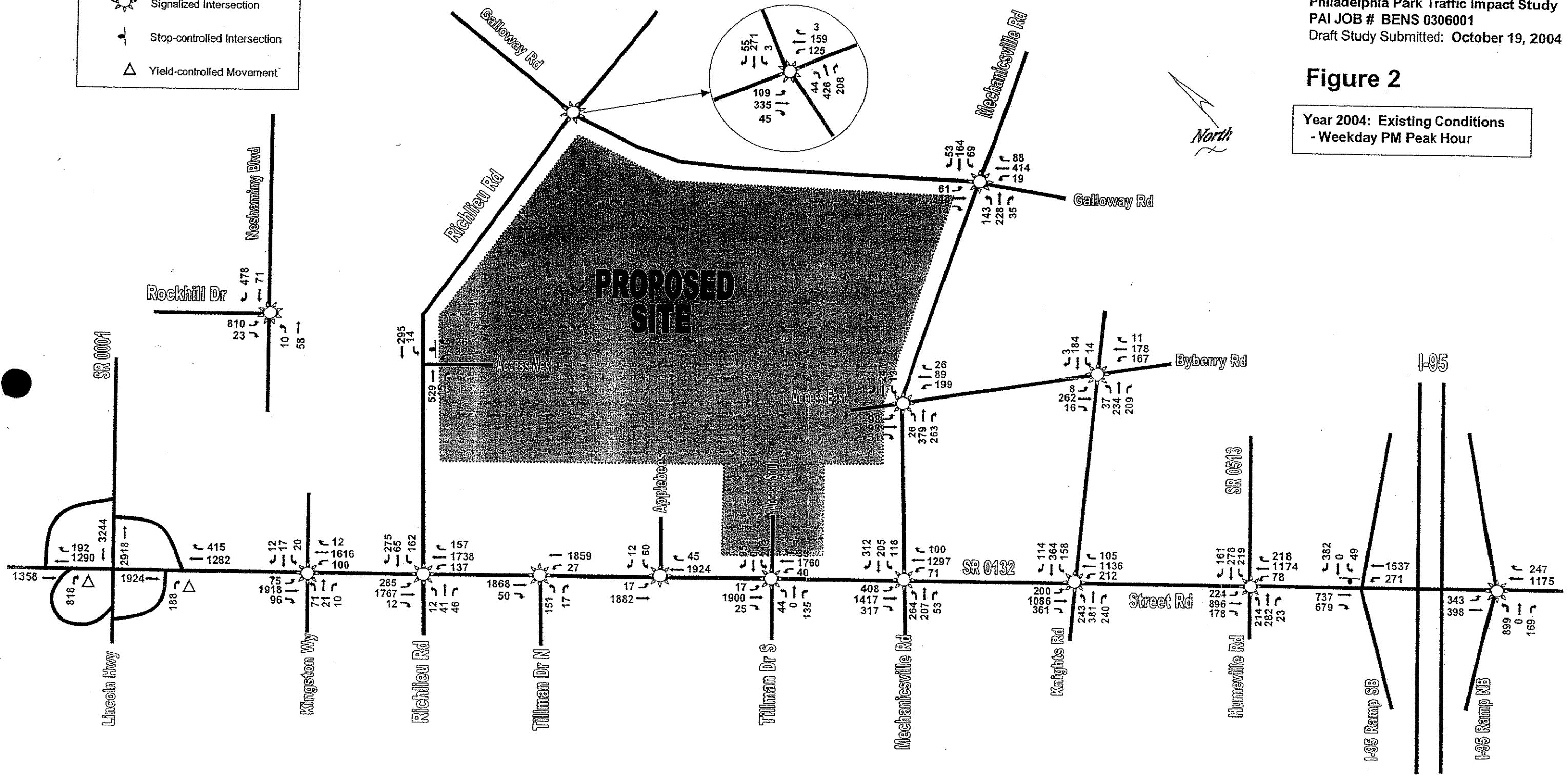
-  Signalized Intersection
-  Stop-controlled Intersection
-  Yield-controlled Movement

Figure 2

Year 2004: Existing Conditions
 - Weekday PM Peak Hour



FUTURE "PRE-DEVELOPMENT" TRAFFIC CONDITIONS

Pre-Development Traffic Volumes

In order to assess the impact of the traffic generated by the proposed Philadelphia Park gaming device facility, an analysis of pre-development conditions (traffic conditions without the completion of the proposed project) was prepared for the proposed build year of 2005 and the design year of 2015.

An evaluation of future traffic conditions must first account for the traffic volume increases that are expected to occur throughout the region over this period. To account for traffic volume increases from general growth, existing traffic volumes were increased by an annual growth factor of 1.5%, which is consistent with projected traffic growth rates utilized for the Bensalem Township area in the Pennsylvania Turnpike / I-95 Interchange Project Final Environmental Impact Statement prepared by FHWA, PENNDOT, and the Turnpike Commission. In addition to a background growth rate, traffic to be generated by other area developments was included in the pre-development volumes. The following planned developments were included:

Youth Development Center (YDC) Redevelopment

Realen Homes, Commerce Bank, and CVS are redeveloping the YDC site in Bensalem Township located just south of the intersection of Rockhill Drive and Neshaminy Road. The new development will include 149 single family homes, a 4,100 sf Bank, and a 13,000 sf CVS Pharmacy. As part of this project, Rockhill Drive will be extended south of its current T-intersection with Neshaminy Boulevard to Richlieu Road. Rockhill Drive will intersect Richlieu Road approximately 4,500' north of Street Road at a signalized intersection. This project is currently in construction and estimated traffic from this development has been included in the 2005 and 2015 analysis scenarios.

Deluca Homes – Saint Francis Tract

Deluca Homes plans to construct 206 single family homes, a 3,500 sf bank, and four high turnover sit-down restaurants. The site will be located on the northern side of Street Road just west of Bristol Pike. Access for the development will be provided by two Street Road access points, one signalized, and one unsignalized; and one signalized access to Bristol Pike that will be located just north of the Bristol Pike/Street Road westbound intersection. The project is projected to open in 2005, and to be completed by 2007, therefore, in order to be conservative; traffic from this development has been included in both the 2005 and 2015 analysis scenarios.

APPENDIX D contains a summary of the future traffic volumes, as well as trip generation and distribution information for the above referenced developments.

FIGURES 6 & 7 illustrate the 2005 pre-development volumes.

FIGURES 8 & 9 illustrate the 2015 pre-development volumes.

Pre-Development Levels of Service (2005)

In general, results of the analysis for the pre-development levels of service for the intersections along Street Road show that deficient Levels of Service found in the existing condition are projected to deteriorate due to growth in vehicular volume. In addition, several locations show increased delay as a result of the traffic generated by the YDC and St. Francis Tract developments.

The majority of the intersections within the study area continue to operate with acceptable overall Levels of Service during 2005 pre-development conditions. The intersection of Street Road and the I-95 southbound ramps continues to operate at an overall LOS "F" during the weekday evening peak hour, and the intersection of Street Road and Richlieu Road deteriorates to an overall LOS "E" during the weekday evening peak hour. The increase in delay at Street and Richlieu is due mainly to the increase in traffic that is diverting to the proposed Rockhill connector roadway.

The following intersection movements will further degrade from acceptable to deficient LOS or from LOS "E/e" to LOS "F/f" when compared to existing conditions:

Weekday Evening Peak Hour

- Street Road and I-95 northbound ramps; northbound left – LOS "F"
- Street Road and I-95 southbound ramps; westbound left - LOS "F"
- Street Road and Knights Road; westbound left - LOS "E"
- Street Road and Philadelphia Park Entrance/Tillman Drive (S); northbound through/left - LOS "F"
- Street Road and Richlieu Road; southbound through/right – LOS "E", eastbound left, southbound left, - LOS "F"
- Neshaminy Boulevard and Rockhill Drive; southbound left – LOS "E"
- Richlieu Road and Philadelphia Park entrance; westbound left/right – LOS "F"

Saturday Evening Peak Hour

During the Saturday evening peak hour, no intersection movements further degrade from acceptable to deficient LOS or from LOS "E/e" to LOS "F/f" when compared to existing conditions.

Philadelphia Park Accesses

Results of the pre-development (2005) analyses indicate that the Street Road and Mechanicsville Road access approaches will continue to operate with similar Levels of Service when compared to existing conditions. The Richlieu Road access however degrades to LOS "F" during the weekday evening peak hour as noted above. This degradation is mainly due to the increase in traffic along Richlieu Road resulting from the Rockhill Drive extension.

Pre-Development Levels of Service (2015)

The results of the pre-development (2015) analysis indicates that the study intersections and roadway network surrounding the Philadelphia Park site will experience general degradation in Level of Service and increase in delay. This is to be expected due to growth over a period of 10 years.

For the 2015 pre and post development conditions, the reconfiguration of the Street Road / Route 1 interchange has been included in the analysis. This includes two additional signalized intersections along Street Road at the Route 1 ramps.

Due to a significant increase of volume, the following overall intersections and intersection movements experience degradation from acceptable to deficient LOS or from LOS "E/e" to LOS "F/f" when compared to pre-development 2005 conditions:

Weekday Evening Peak Hour

- Street Road and I-95 northbound ramps; **Overall – LOS "E"**, northbound left/through/right – LOS "F"
- Byberry Road and Mechanicsville Road; westbound left/through/right – LOS "F"
- Street Road and Hulmeville Road; **Overall – LOS "F"**, westbound through/right, northbound left – LOS "F"
- Street Road and Knights Road; **Overall – LOS "E"**, eastbound through, westbound through, northbound through, southbound left – LOS "E", eastbound left, westbound left, northbound left, southbound through - LOS "F"
- Street Road and Mechanicsville Road; **Overall – LOS "E"**, northbound through – LOS "E", eastbound left, westbound through – LOS "F"
- Street Road and Philadelphia Park Entrance/Tillman Drive (S); **Overall – LOS "E"**, eastbound left – LOS "E", eastbound through, westbound left – LOS "F"
- Street Road and Richlieu Road; **Overall – LOS "F"**, westbound left, northbound left/through/right – LOS "E", westbound through, southbound through/right - LOS "F"
- Street Road and Kingston Way; westbound left – LOS "E"
- Neshaminy Boulevard and Rockhill Drive; **Overall – LOS "F"**, southbound left – LOS "F"
- Mechanicsville Road and Galloway Road; **Overall – LOS "E"**, southbound left/through/right – LOS "F"
- Richlieu Road and Rockhill Drive; eastbound left – LOS "F"

Saturday Evening Peak Hour

- Street Road and I-95 southbound ramps; **Overall – LOS "e"**, westbound left - LOS "e"
- Street Road and Knights Road; eastbound through, northbound left, southbound through – LOS "E"
- Neshaminy Boulevard and Rockhill Drive; southbound left – LOS "F"

Philadelphia Park Accesses

Results of the pre-development (2015) analyses indicate that the Street Road and Richlieu Road access approaches will continue to operate with similar Levels of Service when compared to pre-development 2005 conditions. The Street Road access degrades to LOS "E" with several movement further degrading during the weekday evening peak hour as noted above. Also, the Byberry Road approach at the Mechanicsville Road access degrades to LOS "F" as noted above.

APPENDIX E contains the summary outputs for the analysis software of the pre-development conditions.

FIGURES 10 & 11 illustrate the results of the 2005 pre-development analysis.

FIGURES 12 & 13 illustrate the results of the 2015 pre-development analysis.

Legend

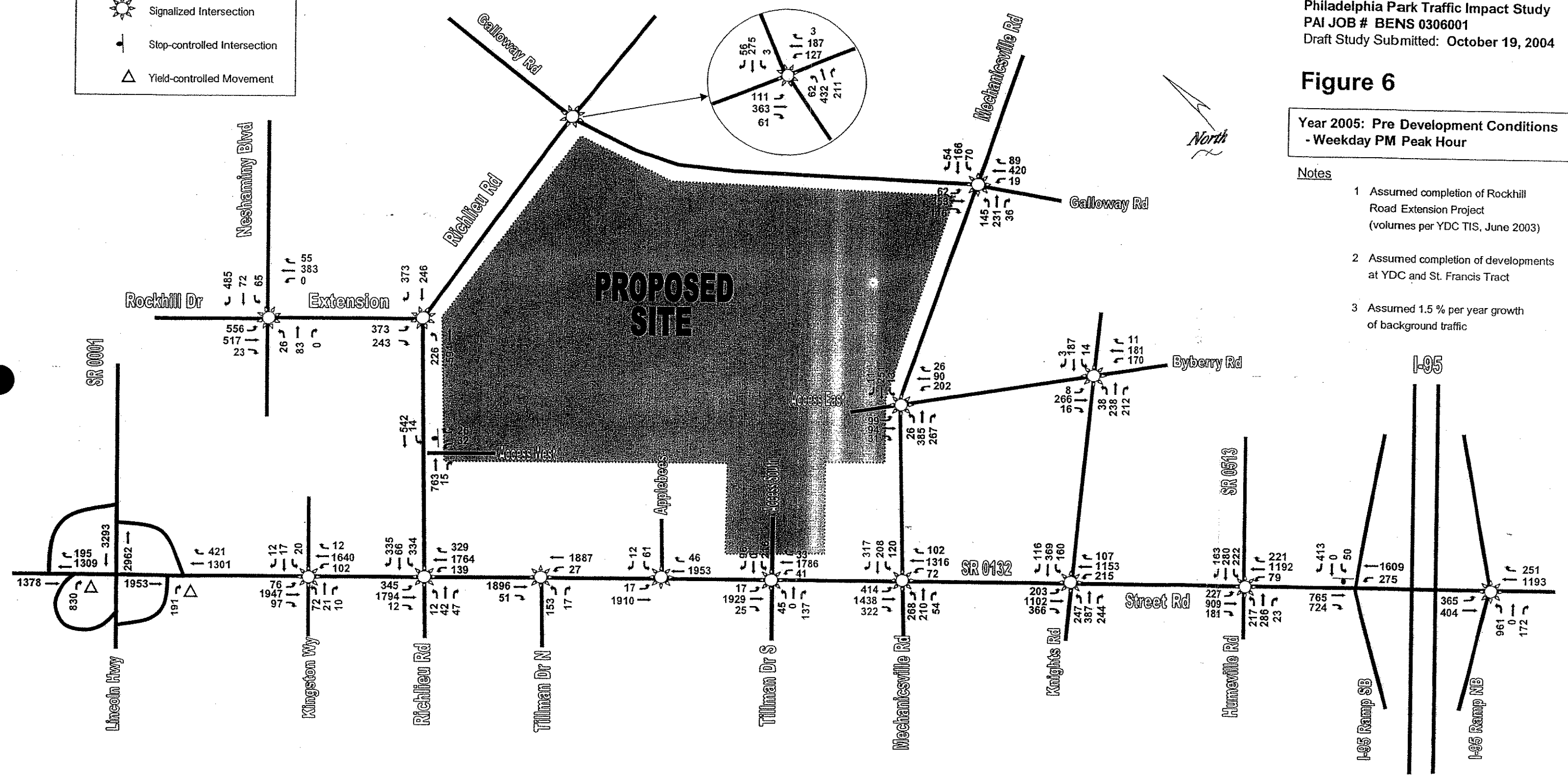
- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Philadelphia Park Traffic Impact Study
 PAI JOB # BENS 0306001
 Draft Study Submitted: October 19, 2004

Figure 6

Year 2005: Pre Development Conditions
 - Weekday PM Peak Hour

- Notes**
- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
 - 2 Assumed completion of developments at YDC and St. Francis Tract
 - 3 Assumed 1.5 % per year growth of background traffic



Legend

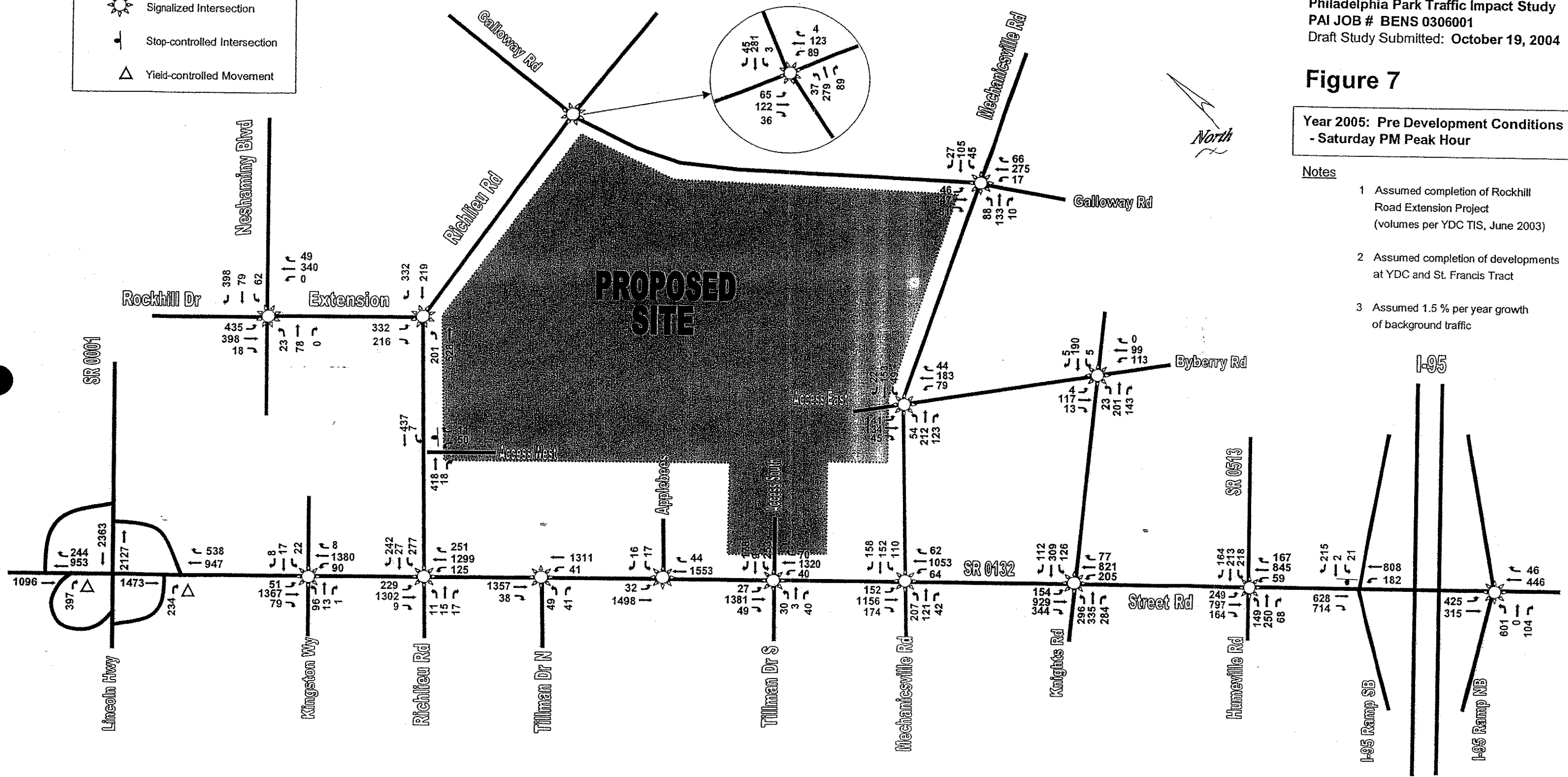
- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 7

Year 2005: Pre Development Conditions - Saturday PM Peak Hour

Notes

- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
- 2 Assumed completion of developments at YDC and St. Francis Tract
- 3 Assumed 1.5 % per year growth of background traffic



Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

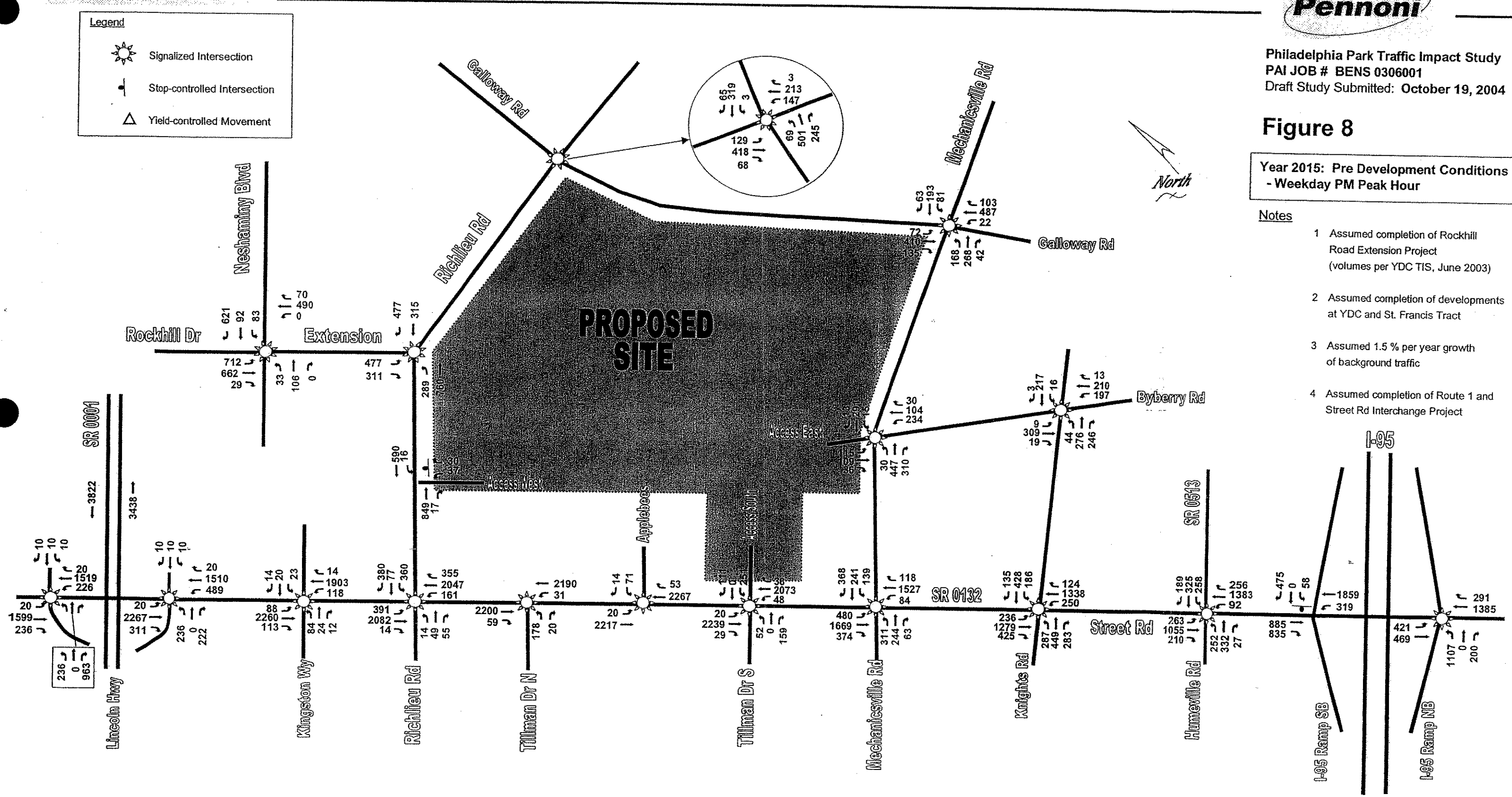
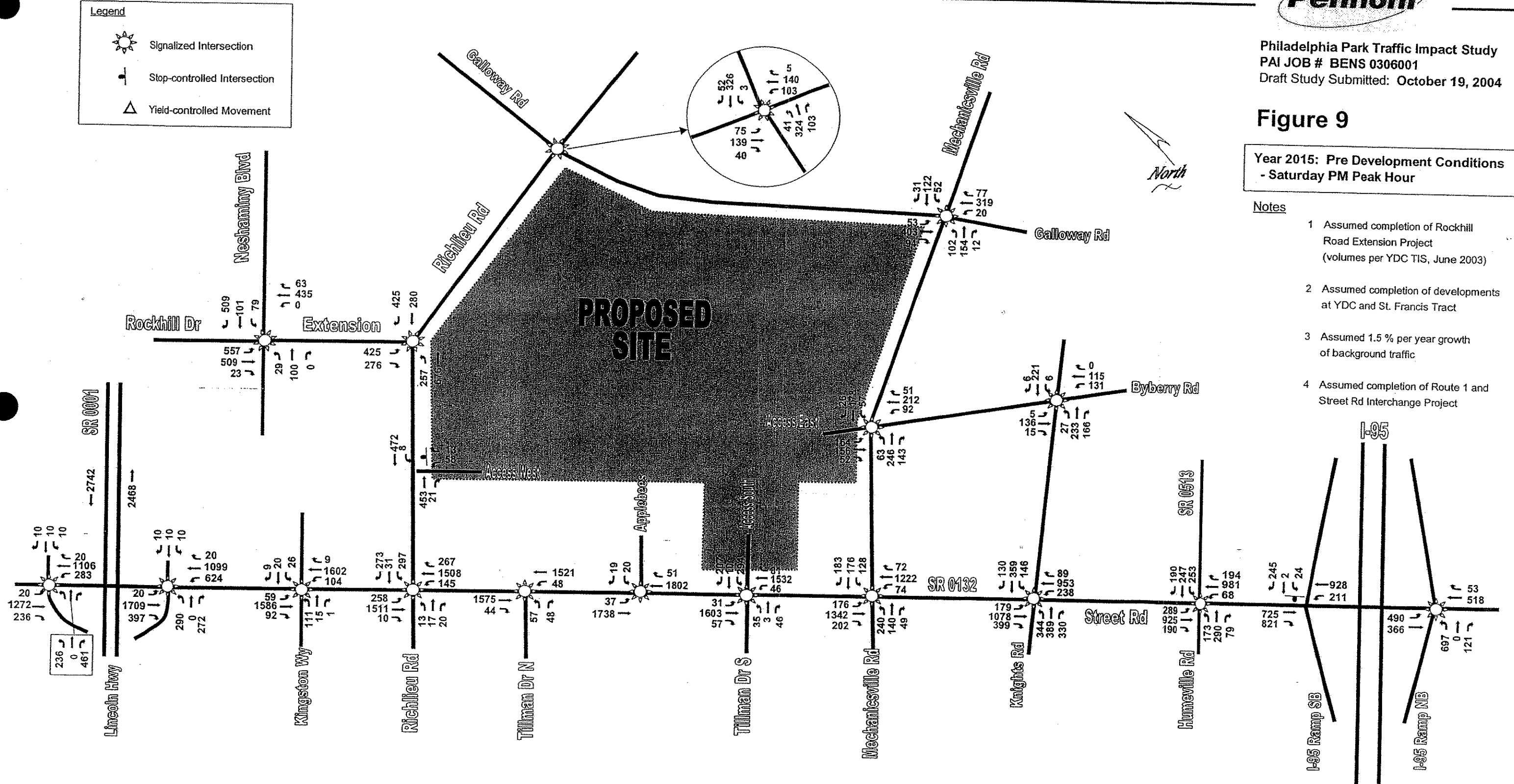


Figure 9

**Year 2015: Pre Development Conditions
 - Saturday PM Peak Hour**

Notes

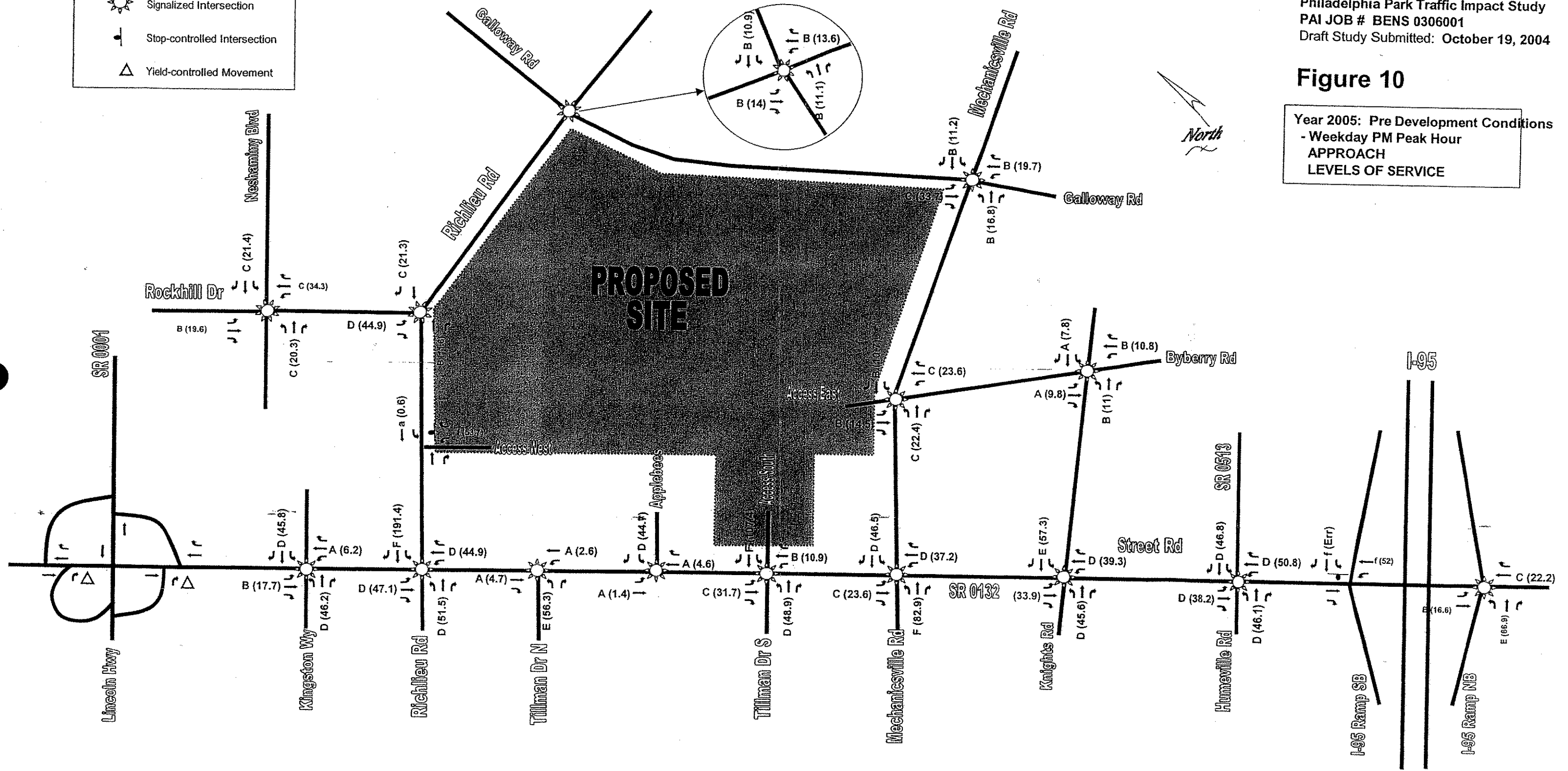
- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
- 2 Assumed completion of developments at YDC and St. Francis Tract
- 3 Assumed 1.5 % per year growth of background traffic
- 4 Assumed completion of Route 1 and Street Rd Interchange Project



Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 10
Year 2005: Pre Development Conditions
- Weekday PM Peak Hour
APPROACH
LEVELS OF SERVICE



Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 11

Year 2005: Pre Development Conditions
- Saturday PM Peak Hour
APPROACH
LEVELS OF SERVICE

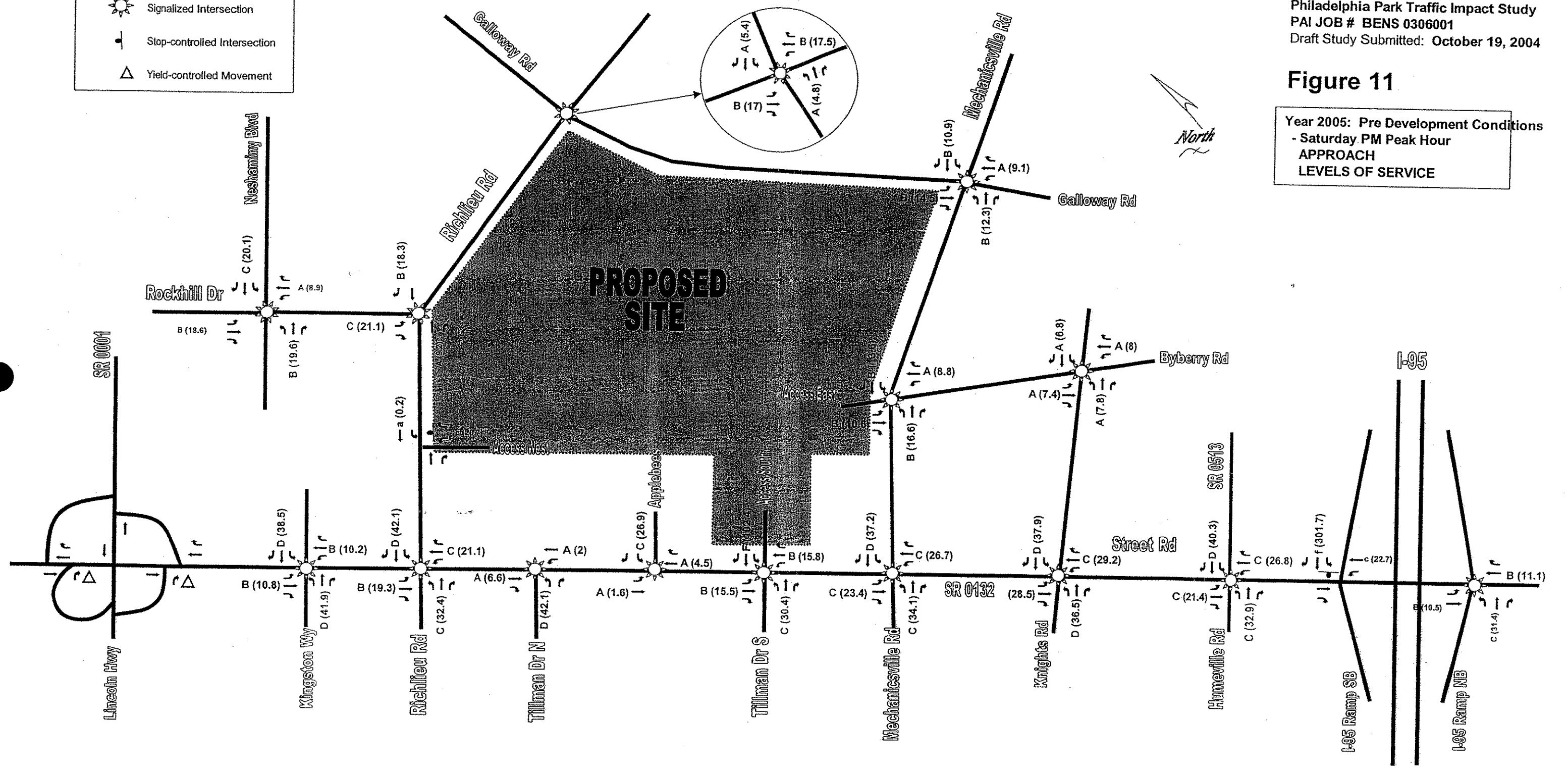


Figure 12

Year 2015: Pre Development Conditions
- Weekday PM Peak Hour
APPROACH
LEVELS OF SERVICE

Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

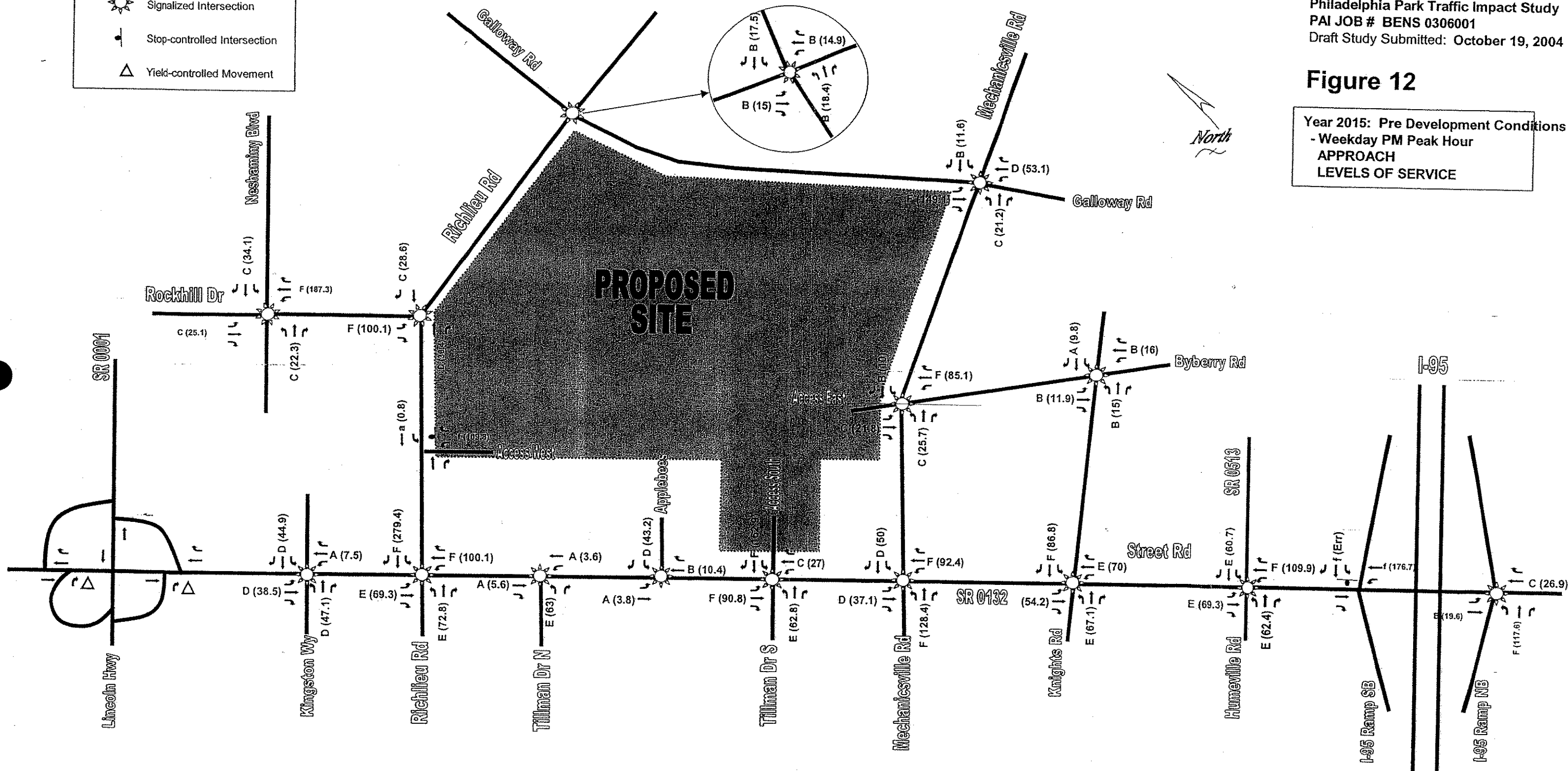
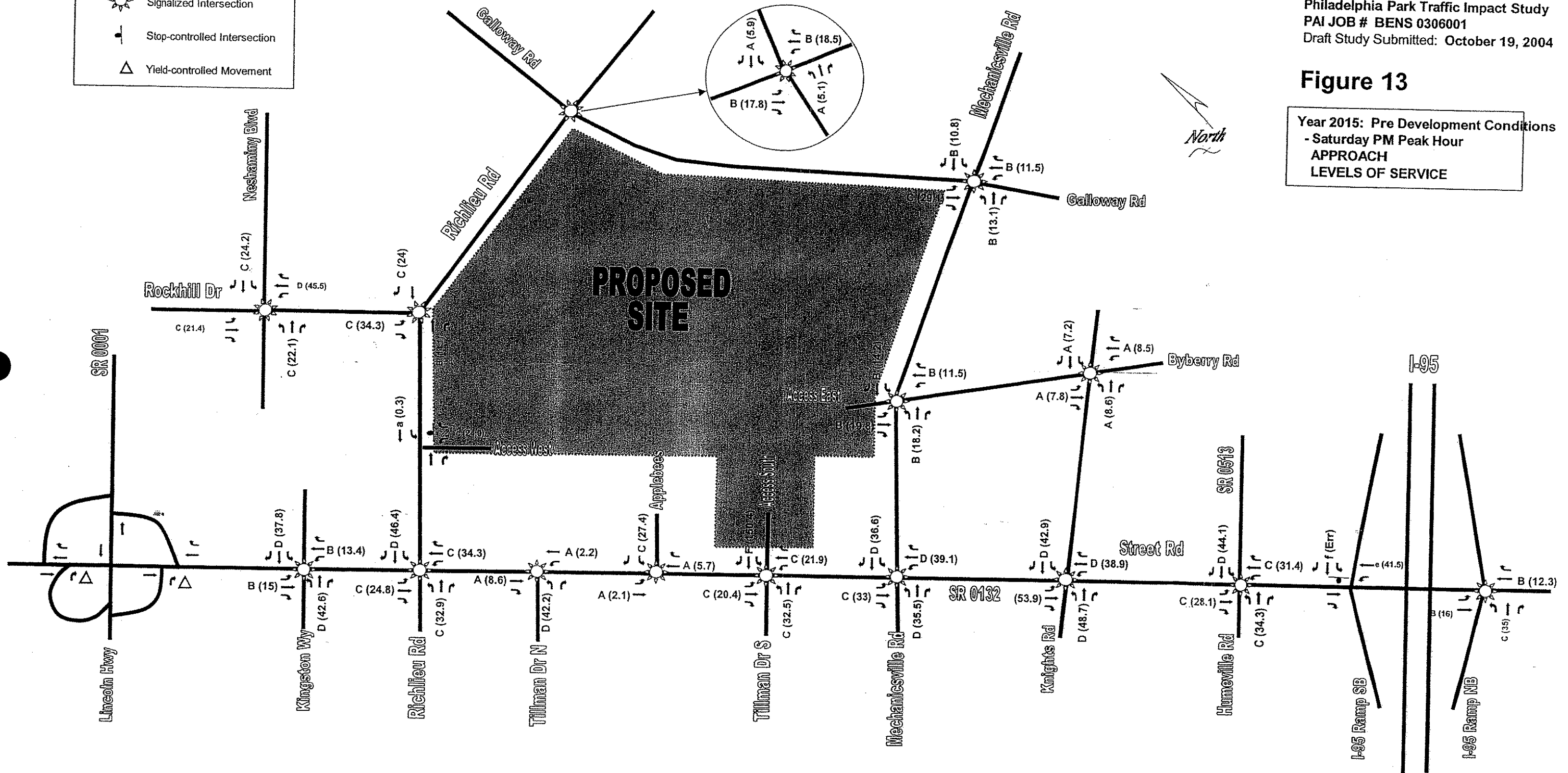


Figure 13

Year 2015: Pre Development Conditions
 - Saturday PM Peak Hour
APPROACH LEVELS OF SERVICE

Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement



PHILADELPHIA PARK DEVELOPMENT

Project Description

Philadelphia Park proposes to construct an electronic gaming device facility at their existing mixed venue entertainment. The proposed gaming device facility will be comprised of restaurants, bars, nightclubs, and 3000 electronic gaming units.

Currently there are three (3) existing public accesses to the site:

- **The Main Entrance (South Driveway)** provides full movement access to Street Road.
- **The East Driveway** provides full movement access to Mechanicsville Road.
- **The West Driveway** provides full movement access to Richlieu Road.

Trip Generation

The standard reference generally utilized to estimate traffic generated by new developments is a publication entitled Trip Generation by the Institute of Transportation Engineers. However, Trip Generation does not include a significant amount of data for gaming uses. The data it does include, does not match up well with the proposed Philadelphia Park development. Therefore, additional research was conducted to identify other sources of trip data.

An article titled "Gaming Casino Traffic", published in the ITE Journal, March 1998, by Paul C. Box and William Bunte, provides trip generation rates and an analysis of the daily fluctuation in generated traffic for two gaming casino facilities. While the article establishes trip generation rates per gaming position for the study sites, the rates could not be reasonably applied to the Philadelphia Park site, because the sites described in the article contain table and audience type gaming positions (blackjack, poker, Keno).

In order to develop an estimate of the future traffic for the proposed gaming device facility, driveway count information from similar facilities was utilized. Traffic counts from the following facilities were analyzed:

- Freehold National, New Jersey
- Delaware Park, Delaware
- Dover Downs, Delaware

Out of these three sites, the trip generation rates from Delaware Park Saturday evening driveway vehicle counts appear to be most suitable to be applied to Philadelphia Park. This is primarily because the driveway traffic counts at this facility were conducted when the live horse racing facility was closed and therefore the trips attracted by the gaming device facility were isolated. Additionally, the Delaware Park site is comparable with the proposed Philadelphia Park development, in that it includes a similar number and type of supporting patron services within the gaming device facility.

In order to develop trip generation rates for the weekday evening peak hour, the regressed Saturday evening rate was adjusted based on ratios provided in the Box and Bunte article

mentioned previously. The Saturday midday peak hour rate was obtained using Table 2 from the Box and Bunte article which provides an hourly breakdown of the daily traffic percentages.

The combination of literature research and field observations resulted in the following trip generation rate estimates:

- **0.358** trips per gaming position during the **weekday evening** peak hour (52% entering and 48% exiting); and
- **0.477** trips per gaming position during the **Saturday evening** peak hour (53% entering and 47% exiting)
- **0.252** trips per gaming position during the **Saturday midday** peak hour (52% entering and 48% exiting)

Additional information on the trip generation research, data from the local observations, and the ITE article are provided in **APPENDIX F**.

Based on the above stated rates, the proposed Philadelphia Park development is anticipated to generate the following peak hour trips:

- 1,074 trips during the weekday evening peak hour (558 entering and 516 exiting);
- 1,431 trips during the Saturday evening peak hour (758 entering and 673 exiting); and
- 756 trips during the Saturday midday peak hour (476 entering and 280 exiting).

In order to determine the total daily traffic expected to be developed by the site, peak hour/daily traffic ratios were applied to the entering and exiting traffic for both the proposed electronic gaming facility traffic, and the existing horse track traffic. For the proposed facility, the ratios were taken from the Box and Bunte ITE article, while the daily traffic rates for the existing traffic were estimated using ITE Trip Generation. The results of the daily traffic estimates are as follows:

- 19,000 daily trips for an average weekday (4,450 existing and 14,550 proposed)
- 30,000 daily trips for a Saturday (10,150 existing and 19,850 proposed)

Trip Distribution and Assignment

With the proposed facility's close proximity to several major highways, a separation of local trips and regional trips was established to accurately estimate the distribution of the proposed traffic. The results of the analysis indicate that approximately 85% of the new trips generated by the site will be regional trips that will access the site and the surrounding local roadway network via a major highway or arterial. The distribution of the regional and local traffic is outlined below:

1. Regional Distribution

In order to estimate the regional distribution of new trips to and from the proposed gaming facility, a gravity model, with an exponentially distributed impedance function was developed.

Total population, adjusted for potential casino trip-makers within a 10-mile radius of the project site was used to represent weighted trip attraction. The population is allocated to seven major zones, composed out of individual census tracts based on the proximity to a regional expressway (I-95, US-1, US-13, PA Turnpike, and Street Road). Specific zones and casino populations are shown in the image below.



Traffic analysis zones in 10-mile radius

Adjustment of Total Population to Casino Trip Makers

The total population was adjusted to potential casino trip-makers based on a survey performed by American Gaming Association about a profile of a typical American gambler [1]. Distribution by casino visitor's age was taken as an adjustment factor.

Gravity Model Set-Up

The gravity model $T_{ij} = P_i \frac{A_j F_{ij} K_{ij}}{\sum_j A_j F_{ij} K_{ij}}$ produces T number of trips between any zone i and

Philadelphia park (zone j), adjusted by the following factors:

- F_{ij} is a friction coefficient, which accounts for an impedance (travel time, distance). The impedance function was used where distance is the least responsive, yet still decreases the number of trips to Philadelphia Park with increasing distance.
- K_{ij} is a socioeconomic coefficient expressing a non-gravity relationship between zones i and j . Trips are adjusted by K_{ij} for three zones: local traffic, US-1 N traffic and PA Turnpike traffic. This adjustment factor takes into account the expectation of traffic from areas which are outside of the 10-mile radius and therefore non-reflected in the unadjusted gravity model. It also provides impedance to local traffic to prevent an overestimation of how much traffic will be generated locally.

Final regional distribution is shown in Tables 3 and 4.

**TABLE 1
PHILADELPHIA PARK
POPULATION DEMOGRAPHICS- POPULATION BY AGE**

	Total 2000 Population	21-35	36-50	51-65	66 >
LOCAL	75,479	21,314	12,092	12,438	8,008
RT. 13 NORTH	90,331	23,018	14,767	12,557	12,084
I-95 SOUTH	333,782	87,815	47,354	46,649	55,316
RT. 1 NORTH	121,016	27,590	23,318	20,183	12,409
RT. 1 SOUTH	134,660	29,846	19,769	23,067	29,711
PA TURNPIKE/ STREET ROAD	127,543	29,376	20,245	21,630	20,785
NEW JERSEY	148,693	36,359	23,872	24,411	19,528
SUM:	1,031,504				

**TABLE 2
PHILADELPHIA PARK
GRAVITY MODEL**

	Estimated Casino Population:	Approx. Distance To Site [km]:	F_{ij}	K_{ij}	$A_i K_{ij} F_{ij}$	T_{ij}	Distrib:
LOCAL	14,245	2.4	0.3817	0.55	2,990.85	310	16%
RT. 13 NORTH	16,476	9.5	0.0840	1.00	1,384.70	144	7%
I-95 SOUTH	62,722	12	0.0650	1.00	4,076.83	423	21%
RT. 1 NORTH	22,132	11.1	0.0708	1.90	2,978.01	309	15%
RT. 1 SOUTH	27,346	7.8	0.1044	1.00	2,854.87	296	15%
PA TURNPIKE/ STREET ROAD	24,506	10	0.0794	1.70	3,309.21	343	17%
NEW JERSEY	27,654	12.7	0.0611	1.00	1,688.76	175	9%
Total	195,081				19,283.23	2000	
$c = 1.1$					$\Sigma_i [A_i K_{ij} F_{ij}]$	$\Sigma_j [T_{ij}]$	

2. Local Distribution

The local distribution was based on existing traffic volumes, reduced by regional traffic along Street Rd. The reduction applies to both I-95 and US-1 traffic. The traffic to and from I-95 and US-1 was reduced proportionately to the approach volumes, as it enters or exits Street Rd. This reduction allows for the local traffic to be distributed along local roadways.

Sources:

1. "Profile of an American Gambler." Harrah's Survey. American Gaming Association, Washington, D.C., 2003.

It was estimated that the traffic generated by the Philadelphia Park gaming device facility will be **85% regional** and **15% local**. Local traffic was distributed to the local roadway network utilizing existing traffic patterns, while regional traffic was allocated with the use of a gravity model which yielded the following distribution:

To/From North:	Lincoln Highway (Route 1)	15%	
	Bristol Pike (Route 13)	7%	
To/From South:	Interstate 95	22%	
	Lincoln Highway (Route 1)	15%	
To/From East:	Interstate 276	9%	
To/From West:	Interstate 276	11%	
	Street Road (SR 0132)	6%	+
Total Regional Traffic		85%	

FIGURES 14, 15, 16, 17, 18 & 19 provide illustrations of the distribution of project traffic and the assignment of project trips to the study intersections and site accesses.

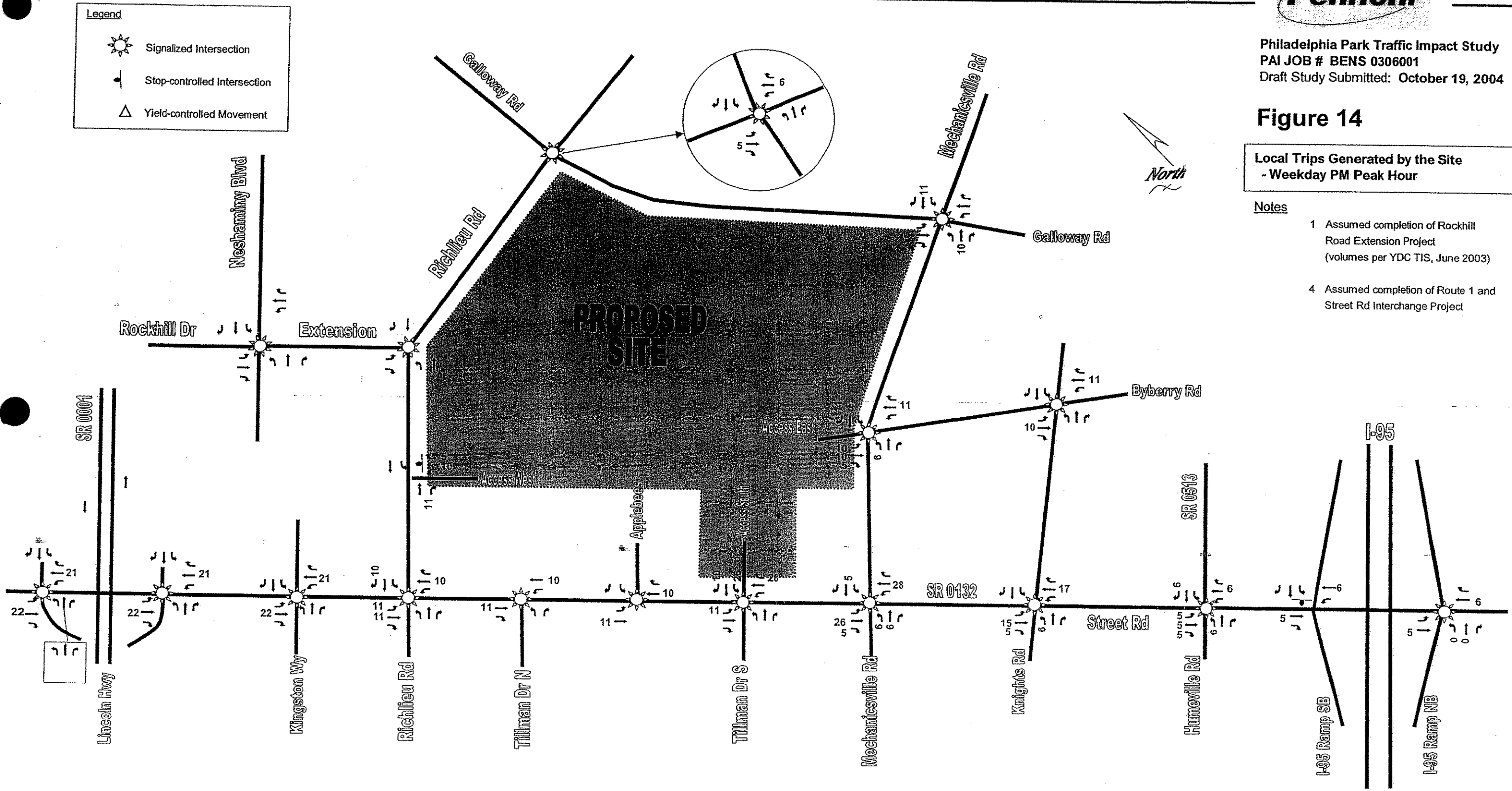
As previously noted, the distribution of the regional traffic will take into account the completion of the Rockhill Drive extension/connector road that is currently in construction as part of the YDC redevelopment project. The connector road will provide an optional route to Route 1. The roadway is estimated to attract approximately 8% of the regional Route 1 traffic.

Figure 14

**Local Trips Generated by the Site
- Weekday PM Peak Hour**

Notes

- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
- 4 Assumed completion of Route 1 and Street Rd Interchange Project



Legend

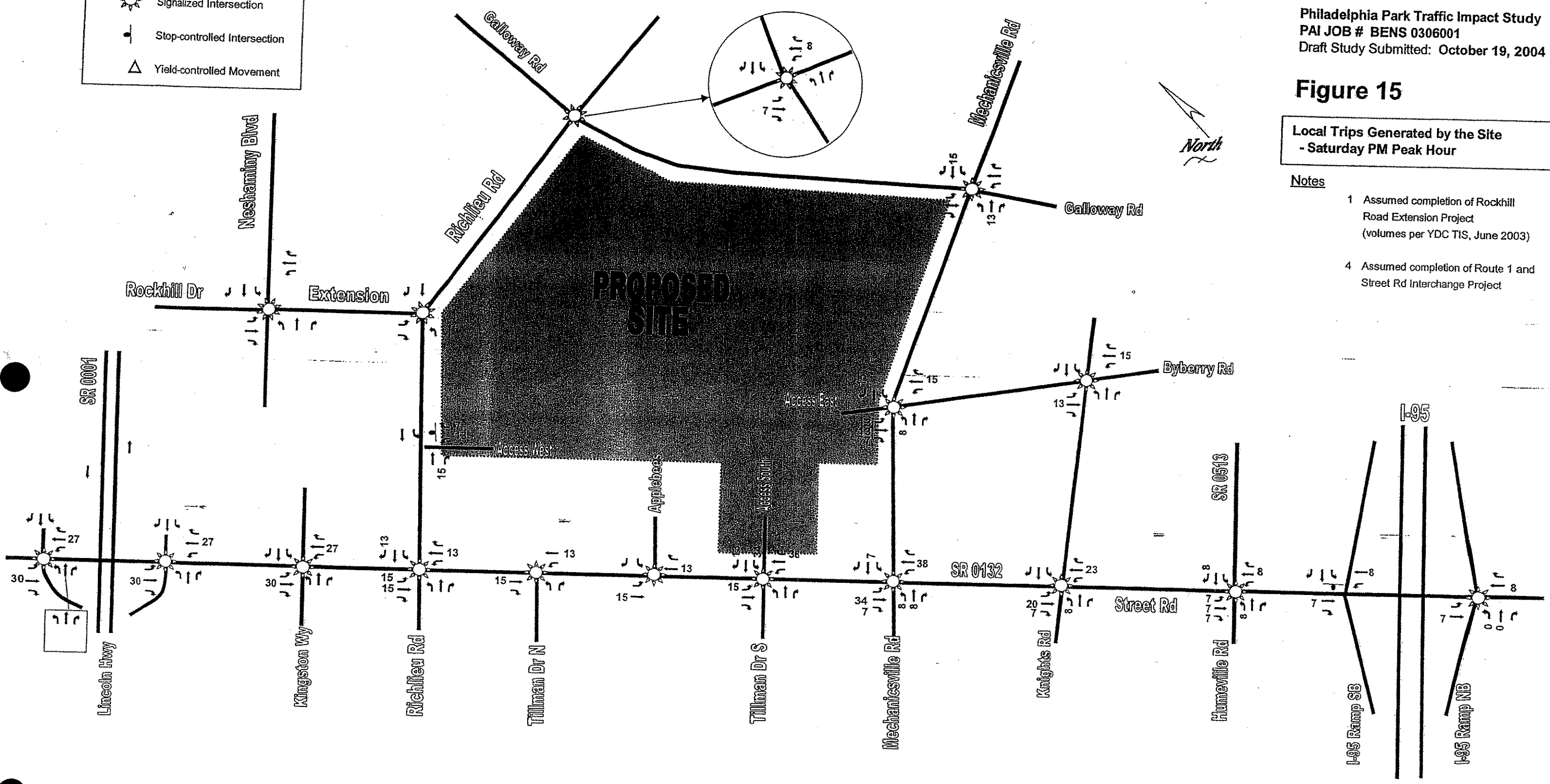
- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 15

**Local Trips Generated by the Site
- Saturday PM Peak Hour**

Notes

- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
- 4 Assumed completion of Route 1 and Street Rd Interchange Project



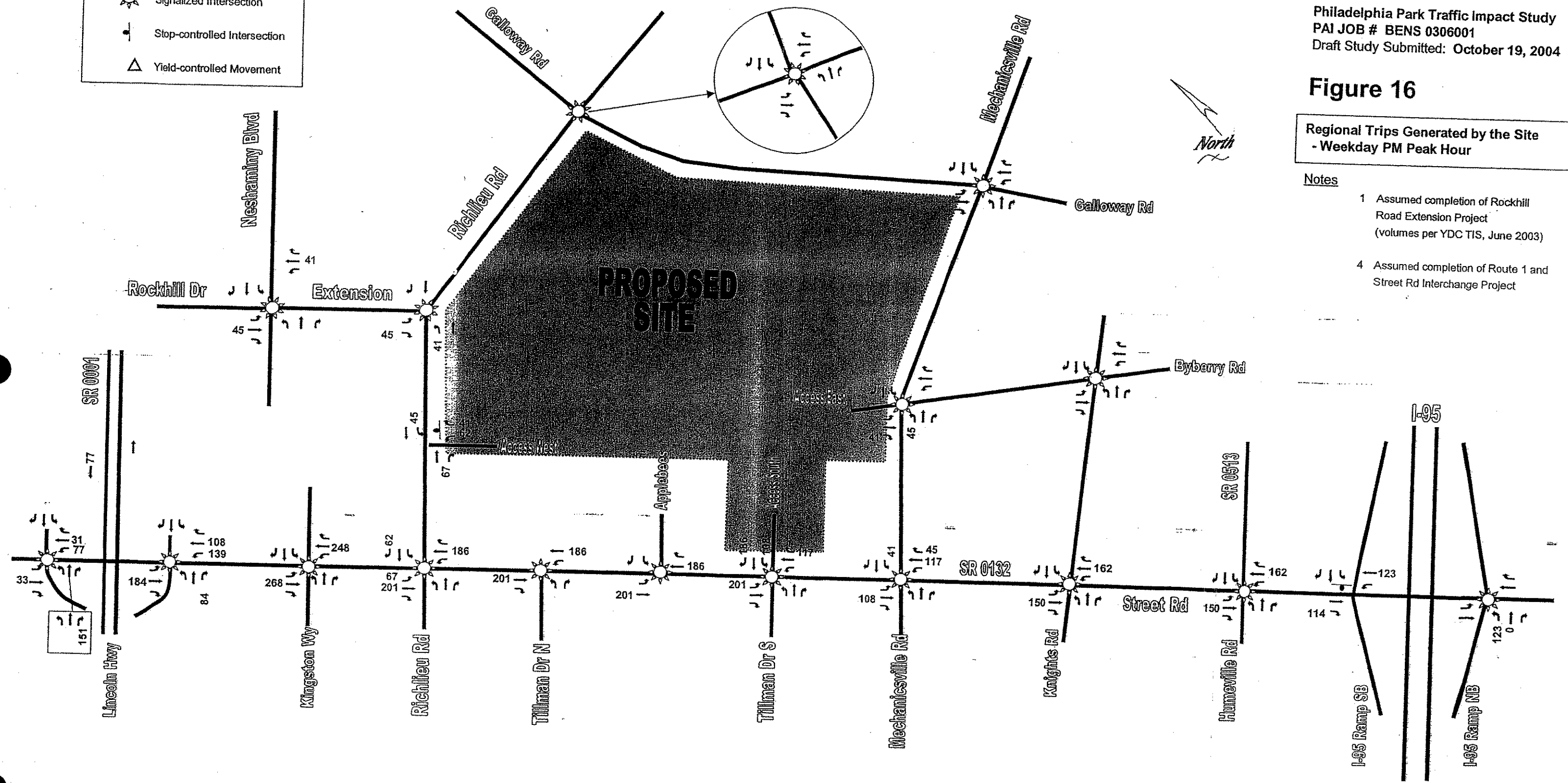
Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 16

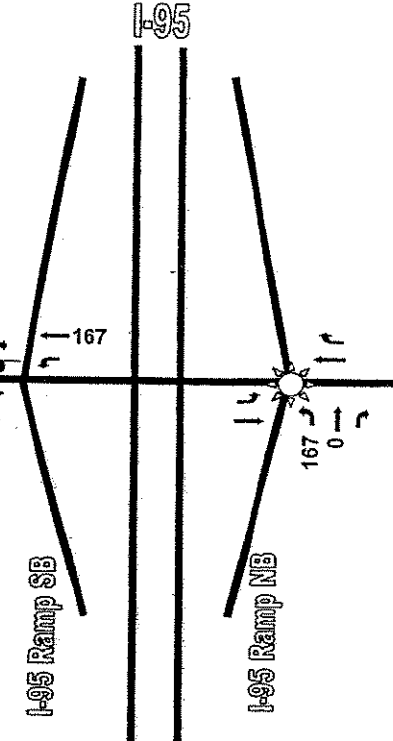
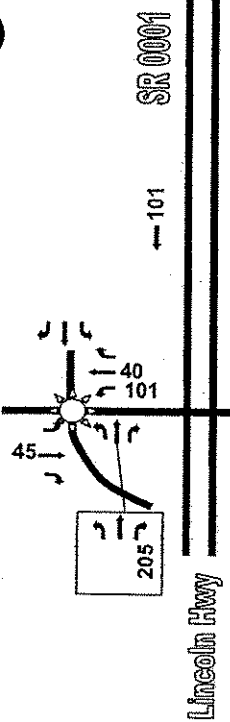
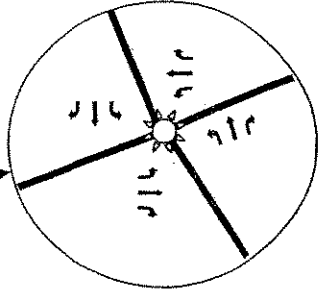
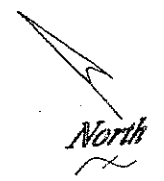
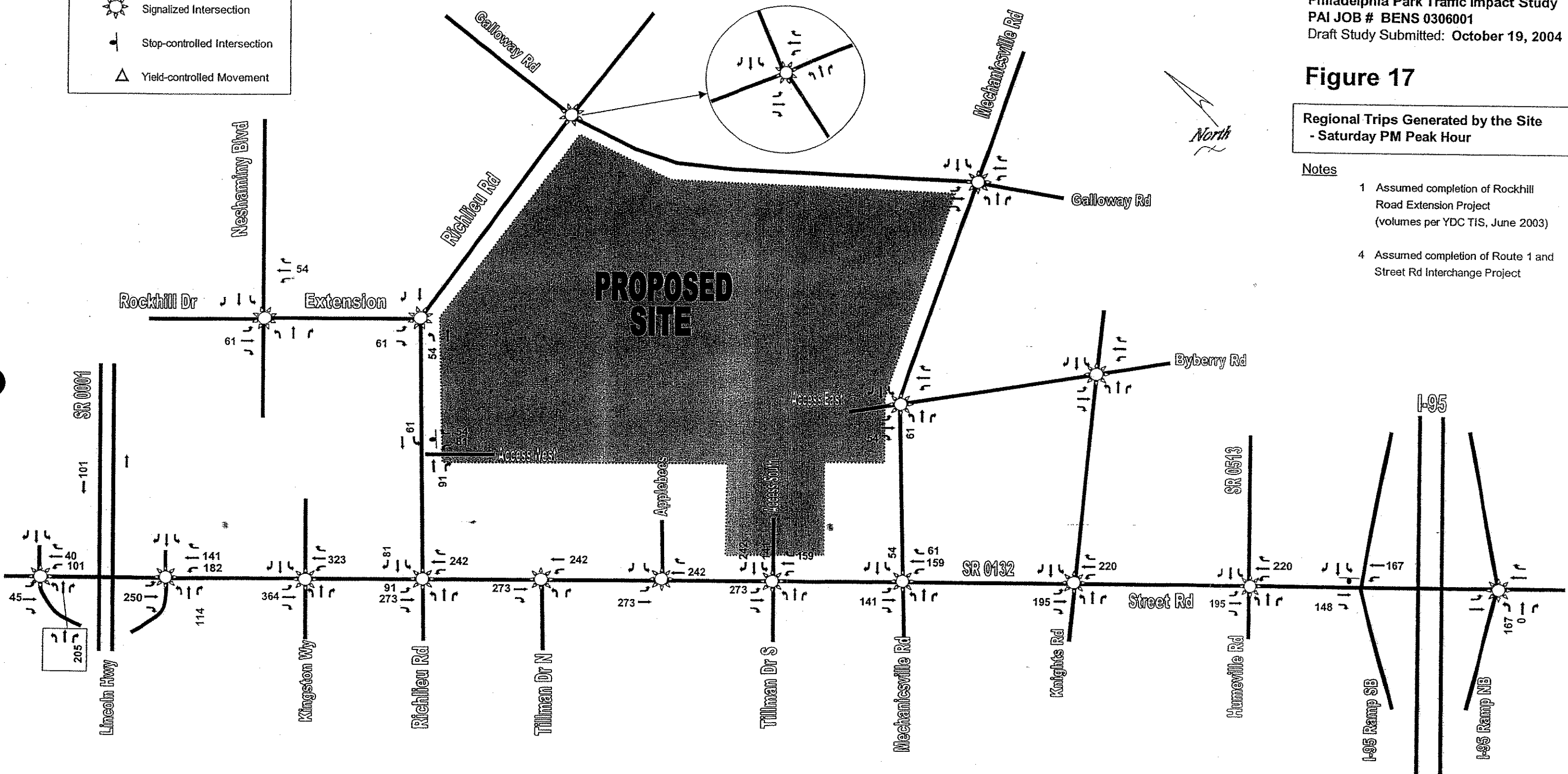
Regional Trips Generated by the Site - Weekday PM Peak Hour

- Notes**
- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
 - 4 Assumed completion of Route 1 and Street Rd Interchange Project



Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement



Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

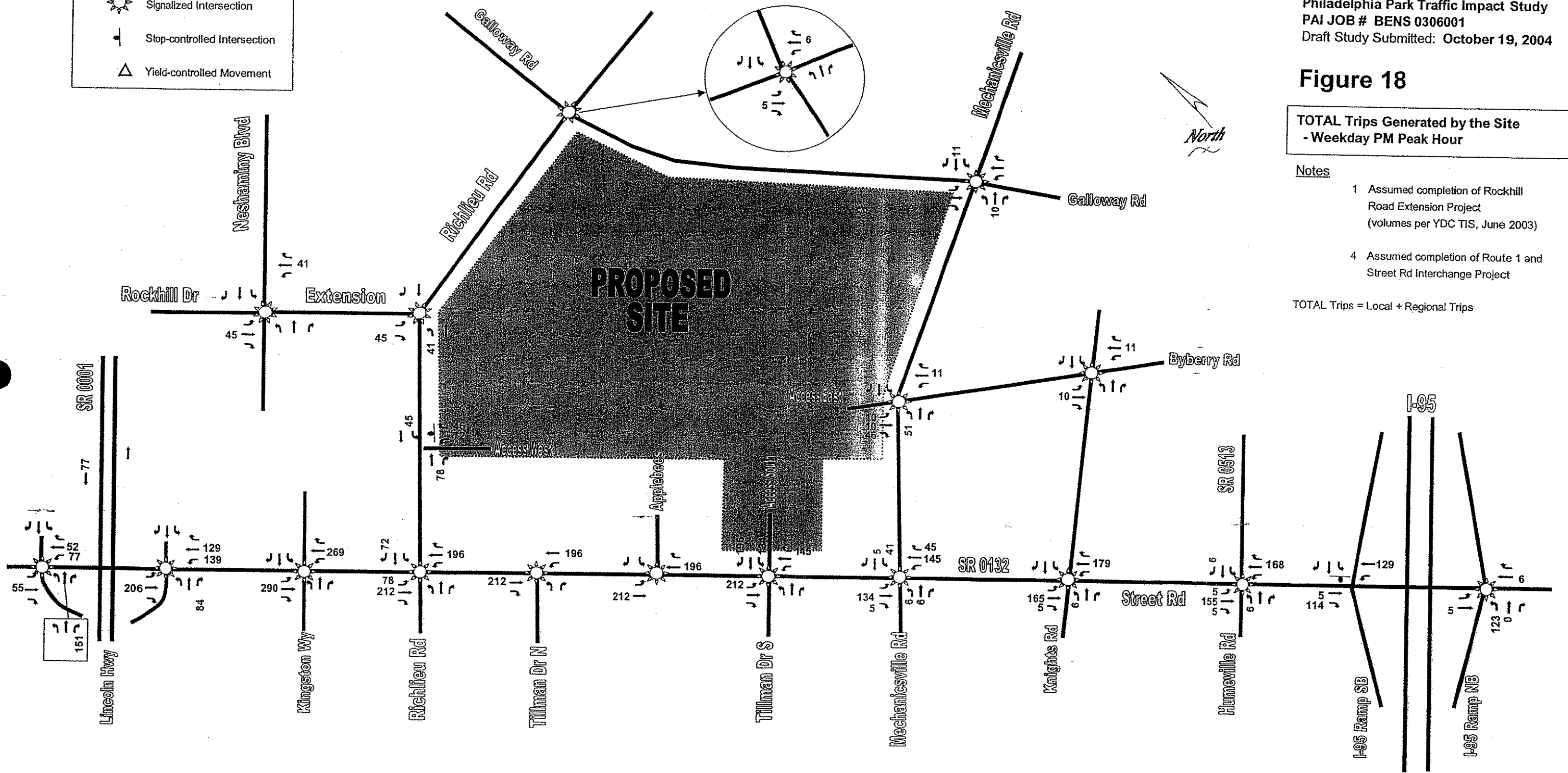


Figure 18

TOTAL Trips Generated by the Site - Weekday PM Peak Hour

- Notes**
- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
 - 4 Assumed completion of Route 1 and Street Rd Interchange Project

TOTAL Trips = Local + Regional Trips

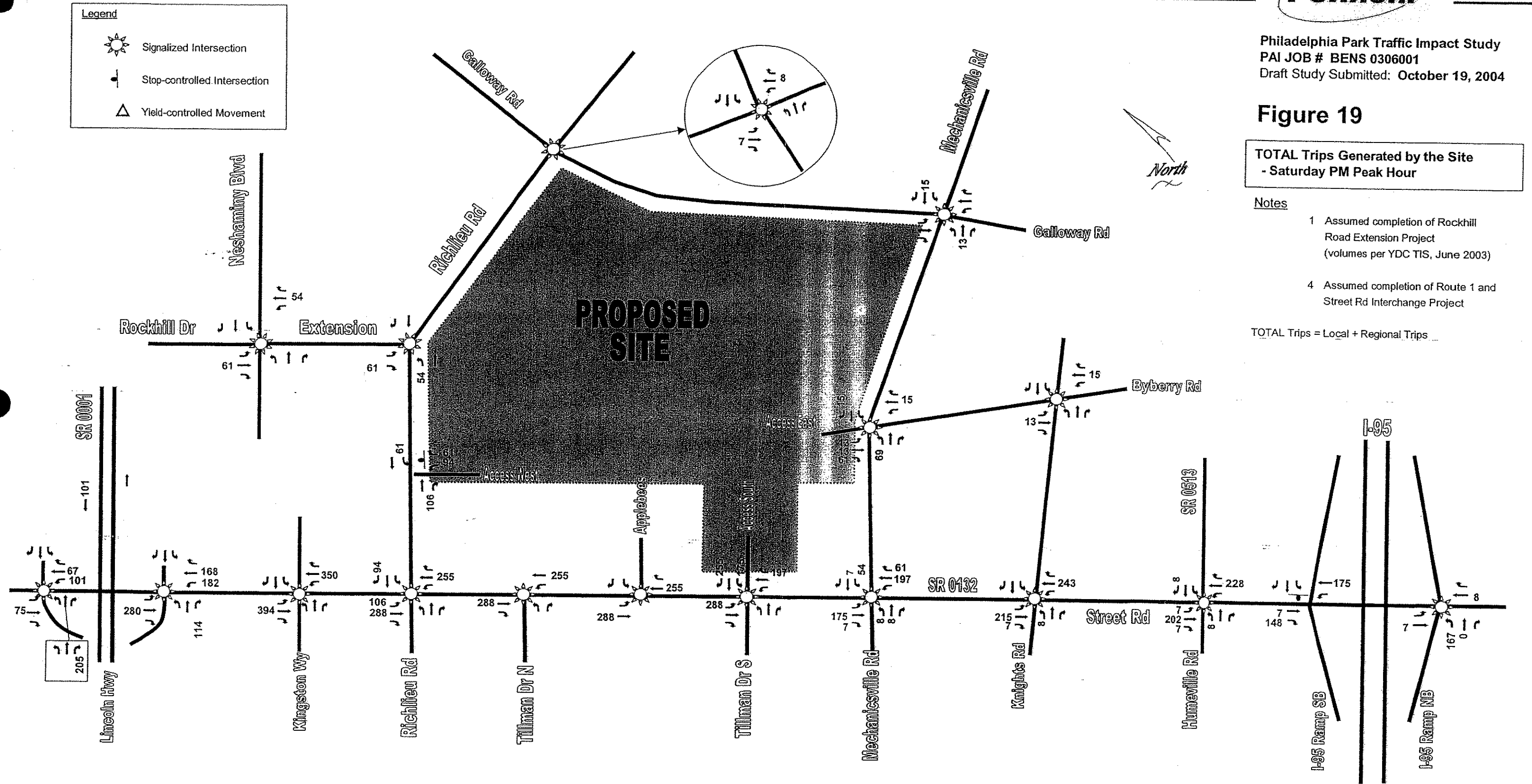
Figure 19

TOTAL Trips Generated by the Site - Saturday PM Peak Hour

Notes

- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
- 4 Assumed completion of Route 1 and Street Rd Interchange Project

TOTAL Trips = Local + Regional Trips



Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

FUTURE “POST-DEVELOPMENT” TRAFFIC CONDITIONS

Post-Development Traffic Volumes

The traffic generated by the addition of the proposed 3000 unit gaming device facility was added to the pre-development traffic volumes to provide the total post-development traffic volumes for the 2005 completion year and 2015 horizon year.

APPENDIX D contains a summary of the future traffic volumes.
FIGURES 20 & 21 illustrate the 2005 post-development volumes.
FIGURES 22 & 23 illustrate the 2015 post-development volumes.

Post-Development Levels of Service (2005 without Improvements)

The results of the post-development (2005) analyses indicate that the study intersections and roadway network surrounding the Philadelphia Park site will experience general degradation in Level of Service and increase in delay. Due to an increase of volume generated from the proposed site, the following overall intersections and intersection movements experience degradation from acceptable to deficient LOS or from LOS “E/e” to LOS “F/f” when compared to pre-development 2005 conditions:

Weekday Evening Peak Hour

- Street Road and I-95 northbound ramps; northbound left/through/right – LOS “E”
- Byberry Road and Mechanicsville Road; westbound left/through/right – LOS “E”
- Street Road and Hulmeville Road; **Overall – LOS “E”**, westbound through/right – LOS “F”
- Street Road and Knights Road; eastbound left, eastbound through, westbound through, northbound left - LOS “E”
- Street Road and Mechanicsville Road; northbound through, eastbound left, westbound through – LOS “E”
- Street Road and Philadelphia Park Entrance/Tillman Drive (S); **Overall – LOS “E”**, eastbound left, southbound right – LOS “F”
- Street Road and Richlieu Road; **Overall – LOS “F”**, westbound through, southbound through/right - LOS “F”
- Street Road and Kingston Way; westbound left – LOS “F”
- Neshaminy Boulevard and Rockhill Drive; southbound left – LOS “F”
- Richlieu Road and Philadelphia Park Entrance; **Overall – LOS “F”**

Saturday Evening Peak Hour

- Street Road and Knights Road; eastbound through – LOS “F”
- Street Road and Philadelphia Park Entrance/Tillman Drive (S); **Overall – LOS “F”**, westbound through/right – LOS “E”, southbound right – LOS “F”
- Street Road and Richlieu Road; eastbound left – LOS “E”, westbound through - LOS “F”
- Richlieu Road and Philadelphia Park Entrance; westbound left/right – LOS “F”

Post-Development Levels of Service (2015 without Improvements)

As in the 2005 post development conditions, the 2015 post development conditions indicate increased delay at many of the study area intersection as a result of the development traffic. The following overall intersections and intersection movements experience degradation from acceptable to deficient LOS or from LOS "E/e" to LOS "F/f" when compared to pre-development 2015 conditions:

Weekday Evening Peak Hour

- Street Road and Hulmeville Road; westbound left – LOS "E", eastbound through – LOS "F"
- Street Road and NB Route 1 Ramps; westbound left – LOS "E"
- Street Road and Knights Road; **Overall – LOS "F"**, eastbound through, westbound through – LOS "F"
- Street Road and Mechanicsville Road; **Overall – LOS "F"**, southbound through – LOS "E", westbound left, southbound left – LOS "F"
- Street Road and Philadelphia Park Entrance/Tillman Drive (S); **Overall – LOS "F"**, eastbound left, westbound through, southbound right – LOS "F"
- Street Road and Tillman Drive (N); westbound left – LOS "F"
- Street Road and Richlieu Road; eastbound through – LOS "E"
- Street Road and Kingston Way; eastbound left, eastbound through – LOS "F"
- Mechanicsville Road and Galloway Road; northbound left/through/right – LOS "E"
- Richlieu Road and Philadelphia Park Entrance; **Overall – LOS "F"**

Saturday Evening Peak Hour

- Street Road and I-95 northbound ramps; northbound left – LOS "E"
- Street Road and I-95 southbound ramps; westbound left – LOS "F"
- Byberry Road and Mechanicsville Road – LOS "F"
- Street Road and Knights Road; **Overall – LOS "E"**, westbound left, westbound through – LOS "E", eastbound through, northbound left – LOS "F"
- Street Road and Mechanicsville Road; **Overall – LOS "E"**, eastbound through – LOS "E", westbound through – LOS "F"
- Street Road and Philadelphia Park Entrance/Tillman Drive (S); **Overall – LOS "F"**, westbound through/right, southbound right – LOS "F"
- Street Road and Richlieu Road; **Overall – LOS "F"**, eastbound left – LOS "E", westbound through – LOS "F"
- Richlieu Road and Philadelphia Park Entrance; **Overall – LOS "e"**, westbound left/right – LOS "F"
- Street Road and NB Route 1 Ramps; westbound left – LOS "E"

Recommended Roadway Improvements

As shown in the post development analysis, improvements are necessary to mitigate the impact of the project traffic. In order to accommodate the additional traffic that is expected to be generated by the Philadelphia Park gaming device facility, the following area roadway and traffic signal improvements are recommended to prevent Levels of Service from degrading from acceptable to unacceptable and to prevent deficient Levels of Service from increasing in delay:

- An additional through lane should be provided for both the eastbound and westbound directions of Street Road from east of Mechanicsville Road to west of Richlieu Road.
- At the Street Road Philadelphia Park Access, dual southbound left turn lanes out of the site should be provided. With this modification, the northbound (Tillman Drive) and southbound (Philadelphia Park) approaches must operate under split phasing.
- A right turn lane should be provided for the southbound approach of Richlieu Road at Street Road.
- One public access should be provided to Richlieu Road. This access point should be signalized with auxiliary turn lanes into and out of the site, and should be interconnected with fiber optic cable to the adjacent intersections along Richlieu Road at Street Road and Rockhill Drive.
- Left turn lanes should be provided for all approaches at the Mechanicsville site access location.
- Timing modifications should be provided for all signalized intersections within the study area. Event timing plans for the Street Road corridor must be developed and implemented with the corridor's traffic responsive operation.
- Data collection should be completed after the development is open to determine the effectiveness of the recommended improvements and to optimize the area signal timings based on the actual distribution of the project traffic.

Post development analysis was conducted utilizing the implementation of the above referenced improvements. The results indicate that for the build year 2005, and for the design year 2015, the improvements successfully mitigate the impact of the development traffic throughout the local roadway network with a few exceptions. At the intersection of Street Road and the Philadelphia Park access, the eastbound left turn movement into the site degrades to a LOS "E" during the weekday evening peak hour, however, the v/c ratio is below 1.0 and the 95th percentile queue is accommodated within the left turn storage area.

The intersections of Street Road and Knights Road and Street Road and Hulmeville Road continue to experience some degradation during post development conditions, primarily associated with movements that are at or near capacity in the pre-development conditions. All traffic heading northbound on I-95 destined for the Philadelphia Park site was conservatively assumed to exit at Street Road and continue west to Philadelphia Park. In actuality, vehicles could exit at the Woodhaven Road/I-95 interchange and take Woodhaven Road to Knights Road, or Bristol Pike to Hulmeville Road to get to the site. It is recommended that these intersections be monitored after the development is open to determine the impact of the development traffic. Optimal timings plans and/or geometric improvements could then be recommended.

At the Street Road/I-95 interchange, the signalized northbound ramps can be retimed to successfully mitigate the additional development traffic. The unsignalized southbound ramps, however, continue to experience deficient Levels of Service and increased delay under post development conditions. Without a reasonable improvement scenario for the interchange that could be implemented as part of this project, it is recommended that the findings and projected volumes outlined in this study be utilized in the Street Road/I-95 Interchange Project mentioned previously to ensure that an adequate final design is achieved.

APPENDIX G contains the summary outputs for the analysis software of the post-development conditions.

FIGURES 24 & 25 illustrate the results of the 2005 post development analysis.

FIGURES 26 & 27 illustrate the results of the 2015 post development analysis.

FIGURES 28 & 29 illustrate the results of the 2005 post development improvement analysis.

FIGURES 30 & 31 illustrate the results of the 2015 post development improvement analysis.

Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 20

**Year 2005: Post Development Conditions
 - Weekday PM Peak Hour**

Notes

- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
- 2 Assumed completion of developments at YDC and St. Francis Tract
- 3 Assumed 1.5 % per year growth of background traffic

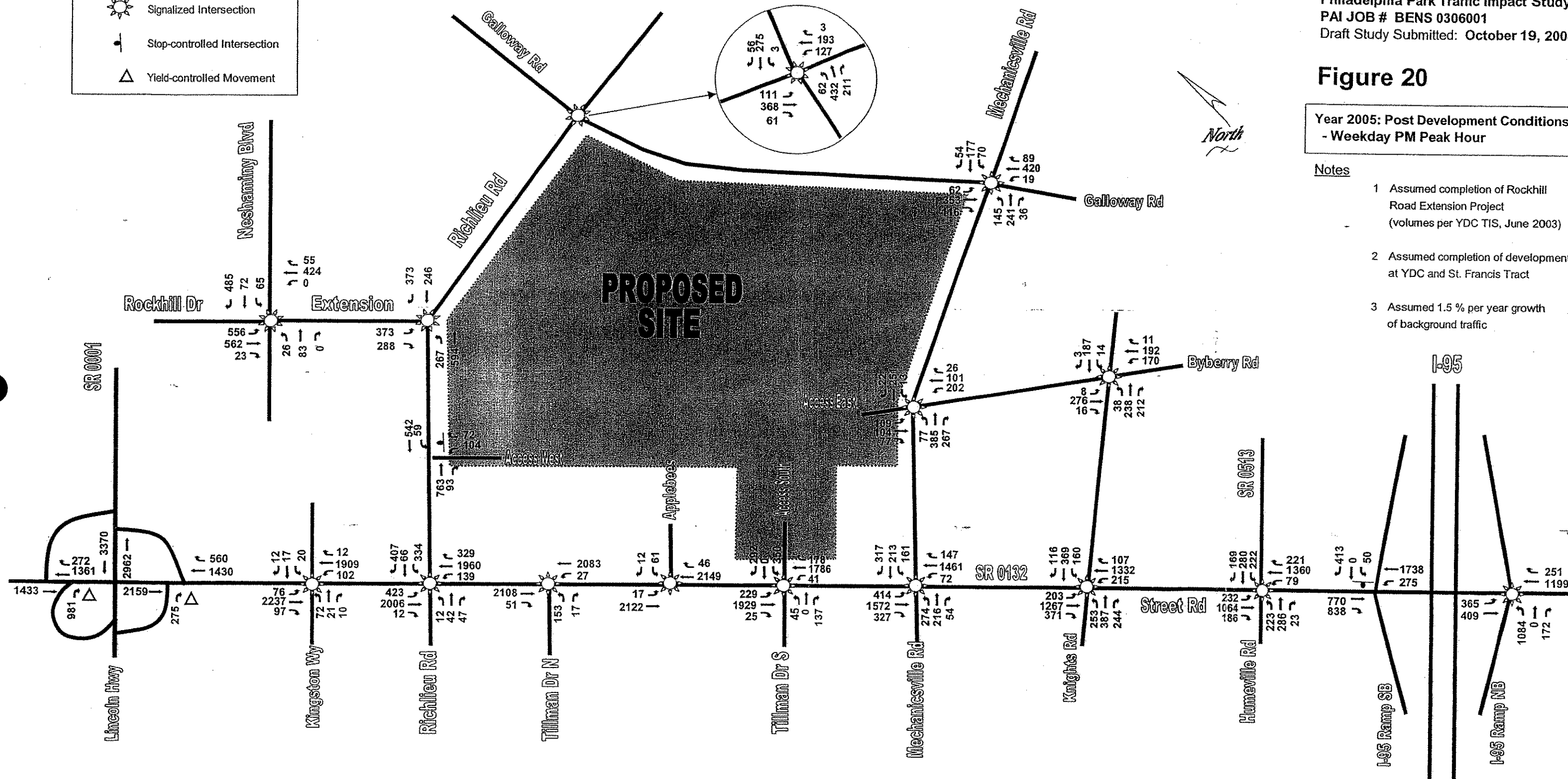


Figure 25

Year 2005: Post Development Conditions
 - Saturday PM Peak Hour
 APPROACH
 LEVELS OF SERVICE

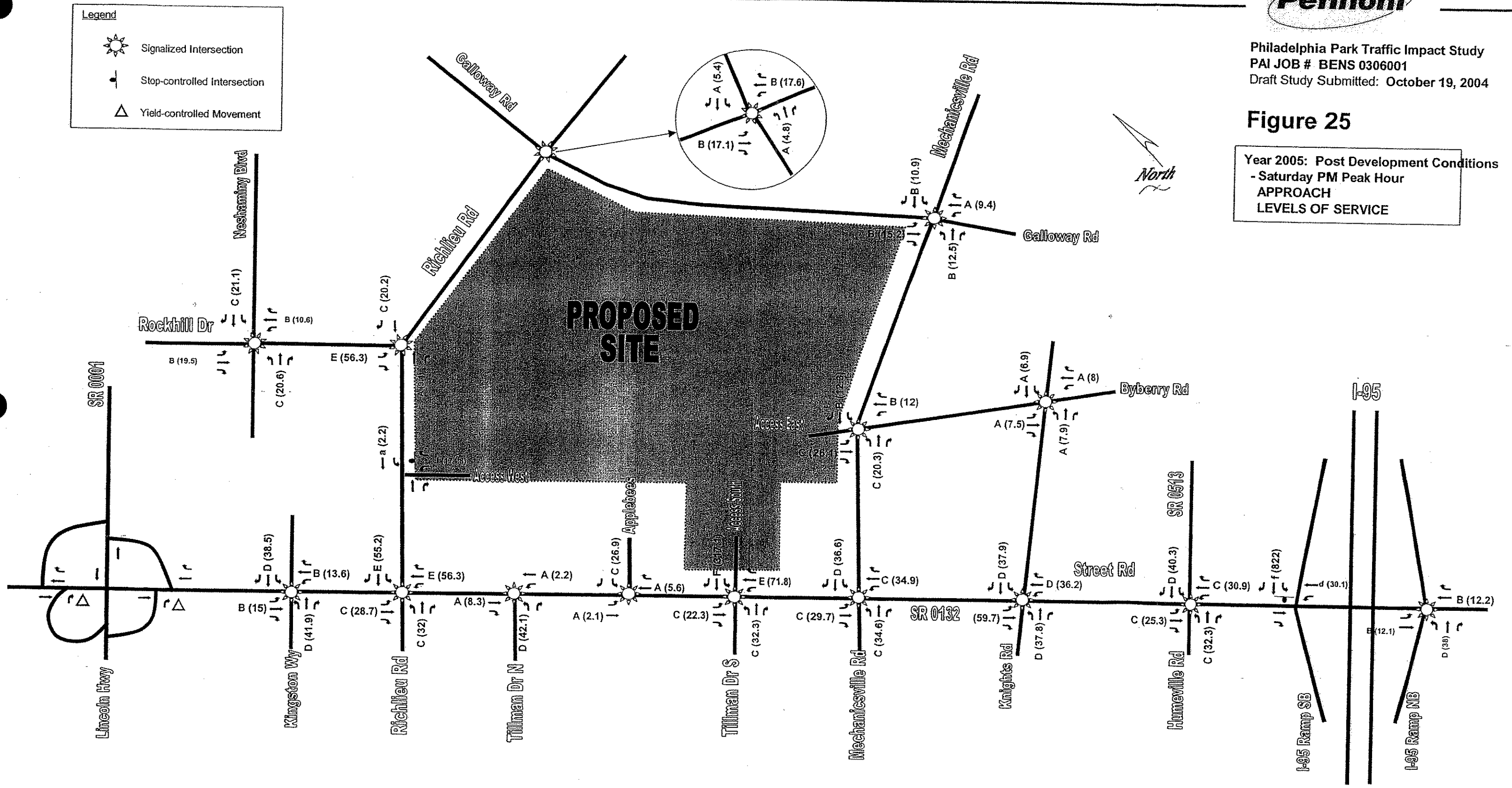


Figure 24

Year 2005: Post Development Conditions
 - Weekday PM Peak Hour
 APPROACH
 LEVELS OF SERVICE

Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

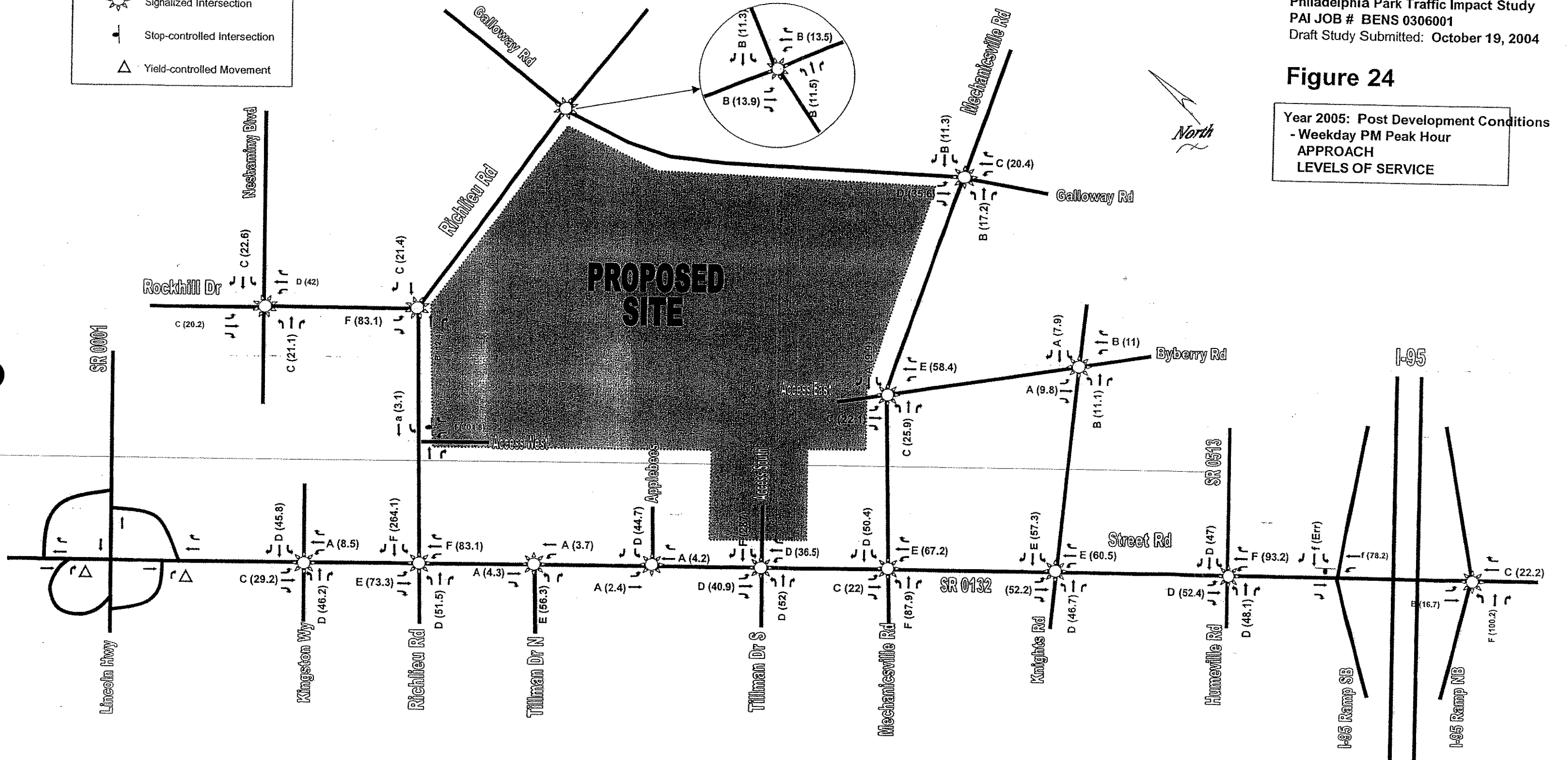
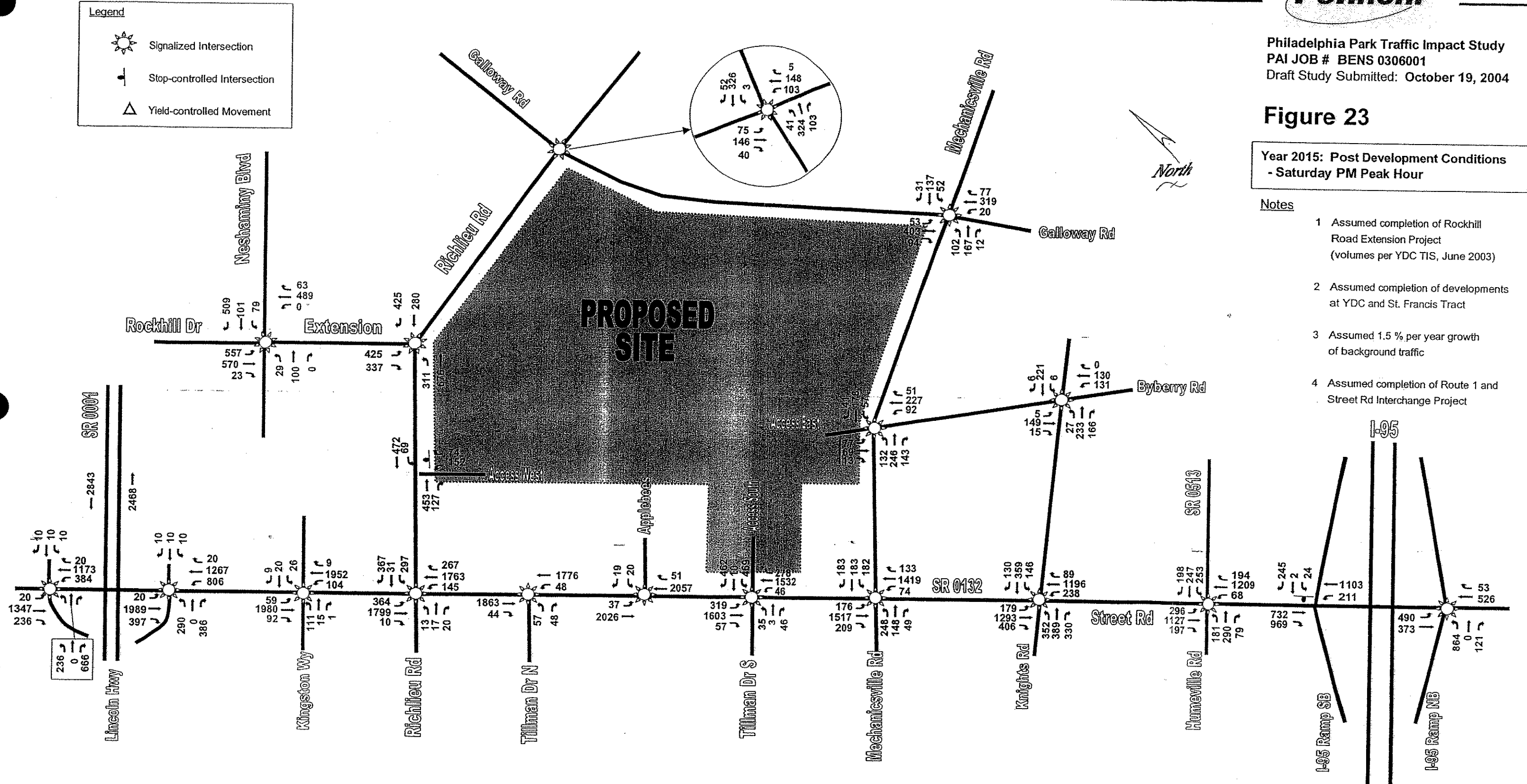


Figure 23

**Year 2015: Post Development Conditions
 - Saturday PM Peak Hour**

Notes

- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
- 2 Assumed completion of developments at YDC and St. Francis Tract
- 3 Assumed 1.5 % per year growth of background traffic
- 4 Assumed completion of Route 1 and Street Rd Interchange Project



Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

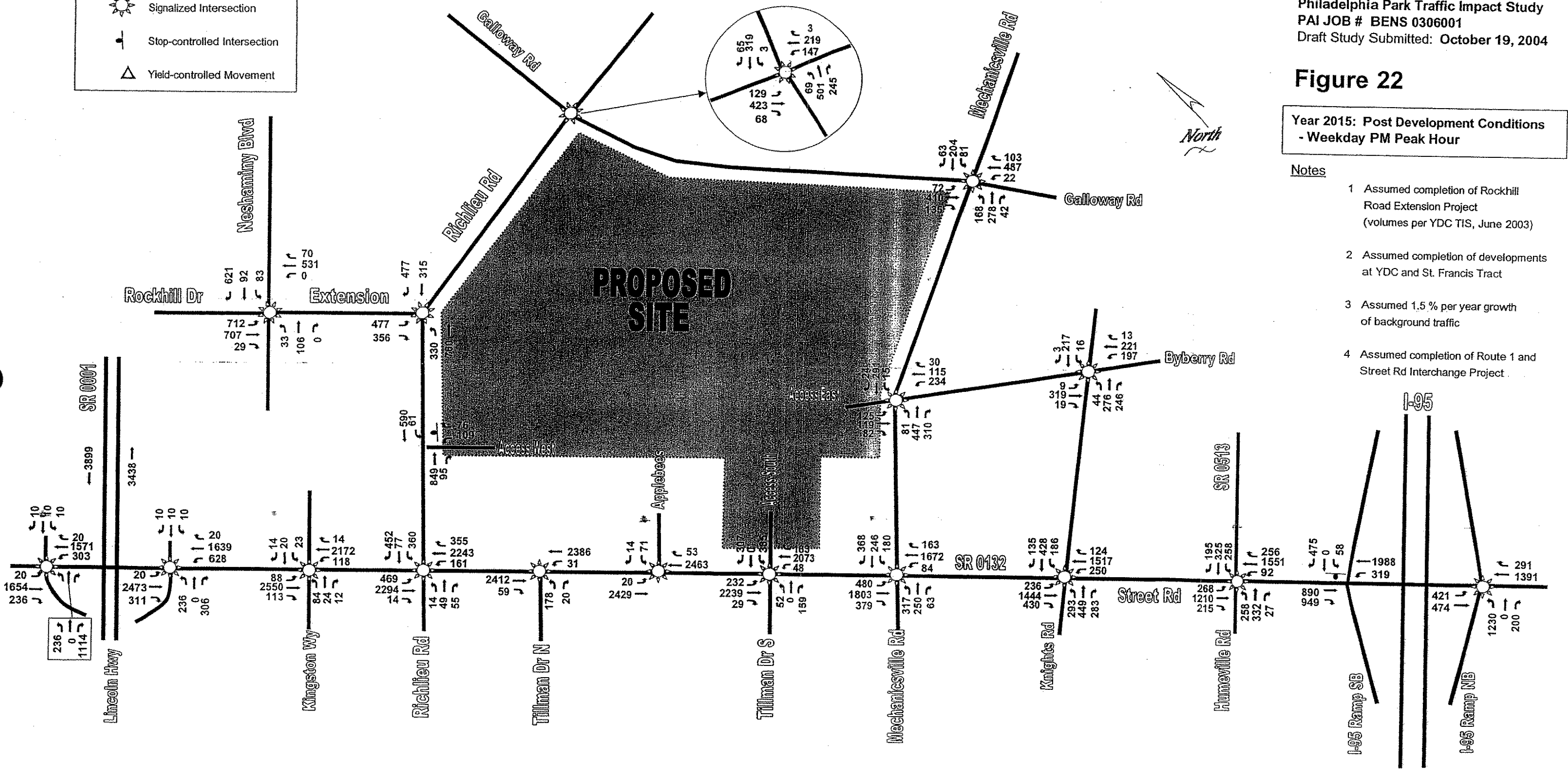


Figure 21

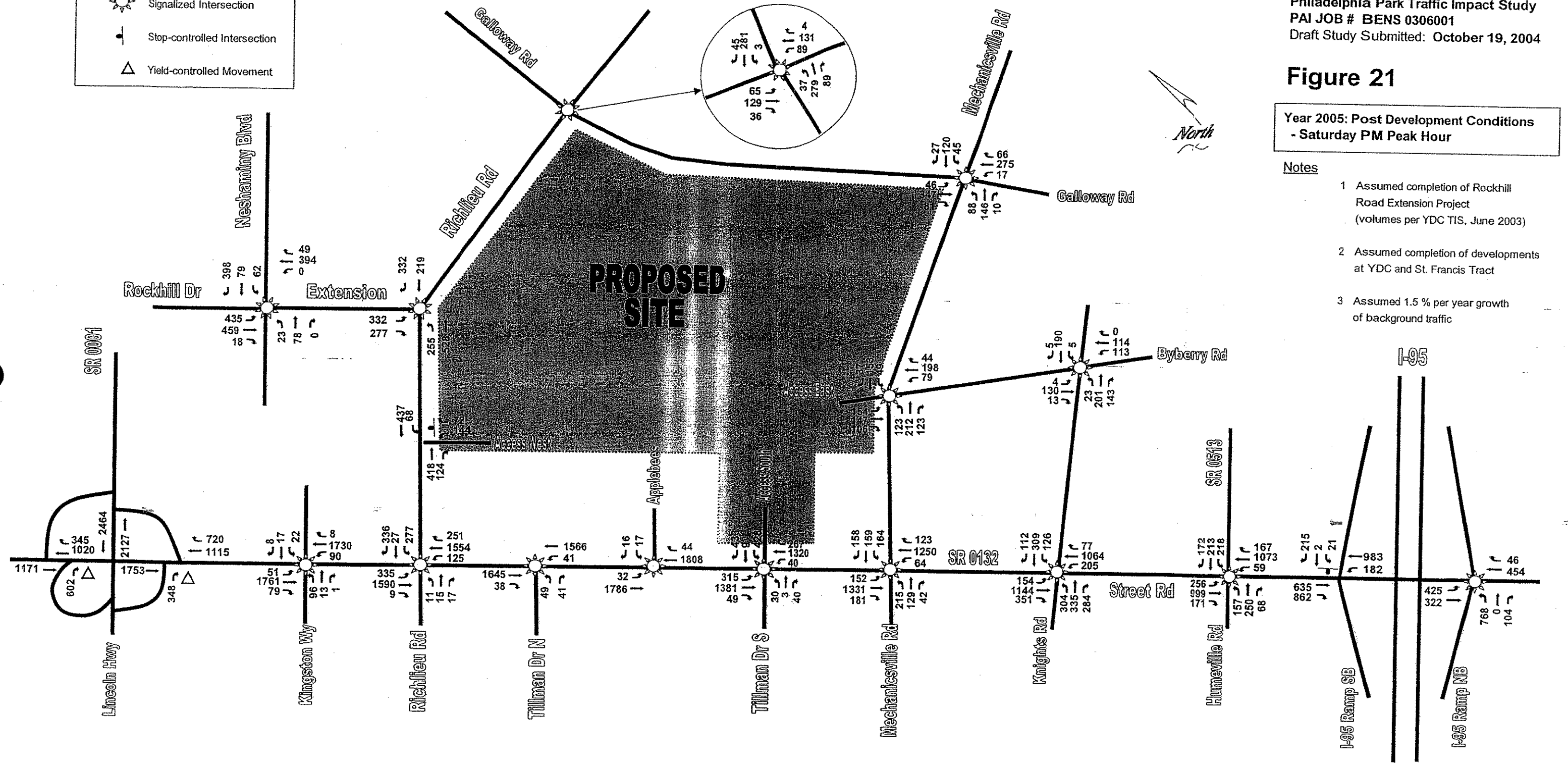
Year 2005: Post Development Conditions
 - Saturday PM Peak Hour

Notes

- 1 Assumed completion of Rockhill Road Extension Project (volumes per YDC TIS, June 2003)
- 2 Assumed completion of developments at YDC and St. Francis Tract
- 3 Assumed 1.5 % per year growth of background traffic

Legend

- ☀ Signalized Intersection
- ⊥ Stop-controlled Intersection
- △ Yield-controlled Movement



SUMMARY AND CONCLUSIONS

Philadelphia Park proposes to construct an electronic gaming device facility at their existing mixed venue entertainment complex which includes a horse racing facility (consisting of grandstands and box seating); restaurants, sports bars, lounges and simulcasting theaters. The proposed gaming device facility will be comprised of restaurants, bars, nightclubs, and 3000 electronic gaming units.

Based on literature research and data from existing gambling facilities, the proposed addition of 3000 gaming units to the existing Philadelphia Park site is anticipated to generate a total of:

- 1,074 trips during the weekday evening peak hour (558 entering and 516 exiting);
- 1,431 trips during the Saturday evening peak hour (758 entering and 673 exiting); and
- 756 trips during the Saturday evening peak hour (476 entering and 280 exiting).

Utilizing peak/daily traffic rates for the proposed gaming facility traffic and the existing racetrack traffic yields the following daily traffic estimates for the entire site:

- 19,000 daily trips for an average weekday (4,450 existing and 14,550 proposed)
- 30,000 daily trips for a Saturday (10,150 existing and 19,850 proposed)

It was estimated that the traffic generated by the Philadelphia Park gaming device facility will be **85% regional** and **15% local**. The local traffic was distributed to the roadway network utilizing existing traffic patterns while the regional traffic was allocated to the roadway network through the use of a gravity model which yielded the following distribution:

To/From North:	Lincoln Highway (Route 1)	15%	
	Bristol Pike (Route 13)	7%	
To/From South:	Interstate 95	22%	
	Lincoln Highway (Route 1)	15%	
To/From East:	Interstate 276	9%	
To/From West:	Interstate 276	11%	
	Street Road (SR 0132)	6%	+
Total Regional Traffic		85%	

The projected development traffic was added to traffic from other planned area developments and analyzed under build year 2005 and design year 2015 conditions. For both the build year and design year, area roadway improvements that are either in construction or planned for future construction were included in the analysis period which corresponds to their anticipated completion date. Based on the analysis, the following roadway and traffic signal improvements are recommended as part of this project to mitigate the impact of the development traffic:

- An additional through lane should be provided for both the eastbound and westbound directions of Street Road from east of Mechanicsville Road to west of Richlieu Road.
- At the Street Road Philadelphia Park Access, dual southbound left turn lanes out of the site should be provided. With this modification, the northbound (Tillman Drive) and southbound (Philadelphia Park) approaches must operate under split phasing.
- A right turn lane should be provided for the southbound approach of Richlieu Road at Street Road.
- One public access should be provided to Richlieu Road. This access point should be signalized with auxiliary turn lanes into and out of the site, and should be interconnected with fiber optic cable to the adjacent intersections along Richlieu Road at Street Road and Rockhill Drive.
- Left turn lanes should be provided for all approaches at the Mechanicsville site access location.
- Timing modifications should be provided for all signalized intersections within the study area. Event timing plans for the Street Road corridor must be developed and implemented with the corridor's traffic responsive operation.
- Data collection should be completed after the development is open to determine the effectiveness of the recommended improvements and to optimize the area signal timings based on the actual distribution of the project traffic.

With the implementation of the above referenced improvements, and with close coordination with planned area roadway improvements, the traffic to be generated by the proposed Philadelphia Park electronic gaming device facility can be successfully accommodated within the local roadway network.

A summary of the results of the Level of Service analyses is provided in **TABLE 3**

Figure 26

Year 2015: Post Development Conditions
 - Weekday PM Peak Hour
APPROACH LEVELS OF SERVICE

WITHOUT SITE RELATED IMPROVEMENTS

Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

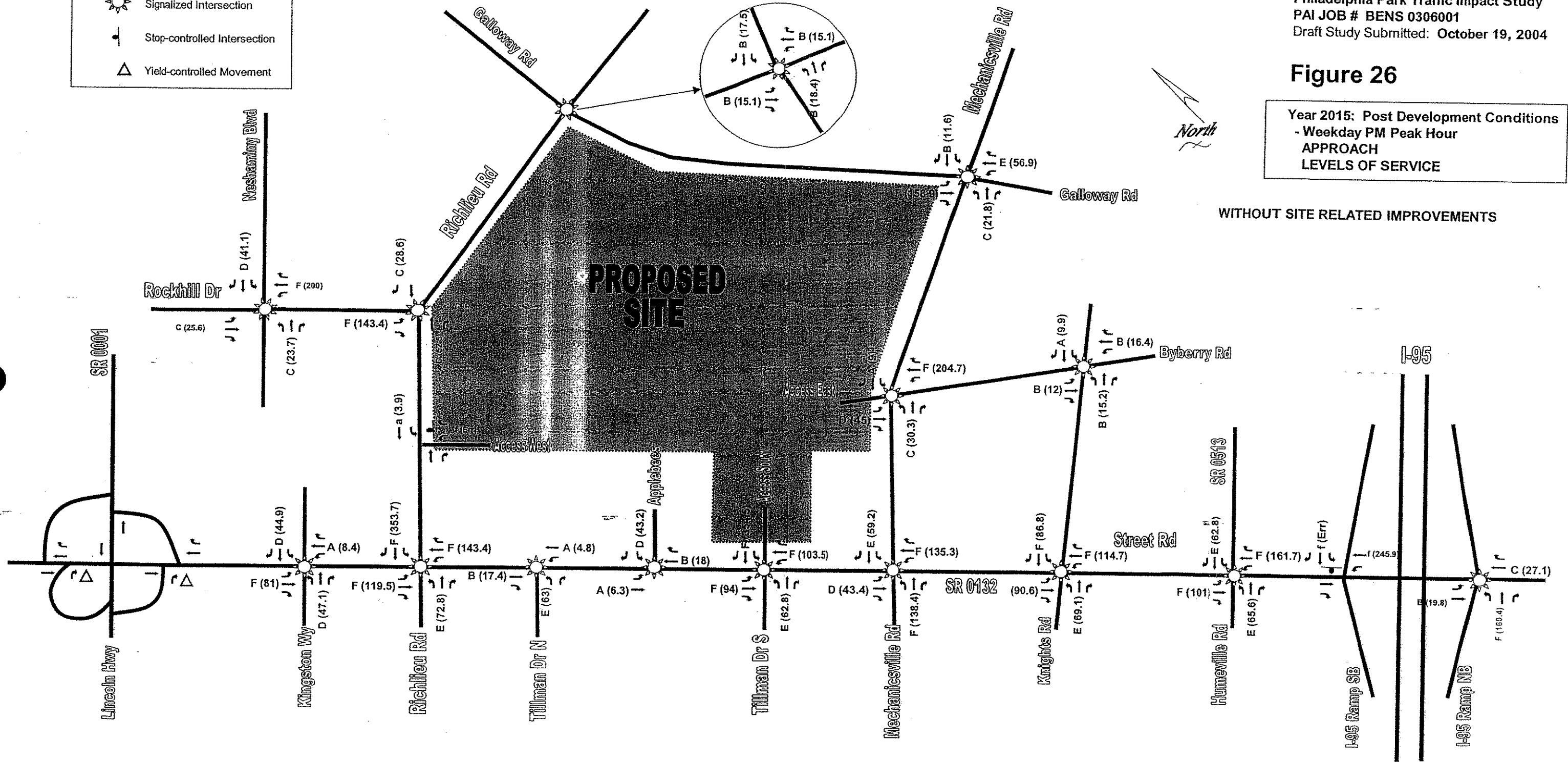
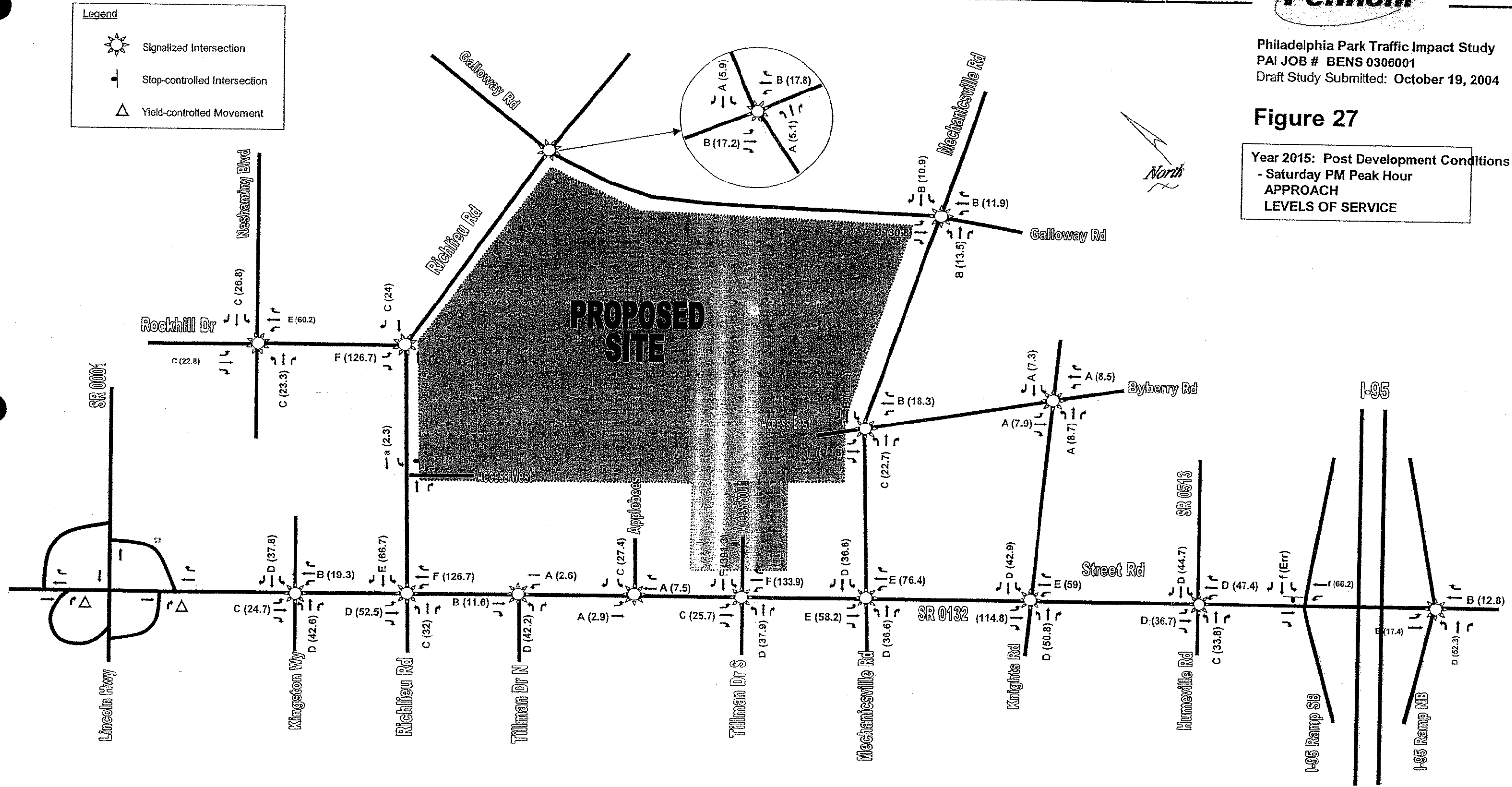


Figure 27

Year 2015: Post Development Conditions
 - Saturday PM Peak Hour
APPROACH LEVELS OF SERVICE



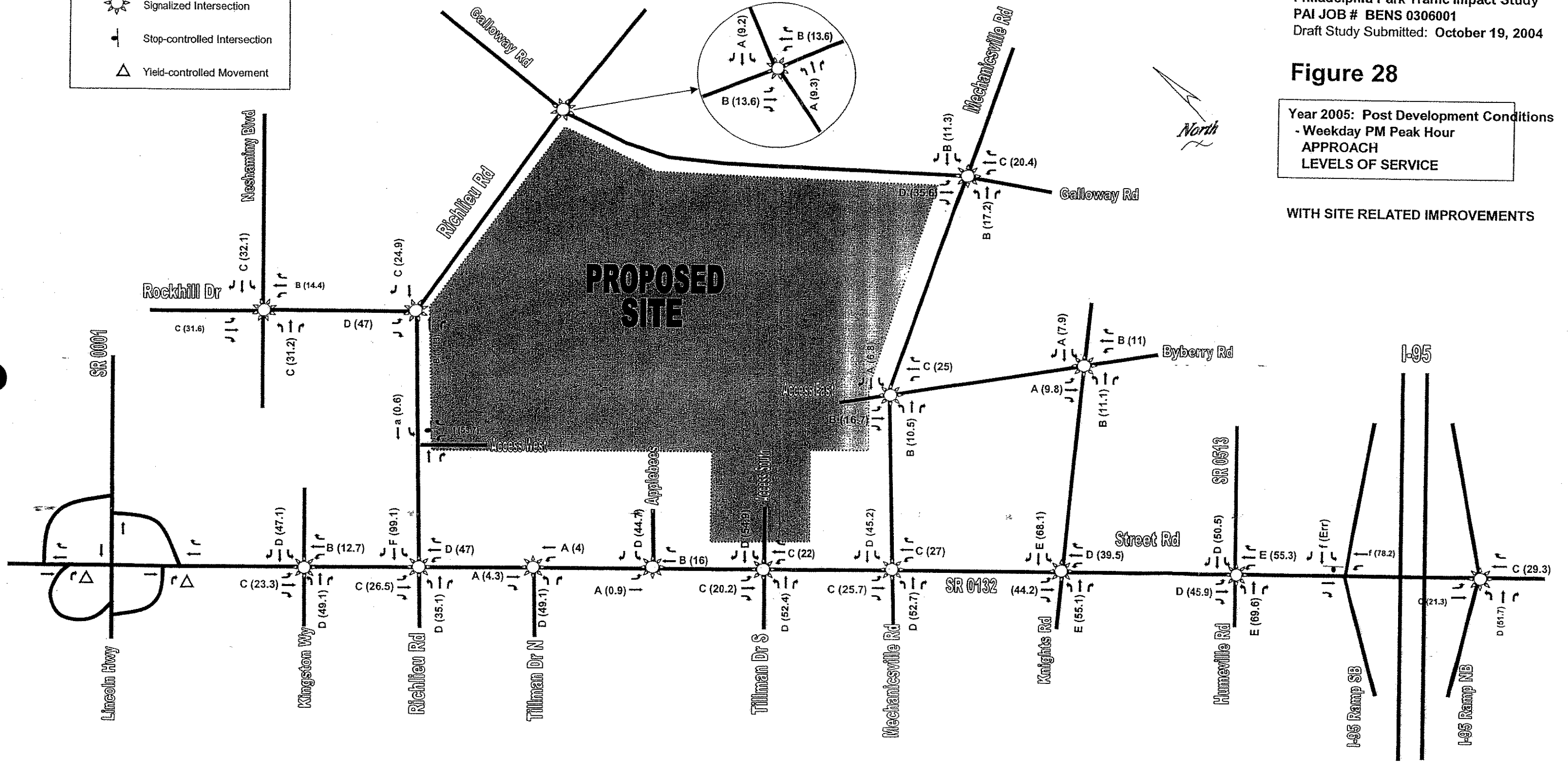
Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 28

Year 2005: Post Development Conditions
- Weekday PM Peak Hour
APPROACH
LEVELS OF SERVICE

WITH SITE RELATED IMPROVEMENTS



Legend




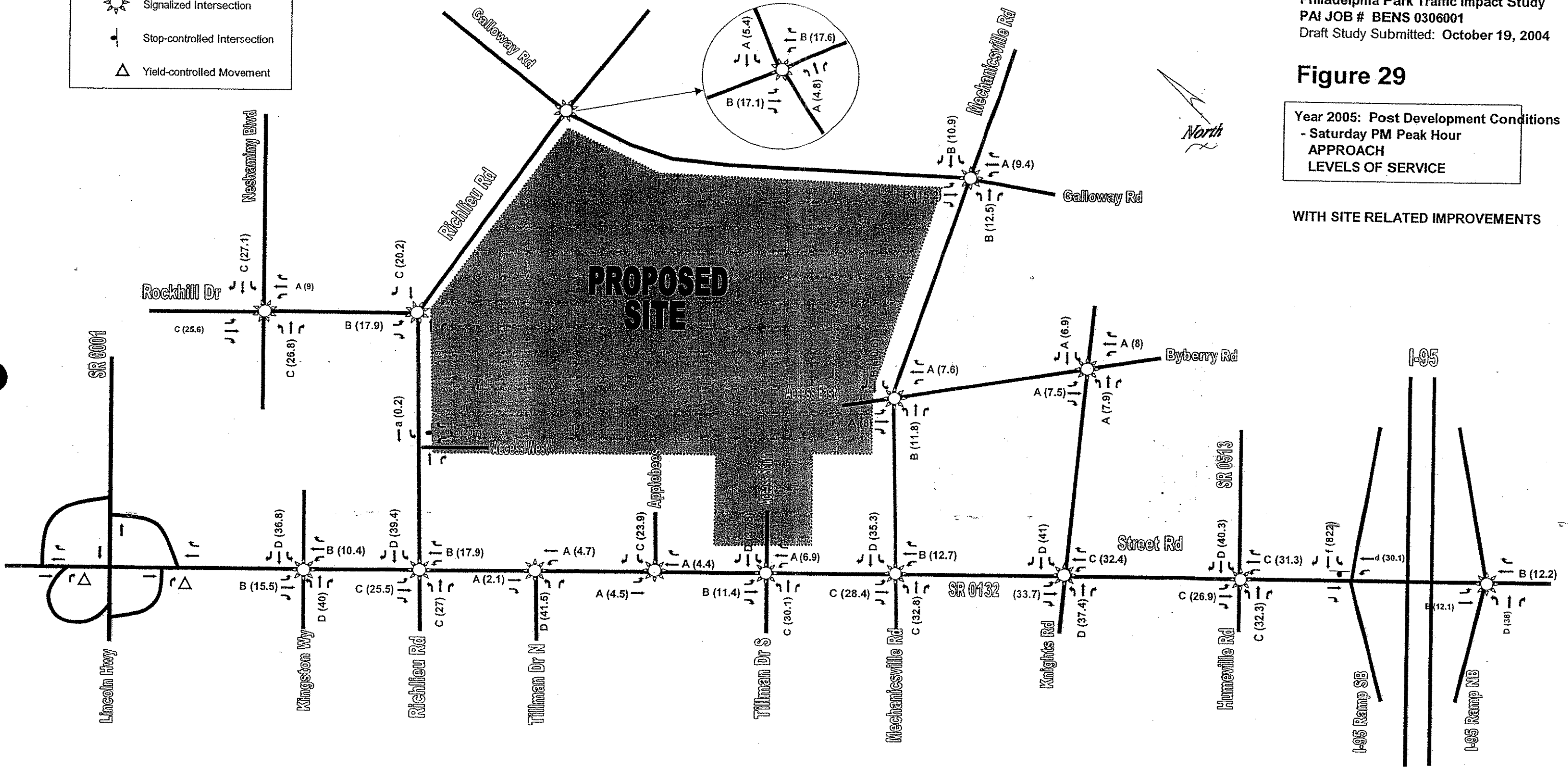
-  Signalized Intersection
-  Stop-controlled Intersection
-  Yield-controlled Movement

Figure 29

Year 2005: Post Development Conditions
- Saturday PM Peak Hour
APPROACH
LEVELS OF SERVICE

WITH SITE RELATED IMPROVEMENTS

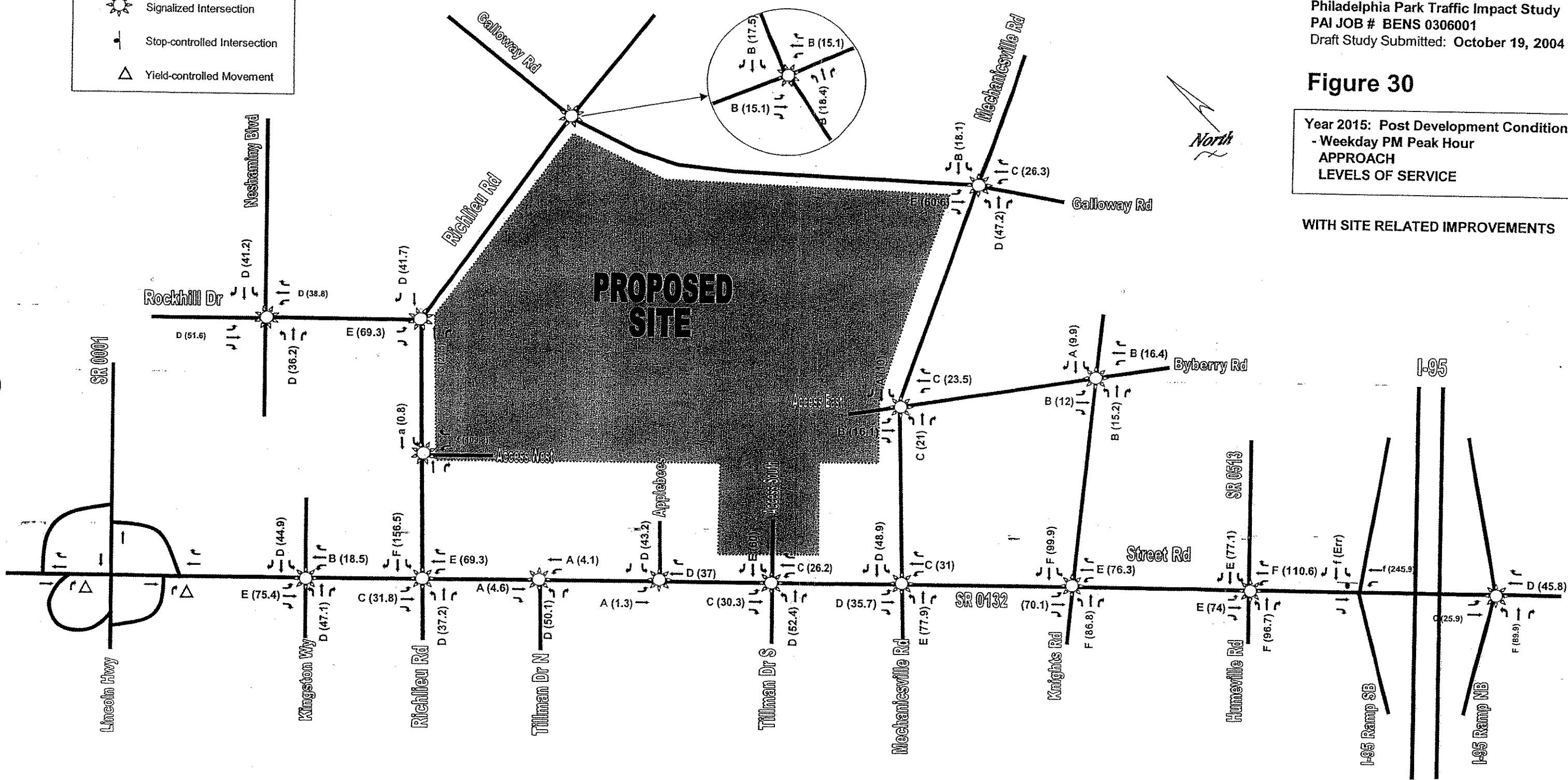


Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 30
 Year 2015: Post Development Conditions
 - Weekday PM Peak Hour
APPROACH
LEVELS OF SERVICE

WITH SITE RELATED IMPROVEMENTS



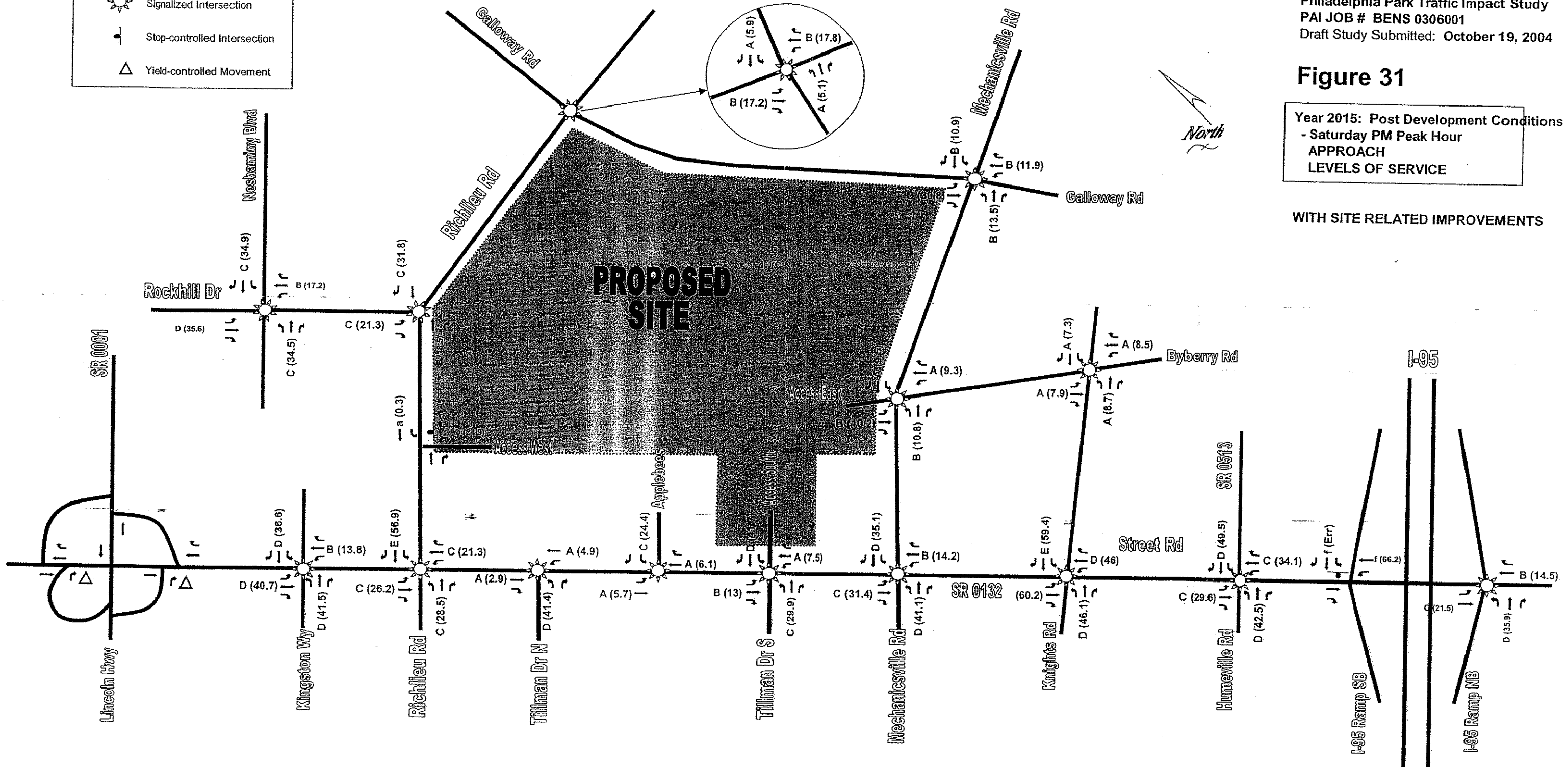
Legend

- Signalized Intersection
- Stop-controlled Intersection
- Yield-controlled Movement

Figure 31

Year 2015: Post Development Conditions
 - Saturday PM Peak Hour
APPROACH LEVELS OF SERVICE

WITH SITE RELATED IMPROVEMENTS



PHILADELPHIA PARK
TRAFFIC IMPACT STUDY

APPENDIX A

**TRAFFIC COUNTS &
EXISTING SIGNAL PLANS**

JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
 Change These In PREFERENCES

File Name : GALLOW~3
 Site Code : 00000000
 Start Date : 5/21/2002
 Page No : 1

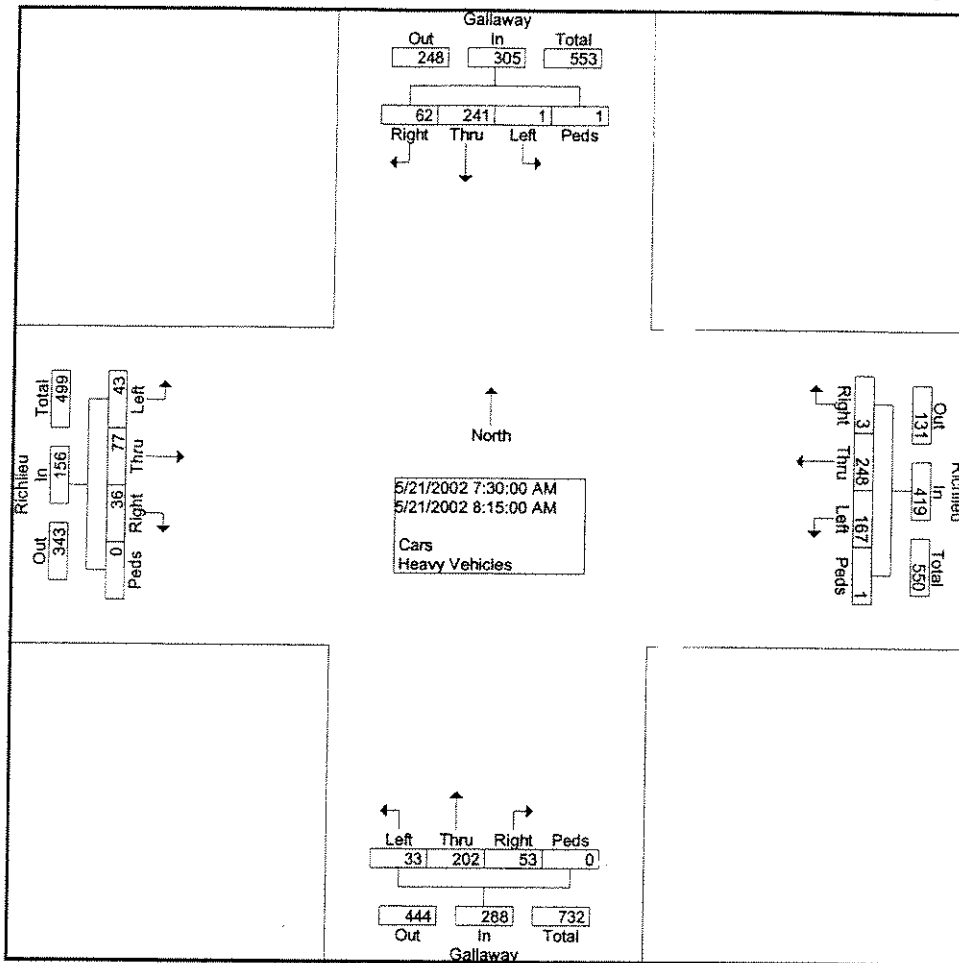
Groups Printed- Cars - Heavy Vehicles

Start Time	Galloway From North				Richlieu From East				Galloway From South				Richlieu From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
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	
07:00 AM	13	54	0	0	3	42	47	0	6	31	10	0	7	4	9	0	226
07:15 AM	12	63	0	0	0	54	45	0	10	45	8	0	8	10	9	0	264
07:30 AM	13	88	0	0	2	56	33	0	13	50	8	0	9	11	9	0	292
07:45 AM	21	68	0	0	1	71	64	0	14	52	11	0	8	22	10	0	342
Total	59	273	0	0	6	223	189	0	43	178	37	0	32	47	37	0	1124
08:00 AM	6	47	0	1	0	65	38	1	12	51	6	0	11	21	9	0	268
08:15 AM	22	38	1	0	0	56	32	0	14	49	8	0	8	23	15	0	266
08:30 AM	16	60	0	0	1	58	29	0	14	45	8	0	9	26	10	0	276
08:45 AM	10	40	0	0	1	44	27	0	15	45	15	0	9	19	17	0	242
Total	54	185	1	1	2	223	126	1	55	190	37	0	37	89	51	0	1052

*** BREAK ***

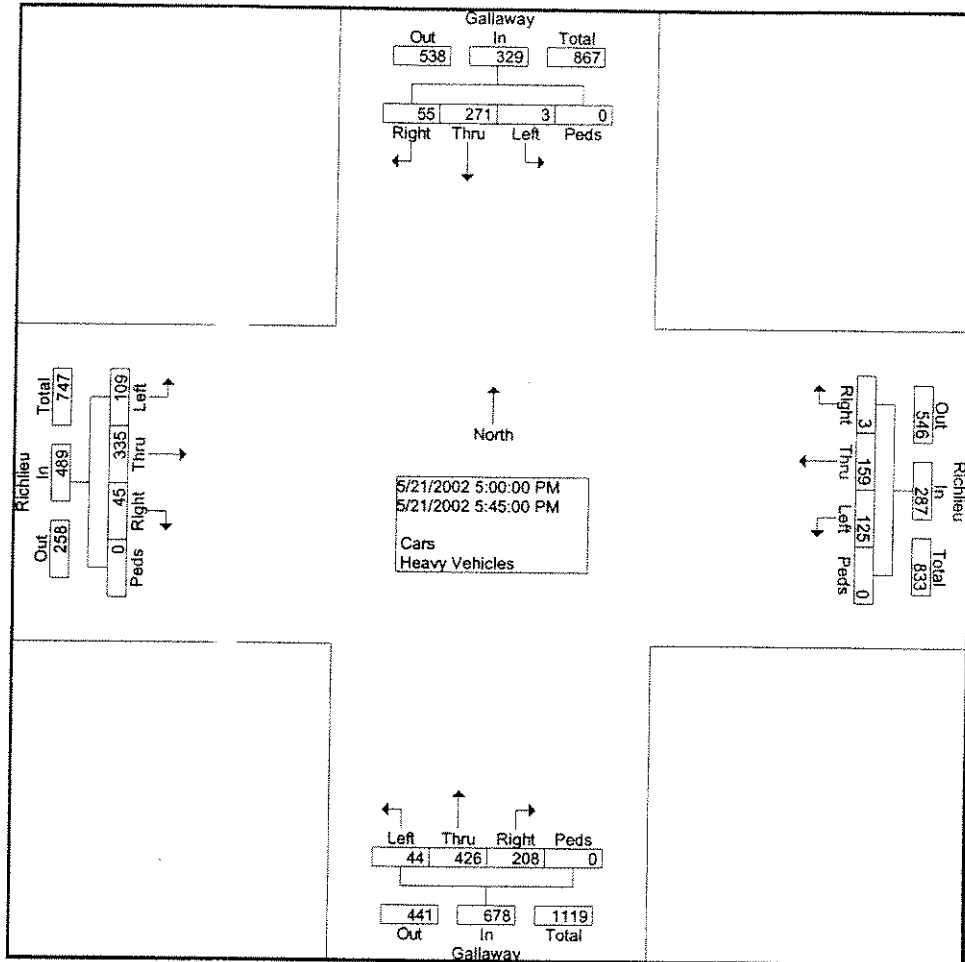
04:00 PM	15	69	1	0	2	34	17	0	50	82	9	0	7	59	26	0	371
04:15 PM	14	78	0	0	2	32	34	0	34	87	9	0	6	52	20	0	368
04:30 PM	13	80	1	0	3	34	14	0	50	95	13	0	11	50	33	1	398
04:45 PM	11	63	0	0	0	33	34	0	40	110	8	0	12	57	22	0	390
Total	53	290	2	0	7	133	99	0	174	374	39	0	36	218	101	1	1527
05:00 PM	18	71	0	0	0	37	30	0	53	113	12	0	7	77	29	0	447
05:15 PM	12	71	1	0	2	38	25	0	50	115	9	0	6	69	30	0	428
05:30 PM	12	63	0	0	0	37	37	0	60	99	13	0	19	96	27	0	463
05:45 PM	13	66	2	0	1	47	33	0	45	99	10	0	13	93	23	0	445
Total	55	271	3	0	3	159	125	0	208	426	44	0	45	335	109	0	1783
Grand Total	221	1019	6	1	18	738	539	1	480	1168	157	0	150	689	298	1	5486
Apprch %	17.7	81.7	0.5	0.1	1.4	56.9	41.6	0.1	26.6	64.7	8.7	0.0	13.2	60.5	26.2	0.1	
Total %	4.0	18.6	0.1	0.0	0.3	13.5	9.8	0.0	8.7	21.3	2.9	0.0	2.7	12.6	5.4	0.0	

Start Time	Galloway From North					Richlieu From East					Galloway From South					Richlieu From West					Int. Total
	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	Rig ht	Thru	Left	Ped s	App. Total	
Peak Hour From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Intersection																					
07:30 AM	62	241	1	1	305	3	248	167	1	419	53	202	33	0	288	36	77	43	0	156	1168
Percent	20.3	79.0	0.3	0.3		0.7	59.2	39.9	0.2		18.4	70.1	11.5	0.0		23.1	49.4	27.6	0.0		
07:45 AM	21	68	0	0	89	1	71	64	0	136	14	52	11	0	77	8	22	10	0	40	342
Peak Factor																					
High Int.	07:30 AM					07:45 AM					07:45 AM					08:15 AM					
Volume	13	88	0	0	101	1	71	64	0	136	14	52	11	0	77	8	23	15	0	46	
Peak Factor					0.755					0.770					0.935						0.848



Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1

Intersection	05:00 PM				05:45 PM				05:00 PM				05:30 PM									
Volume	55	271	3	0	329	3	159	125	0	287	208	426	44	0	678	45	335	109	0	489	1783	
Percent	16.7	82.4	0.9	0.0		1.0	55.4	43.6	0.0		30.7	62.8	6.5	0.0		9.2	68.5	22.3	0.0			
Volume	12	63	0	0	75	0	37	37	0	74	60	99	13	0	172	19	96	27	0	142	463	
Peak Factor																					0.963	
High Int.	05:00 PM				05:45 PM				05:00 PM				05:30 PM									
Volume	18	71	0	0	89	1	47	33	0	81	53	113	12	0	178	19	96	27	0	142		
Peak Factor					0.924					0.886					0.952						0.861	



1-95 P17 PEAK

Pennoni Associates, Inc.

One Drexel Plaza
3001 Market Street
Philadelphia, PA 19104

Location: Bucks County, PA
In : I95 NB Ramps/Street Rd
Date: Thursday, June 24, 2004
Counter: LD

File Name : LS0624-1
Site Code : 00000000
Start Date : 6/24/2004
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bank 2

Start Time	I-95 NB On Southbound				Street Rd Westbound				I-95 NB Off Northbound				Street Rd Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
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	
15:00	0	0	0	0	0	171	25	0	173	0	60	0	82	114	1	0	626
15:15	0	0	0	0	1	142	30	0	151	0	60	0	76	94	2	0	556
15:30	0	0	0	0	0	278	49	0	196	1	38	0	59	99	0	0	720
15:45	0	0	0	0	0	174	29	0	172	1	41	0	79	103	0	0	599
Total	0	0	0	0	1	765	133	0	692	2	199	0	296	410	3	0	2501
16:00	0	0	0	0	0	210	47	0	126	0	47	0	65	86	0	0	581
16:15	0	0	0	0	0	183	41	0	162	0	61	0	74	98	0	0	619
16:30	0	0	0	0	0	269	65	0	200	0	34	0	64	95	2	0	729
16:45	0	0	0	0	0	226	37	0	189	2	41	0	90	124	0	0	709
Total	0	0	0	0	0	888	190	0	677	2	183	0	293	403	2	0	2638
17:00	0	0	0	0	0	328	81	0	218	0	36	0	58	92	0	0	813
17:15	0	0	0	0	0	233	61	0	213	0	46	0	98	103	0	0	754
17:30	0	0	0	0	0	287	41	0	214	0	46	0	94	109	0	0	791
17:45	0	0	0	0	0	327	64	0	254	0	41	0	93	94	0	0	873
Total	0	0	0	0	0	1175	247	0	899	0	169	0	343	398	0	0	3231
18:00	0	0	0	0	0	206	47	0	224	0	30	0	119	66	0	0	692
18:15	0	0	0	0	0	98	10	0	234	0	28	0	100	66	0	0	536
18:30	0	0	0	0	0	136	25	0	208	0	25	0	80	78	0	0	552
18:45	0	0	0	0	0	102	20	0	178	1	22	0	70	93	0	0	486
Total	0	0	0	0	0	542	102	0	844	1	105	0	369	303	0	0	2266
Grand Total	0	0	0	0	1	3370	672	0	3112	5	656	0	1301	1514	5	0	10636
Apprch %	0.0	0.0	0.0	0.0	0.0	83.4	16.6	0.0	82.5	0.1	17.4	0.0	46.1	53.7	0.2	0.0	
Total %	0.0	0.0	0.0	0.0	0.0	31.7	6.3	0.0	29.3	0.0	6.2	0.0	12.2	14.2	0.0	0.0	

Pennoni Associates, Inc.

One Drexel Plaza
3001 Market Street
Philadelphia, PA 19104

Location: Bucks County, PA
In tention: I95 SB Ramps/Street Rd
Date: Thursday June 24, 2004
Counter: WC

File Name : LS0624-2
Site Code : 00000000
Start Date : 6/24/2004
Page No : 1

Groups Printed- Cars - Heavy Vehicles - Bank 2

Start Time	I-95 SB OFF Southbound				Sreet Rd Westbound				I-95 SB ON Northbound				Sreet Rd Eastbound				Int. Total	
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds		
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	1.0	
15:00	9	0	68	0	53	242	2	0	0	0	0	0	0	167	135	0	0	676
15:15	9	0	49	0	55	197	1	0	0	0	0	0	0	145	169	0	0	625
15:30	5	0	63	0	110	325	0	0	0	0	0	0	0	158	181	0	0	842
15:45	8	1	59	0	49	262	0	0	0	0	0	0	0	173	123	0	0	675
Total	31	1	239	0	267	1026	3	0	0	0	0	0	0	643	608	0	0	2818
16:00	10	0	60	0	83	259	0	0	0	0	0	0	0	137	164	0	0	713
16:15	17	0	96	0	49	287	0	0	0	0	0	0	0	184	138	0	0	771
16:30	8	0	81	0	96	357	0	0	0	0	0	0	0	170	216	0	0	928
16:45	11	0	93	0	65	319	0	0	0	0	0	0	0	222	139	0	0	849
Total	46	0	330	0	293	1222	0	0	0	0	0	0	0	713	657	0	0	3261
17:00	10	0	94	0	58	348	0	0	0	0	0	0	0	227	139	0	0	876
17:15	13	0	99	0	63	350	6	0	0	0	0	0	0	177	207	0	0	915
17:30	12	0	94	0	70	393	0	0	0	0	0	0	0	179	189	0	0	937
17:45	14	0	95	0	80	446	0	0	0	0	0	0	0	154	144	0	0	933
Total	49	0	382	0	271	1537	6	0	0	0	0	0	0	737	679	0	0	3661
18:00	8	0	77	0	71	331	0	0	0	0	0	0	0	155	145	0	0	787
18:15	8	1	83	0	40	322	0	0	0	0	0	0	0	147	137	0	0	738
18:30	10	0	94	0	36	275	0	0	0	0	0	0	0	154	121	0	0	690
18:45	17	1	70	0	34	240	0	0	0	0	0	0	0	142	117	0	0	621
Total	43	2	324	0	181	1168	0	0	0	0	0	0	0	598	520	0	0	2836
Grand Total	169	3	1275	0	1012	4953	9	0	0	0	0	0	0	2691	2464	0	0	12576
Apprch %	11.7	0.2	88.1	0.0	16.9	82.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	52.2	47.8	0.0	0.0	
Total %	1.3	0.0	10.1	0.0	8.0	39.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	21.4	19.6	0.0	0.0	

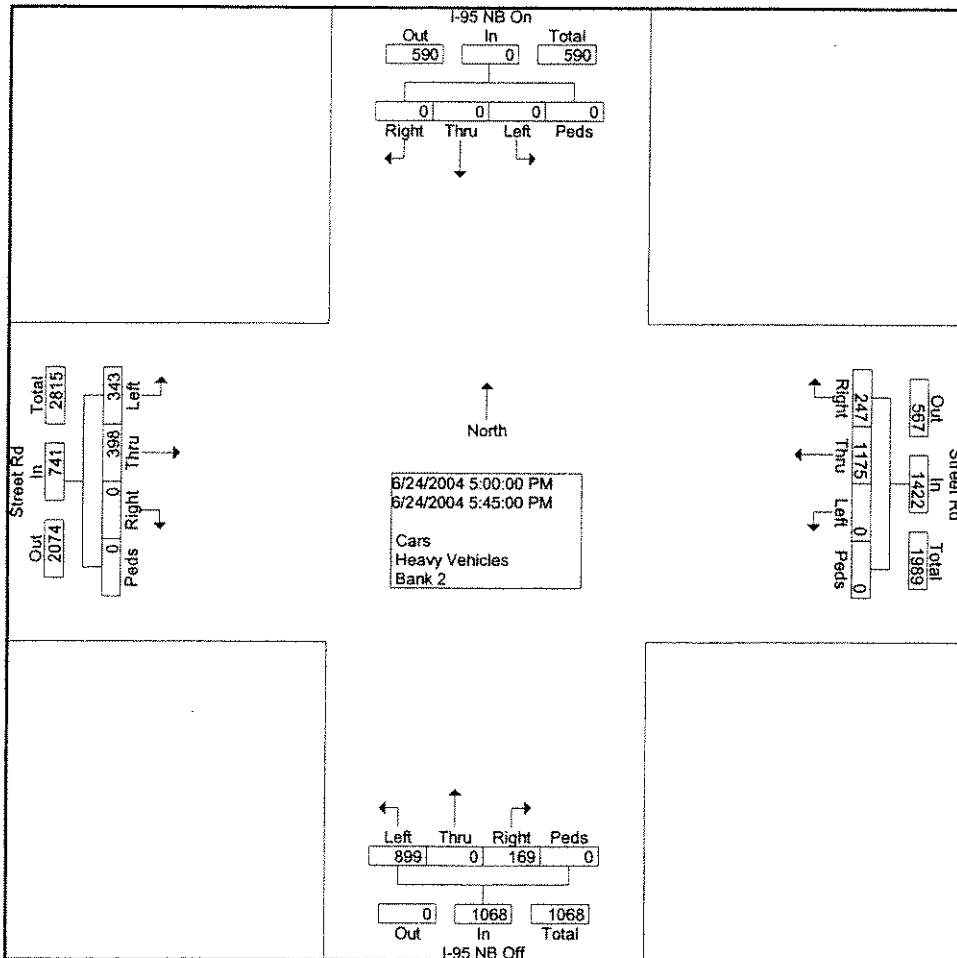
Pennoni Associates, Inc.

One Drexel Plaza
3001 Market Street
Philadelphia, PA 19104

Location: Bucks County, PA
Intersection: I95 NB Ramps/Street Rd
Date: Thursday, June 24, 2004
Counter: LD

File Name : LS0624-1
Site Code : 00000000
Start Date : 6/24/2004
Page No : 2

Start Time	I-95 NB On Southbound					Street Rd Westbound					I-95 NB Off Northbound					Street Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 15:00 to 18:45 - Peak 1 of 1																					
Intersection 17:00																					
Volume	0	0	0	0	0	0	1175	247	0	1422	899	0	169	0	1068	343	398	0	0	741	3231
Percent	0.0	0.0	0.0	0.0		0.0	82.6	17.4	0.0		84.2	0.0	15.8	0.0		46.3	53.7	0.0	0.0		
Volume 17:45	0	0	0	0	0	0	327	64	0	391	254	0	41	0	295	93	94	0	0	187	873
Volume Peak																					0.925
Factor High Int.	2:45:00 PM					17:00					17:45					17:30					
Volume Peak	0	0	0	0	0	0	328	81	0	409	254	0	41	0	295	94	109	0	0	203	
Factor										0.869					0.905						0.913



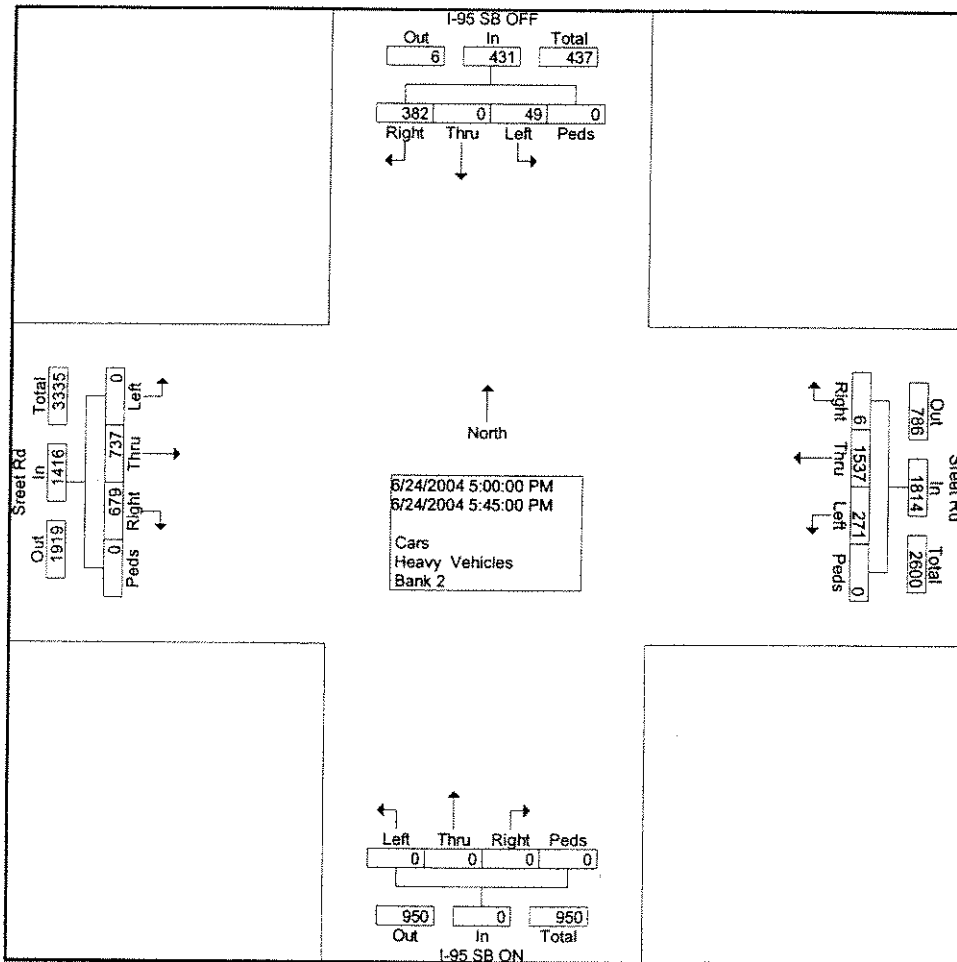
Pennoni Associates, Inc.

One Drexel Plaza
3001 Market Street
Philadelphia, PA 19104

Location: Bucks County, PA
Intersection: I95 SB Ramps/Street Rd
Date: Thursday June 24, 2004
Counter: WC

File Name : LS0624-2
Site Code : 00000000
Start Date : 6/24/2004
Page No : 2

Start Time	I-95 SB OFF Southbound					Street Rd Westbound					I-95 SB ON Northbound					Street Rd Eastbound					
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour From 15:00 to 18:45 - Peak 1 of 1																					
Intersection 17:00																					
Volume	49	0	382	0	431	271	153	6	0	1814	0	0	0	0	0	0	737	679	0	1416	3661
Percent	11.4	0.0	88.6	0.0		14.9	84.7	0.3	0.0		0.0	0.0	0.0	0.0		0.0	52.0	48.0	0.0		
Volume	12	0	94	0	106	70	393	0	0	463	0	0	0	0	0	0	179	189	0	368	937
Peak Factor																					0.977
High Int.	17:15					17:45					2:45:00 PM					17:15					
Volume	13	0	99	0	112	80	446	0	0	526	0	0	0	0	0	0	177	207	0	384	
Peak Factor	0.962										0.862										0.922



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File Name : LS0624-1
 Site Code : 00000000
 Start Date : 6/24/2004
 Page No : 1

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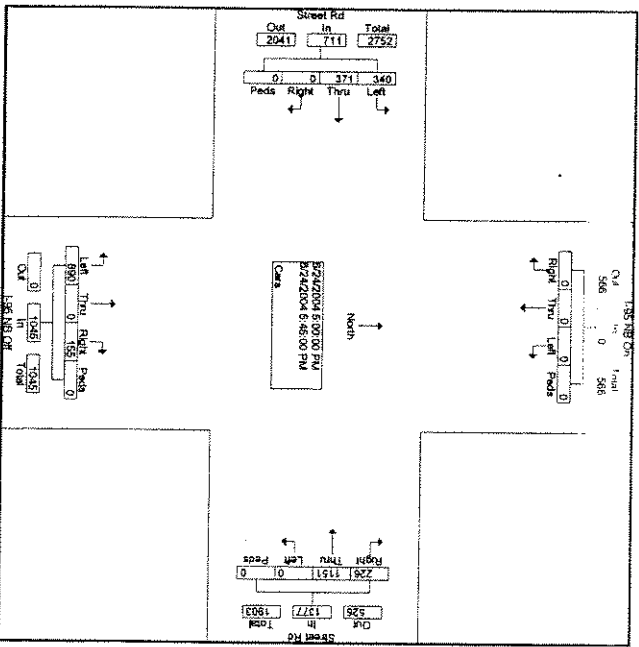
File Name : LS0624-1
 Site Code : 00000000
 Start Date : 6/24/2004
 Page No : 2

PLS ONLY

PH WEEK

Start Time	I-95 NB On			Street Rd			I-95 NB Off			Street Rd			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
03:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Start Time	I-95 NB On			Street Rd			I-95 NB Off			Street Rd			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Approach %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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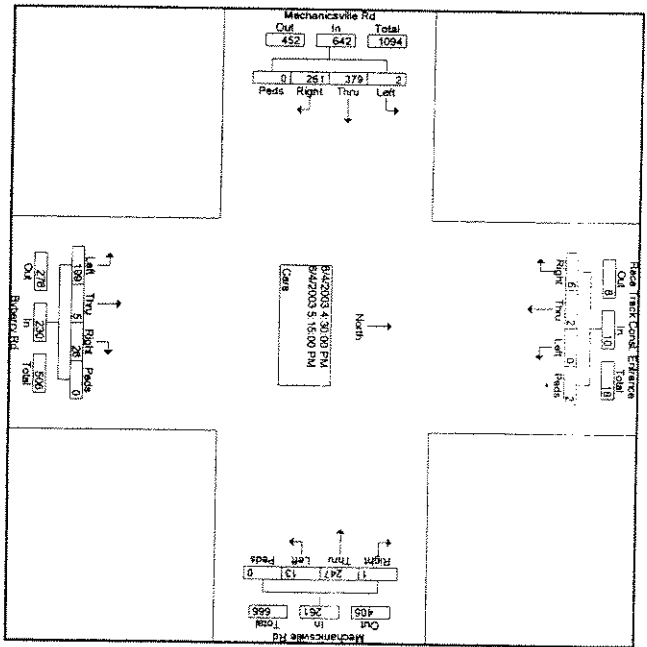
File Name : Byb&Mech
 Site Code : 00000000
 Start Date : 6/4/2003
 Page No : 1

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File Name : Byb&Mech
 Site Code : 00000000
 Start Date : 6/4/2003
 Page No : 2

Start Time	Race Track Const. Entrance					Mechanicsville Rd					Byberry Rd					Mechanicsville Rd					Int. Total
	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:30 PM	3	0	0	0	3	1	67	6	0	74	0	48	0	0	48	0	74	2	0	0	245
03:45 PM	2	0	0	0	2	0	57	6	0	63	0	46	0	0	46	0	74	2	0	0	234
Total	5	0	0	0	5	1	240	16	0	257	0	186	0	0	186	0	277	4	0	0	918
04:00 PM	1	0	0	0	1	0	68	4	0	72	0	55	0	0	55	0	74	0	0	0	270
04:15 PM	1	0	0	0	1	0	69	8	0	77	0	41	0	0	41	0	82	0	0	0	257
04:30 PM	1	0	0	0	1	0	54	3	0	57	0	58	0	0	58	0	95	0	0	0	272
04:45 PM	2	1	0	0	3	2	69	3	0	74	0	70	0	0	70	0	95	0	0	0	290
Total	4	1	0	0	5	2	260	18	0	278	0	193	0	0	193	0	234	0	0	0	1089
05:00 PM	2	1	0	0	3	0	45	3	0	48	0	54	0	0	54	0	81	1	0	0	271
05:15 PM	1	0	0	0	1	0	79	4	0	83	0	46	0	0	46	0	88	1	0	0	310
05:30 PM	2	0	0	0	2	0	61	2	0	63	0	66	0	0	66	0	98	2	0	0	288
05:45 PM	1	0	0	0	1	0	58	4	0	62	0	70	0	0	70	0	99	0	0	0	289
Total	6	1	0	0	7	0	243	13	0	256	0	234	0	0	234	0	346	3	0	0	1126
06:00 PM	2	0	0	0	2	0	56	1	0	57	0	40	0	0	40	0	87	1	0	0	283
06:15 PM	0	0	0	0	0	0	53	2	0	55	0	40	0	0	40	0	69	0	0	0	221
06:30 PM	0	0	0	0	0	0	46	2	0	48	0	37	0	0	37	0	65	0	0	0	201
06:45 PM	3	0	0	0	3	1	59	0	0	59	0	41	0	0	41	0	78	1	0	0	223
Total	5	0	0	0	5	1	214	6	0	220	0	159	0	0	159	0	289	1	0	0	908
Stand Total	18	2	1	2	23	4	867	53	0	920	0	894	1295	10	0	0	1404	0	0	0	4041
Approach %	78.3	8.7	4.3	8.7	0.4	94.4	5.2	0.0	11.3	0.9	87.8	0.0	40.7	58.9	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Total %	0.4	0.0	0.0	0.0	0.1	23.7	1.3	0.0	2.3	0.2	17.5	0.0	40.7	58.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0

Start Time	Race Track Const. Entrance					Mechanicsville Rd					Byberry Rd					Mechanicsville Rd					Int. Total
	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	
04:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																				
Volume	6	2	0	2	10	1	247	13	0	261	26	5	199	0	230	261	379	2	0	0	1143
Percent	60.0	20.0	0.0	20.0	100.0	0.4	94.6	5.0	0.0	11.3	2.2	86.5	0.0	0.0	40.7	59.0	0.3	0.0	0.0	310	
Volume	1	0	0	0	1	0	79	4	0	83	9	0	46	0	55	72	98	1	0	0	171
Factor	1	0	0	0	1	0	79	4	0	83	7	1	58	0	68	72	98	1	0	0	171
High Int. Volume	1	0	0	2	3	0	79	4	0	83	7	1	58	0	68	72	98	1	0	0	171
Peak Factor	0.833	0.000	0.000	0.000	0.833	0.000	0.786	0.000	0.000	0.786	0.000	0.871	0.000	0.871	0.000	0.839	0.000	0.000	0.000	0.839	



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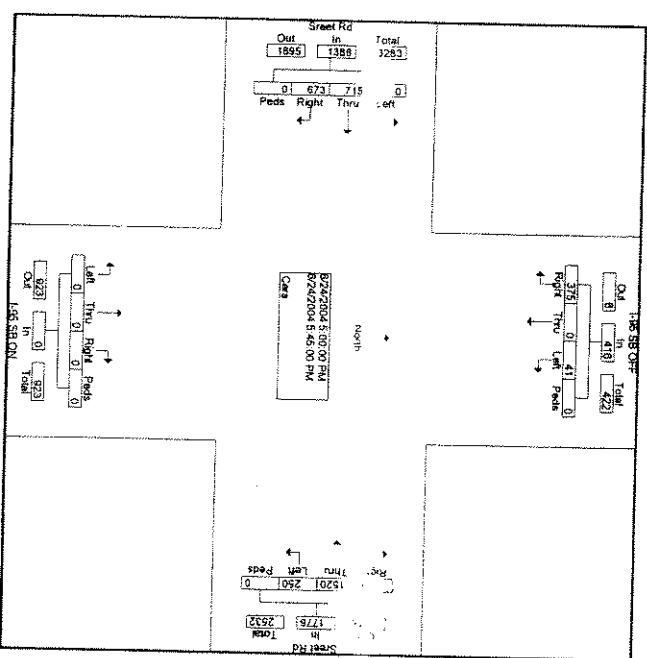
File Name : LS0624-2
 Site Code : 00000000
 Start Date : 6/24/2004
 Page No : 1

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File Name : LS0624-2
 Site Code : 00000000
 Start Date : 6/24/2004
 Page No : 2

Start Time	I-95 SB OFF			Street Rd			I-95 SB ON			Street Rd			Int'l
	From North	Left	Thru	From East	Left	Thru	From South	Left	Thru	From West	Left	Thru	
03:00 PM	68	0	0	231	48	0	0	0	0	131	157	0	641
03:15 PM	46	0	0	189	41	0	0	0	0	166	138	0	586
03:30 PM	61	0	0	349	102	0	0	0	0	179	148	0	813
03:45 PM	57	1	3	235	44	0	0	0	0	119	153	0	642
Total	232	1	20	953	233	0	0	0	0	595	606	0	2682
04:00 PM	56	0	0	254	73	0	0	0	0	157	133	0	684
04:15 PM	83	0	0	349	47	0	0	0	0	137	171	0	739
04:30 PM	81	0	0	349	69	0	0	0	0	215	161	0	901
04:45 PM	92	0	0	312	57	0	0	0	0	138	215	0	823
Total	324	0	0	1182	268	0	0	0	0	647	680	0	3147
05:00 PM	89	0	0	342	52	0	0	0	0	139	221	0	885
05:15 PM	99	0	0	349	58	0	0	0	0	206	170	0	900
05:30 PM	93	0	0	367	65	0	0	0	0	188	176	0	919
05:45 PM	94	0	0	432	75	0	0	0	0	141	148	0	911
Total	375	0	0	1520	250	0	0	0	0	673	715	0	3580
06:00 PM	74	0	0	326	66	0	0	0	0	144	146	0	781
06:15 PM	82	0	0	317	38	0	0	0	0	135	138	0	718
06:30 PM	92	0	0	230	33	0	0	0	0	119	144	0	657
06:45 PM	89	0	0	235	29	0	0	0	0	112	138	0	657
Total	317	0	0	1168	166	0	0	0	0	509	584	0	2739
Grand Total	1246	2	133	4983	915	0	0	0	0	2424	2565	0	12148
Approach %	90.2	0.1	9.8	0.0	0.0	0.0	0.0	0.0	0.0	48.6	51.4	0.0	0.0
Total %	10.3	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	20.0	21.1	0.0	0.0

Start Time	I-95 SB OFF			Street Rd			I-95 SB ON			Street Rd			Int'l			
	From North	Left	Thru	From East	Left	Thru	From South	Left	Thru	From West	Left	Thru				
05:15 PM	99	0	12	0	111	0	442	75	0	517	0	0	206	170	0	376
Volume	99	0	12	0	111	0	442	75	0	517	0	0	206	170	0	376
Percent	90.1	0.0	9.9	0.0	0.0	0.0	85.6	14.1	0.0	0.0	0.0	0.0	48.5	51.5	0.0	0.0
Volume	93	0	10	0	103	0	387	65	0	452	0	0	188	178	0	364
Volume	93	0	10	0	103	0	387	65	0	452	0	0	188	178	0	364
Factor	0.937	0.000	0.833	0.000	0.920	0.000	0.920	0.000	0.920	0.000	0.000	0.000	0.920	0.920	0.000	0.920
High Int'l	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volume	99	0	12	0	111	0	442	75	0	517	0	0	206	170	0	376
Factor	0.937	0.000	0.833	0.000	0.920	0.000	0.920	0.000	0.920	0.000	0.000	0.000	0.920	0.920	0.000	0.920



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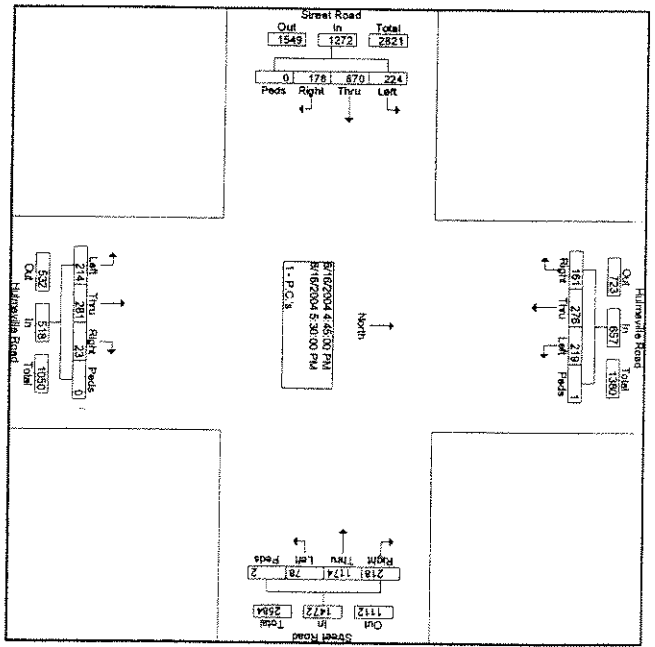
File Name : STREET~1
 Site Code : 00000111
 Start Date : 6/16/2004
 Page No : 1

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File Name : STREET~1
 Site Code : 00000111
 Start Date : 6/16/2004
 Page No : 2

Start Time	Hulmeville Road From North			Street Road From East			Hulmeville Road From South			Street Road From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
03:00 PM	41	59	33	1	178	22	14	46	29	3	25	258	766
03:15 PM	38	52	42	1	38	16	0	62	40	0	23	169	760
03:30 PM	34	71	49	0	50	262	15	4	42	0	33	223	880
03:45 PM	40	68	55	0	56	223	11	0	74	0	34	154	807
Total	153	250	179	2	193	870	64	0	38	224	149	754	3273
04:00 PM	41	46	60	0	59	241	13	5	51	36	48	205	873
04:15 PM	41	63	57	0	50	203	21	1	9	76	44	0	876
04:30 PM	45	70	59	0	45	252	19	0	3	31	25	0	724
04:45 PM	35	70	59	0	45	252	19	0	5	91	58	0	819
Total	158	180	226	0	207	986	68	5	22	249	163	0	3392
05:00 PM	37	76	58	1	62	303	23	0	58	57	48	247	1024
05:15 PM	56	70	62	0	37	281	1	2	13	86	41	0	966
05:30 PM	33	60	41	0	74	338	36	0	4	48	58	0	1008
05:45 PM	47	1	38	0	66	267	33	2	7	48	44	0	841
Total	173	287	199	1	239	1189	93	2	25	238	200	0	3841
06:00 PM	37	61	54	0	57	262	28	0	7	63	40	0	918
06:15 PM	33	56	41	0	60	261	28	0	10	78	39	0	907
06:30 PM	40	51	39	0	55	221	14	2	11	74	29	0	797
06:45 PM	43	63	45	0	49	208	12	0	10	59	40	0	782
Total	153	231	179	0	220	950	82	2	38	271	148	0	3404
Grand Total	637	888	783	3	859	3995	307	9	123	982	660	3	13910
Appet %	27.8	37.9	34.2	0.1	16.8	77.3	5.9	0.2	7.0	55.5	37.3	0.2	20.8
Total %	4.8	6.2	5.6	0.0	6.2	28.7	2.2	0.1	0.9	7.1	4.7	0.0	7.9

Start Time	Hulmeville Road From North			Street Road From East			Hulmeville Road From South			Street Road From West			Int. Total										
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left											
04:45 PM	161	276	219	1	657	218	117	78	2	1472	23	281	214	0	518	178	870	224	0	1272	3819		
05:00 PM	24	42	33	0.2	14	79	8	5.3	0.1	4.4	54	41	0.0	0	0	14	68	17	0.0	0	4	6	0.0
05:15 PM	37	76	58	1	172	62	303	23	0	388	1	58	57	0	116	48	247	53	0	348	1024	0.957	
05:30 PM	56	70	62	0	188	74	338	36	0	445	5	51	58	0	154	48	247	53	0	348	1024	0.91	
05:45 PM	47	1	38	0	188	74	338	36	0	445	5	51	58	0	154	48	247	53	0	348	1024	0.91	
Total	265	467	383	1.2	1155	437	1117	137	0.3	1962	29	162	169	0	382	110	568	107	0.0	0	4	6	0.0



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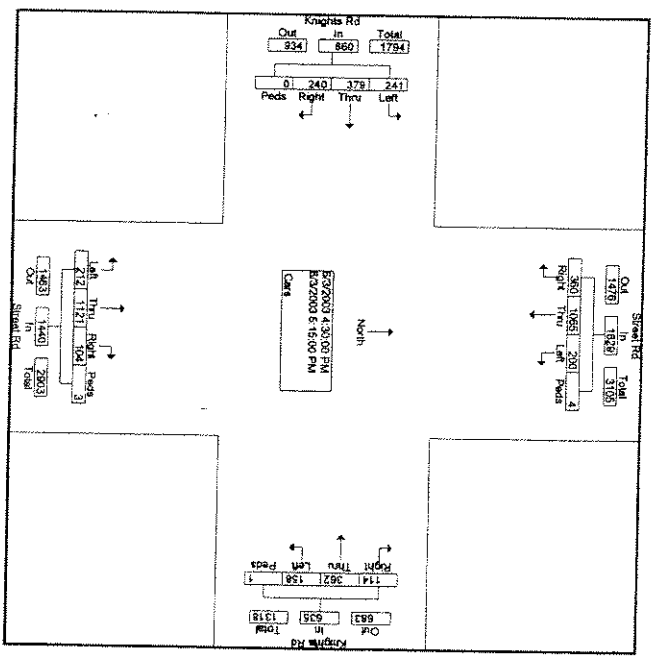
File Name : S&Kknigh
 Site Code : 00000000
 Start Date : 6/3/2003
 Page No : 1

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 151 Keith Valley Road
 Horsham, PA 19044
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File Name : S&Kknigh
 Site Code : 00000000
 Start Date : 6/3/2003
 Page No : 2

Start Time	Street Rd From North			Knights Rd From East			Street Rd From South			Knights Rd From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
03:00 PM	69	205	25	28	73	38	0	22	240	39	0	0	906
03:15 PM	51	215	29	15	66	22	1	26	266	46	0	0	916
03:30 PM	56	233	35	3	21	90	1	19	285	41	0	0	1027
03:45 PM	65	240	35	14	83	27	0	29	275	47	0	0	1014
Total	242	893	124	75	312	126	2	68	1046	173	8	0	3865
04:00 PM	63	233	32	19	78	34	0	23	256	62	0	0	1015
04:15 PM	74	271	33	4	29	77	0	31	279	44	0	0	1101
04:30 PM	103	282	66	1	21	109	0	31	290	56	0	0	1120
04:45 PM	90	251	41	34	79	35	1	37	291	52	0	0	1122
Total	330	1007	162	5	103	343	1	122	1076	214	2	0	4358
05:00 PM	74	244	52	3	39	99	0	25	254	49	0	0	1130
05:15 PM	83	318	51	0	20	75	0	11	326	65	0	0	1192
05:30 PM	97	249	43	2	28	96	0	29	242	64	0	0	1192
05:45 PM	76	239	30	2	23	71	0	30	270	59	0	0	1146
Total	350	1064	178	7	110	340	0	95	1092	227	2	0	4468
06:00 PM	74	236	44	0	27	102	0	29	266	53	0	0	1116
06:15 PM	70	231	43	2	26	80	0	31	215	49	0	0	988
06:30 PM	69	220	34	4	29	84	0	14	242	57	0	0	1010
06:45 PM	80	218	37	4	23	65	0	8	187	50	0	0	923
Total	292	965	158	10	105	331	0	82	910	209	2	0	4037
Grand Total	1194	3869	620	31	393	1326	3	397	4124	823	14	0	16728
Approach %	20.9	67.7	10.9	0.5	17.3	59.5	0.1	7.4	77.0	15.4	0.3	0.0	
Total %	7.1	23.1	3.7	0.2	2.3	7.9	0.0	2.4	24.7	4.9	0.1	0.0	

Start Time	Street Rd From North			Knights Rd From East			Street Rd From South			Knights Rd From West			Int. Total	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left		
04:30 PM	5	123	0.2	18.0	57.0	24.9	0.2	7.2	77.8	14.7	0.2	0.0	1192	
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1														
Interaction														
n	360	106	200	4	1629	114	362	158	1	635	104	112	212	
Volume	22.1	65.4	12.3	0.2	18.0	57.0	24.9	0.2	7.2	77.8	14.7	0.2	0.0	
Percent	93	318	51	0	482	20	75	35	0	130	11	326	55	0
Volume														
Peak Factor														
Height Int.	08:15 PM													
Volume	93	318	51	0	462	39	99	46	0	184	11	326	55	0
Peak Factor														
Volume														
Peak Factor														
Volume														
Peak Factor														



JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
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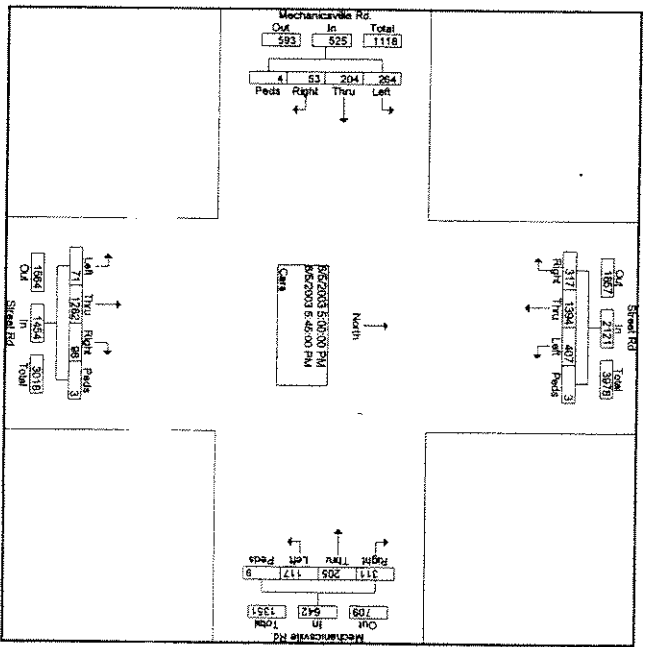
File Name : S&M Mech
 Site Code : 000000000
 Start Date : 6/5/2003
 Page No : 1

JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
 Change These In PREFERENCES

File Name : S&M Mech
 Site Code : 000000000
 Start Date : 6/5/2003
 Page No : 2

	Street Rd					Mechanicsville Rd					Street Rd					Mechanicsville Rd					Int. Total
	From North		From East		From South		From West		From North		From East		From South		From West						
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
03:00 PM	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	1.0	1.0	1.0	1.0	
03:15 PM	36	246	99	2	72	46	55	0	16	266	21	0	11	30	52	36	892	36	892	982	
03:30 PM	53	278	57	0	53	54	38	2	20	283	21	0	12	43	38	2	941	43	941	941	
03:45 PM	89	277	56	0	58	34	21	1	21	308	11	0	16	33	44	0	985	33	985	985	
03:45 PM	57	274	75	0	59	55	27	2	20	279	18	0	13	39	57	0	985	39	985	985	
Total	205	1075	246	3	250	189	141	5	77	1137	63	1	52	146	191	4	3784	146	3784	3784	
04:00 PM	53	294	89	0	73	36	30	1	22	290	21	1	9	49	47	1	1096	49	1096	1096	
04:15 PM	53	296	75	0	68	45	39	0	16	291	20	0	12	36	55	1	1007	36	1007	1007	
04:30 PM	62	300	86	0	61	49	35	2	21	338	16	0	19	52	52	0	1119	52	1119	1119	
04:45 PM	87	309	79	0	52	61	37	3	22	332	21	0	20	59	78	0	1167	59	1167	1167	
Total	235	1199	325	1	279	191	141	6	81	1251	78	1	60	186	232	2	4239	186	4239	4239	
05:00 PM	66	380	104	1	83	42	25	1	29	339	13	0	9	56	65	0	1213	56	1213	1213	
05:15 PM	83	333	94	1	81	62	25	6	20	306	18	1	11	60	63	3	1184	60	1184	1184	
05:30 PM	76	337	102	1	71	44	36	1	27	315	21	3	14	43	69	3	1163	43	1163	1163	
05:45 PM	92	324	102	1	71	57	31	1	22	322	19	0	19	45	76	0	1182	45	1182	1182	
Total	317	1394	407	3	311	205	117	9	98	1282	71	3	53	204	264	4	4742	204	4742	4742	
06:00 PM	68	381	88	2	63	49	22	0	17	282	11	1	14	50	72	1	1101	50	1101	1101	
06:15 PM	73	328	60	0	57	35	27	1	15	275	23	0	18	48	53	0	1017	48	1017	1017	
06:30 PM	56	310	81	0	41	41	32	0	15	257	20	1	24	55	48	0	981	55	981	981	
06:45 PM	39	302	58	0	41	39	38	4	13	298	19	0	14	28	40	2	931	28	931	931	
Total	236	1301	285	2	202	164	119	5	60	1110	73	2	70	182	213	6	4030	182	4030	4030	
Grand Total	1013	4889	1284	9	1042	749	518	25	316	4780	285	7	235	727	900	16	16885	727	16885	16885	
Appet %	14.0	68.5	17.4	0.1	44.6	32.1	22.2	1.1	5.9	88.7	5.3	0.1	12.5	38.7	47.9	0.9		38.7	47.9	0.9	
Total %	6.0	29.5	7.5	0.1	6.2	4.4	3.1	0.1	1.9	28.4	1.7	0.0	1.4	4.3	5.3	0.1		4.3	5.3	0.1	

	Street Rd					Mechanicsville Rd					Street Rd					Mechanicsville Rd					Int. Total
	From North		From East		From South		From West		From North		From East		From South		From West						
Start Time	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
05:00 PM	14	65	19	0.1	48	31	18	1.4	4	9	2	0	6.7	88	2	0	10	38	50	0.8	
05:00 PM	66	380	104	1	83	42	25	1	151	29	339	13	0	381	9	56	65	0	130	121.3	
Factor																					
High Int. Volume	66	380	104	1	83	42	25	1	151	29	339	13	0	381	9	56	65	0	130	121.3	
Volume Peak	66	380	104	1	83	42	25	1	151	29	339	13	0	381	9	56	65	0	130	121.3	
Factor																					
High Int. Volume	66	380	104	1	83	42	25	1	151	29	339	13	0	381	9	56	65	0	130	121.3	
Volume Peak	66	380	104	1	83	42	25	1	151	29	339	13	0	381	9	56	65	0	130	121.3	
Factor																					



JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
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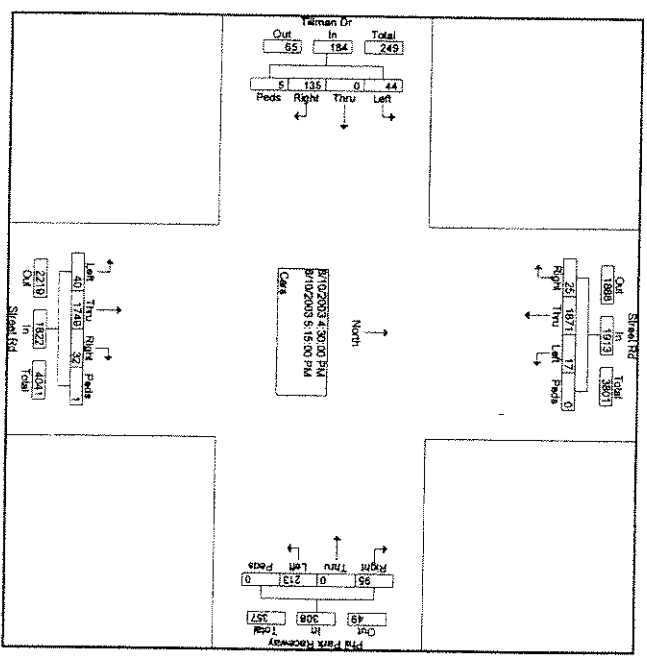
File Name : S&P&K
 Site Code : 00000000
 Start Date : 6/10/2003
 Page No : 1

Start Time	Street Rd			Phil Park Raceway			Street Rd			Tilman Dr			Int.
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
03:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	2	345	4	0	12	0	0	21	0	9	318	3	0
03:30 PM	2	382	6	0	12	0	0	26	1	17	354	6	0
03:45 PM	5	385	2	0	1	0	0	22	0	14	376	5	0
Total	18	1497	17	0	13	0	0	25	0	12	401	13	0
04:00 PM	4	440	6	0	23	0	0	56	0	12	351	11	0
04:15 PM	8	421	0	0	14	0	0	20	0	12	382	7	0
04:30 PM	5	478	8	0	52	0	0	89	0	7	448	16	0
04:45 PM	5	432	2	0	12	0	0	47	0	13	447	9	0
Total	20	1771	13	0	101	0	0	212	0	44	1626	43	0
05:00 PM	6	510	1	0	24	0	0	56	0	6	417	8	0
05:15 PM	9	461	7	0	7	0	0	40	0	6	439	7	0
05:30 PM	9	525	6	0	7	0	0	21	0	11	357	15	0
05:45 PM	13	432	4	0	0	0	0	9	0	9	399	11	0
Total	37	1918	18	0	38	0	0	128	0	28	1612	41	0
06:00 PM	7	468	3	0	3	0	0	21	0	12	366	21	0
06:15 PM	11	505	3	0	2	0	0	7	0	8	333	10	0
06:30 PM	14	431	2	0	2	0	0	11	0	14	317	12	0
06:45 PM	8	404	4	0	1	0	0	6	0	18	350	10	0
Total	40	1808	15	0	8	0	0	45	0	50	1366	53	0
Grand Total	115	6994	65	0	206	0	0	487	0	175	6053	164	0
Approach %	1.6	97.5	0.9	0.0	29.4	0.0	0.0	63.6	0.7	2.7	94.6	2.6	0.1
Total %	0.8	47.4	0.4	0.0	1.4	0.0	0.0	3.3	0.0	1.2	41.0	1.1	0.0

JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
 Change These In PREFERENCES

File Name : S&P&K
 Site Code : 00000000
 Start Date : 6/10/2003
 Page No : 2

Start Time	Street Rd			Phil Park Raceway			Street Rd			Tilman Dr			Int.
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
04:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	0	0	0	0	0	0	0	0	0	0	0	0
06:00 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
06:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
06:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
06:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0
Total	6	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	12	0	0	0	0	0	0	0	0	0	0	0	0
Approach %	1.6	97.5	0.9	0.0	29.4	0.0	0.0	63.6	0.7	2.7	94.6	2.6	0.1
Total %	0.8	47.4	0.4	0.0	1.4	0.0	0.0	3.3	0.0	1.2	41.0	1.1	0.0



JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
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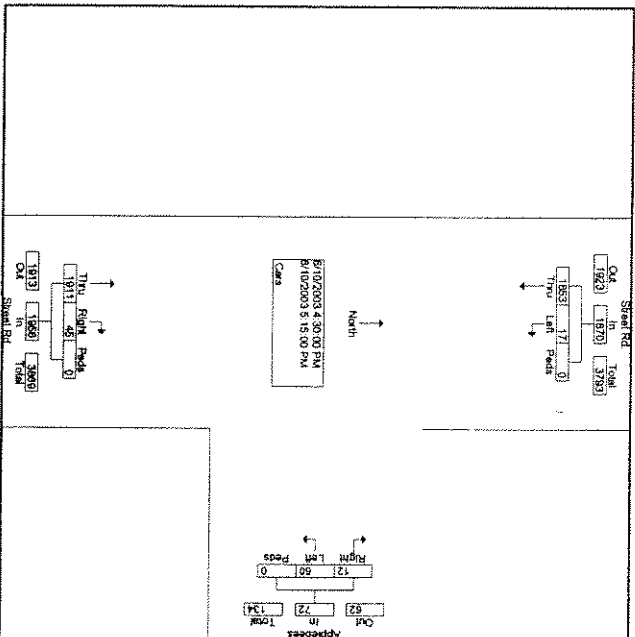
File Name : S1&Applb
 Site Code : 00000000
 Start Date : 6/10/2003
 Page No : 1

Start Time	Street Rd. From North			Appelbase From East			Street Rd. From South			Inl. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
03:00 PM	0	363	4	0	0	7	0	0	0	738
03:15 PM	0	382	3	0	0	4	0	0	0	768
03:30 PM	0	382	4	0	0	2	0	0	0	810
03:45 PM	0	412	8	0	0	3	0	0	0	857
Total	0	1509	19	0	0	16	0	0	0	3139
04:00 PM	0	436	1	0	0	13	0	0	0	861
04:15 PM	0	434	2	0	0	6	0	0	0	863
04:30 PM	0	470	5	0	0	11	0	0	0	1026
04:45 PM	0	439	5	0	0	11	0	0	0	864
Total	0	1779	13	0	0	41	0	0	0	3684
05:00 PM	0	500	2	0	0	22	0	0	0	987
05:15 PM	0	444	5	0	0	16	0	0	0	941
05:30 PM	0	515	6	0	0	18	0	0	0	931
05:45 PM	0	445	7	0	0	9	0	0	0	894
Total	0	1904	20	0	0	65	0	0	0	3763
06:00 PM	0	467	9	0	0	13	0	0	0	886
06:15 PM	0	510	3	0	0	10	0	0	0	884
06:30 PM	0	465	2	0	0	4	0	0	0	814
06:45 PM	0	429	5	0	0	4	0	0	0	836
Total	0	1861	19	0	0	31	0	0	0	3407
Grand Total	0	7053	71	0	0	153	0	0	0	14013
Approach %	0.0	99.0	1.0	0.0	0.0	68.9	2.3	1.6	0.0	98.2
Total %	0.0	50.3	0.5	0.0	0.0	1.1	0.0	0.9	0.0	46.7

JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
 Change These In PREFERENCES

File Name : S1&Applb
 Site Code : 00000000
 Start Date : 6/10/2003
 Page No : 2

Start Time	Street Rd. From North			App. Total	Appelbase From East			App. Total	Street Rd. From South			App. Total	Inl. Total	
	Right	Thru	Left		Right	Thru	Left		Right	Thru	Left			
04:30 PM	0	1853	17	1870	12	0	60	0	72	45	1911	0	1986	
Volume Percent	0.0	98.1	0.9	0.0	16.7	0.0	83.3	0.0	2.3	97.7	0.0	0.0	1026	
Volume	0	470	5	0	3	0	11	0	14	13	524	0	537	
Peak Factor														
High Int. Volume	0	500	2	0	502	3	0	22	0	25	13	524	0	537
Peak Factor				0.931					0.716					0.950



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 151 Keith Valley Road
 Horsham, PA 19044
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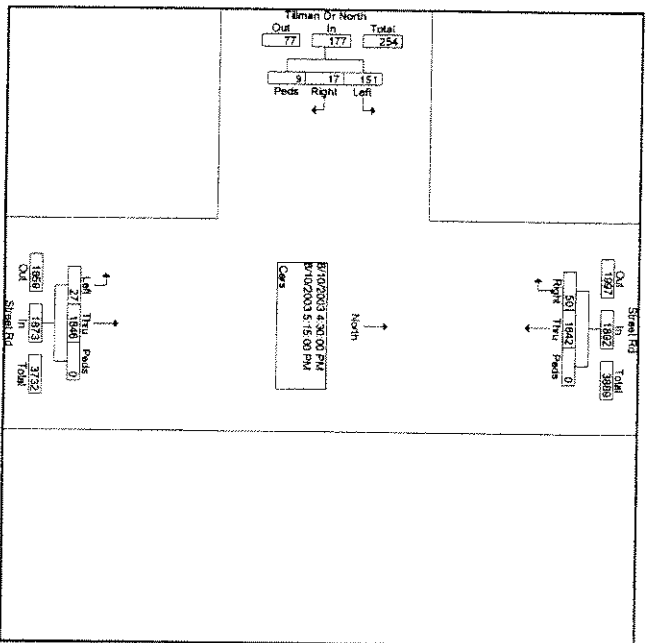
File Name : S&T/IN
 Site Code : 00000000
 Start Date : 6/10/2003
 Page No : 1

JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
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File Name : S&T/IN
 Site Code : 00000000
 Start Date : 6/10/2003
 Page No : 2

Start Time	Street Rd From North			TILMAN DR N From East			Street Rd From South			Tilman Dr North From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
03:00 PM	1	10	0	0	0	0	0	0	0	0	0	0	706
03:15 PM	8	380	0	0	0	0	0	335	3	0	0	0	709
03:30 PM	9	355	0	0	0	0	0	389	3	0	0	0	743
03:45 PM	8	384	0	0	0	0	0	408	4	1	0	0	828
03:45 PM	8	411	0	0	0	0	0	411	7	0	0	0	852
Total	26	1520	0	0	0	0	0	1524	17	1	0	0	3131
04:00 PM	14	397	0	0	0	0	0	387	5	0	0	0	838
04:15 PM	7	442	0	0	0	0	0	392	6	0	0	0	866
04:30 PM	10	403	0	0	0	0	0	501	5	0	0	0	1095
04:45 PM	17	441	0	0	0	0	0	464	6	0	0	0	956
Total	48	1743	0	0	0	0	0	1744	22	0	0	0	3685
05:00 PM	16	485	0	0	0	0	0	431	7	0	0	0	989
05:15 PM	7	453	0	0	0	0	0	450	9	0	0	0	972
05:30 PM	8	494	0	0	0	0	0	387	2	0	0	0	917
05:45 PM	12	457	0	0	0	0	0	397	7	0	0	0	893
Total	43	1889	0	0	0	0	0	1865	25	0	0	0	3771
06:00 PM	8	445	0	0	0	0	0	371	10	0	0	0	857
06:15 PM	3	488	0	0	0	0	0	327	12	0	0	0	864
06:30 PM	11	437	0	0	0	0	0	324	9	0	0	0	797
06:45 PM	10	416	0	0	0	0	0	340	15	0	0	0	806
Total	32	1766	0	0	0	0	0	1362	46	1	0	0	3314
Grand Total	149	6938	0	0	0	0	0	6295	110	2	0	0	13901
Apprec %	2.1	97.9	0.0	0.0	0.0	0.0	0.0	98.3	1.7	0.0	0.0	0.0	4.9
Total %	1.1	49.9	0.0	0.0	0.0	0.0	0.0	45.3	0.8	0.0	0.0	0.0	0.1

Start Time	Street Rd From North			TILMAN DR N From East			Street Rd From South			Tilman Dr North From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
04:30 PM	16	485	0	0	0	0	0	194	27	0	151	9	1025
Peak Hour	16	485	0	0	0	0	0	194	27	0	151	9	1025
Volume	16	485	0	0	0	0	0	194	27	0	151	9	1025
High Int. Volume	16	485	0	0	0	0	0	194	27	0	151	9	1025
Peak Factor	1.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0



JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
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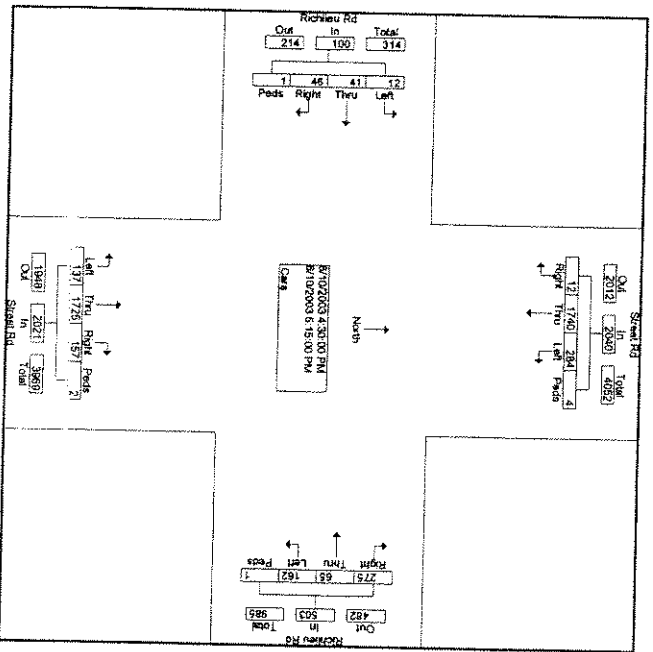
File Name : S&RRich
 Site Code : 00000000
 Start Date : 6/10/2003
 Page No : 1

JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
 Change These In PREFERENCES

File Name : S&RRich
 Site Code : 00000000
 Start Date : 6/10/2003
 Page No : 2

Start Time	Street Rd				Richlieu Rd				Street Rd				Richlieu Rd				Incl. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
03:00 PM	1	10	10	0	1	10	10	0	1	10	10	0	1	10	10	0	796
03:15 PM	1	331	48	0	38	14	20	0	18	277	22	0	15	10	10	0	796
03:30 PM	4	375	66	0	36	11	21	1	28	338	19	0	14	8	3	0	849
03:45 PM	1	370	61	0	51	10	28	1	31	382	26	0	14	13	2	0	878
Total	7	1409	206	0	154	47	94	3	20	1331	63	0	65	45	21	0	3581
04:00 PM	1	401	59	0	62	9	28	1	38	371	30	0	9	9	4	0	1020
04:15 PM	2	408	66	0	43	7	28	0	34	347	25	1	12	7	2	0	1084
04:30 PM	4	423	62	0	68	9	30	0	37	473	34	1	12	12	4	0	1184
04:45 PM	4	423	69	0	71	16	45	0	37	482	35	0	13	9	4	0	1130
Total	8	1671	237	0	244	40	130	2	144	1583	124	1	46	37	14	0	4318
05:00 PM	3	464	78	0	73	19	49	1	33	446	32	0	7	6	3	0	1214
05:15 PM	4	414	78	0	63	21	38	0	50	404	38	0	14	14	3	0	1156
05:30 PM	2	463	98	0	38	14	40	1	53	328	38	0	13	12	3	0	1102
05:45 PM	4	417	86	0	38	19	36	0	38	350	24	0	18	11	3	0	1044
Total	13	1758	339	0	212	73	163	2	174	1526	130	1	52	43	10	0	4486
06:00 PM	1	404	75	0	40	19	39	0	44	315	32	0	10	5	2	1	987
06:15 PM	5	451	89	0	37	8	35	1	36	277	29	0	14	12	4	0	1094
06:30 PM	8	376	89	0	38	19	31	0	51	278	20	0	15	7	7	0	894
06:45 PM	2	388	66	0	31	9	33	0	47	293	27	0	7	6	2	0	820
Total	16	1619	284	0	146	55	138	1	178	1163	108	0	46	30	15	2	3804
Grand Total	44	6457	1095	0	786	215	525	8	589	5588	492	2	209	155	80	5	16189
Approach %	0.6	66.0	14.3	0.1	50.3	14.3	34.9	0.5	8.8	83.8	7.4	0.0	48.7	38.1	14.0	1.2	
Total %	0.3	38.9	6.7	0.1	4.7	1.3	3.2	0.0	3.6	34.5	3.0	0.0	1.3	1.0	0.4	0.0	

Start Time	Street Rd				Richlieu Rd				Street Rd				Richlieu Rd				Incl. Total		
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds			
05:00 PM	3	464	78	0	545	73	19	1	142	37	473	34	1	545	12	12	4	1	28
05:30 PM	4	417	86	0	0.88	6													0.86
04:30 PM	4	423	62	0	7.8	85	6.8	0.1	46	41	12	1	100	4064					1214
04:00 PM	1	401	59	0	157	172	137	2	2021	46	41	12	1	100	4064				
03:30 PM	4	375	66	0	54	12	32	0.2	7	9	2	0.2							
03:00 PM	1	331	48	0	18	14	20	0	18	277	22	0	15	10	10	0	796		



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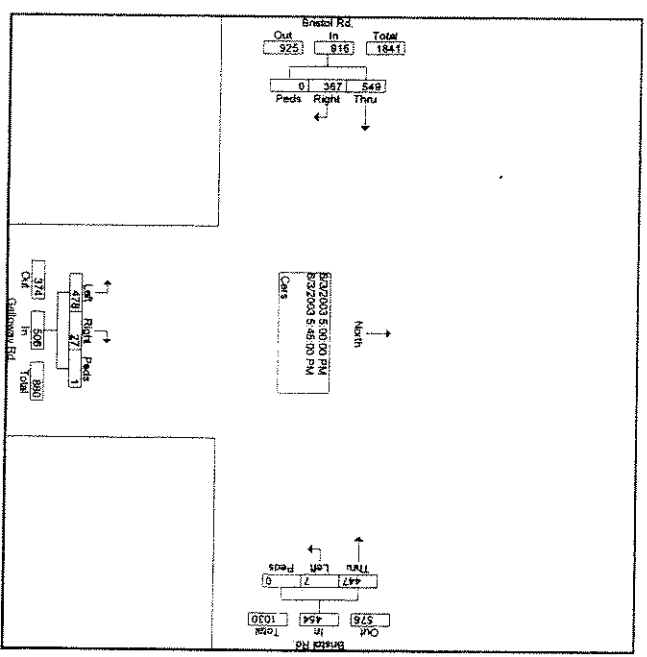
File Name : Btts&Gal
 Site Code : 00000000
 Start Date : 6/3/2003
 Page No : 1

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File Name : Btts&Gal
 Site Code : 00000000
 Start Date : 6/3/2003
 Page No : 2

Start Time	Bristol Rd From East			Galloway Rd From South			Bristol Rd From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
03:00 PM	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	78	3	0	89	72	0	107	0	363
03:30 PM	0	79	1	0	97	117	0	117	0	363
03:45 PM	0	95	2	0	100	127	0	114	0	381
Total	0	329	7	0	390	465	0	465	0	1527
04:00 PM	0	89	2	0	5	0	0	84	0	396
04:15 PM	0	100	3	0	0	101	0	77	0	423
04:30 PM	0	86	6	0	0	97	0	92	0	409
04:45 PM	0	95	2	0	0	117	0	77	0	442
Total	0	370	13	0	20	403	0	330	0	1670
05:00 PM	0	113	1	0	6	0	0	96	0	493
05:15 PM	0	113	1	0	0	142	0	95	0	475
05:30 PM	0	108	3	0	0	116	0	81	0	440
05:45 PM	0	123	2	0	0	122	0	95	0	469
Total	0	447	7	0	27	478	0	367	0	1877
06:00 PM	0	86	5	0	7	0	0	95	0	422
06:15 PM	0	78	1	0	0	97	0	88	0	394
06:30 PM	0	83	2	0	0	83	0	78	0	377
06:45 PM	0	72	6	0	0	85	0	70	0	361
Total	0	319	14	0	23	359	0	331	0	1564
Grand Total	0	1465	41	0	90	1630	0	1344	0	6628
Approach %	0.0	97.3	2.7	0.0	5.2	94.6	0.0	80.5	0.0	80.5
Total %	0.0	22.1	0.6	0.0	1.4	24.6	0.0	20.3	0.0	20.3

Start Time	Bristol Rd From East			Galloway Rd From South			Bristol Rd From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
05:00 PM	0	447	7	0	454	27	0	507	0	916
05:15 PM	0	98.5	1.5	0.0	114	5.3	0.2	149	0.0	230
05:30 PM	0	113	1	0	114	6	0	142	0	230
05:45 PM	0	123	2	0	125	8	0	149	0	238
App. Total	0	780.5	10.5	0.0	807	26.6	0.2	807	0.0	1384
High Int. Volume	0	123	2	0	125	8	0	149	0	238
Peak Factor	0	0.908	0.908	0	0.908	0.908	0	0.908	0	0.902



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 Horsham, PA 19044
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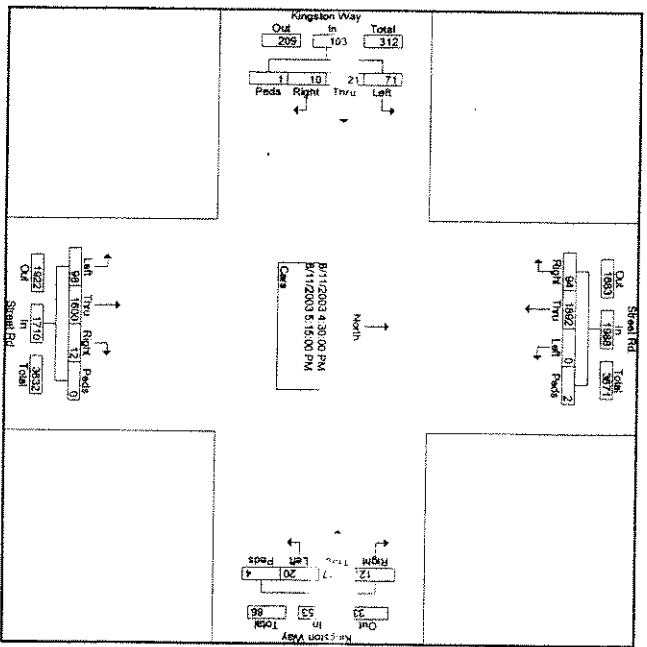
File Name : S&KKingt
 Site Code : 00000000
 Start Date : 6/11/2003
 Page No : 1

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 151 Keith Valley Road
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File Name : S&KKingt
 Site Code : 00000000
 Start Date : 6/11/2003
 Page No : 2

Start Time	Street Rd. From North			Kingston Way From East			Street Rd. From South			Kingston Way From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
03:00 PM	0	309	0	3	1	4	4	0	0	1	10	15	2
03:15 PM	0	296	0	3	4	7	1	1	3	294	14	2	690
03:30 PM	0	378	0	3	5	2	8	1	2	338	30	0	698
03:45 PM	7	401	1	7	6	4	4	1	3	350	19	2	783
Total	7	1384	1	15	15	23	3	9	1307	78	21	13	822
04:00 PM	0	411	0	3	5	3	3	1	2	390	17	0	855
04:15 PM	10	353	0	2	2	2	3	0	4	375	21	0	802
04:30 PM	16	492	0	1	3	1	5	1	4	492	21	0	864
04:45 PM	23	457	0	7	4	6	0	0	3	407	27	0	866
Total	49	1713	0	17	10	17	2	13	1574	86	6	73	3587
05:00 PM	18	481	0	2	9	4	1	3	388	22	0	3	858
05:15 PM	37	462	0	0	3	5	2	2	383	28	0	1	986
05:30 PM	21	474	0	4	4	4	0	15	388	24	0	1	984
05:45 PM	30	402	0	3	0	7	0	4	317	26	1	1	875
Total	112	1879	0	9	16	22	3	24	1484	100	6	24	3753
06:00 PM	34	489	1	3	2	10	0	2	376	23	0	3	984
06:15 PM	28	464	0	3	2	2	5	0	339	23	0	1	894
06:30 PM	29	408	0	4	2	2	2	2	301	26	0	0	809
06:45 PM	26	312	0	2	6	4	4	2	201	14	4	4	582
Total	108	1880	1	12	12	21	0	9	1271	86	0	5	3258
Grand Total	274	8856	2	18	53	83	8	55	5592	260	3	25	13562
Appen %	3.9	33.8	0.0	0.2	28.9	42.1	4.1	0.9	93.2	5.8	0.1	6.0	21.6
Total %	2.0	49.1	0.0	0.4	0.4	0.6	0.1	0.4	41.2	2.6	0.0	0.2	0.7

Start Time	Street Rd. From North			Kingston Way From East			Street Rd. From South			Kingston Way From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
04:30 PM	0	509	1	509	0.97	6	0	17	3	407	0.97	8	0.997
04:45 PM	0	509	1	509	0.97	6	0	17	3	407	0.97	8	0.997
05:15 PM	0	509	1	509	0.97	6	0	17	3	407	0.97	8	0.997
05:30 PM	0	509	1	509	0.97	6	0	17	3	407	0.97	8	0.997
05:45 PM	0	509	1	509	0.97	6	0	17	3	407	0.97	8	0.997
Total	0	509	1	509	0.97	6	0	17	3	407	0.97	8	0.997



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 151 Keith Valley Road
 Horsham, PA 19044
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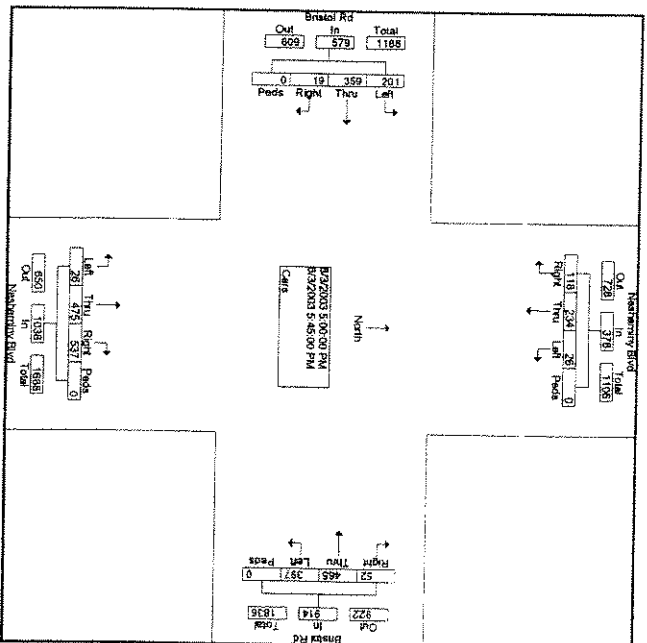
File Name : Br&Nesh
 Site Code : 00000000
 Start Date : 6/3/2003
 Page No : 1

Start Time	Nashamny Blvd From North				Bristol Rd From East				Nashamny Blvd From South				Bristol Rd From West				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
03:00 PM	15	38	7	0	14	90	74	0	103	63	9	0	8	76	28	0	515
03:15 PM	22	48	2	0	16	78	76	0	94	70	3	0	3	79	35	0	526
03:30 PM	17	53	16	0	13	70	85	0	104	66	7	0	7	92	35	0	563
03:45 PM	18	39	19	0	8	96	79	0	132	75	3	0	5	95	23	0	595
Total	72	178	44	0	51	334	314	0	433	270	18	0	23	342	121	0	2200
04:00 PM	33	47	8	0	17	97	67	0	111	84	3	0	5	83	41	1	608
04:15 PM	38	60	4	0	20	108	71	0	106	105	8	0	2	86	34	0	657
04:30 PM	31	54	9	0	13	96	75	0	118	121	8	0	0	105	41	1	678
04:45 PM	27	54	2	0	7	118	89	0	121	88	4	0	1	94	27	0	644
Total	129	215	21	0	57	419	301	0	456	409	23	0	14	386	143	2	2587
05:00 PM	29	64	8	0	13	122	103	0	128	114	4	0	2	84	61	0	732
05:15 PM	31	58	4	0	9	122	103	0	149	118	5	0	1	97	49	0	746
05:30 PM	32	54	1	0	18	103	91	0	124	118	10	0	1	92	51	0	712
05:45 PM	26	59	5	0	12	118	100	0	136	125	7	0	1	86	40	0	719
Total	118	234	26	0	52	465	397	0	537	475	26	0	19	359	201	0	2909
06:00 PM	23	56	10	0	14	79	87	0	109	85	1	0	2	92	49	0	807
06:15 PM	28	63	9	0	7	84	88	0	125	98	1	0	2	95	41	0	838
06:30 PM	23	69	9	0	9	75	80	0	103	73	3	0	5	92	38	0	577
06:45 PM	26	55	5	0	13	60	90	0	112	90	3	0	6	79	35	0	584
Total	100	243	33	0	43	298	335	0	449	346	8	0	15	351	183	0	2394
Grand Total	419	870	124	5	203	1516	1347	1	1877	1500	75	0	71	1440	628	4	10090
Right %	29.5	61.4	8.7	0.4	6.6	49.4	43.9	0.0	54.4	43.5	2.2	0.0	3.3	67.2	29.3	0.2	
Total %	4.2	8.6	1.2	0.0	2.0	15.0	13.4	0.0	18.8	14.9	0.7	0.0	0.7	14.3	6.2	0.0	

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 151 Keith Valley Road
 Horsham, PA 19044
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File Name : Br&Nesh
 Site Code : 00000000
 Start Date : 6/3/2003
 Page No : 2

Start Time	Nashamny Blvd From North				Bristol Rd From East				Nashamny Blvd From South				Bristol Rd From West				Int. Total	
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds		
05:00 PM	118	234	26	0	52	465	397	0	537	475	26	0	19	359	201	0	2909	
Volume	31	61	6.9	0.0	5.7	50	43	0.0	9	4	0.0	0.0	3.3	62	34	0.0	746	
Percent	2	8	0	0	9	122	103	0	234	149	118	5	0	272	1	97	0	147
Volume Peak Factor	29	64	8	0	238	149	118	0	272	15	92	51	0	156	0	91	6	
High Int. Volume Peak Factor	0.96	0	0	0	0.96	0	0	0	0.975	0	0	0	0	0.91	0	0	0.975	



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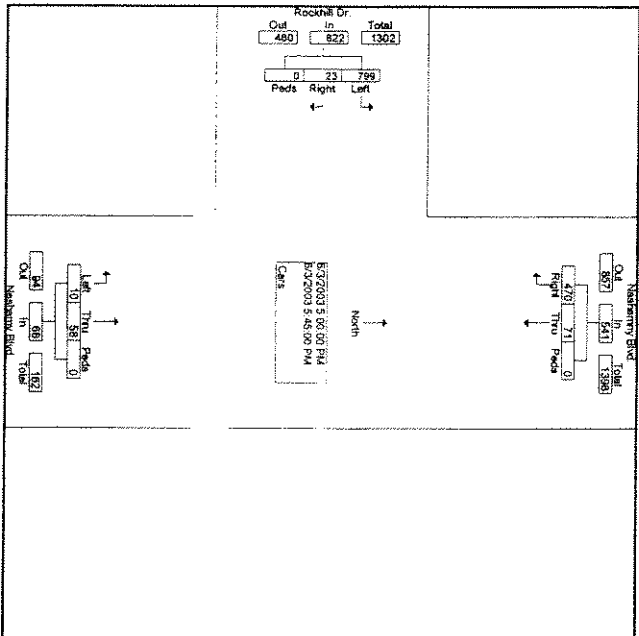
File Name : Rok&Nesh
 Site Code : 00000000
 Start Date : 6/3/2003
 Page No : 1

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 151 Keith Valley Road
 Horsham, PA 19044
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File Name : Rok&Nesh
 Site Code : 00000000
 Start Date : 6/3/2003
 Page No : 2

Start Time	Neshamy Blvd.				Groups Printed Cars				Rockhill Dr.				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
03:00 PM	14	0	0	0	0	0	0	0	0	0	0	0	262
03:15 PM	80	18	0	0	28	6	0	0	104	0	0	0	257
03:30 PM	103	22	0	0	21	5	0	0	116	0	0	0	305
03:45 PM	103	73	0	0	20	2	0	0	141	0	0	0	309
Total	407	73	0	0	95	21	0	0	527	1	1	1	1133
04:00 PM	98	14	0	0	18	2	0	0	188	0	0	0	303
04:15 PM	108	17	0	0	19	7	0	0	156	0	0	0	306
04:30 PM	83	14	0	0	17	8	0	0	204	0	0	0	345
04:45 PM	100	14	0	0	13	5	0	0	178	0	0	0	315
Total	389	58	0	0	67	22	0	0	706	0	0	0	1269
05:00 PM	122	13	0	0	18	2	0	0	189	0	0	0	348
05:15 PM	129	16	0	0	10	0	0	0	215	0	0	0	376
05:30 PM	112	23	0	0	13	7	0	0	209	0	0	0	373
05:45 PM	107	19	0	0	1	1	0	0	186	0	0	0	334
Total	470	71	0	0	58	10	0	0	799	0	0	0	1431
06:00 PM	108	18	0	0	18	2	0	0	143	0	0	0	292
06:15 PM	98	19	0	0	0	0	0	0	161	1	0	0	307
06:30 PM	89	22	0	0	0	1	0	0	133	0	0	0	277
06:45 PM	102	21	0	0	30	2	0	0	119	0	0	0	276
Total	407	80	0	0	87	6	0	0	586	1	1	1	1152
Grand Total	1893	283	0	0	307	59	0	0	2598	2	2	2	4985
Approach %	85.5	14.4	0.0	0.0	83.9	16.1	0.0	0.0	97.6	0.1	0.1	0.1	376
Total %	33.8	5.7	0.0	0.0	6.2	1.2	0.0	0.0	51.9	0.0	0.0	0.0	951

Start Time	Neshamy Blvd.				Neshamy Blvd.				Rockhill Dr.				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
05:15 Volume Percent	470	71	0	0	541	0	0	0	68	23	0	0	822
High Int. Volume	86.9	13.1	0.0	0.0	145	0	0	0	2.8	0.0	0.0	0	376
Peak Factor	129	16	0	0	145	0	0	0	6	0	0	0	951
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1	129	16	0	0	145	0	0	0	6	0	0	0	951
Intersection 05:00 PM	129	16	0	0	145	0	0	0	6	0	0	0	951
Peak Factor	129	16	0	0	145	0	0	0	6	0	0	0	951



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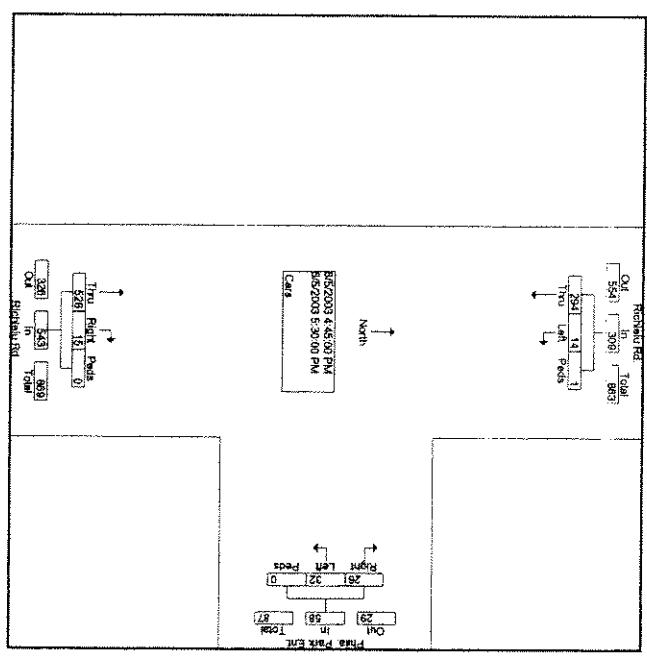
File Name : Rich&Prk
 Site Code : 00000000
 Start Date : 6/5/2003
 Page No : 1

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File Name : Rich&Prk
 Site Code : 00000000
 Start Date : 6/5/2003
 Page No : 2

Start Time	Richieu Rd					Phila Park Ent					Richieu Rd					Int. Total
	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	53	1	0	54	0	0	0	0	0	0	0	0	0	0	54
03:30 PM	0	50	3	0	53	0	0	0	0	0	0	0	0	0	0	53
03:45 PM	0	30	2	0	32	0	0	0	0	0	0	0	0	0	0	32
Total	0	227	7	0	234	0	0	0	0	0	0	0	0	0	0	234
04:00 PM	0	70	3	0	73	0	0	0	0	0	0	0	0	0	0	73
04:15 PM	0	72	3	0	75	0	0	0	0	0	0	0	0	0	0	75
04:30 PM	0	64	2	0	66	0	0	0	0	0	0	0	0	0	0	66
04:45 PM	0	81	7	0	88	0	0	0	0	0	0	0	0	0	0	88
Total	0	287	15	0	302	0	0	0	0	0	0	0	0	0	0	302
05:00 PM	0	77	3	0	80	0	0	0	0	0	0	0	0	0	0	80
05:15 PM	0	61	2	0	63	0	0	0	0	0	0	0	0	0	0	63
05:30 PM	0	75	2	0	77	0	0	0	0	0	0	0	0	0	0	77
05:45 PM	0	58	4	0	62	0	0	0	0	0	0	0	0	0	0	62
Total	0	268	11	0	279	0	0	0	0	0	0	0	0	0	0	279
06:00 PM	0	62	3	0	65	0	0	0	0	0	0	0	0	0	0	65
06:15 PM	0	59	2	0	61	0	0	0	0	0	0	0	0	0	0	61
06:30 PM	0	62	4	0	66	0	0	0	0	0	0	0	0	0	0	66
06:45 PM	0	60	0	0	60	0	0	0	0	0	0	0	0	0	0	60
Total	0	240	9	0	249	0	0	0	0	0	0	0	0	0	0	249
Grand Total	0	1022	42	0	1064	0	0	0	0	0	0	0	0	0	0	1064
Approach %	0.0	94.1	3.9	1.4	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Total %	0.0	34.1	1.4	0.3	43.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3

Start Time	Richieu Rd					Phila Park Ent					Richieu Rd					Int. Total
	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	Right	Thru	Left	Peds	Total	
03:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:15 PM	0	53	1	0	54	0	0	0	0	0	0	0	0	0	0	54
03:30 PM	0	50	3	0	53	0	0	0	0	0	0	0	0	0	0	53
03:45 PM	0	30	2	0	32	0	0	0	0	0	0	0	0	0	0	32
Total	0	227	7	0	234	0	0	0	0	0	0	0	0	0	0	234
04:00 PM	0	70	3	0	73	0	0	0	0	0	0	0	0	0	0	73
04:15 PM	0	72	3	0	75	0	0	0	0	0	0	0	0	0	0	75
04:30 PM	0	64	2	0	66	0	0	0	0	0	0	0	0	0	0	66
04:45 PM	0	81	7	0	88	0	0	0	0	0	0	0	0	0	0	88
Total	0	287	15	0	302	0	0	0	0	0	0	0	0	0	0	302
05:00 PM	0	77	3	0	80	0	0	0	0	0	0	0	0	0	0	80
05:15 PM	0	61	2	0	63	0	0	0	0	0	0	0	0	0	0	63
05:30 PM	0	75	2	0	77	0	0	0	0	0	0	0	0	0	0	77
05:45 PM	0	58	4	0	62	0	0	0	0	0	0	0	0	0	0	62
Total	0	268	11	0	279	0	0	0	0	0	0	0	0	0	0	279
06:00 PM	0	62	3	0	65	0	0	0	0	0	0	0	0	0	0	65
06:15 PM	0	59	2	0	61	0	0	0	0	0	0	0	0	0	0	61
06:30 PM	0	62	4	0	66	0	0	0	0	0	0	0	0	0	0	66
06:45 PM	0	60	0	0	60	0	0	0	0	0	0	0	0	0	0	60
Total	0	240	9	0	249	0	0	0	0	0	0	0	0	0	0	249
Grand Total	0	1022	42	0	1064	0	0	0	0	0	0	0	0	0	0	1064
Approach %	0.0	94.1	3.9	1.4	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0
Total %	0.0	34.1	1.4	0.3	43.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3



JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
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File Name : GALLOW-2
 Site Code : 00000000
 Start Date : 5/21/2002
 Page No : 1

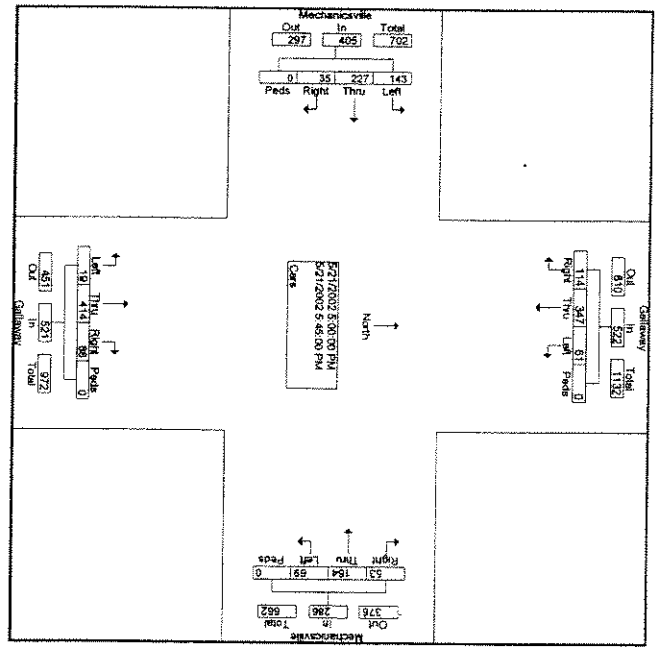
JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
 Change These In PREFERENCES

File Name : GALLOW-2
 Site Code : 00000000
 Start Date : 5/21/2002
 Page No : 2

PNW

Start Time	Galloway				Mechanicsville				Galloway				Mechanicsville				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	18	56	2	0	14	36	14	0	8	30	2	0	18	10	10	0	207
07:15 AM	14	72	3	0	21	42	13	0	14	53	3	0	18	16	0	0	271
07:30 AM	13	90	4	0	13	48	24	0	10	57	6	0	4	10	0	0	294
07:45 AM	17	95	4	0	16	48	20	0	11	54	6	0	8	26	15	0	312
Total	62	314	13	0	64	172	71	0	41	194	12	0	1	82	51	0	1064
08:00 AM	16	68	4	0	18	41	17	0	12	50	8	0	2	23	9	0	267
08:15 AM	7	53	3	0	19	39	13	0	16	47	7	0	3	22	17	0	249
08:30 AM	10	76	7	0	16	37	12	0	9	45	5	0	1	13	11	0	242
08:45 AM	7	69	2	0	16	34	15	0	7	52	3	0	6	17	11	0	239
Total	40	266	16	0	69	151	57	0	44	194	21	0	14	77	47	0	957

Start Time	Galloway				Mechanicsville				Galloway				Mechanicsville				Int. Total			
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds				
05:30 PM	31	89	18	0	139	17	48	18	0	83	19	112	3	0	134	10	81	37	0	108
Peak	31	89	18	0	139	17	48	18	0	83	19	112	3	0	134	10	81	37	0	108
Factor	0.939				0.939					0.961					0.972					0.970



--- BREAK ---

JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
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File Name : BYBERR-2
 Site Code : 00000000
 Start Date : 3/5/2003
 Page No : 1

JAMAR Technologies, Inc.
 151 Keith Valley Road
 Horsham, PA 19044
 Change These In PREFERENCES

File Name : BYBERR-2
 Site Code : 00000000
 Start Date : 3/5/2003
 Page No : 2

Start Time	Knights Road From North			Byberry Road From East			Knights Road From South			Byberry Road From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
07:00 AM	0	35	4	0	63	29	0	19	2	0	0	0	238
07:30 AM	4	47	1	0	14	62	27	0	20	27	1	0	247
07:45 AM	2	60	5	0	3	84	39	0	20	28	1	0	255
Total	6	189	10	0	20	267	127	0	35	57	2	0	288
08:00 AM	1	54	2	0	1	75	33	0	39	25	0	0	1004
08:15 AM	2	28	5	0	0	50	23	0	32	28	1	0	276
08:30 AM	0	34	2	0	3	56	34	1	32	28	1	0	204
08:45 AM	1	40	3	0	3	54	42	1	37	29	2	0	220
Total	4	154	12	0	7	235	133	2	141	69	10	0	653

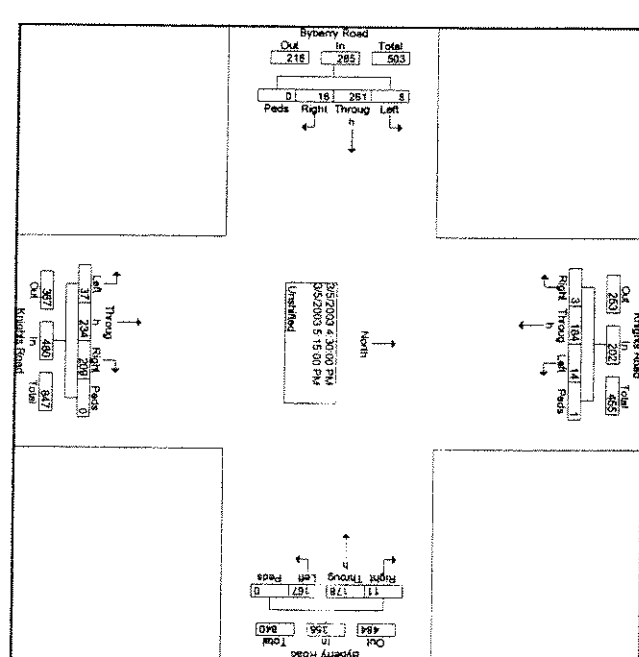
Start Time	Knights Road From North			Byberry Road From East			Knights Road From South			Byberry Road From West			Int. Total	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left		
05:00 PM	1	178	187	0	356	209	234	37	0	480	18	281	8	285
05:15 PM	3	103	68	0	103	435	488	7.7	0.0	5.0	81.0	2.8	0.0	1323
Total	4	281	255	0	459	644	722	37	0	485	18	283	8	381

Start Time	Knights Road From North			Byberry Road From East			Knights Road From South			Byberry Road From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
03:00 PM	1	44	1	0	4	37	51	0	66	53	0	0	310
03:15 PM	0	31	1	0	11	35	31	2	57	67	7	1	288
03:30 PM	2	29	3	0	2	50	60	0	52	56	7	0	288
03:45 PM	1	32	7	0	1	44	40	1	54	49	5	0	328
Total	4	136	12	0	18	166	182	3	229	215	2	0	1250

Start Time	Knights Road From North			Byberry Road From East			Knights Road From South			Byberry Road From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
04:00 PM	3	45	2	0	2	34	39	0	48	43	10	0	285
04:15 PM	0	48	7	0	4	32	39	0	44	59	7	0	286
04:30 PM	1	48	2	0	1	31	35	0	41	54	6	0	323
04:45 PM	1	34	1	0	0	24	28	0	33	60	13	0	323
Total	5	175	12	0	7	125	151	0	166	216	36	0	1235

Start Time	Knights Road From North			Byberry Road From East			Knights Road From South			Byberry Road From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
05:00 PM	2	53	4	0	2	58	43	0	50	63	11	0	381
05:15 PM	0	34	1	0	3	42	33	0	50	57	7	0	307
05:30 PM	2	40	1	0	2	45	39	0	41	51	12	0	308
05:45 PM	4	41	9	0	1	38	49	0	64	62	8	0	340
Total	8	168	15	0	8	183	184	0	205	233	38	0	1310

Start Time	Knights Road From North			Byberry Road From East			Knights Road From South			Byberry Road From West			Int. Total
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	
Grand Total	25	892	83	7	76	1123	825	7	1075	1054	127	4	6775
Approach %	2.3	89.6	7.5	0.6	2.6	52.7	43.4	0.3	47.6	46.6	5.8	0.2	7.7
Total %	0.4	14.6	1.2	0.1	1.1	10.9	13.7	0.1	15.9	15.8	1.8	0.1	1.5



JAMAR Technologies, Inc.
 151 Keith Valley Road
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File Name : GALLOW-3
 Site Code : 00000000
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 Page No : 1

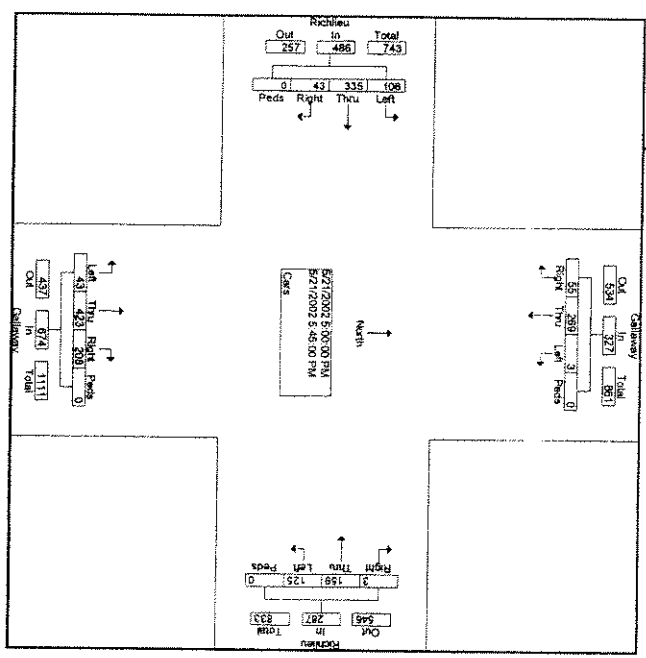
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 151 Keith Valley Road
 Horsham, PA 19044
 Change These In PREFERENCES

File Name : GALLOW-3
 Site Code : 00000000
 Start Date : 5/21/2002
 Page No : 2

PTWEEA

Start Time	Gateway From North				Richlieu From East				Gateway From South				Richlieu From West				Int. Total
	Rght	Thru	Left	Peds	Rght	Thru	Left	Peds	Rght	Thru	Left	Peds	Rght	Thru	Left	Peds	
07:00 AM	13	53	0	0	42	47	0	0	6	31	9	0	4	9	9	0	223
07:15 AM	12	62	0	0	64	44	0	0	10	43	8	0	8	8	7	0	255
07:30 AM	13	67	0	0	55	62	0	0	13	48	7	0	10	9	9	0	285
07:45 AM	21	67	0	0	71	62	0	0	14	52	10	0	22	10	10	0	338
Total	59	269	0	0	222	185	0	0	43	174	34	0	30	44	35	0	1101
08:00 AM	6	45	0	0	64	38	0	0	9	49	5	0	11	20	9	0	258
08:15 AM	21	38	0	0	55	32	0	0	14	49	8	0	7	13	7	0	259
08:30 AM	16	60	0	0	55	28	0	0	14	43	8	0	7	23	7	0	281
08:45 AM	10	39	0	0	42	27	0	0	15	43	15	0	9	19	17	0	237
Total	52	182	0	0	216	125	0	0	52	184	36	0	34	83	46	0	1015
*** BREAK ***																	
04:00 PM	15	88	1	0	34	17	0	0	50	81	9	0	7	58	26	0	389
04:15 PM	14	76	0	0	31	33	0	0	53	85	9	0	6	51	20	0	360
04:30 PM	12	40	0	0	34	14	0	0	50	93	13	0	11	50	33	1	395
04:45 PM	11	62	1	0	35	34	0	0	40	110	8	0	12	56	22	2	389
Total	52	266	2	0	132	98	0	0	173	369	39	0	36	216	101	1	1512
05:00 PM	18	69	0	0	37	30	0	0	53	113	11	0	7	77	29	0	444
05:15 PM	12	71	0	0	38	25	0	0	50	114	9	0	5	69	29	0	425
05:30 PM	12	63	0	0	37	37	0	0	50	99	13	0	19	96	27	0	463
05:45 PM	13	66	2	0	47	32	0	0	45	97	10	0	12	93	23	0	442
Total	55	269	3	0	159	125	0	0	208	423	43	0	43	335	108	0	1774
Grand Total	218	1006	6	1	729	533	0	0	476	1160	152	0	143	678	290	1	5402
Approach	17.7	81.7	0.5	0.1	1.4	56.9	41.6	0.1	28.8	64.7	8.5	0.0	12.9	61.0	28.1	0.1	
Total %	4.0	18.6	0.1	0.0	0.3	13.5	9.9	0.0	8.8	21.3	2.8	0.0	2.8	12.6	5.4	0.0	

Start Time	Gateway From North				Richlieu From East				Gateway From South				Richlieu From West				Int. Total			
	Rght	Thru	Left	Peds	Rght	Thru	Left	Peds	Rght	Thru	Left	Peds	Rght	Thru	Left	Peds				
05:00 PM	55	269	3	0	159	125	0	0	208	423	43	0	674	43	335	108	0	486		
Peak Hour From 12:00 PM to 05:45 PM - Peak 1 of 1	Intersectio	n	0.9	0.0	327	1.0	55.4	43.6	0.0	30.9	62.9	6.4	0.0	8.8	68.9	22.2	0.0	1774		
Volume	16.8	82.3	0.9	0.0	75	0	37	37	0	74	60	99	13	0	172	19	96	27	0	483
Peak Factor	0.940	0.898	0.940	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898	0.898



Weekday
①

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
Intersection: Street Rd. / Knights Rd.
Date: Tuesday, June 3, 2003
Counter: ET / JT

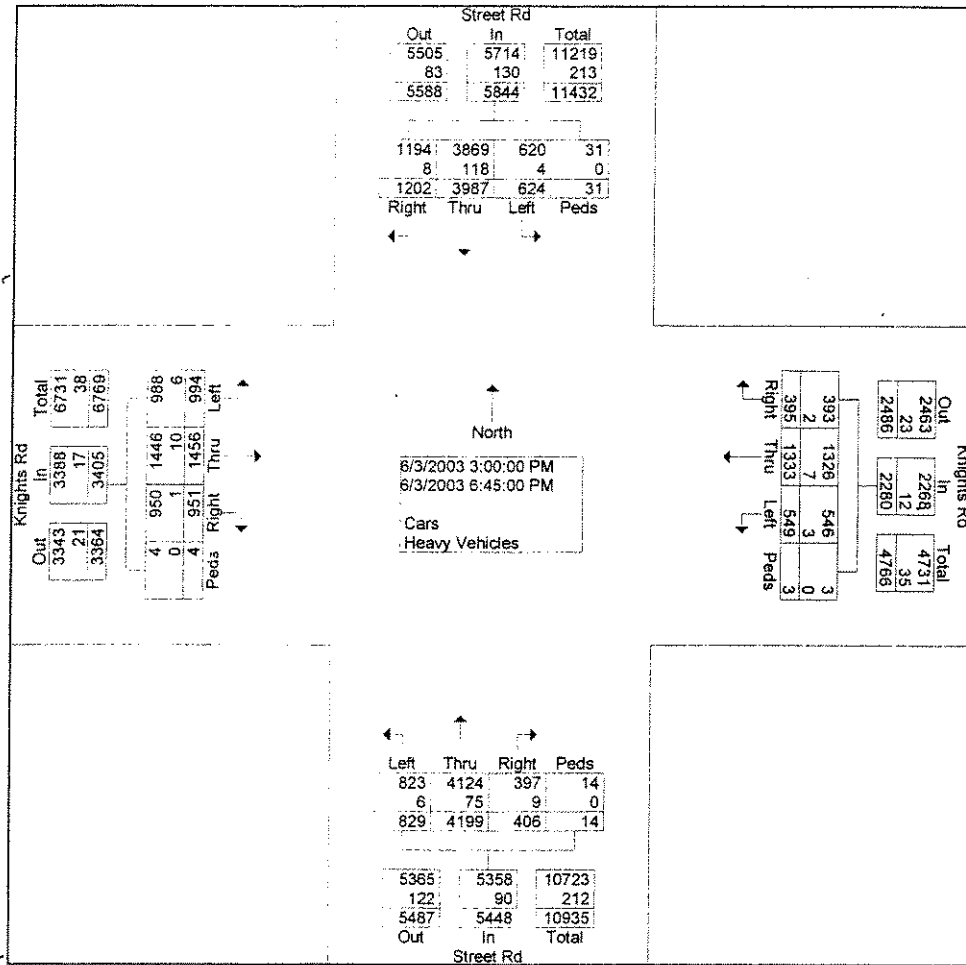
File Name : AF0603-1
Site Code : 00000000
Start Date : 06/03/2003
Page No : 1

Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd Southbound					Knights Rd Westbound					Street Rd Northbound					Knights Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	25	215	69	3	312	38	73	26	0	137	40	252	28	4	324	52	70	41	1	164	937
03:15 PM	30	227	51	3	311	22	66	15	1	104	47	270	28	0	345	60	74	42	1	177	937
03:30 PM	36	241	57	3	337	42	90	22	1	155	41	271	19	0	331	73	96	53	0	222	1045
03:45 PM	35	246	68	0	349	27	85	14	0	126	48	280	29	4	361	60	86	49	2	197	1033
Total	126	929	245	9	1309	129	314	77	2	522	176	1073	104	8	1361	245	326	185	4	760	3952
04:00 PM	33	242	64	0	339	34	78	19	0	131	64	260	23	0	347	65	90	65	0	220	1037
04:15 PM	33	278	76	4	391	38	77	29	0	144	44	284	33	1	362	57	95	68	0	220	1117
04:30 PM	56	255	104	1	416	42	111	21	0	174	56	254	31	1	342	59	88	51	0	198	1130
04:45 PM	41	254	90	0	385	35	79	34	1	149	52	296	38	0	386	56	96	61	0	213	1133
Total	163	1029	334	5	1531	149	345	103	1	598	216	1094	125	2	1437	237	369	245	0	851	4417
05:00 PM	52	250	74	3	379	46	99	39	0	184	49	255	25	2	331	62	105	77	0	244	1138
05:15 PM	51	327	93	0	471	35	75	20	0	130	55	331	11	0	397	66	92	51	0	209	1207
05:30 PM	43	246	87	2	378	36	97	28	0	161	64	247	29	0	340	81	97	53	0	231	1110
05:45 PM	30	270	76	2	378	26	71	23	0	120	59	272	30	0	361	47	85	69	0	201	1060
Total	176	1093	330	7	1606	143	342	110	0	595	227	1105	95	2	1429	256	379	250	0	885	4515
06:00 PM	45	242	74	0	361	33	102	27	0	162	53	270	29	1	353	81	102	70	0	253	1129
06:15 PM	43	238	71	2	354	27	80	26	0	133	49	219	31	0	299	58	88	69	0	215	1001
06:30 PM	34	230	68	4	336	35	85	29	0	149	58	246	14	0	318	56	93	74	0	223	1026
06:45 PM	37	226	80	4	347	33	65	23	0	121	50	192	8	1	251	61	99	58	0	218	937
Total	159	936	293	10	1398	128	332	105	0	565	210	927	82	2	1221	256	382	271	0	909	4093
Grand Total	624	3987	1202	31	5844	549	1333	395	3	2280	829	4199	406	14	5448	994	1456	951	4	3405	16977
Apprch %	10.7	68.2	20.6	0.5		24.1	58.5	17.3	0.1		15.2	77.1	7.5	0.3		29.2	42.8	27.9	0.1		
Total %	3.7	23.5	7.1	0.2	34.4	3.2	7.9	2.3	0.0	13.4	4.9	24.7	2.4	0.1	32.1	5.9	8.6	5.6	0.0	20.1	

Location: Bucks County, PA
Intersection: Street Rd. / Knights Rd.
Date: Tuesday, June 3, 2003
Counter: ET / JT

File Name : AF0603-1
Site Code : 00000000
Start Date : 06/03/2003
Page No : 2

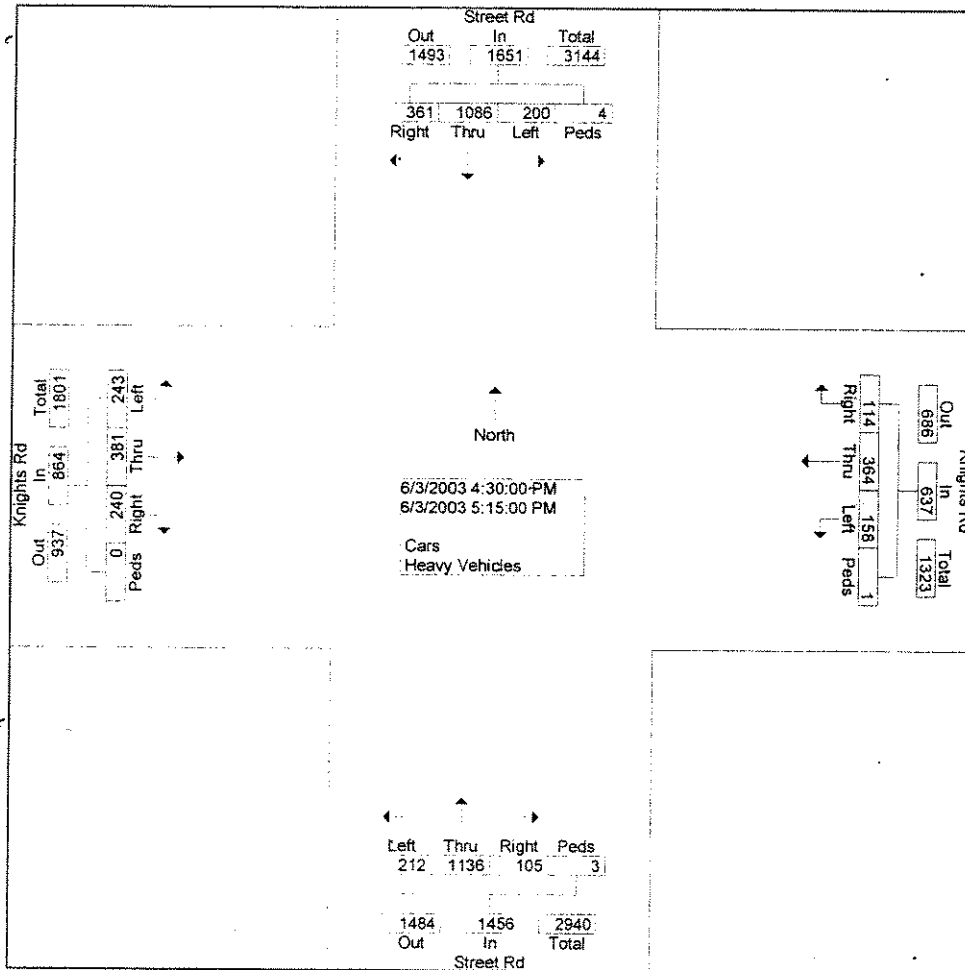


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
Intersection: Street Rd. / Knights Rd.
Date: Tuesday, June 3, 2003
Counter: ET / JT

File Name : AF0603-1
Site Code : 00000000
Start Date : 06/03/2003
Page No : 3

Start Time	Street Rd Southbound					Knights Rd Westbound					Street Rd Northbound					Knights Rd Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																						
Intersection																						
04:30 PM																						
Volume	200	1086	361	4	1651	158	364	114	1	637	212	1136	105	3	1456	243	381	240	0	864	4608	
Percent	12.1	65.8	21.9	0.2		24.8	57.1	17.9	0.2		14.6	78.0	7.2	0.2		28.1	44.1	27.8	0.0			
05:15																						
Volume	51	327	93	0	471	35	75	20	0	130	55	331	11	0	397	66	92	51	0	209	1207	
Peak Factor																						
High Int.																						
05:15 PM																						
Volume	51	327	93	0	471	46	99	39	0	184	55	331	11	0	397	62	105	77	0	244	1207	
Peak Factor	0.876					0.865					0.917					0.885						



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Busks Co., PA
Intersection: Street Rd. / Knights Rd.
Date: Saturday, July 19, 2003
Counter: ET / JT

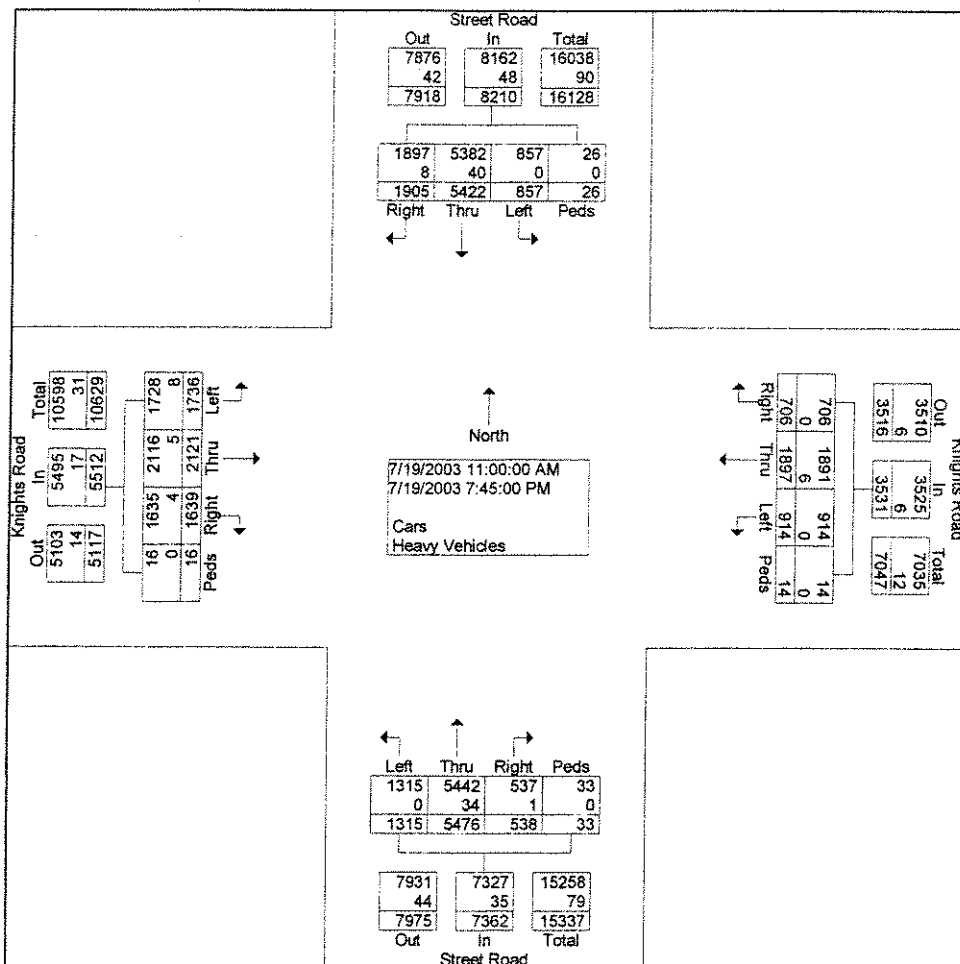
File Name : MS0719-1
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

Groups Printed- Cars - Heavy Vehicles

Start Time	Street Road Southbound					Knights Road Westbound					Street Road Northbound					Knights Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	43	215	88	0	346	36	70	40	1	147	55	221	21	0	297	62	79	83	2	226	1016
11:15 AM	31	250	70	0	351	51	85	31	1	168	50	236	20	2	308	64	98	57	3	222	1049
11:30 AM	44	246	76	3	369	49	86	36	0	171	61	261	17	2	341	80	112	70	0	262	1143
11:45 AM	37	238	79	0	354	50	98	28	1	177	68	287	25	0	380	66	107	75	0	248	1159
Total	155	949	313	3	1420	186	339	135	3	663	234	1005	83	4	1326	272	396	285	5	958	4367
12:00 PM	38	260	79	0	377	51	96	22	2	171	66	273	22	1	362	74	84	70	0	228	1138
12:15 PM	40	237	99	0	376	37	70	29	0	136	57	271	33	0	361	91	92	71	1	255	1128
12:30 PM	24	240	93	0	357	39	85	25	1	150	58	252	30	3	343	79	83	72	0	234	1084
12:45 PM	33	237	105	1	376	44	80	24	1	149	56	249	33	3	341	71	113	67	1	252	1118
Total	135	974	376	1	1486	171	331	100	4	606	237	1045	118	7	1407	315	372	280	2	969	4468
01:00 PM	41	255	61	3	360	46	86	34	0	166	63	243	31	1	338	74	101	64	0	239	1103
01:15 PM	29	222	75	3	329	49	84	45	1	179	68	257	16	1	342	77	100	62	0	239	1089
01:30 PM	38	234	89	0	361	37	91	36	1	165	51	259	26	1	337	73	88	64	0	225	1088
01:45 PM	45	251	85	1	382	38	87	25	2	152	52	252	26	1	331	71	86	69	0	226	1091
Total	153	962	310	7	1432	170	348	140	4	662	234	1011	99	4	1348	295	375	259	0	929	4371
** EAK **																					
05:00 PM	38	259	103	0	400	29	96	37	0	162	65	197	25	0	287	73	93	62	1	229	1078
05:15 PM	38	245	84	0	367	30	69	23	0	122	48	200	13	3	264	73	93	69	2	237	990
05:30 PM	41	196	71	1	309	39	72	26	0	137	34	193	26	3	256	69	65	69	0	203	905
05:45 PM	35	215	81	3	334	26	67	24	0	117	55	219	12	0	286	77	79	80	1	237	974
Total	152	915	339	4	1410	124	304	110	0	538	202	809	76	6	1093	292	330	280	4	906	3947
06:00 PM	36	239	66	7	348	31	73	27	3	134	43	233	26	5	307	69	72	67	2	210	999
06:15 PM	30	217	90	1	338	28	67	28	0	123	54	176	20	0	250	62	72	75	1	210	921
06:30 PM	28	209	65	0	302	37	96	21	0	154	55	215	21	0	291	66	78	68	0	212	959
06:45 PM	33	215	68	0	316	27	67	30	0	124	56	193	15	0	264	86	94	69	0	249	953
Total	127	880	289	8	1304	123	303	106	3	535	208	817	82	5	1112	283	316	279	3	881	3832
07:00 PM	34	217	83	0	334	27	75	26	0	128	50	188	23	3	264	77	91	70	0	238	964
07:15 PM	31	173	84	3	291	39	61	24	0	124	51	217	22	1	291	66	89	71	1	227	933
07:30 PM	49	178	66	0	293	32	60	34	0	126	51	188	19	0	258	61	80	55	1	197	874
07:45 PM	21	174	45	0	240	42	76	31	0	149	48	196	16	3	263	75	72	60	0	207	859
Total	135	742	278	3	1158	140	272	115	0	527	200	789	80	7	1076	279	332	256	2	869	3630
Grand Total	857	5422	1905	26	8210	914	1897	706	14	3531	1315	5476	538	33	7362	1736	2121	1639	16	5512	24615
Apprch %	10.4	66.0	23.2	0.3		25.9	53.7	20.0	0.4		17.9	74.4	7.3	0.4		31.5	38.5	29.7	0.3		
Total %	3.5	22.0	7.7	0.1	33.4	3.7	7.7	2.9	0.1	14.3	5.3	22.2	2.2	0.1	29.9	7.1	8.6	6.7	0.1	22.4	

Location: Bensalem, Busks Co., PA
Intersection: Street Rd. / Knights Rd.
Date: Saturday, July 19, 2003
Counter: ET / JT

File Name : MS0719-1
Site Code : 00000000
Start Date : 07/19/2003
Page No : 2

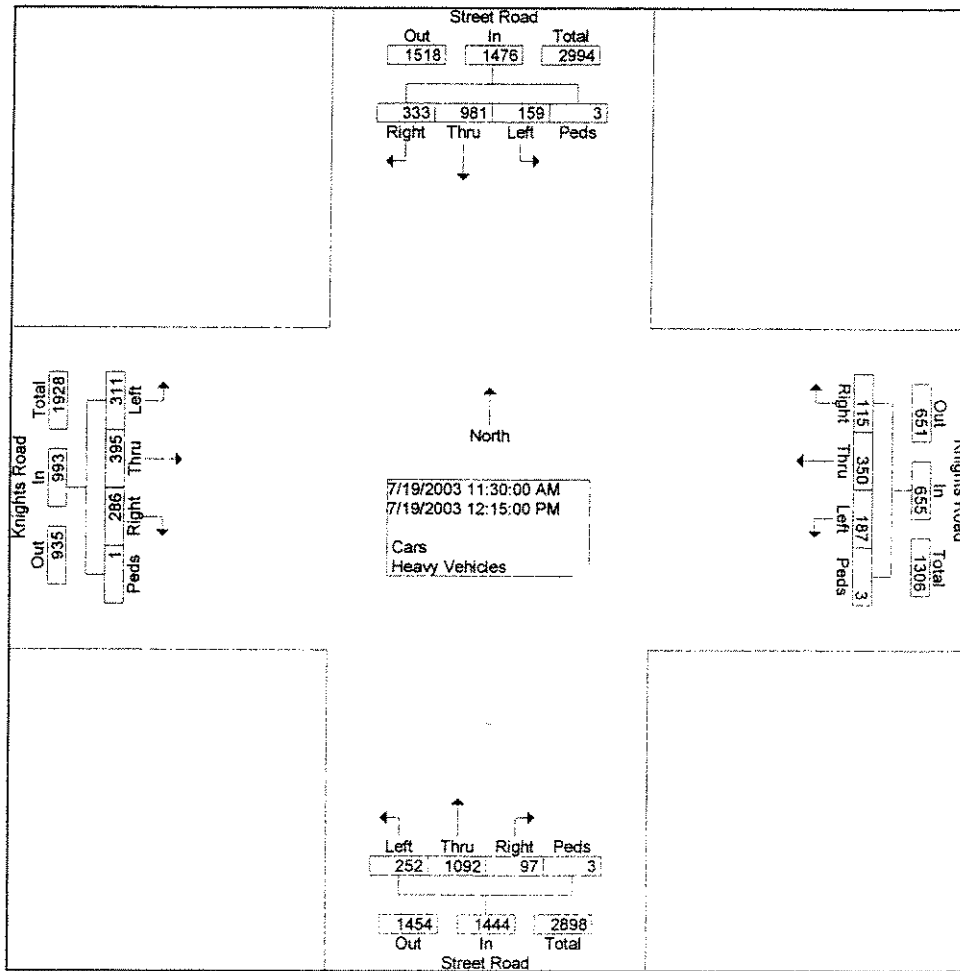


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Busks Co., PA
Intersection: Street Rd. / Knights Rd.
Date: Saturday, July 19, 2003
Counter: ET / JT

File Name : MS0719-1
Site Code : 00000000
Start Date : 07/19/2003
Page No : 3

Start Time	Street Road Southbound					Knights Road Westbound					Street Road Northbound					Knights Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 11:00 AM to 03:30 PM - Peak 1 of 1																					
Intersection	11:30 AM																				
Volume	159	981	333	3	1476	187	350	115	3	655	252	1092	97	3	1444	311	395	286	1	993	4568
Percent	10.8	66.5	22.6	0.2		28.5	53.4	17.6	0.5		17.5	75.6	6.7	0.2		31.3	39.8	28.8	0.1		
11:45 Volume	37	238	79	0	354	50	98	28	1	177	68	287	25	0	380	66	107	75	0	248	1159
Peak Factor																					
High Int. Volume	12:00 PM					11:45 AM					11:45 AM					11:30 AM					
Peak Factor	38	260	79	0	377	50	98	28	1	177	68	287	25	0	380	80	112	70	0	262	0.985
	0.979					0.925					0.950					0.948					

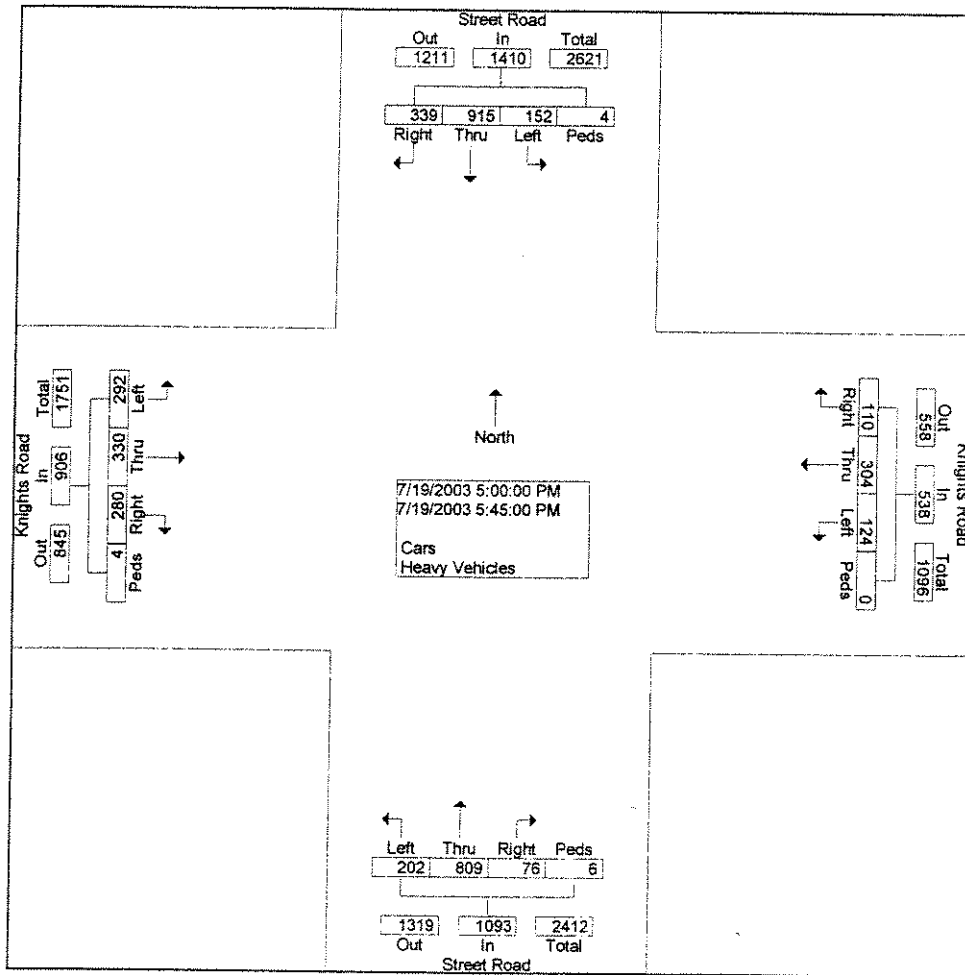


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Busks Co., PA
 Intersection: Street Rd. / Knights Rd.
 Date: Saturday, July 19, 2003
 Counter: ET / JT

File Name : MS0719-1
 Site Code : 00000000
 Start Date : 07/19/2003
 Page No : 4

Start Time	Street Road Southbound					Knights Road Westbound					Street Road Northbound					Knights Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																					
Intersection	05:00 PM																				
Volume	152	915	339	4	1410	124	304	110	0	538	202	809	76	6	1093	292	330	280	4	906	3947
Percent	10.8	64.9	24.0	0.3		23.0	56.5	20.4	0.0		18.5	74.0	7.0	0.5		32.2	36.4	30.9	0.4		
05:00 Volume	38	259	103	0	400	29	96	37	0	162	65	197	25	0	287	73	93	62	1	229	1078
Peak Factor																					0.915
High Int. Volume	05:00 PM					05:00 PM					05:00 PM					05:15 PM					
Peak Factor	0.881					0.830					0.952					0.956					



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Busks Co., PA
In section: Street Rd. / Knights Rd.
Date: Saturday, July 19, 2003
Counter: ET / JT

File Name : MS0719-1
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Street Road Southbound					Knights Road Westbound					Street Road Northbound					Knights Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	0	3	1	0	4	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5
11:15 AM	0	6	1	0	7	0	0	0	0	0	0	3	0	0	3	0	1	1	0	2	12
11:30 AM	0	2	1	0	3	0	1	0	0	1	0	3	0	0	3	1	0	0	0	1	8
11:45 AM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	1	0	1	0	2	9
Total	0	14	3	0	17	0	1	0	0	1	0	10	0	0	10	3	1	2	0	6	34
12:00 PM	0	1	1	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	5
12:15 PM	0	2	0	0	2	0	1	0	0	1	0	1	0	0	1	0	1	1	0	2	6
12:30 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
12:45 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	1	0	0	0	1	6
Total	0	6	1	0	7	0	1	0	0	1	0	9	0	0	9	1	1	1	0	3	20
01:00 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	3
01:15 PM	0	2	1	0	3	0	1	0	0	1	0	4	0	0	4	0	0	0	0	0	8
01:30 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
01:45 PM	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	0	0	1	0	1	6
Total	0	5	1	0	6	0	1	0	0	1	0	10	1	0	11	0	1	1	0	2	20
*** BREAK ***																					
05:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	3
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
05:45 PM	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	5
Total	0	6	1	0	7	0	1	0	0	1	0	1	0	0	1	2	0	0	0	2	11
06:00 PM	0	5	1	0	6	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	8
06:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
Total	0	6	1	0	7	0	1	0	0	1	0	2	0	0	2	1	1	0	0	2	12
07:00 PM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
07:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
07:30 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	3
07:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	3	1	0	4	0	1	0	0	1	0	2	0	0	2	1	1	0	0	2	9
Grand Total	0	40	8	0	48	0	6	0	0	6	0	34	1	0	35	8	5	4	0	17	106
Apprch %	0.0	83.3	16.7	0.0		0.0	100.0	0.0	0.0		0.0	97.1	2.9	0.0		47.1	29.4	23.5	0.0		
Total %	0.0	37.7	7.5	0.0	45.3	0.0	5.7	0.0	0.0	5.7	0.0	32.1	0.9	0.0	33.0	7.5	4.7	3.8	0.0	16.0	

Wednesday PM
2

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
Intersection: Street Rd. / Mechanicsville
Date: Thursday, June 5, 2003
Counter: RZVG

File Name : AF0605-2
Site Code : 00000000
Start Date : 06/05/2003
Page No : 1

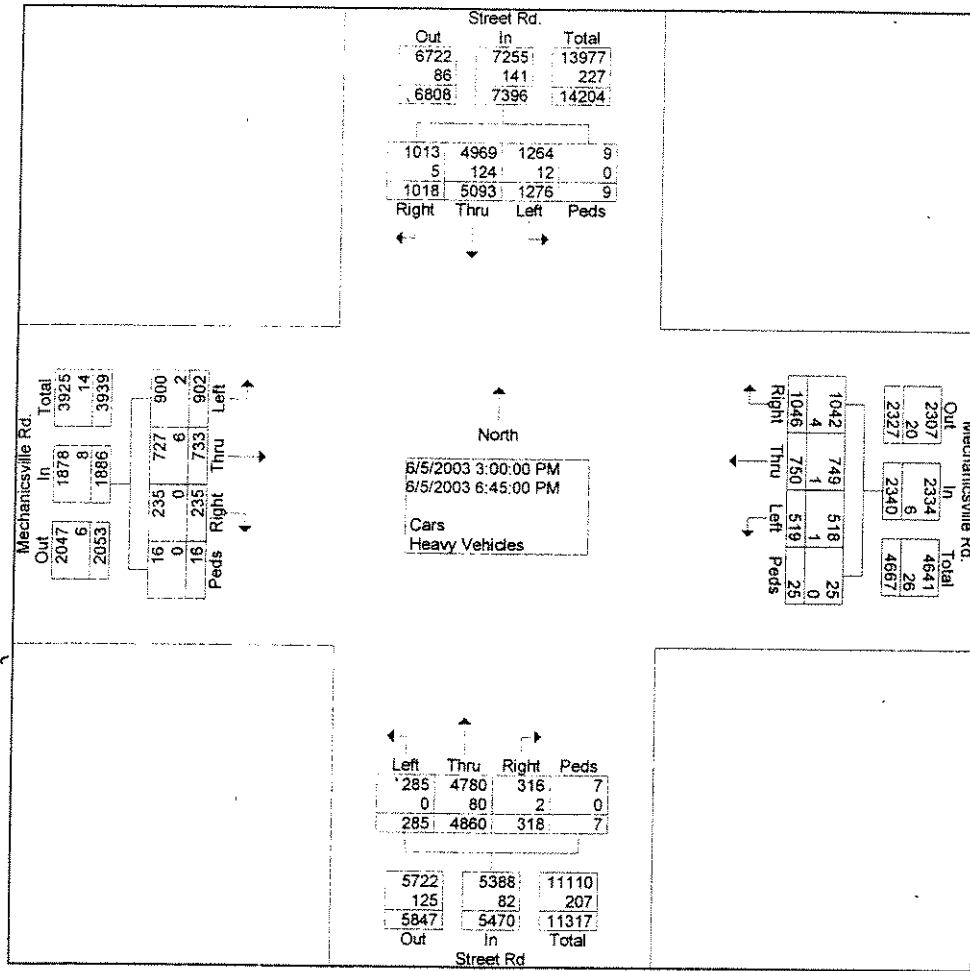
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd. Southbound					Mechanicsville Rd. Westbound					Street Rd. Northbound					Mechanicsville Rd. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	58	262	36	2	358	55	46	73	0	174	13	274	16	0	303	52	30	11	0	93	928
03:15 PM	57	285	54	1	397	38	54	54	2	148	21	288	20	0	329	38	43	12	2	95	969
03:30 PM	58	282	61	0	401	21	34	57	1	113	11	318	21	1	351	44	33	16	2	95	960
03:45 PM	75	284	58	0	417	27	56	69	2	154	18	284	20	0	322	57	39	13	0	109	1002
Total	248	1113	209	3	1573	141	190	253	5	589	63	1116	77	1	1305	191	145	52	4	392	3859
04:00 PM	91	304	53	0	448	30	36	73	1	140	21	295	22	1	339	48	51	9	1	109	1036
04:15 PM	77	311	54	0	442	39	45	68	0	152	20	295	16	0	331	55	37	12	1	105	1030
04:30 PM	86	305	62	1	454	35	49	86	2	172	16	343	21	0	380	52	52	19	0	123	1129
04:45 PM	79	312	87	0	478	37	61	52	3	153	21	337	22	0	380	79	59	20	0	158	1169
Total	333	1232	256	1	1822	141	191	279	6	617	78	1270	81	1	1430	234	199	60	2	495	4364
05:00 PM	104	386	66	1	557	25	42	83	1	151	13	343	30	0	386	65	57	9	0	131	1225
05:15 PM	94	357	83	1	535	25	62	81	6	174	18	309	20	0	347	63	61	11	1	136	1192
05:30 PM	107	343	76	0	526	37	44	77	1	159	21	321	28	3	373	60	44	14	3	121	1179
05:45 PM	103	331	92	1	527	31	57	71	1	160	19	324	22	0	365	76	45	19	0	140	1192
Total	408	1417	317	3	2145	118	205	312	9	644	71	1297	100	3	1471	264	207	53	4	528	4788
06:00 PM	88	372	68	2	530	22	49	63	0	134	11	286	17	1	315	72	50	14	1	137	1116
06:15 PM	61	340	73	0	474	27	35	57	1	120	23	283	15	0	321	53	49	18	3	123	1038
06:30 PM	81	311	56	0	448	32	41	41	0	114	20	259	15	1	295	48	55	24	0	127	984
06:45 PM	57	308	39	0	404	38	39	41	4	122	19	301	13	0	333	40	28	14	2	84	943
Total	287	1331	236	2	1856	119	164	202	5	490	73	1129	60	2	1264	213	182	70	6	471	4081
Grand Total	127	509	101	9	7396	519	750	104	25	2340	285	486	318	7	5470	902	733	235	16	1886	17092
Apprch %	17.3	68.9	13.8	0.1		22.2	32.1	44.7	1.1		5.2	88.8	5.8	0.1		47.8	38.9	12.5	0.8		
Total %	7.5	29.8	6.0	0.1	43.3	3.0	4.4	6.1	0.1	13.7	1.7	28.4	1.9	0.0	32.0	5.3	4.3	1.4	0.1	11.0	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In...section: Street Rd. / Mechanicsvill
Date: Thursday, June 5, 2003
Counter: RZ/VG

File Name : AF0605-2
Site Code : 00000000
Start Date : 06/05/2003
Page No : 2

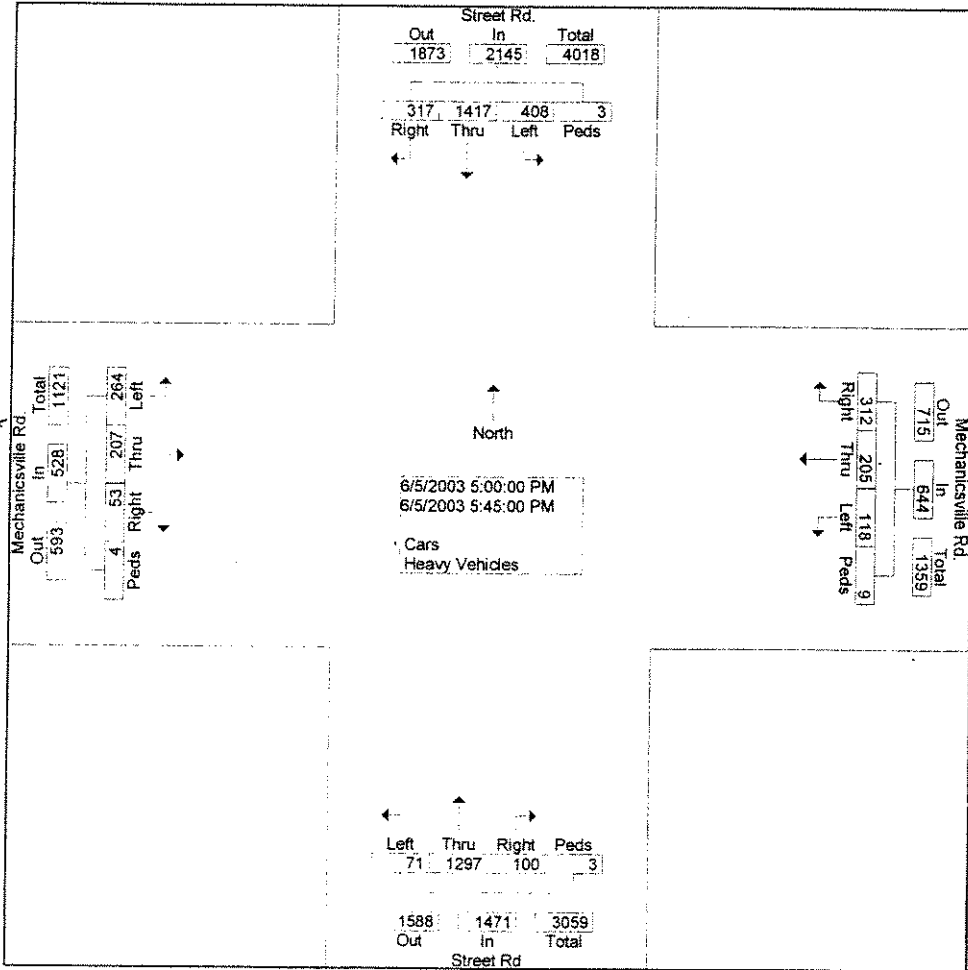


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In. section: Street Rd. / Mechanicsvill
Date: Thursday, June 5, 2003
Counter: RZ/VG

File Name : AF0605-2
Site Code : 00000000
Start Date : 06/05/2003
Page No : 3

Start Time	Street Rd. Southbound					Mechanicsville Rd. Westbound					Street Rd. Northbound					Mechanicsville Rd. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																					
Intersection	05:00 PM																				
Volume	408	1417	317	3	2145	118	205	312	9	644	71	1297	100	3	1471	264	207	53	4	528	4788
Percent	19.0	66.1	14.8	0.1		18.3	31.8	48.4	1.4		4.8	88.2	6.8	0.2		50.0	39.2	10.0	0.8		
Volume	104	386	66	1	557	25	42	83	1	151	13	343	30	0	386	65	57	9	0	131	1225
Peak Factor	0.963					0.925					0.953					0.943					
High Int.	05:00 PM					05:15 PM					05:00 PM					05:45 PM					
Volume	104	386	66	1	557	25	62	81	6	174	13	343	30	0	386	76	45	19	0	140	
Peak Factor	0.963					0.925					0.953					0.943					



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
Intersection: Street / Mechanicsville
Date: Saturday, July 26, 2003
Counter: ET / JT

File Name : MS0726-2
Site Code : 00000000
Start Date : 07/26/2003
Page No : 1

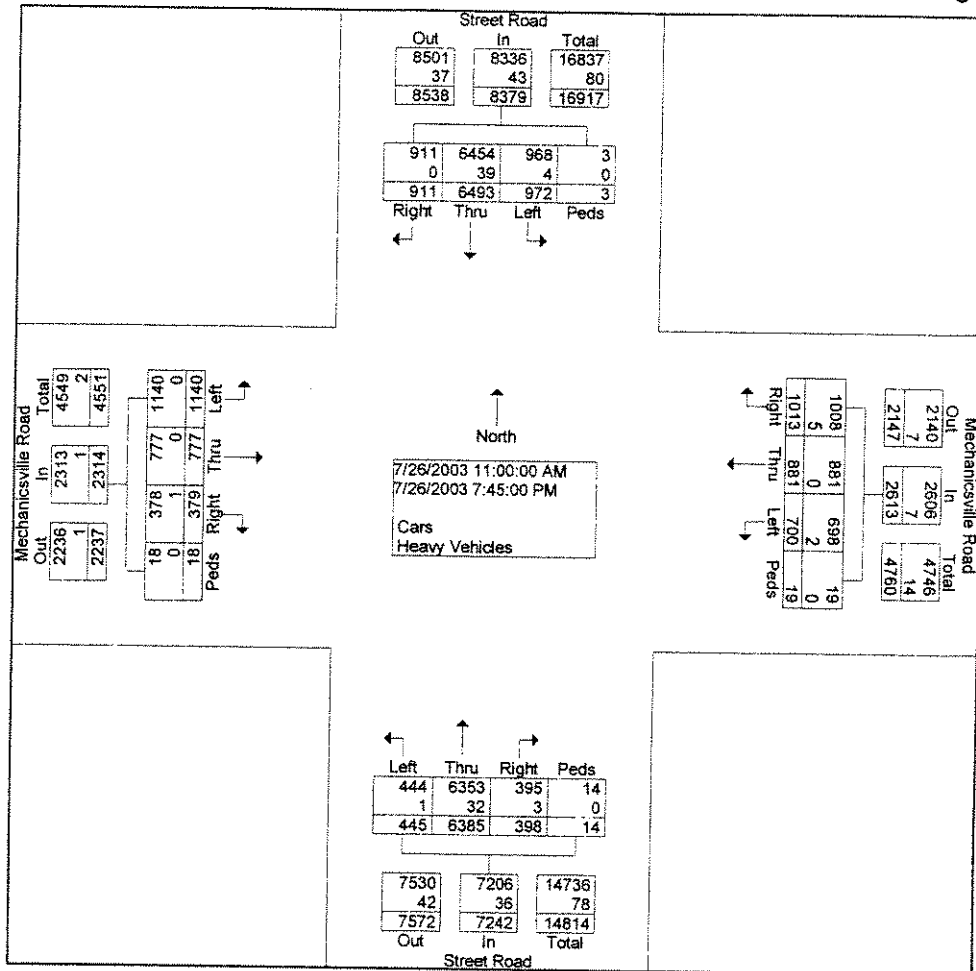
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Road Southbound					Mechanicsville Road Westbound					Street Road Northbound					Mechanicsville Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	33	265	48	0	346	25	37	37	0	99	26	241	13	0	280	58	37	21	0	116	841
11:15 AM	49	300	32	0	381	27	49	36	1	113	23	253	20	2	298	55	44	26	1	126	918
11:30 AM	42	251	31	0	324	33	37	50	1	121	25	274	16	0	315	45	36	21	2	104	864
11:45 AM	43	278	34	0	355	32	33	66	0	131	20	317	17	0	354	60	35	11	0	106	946
Total	167	1094	145	0	1406	117	156	189	2	464	94	1085	66	2	1247	218	152	79	3	452	3569
12:00 PM	61	305	30	0	396	31	49	63	0	143	27	292	24	0	343	57	42	22	0	121	1003
12:15 PM	46	296	34	0	376	41	48	47	1	137	23	314	21	1	359	51	43	29	0	123	995
12:30 PM	46	278	43	0	367	39	41	64	2	146	26	295	24	1	346	68	38	22	0	128	987
12:45 PM	51	277	39	0	367	24	34	47	0	105	24	281	15	0	320	57	37	22	0	116	908
Total	204	1156	146	0	1506	135	172	221	3	531	100	1182	84	2	1368	233	160	95	0	488	3893
01:00 PM	41	304	31	0	376	38	44	58	0	140	17	281	22	1	321	45	33	12	0	90	927
01:15 PM	51	287	38	2	378	43	34	57	1	135	21	268	27	1	317	61	43	17	1	122	952
01:30 PM	40	295	35	0	370	24	41	47	0	112	22	278	14	2	316	52	20	14	0	86	884
01:45 PM	29	265	39	0	333	34	36	50	0	120	17	278	23	1	319	58	35	18	0	111	883
Total	161	1151	143	2	1457	139	155	212	1	507	77	1105	86	5	1273	216	131	61	1	409	3646
*** PEAK ***																					
05:00 PM	48	319	49	0	416	22	35	36	0	93	18	301	12	0	331	36	36	14	1	87	927
05:15 PM	28	280	47	0	355	35	36	39	1	111	12	234	11	0	257	58	30	8	3	99	822
05:30 PM	38	274	39	0	351	21	32	45	0	98	20	252	22	2	296	49	26	6	0	81	926
05:45 PM	36	266	36	0	338	30	47	36	4	117	13	250	16	0	279	61	27	13	0	101	835
Total	150	1139	171	0	1460	108	150	156	5	419	63	1037	61	2	1163	204	119	41	4	368	3410
06:00 PM	45	265	43	1	354	29	35	34	2	100	15	274	15	0	304	48	40	16	2	106	864
06:15 PM	35	250	33	0	318	29	34	36	0	99	14	257	13	1	285	29	23	19	1	72	774
06:30 PM	32	270	35	0	337	29	41	31	1	102	19	226	13	0	258	37	27	9	0	73	770
06:45 PM	51	266	38	0	355	17	32	32	0	81	19	280	15	0	314	27	18	9	2	56	806
Total	163	1051	149	1	1364	104	142	133	3	382	67	1037	56	1	1161	141	108	53	5	307	3214
07:00 PM	36	238	45	0	319	27	28	29	3	87	8	291	12	0	311	41	25	17	2	85	802
07:15 PM	32	252	44	0	328	21	24	25	0	70	16	231	9	1	257	24	23	13	2	62	717
07:30 PM	28	209	35	0	272	29	30	23	0	82	13	219	8	1	241	33	32	7	0	72	667
07:45 PM	31	203	33	0	267	20	24	25	2	71	7	198	16	0	221	30	27	13	1	71	630
Total	127	902	157	0	1186	97	106	102	5	310	44	939	45	2	1030	128	107	50	5	290	2816
Grand Total	972	6493	911	3	8379	700	881	1013	19	2613	445	6385	398	14	7242	1140	777	379	18	2314	20548
Apprch %	11.6	77.5	10.9	0.0		26.8	33.7	38.8	0.7		6.1	88.2	5.5	0.2		49.3	33.6	16.4	0.8		
Total %	4.7	31.6	4.4	0.0	40.8	3.4	4.3	4.9	0.1	12.7	2.2	31.1	1.9	0.1	35.2	5.5	3.8	1.8	0.1	11.3	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. section: Street / Mechanicsville
Date: Saturday, July 26, 2003
Counter: ET / JT

File Name : MS0726-2
Site Code : 00000000
Start Date : 07/26/2003
Page No : 2

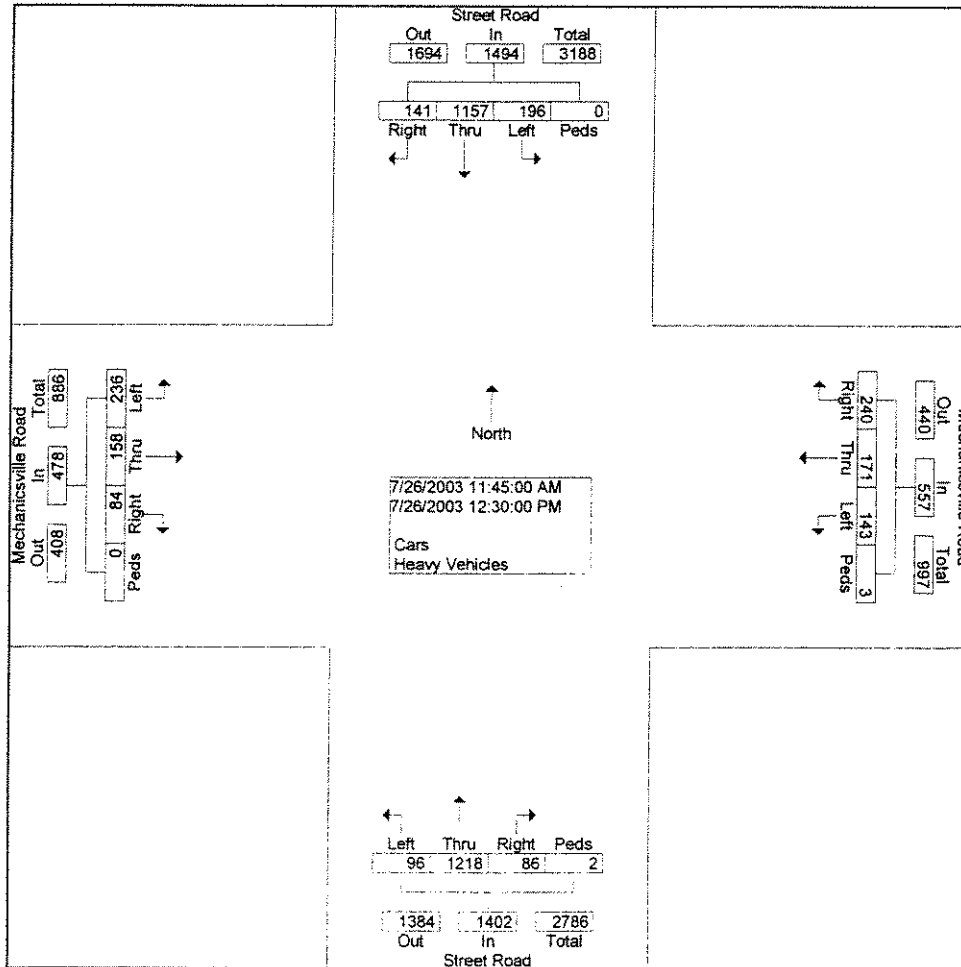


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. Section: Street / Mechanicsville
Date: Saturday, July 26, 2003
Counter: ET / JT

File Name : MS0726-2
Site Code : 00000000
Start Date : 07/26/2003
Page No : 3

Start Time	Street Road Southbound					Mechanicsville Road Westbound					Street Road Northbound					Mechanicsville Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 11:00 AM to 03:30 PM - Peak 1 of 1																					
Intersection	11:45 AM																				
Volume	196	1157	141	0	1494	143	171	240	3	557	96	1218	86	2	1402	236	158	84	0	478	3931
Percent	13.1	77.4	9.4	0.0		25.7	30.7	43.1	0.5		6.8	86.9	6.1	0.1		49.4	33.1	17.6	0.0		
Volume	61	305	30	0	396	31	49	63	0	143	27	292	24	0	343	57	42	22	0	121	1003
Peak Factor																					
High Int.	12:00 PM					12:30 PM					12:15 PM					12:30 PM					
Volume	61	305	30	0	396	39	41	64	2	146	23	314	21	1	359	68	38	22	0	128	
Peak Factor	0.943					0.954					0.976					0.934					

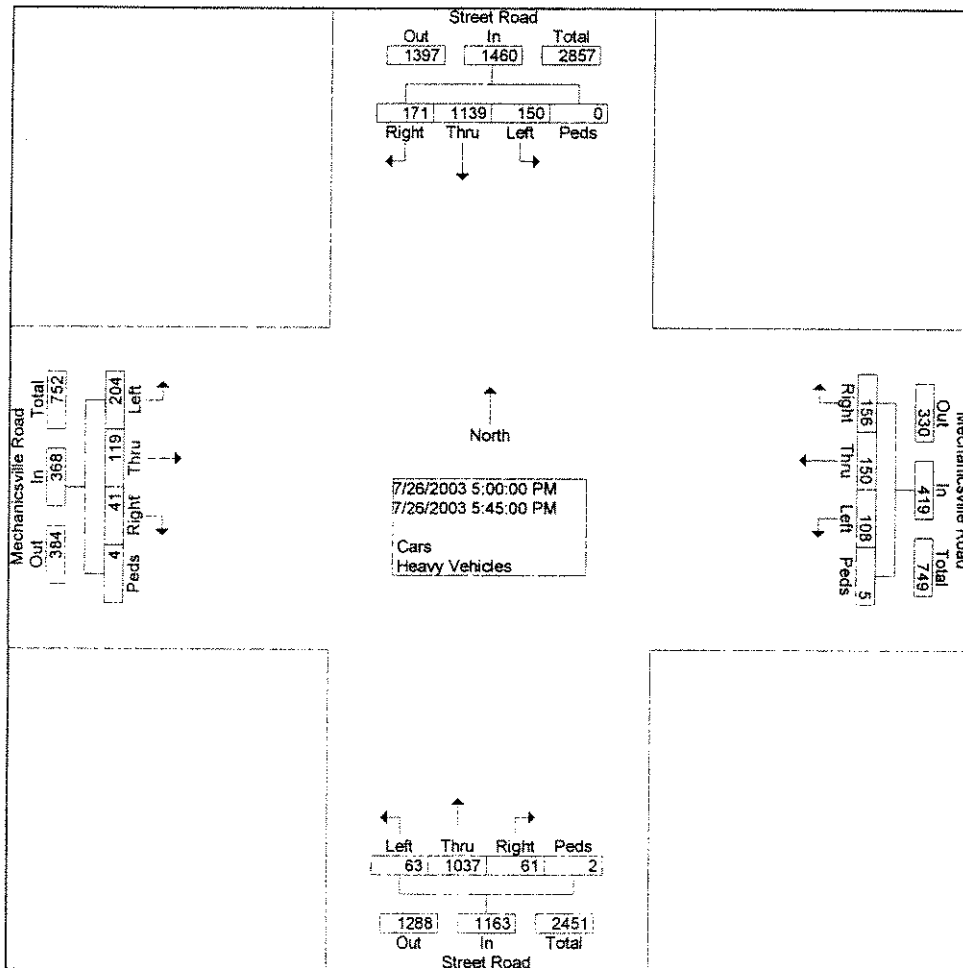


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. Section: Street / Mechanicsville
Date: Saturday, July 26, 2003
Counter: ET / JT

File Name : MS0726-2
Site Code : 00000000
Start Date : 07/26/2003
Page No : 4

Start Time	Street Road Southbound					Mechanicsville Road Westbound					Street Road Northbound					Mechanicsville Road Eastbound					Int. Total				
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total					
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																									
Intersection	05:00 PM																								
Volume	150	1139	171	0	1460	108	150	156	5	419	63	1037	61	2	1163	204	119	41	4	368	3410				
Percent	10.3	78.0	11.7	0.0		25.8	35.8	37.2	1.2		5.4	89.2	5.2	0.2		55.4	32.3	11.1	1.1						
Volume	48	319	49	0	416	22	35	36	0	93	18	301	12	0	331	36	36	14	1	87	927				
Peak Factor																					0.920				
High Int.	05:00 PM																								
Volume	48	319	49	0	416	05:45 PM					05:00 PM					05:45 PM									
Peak Factor	0.877										0.895					0.878					0.911				



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
Injury section: Street / Mechanicsville
Date: Saturday, July 26, 2003
Counter: ET / JT

File Name : MS0726-2
Site Code : 00000000
Start Date : 07/26/2003
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Street Road Southbound					Mechanicsville Road Westbound					Street Road Northbound					Mechanicsville Road Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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			
11:00 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
11:15 AM	0	4	0	0	4	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	0	7
11:30 AM	1	2	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	1	0	1	1	7
11:45 AM	1	1	0	0	2	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	8
Total	2	9	0	0	11	1	0	0	0	1	1	11	1	0	13	0	0	1	0	1	1	26
12:00 PM	0	6	0	0	6	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	8
12:15 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5
12:30 PM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1
12:45 PM	0	0	0	0	0	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	5
Total	0	9	0	0	9	1	0	1	0	2	0	8	0	0	8	0	0	0	0	0	0	19
01:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
01:15 PM	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
01:30 PM	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	3
01:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
Total	0	9	0	0	9	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	12
*** BREAK ***																						
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
05:15 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
Total	1	5	0	0	6	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	9
06:00 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
06:15 PM	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	3
06:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	3
Total	0	3	0	0	3	0	0	1	0	1	0	6	1	0	7	0	0	0	0	0	0	11
07:00 PM	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	3
07:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
07:30 PM	0	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
07:45 PM	1	0	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	3
Total	1	4	0	0	5	0	0	2	0	2	0	2	1	0	3	0	0	0	0	0	0	10
Grand Total	4	39	0	0	43	2	0	5	0	7	1	32	3	0	36	0	0	1	0	1	1	87
Apprch %	9.3	90.7	0.0	0.0		28.6	0.0	71.4	0.0		2.8	88.9	8.3	0.0		0.0	0.0	100.0	0.0			
Total %	4.6	44.8	0.0	0.0	49.4	2.3	0.0	5.7	0.0	8.0	1.1	36.8	3.4	0.0	41.4	0.0	0.0	1.1	0.0	1.1		

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In-section: Street / Race Track
Date: Tuesday, June 10, 2003
Counter: ET / JT

File Name : AF0610-3
Site Code : 00000000
Start Date : 06/10/2003
Page No : 1

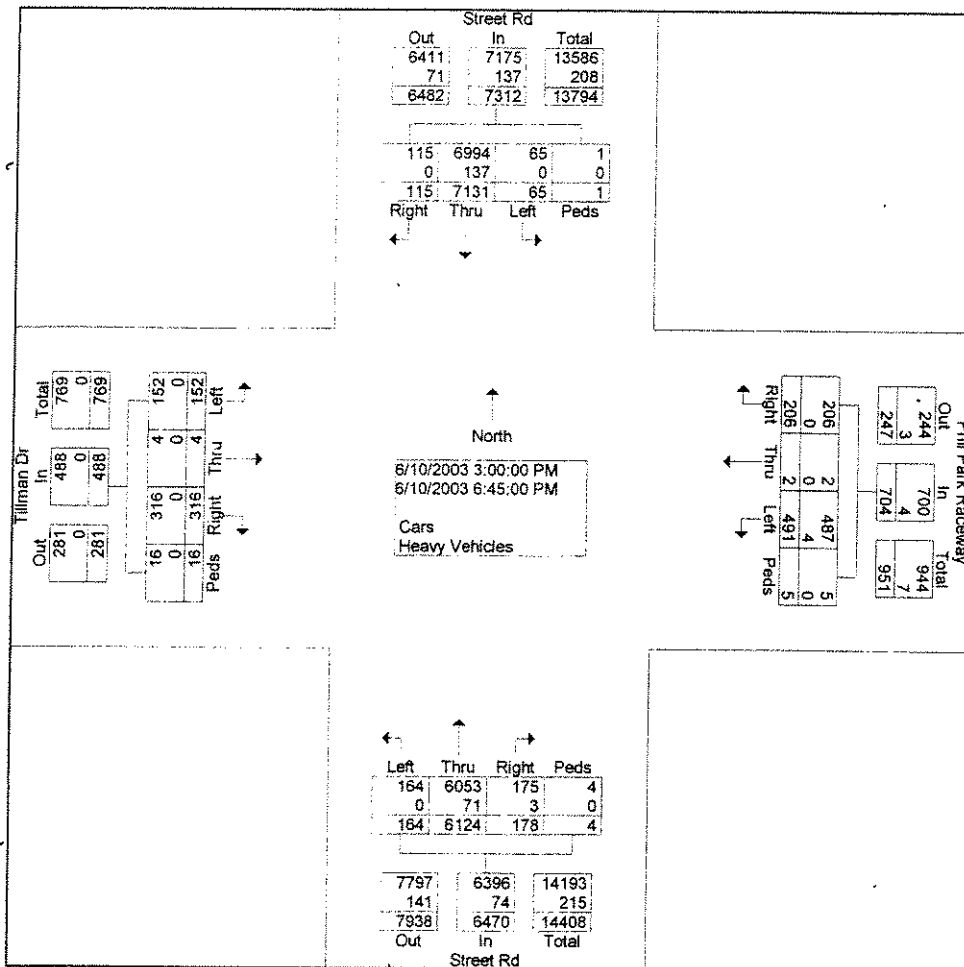
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd Southbound					Phil Park Raceway Westbound					Street Rd Northbound					Tilman Dr Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	4	354	2	0	360	21	0	12	0	33	3	323	9	0	335	6	0	5	0	11	739
03:15 PM	6	375	5	0	386	27	0	12	1	40	6	363	17	0	386	2	0	5	0	7	819
03:30 PM	2	372	2	1	377	31	0	22	2	55	5	381	14	0	400	6	0	11	4	21	853
03:45 PM	5	436	9	0	450	25	0	13	0	38	13	413	13	1	440	6	0	7	1	14	942
Total	17	1537	18	1	1573	104	0	59	3	166	27	1480	53	1	1561	20	0	28	5	53	3353
04:00 PM	6	451	4	0	461	56	0	23	0	79	11	358	12	0	381	8	1	17	1	27	948
04:15 PM	0	434	6	0	440	21	1	14	1	37	7	385	12	0	404	6	0	10	0	16	897
04:30 PM	6	483	5	0	494	89	0	52	0	141	16	448	7	0	471	10	0	26	1	37	1143
04:45 PM	3	444	5	0	452	47	0	12	0	59	9	449	13	0	471	12	0	30	0	42	1024
Total	15	1812	20	0	1847	213	1	101	1	316	43	1640	44	0	1727	36	1	83	2	122	4012
05:00 PM	1	515	6	0	522	56	0	24	0	80	8	421	7	0	436	11	0	42	1	54	1092
05:15 PM	7	458	9	0	474	21	0	7	0	28	7	442	6	1	456	11	0	37	3	51	1009
05:30 PM	6	534	9	0	549	40	0	7	1	48	15	364	11	1	391	18	0	18	3	39	1027
05:45 PM	4	444	13	0	461	11	0	0	0	11	11	400	6	0	417	6	0	21	0	27	916
Total	18	1951	37	0	2006	128	0	38	1	167	41	1627	30	2	1700	46	0	118	7	171	4044
06:00 PM	3	472	7	0	482	21	0	3	0	24	21	369	12	0	402	19	0	22	0	41	949
06:15 PM	5	509	11	0	525	8	0	2	0	10	10	337	8	0	355	6	1	35	1	43	933
06:30 PM	3	441	14	0	458	11	1	2	0	14	12	318	14	1	345	8	2	13	1	24	841
06:45 PM	4	409	8	0	421	6	0	1	0	7	10	353	17	0	380	17	0	17	0	34	842
Total	15	1831	40	0	1886	46	1	8	0	55	53	1377	51	1	1482	50	3	87	2	142	3565
Grand Total	65	7131	115	1	7312	491	2	206	5	704	164	6124	178	4	6470	152	4	316	16	488	14974
Apprch %	0.9	97.5	1.6	0.0		69.7	0.3	29.3	0.7		2.5	94.7	2.8	0.1		31.1	0.8	64.8	3.3		
Total %	0.4	47.6	0.8	0.0	48.8	3.3	0.0	1.4	0.0	4.7	1.1	40.9	1.2	0.0	43.2	1.0	0.0	2.1	0.1	3.3	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
Intersection: Street / Race Track
Date: Tuesday, June 10, 2003
Counter: ET / JT

File Name : AF0610-3
Site Code : 00000000
Start Date : 06/10/2003
Page No : 2

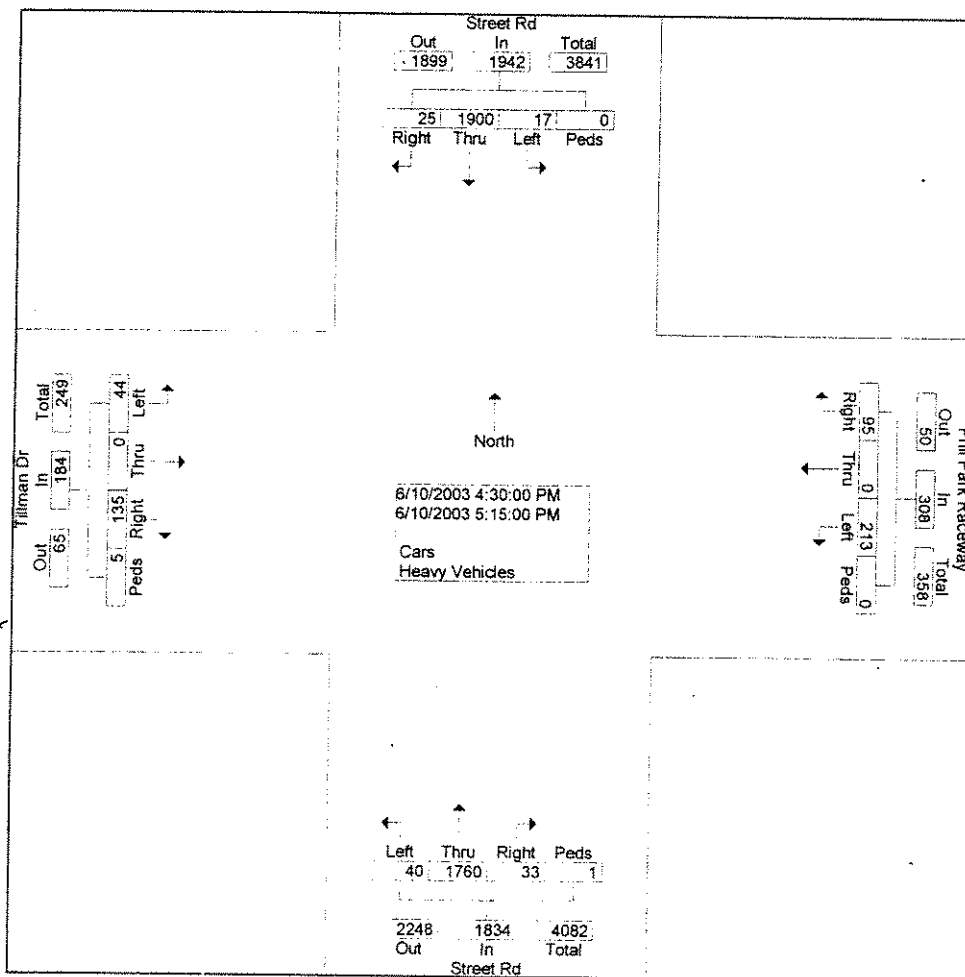


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In. section: Street / Race Track
Date: Tuesday, June 10, 2003
Counter: ET / JT

File Name : AF0610-3
Site Code : 00000000
Start Date : 06/10/2003
Page No : 3

Start Time	Street Rd Southbound					Left	Phil Park Raceway Westbound				Street Rd Northbound					Tillman Dr Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total		Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	17	1900	25	0	1942	213	0	95	0	308	40	1760	33	1	1834	44	0	135	5	184	4268
Percent	0.9	97.8	1.3	0.0	69.2	0.0	30.8	0.0			2.2	96.0	1.8	0.1		23.9	0.0	73.4	2.7		
Volume	6	483	5	0	494	89	0	52	0	141	16	448	7	0	471	10	0	26	1	37	1143
Peak Factor	0.934																				
High Int. Volume	05:00 PM					04:30 PM					04:30 PM					05:00 PM					
Peak Factor	1	515	6	0	522	89	0	52	0	141	16	448	7	0	471	11	0	42	1	54	0.852
	0.930					0.546					0.973										



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
In. Section: Street Rd / Phil Race Trac
Date: Saturday, July 19, 2003
Weather: Id

File Name : MS0719-3
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

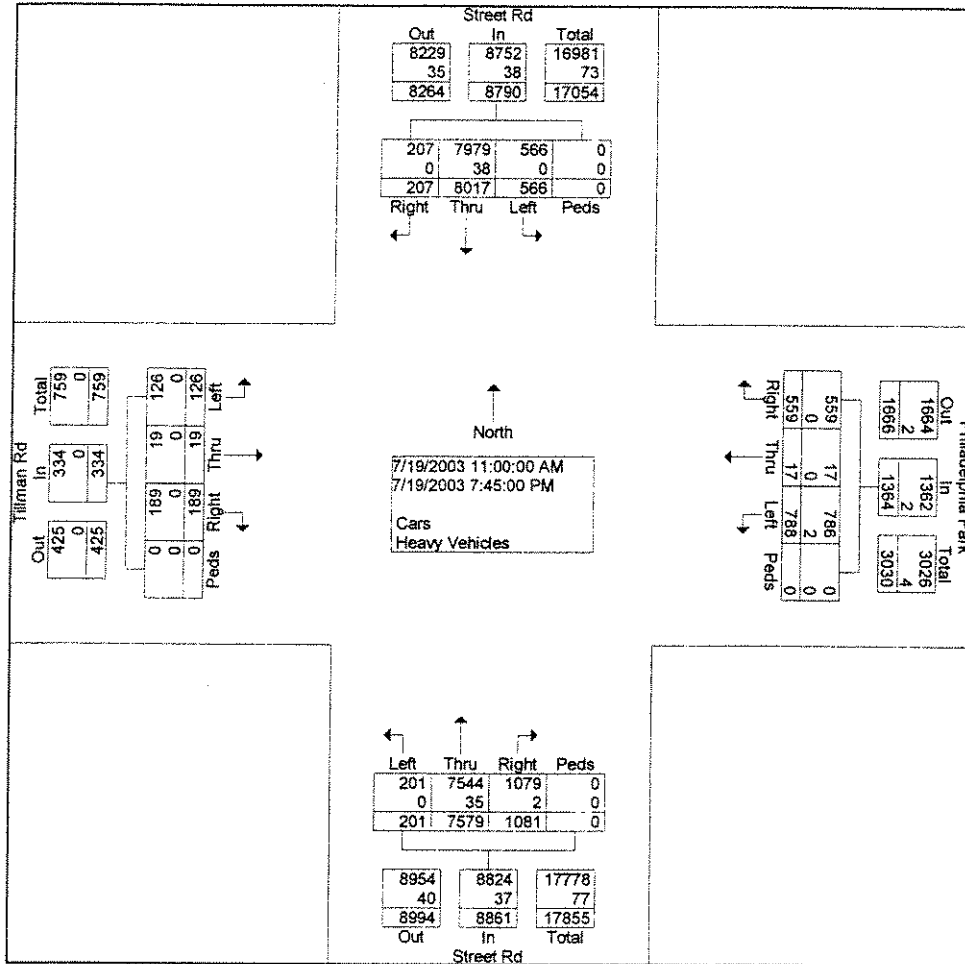
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd Southbound					Philadelphia Park Westbound					Street Rd Northbound					Tillman Rd Eastbound					Int. Total
	Left	Thru	Rig ht	Ped s	App. Total	Left	Thru	Rig ht	Ped s	App. Total	Left	Thru	Rig ht	Ped s	App. Total	Left	Thru	Rig ht	Ped s	App. 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		
11:00 AM	23	348	3	0	374	24	2	28	0	54	5	278	68	0	351	2	2	2	0	6	785
11:15 AM	46	338	2	0	386	21	0	19	0	40	4	291	61	0	356	2	1	4	0	7	789
11:30 AM	37	367	3	0	407	29	0	19	0	48	5	332	89	0	426	2	2	9	0	13	894
11:45 AM	73	348	1	0	422	22	0	20	0	42	5	347	119	0	471	3	0	6	0	9	944
Total	179	1401	9	0	1589	96	2	86	0	184	19	1248	337	0	1604	9	5	21	0	35	3412
12:00 PM	55	352	7	0	414	28	1	13	0	42	8	344	126	0	478	4	3	5	0	12	946
12:15 PM	46	350	4	0	400	45	1	16	0	62	5	364	85	0	454	8	1	4	0	13	929
12:30 PM	37	368	6	0	411	23	0	23	0	46	5	338	74	0	417	0	1	8	0	9	883
12:45 PM	34	363	5	0	402	21	1	17	0	39	9	335	59	0	403	3	1	9	0	13	857
Total	172	1433	22	0	1627	117	3	69	0	189	27	1381	344	0	1752	15	6	26	0	47	3615
01:00 PM	33	365	4	0	402	33	1	20	0	54	6	320	60	0	386	6	0	11	0	17	859
01:15 PM	33	342	2	0	377	25	0	24	0	49	12	332	47	0	391	3	1	6	0	10	827
01:30 PM	32	357	9	0	398	33	0	19	0	52	5	330	59	0	394	4	1	6	0	11	855
01:45 PM	32	343	7	0	382	24	0	18	0	42	7	336	40	0	383	2	0	6	0	8	815
Total	130	1407	22	0	1559	115	1	81	0	197	30	1318	206	0	1554	15	2	29	0	46	3356
*** PEAK ***																					
05:00 PM	7	361	11	0	379	95	3	59	0	157	9	321	18	0	348	4	0	4	0	8	892
05:15 PM	4	328	13	0	345	52	6	28	0	86	11	304	27	0	342	8	1	11	0	20	793
05:30 PM	8	317	10	0	335	56	0	49	0	105	9	308	6	0	323	8	0	11	0	19	782
05:45 PM	8	355	14	0	377	46	0	39	0	85	10	367	18	0	395	10	2	13	0	25	882
Total	27	1361	48	0	1436	249	9	175	0	433	39	1300	69	0	1408	30	3	39	0	72	3349
06:00 PM	10	311	10	0	331	69	2	51	0	122	3	316	13	0	332	7	1	4	0	12	797
06:15 PM	6	352	9	0	367	30	0	33	0	63	9	311	15	0	335	7	0	11	0	18	783
06:30 PM	6	324	16	0	346	33	0	17	0	50	12	282	15	0	309	5	0	13	0	18	723
06:45 PM	7	297	11	0	315	22	0	17	0	39	16	311	26	0	353	4	1	10	0	15	722
Total	29	1284	46	0	1359	154	2	118	0	274	40	1220	69	0	1329	23	2	38	0	63	3025
07:00 PM	10	294	11	0	315	24	0	15	0	39	16	268	17	0	301	8	0	5	0	13	668
07:15 PM	6	291	12	0	309	7	0	3	0	10	7	295	16	0	318	6	0	15	0	21	658
07:30 PM	3	273	20	0	296	14	0	6	0	20	10	293	14	0	317	14	1	8	0	23	656
07:45 PM	10	273	17	0	300	12	0	6	0	18	13	256	9	0	278	6	0	8	0	14	610
Total	29	1131	60	0	1220	57	0	30	0	87	46	1112	56	0	1214	34	1	36	0	71	2592
Grand Total	566	8017	207	0	8790	788	17	559	0	1364	201	7579	1081	0	8861	126	19	189	0	334	19349
Apprch %	6.4	91.2	2.4	0.0		57.8	1.2	41.0	0.0		2.3	85.5	12.2	0.0		37.7	5.7	56.6	0.0		
Total %	2.9	41.4	1.1	0.0	45.4	4.1	0.1	2.9	0.0	7.0	1.0	39.2	5.6	0.0	45.8	0.7	0.1	1.0	0.0	1.7	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
In. Section: Street Rd / Phil Race Trac
Date: Saturday, July 19, 2003
Weather: Id

File Name : MS0719-3
Site Code : 00000000
Start Date : 07/19/2003
Page No : 2

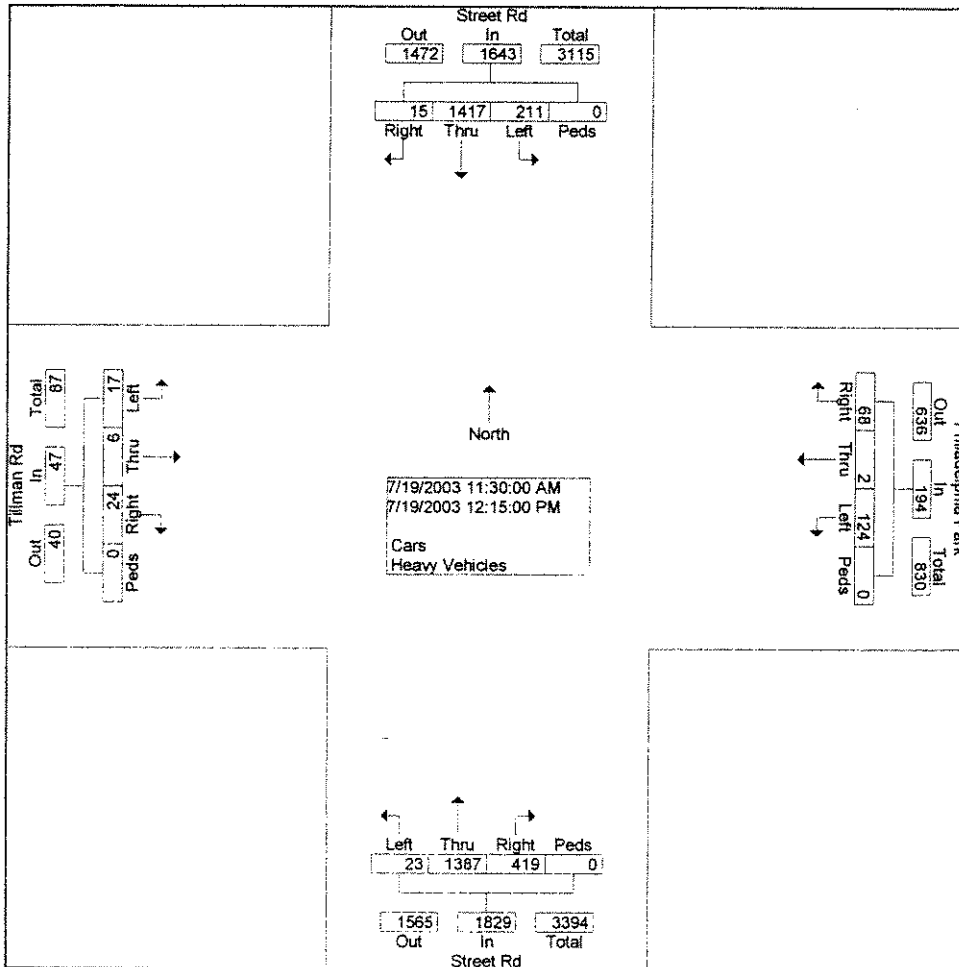


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
In. section: Street Rd / Phil Race Trac
Date: Saturday, July 19, 2003
Weather: ld

File Name : MS0719-3
Site Code : 00000000
Start Date : 07/19/2003
Page No : 3

Start Time	Street Rd Southbound					Philadelphia Park Westbound					Street Rd Northbound					Tillman Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 11:00 AM to 03:30 PM - Peak 1 of 1																					
Intersection	11:30 AM																				
Volume	211	1417	15	0	1643	124	2	68	0	194	23	1387	419	0	1829	17	6	24	0	47	3713
Percent	12.8	86.2	0.9	0.0		63.9	1.0	35.1	0.0		1.3	75.8	22.9	0.0		36.2	12.8	51.1	0.0		
Volume	55	352	7	0	414	28	1	13	0	42	8	344	126	0	478	4	3	5	0	12	946
Peak Factor	0.981																				
High Int.	11:45 AM					12:15 PM					12:00 PM					11:30 AM					
Volume	73	348	1	0	422	45	1	16	0	62	8	344	126	0	478	2	2	9	0	13	
Peak Factor	0.973					0.782					0.957					0.904					

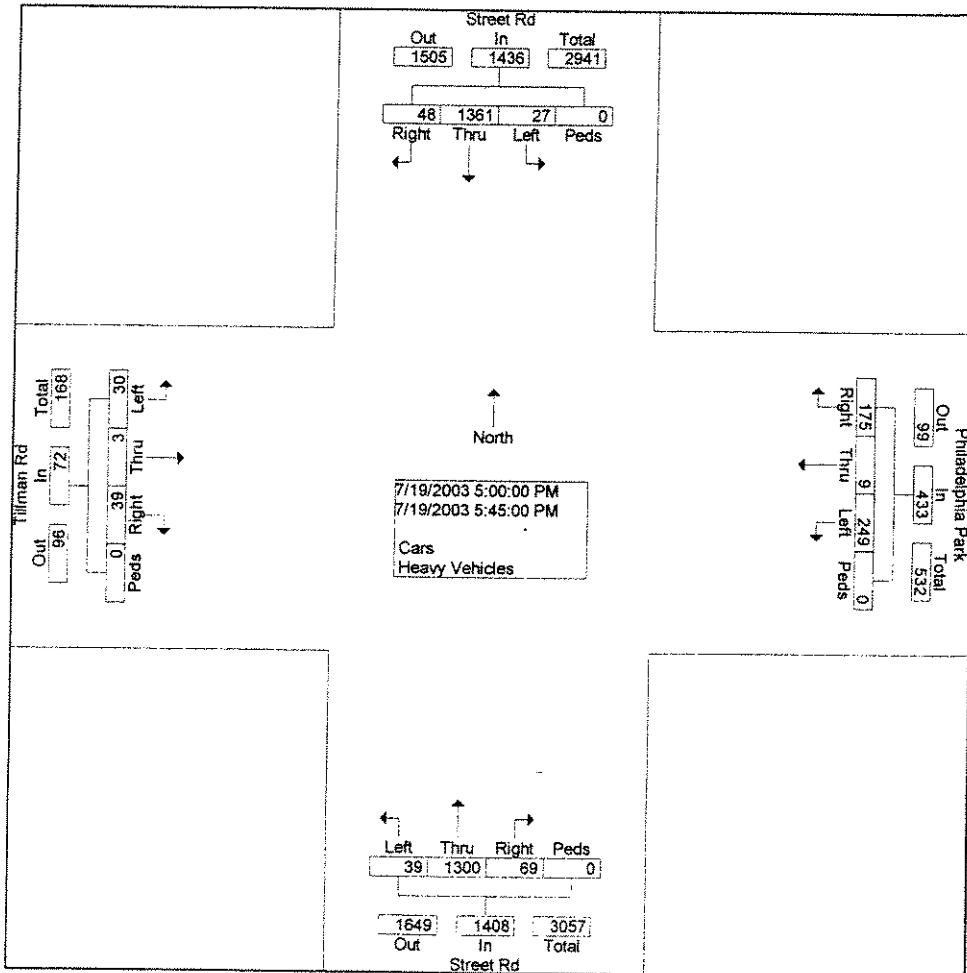


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
Intersection: Street Rd / Phil Race Trac
Date: Saturday, July 19, 2003
Weather: Id

File Name : MS0719-3
Site Code : 00000000
Start Date : 07/19/2003
Page No : 4

Start Time	Street Rd Southbound					Philadelphia Park Westbound					Street Rd Northbound					Tillman Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																					
Intersection 05:00 PM																					
Volume	27	1361	48	0	1436	249	9	175	0	433	39	1300	69	0	1408	30	3	39	0	72	3349
Percent	1.9	94.8	3.3	0.0		57.5	2.1	40.4	0.0		2.8	92.3	4.9	0.0		41.7	4.2	54.2	0.0		
05:00 Volume	7	361	11	0	379	95	3	59	0	157	9	321	18	0	348	4	0	4	0	8	892
Peak Factor																					
High Int. 05:00 PM																					
Volume	7	361	11	0	379	95	3	59	0	157	10	367	18	0	395	10	2	13	0	25	939
Peak Factor	0.947					0.689					0.891					0.720					



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
In. section: Street Rd / Phil Race Trac
Date: Saturday, July 19, 2003
Weather: Id

File Name : MS0719-3
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Street Rd Southbound					Philadelphia Park Westbound					Street Rd Northbound					Tillman Rd Eastbound					Int Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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			
11:00 AM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3
11:15 AM	0	6	0	0	6	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	8
11:30 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
11:45 AM	0	3	0	0	3	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	6
Total	0	13	0	0	13	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	21
12:00 PM	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6
12:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:30 PM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5
12:45 PM	0	1	0	0	1	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	5
Total	0	7	0	0	7	0	0	0	0	0	0	10	1	0	11	0	0	0	0	0	0	18
01:00 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4
01:15 PM	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
01:45 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4
Total	0	5	0	0	5	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	15
*** BREAK ***																						
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4
05:45 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	5	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	8
06:00 PM	0	3	0	0	3	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	6
06:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
BREAK ***																						
06:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	3
Total	0	5	0	0	5	1	0	0	0	1	0	3	1	0	4	0	0	0	0	0	0	10
07:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
BREAK ***																						
07:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
07:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	0	3	0	0	3	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	5
Grand Total	0	38	0	0	38	2	0	0	0	2	0	35	2	0	37	0	0	0	0	0	0	77
Apprch %	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	94.6	5.4	0.0		0.0	0.0	0.0	0.0			
Total %	0.0	49.4	0.0	0.0	49.4	2.6	0.0	0.0	0.0	2.6	0.0	45.5	2.6	0.0	48.1	0.0	0.0	0.0	0.0	0.0	0.0	

Tri-State Traffic Data, Inc.
610-466-1469

Weekday

(4)

Location: Bucks County, PA
 Section: Street Rd / Applebees
 Date: Tuesday, June 10, 2003
 Counter: RZ

File Name : AF0610-4
 Site Code : 00000000
 Start Date : 06/10/2003
 Page No : 1

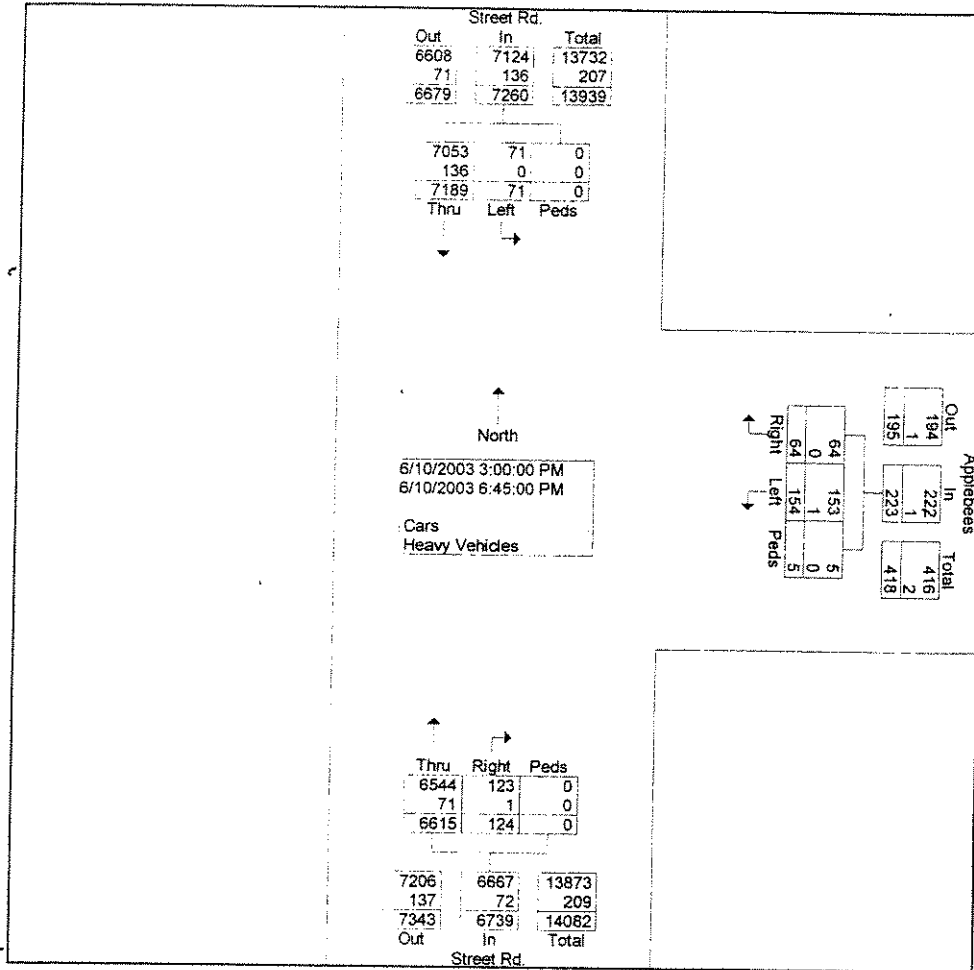
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd. Southbound					Applebees Westbound					Street Rd. Northbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	4	377	0	0	381	7	0	4	0	11	0	359	4	0	363	755
03:15 PM	3	362	0	0	365	4	0	6	1	11	0	396	2	0	398	774
03:30 PM	4	387	0	0	391	2	0	3	0	5	0	419	6	0	425	821
03:45 PM	8	421	0	0	429	3	0	3	1	7	0	436	5	0	441	877
Total	19	1547	0	0	1566	16	0	16	2	34	0	1610	17	0	1627	3227
04:00 PM	1	448	0	0	449	13	0	3	1	17	0	396	8	0	404	870
04:15 PM	2	447	0	0	449	6	0	5	1	12	0	410	8	0	418	879
04:30 PM	5	475	0	0	480	11	0	3	0	14	0	527	13	0	540	1034
04:45 PM	5	452	0	0	457	11	0	0	0	11	0	480	11	0	491	959
Total	13	1822	0	0	1835	41	0	11	2	54	0	1813	40	0	1853	3742
05:00 PM	2	504	0	0	506	22	0	3	0	25	0	453	11	0	464	995
05:15 PM	5	451	0	0	456	16	0	6	0	22	0	464	10	0	474	952
05:30 PM	6	523	0	0	529	19	0	8	1	28	0	405	5	0	410	967
05:45 PM	7	457	0	0	464	9	0	1	0	10	0	416	7	0	423	897
Total	20	1935	0	0	1955	66	0	18	1	85	0	1738	33	0	1771	3811
06:00 PM	9	471	0	0	480	13	0	8	0	21	0	377	15	0	392	893
06:15 PM	3	514	0	0	517	10	0	5	0	15	0	350	10	0	360	892
06:30 PM	2	465	0	0	467	4	0	5	0	9	0	341	5	0	346	822
06:45 PM	5	435	0	0	440	4	0	1	0	5	0	386	4	0	390	835
Total	19	1885	0	0	1904	31	0	19	0	50	0	1454	34	0	1488	3442
Grand Total	71	7189	0	0	7260	154	0	64	5	223	0	6615	124	0	6739	14222
Apprch %	1.0	99.0	0.0	0.0		69.1	0.0	28.7	2.2		0.0	98.2	1.8	0.0		
Total %	0.5	50.5	0.0	0.0	51.0	1.1	0.0	0.5	0.0	1.6	0.0	46.5	0.9	0.0	47.4	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
 Intersection: Street Rd / Applebees
 Date: Tuesday, June 10, 2003
 Counter: RZ

File Name : AF0610-4
 Site Code : 00000000
 Start Date : 06/10/2003
 Page No : 2

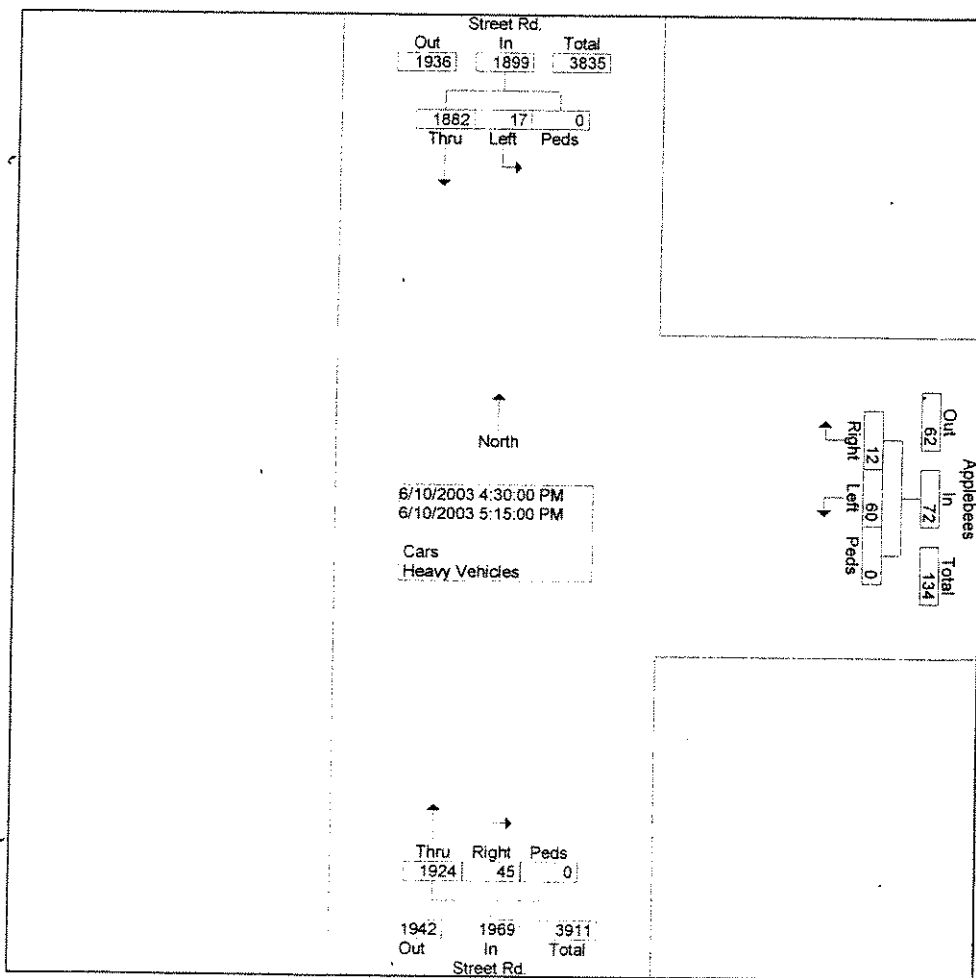


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In. Section: Street Rd / Applebees
Date: Tuesday, June 10, 2003
Counter: RZ

File Name : AF0610-4
Site Code : 00000000
Start Date : 06/10/2003
Page No : 3

Start Time	Street Rd. Southbound					Applebees Westbound					Street Rd. Northbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																
Intersection 04:30 PM																
Volume	17	1882	0	0	1899	60	0	12	0	72	0	1924	45	0	1969	3940
Percent	0.9	99.1	0.0	0.0		83.3	0.0	16.7	0.0		0.0	97.7	2.3	0.0		
04:30 Volume	5	475	0	0	480	11	0	3	0	14	0	527	13	0	540	1034
Peak Factor																
High Int. 05:00 PM																
Volume	2	504	0	0	506	22	0	3	0	25	0	527	13	0	540	0.953
Peak Factor																
						0.938										0.912



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
In section: Street Rd @ Applebees Drw
Date: Saturday, July 19, 2003
Weather: wc

File Name : MS0719-4
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

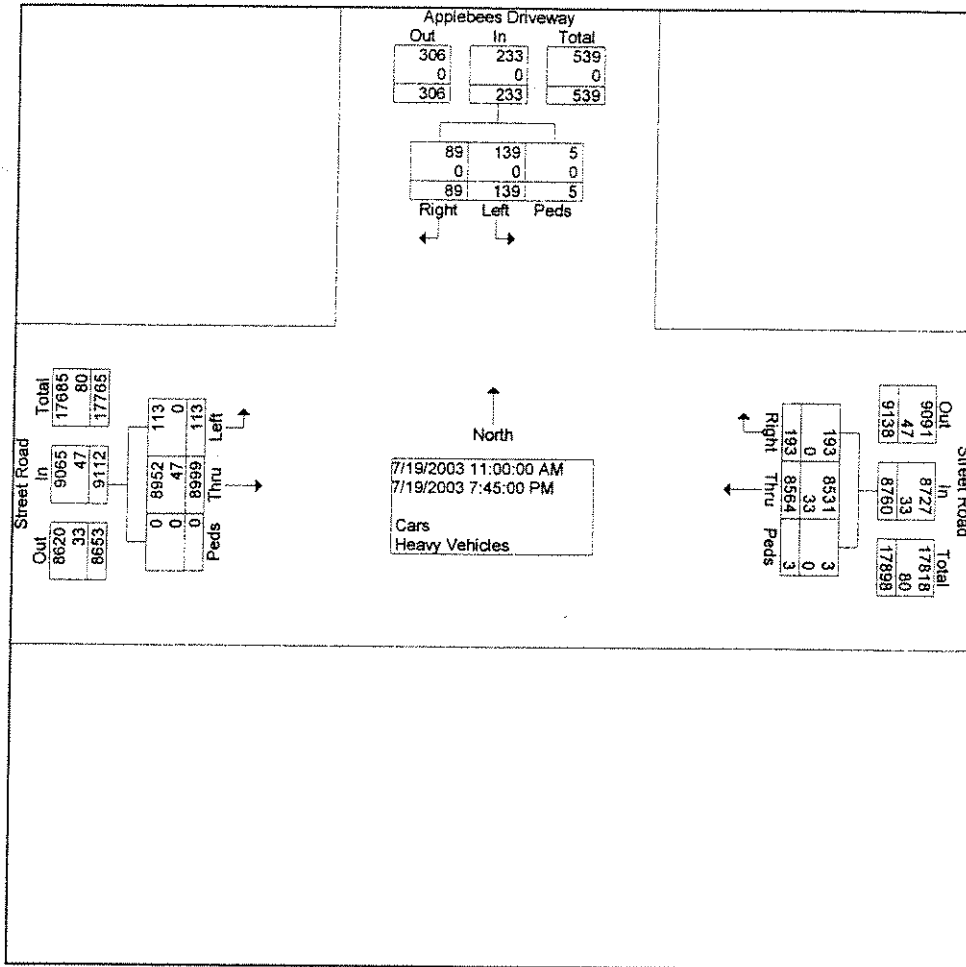
Groups Printed- Cars - Heavy Vehicles

Start Time	Applebees Driveway Southbound					Street Road Westbound					Street Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	2	0	0	0	2	0	300	4	0	304	3	361	0	0	364	670
11:15 AM	4	0	0	1	5	0	306	7	0	313	0	389	0	0	389	707
11:30 AM	5	0	4	0	9	0	363	4	0	367	6	408	0	0	414	790
11:45 AM	3	0	3	0	6	0	373	9	0	382	5	414	0	0	419	807
Total	14	0	7	1	22	0	1342	24	0	1366	14	1572	0	0	1586	2974
12:00 PM	17	0	5	1	23	0	390	5	0	395	5	424	0	0	429	847
12:15 PM	5	0	3	0	8	0	394	3	0	397	2	425	0	0	427	832
12:30 PM	1	0	2	0	3	0	392	5	0	397	4	433	0	0	437	837
12:45 PM	7	0	3	0	10	0	369	10	0	379	2	393	0	0	395	784
Total	30	0	13	1	44	0	1545	23	0	1568	13	1675	0	0	1688	3300
01:00 PM	5	0	2	0	7	0	328	3	0	331	2	416	0	0	418	756
01:15 PM	1	0	3	0	4	0	383	3	0	386	2	392	0	0	394	784
01:30 PM	6	0	0	1	7	0	384	5	1	390	5	400	0	0	405	802
01:45 PM	7	0	2	0	9	0	360	7	0	367	3	387	0	0	390	766
Total	19	0	7	1	27	0	1455	18	1	1474	12	1595	0	0	1607	3108
*** BREAK ***																
05:00 PM	5	0	2	0	7	0	401	10	0	411	7	384	0	0	391	809
05:15 PM	3	0	4	1	8	0	347	8	1	356	10	367	0	0	377	741
05:30 PM	4	0	6	0	10	0	371	8	0	379	7	334	0	0	341	730
05:45 PM	5	0	4	0	9	0	411	17	0	428	8	391	0	0	399	836
Total	17	0	16	1	34	0	1530	43	1	1574	32	1476	0	0	1508	3116
06:00 PM	11	0	1	0	12	0	395	12	0	407	3	334	0	0	337	756
06:15 PM	6	0	5	0	11	0	363	12	0	375	4	384	0	0	388	774
06:30 PM	4	0	3	1	8	0	333	7	1	341	10	355	0	0	365	714
06:45 PM	8	0	10	0	18	0	353	20	0	373	1	322	0	0	323	714
Total	29	0	19	1	49	0	1444	51	1	1496	18	1395	0	0	1413	2958
07:00 PM	8	0	3	0	11	0	308	6	0	314	2	319	0	0	321	646
07:15 PM	8	0	12	0	20	0	342	8	0	350	6	331	0	0	337	707
07:30 PM	4	0	6	0	10	0	322	13	0	335	12	328	0	0	340	685
07:45 PM	10	0	6	0	16	0	276	7	0	283	4	308	0	0	312	611
Total	30	0	27	0	57	0	1248	34	0	1282	24	1286	0	0	1310	2649
Grand Total	139	0	89	5	233	0	8564	193	3	8760	113	8999	0	0	9112	18105
Apprch %	59.7	0.0	38.2	2.1		0.0	97.8	2.2	0.0		1.2	98.8	0.0	0.0		
Total %	0.8	0.0	0.5	0.0	1.3	0.0	47.3	1.1	0.0	48.4	0.6	49.7	0.0	0.0	50.3	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
In. section: Street Rd @ Applebees Drw
Date: Saturday, July 19, 2003
Weather: wc

File Name : MS0719-4
Site Code : 00000000
Start Date : 07/19/2003
Page No : 2

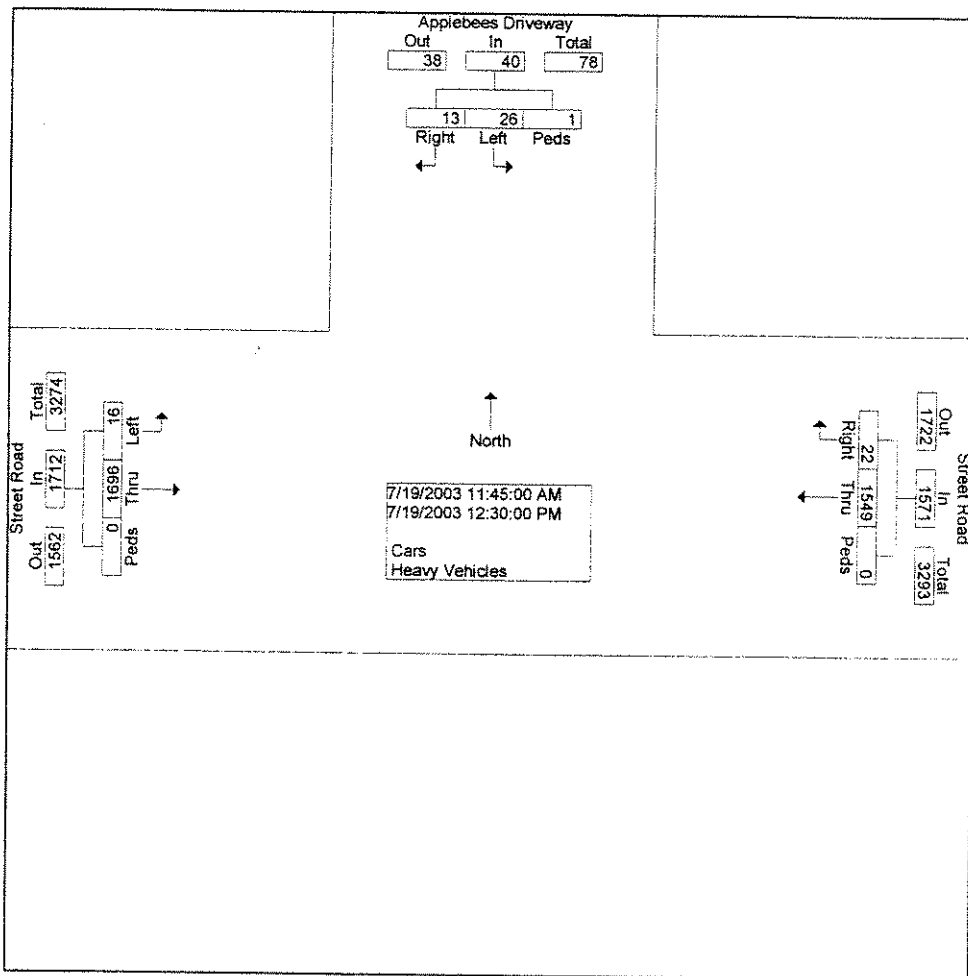


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
In. Section: Street Rd @ Applebees Drw
Date: Saturday, July 19, 2003
Weather: wc

File Name : MS0719-4
Site Code : 00000000
Start Date : 07/19/2003
Page No : 3

Start Time	Applebees Driveway Southbound					Street Road Westbound					Street Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 11:00 AM to 03:30 PM - Peak 1 of 1																
Intersection 11:45 AM																
Volume	26	0	13	1	40	0	1549	22	0	1571	16	1696	0	0	1712	3323
Percent	65.0	0.0	32.5	2.5		0.0	98.6	1.4	0.0		0.9	99.1	0.0	0.0		
12:00 Volume	17	0	5	1	23	0	390	5	0	395	5	424	0	0	429	847
Peak Factor																
High Int. 12:00 PM																
Volume	17	0	5	1	23	0	394	3	0	397	4	433	0	0	437	0.981
Peak Factor	0.435					0.989					0.979					

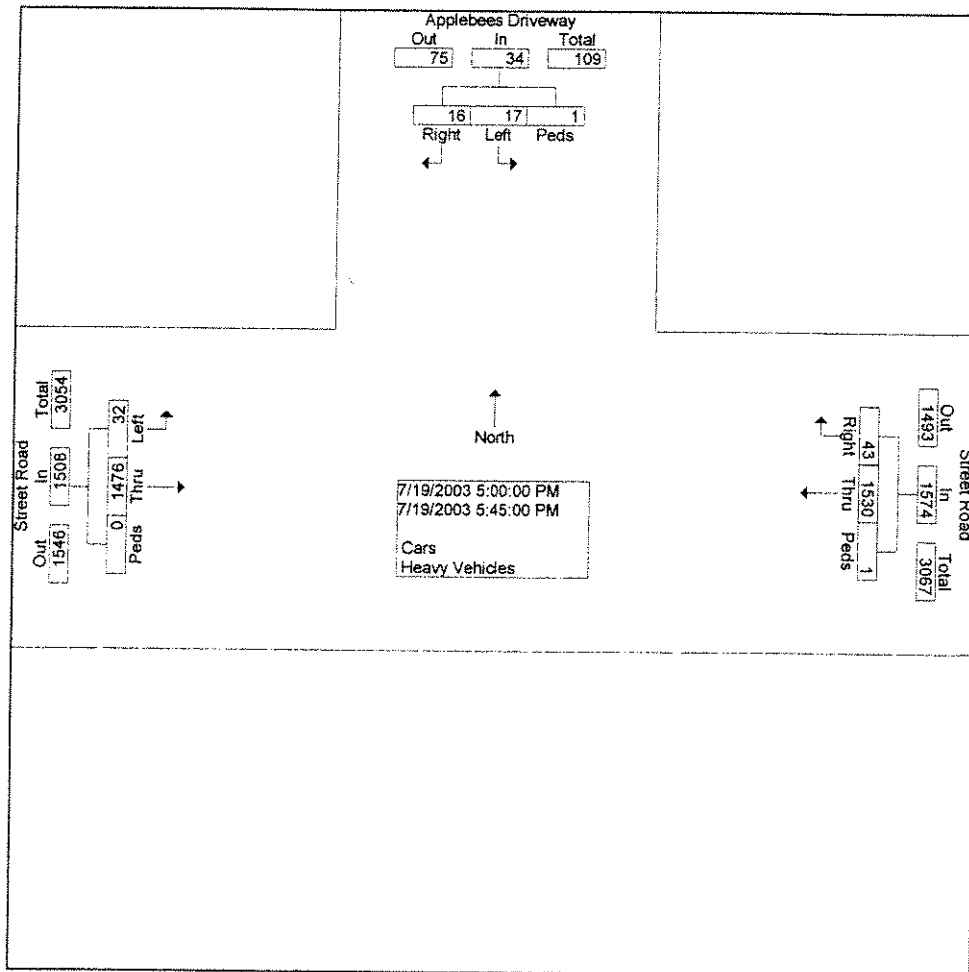


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
Intersection: Street Rd @ Applebees Drw
Date: Saturday, July 19, 2003
Weather: wc

File Name : MS0719-4
Site Code : 00000000
Start Date : 07/19/2003
Page No : 4

Start Time	Applebees Driveway Southbound					Street Road Westbound					Street Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																
Intersection	05:00 PM															
Volume	17	0	16	1	34	0	1530	43	1	1574	32	1476	0	0	1508	3116
Percent	50.0	0.0	47.1	2.9		0.0	97.2	2.7	0.1		2.1	97.9	0.0	0.0		
05:45 Volume	5	0	4	0	9	0	411	17	0	428	8	391	0	0	399	836
Peak Factor	0.932															
High Int.	05:30 PM															
Volume	4	0	6	0	10	0	411	17	0	428	8	391	0	0	399	
Peak Factor	0.850															
										0.919					0.945	



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp., Bucks Co.
In. section: Street Rd @ Applebees Drw
Date: Saturday, July 19, 2003
Weather: wc

File Name : MS0719-4
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Applebees Driveway Southbound					Street Road Westbound					Street Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	0	0	0	0	0	0	2	0	0	2	0	4	0	0	4	6
11:15 AM	0	0	0	0	0	0	3	0	0	3	0	6	0	0	6	9
11:30 AM	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	4
11:45 AM	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	5
Total	0	0	0	0	0	0	8	0	0	8	0	16	0	0	16	24
12:00 PM	0	0	0	0	0	0	4	0	0	4	0	3	0	0	3	7
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
12:30 PM	0	0	0	0	0	0	3	0	0	3	0	3	0	0	3	6
12:45 PM	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	4
Total	0	0	0	0	0	0	10	0	0	10	0	9	0	0	9	19
01:00 PM	0	0	0	0	0	0	2	0	0	2	0	2	0	0	2	4
01:15 PM	0	0	0	0	0	0	4	0	0	4	0	2	0	0	2	6
01:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
01:45 PM	0	0	0	0	0	0	3	0	0	3	0	1	0	0	1	4
Total	0	0	0	0	0	0	10	0	0	10	0	5	0	0	5	15
*** BREAK ***																
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	4
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
Total	0	0	0	0	0	0	1	0	0	1	0	8	0	0	8	9
06:00 PM	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3	5
06:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
BREAK ***																
06:45 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
Total	0	0	0	0	0	0	3	0	0	3	0	5	0	0	5	8
07:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
BREAK ***																
07:30 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
07:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
Total	0	0	0	0	0	0	1	0	0	1	0	4	0	0	4	5
Grand Total	0	0	0	0	0	0	33	0	0	33	0	47	0	0	47	80
Apprch %	0.0	0.0	0.0	0.0		0.0	100.0	0.0	0.0		0.0	100.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	0.0	41.2	0.0	0.0	41.2	0.0	58.8	0.0	0.0	58.8	

Tri-State Traffic Data, Inc.
610-466-1469

File Name : AF0610-5
Site Code : 00000000
Start Date : 06/10/2003
Page No : 1

Location: Bucks County, PA
In section : Tillman Dr N / Street Rd
Date: Tuesday June 10, 2003
Counter: VG

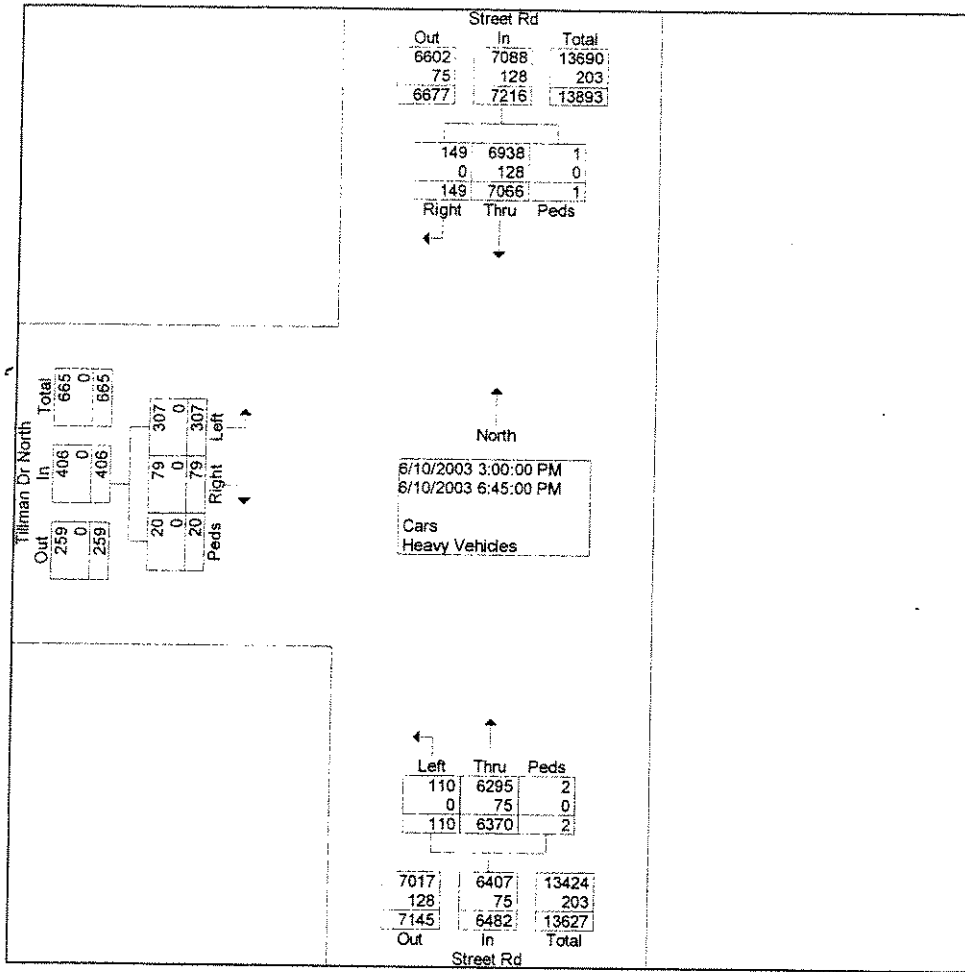
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd Southbound					TILLMAN DR N Westbound					Street Rd Northbound					Tillman Dr North Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	0	374	1	0	375	0	0	0	0	0	3	340	0	0	343	7	0	2	0	9	727
03:15 PM	0	365	8	0	373	0	0	0	0	0	3	379	0	0	382	4	0	3	1	8	763
03:30 PM	0	399	9	0	408	0	0	0	0	0	4	416	0	1	421	7	0	3	1	11	840
03:45 PM	0	422	8	0	430	0	0	0	0	0	7	420	0	0	427	9	0	3	3	15	872
Total	0	1560	26	0	1586	0	0	0	0	0	17	1555	0	1	1573	27	0	11	5	43	3202
04:00 PM	0	406	14	0	420	0	0	0	0	0	5	394	0	0	399	29	0	5	1	35	854
04:15 PM	0	454	7	0	461	0	0	0	0	0	6	395	0	0	401	15	0	4	0	19	881
04:30 PM	0	468	10	0	478	0	0	0	0	0	5	504	0	0	509	44	0	1	1	46	1033
04:45 PM	0	452	17	0	469	0	0	0	0	0	6	467	0	0	473	22	0	5	1	28	970
Total	0	1780	48	0	1828	0	0	0	0	0	22	1760	0	0	1782	110	0	15	3	128	3738
05:00 PM	0	489	16	0	505	0	0	0	0	0	7	435	0	0	442	44	0	5	1	50	997
05:15 PM	0	459	7	0	466	0	0	0	0	0	9	453	0	0	462	41	0	6	6	53	981
05:30 PM	0	499	8	1	508	0	0	0	0	0	2	395	0	0	397	21	0	2	2	25	930
05:45 PM	0	470	12	0	482	0	0	0	0	0	7	399	0	0	406	15	0	5	0	20	908
Total	0	1917	43	1	1961	0	0	0	0	0	25	1682	0	0	1707	121	0	18	9	148	3816
06:00 PM	0	448	8	0	456	0	0	0	0	0	10	374	0	0	384	11	0	11	1	23	863
PM	0	492	3	0	495	0	0	0	0	0	12	331	0	0	343	11	0	12	1	24	862
06:30 PM	0	448	11	0	459	0	0	0	0	0	9	325	0	0	334	10	0	5	1	16	809
06:45 PM	0	421	10	0	431	0	0	0	0	0	15	343	0	1	359	17	0	7	0	24	814
Total	0	1809	32	0	1841	0	0	0	0	0	46	1373	0	1	1420	49	0	35	3	87	3348
Grand Total	0	7066	149	1	7216	0	0	0	0	0	110	6370	0	2	6482	307	0	79	20	406	14104
Apprch %	0.0	97.9	2.1	0.0		0.0	0.0	0.0	0.0		1.7	98.3	0.0	0.0		75.6	0.0	19.5	4.9		
Total %	0.0	50.1	1.1	0.0	51.2	0.0	0.0	0.0	0.0	0.0	0.8	45.2	0.0	0.0	46.0	2.2	0.0	0.6	0.1	2.9	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
 Intersection : Tillman Dr N / Street Rd
 Date: Tuesday June 10, 2003
 Counter: VG

File Name : AF0610-5
 Site Code : 00000000
 Start Date : 06/10/2003
 Page No : 2

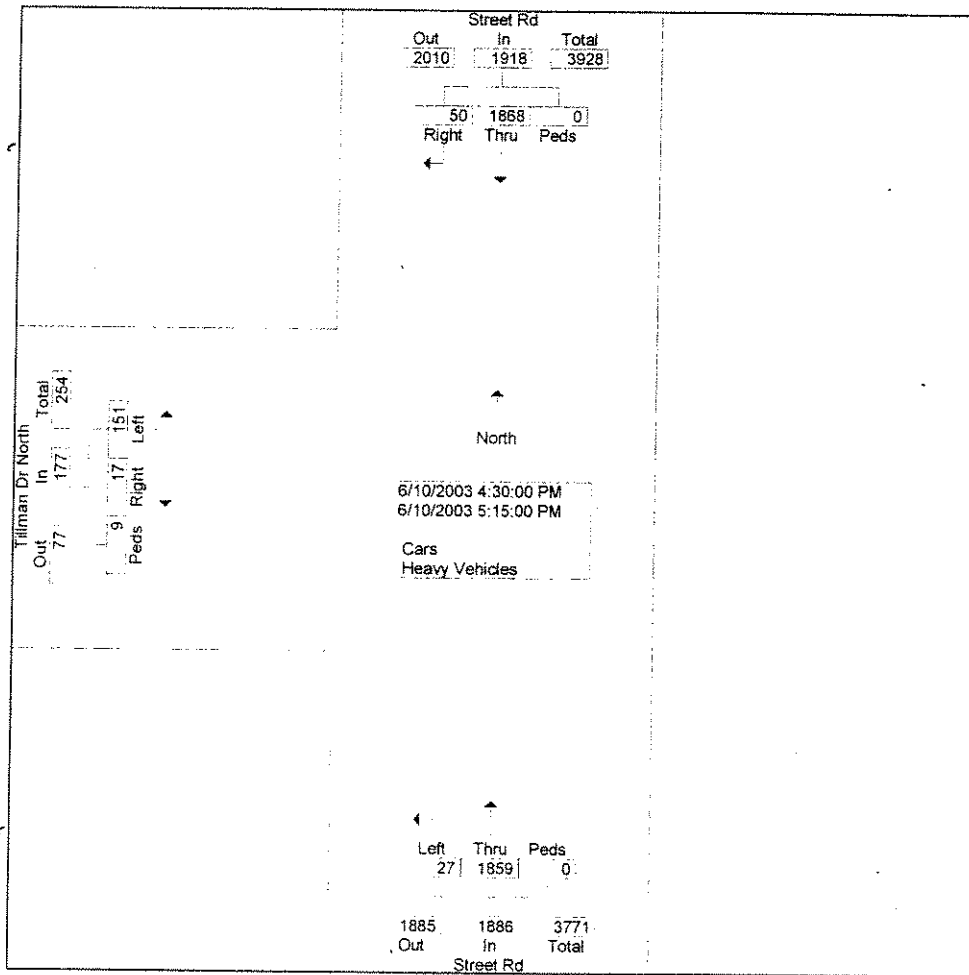


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In. section : Tillman Dr N / Street Rd
Date: Tuesday June 10, 2003
Counter: VG

File Name : AF0610-5
Site Code : 00000000
Start Date : 06/10/2003
Page No : 3

Start Time	Street Rd Southbound					TILLMAN DR N Westbound					Street Rd Northbound					Tillman Dr North Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																						
Intersection																						
04:30 PM																						
Volume	0	1868	50	0	1918	0	0	0	0	0	27	1859	0	0	1886	151	0	17	9	177	3981	
Percent	0.0	97.4	2.6	0.0		0.0	0.0	0.0	0.0		1.4	98.6	0.0	0.0		85.3	0.0	9.6	5.1			
04:30 Volume	0	468	10	0	478	0	0	0	0	0	5	504	0	0	509	44	0	1	1	46	1033	
Peak Factor																						
High Int.																						
05:00 PM																						
Volume	0	489	16	0	505	0	0	0	0	0	5	504	0	0	509	41	0	6	6	53		
Peak Factor																						
	0.950										0.926										0.835	



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
In. section : Street Rd / Tillman Dr N.
Date : Saturday, July 12, 2003
Counter : VG

File Name : MS0712-5
Site Code : 00000000
Start Date : 07/12/2003
Page No : 1

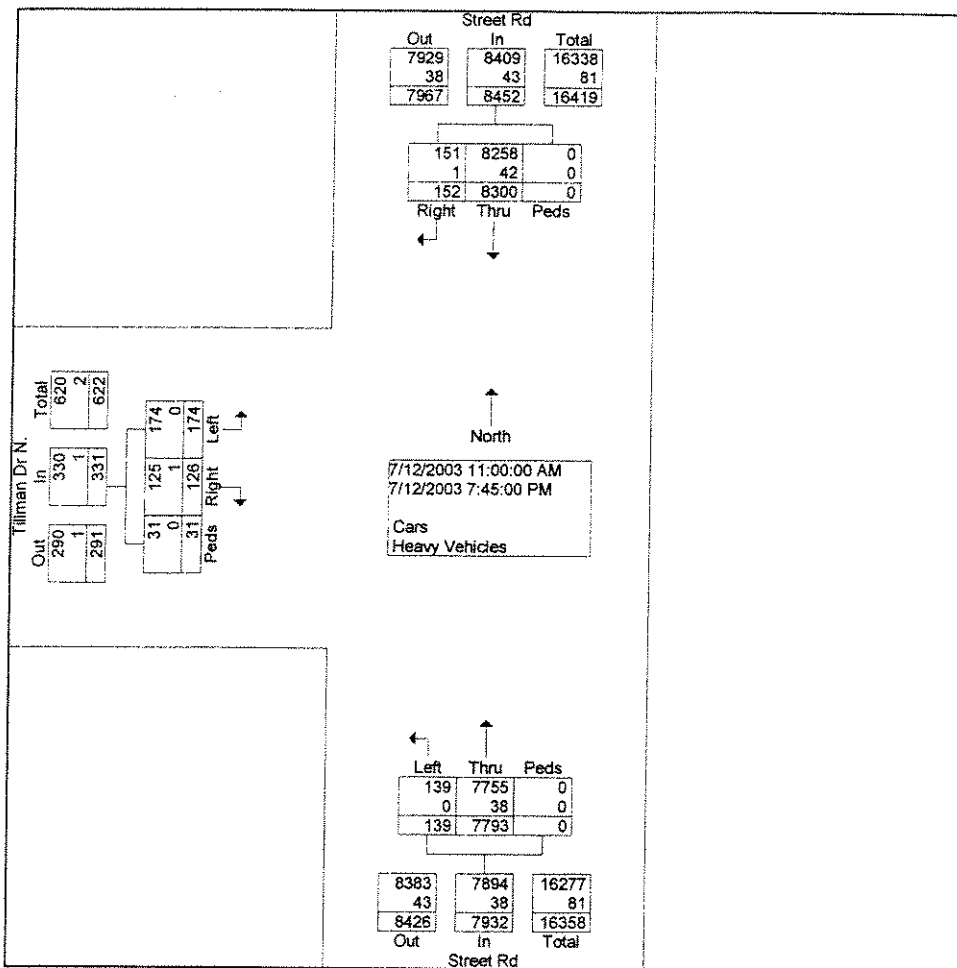
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd Southbound					Street Rd Northbound					Tillman Dr N. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	0	352	2	0	354	0	321	0	0	321	3	0	0	1	4	679
11:15 AM	0	350	3	0	353	0	332	0	0	332	1	0	0	2	3	688
11:30 AM	0	362	0	0	362	0	299	0	0	299	1	0	0	0	1	662
11:45 AM	0	396	0	0	396	0	374	0	0	374	1	0	0	0	1	771
Total	0	1460	5	0	1465	0	1326	0	0	1326	6	0	0	3	9	2800
12:00 PM	0	405	1	0	406	3	327	0	0	330	2	0	3	2	7	743
12:15 PM	0	374	2	0	376	1	360	0	0	361	4	0	0	0	4	741
12:30 PM	0	400	4	0	404	2	359	0	0	361	2	0	0	0	2	767
12:45 PM	0	403	1	0	404	1	331	0	0	332	1	0	3	0	4	740
Total	0	1582	8	0	1590	7	1377	0	0	1384	9	0	6	2	17	2991
01:00 PM	0	360	1	0	361	1	354	0	0	355	3	0	1	1	5	721
01:15 PM	0	363	4	0	367	1	366	0	0	367	3	0	4	0	7	741
01:30 PM	0	334	1	0	335	2	386	0	0	388	3	0	1	1	5	728
01:45 PM	0	355	4	0	359	2	332	0	0	334	2	0	1	0	3	696
Total	0	1412	10	0	1422	6	1438	0	0	1444	11	0	7	2	20	2886
*** BREAK ***																
05:00 PM	0	336	10	0	346	9	313	0	0	322	10	0	6	1	17	685
05:15 PM	0	324	11	0	335	5	325	0	0	330	16	0	8	3	27	692
5:30 PM	0	321	8	0	329	12	312	0	0	324	12	0	9	1	22	675
5:45 PM	1	320	9	0	330	8	327	0	0	335	9	0	12	0	21	686
Total	1	1301	38	0	1340	34	1277	0	0	1311	47	0	35	5	87	2738
06:00 PM	0	326	9	0	335	11	344	0	0	355	10	0	11	3	24	714
06:15 PM	0	370	11	0	381	9	309	0	0	318	17	0	8	0	25	724
06:30 PM	0	289	3	0	292	8	300	0	0	308	10	0	6	0	16	616
06:45 PM	0	334	8	0	342	10	299	0	0	309	13	0	12	2	27	678
Total	0	1319	31	0	1350	38	1252	0	0	1290	50	0	37	5	92	2732
07:00 PM	0	323	39	0	362	18	290	0	0	308	15	0	8	8	31	701
07:15 PM	0	294	6	0	300	16	268	0	0	284	14	0	10	6	30	614
07:30 PM	0	335	6	0	341	14	290	0	0	304	4	0	17	0	21	666
07:45 PM	0	274	9	0	283	6	275	0	0	281	18	0	6	0	24	588
Total	0	1226	60	0	1286	54	1123	0	0	1177	51	0	41	14	106	2569
Grand Total	1	8300	152	0	8453	139	7793	0	0	7932	174	0	126	31	331	16716
Apprch %	0.0	98.2	1.8	0.0		1.8	98.2	0.0	0.0		52.6	0.0	38.1	9.4		
Total %	0.0	49.7	0.9	0.0	50.6	0.8	46.6	0.0	0.0	47.5	1.0	0.0	0.8	0.2	2.0	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
 Intersection: Street Rd / Tillman Dr N.
 Date: Saturday, July 12, 2003
 Counter: VG

File Name : MS0712-5
 Site Code : 00000000
 Start Date : 07/12/2003
 Page No : 2

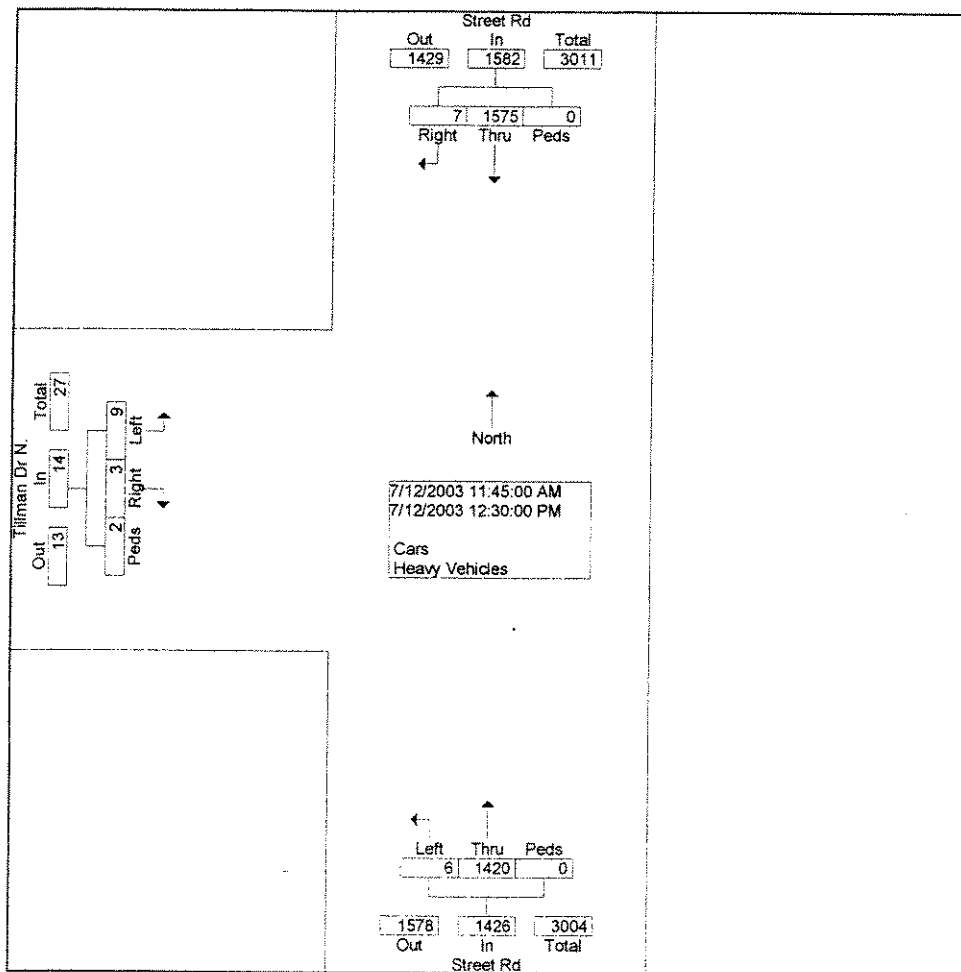


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
In. section : Street Rd / Tillman Dr N.
Date : Saturday, July 12, 2003
Counter : VG

File Name : MS0712-5
Site Code : 00000000
Start Date : 07/12/2003
Page No : 3

Start Time	Street Rd Southbound					Street Rd Northbound					Tillman Dr N. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From	11:00 AM to 03:30 PM - Peak 1 of 1															
Intersection	11:45 AM															
Volume	0	1575	7	0	1582	6	1420	0	0	1426	9	0	3	2	14	3022
Percent	0.0	99.6	0.4	0.0		0.4	99.6	0.0	0.0		64.3	0.0	21.4	14.3		
11:45 Volume	0	396	0	0	396	0	374	0	0	374	1	0	0	0	1	771
Peak Factor	0.980															
High Int.	12:00 PM															
Volume	0	405	1	0	406	0	374	0	0	374	2	0	3	2	7	
Peak Factor	0.974															
	0.953															
	0.500															

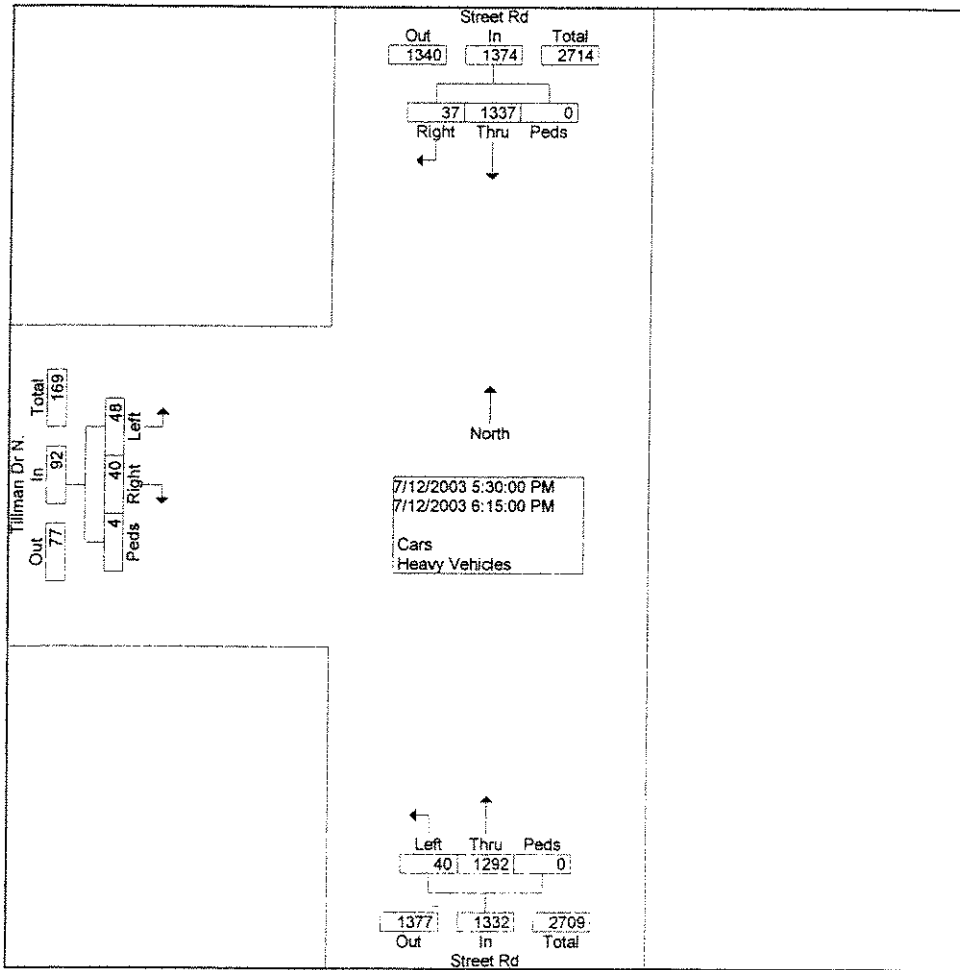


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
 Intersection: Street Rd / Tillman Dr N.
 Date: Saturday, July 12, 2003
 Counter: VG

File Name : MS0712-5
 Site Code : 00000000
 Start Date : 07/12/2003
 Page No : 4

Start Time	Street Rd Southbound					Street Rd Northbound					Tillman Dr N. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																
Intersection 05:30 PM																
Volume	1	1337	37	0	1375	40	1292	0	0	1332	48	0	40	4	92	2799
Percent	0.1	97.2	2.7	0.0		3.0	97.0	0.0	0.0		52.2	0.0	43.5	4.3		
06:15 Volume	0	370	11	0	381	9	309	0	0	318	17	0	8	0	25	724
Peak Factor																
High Int. 06:15 PM																
Volume	0	370	11	0	381	11	344	0	0	355	17	0	8	0	25	0.967
Peak Factor																
						0.902										0.920



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
 Intersection: Street Rd / Tillman Dr N.
 Date: Saturday, July 12, 2003
 Counter: VG

File Name: MS0712-5
 Site Code: 00000000
 Start Date: 07/12/2003
 Page No: 1

Groups Printed- Heavy Vehicles

Start Time	Street Rd Southbound					Street Rd Northbound					Tillman Dr N. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	0	2	0	0	2	0	4	0	0	4	0	0	0	0	0	6
11:15 AM	0	1	1	0	2	0	2	0	0	2	0	0	0	0	0	4
11:30 AM	0	4	0	0	4	0	2	0	0	2	0	0	0	0	0	6
11:45 AM	0	4	0	0	4	0	1	0	0	1	0	0	0	0	0	5
Total	0	11	1	0	12	0	9	0	0	9	0	0	0	0	0	21
12:00 PM	0	2	0	0	2	0	1	0	0	1	0	0	1	0	1	4
12:15 PM	0	3	0	0	3	0	1	0	0	1	0	0	0	0	0	4
12:30 PM	0	4	0	0	4	0	1	0	0	1	0	0	0	0	0	5
12:45 PM	0	2	0	0	2	0	5	0	0	5	0	0	0	0	0	7
Total	0	11	0	0	11	0	8	0	0	8	0	0	1	0	1	20
01:00 PM	0	3	0	0	3	0	1	0	0	1	0	0	0	0	0	4
01:15 PM	0	4	0	0	4	0	4	0	0	4	0	0	0	0	0	8
01:30 PM	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	3
01:45 PM	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	3
Total	0	9	0	0	9	0	9	0	0	9	0	0	0	0	0	18
*** BREAK ***																
05:00 PM	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	3
05:15 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
05:30 PM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
Total	0	4	0	0	4	0	5	0	0	5	0	0	0	0	0	9
06:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
06:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
06:45 PM	0	2	0	0	2	0	3	0	0	3	0	0	0	0	0	5
Total	0	4	0	0	4	0	4	0	0	4	0	0	0	0	0	8
*** BREAK ***																
07:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
07:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
07:45 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	3
Total	0	3	0	0	3	0	3	0	0	3	0	0	0	0	0	6
Grand Total	0	42	1	0	43	0	38	0	0	38	0	0	1	0	1	82
Apprch %	0.0	97.7	2.3	0.0		0.0	100.0	0.0	0.0		0.0	0.0	100.0	0.0		
Total %	0.0	51.2	1.2	0.0	52.4	0.0	46.3	0.0	0.0	46.3	0.0	0.0	1.2	0.0	1.2	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
 Section: Street / Richlieu Rds.
 Date: Tuesday, June 10, 2003
 Counter: JI

File Name : AF0610-6
 Site Code : 00000000
 Start Date : 06/10/2003
 Page No : 1

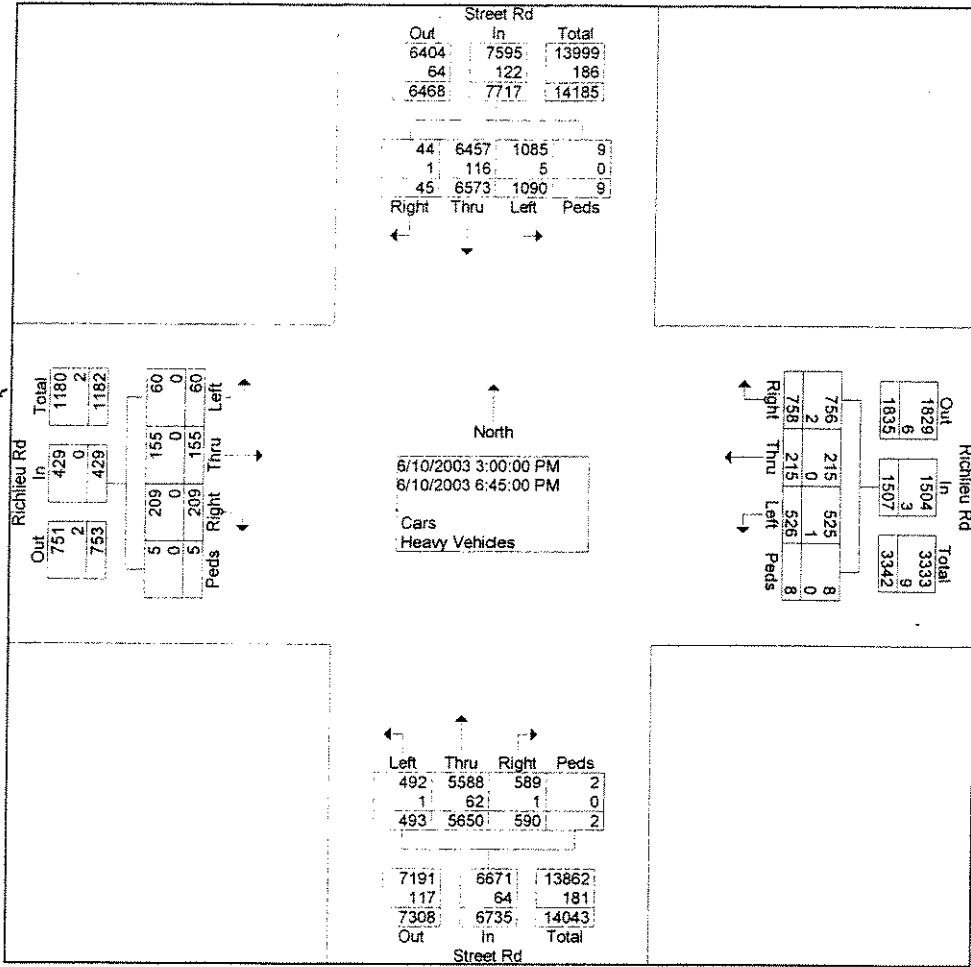
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd Southbound					Richlieu Rd Westbound					Street Rd Northbound					Richlieu Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	50	344	1	0	395	20	14	39	0	73	22	277	16	0	315	3	10	15	0	28	811
03:15 PM	46	331	1	0	378	21	11	36	1	69	19	345	26	0	390	6	8	14	0	28	865
03:30 PM	61	380	4	0	445	26	10	51	1	88	26	367	31	0	424	5	13	14	0	32	989
03:45 PM	52	383	1	1	437	27	12	29	1	69	64	340	20	0	424	7	14	22	0	43	973
Total	209	1438	7	1	1655	94	47	155	3	299	131	1329	93	0	1553	21	45	65	0	131	3638
04:00 PM	59	413	1	0	473	29	8	62	1	100	30	376	36	0	442	4	9	9	0	22	1037
04:15 PM	68	417	2	0	487	26	7	43	1	77	25	350	34	0	409	2	7	12	2	23	996
04:30 PM	62	444	1	1	508	30	9	68	0	107	34	476	37	1	548	4	12	12	1	29	1192
04:45 PM	68	435	4	3	510	45	16	71	0	132	35	404	37	0	476	4	9	13	0	26	1144
Total	257	1709	8	4	1978	130	40	244	2	416	124	1606	144	1	1875	14	37	46	3	100	4369
05:00 PM	78	466	3	0	547	49	19	73	1	142	32	451	33	0	516	3	6	7	0	16	1221
05:15 PM	77	422	4	0	503	38	21	63	0	122	36	407	50	1	494	1	14	14	0	29	1148
05:30 PM	98	472	2	1	573	40	14	38	1	93	38	332	54	0	424	3	12	13	0	28	1118
05:45 PM	86	427	4	0	517	37	19	38	0	94	24	351	38	0	413	3	11	18	0	32	1056
Total	339	1787	13	1	2140	164	73	212	2	451	130	1541	175	1	1847	10	43	52	0	105	4543
06:00 PM	76	407	2	0	485	39	19	41	0	99	32	320	44	0	396	2	5	10	1	18	998
06:15 PM	85	456	5	0	546	35	8	37	1	81	29	279	36	0	344	4	12	14	0	30	1001
06:30 PM	68	384	8	2	462	31	19	38	0	88	20	279	51	0	350	7	7	15	0	29	929
06:45 PM	56	392	2	1	451	33	9	31	0	73	27	296	47	0	370	2	6	7	1	16	910
Total	285	1639	17	3	1944	138	55	147	1	341	108	1174	178	0	1460	15	30	46	2	93	3838
Grand Total	1090	6573	45	9	7717	526	215	758	8	1507	493	5650	590	2	6735	60	155	209	5	429	16388
Apprch %	14.1	85.2	0.6	0.1		34.9	14.3	50.3	0.5		7.3	83.9	8.8	0.0		14.0	36.1	48.7	1.2		
Total %	6.7	40.1	0.3	0.1	47.1	3.2	1.3	4.6	0.0	9.2	3.0	34.5	3.6	0.0	41.1	0.4	0.9	1.3	0.0	2.6	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
 Intersection: Street / Richlieu Rds.
 Date: Tuesday, June 10, 2003
 Counter: JI

File Name : AF0610-6
 Site Code : 00000000
 Start Date : 06/10/2003
 Page No : 2

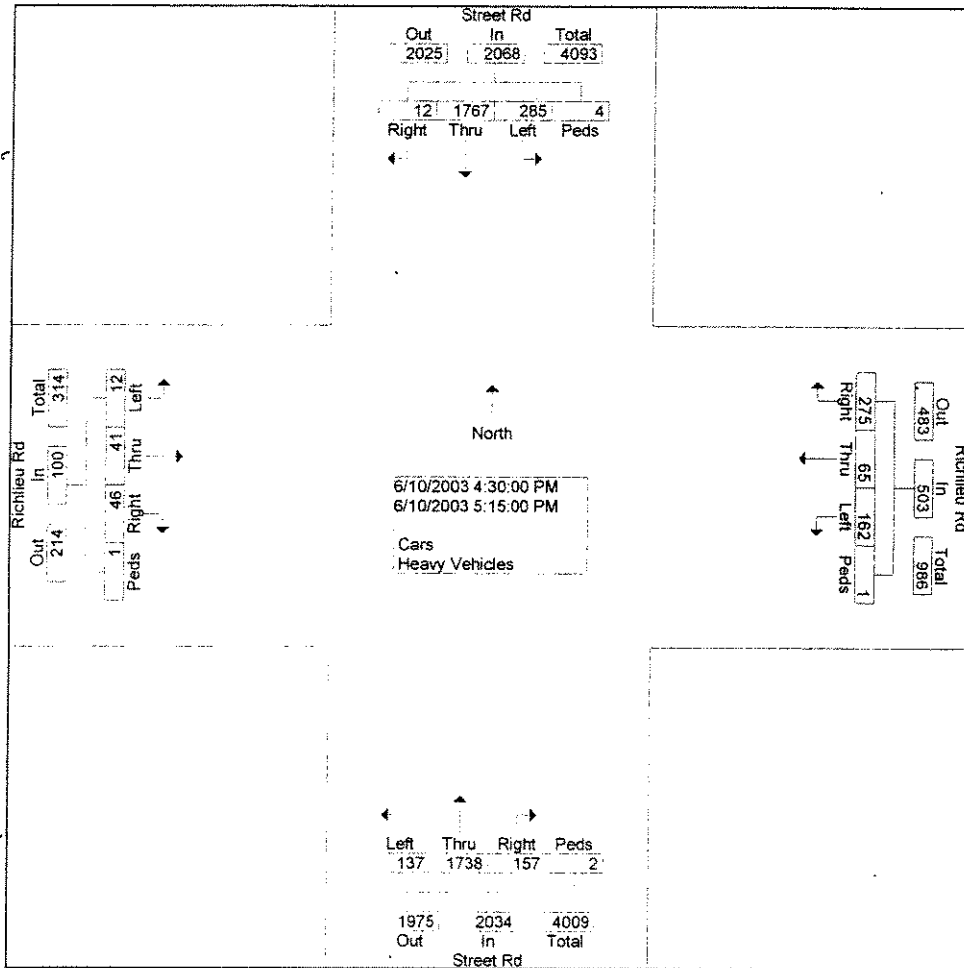


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In. section: Street / Richlieu Rds.
Date: Tuesday, June 10, 2003
Counter: JI

File Name : AF0610-6
Site Code : 00000000
Start Date : 06/10/2003
Page No : 3

Start Time	Street Rd Southbound					Richlieu Rd Westbound					Street Rd Northbound					Richlieu Rd Eastbound					Int Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																					
Intersection	04:30 PM																				
Volume	285	1767	12	4	2068	162	65	275	1	503	137	1738	157	2	2034	12	41	46	1	100	4705
Percent	13.8	85.4	0.6	0.2		32.2	12.9	54.7	0.2		6.7	85.4	7.7	0.1		12.0	41.0	46.0	1.0		
Volume	78	466	3	0	547	49	19	73	1	142	32	451	33	0	516	3	6	7	0	16	1221
Peak Factor	0.963																				
High Int.	05:00 PM																				
Volume	78	466	3	0	547	49	19	73	1	142	34	476	37	1	548	4	12	12	1	29	
Peak Factor	0.945					0.886					0.928					0.862					



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
 Section: Street Rd / Richlieu Rd
 Date: Saturday, July 19, 2003
 Counter: VG

File Name: MS0719-6
 Site Code: 00000000
 Start Date: 07/19/2003
 Page No: 1

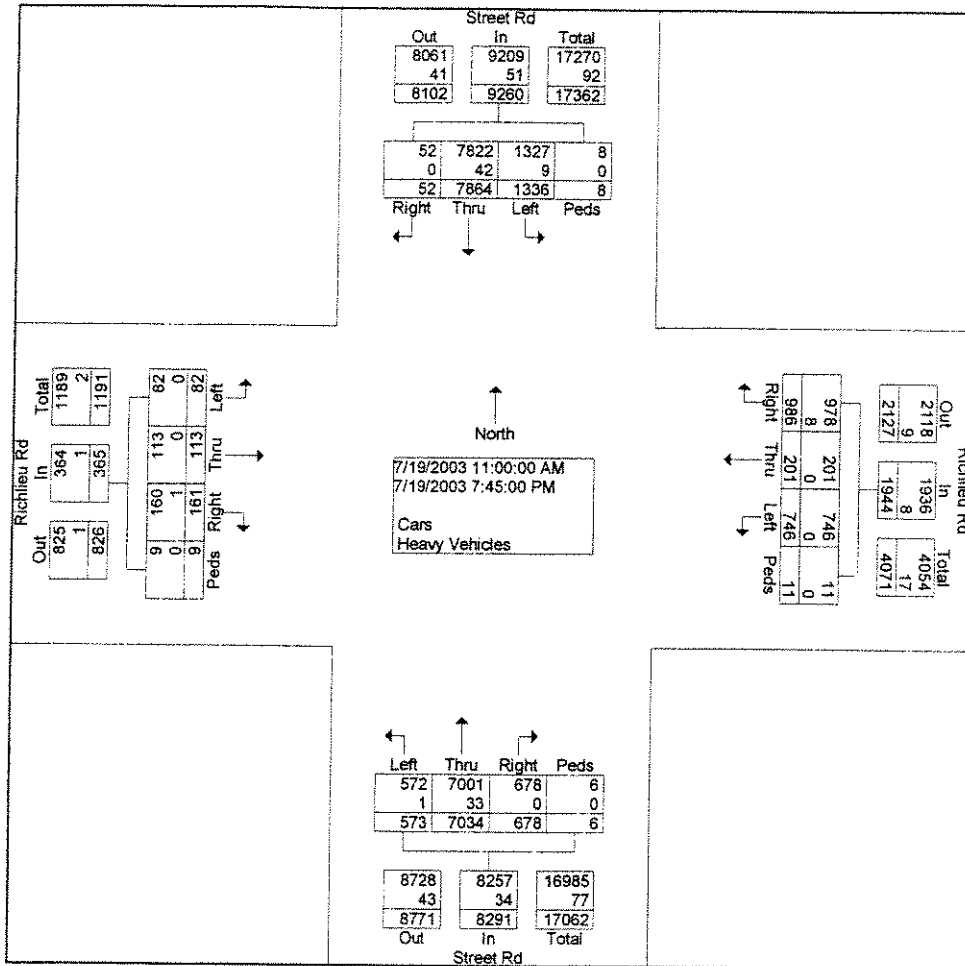
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd Southbound					Richlieu Rd Westbound					Street Rd Northbound					Richlieu Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	47	336	2	0	385	33	8	34	1	76	13	252	25	0	290	2	6	3	0	11	
11:15 AM	68	330	0	2	400	25	7	22	0	54	12	257	33	0	302	3	2	12	1	18	
11:30 AM	70	350	3	0	423	41	7	36	0	84	25	291	35	0	351	3	4	6	0	13	
11:45 AM	82	381	2	1	466	29	3	45	0	77	20	315	37	0	372	2	6	4	0	12	
Total	267	1397	7	3	1674	128	25	137	1	291	70	1115	130	0	1315	10	18	25	1	54	
12:00 PM	91	347	5	0	443	45	10	46	0	101	22	310	35	0	367	2	10	7	0	19	
12:15 PM	71	367	4	0	442	36	11	36	1	84	27	320	27	0	374	4	2	3	0	9	
12:30 PM	68	380	0	0	448	23	5	34	0	62	18	331	27	0	376	2	6	5	0	13	
12:45 PM	95	361	3	0	459	31	11	36	0	78	27	300	30	0	357	5	8	8	2	23	
Total	325	1455	12	0	1792	135	37	152	1	325	94	1261	119	0	1474	13	26	23	2	64	
01:00 PM	66	367	1	0	434	32	6	50	0	88	28	318	25	0	371	3	8	5	1	17	
01:15 PM	59	338	4	1	402	35	7	39	2	83	23	292	37	0	352	3	2	10	0	15	
01:30 PM	52	369	1	0	422	26	12	38	5	81	24	319	26	0	369	3	3	11	1	18	
01:45 PM	51	345	2	0	398	42	11	37	0	90	34	292	27	0	353	4	6	9	0	19	
Total	228	1419	8	1	1656	135	36	164	7	342	109	1221	115	0	1445	13	19	35	2	69	
*** BREAK ***																					
05:00 PM	35	326	3	0	364	38	9	58	0	105	31	321	28	1	381	5	6	6	0	17	
05:15 PM	54	338	3	1	396	26	8	46	0	80	20	312	18	0	350	1	4	3	0	8	
05:30 PM	40	310	1	0	351	27	7	52	1	87	21	306	22	0	349	0	2	4	1	7	
05:45 PM	47	309	2	0	358	33	3	33	0	69	51	341	31	1	424	5	3	4	0	12	
Total	176	1283	9	1	1469	124	27	189	1	341	123	1280	99	2	1504	11	15	17	1	44	
06:00 PM	41	307	1	2	351	25	12	54	1	92	28	318	31	0	377	5	6	4	0	15	
06:15 PM	40	323	4	1	368	34	7	41	0	82	15	298	30	0	343	6	5	10	0	21	
06:30 PM	48	321	1	0	370	33	9	49	0	91	20	275	26	1	322	3	4	8	1	16	
06:45 PM	53	269	0	0	322	28	8	47	0	83	26	245	24	1	296	4	4	6	0	14	
Total	182	1220	6	3	1411	120	36	191	1	348	89	1136	111	2	1338	18	19	28	1	66	
07:00 PM	39	273	4	0	316	25	14	53	0	92	27	249	25	0	301	6	6	10	0	22	
07:15 PM	34	267	3	0	304	28	10	33	0	71	17	266	25	1	309	4	4	9	2	19	
07:30 PM	37	295	1	0	333	29	7	38	0	74	33	272	24	0	329	5	3	7	0	15	
07:45 PM	48	255	2	0	305	22	9	29	0	60	11	234	30	1	276	2	3	7	0	12	
Total	158	1090	10	0	1258	104	40	153	0	297	88	1021	104	2	1215	17	16	33	2	68	
Grand Total	1336	7864	52	8	9260	746	201	986	11	1944	573	7034	678	6	8291	82	113	161	9	3650	
Apprch %	14.4	84.9	0.6	0.1		38.4	10.3	50.7	0.6		6.9	84.8	8.2	0.1		22.5	31.0	44.1	2.5		
Total %	6.7	39.6	0.3	0.0	46.6	3.8	1.0	5.0	0.1	9.8	2.9	35.4	3.4	0.0	41.7	0.4	0.6	0.8	0.0	1.8	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
Intersection: Street Rd / Richlieu Rd
Date: Saturday, July 19, 2003
Counter: VG

File Name : MS0719-6
Site Code : 00000000
Start Date : 07/19/2003
Page No : 2

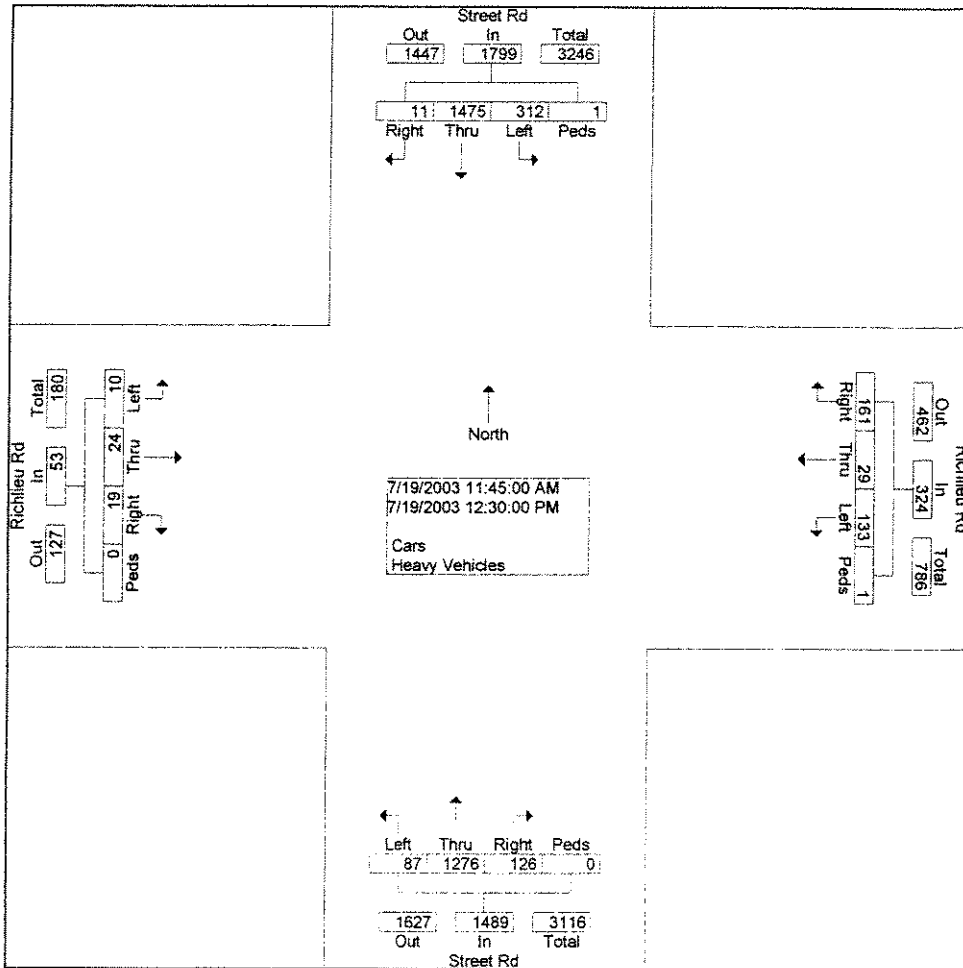


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
Intersection: Street Rd / Richlieu Rd
Date: Saturday, July 19, 2003
Counter: VG

File Name: MS0719-6
Site Code: 00000000
Start Date: 07/19/2003
Page No: 3

Start Time	Street Rd Southbound					Richlieu Rd Westbound					Street Rd Northbound					Richlieu Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 11:00 AM to 03:30 PM - Peak 1 of 1																					
Intersection	11:45 AM																				
Volume	312	1475	11	1	1799	133	29	161	1	324	87	1276	126	0	1489	10	24	19	0	53	3665
Percent	17.3	82.0	0.6	0.1		41.0	9.0	49.7	0.3		5.8	85.7	8.5	0.0		18.9	45.3	35.8	0.0		
Volume	91	347	5	0	443	45	10	46	0	101	22	310	35	0	367	2	10	7	0	19	930
Peak Factor	0.985																				
High Int.	11:45 AM																				
Volume	82	381	2	1	466	45	10	46	0	101	18	331	27	0	376	2	10	7	0	19	
Peak Factor	0.965					0.802					0.990					0.697					

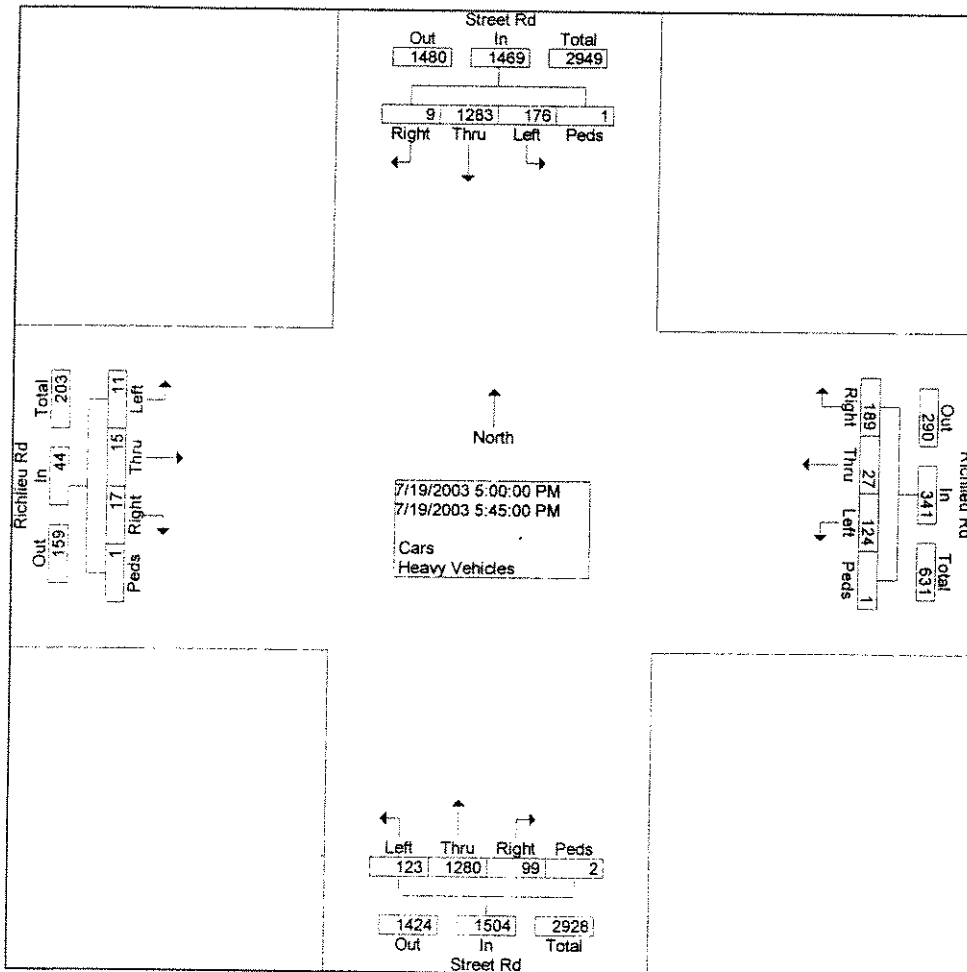


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
Intersection: Street Rd / Richlieu Rd
Date: Saturday, July 19, 2003
Counter: VG

File Name: MS0719-6
Site Code: 00000000
Start Date: 07/19/2003
Page No: 4

Start Time	Street Rd Southbound					Richlieu Rd Westbound					Street Rd Northbound					Richlieu Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																					
Intersection	05:00 PM																				
Volume	176	1283	9	1	1469	124	27	189	1	341	123	1280	99	2	1504	11	15	17	1	44	3358
Percent	12.0	87.3	0.6	0.1		36.4	7.9	55.4	0.3		8.2	85.1	6.6	0.1		25.0	34.1	38.6	2.3		
05:00 Volume	35	326	3	0	364	38	9	58	0	105	31	321	28	1	381	5	6	6	0	17	867
Peak Factor	0.968																				
High Int.	05:15 PM																				
Volume	54	338	3	1	396	38	9	58	0	105	51	341	31	1	424	5	6	6	0	17	
Peak Factor	0.927					0.812					0.887					0.647					



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp, Bucks Co, PA
In. Section: Street Rd / Richlieu Rd
Date: Saturday, July 19, 2003
Counter: VG

File Name: MS0719-6
Site Code: 00000000
Start Date: 07/19/2003
Page No: 1

Groups Printed- Heavy Vehicles

Start Time	Street Rd Southbound					Richlieu Rd Westbound					Street Rd Northbound					Richlieu Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	1	3	0	0	4	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0
11:15 AM	0	7	0	0	7	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0
11:30 AM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0
11:45 AM	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0
Total	1	16	0	0	17	0	0	1	0	1	0	10	0	0	10	0	0	0	0	0	0
12:00 PM	1	3	0	0	4	0	0	1	0	1	0	4	0	0	4	0	0	0	0	0	0
12:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30 PM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0
12:45 PM	2	1	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Total	3	7	0	0	10	0	0	1	0	1	0	8	0	0	8	0	0	0	0	0	0
01:00 PM	2	2	0	0	4	0	0	3	0	3	0	4	0	0	4	0	0	0	0	0	0
01:15 PM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0
01:30 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0
01:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0
Total	2	5	0	0	7	0	0	3	0	3	0	11	0	0	11	0	0	0	0	0	0
*** BREAK ***																					
05:00 PM	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	3	0	0	3	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0
Total	1	6	0	0	7	0	0	1	0	1	1	0	0	0	1	0	0	1	0	1	0
06:00 PM	1	3	0	0	4	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0
06:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BREAK ***																					
06:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Total	1	4	0	0	5	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0
07:00 PM	1	1	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
BREAK ***																					
07:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
07:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	4	0	0	5	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0
Grand Total	9	42	0	0	51	0	0	8	0	8	1	33	0	0	34	0	0	1	0	1	94
Apprch %	17.6	82.4	0.0	0.0		0.0	0.0	100.0	0.0		2.9	97.1	0.0	0.0		0.0	0.0	100.0	0.0		
Total %	9.6	44.7	0.0	0.0	54.3	0.0	0.0	8.5	0.0	8.5	1.1	35.1	0.0	0.0	36.2	0.0	0.0	1.1	0.0	1.1	

Tri-State Traffic Data, Inc.
610-466-1469

Weekday PM

(7)

Location: Bucks County, PA
 Section: Kingston Way / Street Road
 Date: Wednesday, June 11, 2003
 Counter: RZ

File Name : AF0611-7
 Site Code : 00000000
 Start Date : 06/11/2003
 Page No : 1

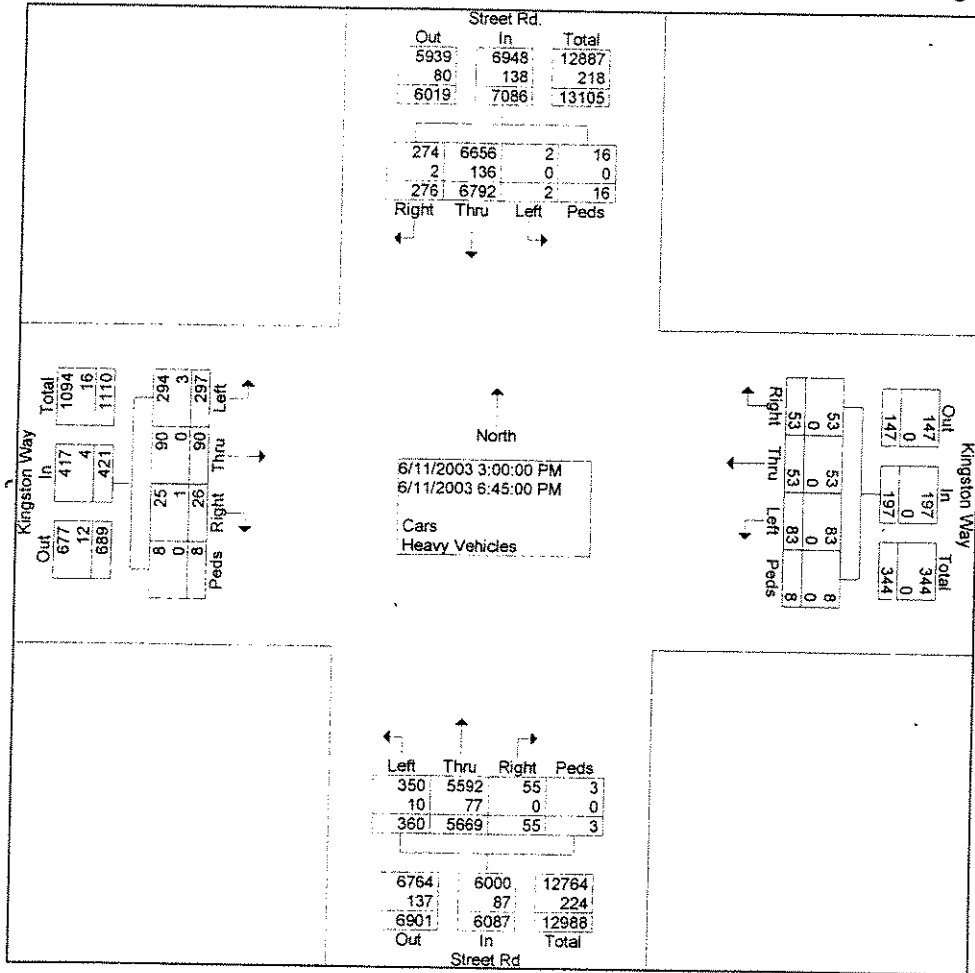
Groups Printed- Cars - Heavy Vehicles

Start Time	Street Rd. Southbound					Kingston Way Westbound					Street Rd Northbound					Kingston Way Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	0	322	0	3	325	4	4	1	0	9	16	335	1	0	352	16	10	1	2	29	715
03:15 PM	0	304	0	3	307	7	6	4	1	18	16	300	3	2	321	24	3	0	1	28	674
03:30 PM	1	385	0	0	386	8	2	5	1	16	30	349	2	0	381	14	3	0	1	18	801
03:45 PM	0	413	7	1	421	4	3	5	1	13	21	354	3	0	378	13	6	7	2	28	840
Total	1	1424	7	7	1439	23	15	15	3	56	83	1338	9	2	1432	67	22	8	6	103	3030
04:00 PM	0	423	0	3	426	3	3	5	1	12	19	396	2	0	417	17	5	0	0	22	877
04:15 PM	0	369	10	0	379	3	2	2	0	7	21	378	4	0	403	24	8	0	0	32	821
04:30 PM	0	499	16	1	516	5	1	3	1	10	23	410	4	0	437	15	2	1	0	18	981
04:45 PM	0	463	23	1	487	6	4	7	0	17	27	409	3	0	439	19	7	5	0	31	974
Total	0	1754	49	5	1808	17	10	17	2	46	90	1593	13	0	1696	75	22	6	0	103	3653
05:00 PM	0	489	20	0	509	4	9	2	1	16	22	403	3	0	428	14	2	3	1	20	973
05:15 PM	0	467	37	0	504	5	3	0	2	10	28	394	2	0	424	23	10	1	0	34	972
05:30 PM	0	480	27	0	507	6	4	4	0	14	25	390	15	0	430	18	5	2	0	25	976
05:45 PM	0	465	30	3	498	7	0	3	0	10	26	321	4	1	352	14	7	1	0	22	882
Total	0	1901	114	3	2018	22	16	9	3	50	101	1508	24	1	1634	69	24	7	1	101	3803
06:00 PM	1	509	24	0	534	10	2	3	0	15	23	379	2	0	404	17	5	3	0	25	978
06:05 PM	0	468	29	0	497	5	2	3	0	10	23	344	3	0	370	22	3	1	0	26	903
06:10 PM	0	414	29	1	444	2	2	4	0	8	26	304	2	0	332	25	10	0	1	36	820
06:15 PM	0	322	24	0	346	4	6	2	0	12	14	203	2	0	219	22	4	1	0	27	604
Total	1	1713	106	1	1821	21	12	12	0	45	86	1230	9	0	1325	86	22	5	1	114	3305
Grand Total	2	6792	276	16	7086	83	53	53	8	197	360	5669	55	3	6087	297	90	26	8	421	13791
Apprch %	0.0	95.9	3.9	0.2		42.1	26.9	26.9	4.1		5.9	93.1	0.9	0.0		70.5	21.4	6.2	1.9		
Total %	0.0	49.2	2.0	0.1	51.4	0.6	0.4	0.4	0.1	1.4	2.6	41.1	0.4	0.0	44.1	2.2	0.7	0.2	0.1	3.1	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
 Section: Kingston Way / Street Road
 Date: Wednesday, June 11, 2003
 Counter: RZ

File Name : AF0611-7
 Site Code : 00000000
 Start Date : 06/11/2003
 Page No : 2

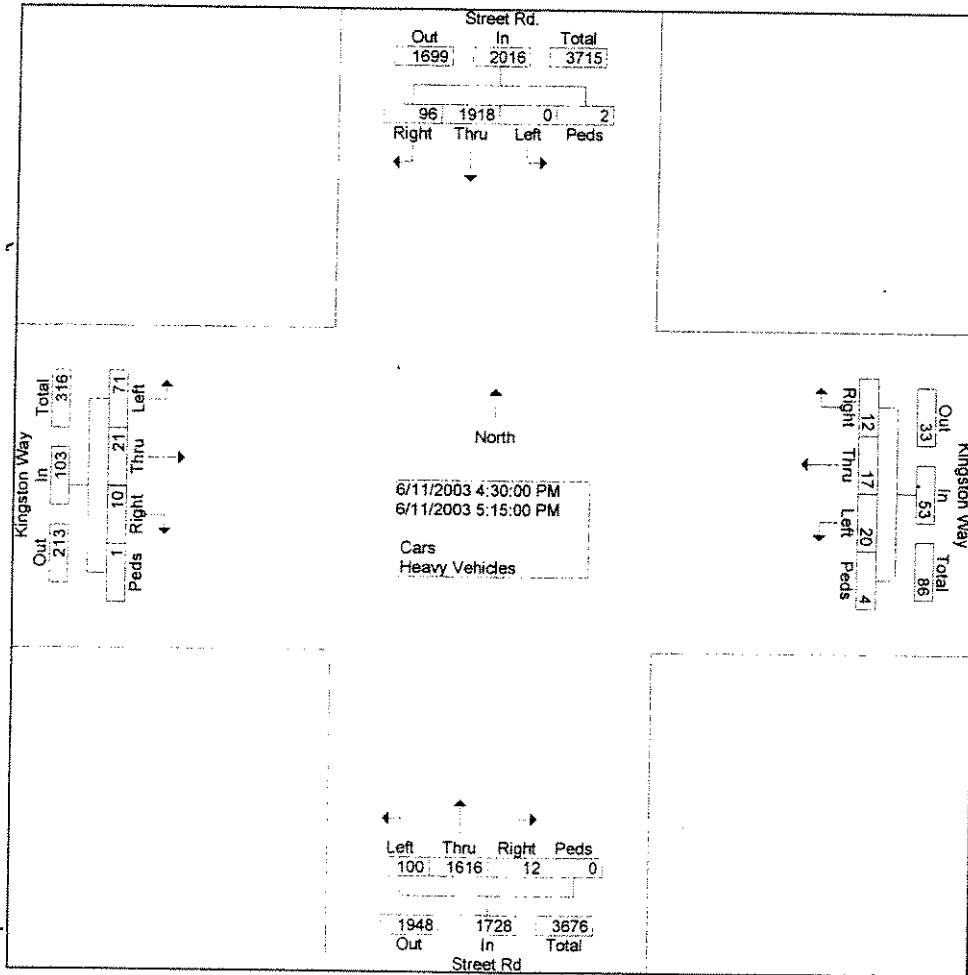


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
 Ir. Section: Kingston Way / Street Road
 Date: Wednesday, June 11, 2003
 Counter: RZ

File Name : AF0611-7
 Site Code : 00000000
 Start Date : 06/11/2003
 Page No : 3

Start Time	Street Rd. Southbound					Kingston Way Westbound					Street Rd Northbound					Kingston Way Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																						
Intersection																						
04:30 PM																						
Volume	0	1918	96	2	2016	20	17	12	4	53	100	1616	12	0	1728	71	21	10	1	103	3900	
Percent	0.0	95.1	4.8	0.1		37.7	32.1	22.6	7.5		5.8	93.5	0.7	0.0		68.9	20.4	9.7	1.0			
04:30 Volume	0	499	16	1	516	5	1	3	1	10	23	410	4	0	437	15	2	1	0	18	981	
Peak Factor																						
High Int.																						
04:30 Volume	0	499	16	1	516	6	4	7	0	17	04:45 PM	27	409	3	0	439	05:15 PM	23	10	1	0	34
Peak Factor																						
	0.977					0.779					0.984					0.757						



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. section: Street / Kingston Way
Date: Saturday, July 19, 2003
Counter: BB

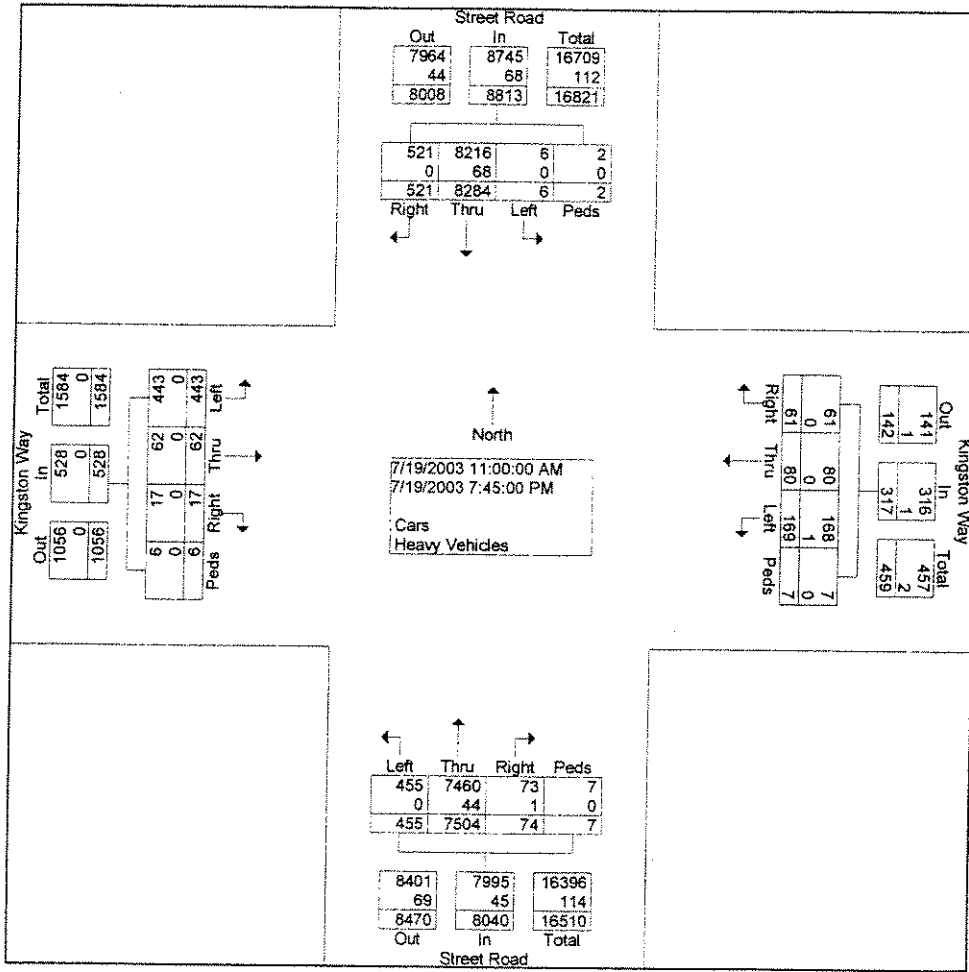
File Name : MS0719-7
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

Groups Printed- Cars - Heavy Vehicles

Start Time	Street Road Southbound					Kingston Way Westbound					Street Road Northbound					Kingston Way Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	0	345	22	0	367	4	5	1	0	10	14	265	1	1	281	25	1	1	1	28	686
11:15 AM	0	354	15	0	369	12	2	3	0	17	9	280	5	1	295	16	1	1	0	18	699
11:30 AM	0	394	16	0	410	3	0	3	0	6	27	301	4	0	332	13	1	1	0	15	763
11:45 AM	0	418	21	0	439	9	5	4	0	18	14	343	1	0	358	21	2	2	0	25	840
Total	0	1511	74	0	1585	28	12	11	0	51	64	1189	11	2	1266	75	5	5	1	86	2988
12:00 PM	0	399	30	0	429	10	2	2	0	14	17	335	3	0	355	17	2	1	0	20	818
12:15 PM	0	404	26	0	430	8	3	2	0	13	13	346	0	0	359	16	3	1	0	20	822
12:30 PM	0	421	29	0	450	10	3	3	0	16	17	352	1	1	371	17	3	1	0	21	858
12:45 PM	0	376	20	0	396	6	4	5	1	16	13	317	3	0	333	20	5	0	1	26	771
Total	0	1600	105	0	1705	34	12	12	1	59	60	1350	7	1	1418	70	13	3	1	87	3269
01:00 PM	0	394	19	0	413	6	2	4	1	13	29	334	2	0	365	19	3	0	0	22	813
01:15 PM	0	376	17	0	393	8	1	2	0	11	20	323	6	3	352	17	1	0	1	19	775
01:30 PM	0	353	26	1	380	12	0	3	0	15	24	322	5	0	351	23	0	0	0	23	769
01:45 PM	0	357	29	0	386	2	5	5	0	12	13	314	3	0	330	17	3	0	0	20	748
Total	0	1480	91	1	1572	28	8	14	1	51	86	1293	16	3	1398	76	7	0	1	84	3105
*** BREAK ***																					
05:00 PM	1	353	20	0	374	3	6	1	1	11	19	359	4	0	382	25	5	0	2	32	799
05:15 PM	0	330	24	0	354	7	2	1	0	10	24	325	1	0	350	27	2	1	0	30	744
05:30 PM	1	309	16	0	326	6	1	4	1	12	24	342	1	0	367	23	2	0	1	26	731
05:45 PM	0	355	18	0	373	6	8	2	0	16	22	334	2	0	358	20	4	0	0	24	771
Total	2	1347	78	0	1427	22	17	8	2	49	89	1360	8	0	1457	95	13	1	3	112	3045
06:00 PM	0	309	20	0	329	1	4	2	0	7	31	342	5	0	378	17	3	1	0	21	735
06:15 PM	1	333	28	0	362	12	3	1	0	16	17	310	4	0	331	18	4	0	0	22	731
06:30 PM	0	303	16	0	319	11	5	3	0	19	19	291	7	0	317	13	3	2	0	18	673
06:45 PM	1	287	21	0	309	5	4	1	0	10	16	290	3	0	309	15	7	0	0	22	650
Total	2	1232	85	0	1319	29	16	7	0	52	83	1233	19	0	1335	63	17	3	0	83	2789
07:00 PM	1	298	14	0	313	4	2	1	0	7	11	288	3	0	302	14	2	0	0	16	638
07:15 PM	1	270	27	1	299	9	1	2	1	13	24	282	3	0	309	22	3	3	0	28	649
07:30 PM	0	265	30	0	295	6	7	5	2	20	23	263	4	0	290	12	1	2	0	15	620
07:45 PM	0	281	17	0	298	9	5	1	0	15	15	246	3	1	265	16	1	0	0	17	595
Total	2	1114	88	1	1205	28	15	9	3	55	73	1079	13	1	1166	64	7	5	0	76	2502
Grand Total	6	8284	521	2	8813	169	80	61	7	317	455	7504	74	7	8040	443	62	17	6	528	17698
Apprch %	0.1	94.0	5.9	0.0		53.3	25.2	19.2	2.2		5.7	93.3	0.9	0.1		83.9	11.7	3.2	1.1		
Total %	0.0	46.8	2.9	0.0	49.8	1.0	0.5	0.3	0.0	1.8	2.6	42.4	0.4	0.0	45.4	2.5	0.4	0.1	0.0	3.0	

Location: Bensalem, Bucks Co., PA
 Ir. section: Street / Kingston Way
 Date: Saturday, July 19, 2003
 Counter: BB

File Name : MS0719-7
 Site Code : 00000000
 Start Date : 07/19/2003
 Page No : 2

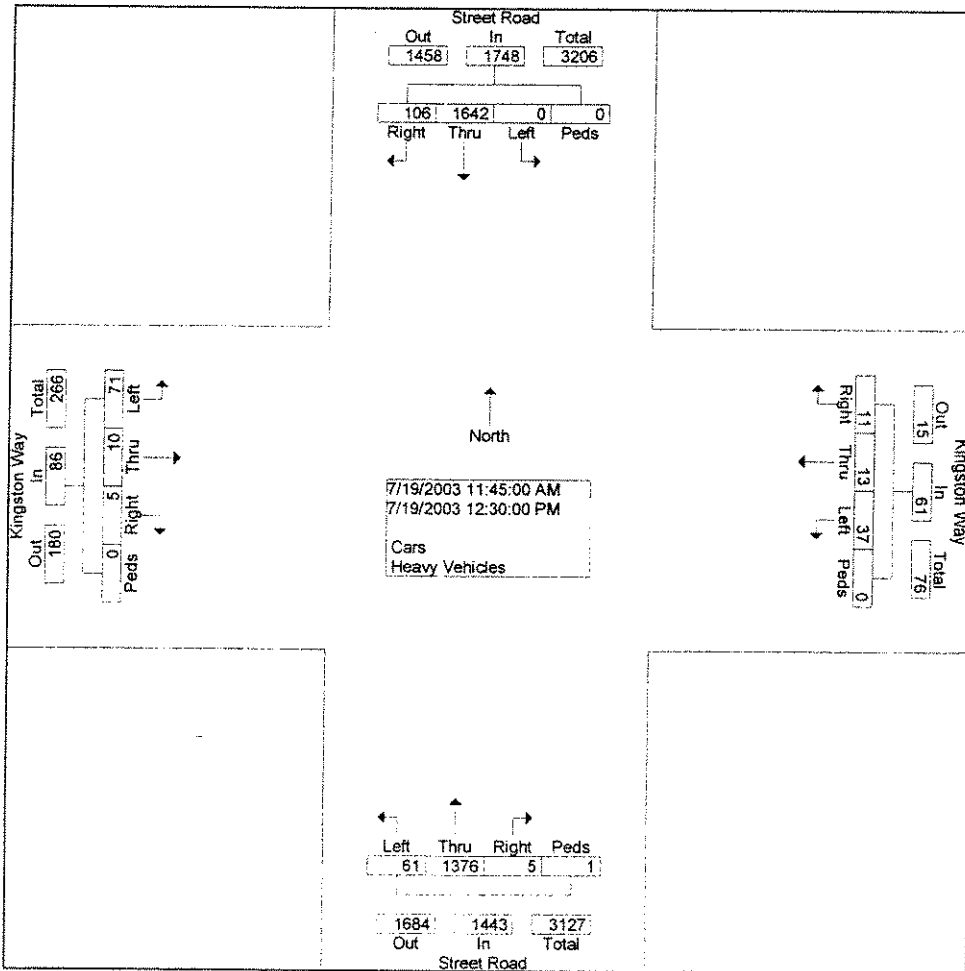


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. section: Street / Kingston Way
Date: Saturday, July 19, 2003
Counter: BB

File Name : MS0719-7
Site Code : 00000000
Start Date : 07/19/2003
Page No : 3

Start Time	Street Road Southbound					Kingston Way Westbound					Street Road Northbound					Kingston Way Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Peak Hour From 11:00 AM to 03:30 PM - Peak 1 of 1																						
Intersection 11:45 AM																						
Volume	0	1642	106	0	1748	37	13	11	0	61	61	1376	5	1	1443	71	10	5	0	86	3338	
Percent	0.0	93.9	6.1	0.0		60.7	21.3	18.0	0.0		4.2	95.4	0.3	0.1		82.6	11.6	5.8	0.0			
Volume	0	421	29	0	450	10	3	3	0	16	17	352	1	1	371	17	3	1	0	21	858	
Peak Factor																						0.973
High Int.																						
Volume	12:30 PM					11:45 AM					12:30 PM					11:45 AM						
Peak Factor	0.971					0.847					0.972					0.860						

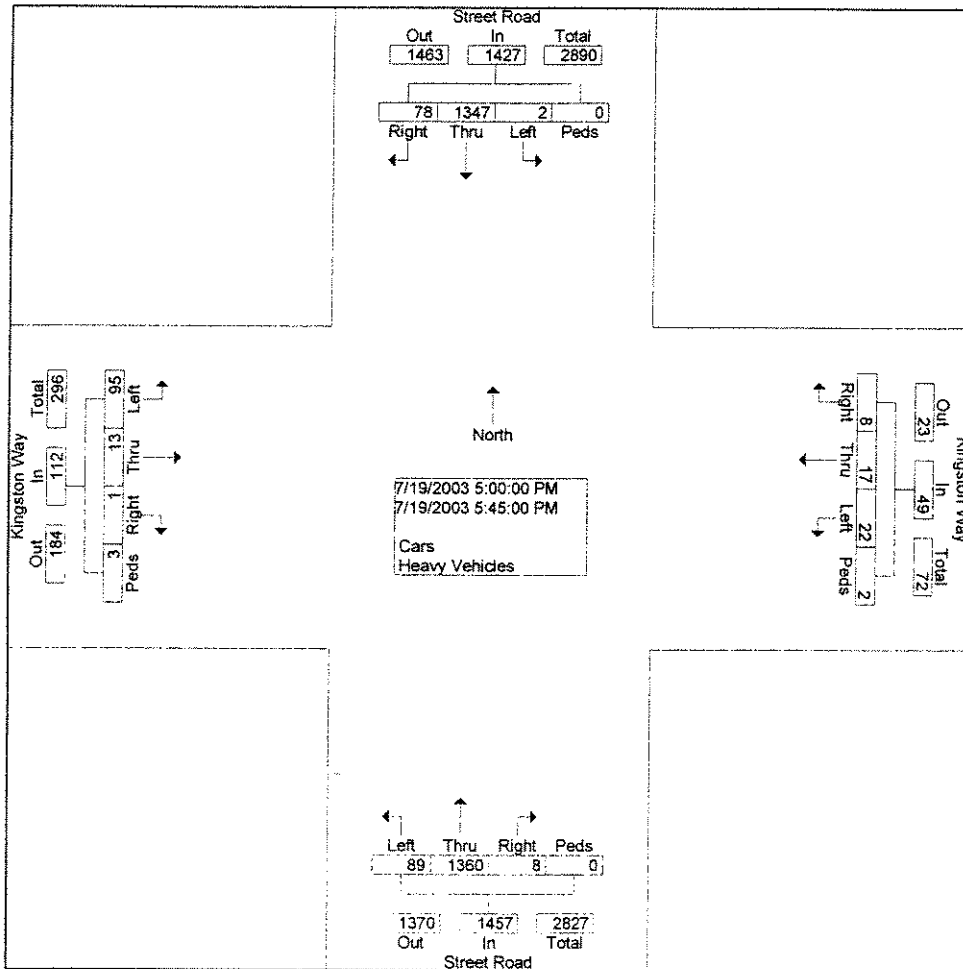


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. section: Street / Kingston Way
Date: Saturday, July 19, 2003
Counter: BB

File Name : MS0719-7
Site Code : 00000000
Start Date : 07/19/2003
Page No : 4

Start Time	Street Road Southbound					Kingston Way Westbound					Street Road Northbound					Kingston Way Eastbound					Int. Total				
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total					
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																									
Intersection	05:00 PM																								
Volume	2	1347	78	0	1427	22	17	8	2	49	89	1360	8	0	1457	95	13	1	3	112	3045				
Percent	0.1	94.4	5.5	0.0		44.9	34.7	16.3	4.1		6.1	93.3	0.5	0.0		84.8	11.6	0.9	2.7						
Volume	1	353	20	0	374	3	6	1	1	11	19	359	4	0	382	25	5	0	2	32	799				
Peak Factor	0.953																								
High Int.	05:00 PM																								
Volume	1	353	20	0	374	05:45 PM					05:00 PM					05:00 PM									
Peak Factor	0.954										0.766					0.954					0.875				



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In Section: Street / Kingston Way
Date: Saturday, July 19, 2003
Counter: BB

File Name : MS0719-7
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Street Road Southbound					Kingston Way Westbound					Street Road Northbound					Kingston Way Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	6
11:15 AM	0	7	0	0	7	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	10
11:30 AM	0	4	0	0	4	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	6
11:45 AM	0	7	0	0	7	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	10
Total	0	23	0	0	23	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	32
12:00 PM	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	8
12:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
12:30 PM	0	2	0	0	2	1	0	0	0	1	0	5	0	0	5	0	0	0	0	0	8
12:45 PM	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	7
Total	0	12	0	0	12	1	0	0	0	1	0	11	0	0	11	0	0	0	0	0	24
01:00 PM	0	5	0	0	5	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	12
01:15 PM	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	7
01:30 PM	0	1	0	0	1	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	5
01:45 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Total	0	11	0	0	11	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	27
*** BREAK ***																					
05:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
05:45 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	0	10	0	0	10	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	11
06:00 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	4
06:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
06:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	3
Total	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	10
07:00 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
07:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 PM	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
07:45 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
Total	0	7	0	0	7	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	10
Grand Total	0	68	0	0	68	1	0	0	0	1	0	44	1	0	45	0	0	0	0	0	114
Approch %	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	97.8	2.2	0.0		0.0	0.0	0.0	0.0		
Total %	0.0	59.6	0.0	0.0	59.6	0.9	0.0	0.0	0.0	0.9	0.0	38.6	0.9	0.0	39.5	0.0	0.0	0.0	0.0	0.0	

Location: Bucks County, PA
In. Section: Rockhill Dr. / Neshamny Bl
Date: Tuesday, June 03, 2003
Counter: RZ

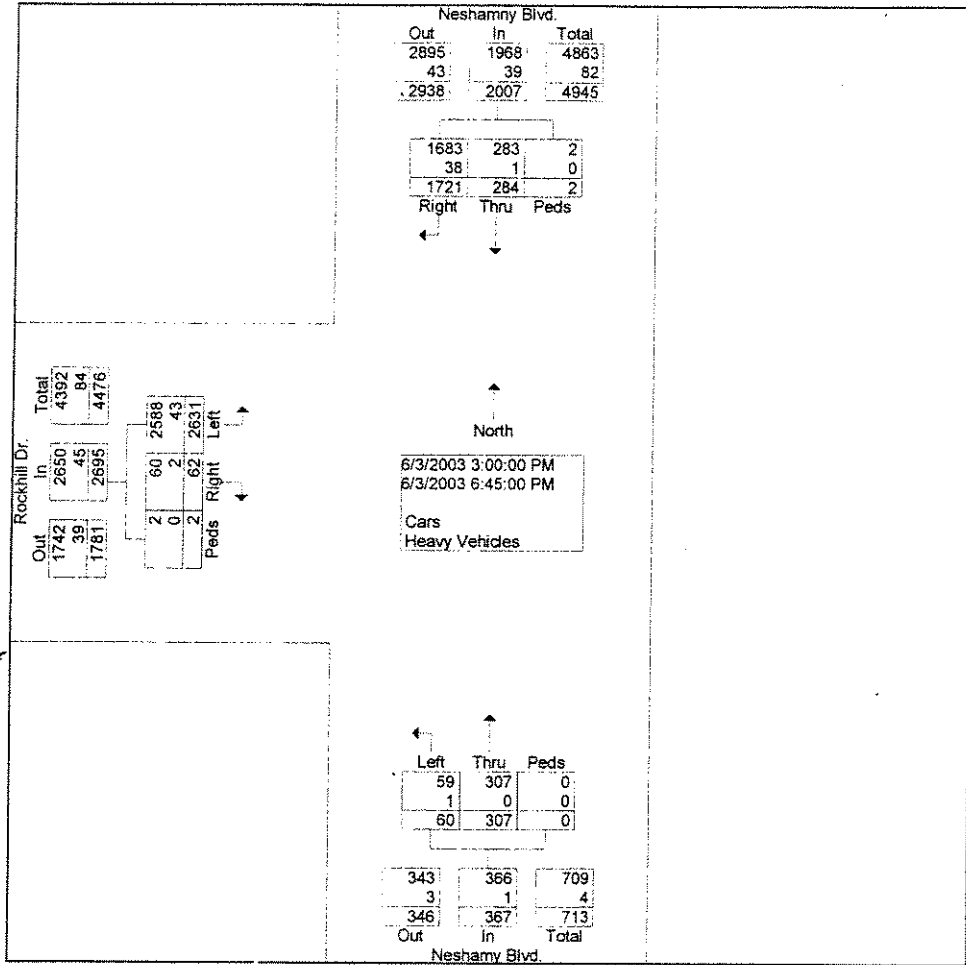
Groups Printed- Cars - Heavy Vehicles

Start Time	Neshamny Blvd. Southbound					Neshamny Blvd. Northbound					Rockhill Dr. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	0	19	106	0	125	6	28	0	0	34	104	1	0	0	105	264
03:15 PM	0	19	92	0	111	8	21	0	0	29	122	0	3	0	125	265
03:30 PM	0	22	113	0	135	5	26	0	0	31	142	0	1	0	143	309
03:45 PM	0	13	106	0	119	2	20	0	0	22	168	0	5	1	174	315
Total	0	73	417	0	490	21	95	0	0	116	536	1	9	1	547	1153
04:00 PM	0	14	102	2	118	2	18	0	0	20	173	0	2	0	175	313
04:15 PM	0	18	108	0	126	7	19	0	0	26	160	0	1	0	161	313
04:30 PM	0	14	98	0	112	8	17	0	0	25	205	0	7	0	212	349
04:45 PM	0	14	103	0	117	5	13	0	0	18	182	0	5	0	187	322
Total	0	60	411	2	473	22	67	0	0	89	720	0	15	0	735	1297
05:00 PM	0	13	122	0	135	2	18	0	0	20	192	0	4	0	196	351
05:15 PM	0	16	132	0	148	0	10	0	0	10	219	0	6	0	225	383
05:30 PM	0	23	113	0	136	7	13	0	0	20	211	0	9	0	220	376
05:45 PM	0	19	111	0	130	1	17	0	0	18	188	0	4	0	192	340
Total	0	71	478	0	549	10	58	0	0	68	810	0	23	0	833	1450
06:00 PM	0	18	109	0	127	2	16	0	0	18	145	0	5	0	150	295
06:15 PM	0	19	100	0	119	1	23	0	0	24	163	0	4	1	168	311
06:30 PM	0	22	103	0	125	2	18	0	0	20	135	0	4	0	139	284
06:45 PM	0	21	103	0	124	2	30	0	0	32	122	0	2	0	124	280
Total	0	80	415	0	495	7	87	0	0	94	565	0	15	1	581	1170
Grand Total	0	284	1721	2	2007	60	307	0	0	367	2631	1	62	2	2696	5070
Approch %	0.0	14.2	85.7	0.1		16.3	83.7	0.0	0.0		97.6	0.0	2.3	0.1		
Total %	0.0	5.6	33.9	0.0	39.6	1.2	6.1	0.0	0.0	7.2	51.9	0.0	1.2	0.0	53.2	

Tri-State Traffic Data, Inc.
610-466-1469

File Name : AF0603-8
Site Code : 00000000
Start Date : 06/03/2003
Page No : 2

Location: Bucks County, PA
In Section: Rockhill Dr. / Neshamny Bl
Date: Tuesday, June 03, 2003
Counter: RZ

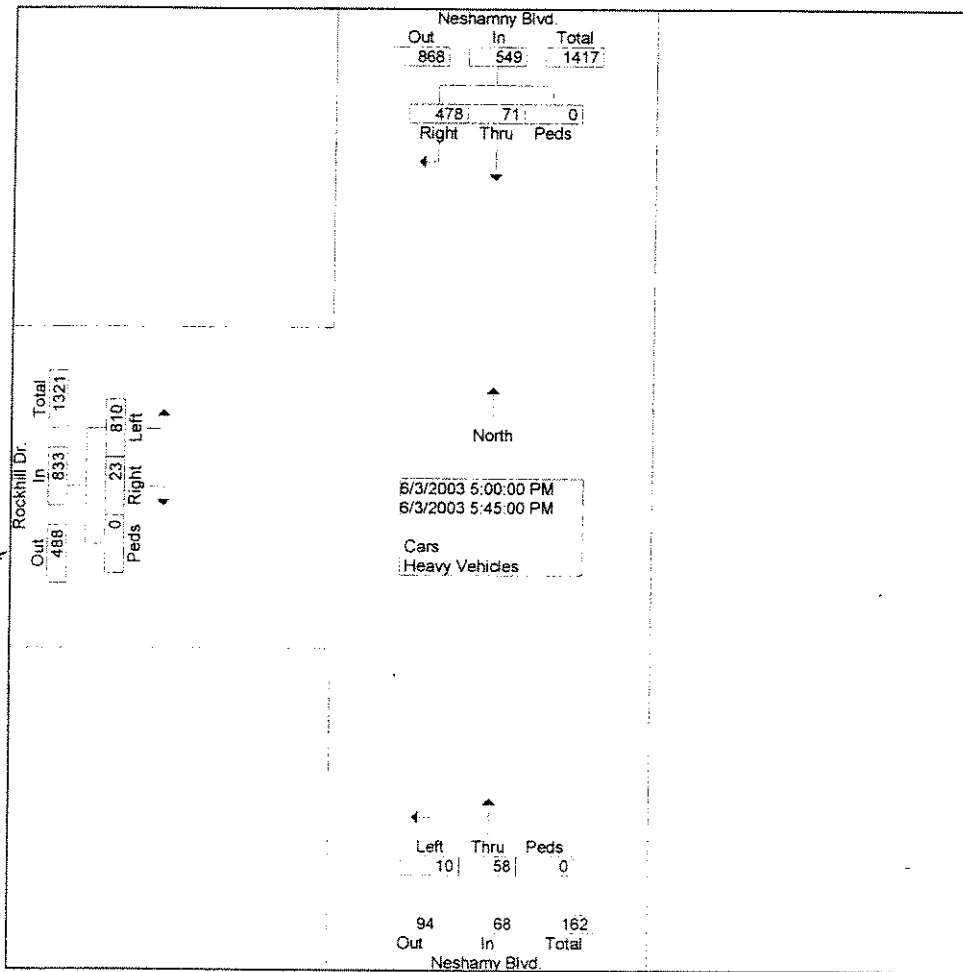


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In. section: Rockhill Dr. / Neshamny Bl
Date: Tuesday, June 03, 2003
Counter: RZ

File Name : AF0603-8
Site Code : 00000000
Start Date : 06/03/2003
Page No : 3

Start Time	Neshamny Blvd. Southbound					Neshamny Blvd. Northbound					Rockhill Dr. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From	03:00 PM to 06:45 PM - Peak 1 of 1															
Intersection	05:00 PM															
Volume	0	71	478	0	549	10	58	0	0	68	810	0	23	0	833	1450
Percent	0.0	12.9	87.1	0.0		14.7	85.3	0.0	0.0		97.2	0.0	2.8	0.0		
05:15 Volume	0	16	132	0	148	0	10	0	0	10	219	0	6	0	225	383
Peak Factor	0.946															
High Int.	05:15 PM															
Volume	0	16	132	0	148	2	18	0	0	20	219	0	6	0	225	
Peak Factor	0.927										0.850					



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
In section: Rockhill Dr. & Neshaminy B
Date: Saturday: July 19, 2003
Counter: JI

File Name : MS0719-8
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

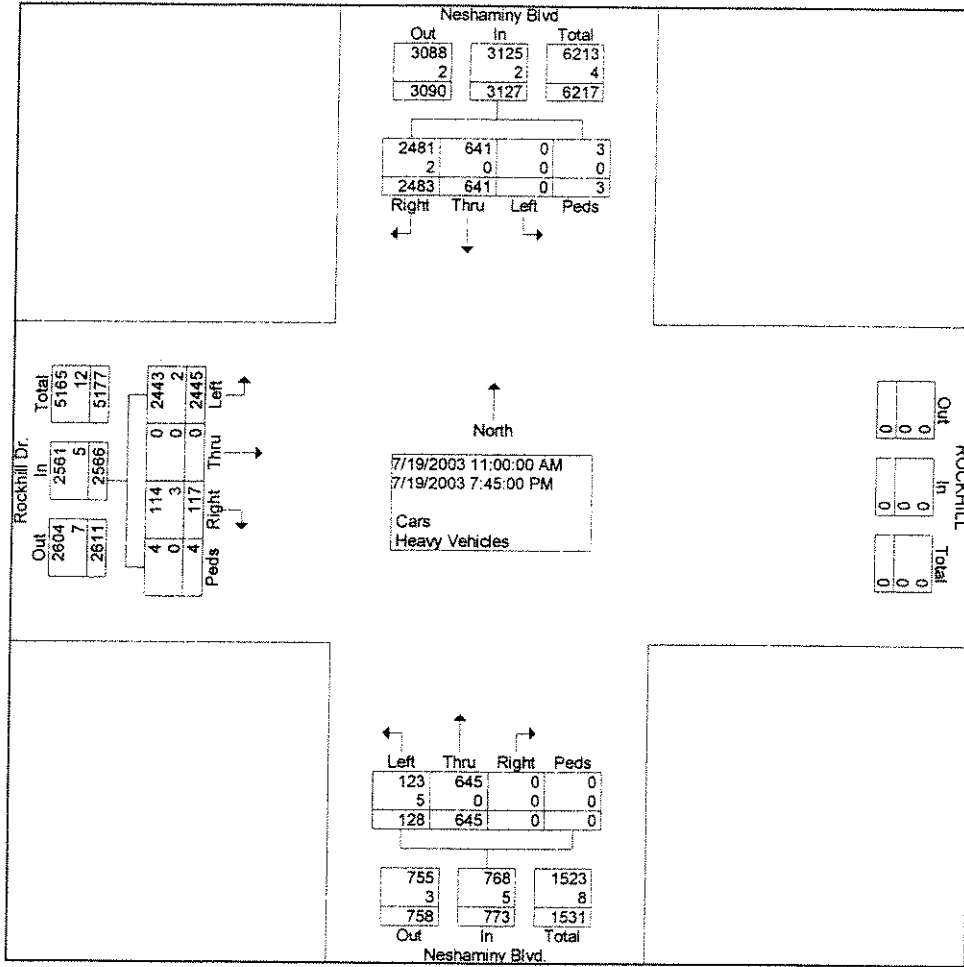
Groups Printed- Cars - Heavy Vehicles

Start Time	Neshaminy Blvd Southbound					Neshaminy Blvd. Northbound					Rockhill Dr. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	0	33	109	0	142	1	31	0	0	32	114	0	7	0	121	295
11:15 AM	0	36	115	0	151	5	39	0	0	44	94	0	6	2	102	297
11:30 AM	0	35	118	0	153	4	25	0	0	29	83	0	1	1	85	267
11:45 AM	0	31	117	1	149	6	36	0	0	42	102	0	5	0	107	298
Total	0	135	459	1	595	16	131	0	0	147	393	0	19	3	415	1157
12:00 PM	0	32	117	0	149	6	30	0	0	36	114	0	2	0	116	301
12:15 PM	0	24	111	0	135	5	30	0	0	35	120	0	7	0	127	297
12:30 PM	0	29	117	1	147	6	26	0	0	32	124	0	7	0	131	310
12:45 PM	0	41	115	0	156	6	31	0	0	37	109	0	9	0	118	311
Total	0	126	460	1	587	23	117	0	0	140	467	0	25	0	492	1219
01:00 PM	0	46	104	0	150	5	34	0	0	39	108	0	7	0	115	304
01:15 PM	0	34	94	1	129	15	34	0	0	49	116	0	5	0	121	299
01:30 PM	0	29	109	0	138	18	34	0	0	52	103	0	5	0	108	298
01:45 PM	0	25	112	0	137	1	32	0	0	33	102	0	3	1	106	276
Total	0	134	419	1	554	39	134	0	0	173	429	0	20	1	450	1177
*** BREAK ***																
05:00 PM	0	20	106	0	126	4	25	0	0	29	98	0	2	0	100	255
05:15 PM	0	25	109	0	134	2	21	0	0	23	108	0	4	0	112	269
5:30 PM	0	21	94	0	115	3	30	0	0	33	73	0	6	0	79	227
5:45 PM	0	20	93	0	113	2	21	0	0	23	111	0	6	0	117	253
Total	0	86	402	0	488	11	97	0	0	108	390	0	18	0	408	1004
06:00 PM	0	16	99	0	115	4	13	0	0	17	104	0	6	0	110	242
06:15 PM	0	22	109	0	131	14	21	0	0	35	105	0	3	0	108	274
06:30 PM	0	20	91	0	111	3	22	0	0	25	109	0	3	0	112	248
06:45 PM	0	16	85	0	101	3	20	0	0	23	73	0	7	0	80	204
Total	0	74	384	0	458	24	76	0	0	100	391	0	19	0	410	968
07:00 PM	0	21	107	0	128	4	29	0	0	33	98	0	5	0	103	264
07:15 PM	0	22	87	0	109	4	15	0	0	19	94	0	3	0	97	225
07:30 PM	0	25	75	0	100	3	20	0	0	23	94	0	3	0	97	220
07:45 PM	0	18	90	0	108	4	26	0	0	30	89	0	5	0	94	232
Total	0	86	359	0	445	15	90	0	0	105	375	0	16	0	391	941
Grand Total	0	641	2483	3	3127	128	645	0	0	773	2445	0	117	4	2566	6466
Apprch %	0.0	20.5	79.4	0.1		16.6	83.4	0.0	0.0		95.3	0.0	4.6	0.2		
Total %	0.0	9.9	38.4	0.0	48.4	2.0	10.0	0.0	0.0	12.0	37.8	0.0	1.8	0.1	39.7	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
Intersection: Rockhill Dr. & Neshaminy B
Date: Saturday: July 19, 2003
Counter: J1

File Name : MS0719-8
Site Code : 00000000
Start Date : 07/19/2003
Page No : 2

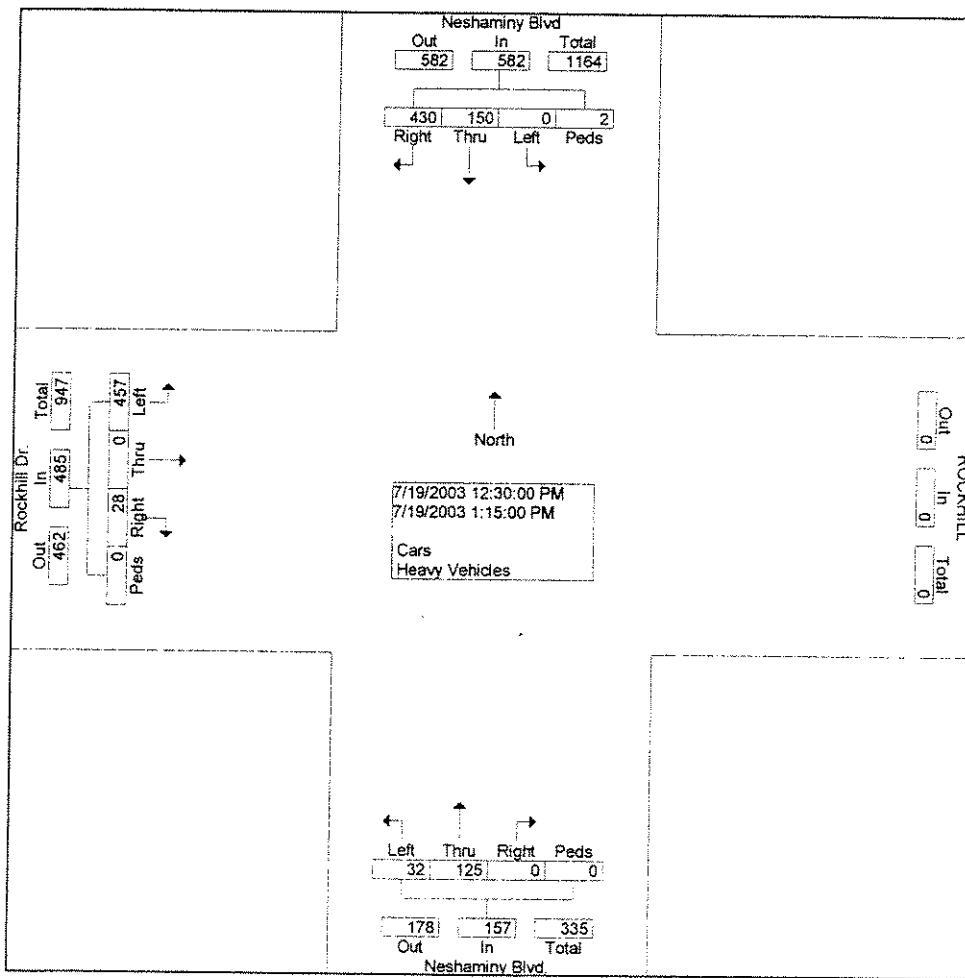


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
Intersection: Rockhill Dr. & Neshaminy B
Date: Saturday: July 19, 2003
Counter: JI

File Name : MS0719-8
Site Code : 00000000
Start Date : 07/19/2003
Page No : 3

Start Time	Neshaminy Blvd Southbound					Neshaminy Blvd. Northbound					Rockhill Dr. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 11:00 AM to 03:30 PM - Peak 1 of 1																
Intersection 12:30 PM	0	150	430	2	582	32	125	0	0	157	457	0	28	0	485	1224
Volume	0	150	430	2	582	32	125	0	0	157	457	0	28	0	485	1224
Percent	0.0	25.8	73.9	0.3		20.4	79.6	0.0	0.0		94.2	0.0	5.8	0.0		
12:45 Volume	0	41	115	0	156	6	31	0	0	37	109	0	9	0	118	311
Peak Factor																
High Int. 12:45 PM	0	41	115	0	156	15	34	0	0	49	124	0	7	0	131	0.984
Volume	0	41	115	0	156	15	34	0	0	49	124	0	7	0	131	0.984
Peak Factor																
						0.801										

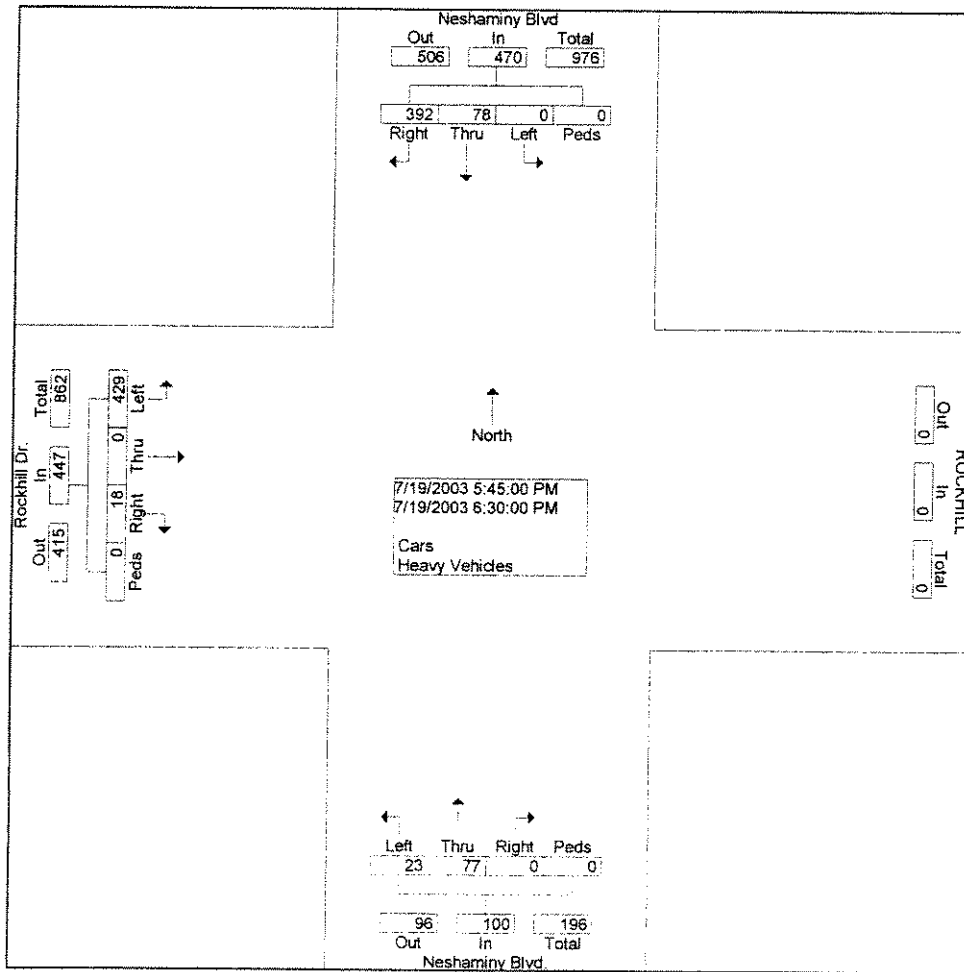


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
Intersection: Rockhill Dr. & Neshaminy B
Date: Saturday: July 19, 2003
Counter: JI

File Name : MS0719-8
Site Code : 00000000
Start Date : 07/19/2003
Page No : 4

Start Time	Neshaminy Blvd Southbound					Neshaminy Blvd. Northbound					Rockhill Dr. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																
Intersection	05:45 PM															
Volume	0	78	392	0	470	23	77	0	0	100	429	0	18	0	447	1017
Percent	0.0	16.6	83.4	0.0		23.0	77.0	0.0	0.0		96.0	0.0	4.0	0.0		
06:15 Volume	0	22	109	0	131	14	21	0	0	35	105	0	3	0	108	274
Peak Factor	0.928															
High Int.	06:15 PM															
Volume	0	22	109	0	131	14	21	0	0	35	111	0	6	0	117	0.955
Peak Factor	0.897															
	0.714															



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
In. section: Rockhill Dr. & Neshaminy B
Date: Saturday: July 19, 2003
Counter: JI

File Name : MS0719-8
Site Code : 00000000
Start Date : 07/19/2003
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Neshaminy Blvd Southbound					Neshaminy Blvd. Northbound					Rockhill Dr. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
*** BREAK ***																
11:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
11:45 AM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	2
Total	0	0	0	0	0	2	0	0	0	2	1	0	0	0	1	3
*** BREAK ***																
12:45 PM	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	2
Total	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	2
01:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
01:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
01:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	1	0	1	1	0	0	0	1	0	0	2	0	2	4
*** BREAK ***																
05:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
BREAK ***																
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	2
06:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
BREAK ***																
Total	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
*** BREAK ***																
Grand Total	0	0	2	0	2	5	0	0	0	5	2	0	3	0	5	12
Apprch %	0.0	0.0	100.0	0.0		100.0	0.0	0.0	0.0		40.0	0.0	60.0	0.0		
Total %	0.0	0.0	16.7	0.0	16.7	41.7	0.0	0.0	0.0	41.7	16.7	0.0	25.0	0.0	41.7	

Tri-State Traffic Data, Inc.
610-466-1469

9.

Location : Bucks County, PA
In section : Bristol Rd / Neshaminy Blv
Date : Tuesday, June 3, 2003
Counter : VG

File Name : AF0603-9
Site Code : 00000000
Start Date : 06/03/2003
Page No : 1

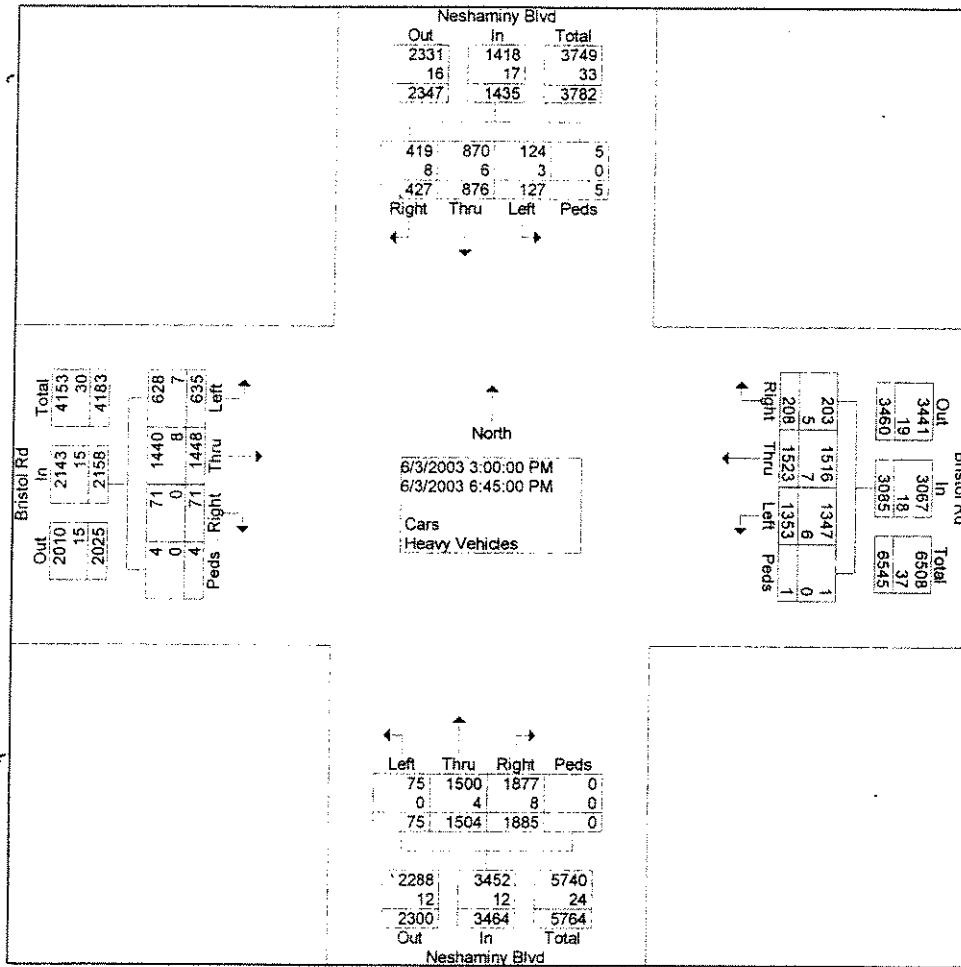
Groups Printed- Cars - Heavy Vehicles

Start Time	Neshaminy Blvd Southbound					Bristol Rd Westbound					Neshaminy Blvd Northbound					Bristol Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	7	38	16	0	61	75	91	15	0	181	9	53	104	0	166	28	77	8	0	113	521
03:15 PM	2	48	22	0	72	76	80	17	0	173	3	70	95	0	168	36	81	3	0	120	533
03:30 PM	17	53	17	0	87	86	72	15	0	173	3	68	104	0	175	36	92	7	0	135	570
03:45 PM	20	41	23	0	84	80	96	8	0	184	3	79	132	0	214	25	95	5	0	125	607
Total	46	180	78	0	304	317	339	55	0	711	18	270	435	0	723	125	345	23	0	493	2231
04:00 PM	7	48	34	3	92	67	98	18	0	183	3	84	112	0	199	42	96	5	1	144	618
04:15 PM	4	61	39	1	105	71	108	20	1	200	8	107	111	0	226	35	96	2	0	133	664
04:30 PM	9	54	31	0	94	76	97	13	0	186	8	121	119	0	248	41	105	6	1	153	681
04:45 PM	2	55	27	1	85	88	118	7	0	213	4	98	122	0	224	27	95	1	2	125	647
Total	22	218	131	5	376	302	421	58	1	782	23	410	464	0	897	145	392	14	4	555	2610
05:00 PM	8	64	29	0	101	103	122	13	0	238	4	114	128	0	246	61	85	2	0	148	733
05:15 PM	4	58	31	0	93	104	122	9	0	235	5	121	149	0	275	49	97	1	0	147	750
05:30 PM	4	54	32	0	90	91	103	18	0	212	10	118	124	0	252	51	92	15	0	158	712
05:45 PM	10	59	26	0	95	100	118	12	0	230	7	125	136	0	268	41	86	1	0	128	721
Total	26	235	118	0	379	398	465	52	0	915	26	478	537	0	1041	202	360	19	0	581	2916
06:00 PM	10	56	23	0	89	87	79	14	0	180	1	85	109	0	195	49	92	2	0	143	607
06:15 PM	9	63	28	0	100	89	84	7	0	180	3	98	125	0	226	41	88	2	0	131	637
06:30 PM	9	69	23	0	101	80	75	9	0	164	1	73	103	0	177	38	92	5	0	135	577
06:45 PM	5	55	26	0	86	80	60	13	0	153	3	90	112	0	205	35	79	6	0	120	564
Total	33	243	100	0	376	336	298	43	0	677	8	346	449	0	803	163	351	15	0	529	2385
Grand Total	127	876	427	5	1435	135	152	208	1	3085	75	150	188	0	3464	635	144	71	4	2158	1014
Apprch %	8.9	61.0	29.8	0.3		43.9	49.4	6.7	0.0		2.2	43.4	54.4	0.0		29.4	67.1	3.3	0.2		2
Total %	1.3	8.6	4.2	0.0	14.1	13.3	15.0	2.1	0.0	30.4	0.7	14.8	18.6	0.0	34.2	6.3	14.3	0.7	0.0	21.3	

Tri-State Traffic Data, Inc.
610-466-1469

Location : Bucks County, PA
In section : Bristol Rd / Neshaminy Blv
Date : Tuesday, June 3, 2003
Counter : VG

File Name : AF0603-9
Site Code : 00000000
Start Date : 06/03/2003
Page No : 2

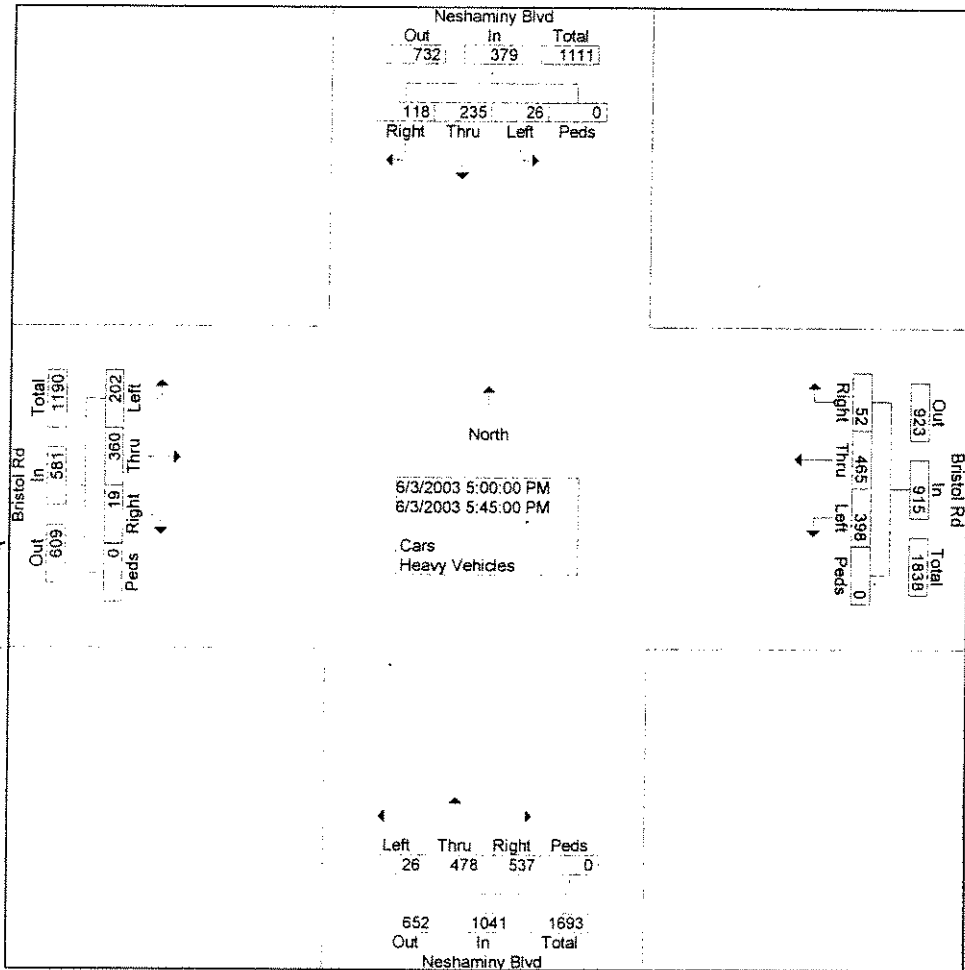


Tri-State Traffic Data, Inc.
610-466-1469

Location : Bucks County, PA
In section : Bristol Rd / Neshaminy Blv
Date : Tuesday, June 3, 2003
Counter : VG

File Name : AF0603-9
Site Code : 00000000
Start Date : 06/03/2003
Page No : 3

Start Time	Neshaminy Blvd Southbound					Bristol Rd Westbound					Neshaminy Blvd Northbound					Bristol Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																					
Intersection	05:00 PM																				
Volume	26	235	118	0	379	398	465	52	0	915	26	478	537	0	1041	202	360	19	0	581	2916
Percent	6.9	62.0	31.1	0.0		43.5	50.8	5.7	0.0		2.5	45.9	51.6	0.0		34.8	62.0	3.3	0.0		
05:15 Volume	4	58	31	0	93	104	122	9	0	235	5	121	149	0	275	49	97	1	0	147	750
Peak Factor																					
High Int.	05:00 PM					05:00 PM					05:15 PM					05:30 PM					
Volume	8	64	29	0	101	103	122	13	0	238	5	121	149	0	275	51	92	15	0	158	
Peak Factor	0.938					0.961					0.946					0.919					



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
In. Section: Neshaminy Blvd /Bristol Rd
Date: Saturday: July 26, 2003
Counter: JI

File Name : MS0726-9
Site Code : 00000000
Start Date : 07/26/2003
Page No : 1

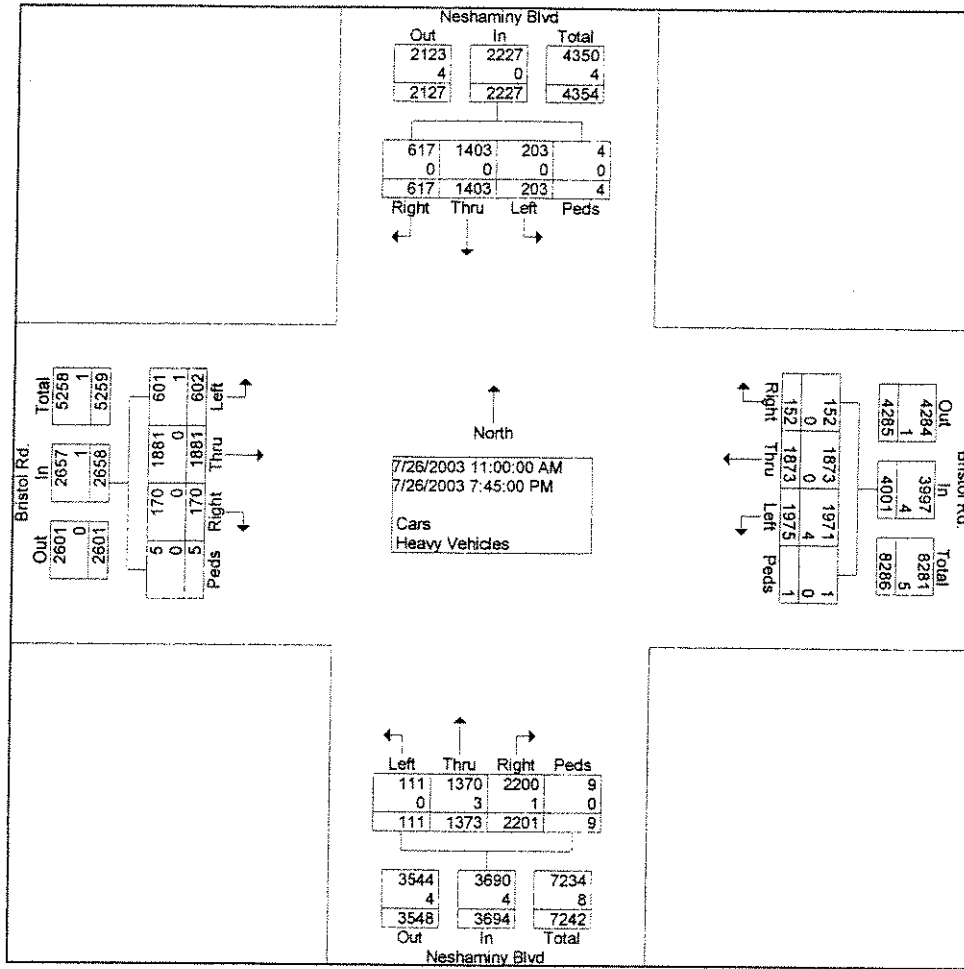
Groups Printed- Cars - Heavy Vehicles

Start Time	Neshaminy Blvd Southbound					Bristol Rd. Westbound					Neshaminy Blvd Northbound					Bristol Rd. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	9	68	32	0	109	98	75	8	0	181	2	64	84	0	150	18	84	17	0	119	559
11:15 AM	7	61	28	0	96	82	79	4	0	165	6	47	88	5	146	22	81	3	0	106	513
11:30 AM	14	69	24	0	107	91	75	11	0	177	6	43	95	0	144	32	89	14	0	135	563
11:45 AM	11	54	32	1	98	91	79	6	1	177	6	47	93	0	146	22	89	9	2	122	543
Total	41	252	116	1	410	362	308	29	1	700	20	201	360	5	586	94	343	43	2	482	2178
12:00 PM	12	77	31	0	120	97	104	9	0	210	6	76	97	0	179	27	83	5	0	115	624
12:15 PM	10	56	19	0	85	94	71	5	0	170	2	47	92	0	141	35	86	6	0	127	523
12:30 PM	12	74	31	0	117	93	86	9	0	188	7	61	120	0	188	25	80	6	0	111	604
12:45 PM	6	70	22	0	98	95	81	4	0	180	7	64	101	2	174	31	87	7	0	125	577
Total	40	277	103	0	420	379	342	27	0	748	22	248	410	2	682	118	336	24	0	478	2328
01:00 PM	8	67	25	0	100	115	92	8	0	215	7	46	105	1	159	21	74	8	0	103	577
01:15 PM	6	58	26	0	90	97	94	9	0	200	2	60	100	0	162	40	74	5	0	119	571
01:30 PM	8	80	24	0	112	87	78	6	0	171	11	58	75	0	144	17	76	9	0	102	529
01:45 PM	5	59	19	0	83	92	76	3	0	171	8	62	79	0	149	21	86	6	0	113	516
Total	27	264	94	0	385	391	340	26	0	757	28	226	359	1	614	99	310	28	0	437	2193
*** BREAK ***																					
05:00 PM	6	41	16	0	63	68	77	2	0	147	4	66	116	0	186	27	63	9	0	99	495
05:15 PM	9	44	20	0	73	84	65	4	0	153	1	61	76	0	138	27	78	5	0	110	474
05:30 PM	10	47	29	0	86	71	64	5	0	140	3	63	97	0	163	30	82	5	0	117	506
05:45 PM	10	52	23	0	85	73	88	4	0	165	1	72	79	0	152	24	76	3	0	103	505
Total	35	184	88	0	307	296	294	15	0	605	9	262	368	0	639	108	299	22	0	429	1980
06:00 PM	5	52	32	0	89	70	77	2	0	149	4	54	96	0	154	20	62	10	0	92	484
06:15 PM	10	58	25	0	93	66	78	3	0	147	2	69	85	0	156	28	84	6	0	118	514
06:30 PM	6	58	31	3	98	73	71	9	0	153	1	65	101	0	167	19	91	7	3	120	538
06:45 PM	12	65	26	0	103	89	70	9	0	168	6	55	96	0	157	32	57	7	0	96	524
Total	33	233	114	3	383	298	296	23	0	617	13	243	378	0	634	99	294	30	3	426	2060
07:00 PM	9	58	20	0	87	73	84	11	0	168	6	49	86	0	141	22	83	6	0	111	507
07:15 PM	7	48	25	0	80	57	72	8	0	137	5	49	86	0	140	26	69	6	0	101	458
07:30 PM	5	45	30	0	80	63	78	7	0	148	4	49	72	0	125	23	81	6	0	110	463
07:45 PM	6	42	27	0	75	56	59	6	0	121	4	46	82	1	133	13	66	5	0	84	413
Total	27	193	102	0	322	249	293	32	0	574	19	193	326	1	539	84	299	23	0	406	1841
Grand Total	203	1403	617	4	2227	1975	1873	152	1	4001	111	1373	2201	9	3694	602	1881	170	5	2658	12580
Apprch %	9.1	63.0	27.7	0.2		49.4	46.8	3.8	0.0		3.0	37.2	59.6	0.2		22.6	70.8	6.4	0.2		
Total %	1.6	11.2	4.9	0.0	17.7	15.7	14.9	1.2	0.0	31.8	0.9	10.9	17.5	0.1	29.4	4.8	15.0	1.4	0.0	21.1	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
In. section: Neshaminy Blvd /Bristol Rd
Date: Saturday: July 26, 2003
Counter: JI

File Name : MS0726-9
Site Code : 00000000
Start Date : 07/26/2003
Page No : 2

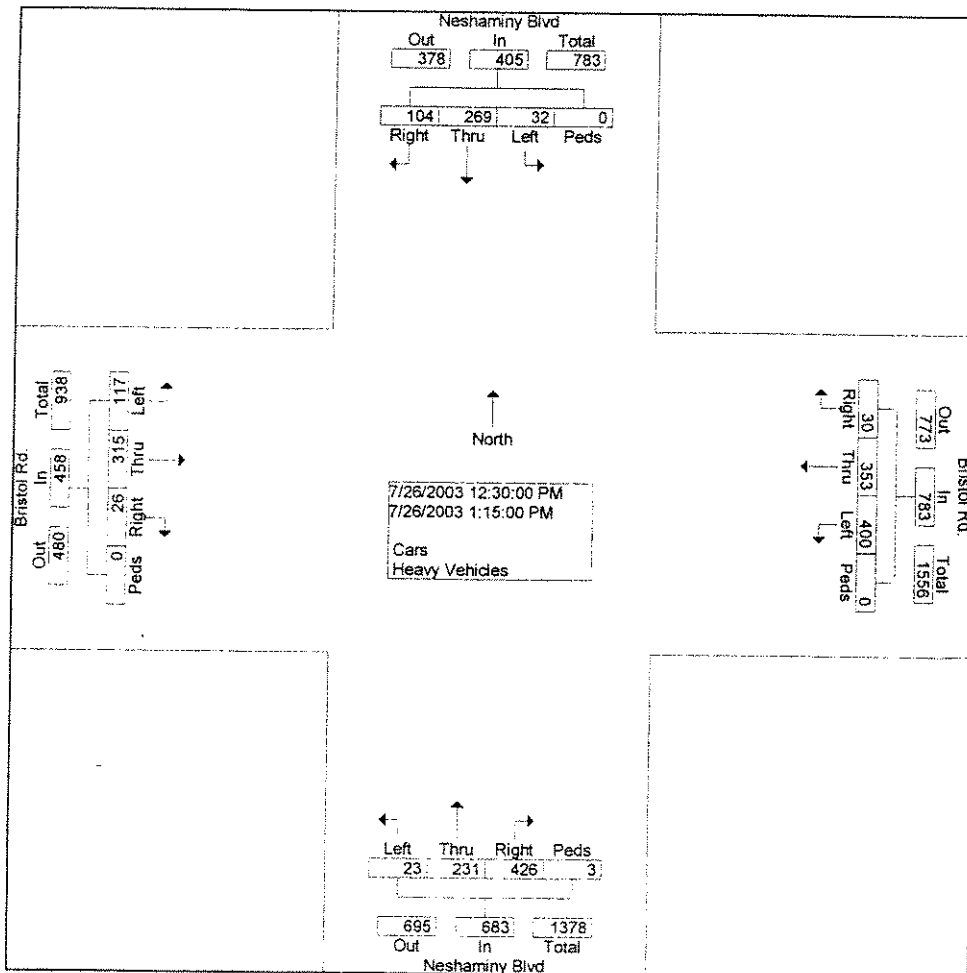


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
Intersection: Neshaminy Blvd /Bristol Rd
Date: Saturday: July 26, 2003
Counter: JI

File Name : MS0726-9
Site Code : 00000000
Start Date : 07/26/2003
Page No : 3

Start Time	Neshaminy Blvd Southbound					Bristol Rd. Westbound					Neshaminy Blvd Northbound					Bristol Rd. Eastbound					Int. Total	
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total		
Peak Hour From 11:00 AM to 03:30 PM - Peak 1 of 1																						
Intersection	12:30 PM																					
Volume	32	269	104	0	405	400	353	30	0	783	23	231	426	3	683	117	315	26	0	458	2329	
Percent	7.9	66.4	25.7	0.0		51.1	45.1	3.8	0.0		3.4	33.8	62.4	0.4		25.5	68.8	5.7	0.0			
Volume	12	74	31	0	117	93	86	9	0	188	7	61	120	0	188	25	80	6	0	111	604	
Peak Factor																						0.964
High Int.	12:30 PM																					
Volume	12	74	31	0	117	01:00 PM					12:30 PM					12:45 PM						
Peak Factor	0.865										0.910					0.908					0.916	

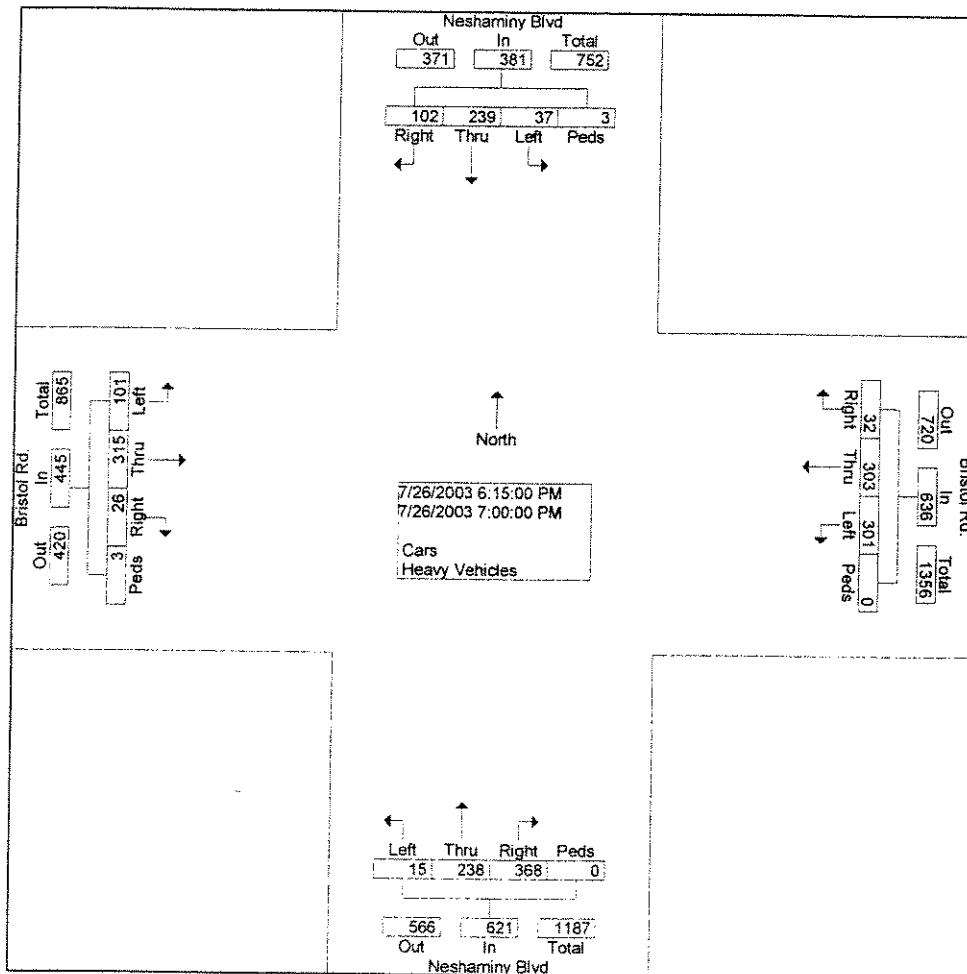


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
Intersection: Neshaminy Blvd /Bristol Rd
Date: Saturday: July 26, 2003
Counter: JI

File Name : MS0726-9
Site Code : 00000000
Start Date : 07/26/2003
Page No : 4

Start Time	Neshaminy Blvd Southbound					Bristol Rd. Westbound					Neshaminy Blvd Northbound					Bristol Rd. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																					
Intersection	06:15 PM																				
Volume	37	239	102	3	381	301	303	32	0	636	15	238	368	0	621	101	315	26	3	445	2083
Percent	9.7	62.7	26.8	0.8		47.3	47.6	5.0	0.0		2.4	38.3	59.3	0.0		22.7	70.8	5.8	0.7		445
06:30 Volume	6	58	31	3	98	73	71	9	0	153	1	65	101	0	167	19	91	7	3	120	538
Peak Factor																					0.968
High Int. Volume	06:45 PM					06:45 PM					06:30 PM					06:30 PM					
Peak Factor	12	65	26	0	103	89	70	9	0	168	1	65	101	0	167	19	91	7	3	120	0.927
	0.925					0.946					0.930					0.927					



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem Twp. Bucks Co.
In. section: Neshaminy Blvd /Bristol Rd
Date: Saturday: July 26, 2003
Counter: JI

File Name : MS0726-9
Site Code : 00000000
Start Date : 07/26/2003
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Neshaminy Blvd Southbound					Bristol Rd. Westbound					Neshaminy Blvd Northbound					Bristol Rd. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
*** BREAK ***																					***
11:15 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
BREAK ***																					***
11:45 AM	0	0	0	0	0	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	0
Total	0	0	0	0	0	2	0	0	0	2	0	1	1	0	2	0	0	0	0	0	0
12:00 PM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0
BREAK ***																					***
12:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
BREAK ***																					***
Total	0	0	0	0	0	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0
*** BREAK ***																					***
01:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
BREAK ***																					***
01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2
** JAK ***																					
Grand Total	0	0	0	0	0	4	0	0	0	4	0	3	1	0	4	1	0	0	0	1	9
Apprch %	0.0	0.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	75.0	25.0	0.0		100.0	0.0	0.0	0.0		
Total %	0.0	0.0	0.0	0.0	0.0	44.4	0.0	0.0	0.0	44.4	0.0	33.3	11.1	0.0	44.4	11.1	0.0	0.0	0.0	11.1	

Tri-State Traffic Data, Inc.
 610-466-1469

Location: Bucks County, PA
 In section: Bristol / Galloway Rds.
 Date: Tuesday: June 03, 2003
 Counter: J1

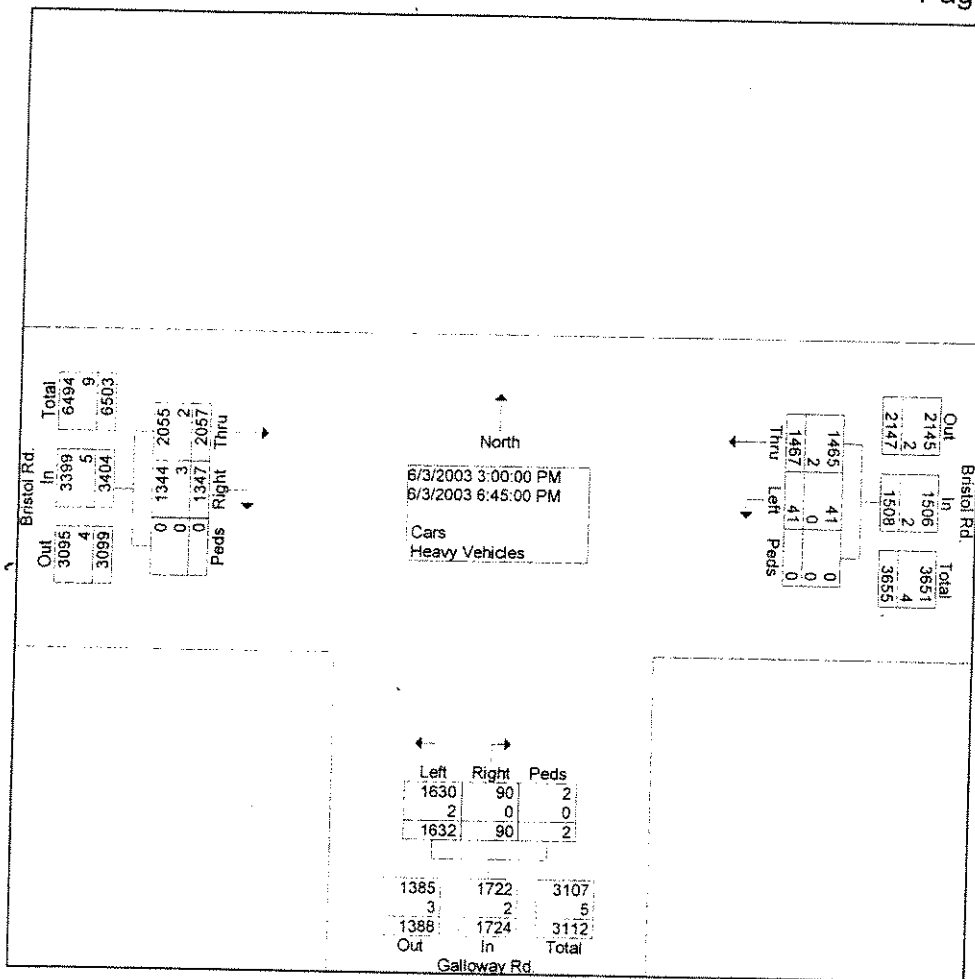
File Name : AF0603-10
 Site Code : 00000000
 Start Date : 06/03/2003
 Page No : 1

Groups Printed- Cars - Heavy Vehicles

Start Time	Bristol Rd. Westbound					Galloway Rd. Northbound					Bristol Rd. Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	3	78	0	0	81	99	0	5	0	104	0	107	72	0	179	364
03:15 PM	1	78	0	0	79	97	0	5	0	102	0	117	65	0	182	363
03:30 PM	1	79	0	0	80	100	0	6	0	106	0	114	81	0	195	381
03:45 PM	2	95	0	0	97	94	0	4	0	98	0	127	98	0	225	420
Total	7	330	0	0	337	390	0	20	0	410	0	465	316	0	781	1528
04:00 PM	2	89	0	0	91	89	0	5	0	94	0	128	84	0	212	397
04:15 PM	3	100	0	0	103	101	0	4	1	106	0	137	80	0	217	426
04:30 PM	6	86	0	0	92	97	0	6	0	103	0	123	92	0	215	410
04:45 PM	2	95	0	0	97	117	0	5	0	122	0	147	77	0	224	443
Total	13	370	0	0	383	404	0	20	1	425	0	535	333	0	868	1676
05:00 PM	1	113	0	0	114	142	0	6	1	149	0	134	96	0	230	493
05:15 PM	1	113	0	0	114	117	0	7	0	124	0	143	95	0	238	476
05:30 PM	3	98	0	0	101	122	0	5	0	127	0	131	81	0	212	440
05:45 PM	2	123	0	0	125	98	1	9	0	108	0	141	95	0	236	469
Total	7	447	0	0	454	479	1	27	1	508	0	549	367	0	916	1878
06:00 PM	5	87	0	0	92	97	0	7	0	104	0	132	95	0	227	423
06:15 PM	1	78	0	0	79	94	0	4	0	98	0	129	88	0	217	394
06:30 PM	2	83	0	0	85	83	0	7	0	90	0	124	78	0	202	377
06:45 PM	6	72	0	0	78	85	0	5	0	90	0	123	70	0	193	361
Total	14	320	0	0	334	359	0	23	0	382	0	508	331	0	839	1555
Grand Total	41	1467	0	0	1508	1632	1	90	2	1725	0	2057	1347	0	3404	6637
Apprch %	2.7	97.3	0.0	0.0		94.6	0.1	5.2	0.1		0.0	60.4	39.6	0.0		
Total %	0.6	22.1	0.0	0.0	22.7	24.6	0.0	1.4	0.0	26.0	0.0	31.0	20.3	0.0	51.3	

Location: Bucks County, PA
Intersection: Bristol / Galloway Rds.
Date: Tuesday, June 03, 2003
Counter: JI

File Name : AF0603-10
Site Code : 00000000
Start Date : 06/03/2003
Page No : 2

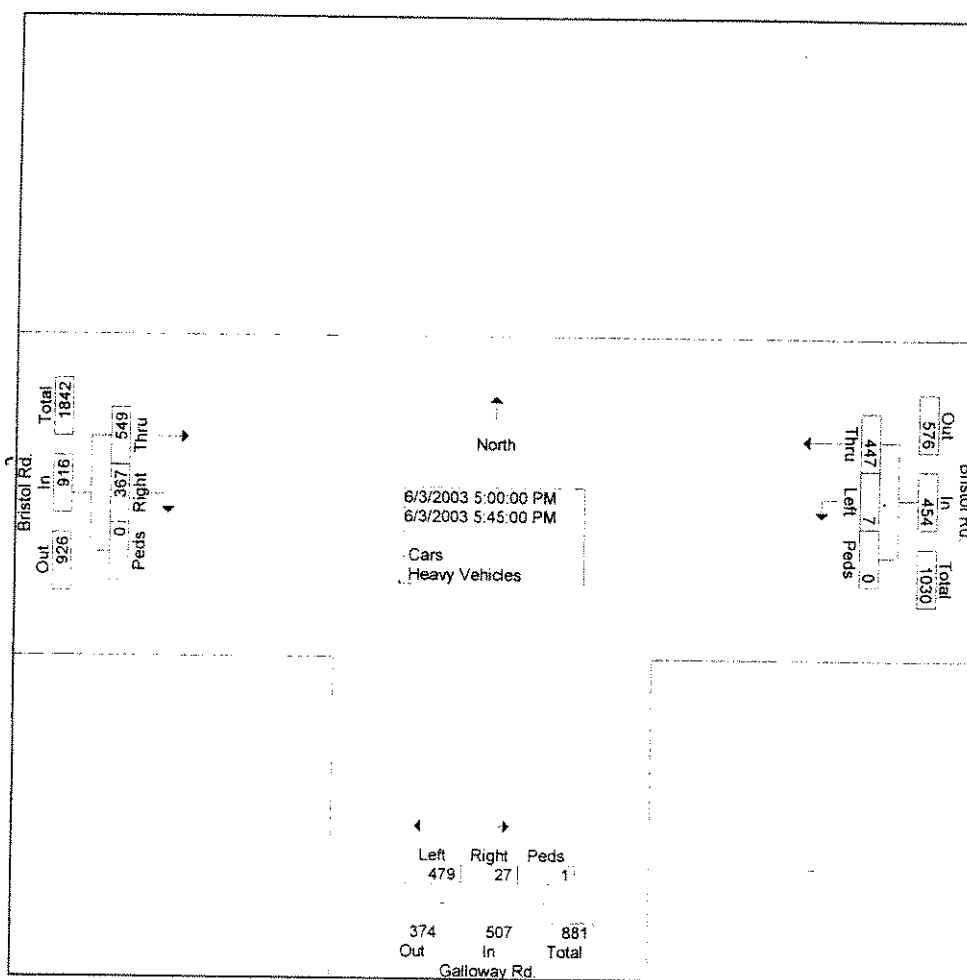


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In section: Bristol / Galloway Rds.
Date: Tuesday: June 03, 2003
Counter: JI

File Name : AF0603-10
Site Code : 00000000
Start Date : 06/03/2003
Page No : 3

Start Time	Bristol Rd. Westbound					App. Total	Galloway Rd. Northbound					App. Total	Bristol Rd. Eastbound					App. Total	Int. Total
	Left	Thru	Right	Peds	Left		Thru	Right	Peds	Left	Thru		Right	Peds					
Peak Hour From	03:00 PM to 06:45 PM - Peak 1 of 1																		
Intersection	05:00 PM																		
Volume	7	447	0	0	454	479	1	27	1	508	0	549	367	0	916	1878			
Percent	1.5	98.5	0.0	0.0		94.3	0.2	5.3	0.2		0.0	59.9	40.1	0.0					
05:00 Volume	1	113	0	0	114	142	0	6	1	149	0	134	96	0	230	493			
Peak Factor	0.952																		
High Int.	05:45 PM																		
Volume	2	123	0	0	125	142	0	6	1	149	0	143	95	0	238	0.952			
Peak Factor	0.908																		
	05:15 PM																		
	0.852																		



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. section: Bristol Rd. / Galloway Rd
Date: Saturday, July 26, 2003
Counter: BB

File Name : MS0716-10
Site Code : 00000000
Start Date : 07/26/2003
Page No : 1

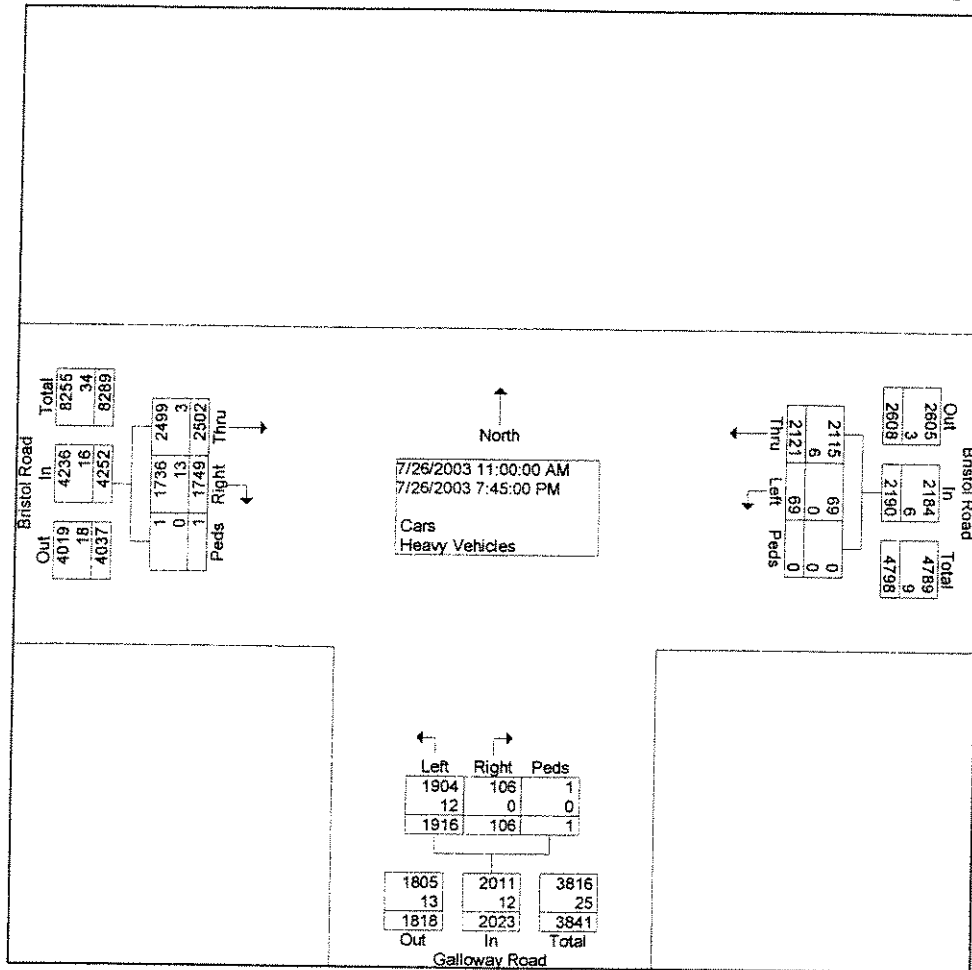
Groups Printed- Cars - Heavy Vehicles

Start Time	Bristol Road Westbound					Galloway Road Northbound					Bristol Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	1	98	0	0	99	84	0	6	0	90	0	95	74	0	169	358
11:15 AM	4	99	0	0	103	79	0	3	1	83	0	85	86	0	171	357
11:30 AM	3	97	0	0	100	83	0	3	0	86	0	115	94	1	210	396
11:45 AM	3	98	1	0	102	90	0	4	0	94	0	109	77	0	186	382
Total	11	392	1	0	404	336	0	16	1	353	0	404	331	1	736	1493
12:00 PM	0	116	0	0	116	90	0	7	0	97	0	112	85	0	197	410
12:15 PM	1	92	0	0	93	81	0	7	0	88	0	111	71	0	182	363
12:30 PM	6	90	0	0	96	82	0	6	0	88	0	133	76	0	209	393
12:45 PM	4	101	0	0	105	87	0	4	0	91	0	120	86	0	206	402
Total	11	399	0	0	410	340	0	24	0	364	0	476	318	0	794	1568
01:00 PM	2	117	0	0	119	116	0	5	0	121	0	111	71	0	182	422
01:15 PM	1	98	0	0	99	98	0	2	0	100	0	96	69	0	165	364
01:30 PM	3	90	0	0	93	82	0	11	0	93	0	85	75	0	160	346
01:45 PM	3	89	0	0	92	75	0	5	0	80	0	112	67	0	179	351
Total	9	394	0	0	403	371	0	23	0	394	0	404	282	0	686	1483
*** BREAK ***																
05:00 PM	3	76	0	0	79	73	0	2	0	75	0	114	60	0	174	328
05:15 PM	3	84	0	0	87	74	0	2	0	76	0	101	67	0	168	331
05:30 PM	5	79	0	0	84	83	0	5	0	88	0	121	74	0	195	367
05:45 PM	3	79	0	0	82	67	0	7	0	74	0	101	61	0	162	318
Total	14	318	0	0	332	297	0	16	0	313	0	437	262	0	699	1344
06:00 PM	0	80	0	0	80	87	0	5	0	92	0	106	58	0	164	336
06:15 PM	2	73	0	0	75	67	0	5	0	72	0	110	78	0	188	335
06:30 PM	3	92	0	0	95	68	0	2	0	70	0	90	82	0	172	337
06:45 PM	0	82	0	0	82	78	0	2	0	80	0	102	72	0	174	336
Total	5	327	0	0	332	300	0	14	0	314	0	408	290	0	698	1344
07:00 PM	7	73	0	0	80	79	0	1	0	80	0	106	75	0	181	341
07:15 PM	2	75	0	0	77	89	1	3	0	93	0	88	69	0	157	327
07:30 PM	4	75	0	0	79	40	0	4	0	44	0	97	59	0	156	279
07:45 PM	6	68	0	0	74	64	0	5	0	69	0	82	63	0	145	288
Total	19	291	0	0	310	272	1	13	0	286	0	373	266	0	639	1235
Grand Total	69	2121	1	0	2191	1916	1	106	1	2024	0	2502	1749	1	4252	8467
Apprch %	3.1	96.8	0.0	0.0		94.7	0.0	5.2	0.0		0.0	58.8	41.1	0.0		
Total %	0.8	25.1	0.0	0.0	25.9	22.6	0.0	1.3	0.0	23.9	0.0	29.6	20.7	0.0	50.2	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. section: Bristol Rd. / Galloway Rd
Date: Saturday, July 26, 2003
Counter: BB

File Name : MS0716-10
Site Code : 00000000
Start Date : 07/26/2003
Page No : 2

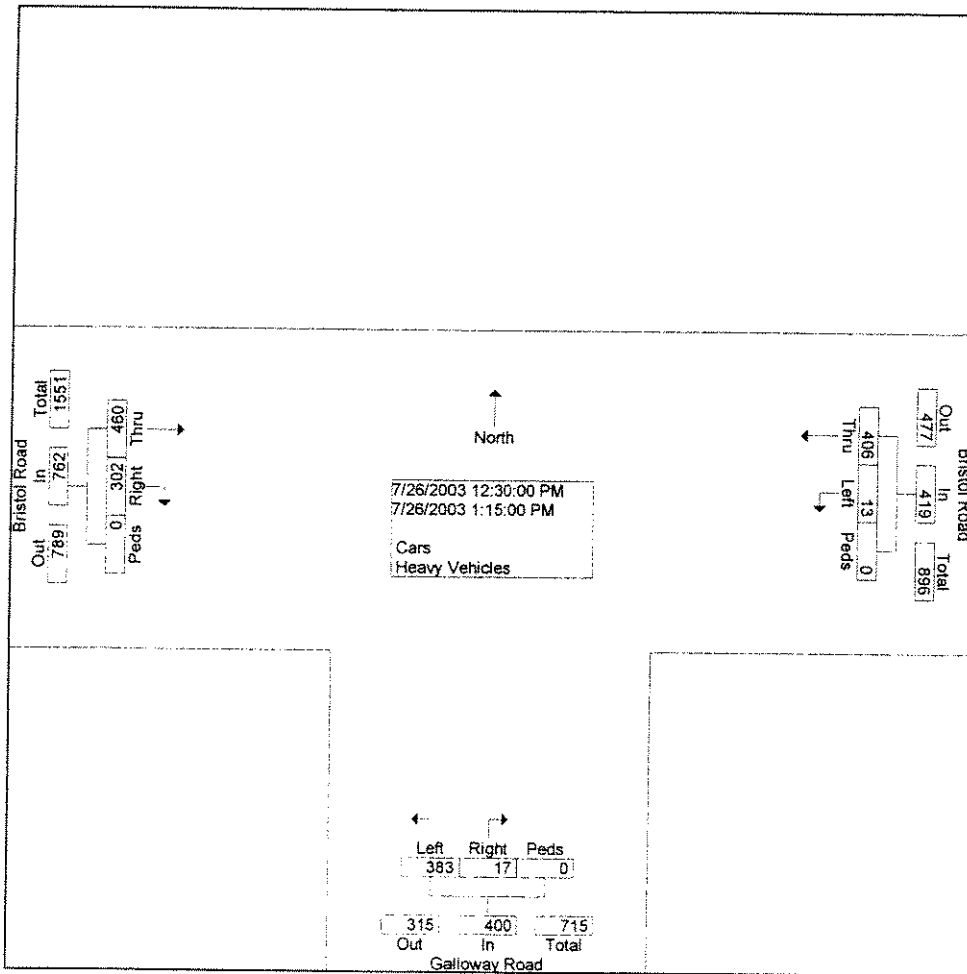


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
Intersection: Bristol Rd. / Galloway Rd
Date: Saturday, July 26, 2003
Counter: BB

File Name : MS0716-10
Site Code : 00000000
Start Date : 07/26/2003
Page No : 3

Start Time	Bristol Road Westbound					Galloway Road Northbound					Bristol Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 11:00 AM to 03:30 PM - Peak 1 of 1																
Intersection 12:30 PM																
Volume	13	406	0	0	419	383	0	17	0	400	0	460	302	0	762	1581
Percent	3.1	96.9	0.0	0.0		95.8	0.0	4.2	0.0		0.0	60.4	39.6	0.0		
01:00 Volume	2	117	0	0	119	116	0	5	0	121	0	111	71	0	182	422
Peak Factor																
High Int. 01:00 PM																
Volume	2	117	0	0	119	116	0	5	0	121	0	133	76	0	209	0.937
Peak Factor	0.880										0.826					0.911

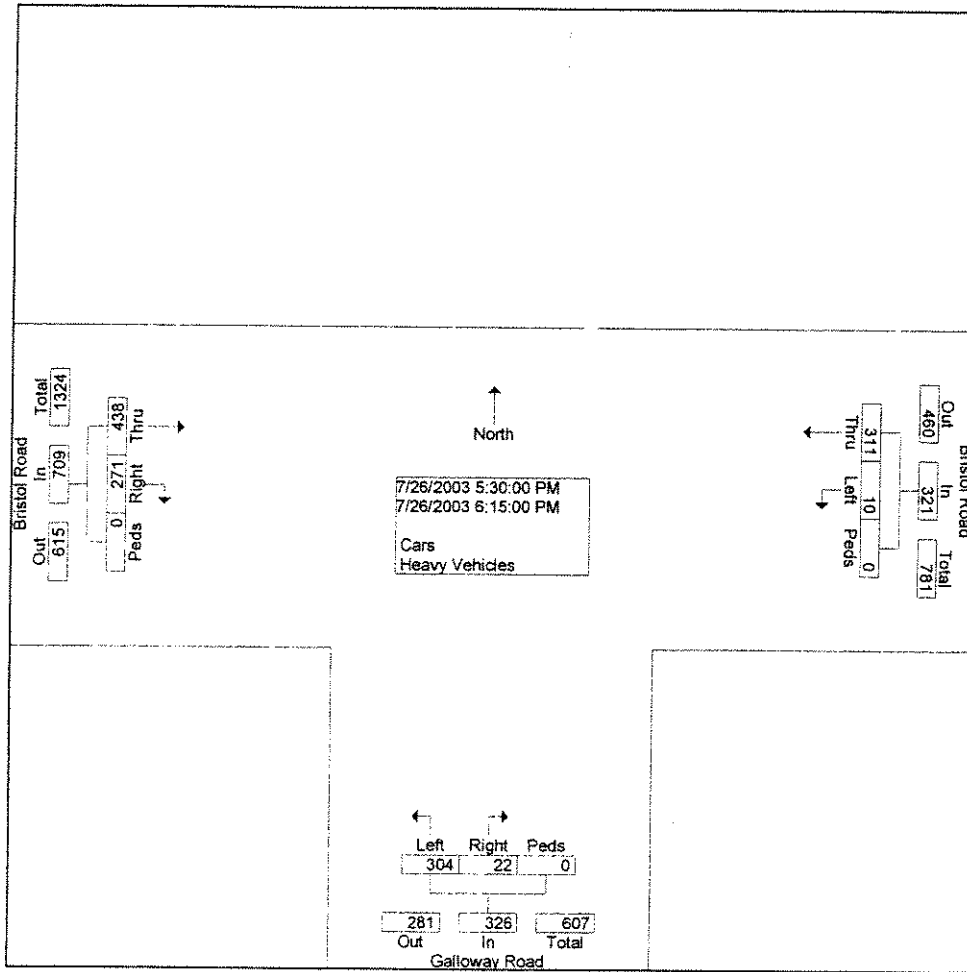


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. section: Bristol Rd. / Galloway Rd
Date: Saturday, July 26, 2003
Counter: BB

File Name : MS0716-10
Site Code : 00000000
Start Date : 07/26/2003
Page No : 4

Start Time	Bristol Road Westbound					Galloway Road Northbound					Bristol Road Eastbound					Int. Total		
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total			
Peak Hour From 03:45 PM to 07:45 PM - Peak 1 of 1																		
Intersection	05:30 PM																	
Volume	10	311	0	0	321	304	0	22	0	326	0	438	271	0	709	1356		
Percent	3.1	96.9	0.0	0.0		93.3	0.0	6.7	0.0		0.0	61.8	38.2	0.0				
05:30 Volume	5	79	0	0	84	83	0	5	0	88	0	121	74	0	195	367		
Peak Factor																		
High Int.	05:30 PM					06:00 PM					05:30 PM					0.924		
Volume	5	79	0	0	84	87	0	5	0	92	0	121	74	0	195			
Peak Factor						0.955						0.886						0.909



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bensalem, Bucks Co., PA
In. section: Bristol Rd. / Galloway Rd
Date: Saturday, July 26, 2003
Counter: BB

File Name : MS0716-10
Site Code : 00000000
Start Date : 07/26/2003
Page No : 1

Groups Printed- Heavy Vehicles

Start Time	Bristol Road Westbound					Galloway Road Northbound					Bristol Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
11:00 AM	0	2	0	0	2	1	0	0	0	1	0	0	1	0	1	4
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
11:30 AM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	2
11:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	3	0	3	4
Total	0	2	0	0	2	3	0	0	0	3	0	1	5	0	6	11
12:00 PM	0	0	0	0	0	1	0	0	0	1	0	1	1	0	2	3
12:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
12:30 PM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	0	0	1	3	0	0	0	3	0	2	1	0	3	7
01:00 PM	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	2
01:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1	2
01:30 PM	0	0	0	0	0	2	0	0	0	2	0	0	1	0	1	3
BREAK ***																***
Total	0	1	0	0	1	3	0	0	0	3	0	0	3	0	3	7
*** BREAK ***																
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
BREAK ***																***
05:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
BREAK ***																***
Total	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	2
06:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
BREAK ***																***
06:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
BREAK ***																***
Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	3
07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:15 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
07:30 PM	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	2
BREAK ***																***
Total	0	1	0	0	1	2	0	0	0	2	0	0	1	0	1	4
Grand Total	0	6	0	0	6	12	0	0	0	12	0	3	13	0	16	34
Apprch %	0.0	100.0	0.0	0.0		100.0	0.0	0.0	0.0		0.0	18.8	81.2	0.0		
Total %	0.0	17.6	0.0	0.0	17.6	35.3	0.0	0.0	0.0	35.3	0.0	8.8	38.2	0.0	47.1	

11.

Tri-State Traffic Data, Inc.
610-466-1469

Location : Bucks County, PA
 Ir section : Mechanicsville Rd/Byberry
 Date : Wednesday, June 4, 2003
 Counter : VG

File Name : AF0604-11
 Site Code : 00000000
 Start Date : 06/04/2003
 Page No : 1

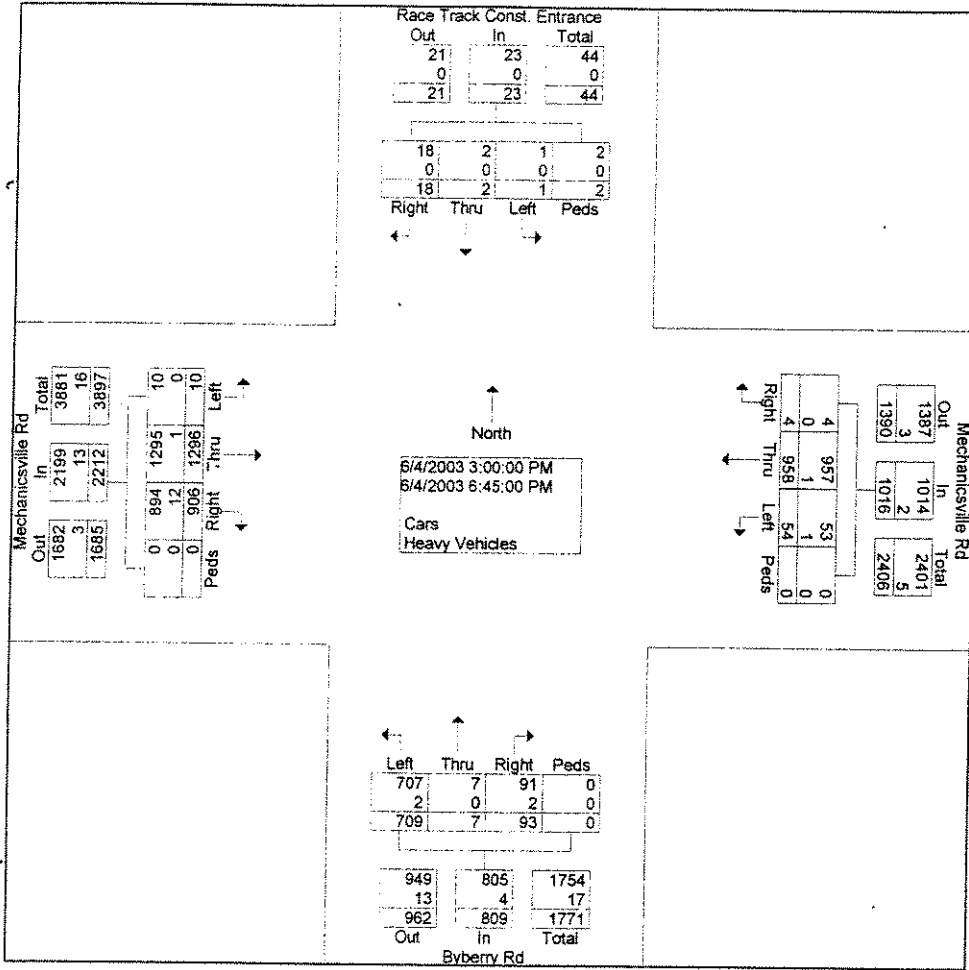
Groups Printed- Cars - Heavy Vehicles

Start Time	Race Track Const. Entrance Southbound					Mechanicsville Rd Westbound					Byberry Rd Northbound					Mechanicsville Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	1	0	0	0	1	2	62	0	0	64	40	1	4	0	45	0	59	36	0	95	205
03:15 PM	0	0	0	0	0	6	68	0	0	74	39	0	8	0	47	0	78	51	0	129	250
03:30 PM	0	0	3	0	3	3	54	1	0	58	47	0	6	0	53	2	74	49	0	125	239
03:45 PM	0	0	2	0	2	6	57	0	0	63	42	0	6	0	48	2	67	52	0	121	234
Total	1	0	5	0	6	17	241	1	0	259	168	1	24	0	193	4	278	188	0	470	928
04:00 PM	0	0	1	0	1	4	68	1	0	73	55	0	9	0	64	0	74	62	0	136	274
04:15 PM	0	0	0	0	0	8	69	0	0	77	41	0	2	0	43	0	82	57	0	139	259
04:30 PM	0	0	1	2	3	3	54	0	0	57	58	1	7	0	66	0	95	52	0	147	273
04:45 PM	0	1	2	0	3	3	69	1	0	73	41	2	6	0	49	0	95	71	0	166	291
Total	0	1	4	2	7	18	260	2	0	280	195	3	24	0	222	0	346	242	0	588	1097
05:00 PM	0	1	2	0	3	3	45	0	0	48	54	2	4	0	60	1	91	68	0	160	271
05:15 PM	0	0	1	0	1	4	79	0	0	83	46	0	9	0	55	1	98	72	0	171	310
05:30 PM	0	0	2	0	2	2	61	0	0	63	40	0	7	0	47	2	98	56	0	156	268
05:45 PM	0	0	1	0	1	4	58	0	0	62	51	0	3	0	54	1	86	73	0	160	277
Total	0	1	6	0	7	13	243	0	0	256	191	2	23	0	216	5	373	269	0	647	1126
06:00 PM	0	0	2	0	2	1	56	1	0	58	40	0	4	0	44	1	87	71	0	159	263
06:15 PM	0	0	0	0	0	3	53	0	0	56	40	0	7	0	47	0	69	49	0	118	221
06:30 PM	0	0	0	0	0	2	46	0	0	48	37	0	6	0	43	0	65	46	0	111	202
06:45 PM	0	0	1	0	1	0	59	0	0	59	38	1	5	0	44	0	78	41	0	119	223
Total	0	0	3	0	3	6	214	1	0	221	155	1	22	0	178	1	299	207	0	507	909
Grand Total	1	2	18	2	23	54	958	4	0	1016	709	7	93	0	809	10	1296	906	0	2212	4060
Apprch %	4.3	8.7	78.3	8.7		5.3	94.3	0.4	0.0		87.6	0.9	11.5	0.0		0.5	58.6	41.0	0.0		
Total %	0.0	0.0	0.4	0.0	0.6	1.3	23.6	0.1	0.0	25.0	17.5	0.2	2.3	0.0	19.9	0.2	31.9	22.3	0.0	54.5	

Tri-State Traffic Data, Inc.
610-466-1469

Location : Bucks County, PA
 Intersection : Mechanicsville Rd/Byberry
 Date : Wednesday, June 4, 2003
 Counter : VG

File Name : AF0604-11
 Site Code : 00000000
 Start Date : 06/04/2003
 Page No : 2

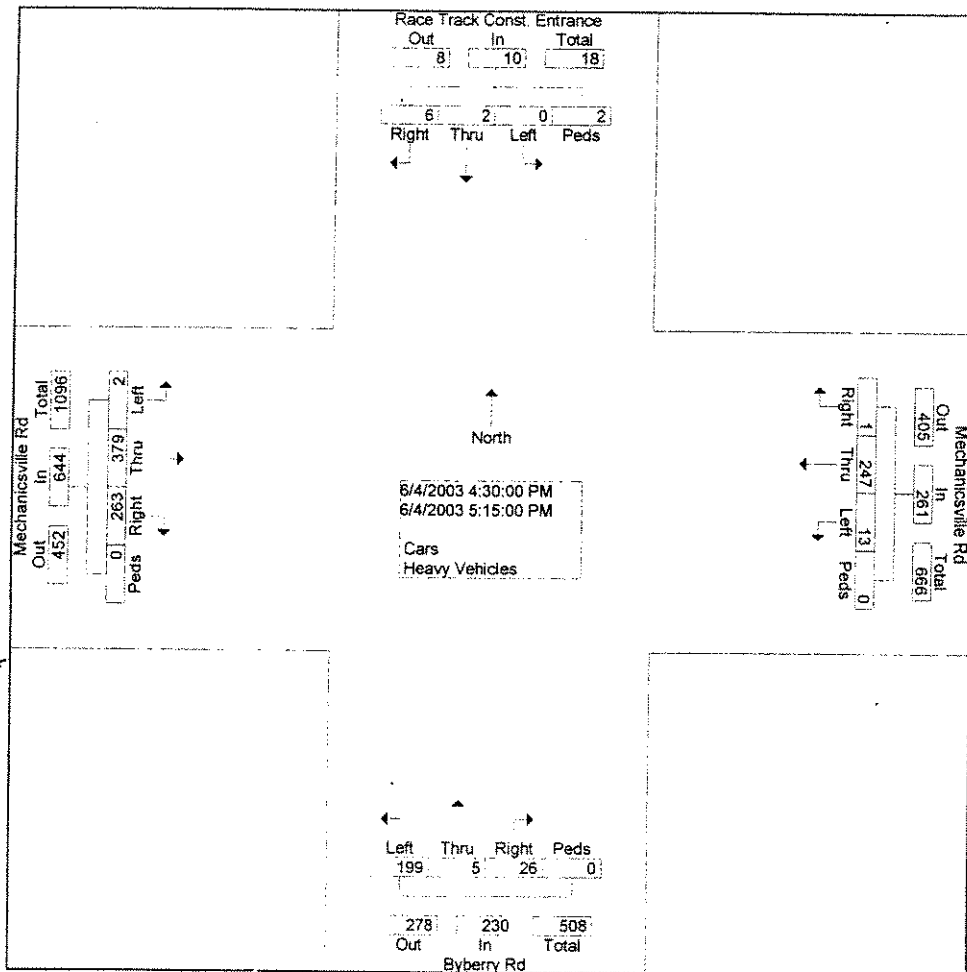


Tri-State Traffic Data, Inc.
610-466-1469

Location : Bucks County, PA
 Intersection : Mechanicsville Rd/Byberry
 Date : Wednesday, June 4, 2003
 Counter : VG

File Name : AF0604-11
 Site Code : 00000000
 Start Date : 06/04/2003
 Page No : 3

Start Time	Race Track Const. Entrance Southbound					Mechanicsville Rd Westbound					Byberry Rd Northbound					Mechanicsville Rd Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 03:00 PM to 06:45 PM - Peak 1 of 1																					
Intersection 04:30 PM																					
Volume	0	2	6	2	10	13	247	1	0	261	199	5	26	0	230	2	379	263	0	644	1145
Percent	0.0	20.0	60.0	20.0		5.0	94.6	0.4	0.0		86.5	2.2	11.3	0.0		0.3	58.9	40.8	0.0		
05:15																					
Volume	0	0	1	0	1	4	79	0	0	83	46	0	9	0	55	1	98	72	0	171	310
Peak Factor																					
High Int. 04:30 PM						05:15 PM					04:30 PM					05:15 PM					
Volume	0	0	1	2	3	4	79	0	0	83	58	1	7	0	66	1	98	72	0	171	
Peak Factor	0.833					0.786					0.871					0.942					



Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
In. section: Richlieu Rd. / Phila. Park
Date: Thursday: June 05, 2003
Counter: JI

File Name : AF0605-12
Site Code : 00000000
Start Date : 06/05/2003
Page No : 1

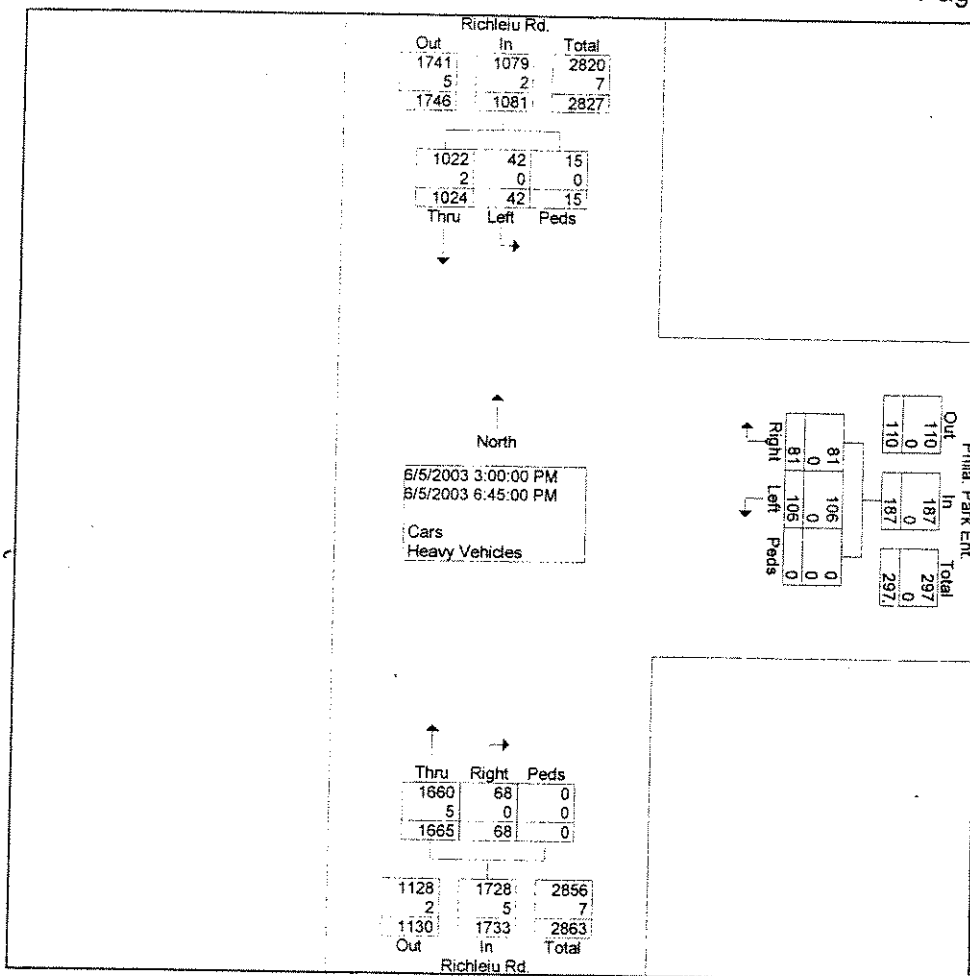
Groups Printed- Cars - Heavy Vehicles

Start Time	Richlieu Rd. Southbound					Phila. Park Ent. Westbound					Richlieu Rd. Northbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. 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		
03:00 PM	1	63	0	0	64	6	0	2	0	8	0	70	5	0	75	147
03:15 PM	1	51	0	0	52	6	0	10	0	16	0	65	5	0	70	138
03:30 PM	3	64	0	0	67	11	0	6	0	17	0	79	2	0	81	165
03:45 PM	2	50	0	0	52	8	0	5	0	13	0	94	7	0	101	166
Total	7	228	0	0	235	31	0	23	0	54	0	308	19	0	327	616
04:00 PM	3	70	0	0	73	5	0	6	0	11	0	87	3	0	90	174
04:15 PM	3	72	0	0	75	6	0	1	0	7	0	102	3	0	105	187
04:30 PM	2	64	0	2	68	8	0	4	0	12	0	85	3	0	88	168
04:45 PM	7	81	0	1	89	14	0	3	0	17	0	93	4	0	97	203
Total	15	287	0	3	305	33	0	14	0	47	0	367	13	0	380	732
05:00 PM	3	78	0	0	81	6	0	12	0	18	0	147	4	0	151	250
05:15 PM	2	61	0	0	63	7	0	4	0	11	0	134	5	0	139	213
05:30 PM	2	75	0	0	77	5	0	7	0	12	0	155	2	0	157	246
05:45 PM	4	55	0	0	59	7	0	7	0	14	0	106	4	0	110	183
Total	11	269	0	0	280	25	0	30	0	55	0	542	15	0	557	892
06:00 PM	3	62	0	6	71	4	0	4	0	8	0	107	3	0	110	189
06:15 PM	2	56	0	0	58	3	0	5	0	8	0	104	7	0	111	177
06:30 PM	4	62	0	2	68	4	0	2	0	6	0	115	2	0	117	191
06:45 PM	0	60	0	4	64	6	0	3	0	9	0	122	9	0	131	204
Total	9	240	0	12	261	17	0	14	0	31	0	448	21	0	469	761
Grand Total	42	1024	0	15	1081	106	0	81	0	187	0	1665	68	0	1733	3001
Apprch %	3.9	94.7	0.0	1.4		56.7	0.0	43.3	0.0		0.0	96.1	3.9	0.0		
Total %	1.4	34.1	0.0	0.5	36.0	3.5	0.0	2.7	0.0	6.2	0.0	55.5	2.3	0.0	57.7	

Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
 Intersection: Richlieu Rd. / Phila. Park
 Date: Thursday: June 05, 2003
 Counter: JI

File Name : AF0605-12
 Site Code : 00000000
 Start Date : 06/05/2003
 Page No : 2

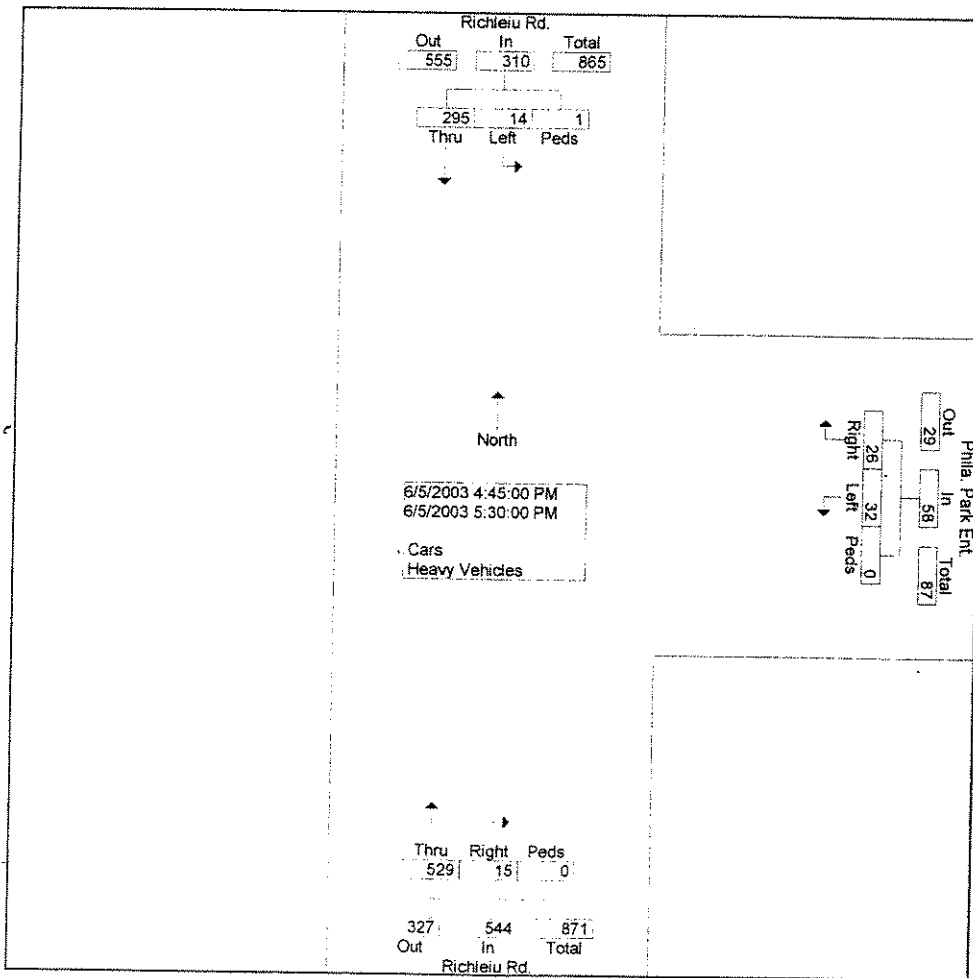


Tri-State Traffic Data, Inc.
610-466-1469

Location: Bucks County, PA
 In. section: Richleiu Rd. / Phila. Park
 Date: Thursday: June 05, 2003
 Counter: JI

File Name : AF0605-12
 Site Code : 00000000
 Start Date : 06/05/2003
 Page No : 3

Start Time	Richleiu Rd. Southbound					Phila. Park Ent. Westbound					Richleiu Rd. Northbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From	03:00 PM to 06:45 PM - Peak 1 of 1															
Intersection	04:45 PM															
Volume	14	295	0	1	310	32	0	26	0	58	0	529	15	0	544	912
Percent	4.5	95.2	0.0	0.3		55.2	0.0	44.8	0.0		0.0	97.2	2.8	0.0		
05:00 Volume	3	78	0	0	81	6	0	12	0	18	0	147	4	0	151	250
Peak Factor	0.912															
High Int.	04:45 PM															
Volume	7	81	0	1	89	6	0	12	0	18	0	155	2	0	157	0.912
Peak Factor	0.871															
	05:00 PM															
	05:30 PM															
	0.806															
	0.866															



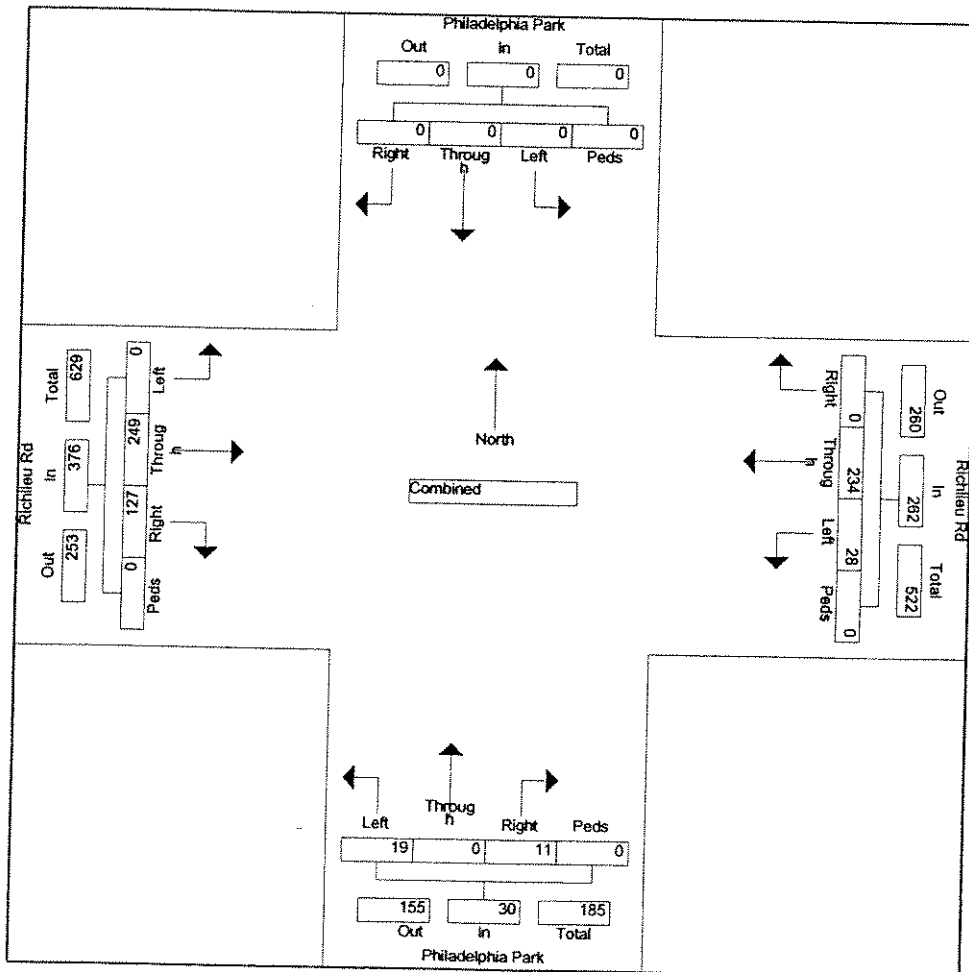
These Are The Default Titles
 Change These In The Preferences Window : Richlieu&PhilaPark_Mid
 Press the 'Saved Titles' Right Arrow Site Code : 00005678
 To Add A New Set of Titles Start Date : 07/26/2003
 Page : 1

Groups Printed: Unshifted - Bank 1 - Bank 2

Start Time	Philadelphia Park Southbound				Richlieu Rd Westbound				Philadelphia Park Northbound				Richlieu Rd Eastbound				Int. Total
	Left	Throug h	Right	Peds	Left	Throug h	Right	Peds	Left	Throug h	Right	Peds	Left	Throug h	Right	Peds	
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	1.0
11:00 AM	0	0	0	0	6	49	0	0	4	0	3	0	0	58	25	0	145
11:15 AM	0	0	0	0	4	53	0	0	3	0	2	0	0	49	26	0	137
11:30 AM	0	0	0	0	3	54	0	0	4	0	2	0	0	69	27	0	159
11:45 AM	0	0	0	0	6	56	0	0	5	0	1	0	0	56	43	0	167
Total	0	0	0	0	19	212	0	0	16	0	8	0	0	232	121	0	608
12:00 PM	0	0	0	0	11	60	0	0	7	0	3	0	0	70	32	0	183
12:15 PM	0	0	0	0	8	64	0	0	3	0	5	0	0	54	25	0	159
12:30 PM	0	0	0	0	5	59	0	0	3	0	1	0	0	65	22	0	155
12:45 PM	0	0	0	0	3	59	0	0	0	0	4	0	0	61	20	0	147
Total	0	0	0	0	27	242	0	0	13	0	13	0	0	250	99	0	644
01:00 PM	0	0	0	0	3	51	1	0	4	0	7	0	0	82	16	0	164
01:15 PM	0	0	0	0	4	58	0	0	6	0	4	0	0	50	8	0	130
01:30 PM	0	0	0	0	2	47	0	0	4	0	1	0	0	50	12	0	116
01:45 PM	0	0	0	0	2	50	0	0	11	0	4	0	0	51	16	0	134
Total	0	0	0	0	11	206	1	0	25	0	16	0	0	233	52	0	544
Grand Total	0	0	0	0	57	660	1	0	54	0	37	0	0	715	272	0	1796
Apprch %	0.0	0.0	0.0	0.0	7.9	91.9	0.1	0.0	59.3	0.0	40.7	0.0	0.0	72.4	27.6	0.0	
Total %	0.0	0.0	0.0	0.0	3.2	36.7	0.1	0.0	3.0	0.0	2.1	0.0	0.0	39.8	15.1	0.0	

These Are The Default Titles
 Change These In The Preferences Window
 File Name : Richlieu&PhilaPark_Mid
 Site Code : 00005678
 Start Date : 07/26/2003
 Page : 2

Start Time	Philadelphia Park Southbound					Richlieu Rd Westbound					Philadelphia Park Northbound					Richlieu Rd Eastbound					Int. Total
	Left	Throug h	Rig ht	Ped s	App. Total	Left	Throug h	Rig ht	Ped s	App. Total	Left	Throug h	Rig ht	Ped s	App. Total	Left	Throug h	Rig ht	Ped s	App. Total	
Peak Hour From 11:00 AM to 01:45 PM - Peak 1 of 1																					
Intersection 11:30 AM																					
Volume	0	0	0	0	0	28	234	0	0	262	19	0	11	0	30	0	249	127	0	376	668
Percent	0.0	0.0	0.0	0.0		10.7	89.3	0.0	0.0		63.3	0.0	36.7	0.0		0.0	66.2	33.8	0.0		
High Int. 10:45:00 AM																					
Volume 12:15 PM	0	0	0	0	0	11	64	0	0	72	7	0	5	0	10	0	70	43	0	102	183
Peak Factor						0.910					0.750					0.922					0.913



These Are The Default Titles
 Change These In The Preferences Window
 Press the 'Saved Titles' Right Arrow
 To Add A New Set of Titles

File Name : Richlieu&PhilaPark
 Site Code : 00008765
 Start Date : 07/26/2003
 Page : 1

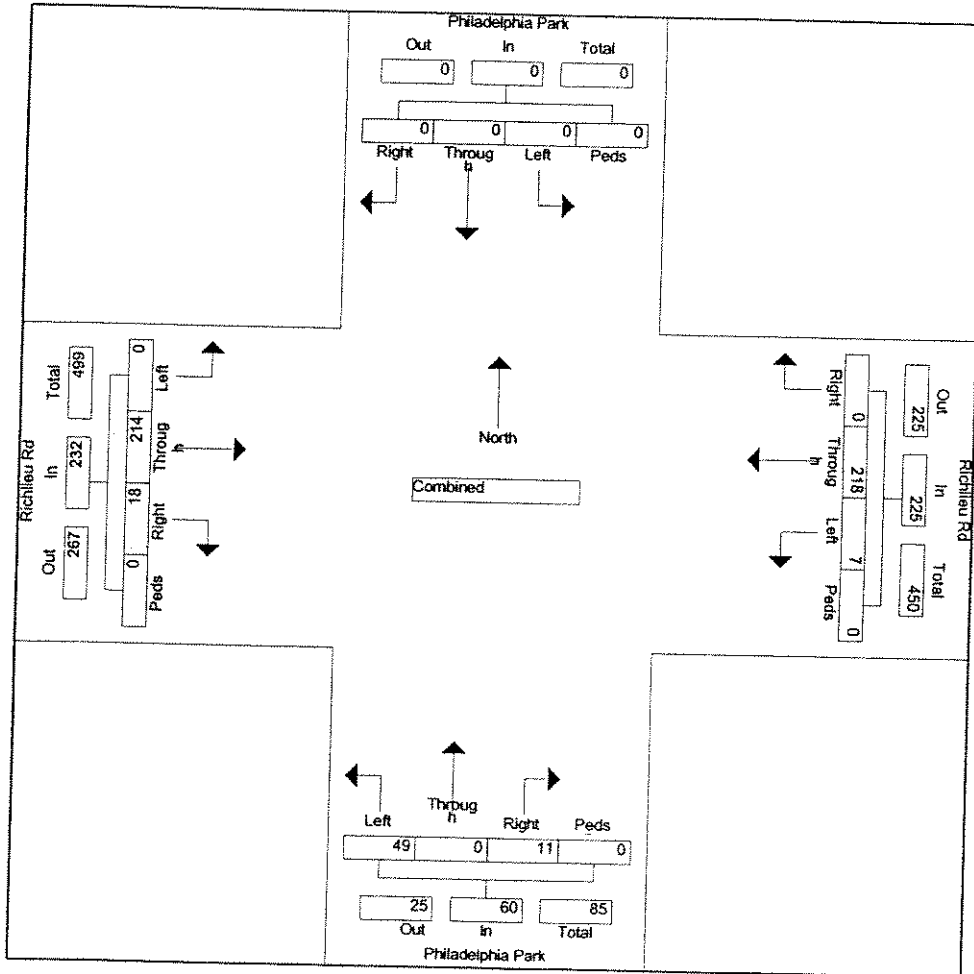
Groups Printed: Unshifted - Bank 1 - Bank 2

Start Time	Philadelphia Park Southbound				Richlieu Rd Westbound				Philadelphia Park Northbound				Richlieu Rd Eastbound				Int. Total
	Left	Throug h	Right	Peds	Left	Throug h	Right	Peds	Left	Throug h	Right	Peds	Left	Throug h	Right	Peds	
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	
05:00 PM	0	0	0	0	2	49	0	0	17	0	3	0	0	57	4	0	132
05:15 PM	0	0	0	0	2	60	0	0	16	0	4	0	0	50	4	0	136
05:30 PM	0	0	0	0	0	59	0	0	8	0	0	0	0	55	7	0	129
05:45 PM	0	0	0	0	2	47	0	0	14	0	0	0	0	51	3	0	117
Total	0	0	0	0	6	215	0	0	55	0	7	0	0	213	18	0	514
06:00 PM	0	0	0	0	3	52	0	0	11	0	7	0	0	58	4	0	135
06:15 PM	0	0	0	0	1	54	0	0	10	0	2	0	0	48	7	0	122
06:30 PM	0	0	0	0	0	52	0	0	17	0	1	0	0	52	7	0	129
06:45 PM	0	0	0	0	0	60	0	0	7	0	2	0	0	50	7	0	126
Total	0	0	0	0	4	218	0	0	45	0	12	0	0	208	25	0	512
07:00 PM	0	0	0	0	2	65	0	0	7	0	3	0	0	55	6	0	138
07:15 PM	0	0	0	0	0	48	0	0	4	0	1	0	1	51	7	0	112
07:30 PM	0	0	0	0	1	46	0	0	4	0	0	0	0	52	6	0	109
07:45 PM	0	0	0	0	0	48	0	0	4	0	1	0	0	47	3	0	103
Total	0	0	0	0	3	207	0	0	19	0	5	0	1	205	22	0	462
Grand Total	0	0	0	0	13	640	0	0	119	0	24	0	1	626	65	0	1488
Apprch %	0.0	0.0	0.0	0.0	2.0	98.0	0.0	0.0	83.2	0.0	16.8	0.0	0.1	90.5	9.4	0.0	
Total %	0.0	0.0	0.0	0.0	0.9	43.0	0.0	0.0	8.0	0.0	1.6	0.0	0.1	42.1	4.4	0.0	

These Are The Default Titles
 Change These In The Preferences Window
 Press the 'Saved Titles' Right Arrow To Add A New Set of Titles

File Name : Richlieu&PhilaPark
 Site Code : 00008765
 Start Date : 07/26/2003 *Set*
 Page : 2

Start Time	Philadelphia Park Southbound					Richlieu Rd Westbound					Philadelphia Park Northbound					Richlieu Rd Eastbound					Int. Total
	Left	Throug h	Rig ht	Ped s	App. Total	Left	Throug h	Rig ht	Ped s	App. Total	Left	Throug h	Rig ht	Ped s	App. Total	Left	Throug h	Rig ht	Ped s	App. Total	
Peak Hour From 05:00 PM to 07:45 PM - Peak 1 of 1																					
Intersection	05:15 PM																				
Volume	0	0	0	0	0	7	218	0	0	225	49	0	11	0	60	0	214	18	0	232	517
Percent	0.0	0.0	0.0	0.0		3.1	96.9	0.0	0.0		81.7	0.0	18.3	0.0		0.0	92.2	7.8	0.0		
High Int.	4:45:00 PM																				
Volume	0	0	0	0	0	3	60	0	0	62	16	0	7	0	20	0	58	7	0	62	136
Peak Factor						0.907					0.750					0.935					0.950



Weekday PM
16.

Pennoni Associates, Inc.

One Drexel Plaza
3001 Market Street
Philadelphia, PA 19104

File Name : Street&Hulmeville(WeekdayPM)
Site Code : 00000111
Start Date : 6/16/2004
Page No : 1

Location:
ate:
Weather:
Counter:

Groups Printed- P.C.'s - H.V.'s - Bank 2

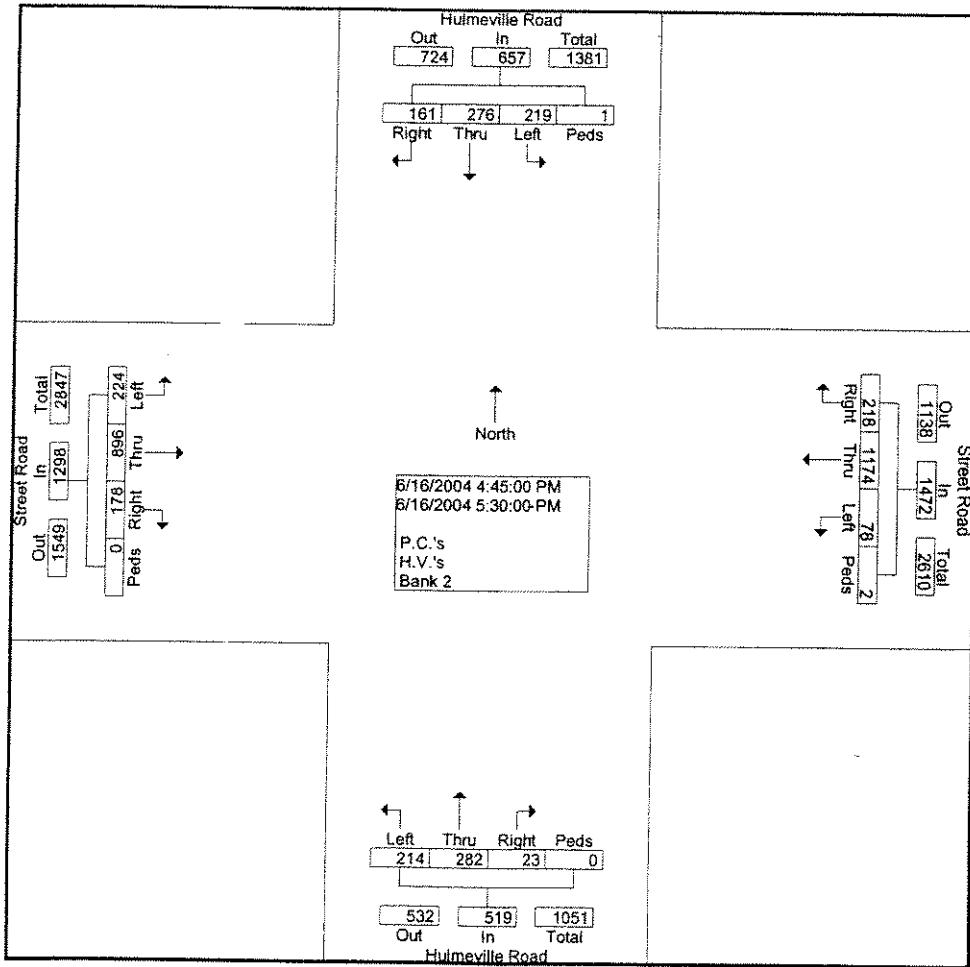
Start Time	Hulmeville Road Southbound				Street Road Westbound				Hulmeville Road Northbound				Street Road Eastbound				Int. Total
	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	Left	Thru	Right	Peds	
Factor	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
15:00	33	59	41	1	22	178	49	0	29	46	14	3	58	215	25	0	773
15:15	42	52	38	1	16	207	38	0	40	62	14	0	59	183	23	0	775
15:30	49	71	34	0	15	262	50	0	38	44	4	0	59	240	33	0	899
15:45	55	68	40	0	11	223	56	0	42	75	7	0	60	203	34	4	878
Total	179	250	153	2	64	870	193	0	149	227	39	3	236	841	115	4	3325
16:00	60	46	41	0	13	241	59	4	36	51	5	0	64	219	48	0	887
16:15	57	63	41	0	21	203	50	1	44	76	9	0	51	230	37	0	883
16:30	51	1	41	0	16	290	53	0	25	31	3	0	38	149	36	0	734
16:45	58	70	35	0	18	252	45	0	58	91	5	0	39	215	38	0	924
Total	226	180	158	0	68	986	207	5	163	249	22	0	192	813	159	0	3428
17:00	58	76	37	1	23	303	62	0	57	58	1	0	53	256	48	0	1033
17:15	62	70	56	0	1	281	37	2	41	86	13	0	59	226	39	0	973
17:30	41	60	33	0	36	338	74	0	58	47	4	0	73	199	53	0	1016
17:45	38	1	47	0	33	267	66	0	45	48	7	0	65	187	50	0	854
Total	199	207	173	1	93	1189	239	2	201	239	25	0	250	868	190	0	3876
18:00	54	61	37	0	28	262	57	0	40	63	7	0	71	217	31	0	928
18:15	41	56	33	0	28	261	60	0	39	78	10	0	83	192	34	0	915
18:30	39	51	40	0	14	221	55	2	30	74	11	0	73	166	35	0	811
18:45	45	63	43	0	12	206	48	0	40	56	10	0	75	168	24	0	790
Total	179	231	153	0	82	950	220	2	149	271	38	0	302	743	124	0	3444
Grand Total	783	868	637	3	307	3995	859	9	662	986	124	3	980	3265	588	4	14073
Apprch %	34.2	37.9	27.8	0.1	5.9	77.3	16.6	0.2	37.3	55.5	7.0	0.2	20.3	67.5	12.2	0.1	
Total %	5.6	6.2	4.5	0.0	2.2	28.4	6.1	0.1	4.7	7.0	0.9	0.0	7.0	23.2	4.2	0.0	

Pennoni Associates, Inc.

One Drexel Plaza
3001 Market Street
Philadelphia, PA 19104

File Name : Street&Hulmeville(WeekdayPM)
Site Code : 00000111
Start Date : 6/16/2004
Page No : 2

Start Time	Hulmeville Road Southbound					Street Road Westbound					Hulmeville Road Northbound					Street Road Eastbound					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour From 15:00 to 18:45 - Peak 1 of 1																					
Intersection	16:45																				
Volume	219	276	161	1	657	78	1174	218	2	1472	214	282	23	0	519	224	896	178	0	1298	3946
Percent	33.3	42.0	24.5	0.2		5.3	79.8	14.8	0.1		41.2	54.3	4.4	0.0		17.3	69.0	13.7	0.0		
17:00 Volume	58	76	37	1	172	23	303	62	0	388	57	58	1	0	116	53	256	48	0	357	1033
Peak Factor																					
High Int.	17:15																				
Volume	62	70	56	0	188	36	338	74	0	448	58	91	5	0	154	53	256	48	0	357	1033
Peak Factor	0.874					0.821					0.843					0.909					



SIGN TABULATION

SERIES NUMBER	SIZE	REMARKS
R10-12	30"x36"	LEFT TURN YIELD ON GREEN
R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
R10-3L	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
R10-3R	30"x30"	LANE USE CONTROL
R10-3R	78"x16"	STATE RD
R10-3R	96"x16"	STREET RD
R10-3R	96"x16"	STREET RD
R10-3R	9"x12"	PUSH BUTTON FOR GREEN LIGHT

GENERAL NOTES

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

ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS 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 IN ACCORDANCE WITH PUBLICATION NO. 6B.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.

ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.

EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.

CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS.

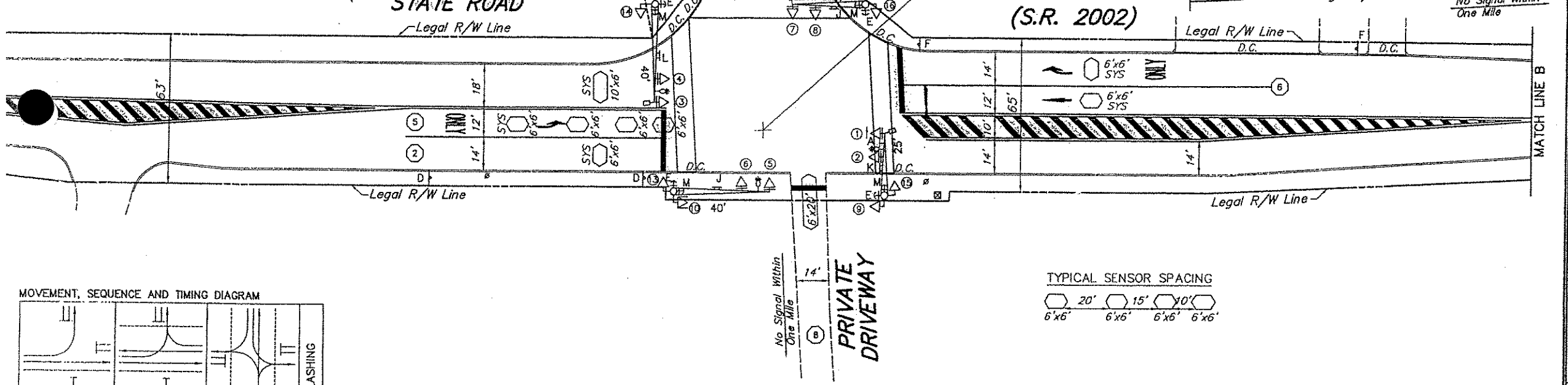
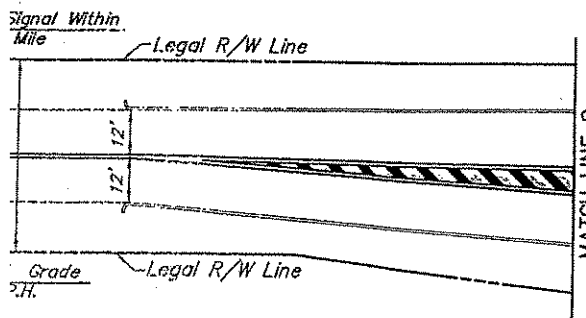
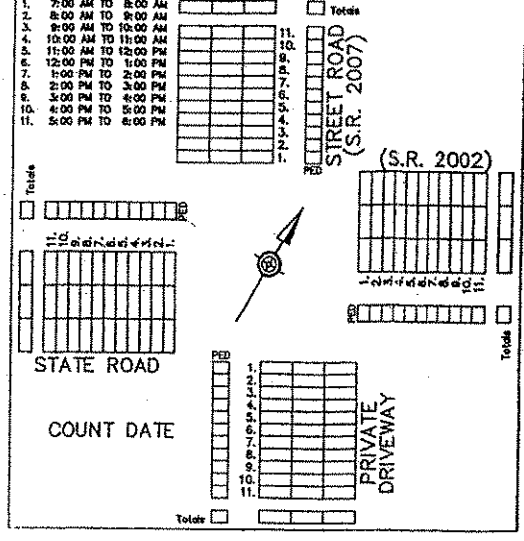
PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF

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, EFFECTIVE DATE DECEMBER 19, 1996.

WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.

PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.



MOVEMENT, SEQUENCE AND TIMING DIAGRAM

MOVEMENT, SEQUENCE AND TIMING DIAGRAM									FLASHING
2+5			2+6			4+8			
1	2	3	4	5	6	7	8	9	Y
G	Y	R	G	Y	R	R	R	R	Y
R	R	R	G	Y	R	R	R	R	Y
R	R	R	R	R	R	G	Y	R	R
R	R	R	R	R	R	G	Y	R	R
G	Y	R	G	Y	R	R	R	R	OFF
R	R	R	G	Y	R	R	R	R	OFF
R	R	R	R	R	R	G	Y	R	OFF
R	R	R	R	R	R	G	Y	R	OFF

1	2	4	2	3	4	2
		17		3		
		35		25		
		40		30		
		17		17		
NL		MR		NL		

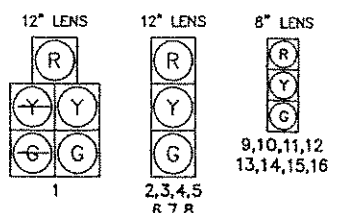
OPERATION NOTES :

- 1. G IF FOLLOWED BY PHASE 2+6
- 2. G IF FOLLOWED BY PHASE 2+6
- SIGNAL TO DWELL IN PHASE 2+6 UNTIL ACTUATED BY PHASE 4+8.

TRAFFIC SIGNAL SYSTEM NOTE:

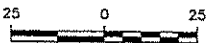
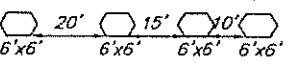
- REFER TO SYSTEM PERMIT # _____ FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.

SIGNAL INDICATIONS



SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS
SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS 10.11

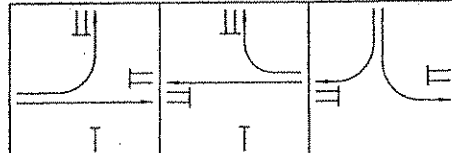
TYPICAL SENSOR SPACING



LEGEND

- 20' MAST ARM/ IDENTIFYING LENGTH
- VEHICULAR SIGNAL HEAD/ BACKPLATE/VISORS/ DIRECTIONAL ARROW/ IDENTIFYING NUMBER
- PEDESTRIAN SIGNAL HEAD/ IDENTIFYING NUMBER
- PEDESTRIAN PUSHBUTTON/ SIGN
- SIGN/IDENTIFYING LETTER
- LOOP SENSOR/SIZE
- MICROWAVE DETECTOR
- EMERGENCY PREEMPTION BEACON
- EMERGENCY PREEMPTION DETECTOR
- CURB CUT RAMP
- UTILITY POLE
- PHASE NUMBER
- INLET
- VIDEO DETECTION CAMERA

**EMERGENCY PRE-EMPTION PHASING
MOVEMENT, SEQUENCE AND TIMING DIAGRAM**



PHASE	2			6			4		
INTERVAL	10	11	12	13	14	15	16	17	18
1	G [ⓐ]	Y [ⓑ]	R [ⓐ]	R	R	R	R	R	R
2	G	Y [ⓑ]	R [ⓐ]	R	R	R	R	R	R
3,4	R	R	R	G	Y [ⓑ]	R [ⓐ]	R	R	R
5,6	R	R	R	R	R	R	G	Y	R
7,8	R	R	R	R	R	R	R	R	R
9,10	R	R	R	R	R	R	R	R	R
11,12	R	R	R	R	R	R	R	R	R
13,14	R	R	R	R	R	R	R	R	R
15,16	R	R	R	R	R	R	R	R	R
FIXED TIME	*	4	2	*	4	2	*	4	2

* FOR DURATION OF PRE-EMPTION

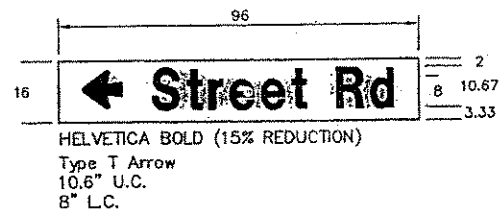
NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

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

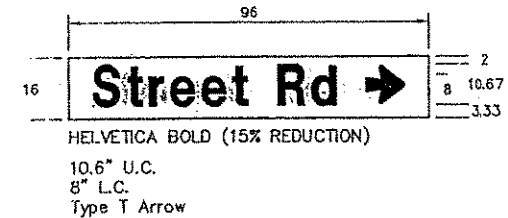
EMERGENCY PRE-EMPTION NOTES:

- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND APPROACH OF STREET ROAD (S.R. 2007), AND THE NORTHBOUND AND SOUTHBOUND APPROACHES OF STATE ROAD (S.R. 2002), WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION.
THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL FOR THE PREEMPTED PHASE.
- IF THE SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE TIMES SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION PHASE OCCURS.
- IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE ALL SIGNALS SHALL REMAIN FLASHING.
- UPON COMPLETION OF PRE-EMPTION PHASE 2, 4 OR 6, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 4 SHALL FOLLOW.
- IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
- THE FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN PED "WALK (MAN)" AND PED "CLEAR (HAND)". THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.

Sign "K"



Sign "L"



CLOSED LOOP SYSTEM PERMIT # _____

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

COUNTY: BUCKS
MUNICIPALITY: BENSALEM TOWNSHIP
INTERSECTION: STREET ROAD (S.R. 2007) AND
STATE ROAD (S.R. 2002)

REVIEWED: _____ DATE _____
MUNICIPAL OFFICIAL _____ DATE _____

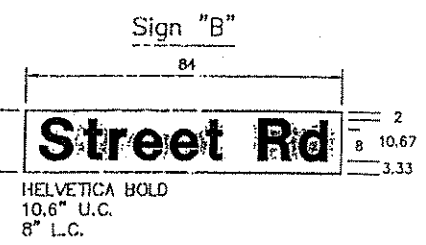
RECOMMENDED: Paul M. Lutz DATE 03/30/01
Louis R. Belmonte DATE 04/04/01
DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REVW.	DATE	RECOM.	DATE
1	Added Emergency Pre-emption/ Push Buttons	PAI	03/31/04				
2							
3							
4							
5							
6							
7							
8							

SHEET 3 OF 3 PERMIT # 61-0267 FILE # 0267

BENS 0312 FILE 0267 05/11/04

SERIES NUMBER	SIZE	REMARKS
R3-2	24"x24"	NO LEFT TURN
D3-4	84"x16"	STREET ROAD
R3-2	30"x30"	NO LEFT TURN
R3	30"x30"	NO RIGHT TURN
R3	18"x18"	NO PEDESTRIAN CROSSING
R3	30"x30"	DO NOT ENTER
R6-1L	36"x12"	ONE WAY
R6-1L	36"x12"	ONE WAY
R10-12	30"x36"	LEFT TURN YIELD ON GREEN
R3-6LR	30"x36"	OPTIONAL LEFT OR RIGHT TURN
R3-5L	30"x36"	LEFT TURN
R10-11	30"x36"	NO TURN ON RED

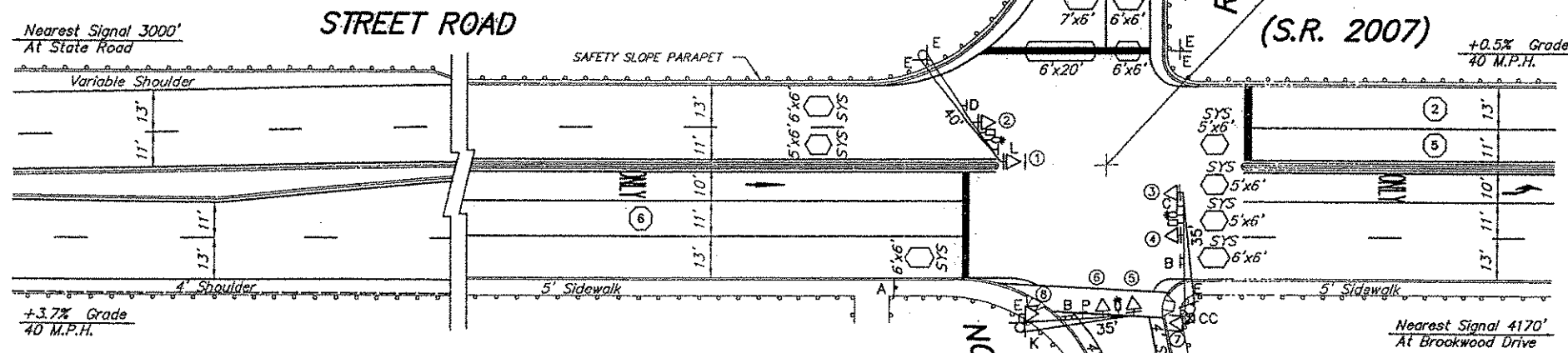


EMERGENCY PRE-EMPTION PHASING MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	2			6			4		
SIGNALS	10	11	12	13	14	15	16	17	18
1	G	Y	R	R	R	R	R	R	R
2	G	Y	R	R	R	R	R	R	R
3,4	R	R	R	G	Y	R	R	R	R
5,6	R	R	R	R	R	R	G	Y	R
7,8	R	R	R	R	R	R	R	R	R

NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

① SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION.
 ② SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.



OPERATION NOTES:

① G/Y IF FOLLOWED BY PHASE 2+6
 ② G IF FOLLOWED BY PHASE 2+6

MOVEMENT, SEQUENCE AND TIMING DIAGRAM

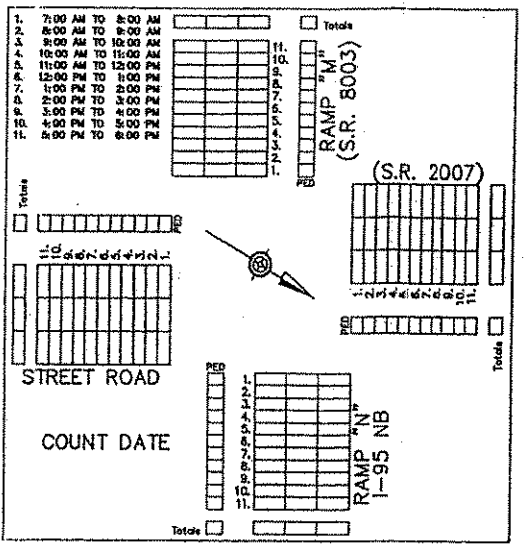
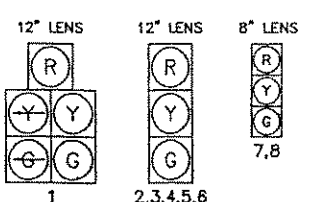
PHASE	2+5			2+6			4			FLASHING
SIGNALS	1	2	3	4	5	6	7	8	9	
1	G	Y	R	G	Y	R	R	R	R	Y
2	G	Y	R	G	Y	R	R	R	R	Y
3	R	R	R	G	Y	R	R	R	R	Y
4	R	R	R	R	R	R	G	Y	R	R
5	R	R	R	G	Y	R	R	R	R	OFF

EMERGENCY PRE-EMPTION NOTES:

- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND & WESTBOUND APPROACHES OF STREET ROAD (S.R. 2007), AND THE NORTHBOUND APPROACH OF RAMP "M" (S.R. 8003), WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION.
- THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL FOR THE PREEMPTED PHASE.
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- IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE ALL SIGNALS SHALL REMAIN FLASHING.
- UPON COMPLETION OF PRE-EMPTION PHASE 2, 6 OR 4, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 4 SHALL FOLLOW.
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SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS _____
 SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS 7,8

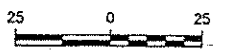
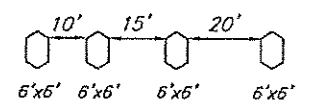
SIGNAL INDICATIONS



S.R. 2007 SEG 0020 OFF 0850
 S.R. 8003 SEG 0010 OFF 0712

(S.R. 2007) +0.5% Grade 40 M.P.H.

TYPICAL SENSOR SPACING



LEGEND

- MAST ARM/IDENTIFYING LENGTH
- VEHICULAR SIGNAL HEAD/BACKPLATE/SENSORS/DIRECTIONAL ARROW/IDENTIFYING NUMBER
- PEDESTRIAN SIGNAL HEAD/IDENTIFYING NUMBER
- PEDESTRIAN PUSHBUTTON/SIGN
- SIGN/IDENTIFYING LETTER
- LOOP SENSOR/SIZE
- MICROWAVE DETECTOR
- EMERGENCY PREEMPTION BEACON
- EMERGENCY PREEMPTION DETECTOR
- CURB CUT RAMP
- UTILITY POLE
- PHASE NUMBER
- INLET
- VIDEO DETECTION CAMERA

GENERAL NOTES

- NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED IN WRITING BY A REPRESENTATIVE OF THE DEPARTMENT OF TRANSPORTATION.
- ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS 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 IN ACCORDANCE WITH PUBLICATION NO. 68.
- POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.
- SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.
- ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.
- EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.
- CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.
- PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.
- 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, EFFECTIVE DATE DECEMBER 19, 1996.
- WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.
- PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.
- CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

CLOSED LOOP SYSTEM PERMIT # _____

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 ENGINEERING DISTRICT 6-0

COUNTY: BUCKS
 MUNICIPALITY: BENSLEM TOWNSHIP
 INTERSECTION: STREET ROAD (S.R. 2007) AND RAMP M (S.R. 8003)/RAMP N (NB OF I-95)

REVIEWED: _____ DATE _____

MUNICIPAL OFFICIAL: _____ DATE _____

RECOMMENDED: Paul M. Lutz 03/30/01
 Louis R. Belmonte 04/04/01
 DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECD.	DATE
1	Added Emergency Pre-Emption	PAI	05/11/04				
2							
3							
4							
5							
6							
7							
8							

SHEET 2 OF 2 PERMIT # 61-1443 FILE # 1443

SERIES NUMBER	SIZE	REMARKS
R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
R10-3L	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R9-3	18"x18"	NO PEDESTRIAN CROSSING
R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
RF	36"x12"	HORIZONTAL LEFT ONE-WAY
	96"x16"	BROOKWOOD DR
	30"x36"	LEFT TURN YIELD ON GREEN
	72"x16"	STREET RD
	24"x24"	NO LEFT TURN
R6-1R	36"x12"	HORIZONTAL RIGHT ONE-WAY

MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	INTERVAL	10	11	12	13	14	15	16	17	18
1		R	R	R	G	Y	R	R	R	R
2		R	R	R	G	Y	R	R	R	R
3,4		G	Y	R	R	R	R	R	R	R
5,6		R	R	R	R	R	R	R	R	R
7,8		R	R	R	R	R	R	G	Y	R
9,10		R	R	R	R	R	R	R	R	R
11,12,13		R	R	R	R	R	R	R	R	R
FIXED TIME		* 4	2		* 4	2		* 4	2	

* FOR DURATION OF PRE-EMPTION
 NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.
 (G) SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION.
 (Y) SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.

COMMERCIAL DRIVEWAY (S.R. 0132)

STREET ROAD

BROOKWOOD DRIVE

COUNT DATE
 AM - 08/22/2001
 PM - 02/05/2003

Totals 71 [778] 37 [1222]

GENERAL NOTES

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POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

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CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.

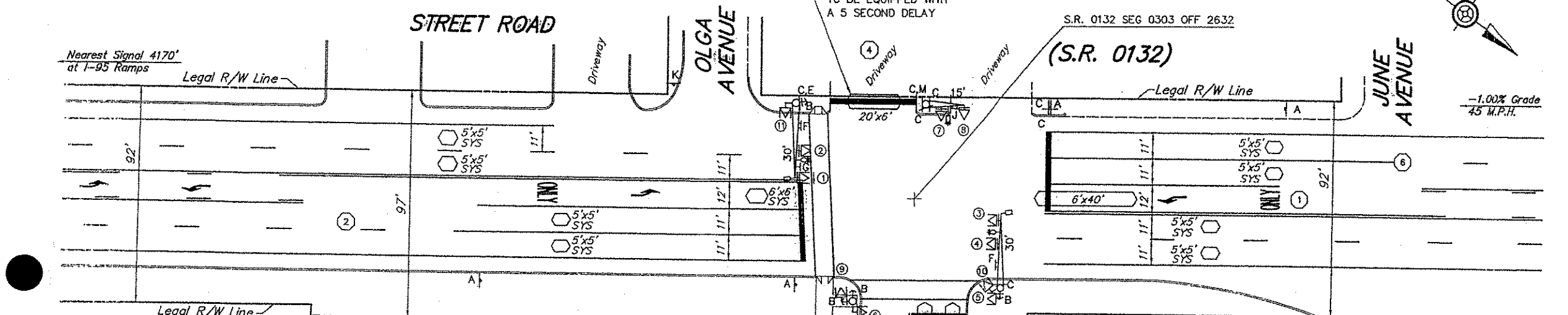
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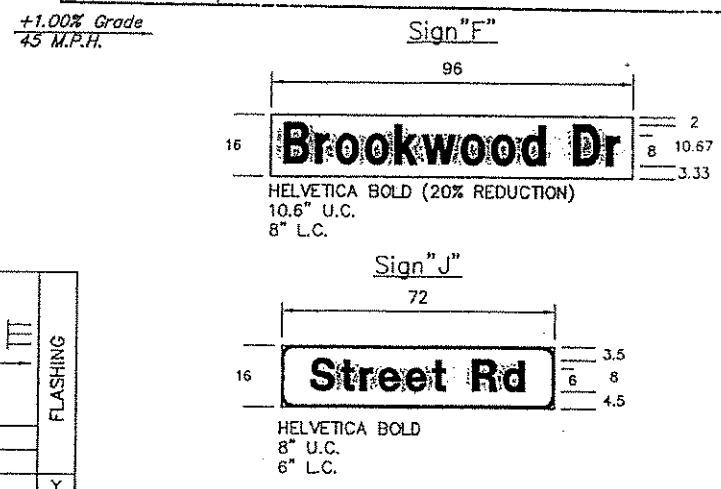
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PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEAR OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.



OPERATION NOTES:
 G IF FOLLOWED BY PHASE 2+6
 Y IF FOLLOWED BY PHASE 1+6
 MINIMUM GREEN TIME : ACTUAL GREEN TIME TO BE DETERMINED BY CYCLE LENGTH.



MOVEMENT, SEQUENCE AND TIMING DIAGRAM

VAL	1	2	3	4	5	6	7	8	9	FLASHING
1+6	G	Y	R	G	Y	R	R	R	R	Y
2+6	R	R	R	G	Y	R	R	R	R	Y
4+8	R	R	R	G	Y	R	R	R	R	OFF
	R	R	R	R	R	R	G	Y	R	R
	R	R	R	R	R	R	G	Y	R	R
	R	R	R	R	R	R	G	Y	R	OFF

5	2	15	5	2	3	3
		57			20	
		87			29	
		15			18	
NL	MR		NL			

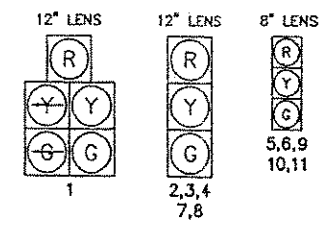
PEDESTRIAN ACTUATION ONLY

TRAFFIC SIGNAL SYSTEM NOTE:
 REFER TO SYSTEM PERMIT # 10005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.

EMERGENCY PRE-EMPTION NOTES (CONTINUED):

- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
- THE FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN PED "WALK (MAN)" AND PED "CLEAR (HAND)". THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.

SIGNAL INDICATIONS



SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS 1,2,3,4,5,6,9,10,11
 SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS

LEGEND

20'	MAST ARM/ IDENTIFYING LENGTH	—	MICROWAVE DETECTOR
(R)	VEHICULAR SIGNAL HEAD/ BACKPLATE/MSORS/ DIRECTIONAL ARROW/ IDENTIFYING NUMBER	⊕	EMERGENCY PREEMPTION BEACON
(P)	PEDESTRIAN SIGNAL HEAD/ IDENTIFYING NUMBER	⊖	EMERGENCY PREEMPTION DETECTOR
(PB)	PEDESTRIAN PUSHBUTTON/ SIGN	⊙	CURB CUT RAMP
(A)	SIGN/IDENTIFYING LETTER	⊠	UTILITY POLE
(L)	LOOP SENSOR/SIZE	(2)	PHASE NUMBER
		IN	INLET
		VC	VIDEO DETECTION CAMERA

CLOSED LOOP SYSTEM PERMIT # 10005

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 ENGINEERING DISTRICT 6-0

COUNTY: BUCKS
 MUNICIPALITY: BENSALEM TOWNSHIP
 INTERSECTION: STREET ROAD (S.R. 0132) AND BROOKWOOD DRIVE

REVIEWED: _____ DATE _____
 William J. McCauley, III 07/28/93
 MUNICIPAL OFFICIAL DATE

RECOMMENDED: _____ DATE _____
 Paul M. Lutz 03/30/01
 DATE

Louis R. Belmonte 04/04/01
 DISTRICT TRAFFIC ENGINEER DATE

NO.	REVISION	DES/ REV.	DATE	REV.	DATE	RECD.	DATE
1	New Drawing, Added Phase 1+6, Added Emergency Pre-emption	PAI	06/11/04				
2							
3							
4							
5							
6							
7							
8							

SHEET 2 OF 2 PERMIT # 61-1627 FILE # 1627

SIGN TABULATION			
SERIES NUMBER	SIZE	REMARKS	
R3-7L	30"x30"	LEFT LANE MUST TURN LEFT	
R9-3	18"x18"	NO PEDESTRIAN CROSSING	
R1-7R	30"x30"	RIGHT LANE MUST TURN RIGHT	
2	30"x36"	LEFT TURN YIELD ON GREEN	
4L	9"x12"	PUSH BUTTON FOR GREEN LIGHT	
3R	9"x12"	PUSH BUTTON FOR GREEN LIGHT	

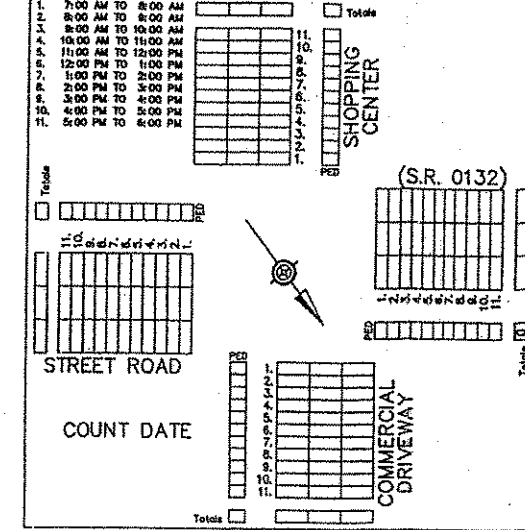
- EMERGENCY PRE-EMPTION NOTES:**
- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND & WESTBOUND APPROACHES OF STREET ROAD (S.R. 0132), AND THE NORTHBOUND APPROACH OF THE SHOPPING CENTER DRIVEWAY, WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION. THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
 - THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL FOR THE PREEMPTED PHASE.
 - IF THE SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE TIMES SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION PHASE OCCURS.
 - IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE ALL SIGNALS SHALL REMAIN FLASHING.
 - UPON COMPLETION OF PRE-EMPTION PHASE 2, 4 OR 6, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 4 SHALL FOLLOW.
 - IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
 - IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
 - THE FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.
 - IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN PED "WALK (MAN)" AND PED "CLEAR (HAND)", THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.

EMERGENCY PRE-EMPTION PHASING

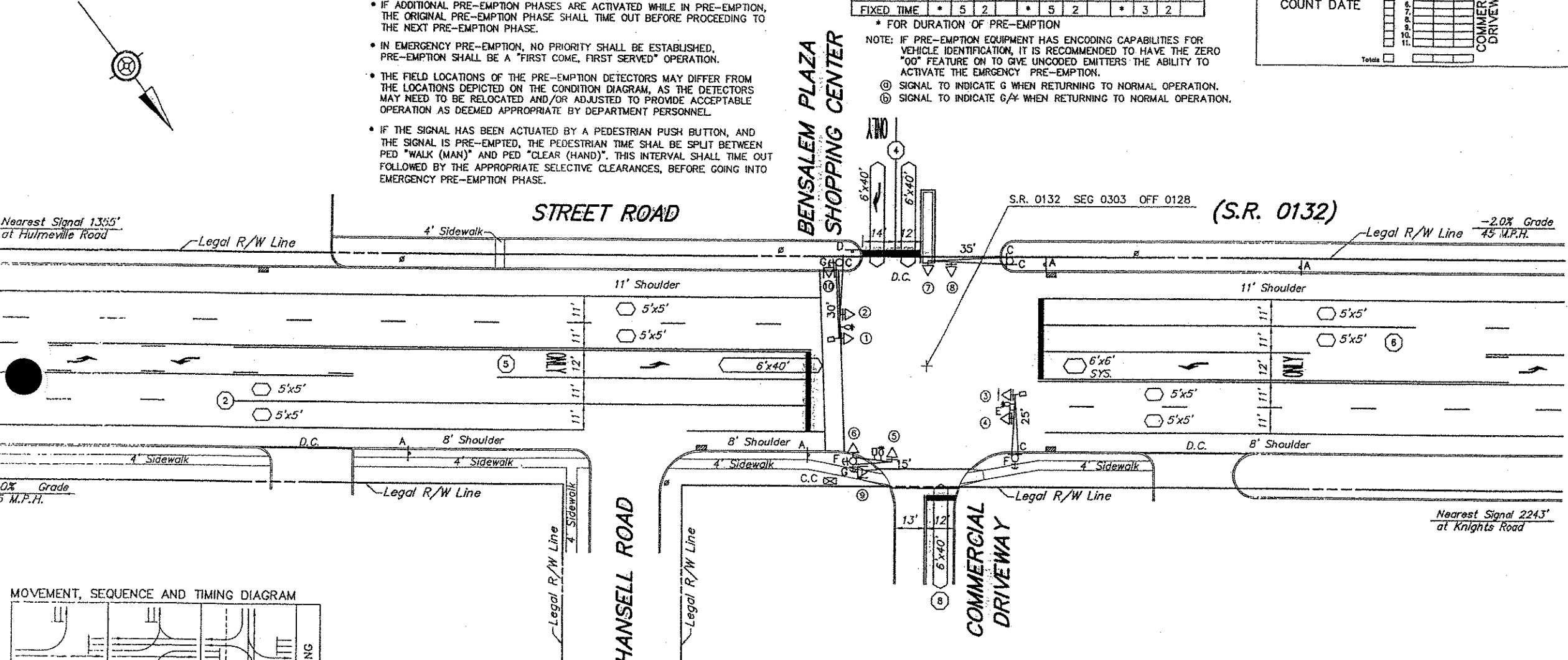
MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	2	6	4
1,2	R R R	G Y R	R R R
3	G Y R	R R R	R R R
4	R R R	R R R	R R R
5,6	R R R	R R R	G Y R
7,8	R R R	R R R	R R R
9,10	R R R	R R R	R R R

FIXED TIME * 5 2 * 5 2 * 3 2



* FOR DURATION OF PRE-EMPTION
 NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.
 (1) SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION.
 (2) SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.



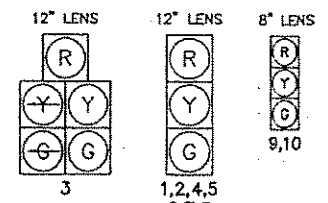
MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	2+5	2+6	4+8	FLASHING
1	R R R	G Y R	R R R	Y
2	G Y R	R R R	R R R	Y
3	R R R	R R R	G Y R	R
4	R R R	R R R	R R R	R
5	G Y R	G Y R	R R R	OFF
6	R R R	R R R	G Y R	OFF

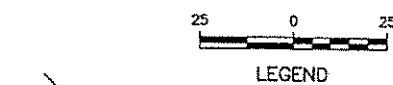
TRAFFIC SIGNAL SYSTEM NOTE:

- REFER TO SYSTEM PERMIT # 10005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.
- OPERATION NOTES :
 (1) G IF FOLLOWED BY PHASE 2+6.
 (2) G IF FOLLOWED BY PHASE 2+6.
 (3) TIMING WILL BE AS SHOWN IN PHASE 2+6. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6.
- SIGNAL TO DWELL IN PHASE 2+6, UNTIL ACTUATED BY PHASE 4 OR 8.

SIGNAL INDICATIONS



SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS
 SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS 9,10



LEGEND

- 20' MAST ARM/IDENTIFYING LENGTH
- (1) VEHICULAR SIGNAL HEAD/BACKPLATE/VISORS/DIRECTIONAL ARROW/IDENTIFYING NUMBER
- (2) PEDESTRIAN SIGNAL HEAD/IDENTIFYING NUMBER
- (3) PEDESTRIAN PUSHBUTTON/SIGN
- (4) SIGN/IDENTIFYING LETTER
- (5) LOOP SENSOR/SIZE
- (6) MICROWAVE DETECTOR
- (7) EMERGENCY PREEMPTION BEACON
- (8) EMERGENCY PREEMPTION DETECTOR
- (9) CURB CUT RAMP
- (10) UTILITY POLE
- (11) PHASE NUMBER
- (12) INLET

GENERAL NOTES

- NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED IN WRITING BY A REPRESENTATIVE OF THE DEPARTMENT OF TRANSPORTATION.
- ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS 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 IN ACCORDANCE WITH PUBLICATION NO. 68.
- POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.
- SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.
- ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.
- EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.
- CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE MOVED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.
- PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.
- 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, EFFECTIVE DATE DECEMBER 19, 1996.
- WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.
- PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.
- CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

CLOSED LOOP SYSTEM PERMIT # 10005

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 ENGINEERING DISTRICT 6-0

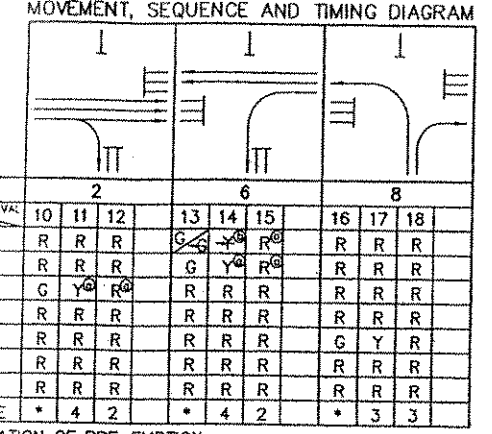
COUNTY: BUCKS
 MUNICIPALITY: BENSALEM TOWNSHIP
 INTERSECTION: STREET ROAD (S.R. 0132) AND
BENSALEM PLAZA SHOPPING CENTER ENTRANCE

REVIEWED: _____ DATE: _____
 MUNICIPAL OFFICIAL: _____ DATE: _____
 RECOMMENDED: Paul M. Lutz 03/30/01
Louis R. Belmonte 04/04/01
 DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECOM.	DATE
1	Added Emergency Pre-emption	PAI	03/31/01				
2							
3							
4							
5							
6							
7							
8							

SHEET 2 OF 2 | PERMIT # 61-1491 | FILE # 1491
 BENS 0312 FILE 1491 08/11/04

SERIES NUMBER	SIZE	REMARKS
R10-3R	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R4-7	18"x24"	KEEP RIGHT
W1C-1D	18"x18"	HAZARD MARKER
R10-3L	30"x30"	LEFT LANE MUST TURN LEFT
R10-3R	30"x30"	RIGHT LANE MUST TURN RIGHT
R10-3L	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R10-3R	30"x36"	LEFT TURN YIELD ON GREEN
R10-6L	24"x30"	STOP HERE ON RED

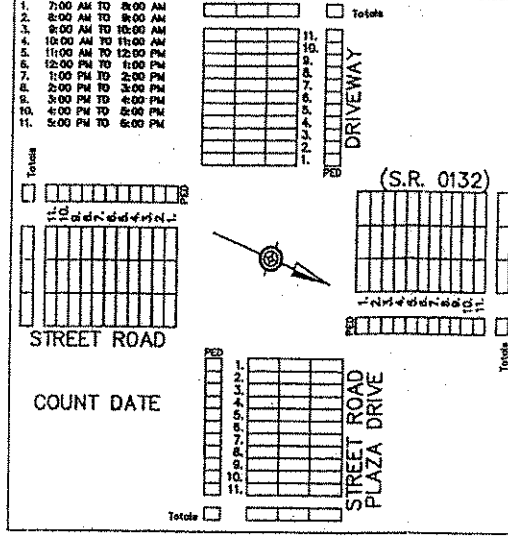


NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

① SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION.

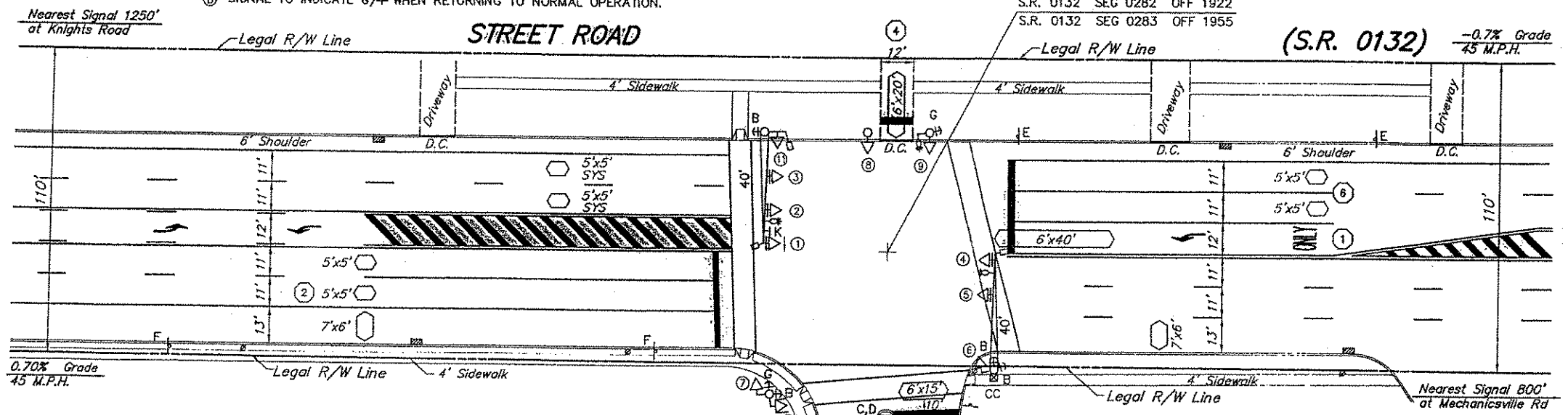
② SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.

- EMERGENCY PRE-EMPTION NOTES:**
- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND AND WESTBOUND APPROACHES OF STREET ROAD (S.R. 0132), AND THE SOUTHBOUND APPROACH OF STREET ROAD PLAZA DRIVE, WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION.
 - THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
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 - IF THE SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE TIMES SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION PHASE OCCURS.
 - IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE ALL SIGNALS SHALL REMAIN FLASHING.
 - UPON COMPLETION OF PRE-EMPTION PHASE 2, 6 OR 8 IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 4 SHALL FOLLOW.
 - IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.



GENERAL NOTES

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- ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.
- EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.
- CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.
- PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.
- THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITEE COMPLIES WITH THE PROVISIONS OF ACT 187, PREVENTION OF DAMAGE TO UNDERGROUND UTILITIES, EFFECTIVE DATE DECEMBER 19, 1995.
- WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.
- PERMITEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.
- CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.



TRAFFIC SIGNAL SYSTEM NOTE:

REFER TO SYSTEM PERMIT # 10005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.

EMERGENCY PRE-EMPTION NOTES (CONTINUED):

- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
- THE FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN PED "WALK (MAN)" AND PED "CLEAR (HAND)". THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.

OPERATION NOTES :

- ① IF FOLLOWED BY PHASE 2+6.
- ② G IF FOLLOWED BY PHASE 2+6.
- ③ TIMING WILL BE AS SHOWN IN PHASE 2+6. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6.
- SIGNAL TO DWELL IN PHASE 2+6, UNTIL ACTUATED BY PHASE 4 OR 8.

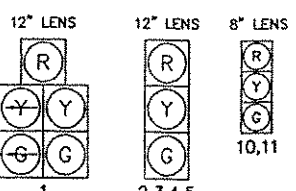
MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	1+6	2+6	4+8	FLASHING
1	G	G	R	Y
2	Y	Y	R	Y
3	R	R	R	Y
4	R	G	R	Y
5	R	Y	R	R
6	R	R	R	R
7	R	R	G	Y
8	R	R	R	R
9	R	R	G	Y
10	R	R	R	R
11	R	R	R	R
12	R	R	R	R
13	R	R	R	R
14	R	R	R	R
15	R	R	R	R
16	R	R	R	R
17	R	R	R	R
18	R	R	R	R

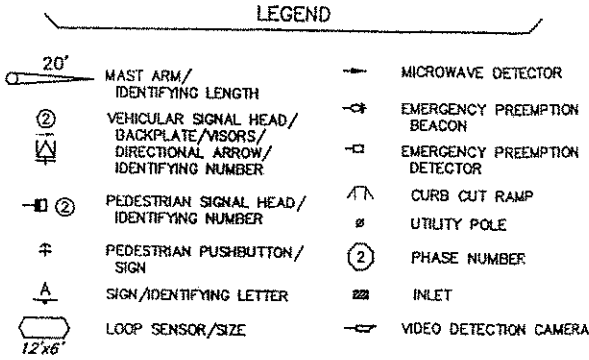
PHASE	4	2	16	4	2	3	3
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
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18							

PEDESTRIAN ACTUATION ONLY

SIGNAL INDICATIONS

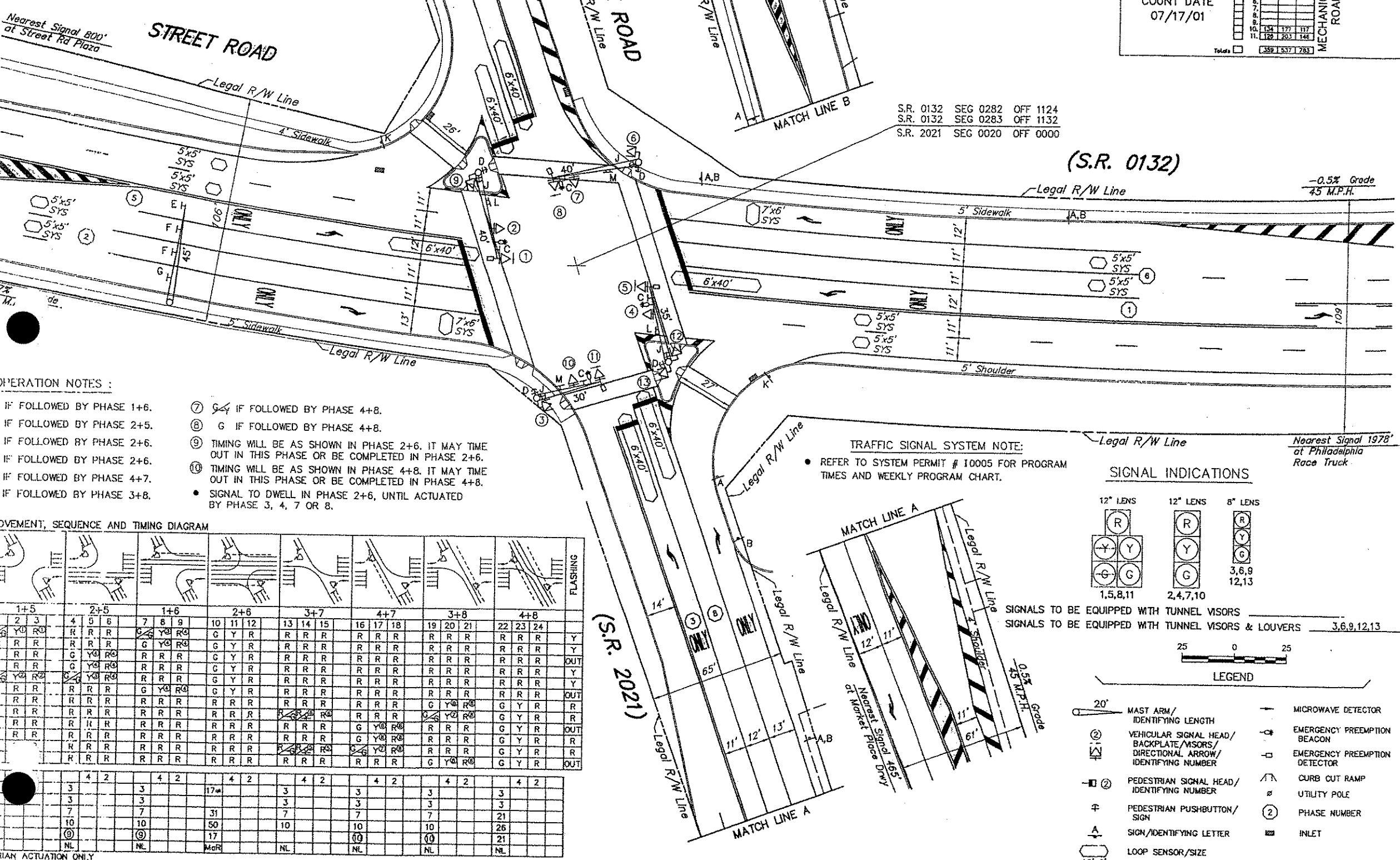


SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS
SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS



SERIES NUMBER	SIZE	REMARKS
R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
R10-12	30"x36"	LEFT TURN YIELD ON GREEN •
R10-	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R3	30"x36"	LEFT TURN
R1	30"x36"	STRAIGHT THROUGH
R10-3	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R1-2	36"x36"	YIELD
D3-4	96"x16"	MECHANICSVILLE RD
D3-4	84"x16"	STREET RD

Nearest Signal 800' at Street Rd Plaza



		79	1359	1800
8:00 AM TO 8:30 AM		18	203	144
8:30 AM TO 9:00 AM		23	195	145
9:00 AM TO 9:30 AM				
9:30 AM TO 10:00 AM				
10:00 AM TO 10:30 AM				
10:30 AM TO 11:00 AM				
11:00 AM TO 11:30 AM				
11:30 AM TO 12:00 PM				
12:00 PM TO 12:30 PM				
12:30 PM TO 1:00 PM				
1:00 PM TO 1:30 PM				
1:30 PM TO 2:00 PM				
2:00 PM TO 2:30 PM				
2:30 PM TO 3:00 PM				
3:00 PM TO 3:30 PM				
3:30 PM TO 4:00 PM				
4:00 PM TO 4:30 PM				
4:30 PM TO 5:00 PM				
5:00 PM TO 5:30 PM				
5:30 PM TO 6:00 PM				
Total		135	1537	783

(S.R. 2021)

(S.R. 0132)

STREET ROAD

MECHANICSVILLE ROAD

COUNT DATE 07/17/01

S.R. 0132 SEG 0282 OFF 1124
 S.R. 0132 SEG 0283 OFF 1132
 S.R. 2021 SEG 0020 OFF 0000

(S.R. 0132)

-0.5% Grade
 45 M.P.H.

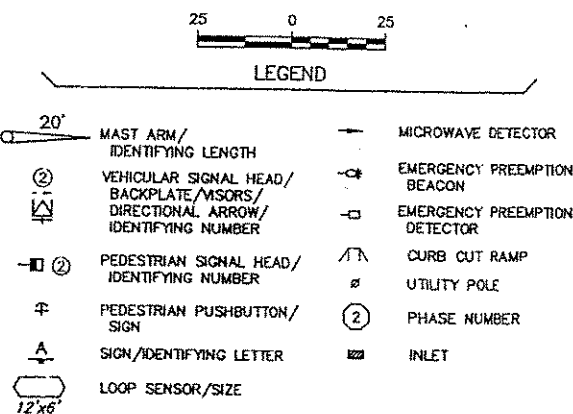
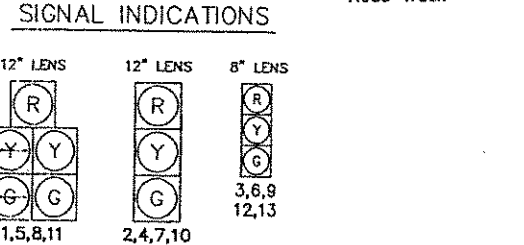
OPERATION NOTES :

IF FOLLOWED BY PHASE 1+6.
 IF FOLLOWED BY PHASE 2+5.
 IF FOLLOWED BY PHASE 2+6.
 IF FOLLOWED BY PHASE 2+6.
 IF FOLLOWED BY PHASE 4+7.
 IF FOLLOWED BY PHASE 3+8.

⑦ G IF FOLLOWED BY PHASE 4+8.
 ⑧ G IF FOLLOWED BY PHASE 4+8.
 ⑨ TIMING WILL BE AS SHOWN IN PHASE 2+6. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6.
 ⑩ TIMING WILL BE AS SHOWN IN PHASE 4+8. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 4+8.
 • SIGNAL TO DWELL IN PHASE 2+6, UNTIL ACTUATED BY PHASE 3, 4, 7 OR 8.

TRAFFIC SIGNAL SYSTEM NOTE:

- REFER TO SYSTEM PERMIT # 10005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.



MOVEMENT, SEQUENCE AND TIMING DIAGRAM

1+5	2+5	1+6	2+6	3+7	4+7	3+8	4+8	FLASHING
1 2 3	4 5 6	7 8 9	10 11 12	13 14 15	16 17 18	19 20 21	22 23 24	
Y Y R	R R R	G Y R	G Y R	R R R	R R R	R R R	R R R	Y
R R R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	Y
R R R	G Y R	R R R	G Y R	R R R	R R R	R R R	R R R	OUT
R R R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	Y
R R R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	OUT
R R R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	R
R R R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	OUT
R R R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	Y
R R R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	OUT
R R R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	Y
R R R	R R R	R R R	R R R	R R R	R R R	R R R	R R R	OUT

	3	4	2		4	2		4	2		3	4	2		3	4	2

PHASE ACTUATION ONLY

GENERAL NOTES

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

ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS 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 IN ACCORDANCE WITH PUBLICATION NO. 68.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.

ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.

EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.

CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.

PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

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, EFFECTIVE DATE DECEMBER 19, 1996.

WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.

PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

CLOSED LOOP SYSTEM PERMIT # 10005

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 ENGINEERING DISTRICT 6-0

COUNTY: BUCKS
 MUNICIPALITY: BENSALEM TOWNSHIP
 INTERSECTION: STREET ROAD (S.R. 0132) AND
MECHANICSVILLE ROAD (S.R. 2021)

REVIEWED:

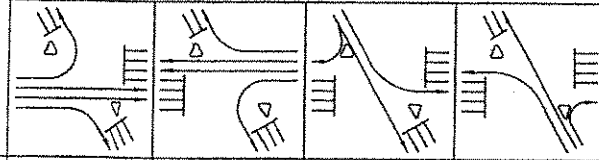
MUNICIPAL OFFICIAL _____ DATE _____

RECOMMENDED:
 Paul M. Lutz _____ 03/30/01 DATE
 Louis R. Belmonte _____ 04/04/01 DATE
 DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DATE	REV.	DATE	RECOMM.	DATE
1	Added LT phase for WB Mechanicsville Road	PAI	02/04/02	MLK	03/04/02	LRB
2	Added Emergency Pre-emption	PAI	09/11/04			
3						
4						
5						
6						
7						
8						

SHEET 2 OF 3 PERMIT # 61-0302 FILE # 0302

**EMERGENCY PRE-EMPTION PHASING
MOVEMENT, SEQUENCE AND TIMING DIAGRAM**



PHASE	2			6			4			8		
SIGNALS	25	26	27	28	29	30	31	32	33	34	35	36
1	R	R	R	G	Y	R	R	R	R	R	R	R
2	R	R	R	G	Y	R	R	R	R	R	R	R
4	G	Y	R	R	R	R	R	R	R	R	R	R
5	G	Y	R	R	R	R	R	R	R	R	R	R
7	R	R	R	R	R	R	R	R	R	G	Y	R
8	R	R	R	R	R	R	R	R	R	G	Y	R
10	R	R	R	R	R	R	G	Y	R	R	R	R
11	R	R	R	R	R	R	G	Y	R	R	R	R
3,6,9,12,13	R	R	R	R	R	R	R	R	R	R	R	R
FIXED TIME	*	4	2	*	4	2	*	4	2	*	4	2

* FOR DURATION OF PRE-EMPTION

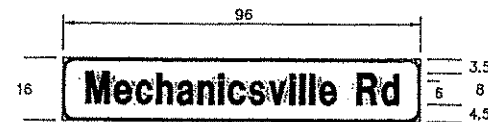
NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

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

EMERGENCY PRE-EMPTION NOTES:

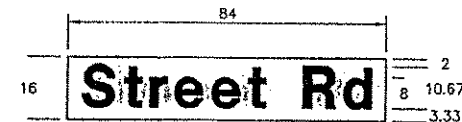
- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND & WESTBOUND APPROACHES OF STREET ROAD (S.R. 0132), AND THE NORTHBOUND & SOUTHBOUND APPROACHES OF MECHANICSVILLE ROAD (S.R. 2021), WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION. THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL FOR THE PREEMPTED PHASE.
- IF THE SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE TIMES SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION PHASE OCCURS.
- IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE ALL SIGNALS SHALL REMAIN FLASHING.
- UPON COMPLETION OF PRE-EMPTION PHASE 2,4, 6 OR 8, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 10 SHALL FOLLOW.
- IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED. PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
- THE FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN PED "WALK (MAN)" AND PED "CLEAR (HAND)". THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.

Sign "L"



HELVETICA BOLD (25% REDUCTION)
8" U.C.
6" L.C.

Sign "Z"



HELVETICA BOLD
10.6" U.C.
8" L.C.

CLOSED LOOP SYSTEM PERMIT # 10005

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

COUNTY: BUCKS
MUNICIPALITY: BENSALEM TOWNSHIP
INTERSECTION: STREET ROAD (S.R. 0132) AND
MECHANICSVILLE ROAD (S.R. 2021)

REVIEWED: _____ DATE _____
MUNICIPAL OFFICIAL _____ DATE _____

RECOMMENDED:
Paul M. Lutz _____ 03/30/01
DATE
Louis R. Belmonte _____ 04/04/01
DISTRICT TRAFFIC ENGINEER DATE

NO.	REVISION	DES/REV.	DATE	REV.	DATE	RECD.	DATE
1	Added Lt phase for WB Mechanicsville Road	PAI	02/04/02	MLK	03/14/02	IRB	04/16/02
2	Added Emergency Pre-Emption	PAI	05/11/04				
3							
4							
5							
6							
7							
8							

SHEET 3 OF 3 PERMIT # 61-0302 FILE # 0302

BENS 0312 FILE 0302 05/11/04

SERIES NUMBER	SIZE	REMARKS
R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
10-12	30"x36"	LEFT TURN YIELD ON GREEN *
R9-1	18"x18"	NO PEDESTRIAN CROSSING
3-	30"x30"	LANE USE CONTROL
D-	96"x16"	← TILLMAN DR
D-	96"x16"	TILLMAN DR →
10-3R	9"x12"	PUSH BUTTON FOR GREEN LIGHT
10-3L	9"x12"	PUSH BUTTON FOR GREEN LIGHT
W16-1	18"x18"	HAZARD MARKER
R4-7	24"x30"	KEEP RIGHT

EMERGENCY PRE-EMPTION NOTES:

VEHICLES TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE URBAN AND WESTBOUND APPROACHES OF STREET ROAD (S.R. 0132) AND EASTBOUND APPROACH OF TILLMAN DRIVE, WITH A FLASHING FAIL SAFE FOR EACH DIRECTION OF OPERATION.

EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, WHICH WILL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.

SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL OF THE PREEMPTED PHASE.

SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION OCCURS.

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

COMPLETION OF PRE-EMPTION PHASE 2, 4 OR 6, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 4 SHALL FOLLOW.

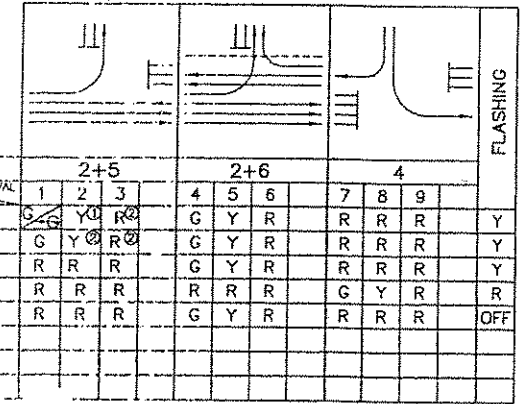
ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO NEXT PRE-EMPTION PHASE.

EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, OPERATION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.

LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THOSE SHOWN ON THE CONDITION DIAGRAM, AS THE DETECTORS ARE FIELD LOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.

IF SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN "WALK (MAN)" AND "HOLD (HAND)". THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING TO NORMAL OPERATION PHASE.

MOVEMENT, SEQUENCE AND TIMING DIAGRAM



VAL	1	2	3	4	5	6	7	8	9	FLASHING
2+5	G	Y	R	G	Y	R	R	R	R	Y
2+6	G	Y	R	G	Y	R	R	R	R	Y
4	R	R	R	G	Y	R	R	R	R	Y
	R	R	R	R	R	R	G	Y	R	R
	R	R	R	G	Y	R	R	R	R	OFF

PEDESTRIAN ACTUATION ONLY

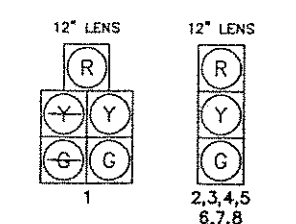
TRAFFIC SIGNAL SYSTEM NOTE:

- REFER TO SYSTEM PERMIT # 10005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.

OPERATION NOTES:

- ① G/Y IF FOLLOWED BY PHASE 2+6
- ② G IF FOLLOWED BY PHASE 2+6

SIGNAL INDICATIONS



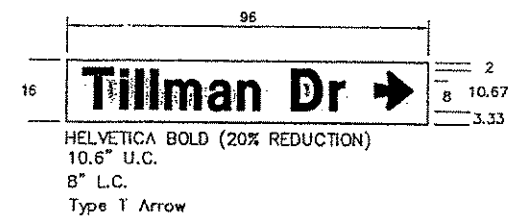
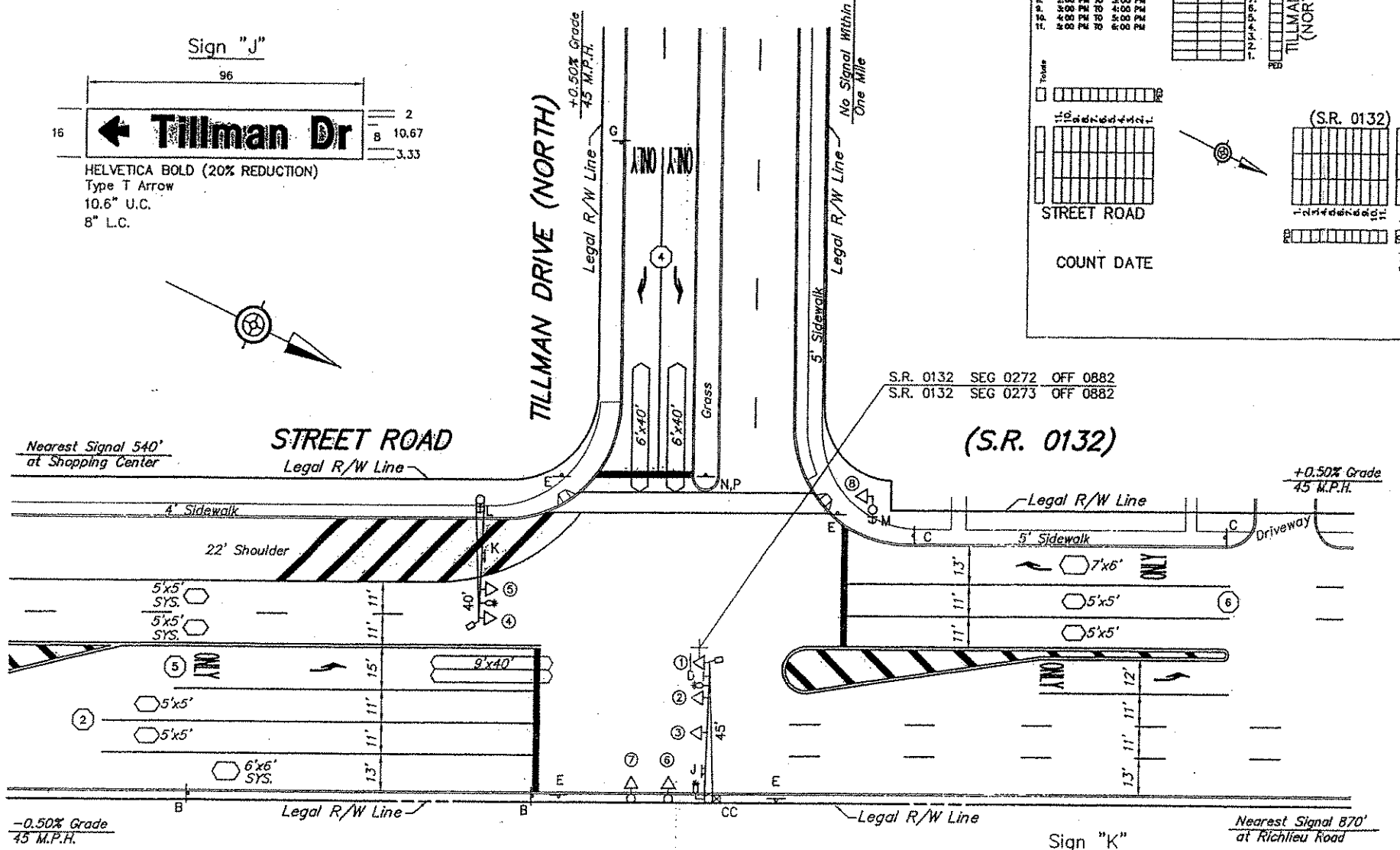
SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS
SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS

EMERGENCY PRE-EMPTION PHASING MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	2	6	4
SIGNALS	10 11 12	13 14 15	16 17 18
INTERVAL	G Y R	R R R	R R R
1	G Y R	R R R	R R R
2,3	G Y R	R R R	R R R
4,5	R R R	G Y R	R R R
6,7	R R R	R R R	G Y R
8	R R R	R R R	R R R
FIXED TIME	* 4 2	* 4 2	* 4 2

* FOR DURATION OF PRE-EMPTION
NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

- ③ SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION.
- ④ SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.



LEGEND

- MAST ARM/IDENTIFYING LENGTH
- VEHICULAR SIGNAL HEAD/BACKPLATE/VISORS/DIRECTIONAL ARROW/IDENTIFYING NUMBER
- PEDESTRIAN PUSHBUTTON/SIGN
- SIGN/IDENTIFYING LETTER
- LOOP SENSOR/SIZE
- MICROWAVE DETECTOR
- EMERGENCY PREEMPTION BEACON
- EMERGENCY PREEMPTION DETECTOR
- CURB CUT RAMP
- UTILITY POLE
- PHASE NUMBER
- INLET

GENERAL NOTES

- NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED IN WRITING BY A REPRESENTATIVE OF THE DEPARTMENT OF TRANSPORTATION.
- ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS 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 IN ACCORDANCE WITH PUBLICATION NO. 68.
- POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.
- SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.
- ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.
- EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.
- CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.
- PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.
- 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, EFFECTIVE DATE DECEMBER 19, 1996.
- WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.
- PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.
- CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

CLOSED LOOP SYSTEM PERMIT # 10005

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6--0

COUNTY: BUCKS
MUNICIPALITY: BENSALEM TOWNSHIP
INTERSECTION: STREET ROAD (S.R. 0132) AND TILLMAN DRIVE (NORTH)

REVIEWED: _____ DATE _____
MUNICIPAL OFFICIAL: _____ DATE _____
RECOMMENDED: Paul M. Lutz 03/30/01
DATE: _____
Louis R. Belmonte 04/04/01
DISTRICT TRAFFIC ENGINEER DATE: _____

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECORD	DATE
1	Added Emergency Pre-Emption	PAJ	05/11/04				
2							
3							
4							
5							
6							
7							
8							

SHEET 2 OF 2 PERMIT # 61-2696 FILE # 2696

GENERAL NOTES

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

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

ALL SIGNS AND PAVEMENT MARKINGS INDICATED ON THIS DRAWING ARE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH PUBLICATION NO. 6B.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.

ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.

EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.

CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 40B.

PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITEE COMPLIES WITH THE PROVISIONS OF ACT 187, PREVENTION OF DAMAGE TO UNDERGROUND UTILITIES, EFFECTIVE DATE DECEMBER 19, 1996.

WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 40B AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.

PERMITEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

CLOSED LOOP SYSTEM PERMIT # I0005

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

COUNTY: BUCKS
MUNICIPALITY: BENSALEM TOWNSHIP
INTERSECTION: STREET ROAD (S.R. 0132) AND RICHIEU ROAD (S.R. 2035)

REVIEWED: _____ DATE _____

MUNICIPAL OFFICIAL: _____ DATE _____

RECOMMENDED: **Paul M. Lutz** DATE **03/30/01**

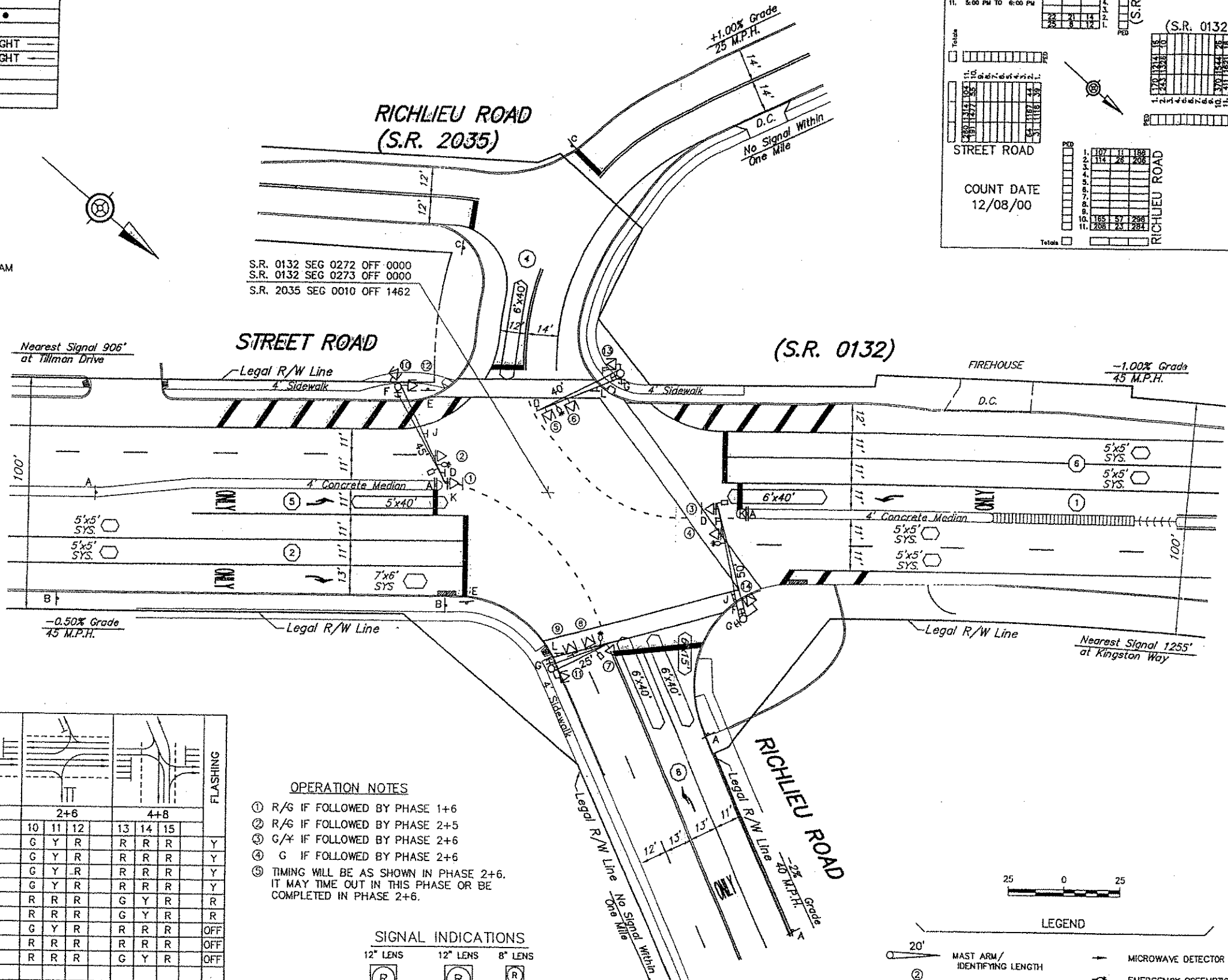
Louis R. Belmonte DATE **04/04/01**
DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECD.	DATE
1	Modified Geometry on West Leg of Richlieu Rd	PAJ	03/20/01	MK	04/03/01	LRD	04/17/01
2	Added Emergency Pre-emption/ Push Buttons	PAJ	04/11/01				
3							
4							
5							
6							
7							
8							

SHEET 2 OF 3 PERMIT # 61-1918 FILE # 1918

SERIES NUMBER	SIZE	REMARKS
R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
R1-1	24"x24"	STOP
R10-12	30"x36"	LEFT TURN YIELD ON GREEN
R9-	18"x18"	NO PEDESTRIAN CROSSING
R7-	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R7-	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R7-	96"x16"	RICHIEU RD
W16-1	18"x18"	HAZARD MARKER
D3-4	72"x16"	STREET RD

TRAFFIC SIGNAL SYSTEM NOTE:
REFER TO SYSTEM PERMIT # I0005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.



Legend

Symbol	Description
①	MAST ARM/ IDENTIFYING LENGTH
②	VEHICULAR SIGNAL HEAD/ BACKPLATE/VISORS/ DIRECTIONAL ARROW/ IDENTIFYING NUMBER
③	PEDESTRIAN SIGNAL HEAD/ IDENTIFYING NUMBER
④	PEDESTRIAN PUSHBUTTON/ SIGN
⑤	SIGN/IDENTIFYING LETTER
⑥	LOOP SENSOR/SIZE
⑦	MICROWAVE DETECTOR
⑧	EMERGENCY PREEMPTION BEACON
⑨	EMERGENCY PREEMPTION DETECTOR
⑩	CURB CUT RAMP
⑪	UTILITY POLE
⑫	PHASE NUMBER
⑬	INLET

MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	MOVEMENT					SEQUENCE					TIMING					FLASHING
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
R/G	R	R	R	G	Y	R	R	R	G	Y	R	R	R	G	Y	Y
G/Y	G	Y	R	R	R	R	R	R	G	Y	R	R	R	G	Y	Y
R/G	R	R	R	G	Y	R	R	R	G	Y	R	R	R	G	Y	Y
G/Y	G	Y	R	R	R	R	R	R	G	Y	R	R	R	G	Y	Y
R/G	R	R	R	G	Y	R	R	R	G	Y	R	R	R	G	Y	R
G/Y	G	Y	R	R	R	R	R	R	G	Y	R	R	R	G	Y	R
R/G	R	R	R	G	Y	R	R	R	G	Y	R	R	R	G	Y	OFF
G/Y	G	Y	R	R	R	R	R	R	G	Y	R	R	R	G	Y	OFF
R/G	R	R	R	G	Y	R	R	R	G	Y	R	R	R	G	Y	OFF
G/Y	G	Y	R	R	R	R	R	R	G	Y	R	R	R	G	Y	OFF

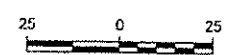
OPERATION NOTES

- ① R/G IF FOLLOWED BY PHASE 1+6
- ② R/G IF FOLLOWED BY PHASE 2+5
- ③ G/Y IF FOLLOWED BY PHASE 2+6
- ④ G IF FOLLOWED BY PHASE 2+6
- ⑤ TIMING WILL BE AS SHOWN IN PHASE 2+6. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6.

SIGNAL INDICATIONS

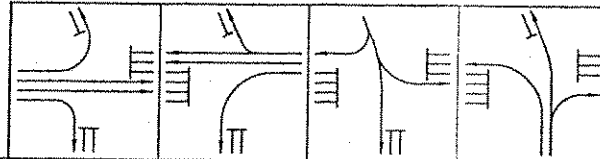
12" LENS	12" LENS	8" LENS
(R)	(R)	(R)
(Y)	(Y)	(Y)
(G)	(G)	(G)

SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS: 7,8,10,11
SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS: 3,12,13,14



PEDESTRIAN ACTUATION ONLY.

EMERGENCY PRE-EMPTION PHASING
MOVEMENT, SEQUENCE AND TIMING DIAGRAM



PHASE	2			6			4			8		
INTERVAL	16	17	18	19	20	21	22	23	24	25	26	27
1	R	R	R	G	Y [ⓐ]	R [ⓑ]	R	R	R	R	R	R
2	R	R	R	G	Y [ⓐ]	R [ⓑ]	R	R	R	R	R	R
3	G	Y [ⓐ]	R [ⓑ]	R	R	R	R	R	R	R	R	R
4	G	Y [ⓐ]	R [ⓑ]	R	R	R	R	R	R	R	R	R
5,6,7	R	R	R	R	R	R	R	R	R	G	Y	R
8,9,10	R	R	R	R	R	R	G	Y	R	R	R	R
11,12,13	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
FIXED TIME	*	4	2	**	4	2	*	4	2	*	4	2

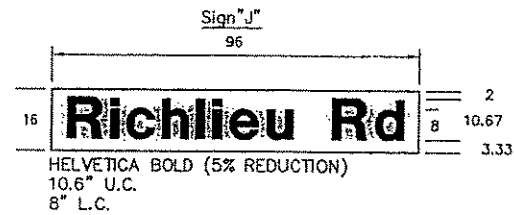
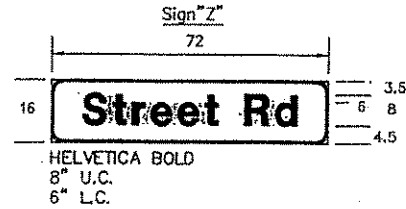
* FOR DURATION OF PRE-EMPTION
** IF ACTUATED BY THE FIREHOUSE PUSH BUTTON, A FIXED TIME OF 60 SECONDS WILL BE PROVIDED. OTHERWISE, FOR DURATION OF PRE-EMPTION.

NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

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

EMERGENCY PRE-EMPTION NOTES:

- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND & WESTBOUND APPROACHES OF STREET ROAD (S.R. 0132), AND THE NORTHBOUND & SOUTHBOUND APPROACHES OF RICHLIEU ROAD (S.R. 2035), WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION.
- THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL FOR THE PREEMPTED PHASE.
- IF THE SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE TIMES SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION PHASE OCCURS.
- IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE ALL SIGNALS SHALL REMAIN FLASHING.
- UPON COMPLETION OF PRE-EMPTION PHASE 2, 4, 6 OR 8, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 10 SHALL FOLLOW.
- IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
- THE FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN PED "WALK (MAN)" AND PED "CLEAR (HAND)". THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.



CLOSED LOOP SYSTEM PERMIT # I0005

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

COUNTY: BUCKS
MUNICIPALITY: BENSALEM TOWNSHIP
INTERSECTION: STREET ROAD (S.R. 0132) AND
RICHLIEU ROAD (S.R. 2035)

REVIEWED:

DATE: _____
MUNICIPAL OFFICIAL

RECOMMENDED:
Paul M. Lutz 03/30/01
DATE
Louis R. Belmonte 04/04/01
DISTRICT TRAFFIC ENGINEER DATE

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECOM.	DATE
1	Modified Geometry on West Leg of Richlieu Rd	PAI	03/05/02	MK	04/01/02	LKB	04/17/02
2	Added Emergency Pre-emption/Push buttons	PAI	05/11/04				
3							
4							
5							
6							
7							
8							

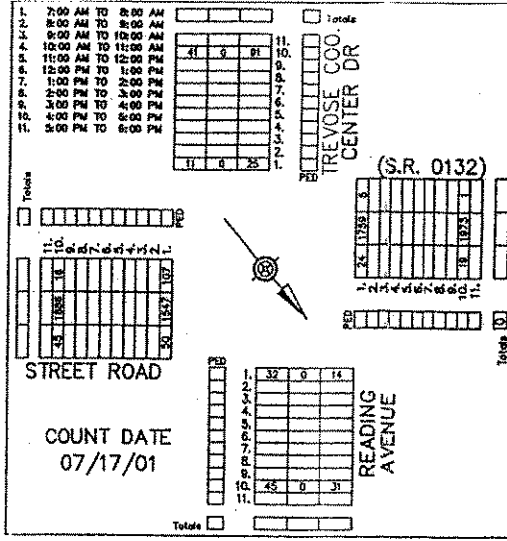
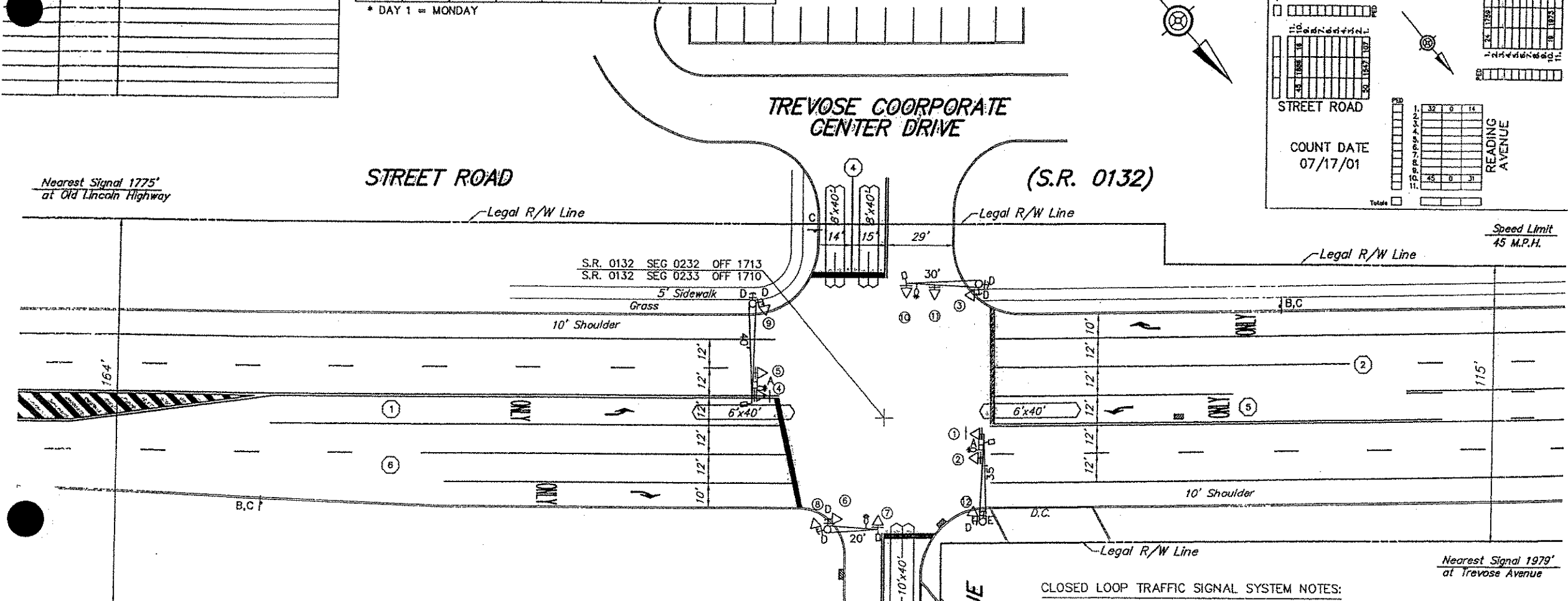
SHEET 3 OF 3 PERMIT # 61-1916 FILE # 1916

SERIES NUMBER	SIZE	REMARKS
R10-12	30"x36"	LEFT TURN YIELD ON GREEN
R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
R10-	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R1-	9"x12"	PUSH BUTTON FOR GREEN LIGHT

EVENT	DAY*	TIME	CYCLE	OFFSET	PROGRAM	REMARKS
1	1-5	0600	110	72	1	AM PEAK
2	1-5	1000	90	64	2	OFF PEAK
3	1-5	1500	110	91	3	PM PEAK
4	1-5	1900	90	64	2	OFF PEAK
5	6,7	0600	90	64	2	WEEKEND PEAK
6	1-7	0000	-	-	-	FLASH

* DAY 1 = MONDAY

Nearest Signal 1775' at Old Lincoln Highway



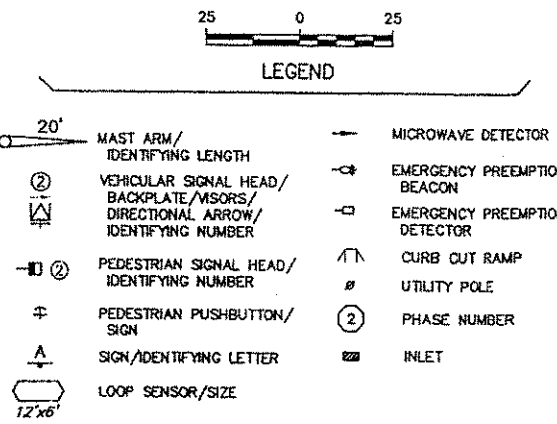
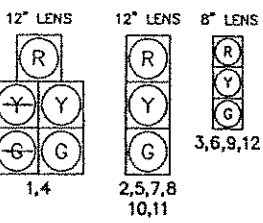
Speed Limit 45 M.P.H.

VAL	1-5	2+5	1+6	2+6	4+8	FLASHING
1	R	R	G	G	R	Y
2	R	R	G	G	R	Y
3	R	R	G	G	R	Y
4	R	R	G	G	R	Y
5	R	R	G	G	R	Y
6	R	R	G	G	R	Y
7	R	R	G	G	R	Y
8	R	R	G	G	R	Y
9	R	R	G	G	R	Y
10	R	R	G	G	R	Y
11	R	R	G	G	R	Y
12	R	R	G	G	R	Y
13	R	R	G	G	R	Y
14	R	R	G	G	R	Y
15	R	R	G	G	R	Y
16	R	R	G	G	R	Y
17	R	R	G	G	R	Y
18	R	R	G	G	R	Y
19	R	R	G	G	R	Y
20	R	R	G	G	R	Y
21	R	R	G	G	R	Y
22	R	R	G	G	R	Y
23	R	R	G	G	R	Y
24	R	R	G	G	R	Y
25	R	R	G	G	R	Y
26	R	R	G	G	R	Y
27	R	R	G	G	R	Y
28	R	R	G	G	R	Y
29	R	R	G	G	R	Y
30	R	R	G	G	R	Y
31	R	R	G	G	R	Y
32	R	R	G	G	R	Y
33	R	R	G	G	R	Y
34	R	R	G	G	R	Y
35	R	R	G	G	R	Y
36	R	R	G	G	R	Y
37	R	R	G	G	R	Y
38	R	R	G	G	R	Y
39	R	R	G	G	R	Y
40	R	R	G	G	R	Y
41	R	R	G	G	R	Y
42	R	R	G	G	R	Y
43	R	R	G	G	R	Y
44	R	R	G	G	R	Y
45	R	R	G	G	R	Y
46	R	R	G	G	R	Y
47	R	R	G	G	R	Y
48	R	R	G	G	R	Y
49	R	R	G	G	R	Y
50	R	R	G	G	R	Y
51	R	R	G	G	R	Y
52	R	R	G	G	R	Y
53	R	R	G	G	R	Y
54	R	R	G	G	R	Y
55	R	R	G	G	R	Y
56	R	R	G	G	R	Y
57	R	R	G	G	R	Y
58	R	R	G	G	R	Y
59	R	R	G	G	R	Y
60	R	R	G	G	R	Y

- OPERATION NOTES :
- ① G IF FOLLOWED BY PHASE 1+6.
 - ② G IF FOLLOWED BY PHASE 2+5.
 - ③ R IF FOLLOWED BY PHASE 1+6.
 - ④ R IF FOLLOWED BY PHASE 2+5.
 - ⑤ G IF FOLLOWED BY PHASE 2+6.
 - ⑥ R IF FOLLOWED BY PHASE 2+6.
 - ⑦ TIMING WILL BE AS SHOWN IN PHASE 2+6. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6.

- CLOSED LOOP TRAFFIC SIGNAL SYSTEM NOTES:
- PROGRAMS TO BE SELECTED BY CLOSED LOOP SYSTEM MASTER CONTROLLER OR TBC BACKUP.
 - OFFSET REFERENCED TO THE BEGINNING OF INTERVAL 11, PHASE 2+6.
 - SYSTEM STREET ROAD (4 INTERSECTIONS). SYSTEM LIMITS : OLD LINCOLN HWY TO PHILMONT AVE. MASTER CONTROLLER LOCATION : PHILMONT AVENUE. PRIMARY COORDINATION : CLOSE LOOP SYSTEM/HARD WIRE COMMUNICATION CABLE (COPPER). SECONDARY COORDINATION : TIME BASE COORDINATION (DEFAULT TO WEEKLY PROGRAM CHART).

SIGNAL INDICATIONS



SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS 3,8,6

GENERAL NOTES

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

ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS 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 IN ACCORDANCE WITH PUBLICATION NO. 60.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.

ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.

EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.

CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.

PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

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, EFFECTIVE DATE DECEMBER 19, 1996.

WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.

PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

COUNTY: BUCKS
MUNICIPALITY: BENSLEM TOWNSHIP
INTERSECTION: STREET ROAD (S.R. 0132) AND READING AVE/TREVOISE CORPORATE CENTER DR.

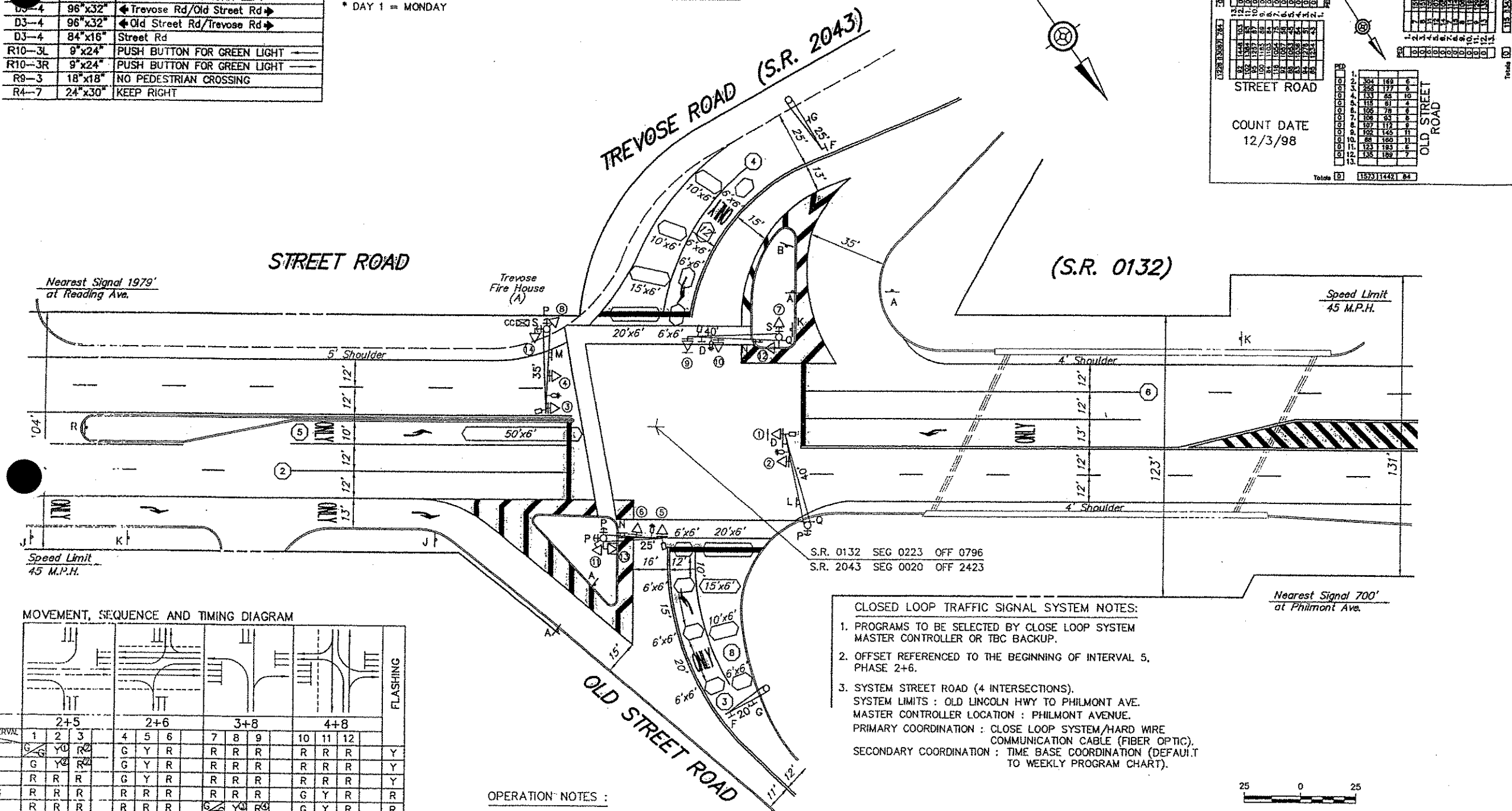
REVIEWED: _____ DATE _____
MUNICIPAL OFFICIAL: _____ DATE _____
RECOMMENDED: Werner J. Eichorn 01/04/85 DATE
Stephen B. Lester 01/04/85 DATE
DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECU.	DATE
1	New Controller, Interconnect Timing	SHG	03/25/84	PML	03/29/84	DWM	04/12/84
2	Timing Change	SM	02/24/84	PML	02/24/84	LHR	02/24/84
3	Added Emergency Pre-emption/ Push Buttons	PAI	05/11/84				
4							
5							
6							
7							
8							

SERIES NUMBER	SIZE	REMARKS
R1-2	36"x36"	YIELD
R5-1	24"x24"	DO NOT ENTER
R10-12	30"x36"	LEFT TURN YIELD ON GREEN*
R3-3	30"x36"	LEFT TURN
R7	30"x36"	OPTIONAL RIGHT TURN
	30"x30"	RIGHT LANE MUST TURN RIGHT
	30"x30"	LEFT LANE MUST TURN LEFT
D3-4	96"x32"	Trevoze Rd/Old Street Rd
D3-4	96"x32"	Old Street Rd/Trevoze Rd
D3-4	84"x16"	Street Rd
R10-3L	9"x24"	PUSH BUTTON FOR GREEN LIGHT
R10-3R	9"x24"	PUSH BUTTON FOR GREEN LIGHT
R9-3	18"x18"	NO PEDESTRIAN CROSSING
R4-7	24"x30"	KEEP RIGHT

EVENT	DAY*	TIME	CYCLE	OFFSET	PROGRAM	REMARKS
2	1-5	0600	110	11	1	AM PEAK
3	1-5	1000	90	85	2	OFF PEAK
4	1-5	1500	110	0	3	PM PEAK
5	1-5	1900	90	85	2	OFF PEAK
6	6,7	0600	90	85	2	WEEKEND PEAK
1	1-7	0000	-	-	-	FREE MAX 1

* DAY 1 = MONDAY



TIME	STREET ROAD	TREVOZE RD (S.R. 2043)	OLD STREET ROAD (S.R. 0132)
6:00 AM	10	10	10
7:00 AM	10	10	10
8:00 AM	10	10	10
9:00 AM	10	10	10
10:00 AM	10	10	10
11:00 AM	10	10	10
12:00 PM	10	10	10
1:00 PM	10	10	10
2:00 PM	10	10	10
3:00 PM	10	10	10
4:00 PM	10	10	10
5:00 PM	10	10	10
6:00 PM	10	10	10
7:00 PM	10	10	10

COUNT DATE 12/3/98

MOVEMENT, SEQUENCE AND TIMING DIAGRAM

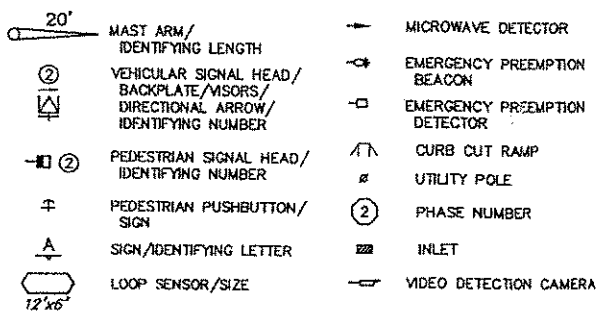
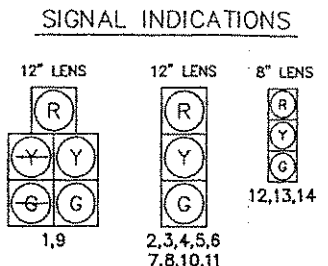
PHASE	2+5	2+6	3+8	4+8	FLASHING
1	G	Y	R	R	Y
2	G	Y	R	R	Y
3	R	R	R	G	Y
4	R	R	R	G	Y
5	R	R	R	G	Y
6	R	R	R	G	Y
7	R	R	R	G	Y
8	R	R	R	G	Y
9	R	R	R	G	Y
10	R	R	R	G	Y
11	R	R	R	G	Y
12	R	R	R	G	Y

OPERATION NOTES:

- IF FOLLOWED BY PHASE 2+6
- G IF FOLLOWED BY PHASE 2+6
- IF FOLLOWED BY PHASE 4+8
- G IF FOLLOWED BY PHASE 4+8
- TIMING WILL BE AS SHOWN IN PHASE 2+6. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6.

CLOSED LOOP TRAFFIC SIGNAL SYSTEM NOTES:

- PROGRAMS TO BE SELECTED BY CLOSE LOOP SYSTEM MASTER CONTROLLER OR TBC BACKUP.
- OFFSET REFERENCED TO THE BEGINNING OF INTERVAL 5, PHASE 2+6.
- SYSTEM STREET ROAD (4 INTERSECTIONS).
SYSTEM LIMITS: OLD LINCOLN HWY TO PHILMONT AVE.
MASTER CONTROLLER LOCATION: PHILMONT AVENUE.
PRIMARY COORDINATION: CLOSE LOOP SYSTEM/HARD WIRE COMMUNICATION CABLE (FIBER OPTIC).
SECONDARY COORDINATION: TIME BASE COORDINATION (DEFAULT TO WEEKLY PROGRAM CHART).



PHASE	1	2	3	4	5	6	7	8	9	10	11	12
1	7	3	2	57	4	2	14	3	2	10	4	2
2	7	3	2	37	4	2	7	3	2	17	4	2
3	7	3	2	47	4	2	7	3	2	27	4	2

PEDESTRIAN ACTIVATION ONLY

GENERAL NOTES

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

ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS 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 IN ACCORDANCE WITH PUBLICATION NO. 68.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.

ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.

EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.

CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.

PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

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, EFFECTIVE DATE DECEMBER 19, 1996.

WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.

PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

COUNTY: BUCKS

MUNICIPALITY: BENSALEM TOWNSHIP

INTERSECTION: STREET ROAD (S.R. 0132) AND TREVOZE ROAD (S.R. 2043)/OLD STREET ROAD

REVIEWED: _____ DATE _____

MUNICIPAL OFFICIAL: _____ DATE _____

RECOMMENDED: Paul M. Lutz DATE 03/25/99

Douglas May DATE 05/03/99
DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECOM.	DATE
1	Timing Change	ABP	07/28/98	PML	07/28/98	DWM	07/28/98
2	Timing Change	SM	02/24/94	PML	02/24/94	JRB	02/24/94
3	New Drawing, Added Emergency Pre-Emption	PAI	05/31/94				

SHEET 2 OF 3 PERMIT # 61-1512 FILE # 1512

EMERGENCY PRE-EMPTION PHASING
MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	2			6			4			8		
SIGNALS	13	14	15	16	17	18	19	20	21	22	23	24
1	G	Y	R	R	R	R	R	R	R	R	R	R
2	G	Y	R	R	R	R	R	R	R	R	R	R
3,4	R	R	R	G	Y	R	R	R	R	R	R	R
5,6,7,8	R	R	R	R	R	R	G	Y	R	R	R	R
9	R	R	R	R	R	R	R	R	R	G	Y	R
10,11	R	R	R	R	R	R	R	R	R	G	Y	R
12,13,14	R	R	R	R	R	R	R	R	R	R	R	R
FIXED TIME	* 4	2		* 4	2		** 4	2		* 4	2	

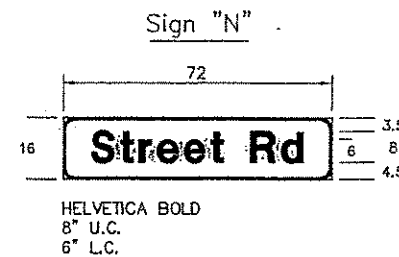
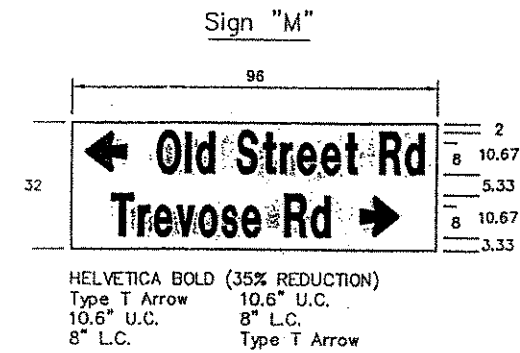
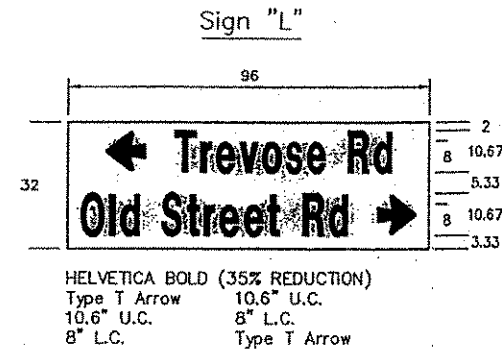
* FOR DURATION OF PRE-EMPTION
** IF ACTUATED BY THE FIREHOUSE PUSH BUTTON, A FIXED TIME OF 90 SECONDS WILL BE PROVIDED, OTHERWISE, FOR DURATION OF PRE-EMPTION.

NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

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

EMERGENCY PRE-EMPTION NOTES:

- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND AND WESTBOUND APPROACHES OF STREET ROAD (S.R. 0132), AND THE NORTHBOUND APPROACH OF TREVOSE ROAD (S.R. 2423) AND SOUTHBOUND APPROACH OF OLD STREET ROAD, WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION.
- THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE OR A PUSH BUTTON LOCATED IN THE TREVOSE FIRE STATION, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL FOR THE PREEMPTED PHASE.
- IF THE SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE TIMES SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION PHASE OCCURS.
- IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE ALL SIGNALS SHALL REMAIN FLASHING.
- UPON COMPLETION OF PRE-EMPTION PHASE 2, 4, 6 OR 8, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 4 SHALL FOLLOW.
- IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
- THE FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN PED "WALK (MAN)" AND PED "CLEAR (HAND)". THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.



PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

COUNTY: BUCKS
MUNICIPALITY: BENSALEM TOWNSHIP
INTERSECTION: STREET ROAD (S.R. 0132) AND
TREVOSE AVENUE/OLD STREET ROAD

REVIEWED: _____ DATE _____

MUNICIPAL OFFICIAL _____ DATE _____

RECOMMENDED:
Paul M. Lutz _____ 03/25/99
DATE

Douglas May _____ 05/03/99
DISTRICT TRAFFIC ENGINEER DATE

NO.	REVISION	DES./REV.	DATE	REV.	DATE	REVIS.	DATE
1	Timing Change	ABP	01/28/98	PML	01/28/98	DWM	07/28/98
2	Timing Change	SM	02/24/04	PML	02/24/04	LRI	02/24/04
3	New Drawing, Added Emergency Pre-emption	PAI	05/11/04				
4							
5							
6							
7							
8							

SERIES NUMBER	SIZE	REMARKS
R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
P	24"x30"	KEEP RIGHT
	18"x18"	NO PEDESTRIAN CROSSING
5L	30"x36"	LEFT TURN
5S	30"x36"	STRAIGHT THROUGH
R3-5R	30"x36"	RIGHT TURN
D3-4	96"x16"	TILLMAN DR
D3-4	96"x16"	TILLMAN DR
R10-3R	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R10-3L	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R10-12	30"x36"	LEFT TURN YIELD ON GREEN
R3-6SR	30"x36"	OPTIONAL RIGHT TURN
W16-1	18"x18"	HAZARD MARKER
D3-4	72"x16"	STREET RD

GENERAL NOTES

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

ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS 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 IN ACCORDANCE WITH PUBLICATION NO. 68.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.

ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.

EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.

CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.

PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

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, EFFECTIVE DATE DECEMBER 19, 1996.

WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.

PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

CLOSED LOOP SYSTEM PERMIT # I 0005

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

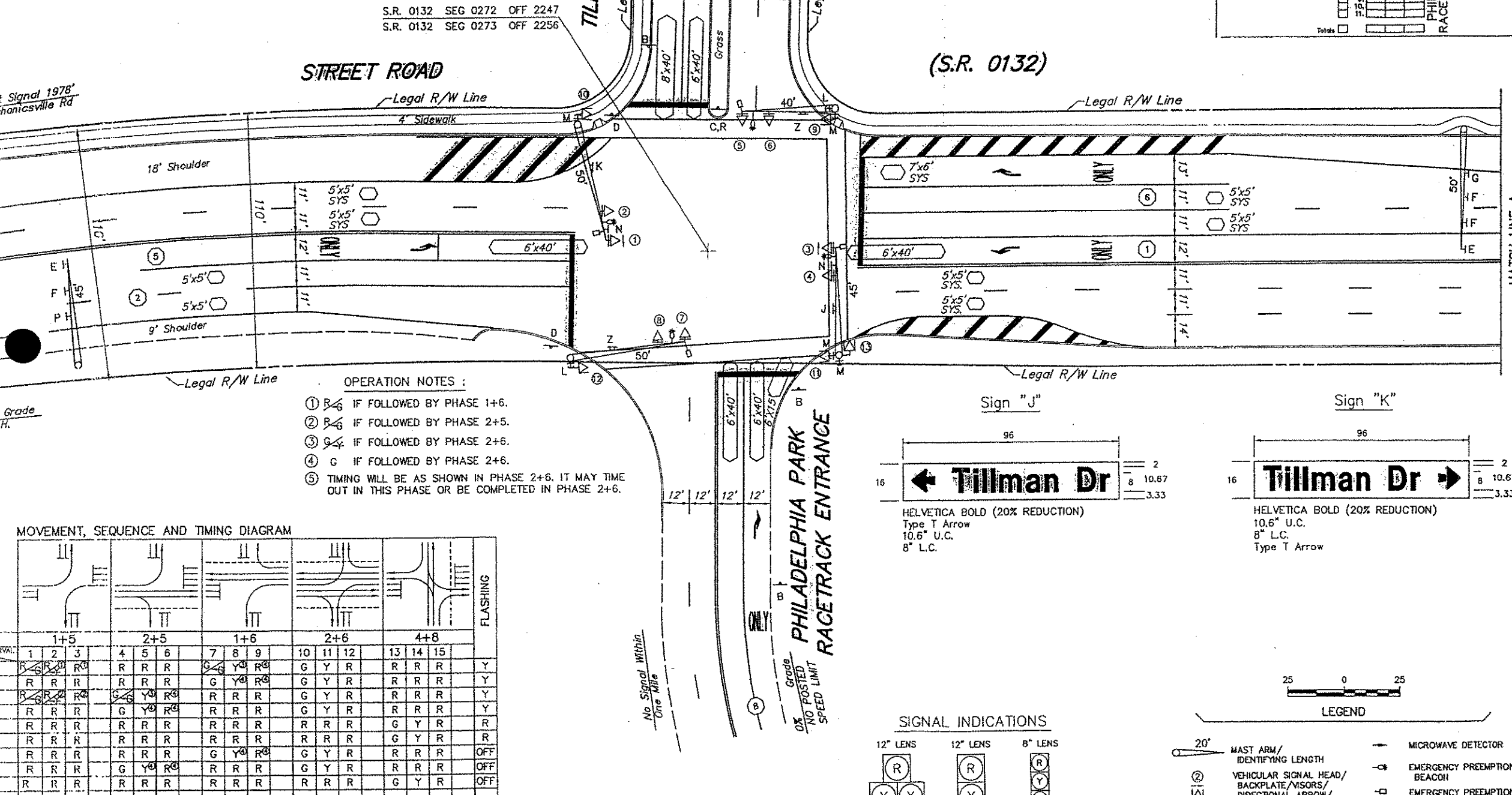
COUNTY: **BUCKS**
MUNICIPALITY: **BENSALEM TOWNSHIP**
INTERSECTION: **STREET ROAD (S.R. 0132) AND
TILLMAN DRIVE SOUTH/PHILADELPHIA PARK**

REVIEWED: _____ DATE: _____
MUNICIPAL OFFICIAL: _____ DATE: _____

RECOMMENDED: **Paul M. Lutz** DATE: **03/30/01**
Louis R. Belmonte DATE: **04/04/01**
DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECORD	DATE
1	Added Emergency Pre-emption/ Push Buttons	PAI	08/11/04				
2							
3							
4							
5							
6							
7							
8							

SHEET 2 OF 3 PERMIT # **61-1917** FILE # **1917**
BENS 0312 FILE 1917 06/11/04



Signal 1978' Mechanicsville Rd

Grade H.

MOVEMENT, SEQUENCE AND TIMING DIAGRAM

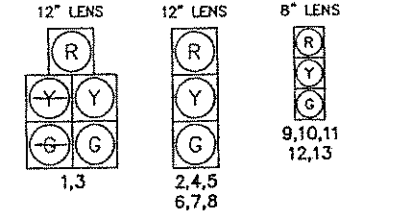
PHASE	1+5		2+5			1+6			2+6			4+8			FLASHING		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14		15	
R	R	R	R	R	R	R	G	Y	R	G	Y	R	R	R	R	Y	
R	R	R	R	R	R	R	G	Y	R	G	Y	R	R	R	R	Y	
R	R	R	R	G	Y	R	R	R	R	G	Y	R	R	R	R	Y	
R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	
R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R
R	R	R	R	R	R	R	G	Y	R	G	Y	R	R	R	R	R	OFF
R	R	R	R	G	Y	R	R	R	R	G	Y	R	R	R	R	R	OFF
R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	OFF

	4	2	3	3	4	2	4	2	4	2	3	4	2
1	7	7	7	7	44	21	7	7	7	7	21	7	7
2	7	7	7	7	74	23	7	7	7	7	23	7	7
NL*		(5)	(5)	(5)	27	21					21		
NL		NL	NL	NL	MoR	NL					NL		

OPERATION NOTES :
 ① IF FOLLOWED BY PHASE 1+6.
 ② IF FOLLOWED BY PHASE 2+5.
 ③ IF FOLLOWED BY PHASE 2+6.
 ④ IF FOLLOWED BY PHASE 2+6.
 ⑤ TIMING WILL BE AS SHOWN IN PHASE 2+6. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6.

TRAFFIC SIGNAL SYSTEM NOTE:
 REFER TO SYSTEM PERMIT # 10005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.

SIGNAL INDICATIONS

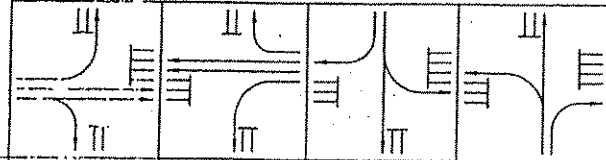


LEGEND

- 20' MAST ARM/ IDENTIFYING LENGTH
- ② VEHICULAR SIGNAL HEAD/ BACKPLATE/VISORS/ DIRECTIONAL ARROW/ IDENTIFYING NUMBER
- ② PEDESTRIAN SIGNAL HEAD/ IDENTIFYING NUMBER
- ± PEDESTRIAN PUSHBUTTON/ SIGN
- A SIGN/IDENTIFYING LETTER
- 12x6 LOOP SENSOR/SIZE
- MICROWAVE DETECTOR
- ⇨ EMERGENCY PREEMPTION BEACON
- ⇨ EMERGENCY PREEMPTION DETECTOR
- ⇨ CURB CUT RAMP
- ± UTILITY POLE
- ② PHASE NUMBER
- INLET

SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS 10,11,13
 SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS 9,12

**EMERGENCY PRE-EMPTION PHASING
MOVEMENT, SEQUENCE AND TIMING DIAGRAM**



PHASE	2			6			4			8		
INTERVAL	16	17	18	19	20	21	22	23	24	25	26	27
1	R	R	R	G	Y	R	R	R	R	R	R	R
2	R	R	R	G	Y	R	R	R	R	R	R	R
3	G	Y	R	R	R	R	R	R	R	R	R	R
4	G	Y	R	R	R	R	R	R	R	R	R	R
5,6	R	R	R	R	R	R	R	R	R	G	Y	R
7,8	R	R	R	R	R	R	G	Y	R	R	R	R
10,11,12,13	R	R	R	R	R	R	R	R	R	R	R	R
FIXED TIME	*	4	2	*	4	2	*	4	2	*	4	2

- * FOR DURATION OF PRE-EMPTION
- E: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.
- ③ SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION.
- ④ SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.

EMERGENCY PRE-EMPTION NOTES:

CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND AND WESTBOUND APPROACHES OF STREET ROAD (S.R. 0132) AND THE NORTHBOUND APPROACH OF TILLMAN DRIVE AND SOUTHBOUND APPROACH OF PHILADELPHIA PARK RACETRACK ENTRANCE, WITH A FLASHING FAIL SAFE EMITTER EACH DIRECTION OF OPERATION.

EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, WHICH SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.

THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL FOR THE PRE-EMPTED PHASE.

IF THE SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE INTERVALS SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION PHASE OCCURS.

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

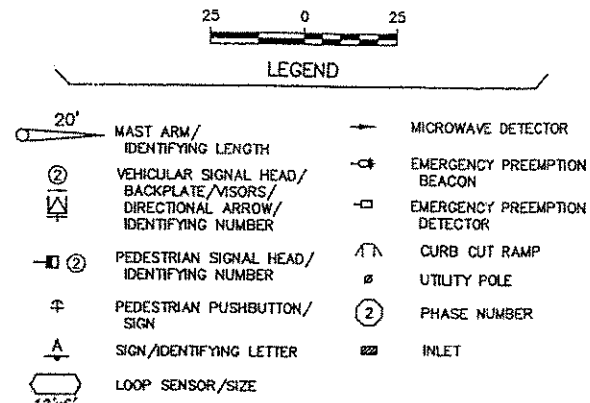
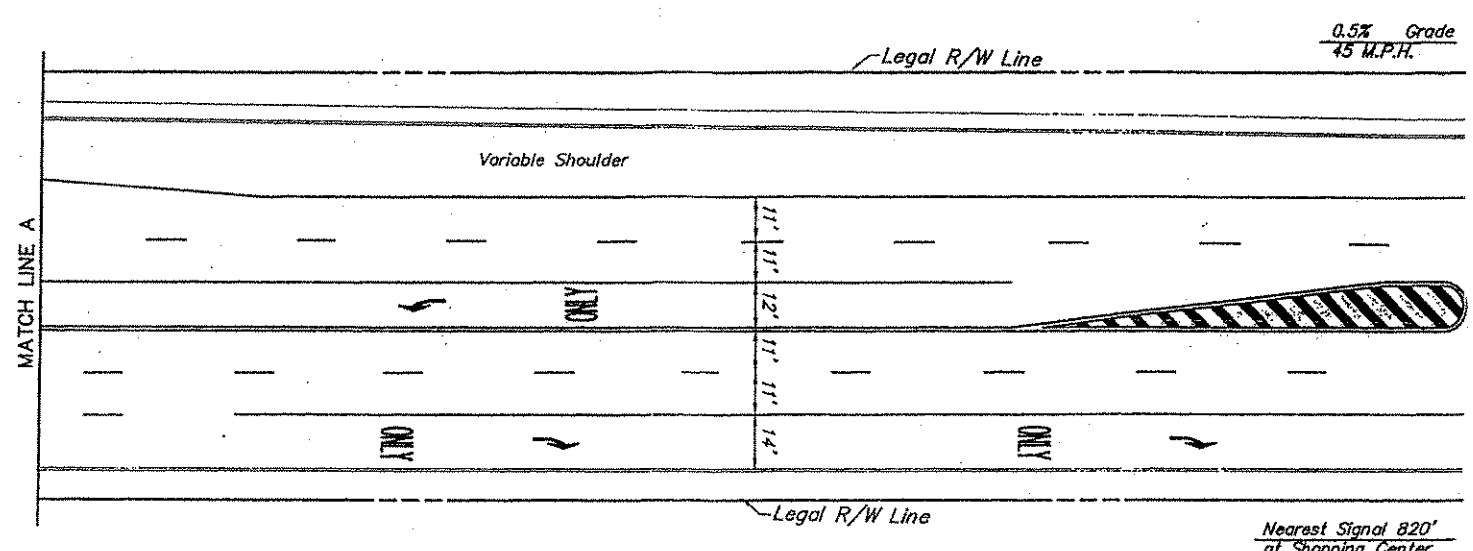
UPON COMPLETION OF PRE-EMPTION PHASE 2, 4, 6 OR 8, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 10 SHALL FOLLOW.

ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.

EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.

IF FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DETERMINED APPROPRIATE BY DEPARTMENT PERSONNEL.

IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PEDESTRIAN TIME SHALL BE SPLIT BETWEEN PED "ALK (MAN)" AND PED "CLEAR (HAND)". THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.



CLOSED LOOP SYSTEM PERMIT # 10005

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

COUNTY: BUCKS

MUNICIPALITY: BENSALEM TOWNSHIP

INTERSECTION: STREET ROAD (S.R. 0132) AND TILLMAN DRIVE SOUTH/PHILADELPHIA PARK

REVIEWED: _____ DATE: _____

MUNICIPAL OFFICIAL: _____ DATE: _____

RECOMMENDED: Paul M. Lutz DATE: 03/30/01

Louis R. Belmonte DATE: 04/04/01
DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECD.	DATE
1	Added Emergency Pre-emption/Push Buttons	PAI	03/11/01				
2							
3							
4							
5							
6							
7							
8							

SHEET 3 OF 3 PERMIT # 81-1917 FILE # 1917

BENS A119 SUP 1819 04/11/01

GENERAL NOTES

NO MODIFICATIONS OF THIS INSTALL PERMITTED UNLESS PRIOR APPROVAL IN WRITING BY A REPRESENTATIVE OF THE DEPARTMENT OF TRANSPORTATION.

ALL MAINTENANCE WORK INCLUDING TREES, NECESSARY FOR PROPER VISIBILITY IS THE RESPONSIBILITY OF THE CONTRACTOR.

ALL SIGNS AND PAVEMENT MARKINGS ON THIS DRAWING ARE CONSIDERED PERMITTED AND SHALL BE INSTALLED IN ACCORDANCE WITH PUBLICATIONS OF THE DEPARTMENT OF TRANSPORTATION.

POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 8 FEET BEHIND THE FACE OF CURB OR THE EDGE OF SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE WALK OR PAVEMENT GRADE.

ALL OVERHEAD SIGNALS MUST BE FENCED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.

THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLE TO APPROACH SHALL BE 8 FEET.

EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY REPRESENTATIVE OF PENNDOT.

CURBING TO BE INSTALLED BY MUNICIPALITY WHERE NOTED, SHALL BE PLAIN CEMENT CURB OR GRANITE CURB, INSTALLED WITH DEPARTMENT SPECIFICATIONS.

PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS TO RESOLVE ANY PROBLEMS THAT MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.

IN ADDITION TO THIS SIGNAL PERMIT, THE CONTRACTOR SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT PRIOR TO ANY OPENINGS BEING MADE IN ANY PORTION OF A STATE HIGHWAY.

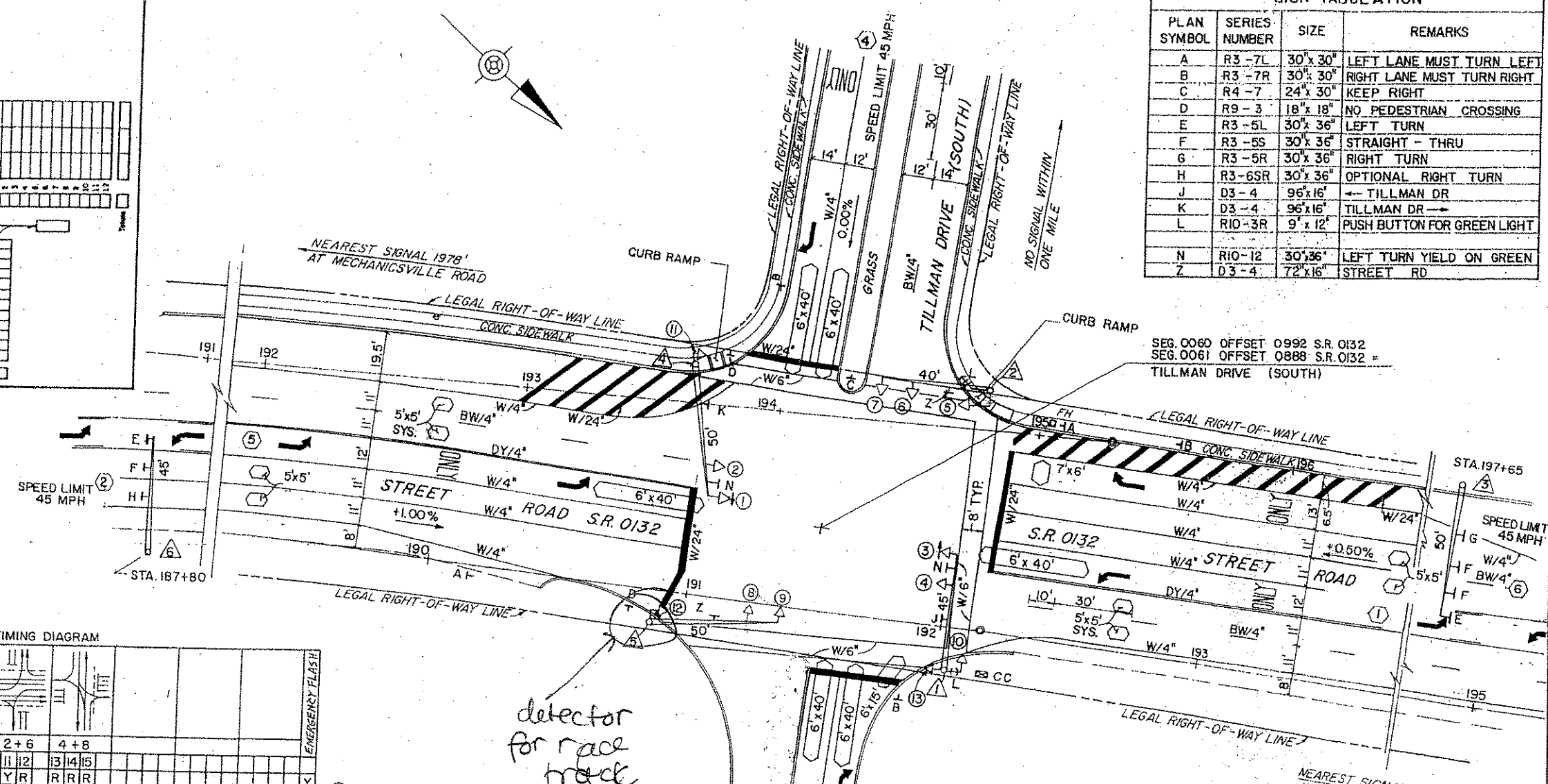
THIS DRAWING CANNOT BE USED AS A BASIS FOR INSTALLATION UNLESS THE PERMITTEE WITH THE PROVISIONS OF ACT 38, PROVISIONS OF DAMAGE TO UNDERGROUND UTILITIES, DATE DECEMBER 12, 1991.

WHEN LIQUID FUELS MONEY IS USED IN INSTALLATION, MUST CONFORM TO THE PROVISIONS OF ACT 38, AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT ENGINEER, PRIOR TO BIDDING.

SIGN TABULATION

PLAN SYMBOL	SERIES NUMBER	SIZE	REMARKS
A	R3-7L	30" x 30"	LEFT LANE MUST TURN LEFT
B	R3-7R	30" x 30"	RIGHT LANE MUST TURN RIGHT
C	R4-7	24" x 30"	KEEP RIGHT
D	R9-3	18" x 18"	NO PEDESTRIAN CROSSING
E	R3-5L	30" x 36"	LEFT TURN
F	R3-5S	30" x 36"	STRAIGHT - THRU
G	R3-5R	30" x 36"	RIGHT TURN
H	R3-6SR	30" x 36"	OPTIONAL RIGHT TURN
J	D3-4	96" x 16"	← TILLMAN DR
K	D3-4	96" x 16"	TILLMAN DR →
L	R10-3R	9" x 12"	PUSH BUTTON FOR GREEN LIGHT
N	R10-12	30" x 36"	LEFT TURN YIELD ON GREEN
Z	D3-4	72" x 16"	STREET RD

1	7:00AM	8:00AM
2	8:00AM	9:00AM
3	9:00AM	10:00AM
4	10:00AM	11:00AM
5	11:00AM	12:00PM
6	12:00PM	1:00PM
7	1:00PM	2:00PM
8	2:00PM	3:00PM
9	3:00PM	4:00PM
10	4:00PM	5:00PM
11	5:00PM	6:00PM
12	6:00PM	7:00PM



MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	1+5	2+5	1+6	2+6	4+8	EMERGENCY FLASH
1	R	R	R	G	R	Y
2	R	R	R	G	R	Y
3	R	R	R	G	R	Y
4	R	R	R	G	R	Y
5	R	R	R	G	R	Y
6,7,8,9	R	R	R	R	G	Y
10	R	R	R	R	G	Y
11	R	R	R	R	G	Y
12,13	R	R	R	R	G	Y

- ① - R/G IF FOLLOWED BY PHASE 1+6
- ② - R/G IF FOLLOWED BY PHASE 2+5
- ③ - R/Y IF FOLLOWED BY PHASE 2+6
- ④ - G/Y IF FOLLOWED BY PHASE 2+6
- ⑤ - G IF FOLLOWED BY PHASE 2+6

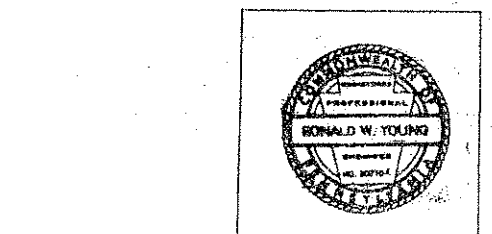
FIXED	4	2	4	2	4	2	4	2	4	2		
MINIMUM	3	3	3	3	25	3	3	3	3	3		
PASSAGE	3	3	3	3	25	3	3	3	3	3		
MAXIMUM I	7	7	7	7	44	7	7	7	7	7		
MAXIMUM II	7	7	7	7	74	7	7	7	7	7		
* PEDESTRIAN												
PROG I	7	4	2	7	4	2	7	4	2	23	4	2
PROG II	7	4	2	7	4	2	7	4	2	21	4	2
PROG III	7	4	2	7	4	2	7	4	2	21	4	2
MEMORY	NL		NL		NL		NL		NL		NL	

120 SEC
120 SEC
90 SEC

WEEKLY PROGRAM CHART

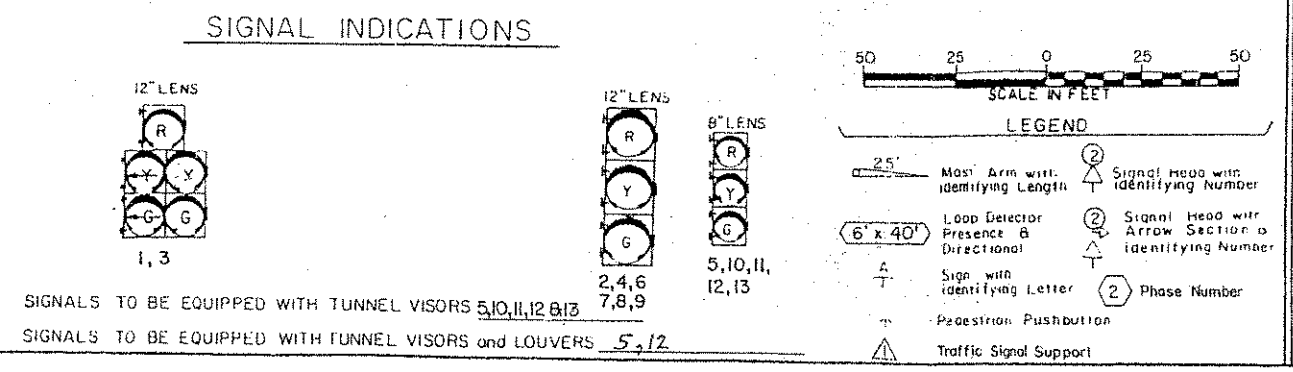
EVENT	DAY	HOUR	MINUTE	SECOND	PROGRAM NUMBER	CYCLE	OFFSET
1	1-5	06	00	00	I	20 SEC	117
2	1-5	09	00	00	II	90 SEC	38
3	1-5	15	00	00	II	120 SEC	21
4	1-5	18	00	00	III	90 SEC	38
5	6-7	00	00	00	III	90 SEC	38

* DAY MONDAY



Closed Loop Traffic Signal System Notes
 Traffic Responsive Operation

1. Programs to be selected by Closed Loop System Master Controller or TBC Backup.
2. Offset Referenced to Start of Green (Interval 1) on Street Road.
3. Min. Green Time, Actual Green Time to be Determined by Cycle Length.
4. System: Street Road (10 intersections)
 System Limits: Brookwood Drive to Kingston Way
 Master Controller Location: Street Road and Hulmeville Road
 Primary Coordination: Closed Loop System / Hard Wire Communication Cable (Fiber Optics)
 Secondary Coordination: Time Base Coordination (default to weekly program chart)



PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT

COUNTY: BUCKS
 MUNICIPALITY: BENSALEM TOWNSHIP
 INTERSECTION: STREET ROAD (S.R. 0132) / TILLMAN DRIVE SOUTH

REVIEWED: William J. McCandless III
 MUNICIPAL OFFICIAL

RECOMMENDED: [Signature]
 DISTRICT TRAFFIC ENGINEER 1/27/91

Revised _____
 Revised _____
 Revised _____
 Revised _____

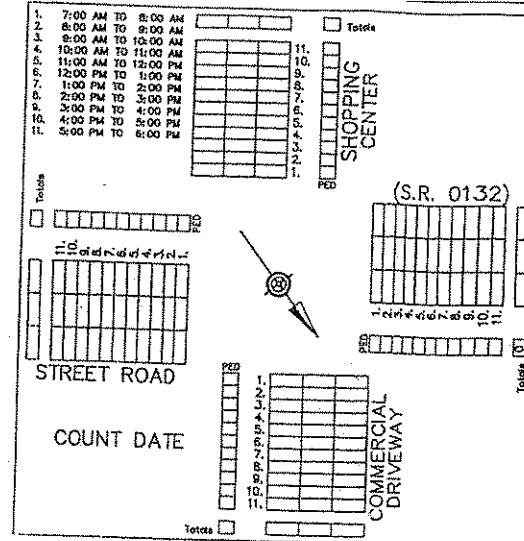
IN 30L	SERIES NUMBER	SIZE	REMARKS
	R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
	R9-3	18"x18"	NO PEDESTRIAN CROSSING
	R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
	R10-12	30"x36"	LEFT TURN YIELD ON GREEN
	3L	9"x12"	PUSH BUTTON FOR GREEN LIGHT
	3R	9"x12"	PUSH BUTTON FOR GREEN LIGHT

- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE NORTHBOUND & SOUTHBOUND APPROACHES OF STREET ROAD (S.R. 0132), AND THE EASTBOUND APPROACH OF THE SHOPPING CENTER DRIVEWAY, WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION. THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL FOR THE PREEMPTED PHASE.
- IF THE SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE TIMES SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION PHASE OCCURS.
- IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE ALL SIGNALS SHALL REMAIN FLASHING.
- UPON COMPLETION OF PRE-EMPTION PHASE 2, 4 OR 6, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 4 SHALL FOLLOW.
- IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
- THE FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PED "WALK (MAN)" INTERVAL SHALL TERMINATE IMMEDIATELY, FOLLOWED BY THE PED "CLEAR (FLASHING HAND)" INTERVAL. THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.

EMERGENCY PRE-EMPTION PHASING MOVEMENT, SEQUENCE AND TIMING DIAGRAM

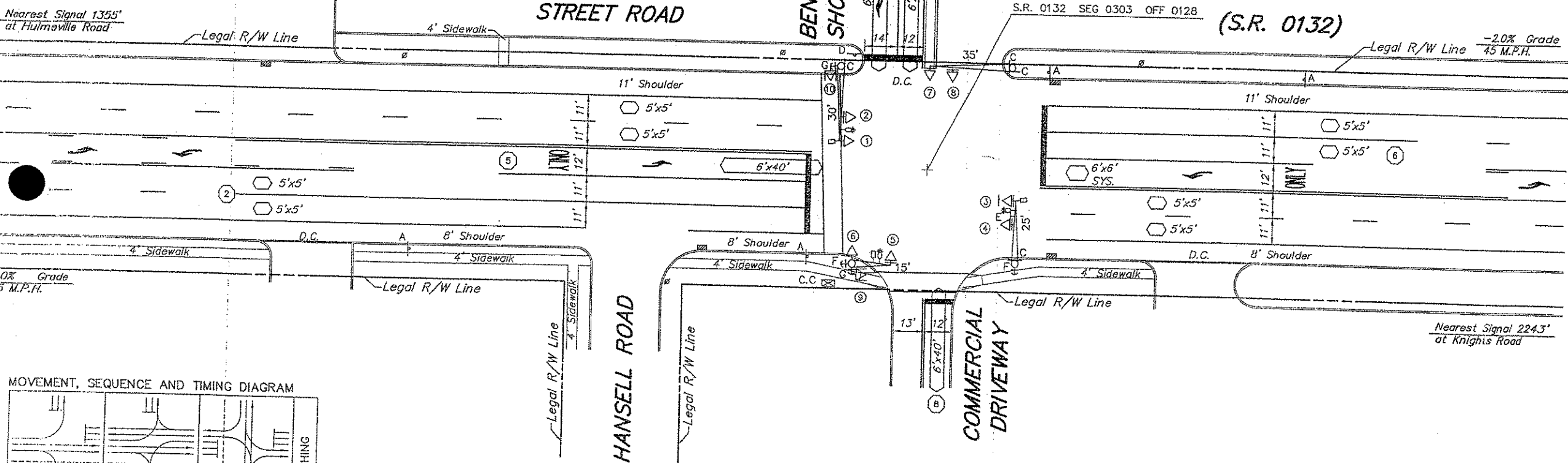
PHASE	10	11	12	13	14	15	16	17	18
1,2	R	R	R	G	Y	R	R	R	R
3	G	Y	R	R	R	R	R	R	R
4	R	R	R	R	R	R	G	Y	R
5,6	R	R	R	R	R	R	R	R	R
7,8	R	R	R	R	R	R	R	R	R
9,10	R	R	R	R	R	R	R	R	R

* FOR DURATION OF PRE-EMPTION
 NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.
 (G) SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION.
 (G/Y) SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.



GENERAL NOTES

- NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS PRIOR APPROVAL IS GRANTED IN WRITING BY A REPRESENTATIVE OF THE DEPARTMENT OF TRANSPORTATION.
- ALL MAINTENANCE WORK INCLUDING TRIMMING OF TREES, NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS 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 IN ACCORDANCE WITH PUBLICATION NO. 68.
- POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.
- SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.
- ALL OVERHEAD SIGNALS MUST BE RIGIDLY MOUNTED, TOP AND BOTTOM, AND EQUIPPED WITH BACKPLATES.
- THE MINIMUM HORIZONTAL DISTANCE BETWEEN SIGNALS MEASURED AT RIGHT ANGLES TO THE APPROACH SHALL BE 8 FEET.
- EXACT LOCATION OF DETECTORS SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PENNDOT.
- CURBING TO BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE PLAIN CEMENT CONCRETE CURB OR GRANITE CURB, INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FORM 408.
- PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE LOCAL OFFICIALS AND UTILITY COMPANIES TO RESOLVE ANY PROBLEMS WHICH MAY BE CREATED DUE TO THE LOCATION OF UTILITIES.
- 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, EFFECTIVE DATE DECEMBER 19, 1996.
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- PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.
- CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

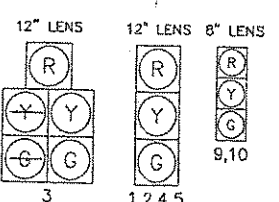


MOVEMENT, SEQUENCE AND TIMING DIAGRAM

MOVEMENT	2+5	2+6	4+8	FLASHING
1	R	G	R	Y
2	R	Y	R	Y
3	R	R	R	Y
4	G	G	R	Y
5	R	R	R	R
6	R	R	G	Y
7	R	R	R	R
8	R	R	G	Y
9	R	R	R	R
10	G	G	R	OFF
11	R	R	R	OFF
12	R	R	G	OFF

- OPERATION NOTES:
- G/Y IF FOLLOWED BY PHASE 2+6.
 - G IF FOLLOWED BY PHASE 2+6.
 - SIGNAL TO DWELL IN PHASE 2+6, UNTIL ACTUATED BY PHASE 4 OR 8.
- TRAFFIC SIGNAL SYSTEM NOTE:
- REFER TO SYSTEM PERMIT # 10005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.

SIGNAL INDICATIONS



LEGEND

- 20' MAST ARM / IDENTIFYING LENGTH
- (G) VEHICULAR SIGNAL HEAD / BACKPLATE / VISORS / DIRECTIONAL ARROW / IDENTIFYING NUMBER
- (P) PEDESTRIAN SIGNAL HEAD / IDENTIFYING NUMBER
- (P) PEDESTRIAN PUSHBUTTON / SIGN
- (A) SIGN / IDENTIFYING LETTER
- (L) LOOP SENSOR / SIZE
- (M) MICROWAVE DETECTOR
- (E) EMERGENCY PREEMPTION BEACON
- (E) EMERGENCY PREEMPTION DETECTOR
- (C) CURB CUT RAMP
- (U) UTILITY POLE
- (2) PHASE NUMBER
- (I) INLET

SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS
 SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS 9,10

PHASE	2	5	2	3	2
3		25		3	
10		45		3	
		74		20	
		10		20	
NL	MGR		NL		

PEDESTRIAN ACTUATION ONLY

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 ENGINEERING DISTRICT 6-0

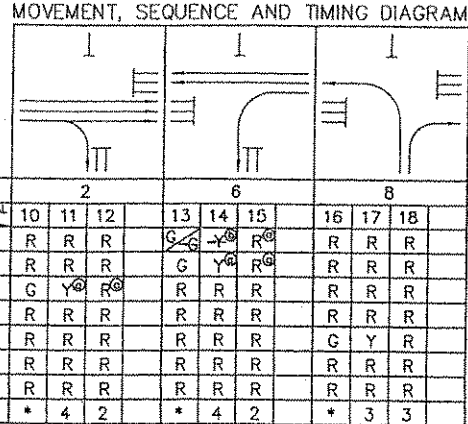
COUNTY: BUCKS
 MUNICIPALITY: BENSALEM TOWNSHIP
 INTERSECTION: STREET ROAD (S.R. 0132) AND
BENSALEM PLAZA SHOPPING CENTER ENTRANCE

REVIEWED: _____ DATE _____
 MUNICIPAL OFFICIAL _____ DATE _____
 RECOMMENDED: Paul M. Lutz _____ DATE 03/30/01
 Louis R. Belmonte _____ DATE 04/04/01
 DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REV.	DATE	RECOM.	DATE
1	Added Emergency Pre-emption	PAI	01/22/04				
2							
3							
4							
5							
6							
7							
8							

DRY TABULATION

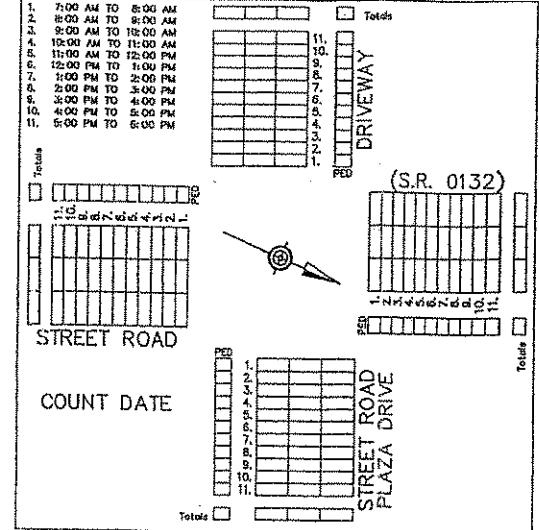
SERIES NUMBER	SIZE	REMARKS
R10-3R	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R4-7	18"x24"	KEEP RIGHT
W16-1D	18"x18"	HAZARD MARKER
R1-1	30"x30"	LEFT LANE MUST TURN LEFT
R1-2	30"x30"	RIGHT LANE MUST TURN RIGHT
R1-3	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R1-4	30"x36"	LEFT TURN YIELD ON GREEN
R10-6L	24"x30"	STOP HERE ON RED



* FOR DURATION OF PRE-EMPTION
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 (G) SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.

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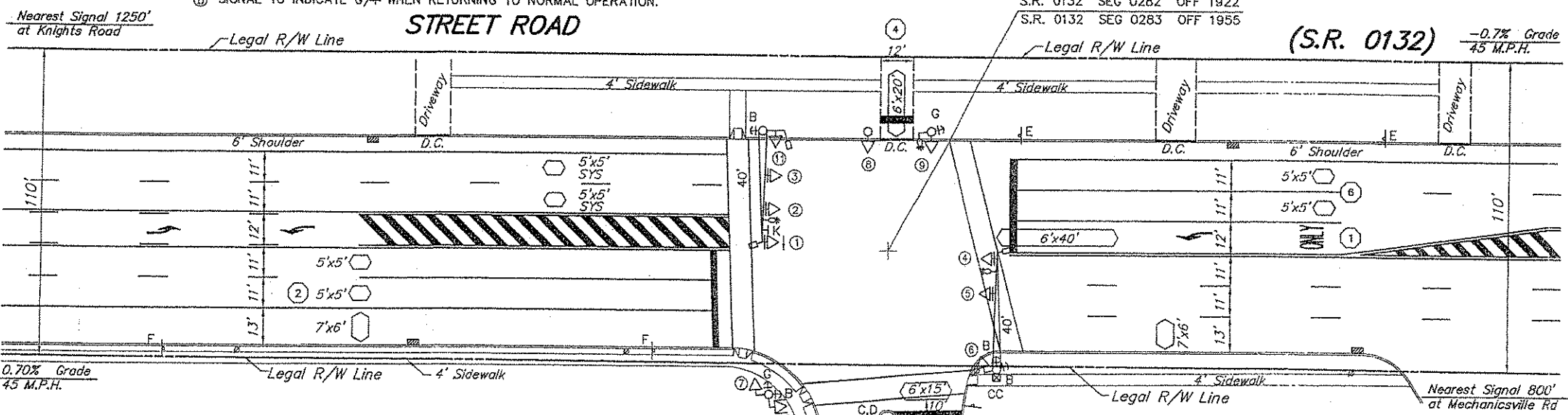
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PERMITEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

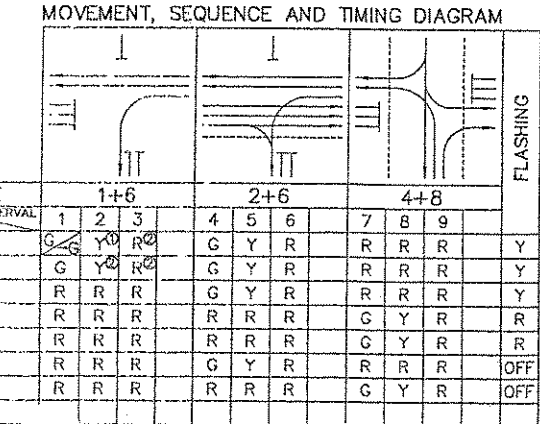
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TRAFFIC SIGNAL SYSTEM NOTE:
 REFER TO SYSTEM PERMIT # 10005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.

EMERGENCY PRE-EMPTION NOTES (CONTINUED):

- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
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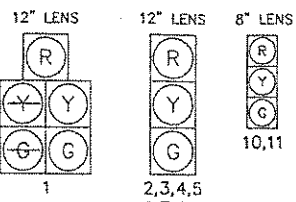
PEDESTRIAN ACTUATION ONLY

INTERVAL	1	2	3	4	5	6	7	8	9
1	G	Y	R	G	Y	R	R	R	R
2	G	Y	R	G	Y	R	R	R	R
3	R	R	R	R	R	R	G	Y	R
4	R	R	R	R	R	R	R	R	R
5	R	R	R	G	Y	R	R	R	R
6	R	R	R	R	R	R	G	Y	R
7	R	R	R	R	R	R	R	R	R
8	R	R	R	R	R	R	R	R	R
9	R	R	R	R	R	R	R	R	R

OPERATION NOTES:

- (1) G/Y IF FOLLOWED BY PHASE 2+6.
- (2) G IF FOLLOWED BY PHASE 2+6.
- SIGNAL TO DWELL IN PHASE 2+6, UNTIL ACTUATED BY PHASE 4 OR 8.

SIGNAL INDICATIONS



SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS
 SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS 10

LEGEND

20'	MAST ARM/IDENTIFYING LENGTH	—	MICROWAVE DETECTOR
(V)	VEHICULAR SIGNAL HEAD/BACKPLATE/VISORS/DIRECTIONAL ARROW/IDENTIFYING NUMBER	(CB)	EMERGENCY PREEMPTION BEACON
(P)	PEDESTRIAN SIGNAL HEAD/IDENTIFYING NUMBER	(D)	EMERGENCY PREEMPTION DETECTOR
(PB)	PEDESTRIAN PUSHBUTTON/SIGN	(CR)	CURB CUT RAMP
(A)	SIGN/IDENTIFYING LETTER	(U)	UTILITY POLE
(L)	LOOP SENSOR/SIZE	(2)	PHASE NUMBER
		(I)	INLET
		(VDC)	VIDEO DETECTION CAMERA

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
 ENGINEERING DISTRICT 6-0

COUNTY: BUCKS

MUNICIPALITY: BENSALEM TOWNSHIP

INTERSECTION: STREET ROAD (S.R. 0132) AND STREET ROAD PLAZA DRIVE

REVIEWED: _____ DATE _____

MUNICIPAL OFFICIAL: _____ DATE _____

RECOMMENDED: Paul M. Lutz 03/30/01
 DISTRICT TRAFFIC ENGINEER DATE

Louis R. Belmonte 04/04/01
 DISTRICT TRAFFIC ENGINEER DATE

NO.	REVISION	DES./REV.	DATE	REV.	BILL	RECORD	DATE
1	Added Emergency Pre-Emption/ Push Buttons	PAI	01/23/04				
2							
3							
4							
5							
6							
7							
8							

SHEET 2 OF 2 PERMIT # 61-2588 FILE # 2588
 BENS 0312.01 FILE 2588 01/22/04

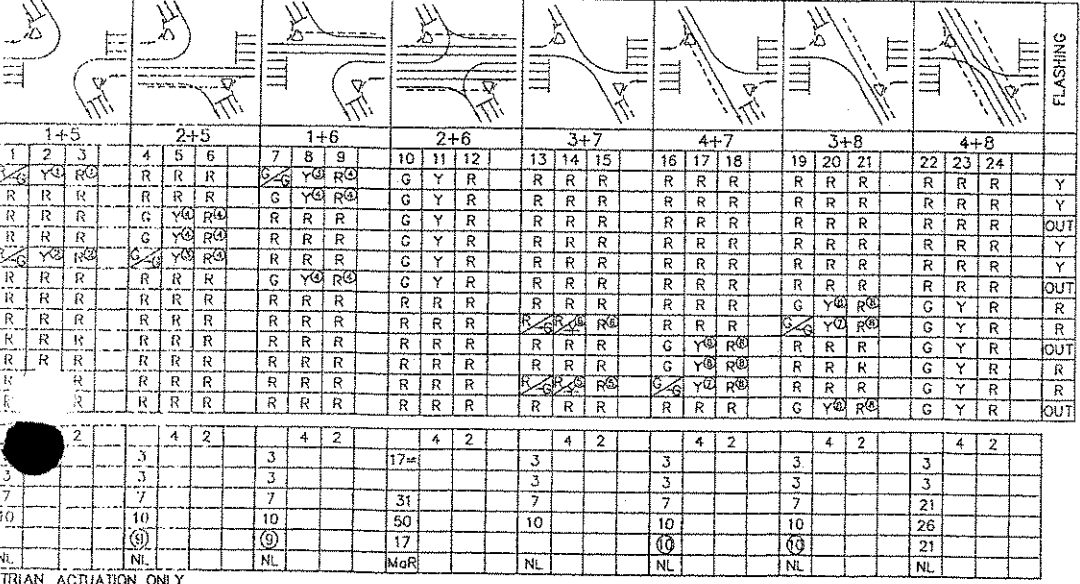
SERIES NUMBER	SIZE	REMARKS
R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
R3-7R	30"x30"	RIGHT LANE MUST TURN RIGHT
R10-12	30"x36"	LEFT TURN YIELD ON GREEN
R7	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R1	30"x36"	LEFT TURN
R3	30"x36"	STRAIGHT THROUGH
R2	30"x36"	RIGHT TURN
R10-3	9"x12"	PUSH BUTTON FOR GREEN LIGHT
R1-2	36"x36"	YIELD
D3-4	96"x16"	MECHANICSVILLE RD
D3-4	84"x16"	STREET RD

Nearest Signal 800'
at Street Rd Plaza

OPERATION NOTES :

- ④ IF FOLLOWED BY PHASE 1+6.
- ⑤ IF FOLLOWED BY PHASE 2+5.
- ⑥ IF FOLLOWED BY PHASE 2+6.
- ⑦ IF FOLLOWED BY PHASE 2+6.
- ⑧ IF FOLLOWED BY PHASE 4+7.
- ⑨ IF FOLLOWED BY PHASE 3+8.
- ⑦ IF FOLLOWED BY PHASE 4+8.
- ⑧ G IF FOLLOWED BY PHASE 4+8.
- ⑨ TIMING WILL BE AS SHOWN IN PHASE 2+5. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 2+6.
- ⑩ TIMING WILL BE AS SHOWN IN PHASE 4+8. IT MAY TIME OUT IN THIS PHASE OR BE COMPLETED IN PHASE 4+8.
- SIGNAL TO DWELL IN PHASE 2+5, UNTIL ACTUATED BY PHASE 3, 4, 7 OR 8.

MOVEMENT, SEQUENCE AND TIMING DIAGRAM



PEDESTRIAN ACTUATION ONLY

Time	7-9 T 539 7 850	Total
7:00 AM TO 8:00 AM		
8:00 AM TO 9:00 AM	18 205 244	11.
9:00 AM TO 10:00 AM		
10:00 AM TO 11:00 AM		
11:00 AM TO 12:00 PM	25 156 146	10.
12:00 PM TO 1:00 PM		
1:00 PM TO 2:00 PM		
2:00 PM TO 3:00 PM		
3:00 PM TO 4:00 PM		
4:00 PM TO 5:00 PM		
5:00 PM TO 6:00 PM		
6:00 PM TO 7:00 PM		
Total	43 361 390	

(S.R. 2021)

Time	(S.R. 0132)	Total
7:00 AM TO 8:00 AM		
8:00 AM TO 9:00 AM		
9:00 AM TO 10:00 AM		
10:00 AM TO 11:00 AM		
11:00 AM TO 12:00 PM		
12:00 PM TO 1:00 PM		
1:00 PM TO 2:00 PM		
2:00 PM TO 3:00 PM		
3:00 PM TO 4:00 PM		
4:00 PM TO 5:00 PM		
5:00 PM TO 6:00 PM		
Total	134 177 117	

Counts for MECHANICSVILLE ROAD and STREET ROAD.

GENERAL NOTES

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POST MOUNTED SIGNALS SHALL BE INSTALLED WITH THE SIGNAL HEADS A MINIMUM OF 2 FEET BEHIND THE FACE OF CURB OR THE EDGE OF THE SHOULDER. SUPPORT POLES FOR OVERHEAD SIGNALS SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS ERECTED OVER THE ROADWAY SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 16 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR PAVEMENT.

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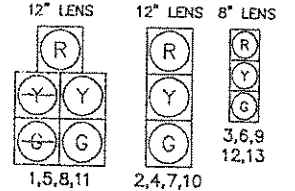
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WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 408 AND A COPY OF THE PROPOSED SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.

PERMITEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR ANY CHANGES IN INTERSECTION GEOMETRY REGARDING EXCAVATION.

CONDUIT INSTALLED IN BITUMINOUS ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY. INSTALL IN ACCORDANCE WITH TRAFFIC SIGNAL STANDARDS TC-7800 SERIES.

SIGNAL INDICATIONS



SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS _____

SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS & LOUVERS 3,6,9,12,13

LEGEND

- 20' MAST ARM/ IDENTIFYING LENGTH
- ② VEHICULAR SIGNAL HEAD/ BACKPLATE/VISORS/ DIRECTIONAL ARROW/ IDENTIFYING NUMBER
- ①② PEDESTRIAN SIGNAL HEAD/ IDENTIFYING NUMBER
- ⊕ PEDESTRIAN PUSHBUTTON/ SIGN
- A SIGN/IDENTIFYING LETTER
- 12x6' LOOP SENSOR/SIZE
- MICROWAVE DETECTOR
- ⊕ EMERGENCY PREEMPTION BEACON
- ⊕ EMERGENCY PREEMPTION DETECTOR
- ⊕ CURB CUT RAMP
- ⊕ UTILITY POLE
- ⊕ PHASE NUMBER
- ⊕ INLET

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6--0

COUNTY: BUCKS
MUNICIPALITY: BENSALEM TOWNSHIP
INTERSECTION: STREET ROAD (S.R. 0132) AND MECHANICSVILLE ROAD (S.R. 2021)

REVIEWED: _____ DATE _____

MUNICIPAL OFFICIAL: _____ DATE _____

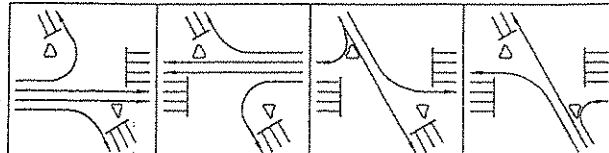
RECOMMENDED: _____

Paul M. Lutz 03/30/01 DATE

Louis R. Belmonte 04/04/01 DATE
DISTRICT TRAFFIC ENGINEER

NO.	REVISION	DES./REV.	DATE	REVW.	DATE	REC'D	DATE
1	Added LT phase for WB Mechanicsville Road	PAI	02/04/02	MLK	03/04/02	LRB	03/15/02
2	Added Emergency Pre-emption	PAI	01/22/04				
3							
4							
5							
6							
7							
8							

EMERGENCY PRE-EMPTION PHASING
MOVEMENT, SEQUENCE AND TIMING DIAGRAM



PHASE	2			6			4			8		
SIGNALS	25	26	27	28	29	30	31	32	33	34	35	36
1	R	R	R	G	Y	R	R	R	R	R	R	R
2	R	R	R	G	Y	R	R	R	R	R	R	R
4	G	Y	R	R	R	R	R	R	R	R	R	R
5	G	Y	R	R	R	R	R	R	R	R	R	R
7	R	R	R	R	R	R	R	R	R	G	Y	R
8	R	R	R	R	R	R	R	R	R	G	Y	R
10	R	R	R	R	R	R	G	Y	R	R	R	R
11	R	R	R	R	R	R	G	Y	R	R	R	R
3,6,9,12,13	R	R	R	R	R	R	R	R	R	R	R	R
FIXED TIME	*	4	2	*	4	2	*	4	2	*	4	2

* FOR DURATION OF PRE-EMPTION

NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, IT IS RECOMMENDED TO HAVE THE ZERO "00" FEATURE ON TO GIVE UNCODED EMITTERS THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

- Ⓐ SIGNAL TO INDICATE G WHEN RETURNING TO NORMAL OPERATION.
- Ⓑ SIGNAL TO INDICATE G/Y WHEN RETURNING TO NORMAL OPERATION.

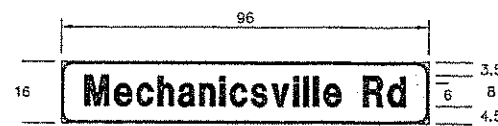
EMERGENCY PRE-EMPTION NOTES:

- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND & WESTBOUND APPROACHES OF MECHANICSVILLE ROAD (S.R. 2021), AND THE NORTHBOUND & SOUTHBOUND APPROACHES OF STREET ROAD (S.R. 0132), WITH A FLASHING FAIL SAFE DEVICE FOR EACH DIRECTION OF OPERATION. THIS EMERGENCY BEACON SHALL CONSIST OF A FLASHING WHITE FLOOD LIGHT, AND SHALL FLASH WHEN THE EMERGENCY VEHICLE HAS CONTROL OF THE INTERSECTION FOR THE APPROPRIATE APPROACH.
- THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE, SHALL TERMINATE ALL GREEN INDICATIONS IMMEDIATELY, FOLLOWED BY THE COMPLETE YELLOW AND RED CLEARANCE INTERVALS ACCORDINGLY, FOLLOWED BY THE GREEN INTERVAL FOR THE PREEMPTED PHASE.
- IF THE SIGNALS ARE IN EITHER YELLOW OR RED CLEARANCE, THE CLEARANCE TIMES SHALL BE COMPLETED BEFORE THE GREEN INTERVAL OF THE PRE-EMPTION PHASE OCCURS.
- IF THE SIGNALS ARE FLASHING WHEN ACTIVATED BY AN EMERGENCY VEHICLE ALL SIGNALS SHALL REMAIN FLASHING.
- UPON COMPLETION OF PRE-EMPTION PHASE 2,4, 6 OR 8, IN RETURNING TO NORMAL OPERATION PHASE 2+6 INTERVAL 10 SHALL FOLLOW.
- IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE ORIGINAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED, PRE-EMPTION SHALL BE A "FIRST COME, FIRST SERVED" OPERATION.
- THE FIELD LOCATIONS OF THE PRE-EMPTION DETECTORS MAY DIFFER FROM THE LOCATIONS DEPICTED ON THE CONDITION DIAGRAM, AS THE DETECTORS MAY NEED TO BE RELOCATED AND/OR ADJUSTED TO PROVIDE ACCEPTABLE OPERATION AS DEEMED APPROPRIATE BY DEPARTMENT PERSONNEL.
- IF THE SIGNAL HAS BEEN ACTUATED BY A PEDESTRIAN PUSH BUTTON, AND THE SIGNAL IS PRE-EMPTED, THE PED "WALK (MAN)" INTERVAL SHALL TERMINATE IMMEDIATELY, FOLLOWED BY THE PED "CLEAR (FLASHING HAND)" INTERVAL. THIS INTERVAL SHALL TIME OUT FOLLOWED BY THE APPROPRIATE SELECTIVE CLEARANCES, BEFORE GOING INTO EMERGENCY PRE-EMPTION PHASE.

TRAFFIC SIGNAL SYSTEM NOTE:

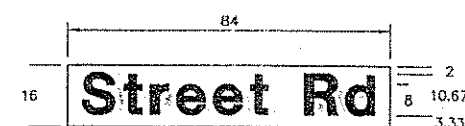
- REFER TO SYSTEM PERMIT # 10005 FOR PROGRAM TIMES AND WEEKLY PROGRAM CHART.

Sign "L"



HELVETICA BOLD (25% REDUCTION)
8" U.C.
6" L.C.

Sign "Z"



HELVETICA BOLD
10.6" U.C.
8" L.C.

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DATE

Louis R. Belmonte 04/04/01
DISTRICT TRAFFIC ENGINEER DATE

NO.	REVISION	DES./REVW.	DATE	REVW.	DATE	RECOM.	DATE
1	Added LT phase for WB Mechanicville Road	PAI	02/04/02	MLK	03/14/02	LRB	04/15/02
2	Added Emergency Pre-Emption	PAI	01/22/04				
3							
4							
5							
6							
7							
8							

*PHILADELPHIA PARK
TRAFFIC IMPACT STUDY*

APPENDIX B

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 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

⁽¹⁾ Table 6-4, Level of Service Criteria for TWSC and AWSC intersections (2000 HCM)