

**Perkasie Borough
Planning Commission Meeting
July 22, 2026**

- 1. Meeting Convenes – 7:00 PM**
- 2. Pledge of Allegiance**
- 3. Approval** of Minutes from June 24, 2026
- 4. Public Forum –** Non agenda items.
- 5. New Business**
 - Review SALDO Application:
 - Perkasie Place LLC. / 505 Constitution Ave.
Preliminary Plans – Recycling Facility
- 6. Old Business:** Continue Discussion on Draft Data Center Ordinance Regulations and Recommendations
- 7. Public Forum -** Agenda Items.
- 8. Other Business**
- 9. Adjournment**

Minutes of Meeting
Perkasie Planning Commission
June 24, 2026

620 W. Chestnut Street
Perkasie, PA 18944

Attendance:
Planning Commission:

Maureen Knouse
Heather Nunn (Absent)
Mairi Schuler (Absent)
Mary McKay
Dave Weaver
Dale Schlegel
Joseph Sieps
Patrick Freeman
Quinten Baker

Borough of Perkasie: Cassandra L. Grillo, Borough Zoning Officer
Attorney Brendan Callahan, Borough Solicitor
Judith Goldstien, Borough Planner

Call to Order

Chairperson Dale Schlegel called the meeting to order at 7:01 PM. The Pledge of Allegiance was recited. A quorum was present, and business before the Commission was acknowledged.

Approval of Minutes

Upon a motion by Mary McKay, seconded by Dale Schlegel, the Planning Commission unanimously approved the April 22, 2026 meeting minutes.

New Business

505 Constitution Avenue – Recycling Facility (Land Development Application)

- The applicant requested that review of the land development application be continued until the next regular Planning Commission meeting, scheduled for July 22, 2026.
- The Commission agreed to continue the application.

Old Business

Data Center Ordinance Amendment Discussion

The Planning Commission continued its review of the proposed Data Center Ordinance. Ms. Grillo presented comments and recommendations received from the Borough's Electric Utility Engineer for the Commission's consideration.

Discussion included the following topics:

- **Light Pollution**
 - Discussed adding requirements for full-cutoff, downward-directed lighting.
 - Considered property line illumination limits, shielding rooftop lighting, generator lighting restrictions, motion sensors or dimming after hours, and compliance with DarkSky standards.
- **Power Consumption**
 - Reviewed recommendations to require applicants to disclose anticipated electrical demand, phased expansions, annual energy consumption, coincident peak demand, and Power Usage Effectiveness (PUE).
 - Discussed requiring additional Borough approvals for significant increases in electrical load, water usage, generators, cooling equipment, substations, utility feeds, or building expansions.
- **Perkasie Borough Electric**
 - Mr. Callahan confirmed the proposed ordinance would require future data centers to receive electric service from Perkasie Borough Electric.
- **Water Usage**
 - Discussed reporting requirements for annual water consumption, Water Use Effectiveness (WUE), drought contingency planning, and limitations on evaporative cooling systems.
- **Noise Standards**
 - Reviewed the Utility Engineer's recommendations regarding tonal noise, generator testing hours, annual testing limits, and other noise mitigation measures.
- **Privacy and Security**
 - Mr. Freeman expressed concerns regarding the placement of security cameras and protecting the privacy of neighboring residential properties.
- **Decommissioning**
 - Mr. Baker requested clarification regarding the timing of the decommissioning plan and the financial security requirements.
- **Future Expansion of the Use**
 - Mr. Schlegel questioned how the Conditional Use process would apply if a data center proposed future expansions to the facility or operations.
 - The Commission discussed whether significant increases in electrical load, water consumption, cooling equipment, generators, substations, utility feeds, or building expansions should require a new Conditional Use approval.
- **Annual Reporting**
 - Mr. Schlegel asked whether the ordinance should require annual reporting of water usage, electrical consumption, generator operating hours, equipment modifications, and complaints received.
- **State Legislation**
 - Ms. Goldstein noted that several proposed state bills would require data centers to report utility usage and could require developers to fund necessary utility infrastructure improvements.
- **Additional Standards**
 - The Commission discussed potential requirements addressing construction impacts, including dust control, truck routing, erosion and sediment controls, construction hours, construction noise, and heat pollution mitigation.

No formal action was taken. Staff were directed to continue revising the draft ordinance for future review.

Public Comment

****Steve Lewis - 1313 W Park Ave:** ****Expressed concerns regarding the data transmission and fiber optics coming in and out of the property.**

Pam Cobmage – 1204 N Ridge Rd.: Maybe comments regarding water quality testing and pressure and contamination of wells. And also expressed concerns regarding air pollutions and sound pollution.

****Todd Tobin – 221 Branford Terrance **–** Made comments about future data center developments and requesting developer to pay for upgrades in fractures and taxes.

Tiffany Cysk – 1313 W Park Ave. – expressed concerns about Data Center developments received tax breaks that would affect taxpayers.

Adjournment

With no further business before the Commission, the meeting adjourned at 8:35 PM.

Secretary , Heather Nunn



BOROUGH OF PERKASIE

620 W. Chestnut St
P.O. Box 96
Perkasie, PA 18944

(215)257-5065
Fax (215)257-6875

SUBDIVISION/LAND DEVELOPMENT APPLICATION

Date of Application: 3/27/2026 Date of Plan or Revision: _____

APPLICATION FOR:

☐ Subdivision ☐ Sketch Plan _____ ☐ Lot Line Change _____
Formal or Informal (Circle One)
☒ Land Development ☒ Preliminary Plan _____ ☒ Minor Subdivision _____
☐ Final Plan _____

NAME of Subdivision or Land Development: Perkasie Place Recycling Center
To be the name for the Duration of the Project

Location: Constitution Avenue, Perkasie, PA 18944

Tax Parcel No(s): 33-009-001

Total Acreage Gross: 22.198 Net Buildable Site Area: 7.3 ac.

ZONING REQUIREMENTS:

Zoning District I-2 Minimum Lot Size 7.3 ac Maximum Density n/a

Yard Setbacks: Front 40' Side 40' Rear 40' Number of Lots or Dwelling Units: 2 lots

Water Supply: ☐ Private ☒ Public

Sewer Service: ☐ On-Lot ☒ Public

EQUITABLE OWNER of Record of Land: Perkasie Place, LLC

Address: P.O. Box 538, Doylestown, PA 18901 Phone: 215-429-4426

APPLICANT: Same as Equitable Owner

Email: mtulio@csacinc.net Phone: _____

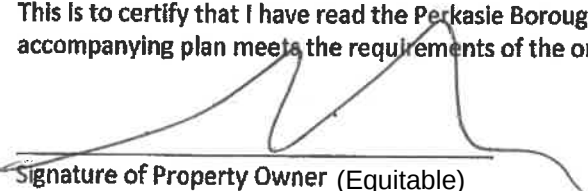
Address: _____

REGISTERED ENGINEER OR SURVEYOR: Larry Grybosky, P.E. (C2C Design Group)

Email: LGrybosky@c2cdg.com Phone: 610.860.6050 ext. 104

Address: 37 E. Penn Avenue, Wernersville, PA 19565

This is to certify that I have read the Perkasio Borough Subdivision and Land Development Ordinance and that the accompanying plan meets the requirements of the ordinance to the best of my knowledge.



Signature of Property Owner (Equitable)

Signature of Registered Engineer or Surveyor



BOROUGH OF PERKASIO

620 W. Chestnut St
P.O. Box 96
Perkasie, PA 18944

(215)257-5065
Fax (215)257-6875

Subdivision & Land Development Plan Submission Checklist

Date of Application: 3/27/2026

Subdivision/Land Development Name: Perkasie Place Recycling Center

Address of Property: Constitution Avenue, Perkasie, PA 18944

Owner(s) Name: PACAZ Realty, LLC

Applicants Name: Perkasie Place, LLC (Equitable Owner)

Tax Map Parcel Number: 33-009-001

Plan Sets – **Folded** to 8 ½ x 11: (11 Total)

_____ Planning Commission – 8 Copies _____ Boro File – 2 Copies

_____ Borough Engineer – 1 Copy

The applicant must show **proof of submission** to the outside agencies listed below, as applicable, (stamped copy or cover letters and copy of application form). The following plan sets are subject to the requirements of the outside agency and ***must be submitted to the outside agency by the applicant.***

_____ Bucks County Planning Commission (1 Copy)

_____ Bucks County Conservation District (1 Copy)

_____ Supplying Water Authority – (1 Copy)

_____ Bucks County Department of Health (1 Copy)

_____ Penn DOT (Highway Permit)

_____ Army Corps of Engineers (Wetlands)

APPLICATION FORMS & FEES ARE TO BE SUBMITTED TO THE BOROUGH. All applications must include these items or the application will be considered administratively incomplete and returned to the applicant.

BOROUGH OF PERKASIE

PLAN CHECKLIST

(To Be Completed by Applicant)

GENERAL SUBMISSION ITEMS - Does the submission include:

PLAN REQUIREMENTS - Do the Plans have:

Yes* No Sheet No.

* Note (Insert NA if not applicable)

- | | | | | |
|----------|----------|------------|----|---|
| <u>X</u> | ___ | <u>1-5</u> | 1. | Plan drawings at a size of 24" x 36" |
| ___ | <u>X</u> | ___ | 2. | A scale of 1" = 50' or 1" = 100'? |
| <u>X</u> | ___ | <u>1-5</u> | 3. | Dimensions set in feet and decimal part thereof and bearings in degrees, minutes and seconds? |
| <u>X</u> | ___ | <u>1-5</u> | 4. | Sheets numbered and show relationship to the total number of sheets? |
| <u>X</u> | ___ | <u>1-5</u> | 5. | An adequate legend indicating clearly which features are existing and which are proposed? |

GENERAL INFORMATION - Do the Plans have:

Yes* No Sheet No.

- | | | | | |
|----------|----------|------------|-----|---|
| <u>X</u> | ___ | <u>1</u> | 6. | Name and address of Owner? |
| <u>X</u> | ___ | <u>1</u> | 7. | Name and location of subdivision or land development? |
| <u>X</u> | ___ | <u>1-4</u> | 8. | Graphic and/or written scales? |
| <u>X</u> | ___ | <u>1-5</u> | 9. | Date of plan and all subsequent revision dates? |
| <u>X</u> | ___ | <u>1</u> | 10. | Name and address, signature and seal of the licensed engineer or surveyor responsible for the Plan? |
| <u>X</u> | ___ | <u>1</u> | 11. | Location map at a minimum scale of 1" = 800'? |
| <u>X</u> | ___ | <u>1-4</u> | 12. | North arrow? |
| <u>X</u> | ___ | ___ | 13. | Site boundaries survey with tie-ins to all adjacent streets? |
| <u>X</u> | ___ | <u>2</u> | 14. | Location and type of existing monuments? |
| ___ | <u>X</u> | ___ | 15. | Forested areas? |
| <u>X</u> | ___ | <u>2,4</u> | 16. | Watercourses, lakes and wetlands (with names, if any)? |

Do the plans include the location of the following existing features on the site being subdivided or developed and within 400 feet of the site:

<u>Yes*</u>	<u>No</u>	<u>Sheet No.</u>	
<u>X</u>	<u> </u>	<u>1-4</u>	17. Streets and rights-of-way (including name and right-of-way widths)?
<u>X</u>	<u> </u>	<u>1-4</u>	18. Existing lot layout on the site and on immediately adjacent tracts?
<u>X</u>	<u> </u>	<u>1-4</u>	19. Property lines, building locations, driveway locations, and names of adjacent property owners?
<u> </u>	<u>X</u>	<u> </u>	20. Sewer lines, storm drains and easements, other utilities?
<u>X</u>	<u> </u>	<u>1</u>	21. Pennsylvania One-Call Serial No. and note.

PROPOSED FEATURES - Do the Plans show:

<u> </u>	<u>X</u>	<u> </u>	22. Layout of streets with center lines, cartways and right-of-ways, and proposed names?
<u>X</u>	<u> </u>	<u>3,4</u>	23. Layout of lots and dimensions?
<u>X</u>	<u> </u>	<u>1-4</u>	24. Building setback lines from all lot lines?
<u>X</u>	<u> </u>	<u>4</u>	25. The arrangement and use of buildings and parking areas with all necessary dimensions and number of parking spaces?
<u> </u>	<u>X</u>	<u> </u>	26. Rights-of-way and easements for all drainage, utilities, (electric, gas, telephone, and CATV) or other purpose which might affect development?
<u>N/A</u>	<u> </u>	<u> </u>	27. Open space areas, proposed use and maintenance?
<u> </u>	<u>X</u>	<u> </u>	28. Proposed monuments and individual lot pins.
<u>X</u>	<u> </u>	<u>1</u>	29. Applicable zoning requirements and the location of zoning district boundary lines affecting the subdivision.
<u>N/A</u>	<u> </u>	<u> </u>	30. A reference to any land to be dedicated for parks, recreation areas, widening of streets or other public uses.
<u>N/A</u>	<u> </u>	<u> </u>	31. For multi-family developments, the total area, total dwelling units, number of buildings, proposed total parking spaces, building coverage and the bedroom ratio shall be on the plan.

Plan Checklist

<u>Yes*</u>	<u>No</u>	<u>Sheet No.</u>	
<u>X</u>	<u> </u>	<u>1</u>	32. An indication of any lots in which other than a residential use is intended.
<u>X</u>	<u> </u>	<u>1</u>	33. For subdivisions, the total area, number of lots, average and minimum lot size shall be noted on the plan.
<u> </u>	<u>X</u>	<u> </u>	34. The location and size of storm drains, stormwater management facilities, sanitary sewers, culverts, watercourses and all appurtenances thereof, on-site sewage disposal facilities, gas mains, electric facilities, water mains, fire hydrants, street lights, planting, special structures and other underground conduits or structures.
<u> </u>	<u>X</u>	<u> </u>	35. Typical cross sections and centerline profiles for each proposed street. These plans may be submitted as separate sheets. Where the plan covers only a part of the owner's entire holding, a sketch shall be submitted of the prospective street layout for the remainder.
<u>X</u>	<u> </u>	<u>4</u>	36. A plan for planting is required for open space subdivision; this plan shall show the location of all existing trees greater than three (3) inches in caliper. All new plantings shall indicate species and size.
<u>X</u>	<u> </u>	<u>4</u>	37. The location of all trees to be saved.
<u> </u>	<u>X</u>	<u> </u>	38. The tree protection zone.
<u>N/A</u>	<u> </u>	<u> </u>	39. The location of proposed retaining walls.
<u> </u>	<u>X</u>	<u> </u>	40. A table showing open space ratio, density and impervious surface ratio.
<u> </u>	<u>X</u>	<u> </u>	41. Estimated average and peak volumes of water needed to serve the proposed subdivision or land development and an indication of the available water volume for fire flow and the water volume required to satisfy the Insurance Services Office (ISO) standards for fire protection.
<u> </u>	<u>X</u>	<u> </u>	42. Owners Statement of Acknowledgment

Plan Check 1st

Yes* No Sheet No.

X 1 43.

The signature block for the Chairman and Secretary of the Borough Planning Commission?

X 1 44.

The signature block for Executive Director of the Bucks County Planning Commission.

 X 45.

The signature block for the Borough Engineer.

X 1 46.

The signature block for the President and Secretary of the Borough Council.

Prepared By:

Accepted by:

Date:

Date:

Signature: Dan Bartolo (Agent for Applicant)
Applicant or representative

Signature: _____
Borough Official

m:\wp51\perkasiel\subcheck.ls2



BOROUGH OF PERKASIE

620 W. Chestnut St
P.O. Box 96
Perkasie, PA 18944

(215)257-5065
Fax (215)257-6875

SUBDIVISION / LAND DEVELOPMENT 90-DAY REVIEW WAIVER

Date: 3/27/2026

Borough Manager
Perkasie Borough
620 W. Chestnut St.
P.O. Box 96
Perkasie, PA 18944

Re: Subdivision/Land Development Plan of Perkasie Place Recycling Center

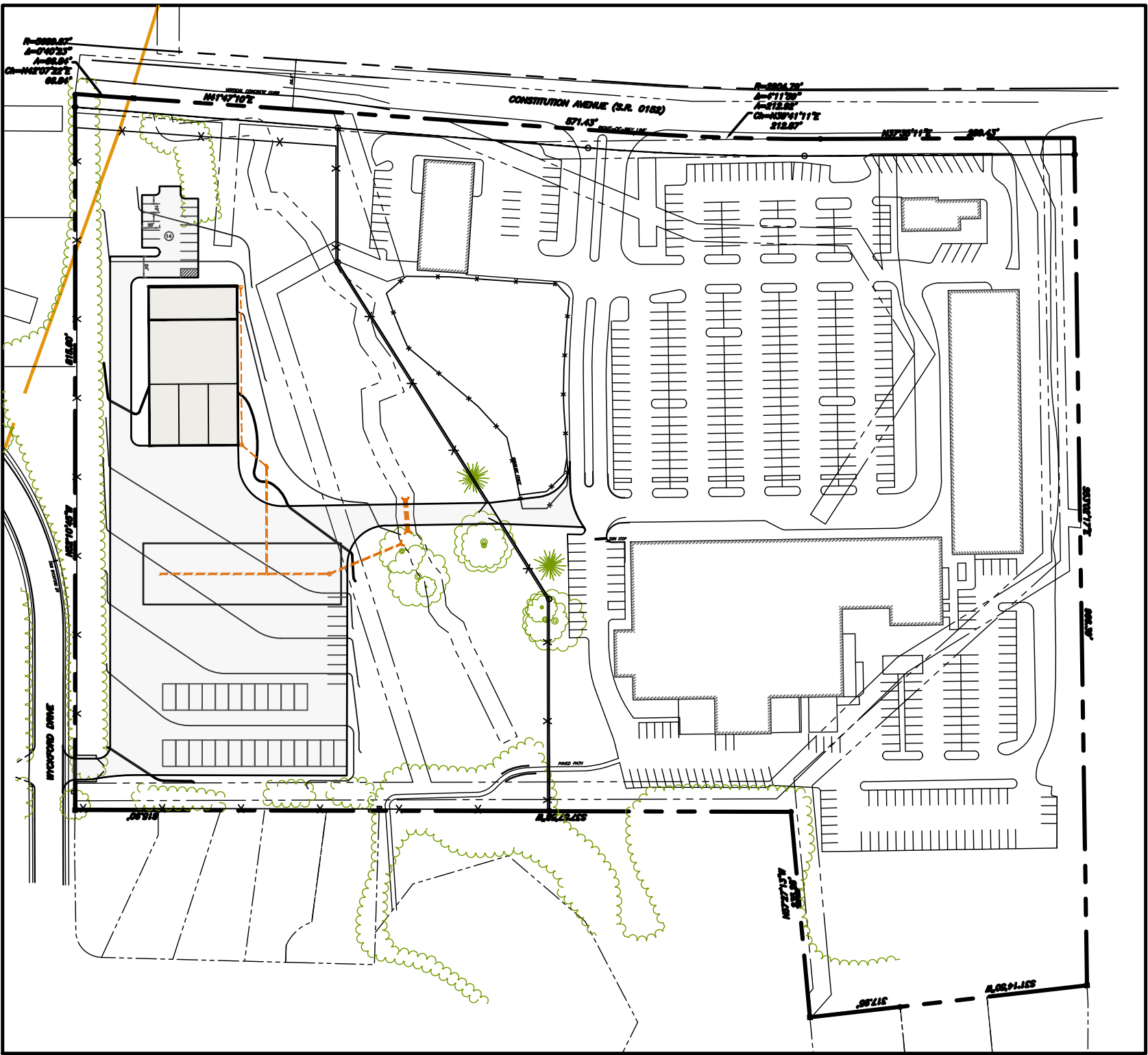
On March, 27, 20 26, I/We submitted for official filing, the above referenced plan of subdivision/land development.

Please be advised that, notwithstanding, any contrary provision of the Pennsylvania Municipalities Planning Code or the Perkasio Borough Code, this letter will serve as notice to Perkasio Borough that the requirement that action be taken on this subdivision proposal within ninety (90) days is hereby waived, without limitation as to time.

This Waiver can be revoked upon thirty (30) days written notice to Perkasio Borough.

Very truly yours,

BOROUGH OF PERKASIE, BUCKS COUNTY, PENNSYLVANIA

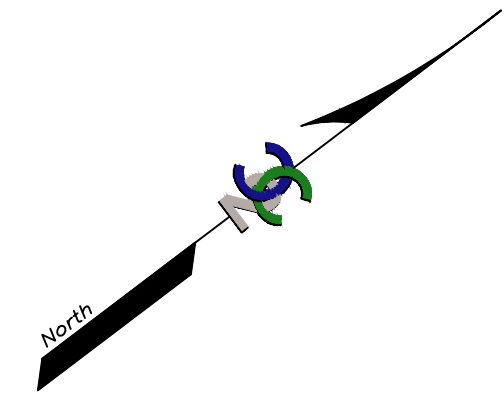


LAND DEVELOPMENT PLANS		
T-1	1 OF 5	TITLE SHEET
EX-2	2 OF 5	EXISTING FEATURES PLAN
SU-1	3 OF 5	SUBDIVISION PLAN
GR-1	4 OF 5	GRADING AND UTILITY PLAN
DE-1	5 OF 5	CONSTRUCTION DETAILS

BOROUGH OF PERKASIE ZONING DATA I-2 LIGHT INDUSTRIAL DISTRICT			
REGULATION		REQUIRED	PROPOSED LOT 2
MINIMUM LOT SIZE (AC.)		1.75	7.94
MINIMUM LOT WIDTH (FT.)		100	233.46
FRONT YARD (FT.)		100	100
SIDE YARD (FT.)		50	50
REAR YARD (FT.)		50	50
MAXIMUM LOT COVERAGE (%)		25	5.2
BUILDING HEIGHT (FT.)		40	<40

1. "DRAINAGE DITCH-PLAN (JOHN & TERESA MAINS-PROPERTY) PREPARED BY KMD ASSOCIATES, DATED 5-22-89 RECORDED IN PLAN BOOK 256 PAGE 87, BUCKS COUNTY RECORDS.
2. ALTA/NSPS LAND TITLE SURVEY FOR LANDS N/F PACAZ REALTY, LLC-PERKASIE SQUARE SHOPPING CENTER, BY NAVE NEWELL, PROJECT NO. 2024-093.01, DATED 9/11/2024.

[illegible]

[illegible]

EXISTING FEATURES PLAN

C2C DESIGN GROUP
601 E. High Street
Pottstown, PA 19464

37 E. Penn Avenue
Wernersville, PA 19565

610.860.6050 www.c2cdg.com

PERKASIE PLACE
RECYCLING CENTER

PROJECT #:	CSA-PER-01
SCALE:	AS SHOWN
DRAWN BY:	CAD
CHECKED BY:	
DATE:	3/27/2026
DWG. NO.:	2 OF 5
SHEET NO.:	

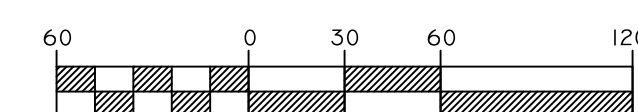
EX-1

LEGEND

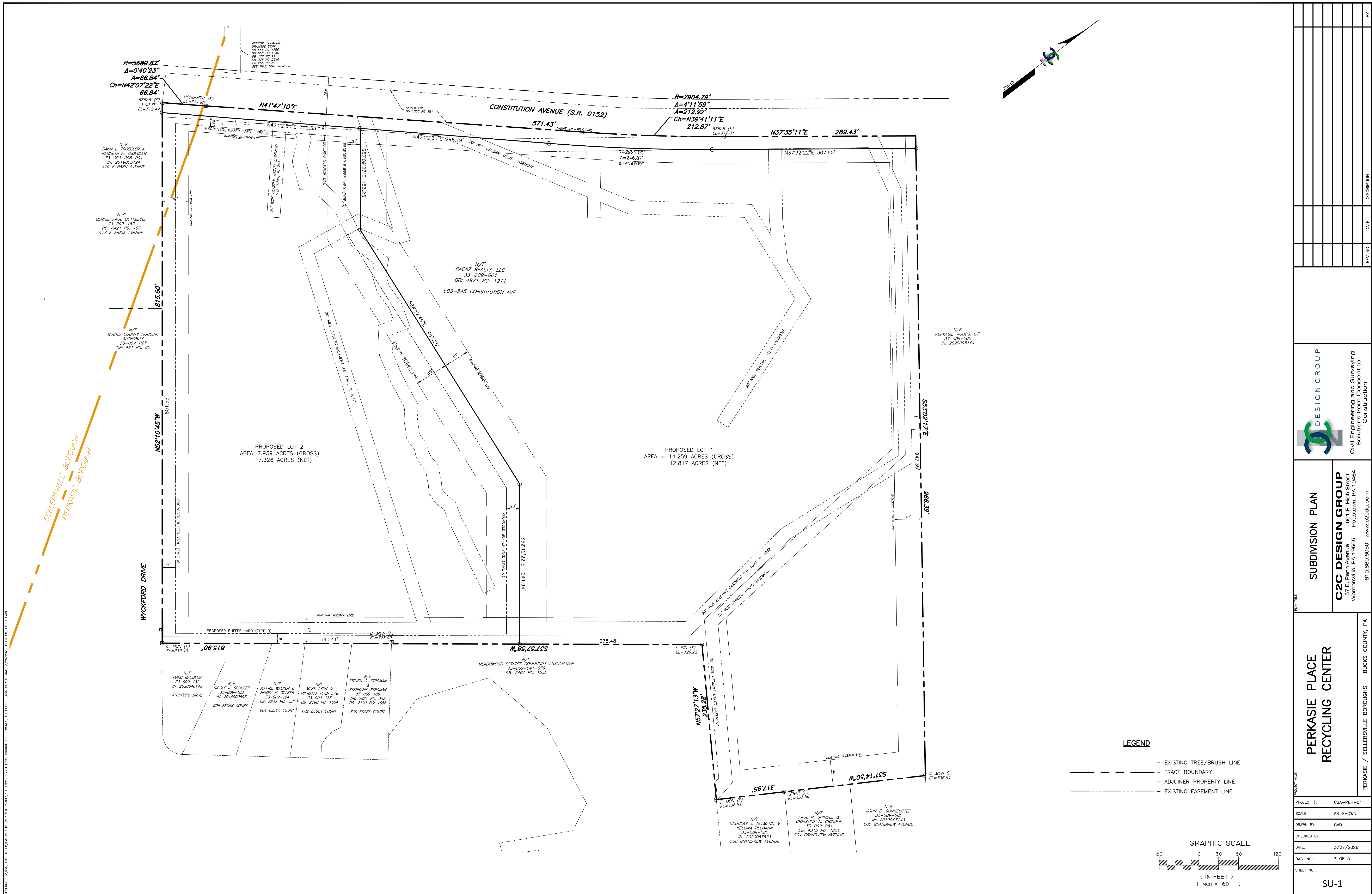
FEATURES WHICH MAY BE
SHOWN ON THIS PLAN:

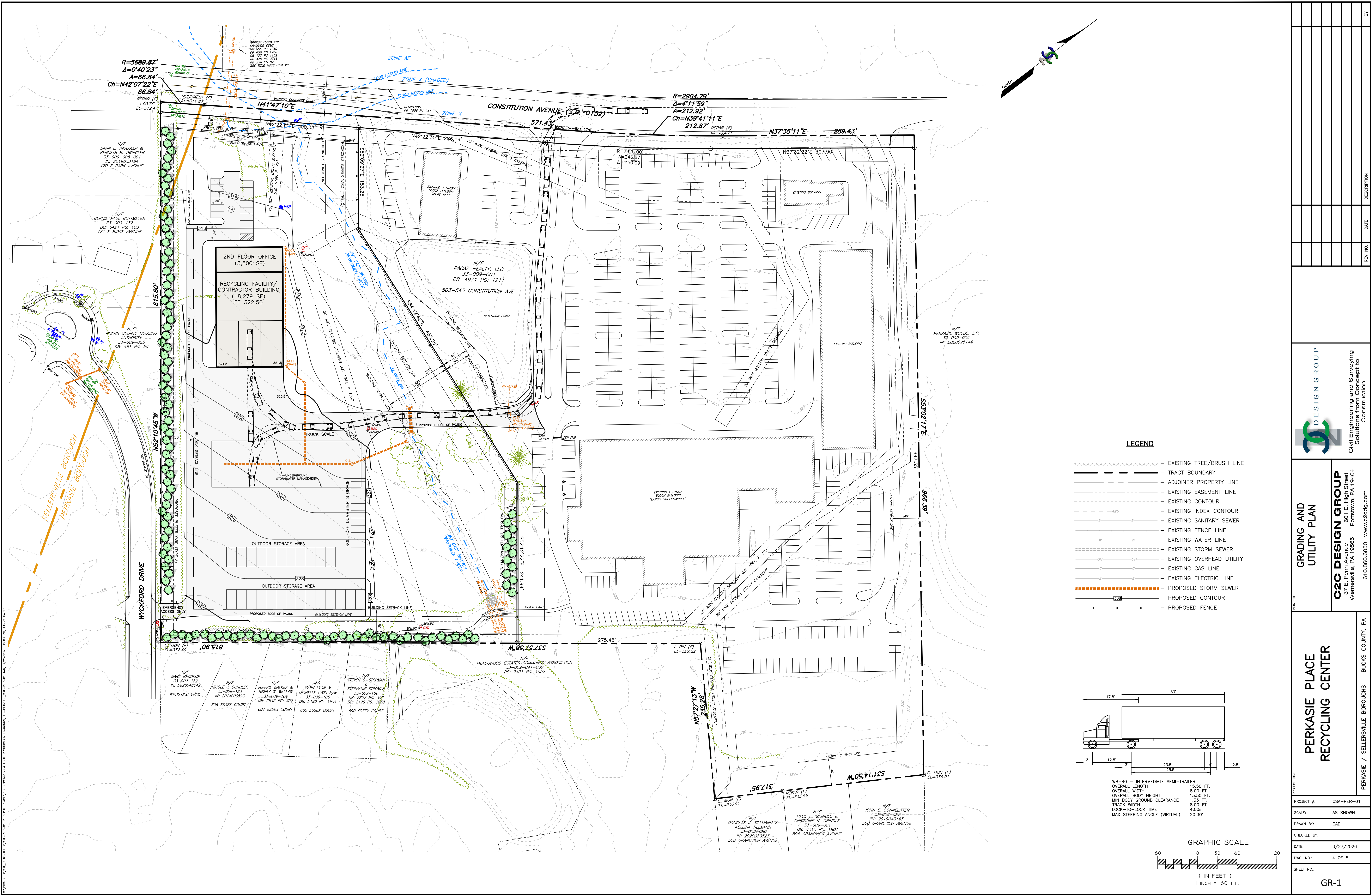
- | | |
|---|---------------------------|
|  | RAILROAD SPIKE FOUND |
|  | REBAR FOUND |
|  | MONUMENT FOUND |
|  | UTILITY POLE |
|  | LIGHT POLE |
|  | A/C UNIT |
|  | ELECTRIC METER |
|  | WATER VALVE/SHUT-OFF |
|  | WATER METER |
|  | WATER METER MH |
|  | FIRE HYDRANT |
|  | SANITARY MANHOLE |
|  | SANITARY CLEAN-OUT |
|  | GAS VALVE |
|  | GAS METER |
|  | STORM DRAINAGE MANHOLE |
|  | TYPE 'C' INLET |
|  | TYPE 'M' INLET |
|  | CONIFEROUS TREE |
|  | DECIDUOUS TREE |
|  | BOUNDARY LINE |
|  | STREET RIGHT-OF-WAY LINE |
|  | ADJOINER LINE |
|  | EASEMENT LINE |
|  | MUNICIPAL BOUNDARY |
|  | MUNICIPAL ZONING LINE |
|  | SANITARY SEWER LINE |
|  | SANITARY LATERAL |
|  | STREAM LINE |
|  | SPECIAL FLOOD HAZARD LINE |
|  | WATER LINE |
|  | WATER LATERAL |
|  | STORM SEWER |
|  | GAS LINE |
|  | OVERHEAD WIRES |
|  | INDEX CONTOUR LINE |
| | INTERMITTENT CONTOUR LINE |

GRAPHIC SCALE



(IN FEET)
1 INCH = 60 FT.





LEGEND

- EXISTING TREE/BRUSH LINE
- TRACT BOUNDARY
- ADJOINER PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING SANITARY SEWER
- EXISTING FENCE LINE
- EXISTING WATER LINE
- EXISTING STORM SEWER
- EXISTING OVERHEAD UTILITY
- EXISTING GAS LINE
- EXISTING ELECTRIC LINE
- PROPOSED STORM SEWER
- PROPOSED CONTOUR
- PROPOSED FENCE

GRAPHIC SCALE

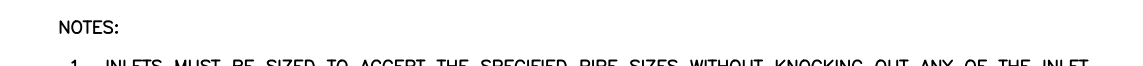
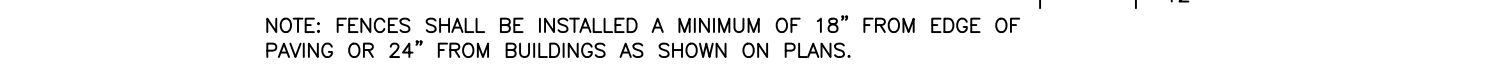
(IN FEET)

1 INCH = 60 FT.

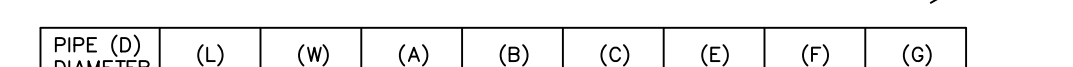
WB-40 - INTERMEDIATE SEMI-TRAILER

OVERALL LENGTH	15.50 FT.
OVERALL WIDTH	8.00 FT.
OVERALL BODY HEIGHT	13.50 FT.
MIN BODY GROUND CLEARANCE	1.33 FT.
TRACK WIDTH	8.00 FT.
LOCK-TO-LOCK TIME	4.00s
MAX STEERING ANGLE (VIRTUAL)	20.30°

DESIGN GROUP		C2C DESIGN GROUP		PERKASIE / SELLERSVILLE BOROUGHS	
Civil Engineering and Surveying Solutions from Concept to Construction		37 E. Penn Avenue Wernersville, PA 19565 610.860.6050 www.c2cdg.com		BUCKS COUNTY, PA	
GRADING AND UTILITY PLAN		PERKASIE PLACE RECYCLING CENTER		PROJECT #:	
DATE		DATE		CSA-PER-01	
REV NO.		REV NO.		SCALE:	
DESCRIPTION		DESCRIPTION		AS SHOWN	
BY		BY		DRAWN BY:	
				CAD	
				CHECKED BY:	
				DATE:	
				3/27/2026	
				DWG. NO.:	
				4 OF 5	
				SHEET NO.:	
				GR-1	



- TYPE "M" INLET



NOTES:
1. PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH THE APPROPRIATE SPECIFICATIONS AS

- TYPICAL D-W ENDWALL / HEADWALL DETAIL



April 29, 2026

File No. 24-00991

Cassandra L. Grillo, CZO, BCO
Zoning Officer and Code Enforcement Administrator
Borough of Perkasio
620 West Chestnut Street
P.O. Box 96
Perkasie, PA 18944

Reference: Preliminary Subdivision and Land Development Plans – Review #1
Perkasie Place Recycling Center
505 Constitution Avenue
TMP #33-009-001
Perkasie Borough, Bucks County, PA

Dear Cassandra:

Pursuant to your request, Gilmore & Associates, Inc. (G&A) has reviewed the Preliminary Subdivision and Land Development Plans for the above-referenced project. We offer the following comments for consideration by the Borough:

I. Submission

- A. Preliminary Subdivision and Land Development Plans for Perkasio Place Recycling Center, as prepared by C2C Design Group, consisting of five (5) sheets, dated March 27, 2026.
- B. Subdivision/Land Development Application and Plan Submission Checklists dated March 27, 2026.
- C. Sketch Plan Application of Perkasio Place LLC letter from Sellersville Borough prepared by Clemons Richter & Reiss dated October 15, 2025.
- D. Bucks County Planning Commission (BCPC #11294-C) Letter dated February 20, 2026.

II. General Information

The subject site is located at 505 Constitution Avenue (S.R. 0152) within the same property as the Perkasio Square Shopping Center in Perkasio and Sellersville Boroughs, Bucks County, PA. A small portion of the site at the western corner is in Sellersville Borough. However, the property was assessed 100% in Perkasio. The site consists of tax map parcel 33-009-001. The Applicant and Owner of Record for the site is PACAZ Realty, LLC.

The site consists of the existing Perkasio Square Shopping Center, including two (2) multi-store buildings, McDonald's, Mavis Tire Center, and associated parking with two (2) access driveways onto Constitution Avenue (S.R. 0152) occupying approximately 14.24 acres of the total 22.183-acre site. The remaining area (7.943 acres) consists of vacant land with woodlands, individual trees, open space, and 'Waters of the United States', which consists of an unnamed tributary to the East Branch Perkiomen Creek.

The Applicant proposes a minor two (2) lot subdivision to create a 14.259-acre parcel (Lot 1) containing the existing Perkasio Square Shopping Center and a second 7.939-acre parcel (Lot 2) for a proposed 18,279 square foot recycling facility/contractor building with a 3,800 square foot 2nd floor office and associated outdoor storage areas, roll off dumpster storage area, passenger vehicle parking, truck scale,

65 East Butler Avenue | Suite 100 | New Britain, PA 18901 | Phone: 215-345-4330 | Fax: 215-345-8606

truck turnaround areas, and areas for loading and unloading of materials. Lot 1 will continue to have access to Constitution Avenue, and Lot 2 will have access to Constitution Avenue through the shopping center, as well as an emergency access driveway onto Wyckford Drive. The site is zoned Light Industrial (I-2) Zoning District and the existing use for Lot 1 is "Planned Commercial Development" (E15), which is a use permitted by right in the I-2 Zoning District, while the intended use for Lot 2 is "Recycling Facility" (G7) with a 2nd floor "Contractor Office" (G1), which are uses permitted by right in the I-2 Zoning District. Lot 2 will also contain outdoor storage area, which is a permitted "Accessory Use".

According to FEMA map 42017C0256J, dated March 16, 2015, the site is located in three (3) Zones: Zone "X", which is outside the 0.2% annual chance floodplain, Zone "X", which is an area of 1% annual chance flood with average depths of less than 1 foot, and Zone "AE" – Flood-Fringe Area (FF), which has determined base flood elevations. According to the U.S. Fish and Wildlife Service's National Wetlands Inventory, the site contains 'Waters of the United States', which consists of a tributary to the East Branch Perkiomen Creek fed by a freshwater pond. The site is served by public water and sanitary sewer provided by the Perkasie Regional Authority (PRA). The plans illustrate an underground stormwater management system on Lot 2 with no details provided.

III. Reference Plans

- A. Final Site Plan, as prepared by Korab, McConnell & Dougherty Associates, dated May 31, 1988 and last revised February 4, 1993.
- B. ALTA/NSPS Land Title Survey for Lands N/F PACAZ Realty, LLC, Perkasie Square Shopping Center, as prepared by Nave Newell, Inc., consisting of one (1) sheet, dated August 20, 2024.

IV. Review Comments

A. Zoning Ordinance (Chapter 186)

We have identified the following issues in regards to the requirements and provisions of the current Perkasie Borough Zoning Ordinance:

- 1. §186-2.1 – The purpose of the zoning requirements is to promote, protect and facilitate the public health, safety, morals and general welfare by giving reasonable consideration, among other things, to the character of the Borough as a whole and of each district and its peculiar suitability for particular uses and structures. To accommodate reasonable overall community growth, including population and employment growth, and opportunities for development of a variety of residential dwelling types and nonresidential uses. While the proposed recycling center is a by right use, due to the proximity of the adjacent residential and retail uses, we do not believe the proposed use is in the best interest of the Borough community. The current parcel was approved and developed as a Planned Commercial Development (E15) and we do not believe an industrial use meets the intent and vision of the original Land Development approval granted by Borough Council.
- 2. §186-18.G.(7)(b)[1] – A recycling facility use shall have a 100-foot front yard setback. The plans show a 50-foot front yard setback from Constitution Avenue and should be revised to show a 100-foot front yard setback. Also, the proposed building setbacks should be dimensioned on the plan.
- 3. §186-18.G.(7)(c) – The provisions set forth in §186-18G(9)(c) through (u) for resource recovery facility shall be met for a recycling facility use. The following items related to site design will need to be addressed:
 - a. §186-18.G.(9)(d) - Operation of a resource recovery facility shall at all times be in full compliance with the statutes of the Commonwealth of Pennsylvania and the rules and regulations of the Department of Environmental Protection (PaDEP) and the provisions of this section of the Borough Ordinance. In the event that any of the provisions of this section of the Borough Ordinance is less restrictive than any present or future rules or regulations of PaDEP, the more restrictive PaDEP regulations shall control. A note stating this requirement shall be added to the Record Plan.

- b. §186-18.G.(9)(e) - In order to protect against indiscriminate and unauthorized dumping, every resource recovery facility shall be protected by locked barricades, fences or gates. Such barricade shall be at least six feet high. An eight-foot-high fence with privacy slats is proposed around the perimeter of the property. The following issues related to the proposed fence should be addressed:
 - i. The fence crosses through the existing walking path that extends from Meadowood Estates to the shopping center. The fence should be relocated to allow continued use of the trail.
 - ii. The fence crosses through a 20' Wide Electrical Easement and a 20' Wide General Utility Easement in multiple locations. Copies of these easement agreements should be provided to determine if a fence is permitted within this easement. If a fence is permitted, then we recommend that a gate be installed at each crossing location to allow the utility companies access to these easements.
 - iii. The fence is shown crossing directly through and within the unnamed tributary to the East Branch Perkiomen Creek. The fence should be relocated to avoid conflicts with this watercourse.
 - iv. The fence is shown crossing the access road to the recycling facility at an angle and should be revised to be perpendicular to the access road.
 - v. Details of the gates should be provided, including notation and specifications on how the gates can be accessed by emergency personnel and utility companies.
- c. §186-18.G.(9)(g) - Hazardous waste as included on the list of hazardous waste as maintained by the Department of Environmental Protection shall not be disposed of, handled or processed in a resource recovery facility. A note stating this requirement shall be added to the Record Plan.
- d. §186-18.G.(9)(h) - Litter control shall be exercised to confine blowing litter to the work area, and a working plan for cleanup of litter shall be submitted to the municipality. The entire area shall be kept clean and orderly.
- e. §186-18.G.(9)(i) - All parts of the process, unloading, handling and storage of municipal solid waste, shall occur within a building. However, certain separated recyclable materials like glass, aluminum and other metals may be stored outdoors. The Grading and Utility Plan identifies spaces for Roll Off Dumpster Storage and Outdoor Storage Areas. A note should be added to the Record Plan that states that only separated recyclable glass, aluminum and other metal materials may be stored outdoors.
- f. §186-18.G.(9)(l) - No material shall be placed or deposited to a height greater than the height of the fence or wall herein prescribed. A note stating this requirement should be added to the Record Plan.
- g. §186-18.G.(9)(m) - No municipal solid waste shall be processed or stored at a recycling facility. A full written description of the proposed recycling facility process, materials to be recycled, how they are sorted and how non-recyclable materials are handled should be provided to the Borough and our office to determine if any of the materials are classified as municipal waste.
- h. §186-18.G.(9)(o) - Leachate from the water used to wash vehicles or any part of the operation shall be disposed of in a manner in compliance with PaDEP regulations. If the leachate is to be discharged to a municipal sewage treatment plant, appropriate permits shall be obtained from the applicable agencies and authorities. In no event shall the leachate be disposed of in a storm sewer, to the ground or in any other manner inconsistent with the Pennsylvania Department of Environmental Protection regulations. A note stating this requirement shall be added to the Record Plan. Also, the location proposed for washing of vehicles should be identified on the plans along with any proposed leachate collection system.

- i. §186-18.G.(9)(p) - Waste from the resource recovery facility process shall be located at least 100 feet from any property line and stored in leakproof and vectorproof containers. We note that the recycling facility building is 85 feet from the southern property line and the outdoor storage area is 50 feet from the eastern property line. The location of waste storage will need to be clarified, and notes added to the Record Plan identifying the locations prohibited from waste storage.
 - j. §186-18.G.(9)(q) - A dense evergreen buffer shall be provided on the outside perimeter of the fenced area. Evergreens shall be four to five feet in height and planted on ten-foot staggered centers. The plans show the fence along the perimeter of the Lot 2 property line with landscaping along the interior of the fence. The fence should be relocated, and the evergreen buffer should be provided along the exterior of the fence line. Also, the buffer requirements of §186-54 of this chapter shall be met.
 - k. §186-18.G.(9)(r) - A note stating that “open burning of any materials shall specifically be prohibited” shall be added to the Record Plan.
 - l. §186-18.G.(9)(s) - The performance standards of Article VII (§186-47, 48, 49, 50 & 52) of this chapter shall be met regarding noise, smoke, emissions, heat and vibrations.
 - m. §186-18.G.(9)(t) - A traffic impact study and a water impact study shall be required. The Traffic Impact Study shall be in accordance with the requirements of SALDO §164-41.2.
 - n. §186-18.G.(9)(u) - A note should be added to the Record Plan stating that a zoning permit shall be renewed on an annual basis after inspection for compliance with §186-18.G.(9)(c) through (t).
4. §186-20.I.(1) - The existing and proposed uses of Lots 1 and 2 should be listed in the Zoning Data tables on Sheet 1. The tables should also include any zoning requirements specific to the proposed use.
 5. §186-20.I.(2) - The Maximum Lot Coverage for a Planned Commercial Development Use (E15) is 25%. The existing use of the site is a “Planned Commercial Development” with a lot coverage of 9.5%. The zoning table notes a proposed lot coverage of 14.8% for Lot 1 and 5.2% for Lot 2. An impervious coverage table should be provided with a breakdown of the different types of impervious on each lot to verify the lot coverage ratios.
 6. §186-20.I.(3) - The Maximum Lot Coverage for Any Other Principal Structure or Use, such as “Recycling Facility” (G7) is 30%. The ‘Required’ maximum lot coverage noted in the zoning table under Lot 2 is 25% and should be revised to 30%. Also, the zoning table notes a proposed lot coverage of 5.2% for Lot 2. This lot coverage does not appear to include the area of the outside storage of materials. The ‘Maximum Lot Coverage’ should, by definition, represent “the proportion of the lot area, expressed as a percentage, that is covered by the maximum horizontal cross section of, all principal and accessory buildings (including balconies, decks, patios, porches, breezeways, and carports), and outside storage of materials”.
 7. §186-32 - The provisions of §186-30 shall not apply to front fences, hedges or walls less than seven feet high above the natural grade in the required front yard. We note that an 8-foot-high chain link fence with privacy slats is proposed in the front yard. Due to the height of the proposed fence, the provisions of §186-30 shall apply to the front portion of the fence.
 8. §186-45.B. - Based on the Borough’s Street Classification Map, Constitution Avenue is classified as an arterial street with a half-width right-of-way of 50 feet. The legal right-of-way appears to be 56.5 feet along the property frontage. Therefore, an ultimate right-of-way of 50 feet measured from the center line of Constitution Avenue should be shown on the plan. All zoning information, including setbacks, lot areas, lot coverage, etc., should be calculated based on the ultimate right-of-way.

9. §186-47 – The sound level of any operation (other than the operation of motor vehicles or other transportation facilities, operations involved in construction or demolition of structures, emergency alarm signals or time signals) should not exceed the decibel levels in the designated octave bands and center frequency as required in this section. A note should be added to the Record Plan specifying a restriction to the hours of unloading the storage bins in the outdoor storage area due to the excessive sound normally contributed with the emptying of bins and the close proximity of the outdoor storage area to the adjoining residential properties.
10. §186-49.A. – The emission of dust, dirt, fly ash, fumes, vapors or gases which can cause any damage to human health, to animals or vegetation or to other forms of property or which can cause any soiling or staining of persons or property at any point beyond the lot line of the use creating the emission is herewith prohibited. The Applicant indicated that concrete may be crushed at this facility. A written description and details of the concrete crushing process, equipment, location and precautions used to prevent emissions spreading beyond the property line should be provided to demonstrate compliance with this requirement.
11. §186-52.A.(1) – No use shall produce glare off the premises by illumination originating on the premises. Glare is defined as the sensation produced by light within the visual field that is sufficiently greater than the light to which the eyes are adapted and which causes annoyance, discomfort, or loss in visual performance or visibility, for any period of time, no matter how short in duration. The preliminary plans do not include any proposed lighting. All proposed lights shall be designed to ensure no glare is produced and is in accordance with all lighting requirements of this section.
12. §186-54 – The following issues related to buffering should be addressed:
 - a. The proposed industrial use on Lot 2 is bordered by single family residential uses along the southeast and southwest property lines and shall provide a 50-foot-wide Class D buffer. Also, the proposed industrial use is bordered by a retail and consumer service use to the northeast and shall provide a 15-foot Class B buffer. Finally, the proposed industrial use fronts along an arterial road and shall provide a 10-foot-wide Class A buffer. This is not consistent with the buffer yards shown on the plans. The plans should be revised accordingly. Also, the required buffer yard plantings should be provided on the plans.
 - b. The existing retail use on Lot 1 would require a 20-foot Class C buffer along the residential properties to the southeast and northeast, a 15-foot Class B buffer along the subdivision line for the industrial use to the south and a 10-foot Class A buffer along the road. These buffers should be shown on the Record Plan and the required plantings along the subdivision line should be provided on the landscape plan.
 - c. Where vegetation, topography, or man-made structures exist which can meet the objectives of the buffer requirements, they may be preserved and may be used to meet the buffer and planting requirements. Quantities, size, species, and locations of existing plant materials and other features intended to meet the buffer requirements must be shown on the plans.
13. §186-54.A.(1) - All landscape plans shall be prepared by a Landscape Architect familiar with this section to promote the proper use and arrangement of plant materials. A landscape plan with planting details should be provided.
14. §186-54.D & E – A compliance chart should be provided to demonstrate that the selected planting buffer and calculations of the required and proposed plant material meet the requirements. We note that conceptual buffers have been provided. However, the required buffers should be provided and detailed in a chart. The chart and details should include the species, quantities, sizes, etc. of proposed buffer material.

15. §186-57.D – Watercourses shall be left as permanent open space and free flowing. Such areas shall not be altered, regraded, filled, piped, diverted or built upon, unless design approval is obtained from the Borough and the Pennsylvania Department of Environmental Protection as required. The plans propose a driveway and fence across the unnamed tributary to the East Branch Perkiomen Creek to access the Perkasie Square Shopping Center. All necessary permits from PADEP will be required for the proposed stream crossing.
16. §186-57.E & F & §164-41.F (SALDO) – The previously submitted Final Site Plan as prepared by Korab, McConnell & Dougherty Associates, dated May 31, 1988 and last revised February 4, 1993, indicated that 3.197 acres of wetlands were present around the existing stream. Also, a separate ALTA/NSPS Land Title Survey for the subject property dated August 20, 2024 included wetland areas along the unnamed tributary to the East Branch Perkiomen Creek. General Note 5 on Sheet 1 states that “No know wetlands located within the project site” based on an aquatic resource investigation performed by NOVA Consultants, LTD. on February 9, 2025. A copy of the aquatic resource investigation should be submitted for review to verify the absence of wetlands onsite.
17. §186-57.G.(2) & §164-41.G (SALDO) – No more than 50% of a woodland area not associated with another environmentally sensitive resource shall be altered, regraded, cleared or built upon. Woodlands are defined as areas, groves or stands of mature or largely mature trees covering an area greater than 1/4 acre in which the largest trees measure at least six inches ddb. The trees associated with the woodlands around the perimeter of the site shall be surveyed to determine the woodlands disturbance for the required fencing and access driveways to verify it does not disturb more than 50% of the woodlands.
18. §186-61.C. – The plan lists the parking requirements for a recycling facility of 3 spaces per 1,000 square feet of office floor area for a total of 12 required parking spaces. However, we note that the proposed building is labeled as Recycling Facility/ Contractor Building. The parking requirement for a “Contractor” use is 0.9 per 1,000 square feet of GFA, which would require an additional 17 spaces. Also, the plan notes a second floor office area of 3,800 square feet which requires 1 space per 350 square feet of GFA for an additional 11 required parking spaces for a maximum total of 28 required parking spaces. The proposed layout currently provides for only 14 spaces. The square footage allocated to each proposed use shall be clarified and the additional parking spaces provided.
19. §186-70.F – Parking lots with 90° parking should have 24-foot aisles for two-way traffic. We note that the outdoor storage area and roll off dumpster storage areas are laid out like a parking lot and should meet these requirements. The aisle between the outdoor storage area and roll off dumpster storage area is less than 24 feet. Also, the aisle on the southern side of the second row of outdoor storage area has a width of only 10 feet. Circulation exhibits should be provided to clarify how these spaces will be accessed to determine if additional spaces are required.
20. §186-70.F – An accessible walkway shall be provided from the proposed ADA parking spaces to the building.
21. §186-70.J – Except where entrance and exit drives cross street lines, all parking areas for any purpose other than single-family residences shall be physically separated from any public street by a concrete curb. Concrete curb shall be provided along the perimeter of the parking lot.
22. §186-70.K – In any parking area of more than three spaces in a residence district or abutting a residence or apartment district, all spaces not within a building shall be buffered with evergreen or other suitable planting which shall be at least four feet in height, designed to screen noise, odors, visibility and headlight glare and located between such parking spaces and any lot in a residence or apartment district that abuts directly or across a street. We note that the plan appears to show proposed trees along the southeast and southwest property boundaries. However, these trees are not identified. A landscape plan will be required, and additional buffer trees shall be provided as necessary for the parking area adjacent to the residential district.

23. §186-70.L – All artificial lighting used to illuminate any parking space or spaces shall be so arranged that no direct rays from such lighting shall fall upon any neighboring property. Lighting plans are required to demonstrate lighting for the recycling facility does not impact the neighboring properties.
24. §186-71.A - Every industrial plant exceeding 6,000 square feet shall have at least one off-street loading space. The off-street loading space should be identified and dimensioned on the plan.
25. §186-75.C.(1) – Prior to the erection of a sign and the issuance of a permit, the Borough Code Enforcement Administrator shall review all signs for conformance to the provisions of this Article, the Municipal Building Code. We note that the plan does not indicate a freestanding sign with the name of the business. If a freestanding sign is to be proposed for this development, then the location of the sign should be shown on the plans along with appropriate details.

B. Subdivision and Land Development Ordinance (Chapter 164)

We have identified the following issues in regards to the requirements and provisions of the current Perkasie Borough Subdivision and Land Development Ordinance (SALDO):

1. §164-10.B.(2) – When the Applicant is requesting a modification to a provision or provisions of the Subdivision and Land Development Ordinance, a written request should accompany the plan submission. The request should cite the section(s) of the chapter to be modified, the extent of modification and the reasons for the modification. A Waiver Request Letter should be submitted to the Borough if waivers are to be requested and the list of waivers added to the Record Plan.
2. §164-20.B.(3) – Provision for additional street width may be required by Borough Council where the minimum width does not meet with the specific requirements for the individual street classification. Wyckford Drive is a secondary street which requires a minimum cartway width of 34 feet and the existing cartway only appears to be 32 feet. Borough Council should determine if additional cartway width is required for this existing street or a waiver required.
3. §164-20.G(1) & §164-24.A – Proper sight distances should be provided for both horizontal and vertical alignments. Measured along the centerline, minimum sight distances should be 500 feet for collector streets, 400 feet for primary streets and 250 feet for secondary streets. Sight distances for the existing shopping center driveway and proposed emergency access driveway should be provided to demonstrate compliance with this requirement.
4. §164-24.D. – The proposed driveway connection to the shopping center should meet the minimum design requirements for a Class D driveway. The driveway width, radius and grades should be noted on the plan to demonstrate compliance with the requirement.
5. §164-25.A.(1)(a) – No one row of off-street parking spaces shall exceed 12 spaces. Raised planting beds shall be at intervals not to exceed 12 spaces, with beds offset on alternating sides of parking rows. Raised planting beds should be provided for the outdoor storage spaces which exceed 12 spaces in length. Raised planting beds shall be planted with one shade tree.
6. §164-25.A.(1)(d) – Perimeter plantings should be provided around all parking areas and should have a minimum width of five feet. Perimeter plantings, inclusive of shrubs, should be provided.
7. §164-25.A.(1)(f) – The edge of any parking area or parking driveway shall not be closer than 15 feet to the outside wall of the nearest building. This area shall be used for foundation plantings and sidewalks to entryways. The northwestern side of the proposed building is less than 15 feet from the parking and driveway aisle and should be revised to provide the required separation. Also, the distance between the building and the parking area/driveway should be dimensioned on the plans.

8. §164-25.A.(2) – A landscape plan shall be provided to demonstrate compliance with the parking lot landscaping requirements of §164-25.A.
9. §164-27.B – All traffic control signs installed along any public or private street, road, alley, driveway or parking area within Perkasie Borough shall meet the requirements of the PennDOT Handbook of Approved Signs, latest version. All traffic signs within the recycling center parking area, access driveway and additional signs required within the shopping center for the shared driveway use should be shown on the plans with details provided.
10. §164-27.B(5) – The ‘Reserved Parking’ sign (R7-8) should be accompanied by the Reserved Parking Penalties sign (R7-8F) and ‘Van Accessible’ sign (R7-8P). These signs should be noted in the plan view, where appropriate, and details added to the plans.
11. §164-30.F – Lots excessively deep in relation to width or lots excessively irregular in shape are to be avoided. A proportion of 2½ in depth to one width is generally accepted as a proper maximum. Proposed Lot 2 has a width of 300 feet at the building setback line and a depth exceeding 750 feet. The proposed subdivision line should be revised to not exceed the 2½ to 1 ratio or a waiver required.
12. §164-31. – The following comments pertain to the proposed grading:
 - a. Spot elevations should be provided at the corners of the proposed building.
 - b. The building notes a finished floor elevation of 322.50 which is 6.5 feet higher than the adjacent parking lot. The access door for the building should be shown on the plan and stairs and ramps to the access door should be shown on the plan with associated grading and spot elevations.
 - c. Spot elevations should be provided along the edge and at the corners of the parking areas.
 - d. Detailed grading should be provided for the emergency access drive connection to Wyckford Drive. The grading should include an ADA complaint driveway apron across the existing sidewalk.
 - e. Detailed grading for the creek culvert and access road connection to the shopping center should be provided to demonstrate adequate roadway clearance over the culvert.
 - f. Additional grading along the access road to the shopping center should be provided to determine the need for guiderails at the creek culvert.
 - g. We note that curb is required around the perimeter of the parking area. Additional grading comments may need to be addressed based on the grading for curbs and stormwater structures within the parking area.
13. §164-31.F. – The top or bottom edge of slopes should be a minimum of five (5) feet from property or right-of-way lines of streets in order to permit the normal rounding of the edge without encroaching on the abutting property.
14. §164-32 – The plan proposes an access driveway to the Perkasie Square Shopping Center. An access easement from this connection point out to Constitution Avenue will be required.
15. §164-32 – As specified in the Bucks County Planning Commission Review Letter dated May 27, 2016, an easement should be shown for the existing paved path that provides access to the shopping center from the adjacent Meadowood Estates residential community. The easement agreement should specify the maintenance responsibilities regarding snow removal and repairs to the paved path.

16. §164-32.C – Nothing should be permitted to be placed, planted, set or put within the area of an easement, the area should be kept as lawn. The proposed fence and access driveway are shown within existing easements and within a proposed easement. The fence and driveway should be relocated or a waiver requested from this requirement.
17. §164-32.D. & §158-12.O. – Where a subdivision is traversed by a watercourse, there should be provided a drainage easement conforming substantially with the line of such watercourse and of such width as will be adequate to preserve natural drainage but not less than 20 feet or as may be required or directed by the Department of Forests and Waters. The width of the easement shall be adequate to provide for the unimpeded flow of stormwater runoff from the 100-year storm event. The plan appears to show a 20-foot-wide drainage easement over the existing stream centerline. However, the existing contours appear to indicate portions of the streambank extend beyond the 20-foot-wide drainage easement. The extent of flows in the streambank from the 100-year storm should be analyzed to ensure the easement width is adequate. The proposed easement should be labeled on the plans with metes and bounds.
18. §164-33.D. – In the design of storm sewerage systems, the future use of undeveloped areas upstream shall be taken into account in calculating pipe sizes. The upstream area of the existing watercourse that traverses the site includes wooded area that could be developed in the future. The upstream drainage area should be analyzed and any undeveloped areas should be modeled as developed based on the zoning designation of the property when designing the driveway culvert.
19. §164-35. – The following issues related to buffering should be addressed:
 - a. The proposed industrial use on Lot 2 is bordered by single family residential uses along the southeast and southwest property lines and shall provide a 100-foot-wide Class D buffer. Also, the proposed industrial use is bordered by a retail and consumer service use to the northeast and shall provide a 15-foot Class B buffer. Finally, the proposed industrial use fronts along an arterial road and shall provide a Class A buffer. This is not consistent with the buffer yards shown on the plans. The plans should be revised accordingly. Also, the required buffer yard plantings should be provided on the plans.
 - b. The existing retail use on Lot 1 would require a 30-foot Class C buffer along the residential properties to the southeast and northeast, A 15-foot Class B buffer along the subdivision line for the industrial use to the south and a Class A buffer along the road. These buffers should be shown on the Record Plan and the required plantings along the subdivision line should be provided on the landscape plan.
 - c. Where vegetation, topography, or man-made structures exist which can meet the objectives of the buffer requirements, they may be preserved and may be used to meet the buffer and planting requirements. Quantities, size, species, and locations of existing plant materials and other features intended to meet the buffer requirements must be shown on plans
20. §164-35.D & E – Specifies options for quantities of various plant material required for planted buffers. The plan appears to propose a staggered planting along the boundaries of the property. A planting schedule should be provided and keyed to the plan to indicate the location, species, size and quantity of each proposed planting. The plantings should be from the plant materials list in this section and specify species, quantities, sizes, etc. of proposed buffer material.
21. §164-38.G – Streets carrying nonresidential traffic shall not normally be extended to the boundaries of the adjacent existing or potential residential areas or connected to streets intended for predominantly residential traffic. We note that the plan does not propose an extension of any streets but does propose a driveway connection to Wyckford Drive which is intended for emergency access only. The plans should include details of the entrance to clarify how access will be limited to emergency vehicles (i.e. knox box).

22. §164-41.1 – All existing trees to remain within 10 feet of the limits of disturbance should be protected. A forty-eight-inch-high wooden snow fence mounted on steel posts, located eight feet on center, shall be placed along the boundary of the tree protection zone. All tree protection fence should be shown on the landscape plans and E&S plans. Also, a tree protection fence detail should be provided on the plans.
23. §164-41.2 – A transportation impact study is required for the proposed use in accordance with §186-18.G.(9)(t). A Transportation Impact Study shall be required for all major subdivisions and land developments to enable the Borough to assess the impact of a proposed development on the local transportation systems, both highways and public transportation. The purpose of the study is to ensure that proposed developments do not adversely affect the transportation network and to identify any traffic problems that are created in the existing highway network as a result of the development and to delineate solutions to potential problems and to present improvements to be incorporated into the proposed development or to the highway and/or public transportation systems within the designated study area. We note a traffic study was previously prepared for this site and the Applicant intends to update the study for the proposed use.
24. §164-50.A. – Concrete monuments should be placed at each change in direction of boundary around the entire site. All existing property monumentation should be noted on the Record Plan and concrete monuments should be proposed at all property corners and along the ultimate right-of-way where they do not currently exist.
25. §164-52 – We note that curbing is not proposed as part of this project. However, we recommend that curbing be installed at a minimum along the northern side of the paved area in the rear of the proposed building in order to prevent possible contaminated runoff from entering the existing watercourse. Inlets with oil/grease separators should be installed along the proposed curbing to capture and remove any possible contaminants within the runoff.
26. §164-54.A. – Review and approval by the Perkasie Regional Authority (PRA) should be obtained by the Applicant for the entire water supply system. A copy of the approval letter should be submitted to the Borough and our Office. We note that the proposed water supply system is not shown on the current plans.
27. §164-54.B. – Review and approval by the Perkasie Fire Chief and Fire Protection Consultant should be obtained by the Applicant in order to ensure that fire protection is provided. A copy of the approval letter should be submitted to the Borough and our Office. Also, all hydrants located along the property frontages and within the shopping center should be shown on the plans to determine if adequate hydrant protection exists for the proposed building.
28. §164-56.B. – Review and approval by the Perkasie Regional Authority (PRA) should be obtained by the Applicant for the entire sanitary sewer system. We note that Sellersville Borough stated in a letter dated October 15, 2025 that “sewage from this property will have to go through Sellersville Borough in order to get to the sewer treatment plant and the current sewer lines in this area are already at capacity.” The Applicant should coordinate with Sellersville Borough and PRA regarding the sanitary sewer connection and flows for this development. A copy of all approval letters should be submitted to the Borough and our Office.
29. §164-56.C. – The Applicant shall provide a certification from the Perkasie Regional Authority (PRA) setting forth that sewage service and capacity are available for the proposed building.
30. §164-59. – Gas, electric power and telephone facilities should be shown on the Utility Plan and Landscape Plan. We note that the Perkasie Borough Electric Department will design the layout of the electrical system and UGI Utilities will review the layout of the gas system for the project. Once the electrical and gas layouts are approved, the plans should be updated accordingly and correspondence from the Borough Electric Department and UGI submitted to the Borough and our Office.

31. §164-61.A – Street trees and other required plantings shall be in accordance with §164-35 of this chapter. The required street trees should be shown and labeled on the plans.
32. §164-68. – The following information should be provided on the plans:
- a. Lot 1 was developed as a Planned Commercial Development. The zoning table should list the existing and proposed uses for each lot and any additional zoning requirements associated with the use.
 - b. The metes and bounds for the ultimate right-of-way, as well as tie in distances from the title line to the ultimate right-of-way line should be listed on the plans.
 - c. The existing Constitution Avenue cartway should be dimensioned on the plans.
 - d. The dimensions of all driveways, sidewalks and parking spaces should be shown on the plans.
 - e. The radius of all pavement and curb should be labeled on the plans.
 - f. The loading area within the building should be labeled on the plans.
 - g. The location, size and material of all existing utility lines should be shown on the plans. We note there appears to be a sewer and water main within the utility easement along the property frontage.
 - h. The words "preliminary plan — not to be recorded" shall be shown on the plans.
 - i. The signature block for the Bucks County Planning Commission should just note the BCPC number and the date of approval.
 - j. The Perkasie Planning Commission signature lines should be reduced to just two lines for signatures from the Chairman and Secretary of the Borough Planning Commission.
 - k. The Perkasie Borough Council signature lines should be reduced to just two lines for signatures from the President and Secretary of the Borough Council.
 - l. A signature line should be provided for the Borough Engineer.
 - m. Language of the certification of recording for the Bucks County Recorder of Deeds should be added to the signature block.
33. §164-68.B – The following information should be provided on the Subdivision Plan:
- a. The zoning tables for each lot on Sheet 1 should be shown on the plan. The tables should be revised to list the proposed setbacks for Lots 1 and 2. Also, any existing non-conformities should be noted on the plan.
 - b. The existing structures with the existing and proposed building setback distances dimensioned on the plan.
 - c. The front yard setbacks should be dimensioned from the ultimate right-of-way.
 - d. Metes and bounds for the existing and proposed easements should be provided.
 - e. Notations offering the ultimate right-of-way for dedication to Perkasie Borough.
 - f. The zoning boundary lines should be shown on the plan.
34. §164-68.C – The plans do not accurately represent the existing features along Constitution Avenue. The plans should be revised to show the full extent of curb, sidewalk and storm sewer along the roadway and at the shopping center entrance.
35. §164-68.C.(2) & §164-70.C.(2) – Requires existing features within 400 feet of any part of the land to be subdivided or developed to be shown on the plans. The Existing Features Plan should either be revised to show all existing features within 400 feet of the site boundary or a waiver will be required. We have no objection to a waiver request conditioned upon the Applicant providing an aerial site plan which shows features within 400 feet around the entire site at a minimum of one-

inch equals 100 feet or larger, per §164-68.C.(8), and including the names of all roads and property owner information for the adjoining properties and properties across the streets.

36. §164-68.D.(18) – Requires the tree protection zone to be indicated on the plan. There appears to be existing trees to remain on the plans. However, there is no tree protection shown. The plans should be revised to demonstrate compliance. It is also noted that it appears that proposed landscape buffering is indicated where there appears to be existing vegetation. Clarification should be provided as to the intent of preserving existing vegetation.
37. §164-68.D.(22) – Requires a planning module for land development as required under Pennsylvania Sewage Facilities Act (Act No. 537). A copy of the approved Sewage Facilities Planning Module or exception should be provided to the Borough and our Office.
38. §164-68.D.(23) – An indication of the available water volume for fire flow and the water volume required to satisfy the Insurance Services Office (ISO) standards for fire protection should be provided in a letter.
39. §164-70.A.(5) – Final Plans should be on sheets either 18 inches by 22 inches or 36 inches by 44 inches, and all lettering should be so drawn as to be legible if the plan should be reduced to half size. The enclosed plans are on 24 by 36 inch sheets. The Applicant should request a waiver from this section of the ordinance, which we have no objection.
40. §164-71.C.(1) – We note that the Applicant is in negotiations to purchase Lot 2 from the property owner. The Applicant should clarify the ownership of the parcels at the time of recording to determine if multiple ownership signatures are required.
41. §164-73 – If any mandatory provisions of these regulations are shown by the applicant, to the satisfaction of the Borough Council to be unreasonable, to cause undue hardship or that an alternate standard can provide equal or better results, the Borough Council may grant a modification to that provision. All requests for modification shall be in writing and signed by the applicant. The request shall state the reasons and grounds for why the provision is unreasonable or the hardship imposed and shall discuss the minimum modification necessary.
42. §164-76.A. – Three (3) days prior to the commencement of any operation in the construction or installation of streets, curbs, sidewalks, drainage facilities, street signs, monuments and capped sewers, the owner shall notify the Borough Engineer, who shall inspect the work, materials, construction and installation to assure that the same are in accordance with Borough requirements. A note stating the above should be added to the plans.

C. Sidewalk and Curb Rules and Regulations (Chapter 160)

We have identified the following issues in regards to the specifications for reconstruction and/or repair of curb and sidewalks (Chapter 160 Attachment 1):

1. VII.A.(3) – The following issues related to compliance with ADA regulations should be addressed:
 - a. ADA parking spaces should be provided with an accessible route to the building. The number of ADA spaces is based on the total number of parking spaces provided.
 - b. Details with grading and dimensions should be provided demonstrating the parking space and accessible path are compliant with ADA regulations.
 - c. ADA parking signage should be provided at the accessible parking spaces.
2. VII.P.(1)(f) – Detectable warning surfaces should be provided at all handicap ramps. The detectable warning surfaces should be shown on the plan and a detail of the surface should be provided.

D. Amended Stormwater Management Ordinance (Chapter 158) – East Branch Perkiomen Creek Watershed (District 'B')

We have identified the following issues in regards to the requirements and provisions of the current Perkasie Borough Amended Stormwater Management Ordinance (SMO):

1. §158-12.D. – For all regulated earth disturbance activities, erosion and sediment (E&S) control best management practices (BMPs) shall be designed, implemented, operated, and maintained during the regulated earth disturbance activities. Erosion and Sediment Control plans and details should be provided for the proposed development.
2. §158-12.U. & §158-17.B – Whenever a watercourse is located within a development site, it shall remain open in the natural state and location and shall not be piped, impeded, or altered (except for road crossings). It is the responsibility of the Developer to stabilize existing eroded stream/channel beds and banks. The Developer must submit pictorial documentation of existing stream/channel beds and banks to determine whether existing banks must be stabilized.
3. §158-12.T. – All storm sewer inlets must be identified with a storm drain marker. Storm drain markers should be embossed into the inlet hood. Marker should have a minimum diameter of 3 1/2 inches and include "No Dumping - Drains to Waterway" and a fish symbol. Alternate designs/sizes may be used if approved by the Borough. A detail of the inlet top with the required marker should be provided on the plans.
4. §158-12.X. – Hot spots are sites where the land use or activity produces a higher concentration of trace metals, hydrocarbons, or priority pollutants than normally found in urban runoff. Use of infiltration BMPs is prohibited on hot spot land use areas. Recycling facilities are considered hot spots. Stormwater runoff from hot spot land uses shall be pretreated. A stormwater management report should be provided to address the stormwater runoff from the proposed hot spot and how the development will meet the infiltration requirements of §158-15.
5. §158-13.E. – The site shall meet the peak rate reduction requirements for the East Branch Perkiomen Creek Watershed. A stormwater management report should be provided with hydrographs and calculations to demonstrate how the pre and post development peak flows meet this requirement. The calculations shall be in accordance with §158-19.
6. §158-13.G. – Off-site areas that drain through a proposed development site are not subject to release rate criteria when determining allowable peak runoff rates or volume reduction. However, on-site drainage facilities shall be designed to safely convey off-site flows through the development site for the 100-year frequency storm event. Offsite flows from the south cross through the site and should be included in the drainage analysis for the stormwater management design.
7. §158-13.I. – Runoff from developed areas of the site, including but not limited to areas of impervious surface, shall be managed through a series of riparian corridor vegetation facilities whenever possible. The priority goal of the riparian vegetation will be the reduction of thermal impacts on stormwater runoff associated with impervious areas, with a secondary goal being the protection of capacity of existing stormwater conveyance channels. Riparian corridor plantings should be provided for the existing watercourse through the site in accordance with §158.20.1.
8. §158-14.B.(1). – An Existing Resources and Site Analysis Map (ERSAM), showing environmentally sensitive areas, including, but not limited to, steep slopes, ponds, lakes, streams, wetlands, hydric soils, vernal pools, floodplains, riparian corridors, hydrologic soil groups A, B, C, and D, woodlands, surface waters regulated by the state or federal government, any existing recharge areas, and any other requirements outlined in the Subdivision and Land Development and Zoning Ordinances should be provided with the plan set.

9. §158-14.B.(3). – Identify site specific existing conditions, drainage areas, discharge points (points of interest), recharge areas, and hydrologic soil groups A and B. Drainage area maps should be provided with individual drainage areas labeled, consistent with areas and calculations provided in the stormwater management report.
10. §158-15.B.(3). – Stormwater management facilities should be designed to meet the volume control and infiltration requirements. The recharge volume calculation in §158-15.D. should be provided to determine the recharge volume requirement.
11. §158-15.E. – Infiltration BMPs intended to receive runoff from developed areas shall be selected based on the suitability of soils and site conditions. All applicants proposing stormwater management facilities are required to perform a detailed soils evaluation of the project site by a qualified geotechnical engineer, geologist and/or soil scientist, which at minimum addresses soil permeability, soil mottling, depth to groundwater table, depth to bedrock, susceptibility to sinkhole formation, and subgrade stability.
12. §158-15.F. – Infiltration BMPs must include safeguards against groundwater contamination for uses where it is anticipated that pollutants may enter the facility, by mishap or spill or where salt or chloride might be a non-point source contaminant since soils do little to filter this pollutant. As noted above, the proposed recycling center may be considered a “Hot Spot”. A detailed written description of the recycling activities and processes should be submitted to determine if the recycling use is a concern for groundwater contamination. If it is anticipated that pollutants may enter the infiltration facility (or other stormwater facility impounding water), resulting in potential groundwater contamination, Perkasie Borough may require the developer to submit a hydrogeologic study of the site and proposed infiltration BMPs, prepared by a qualified design professional, to determine the risk for such contamination. The Borough may require the installation of a mitigative layer or an impermeable liner in the BMP and/or detention basins where the possibility of groundwater contamination exists.
13. §158-16.A. – Adequate storage and treatment facilities must be provided to capture and treat stormwater runoff from developed or disturbed areas. Stormwater management facilities should be designed to meet the water quality requirements. The water quality storage volume calculation in §158-16.A. should be provided to determine this requirement.
14. §158-17.A. – To mitigate the impact of stormwater runoff on downstream stream bank erosion, BMPs must be designed to detain the proposed conditions two-year, twenty-four-hour design storm to the existing conditions one-year flow using the SCS Type II distribution.
15. §158-18.C & F. – The Grading and Utility Plan shows conceptual stormwater management conveyance system and an underground stormwater management facility. The design of the conveyance facilities should be finalized in accordance with the standards of these sections.
16. §158-18.C.(4) – Manhole castings and covers should have the word “STORM” cast in two (2) inch high letters on the top of the cover and all inlet grates should be “bicycle safe” heavy duty structural steel with proper identification and markers per this section. Storm Manhole and bicycle safe grate details should be added to the plans.
17. §158-18.C.(8) – Storm sewer bedding/backfill requirements shall conform to the Perkasie Borough Roadway Construction Standards and Specifications. The required detail should be added to the plans.
18. §158-18.G.(1) – After completion of rough grading, a minimum of eight (8) inches of topsoil shall be returned to remaining disturbed areas prior to final grading and seeding. A note stating this requirement should be added to the plans.

19. §158-18.G.(7) – Both lots must be kept free of any debris or nuisances whatsoever during construction. A note should be added to the plans acknowledging this right.
20. §158-18.H.(2) – During construction, duly authorized representatives of Perkasie Borough may enter at any reasonable time upon any property within the Borough to investigate whether construction activity is in compliance with this Chapter. A note should be added to the plans acknowledging this right.
21. §158-18.H.(6) – As-built drawings of the underground stormwater management facility should be submitted to the Borough for review. The system should not be considered functional until it is proven by the Developer that the system meets the volume requirements and the outflow characteristics of the original design of the system. A note should be added to the plans which state this requirement.
22. §158-18.I. – The Grading and Utility Plan shows a conceptual underground stormwater management facility. The design of the conveyance facilities should be finalized in accordance with the standards of this section. Full details of the stormwater management facility, structures and conveyance system should be provided, including cross sections and profiles.
23. §158-20.B. – No Regulated Earth Disturbance activities within the Borough shall commence until approval by the Borough of an Erosion and Sediment Control Plan for construction activities.
24. §158-20.C. – Under 25 PA Code Chapter 92, a PADEP “NPDES Construction Activities” permit is required for Regulated Earth Disturbance activities of one (1) or more acres. An NPDES Permit Application should be submitted to the Bucks County Conservation District (BCCD) since there is more than one (1) acre of disturbance. Once approval is granted, a copy of the NPDES Permit should be submitted to the Borough and our office.
25. §158-20.D. – Evidence of any necessary permit(s) for Regulated Earth Disturbance activities from the appropriate PADEP regional office or County Conservation District must be submitted to the Borough. An Erosion and Sedimentation Control plan should be submitted to the Bucks County Conservation District (BCCD) since there is more than 1,000 square feet of disturbance. No permit shall be approved unless there has been a plan approved by the BCCD. Once approval is granted, a copy of the Adequacy Letter should be submitted to the Borough and our office.
26. §158-20.F. – Additional erosion and sedimentation control design standards and criteria that should be applied where infiltration BMPs are proposed, include the following:
 - a. A note should be added to the plans which states: “Areas proposed for infiltration BMPs shall be protected from sedimentation and compaction during the construction phase, so as to maintain their maximum infiltration capacity.”
 - b. A note should be added to the plans which states: “Infiltration BMPs shall not be constructed nor receive runoff until the entire contributory drainage area to the infiltration BMP has received final stabilization.”
27. §158-22.C. – A feasibility analysis that evaluates the potential application of infiltration, flow attenuation, bioretention, wetland, or wet pond BMPs must be submitted with the stormwater management site plans required. The feasibility analysis must allow the Borough to review the general soil characteristics of a site and the proposed development for that site and determine if infiltration BMPs or wet pond or artificial wetland BMPs could have been more thoroughly pursued for use by the developer. The analysis should not limit the location of the stormwater management facility to a single location. The analysis should be included in the stormwater management report.

28. §158-22.F.(23). – A statement, signed by the landowner, acknowledging the stormwater management system to be a permanent fixture that can be altered or removed only after approval of a revised plan by the Borough, which shall be recorded with the record plan and which shall be applicable to all future landowners should be added to a Record Plan.
29. §158-22.F.(25). – A signature block for the design engineer stating “(Design engineer), on this date (date of signature), has reviewed and hereby certify that the stormwater management site plan meets all design standards and criteria of the current Perkasie Borough Stormwater Management Ordinance” should be added to a plan sheet to be recorded.
30. §158-38.A – The stormwater management site plan for the development site shall contain a BMP Operation and Maintenance Plan (BMP O&M) prepared by the Design Engineer. The operation and maintenance plan shall outline required routine maintenance actions and schedules necessary to insure proper operation of the BMPs, including specifying the party responsible for the inspection and maintenance responsibilities of the BMPs. Inspection, operations and maintenance responsibilities should be provided on the plans for the stormwater facilities and basin. Inspections should be in accordance with §158-43. Also, the following note should be added to the plans “A written inspection report shall be created to document each inspection. The inspection report shall contain the date and time of the inspection, the individual(s) who completed the inspection, the location of the BMP, facility or structure inspected, observations on performance, and recommendations for improving performance, if applicable. Inspection reports shall be submitted to the Borough within 30 days following completion of the inspection.”
31. §158-38.C.(3). – A statement, signed by the facility owner, acknowledging that the stormwater facilities and BMPs are fixtures that can be altered or removed only after approval by the Borough should be added to a plan sheet to be recorded.
32. §158-40.A. – Prior to final approval of the site’s Stormwater Management Site Plan, the Applicant shall sign and record a Stormwater Facilities Maintenance and Monitoring Agreement prepared and approved by the Borough Solicitor covering all stormwater control facilities that are to be privately owned.
33. §158-41 – Stormwater management easements shall be granted by the property owner as necessary to provide for access to the property by the Borough for facility inspections and emergency maintenance. An easement should be provided around the basin with access from a public right-of-way for the Borough. Alternatively, a blanket easement may be granted to the Borough for the inspection and maintenance of the stormwater facilities.
34. §158-48.A. – A note should be added to the plans which states: “No person shall modify, remove, fill, landscape, or alter any existing stormwater management BMP, unless part of an approved maintenance program, and written approval of the Borough has been obtained.”
35. §158-48.B. – A note should be added to the plans which states: “No person shall place any structure, fill, landscaping or vegetation into a stormwater management facility or BMP or within a drainage easement, without the written approval of the Borough.”

E. Traffic Comments

1. Provide truck turning templates demonstrating that refuse collection trucks, emergency vehicles and delivery trucks are able to navigate the site. The templates should include all applicable movements into and out of the site. A review and approval by the Perkasie Fire Chief and Fire Protection Consultant will be required to ensure adequate access is provided for emergency vehicles and that fire protection can be provided.

2. An Applicant who encroaches within the legal right-of-way of a State highway, or proposes a change in the use or intensity of use for an existing driveway, is required to obtain a Highway Occupancy Permit (HOP) from the Pennsylvania Department of Transportation (PennDOT). Constitution Avenue is a state road (S.R. 0152). The Applicant is proposing to utilize the existing driveway for the Perkasie Square Shopping Center which would change the intensity of use for the existing driveway. Therefore, the Applicant should initiate the HOP process simultaneously to the preliminary plan submission in accordance with latest PennDOT procedures. The Applicant should include the Borough Engineer in any and all meetings, including the Scoping Meeting and/or correspondence or discussions regarding the permitting process. Any documentation submitted as part of the HOP process should be simultaneously submitted to the Borough for review purposes. Additionally, in order to facilitate our review of the Highway Occupancy Plan Submission, the Applicant should include Gilmore & Associates as an "Engineering Firm" on the permit application within the PennDOT ePermitting System.
3. The plans should be revised to include a stop bar and stop sign at the intersection of the proposed driveway with the Shopping Center driveway.
4. A note should be added to the Record Plan which states that any public or private road that is damaged during the construction phase of the project as a direct result of the construction work shall be corrected in a manner approved by the Borough.
5. We recommend that the 'Heavy Duty Asphalt Detail' be revised to include: 1) 6" compacted 2A stone subbase, 2) 5" superpave WMA base course (25MM), 3) 2.5" superpave WMA binder course (19MM), and 4) 1.5" superpave WMA wearing course (9.5MM).

F. General Comments

1. Since a small portion of the existing parcel is within Sellersville Borough, the Applicant should provide a copy of all submission packages to Sellersville Borough for review. A copy of the Review Letter should be provided to Perkasie Borough.
2. Sellersville Borough has requested that the sidewalk along the property frontage be extended along the southeastern side of E. Park Avenue (within Sellersville) and connect to the existing sidewalk at 136 E. Park Avenue to provide a pedestrian connection between the Boroughs.
3. The Perkasie Square Shopping Center currently uses a separate driveway along the northern property line for truck deliveries to separate customer traffic from large truck traffic. We recommend this access driveway be used for traffic to and from site. This will help protect pedestrians in the shopping center and prevent traffic issues at the signal on Constitution Avenue.
4. A legal description for each lot, all easements, and road ROWs to be dedicated to the Borough and PennDOT should be provided to the Borough for review and approval prior to final plan recording.
5. The Applicant is responsible for any other required approvals, permits, etc. (i.e., BCCD, PADEP, Perkasie Regional Authority, Perkasie Fire Chief, Perkasie Electric Department, UGI, PennDOT, etc.). Copies of these permits and approvals should be submitted to the Borough and our Office.

We recommend the plans be revised to address the above comments to the satisfaction of the Borough. Considering the extent of the required plan revisions identified in this letter, we may have additional comments relating to compliance with the Borough Ordinances upon resubmission by the Applicant. In order to help expedite the review process of the resubmission of the plans, the Applicant should submit a response letter which addresses each of the above comments. Changes that have been made to the application that are unrelated to the review comments should also be identified in the response letter. If you have any questions regarding the above, please contact this office.

Sincerely,



Douglas C. Rossino, P.E.
Gilmore & Associates, Inc.
Borough Engineers

DCR/tw

cc: Andrea L. Coaxum, Borough Manager
Linda J. Reid, Assistant Borough Manager
Megan McShane, Executive Assistant
Jeffrey P. Garton, Esq., Borough Solicitor
Judith Stern Goldstein, R.L.A., ASLA, Gilmore & Associates, Inc.
Jeffrey Tulone, Public Works Director
Harold Stone, Electric Superintendent
Nicholas Fretz, Manager, Perkasie Regional Authority
Perkasie Fire Company Number 1 (Station 26)
Brenda L. Detweiler, Sellersville Borough Manager
Vicki L. Kushto, Clemons Richter & Reiss
Pacaz Realty, LLC, Owner
Michael V. Tulio, Perkasie Place, LLC, Equitable Owner/Applicant (mtulio@csacinc.net)
David M. Shafkowitz, Esq., Shafkowitz Law Group, P.C. (dms@shafkowitzlaw.com)
Larry Grybosky, P.E., C2C Design Group (LGrybosky@c2cdg.com)
Dan Bartolo, R.L.A., C2C Design Group (dbartolo@c2cdg.com)
Erik Garton, P.E., President, Gilmore & Associates, Inc.



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

April 22, 2026

REVISED AND REISSUED on April 23, 2026

File No. 24-00991.01

Cassandra Grillo
Zoning Officer and Code Enforcement Administrator
Borough of Perkasio
620 West Chestnut Street
P.O. Box 96
Perkasie, PA 18944

Reference: 503-545 Constitution Avenue- Preliminary Subdivision/Land Development Plan
503-545 Constitution Avenue – Planning Review #1
Perkasie Place LLC
Tax Map Parcel Number: 33-009-001

Dear Ms. Grillo:

As requested, Gilmore & Associates Inc. has reviewed the Preliminary Subdivision Land Development Application for Perkasio Place Recycling Center prepared by C2C Design Group, dated March 27, 2026.

Background Information Summary

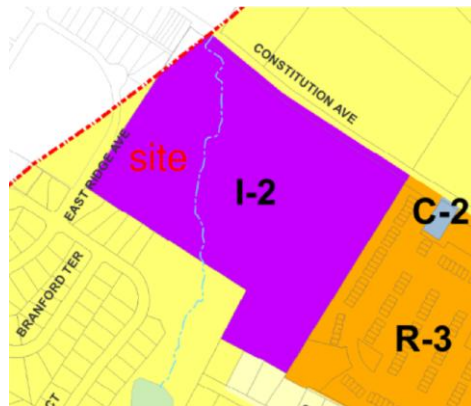
Application Title: Perkasio Place
Plan Stage: Preliminary Land Development Application
Applicant: Perkasio Place, LLC
Plan date: March 27, 2026
Location: 503-545 Constitution Avenue
Total Site Area: 22.184 Ac

The site consisting of TMP Nos. 33009-001 is approximately 22.184 Acres. The plan proposes to subdivide the site into two lots with Lot 1 consisting of 14.25 Acres (Landis Supermarket) and Lot 2 consisting of 7.93 Acres. The plans propose an 18,279 SF Recycling Facility /Contractor Building with a second-floor office (3,800 SF) on Lot 2. In addition, twenty-five (25) outdoor storage units proposed on Lot 2 along with truck parking, roll off dumpster storage and an employee parking lot. The site has frontage along Constitution Avenue. One access drive is proposed through the existing shopping center entrance with emergency access to Wickford Drive.

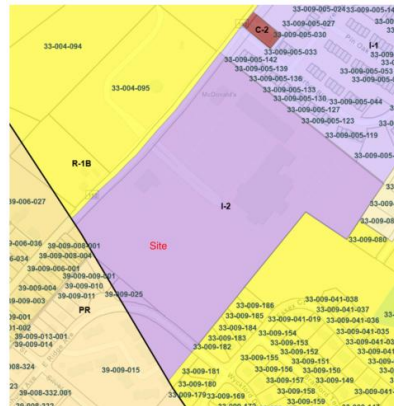
We offer the following comments for your consideration:

1. Existing and Surrounding Land Use

- a. The site is currently a Shopping Center with vacant land southwest of the stream. It is surrounded by residential use to the east and south, institutional use (municipal park) to the north across Constitution Avenue, and residential use to the west in Sellersville Borough. The borough line traverses the northwest property corner of the site.



Zoning Map



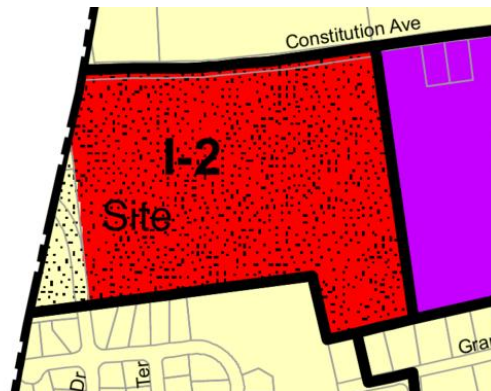
Bucks County Parcel viewer

2. Consistency with the Comprehensive Plan

- a. As per the 2014 Perkasio Borough Comprehensive Plan Future Land Use Map, the site is designated Commercial Center and noted as a Potential Change of Zoning. The Commercial Center is intended to provide areas for office, retail, personal services and related uses. The proposed use (recycling facility) is not generally consistent with the Comprehensive Plan.



Existing Land use map Comp Plan 2014



Future Land Use Map Comp Plan 2014

- b. The Economic Development section of the 2014 Perkasio Borough Comprehensive Plan includes a retail market analysis which encourages this business center to provide for a wide variety of retail and personal service business uses, serving residents of adjacent neighborhoods and beyond complementing, not competing with businesses in the Town Center. This plan had recommended that the I-2 light industrial zoning district be changed to the C-1 business professional zoning district. (p. 172) The proposed use (recycling facility) is not generally consistent with the vision of the Economic Development Plan.
- c. As per the Land Use Vision Map of the *Bucks 2040 Vision Plan* (pg. 62) the site is categorized as "Suburban Center" with unique history, character, and sense of place and serve a regional center providing goods, services, and jobs for people throughout county. Development and redevelopment in Suburban centers should continue to include compact and efficient development, a mixture of uses, a variety of transportation options, walkable neighborhoods, distinctive communities with a strong sense of place and range of housing types. The proposed land use is not generally consistent with the Bucks 2040 Vision Plan.

3. Use Regulations and Area and Dimensional Requirements

- a. As per ZO §186-20. I. (1)(a), G(7) Recycling facility and H(1) accessory use (outdoor storage) are permitted by right in the I-2 Light Industrial District.
- b. ZO §186-18.G(7)(b)[1] requires a front yard of 100 feet for a G(7) use, however the plans show a building setback line of 50 feet for Lot #2 along the frontage of Constitution Avenue.
 1. ZO §186-5.C defines Yard, Front as "A yard between a structure and a street line and extending the entire length of the street line. In the case of a corner lot, the yards extending along all streets are "front yards." In the case of a lot other than a corner lot that fronts on more than one street, the yards extending along all streets are front yards."
 2. The plans should be revised to show the minimum required front yard for Lot #2 along the frontage of Constitution Avenue, or a variance would be required.
- c. ZO §186-18.G(7)(c) of the G7 Recycling facility use regulations requires that the provisions set forth in §186-18.G.9(c) through (u) for resource recovery facility shall also be met. Plans shall be revised to include notes and/or details to demonstrate compliance with the requirements of the ordinance.
 1. ZO §186.18.G(9)(c) requires that truck parking areas shall be a minimum of 50 feet from any property line. The plans should be revised to include notes specifying that trucks shall not be stored or parked within 50 feet of any property line to demonstrate compliance with the ordinance requirements, or a variance would be required.
 2. ZO §186.G(9)(d) requires that the facility shall at all times be in compliance with the statutes of the Commonwealth of Pennsylvania and the rules and regulations of the Department of Environmental Protection (PaDEP) and the provisions of this subsection. In the event that any of the provisions of this subsection are less restrictive than any present or future rules or regulations of PaDEP, the more restrictive PaDEP regulations shall control. The plans should be revised to include notes to demonstrate compliance with the ordinance requirements, or a variance would be required.
 3. ZO §186.G(9)(e) requires that access to the site shall be limited to those posted times when an attendant is on duty. In order to protect against indiscriminate and unauthorized dumping, every resource recovery facility shall be protected by locked barricades, fences, gates or other positive means designed to deny access to the area at unauthorized times or locations. Such barricade shall be at least six feet high and shall be kept in good repair and neatly painted in a uniform color. The plans show a proposed fence surrounding the facility, but do not include information or details regarding locked gates, or area for an attendant on duty, and do not address areas of conflict with the proposed fencing, such as where it crosses an existing pedestrian trail and would impede use of the existing trail, or where it crosses the existing waterway. The plans should be revised to include information and notes/details to show the location(s) of the proposed locked barricades, fences, gates or other means to control access and to demonstrate compliance with the ordinance, or a variance would be required.
 4. ZO §186.G(9)(f) requires that unloading of municipal solid waste shall be continuously supervised by a facility operator. The plans should be revised to include notes to demonstrate compliance with the ordinance, or a variance would be required.

5. ZO §186.G(9)(g) requires that hazardous waste as included on the list of hazardous waste as maintained by the Department of Environmental Protection shall not be disposed of, handled or processed in a resource recovery facility. The plans should be revised to include notes to demonstrate compliance with the ordinance, or a variance would be required.
6. ZO §186.G(9)(h) requires that litter control shall be exercised to confine blowing litter to the work area, and a working plan for cleanup of litter shall be submitted to the municipality. To control blowing paper, there shall be erected a fence having a minimum height of six feet, with openings not more than three inches by three inches along all boundaries. The entire area shall be kept clean and orderly. The plans should be revised to include notes to demonstrate compliance with the ordinance, or a variance would be required.
7. ZO §186.G(9)(i) requires that all parts of the process, unloading, handling and storage of municipal solid waste, shall occur within a building. However, certain separated recyclable materials like glass, aluminum and other metals may be stored outdoors. The plans should be revised to include notes to demonstrate compliance with the ordinance, or a variance would be required.
8. ZO §186.G(9)(j) requires that the storage of paper shall be within an enclosed structure. The plans should be revised to include a note precluding the storage of paper in any outdoor storage area and specifying that any storage of paper shall be within an enclosed structure to demonstrate compliance with the ordinance, or a variance would be required.
9. ZO §186.G(9)(l) requires that no material shall be placed or deposited to a height greater than the height of the fence or wall herein prescribed. The plans should be revised to include notes to demonstrate compliance with the ordinance, or a variance would be required.
10. ZO §186.G(9)(m) requires that no municipal solid waste shall be processed or stored at a recycling facility. For all other types of resource recovery facilities, municipal solid waste shall not be stored on the site for more than 72 hours. The plans should be revised to include notes to demonstrate compliance with the ordinance, or a variance would be required.
11. ZO §186-18.G(9)(q) requires that a dense evergreen tree buffer shall be provided on the outside perimeter of the fenced area. Evergreens shall be four to five feet in height and planted on ten-foot staggered centers. In addition, the buffer requirements of §186-54 shall be met. Plans shall be revised to show the buffer outside the perimeter of the fence area to demonstrate compliance with the ordinance, or a variance would be required.
12. ZO §186.G(9)(s) requires that the performance standards of Article VII of this chapter shall be met regarding noise, smoke, emissions, heat and vibrations. The plans should be revised to include sufficient notes and/or details to demonstrate compliance with the ordinance, or a variance would be required.
13. ZO §186.G(9)(t) requires as traffic impact study and water impact study, neither of which have been submitted. The required studies shall be submitted for review as required by the ordinance, or a variance would be required.

14. ZO §186.G(9)(u) requires that a zoning permit shall be renewed on an annual basis after inspection for compliance with the above provisions. The plans should be revised to include a note stating that the zoning permit is required to be renewed on an annual basis and will only be issued after a review/inspection has been conducted for compliance with ZO Sections 186-G(9)(c) through (u) to confirm continued compliance with these requirements.
- d. ZO §186-47 Noise requires that the sound level of any operation shall not exceed the decibel levels in the designated octave bands and center frequency as stated below. The sound pressure level shall be measured with a sound level meter and an octave band analyzer that conforms to specifications published by the American National Standards Institute, Inc. [American National Standard Specification for Sound Level Meters, S1. 4-1971, American National Standards Institute, Inc., New York and the American Standard Specification for Octave, Half-Octave and Third-Octave Band Filter Sets, S1. 11-1966 (R 1971), American Standards Association, Inc., New York, New York], shall be used. Such levels shall be measured at the property boundary of the sound source.
 1. The plans should be revised to include sufficient information to demonstrate compliance with ZO §186-47.B regarding maximum permissible sound-pressure levels for smooth and continuous noise, or a variance would be required.
 2. The plans should be revised to include sufficient information to demonstrate compliance with ZO §186-47.C regarding sound that is not smooth or continuous or is radiated during sleeping hours (between the hours of 10:00pm and 7:00am), or a variance would be required.

4. Pedestrian Connections

- a. A proposed fence is shown crossing the existing pedestrian trail from the shopping center to the adjacent residential area to the southeast of the proposed facility and will essentially block pedestrian access to the existing trail. The plans should be revised to relocate the proposed fence to eliminate this conflict and to not impede pedestrian access from the neighborhood to the shopping center.

5. General Planning Comments

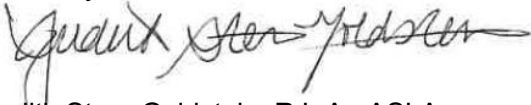
- a. The proximity of the proposed G7 Recycling facility use to adjacent residential dwelling units and the adjacent shopping center is a concern. The intensity of the proposed use, intensity of anticipated traffic, noise, and dust, are all issues that need to be addressed to ensure that the surrounding residents and users of the adjacent shopping center are not adversely impacted.
- b. The plans propose tractor trailer and dumpster trucks entering/exiting the site through one access point from Constitution Avenue through the existing entrance driveway for the Landis Shopping Center.
 1. The traffic patterns for the proposed industrial use are a concern and pose potential conflicts with vehicular and pedestrian access to the existing shopping center and may also impede truck traffic entering and existing the existing loading areas of the shopping center.
 2. It is recommended that truck traffic for the industrial use be separated from both vehicular and pedestrian traffic associated with the existing shopping center to alleviate these potential conflicts.

- c. The plans propose vehicular circulation to a dead-end parking lot on Lot 2. We recommend the plans be revised to provide better vehicular circulation and eliminate the dead-end parking condition.
- d. The plans do not show any ADA accessible parking spaces or an accessible route from the proposed parking area to the proposed building on lot 2. We recommend the plans be revised to comply with all applicable ADA requirements.
- e. The applicant should demonstrate that the proposed facility and anticipated operation of the facility are in compliance with all emergency management protocol for such a facility to ensure the safety of the surrounding residents and users of the adjacent shopping center.

In conjunction with any resubmission, the applicant must provide a response letter using the same numbering system and explaining how each comment has been satisfactorily addressed.

Please contact me if you have any questions or require additional information.

Sincerely,



Judith Stern Goldstein, R.L.A., ASLA
Senior Project Manager
Gilmore & Associates, Inc.

JSG/sl

cc: Andrea L. Coaxum, Borough Manager
Megan McShane, Executive Secretary
Jeffrey P. Garton, Esq., Borough Solicitor
Brendan M. Callahan, Begley Carlin
Douglas Rossino, P.E., Borough Engineer
Erik Garton, P.E., President - Municipal Division, Gilmore & Associates, Inc.



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

June 9, 2026

File No. 24-00991

Cassandra L. Grillo, CZO, BCO
Zoning Officer and Code Enforcement Administrator
Borough of Perkasie
620 West Chestnut Street
P.O. Box 96
Perkasie, PA 18944

Reference: Traffic Impact Assessment – Review #1
Perkasie Place Recycling Center
505 Constitution Avenue
TMP #33-009-001
Perkasie Borough, Bucks County, PA

Dear Cassandra:

Gilmore & Associates, Inc. (G&A) has reviewed the Traffic Impact Assessment for the above-referenced project. We offer the following comments for consideration by the Borough:

I. Submission

- A. Traffic Impact Assessment (TIA) for Perkasie Place Recycling Center, as prepared by Horner & Canter Associates, dated May 8, 2026.

II. General Information

The subject site is located at 505 Constitution Avenue (S.R. 0152) within the same property as the Perkasie Square Shopping Center in Perkasie and Sellersville Boroughs, Bucks County, PA. A small portion of the site at the western corner is in Sellersville Borough. However, the property was assessed 100% in Perkasie. The site consists of tax map parcel 33-009-001. The Applicant and Owner of Record for the site is PACAZ Realty, LLC.

The site consists of the existing Perkasie Square Shopping Center, including two (2) multi-store buildings, McDonald's, Mavis Tire Center, and associated parking with two (2) access driveways onto Constitution Avenue (S.R. 0152) occupying approximately 14.24 acres of the total 22.183-acre site. The remaining area (7.943 acres) consists of vacant land with woodlands, individual trees, open space, and 'Waters of the United States', which consists of an unnamed tributary to the East Branch Perkiomen Creek.

The Applicant proposes a minor two (2) lot subdivision to create a 14.259-acre parcel (Lot 1) containing the existing Perkasie Square Shopping Center and a second 7.939-acre parcel (Lot 2) for a proposed 18,279 square foot recycling facility/contractor building with a 3,800 square foot 2nd floor office and associated outdoor storage areas, roll off dumpster storage area, passenger vehicle parking, truck scale, truck turnaround areas, and areas for loading and unloading of materials. Lot 1 will continue to have access to Constitution Avenue, and Lot 2 will have access to Constitution Avenue through the shopping center, as well as an emergency access driveway onto Wyckford Drive. The site is zoned Light Industrial (I-2) Zoning District and the existing use for Lot 1 is "Planned Commercial Development" (E15), which is a use permitted by right in the I-2 Zoning District, while the intended use for Lot 2 is "Recycling Facility" (G7) with a 2nd floor "Contractor Office" (G1), which are uses permitted by right in the I-2 Zoning District. Lot 2 will also contain outdoor storage area, which is a permitted "Accessory Use".

65 East Butler Avenue | Suite 100 | New Britain, PA 18901 | Phone: 215-345-4330 | Fax: 215-345-8606

According to FEMA map 42017C0256J, dated March 16, 2015, the site is located in three (3) Zones: Zone "X", which is outside the 0.2% annual chance floodplain, Zone "X", which is an area of 1% annual chance flood with average depths of less than 1 foot, and Zone "AE" – Flood-Fringe Area (FF), which has determined base flood elevations. According to the U.S. Fish and Wildlife Service's National Wetlands Inventory, the site contains 'Waters of the United States', which consists of a tributary to the East Branch Perkiomen Creek fed by a freshwater pond. The site is served by public water and sanitary sewer provided by the Perkasie Regional Authority (PRA). The plans illustrate an underground stormwater management system on Lot 2 with no details provided.

III. Reference Plans

- A. Final Site Plan, as prepared by Korab, McConnell & Dougherty Associates, dated May 31, 1988 and last revised February 4, 1993.
- B. ALTA/NSPS Land Title Survey for Lands N/F PACAZ Realty, LLC, Perkasie Square Shopping Center, as prepared by Nave Newell, Inc., consisting of one (1) sheet, dated August 20, 2024.

IV. Review Comments

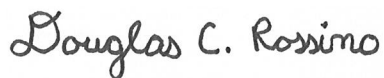
A. §164-41.2 - Traffic Impact Assessment Comments

- 1. Provide documentation from PennDOT on the continued acceptability of the existing driveway permit given the proposed additional development.
- 2. Confirm the appropriateness of the ITE Trip Generation Land Use Code 180 (Specialty Trade Contractor) for the recycling center. Provide a description of the proposed operation, including hours of operation, target market, truck traffic, etc.
- 3. Provide additional justification for the use of AM Peak trip generation for the Saturday Peak trip generation for the Recycling Center due to the absence of data in the ITE Trip Generation Manual. It appears that weekend use would be more significant than weekday use.
- 4. Utilize the most conservative background growth factor from the PennDOT background growth rate (as utilized in the TIA) and 'the projected rates of population and employment growth as determined by the Bucks County Planning Commission, the average annual traffic growth of the area's roadways as determined from the Delaware Valley Regional Planning Commission's "Highway Network Coverage Traffic Counts" or the Bucks County Planning Commission's traffic count database', as required by §164-41.2.E.(5)(a).
- 5. The distribution of site trips onto Constitution Avenue does not appear to be consistent with the existing traffic volumes – more traffic appears to enter and exit the site from the north than the south while the distribution is the inverse. Verify and revise the report accordingly with justification.
- 6. Confirm that the signal operational parameters (cycle length, phasing, phase times) utilized in the capacity analyses are consistent with the traffic signal permit, i.e. the Perkasie Square intersection analyses appear to include additional phase time for the Constitution Avenue left turn movements and the Walnut Street intersection analyses do not appear to have the phasing consistent with the signal permit.
- 7. Revise the values in the delay and queue length tables to match the results of the analyses.
- 8. Any existing individual movements with a level of service below C shall be noted as deficient within the study (per §164-41.2.E.(3)(c)). Recommendations for the elimination of the deficiencies shall be listed.
- 9. Include the site plan for the proposed development in the TIA. The plan should include internal roadway connections to the existing shopping center with site signage and pavement markings.

10. Based on the provided analyses, the following Build queues extend beyond the available storage and exceed the No Build queues. Mitigation of these queues should be evaluated. The identified queues within the Perkasie Square Shopping Center would block the first internal intersection and should be addressed. At a minimum, the traffic signal timings should be optimized for the Build conditions.
 - a. Constitution Avenue and Perkasie Square Shopping Center:
 - i. Westbound left
 - ii. Westbound right
 - b. Constitution Avenue and Walnut Street:
 - i. Northbound left

We recommend that the Traffic Impact Assessment be revised to address the above comments to the satisfaction of the Borough. In order to help expedite the review process of the resubmission, the Applicant should submit a response letter which addresses each of the above comments. Changes that have been made to the assessment that are unrelated to the review comments should also be identified in the response letter. If you have any questions regarding the above, please contact this office.

Sincerely,



Douglas C. Rossino, P.E.
Gilmore & Associates, Inc.
Borough Engineer



Leslie S. Bogdnoff, P.E.
Gilmore & Associates, Inc.
Borough Traffic Engineer

DCR/LSB/beh

cc: Linda J. Reid, Acting Borough Manager
Megan McShane, Executive Assistant
Jeffrey P. Garton, Esq., Borough Solicitor
Judith Stern Goldstein, R.L.A., ASLA, Gilmore & Associates, Inc.
Jeffrey Tulone, Public Works Director
Harold Stone, Electric Superintendent
Nicholas Fretz, Manager, Perkasie Regional Authority
Perkasie Fire Company Number 1 (Station 26)
Brenda L. Detweiler, Sellersville Borough Manager
Vicki L. Kushto, Clemons Richter & Reiss
Pacaz Realty, LLC, Owner
Michael V. Tulio, Perkasie Place, LLC, Equitable Owner/Applicant (mtulio@csacinc.net)
David M. Shafkowitz, Esq., Shafkowitz Law Group, P.C. (dms@shafkowitzlaw.com)
Larry Grybosky, P.E., C2C Design Group (LGrybosky@c2cdg.com)
Dan Bartolo, R.L.A., C2C Design Group (dbartolo@c2cdg.com)
David H. Horner, P.E., PTOE, Horner & Canter Associates (DHorner@horner-canter.com)
Erik Garton, P.E., President, Gilmore & Associates, Inc.



The Almshouse Neshaminy Manor Center 1260 Almshouse Road
Doylestown, Pennsylvania 18901 215.345.3400 FAX 215.345.3886
E-mail: planningcommission@buckscounty.org

PLANNING COMMISSION:
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James J. Keenan
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David R. Nyman
Edward J. Tokmajian
Tom Tosti

Michael A. Roedig
Executive Director

MEMORANDUM

To: Perkasio Borough Council
Perkasie Borough Planning Commission

From: Staff of the Bucks County Planning Commission

Date: May 22, 2026

Subject: BCPC #11294-C
Preliminary Plan of Land Development for Perkasio Place Recycling Center
TMP #33-9-1
Applicant: Perkasio Place, LLC
Owner: PACAZ Realty, LLC
Plan Dated: March 27, 2026
Date Received: April 21, 2026

This proposal has been reviewed by the Bucks County Planning Commission professional staff, which prepared the following comments in accordance with the Pennsylvania Municipalities Planning Code (Section 502).

GENERAL INFORMATION

Proposal: Subdivide a 22.198-acre site into two lots of 14.259 acres (Lot 1) and 7.939 acres (Lot 2). Lot 1 contains an existing shopping center that is to remain. Construct an 18,279-square-foot recycling facility with an additional 3,800 square feet of office space on Lot 2. Public water and sewerage serve the site.

Location: Along the southeastern side of Constitution Avenue, about 700 feet north of Silver Street.

Zoning: The I-2 Light Industrial District permits Use G7 Recycling facility by right on a minimum lot size of 1.75 acres and a maximum lot coverage of 25 percent.

Present Use: Commercial

COMMENTS

We reviewed the sketch plan submission for this site in February of 2026 (BCPC #11294-C, dated February 20, 2026). Although several of the comments from our previous review have been addressed, we want to reiterate and add comments that should be considered prior to approval:

1. **Site access**—The plan shows a driveway connecting the site to the Perkasio Square shopping center.



A recycling facility is an industrial type of use involving frequent truck movements. These traffic patterns differ substantially from those of retail areas. Direct connection to the shopping center is not necessary, as customers using the recycling facility will most likely not combine that trip with a visit to the shopping center.

Routing truck traffic through the shopping center parking areas would create conflicts with pedestrians, parked vehicles, and retail circulation patterns. We recommend that a driveway onto Constitution Avenue (PA 152) function as the primary access point for the facility.

2. **Outside storage screening**—Section 186-18.G.(9)(k) of the zoning ordinance requires that any materials stored outdoors be properly screened so as not to be visible from any adjacent streets or property. Section 186-18.G.(9)(q) requires that a dense evergreen buffer shall be provided on the outside perimeter of the fenced area. The plan shows evergreen plantings but does not indicate the species and size. We recommend that the applicant provide these details as required by Section 164-68.D.(16) of the subdivision and land development ordinance (SALDO).
3. **Transportation impact study**—Section 186-18.G.(9)(t) of the zoning ordinance and Sections 164-41.2.A. and C. of the SALDO require a transportation impact study for all major subdivisions and land developments to enable the borough to assess the impact of a proposed development on the local transportation system. The study should determine if the proposed development will have impacts on the signalized intersection on Constitution Avenue and determine if signal retiming is necessary. Subsequent plan submittals should include the study.
4. **Sewage facilities**—The applicant must submit a Sewage Facilities Planning Module Application Mailer to the Pennsylvania Department of Environmental Protection (PaDEP) to determine if an Act 537 Planning Module must be submitted for this proposed land development.

This review will be included in the Bucks County Planning Commission board materials for the June 3, 2026, meeting. It is not necessary for you to attend this meeting, but you are welcome to do so and to offer comments on the proposal to the BCPC board and staff.

In order that we may be more aware of your concerns, please send us a copy of all municipal decisions sent to this applicant.

MMW:emh
26-0081

cc: Michael Tulio, Perkasio Place, LLC (via email)
Larry Gryboski, PE, C2C Design Group (via email)
David M. Shafkowitz, Esq., Shafkowitz Law Group, PC (via email)
Doug Rossino, PE, Gilmore & Associates, Borough Engineer (via email)
Andrea Coaxum, Borough Manager (via email)
Cassandra Grillo, Borough Zoning Officer (via email)
Brenda L. Detweiler, Sellersville Borough Manager (via email)

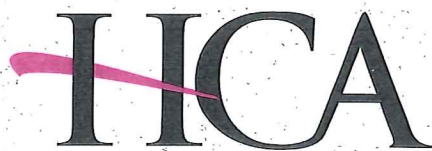
TRAFFIC IMPACT ASSESSMENT

PERKASIE PLACE RECYCLING CENTER

Perkasie/Sellersville Boroughs, Bucks County

Pennsylvania

May 8, 2026



Horner & Canter Associates A PROFESSIONAL CORPORATION

TRANSPORTATION AND TRAFFIC ENGINEERING

TRAFFIC IMPACT ASSESSMENT

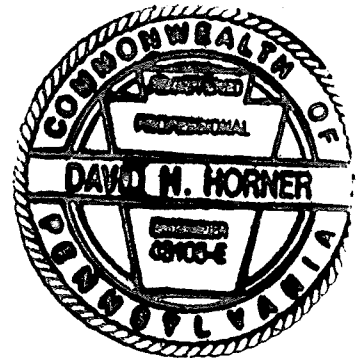
PERKASIE PLACE RECYCLING CENTER

Constitution Avenue (SR 0152)

Perkasie/Sellersville Boroughs
Bucks County
Pennsylvania

Prepared by:

HORNER & CANTER ASSOCIATES
A Professional Corporation
Transportation and Traffic Engineering
4950 York Road, Suite 2G
P.O. Box 301
Holicong, Pennsylvania 18928



May 8, 2026

A handwritten signature in black ink, appearing to read "David H. Horner", written over a horizontal line.

David H. Horner, P.E., PTOE
Professional Engineer
PA Lic. No. PE-043105-E

File No. 25-038

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APPENDICES

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- APPENDIX B - Traffic Counts
- APPENDIX C - Level of Service Delay Thresholds
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INTRODUCTION

Horner & Canter Associates has prepared this Traffic Impact Assessment for the proposed Perkasio Place recycling center located on the east side of Constitution Avenue (SR 0152) in Perkasio and Sellersville Boroughs, Bucks County, Pennsylvania, (Figure 1). The proposed development will consist of a 22,079 square feet recycling facility/contractor building with accessory office space with access provided via the existing Perkasio Square shopping center, which accesses Constitution Avenue at a signalized intersection.

For the purpose of this Traffic Impact Assessment, the completion and occupancy date of the proposed development is assumed to be 2028.

Scope of Study

The purpose of this Traffic Impact Assessment is to determine the traffic impact the proposed development will have with respect to the conditions on the adjacent roadways and intersections. The study scope, which was confirmed as appropriate by the Borough's traffic consultant, Gilmore & Associates, Inc., includes the following:

- A site inspection and inventory of existing roadway features such as geometric layout, lane configurations, traffic control devices, and other pertinent physical characteristics.
- Conduct of Manual Turning Movement (MTM) counts for the weekday AM (7:00 AM - 9:00 AM), weekday PM (4:00 PM - 6:00 PM), and Saturday midday (11:00 AM – 1:00 PM) peak periods at the following intersections which constitute the study area:
 - Constitution Avenue (SR 0152)/Perkasio Square Access/Lenape Park Access
 - Constitution Avenue (SR 0152)/Walnut Street (SR 0152)
- Projection of development-generated traffic volumes and distribution of this traffic to the study area roadway network.
- Establishment of future traffic volumes for the study horizon year (2028) including background traffic growth projections and the site-generated traffic.

- Analysis of existing, future No-Build (without development) and future Build (with development) traffic conditions at the study area intersections.
- Formulation of conclusions with regard to the traffic impact of the proposed development on traffic conditions in the study area.

EXISTING CONDITIONS

The study area roadway network was inventoried with regard to the existing physical and operating characteristics as they affect traffic flow. The study area roadway network is described in further detail below.

The site fronts on **Constitution Avenue**, a State roadway carrying the SR 0152 designation in a general north/south direction. In the vicinity of the site, Constitution Avenue provides one through travel lane in each direction with separate left-turn and/or right-turn lanes at various intersections. The posted speed limit on Constitution Avenue is 35 miles per hour.

Walnut Street carries the State roadway SR 0152 designation eastward from its intersection with Constitution Avenue. It is a local roadway west of its intersection with Constitution Avenue. Walnut Street provides one through travel lane in each direction with a posted speed limit of 35 miles per hour east of Constitution Avenue and 25 miles per hour west of Constitution Avenue.

The study area intersections of Constitution Avenue (SR 0152)/Perkasie Square Access/Lenape Park Access and Constitution Avenue (SR 0152)/Walnut Street (SR 0152) are both signalized. A reduced-size copy of the Traffic Signal Permit Plans for both intersections are provided for reference in Appendix A.

Existing Traffic Volumes

Since the peak hour traffic conditions reflect the critical periods for evaluation of operating conditions and traffic impact, existing traffic volumes were acquired at the study area intersections through the conduct of peak hour Manual Turning Movement (MTM) traffic counts. The counts were conducted during the weekday AM (7:00 – 9:00 AM), weekday PM (4:00 – 6:00 PM), and Saturday midday (11:00 AM – 1:00 PM) peak periods in May/June 2025. These count periods were selected to capture both the peak hours of adjacent street traffic and the peak periods of the proposed development. The summarized MTM counts are provided for reference in Appendix B.

The resultant existing peak hour traffic volumes are presented in Figures 2, 3 and 4 for the respective peak periods.

Existing Levels of Service

The operating conditions of the study area intersections were determined through the conduct of a capacity/Level of Service (LOS) analysis using the methodologies contained in the Highway Capacity Manual (HCM 7th Edition). Level of Service (LOS) is a measure of the quality of the traffic flow and generally is expressed as follows:

- Level of Service A - Excellent - Free flow
- B - Very Good - Minor adjustments in traffic flows
- C - Good - Stable flow of traffic
- D - Satisfactory flow - Occasional short periods with minor delays
- E – Approaching Capacity - Regular delays
- F - Forced Flow - Significant delays and queuing

At signalized intersections, overall LOS is based on the average delay to all movements at the intersection. The delay thresholds for various Levels of Service are contained in Appendix C.

The existing LOS findings for the study area intersections are presented in Figure 5. The detailed capacity/LOS analysis worksheets are provided in Appendix D.

SITE TRAFFIC

The determination of the amount of traffic that a proposed development will generate can best be made by comparison with similar sites. The development of the site will consist of a 22,079 square foot building of which 18,279 square feet is recycling facility/contractor space and 3,800 square feet is office space. The Institute of Transportation Engineers (ITE) publication *Trip Generation Manual, 12th Edition* is a compilation of trip generation studies for a variety of land uses and is considered the primary data source for use of trip generation projections. To be conservative in the site trip projections, we projected the recycling center/contractor space and the office space separately. Land Use Code 180 – Specialty Trade Contractor was selected as the most appropriate for the recycling facility/contractor building square footage while Land Use Code 712 – Small Office Building was selected as most appropriate for the office square footage.

Table 1 presents the projected development-generated traffic for the site based on the ITE database. The trip generation worksheets are provided for reference in Appendix E.

Table 1 Site Trips										
		AM Peak Hour			PM Peak Hour			SAT Peak Hour		
	Daily	In	Out	Total	In	Out	Total	In	Out	Total
Recycling Center (18,279 s.f.)										
Passenger Vehicles ⁽¹⁾	146	19	6	25	8	22	30	25	6	31
Trucks ⁽²⁾	34	3	2	5	3	2	5	3	2	5
Office Space (3,800 s.f.)	55	5	1	6	3	5	8	2	2	4
Total	235	27	9	36	14	29	43	30	10	40

⁽¹⁾No ITE data is available for the Saturday peak hour for LUC 180; thus, weekday AM Peak Hour of Generation was used to project the Saturday peak hour volumes.

⁽²⁾The ITE data for LUC 180 does not differentiate by type of vehicle; thus, truck trip estimates were established through data available in ITE LUC 175 – Industrial Recycling Facility.

The development-generated traffic was distributed to the study area roadway network based on existing traffic patterns. The site traffic distribution percentages are summarized below:

Constitution Avenue (SR 0152)	
to/from the south	60%
Walnut Street (SR 0152)	
to/from the east	12%
to/from the west	<u>28%</u>
	100%

The resultant distributed site trips are depicted in Figure 6 for all three peak periods.

FUTURE CONDITIONS

To assess the impact of the development-generated traffic volumes on the study area roadway network, the future traffic volumes in the anticipated build-out year of the site (2028) were determined. To account for regional growth that is expected to occur during the intervening period, a background traffic growth rate was applied to the existing traffic volumes. Based on PennDOT's growth rates for the area, a 0.12 percent per year background growth was applied (total 0.36 percent over three years) to the existing 2025 traffic volumes. It was confirmed with the Perkasio Borough engineer that there are no approved but not yet constructed developments that will impact the study area within the study horizon year.

The 2028 No-Build traffic volumes are presented in Figures 7, 8 and 9 for the respective peak periods. The total Build 2028 traffic volumes, which overlay the site-generated traffic volumes onto the No-Build traffic volumes, are presented in Figures 10, 11 and 12 for the three study peak periods, respectively.

Assessment

An assessment of the future 2028 No-Build and Build operating conditions within the study area was completed. The assessment included a Level of Service (LOS) analysis of the study area intersections in order to determine if the projected traffic volumes can be acceptably accommodated within the study area and whether any roadway or intersection improvements would be required. The future No-Build LOS results are presented in Figure 13. The future Build LOS results are presented in Figure 14. The detailed capacity analysis worksheets for the No-Build and Build conditions analyses are contained in Appendices F and G, respectively.

The Level of Service (LOS) results for each of the study locations are summarized in Table 2 at the end of this section and detailed below.

Constitution Avenue (SR 0152)/Perkasie Square Access/Lenape Park Access – This signalized intersection currently operates at overall LOS B/C with all movements at acceptable LOS D or better during all three peak hours. Under No-Build and Build conditions these acceptable LOS conditions remain.

There are no improvements required at this intersection in conjunction with the proposed development project.

Constitution Avenue (SR 0152)/Walnut Street (SR 0152)– This signalized intersection currently operates at overall LOS B/C with all movements at acceptable LOS D or better during all three peak hours. Under No-Build and Build conditions these acceptable LOS conditions remain.

There are no improvements required at this intersection in conjunction with the proposed development project.

Queues

The 95th percentile queues for the study area intersections were calculated as part of the capacity/LOS analysis. Table 3 at the end of this section provides a summary of the 95th percentile queues for the existing, No-Build, and Build conditions at all locations. It is noted that the site traffic has very little effect on the queue conditions.

Table 2
Intersection Level of Service Summary

		Weekday AM Peak			Weekday PM Peak			Saturday Midday Peak		
Intersections	Movement	Existing	No-Build	Build	Existing	No-Build	Build	Existing	No-Build	Build
Constitution Ave (SR 0152)/Perkasie Square Access/Lenape Park Access	EB LTR	C (24.4)	C (24.4)	C (24.4)	C (33.0)	C (33.0)	C (33.0)	C (24.4)	C (24.4)	C (24.4)
	WB LT	C (25.1)	C (25.1)	C (25.6)	D (35.6)	D (35.6)	D (36.0)	C (25.9)	C (25.9)	C (26.2)
	WB R	C (24.8)	C (24.8)	C (25.0)	D (36.2)	D (36.3)	D (36.5)	C (26.8)	C (26.8)	C (27.0)
	NB L	B (14.2)	B (14.2)	B (14.2)	B (13.2)	B (13.2)	B (13.2)	B (14.2)	B (14.2)	B (14.2)
	NB T	C (20.9)	C (20.9)	C (20.9)	C (20.3)	C (20.3)	C (20.3)	C (21.6)	C (21.6)	C (21.6)
	NB R	B (19.7)	B (19.7)	B (19.8)	B (18.4)	B (18.4)	B (18.7)	C (20.3)	C (20.3)	C (20.4)
	SB L	A (7.2)	A (7.2)	A (7.2)	A (8.1)	A (8.1)	A (8.2)	A (7.8)	A (7.8)	A (7.8)
	SB TR	B (12.7)	B (12.7)	B (12.7)	B (12.0)	B (12.0)	B (12.0)	B (12.6)	B (12.6)	B (12.6)
	Overall	B (16.9)	B (16.9)	B (17.4)	C (21.1)	C (21.1)	C (21.3)	B (18.6)	B (18.6)	B (18.8)
Constitution Ave (SR 0152)/Walnut Street (SR 0152)	EB LTR	B (18.2)	B (18.2)	B (18.3)	B (19.5)	B (19.5)	B (19.7)	B (19.0)	B (19.0)	B (19.2)
	WB L	B (10.8)	B (10.8)	B (10.9)	A (9.0)	A (9.0)	A (9.2)	B (11.8)	B (11.9)	B (11.9)
	WB TR	A (8.4)	A (8.4)	A (8.4)	A (6.8)	A (6.8)	A (6.8)	A (8.6)	A (8.6)	A (8.6)
	NB L	C (24.2)	C (24.2)	C (24.3)	D (36.4)	D (36.5)	D (36.9)	C (25.9)	C (25.9)	C (26.0)
	NB TR	C (23.3)	C (23.3)	C (23.3)	C (31.5)	C (31.5)	C (31.6)	C (24.5)	C (24.5)	C (24.6)
	SB LTR	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)	A (0.0)
	Overall	B (16.5)	B (16.5)	B (16.7)	C (20.1)	C (20.2)	C (20.4)	B (18.2)	B (18.2)	B (18.3)

Table 3
95th Percentile Queue Summary (in feet)

			Weekday AM Peak			Weekday PM Peak			Saturday Midday Peak		
Intersections	Movement	Storage Length	Existing	No-Build	Build	Existing	No-Build	Build	Existing	No-Build	Build
Constitution Ave (SR 0152)/Perkasie Square Access/Lenape Park Access	EB LTR	n/a	13	13	13	25	25	25	16	16	16
	WB LT	105'	38	38	56	119	119	132	69	69	78
	WB R	105'	29	29	36	154	155	165	110	111	117
	NB L	100'	2	2	2	2	2	2	2	2	2
	NB T	n/a	78	78	78	176	177	177	113	114	114
	NB R	150'	25	25	30	64	64	79	54	54	60
	SB L	220'	22	22	23	60	60	66	47	47	49
	SB TR	n/a	82	83	83	90	90	90	75	75	75
Constitution Ave (SR 0152)/Walnut Street (SR 0152)	EB LTR	n/a	222	224	226	258	260	267	254	255	259
	WB L	135'	26	26	27	34	34	35	50	50	50
	WB TR	n/a	64	64	64	110	111	111	78	78	78
	NB L	200'	85	85	94	251	252	258	166	167	171
	NB TR	n/a	38	38	42	112	112	114	92	92	94
	SB LTR	n/a	0	0	0	0	0	0	0	0	0

n/a – storage length not applicable for movements without a designated turn lane

CONCLUSIONS

The conduct of this Traffic Impact Assessment for the proposed Perkasio Place recycling center in Perkasio/Sellersville Boroughs, Bucks County, has led to the following conclusions and recommendations:

1. The proposed residential development will generate an estimated 235 daily trips with 36 trips in the AM peak hour, 43 trips in the PM peak hour, and 40 trips in the Saturday peak hour.
2. Access to the proposed development will be provided via the existing signalized intersection of Perkasio Square shopping center with Constitution Avenue. The intersection will continue to operate at overall acceptable LOS B/C during all three peak periods.
3. The intersection of Constitution Avenue (SR 0152)/Walnut Street (SR 0152) will continue to operate at overall acceptable LOS B/C conditions during all three peak periods.
4. The site-generated traffic can be accommodated within the study area roadway network with no mitigation improvements required at the study area intersections.

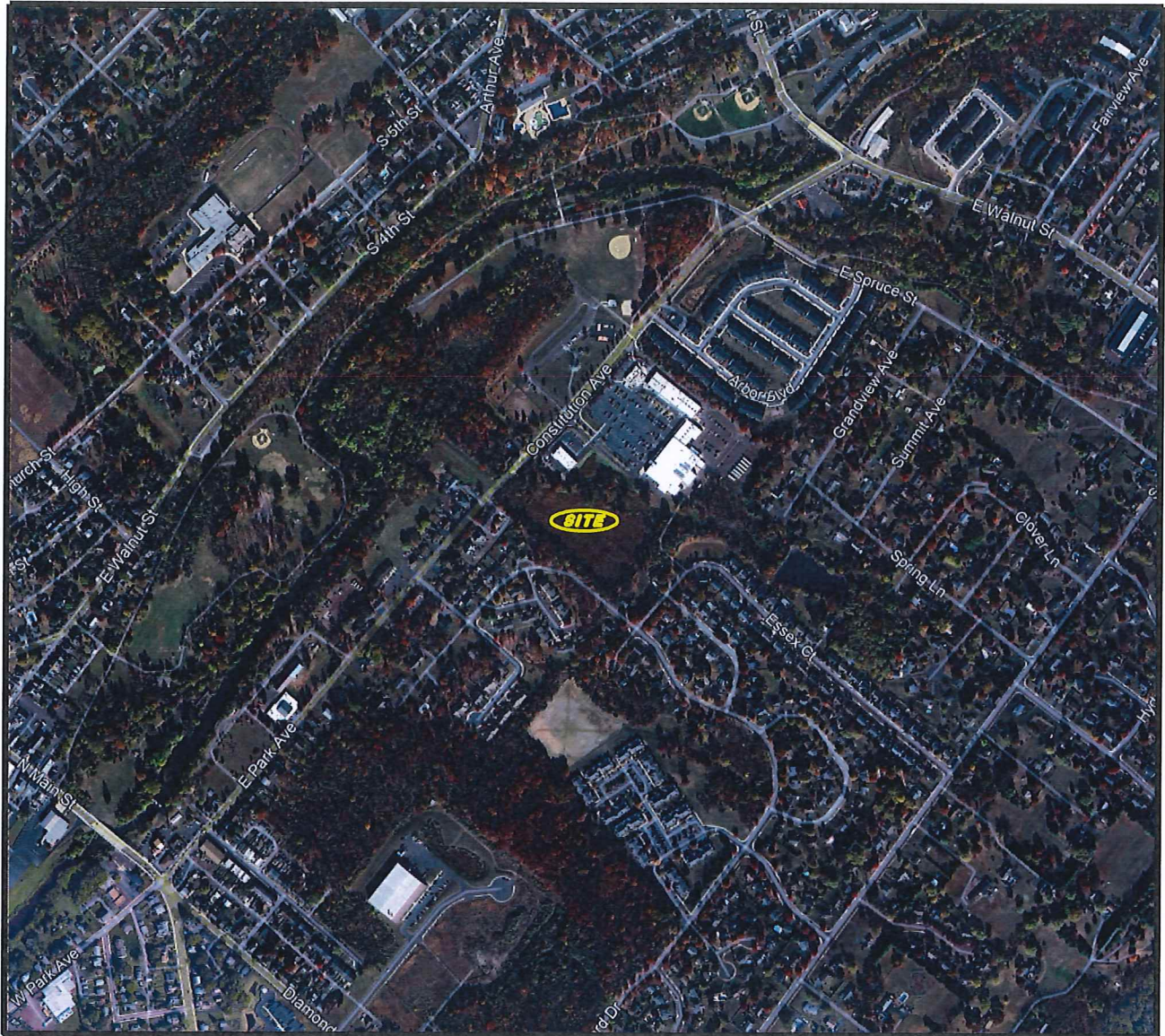
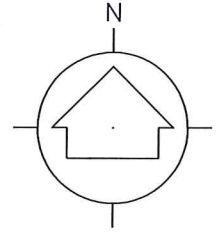


FIGURE 1
SITE LOCATION MAP

PERKASIE PLACE RECYCLING CENTER

PERKASIE AND SELLERSVILLE BOROUGH, BUCKS COUNTY, PA

25-038
MAY 2026

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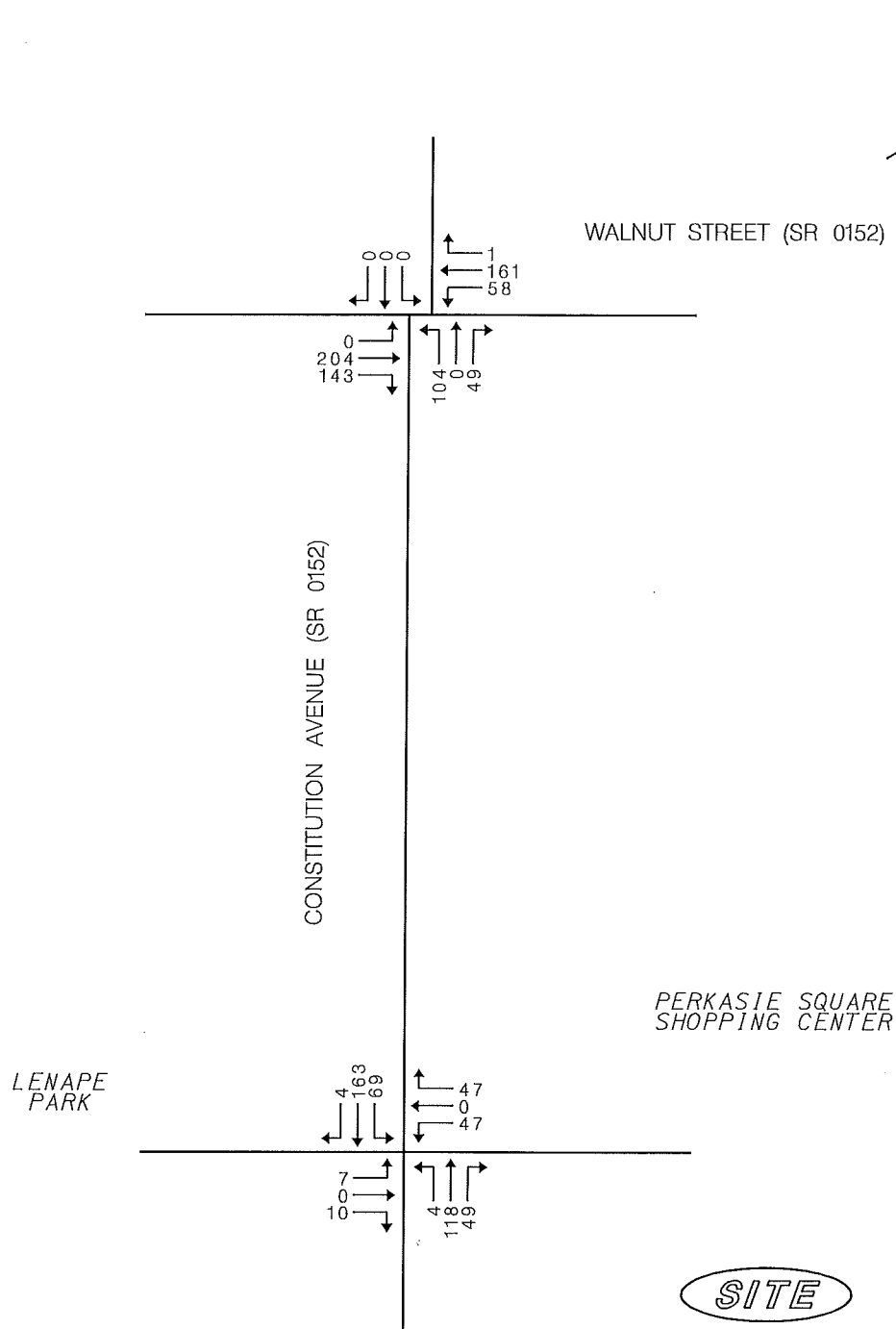


FIGURE 2
EXISTING WEEKDAY AM PEAK HOUR TRAFFIC VOLUMES

**PERKASIE PLACE
RECYCLING CENTER**

PERKASIE AND SELLERSVILLE BOROUGH, BUCKS COUNTY, PA

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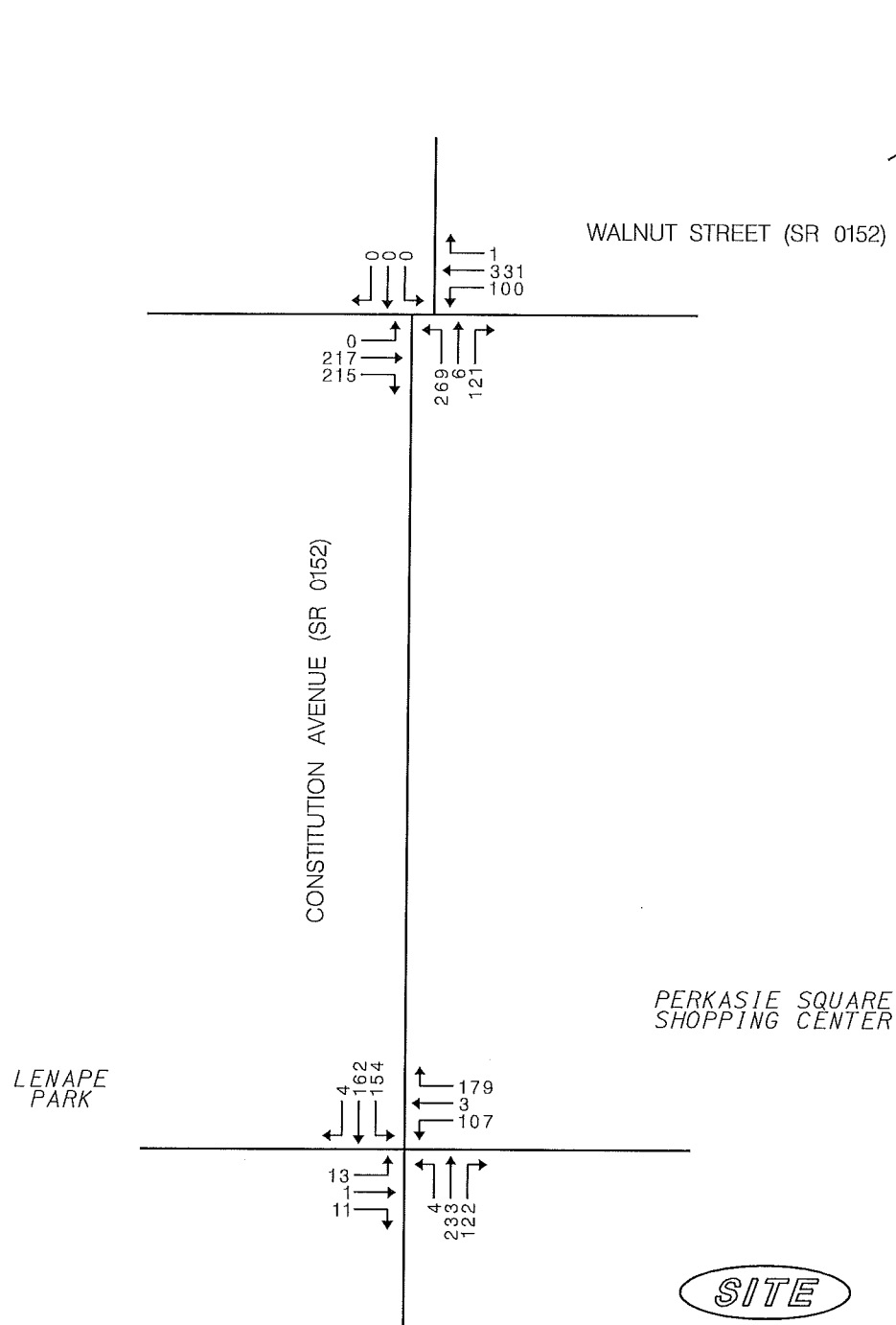


FIGURE 3
EXISTING WEEKDAY PM PEAK HOUR TRAFFIC VOLUMES

**PERKASIE PLACE
RECYCLING CENTER**

PERKASIE AND SELLERSVILLE BOROUGHES, BUCKS COUNTY, PA

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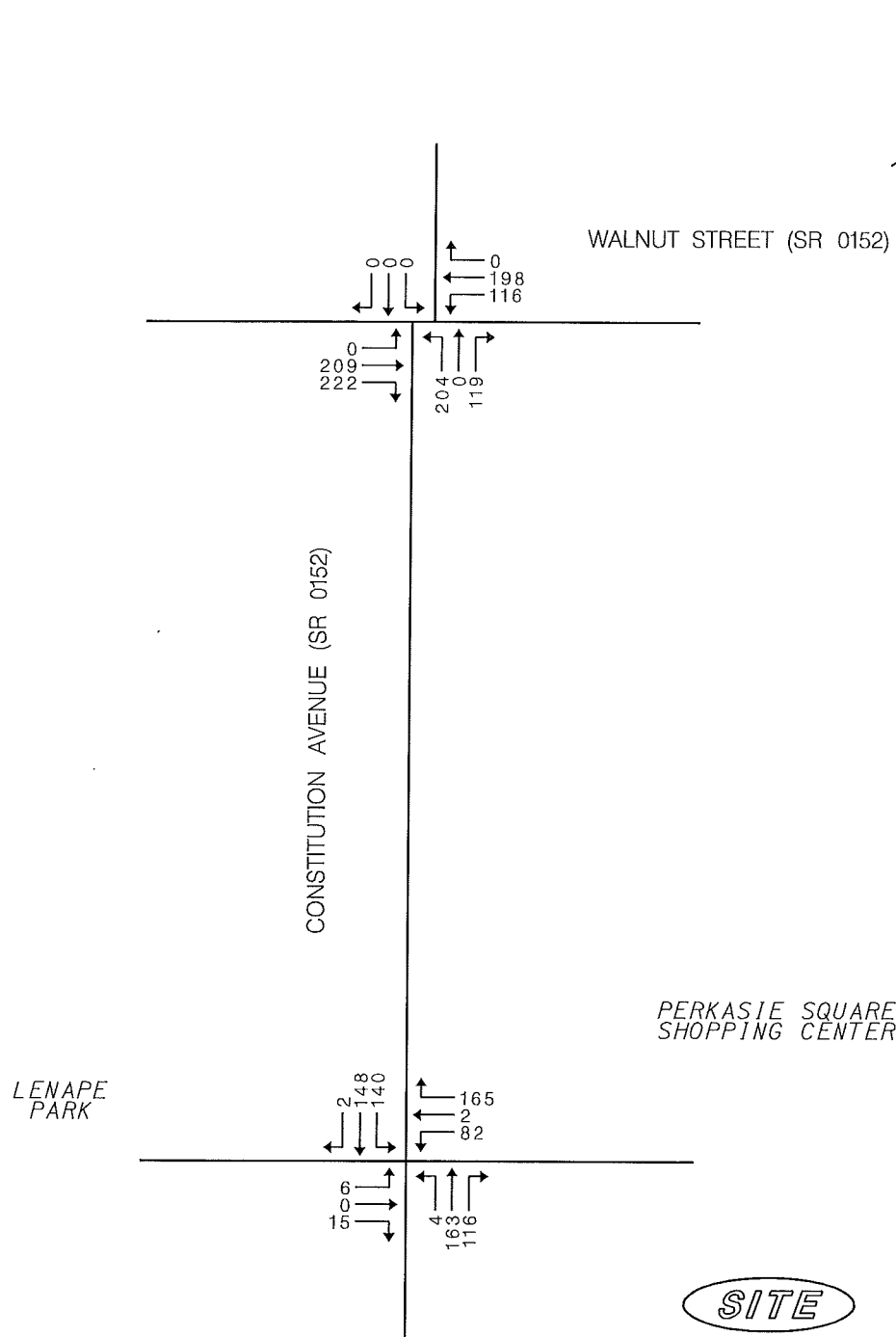
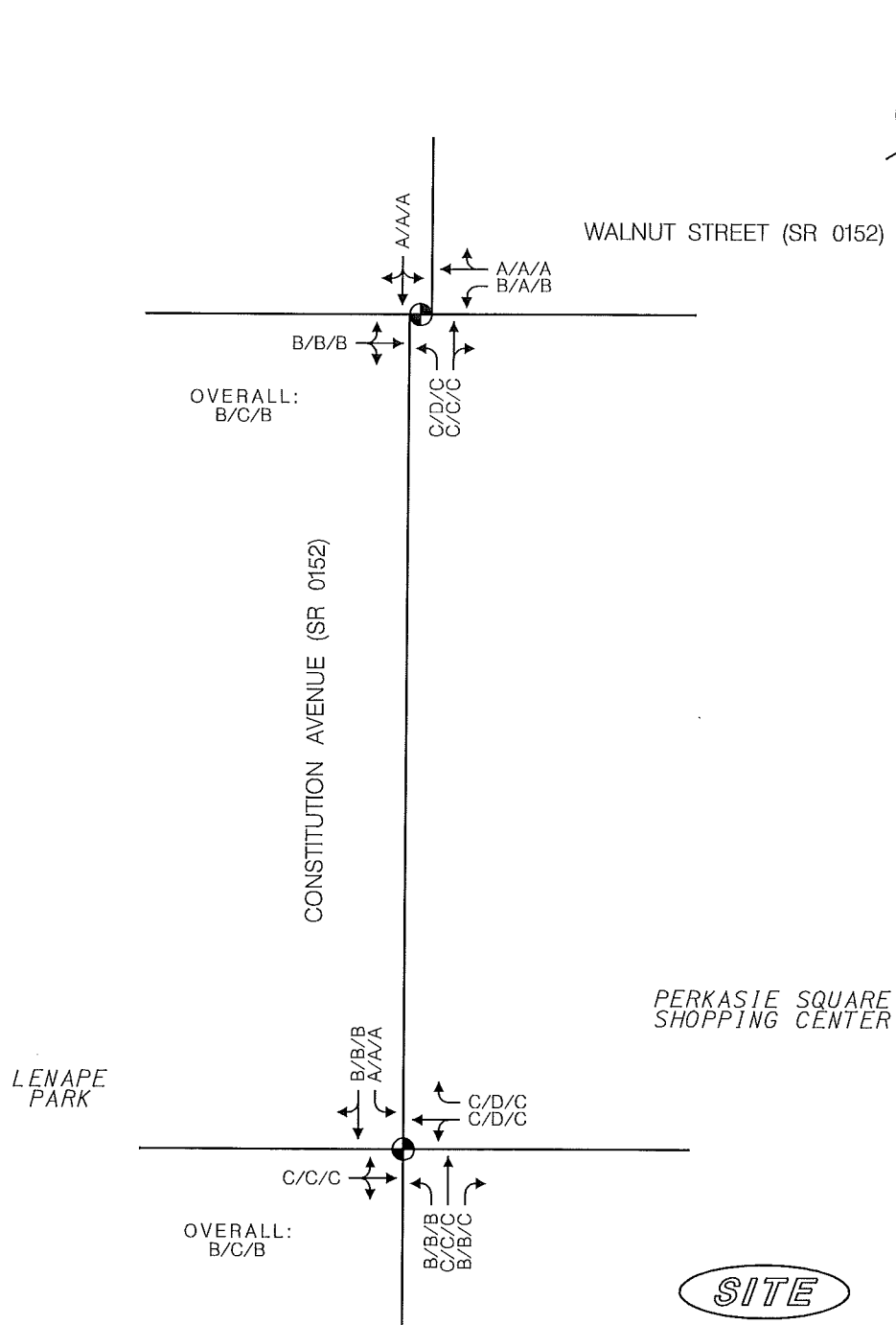


FIGURE 4
EXISTING SATURDAY MIDDAY PEAK HOUR TRAFFIC VOLUMES

**PERKASIE PLACE
RECYCLING CENTER**

PERKASIE AND SELLERSVILLE BOROUGHES, BUCKS COUNTY, PA

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LEGEND:

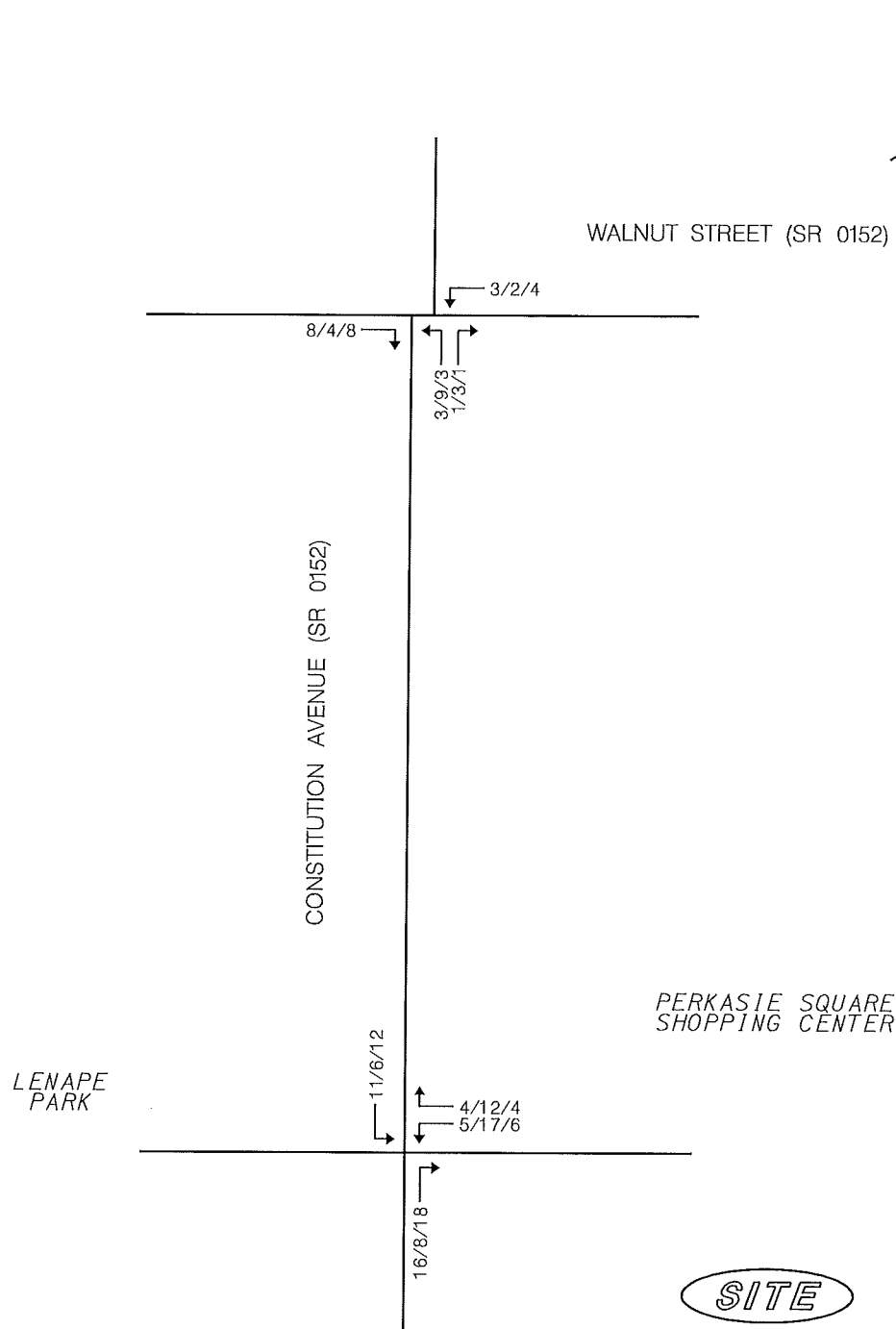
- ← AM/PM/SATURDAY PEAK HOUR
- ⊕ TRAFFIC SIGNAL

FIGURE 5
EXISTING LEVELS OF SERVICE

*PERKASIE PLACE
RECYCLING CENTER*

PERKASIE AND SELLERSVILLE BOROUGH, BUCKS COUNTY, PA

25-038
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LEGEND:

← AM/PM/SATURDAY PEAK HOUR

FIGURE 6
SITE TRIPS

*PERKASIE PLACE
RECYCLING CENTER*

PERKASIE AND SELLERSVILLE BOROUGH, BUCKS COUNTY, PA

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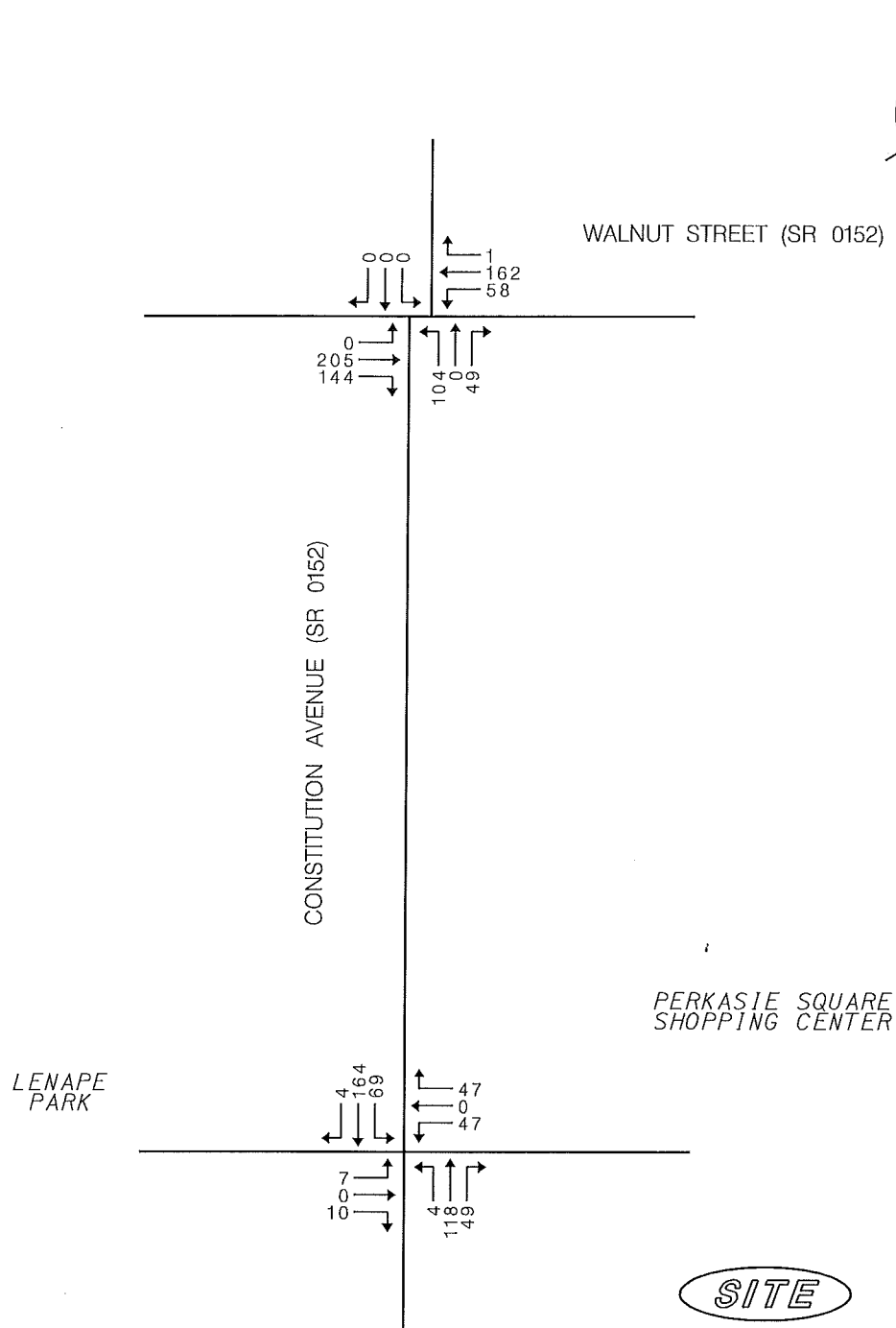


FIGURE 7
NO-BUILD WEEKDAY AM PEAK HOUR TRAFFIC VOLUMES

**PERKASIE PLACE
RECYCLING CENTER**

PERKASIE AND SELLERSVILLE BOROUGHES, BUCKS COUNTY, PA

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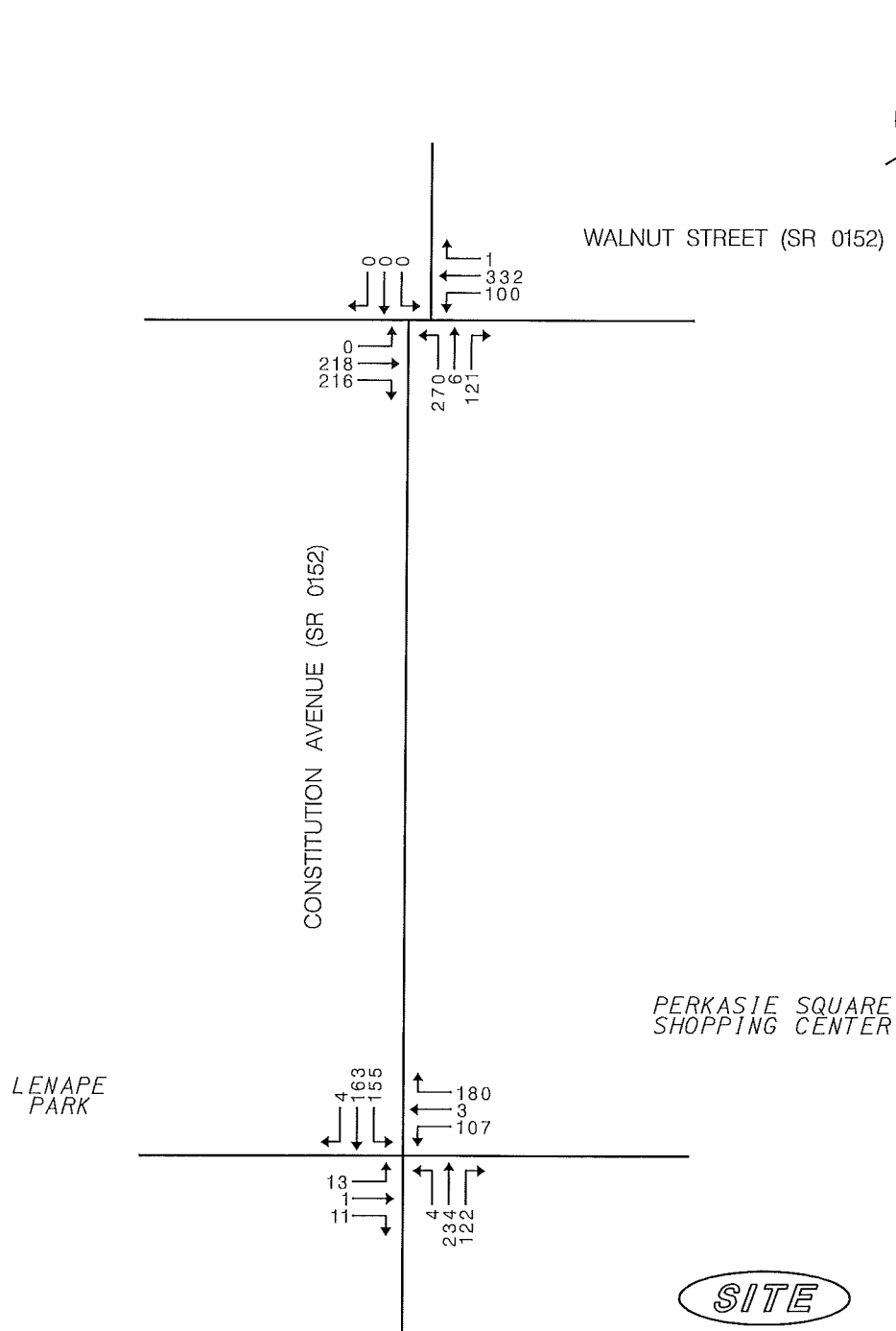


FIGURE 8
NO-BUILD WEEKDAY PM PEAK HOUR TRAFFIC VOLUMES

**PERKASIE PLACE
RECYCLING CENTER**

PERKASIE AND SELLERSVILLE BOROUGH, BUCKS COUNTY, PA

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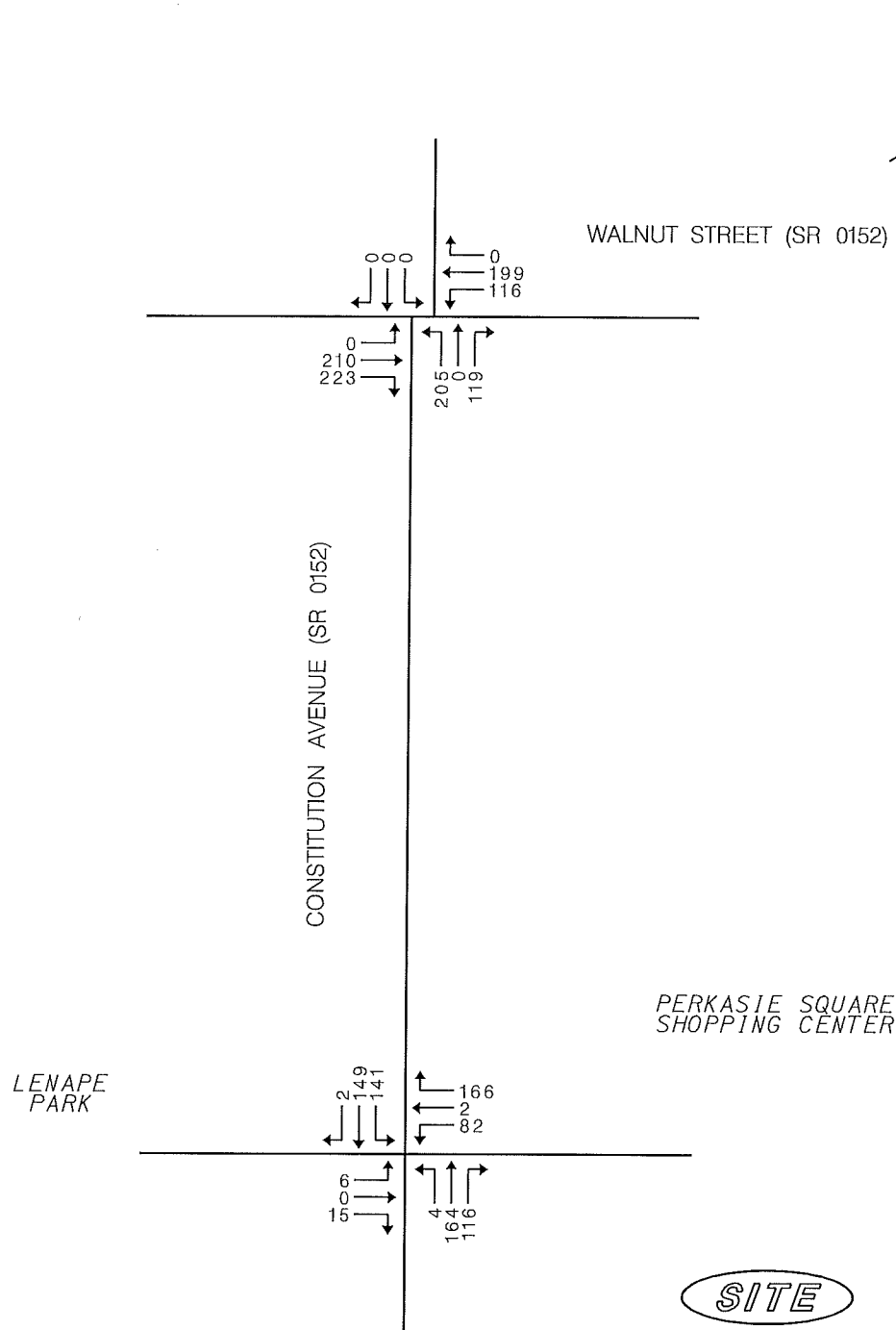


FIGURE 9
NO-BUILD SATURDAY MIDDAY PEAK HOUR TRAFFIC VOLUMES

**PERKASIE PLACE
RECYCLING CENTER**

PERKASIE AND SELLERSVILLE BOROUGHES, BUCKS COUNTY, PA

25-038
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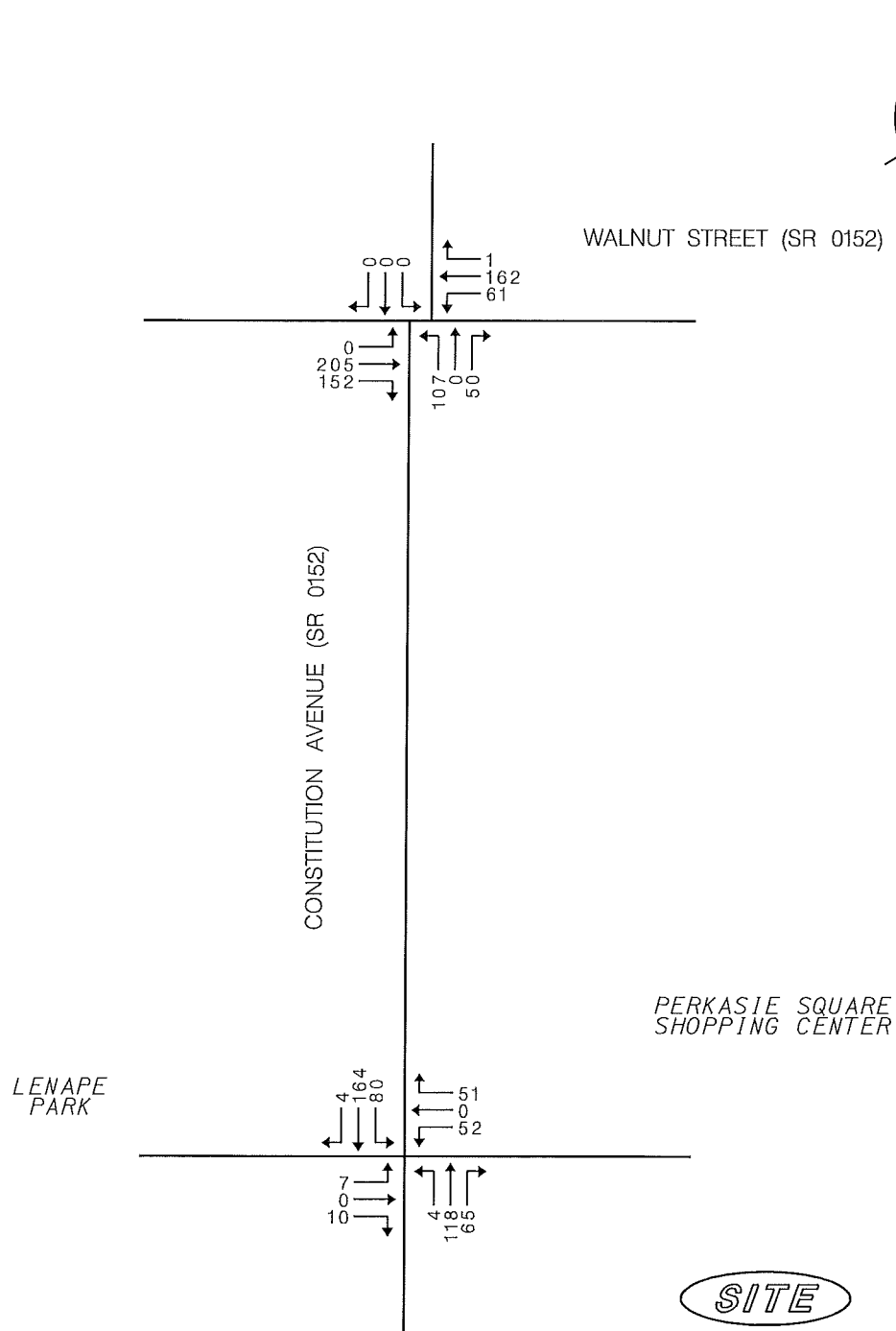
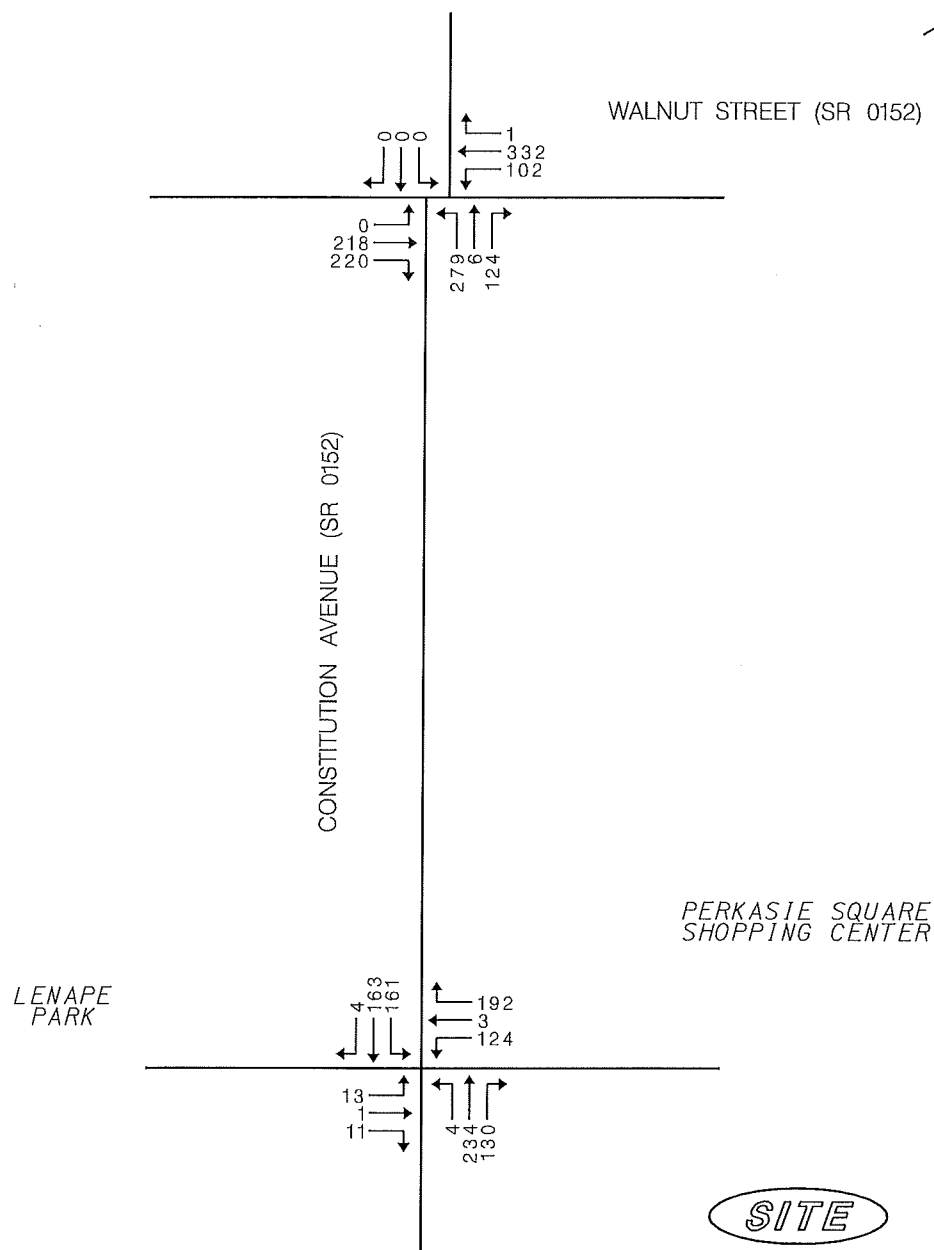
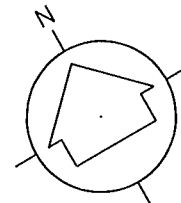


FIGURE 10
BUILD WEEKDAY AM PEAK HOUR TRAFFIC VOLUMES

**PERKASIE PLACE
RECYCLING CENTER**

PERKASIE AND SELLERSVILLE BOROUGHES, BUCKS COUNTY, PA

25-038
MAY 2026



FUGRE 11
BUILD WEEKDAY PM PEAK HOUR TRAFFIC VOLUMES

**PERKASIE PLACE
RECYCLING CENTER**

PERKASIE AND SELLERSVILLE BOROUGHES, BUCKS COUNTY, PA

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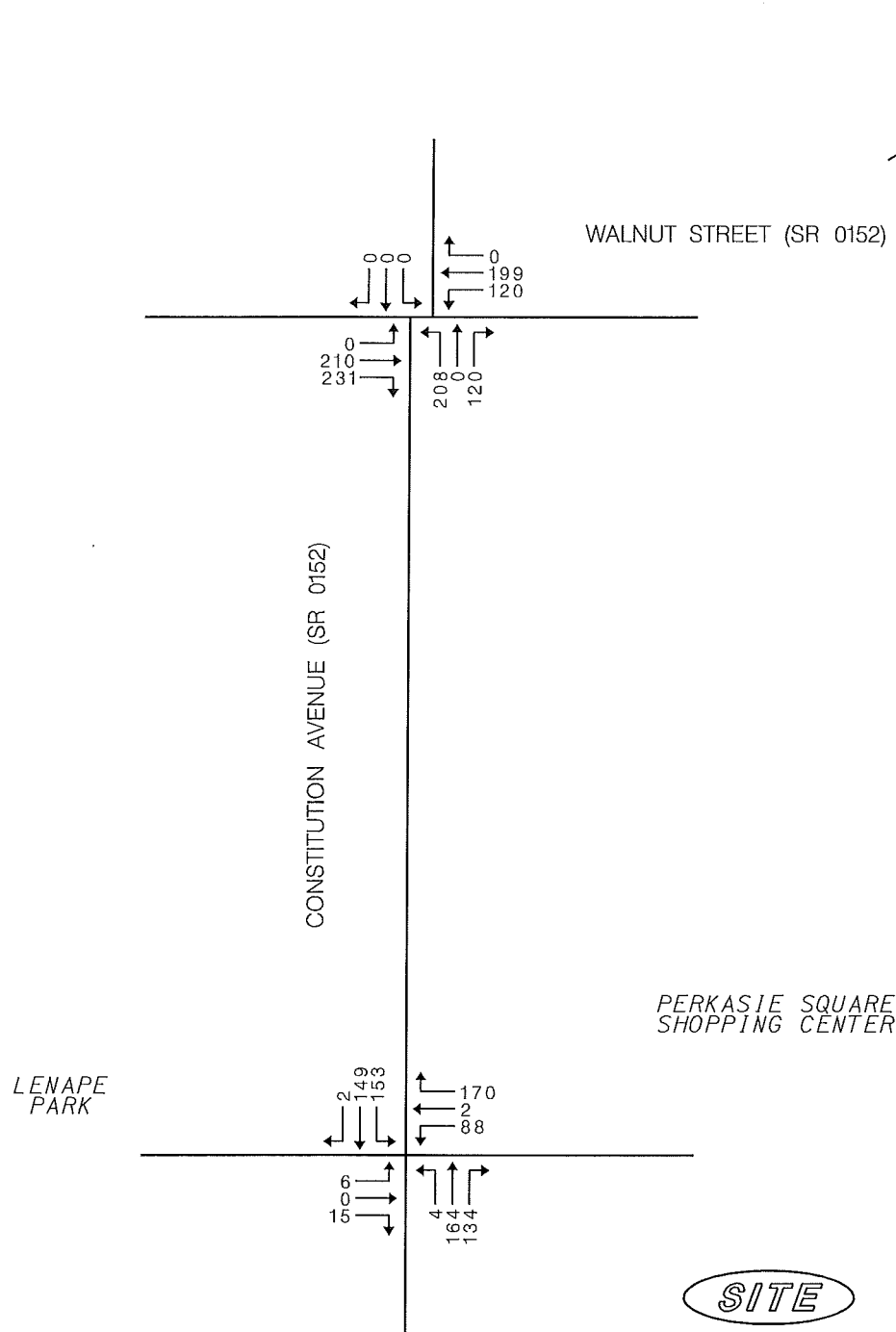
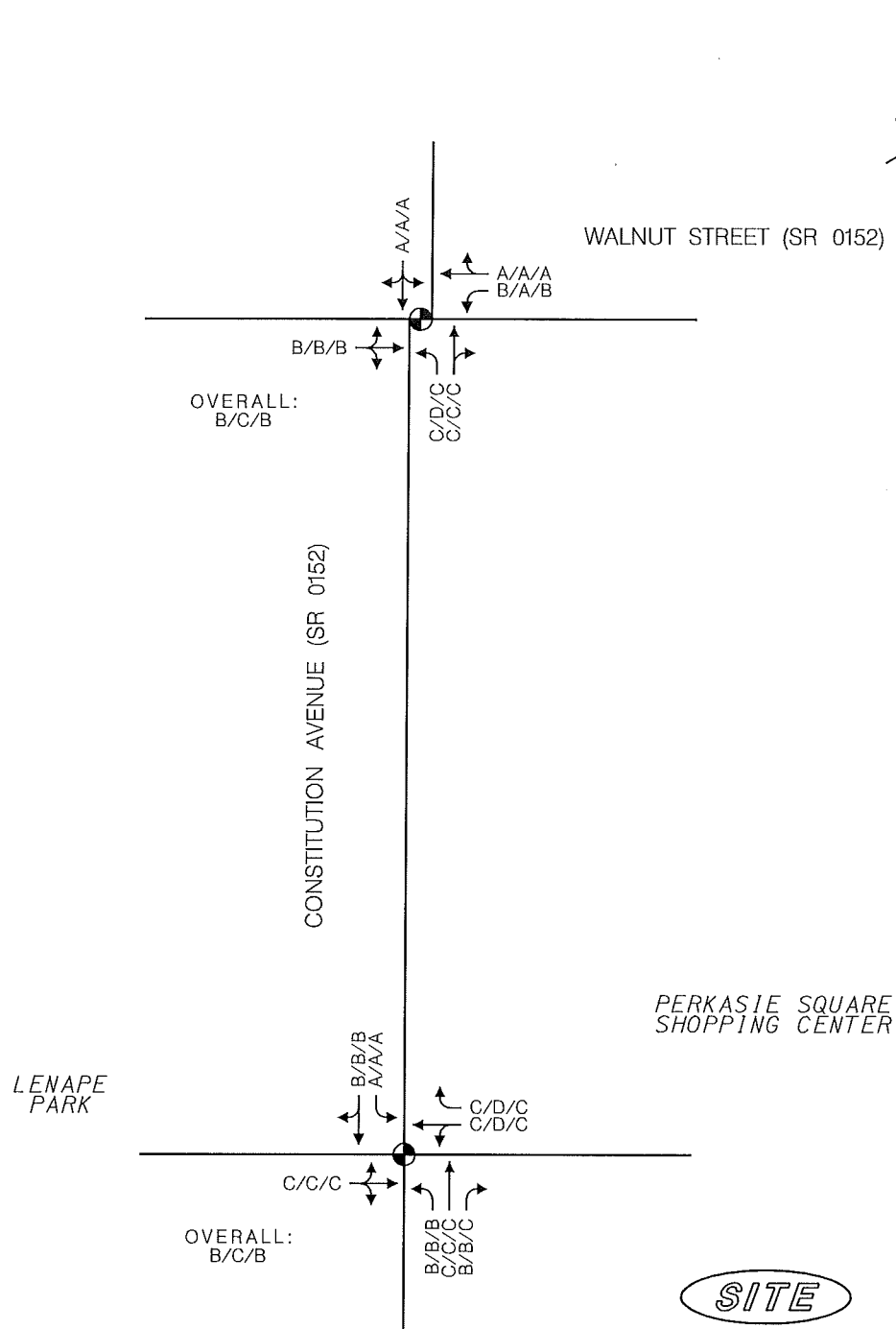


FIGURE 12
BUILD SATURDAY MIDDAY PEAK HOUR TRAFFIC VOLUMES

**PERKASIE PLACE
RECYCLING CENTER**

PERKASIE AND SELLERSVILLE BOROUGHS, BUCKS COUNTY, PA

25-038
MAY 2026



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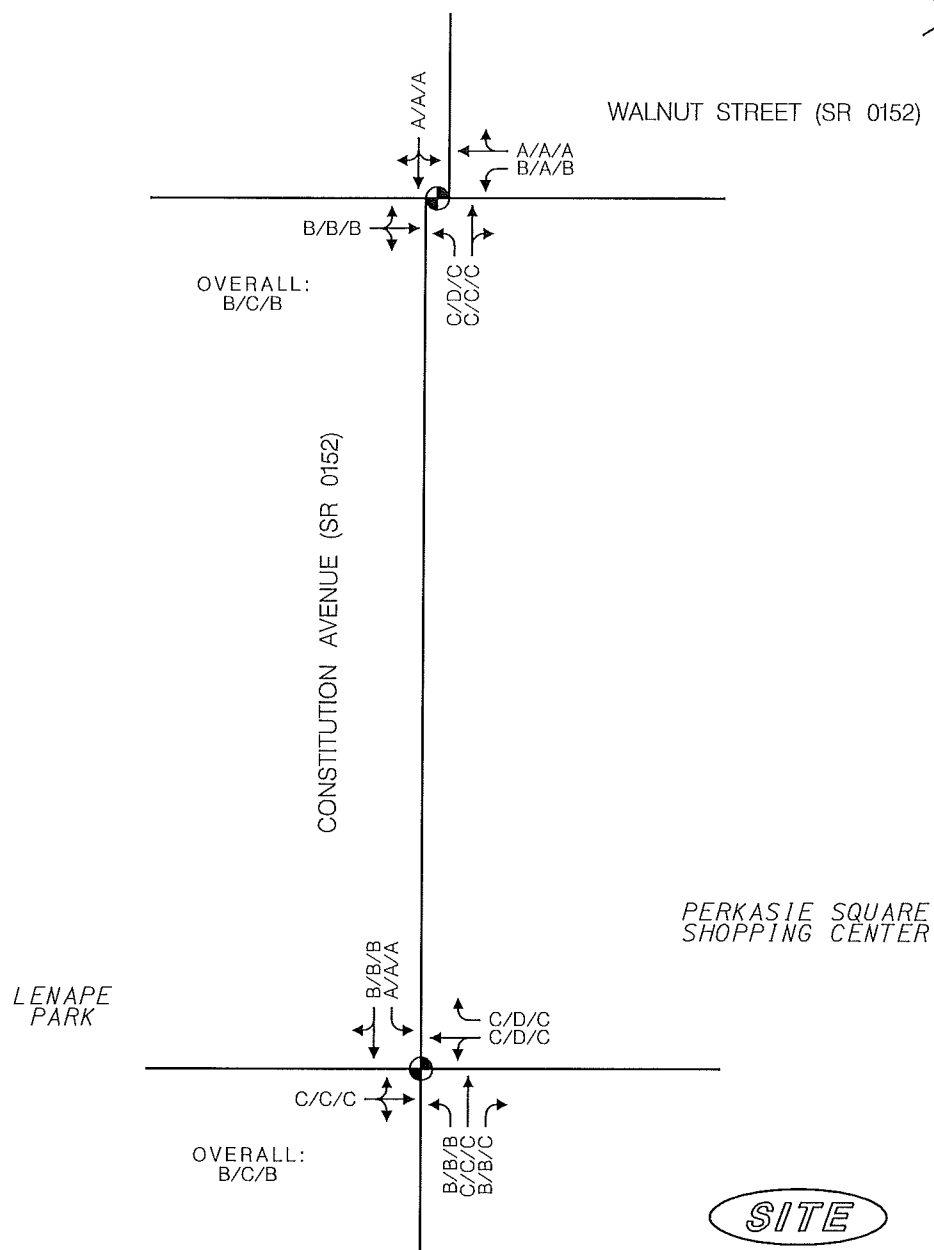
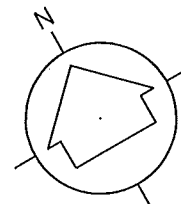
- ← AM/PM/SATURDAY PEAK HOUR
- ⊙ TRAFFIC SIGNAL

FIGURE 13
NO-BUILD LEVELS OF SERVICE

*PERKASIE PLACE
RECYCLING CENTER*

PERKASIE AND SELLERSVILLE BOROUGH, BUCKS COUNTY, PA

25-038
MAY 2026



LEGEND:

- ← AM/PM/SATURDAY PEAK HOUR
- ⊕ TRAFFIC SIGNAL

FIGURE 14
BUILD LEVELS OF SERVICE

*PERKASIE PLACE
RECYCLING CENTER*

PERKASIE AND SELLERSVILLE BOROUGH, BUCKS COUNTY, PA

25-038
MAY 2026

APPENDIX A

Traffic Signal Plans

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

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. 212.

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 18 FT. ABOVE THE ROADWAY. POST MOUNTED SIGNALS SHALL BE A MINIMUM OF 8 FT. ABOVE THE SIDEWALK OR DRAINAGE.

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 6 FEET.

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 BY THE PROPOSED INSTALLATION.

THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING UNLESS THE PERMITEE COMPLIES WITH THE PROVISIONS OF THIS ORDINANCE THAT MAY BE CHANGED DUE TO THE LOCATION OF UTILITIES.

WHEN LIQUID FUELS MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FEDERAL AND A. CORDON, SE. 242.

PERMITTEE SHALL OBTAIN A HIGHWAY OCCUPANCY PERMIT FOR SPECIFICATIONS MUST BE SUBMITTED TO THE DISTRICT TRAFFIC UNIT, FOR REVIEW, PRIOR TO BIDDING.

CONDUIT INSTALLED IN BRICKHOUSE ROADWAY LESS THAN 5 YEARS OLD, OR CONCRETE ROADWAY REGARDLESS OF AGE, MUST BE BORED OR JACKED UNDER THE ROADWAY INSTEAD OF EXCAVATED.

THE TROUBLE, INSTALLED IN ACCORDANCE WITH
TRAFFIC SIGNAL STANDARDS TC-8000 SERIES.

•

10

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6 C

COUNTY: BUCKS

MUNICIPALITY: PERKASIE BOROUGH
INTERSECTION: CONSTITUTION AVENUE (S.R. 0152)

AND WALNUT STREET

ANDREA COAXUM
DATE 10/26/17

RECOMMENDED: MARK L. KRAY 6/29/09

DOUGLAS MAY
DISTRICT PLANT ENGINEER
6/29/09
DATE

NO	DESCRIPTION	REVW	DATE	REVW	DATE	RECON	DATE
	ADDED SIGN "J" & CHANGED P/M	R/W	5/17/05	D/W	5/17/05	D/W	5/17/05
	NEW DRAWING	M/K	5/25/05	M/K	5/25/05	M/K	5/25/05

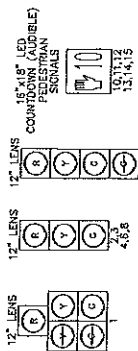
ADDED NEW AIA RAMP (SP 0013 SEC CRT)	CNIX	8/20/86		
REMOVED SW CORNER	N/C/M	1/7/84	NBP	3/11/84 APATEL 3/15/84
ADDED VIDEO DETECTION	BJD	5/23/85	*	

REVISION BRIDGE & REWELD ALL CORNERS	CEC	10/25/72	NBP	11/1/72	DIA	11/1/72
AS-BUILT (WASI, APR & UPRIDGE LGN.)	CEC	7/1/73	f. f.	1/1/73	DIA	2-1/73

HEET 2 OF 3 PERMIT # 61-1748 FILE # 1748

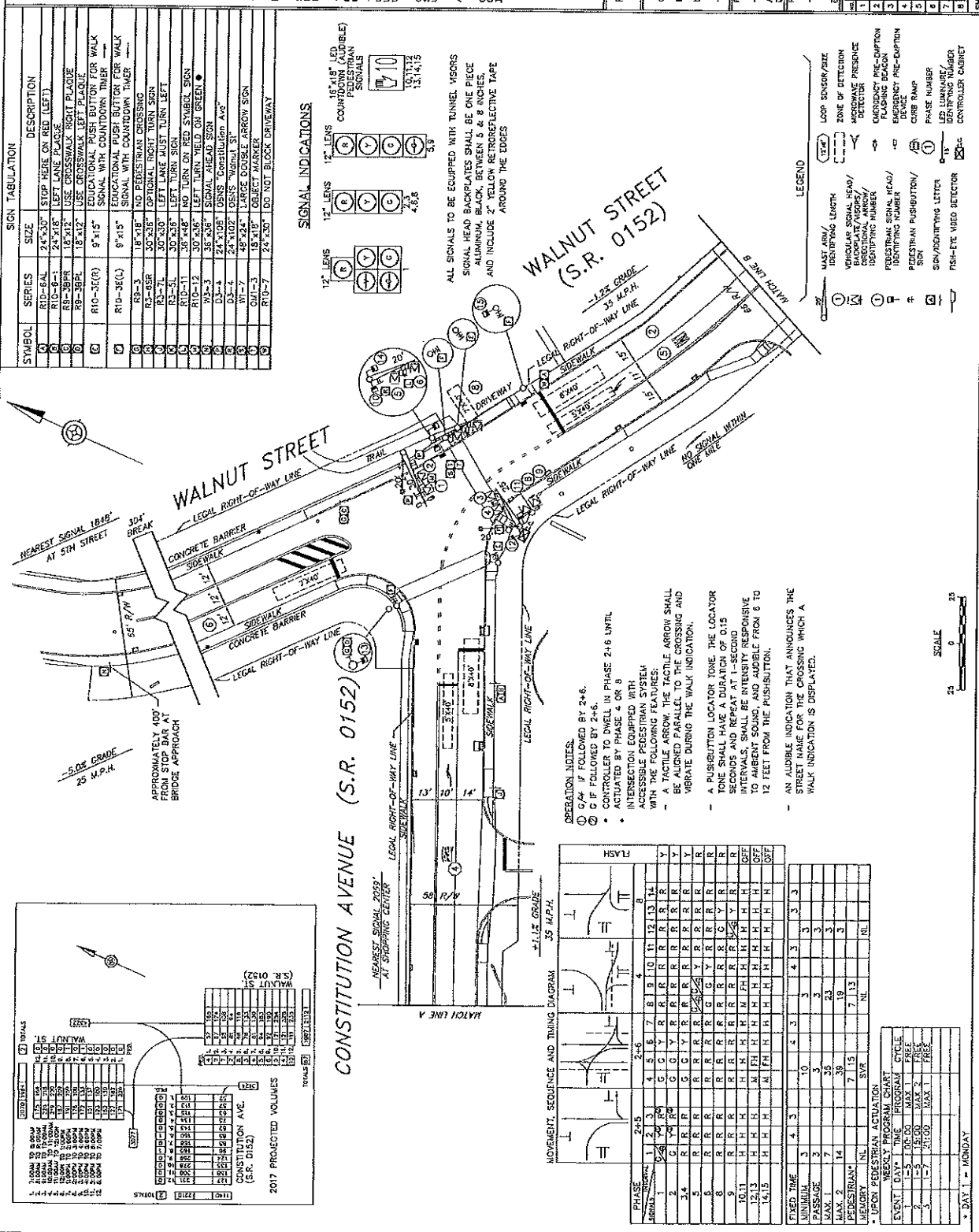
SYMBOL	SERIES	SIZE	DESCRIPTION
Q	R10-6AL	24"x30"	STOP HERE ON RED (LEFT)
Q	R10-6B	24"x18"	LEFT LANE PLACQUE
Q	R8-25HR	18"x15"	USE CROSSWALK RIGHT PLACQUE
Q	R8-25PL	18"x12"	USE CROSSWALK LEFT PLACQUE
Q	R10-3E(R)	9"x15"	EDUCATIONAL PUSH BUTTON FOR WALK
Q	R10-3E(L)	9"x15"	EDUCATIONAL PUSH BUTTON FOR WALK
Q	R3-3	18"x18"	SIGNAL WITH COUNTDOWN TIMER
Q	R3-3	18"x18"	NO PEDESTRIAN CROSSING
Q	R2-65R	30"x45"	ORIGINAL RIGHT TURN SIGN
Q	R3-7L	30"x30"	LEFT LANE MUST TURN LEFT
Q	R3-5L	30"x30"	LEFT TURN SIGN
Q	R10-11	36"x48"	NO TURN ON RED SYMBOL SIGN
Q	R10-12	30"x36"	LEFT TURN YIELD ON GREEN
Q	R2-3	36"x36"	SIGNAL AHEAD SIGN
Q	R2-4	36"x36"	SIGNAL AHEAD SIGN
Q	R2-4	24"x108"	USNS "Construction Ave"
Q	W1-7	48"x24"	Large Arrow Sign
Q	OM1-3	18"x18"	OBJECT MARKER
Q	R10-7	24"x30"	DO NOT BLOCK DRIVEWAY

SIGNAL INDICATIONS

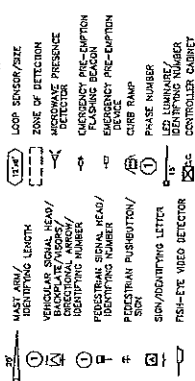


ALL SIGNALS TO BE EQUIPPED WITH TUNNEL VISORS

SIGNAL HEAD BACKPLATES SHALL BE ONE PIECE ALUMINUM, BLACK, BETWEEN 5 & 8 INCHES, AND INCLUDE 2" YELLOW RETROREFLECTIVE TAPE AROUND THE EDGES



LEGEND



OPERATION NOTES:

- G/A IF FOLLOWED BY 2+6.
- D IF FOLLOWED BY 2+6.
- CONTROLLER TO PHASE IN PHASE 2+6 UNTIL
- ACTUATED BY WALK 4 OR 8
- INTERSECTION EQUIPPED WITH ACCESSIBLE PEDESTRIAN SYSTEM WITH THE FOLLOWING FEATURES:
 - A TACTILE ARROW, THE TACTILE ARROW SHALL BE ALIGNED PARALLEL TO THE CROSSING AND VIBRATE DURING THE WALK INDICATION.
 - A PUSHBUTTON LOCATOR TONE, THE LOCATOR TONE SHALL HAVE A DURATION OF 0.15 SECONDS AND REPEAT AT 1-SECOND INTERVALS. THE TONE SHALL BE INTENSIFY RESPONSIVE TO WALKER'S SOUND TO INDICATE TACTILE FROM 12 FEET FROM THE PUSHBUTTON.
 - AN AUDIBLE INDICATION THAT ANNOUNCES STREET NAME FOR THE CROSSING WHICH WALK INDICATION IS DISPLAYED.

MOVEMENT, SEQUENCE AND TIMING DIAGRAM

PHASE	2+5	2+6	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000
MINIMUM	3	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

UPON PEDESTRIAN ACTUATION

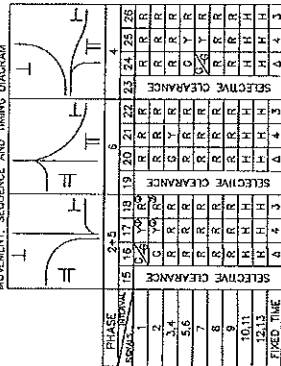
EVENT	DAY*	TIME	PROGRAM	CYCLE
1	1-5	08:00	MAX 1	FREE
2	1-5	15:00	MAX 2	FREE
3	1-7	21:00	MAX 1	FREE

* DAY 1 - MONDAY

SCALE

EMERGENCY PRE-EMPTION PHASING

MOVEMENT, SEQUENCE AND TIMING DIAGRAM



FOR DURATION OF PRE-EMPTION

NOTE: IF PRE-EMPTION EQUIPMENT HAS ENCODING CAPABILITIES FOR VEHICLE IDENTIFICATION, AND/OR IF THE EQUIPMENT IS CAPABLE OF PROVIDING A "FLASHING HAND" INDICATION, THE ABILITY TO ACTIVATE THE EMERGENCY PRE-EMPTION.

EMERGENCY PRE-EMPTION NOTES:

- CONTROLLER TO BE EQUIPPED WITH EMERGENCY PRE-EMPTION FOR THE EASTBOUND AND WESTBOUND APPROACHES OF WALNUT STREET AND THE NORTHBOROUGH APPROACH OF CONSTITUTION AVENUE WITH A 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 DIRECTION OF TRAVEL OF THE EMERGENCY VEHICLE. THE EMERGENCY VEHICLE DETECTORS ARE TO BE FIELD ADJUSTED TO ACHIEVE MAXIMUM OPERATION.
- THE SIGNALS, WHEN ACTIVATED BY EMERGENCY VEHICLES, SHALL TERMINATE ALL GREEN INDICATIONS, INCLUDING THE GREEN INDICATIONS FOR THE PRE-EMPTION PHASE, AND FOLLOW. ONLY THOSE PHASES NOT FORMING A YELLOW TRAP CONDITION MAY REMAIN GREEN (2+5) WHEN GOVERNED BY THE APPROACHING EMERGENCY VEHICLE.
- THE SIGNALS, WHEN ACTIVATED BY EMERGENCY VEHICLE SHALL TIME OUT ALL YELLOW, HAND/AND AND RED INDICATIONS, FOLLOWED BY THE GREEN INTERVAL OF THE PRE-EMPTION PHASE GOVERNED BY THE APPROACHING EMERGENCY VEHICLE.
- IF THE SIGNAL HAS BEEN ACTIVATED BY A PEDESTRIAN PUSH BUTTON AND THE SIGNAL IS PRE-EMPTED DURING THE "FLASHING HAND" INDICATION IN ITS EXTREME, FOLLOWED BY THE "FLASHING HAND" INDICATION BEFORE PROCEEDING TO THE PRE-EMPTION PHASE.
- IF THE SIGNALS, WHEN ACTIVATED BY AN EMERGENCY VEHICLE ARE FLASHING, ALL SIGNALS SHALL REMAIN FLASHING.
- IF ADDITIONAL PRE-EMPTION PHASES ARE ACTIVATED WHILE IN PRE-EMPTION, THE SIGNAL PRE-EMPTION PHASE SHALL TIME OUT BEFORE PROCEEDING TO THE NEXT PRE-EMPTION PHASE.
- UPON COMPLETION OF PRE-EMPTION PHASES 2, 4, OR 5 IN RETURNING TO NORMAL OPERATION, PHASE 2+5 INTERVAL 4 SHALL FOLLOW.
- IN EMERGENCY PRE-EMPTION, NO PRIORITY SHALL BE ESTABLISHED. PRE-EMPTION SHALL BE A FIRST COME, FIRST SERVED OPERATION.

GENERAL NOTES

NO MODIFICATIONS OF THIS INSTALLATION ARE PERMITTED UNLESS THE CONTRACTOR CONSULTS WITH THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NECESSARY FOR PROPER VISIBILITY OF THE SIGNALS IS THE RESPONSIBILITY OF THE PERMITTEE.

ALL SIGNS AND PARALLEL LAYOUTS INDICATED ON THIS DRAWING ARE TO BE CONSIDERED PART OF THE PERMIT AND SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH PUBLICATION NO. 212.

PERMITTEE SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE SIGNALS. THE PERMITTEE SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SIGNALS. THE PERMITTEE SHALL ALSO HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

SIGNALS LOCATED OVER THE ROADWAY SHALL HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET. SIGNALS LOCATED OVER THE SIDEWALK SHALL HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET. SIGNALS LOCATED OVER THE SIDEWALK SHALL HAVE A MINIMUM CLEARANCE HORIZONTALLY OF 2 FEET.

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

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

EXACT LOCATION OF DETECTOR SHALL BE DETERMINED PRIOR TO INSTALLATION BY A REPRESENTATIVE OF PERMITTEE.

ALL SIGNALS SHALL BE INSTALLED BY MUNICIPALITY AND WHERE NOTED, SHALL BE FOR THE USE OF THE MUNICIPALITY. SIGNALS SHALL BE INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS FOR 400.

PRIOR TO INSTALLATION THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER TO DETERMINE THE LOCATION OF THE SIGNALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF THE SIGNALS.

THIS DRAWING CANNOT BE USED AS A CONSTRUCTION DRAWING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF THE SIGNALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF THE SIGNALS.

WHEN LUMP SUM MONEY IS USED, SIGNAL INSTALLATION MUST CONFORM TO FORM 400 AND A COPY OF THE PROPOSED INSTALLATION SHALL 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 REQUIRING EXCAVATION.

CONDUIT INSTALLED IN BURIED ROADWAY SHALL BE AT LEAST 6 INCHES OLD, OR CONCRETE ROADWAY REARLESS OF AGE, MUST BE BORED AND CEMENTED IN PLACE. SIGNALS SHALL BE INSTALLED IN ACCORDANCE WITH DEPARTMENT SPECIFICATIONS TO 400.

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION
ENGINEERING DISTRICT 6-0

COUNTY: BUCKS

MUNICIPALITY: PERKASE BOROUGH

INTERSECTION: CONSTITUTION AVENUE (S.R. 0152)

AND WALNUT STREET

DATE: 10/26/17

BY: ANDREA COAXIN

REVISION: 10/26/17

DATE: 6/28/09

BY: MARK L. KRAY

DATE: 6/28/09

BY: DOUGLAS MAY

DATE: 6/28/09

BY: DOUGLAS MAY

DATE: 6/28/09

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SCALE
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APPENDIX B

Traffic Counts

Horner & Canter Associates
Transportation and Traffic Engineering

4950 York Rd, Suite 2G, P.O. 301, Holicong, PA 18928-0301
105 Atsion Rd, Suite F, Medford, NJ 08055

NB/SB: Constitution Ave./ Business DW
EB/WB: Walnut St.
Perkasie Boro./ Bucks Co./ PA
Saturday/ Lt. Rain/ E-14/ GD

File Name : 25-038-011
Site Code : 25038011
Start Date : 6/7/2025
Page No : 1

Groups Printed- Passenger and 2 Axle Vehicles - Buses and Heavy Vehicles

	Business DW Southbound			Walnut St. Westbound			Constitution Ave. Northbound			Walnut St. Eastbound			Int. Total
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
11:00 AM	0	0	0	23	49	0	44	0	27	0	54	59	256
11:15 AM	0	0	0	12	44	0	52	0	29	0	61	40	238
11:30 AM	0	0	0	22	42	0	45	0	26	0	51	53	239
11:45 AM	0	0	0	23	51	0	45	0	29	0	57	60	265
Total	0	0	0	80	186	0	186	0	111	0	223	212	998
12:00 PM	0	0	0	31	57	0	47	0	29	0	60	66	290
12:15 PM	0	0	0	27	39	0	45	0	31	0	62	48	252
12:30 PM	0	0	0	28	49	0	64	0	25	0	40	53	259
12:45 PM	0	0	0	30	53	0	48	0	34	0	47	55	267
Total	0	0	0	116	198	0	204	0	119	0	209	222	1068
Grand Total	0	0	0	196	384	0	390	0	230	0	432	434	2066
Apprch %	0	0	0	33.8	66.2	0	62.9	0	37.1	0	49.9	50.1	
Total %	0	0	0	9.5	18.6	0	18.9	0	11.1	0	20.9	21	
Passenger and 2 Axle Vehicles	0	0	0	193	376	0	381	0	224	0	424	428	2026
% Passenger and 2 Axle Vehicles	0	0	0	98.5	97.9	0	97.7	0	97.4	0	98.1	98.6	98.1
Buses and Heavy Vehicles	0	0	0	3	8	0	9	0	6	0	8	6	40
% Buses and Heavy Vehicles	0	0	0	1.5	2.1	0	2.3	0	2.6	0	1.9	1.4	1.9

	Business DW Southbound				Walnut St. Westbound				Constitution Ave. Northbound				Walnut St. Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	0	0	0	0	31	57	0	88	47	0	29	76	0	60	66	126	290
12:15 PM	0	0	0	0	27	39	0	66	45	0	31	76	0	62	48	110	252
12:30 PM	0	0	0	0	28	49	0	77	64	0	25	89	0	40	53	93	259
12:45 PM	0	0	0	0	30	53	0	83	48	0	34	82	0	47	55	102	267
Total Volume	0	0	0	0	116	198	0	314	204	0	119	323	0	209	222	431	1068
% App. Total	0	0	0		36.9	63.1	0		63.2	0	36.8		0	48.5	51.5		
PHF	.000	.000	.000	.000	.935	.868	.000	.892	.797	.000	.875	.907	.000	.843	.841	.855	.921
Passenger and 2 Axle Vehicles	0	0	0	0	113	192	0	305	200	0	115	315	0	203	220	423	1043
% Passenger and 2 Axle Vehicles	0	0	0	0	97.4	97.0	0	97.1	98.0	0	96.6	97.5	0	97.1	99.1	98.1	97.7
Buses and Heavy Vehicles	0	0	0	0	3	6	0	9	4	0	4	8	0	6	2	8	25
% Buses and Heavy Vehicles	0	0	0	0	2.6	3.0	0	2.9	2.0	0	3.4	2.5	0	2.9	0.9	1.9	2.3

Horner & Canter Associates

Transportation and Traffic Engineering

4950 York Rd, Suite 2G, P.O. 301, Holicong, PA 18928-0301
105 Atsion Rd, Suite F, Medford, NJ 08055

NB/SB: Constitution Ave.
EB/WB: Perkasio Place/ Park Access
Perkasie Boro/ Bucks Co./ PA
Tuesday/ Cloudy/ E-01/ LE

File Name : 25-038-002
Site Code : 25038002
Start Date : 5/27/2025
Page No : 1

Groups Printed- Passenger and 2 Axle Vehicles - Buses and Heavy Vehicles

Start Time	Constitution Ave. Southbound			Perkasie Place Westbound			Constitution Ave. Northbound			Park Access Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	16	38	1	4	0	6	1	23	13	1	0	2	105
07:15 AM	17	40	1	10	0	9	1	33	8	3	0	3	125
07:30 AM	15	44	1	12	0	10	0	30	14	1	0	1	128
07:45 AM	22	41	1	12	0	16	0	26	15	1	0	5	139
Total	70	163	4	38	0	41	2	112	50	6	0	11	497
08:00 AM	15	38	1	13	0	12	3	29	12	2	0	1	126
08:15 AM	9	39	3	11	0	9	2	35	11	4	0	1	124
08:30 AM	11	36	0	7	2	9	1	32	13	0	0	0	111
08:45 AM	18	33	0	11	0	17	0	26	16	3	0	2	126
Total	53	146	4	42	2	47	6	122	52	9	0	4	487
*** BREAK ***													
04:00 PM	27	34	1	27	5	36	1	54	33	1	0	2	221
04:15 PM	27	27	3	22	1	39	1	64	37	3	0	2	226
04:30 PM	40	39	0	18	0	39	1	73	22	2	1	4	239
04:45 PM	36	53	0	28	2	45	1	39	32	2	0	0	238
Total	130	153	4	95	8	159	4	230	124	8	1	8	924
05:00 PM	38	34	1	30	0	45	1	71	30	3	0	3	256
05:15 PM	42	38	2	20	0	48	2	67	29	4	1	3	256
05:30 PM	38	37	1	29	1	41	0	56	31	4	0	5	243
05:45 PM	21	38	1	25	2	35	0	55	25	2	1	2	207
Total	139	147	5	104	3	169	3	249	115	13	2	13	962
Grand Total	392	609	17	279	13	416	15	713	341	36	3	36	2870
Apprch %	38.5	59.8	1.7	39.4	1.8	58.8	1.4	66.7	31.9	48	4	48	
Total %	13.7	21.2	0.6	9.7	0.5	14.5	0.5	24.8	11.9	1.3	0.1	1.3	
Passenger and 2 Axle Vehicles	391	608	17	277	13	416	15	712	339	36	3	36	2863
% Passenger and 2 Axle Vehicles	99.7	99.8	100	99.3	100	100	100	99.9	99.4	100	100	100	99.8
Buses and Heavy Vehicles	1	1	0	2	0	0	0	1	2	0	0	0	7
% Buses and Heavy Vehicles	0.3	0.2	0	0.7	0	0	0	0.1	0.6	0	0	0	0.2

Transportation and Traffic Engineering

4950 York Rd, Suite 2G, P.O. 301, Holicong, PA 18928-0301
105 Atsion Rd, Suite F, Medford, NJ 08055

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Tuesday/ Cloudy/ E-01/ LE

File Name : 25-038-002
Site Code : 25038002
Start Date : 5/27/2025
Page No : 2

	Constitution Ave. Southbound				Perkasie Place Westbound				Constitution Ave. Northbound				Park Access Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	17	40	1	58	10	0	9	19	1	33	8	42	3	0	3	6	125
07:30 AM	15	44	1	60	12	0	10	22	0	30	14	44	1	0	1	2	128
07:45 AM	22	41	1	64	12	0	16	28	0	26	15	41	1	0	5	6	139
08:00 AM	15	38	1	54	13	0	12	25	3	29	12	44	2	0	1	3	126
Total Volume	69	163	4	236	47	0	47	94	4	118	49	171	7	0	10	17	518
% App. Total	29.2	69.1	1.7		50	0	50		2.3	69	28.7		41.2	0	58.8		
PHF	.784	.926	1.00	.922	.904	.000	.734	.839	.333	.894	.817	.972	.583	.000	.500	.708	.932
Passenger and 2 Axle Vehicles	69	163	4	236	45	0	47	92	4	118	48	170	7	0	10	17	515
% Passenger and 2 Axle Vehicles	100	100	100	100	95.7	0	100	97.9	100	100	98.0	99.4	100	0	100	100	99.4
Buses and Heavy Vehicles	0	0	0	0	2	0	0	2	0	0	1	1	0	0	0	0	3
% Buses and Heavy Vehicles	0	0	0	0	4.3	0	0	2.1	0	0	2.0	0.6	0	0	0	0	0.6

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:45 PM

[illegible]

4950 York Rd, Suite 2G, P.O. 301, Holicong, PA 18928-0301
105 Atsion Rd, Suite F, Medford, NJ 08055

File Name : 25-038-012
Site Code : 25038012
Start Date : 5/31/2025
Page No : 1

[illegible][illegible]

Horner & Canter Associates
Transportation and Traffic Engineering

4950 York Rd, Suite 2G, P.O. 301, Holicong, PA 18928-0301
105 Atsion Rd, Suite F, Medford, NJ 08055

NB/SB: Constitution Ave./ Business DW
EB/WB: Walnut St.
Perkasie Boro./ Bucks Co./ PA
Thursday/ Clear/ E- 06/ AC

File Name : 25-038-001 AM
Site Code : 25038001
Start Date : 6/5/2025
Page No : 1

Groups Printed- Passenger and 2 Axle Vehicle - Buses and Heavy Vehicles

	Business DW Southbound			Walnut St. Westbound			Constitution Ave. Northbound			Walnut St. Eastbound			Int. Total
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:00 AM	0	0	0	10	23	0	18	1	10	0	42	37	141
07:15 AM	0	0	0	19	43	0	31	0	12	0	50	42	197
07:30 AM	0	0	0	15	35	1	27	0	10	0	60	31	179
07:45 AM	0	0	0	18	50	0	24	0	14	0	51	43	200
Total	0	0	0	62	151	1	100	1	46	0	203	153	717
08:00 AM	0	0	0	6	33	0	22	0	13	0	43	27	144
08:15 AM	0	0	0	14	41	0	30	0	5	0	42	37	169
08:30 AM	0	0	0	19	34	0	27	0	13	0	43	37	173
08:45 AM	0	0	2	13	35	0	27	0	15	0	36	34	162
Total	0	0	2	52	143	0	106	0	46	0	164	135	648
Grand Total	0	0	2	114	294	1	206	1	92	0	367	288	1365
Apprch %	0	0	100	27.9	71.9	0.2	68.9	0.3	30.8	0	56	44	
Total %	0	0	0.1	8.4	21.5	0.1	15.1	0.1	6.7	0	26.9	21.1	
Passenger and 2 Axle Vehicle	0	0	2	103	286	1	190	1	88	0	357	272	1300
% Passenger and 2 Axle Vehicle	0	0	100	90.4	97.3	100	92.2	100	95.7	0	97.3	94.4	95.2
Buses and Heavy Vehicles	0	0	0	11	8	0	16	0	4	0	10	16	65
% Buses and Heavy Vehicles	0	0	0	9.6	2.7	0	7.8	0	4.3	0	2.7	5.6	4.8

	Business DW Southbound				Walnut St. Westbound				Constitution Ave. Northbound				Walnut St. Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	19	43	0	62	31	0	12	43	0	50	42	92	197
07:30 AM	0	0	0	0	15	35	1	51	27	0	10	37	0	60	31	91	179
07:45 AM	0	0	0	0	18	50	0	68	24	0	14	38	0	51	43	94	200
08:00 AM	0	0	0	0	6	33	0	39	22	0	13	35	0	43	27	70	144
Total Volume	0	0	0	0	58	161	1	220	104	0	49	153	0	204	143	347	720
% App. Total	0	0	0		26.4	73.2	0.5		68	0	32		0	58.8	41.2		
PHF	.000	.000	.000	.000	.763	.805	.250	.809	.839	.000	.875	.890	.000	.850	.831	.923	.900
Passenger and 2 Axle Vehicle	0	0	0	0	51	157	1	209	96	0	45	141	0	195	131	326	676
% Passenger and 2 Axle Vehicle	0	0	0	0	87.9	97.5	100	95.0	92.3	0	91.8	92.2	0	95.6	91.6	93.9	93.9
Buses and Heavy Vehicles	0	0	0	0	7	4	0	11	8	0	4	12	0	9	12	21	44
% Buses and Heavy Vehicles	0	0	0	0	12.1	2.5	0	5.0	7.7	0	8.2	7.8	0	4.4	8.4	6.1	6.1

Horner & Canter Associates
Transportation and Traffic Engineering

4950 York Rd, Suite 2G, P.O. 301, Holicong, PA 18928-0301
105 Atsion Rd, Suite F, Medford, NJ 08055

NB/SB: Constitution Ave./ Business DW
EB/WB: Walnut St.
Perkasie Boro./ Bucks Co./ PA
Thursday/ Clear/ E-01/ LE

File Name : 25-038-001 PM
Site Code : 25038001
Start Date : 6/5/2025
Page No : 1

Groups Printed- Passenger and 2 Axle Vehicles - Buses and Heavy Vehicles

	Business DW Southbound			Walnut St. Westbound			Constitution Ave. Northbound			Walnut St. Eastbound			Int. Total
Start Time	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
04:00 PM	0	0	0	21	78	3	65	0	26	0	53	46	292
04:15 PM	0	0	0	24	66	0	61	3	28	0	60	56	298
04:30 PM	0	0	0	21	76	2	64	0	36	0	68	51	318
04:45 PM	0	0	0	24	76	0	58	6	28	0	61	58	311
Total	0	0	0	90	296	5	248	9	118	0	242	211	1219
05:00 PM	0	0	0	21	83	1	77	0	29	0	49	54	314
05:15 PM	0	0	0	25	81	0	59	0	31	0	51	59	306
05:30 PM	0	0	0	30	91	0	75	0	33	0	56	44	329
05:45 PM	0	0	0	26	78	3	67	0	27	0	44	45	290
Total	0	0	0	102	333	4	278	0	120	0	200	202	1239
Grand Total	0	0	0	192	629	9	526	9	238	0	442	413	2458
Apprch %	0	0	0	23.1	75.8	1.1	68	1.2	30.8	0	51.7	48.3	
Total %	0	0	0	7.8	25.6	0.4	21.4	0.4	9.7	0	18	16.8	
Passenger and 2 Axle Vehicles	0	0	0	192	628	9	526	9	238	0	442	412	2456
% Passenger and 2 Axle Vehicles	0	0	0	100	99.8	100	100	100	100	0	100	99.8	99.9
Buses and Heavy Vehicles	0	0	0	0	1	0	0	0	0	0	0	1	2
% Buses and Heavy Vehicles	0	0	0	0	0.2	0	0	0	0	0	0	0.2	0.1

	Business DW Southbound				Walnut St. Westbound				Constitution Ave. Northbound				Walnut St. Eastbound				Int. Total
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	24	76	0	100	58	6	28	92	0	61	58	119	311
05:00 PM	0	0	0	0	21	83	1	105	77	0	29	106	0	49	54	103	314
05:15 PM	0	0	0	0	25	81	0	106	59	0	31	90	0	51	59	110	306
05:30 PM	0	0	0	0	30	91	0	121	75	0	33	108	0	56	44	100	329
Total Volume	0	0	0	0	100	331	1	432	269	6	121	396	0	217	215	432	1260
% App. Total	0	0	0		23.1	76.6	0.2		67.9	1.5	30.6		0	50.2	49.8		
PHF	.000	.000	.000	.000	.833	.909	.250	.893	.873	.250	.917	.917	.000	.889	.911	.908	.957
Passenger and 2 Axle Vehicles	0	0	0	0	100	330	1	431	269	6	121	396	0	217	214	431	1258
% Passenger and 2 Axle Vehicles	0	0	0	0	100	99.7	100	99.8	100	100	100	100	0	100	99.5	99.8	99.8
Buses and Heavy Vehicles	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2
% Buses and Heavy Vehicles	0	0	0	0	0	0.3	0	0.2	0	0	0	0	0	0	0.5	0.2	0.2

APPENDIX C

Level of Service Delay Thresholds

Level of Service Criteria

Level of Service at intersections is defined in terms of DELAY. Delay is a measure of driver discomfort, frustration, and lost travel time, thus the rating of delay from highly acceptable LOS A to unacceptable LOS F.

At traffic signals, delay is a complex measure and is dependent on a number of variables including signal progression, the cycle length, the green-time ratio, clearance times, trucks, pedestrians, parking, and signal phasing.

At unsignalized intersections, delay is dependent on the available gaps in the two-way flow of the uninterrupted traffic movement, intersection width, and queuing.

Intersection LOS

	<u>Signalized</u>	<u>Unsignalized</u>
LOS A	Less than 10.0 sec/veh	Less than 10.0 sec/veh
B	10.0 to 20.0 sec/veh	10.0 to 15.0 sec/veh
C	20.0 to 35.0 sec/veh	15.0 to 25.0 sec/veh
D	35.0 to 55.0 sec/veh	25.0 to 35.0 sec/veh
E	55.0 to 80.0 sec/veh	35.0 to 50.0 sec/veh
F	Greater than 80.0 sec/veh	Greater than 50.0 sec/veh

LEVEL OF SERVICE FOR SIGNALIZED INTERSECTIONS

Level of service for signalized intersections is defined in terms of delay. Delay is a measure of driver discomfort, frustration, fuel consumption, and lost travel time.

- **LEVEL-OF-SERVICE A** describes operations with very low delay, i.e., less than 10.0 sec per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
- **LEVEL-OF-SERVICE B** describes operations with delay in the range of 10.0 to 20.0 sec per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.
- **LEVEL-OF-SERVICE C** describes operations with delay in the range of 20.0 to 35.0 sec per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
- **LEVEL-OF-SERVICE D** describes operations with delay in the range of 35.0 to 55.0 sec per vehicle. At level D, the influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
- **LEVEL-OF-SERVICE E** describes operations with delay in the range of 55.0 to 80.0 sec per vehicle. This is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.
- **LEVEL-OF-SERVICE F** describes operations with delay in excess of 80.0 sec per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with over saturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

APPENDIX D

Existing Capacity/LOS Analysis Worksheets

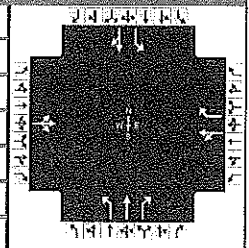
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc		
Analyst	DHH	Analysis Date	May 7, 2026
Jurisdiction	Perkasie Borough	Time Period	AM Peak Hour
Urban Street		Analysis Year	Existing
Intersection	Constitution Ave/Perkasi...	File Name	Constitution Ave_Perkasie Square_ea.xus
Project Description	25-038 Perkasi Place		

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.93
Analysis Period	1 > 7:00



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	7	0	10	47	0	47	4	118	49	69	163	4

Signal Information

Cycle, s	85.0	Reference Phase	2					
Offset, s	0	Reference Point	End					
Uncoordinated	Yes	Simult. Gap E/W	On					
Force Mode	Fixed	Simult. Gap N/S	On					
		Green	7.0	7.0	27.0	20.0	0.0	0.0
		Yellow	4.0	4.0	4.0	4.0	0.0	0.0
		Red	2.0	2.0	2.0	2.0	0.0	0.0

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		8.0		7.0	1.1	3.0	1.1	4.0
Phase Duration, s		26.0		26.0	13.0	33.0	26.0	46.0
Change Period, (Y+R c), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (MAH), s		3.5		3.5	3.1	3.1	3.1	3.1
Queue Clearance Time (g s), s		3.2		5.1	2.6	6.7	4.0	7.4
Green Extension Time (g e), s		0.2		0.2	0.0	0.6	0.1	0.6
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.00		0.00	0.03	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		18			51	40	4	127	42	74	180	
Adjusted Saturation Flow Rate (s), veh/h/ln		1633			1311	1508	1750	1837	1594	1714	1792	
Queue Service Time (g s), s		0.0			1.9	1.7	0.1	4.2	1.5	1.5	4.9	
Cycle Queue Clearance Time (g c), s		0.7			2.6	1.7	0.1	4.2	1.5	1.5	4.9	
Green Ratio (g/C)		0.25			0.25	0.25	0.42	0.33	0.33	0.61	0.48	
Capacity (c), veh/h		463			409	373	646	605	525	867	865	
Volume-to-Capacity Ratio (X)		0.039			0.124	0.107	0.007	0.210	0.080	0.086	0.208	
Back of Queue (Q), ft/ln (95 th percentile)		13			38	29	2	78	25	22	82	
Back of Queue (Q), veh/ln (95 th percentile)		0.5			1.5	1.2	0.1	3.1	1.0	0.9	3.3	
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d 1), s/veh		24.3			25.1	24.7	14.2	20.9	19.6	7.2	12.7	
Incremental Delay (d 2), s/veh		0.0			0.0	0.0	0.0	0.1	0.0	0.0	0.0	
Initial Queue Delay (d 3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh		24.4			25.1	24.8	14.2	20.9	19.7	7.2	12.7	
Level of Service (LOS)		C			C	C	B	C	B	A	B	
Approach Delay, s/veh / LOS	24.4	C		25.0	C		20.5	C		11.1	B	
Intersection Delay, s/veh / LOS	16.9						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.13	B		1.93	B		1.93	B		1.67	B	
Bicycle LOS Score / LOS	0.52	A		0.64	A		0.77	A		0.91	A	

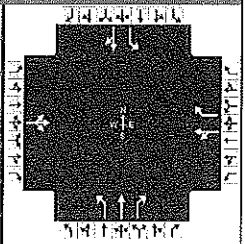
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Perkasi...
Project Description	25-038 Perkasie Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.97
Analysis Period	1> 7:00
File Name	Constitution Ave_Perkasie Square_ep.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	13	1	11	107	3	179	4	233	122	154	162	4

Signal Information

Cycle, s	111.0	Reference Phase	2							
Offset, s	0	Reference Point	End							
Uncoordinated	Yes	Simult. Gap E/W	On	Green	7.0	7.0	48.0	25.0	0.0	0.0
				Yellow	4.0	4.0	4.0	4.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.0	2.0	2.0	0.0	0.0

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		8.0		7.0	1.1	3.0	1.1	4.0
Phase Duration, s		31.0		31.0	13.0	54.0	26.0	67.0
Change Period, (Y+R _c), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (MAH), s		3.5		3.5	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		3.7		11.4	2.6	11.8	6.4	7.7
Green Extension Time (g _e), s		0.6		0.6	0.0	0.9	0.2	0.9
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.00		0.00	0.03	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		26			113	143	4	240	95	159	171	
Adjusted Saturation Flow Rate (s), veh/h/ln		1649			1362	1508	1750	1837	1619	1714	1792	
Queue Service Time (g _s), s		0.0			6.5	8.9	0.1	9.3	3.9	3.9	5.2	
Cycle Queue Clearance Time (g _c), s		1.2			7.7	8.9	0.1	9.3	3.9	3.9	5.2	
Green Ratio (g/C)		0.23			0.23	0.23	0.51	0.44	0.44	0.65	0.56	
Capacity (c), veh/h		436			383	353	735	811	715	803	1001	
Volume-to-Capacity Ratio (X)		0.059			0.296	0.406	0.006	0.296	0.133	0.198	0.171	
Back of Queue (Q), ft/ln (95 th percentile)		25			119	154	2	176	64	60	90	
Back of Queue (Q), veh/ln (95 th percentile)		1.0			4.8	6.1	0.1	7.0	2.6	2.4	3.6	
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh		33.0			35.5	36.0	13.2	20.2	18.4	8.1	12.0	
Incremental Delay (d ₂), s/veh		0.0			0.2	0.3	0.0	0.1	0.0	0.0	0.0	
Initial Queue Delay (d ₃), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh		33.0			35.6	36.2	13.2	20.3	18.4	8.1	12.0	
Level of Service (LOS)		C			D	D	B	C	B	A	B	
Approach Delay, s/veh / LOS	33.0	C		36.0	D		19.7	B		10.1	B	
Intersection Delay, s/veh / LOS	21.1						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.17	B		1.94	B		1.97	B		1.67	B	
Bicycle LOS Score / LOS	0.53	A		0.91	A		1.05	A		1.03	A	

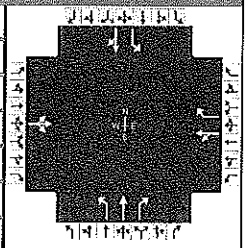
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Perkasi...
Project Description	25-038 Perkasi Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.92
Analysis Period	1> 7:00
File Name	Constitution Ave_Perkasie Square_es.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	6	0	15	82	2	165	4	163	116	140	148	2

Signal Information

Cycle, s	85.0	Reference Phase	2	
----------	------	-----------------	---	--

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		8.0		7.0	1.1	3.0	1.1	4.0
Phase Duration, s		26.0		26.0	13.0	33.0	26.0	46.0
Change Period, (Y+R c), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (MAH), s		3.6		3.6	3.1	3.1	3.1	3.1
Queue Clearance Time (g s), s		3.4		9.1	2.6	8.6	5.8	6.9
Green Extension Time (g e), s		0.5		0.5	0.0	0.7	0.2	0.8
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.00		0.00	0.03	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		23			91	141	4	177	88	152	163	
Adjusted Saturation Flow Rate (s), veh/h/ln		1648			1356	1508	1750	1837	1619	1714	1782	
Queue Service Time (g s), s		0.0			3.8	6.6	0.1	6.1	3.3	3.3	4.4	
Cycle Queue Clearance Time (g c), s		0.9			4.6	6.6	0.1	6.1	3.3	3.3	4.4	
Green Ratio (g/C)		0.25			0.25	0.25	0.42	0.33	0.33	0.61	0.48	
Capacity (c), veh/h		462			419	373	652	605	533	824	859	
Volume-to-Capacity Ratio (X)		0.049			0.218	0.379	0.007	0.293	0.165	0.185	0.190	
Back of Queue (Q), ft/ln (95 th percentile)		16			69	110	2	113	54	47	75	
Back of Queue (Q), veh/ln (95 th percentile)		0.7			2.8	4.4	0.1	4.5	2.1	1.9	3.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d 1), s/veh		24.4			25.8	26.6	14.2	21.5	20.2	7.7	12.5	
Incremental Delay (d 2), s/veh		0.0			0.1	0.2	0.0	0.1	0.1	0.0	0.0	
Initial Queue Delay (d 3), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh		24.4			25.9	26.8	14.2	21.6	20.3	7.8	12.6	
Level of Service (LOS)		C			C	C	B	C	C	A	B	
Approach Delay, s/veh / LOS	24.4	C		26.5	C		21.0	C		10.3	B	
Intersection Delay, s/veh / LOS	18.6						B					

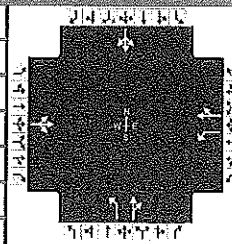
Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.17	B	1.93	B	1.97	B	1.67	B
Bicycle LOS Score / LOS	0.53	A	0.87	A	0.93	A	1.01	A

HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc			Duration, h	0.250
Analyst	DHH	Analysis Date	May 7, 2026	Area Type	Other
Jurisdiction	Perkasie Borough	Time Period	AM Peak Hour	PHF	0.90
Urban Street		Analysis Year	Existing	Analysis Period	1> 7:00
Intersection	Constitution Ave/Walnut...	File Name	Constitution Ave_Walnut Street_ea.xus		
Project Description	25-038 Perkasie Place				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	1	204	143	58	161	1	104	0	49	0	0	0

Signal Information

Cycle, s	86.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	23.0	7.0	35.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	3.0	3.0	3.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4	3	8		2		6
Case Number		8.3	1.0	4.0		6.0		8.0
Phase Duration, s		42.0	14.0	56.0		30.0		30.0
Change Period, (Y+R _c), s		7.0	7.0	7.0		7.0		7.0
Max Allow Headway (MAH), s		3.2	3.1	3.2		3.1		0.0
Queue Clearance Time (g _s), s		14.6	4.2	6.3		7.3		
Green Extension Time (g _e), s		1.0	0.0	1.1		0.2		0.0
Phase Call Probability		1.00	1.00	1.00		1.00		
Max Out Probability		0.00	1.00	0.00		0.00		

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		348		64	180		116	54			0	
Adjusted Saturation Flow Rate (s), veh/h/ln		1789		1587	1864		1607	1483			0	
Queue Service Time (g _s), s		0.0		1.7	3.8		4.8	2.4			0.0	
Cycle Queue Clearance Time (g _c), s		12.1		1.7	3.8		4.8	2.4			0.0	
Green Ratio (g/C)		0.42		0.54	0.58		0.28	0.28				
Capacity (c), veh/h		791		502	1084		532	414				
Volume-to-Capacity Ratio (X)		0.440		0.128	0.166		0.217	0.132			0.000	
Back of Queue (Q), ft/ln (95 th percentile)		222		26	64		85	38			0	
Back of Queue (Q), veh/ln (95 th percentile)		8.5		1.0	2.5		3.2	1.4			0.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00	0.00		0.00	0.00			0.00	
Uniform Delay (d ₁), s/veh		18.0		10.8	8.3		24.1	23.2				
Incremental Delay (d ₂), s/veh		0.1		0.0	0.0		0.1	0.1			0.0	
Initial Queue Delay (d ₃), s/veh		0.0		0.0	0.0		0.0	0.0			0.0	
Control Delay (d), s/veh		18.2		10.8	8.4		24.2	23.3				
Level of Service (LOS)		B		B	A		C	C				
Approach Delay, s/veh / LOS	18.2	B		9.0	A		23.9	C		0.0		
Intersection Delay, s/veh / LOS	16.5						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		1.66	B		1.92	B		1.75	B	
Bicycle LOS Score / LOS	1.06	A		0.89	A		0.77	A		0.49	A	

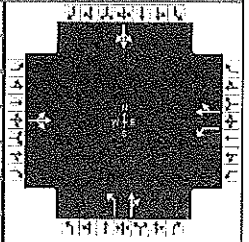
HCS Signalized Intersection Results Summary

General Information

Agency: Horner & Canter Assoc
 Analyst: DHH
 Jurisdiction: Perkasio Borough
 Urban Street:
 Intersection: Constitution Ave/Walnut...
 Project Description: 25-038 Perkasio Place

Intersection Information

Duration, h: 0.250
 Area Type: Other
 PHF: 0.96
 Analysis Period: 1 > 7:00
 File Name: Constitution Ave_Walnut Street_ep.xus



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	1	217	215	100	331	1	269	6	121	0	0	0

Signal Information

Cycle, s	93.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	Yes	Simult. Gap E/W	On	Green	19.0	14.0	39.0	0.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0	
				Red	3.0	3.0	3.0	0.0	0.0	0.0	

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4	3	8		2		6
Case Number		8.3	1.0	4.0		6.0		8.0
Phase Duration, s		46.0	21.0	67.0		26.0		26.0
Change Period, (Y+R _c), s		7.0	7.0	7.0		7.0		7.0
Max Allow Headway (MAH), s		3.2	3.1	3.2		3.1		0.0
Queue Clearance Time (g _s), s		17.3	4.7	9.6		16.8		
Green Extension Time (g _e), s		1.5	0.1	1.6		0.2		0.0
Phase Call Probability		1.00	1.00	1.00		1.00		
Max Out Probability		0.00	0.00	0.00		1.00		

Movement Group Results

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		399		104	346		280	132			0	
Adjusted Saturation Flow Rate (s), veh/h/ln		1830		1750	1910		1714	1593			0	
Queue Service Time (g _s), s		0.0		2.2	7.1		14.3	6.6			0.0	
Cycle Queue Clearance Time (g _c), s		14.8		2.2	7.1		14.3	6.6			0.0	
Green Ratio (g/C)		0.43		0.62	0.66		0.22	0.22				
Capacity (c), veh/h		826		637	1253		446	343				
Volume-to-Capacity Ratio (X)		0.483		0.163	0.276		0.628	0.386			0.000	
Back of Queue (Q), ft/ln (95 th percentile)		258		34	110		251	112			0	
Back of Queue (Q), veh/ln (95 th percentile)		10.3		1.3	4.4		10.0	4.5			0.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00	0.00		0.00	0.00			0.00	
Uniform Delay (d ₁), s/veh		19.3		9.0	6.7		34.2	31.2				
Incremental Delay (d ₂), s/veh		0.2		0.0	0.0		2.1	0.3			0.0	
Initial Queue Delay (d ₃), s/veh		0.0		0.0	0.0		0.0	0.0			0.0	
Control Delay (d), s/veh		19.5		9.0	6.8		36.4	31.5				
Level of Service (LOS)		B		A	A		D	C				
Approach Delay, s/veh / LOS	19.5	B		7.3	A		34.8	C		0.0		
Intersection Delay, s/veh / LOS	20.1						C					

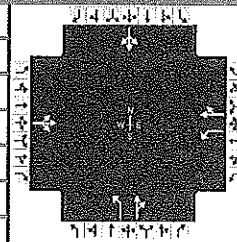
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		1.64	B		1.93	B		1.78	B	
Bicycle LOS Score / LOS	1.15	A		1.23	A		1.17	A		0.49	A	

HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc			Duration, h	0.250
Analyst	DHH	Analysis Date	May 7, 2026	Area Type	Other
Jurisdiction	Perkasie Borough	Time Period	SAT Peak Hour	PHF	0.92
Urban Street		Analysis Year	Existing	Analysis Period	1> 7:00
Intersection	Constitution Ave/Walnut...	File Name	Constitution Ave_Walnut Street_es.xus		
Project Description	25-038 Perkasie Place				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	1	209	222	116	198	1	204	0	119	0	0	0

Signal Information

Cycle, s	86.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	23.0	7.0	35.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	3.0	3.0	3.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4	3	8		2		6
Case Number		8.3	1.0	4.0		6.0		8.0
Phase Duration, s		42.0	14.0	56.0		30.0		30.0
Change Period, (Y+R _c), s		7.0	7.0	7.0		7.0		7.0
Max Allow Headway (MAH), s		3.2	3.1	3.2		3.2		0.0
Queue Clearance Time (g _s), s		17.1	5.6	7.2		11.9		
Green Extension Time (g _e), s		1.3	0.0	1.3		0.5		0.0
Phase Call Probability		1.00	1.00	1.00		1.00		
Max Out Probability		0.00	1.00	0.00		0.00		

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		410		126	216		222	129			0	
Adjusted Saturation Flow Rate (s), veh/h/ln		1813		1709	1865		1688	1544			0	
Queue Service Time (g_s), s		0.0		3.1	4.7		9.4	5.7			0.0	
Cycle Queue Clearance Time (g_c), s		14.6		3.1	4.7		9.4	5.7			0.0	
Green Ratio (g/C)		0.42		0.54	0.58		0.28	0.28				
Capacity (c), veh/h		801		489	1084		555	431				
Volume-to-Capacity Ratio (X)		0.512		0.258	0.200		0.400	0.300			0.000	
Back of Queue (Q), ft/ln (95 th percentile)		254		50	78		166	92			0	
Back of Queue (Q), veh/ln (95 th percentile)		10.0		1.9	3.0		6.5	3.6			0.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00	0.00		0.00	0.00			0.00	
Uniform Delay (d_1), s/veh		18.8		11.7	8.5		25.7	24.4				
Incremental Delay (d_2), s/veh		0.2		0.1	0.0		0.2	0.1			0.0	
Initial Queue Delay (d_3), s/veh		0.0		0.0	0.0		0.0	0.0			0.0	
Control Delay (d), s/veh		19.0		11.8	8.6		25.9	24.5				
Level of Service (LOS)		B		B	A		C	C				
Approach Delay, s/veh / LOS	19.0	B		9.8	A		25.4	C		0.0		
Intersection Delay, s/veh / LOS	18.2						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		1.66	B		1.92	B		1.77	B	
Bicycle LOS Score / LOS	1.16	A		1.05	A		1.07	A		0.49	A	

APPENDIX E

Trip Generation Worksheets

Specialty Trade Contractor (180)

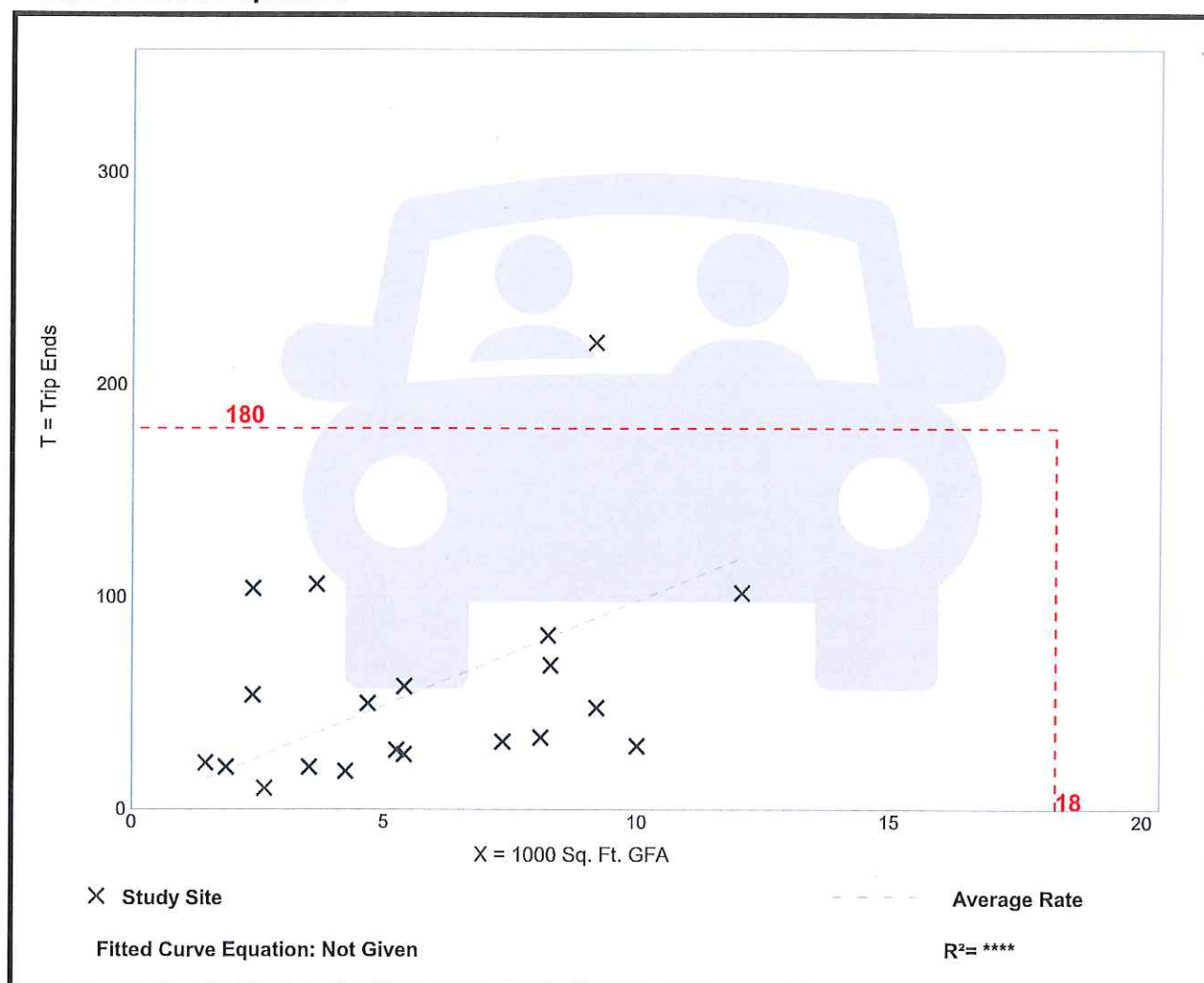
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 20
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.82	3.00 - 43.33	8.56

Data Plot and Equation



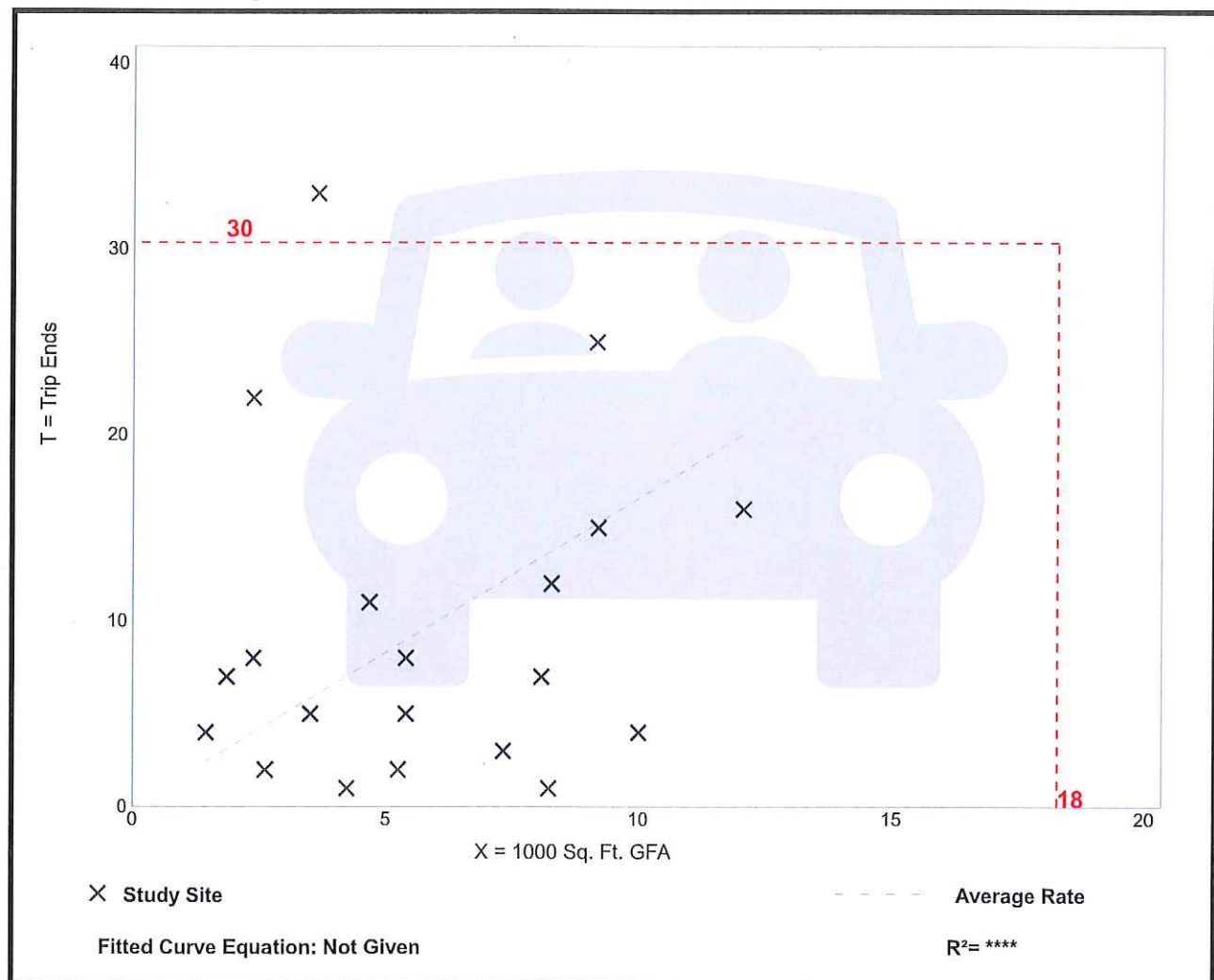
Specialty Trade Contractor (180)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 20
 Avg. 1000 Sq. Ft. GFA: 6
 Directional Distribution: 74% entering, 26% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.66	0.12 - 9.17	2.00

Data Plot and Equation



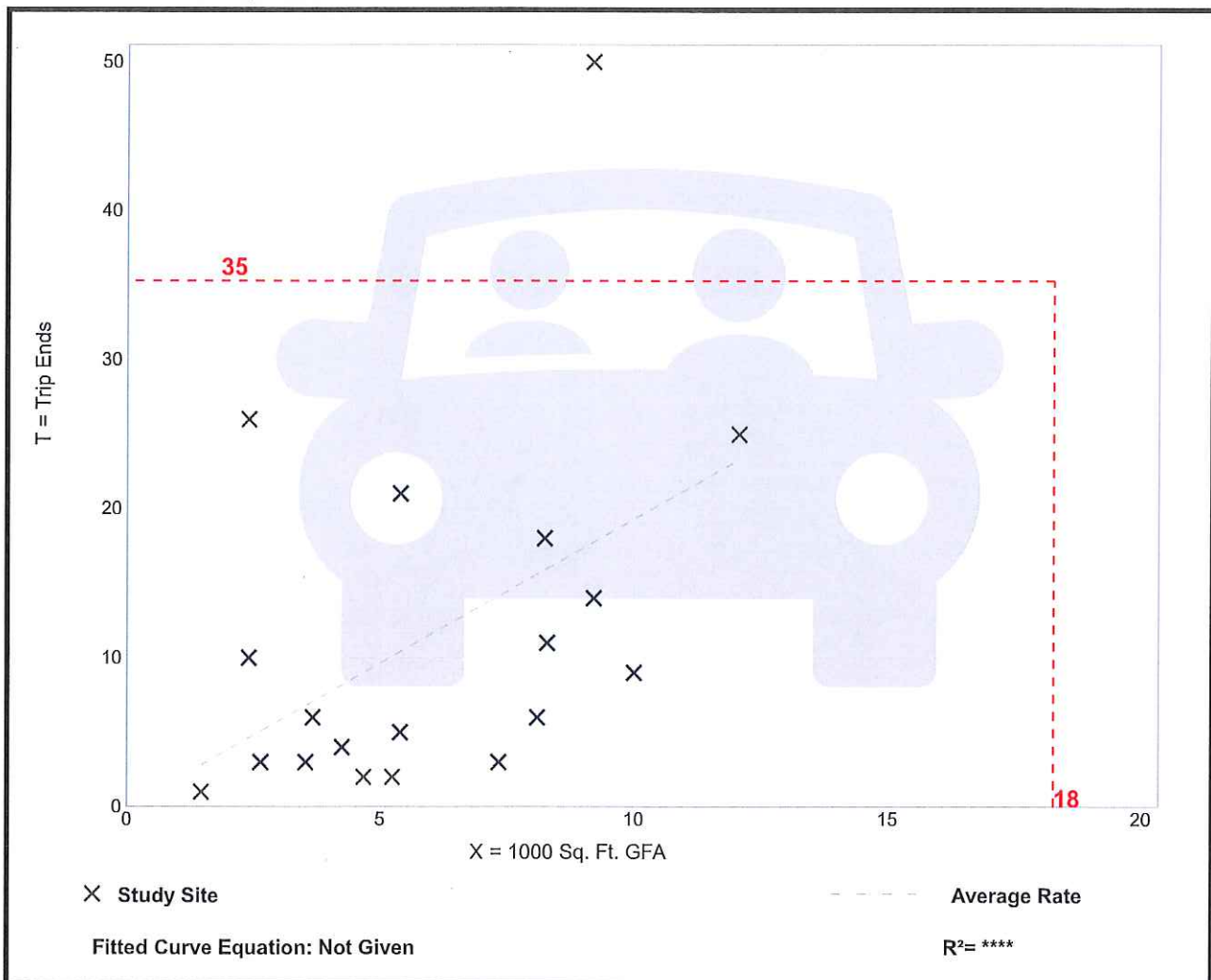
Specialty Trade Contractor (180)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 19
 Avg. 1000 Sq. Ft. GFA: 6
 Directional Distribution: 32% entering, 68% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.93	0.38 - 10.83	1.98

Data Plot and Equation



Specialty Trade Contractor (180)

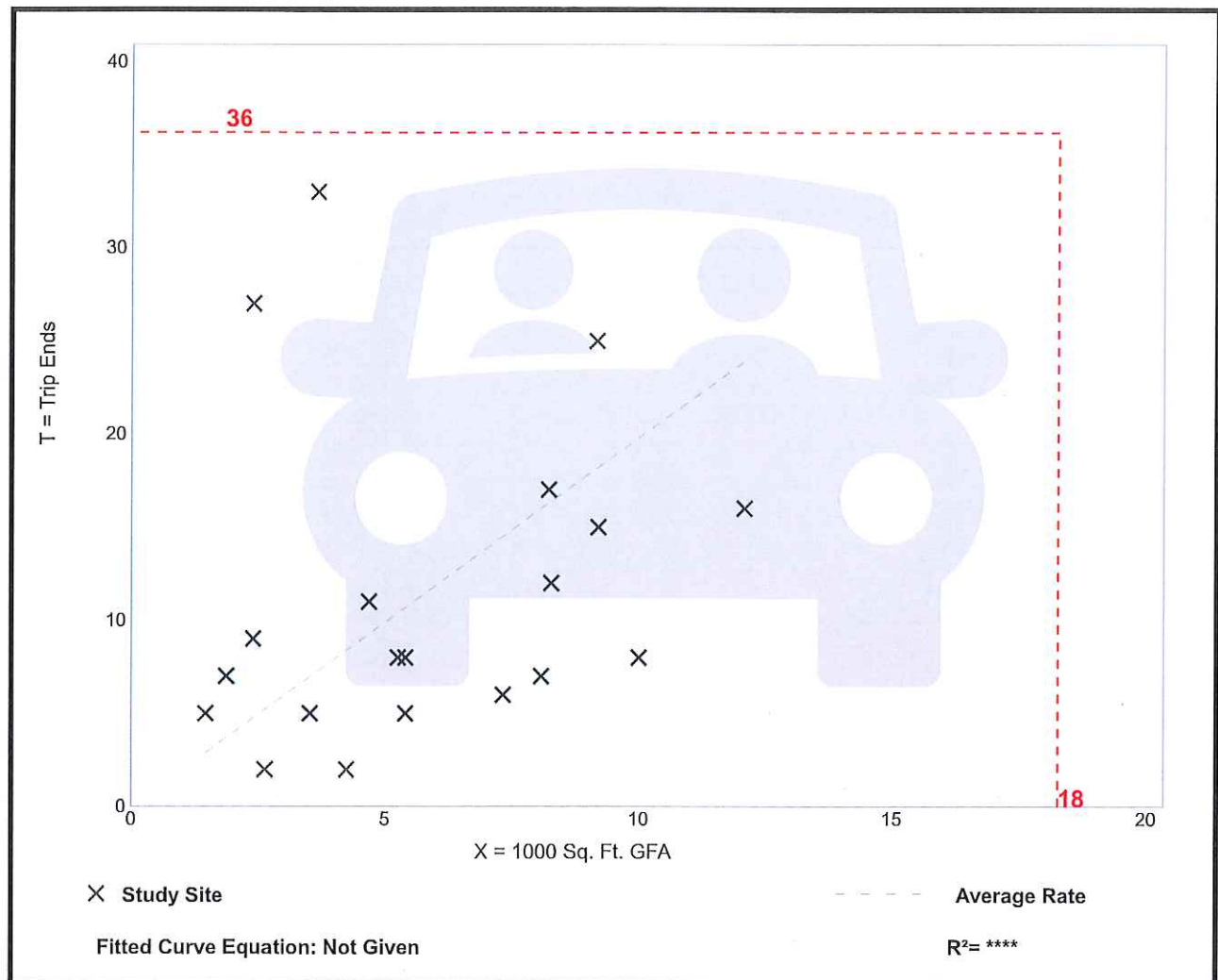
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 20
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 77% entering, 23% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.98	0.47 - 11.25	2.08

Data Plot and Equation



Small Office Building (712)

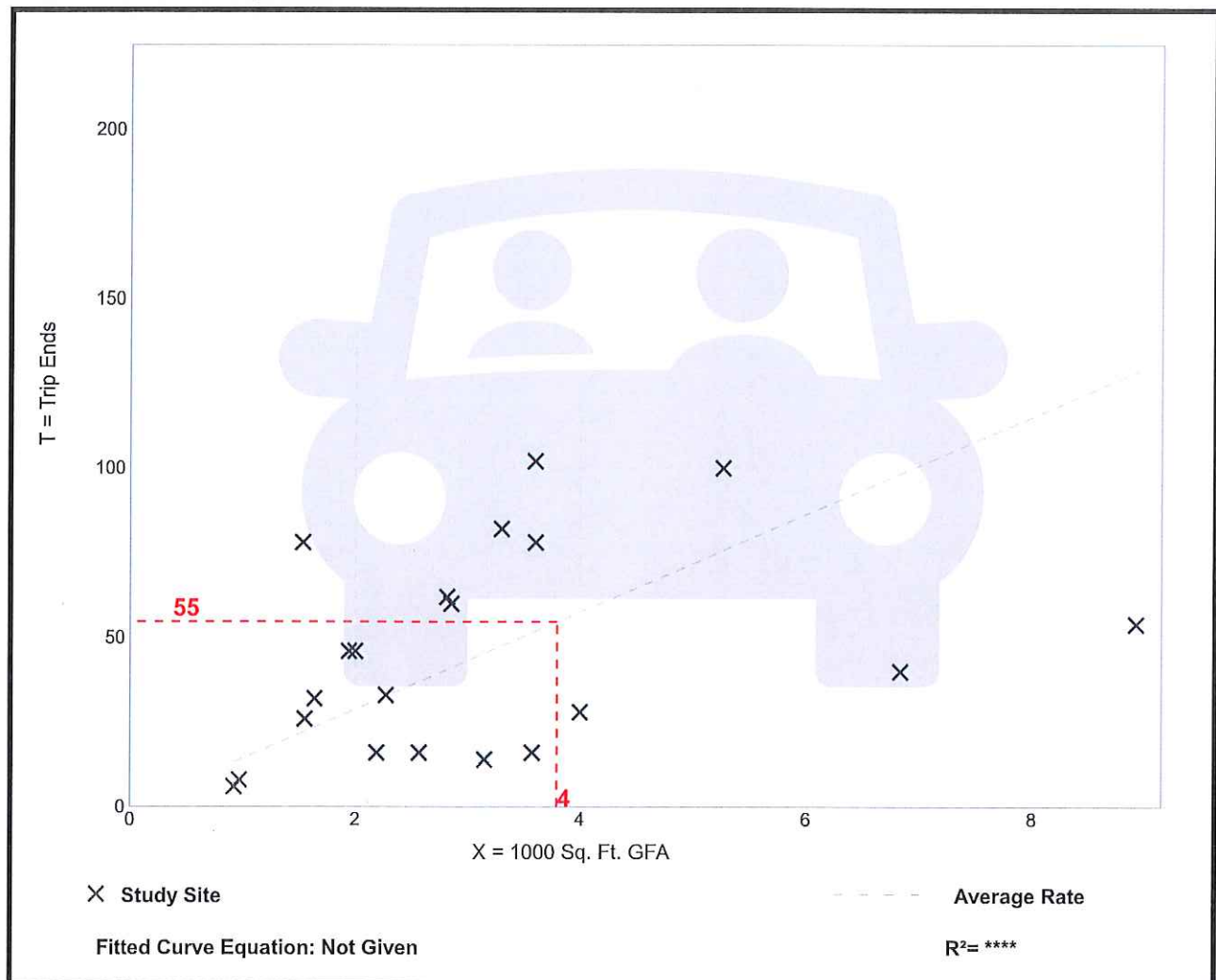
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 21
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
14.39	4.44 - 50.91	10.16

Data Plot and Equation



Small Office Building (712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA

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

Setting/Location: General Urban/Suburban

Number of Studies: 20

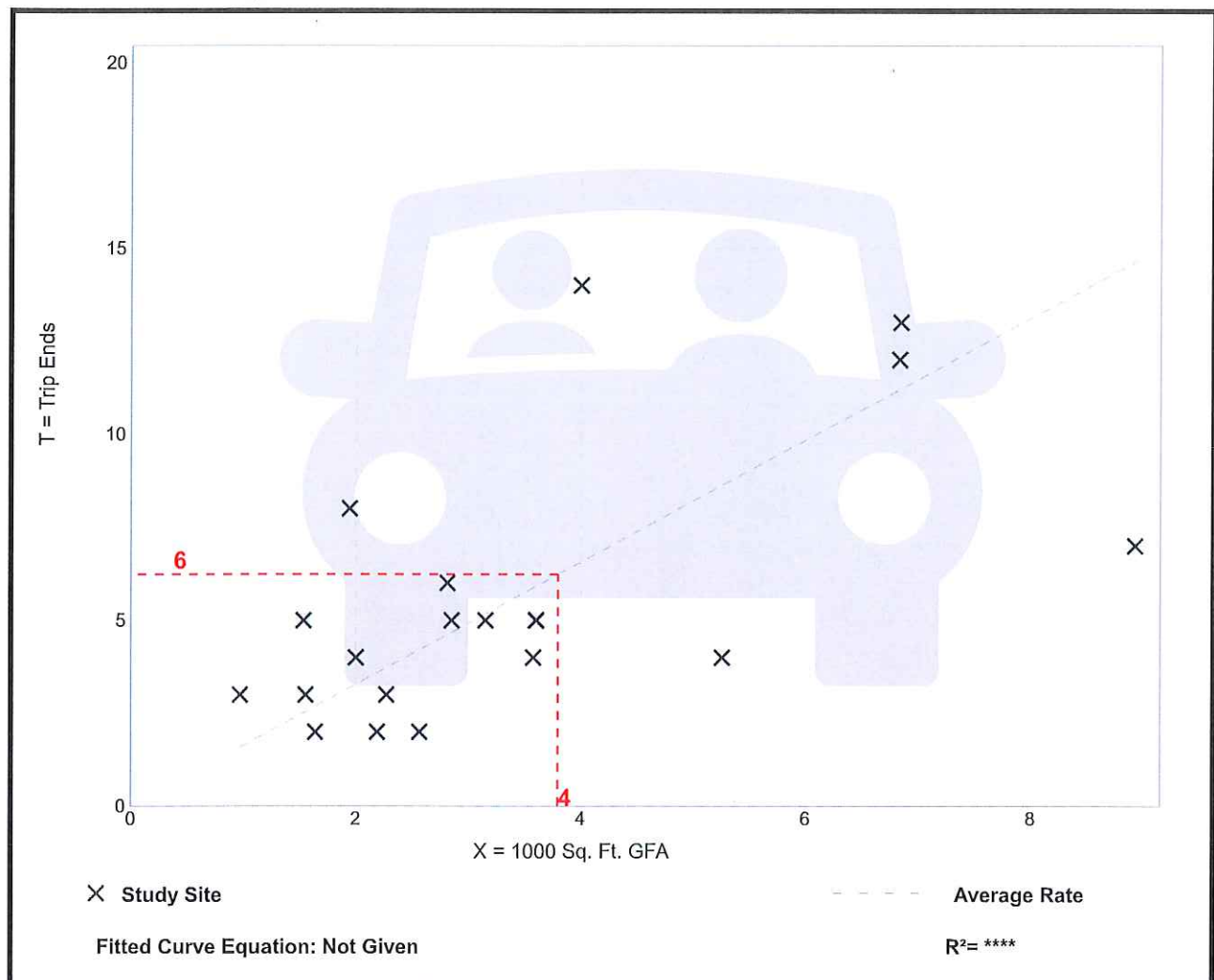
Avg. 1000 Sq. Ft. GFA: 3

Directional Distribution: 83% entering, 17% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.64	0.76 - 4.12	0.87

Data Plot and Equation



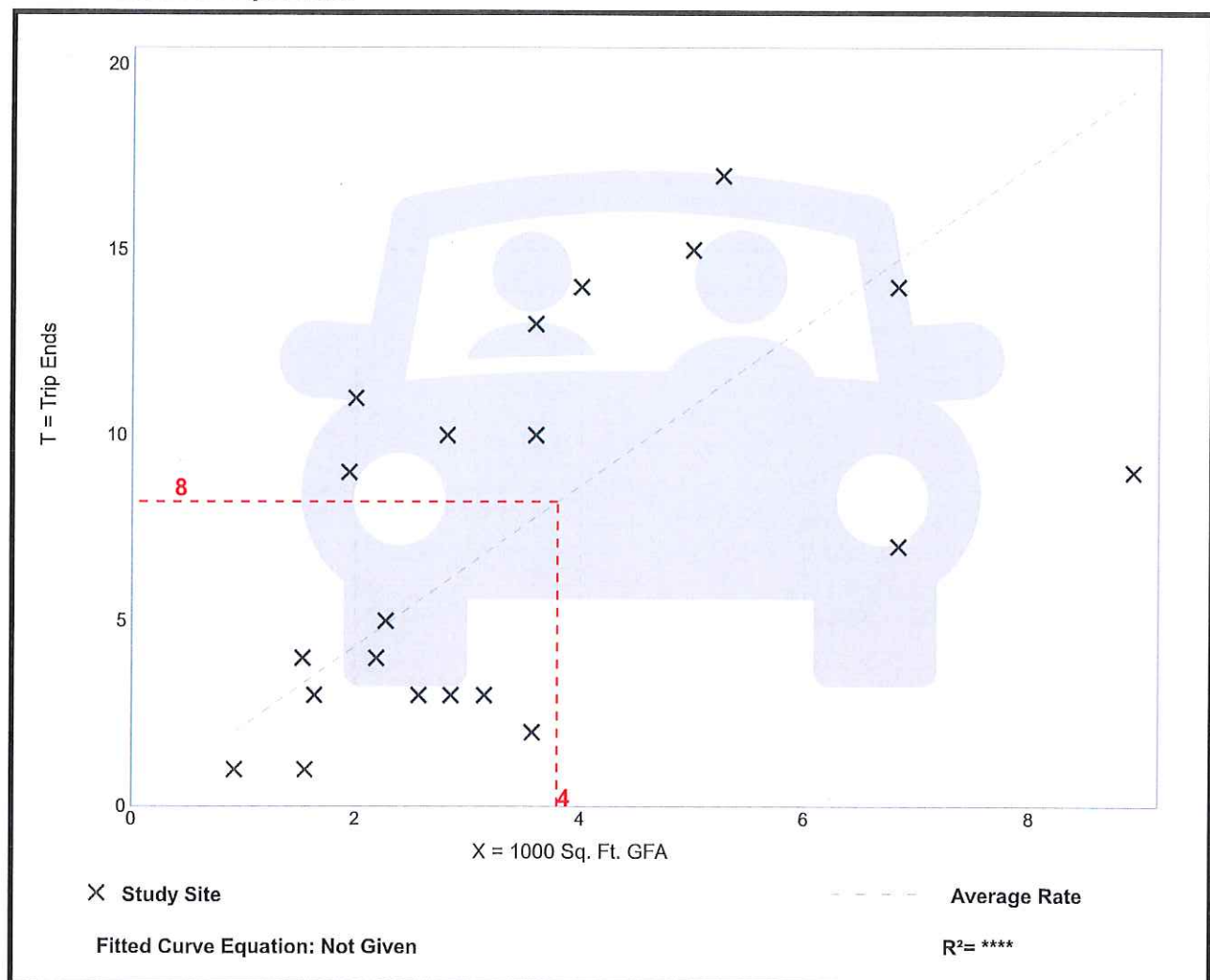
Small Office Building (712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 21
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 34% entering, 66% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.16	0.56 - 5.50	1.26

Data Plot and Equation



Small Office Building (712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday, Peak Hour of Generator

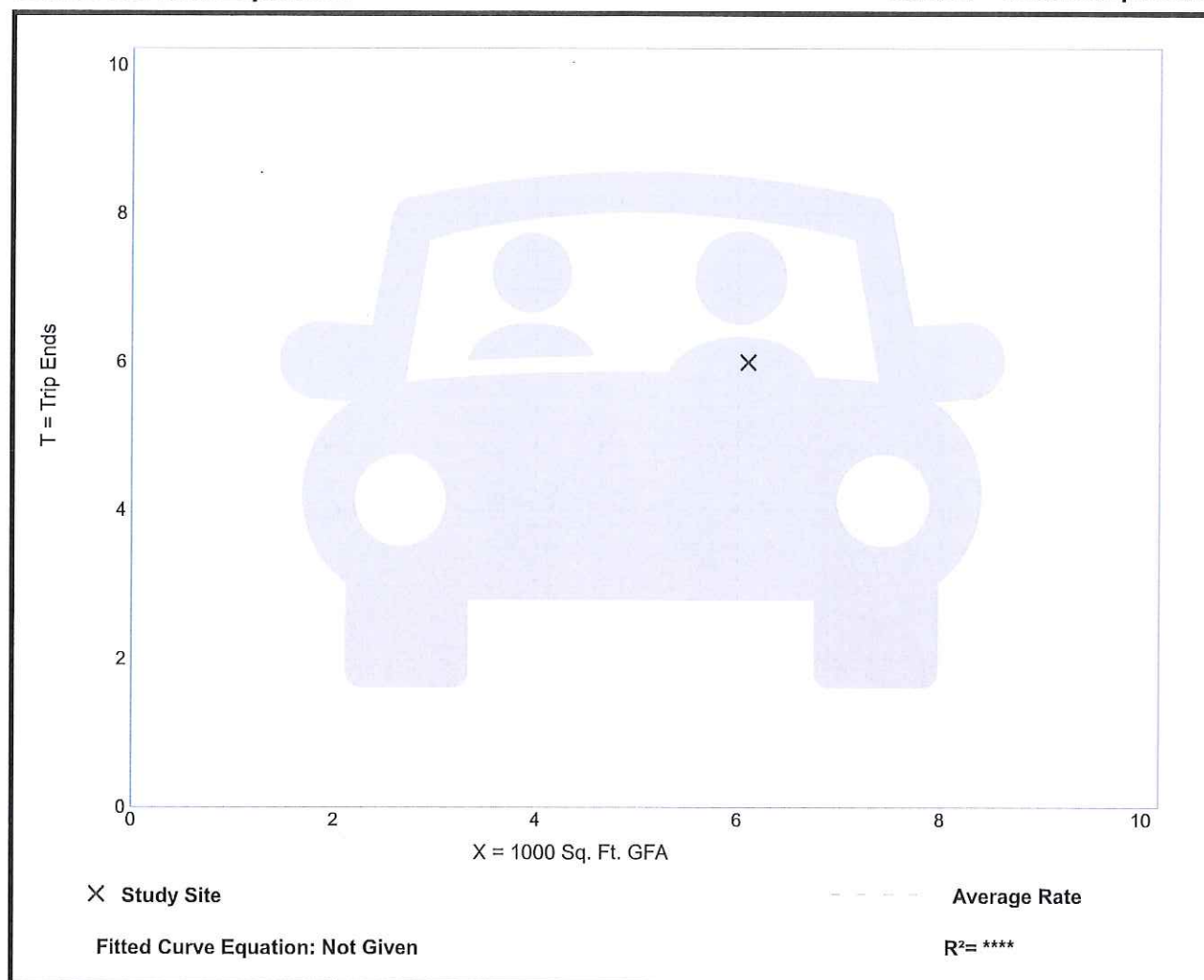
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.98	0.98 - 0.98	*

Data Plot and Equation

Caution – Small Sample Size



Industrial Recycling Facility (175)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

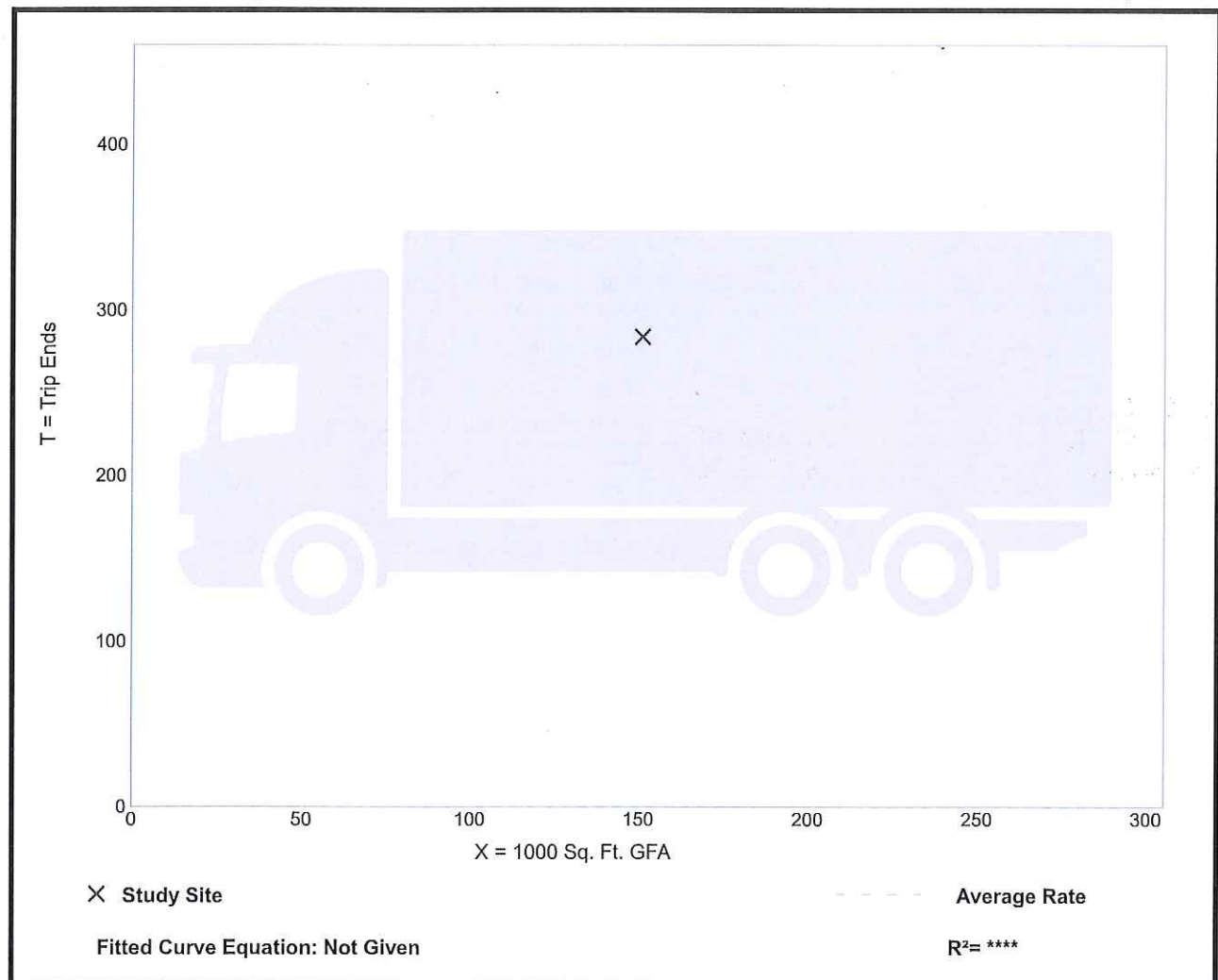
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 151
Directional Distribution: 50% entering, 50% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.88	1.88 - 1.88	*

Data Plot and Equation

Caution – Small Sample Size



Industrial Recycling Facility (175)

Truck Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
AM Peak Hour of Generator

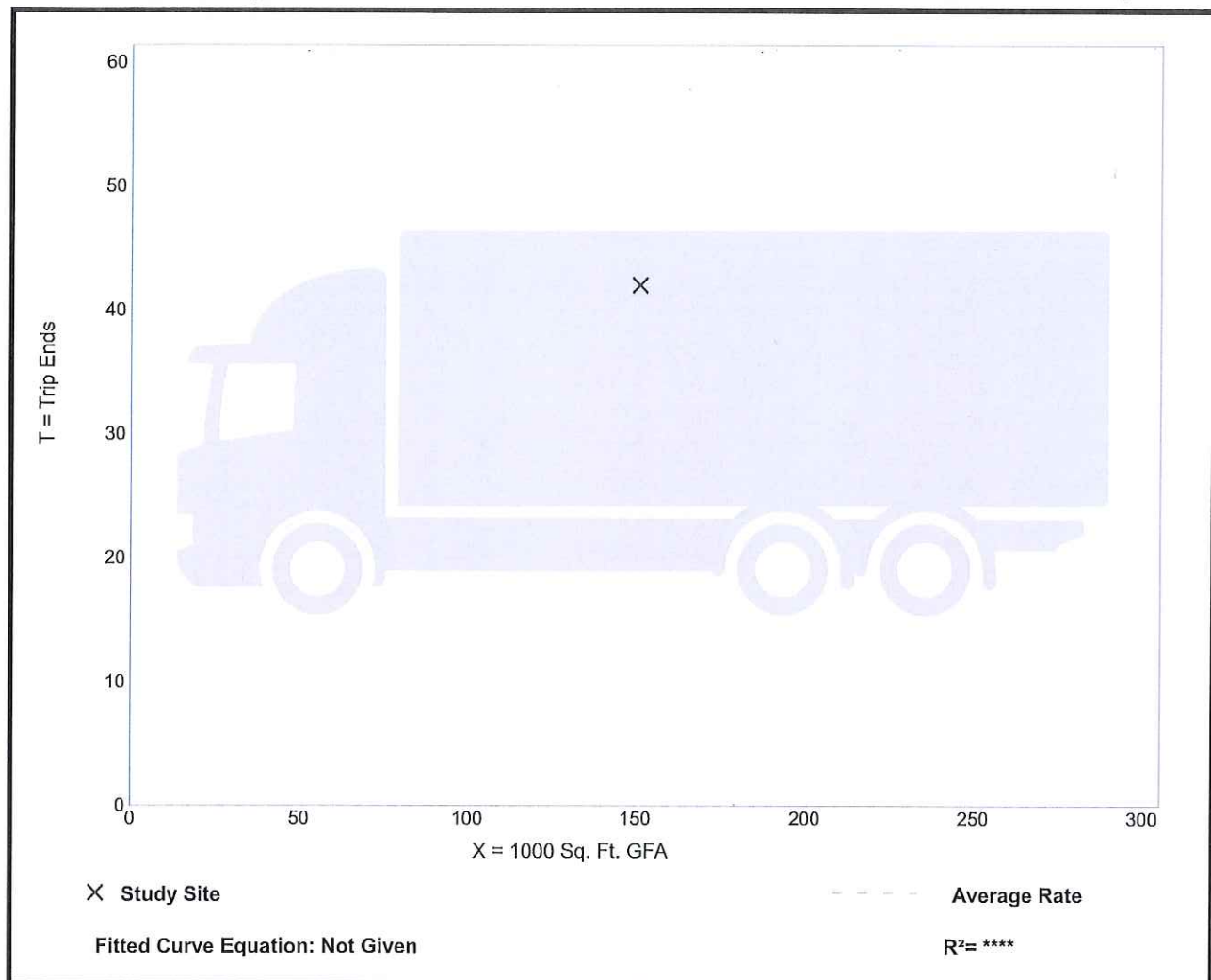
Setting/Location: General Urban/Suburban
Number of Studies: 1
Avg. 1000 Sq. Ft. GFA: 151
Directional Distribution: 50% entering, 50% exiting

Truck Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.28	0.28 - 0.28	*

Data Plot and Equation

Caution – Small Sample Size



APPENDIX F

No-Build Capacity/LOS Analysis Worksheets

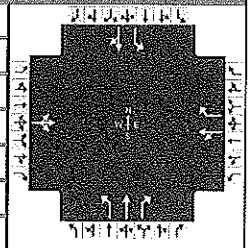
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Perkasi...
Project Description	25-038 Perkasi Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.93
Analysis Period	1> 7:00
File Name	Constitution Ave_Perkasie Square_na.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	7	0	10	47	0	47	4	118	49	69	164	4

Signal Information

Cycle, s	85.0	Reference Phase	2												
Offset, s	0	Reference Point	End												
Uncoordinated	Yes	Simult. Gap E/W	On	Green	7.0	7.0	27.0	20.0	0.0	0.0					
				Yellow	4.0	4.0	4.0	4.0	0.0	0.0					
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.0	2.0	2.0	0.0	0.0					

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		8.0		7.0	1.1	3.0	1.1	4.0
Phase Duration, s		26.0		26.0	13.0	33.0	26.0	46.0
Change Period, (Y+R _c), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (MAH), s		3.5		3.5	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		3.2		5.1	2.6	6.7	4.0	7.4
Green Extension Time (g _e), s		0.2		0.2	0.0	0.6	0.1	0.6
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.00		0.00	0.03	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		18			51	40	4	127	42	74	181	
Adjusted Saturation Flow Rate (s), veh/h/ln		1633			1311	1508	1750	1837	1594	1714	1792	
Queue Service Time (g _s), s		0.0			1.9	1.7	0.1	4.2	1.5	1.5	4.9	
Cycle Queue Clearance Time (g _c), s		0.7			2.6	1.7	0.1	4.2	1.5	1.5	4.9	
Green Ratio (g/C)		0.25			0.25	0.25	0.42	0.33	0.33	0.61	0.48	
Capacity (c), veh/h		463			409	373	646	605	525	867	865	
Volume-to-Capacity Ratio (X)		0.039			0.124	0.107	0.007	0.210	0.080	0.086	0.209	
Back of Queue (Q), ft/ln (95 th percentile)		13			38	29	2	78	25	22	83	
Back of Queue (Q), veh/ln (95 th percentile)		0.5			1.5	1.2	0.1	3.1	1.0	0.9	3.3	
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh		24.3			25.1	24.7	14.2	20.9	19.6	7.2	12.7	
Incremental Delay (d ₂), s/veh		0.0			0.0	0.0	0.0	0.1	0.0	0.0	0.0	
Initial Queue Delay (d ₃), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh		24.4			25.1	24.8	14.2	20.9	19.7	7.2	12.7	
Level of Service (LOS)		C			C	C	B	C	B	A	B	
Approach Delay, s/veh / LOS	24.4	C		25.0	C		20.5	C		11.1	B	
Intersection Delay, s/veh / LOS	16.9						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.13	B		1.93	B		1.93	B		1.67	B	
Bicycle LOS Score / LOS	0.52	A		0.64	A		0.77	A		0.91	A	

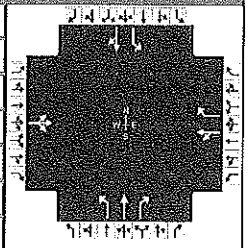
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Perkasi...
Project Description	25-038 Perkasie Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.97
Analysis Period	1> 7:00
File Name	Constitution Ave_Perkasie Square_np.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	13	1	11	107	3	180	4	234	122	155	163	4

Signal Information

Cycle, s	111.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		8.0		7.0	1.1	3.0	1.1	4.0
Phase Duration, s		31.0		31.0	13.0	54.0	26.0	67.0
Change Period, (Y+R _c), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (MAH), s		3.5		3.5	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		3.7		11.5	2.6	11.9	6.5	7.7
Green Extension Time (g _e), s		0.6		0.6	0.0	0.9	0.2	0.9
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.00		0.00	0.03	0.00	0.00	0.00

Movement Group Results

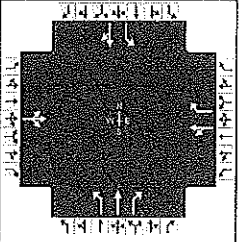
	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	26			113	144		4	241	95	160	172	
Adjusted Saturation Flow Rate (s), veh/h/ln	1649			1362	1508		1750	1837	1619	1714	1792	
Queue Service Time (g _s), s	0.0			6.5	9.0		0.1	9.4	3.9	4.0	5.2	
Cycle Queue Clearance Time (g _c), s	1.2			7.7	9.0		0.1	9.4	3.9	4.0	5.2	
Green Ratio (g/C)	0.23			0.23	0.23		0.51	0.44	0.44	0.65	0.56	
Capacity (c), veh/h	436			383	353		735	811	715	802	1001	
Volume-to-Capacity Ratio (X)	0.059			0.296	0.409		0.006	0.297	0.133	0.199	0.172	
Back of Queue (Q), ft/ln (95 th percentile)	25			119	155		2	177	64	60	90	
Back of Queue (Q), veh/ln (95 th percentile)	1.0			4.8	6.2		0.1	7.1	2.6	2.4	3.6	
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh	33.0			35.5	36.0		13.2	20.2	18.4	8.1	12.0	
Incremental Delay (d ₂), s/veh	0.0			0.2	0.3		0.0	0.1	0.0	0.0	0.0	
Initial Queue Delay (d ₃), s/veh	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	33.0			35.6	36.3		13.2	20.3	18.4	8.1	12.0	
Level of Service (LOS)	C			D	D		B	C	B	A	B	
Approach Delay, s/veh / LOS	33.0	C		36.0	D		19.7	B		10.1	B	
Intersection Delay, s/veh / LOS	21.1						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.17	B		1.94	B		1.97	B		1.67	B	
Bicycle LOS Score / LOS	0.53	A		0.91	A		1.05	A		1.04	A	

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Horner & Canter Assoc			Duration, h	0.250
Analyst	DHH	Analysis Date	May 7, 2026	Area Type	Other
Jurisdiction	Perkasie Borough	Time Period	SAT Peak Hour	PHF	0.92
Urban Street		Analysis Year	2028 No-Build	Analysis Period	1> 7:00
Intersection	Constitution Ave/Perkasi...	File Name	Constitution Ave_Perkasie Square_ns.xus		
Project Description	25-038 Perkasi Place				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	6	0	15	82	2	166	4	164	116	141	149	2

Signal Information											
Cycle, s	85.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	Yes	Simult. Gap E/W	On	Green	7.0	7.0	27.0	20.0	0.0	0.0	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	0.0	0.0	
				Red	2.0	2.0	2.0	2.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		8.0		7.0	1.1	3.0	1.1	4.0
Phase Duration, s		26.0		26.0	13.0	33.0	26.0	46.0
Change Period, (Y+R _c), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (MAH), s		3.6		3.6	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		3.4		9.2	2.6	8.6	5.8	7.0
Green Extension Time (g _e), s		0.6		0.5	0.0	0.7	0.2	0.8
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.00		0.00	0.03	0.00	0.00	0.00

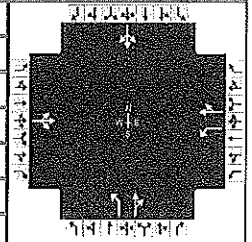
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		23			91	142	4	178	88	153	164	
Adjusted Saturation Flow Rate (s), veh/h/ln		1648			1356	1508	1750	1837	1619	1714	1782	
Queue Service Time (g _s), s		0.0			3.8	6.7	0.1	6.1	3.3	3.3	4.5	
Cycle Queue Clearance Time (g _c), s		0.9			4.6	6.7	0.1	6.1	3.3	3.3	4.5	
Green Ratio (g/C)		0.25			0.25	0.25	0.42	0.33	0.33	0.61	0.48	
Capacity (c), veh/h		462			419	373	652	605	533	824	859	
Volume-to-Capacity Ratio (X)		0.049			0.218	0.382	0.007	0.295	0.165	0.186	0.191	
Back of Queue (Q), ft/ln (95 th percentile)		16			69	111	2	114	54	47	75	
Back of Queue (Q), veh/ln (95 th percentile)		0.7			2.8	4.4	0.1	4.5	2.1	1.9	3.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh		24.4			25.8	26.6	14.2	21.5	20.2	7.7	12.5	
Incremental Delay (d ₂), s/veh		0.0			0.1	0.2	0.0	0.1	0.1	0.0	0.0	
Initial Queue Delay (d ₃), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh		24.4			25.9	26.8	14.2	21.6	20.3	7.8	12.6	
Level of Service (LOS)		C			C	C	B	C	C	A	B	
Approach Delay, s/veh / LOS	24.4	C		26.5	C		21.1	C		10.3	B	
Intersection Delay, s/veh / LOS	18.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.17	B	1.93	B	1.97	B	1.67	B
Bicycle LOS Score / LOS	0.53	A	0.87	A	0.93	A	1.01	A

HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc			Duration, h	0.250
Analyst	DHH	Analysis Date	May 7, 2026	Area Type	Other
Jurisdiction	Perkasie Borough	Time Period	AM Peak Hour	PHF	0.90
Urban Street		Analysis Year	2028 No-Build	Analysis Period	1 > 7:00
Intersection	Constitution Ave/Walnut...	File Name	Constitution Ave_Walnut Street_na.xus		
Project Description	25-038 Perkasie Place				



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	1	205	144	58	162	1	104	0	49	0	0	0

Signal Information

Cycle, s	86.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On	Green	23.0	7.0	35.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	3.0	3.0	3.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4	3	8		2		6
Case Number		8.3	1.0	4.0		6.0		8.0
Phase Duration, s		42.0	14.0	56.0		30.0		30.0
Change Period, (Y+R _c), s		7.0	7.0	7.0		7.0		7.0
Max Allow Headway (MAH), s		3.2	3.1	3.2		3.1		0.0
Queue Clearance Time (g _s), s		14.7	4.2	6.4		7.3		
Green Extension Time (g _e), s		1.1	0.0	1.1		0.2		0.0
Phase Call Probability		1.00	1.00	1.00		1.00		
Max Out Probability		0.00	1.00	0.00		0.00		

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		350		64	181		116	54			0	
Adjusted Saturation Flow Rate (s), veh/h/ln		1789		1587	1864		1607	1483			0	
Queue Service Time (g _s), s		0.0		1.7	3.9		4.8	2.4			0.0	
Cycle Queue Clearance Time (g _c), s		12.2		1.7	3.9		4.8	2.4			0.0	
Green Ratio (g/C)		0.42		0.54	0.58		0.28	0.28				
Capacity (c), veh/h		791		500	1084		532	414				
Volume-to-Capacity Ratio (X)		0.443		0.129	0.167		0.217	0.132			0.000	
Back of Queue (Q), ft/ln (95 th percentile)		224		26	64		85	38			0	
Back of Queue (Q), veh/ln (95 th percentile)		8.5		1.0	2.5		3.2	1.4			0.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00	0.00		0.00	0.00			0.00	
Uniform Delay (d ₁), s/veh		18.1		10.8	8.3		24.1	23.2				
Incremental Delay (d ₂), s/veh		0.1		0.0	0.0		0.1	0.1			0.0	
Initial Queue Delay (d ₃), s/veh		0.0		0.0	0.0		0.0	0.0			0.0	
Control Delay (d), s/veh		18.2		10.8	8.4		24.2	23.3				
Level of Service (LOS)		B		B	A		C	C				
Approach Delay, s/veh / LOS	18.2	B		9.0	A		23.9	C		0.0		
Intersection Delay, s/veh / LOS	16.5						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		1.66	B		1.92	B		1.75	B	
Bicycle LOS Score / LOS	1.07	A		0.89	A		0.77	A		0.49	A	

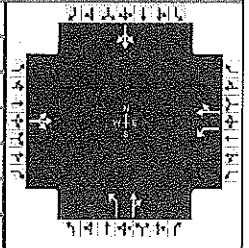
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Walnut...
Project Description	25-038 Perkasie Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.96
Analysis Period	1> 7:00
File Name	Constitution Ave_Walnut Street_np.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	1	218	216	100	332	1	270	6	121	0	0	0

Signal Information

Cycle, s	93.0	Reference Phase	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4	3	8		2		6
Case Number		8.3	1.0	4.0		6.0		8.0
Phase Duration, s		46.0	21.0	67.0		26.0		26.0
Change Period, (Y+R _c), s		7.0	7.0	7.0		7.0		7.0
Max Allow Headway (MAH), s		3.2	3.1	3.2		3.1		0.0
Queue Clearance Time (g _s), s		17.4	4.7	9.6		16.8		
Green Extension Time (g _e), s		1.5	0.1	1.6		0.2		0.0
Phase Call Probability		1.00	1.00	1.00		1.00		
Max Out Probability		0.00	0.00	0.00		1.00		

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	401			104	347		281	132		0		
Adjusted Saturation Flow Rate (s), veh/h/ln	1830			1750	1910		1714	1593		0		
Queue Service Time (g _s), s	0.0			2.2	7.1		14.3	6.6		0.0		
Cycle Queue Clearance Time (g _c), s	14.9			2.2	7.1		14.3	6.6		0.0		
Green Ratio (g/C)	0.43			0.62	0.66		0.22	0.22				
Capacity (c), veh/h	826			636	1253		446	343				
Volume-to-Capacity Ratio (X)	0.486			0.164	0.277		0.630	0.386		0.000		
Back of Queue (Q), ft/ln (95 th percentile)	260			34	111		252	112		0		
Back of Queue (Q), veh/ln (95 th percentile)	10.3			1.3	4.4		10.1	4.5		0.0		
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00	0.00		0.00	0.00		0.00		
Uniform Delay (d ₁), s/veh	19.3			9.0	6.7		34.3	31.2				
Incremental Delay (d ₂), s/veh	0.2			0.0	0.0		2.2	0.3		0.0		
Initial Queue Delay (d ₃), s/veh	0.0			0.0	0.0		0.0	0.0		0.0		
Control Delay (d), s/veh	19.5			9.1	6.8		36.5	31.5				
Level of Service (LOS)	B			A	A		D	C				
Approach Delay, s/veh / LOS	19.5	B		7.3	A		34.9	C		0.0		
Intersection Delay, s/veh / LOS	20.2						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		1.64	B		1.93	B		1.78	B	
Bicycle LOS Score / LOS	1.15	A		1.23	A		1.17	A		0.49	A	

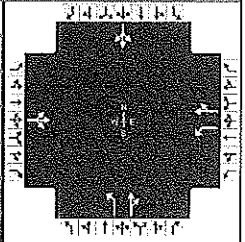
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Walnut...
Project Description	25-038 Perkasie Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.92
Analysis Period	1> 7:00
File Name	Constitution Ave_Walnut Street_ns.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	1	210	223	116	199	1	205	0	119	0	0	0

Signal Information

Cycle, s	86.0	Reference Phase	2																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4	3	8		2		6
Case Number		8.3	1.0	4.0		6.0		8.0
Phase Duration, s		42.0	14.0	56.0		30.0		30.0
Change Period, (Y+R _c), s		7.0	7.0	7.0		7.0		7.0
Max Allow Headway (MAH), s		3.2	3.1	3.2		3.2		0.0
Queue Clearance Time (g _s), s		17.2	5.6	7.3		11.9		
Green Extension Time (g _e), s		1.3	0.0	1.3		0.5		0.0
Phase Call Probability		1.00	1.00	1.00		1.00		
Max Out Probability		0.00	1.00	0.00		0.00		

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		412		126	217		223	129			0	
Adjusted Saturation Flow Rate (s), veh/h/ln		1813		1709	1865		1688	1544			0	
Queue Service Time (g _s), s		0.0		3.1	4.8		9.4	5.7			0.0	
Cycle Queue Clearance Time (g _c), s		14.7		3.1	4.8		9.4	5.7			0.0	
Green Ratio (g/C)		0.42		0.54	0.58		0.28	0.28				
Capacity (c), veh/h		801		487	1084		555	431				
Volume-to-Capacity Ratio (X)		0.514		0.259	0.201		0.402	0.300			0.000	
Back of Queue (Q), ft/ln (95 th percentile)		255		50	78		167	92			0	
Back of Queue (Q), veh/ln (95 th percentile)		10.1		1.9	3.1		6.6	3.6			0.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00	0.00		0.00	0.00			0.00	
Uniform Delay (d ₁), s/veh		18.8		11.8	8.5		25.7	24.4				
Incremental Delay (d ₂), s/veh		0.3		0.1	0.0		0.2	0.1			0.0	
Initial Queue Delay (d ₃), s/veh		0.0		0.0	0.0		0.0	0.0			0.0	
Control Delay (d), s/veh		19.1		11.9	8.6		25.9	24.5				
Level of Service (LOS)		B		B	A		C	C				
Approach Delay, s/veh / LOS	19.1	B		9.8	A		25.4	C		0.0		
Intersection Delay, s/veh / LOS	18.2						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		1.66	B		1.92	B		1.77	B	
Bicycle LOS Score / LOS	1.17	A		1.05	A		1.07	A		0.49	A	

APPENDIX G

Build Capacity/LOS Analysis Worksheets

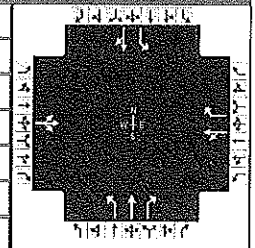
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Perkasi...
Project Description	25-038 Perkasi Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.93
Analysis Period	1> 7:00
File Name	Constitution Ave_Perkasie Square_ba.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	7	0	10	52	0	51	4	118	65	80	164	4

Signal Information

Cycle, s	85.0	Reference Phase	2							
Offset, s	0	Reference Point	End	Green	7.0	7.0	27.0	20.0	0.0	0.0
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	4.0	4.0	4.0	4.0	0.0	0.0
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.0	2.0	2.0	0.0	0.0

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		8.0		7.0	1.1	3.0	1.1	4.0
Phase Duration, s		26.0		26.0	13.0	33.0	26.0	46.0
Change Period, (Y+R _c), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (MAH), s		3.5		3.5	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		3.2		5.4	2.6	6.7	4.3	7.4
Green Extension Time (g _e), s		0.2		0.2	0.0	0.6	0.1	0.7
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.00		0.00	0.03	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		18			56	39	4	127	59	86	181	
Adjusted Saturation Flow Rate (s), veh/h/ln		1633			1289	1483	1750	1837	1557	1701	1792	
Queue Service Time (g _s), s		0.0			2.2	1.7	0.1	4.2	2.3	1.8	4.9	
Cycle Queue Clearance Time (g _c), s		0.7			2.9	1.7	0.1	4.2	2.3	1.8	4.9	
Green Ratio (g/C)		0.25			0.25	0.25	0.42	0.33	0.33	0.61	0.48	
Capacity (c), veh/h		463			403	366	646	605	513	861	865	
Volume-to-Capacity Ratio (X)		0.039			0.139	0.106	0.007	0.210	0.115	0.100	0.209	
Back of Queue (Q), ft/ln (95 th percentile)		13			43	28	2	78	37	26	83	
Back of Queue (Q), veh/ln (95 th percentile)		0.5			1.6	1.1	0.1	3.1	1.4	1.0	3.3	
Queue Storage Ratio (RQ) (95 th percentile)		0.00			0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh		24.3			25.2	24.7	14.2	20.9	19.9	7.2	12.7	
Incremental Delay (d ₂), s/veh		0.0			0.1	0.0	0.0	0.1	0.0	0.0	0.0	
Initial Queue Delay (d ₃), s/veh		0.0			0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh		24.4			25.2	24.8	14.2	20.9	19.9	7.3	12.7	
Level of Service (LOS)		C			C	C	B	C	B	A	B	
Approach Delay, s/veh / LOS	24.4	C		25.1	C		20.5	C		11.0	B	
Intersection Delay, s/veh / LOS	16.9						B					

Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.13	B	1.93	B	1.94	B	1.67	B
Bicycle LOS Score / LOS	0.52	A	0.64	A	0.80	A	0.93	A

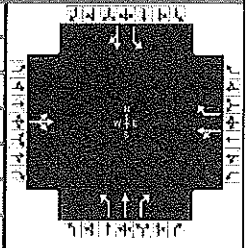
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Perkasi...
Project Description	25-038 Perkasi Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.97
Analysis Period	1> 7:00
File Name	Constitution Ave_Perkasie Square_bp.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	13	1	11	124	3	192	4	234	130	161	163	4

Signal Information

Cycle, s	111.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	Yes	Simult. Gap E/W	On	Green	7.0	7.0	48.0	25.0	0.0	0.0				
				Yellow	4.0	4.0	4.0	4.0	0.0	0.0				
Force Mode	Fixed	Simult. Gap N/S	On	Red	2.0	2.0	2.0	2.0	0.0	0.0				

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		8.0		7.0	1.1	3.0	1.1	4.0
Phase Duration, s		31.0		31.0	13.0	54.0	26.0	67.0
Change Period, (Y+R c), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (MAH), s		3.5		3.5	3.1	3.1	3.1	3.1
Queue Clearance Time (g s), s		3.7		12.4	2.6	11.9	6.7	7.7
Green Extension Time (g e), s		0.7		0.6	0.0	0.9	0.2	0.9
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.00		0.00	0.03	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	26			131	157		4	241	103	166	172	
Adjusted Saturation Flow Rate (s), veh/h/ln	1655			1349	1495		1750	1837	1594	1701	1792	
Queue Service Time (g s), s	0.0			7.9	9.9		0.1	9.4	4.3	4.2	5.2	
Cycle Queue Clearance Time (g c), s	1.2			9.1	9.9		0.1	9.4	4.3	4.2	5.2	
Green Ratio (g/C)	0.23			0.23	0.23		0.51	0.44	0.44	0.65	0.56	
Capacity (c), veh/h	437			380	350		735	811	704	796	1001	
Volume-to-Capacity Ratio (X)	0.059			0.344	0.447		0.006	0.297	0.146	0.208	0.172	
Back of Queue (Q), ft/ln (95 th percentile)	25			141	171		2	177	71	63	90	
Back of Queue (Q), veh/ln (95 th percentile)	1.0			5.6	6.8		0.1	7.1	2.8	2.5	3.6	
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d 1), s/veh	33.0			36.0	36.4		13.2	20.2	18.5	8.1	12.0	
Incremental Delay (d 2), s/veh	0.0			0.2	0.3		0.0	0.1	0.0	0.0	0.0	
Initial Queue Delay (d 3), s/veh	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	33.0			36.2	36.7		13.2	20.3	18.5	8.2	12.0	
Level of Service (LOS)	C			D	D		B	C	B	A	B	
Approach Delay, s/veh / LOS	33.0	C		36.5	D		19.7	B		10.1	B	
Intersection Delay, s/veh / LOS	21.6						C					

Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.17	B	1.94	B	1.97	B	1.67	B
Bicycle LOS Score / LOS	0.53	A	0.96	A	1.06	A	1.05	A

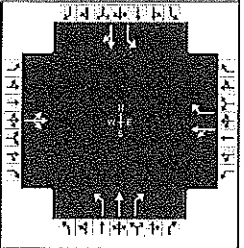
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Perkasie...
Project Description	25-038 Perkasie Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.92
Analysis Period	1> 7:00
File Name	Constitution Ave_Perkasie Square_bs.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	6	0	15	88	2	170	4	164	134	153	149	2

Signal Information

Cycle, s	85.0	Reference Phase	2						
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Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		8.0		7.0	1.1	3.0	1.1	4.0
Phase Duration, s		26.0		26.0	13.0	33.0	26.0	46.0
Change Period, (Y+R), s		6.0		6.0	6.0	6.0	6.0	6.0
Max Allow Headway (MAH), s		3.6		3.6	3.1	3.1	3.1	3.1
Queue Clearance Time (g _s), s		3.4		9.5	2.6	8.6	6.1	7.0
Green Extension Time (g _e), s		0.6		0.5	0.0	0.8	0.2	0.8
Phase Call Probability		1.00		1.00	1.00	1.00	1.00	1.00
Max Out Probability		0.00		0.01	0.03	0.00	0.00	0.00

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	23			98	147		4	178	108	166	164	
Adjusted Saturation Flow Rate (s), veh/h/ln	1649			1345	1495		1750	1837	1594	1701	1782	
Queue Service Time (g _s), s	0.0			4.2	7.0		0.1	6.1	4.1	3.6	4.5	
Cycle Queue Clearance Time (g _c), s	0.9			5.0	7.0		0.1	6.1	4.1	3.6	4.5	
Green Ratio (g/C)	0.25			0.25	0.25		0.42	0.33	0.33	0.61	0.48	
Capacity (c), veh/h	462			416	369		652	605	525	818	859	
Volume-to-Capacity Ratio (X)	0.049			0.235	0.397		0.007	0.295	0.205	0.203	0.191	
Back of Queue (Q), ft/ln (95 th percentile)	16			75	116		2	114	68	52	75	
Back of Queue (Q), veh/ln (95 th percentile)	0.7			3.0	4.6		0.1	4.5	2.7	2.1	3.0	
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00	0.00		0.00	0.00	0.00	0.00	0.00	
Uniform Delay (d ₁), s/veh	24.4			26.0	26.7		14.2	21.5	20.5	7.8	12.5	
Incremental Delay (d ₂), s/veh	0.0			0.1	0.3		0.0	0.1	0.1	0.0	0.0	
Initial Queue Delay (d ₃), s/veh	0.0			0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	24.4			26.1	27.0		14.2	21.6	20.6	7.9	12.6	
Level of Service (LOS)	C			C	C		B	C	C	A	B	
Approach Delay, s/veh / LOS	24.4	C		26.6	C		21.1	C		10.2	B	
Intersection Delay, s/veh / LOS	18.7						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.17	B		1.93	B		1.97	B		1.67	B	
Bicycle LOS Score / LOS	0.53	A		0.89	A		0.97	A		1.03	A	

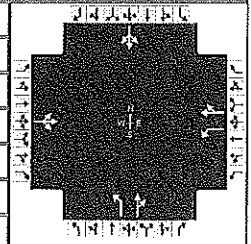
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc		
Analyst	DHH	Analysis Date	May 7, 2026
Jurisdiction	Perkasie Borough	Time Period	AM Peak Hour
Urban Street		Analysis Year	2028 Build
Intersection	Constitution Ave/Walnut...	File Name	Constitution Ave_Walnut Street_ba.xus
Project Description	25-038 Perkasie Place		

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.90
Analysis Period	1> 7:00



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	1	205	152	61	162	1	107	0	50	0	0	0

Signal Information

Cycle, s	86.0	Reference Phase	2																																																																										
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Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4	3	8		2		6
Case Number		8.3	1.0	4.0		6.0		8.0
Phase Duration, s		42.0	14.0	56.0		30.0		30.0
Change Period, (Y+R _c), s		7.0	7.0	7.0		7.0		7.0
Max Allow Headway (MAH), s		3.2	3.1	3.2		3.1		0.0
Queue Clearance Time (g _s), s		15.1	4.3	6.4		7.5		
Green Extension Time (g _e), s		1.1	0.0	1.1		0.3		0.0
Phase Call Probability		1.00	1.00	1.00		1.00		
Max Out Probability		0.00	1.00	0.00		0.00		

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		359		68	181		119	56			0	
Adjusted Saturation Flow Rate (s), veh/h/ln		1784		1574	1864		1594	1470			0	
Queue Service Time (g _s), s		0.0		1.8	3.9		5.0	2.4			0.0	
Cycle Queue Clearance Time (g _c), s		12.6		1.8	3.9		5.0	2.4			0.0	
Green Ratio (g/C)		0.42		0.54	0.58		0.28	0.28				
Capacity (c), veh/h		789		490	1084		529	410				
Volume-to-Capacity Ratio (X)		0.455		0.138	0.167		0.225	0.135			0.000	
Back of Queue (Q), ft/ln (95 th percentile)		230		28	64		88	40			0	
Back of Queue (Q), veh/ln (95 th percentile)		8.8		1.0	2.5		3.3	1.5			0.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00	0.00		0.00	0.00			0.00	
Uniform Delay (d ₁), s/veh		18.2		10.9	8.3		24.2	23.2				
Incremental Delay (d ₂), s/veh		0.2		0.0	0.0		0.1	0.1			0.0	
Initial Queue Delay (d ₃), s/veh		0.0		0.0	0.0		0.0	0.0			0.0	
Control Delay (d), s/veh		18.3		11.0	8.4		24.2	23.3				
Level of Service (LOS)		B		B	A		C	C				
Approach Delay, s/veh / LOS	18.3	B		9.1	A		23.9	C		0.0		
Intersection Delay, s/veh / LOS	16.6						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		1.66	B		1.92	B		1.75	B	
Bicycle LOS Score / LOS	1.08	A		0.90	A		0.78	A		0.49	A	

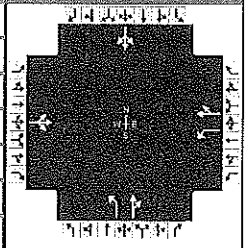
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Walnut...
Project Description	25-038 Perkasie Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.96
Analysis Period	1> 7:00
File Name	Constitution Ave_Walnut Street_bp.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	1	218	220	102	332	1	279	6	124	0	0	0

Signal Information

Cycle, s	93.0	Reference Phase	2																																																																																														
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Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4	3	8		2		6
Case Number		8.3	1.0	4.0		6.0		8.0
Phase Duration, s		46.0	21.0	67.0		26.0		26.0
Change Period, (Y+R c), s		7.0	7.0	7.0		7.0		7.0
Max Allow Headway (MAH), s		3.2	3.1	3.2		3.1		0.0
Queue Clearance Time (g s), s		17.6	4.8	9.6		17.5		
Green Extension Time (g e), s		1.5	0.1	1.6		0.2		0.0
Phase Call Probability		1.00	1.00	1.00		1.00		
Max Out Probability		0.00	0.00	0.00		1.00		

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h		405		106	347		291	135			0	
Adjusted Saturation Flow Rate (s), veh/h/ln		1828		1736	1910		1701	1580			0	
Queue Service Time (g s), s		0.0		2.3	7.1		15.0	6.8			0.0	
Cycle Queue Clearance Time (g c), s		15.1		2.3	7.1		15.0	6.8			0.0	
Green Ratio (g/C)		0.43		0.62	0.66		0.22	0.22				
Capacity (c), veh/h		825		628	1253		443	340				
Volume-to-Capacity Ratio (X)		0.491		0.169	0.277		0.656	0.398			0.000	
Back of Queue (Q), ft/ln (95 th percentile)		263		35	111		265	116			0	
Back of Queue (Q), veh/ln (95 th percentile)		10.4		1.4	4.4		10.5	4.6			0.0	
Queue Storage Ratio (RQ) (95 th percentile)		0.00		0.00	0.00		0.00	0.00			0.00	
Uniform Delay (d 1), s/veh		19.4		9.1	6.7		34.6	31.3				
Incremental Delay (d 2), s/veh		0.2		0.0	0.0		2.8	0.3			0.0	
Initial Queue Delay (d 3), s/veh		0.0		0.0	0.0		0.0	0.0			0.0	
Control Delay (d), s/veh		19.6		9.1	6.8		37.3	31.6				
Level of Service (LOS)		B		A	A		D	C				
Approach Delay, s/veh / LOS	19.6	B		7.3	A		35.5	D		0.0		
Intersection Delay, s/veh / LOS	20.5						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		1.64	B		1.93	B		1.78	B	
Bicycle LOS Score / LOS	1.16	A		1.24	A		1.19	A		0.49	A	

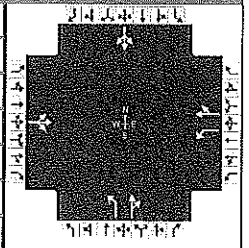
HCS Signalized Intersection Results Summary

General Information

Agency	Horner & Canter Assoc
Analyst	DHH
Jurisdiction	Perkasie Borough
Urban Street	
Intersection	Constitution Ave/Walnut...
Project Description	25-038 Perkasie Place

Intersection Information

Duration, h	0.250
Area Type	Other
PHF	0.92
Analysis Period	1 > 7:00
File Name	Constitution Ave_Walnut Street_bs.xus



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	1	210	231	120	199	1	208	0	120	0	0	0

Signal Information

Cycle, s	86.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	23.0	7.0	35.0	0.0	0.0	0.0						
Yellow	4.0	4.0	4.0	0.0	0.0	0.0						
Red	3.0	3.0	3.0	0.0	0.0	0.0						

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4	3	8		2		6
Case Number		8.3	1.0	4.0		6.0		8.0
Phase Duration, s		42.0	14.0	56.0		30.0		30.0
Change Period, (Y+R _c), s		7.0	7.0	7.0		7.0		7.0
Max Allow Headway (MAH), s		3.2	3.1	3.2		3.2		0.0
Queue Clearance Time (g _s), s		17.8	5.8	7.3		12.2		
Green Extension Time (g _e), s		1.3	0.0	1.4		0.5		0.0
Phase Call Probability		1.00	1.00	1.00		1.00		
Max Out Probability		0.00	1.00	0.00		0.00		

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	421			130	217		226	130		0		
Adjusted Saturation Flow Rate (s), veh/h/ln	1796			1696	1850		1674	1532		0		
Queue Service Time (g _s), s	0.0			3.3	4.8		9.7	5.8		0.0		
Cycle Queue Clearance Time (g _c), s	15.3			3.3	4.8		9.7	5.8		0.0		
Green Ratio (g/C)	0.42			0.54	0.58		0.28	0.28				
Capacity (c), veh/h	794			476	1076		551	428				
Volume-to-Capacity Ratio (X)	0.530			0.274	0.202		0.410	0.305		0.000		
Back of Queue (Q), ft/ln (95 th percentile)	264			52	79		171	94		0		
Back of Queue (Q), veh/ln (95 th percentile)	10.3			2.0	3.1		6.7	3.7		0.0		
Queue Storage Ratio (RQ) (95 th percentile)	0.00			0.00	0.00		0.00	0.00		0.00		
Uniform Delay (d ₁), s/veh	19.0			12.0	8.5		25.8	24.4				
Incremental Delay (d ₂), s/veh	0.3			0.1	0.0		0.2	0.1		0.0		
Initial Queue Delay (d ₃), s/veh	0.0			0.0	0.0		0.0	0.0		0.0		
Control Delay (d), s/veh	19.3			12.1	8.6		26.0	24.6				
Level of Service (LOS)	B			B	A		C	C				
Approach Delay, s/veh / LOS	19.3	B		9.9	A		25.5	C		0.0		
Intersection Delay, s/veh / LOS	18.4						B					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	1.91	B		1.66	B		1.92	B		1.77	B	
Bicycle LOS Score / LOS	1.18	A		1.06	A		1.08	A		0.49	A	



- ☐ 3850 Sierra Circle, Suite 100 | **Center Valley**, PA 18034 | P: 610.366.8064 | F: 610.366.0433
- ☐ 12 Terry Drive, Suite 205 | **Newtown**, PA 18940 | P: 215.369.3955 | F: 610.968.1829
- ☒ 65 E. Butler Avenue, Suite 100 | **New Britain**, PA 18901 | P: 215.345.4330 | F: 215.948.9943
- ☐ 401 Plymouth Road, Suite 150 | **Plymouth Meeting**, PA 19462 | P: 610.489.4949 | F: 610.489.8447
- ☐ One Penn Center at Suburban Station, 1617 JFK Blvd., Suite 425 | **Philadelphia**, PA 19103 | P: 215.687.4246 | F: 215.564.1780

MEMORANDUM

Date: June 5, 2026

To: Cassandra Grillo

Cc: Linda Reid
Jeff Garton

From: Judith Stern Goldstein and Stacy Yoder

Reference: Data Centers Zoning Ordinance Amendment

As requested, we have prepared the following zoning ordinance amendment to address data center use:

Section 1. The provisions of Chapter 186, Zoning, Article II, Definitions, Section 186-5.C shall be amended to add the following terms:

DATA CENTER - A facility primarily used for housing and operating computer systems and associated equipment, including servers, data storage and processing systems, and accessory infrastructure such as cooling systems, power generators, electrical substations, and network hardware.

DATA CENTER ACCESSORY USE - Ancillary uses or structures secondary and incidental to a Data Center use, including but not limited to: administrative, logistical, fiber optic, storage, and security buildings or structures; electrical substations; utility lines; domestic and non-contact cooling water and wastewater treatment facilities; water holding facilities; pump stations; water towers; environmental controls (air conditioning or cooling towers, fire suppression, and related equipment); security features, provided such data center accessory uses/structures are located on the same tract or assemblage of adjacent parcels developed as a unified development with a Data Center.

Section 2. The provisions of Chapter 186, Zoning, Article IV, Use Regulations and Restrictions, Section 186-18.G, Industrial Uses, shall be amended to add the following:

- (14) Data center. Such use shall include, but is not limited to, facilities primarily used for housing and operating computer systems and associated equipment, including servers, data storage and processing systems, and accessory infrastructure such as cooling systems, power generators, electrical substations, and network hardware, subject to the following provisions:
 - (a) Minimum lot area. The minimum lot area shall be 3 acres.
 - (b) Building height. The maximum building height shall be 45 feet not to exceed three stories, inclusive of associated roof-top equipment and Data Center Accessory Uses.
 - (c) Setbacks. The Data Center and Data Center Accessory Uses and associated equipment and structures shall be setback 50 feet from the property line of all other adjoining properties and road rights-of-way, and if abutting a residential district or residential use, the required setback shall be 100 feet from the property line that abuts such residential district or use.

- (d) Buffers and screening. The perimeter buffer shall comply with Zoning §§ 186-20.L(2) and 186-54. Data Center Accessory Uses, including ground level and roof top mechanical equipment used for cooling, ventilating, or otherwise operating the facility, shall be screened from view on all sides with a visually solid screen. Such screen may be provided by a visually solid fence, screen wall, parapet wall, or other visually solid screen. Such screen may incorporate perforated surfaces on it as necessary to permit ventilation of the equipment.
- (e) Barbed wire, razor wire, electrified fences, fence spikes or other types of hazardous fencing are prohibited.
- (f) Noise and vibration.
 - [1] The applicant shall submit a pre-construction noise and vibration study with the conditional use application prepared and sealed by a qualified professional. Such qualified professional shall be an engineer licensed in the Commonwealth of Pennsylvania or other environmental or technical professional with demonstrated education, training and experience in acoustical noise or vibration analysis applicable to the scope of work being performed (defined herein as “Qualified Professional”) to include the predicted noise and vibration levels from the operation of the Data Center.
 - [2] Simultaneous operation assumption. All noise evaluations, studies, modeling, and compliance determinations shall assume the concurrent operation of all generators, cooling systems, mechanical equipment, and other noise producing devices operating at maximum rated capacity, unless a more restrictive operating condition is required by approval.
 - [3] Within 180 days following issuance of a use and occupancy certificate and commencement of operations at the Data Center, the applicant shall submit to the Borough an as-built post-construction noise and vibration study. The study shall:
 - [a] Be conducted by a Qualified Professional using applicable ANSI standards and generally accepted criteria.
 - [b] Demonstrate compliance with all applicable noise regulations set forth in the Data Center Noise Standards Tables at the end of this section. Compliance shall be demonstrated using objective sound level limits expressed in A-weighted decibels (dBA), measured and evaluated in accordance with standardized methodologies acceptable to the Borough.
 - [c] Include sound measurements taken at all property lines.
 - [d] Include measurements taken during normal operations, peak cooling load, and during operation of emergency generators under load.
 - [e] Address low-frequency noise impacts, including compliance with applicable dBC limits set forth in the Data Center Noise Standards Tables.
 - [f] Vibration Standards to be used in the study. Vibration shall be evaluated using two distinct criteria: (a) Building Damage: Ground vibration shall not exceed 0.2 to 0.5 inches per second peak particle velocity (PPV), measured in accordance with USBM RI 8507 or successor standard; and (b) Human Perception: Vibration levels shall not exceed 65 VdB, measured in accordance with ISO 2631-1 or successor standard.
 - [g] Identify all measurement locations, instrumentation used, calibration documentation, testing methodology, operational conditions during testing, and meteorological conditions.
 - [h] The timing of the post construction noise and vibration study shall not preclude enforcement by the Borough at any time upon identification of a violation. The applicant shall provide reasonable access to monitoring data,

equipment specifications, and operating conditions to the Borough Engineer, designee or other consultant acting on behalf of the Borough.

- [4] If the post construction study demonstrates non-compliance with any applicable noise or vibration standard, the applicant shall, within 30 days of written notice from the Borough, submit a corrective action plan prepared by a Qualified Professional. All violations shall be fully remediated within a timeframe approved by the Borough, but in no event later than 90 days following Borough notice of non-compliance, unless extended by the Borough for good cause shown.
- [5] If the pre-construction noise study establishes a baseline sound level in excess of the maximum sound level permitted under Data Center Noise Standards Tables, the post-construction study shall demonstrate that operations of the proposed use do not increase baseline ambient sound levels. Sound levels with 1 dBA of ambient sound levels will meet this requirement.
- [6] Objective Noise Standards. Noise limits shall be established by land use category, measurement location, time-of-day, and averaging period, and shall include provisions for instrumentation and low-frequency noise evaluation.
- [7] The Borough may require additional noise and vibration testing upon receipt of substantiated complaints or following material modification, replacement, or addition of mechanical equipment, cooling systems, generators, or other vibration-generating equipment.
- [8] If initial monitoring or complaints indicate a probable violation, the Borough may require interim mitigation measures, which may include operational modifications, equipment limitations, or temporary curtailment of specific noise producing activities until compliance is demonstrated.
- [9] Data Center Noise Standards Tables.

Table 1: Data Center Noise Limits, Measurement, and Compliance Requirements

Category	Requirement
Applicable Uses	Data Centers, including all accessory mechanical equipment, generators, cooling systems, and substations
Measurement Basis	A-weighted sound levels (dBA), unless noted otherwise for low-frequency noise
Receptor Locations	Measurements and modeling shall be conducted at the nearest property line to receptors
Operating Condition Assumption	All compliance evaluations shall assume simultaneous operation of all generators, cooling equipment, and other noise-producing devices at maximum rated capacity

Table 2: Numeric Noise Limits by Zoning Use

Receiving Land Use	Daytime (7:00 AM – 10:00 PM)	Nighttime (10:00 PM – 7:00 AM)
Residential	55 dBA Leq (1-hour)	45 dBA Leq (1-hour)
Mixed-Use / Commercial	60 dBA Leq (1-hour)	50 dBA Leq (1-hour)
Industrial	65 dBA Leq (1-hour)	55 dBA Leq (1-hour)

Short term tonal or impulsive noise exceeding the above limits by 5 dBA or more shall constitute a violation.

Table 3: Low Frequency Noise Criteria

Parameter	Requirement
Frequency Sensitivity	C-weighted sound levels (dBC), capturing enhanced sensitivity to low-frequency noise
Measurement Metric	Equivalent continuous sound level (Leq, 1-hour) in dBC
Measurement Locations	At the nearest property line
Daytime Limit (7:00 AM – 10:00 PM)	70 dBC Leq (1-hour)
Nighttime Limit (10:00 PM – 7:00 AM)	60 dBC Leq (1-hour)
Tonal / Narrowband Noise	Clearly perceptible low-frequency tonal noise shall require mitigation regardless of overall dBC compliance, as determined by the Qualified Professional or the Borough based on clearly perceptible tonal characteristics
Applicability	Limits apply under simultaneous operation of all generators, cooling systems, and mechanical equipment

Table 4: Modeling and Study Requirements

Requirement	Standard
Pre-construction Study	Required with conditional use application
Post-construction Verification	Required within 180 days of commencement of operations
Prepared By	Qualified Professional with demonstrated noise expertise
Modeling Methodology	ISO 9613-2, CadnaA, SoundPLAN, or equivalent accepted industry model
Meteorological Assumptions	Downwind propagation, ISO-conservative conditions
Equipment Data	Manufacturer sound power levels and octave-band spectra
Low-Frequency Evaluation	Required where large generators or cooling systems are used

Table 5: Measurement Procedures

Element	Requirement
Instrumentation	Type 1 or Type 2 ANSI-certified sound level meter
Calibration	Pre- and post-measurement field calibration required
Measurement Duration	Minimum 15 minutes per location unless otherwise specified. Sound level limits expressed as hourly equivalent levels (Leq, 1-hour) may be evaluated using shorter-duration measurements, including the minimum durations identified in this table, where such measurements are conducted under steady-state operating conditions and are representative of normal operations.
Operating Conditions	Measurements shall include peak cooling load and generator operation under load

Background Noise	Baseline ambient levels documented prior to construction
------------------	--

Table 6: Compliance

Item	Requirement
Material Increase Definition	An increase of ≥ 3 dBA above baseline ambient sound level
Violation Determination	Exceedance of numeric limits or material increase
Retesting Authority	Borough may require additional testing following substantiated complaints or equipment changes

[10]Water and sewer.

- [a] All data center facilities shall be served by public water systems and public sewer systems.
- [b] Applicant shall provide detailed estimates of daily and annual water usage.
- [c] Applicant shall provide documentation from the public water provider that there is sufficient water available to serve the Data Center without impacting water pressure or availability of water to other users in Borough.
- [d] Applicant shall be required to utilize air-cooled or closed-loop water systems or similar high-efficiency systems in order to protect local water resources.
- [e] No Data Center shall be approved unless the applicant demonstrates that the anticipated water supply yield is sufficient for the Data Center and will not adversely impact water pressure or availability of water to other users in the Borough.

[11]Power supply.

- [a] If the applicant proposes to connect the Data Center to the electric grid used by the public, the applicant shall provide documentation from the applicable electric service provider (the "Utility Provider") certifying that that the necessary capacity is available and that the Utility Provider will be able to serve the Data Center. Applicant shall submit detailed plans which describe and depict the manner and design by which power will be provided (including location of substations) by the Utility Provider.
- [b] If feasible and can reasonably be obtained, the Applicant shall provide an analysis of potential ratepayer impacts, including projected effects on public electric rates or service reliability. Known impacts on electric rates or availability for other uses directly attributable to the data center project shall be noted.
- [c] Applicant shall provide documentation of working with the Utility Provider to provide site design to enable future technology which aid in the Data Center being more energy self-sufficient such as incorporation of microgrid elements, advance conductors to connect the site, and the possibility of a separate, underground HVDC grid for the Data Center.

[12]Power generation facilities.

- [a] Any energy generation system designed or used to supply power directly to a Data Center during normal operations, including solar, wind, or fossil fuel, shall not be considered part of the Data Center use but shall be subject to existing municipal or utility regulations. Such systems shall be considered a separate principal use and shall be approved according to all applicable

state and federal regulations along with municipal zoning regulations applicable to such use. The applicant shall select, design and locate the energy generation systems to limit noise, emissions, and visual impacts to adjacent and nearby uses as much as possible.

- [b] Electric Utility Substations on the same property as the Data Center they serve must be located on the side or rear of a Data Center principal building so they are screened from public view and shall not be located in a required front yard. On-site substations do not require a buffer or screening between the Data Center Principal Building and the substation.
- [c] Data Center electric utility substations visible from an arterial roadway must include a combination of year-round opaque landscaping and screening walls to minimize visual impact.
- [d] Burying power lines serving the property is strongly encouraged. On-site power lines of 34.5 kV and below must be buried.
- [e] Substations abutting a district boundary other than Limited Industrial and/or a parcel containing a sensitive receptor shall be set back a minimum of 800 feet from the property line. If abutting another Limited-Industrial zoned parcel and use, substations shall meet the requirements for accessory uses in the underlying zoning district.
- [f] The Data Center electric utility substation shall be subject to applicable zoning district setback requirements. Setbacks shall be measured from the edge of the enclosure containing the substation to the property boundary of the lot it occupies.
- [g] No nuclear energy generating system shall be permitted as part of the Data Center use.

[13] Backup power generators are only to be used to provide backup electrical supply during a power outage or similar emergency situations, or for testing purposes. Only Tier IV generators shall be utilized. If the Data Center operator intends to use backup power generators, the operator shall maintain a public website announcing the times when the generators will be in operation. Any operation of the backup generators, for testing purposes, shall be announced on the website at least 24 hours in advance. The operator shall also notify the Borough at least 24 hours in advance of a test. Upon request by the Borough, the Data Center operator shall provide the address of the website where the notices required by this Section are published.

[14] Emergency management.

- [a] The applicant shall submit an Emergency Response Plan (ERP) prepared by a qualified professional. The ERP shall:
 - [i] Be reviewed and accepted by the local fire department and emergency management services as part of the conditional use process;
 - [ii] Include detailed procedures for fire suppression, containment, ventilation, and evacuation;
 - [iii] Include an evaluation of the access roads and hydrant locations within the site to ensure suitable access for emergency equipment within the site;
 - [iv] Ensure that all first responders receive adequate training specific to the installed system; and
 - [v] Include provisions for annual fire safety inspections demonstrating compliance with fire safety standards to be performed by a qualified professional on behalf of the Data Center.

- [b] Costs incurred, including specialized training for fire and EMS personnel, shall be reimbursed by the applicant, including future ongoing training specific to the Data Center's ERP.
- [c] Any Data Center proposing battery storage or any other device or group of devices capable of storing energy in order to supply electrical energy at a later time, whether the energy is stored for use on-site or off-site, shall demonstrate compliance with National Fire Protection Association (NFPA) Standard 855, Installation of Stationary Energy Storage Systems, or similar standards and must include fire suppression systems designed specifically for battery storage.
- [d] No Data Center shall be approved unless the applicant demonstrates that procedures for fire suppression, containment, ventilation, and evacuation are sufficiently protective of public health, safety and welfare.

[15]Decommissioning. At the time of application, the operator shall submit a Decommissioning Plan prepared by a qualified professional. The plan shall outline the procedures for safe shutdown, removal of equipment, disposal or recycling of materials, and site restoration. The Borough may require financial security (with related agreements) to be posted to cover the full cost of decommissioning and site restoration if not done in a timely fashion by the operator/owner of the Data Center

Section 3. The provisions of Chapter 186, Zoning, Article V, Zoning Districts, Section 186-20.L(1) shall be amended to add the following:

- (c) Uses by conditional use. The following uses shall be permitted when authorized as a conditional use by Council in accordance with Article XII.

G(14) Data center

Section 4. The provisions of Chapter 186, Zoning, Article V, Zoning Districts, Section 186-20.L(3)(a) shall be amended to add the following:

- [4] Data center: one off-street parking space per 8,000 s.f. of floor area designed and intended to be accessible regularly by employees.

Section 5. The provisions of Chapter 186, Zoning, Article VIII, Off-Street Parking and Loading, Section 186-61.C shall be amended to add the following:

Land Use

Required Off-Street Parking

Data center

One space per 8,000 s.f. of floor area designed and intended to be accessible regularly by employees

Section 6. Attachment 2, Table of Uses by District shall be amended to read as follows:

Use	R1A	R1B	R2	R3	A	C-1	C-2	I-1	I-2	I-3	TC
G. Industrial Uses											
14 Data Center										C	

I reviewed the draft ordinance. Overall, I think it does a good job addressing noise and water consumption. I recommend protections against *noise pollution, light pollution, excessive water use, and excessive power use.*

- Light Pollution Is Largely Missing
 - I would recommend adding provisions such as:
 - All exterior lighting shall be full-cutoff/downward directed.
 - Maximum property-line illumination limits (e.g., 0.1 foot-candles at residential boundaries).
 - Prohibit uplighting except for security purposes.
 - Motion sensors or dimming after hours.
 - Shielding of rooftop mechanical equipment lighting.
 - Generator test lighting restrictions.
 - Compliance with DarkSky standards.
- Power Consumption Is Addressed Indirectly, But Not Controlled
 - Section 11 requires documentation from the utility and discussion of future technologies. It does not actually limit electrical demand.
 - If the Borough's intent is to discourage extremely power-intensive AI campuses, I would consider requiring disclosure of:
 - Ultimate build-out load (MW).
 - Initial load and phased expansions.
 - Coincident peak demand.
 - PUE (Power Usage Effectiveness).
 - Annual energy consumption (MWh).
 - You can also consider requiring:
 - Load management plans.
 - Demand response participation where available.
 - Waste heat recovery evaluation.
 - Capability for future microgrid integration.
 - Annual reporting of actual power consumption.
 - Explicitly note that future approvals will be required for:
 - Load increase >10%.
 - Water increase >20%.
 - Generator increase >20%.
 - Additional cooling equipment.
 - Additional substations.
 - Building expansions.
 - Additional utility feeds.

- Water Requirements
 - Section 10 requires public water and encourages air-cooled or closed-loop systems. Consider adding:
 - Water Use Effectiveness (WUE) Rules
 - Require reporting and approval on:
 - WUE.
 - Annual gallons consumed.
 - Maximum annual water withdrawal.
 - Drought contingency plans.
 - Cooling Technology
 - Evaporative cooling systems shall not be permitted unless the applicant demonstrates that no reasonably feasible air-cooled alternative exists.
 - Noise Provisions Are Very Strong
 - The noise section is probably the strongest part of the ordinance (that's good). There are some good pre-construction studies, post-construction verification, low-frequency limits, generator testing requirements, and provisions for corrective action – good job on this part.
 - One addition I would make:
 - Tonal Noise Penalty
 - Any tonal noise shall be subject to a 5 dBA penalty.
 - Some fans can produce tonal noise that residents find more objectionable than broadband noise.
 - Generator Requirements
 - The draft requires Tier IV generators and public notification of testing.
 - I recommend adding a limit on testing hours:
 - Generator testing shall occur:
 - Monday-Friday
 - 9 AM – 4 PM
 - No weekends or holidays except emergencies.
 - Cap annual testing hours
 - Routine testing shall not exceed 50 hours per generator annually.
 - Substation screening requirements looks great, but 800 foot might be tough.
- Heat Pollution Requirements
 - Consider requiring:

- Evaluation of waste heat recovery.
 - Exhaust orientation away from residences.
 - Thermal plume studies for campuses over a certain size.
 - Prohibition of cooling tower drift onto neighboring properties.
- Construction Impacts
 - In order to address construction nuisances, consider adding”
 - Dust control plans.
 - Truck routing requirements.
 - Construction hours.
 - Erosion and sediment controls.
 - Construction noise limits.
 - Expansion Controls
 - Any increase in connected electrical load exceeding 10%, any increase in water consumption exceeding 10%, or any addition of major cooling or generation equipment shall require a new conditional use approval.
- Overall Annual Compliance Reporting
 - Require annual submission of:
 - Water consumption.
 - Electrical consumption.
 - Generator operating hours.
 - Major equipment modifications.
 - Complaints received.
 - Noise measurements if requested by the Borough.

Living near a construction and demolition (C&D) recycling site carries specific environmental and safety risks. While not immediately toxic like a Superfund site, hazards include **airborne dust (silica)**, **heavy truck traffic**, **noise pollution**, and **vibration**. Health impacts depend largely on your distance from the facility and its dust mitigation practices. [, , , ,]

Key factors to consider include:

- **Air Quality & Dust:** Processing construction waste involves crushing concrete, brick, and drywall. This mechanical grinding releases **respirable crystalline silica**, which can cause chronic respiratory issues with long-term exposure. [, ,]
- **Heavy Truck Traffic:** These facilities generate high volumes of heavy-duty truck traffic. This increases localized exhaust emissions, road noise, and poses safety risks for pedestrians and cyclists in the area. []
- **Noise & Vibration:** Crushing, sorting, and loading heavy materials create significant industrial noise and ground vibrations that can disrupt daily life and lower property values. [, , ,]
- **Wind Direction:** Your exposure is heavily dictated by prevailing winds. If your home is downwind from the facility, you are more likely to experience blowing dust and debris. [,]

Because building codes and local zoning vary heavily by region, the best step is to look up the specific facility's operating compliance and permitted activities. []

To help you evaluate your specific situation, could you tell me:

- **How close** is your home to the facility (in miles or feet)?
- Does the facility handle mostly **inert materials** (concrete, asphalt) or mixed materials?
- Have you noticed any specific issues like **dust accumulation** or **heavy odors**?

12 sites

Show all

You said: What dangers pose to neighbors that live less than a 1/2 mile from a construction recycling center

June 28, 2026

Living less than a half-mile (2,640 feet) places a home directly within the active impact zone for industrial emissions, heavy traffic, and noise. At this close proximity, the primary dangers to neighbors include severe respiratory risks, physical safety hazards, and structural disruptions. []

Air Pollution and Chronic Illness

- **Respirable Crystalline Silica:** Concrete crushing releases microscopic silica dust. Breathing it over time causes silicosis, an irreversible lung disease. [, ,]
- **Toxic Materials:** Older demolished buildings often contain asbestos, lead-based paint, or treated wood. Mechanical sorting can accidentally pulverize and airborne these hazardous materials. [,]
- **Diesel Particulate Matter:** Dozens of heavy trucks and diesel-powered heavy machinery idle and accelerate daily. This fine soot penetrates deep into lungs, increasing risks of asthma, heart disease, and lung cancer. []

! **Traffic and Physical Safety**

- **Pedestrian Hazards:** Heavy dump trucks and flatbeds frequently navigate neighborhood roads. This drastically increases accident risks for local children, cyclists, and pedestrians.
- **Debris Spills:** Trucks leaving the facility often drop gravel, nails, or shards of metal. This creates immediate driving hazards, flat tires, and cracked windshields for neighbors.

Noise, Vibration, and Structural Damage

- **Low-Frequency Vibration:** Industrial shredders, screeners, and concrete crushers create ground vibrations. Over months, this shaking can crack residential foundations, drywall, and underground pipes.
- **Chronic Noise Pollution:** Constant backup alarms, metal-on-metal impact, and engine braking exceed residential decibel limits. This disrupts sleep, spikes cortisol levels, and contributes to chronic hypertension. []



Vectors and Environmental Pests

- **Pest Infestations:** Mixed construction waste often includes wood, cardboard, and organic debris. These piles trap water and create ideal breeding grounds for rats, mice, and mosquitoes.